PES Environmental, Inc.
Engineering & Environmental Services

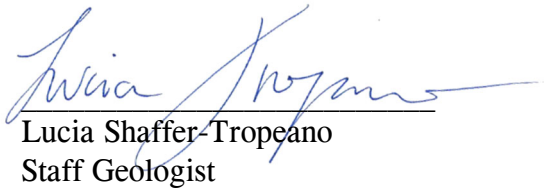
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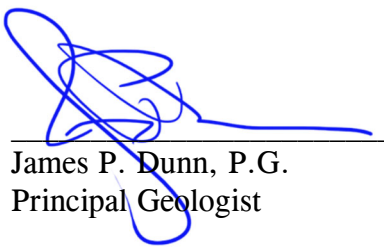
PHASE I
ENVIRONMENTAL SITE ASSESSMENT
NORTHERN THIRD OF EL CAMINO CENTER
200-336 PORTAGE AVENUE
PALO ALTO, CALIFORNIA

NOVEMBER 17, 2020

By:



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126.076.02.001

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1.0 INTRODUCTION

1.1 Purpose and Scope of Work

This report presents the results of a Phase I Environmental Site Assessment (ESA) for the northern third of the El Camino Center located in Palo Alto, California (the site or subject property; see Plate 1). PES Environmental, Inc. (PES) was retained by The Sobrato Organization (Sobrato) to compile and evaluate available information to assess for Recognized Environmental Conditions[1] (RECs) associated with the subject property as part of the redevelopment planning process.

The ESA was performed pursuant to our proposal (Reference No. 126.076.02.P01) dated September 26, 2020, and in general accordance with ASTM International guidelines for Phase I Environmental Site Assessments (ASTM E 1527-13). These practice guidelines comply with the U.S. Environmental Protection Agency's All Appropriate Inquiries (AAI) rule adopted in November 2005 and amended December 30, 2013. PES performed the following tasks during the ESA:

- Federal, State, and local agency databases were reviewed to identify nearby sites which have reported the use, storage, or release of hazardous materials;
- Regulatory agency records regarding the site and adjacent properties were reviewed;
- Historical aerial photographs, Sanborn Fire Insurance maps, and historical topographic maps of the site and surrounding area were evaluated, as available, to assess prior land uses;
- Individuals with knowledge of the site were interviewed;
- An inspection of the site and a reconnaissance of surrounding properties were performed to assess the potential for contamination of the site from onsite or offsite sources. The site inspection was conducted by an environmental professional with qualifying experience under AAI; and
- This report was prepared presenting the results of the Phase I assessment.

A Recognized Environmental Condition, or REC, is defined in the ASTM International guidelines (ASTM E 1527-13) as the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that

[1] A REC is defined in the American Society for Testing and Materials guidelines for Phase I Environmental Site Assessments (ASTM E 1527-05) as *"the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property on into the ground, groundwater, or surface water of the property". RECs are equivalent to "environmental conditions" as that term is defined in Appendix A.*

pose a material threat of a future release to the environment. A controlled REC (CREC) is a REC resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority, with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls (e.g., property use restrictions, activity and use limitations, institutional controls, or engineering controls). A historical REC (HREC) is a past release of any hazardous substance or petroleum product that has occurred about the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the property to any required controls. *De minimis* conditions are defined by ASTM as conditions that generally do not present a threat to human health or the environment, and that generally would not be the subject of an enforcement action if brought to the attention of appropriate government agencies. A *de minimis* condition is not a REC and not a CREC.

1.2 Special Terms and Conditions

Chain-of-title documentation was not provided or obtained for this ESA.

1.3 Limitations and Exceptions

This Phase I ESA was performed in accordance with practices and procedures generally accepted in the consulting engineering field at the time they were performed. The findings, opinions, conclusions, and recommendations expressed herein are applicable as of the date the services were provided. Our professional judgment to assess the potential for contamination is based on limited data; no warranty is given or implied.

The Phase I ESA was prepared at the request of Sobrato as part of redevelopment planning the subject property and may be relied on only by Sobrato and the Sobrato affiliate(s), if any. No other party may rely on this report without the express written permission of Sobrato and PES.

2.0 USER PROVIDED INFORMATION

2.1 Title Records

Title records were not provided to PES for the preparation of this Phase I ESA.

2.2 Environmental Liens or Activity and Use Limitations

Sobrato advised PES that they are not aware of any environmental liens or activity and use limitations (AULs) recorded against the subject property, and PES is not aware of any such liens or AULs for the subject property. A search for environmental liens and AULs was conducted by GeoSearch (see Appendix A) for this Phase 1 ESA. No liens or AULs were identified.

2.3 Specialized Knowledge

Sobrato has advised PES that it is not aware of any specialized environmental knowledge regarding the subject property other then what was known as the current property owner and landlord as well as provided in a prior environmental documents for the property currently in their possession.

2.4 User Questionnaire

As part of the ESA, a User Questionnaire was transmitted to the User's representative, Ms. Phyllis Yamasaki (Senior Vice President, Commercial Property Management), as recommended in ASTM E 1527-13. This questionnaire, to be completed by the party who will rely on the ESA, facilitates the transfer of known site information to the environmental professional and promotes qualification of the relying party for one of the *Landowner Liability Protections (LLPs)*[2] offered by the Small Business Liability Relief and Brownfields Revitalization Act of 2001 (the "*Brownfields Amendments*"). A copy of the completed User Questionnaire is provided in Appendix B.

According to the responses to the questionnaire, Ms. Yamasaki provided the following information:

- Ms. Yamasaki has no knowledge of environmental liens or AULS for the subject property;
- Her specialized knowledge of the subject property is limited to operational information that is known by a current property owner and landlord;
- Ms. Yamasaki has no knowledge of specific chemicals present or once presence on the property. She also has no knowledge of chemical spills or environmental cleanups that may have taken place at the property; and
- Ms. Yamasaki has no knowledge of obvious indicators that point to the presence or likely presence of contamination or chemical releases on the subject property.

2.5 Commonly Known or Reasonably Ascertainable Information

Any commonly known or reasonably ascertainable information provided to PES during the preparation of this Phase I ESA is presented within this report.

[2] Landowner Liability Protections, or LLPs, is the term used to describe the three types of potential defenses to Superfund Liability in US EPA's Interim Guidance Regarding Criteria Landowners Must Meet in Order to Qualify for Bona Fide Prospective Purchaser, Contiguous Property Owner, or Innocent Landowner Limitations on CERCLA Liability ("Common Elements" Guide) issued on March 6, 2003.

2.6 Owner, Property Manager, and Occupant Information

In addition to the User Questionnaire, a Key Site Manager Questionnaire was also completed by Ms. Yamasaki on November 13, 2020. Ms. Yamasaki has been associated with the subject property for 8 years. As provided in Appendix B, Ms. Henry's completed questionnaire documented negative or unknown responses to all questions regarding known or potential environmental issues on the subject or adjacent properties, with the exception of the following:

- Asbestos is likely present in building materials based on the dates of construction prior to 1980;
- Ms. Yamasaki indicated that annual inspections of the tenant space heating, ventilation, and air conditioning (HVAC) systems occur and that prompt repairs take place if needed; and
- Water damage has occurred in the building in the past from flooding, plumbing leaks or roof leaks. These issues are also addressed promptly.

3.0 SITE DESCRIPTION

3.1 Location and Site Access

The subject property consists of the northern third of the El Camino Center with the addresses of 200 – 336 Portage Avenue in the City of Palo Alto, Santa Clara County, California (Plates 1 and 2). Onsite parking to the subject property is accessed from Portage Avenue and Park Boulevard.

Historical addresses for the portion of EL Camino Center that is included in the subject property include 1518 Third Street and 3018 and 3200 Park Boulevard. The Third Street address was for a building that formerly fronted Park Boulevard. The historical Park Boulevard addresses are known included in the combined 200-210 Portage Avenue tenant space of the building.

3.2 Site and Vicinity Characteristics

The subject property, which comprises approximately 2 acres, contains one multi-segmented retail, warehouse, and office building and associated paved parking and landscaped areas. The site is identified by Santa Clara County Assessor's Parcel Numbers (SCC APNs) 132-38-071 (partial), 132-32-042, and 132-32-047.

The site is zoned as a Commercial Downtown Community (CDCP) and is located in a primarily commercial area. The site is bounded to the north by a small commercial property (3040 Park Boulevard) and Park Boulevard, to the south by the remainder of the commercial buildings of the El Camino Center, to the west by commercial and residential properties fronting Olive Avenue, and to the east by Matadero Creek.

3.3 Physical Setting

According to the United States Geological Survey (USGS) *Palo Alto, California* Quadrangle 7.5-minute series topographic map produced in 1999, the site vicinity is situated at an elevation of approximately 25 feet above mean sea level. The ground surface is relatively flat, but gently slopes regionally to the northeast.

3.4 Regional Geology and Hydrogeology

Based on the results of investigations performed in the site vicinity, the site is underlain by alluvial fan deposits associated with San Francisquito Creek to the west and Matadero Creek to the east. Soils in the area consist primarily of sandy silt and silty sand with intermittent gravel lenses; and have been subdivided into several water-bearing zones. Shallow groundwater has been encountered at approximately 16 feet below ground surface (bgs) on the subject property, and groundwater flow to the north-northeast has been measured (Stantec, 2020).

The nearest surface water is Matadero Creek, which traverses along the eastern boundary of the site. According to Federal Emergency Management Agency (FEMA) map information presented in the GeoSearch Physical Settings report (see Appendix C) , the subject property is located within a 500-year flood zone.

3.5 Descriptions of Existing On-site Structures and Improvements

3.5.1 Structures and Current Use

The subject property contains one multi-segmented single-story high-ceiling building and associated paved parking and landscaped areas. Selected portions of the building were equipped with interior mezzanines. The property is partially vacant (formerly electronics and patio furniture retail) and where currently occupied, tenant spaces are used as offices. A current list of tenants at the time of the ESA site inspection is provided in Section 6.0.

3.5.2 Other Improvements

Electricity, natural gas, water and sewage services are provided by the City of Palo Alto.

3.6 Current Uses of Adjoining Properties

PES conducted a reconnaissance of the surrounding area to assess whether neighboring properties pose potential environmental concerns to the subject property. Adjacent land uses are identified on Plate 2. Adjacent properties are used for commercial purposes, as described below.

Properties to the North

The site is bounded to the north by a small commercial property (currently operating as a fitness gym) and Park Boulevard. Across Park Boulevard are commercial businesses, including WeWork (a shared workspace facility) and Vance Brown Builders corporate office. A newly constructed commercial office building is present across Park Boulevard from the northwestern corner if the subject property. This building is not yet occupied.

Properties to the South

The site is bounded to the south by the remainder of the El Camino Center. Playground Global occupies the entire southern portion (south of the now vacant Fry's tenant space).

Properties to the West

The site is bounded to the west by a commercial property and several single-family residential properties that front Olive Avenue. The commercial warehouse property, located at 245 Olive Avenue, is not identified by external signage.

Properties to the East

The site is bounded to the east by the channelized Matadero Creek. Further to the east are commercial businesses associated with the El Camino Center including Kuni Auto Motors, .

3.7 Past Uses of Property and Adjoining Properties

3.7.1 Historical Sources

Site use information was obtained through a review of the following list of historical sources. The results of the review of these sources are summarized in the next section.

- **Aerial Photographs:** Aerial photographs obtained from GeoSearch were reviewed for the following years: 1930, 1939, 1948, 1956, 1960, 1968, 1970, 1974, 1981, 1987, 1991, 2003, 2005, 2009, 2010, 2012, 2014, 2016, and 2018. The photographs are presented in Appendix D. Copies of the aerial photos are presented in Appendix C;

- **Sanborn Fire Insurance Maps:** Sanborn Fire Insurance Maps were compiled by GeoSearch: 1904, 1908, 1925, and 1945. Fire insurance maps complied by EDR and included in the PES 2011 Phase 1 ESA were also reviewed for the following years: 1956, 1969, and 1978. Copies are provided in Appendix E;

- **Topographic Maps:** Various topographic maps of the subject property vicinity were compiled by GeoSearch. The following maps were included in the compilation: USGS*, Palo Alto, California* and *Mountain View, California* Quadrangles 7.5-minute series topographic maps produced in 1953, 1961, 1968 (1961 photo-revised), 1973 (1961 photo-revised), 1991, 1997 (1991 phot-revised), and 2012; *Palo Alto, California* Quadrangle 15-minute series topographic maps produced in 1943 and 1948; and *Palo Alto, California* Quadrangle 30-minute series topographic map produced in 1897, 1899, and 1902 were reviewed by PES. Copies of the maps are presented in Appendix F;

- **City Directories:** A search of city directories was performed by GeoSearch for the addresses on Portage Avenue and Park Boulevard for the years 1942 through 2019 in approximately 5-year intervals. A copy of the directory searches are presented in Appendix G; and

- **Previous environmental documents for the subject property:** A discussion of the documents is presented in Section 4.0.

3.7.2 Historical Review Summary

Subject Property

Earliest historical information, topographic maps from 1897, 1899 and 1902, show the subject property as undeveloped. Development of the site began in 1918 with the construction of a food canning/processing plant by Thomas Foon Chew. By 1925, Sanborn fire insurance maps show a warehouse/food processing building operated by Bayside Canning Company within the current day footprint of the former retail portion (336-340 Portage Avenue) of the El Camino Center building. The portion of the building that extends onto the subject property is listed as warehouse. The area north of this building, which now includes the 200 to 320 Portage Avenue portion of the El Camino Center building, is recorded in 1925 as vacant except for a dwelling and a small out building fronting Park Boulevard (historical address: 1518 Third Street). The urbanized area surrounding the site was known as Mayfield. In 1930, aerial photographs show the El Camino Center building on the subject property has expanded over the eastern half of the footprint northward to present day Park Boulevard. A 1939 aerial photograph shown that the dwelling had been removed and the El Camino Center structure had been completed to its current footprint. Two small buildings, the cannery warehouse and later foundry buildings, are visible adjacent to the northwest side of the main building, between the Southern Pacific right-of way and spur adjacent to the loading dock of the building Matadero Creek, present along the east side of the property, has not been channelized at time and there was no vehicle parking on the eastern side of the property In 1945, the subject property was

being operated by Sutter Packing Company, for the processing and canning of fruits and vegetables. Shown on the 1948 photograph, the parking area to the east of the main building had been improved for truck parking and storage.

No significant changes to the subject property occurred from the late 1940s until the mid 1970s when the Palo Alto foundry vacated the property and the two small buildings were demolished in the late 1970s. During this period, the subject property was used for a variety of produce packaging and canning as well as retail sales for goods. The most significant change to the subject property was the realignment of Matadero Creek which increase the parking areas on the eastern side of the site. By 1990, a portion of the main building on the subject property was used by Mercer Processing for freeze-drying fruit. This business, which operated until 1998, is further discussed in Section 4.0. Finally, from the mid-1980s until recent, the subject property was used for retail sales and office operations.

In summary, historical uses records for the subject property are as follows:

Current Address	Historical Address	Business Listings
200 Portage Avenue	3200 Park Boulevard	Bayside Canning (1918-1928); Sutter Packing Company (1928-1949); James R W Packaging (1949 – 1962); Maximart Dept Store (1964 – 1978); Hamdco Inc How (1965); Maximart Snack Bar Kestr (1965); P A Sundry Sales Inc Drug Store (1965); Maximart Automotive & Bikes (1970-1975); Maximart Camera Sales (1970); Maximart Jewelry And Luggage (1970); Maximart Radio (1970); Aximart Sundries (1970); Hamdco Inc (1975); Juvenile Shops Ltd (1975); Maximart Camera (1975); At E (1986); At E Micrographics (1986); Advanced Technology Enterprises (1986); Computer Parts Mart (1986); Nyden Eclectic Construction (1986); Mid Peninsula Access Corp (1991-1994); Cable Co Op (1991-1999); Glenda Torres (2004); Silicon Valley Community Commu (2009); Intapp Inc (2009); Integration Appliance Inc (2009); Tsunami Software (2009); No Listing (2014-2017); Intapp (2019).

Current Address	Historical Address	Business Listings
210 Portage Ave		No Listing (1942-1997); Euphonics (1997 - ?); Paycycle Inc (2009); Better Planet Investments (2014-2019); Imo Im (2014-2019); Paycycle Inc (2017).
220 Portage Ave		No Listing (1942-1991); Euphonix Inc (1994); Euphonix Incorporated (1999); Rensong Tsay (2004); Euphonix Inc (2009-2014); Boxnet Inc (2014-2017); Box.Net Inc (2019); Nauto Inc (2019).
230 Portage Ave		No Listing (1942- 1989), Mercer Processing (1989-1999); The Teak Patio (2004-2011); Blue Sky Outdoor (2014); Regency Teak (2014); No Listing (2017-2019).
336 Portage Ave	303 Portage Avenue 330 Portage Avenue 332 Portage Avenue 335 Portage Avenue 336 Portage Avenue	No Listing (1942-1960); Advance Transformer Co (1965); James R W Packaging Pkg (1965-1975); James Packaging Corp (1982); Pogo Educational Services (1991); ABC Self Storage (1991-1994); Douglas Rafferty Tech Document (1994); Carroll Publishing Co (1991); Sound Approaches (1991); Lanig Associates (1994-1999); Occupant Unknown (2004); Ready To Play (2009-2017); Neighborhood Tech Support (2014-2019); Trueinsider Inc (2014); Sunbridge Global Inc (2017); Zendo Products Inc (2019) No Listing (1986-2019).
None	3180 Park Boulevard	Palo Alto Foundry (1970-1975).

Subject Property Vicinity

Historical information indicates that the subject property vicinity was primarily undeveloped until the early to mid 1900s with sporadic residential uses and grassland agriculture. Residential infilling with gradual partial replacement by commercial and light industrial uses occurred from 1948 through the 1970s. After the 1970s, development of the subject property vicinity was largely complete with little change in site use, whether residential or commercial.

4.0 PREVIOUS ENVIRONMENTAL INVESTIGATIONS AND REMEDIATION

Several investigations and remedial activities have been performed on the El Camino Center property in its entity, including Phase I ESAs, soil and groundwater sampling, underground storage tank (UST) removals, soil excavation and other activities. Documents reviewed concerning the El Camino Center were provided by current and prior property owners (as summarized in the PES 2011 Phase 1 ESA [see below]) and obtained from the California State Water Resources Control Board's GeoTracker website at http://geotracker.swrcb.ca.gov/. PES's review of these documents is summarized below. Copies of pertinent reports are provided electronically in Appendix H.

4.1 Previous Site Investigations Including the Subject Property

4.1.1 1992 Kennedy/Jenks Phase 1 Environmental Site Assessment (K/JC, 1992a)

In January 1992, Kennedy/Jenks Consultants (K/JC) conducted a Phase 1 environmental site assessment and focus soil investigation of the Southern Pacific Railroad (SP) right-of-way that traverses north-south across the western portion of the subject property. According to the K/JC document, the SP right-of-way between El Camino Real and Park Boulevard were assessed and investigated for potential environmental risks. With the exception of a small storage structure adjacent to Park Boulevard (on the subject property), no buildings were present on the right-of-way. The rails were reportedly removed between 1985 and 1990 followed by grading to allow placement of a hardscape asphaltic cover. There was no mention of removal of the railroad ties or underlying ballast materials.

During the Phase 1 assessment, K/JC personnel found no evidence of the following:

- Surface impoundments;
- Aboveground storage tanks;
- Treatment or disposal operations involving hazardous materials or wastes;
- Stained ground surface or distressed vegetation;
- Underground storage tanks;
- Chemical handling or storage areas; or
- Asbestos- or PCB-containing materials.

Historical chemical use on the right-of-way was reportedly limited to herbicides to keep the track clear of weeds and other obstructive vegetation as well as track curve and switch greases. Curve oiling mechanisms have been used on portions of the SP tracks since the 1940s with the oil being stored in small underground storage tanks. K/JC personnel found no evidence of curve oiling mechanisms or oil storage on the right-of-way that traverses the subject property.

Other historical information provided in the K/JC Phase 1 ESA was consistent with that presented in Section 3.7.

As part of the K/JC Phase 1 assessment, soil samples were collected from 8 locations along the SP right-of-way with 4 locations in close proximity to or on the subject property. At each location, soil samples were collected from depths of 6, 10, 15 and 19 feet below ground surface (bgs). Composite samples, consisting of the 6- and 19-foot discrete samples, were created at each location and analyzed for one or more organic and inorganic constituents including total petroleum hydrocarbons quantified as gasoline (TPHg) and diesel (TPHd), volatile organic compounds (VOCs), organochlorine pesticides, PCBs, Title 22 metals, semi-volatile organic compounds, and total oil and grease (TOG). No groundwater sampling was conducted during the K/JC investigation.

The results of the soil analyses for the samples collected on the subject property identified the presence of low concentrations of TOG in one sample below current Tier 1 screening levels and metals consistent with naturally-occurring conditions. TPH, VOCs, SVOCs, pesticides, and PCBs were not detected in any samples above the laboratory reporting limits.

4.1.2 Environ Corporation Groundwater Investigation (Environ, 1992)

In February 1992, Environ Corporation (Environ) performed a cone penetration test (CPT) along the SP Right-of-Way on behalf of HP and Varian. The CPT procedure consisted of advancing a probe to approximately 80 feet bgs at three locations along the SP right-of-way with the boundary of the subject property (Environ, 1992). Grab groundwater samples were collected at selected locations at depths ranging from approximately 22 to 48 bgs and analyzed for the presence of VOCs. TCE was detected at concentrations ranging from 76 to 240 μg/L, and 1,1,1-TCA and dichloromethane (DCE) were detected in one location at 270 and 290 μg/L, respectively.

4.1.3 1992 Kennedy/Jenks Additional Groundwater Sampling (K/JC, 1992b)

In April 1992, K/JC performed additional soil sampling in the vicinity of Environ's CPT location in which TCE, 1,1,1-TCA and DCE were detected (KJC, 1992b). KJC advanced borings to a depth of approximately 20 feet bgs, and collected soil samples at approximately 5-foot intervals. TCE was detected in several samples at concentrations ranging from 2 to 10 μg/kg. K/JC concluded that the concentrations were consistent with diffusion of soil gas through the capillary fringe (associated with the HP and Varian investigation) rather than evidence of a surface spill.

4.1.4 2002 Former Mercer Processing Investigation and Remediation

Multiple documents were reviewed related to the former Mercer Processing, Inc. (Mercer) investigations and remediation conducted along the southern edge of the subject property inside the current 230 Portage Avenue tenant space (see Plate 2). A list of the reports reviewed included the following:

- IT Corporation, 2000. *Soil Sampling and Analysis Report, Former Mercer Processing Facility, 230 Portage Avenue, Palo Alto, California*. July 24 (IT, 2000);

- IT Corporation, 2000. *Additional Definition Soil Sampling and Analysis Report, Former Mercer Processing Facility, 230 Portage Avenue, Palo Alto, California*. November 21 (IT, 2001);

- PES, 2000. *Facility Closure Assessment, Former Mercer Processing Facility, 230 Portage Avenue, Palo Alto, California*. January 2000 (PES 2000);

- PES, 2001. *Final Remedial Action Plan, Former Mercer Processing Inc. Facility, 230 Portage Avenue, Palo Alto, California*. October 18 (PES, 2001);

- PES, 2001. *Remedial Action Completion Report, Former Mercer Processing, Inc. Facility, 230 Portage Avenue, Palo Alto California*. March 12 (PES, 2002); and

- California Regional Water Quality Control Board, San Francisco Bay Region, 2002, *No Further Action at 230 Portage Avenue, Palo Alto, Santa Clara County*. April 8 (RWQCB, 2002).

Mercer Processing, Inc. (Mercer) occupied the tenant space at 230 Portage Avenue from 1989 to 1999. Operations performed by Mercer at this location included freeze-drying and packaging of food products. Refrigeration equipment used in the freeze-drying process contained solvents, including TCE, and Genesolv 2000, also referred to as Refrigerant 141b and composed of 1,1-dichloro-1-fluoroethane.

In 1999, PES performed a Facility Closure Assessment to assess whether operations at the Mercer facility had adversely affected environmental conditions at the site (PES, 2000). The results of analysis performed on ten soil samples collected in the vicinity of the former refrigeration unit indicated the presence of acetone, methyl ethyl ketone, TCE, and tert-butanol in the soil samples. Additional investigations were performed to further define the lateral and vertical extent of chemicals in the vadose zone beneath the site (IT, 2000). Chemicals detected in the soil included TCE, 1,1-dichloroethene, cis-1,2-dichloroethene, and trans-1,2-dichloroethene. The highest concentrations were found beneath the former refrigeration unit.

A Remedial Action Plan (RAP) was subsequently developed to address contamination identified at the site (PES, 2001). The RAP included an evaluation of risk to human health and the environment, principally groundwater resources, development of a site-specific remedial goal for contaminated soil, an evaluation of remedial alternatives, and a description of the procedures to implement the recommended remedial alternative. Based on the results of the health and environmental risk assessment, a soil cleanup goal of 0.2 mg/kg of TCE was recommended. The risk assessment indicated that removal of TCE-affected soil exceeding 0.2 to 0.4 mg/kg would be protective of human health for residences with a concrete floor slab. Soil excavation was the selected remedial alternative. The RWQCB concurred with the RAP in a letter dated October 18, 2001.

Remedial activities were performed at the former Mercer facility during January 2002 (PES, 2002). Approximately 285 cubic yards of TCE-impacted soil was excavated to a maximum depth of approximately 20.5 feet below grade. Excavated soil was characterized and disposed offsite. On the basis of verification soil samples collected from the bottom and sidewalls of the excavation, soil with TCE concentrations exceeding the target cleanup goal was removed from the site. During excavation, several concrete footings and inactive utilities were uncovered and removed. Groundwater was not encountered during the excavation of TCE-impacted soil. The excavation was backfilled with sand cement slurry, imported clean fill, and re-usable excavated clean soil. The area of soil excavation was capped with a concrete slab. In a letter dated April 8, 2002, the RWQCB stated the remedial goal had been achieved, and that no further action was required (RWQCB, 2002).

4.1.5 2010 PES Phase 1 Environmental Site Assessment

In late 2010, PES conducted a Phase 1 ESA for the entire El Camino Center including the subject property. Addresses covered in the 2011 Phase 1 ESA included 3201 and 3225 Ash Street, 200 – 382 Portage Avenue (referred to as El Camino Center), 270 Lambert Avenue, and 3250 Park Boulevard. PES's historical research conducted for the 2011 ESA was consistent with findings presented in Section 3.7 of this report.

Of note to the subject property, the 2011 Phase 1 ESA identified several potential environmental issues including the following:

- Operation of the Palo Alto Foundry in the center of the subject property in buildings formerly constructed during the cannery days and used for warehousing (see Plate 2). A sump was noted between the two buildings;

- Historical reference to an unleaded gasoline fuel dispenser formerly located near the northwest corner of the main building; and

- Investigation and remediation activities at 230 Portage Avenue related to the former Mercer Processing operations.

Other environmental issues on the El Camino Center property that are not part of the current subject property included: (1) chemical releases and UST usage by Dura-Bond, (2) a subsurface fuel oil vault investigation along the loading dock south of the subject property, (3) several UST closures in the main parking lot south of the subject property associated with former produce packing operations conducted at the center, and (4) the regional COE chlorinated solvent groundwater plume which underlies the entire El Camino Center. A summary of these issues is presented in Section 4.1.8.

4.1.6 2010 PES Phase 2 Environmental Testing and Analysis

In late 2010, soil sampling and analysis was conducted along the former SP railroad and rail spur alignments to assess whether there may have been impacts to site soils from residual polynuclear aromatic hydrocarbons, arsenic and petroleum hydrocarbons.

Along the former Southern Pacific rail alignment there was no evidence of significant impact due to the railroad activities. There was a detection of diethyl phthalate at a concentration significantly exceeding the corresponding residential ESL. The source of this compound was not known, it was not detected at other sampling locations.

Under the footprint of the former foundry, there were concentrations of vanadium detected above residential and commercial ESLs. However, the concentrations appear to be within naturally occurring background concentrations reported for soils in California. Arsenic was detected at concentrations above background and above ESLs at two locations under the former rail spur along the northern portion of the building and at one location under the southern portion of the former foundry building. Total petroleum hydrocarbons quantified as motor oil were also detected above residential ESLs in force at the time at three locations in the same general area.

The results of the PES soil investigation suggested that while widespread environmental impacts were not identified in the areas tested there may be sporadic elevated concentrations of metals and hydrocarbons in the near surface soil consistent with the former use of the property for industrial activities.

Finally, a geophysical survey was conducted in the vicinity of the former fuel dispenser discovered during the PES Phase 1 ESA. No evidence of a UST in the vicinity of this feature was detected.

4.1.7 El Camino Center Environmental Issues Not Related to the Subject Property

4.1.7.1 Former Dura-Bond Facility, 370 Portage Avenue

The bearing manufacturer, Dura-Bond, originally maintained a sludge pond associated with a wastewater treatment system, and had gasoline, diesel, Stoddard solvent and waste oil USTs, in addition to using other hazardous materials in the facility, such as lubricant oils, acids, and metals. During the 1980s, the wastewater treatment system was closed, and the USTs were removed from the facility. Soil was excavated from beneath the sludge pond and USTs, but it did not appear that confirmation samples were collected from all areas of the excavations. Groundwater samples were collected from three to four monitoring wells installed as part of the removal activities, and were initially found to contain elevated levels of TPHg, TPHd and lead. After four years of groundwater monitoring, contaminant levels were below detectable limits. Regulatory case closure for the USTs was issued in 1998. During closure of the facility in 1989, soil sampling indicated the presence of elevated concentrations of lead and

zinc within the facility. Soil excavation was performed, but confirmation sampling was not performed in all excavated areas. A subsequent soil investigation performed to investigate the completeness of the investigation identified the presence of elevated concentrations of lead and zinc remaining in soil at depths of up to 10 feet bgs. Tentative Site Cleanup Requirements were issued by the RWQCB for the Dura-Bond facility in 1990, but do not appear to have been filed.

4.1.7.2 Subsurface Fuel Oil Vault Investigation

In 1997, while excavating for a new storm sewer pipe installation, the property owner's contractor encountered a concrete structure and petroleum hydrocarbon-affected soil on the west side of the main building (Plate 2). An inspection of the vault was made through an access port; the presence of a black, oily liquid was observed at a depth of approximately 5 feet bgs. Based on this observation, an investigation, abandonment and closure of the vault was performed by PES in 1997 (PES, 1998) under oversight of the City of Palo Alto Fire Department (PAFD).

After removing overburden from the vault, its dimensions were measured to be 13 feet wide by 36 feet long by 8 feet deep, with a capacity of approximately 28,000 gallons. The bottom, sidewalls and top of the vault were constructed of 8-inch thick reinforced concrete. Approximately 282 tons of soil and concrete debris (from the vault top) were removed from the vault and disposed offsite. Pockets of residual liquids which remained in the vault were pumped out, and the vault sidewalls and bottom were then cleaned using a citrus-based degreaser and high pressure steam rinse. Rinseate was pumped out, and approximately 2,500 gallons of residual product and rinseate were disposed offsite.

The bottom and sidewall of the vault was subsequently inspected by PES and PAFD personnel. No cracks in the walls or bottom of the vault or other visual evidence indicating the integrity of the vault was compromised was observed during the inspection. PAFD gave approval to abandon the vault in place. The eight core holes were filled with sand to allow fluids entering the vault to drain into the subsurface. The vault was backfilled with clean native material obtained onsite during site improvements activities, and the storm sewer piping was replaced. The surface was covered with asphaltic concrete pavement. The site received case closure from PAFD following confirmation sampling and abandonment of the vault (PAFD, 1998).

4.1.7.3 USTs Associated with Former Produce Packing Business

During a 2010 subsurface investigation, two undocumented USTs, with approximate capacities of 1,000 and 1150 gallons, were identified in southwestern portion of the main parking area of the El Camino Center. The USTs are believed to have stored gasoline and/or diesel fuels related to historical vehicle fueling activities conducted as part of produce packing and transportation operations formerly conducted on the site sometime in the 1950s, until an uncertain date.

The USTs and surrounding tank backfill materials were removed in October 2011 under oversight of the Santa Clara County Department of Environmental Health. Additional hydrocarbon-affected soils were also excavated to a depth of first encountered groundwater. The UST removals are documented in PES' December 22, 2011 report, *Underground Storage Tank Removal Report, El Camino Center, 340 Portage Avenue, Palo Alto, California* (PES, 2011).

Following the UST removal, which included excavation of approximately 750 cubic yards of hydrocarbon-affected soil and application of approximately 500 pounds of oxygen-releasing compound (ORC) to assist in degradation of residual hydrocarbons in the subsurface, a series of subsurface investigations were conducted in the vicinity of the former location of the USTs to document soil and groundwater conditions following the UST removals.

Petroleum residuals in soil appeared to be limited to the vicinity of the former tank and were present in three locations at concentrations slightly above 2008 environmental screening levels (ESLs)[3]. The extent of residual petroleum hydrocarbons in groundwater appears to be generally controlled by lateral groundwater flow in the downgradient north-to-northeast groundwater flow direction. Mobile non-aqueous phase liquid (NAPL) has not been observed in any groundwater samples. Dissolved residual petroleum hydrocarbons appeared to be depleted via natural attenuation, advection, and diffusion. The highest concentrations of petroleum hydrocarbon residuals in groundwater was found to be in the near vicinity of the former tanks, represented by and the downgradient extent of the residual hydrocarbon plume was documented to be less than 150 feet in length. No significant concentrations of volatile organic compounds were identified in soil or groundwater associated with the former USTs. Based on these findings, the County of Santa Clara Environmental Health Department (SCCDEH) granted case closure[4] for this UST issue on July 7, 2015.

4.1.7.4 California-Olive-Emerson Regional Groundwater Plume

Groundwater contamination associated with the California-Olive-Emerson (COE) regional chlorinated solvent plume has been identified at the subject property. The VOC plume associated with the up-gradient Varian, Eastman Kodak and Dura Bond [not related to site activities] facilities has been under investigation since 1981. Two active monitoring wells associated with the investigations are present on the subject property and are sampled on a biannual basis. Further discussion of the COE regional plume is provided in Section 5.2.2.

[3] California Regional Water Quality Control Board (RWQCB) Environmental Screening Levels (ESLs), May 2008.

[4] County of Santa Clara Department of Environmental Health, 2015. *Fuel Leak Site Case Closure at El Camino Center, 340 Portage Avenue, Palo Alto, CA; Case No. 14-825, SCVWDID No. 06S3W12J02f, July 7.*

5.0 RECORDS REVIEW

5.1 Environmental Liens

Based on review of an environmental database search conducted by GeoSearch, there are no Federal Superfund (NPL) liens or State deed restrictions associated with the subject property (see Appendix A).

5.2 Standard Environmental Record Sources

The discussion presented in this section is based on available information provided by government agencies and various databases. An GeoSearch report dated October 23, 2020 contains listings of sites located within a 1-mile radius, which were selected in accordance with ASTM E 1527-13 standards. This information is obtained from computerized databases of Federal, State, and local records. Descriptions of the lists reviewed are presented below. The GeoSearch database report is included as Appendix I. The following regulatory agency databases were searched and reported in the GeoSearch report:

- U.S. EPA – Comprehensive Environmental Response Compensation, and Liability Information System (CERCLIS) – within ½-mile of the subject property;
- U.S. EPA – CERCLA NPL – within 1-mile of the subject property;
- U.S. EPA – Resource Conservation and Recovery Information System, Small Quantity and Large Quantity Generators of hazardous waste (RCRAGR09) and non-generators (RCRANGR09) databases within ½-mile of the subject property;
- U.S. EPA – Emergency Response Notification System (ERNS) – within ¼-mile of the subject property;
- U.S. EPA RCRA Corrective Action Report (CORRACTS) – within 1-mile of the site;
- U.S. EPA Facility Registry System (FRSCA) – within ¼-mile of the subject property;
- U.S. EPA Enforcement and Compliance History Information (ECHOR09) – the subject and adjacent properties;
- U.S. EPA Toxic Chemical Release Inventory System (TRI) – within ¼-mile of the subject property;
- U.S. Engineering Control Sites - within ½-mile of the subject property;
- U.S. Institutional Control Sites – within ½-mile of the subject property;

- California State Water Resources Control Board (SWRCB) – Leaking Underground Storage Tank Listing (LUST) sites including Indian Land – within ½-mile of the subject property;

- SWRCB – Underground Storage Tank (UST) – within ½-mile of the site;

- SWRCB – Voluntary Cleanup Sites (VCP) – within ½-mile of the site;

- DTSC – EnviroStor Database including known contamination, deed-restricted, and Brownsfield sites – within 1-mile of the subject property;

- DTSC – Voluntary Cleanup Program (VCP) – within ½-mile of the site;

- DTSC – Facility and Manifest Data (HAZNET) – the subject property; and

- California Department of Resources, Recycling, and Recovery – Solid Waste Information System (SWIS)– within ½-mile of the subject property.

In addition, local, State and Federal supplemental regulatory databases were searched (e.g., AST and Waste Discharge System databases) and summarized in the GeoSearch report. The findings of the review of the GeoSearch report are presented below.

PES also searched the following agency websites for environmental records related to the subject property and nearby properties:

- California State Water Resources Control Board's GeoTracker website located at http://geotracker.swrcb.ca.gov/. Listings from this database are also compiled in the GeoSearch report as CLEANUPSITES locations;

- Department of Toxic Substances Control's (DTSC) EnviroStor website located at http://www.envirostor.dtsc.ca.gov/public/default.asp; and

- United States Environmental Protection Agency (USEPA) website located at https://yosemite.epa.gov/r9/sfund/r9sfdocw.nsf/vWSOAlphabetic?openview.

Additionally, PES requested records for the subject property from the Santa Clara County Environmental Health Department. County personnel indicated that all records maintained by their department have been moved to the State GeoTracker system.

5.2.1 Subject Property Records

The GeoSearch Radius Report identified tenants (current and past) for the subject property on the following databases: CHMIRS, CLEANUPSITES, ECHOR09, FRSCA, HWTS, LUST, RCRAGR09, and SLIC. Many of the listings are related to the 340 Portage Street address which tenant space is shared between the subject property and the adjacent remaining

El Camino Center parcel to the south. The listings for the subject property include the following:

- **Mercer Processing**, 230 Portage, is listed on the CLEANUPSITES, FRSCA, and SLIC database. The listing refers to the soil excavation at the facility as discussed further in Section 4.1.5. The database lists the site as having received case closure as of April 8, 2002;

- **Systems Control Inc**., 220 Portage, is listed on the RCRAGR09 database. No violations are listed for the site. Tenant roles for the subject property do not have any record of Systems Control Inc. as a tenant on the subject property. No hazardous material records concerning at this address were identified in available records; and

- **Release Report – City of Palo** Alto, 210 Portage Avenue, is listed on the CHMIRS data for a sewage spill that occurred in June 2013. An underground pipe was broken and discharge was threating a nearby storm drain inlet. The spill was cleaned up with no report of violations.

PES reviewed records for the subject property from the California State Water Resources Control Board's GeoTracker website located at http://geotracker.swrcb.ca.gov/; and Department of Toxic Substances Control's (DTSC) EnviroStor website located at http://www.envirostor.dtsc.ca.gov/public/default.asp.

The discussion of regulatory agencies records for the subject property, which were limited to the Mercer Processing case, is included in Section 4.0.

5.2.2 Surrounding Area

With the exception of identified environmental issues on the adjacent El Camino Center property which are discussed in Section 4.1.8, the following is a discussion of sites listed on regulatory agency databases which have the potential to affect environmental conditions at the subject property.

Hewlett Packard (HP) at 395 and 640 Page Mill Road, Varian at 601 California Avenue

Hewlett Packard (HP) at 395 and 640 Page Mill Road, Varian at 601 California Avenue, and offsite areas (referred to as the California-Olive-Emerson (COE) Area and Perimeter Area) comprise the study area associated with a comingled VOC plume. The primary chemicals of concern are TCE, 1,1,1-TCA, 1,1-DCE, 1,1-DCA and PCE. TCE is the VOC most widely distributed and at the highest concentrations. The most recent groundwater monitoring report (2010 Annual Groundwater Monitoring) for the HP-Varian investigation is included in Appendix G.

Soil and groundwater investigations were initiated by HP in 1981 as a result of a leaking waste solvent UST (Environ, 1994). Investigations and remediation activities at HP-Varian and

offsite areas are performed under oversight by the RWQCB and in accordance with RWQCB Order 94-130 (Order; RWQCB, 1994). Cleanup standards for groundwater are U.S. EPA MCLs, California Department of Environmental Protection MCLs, or, for acetone, a target level based upon toxicity characteristics. The cleanup standard for TCE in groundwater is 5 μg/L. Remedial activities associated with the plume have included soil vapor extraction, groundwater extraction and treatment, and injection.

Two water-bearing zones were identified during the investigations, termed the A aquifer (further divided into the A1 Upper [A1U], A1 and A2 Zones) which extends between approximate depths of 13 to 55 feet bgs, and the B aquifer (further divided into the B1 and B2 Zones) which was encountered between depths of approximately 60 and 120 feet bgs. Groundwater flow to the north-northeast has been measured in both zones.

The results of the most recent groundwater monitoring event (June 2020) indicates that the TCE plume in the A1 Upper and A1 Zones extends onto the El Camino Center property but only the A1 Zone appears to significantly affect the subject property. The plume does not extend to the subject property in the A2 or B Zones. In the A1 Upper Zone, the El Camino Center property is shown partially encroached by the 5-49 μg/l contour intervals but does not extend onto the subject property. In the A1 Zone, the subject property is bisected by the 5 μg/L contour interval (Santec, 2020).

Three active monitoring wells associated with the COE investigations are present on the subject property as shown on Plates 2 and 3. Two wells are in the A1 Zone (F140A1 and F77A1) and one well is in the A2 Zone (F76A2) are sampled biannually and infrequently, respectively. TCE has been detected in Well F140A1 at consistent concentrations ranging from 0.63 and 3.4 μg/l between 1996 and 2019. In Well F77A1, TCE has been detected at concentrations ranging from 0.56 to 250 μg/l during the period of 1991 to June 2011. After this date TCE has not been detected in this well. No TCE concentrations above the cleanup standard have been detected in Well F76A2 since 1996 although very low levels of associated breakdown products have been detected. Monitoring of Well F76A2 was suspended in 2000.

Say Ray Auto, 3225 Ash Street

Say Ray Auto is listed on the Historical UST database (as Sun Ray Foreign Auto Service at 325U Park Boulevard – an apparent typographical error). The database lists the facility with a waste oil UST. Regulatory agency records did not include any information regarding the potential removal of this UST. This facility is located potentially upgradient of the subject property, and has the potential to affect groundwater beneath the subject property.

Several other sites in the subject property vicinity are listed on hazardous materials release and/or storage databases. However, the other sites listed in the databases are not expected to present significant environmental conditions to the subject property based on one or more of the following: (1) the listed site has received case closure by the appropriate regulatory agency; (2) the listed site is either crossgradient or downgradient of the subject property with

respect to the inferred regional groundwater flow direction; (3) the listed site is a soils-only affected case; and (4) the listed site is located at too great a distance to represent a significant environmental condition with respect to the subject property.

Star Graphics, 3200 Ash Street

Star Graphis is listed on the SWEEPS database. Historical site documents included a report prepared by J.V. Lowney Associates (Lowney) concerning a reconnaissance and soil quality investigation at the former Star Graphics facility formerly located at 3200 Ash Street. Lowney reported that Star Graphics had occupied the building from approximately 1974 through 1989, and used the building for production of color film negatives. A 2,000-gallon fiberglass UST (contents not specified) was present in the parking lot in front of the building, and was reportedly scheduled for removal during 1990 (Lowney, 1990). Floor drains were observed in the main processing area, and staining was observed on floors within the building. Lowney collected soil samples from approximately 1-foot beneath the concrete slab and collected liquid and residue present in floor drains. The six soil samples were composited into two samples and the four drain samples were composited into one sample. All samples were analyzed for VOCs, SVOCs, CAM-17 metal, and hexavalent chromium. One composted soil sample contained an elevated concentration of silver, but the concentration was below regulatory limits. Some organics were identified in the drain residue, suggesting that organics may have been discharged into the sanitary sewer. Lowney suggested that groundwater monitoring wells could be installed to further evaluate potential releases to the subsurface. No information was found in regulatory files concerning removal of the UST, however, a letter in a prior property owners files indicated that the UST had been removed, and that analytical data from soil samples collected from beneath the UST indicated that the UST had not leaked (Parfitt, 1990b).

5.2.3 Vapor Intrusion

As discussed above in Section 5.0, there is currently no reported use or storage of volatile organic compounds (VOCs) at the subject property. TCE was historically used by the former tenant Mercer Processing at 230 Portage Avenue, but TCE-contaminated soil was removed in 2002, and no impact to groundwater was identified (see Section 4.1.5). The presence of residual TCE in soil beneath the Mercer Processing remediation area represents a potential vapor encroachment concern for the property. A regional VOC plume is also present in the subject property vicinity, and VOCs have been detected in groundwater monitoring wells on the subject property which presents the potential for vapor intrusion to be a concern at the subject property.

6.0 SITE INSPECTION

Inspection of the subject property was conducted by Mr. James Dunn and Ms. Lucia Tropeano, both of PES, on October 14 and October 20, 2020, accompanied by Mr. Tim Steele and Ms. Shelle Barnes of Sobrato. All accessible areas of the subject

property were inspected. Site details are illustrated on Plate 3 and Site photographs are provided on Plates 4 through 15.

The subject property contains one single-story building and associated paved parking and landscaped areas. Where occupied, uses of the subject property building, which include primarily office, unoccupied space, storage, and fitness gym, are as follows:

Address	Tenant	Use
200 and 210 Portage Avenue	Earnin/Activehours, Inc.	Office – Software Development
220 Portage Avenue	NAuto, Inc.	Office – Software Development
230 Portage Avenue	Vacant	Storage for El Camino Center
336 Portage Avenue	Vacant	Vacant (former Fry's Electronics)

Hazardous material use at the subject property is limited to *de minimis* quantities of typical cleaning and maintenance supplies, except for the tenant spaces listed below. The grounds of the center were observed to be in generally good condition. Mr. Dunn did not observe any evidence of improper dumping or stressed vegetation. No evidence of sumps or pits was observed. No indications of septic systems were identified during the site inspection. No hazardous material use or storage in exterior areas was observed at the subject property. No evidence of USTs or ASTs was observed during the inspection.

5.1 Undeveloped Area

No undeveloped areas are present at the site.

5.2 Chemicals/Hazardous Substances Containers

Other than the items discussed above in Section 5.0, there were no obvious indications of hazardous materials use or storage at the site.

5.3 Underground and Aboveground Storage Tanks

No USTs or ASTs were observed at the subject property.

5.4 Back-Up Generators

No back -up generators were observed.

5.5 Elevators

There are no elevators on the subject property.

5.6 Hydraulic Trash Compactors

No hydraulic equipment was observed on the site.

5.7 Indications of Polychlorinated Biphenyls (PCBs)

One City of Palo Alto-owned transformers are present in parking and landscaped area in the center of the subject property. No leaks or stains were observed on the transformer or the concrete pad beneath the transformers. The transformer was not labeled as to PCB content.

5.8 Other Conditions

5.8.1 Asbestos

An assessment of asbestos-containing materials was not conducted as part of this Phase I ESA. Standards set by the Occupational Safety and Health Administration (OSHA) require building owners to presume that thermal system insulation (TSI) and surfacing asbestos containing material (ACM) found in buildings constructed before 1981, and floor tile installed in buildings through 1981, are asbestos containing, unless demonstrated to be less than 1 percent asbestos through sampling. The rule does not permit an assumption to be made that a material does not contain asbestos in buildings constructed after 1980. However, since the late 1970s to early 1980s, asbestos has been removed or substituted for in all but a small number of construction products. For example, asbestos is still used, although at low concentrations, in various mastics and roofing materials.

Based on the pre-1950 construction date of the El Camino Center, ACM may be present in these buildings. Removal of asbestos-containing tile and adhesive occurred in 1993 in the 210 Portage Avenue tenant space.

5.8.2 Radon

The National Radon Database includes radon information from U.S. EPA/State Residential Radon Surveys conducted between 1986 and 1992. The database includes test results from 4 sites within the subject property zip code. The average value for radon level reported in this region was 2.525 pico curies per liter (pCi/l) of air for the first floor living area. This is lower than the U.S. EPA's recommended action level of 4 pCi/l.

Based on the U.S. EPA and California DHS surveys, it is unlikely that radon levels at the site exceed the U.S. EPA's action level.

5.8.3 Solid Waste

Solid wastes generated at the subject property are limited to non-hazardous solid office wastes. Wastes are collected in collection bins which are picked up by GreenWaste for offsite disposal. No concerns were identified with solid waste storage at the subject property.

5.8.4 Lead in Paint

The Consumer Products Safety Commission limited lead content in residential paint to 0.06 percent (600 parts per million) in 1978. The use of paint containing greater than 0.06 percent lead was also prohibited in areas where consumers have direct access to painted surfaces. Based on the pre-1950 construction date of the El Camino Center building, lead-containing paint may be present in or on this building.

5.8.5 Mold

Molds are simple, microscopic organisms, which can often be seen in the form of discoloration, frequently green, gray, brown, or black. Molds grow on virtually any organic substance, as long as moisture and oxygen are present. Mold spores primarily cause health problems through the inhalation of mold spores or the toxins they emit when they are present in large numbers. This can occur primarily when there is active mold growth within places where people live or work.

Potential mold was observed on stained ceiling tiles in the 200 Portage Avenue tenant space.

6.0 FINDINGS AND CONCLUSIONS

6.1 Summary of Findings

The subject property has the addresses of 200 – 336 Portage Avenue and is a portion of the El Camino Center in the City of Palo Alto, Santa Clara County, California. The subject property, which comprises approximately 2 acres, contains one building with associated paved parking and landscaped areas. Matadero Creek, under an easement from Santa Clara Valley Water District, borders the eastern portion of the site. The site is located in a primarily commercial area. The site is bounded to the north by Park Boulevard and a commercial building, to the south by the remainder of the El Camino Center, to the east by Matadero Creek, and to west by a small commercial warehouse building and single-family residences.

PES's historical research indicates that the subject property main building were constructed prior to 1920. A railroad spur and line were present on the west side of the main building until the 1980s. Historical site uses and tenants in the subject property portion of the building included a warehouse and foundry (buildings no longer present), a food processor, a paper container manufacturer, a display manufacturer, a market, and offices.

During a 1992 investigation of the former SP right-of-way, soil samples were collected and composited to evaluate soil quality. Low levels of TCE detected immediately above the groundwater table were concluded to be associated with a known offsite source of contamination. No significant concerns were identified.

In 2002, soil contaminated with TCE was removed from the former Mercer Processing facility at 230 Portage Avenue. A TCE cleanup goal of 0.2 mg/kg (below current residential RWQCB cleanup standards) was used in excavating approximately 285 cubic yards of soil from depths up to 20.5 feet below grade. Regulatory case closure was issued in 2002. Based on the agency closure of this case with no conditions, the Mercer Processing facility is considered a HREC.

The subject property is currently used for offices. Hazardous material use is limited to the *de minimis* use of janitorial supplies. No significant concerns regarding hazardous material use at the site was identified.

Groundwater contamination associated with the offsite Hewlett Packard and Varian facilities has been identified at the subject property, and the facilities are listed on several environmental databases. A VOC plume associated with the facilities has been under investigation since 1981. Three active monitoring wells associated with the investigations are present on the subject property.

6.2 Conclusions and Recommendations

PES has performed a *Phase I Environmental Site Assessment,* in conformance with the scope and limitations of ASTM Practice E1527-13, of the northern third portion of El Camino Center in Palo Alto, California. Any exceptions to, or deletions from, this practice are described in Section 1.3 of this report. This assessment revealed the following historical recognized environmental conditions (HRECs) in connection with the property:

- In 2002, soil contaminated with TCE was removed from the former Mercer Processing facility at 230 Portage Avenue. Regulatory case closure was issued in 2002. However, if this area is disturbed during redevelopment and because the clean-up levels used in 2002 now exceed current environmental screening levels, agency closure of this case may be rescinded and additional soil mitigation may be required.

This assessment revealed the following recognized environmental conditions (RECs) in connection with the property:

- Groundwater contaminated with VOCs associated with the HP/Varian COE regional plume has been identified in groundwater monitoring wells present on the subject property.

While the presence of the COE VOC-affected groundwater plume encroaching on the subject property constitutes a vapor encroachment concern for the subject property, the relatively low concentrations identified in the on-site monitoring wells does not preclude

the use of the property as a residential development. Vapor intrusion risk mitigation (i.e., installation of a passive/active vapor barrier and subslab venting system) may be required and further evaluation of current site soil vapor conditions is warranted to assess the type and design of mitigation options that may be needed, if any.

Also, based on the historical industrial nature of the subject property and adjacent remaining parts of the El Camino Center, it is recommended that a site-specific soil management plan be prepared to address any unidentified and undocumented chemically-affected soil that may be encountered during redevelopment.

7.0 DATA GAPS

The following data gaps that may have affected our ability to identify RECs associated with the subject property were identified during the performance of this Phase I ESA are listed below:

- No information concerning activities and hazardous material use and storage practices at the foundry formerly present on the site was identified.

8.0 ADDITIONAL SERVICES

No additional services were performed as part of this Phase I ESA.

9.0 ENVIRONMENTAL PROFESSIONAL STATEMENT

We declare that to the best of our professional knowledge and belief, we meet the definition of Environmental Professional as defined in §312.10 of 40 CFR 312.

We have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. We have developed and performed all the appropriate inquires in conformance with the standards and practices set forth in 40 CFR Part 312.

Resumes of the Environmental Professionals signing this report are presented in Appendix J.

10.0 REFERENCES

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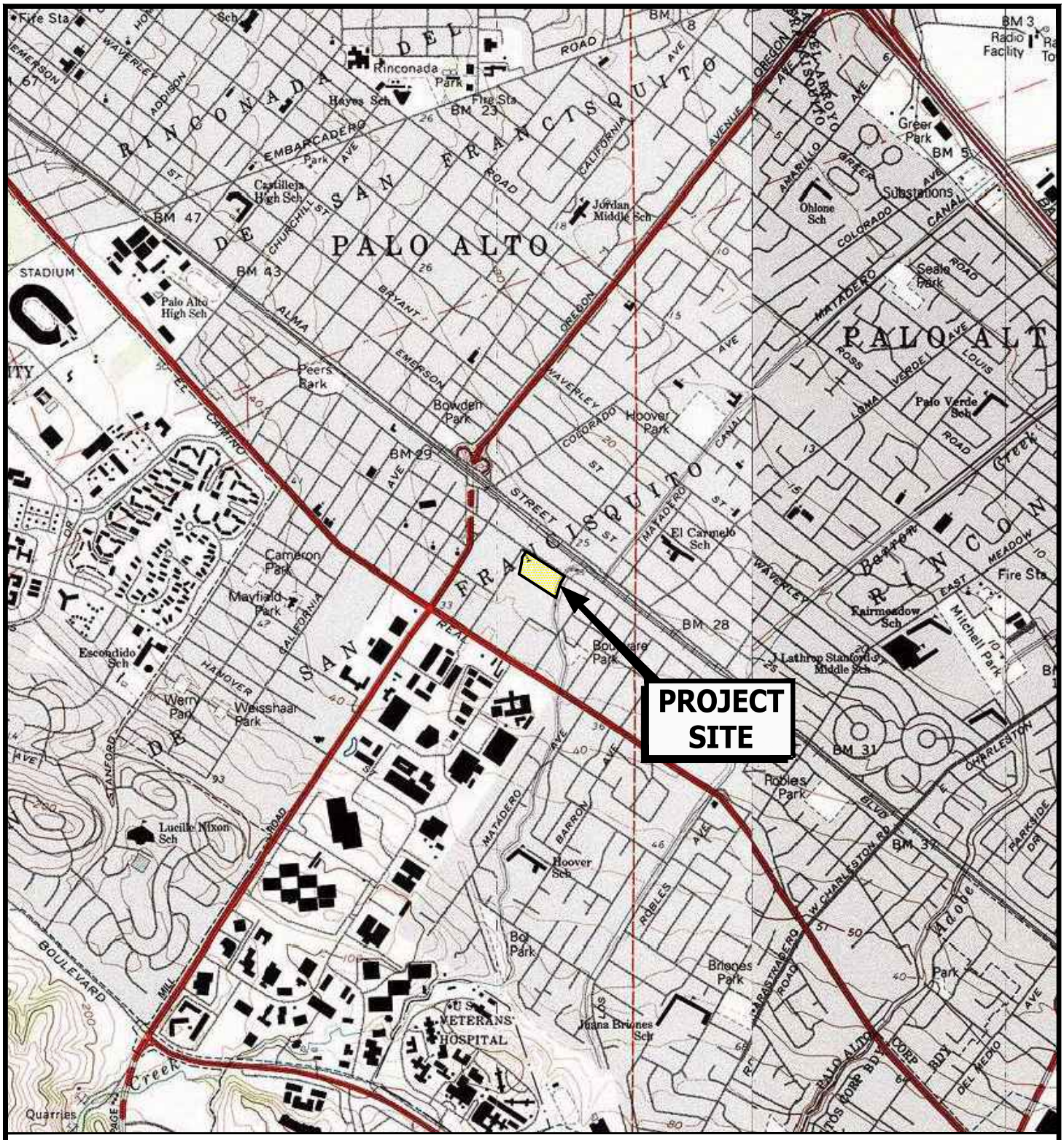
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ILLUSTRATIONS



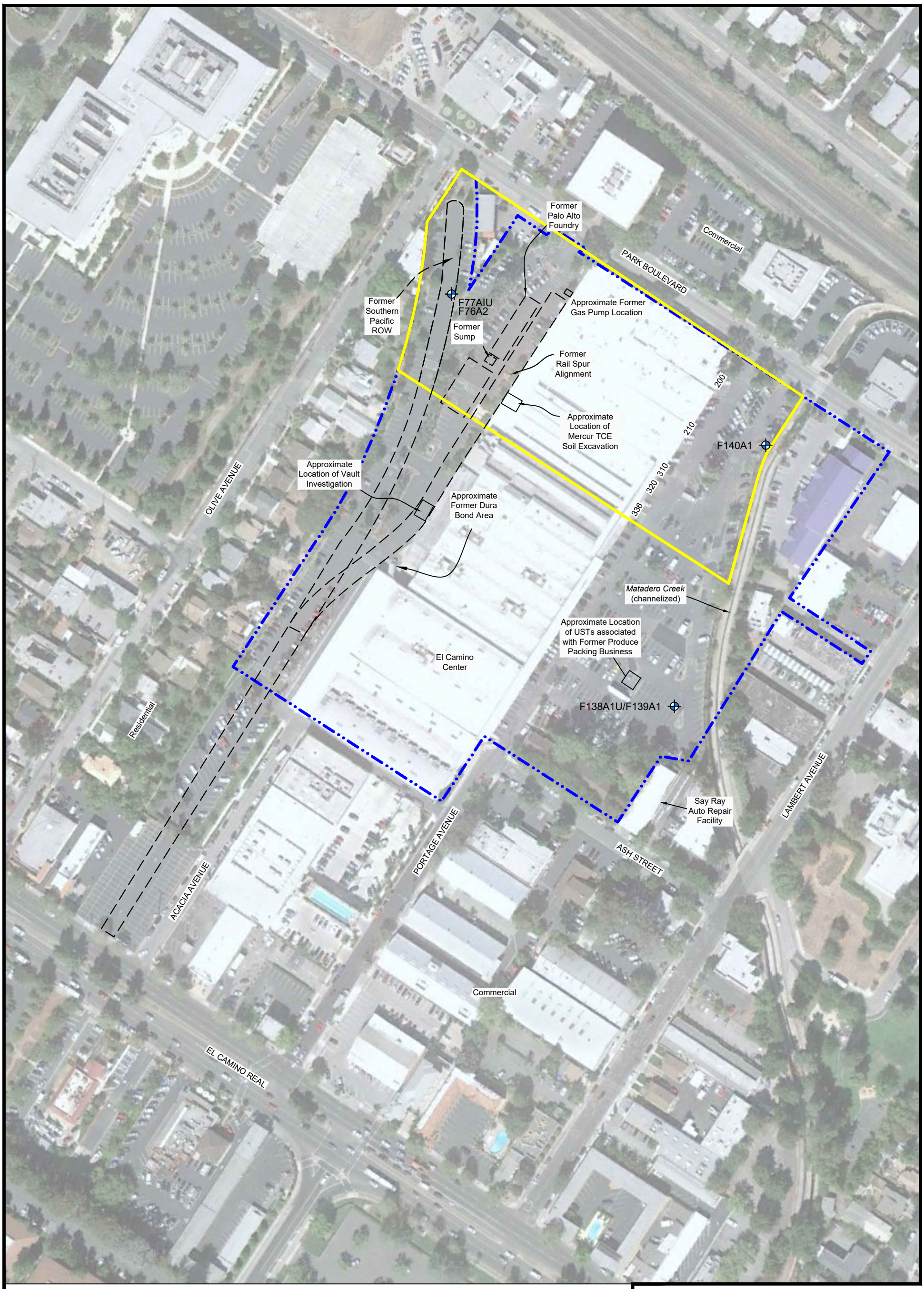
U.S.G.S. Topo Map - Palo Alto, California, 7.5-minute quadrangle. Map version 1997; current as of 1997.
U.S.G.S. Topo Map - Mountain View, California, 7.5-minute quadrangle. Map version 1997; current as of 1997.

PES Environmental, Inc.
Engineering & Environmental Services

Site Location Map
Phase 1 Environmental Site Assessment
El Camino Center - Proposed Residential Development
200-336 Portage Avenue
Palo Alto, California

PLATE
1

126.076.02.001	12607602001_ESA_1-3	JPD	11/20
JOB NUMBER	DRAWING NUMBER	REVIEWED BY	DATE



Explanation

- Approximate Boundary of Study Area
- Approximate Boundary of El Camino Center
- Approximate Location of Former Feature
- F140AI — Approximate HP/Varian Well Location

N

0 150

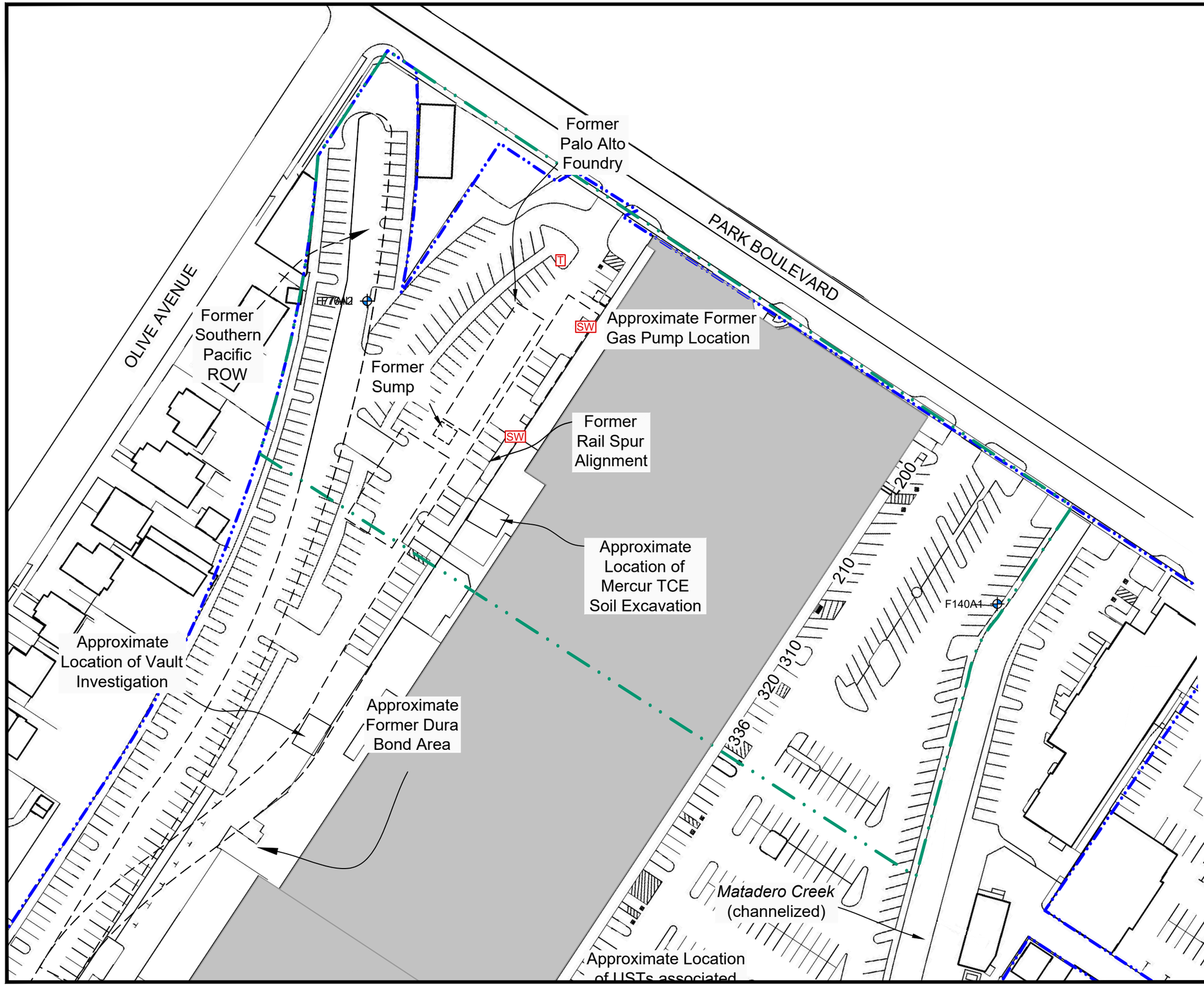
SCALE IN FEET

PES Environmental, Inc.
Engineering & Environmental Services

Site Plan
Phase 1 Environmental Site Assessment
El Camino Center - Proposed Residential Development
200-336 Portage Avenue
Palo Alto, California

PLATE 2

126.076.02.001	12607602001_ESA_1-3	JPD	11/20
JOB NUMBER	DRAWING NUMBER	REVIEWED BY	DATE



Explanation

- Approximate Boundary of Study Area
- Approximate Boundary of El Camino Center
- Approximate Location of Former Feature
- F76A2 — Approximate HP/Varian Well Location

Observations

- T — Transformer
- SW — Solid Waste Bins

N

0 80

SCALE IN FEET

Note: The original version of this figure includes color-designated features. A black and white copy of the figure may not accurately represent the information originally presented.

PES Environmental, Inc.
Engineering & Environmental Services

Study Area Detail
Phase 1 Environmental Site Assessment
El Camino Center - Proposed Residential Development
200-336 Portage Avenue
Palo Alto, California

PLATE 3

126.037.02.001	12607602001_ESA_1-3	JPD	11/20
JOB NUMBER	DRAWING NUMBER	REVIEWED BY	DATE



Photo 1.
View of the east side of subject property looking west with building addresses of 200 through 340 Portage Avenue (partial) tenant spaces, looking northwest. Photograph taken October 14, 2020.



Photo 2.
View from the northeastern corner of the subject property, facing south, of eastern parking lot and central portion of the El Camino Center structure included in the subject property. Photograph taken October 14, 2020.



Photo 1.
View from the northeastern corner of the subject property, facing west, of the northern portion of the El Camino Center structure included in the subject property.
Photograph taken October 14, 2020.

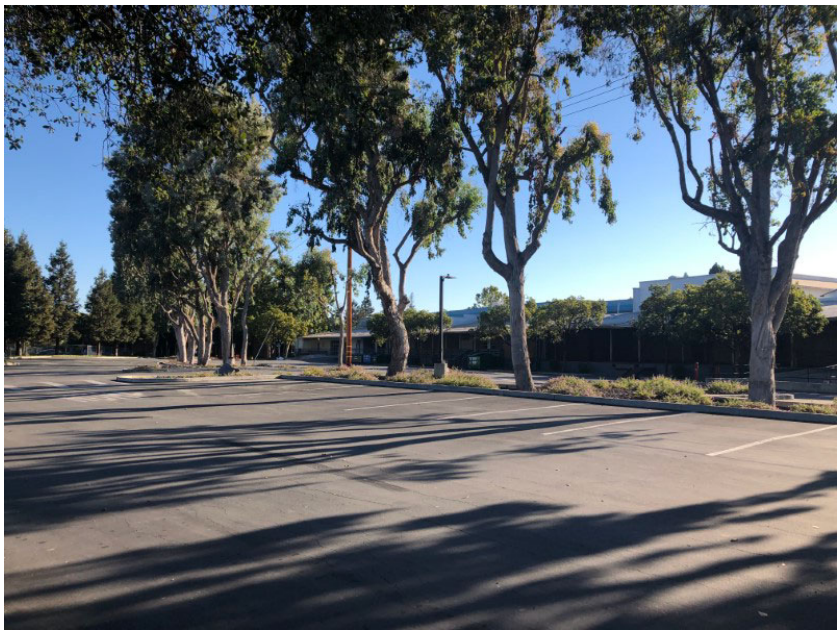


Photo 2.
View, facing northeast, of the western side of the subject property.
Photograph taken October 14, 2020.



Photo 1.
View, facing south, of the Earnin tenant space entrance on northwestern corner of the El Camino Center structure. Photograph taken October 14, 2020.



Photo 2.
View, facing south, of the loading dock area on the west side of the El Camino Center structure. The subject property line is approximately located along the metal railing which crosses the center of the photograph. Further to the south is non-subject property improvements of the El Camino Center. Photograph taken October 14. 2020.



Photo 1.
View, facing south, of same loading dock area as prior photograph also showing western parking area for the El Camino Center and ADA access. An unused electric lift gate is visible in the foreground of the photograph. All of the area further than the ADA ramp is not part of the subject property. Photograph taken October 14, 2020.



Photo 2.
View, facing north, pf the loading dock and employee gathering areas (in background) along western side of the El Camino Center structure. Photograph taken October 14, 2020.



Photo 1.
View, facing south, of the subject property western parking area. Photograph taken October 14, 2020.



Photo 2.
View, facing northeast, of El Camino Center parking area on west side of the 3040 Park Boulevard parcel. Photograph taken October 14, 2020.



Photo 1.
View, facing south, of western boundary of subject property denoted by the concrete block wall. Photograph taken October 14, 2020.

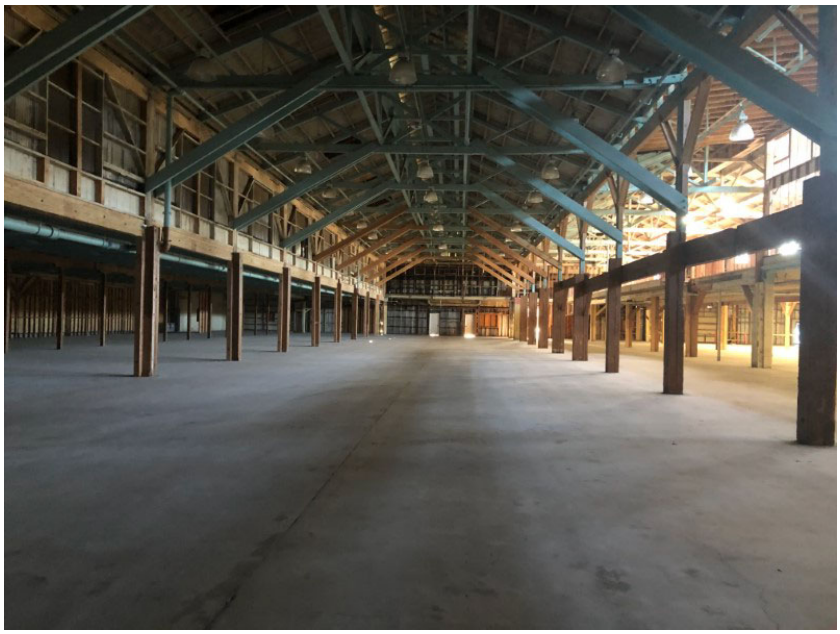


Photo 2.
View, facing east, inside the northern end of the 340 Portage Avenue tenant space under the northern high ceiling section of the building. The southern edge of the subject property begins at the column line on the left center portion of the photograph. Photograph taken October 14, 2020.

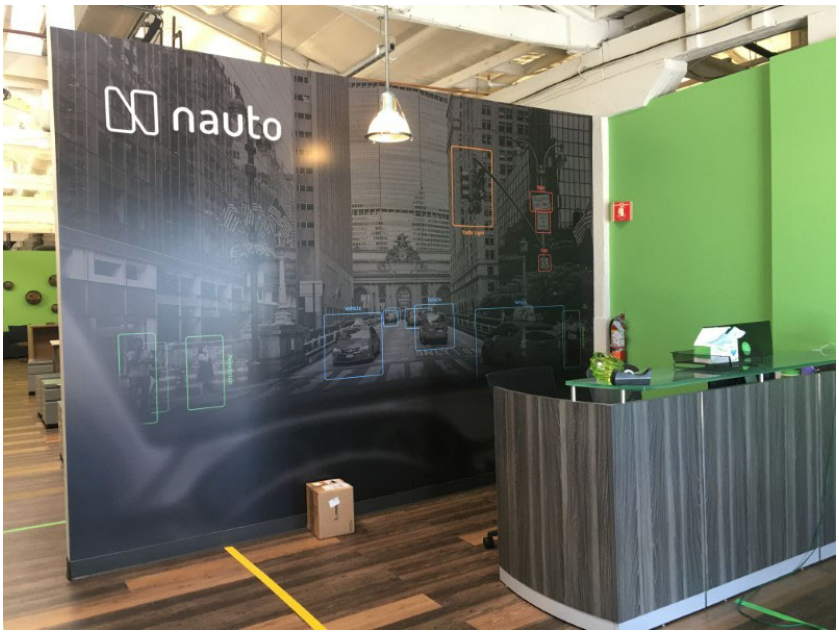


Photo 1.
View of Nauto's reception area looking northwest, the office space tenant at 220 Portage Avenue. Photograph taken October 20, 2020.



Photo 2.
View of 230 Portage Avenue tenant space. Photograph taken October 20, 2020.



Photo 1.
View of rear portion of 230 Portage Avenue tenant space. Area of Mercer Processing soil removal is area of replaced concrete. Photograph taken on October 20, 2020.



Photo 2.
View, facing west from the northern driveway on the west side of El Camino Center, of the off-site commercial building at 3040 Park Boulevard. This facility is currently being used as a fitness center. Photograph taken October 14, 2020.



Photo 1.
View of a pad-mounted transformers to the north of the west parking lot for the El Camino Center, facing north. Photograph taken October 20, 2020.



Photo 2.
View of 3045 Park Boulevard building under development to the northwestern of the subject property across Park Boulevard. Photograph taken October 20, 2020.



Photo 1.
View of commercial building occupied by wework to the north of the subject property across Park Boulevard. Photograph taken October 20, 2020.



Photo 2.
View of Vance Brown Builders to the northeastern of the subject property across Park Boulevard. Photograph taken October 20, 2020.



Photo 1.
View, facing south, of channelized drainage ditch bordering the eastern boundary of the subject property. Photograph taken October 14, 2020.



Photo 2.
View, facing west, of the portion of El Camino Center bordering but not including the subject property to the south. The subject property begins to the north of the high ceiling potion of the building (view partially obscured by the tree on the right edge of photograph). Photograph taken October 14, 2020.



Photo 1.
View, facing southwest, of El Camino parking lot bordering but not including the subject property. Photograph taken October 14, 2020.



Photo 2.
View of the commercial facility east of the subject property across the channelized drainage course. Photograph taken October 20, 2020.

APPENDIX A

ENVIRONMENTAL LIEN REPORT

GeoSearch
On time. On target. In touch.™

Environmental Lien

Target Property:

El Camino Center
340 Portage Ave
Palo Alto, Santa Clara County, California 94306

Prepared For:

PES Environmental, Inc.

Order #: 154956
Job #: 376061
Project #: 126.076.02
PO #: 126.076.02.001
Date: 10/06/2020

phone: 888-396-0042 · fax: 512-472-9967 · www.geo-search.com

TARGET PROPERTY SUMMARY

El Camino Center
340 Portage Ave
Palo Alto, Santa Clara County, California 94306

USGS Quadrangle: ***Palo Alto, CA***
Target Property Geometry: ***Area***

Target Property Longitude(s)/Latitude(s):
(-122.137351, 37.425321), (-122.137233, 37.425261), (-122.137308, 37.424631), (-122.137394, 37.424384), (-122.137029, 37.424767), (-122.136793, 37.424903), (-122.136686, 37.424937), (-122.134969, 37.424017), (-122.135506, 37.423361), (-122.135055, 37.423131), (-122.135087, 37.423063), (-122.135538, 37.423310), (-122.135828, 37.422978), (-122.135795, 37.422586), (-122.135720, 37.422330), (-122.135795, 37.422211), (-122.135892, 37.422518), (-122.136107, 37.422637), (-122.136257, 37.422654), (-122.136482, 37.422339), (-122.137255, 37.422739), (-122.137501, 37.422450), (-122.138628, 37.423029), (-122.138392, 37.423327), (-122.137920, 37.423975), (-122.137662, 37.424392), (-122.137523, 37.424810), (-122.137544, 37.425116), (-122.137351, 37.425321)

County/Parish Covered:
Santa Clara (CA)

Zipcode(s) Covered:
Palo Alto CA: 94301, 94304, 94306

State(s) Covered:
CA

Disclaimer - The information provided in this report was obtained from a variety of public sources. GeoSearch cannot ensure and makes no warranty or representation as to the accuracy, reliability, quality, errors occurring from data conversion or the customer's interpretation of this report. This report was made by GeoSearch for exclusive use by its clients only. Therefore, this report may not contain sufficient information for other purposes or parties. GeoSearch and its partners, employees, officers and independent contractors cannot be held liable for actual, incidental, consequential, special or exemplary damages suffered by a customer resulting directly or indirectly from any information provided by GeoSearch.

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On time. On target. In touch.™

ENVIRONMENTAL LIEN/AUL SEARCH

We have done a search of Santa Clara County Recorders Records for “Environmental Liens” only on the subject property as identified as 340 Portage Ave., Palo Alto, CA. Tax Parcel No. 132-38-071and find the following:

None found

We have done a search of Santa Clara County Recorders Records for “Activity and Use Limitations” (AUL’s) only on the subject property as identified as 340 Portage Ave., Palo Alto, CA. Tax Parcel No. 132-38-071and find the following:

None found

APPENDIX B

USER AND KEY SITE MANAGER QUESTIONNAIRES

USER QUESTIONNAIRE[1]
PHASE I ENVIRONMENTAL SITE ASSESSMENT

In order to qualify for one of the *Landowner Liability Protections (LLPs)*[2] offered by the Small Business Liability Relief and Brownfields Revitalization Act of 2001 (the *"Brownfields Amendments"*), the User must provide the following information (if available) to the environmental professional. Failure to provide this information could result in a determination that "all appropriate inquiry" is not complete.

User Information	
Name:	Phyllis Yamasaki
Title:	VP- Commercial PM
Company:	T30
Representing, if applicable:	N/A
Signature:	Date: 11-12-21

Site Information
Site Name:
Address:

1. Environmental liens that are filed or recorded against the property (40 CFR 312.25)

Did a search of recorded land title records (or judicial records where appropriate[3]) identify any environmental cleanup liens filed or recorded against the property under federal, tribal, state or local law?

do not know

2. Activity and land use limitations that are in place on the property or that have been filed or recorded against the property (40 CFR 312.26(a)(1)(v) and (vi))

Did a search of recorded land title records (or judicial records, where appropriate[3]) identify any activity or use limitations (AULs), such as engineering controls, land use restrictions or institutional controls that are in place at the property and/or have been filed or recorded against the property under federal, tribal, state or local law?

do not know

---

[1] In accordance with Appendix X3 of ASTM E1527-13.

[2] *Landowner Liability Protections*, or *LLPs*, is the term used to describe the three types of potential defenses to Superfund liability in EPA's *Interim Guidance Regarding Criteria Landowners Must Meet in Order to Qualify for Bona Fide Prospective Purchaser, Contiguous Property Owner, or Innocent Landowner Limitations on CERCLA Liability* (*"Common Elements"* Guide) issued on March 6, 2003.

[3] In certain jurisdictions, federal, tribal, state, or local statutes, or regulations specify that environmental lien and Activity and Use Limitations (AULs) be filed in judicial records rather than in land title records. In such cases judicial records must be searched for environmental liens and AULs.

3. Specialized knowledge or experience of the person seeking to qualify for the LLP (40 CFR 312.28)

As the user of this Phase I ESA, do you have any specialized knowledge or experience related to the property or nearby properties? For example, are you involved in the same line of business as the current or former property occupants of the property or an adjoining property so that you have specialized knowledge of the chemicals and processes used by this type of business?

NA

4. Relationship of the purchase price to the fair market value of the property if it were not contaminated (40 CFR 312.29)

Does the purchase price being paid for this property reasonably reflect the fair market value of the property? If you conclude that there is a difference, have you considered whether the lower purchase price is because contamination is known or believed to be present at the property?

do not know

5. Commonly known or reasonably ascertainable information about the property (40 CFR 312.30)

Are you aware of commonly known or reasonably ascertainable information about the property that would help the environmental professional to identify conditions indicative of releases or threatened releases? For example, as User:

(a) Do you know the past uses of the property? Cannery

(b) Do you know of specific chemicals that are present or once present at the property?

No

(c) Do you know of spills or other chemical releases that have taken place at the property?

No

(d) Do you know of any environmental cleanups that have taken place at the property?

No

6. The degree of obviousness of the presence or likely presence of contamination at the property, and the ability to detect the contamination by appropriate investigation (40 CFR 312.31)

As the user of this ESA, based on your knowledge and experience related to the property are there any obvious indicators that point to the presence or likely presence of releases at the property?

do not know

KEY SITE MANAGER – PRE-SURVEY QUESTIONNAIRE

Name of person completing questionnaire: Phyllis Yamasaki

Association with property: VP - Commercial Property Mgmt

Length of association with property: 8 years

Date: 11-13-2020

Phone Number: 408 858 4202

Property Name: El Camino Center

PES Project Number: do not know

Directions: Please answer all questions to the best of your knowledge and in good faith. Mark the column corresponding to the appropriate response. Additional details necessary to explain any yes or unknown responses should be provided in the "Comments" column.
Note: *U/NR* indicates *"Unknown"* or *"No Response"*.

	QUESTION	RESPONSE			COMMENTS
		Y	N	U/NR	
1A.	Is the Project used for an industrial use?		✓		
1B.	Are any adjoining properties used for an industrial use?				do not know
2A.	To the best of your knowledge, has the Project been used for an industrial use in the past?				do not know
2B.	To the best of your knowledge, has any adjoining properties been used for an industrial use in the past?				do not know
3A.	Is the Project used as a gasoline station, motor repair facility, commercial printing facility, dry cleaners, photo developing laboratory, junkyard or landfill, or as a waste treatment, storage, disposal, processing, or recycling facility?		✓		
3B.	Is any adjoining property used as a gasoline station, motor repair facility, commercial printing facility, dry cleaners, photo developing laboratory, junkyard or landfill, or as a waste treatment, storage, disposal, processing, or recycling facility?				do not know
4A.	To the best of your knowledge, has the Project been used as a gasoline station, motor repair facility, commercial printing facility, dry cleaners, photo developing laboratory, junkyard or landfill, or as a waste treatment, storage, disposal, processing, or recycling facility?				do not know
4B.	To the best of your knowledge, has any adjoining property been used as a gasoline station, motor repair facility, commercial printing facility, dry cleaners, photo developing laboratory, junkyard or landfill, or as a waste treatment, storage, disposal, processing, or recycling facility?				do not know
5A.	Are there currently any automotive or industrial batteries, pesticides, paints, or other chemicals in individual containers of greater than five gallons in volume or fifty gallons in the aggregate, stored on or used at the Project?		✓		

	QUESTION	RESPONSE			COMMENTS
		Y	N	U/NR	
5B.	To the best of your knowledge, have there been previously any automotive or industrial batteries, pesticides, paints, or other chemicals in individual containers of greater than five gallons in volume or fifty gallons in the aggregate, stored on or used at the Project?				do not know
6A.	Are there currently any industrial drums (typically 55 gallon) or sacks of chemicals located on the Project?		✓		
6B.	To the best of your knowledge, have there been previously any industrial drums (typically 55 gallon) or sacks of chemicals located on the Project?				do not know
7A.	Are there currently any groundwater monitoring wells or other groundwater wells (i.e., potable drinking water wells) located on the Project?				do not know
7B.	To the best of your knowledge, have there been previously any groundwater monitoring wells or other groundwater wells (i.e., potable drinking water wells) located on the Project?				do not know
8A.	Has fill dirt been brought onto the Project which originated from a contaminated site?		✓		
8B.	Has fill dirt been brought onto the Project which is of an unknown origin?		✓		
9A.	Are there currently any pits, ponds or lagoons located on the Project in connection with waste treatment or waste disposal?		✓		
9B.	To the best of your knowledge, have there been previously any pits, ponds or lagoons located on the Project in connection with waste treatment or waste disposal?				do not know
10A.	Is there currently, any stained soil on the Project?		✓		
10B.	To the best of your knowledge, has there been previously any stained soil on the Project?				do not know
11A.	Are there currently any registered or unregistered storage tanks (above or underground) located on the Project?				do not know
11B.	To the best of your knowledge, have there been previously any registered or unregistered storage tanks (above or underground) located on the Project?				do not know
12A.	Are there currently any vent pipes, fill pipes or access ways indicating a fill pipe protruding from the ground on the Project or adjacent to any structure located on the Project?				do not know
12B.	To the best of your knowledge, have there been previously any vent pipes, fill pipes or access ways indicating a fill pipe protruding from the ground on the Project or adjacent to any structure located on the Project?				do not know
13A.	Are there currently any flooring, drains, or walls located at the Project that are stained by substances other than water or are emitting foul odors?				do not know
13B.	To the best of your knowledge, have there been previously any flooring, drains, or walls located at the Project that are stained by substances other than water or are emitting foul odors?				do not know

	QUESTION	RESPONSE			COMMENTS
		Y	N	U/NR	
14A.	If the Project is served by a private well or non-public water system, have contaminants been identified in the well or system that exceed guidelines applicable to the water system?				\N/A
14B.	If the Project is served by a private well or non-public water system, has the well been designated as contaminated by any government environmental/health agency?				\N/A
15A.	Have you been informed of the past existence of hazardous substances or petroleum products with respect to the Project or any facility located on the Project?				do not know
15B.	Have you been informed of the current existence of hazardous substances or petroleum products with respect to the Project or any facility located on the Project?				do not know
16A.	Are there any environmental liens or governmental notification relating to past or current violations of environmental laws with respect to the Project or any facility located on the Project?				do not know
16B.	Have you been informed of the past existence of environmental violations with respect to the Project or any facility located on the Project?				do not know
16C.	Are you aware of any pending, threatened, or past litigation relevant to hazardous substances of petroleum products in, on or from the property?				do not know
16D.	Are you aware of any pending, threatened, or past administrative proceedings relevant to hazardous substances or petroleum products in, on or from the property?				do not know
16E.	Are you aware of any notices from any governmental entity regarding any possible violation or environmental laws or possible liability relating to hazardous substances or petroleum products?				do not know
17.	Have there been any environmental site assessments of the Project that indicated the presence of hazardous substances or petroleum products on, or contamination of, the Project or recommended further assessment of the Project?				do not know
18.	Does the Project discharge waste water on or adjacent to the project, other than storm water, into a storm water sewer system?				do not know
19.	Does the Project discharge waste water on or adjacent to the project, other than storm water, or into a sanitary system?				do not know
20.	Have any hazardous substances or petroleum products, unidentified waste materials, tires, automotive or industrial batteries or any other waste materials been dumped above grade, buried and/or burned on the Project?				do not know
21.	Is there a transformer, capacitor or any hydraulic equipment for which there are any records indicating the presence of PCBs?		✓		
22.	Is there now or has there ever been any asbestos-containing materials (ACM), in any application, on the Project?	✓			Probably in the roof
23.	Has there ever been any ACM testing conducted on the Project?		✓		
24.	Is there an asbestos Operations and Maintenance (O&M) program in place at the Project?		✓		

	QUESTION	RESPONSE			COMMENTS
		Y	N	U/NR	
25.	Is there now or has there ever been any lead-based paint (LBP) applications on the Project?				do not know
26.	Has there ever been LBP testing conducted on the Project?		✓		
27.	Is there a Lead Paint Operations and Maintenance (O&M) Program in place at the Project?		✓		
28.	Has the water at the Project ever been tested for lead?		✓		
29.	Has Radon testing ever been conducted at the Project?		✓		
30.	Are there any other Operations and Maintenance (O&M) programs in place that we should be made aware of?		✓		
31.	Is the Project or any portion of the Project located or involved in any environmentally sensitive areas (i.e., wetlands, coastal barrier resource areas, coastal barrier improvement act areas, flood plains, endangered species, etc.)?		✓		
32.	Do you know or suspect that mold was or is present in the building(s) or HVAC system? - If "Yes", proceed to question #33. - If "No", skip question #33 and proceed to question #34.		✓		
33.	Are there reliable procedures that specify the actions (i.e. operations and maintenance) to be taken to prevent and/or respond to mold or mold producing problems?				
34.	Is there a mold Operations and Maintenance (O&M) program in place at the Project?		✓		
35.	Is the HVAC system inspected at least annually?	✓			
36.	Have identified HVAC problems been corrected in a timely manner?	✓			
37.	Is there now, or has there ever been evidence of mold or mildew present at the building(s)? If so, when?		✓		
38.	Is there now, or has there ever been any water damage in the building(s), whether from flooding, plumbing, roof leaks, or other sources? If so, when?	✓			
39.	Has there ever been any sort of Indoor Air Quality (IAQ) or mold testing conducted in the building(s)?		✓		
Summarize historical Project use (when was the Project developed with the current improvements, what modifications have taken place, what was the Project used for prior to it's current use)		See Developments Historical report. This building, or parts of it, are over 100 years old.			

APPENDIX C

PHYSICAL SETTINGS REPORT

GeoSearch

On time. On target. In touch.™

GeoPlus Physical Setting Maps

Target Property:

El Camino Center
200-340, 3040, 3180, and 3200 Park Avenue
Palo Alto, Santa Clara County, California 94306

Prepared For:

PES Environmental, Inc.

Order #: 154956
Job #: 376067
Project #: 126.076.02
PO #: 126.076.02.001
Date: 10/23/2020

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Disclaimer

The information provided in this report was obtained from a variety of public sources. GeoSearch cannot ensure and makes no warranty or representation as to the accuracy, reliability, quality, errors occurring from data conversion or the customer's interpretation of this report. This report was made by GeoSearch for exclusive use by its clients only. Therefore, this report may not contain sufficient information for other purposes or parties. GeoSearch and its partners, employees, officers And independent contractors cannot be held liable For actual, incidental, consequential, special or exemplary damages suffered by a customer resulting directly or indirectly from any information provided by GeoSearch.

Target Property Summary

Target Property Information

El Camino Center
200-340, 3040, 3180, and 3200 Park Avenue
Palo Alto, California 94306

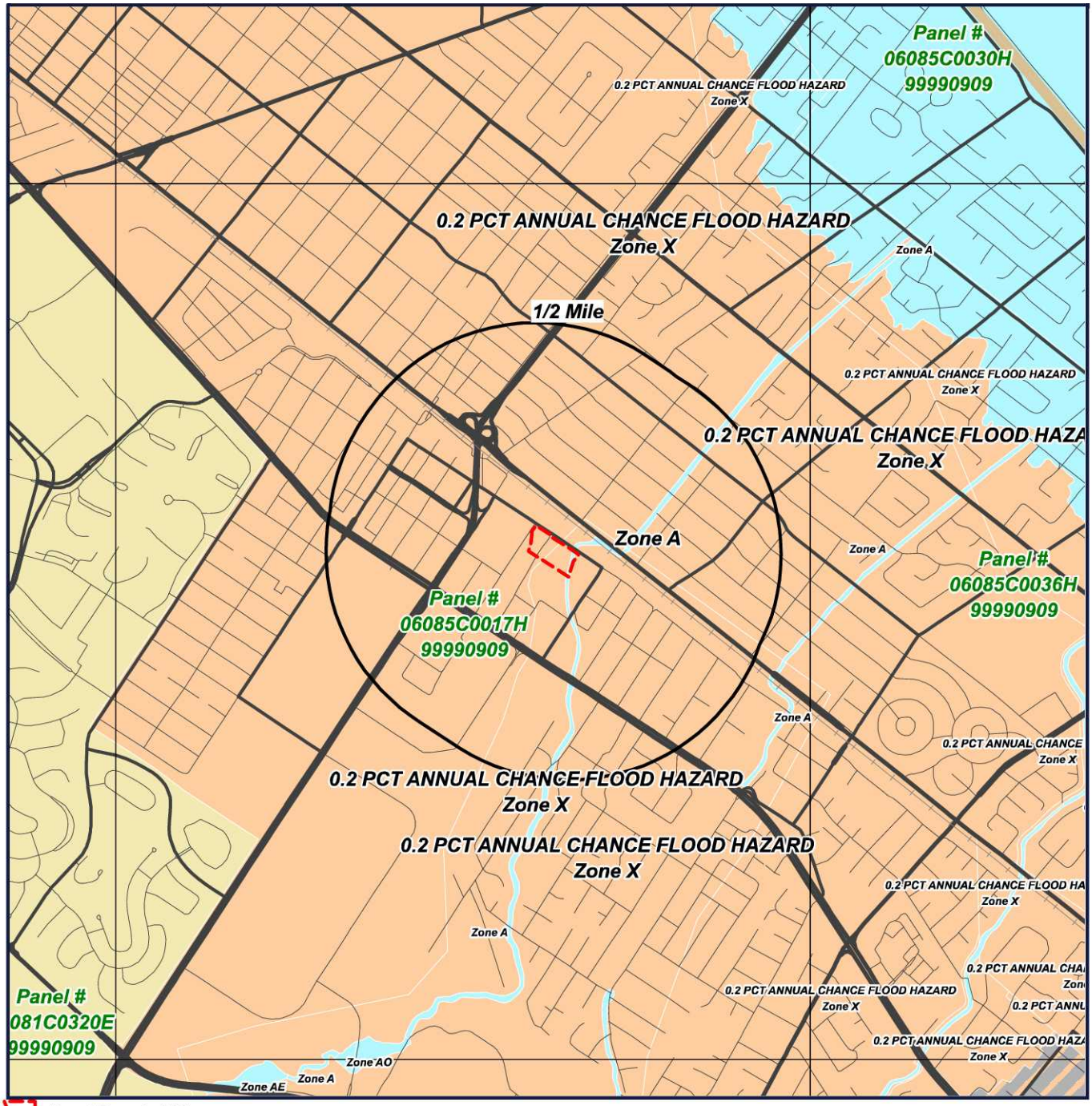
Coordinates
Area centroid (-122.13662, 37.4243779)
33 feet above sea level

USGS Quadrangle
Palo Alto, CA

Geographic Coverage Information

County/Parish: Santa Clara (CA)
ZipCode(s):
Palo Alto CA: 94301, 94304, 94306

FEMA Map



Target Property (TP)

Without Base Flood Elevation (BFE)
Zone A, V, A99
With BFE or Depth

Regulatory Floodway Zone AE, AO, AH, VE, AR

0.2% Annual Chance Flood Hazard - Zone X

Future Conditions 1% Annual
Chance Flood Hazard - Zone X

Area with Reduced Flood Risk due to
Levee - Zone X

Area with Flood Risk due to Levee - Zone D

Area of Undetermined Flood Hazard
Zone D

Minimal Flood Hazard - Zone X

Digital Data Not Available

Letter of map revision date:
08/31/2020
Latest study effective date:
12/20/2019

El Camino Center
200-340, 3040, 3180, and 3200
Park Avenue
Palo Alto, California
94306

N
W E
S

0' 1000' 2000' 3000'
SCALE: 1" = 2000'

FEMA Report

FEMA - Federal Emergency Management Agency

The National Flood Hazard Layer (NFHL) data used in this report is derived from the Federal Emergency Management Agency. The NFHL dataset is a compilation of effective Flood Insurance Rate Map (FIRM) databases (a collection of the digital data that are used in GIS systems for creating new Flood Insurance Rate Maps) and Letters of Map Change (Letters of Map Amendment and Letters of Map Revision only) that create a seamless GIS data layer for United States and its territories. The NFHL is updated as new study or LOMC data becomes effective. Note: Currently, not all areas have modernized FIRM database data available. As a result, users may need to refer to the effective Flood Insurance Rate Map for effective flood hazard information.

FEMA Flood Zone Definitions within Search Radius

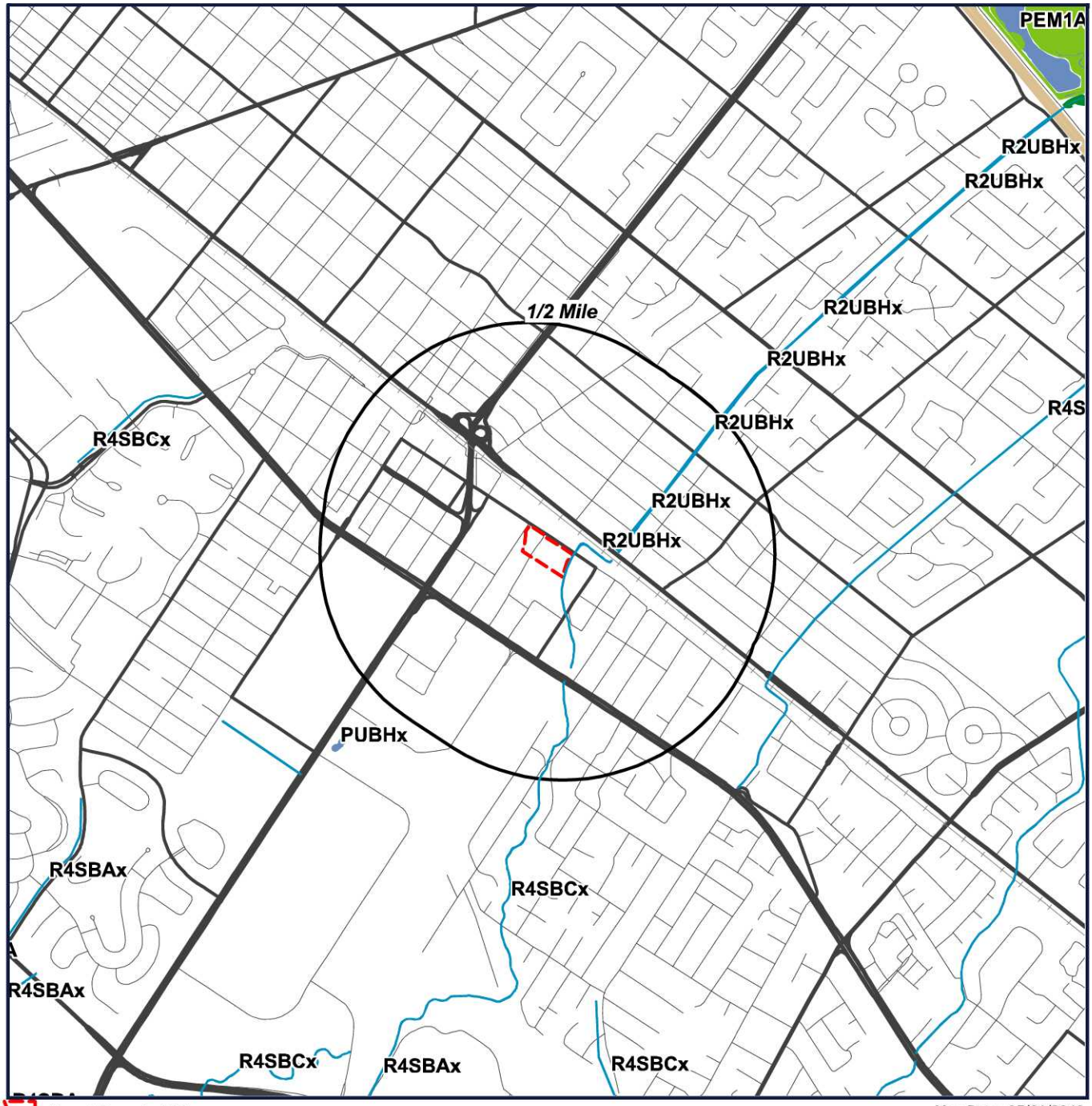
Zone A

Areas subject to inundation by the 1-percent-annual-chance flood event. Because detailed hydraulic analyses have not been performed, no Base Flood Elevations (BFEs) or flood depths are shown.

Zone X

An area that is determined to be outside the 100 and 500 year floodplains.

NWI Map



Target Property (TP)

Map Date: 05/01/2018

ESTUARINE AND MARINE DEEPWATER
ESTUARINE AND MARINE WETLAND
FRESHWATER EMERGENT WETLAND
FRESHWATER FORESTED/ SHRUB WETLAND
LAKE
OTHER
RIVERINE
FRESHWATER POND
NDA - DIGITAL DATA NOT AVAILABLE

El Camino Center
200-340, 3040, 3180, and 3200
Park Avenue
Palo Alto, California
94306

N
W E
S

0' 1000' 2000' 3000'
SCALE: 1" = 2000'

NWI Report

NWI - National Wetlands Inventory

The US NWI digital data bundle is a set of records of wetlands location and classification as defined by the U.S. Fish & Wildlife Service. This dataset is one of a series available in 7.5 minute by 7.5 minute blocks containing ground planimetric coordinates of wetlands point, line, and area features and wetlands attributes. When completed, the series will provide coverage for all of the contiguous United States, Hawaii, Alaska, and U.S. protectorates in the Pacific and Caribbean. The digital data as well as the hardcopy maps that were used as the source for the digital data are produced and distributed by the U.S. Fish & Wildlife Service's National Wetlands Inventory project. Currently, this data is only available in select counties throughout the United States.

NWI Definitions within Search Radius

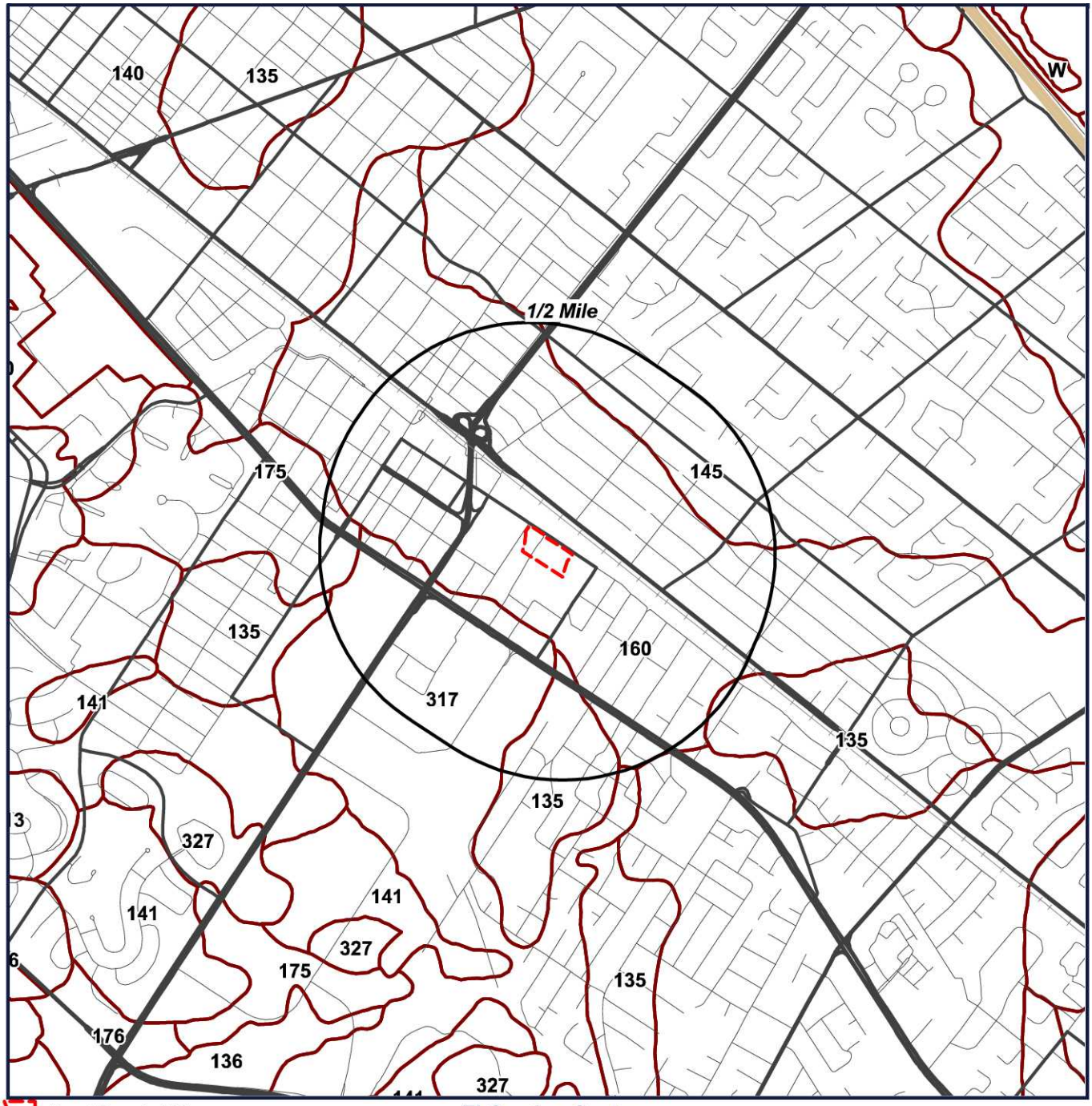
R2UBHx

SYSTEM: **RIVERINE**
SUBSYSTEM: **LOWER PERENNIAL**
CLASS: **UNCONSOLIDATED BOTTOM**
WATER REGIME: **PERMANENTLY FLOODED**
SPECIAL MODIFIER: **EXCAVATED**

R4SBCx

SYSTEM: **RIVERINE**
SUBSYSTEM: **INTERMITTENT**
CLASS: **STREAMBED**
WATER REGIME: **SEASONALLY FLOODED**
SPECIAL MODIFIER: **EXCAVATED**

Soil Map



Target Property (TP)

SOIL BOUNDARY

NOTCOM - DIGITAL DATA NOT AVAILABLE/NOT COMPLETE

El Camino Center
200-340, 3040, 3180, and 3200
Park Avenue
Palo Alto, California
94306

N
W E
S

0' 1000' 2000' 3000'
SCALE: 1" = 2000'

SOIL Report

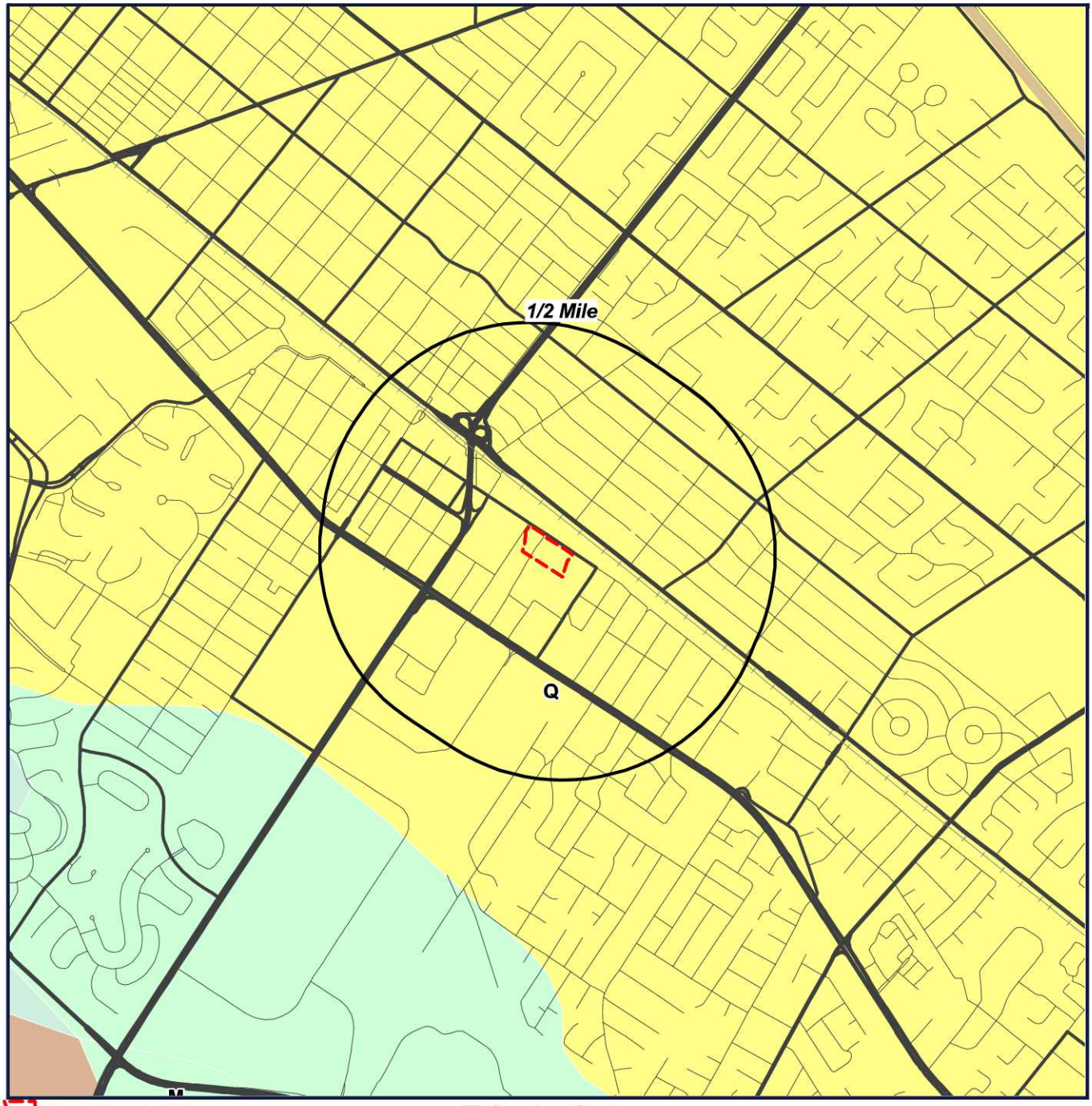
Soil Surveys

The soil data used in this report is obtained from the Natural Resources Conservation Service (NRCS). The NRCS is the primary federal agency that works with private landowners to help them conserve, maintain and improve their natural resources. The soil survey contains information that can be applied in managing farms and ranches; in selecting sites for roads, ponds, buildings and other structures; and in determining the suitability of tracts of land for farming, industry and recreation. This data is available in select counties throughout the United States.

SOIL Code Definitions within Search Radius

160	URBANLAND-CLEAR LAKE COMPLEX, 0 TO 2 PERCENT SLOPES
145	URBANLAND-HANGERONE COMPLEX, 0 TO 2 PERCENT SLOPES, DRAINED
140	URBAN LAND-FLASKAN COMPLEX, 0 TO 2 PERCENT SLOPES
135	URBAN LAND-STEVENSCREEK COMPLEX, 0 TO 2 PERCENT SLOPES
175	URBANLAND-BOTELLA COMPLEX, 0 TO 2 PERCENT SLOPES
317	URBANLAND-CROPLEY COMPLEX, 0 TO 2 PERCENT SLOPES

Geology Map



Target Property (TP)

El Camino Center
200-340, 3040, 3180, and 3200
Park Avenue
Palo Alto, California
94306

N
W E
S

0' 1000' 2000' 3000'
SCALE: 1" = 2000'

GEOLOGY Report

US GEOLOGY

THE GEOLOGY DATA USED IN THIS REPORT ORIGINATES FROM THE USGS. THE FIRST STAGE IN DEVELOPING STATE DATABASES FOR THE CONTERMINOUS UNITED STATES WAS TO ACQUIRE DIGITAL VERSIONS OF ALL EXISTING STATE GEOLOGIC MAPS. ALTHOUGH A SIGNIFICANT NUMBER OF DIGITAL STATE MAPS ALREADY EXISTED, A NUMBER OF STATES LACKED THEM. FOR THESE STATES NEW DIGITAL COMPILATIONS WERE PREPARED IN COOPERATION WITH STATE GEOLOGIC SURVEYS OR BY THE NSA (NATIONAL SURVEYS AND ANALYSIS) PROJECT. THESE NEW DIGITAL STATE GEOLOGIC MAPS AND DATABASES WERE CREATED BY DIGITIZING ALREADY EXISTING PRINTED MAPS, OR, IN A FEW CASES, BY MERGING EXISTING LARGER SCALE DIGITAL MAPS.

GEOLOGY Definitions within Search Radius

GEOLOGY SYMBOL: **Q**
UNIT NAME: **Quaternary alluvium and marine deposits**
UNIT AGE: **Pliocene to Holocene**
UNIT DESCRIPTION:
Alluvium, lake, playa, and terrace deposits; unconsolidated and semi-consolidated. Mostly nonmarine, but includes marine deposits near the coast.
ADDITIONAL UNIT INFORMATION:
NOT REPORTED
ROCKTYPE/S: **alluvium; terrace; lake or marine deposit (non-glacial)**

APPENDIX D

AERIAL PHOTOGRAPHS

GeoSearch
On time. On target. In touch.™

Historical Aerial Photographs

NEW: *GeoLens by Geosearch*

Target Property:

El Camino Center
340 Portage Ave
Palo Alto, Santa Clara, California 94306

Prepared For:

PES Environmental, Inc.

Order #: 154956
Job #: 376063
Project #: 126.076.02
Date: 10/6/2020

Target Property Summary

El Camino Center
340 Portage Ave
Palo Alto, Santa Clara, California 94306

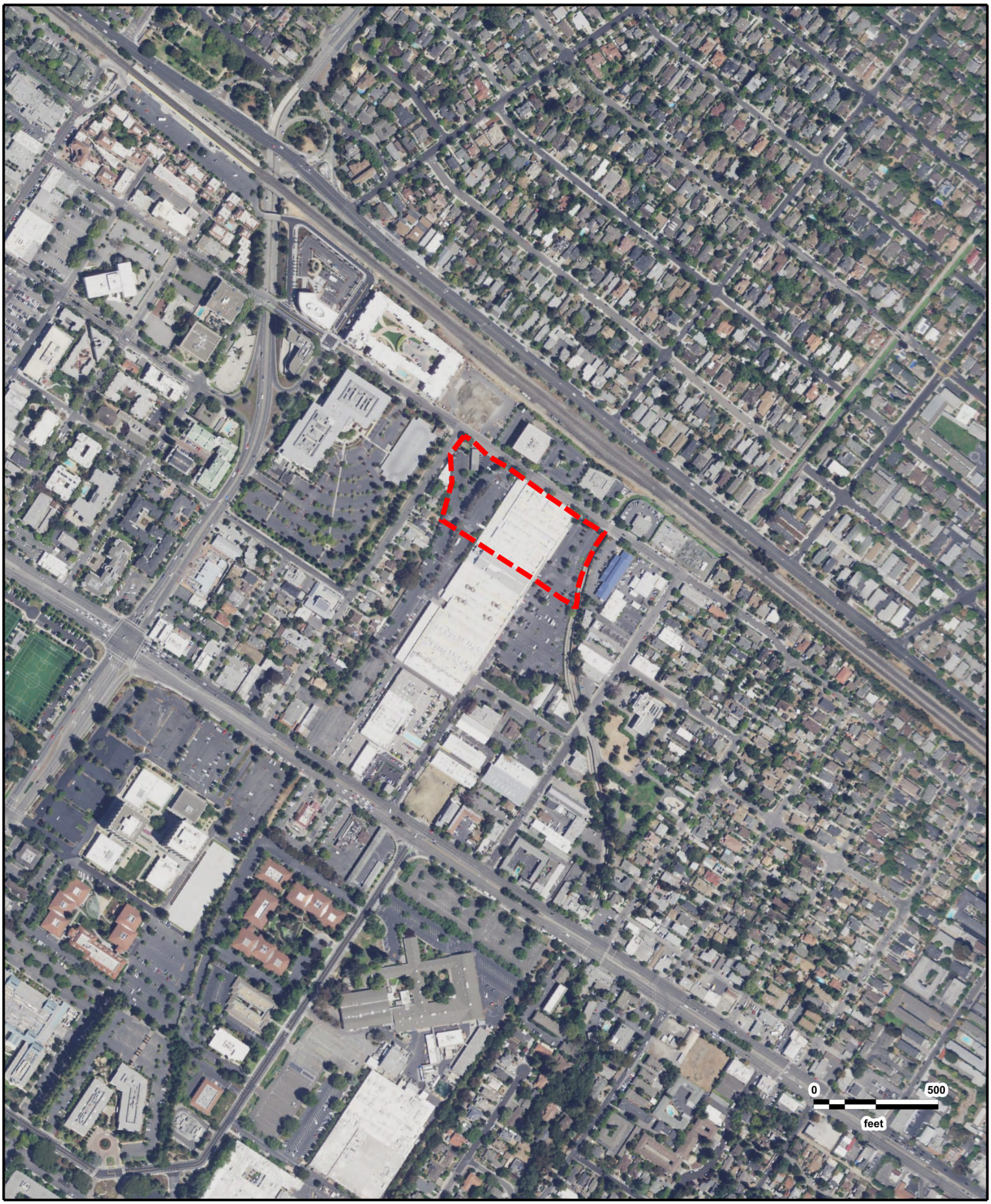
USGS Quadrangle: ***Palo Alto***
Target Property Geometry: ***Area***

Target Property Longitude(s)/Latitude(s):
(-122.137351150, 37.425320898), (-122.137233133, 37.425261256), (-122.137308234, 37.424630753), (-122.137394065, 37.424383663), (-122.137029285, 37.424767078), (-122.136793250, 37.424903404), (-122.136685962, 37.424937485), (-122.134969348, 37.424017286), (-122.135505790, 37.423361211), (-122.135055179, 37.423131158), (-122.135087365, 37.423062994), (-122.135537977, 37.423310088), (-122.135827655, 37.422977788), (-122.135795469, 37.422585843), (-122.135720367, 37.422330225), (-122.135795469, 37.422210937), (-122.135892028, 37.422517678), (-122.136106605, 37.422636967), (-122.136256809, 37.422654008), (-122.136482114, 37.422338746), (-122.137254590, 37.422739213), (-122.137501354, 37.422449514), (-122.138627881, 37.423028912), (-122.138391847, 37.423327129), (-122.137919778, 37.423974684), (-122.137662286, 37.424392183), (-122.137522811, 37.424809680), (-122.137544269, 37.425116411)

Aerial Research Summary

Date	Source	Scale	Frame
2018	USDA	1" = 500'	N/A
2016	USDA	1" = 500'	N/A
2014	USDA	1" = 500'	N/A
2012	USDA	1" = 500'	N/A
2010	USDA	1" = 500'	N/A
2009	USDA	1" = 500'	N/A
2005	USDA	1" = 500'	N/A
2003	USDA	1" = 500'	N/A
10/30/1991	USGS	1" = 500'	N/A
07/02/1987	USGS	1" = 500'	518-35
04/08/1981	USGS	1" = 500'	4-87
06/25/1974	USGS	1" = 500'	9-133
04/30/1970	USGS	1" = 500'	2-146
05/16/1968	USGS	1" = 500'	1-147
08/15/1960	USGS	1" = 500'	2-63
07/02/1956	ASCS	1" = 500'	9-69
05/05/1948	USFS	1" = 500'	2-55
08/01/1939	FAIRCHILD	1" = 500'	286-5
05/31/1930	FAIRCHILD	1" = 500'	Z-145

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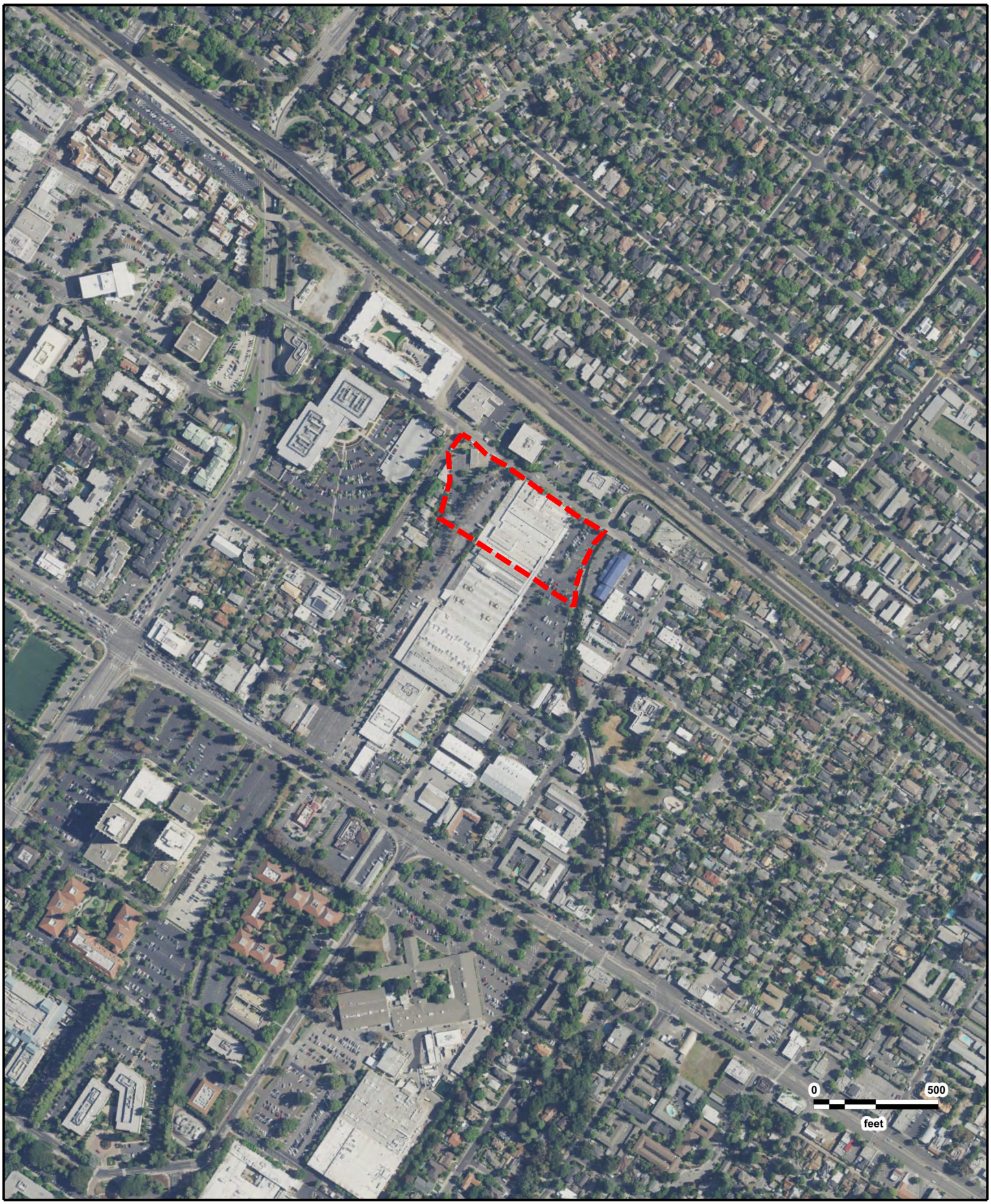


N
W E
S

El Camino Center
USDA
2018

GeoSearch

JOB #: 376063 - 10/06/2020

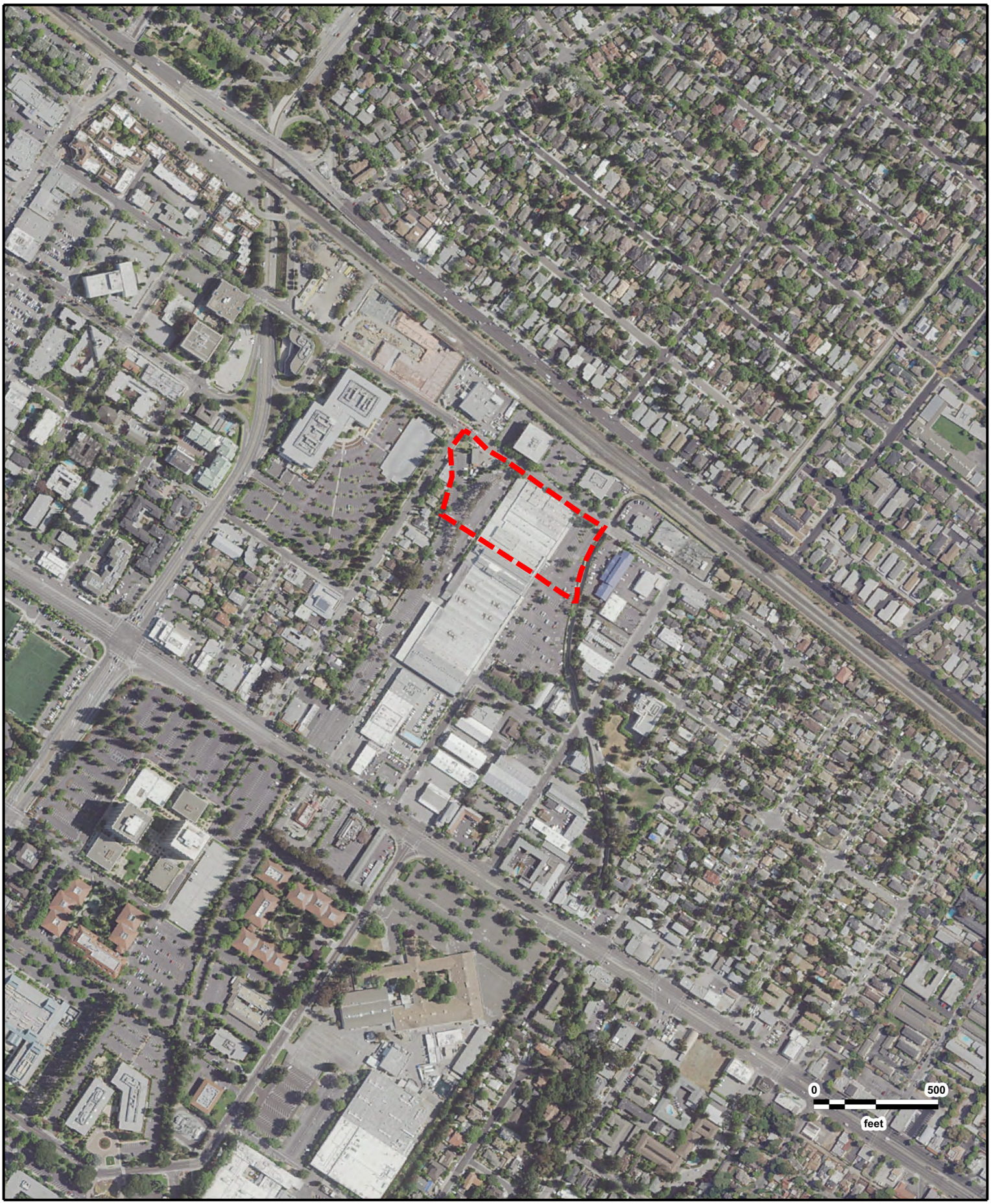


N
W E
S

El Camino Center
USDA
2016

GeoSearch

JOB #: 376063 - 10/06/2020



N
W E
S

El Camino Center
USDA
2014

GeoSearch

JOB #: 376063 - 10/06/2020

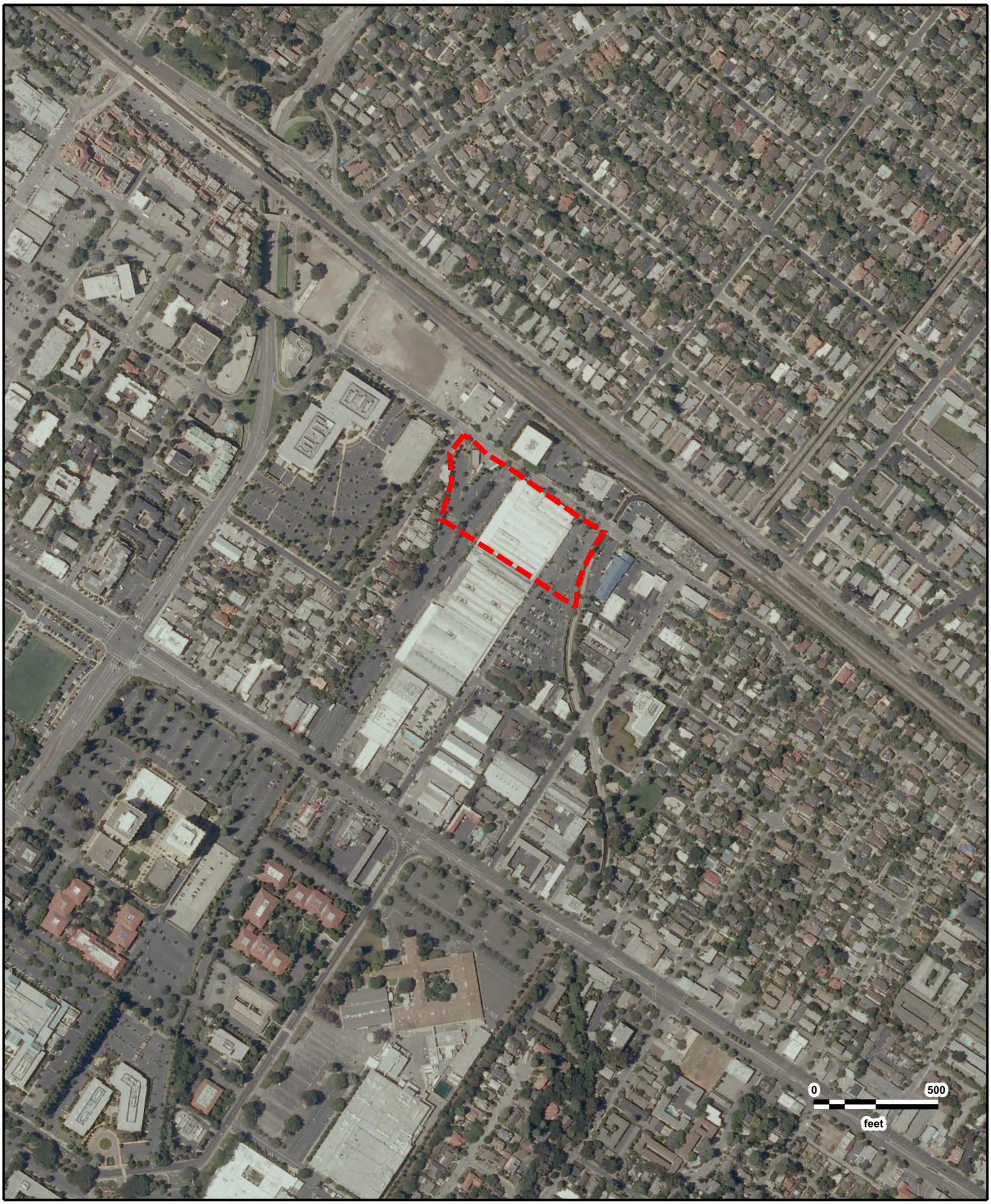


N
W E
S

El Camino Center
USDA
2012

GeoSearch

JOB #: 376063 - 10/06/2020

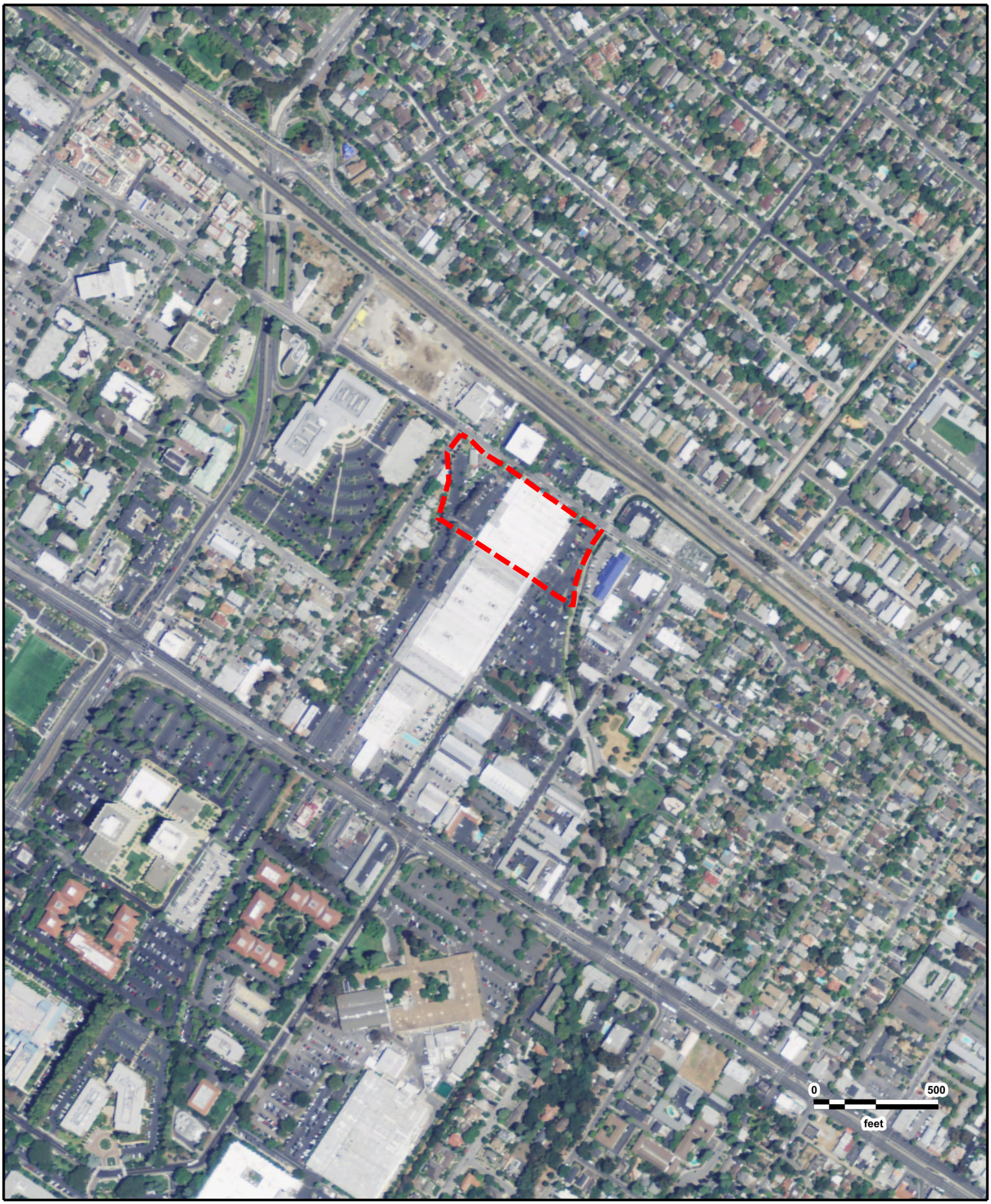


N
W E
S

El Camino Center
USDA
2010

GeoSearch

JOB #: 376063 - 10/06/2020



N
W E
S

El Camino Center
USDA
2009

GeoSearch

JOB #: 376063 - 10/06/2020



N
W E
S

El Camino Center
USDA
2005

GeoSearch

JOB #: 376063 - 10/06/2020



N
W E
S

El Camino Center
USDA
2003

GeoSearch

JOB #: 376063 - 10/06/2020



N
W E
S

El Camino Center
USGS
10/30/1991

GeoSearch

JOB #: 376063 - 10/06/2020



N
W E
S

El Camino Center
USGS
07/02/1987

GeoSearch

JOB #: 376063 - 10/06/2020



N
W E
S

El Camino Center
USGS
04/08/1981

GeoSearch

JOB #: 376063 - 10/06/2020



N
W E
S

El Camino Center
USGS
06/25/1974

GeoSearch

JOB #: 376063 - 10/06/2020



N
W E
S

El Camino Center
USGS
04/30/1970

GeoSearch

JOB #: 376063 - 10/06/2020



N
W E
S

El Camino Center
USGS
05/16/1968

GeoSearch

JOB #: 376063 - 10/06/2020



N
W E
S

El Camino Center
USGS
08/15/1960

GeoSearch

JOB #: 376063 - 10/06/2020

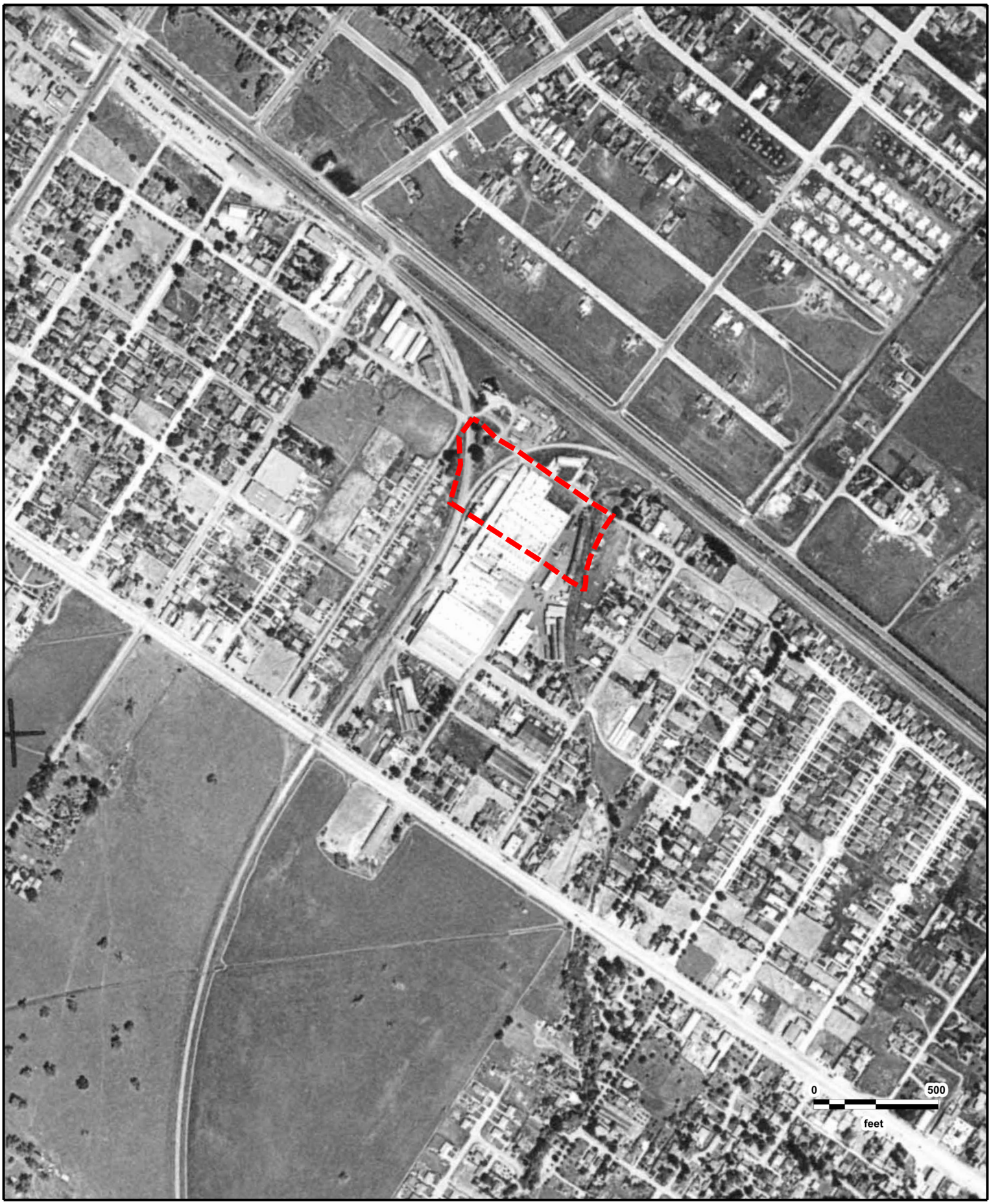


N
W E
S

El Camino Center
ASCS
07/02/1956

GeoSearch

JOB #: 376063 - 10/06/2020

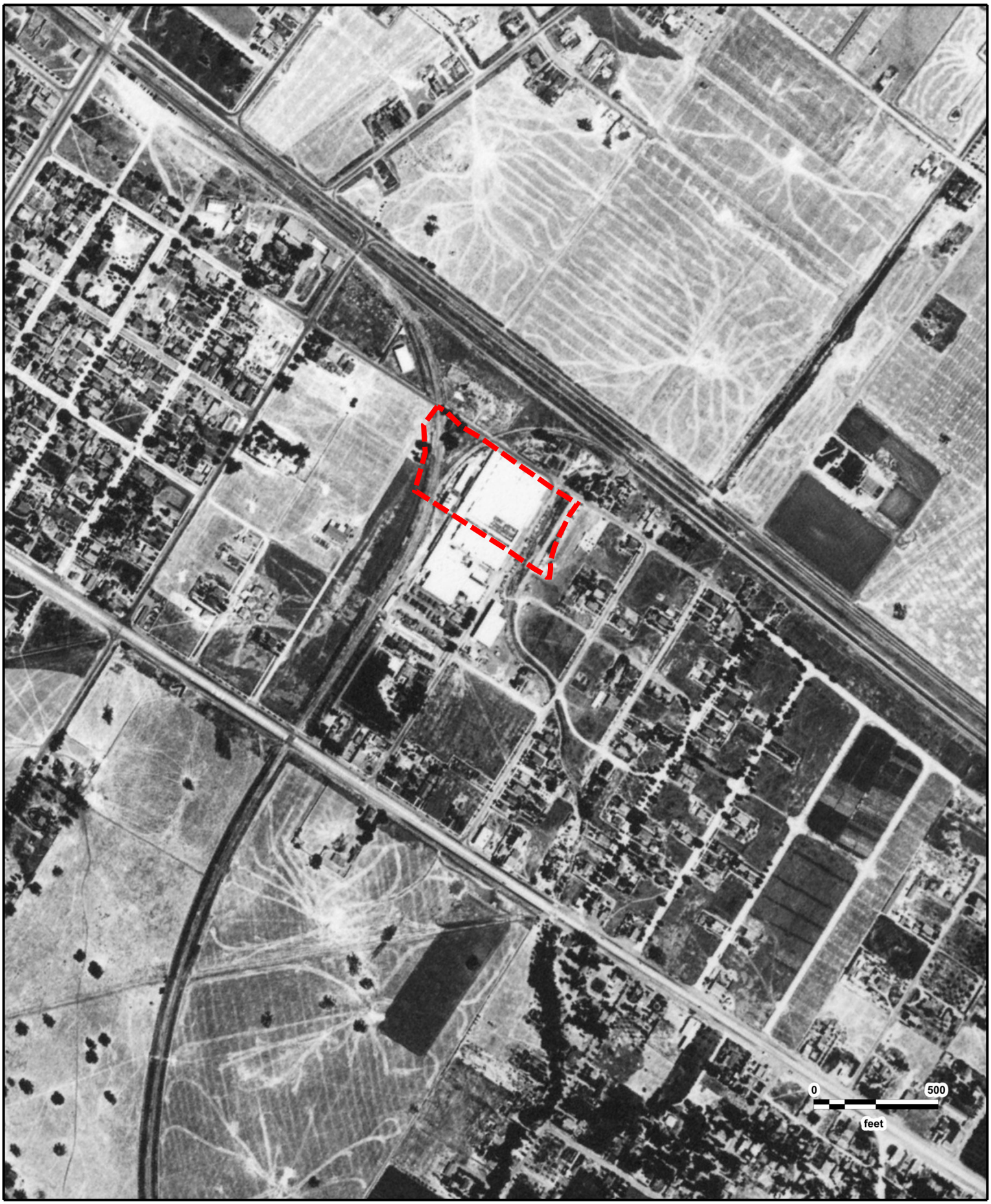


N
W E
S

El Camino Center
USFS
05/05/1948

GeoSearch

JOB #: 376063 - 10/06/2020



N
W E
S

El Camino Center
FAIRCHILD
08/01/1939

GeoSearch

JOB #: 376063 - 10/06/2020



N
W E
S

El Camino Center
FAIRCHILD
05/31/1930

GeoSearch

JOB #: 376063 - 10/06/2020

APPENDIX E

SANBORN FIRE INSURANCE MAPS

GeoSearch

On time. On target. In touch.™

Fire Insurance Map Abstract

Target Property:

El Camino Center

340 Portage Ave,
Palo Alto, CA 94306

Prepared For:

PES Environmental, Inc.

Order #: 154956
Job #: 376066
Project #: 126.076.02
Date #: 10/05/20

phone: 888-396-0042 · fax: 512-472-9967 · www.Geo-Search.com

GeoSearch FIM

FIRE INSURANCE MAP ABSTRACT RESEARCH RESULTS

Report Date: 10/05/20
Order Number: 154956
Job Number: 376066
Site Address(es): 340 Portage Ave,
Palo Alto, CA 94306

This abstract is the result of a visual inspection of various Fire Insurance Map collections. Supporting documentation follows in the Appendix to validate our research. Use of this material is meant for research purposes only. Copyrighted Sanborn Maps can be purchased upon request.

Listed below, please find the results of our search for historic fire insurance maps

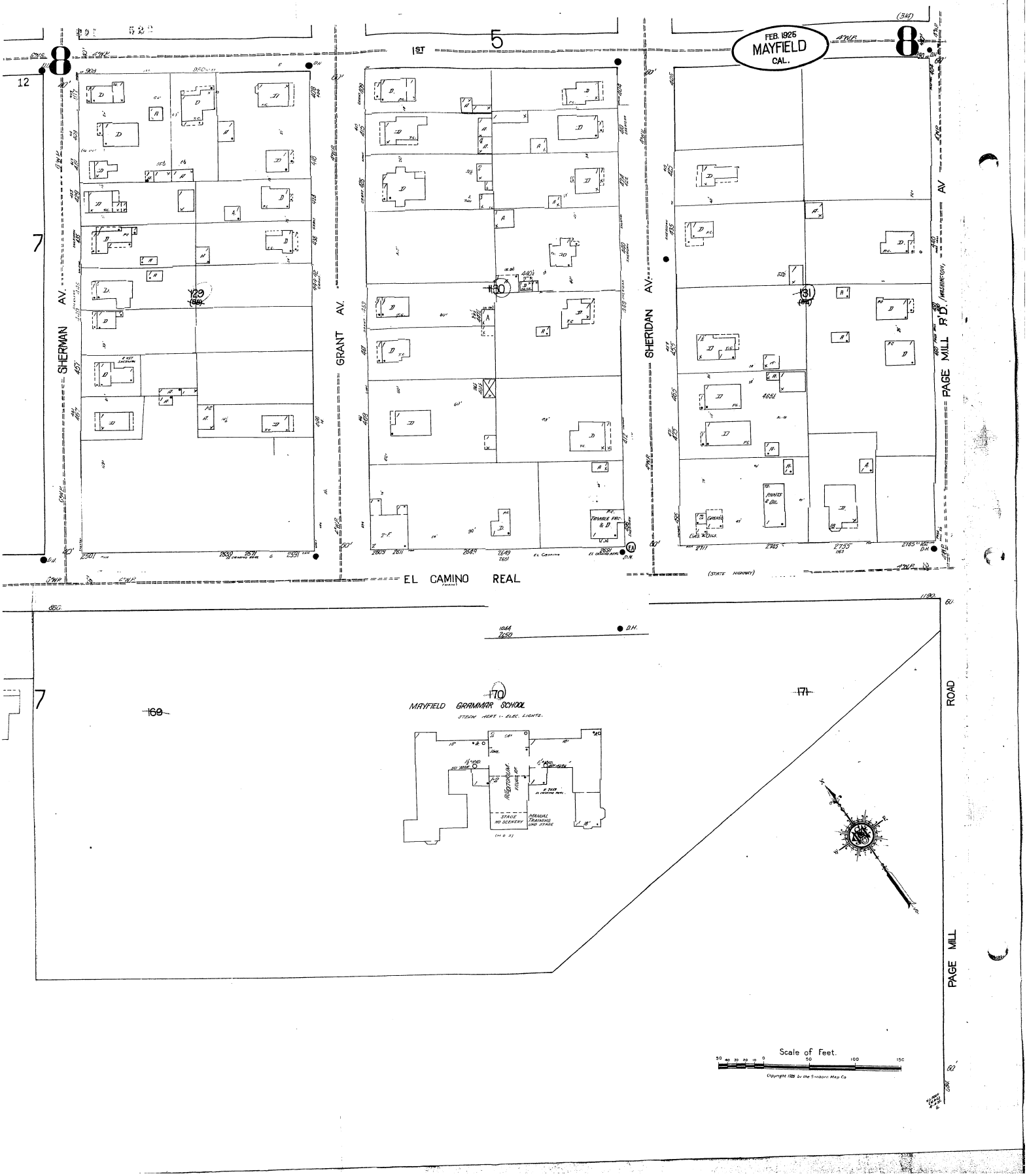
State	City	Date	Volume	Sheet Number(s)
CA	Mayfield	1945	1	8
CA	Mayfield	1945	1	5
CA	Mayfield	1945	1	1
CA	Mayfield	1925	1	8
CA	Mayfield	1925	1	5
CA	Mayfield	1925	1	1
CA	Mayfield	1908	1	5
CA	Mayfield	1904	1	4

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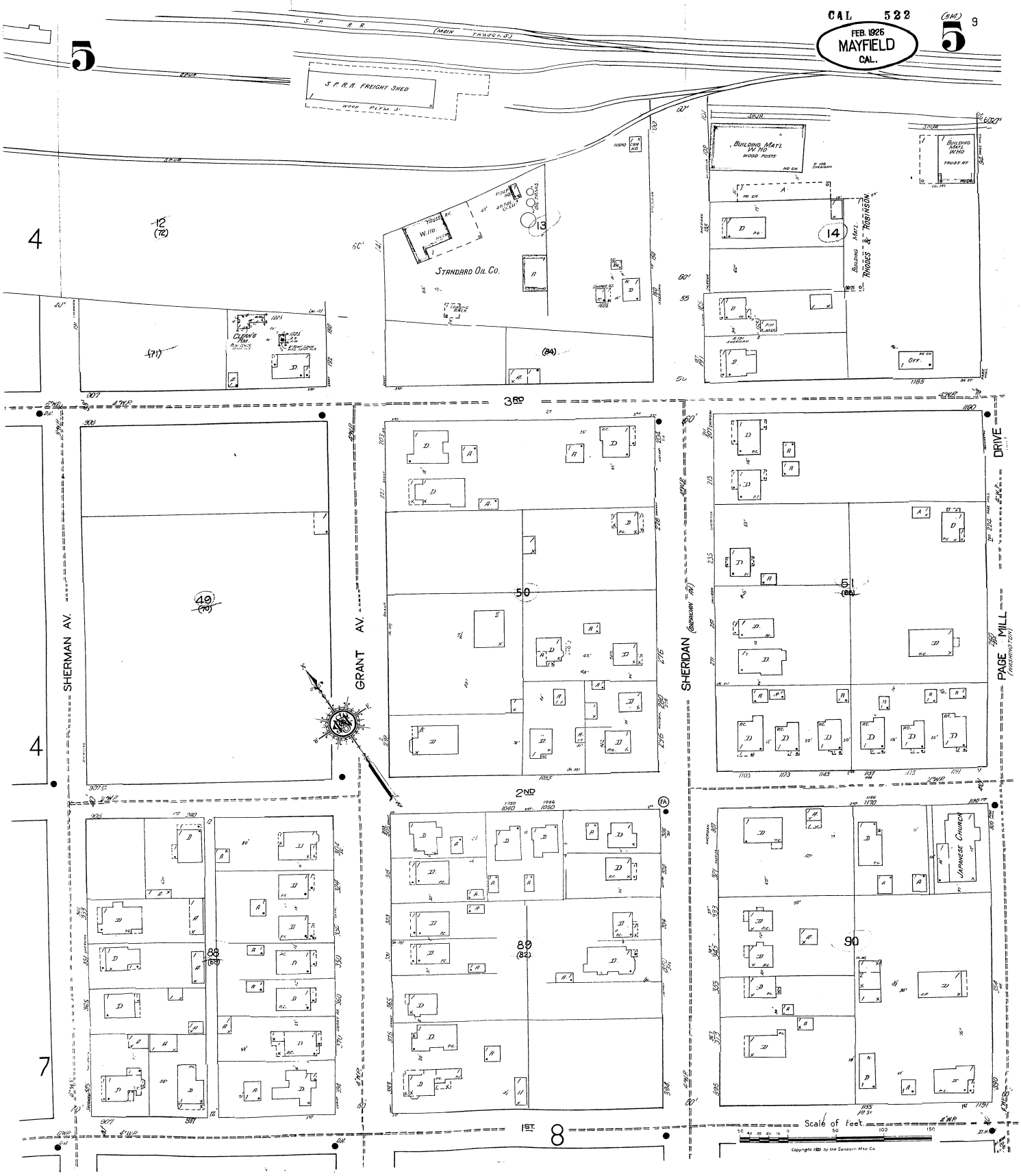
phone: 888-396-0042 · fax: 512-472-9967 · www.Geo-Search.com

Appendix
Supporting Documentation



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Sheet 8
1945



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Sheet 5
1945

CAL 522 8 SHEETS ON 50' SCALE. (3/4)
1 SHEET = 100' "
"E" SHEETS.

1

1 5

SANBORN MAP COMPANY
POPULATION 1300
PREVAILING WINDS N.W.
FOR WATER FACILITIES AND FIRE DEPARTMENT, SEE REPORT
MAYFIELD
SANTA CLARA CO. CAL.
FEB. 1925
NEW YORK
CORRECTIONS MADE BY THE SANBORN MAP COMPANY

NOTE: MAYFIELD IS WITHIN THE CITY LIMITS OF PALO ALTO.

ALL RIGHTS RESERVED. NO PART OF THIS MAP MAY BE REPRODUCED IN ANY FORM WITHOUT WRITTEN PERMISSION FROM THE SANBORN MAP COMPANY.

CORRECTION RECORD

REVN NO.	DATE OF CORRECTION	ATTACHED BY
11	4-45	M.Q. 11-13-45

KEY
FIRE WALL 8IN. ASV ROOF
METAL CORNICE
FIRE WALL 8IN ASV ROOF
WOOD CORNICE
FUTURE WALL 8IN ASV ROOF
FRAME PARTITION
OPENING WITH IRON DOOR
" "STANDARD"
" IRON DOOR
WINDOWS & IRON SHUTTERS
WINDOW 1ST STORY
WINDOWS 2ND & 3RD STORIES
" 2ND & 3RD "
STABLE (CB) CONCRETE BLOCK
BUILDING COLORED YELLOW ASBESTOS
" " RED BRICK
" " BLUE STONE
" " GRAY IRON
" " BROWN FIRE PROOF
INDICATE RELATIVE HEIGHTS
FIRE STATION AS SHOWN ON KEY MAP.
ALTERNATE STREET NUMBERS ARE ACTUAL
CONSECUTIVE STREET NOS ARE ARBITRARY
(P.E.) PERPENDICULAR ELUE

WATER FACILITIES:- MUNICIPAL OWNERSHIP GRAVITY & DIRECT PRESS: WATER FROM H 14" DRILLED WELL, 300' DEEP LOCATED AT P PUMPING PLANT (BLOCK 9, SHEET 1) BY 8 WESTERN WELL WKS ELEC. DRIVEN CENTR. PUMP (CAPY 400 G.P.M. INTO H CONC. SURFACE CISTERN CAPY 50000 GAL. THENCE BY BYRON-JACKSON ELEC. DRIVEN CENTR. BOOSTER PUMP (CAPY 500 G.P.M.) DIRECT INTO DISTRIBUTING SYSTEM. SUPPLIG FILING INTO H 350,000 GAL. CONC. RESERVOIR ELEV. 125' ABOVE BUSINESS DISTRICT (SEE KEY MAP.) GRAVITY PRESSURE 52 LBS., DIRECT PRESSURE 75 LBS. THIS SYSTEM IS CONECTED TO THE PALO ALTO SYSTEM AT VARIOUS POINTS.
-STANDPIPE 80' & 20 DOUBLE HYDS. WHICH ABOUT 5 MILES UP 2", 4", 6", 8", 10", 12" & 18" C.I. WATER MAINS.

FIRE DEPT:- NOW A UNIT OF THE PALO ALTO FIRE DEPT. & KNOWN AS H STATION "2". 2 GMT. TRK. 3 HUNT. MEN. 1-50H GRAVE TRUCK (MOTOR DRIVEN) 1-APP. 250 G.P.M. PUMP. 80 BBL. WATER TANK.- 1200'-2½" - 300'-1½" & 150'-¾" HOSE. 1 - 2-HND COND. HOSE & CHEM.- (MOTOR DRIVEN) 2-40 GAL. CHEM. TANKS. 300'-2½" - 150-CHEM. HOSE.
FIRE ALARM:- SYSTEM OF 50 BOXES IN THIS DISTRICT, SEE SHEET ON END. IND. CORPORATION LIMITS:- OUTLINED ON KEY MAP.
FIRE LIMITS:- AS SHOWN ON KEY MAP BY RED LINE.
PUBLIC LIGHTS:- ELEC. GRAVITY - LEVEL.

INDEX

MAYFIELD, CAL.

PASTE OVER ORIGINAL INDEX

NEW INDEX, MAY, 1945

STREETS

	SHEET
A	
Amherst	498-799 9
Ash	200-299 2
"	300-599 *6
"	301-599 *3
B	
Birch	200-299 2
"	300-599 3
Bowdoin	500-799 9
C	
California Ave., S.	100-351 4
" "	352-599 7
" "	600-1698 *9
Cambridge Ave.	200-377 4
"	378-599 7
College Ave.	200-398 *2
" "	201-383 *4
" "	385-599 *5
" "	400-585 *6
" "	600-1699 9
Columbia	500-799 9
Cornell	400-799 9
D	
Dartmouth	524-799 9
E	
El Camino Real	1630-1899 2
" "	1900-2179 6
" "	2200-2499 7
" "	2500-2799 8
F	
First, Arcata Ave. to Portage Ave.	1
"	800-899 7
"	900-1198 *8
"	901-1199 *5
G	
Grant Ave.	140-399 5
" "	400-599 8
H	
Hanover	500-799 9
Harvard	400-799 9
L	
Lark Lane	3
Leland Ave.	200-498 *2
" "	201-399 *3
" "	401-499 *6
O	
Oberlin	400-799 9
Oxford Ave.	200-399 3
" "	400-599 6
P	
Page Mill Drive	90-398 *5
" " Road	399-599 8
Park Ave.	100-199 2
Park Boulevard	100-299 2
" "	300-587 3
" "	600-799 4
Princeton	400-799 9
S	
Second	600-899 4
"	900-1199 5
Sheridan Ave.	100-399 5
"	400-499 8
Sherman Ave.	176-354 *4
" "	177-399 *5
" "	356-498 *7
" "	401-499 *8
Stanford Ave.	100-399 3
" "	400-599 6
" "	601-1347 *9
Staunton Court	500-599 6
T	
Third	800-899 4
"	900-1199 5
"	1510-1538 *1
W	
Wellesley	400-799 9
Williams	400-799 9
Y	
Yale	400-798 *9
"	401-599 8
"	601-789 *7

* Indicates only one side of Street shown.

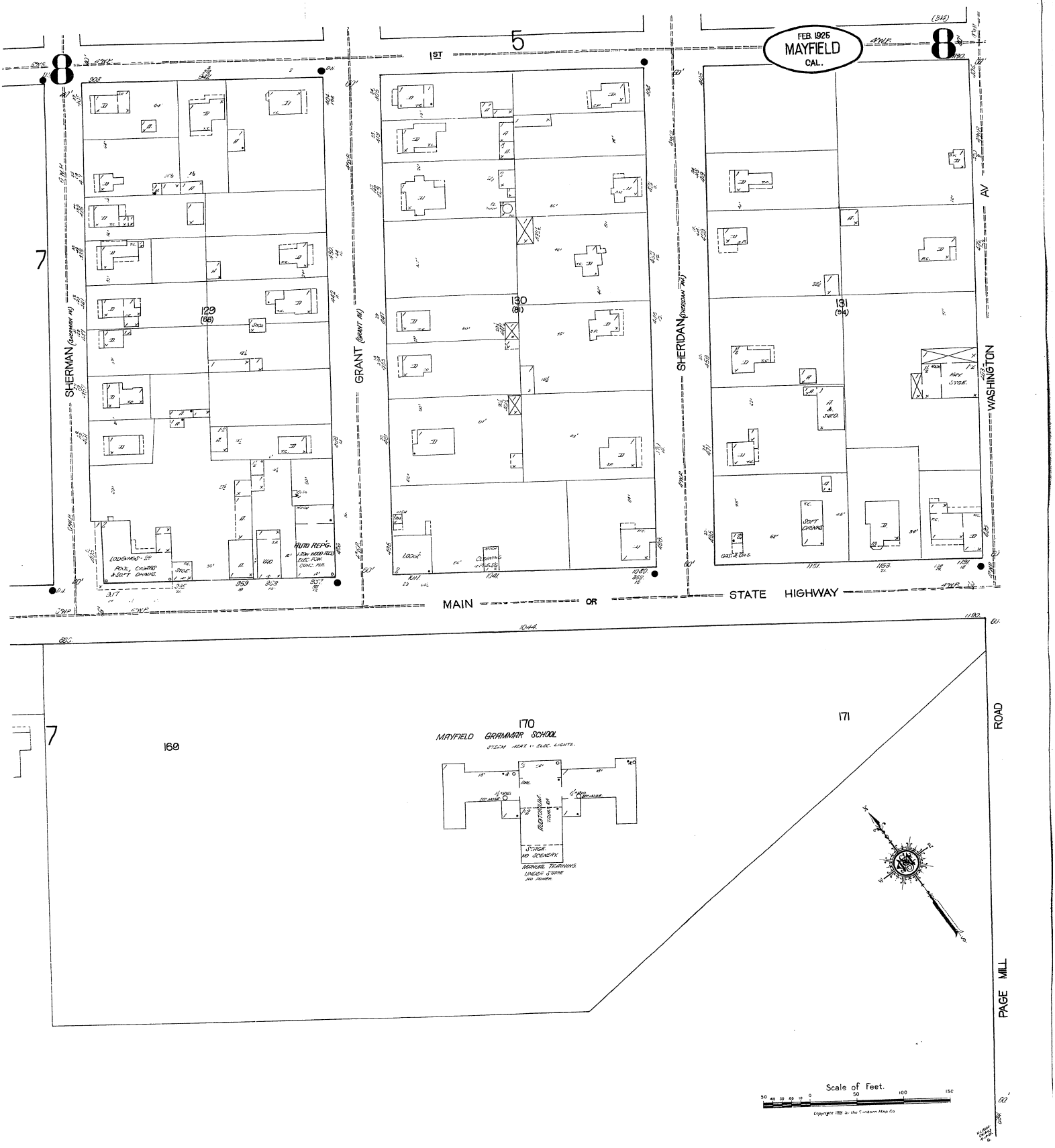
SPECIALS

	SHEET
C	
City Offices	7
Community Church	7
F	
Fire Department, Station No. 2	4
L	
Library, Palo Alto Branch	9
M	
Mayfield Grammar School	8
N	
National Transcribers Society for the Blind	2
P	
Post Office	6
R	
Rhodes & Robinson, Building Material	5
S	
St. Aloysius Church (Roman Catholic)	6
S. P. R. R., Freight Shed	5
Standard Oil Co., Warehouse	5
Sutter Packing Co., Cannery	1
W	
Western Well Works	4

A8

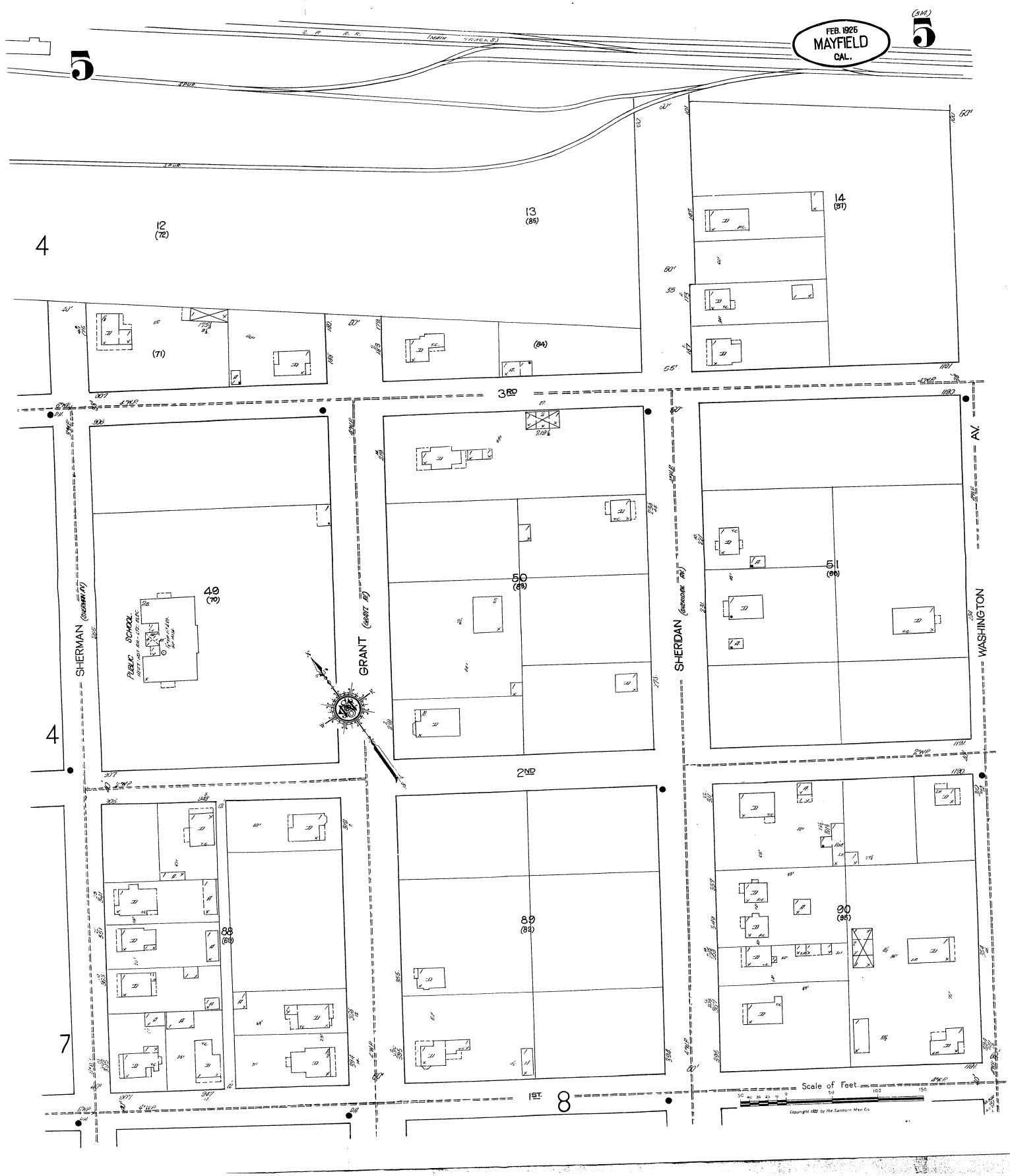
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Sheet 1
1945



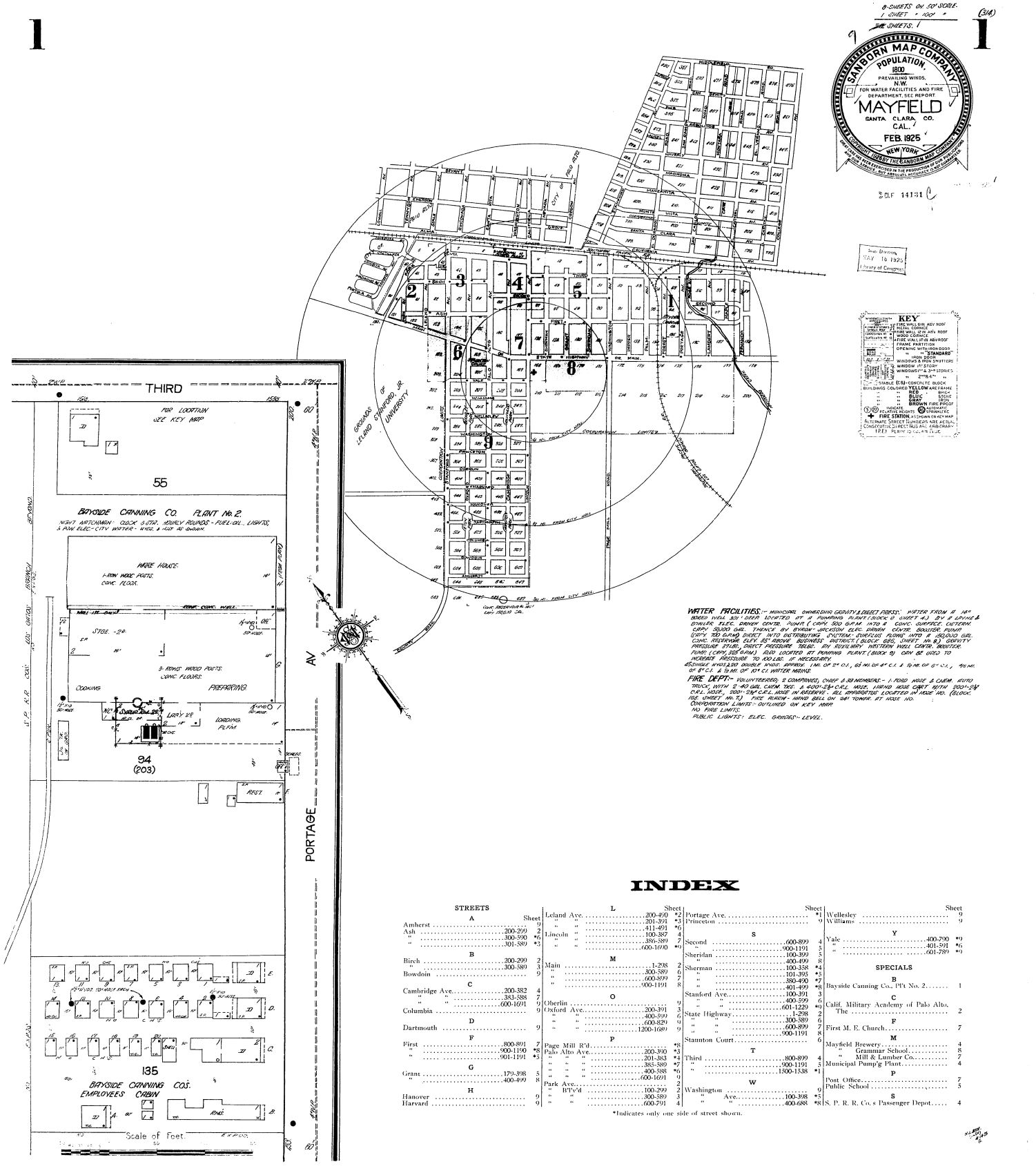
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Sheet 8
1925



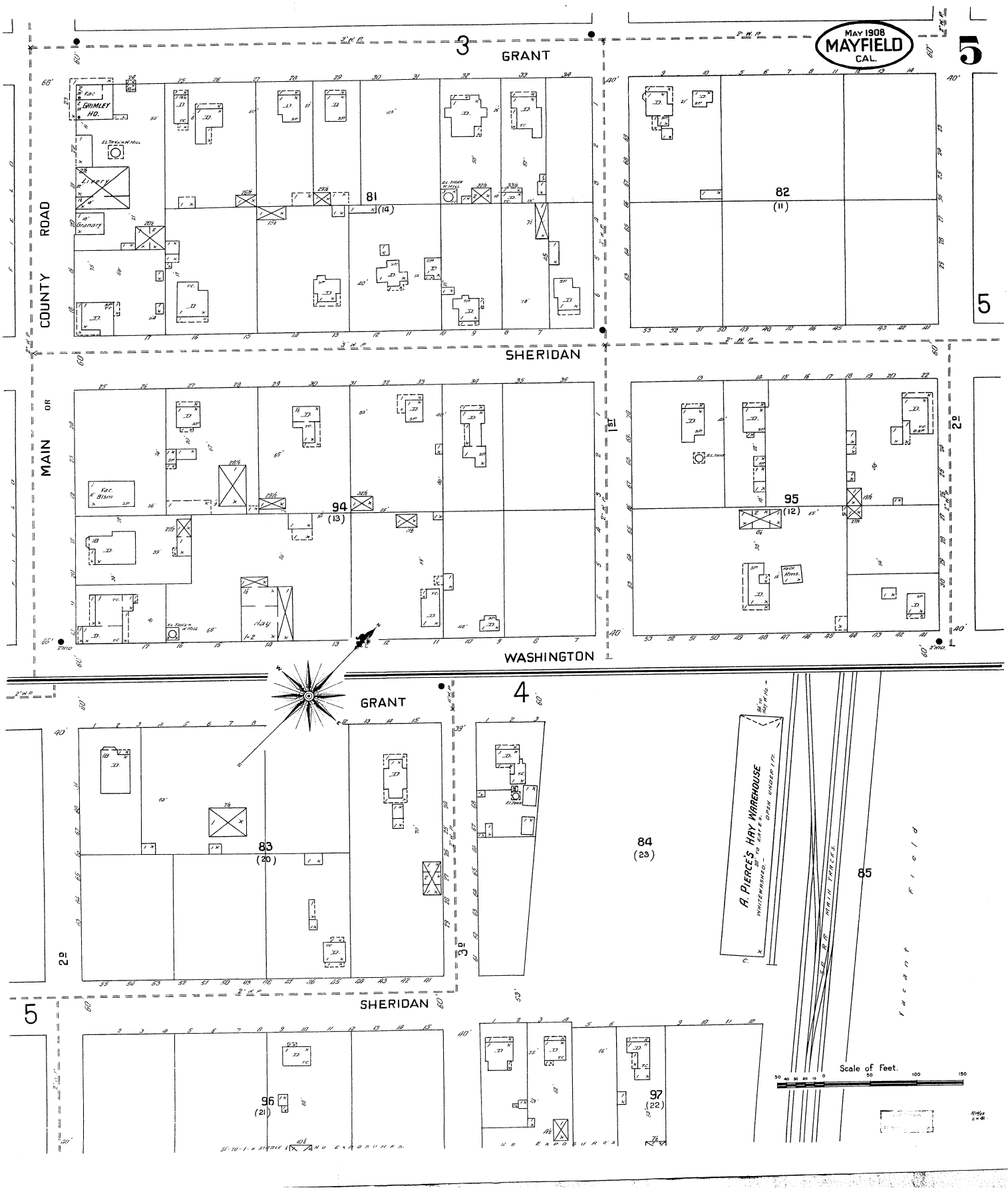
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Sheet 5
1925



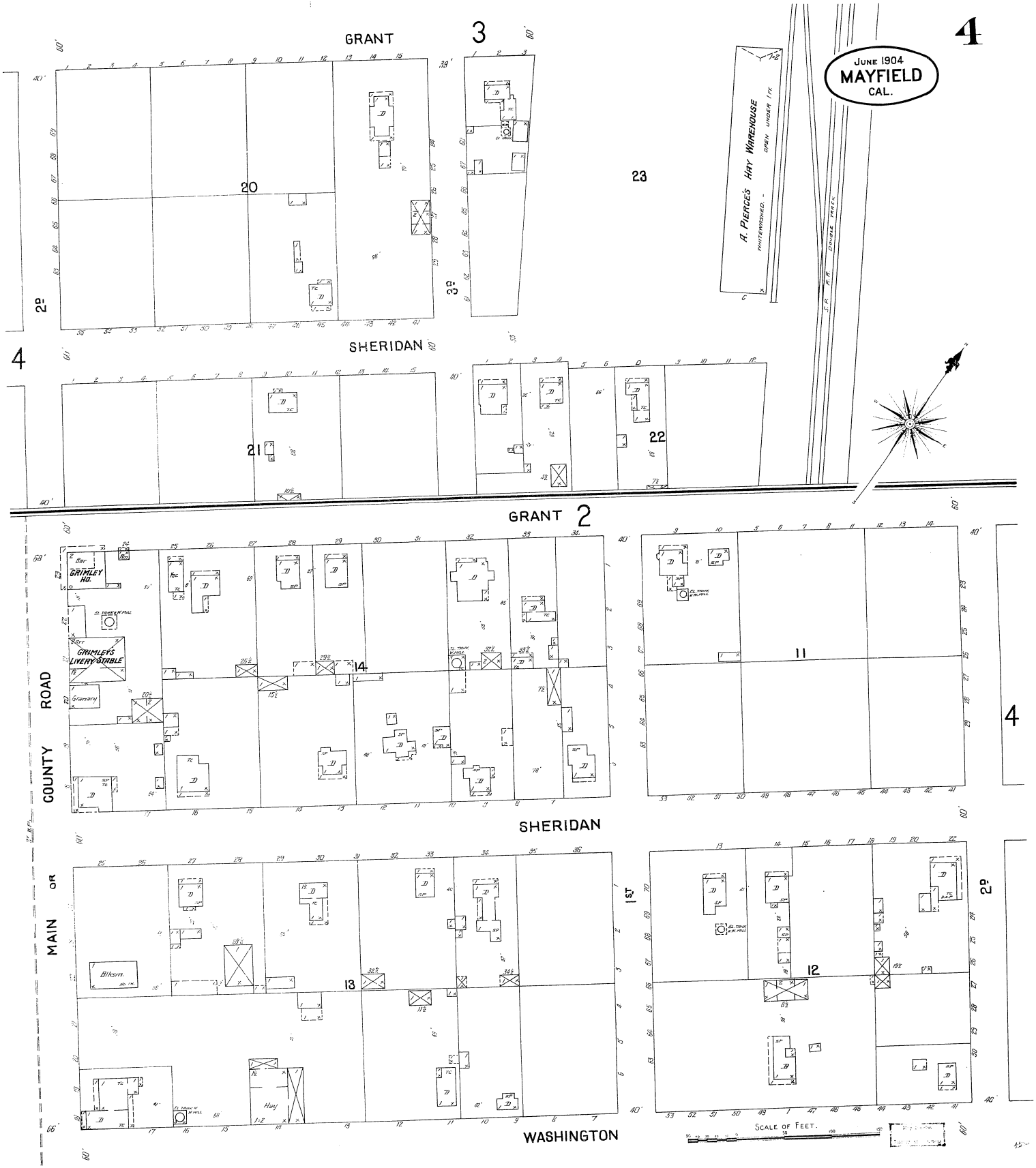
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Sheet 1
1925



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Sheet 5
1908



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Sheet 4
1904

15.5 Acre Retail Center
3200 Park Boulevard
Palo Alto, CA 94306

Inquiry Number: 2897822.3
October 21, 2010

Certified Sanborn® Map Report

EDR® Environmental Data Resources Inc

440 Wheelers Farms Road
Milford, CT 06461
800.352.0050
www.edrnet.com

Certified Sanborn® Map Report

10/21/10

Site Name:
15.5 Acre Retail Center
3200 Park Boulevard
Palo Alto, CA 94306

Client Name:
PES Environmental, Inc.
1682 Novato Boulevard
Novato, CA 94947

EDR Inquiry # 2897822.3

Contact: Chris Baldassari

EDR® Environmental Data Resources Inc

The complete Sanborn Library collection has been searched by EDR, and fire insurance maps covering the target property location provided by PES Environmental, Inc. were identified for the years listed below. The certified Sanborn Library search results in this report can be authenticated by visiting www.edrnet.com/sanborn and entering the certification number. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by Sanborn Library LLC, the copyright holder for the collection.

Certified Sanborn Results:

Site Name: 15.5 Acre Retail Center
Address: 3200 Park Boulevard
City, State, Zip: Palo Alto, CA 94306
Cross Street:
P.O. # 126.076.01.001
Project: 15.5 Acre Retai
Certification # 28EF-4307-A028

Maps Provided:

1978
1969
1956

Sanborn® Library search results
Certification # 28EF-4307-A028

The Sanborn Library includes more than 1.2 million Sanborn fire insurance maps, which track historical property usage in approximately 12,000 American cities and towns. Collections searched:

- ☑ Library of Congress
- ☑ University Publications of America
- ☑ EDR Private Collection

The Sanborn Library LLC Since 1866™

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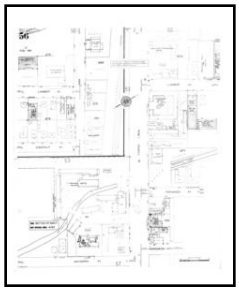
Sanborn Sheet Thumbnails

This Certified Sanborn Map Report is based upon the following Sanborn Fire Insurance map sheets.

1978 Source Sheets



Volume 1, Sheet 50

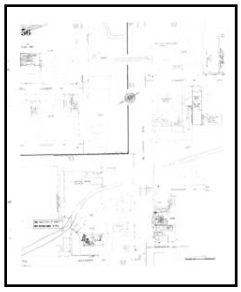


Volume 1, Sheet 56

1969 Source Sheets



Volume 1, Sheet 50



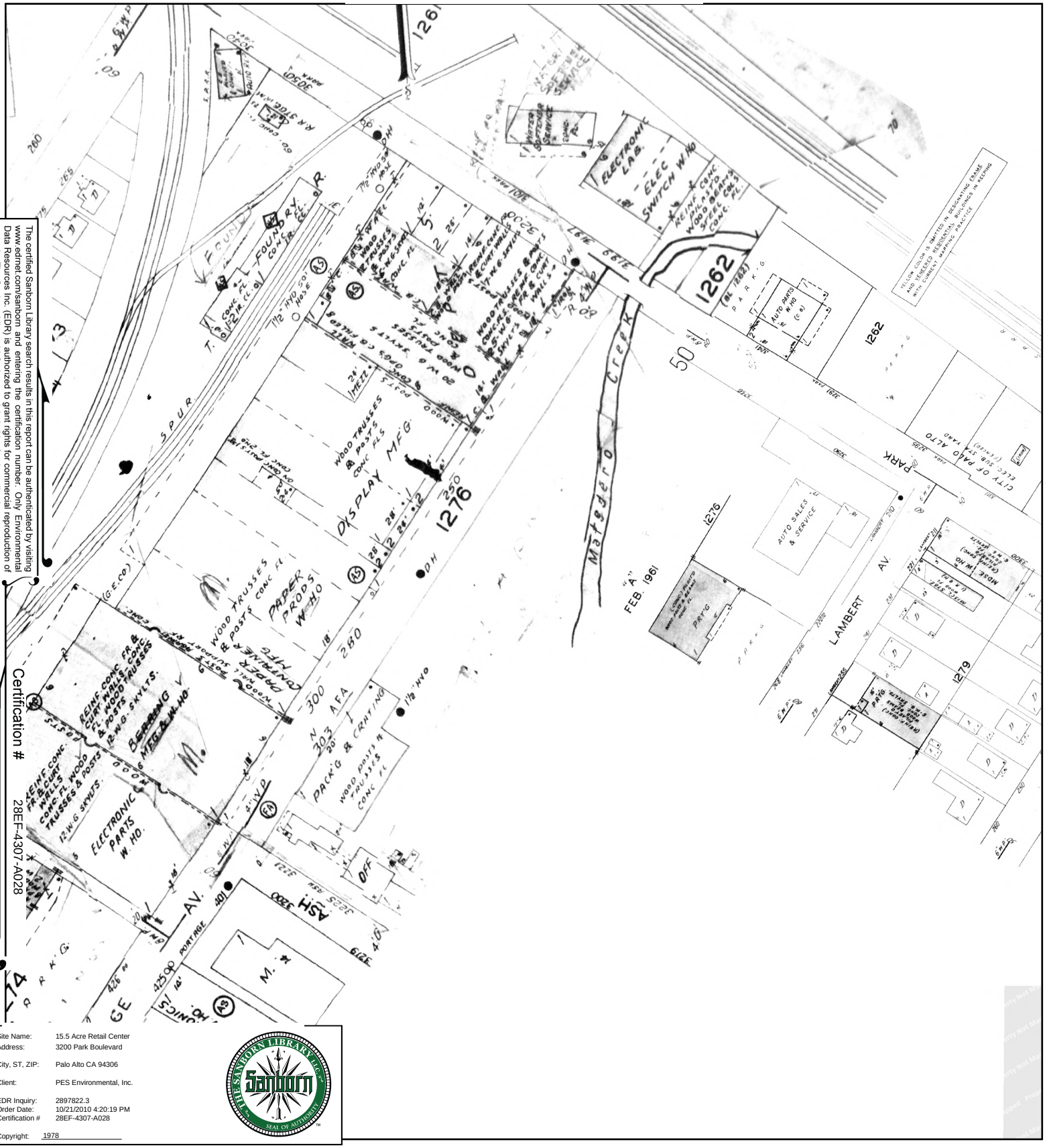
Volume 1, Sheet 56

1956 Source Sheets



Volume 1, Sheet 50

1978 Certified Sanborn Map



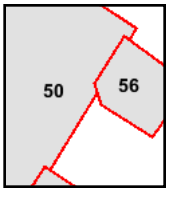
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Certification # 28EF-4307-A028

Site Name: 15.5 Acre Retail Center
Address: 3200 Park Boulevard
City, ST, ZIP: Palo Alto CA 94306
Client: PES Environmental, Inc.
EDR Inquiry: 2897822.3
Order Date: 10/21/2010 4:20:19 PM
Certification # 28EF-4307-A028
Copyright: 1978

This Certified Sanborn Map combines the following sheets.
Outlined areas indicate map sheets within the collection.



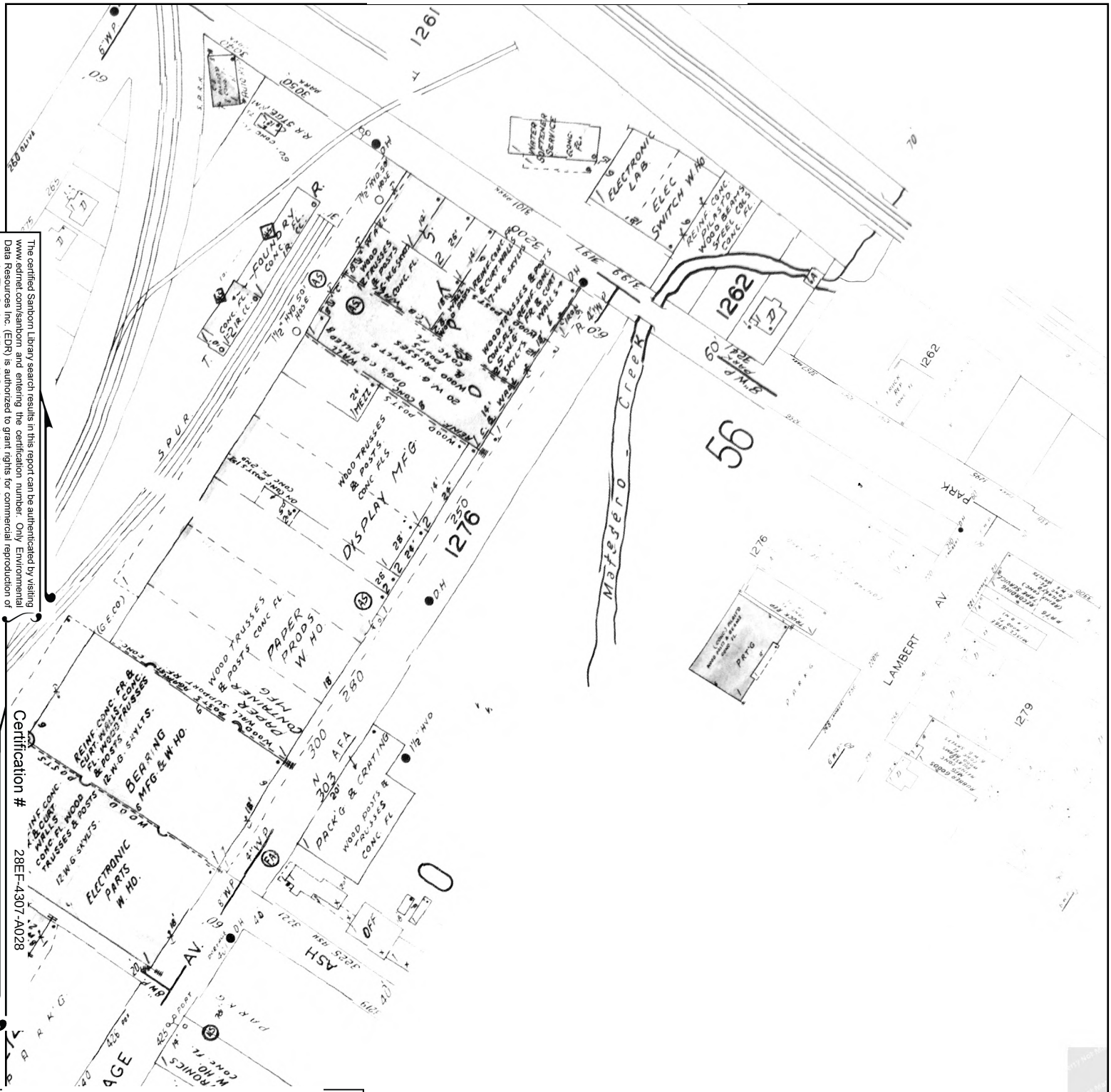


Volume 1, Sheet 50
Volume 1, Sheet 56

0 Feet 150 300 600

N

1969 Certified Sanborn Map



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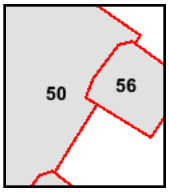
Certification # 28EF-4307-A028

Site Name:	15.5 Acre Retail Center
Address:	3200 Park Boulevard
City, ST, ZIP:	Palo Alto CA 94306
Client:	PES Environmental, Inc.
EDR Inquiry:	2897822.3
Order Date:	10/21/2010 4:20:19 PM
Certification #	28EF-4307-A028
Copyright:	1969

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Volume 1, Sheet 50
Volume 1, Sheet 56

0 Feet 150 300 600

N

1956 Certified Sanborn Map



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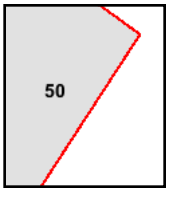
Certification # 28EF-4307-A028

Site Name: 15.5 Acre Retail Center
Address: 3200 Park Boulevard
City, ST, ZIP: Palo Alto CA 94306
Client: PES Environmental, Inc.
EDR Inquiry: 2897822.3
Order Date: 10/21/2010 4:20:19 PM
Certification # 28EF-4307-A028
Copyright: 1956

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Outlined areas indicate map sheets within the collection.

0 Feet 150 300 600





Volume 1, Sheet 50

N

APPENDIX F

HISTORICAL TOPOGRAPHIC MAPS

GeoSearch
On time. On target. In touch.™

Historical Topographic Maps

NEW: *GeoLens by Geosearch*

Target Property:

El Camino Center
340 Portage Ave
Palo Alto, Santa Clara, California 94306

Prepared For:

PES Environmental, Inc.

Order #: 154956
Job #: 376062
Project #: 126.076.02
Date: 10/5/2020

Target Property Summary

El Camino Center
340 Portage Ave
Palo Alto, Santa Clara, California 94306

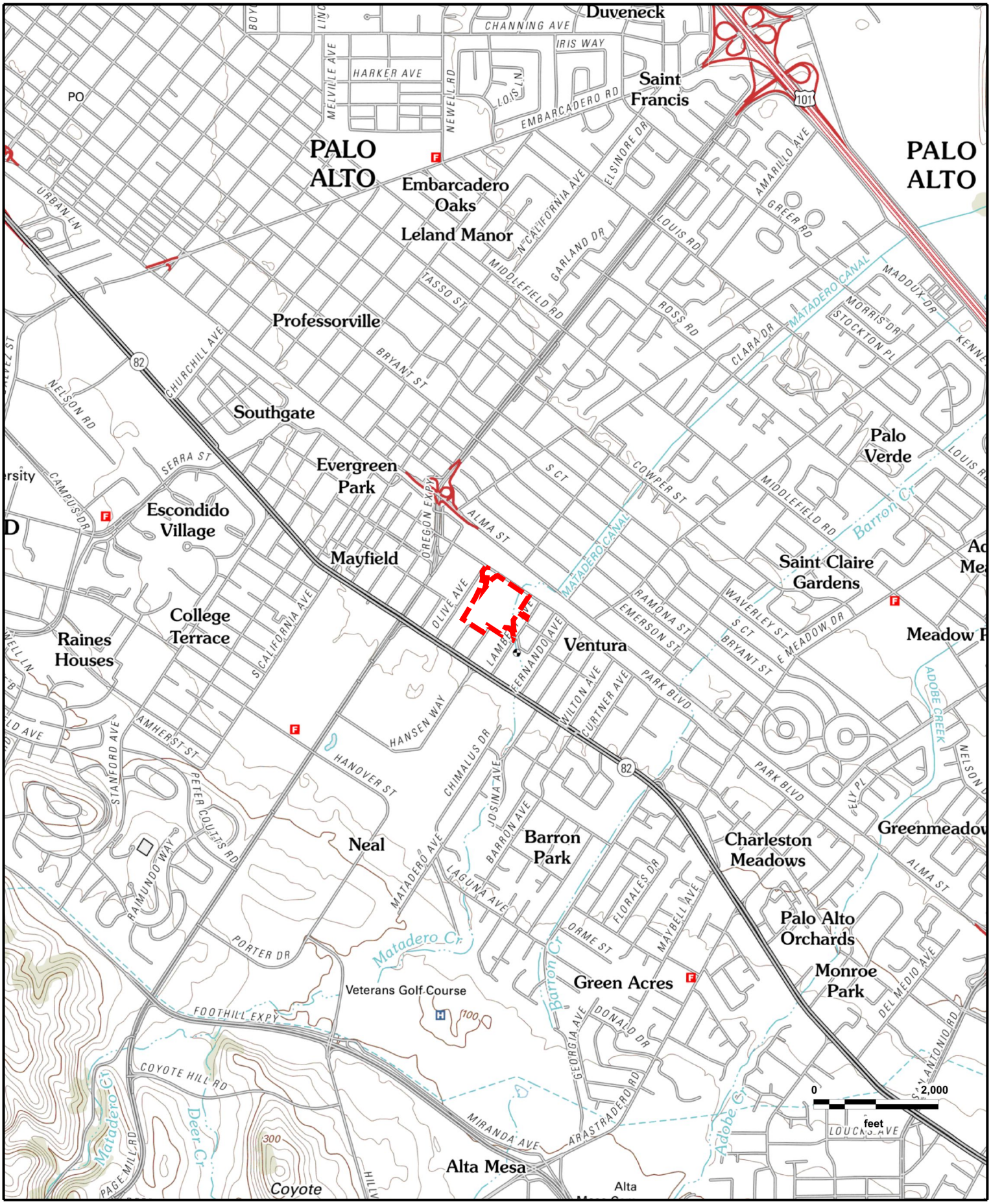
USGS Quadrangle: ***Palo Alto***
Target Property Geometry: ***Area***

Target Property Longitude(s)/Latitude(s):
(-122.137351150, 37.425320898), (-122.137233133, 37.425261256), (-122.137308234, 37.424630753), (-122.137394065, 37.424383663), (-122.137029285, 37.424767078), (-122.136793250, 37.424903404), (-122.136685962, 37.424937485), (-122.134969348, 37.424017286), (-122.135505790, 37.423361211), (-122.135055179, 37.423131158), (-122.135087365, 37.423062994), (-122.135537977, 37.423310088), (-122.135827655, 37.422977788), (-122.135795469, 37.422585843), (-122.135720367, 37.422330225), (-122.135795469, 37.422210937), (-122.135892028, 37.422517678), (-122.136106605, 37.422636967), (-122.136256809, 37.422654008), (-122.136482114, 37.422338746), (-122.137254590, 37.422739213), (-122.137501354, 37.422449514), (-122.138627881, 37.423028912), (-122.138391847, 37.423327129), (-122.137919778, 37.423974684), (-122.137662286, 37.424392183), (-122.137522811, 37.424809680), (-122.137544269, 37.425116411)

Topographic Map Summary

Date	Quadrangle	Scale
2012	PALO ALTO, CA (2012)	1" = 2000'
	MOUNTAIN VIEW, CA (2012)	
1991 PHOTOINSPECTED 1997	PALO ALTO, CA (1997)	1" = 2000'
	MOUNTAIN VIEW, CA (1997)	
1991	PALO ALTO, CA (1991)	1" = 2000'
	MOUNTAIN VIEW, CA (1991)	
1961 PHOTOREVISED 1973	PALO ALTO, CA (1973)	1" = 2000'
	MOUNTAIN VIEW, CA (1973)	
1961 PHOTOREVISED 1968	PALO ALTO, CA (1968)	1" = 2000'
	MOUNTAIN VIEW, CA (1968)	
1961	PALO ALTO, CA (1961)	1" = 2000'
	MOUNTAIN VIEW, CA (1961)	
1953	PALO ALTO, CA (1953)	1" = 2000'
	MOUNTAIN VIEW, CA (1953)	
1948	PALO ALTO, CA	1" = 5208'
1943	PALO ALTO, CA	1" = 5208'
1902	SANTA CRUZ, CA	1" = 10420'
1899	PALO ALTO, CA	1" = 5208'
1897	PALO ALTO, CA	1" = 5208'

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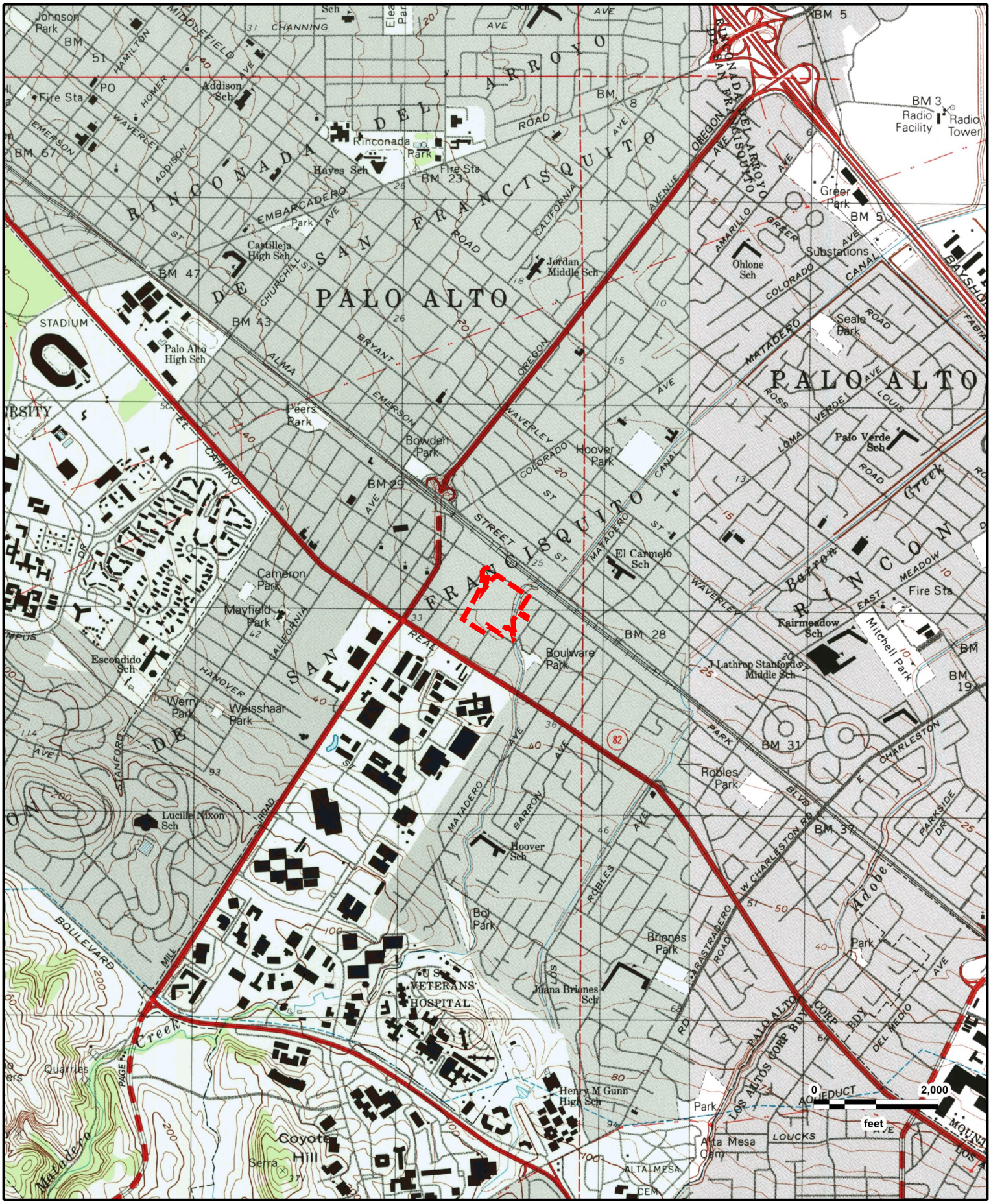


N
W E
S

El Camino Center
PALO ALTO, CA (2012), MOUNTAIN VIEW, CA (2012)

GeoSearch

JOB #: 376062 - 10/05/2020

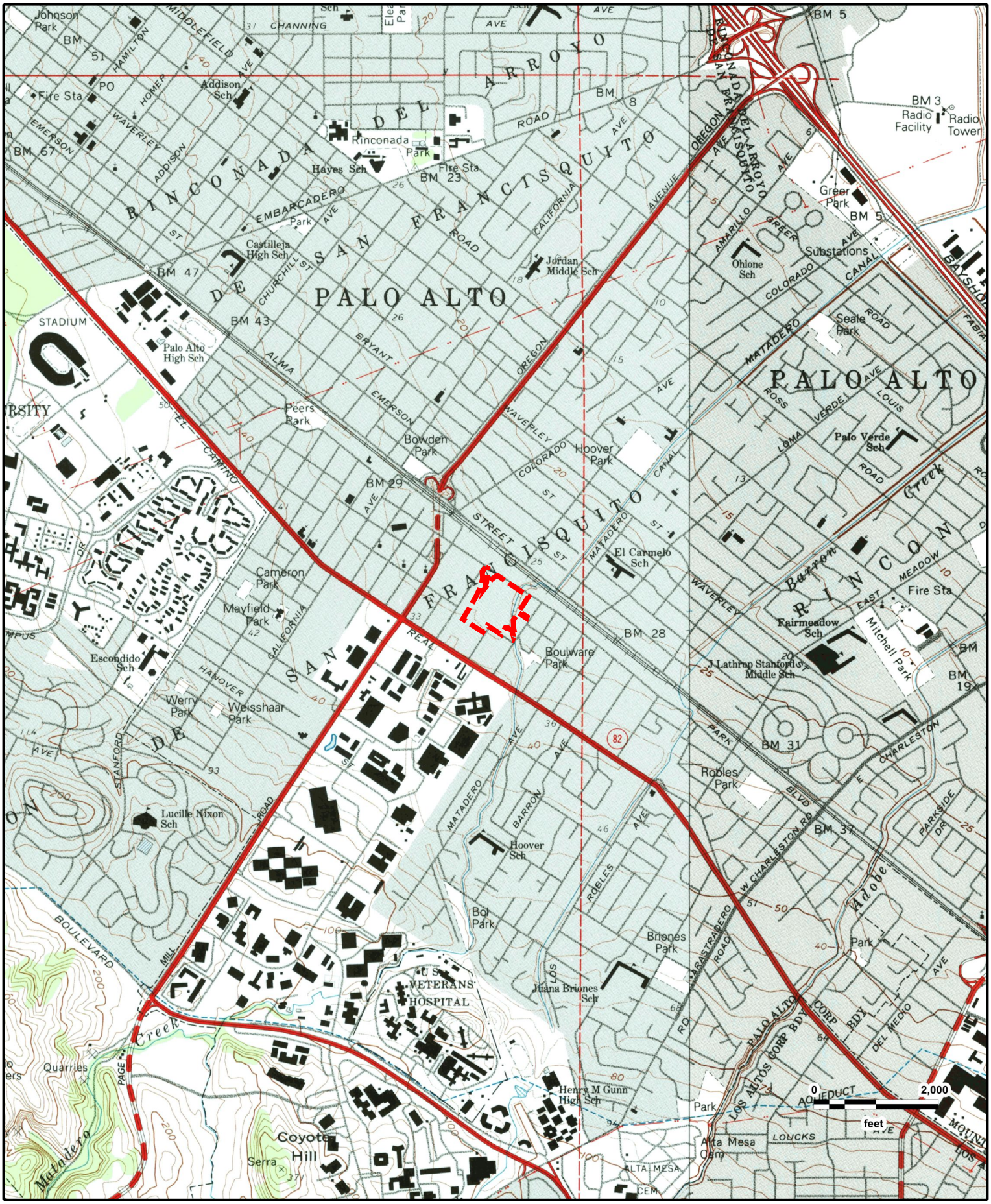


N
W E
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El Camino Center
PALO ALTO, CA (1997), MOUNTAIN VIEW, CA (1997)

GeoSearch

JOB #: 376062 - 10/05/2020

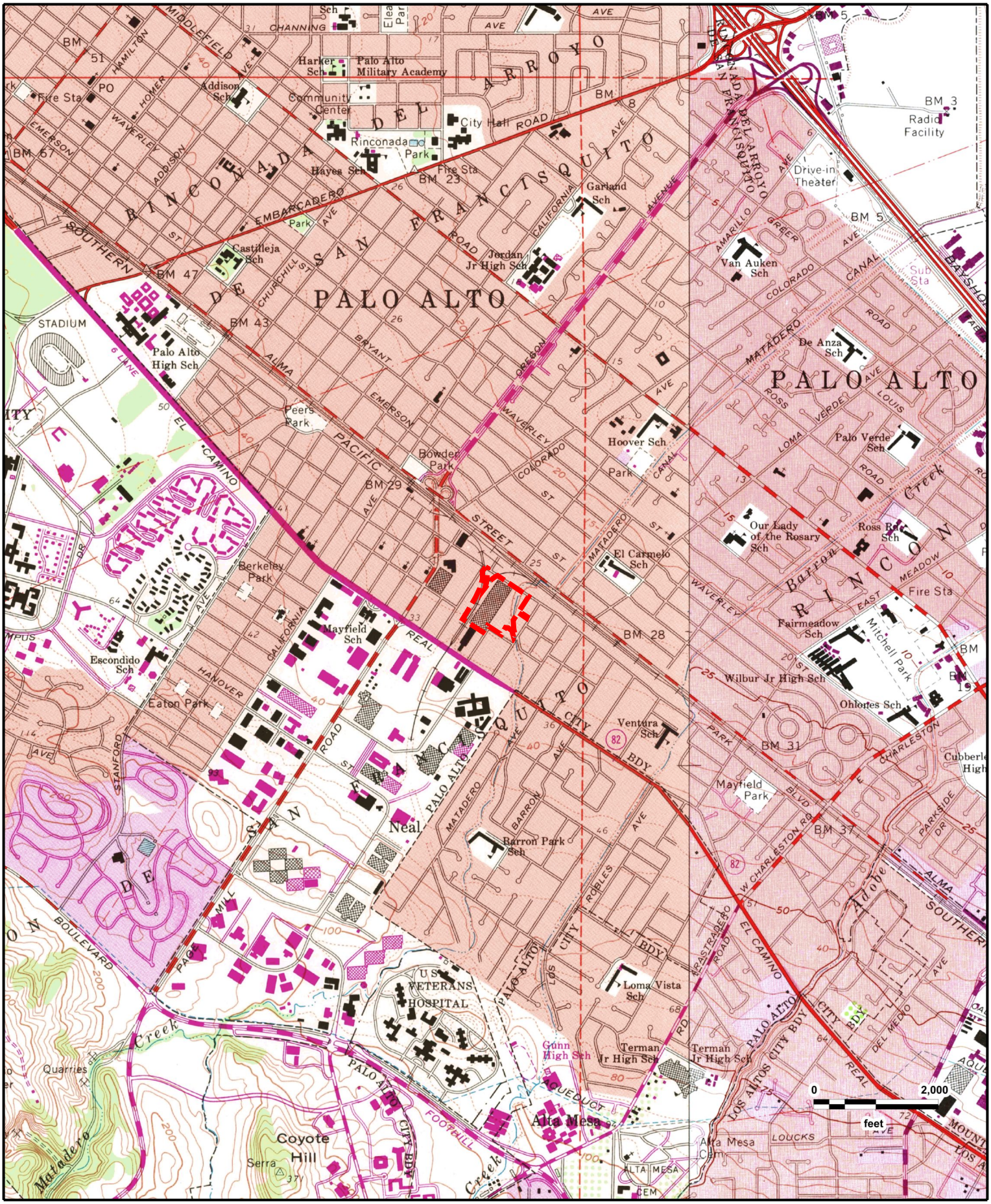


N
W E
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El Camino Center
PALO ALTO, CA (1991), MOUNTAIN VIEW, CA (1991)

GeoSearch

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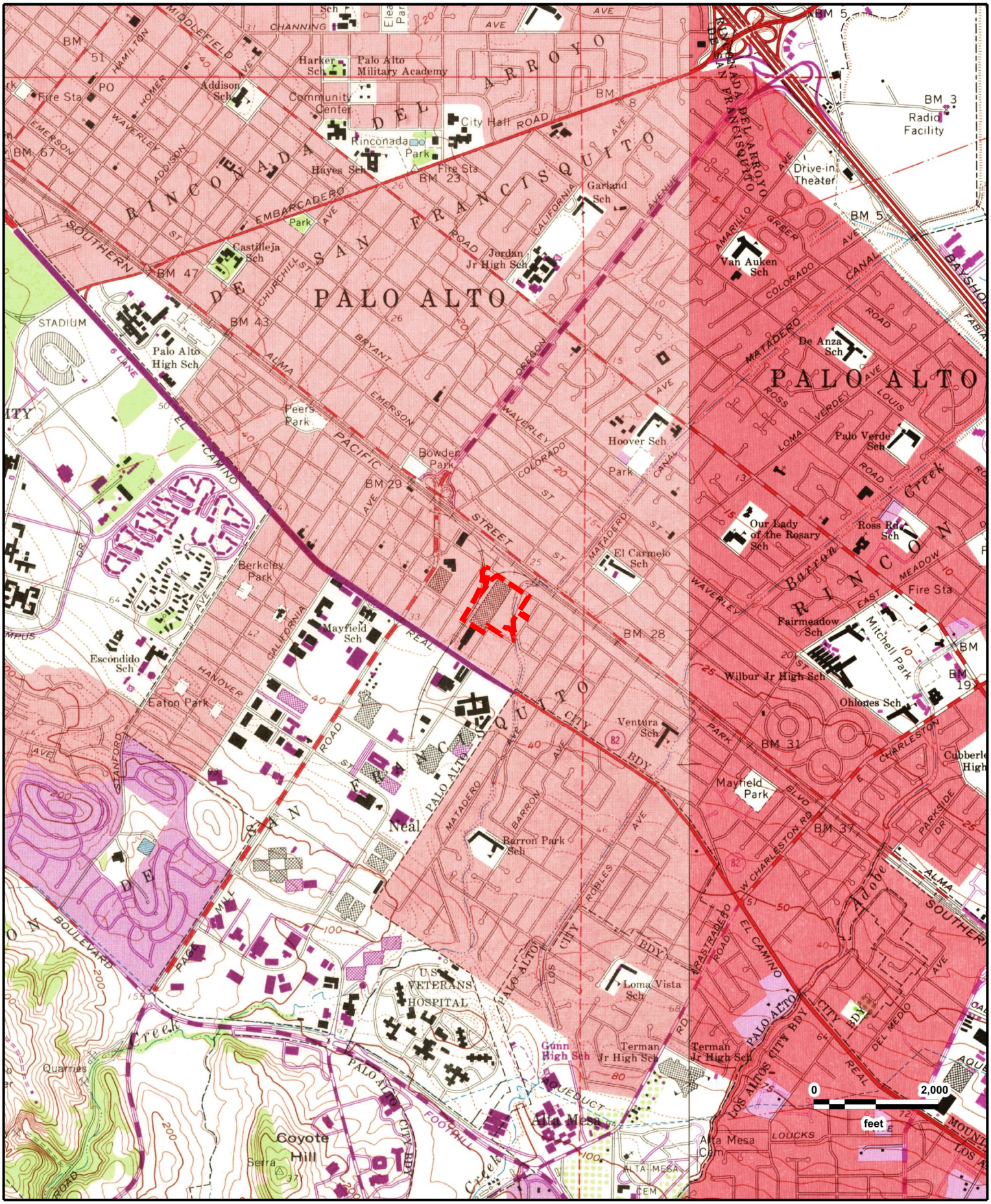


N
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El Camino Center
PALO ALTO, CA (1973), MOUNTAIN VIEW, CA (1973)

GeoSearch

JOB #: 376062 - 10/05/2020

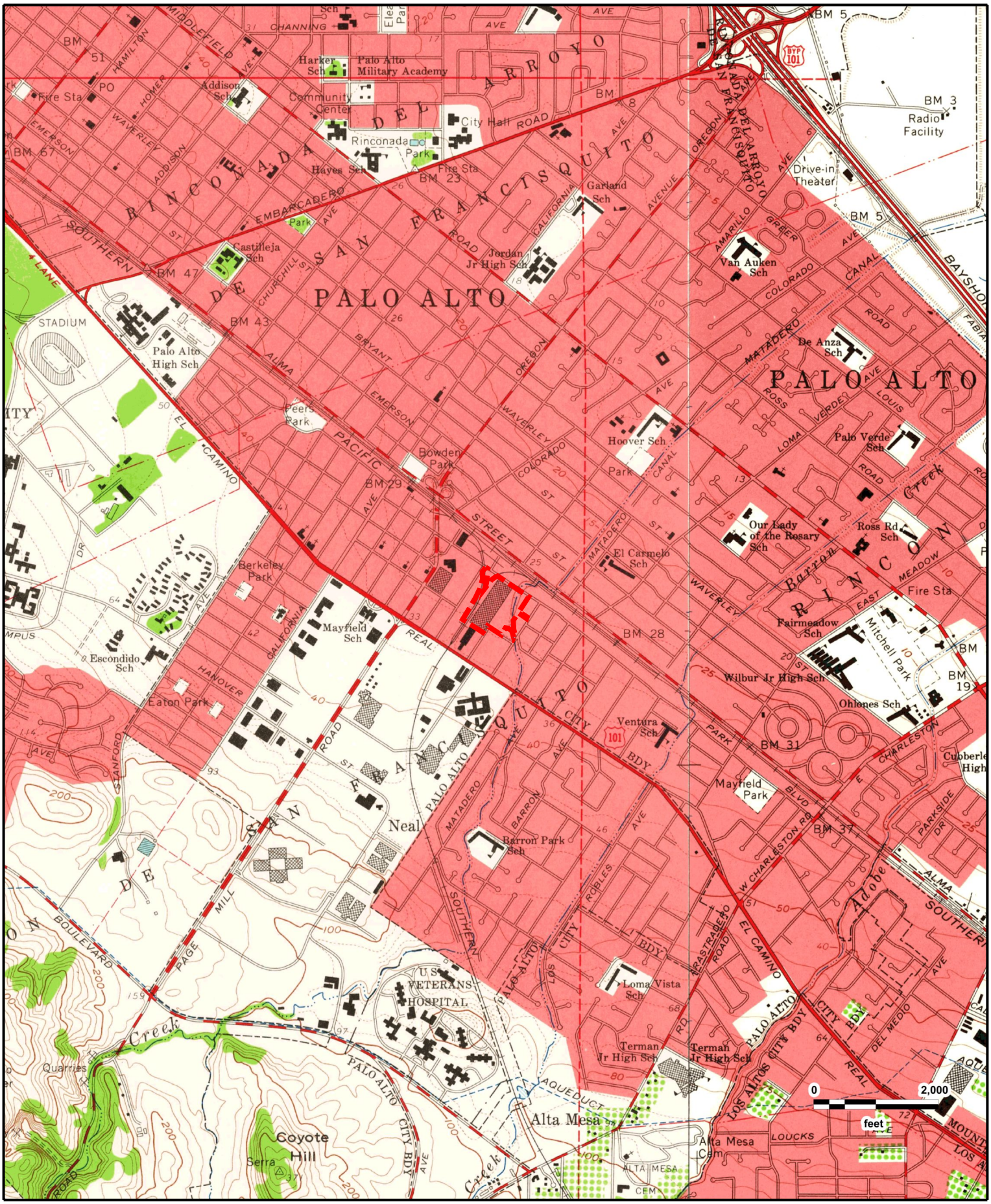


N
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El Camino Center
PALO ALTO, CA (1968), MOUNTAIN VIEW, CA (1968)

GeoSearch

JOB #: 376062 - 10/05/2020

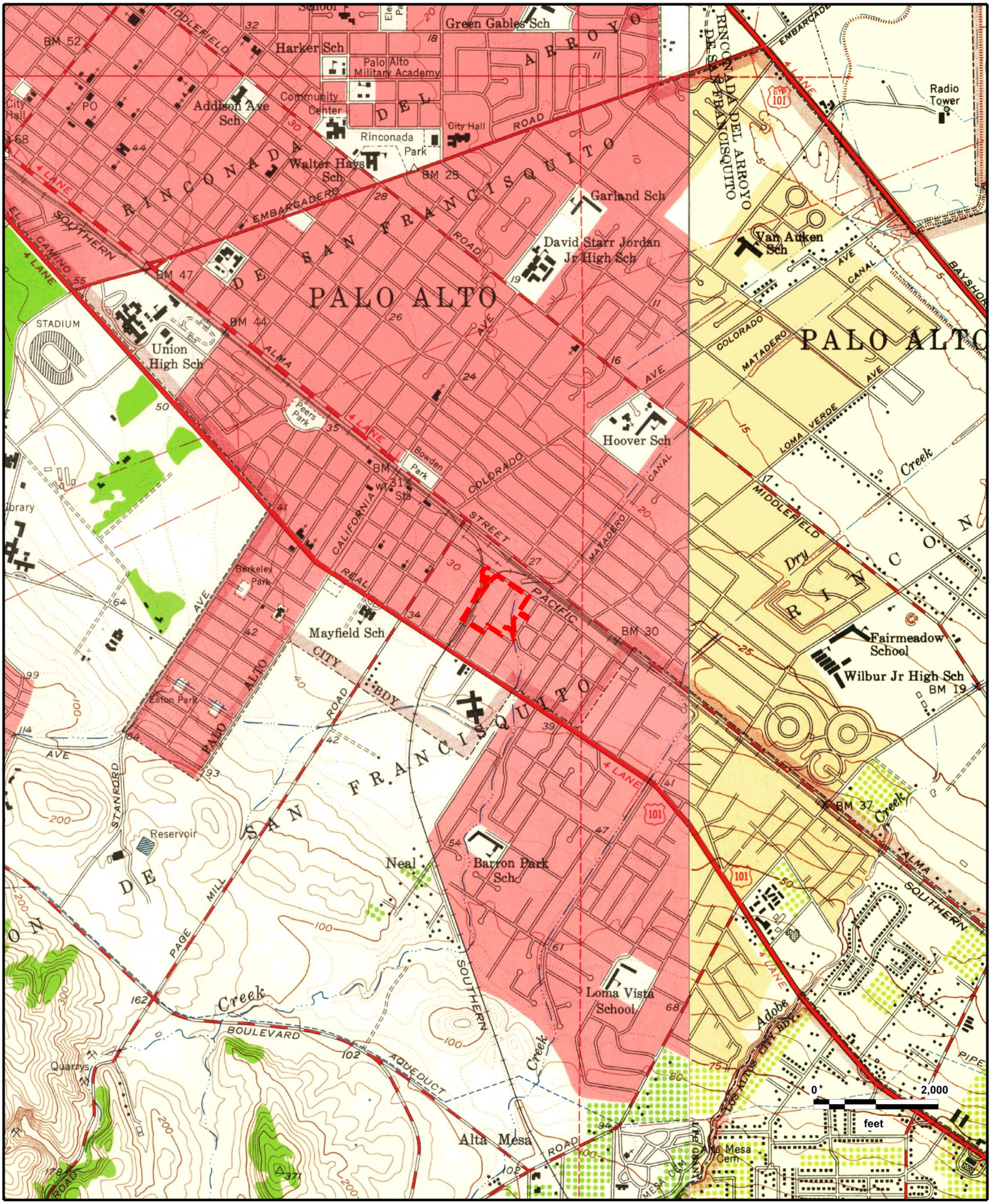


N
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El Camino Center
PALO ALTO, CA (1961), MOUNTAIN VIEW, CA (1961)

GeoSearch

JOB #: 376062 - 10/05/2020

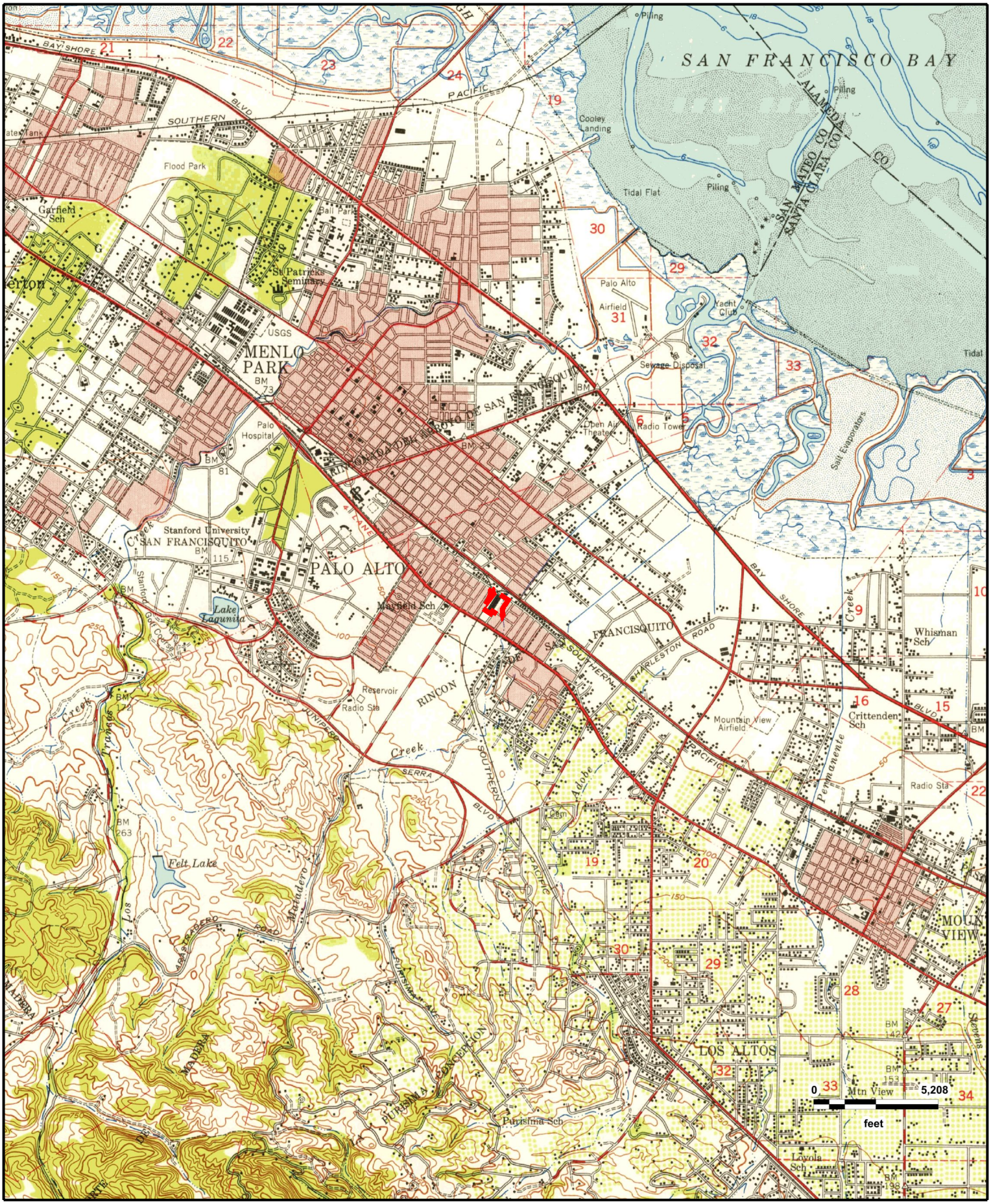


N
W E
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El Camino Center
PALO ALTO, CA (1953), MOUNTAIN VIEW, CA (1953)

GeoSearch

JOB #: 376062 - 10/05/2020

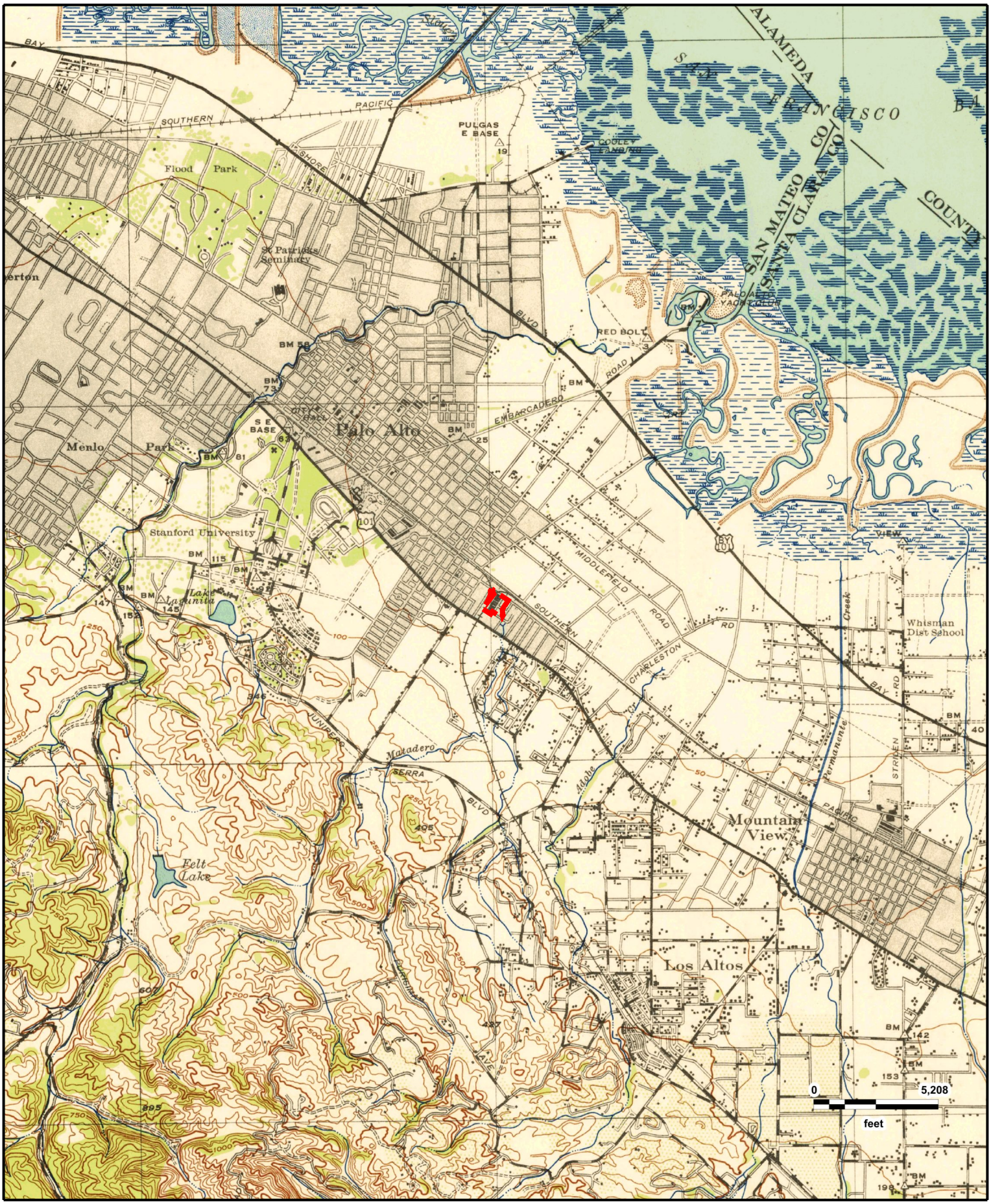


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El Camino Center
PALO ALTO, CA (1948)

GeoSearch

JOB #: 376062 - 10/05/2020

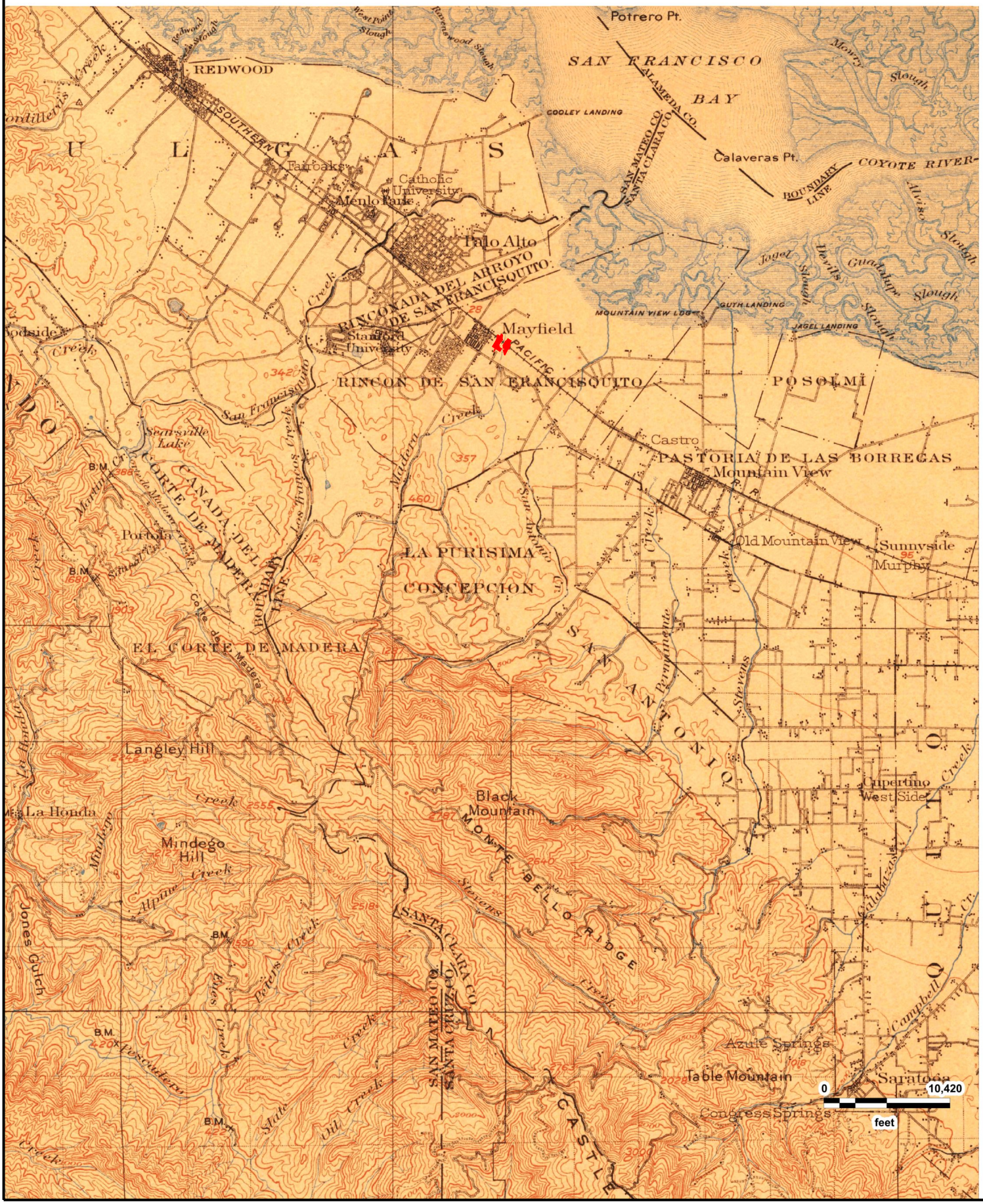


N
W E
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El Camino Center
PALO ALTO, CA (1943)

GeoSearch

JOB #: 376062 - 10/05/2020

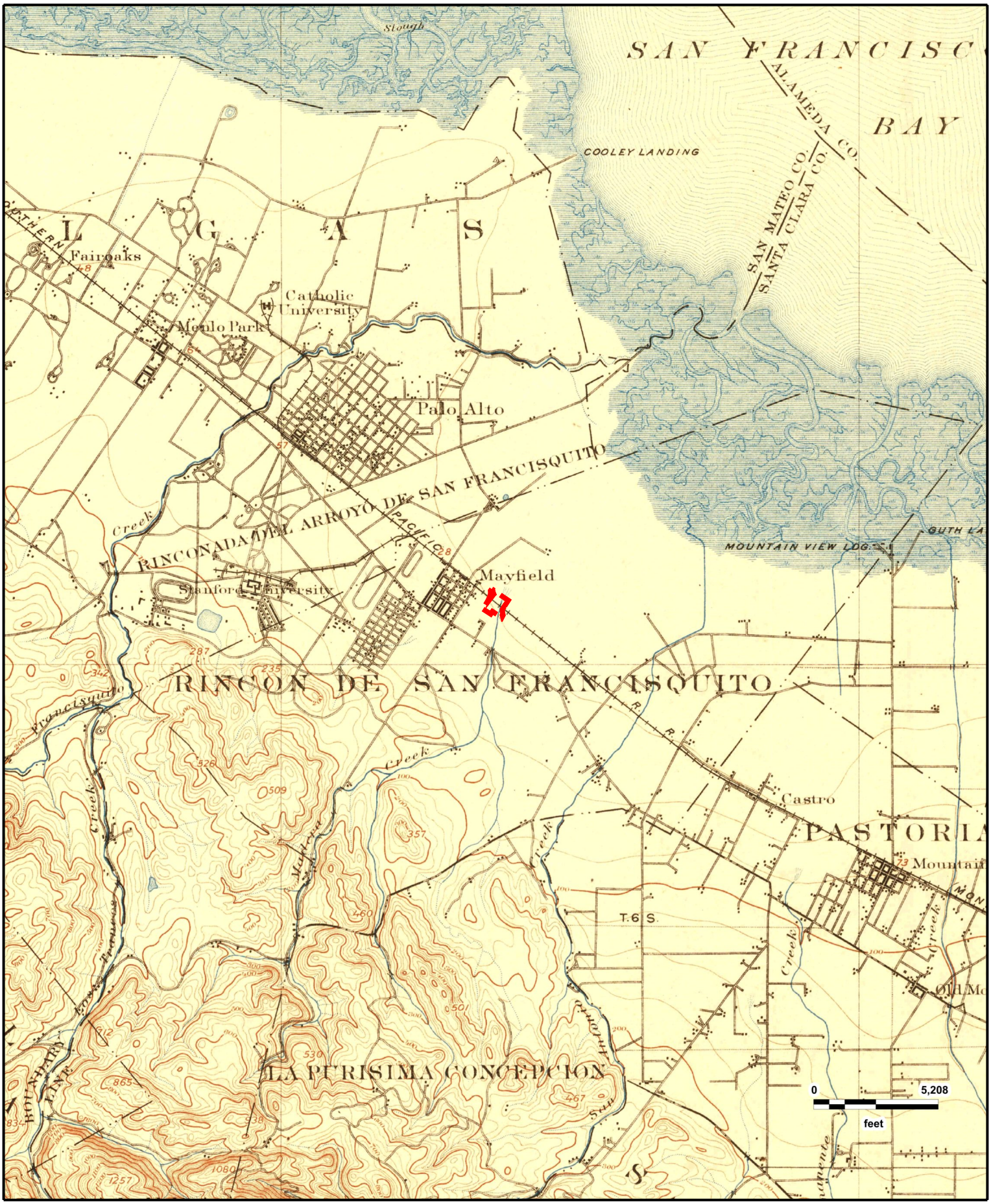


N
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El Camino Center
SANTA CRUZ, CA (1902)

GeoSearch

JOB #: 376062 - 10/05/2020



El Camino Center
PALO ALTO, CA (1899)

GeoSearch

JOB #: 376062 - 10/05/2020



N
W E
S

El Camino Center
PALO ALTO, CA (1897)

GeoSearch

JOB #: 376062 - 10/05/2020

APPENDIX G

CITY ADDRESS DIRECTORY ABSTRACT

GeoSearch
On time. On target. In touch.™

Historical By Street Number

Target Property:

340 Portage Ave,

Palo Alto, CA 94306

Prepared For:
PES Environmental, Inc.

Order #: 154956

Project #: 126.076.02

Date: 10/1/2020

City Directory Historical by Street Number

200 Portage Ave	No Listing (1942-2004); Intapp Inc (2009); Integration Appliance Inc (2009); Tsunami Software (2009); No Listing (2014-2017); Intapp (2019)
210 Portage Ave	No Listing (1942-2004); Paycycle Inc (2009); Better Planet Investments (2014-2019); Imo Im (2014-2019); Paycycle Inc (2017)
220 Portage Ave	No Listing (1942-1991); Euphonix Inc (1994); Euphonix Incorporated (1999); Rensong Tsay (2004); Euphonix Inc (2009-2014); Boxnet Inc (2014-2017); Box.Net Inc (2019); Nauto Inc (2019)
230 Portage Ave	No Listing (1942-1999); The Teak Patio (2004); No Listing (2009); Blue Sky Outdoor (2014); Regency Teak (2014); No Listing (2017-2019)
303 Portage Ave	No Listing (1942-1960); Advance Transformer Co (1965); James R W Packaging Pkg (1965-1975); James Packaging Corp (1982); No Listing (1986-2019)
330 Portage Ave	No Listing (1942-1986); Abc Self Storage (1991-1994); No Listing (1999-2019)
332 Portage Ave	No Listing (1942-1986); Pogo Educational Services (1991); Douglas Rafferty Tech Document (1994); No Listing (1999-2019)
335 Portage Ave	No Listing (1942-1986); Rescue Now Internatl (1991-1994); Rni (1999-2009); No Listing (2014-2019)
336 Portage Ave	No Listing (1942-1986); Carroll Publishing Co (1991); Sound Approaches (1991); Lanig Associates (1994-1999); Occupant Unknown (2004); Ready To Play (2009-2017); Neighborhood Tech Support (2014-2019); Trueinsider Inc (2014); Sunbridge Global Inc (2017); Zendo Products Inc (2019)
340 Portage Ave	No Listing (1942-1982); Basket Galleria Inc (1986-1991); No Listing (1994-2014); Frys Electronics (2017); Verizon Wireless (2017); No Listing (2019)
360 Portage Ave	No Listing (1942-1986); Frys Electronics (1991-1999); American Institute Of Mathematics (1999); Occupant Unknown (2004); American Institute Of Mathematics (2009-2014); Frys Electronics Inc (2009-2017); Fry's Electronics (2019)
370 Portage Ave	No Listing (1942-1994); Pacific Data Images (1999); Lyncean Technologies Inc (2004-2014); No Listing (2017-2019)
380 Portage Ave	No Listing (1942-2014); Playground Global (2017); Castar Inc (2019); Essential Products Inc (2019); Microsoft Corp (2019); Playground Global (2019); Uavionix Corp (2019)
382 Portage Ave	No Listing (1942-1999); Occupant Unknown (2004); No Listing (2009-2019)
395 Portage Ave	Brown G L (1942); Vacant (1942); No Listing (1946-1970); Me Quay Norris Inc Dura Bond Div (1975); No Listing (1982-2019)
401 Portage Ave	No Listing (1942-1950); Ames Mach Co (1955); No Listing (1960-2019)
425 Portage Ave	No Listing (1942-1950); Aero Mayflower Transit Co Da (1955); A 4 Da (1955); Neal Moving & Stge Co Ada (1955-1960); Hewlett Packard Whsc (1965); Hewlett Packard Whse (1970-1975); No Listing (1982-1994); Nichols Window Systems (1999); Pozzi Wood Windows (1999); Occupant Unknown (2004); Windows Systems Sales Group (2004); Temple Window Systems (2009-2017); Pet Food Depot (2014-2017); No Listing (2019)
426 Portage Ave	No Listing (1942-1950); Portage Av Contd (1955); Bedinger Welding Wks Da (1955); No Listing (1960-2019)
429 Portage Ave	No Listing (1942-2009); General Motors Gm (2014-2017); No Listing (2019)
435 Portage Ave	No Listing (1942-1950); R S Electronics Corp Da (1955-1960); Varian Assocs Whse & Laby (1965-1975); Center (1970-1975); No Listing (1982-2009); Mspot Inc (2014); Dji Research Llc (2017-2019)
440 Portage Ave	Wood L P Mrs (1942); Curtiss E C (1946-1950); Henning Chas (1946); Vacant (1955); No Listing (1960-2004); Equinox Fitness Club Inc (2009); Fuel Cafe Pa (2014); Equinox (2014-2017); No Listing (2019)
442 Portage Ave	No Listing (1942-1955); Genera L Elec Whse (1960); No Listing (1965-2019)

455 Portage Ave	No Listing (1942-1950); Vacant (1955); Hewlett Packard Co (1960); Whse (1960); No Listing (1965); Hewlett Packard Whse (1970-1975); No Listing (1982-1994); Klutz Press Incorporated (1999); The Klutz Headquarters (2004); Klutz Warehouse (2004); Funny Or Die Inc (2009-2017); Litbit (2014); Samsung Information Sytems American (2014-2017); No Listing (2019)
470 Portage Ave	Smarz Edwin (1942-1946); Hill R D (1950); Northampton Dr (1950); Middlefield Rd To (1950); Northeast F R O M (1950); Portal Place (1950); No Listing (1955); Brisby James C Da (1960); Gervais Hubert J (1965); No Listing (1970-2019)
Street No Portage Ave	No Listing (1942-1994); Occupant Name (1999); No Listing (2004-2019)

Comments: No coverage available for Portage Ave prior to 1942 at the time of this report.

GeoSearch
On time. On target. In touch.™

Historical By Street Number

Target Property:

Park Blvd,

Palo Alto, CA 94306

Prepared For:
PES Environmental, Inc.

Order #: 154956

Project #: 126.076.02

Date: 10/1/2020

City Directory Historical by Street Number

2865 Park Blvd	No Listing (1955); Dymec Division Of (1960); Hewlett Packard Co (1960-1965); Dymec A Division Of (1965); Me Creery D Sign Co Inc (1970); No Listing (1975); Cmx Inc (1982); Mercer Processing Inc (1982-1994); No Listing (1999); Occupant Unknown (2004); Lassen High Vacuum Inc (2009); No Listing (2014-2019)
2873 Park Blvd	No Listing (1955-1965); B & Z Manufacturing Co Mach (1970); No Listing (1975-2019)
2891 Park Blvd	Pac Flooring Sup Pa Da (1955-1960); Lit Mo Corp (1965-1970); No Listing (1975); Bix Furniture Service (1982-1986); No Listing (1991-1999); Hectors Custom Woodworks (2004); D & C Car Dealer (2004); No Listing (2009-2019)
2901 Park Blvd	Metalead Products Corp Da (1955-1965); Wilson Sales Co (1970); No Listing (1975); Hans Impoqrted Car Service (1982); Akins Body Shop (1986-1991); Akins Collision Ctr (1994); Akins Of Palo Alto (1999); Akins Body Shop Inc (2004-2009); Occupant Unknown (2004); Akins Of Palo Alto (2014); No Listing (2019)
2905 Park Blvd	No Listing (1955-1960); Metal Organics Ltd Chem Mfrs (1965); Vacant (1970); No Listing (1975-2019)
2974 Park Blvd	No Listing (1955-1982); Conlon Michael & Claudia (1986); No Listing (1991-2019)
3040 Park Blvd	No Listing (1955-1970); Park Automotive Service (1975-1991); Park Automotive Svc (1994-2014); Occupant Unknown (2004); Functional Lifestyles Llc (2019)
3045 Park Blvd	No Listing (1955-1986); Stanford Bmw (1991-1994); Click Over Incorporated (1999); Clickover (1999); Angara Database (1999); Bmw Of Palo Alto (1999); Stanford European (1999-2004); Anthony Presutti (1999-2009); Skymoon Ventures (2004); Pixonics (2004); Icontrol Networks (2009); Akins Body Shop (2014); Hertz (2014); No Listing (2019)
3075 Park Blvd	No Listing (1955-2009); Stacia Garr (2014); No Listing (2019)
3101 Park Blvd	Servisoft Soft Water Serv Da (1955-1960); Servisoft Of Palo Alto (1965); Servisoft Water Conditioning Inc (1970-1975); No Listing (1982-1994); Pacific Data Images (1999); Lioudmula Gilynskaia (2004); Danger Inc (2009); Danger Research (2014); Groupon Inc (2014); Bozzuto's Inc (2019)
3180 Park Blvd	No Listing (1955-1965); Palo Alto Foundry (1970-1975); No Listing (1982-2019)
3195 Park Blvd	Holst Christen Da (1955-1960); No Listing (1965-2019)
3197 Park Blvd	No Listing (1955-1960); Morgan Robt A Consulting Eng (1965); Morgan R A Co Inc Optical Gds Mfrs (1970); No Listing (1975); Elect Air Tool Inc (1982-1986); Zamora Tony & Bobbie (1986); Palo Alto Electric Motor Corp (1991-1994); Vance Brown Incorporated (1999); Timothy Long (2004); Vance Brown Inc (2009-2014); Brown Vance (2019); Cunningham Cathy (2019); Park Place Assoc (2019); Vance Brown Builders (2019)
3199 Park Blvd	No Listing (1955-1960); Fisher Switches Inc Electronics Sups (1965); Vacant (1970); Precision Automatic Equipment Inc (1975); B & Z Mfg Co Mach Prts (1975-1982); No Listing (1986-2019)
3200 Park Blvd	No Listing (1955-1960); Maximart Dept Store (1965); Hamdco Inc How (1965); Maximart Snack Bar Kestr (1965); P A Sundry Sales Inc Drug Store (1965); Maximart Automotive & Bikes (1970-1975); Maximart Camera Sls (1970); Maximart Jewelry And Luggage (1970); Maximart Radio (1970); Aximart Sundries (1970); Hamdco Inc (1975); Juvenile Shops Ltd (1975); Maximart Camera (1975); No Listing (1982); At E (1986); At E Micrographics (1986); Advanced Technology Enterprises (1986); Computer Parts Mart (1986); Nyden Eclectic Construction (1986); Mid Peninsula Access Corp (1991-1994); Cable Co Op (1991-1999); Glenda Torres (2004); Silicon Valley Community Commu (2009); No Listing (2014-2019)
3241 Park Blvd	Cook Rosalee L Mrs Da (1955-1960); Cooks Rosalee Mrs (1965); Peninsula Carburetor & Electric Service (1970-1975); No Listing (1982); Barren Park Auto Service (1986-1999); Peninsula Carburetor & Electric Service (1986-1991); Park Avenue Motors (2004-2014); Occupant Unknown (2004); No Listing (2019)
3257 Park Blvd	Jones Annabelle Mrs Da (1955-1960); No Return (1965); No Listing (1970-2019)

3267 Park Blvd	Brown John D Da (1955-1960); Scott Robt L (1965); No Listing (1970-2019)
3290 Park Blvd	No Listing (1955-1970); Park Avenue Motors Inc (1975-1999); No Listing (2004-2009); Mercedes Benz Park Avenue Motors Pa (2014); Akins Body Shop Inc (2019); An San Jose Luxury Imports Inc (2019)
3291 Park Blvd	Bahr & Ledoyen Inc (1955-1960); Paving Contrs Da (1955-1960); Page Mill Quarry Ofc Da (1960-1965); Bahr Ledoyen Inc Paving Contrs (1965); Toyota Of Palo Alto Body Shop (1970); No Listing (1975-2019)
3295 Park Blvd	Palo Alto Fdry Da (1955-1965); No Listing (1970-2019)
3297 Park Blvd	Rhoades Mach Shop (1955-1960); Rhoades Machine Shop (1965); No Listing (1970-2019)
3300 Park Blvd	No Listing (1955-1965); Vacant (1970); Norms Furniture Repairing (1975); J & S Cnn Struct Ion (1975-1982); Apple Cabinetry (1982); Evergreen Woodworking (1986); A Martin Loy D Fine Custom Furniture (1991-1994); No Listing (1999-2019)
3311 Park Blvd	Progress Electric Elec Contr Da (1955); Electronics Da (1960); Universal Spare Parts Inc (1960); Johnson Red Electronics (1965); No Listing (1970-2019)
3333 Park Blvd	No Listing (1955-1986); Asper Lara C (1991); No Listing (1994); Occupant Unknown (1999); Matt Wright (2004); Occupant Unknown (2009); Karen Marincovich (2014); No Listing (2019)
3335 Park Blvd	No Listing (1955-1986); Loos Greg (1991); Gandrud, L (1994); Occupant Unknown (1999); Marco Mostrel (1999); Y Wang (2004); Marco Mostrel (2009); Kelley Wager (2014); No Listing (2019)
3341 Park Blvd	Nolan Frank L Whse (1955-1960); Surgeon Da (1960); No Return (1965); Lloyds Towing Inc Stge (1970); No Listing (1975-1986); Ashcroft Robert N (1991); Perkins, Thomas (1994); Occupant Unknown (1999); C Conroy (1999); Heun Lee (2004); Occupant Unknown (2009-2014); No Listing (2019)
3345 Park Blvd	No Listing (1955-1994); Occupant Unknown (1999); No Listing (2004-2019)
3346 Park Blvd	No Listing (1955); Villa Louis Ad (1960); Swason Charles (1965); Swanson Charles (1970); Cockroft Paul (1975); No Listing (1982-1994); Occupant Unknown (1999-2009); Samuel Lederer (2014); No Listing (2019)
3348 Park Blvd	No Listing (1955); Piscitello Angelo Da (1960); Huber Robt (1965); Watson Laur (1970-1975); No Listing (1982-1994); Occupant Unknown (1999); Corinne Henry (1999); Mon Lin (2004); Corinne Henry (2009); Occupant Unknown (2014); No Listing (2019)
3350 Park Blvd	No Listing (1955); Townsley Calvin L (1960); Klrrik Andres (1965); Jones Raymond E (1970); Noerdinger Chris (1975); No Listing (1982-1994); Occupant Unknown (1999); Mon Lin (2004); Occupant Unknown (2009); Mon Lin (2014); No Listing (2019)
3357 Park Blvd	No Listing (1955-1991); Sugal, Cheri (1994); Occupant Unknown (1999); Chintsau Hsu (2004); Occupant Unknown (2009); Ayesh Ghassan (2014); No Listing (2019)
3363 Park Blvd	No Listing (1955-1994); Susan Shores (1999-2009); M Ho (2014); No Listing (2019)
3370 Park Blvd	Kumano Takaji K Da (1955-1975); No Listing (1982-2019)
3371 Park Blvd	Ferguson Jas Da (1955-1960); Ferguson Doris S Mrs O (1965-1970); No Listing (1975-1982); Ferguson De (1986); Bartholomew Lawrence (1991); Ferguson D E (1991-1994); Frederick Lee (1999); Brian Grone (1999); Andrea Temkin (1999-2014); Joseph Defrancesco (2004); Frederick Lee (2009); Brian Grone (2009); Sofia Fojas (2014); No Listing (2019)
3375 Park Blvd	No Listing (1955-1982); Halperin Ernst A (1986); No Listing (1991-2019)
3381 Park Blvd	Vacant (1955); Kinner Lamma J Da (1960); Moughan Ed (1965); Scott Warren H (1970); No Listing (1975-1994); Ted Pauly (1999-2014); Pauly Dave Graphics (1999); No Listing (2019)
3389 Park Blvd	Schellin Clarence F (1955-1970); No Listing (1975-1994); Michael Meyer (1999-2014); Occupant Unknown (1999); Meyer Michael Fine Woodworking (2009); No Listing (2019)
3390 Park Blvd	No Listing (1955-1994); Occupant Unknown (1999); No Listing (2004); Occupant Unknown (2009-2014); No Listing (2019)

3395 Park Blvd	Magee Perry J (1955-1960); Sects (1955); Kabra Nand (1965); Park Nursery School (1970); Clark Romania Mrs (1970); No Listing (1975); Wilkerson Bruce & Mary (1982); No Listing (1986-1994); Jing Jin (1999); Chris Korff (2004); Jing Jin (2009); Miguel Torres (2014); No Listing (2019)

Comments: No coverage available for Park Blvd prior to 1955 at the time of this report.

APPENDIX H

REPORTS FROM PREVIOUS INVESTIGATIONS

IT Corporation
4005 Port Chicago Highway
Concord, CA 94520-1120
Tel. 925.288.9898
Fax. 925.288.0888

A Member of The IT Group

July 24, 2000

Mr. David A. Noland
President
Mercer Processing, Inc.
195 Page Mill Road
Palo Alto, California 94306

CALIFORNIA REGIONAL WATER

FEB 0 7 2001

QUALITY CONTROL BOARD

Subject: Soil Sampling and Analysis Report
Former Mercer Processing Facility
230 Portage Avenue, Palo Alto, California

Dear Mr. Noland:

IT Corporation (IT) is pleased to submit this Soil Sampling and Analysis Report for the above-mentioned property. The activities described in this letter report were performed to determine the presence of volatile organic compounds (VOCs) in soil beneath the flooring at the subject site. Soil sampling activities described in this report were performed on June 1, 2000.

Scope of Work

The following scope of work was completed as part of the soil assessment activities:

- An underground utilities locating service was retained to mark the locations of utilities and piping beneath the warehouse floor.
- Three borings were advanced for collection of soil samples.
- Soil samples collected during the investigation were analyzed for VOCs by EPA Method 8260.
- This letter report was prepared summarizing the results of the investigation.

Methodology

Prior to the advancement of the three borings, the locations were marked and an underground locating service was dispatch to the site to identify and mark the locations of any underground utilities or conduits in the vicinity of the proposed borings.

On June 1, 2000, three concrete cores were removed from the floor to allow access to the underlying soil. A direct-push rig then advanced the split-spoon sampler to the desired depth for sample collection. The three borings (A, B, and C) were advanced in the locations illustrated in Figure 1. Boring A was advanced from beneath the concrete floor to a total depth of approximately 10 feet below grade. Borings B and C were advanced to a total depth of 6 feet below grade.

The borings were advanced using a 2-inch-diameter split-spoon sampler fitted with an acetate liner from the point soil was first encountered beneath the concrete floor to the desired depth. Soil samples for logging and laboratory analysis were continuously collected by advancing the split-spoon sampler into undisturbed soil. The sampler was driven a maximum of 4 feet using hydraulic pressure. An IT geologist logged the borings using the Unified Soil Classification System and standard geologic techniques.

Soil samples for laboratory analysis were retained in a portion of the acetate liner, capped with Teflon® sheets and plastic end caps, taped with a nonvolatile rubber-based tape, labeled, and sealed in zip-lock plastic bags. The samples were placed in an insulted chest with ice for transport to the laboratory under chain-of-custody protocol. Soil samples were analyzed in the laboratory for VOCs using EPA Method 8260B.

Following completion of the sample collection, the borings were filled with a mixture of Portland I/II cement and water. Waste soil was placed in a plastic 5-gallon pail, labeled as nonclassified waste, and stored on-site pending proper disposal.

Results

The material encountered beneath the concrete warehouse floor consisted of a base fill material consisting of a sandy, gravelly clay to approximately four feet below grade at which point a native clay was encountered to the total depth of the borings. Groundwater was not encountered during the advancement of the three borings. A description of the material encountered in the three borings is presented in the soil boring logs contained in Attachment 1.

The laboratory reported no detectable concentrations of VOCs in the six soil samples collected from boring A. The laboratory reported a trichloroethene (TCE) concentration of 0.442 milligrams per kilogram (mg/kg) in the surface sample collected from boring B (B-0). TCE concentrations of 6.8 mg/kg and 4.19 mg/kg were reported in the samples collected from the 4 and 6 feet below grade, respectively, from boring B. The laboratory also reported the presence of 0.117 mg/kg of trans-1, 2,-dichloroethene (1,2-DCE) in the six-foot sample collected from boring B (B-6).

Concentrations of TCE were reported in the 4-foot sample (0.27 mg/kg) and in the 6-foot sample (0.659 mg/kg) collected from boring C.

The two duplicate soil samples analyzed for quality control purposes exhibited similar results as the original analysis. Copies of the certified laboratory report and chain-of-custody record is presented in Attachment 2.

If you have any questions regarding information in this letter, please call me at our Concord office (925/288-9898).

Sincerely,
IT Corporation

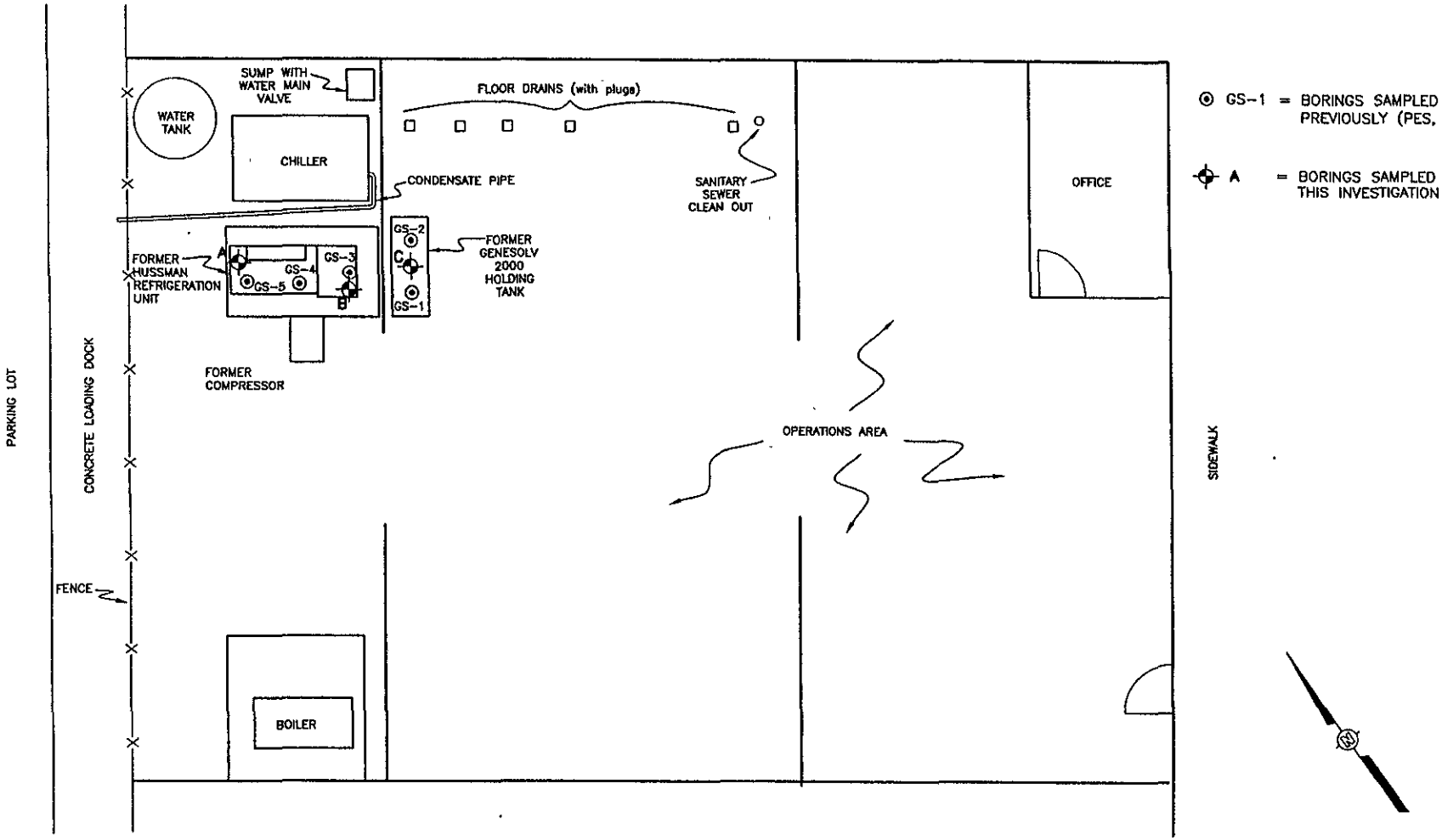
Michael J. Wray
Project Manager

Ed K. Simonis, R.G.
Senior Geologist

EDVARDAS (ED) K. SIMONIS
No. 4422

Figure 1 Soil Boring Location Map
Attachment 1 Soil Boring Logs
Attachment 2 Certified Laboratory Report and Chain-of-Custody Record

IMAGE	X-REF	OFFICE	DRAWN BY		CHECKED BY		APPROVED BY		DRAWING NUMBER
---	---	Concord	M. Verhaeg	07/25/00					806342-A1



REFERENCE: PES, JANUARY 12, 2000, FACILITY CLOSURE ASSESSMENT REPORT.

IT CORPORATION

MERCER PROCESSING, INC.

FIGURE 1

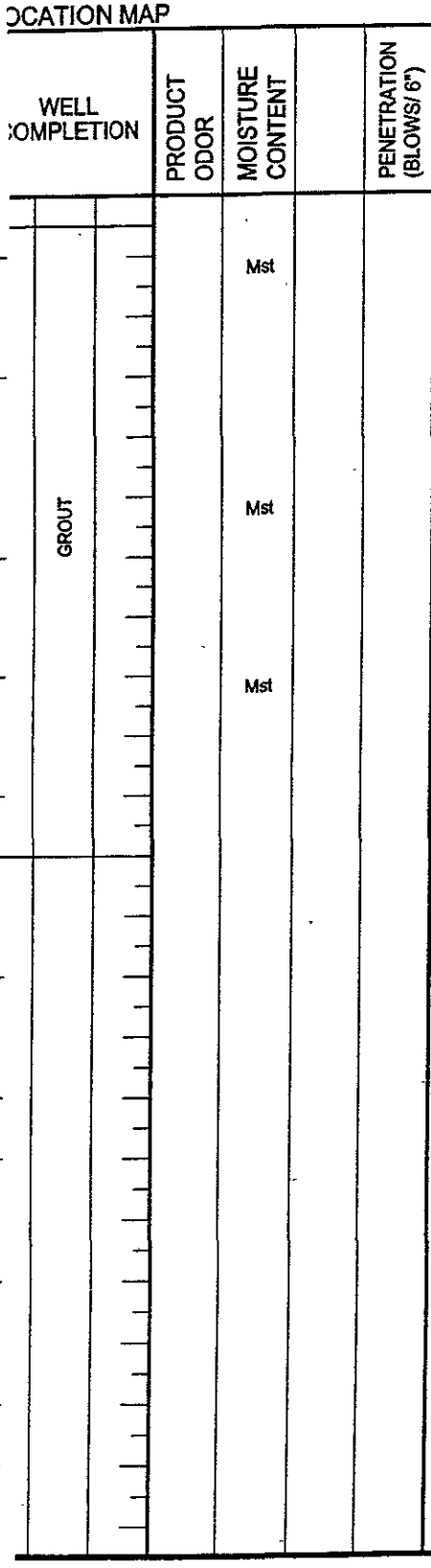
SITE PLAN

BORING NO. A
PAGE 1 OF 1

PROJECT NO: 806342
LOGGED BY: BF
DRILLER: PRECISION DRILLING
DRILLING METHOD: DIRECT PUSH
SAMPLING METHOD: SPLIT SPOON
CASING TYPE: -
SLOT SIZE: -
GRAVEL PACK: -

CLIENT: MERCER PROCESSING
DATE DRILLED: 6-1-00
LOCATION: 230 PORTAGE AVENUE, PALO ALTO
HOLE DIAMETER: 2"
HOLE DEPTH: 10'
WELL DIAMETER: -
WELL DEPTH: -
CASING STICKUP: -

OCATION MAP



PRODUCT ODOR	MOISTURE CONTENT	PENETRATION (BLOWS/ 6")	DEPTH (FEET)	RECOVERY / SAMPLE INTERVAL	GRAPHIC	SOIL TYPE	LITHOLOGY/REMARKS
			0				CONCRETE
	Mst						BASE FILL: Sandy Gravelly Clay; dark gray; hard; no odor
			2				No recovery from 2-4'
						CL	
	Mst		4				CLAY: Trace medium sand (<10%); dark gray; stiff to hard; plastic
			6				No recovery 6-7'
	Mst						CLAY: Trace medium sand (<5%); black; hard; plastic; no odor
			8				
			10				END OF BORING

BORING NO. B
PAGE 1 OF 1

PROJECT NO: 806342
LOGGED BY: BF
DRILLER: PRECISION DRILLING
DRILLING METHOD: DIRECT PUSH
SAMPLING METHOD:
CASING TYPE: -
SLOT SIZE: -
GRAVEL PACK: -

CLIENT: MERCER PROCESSING
DATE DRILLED: 6-1-00
LOCATION: 230 PORTAGE AVENUE, PALO ALTO
HOLE DIAMETER: 2"
HOLE DEPTH: 6'
WELL DIAMETER: -
WELL DEPTH: -
CASING STICKUP: -

OCATION MAP

WELL COMPLETION	PRODUCT ODOR	MOISTURE CONTENT		PENETRATION (BLOWS/ 6")	DEPTH (FEET)	RECOVERY / SAMPLE INTERVAL	GRAPHIC	SOIL TYPE	LITHOLOGY/REMARKS
					0				CONCRETE
GROUT		Mst						CL	BASE FILL: Sandy Gravelly Clay; dark gray; hard; no odor No recovery from 0.5-4'
					2				
		Mst			4				CLAY: Trace medium sand (<10%); medium stiff; plastic; no odor
					6				END OF BORING

K:\Logs\806342\B-1.dwg Mon 19/Jun/00 09:56am LWAHLOREN

BORING NO. C
PAGE 1 OF 1

PROJECT NO: 806342
LOGGED BY: BF
DRILLER: PRECISION DRILLING
DRILLING METHOD: DIRECT PUSH
SAMPLING METHOD: SPLIT SPOON
CASING TYPE: -
SLOT SIZE: -
GRAVEL PACK: -

CLIENT: MERCER PROCESSING
DATE DRILLED: 6-1-00
LOCATION: 230 PORTAGE AVENUE, PALO ALTO
HOLE DIAMETER: 2"
HOLE DEPTH: 6'
WELL DIAMETER: -
WELL DEPTH: -
CASING STICKUP: -

)CATION MAP

WELL OMPLETION	PRODUCT ODOR	MOISTURE CONTENT		PENETRATION (BLOWS/ 6")	DEPTH (FEET)	RECOVERY / SAMPLE INTERVAL	GRAPHIC	SOIL TYPE	LITHOLOGY/REMARKS
GROUT		Mst			0			CL	CONCRETE BASE FILL: Sandy Gravelly Clay; dark gray; hard; slight odor No recovery from 0.5-4'
					2				
		Mst			4				CLAY: Trace medium sand (<5%); medium stiff; plastic; slight odor
					6				END OF BORING

Sequoia Analytical

1551 Industrial Road
San Carlos, CA 94070-4111
(650) 232-9600
FAX (650) 232-9612
www.sequoialabs.com

June 16, 2000

Mike W.
IT Corp (3)
4005 Port Chicago Hwy
Concord, CA 94520

RE: 1/L006019

Dear Mike W.

Enclosed are the revised results for sample(s) received by the laboratory on June 2, 2000 listing the method as EPA 8260B. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Wayne Stevenson
Project Manager

CA ELAP Certificate Number I2360

Report re-issued 6/19/00.

Sequoia Analytical

1551 Industrial Road
San Carlos, CA 94070-4111
(650) 232-9600
FAX (650) 232-9612
www.sequoialabs.com

T Corp (3)
4005 Port Chicago Hwy
Concord, CA 94520

Project: Mercer Processing
Project Number:
Project Manager: Mike W.

Sampled: 6/1/00
Received: 6/2/00
Reported: 6/16/00

ANALYTICAL REPORT FOR L006019

Sample Description	Laboratory Sample Number	Sample Matrix	Date Sampled
A-0	L006019-01	Soil	6/1/00
A-2	L006019-02	Soil	6/1/00
A-4	L006019-03	Soil	6/1/00
A-4-D	L006019-04	Soil	6/1/00
A-7	L006019-05	Soil	6/1/00
A-8	L006019-06	Soil	6/1/00
A-10	L006019-07	Soil	6/1/00
B-0	L006019-08	Soil	6/1/00
B-4	L006019-09	Soil	6/1/00
B-6	L006019-10	Soil	6/1/00
C-0	L006019-11	Soil	6/1/00
C-4	L006019-12	Soil	6/1/00
C-6	L006019-13	Soil	6/1/00
C-6-D	L006019-14	Soil	6/1/00

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Sequoia Analytical

1551 Industrial Road
San Carlos, CA 94070-4111
(650) 232-9600
FAX (650) 232-9612
www.sequoialabs.com

(T Corp (3)	Project: Mercer Processing	Sampled: 6/1/00
4005 Port Chicago Hwy	Project Number:	Received: 6/2/00
Concord, CA 94520	Project Manager: Mike W.	Reported: 6/16/00

Volatile Organic Compounds by EPA Method 8260B
Sequoia Analytical - San Carlos

Analyte	Batch Number	Date Prepared	Date Analyzed	Surrogate Limits	Reporting Limit	Result	Units	Notes*
			L006019-01				Soil	
A-0	0060005	6/6/00	6/8/00		500	ND	ug/kg	
2-Butanone	"	"	"		1000	ND	"	
Acetone	"	"	"		100	ND	"	
Benzene	"	"	"		100	ND	"	
Bromobenzene	"	"	"		100	ND	"	
Bromochloromethane	"	"	"		100	ND	"	
Bromodichloromethane	"	"	"		100	ND	"	
Bromoform	"	"	"		500	ND	"	
Bromomethane	"	"	"		100	ND	"	
n-Butylbenzene	"	"	"		100	ND	"	
sec-Butylbenzene	"	"	"		100	ND	"	
tert-Butylbenzene	"	"	"		100	ND	"	
Carbon tetrachloride	"	"	"		100	ND	"	
Chlorobenzene	"	"	"		500	ND	"	
Chloroethane	"	"	"		100	ND	"	
Chloroform	"	"	"		500	ND	"	
Chloromethane	"	"	"		100	ND	"	
2-Chlorotoluene	"	"	"		100	ND	"	
4-Chlorotoluene	"	"	"		100	ND	"	
Dibromochloromethane	"	"	"		100	ND	"	
1,2-Dibromoethane	"	"	"		100	ND	"	
Dibromomethane	"	"	"		500	ND	"	
1,2-Dibromo-3-chloropropane	"	"	"		100	ND	"	
1,2-Dichlorobenzene	"	"	"		100	ND	"	
1,3-Dichlorobenzene	"	"	"		100	ND	"	
1,4-Dichlorobenzene	"	"	"		500	ND	"	
Dichlorodifluoromethane	"	"	"		100	ND	"	
1,1-Dichloroethane	"	"	"		100	ND	"	
1,2-Dichloroethane	"	"	"		100	ND	"	
1,1-Dichloroethene	"	"	"		100	ND	"	
cis-1,2-Dichloroethene	"	"	"		100	ND	"	
trans-1,2-Dichloroethene	"	"	"		100	ND	"	
1,2-Dichloropropane	"	"	"		100	ND	"	
1,3-Dichloropropane	"	"	"		100	ND	"	
2,2-Dichloropropane	"	"	"		100	ND	"	
1,1-Dichloropropene	"	"	"		100	ND	"	
Ethylbenzene	"	"	"		100	ND	"	
Hexachlorobutadiene	"	"	"		100	ND	"	
Isopropylbenzene	"	"	"		100	ND	"	
p-Isopropyltoluene	"	"	"		500	ND	"	
Methylene chloride	"	"	"		500	ND	"	
Naphthalene								

Sequoia Analytical

1551 Industrial Road
San Carlos, CA 94070-4111
(650) 232-9600
FAX (650) 232-9612
www.sequoialabs.com

T Corp (3)	Project:	Mercer Processing	Sampled: 6/1/00
4005 Port Chicago Hwy	Project Number:		Received: 6/2/00
Concord, CA 94520	Project Manager:	Mike W.	Reported: 6/16/00

Volatile Organic Compounds by EPA Method 8260B
Sequoia Analytical - San Carlos

Analyte	Batch Number	Date Prepared	Date Analyzed	Surrogate Limits	Reporting Limit	Result	Units	Notes*
A-0 (continued)			**L006019-01**				**Soil**	
n-Propylbenzene	0060005	6/6/00	6/8/00		100	ND	ug/kg	
Styrene	"	"	"		100	ND	"	
1,1,1,2-Tetrachloroethane	"	"	"		100	ND	"	
1,1,2,2-Tetrachloroethane	"	"	"		100	ND	"	
Tetrachloroethene	"	"	"		100	ND	"	
Toluene	"	"	"		100	ND	"	
1,2,3-Trichlorobenzene	"	"	"		100	ND	"	
1,2,4-Trichlorobenzene	"	"	"		100	ND	"	
1,1,1-Trichloroethane	"	"	"		100	ND	"	
1,1,2-Trichloroethane	"	"	"		100	ND	"	
Trichloroethene	"	"	"		100	ND	"	
Trichlorofluoromethane	"	"	"		500	ND	"	
1,2,3-Trichloropropane	"	"	"		100	ND	"	
1,2,4-Trimethylbenzene	"	"	"		100	ND	"	
1,3,5-Trimethylbenzene	"	"	"		100	ND	"	
Vinyl chloride	"	"	"		500	ND	"	
Total Xylenes	"	"	"		100	ND	"	
Surrogate: 1,2-Dichloroethane-d4	"	"	"	*70.0-121*		*97.2*	*%*	
Surrogate: Toluene-d8	"	"	"	*81.0-117*		*96.8*	"	
Surrogate: 4-BFB	"	"	"	*74.0-121*		*115*	"	

Sequoia Analytical

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(650) 232-9600
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IT Corp (3)	Project: Mercer Processing	Sampled: 6/1/00
4005 Port Chicago Hwy	Project Number:	Received: 6/2/00
Concord, CA 94520	Project Manager: Mike W.	Reported: 6/16/00

Volatile Organic Compounds by EPA Method 8260B
Sequoia Analytical - San Carlos

Analyte	Batch Number	Date Prepared	Date Analyzed	Surrogate Limits	Reporting Limit	Result	Units	Notes*
			L006019-02				Soil	
A-2								
2-Butanone	0060005	6/6/00	6/8/00		500	ND	ug/kg	
Acetone	"	"	"		1000	ND	"	
Benzene	"	"	"		100	ND	"	
Bromobenzene	"	"	"		100	ND	"	
Bromochloromethane	"	"	"		100	ND	"	
Bromodichloromethane	"	"	"		100	ND	"	
Bromoform	"	"	"		100	ND	"	
Bromomethane	"	"	"		500	ND	"	
n-Butylbenzene	"	"	"		100	ND	"	
sec-Butylbenzene	"	"	"		100	ND	"	
tert-Butylbenzene	"	"	"		100	ND	"	
Carbon tetrachloride	"	"	"		100	ND	"	
Chlorobenzene	"	"	"		100	ND	"	
Chloroethane	"	"	"		500	ND	"	
Chloroform	"	"	"		100	ND	"	
Chloromethane	"	"	"		500	ND	"	
2-Chlorotoluene	"	"	"		100	ND	"	
4-Chlorotoluene	"	"	"		100	ND	"	
Dibromochloromethane	"	"	"		100	ND	"	
1,2-Dibromoethane	"	"	"		100	ND	"	
Dibromomethane	"	"	"		100	ND	"	
1,2-Dibromo-3-chloropropane	"	"	"		500	ND	"	
1,2-Dichlorobenzene	"	"	"		100	ND	"	
1,3-Dichlorobenzene	"	"	"		100	ND	"	
1,4-Dichlorobenzene	"	"	"		100	ND	"	
Dichlorodifluoromethane	"	"	"		500	ND	"	
1,1-Dichloroethane	"	"	"		100	ND	"	
1,2-Dichloroethane	"	"	"		100	ND	"	
1,1-Dichloroethene	"	"	"		100	ND	"	
cis-1,2-Dichloroethene	"	"	"		100	ND	"	
trans-1,2-Dichloroethene	"	"	"		100	ND	"	
1,2-Dichloropropane	"	"	"		100	ND	"	
1,3-Dichloropropane	"	"	"		100	ND	"	
2,2-Dichloropropane	"	"	"		100	ND	"	
1,1-Dichloropropene	"	"	"		100	ND	"	
Ethylbenzene	"	"	"		100	ND	"	
Hexachlorobutadiene	"	"	"		100	ND	"	
Isopropylbenzene	"	"	"		100	ND	"	
p-Isopropyltoluene	"	"	"		500	ND	"	
Methylene chloride	"	"	"		500	ND	"	
Naphthalene								

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:T Corp (3)	Project:	Mercer Processing	Sampled: 6/1/00
4005 Port Chicago Hwy	Project Number:		Received: 6/2/00
Concord, CA 94520	Project Manager:	Mike W.	Reported: 6/16/00

Volatile Organic Compounds by EPA Method 8260B
Sequoia Analytical - San Carlos

Analyte	Batch Number	Date Prepared	Date Analyzed	Surrogate Limits	Reporting Limit	Result	Units	Notes*
A-2 (continued)			**L006019-02**				**Soil**	
n-Propylbenzene	0060005	6/6/00	6/8/00		100	ND	ug/kg	
Styrene	"	"	"		100	ND	"	
1,1,1,2-Tetrachloroethane	"	"	"		100	ND	"	
1,1,2,2-Tetrachloroethane	"	"	"		100	ND	"	
Tetrachloroethene	"	"	"		100	ND	"	
Toluene	"	"	"		100	ND	"	
1,2,3-Trichlorobenzene	"	"	"		100	ND	"	
1,2,4-Trichlorobenzene	"	"	"		100	ND	"	
1,1,1-Trichloroethane	"	"	"		100	ND	"	
1,1,2-Trichloroethane	"	"	"		100	ND	"	
Trichloroethene	"	"	"		100	ND	"	
Trichlorofluoromethane	"	"	"		500	ND	"	
1,2,3-Trichloropropane	"	"	"		100	ND	"	
1,2,4-Trimethylbenzene	"	"	"		100	ND	"	
1,3,5-Trimethylbenzene	"	"	"		100	ND	"	
Vinyl chloride	"	"	"		500	ND	"	
Total Xylenes	"	"	"		100	ND	"	
Surrogate: 1,2-Dichloroethane-d4	"	"	"	*70.0-121*		*98.4*	*%*	
Surrogate: Toluene-d8	"	"	"	*81.0-117*		*91.6*	"	
Surrogate: 4-BFB	"	"	"	*74.0-121*		*111*	"	

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T Corp (3)	Project: Mercer Processing	Sampled: 6/1/00
4005 Port Chicago Hwy	Project Number:	Received: 6/2/00
Concord, CA 94520	Project Manager: Mike W.	Reported: 6/16/00

Volatile Organic Compounds by EPA Method 8260B
Sequoia Analytical - San Carlos

Analyte	Batch Number	Date Prepared	Date Analyzed	Surrogate Limits	Reporting Limit	Result	Units	Notes*
			L006019-03				Soil	
A-4	0060005	6/6/00	6/8/00		500	ND	ug/kg	
2-Butanone	"	"	"		1000	ND	"	
Acetone	"	"	"		100	ND	"	
Benzene	"	"	"		100	ND	"	
Bromobenzene	"	"	"		100	ND	"	
Bromochloromethane	"	"	"		100	ND	"	
Bromodichloromethane	"	"	"		100	ND	"	
Bromoform	"	"	"		500	ND	"	
Bromomethane	"	"	"		100	ND	"	
n-Butylbenzene	"	"	"		100	ND	"	
sec-Butylbenzene	"	"	"		100	ND	"	
ert-Butylbenzene	"	"	"		100	ND	"	
Carbon tetrachloride	"	"	"		100	ND	"	
Chlorobenzene	"	"	"		500	ND	"	
Chloroethane	"	"	"		100	ND	"	
Chloroform	"	"	"		500	ND	"	
Chloromethane	"	"	"		100	ND	"	
2-Chlorotoluene	"	"	"		100	ND	"	
4-Chlorotoluene	"	"	"		100	ND	"	
Dibromochloromethane	"	"	"		100	ND	"	
1,2-Dibromoethane	"	"	"		100	ND	"	
Dibromomethane	"	"	"		500	ND	"	
1,2-Dibromo-3-chloropropane	"	"	"		100	ND	"	
1,2-Dichlorobenzene	"	"	"		100	ND	"	
1,3-Dichlorobenzene	"	"	"		100	ND	"	
1,4-Dichlorobenzene	"	"	"		500	ND	"	
Dichlorodifluoromethane	"	"	"		100	ND	"	
1,1-Dichloroethane	"	"	"		100	ND	"	
1,2-Dichloroethane	"	"	"		100	ND	"	
1,1-Dichloroethene	"	"	"		100	ND	"	
cis-1,2-Dichloroethene	"	"	"		100	ND	"	
trans-1,2-Dichloroethene	"	"	"		100	ND	"	
1,2-Dichloropropane	"	"	"		100	ND	"	
1,3-Dichloropropane	"	"	"		100	ND	"	
2,2-Dichloropropane	"	"	"		100	ND	"	
1,1-Dichloropropene	"	"	"		100	ND	"	
Ethylbenzene	"	"	"		100	ND	"	
Hexachlorobutadiene	"	"	"		100	ND	"	
Isopropylbenzene	"	"	"		500	ND	"	
p-Isopropyltoluene	"	"	"		500	ND	"	
Methylene chloride	"	"	"		500	ND	"	
Naphthalene								

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T Corp (3)	Project:	Mercer Processing	Sampled: 6/1/00
4005 Port Chicago Hwy	Project Number:		Received: 6/2/00
Concord, CA 94520	Project Manager:	Mike W.	Reported: 6/16/00

Volatile Organic Compounds by EPA Method 8260B
Sequoia Analytical - San Carlos

Analyte	Batch Number	Date Prepared	Date Analyzed	Surrogate Limits	Reporting Limit	Result	Units	Notes*
A-4 (continued)			**L006019-03**				**Soil**	
n-Propylbenzene	0060005	6/6/00	6/8/00		100	ND	ug/kg	
Styrene	"	"	"		100	ND	"	
1,1,1,2-Tetrachloroethane	"	"	"		100	ND	"	
1,1,2,2-Tetrachloroethane	"	"	"		100	ND	"	
Tetrachloroethene	"	"	"		100	ND	"	
Toluene	"	"	"		100	ND	"	
1,2,3-Trichlorobenzene	"	"	"		100	ND	"	
1,2,4-Trichlorobenzene	"	"	"		100	ND	"	
1,1,1-Trichloroethane	"	"	"		100	ND	"	
1,1,2-Trichloroethane	"	"	"		100	ND	"	
Trichloroethene	"	"	"		100	ND	"	
Trichlorofluoromethane	"	"	"		500	ND	"	
1,2,3-Trichloropropane	"	"	"		100	ND	"	
1,2,4-Trimethylbenzene	"	"	"		100	ND	"	
1,3,5-Trimethylbenzene	"	"	"		100	ND	"	
Vinyl chloride	"	"	"		500	ND	"	
Total Xylenes	"	"	"		100	ND	"	
Surrogate: 1,2-Dichloroethane-d4	"	"	"	*70.0-121*		*102*	*%*	
Surrogate: Toluene-d8	"	"	"	*81.0-117*		*93.2*	"	
Surrogate: 4-BFB	"	"	"	*74.0-121*		*113*	"	

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T Corp (3)	Project:	Mercer Processing	Sampled: 6/1/00
1005 Port Chicago Hwy	Project Number:		Received: 6/2/00
Concord, CA 94520	Project Manager:	Mike W.	Reported: 6/16/00

Volatile Organic Compounds by EPA Method 8260B
Sequoia Analytical - San Carlos

Analyte	Batch Number	Date Prepared	Date Analyzed	Surrogate Limits	Reporting Limit	Result	Units	Notes*
A-4-D			**L006019-04**				**Soil**	
!-Butanone	0060005	6/6/00	6/8/00		500	ND	ug/kg	
Acetone	"	"	"		1000	ND	"	
Benzene	"	"	"		100	ND	"	
3romobenzene	"	"	"		100	ND	"	
3romochloromethane	"	"	"		100	ND	"	
Bromodichloromethane	"	"	"		100	ND	"	
3romoform	"	"	"		100	ND	"	
3romomethane	"	"	"		500	ND	"	
n-Butylbenzene	"	"	"		100	ND	"	
sec-Butylbenzene	"	"	"		100	ND	"	
ert-Butylbenzene	"	"	"		100	ND	"	
Carbon tetrachloride	"	"	"		100	ND	"	
Chlorobenzene	"	"	"		100	ND	"	
Chloroethane	"	"	"		500	ND	"	
Chloroform	"	"	"		100	ND	"	
Chloromethane	"	"	"		500	ND	"	
2-Chlorotoluene	"	"	"		100	ND	"	
4-Chlorotoluene	"	"	"		100	ND	"	
Dibromochloromethane	"	"	"		100	ND	"	
1,2-Dibromoethane	"	"	"		100	ND	"	
Dibromomethane	"	"	"		100	ND	"	
,2-Dibromo-3-chloropropane	"	"	"		500	ND	"	
,2-Dichlorobenzene	"	"	"		100	ND	"	
1,3-Dichlorobenzene	"	"	"		100	ND	"	
',4-Dichlorobenzene	"	"	"		100	ND	"	
Dichlorodifluoromethane	"	"	"		500	ND	"	
,1-Dichloroethane	"	"	"		100	ND	"	
1,2-Dichloroethane	"	"	"		100	ND	"	
,1-Dichloroethene	"	"	"		100	ND	"	
is-1,2-Dichloroethene	"	"	"		100	ND	"	
trans-1,2-Dichloroethene	"	"	"		100	ND	"	
',2-Dichloropropane	"	"	"		100	ND	"	
,3-Dichloropropane	"	"	"		100	ND	"	
2,2-Dichloropropane	"	"	"		100	ND	"	
1,1-Dichloropropene	"	"	"		100	ND	"	
Ethylbenzene	"	"	"		100	ND	"	
Hexachlorobutadiene	"	"	"		100	ND	"	
Isopropylbenzene	"	"	"		100	ND	"	
p-Isopropyltoluene	"	"	"		100	ND	"	
Methylene chloride	"	"	"		500	ND	"	
Naphthalene	"	"	"		500	ND	"	

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IT Corp (3)	Project: Mercer Processing	Sampled: 6/1/00
4005 Port Chicago Hwy	Project Number:	Received: 6/2/00
Concord, CA 94520	Project Manager: Mike W.	Reported: 6/16/00

Volatile Organic Compounds by EPA Method 8260B
Sequoia Analytical - San Carlos

Analyte	Batch Number	Date Prepared	Date Analyzed	Surrogate Limits	Reporting Limit	Result	Units	Notes*
			L006019-04				Soil	
A-4-D (continued)	0060005	6/6/00	6/8/00		100	ND	ug/kg	
n-Propylbenzene	"	"	"		100	ND	"	
Styrene	"	"	"		100	ND	"	
1,1,1,2-Tetrachloroethane	"	"	"		100	ND	"	
1,1,2,2-Tetrachloroethane	"	"	"		100	ND	"	
Tetrachloroethene	"	"	"		100	ND	"	
Toluene	"	"	"		100	ND	"	
1,2,3-Trichlorobenzene	"	"	"		100	ND	"	
1,2,4-Trichlorobenzene	"	"	"		100	ND	"	
1,1,1-Trichloroethane	"	"	"		100	ND	"	
1,1,2-Trichloroethane	"	"	"		100	ND	"	
Trichloroethene	"	"	"		500	ND	"	
Trichlorofluoromethane	"	"	"		100	ND	"	
1,2,3-Trichloropropane	"	"	"		100	ND	"	
1,2,4-Trimethylbenzene	"	"	"		100	ND	"	
1,3,5-Trimethylbenzene	"	"	"		500	ND	"	
Vinyl chloride	"	"	"		100	ND	"	
Total Xylenes	"	"	"			ND	"	
Surrogate: 1,2-Dichloroethane-d4	"	"	"	*70.0-121*		*94.4*	*%*	
Surrogate: Toluene-d8	"	"	"	*81.0-117*		*94.0*	*"*	
Surrogate: 4-BFB	"	"	"			*112*	*"*	

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T Corp (3)	Project: Mercer Processing	Sampled:	6/1/00
1005 Port Chicago Hwy	Project Number:	Received:	6/2/00
Concord, CA 94520	Project Manager: Mike W.	Reported:	6/16/00

Volatile Organic Compounds by EPA Method 8260B
Sequoia Analytical - San Carlos

Analyte	Batch Number	Date Prepared	Date Analyzed	Surrogate Limits	Reporting Limit	Result	Units	Notes*
A-7			L006019-05				Soil	
2-Butanone	0060005	6/6/00	6/8/00		500	ND	ug/kg	
Acetone	"	"	"		1000	ND	"	
Benzene	"	"	"		100	ND	"	
Bromobenzene	"	"	"		100	ND	"	
Bromochloromethane	"	"	"		100	ND	"	
Bromodichloromethane	"	"	"		100	ND	"	
Bromoform	"	"	"		100	ND	"	
Bromomethane	"	"	"		500	ND	"	
n-Butylbenzene	"	"	"		100	ND	"	
sec-Butylbenzene	"	"	"		100	ND	"	
ert-Butylbenzene	"	"	"		100	ND	"	
Carbon tetrachloride	"	"	"		100	ND	"	
Chlorobenzene	"	"	"		100	ND	"	
Chloroethane	"	"	"		500	ND	"	
Chloroform	"	"	"		100	ND	"	
Chloromethane	"	"	"		500	ND	"	
2-Chlorotoluene	"	"	"		100	ND	"	
4-Chlorotoluene	"	"	"		100	ND	"	
Dibromochloromethane	"	"	"		100	ND	"	
1,2-Dibromoethane	"	"	"		100	ND	"	
Dibromomethane	"	"	"		100	ND	"	
,2-Dibromo-3-chloropropane	"	"	"		500	ND	"	
,2-Dichlorobenzene	"	"	"		100	ND	"	
1,3-Dichlorobenzene	"	"	"		100	ND	"	
,4-Dichlorobenzene	"	"	"		100	ND	"	
Dichlorodifluoromethane	"	"	"		500	ND	"	
,1-Dichloroethane	"	"	"		100	ND	"	
1,2-Dichloroethane	"	"	"		100	ND	"	
,1-Dichloroethene	"	"	"		100	ND	"	
cis-1,2-Dichloroethene	"	"	"		100	ND	"	
trans-1,2-Dichloroethene	"	"	"		100	ND	"	
,2-Dichloropropane	"	"	"		100	ND	"	
,3-Dichloropropane	"	"	"		100	ND	"	
2,2-Dichloropropane	"	"	"		100	ND	"	
1,1-Dichloropropene	"	"	"		100	ND	"	
Ethylbenzene	"	"	"		100	ND	"	
Hexachlorobutadiene	"	"	"		100	ND	"	
Isopropylbenzene	"	"	"		100	ND	"	
p-Isopropyltoluene	"	"	"		500	ND	"	
Methylene chloride	"	"	"		500	ND	"	
Naphthalene								

Refer to end of report for text of notes and definitions.

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IT Corp (3)	Project:	Mercer Processing	Sampled: 6/1/00
4005 Port Chicago Hwy	Project Number:		Received: 6/2/00
Concord, CA 94520	Project Manager:	Mike W.	Reported: 6/16/00

Volatile Organic Compounds by EPA Method 8260B
Sequoia Analytical - San Carlos

Analyte	Batch Number	Date Prepared	Date Analyzed	Surrogate Limits	Reporting Limit	Result	Units	Notes*
A-7 (continued)			**L006019-05**				**Soil**	
n-Propylbenzene	0060005	6/6/00	6/8/00		100	ND	ug/kg	
Styrene	"	"	"		100	ND	"	
1,1,1,2-Tetrachloroethane	"	"	"		100	ND	"	
1,1,2,2-Tetrachloroethane	"	"	"		100	ND	"	
Tetrachloroethene	"	"	"		100	ND	"	
Toluene	"	"	"		100	ND	"	
1,2,3-Trichlorobenzene	"	"	"		100	ND	"	
1,2,4-Trichlorobenzene	"	"	"		100	ND	"	
1,1,1-Trichloroethane	"	"	"		100	ND	"	
1,1,2-Trichloroethane	"	"	"		100	ND	"	
Trichloroethene	"	"	"		100	ND	"	
Trichlorofluoromethane	"	"	"		500	ND	"	
1,2,3-Trichloropropane	"	"	"		100	ND	"	
1,2,4-Trimethylbenzene	"	"	"		100	ND	"	
1,3,5-Trimethylbenzene	"	"	"		100	ND	"	
Vinyl chloride	"	"	"		500	ND	"	
Total Xylenes	"	"	"		100	ND	"	
Surrogate: 1,2-Dichloroethane-d4	"	"	"	*70.0-121*		*109*	*%*	
Surrogate: Toluene-d8	"	"	"	*81.0-*		*98.4*	"	
Surrogate: 4-BFB	"	"	"			*121*	"	

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T Corp (3)	Project: Mercer Processing	Sampled:	6/1/00
1005 Port Chicago Hwy	Project Number:	Received:	6/2/00
Concord, CA 94520	Project Manager: Mike W.	Reported:	6/16/00

Volatile Organic Compounds by EPA Method 8260B
Sequoia Analytical - San Carlos

Analyte	Batch Number	Date Prepared	Date Analyzed	Surrogate Limits	Reporting Limit	Result	Units	Notes*
			L006019-06				Soil	
4-8								
2-Butanone	0060005	6/6/00	6/8/00		500	ND	ug/kg	
Acetone	"	"	"		1000	ND	"	
Benzene	"	"	"		100	ND	"	
Bromobenzene	"	"	"		100	ND	"	
Bromochloromethane	"	"	"		100	ND	"	
Bromodichloromethane	"	"	"		100	ND	"	
Bromoform	"	"	"		100	ND	"	
Bromomethane	"	"	"		500	ND	"	
n-Butylbenzene	"	"	"		100	ND	"	
sec-Butylbenzene	"	"	"		100	ND	"	
tert-Butylbenzene	"	"	"		100	ND	"	
Carbon tetrachloride	"	"	"		100	ND	"	
Chlorobenzene	"	"	"		100	ND	"	
Chloroethane	"	"	"		500	ND	"	
Chloroform	"	"	"		100	ND	"	
Chloromethane	"	"	"		500	ND	"	
2-Chlorotoluene	"	"	"		100	ND	"	
4-Chlorotoluene	"	"	"		100	ND	"	
Dibromochloromethane	"	"	"		100	ND	"	
1,2-Dibromoethane	"	"	"		100	ND	"	
Dibromomethane	"	"	"		100	ND	"	
1,2-Dibromo-3-chloropropane	"	"	"		500	ND	"	
1,2-Dichlorobenzene	"	"	"		100	ND	"	
1,3-Dichlorobenzene	"	"	"		100	ND	"	
1,4-Dichlorobenzene	"	"	"		100	ND	"	
Dichlorodifluoromethane	"	"	"		500	ND	"	
1,1-Dichloroethane	"	"	"		100	ND	"	
1,2-Dichloroethane	"	"	"		100	ND	"	
1,1-Dichloroethene	"	"	"		100	ND	"	
cis-1,2-Dichloroethene	"	"	"		100	ND	"	
trans-1,2-Dichloroethene	"	"	"		100	ND	"	
1,2-Dichloropropane	"	"	"		100	ND	"	
1,3-Dichloropropane	"	"	"		100	ND	"	
2,2-Dichloropropane	"	"	"		100	ND	"	
1,1-Dichloropropene	"	"	"		100	ND	"	
Ethylbenzene	"	"	"		100	ND	"	
Hexachlorobutadiene	"	"	"		100	ND	"	
Isopropylbenzene	"	"	"		100	ND	"	
p-Isopropyltoluene	"	"	"		500	ND	"	
Methylene chloride	"	"	"		500	ND	"	
Naphthalene								

Refer to end of report for text of notes and definitions.

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T Corp (3)	Project:	Mercer Processing	Sampled: 6/1/00
1005 Port Chicago Hwy	Project Number:		Received: 6/2/00
Concord, CA 94520	Project Manager:	Mike W.	Reported: 6/16/00

Volatile Organic Compounds by EPA Method 8260B
Sequoia Analytical - San Carlos

Analyte	Batch Number	Date Prepared	Date Analyzed	Surrogate Limits	Reporting Limit	Result	Units	Notes*
A-8 (continued)			**L006019-06**				**Soil**	
n-Propylbenzene	0060005	6/6/00	6/8/00		100	ND	ug/kg	
Styrene	"	"	"		100	ND	"	
1,1,1,2-Tetrachloroethane	"	"	"		100	ND	"	
1,1,2,2-Tetrachloroethane	"	"	"		100	ND	"	
Tetrachloroethene	"	"	"		100	ND	"	
Toluene	"	"	"		100	ND	"	
1,2,3-Trichlorobenzene	"	"	"		100	ND	"	
1,2,4-Trichlorobenzene	"	"	"		100	ND	"	
1,1,1-Trichloroethane	"	"	"		100	ND	"	
1,1,2-Trichloroethane	"	"	"		100	ND	"	
Trichloroethene	"	"	"		100	ND	"	
Trichlorofluoromethane	"	"	"		500	ND	"	
1,2,3-Trichloropropane	"	"	"		100	ND	"	
1,2,4-Trimethylbenzene	"	"	"		100	ND	"	
1,3,5-Trimethylbenzene	"	"	"		100	ND	"	
Vinyl chloride	"	"	"		500	ND	"	
Total Xylenes	"	"	"		100	ND	"	
Surrogate: 1,2-Dichloroethane-d4	"	"	"	*70.0-121*		*102*	*%*	
Surrogate: Toluene-d8	"	"	"	*81.0-117*		*93.2*	"	
Surrogate: 4-BFB	"	"	"	*74.0-121*		*113*	"	

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IT Corp (3)	Project: Mercer Processing	Sampled:	6/1/00
4005 Port Chicago Hwy	Project Number:	Received:	6/2/00
Concord, CA 94520	Project Manager: Mike W.	Reported:	6/16/00

Volatile Organic Compounds by EPA Method 8260B
Sequoia Analytical - San Carlos

Analyte	Batch Number	Date Prepared	Date Analyzed	Surrogate Limits	Reporting Limit	Result	Units	Notes*
A-10			**L006019-07**				**Soil**	
2-Butanone	0060005	6/6/00	6/8/00		500	ND	ug/kg	
Acetone	"	"	"		1000	ND	"	
Benzene	"	"	"		100	ND	"	
Bromobenzene	"	"	"		100	ND	"	
Bromochloromethane	"	"	"		100	ND	"	
Bromodichloromethane	"	"	"		100	ND	"	
Bromoform	"	"	"		100	ND	"	
Bromomethane	"	"	"		500	ND	"	
n-Butylbenzene	"	"	"		100	ND	"	
sec-Butylbenzene	"	"	"		100	ND	"	
tert-Butylbenzene	"	"	"		100	ND	"	
Carbon tetrachloride	"	"	"		100	ND	"	
Chlorobenzene	"	"	"		100	ND	"	
Chloroethane	"	"	"		500	ND	"	
Chloroform	"	"	"		100	ND	"	
Chloromethane	"	"	"		500	ND	"	
2-Chlorotoluene	"	"	"		100	ND	"	
4-Chlorotoluene	"	"	"		100	ND	"	
Dibromochloromethane	"	"	"		100	ND	"	
1,2-Dibromoethane	"	"	"		100	ND	"	
Dibromomethane	"	"	"		100	ND	"	
1,2-Dibromo-3-chloropropane	"	"	"		500	ND	"	
1,2-Dichlorobenzene	"	"	"		100	ND	"	
1,3-Dichlorobenzene	"	"	"		100	ND	"	
1,4-Dichlorobenzene	"	"	"		100	ND	"	
Dichlorodifluoromethane	"	"	"		500	ND	"	
1,1-Dichloroethane	"	"	"		100	ND	"	
1,2-Dichloroethane	"	"	"		100	ND	"	
1,1-Dichloroethene	"	"	"		100	ND	"	
cis-1,2-Dichloroethene	"	"	"		100	ND	"	
trans-1,2-Dichloroethene	"	"	"		100	ND	"	
1,2-Dichloropropane	"	"	"		100	ND	"	
1,3-Dichloropropane	"	"	"		100	ND	"	
2,2-Dichloropropane	"	"	"		100	ND	"	
1,1-Dichloropropene	"	"	"		100	ND	"	
Ethylbenzene	"	"	"		100	ND	"	
Hexachlorobutadiene	"	"	"		100	ND	"	
Isopropylbenzene	"	"	"		100	ND	"	
p-Isopropyltoluene	"	"	"		500	ND	"	
Methylene chloride	"	"	"		500	ND	"	
Naphthalene								

*Refer to end of report for text of notes and definitions.

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IT Corp (3)	Project:	Mercer Processing	Sampled: 6/1/00
4005 Port Chicago Hwy	Project Number:		Received: 6/2/00
Concord, CA 94520	Project Manager:	Mike W.	Reported: 6/16/00

Volatile Organic Compounds by EPA Method 8260B
Sequoia Analytical - San Carlos

Analyte	Batch Number	Date Prepared	Date Analyzed	Surrogate Limits	Reporting Limit	Result	Units	Notes*
A-10 (continued)			**L006019-07**				**Soil**	
n-Propylbenzene	0060005	6/6/00	6/8/00		100	ND	ug/kg	
Styrene	"	"	"		100	ND	"	
1,1,1,2-Tetrachloroethane	"	"	"		100	ND	"	
1,1,2,2-Tetrachloroethane	"	"	"		100	ND	"	
Tetrachloroethene	"	"	"		100	ND	"	
Toluene	"	"	"		100	ND	"	
1,2,3-Trichlorobenzene	"	"	"		100	ND	"	
1,2,4-Trichlorobenzene	"	"	"		100	ND	"	
1,1,1-Trichloroethane	"	"	"		100	ND	"	
1,1,2-Trichloroethane	"	"	"		100	ND	"	
Trichloroethene	"	"	"		100	ND	"	
Trichlorofluoromethane	"	"	"		500	ND	"	
1,2,3-Trichloropropane	"	"	"		100	ND	"	
1,2,4-Trimethylbenzene	"	"	"		100	ND	"	
1,3,5-Trimethylbenzene	"	"	"		100	ND	"	
Vinyl chloride	"	"	"		500	ND	"	
Total Xylenes	"	"	"		100	ND	"	
Surrogate: 1,2-Dichloroethane-d4	"	"	"	*70.0-121*		*101*	*%*	
Surrogate: Toluene-d8	"	"	"	*81.0-117*		*90.8*	"	
Surrogate: 4-BFB	"	"	"	*74.0-121*		*111*	"	

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T Corp (3)	Project:	Mercer Processing	Sampled: 6/1/00
1005 Port Chicago Hwy	Project Number:		Received: 6/2/00
Concord, CA 94520	Project Manager:	Mike W.	Reported: 6/16/00

Volatile Organic Compounds by EPA Method 8260B
Sequoia Analytical - San Carlos

Analyte	Batch Number	Date Prepared	Date Analyzed	Surrogate Limits	Reporting Limit	Result	Units	Notes*
			L006019-08				Soil	
B-0	0060005	6/6/00	6/8/00		500	ND	ug/kg	
2-Butanone	"	"	"		1000	ND	"	
Acetone	"	"	"		100	ND	"	
Benzene	"	"	"		100	ND	"	
Bromobenzene	"	"	"		100	ND	"	
Bromochloromethane	"	"	"		100	ND	"	
Bromodichloromethane	"	"	"		100	ND	"	
Bromoform	"	"	"		500	ND	"	
Bromomethane	"	"	"		100	ND	"	
n-Butylbenzene	"	"	"		100	ND	"	
sec-Butylbenzene	"	"	"		100	ND	"	
ert-Butylbenzene	"	"	"		100	ND	"	
Carbon tetrachloride	"	"	"		100	ND	"	
Chlorobenzene	"	"	"		500	ND	"	
Chloroethane	"	"	"		100	ND	"	
Chloroform	"	"	"		500	ND	"	
Chloromethane	"	"	"		100	ND	"	
2-Chlorotoluene	"	"	"		100	ND	"	
4-Chlorotoluene	"	"	"		100	ND	"	
Dibromochloromethane	"	"	"		100	ND	"	
1,2-Dibromoethane	"	"	"		100	ND	"	
Dibromomethane	"	"	"		500	ND	"	
1,2-Dibromo-3-chloropropane	"	"	"		100	ND	"	
1,2-Dichlorobenzene	"	"	"		100	ND	"	
1,3-Dichlorobenzene	"	"	"		100	ND	"	
1,4-Dichlorobenzene	"	"	"		500	ND	"	
Dichlorodifluoromethane	"	"	"		100	ND	"	
1,1-Dichloroethane	"	"	"		100	ND	"	
1,2-Dichloroethane	"	"	"		100	ND	"	
1,1-Dichloroethene	"	"	"		100	ND	"	
cis-1,2-Dichloroethene	"	"	"		100	ND	"	
trans-1,2-Dichloroethene	"	"	"		100	ND	"	
1,2-Dichloropropane	"	"	"		100	ND	"	
1,3-Dichloropropane	"	"	"		100	ND	"	
2,2-Dichloropropane	"	"	"		100	ND	"	
1,1-Dichloropropene	"	"	"		100	ND	"	
Ethylbenzene	"	"	"		100	ND	"	
Hexachlorobutadiene	"	"	"		100	ND	"	
Isopropylbenzene	"	"	"		100	ND	"	
p-Isopropyltoluene	"	"	"		500	ND	"	
Methylene chloride	"	"	"		500	ND	"	
Naphthalene								

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T Corp (3)	Project:	Mercer Processing	Sampled: 6/1/00
1005 Port Chicago Hwy	Project Number:		Received: 6/2/00
Concord, CA 94520	Project Manager:	Mike W.	Reported: 6/16/00

Volatile Organic Compounds by EPA Method 8260B
Sequoia Analytical - San Carlos

Analyte	Batch Number	Date Prepared	Date Analyzed	Surrogate Limits	Reporting Limit	Result	Units	Notes*
			L006019-08				Soil	
3-0 (continued)	0060005	6/6/00	6/8/00		100	ND	ug/kg	
-Propylbenzene	"	"	"		100	ND	"	
Styrene	"	"	"		100	ND	"	
1,1,1,2-Tetrachloroethane	"	"	"		100	ND	"	
,1,2,2-Tetrachloroethane	"	"	"		100	ND	"	
Tetrachloroethene	"	"	"		100	ND	"	
Toluene	"	"	"		100	ND	"	
1,2,3-Trichlorobenzene	"	"	"		100	ND	"	
,2,4-Trichlorobenzene	"	"	"		100	ND	"	
1,1,1-Trichloroethane	"	"	"		100	ND	"	
1,1,2-Trichloroethane	"	"	"		100	442	"	
Trichloroethene	"	"	"		500	ND	"	
Trichlorofluoromethane	"	"	"		100	ND	"	
1,2,3-Trichloropropane	"	"	"		100	ND	"	
1,2,4-Trimethylbenzene	"	"	"		100	ND	"	
,3,5-Trimethylbenzene	"	"	"		500	ND	"	
Vinyl chloride	"	"	"		100	ND	"	
Total Xylenes	"	"	"			*109*	%	
Surrogate: 1,2-Dichloroethane-d4	"	"	"	*70.0-121*		*94.8*	"	
Surrogate: Toluene-d8	"	"	"	*81.0-117*		*116*	"	
Surrogate: 4-BFB				*74.0-121*				

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T Corp (3)	Project: Mercer Processing	Sampled:	6/1/00
4005 Port Chicago Hwy	Project Number:	Received:	6/2/00
Concord, CA 94520	Project Manager: Mike W.	Reported:	6/16/00

Volatile Organic Compounds by EPA Method 8260B
Sequoia Analytical - San Carlos

Analyte	Batch Number	Date Prepared	Date Analyzed	Surrogate Limits	Reporting Limit	Result	Units	Notes*
			L006019-09				Soil	
3-4	0060005	6/6/00	6/8/00		500	ND	ug/kg	
2-Butanone	"	"	"		1000	ND	"	
Acetone	"	"	"		100	ND	"	
Benzene	"	"	"		100	ND	"	
Bromobenzene	"	"	"		100	ND	"	
Bromochloromethane	"	"	"		100	ND	"	
Bromodichloromethane	"	"	"		100	ND	"	
Bromoform	"	"	"		500	ND	"	
Bromomethane	"	"	"		100	ND	"	
n-Butylbenzene	"	"	"		100	ND	"	
sec-Butylbenzene	"	"	"		100	ND	"	
ert-Butylbenzene	"	"	"		100	ND	"	
Carbon tetrachloride	"	"	"		100	ND	"	
Chlorobenzene	"	"	"		500	ND	"	
Chloroethane	"	"	"		100	ND	"	
Chloroform	"	"	"		500	ND	"	
Chloromethane	"	"	"		100	ND	"	
2-Chlorotoluene	"	"	"		100	ND	"	
4-Chlorotoluene	"	"	"		100	ND	"	
Dibromochloromethane	"	"	"		100	ND	"	
1,2-Dibromoethane	"	"	"		100	ND	"	
Dibromomethane	"	"	"		500	ND	"	
1,2-Dibromo-3-chloropropane	"	"	"		100	ND	"	
1,2-Dichlorobenzene	"	"	"		100	ND	"	
1,3-Dichlorobenzene	"	"	"		100	ND	"	
1,4-Dichlorobenzene	"	"	"		500	ND	"	
Dichlorodifluoromethane	"	"	"		100	ND	"	
1,1-Dichloroethane	"	"	"		100	ND	"	
1,2-Dichloroethane	"	"	"		100	ND	"	
1,1-Dichloroethene	"	"	"		100	ND	"	
cis-1,2-Dichloroethene	"	"	"		100	ND	"	
trans-1,2-Dichloroethene	"	"	"		100	ND	"	
1,2-Dichloropropane	"	"	"		100	ND	"	
1,3-Dichloropropane	"	"	"		100	ND	"	
2,2-Dichloropropane	"	"	"		100	ND	"	
1,1-Dichloropropene	"	"	"		100	ND	"	
Ethylbenzene	"	"	"		100	ND	"	
Hexachlorobutadiene	"	"	"		100	ND	"	
Isopropylbenzene	"	"	"		500	ND	"	
p-Isopropyltoluene	"	"	"		500	ND	"	
Methylene chloride	"	"	"		100	ND	"	
Naphthalene								

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T Corp (3)	Project:	Mercer Processing	Sampled: 6/1/00
4005 Port Chicago Hwy	Project Number:		Received: 6/2/00
Concord, CA 94520	Project Manager:	Mike W.	Reported: 6/16/00

Volatile Organic Compounds by EPA Method 8260B
Sequoia Analytical - San Carlos

Analyte	Batch Number	Date Prepared	Date Analyzed	Surrogate Limits	Reporting Limit	Result	Units	Notes*
3-4 (continued)			**L006019-09**				**Soil**	
-Propylbenzene	0060005	6/6/00	6/8/00		100	ND	ug/kg	
Styrene	"	"	"		100	ND	"	
',1,1,2-Tetrachloroethane	"	"	"		100	ND	"	
,1,2,2-Tetrachloroethane	"	"	"		100	ND	"	
Tetrachloroethene	"	"	"		100	ND	"	
Toluene	"	"	"		100	ND	"	
,2,3-Trichlorobenzene	"	"	"		100	ND	"	
,2,4-Trichlorobenzene	"	"	"		100	ND	"	
1,1,1-Trichloroethane	"	"	"		100	ND	"	
1,1,2-Trichloroethane	"	"	"		100	ND	"	
Trichloroethene	"	"	"		100	**6800**	"	
Trichlorofluoromethane	"	"	"		500	ND	"	
1,2,3-Trichloropropane	"	"	"		100	ND	"	
,2,4-Trimethylbenzene	"	"	"		100	ND	"	
,3,5-Trimethylbenzene	"	"	"		100	ND	"	
Vinyl chloride	"	"	"		100	ND	"	
Total Xylenes	"	"	"		500	ND	"	
Surrogate: 1,2-Dichloroethane-d4	"	"	"	*70.0-121*	100	*102*	*%*	
Surrogate: Toluene-d8	"	"	"	*81.0-117*		*94.0*	"	
Surrogate: 4-BFB	"	"	"	*74.0-121*		*113*	"	

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Γ Corp (3)	Project:	Mercer Processing	Sampled: 6/1/00
,005 Port Chicago Hwy	Project Number:		Received: 6/2/00
Concord, CA 94520	Project Manager:	Mike W.	Reported: 6/16/00

Volatile Organic Compounds by EPA Method 8260B
Sequoia Analytical - San Carlos

Analyte	Batch Number	Date Prepared	Date Analyzed	Surrogate Limits	Reporting Limit	Result	Units	Notes*
?-6			L006019-10				Soil	
-Butanone	0060005	6/6/00	6/8/00		500	ND	ug/kg	
Acetone	"	"	"		1000	ND	"	
Benzene	"	"	"		100	ND	"	
Bromobenzene	"	"	"		100	ND	"	
Bromochloromethane	"	"	"		100	ND	"	
Bromodichloromethane	"	"	"		100	ND	"	
Bromoform	"	"	"		100	ND	"	
Bromomethane	"	"	"		500	ND	"	
n-Butylbenzene	"	"	"		100	ND	"	
sec-Butylbenzene	"	"	"		100	ND	"	
ert-Butylbenzene	"	"	"		100	ND	"	
Carbon tetrachloride	"	"	"		100	ND	"	
Chlorobenzene	"	"	"		100	ND	"	
Chloroethane	"	"	"		500	ND	"	
...oform	"	"	"		100	ND	"	
...oromethane	"	"	"		500	ND	"	
2-Chlorotoluene	"	"	"		100	ND	"	
-Chlorotoluene	"	"	"		100	ND	"	
Dibromochloromethane	"	"	"		100	ND	"	
1,2-Dibromoethane	"	"	"		100	ND	"	
Dibromomethane	"	"	"		100	ND	"	
,2-Dibromo-3-chloropropane	"	"	"		500	ND	"	
,2-Dichlorobenzene	"	"	"		100	ND	"	
1,3-Dichlorobenzene	"	"	"		100	ND	"	
,4-Dichlorobenzene	"	"	"		100	ND	"	
Dichlorodifluoromethane	"	"	"		500	ND	"	
,1-Dichloroethane	"	"	"		100	ND	"	
1,2-Dichloroethane	"	"	"		100	ND	"	
,1-Dichloroethene	"	"	"		100	ND	"	
is-1,2-Dichloroethene	"	"	"		100	ND	"	
trans-1,2-Dichloroethene	"	"	"		100	**117**	"	
,2-Dichloropropane	"	"	"		100	ND	"	
,3-Dichloropropane	"	"	"		100	ND	"	
,2-Dichloropropane	"	"	"		100	ND	"	
1,1-Dichloropropene	"	"	"		100	ND	"	
thylbenzene	"	"	"		100	ND	"	
Hexachlorobutadiene	"	"	"		100	ND	"	
Isopropylbenzene	"	"	"		100	ND	"	
p-Isopropyltoluene	"	"	"		100	ND	"	
Methylene chloride	"	"	"		500	ND	"	
aphthalene	"	"	"		500	ND	"	

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T Corp (3)	Project:	Mercer Processing	Sampled: 6/1/00
,005 Port Chicago Hwy	Project Number:		Received: 6/2/00
Concord, CA 94520	Project Manager:	Mike W.	Reported: 6/16/00

Volatile Organic Compounds by EPA Method 8260B
Sequoia Analytical - San Carlos

Analyte	Batch Number	Date Prepared	Date Analyzed	Surrogate Limits	Reporting Limit	Result	Units	Notes*
3-6 (continued)			**L006019-10**				**Soil**	
-Propylbenzene	0060005	6/6/00	6/8/00		100	ND	ug/kg	
Styrene	"	"	"		100	ND	"	
1,1,1,2-Tetrachloroethane	"	"	"		100	ND	"	
,1,2,2-Tetrachloroethane	"	"	"		100	ND	"	
etrachloroethene	"	"	"		100	ND	"	
Toluene	"	"	"		100	ND	"	
1,2,3-Trichlorobenzene	"	"	"		100	ND	"	
,2,4-Trichlorobenzene	"	"	"		100	ND	"	
,1,1-Trichloroethane	"	"	"		100	ND	"	
1,1,2-Trichloroethane	"	"	"		100	ND	"	
richloroethene	"	"	"		100	**4190**	"	
richlorofluoromethane	"	"	"		500	ND	"	
1,2,3-Trichloropropane	"	"	"		100	ND	"	
1,2,4-Trimethylbenzene	"	"	"		100	ND	"	
,3,5-Trimethylbenzene	"	"	"		100	ND	"	
inyl chloride	"	"	"		100	ND	"	
Total Xylenes	"	"	"		500	ND	"	
urrogate: 1,2-Dichloroethane-d4	"	"	"			*100*	*%*	
urrogate: Toluene-d8	"	"	"	*81.0-117*		*88.8*	"	
Surrogate: 4-BFB	"	"	"	*74.0-121*		*111*	"	

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IT Corp (3)	Project:	Mercer Processing	Sampled: 6/1/00
4005 Port Chicago Hwy	Project Number:		Received: 6/2/00
Concord, CA 94520	Project Manager:	Mike W.	Reported: 6/16/00

Volatile Organic Compounds by EPA Method 8260B
Sequoia Analytical - San Carlos

Analyte	Batch Number	Date Prepared	Date Analyzed	Surrogate Limits	Reporting Limit	Result	Units	Notes*
C-0			L006019-11				Soil	
2-Butanone	0060005	6/6/00	6/8/00		500	ND	ug/kg	
Acetone	"	"	"		1000	ND	"	
Benzene	"	"	"		100	ND	"	
Bromobenzene	"	"	"		100	ND	"	
Bromochloromethane	"	"	"		100	ND	"	
Bromodichloromethane	"	"	"		100	ND	"	
Bromoform	"	"	"		100	ND	"	
Bromomethane	"	"	"		500	ND	"	
n-Butylbenzene	"	"	"		100	ND	"	
sec-Butylbenzene	"	"	"		100	ND	"	
ert-Butylbenzene	"	"	"		100	ND	"	
Carbon tetrachloride	"	"	"		100	ND	"	
Chlorobenzene	"	"	"		100	ND	"	
Chloroethane	"	"	"		500	ND	"	
Chloroform	"	"	"		100	ND	"	
Chloromethane	"	"	"		500	ND	"	
2-Chlorotoluene	"	"	"		100	ND	"	
4-Chlorotoluene	"	"	"		100	ND	"	
Dibromochloromethane	"	"	"		100	ND	"	
1,2-Dibromoethane	"	"	"		100	ND	"	
Dibromomethane	"	"	"		100	ND	"	
1,2-Dibromo-3-chloropropane	"	"	"		500	ND	"	
1,2-Dichlorobenzene	"	"	"		100	ND	"	
1,3-Dichlorobenzene	"	"	"		100	ND	"	
1,4-Dichlorobenzene	"	"	"		100	ND	"	
Dichlorodifluoromethane	"	"	"		500	ND	"	
1,1-Dichloroethane	"	"	"		100	ND	"	
1,2-Dichloroethane	"	"	"		100	ND	"	
1,1-Dichloroethene	"	"	"		100	ND	"	
cis-1,2-Dichloroethene	"	"	"		100	ND	"	
trans-1,2-Dichloroethene	"	"	"		100	ND	"	
1,2-Dichloropropane	"	"	"		100	ND	"	
1,3-Dichloropropane	"	"	"		100	ND	"	
2,2-Dichloropropane	"	"	"		100	ND	"	
1,1-Dichloropropene	"	"	"		100	ND	"	
Ethylbenzene	"	"	"		100	ND	"	
Hexachlorobutadiene	"	"	"		100	ND	"	
Isopropylbenzene	"	"	"		100	ND	"	
p-Isopropyltoluene	"	"	"		100	ND	"	
Methylene chloride	"	"	"		500	ND	"	
Naphthalene	"	"	"		500	ND	"	

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T Corp (3)	Project:	Mercer Processing	Sampled: 6/1/00
.005 Port Chicago Hwy	Project Number:		Received: 6/2/00
Concord, CA 94520	Project Manager:	Mike W.	Reported: 6/16/00

Volatile Organic Compounds by EPA Method 8260B
Sequoia Analytical - San Carlos

Analyte	Batch Number	Date Prepared	Date Analyzed	Surrogate Limits	Reporting Limit	Result	Units	Notes*
			L006019-11				Soil	
C-0 (continued)								
-Propylbenzene	0060005	6/6/00	6/8/00		100	ND	ug/kg	
Styrene	"	"	"		100	ND	"	
1,1,1,2-Tetrachloroethane	"	"	"		100	ND	"	
,1,2,2-Tetrachloroethane	"	"	"		100	ND	"	
Tetrachloroethene	"	"	"		100	ND	"	
Toluene	"	"	"		100	ND	"	
,2,3-Trichlorobenzene	"	"	"		100	ND	"	
,2,4-Trichlorobenzene	"	"	"		100	ND	"	
,1,1-Trichloroethane	"	"	"		100	ND	"	
1,1,2-Trichloroethane	"	"	"		100	ND	"	
Trichloroethene	"	"	"		500	ND	"	
Trichlorofluoromethane	"	"	"		100	ND	"	
1,2,3-Trichloropropane	"	"	"		100	ND	"	
1,2,4-Trimethylbenzene	"	"	"		100	ND	"	
,3,5-Trimethylbenzene	"	"	"		500	ND	"	
Vinyl chloride	"	"	"		100	ND	"	
Total Xylenes	"	"	"			96.4	%	
Surrogate: 1,2-Dichloroethane-d4	"	"	"	*70.0-121*		*95.2*	"	
Surrogate: Toluene-d8	"	"	"	*81.0-117*		*111*	"	
Surrogate: 4-BFB	"	"	"	*74.0-121*				

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T Corp (3)	Project:	Mercer Processing	Sampled: 6/1/00
005 Port Chicago Hwy	Project Number:		Received: 6/2/00
Concord, CA 94520	Project Manager:	Mike W.	Reported: 6/16/00

Volatile Organic Compounds by EPA Method 8260B
Sequoia Analytical - San Carlos

Analyte	Batch Number	Date Prepared	Date Analyzed	Surrogate Limits	Reporting Limit	Result	Units	Notes*
			L006019-12				Soil	
C-4	0060005	6/6/00	6/8/00		500	ND	ug/kg	
-Butanone	"	"	"		1000	ND	"	
Acetone	"	"	"		100	ND	"	
Benzene	"	"	"		100	ND	"	
Bromobenzene	"	"	"		100	ND	"	
Bromochloromethane	"	"	"		100	ND	"	
Bromodichloromethane	"	"	"		100	ND	"	
Bromoform	"	"	"		500	ND	"	
Bromomethane	"	"	"		100	ND	"	
-Butylbenzene	"	"	"		100	ND	"	
sec-Butylbenzene	"	"	"		100	ND	"	
ert-Butylbenzene	"	"	"		100	ND	"	
Carbon tetrachloride	"	"	"		100	ND	"	
Chlorobenzene	"	"	"		500	ND	"	
Chloroethane	"	"	"		100	ND	"	
Chloroform	"	"	"		500	ND	"	
Chloromethane	"	"	"		100	ND	"	
2-Chlorotoluene	"	"	"		100	ND	"	
4-Chlorotoluene	"	"	"		100	ND	"	
Dibromochloromethane	"	"	"		100	ND	"	
1,2-Dibromoethane	"	"	"		100	ND	"	
Dibromomethane	"	"	"		500	ND	"	
,2-Dibromo-3-chloropropane	"	"	"		100	ND	"	
,2-Dichlorobenzene	"	"	"		100	ND	"	
1,3-Dichlorobenzene	"	"	"		100	ND	"	
1,4-Dichlorobenzene	"	"	"		500	ND	"	
Dichlorodifluoromethane	"	"	"		100	ND	"	
1,1-Dichloroethane	"	"	"		100	ND	"	
1,2-Dichloroethane	"	"	"		100	ND	"	
,1-Dichloroethene	"	"	"		100	ND	"	
is-1,2-Dichloroethene	"	"	"		100	ND	"	
trans-1,2-Dichloroethene	"	"	"		100	ND	"	
1,2-Dichloropropane	"	"	"		100	ND	"	
,3-Dichloropropane	"	"	"		100	ND	"	
2,2-Dichloropropane	"	"	"		100	ND	"	
1,1-Dichloropropene	"	"	"		100	ND	"	
Ethylbenzene	"	"	"		100	ND	"	
Hexachlorobutadiene	"	"	"		100	ND	"	
Isopropylbenzene	"	"	"		100	ND	"	
p-Isopropyltoluene	"	"	"		500	ND	"	
Methylene chloride	"	"	"		500	ND	"	
Naphthalene								

*Refer to end of report for text of notes and definitions.

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T Corp (3)	Project:	Mercer Processing	Sampled: 6/1/00
4005 Port Chicago Hwy	Project Number:		Received: 6/2/00
Concord, CA 94520	Project Manager:	Mike W.	Reported: 6/16/00

Volatile Organic Compounds by EPA Method 8260B
Sequoia Analytical - San Carlos

Analyte	Batch Number	Date Prepared	Date Analyzed	Surrogate Limits	Reporting Limit	Result	Units	Notes*
			L006019-12				Soil	
-4 (continued)	0060005	6/6/00	6/8/00		100	ND	ug/kg	
-Propylbenzene	"	"	"		100	ND	"	
Styrene	"	"	"		100	ND	"	
1,1,1,2-Tetrachloroethane	"	"	"		100	ND	"	
,1,2,2-Tetrachloroethane	"	"	"		100	ND	"	
Tetrachloroethene	"	"	"		100	ND	"	
Toluene	"	"	"		100	ND	"	
,2,3-Trichlorobenzene	"	"	"		100	ND	"	
,2,4-Trichlorobenzene	"	"	"		100	ND	"	
1,1,1-Trichloroethane	"	"	"		100	ND	"	
1,1,2-Trichloroethane	"	"	"		100	**270**	"	
richloroethene	"	"	"		500	ND	"	
richlorofluoromethane	"	"	"		100	ND	"	
1,2,3-Trichloropropane	"	"	"		100	ND	"	
,2,4-Trimethylbenzene	"	"	"		100	ND	"	
,3,5-Trimethylbenzene	"	"	"		500	ND	"	
Vinyl chloride	"	"	"		100	ND	"	
Total Xylenes	"	"	"			*113*	%	
urrogate: 1,2-Dichloroethane-d4	"	"	"	*70.0-121*		*98.4*	"	
urrogate: Toluene-d8	"	"	"	*81.0-117*		*119*	"	
Surrogate: 4-BFB	"	"	"	*74.0-121*				

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IT Corp (3)	Project: Mercer Processing	Sampled: 6/1/00
4005 Port Chicago Hwy	Project Number:	Received: 6/2/00
Concord, CA 94520	Project Manager: Mike W.	Reported: 6/16/00

Volatile Organic Compounds by EPA Method 8260B
Sequoia Analytical - San Carlos

Analyte	Batch Number	Date Prepared	Date Analyzed	Surrogate Limits	Reporting Limit	Result	Units	Notes*
			L006019-13				Soil	
C-6								
2-Butanone	0060005	6/6/00	6/8/00		500	ND	ug/kg	
Acetone	"	"	"		1000	ND	"	
Benzene	"	"	"		100	ND	"	
Bromobenzene	"	"	"		100	ND	"	
Bromochloromethane	"	"	"		100	ND	"	
Bromodichloromethane	"	"	"		100	ND	"	
Bromoform	"	"	"		100	ND	"	
Bromomethane	"	"	"		500	ND	"	
n-Butylbenzene	"	"	"		100	ND	"	
sec-Butylbenzene	"	"	"		100	ND	"	
tert-Butylbenzene	"	"	"		100	ND	"	
Carbon tetrachloride	"	"	"		100	ND	"	
Chlorobenzene	"	"	"		100	ND	"	
Chloroethane	"	"	"		500	ND	"	
Chloroform	"	"	"		100	ND	"	
Chloromethane	"	"	"		500	ND	"	
2-Chlorotoluene	"	"	"		100	ND	"	
4-Chlorotoluene	"	"	"		100	ND	"	
Dibromochloromethane	"	"	"		100	ND	"	
1,2-Dibromoethane	"	"	"		100	ND	"	
Dibromomethane	"	"	"		100	ND	"	
1,2-Dibromo-3-chloropropane	"	"	"		500	ND	"	
1,2-Dichlorobenzene	"	"	"		100	ND	"	
1,3-Dichlorobenzene	"	"	"		100	ND	"	
1,4-Dichlorobenzene	"	"	"		100	ND	"	
Dichlorodifluoromethane	"	"	"		500	ND	"	
1,1-Dichloroethane	"	"	"		100	ND	"	
1,2-Dichloroethane	"	"	"		100	ND	"	
1,1-Dichloroethene	"	"	"		100	ND	"	
cis-1,2-Dichloroethene	"	"	"		100	ND	"	
trans-1,2-Dichloroethene	"	"	"		100	ND	"	
1,2-Dichloropropane	"	"	"		100	ND	"	
1,3-Dichloropropane	"	"	"		100	ND	"	
2,2-Dichloropropane	"	"	"		100	ND	"	
1,1-Dichloropropene	"	"	"		100	ND	"	
Ethylbenzene	"	"	"		100	ND	"	
Hexachlorobutadiene	"	"	"		100	ND	"	
Isopropylbenzene	"	"	"		100	ND	"	
p-Isopropyltoluene	"	"	"		500	ND	"	
Methylene chloride	"	"	"		500	ND	"	
Naphthalene								

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T Corp (3)	Project:	Mercer Processing	Sampled: 6/1/00
4005 Port Chicago Hwy	Project Number:		Received: 6/2/00
Concord, CA 94520	Project Manager:	Mike W.	Reported: 6/16/00

Volatile Organic Compounds by EPA Method 8260B
Sequoia Analytical - San Carlos

Analyte	Batch Number	Date Prepared	Date Analyzed	Surrogate Limits	Reporting Limit	Result	Units	Notes*
C-6 (continued)			**L006019-13**				**Soil**	
n-Propylbenzene	0060005	6/6/00	6/8/00		100	ND	ug/kg	
Styrene	"	"	"		100	ND	"	
1,1,1,2-Tetrachloroethane	"	"	"		100	ND	"	
1,1,2,2-Tetrachloroethane	"	"	"		100	ND	"	
Tetrachloroethene	"	"	"		100	ND	"	
Toluene	"	"	"		100	ND	"	
1,2,3-Trichlorobenzene	"	"	"		100	ND	"	
1,2,4-Trichlorobenzene	"	"	"		100	ND	"	
1,1,1-Trichloroethane	"	"	"		100	ND	"	
1,1,2-Trichloroethane	"	"	"		100	659	"	
Trichloroethene	"	"	"		500	ND	"	
Trichlorofluoromethane	"	"	"		100	ND	"	
1,2,3-Trichloropropane	"	"	"		100	ND	"	
1,2,4-Trimethylbenzene	"	"	"		100	ND	"	
1,3,5-Trimethylbenzene	"	"	"		500	ND	"	
Vinyl chloride	"	"	"		100	ND	"	
Total Xylenes	"	"	"		100	ND	"	
Surrogate: 1,2-Dichloroethane-d4	"	"	"	*70.0-121*		*115*	%	
Surrogate: Toluene-d8	"	"	"	*81.0-117*		*92.0*	"	
Surrogate: 4-BFB	"	"	"	*74.0-121*		*115*	"	

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T Corp (3)	Project:	Mercer Processing	Sampled: 6/1/00
4005 Port Chicago Hwy	Project Number:		Received: 6/2/00
Concord, CA 94520	Project Manager:	Mike W.	Reported: 6/16/00

Volatile Organic Compounds by EPA Method 8260B
Sequoia Analytical - San Carlos

Analyte	Batch Number	Date Prepared	Date Analyzed	Surrogate Limits	Reporting Limit	Result	Units	Notes*
			L006019-14				Soil	
2-6-D	0060005	6/6/00	6/8/00		500	ND	ug/kg	
2-Butanone	"	"	"		1000	ND	"	
Acetone	"	"	"		100	ND	"	
Benzene	"	"	"		100	ND	"	
Bromobenzene	"	"	"		100	ND	"	
Bromochloromethane	"	"	"		100	ND	"	
Bromodichloromethane	"	"	"		100	ND	"	
Bromoform	"	"	"		500	ND	"	
Bromomethane	"	"	"		100	ND	"	
n-Butylbenzene	"	"	"		100	ND	"	
sec-Butylbenzene	"	"	"		100	ND	"	
ert-Butylbenzene	"	"	"		100	ND	"	
Carbon tetrachloride	"	"	"		100	ND	"	
Chlorobenzene	"	"	"		500	ND	"	
Chloroethane	"	"	"		100	ND	"	
Chloroform	"	"	"		500	ND	"	
Chloromethane	"	"	"		100	ND	"	
2-Chlorotoluene	"	"	"		100	ND	"	
4-Chlorotoluene	"	"	"		100	ND	"	
Dibromochloromethane	"	"	"		100	ND	"	
1,2-Dibromoethane	"	"	"		100	ND	"	
Dibromomethane	"	"	"		100	ND	"	
1,2-Dibromo-3-chloropropane	"	"	"		500	ND	"	
1,2-Dichlorobenzene	"	"	"		100	ND	"	
1,3-Dichlorobenzene	"	"	"		100	ND	"	
1,4-Dichlorobenzene	"	"	"		100	ND	"	
Dichlorodifluoromethane	"	"	"		500	ND	"	
1,1-Dichloroethane	"	"	"		100	ND	"	
1,2-Dichloroethane	"	"	"		100	ND	"	
1,1-Dichloroethene	"	"	"		100	ND	"	
cis-1,2-Dichloroethene	"	"	"		100	ND	"	
trans-1,2-Dichloroethene	"	"	"		100	ND	"	
1,2-Dichloropropane	"	"	"		100	ND	"	
1,3-Dichloropropane	"	"	"		100	ND	"	
2,2-Dichloropropane	"	"	"		100	ND	"	
1,1-Dichloropropene	"	"	"		100	ND	"	
Ethylbenzene	"	"	"		100	ND	"	
Hexachlorobutadiene	"	"	"		100	ND	"	
Isopropylbenzene	"	"	"		100	ND	"	
p-Isopropyltoluene	"	"	"		500	ND	"	
Methylene chloride	"	"	"		500	ND	"	
Naphthalene								

Refer to end of report for text of notes and definitions.

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T Corp (3)	Project:	Mercer Processing	Sampled: 6/1/00
4005 Port Chicago Hwy	Project Number:		Received: 6/2/00
Concord, CA 94520	Project Manager:	Mike W.	Reported: 6/16/00

Volatile Organic Compounds by EPA Method 8260B
Sequoia Analytical - San Carlos

Analyte	Batch Number	Date Prepared	Date Analyzed	Surrogate Limits	Reporting Limit	Result	Units	Notes*
2-6-D (continued)			**L006019-14**				**Soil**	
n-Propylbenzene	0060005	6/6/00	6/8/00		100	ND	ug/kg	
Styrene	"	"	"		100	ND	"	
1,1,1,2-Tetrachloroethane	"	"	"		100	ND	"	
1,1,2,2-Tetrachloroethane	"	"	"		100	ND	"	
Tetrachloroethene	"	"	"		100	ND	"	
Toluene	"	"	"		100	ND	"	
1,2,3-Trichlorobenzene	"	"	"		100	ND	"	
1,2,4-Trichlorobenzene	"	"	"		100	ND	"	
1,1,1-Trichloroethane	"	"	"		100	ND	"	
1,1,2-Trichloroethane	"	"	"		100	ND	"	
Trichloroethene	"	"	"		100	**552**	"	
Trichlorofluoromethane	"	"	"		500	ND	"	
1,2,3-Trichloropropane	"	"	"		100	ND	"	
1,2,4-Trimethylbenzene	"	"	"		100	ND	"	
1,3,5-Trimethylbenzene	"	"	"		100	ND	"	
Vinyl chloride	"	"	"		500	ND	"	
Total Xylenes	"	"	"		100	ND	"	
Surrogate: 1,2-Dichloroethane-d4	"	"	"	*70.0-121*		*121*	*%*	
Surrogate: Toluene-d8	"	"	"	*81.0-117*		*89.2*	"	
Surrogate: 4-BFB	"	"	"	*74.0-121*		*113*	"	

Sequoia Analytical

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San Carlos, CA 94070-4111
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T Corp (3)	Project: Mercer Processing	Sampled:	6/1/00
-005 Port Chicago Hwy	Project Number:	Received:	6/2/00
Concord, CA 94520	Project Manager: Mike W.	Reported:	6/16/00

Volatile Organic Compounds by EPA Method 8260B/Quality Control
Sequoia Analytical - San Carlos

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit / Recov. Limits	Recov. %	RPD Limit	RPD %	Notes*
Batch: 0060005	**Date Prepared: 5/31/00**				**Extraction Method: EPA 5030B [P/T]**					
Blank	**0060005-BLK1**									
Benzene	5/31/00			ND	ug/kg	100				
Bromobenzene	"			ND	"	100				
Bromochloromethane	"			ND	"	100				
Bromodichloromethane	"			ND	"	100				
Bromoform	"			ND	"	100				
Bromomethane	"			ND	"	500				
n-Butylbenzene	"			ND	"	100				
sec-Butylbenzene	"			ND	"	100				
tert-Butylbenzene	"			ND	"	100				
Carbon tetrachloride	"			ND	"	100				
Chlorobenzene	"			ND	"	100				
Chloroethane	"			ND	"	500				
Chloroform	"			ND	"	100				
Chloromethane	"			ND	"	500				
2-Chlorotoluene	"			ND	"	100				
4-Chlorotoluene	"			ND	"	100				
Dibromochloromethane	"			ND	"	100				
1,2-Dibromoethane	"			ND	"	100				
Dibromomethane	"			ND	"	100				
1,2-Dibromo-3-chloropropane	"			ND	"	500				
1,2-Dichlorobenzene	"			ND	"	100				
1,3-Dichlorobenzene	"			ND	"	100				
1,4-Dichlorobenzene	"			ND	"	100				
Dichlorodifluoromethane	"			ND	"	500				
1,1-Dichloroethane	"			ND	"	100				
1,2-Dichloroethane	"			ND	"	100				
1,1-Dichloroethene	"			ND	"	100				
cis-1,2-Dichloroethene	"			ND	"	100				
trans-1,2-Dichloroethene	"			ND	"	100				
1,2-Dichloropropane	"			ND	"	100				
1,3-Dichloropropane	"			ND	"	100				
2,2-Dichloropropane	"			ND	"	100				
1,1-Dichloropropene	"			ND	"	100				
Ethylbenzene	"			ND	"	100				
Hexachlorobutadiene	"			ND	"	100				
Isopropylbenzene	"			ND	"	100				
p-Isopropyltoluene	"			ND	"	500				
Methylene chloride	"			ND	"	500				
Naphthalene	"			ND	"	100				
n-Propylbenzene	"			ND	"	100				

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Γ Corp (3)	Project: Mercer Processing	Sampled:	6/1/00
1005 Port Chicago Hwy	Project Number:	Received:	6/2/00
Concord, CA 94520	Project Manager: Mike W.	Reported:	6/16/00

Volatile Organic Compounds by EPA Method 8260B/Quality Control
Sequoia Analytical - San Carlos

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit / Recov. Limits	Recov. %	RPD Limit	RPD %	Notes*
Blank (continued)	**0060005-BLK1**									
tyrene	5/31/00			ND	ug/kg	100				
1,1,1,2-Tetrachloroethane	"			ND	"	100				
1,1,2,2-Tetrachloroethane	"			ND	"	100				
etrachloroethene	"			ND	"	100				
oluene	"			ND	"	100				
1,2,3-Trichlorobenzene	"			ND	"	100				
,2,4-Trichlorobenzene	"			ND	"	100				
,1,1-Trichloroethane	"			ND	"	100				
1,1,2-Trichloroethane	"			ND	"	100				
Trichloroethene	"			ND	"	500				
richlorofluoromethane	"			ND	"	100				
,2,3-Trichloropropane	"			ND	"	100				
1,2,4-Trimethylbenzene	"			ND	"	100				
1,3,5-Trimethylbenzene	"			ND	"	500				
inyl chloride	"			ND	"	100				
otal Xylenes	"			ND	"	100				
Surrogate: 1,2-Dichloroethane-d4	"	*2500*		*2680*	"	*70.0-121*	*107*			
urrogate: Toluene-d8	"	*2500*		*2540*	"	*81.0-117*	*102*			
urrogate: 4-BFB	"	*2500*		*2420*	"	*1*	*96.8*			
Blank	**0060005-BLK2**									
enzene	6/2/00			ND		100				
romobenzene	"			ND		100				
Bromochloromethane	"			ND		100				
romodichloromethane	"			ND	"	100				
romoform	"			ND	"	100				
Bromomethane	"			ND	"	500				
n-Butylbenzene	"			ND	"	100				
ec-Butylbenzene	"			ND	"	100				
ert-Butylbenzene	"			ND	"	100				
Carbon tetrachloride	"			ND	"	100				
hlorobenzene	"			ND	"	100				
hloroethane	"			ND	"	500				
Chloroform	"			ND	"	100				
Chloromethane	"			ND	"	500				
-Chlorotoluene	"			ND	"	100				
-Chlorotoluene	"			ND	"	100				
Dibromochloromethane	"			ND	"	100				
1,2-Dibromoethane	"			ND	"	100				
Dibromomethane	"			ND	"	100				
,2-Dibromo-3-chloropropane	"			ND	"	500				

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T Corp (3)	Project: Mercer Processing	Sampled: 6/1/00
1005 Port Chicago Hwy	Project Number:	Received: 6/2/00
Concord, CA 94520	Project Manager: Mike W.	Reported: 6/16/00

Volatile Organic Compounds by EPA Method 8260B/Quality Control
Sequoia Analytical - San Carlos

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit / Recov. Limits	Recov. %	RPD Limit	RPD %	Notes*
Blank (continued)	**0060005-BLK2**									
,2-Dichlorobenzene	6/2/00			ND	ug/kg	100				
,3-Dichlorobenzene	"			ND	"	100				
,4-Dichlorobenzene	"			ND	"	100				
Dichlorodifluoromethane	"			ND	"	500				
,1-Dichloroethane	"			ND	"	100				
,2-Dichloroethane	"			ND	"	100				
,1-Dichloroethene	"			ND	"	100				
is-1,2-Dichloroethene	"			ND	"	100				
rans-1,2-Dichloroethene	"			ND	"	100				
1,2-Dichloropropane	"			ND	"	100				
,3-Dichloropropane	"			ND	"	100				
,2-Dichloropropane	"			ND	"	100				
1,1-Dichloropropene	"			ND	"	100				
Ethylbenzene	"			ND	"	100				
Hexachlorobutadiene	"			ND	"	100				
sopropylbenzene	"			ND	"	100				
p-Isopropyltoluene	"			ND	"	100				
Methylene chloride	"			ND	"	500				
Naphthalene	"			ND	"	500				
n-Propylbenzene	"			ND	"	100				
Styrene	"			ND	"	100				
,1,1,2-Tetrachloroethane	"			ND	"	100				
,1,2,2-Tetrachloroethane	"			ND	"	100				
Tetrachloroethene	"			ND	"	100				
Toluene	"			ND	"	100				
,2,3-Trichlorobenzene	"			ND	"	100				
,2,4-Trichlorobenzene	"			ND	"	100				
1,1,1-Trichloroethane	"			ND	"	100				
,1,2-Trichloroethane	"			ND	"	100				
Trichloroethene	"			ND	"	100				
Trichlorofluoromethane	"			ND	"	500				
1,2,3-Trichloropropane	"			ND	"	100				
,2,4-Trimethylbenzene	"			ND	"	100				
,3,5-Trimethylbenzene	"			ND	"	100				
Vinyl chloride	"			ND	"	500				
Total Xylenes	"			ND	"	100				
Surrogate: 1,2-Dichloroethane-d4	"	*2500*	*2680*		"	*70.0-121*	*107*			
Surrogate: Toluene-d8	"	*2500*	*2540*		"	*81.0-117*	*102*			
Surrogate: 4-BFB	"	*2500*	*2980*		"	*74.0-121*	*119*			

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T Corp (3)	Project: Mercer Processing	Sampled: 6/1/00
1005 Port Chicago Hwy	Project Number:	Received: 6/2/00
Concord, CA 94520	Project Manager: Mike W.	Reported: 6/16/00

Volatile Organic Compounds by EPA Method 8260B/Quality Control
Sequoia Analytical - San Carlos

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit / Recov. Limits	Recov. %	RPD Limit	RPD %	Notes*
Blank	0060005-BLK3									
2-Butanone	6/8/00			ND	ug/kg	500				
Acetone	"			ND	"	1000				
Benzene	"			ND	"	100				
Bromobenzene	"			ND	"	100				
Bromochloromethane	"			ND	"	100				
Bromodichloromethane	"			ND	"	100				
Bromoform	"			ND	"	100				
Bromomethane	"			ND	"	500				
n-Butylbenzene	"			ND	"	100				
sec-Butylbenzene	"			ND	"	100				
tert-Butylbenzene	"			ND	"	100				
Carbon tetrachloride	"			ND	"	100				
Chlorobenzene	"			ND	"	100				
Chloroethane	"			ND	"	500				
Chloroform	"			ND	"	100				
Chloromethane	"			ND	"	500				
2-Chlorotoluene	"			ND	"	100				
4-Chlorotoluene	"			ND	"	100				
Dibromochloromethane	"			ND	"	100				
1,2-Dibromoethane	"			ND	"	100				
Dibromomethane	"			ND	"	100				
1,2-Dibromo-3-chloropropane	"			ND	"	500				
1,2-Dichlorobenzene	"			ND	"	100				
1,3-Dichlorobenzene	"			ND	"	100				
1,4-Dichlorobenzene	"			ND	"	100				
Dichlorodifluoromethane	"			ND	"	500				
1,1-Dichloroethane	"			ND	"	100				
1,2-Dichloroethane	"			ND	"	100				
1,1-Dichloroethene	"			ND	"	100				
cis-1,2-Dichloroethene	"			ND	"	100				
trans-1,2-Dichloroethene	"			ND	"	100				
1,2-Dichloropropane	"			ND	"	100				
1,3-Dichloropropane	"			ND	"	100				
2,2-Dichloropropane	"			ND	"	100				
1,1-Dichloropropene	"			ND	"	100				
Ethylbenzene	"			ND	"	100				
Hexachlorobutadiene	"			ND	"	100				
Isopropylbenzene	"			ND	"	100				
p-Isopropyltoluene	"			ND	"	100				
Methylene chloride	"			ND	"	500				
Naphthalene	"			ND	"	500				

Sequoia Analytical

rp (3)
Port Chicago Hwy
ord, CA 94520

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Volatile Organic Co
S

yte	Date Analyzed	Sp Le
	0060005-BS3	
ene	6/8/00	2
robenzene	"	2
Dichloroethene	"	2
ene	"	2
hloroethene	"	2
ogate: 1,2-Dichloroethane-d4	"	2
ogate: Toluene-d8	"	2
ogate: 4-BFB	"	2
Dup	**0060005-BSD1**	
zene	5/31/00	2
robenzene	"	2
Dichloroethene	"	2
ene	"	2
hloroethene	"	2
ogate: 1,2-Dichloroethane-d4	"	2
ogate: Toluene-d8	"	2
ogate: 4-BFB	"	2
trix Spike	**0060005-MS1**	
zene	6/2/00	2
orobenzene	"	2
—Dichloroethene	"	2
uene	"	2
chloroethene	"	2
rogate: 1,2-Dichloroethane-d4	"	2
rogate: Toluene-d8	"	2
rogate: 4-BFB	"	2
trix Spike Dup	**0060005-MSD1**	
nzene	6/2/00	
lorobenzene	"	
-Dichloroethene	"	
luene	"	
chloroethene	"	
rrogate: 1,2-Dichloroethane-d4	"	
rrogate: Toluene-d8	"	
rrogate: 4-BFB	"	

T Corp (3)
4005 Port Chicago Hwy
Concord, CA 94520

Project: Mercer Processing
Project Number:
Project Manager: Mike W.

Volatile Organic Compounds by EPA Metho
Sequoia Analytical - San

Analyte	Date Analyzed	Spike Level	Sample Result	Q Resu
Blank (continued)	**0060005-BLK3**			
n-Propylbenzene	6/8/00			N
Styrene	"			N
1,1,1,2-Tetrachloroethane	"			N
1,1,2,2-Tetrachloroethane	"			N
Tetrachloroethene	"			N
Toluene	"			N
1,2,3-Trichlorobenzene	"			N
1,2,4-Trichlorobenzene	"			N
1,1,1-Trichloroethane	"			N
1,1,2-Trichloroethane	"			N
Trichloroethene	"			N
Trichlorofluoromethane	"			N
1,2,3-Trichloropropane	"			N
1,2,4-Trimethylbenzene	"			N
1,3,5-Trimethylbenzene	"			N
Vinyl chloride	"			N
Total Xylenes	"			N
Surrogate: 1,2-Dichloroethane-d4	"	*2500*		255
Surrogate: Toluene-d8	"	*2500*		254
Surrogate: 4-BFB	"	*2500*		298
LCS	**0060005-BS1**			
Benzene	5/31/00	2500		25
Chlorobenzene	"	2500		24
1,1-Dichloroethene	"	2500		25
Toluene	"	2500		23
Trichloroethene	"	2500		24
Surrogate: 1,2-Dichloroethane-d4	"	*2500*		260
Surrogate: Toluene-d8	"	*2500*		246
Surrogate: 4-BFB	"	*2500*		287
LCS	**0060005-BS2**			
Benzene	6/2/00	2500		25
Chlorobenzene	"	2500		24
1,1-Dichloroethene	"	2500		25
Toluene	"	2500		23
Trichloroethene	"	2500		24
Surrogate: 1,2-Dichloroethane-d4	"	*2500*		260
Surrogate: Toluene-d8	"	*2500*		246
Surrogate: 4-BFB	"	*2500*		287

Sequoia Analytical

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(650) 232-9600
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IT Corp (3)	Project: Mercer Processing	Sampled: 6/1/00
4005 Port Chicago Hwy	Project Number:	Received: 6/2/00
Concord, CA 94520	Project Manager: Mike W.	Reported: 6/16/00

Notes and Definitions

#	Note
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
Recov.	Recovery
RPD	*Relative Percent Difference*

SEQUOIA ANALYTICAL
CHAIN OF CUSTODY

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☐ 819 Striker Ave., Suite 8 • Sacramento, CA 95834 • (916) 921-9600 FAX (916) 921-0100
☐ 404 N. Wiget Lane • Walnut Creek, CA 94598 • (925) 988-9600 FAX (925) 988-9673
☐ 1455 McDowell Blvd. North, Suite D • Petaluma, CA 94954 • (707) 792-1865 FAX (707) 792-0342
☑ 1551 Industrial Road • San Carlos, CA 94070 • (650) 232-9600 FAX (650) 232-9612

Company Name: IT Corporation / 106019	Project Name: Mercer Processing
Mailing Address: 4005 Port Chicago Hwy	Billing Address (if different):
City: Concord State: CA Zip Code: 94520	
Telephone: (925) 288-9898 FAX #: (925) 288-0888	P.O. #:
Report To: Mike Wray Sampler: Bob Feher	QC Data: ☑ Level D (Standard) ☐ Level C ☐ Level B ☐ Level A

Turnaround Time: ☑ 10 Working Days ☐ 3 Working Days ☐ 2 - 8 Hours ☐ 7 Working Days ☐ 2 Working Days ☐ 5 Working Days ☐ 24 Hours

☐ Drinking Water ☐ Waste Water ☐ Other

Analyses Requested

Client Sample I.D.	Date/Time Sampled	Matrix Desc.	# of Cont.	Cont. Type	Sequoia's Sample #	EPA 8260B	Comments
1. C-0'	6/	SOIL	1	Tube		X	
2. C-4'	6/1/	"	"	"		"	
3. C-6'	6/1/	"	"	"		"	
4. C-6'-D	6/1/00	"	"	"		"	
5.							
6.							
7.							
8.							
9.							
10.							

Relinquished By:		Date: 6.1.00	Time: 1600	Received By:		Date: 6/2/00	Time: 9:00
Relinquished By:		Date: 6/2/00	Time:	Received By:	K. Cox	Date: 6/2/00	Time: 1400
Relinquished By:		Date:	Time:	Received By Lab:		Date:	Time:

Pink - Client

Yellow - Sequoia

White - Sequoia

IT Corporation
4005 Port Chicago Highway
Concord, CA 94520-1120
Tel. 925.288.9898
Fax. 925.288.0888

A Member of The IT Group

November 21, 2000

Mr. David A. Noland, President
Mercer Processing, Inc.
1836 Latham Drive
Modesto, California 95354

Subject: **Additional Definition Soil Sampling and Analysis Report**
Former Mercer Processing Facility
230 Portage Avenue, Palo Alto, California
IT Corporation Project 806342

Dear Mr. Noland:

IT Corporation (IT) presents the following Additional Definition Soil Sampling and Analysis Report for 230 Portage Avenue, Palo Alto, California. The activities described in this letter were conducted to further define the vertical and lateral extent of soil contamination that was reported in the IT *Additional Definition Soil Sampling and Analysis Report* dated October 13, 2000.

Scope of Work

The following scope of work was completed as part of the soil assessment activities:

- Drilled five borings for the collection of soil samples (Figure 1, Attachment 1) to determine the vertical and lateral extent of volatile organic compounds (VOCs) in soil.
- Employed a mobile laboratory at the site to obtain quick turnaround of the soil sample analytical results.
- Prepared this report to document the findings of the additional soil investigation.

Methodology

In September, prior to the initiation of fieldwork, an underground utility locating service was dispatched to the site to identify and mark the locations of underground utilities or conduits in the vicinity of the proposed borings.

Starting on November 1, 2000, five concrete cores were removed from the floor to allow access to the underlying soil. A direct-push drill rig then advanced a split-spoon sampler fitted with an acetate liner to the desired depth for sample collection. Soil sampling was conducted during two days (November 1 and 2). Five borings (B, L, L(2), H(2) and K) were advanced in the locations illustrated in Figure 1 (Attachment 1), and a total of 25 soil samples were collected for laboratory analysis. Borings K and L(2) were advanced to a total depth of 13 feet below ground surface (bgs), boring H(2) to 25 feet bgs, boring B to 28 feet bgs and boring L to only 4 feet bgs due to a subsurface obstruction.

The borings were advanced using a 2-inch-diameter split-spoon sampler fitted with an acetate liner from the point soil was first encountered beneath the concrete floor to the desired depth. Soil samples for logging and laboratory analysis were continuously collected by advancing the split-spoon sampler into undisturbed soil. An IT geologist logged the borings using the Unified Soil Classification System and standard geologic techniques. The boring logs are presented in Attachment 3.

A portion of each soil sample collected was retained for laboratory analysis. The samples were capped with Teflon® sheets and plastic end caps, labeled, and sealed in zip-lock plastic bags. The samples were then stored in an insulated chest with ice or in the refrigerator located in the mobile laboratory while awaiting analysis. All soil samples were recorded on a laboratory chain-of-custody record (Attachment 4). To facilitate the delineation of the impacted soil, IT employed a California-certified mobile laboratory to analyze the samples on site. The soil samples were analyzed for VOCs and 2-butanone using Environmental Protection Agency Method 8260B.

For vertical definition, boring B was advanced directly adjacent to former boring B (Figure 1, Attachment 1). During IT's June 2000 investigation, this boring was advanced to approximately 8 feet bgs, at which point a sample was collected for analysis. VOCs were detected in the 8-foot sample; therefore, additional soil samples were collected at 2-foot intervals during this investigation, until VOCs were no longer detected at 24 feet bgs.

To complete the vertical definition of boring H, previously advanced to 12 feet bgs during IT's September 2000 investigation, boring H(2) was advanced to 16 feet bgs and sampled for analysis. VOCs were detected in the 14-foot sample, and additional deeper samples were collected at 2-foot intervals, until VOCs were no longer detected at 22 feet bgs.

To investigate the lateral extent of impacted soil, borings K, L and L(2) were located approximately 10 feet north and south, respectively, of former borings I and H (Figure 1, Attachment 1). A boring was not drilled to the west of boring B, or to the east of boring J, because lateral extent is defined in these directions. Soil samples in the stepout borings were collected at approximately 2-foot intervals beginning immediately beneath the concrete floor, where possible, to a total depth of 8 feet below grade. The borings were then advanced deeper if laboratory results indicated the presence of VOCs. Boring L was advanced to 4 feet bgs, where a subsurface obstruction was encountered. As a result, boring L(2) was advanced 5 feet west of boring L, due to safety concerns, to a total depth of 8 feet bgs. VOCs were not detected in any L or L(2) samples; therefore, lateral extent is defined to the south. VOCs were detected at shallower than 8 feet below grade in boring K. However, VOCs were not detected in the 10-foot sample. Additional step out borings could be drilled to the north and stay within the subject property line.

Following completion of the sample collection, all borings were backfilled with neat cement to the existing site grade. Waste soil was placed in 50-gallon drums, labeled as nonclassified waste, and removed from the site by the drilling company, pending proper disposal.

Results

The material encountered beneath the concrete warehouse floor consisted of a gravelly to sandy clay base fill material to approximately 5 to 6.5 feet bgs. Native clay interbedded with thin (< 3 feet), discontinuous sandy clay layers was encountered beneath the base fill to the total depth of the borings,

which was a maximum of 28 feet bgs. Trends evident with increasing depth included lightening of color, mottling and increased density of the clay. Groundwater was not encountered in any of the borings drilled during this investigation. A description of the materials encountered in the five borings is presented in the soil boring logs contained in Attachment 3.

The four analytes detected in soil samples include trichloroethene (TCE), 1,1-dichloroethene (1,1-DCE), trans-1,2-dichloroethene (trans-1,2 DCE), and cis-1,2-dichloroethene (cis-1,2-DCE) (Table 1, Attachment 2). The compound 2-butanone, which was detected in a previous investigation, was not detected in soil samples from this investigation.

The laboratory reported a maximum TCE concentration of 900 µg/kg in the 10 feet bgs sample from boring B. TCE concentrations typically decrease with depth in each of the borings, with the exception of boring H where TCE slightly increased to 100µg/kg at 18 feet bgs and then decreased to non-detectable levels at 22 feet bgs.

The VOC 1,1-DCE was detected above the PQL in 9 of the 25 soil samples. The highest concentration of 1,1-DCE detected was 39 µg/kg (B-18). Vertical and lateral definition of 1,1-DCE was accomplished in each of the borings. 1,1-DCE was not detected in the previous investigations.

Trans-1, 2 DCE, was detected during this investigation in 3 of the 25 samples. Maximum values of 48 µg/kg were present at 8 and 10 feet bgs in boring B. Trans-1, 2 DCE was also detected in boring K(8) at 12 µg/kg. This contaminant was vertically defined in all borings, yet north lateral definition from boring K is incomplete. This VOC was not detected in previous investigations.

Cis-1,2-DCE was detected above the PQL in 8 of the 25 samples, with a maximum of 35 µg/kg in boring B at 8 feet bgs. This VOC was successfully vertically defined in all borings, yet lateral delineation to the north of boring K was not accomplished.

Quality control data from the certified laboratory verifies the validity of all results obtained. Copies of the laboratory reports and chain-of custody records are included as Attachment 4.

If you have any questions or comments regarding this report, please do not hesitate to contact us at (925) 288-9898.

Sincerely,
IT CORPORATION

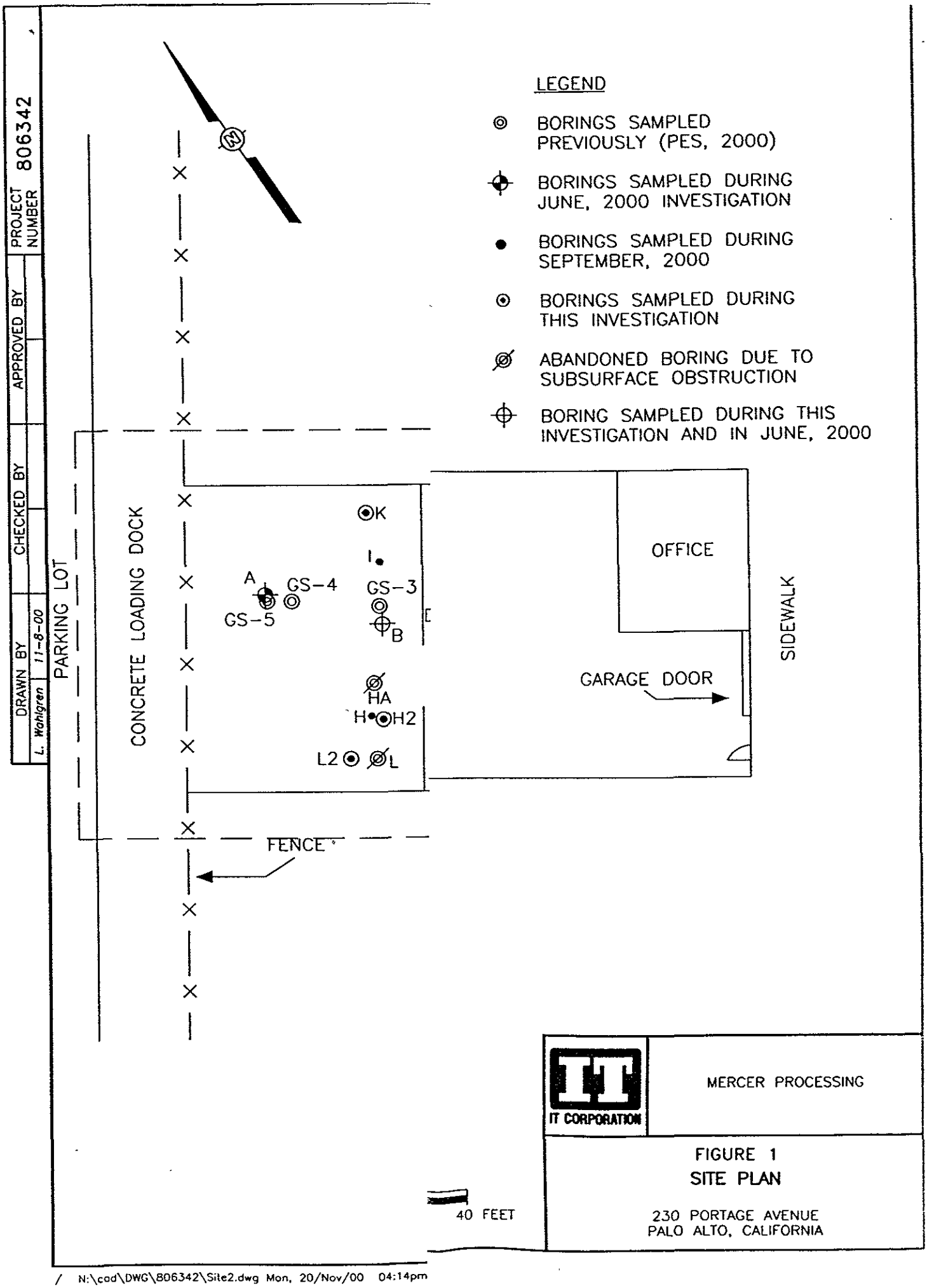
Michael J. Wray
Project Manager

IT CORPORATION

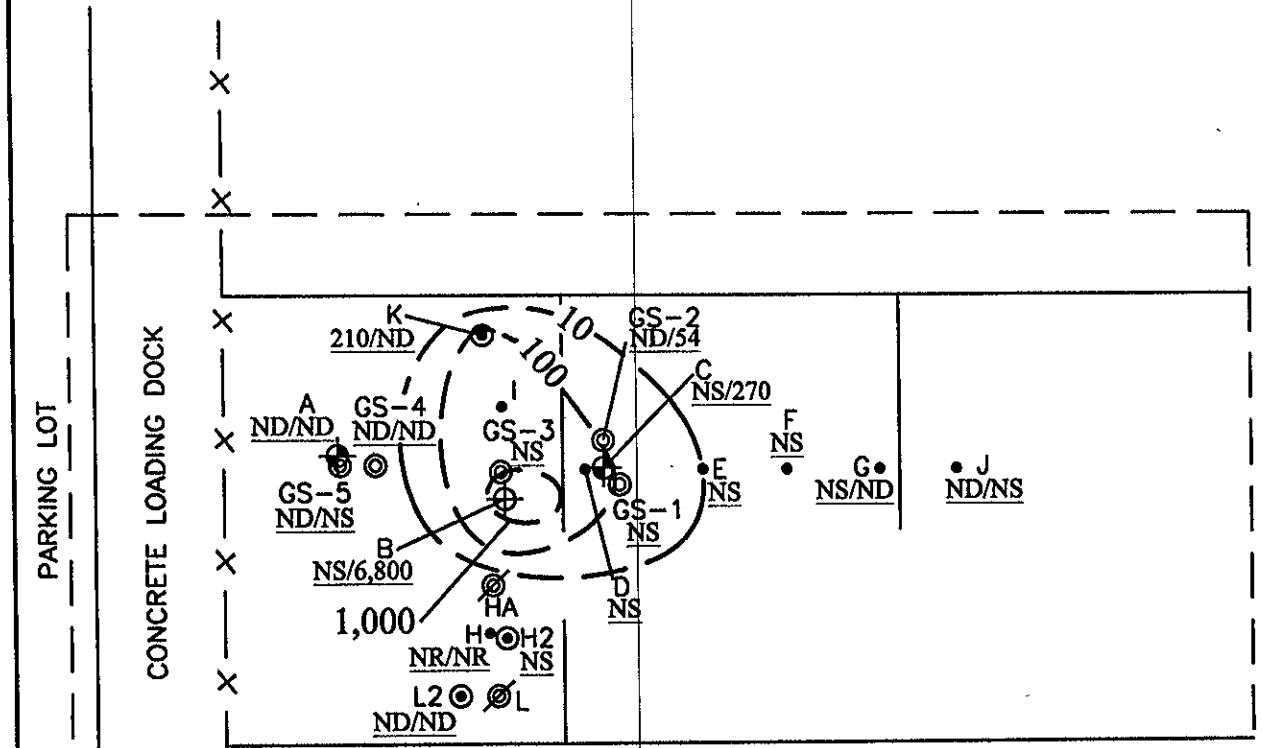
for Richard S. Dreessen Jr.
Ed K. Simonis, R.G.
Senior Geologist

REGISTERED GEOLOGIST
RICHARD S. DREESSEN JR.
No. 3165
STATE OF CALIFORNIA

Attachments:
1. Figures
2. Table
3. Boring Logs
4. Analytical Results and Chain of Custody Documentation


PROJECT NUMBER 806342
APPROVED BY
CHECKED BY
DRAWN BY L. Wahlgren 11-8-00
LEGEND
BORINGS SAMPLED PREVIOUSLY (PES, 2000)
BORINGS SAMPLED DURING JUNE, 2000 INVESTIGATION
BORINGS SAMPLED DURING SEPTEMBER, 2000
BORINGS SAMPLED DURING THIS INVESTIGATION
ABANDONED BORING DUE TO SUBSURFACE OBSTRUCTION
BORING SAMPLED DURING THIS INVESTIGATION AND IN JUNE, 2000
N
PARKING LOT
CONCRETE LOADING DOCK
OFFICE
SIDEWALK
GARAGE DOOR
FENCE
K
I
A
GS-4
GS-3
GS-5
B
HA
H
H2
L2
L
40 FEET
IT CORPORATION
MERCER PROCESSING
FIGURE 1
SITE PLAN
230 PORTAGE AVENUE
PALO ALTO, CALIFORNIA
N:\cad\DWG\806342\Site2.dwg Mon, 20/Nov/00 04:14pm

DRAWN BY	CHECKED BY	APPROVED BY	PROJECT NUMBER
L. Wohlgren 11-13-00			806342



LEGEND

- BORINGS SAMPLED PREVIOUSLY (PES, 2000)
- BORINGS SAMPLED DURING JUNE, 2000 INVESTIGATION
- BORINGS SAMPLED DURING SEPTEMBER, 2000
- BORINGS SAMPLED DURING THIS INVESTIGATION
- ABANDONED BORING DUE TO SUBSURFACE OBSTRUCTION
- BORING SAMPLED DURING THIS INVESTIGATION AND IN JUNE, 2000

NS/6,800 TCE CONCENTRATION AT 2' AND 4' BELOW GROUND SURFACE IN MICROGRAMS PER KILOGRAM

NS NOT SAMPLED

ND NOT DETECTED

NR NO RECOVERY

TCE CONTOUR LINE

N

SCALE

0 20 40 FEET

IT CORPORATION

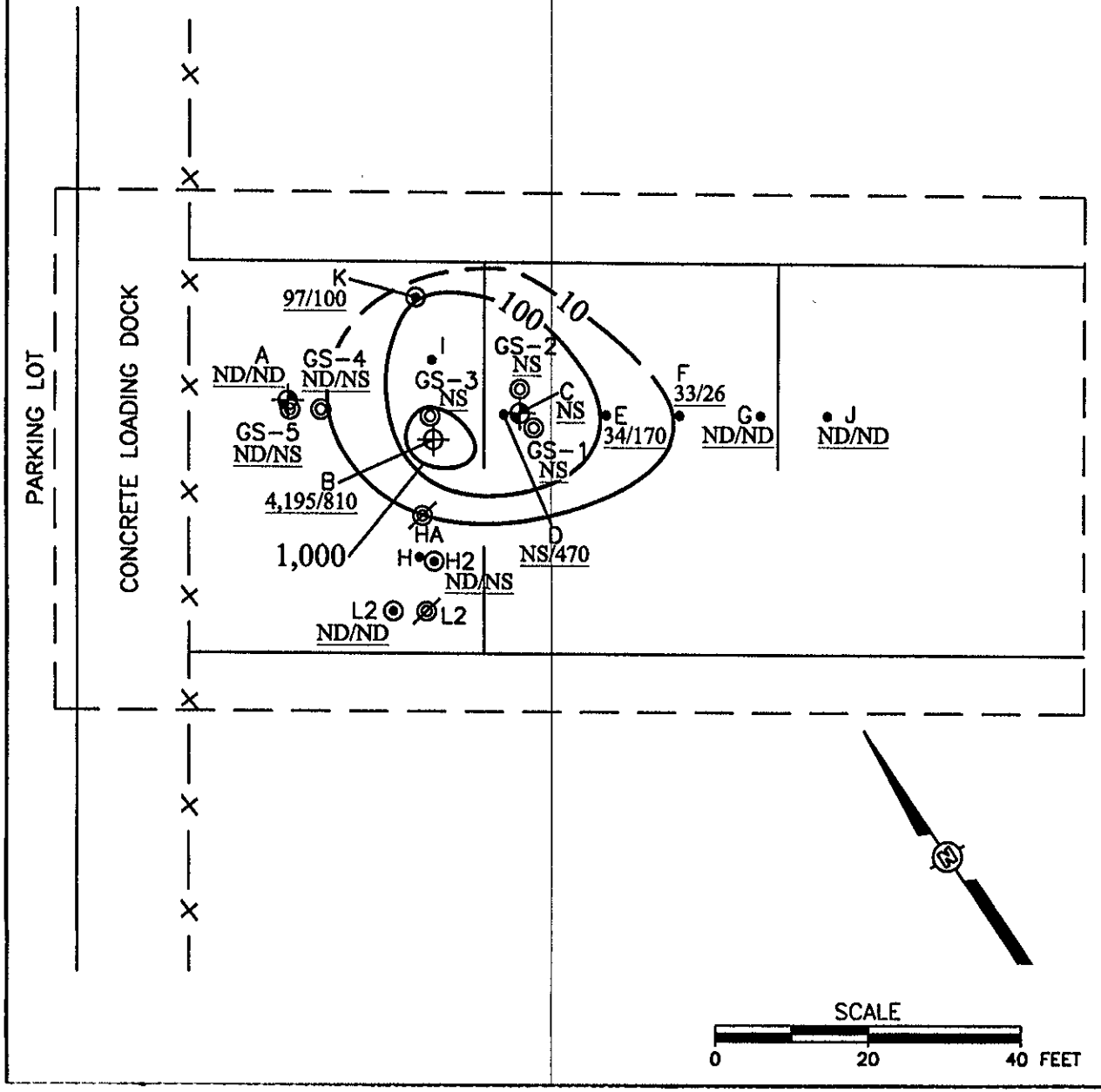
MERCER PROCESSING

FIGURE 2

TCE CONCENTRATIONS IN SOIL
2-4 FEET BELOW GROUND SURFACE

230 PORTAGE AVENUE
PALO ALTO, CALIFORNIA

DRAWN BY		CHECKED BY		APPROVED BY		PROJECT NUMBER
L. Wahlgren	11-13-00					806342



LEGEND

- BORINGS SAMPLED PREVIOUSLY (PES, 2000)
- BORINGS SAMPLED DURING JUNE, 2000 INVESTIGATION
- BORINGS SAMPLED DURING SEPTEMBER, 2000
- BORINGS SAMPLED DURING THIS INVESTIGATION
- ABANDONED BORING DUE TO SUBSURFACE OBSTRUCTION
- BORING SAMPLED DURING THIS INVESTIGATION AND IN JUNE, 2000
- 97/100 TCE CONCENTRATION AT 6' AND 8' BELOW GROUND SURFACE IN MICROGRAMS PER KILOGRAM
- NS NOT SAMPLED
- ND NOT DETECTED
- TCE CONTOUR LINE

IT CORPORATION

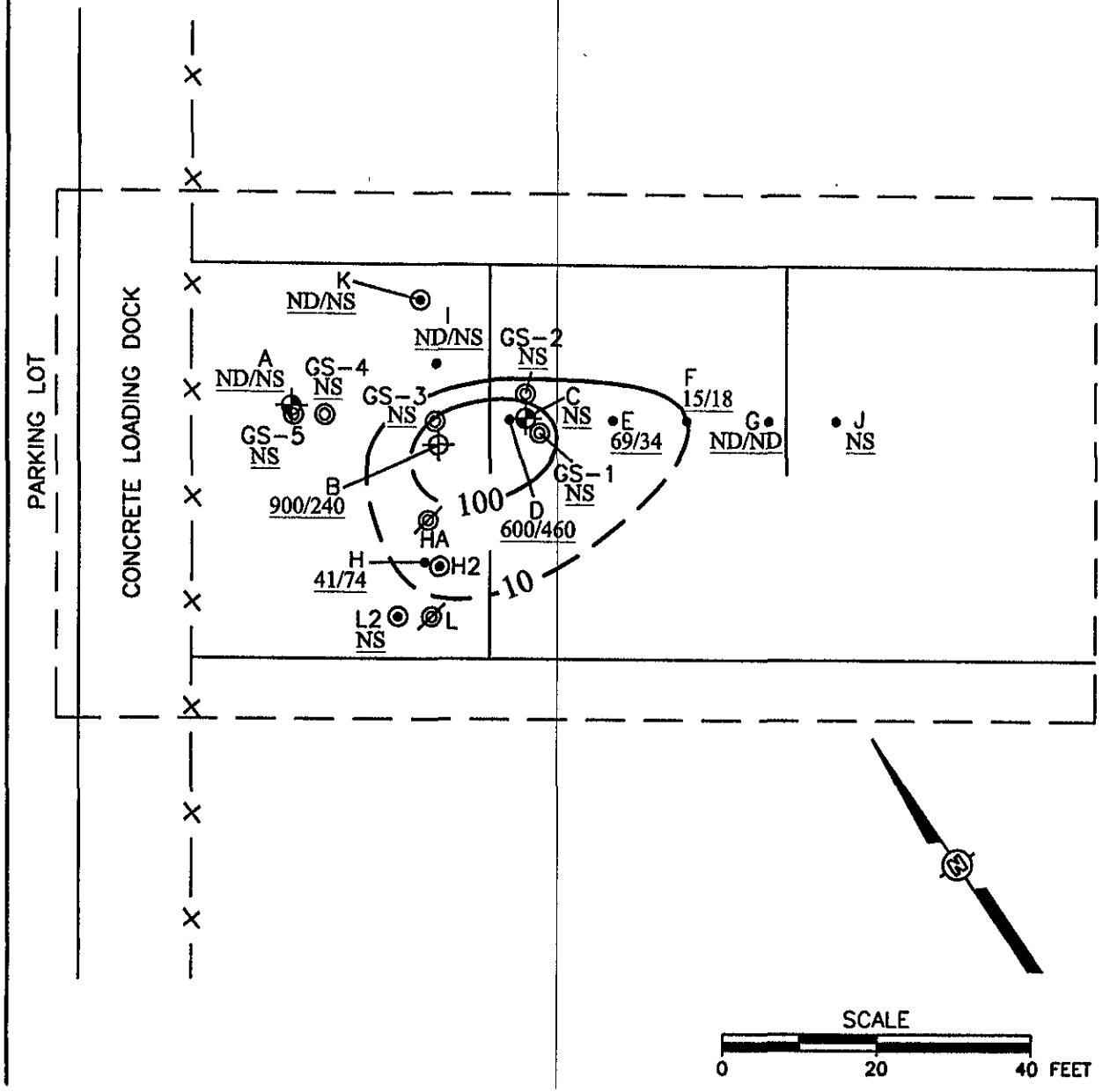
MERCER PROCESSING

FIGURE 3

TCE CONCENTRATIONS IN SOIL 6-8 FEET BELOW GROUND SURFACE

230 PORTAGE AVENUE
PALO ALTO, CALIFORNIA

DRAWN BY	CHECKED BY	APPROVED BY	PROJECT NUMBER
L. Wahlgren 11-13-00			806342



LEGEND

- BORINGS SAMPLED PREVIOUSLY (PES, 2000)
- BORINGS SAMPLED DURING JUNE, 2000 INVESTIGATION
- BORINGS SAMPLED DURING SEPTEMBER, 2000
- BORINGS SAMPLED DURING THIS INVESTIGATION
- ABANDONED BORING DUE TO SUBSURFACE OBSTRUCTION
- BORING SAMPLED DURING THIS INVESTIGATION AND IN JUNE, 2000
- 97/100 TCE CONCENTRATION AT 10' AND 12' BELOW GROUND SURFACE IN MICROGRAMS PER KILOGRAM
- NS NOT SAMPLED
- ND NOT DETECTED
- TCE CONTOUR LINE

IT CORPORATION

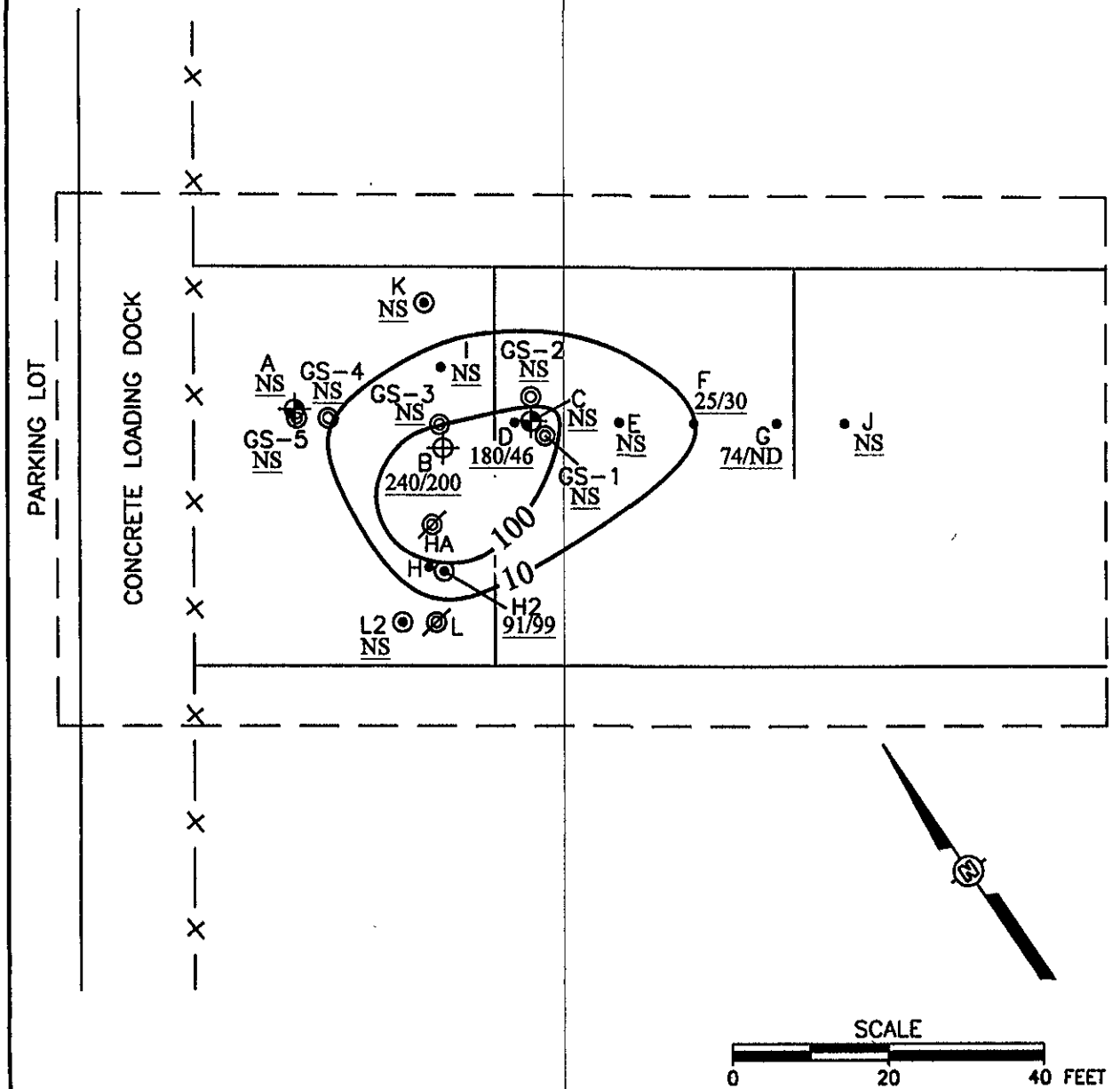
MERCER PROCESSING

FIGURE 4

TCE CONCENTRATIONS IN SOIL
10-12 FEET BELOW GROUND SURFACE

230 PORTAGE AVENUE
PALO ALTO, CALIFORNIA

DRAWN BY	CHECKED BY	APPROVED BY	PROJECT NUMBER
L. Wahlgren 11-13-00			806342



LEGEND

- BORINGS SAMPLED PREVIOUSLY (PES, 2000)
- BORINGS SAMPLED DURING JUNE, 2000 INVESTIGATION
- BORINGS SAMPLED DURING SEPTEMBER, 2000
- BORINGS SAMPLED DURING THIS INVESTIGATION
- ABANDONED BORING DUE TO SUBSURFACE OBSTRUCTION
- BORING SAMPLED DURING THIS INVESTIGATION AND IN JUNE, 2000
- 97/100 TCE CONCENTRATION AT 14' AND 16' BELOW GROUND SURFACE IN MICROGRAMS PER KILOGRAM
- NS NOT SAMPLED
- ND NOT DETECTED
- TCE CONTOUR LINE

IT CORPORATION

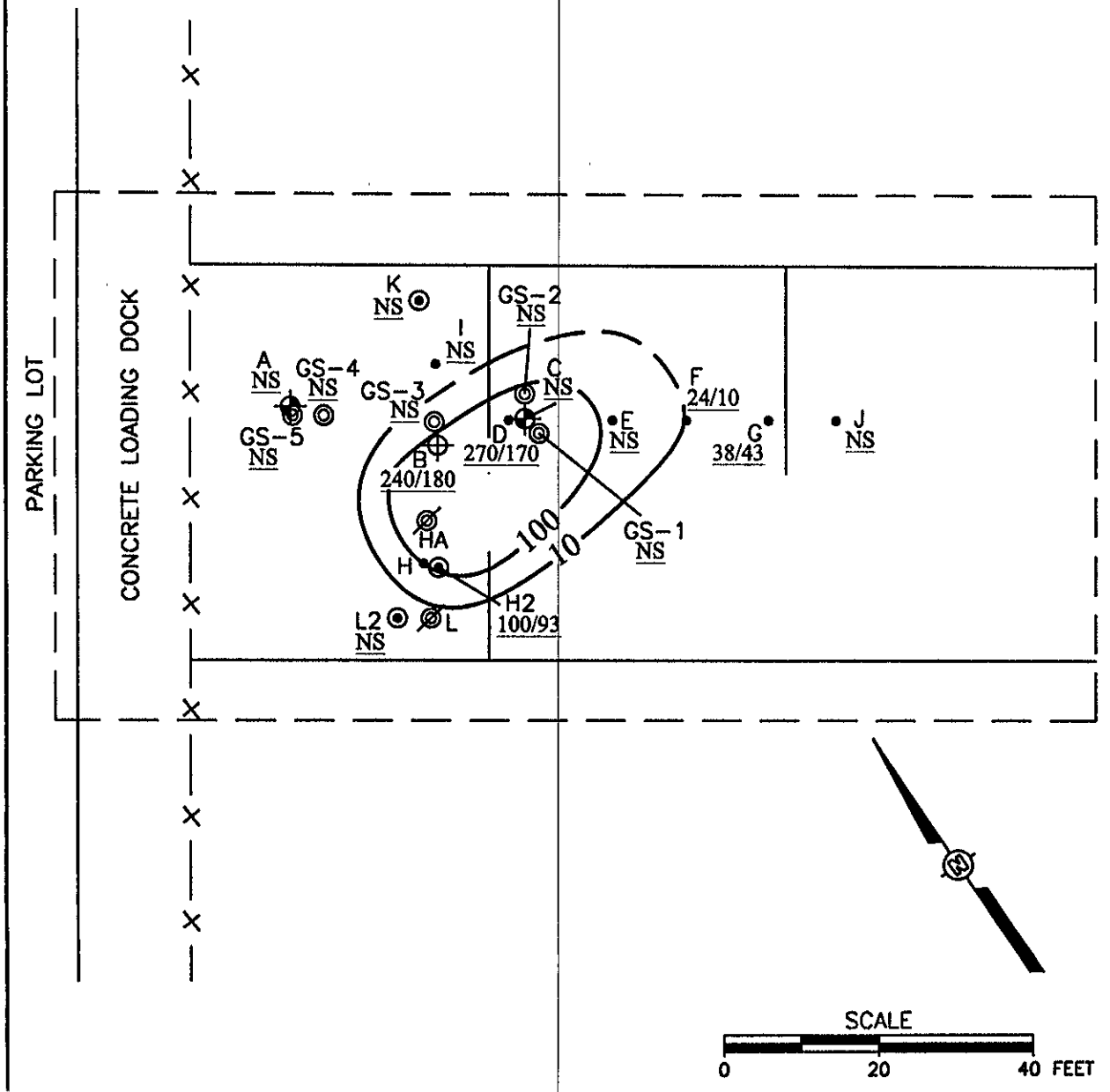
MERCER PROCESSING

FIGURE 5

TCE CONCENTRATIONS IN SOIL
14–16 FEET BELOW GROUND SURFACE

230 PORTAGE AVENUE
PALO ALTO, CALIFORNIA

DRAWN BY	CHECKED BY	APPROVED BY	PROJECT NUMBER
L. Wahlgren 11-13-00			806342



LEGEND

- ◎ BORINGS SAMPLED PREVIOUSLY (PES, 2000)
- ⊕ BORINGS SAMPLED DURING JUNE, 2000 INVESTIGATION
- ● BORINGS SAMPLED DURING SEPTEMBER, 2000
- ◎ BORINGS SAMPLED DURING THIS INVESTIGATION
- ⌀ ABANDONED BORING DUE TO SUBSURFACE OBSTRUCTION
- ⊕ BORING SAMPLED DURING THIS INVESTIGATION AND IN JUNE, 2000
- 97/100 TCE CONCENTRATION AT 18' AND 20' BELOW GROUND SURFACE IN MICROGRAMS PER KILOGRAM
- NS NOT SAMPLED
- ND NOT DETECTED
- TCE CONTOUR LINE

IT CORPORATION

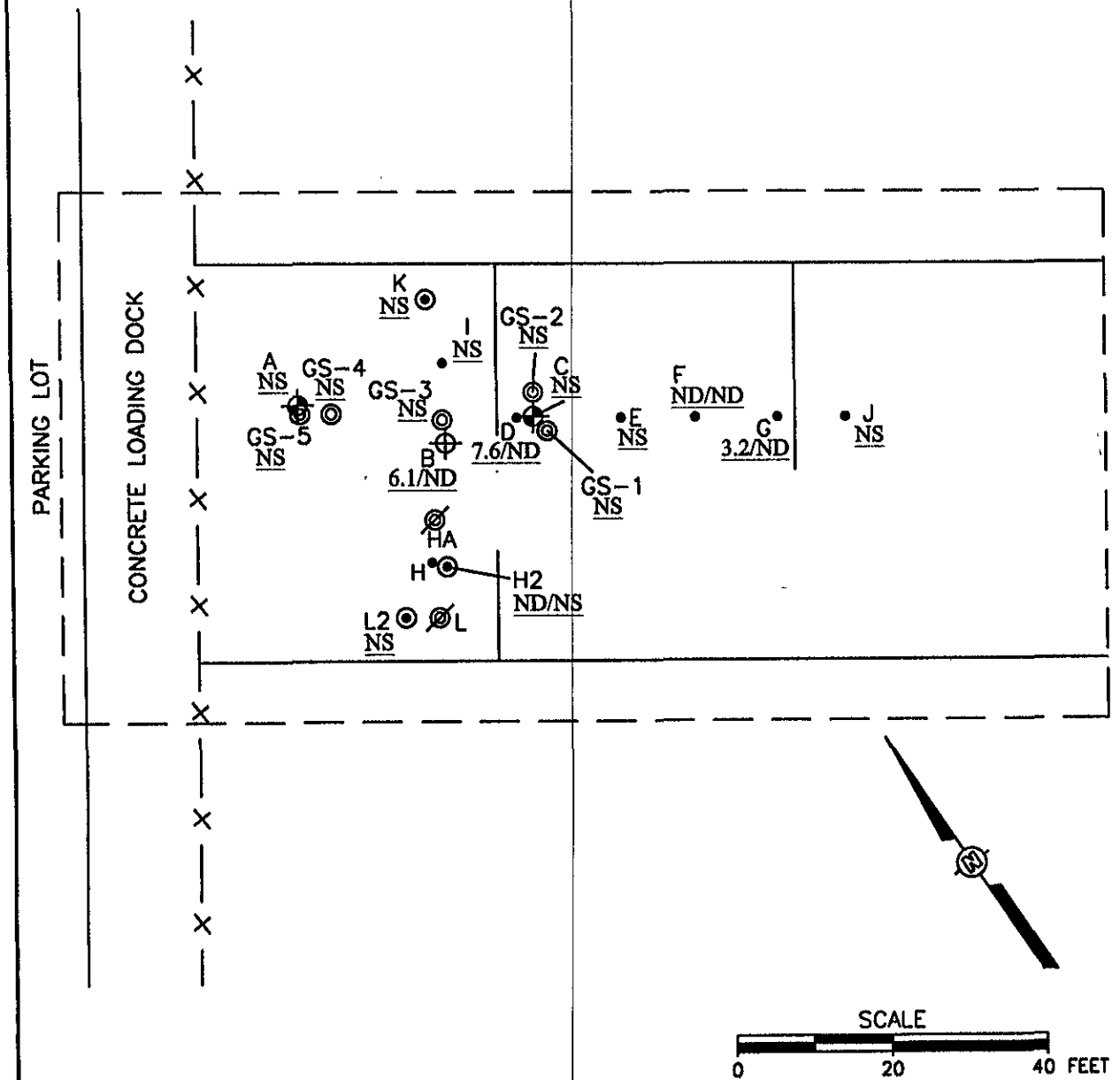
MERCER PROCESSING

FIGURE 6

TCE CONCENTRATIONS IN SOIL
18–20 FEET BELOW GROUND SURFACE

230 PORTAGE AVENUE
PALO ALTO, CALIFORNIA

DRAWN BY	CHECKED BY	APPROVED BY	PROJECT NUMBER
L. Wahlgren 11-13-00			806342



LEGEND

- ◎ BORINGS SAMPLED PREVIOUSLY (PES, 2000)
- ⊕ BORINGS SAMPLED DURING JUNE, 2000 INVESTIGATION
- ● BORINGS SAMPLED DURING SEPTEMBER, 2000
- ◉ BORINGS SAMPLED DURING THIS INVESTIGATION
- ⌀ ABANDONED BORING DUE TO SUBSURFACE OBSTRUCTION
- ⊕ BORING SAMPLED DURING THIS INVESTIGATION AND IN JUNE, 2000
- 97/100 TCE CONCENTRATION AT 22' AND 24' BELOW GROUND SURFACE IN MICROGRAMS PER KILOGRAM
- NS NOT SAMPLED
- ND NOT DETECTED
- TCE CONTOUR LINE

IT CORPORATION

MERCER PROCESSING

FIGURE 7

TCE CONCENTRATIONS IN SOIL
22–24 FEET BELOW GROUND SURFACE

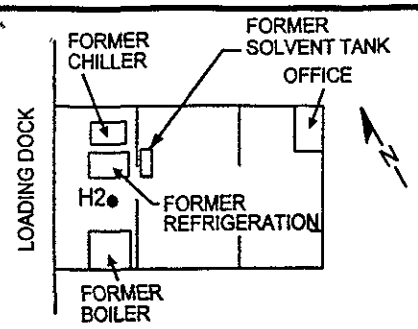
230 PORTAGE AVENUE
PALO ALTO, CALIFORNIA

TABLE 1
Analytical Results for Mercer Processing
Sampled November 1-2, 2000

230 Portage Ave.
Palo Alto, CA

Sample ID/Analyte	1,1-Dichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Trichloroethene
B-8	ND	35	48	810
B-10	ND	32	48	900
B-12	19	ND	ND	240
B-14	26	ND	ND	240
B-16	28	3.5J	ND	200
B-18	39	4.9J	ND	240
B-20	32	4.4J	ND	180
B-22	3.5J	4.3J	ND	6.1
B-24	ND	4.0J	ND	3.0J
H2-14	55	4.0J	ND	91
H2-16	67	5.7	ND	99
H2-18	60	5.6	ND	100
H2-20	63	5.3	ND	93
H2-22	2.7J	4.7J	ND	ND
K- (0.5-1)	ND	ND	ND	5.7
K-2	ND	9.5	ND	210
K-4	ND	ND	ND	ND
K-5.5	ND	5.6	ND	97
K-8	ND	14	12	100
K-10	4.4J	ND	ND	ND
L-1	ND	ND	ND	ND
L-2	ND	ND	ND	ND
L-4	ND	ND	ND	ND
L2-6	ND	ND	ND	ND
L2-8	ND	ND	ND	ND

Notes:
ND = analyte not detected at or above PQL
PQL = Practical Quantitation Limit
µg/Kg = micrograms per kilogram (ppb)
J = estimated value, less than PQL but greater than Method Detection Limit



LOCATION MAP

IT CORPORATION

BORING NO. H2
PAGE 1 OF 2

PROJECT NO: 806342
LOGGED BY: TG
DRILLER: PRECISION DRILLING
DRILLING METHOD: DIRECT PUSH
SAMPLING METHOD: CONTINUOUS
CASING TYPE: EC4
SLOT SIZE: -
GRAVEL PACK: -

CLIENT: MERCER PROCESSING
DATE DRILLED: 11-1-00
LOCATION: 230 PORTAGE AVENUE, PALO ALTO
HOLE DIAMETER: 2"
HOLE DEPTH: 25'
WELL DIAMETER: -
WELL DEPTH: -
CASING STICKUP: -

WELL COMPLETION	PRODUCT ODOR	MOISTURE CONTENT	PENETRATION (BLOWS/ 6")	DEPTH (FEET)	SOIL TYPE	LITHOLOGY/REMARKS
NEAT CEMENT GROUT				0		Concrete 0"-6"
					GW	GRAVEL (FILL): light brown; ~15% coarse gravels; sub rounded; ~30% fine gravels; <5% fines; ~30% coarse sand; no product odor
		Dry		2		
				4	CL	CLAY: black; trace medium coarse sand; medium plasticity; no product odor
		Dmp		6		
		Dmp		8		As above; no product odor
				10		Color lightens to dark brown
		Dmp		12		
					SC/ CL	CLAY/SANDY CLAY: dark brown to black; trace coarse sand; ~10% medium sand; very hard clay; low plasticity; no product odor
				14		As above; color changes to light gray; no product odor
					CL	CLAY: yellow-orange; iron oxide mottling; low plasticity; no product odor
		Dmp		16		
				18		
				20		As above; gray-green; iron oxide mottling; silty; no product odor
		Dmp		22		

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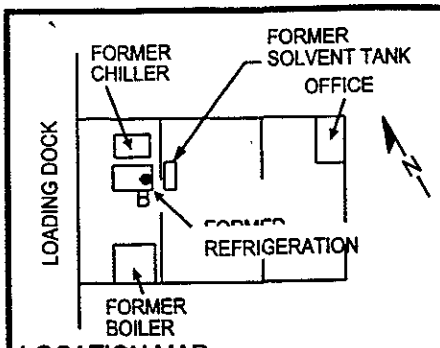
IT CORPORATION

PROJECT NO: 806342
LOGGED BY: TG
DRILLER: PRECISION DRILLING
DRILLING METHOD: DIRECT PUSH
SAMPLING METHOD: CAL MOD
CASING TYPE: EC4
SLOT SIZE: -
GRAVEL PACK: -

CLIENT: MERCER PROCESSING
DATE DRILLED: 11-1-00
LOCATION: 230 PORTAGE AVENUE, PALO ALTO
HOLE DIAMETER: 2"
HOLE DEPTH: 25'
WELL DIAMETER: -
WELL DEPTH: -
CASING STICKUP: -

LOCATION MAP See page 1

WELL COMPLETION	PRODUCT ODOR	MOISTURE CONTENT	PENETRATION (BLOWS/ 6")	DEPTH (FEET)	RECOVERY / SAMPLE INTERVAL	GRAPHIC	SOIL TYPE	LITHOLOGY/REMARKS
CEMENT GROUT		Dmp		24			CL	CLAY: gray-green; iron oxide mottling; silty; low plasticity; no product odor
				26				BOTTOM OF BORING=25'



LOCATION MAP

IT CORPORATION

BORING NO. B
PAGE 1 OF 2

PROJECT NO: 806342
LOGGED BY: TG
DRILLER: PRECISION DRILLING
DRILLING METHOD: DIRECT PUSH
SAMPLING METHOD: CONTINUOUS
CASING TYPE: EC4
SLOT SIZE: -
GRAVEL PACK: -

CLIENT: MERCER PROCESSING
DATE DRILLED: 11-1-00
LOCATION: 230 PORTAGE AVENUE, PALO ALTO
HOLE DIAMETER: 2"
HOLE DEPTH: 28'
WELL DIAMETER: -
WELL DEPTH: -
CASING STICKUP: -

WELL COMPLETION	PRODUCT ODOR	MOISTURE CONTENT	PENETRATION (BLOWS/ 6")	DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	GRAPHIC	SOIL TYPE	LITHOLOGY/REMARKS
CEMENT GROUT		Dry		2				GW/ GC	0-6": concrete GRAVELLY CLAY/SAND (FILL): dark brown; ~50% gravels; sub-rounded coarse gravel ~20%; fine gravel ~30%; coarse sand ~20%; well graded; no product odor
									Clay content increases with depth; grades to gravelly clay
				4				SC/ CL	CLAY/SANDY CLAY: light brown; ~25% coarse sands; medium plasticity clay; no product odor
		Dmp		6				CL	CLAY: dark brown-black; trace coarse sands; medium plasticity; very dense; no product odor
				8				SC	CLAY/SANDY CLAY: light brown; ~25% coarse sands; medium plasticity clay; no product odor
		Dmp		10				CL	CLAY: dark brown; trace coarse sands; very dense; medium plasticity; no product odor
		Dmp		12					
									As above; no product odor
				14				SC	SANDY CLAY: white; light gray-green; ~15% white coarse sands; low plasticity; very dense; no product odor
				16					
		VDmp		18				CL	CLAY: yellowish-orange; iron oxide mottling; <5% fine sand; trace coarse sand; silty; low plasticity; no product odor
				20					
		Sat		22					As above; slight product odor

IT CORPORATION

BORING NO. B
PAGE 2 OF 2

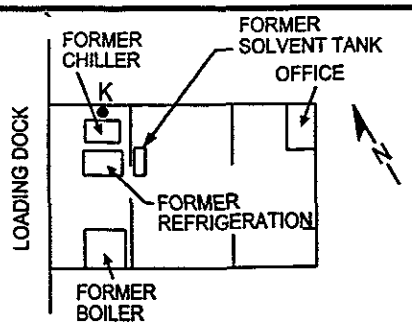
PROJECT NO: 806342
LOGGED BY: TG
DRILLER: PRECISION DRILLING
DRILLING METHOD: DIRECT PUSH
SAMPLING METHOD: CONTINOUS
CASING TYPE: EC4
SLOT SIZE: -
GRAVEL PACK: -

CLIENT: MERCER PROCESSING
DATE DRILLED: 11-1-00
LOCATION: 230 PORTAGE AVENUE, PALO ALTO
HOLE DIAMETER: 2"
HOLE DEPTH: 28'
WELL DIAMETER: -
WELL DEPTH: -
CASING STICKUP: -

LOCATION MAP See page 1

WELL COMPLETION	PRODUCT ODOR	MOISTURE CONTENT	PENETRATION (BLOWS/ 6")	DEPTH (FEET)	RECOVERY / SAMPLE INTERVAL	GRAPHIC	SOIL TYPE	LITHOLOGY/REMARKS
CEMENT GROUT		VDmp		24			CL	CLAY: color lightens to gray-green; ~20%iron oxide mottling; silty; slight product odor
		VDmp		26				
				28				BOTTOM OF BORING=28'
				30				

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LOCATION MAP

IT CORPORATION

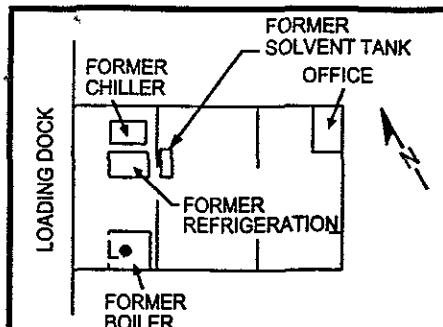
BORING NO. K
PAGE 1 OF 1

PROJECT NO: 806342
LOGGED BY: TG
DRILLER: PRECISION DRILLING
DRILLING METHOD: DIRECT PUSH
SAMPLING METHOD: CONTINUOUS
CASING TYPE: EC4
SLOT SIZE: -
GRAVEL PACK: -

CLIENT: MERCER PROCESSING
DATE DRILLED: 11-1-00
LOCATION: 230 PORTAGE AVENUE, PALO ALTO
HOLE DIAMETER: 2"
HOLE DEPTH: 13'
WELL DIAMETER: -
WELL DEPTH: -
CASING STICKUP: -

WELL COMPLETION	PRODUCT ODOR	MOISTURE CONTENT	PENETRATION (BLOWS/ 6")	DEPTH (FEET)	RECOVERY / SAMPLE INTERVAL / GRAPHIC	SOIL TYPE	LITHOLOGY/REMARKS
NEAT CEMENT GROUT		Dry		0		GW	Concrete 0"-6" GRAVEL (FILL): gravel; light brown; ~30% coarse gravel
		Dmp		2		CL	At 2': white concrete/gravel ~6" thick CLAY: dark brown to black; <5% fine sand; medium plasticity; no product odor
				4			As above: no product odor
		Dmp		6			As above: black; trace medium sand; no product odor
		Dmp		8			As above; color lightens to dark brown; trace medium sands; slight product odor
				10			
				12			END OF BORING=13.0'
				14			

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LOCATION MAP

IT CORPORATION

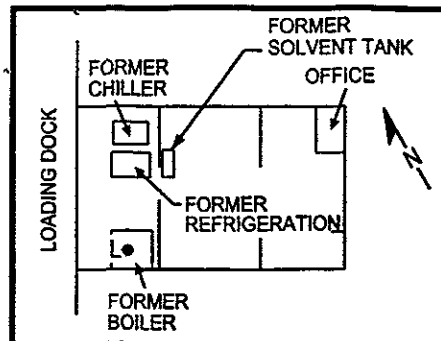
BORING NO. L
PAGE 1 OF 1

PROJECT NO: 806342
LOGGED BY: TG
DRILLER: PRECISION DRILLING
DRILLING METHOD: DIRECT PUSH
SAMPLING METHOD: CONTINUOUS
CASING TYPE: EC4
SLOT SIZE: -
GRAVEL PACK: -

CLIENT: MERCER PROCESSING
DATE DRILLED: 11-1-00
LOCATION: 230 PORTAGE AVENUE, PALO ALTO
HOLE DIAMETER: 2"
HOLE DEPTH: 4'
WELL DIAMETER: -
WELL DEPTH: -
CASING STICKUP: -

WELL COMPLETION	PRODUCT ODOR	MOISTURE CONTENT	PENETRATION (BLOWS/ 6")	DEPTH (FEET)	RECOVERY / SAMPLE INTERVAL	GRAPHIC	SOIL TYPE	LITHOLOGY/REMARKS
NEAT CEMENT GROUT		Dry						Concrete 0"-6"
							GC	CLAYEY GRAVEL (FILL/SOIL INTERFACE): light brown; ~10% coarse gravels; sub-rounded; no product odor
		Dmp		2			CL	CLAY: black; medium plasticity; <5% fine sand; dense; no product odor
							GC	CLAYEY GRAVEL (FILL/SOIL INTERFACE): light brown; ~10% coarse gravels; sub-rounded; no product odor
		Dmp		4			CL	CLAY: black; medium plasticity; <5% sand; dense; no product odor
								END OF BORING=4.0'
				6				Subsurface obstruction encountered

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LOCATION MAP

IT CORPORATION

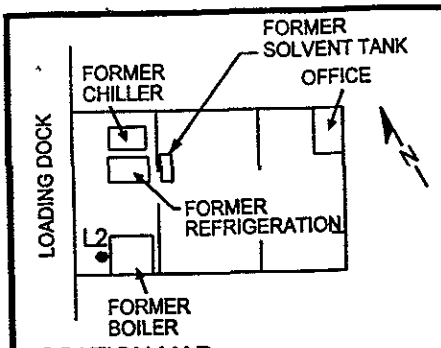
BORING NO. L
PAGE 1 OF 1

PROJECT NO: 806342
LOGGED BY: TG
DRILLER: PRECISION DRILLING
DRILLING METHOD: DIRECT PUSH
SAMPLING METHOD: CONTINUOUS
CASING TYPE: EC4
SLOT SIZE: -
GRAVEL PACK: -

CLIENT: MERCER PROCESSING
DATE DRILLED: 11-1-00
LOCATION: 230 PORTAGE AVENUE, PALO ALTO
HOLE DIAMETER: 2"
HOLE DEPTH: 4'
WELL DIAMETER: -
WELL DEPTH: -
CASING STICKUP: -

WELL COMPLETION	PRODUCT ODOR	MOISTURE CONTENT	PENETRATION (BLOWS/ 6")	DEPTH (FEET)	RECOVERY / SAMPLE INTERVAL / GRAPHIC	SOIL TYPE	LITHOLOGY/REMARKS
NEAT CEMENT GROUT		Dry					Concrete 0"-6"
						GC	CLAYEY GRAVEL (FILL/SOIL INTERFACE): light brown; ~10% coarse gravels; sub-rounded; no product odor
		Dmp		2		CL	CLAY: black; medium plasticity; <5% fine sand; dense; no product odor
						GC	CLAYEY GRAVEL (FILL/SOIL INTERFACE): light brown; ~10% coarse gravels; sub-rounded; no product odor
		Dmp		4		CL	CLAY: black; medium plasticity; <5% sand; dense; no product odor
							END OF BORING=4.0'
							Subsurface obstruction encountered
				6			

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LOCATION MAP

IT CORPORATION

BORING NO. L2
PAGE 1 OF 1

PROJECT NO: 806342
LOGGED BY: TG
DRILLER: PRECISION DRILLING
DRILLING METHOD: DIRECT PUSH
SAMPLING METHOD: CONTINUOUS
CASING TYPE: EC4
SLOT SIZE: -
GRAVEL PACK: -

CLIENT: MERCER PROCESSING
DATE DRILLED: 11-1-00
LOCATION: 230 PORTAGE AVENUE, PALO ALTO
HOLE DIAMETER: 2"
HOLE DEPTH: 13'
WELL DIAMETER: -
WELL DEPTH: -
CASING STICKUP: -

WELL COMPLETION	PRODUCT ODOR	MOISTURE CONTENT	PENETRATION (BLOWS/ 6")	DEPTH (FEET)	RECOVERY / SAMPLE INTERVAL	GRAPHIC	SOIL TYPE	LITHOLOGY/REMARKS
NEAT CEMENT GROUT		Dry		2			GC	Concrete 0"-6" GRAVEL (FILL/SOIL INTERFACE): light brown; ~10% coarse gravel; subrounded; black clay; medium plasticity; no product odor
		Dmp		4			CL	CLAY: gray to black; trace medium coarse sand; green mottling at 6'; medium plasticity; hard; slight product odor
		Dmp		6				
				8				As above; color changes to dark brown; no product odor
		Dmp		10				As above; color changes to brown; white trace medium sands; no product odor
				12				
				14				END OF BORING=13.0'

N:\Logs\806342\L-2.dwg Mon, 20/Nov/00 04:11pm lwahlgren

Analytical Laboratory Report
Volatile Organics by EPA 8260B

ONSITE ENVIRONMENTAL LABORATORIES, INC

Date Sampled:	11/1/00	**Project Mgr:**	Mike Wray
Date Received:	11/1/00	**Client:**	IT Group
Report Number:	6G221.rpt	**Project Name:**	Mercer
Lab ID Number:	6G221	**Matrix:**	Soil
		Units:	µg/Kg

Field ID No.		B-16	B-18	H2-14	H2-16	B-20
Lab ID No.		6G221-01	6G221-02	6G221-03	6G221-04	6G221-09
Date Analyzed		1-Nov-00	1-Nov-00	1-Nov-00	1-Nov-00	1-Nov-00
Analyte	PQL					
Dichlorodifluoromethane	10	U	U	U	U	U
Chloromethane	10	U	U	U	U	U
Vinyl chloride	10	U	U	U	U	U
Bromomethane	10	U	U	U	U	U
Chloroethane	10	U	U	U	U	U
Trichlorofluoromethane	10	U	U	U	U	U
Acetone	50	U	U	U	U	U
1,1-Dichloroethene	5	28	39	55	67	32
Carbon Disulfide	5	U	U	U	U	U
Methylene chloride	5	U	U	U	U	U
trans-1,2-Dichloroethene	5	U	U	U	U	U
1,1-Dichloroethane	5	U	U	U	U	U
cis-1,2-Dichloroethene	5	3.5 J	4.9 J	4.0 J	5.7	4.4 J
2,2-Dichloropropane	5	U	U	U	U	U
Bromochloromethane	5	U	U	U	U	U
Chloroform	5	U	U	U	U	U
1,1,1-Trichloroethane	5	U	U	U	U	U
Carbon tetrachloride	5	U	U	U	U	U
1,1-Dichloropropene	5	U	U	U	U	U
Benzene	5	U	U	U	U	U
1,2-Dichloroethane	5	U	U	U	U	U
Trichloroethene	5	200	240	91	99	180
1,2-Dichloropropane	5	U	U	U	U	U
Dibromomethane	5	U	U	U	U	U
Bromodichloromethane	5	U	U	U	U	U
cis-1,3-Dichloropropene	5	U	U	U	U	U
Toluene	5	U	U	U	U	U
trans-1,3-Dichloropropene	5	U	U	U	U	U
1,1,2-Trichloroethane	5	U	U	U	U	U
Tetrachloroethene	5	U	U	U	U	U

Field ID No.		B-16	B-18	H2-14	H2-16	B-20
Lab ID No.		6G221-01	6G221-02	6G221-03	6G221-04	6G221-09
Date Analyzed		1-Nov-00	1-Nov-00	1-Nov-00	1-Nov-00	1-Nov-00
Analyte	PQL					
1,3-Dichloropropane	5	U	U	U	U	U
Dibromochloromethane	5	U	U	U	U	U
1,2-Dibromoethane	5	U	U	U	U	U
Chlorobenzene	5	U	U	U	U	U
1,1,1,2-Tetrachloroethane	5	U	U	U	U	U
Ethyl benzene	5	U	U	U	U	U
m,p-Xylene	5	U	U	U	U	U
o-Xylene	5	U	U	U	U	U
Styrene	5	U	U	U	U	U
Bromoform	5	U	U	U	U	U
Isopropyl benzene	5	U	U	U	U	U
Bromobenzene	5	U	U	U	U	U
1,1,2,2-Tetrachloroethane	5	U	U	U	U	U
1,2,3-Trichloropropane	5	U	U	U	U	U
n-Propylbenzene	5	U	U	U	U	U
2-Chlorotoluene	5	U	U	U	U	U
4-Chlorotoluene	5	U	U	U	U	U
1,3,5-Trimethyl benzene	5	U	U	U	U	U
tert-Butyl benzene	5	U	U	U	U	U
1,2,4-Trimethyl benzene	5	U	U	U	U	U
sec-Butyl benzene	5	U	U	U	U	U
1,3-Dichlorobenzene	5	U	U	U	U	U
4-Isopropyl toluene	5	U	U	U	U	U
1,4-Dichlorobenzene	5	U	U	U	U	U
1,2-Dichlorobenzene	5	U	U	U	U	U
SURROGATES	QC Lim.					
Dibromofluoromethane	84-118%	98%	95%	95%	96%	96%
1,2-Dichloroethane-d4	76-126%	90%	81%	94%	86%	94%
Toluene-d8	80-118%	92%	91%	92%	91%	92%
4-Bromofluorobenzene	82-118%	88%	83%	89%	85%	88%
Dilution Factor		1	1	1	1	1

NOTES:

U - Analytes not detected at, or above the PQL

J - Estimated value

µg/Kg - Micrograms per kilogram (ppb)

PQL - Practical Quantitation Limit

Analytical Laboratory Report
Volatile Organics by EPA 8260B

ONSITE ENVIRONMENTAL LABORATORIES, INC.

Date Sampled:	11/1/00	**Project Mgr:**	Mike Wray
Date Received:	11/1/00	**Client:**	IT Group
Report Number:	6G221.rpt	**Project Name:**	Mercer
Lab ID Number:	6G221	**Matrix:**	Soil
		Units:	µg/Kg

Field ID No.		H2-18	K (0.5-1)	K-2	K-5.5	K-4
Lab ID No.		6G221-10	6G221-11	6G221-12	6G221-13	6G221-14
Date Analyzed		1-Nov-00	1-Nov-00	1-Nov-00	1-Nov-00	1-Nov-00
Analyte	PQL					
Dichlorodifluoromethane	10	U	U	U	U	U
Chloromethane	10	U	U	U	U	U
Vinyl chloride	10	U	U	U	U	U
Bromomethane	10	U	U	U	U	U
Chloroethane	10	U	U	U	U	U
Trichlorofluoromethane	10	U	U	U	U	U
Acetone	50	U	U	U	U	U
1,1-Dichloroethene	5	60	U	U	U	U
Carbon Disulfide	5	U	U	U	U	U
Methylene chloride	5	U	U	U	U	U
trans-1,2-Dichloroethene	5	U	U	U	U	U
1,1-Dichloroethane	5	U	U	U	U	U
cis-1,2-Dichloroethene	5	5.6	U	9.5	5.6	U
2,2-Dichloropropane	5	U	U	U	U	U
Bromochloromethane	5	U	U	U	U	U
Chloroform	5	U	U	U	U	U
1,1,1-Trichloroethane	5	U	U	U	U	U
Carbon tetrachloride	5	U	U	U	U	U
1,1-Dichloropropene	5	U	U	U	U	U
Benzene	5	U	U	U	U	U
1,2-Dichloroethane	5	U	U	U	U	U
Trichloroethene	5	100	5.7	210	97	U
1,2-Dichloropropane	5	U	U	U	U	U
Dibromomethane	5	U	U	U	U	U
Bromodichloromethane	5	U	U	U	U	U
cis-1,3-Dichloropropene	5	U	U	U	U	U
Toluene	5	U	U	U	U	U
trans-1,3-Dichloropropene	5	U	U	U	U	U
1,1,2-Trichloroethane	5	U	U	U	U	U
Tetrachloroethene	5	U	U	U	U	U

Field ID No. Lab ID No. Date Analyzed		H2-18 6G221-10 1-Nov-00	K (0.5-1) 6G221-11 1-Nov-00	K-2 6G221-12 1-Nov-00	K-5.5 6G221-13 1-Nov-00	K-4 6G221-14 1-Nov-00
Analyte	PQL					
1,3-Dichloropropane	5	U	U	U	U	U
Dibromochloromethane	5	U	U	U	U	U
1,2-Dibromoethane	5	U	U	U	U	U
Chlorobenzene	5	U	U	U	U	U
1,1,1,2-Tetrachloroethane	5	U	U	U	U	U
Ethyl benzene	5	U	U	U	U	U
m,p-Xylene	5	U	U	U	U	U
o-Xylene	5	U	U	U	U	U
Styrene	5	U	U	U	U	U
Bromoform	5	U	U	U	U	U
Isopropyl benzene	5	U	U	U	U	U
Bromobenzene	5	U	U	U	U	U
1,1,2,2-Tetrachloroethane	5	U	U	U	U	U
1,2,3-Trichloropropane	5	U	U	U	U	U
n-Propylbenzene	5	U	U	U	U	U
2-Chlorotoluene	5	U	U	U	U	U
4-Chlorotoluene	5	U	U	U	U	U
1,3,5-Trimethyl benzene	5	U	U	U	U	U
tert-Butyl benzene	5	U	U	U	U	U
1,2,4-Trimethyl benzene	5	U	U	U	U	U
sec-Butyl benzene	5	U	U	U	U	U
1,3-Dichlorobenzene	5	U	U	U	U	U
4-Isopropyl toluene	5	U	U	U	U	U
1,4-Dichlorobenzene	5	U	U	U	U	U
1,2-Dichlorobenzene	5	U	U	U	U	U
SURROGATES	QC Lim					
Dibromofluoromethane	84-118%	100%	98%	100%	98%	98%
1,2-Dichloroethane-d4	76-126%	103%	102%	103%	101%	101%
Toluene-d8	80-118%	93%	91%	94%	93%	93%
4-Bromofluorobenzene	82-118%	91%	90%	91%	89%	91%
Dilution Factor		1	1	1	1	1

NOTES:

U - Analytes not detected at, or above the PQL

J - Estimated value

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PQL - Practical Quantitation Limit

Analytical Laboratory Report
Volatile Organics by EPA 8260B

ONSITE ENVIRONMENTAL LABORATORIES, INC

Date Sampled:	11/1/00	**Project Mgr:**	Mike Wray
Date Received:	11/1/00	**Client:**	IT Group
Report Number:	6G221.rpt	**Project Name:**	Mercer
Lab ID Number:	6G221	**Matrix:**	Soil
		Units:	µg/Kg

Field ID No.		B-8	B-10	B-12	B-14	B-22
Lab ID No.		6G221-05	6G221-06	6G221-07	6G221-08	6G221-15
Date Analyzed		1-Nov-00	1-Nov-00	2-Nov-00	2-Nov-00	1-Nov-00
Analyte	PQL					
Dichlorodifluoromethane	10	U	U	U	U	U
Chloromethane	10	U	U	U	U	U
Vinyl chloride	10	U	U	U	U	U
Bromomethane	10	U	U	U	U	U
Chloroethane	10	U	U	U	U	U
Trichlorofluoromethane	10	U	U	U	U	U
Acetone	50	U	U	U	U	U
1,1-Dichloroethene	5	U	U	19	26	3.5 J
Carbon Disulfide	5	U	U	U	U	U
Methylene chloride	5	U	U	U	U	U
trans-1,2-Dichloroethene	5	48	48	U	U	U
1,1-Dichloroethane	5	U	U	U	U	U
cis-1,2-Dichloroethene	5	35	32	U	U	4.3 J
2,2-Dichloropropane	5	U	U	U	U	U
Bromochloromethane	5	U	U	U	U	U
Chloroform	5	U	U	U	U	U
1,1,1-Trichloroethane	5	U	U	U	U	U
Carbon tetrachloride	5	U	U	U	U	U
1,1-Dichloropropene	5	U	U	U	U	U
Benzene	5	U	U	U	U	U
1,2-Dichloroethane	5	U	U	U	U	U
Trichloroethene	5	810	900	240	240	6.1
1,2-Dichloropropane	5	U	U	U	U	U
Dibromomethane	5	U	U	U	U	U
Bromodichloromethane	5	U	U	U	U	U
cis-1,3-Dichloropropene	5	U	U	U	U	U
Toluene	5	U	U	U	U	U
trans-1,3-Dichloropropene	5	U	U	U	U	U
1,1,2-Trichloroethane	5	U	U	U	U	U
Tetrachloroethene	5	U	U	U	U	U

Field ID No.		B-8	B-10	B-12	B-14	B-22
Lab ID No.		6G221-05	6G221-06	6G221-07	6G221-08	6G221-15
Date Analyzed		1-Nov-00	1-Nov-00	2-Nov-00	2-Nov-00	1-Nov-00
Analyte	PQL					
1,3-Dichloropropane	5	U	U	U	U	U
Dibromochloromethane	5	U	U	U	U	U
1,2-Dibromoethane	5	U	U	U	U	U
Chlorobenzene	5	U	U	U	U	U
1,1,1,2-Tetrachloroethane	5	U	U	U	U	U
Ethyl benzene	5	U	U	U	U	U
m,p-Xylene	5	U	U	U	U	U
o-Xylene	5	U	U	U	U	U
Styrene	5	U	U	U	U	U
Bromoform	5	U	U	U	U	U
Isopropyl benzene	5	U	U	U	U	U
Bromobenzene	5	U	U	U	U	U
1,1,2,2-Tetrachloroethane	5	U	U	U	U	U
1,2,3-Trichloropropane	5	U	U	U	U	U
n-Propylbenzene	5	U	U	U	U	U
2-Chlorotoluene	5	U	U	U	U	U
4-Chlorotoluene	5	U	U	U	U	U
1,3,5-Trimethyl benzene	5	U	U	U	U	U
tert-Butyl benzene	5	U	U	U	U	U
1,2,4-Trimethyl benzene	5	U	U	U	U	U
sec-Butyl benzene	5	U	U	U	U	U
1,3-Dichlorobenzene	5	U	U	U	U	U
4-Isopropyl toluene	5	U	U	U	U	U
1,4-Dichlorobenzene	5	U	U	U	U	U
1,2-Dichlorobenzene	5	U	U	U	U	U
SURROGATES	QC Lim					
Dibromofluoromethane	84-118%	99%	99%	98%	99%	98%
1,2-Dichloroethane-d4	76-126%	101%	101%	103%	104%	102%
Toluene-d8	80-118%	94%	93%	94%	95%	93%
4-Bromofluorobenzene	82-118%	88%	89%	92%	92%	93%
Dilution Factor		1	1	1	1	1

NOTES:

U - Analytes not detected at, or above the PQL

J - Estimated value

µg/Kg - Micrograms per kilogram (ppb)

PQL - Practical Quantitation Limit

Analytical Laboratory Report
Volatile Organics by EPA 8260B

ONSITE ENVIRONMENTAL LABORATORIES, INC

Date Sampled:	11/1/00	**Project Mgr:**	Mike Wray
Date Received:	11/1/00	**Client:**	IT Group
Report Number:	6G221.rpt	**Project Name:**	Mercer
Lab ID Number:	6G221	**Matrix:**	Soil
		Units:	µg/Kg

Field ID No.		H2-20	B-24	H2-22	L-1	L-4
Lab ID No.		6G221-16	6G221-17	6G221-21	6G221-18	6G221-20
Date Analyzed		1-Nov-00	1-Nov-00	1-Nov-00	1-Nov-00	1-Nov-00
Analyte	**PQL**					
Dichlorodifluoromethane	10	U	U	U	U	U
Chloromethane	10	U	U	U	U	U
Vinyl chloride	10	U	U	U	U	U
Bromomethane	10	U	U	U	U	U
Chloroethane	10	U	U	U	U	U
Trichlorofluoromethane	10	U	U	U	U	U
Acetone	50	U	U	U	U	U
1,1-Dichloroethene	5	63	U	2.7 J	U	U
Carbon Disulfide	5	U	U	U	U	U
Methylene chloride	5	U	U	U	U	U
trans-1,2-Dichloroethene	5	U	U	U	U	U
1,1-Dichloroethane	5	U	U	U	U	U
cis-1,2-Dichloroethene	5	5.3	4.0 J	4.7 J	U	U
2,2-Dichloropropane	5	U	U	U	U	U
Bromochloromethane	5	U	U	U	U	U
Chloroform	5	U	U	U	U	U
1,1,1-Trichloroethane	5	U	U	U	U	U
Carbon tetrachloride	5	U	U	U	U	U
1,1-Dichloropropene	5	U	U	U	U	U
Benzene	5	U	U	U	U	U
1,2-Dichloroethane	5	U	U	U	U	U
Trichloroethene	5	93	3.0 J	U	U	U
1,2-Dichloropropane	5	U	U	U	U	U
Dibromomethane	5	U	U	U	U	U
Bromodichloromethane	5	U	U	U	U	U
cis-1,3-Dichloropropene	5	U	U	U	U	U
Toluene	5	U	U	U	U	U
trans-1,3-Dichloropropene	5	U	U	U	U	U
1,1,2-Trichloroethane	5	U	U	U	U	U
Tetrachloroethene	5	U	U	U	U	U

Field ID No.		H2-20	B-24	H2-22	L-1	L-4
Lab ID No.		6G221-16	6G221-17	6G221-21	6G221-18	6G221-20
Date Analyzed		1-Nov-00	1-Nov-00	1-Nov-00	1-Nov-00	1-Nov-00
Analyte	PQL					
1,3-Dichloropropane	5	U	U	U	U	U
Dibromochloromethane	5	U	U	U	U	U
1,2-Dibromoethane	5	U	U	U	U	U
Chlorobenzene	5	U	U	U	U	U
1,1,1,2-Tetrachloroethane	5	U	U	U	U	U
Ethyl benzene	5	U	U	U	U	U
m,p-Xylene	5	U	U	U	U	U
o-Xylene	5	U	U	U	U	U
Styrene	5	U	U	U	U	U
Bromoform	5	U	U	U	U	U
Isopropyl benzene	5	U	U	U	U	U
Bromobenzene	5	U	U	U	U	U
1,1,2,2-Tetrachloroethane	5	U	U	U	U	U
1,2,3-Trichloropropane	5	U	U	U	U	U
n-Propylbenzene	5	U	U	U	U	U
2-Chlorotoluene	5	U	U	U	U	U
4-Chlorotoluene	5	U	U	U	U	U
1,3,5-Trimethyl benzene	5	U	U	U	U	U
tert-Butyl benzene	5	U	U	U	U	U
1,2,4-Trimethyl benzene	5	U	U	U	U	U
sec-Butyl benzene	5	U	U	U	U	U
1,3-Dichlorobenzene	5	U	U	U	U	U
4-Isopropyl toluene	5	U	U	U	U	U
1,4-Dichlorobenzene	5	U	U	U	U	U
1,2-Dichlorobenzene	5	U	U	U	U	U
SURROGATES	QC Lim					
Dibromofluoromethane	84-118%	99%	97%	98%	99%	101%
1,2-Dichloroethane-d4	76-126%	102%	99%	104%	106%	107%
Toluene-d8	80-118%	93%	93%	95%	94%	94%
4-Bromofluorobenzene	82-118%	89%	88%	90%	90%	93%
Dilution Factor		1	1	1	1	1

NOTES:

U - Analytes not detected at, or above the PQL

j - Estimated value

µg/Kg - Micrograms per kilogram (ppb)

PQL - Practical Quantitation Limit

Analytical Laboratory Report
Volatile Organics by EPA 8260B

ONSITE ENVIRONMENTAL LABORATORIES, INC

Date Sampled:	11/1/00	**Project Mgr:**	Mike Wray
Date Received:	11/1/00	**Client:**	IT Group
Report Number:	6G221.rpt	**Project Name:**	Mercer
Lab ID Number:	6G221	**Matrix:**	Soil
		Units:	µg/Kg

Field ID No.		L-2				
Lab ID No.		6G221-19				
Date Analyzed		2-Nov-00				
Analyte	PQL					
Dichlorodifluoromethane	10	U				
Chloromethane	10	U				
Vinyl chloride	10	U				
Bromomethane	10	U				
Chloroethane	10	U				
Trichlorofluoromethane	10	U				
Acetone	50	U				
1,1-Dichloroethene	5	U				
Carbon Disulfide	5	U				
Methylene chloride	5	U				
trans-1,2-Dichloroethene	5	U				
1,1-Dichloroethane	5	U				
cis-1,2-Dichloroethene	5	U				
2,2-Dichloropropane	5	U				
Bromochloromethane	5	U				
Chloroform	5	U				
1,1,1-Trichloroethane	5	U				
Carbon tetrachloride	5	U				
1,1-Dichloropropene	5	U				
Benzene	5	U				
1,2-Dichloroethane	5	U				
Trichloroethene	5	U				
1,2-Dichloropropane	5	U				
Dibromomethane	5	U				
Bromodichloromethane	5	U				
cis-1,3-Dichloropropene	5	U				
Toluene	5	U				
trans-1,3-Dichloropropene	5	U				
1,1,2-Trichloroethane	5	U				
Tetrachloroethene	5	U				

Field ID No.		L-2				
Lab ID No.		6G221-19				
Date Analyzed		2-Nov-00				
Analyte	PQL					
1,3-Dichloropropane	5	U				
Dibromochloromethane	5	U				
1,2-Dibromoethane	5	U				
Chlorobenzene	5	U				
1,1,1,2-Tetrachloroethane	5	U				
Ethyl benzene	5	U				
m,p-Xylene	5	U				
o-Xylene	5	U				
Styrene	5	U				
Bromoform	5	U				
Isopropyl benzene	5	U				
Bromobenzene	5	U				
1,1,2,2-Tetrachloroethane	5	U				
1,2,3-Trichloropropane	5	U				
n-Propylbenzene	5	U				
2-Chlorotoluene	5	U				
4-Chlorotoluene	5	U				
1,3,5-Trimethyl benzene	5	U				
tert-Butyl benzene	5	U				
1,2,4-Trimethyl benzene	5	U				
sec-Butyl benzene	5	U				
1,3-Dichlorobenzene	5	U				
4-Isopropyl toluene	5	U				
1,4-Dichlorobenzene	5	U				
1,2-Dichlorobenzene	5	U				
SURROGATES	QC Lim.					
Dibromofluoromethane	84-118%	100%				
1,2-Dichloroethane-d4	76-126%	100%				
Toluene-d8	80-118%	93%				
4-Bromofluorobenzene	82-118%	82%				
Dilution Factor		1				

NOTES:

U - Analytes not detected at, or above the PQL

J - Estimated value

µg/Kg - Micrograms per kilogram (ppb)

PQL - Practical Quantitation Limit

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

ONSITE ENVIRONMENTAL LABORATORIES, INC.
[redacted]
5500 Boscell Common Fremont, CA 94538 Tel. (510) 490-8571 Fax. (510) 490-8572

Date:	11-1-00
Page:	2 of 2
Laboratory:	On Site
Lab Number:	66221

Project Manager:	Mike Wray
Client Name:	Mercer
Address:	230 Portage Av
City, State ZIP	Palo Alto, CA
Phone:	
Fax:	

Bill to	Mike Wray
Company:	IT Corp
Address:	
City, State ZIP	Concord, CA
Phone:	9252882382
Fax:	

Project Name:	Mercer
Project Number:	306342

P.O. No.:	

Analysis Requested

Sample Identification	Date Sampled	Time Sampled	Matrix	Sampled & Relinquished By:	Time Relinquished:	Received By:	Lab ID	BTEX (8021)	TPH - Gas (8015M)	TPH - Diesel (8015M)	VOCs EPA 8260					No. Containers	Remarks
B-22	11-1-00	2:10	Soil	MY	2:30	MY	66221-15				X					1	
H2-20		2:30		MY	2:45		-16				X					1	
B-24		4:00		MY	4:10		-17				X					1	
L-1		4:00		MY	4:10		-18				X					1	
L-2		4:00		MY	4:10		-19				X					1	
L-4		4:00		MY	4:10		-20				X					1	
H2-22		4:00		MY	4:15		-21				X					1	

Initials:	Printed Name:	Signature:		
MY	Michael Yuracsky	Michael Yuracsky	Date:	
TG	Tina Gerard	Tina Gerard	Start Time:	
			Stop Time:	
			Hours:	
			Client Sign-off:	

Total Containers:	
Received Intact:	
Received Cold:	
Custody Seals:	

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

ONSITE ENVIRONMENTAL LABORATORIES, INC.
5500 Boscell Common Fremont, CA 94538 Tel. (510) 490-8571 Fax. (510) 490-8572

Project Manager:	Mike Wray
Client Name:	Mercer
Address:	230 Portage Av
City, State ZIP	Palo Alto, CA
Phone:	
Fax:	

Bill to:	Mike Wray
Company:	IT Corp.
Address:	
City, State ZIP	Concord, CA
Phone:	925 798 2382
Fax:	

Date:	11/1/00
Page:	1 of 2
Laboratory:	Onsite
Lab Number:	66 221

Project Name:	Mercer
Project Number:	#26512

P.O. No.:	

Analysis Requested

Sample Identification	Date Sampled	Time Sampled	Matrix	Sampled & Relinquished By:	Time Relinquished:	Received By:	Lab ID	BTEX (8021)	TPH - Gas (8015M)	TPH - Diesel (8015M)	VOCs EPA 8260					No. Containers	Remarks
K-16	11/1/00	9:15	Soil			MY	66 221-01				X					1	
L-1	11/1/00	9:40	Soil				-02									1	
H2 14		950			1100		-03									1	
H2 16		950			1100		-04									1	
B-8		950			1130		-05									1	
B-10		955			1130		-06									1	
B-12		955			1130		-07									1	
B-14		1000			1150		-08									1	
B-20		1150			1150		-09									1	
H2-18							-10									1	
K(0.5-1)							-11									1	
K-2							-12									1	
K 5.5							-13									1	
K4	11/1/00		Soil				-14				X					1	

Initials:	Printed Name:	Signature:		
MY	Michael Yuranski	Michael Yuranski	Date:	
TG	Tina Gerard	Tina Gerard	Start Time:	
			Stop Time:	
			Hours:	
			Client Sign-off:	

Total Containers:	
Received Intact:	
Received Cold:	
Custody Seals:	

White Copy - Admin/Lab Yellow - Mobile Lab Pink - Client

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

ONSITE ENVIRONMENTAL LABORATORIES, INC.
5500 Boscell Common Fremont, CA 94538 Tel. (510) 490-8571 Fax. (510) 490-8572

Project Manager:	Mike Wray
Client Name:	IT Corp / Mercer
Address:	230 Portage Av
City, State ZIP	Palo Alto, CA
Phone:	
Fax:	

Bill to:	Mike Wray
Company:	IT Corporation
Address:	
City, State ZIP	Concord, CA
Phone	925 288 2382
Fax:	

Date:	11-2-00
Page:	1 of 1
Laboratory:	Onsite
Lab Number:	66222

Project Name:	Mercer
Project Number:	801342

P.O. No.:	

Analysis Requested

Sample Identification	Date Sampled	Time Sampled	Matrix	Sampled & Relinquished By	Time Relinquished	Received By	Lab ID	BTEX (8021)	TPH - Gas (8015M)	TPH - Diesel (8015M)	TPH 5030 8015					No. Containers	Remarks
K-8	11-2-00	1100	SOIL	MY	1110	MY	66222.01				X					1	
K-10	11-2-00	1115			1125		-02				X					1	
L2-6	11-2-00	1230			1245		-03				X					1	
L2-8	11-2-00	1235	SOIL		1245		-04				X					1	

Initials:	Printed Name:	Signature:		
MY	Michael Yuravsky		Date:	
	Tina Girard		Start Time:	
			Stop Time:	
			Hours:	
			Client Sign-off:	

Total Containers:	
Received Intact:	
Received Cold:	
Custody Seals:	

White Copy - Admin/Lab Yellow - Mobile Lab Pink - Client

Analytical Laboratory Report
Volatile Organics by EPA 8260B

ONSITE ENVIRONMENTAL LABORATORIES, INC.

Date Sampled:	11/1/00	**Project Mgr:**	Mike Wray
Date Received:	11/1/00	**Client:**	IT Group
Report Number:	6G221.rpt	**Project Name:**	Mercer
Lab ID Number:	6G221	**Matrix:**	Soil
		Units:	µg/Kg

Field ID No. / Lab ID No. / Date Analyzed		B-16 6G221-01 01-Nov-00	B-18 6G221-02 01-Nov-00	H2-14 6G221-03 01-Nov-00	H2-16 6G221-04 01-Nov-00	B-20 6G221-09 01-Nov-00
Analyte	**PQL**					
Dichlorodifluoromethane	10	U	U	U	U	U
Chloromethane	10	U	U	U	U	U
Vinyl chloride	10	U	U	U	U	U
Bromomethane	10	U	U	U	U	U
Chloroethane	10	U	U	U	U	U
Trichlorofluoromethane	10	U	U	U	U	U
1,1-Dichloroethene	5	**28**	**39**	**55**	**67**	**32**
Carbon Disulfide	5	U	U	U	U	U
Methylene chloride	5	U	U	U	U	U
trans-1,2-Dichloroethene	5	U	U	U	U	U
1,1-Dichloroethane	5	U	U	U	U	U
cis-1,2-Dichloroethene	5	3.5 J	4.9 J	4.0 J	5.7	4.4 J
2,2-Dichloropropane	5	U	U	U	U	U
Bromochloromethane	5	U	U	U	U	U
Chloroform	5	U	U	U	U	U
1,1,1-Trichloroethane	5	U	U	U	U	U
Carbon tetrachloride	5	U	U	U	U	U
1,1-Dichloropropene	5	U	U	U	U	U
Benzene	5	U	U	U	U	U
1,2-Dichloroethane	5	U	U	U	U	U
Trichloroethene	5	**200**	**240**	**91**	**99**	**180**
1,2-Dichloropropane	5	U	U	U	U	U
Dibromomethane	5	U	U	U	U	U
Bromodichloromethane	5	U	U	U	U	U
cis-1,3-Dichloropropene	5	U	U	U	U	U
Toluene	5	U	U	U	U	U
trans-1,3-Dichloropropene	5	U	U	U	U	U
1,1,2-Trichloroethane	5	U	U	U	U	U
Tetrachloroethene	5	U	U	U	U	U

Field ID No.		B-16	B-18	H2-14	H2-16	B-20
Lab ID No.		6G221-01	6G221-02	6G221-03	6G221-04	6G221-09
Date Analyzed		01-Nov-00	01-Nov-00	01-Nov-00	01-Nov-00	01-Nov-00
Analyte	PQL					
1,3-Dichloropropane	5	U	U	U	U	U
Dibromochloromethane	5	U	U	U	U	U
1,2-Dibromoethane	5	U	U	U	U	U
Chlorobenzene	5	U	U	U	U	U
1,1,1,2-Tetrachloroethane	5	U	U	U	U	U
Ethyl benzene	5	U	U	U	U	U
m,p-Xylene	5	U	U	U	U	U
o-Xylene	5	U	U	U	U	U
Styrene	5	U	U	U	U	U
Bromoform	5	U	U	U	U	U
Isopropyl benzene	5	U	U	U	U	U
Bromobenzene	5	U	U	U	U	U
1,1,2,2-Tetrachloroethane	5	U	U	U	U	U
1,2,3-Trichloropropane	5	U	U	U	U	U
n-Propylbenzene	5	U	U	U	U	U
2-Chlorotoluene	5	U	U	U	U	U
4-Chlorotoluene	5	U	U	U	U	U
1,3,5-Trimethyl benzene	5	U	U	U	U	U
tert-Butyl benzene	5	U	U	U	U	U
1,2,4-Trimethyl benzene	5	U	U	U	U	U
sec-Butyl benzene	5	U	U	U	U	U
1,3-Dichlorobenzene	5	U	U	U	U	U
4-Isopropyl toluene	5	U	U	U	U	U
1,4-Dichlorobenzene	5	U	U	U	U	U
1,2-Dichlorobenzene	5	U	U	U	U	U
SURROGATES	QC Lim.					
Dibromofluoromethane	84-118%	98%	95%	95%	96%	96%
1,2-Dichloroethane-d4	76-126%	90%	81%	94%	86%	94%
Toluene-d8	80-118%	92%	91%	92%	91%	92%
4-Bromofluorobenzene	82-118%	88%	83%	89%	85%	88%
Dilution Factor		1	1	1	1	1

NOTES:

U - Analytes not detected at, or above the PQL

J - Estimated value

µg/Kg - Micrograms per kilogram (ppb)

PQL - Practical Quantitation Limit

Analytical Laboratory Report
Volatile Organics by EPA 8260B

ONSITE ENVIRONMENTAL LABORATORIES, INC.

Date Sampled:	11/1/00	**Project Mgr:**	Mike Wray
Date Received:	11/1/00	**Client:**	IT Group
Report Number:	6G221.rpt	**Project Name:**	Mercer
Lab ID Number:	6G221	**Matrix:**	Soil
		Units:	µg/Kg

Field ID No.		H2-18	K (0.5-1)	K-2	K-5.5	K-4
Lab ID No.		6G221-10	6G221-11	6G221-12	6G221-13	6G221-14
Date Analyzed		01-Nov-00	01-Nov-00	01-Nov-00	01-Nov-00	01-Nov-00
Analyte	**PQL**					
Dichlorodifluoromethane	10	U	U	U	U	U
Chloromethane	10	U	U	U	U	U
Vinyl chloride	10	U	U	U	U	U
Bromomethane	10	U	U	U	U	U
Chloroethane	10	U	U	U	U	U
Trichlorofluoromethane	10	U	U	U	U	U
1,1-Dichloroethene	5	60	U	U	U	U
Carbon Disulfide	5	U	U	U	U	U
Methylene chloride	5	U	U	U	U	U
trans-1,2-Dichloroethene	5	U	U	U	U	U
1,1-Dichloroethane	5	U	U	U	U	U
cis-1,2-Dichloroethene	5	5.6	U	9.5	5.6	U
2,2-Dichloropropane	5	U	U	U	U	U
Bromochloromethane	5	U	U	U	U	U
Chloroform	5	U	U	U	U	U
1,1,1-Trichloroethane	5	U	U	U	U	U
Carbon tetrachloride	5	U	U	U	U	U
1,1-Dichloropropene	5	U	U	U	U	U
Benzene	5	U	U	U	U	U
1,2-Dichloroethane	5	U	U	U	U	U
Trichloroethene	5	100	5.7	210	97	U
1,2-Dichloropropane	5	U	U	U	U	U
Dibromomethane	5	U	U	U	U	U
Bromodichloromethane	5	U	U	U	U	U
cis-1,3-Dichloropropene	5	U	U	U	U	U
Toluene	5	U	U	U	U	U
trans-1,3-Dichloropropene	5	U	U	U	U	U
1,1,2-Trichloroethane	5	U	U	U	U	U
Tetrachloroethene	5	U	U	U	U	U

Field ID No.		H2-18	K (0.5-1)	K-2	K-5.5	K-4
Lab ID No.		6G221-10	6G221-11	6G221-12	6G221-13	6G221-14
Date Analyzed		01-Nov-00	01-Nov-00	01-Nov-00	01-Nov-00	01-Nov-00
Analyte	PQL					
1,3-Dichloropropane	5	U	U	U	U	U
Dibromochloromethane	5	U	U	U	U	U
1,2-Dibromoethane	5	U	U	U	U	U
Chlorobenzene	5	U	U	U	U	U
1,1,1,2-Tetrachloroethane	5	U	U	U	U	U
Ethyl benzene	5	U	U	U	U	U
m,p-Xylene	5	U	U	U	U	U
o-Xylene	5	U	U	U	U	U
Styrene	5	U	U	U	U	U
Bromoform	5	U	U	U	U	U
Isopropyl benzene	5	U	U	U	U	U
Bromobenzene	5	U	U	U	U	U
1,1,2,2-Tetrachloroethane	5	U	U	U	U	U
1,2,3-Trichloropropane	5	U	U	U	U	U
n-Propylbenzene	5	U	U	U	U	U
2-Chlorotoluene	5	U	U	U	U	U
4-Chlorotoluene	5	U	U	U	U	U
1,3,5-Trimethyl benzene	5	U	U	U	U	U
tert-Butyl benzene	5	U	U	U	U	U
1,2,4-Trimethyl benzene	5	U	U	U	U	U
sec-Butyl benzene	5	U	U	U	U	U
1,3-Dichlorobenzene	5	U	U	U	U	U
4-Isopropyl toluene	5	U	U	U	U	U
1,4-Dichlorobenzene	5	U	U	U	U	U
1,2-Dichlorobenzene	5	U	U	U	U	U
SURROGATES	QC Lim.					
Dibromofluoromethane	84-118%	100%	98%	100%	98%	98%
1,2-Dichloroethane-d4	76-126%	103%	102%	103%	101%	101%
Toluene-d8	80-118%	93%	91%	94%	93%	93%
4-Bromofluorobenzene	82-118%	91%	90%	91%	89%	91%
Dilution Factor		1	1	1	1	1

NOTES:

U - Analytes not detected at, or above the PQL

J - Estimated value

µg/Kg - Micrograms per kilogram (ppb)

PQL - Practical Quantitation Limit

Analytical Laboratory Report
Volatile Organics by EPA 8260B

ONSITE ENVIRONMENTAL LABORATORIES, INC.

Date Sampled:	11/1/00	**Project Mgr:**	Mike Wray
Date Received:	11/1/00	**Client:**	IT Group
Report Number:	6G221.rpt	**Project Name:**	Mercer
Lab ID Number:	6G221	**Matrix:**	Soil
		Units:	µg/Kg

Field ID No.		B-8	B-10	B-12	B-14	B-22
Lab ID No.		6G221-05	6G221-06	6G221-07	6G221-08	6G221-15
Date Analyzed		01-Nov-00	01-Nov-00	02-Nov-00	02-Nov-00	01-Nov-00
Analyte	**PQL**					
Dichlorodifluoromethane	10	U	U	U	U	U
Chloromethane	10	U	U	U	U	U
Vinyl chloride	10	U	U	U	U	U
Bromomethane	10	U	U	U	U	U
Chloroethane	10	U	U	U	U	U
Trichlorofluoromethane	10	U	U	U	U	U
1,1-Dichloroethene	5	U	U	19	26	3.5 J
Carbon Disulfide	5	U	U	U	U	U
Methylene chloride	5	U	U	U	U	U
trans-1,2-Dichloroethene	5	48	48	U	U	U
1,1-Dichloroethane	5	U	U	U	U	U
cis-1,2-Dichloroethene	5	35	32	U	U	4.3 J
2,2-Dichloropropane	5	U	U	U	U	U
Bromochloromethane	5	U	U	U	U	U
Chloroform	5	U	U	U	U	U
1,1,1-Trichloroethane	5	U	U	U	U	U
Carbon tetrachloride	5	U	U	U	U	U
1,1-Dichloropropene	5	U	U	U	U	U
Benzene	5	U	U	U	U	U
1,2-Dichloroethane	5	U	U	U	U	U
Trichloroethene	5	810	900	240	240	6.1
1,2-Dichloropropane	5	U	U	U	U	U
Dibromomethane	5	U	U	U	U	U
Bromodichloromethane	5	U	U	U	U	U
cis-1,3-Dichloropropene	5	U	U	U	U	U
Toluene	5	U	U	U	U	U
trans-1,3-Dichloropropene	5	U	U	U	U	U
1,1,2-Trichloroethane	5	U	U	U	U	U
Tetrachloroethene	5	U	U	U	U	U

Field ID No.		B-8	B-10	B-12	B-14	B-22
Lab ID No.		6G221-05	6G221-06	6G221-07	6G221-08	6G221-15
Date Analyzed		01-Nov-00	01-Nov-00	02-Nov-00	02-Nov-00	01-Nov-00
Analyte	PQL					
1,3-Dichloropropane	5	U	U	U	U	U
Dibromochloromethane	5	U	U	U	U	U
1,2-Dibromoethane	5	U	U	U	U	U
Chlorobenzene	5	U	U	U	U	U
1,1,1,2-Tetrachloroethane	5	U	U	U	U	U
Ethyl benzene	5	U	U	U	U	U
m,p-Xylene	5	U	U	U	U	U
o-Xylene	5	U	U	U	U	U
Styrene	5	U	U	U	U	U
Bromoform	5	U	U	U	U	U
Isopropyl benzene	5	U	U	U	U	U
Bromobenzene	5	U	U	U	U	U
1,1,2,2-Tetrachloroethane	5	U	U	U	U	U
1,2,3-Trichloropropane	5	U	U	U	U	U
n-Propylbenzene	5	U	U	U	U	U
2-Chlorotoluene	5	U	U	U	U	U
4-Chlorotoluene	5	U	U	U	U	U
1,3,5-Trimethyl benzene	5	U	U	U	U	U
tert-Butyl benzene	5	U	U	U	U	U
1,2,4-Trimethyl benzene	5	U	U	U	U	U
sec-Butyl benzene	5	U	U	U	U	U
1,3-Dichlorobenzene	5	U	U	U	U	U
4-Isopropyl toluene	5	U	U	U	U	U
1,4-Dichlorobenzene	5	U	U	U	U	U
1,2-Dichlorobenzene	5	U	U	U	U	U
SURROGATES	QC Lim.					
Dibromofluoromethane	84-118%	99%	99%	98%	99%	98%
1,2-Dichloroethane-d4	76-126%	101%	101%	103%	104%	102%
Toluene-d8	80-118%	94%	93%	94%	95%	93%
4-Bromofluorobenzene	82-118%	88%	89%	92%	92%	93%
Dilution Factor		1	1	1	1	1

NOTES:

U - Analytes not detected at, or above the PQL

J - Estimated value

µg/Kg - Micrograms per kilogram (ppb)

PQL - Practical Quantitation Limit

Analytical Laboratory Report
Volatile Organics by EPA 8260B

ONSITE ENVIRONMENTAL LABORATORIES, INC.

Date Sampled:	11/1/00	**Project Mgr:**	Mike Wray
Date Received:	11/1/00	**Client:**	IT Group
Report Number:	6G221.rpt	**Project Name:**	Mercer
Lab ID Number:	6G221	**Matrix:**	Soil
		Units:	µg/Kg

Field ID No.		H2-20	B-24	H2-22	L-1	L-4
Lab ID No.		6G221-16	6G221-17	6G221-21	6G221-18	6G221-20
Date Analyzed		01-Nov-00	01-Nov-00	01-Nov-00	01-Nov-00	01-Nov-00
Analyte	**PQL**					
Dichlorodifluoromethane	10	U	U	U	U	U
Chloromethane	10	U	U	U	U	U
Vinyl chloride	10	U	U	U	U	U
Bromomethane	10	U	U	U	U	U
Chloroethane	10	U	U	U	U	U
Trichlorofluoromethane	10	U	U	U	U	U
1,1-Dichloroethene	5	63	U	2.7 J	U	U
Carbon Disulfide	5	U	U	U	U	U
Methylene chloride	5	U	U	U	U	U
trans-1,2-Dichloroethene	5	U	U	U	U	U
1,1-Dichloroethane	5	U	U	U	U	U
cis-1,2-Dichloroethene	5	5.3	4.0 J	4.7 J	U	U
2,2-Dichloropropane	5	U	U	U	U	U
Bromochloromethane	5	U	U	U	U	U
Chloroform	5	U	U	U	U	U
1,1,1-Trichloroethane	5	U	U	U	U	U
Carbon tetrachloride	5	U	U	U	U	U
1,1-Dichloropropene	5	U	U	U	U	U
Benzene	5	U	U	U	U	U
1,2-Dichloroethane	5	U	U	U	U	U
Trichloroethene	5	93	3.0 J	U	U	U
1,2-Dichloropropane	5	U	U	U	U	U
Dibromomethane	5	U	U	U	U	U
Bromodichloromethane	5	U	U	U	U	U
cis-1,3-Dichloropropene	5	U	U	U	U	U
Toluene	5	U	U	U	U	U
trans-1,3-Dichloropropene	5	U	U	U	U	U
1,1,2-Trichloroethane	5	U	U	U	U	U
Tetrachloroethene	5	U	U	U	U	U

Field ID No.		H2-20	B-24	H2-22	L-1	L-4
Lab ID No.		6G221-16	6G221-17	6G221-21	6G221-18	6G221-20
Date Analyzed		01-Nov-00	01-Nov-00	01-Nov-00	01-Nov-00	01-Nov-00
Analyte	PQL					
1,3-Dichloropropane	5	U	U	U	U	U
Dibromochloromethane	5	U	U	U	U	U
1,2-Dibromoethane	5	U	U	U	U	U
Chlorobenzene	5	U	U	U	U	U
1,1,1,2-Tetrachloroethane	5	U	U	U	U	U
Ethyl benzene	5	U	U	U	U	U
m,p-Xylene	5	U	U	U	U	U
o-Xylene	5	U	U	U	U	U
Styrene	5	U	U	U	U	U
Bromoform	5	U	U	U	U	U
Isopropyl benzene	5	U	U	U	U	U
Bromobenzene	5	U	U	U	U	U
1,1,2,2-Tetrachloroethane	5	U	U	U	U	U
1,2,3-Trichloropropane	5	U	U	U	U	U
n-Propylbenzene	5	U	U	U	U	U
2-Chlorotoluene	5	U	U	U	U	U
4-Chlorotoluene	5	U	U	U	U	U
1,3,5-Trimethyl benzene	5	U	U	U	U	U
tert-Butyl benzene	5	U	U	U	U	U
1,2,4-Trimethyl benzene	5	U	U	U	U	U
sec-Butyl benzene	5	U	U	U	U	U
1,3-Dichlorobenzene	5	U	U	U	U	U
4-Isopropyl toluene	5	U	U	U	U	U
1,4-Dichlorobenzene	5	U	U	U	U	U
1,2-Dichlorobenzene	5	U	U	U	U	U
SURROGATES	QC Lim.					
Dibromofluoromethane	84-118%	99%	97%	98%	99%	101%
1,2-Dichloroethane-d4	76-126%	102%	99%	104%	106%	107%
Toluene-d8	80-118%	93%	93%	95%	94%	94%
4-Bromofluorobenzene	82-118%	89%	88%	90%	90%	93%
Dilution Factor		1	1	1	1	1

NOTES:

U - Analytes not detected at, or above the PQL

J - Estimated value

µg/Kg - Micrograms per kilogram (ppb)

PQL - Practical Quantitation Limit

ONSITE ENVIRONMENTAL LABORATORIES, INC.

Analytical Laboratory Report
Volatile Organics by EPA 8260B

Date Sampled:	11/1/00	**Project Mgr:**	Mike Wray
Date Received:	11/1/00	**Client:**	IT Group
Report Number:	6G221.rpt	**Project Name:**	Mercer
Lab ID Number:	6G221	**Matrix:**	Soil
		Units:	µg/Kg

Field ID No.		**L-2**				
Lab ID No.		**6G221-19**				
Date Analyzed		**02-Nov-00**				
Analyte	**PQL**					
Dichlorodifluoromethane	10	U				
Chloromethane	10	U				
Vinyl chloride	10	U				
Bromomethane	10	U				
Chloroethane	10	U				
Trichlorofluoromethane	10	U				
1,1-Dichloroethene	5	U				
Carbon Disulfide	5	U				
Methylene chloride	5	U				
trans-1,2-Dichloroethene	5	U				
1,1-Dichloroethane	5	U				
cis-1,2-Dichloroethene	5	U				
2,2-Dichloropropane	5	U				
Bromochloromethane	5	U				
Chloroform	5	U				
1,1,1-Trichloroethane	5	U				
Carbon tetrachloride	5	U				
1,1-Dichloropropene	5	U				
Benzene	5	U				
1,2-Dichloroethane	5	U				
Trichloroethene	5	U				
1,2-Dichloropropane	5	U				
Dibromomethane	5	U				
Bromodichloromethane	5	U				
cis-1,3-Dichloropropene	5	U				
Toluene	5	U				
trans-1,3-Dichloropropene	5	U				
1,1,2-Trichloroethane	5	U				
Tetrachloroethene	5	U				

Field ID No. Lab ID No. Date Analyzed		L-2 6G221-19 02-Nov-00				
Analyte	PQL					
1,3-Dichloropropane	5	U				
Dibromochloromethane	5	U				
1,2-Dibromoethane	5	U				
Chlorobenzene	5	U				
1,1,1,2-Tetrachloroethane	5	U				
Ethyl benzene	5	U				
m,p-Xylene	5	U				
o-Xylene	5	U				
Styrene	5	U				
Bromoform	5	U				
Isopropyl benzene	5	U				
Bromobenzene	5	U				
1,1,2,2-Tetrachloroethane	5	U				
1,2,3-Trichloropropane	5	U				
n-Propylbenzene	5	U				
2-Chlorotoluene	5	U				
4-Chlorotoluene	5	U				
1,3,5-Trimethyl benzene	5	U				
tert-Butyl benzene	5	U				
1,2,4-Trimethyl benzene	5	U				
sec-Butyl benzene	5	U				
1,3-Dichlorobenzene	5	U				
4-Isopropyl toluene	5	U				
1,4-Dichlorobenzene	5	U				
1,2-Dichlorobenzene	5	U				
SURROGATES	QC Lim.					
Dibromofluoromethane	84-118%	100%				
1,2-Dichloroethane-d4	76-126%	100%				
Toluene-d8	80-118%	93%				
4-Bromofluorobenzene	82-118%	82%				
Dilution Factor		1				

NOTES:

U - Analytes not detected at, or above the PQL

J - Estimated value

µg/Kg - Micrograms per kilogram (ppb)

PQL - Practical Quantitation Limit

Analytical Laboratory Report
Volatile Organics by EPA 8260B

ONSITE ENVIRONMENTAL LABORATORIES, INC.

Date Sampled:	11/2/00	**Project Mgr:**	Mike Wray
Date Received:	11/2/00	**Client:**	IT Group
Report Number:	6G222.rpt	**Project Name:**	Mercer
Lab ID Number:	6G222	**Matrix:**	Soil
		Units:	µg/Kg

Field ID No.		K-8	K-10	L2-6	L2-8	
Lab ID No.		6G222-01	6G222-02	6G222-03	6G222-04	
Date Analyzed		02-Nov-00	02-Nov-00	02-Nov-00	02-Nov-00	
Analyte	**PQL**					
Dichlorodifluoromethane	10	U	U	U	U	
Chloromethane	10	U	U	U	U	
Vinyl chloride	10	U	U	U	U	
Bromomethane	10	U	U	U	U	
Chloroethane	10	U	U	U	U	
Trichlorofluoromethane	10	U	U	U	U	
1,1-Dichloroethene	5	U	4.4 J	U	U	
Carbon Disulfide	5	U	U	U	U	
Methylene chloride	5	U	U	U	U	
trans-1,2-Dichloroethene	5	12	U	U	U	
1,1-Dichloroethane	5	U	U	U	U	
cis-1,2-Dichloroethene	5	14	U	U	U	
2,2-Dichloropropane	5	U	U	U	U	
Bromochloromethane	5	U	U	U	U	
Chloroform	5	U	U	U	U	
1,1,1-Trichloroethane	5	U	U	U	U	
Carbon tetrachloride	5	U	U	U	U	
1,1-Dichloropropene	5	U	U	U	U	
Benzene	5	U	U	U	U	
1,2-Dichloroethane	5	U	U	U	U	
Trichloroethene	5	100	U	U	U	
1,2-Dichloropropane	5	U	U	U	U	
Dibromomethane	5	U	U	U	U	
Bromodichloromethane	5	U	U	U	U	
cis-1,3-Dichloropropene	5	U	U	U	U	
Toluene	5	U	U	U	U	
trans-1,3-Dichloropropene	5	U	U	U	U	
1,1,2-Trichloroethane	5	U	U	U	U	
Tetrachloroethene	5	U	U	U	U	

Field ID No.		K-8	K-10	L2-6	L2-8	
Lab ID No.		6G222-01	6G222-02	6G222-03	6G222-04	
Date Analyzed		02-Nov-00	02-Nov-00	02-Nov-00	02-Nov-00	
Analyte	PQL					
1,3-Dichloropropane	5	U	U	U	U	
Dibromochloromethane	5	U	U	U	U	
1,2-Dibromoethane	5	U	U	U	U	
Chlorobenzene	5	U	U	U	U	
1,1,1,2-Tetrachloroethane	5	U	U	U	U	
Ethyl benzene	5	U	U	U	U	
m,p-Xylene	5	U	U	U	U	
o-Xylene	5	U	U	U	U	
Styrene	5	U	U	U	U	
Bromoform	5	U	U	U	U	
Isopropyl benzene	5	U	U	U	U	
Bromobenzene	5	U	U	U	U	
1,1,2,2-Tetrachloroethane	5	U	U	U	U	
1,2,3-Trichloropropane	5	U	U	U	U	
n-Propylbenzene	5	U	U	U	U	
2-Chlorotoluene	5	U	U	U	U	
4-Chlorotoluene	5	U	U	U	U	
1,3,5-Trimethyl benzene	5	U	U	U	U	
tert-Butyl benzene	5	U	U	U	U	
1,2,4-Trimethyl benzene	5	U	U	U	U	
sec-Butyl benzene	5	U	U	U	U	
1,3-Dichlorobenzene	5	U	U	U	U	
4-Isopropyl toluene	5	U	U	U	U	
1,4-Dichlorobenzene	5	U	U	U	U	
1,2-Dichlorobenzene	5	U	U	U	U	
SURROGATES	QC Lim.					
Dibromofluoromethane	84-118%	101%	98%	101%	101%	
1,2-Dichloroethane-d4	76-126%	109%	107%	108%	112%	
Toluene-d8	80-118%	94%	93%	93%	95%	
4-Bromofluorobenzene	82-118%	91%	94%	94%	95%	
Dilution Factor		1	1	1	1	

NOTES:

U - Analytes not detected at, or above the PQL

J - Estimated value

µg/Kg - Micrograms per kilogram (ppb)

PQL - Practical Quantitation Limit

ONSITE ENVIRONMENTAL LABORATORIES, INC.

Laboratory QC Report
Volatile Organics by EPA 8260B

Date Analyzed: 11/1/00

Report Number: 6G1101.qac

Project Mgr: Mike Wray
Client: IT Group
Proj. Name: Mercer
Matrix: Soil
Units: µg/Kg

Lab ID No.		M.Blank	Spike	LCS 11/1		QC Limits
		11/1	level	Concentr.	% Recov.	Accuracy
Analyte	PQL		µg/L	µg/L		
Dichlorodifluoromethane	10	U	50	72.8	146%	60% - 130%
Chloromethane	10	U	50	63.5	127%	60% - 130%
Vinyl chloride	10	U	50	59.7	119%	60% - 130%
Bromomethane	10	U	50	59.7	119%	60% - 130%
Chloroethane	10	U	50	64.3	129%	60% - 130%
Trichlorofluoromethane	10	U	50	59.6	119%	60% - 130%
1,1-Dichloroethene	5	U	50	57.4	115%	60% - 130%
Methylene chloride	5	U	50	54.7	109%	60% - 130%
trans-1,2-Dichloroethene	5	U	50	56.3	113%	60% - 130%
1,1-Dichloroethane	5	U	50	60.6	121%	60% - 130%
cis-1,2-Dichloroethene	5	U	50	56.3	113%	60% - 130%
2,2-Dichloropropane	5	U	50	58.3	117%	60% - 130%
Bromochloromethane	5	U	50	49.7	99%	60% - 130%
Chloroform	5	U	50	59.4	119%	60% - 130%
1,1,1-Trichloroethane	5	U	50	61.7	123%	60% - 130%
Carbon tetrachloride	5	U	50	59.9	120%	60% - 130%
1,1-Dichloropropene	5	U	50	59.9	120%	60% - 130%
Benzene	5	U	50	56.4	113%	60% - 130%
1,2-Dichloroethane	5	U	50	66.2	132%	60% - 130%
Trichloroethene	5	U	50	59.1	118%	60% - 130%
1,2-Dichloropropane	5	U	50	61.0	122%	60% - 130%
Dibromomethane	5	U	50	57.3	115%	60% - 130%
Bromodichloromethane	5	U	50	57.0	114%	60% - 130%
cis-1,3-Dichloropropene	5	U	50	59.7	119%	60% - 130%
Toluene	5	U	50	58.8	118%	60% - 130%
trans-1,3-Dichloropropene	5	U	50	60.2	120%	60% - 130%
1,1,2-Trichloroethane	5	U	50	56.9	114%	60% - 130%
Tetrachloroethene	5	U	50	49.7	99%	60% - 130%

Lab ID No.		M.Blank	Spike	LCS		QC Limits
		11/1	level	Concentr.	% Recov.	Accuracy
Analyte	PQL					
1,3-Dichloropropane	5	U	50	62.7	125%	60% - 130%
Dibromochloromethane	5	U	50	53.0	106%	60% - 130%
1,2-Dibromoethane	5	U	50	58.5	117%	60% - 130%
Chlorobenzene	5	U	50	57.9	116%	60% - 130%
1,1,1,2-Tetrachloroethane	5	U	50	53.9	108%	60% - 130%
Ethyl benzene	5	U	50	62.0	124%	60% - 130%
m,p-Xylene	5	U	100	123.1	123%	60% - 130%
o-Xylene	5	U	50	63.1	126%	60% - 130%
Styrene	5	U	50	72.1	144%	60% - 130%
Bromoform	5	U	50	55.5	111%	60% - 130%
Isopropyl benzene	5	U	50	62.6	125%	60% - 130%
Bromobenzene	5	U	50	52.2	104%	60% - 130%
1,1,2,2-Tetrachloroethane	5	U	50	60.3	121%	60% - 130%
1,2,3-Trichloropropane	5	U	50	58.7	117%	60% - 130%
n-Propylbenzene	5	U	50	64.8	130%	60% - 130%
2-Chlorotoluene	5	U	50	63.5	127%	60% - 130%
4-Chlorotoluene	5	U	50	64.5	129%	60% - 130%
1,3,5-Trimethyl benzene	5	U	50	63.0	126%	60% - 130%
tert-Butyl benzene	5	U	50	68.0	136%	60% - 130%
1,2,4-Trimethyl benzene	5	U	50	64.7	129%	60% - 130%
sec-Butyl benzene	5	U	50	65.3	131%	60% - 130%
1,3-Dichlorobenzene	5	U	50	57.0	114%	60% - 130%
4-Isopropyl toluene	5	U	50	69.0	138%	60% - 130%
1,4-Dichlorobenzene	5	U	50	56.4	113%	60% - 130%
1,2-Dichlorobenzene	5	U	50	57.6	115%	60% - 130%
SURROGATES	QC Lim.					
Dibromofluoromethane	84-118%	93%		100%		
1,2-Dichloroethane-d4	76-126%	78%		117%		
Toluene-d8	80-118%	92%		94%		
4-Bromofluorobenzene	82-118%	82%		108%		
Dilution Factor		1		1		

NOTES:

U - Analytes not detected at, or above the reporting limit

RL - Reporting Limit

µg/L - Micrograms per liter (ppb)

ONSITE ENVIRONMENTAL LABORATORIES, INC.

Laboratory QC Report
Volatile Organics by EPA 8260B

Date Analyzed: 11/2/00

Report Number: 6G1102.qac

Project Mgr: Mike Wray
Client: IT Group
Proj. Name: Mercer
Matrix: Soil
Units: µg/Kg

Lab ID No.		M.Blank	Spike	LCS 11/2		QC Limits
		11/2	level	Concentr.	% Recov.	Accuracy
Analyte	PQL		µg/L	µg/L		
Dichlorodifluoromethane	10	U	50	65.6	131%	60% - 130%
Chloromethane	10	U	50	56.2	112%	60% - 130%
Vinyl chloride	10	U	50	56.5	113%	60% - 130%
Bromomethane	10	U	50	55.4	111%	60% - 130%
Chloroethane	10	U	50	56.8	114%	60% - 130%
Trichlorofluoromethane	10	U	50	57.0	114%	60% - 130%
1,1-Dichloroethene	5	U	50	53.4	107%	60% - 130%
Methylene chloride	5	U	50	51.8	104%	60% - 130%
trans-1,2-Dichloroethene	5	U	50	52.9	106%	60% - 130%
1,1-Dichloroethane	5	U	50	56.6	113%	60% - 130%
cis-1,2-Dichloroethene	5	U	50	52.2	104%	60% - 130%
2,2-Dichloropropane	5	U	50	55.9	112%	60% - 130%
Bromochloromethane	5	U	50	44.6	89%	60% - 130%
Chloroform	5	U	50	54.6	109%	60% - 130%
1,1,1-Trichloroethane	5	U	50	58.0	116%	60% - 130%
Carbon tetrachloride	5	U	50	56.2	112%	60% - 130%
1,1-Dichloropropene	5	U	50	56.3	113%	60% - 130%
Benzene	5	U	50	52.6	105%	60% - 130%
1,2-Dichloroethane	5	U	50	62.0	124%	60% - 130%
Trichloroethene	5	U	50	56.6	113%	60% - 130%
1,2-Dichloropropane	5	U	50	58.2	116%	60% - 130%
Dibromomethane	5	U	50	54.5	109%	60% - 130%
Bromodichloromethane	5	U	50	53.4	107%	60% - 130%
cis-1,3-Dichloropropene	5	U	50	56.1	112%	60% - 130%
Toluene	5	U	50	53.1	106%	60% - 130%
trans-1,3-Dichloropropene	5	U	50	57.0	114%	60% - 130%
1,1,2-Trichloroethane	5	U	50	53.7	107%	60% - 130%
Tetrachloroethene	5	U	50	45.6	91%	60% - 130%

Lab ID No.		M.Blank	Spike	LCS		QC Limits
		11/2	level	Concentr.	% Recov.	Accuracy
Analyte	PQL					
1,3-Dichloropropane	5	U	50	58.2	116%	60% - 130%
Dibromochloromethane	5	U	50	49.2	98%	60% - 130%
1,2-Dibromoethane	5	U	50	55.2	110%	60% - 130%
Chlorobenzene	5	U	50	53.9	108%	60% - 130%
1,1,1,2-Tetrachloroethane	5	U	50	50.1	100%	60% - 130%
Ethyl benzene	5	U	50	57.6	115%	60% - 130%
m,p-Xylene	5	U	100	115.2	115%	60% - 130%
o-Xylene	5	U	50	59.4	119%	60% - 130%
Styrene	5	U	50	66.2	132%	60% - 130%
Bromoform	5	U	50	52.1	104%	60% - 130%
Isopropyl benzene	5	U	50	58.0	116%	60% - 130%
Bromobenzene	5	U	50	48.2	96%	60% - 130%
1,1,2,2-Tetrachloroethane	5	U	50	57.0	114%	60% - 130%
1,2,3-Trichloropropane	5	U	50	54.5	109%	60% - 130%
n-Propylbenzene	5	U	50	59.4	119%	60% - 130%
2-Chlorotoluene	5	U	50	59.3	119%	60% - 130%
4-Chlorotoluene	5	U	50	58.6	117%	60% - 130%
1,3,5-Trimethyl benzene	5	U	50	58.3	117%	60% - 130%
tert-Butyl benzene	5	U	50	60.6	121%	60% - 130%
1,2,4-Trimethyl benzene	5	U	50	59.0	118%	60% - 130%
sec-Butyl benzene	5	U	50	60.1	120%	60% - 130%
1,3-Dichlorobenzene	5	U	50	51.3	103%	60% - 130%
4-Isopropyl toluene	5	U	50	63.0	126%	60% - 130%
1,4-Dichlorobenzene	5	U	50	50.6	101%	60% - 130%
1,2-Dichlorobenzene	5	U	50	52.1	104%	60% - 130%
SURROGATES	QC Lim.					
Dibromofluoromethane	84-118%	98%		99%		
1,2-Dichloroethane-d4	76-126%	95%		116%		
Toluene-d8	80-118%	93%		94%		
4-Bromofluorobenzene	82-118%	87%		109%		
Dilution Factor		1		1		

NOTES:

U - Analytes not detected at, or above the reporting limit

RL - Reporting Limit

µg/L - Micrograms per liter (ppb)

Laboratory QC Report
Volatile Organics by EPA 8260B

ONSITE ENVIRONMENTAL LABORATORIES, INC.

Date Analyzed:	11/1,2/00	**Project Mgr:**	Mike Wray
		Client:	IT Group
Report Number:	6G1102.qac	**Proj. Name:**	Mercer
		Matrix:	Soil
Spiked sample Field ID:	B-20	**Units:**	µg/Kg

Lab ID No.		6G221-09	Spike level	6G221-09 MS		6G221-09 MSD		RPD	QC Limits	
				Concentr.	% Recov.	Concentr.	% Recov.	%	% Recov.	RPD, %
Analyte	PQL									
1,1-Dichloroethene	5	31.9	250	295.5	105%	304.2	109%	3%	65% - 135%	<25%
Benzene	5	U	250	249.7	100%	247.5	99%	1%	65% - 135%	<25%
Trichloroethene	5	181.2	250	431.8	100%	446.0	106%	3%	65% - 135%	<25%
Toluene	5	U	250	259.5	104%	251.5	101%	3%	65% - 135%	<25%
Chlorobenzene	5	U	250	263.2	105%	261.1	104%	1%	65% - 135%	<25%
SURROGATES	QC Lim.									
Dibromofluoromethane	84-118%	96%		100%		98%				
1,2-Dichloroethane-d4	76-126%	94%		115%		109%				
Toluene-d8	80-118%	92%		94%		93%				
4-Bromofluorobenzene	82-118%	88%		112%		103%				
Dilution Factor		1		1		1				

NOTES:

U - Analytes not detected at, or above the reporting limit

RL - Reporting Limit

µg/L - Micrograms per liter (ppb)

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

ONSITE ENVIRONMENTAL LABORATORIES, INC.
[redacted]
5500 Boscell Common Fremont, CA 94538 Tel. (510) 490-8571 Fax. (510) 490-8572

Date:	11-1-00
Page:	1 of 2
Laboratory:	On-site.
Lab Number:	66 221

Project Manager:	Mike Wray
Client Name:	Mercer
Address:	230 Portage Av
City, State ZIP	Palo Alto, CA
Phone:	
Fax:	

Bill to:	Mike Wray
Company:	IT Corp.
Address:	
City, State ZIP	Concord, CA
Phone:	9252882382
Fax:	

Project Name:	Mercer.
Project Number:	806342

P.O. No.:	

Analysis Requested

Sample Identification	Date Sampled	Time Sampled	Matrix	Sampled & Relinquished By:	Time Relinquished:	Received By:	Lab ID	BTEX (8021)	TPH - Gas (8015M)	TPH - Diesel (8015M)	VOCs EPA 8260B				No. Containers	Remarks
B-16	11-1-00	9:55	SOIL	MY	10:10	MY	66 221-01				X				1	
B-18	11-1-00	10:00	SOIL	MY	10:10		-02								1	
H2 14		9 50		MY	1100		-03								1	
H2-16		950		MY	1100		-04								1	
B-8		950		MY	1130		-05								1	
B-10		955		MY	1130		-06								1	
B-12		955		MY	1130		-07								1	
B-14		1000		MY	1150	✓	-08								1	
B-20		1150		MY	1150		-09								1	
H2-18.				MY			-10								1	
K(0.5-1)				MY			-11								1	
K-2				MY		✓	-12								1	
K 5.5				MY			-13								1	
K4	11-1-00		SOIL	MY		✓	-14				X				1	

Initials:	Printed Name:	Signature:		
MY	Michael Yurovsky	Michael Yurovsky	Date:	
MY	Tina Girard	Tina Girard	Start Time:	
			Stop Time:	
			Hours:	
			Client Sign-off:	

Total Containers:	
Received Intact:	
Received Cold:	
Custody Seals:	

White Copy - Admin/Lab Yellow - Mobile Lab Pink - Client

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

ONSITE ENVIRONMENTAL LABORATORIES, INC.
[redacted]
5500 Boscell Common Fremont, CA 94538 Tel. (510) 490-8571 Fax. (510) 490-8572

Date:	11-1-00
Page:	2 of 2
Laboratory:	On Site
Lab Number:	66221

Project Manager:	Mike Wray
Client Name:	Mercer
Address:	230 Portage Av
City, State ZIP	Palo Alto, CA
Phone:	
Fax:	

Bill to:	Mike Wray
Company:	IT Corp
Address:	
City, State ZIP	Concord, CA
Phone:	925 288 2382
Fax:	

Project Name:	Mercer
Project Number:	306342

P.O. No.:	

Analysis Requested

Sample Identification	Date Sampled	Time Sampled	Matrix	Sampled & Relinquished By:	Time Relinquished:	Received By:	Lab ID	BTEX (8021)	TPH - Gas (8015M)	TPH - Diesel (8015M)	VOCs EPA 8260B					No. Containers	Remarks
B-22	11-1-00	2:10	Soil	MY	2:30	MY	66221-15				X					1	
H2-20		2:30		MY	2:45		-16				X					1	
B-24		4:00		MY	4:10		-17				X					1	
L-1		4:00		MY	4:10		-18				X					1	
L-2		4:00		MY	4:10		-19				X					1	
L-4		4:00		MY	4:10		-20				X					1	
H2-22		4:00		MY	4:15		-21				X					1	

Initials:	Printed Name:	Signature:		
MY	Michael Yurovsky	Michael	Date:	
MY	Tina Girard	Tina Girard	Start Time:	
			Stop Time:	
			Hours:	
			Client Sign-off:	

Total Containers:	
Received Intact:	
Received Cold:	
Custody Seals:	

White Copy - Admin/Lab Yellow - Mobile Lab Pink - Client

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

ONSITE ENVIRONMENTAL LABORATORIES, INC.

5500 Boscell Common Fremont, CA 94538 Tel. (510) 490-8571 Fax. (510) 490-8572

Project Manager:	Mike Wray
Client Name:	IT Corp / Mercer
Address:	230 Portage Av
City, State ZIP	Palo Alto, CA
Phone:	
Fax:	

Bill to:	Mike Wray
Company:	IT Corporation
Address:	
City, State ZIP	Concord, CA
Phone:	925 288 2382
Fax:	

Date:	11.2.00
Page:	1 of 1
Laboratory:	Onsite
Lab Number:	66222

Project Name:	Mercer
Project Number:	801342

P.O. No.:	

Analysis Requested

Sample Identification	Date Sampled	Time Sampled	Matrix	Sampled & Relinquished By:	Time Relinquished:	Received By:	Lab ID	BTEX (8021)	TPH - Gas (8015M)	TPH - Diesel (8015M)	EPA 8260B				No. Containers	Remarks
K-8	11.2.00	1100	SOIL	[illegible]	1110	MW	66222-01				X				1	
K-10	11.2.00	1115	"	[illegible]	1135	"	-02				X				1	
L2-6	11.2.00	1230	"	[illegible]	1245	"	-03				X				1	
L2-8	11.2.00	1235	SOIL	[illegible]	1245	"	-04				X				1	

Initials:	Printed Name:	Signature:		
MW	Michael Yurovsky	[signature]	Date:	
TG	Tina Girard	[signature]	Start Time:	
			Stop Time:	
			Hours:	
			Client Sign-off:	

Total Containers:	
Received Intact:	
Received Cold:	
Custody Seals:	

White Copy - Admin/Lab Yellow - Mobile Lab Pink - Client

WSJ Properties
Final Report
PHASE I
ENVIRONMENTAL ASSESSMENT
SP Right-of-Way
Palo Alto, California

January 1992
(K/J 910056.00)

PREPARED BY:

KENNEDY/JENKS CONSULTANTS
MARATHON PLAZA, TENTH FLOOR NORTH
303 SECOND STREET
SAN FRANCISCO, CALIFORNIA 94107

K/J 910056.00

JANUARY 1992

Kennedy/Jenks Consultants

Engineers and Scientists
Marathon Plaza Tenth Floor
303 Second Street
San Francisco, California 94107
415-243-2150
FAX 415-896-0999

22 January 1991

Mr. Richard Jacobsen
WSJ Properties
3201 Ash Street
Palo Alto, CA 94306

Subject: Phase I Environmental Assessment
Palo Alto, California
K/J 910056.00-G-92

Dear Mr. Jacobsen:

Kennedy/Jenks Consultants (K/J) is pleased to submit this final report of the Phase I Environmental Site Assessment conducted for a Southern Pacific Railroad property located in Palo Alto, California.

If you have any questions regarding information presented in this report, please call.

Very truly yours,

KENNEDY/JENKS CONSULTANTS

Stephen E. Fox
Project Geologist

Bert Drews
Project Manager

INTRODUCTION

Kennedy/Jenks Consultants conducted a Phase I Environmental Site Assessment and subsurface investigation on a portion of an existing Southern Pacific Railroad (SP) right-of-way located in Palo Alto, California. The objectives of the Phase I Environmental Site Assessment and subsurface investigation were to assemble environmental information on the subject property and identify areas or issues that may represent potential environmental risks.

Site Description

The subject property is an approximately 80 feet wide by 1,000 feet long railroad right-of-way bounded by El Camino Real, Park Boulevard, Olive Avenue, and Acacia Avenue in Palo Alto, California. With the exception of a small storage shed located near Park Avenue, no structures are located on the property. The rails were removed between 1985 and 1990, and the property was graded.

The site is bounded by single family residences to the north. Some of these property owners appear to have encroached on the subject property. Palo Alto Nissan is located immediately west of the subject property. Durabond, listed on the Federal CERCLIS, and Fry's Electronics bound the property to the south. Park Automotive is located immediately west of the subject property. The location of the subject property is shown on Figure 1.

Site Visit

K/J investigated the subject property and the area located within a radius of 5000 feet of the subject property on 18 December 1991. K/J walked the subject property and conducted a reconnaissance of the area surrounding the subject property by vehicle.

During the site investigation, K/J personnel did not find evidence of the following:

- surface impoundments
- aboveground storage tanks
- treatment or disposal operations involving hazardous materials or wastes
- stained ground surfaces, and stressed vegetation
- underground storage tanks
- chemical handling or storage areas
- asbestos-containing building materials

- PCB-containing electrical equipment

Two monitoring wells are located on the subject property. These wells were installed by ENVIRON for Hewlett Packard. A description of these wells and results of analytical data are discussed below.

SITE HISTORY

Since the early 1900s, the subject property has historically been used as a railroad right-of-way. According to Steven Staiger, Palo Alto Historian, the City of Palo Alto was serviced by an Urban Trolley system in the early 1900s and his records indicate that the subject property was included in this electrical train system. Mr. John Ivawusich, an engineer with Southern Pacific Railroads, stated the main Southern Pacific Railroad line, San Francisco to Palo Alto, was constructed in 1864; however, the subject property was not purchased until 1911. Upon purchase, the subject property was developed into the Los Altos Railroad line that connected Palo Alto and Santa Cruz, California.

Since the 1911 purchase, the only structures recorded on the subject property is a Southern Pacific Railroad storage shed. The shed is located adjacent to Park Avenue. The railroad tracks and shed were identified on a 1924 Sanborn Map. This map did not indicate the presence of flammable materials or underground or aboveground storage tanks.

Available aerial photographs, since 1955, show the land use of the surrounding area as a mixture of residential and commercial. Steven Staiger, Palo Alto Historian, stated the general study area was never developed by heavy industry. Single family residences predominated in the early 1900s and commercial development has occurred in the most recent years. In the 1955 aerial photograph, agriculture land is visible to the west of the property. The railroad tracks are visible on the subject property in the aerial photograph taken as late as 1990.

A historical review of articles on train accidents, at the Palo Alto City Library, showed one accident occurred in the vicinity of the subject property since the 1950s. The accident was recorded in the Palo Alto Times Newspaper on Tuesday 17, 1969 when a cement truck collided with a backing train crossing El Camino Real. The article did not indicate that any chemical release had occurred as a result of the accident.

Chemical usage on the subject property appears to have been limited to the use of herbicides to the keep the tracks clear of weed and other obstructive vegetation and curve and switch greases.

According to information developed for SP Railroad by Brunsing Associates, Inc., the use of herbicides for weed control has occurred since before World War II. Since 1986 herbicides used on the subject property may have included atrazine, diuron, sulfometuron, and glyphosphate. These compounds are

usually applied during the fall or winter and rain-activated. Typically these herbicides are short-lived and are re-applied annually.

Curve rail oiling mechanisms have been in place on portions of the sp track since the late 1940s. The curve oilers were supplied by 30-gallon underground storage tanks. During the K/J site visit, there was no evidence that a curve oil mechanism and tank ever existed on the subject property.

Switch lubricant may have been used to lubricate any switch plates located on the subject property. Historically this graphite lubricant may have been mixed with kerosene, and diesel oil. During the site visit, no hydrocarbon staining was evident on the subject property.

Aerial Photographs

Information regarding past land use and configuration was obtained by reviewing available aerial photographs from the collection maintained by Pacific Aerial Survey located in Oakland, California. The photographs often provide useful information regarding the site at the time of the photograph; however, they do not provide information about the intervening period between photographs.

Aerial photographs of the site and vicinity were reviewed for the following years: 1955, 1963, 1968, 1972, 1977, 1981, and 1990.

1955 Photograph - The railroad tracks are visible on the subject property. A railroad spur connected to the subject property line terminates at the commercial building located to the south. Agriculture land is visible southwest of the property and production appears to be wheat. Land use surrounding the subject property is a mixture of residential and commercial.

1963 Photograph - Railroad tracks are visible onsite. A structure is visible on the eastern section of the property, adjacent to Park Avenue. Single family residential properties are located to the north of the property, on Olive Street and commercial land use is located to the south and west.

1968 Photograph - The photograph resolution was poor. The site configuration appears similar to the 1963 photograph.

1972 Photograph - The land use in the vicinity of the subject property is a mixture of residential and commercial. Auto parking is visible along the south east end of the property.

1977 Photograph - Photograph is similar to the 1972 photograph. A box-style railroad car is visible on the railroad spur. Two buildings are visible near Park Avenue.

1981 Photograph - Land use surrounding the subject property continues to be a mixture of residential and commercial.

1985 Photograph - Photograph is similar to the 1981 photograph.

1990 Photograph - The railroad tracks have been removed from the subject property. No structures except for the Southern Pacific storage shed previously mentioned are visible on the site. Land use surrounding the property continues to be a mixture of commercial and residential. The Park Avenue buildings are visible east of the subject property. The area adjacent to El Camino Road is an auto dealership.

REVIEW OF REGULATORY AGENCY LISTS AND RECORDS

The discussion presented in this section is based on available information provided by regulatory agencies. A review of available agency lists from the Regional Water Quality Control Board, the California Department of Health Services, and the Environmental Protection Agency was conducted by NATEC Environmental Reporting Service, Ltd., a subcontractor to K/J, to identify potential regulatory issues at the subject property and the area within a radius of 5000 feet of the property. The records search included the review of the following regulatory records and lists.

Records Searched	Date	Sources Lists
CERCLIS	7/91	EPA-Superfund Sites
NPL	10/91	EPA-National Priority List
LIENS	3/91	Federal Superfund Liens
SWIS	7/91	California Solid Waste Information System List
SWAT	7/91	California Solid Waste Assessment Program
LUST	1/91	California Leaking Underground Storage Tanks Lists
CORTESE	11/91	California Hazardous Waste Substances Sites
RCRA	1/91	EPA-Hazardous Waste Generators

BEP	1/91	California Bond Expenditure Plan
ASPIS	1/91	California Abandoned Site Program Information System
WDS	10/90	NPDES Permits-Waste Waste Discharge
SARA	12/90	EPA-Superfund Amendments and Reauthorization Act

The subject property was not listed on the above lists and records. The records review conducted by NATEC Environmental Reporting Service, Ltd. indicated that sixteen CERCLIS, one NPL, forty-one RCRA, twenty-one LUST, thirty-two CORTESE, eighteen ASPIS and twenty-three SARA sites are located within a 5000 foot radius of the subject property. Release of volatile organic chemicals (VOCs) at several of the listed sites have resulted in groundwater contamination in the immediate vicinity of the subject property. As discussed in greater detail below, VOCs have been detected in two on-site monitoring wells. Sites that are located within a 2500 foot radius of the subject property are shown on Figure 1. Summaries of the file review are presented in Appendix A.

CERCLIS

Sixteen sites have been identified on the CERCLIS list, which is complied by the U.S. Environmental Protection Agency of contaminated properties for designation under the Federal Superfund Program pursuant to the Comprehensive Environmental Response Compensation and Liability Act (CERCLA). Sites located in the immediate vicinity of the subject property include the following;

Alza Corporation

Alza Pharmaceutical is located at 1454 Page Mill Road. The site was included on the CERCLIS list in January 1987, because of soil and groundwater contamination. Apparently the contamination resulted from the improper handling of chemicals onsite. Initial subsurface sampling identified chloroform concentrations at 4100 parts per billion (ppb), carbon tetrachloride concentrations at 130 ppb and trichloroethylene (TCE) concentrations at 19 ppb in groundwater. Under the supervision of the RWQCB, a soil gas extraction and treatment system was used for interim remedial measures followed by a groundwater extraction and treatment system. The most recent analytical results showed chloroform concentrations at 200 ppb, carbon tetrachloride concentrations below detection limits, and TCE concentrations at 4.5 ppb. The site is active and RWQCB continues to review operations at the site.

Beckman Instruments

This site is located at 1050 Page Mill Road. The RWQCB listed the site in August 1986 because of trichloroethane (TCA) detected in groundwater. Beckman's records indicate TCE has not been used onsite for the past ten years, but TCA has been detected in downgradient wells of the site. Analytical data for the monitoring wells was not available for review during the records review conducted by K/J. Apparently, no enforcement action has been taken against Beckman at this time; however, the final remedial measures for the site have not been determined by the RWQCB.

Dura-Bond

The site is located at 3201 Ash Street. RWQCB included this site on the CERCLIS in February 1981. Apparently the sources of contamination onsite were an underground storage tank and a waste impoundment from the manufacture of bearings. Sixty cubic yards of contaminated soil from the waste impoundment area were removed. Monitoring wells were also installed on the site. Chemicals identified during initial groundwater sampling showed concentrations of TCE at 708 ppb, xylene isomers and ethyl benzene at 1200 ppb and volatile fuel hydrocarbons at 9500 ppb. Apparently chlorinated solvents were detected during sampling of an upgradient monitoring well, indicating a potential offsite plume. RWQCB has required the installation of additional monitoring wells to determine the extent of the hydrocarbon plume and continued monitoring for fuel hydrocarbons.

Eastman Kodak Company

Operations at the facility located at 925 Page Mill Road included photographic film and paper processing. RWQCB's review of facility files indicate TCE was used onsite. The facility is located upgradient of an unexplained chlorinated solvent source and groundwater sampling showed TCE concentrations at 610 ppb, tetrachloroethylene (PCE) at 63 ppb and 1,1-dichloroethene (1,1-DCE) at 150 ppb. RWQCB has not determined remedial measures for the facility, because the Kodak submittal to characterize the potential contamination sources was rejected by RWQCB in February 1990.

Hewlett Packard Facility

This Hewlett Packard facility, which manufactures electronics equipment, is located at 640 Page Mill Road. Initial site investigations began in 30 June 1981. The source of contamination identified onsite was a leaking solvent waste tank. The tank was removed in July 1981 with an additional 100 cubic feet of contaminated soil. Initial analytical results showed TCE and 1,1-dichloroethane (1,1-DCA) in groundwater. An air stripper system was used for interim remedial measures. Apparently, the identified chemicals have migrated offsite and may have been intercepted by the Highway Underpass Dewatering System. The June 1991 Analytical Groundwater Report summarized by the RWQCB showed TCA

concentrations at 8900 ppb, TCE concentrations at 680 ppb, and 1,1 DCA concentrations at 380 ppb. The site is active and final remedial measures are not completed.

Hewlett Packard Facility

A second Hewlett Packard facility, identified on the CERCLIS list, is located at 395 Page Mill Road. In June 1982, sources of groundwater contamination onsite were identified as a leaking underground storage tank, chemical storage areas, and degreaser pits. Initial groundwater sampling showed chemical concentrations of 1,1,1-TCA at 93 ppb, TCE at 320, and 1,1 DCA at 7 ppb. During site characterization, in addition to onsite sources, chemical pollutants were found to be migrating onto the site from another source. A soil vapor recovery system was installed for the underground tank contamination and according to the RWQCB's records this phase of operations was completed in February 1989. The most re ent subsurface analytical sample results showed 1,1,1-TCA concentrations at 46 ppb, TCE concentrations at 230 ppb and 1,1 DCA concentrations below the detection limit. The RWQCB has required additional investigations to determine on and offsite source contributions.

Stanford Cleaners

Stanford Cleaners is located at 2875 El Camino Boulevard approximately one-tenth of a mile northwest of the subject property. The RWQCB identified contaminated subsurface conditions on 30 April 1982. Apparently soils were impacted as result of a leaking waste solvent underground storage tank. The tank along with 360 cubic feet of contaminated soil was removed and the RWQCB recommended a program of semi-annual/annual monitoring of groundwater. Initial analytical results detected 140 F Solvent, trans-1,2-dichloroethene (trans-1,2-DCE) and 1,1,1-TCA in groundwater. The RWQCB did not require a groundwater extraction system for the site. The site currently is recorded with the RWQCB as inactive.

Varian Associates Corporation Headquarters

Varian Associates located at 611 Hansen Way manufactures electronic equipment. According to RWQCB's records, three areas are under investigation at this property. The areas include VOC chemical release near Building 1, gasoline contamination release near Building 4, and VOC contamination near Building 4. Initial groundwater analytical data showed concentrations of TCE at 4,100 ppb, 1,1-DCE at 180 ppb, and 1,1 DCA at 98 ppb. During the site characterization, analytical data collected in a upgradient well indicated a potential offsite source migrating on to the site. Apparently the RWQCB has not determined the final remedial measures for site and quarterly review of monitoring data continues. The most recent available analytical data for the groundwater showed TCE concentrations at 490 ppb, 1,1-DCE concentrations at 140 ppb and 1,1-DCA concentrations at 82 ppb.

Varian Associates

The second Varian property, identified on the CERCLIS list, is located at 601 California Avenue. This facility also manufactures electronic equipment. The RWQCB identified the site in May 1986. Contamination sources were identified as a leaking underground tank and improper chemical handling. Initial groundwater sampling data showed chemical concentrations of TCA at 62 ppb, TCE at 16,000 ppb, and 1,1 DCE at 28 ppb. RWQCB required the construction of a groundwater extraction system onsite and characterization of the downgradient plume. The RWQCB has not determined the final remedial measures for the site. The most recent available analytical data submitted to the RWQCB showed concentrations of TCA at 32 ppb, TCE at 120 ppb, and 1,1 DCE at 20 ppb. The RWQCB has taken enforcement actions against the site. These regulatory actions are being addressed by Varian.

NPL

The Hewlett Packard facility located at 640 Page Mill Road, also listed on the CERCLIS list, has been listed on the NPL list. The U.S. EPA selects sites from the CERCLIS list and prioritized the sites for their significant risk to human health and the environment. A NPL site can receive remedial funding under CERCLA, because the site is considered the highest priority for remedial action. The Hewlett Packard site is located two-tenths of a mile northwest of the subject property. As stated in the CERCLIS section, the VOCs have migrated off site and the RWQCB continues to investigate the site.

RCRA

Hazardous waste generators have been identified in the vicinity of the property. Generators in this classification are required to have a U.S. Environmental Protection Agency identification number and must comply with the provisions of the Resource Conservation and Recovery Act (RCRA).

Twenty-six hazardous waste generators have been identified in the vicinity of the subject property. Many of these RCRA facilities have released VOCs into groundwater and soils. As mentioned previously, VOCs have been detected in groundwater beneath the subject property. It is unlikely, given the historical use of the property, that activities on the subject property have resulted in the release of chemicals to groundwater.

LUST

The Regional Water Quality Control Board (RWQCB) of Santa Clara County provides a list of site names and addresses of reported leaks from underground storage tanks. Six sites with leaking underground storage tanks have been identified in the immediate vicinity of the property. The sites include the following:

The Palo Alto Nissan auto dealership located at 411 Acacia Street is immediately adjacent the subject property. The Nissan site is also listed on the RCRA list. A leaking waste oil underground storage tank has been identified on the site. The extent of contamination is not known and additional investigation is necessary. Palo Alto Nissan leases a portion of the subject property. Nissan uses the property to park new and used cars. The leaking underground waste oil storage tank mentioned above is not located on the subject property.

Jost Heating and Sheet Metal, Inc. is located at 412 Olive Avenue. The site is located one-tenth of a mile from the subject property. A leak of unleaded gasoline has not been characterized and no action taken since the initial report. The RWQCB is currently reviewing the site.

Bleiber Iron Works located at 411 Page Mill Road is located two-tenths of a mile northwest of the subject property. The substance released was gasoline. An initial release leak report was submitted to the RWQCB; however, no action has been taken by the responsible party since that report. It is not known if the groundwater has been impacted by the release.

The Varian Associates site at 425 Lambert Street is located three-tenths of mile from the subject property. The substance released on site is gasoline. It is unclear if the groundwater has been impacted. It is also not apparent if an initial release report has been filed with the RWQCB.

The Chevron Service Station at 775 Page Mill Road is located three-tenths of a mile from the site. An assortment of hydrocarbon products have been released to the soil. A remediation plan was approved by the RWQCB for the treatment of contaminated soils which included excavation and onsite aeration with disposal to an approved site. It is not known if the groundwater has been impacted at this site.

The Hohback site at 216 Page Mill Road is located two-tenths of a mile northeast of the subject property. Gasoline was released and groundwater has been impacted. An initial investigation report was submitted to the RWQCB; however, no action has been taken since that report.

The remaining sites on the LUST list are not in the immediate vicinity of the subject property.

CORTESE

The CORTESE list is complied by the California State Office of Planning and Research and provides listing of hazardous waste/substances sites within the State. Fifteen sites have been identified in the immediate vicinity of the subject property. These sites have also been identified on the LUST list with the exception of a listed site located at 2901 Park Avenue. This site is also listed on the ASPIS list as a Southern Pacific Railroad property. Both Randy Smith and Rob Cranse of Southern Pacific Railroad were unaware of a contaminated site belonging to Southern Pacific

at this address. Additional information will be requested from the California Department of Health Services (California Environmental Protection Agency). Any new information obtained will be forwarded to WSJ Properties when the information is received.

ASPIS

Sites in the vicinity of the property have been identified on the Abandoned Sites Program Information System (ASPIS). The list consists of potential hazardous waste sites and is not a documentation of an incident. The Hewlett Packard facility at 640 Page Mill Road is the closest site to the subject property as previously mentioned. The site is listed on the CERCLIS and NPL lists. The remaining sites listed on the ASPIS sites are also listed on the LUST, CORTESE and CERCLIS list.

SARA

Six SARA sites have been identified within the 5000 feet radius of the subject property. Section 313 of the Emergency Planning and Community Right to Know Act (Superfund Amendments and Reauthorization Act of 1986) requires certain facilities to file annual toxic chemical release inventory forms with the U.S. Environmental Protection Agency and the California Environmental Affairs Agency. The reports to the regulatory agencies include information on releases to air, water and land. The sites listed are also included on the CERCLIS List. The closest sites are Hewlett-Packard located at 395 Page Mill Road and Varian Associates located at 611 Hansen Way. The invertory release data is presented in the summarization report (Appendix A).

OTHER AGENCY CONTACTS

In conjunction with the environmental records review, K/J contacted other local and State agencies and individuals who may have knowledge of activities conducted on the subject property. The content of these telephone conversations are summarized in Appendix B.

DESCRIPTION OF FIELD ACTIVITIES

On 19 and 20 December 1991, eight soil borings (SB-1, SB-2, SB-3, SB-4, SB-5, SB-6, SB-7 and SB-8) were drilled at the site by HEW Drilling Inc. of East Palo Alto, using a CME-75 drill rig equipped with 8-inch hollow stem augers and split-spoon samplers. The boreholes were located on an east-west line across the SP right-of-way and the borings were drilled within 10 to 15 feet of the centerline of the old railbed. The locations of the soil borings are shown on Figure 2.

From each soil boring, four soil samples were driven at the following approximate depths: from 5.0 to 6.5 feet, 10.0 to 11.5-feet, 15.0 to 16.5-feet and from 18.0 to 19.5-feet below ground surface. At each sampling interval, the split spoon sampler, which was filled with three, 2-inch 6-inches brass liners was driven 1.5-

feet. From each drive interval, a soil sample was selected from the three brass liners for analysis for TPH as gas and diesel, VOCs, organochlorine pesticides, PCBs, 17 Title 22 Priority Metals, semi-volatile organics, and oil and grease. Each boring was logged noting the soil types, contacts between the different soil intervals and other such pertinent information such as color, and moisture content.

The boring installation and sampling procedures are described in greater detail in Appendix C. Boring logs of boreholes drilled during this investigation are presented in Appendix D.

RESULTS OF SOIL AND GROUNDWATER SAMPLING

As indicated above, four soil samples were collected from each soil boring, and retained for potential laboratory analysis. From each soil boring, selected soil samples from specific sampling intervals were composited by the laboratory and analyzed as one sample. In addition, selected soil samples from each boring were analyzed as individual samples. From each soil boring, soil samples collected from the 5.0 to 6.5-foot and 18.0 to 19.5-foot intervals were composited and analyzed as one sample. These composite samples were analyzed for TPH as gas and diesel (LUFT Mod. Method 8015), VOCs by EPA Method 8240, organochlorine pesticides and PCB's by EPA Method 8080 and 17 Title 22 Priority Metals. The shallow soil samples collected from the 5.0 to 6.5-foot interval from each boring were also analyzed as individual samples for oil and grease.

Composite soil samples from soil borings SB-1, SB-4, SB-7 and SB-8 were also analyzed for semi-volatile organics by EPA Method 8270. These borings were located adjacent to commercial or industrial activities.

No grab-groundwater samples were collected from the shallowest onsite aquifer during the investigation because previous investigations (ENVIRON data submittal to K/J on 6 January 1992), detected VOCs in groundwater from onsite monitoring wells F76A2 and F77A1. Monitoring well F77A1 was screened in the shallowest onsite water bearing zone from 18.5 to 28.5 feet below ground surface. Monitoring well F76A2 was screened from 40 to 50 feet below ground surface, in what appears to be the next deepest water bearing zone. The well specifications for the monitoring wells F76A2 and F77A1 also provided by ENVIRON on 13 January 1992 are presented in Appendix E.

Laboratory data was provided to K/J by ENVIRON (6 January 1992) on groundwater samples collected from the two above mentioned monitoring wells from February 1990 through August 1991. Trichloroethylene (TCE) appears to be the primary chemical of concern detected in groundwater samples collected from monitoring well F77A1. Concentrations of up to 260 ppb of TCE were detected in monitoring well F77A1 during the monitoring period. Other VOCs detected in groundwater samples collected from well F77A1 are Methylene Chloride, Acetone, 1,1,1-TCA, 1,1-DCE, c-1,2-DCE and 1,1-DCA.

Concentrations up to 2.6 ppb of TCE and 1.2 ppb of 1,1-DCA were detected in the groundwater samples collected from the deeper monitoring well, F76A2. Laboratory results provided by ENVIRON are presented in Appendix F.

Laboratory analytical reports and chain of custody forms for the soil samples collected during the Kennedy/Jenks investigation are presented in Appendix G.

VOCs

As mentioned above, groundwater samples collected from two onsite monitoring wells, indicate that the shallow groundwater onsite contains detectable concentrations of VOCs. However, VOCs were not detected above the laboratory detection limit in the eight composite soil samples collected.

PCBs

PCB's were not detected above the laboratory detection limit in the eight composite soil samples collected.

TPH as GAS AND DIESEL

TPH as gas and diesel was not detected above the laboratory detection limit in the eight composite soil samples collected.

ORGANOCHLORINE PESTICIDES

Organochlorine pesticides were not detected above the laboratory detection limit in the eight composite soil samples collected.

SEMI-VOLATILE ORGANICS

Semi-volatile organics were not detected above the laboratory detection limit in the four composite soil samples collected.

OIL AND GREASE

Oil and grease was detected at 60 ppm in samples SB-1A, SB-4A and SB-5A. The analytical results are presented in Table 1. The elevated concentrations of oil and grease detected may be attributed to either oil and grease associated with the track maintenance or may be attributed to background organics present in the soil. These oil and grease values do not appear to represent a significant problem throughout the site.

CALIFORNIA TITLE 22 METALS

Concentrations of metals detected in the soil samples are summarized in Table 2. The detected metal concentrations are compared to average metals concentrations

in soils reported by Lindsay, I.W.L Lindsay, 1979, Chemical Equilibria in Soil, John Wiley and Sons, New York and Total Threshold Limit Concentrations (TTLCs) established for the designation of hazardous wastes by the State of California. TTLCs for the metals of concern are not exceeded.

The concentrations of metals detected in the soil samples appear to be representative and consistent with metal background soil concentrations reported by Lindsay.

FINDINGS AND CONCLUSIONS

The following finding and conclusions are based on the data gathered during this investigation, the laboratory analytical results, the review of site history, and the review of regulatory agency lists and records.

- A review of the site history does not indicate that the subject site has had any other historical use other than a railroad right-of-way. The historical records also do not indicate that any major spills or industrial accidents have occurred on the site.

- A review of aerial photographs taken of the site from 1955 through 1990 do not indicate any use of the site other than as a railroad right-of-way. Between 1985 and 1990, the railroad tracks were removed from the site.

- A review of the regulatory lists and records was conducted for the subject property and the area within a radius of 5000 feet of the property. The records review indicated that sixteen CERCLIS, one NPL, forty-one RCRA, twenty-one LUST, thirty-two CORTESE, eighteen ASPIS and twenty-three SARA site are located within this 5000 foot radius. Activities at some of these listed sites have resulted in the release of chemicals to soil and groundwater in the immediate vicinity of the subject property.

- TPH as gas and diesel, VOCs, organochlorine pesticides, and PCBs were not detected above the detection limits of the analytical methods, in composite soil samples collected at the site to a depth of 19.5 feet below ground surface (borings SB-1, SB-2, SB-3, SB-4, SB-5, SB-6, SB-7 and SB-8)

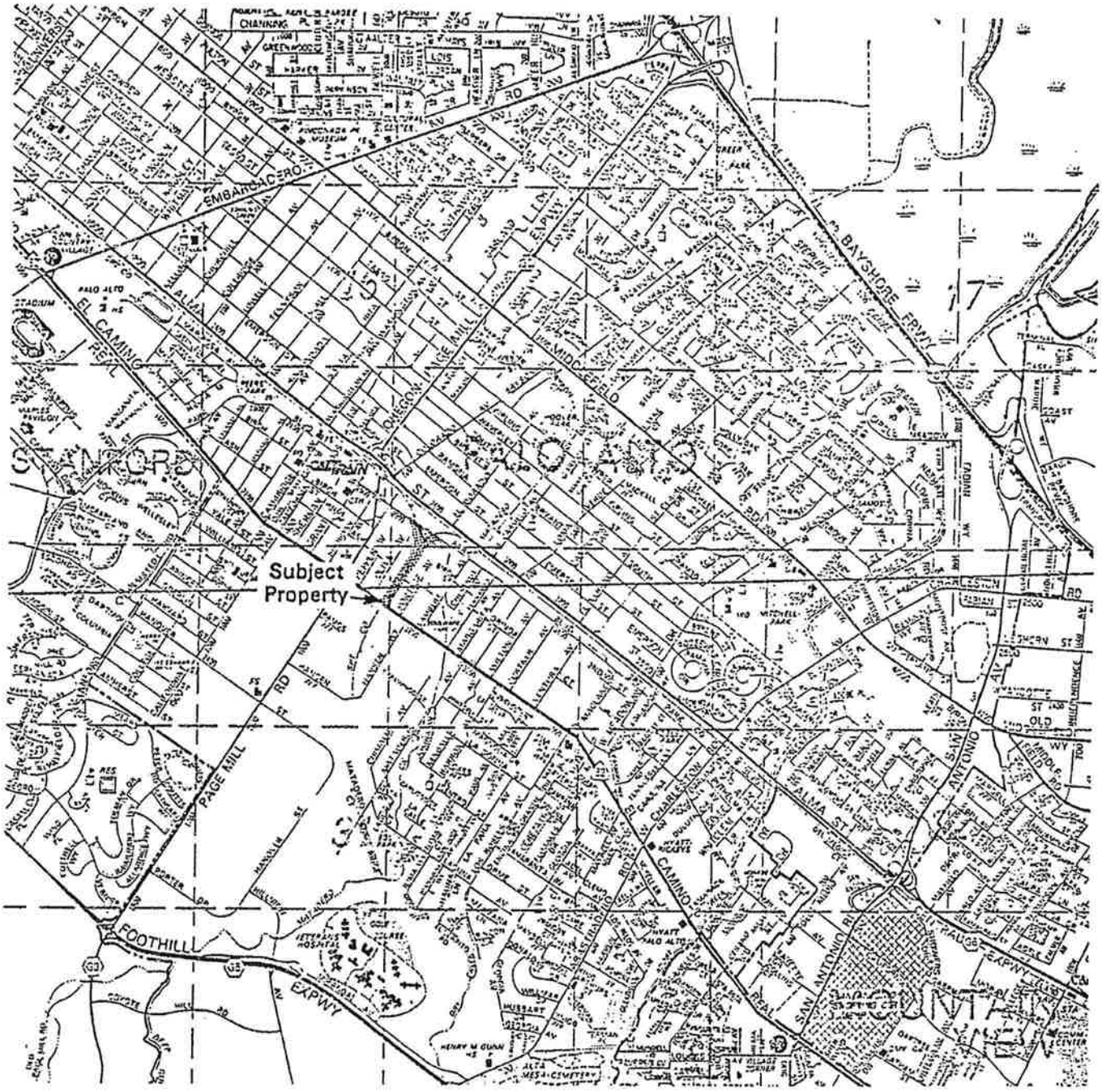
- Semi-Volatile Organics were not detected above the detection limits of the analytical methods, in selected shallow composite soil samples collected at the site (borings SB-1, SB-4, SB-7 and SB-8).

- Even though the shallow groundwater at the site contains VOCs at detectable concentrations, it does not appear that the unsaturated zone is significantly impacted by chemicals of concern.

- Detectable metal concentrations were present in all of the soil samples collected at the site. The concentrations of metals appear to be consistent with background soil concentrations (I.W.L Lindsay, New York, 1979).

- Concentrations of oil and grease were detected in three shallow soil samples collected at the site. The concentrations were only slightly elevated above detection limits and do not appear to represent a significant problem.

FIGURES



Legend:

▒▒ Subject Property

N

0 1/2 1

Approximate Scale in Miles

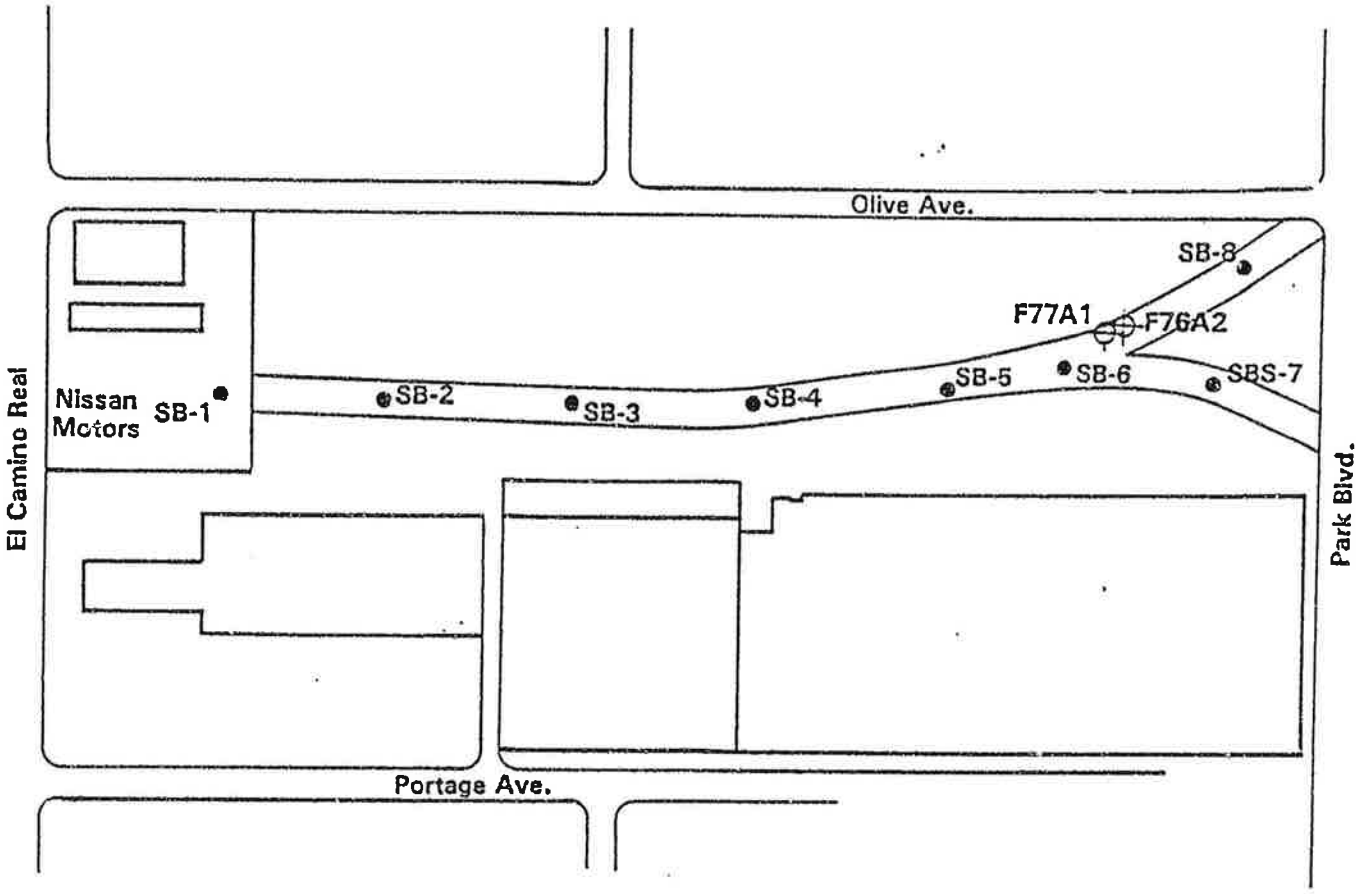
Kennedy/Jenks Consultants

WSJ Properties
SP Right-of-Way
Palo Alto, California

Vicinity Map

K/J 910056
January 1992

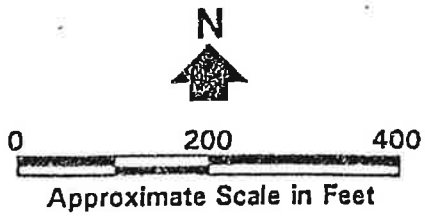
Figure 1



Legend:

SB-8 ● Soil Boring Location and Number

F77A1 ⊕ Monitoring Well Location and Number



Kennedy/Jenks Consultants

WSJ Properties
SP Right-of-Way
Palo Alto, California

Soil Boring Location Map

K/J 910056
January 1992

Figure 2

TABLES

DRAFT

TABLE 1
OIL AND GREASE DETECTED IN SOILS (mg/kg)
WSJ PROPERTIES
SP RIGHT-OF-WAY
PALO ALTO, CALIFORNIA
K/J 910056.00

SAMPLE #	OIL AND GREASE
SB-1A	60
SB-2A	<25
SB-3A	<25
SB-4A	60
SB-5A	60
SB-5A	<25
SB-6A	<25
SB-7A	<25
SB-8A	<25

TABLE 2

METALS DETECTED IN SOILS (mg/Kg)
WSJ PROOPERTIES
SP RIGHT-OF-WAY
PALO ALTO, CALIFORNIA
K/J 910056.00

SAMPLE #	Sb	As	Ba	Be	Cd	Cr	Co	Cu	Pb	Mo	Ni	Se	Ag	Tl	V	Zn	Hg
SB-1A/SB-1D	<5	<3	110	<0.2	<0.2	37	6.4	10	<2	<1	48	<3	<1	<3	12	25	<0.05
SB-2A/SB-2D	<5	<3	74	<0.2	<0.2	29	5.0	12	<5	<1	37	<3	<1	<3	7.6	25	0.52
SB-3A/SB-3D	<5	<3	93	<0.2	<0.2	34	6.5	22	<2	<1	45	<3	<1	<3	11	33	0.08
SB-4A/SB-4D	<5	<3	73	<0.2	<0.2	32	5.2	19	<2	<1	41	<3	<1	<3	10	28	<0.05
SB-5A/SB-5D	<5	<3	90	<0.2	<0.2	56	11	18	<2	<1	77	<3	<1	<3	12	39	<0.05
SB-6A/SB-6D	<5	<3	120	<0.2	<0.2	44	8.7	16	2.9	<1	59	<3	<1	<3	13	39	<0.05
SB-7A/SB-7D	<5	<3	59	<0.2	<0.2	40	8.3	11	<2	<1	53	<3	<1	<3	6.7	38	<0.05
SB-8A/SB-8D	<5	<3	74	<0.2	<0.2	38	5.9	9.7	<2	<1	45	<3	<1	<3	7.1	35	<0.05
TTLC[1]	500	500	10,000	75	100	2,500	8,000	2,500	1,000	3,500	2,000	100	500	-	2,400	5,000	20
Lindsay Average[2]	-	5	430	6	0.06	100	8	30	10	2	40	0.3	0.05	-	100	50	0.03

NOTES:

1. California Title 22 CCR 66699.
2. I.W.L. Lindsay, Chemical Equilibria in Soils, John Wiley and Sons, New York, 1979.
3. A previous sample was run for metals that detected lead at 350 ppm for SB-2A/SB-2D. The separate intervals were analyzed; however, lead concentrations above the limits of detection were not detected. The composite sample was re-analyzed after the entire core was mixed. Lead was below detection limits.

PES Environmental, Inc.
Engineering & Environmental Services

January 12, 2000

500.009.02.001

WSJ Properties
3201 Ash Street
Palo Alto, California 94306

Attention: Mr. Greg Osborn

FACILITY CLOSURE ASSESSMENT
FORMER MERCER PROCESSING FACILITY
230 PORTAGE AVENUE
PALO ALTO, CALIFORNIA

Dear Mr. Osborn:

This letter has been prepared on behalf of WSJ Properties (WSJ), and presents the findings of PES Environmental, Inc.'s (PES) facility closure assessment of the former Mercer Processing Facility, located at 230 Portage Avenue in Palo Alto, California (Plate 1). Mercer Processing has recently vacated the tenant space and WSJ Properties requested that PES conduct a facility closure assessment. We conducted the assessment in accordance with our proposal to WSJ dated December 8, 1999.

This report includes a general description of the former facility operations, a summary of our review of environmental documentation prepared by local regulatory agencies, a discussion of the shallow soil sampling procedures and results, conclusions and recommendations for additional investigation.

BACKGROUND INFORMATION

According to information presented to PES, Mercer Processing had been at this location since 1989 and had just recently ceased operations. Mercer Processing reportedly conducted freeze-drying of food at the subject property. They have reportedly relocated their freeze-dying operation to another property in Central California.

On December 1, 1999, PES conducted a site inspection of the facility. A Site Plan is presented as Plate 2, and Plate 3 shows the layout of the former Mercer Processing facility. Operations performed by Mercer Processing at this location included freeze-drying and packaging of food products. Refrigeration equipment used in the freeze-drying process

contained solvents including trichloroethylene (TCE) and Genesolv 2000. According to Mr. Dave Noland, the president of the business, the refrigeration equipment utilized TCE from approximately 1989 until 1991, and Genesolv 2000 from 1991 until the facility ceased operations. Genesolv 2000 is also referred to as Refrigerant 141b and is composed of 1,1-dichloro-1-fluoroethane.

DOCUMENT REVIEW

PES was provided facility closure documentation by Mr. Noland. These documents included: (1) a Santa Clara County Hazardous Materials Compliance Division (SCCHMCD) Hazardous Materials Business Plan (HMBP) dated September 11, 1998; (2) a SCCHMCD Hazardous Materials Facility Closure Application dated September 17, 1999; (3) a City of Palo Alto Fire Prevention Bureau (CPAFPB) Record of Additional Information dated November 9, 1999; (4) a CPAFPB Record of Additional Information dated November 11, 1999; and (5) a Record of Additional Information dated December 21, 1999. In addition, PES interviewed CPAFPB staff who had previously inspected the facility and were involved in the facility closure process. A brief summary of the findings of the document review follows. Copies of these documents are presented in Appendix A.

The SCCHMCD oversees the State of California Hazardous Materials Storage Ordinance (Chapter 6.95, Health & Safety Code, Title 22, Division 4.5, California Code of Regulations), and has designated the CPAFPB to implement the ordinance at facilities within the City of Palo Alto. Consequently, CPAFPB inspectors oversee hazardous materials business closure activities.

Review of the September 11, 1998 HMBP indicated that the Mercer Processing facility stored approximately 650 gallons of Genesolv 2000, and smaller quantities (less than 55 gallons) of water treatment chemicals and lubricating oils.

Mercer Processing submitted a Hazardous Materials Facility Closure Application on September 17, 1999. The application stated that Mercer Processing will remove the freeze drying system, the heat transfer fluid (Genesolv 2000) will be sold to a recycler, the vacuum pump oil and refrigerant will be sold to a recycler, and water treatment chemicals will be shipped to their new facility. The heat transfer fluid piping was to be disassembled and also shipped to their new facility.

The December 21, 1999 Record of Additional Information documents the findings of the final facility closure inspection performed by the CPAFPB. According to the CPAFPB report, the removal of equipment and wastes had been performed and no remaining site contamination issues were noted. The only item remaining in the permitting process was for Mercer Processing to prepare and submit a Final Closure Report. The report was to document closure

procedures performed and provide manifests for chemicals and chemical-containing equipment removed from the site.

According to Mr. Noland, the Final Closure Report will be submitted to the CPAFPB the week of January 17, 2000.

According to CPAFPB staff, no spills or hazardous materials storage violations were reported for the facility.[1] Additionally, CPAFPB staff have requested that if soil sampling was performed, that the results of the sampling be provided to them for their review and potential referral to other regulatory agencies.[2]

SITE REINSPECTION

On December 21, 1999, PES returned to the site to reinspect the condition of the floor following removal of the processing equipment. The concrete floor in the location of the former processing equipment was visually observed to be in good condition throughout without any significant cracking. Some minor staining was observed on the floor at the location that was the northern end of the refrigeration unit. Soil boring GS-5 was placed in this location (see discussion of soil sampling below).

In PES' opinion, the condition of the concrete floor at the site had not been significantly degraded by operations formerly conducted by Mercer Processing.

SHALLOW SOIL BORING AND SOIL SAMPLING METHODOLOGIES

Following reinspection of the facility, PES selected five soil sampling locations. Prior to sampling, an underground utility survey was performed using electromagnetic line location equipment by Foresite, Inc. Once the proposed sampling locations were cleared of underground utilities, the concrete floor was cored and the cores removed in preparation for hand-augering. Soil sampling locations are shown on Plate 3.

Soil borings were advanced using a hand auger. During hand-augering, concrete rubble and other coarse fill materials were encountered which made advancement of the borings difficult. Additionally, concrete rubble prevented the collection of soil samples at several locations. Due to the presence of these coarse fill materials, PES could not collect any soil samples for analysis at boring GS-1. PES proposed to collect samples at depths of 0.5, 2 and 4 feet below ground surface (bgs). The deepest sample collected from boring GS-2 was at 3.5 feet bgs, and

[1] Personal communication, January 11, 2000, between Saul Germanas of PES and Thomas Newland of CPAFPB.
[2] Personal communication, January 12, 2000, between Saul Germanas of PES and Thomas Newland of CPAFPB.

at only 0.5 feet bgs at boring GS-3. PES was able to collect deeper samples from borings GS-4 and GS-5 and retrieved samples from 0.5, 2, 4 and 6 feet bgs at these two locations. Field screening of the soil was performed using an organic vapor meter (OVM). Low PID readings (0 to 5 parts per million [ppm]) were observed during augering and sampling.

Where possible, samples were collected using a 25-pound hand-held drive sampler lined with 6-inch long stainless steel sample tubes. Once filled, the sample tubes were covered at each end with teflon sheeting and plastic end caps. End caps were sealed with silicone tape.

To avoid cross-contamination, all sampling equipment was decontaminated prior to and between sampling events. Following completion of the soil sampling, the boreholes were partially backfilled with cement. Additional sealing of the boreholes will be performed in the near future. Soil cuttings generated from sampling were stored in 5-gallon poly containers. Rinsate generated from the decontamination of sampling equipment was also stored onsite.

The shallowest soil sample collected from each boring was submitted for analysis under proper chain-of-custody control to Entech Analytical Labs, Inc. of Sunnyvale, California. The soil samples were analyzed for volatile organic compounds (VOCs) by EPA Test Method 8260B. Based on the results of the shallow sample analyses, deeper samples were subsequently submitted for analysis of VOCs. Soil sample analytical results are compiled in Table 1 and also shown on Plate 3. Laboratory analytical data sheets and chain-of-custody records are presented in Appendix B.

SOIL ANALYTICAL RESULTS

TCE was detected in two of the ten soil samples submitted for analysis. The only sample collected from boring GS-3 (at 0.5 feet bgs) was found to contain 470 micrograms per kilogram (μg/kg) of TCE. The deepest sample collected from boring GS-2 (at 3.5 feet bgs) was also found to contain TCE at a concentration of 54 ug/kg.

Acetone, methyl ethyl ketone (MEK) and tert-Butanol were detected in several of the soil samples submitted for analysis at low concentrations.

CONCLUSIONS AND RECOMMENDATIONS

Based on our review of site closure documentation and interview of the CPAFPB inspector who has handled the case, it appears that Mercer Processing has performed the required hazardous materials facility closure process to the satisfaction of the local agency, with the exception of preparing a final closure report. The CPAFPB does not require any further action other than preparation of the report. According to Mr. Noland, this report will be

prepared and submitted to CPAFPB the week of January 17, 2000. The CPAFPB also has requested that the results of soil sampling at the site be provided to them for their review. PES recommends that the results of subsurface sampling be submitted to CPAFPB by Mercer Processing representatives.

Based on the presence of TCE in soil and the absence of deeper soil samples at the locations where TCE was detected, PES recommends additional soil characterization. The objectives of the additional characterization are to better evaluate the lateral and vertical extent of TCE and other detected VOCs in soil, and to demonstrate that TCE has not affected groundwater at this location due to historical activities performed by the tenant. Due to the nature of the fill materials beneath the concrete floor of the facility, the additional sample collection will likely need to be performed utilizing a limited access drilling rig.

We trust this is the information you require at this time. If you have any questions or require any additional information, please call either of the undersigned at (415) 899-1600.

Yours very truly,

PES ENVIRONMENTAL, INC.

Saulius Germanas, R.G.
Senior Geologist

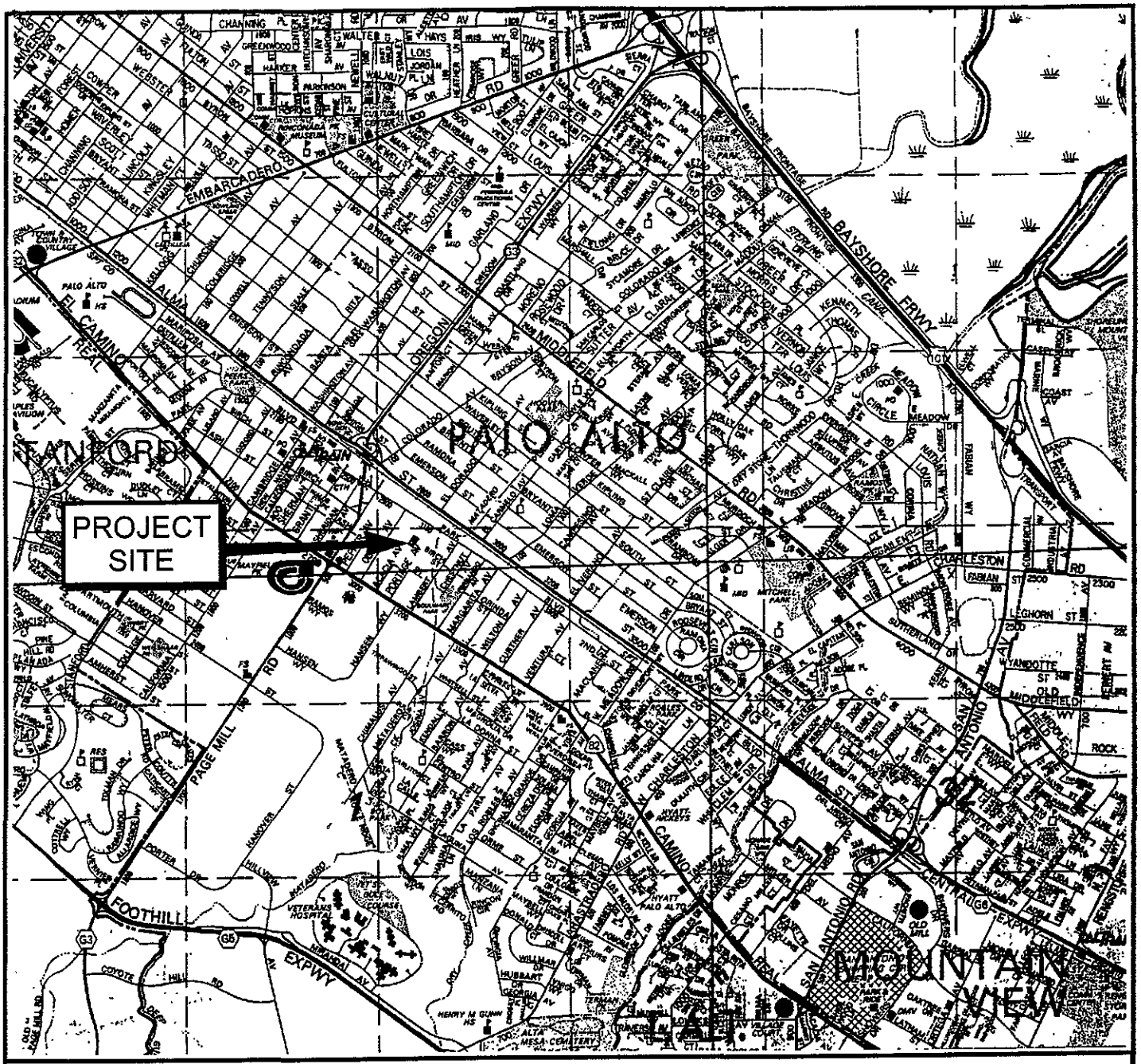
Kyle S. Flory, R.G.
Associate Geologist

Attachment: Table 1 – Summary of Soil Sample Analytical Results
Plate 1 – Site Location Map
Plate 2 – Vicinity Map
Plate 3 – Site Plan and Soil Sample Analytical Results
Appendix A – Mercer Processing Closure Documentation
Appendix B – Laboratory Analytical Reports and Chain-of-Custody Forms

Table 1
Soil Sample Analytical Results
Former Mercer Processing Facility
230 Portage Avenue
Palo Alto, California

Boring Designation	Sample Designation	Date	Sample Depth (feet bgs)	Acetone (µg/kg)	TCE (µg/kg)	MEK (µg/kg)	t-Butanol (µg/kg)
GS-2	GS-2-0.5	12/21/99	0.5	<100	<5	<20	**23**
	GS-2-3.5	12/21/99	3.5	<100	**54**	<20	<20
GS-3	GS-3-0.5	12/21/99	0.5	<500	**470**	<100	<100
GS-4	GS-4-0.5	12/21/99	0.5	<100	<5	**47**	<20
	GS-4-2.0	12/21/99	2.0	**150**	<5	**24**	<20
	GS-4-4.0	12/21/99	4.0	<100	<5	<20	<20
	GS-4-6.0	12/21/99	6.0	<100	<5	<20	<20
GS-5	GS-5-0.5	12/21/99	0.5	**270**	<5	**52**	<20
	GS-5-2.0	12/21/99	2.0	**330**	<5	**47**	<20
	GS-5-6.0	12/21/99	6.0	**120**	<5	<20	<20

Notes:
µg/kg = micrograms per kilogram
bgs = below ground surface
< = compound not detected at or above the respective laboratory reporting limit
TCE = tricholorethylene
MEK = methyl ethyl ketone
t-Butanol = tert-Butanol



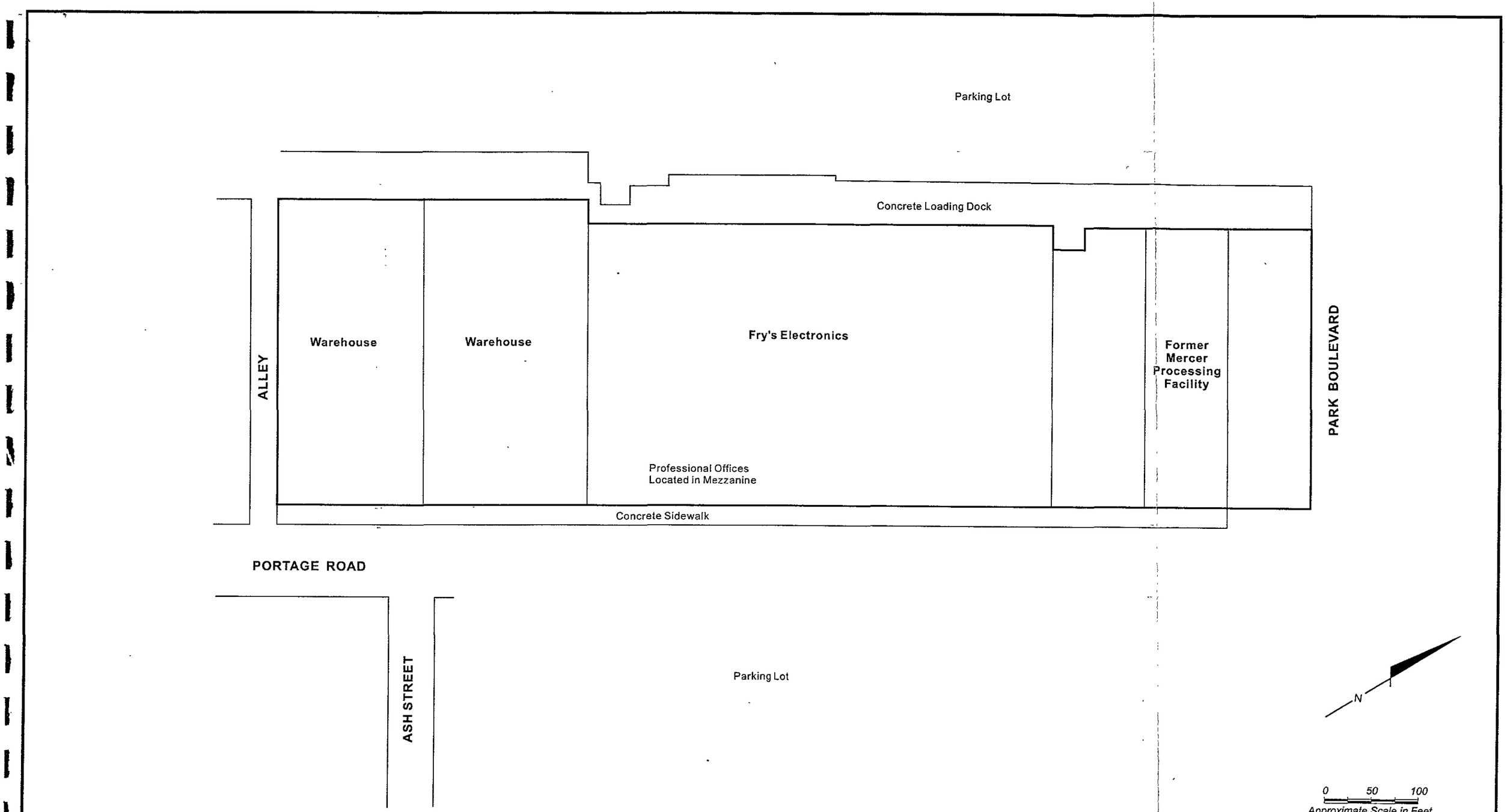
Ref: "The Thomas Guide- Golden Gate Street Guide and Directory" 1993 Edition.

PES Environmental, Inc.
Engineering & Environmental Services

Site Location Map
Former Mercer Processing Facility
230 Portage Avenue
Palo Alto, California

PLATE
1

500.009.02.001	50000902001V1.CDR	SC	01/00
JOB NUMBER	DRAWING NUMBER	REVIEWED BY	DATE

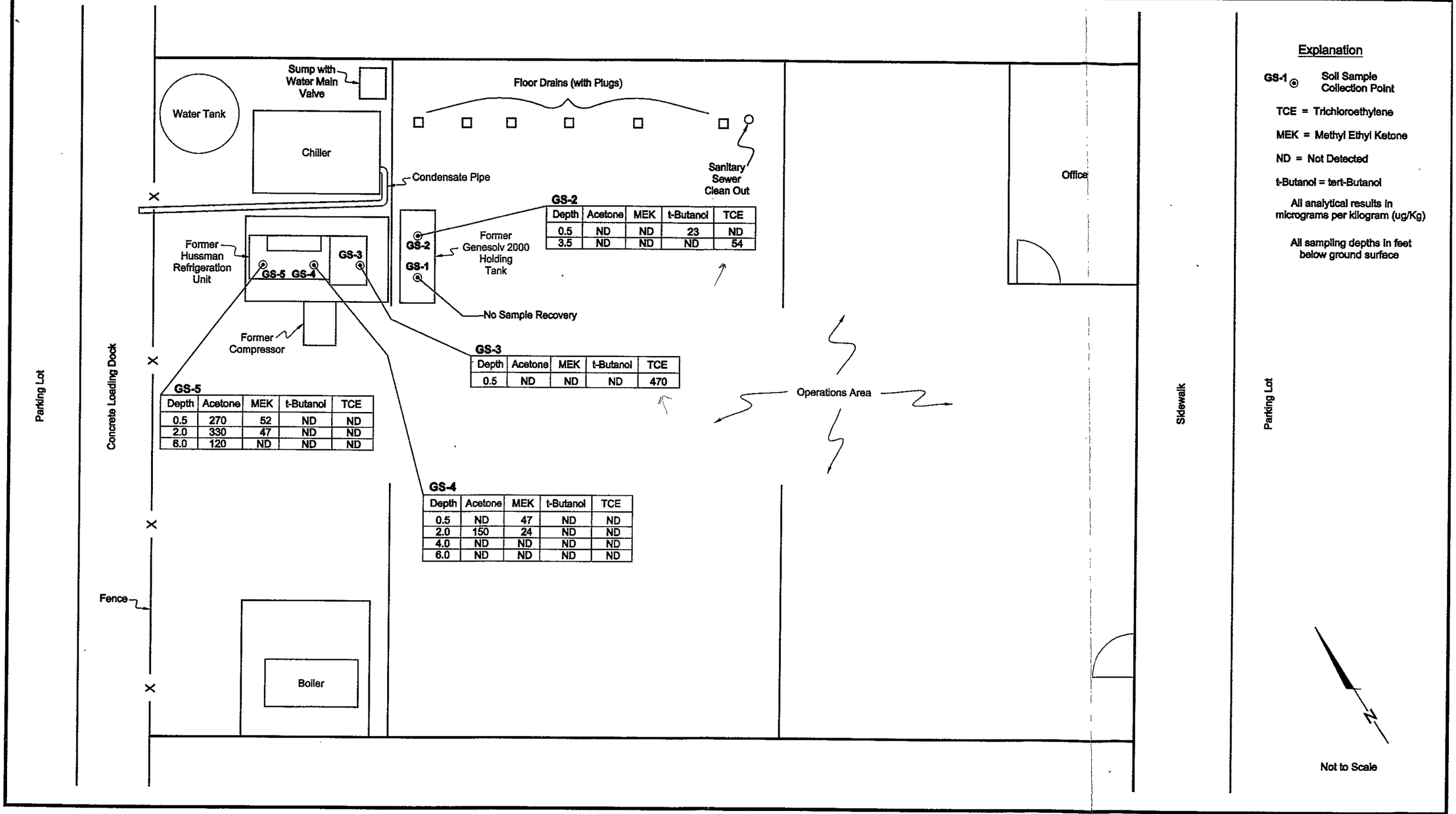


PES Environmental, Inc.
Engineering & Environmental Services

Vicinity Map
Former Mercer Processing Facility
230 Portage Avenue
Palo Alto, California

PLATE
2

500.009.02.001	50000902001s2.CDR	SC	01/00
JOB NUMBER	DRAWING NUMBER	REVIEWED BY	DATE



GS-2

Depth	Acetone	MEK	t-Butanol	TCE
0.5	ND	ND	23	ND
3.5	ND	ND	ND	54

GS-3

Depth	Acetone	MEK	t-Butanol	TCE
0.5	ND	ND	ND	470

GS-5

Depth	Acetone	MEK	t-Butanol	TCE
0.5	270	52	ND	ND
2.0	330	47	ND	ND
6.0	120	ND	ND	ND

GS-4

Depth	Acetone	MEK	t-Butanol	TCE
0.5	ND	47	ND	ND
2.0	150	24	ND	ND
4.0	ND	ND	ND	ND
6.0	ND	ND	ND	ND

Explanation

GS-1 ◉ Soil Sample Collection Point

TCE = Trichloroethylene

MEK = Methyl Ethyl Ketone

ND = Not Detected

t-Butanol = tert-Butanol

All analytical results in micrograms per kilogram (ug/Kg)

All sampling depths in feet below ground surface

PES Environmental, Inc.
Engineering & Environmental Services

Site Plan and Soil Sample Analytical Results
Former Mercer Processing Facility
230 Portage Avenue
Palo Alto, California

PLATE 3

500.009.02.001	50000902001_base	SA	01/00
JOB NUMBER	DRAWING NUMBER	REVIEWED BY	DATE

HAZARDOUS MATERIALS FACILITY CLOSURE APPLICATION

For Use by All Jurisdictions Within the County of Santa Clara

Please complete and submit this form prior to the closure of any aboveground hazardous materials storage system or facility. Based on the information submitted below, and the complexity of the closure, a written Closure Plan may be required (see guidelines).

1. Facility Information: *(Note: Print or type all information)*

Facility Name: Mercer Processing Facility Phone: (650) 494-8992

Site Address: 230 Portage St

City: Palo Alto State: CA Zip: 94306

Contact Name: David Noland Contact Phone: (650) 322-1827 x11

Forwarding Address: 195 Page Mill Road

City: Palo Alto State: CA Zip: 94306 Phone No.: (650) 322-1827

Property Owner Name: WSJ Properties

Property Owner Mailing Address: 3201 Ash Street Palo Alto, CA 94306
If different from site address

City: Palo Alto State: CA Zip: 94306 Phone No.: (650) 493-5310

2. Closure Information:

☒ Full Facility Closure ☐ Partial Facility Closure/Remodel | Proposed Date of Closure: 12/15/1999

Briefly describe the proposed closure activity. Indicate the previous use(s) of the area(s) intended to be closed and the types of chemicals used or stored in the area(s) (i.e. by submitting a copy of the Inventory Statements from your Hazardous Materials Business Plan, etc.). Include equipment, tanks, piping, exhaust and treatment systems, and the proposed final disposition of any hazardous materials and/or wastes. Attach additional pages if necessary.

Freeze Drying System: to be removed. Heat transfer fluid (Genesolv 2000) will be removed from system & sold back to A Recycler. Vacuum pump oil will be removed by recycler. Freon 22 will be pumped back into appropriate containers & sold to A recycler. Water treatment chemicals will be shipped to other facility at their orginal container. When heat transfer fluid piping has been completely emptied, it will be disassembled, & shipped to new facility.

Applicant/Agent's Name *(Print)*: David Noland Title: President

Signature of Applicant/Agent: [signature] Date: 9/17/99

Agency Use Only

Application: ☐ approved ☐ disapproved	Closure Plan: ☐ required ☐ not required	Inspection: ☐ required ☐ not required
Fee Received: $	Receipt No.:	Date: / /
Comments:		
Staff:		Date: / /

UN-033 Rev. 10/10/95

FPB 8A

RECORD OF ADDITIONAL INFORMATION

City of Palo Alto
FIRE PREVENTION BUREAU (415) 329-2184
250 HAMILTON AVENUE PALO ALTO, CALIFORNIA 94301

BUSINESS NAME: T.Y. C. MFG. INC. BUSINESS PHONE: 494-8912

ADDRESS NUMBER: 961 972 NUMBER OR STREET & BUILDING: 230 MOFFETT BLVD TYPE ROOM

CONTACT WITH Dave Alan

TYPE INSP: 4TP DURATION: 120 INSPECTION DATE: 11/8/99 INSPECTOR: LAT

- PRELIMINARY CLOSURE INSPECTION

ITEMS TO ADDRESS FOR CLOSURE:

(1) FOLLOW CLOSURE GUIDELINES FOR CLOSURE APPLICATION. INCLUDE 215^{00} FEE TO: "CITY OF PALO ALTO"

(2) ~~PARKING~~ PIPING THAT TRANSPORTED COOLANT TO BE INSPECTED BY FIRE DEPT. BEFORE DISPOSAL OR RECYCLING.

(3) DOCUMENTATION OF CHEMICAL DISPOSAL VIA SALE TO BE PROVIDED - MANIFESTS ETC.

(4) DOCUMENTATION TO BE PROVIDED REGARDING EQUIPMENT THAT USED CHEMICALS. DOCUMENTATION SHALL INCLUDE A NARRATIVE OF RELOCATION OF EQUIPMENT AND/OR TRANSPORT MANIFESTS.

(5) INSPECTION OF FACILITY TO OCCUR AFTER EQUIPMENT HAS BEEN REMOVED FROM FACILITY (FIRE DEPT. INSP.)

(6) PROVIDE FINAL CLOSURE REPORT TO FIRE DEPT. W/ ALL DOCUMENTATION.

[illegible] FAX [illegible] 321-2081

CONTACT [illegible]

White Copy: File Yellow Copy: Inspector Pink Copy: Data Processing Goldenrod Copy: Contact

FPB 8A

RECORD OF ADDITIONAL INFORMATION

City of Palo Alto
FIRE PREVENTION BUREAU (415) 329-2184
250 HAMILTON AVENUE PALO ALTO, CALIFORNIA 94301

BUSINESS NAME: MERCER PROCESSING
BUSINESS PHONE: 322-1877
ID NUMBER:
NUMBER: 230 STREET & BUILDING: PORTAGE TYPE: ROOM:

CONTACT WITH PETER SNOW

TYPE INSP: FFP DURATION: 4.0 INSPECTION DATE: 11.1.99 INSPECTOR: T.H. CODE: ERROR:

FACILITY CLOSURE INSPECTION

FOOD FREEZE DRY FACILITY

(1) PIPING REMOVED THAT CONTAINED GENESALV 2000 REFRIGERANT (HCFC-141b)
- REFRIGERANT RECOVERED - PROVIDE FIRE DEPT W/ SHIPPING MANIFEST &/or SALES MANIFEST.
- NO INDICATION OF CHEMICAL CONTAMINATION TO PIPING AFTER EVACUATION OF REFRIGERANT FROM PIPING.

* O.K. TO DISPOSE OF PIPING AS WASTE METAL, OR RECYCLE OR REUSE.

ITEMS TO ADDRESS:
(1) CLEAN RUST & CHEMICAL STAINS FROM FLOOR. FURTHER ANALYSIS OF STAINS MAY BE REQUIRED, WHICH MAY INCLUDE CORE & DRILL TO SAMPLE SOIL BENEATH STAINS. FIRE DEPT. WILL DETERMINE REQUIRED ACTION. PROPERLY DISPOSE OF RUST FROM STAIN CLEANING
(2) PROVIDE CLOSURE REPORT INCLUDING MANIFESTS & ANY SOIL SAMPLE RESULTS THAT MAY BE REQUIRED.

INSPECTOR: THOMAS J. Penfield CONTACT X

NOTE: DETERMINE SOIL SAMPLE NEEDS.

White Copy: File Yellow Copy: Inspector Pink Copy: Data Processing Goldenrod Copy: Contact

HAZARDOUS MATERIALS BUSINESS PLAN
Section A - General Information

1. Facility Information: *(Note: Print or type all information. Instructions are located on the other side of this page.)*

Business Name: Mercer Processing Inc Business Phone: (650) 494-8992
Site Address: 230 Portage Ave
City: Palo Alto State: CA Zip: 94306
Dunn & Bradstreet No.: 02-982-4893 Primary SIC Code *(4 digit)*: 2034
Operator Name: Dave Noland Operator Phone: (650) 322-1827

2. Owner Information:

Owner Name: Meecer Family Trust Owner Phone: (650) 322-1827
Owner Mailing Address: 195 Page Mill Road *If different from site address*
City: Palo Alto State: CA Zip: 94306

3. Environmental Contact:

Contact Name: Dave Noland Contact Phone: (650) 322-1827
Contact Mailing Address: 195 Page Mill Road *If different from site address*
City: Palo Alto State: CA Zip: 94306

4. Emergency Contacts:

Primary Emergency Coordinator	Secondary Emergency Coordinator
Name: Tom Schoder	Name: Tim Lacombe
Title: Project Manager	Title: Operations Manager
Business Phone: (650) 494-8992	Business Phone: (650) 322-1827
24 Hour Phone: (408) 257-4326	24 Hour Phone: (650) 368-3286
Pager No.: (415) 698-9745	Pager No.: (415) 698-9744

☐ *(Check box only if applicable)* Additional Emergency Coordinators are listed on page ____ of this HMBP.

5. California Accidental Release Prevention (CalARP) Program:

Are CalARP-Regulated Substances Present On-Site? ☐ Yes; ☒ No *(Note: See instructions on reverse side of this page.)*

6. Additional Required Information:

EPA ID No.: Cal 000 099 480 Principal Type of Business: Food Processing
Billing Address: *If different from owner mailing address* City: State: Zip:
Industrial Waste Discharge Contact: Phone No.: ( )
Property Owner: WSJ Phone No.: (650) 493-5310
Facility Hours of Operation: 7Am - 4Pm No. of Employees Per Shift: Day 8-10; Swing: ; Grave

7. OWNER/OPERATOR CERTIFICATION: Based upon my inquiry of those individuals responsible for obtaining the information, I certify under penalty of law that I have personally examined and am familiar with the information submitted in this Hazardous Materials Business Plan and believe the information is true, accurate, and complete.

Name of HMBP Document Preparer *(Print)*: Tim Lacombe Title: Operations Manager
Signature of Owner/Operator: Date: 9/11/99

Instructions for Completion of Section A of the HMBP

Page 1 is designed to conform with IOES Form No 2709 6/201

The following table describes the information required on Page 1 of the HMBP:

Section No.	Data Element	Information Required
1	Business Name	The full legal name of the business.
1	Business Phone	The business phone number; include area code and extension.
1	Site Address	The street address where the facility is located, including building number, if applicable. *(Note: Post office box numbers are not acceptable. This information must provide a means to locate the facility geographically.)*
1	City	The city where the facility is located.
1	State	The abbreviation for California has been entered on the form.
1	Zip	The 5 or 9 digit zip code for the facility.
1	Dun & Bradstreet No.	If the business has a D&B number, enter it on this line. *(Note: The Dun & Bradstreet number may be obtained by calling (610) 882-7748.)*
1	Primary SIC Code	The 4 digit primary Standard Industrial Classification code for the facility. *(Note: If your code has more than 4 digits, report only the first four.)*
1	Operator Name	The name of the business operator.
1	Operator Phone	The business operator phone number; include area code and extension.
2	Owner Name	The name of the business owner.
2	Owner Phone	The owner's phone number if different from business phone; include area code and extension.
2	Owner Mailing Address	The owner's street or P.O. Box mailing address if different from the site address.
2	City	The name of the city for the owner's mailing address.
2	State	The 2 character state abbreviation (e.g. CA, TX, NY, etc.) for the owner's mailing address.
2	Zip	The 5 or 9 digit zip code for the owner's mailing address.
3	Environmental Contact Name	The name of the person, if different from the Business Owner or Operator, who will receive environmental correspondence and will respond to enforcement activity.
3	Contact Phone	The Environmental Contact's phone number; include area code and extension.
3	Contact Mailing Address	The street or P.O. Box mailing address, if different from the site address, where all environmental correspondence should be sent.
3	City	The name of the city for the Environmental Contact's mailing address.
3	State	The 2 character state abbreviation (e.g. CA, TX, NY, etc.) for the Environmental Contact's mailing address.
3	Zip	The 5 or 9 digit zip code for the Environmental Contact's mailing address.
4	Primary Emergency Coordinator (EC) Name	The name of a facility representative who can be contacted in case of an emergency involving hazardous materials at the facility. *(Note: This person shall have full facility access, site familiarity, and authority to make decisions for the business regarding incident mitigation.)*
4	Title	The title of the Primary Emergency Coordinator.
4	Business Phone	The business phone number for the Primary Emergency Coordinator; include area code and extension.
4	24-hour Phone	A number that will be answered 24 hours a day. If not the Emergency Coordinator's home phone number, then the number of an answering service able to immediately contact the Emergency Coordinator must be provided.
4	Pager Number	The pager telephone number for the Primary Emergency Coordinator, if available.
4	Secondary Emergency Coordinator Name	The name of a facility representative who can be contacted in the event that the Primary Emergency Coordinator is not available. *(Note: This person shall have full facility access, site familiarity, and authority to make decisions for the business regarding incident mitigation.)*
4	Title	The title of the Secondary Emergency Coordinator.
4	Business Phone	The business phone number for the Secondary Emergency Coordinator; include area code and extension.
4	24-hour Phone	A number that will be answered 24 hours a day. If not the Secondary Emergency Coordinator's home phone number, then the number of an answering service able to immediately contact the Secondary EC must be provided.
4	Pager Number	The pager telephone number for the Secondary Emergency Coordinator, if available.
5	Substances Regulated Under the CalARP Program	Check the appropriate box to indicate whether any substances listed in Section 2770.5 of 19 CCR are handled at the facility in quantities greater than their listed Threshold Quantities. If "Yes" is checked, contact your local agency to obtain a California Accidental Release Prevention Program Registration Form.
6	EPA ID No.	If the facility generates hazardous waste, enter the facility's site-specific EPA ID Number. This number always includes 3 letters followed by 9 numerals (e.g. "CAL123456789").
6	Principal Type of Business	The business activity performed by the facility *(e.g. "Plating Shop", "Gas Station, etc.)*.
6	Billing Address	The street or P.O. Box mailing address, if different from the owner mailing address, where bills for permit/inspection fees should be sent.
6	City	The name of the city for the Billing Address.
6	State	The 2 character state abbreviation (e.g. CA, TX, NY, etc.) for the Billing Address.
6	Zip	The 5 or 9 digit zip code for the Billing Address.
6	Industrial Waste Discharge Contact	If the facility discharges process materials to the sewer system, enter the name of the person responsible for industrial waste compliance at the facility.
6	Phone No.	The business phone number for the Industrial Waste Discharge Contact; include area code and extension.
6	Property Owner	The name of the owner of the property on which the facility is located.
6	Phone No.	The property owner's phone number; include area code and extension.
6	Facility Hours of Operation	The days and hours during which the facility is in operation *(e.g. "M-F 8 a.m.-5 p.m.")*.
6	No. of Employees Per Shift	The total number of employees present on-site during each shift of operation.
7	Name of HMBP Document Preparer	The printed full name of the person who prepared the HMBP.
7	Title	The title of the person who prepared the HMBP.
7	Signature of Owner/Operator	The business Owner/Operator, or officially designated representative of the Owner/Operator shall sign in the space provided. This signature certifies that all information contained in the HMBP and any attachments/appendices is true, accurate, and complete.
7	Date	The date the Owner/Operator Certification was signed. (MM/DD/YY)
7	Page 1 of	The total number of pages in the HMBP must be noted on this line. All pages of the HMBP shall be numbered

Section B - Non-Waste Hazardous Materials Inventory

All non-waste hazardous materials stored at the facility must be listed on the Non-Waste Hazardous Materials Inventory Statement (printed on other side of this page). Instructions for completing the inventory are provided below. Trade secret materials should be listed separately from non-trade secret materials and each page must clearly be marked "Trade Secret". Your local agency may be capable of accepting electronic reporting of this information. Contact your local agency for details.

Report all hazardous materials handled at the facility. Group materials by storage location. Complete one row for each individual material stored at a storage location. Make additional copies of the form if needed. Number each page of the inventory appropriately.

1. Enter the facility's street address on the line at the top of each page. Include the building number, if applicable.
2. Enter the date the inventory statement was prepared in the space at the top right side of each page.
3. In column 1, list the primary hazard class of the material. Contact your local agency regarding specific information to be reported.
4. In column 2 *(Note: LC = Location Code)*, identify the location within the facility where the material is stored by entering the same location code you assigned in your HMBP storage map. *(e.g. If you have assigned letter codes to storage locations and store a material in area D, then you would write "D" in this column.)*
5. In column 3, enter the common name or trade name by which the material is generally known *(e.g. "Lacquer Thinner", "Gasoline", etc.)*.
6. In column 4, enter the chemical name and concentration of each hazardous constituent comprising 1% or more of the material.
7. In column 5, enter the CAS (Chemical Abstract Service) Number of the material, if applicable. If the material has no CAS Number, list the CAS Number for each constituent listed in Column 4.
8. In column 6, identify the physical state of the material by checking the "pure" or "mixture box and the "solid", "liquid", or "gas" box.
9. In the appropriate spaces within column 7, provide the maximum daily amount stored, the average daily amount stored, and size of the largest container in which the material is stored at the location. *(Note: The unit of measure used must be the same as that indicated in Column 8.)*
10. In column 8, check the appropriate unit of measure: gallons for liquids, pounds for solids, and cubic feet for gases. Radioactive materials may be listed in μ *(micro)* curies.
11. In column 9, list the total number of days (e.g. 365) the material is present on site during the year.
12. In the appropriate spaces within Column 10, list every type of container in which the material is stored, the storage pressure, and the storage temperature. *[Note: "amb." = ambient (standard), "> amb." = greater than ambient, "< amb." = less than ambient, and "cryo." = cryogenic.]* The following codes shall be used to indicate container type(s):

Code	Storage Type	Code	Storage Type	Code	Storage Type
A	Aboveground Tank	G	Carboy	M	Glass Bottle or Jug
B	Belowground Tank	H	Silo	N	Plastic Bottle or Jug
C	Tank Inside Building	I	Fiber Drum	O	Tote Bin
D	Steel Drum	J	Bag	P	Tank Wagon
E	Plastic or Non-metallic Drum	K	Box	Q	Rail Car
F	Can	L	Cylinder	R	Other

13. In column 11, check the box(es) which describe the SARA *(Superfund Amendment and Reauthorization Act)* physical and health hazards associated with the material. Refer to the material's Material Safety Data Sheet (MSDS) and the following table when making your determinations.

Physical Hazards			Health Hazards	
Fire	**Pressure**	**Reactive**	**Immediate** *(acute)*	**Delayed** *(chronic)*
Flammables	Explosives	Unstable Reactives	Toxic/Highly Toxic Matls.	Carcinogens
Combustible Liquids	Compressed Gases	Organic Reactives	Corrosives	
Pyrophorics		Water Reactives	Sensitizers	
Oxidizers			Irritants	

(Note: This table is intended to serve as a guideline, and is not all-inclusive.)

14. Check the box in Column 12 *(Note: IW = Industrial Waste)* if the material is discharged to the sewer, even if it is pre-treated.

Non-Waste Hazardous Materials Inventory Statement

For Use By All Jurisdictions Within the County of Santa Clara

Site Address: 230 PORTAGE AVE, PALO ALTO

Date: 9/10/98

1. Hazard Class	2. LC	3. Common/Trade Name	4. Chemical Name Components & Concentration	5. Chemical Abstract Service No.	6. Physical State	7. Quantity Stored Max.	Average	Last Cont.	8. Units	9. Days On Site	10. Storage Codes Cont. Type(s)	Pressure	Temp.	11. SARA Hazard Class(es)	12 IW
	1	GENISOLV 2000 SOLVENT	☐ Same as Column 3. 1,1-DICHLORO-FLUOR-OETHANE	[redacted] 1717-00-6	☒ pure ☐ mixture ☐ solid ☒ liquid ☐ gas	650	650		☒ gal. ☐ lbs. ☐ cu. ft. ☐ µ cur.	365	C	☒ amb. ☐ > amb. ☒ < amb.	☐ amb. ☐ > amb ☒ < amb. ☐ cryo.	☐ fire ☐ pressure ☐ reactive ☒ immediate ☒ delayed	☐
	2	Formula 1510	☐ Same as Column 3. Sodium Hydroxide 1-10% Morpholine 1-10%	1310-73-2 110-91-8	☐ pure ☒ mixture ☐ solid ☒ liquid ☐ gas	55	25	55	☒ gal. ☐ lbs. ☐ cu. ft. ☐ µ cur.	365	E	☒ amb. ☐ > amb. ☐ < amb.	☒ amb. ☐ > amb. ☐ < amb. ☐ cryo.	☐ fire ☐ pressure ☐ reactive ☒ immediate ☐ delayed	☐
	2	FORMULA 1571	☐ Same as Column 3. Sodium METASULFITE 20-90%	7681-57-4	☐ pure ☒ mixture ☐ solid ☒ liquid ☐ gas	55	25	55	☒ gal. ☐ lbs. ☐ cu. ft. ☐ µ cur.	365	E	☒ amb. ☐ > amb. ☐ < amb.	☒ amb. ☐ > amb. ☐ < amb. ☐ cryo.	☐ fire ☐ pressure ☐ reactive ☐ immediate ☐ delayed	☐
	3	Shell Tellus oil 100	☐ Same as Column 3. Solvent Refined Hydrotreated Heavy Paraffinic Distillate 0-99% Sol. Ref. Hydrotreated/Acid-Treated Heavy Naphthenic Lc Dist. 0-5%	64742-54-7 64742-18-3	☐ pure ☒ mixture ☐ solid ☒ liquid ☐ gas	55	25	55	☒ gal. ☐ lbs. ☐ cu. ft. ☐ µ cur.	365	D	☒ amb. ☐ > amb. ☐ < amb.	☒ amb. ☐ > amb. ☐ < amb. ☐ cryo.	☐ fire ☐ pressure ☐ reactive ☐ immediate ☐ delayed	☐
			☐ Same as Column 3.		☐ pure ☐ mixture ☐ solid ☐ liquid ☐ gas				☐ gal. ☐ lbs. ☐ cu. ft. ☐ µ cur.			☐ amb. ☐ > amb. ☐ < amb.	☐ amb. ☐ > amb. ☐ < amb. ☐ cryo.	☐ fire ☐ pressure ☐ reactive ☐ immediate ☐ delayed	☐
			☐ Same as Column 3.		☐ pure ☐ mixture ☐ solid ☐ liquid ☐ gas				☐ gal. ☐ lbs. ☐ cu. ft. ☐ µ cur.			☐ amb. ☐ > amb. ☐ < amb.	☐ amb. ☐ > amb. ☐ < amb. ☐ cryo.	☐ fire ☐ pressure ☐ reactive ☐ immediate ☐ delayed	☐
			☐ Same as Column 3.		☐ pure ☐ mixture ☐ solid ☐ liquid ☐ gas				☐ gal. ☐ lbs. ☐ cu. ft. ☐ µ cur.			☐ amb. ☐ > amb. ☐ < amb.	☐ amb. ☐ > amb. ☐ < amb. ☐ cryo.	☐ fire ☐ pressure ☐ reactive ☐ immediate ☐ delayed	☐

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Section C - Hazardous Waste Inventory

All hazardous wastes generated or handled at the facility must be listed on the Hazardous Waste Inventory Statement (printed on other side of this page). Instructions for completing the inventory are provided below. Trade secret materials should be listed separately from non-trade secret materials and each page must clearly be marked "Trade Secret". Your local agency may be capable of accepting electronic reporting of this information. Contact your local agency for details.

Group wastes by storage location. Complete one row for each individual hazardous waste accumulated or stored at a storage location. Make additional copies of the form if needed. Number each page of the inventory appropriately. Completion of this inventory constitutes an application for (or an amendment to) the facility's Hazardous Waste Generator Permit.

1. Enter the facility's street address on the line at the top of each page. Include the building number, if applicable.
2. Enter the facility's EPA Identification Number on the line provided at the top of each page.
3. Enter the date the inventory statement was prepared in the space at the top right side of each page.
4. In column 1, list the primary hazard class of the waste. Contact your local agency regarding specific information to be reported.
5. In column 2 *(Note: LC = Location Code)*, identify the location within the facility where the waste is accumulated or stored by entering the same location code you assigned in your HMBP storage map. *(e.g. If you have assigned letter codes to storage locations and store a waste in area B, then you would write "B" in this column.)*
6. In column 3, enter the name of the waste stream *(e.g. "Waste Oil", "Used Antifreeze", etc.)* and the chemical name and concentration of each hazardous constituent comprising 1% or more of the waste.
7. In column 4, check the box which describes how the waste stream is managed.
8. In column 5, enter the 3 digit California Waste Code most appropriate for the waste. *(Note: These codes can be found listed on the back of California Uniform Hazardous Waste Manifests. Codes beginning with 7 or 8 take precedence over other codes.)*
9. In column 6, note the physical state of the waste by checking the "pure" or "mixture box and the "solid", "liquid", or "gas" box.
10. In column 7, identify the total amount of this waste generated over the past year.
11. In the appropriate spaces within column 8, provide the maximum and average daily amounts stored, and size of the largest container in which the waste is stored at the location. *(Note: Unit of measure must be the same as that indicated in Column 9.)*
12. In column 9, check the appropriate unit of measure: gallons or pounds for liquids, and pounds for solids or gases.
13. In column 10, list the total number of days the waste is present on site during the year (e.g. 365). *(Note: This might differ from accumulation time for individual containers.)*
14. In the appropriate spaces within Column 11, list every type of container in which the waste is stored, the storage pressure, and the storage temperature. *[Note: "amb." = ambient (standard), "> amb." = greater than ambient, "< amb." = less than ambient, and "cryo." = cryogenic.]* The following codes shall be used to indicate container type(s):

Code	Storage Type	Code	Storage Type	Code	Storage Type
A	Aboveground Tank	G	Carboy	M	Glass Bottle or Jug
B	Belowground Tank	H	Silo	N	Plastic Bottle or Jug
C	Tank Inside Building	I	Fiber Drum	O	Tote Bin
D	Steel Drum	J	Bag	P	Tank Wagon
E	Plastic or Non-metallic Drum	K	Box	Q	Rail Car
F	Can	L	Cylinder	R	Other

15. In column 12, check the box(es) which describe the SARA *(Superfund Amendment and Reauthorization Act)* physical and health hazards associated with the waste. Refer to MSDSs and the following table when making your determinations.

Physical Hazards			Health Hazards	
Fire	**Pressure**	**Reactive**	**Immediate** *(acute)*	**Delayed** *(chronic)*
Flammables	Explosives	Unstable Reactives	Toxic/Highly Toxic Matls.	Carcinogens
Combustible Liquids	Compressed Gases	Organic Reactives	Corrosives	
Pyrophorics		Water Reactives	Sensitizers	
Oxidizers			Irritants	

(Note: This table is intended to serve as a guideline, and is not all-inclusive.)

Hazardous Waste Inventory Statement

(Hazardous Waste Generator Permit Application/Amendment)

For Use By All Jurisdictions Within the County of Santa Clara

Site Address: 230 PORTAGE AVE, Palo ALTO EPA ID No.: Cal 000 049 480 Date: 9/10/99

1. Hazard Class	2. LC	3. Waste Stream Name, Components & Concentration	4. Treatment/ Disposal Method(s)	5. California Waste Code	6. Physical State	7. Annual Quantity Generated	8. Quantity Stored Max.	Average	Lgst. Cont.	9. Units	10. Days On Site	11. Storage Codes Cont. Type(s)	Pressure	Temp.	12. SARA Hazard Class(es)
1-10	3	Waste Oil - Petroleum Hydrocarbon	☐ Recycled on-site. ☐ Treated on-site. ☒ Shipped off-site for recycling/ treatment/ disposal	221	☐ pure ☒ mixture ☐ solid ☒ liquid ☐ gas		55	25	55	☒ gal. ☐ lbs. ☐ cu. ft. ☐ µ cur.	365	D	☒ amb. ☐ > amb. ☐ < amb.	☒ amb. ☐ > amb. ☐ < amb. ☐ cryo.	☐ fire ☐ pressure ☐ reactive ☐ immediate ☐ delayed
			☐ Recycled on-site. ☐ Treated on-site. ☐ Shipped off-site for recycling/ treatment/ disposal		☐ pure ☐ mixture ☐ solid ☐ liquid ☐ gas					☐ gal. ☐ lbs. ☐ cu. ft. ☐ µ cur.			☐ amb. ☐ > amb. ☐ < amb	☐ amb. ☐ > amb. ☐ < amb. ☐ cryo.	☐ fire ☐ pressure ☐ reactive ☐ immediate ☐ delayed
			☐ Recycled on-site. ☐ Treated on-site. ☐ Shipped off-site for recycling/ treatment/ disposal		☐ pure ☐ mixture ☐ solid ☐ liquid ☐ gas					☐ gal. ☐ lbs. ☐ cu. ft. ☐ µ cur.			☐ amb. ☐ > amb. ☐ < amb.	☐ amb. ☐ > amb. ☐ < amb. ☐ cryo.	☐ fire ☐ pressure ☐ reactive ☐ immediate ☐ delayed
			☐ Recycled on-site. ☐ Treated on-site. ☐ Shipped off-site for recycling/ treatment/ disposal		☐ pure ☐ mixture ☐ solid ☐ liquid ☐ gas					☐ gal. ☐ lbs. ☐ cu. ft. ☐ µ cur.			☐ amb. ☐ > amb. ☐ < amb.	☐ amb. ☐ > amb. ☐ < amb. ☐ cryo.	☐ fire ☐ pressure ☐ reactive ☐ immediate ☐ delayed
			☐ Recycled on-site. ☐ Treated on-site. ☐ Shipped off-site for recycling/ treatment/ disposal		☐ pure ☐ mixture ☐ solid ☐ liquid ☐ gas					☐ gal. ☐ lbs. ☐ cu. ft. ☐ µ cur.			☐ amb. ☐ > amb. ☐ < amb.	☐ amb. ☐ > amb. ☐ < amb. ☐ cryo.	☐ fire ☐ pressure ☐ reactive ☐ immediate ☐ delayed
			☐ Recycled on-site. ☐ Treated on-site. ☐ Shipped off-site for recycling/ treatment/ disposal		☐ pure ☐ mixture ☐ solid ☐ liquid ☐ gas					☐ gal. ☐ lbs. ☐ cu. ft. ☐ µ cur.			☐ amb. ☐ > amb. ☐ < amb.	☐ amb. ☐ > amb. ☐ < amb. ☐ cryo.	☐ fire ☐ pressure ☐ reactive ☐ immediate ☐ delayed
			☐ Recycled on-site. ☐ Treated on-site. ☐ Shipped off-site for recycling/ treatment/ disposal		☐ pure ☐ mixture ☐ solid ☐ liquid ☐ gas					☐ gal. ☐ lbs. ☐ cu. ft. ☐ µ cur.			☐ amb. ☐ > amb. ☐ < amb.	☐ amb. ☐ > amb. ☐ < amb. ☐ cryo.	☐ fire ☐ pressure ☐ reactive ☐ immediate ☐ delayed
			☐ Recycled on-site. ☐ Treated on-site. ☐ Shipped off-site for recycling/ treatment/ disposal		☐ pure ☐ mixture ☐ solid ☐ liquid ☐ gas					☐ gal. ☐ lbs. ☐ cu. ft. ☐ µ cur.			☐ amb. ☐ > amb. ☐ < amb.	☐ amb. ☐ > amb. ☐ < amb. ☐ cryo.	☐ fire ☐ pressure ☐ reactive ☐ immediate ☐ delayed

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Facility Site Plan and Storage Map
(Hazardous Materials Business Plan Module)

A site plan and storage map must be included with your HMBP. For relatively small facilities, these documents may be combined into one drawing. Since these drawings are intended for use in emergency response situations, larger facilities *(generally those with complex and/or multiple buildings)* should provide an overall site plan and a separate storage map for each building/storage area. A blank Facility Site Plan/Storage Map sheet has been provided on the reverse side of this page. You may complete that page or attach any other drawing(s) which contain(s) the information required below.

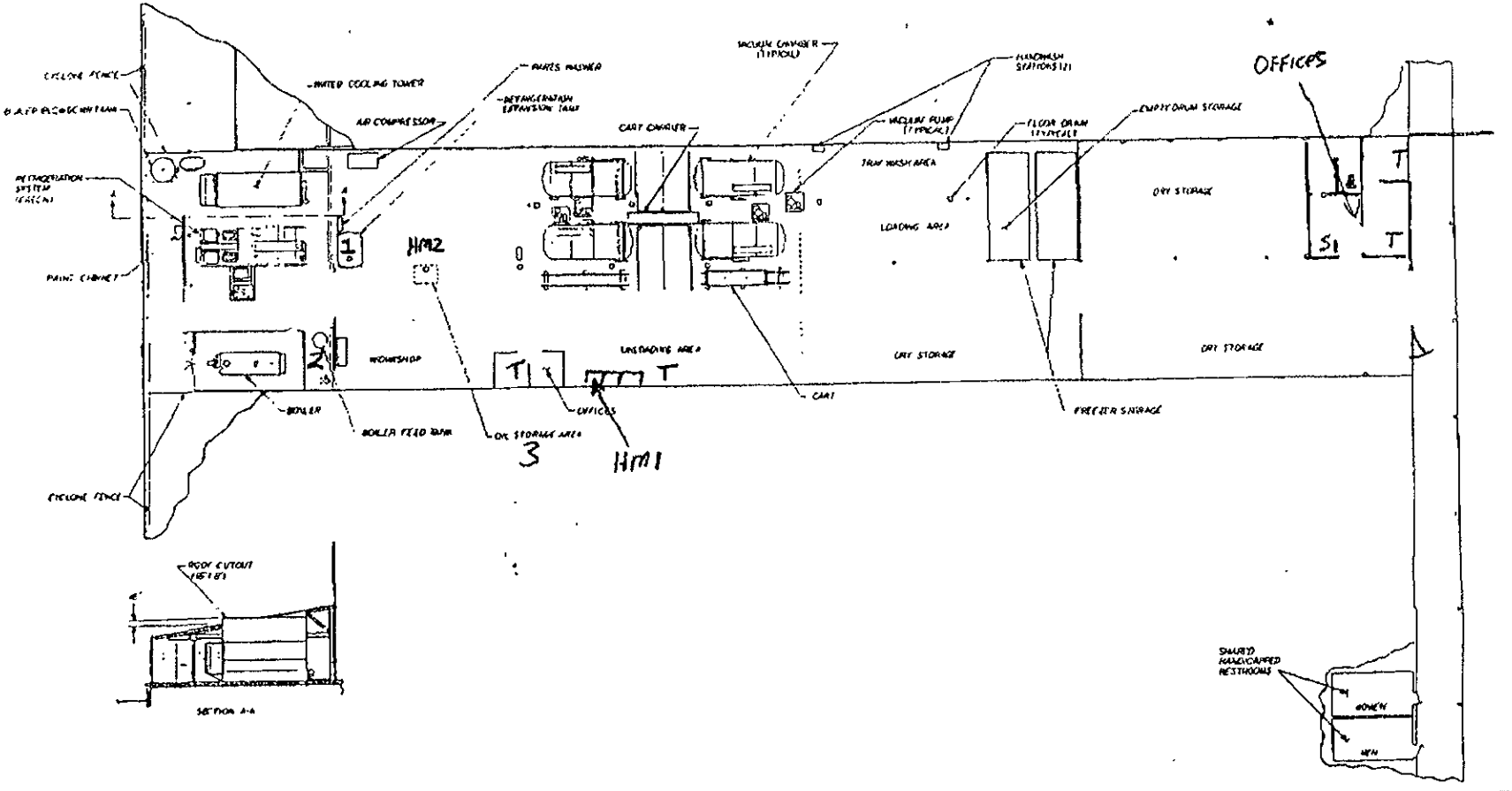
1. **Site Plan:** This drawing shall contain, at a minimum, the following information:

   a. An indication of North Direction;
   b. Approximate scale *(e.g. "1 inch = 10 feet".)*;
   c. Date the map was drawn;
   d. All streets bordering the facility;
   e. Locations of all buildings and other structures;
   f. Parking lots and internal roads;
   g. Hazardous materials loading/unloading areas;
   h. Outside hazardous materials storage or use areas;
   i. Storm drain and sanitary sewer drain inlets;
   j. Wells for monitoring of underground tank systems;
   k. Primary and alternate evacuation routes, emergency exits, and primary and alternate staging areas.

2. **Storage Map(s):** The map(s) shall contain, at a minimum, the following information:

   a. General purpose of each section/area within each building *(e.g. "Office Area", "Manufacturing Area", etc.)*;
   b. Location of each hazardous material/waste storage, dispensing, use, or handling area *(e.g. individual underground tanks, aboveground tanks, storage rooms, paint booths, etc.)*. Each area shall be identified by a unique location code number, letter, or name *(e.g. "1", "2", "3"; "A", "B", "C", etc.)*;
   c. Entrances to and exits from each building and hazardous material/waste room/area;
   d. Location of each utility emergency shut-off point *(i.e. gas, water, electric.)*;
   e. Location of each monitoring system control panel *(e.g. underground tank monitoring, toxic gas monitoring, etc.)*.

scale: 3" = 100' - 0"



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Mercer Processing

230 PORTAGE ST

Emergency Response/Contingency Plan

(Hazardous Materials Business Plan Module)

Authority Cited: H&SC, Section 25504(b); Title 22, Div. 4.5, Ch. 12, Art. 3 CCR

All facilities which handle hazardous materials in specified quantities must have a written emergency response plan. In addition, facilities which generate 1,000 kilograms or more of hazardous waste per month, or accumulate more than 6,000 kilograms of hazardous waste on-site at any one time, must prepare a contingency plan. Because the requirements are similar, they have been combined in a single document, provided below, for your convenience. This plan is a required module of the Hazardous Materials Business Plan (HMBP). If you already have a plan which meets these requirements, you should not complete the blank plan, below, but you must include a copy of your existing plan as part of your HMBP.

This site-specific Emergency Response/Contingency Plan is the facility's plan for dealing with emergencies and shall be implemented immediately whenever there is a fire, explosion, or release of hazardous materials which could threaten human health and/or the environment. **At least one copy of the plan shall be maintained at the facility for use in the event of an emergency and for inspection by the local agency.** Within Santa Clara County, hospitals and police agencies have delegated receipt of these plans to the local agencies administering Hazardous Materials Business Plans, so additional copies need not be submitted. However, a copy of the plan and any revisions must be provided to any contractor, hospital, or agency with whom special (i.e. contractual) emergency services arrangements have been made *(see section 3, below)*.

1. Evacuation Plan:

a. The following alarm signal(s) will be used to begin evacuation of the facility *(check all which apply)*:

☐ Bells; ☐ Horns/Sirens; ☒ Verbal *(i.e. shouting)*; ☐ Other *(specify)* _____

b. ☐ Evacuation map is prominently displayed throughout the facility.

Note: A properly completed HMBP Site Plan satisfies contingency plan map requirements. This drawing (or any other drawing which shows primary and alternate evacuation routes, emergency exits, and primary and alternate staging areas) must be prominently posted throughout the facility in locations where it will be visible to employees and visitors.

2. a. Emergency Contacts*:

Fire/Police/Ambulance	Phone No. 911
State Office of Emergency Services	Phone No. (800) 852-7550

b. Post-Incident Contacts*:

Fire Department Hazardous Materials Program	Phone No.: (650) 329-2184
Santa Clara County Hazardous Materials Compliance Division	Phone No. (408) 299-6930
California EPA Department of Toxic Substances Control	Phone No. (510) 540-3739
Cal-OSHA Division of Occupational Safety and Health	Phone No. (415) 557-1677
Bay Area Air Quality Management District	Phone No. (415) 771-6000
Regional Water Quality Control Board	Phone No. (510) 286-1255

** These telephone numbers are provided as a general aid to emergency notification. Be advised that additional agencies may be required to be notified.*

c. Emergency Resources:

Poison Control Center ..... Phone No. (800) 876-4766

Nearest Hospital: Name: STANFORD Phone No.: (650) 723-4000

Address: 300 PASTEUR City: STANFORD

3. Arrangements With Emergency Responders:

If you have made special (i.e. contractual) arrangements with any police department, fire department, hospital, contractor, or State or local emergency response team to coordinate emergency services, describe those arrangements on the lines below:

4. **Emergency Procedures:**

Emergency Coordinator Responsibilities:

a. Whenever there is an imminent or actual emergency situation such as a explosion, fire, or release, the emergency coordinator *(or his/her designee when the emergency coordinator is on call)* shall:

   i. Identify the character, exact source, amount, and areal extent of any released hazardous materials.

   ii. Assess possible hazards to human health or the environment that may result from the explosion, fire, or release. This assessment must consider both direct and indirect effects *(e.g. the effects of any toxic, irritating, or asphyxiating gases that are generated, the effects of any hazardous surface water run-off from water or chemical agents used to control fire, etc.).*

   iii. Activate internal facility alarms or communications systems, where applicable, to notify all facility personnel.

   iv. Notify appropriate local authorities *(i.e. call 911).*

   v. Notify the State Office of Emergency Services at 1-800-852-7550.

   vi. Monitor for leaks, pressure build-up, gas generation, or ruptures in valves, pipes, or other equipment shut down in response to the incident.

   vii. Take all reasonable measures necessary to ensure that fires, explosions, and releases do not occur, recur, or spread to other hazardous materials at the facility.

b. Before facility operations are resumed in areas of the facility affected by the incident, the emergency coordinator shall:

   i. Provide for proper storage and disposal of recovered waste, contaminated soil or surface water, or any other material that results from a explosion, fire, or release at the facility.

   ii. Ensure that no material that is incompatible with the released material is transferred, stored, or disposed of in areas of the facility affected by the incident until cleanup procedures are completed.

   iii. Ensure that all emergency equipment is cleaned, fit for its intended use, and available for use.

   iv. Notify the California Environmental Protection Agency's Department of Toxic Substances Control, the County of Santa Clara's Hazardous Materials Compliance Division, and the local fire department's hazardous materials program that the facility is in compliance with requirements b-i and b-ii, above.

Responsibilities of Other Personnel:

On a separate page, list any emergency response functions not covered in the "Emergency Coordinator Responsibilities" section, above. Next to each function, list the job title or name of each person responsible for performing the function. Number the page(s) appropriately.

5. **Post-Incident Reporting/Recording:**

The time, date, and details of any hazardous materials incident that requires implementation of this plan shall be noted in the facility's operating record.

Within 15 days of any hazardous materials emergency incident or threatened hazardous materials emergency incident which triggers implementation of this plan, a written Emergency Incident Report, including, but not limited to a description of the incident and the facility's response to the incident, must be submitted to the California Environmental Protection Agency's Department of Toxic Substances Control, the County of Santa Clara's Hazardous Materials Compliance Division, and the local fire department's hazardous materials program. The report shall include:

a. Name, address, and telephone number of the facility's owner/operator;
b. Name, address, and telephone number of the facility;
c. Date, time, and type of incident *(e.g. fire, explosion, etc.)*;
d. Name and quantity of material(s) involved;
e. The extent of injuries, if any;
f. An assessment of actual or potential hazards to human health or the environment, where this is applicable;
g. Estimated quantity and disposition of recovered material that resulted from the incident;
h. Cause(es) of the incident;
i. Actions taken in response to the incident;
j. Administrative or engineering controls designed to prevent such incidents in the future.

Emergency Response/Contingency Plan

6. **Emergency Equipment:**

22 CCR, Section 66265.52(e) [as referenced by Section 66262.34(a)(3)] and the Hazardous Materials Storage Ordinance require that emergency equipment at the facility be listed. Completion of the following Emergency Equipment Inventory Table meets this requirement.

EMERGENCY EQUIPMENT INVENTORY TABLE

1. Equipment Category	2. Equipment Type	3. Locations *	4. Description**
Personal Protective, Equipment, Safety Equipment, and First Aid Equipment	☐ Cartridge Respirators		
	☐ Chemical Monitoring Equipment *(describe)*		
	☐ Chemical Protective Aprons/Coats		
	☐ Chemical Protective Boots		
	☒ Chemical Protective Gloves	HM1	
	☐ Chemical Protective Suits *(describe)*		
	☐ Face Shields		
	☒ First Aid Kits/Stations *(describe)*	S1	
	☐ Hard Hats		
	☐ Plumbed Eye Wash Stations		
	☒ Portable Eye Wash Kits *(i.e. bottle type)*	S1	
	☐ Respirator Cartridges *(describe)*		
	☒ Safety Glasses/Splash Goggles	HM1	
	☐ Safety Showers		
	☐ Self-Contained Breathing Apparatuses (SCBA)		
	☐ Other *(describe)*		
Fire Extinguishing Systems	☐ Automatic Fire Sprinkler Systems		
	☐ Fire Alarm Boxes/Stations		
	☐ Fire Extinguisher Systems *(describe)*		
	☐ Other *(describe)*		
Spill Control Equipment and Decontamination Equipment	☒ Absorbents *(describe)*	HM1	Absorbent Socks
	☒ Berms/Dikes *(describe)*		Concrete Berms
	☐ Decontamination Equipment *(describe)*		
	☐ Emergency Tanks *(describe)*		
	☐ Exhaust Hoods		
	☐ Gas Cylinder Leak Repair Kits *(describe)*		
	☐ Neutralizers *(describe)*		
	☒ Overpack Drums	HM2	
	☐ Sumps *(describe)*		
	☐ Other *(describe)*		
Communications and Alarm Systems	☐ Chemical Alarms *(describe)*		
	☐ Intercoms/PA Systems		
	☐ Portable Radios		
	☒ Telephones	T	
	☐ Underground Tank Leak Detection Monitors		
	☐ Other *(describe)*		
Additional Equipment *(Use Additional Pages if Needed.)*			

* *Use the Location Codes (LC) from the Storage Map(s) prepared earlier for your HMBP.*

** *Describe the equipment and its capabilities. If applicable, specify any testing/maintenance procedures/intervals. Attach additional pages, numbered appropriately, if needed.*

Employee Training Plan

(Hazardous Materials Business Plan Module)

Authority Cited: H&SC, Section 25504(c); 22 CCR, Section 66265.16

All facilities which handle hazardous materials must have a written employee training plan. This plan is a required module of the Hazardous Materials Business Plan (HMBP). A blank plan has been provided below for you to complete and submit if you do not already have such a plan. If you already have a training plan, you are not required to complete the blank plan, below, but you must include a copy of your existing plan as part of your HMBP.

Check all boxes which apply. *[Note: Items marked with an asterisk (*) are required.]*:

1. **Personnel** are trained in the following procedures:

☒	Internal alarm/notification *
☒	Evacuation/re-entry procedures & assembly point locations*
☐	Emergency incident reporting;
☐	External emergency response organization notification
☐	Location(s) and contents of Emergency Response/Contingency Plan
☐	Facility evacuation drills, which are conducted at least *(specify)* _____ *(e.g. "Quarterly", etc.)*

2. **Chemical Handlers** are additionally trained in the following:

☒	Safe methods for handling and storage of hazardous materials *
☐	Location(s) and proper use of fire and spill control equipment
☐	Spill procedures/emergency procedures
☒	Proper use of personal protective equipment *
☒	Specific hazard(s) of each chemical to which they may be exposed, including routes of exposure *(i.e. inhalation, ingestion, absorption)* *
☒	**Hazardous Waste Handlers/Managers** are trained in all aspects of hazardous waste management specific to their job duties *(e.g. container accumulation time requirements, labeling requirements, storage area inspection requirements, manifesting requirements, etc.)* *

3. **Emergency Response Team Members** are capable of and engaged in the following:

☐	Personnel rescue procedures
☒	Shutdown of operations
☐	Liaison with responding agencies
☐	Use, maintenance, and replacement of emergency response equipment
☒	Refresher training, which is provided at least annually *
☐	Emergency response drills, which are conducted at least *(specify)* _____ *(e.g. "Quarterly", etc.)*

Recordkeeping
(Hazardous Materials Business Plan Module)

All facilities which handle hazardous materials must maintain records associated with their management. A summary of your recordkeeping procedures is a required module of the Hazardous Materials Business Plan (HMBP). A blank summary has been provided below for you to complete and submit if you do not already have such a document. If you already have a brief written description of your hazardous materials recordkeeping systems which addresses all subjects covered below, you are not required to complete this page, but you must include a copy of your existing document as part of your HMBP.

Check all boxes which apply. The following records are maintained at the facility. *[Note: Items marked with an asterisk (*) are required.]*:

☒	Current employees' training records *(to be retained until closure of the facility)* *
☒	Former employees' training records *(to be retained at least three years after termination of employment)* *
☒	Training Program(s) *(i.e. written description of introductory and continuing training)* *
☒	Current copy of this Emergency Response/Contingency Plan *
☒	Record of recordable/reportable hazardous material/waste releases *
☒	Record of hazardous material/waste storage area inspections *
☒	Record of hazardous waste tank daily inspections *
☐	Description and documentation of facility emergency response drills

Note: The above list of records does not necessarily identify every type of record required to be maintained by the facility.

Per the Hazardous Materials Storage Ordinance, a sample copy of each Inspection Check Sheet or Log used in conjunction with required routine self-inspections of your facility must be submitted with your HMBP. *(Exception: Attached, you will find a Hazardous Materials/Waste Storage Area Inspection Form which you may use if you do not already have your own form. If you indicate that you use the example provided, you do not need to attach a copy.)*

Check the appropriate box:

☒	We will use the "Hazardous Materials/Waste Storage Area Inspection Form" to document inspections.
☐	We will use our own documents to record inspections. *(A blank copy of each document used must be attached to this HMBP.)*

Aboveground Separation, Containment, and Monitoring Plan

(Appendix to Hazardous Materials Business Plan)

Complete one column for each aboveground storage area shown on the Hazardous Materials Business Plan Storage Map(s). Write the appropriate location code in the box provided at the top of each column, then moving down the column, check all boxes which apply to that location. Make additional copies of this page if needed.

Location Code	1	2	3		
Storage Type	☒ Inside building ☐ Outside storage shed ☐ Outdoors	☒ Inside building ☐ Outside storage shed ☐ Outdoors	☒ Inside building ☐ Outside storage shed ☐ Outdoors	☐ Inside building ☐ Outside storage shed ☐ Outdoors	☐ Inside building ☐ Outside storage shed ☐ Outdoors
Primary Containment	☐ Original containers ☐ Safety cans ☒ Inside machinery ☐ Drums/barrels ☐ Pressure vessels ☒ Bulk tanks ☐ Aboveground piping ☐ Other	☒ Original containers ☐ Safety cans ☐ Inside machinery ☐ Drums/barrels ☐ Pressure vessels ☐ Bulk tanks ☐ Aboveground piping ☐ Other	☐ Original containers ☐ Safety cans ☐ Inside machinery ☒ Drums/barrels ☐ Pressure vessels ☐ Bulk tanks ☐ Aboveground piping ☐ Other	☐ Original containers ☐ Safety cans ☐ Inside machinery ☐ Drums/barrels ☐ Pressure vessels ☐ Bulk tanks ☐ Aboveground piping ☐ Other	☐ Original containers ☐ Safety cans ☐ Inside machinery ☐ Drums/barrels ☐ Pressure vessels ☐ Bulk tanks ☐ Aboveground piping ☐ Other
Secondary Containment	☐ Approved cabinets ☐ Secondary drum ☐ Tray ☒ Bermed & coated floor ☐ Tank vault ☐ Secondary piping or piping trench ☐ Other	☐ Approved cabinets ☒ Secondary drum ☐ Tray ☐ Bermed & coated floor ☐ Tank vault ☐ Secondary piping or piping trench ☐ Other	☐ Approved cabinets ☐ Secondary drum ☐ Tray ☐ Bermed & coated floor ☐ Tank vault ☐ Secondary piping or piping trench ☒ Other Containment Pallet	☐ Approved cabinets ☐ Secondary drum ☐ Tray ☐ Bermed & coated floor ☐ Tank vault ☐ Secondary piping or piping trench ☐ Other	☐ Approved cabinets ☐ Secondary drum ☐ Tray ☐ Bermed & coated floor ☐ Tank vault ☐ Secondary piping or piping trench ☐ Other
Separation	☐ All materials compatible ☐ One-hour separation wall/partition ☐ Separation by at least 20 feet ☐ Approved cabinets ☐ Other	☒ All materials compatible ☐ One-hour separation wall/partition ☐ Separation by at least 20 feet ☐ Approved cabinets ☐ Other	☒ All materials compatible ☐ One-hour separation wall/partition ☐ Separation by at least 20 feet ☐ Approved cabinets ☐ Other	☐ All materials compatible ☐ One-hour separation wall/partition ☐ Separation by at least 20 feet ☐ Approved cabinets ☐ Other	☐ All materials compatible ☐ One-hour separation wall/partition ☐ Separation by at least 20 feet ☐ Approved cabinets ☐ Other
Monitoring Type	☒ Visual ☐ Continuous (automatic sensors) ☐ Other	☒ Visual ☐ Continuous (automatic sensors) ☐ Other	☒ Visual ☐ Continuous (automatic sensors) ☐ Other	☐ Visual ☐ Continuous (automatic sensors) ☐ Other	☐ Visual ☐ Continuous (automatic sensors) ☐ Other
Monitoring Frequency	☐ Daily ☒ Weekly ☐ Monthly ☐ Other	☐ Daily ☒ Weekly ☐ Monthly ☐ Other	☐ Daily ☒ Weekly ☐ Monthly ☐ Other	☐ Daily ☐ Weekly ☐ Monthly ☐ Other	☐ Daily ☐ Weekly ☐ Monthly ☐ Other

Describe the location, type, manufacturer's specifications (if applicable) and suitability of any monitoring methods used other than visual monitoring:

FPB 8A

RECORD OF ADDITIONAL INFORMATION

City of Palo Alto
FIRE PREVENTION BUREAU (415) 329-2184
250 HAMILTON AVENUE PALO ALTO, CALIFORNIA 94301

PERMIT # 00-346

BUSINESS NAME: MERCER PROCESSING
BUSINESS PHONE: 494-8992 (TYPE / ROOM)
NUMBER: 230 STREET & BUILDING: PORTAGE
NUMBER: 00692

CONTACT WITH DAVE NOLAND - 322-1827 x11

TYPE INSP: 10 DURATION: 070 INSPECTION DATE: 12/29/99 INSPECTOR: GH CODE: ☐ BY: ☐

FACILITY CLOSURE INSPECTION

(1) GENISCO 200# REFRIGERANT DRUMS MOVED TO PARK BLVD. BUILDING.
(2) MACHINERY MOVED TO NEW LOCATION +/OR TO BE SOLD.
(3) ASPHALT INSIDE BUILDING REMOVED TO EXPOSE UNDERLYING CONCRETE AS PREVIOUSLY REQUESTED BY FIRE DEPT.
(4) MAJOR STAINS - PRIMARILY OIL. ABSORBED W/ ABSORBENT (SENT ABSORBENT TO BE PROPERLY DISPOSED OF)
(5) DUE TO TYPE OF CHEMICALS USED, FIRE DEPT. IS NOT CONCERNED OF ANY CONTAMINATION THRU CONCRETED FLOOR TO SOIL. STAINS ON FLOOR PRIMARILY FROM OILS, + RUST FROM WATER IN CONTACT W/ METAL EQUIPMENT.
(6) ALL FLOOR DRAINS INSPECTED - ALL APPEAR TO BE INTACT W/ NO INDICATION OF CORROSION &/OR LACK OF INTEGRITY.

* FIRE DEPT. DOES NOT REQUIRE FURTHER ACTION AT SITE.

ITEMS TO ADDRESS:
(1) PROVIDE FIRE DEPT. W/ FINAL CLOSURE REPORT. INCLUDE TRANSPORT MANIFESTS FOR CHEMICALS + CHEMICAL USE EQUIPMENT. PROVIDE MANIFESTS FOR SALE &/OR DISPOSAL OF CHEMICALS + RELATED EQUIPMENT + SPENT ABSORBENT. PROVIDE NARRATIVE OF CLOSURE PROCEDURES TAKEN TO EXPLAIN ABOVE DOCUMENTATION.

White Copy: File Yellow Copy: Inspector Pink Copy: Data Processing Goldenrod Copy: Contact

CITY X [signature] CONTACT X

Entech Analytical Labs, Inc.

CA ELAP# I-2346

525 Del Rey Avenue, Suite E • Sunnyvale, CA 94086 • (408) 735-1550 • Fax (408) 735-1554

December 30, 1999

RECEIVED JAN 12 2000

Kyle Flory
PES Environmental, Inc
1682 Novato Boulevard, Suite 100
Novato, CA 94947

Order:	18299	**Date Collected:**	12/21/99
Project Name:	Former Mercer Processing Plant	**Date Received:**	12/22/99
Project Number:	500 009.02.001	**P.O. Number:**	
Project Notes:			

On December 22, 1999, 12 samples were received under documentented chain of custody. Results for the following analyses are attached:

Matrix	Test	Method
Solid	EPA 8260B	EPA 8260B

Chemical analysis of these samples has been completed. Summaries of the data are contained on the following pages. USEPA protocols for sample storage and preservation were followed.

Entech Analytical Labs, Inc. is certified by the State of California (#I-2346). If you have any questions regarding procedures or results, please call me at 408-735-1550.

Sincerely,

Michelle L. Anderson
Lab Director

Entech Analytical Labs, Inc.

CA ELAP# I-2346

525 Del Rey Avenue, Suite E • Sunnyvale, CA 94086 • (408) 735-1550 • Fax (408) 735-1554

PES Environmental, Inc.
1682 Novato Boulevard, Suite 100
Novato, CA 94947
Attn: Kyle Flory

Date: 12/30/99
Date Received: 12/22/99
Project Name: Former Mercer Processing Plant
Project Number: 500.009.02.001
P.O. Number:
Sampled By: Keary Knickerbocker

Certified Analytical Report

Order ID: 18299 **Lab Sample ID:** 18299-001 **Client Sample ID:** GS-2-0.5

Sample Time: 9:20 AM **Sample Date:** 12/21/99 **Matrix:** Solid

Parameter	Result	Flag	DF	PQL	DLR	Units	Analysis Date	QC Batch ID	Method
Acetone	ND		1	100	100	µg/Kg	12/28/99	SMS991227	EPA 8260B
Acrylonitrile	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
Allyl Chloride	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
tert-Amyl Methyl Ether	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
Benzene	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
Benzyl Chloride	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
Bromobenzene	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
Bromochloromethane	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
Bromodichloromethane	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
Bromoform	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
Bromomethane	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
tert-Butanol	23		1	20	20	µg/Kg	12/28/99	SMS991227	EPA 8260B
2-Butanone (MEK)	ND		1	20	20	µg/Kg	12/28/99	SMS991227	EPA 8260B
tert-Butyl Ethyl Ether	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
n-Butylbenzene	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
sec-Butylbenzene	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
tert-Butylbenzene	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
Carbon Disulfide	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
Carbon Tetrachloride	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
Chlorobenzene	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
Chloroethane	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
2-Chloroethyl-vinyl Ether	ND		1	20	20	µg/Kg	12/28/99	SMS991227	EPA 8260B
Chloroform	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
Chloromethane	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
2-Chlorotoluene	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
4-Chlorotoluene	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
Dibromochloromethane	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
1,2-Dibromo-3-Chloropropane	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
1,2-Dibromoethane	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
Dibromomethane	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
cis-1,4-Dichloro-2-butene	ND		1	20	20	µg/Kg	12/28/99	SMS991227	EPA 8260B
trans-1,4-Dichloro-2-butene	ND		1	20	20	µg/Kg	12/28/99	SMS991227	EPA 8260B
Dichlorodifluoromethane	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
1,2-Dichlorobenzene	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
1,3-Dichlorobenzene	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
1,4-Dichlorobenzene	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B

DF = Dilution Factor ND = Not Detected DLR = Detection Limit Reported PQL = Practical Quantitation Limit

Analysis performed by Entech Analytical Labs, Inc. (CA ELAP #I-2346)

Michelle L. Anderson, Laboratory Director

Entech Analytical Labs, Inc.

CA ELAP# I-2346

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Parameter	Result	Flag	DF	PQL	DLR	Units	Analysis Date	QC Batch ID	Method
1,1-Dichloroethane	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
1,2-Dichloroethane	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
1,1-Dichloroethene	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
cis-1,2-Dichloroethene	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
trans-1,2-Dichloroethene	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
1,2-Dichloropropane	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
1,3-Dichloropropane	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
2,2-Dichloropropane	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
1,1-Dichloropropene	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
cis-1,3-Dichloropropene	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
trans-1,3-Dichloropropene	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
Diisopropyl Ether	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
Ethyl Methacrylate	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
Ethyl Benzene	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
Hexachlorobutadiene	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
2-Hexanone	ND		1	20	20	µg/Kg	12/28/99	SMS991227	EPA 8260B
Iodomethane	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
Isopropylbenzene	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
p-Isopropyltoluene	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
Methacrylonitrile	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
Methyl Methacrylate	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
4-Methyl-2-Pentanone(MIBK)	ND		1	20	20	µg/Kg	12/28/99	SMS991227	EPA 8260B
Methyl-t-butyl Ether	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
Methylene Chloride	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
Naphthalene	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
Pentachloroethane	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
Propionitrile	ND		1	20	20	µg/Kg	12/28/99	SMS991227	EPA 8260B
n-Propylbenzene	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
Styrene	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
1,1,1,2-Tetrachloroethane	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
1,1,2,2-Tetrachloroethane	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
Tetrachloroethene	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
Toluene	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
1,2,3-Trichlorobenzene	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
1,2,4-Trichlorobenzene	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
1,2,3-Trichloropropane	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B

DF = Dilution Factor ND = Not Detected DLR = Detection Limit Reported PQL = Practical Quantitation Limit

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Michelle L. Anderson, Laboratory Director

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CA ELAP# I-2346

525 Del Rey Avenue, Suite E • Sunnyvale, CA 94086 • (408) 735-1550 • Fax (408) 735-1554

PES Environmental, Inc.
1682 Novato Boulevard, Suite 100
Novato, CA 94947
Attn: Kyle Flory

Date: 12/30/99
Date Received: 12/22/99
Project Name: Former Mercer Processing Plant
Project Number: 500.009.02.001
P.O. Number:
Sampled By: Keary Knickerbocker

Certified Analytical Report

Order ID: 18299 **Lab Sample ID:** 18299-001 **Client Sample ID:** GS-2-0.5

Sample Time: 9:20 AM **Sample Date:** 12/21/99 **Matrix:** Solid

Parameter	Result	Flag	DF	PQL	DLR	Units	Analysis Date	QC Batch ID	Method
1,1,1-Trichloroethane	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
1,1,2-Trichloroethane	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
Trichloroethene	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
Trichlorofluoromethane	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
1,2,4-Trimethylbenzene	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
1,3,5-Trimethylbenzene	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
Vinyl Acetate	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
Vinyl Chloride	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
Xylenes, Total	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B

Surrogate	Surrogate Recovery	Control Limits (%)
4-Bromofluorobenzene	94	65 - 135
Dibromofluoromethane	112	65 - 135
Toluene-d8	92	65 - 135

DF = Dilution Factor ND = Not Detected DLR = Detection Limit Reported PQL = Practical Quantitation Limit

Analysis performed by Entech Analytical Labs, Inc. (CA ELAP #I-2346)

Michelle L. Anderson, Laboratory Director

Environmental Analysis Since 1983

Entech Analytical Labs, Inc.

CA ELAP# I-2346

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Project Name: Former Mercer Processing Plant
Project Number: 500.009.02.001
P.O. Number:
Sampled By: Keary Knickerbocker

Certified Analytical Report

Order ID: 18299 **Lab Sample ID:** 18299-004 **Client Sample ID:** GS-3-0.5

Sample Time: 10:55 AM **Sample Date:** 12/21/99 **Matrix:** Solid

Parameter	Result	Flag	DF	PQL	DLR	Units	Analysis Date	QC Batch ID	Method
Acetone	ND		5	100	500	µg/Kg	12/28/99	SMS991227	EPA 8260B
Acetonitrile	ND		5	20	100	µg/Kg	12/28/99	SMS991227	EPA 8260B
Allyl Chloride	ND		5	5	25	µg/Kg	12/28/99	SMS991227	EPA 8260B
tert-Amyl Methyl Ether	ND		5	5	25	µg/Kg	12/28/99	SMS991227	EPA 8260B
Benzene	ND		5	5	25	µg/Kg	12/28/99	SMS991227	EPA 8260B
Benzyl Chloride	ND		5	5	25	µg/Kg	12/28/99	SMS991227	EPA 8260B
Bromobenzene	ND		5	5	25	µg/Kg	12/28/99	SMS991227	EPA 8260B
Bromochloromethane	ND		5	5	25	µg/Kg	12/28/99	SMS991227	EPA 8260B
Bromodichloromethane	ND		5	5	25	µg/Kg	12/28/99	SMS991227	EPA 8260B
Bromoform	ND		5	5	25	µg/Kg	12/28/99	SMS991227	EPA 8260B
Bromomethane	ND		5	5	25	µg/Kg	12/28/99	SMS991227	EPA 8260B
tert-Butanol	ND		5	20	100	µg/Kg	12/28/99	SMS991227	EPA 8260B
2-Butanone (MEK)	ND		5	20	100	µg/Kg	12/28/99	SMS991227	EPA 8260B
tert-Butyl Ethyl Ether	ND		5	5	25	µg/Kg	12/28/99	SMS991227	EPA 8260B
n-Butylbenzene	ND		5	5	25	µg/Kg	12/28/99	SMS991227	EPA 8260B
sec-Butylbenzene	ND		5	5	25	µg/Kg	12/28/99	SMS991227	EPA 8260B
tert-Butylbenzene	ND		5	5	25	µg/Kg	12/28/99	SMS991227	EPA 8260B
Carbon Disulfide	ND		5	5	25	µg/Kg	12/28/99	SMS991227	EPA 8260B
Carbon Tetrachloride	ND		5	5	25	µg/Kg	12/28/99	SMS991227	EPA 8260B
Chlorobenzene	ND		5	5	25	µg/Kg	12/28/99	SMS991227	EPA 8260B
Chloroethane	ND		5	5	25	µg/Kg	12/28/99	SMS991227	EPA 8260B
2-Chloroethyl-vinyl Ether	ND		5	20	100	µg/Kg	12/28/99	SMS991227	EPA 8260B
Chloroform	ND		5	5	25	µg/Kg	12/28/99	SMS991227	EPA 8260B
Chloromethane	ND		5	5	25	µg/Kg	12/28/99	SMS991227	EPA 8260B
2-Chlorotoluene	ND		5	5	25	µg/Kg	12/28/99	SMS991227	EPA 8260B
4-Chlorotoluene	ND		5	5	25	µg/Kg	12/28/99	SMS991227	EPA 8260B
Cyclohexanone	ND		5	20	100	µg/Kg	12/28/99	SMS991227	EPA 8260B
1,2-Dibromo-3-Chloropropane	ND		5	5	25	µg/Kg	12/28/99	SMS991227	EPA 8260B
1,2-Dibromoethane	ND		5	5	25	µg/Kg	12/28/99	SMS991227	EPA 8260B
Dibromomethane	ND		5	5	25	µg/Kg	12/28/99	SMS991227	EPA 8260B
cis-1,4-Dichloro-2-butene	ND		5	20	100	µg/Kg	12/28/99	SMS991227	EPA 8260B
trans-1,4-Dichloro-2-butene	ND		5	20	100	µg/Kg	12/28/99	SMS991227	EPA 8260B
Dichlorodifluoromethane	ND		5	5	25	µg/Kg	12/28/99	SMS991227	EPA 8260B
1,2-Dichlorobenzene	ND		5	5	25	µg/Kg	12/28/99	SMS991227	EPA 8260B
1,3-Dichlorobenzene	ND		5	5	25	µg/Kg	12/28/99	SMS991227	EPA 8260B
1,4-Dichlorobenzene	ND		5	5	25	µg/Kg	12/28/99	SMS991227	EPA 8260B

DF = Dilution Factor ND = Not Detected DLR = Detection Limit Reported PQL = Practical Quantitation Limit

Analysis performed by Entech Analytical Labs, Inc. (CA ELAP #I-2346)

Michelle L. Anderson, Laboratory Director

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Date: 12/30/99
Date Received: 12/22/99
Project Name: Former Mercer Processing Plant
Project Number: 500.009.02.001
P.O. Number:
Sampled By: Keary Knickerbocker

Certified Analytical Report

Order ID: 18299 **Lab Sample ID:** 18299-004 **Client Sample ID:** GS-3-0.5

Sample Time: 10 55 AM **Sample Date:** 12/21/99 **Matrix:** Solid

Parameter	Result	Flag	DF	PQL	DLR	Units	Analysis Date	QC Batch ID	Method
1,1-Dichloroethane	ND		5	5	25	µg/Kg	12/28/99	SMS991227	EPA 8260B
1,2-Dichloroethane	ND		5	5	25	µg/Kg	12/28/99	SMS991227	EPA 8260B
1,1-Dichloroethene	ND		5	5	25	µg/Kg	12/28/99	SMS991227	EPA 8260B
cis-1,2-Dichloroethene	ND		5	5	25	µg/Kg	12/28/99	SMS991227	EPA 8260B
trans-1,2-Dichloroethene	ND		5	5	25	µg/Kg	12/28/99	SMS991227	EPA 8260B
1,2-Dichloropropane	ND		5	5	25	µg/Kg	12/28/99	SMS991227	EPA 8260B
1,3-Dichloropropane	ND		5	5	25	µg/Kg	12/28/99	SMS991227	EPA 8260B
2,2-Dichloropropane	ND		5	5	25	µg/Kg	12/28/99	SMS991227	EPA 8260B
1,1-Dichloropropene	ND		5	5	25	µg/Kg	12/28/99	SMS991227	EPA 8260B
cis-1,3-Dichloropropene	ND		5	5	25	µg/Kg	12/28/99	SMS991227	EPA 8260B
trans-1,3-Dichloropropene	ND		5	5	25	µg/Kg	12/28/99	SMS991227	EPA 8260B
Diisopropyl Ether	ND		5	5	25	µg/Kg	12/28/99	SMS991227	EPA 8260B
Ethyl Methacrylate	ND		5	5	25	µg/Kg	12/28/99	SMS991227	EPA 8260B
Ethyl Benzene	ND		5	5	25	µg/Kg	12/28/99	SMS991227	EPA 8260B
Hexachlorobutadiene	ND		5	5	25	µg/Kg	12/28/99	SMS991227	EPA 8260B
2-Hexanone	ND		5	20	100	µg/Kg	12/28/99	SMS991227	EPA 8260B
Iodomethane	ND		5	5	25	µg/Kg	12/28/99	SMS991227	EPA 8260B
Isopropylbenzene	ND		5	5	25	µg/Kg	12/28/99	SMS991227	EPA 8260B
p-Isopropyltoluene	ND		5	5	25	µg/Kg	12/28/99	SMS991227	EPA 8260B
Isopropanol	ND		5	100	500	µg/Kg	12/28/99	SMS991227	EPA 8260B
Methyl Methacrylate	ND		5	5	25	µg/Kg	12/28/99	SMS991227	EPA 8260B
4-Methyl-2-Pentanone(MIBK)	ND		5	20	100	µg/Kg	12/28/99	SMS991227	EPA 8260B
Methyl-t-butyl Ether	ND		5	5	25	µg/Kg	12/28/99	SMS991227	EPA 8260B
Methylene Chloride	ND		5	5	25	µg/Kg	12/28/99	SMS991227	EPA 8260B
Naphthalene	ND		5	5	25	µg/Kg	12/28/99	SMS991227	EPA 8260B
Pentachloroethane	ND		5	5	25	µg/Kg	12/28/99	SMS991227	EPA 8260B
Propionitrile	ND		5	20	100	µg/Kg	12/28/99	SMS991227	EPA 8260B
n-Propylbenzene	ND		5	5	25	µg/Kg	12/28/99	SMS991227	EPA 8260B
Styrene	ND		5	5	25	µg/Kg	12/28/99	SMS991227	EPA 8260B
1,1,1,2-Tetrachloroethane	ND		5	5	25	µg/Kg	12/28/99	SMS991227	EPA 8260B
1,1,2,2-Tetrachloroethane	ND		5	5	25	µg/Kg	12/28/99	SMS991227	EPA 8260B
Tetrachloroethene	ND		5	5	25	µg/Kg	12/28/99	SMS991227	EPA 8260B
Toluene	ND		5	5	25	µg/Kg	12/28/99	SMS991227	EPA 8260B
1,2,3-Trichlorobenzene	ND		5	5	25	µg/Kg	12/28/99	SMS991227	EPA 8260B
1,2,4-Trichlorobenzene	ND		5	5	25	µg/Kg	12/28/99	SMS991227	EPA 8260B
1,2,3-Trichloropropane	ND		5	5	25	µg/Kg	12/28/99	SMS991227	EPA 8260B

DF = Dilution Factor ND = Not Detected DLR = Detection Limit Reported PQL = Practical Quantitation Limit

Analysis performed by Entech Analytical Labs, Inc. (CA ELAP #I-2346)

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Date Received: 12/22/99
Project Name: Former Mercer Processing Plant
Project Number: 500.009.02.001
P.O. Number:
Sampled By: Keary Knickerbocker

Certified Analytical Report

Order ID: 18299 **Lab Sample ID:** 18299-004 **Client Sample ID:** GS-3-0.5

Sample Time: 10:55 AM **Sample Date:** 12/21/99 **Matrix:** Solid

Parameter	Result	Flag	DF	PQL	DLR	Units	Analysis Date	QC Batch ID	Method
1,1,1-Trichloroethane	ND		5	5	25	µg/Kg	12/28/99	SMS991227	EPA 8260B
1,1,2-Trichloroethane	ND		5	5	25	µg/Kg	12/28/99	SMS991227	EPA 8260B
Trichloroethene	470		5	5	25	µg/Kg	12/28/99	SMS991227	EPA 8260B
Trichlorofluoromethane	ND		5	5	25	µg/Kg	12/28/99	SMS991227	EPA 8260B
1,2,4-Trimethylbenzene	ND		5	5	25	µg/Kg	12/28/99	SMS991227	EPA 8260B
1,3,5-Trimethylbenzene	ND		5	5	25	µg/Kg	12/28/99	SMS991227	EPA 8260B
Vinyl Acetate	ND		5	5	25	µg/Kg	12/28/99	SMS991227	EPA 8260B
Vinyl Chloride	ND		5	5	25	µg/Kg	12/28/99	SMS991227	EPA 8260B
Xylenes, Total	ND		5	5	25	µg/Kg	12/28/99	SMS991227	EPA 8260B

Surrogate	Surrogate Recovery	Control Limits (%)
4-Bromofluorobenzene	91	65 - 135
Dibromofluoromethane	110	65 - 135
Toluene-d8	107	65 - 135

DF = Dilution Factor ND = Not Detected DLR = Detection Limit Reported PQL = Practical Quantitation Limit

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Project Name: Former Mercer Processing Plant
Project Number: 500.009.02.001
P.O. Number:
Sampled By: Keary Knickerbocker

Certified Analytical Report

Order ID: 18299 **Lab Sample ID:** 18299-005 **Client Sample ID:** GS-4-0.5

Sample Time: 11:55 AM **Sample Date:** 12/21/99 **Matrix:** Solid

Parameter	Result	Flag	DF	PQL	DLR	Units	Analysis Date	QC Batch ID	Method
Acetone	230		1	100	100	µg/Kg	12/28/99	SMS991227	EPA 8260B
Acetonitrile	ND		1	20	20	µg/Kg	12/28/99	SMS991227	EPA 8260B
Allyl Chloride	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
tert-Amyl Methyl Ether	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
Benzene	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
Benzyl Chloride	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
Bromobenzene	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
Bromochloromethane	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
Bromodichloromethane	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
Bromoform	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
Bromomethane	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
tert-Butanol	ND		1	20	20	µg/Kg	12/28/99	SMS991227	EPA 8260B
2-Butanone (MEK)	47		1	20	20	µg/Kg	12/28/99	SMS991227	EPA 8260B
tert-Butyl Ethyl Ether	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
n-Butylbenzene	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
sec-Butylbenzene	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
tert-Butylbenzene	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
Carbon Disulfide	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
Carbon Tetrachloride	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
Chlorobenzene	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
Chloroethane	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
2-Chloroethyl-vinyl Ether	ND		1	20	20	µg/Kg	12/28/99	SMS991227	EPA 8260B
Chloroform	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
Chloromethane	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
2-Chlorotoluene	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
4-Chlorotoluene	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
Cyclohexanone	ND		1	20	20	µg/Kg	12/28/99	SMS991227	EPA 8260B
1,2-Dibromo-3-Chloropropane	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
1,2-Dibromoethane	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
Dibromomethane	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
cis-1,4-Dichloro-2-butene	ND		1	20	20	µg/Kg	12/28/99	SMS991227	EPA 8260B
trans-1,4-Dichloro-2-butene	ND		1	20	20	µg/Kg	12/28/99	SMS991227	EPA 8260B
Dichlorodifluoromethane	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
1,2-Dichlorobenzene	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
1,3-Dichlorobenzene	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
1,4-Dichlorobenzene	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B

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Project Number: 500.009.02.001
P.O. Number:
Sampled By: Keary Knickerbocker

Certified Analytical Report

Order ID: 18299 **Lab Sample ID:** 18299-005 **Client Sample ID:** GS-4-0 5

Sample Time: 11:55 AM **Sample Date:** 12/21/99 **Matrix:** Solid

Parameter	Result	Flag	DF	PQL	DLR	Units	Analysis Date	QC Batch ID	Method
1,1-Dichloroethane	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
1,2-Dichloroethane	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
1,1-Dichloroethene	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
cis-1,2-Dichloroethene	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
trans-1,2-Dichloroethene	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
1.2-Dichloropropane	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
1.3-Dichloropropane	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
2.2-Dichloropropane	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
1.1-Dichloropropene	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
cis-1,3-Dichloropropene	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
trans-1,3-Dichloropropene	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
Diisopropyl Ether	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
Ethyl Methacrylate	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
Ethyl Benzene	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
Hexachlorobutadiene	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
2-Hexanone	ND		1	20	20	µg/Kg	12/28/99	SMS991227	EPA 8260B
Iodomethane	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
Isopropylbenzene	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
p-Isopropyltoluene	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
Methacrylonitrile	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
Methyl Methacrylate	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
4-Methyl-2-Pentanone(MIBK)	ND		1	20	20	µg/Kg	12/28/99	SMS991227	EPA 8260B
Methyl-t-butyl Ether	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
Methylene Chloride	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
Naphthalene	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
Pentachloroethane	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
Propionitrile	ND		1	20	20	µg/Kg	12/28/99	SMS991227	EPA 8260B
n-Propylbenzene	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
Styrene	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
1.1.1.2-Tetrachloroethane	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
1.1.2.2-Tetrachloroethane	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
Tetrachloroethene	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
Toluene	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
1.2.3-Trichlorobenzene	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
1.2.4-Trichlorobenzene	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
1.2.3-Trichloropropane	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B

DF = Dilution Factor ND = Not Detected DLR = Detection Limit Reported PQL = Practical Quantitation Limit

Analysis performed by Entech Analytical Labs, Inc. (CA ELAP #I-2346)

Michelle L. Anderson, Laboratory Director

Environmental Analysis Since 1983

Entech Analytical Labs, Inc.

CA ELAP# I-2346

525 Del Rey Avenue, Suite E • Sunnyvale, CA 94086 • (408) 735-1550 • Fax (408) 735-1554

PES Environmental, Inc.
1682 Novato Boulevard, Suite 100
Novato, CA 94947
Attn: Kyle Flory

Date: 12/30/99
Date Received: 12/22/99
Project Name: Former Mercer Processing Plant
Project Number: 500.009.02.001
P.O. Number:
Sampled By: Keary Knickerbocker

Certified Analytical Report

Order ID: 18299 **Lab Sample ID:** 18299-005 **Client Sample ID:** GS-4-0.5

Sample Time: 11:55 AM **Sample Date:** 12/21/99 **Matrix:** Solid

Parameter	Result	Flag	DF	PQL	DLR	Units	Analysis Date	QC Batch ID	Method
1,1,1-Trichloroethane	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
1,1,2-Trichloroethane	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
Trichloroethene	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
Trichlorofluoromethane	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
1,2,4-Trimethylbenzene	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
1,3,5-Trimethylbenzene	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
Vinyl Acetate	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
Vinyl Chloride	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
Xylenes, Total	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B

Surrogate	Surrogate Recovery	Control Limits (%)
4-Bromofluorobenzene	83	65 - 135
Dibromofluoromethane	106	65 - 135
Toluene-d8	106	65 - 135

DF = Dilution Factor ND = Not Detected DLR = Detection Limit Reported PQL = Practical Quantitation Limit

Analysis performed by Entech Analytical Labs, Inc. (CA ELAP #I-2346)

Michelle L. Anderson, Laboratory Director

Environmental Analysis Since 1983

Entech Analytical Labs, Inc.

CA ELAP# I-2346

525 Del Rey Avenue, Suite E • Sunnyvale, CA 94086 • (408) 735-1550 • Fax (408) 735-1554

PES Environmental, Inc.
1682 Novato Boulevard, Suite 100
Novato, CA 94947
Attn: Kyle Flory

Date: 12/30/99
Date Received: 12/22/99
Project Name: Former Mercer Processing Plant
Project Number: 500.009.02.001
P.O. Number:
Sampled By: Keary Knickerbocker

Certified Analytical Report

Order ID: 18299 **Lab Sample ID:** 18299-009 **Client Sample ID:** GS-5-0.5

Sample Time: 1:10 PM **Sample Date:** 12/21/99 **Matrix:** Solid

Parameter	Result	Flag	DF	PQL	DLR	Units	Analysis Date	QC Batch ID	Method
Acetone	270		1	100	100	µg/Kg	12/28/99	SMS991227	EPA 8260B
Acetonitrile	ND		1	20	20	µg/Kg	12/28/99	SMS991227	EPA 8260B
Allyl Chloride	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
tert-Amyl Methyl Ether	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
Benzene	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
Benzyl Chloride	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
Bromobenzene	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
Bromochloromethane	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
Bromodichloromethane	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
Bromoform	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
Bromomethane	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
tert-Butanol	ND		1	20	20	µg/Kg	12/28/99	SMS991227	EPA 8260B
2-Butanone (MEK)	52		1	20	20	µg/Kg	12/28/99	SMS991227	EPA 8260B
tert-Butyl Ethyl Ether	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
n-Butylbenzene	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
sec-Butylbenzene	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
tert-Butylbenzene	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
Carbon Disulfide	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
Carbon Tetrachloride	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
Chlorobenzene	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
Chloroethane	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
2-Chloroethyl-vinyl Ether	ND		1	20	20	µg/Kg	12/28/99	SMS991227	EPA 8260B
Chloroform	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
Chloromethane	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
2-Chlorotoluene	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
4-Chlorotoluene	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
Cyclohexanone	ND		1	20	20	µg/Kg	12/28/99	SMS991227	EPA 8260B
1,2-Dibromo-3-Chloropropane	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
1,2-Dibromoethane	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
Dibromomethane	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
cis-1,4-Dichloro-2-butene	ND		1	20	20	µg/Kg	12/28/99	SMS991227	EPA 8260B
trans-1,4-Dichloro-2-butene	ND		1	20	20	µg/Kg	12/28/99	SMS991227	EPA 8260B
Dichlorodifluoromethane	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
1,2-Dichlorobenzene	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
1,3-Dichlorobenzene	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
1,4-Dichlorobenzene	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B

DF = Dilution Factor ND = Not Detected DLR = Detection Limit Reported PQL = Practical Quantitation Limit

Analysis performed by Entech Analytical Labs, Inc (CA ELAP #I-2346)

Michelle L. Anderson, Laboratory Director

Environmental Analysis Since 1983

Entech Analytical Labs, Inc.

CA ELAP# I-2346

525 Del Rey Avenue, Suite E • Sunnyvale, CA 94086 • (408) 735-1550 • Fax (408) 735-1554

PES Environmental, Inc.
1682 Novato Boulevard, Suite 100
Novato, CA 94947
Attn: Kyle Flory

Date: 12/30/99
Date Received: 12/22/99
Project Name: Former Mercer Processing Plant
Project Number: 500.009.02.001
P.O. Number:
Sampled By: Keary Knickerbocker

Certified Analytical Report

Order ID: 18299 **Lab Sample ID:** 18299-009 **Client Sample ID:** GS-5-0.5

Sample Time: 1:10 PM **Sample Date:** 12/21/99 **Matrix:** Solid

Parameter	Result	Flag	DF	PQL	DLR	Units	Analysis Date	QC Batch ID	Method
1,1-Dichloroethane	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
1,2-Dichloroethane	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
1,1-Dichloroethene	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
cis-1,2-Dichloroethene	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
trans-1,2-Dichloroethene	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
1,2-Dichloropropane	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
1,3-Dichloropropane	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
2,2-Dichloropropane	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
1,1-Dichloropropene	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
cis-1,3-Dichloropropene	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
trans-1,3-Dichloropropene	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
Diisopropyl Ether	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
Ethyl Methacrylate	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
Ethyl Benzene	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
Hexachlorobutadiene	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
2-Hexanone	ND		1	20	20	µg/Kg	12/28/99	SMS991227	EPA 8260B
Iodomethane	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
Isopropylbenzene	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
p-Isopropyltoluene	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
Methacrylonitrile	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
Methyl Methacrylate	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
4-Methyl-2-Pentanone(MIBK)	ND		1	20	20	µg/Kg	12/28/99	SMS991227	EPA 8260B
Methyl-t-butyl Ether	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
Methylene Chloride	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
Naphthalene	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
Pentachloroethane	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
Propionitrile	ND		1	20	20	µg/Kg	12/28/99	SMS991227	EPA 8260B
n-Propylbenzene	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
Styrene	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
1,1,1,2-Tetrachloroethane	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
1,1,2,2-Tetrachloroethane	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
Tetrachloroethene	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
Toluene	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
1,2,3-Trichlorobenzene	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
1,2,4-Trichlorobenzene	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
1,2,3-Trichloropropane	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B

DF = Dilution Factor ND = Not Detected DLR = Detection Limit Reported PQL = Practical Quantitation Limit

Analysis performed by Entech Analytical Labs, Inc. (CA ELAP #I-2346)

Michelle L. Anderson, Laboratory Director

Entech Analytical Labs, Inc.

CA ELAP# I-2346

525 Del Rey Avenue, Suite E • Sunnyvale, CA 94086 • (408) 735-1550 • Fax (408) 735-1554

PES Environmental, Inc.
1682 Novato Boulevard, Suite 100
Novato, CA 94947
Attn: Kyle Flory

Date: 12/30/99
Date Received: 12/22/99
Project Name: Former Mercer Processing Plant
Project Number: 500.009.02.001
P.O. Number:
Sampled By: Keary Knickerbocker

Certified Analytical Report

Order ID: 18299 **Lab Sample ID:** 18299-009 **Client Sample ID:** GS-5-0.5

Sample Time: 1:10 PM **Sample Date:** 12/21/99 **Matrix:** Solid

Parameter	Result	Flag	DF	PQL	DLR	Units	Analysis Date	QC Batch ID	Method
1,1,1-Trichloroethane	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
1,1,2-Trichloroethane	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
Trichloroethene	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
Trichlorofluoromethane	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
1,2,4-Trimethylbenzene	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
1,3,5-Trimethylbenzene	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
Vinyl Acetate	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
Vinyl Chloride	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B
Xylenes, Total	ND		1	5	5	µg/Kg	12/28/99	SMS991227	EPA 8260B

Surrogate	Surrogate Recovery	Control Limits (%)
4-Bromofluorobenzene	81	65 - 135
Dibromofluoromethane	106	65 - 135
Toluene-d8	110	65 - 135

DF = Dilution Factor ND = Not Detected DLR = Detection Limit Reported PQL = Practical Quantitation Limit

Analysis performed by Entech Analytical Labs, Inc. (CA ELAP #I-2346)

Michelle L. Anderson, Laboratory Director

Environmental Analysis Since 1983

Entech Analytical Labs, Inc.

525 Del Rey Avenue, Suite E
Sunnyvale, CA 94086

QUALITY CONTROL RESULTS SUMMARY

Volatile Organic Compounds
Laboratory Control Sample

QC Batch #: SMS991227
Matrix: Solid
Units: µg/kg

Date analyzed: 12/27/99
Spiked Sample: Blank Spike

PARAMETER	Method #	SA µg/kg	SR µg/kg	SP µg/kg	SP %R	SPD µg/kg	SPD %R	RPD	QC LIMITS RPD	QC LIMITS
1,1-Dichloroethene	8240/8260	25.0	ND	27.4	**110**	27.0	**108**	1.5	25	65-135
Benzene	8240/8260	25.0	ND	27.5	**110**	26.9	**108**	2.2	25	65-135
Trichloroethene	8240/8260	25.0	ND	28.8	**115**	28.0	**112**	2.8	25	65-135
Toluene	8240/8260	25.0	ND	28.5	**114**	28.5	**114**	0.0	25	65-135
Chlorobenzene	8240/8260	25.0	ND	26.5	**106**	26.5	**106**	0.0	25	65-135
Surrogates										
Dibromofluoromethane	8240/8260		95%	101%		100%				65-135
1,2 - Dichloroethane	8240/8260		99%	106%		101%				65-135
Toluene -d8	8240/8260		95%	96%		97%				65-135
4-Bromofluorobenzene	8240/8260		93%	92%		93%				65-135

Definition of Terms:

- na: Not Analyzed in QC batch
- SA: Spike Added
- SR: Sample Result
- RPD(%): Duplicate Analysis - Relative Percent Difference
- SP: Spike Result
- SP (%R): Spike % Recovery
- SPD: Spike Duplicate Result
- SPD (%R): Spike Duplicate % Recovery
- NC: Not Calculated

PES ENVIRONMENTAL, Inc.
Engineering & Environmental Services

CHAIN OF CUSTODY RECORD

1682 NOVATO BOULEVARD, SUITE 100
NOVATO, CALIFORNIA 94947
(415) 899-1600 FAX (415) 899-1601

SAMPLERS: Keary Knickerbocker

JOB NUMBER: 500-009-02.001

NAME / LOCATION: Former Mercer Processing Plant

PROJECT MANAGER: Kyle S. Flory

RECORDER: Keary Knickerbocker

DATE YR	MO	DY	TIME	SAMPLE NUMBER / DESIGNATION	SOURCE CODE	MATRIX: Water	Sedim't	Soil	Oil	# CONTAINERS & PRESERV.: Unpres.	H_2SO_4	HNO_3	HCl	Filtered	DEPTH IN FEET	COL MTD CD	QA CODE	ANALYSIS REQUESTED: EPA 601 / 8010	EPA 602 / 8020 (BTEX)	EPA 624 / 8240	EPA 625 / 8270	TPHg by 5030 / 8015 (mod)	TPHd by 3550 / 8015 (mod)	Halogenated Solvents by 8260B							18299
99	12	21	0920	GS-2-0.5	48			✓		1					0.5	37	10						✓	*						001
			0935	GS-2-2.0	48			✓		1					2.0	37	10						✓	} Hold						002
			1000	GS-2-3.5	48			✓		1					3.5	37	10						✓	}						003
			1055	GS-3-0.5	48			✓		1					0.5	37	10						✓	*						004
			1155	GS-4-0.5	48			✓		1					0.5	37	10						✓	*						005
			1220	GS-4-2.0	48			✓		1					2.0	37	10						✓	}						006
			1240	GS-4-4.0	48			✓		1					4.0	37	10						✓	} Hold						007
			1445	GS-4-6.0	48			✓		1					6.0	37	10						✓	}						008
			1310	GS-5-0.5	48			✓		1					0.5	37	10						✓	*						009
			1325	GS-5-2.0	48			✓		1					2.0	37	10						✓	}						010
			1345	GS-5-4.0	48			✓		1					4.0	37	10						✓	} Hold						011
			1410	GS-5-6.0	48			✓		1					6.0	37	10						✓	}						012

NOTE

* = Analyze for Halogenated Solvents by 8260B

- If Tentatively Identified Compounds (TIC's) are observed contact PES to discuss further analysis

Standard 5 day Turn Around Time

CHAIN OF CUSTODY RECORD

RELINQUISHED BY (Signature)		RECEIVED BY (Signature) 617	DATE 12/22/99 TIME 810
RELINQUISHED BY (Signature) 617		RECEIVED BY: (Signature)	DATE TIME
RELINQUISHED BY (Signature)		RECEIVED BY (Signature)	DATE TIME
RELINQUISHED BY (Signature)		RECEIVED BY (Signature)	DATE TIME
DISPATCHED BY (Signature)	DATE TIME	RECEIVED FOR LAB BY (Signature) Leo Rodriguez	DATE 12/22/99 TIME 1120
METHOD OF SHIPMENT			

Entech Analytical Labs, Inc.

CA ELAP# I-2346

525 Del Rey Avenue, Suite E • Sunnyvale, CA 94086 • (408) 735-1550 • Fax (408) 735-1554

January 06, 2000

Kyle Flory
PES Environmental, Inc.
1682 Novato Boulevard, Suite 100
Novato, CA 94947

Order: 18299
Project Name: Former Mercer Processing Plant
Project Number: 500.009.02.001
Project Notes:

Date Collected: 12/21/99
Date Received: 12/22/99
P.O. Number:

On December 22, 1999, 12 samples were received under documentented chain of custody. Results for the following analyses are attached:

Matrix	Test	Method
Solid	EPA 8260B	EPA 8260B

Chemical analysis of these samples has been completed. Summaries of the data are contained on the following pages. USEPA protocols for sample storage and preservation were followed.

Entech Analytical Labs, Inc. is certified by the State of California (#I-2346). If you have any questions regarding procedures or results, please call me at 408-735-1550.

Sincerely,

Michelle L. Anderson
Lab Director

Entech Analytical Labs, Inc.

CA ELAP# I-2346

525 Del Rey Avenue, Suite E • Sunnyvale, CA 94086 • (408) 735-1550 • Fax (408) 735-1554

PES Environmental, Inc.
1682 Novato Boulevard, Suite 100
Novato, CA 94947
Attn: Kyle Flory

Date: 1/6/00
Date Received: 12/22/99
Project Name: Former Mercer Processing Plant
Project Number: 500.009.02.001
P.O. Number:
Sampled By: Keary Knickerbocker

Certified Analytical Report

Order ID: 18299 **Lab Sample ID:** 18299-003 **Client Sample ID:** GS-2-3.5

Sample Time: 10:00 AM **Sample Date:** 12/21/99 **Matrix:** Solid

Parameter	Result	Flag	DF	PQL	DLR	Units	Analysis Date	QC Batch ID	Method
Acetone	ND		1	100	100	µg/Kg	1/4/00	SMS000103	EPA 8260B
Acrylonitrile	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Allyl Chloride	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
tert-Amyl Methyl Ether	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Benzene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Benzyl Chloride	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Bromobenzene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Bromochloromethane	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Bromodichloromethane	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Bromoform	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Bromomethane	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
tert-Butanol	ND		1	20	20	µg/Kg	1/4/00	SMS000103	EPA 8260B
2-Butanone (MEK)	ND		1	20	20	µg/Kg	1/4/00	SMS000103	EPA 8260B
tert-Butyl Ethyl Ether	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
n-Butylbenzene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
sec-Butylbenzene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
tert-Butylbenzene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Carbon Disulfide	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Carbon Tetrachloride	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Chlorobenzene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Chloroethane	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
2-Chloroethyl-vinyl Ether	ND		1	20	20	µg/Kg	1/4/00	SMS000103	EPA 8260B
Chloroform	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Chloromethane	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
2-Chlorotoluene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
4-Chlorotoluene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Dibromochloromethane	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
1,2-Dibromo-3-Chloropropane	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
1,2-Dibromoethane	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Dibromomethane	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
cis-1,4-Dichloro-2-butene	ND		1	20	20	µg/Kg	1/4/00	SMS000103	EPA 8260B
trans-1,4-Dichloro-2-butene	ND		1	20	20	µg/Kg	1/4/00	SMS000103	EPA 8260B
Dichlorodifluoromethane	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
1,2-Dichlorobenzene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
1,3-Dichlorobenzene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
1,4-Dichlorobenzene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B

DF = Dilution Factor ND = Not Detected DLR = Detection Limit Reported PQL = Practical Quantitation Limit

Analysis performed by Entech Analytical Labs, Inc. (CA ELAP #I-2346)

Michelle L. Anderson, Laboratory Director

Entech Analytical Labs, Inc.

CA ELAP# I-2346

525 Del Rey Avenue, Suite E • Sunnyvale, CA 94086 • (408) 735-1550 • Fax (408) 735-1554

PES Environmental, Inc.
1682 Novato Boulevard, Suite 100
Novato, CA 94947
Attn: Kyle Flory

Date: 1/6/00
Date Received: 12/22/99
Project Name: Former Mercer Processing Plant
Project Number: 500.009.02.001
P.O. Number:
Sampled By: Keary Knickerbocker

Certified Analytical Report

Order ID: 18299 **Lab Sample ID:** 18299-003 **Client Sample ID:** GS-2-3.5

Sample Time: 10:00 AM **Sample Date:** 12/21/99 **Matrix:** Solid

Parameter	Result	Flag	DF	PQL	DLR	Units	Analysis Date	QC Batch ID	Method
1,1-Dichloroethane	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
1,2-Dichloroethane	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
1,1-Dichloroethene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
cis-1,2-Dichloroethene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
trans-1,2-Dichloroethene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
1,2-Dichloropropane	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
1,3-Dichloropropane	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
2,2-Dichloropropane	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
1,1-Dichloropropene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
cis-1,3-Dichloropropene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
trans-1,3-Dichloropropene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Diisopropyl Ether	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Ethyl Methacrylate	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Ethyl Benzene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Hexachlorobutadiene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
2-Hexanone	ND		1	20	20	µg/Kg	1/4/00	SMS000103	EPA 8260B
Iodomethane	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Isopropylbenzene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
p-Isopropyltoluene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Methacrylonitrile	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Methyl Methacrylate	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
4-Methyl-2-Pentanone(MIBK)	ND		1	20	20	µg/Kg	1/4/00	SMS000103	EPA 8260B
Methyl-t-butyl Ether	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Methylene Chloride	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Naphthalene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Pentachloroethane	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Propionitrile	ND		1	20	20	µg/Kg	1/4/00	SMS000103	EPA 8260B
n-Propylbenzene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Styrene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
1,1,1,2-Tetrachloroethane	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
1,1,2,2-Tetrachloroethane	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Tetrachloroethene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Toluene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
1,2,3-Trichlorobenzene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
1,2,4-Trichlorobenzene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
1,2,3-Trichloropropane	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B

DF = Dilution Factor ND = Not Detected DLR = Detection Limit Reported PQL = Practical Quantitation Limit

Analysis performed by Entech Analytical Labs, Inc. (CA ELAP #I-2346)

Michelle L. Anderson, Laboratory Director

Entech Analytical Labs, Inc.

CA ELAP# I-2346

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PES Environmental, Inc.
1682 Novato Boulevard, Suite 100
Novato, CA 94947
Attn: Kyle Flory

Date: 1/6/00
Date Received: 12/22/99
Project Name: Former Mercer Processing Plant
Project Number: 500.009.02.001
P.O. Number:
Sampled By: Keary Knickerbocker

Certified Analytical Report

Order ID: 18299 **Lab Sample ID:** 18299-003 **Client Sample ID:** GS-2-3.5

Sample Time: 10:00 AM **Sample Date:** 12/21/99 **Matrix:** Solid

Parameter	Result	Flag	DF	PQL	DLR	Units	Analysis Date	QC Batch ID	Method
1,1,1-Trichloroethane	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
1,1,2-Trichloroethane	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Trichloroethene	54		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Trichlorofluoromethane	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
1,2,4-Trimethylbenzene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
1,3,5-Trimethylbenzene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Vinyl Acetate	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Vinyl Chloride	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Xylenes, Total	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B

Surrogate	Surrogate Recovery	Control Limits (%)
4-Bromofluorobenzene	86	65 - 135
Dibromofluoromethane	99	65 - 135
Toluene-d8	101	65 - 135

DF = Dilution Factor ND = Not Detected DLR = Detection Limit Reported PQL = Practical Quantitation Limit

Analysis performed by Entech Analytical Labs, Inc. (CA ELAP #I-2346)

Michelle L. Anderson, Laboratory Director

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CA ELAP# I-2346

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PES Environmental, Inc.
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Attn: Kyle Flory

Date: 1/6/00
Date Received: 12/22/99
Project Name: Former Mercer Processing Plant
Project Number: 500.009.02.001
P.O. Number:
Sampled By: Keary Knickerbocker

Certified Analytical Report

Order ID: 18299 **Lab Sample ID:** 18299-006 **Client Sample ID:** GS-4-2.0

Sample Time: 12:20 PM **Sample Date:** 12/21/99 **Matrix:** Solid

Parameter	Result	Flag	DF	PQL	DLR	Units	Analysis Date	QC Batch ID	Method
Acetone	150		1	100	100	µg/Kg	1/4/00	SMS000103	EPA 8260B
Acetonitrile	ND		1	20	20	µg/Kg	1/4/00	SMS000103	EPA 8260B
Allyl Chloride	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
tert-Amyl Methyl Ether	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Benzene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Benzyl Chloride	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Bromobenzene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Bromochloromethane	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Bromodichloromethane	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Bromoform	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Bromomethane	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
tert-Butanol	ND		1	20	20	µg/Kg	1/4/00	SMS000103	EPA 8260B
2-Butanone (MEK)	24		1	20	20	µg/Kg	1/4/00	SMS000103	EPA 8260B
tert-Butyl Ethyl Ether	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
n-Butylbenzene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
sec-Butylbenzene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
tert-Butylbenzene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Carbon Disulfide	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Carbon Tetrachloride	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Chlorobenzene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Chloroethane	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
2-Chloroethyl-vinyl Ether	ND		1	20	20	µg/Kg	1/4/00	SMS000103	EPA 8260B
Chloroform	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Chloromethane	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
2-Chlorotoluene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
4-Chlorotoluene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Cyclohexanone	ND		1	20	20	µg/Kg	1/4/00	SMS000103	EPA 8260B
1,2-Dibromo-3-Chloropropane	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
1,2-Dibromoethane	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Dibromomethane	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
cis-1,4-Dichloro-2-butene	ND		1	20	20	µg/Kg	1/4/00	SMS000103	EPA 8260B
trans-1,4-Dichloro-2-butene	ND		1	20	20	µg/Kg	1/4/00	SMS000103	EPA 8260B
Dichlorodifluoromethane	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
1,2-Dichlorobenzene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
1,3-Dichlorobenzene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
1,4-Dichlorobenzene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B

DF = Dilution Factor ND = Not Detected DLR = Detection Limit Reported PQL = Practical Quantitation Limit

Analysis performed by Entech Analytical Labs, Inc. (CA ELAP #I-2346)

Michelle L. Anderson, Laboratory Director

Environmental Analysis Since 1983

Entech Analytical Labs, Inc.

CA ELAP# I-2346

525 Del Rey Avenue, Suite E • Sunnyvale, CA 94086 • (408) 735-1550 • Fax (408) 735-1554

PES Environmental, Inc.
1682 Novato Boulevard, Suite 100
Novato, CA 94947
Attn: Kyle Flory

Date: 1/6/00
Date Received: 12/22/99
Project Name: Former Mercer Processing Plant
Project Number: 500.009.02.001
P.O. Number:
Sampled By: Keary Knickerbocker

Certified Analytical Report

Order ID: 18299 **Lab Sample ID:** 18299-006 **Client Sample ID:** GS-4-2.0

Sample Time: 12:20 PM **Sample Date:** 12/21/99 **Matrix:** Solid

Parameter	Result	Flag	DF	PQL	DLR	Units	Analysis Date	QC Batch ID	Method
1,1-Dichloroethane	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
1,2-Dichloroethane	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
1,1-Dichloroethene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
cis-1,2-Dichloroethene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
trans-1,2-Dichloroethene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
1,2-Dichloropropane	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
1,3-Dichloropropane	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
2,2-Dichloropropane	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
1,1-Dichloropropene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
cis-1,3-Dichloropropene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
trans-1,3-Dichloropropene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Diisopropyl Ether	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Ethyl Methacrylate	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Ethyl Benzene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Hexachlorobutadiene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
2-Hexanone	ND		1	20	20	µg/Kg	1/4/00	SMS000103	EPA 8260B
Iodomethane	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Isopropylbenzene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
p-Isopropyltoluene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Isopropanol	ND		1	100	100	µg/Kg	1/4/00	SMS000103	EPA 8260B
Methyl Methacrylate	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
4-Methyl-2-Pentanone(MIBK)	ND		1	20	20	µg/Kg	1/4/00	SMS000103	EPA 8260B
Methyl-t-butyl Ether	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Methylene Chloride	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Naphthalene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Pentachloroethane	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Propionitrile	ND		1	20	20	µg/Kg	1/4/00	SMS000103	EPA 8260B
n-Propylbenzene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Styrene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
1,1,1,2-Tetrachloroethane	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
1,1,2,2-Tetrachloroethane	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Tetrachloroethene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Toluene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
1,2,3-Trichlorobenzene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
1,2,4-Trichlorobenzene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
1,2,3-Trichloropropane	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B

DF = Dilution Factor ND = Not Detected DLR = Detection Limit Reported PQL = Practical Quantitation Limit

Analysis performed by Entech Analytical Labs, Inc. (CA ELAP #I-2346)

Michelle L. Anderson, Laboratory Director

Entech Analytical Labs, Inc.

CA ELAP# I-2346

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Date: 1/6/00
Date Received: 12/22/99
Project Name: Former Mercer Processing Plant
Project Number: 500.009.02.001
P.O. Number:
Sampled By: Keary Knickerbocker

Certified Analytical Report

Order ID: 18299 **Lab Sample ID:** 18299-006 **Client Sample ID:** GS-4-2.0

Sample Time: 12:20 PM **Sample Date:** 12/21/99 **Matrix:** Solid

Parameter	Result	Flag	DF	PQL	DLR	Units	Analysis Date	QC Batch ID	Method
1,1,1-Trichloroethane	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
1,1,2-Trichloroethane	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Trichloroethene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Trichlorofluoromethane	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
1,2,4-Trimethylbenzene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
1,3,5-Trimethylbenzene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Vinyl Acetate	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Vinyl Chloride	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Xylenes, Total	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B

Surrogate	Surrogate Recovery	Control Limits (%)
4-Bromofluorobenzene	86	65 - 135
Dibromofluoromethane	98	65 - 135
Toluene-d8	101	65 - 135

DF = Dilution Factor ND = Not Detected DLR = Detection Limit Reported PQL = Practical Quantitation Limit

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Attn: Kyle Flory

Date: 1/6/00
Date Received: 12/22/99
Project Name: Former Mercer Processing Plant
Project Number: 500.009.02.001
P.O. Number:
Sampled By: Keary Knickerbocker

Certified Analytical Report

Order ID: 18299 **Lab Sample ID:** 18299-007 **Client Sample ID:** GS-4-4.0

Sample Time: 12:40 PM **Sample Date:** 12/21/99 **Matrix:** Solid

Parameter	Result	Flag	DF	PQL	DLR	Units	Analysis Date	QC Batch ID	Method
Acetone	ND		1	100	100	µg/Kg	1/4/00	SMS000103	EPA 8260B
Acetonitrile	ND		1	20	20	µg/Kg	1/4/00	SMS000103	EPA 8260B
Allyl Chloride	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
tert-Amyl Methyl Ether	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Benzene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Benzyl Chloride	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Bromobenzene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Bromochloromethane	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Bromodichloromethane	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Bromoform	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Bromomethane	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
tert-Butanol	ND		1	20	20	µg/Kg	1/4/00	SMS000103	EPA 8260B
2-Butanone (MEK)	ND		1	20	20	µg/Kg	1/4/00	SMS000103	EPA 8260B
tert-Butyl Ethyl Ether	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
n-Butylbenzene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
sec-Butylbenzene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
tert-Butylbenzene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Carbon Disulfide	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Carbon Tetrachloride	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Chlorobenzene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Chloroethane	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
2-Chloroethyl-vinyl Ether	ND		1	20	20	µg/Kg	1/4/00	SMS000103	EPA 8260B
Chloroform	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Chloromethane	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
2-Chlorotoluene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
4-Chlorotoluene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Cyclohexanone	ND		1	20	20	µg/Kg	1/4/00	SMS000103	EPA 8260B
1,2-Dibromo-3-Chloropropane	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
1,2-Dibromoethane	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Dibromomethane	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
cis-1,4-Dichloro-2-butene	ND		1	20	20	µg/Kg	1/4/00	SMS000103	EPA 8260B
trans-1,4-Dichloro-2-butene	ND		1	20	20	µg/Kg	1/4/00	SMS000103	EPA 8260B
Dichlorodifluoromethane	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
1,2-Dichlorobenzene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
1,3-Dichlorobenzene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
1,4-Dichlorobenzene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B

DF = Dilution Factor ND = Not Detected DLR = Detection Limit Reported PQL = Practical Quantitation Limit

Analysis performed by Entech Analytical Labs, Inc. (CA ELAP #I-2346)

Michelle L. Anderson, Laboratory Director

Entech Analytical Labs, Inc.

CA ELAP# I-2346

525 Del Rey Avenue, Suite E • Sunnyvale, CA 94086 • (408) 735-1550 • Fax (408) 735-1554

PES Environmental, Inc.
1682 Novato Boulevard, Suite 100
Novato, CA 94947
Attn: Kyle Flory

Date: 1/6/00
Date Received: 12/22/99
Project Name: Former Mercer Processing Plant
Project Number: 500.009.02.001
P.O. Number:
Sampled By: Keary Knickerbocker

Certified Analytical Report

Order ID: 18299 **Lab Sample ID:** 18299-007 **Client Sample ID:** GS-4-4.0

Sample Time: 12:40 PM **Sample Date:** 12/21/99 **Matrix:** Solid

Parameter	Result	Flag	DF	PQL	DLR	Units	Analysis Date	QC Batch ID	Method
1,1-Dichloroethane	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
1,2-Dichloroethane	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
1,1-Dichloroethene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
cis-1,2-Dichloroethene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
trans-1,2-Dichloroethene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
1,2-Dichloropropane	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
1,3-Dichloropropane	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
2,2-Dichloropropane	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
1,1-Dichloropropene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
cis-1,3-Dichloropropene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
trans-1,3-Dichloropropene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Diisopropyl Ether	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Ethyl Methacrylate	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Ethyl Benzene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Hexachlorobutadiene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
2-Hexanone	ND		1	20	20	µg/Kg	1/4/00	SMS000103	EPA 8260B
Iodomethane	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Isopropylbenzene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
p-Isopropyltoluene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Isopropanol	ND		1	100	100	µg/Kg	1/4/00	SMS000103	EPA 8260B
Methyl Methacrylate	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
4-Methyl-2-Pentanone(MIBK)	ND		1	20	20	µg/Kg	1/4/00	SMS000103	EPA 8260B
Methyl-t-butyl Ether	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Methylene Chloride	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Naphthalene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Pentachloroethane	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Propionitrile	ND		1	20	20	µg/Kg	1/4/00	SMS000103	EPA 8260B
n-Propylbenzene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Styrene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
1,1,1,2-Tetrachloroethane	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
1,1,2,2-Tetrachloroethane	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Tetrachloroethene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Toluene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
1,2,3-Trichlorobenzene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
1,2,4-Trichlorobenzene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
1,2,3-Trichloropropane	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B

DF = Dilution Factor ND = Not Detected DLR = Detection Limit Reported PQL = Practical Quantitation Limit

Analysis performed by Entech Analytical Labs, Inc. (CA ELAP #I-2346)

Michelle L. Anderson, Laboratory Director

Entech Analytical Labs, Inc.

CA ELAP# I-2346

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PES Environmental, Inc.
1682 Novato Boulevard, Suite 100
Novato, CA 94947
Attn: Kyle Flory

Date: 1/6/00
Date Received: 12/22/99
Project Name: Former Mercer Processing Plant
Project Number: 500.009.02.001
P.O. Number:
Sampled By: Keary Knickerbocker

Certified Analytical Report

Order ID: 18299 **Lab Sample ID:** 18299-007 **Client Sample ID:** GS-4-4.0

Sample Time: 12:40 PM **Sample Date:** 12/21/99 **Matrix:** Solid

Parameter	Result	Flag	DF	PQL	DLR	Units	Analysis Date	QC Batch ID	Method
1,1,1-Trichloroethane	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
1,1,2-Trichloroethane	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Trichloroethene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Trichlorofluoromethane	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
1,2,4-Trimethylbenzene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
1,3,5-Trimethylbenzene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Vinyl Acetate	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Vinyl Chloride	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Xylenes, Total	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B

Surrogate	Surrogate Recovery	Control Limits (%)
4-Bromofluorobenzene	83	65 - 135
Dibromofluoromethane	96	65 - 135
Toluene-d8	103	65 - 135

DF = Dilution Factor ND = Not Detected DLR = Detection Limit Reported PQL = Practical Quantitation Limit

Analysis performed by Entech Analytical Labs, Inc. (CA ELAP #I-2346)

Michelle L. Anderson, Laboratory Director

Entech Analytical Labs, Inc.

CA ELAP# I-2346

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PES Environmental, Inc.
1682 Novato Boulevard, Suite 100
Novato, CA 94947
Attn: Kyle Flory

Date: 1/6/00
Date Received: 12/22/99
Project Name: Former Mercer Processing Plant
Project Number: 500.009.02.001
P.O. Number:
Sampled By: Keary Knickerbocker

Certified Analytical Report

Order ID: 18299 **Lab Sample ID:** 18299-008 **Client Sample ID:** GS-4-6.0

Sample Time: 2:45 PM **Sample Date:** 12/21/99 **Matrix:** Solid

Parameter	Result	Flag	DF	PQL	DLR	Units	Analysis Date	QC Batch ID	Method
Acetone	ND		1	100	100	µg/Kg	1/4/00	SMS000103	EPA 8260B
Acetonitrile	ND		1	20	20	µg/Kg	1/4/00	SMS000103	EPA 8260B
Allyl Chloride	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
tert-Amyl Methyl Ether	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Benzene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Benzyl Chloride	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Bromobenzene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Bromochloromethane	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Bromodichloromethane	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Bromoform	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Bromomethane	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
tert-Butanol	ND		1	20	20	µg/Kg	1/4/00	SMS000103	EPA 8260B
2-Butanone (MEK)	ND		1	20	20	µg/Kg	1/4/00	SMS000103	EPA 8260B
tert-Butyl Ethyl Ether	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
n-Butylbenzene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
sec-Butylbenzene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
tert-Butylbenzene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Carbon Disulfide	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Carbon Tetrachloride	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Chlorobenzene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Chloroethane	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
2-Chloroethyl-vinyl Ether	ND		1	20	20	µg/Kg	1/4/00	SMS000103	EPA 8260B
Chloroform	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Chloromethane	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
2-Chlorotoluene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
4-Chlorotoluene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Dibromochloromethane	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
1,2-Dibromo-3-Chloropropane	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
1,2-Dibromoethane	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Dibromomethane	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
cis-1,4-Dichloro-2-butene	ND		1	20	20	µg/Kg	1/4/00	SMS000103	EPA 8260B
trans-1,4-Dichloro-2-butene	ND		1	20	20	µg/Kg	1/4/00	SMS000103	EPA 8260B
Dichlorodifluoromethane	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
1,2-Dichlorobenzene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
1,3-Dichlorobenzene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
1,4-Dichlorobenzene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B

DF = Dilution Factor ND = Not Detected DLR = Detection Limit Reported PQL = Practical Quantitation Limit

Analysis performed by Entech Analytical Labs, Inc. (CA ELAP #I-2346)

Michelle L. Anderson, Laboratory Director

Entech Analytical Labs, Inc.

CA ELAP# I-2346

525 Del Rey Avenue, Suite E • Sunnyvale, CA 94086 • (408) 735-1550 • Fax (408) 735-1554

PES Environmental, Inc.
1682 Novato Boulevard, Suite 100
Novato, CA 94947
Attn: Kyle Flory

Date: 1/6/00
Date Received: 12/22/99
Project Name: Former Mercer Processing Plant
Project Number: 500.009.02.001
P.O. Number:
Sampled By: Keary Knickerbocker

Certified Analytical Report

Order ID: 18299 **Lab Sample ID:** 18299-008 **Client Sample ID:** GS-4-6.0

Sample Time: 2:45 PM **Sample Date:** 12/21/99 **Matrix:** Solid

Parameter	Result	Flag	DF	PQL	DLR	Units	Analysis Date	QC Batch ID	Method
1,1-Dichloroethane	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
1,2-Dichloroethane	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
1,1-Dichloroethene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
cis-1,2-Dichloroethene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
trans-1,2-Dichloroethene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
1,2-Dichloropropane	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
1,3-Dichloropropane	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
2,2-Dichloropropane	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
1,1-Dichloropropene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
cis-1,3-Dichloropropene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
trans-1,3-Dichloropropene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Diisopropyl Ether	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Ethyl Methacrylate	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Ethyl Benzene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Hexachlorobutadiene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
2-Hexanone	ND		1	20	20	µg/Kg	1/4/00	SMS000103	EPA 8260B
Iodomethane	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Isopropylbenzene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
p-Isopropyltoluene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Methacrylonitrile	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Methyl Methacrylate	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
4-Methyl-2-Pentanone(MIBK)	ND		1	20	20	µg/Kg	1/4/00	SMS000103	EPA 8260B
Methyl-t-butyl Ether	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Methylene Chloride	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Naphthalene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Pentachloroethane	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Propionitrile	ND		1	20	20	µg/Kg	1/4/00	SMS000103	EPA 8260B
n-Propylbenzene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Styrene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
1,1,1,2-Tetrachloroethane	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
1,1,2,2-Tetrachloroethane	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Tetrachloroethene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Toluene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
1,2,3-Trichlorobenzene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
1,2,4-Trichlorobenzene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
1,2,3-Trichloropropane	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B

DF = Dilution Factor ND = Not Detected DLR = Detection Limit Reported PQL = Practical Quantitation Limit

Analysis performed by Entech Analytical Labs, Inc. (CA ELAP #I-2346)

Michelle L. Anderson, Laboratory Director

Entech Analytical Labs, Inc.

CA ELAP# I-2346

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Project Name: Former Mercer Processing Plant
Project Number: 500.009.02.001
P.O. Number:
Sampled By: Keary Knickerbocker

Certified Analytical Report

Order ID: 18299 **Lab Sample ID:** 18299-008 **Client Sample ID:** GS-4-6.0

Sample Time: 2:45 PM **Sample Date:** 12/21/99 **Matrix:** Solid

Parameter	Result	Flag	DF	PQL	DLR	Units	Analysis Date	QC Batch ID	Method
1,1,1-Trichloroethane	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
1,1,2-Trichloroethane	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Trichloroethene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Trichlorofluoromethane	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
1,2,4-Trimethylbenzene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
1,3,5-Trimethylbenzene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Vinyl Acetate	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Vinyl Chloride	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Xylenes, Total	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B

Surrogate	Surrogate Recovery	Control Limits (%)
4-Bromofluorobenzene	80	65 - 135
Dibromofluoromethane	99	65 - 135
Toluene-d8	108	65 - 135

DF = Dilution Factor ND = Not Detected DLR = Detection Limit Reported PQL = Practical Quantitation Limit

Analysis performed by Entech Analytical Labs, Inc. (CA ELAP #I-2346)

Michelle L. Anderson, Laboratory Director

Environmental Analysis Since 1983

Entech Analytical Labs, Inc.

CA ELAP# I-2346

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Date Received: 12/22/99
Project Name: Former Mercer Processing Plant
Project Number: 500.009.02.001
P.O. Number:
Sampled By: Keary Knickerbocker

Certified Analytical Report

Order ID: 18299 **Lab Sample ID:** 18299-010 **Client Sample ID:** GS-5-2.0

Sample Time: 1:25 PM **Sample Date:** 12/21/99 **Matrix:** Solid

Parameter	Result	Flag	DF	PQL	DLR	Units	Analysis Date	QC Batch ID	Method
Acetone	330		1	100	100	µg/Kg	1/4/00	SMS000103	EPA 8260B
Acetonitrile	ND		1	20	20	µg/Kg	1/4/00	SMS000103	EPA 8260B
Allyl Chloride	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
tert-Amyl Methyl Ether	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Benzene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Benzyl Chloride	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Bromobenzene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Bromochloromethane	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Bromodichloromethane	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Bromoform	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Bromomethane	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
tert-Butanol	ND		1	20	20	µg/Kg	1/4/00	SMS000103	EPA 8260B
2-Butanone (MEK)	47		1	20	20	µg/Kg	1/4/00	SMS000103	EPA 8260B
tert-Butyl Ethyl Ether	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
n-Butylbenzene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
sec-Butylbenzene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
tert-Butylbenzene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Carbon Disulfide	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Carbon Tetrachloride	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Chlorobenzene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Chloroethane	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
2-Chloroethyl-vinyl Ether	ND		1	20	20	µg/Kg	1/4/00	SMS000103	EPA 8260B
Chloroform	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Chloromethane	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
2-Chlorotoluene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
4-Chlorotoluene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Cyclohexanone	ND		1	20	20	µg/Kg	1/4/00	SMS000103	EPA 8260B
1,2-Dibromo-3-Chloropropane	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
1,2-Dibromoethane	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Dibromomethane	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
cis-1,4-Dichloro-2-butene	ND		1	20	20	µg/Kg	1/4/00	SMS000103	EPA 8260B
trans-1,4-Dichloro-2-butene	ND		1	20	20	µg/Kg	1/4/00	SMS000103	EPA 8260B
Dichlorodifluoromethane	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
1,2-Dichlorobenzene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
1,3-Dichlorobenzene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
1,4-Dichlorobenzene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B

DF = Dilution Factor ND = Not Detected DLR = Detection Limit Reported PQL = Practical Quantitation Limit

Analysis performed by Entech Analytical Labs, Inc. (CA ELAP #I-2346)

Michelle L. Anderson, Laboratory Director

Entech Analytical Labs, Inc.

CA ELAP# I-2346

525 Del Rey Avenue, Suite E • Sunnyvale, CA 94086 • (408) 735-1550 • Fax (408) 735-1554

PES Environmental, Inc.
1682 Novato Boulevard, Suite 100
Novato, CA 94947
Attn: Kyle Flory

Date: 1/6/00
Date Received: 12/22/99
Project Name: Former Mercer Processing Plant
Project Number: 500.009.02.001
P.O. Number:
Sampled By: Keary Knickerbocker

Certified Analytical Report

Order ID: 18299 **Lab Sample ID:** 18299-010 **Client Sample ID:** GS-5-2.0

Sample Time: 1:25 PM **Sample Date:** 12/21/99 **Matrix:** Solid

Parameter	Result	Flag	DF	PQL	DLR	Units	Analysis Date	QC Batch ID	Method
1,1-Dichloroethane	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
1,2-Dichloroethane	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
1,1-Dichloroethene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
cis-1,2-Dichloroethene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
trans-1,2-Dichloroethene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
1,2-Dichloropropane	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
1,3-Dichloropropane	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
2,2-Dichloropropane	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
1,1-Dichloropropene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
cis-1,3-Dichloropropene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
trans-1,3-Dichloropropene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Diisopropyl Ether	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Ethyl Methacrylate	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Ethyl Benzene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Hexachlorobutadiene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
2-Hexanone	ND		1	20	20	µg/Kg	1/4/00	SMS000103	EPA 8260B
Iodomethane	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Isopropylbenzene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
p-Isopropyltoluene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Isopropanol	ND		1	100	100	µg/Kg	1/4/00	SMS000103	EPA 8260B
Methyl Methacrylate	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
4-Methyl-2-Pentanone(MIBK)	ND		1	20	20	µg/Kg	1/4/00	SMS000103	EPA 8260B
Methyl-t-butyl Ether	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Methylene Chloride	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Naphthalene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Pentachloroethane	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Propionitrile	ND		1	20	20	µg/Kg	1/4/00	SMS000103	EPA 8260B
n-Propylbenzene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Styrene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
1,1,1,2-Tetrachloroethane	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
1,1,2,2-Tetrachloroethane	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Tetrachloroethene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Toluene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
1,2,3-Trichlorobenzene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
1,2,4-Trichlorobenzene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
1,2,3-Trichloropropane	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B

DF = Dilution Factor ND = Not Detected DLR = Detection Limit Reported PQL = Practical Quantitation Limit

Analysis performed by Entech Analytical Labs, Inc. (CA ELAP #I-2346)

Michelle L. Anderson, Laboratory Director

Entech Analytical Labs, Inc.

CA ELAP# I-2346

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PES Environmental, Inc.
1682 Novato Boulevard, Suite 100
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Attn: Kyle Flory

Date: 1/6/00
Date Received: 12/22/99
Project Name: Former Mercer Processing Plant
Project Number: 500.009.02.001
P.O. Number:
Sampled By: Keary Knickerbocker

Certified Analytical Report

Order ID: 18299 **Lab Sample ID:** 18299-010 **Client Sample ID:** GS-5-2.0

Sample Time: 1:25 PM **Sample Date:** 12/21/99 **Matrix:** Solid

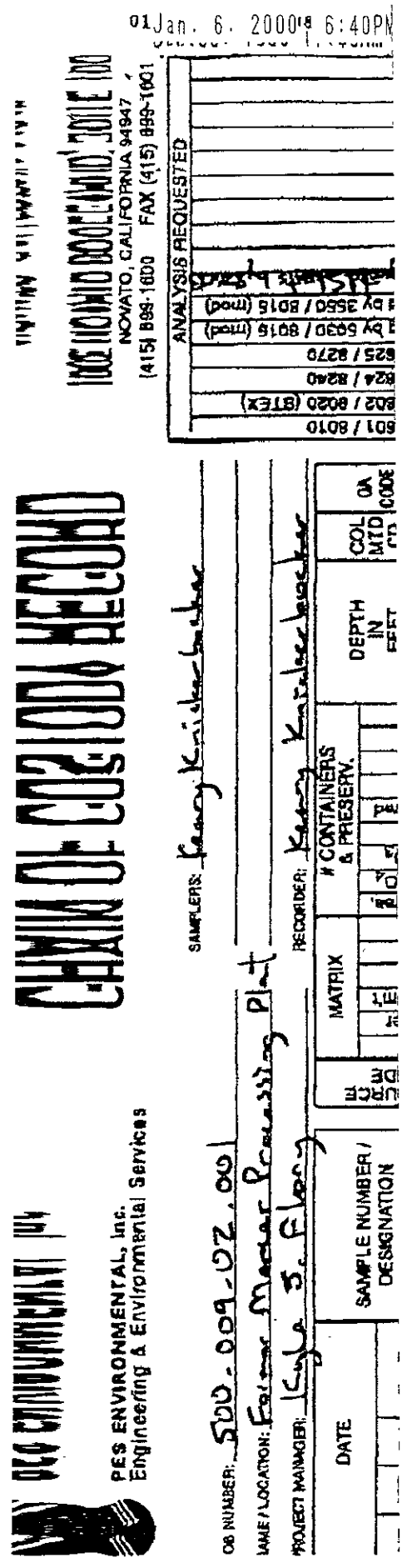
Parameter	Result	Flag	DF	PQL	DLR	Units	Analysis Date	QC Batch ID	Method
1,1,1-Trichloroethane	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
1,1,2-Trichloroethane	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Trichloroethane	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Trichlorofluoromethane	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
1,2,4-Trimethylbenzene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
1,3,5-Trimethylbenzene	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Vinyl Acetate	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Vinyl Chloride	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B
Xylenes, Total	ND		1	5	5	µg/Kg	1/4/00	SMS000103	EPA 8260B

Surrogate	Surrogate Recovery	Control Limits (%)
4-Bromofluorobenzene	83	65 - 135
Dibromofluoromethane	88	65 - 135
Toluene-d8	106	65 - 135

DF = Dilution Factor ND = Not Detected DLR = Detection Limit Reported PQL = Practical Quantitation Limit

Analysis performed by Entech Analytical Labs, Inc. (CA ELAP #I-2346)

Michelle L. Anderson, Laboratory Director



Entech

525 Del Re

PES Environ
1682 Novato I
Novato, CA 9
Attn: Kyle Fl

Order ID: 18

Sample Time: 2:

Parameter
1,1,1-Trichloroethane
1,1,2-Trichloroethane
Trichloroethene
Trichlorofluoromethane
1,2,4-Trimethylbenzene
1,3,5-Trimethylbenzene
Vinyl Acetate
Vinyl Chloride
Xylenes, Total

DF = Dilution Factor

Analysis performed by E

Michelle L. Anders

Entech Analyt

525 Del Rey Avenue, Suite I

PES Environmental, Inc.
1682 Novato Boulevard, Suite 10
Novato, CA 94947
Attn: Kyle Flory

Order ID: 18299 La

Sample Time: 2:10 PM

Parameter	Result
1,1-Dichloroethane	ND
1,2-Dichloroethane	ND
1,1-Dichloroethene	ND
cis-1,2-Dichloroethene	ND
trans-1,2-Dichloroethene	ND
1,2-Dichloropropane	ND
1,3-Dichloropropane	ND
2,2-Dichloropropane	ND
1,1-Dichloropropene	ND
cis-1,3-Dichloropropene	ND
trans-1,3-Dichloropropene	ND
Diisopropyl Ether	ND
Ethyl Methacrylate	ND
Ethyl Benzene	ND
Hexachlorobutadiene	ND
2-Hexanone	ND
Iodomethane	ND
Isopropylbenzene	ND
p-Isopropyltoluene	ND
Methacrylonitrile	ND
Methyl Methacrylate	ND
4-Methyl-2-Pentanone(MIBK)	ND
Methyl-t-butyl Ether	ND
Methylene Chloride	ND
Naphthalene	ND
Pentachloroethane	ND
Propionitrile	ND
n-Propylbenzene	ND
Styrene	ND
1,1,1,2-Tetrachloroethane	ND
1,1,2,2-Tetrachloroethane	ND
Tetrachloroethene	ND
Toluene	ND
1,2,3-Trichlorobenzene	ND
1,2,4-Trichlorobenzene	ND
1,2,3-Trichloropropane	ND

DF = Dilution Factor ND = No

Analysis performed by Entech Analytical Labs, Inc.

Michelle L. Anderson, Laboratory Direc

APPENDIX A

RECORDS REVIEW

PES Environmental, Inc.
Engineering & Environmental Services

A Report Prepared For:

California Regional Water Quality Control Board
San Francisco Bay Region
1515 Clay Street, Suite 1400
Oakland, California 94612

CALIFORNIA REGIONAL WATER
JUL 26 2001
QUALITY CONTROL BOARD

Attention: Dr. Derek Whitworth, P.E.

DRAFT REMEDIAL ACTION PLAN
FORMER MERCER PROCESSING, INC. FACILITY
230 PORTAGE AVENUE
PALO ALTO, CALIFORNIA

VOLUME II

JULY 25, 2001

1682 Novato Boulevard • Suite 100 • Novato, California 94947 • TEL (415) 899-1600 • FAX (415) 899-1601

VOLUME II

APPENDIX D

VAPOR PHASE MIGRATION MODELING CALCULATIONS

Calculate Soil Gas Concentration from Soil Concentration

$$Csg = \frac{H*Csoil*BD}{Pw+(Kd*BD)+(H*Pa)} = \frac{X}{Y}$$

Csg	Soil Gas Concentration (mg/Kg)
H	Henry's law Constant (unitless)
Csoil	Contaminant Soil Concentration (mg/Kg)
BD	Bulk Density (g/cm3)
Pa	Air Filled Porosity (unitless)
Pw	Water Filler Porosity = Pt-Pa (%)
Pt	Total Porosity (unitless)
Kd	Sorption Coefficient = (Koc*foc) + (Koi*foi)

H =	0.37
Csoil =	6.8
BD =	1.04
Pw =	0.32
Kd =	2.6
Pa =	0.2
Pt =	0.52

Csg = X/Y

X	2.61664
Y	3.098
Csg =	0.844622

ug/m3 =	844622.3
	8.45E+05

Table A1. Vapor Phase Migration and Risk Calculations - Mercer Processing

C_{sg}, Soil Gas Concentration (ug/m^3)
844,622

A. Calculation of Flux

formula $FLUX = (D_a * C_{sg})/X$

$= ((D_a * P_a^{3.33}/P_t^2) * C_{sg})/X$

X (m) = 1.22 P_a = 0.2 P_t = 0.52

chemical	D_a (m^2/hr)	FLUX ($ug/hr-m^2$)
TCE	0.2844	**3.42E+03**

B. Calculation of Indoor Air Concentration

formula $C_i = (Slab * Flux)/(height * E)$

chemical	Matrix Used	Flux ($ug/hr-m^2$)	Slab (unitless)	height (m)	E (1/hr)	C_{in} (ug/m^3)
TCE	Soil Gas	3.42E+03	1	3.0480	0.83	**1.35E+03**

B. Calculation Risk

formula Risk = Intake*SlopeFactor

where, Intake = (Ci*IR*ET*EF*ED)/BW*AT

	Ci (mg/m^3)	IR (m^3/day)	ET (hr/24hr)	EF (days/yr)	ED (yr)	BW (kg)	AT (days)	Intake (mg/kg-day)	SlopeFactor $(mg/kg-day)^{-1}$	Risk
TCE Exposure Industrial Setting	1.35E+00	20	12	250	25	70	25500	0.04740281	6.00E-03	2.84E-04

Cancer Risk (1/Risk)
3,516

Table A1. Vapor Phase Migration and Risk Calculations - Mercer Processing

C_{sg}, Soil Gas Concentration (ug/m^3)
844,622

A. Calculation of Flux

formula $FLUX = (D_e * C_{sg})/X$

$= ((D_a * P_a^{3.33}/P_t^2) * C_{sg})/X$

X (m) = 1.22 P_a = 0.2 P_t = 0.52

chemical	D_a (m^2/hr)	FLUX ($ug/hr\text{-}m^2$)
TCE	0.2844	**3.42E+03**

B. Calculation of Indoor Air Concentration

formula $C_I = (Slab * Flux)/(height * E)$

chemical	Matrix Used	Flux ($ug/hr\text{-}m^2$)	Slab (unitless)	height (m)	E (1/hr)	C_{In} (ug/m^3)
TCE	Soil Gas	3.42E+03	0.1	3.0480	0.83	**1.35E+02**

B. Calculation Risk

formula Risk = Intake*SlopeFactor

where, Intake = (Ci*IR*ET*EF*ED)/BW*AT

	Ci (mg/m^3)	IR (m^3/day)	ET (hr/24hr)	EF (days/yr)	ED (yr)	BW (kg)	AT (days)	Intake (mg/kg-day)	SlopeFactor $(mg/kg\text{-}day)^{-1}$	Risk
TCE Exposure Industrial Setting	1.35E-01	20	12	250	25	70	25500	0.004740281	6.00E-03	2.84E-05

Cancer Risk (1/Risk)
35,160

Table A1. Vapor Phase Migration and Risk Calculations - Mercer Processing

C_{sg}, Soil Gas Concentration (ug/m^3)
844,622

A. Calculation of Flux

formula $FLUX = (D_e * C_{sg})/X$

$= ((D_a * P_a^{3.33}/P_t^2) * C_{sg})/X$

X (m) = 1.22 P_a = 0.2 P_t = 0.62

chemical	D_a (m^2/hr)	FLUX ($ug/hr\text{-}m^2$)
TCE	0.2844	**3.42E+03**

B. Calculation of Indoor Air Concentration

formula $C_I = (Slab * Flux)/(height * E)$

chemical	Matrix Used	Flux ($ug/hr\text{-}m^2$)	Slab (unitless)	height (m)	E (1/hr)	C_{In} (ug/m^3)
TCE	Soil Gas	3.42E+03	0.01	3.0480	0.83	**1.35E+01**

B. Calculation Risk

formula Risk = Intake*SlopeFactor

where, Intake = (Ci*IR*ET*EF*ED)/BW*AT

	Ci (mg/m^3)	IR (m^3/day)	ET (hr/24hr)	EF (days/yr)	ED (yr)	BW (kg)	AT (days)	Intake (mg/kg-day)	SlopeFactor $(mg/kg\text{-}day)^{-1}$	Risk
TCE Exposure Industrial Setting	1.35E-02	20	12	250	25	70	25500	0.000474028	6.00E-03	2.84E-06

Cancer Risk (1/Risk)
351,597

Calculate Soil Gas Concentration from Soil Concentration

$$Csg = \frac{H*Csoil*BD}{Pw+(Kd*BD)+(H*Pa)} = \frac{X}{Y}$$

Csg	Soil Gas Concentration (mg/Kg)
H	Henry's law Constant (unitless)
Csoil	Contaminant Soil Concentration (mg/Kg)
BD	Bulk Density (g/cm3)
Pa	Air Filled Porosity (unitless)
Pw	Water Filler Porosity = Pt-Pa (%)
Pt	Total Porosity (unitless)
Kd	Sorption Coefficient = (Koc*foc) + (Koi*foi)

H =	0.37
Csoil =	2
BD =	1.04
Pw =	0.32
Kd =	2.6
Pa =	0.2
Pt =	0.52

Csg = X/Y

X	0.7696
Y	3.098
Csg =	0.248418

ug/m3 =	248418.3
	2.48E+05

Table A1. Vapor Phase Migration and Risk Calculations - Mercer Processing

C_{sg}, Soil Gas Concentration (ug/m^3)
24,841

A. Calculation of Flux

formula $FLUX = (D_e * C_{sg})/X$

$= ((D_a * P_a^{3.33}/P_t^2) * C_{sg})/X$

$X_{(m)} = 1.22$ $P_a = 0.2$ $P_t = 0.52$

chemical	D_a (m^2/hr)	FLUX ($ug/hr\text{-}m^2$)
TCE	0.2844	**1.01E+02**

B. Calculation of Indoor Air Concentration

formula $C_i = (Slab * Flux)/(height * E)$

chemical	Matrix Used	Flux ($ug/hr\text{-}m^2$)	Slab (unitless)	height (m)	E (1/hr)	C_{in} (ug/m^3)
TCE	Soil Gas	1.01E+02	1	3.0480	0.83	**3.98E+01**

B. Calculation Risk

formula Risk = Intake*SlopeFactor

where, Intake = (CI*IR*ET*EF*ED)/BW*AT

	CI (mg/m^3)	IR (m^3/day)	ET (hr/24hr)	EF (days/yr)	ED (yr)	BW (kg)	AT (days)	Intake (mg/kg-day)	SlopeFactor $(mg/kg\text{-}day)^{-1}$	Risk
TCE Exposure Industrial Setting	3.98E-02	20	12	250	25	70	25500	0.001394154	6.00E-03	8.36E-06

Cancer Risk (1/Risk)
119,547

Table A1. Vapor Phase Migration and Risk Calculations - Mercer Processing

C_{sg}, Soil Gas Concentration (ug/m^3)
24,841

A. Calculation of Flux

formula $FLUX = (D_e * C_{sg})/X$

$= ((D_a * P_a^{3.33}/P_t^2) * C_{sg})/X$

X (m) = 1.22 P_a = 0.2 P_t = 0.52

chemical	D_a (m^2/hr)	FLUX ($ug/hr\text{-}m^2$)
TCE	0.2844	**1.01E+02**

B. Calculation of Indoor Air Concentration

formula $C_i = (Slab * Flux)/(height * E)$

chemical	Matrix Used	Flux ($ug/hr\text{-}m^2$)	Slab (unitless)	height (m)	E (1/hr)	C_{in} (ug/m^3)
TCE	Soil Gas	1.01E+02	0.1	3.0480	0.83	**3.98E+00**

B. Calculation Risk

formula Risk = Intake*SlopeFactor

where, Intake = (Ci*IR*ET*EF*ED)/BW*AT

	Ci (mg/m^3)	IR (m^3/day)	ET (hr/24hr)	EF (days/yr)	ED (yr)	BW (kg)	AT (days)	Intake (mg/kg-day)	SlopeFactor $(mg/kg\text{-}day)^{-1}$	Risk
TCE Exposure Industrial Setting	3.98E-03	20	12	250	25	70	25500	0.000139415	6.00E-03	8.36E-07

Cancer Risk (1/Risk)
1,195,468

Table A1. Vapor Phase Migration and Risk Calculations - Mercer Processing

C_{sg}, Soil Gas Concentration (ug/m^3)
24,841

A. Calculation of Flux

formula $FLUX = (D_e * C_{sg})/X$

$= ((D_a * P_a^{3.33}/P_t^2) * C_{sg})/X$

$X_{(m)} = 1.22$ $P_a = 0.2$ $P_t = 0.52$

chemical	D_a (m^2/hr)	FLUX ($ug/hr\text{-}m^2$)
TCE	0.2844	**1.01E+02**

B. Calculation of Indoor Air Concentration

formula $C_I = (Slab * Flux)/(height * E)$

chemical	Matrix Used	Flux ($ug/hr\text{-}m^2$)	Slab (*unitless*)	height (*m*)	E (*1/hr*)	C_{in} (ug/m^3)
TCE	Soil Gas	1.01E+02	0.01	3.0480	0.83	**3.98E-01**

B. Calculation Risk

formula Risk = Intake*SlopeFactor

where, Intake = (Ci*IR*ET*EF*ED)/BW*AT

	CI (mg/m^3)	IR (m^3/day)	ET (hr/24hr)	EF (days/yr)	ED (yr)	BW (kg)	AT (days)	Intake (mg/kg-day)	SlopeFactor $(mg/kg\text{-}day)^{-1}$	Risk
TCE Exposure Industrial Setting	3.98E-04	20	12	250	25	70	25500	1.39415E-05	6.00E-03	8.36E-08

Cancer Risk (1/Risk)
11,954,680

Calculate Soil Gas Concentration from Soil Concentration

$$Csg = \frac{H*Csoil*BD}{Pw+(Kd*BD)+(H*Pa)} = \frac{X}{Y}$$

Csg	Soil Gas Concentration (mg/Kg)
H	Henry's law Constant (unitless)
Csoil	Contaminant Soil Concentration (mg/Kg)
BD	Bulk Density (g/cm3)
Pa	Air Filled Porosity (unitless)
Pw	Water Filler Porosity = Pt-Pa (%)
Pt	Total Porosity (unitless)
Kd	Sorption Coefficient = (Koc*foc) + (Koi*foi)

H =	0.37
Csoil =	1.5
BD =	1.04
Pw =	0.32
Kd =	2.6
Pa =	0.2
Pt =	0.52

Csg =	X/Y
X	0.5772
Y	3.098
Csg =	0.186314
ug/m3 =	186313.8
	1.86E+05

Table A1. Vapor Phase Migration and Risk Calculations - Mercer Processing

C_{sg}, Soil Gas Concentration (ug/m^3)
186,313

A. Calculation of Flux

formula $FLUX = (D_e * C_{sg})/X$

$= ((D_a * P_a^{3.33}/P_t^2) * C_{sg})/X$

X (m) = 1.22 P_a = 0.2 P_t = 0.52

chemical	D_a (m^2/hr)	FLUX ($ug/hr\text{-}m^2$)
TCE	0.2844	7.56E+02

B. Calculation of Indoor Air Concentration

formula $C_i = (Slab * Flux)/(height * E)$

chemical	Matrix Used	Flux ($ug/hr\text{-}m^2$)	Slab (unitless)	height (m)	E (1/hr)	C_{in} (ug/m^3)
TCE	Soil Gas	7.56E+02	1	3.0480	0.83	**2.99E+02**

B. Calculation Risk

formula *Risk = Intake*SlopeFactor*

where, Intake = (Ci*IR*ET*EF*ED)/BW*AT

	Ci (mg/m^3)	IR (m^3/day)	ET (hr/24hr)	EF (days/yr)	ED (yr)	BW (kg)	AT (days)	Intake (mg/kg-day)	SlopeFactor $(mg/kg\text{-}day)^{-1}$	Risk
TCE Exposure Industrial Setting	2.99E-01	20	12	250	25	70	25500	0.010456464	6.00E-03	6.27E-05

Cancer Risk (1/Risk)
15,939

Table A1. Vapor Phase Migration and Risk Calculations - Mercer Processing

C_{sg}, Soil Gas Concentration (ug/m^3)
186,313

A. Calculation of Flux

formula $FLUX = (D_e * C_{sg})/X$

$= ((D_a * P_a^{3.33}/P_t^2) * C_{sg})/X$

X (m) = 1.22 P_a = 0.2 P_t = 0.52

chemical	D_a (m^2/hr)	FLUX ($ug/hr-m^2$)
TCE	0.2844	**7.56E+02**

B. Calculation of Indoor Air Concentration

formula $C_I = (Slab * Flux)/(height * E)$

chemical	Matrix Used	Flux ($ug/hr-m^2$)	Slab (unitless)	height (m)	E (1/hr)	C_{In} (ug/m^3)
TCE	Soil Gas	7.56E+02	0.1	3.0480	0.83	**2.99E+01**

B. Calculation Risk

formula Risk = Intake*SlopeFactor

where, Intake = (Ci*IR*ET*EF*ED)/BW*AT

	Ci (mg/m^3)	IR (m^3/day)	ET (hr/24hr)	EF (days/yr)	ED (yr)	BW (kg)	AT (days)	Intake (mg/kg-day)	SlopeFactor $(mg/kg-day)^{-1}$	Risk
TCE Exposure Industrial Setting	2.99E-02	20	12	250	25	70	25500	0.001045646	6.00E-03	6.27E-06

Cancer Risk (1/Risk)
159,391

Table A1. Vapor Phase Migration and Risk Calculations - Mercer Processing

C_{sg}, Soil Gas Concentration (ug/m^3)
186,313

A. Calculation of Flux

formula $FLUX = (D_e * C_{sg})/X$

$= ((D_a * P_a^{3.33}/P_t^2) * C_{sg})/X$

X (m) = 1.22 P_a = 0.2 P_t = 0.52

chemical	D_a (m^2/hr)	FLUX ($ug/hr\text{-}m^2$)
TCE	0.2844	**7.56E+02**

B. Calculation of Indoor Air Concentration

formula $C_I = (Slab * Flux)/(height * E)$

chemical	Matrix Used	Flux ($ug/hr\text{-}m^2$)	Slab (unitless)	height (m)	E (1/hr)	C_{In} (ug/m^3)
TCE	Soil Gas	7.56E+02	0.01	3.0480	0.83	**2.99E+00**

B. Calculation Risk

formula Risk = Intake*SlopeFactor

where, Intake = (CI*IR*ET*EF*ED)/BW*AT

	CI (mg/m^3)	IR (m^3/day)	ET (hr/24hr)	EF (days/yr)	ED (yr)	BW (kg)	AT (days)	Intake (mg/kg-day)	SlopeFactor $(mg/kg\text{-}day)^{-1}$	Risk
TCE Exposure Industrial Setting	2.99E-03	20	12	250	25	70	25500	0.000104565	6.00E-03	6.27E-07

Cancer Risk (1/Risk)
1,593,910

Calculate Soil Gas Concentration from Soil Concentration

$$Csg = \frac{H*Csoil*BD}{Pw+(Kd*BD)+(H*Pa)} = \frac{X}{Y}$$

Csg	Soil Gas Concentration (mg/Kg)
H	Henry's law Constant (unitless)
Csoil	Contaminant Soil Concentration (mg/Kg)
BD	Bulk Density (g/cm3)
Pa	Air Filled Porosity (unitless)
Pw	Water Filler Porosity = Pt-Pa (%)
Pt	Total Porosity (unitless)
Kd	Sorption Coefficient = (Koc*foc) + (Koi*foi)

H =	0.37
Csoil =	1.3
BD =	1.04
Pw =	0.32
Kd =	2.6
Pa =	0.2
Pt =	0.52

Csg =	X/Y
X	0.50024
Y	3.098
Csg =	0.161472
ug/m3 =	161471.9
	1.61E+05

Table A1. Vapor Phase Migration and Risk Calculations - Mercer Processing

C_{sg}, Soil Gas Concentration (ug/m^3)
161,472

A. Calculation of Flux

formula $FLUX = (D_e * C_{sg})/X$

$= ((D_a * P_a^{3.33}/P_t^2) * C_{sg})/X$

X (m) = 1.22 P_a = 0.2 P_t = 0.52

chemical	D_a (m^2/hr)	FLUX ($ug/hr\text{-}m^2$)
TCE	0.2844	**6.55E+02**

B. Calculation of Indoor Air Concentration

formula $C_I = (Slab * Flux)/(height * E)$

chemical	Matrix Used	Flux ($ug/hr\text{-}m^2$)	Slab (unitless)	height (m)	E (1/hr)	C_{In} (ug/m^3)
TCE	Soil Gas	6.55E+02	1	3.0480	0.83	**2.59E+02**

B. Calculation Risk

formula Risk = Intake*SlopeFactor

where, Intake = (CI*IR*ET*EF*ED)/BW*AT

	CI (mg/m^3)	IR (m^3/day)	ET (hr/24hr)	EF (days/yr)	ED (yr)	BW (kg)	AT (days)	Intake (mg/kg-day)	SlopeFactor $(mg/kg\text{-}day)^{-1}$	Risk
TCE Exposure Industrial Setting	2.59E-01	20	12	250	25	70	25500	0.00906231	6.00E-03	5.44E-05

Cancer Risk (1/Risk)
18,391

Table A1. Vapor Phase Migration and Risk Calculations - Mercer Processing

C_{sg}, Soil Gas Concentration (ug/m^3)
161,472

A. Calculation of Flux

formula $FLUX = (D_e * C_{sg})/X$

$= ((D_a * P_a^{3.33}/P_t^2) * C_{sg})/X$

X (m) = 1.22 P_a = 0.2 P_t = 0.52

chemical	D_a (m^2/hr)	FLUX ($ug/hr\text{-}m^2$)
TCE	0.2844	**6.55E+02**

B. Calculation of Indoor Air Concentration

formula $C_I = (Slab * Flux)/(height * E)$

chemical	Matrix Used	Flux ($ug/hr\text{-}m^2$)	Slab (unitless)	height (m)	E (1/hr)	C_{in} (ug/m^3)
TCE	Soil Gas	6.55E+02	0.1	3.0480	0.83	**2.59E+01**

B. Calculation Risk

formula Risk = Intake*SlopeFactor

where, Intake = (Ci*IR*ET*EF*ED)/BW*AT

	Ci (mg/m^3)	IR (m^3/day)	ET (hr/24hr)	EF (days/yr)	ED (yr)	BW (kg)	AT (days)	Intake (mg/kg-day)	SlopeFactor $(mg/kg\text{-}day)^{-1}$	Risk
TCE Exposure Industrial Setting	2.59E-02	20	12	250	25	70	25500	0.000906231	6.00E-03	5.44E-06

Cancer Risk (1/Risk)
183,912

Table A1. Vapor Phase Migration and Risk Calculations - Mercer Processing

C_{sg}, Soil Gas Concentration (ug/m^3)
161,472

A. Calculation of Flux

formula $FLUX = (D_e * C_{sg})/X$

$= ((D_a * P_a^{3.33}/P_t^2) * C_{sg})/X$

X (m) = 1.22 P_a = 0.2 P_t = 0.52

chemical	D_a (m^2/hr)	FLUX ($ug/hr\text{-}m^2$)
TCE	0.2844	6.55E+02

B. Calculation of Indoor Air Concentration

formula $C_I = (Slab * Flux)/(height * E)$

chemical	Matrix Used	Flux ($ug/hr\text{-}m^2$)	Slab (unitless)	height (m)	E (1/hr)	C_{In} (ug/m^3)
TCE	Soil Gas	6.55E+02	0.01	3.0480	0.83	2.59E+00

B. Calculation Risk

formula *Risk = Intake*SlopeFactor*

where, Intake = (Ci*IR*ET*EF*ED)/BW*AT

	Ci (mg/m^3)	IR (m^3/day)	ET (hr/24hr)	EF (days/yr)	ED (yr)	BW (kg)	AT (days)	Intake (mg/kg-day)	SlopeFactor $(mg/kg\text{-}day)^{-1}$	Risk
TCE Exposure Industrial Setting	2.59E-03	20	12	250	25	70	25500	9.06231E-05	6.00E-03	5.44E-07

Cancer Risk (1/Risk)
1,839,119

Calculate Soil Gas Concentration from Soil Concentration

$$Csg = \frac{H*Csoil*BD}{Pw+(Kd*BD)+(H*Pa)} = \frac{X}{Y}$$

Csg	Soil Gas Concentration (mg/Kg)
H	Henry's law Constant (unitless)
Csoil	Contaminant Soil Concentration (mg/Kg)
BD	Bulk Density (g/cm3)
Pa	Air Filled Porosity (unitless)
Pw	Water Filler Porosity = Pt-Pa (%)
Pt	Total Porosity (unitless)
Kd	Sorption Coefficient = (Koc*foc) + (Koi*foi)

H =	0.37
Csoil =	1.25
BD =	1.04
Pw =	0.32
Kd =	2.6
Pa =	0.2
Pt =	0.52

Csg = X/Y

X	0.481
Y	3.098
Csg =	0.155261

ug/m3 =	155261.5
	1.55E+05

Table A1. Vapor Phase Migration and Risk Calculations - Mercer Processing

C_{sg}, Soil Gas Concentration (ug/m^3)
155,261

A. Calculation of Flux

formula $FLUX = (D_e * C_{sg})/X$

$= ((D_a * P_a^{3.33}/P_t^2) * C_{sg})/X$

X (m) = 1.22 P_a = 0.2 P_t = 0.52

chemical	D_a (m^2/hr)	FLUX ($ug/hr-m^2$)
TCE	0.2844	6.30E+02

B. Calculation of Indoor Air Concentration

formula $C_I = (Slab * Flux)/(height * E)$

chemical	Matrix Used	Flux ($ug/hr-m^2$)	Slab (unitless)	height (m)	E (1/hr)	C_{in} (ug/m^3)
TCE	Soil Gas	6.30E+02	1	3.0480	0.83	**2.49E+02**

B. Calculation Risk

formula Risk = Intake*SlopeFactor

where, Intake = (Ci*IR*ET*EF*ED)/BW*AT

	Ci (mg/m^3)	IR (m^3/day)	ET (hr/24hr)	EF (days/yr)	ED (yr)	BW (kg)	AT (days)	Intake (mg/kg-day)	SlopeFactor $(mg/kg-day)^{-1}$	Risk
TCE Exposure Industrial Setting	2.49E-01	20	12	250	25	70	25500	0.00871373	6.00E-03	5.23E-05

Cancer Risk (1/Risk)
19,127

Table A1. Vapor Phase Migration and Risk Calculations - Mercer Processing

C_{sg}, Soil Gas Concentration (ug/m^3)
155,261

A. Calculation of Flux

formula $FLUX = (D_e * C_{sg})/X$

$= ((D_a * P_a^{3.33}/P_t^2) * C_{sg})/X$

X (m) = 1.22 P_a = 0.2 P_t = 0.52

chemical	D_a (m^2/hr)	FLUX ($ug/hr-m^2$)
TCE	0.2844	**6.30E+02**

B. Calculation of Indoor Air Concentration

formula $C_i = (Slab * Flux)/(height * E)$

chemical	Matrix Used	Flux ($ug/hr-m^2$)	Slab (unitless)	height (m)	E (1/hr)	C_{in} (ug/m^3)
TCE	Soil Gas	6.30E+02	0.1	3.0480	0.83	**2.49E+01**

B. Calculation Risk

formula Risk = Intake*SlopeFactor

where, Intake = (Ci*IR*ET*EF*ED)/BW*AT

	Ci (mg/m^3)	IR (m^3/day)	ET (hr/24hr)	EF (days/yr)	ED (yr)	BW (kg)	AT (days)	Intake (mg/kg-day)	SlopeFactor $(mg/kg-day)^{-1}$	Risk
TCE Exposure Industrial Setting	2.49E-02	20	12	250	25	70	25500	0.000871373	6.00E-03	5.23E-06

Cancer Risk (1/Risk)
191,269

Table A1. Vapor Phase Migration and Risk Calculations - Mercer Processing

C_{sg}, Soil Gas Concentration (ug/m^3)
155,261

A. Calculation of Flux

formula $FLUX = (D_e * C_{sg})/X$

$= ((D_a * P_a^{3.33}/P_t^2) * C_{sg})/X$

X (m) = 1.22 P_a = 0.2 P_t = 0.52

chemical	D_a (m^2/hr)	FLUX ($ug/hr\text{-}m^2$)
TCE	0.2844	**6.30E+02**

B. Calculation of Indoor Air Concentration

formula $C_i = (Slab * Flux)/(height * E)$

chemical	Matrix Used	Flux ($ug/hr\text{-}m^2$)	Slab (unitless)	height (m)	E (1/hr)	C_{in} (ug/m^3)
TCE	Soil Gas	6.30E+02	0.01	3.0480	0.83	**2.49E+00**

B. Calculation Risk

formula Risk = Intake*SlopeFactor

where, Intake = (CI*IR*ET*EF*ED)/BW*AT

	CI (mg/m^3)	IR (m^3/day)	ET (hr/24hr)	EF (days/yr)	ED (yr)	BW (kg)	AT (days)	Intake (mg/kg-day)	SlopeFactor $(mg/kg\text{-}day)^{-1}$	Risk
TCE Exposure Industrial Setting	2.49E-03	20	12	250	25	70	25500	8.71373E-05	6.00E-03	5.23E-07

Cancer Risk (1/Risk)
1,912,690

Calculate Soil Gas Concentration from Soil Concentration

$$Csg = \frac{H*Csoil*BD}{Pw+(Kd*BD)+(H*Pa)} = \frac{X}{Y}$$

Csg	Soil Gas Concentration (mg/Kg)
H	Henry's law Constant (unitless)
Csoil	Contaminant Soil Concentration (mg/Kg)
BD	Bulk Density (g/cm3)
Pa	Air Filled Porosity (unitless)
Pw	Water Filler Porosity = Pt-Pa (%)
Pt	Total Porosity (unitless)
Kd	Sorption Coefficient = (Koc*foc) + (Koi*foi)

H =	0.37
Csoil =	1
BD =	1.04
Pw =	0.32
Kd =	2.6
Pa =	0.2
Pt =	0.52

Csg =	X/Y
X	0.3848
Y	3.098
Csg =	0.124209
ug/m3 =	124209.2
	1.24E+05

Table A1. Vapor Phase Migration and Risk Calculations - Mercer Processing

C_{sg}, Soil Gas Concentration (ug/m^3)
124,209

A. Calculation of Flux

formula $FLUX = (D_a * C_{sg})/X$

$= ((D_a * P_a^{3.33}/P_t^2) * C_{sg})/X$

X (m) = 1.22 P_a = 0.2 P_t = 0.52

chemical	D_a (m^2/hr)	FLUX ($ug/hr-m^2$)
TCE	0.2844	**5.04E+02**

B. Calculation of Indoor Air Concentration

formula $C_i = (Slab * Flux)/(height * E)$

chemical	Matrix Used	Flux ($ug/hr-m^2$)	Slab (unitless)	height (m)	E (1/hr)	C_{in} (ug/m^3)
TCE	Soil Gas	5.04E+02	1	3.0480	0.83	**1.99E+02**

B. Calculation Risk

formula Risk = Intake*SlopeFactor

where, Intake = (Ci*IR*ET*EF*ED)/BW*AT

	Ci (mg/m^3)	IR (m^3/day)	ET (hr/24hr)	EF (days/yr)	ED (yr)	BW (kg)	AT (days)	Intake (mg/kg-day)	SlopeFactor $(mg/kg-day)^{-1}$	Risk
TCE Exposure Industrial Setting	1.99E-01	20	12	250	25	70	25500	0.006970995	6.00E-03	4.18E-05

Cancer Risk (1/Risk)
23,909

Table A1. Vapor Phase Migration and Risk Calculations - Mercer Processing

C_{sg}, Soil Gas Concentration (ug/m^3)
124,209

A. Calculation of Flux

formula $FLUX = (D_e * C_{sg})/X$

$= ((D_a * P_a^{3.33}/P_t^2) * C_{sg})/X$

X (m) = 1.22 P_a = 0.2 P_t = 0.52

chemical	D_a (m^2/hr)	FLUX ($ug/hr\text{-}m^2$)
TCE	0.2844	**5.04E+02**

B. Calculation of Indoor Air Concentration

formula $C_i = (Slab * Flux)/(height * E)$

chemical	Matrix Used	Flux ($ug/hr\text{-}m^2$)	Slab (unitless)	height (m)	E (1/hr)	C_{in} (ug/m^3)
TCE	Soil Gas	5.04E+02	0.1	3.0480	0.83	**1.99E+01**

B. Calculation Risk

formula Risk = Intake*SlopeFactor

where, Intake = (Ci*IR*ET*EF*ED)/BW*AT

	Ci (mg/m^3)	IR (m^3/day)	ET (hr/24hr)	EF (days/yr)	ED (yr)	BW (kg)	AT (days)	Intake (mg/kg-day)	SlopeFactor $(mg/kg\text{-}day)^{-1}$	Risk
TCE Exposure Industrial Setting	1.99E-02	20	12	250	25	70	25500	0.000697099	6.00E-03	4.18E-06

Cancer Risk (1/Risk)
239,086

Table A1. Vapor Phase Migration and Risk Calculations - Mercer Processing

C_{sg}, Soil Gas Concentration (ug/m^3)
124,209

A. Calculation of Flux

formula $FLUX = (D_e * C_{sg})/X$

$= ((D_a * P_a^{3.33}/P_t^2) * C_{sg})/X$

X (m) = 1.22 P_a = 0.2 P_t = 0.52

chemical	D_a (m^2/hr)	FLUX ($ug/hr\text{-}m^2$)
TCE	0.2844	**5.04E+02**

B. Calculation of Indoor Air Concentration

formula $C_I = (Slab * Flux)/(height * E)$

chemical	Matrix Used	Flux ($ug/hr\text{-}m^2$)	Slab (unitless)	height (m)	E (1/hr)	C_{In} (ug/m^3)
TCE	Soil Gas	5.04E+02	0.01	3.0480	0.83	**1.99E+00**

B. Calculation Risk

formula Risk = Intake*SlopeFactor

where, Intake = (Ci*IR*ET*EF*ED)/BW*AT

	Ci (mg/m^3)	IR (m^3/day)	ET (hr/24hr)	EF (days/yr)	ED (yr)	BW (kg)	AT (days)	Intake (mg/kg-day)	SlopeFactor $(mg/kg\text{-}day)^{-1}$	Risk
TCE Exposure Industrial Setting	1.99E-03	20	12	250	25	70	25500	6.97099E-05	6.00E-03	4.18E-07

Cancer Risk (1/Risk)
2,390,859

Calculate Soil Gas Concentration from Soil Concentration

$$Csg = \frac{H*Csoil*BD}{Pw+(Kd*BD)+(H*Pa)} = \frac{X}{Y}$$

Csg	Soil Gas Concentration (mg/Kg)
H	Henry's law Constant (unitless)
Csoil	Contaminant Soil Concentration (mg/Kg)
BD	Bulk Density (g/cm3)
Pa	Air Filled Porosity (unitless)
Pw	Water Filler Porosity = Pt-Pa (%)
Pt	Total Porosity (unitless)
Kd	Sorption Coefficient = (Koc*foc) + (Koi*foi)

H =	0.37
Csoil =	0.4
BD =	1.04
Pw =	0.32
Kd =	2.6
Pa =	0.2
Pt =	0.52

Csg =	X/Y
X	0.15392
Y	3.098
Csg =	0.049684
ug/m3 =	49683.67
	4.97E+04

Table A1. Vapor Phase Migration and Risk Calculations - Mercer Processing

C_{sg}, Soil Gas Concentration (ug/m^3)
49,684

A. Calculation of Flux

formula $FLUX = (D_e * C_{sg})/X$

$= ((D_a * P_a^{3.33}/P_t^2) * C_{sg})/X$

X (m) = 1.22 P_a = 0.2 P_t = 0.52

chemical	D_a (m^2/hr)	FLUX ($ug/hr\text{-}m^2$)
TCE	0.2844	**2.01E+02**

B. Calculation of Indoor Air Concentration

formula $C_I = (Slab * Flux)/(height * E)$

chemical	Matrix Used	Flux ($ug/hr\text{-}m^2$)	Slab (unitless)	height (m)	E (1/hr)	C_{in} (ug/m^3)
TCE	Soil Gas	2.01E+02	1	3.0480	0.83	**7.96E+01**

B. Calculation Risk

formula Risk = Intake*SlopeFactor

where, Intake = (Ci*IR*ET*EF*ED)/BW*AT

	Ci (mg/m^3)	IR (m^3/day)	ET (hr/24hr)	EF (days/yr)	ED (yr)	BW (kg)	AT (days)	Intake (mg/kg-day)	SlopeFactor $(mg/kg\text{-}day)^{-1}$	Risk
TCE Exposure Industrial Setting	7.96E-02	20	12	250	25	70	25500	0.00278842	6.00E-03	1.67E-05

Cancer Risk (1/Risk) [1]
59,771

Table A1. Vapor Phase Migration and Risk Calculations - Mercer Processing

C_{sg}, Soil Gas Concentration (ug/m^3)
49,684

A. Calculation of Flux

formula $FLUX = (D_a * C_{sg})/X$

$= ((D_a * P_a^{3.33}/P_t^2) * C_{sg})/X$

X (m) = 1.22 P_a = 0.2 P_t = 0.52

chemical	D_a (m^2/hr)	FLUX ($ug/hr\text{-}m^2$)
TCE	0.2844	**2.01E+02**

B. Calculation of Indoor Air Concentration

formula $C_i = (Slab * Flux)/(height * E)$

chemical	Matrix Used	Flux ($ug/hr\text{-}m^2$)	Slab (unitless)	height (m)	E (1/hr)	C_{in} (ug/m^3)
TCE	Soil Gas	2.01E+02	0.1	3.0480	0.83	**7.96E+00**

B. Calculation Risk

formula Risk = Intake*SlopeFactor

where, Intake = (CI*IR*ET*EF*ED)/BW*AT

	CI (mg/m^3)	IR (m^3/day)	ET (hr/24hr)	EF (days/yr)	ED (yr)	BW (kg)	AT (days)	Intake (mg/kg-day)	SlopeFactor $(mg/kg\text{-}day)^{-1}$	Risk
TCE Exposure Industrial Setting	7.96E-03	20	12	250	25	70	25500	0.000278842	6.00E-03	1.67E-06

Cancer Risk (1/Risk)
597,710

Table A1. Vapor Phase Migration and Risk Calculations - Mercer Processing

C_{sg}, Soil Gas Concentration (ug/m^3)
49,684

A. Calculation of Flux

formula $FLUX = (D_e * C_{sg})/X$

$= ((D_a * P_a^{3.33}/P_t^2) * C_{sg})/X$

X (m) = 1.22 P_a = 0.2 P_t = 0.52

chemical	D_a (m^2/hr)	FLUX ($ug/hr-m^2$)
TCE	0.2844	**2.01E+02**

B. Calculation of Indoor Air Concentration

formula $C_i = (Slab * Flux)/(height * E)$

chemical	Matrix Used	Flux ($ug/hr-m^2$)	Slab (unitless)	height (m)	E (1/hr)	C_{in} (ug/m^3)
TCE	Soil Gas	2.01E+02	0.01	3.0480	0.83	**7.96E-01**

B. Calculation Risk

formula Risk = Intake*SlopeFactor

where, Intake = (CI*IR*ET*EF*ED)/BW*AT

	CI (mg/m^3)	IR (m^3/day)	ET (hr/24hr)	EF (days/yr)	ED (yr)	BW (kg)	AT (days)	Intake (mg/kg-day)	SlopeFactor $(mg/kg-day)^{-1}$	Risk
TCE Exposure Industrial Setting	7.96E-04	20	12	250	25	70	25500	2.78842E-05	6.00E-03	1.67E-07

Cancer Risk (1/Risk)
5,977,100

Calculate Soil Gas Concentration from Soil Concentration

$$Csg = \frac{H*Csoil*BD}{Pw+(Kd*BD)+(H*Pa)} = \frac{X}{Y}$$

Csg	Soil Gas Concentration (mg/Kg)
H	Henry's law Constant (unitless)
Csoil	Contaminant Soil Concentration (mg/Kg)
BD	Bulk Density (g/cm3)
Pa	Air Filled Porosity (unitless)
Pw	Water Filler Porosity = Pt-Pa (%)
Pt	Total Porosity (unitless)
Kd	Sorption Coefficient = (Koc*foc) + (Koi*foi)

H =	0.37
Csoil =	0.2
BD =	1.04
Pw =	0.32
Kd =	2.6
Pa =	0.2
Pt =	0.52

Csg =	X/Y
X	0.07696
Y	3.098
Csg =	0.024842
ug/m3 =	24841.83
	2.48E+04

Table A1. Vapor Phase Migration and Risk Calculations - Mercer Processing

C_{sg}, Soil Gas Concentration (ug/m^3)
248,418

A. Calculation of Flux

formula $FLUX = (D_e * C_{sg})/X$

$= ((D_a * P_a^{3.33}/P_t^2) * C_{sg})/X$

X (m) = 1.22 P_a = 0.2 P_t = 0.52

chemical	D_a (m^2/hr)	FLUX ($ug/hr-m^2$)
TCE	0.2844	1.01E+03

B. Calculation of Indoor Air Concentration

formula $C_i = (Slab * Flux)/(height * E)$

chemical	Matrix Used	Flux ($ug/hr-m^2$)	Slab (unitless)	height (m)	E (1/hr)	C_{in} (ug/m^3)
TCE	Soil Gas	1.01E+03	1	3.0480	0.83	3.98E+02

B. Calculation Risk

formula Risk = Intake*SlopeFactor

where, Intake = (CI*IR*ET*EF*ED)/BW*AT

	CI (mg/m^3)	IR (m^3/day)	ET (hr/24hr)	EF (days/yr)	ED (yr)	BW (kg)	AT (days)	Intake (mg/kg-day)	SlopeFactor $(mg/kg-day)^{-1}$	Risk
TCE Exposure Industrial Setting	3.98E-01	20	12	250	25	70	25500	0.01394199	6.00E-03	8.37E-05

Cancer Risk (1/Risk)
11,954

Table A1. Vapor Phase Migration and Risk Calculations - Mercer Processing

C_{sg}, Soil Gas Concentration (ug/m^3)
248,418

A. Calculation of Flux

formula $FLUX = (D_e * C_{sg})/X$

$= ((D_a * P_a^{3.33}/P_t^2) * C_{sg})/X$

X (m) = 1.22 P_a = 0.2 P_t = 0.52

chemical	D_a (m^2/hr)	FLUX ($ug/hr\text{-}m^2$)
TCE	0.2844	**1.01E+03**

B. Calculation of Indoor Air Concentration

formula $C_I = (Slab * Flux)/(height * E)$

chemical	Matrix Used	Flux ($ug/hr\text{-}m^2$)	Slab (unitless)	height (m)	E (1/hr)	C_{In} (ug/m^3)
TCE	Soil Gas	1.01E+03	0.1	3.0480	0.83	**3.98E+01**

B. Calculation Risk

formula Risk = Intake*SlopeFactor

where, Intake = (Ci*IR*ET*EF*ED)/BW*AT

	Ci (mg/m^3)	IR (m^3/day)	ET (hr/24hr)	EF (days/yr)	ED (yr)	BW (kg)	AT (days)	Intake (mg/kg-day)	SlopeFactor $(mg/kg\text{-}day)^{-1}$	Risk
TCE Exposure Industrial Setting	3.98E-02	20	12	250	25	70	25500	0.001394199	6.00E-03	8.37E-06

Cancer Risk (1/Risk)
119,543

Table A1. Vapor Phase Migration and Risk Calculations - Mercer Processing

C_{sg}, Soil Gas Concentration (ug/m^3)
248,418

A. Calculation of Flux

formula $FLUX = (D_e * C_{sg})/X$

$= ((D_a * P_a^{3.33}/P_t^2) * C_{sg})/X$

X (m) = 1.22 P_a = 0.2 P_t = 0.52

chemical	D_a (m^2/hr)	FLUX ($ug/hr\text{-}m^2$)
TCE	0.2844	1.01E+03

B. Calculation of Indoor Air Concentration

formula $C_I = (Slab * Flux)/(height * E)$

chemical	Matrix Used	Flux ($ug/hr\text{-}m^2$)	Slab (unitless)	height (m)	E (1/hr)	C_{In} (ug/m^3)
TCE	Soil Gas	1.01E+03	0.01	3.0480	0.83	**3.98E+00**

B. Calculation Risk

formula Risk = Intake*SlopeFactor

where, Intake = (CI*IR*ET*EF*ED)/BW*AT

	CI (mg/m^3)	IR (m^3/day)	ET (hr/24hr)	EF (days/yr)	ED (yr)	BW (kg)	AT (days)	Intake (mg/kg-day)	SlopeFactor $(mg/kg\text{-}day)^{-1}$	Risk
TCE Exposure Industrial Setting	3.98E-03	20	12	250	25	70	25500	0.00013942	6.00E-03	8.37E-07

Cancer Risk (1/Risk)
1,195,430

Calculate Soil Gas Concentration from Soil Concentration

$$Csg = \frac{H*Csoil*BD}{Pw+(Kd*BD)+(H*Pa)} = \frac{X}{Y}$$

Csg	Soil Gas Concentration (mg/Kg)
H	Henry's law Constant (unitless)
Csoil	Contaminant Soil Concentration (mg/Kg)
BD	Bulk Density (g/cm3)
Pa	Air Filled Porosity (unitless)
Pw	Water Filler Porosity = Pt-Pa (%)
Pt	Total Porosity (unitless)
Kd	Sorption Coefficient = (Koc*foc) + (Koi*foi)

H =	0.37
Csoil =	0.1
BD =	1.04
Pw =	0.32
Kd =	2.6
Pa =	0.2
Pt =	0.52

Csg = X/Y

X	0.03848
Y	3.098
Csg =	0.012421

ug/m3 =	12420.92
	1.24E+04

Table A1. Vapor Phase Migration and Risk Calculations - Mercer Processing

C_{sg}, Soil Gas Concentration (ug/m^3)
12,421

A. Calculation of Flux

formula $FLUX = (D_e * C_{sg})/X$

$= ((D_a * P_a^{3.33}/P_t^2) * C_{sg})/X$

$X_{(m)} = 1.22$ $P_a = 0.2$ $P_t = 0.52$

chemical	D_a (m^2/hr)	FLUX ($ug/hr\text{-}m^2$)
TCE	0.2844	5.04E+01

B. Calculation of Indoor Air Concentration

formula $C_i = (Slab * Flux)/(height * E)$

chemical	Matrix Used	Flux ($ug/hr\text{-}m^2$)	Slab (unitless)	height (m)	E (1/hr)	C_{in} (ug/m^3)
TCE	Soil Gas	5.04E+01	1	3.0480	0.83	**1.99E+01**

B. Calculation Risk

formula Risk = Intake*SlopeFactor

where, Intake = (CI*IR*ET*EF*ED)/BW*AT

	Ci (mg/m^3)	IR (m^3/day)	ET (hr/24hr)	EF (days/yr)	ED (yr)	BW (kg)	AT (days)	Intake (mg/kg-day)	SlopeFactor $(mg/kg\text{-}day)^{-1}$	Risk
TCE Exposure Industrial Setting	1.99E-02	20	12	250	25	70	25500	0.000697105	6.00E-03	4.18E-06

Cancer Risk (1/Risk)
239,084

Table A1. Vapor Phase Migration and Risk Calculations - Mercer Processing

C_{sg}, Soil Gas Concentration (ug/m^3)
12,421

A. Calculation of Flux

formula $FLUX = (D_e * C_{sg})/X$

$= ((D_a * P_a^{3.33}/P_t^2) * C_{sg})/X$

X (m) = 1.22 P_a = 0.2 P_t = 0.52

chemical	D_a (m^2/hr)	FLUX ($ug/hr\text{-}m^2$)
TCE	0.2844	5.04E+01

B. Calculation of Indoor Air Concentration

formula $C_I = (Slab * Flux)/(height * E)$

chemical	Matrix Used	Flux ($ug/hr\text{-}m^2$)	Slab (unitless)	height (m)	E (1/hr)	C_{in} (ug/m^3)
TCE	Soil Gas	5.04E+01	0.1	3.0480	0.83	**1.99E+00**

B. Calculation Risk

formula Risk = Intake*SlopeFactor

where, Intake = (CI*IR*ET*EF*ED)/BW*AT

	CI (mg/m^3)	IR (m^3/day)	ET (hr/24hr)	EF (days/yr)	ED (yr)	BW (kg)	AT (days)	Intake (mg/kg-day)	SlopeFactor $(mg/kg\text{-}day)^{-1}$	Risk
TCE Exposure Industrial Setting	1.99E-03	20	12	250	25	70	25500	6.97105E-05	6.00E-03	4.18E-07

Cancer Risk (1/Risk)
2,390,840

Table A1. Vapor Phase Migration and Risk Calculations - Mercer Processing

C_{sg}, Soil Gas Concentration (ug/m^3)
12,421

A. Calculation of Flux

formula $FLUX = (D_e * C_{sg})/X$

$= ((D_a * P_a^{3.33}/P_t^2) * C_{sg})/X$

X (m) = 1.22 P_a = 0.2 P_t = 0.52

chemical	D_a (m^2/hr)	FLUX (ug/hr-m^2)
TCE	0.2844	**5.04E+01**

B. Calculation of Indoor Air Concentration

formula $C_I = (Slab * Flux)/(height * E)$

chemical	Matrix Used	Flux (ug/hr-m^2)	Slab (unitless)	height (m)	E (1/hr)	C_{In} (ug/m^3)
TCE	Soil Gas	5.04E+01	0.01	3.0480	0.83	**1.99E-01**

B. Calculation Risk

formula Risk = Intake*SlopeFactor

where, Intake = (CI*IR*ET*EF*ED)/BW*AT

	Ci (mg/m^3)	IR (m^3/day)	ET (hr/24hr)	EF (days/yr)	ED (yr)	BW (kg)	AT (days)	Intake (mg/kg-day)	SlopeFactor (mg/kg-day)$^{-1}$	Risk
TCE Exposure Industrial Setting	*1.99E-04*	*20*	*12*	*250*	*25*	*70*	*25500*	*6.97105E-06*	*6.00E-03*	4.18E-08

Cancer Risk (1/Risk)
23,908,399

Calculate Soil Gas Concentration from Soil Concentration

$$Csg = \frac{H*Csoil*BD}{Pw+(Kd*BD)+(H*Pa)} = \frac{X}{Y}$$

Csg	Soil Gas Concentration (mg/Kg)
H	Henry's law Constant (unitless)
Csoil	Contaminant Soil Concentration (mg/Kg)
BD	Bulk Density (g/cm3)
Pa	Air Filled Porosity (unitless)
Pw	Water Filler Porosity = Pt-Pa (%)
Pt	Total Porosity (unitless)
Kd	Sorption Coefficient = (Koc*foc) + (Koi*foi)

H =	0.37
Csoil =	0.08
BD =	1.04
Pw =	0.32
Kd =	2.6
Pa =	0.2
Pt =	0.52

Csg = X/Y

X	0.030784
Y	3.098
Csg =	0.009937

ug/m3 =	9936.733
	9.94E+03

Table A1. Vapor Phase Migration and Risk Calculations - Mercer Processing

C_{sg}, Soil Gas Concentration (ug/m^3)
9,937

A. Calculation of Flux

formula $FLUX = (D_e * C_{sg})/X$

$= ((D_a * P_a^{3.33}/P_t^2) * C_{sg})/X$

X (m) = 1.22 P_a = 0.2 P_t = 0.52

chemical	D_a (m^2/hr)	FLUX ($ug/hr\text{-}m^2$)
TCE	0.2844	**4.03E+01**

B. Calculation of Indoor Air Concentration

formula $C_I = (Slab * Flux)/(height * E)$

chemical	Matrix Used	Flux ($ug/hr\text{-}m^2$)	Slab (unitless)	height (m)	E (1/hr)	C_{In} (ug/m^3)
TCE	Soil Gas	4.03E+01	1	3.0480	0.83	**1.59E+01**

B. Calculation Risk

formula Risk = Intake*SlopeFactor

where, Intake = (Ci*IR*ET*EF*ED)/BW*AT

	Ci (mg/m^3)	IR (m^3/day)	ET (hr/24hr)	EF (days/yr)	ED (yr)	BW (kg)	AT (days)	Intake (mg/kg-day)	SlopeFactor $(mg/kg\text{-}day)^{-1}$	Risk
TCE Exposure Industrial Setting	1.59E-02	20	12	250	25	70	25500	0.000557695	6.00E-03	3.35E-06

Cancer Risk (1/Risk)
298,849

Table A1. Vapor Phase Migration and Risk Calculations - Mercer Processing

C_{sg}, Soil Gas Concentration (ug/m^3)
9,937

A. Calculation of Flux

formula $FLUX = (D_e * C_{sg})/X$

$= ((D_a * P_a^{3.33}/P_t^2) * C_{sg})/X$

X (m) = 1.22 P_a = 0.2 P_t = 0.52

chemical	D_a (m^2/hr)	FLUX ($ug/hr\text{-}m^2$)
TCE	0.2844	**4.03E+01**

B. Calculation of Indoor Air Concentration

formula $C_i = (Slab * Flux)/(height * E)$

chemical	Matrix Used	Flux ($ug/hr\text{-}m^2$)	Slab (unitless)	height (m)	E (1/hr)	C_{in} (ug/m^3)
TCE	Soil Gas	4.03E+01	0.1	3.0480	0.83	**1.59E+00**

B. Calculation Risk

formula Risk = Intake*SlopeFactor

where, Intake = (Ci*IR*ET*EF*ED)/BW*AT

	Ci (mg/m^3)	IR (m^3/day)	ET (hr/24hr)	EF (days/yr)	ED (yr)	BW (kg)	AT (days)	Intake (mg/kg-day)	SlopeFactor $(mg/kg\text{-}day)^{-1}$	Risk
TCE Exposure Industrial Setting	1.59E-03	20	12	250	25	70	25500	5.57695E-05	6.00E-03	3.35E-07

Cancer Risk (1/Risk)
2,988,490

Table A1. Vapor Phase Migration and Risk Calculations - Mercer Processing

C_{sg}, Soil Gas Concentration (ug/m^3)
9,937

A. Calculation of Flux

formula $FLUX = (D_e * C_{sg})/X$

$= ((D_a * P_a^{3.33}/P_t^2) * C_{sg})/X$

X (m) = 1.22 P_a = 0.2 P_t = 0.52

chemical	D_a (m^2/hr)	FLUX ($ug/hr-m^2$)
TCE	0.2844	4.03E+01

B. Calculation of Indoor Air Concentration

formula $C_I = (Slab * Flux)/(height * E)$

chemical	Matrix Used	Flux ($ug/hr-m^2$)	Slab (unitless)	height (m)	E (1/hr)	C_{in} (ug/m^3)
TCE	Soil Gas	4.03E+01	0.01	3.0480	0.83	**1.59E-01**

B. Calculation Risk

formula Risk = Intake*SlopeFactor

where, Intake = (CI*IR*ET*EF*ED)/BW*AT

	Ci (mg/m^3)	IR (m^3/day)	ET (hr/24hr)	EF (days/yr)	ED (yr)	BW (kg)	AT (days)	Intake (mg/kg-day)	SlopeFactor $(mg/kg-day)^{-1}$	Risk
TCE Exposure Industrial Setting	1.59E-04	20	12	250	25	70	25500	5.57695E-06	6.00E-03	3.35E-08

Cancer Risk (1/Risk)
29,884,897

Calculate Soil Gas Concentration from Soil Concentration

$$Csg = \frac{H*Csoil*BD}{Pw+(Kd*BD)+(H*Pa)} = \frac{X}{Y}$$

Csg	Soil Gas Concentration (mg/Kg)
H	Henry's law Constant (unitless)
Csoil	Contaminant Soil Concentration (mg/Kg)
BD	Bulk Density (g/cm3)
Pa	Air Filled Porosity (unitless)
Pw	Water Filler Porosity = Pt-Pa (%)
Pt	Total Porosity (unitless)
Kd	Sorption Coefficient = (Koc*foc) + (Koi*foi)

H =	0.37
Csoil =	0.05
BD =	1.04
Pw =	0.32
Kd =	2.6
Pa =	0.2
Pt =	0.52

Csg =	X/Y
X	0.01924
Y	3.098
Csg =	0.00621
ug/m3 =	6210.458
	6.21E+03

Table A1. Vapor Phase Migration and Risk Calculations - Mercer Processing

C_{sg}, Soil Gas Concentration (ug/m^3)
6,210

A. Calculation of Flux

formula $FLUX = (D_e * C_{sg})/X$

$= ((D_a * P_a^{3.33}/P_t^2) * C_{sg})/X$

X (m) = 1.22 P_a = 0.2 P_t = 0.52

chemical	D_a (m^2/hr)	FLUX ($ug/hr-m^2$)
TCE	0.2844	**2.52E+01**

B. Calculation of Indoor Air Concentration

formula $C_i = (Slab * Flux)/(height * E)$

chemical	Matrix Used	Flux ($ug/hr-m^2$)	Slab (unitless)	height (m)	E (1/hr)	C_{in} (ug/m^3)
TCE	Soil Gas	2.52E+01	1	3.0480	0.83	**9.95E+00**

B. Calculation Risk

formula Risk = Intake*SlopeFactor

where, Intake = (Ci*IR*ET*EF*ED)/BW*AT

	Ci (mg/m^3)	IR (m^3/day)	ET (hr/24hr)	EF (days/yr)	ED (yr)	BW (kg)	AT (days)	Intake (mg/kg-day)	SlopeFactor $(mg/kg-day)^{-1}$	Risk
TCE Exposure Industrial Setting	9.95E-03	20	12	250	25	70	25500	0.000348524	6.00E-03	2.09E-06

Cancer Risk (1/Risk)
478,206

Table A1. Vapor Phase Migration and Risk Calculations - Mercer Processing

C_{sg}, Soil Gas Concentration (ug/m^3)
6,210

A. Calculation of Flux

formula $FLUX = (D_e * C_{sg})/X$

$= ((D_a * P_a^{3.33}/P_t^2) * C_{sg})/X$

X (m) = 1.22 P_a = 0.2 P_t = 0.52

chemical	D_a (m^2/hr)	FLUX ($ug/hr\text{-}m^2$)
TCE	0.2844	**2.52E+01**

B. Calculation of Indoor Air Concentration

formula $C_i = (Slab * Flux)/(height * E)$

chemical	Matrix Used	Flux ($ug/hr\text{-}m^2$)	Slab (unitless)	height (m)	E (1/hr)	C_{in} (ug/m^3)
TCE	Soil Gas	2.52E+01	0.1	3.0480	0.83	**9.95E-01**

B. Calculation Risk

formula Risk = Intake*SlopeFactor

where, Intake = (Ci*IR*ET*EF*ED)/BW*AT

	Ci (mg/m^3)	IR (m^3/day)	ET (hr/24hr)	EF (days/yr)	ED (yr)	BW (kg)	AT (days)	Intake (mg/kg-day)	SlopeFactor $(mg/kg\text{-}day)^{-1}$	Risk
TCE Exposure Industrial Setting	9.95E-04	20	12	250	25	70	25500	3.48524E-05	6.00E-03	2.09E-07

Cancer Risk (1/Risk)
4,782,065

Table A1. Vapor Phase Migration and Risk Calculations - Mercer Processing

C_{sg}, Soil Gas Concentration (ug/m^3)
6,210

A. Calculation of Flux

formula $FLUX = (D_e * C_{sg})/X$

$= ((D_a * P_a^{3.33}/P_t^2) * C_{sg})/X$

X (m) = 1.22 P_a = 0.2 P_t = 0.52

chemical	D_a (m^2/hr)	FLUX ($ug/hr\text{-}m^2$)
TCE	0.2844	**2.52E+01**

B. Calculation of Indoor Air Concentration

formula $C_I = (Slab * Flux)/(height * E)$

chemical	Matrix Used	Flux ($ug/hr\text{-}m^2$)	Slab (unitless)	height (m)	E (1/hr)	C_{In} (ug/m^3)
TCE	Soil Gas	2.52E+01	0.01	3.0480	0.83	**9.95E-02**

B. Calculation Risk

formula Risk = Intake*SlopeFactor

where, Intake = (CI*IR*ET*EF*ED)/BW*AT

	CI (mg/m^3)	IR (m^3/day)	ET (hr/24hr)	EF (days/yr)	ED (yr)	BW (kg)	AT (days)	Intake (mg/kg-day)	SlopeFactor $(mg/kg\text{-}day)^{-1}$	Risk
TCE Exposure Industrial Setting	9.95E-05	20	12	250	25	70	25500	3.48524E-06	6.00E-03	2.09E-08

Cancer Risk (1/Risk)
47,820,647

Calculate Soil Gas Concentration from Soil Concentration

$$Csg = \frac{H*Csoil*BD}{Pw+(Kd*BD)+(H*Pa)} = \frac{X}{Y}$$

Csg	Soil Gas Concentration (mg/Kg)
H	Henry's law Constant (unitless)
Csoil	Contaminant Soil Concentration (mg/Kg)
BD	Bulk Density (g/cm3)
Pa	Air Filled Porosity (unitless)
Pw	Water Filler Porosity = Pt-Pa (%)
Pt	Total Porosity (unitless)
Kd	Sorption Coefficient = (Koc*foc) + (Koi*foi)

H =	0.37
Csoil =	0.025
BD =	1.04
Pw =	0.32
Kd =	2.6
Pa =	0.2
Pt =	0.52

Csg =	X/Y
X	0.00962
Y	3.098
Csg =	0.003105
ug/m3 =	3105.229
	3.11E+03

Table A1. Vapor Phase Migration and Risk Calculations - Mercer Processing

C_{sg}, Soil Gas Concentration (ug/m^3)
3,105

A. Calculation of Flux

formula $FLUX = (D_e * C_{sg})/X$

$= ((D_a * P_a^{3.33}/P_t^2) * C_{sg})/X$

X (m) = 1.22 P_a = 0.2 P_t = 0.52

chemical	D_a (m^2/hr)	FLUX ($ug/hr-m^2$)
TCE	0.2844	1.26E+01

B. Calculation of Indoor Air Concentration

formula $C_i = (Slab * Flux)/(height * E)$

chemical	Matrix Used	Flux ($ug/hr-m^2$)	Slab (unitless)	height (m)	E (1/hr)	C_{in} (ug/m^3)
TCE	Soil Gas	1.26E+01	1	3.0480	0.83	**4.98E+00**

B. Calculation Risk

formula Risk = Intake*SlopeFactor

where, Intake = (Ci*IR*ET*EF*ED)/BW*AT

	Ci (mg/m^3)	IR (m^3/day)	ET (hr/24hr)	EF (days/yr)	ED (yr)	BW (kg)	AT (days)	Intake (mg/kg-day)	SlopeFactor $(mg/kg-day)^{-1}$	Risk
TCE Exposure Industrial Setting	4.98E-03	20	12	250	25	70	25500	0.000174262	6.00E-03	1.05E-06

Cancer Risk (1/Risk)
956,413

Table A1. Vapor Phase Migration and Risk Calculations - Mercer Processing

C_{sg}, Soil Gas Concentration (ug/m^3)
3,105

A. Calculation of Flux

formula $FLUX = (D_e * C_{sg})/X$

$= ((D_a * P_a^{3.33}/P_t^2) * C_{sg})/X$

X (m) = 1.22 P_a = 0.2 P_t = 0.52

chemical	D_a (m^2/hr)	FLUX ($ug/hr\text{-}m^2$)
TCE	0.2844	**1.26E+01**

B. Calculation of Indoor Air Concentration

formula $C_i = (Slab * Flux)/(height * E)$

chemical	Matrix Used	Flux ($ug/hr\text{-}m^2$)	Slab (unitless)	height (m)	E (1/hr)	C_{in} (ug/m^3)
TCE	Soil Gas	1.26E+01	0.1	3.0480	0.83	**4.98E-01**

B. Calculation Risk

formula Risk = Intake*SlopeFactor

where, Intake = (Ci*IR*ET*EF*ED)/BW*AT

	Ci (mg/m^3)	IR (m^3/day)	ET (hr/24hr)	EF (days/yr)	ED (yr)	BW (kg)	AT (days)	Intake (mg/kg-day)	SlopeFactor $(mg/kg\text{-}day)^{-1}$	Risk
TCE Exposure Industrial Setting	4.98E-04	20	12	250	25	70	25500	1.74262E-05	6.00E-03	1.05E-07

Cancer Risk (1/Risk)
9,564,129

Table A1. Vapor Phase Migration and Risk Calculations - Mercer Processing

C_{sg}, Soil Gas Concentration (ug/m^3)
3,105

A. Calculation of Flux

formula $FLUX = (D_e * C_{sg})/X$

$= ((D_a * P_a^{3.33}/P_t^2) * C_{sg})/X$

X (m) = 1.22 P_a = 0.2 P_t = 0.52

chemical	D_a (m^2/hr)	FLUX ($ug/hr\text{-}m^2$)
TCE	0.2844	**1.26E+01**

B. Calculation of Indoor Air Concentration

formula $C_i = (Slab * Flux)/(height * E)$

chemical	Matrix Used	Flux ($ug/hr\text{-}m^2$)	Slab (unitless)	height (m)	E (1/hr)	C_{in} (ug/m^3)
TCE	Soil Gas	1.26E+01	0.01	3.0480	0.83	**4.98E-02**

B. Calculation Risk

formula Risk = Intake*SlopeFactor

where, Intake = (Ci*IR*ET*EF*ED)/BW*AT

	Ci (mg/m^3)	IR (m^3/day)	ET (hr/24hr)	EF (days/yr)	ED (yr)	BW (kg)	AT (days)	Intake (mg/kg-day)	SlopeFactor $(mg/kg\text{-}day)^{-1}$	Risk
TCE Exposure Industrial Setting	4.98E-05	20	12	250	25	70	25500	1.74262E-06	6.00E-03	1.05E-08

Cancer Risk (1/Risk)
95,641,294

Calculate Soil Gas Concentration from Soil Concentration

$$Csg = \frac{H*Csoil*BD}{Pw+(Kd*BD)+(H*Pa)} = \frac{X}{Y}$$

Csg	Soil Gas Concentration (mg/Kg)
H	Henry's law Constant (unitless)
Csoil	Contaminant Soil Concentration (mg/Kg)
BD	Bulk Density (g/cm3)
Pa	Air Filled Porosity (unitless)
Pw	Water Filler Porosity = Pt-Pa (%)
Pt	Total Porosity (unitless)
Kd	Sorption Coefficient = (Koc*foc) + (Koi*foi)

H =	0.37
Csoil =	0.01
BD =	1.04
Pw =	0.32
Kd =	2.6
Pa =	0.2
Pt =	0.52

Csg =	X/Y
X	0.003848
Y	3.098
Csg =	0.001242
ug/m3 =	1242.092
	1.24E+03

Table A1. Vapor Phase Migration and Risk Calculations - Mercer Processing

C_{sg}, Soil Gas Concentration (ug/m^3)
1,242

A. Calculation of Flux

formula $FLUX = (D_e * C_{sg})/X$

$= ((D_a * P_a^{3.33}/P_t^2) * C_{sg})/X$

X (m) = 1.22 P_a = 0.2 P_t = 0.52

chemical	D_a (m^2/hr)	FLUX ($ug/hr-m^2$)
TCE	0.2844	**5.04E+00**

B. Calculation of Indoor Air Concentration

formula $C_I = (Slab * Flux)/(height * E)$

chemical	Matrix Used	Flux ($ug/hr-m^2$)	Slab (unitless)	height (m)	E (1/hr)	C_{in} (ug/m^3)
TCE	Soil Gas	5.04E+00	1	3.0480	0.83	**1.99E+00**

B. Calculation Risk

formula Risk = Intake*SlopeFactor

where, Intake = (CI*IR*ET*EF*ED)/BW*AT

	CI (mg/m^3)	IR (m^3/day)	ET (hr/24hr)	EF (days/yr)	ED (yr)	BW (kg)	AT (days)	Intake (mg/kg-day)	SlopeFactor $(mg/kg-day)^{-1}$	Risk
TCE Exposure Industrial Setting	1.99E-03	20	12	250	25	70	25500	6.97049E-05	6.00E-03	4.18E-07

Cancer Risk (1/Risk)
2,391,032

Table A1. Vapor Phase Migration and Risk Calculations - Mercer Processing

C_{sg}, Soil Gas Concentration (ug/m^3)
1,242

A. Calculation of Flux

formula $FLUX = (D_e * C_{sg})/X$

$= ((D_a * P_a^{3.33}/P_t^2) * C_{sg})/X$

X (m) = 1.22 P_a = 0.2 P_t = 0.52

chemical	D_a (m^2/hr)	FLUX ($ug/hr\text{-}m^2$)
TCE	0.2844	**5.04E+00**

B. Calculation of Indoor Air Concentration

formula $C_i = (Slab * Flux)/(height * E)$

chemical	Matrix Used	Flux ($ug/hr\text{-}m^2$)	Slab (unitless)	height (m)	E (1/hr)	C_{in} (ug/m^3)
TCE	Soil Gas	5.04E+00	0.1	3.0480	0.83	**1.99E-01**

B. Calculation Risk

formula Risk = Intake*SlopeFactor

where, Intake = (Ci*IR*ET*EF*ED)/BW*AT

	Ci (mg/m^3)	IR (m^3/day)	ET (hr/24hr)	EF (days/yr)	ED (yr)	BW (kg)	AT (days)	Intake (mg/kg-day)	SlopeFactor $(mg/kg\text{-}day)^{-1}$	Risk
TCE Exposure Industrial Setting	1.99E-04	20	12	250	25	70	25500	6.97049E-06	6.00E-03	4.18E-08

Cancer Risk (1/Risk)
23,910,324

Table A1. Vapor Phase Migration and Risk Calculations - Mercer Processing

C_{sg}, Soil Gas Concentration (ug/m^3)
1,242

A. Calculation of Flux

formula $FLUX = (D_e * C_{sg})/X$

$= ((D_a * P_a^{3.33}/P_t^2) * C_{sg})/X$

X (m) = 1.22 P_a = 0.2 P_t = 0.52

chemical	D_a (m^2/hr)	FLUX ($ug/hr-m^2$)
TCE	0.2844	**5.04E+00**

B. Calculation of Indoor Air Concentration

formula $C_I = (Slab * Flux)/(height * E)$

chemical	Matrix Used	Flux ($ug/hr-m^2$)	Slab (unitless)	height (m)	E (1/hr)	C_{In} (ug/m^3)
TCE	Soil Gas	5.04E+00	0.01	3.0480	0.83	**1.99E-02**

B. Calculation Risk

formula Risk = Intake*SlopeFactor

where, Intake = (Ci*IR*ET*EF*ED)/BW*AT

	Ci (mg/m^3)	IR (m^3/day)	ET (hr/24hr)	EF (days/yr)	ED (yr)	BW (kg)	AT (days)	Intake (mg/kg-day)	SlopeFactor $(mg/kg-day)^{-1}$	Risk
TCE Exposure Industrial Setting	1.99E-05	20	12	250	25	70	25500	6.97049E-07	6.00E-03	4.18E-09

Cancer Risk (1/Risk)
239,103,235

Calculate Soil Gas Concentration from Soil Concentration

$$Csg = \frac{H*Csoil*BD}{Pw+(Kd*BD)+(H*Pa)} = \frac{X}{Y}$$

Csg	Soil Gas Concentration (mg/Kg)
H	Henry's law Constant (unitless)
Csoil	Contaminant Soil Concentration (mg/Kg)
BD	Bulk Density (g/cm3)
Pa	Air Filled Porosity (unitless)
Pw	Water Filler Porosity = Pt-Pa (%)
Pt	Total Porosity (unitless)
Kd	Sorption Coefficient = (Koc*foc) + (Koi*foi)

H =	0.37
Csoil =	0.009
BD =	1.04
Pw =	0.32
Kd =	2.6
Pa =	0.2
Pt =	0.52

Csg =	X/Y
X	0.003463
Y	3.098
Csg =	0.001118
ug/m3 =	1117.883
	1.12E+03

Table A1. Vapor Phase Migration and Risk Calculations - Mercer Processing

C_{sg}, Soil Gas Concentration (ug/m^3)
1,118

A. Calculation of Flux

formula $FLUX = (D_e * C_{sg})/X$

$= ((D_a * P_a^{3.33}/P_t^2) * C_{sg})/X$

X (m) = 1.22 P_a = 0.2 P_t = 0.52

chemical	D_a (m^2/hr)	FLUX ($ug/hr-m^2$)
TCE	0.2844	4.53E+00

B. Calculation of Indoor Air Concentration

formula $C_i = (Slab * Flux)/(height * E)$

chemical	Matrix Used	Flux ($ug/hr-m^2$)	Slab (unitless)	height (m)	E (1/hr)	C_{in} (ug/m^3)
TCE	Soil Gas	4.53E+00	1	3.0480	0.83	**1.79E+00**

B. Calculation Risk

formula Risk = Intake*SlopeFactor

where, Intake = (CI*IR*ET*EF*ED)/BW*AT

	CI (mg/m^3)	IR (m^3/day)	ET (hr/24hr)	EF (days/yr)	ED (yr)	BW (kg)	AT (days)	Intake (mg/kg-day)	SlopeFactor $(mg/kg-day)^{-1}$	Risk
TCE Exposure Industrial Setting	1.79E-03	20	12	250	25	70	25500	6.27456E-05	6.00E-03	3.76E-07

Cancer Risk (1/Risk)
2,656,227

Table A1. Vapor Phase Migration and Risk Calculations - Mercer Processing

C_{sg}, Soil Gas Concentration (ug/m^3)
1,118

A. Calculation of Flux

formula $FLUX = (D_e * C_{sg})/X$

$= ((D_a * P_a^{3.33}/P_t^2) * C_{sg})/X$

X (m) = 1.22 P_a = 0.2 P_t = 0.52

chemical	D_a (m^2/hr)	FLUX ($ug/hr\text{-}m^2$)
TCE	0.2844	**4.53E+00**

B. Calculation of Indoor Air Concentration

formula $C_I = (Slab * Flux)/(height * E)$

chemical	Matrix Used	Flux ($ug/hr\text{-}m^2$)	Slab (unitless)	height (m)	E (1/hr)	C_{In} (ug/m^3)
TCE	Soil Gas	4.53E+00	0.1	3.0480	0.83	**1.79E-01**

B. Calculation Risk

formula Risk = Intake*SlopeFactor

where, Intake = (CI*IR*ET*EF*ED)/BW*AT

	CI (mg/m^3)	IR (m^3/day)	ET (hr/24hr)	EF (days/yr)	ED (yr)	BW (kg)	AT (days)	Intake (mg/kg-day)	SlopeFactor $(mg/kg\text{-}day)^{-1}$	Risk
TCE Exposure Industrial Setting	1.79E-04	20	12	250	25	70	25500	6.27456E-06	6.00E-03	3.76E-08

Cancer Risk (1/Risk)
26,562,274

Table A1. Vapor Phase Migration and Risk Calculations - Mercer Processing

C_{sg}, Soil Gas Concentration (ug/m^3)
1,118

A. Calculation of Flux

formula $FLUX = (D_e * C_{sg})/X$

$= ((D_a * P_a^{3.33}/P_t^2) * C_{sg})/X$

X (m) = 1.22 P_a = 0.2 P_t = 0.52

chemical	D_a (m^2/hr)	FLUX ($ug/hr\text{-}m^2$)
TCE	0.2844	4.53E+00

B. Calculation of Indoor Air Concentration

formula $C_I = (Slab * Flux)/(height * E)$

chemical	Matrix Used	Flux ($ug/hr\text{-}m^2$)	Slab (unitless)	height (m)	E (1/hr)	C_{In} (ug/m^3)
TCE	Soil Gas	4.53E+00	0.01	3.0480	0.83	**1.79E-02**

B. Calculation Risk

formula Risk = Intake*SlopeFactor

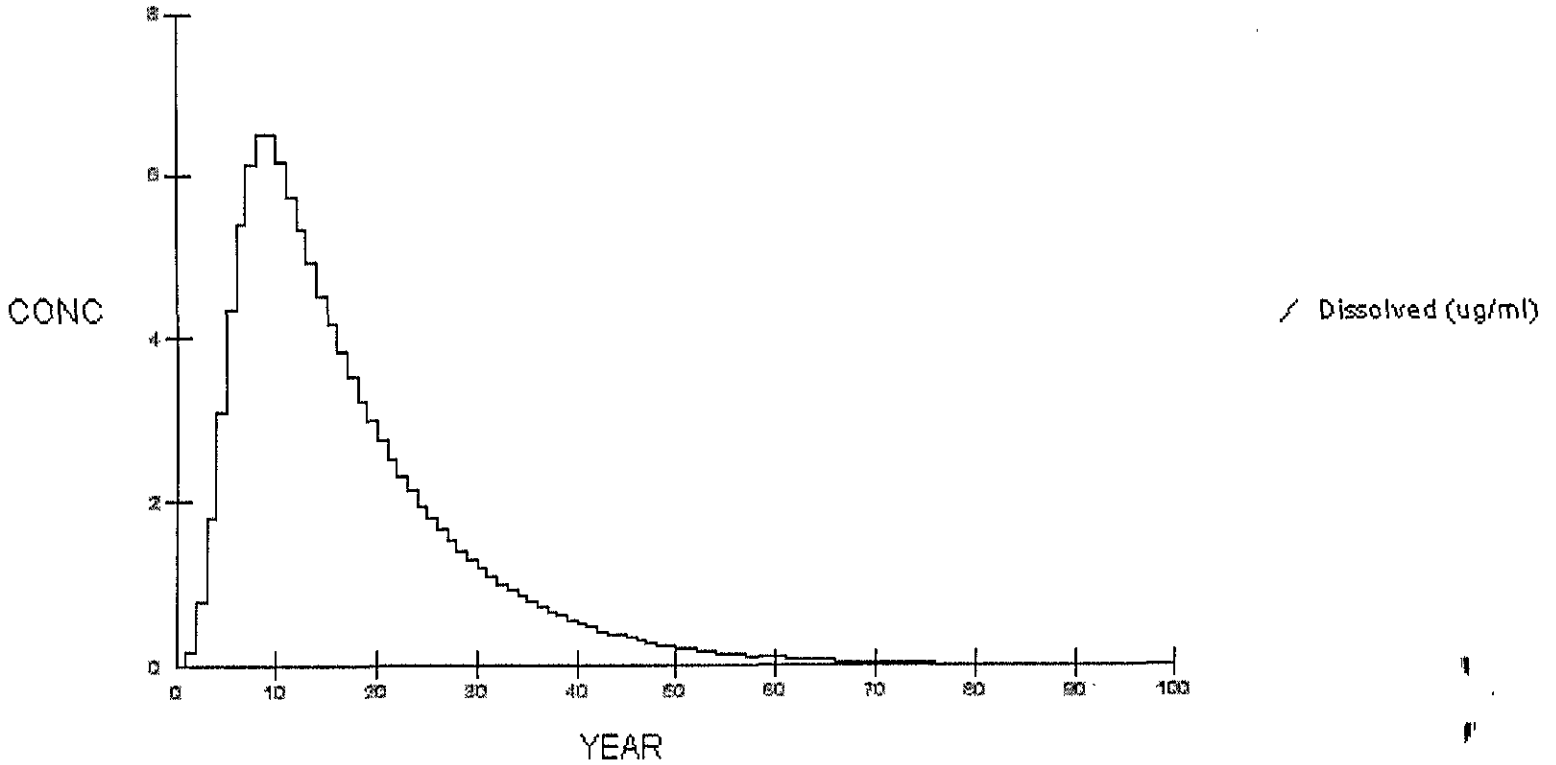
where, Intake = (CI*IR*ET*EF*ED)/BW*AT

	CI (mg/m^3)	IR (m^3/day)	ET (hr/24hr)	EF (days/yr)	ED (yr)	BW (kg)	AT (days)	Intake (mg/kg-day)	SlopeFactor $(mg/kg\text{-}day)^{-1}$	Risk
TCE Exposure Industrial Setting	1.79E-05	20	12	250	25	70	25500	6.27456E-07	6.00E-03	3.76E-09

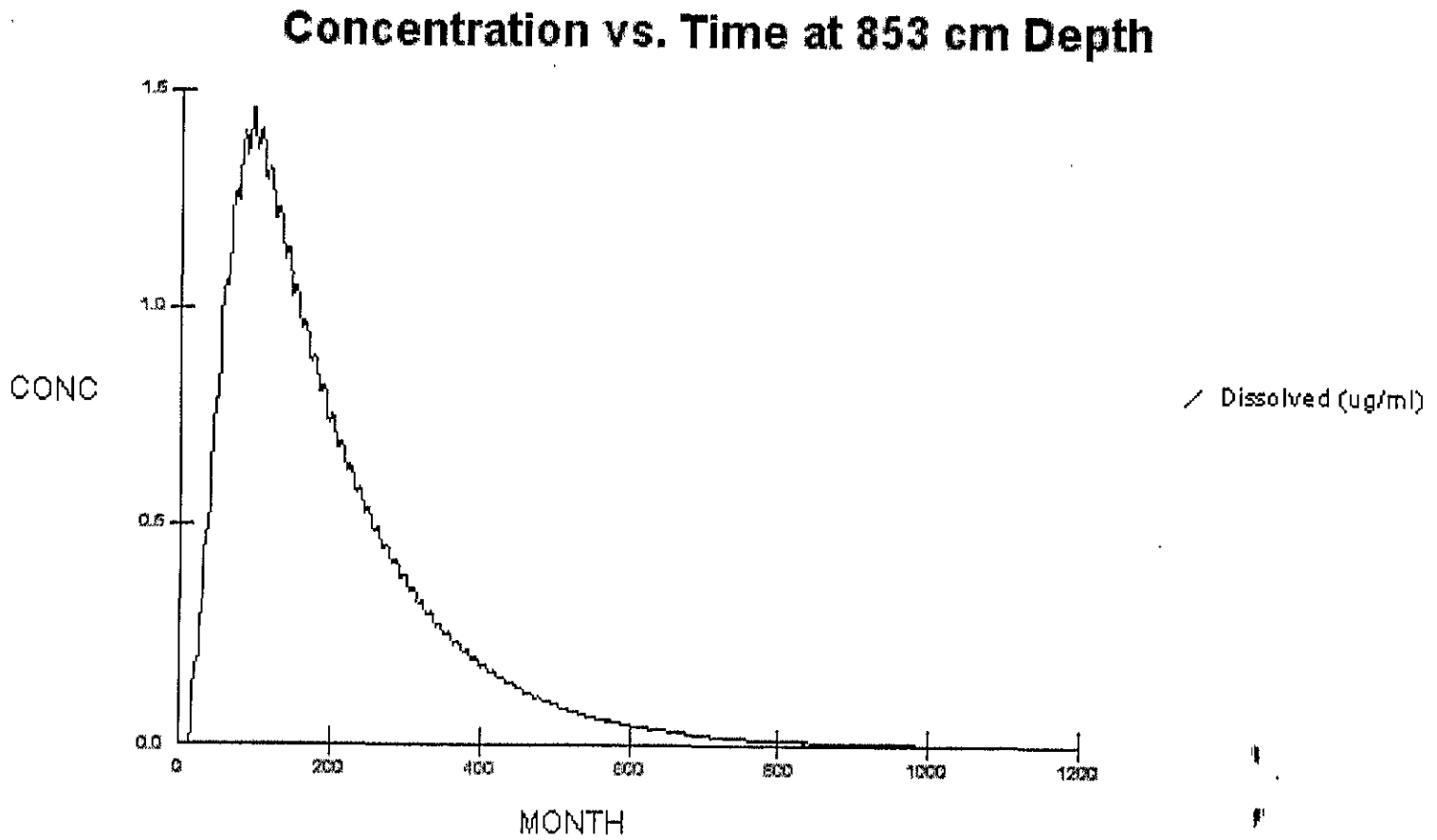
Cancer Risk (1/Risk)
265,622,735

SESOIL Model Results
No Action - Concentration of TCE in pore water at water table

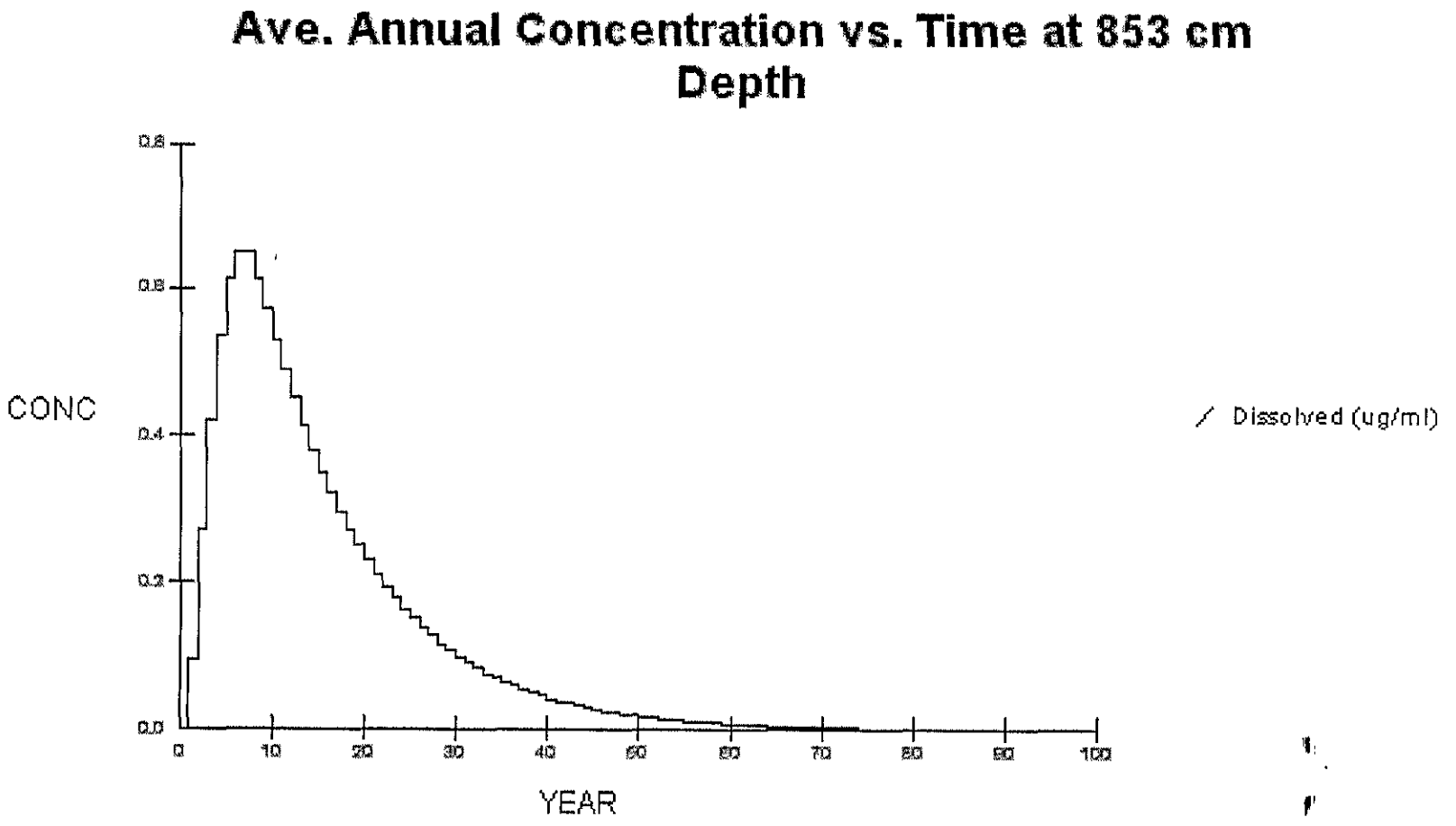
Ave. Annual Concentration vs. Time at 853 cm Depth



SESOIL Model Results
Concentration of TCE in pore water at water table -Cleanup Concentration = 0.9 mg/kg TCE

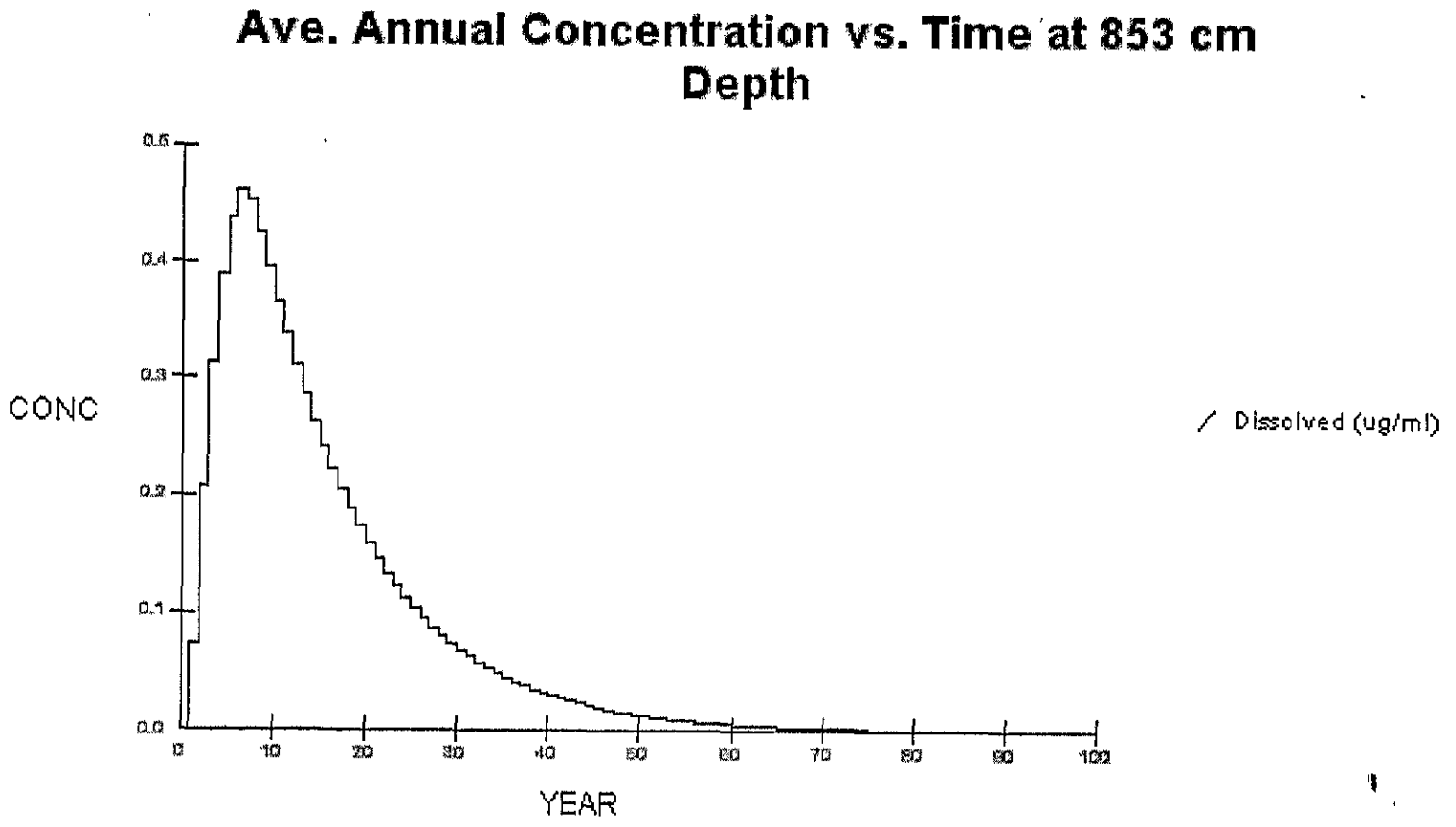


SESOIL Model Results
Concentration of TCE in pore water at water table -Cleanup Concentration = 0.40 mg/kg TCE

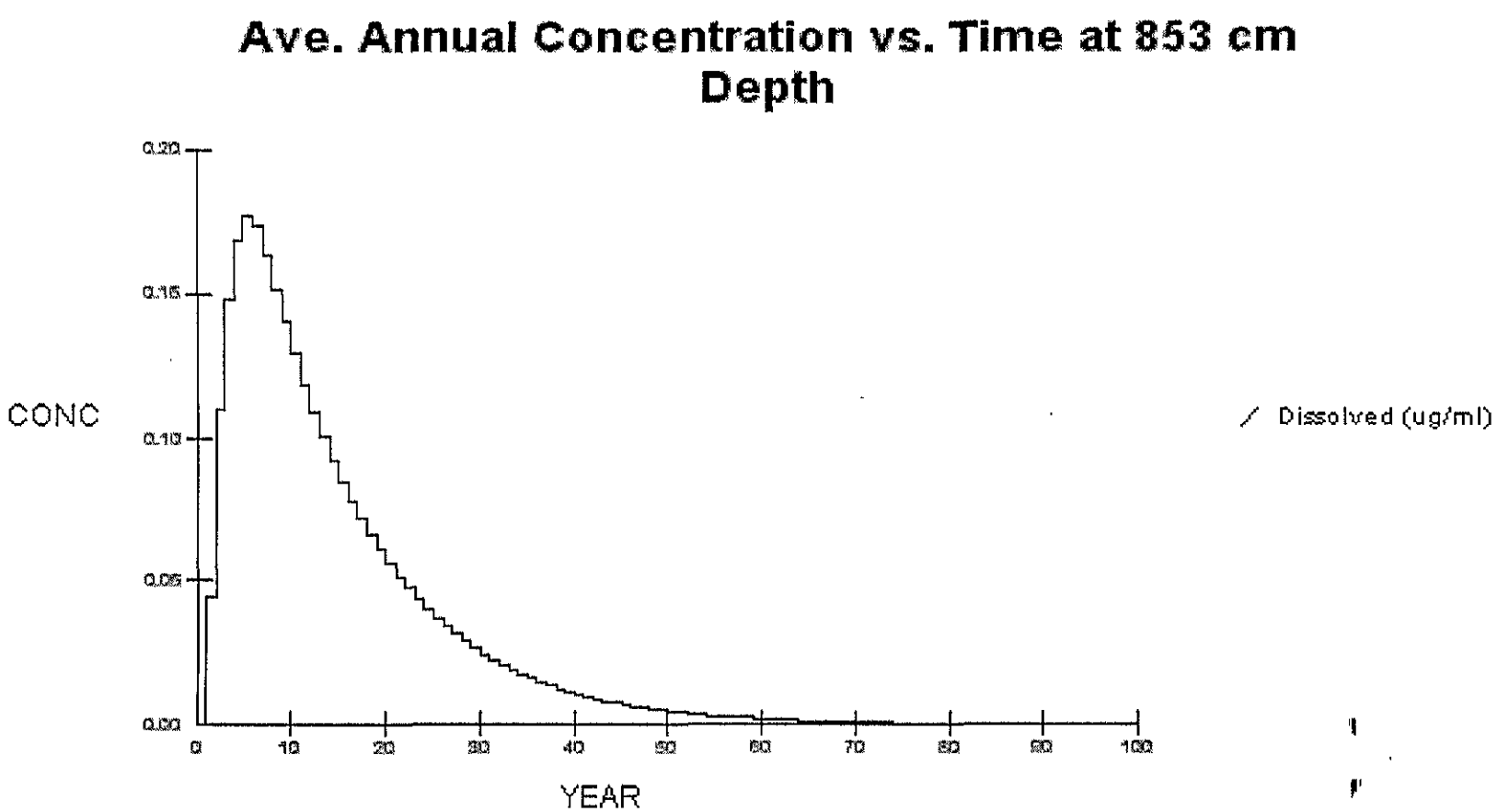


SESOIL Model Results

Concentration of TCE in pore water at water table -Cleanup Concentration = 0.25 mg/kg TCE

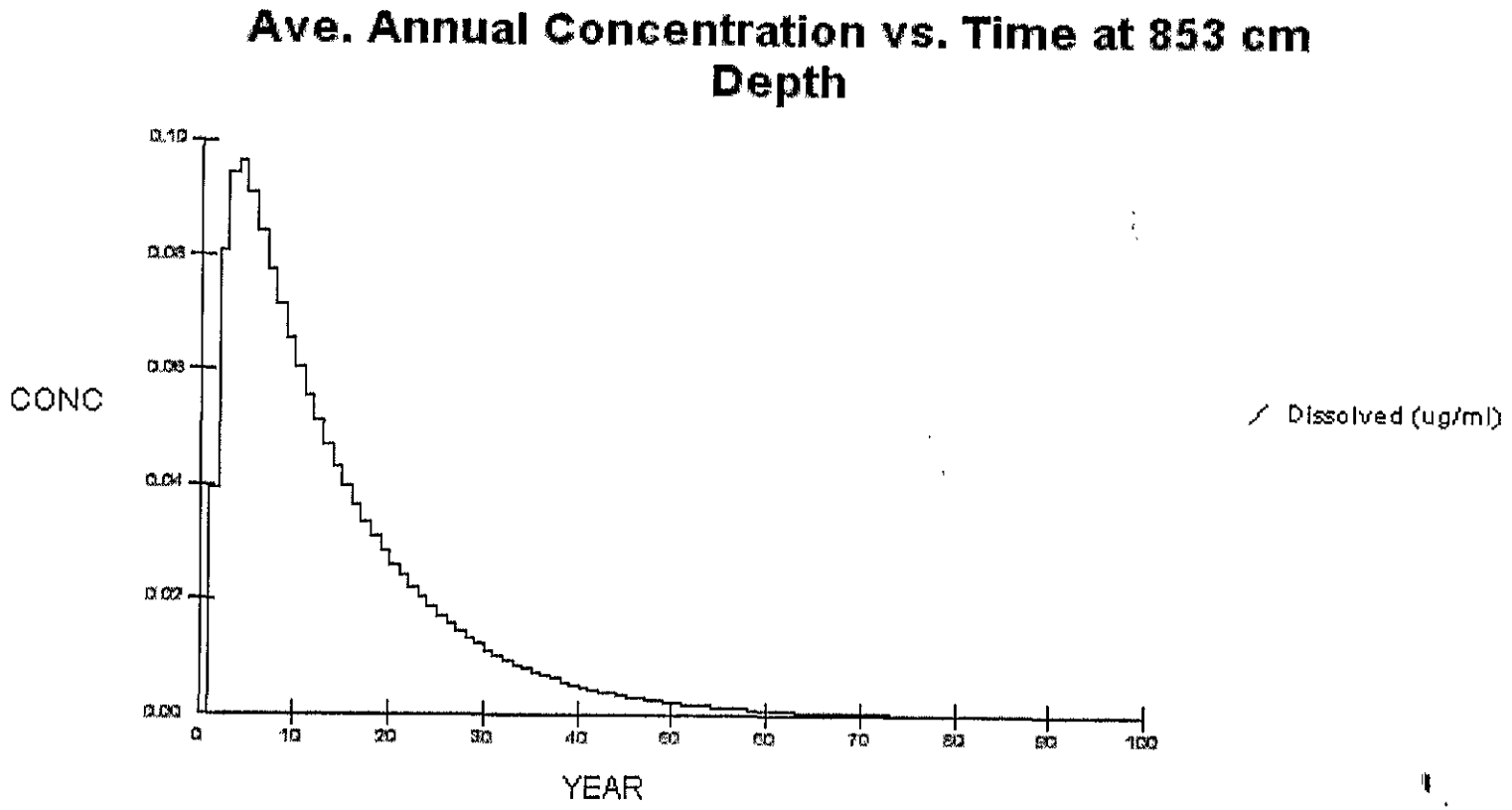


SESOIL Model Results
Concentration of TCE in pore water at water table -Cleanup Concentration = 0.20 mg/kg TCE



SESOIL *Model Results*

Concentration of TCE in pore water at water table -Cleanup Concentration = 0.10 mg/kg TCE



2/20/2001

VLEACH (Version 2.2a, 1996)

By:
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P.O. Box 1198
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Based on the original VLEACH (version 1.0)
developed by CH2M Hill, Redding, California
for USEPA Region IX

No Action

Polygon I
Time: 0.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.32037	0.88257	0.32414E-05
2	0.19788	0.54512	0.20021E-05
3	0.19788	0.54512	0.20021E-05
4	0.42402E-01	0.11681	0.42901E-06
5	0.42402E-01	0.11681	0.42901E-06
6	0.11307E-01	0.31150E-01	0.11440E-06
7	0.11307E-01	0.31150E-01	0.11440E-06
8	0.94227E-02	0.25958E-01	0.95336E-07
9	0.94227E-02	0.25958E-01	0.95336E-07
10	0.35806E-03	0.98640E-03	0.36228E-08
11	0.35806E-03	0.98640E-03	0.36228E-08
12	0.00000	0.00000	0.00000
13	0.00000	0.00000	0.00000
14	0.00000	0.00000	0.00000

Polygon I
Time: 1.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.18154	0.50012	0.18368E-05
2	0.17933	0.49402	0.18144E-05
3	0.18074	0.49790	0.18287E-05
4	0.93595E-01	0.25784	0.94696E-06
5	0.61534E-01	0.16951	0.62258E-06
6	0.31058E-01	0.85558E-01	0.31423E-06
7	0.19328E-01	0.53244E-01	0.19555E-06
8	0.13454E-01	0.37063E-01	0.13612E-06
9	0.11023E-01	0.30366E-01	0.11153E-06
10	0.48328E-02	0.13314E-01	0.48897E-07
11	0.24263E-02	0.66840E-02	0.24548E-07
12	0.11678E-02	0.32170E-02	0.11815E-07
13	0.58170E-03	0.16025E-02	0.58854E-08
14	0.26049E-03	0.71761E-03	0.26356E-08

Polygon I
Time: 2.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.10323	0.28437	0.10444E-05
2	0.14014	0.38607	0.14179E-05
3	0.15583	0.42929	0.15766E-05

4	0.11293	0.31111	0.11426E-05
5	0.79238E-01	0.21829	0.80170E-06
6	0.49059E-01	0.13515	0.49636E-06
7	0.30814E-01	0.84887E-01	0.31177E-06
8	0.20291E-01	0.55898E-01	0.20530E-06
9	0.14689E-01	0.40465E-01	0.14862E-06
10	0.88777E-02	0.24456E-01	0.89821E-07
11	0.51926E-02	0.14305E-01	0.52537E-07
12	0.29402E-02	0.80998E-02	0.29748E-07
13	0.16230E-02	0.44711E-02	0.16421E-07
14	0.81934E-03	0.22571E-02	0.82898E-08

Polygon I
Time: 3.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.58994E-01	0.16252	0.59688E-06
2	0.10177	0.28036	0.10297E-05
3	0.12718	0.35034	0.12867E-05
4	0.11289	0.31098	0.11421E-05
5	0.88921E-01	0.24496	0.89967E-06
6	0.62849E-01	0.17314	0.63588E-06
7	0.42571E-01	0.11727	0.43072E-06
8	0.28730E-01	0.79146E-01	0.29068E-06
9	0.20091E-01	0.55346E-01	0.20327E-06
10	0.13324E-01	0.36705E-01	0.13481E-06
11	0.85132E-02	0.23452E-01	0.86134E-07
12	0.52573E-02	0.14483E-01	0.53191E-07
13	0.31275E-02	0.86157E-02	0.31643E-07
14	0.17224E-02	0.47449E-02	0.17427E-07

Polygon I
Time: 4.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.33966E-01	0.93569E-01	0.34365E-06
2	0.70865E-01	0.19522	0.71698E-06
3	0.99326E-01	0.27362	0.10049E-05
4	0.10225	0.28168	0.10345E-05
5	0.90157E-01	0.24837	0.91217E-06
6	0.70992E-01	0.19557	0.71827E-06
7	0.52266E-01	0.14398	0.52881E-06
8	0.37218E-01	0.10253	0.37656E-06
9	0.26442E-01	0.72844E-01	0.26753E-06
10	0.18331E-01	0.50499E-01	0.18547E-06
11	0.12355E-01	0.34035E-01	0.12500E-06
12	0.80740E-02	0.22243E-01	0.81690E-07
13	0.50800E-02	0.13995E-01	0.51398E-07
14	0.29893E-02	0.82351E-02	0.30245E-07

Polygon I
Time: 5.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.19765E-01	0.54449E-01	0.19997E-06
2	0.48128E-01	0.13258	0.48694E-06
3	0.75027E-01	0.20668	0.75909E-06
4	0.87004E-01	0.23968	0.88028E-06
5	0.84941E-01	0.23400	0.85940E-06
6	0.73489E-01	0.20245	0.74353E-06
7	0.58615E-01	0.16147	0.59304E-06
8	0.44408E-01	0.12233	0.44930E-06
9	0.32790E-01	0.90330E-01	0.33176E-06
10	0.23622E-01	0.65073E-01	0.23899E-06

11	0.16583E-01	0.45683E-01	0.16778E-06
12	0.11312E-01	0.31162E-01	0.11445E-06
13	0.74410E-02	0.20499E-01	0.75286E-07
14	0.46156E-02	0.12715E-01	0.46699E-07

Polygon I
Time: 6.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.11675E-01	0.32164E-01	0.11813E-06
2	0.32235E-01	0.88802E-01	0.32614E-06
3	0.55296E-01	0.15233	0.55947E-06
4	0.70895E-01	0.19530	0.71729E-06
5	0.75795E-01	0.20880	0.76687E-06
6	0.71317E-01	0.19647	0.72156E-06
7	0.61284E-01	0.16883	0.62005E-06
8	0.49431E-01	0.13617	0.50012E-06
9	0.38273E-01	0.10544	0.38723E-06
10	0.28711E-01	0.79094E-01	0.29049E-06
11	0.20934E-01	0.57668E-01	0.21180E-06
12	0.14822E-01	0.40831E-01	0.14996E-06
13	0.10130E-01	0.27906E-01	0.10249E-06
14	0.65672E-02	0.18091E-01	0.66444E-07

Polygon I
Time: 7.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.70397E-02	0.19393E-01	0.71225E-07
2	0.21472E-01	0.59152E-01	0.21725E-06
3	0.40059E-01	0.11036	0.40530E-06
4	0.55993E-01	0.15425	0.56652E-06
5	0.64907E-01	0.17881	0.65671E-06
6	0.65864E-01	0.18144	0.66639E-06
7	0.60626E-01	0.16701	0.61340E-06
8	0.51948E-01	0.14311	0.52559E-06
9	0.42288E-01	0.11650	0.42785E-06
10	0.33101E-01	0.91188E-01	0.33491E-06
11	0.25066E-01	0.69053E-01	0.25361E-06
12	0.18389E-01	0.50658E-01	0.18605E-06
13	0.13018E-01	0.35862E-01	0.13171E-06
14	0.87746E-02	0.24172E-01	0.88778E-07

Polygon I
Time: 8.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.43602E-02	0.12012E-01	0.44115E-07
2	0.14326E-01	0.39465E-01	0.14494E-06
3	0.28707E-01	0.79082E-01	0.29044E-06
4	0.43234E-01	0.11910	0.43743E-06
5	0.53857E-01	0.14837	0.54491E-06
6	0.58507E-01	0.16118	0.59195E-06
7	0.57371E-01	0.15805	0.58046E-06
8	0.52053E-01	0.14340	0.52666E-06
9	0.44539E-01	0.12270	0.45063E-06
10	0.36404E-01	0.10029	0.36833E-06
11	0.28644E-01	0.78908E-01	0.28981E-06
12	0.21763E-01	0.59954E-01	0.22019E-06
13	0.15936E-01	0.43901E-01	0.16123E-06
14	0.11134E-01	0.30671E-01	0.11264E-06

Polygon I
Time: 9.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.27921E-02	0.76917E-02	0.28249E-07
2	0.96357E-02	0.26545E-01	0.97491E-07
3	0.20464E-01	0.56375E-01	0.20705E-06
4	0.32853E-01	0.90505E-01	0.33240E-06
5	0.43619E-01	0.12016	0.44132E-06
6	0.50391E-01	0.13882	0.50984E-06
7	0.52368E-01	0.14426	0.52984E-06
8	0.50132E-01	0.13810	0.50722E-06
9	0.45013E-01	0.12400	0.45543E-06
10	0.38403E-01	0.10579	0.38855E-06
11	0.31396E-01	0.86491E-01	0.31765E-06
12	0.24701E-01	0.68048E-01	0.24992E-06
13	0.18696E-01	0.51504E-01	0.18916E-06
14	0.13513E-01	0.37226E-01	0.13672E-06

Polygon I
Time: 10.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.18582E-02	0.51190E-02	0.18801E-07
2	0.65725E-02	0.18106E-01	0.66498E-07
3	0.14587E-01	0.40185E-01	0.14759E-06
4	0.24704E-01	0.68055E-01	0.24995E-06
5	0.34683E-01	0.95546E-01	0.35091E-06
6	0.42346E-01	0.11665	0.42844E-06
7	0.46408E-01	0.12785	0.46954E-06
8	0.46704E-01	0.12866	0.47254E-06
9	0.43908E-01	0.12096	0.44425E-06
10	0.39056E-01	0.10759	0.39516E-06
11	0.33160E-01	0.91349E-01	0.33550E-06
12	0.27007E-01	0.74400E-01	0.27325E-06
13	0.21118E-01	0.58176E-01	0.21366E-06
14	0.15771E-01	0.43446E-01	0.15957E-06

Polygon I
Time: 11.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.12888E-02	0.35504E-02	0.13040E-07
2	0.45694E-02	0.12588E-01	0.46232E-07
3	0.10446E-01	0.28778E-01	0.10569E-06
4	0.18469E-01	0.50880E-01	0.18687E-06
5	0.27208E-01	0.74953E-01	0.27528E-06
6	0.34897E-01	0.96134E-01	0.35307E-06
7	0.40141E-01	0.11058	0.40613E-06
8	0.42312E-01	0.11656	0.42810E-06
9	0.41545E-01	0.11445	0.42034E-06
10	0.38467E-01	0.10597	0.38919E-06
11	0.33885E-01	0.93347E-01	0.34284E-06
12	0.28553E-01	0.78658E-01	0.28889E-06
13	0.23054E-01	0.63508E-01	0.23325E-06
14	0.17771E-01	0.48957E-01	0.17980E-06

Polygon I
Time: 12.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.93088E-03	0.25644E-02	0.94184E-08
2	0.32502E-02	0.89538E-02	0.32885E-07
3	0.75473E-02	0.20791E-01	0.76361E-07
4	0.13786E-01	0.37977E-01	0.13948E-06
5	0.21146E-01	0.58253E-01	0.21394E-06
6	0.28322E-01	0.78023E-01	0.28656E-06

7	0.34036E-01	0.93763E-01	0.34436E-06
8	0.37442E-01	0.10315	0.37883E-06
9	0.38291E-01	0.10549	0.38742E-06
10	0.36836E-01	0.10148	0.37269E-06
11	0.33625E-01	0.92630E-01	0.34020E-06
12	0.29290E-01	0.80688E-01	0.29634E-06
13	0.24402E-01	0.67224E-01	0.24689E-06
14	0.19400E-01	0.53444E-01	0.19628E-06

Polygon I
Time: 13.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.69745E-03	0.19214E-02	0.70566E-08
2	0.23701E-02	0.65292E-02	0.23980E-07
3	0.55197E-02	0.15206E-01	0.55847E-07
4	0.10311E-01	0.28404E-01	0.10432E-06
5	0.16341E-01	0.45016E-01	0.16533E-06
6	0.22722E-01	0.62595E-01	0.22989E-06
7	0.28396E-01	0.78225E-01	0.28730E-06
8	0.32483E-01	0.89484E-01	0.32865E-06
9	0.34504E-01	0.95052E-01	0.34910E-06
10	0.34416E-01	0.94810E-01	0.34821E-06
11	0.32507E-01	0.89551E-01	0.32889E-06
12	0.29241E-01	0.80555E-01	0.29586E-06
13	0.25119E-01	0.69197E-01	0.25414E-06
14	0.20577E-01	0.56685E-01	0.20819E-06

Polygon I
Time: 14.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.53876E-03	0.14842E-02	0.54510E-08
2	0.17719E-02	0.48814E-02	0.17928E-07
3	0.40965E-02	0.11285E-01	0.41447E-07
4	0.77510E-02	0.21353E-01	0.78422E-07
5	0.12596E-01	0.34699E-01	0.12744E-06
6	0.18076E-01	0.49796E-01	0.18289E-06
7	0.23384E-01	0.64418E-01	0.23659E-06
8	0.27715E-01	0.76351E-01	0.28041E-06
9	0.30493E-01	0.84002E-01	0.30852E-06
10	0.31468E-01	0.86689E-01	0.31838E-06
11	0.30706E-01	0.84589E-01	0.31067E-06
12	0.28490E-01	0.78485E-01	0.28825E-06
13	0.25209E-01	0.69447E-01	0.25506E-06
14	0.21259E-01	0.58565E-01	0.21509E-06

Polygon I
Time: 15.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.42616E-03	0.11740E-02	0.43117E-08
2	0.13558E-02	0.37350E-02	0.13718E-07
3	0.30891E-02	0.85099E-02	0.31254E-07
4	0.58706E-02	0.16173E-01	0.59397E-07
5	0.97111E-02	0.26752E-01	0.98254E-07
6	0.14300E-01	0.39393E-01	0.14468E-06
7	0.19061E-01	0.52510E-01	0.19285E-06
8	0.23323E-01	0.64251E-01	0.23597E-06
9	0.26502E-01	0.73009E-01	0.26814E-06
10	0.28234E-01	0.77779E-01	0.28566E-06
11	0.28412E-01	0.78271E-01	0.28747E-06
12	0.27156E-01	0.74809E-01	0.27475E-06
13	0.24726E-01	0.68116E-01	0.25017E-06

14	0.21445E-01	0.59078E-01	0.21698E-06

Polygon I
Time: 16.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.34296E-03	0.94480E-03	0.34700E-08
2	0.10586E-02	0.29162E-02	0.10710E-07
3	0.23672E-02	0.65213E-02	0.23951E-07
4	0.44876E-02	0.12363E-01	0.45404E-07
5	0.75056E-02	0.20677E-01	0.75939E-07
6	0.11276E-01	0.31063E-01	0.11409E-06
7	0.15417E-01	0.42472E-01	0.15599E-06
8	0.19405E-01	0.53457E-01	0.19633E-06
9	0.22707E-01	0.62555E-01	0.22975E-06
10	0.24916E-01	0.68639E-01	0.25209E-06
11	0.25813E-01	0.71110E-01	0.26117E-06
12	0.25379E-01	0.69913E-01	0.25677E-06
13	0.23752E-01	0.65431E-01	0.24031E-06
14	0.21166E-01	0.58308E-01	0.21415E-06

Polygon I
Time: 17.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.27931E-03	0.76945E-03	0.28260E-08
2	0.84028E-03	0.23148E-02	0.85017E-08
3	0.18418E-02	0.50738E-02	0.18635E-07
4	0.34654E-02	0.95465E-02	0.35061E-07
5	0.58256E-02	0.16049E-01	0.58942E-07
6	0.88816E-02	0.24467E-01	0.89861E-07
7	0.12401E-01	0.34162E-01	0.12547E-06
8	0.15997E-01	0.44068E-01	0.16185E-06
9	0.19222E-01	0.52953E-01	0.19448E-06
10	0.21673E-01	0.59707E-01	0.21928E-06
11	0.23073E-01	0.63561E-01	0.23344E-06
12	0.23301E-01	0.64189E-01	0.23575E-06
13	0.22388E-01	0.61675E-01	0.22652E-06
14	0.20477E-01	0.56410E-01	0.20718E-06

Polygon I
Time: 18.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.22923E-03	0.63148E-03	0.23192E-08
2	0.67560E-03	0.18611E-02	0.68354E-08
3	0.14525E-02	0.40014E-02	0.14696E-07
4	0.27038E-02	0.74486E-02	0.27357E-07
5	0.45466E-02	0.12525E-01	0.46001E-07
6	0.69998E-02	0.19283E-01	0.70822E-07
7	0.99373E-02	0.27375E-01	0.10054E-06
8	0.13092E-01	0.36065E-01	0.13246E-06
9	0.16107E-01	0.44371E-01	0.16296E-06
10	0.18618E-01	0.51290E-01	0.18837E-06
11	0.20329E-01	0.56002E-01	0.20568E-06
12	0.21055E-01	0.58003E-01	0.21303E-06
13	0.20744E-01	0.57146E-01	0.20988E-06
14	0.19453E-01	0.53588E-01	0.19681E-06

Polygon I
Time: 19.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.18899E-03	0.52064E-03	0.19122E-08
2	0.54833E-03	0.15106E-02	0.55478E-08

3	0.11587E-02	0.31920E-02	0.11723E-07
4	0.21307E-02	0.58697E-02	0.21558E-07
5	0.35707E-02	0.98365E-02	0.36127E-07
6	0.55275E-02	0.15227E-01	0.55925E-07
7	0.79466E-02	0.21892E-01	0.80401E-07
8	0.10654E-01	0.29351E-01	0.10780E-06
9	0.13383E-01	0.36866E-01	0.13540E-06
10	0.15822E-01	0.43586E-01	0.16008E-06
11	0.17684E-01	0.48717E-01	0.17892E-06
12	0.18756E-01	0.51670E-01	0.18977E-06
13	0.18924E-01	0.52132E-01	0.19146E-06
14	0.18174E-01	0.50067E-01	0.18388E-06

Polygon I
Time: 20.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.15620E-03	0.43031E-03	0.15804E-08
2	0.44797E-03	0.12341E-02	0.45324E-08
3	0.93283E-03	0.25698E-02	0.94381E-08
4	0.16943E-02	0.46674E-02	0.17142E-07
5	0.28225E-02	0.77756E-02	0.28557E-07
6	0.43777E-02	0.12060E-01	0.44292E-07
7	0.63500E-02	0.17493E-01	0.64247E-07
8	0.86358E-02	0.23790E-01	0.87374E-07
9	0.11043E-01	0.30420E-01	0.11172E-06
10	0.13321E-01	0.36697E-01	0.13478E-06
11	0.15213E-01	0.41908E-01	0.15392E-06
12	0.16496E-01	0.45444E-01	0.16690E-06
13	0.17022E-01	0.46892E-01	0.17222E-06
14	0.16723E-01	0.46070E-01	0.16920E-06

Polygon I
Time: 21.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.12923E-03	0.35600E-03	0.13075E-08
2	0.36757E-03	0.10126E-02	0.37189E-08
3	0.75635E-03	0.20836E-02	0.76525E-08
4	0.13578E-02	0.37405E-02	0.13738E-07
5	0.22454E-02	0.61858E-02	0.22718E-07
6	0.34796E-02	0.95856E-02	0.35205E-07
7	0.50759E-02	0.13983E-01	0.51356E-07
8	0.69802E-02	0.19229E-01	0.70623E-07
9	0.90616E-02	0.24963E-01	0.91682E-07
10	0.11128E-01	0.30656E-01	0.11259E-06
11	0.12959E-01	0.35699E-01	0.13111E-06
12	0.14344E-01	0.39515E-01	0.14513E-06
13	0.15117E-01	0.41645E-01	0.15295E-06
14	0.15176E-01	0.41807E-01	0.15354E-06

Polygon I
Time: 22.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.10691E-03	0.29452E-03	0.10817E-08
2	0.30237E-03	0.83299E-03	0.30593E-08
3	0.61645E-03	0.16982E-02	0.62370E-08
4	0.10953E-02	0.30172E-02	0.11081E-07
5	0.17970E-02	0.49503E-02	0.18181E-07
6	0.27766E-02	0.76489E-02	0.28092E-07
7	0.40623E-02	0.11191E-01	0.41101E-07
8	0.56327E-02	0.15517E-01	0.56989E-07
9	0.74041E-02	0.20397E-01	0.74912E-07

10	0.92350E-02	0.25441E-01	0.93436E-07
11	0.10945E-01	0.30152E-01	0.11074E-06
12	0.12347E-01	0.34013E-01	0.12492E-06
13	0.13272E-01	0.36561E-01	0.13428E-06
14	0.13598E-01	0.37461E-01	0.13758E-06

Polygon I
Time: 23.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.88391E-04	0.24350E-03	0.89431E-09
2	0.24908E-03	0.68617E-03	0.25201E-08
3	0.50425E-03	0.13891E-02	0.51018E-08
4	0.88806E-03	0.24464E-02	0.89851E-08
5	0.14457E-02	0.39826E-02	0.14627E-07
6	0.22244E-02	0.61278E-02	0.22506E-07
7	0.32568E-02	0.89719E-02	0.32951E-07
8	0.45418E-02	0.12512E-01	0.45953E-07
9	0.60304E-02	0.16613E-01	0.61013E-07
10	0.76224E-02	0.20998E-01	0.77121E-07
11	0.91769E-02	0.25281E-01	0.92849E-07
12	0.10532E-01	0.29015E-01	0.10656E-06
13	0.11532E-01	0.31768E-01	0.11668E-06
14	0.12045E-01	0.33181E-01	0.12187E-06

Polygon I
Time: 24.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.73009E-04	0.20113E-03	0.73868E-09
2	0.20527E-03	0.56549E-03	0.20769E-08
3	0.41344E-03	0.11390E-02	0.41831E-08
4	0.72291E-03	0.19915E-02	0.73142E-08
5	0.11684E-02	0.32186E-02	0.11821E-07
6	0.17889E-02	0.49280E-02	0.18099E-07
7	0.26167E-02	0.72084E-02	0.26474E-07
8	0.36622E-02	0.10089E-01	0.37052E-07
9	0.49003E-02	0.13500E-01	0.49580E-07
10	0.62638E-02	0.17256E-01	0.63375E-07
11	0.76461E-02	0.21064E-01	0.77360E-07
12	0.89142E-02	0.24557E-01	0.90190E-07
13	0.99275E-02	0.27348E-01	0.10044E-06
14	0.10558E-01	0.29085E-01	0.10682E-06

Polygon I
Time: 25.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.60232E-04	0.16593E-03	0.60940E-09
2	0.16915E-03	0.46597E-03	0.17114E-08
3	0.33946E-03	0.93516E-03	0.34345E-08
4	0.59018E-03	0.16258E-02	0.59713E-08
5	0.94775E-03	0.26109E-02	0.95890E-08
6	0.14436E-02	0.39770E-02	0.14606E-07
7	0.21072E-02	0.58050E-02	0.21320E-07
8	0.29545E-02	0.81390E-02	0.29892E-07
9	0.39761E-02	0.10954E-01	0.40229E-07
10	0.51295E-02	0.14131E-01	0.51898E-07
11	0.63369E-02	0.17457E-01	0.64115E-07
12	0.74926E-02	0.20641E-01	0.75807E-07
13	0.84757E-02	0.23349E-01	0.85754E-07
14	0.91667E-02	0.25253E-01	0.92745E-07

Polygon I

Time: 26.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.49628E-04	0.13672E-03	0.50212E-09
2	0.13930E-03	0.38376E-03	0.14094E-08
3	0.27890E-03	0.76833E-03	0.28218E-08
4	0.48279E-03	0.13300E-02	0.48847E-08
5	0.77106E-03	0.21241E-02	0.78013E-08
6	0.11687E-02	0.32194E-02	0.11824E-07
7	0.17009E-02	0.46858E-02	0.17210E-07
8	0.23857E-02	0.65722E-02	0.24138E-07
9	0.32235E-02	0.88803E-02	0.32615E-07
10	0.41894E-02	0.11541E-01	0.42387E-07
11	0.52287E-02	0.14404E-01	0.52903E-07
12	0.62601E-02	0.17245E-01	0.63337E-07
13	0.71831E-02	0.19788E-01	0.72676E-07
14	0.78909E-02	0.21738E-01	0.79838E-07

Polygon I

Time: 27.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.40840E-04	0.11251E-03	0.41321E-09
2	0.11464E-03	0.31581E-03	0.11599E-08
3	0.22918E-03	0.63136E-03	0.23188E-08
4	0.39544E-03	0.10894E-02	0.40010E-08
5	0.62872E-03	0.17320E-02	0.63612E-08
6	0.94854E-03	0.26131E-02	0.95970E-08
7	0.13761E-02	0.37909E-02	0.13923E-07
8	0.19288E-02	0.53134E-02	0.19515E-07
9	0.26126E-02	0.71972E-02	0.26433E-07
10	0.34148E-02	0.94072E-02	0.34550E-07
11	0.42988E-02	0.11842E-01	0.43494E-07
12	0.52035E-02	0.14335E-01	0.52647E-07
13	0.60481E-02	0.16661E-01	0.61192E-07
14	0.67405E-02	0.18569E-01	0.68198E-07

Polygon I

Time: 28.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.33568E-04	0.92474E-04	0.33963E-09
2	0.94261E-04	0.25967E-03	0.95370E-09
3	0.18829E-03	0.51870E-03	0.19050E-08
4	0.32414E-03	0.89294E-03	0.32795E-08
5	0.51350E-03	0.14146E-02	0.51954E-08
6	0.77155E-03	0.21255E-02	0.78063E-08
7	0.11156E-02	0.30732E-02	0.11287E-07
8	0.15614E-02	0.43013E-02	0.15798E-07
9	0.21177E-02	0.58338E-02	0.21426E-07
10	0.27797E-02	0.76575E-02	0.28124E-07
11	0.35240E-02	0.97080E-02	0.35655E-07
12	0.43064E-02	0.11863E-01	0.43571E-07
13	0.50634E-02	0.13949E-01	0.51230E-07
14	0.57181E-02	0.15752E-01	0.57853E-07

Polygon I

Time: 29.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.27560E-04	0.75923E-04	0.27884E-09
2	0.77433E-04	0.21331E-03	0.78344E-09
3	0.15463E-03	0.42597E-03	0.15644E-08
4	0.26577E-03	0.73216E-03	0.26890E-08
5	0.41987E-03	0.11567E-02	0.42481E-08

6	0.62866E-03	0.17319E-02	0.63606E-08
7	0.90604E-03	0.24960E-02	0.91670E-08
8	0.12657E-02	0.34868E-02	0.12806E-07
9	0.17172E-02	0.47305E-02	0.17374E-07
10	0.22607E-02	0.62277E-02	0.22873E-07
11	0.28823E-02	0.79402E-02	0.29162E-07
12	0.35509E-02	0.97822E-02	0.35927E-07
13	0.42181E-02	0.11620E-01	0.42677E-07
14	0.48209E-02	0.13281E-01	0.48777E-07

Polygon I
Time: 30.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.22604E-04	0.62271E-04	0.22870E-09
2	0.63552E-04	0.17507E-03	0.64299E-09
3	0.12691E-03	0.34961E-03	0.12840E-08
4	0.21792E-03	0.60034E-03	0.22049E-08
5	0.34356E-03	0.94644E-03	0.34760E-08
6	0.51291E-03	0.14130E-02	0.51895E-08
7	0.73700E-03	0.20303E-02	0.74567E-08
8	0.10274E-02	0.28302E-02	0.10395E-07
9	0.13933E-02	0.38382E-02	0.14097E-07
10	0.18377E-02	0.50626E-02	0.18593E-07
11	0.23534E-02	0.64832E-02	0.23811E-07
12	0.29191E-02	0.80417E-02	0.29535E-07
13	0.34988E-02	0.96386E-02	0.35400E-07
14	0.40424E-02	0.11136E-01	0.40900E-07

Polygon I
Time: 31.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.18523E-04	0.51028E-04	0.18741E-09
2	0.52114E-04	0.14357E-03	0.52727E-09
3	0.10410E-03	0.28676E-03	0.10532E-08
4	0.17865E-03	0.49216E-03	0.18075E-08
5	0.28123E-03	0.77473E-03	0.28454E-08
6	0.41888E-03	0.11539E-02	0.42381E-08
7	0.60028E-03	0.16537E-02	0.60734E-08
8	0.83494E-03	0.23001E-02	0.84476E-08
9	0.11313E-02	0.31164E-02	0.11446E-07
10	0.14937E-02	0.41148E-02	0.15113E-07
11	0.19191E-02	0.52869E-02	0.19417E-07
12	0.23939E-02	0.65947E-02	0.24220E-07
13	0.28916E-02	0.79659E-02	0.29256E-07
14	0.33734E-02	0.92932E-02	0.34131E-07

Polygon I
Time: 32.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.15167E-04	0.41782E-04	0.15345E-09
2	0.42702E-04	0.11764E-03	0.43204E-09
3	0.85328E-04	0.23506E-03	0.86331E-09
4	0.14641E-03	0.40334E-03	0.14814E-08
5	0.23024E-03	0.63428E-03	0.23295E-08
6	0.34231E-03	0.94301E-03	0.34634E-08
7	0.48943E-03	0.13483E-02	0.49519E-08
8	0.67930E-03	0.18713E-02	0.68729E-08
9	0.91926E-03	0.25324E-02	0.93007E-08
10	0.12142E-02	0.33448E-02	0.12285E-07
11	0.15637E-02	0.43076E-02	0.15821E-07
12	0.19593E-02	0.53975E-02	0.19824E-07

13	0.23824E-02	0.65632E-02	0.24105E-07
14	0.28034E-02	0.77228E-02	0.28363E-07

Polygon I
Time: 33.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.12410E-04	0.34188E-04	0.12556E-09
2	0.34965E-04	0.96321E-04	0.35376E-09
3	0.69900E-04	0.19256E-03	0.70722E-09
4	0.11994E-03	0.33042E-03	0.12135E-08
5	0.18850E-03	0.51927E-03	0.19071E-08
6	0.27986E-03	0.77097E-03	0.28315E-08
7	0.39937E-03	0.11002E-02	0.40407E-08
8	0.55320E-03	0.15240E-02	0.55971E-08
9	0.74756E-03	0.20594E-02	0.75636E-08
10	0.98723E-03	0.27196E-02	0.99884E-08
11	0.12734E-02	0.35079E-02	0.12884E-07
12	0.16012E-02	0.44111E-02	0.16201E-07
13	0.19579E-02	0.53936E-02	0.19809E-07
14	0.23212E-02	0.63945E-02	0.23485E-07

Polygon I
Time: 34.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.10149E-04	0.27959E-04	0.10269E-09
2	0.28612E-04	0.78820E-04	0.28948E-09
3	0.57228E-04	0.15765E-03	0.57902E-09
4	0.98218E-04	0.27057E-03	0.99373E-09
5	0.15430E-03	0.42507E-03	0.15611E-08
6	0.22886E-03	0.63047E-03	0.23155E-08
7	0.32608E-03	0.89830E-03	0.32992E-08
8	0.45088E-03	0.12421E-02	0.45618E-08
9	0.60840E-03	0.16760E-02	0.61555E-08
10	0.80301E-03	0.22121E-02	0.81245E-08
11	0.10367E-02	0.28559E-02	0.10489E-07
12	0.13071E-02	0.36008E-02	0.13225E-07
13	0.16056E-02	0.44232E-02	0.16245E-07
14	0.19160E-02	0.52783E-02	0.19386E-07

Polygon I
Time: 35.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.82961E-05	0.22854E-04	0.83937E-10
2	0.23401E-04	0.64465E-04	0.23676E-09
3	0.46829E-04	0.12901E-03	0.47380E-09
4	0.80392E-04	0.22147E-03	0.81338E-09
5	0.12628E-03	0.34787E-03	0.12776E-08
6	0.18717E-03	0.51562E-03	0.18937E-08
7	0.26635E-03	0.73376E-03	0.26949E-08
8	0.36772E-03	0.10130E-02	0.37205E-08
9	0.49548E-03	0.13650E-02	0.50131E-08
10	0.65346E-03	0.18002E-02	0.66114E-08
11	0.84395E-03	0.23249E-02	0.85387E-08
12	0.10662E-02	0.29371E-02	0.10787E-07
13	0.13145E-02	0.36213E-02	0.13300E-07
14	0.15774E-02	0.43455E-02	0.15960E-07

Polygon I
Time: 36.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.67788E-05	0.18674E-04	0.68586E-10

2	0.19130E-04	0.52701E-04	0.19355E-09
3	0.38302E-04	0.10551E-03	0.38752E-09
4	0.65775E-04	0.18120E-03	0.66549E-09
5	0.10332E-03	0.28463E-03	0.10454E-08
6	0.15307E-03	0.42169E-03	0.15487E-08
7	0.21763E-03	0.59953E-03	0.22019E-08
8	0.30006E-03	0.82661E-03	0.30359E-08
9	0.40377E-03	0.11123E-02	0.40852E-08
10	0.53201E-03	0.14656E-02	0.53827E-08
11	0.68709E-03	0.18928E-02	0.69518E-08
12	0.86916E-03	0.23944E-02	0.87938E-08
13	0.10748E-02	0.29609E-02	0.10875E-07
14	0.12958E-02	0.35698E-02	0.13111E-07

Polygon I
Time: 37.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.55374E-05	0.15255E-04	0.56025E-10
2	0.15634E-04	0.43068E-04	0.15817E-09
3	0.31314E-04	0.86265E-04	0.31683E-09
4	0.53795E-04	0.14820E-03	0.54428E-09
5	0.84512E-04	0.23282E-03	0.85506E-09
6	0.12518E-03	0.34484E-03	0.12665E-08
7	0.17785E-03	0.48993E-03	0.17994E-08
8	0.24495E-03	0.67479E-03	0.24783E-08
9	0.32920E-03	0.90690E-03	0.33308E-08
10	0.43334E-03	0.11938E-02	0.43844E-08
11	0.55950E-03	0.15413E-02	0.56608E-08
12	0.70833E-03	0.19513E-02	0.71667E-08
13	0.87792E-03	0.24185E-02	0.88825E-08
14	0.10626E-02	0.29272E-02	0.10751E-07

Polygon I
Time: 38.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.45223E-05	0.12458E-04	0.45755E-10
2	0.12772E-04	0.35185E-04	0.12922E-09
3	0.25593E-04	0.70504E-04	0.25894E-09
4	0.43982E-04	0.12116E-03	0.44499E-09
5	0.69109E-04	0.19038E-03	0.69922E-09
6	0.10235E-03	0.28196E-03	0.10356E-08
7	0.14535E-03	0.40041E-03	0.14706E-08
8	0.20002E-03	0.55101E-03	0.20237E-08
9	0.26853E-03	0.73976E-03	0.27169E-08
10	0.35313E-03	0.97281E-03	0.35728E-08
11	0.45571E-03	0.12554E-02	0.46107E-08
12	0.57718E-03	0.15900E-02	0.58397E-08
13	0.71657E-03	0.19740E-02	0.72500E-08
14	0.87004E-03	0.23968E-02	0.88028E-08

Polygon I
Time: 39.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.36926E-05	0.10172E-04	0.37360E-10
2	0.10432E-04	0.28738E-04	0.10555E-09
3	0.20911E-04	0.57606E-04	0.21157E-09
4	0.35948E-04	0.99030E-04	0.36371E-09
5	0.56498E-04	0.15564E-03	0.57163E-09
6	0.83677E-04	0.23051E-03	0.84661E-09
7	0.11879E-03	0.32724E-03	0.12019E-08
8	0.16336E-03	0.45003E-03	0.16528E-08

9	0.21912E-03	0.60364E-03	0.22170E-08
10	0.28789E-03	0.79307E-03	0.29127E-08
11	0.37129E-03	0.10228E-02	0.37566E-08
12	0.47031E-03	0.12956E-02	0.47584E-08
13	0.58457E-03	0.16104E-02	0.59145E-08
14	0.71157E-03	0.19603E-02	0.71994E-08

Polygon I
Time: 40.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.30148E-05	0.83052E-05	0.30503E-10
2	0.85191E-05	0.23469E-04	0.86193E-10
3	0.17082E-04	0.47057E-04	0.17283E-09
4	0.29374E-04	0.80920E-04	0.29719E-09
5	0.46178E-04	0.12721E-03	0.46721E-09
6	0.68397E-04	0.18842E-03	0.69202E-09
7	0.97080E-04	0.26744E-03	0.98222E-09
8	0.13344E-03	0.36761E-03	0.13501E-08
9	0.17885E-03	0.49271E-03	0.18096E-08
10	0.23478E-03	0.64678E-03	0.23754E-08
11	0.30260E-03	0.83361E-03	0.30616E-08
12	0.38325E-03	0.10558E-02	0.38776E-08
13	0.47673E-03	0.13133E-02	0.48234E-08
14	0.58145E-03	0.16018E-02	0.58829E-08

Polygon I
Time: 41.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.24612E-05	0.67801E-05	0.24901E-10
2	0.69561E-05	0.19163E-04	0.70379E-10
3	0.13951E-04	0.38432E-04	0.14115E-09
4	0.23997E-04	0.66108E-04	0.24279E-09
5	0.37734E-04	0.10395E-03	0.38178E-09
6	0.55898E-04	0.15399E-03	0.56556E-09
7	0.79333E-04	0.21855E-03	0.80267E-09
8	0.10901E-03	0.30030E-03	0.11029E-08
9	0.14602E-03	0.40225E-03	0.14773E-08
10	0.19153E-03	0.52764E-03	0.19379E-08
11	0.24669E-03	0.67960E-03	0.24960E-08
12	0.31236E-03	0.86049E-03	0.31603E-08
13	0.38872E-03	0.10708E-02	0.39329E-08
14	0.47480E-03	0.13080E-02	0.48038E-08

Polygon I
Time: 42.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.20091E-05	0.55348E-05	0.20328E-10
2	0.56792E-05	0.15645E-04	0.57461E-10
3	0.11392E-04	0.31384E-04	0.11527E-09
4	0.19601E-04	0.53997E-04	0.19832E-09
5	0.30829E-04	0.84928E-04	0.31191E-09
6	0.45676E-04	0.12583E-03	0.46213E-09
7	0.64825E-04	0.17858E-03	0.65588E-09
8	0.89053E-04	0.24532E-03	0.90101E-09
9	0.11923E-03	0.32845E-03	0.12063E-08
10	0.15629E-03	0.43056E-03	0.15813E-08
11	0.20118E-03	0.55420E-03	0.20354E-08
12	0.25462E-03	0.70144E-03	0.25762E-08
13	0.31693E-03	0.87308E-03	0.32066E-08
14	0.38753E-03	0.10676E-02	0.39209E-08

Polygon I
Time: 43.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.16401E-05	0.45181E-05	0.16594E-10
2	0.46365E-05	0.12773E-04	0.46911E-10
3	0.93023E-05	0.25626E-04	0.94117E-10
4	0.16008E-04	0.44099E-04	0.16196E-09
5	0.25183E-04	0.69375E-04	0.25479E-09
6	0.37318E-04	0.10280E-03	0.37757E-09
7	0.52965E-04	0.14591E-03	0.53588E-09
8	0.72750E-04	0.20041E-03	0.73606E-09
9	0.97367E-04	0.26823E-03	0.98512E-09
10	0.12757E-03	0.35142E-03	0.12907E-08
11	0.16410E-03	0.45206E-03	0.16603E-08
12	0.20760E-03	0.57191E-03	0.21005E-08
13	0.25840E-03	0.71185E-03	0.26144E-08
14	0.31619E-03	0.87105E-03	0.31991E-08

Polygon I
Time: 44.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.13388E-05	0.36882E-05	0.13545E-10
2	0.37851E-05	0.10427E-04	0.38296E-10
3	0.75950E-05	0.20923E-04	0.76844E-10
4	0.13072E-04	0.36012E-04	0.13226E-09
5	0.20569E-04	0.56663E-04	0.20811E-09
6	0.30485E-04	0.83980E-04	0.30843E-09
7	0.43271E-04	0.11920E-03	0.43780E-09
8	0.59430E-04	0.16372E-03	0.60130E-09
9	0.79519E-04	0.21906E-03	0.80455E-09
10	0.10414E-03	0.28687E-03	0.10536E-08
11	0.13389E-03	0.36883E-03	0.13546E-08
12	0.16930E-03	0.46640E-03	0.17129E-08
13	0.21070E-03	0.58043E-03	0.21318E-08
14	0.25794E-03	0.71057E-03	0.26097E-08

Polygon I
Time: 45.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.10929E-05	0.30107E-05	0.11057E-10
2	0.30899E-05	0.85123E-05	0.31263E-10
3	0.62008E-05	0.17082E-04	0.62737E-10
4	0.10674E-04	0.29405E-04	0.10800E-09
5	0.16798E-04	0.46275E-04	0.16996E-09
6	0.24900E-04	0.68596E-04	0.25193E-09
7	0.35348E-04	0.97377E-04	0.35764E-09
8	0.48548E-04	0.13374E-03	0.49119E-09
9	0.64946E-04	0.17891E-03	0.65710E-09
10	0.85020E-04	0.23422E-03	0.86021E-09
11	0.10926E-03	0.30099E-03	0.11054E-08
12	0.13810E-03	0.38043E-03	0.13972E-08
13	0.17182E-03	0.47333E-03	0.17384E-08
14	0.21039E-03	0.57960E-03	0.21287E-08

Polygon I
Time: 46.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.89214E-06	0.24577E-05	0.90263E-11
2	0.25225E-05	0.69489E-05	0.25521E-10
3	0.50623E-05	0.13946E-04	0.51219E-10
4	0.87152E-05	0.24009E-04	0.88178E-10

5	0.13717E-04	0.37789E-04	0.13879E-09
6	0.20337E-04	0.56024E-04	0.20576E-09
7	0.28873E-04	0.79539E-04	0.29212E-09
8	0.39656E-04	0.10924E-03	0.40122E-09
9	0.53044E-04	0.14613E-03	0.53668E-09
10	0.69421E-04	0.19124E-03	0.70238E-09
11	0.89175E-04	0.24566E-03	0.90224E-09
12	0.11266E-03	0.31037E-03	0.11399E-08
13	0.14014E-03	0.38605E-03	0.14178E-08
14	0.17161E-03	0.47275E-03	0.17363E-08

Polygon I
Time: 47.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.72829E-06	0.20063E-05	0.73686E-11
2	0.20592E-05	0.56728E-05	0.20834E-10
3	0.41328E-05	0.11385E-04	0.41814E-10
4	0.71156E-05	0.19602E-04	0.71994E-10
5	0.11201E-04	0.30857E-04	0.11333E-09
6	0.16608E-04	0.45753E-04	0.16804E-09
7	0.23582E-04	0.64964E-04	0.23859E-09
8	0.32391E-04	0.89230E-04	0.32772E-09
9	0.43323E-04	0.11935E-03	0.43833E-09
10	0.56688E-04	0.15616E-03	0.57354E-09
11	0.72794E-04	0.20053E-03	0.73650E-09
12	0.91931E-04	0.25325E-03	0.93013E-09
13	0.11431E-03	0.31490E-03	0.11566E-08
14	0.13998E-03	0.38561E-03	0.14162E-08

Polygon I
Time: 48.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.59455E-06	0.16379E-05	0.60154E-11
2	0.16811E-05	0.46311E-05	0.17008E-10
3	0.33740E-05	0.92947E-05	0.34137E-10
4	0.58095E-05	0.16004E-04	0.58778E-10
5	0.91458E-05	0.25195E-04	0.92534E-10
6	0.13562E-04	0.37362E-04	0.13722E-09
7	0.19259E-04	0.53056E-04	0.19486E-09
8	0.26455E-04	0.72879E-04	0.26766E-09
9	0.35384E-04	0.97476E-04	0.35800E-09
10	0.46292E-04	0.12753E-03	0.46837E-09
11	0.59429E-04	0.16371E-03	0.60128E-09
12	0.75025E-04	0.20668E-03	0.75908E-09
13	0.93259E-04	0.25691E-03	0.94356E-09
14	0.11418E-03	0.31455E-03	0.11553E-08

Polygon I
Time: 49.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.48538E-06	0.13371E-05	0.49109E-11
2	0.13724E-05	0.37807E-05	0.13885E-10
3	0.27545E-05	0.75881E-05	0.27869E-10
4	0.47430E-05	0.13066E-04	0.47988E-10
5	0.74674E-05	0.20571E-04	0.75553E-10
6	0.11075E-04	0.30509E-04	0.11205E-09
7	0.15728E-04	0.43329E-04	0.15913E-09
8	0.21606E-04	0.59521E-04	0.21860E-09
9	0.28899E-04	0.79610E-04	0.29239E-09
10	0.37804E-04	0.10414E-03	0.38248E-09
11	0.48521E-04	0.13367E-03	0.49092E-09

12	0.61237E-04	0.16870E-03	0.61957E-09
13	0.76095E-04	0.20963E-03	0.76990E-09
14	0.93150E-04	0.25661E-03	0.94246E-09

Polygon I
Time: 50.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.39626E-06	0.10916E-05	0.40093E-11
2	0.11204E-05	0.30865E-05	0.11336E-10
3	0.22488E-05	0.61950E-05	0.22752E-10
4	0.38723E-05	0.10668E-04	0.39179E-10
5	0.60969E-05	0.16796E-04	0.61687E-10
6	0.90429E-05	0.24912E-04	0.91493E-10
7	0.12844E-04	0.35383E-04	0.12995E-09
8	0.17645E-04	0.48609E-04	0.17853E-09
9	0.23601E-04	0.65017E-04	0.23879E-09
10	0.30872E-04	0.85048E-04	0.31236E-09
11	0.39618E-04	0.10914E-03	0.40084E-09
12	0.49988E-04	0.13771E-03	0.50576E-09
13	0.62098E-04	0.17107E-03	0.62829E-09
14	0.76000E-04	0.20937E-03	0.76894E-09

Polygon I
Time: 51.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.32352E-06	0.89124E-06	0.32733E-11
2	0.91472E-06	0.25199E-05	0.92548E-11
3	0.18359E-05	0.50576E-05	0.18575E-10
4	0.31615E-05	0.87093E-05	0.31987E-10
5	0.49779E-05	0.13713E-04	0.50365E-10
6	0.73837E-05	0.20341E-04	0.74705E-10
7	0.10488E-04	0.28893E-04	0.10611E-09
8	0.14410E-04	0.39696E-04	0.14579E-09
9	0.19275E-04	0.53098E-04	0.19501E-09
10	0.25212E-04	0.69454E-04	0.25508E-09
11	0.32350E-04	0.89119E-04	0.32731E-09
12	0.40809E-04	0.11242E-03	0.41289E-09
13	0.50682E-04	0.13962E-03	0.51279E-09
14	0.62014E-04	0.17084E-03	0.62743E-09

Polygon I
Time: 52.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.26414E-06	0.72765E-06	0.26724E-11
2	0.74680E-06	0.20573E-05	0.75559E-11
3	0.14989E-05	0.41292E-05	0.15165E-10
4	0.25811E-05	0.71105E-05	0.26115E-10
5	0.40642E-05	0.11196E-04	0.41121E-10
6	0.60288E-05	0.16608E-04	0.60997E-10
7	0.85641E-05	0.23592E-04	0.86648E-10
8	0.11767E-04	0.32416E-04	0.11906E-09
9	0.15740E-04	0.43362E-04	0.15926E-09
10	0.20589E-04	0.56719E-04	0.20831E-09
11	0.26417E-04	0.72773E-04	0.26727E-09
12	0.33318E-04	0.91785E-04	0.33710E-09
13	0.41369E-04	0.11397E-03	0.41856E-09
14	0.50607E-04	0.13941E-03	0.51202E-09

Polygon I
Time: 53.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)

1	0.21566E-06	0.59409E-06	0.21819E-11
2	0.60972E-06	0.16797E-05	0.61690E-11
3	0.12237E-05	0.33712E-05	0.12381E-10
4	0.21073E-05	0.58053E-05	0.21321E-10
5	0.33183E-05	0.91413E-05	0.33573E-10
6	0.49224E-05	0.13560E-04	0.49803E-10
7	0.69929E-05	0.19264E-04	0.70751E-10
8	0.96089E-05	0.26471E-04	0.97219E-10
9	0.12854E-04	0.35411E-04	0.13005E-09
10	0.16814E-04	0.46319E-04	0.17012E-09
11	0.21571E-04	0.59426E-04	0.21825E-09
12	0.27204E-04	0.74941E-04	0.27524E-09
13	0.33771E-04	0.93032E-04	0.34168E-09
14	0.41302E-04	0.11378E-03	0.41788E-09

Polygon I
Time: 54.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.17608E-06	0.48506E-06	0.17815E-11
2	0.49782E-06	0.13714E-05	0.50367E-11
3	0.99913E-06	0.27524E-05	0.10109E-10
4	0.17205E-05	0.47397E-05	0.17408E-10
5	0.27092E-05	0.74634E-05	0.27411E-10
6	0.40190E-05	0.11072E-04	0.40663E-10
7	0.57098E-05	0.15729E-04	0.57770E-10
8	0.78463E-05	0.21615E-04	0.79386E-10
9	0.10497E-04	0.28917E-04	0.10620E-09
10	0.13730E-04	0.37825E-04	0.13892E-09
11	0.17615E-04	0.48527E-04	0.17822E-09
12	0.22212E-04	0.61191E-04	0.22474E-09
13	0.27570E-04	0.75950E-04	0.27894E-09
14	0.33712E-04	0.92870E-04	0.34108E-09

Polygon I
Time: 55.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.14376E-06	0.39605E-06	0.14546E-11
2	0.40645E-06	0.11197E-05	0.41124E-11
3	0.81575E-06	0.22473E-05	0.82535E-11
4	0.14047E-05	0.38698E-05	0.14213E-10
5	0.22120E-05	0.60936E-05	0.22380E-10
6	0.32815E-05	0.90399E-05	0.33201E-10
7	0.46621E-05	0.12843E-04	0.47169E-10
8	0.64069E-05	0.17650E-04	0.64822E-10
9	0.85715E-05	0.23613E-04	0.86723E-10
10	0.11212E-04	0.30888E-04	0.11344E-09
11	0.14385E-04	0.39627E-04	0.14554E-09
12	0.18137E-04	0.49965E-04	0.18351E-09
13	0.22509E-04	0.62008E-04	0.22774E-09
14	0.27518E-04	0.75808E-04	0.27842E-09

Polygon I
Time: 56.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.11738E-06	0.32337E-06	0.11876E-11
2	0.33186E-06	0.91422E-06	0.33577E-11
3	0.66604E-06	0.18348E-05	0.67388E-11
4	0.11469E-05	0.31596E-05	0.11604E-10
5	0.18060E-05	0.49752E-05	0.18273E-10
6	0.26792E-05	0.73809E-05	0.27108E-10
7	0.38066E-05	0.10487E-04	0.38514E-10

8	0.52314E-05	0.14412E-04	0.52930E-10
9	0.69992E-05	0.19282E-04	0.70815E-10
10	0.91560E-05	0.25223E-04	0.92637E-10
11	0.11746E-04	0.32359E-04	0.11885E-09
12	0.14810E-04	0.40799E-04	0.14984E-09
13	0.18378E-04	0.50627E-04	0.18594E-09
14	0.22464E-04	0.61885E-04	0.22729E-09

Polygon I
Time: 57.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.95844E-07	0.26403E-06	0.96972E-12
2	0.27096E-06	0.74646E-06	0.27415E-11
3	0.54381E-06	0.14981E-05	0.55021E-11
4	0.93643E-06	0.25797E-05	0.94745E-11
5	0.14746E-05	0.40622E-05	0.14919E-10
6	0.21876E-05	0.60263E-05	0.22133E-10
7	0.31081E-05	0.85622E-05	0.31447E-10
8	0.42716E-05	0.11767E-04	0.43218E-10
9	0.57152E-05	0.15744E-04	0.57825E-10
10	0.74766E-05	0.20597E-04	0.75646E-10
11	0.95920E-05	0.26424E-04	0.97048E-10
12	0.12093E-04	0.33315E-04	0.12236E-09
13	0.15005E-04	0.41337E-04	0.15182E-09
14	0.18340E-04	0.50523E-04	0.18555E-09

Polygon I
Time: 58.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.78258E-07	0.21559E-06	0.79178E-12
2	0.22124E-06	0.60948E-06	0.22385E-11
3	0.44402E-06	0.12232E-05	0.44924E-11
4	0.76458E-06	0.21063E-05	0.77358E-11
5	0.12040E-05	0.33167E-05	0.12181E-10
6	0.17861E-05	0.49204E-05	0.18071E-10
7	0.25377E-05	0.69910E-05	0.25676E-10
8	0.34878E-05	0.96083E-05	0.35288E-10
9	0.46667E-05	0.12856E-04	0.47216E-10
10	0.61052E-05	0.16819E-04	0.61770E-10
11	0.78327E-05	0.21578E-04	0.79248E-10
12	0.98751E-05	0.27204E-04	0.99913E-10
13	0.12252E-04	0.33753E-04	0.12396E-09
14	0.14973E-04	0.41248E-04	0.15149E-09

Polygon I
Time: 59.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.63899E-07	0.17603E-06	0.64650E-12
2	0.18065E-06	0.49765E-06	0.18277E-11
3	0.36254E-06	0.99874E-06	0.36681E-11
4	0.62428E-06	0.17198E-05	0.63162E-11
5	0.98301E-06	0.27080E-05	0.99458E-11
6	0.14583E-05	0.40174E-05	0.14755E-10
7	0.20720E-05	0.57081E-05	0.20964E-10
8	0.28478E-05	0.78453E-05	0.28813E-10
9	0.38105E-05	0.10497E-04	0.38554E-10
10	0.49853E-05	0.13733E-04	0.50439E-10
11	0.63960E-05	0.17620E-04	0.64712E-10
12	0.80637E-05	0.22214E-04	0.81586E-10
13	0.10004E-04	0.27560E-04	0.10122E-09
14	0.12225E-04	0.33678E-04	0.12369E-09

Polygon I
Time: 60.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.52175E-07	0.14373E-06	0.52788E-12
2	0.14750E-06	0.40634E-06	0.14924E-11
3	0.29602E-06	0.81547E-06	0.29950E-11
4	0.50972E-06	0.14042E-05	0.51572E-11
5	0.80262E-06	0.22111E-05	0.81206E-11
6	0.11907E-05	0.32802E-05	0.12047E-10
7	0.16918E-05	0.46607E-05	0.17117E-10
8	0.23253E-05	0.64057E-05	0.23526E-10
9	0.31114E-05	0.85714E-05	0.31480E-10
10	0.40707E-05	0.11214E-04	0.41186E-10
11	0.52227E-05	0.14388E-04	0.52842E-10
12	0.65846E-05	0.18139E-04	0.66621E-10
13	0.81690E-05	0.22504E-04	0.82652E-10
14	0.99816E-05	0.27498E-04	0.10099E-09

Polygon I
Time: 61.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.42602E-07	0.11736E-06	0.43103E-12
2	0.12044E-06	0.33178E-06	0.12185E-11
3	0.24170E-06	0.66584E-06	0.24454E-11
4	0.41619E-06	0.11465E-05	0.42108E-11
5	0.65534E-06	0.18053E-05	0.66305E-11
6	0.97221E-06	0.26783E-05	0.98365E-11
7	0.13814E-05	0.38054E-05	0.13976E-10
8	0.18986E-05	0.52303E-05	0.19209E-10
9	0.25405E-05	0.69987E-05	0.25704E-10
10	0.33239E-05	0.91568E-05	0.33630E-10
11	0.42647E-05	0.11748E-04	0.43148E-10
12	0.53768E-05	0.14812E-04	0.54400E-10
13	0.66705E-05	0.18376E-04	0.67489E-10
14	0.81501E-05	0.22452E-04	0.82460E-10

Polygon I
Time: 62.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.34785E-07	0.95827E-07	0.35194E-12
2	0.98339E-07	0.27091E-06	0.99496E-12
3	0.19735E-06	0.54367E-06	0.19967E-11
4	0.33982E-06	0.93615E-06	0.34382E-11
5	0.53509E-06	0.14741E-05	0.54138E-11
6	0.79381E-06	0.21868E-05	0.80315E-11
7	0.11279E-05	0.31071E-05	0.11412E-10
8	0.15502E-05	0.42706E-05	0.15685E-10
9	0.20744E-05	0.57146E-05	0.20988E-10
10	0.27141E-05	0.74768E-05	0.27460E-10
11	0.34823E-05	0.95932E-05	0.35233E-10
12	0.43905E-05	0.12095E-04	0.44421E-10
13	0.54468E-05	0.15005E-04	0.55109E-10
14	0.66547E-05	0.18333E-04	0.67330E-10

Polygon I
Time: 63.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.28403E-07	0.78245E-07	0.28737E-12
2	0.80296E-07	0.22120E-06	0.81240E-12
3	0.16114E-06	0.44391E-06	0.16304E-11

4	0.27747E-06	0.76437E-06	0.28073E-11
5	0.43690E-06	0.12036E-05	0.44204E-11
6	0.64815E-06	0.17855E-05	0.65577E-11
7	0.92092E-06	0.25370E-05	0.93175E-11
8	0.12658E-05	0.34870E-05	0.12807E-10
9	0.16938E-05	0.46660E-05	0.17137E-10
10	0.22161E-05	0.61050E-05	0.22422E-10
11	0.28435E-05	0.78332E-05	0.28769E-10
12	0.35851E-05	0.98762E-05	0.36272E-10
13	0.44476E-05	0.12252E-04	0.44999E-10
14	0.54338E-05	0.14969E-04	0.54977E-10

Polygon I
Time: 64.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.23192E-07	0.63889E-07	0.23465E-12
2	0.65563E-07	0.18061E-06	0.66334E-12
3	0.13157E-06	0.36246E-06	0.13312E-11
4	0.22656E-06	0.62412E-06	0.22922E-11
5	0.35673E-06	0.98274E-06	0.36093E-11
6	0.52922E-06	0.14579E-05	0.53544E-11
7	0.75193E-06	0.20714E-05	0.76078E-11
8	0.10335E-05	0.28471E-05	0.10457E-10
9	0.13830E-05	0.38099E-05	0.13993E-10
10	0.18095E-05	0.49849E-05	0.18308E-10
11	0.23218E-05	0.63961E-05	0.23491E-10
12	0.29274E-05	0.80644E-05	0.29618E-10
13	0.36317E-05	0.10005E-04	0.36744E-10
14	0.44369E-05	0.12223E-04	0.44891E-10

Polygon I
Time: 65.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.18937E-07	0.52167E-07	0.19159E-12
2	0.53534E-07	0.14748E-06	0.54164E-12
3	0.10743E-06	0.29596E-06	0.10870E-11
4	0.18499E-06	0.50961E-06	0.18716E-11
5	0.29128E-06	0.80242E-06	0.29470E-11
6	0.43211E-06	0.11904E-05	0.43719E-11
7	0.61396E-06	0.16913E-05	0.62118E-11
8	0.84386E-06	0.23247E-05	0.85379E-11
9	0.11292E-05	0.31108E-05	0.11425E-10
10	0.14775E-05	0.40703E-05	0.14949E-10
11	0.18958E-05	0.52227E-05	0.19181E-10
12	0.23903E-05	0.65849E-05	0.24185E-10
13	0.29655E-05	0.81693E-05	0.30004E-10
14	0.36229E-05	0.99805E-05	0.36656E-10

Polygon I
Time: 66.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.15462E-07	0.42595E-07	0.15644E-12
2	0.43712E-07	0.12042E-06	0.44226E-12
3	0.87722E-07	0.24166E-06	0.88754E-12
4	0.15105E-06	0.41610E-06	0.15282E-11
5	0.23783E-06	0.65519E-06	0.24063E-11
6	0.35282E-06	0.97196E-06	0.35697E-11
7	0.50130E-06	0.13810E-05	0.50720E-11
8	0.68902E-06	0.18981E-05	0.69713E-11
9	0.92202E-06	0.25400E-05	0.93287E-11
10	0.12064E-05	0.33234E-05	0.12206E-10

11	0.15480E-05	0.42645E-05	0.15662E-10
12	0.19518E-05	0.53769E-05	0.19748E-10
13	0.24214E-05	0.66707E-05	0.24499E-10
14	0.29583E-05	0.81495E-05	0.29931E-10

Polygon I
Time: 67.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.12625E-07	0.34780E-07	0.12774E-12
2	0.35691E-07	0.98324E-07	0.36111E-12
3	0.71627E-07	0.19732E-06	0.72469E-12
4	0.12333E-06	0.33976E-06	0.12478E-11
5	0.19419E-06	0.53497E-06	0.19648E-11
6	0.28808E-06	0.79362E-06	0.29147E-11
7	0.40932E-06	0.11276E-05	0.41413E-11
8	0.56259E-06	0.15498E-05	0.56921E-11
9	0.75284E-06	0.20739E-05	0.76170E-11
10	0.98505E-06	0.27136E-05	0.99664E-11
11	0.12640E-05	0.34820E-05	0.12788E-10
12	0.15937E-05	0.43904E-05	0.16125E-10
13	0.19772E-05	0.54469E-05	0.20005E-10
14	0.24156E-05	0.66545E-05	0.24440E-10

Polygon I
Time: 68.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.10309E-07	0.28399E-07	0.10430E-12
2	0.29143E-07	0.80283E-07	0.29486E-12
3	0.58485E-07	0.16111E-06	0.59173E-12
4	0.10070E-06	0.27742E-06	0.10189E-11
5	0.15856E-06	0.43681E-06	0.16043E-11
6	0.23522E-06	0.64800E-06	0.23799E-11
7	0.33421E-06	0.92070E-06	0.33815E-11
8	0.45936E-06	0.12655E-05	0.46477E-11
9	0.61470E-06	0.16934E-05	0.62193E-11
10	0.80431E-06	0.22157E-05	0.81377E-11
11	0.10321E-05	0.28432E-05	0.10442E-10
12	0.13013E-05	0.35849E-05	0.13166E-10
13	0.16145E-05	0.44476E-05	0.16335E-10
14	0.19724E-05	0.54336E-05	0.19956E-10

Polygon I
Time: 69.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.84173E-08	0.23188E-07	0.85164E-13
2	0.23796E-07	0.65553E-07	0.24076E-12
3	0.47754E-07	0.13155E-06	0.48316E-12
4	0.82226E-07	0.22652E-06	0.83193E-12
5	0.12947E-06	0.35666E-06	0.13099E-11
6	0.19206E-06	0.52910E-06	0.19432E-11
7	0.27289E-06	0.75176E-06	0.27610E-11
8	0.37507E-06	0.10333E-05	0.37949E-11
9	0.50191E-06	0.13827E-05	0.50782E-11
10	0.65673E-06	0.18092E-05	0.66446E-11
11	0.84270E-06	0.23215E-05	0.85262E-11
12	0.10626E-05	0.29272E-05	0.10751E-10
13	0.13183E-05	0.36316E-05	0.13338E-10
14	0.16106E-05	0.44368E-05	0.16295E-10

Polygon I
Time: 70.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.68729E-08	0.18934E-07	0.69538E-13
2	0.19430E-07	0.53526E-07	0.19658E-12
3	0.38992E-07	0.10742E-06	0.39451E-12
4	0.67139E-07	0.18496E-06	0.67929E-12
5	0.10571E-06	0.29122E-06	0.10696E-11
6	0.15682E-06	0.43202E-06	0.15867E-11
7	0.22282E-06	0.61382E-06	0.22544E-11
8	0.30625E-06	0.84367E-06	0.30986E-11
9	0.40982E-06	0.11290E-05	0.41464E-11
10	0.53623E-06	0.14772E-05	0.54254E-11
11	0.68808E-06	0.18955E-05	0.69618E-11
12	0.86761E-06	0.23901E-05	0.87782E-11
13	0.10764E-05	0.29653E-05	0.10891E-10
14	0.13151E-05	0.36228E-05	0.13306E-10

Polygon I
Time: 71.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.56119E-08	0.15460E-07	0.56779E-13
2	0.15865E-07	0.43705E-07	0.16051E-12
3	0.31838E-07	0.87708E-07	0.32212E-12
4	0.54820E-07	0.15102E-06	0.55465E-12
5	0.86318E-07	0.23779E-06	0.87333E-12
6	0.12805E-06	0.35275E-06	0.12956E-11
7	0.18193E-06	0.50120E-06	0.18408E-11
8	0.25006E-06	0.68887E-06	0.25300E-11
9	0.33462E-06	0.92182E-06	0.33856E-11
10	0.43784E-06	0.12062E-05	0.44299E-11
11	0.56183E-06	0.15477E-05	0.56844E-11
12	0.70842E-06	0.19516E-05	0.71676E-11
13	0.87892E-06	0.24213E-05	0.88927E-11
14	0.10738E-05	0.29582E-05	0.10864E-10

Polygon I
Time: 72.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.45822E-08	0.12623E-07	0.46361E-13
2	0.12954E-07	0.35686E-07	0.13106E-12
3	0.25996E-07	0.71615E-07	0.26302E-12
4	0.44762E-07	0.12331E-06	0.45289E-12
5	0.70480E-07	0.19416E-06	0.71309E-12
6	0.10455E-06	0.28803E-06	0.10578E-11
7	0.14855E-06	0.40924E-06	0.15030E-11
8	0.20418E-06	0.56247E-06	0.20658E-11
9	0.27322E-06	0.75268E-06	0.27644E-11
10	0.35750E-06	0.98485E-06	0.36171E-11
11	0.45874E-06	0.12638E-05	0.46414E-11
12	0.57844E-06	0.15935E-05	0.58525E-11
13	0.71767E-06	0.19770E-05	0.72611E-11
14	0.87680E-06	0.24154E-05	0.88711E-11

Polygon I
Time: 73.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.37415E-08	0.10307E-07	0.37855E-13
2	0.10577E-07	0.29138E-07	0.10702E-12
3	0.21227E-07	0.58475E-07	0.21476E-12
4	0.36549E-07	0.10069E-06	0.36979E-12
5	0.57548E-07	0.15854E-06	0.58225E-12
6	0.85371E-07	0.23518E-06	0.86375E-12

7	0.12130E-06	0.33415E-06	0.12272E-11
8	0.16671E-06	0.45927E-06	0.16868E-11
9	0.22309E-06	0.61457E-06	0.22571E-11
10	0.29191E-06	0.80415E-06	0.29534E-11
11	0.37457E-06	0.10319E-05	0.37898E-11
12	0.47231E-06	0.13011E-05	0.47786E-11
13	0.58599E-06	0.16143E-05	0.59289E-11
14	0.71593E-06	0.19723E-05	0.72436E-11

Polygon I
Time: 74.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.30550E-08	0.84159E-08	0.30909E-13
2	0.86365E-08	0.23792E-07	0.87381E-13
3	0.17332E-07	0.47746E-07	0.17536E-12
4	0.29843E-07	0.82212E-07	0.30194E-12
5	0.46989E-07	0.12945E-06	0.47542E-12
6	0.69707E-07	0.19203E-06	0.70527E-12
7	0.99040E-07	0.27284E-06	0.10021E-11
8	0.13612E-06	0.37500E-06	0.13773E-11
9	0.18216E-06	0.50181E-06	0.18430E-11
10	0.23835E-06	0.65660E-06	0.24115E-11
11	0.30584E-06	0.84254E-06	0.30944E-11
12	0.38565E-06	0.10624E-05	0.39019E-11
13	0.47847E-06	0.13181E-05	0.48410E-11
14	0.58458E-06	0.16104E-05	0.59146E-11

Polygon I
Time: 75.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.24945E-08	0.68718E-08	0.25238E-13
2	0.70518E-08	0.19427E-07	0.71348E-13
3	0.14152E-07	0.38986E-07	0.14318E-12
4	0.24367E-07	0.67128E-07	0.24654E-12
5	0.38368E-07	0.10570E-06	0.38819E-12
6	0.56917E-07	0.15680E-06	0.57587E-12
7	0.80868E-07	0.22278E-06	0.81819E-12
8	0.11115E-06	0.30619E-06	0.11246E-11
9	0.14873E-06	0.40973E-06	0.15048E-11
10	0.19461E-06	0.53612E-06	0.19690E-11
11	0.24973E-06	0.68795E-06	0.25266E-11
12	0.31489E-06	0.86746E-06	0.31859E-11
13	0.39068E-06	0.10763E-05	0.39528E-11
14	0.47732E-06	0.13149E-05	0.48294E-11

Polygon I
Time: 76.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.20368E-08	0.56109E-08	0.20607E-13
2	0.57580E-08	0.15862E-07	0.58257E-13
3	0.11555E-07	0.31833E-07	0.11691E-12
4	0.19896E-07	0.54811E-07	0.20131E-12
5	0.31328E-07	0.86303E-07	0.31697E-12
6	0.46474E-07	0.12803E-06	0.47021E-12
7	0.66030E-07	0.18190E-06	0.66807E-12
8	0.90754E-07	0.25001E-06	0.91822E-12
9	0.12144E-06	0.33456E-06	0.12287E-11
10	0.15890E-06	0.43775E-06	0.16077E-11
11	0.20390E-06	0.56172E-06	0.20630E-11
12	0.25711E-06	0.70830E-06	0.26014E-11
13	0.31900E-06	0.87879E-06	0.32275E-11

14	0.38975E-06	0.10737E-05	0.39433E-11

Polygon I
Time: 77.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.16631E-08	0.45814E-08	0.16826E-13
2	0.47015E-08	0.12952E-07	0.47568E-13
3	0.94351E-08	0.25992E-07	0.95461E-13
4	0.16246E-07	0.44754E-07	0.16437E-12
5	0.25580E-07	0.70468E-07	0.25881E-12
6	0.37947E-07	0.10454E-06	0.38393E-12
7	0.53915E-07	0.14853E-06	0.54549E-12
8	0.74103E-07	0.20414E-06	0.74974E-12
9	0.99161E-07	0.27317E-06	0.10033E-11
10	0.12975E-06	0.35743E-06	0.13127E-11
11	0.16649E-06	0.45865E-06	0.16845E-11
12	0.20994E-06	0.57834E-06	0.21241E-11
13	0.26047E-06	0.71755E-06	0.26354E-11
14	0.31824E-06	0.87668E-06	0.32198E-11

Polygon I
Time: 78.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.13579E-08	0.37408E-08	0.13739E-13
2	0.38388E-08	0.10575E-07	0.38840E-13
3	0.77039E-08	0.21223E-07	0.77945E-13
4	0.13265E-07	0.36543E-07	0.13421E-12
5	0.20886E-07	0.57539E-07	0.21132E-12
6	0.30984E-07	0.85356E-07	0.31349E-12
7	0.44023E-07	0.12127E-06	0.44540E-12
8	0.60506E-07	0.16668E-06	0.61218E-12
9	0.80966E-07	0.22305E-06	0.81919E-12
10	0.10594E-06	0.29185E-06	0.10719E-11
11	0.13594E-06	0.37450E-06	0.13754E-11
12	0.17142E-06	0.47222E-06	0.17343E-11
13	0.21268E-06	0.58589E-06	0.21518E-11
14	0.25985E-06	0.71583E-06	0.26290E-11

Polygon I
Time: 79.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.11088E-08	0.30544E-08	0.11218E-13
2	0.31345E-08	0.86349E-08	0.31714E-13
3	0.62904E-08	0.17329E-07	0.63644E-13
4	0.10831E-07	0.29838E-07	0.10959E-12
5	0.17054E-07	0.46981E-07	0.17255E-12
6	0.25299E-07	0.69695E-07	0.25597E-12
7	0.35945E-07	0.99023E-07	0.36368E-12
8	0.49404E-07	0.13610E-06	0.49985E-12
9	0.66110E-07	0.18212E-06	0.66888E-12
10	0.86503E-07	0.23830E-06	0.87520E-12
11	0.11100E-06	0.30578E-06	0.11231E-11
12	0.13996E-06	0.38558E-06	0.14161E-11
13	0.17366E-06	0.47839E-06	0.17570E-11
14	0.21217E-06	0.58449E-06	0.21467E-11

Polygon I
Time: 80.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.90533E-09	0.24940E-08	0.91598E-14
2	0.25594E-08	0.70506E-08	0.25895E-13

3	0.51362E-08	0.14149E-07	0.51966E-13
4	0.88438E-08	0.24363E-07	0.89479E-13
5	0.13925E-07	0.38361E-07	0.14089E-12
6	0.20657E-07	0.56907E-07	0.20900E-12
7	0.29350E-07	0.80854E-07	0.29695E-12
8	0.40339E-07	0.11113E-06	0.40814E-12
9	0.53980E-07	0.14871E-06	0.54615E-12
10	0.70631E-07	0.19458E-06	0.71462E-12
11	0.90633E-07	0.24968E-06	0.91699E-12
12	0.11428E-06	0.31483E-06	0.11563E-11
13	0.14179E-06	0.39061E-06	0.14346E-11
14	0.17324E-06	0.47725E-06	0.17528E-11

Polygon I
Time: 81.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.73921E-09	0.20364E-08	0.74791E-14
2	0.20898E-08	0.57569E-08	0.21144E-13
3	0.41938E-08	0.11553E-07	0.42431E-13
4	0.72212E-08	0.19893E-07	0.73061E-13
5	0.11370E-07	0.31323E-07	0.11504E-12
6	0.16867E-07	0.46466E-07	0.17065E-12
7	0.23965E-07	0.66019E-07	0.24247E-12
8	0.32938E-07	0.90738E-07	0.33325E-12
9	0.44076E-07	0.12142E-06	0.44594E-12
10	0.57671E-07	0.15887E-06	0.58350E-12
11	0.74003E-07	0.20387E-06	0.74874E-12
12	0.93314E-07	0.25706E-06	0.94412E-12
13	0.11578E-06	0.31894E-06	0.11714E-11
14	0.14145E-06	0.38968E-06	0.14312E-11

Polygon I
Time: 82.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.60358E-09	0.16628E-08	0.61068E-14
2	0.17063E-08	0.47006E-08	0.17264E-13
3	0.34243E-08	0.94334E-08	0.34646E-13
4	0.58962E-08	0.16243E-07	0.59656E-13
5	0.92839E-08	0.25575E-07	0.93931E-13
6	0.13772E-07	0.37940E-07	0.13934E-12
7	0.19568E-07	0.53905E-07	0.19798E-12
8	0.26894E-07	0.74089E-07	0.27211E-12
9	0.35989E-07	0.99143E-07	0.36412E-12
10	0.47090E-07	0.12972E-06	0.47644E-12
11	0.60425E-07	0.16646E-06	0.61136E-12
12	0.76192E-07	0.20990E-06	0.77089E-12
13	0.94533E-07	0.26042E-06	0.95646E-12
14	0.11550E-06	0.31818E-06	0.11686E-11

Polygon I
Time: 83.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.49283E-09	0.13577E-08	0.49863E-14
2	0.13932E-08	0.38382E-08	0.14096E-13
3	0.27960E-08	0.77025E-08	0.28289E-13
4	0.48144E-08	0.13263E-07	0.48710E-13
5	0.75805E-08	0.20883E-07	0.76696E-13
6	0.11245E-07	0.30979E-07	0.11378E-12
7	0.15977E-07	0.44015E-07	0.16165E-12
8	0.21960E-07	0.60495E-07	0.22218E-12
9	0.29385E-07	0.80952E-07	0.29731E-12

10	0.38449E-07	0.10592E-06	0.38902E-12
11	0.49338E-07	0.13592E-06	0.49918E-12
12	0.62212E-07	0.17138E-06	0.62944E-12
13	0.77188E-07	0.21264E-06	0.78096E-12
14	0.94307E-07	0.25980E-06	0.95417E-12

Polygon I
Time: 84.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.40241E-09	0.11086E-08	0.40714E-14
2	0.11376E-08	0.31339E-08	0.11510E-13
3	0.22830E-08	0.62892E-08	0.23099E-13
4	0.39310E-08	0.10829E-07	0.39773E-13
5	0.61896E-08	0.17051E-07	0.62624E-13
6	0.91820E-08	0.25295E-07	0.92900E-13
7	0.13046E-07	0.35939E-07	0.13199E-12
8	0.17931E-07	0.49395E-07	0.18141E-12
9	0.23994E-07	0.66098E-07	0.24276E-12
10	0.31395E-07	0.86487E-07	0.31764E-12
11	0.40285E-07	0.11098E-06	0.40759E-12
12	0.50797E-07	0.13994E-06	0.51395E-12
13	0.63025E-07	0.17362E-06	0.63767E-12
14	0.77004E-07	0.21213E-06	0.77910E-12

Polygon I
Time: 85.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.32857E-09	0.90516E-09	0.33244E-14
2	0.92888E-09	0.25589E-08	0.93981E-14
3	0.18641E-08	0.51353E-08	0.18860E-13
4	0.32097E-08	0.88422E-08	0.32475E-13
5	0.50539E-08	0.13923E-07	0.51134E-13
6	0.74973E-08	0.20654E-07	0.75855E-13
7	0.10652E-07	0.29345E-07	0.10777E-12
8	0.14641E-07	0.40332E-07	0.14813E-12
9	0.19591E-07	0.53971E-07	0.19822E-12
10	0.25634E-07	0.70618E-07	0.25936E-12
11	0.32894E-07	0.90616E-07	0.33281E-12
12	0.41477E-07	0.11426E-06	0.41965E-12
13	0.51461E-07	0.14177E-06	0.52067E-12
14	0.62875E-07	0.17321E-06	0.63614E-12

Polygon I
Time: 86.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.26829E-09	0.73908E-09	0.27144E-14
2	0.75845E-09	0.20894E-08	0.76737E-14
3	0.15221E-08	0.41930E-08	0.15400E-13
4	0.26208E-08	0.72199E-08	0.26516E-13
5	0.41266E-08	0.11368E-07	0.41751E-13
6	0.61216E-08	0.16864E-07	0.61937E-13
7	0.86977E-08	0.23960E-07	0.88000E-13
8	0.11954E-07	0.32932E-07	0.12095E-12
9	0.15997E-07	0.44068E-07	0.16185E-12
10	0.20931E-07	0.57661E-07	0.21177E-12
11	0.26858E-07	0.73990E-07	0.27174E-12
12	0.33867E-07	0.93296E-07	0.34265E-12
13	0.42019E-07	0.11575E-06	0.42513E-12
14	0.51338E-07	0.14143E-06	0.51942E-12

Polygon I

Time: 87.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.21906E-09	0.60347E-09	0.22164E-14
2	0.61929E-09	0.17060E-08	0.62657E-14
3	0.12428E-08	0.34237E-08	0.12574E-13
4	0.21399E-08	0.58951E-08	0.21651E-13
5	0.33694E-08	0.92822E-08	0.34091E-13
6	0.49984E-08	0.13770E-07	0.50572E-13
7	0.71018E-08	0.19564E-07	0.71853E-13
8	0.97609E-08	0.26890E-07	0.98758E-13
9	0.13062E-07	0.35982E-07	0.13215E-12
10	0.17090E-07	0.47081E-07	0.17291E-12
11	0.21930E-07	0.60414E-07	0.22188E-12
12	0.27653E-07	0.76178E-07	0.27978E-12
13	0.34309E-07	0.94516E-07	0.34713E-12
14	0.41919E-07	0.11548E-06	0.42412E-12

Polygon I

Time: 88.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.17887E-09	0.49275E-09	0.18097E-14
2	0.50566E-09	0.13930E-08	0.51161E-14
3	0.10148E-08	0.27955E-08	0.10267E-13
4	0.17473E-08	0.48135E-08	0.17679E-13
5	0.27512E-08	0.75791E-08	0.27836E-13
6	0.40813E-08	0.11243E-07	0.41293E-13
7	0.57987E-08	0.15974E-07	0.58670E-13
8	0.79700E-08	0.21956E-07	0.80637E-13
9	0.10665E-07	0.29380E-07	0.10790E-12
10	0.13955E-07	0.38443E-07	0.14119E-12
11	0.17906E-07	0.49329E-07	0.18117E-12
12	0.22579E-07	0.62201E-07	0.22844E-12
13	0.28014E-07	0.77174E-07	0.28344E-12
14	0.34227E-07	0.94290E-07	0.34630E-12

Polygon I

Time: 89.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.14605E-09	0.40234E-09	0.14777E-14
2	0.41288E-09	0.11374E-08	0.41774E-14
3	0.82858E-09	0.22826E-08	0.83833E-14
4	0.14267E-08	0.39303E-08	0.14435E-13
5	0.22464E-08	0.61885E-08	0.22728E-13
6	0.33325E-08	0.91803E-08	0.33717E-13
7	0.47348E-08	0.13043E-07	0.47905E-13
8	0.65076E-08	0.17927E-07	0.65842E-13
9	0.87082E-08	0.23989E-07	0.88106E-13
10	0.11394E-07	0.31389E-07	0.11528E-12
11	0.14621E-07	0.40278E-07	0.14793E-12
12	0.18436E-07	0.50788E-07	0.18653E-12
13	0.22874E-07	0.63014E-07	0.23143E-12
14	0.27947E-07	0.76989E-07	0.28276E-12

Polygon I

Time: 90.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.11925E-09	0.32851E-09	0.12065E-14
2	0.33712E-09	0.92871E-09	0.34109E-14
3	0.67655E-09	0.18638E-08	0.68451E-14
4	0.11649E-08	0.32092E-08	0.11786E-13
5	0.18342E-08	0.50530E-08	0.18558E-13

6	0.27210E-08	0.74959E-08	0.27530E-13
7	0.38660E-08	0.10650E-07	0.39115E-13
8	0.53136E-08	0.14638E-07	0.53761E-13
9	0.71104E-08	0.19588E-07	0.71940E-13
10	0.93036E-08	0.25630E-07	0.94130E-13
11	0.11938E-07	0.32888E-07	0.12079E-12
12	0.15053E-07	0.41469E-07	0.15230E-12
13	0.18677E-07	0.51452E-07	0.18897E-12
14	0.22819E-07	0.62863E-07	0.23088E-12

Polygon I
Time: 91.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.97370E-10	0.26824E-09	0.98516E-15
2	0.27527E-09	0.75831E-09	0.27850E-14
3	0.55241E-09	0.15218E-08	0.55891E-14
4	0.95118E-09	0.26203E-08	0.96237E-14
5	0.14977E-08	0.41259E-08	0.15153E-13
6	0.22218E-08	0.61205E-08	0.22479E-13
7	0.31567E-08	0.86961E-08	0.31938E-13
8	0.43386E-08	0.11952E-07	0.43897E-13
9	0.58057E-08	0.15994E-07	0.58740E-13
10	0.75965E-08	0.20927E-07	0.76859E-13
11	0.97478E-08	0.26853E-07	0.98624E-13
12	0.12291E-07	0.33860E-07	0.12436E-12
13	0.15250E-07	0.42011E-07	0.15429E-12
14	0.18632E-07	0.51329E-07	0.18852E-12

Polygon I
Time: 92.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.79504E-10	0.21902E-09	0.80440E-15
2	0.22476E-09	0.61917E-09	0.22740E-14
3	0.45106E-09	0.12426E-08	0.45636E-14
4	0.77666E-09	0.21395E-08	0.78579E-14
5	0.12229E-08	0.33688E-08	0.12373E-13
6	0.18141E-08	0.49975E-08	0.18354E-13
7	0.25775E-08	0.71005E-08	0.26078E-13
8	0.35426E-08	0.97592E-08	0.35843E-13
9	0.47405E-08	0.13059E-07	0.47963E-13
10	0.62027E-08	0.17087E-07	0.62757E-13
11	0.79592E-08	0.21926E-07	0.80529E-13
12	0.10036E-07	0.27648E-07	0.10154E-12
13	0.12452E-07	0.34303E-07	0.12598E-12
14	0.15214E-07	0.41911E-07	0.15393E-12

Polygon I
Time: 93.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.64917E-10	0.17883E-09	0.65681E-15
2	0.18352E-09	0.50557E-09	0.18568E-14
3	0.36829E-09	0.10146E-08	0.37263E-14
4	0.63415E-09	0.17470E-08	0.64161E-14
5	0.99851E-09	0.27507E-08	0.10103E-13
6	0.14812E-08	0.40806E-08	0.14987E-13
7	0.21046E-08	0.57977E-08	0.21293E-13
8	0.28926E-08	0.79685E-08	0.29266E-13
9	0.38707E-08	0.10663E-07	0.39162E-13
10	0.50646E-08	0.13952E-07	0.51242E-13
11	0.64988E-08	0.17903E-07	0.65753E-13
12	0.81946E-08	0.22575E-07	0.82910E-13

13	0.10167E-07	0.28009E-07	0.10287E-12
14	0.12422E-07	0.34221E-07	0.12568E-12

Polygon I
Time: 94.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.53006E-10	0.14602E-09	0.53629E-15
2	0.14985E-09	0.41280E-09	0.15161E-14
3	0.30072E-09	0.82843E-09	0.30426E-14
4	0.51780E-09	0.14264E-08	0.52389E-14
5	0.81530E-09	0.22460E-08	0.82489E-14
6	0.12095E-08	0.33319E-08	0.12237E-13
7	0.17184E-08	0.47339E-08	0.17386E-13
8	0.23618E-08	0.65065E-08	0.23896E-13
9	0.31605E-08	0.87066E-08	0.31977E-13
10	0.41354E-08	0.11392E-07	0.41840E-13
11	0.53064E-08	0.14618E-07	0.53688E-13
12	0.66911E-08	0.18433E-07	0.67698E-13
13	0.83017E-08	0.22870E-07	0.83994E-13
14	0.10143E-07	0.27942E-07	0.10262E-12

Polygon I
Time: 95.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.43280E-10	0.11923E-09	0.43789E-15
2	0.12235E-09	0.33706E-09	0.12379E-14
3	0.24554E-09	0.67643E-09	0.24843E-14
4	0.42279E-09	0.11647E-08	0.42776E-14
5	0.66571E-09	0.18339E-08	0.67354E-14
6	0.98755E-09	0.27205E-08	0.99917E-14
7	0.14031E-08	0.38653E-08	0.14196E-13
8	0.19285E-08	0.53126E-08	0.19512E-13
9	0.25806E-08	0.71091E-08	0.26110E-13
10	0.33766E-08	0.93019E-08	0.34163E-13
11	0.43328E-08	0.11936E-07	0.43838E-13
12	0.54634E-08	0.15051E-07	0.55276E-13
13	0.67785E-08	0.18674E-07	0.68583E-13
14	0.82819E-08	0.22815E-07	0.83793E-13

Polygon I
Time: 96.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.35339E-10	0.97353E-10	0.35755E-15
2	0.99904E-10	0.27522E-09	0.10108E-14
3	0.20049E-09	0.55231E-09	0.20285E-14
4	0.34522E-09	0.95101E-09	0.34928E-14
5	0.54356E-09	0.14974E-08	0.54996E-14
6	0.80635E-09	0.22214E-08	0.81584E-14
7	0.11457E-08	0.31561E-08	0.11591E-13
8	0.15746E-08	0.43379E-08	0.15932E-13
9	0.21071E-08	0.58047E-08	0.21319E-13
10	0.27570E-08	0.75952E-08	0.27895E-13
11	0.35378E-08	0.97460E-08	0.35794E-13
12	0.44609E-08	0.12289E-07	0.45134E-13
13	0.55348E-08	0.15247E-07	0.55999E-13
14	0.67623E-08	0.18629E-07	0.68419E-13

Polygon I
Time: 97.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.28855E-10	0.79490E-10	0.29194E-15

2	0.81573E-10	0.22472E-09	0.82533E-15
3	0.16370E-09	0.45097E-09	0.16563E-14
4	0.28187E-09	0.77652E-09	0.28519E-14
5	0.44383E-09	0.12227E-08	0.44905E-14
6	0.65840E-09	0.18138E-08	0.66615E-14
7	0.93546E-09	0.25770E-08	0.94646E-14
8	0.12857E-08	0.35419E-08	0.13008E-13
9	0.17205E-08	0.47396E-08	0.17407E-13
10	0.22512E-08	0.62016E-08	0.22777E-13
11	0.28887E-08	0.79578E-08	0.29227E-13
12	0.36424E-08	0.10034E-07	0.36853E-13
13	0.45192E-08	0.12450E-07	0.45724E-13
14	0.55215E-08	0.15211E-07	0.55865E-13

Polygon I
Time: 98.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.23561E-10	0.64905E-10	0.23838E-15
2	0.66606E-10	0.18349E-09	0.67389E-15
3	0.13367E-09	0.36823E-09	0.13524E-14
4	0.23016E-09	0.63404E-09	0.23286E-14
5	0.36239E-09	0.99833E-09	0.36666E-14
6	0.53760E-09	0.14810E-08	0.54392E-14
7	0.76382E-09	0.21042E-08	0.77280E-14
8	0.10498E-08	0.28921E-08	0.10622E-13
9	0.14048E-08	0.38700E-08	0.14213E-13
10	0.18381E-08	0.50637E-08	0.18598E-13
11	0.23587E-08	0.64977E-08	0.23864E-13
12	0.29741E-08	0.81932E-08	0.30091E-13
13	0.36900E-08	0.10165E-07	0.37335E-13
14	0.45084E-08	0.12420E-07	0.45615E-13

Polygon I
Time: 99.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.19238E-10	0.52996E-10	0.19464E-15
2	0.54385E-10	0.14982E-09	0.55025E-15
3	0.10914E-09	0.30066E-09	0.11043E-14
4	0.18793E-09	0.51770E-09	0.19014E-14
5	0.29590E-09	0.81515E-09	0.29938E-14
6	0.43896E-09	0.12092E-08	0.44412E-14
7	0.62367E-09	0.17181E-08	0.63101E-14
8	0.85719E-09	0.23614E-08	0.86728E-14
9	0.11471E-08	0.31599E-08	0.11605E-13
10	0.15009E-08	0.41346E-08	0.15185E-13
11	0.19259E-08	0.53055E-08	0.19485E-13
12	0.24284E-08	0.66899E-08	0.24570E-13
13	0.30130E-08	0.83002E-08	0.30484E-13
14	0.36812E-08	0.10141E-07	0.37245E-13

Polygon I
Time: 100.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.15708E-10	0.43272E-10	0.15893E-15
2	0.44406E-10	0.12233E-09	0.44929E-15
3	0.89116E-10	0.24550E-09	0.90164E-15
4	0.15345E-09	0.42271E-09	0.15525E-14
5	0.24161E-09	0.66559E-09	0.24445E-14
6	0.35842E-09	0.98737E-09	0.36263E-14
7	0.50924E-09	0.14029E-08	0.51523E-14
8	0.69991E-09	0.19281E-08	0.70815E-14

9	0.93659E-09	0.25801E-08	0.94761E-14
10	0.12255E-08	0.33760E-08	0.12399E-13
11	0.15725E-08	0.43320E-08	0.15910E-13
12	0.19828E-08	0.54624E-08	0.20062E-13
13	0.24602E-08	0.67773E-08	0.24891E-13
14	0.30058E-08	0.82804E-08	0.30411E-13

2/20/2001

VLEACH (Version 2.2a, 1996)

By:
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Robert S. Kerr Environmental Research Laboratory
U.S. Environmental Protection Agency
P.O. Box 1198
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Based on the original VLEACH (version 1.0)
developed by CH2M Hill, Redding, California
for USEPA Region IX

Cleanup concentration = 0.90 mg/kg TCE

Polygon I
Time: 0.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.00000	*0.00000*	*0.00000*
2	0.00000	0.00000	0.00000
3	0.42402E-01	0.11681	0.42901E-06
4	0.42402E-01	0.11681	0.42901E-06
5	0.42402E-01	0.11681	0.42901E-06
6	0.11307E-01	0.31150E-01	0.11440E-06
7	0.11307E-01	0.31150E-01	0.11440E-06
8	0.94227E-02	0.25958E-01	0.95336E-07
9	0.94227E-02	0.25958E-01	0.95336E-07
10	0.35806E-03	0.98640E-03	0.36228E-08
11	0.35806E-03	0.98640E-03	0.36228E-08
12	0.00000	0.00000	0.00000
13	0.00000	0.00000	0.00000
14	0.00000	0.00000	0.00000

Polygon I
Time: 1.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.17415E-03	0.47976E-03	0.17620E-08
2	0.35232E-03	0.97059E-03	0.35647E-08
3	0.24396E-01	0.67206E-01	0.24683E-06
4	0.33249E-01	0.91595E-01	0.33640E-06
5	0.36778E-01	0.10132	0.37210E-06
6	0.20636E-01	0.56850E-01	0.20879E-06
7	0.14727E-01	0.40570E-01	0.14900E-06
8	0.11259E-01	0.31015E-01	0.11391E-06
9	0.98581E-02	0.27157E-01	0.99741E-07
10	0.41423E-02	0.11411E-01	0.41911E-07
11	0.19824E-02	0.54610E-02	0.20057E-07
12	0.87543E-03	0.24117E-02	0.88573E-08
13	0.40029E-03	0.11027E-02	0.40500E-08
14	0.17228E-03	0.47460E-03	0.17431E-08

Polygon I
Time: 2.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.24616E-03	0.67813E-03	0.24906E-08
2	0.53355E-03	0.14698E-02	0.53982E-08
3	0.14270E-01	0.39311E-01	0.14438E-06

4	0.24346E-01	0.67068E-01	0.24632E-06
5	0.30206E-01	0.83212E-01	0.30561E-06
6	0.23371E-01	0.64382E-01	0.23646E-06
7	0.17580E-01	0.48430E-01	0.17787E-06
8	0.13382E-01	0.36864E-01	0.13539E-06
9	0.10933E-01	0.30119E-01	0.11062E-06
10	0.67120E-02	0.18490E-01	0.67910E-07
11	0.38674E-02	0.10654E-01	0.39129E-07
12	0.21017E-02	0.57899E-02	0.21265E-07
13	0.11054E-02	0.30453E-02	0.11184E-07
14	0.54525E-03	0.15021E-02	0.55167E-08

Polygon I
Time: 3.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.26464E-03	0.72904E-03	0.26776E-08
2	0.60563E-03	0.16684E-02	0.61276E-08
3	0.85470E-02	0.23545E-01	0.86475E-07
4	0.17193E-01	0.47363E-01	0.17395E-06
5	0.23784E-01	0.65522E-01	0.24064E-06
6	0.22455E-01	0.61861E-01	0.22720E-06
7	0.18768E-01	0.51703E-01	0.18989E-06
8	0.15004E-01	0.41333E-01	0.15180E-06
9	0.12157E-01	0.33489E-01	0.12300E-06
10	0.86396E-02	0.23801E-01	0.87413E-07
11	0.56623E-02	0.15599E-01	0.57289E-07
12	0.34831E-02	0.95953E-02	0.35241E-07
13	0.20370E-02	0.56117E-02	0.20610E-07
14	0.11160E-02	0.30744E-02	0.11291E-07

Polygon I
Time: 4.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.25628E-03	0.70600E-03	0.25929E-08
2	0.61201E-03	0.16860E-02	0.61921E-08
3	0.52853E-02	0.14560E-01	0.53474E-07
4	0.11927E-01	0.32856E-01	0.12067E-06
5	0.18164E-01	0.50037E-01	0.18377E-06
6	0.19792E-01	0.54523E-01	0.20025E-06
7	0.18379E-01	0.50631E-01	0.18595E-06
8	0.15737E-01	0.43352E-01	0.15922E-06
9	0.13111E-01	0.36118E-01	0.13265E-06
10	0.10090E-01	0.27796E-01	0.10208E-06
11	0.72240E-02	0.19901E-01	0.73089E-07
12	0.48581E-02	0.13383E-01	0.49153E-07
13	0.30898E-02	0.85117E-02	0.31261E-07
14	0.18422E-02	0.50748E-02	0.18638E-07

Polygon I
Time: 5.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.23555E-03	0.64889E-03	0.23832E-08
2	0.58146E-03	0.16018E-02	0.58830E-08
3	0.34012E-02	0.93696E-02	0.34412E-07
4	0.82305E-02	0.22673E-01	0.83273E-07
5	0.13584E-01	0.37421E-01	0.13744E-06
6	0.16539E-01	0.45563E-01	0.16734E-06
7	0.16891E-01	0.46533E-01	0.17090E-06
8	0.15552E-01	0.42843E-01	0.15735E-06
9	0.13557E-01	0.37346E-01	0.13716E-06
10	0.11068E-01	0.30490E-01	0.11198E-06

11	0.84707E-02	0.23335E-01	0.85704E-07
12	0.61056E-02	0.16820E-01	0.61774E-07
13	0.41586E-02	0.11456E-01	0.42076E-07
14	0.26598E-02	0.73273E-02	0.26911E-07

Polygon I
Time: 6.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.21016E-03	0.57896E-03	0.21263E-08
2	0.53229E-03	0.14664E-02	0.53855E-08
3	0.22908E-02	0.63108E-02	0.23178E-07
4	0.57053E-02	0.15717E-01	0.57724E-07
5	0.10030E-01	0.27630E-01	0.10148E-06
6	0.13343E-01	0.36756E-01	0.13499E-06
7	0.14814E-01	0.40809E-01	0.14988E-06
8	0.14630E-01	0.40302E-01	0.14802E-06
9	0.13434E-01	0.37007E-01	0.13592E-06
10	0.11557E-01	0.31838E-01	0.11693E-06
11	0.93498E-02	0.25757E-01	0.94598E-07
12	0.71377E-02	0.19663E-01	0.72217E-07
13	0.51516E-02	0.14192E-01	0.52122E-07
14	0.34980E-02	0.96364E-02	0.35391E-07

Polygon I
Time: 7.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.18411E-03	0.50720E-03	0.18628E-08
2	0.47563E-03	0.13103E-02	0.48123E-08
3	0.16177E-02	0.44564E-02	0.16367E-07
4	0.40036E-02	0.11029E-01	0.40507E-07
5	0.73618E-02	0.20280E-01	0.74484E-07
6	0.10511E-01	0.28957E-01	0.10635E-06
7	0.12546E-01	0.34561E-01	0.12693E-06
8	0.13223E-01	0.36426E-01	0.13378E-06
9	0.12806E-01	0.35277E-01	0.12956E-06
10	0.11576E-01	0.31890E-01	0.11712E-06
11	0.98395E-02	0.27106E-01	0.99553E-07
12	0.78972E-02	0.21755E-01	0.79901E-07
13	0.59953E-02	0.16516E-01	0.60659E-07
14	0.42892E-02	0.11816E-01	0.43397E-07

Polygon I
Time: 8.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.15936E-03	0.43901E-03	0.16124E-08
2	0.41802E-03	0.11516E-02	0.42294E-08
3	0.11941E-02	0.32896E-02	0.12082E-07
4	0.28609E-02	0.78812E-02	0.28945E-07
5	0.54041E-02	0.14887E-01	0.54676E-07
6	0.81541E-02	0.22463E-01	0.82501E-07
7	0.10352E-01	0.28518E-01	0.10474E-06
8	0.11574E-01	0.31884E-01	0.11710E-06
9	0.11802E-01	0.32514E-01	0.11941E-06
10	0.11186E-01	0.30816E-01	0.11318E-06
11	0.99522E-02	0.27416E-01	0.10069E-06
12	0.83575E-02	0.23023E-01	0.84558E-07
13	0.66393E-02	0.18290E-01	0.67174E-07
14	0.49765E-02	0.13710E-01	0.50351E-07

Polygon I
Time: 9.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.13678E-03	0.37680E-03	0.13839E-08
2	0.36304E-03	0.10001E-02	0.36731E-08
3	0.91535E-03	0.25216E-02	0.92612E-08
4	0.20897E-02	0.57568E-02	0.21143E-07
5	0.39873E-02	0.10984E-01	0.40342E-07
6	0.62686E-02	0.17269E-01	0.63423E-07
7	0.83803E-02	0.23086E-01	0.84789E-07
8	0.98746E-02	0.27203E-01	0.99908E-07
9	0.10570E-01	0.29119E-01	0.10695E-06
10	0.10479E-01	0.28867E-01	0.10602E-06
11	0.97310E-02	0.26807E-01	0.98454E-07
12	0.85209E-02	0.23473E-01	0.86211E-07
13	0.70563E-02	0.19439E-01	0.71394E-07
14	0.55180E-02	0.15201E-01	0.55830E-07

Polygon I
Time: 10.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.11666E-03	0.32136E-03	0.11803E-08
2	0.31249E-03	0.86085E-03	0.31617E-08
3	0.72258E-03	0.19906E-02	0.73108E-08
4	0.15626E-02	0.43048E-02	0.15810E-07
5	0.29688E-02	0.81785E-02	0.30037E-07
6	0.48002E-02	0.13224E-01	0.48566E-07
7	0.66926E-02	0.18437E-01	0.67713E-07
8	0.82566E-02	0.22745E-01	0.83537E-07
9	0.92416E-02	0.25459E-01	0.93503E-07
10	0.95569E-02	0.26328E-01	0.96693E-07
11	0.92401E-02	0.25455E-01	0.93488E-07
12	0.84140E-02	0.23179E-01	0.85130E-07
13	0.72421E-02	0.19951E-01	0.73273E-07
14	0.58889E-02	0.16223E-01	0.59582E-07

Polygon I
Time: 11.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.98992E-04	0.27271E-03	0.10016E-08
2	0.26711E-03	0.73585E-03	0.27026E-08
3	0.58262E-03	0.16050E-02	0.58947E-08
4	0.11954E-02	0.32931E-02	0.12095E-07
5	0.22370E-02	0.61626E-02	0.22633E-07
6	0.36764E-02	0.10128E-01	0.37197E-07
7	0.52966E-02	0.14591E-01	0.53590E-07
8	0.67965E-02	0.18723E-01	0.68764E-07
9	0.79201E-02	0.21818E-01	0.80133E-07
10	0.85181E-02	0.23466E-01	0.86183E-07
11	0.85536E-02	0.23564E-01	0.86542E-07
12	0.80806E-02	0.22261E-01	0.81757E-07
13	0.72113E-02	0.19866E-01	0.72962E-07
14	0.60811E-02	0.16752E-01	0.61526E-07

Polygon I
Time: 12.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.83647E-04	0.23043E-03	0.84631E-09
2	0.22704E-03	0.62545E-03	0.22971E-08
3	0.47650E-03	0.13127E-02	0.48211E-08
4	0.93331E-03	0.25711E-02	0.94429E-08
5	0.17085E-02	0.47067E-02	0.17286E-07
6	0.28254E-02	0.77834E-02	0.28586E-07

7	0.41698E-02	0.11487E-01	0.42188E-07
8	0.55287E-02	0.15231E-01	0.55938E-07
9	0.66772E-02	0.18395E-01	0.67558E-07
10	0.74447E-02	0.20509E-01	0.75323E-07
11	0.77447E-02	0.21335E-01	0.78358E-07
12	0.75737E-02	0.20864E-01	0.76628E-07
13	0.69929E-02	0.19264E-01	0.70751E-07
14	0.61015E-02	0.16808E-01	0.61732E-07

Polygon I
Time: 13.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.70415E-04	0.19398E-03	0.71243E-09
2	0.19206E-03	0.52908E-03	0.19431E-08
3	0.39320E-03	0.10832E-02	0.39782E-08
4	0.74118E-03	0.20418E-02	0.74990E-08
5	0.13231E-02	0.36450E-02	0.13387E-07
6	0.21839E-02	0.60162E-02	0.22096E-07
7	0.32754E-02	0.90232E-02	0.33140E-07
8	0.44591E-02	0.12284E-01	0.45116E-07
9	0.55554E-02	0.15304E-01	0.56207E-07
10	0.63993E-02	0.17629E-01	0.64746E-07
11	0.68788E-02	0.18950E-01	0.69597E-07
12	0.69482E-02	0.19141E-01	0.70300E-07
13	0.66242E-02	0.18249E-01	0.67021E-07
14	0.59684E-02	0.16442E-01	0.60386E-07

Polygon I
Time: 14.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.59073E-04	0.16274E-03	0.59768E-09
2	0.16179E-03	0.44570E-03	0.16369E-08
3	0.32610E-03	0.89835E-03	0.32994E-08
4	0.59650E-03	0.16433E-02	0.60352E-08
5	0.10383E-02	0.28602E-02	0.10505E-07
6	0.17004E-02	0.46843E-02	0.17204E-07
7	0.25736E-02	0.70899E-02	0.26039E-07
8	0.35757E-02	0.98504E-02	0.36178E-07
9	0.45739E-02	0.12600E-01	0.46277E-07
10	0.54244E-02	0.14943E-01	0.54882E-07
11	0.60087E-02	0.16553E-01	0.60794E-07
12	0.62555E-02	0.17233E-01	0.63291E-07
13	0.61462E-02	0.16932E-01	0.62185E-07
14	0.57080E-02	0.15724E-01	0.57751E-07

Polygon I
Time: 15.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.49402E-04	0.13609E-03	0.49983E-09
2	0.13579E-03	0.37407E-03	0.13739E-08
3	0.27111E-03	0.74686E-03	0.27430E-08
4	0.48481E-03	0.13356E-02	0.49051E-08
5	0.82435E-03	0.22709E-02	0.83405E-08
6	0.13346E-02	0.36766E-02	0.13503E-07
7	0.20266E-02	0.55828E-02	0.20504E-07
8	0.28574E-02	0.78717E-02	0.28910E-07
9	0.37356E-02	0.10291E-01	0.37796E-07
10	0.45449E-02	0.12521E-01	0.45984E-07
11	0.51740E-02	0.14253E-01	0.52348E-07
12	0.55394E-02	0.15260E-01	0.56046E-07
13	0.55986E-02	0.15423E-01	0.56644E-07

14	0.53499E-02	0.14738E-01	0.54128E-07

Polygon I
Time: 16.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.41192E-04	0.11348E-03	0.41676E-09
2	0.11358E-03	0.31291E-03	0.11492E-08
3	0.22554E-03	0.62133E-03	0.22820E-08
4	0.39674E-03	0.10929E-02	0.40140E-08
5	0.66104E-03	0.18210E-02	0.66881E-08
6	0.10560E-02	0.29091E-02	0.10684E-07
7	0.16014E-02	0.44115E-02	0.16202E-07
8	0.22799E-02	0.62808E-02	0.23067E-07
9	0.30329E-02	0.83552E-02	0.30686E-07
10	0.37722E-02	0.10392E-01	0.38165E-07
11	0.44008E-02	0.12123E-01	0.44526E-07
12	0.48346E-02	0.13318E-01	0.48915E-07
13	0.50168E-02	0.13820E-01	0.50759E-07
14	0.49246E-02	0.13566E-01	0.49825E-07

Polygon I
Time: 17.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.34251E-04	0.94356E-04	0.34654E-09
2	0.94721E-04	0.26094E-03	0.95835E-09
3	0.18756E-03	0.51668E-03	0.18976E-08
4	0.32611E-03	0.89836E-03	0.32994E-08
5	0.53429E-03	0.14719E-02	0.54058E-08
6	0.84193E-03	0.23194E-02	0.85184E-08
7	0.12709E-02	0.35011E-02	0.12858E-07
8	0.18191E-02	0.50113E-02	0.18405E-07
9	0.24523E-02	0.67556E-02	0.24811E-07
10	0.31071E-02	0.85594E-02	0.31436E-07
11	0.37045E-02	0.10205E-01	0.37480E-07
12	0.41664E-02	0.11478E-01	0.42154E-07
13	0.44306E-02	0.12206E-01	0.44828E-07
14	0.44603E-02	0.12287E-01	0.45127E-07

Polygon I
Time: 18.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.28407E-04	0.78258E-04	0.28742E-09
2	0.78768E-04	0.21699E-03	0.79695E-09
3	0.15579E-03	0.42918E-03	0.15762E-08
4	0.26875E-03	0.74035E-03	0.27191E-08
5	0.43446E-03	0.11969E-02	0.43957E-08
6	0.67581E-03	0.18617E-02	0.68376E-08
7	0.10133E-02	0.27915E-02	0.10252E-07
8	0.14531E-02	0.40031E-02	0.14702E-07
9	0.19777E-02	0.54481E-02	0.20009E-07
10	0.25441E-02	0.70086E-02	0.25740E-07
11	0.30912E-02	0.85158E-02	0.31276E-07
12	0.35512E-02	0.97830E-02	0.35930E-07
13	0.38629E-02	0.10642E-01	0.39083E-07
14	0.39815E-02	0.10968E-01	0.40284E-07

Polygon I
Time: 19.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.23505E-04	0.64752E-04	0.23782E-09
2	0.65333E-04	0.17998E-03	0.66102E-09

3	0.12922E-03	0.35596E-03	0.13074E-08
4	0.22175E-03	0.61089E-03	0.22436E-08
5	0.35482E-03	0.97748E-03	0.35900E-08
6	0.54558E-03	0.15030E-02	0.55199E-08
7	0.81173E-03	0.22362E-02	0.82128E-08
8	0.11630E-02	0.32039E-02	0.11767E-07
9	0.15928E-02	0.43878E-02	0.16115E-07
10	0.20739E-02	0.57131E-02	0.20983E-07
11	0.25610E-02	0.70551E-02	0.25911E-07
12	0.29984E-02	0.82600E-02	0.30336E-07
13	0.33298E-02	0.91729E-02	0.33689E-07
14	0.35083E-02	0.96646E-02	0.35495E-07

Polygon I
Time: 20.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.19407E-04	0.53462E-04	0.19635E-09
2	0.54063E-04	0.14893E-03	0.54699E-09
3	0.10699E-03	0.29474E-03	0.10825E-08
4	0.18304E-03	0.50424E-03	0.18519E-08
5	0.29064E-03	0.80067E-03	0.29406E-08
6	0.44249E-03	0.12190E-02	0.44770E-08
7	0.65311E-03	0.17992E-02	0.66080E-08
8	0.93312E-03	0.25706E-02	0.94410E-08
9	0.12824E-02	0.35327E-02	0.12975E-07
10	0.16851E-02	0.46422E-02	0.17049E-07
11	0.21094E-02	0.58110E-02	0.21342E-07
12	0.25112E-02	0.69179E-02	0.25407E-07
13	0.28417E-02	0.78285E-02	0.28752E-07
14	0.30556E-02	0.84176E-02	0.30915E-07

Polygon I
Time: 21.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.15992E-04	0.44055E-04	0.16180E-09
2	0.44642E-04	0.12298E-03	0.45167E-09
3	0.88438E-04	0.24363E-03	0.89479E-09
4	0.15104E-03	0.41608E-03	0.15281E-08
5	0.23851E-03	0.65705E-03	0.24132E-08
6	0.36018E-03	0.99224E-03	0.36442E-08
7	0.52756E-03	0.14533E-02	0.53376E-08
8	0.75068E-03	0.20680E-02	0.75951E-08
9	0.10329E-02	0.28455E-02	0.10451E-07
10	0.13663E-02	0.37640E-02	0.13824E-07
11	0.17294E-02	0.47642E-02	0.17498E-07
12	0.20889E-02	0.57545E-02	0.21135E-07
13	0.24042E-02	0.66231E-02	0.24325E-07
14	0.26339E-02	0.72560E-02	0.26649E-07

Polygon I
Time: 22.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.13155E-04	0.36240E-04	0.13310E-09
2	0.36792E-04	0.10135E-03	0.37225E-09
3	0.72978E-04	0.20104E-03	0.73836E-09
4	0.12454E-03	0.34309E-03	0.12601E-08
5	0.19592E-03	0.53974E-03	0.19823E-08
6	0.29397E-03	0.80983E-03	0.29743E-08
7	0.42757E-03	0.11779E-02	0.43260E-08
8	0.60554E-03	0.16682E-02	0.61267E-08
9	0.83283E-03	0.22943E-02	0.84262E-08

10	0.11065E-02	0.30481E-02	0.11195E-07
11	0.14129E-02	0.38922E-02	0.14295E-07
12	0.17278E-02	0.47597E-02	0.17481E-07
13	0.20187E-02	0.55612E-02	0.20425E-07
14	0.22497E-02	0.61976E-02	0.22762E-07

Polygon I
Time: 23.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.10805E-04	0.29765E-04	0.10932E-09
2	0.30271E-04	0.83390E-04	0.30627E-09
3	0.60123E-04	0.16563E-03	0.60831E-09
4	0.10260E-03	0.28263E-03	0.10380E-08
5	0.16100E-03	0.44353E-03	0.16290E-08
6	0.24037E-03	0.66218E-03	0.24320E-08
7	0.34750E-03	0.95730E-03	0.35159E-08
8	0.48973E-03	0.13491E-02	0.49549E-08
9	0.67239E-03	0.18523E-02	0.68030E-08
10	0.89553E-03	0.24670E-02	0.90607E-08
11	0.11512E-02	0.31715E-02	0.11648E-07
12	0.14225E-02	0.39187E-02	0.14392E-07
13	0.16841E-02	0.46395E-02	0.17040E-07
14	0.19061E-02	0.52510E-02	0.19285E-07

Polygon I
Time: 24.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.88627E-05	0.24415E-04	0.89670E-10
2	0.24868E-04	0.68507E-04	0.25161E-09
3	0.49459E-04	0.13625E-03	0.50041E-09
4	0.84431E-04	0.23259E-03	0.85424E-09
5	0.13230E-03	0.36446E-03	0.13386E-08
6	0.19679E-03	0.54212E-03	0.19910E-08
7	0.28304E-03	0.77972E-03	0.28637E-08
8	0.39699E-03	0.10936E-02	0.40166E-08
9	0.54368E-03	0.14978E-02	0.55008E-08
10	0.72484E-03	0.19968E-02	0.73337E-08
11	0.93635E-03	0.25795E-02	0.94737E-08
12	0.11668E-02	0.32143E-02	0.11805E-07
13	0.13973E-02	0.38494E-02	0.14138E-07
14	0.16036E-02	0.44176E-02	0.16225E-07

Polygon I
Time: 25.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.72615E-05	0.20004E-04	0.73469E-10
2	0.20403E-04	0.56207E-04	0.20643E-09
3	0.40632E-04	0.11193E-03	0.41110E-09
4	0.69407E-04	0.19120E-03	0.70224E-09
5	0.10867E-03	0.29938E-03	0.10995E-08
6	0.16122E-03	0.44414E-03	0.16312E-08
7	0.23092E-03	0.63614E-03	0.23364E-08
8	0.32246E-03	0.88833E-03	0.32626E-08
9	0.44032E-03	0.12130E-02	0.44550E-08
10	0.58693E-03	0.16169E-02	0.59383E-08
11	0.76069E-03	0.20956E-02	0.76964E-08
12	0.95428E-03	0.26289E-02	0.96550E-08
13	0.11541E-02	0.31792E-02	0.11676E-07
14	0.13408E-02	0.36937E-02	0.13566E-07

Polygon I

Time: 26.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.59438E-05	0.16374E-04	0.60138E-10
2	0.16721E-04	0.46063E-04	0.16918E-09
3	0.33340E-04	0.91846E-04	0.33732E-09
4	0.56997E-04	0.15702E-03	0.57668E-09
5	0.89222E-04	0.24579E-03	0.90271E-09
6	0.13212E-03	0.36398E-03	0.13368E-08
7	0.18862E-03	0.51963E-03	0.19084E-08
8	0.26238E-03	0.72280E-03	0.26546E-08
9	0.35715E-03	0.98389E-03	0.36135E-08
10	0.47560E-03	0.13102E-02	0.48119E-08
11	0.61760E-03	0.17014E-02	0.62487E-08
12	0.77878E-03	0.21454E-02	0.78794E-08
13	0.94954E-03	0.26158E-02	0.96071E-08
14	0.11152E-02	0.30721E-02	0.11283E-07

Polygon I
Time: 27.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.48615E-05	0.13392E-04	0.49186E-10
2	0.13690E-04	0.37715E-04	0.13852E-09
3	0.27328E-04	0.75284E-04	0.27650E-09
4	0.46761E-04	0.12882E-03	0.47311E-09
5	0.73206E-04	0.20167E-03	0.74067E-09
6	0.10828E-03	0.29830E-03	0.10956E-08
7	0.15420E-03	0.42480E-03	0.15602E-08
8	0.21378E-03	0.58893E-03	0.21630E-08
9	0.29011E-03	0.79921E-03	0.29353E-08
10	0.38572E-03	0.10626E-02	0.39026E-08
11	0.50133E-03	0.13811E-02	0.50723E-08
12	0.63456E-03	0.17481E-02	0.64202E-08
13	0.77890E-03	0.21457E-02	0.78806E-08
14	0.92336E-03	0.25437E-02	0.93423E-08

Polygon I
Time: 28.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.39737E-05	0.10947E-04	0.40204E-10
2	0.11200E-04	0.30855E-04	0.11332E-09
3	0.22380E-04	0.61653E-04	0.22643E-09
4	0.38328E-04	0.10559E-03	0.38779E-09
5	0.60025E-04	0.16536E-03	0.60731E-09
6	0.88731E-04	0.24444E-03	0.89775E-09
7	0.12613E-03	0.34745E-03	0.12761E-08
8	0.17438E-03	0.48037E-03	0.17643E-08
9	0.23596E-03	0.65002E-03	0.23873E-08
10	0.31312E-03	0.86260E-03	0.31681E-08
11	0.40700E-03	0.11212E-02	0.41179E-08
12	0.51650E-03	0.14229E-02	0.52258E-08
13	0.63738E-03	0.17559E-02	0.64488E-08
14	0.76165E-03	0.20982E-02	0.77061E-08

Polygon I
Time: 29.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.32464E-05	0.89431E-05	0.32845E-10
2	0.91574E-05	0.25227E-04	0.92651E-10
3	0.18314E-04	0.50452E-04	0.18530E-09
4	0.31391E-04	0.86478E-04	0.31761E-09
5	0.49186E-04	0.13550E-03	0.49765E-09

6	0.72689E-04	0.20024E-03	0.73544E-09
7	0.10319E-03	0.28427E-03	0.10440E-08
8	0.14235E-03	0.39215E-03	0.14402E-08
9	0.19212E-03	0.52927E-03	0.19438E-08
10	0.25444E-03	0.70093E-03	0.25743E-08
11	0.33053E-03	0.91056E-03	0.33442E-08
12	0.42015E-03	0.11574E-02	0.42509E-08
13	0.52062E-03	0.14342E-02	0.52675E-08
14	0.62629E-03	0.17253E-02	0.63366E-08

Polygon I
Time: 30.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.26511E-05	0.73034E-05	0.26823E-10
2	0.74832E-05	0.20615E-04	0.75712E-10
3	0.14977E-04	0.41260E-04	0.15154E-09
4	0.25692E-04	0.70778E-04	0.25995E-09
5	0.40279E-04	0.11096E-03	0.40753E-09
6	0.59526E-04	0.16398E-03	0.60226E-09
7	0.84431E-04	0.23259E-03	0.85425E-09
8	0.11627E-03	0.32031E-03	0.11764E-08
9	0.15658E-03	0.43134E-03	0.15842E-08
10	0.20694E-03	0.57008E-03	0.20937E-08
11	0.26857E-03	0.73986E-03	0.27173E-08
12	0.34167E-03	0.94123E-03	0.34569E-08
13	0.42468E-03	0.11699E-02	0.42968E-08
14	0.51368E-03	0.14151E-02	0.51973E-08

Polygon I
Time: 31.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.21645E-05	0.59627E-05	0.21899E-10
2	0.61126E-05	0.16839E-04	0.61845E-10
3	0.12242E-04	0.33725E-04	0.12386E-09
4	0.21016E-04	0.57894E-04	0.21263E-09
5	0.32967E-04	0.90817E-04	0.33355E-09
6	0.48728E-04	0.13424E-03	0.49301E-09
7	0.69081E-04	0.19031E-03	0.69894E-09
8	0.95009E-04	0.26173E-03	0.96126E-09
9	0.12770E-03	0.35180E-03	0.12921E-08
10	0.16845E-03	0.46406E-03	0.17043E-08
11	0.21835E-03	0.60152E-03	0.22092E-08
12	0.27784E-03	0.76539E-03	0.28111E-08
13	0.34609E-03	0.95342E-03	0.35016E-08
14	0.42047E-03	0.11583E-02	0.42542E-08

Polygon I
Time: 32.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.17668E-05	0.48671E-05	0.17875E-10
2	0.49915E-05	0.13751E-04	0.50503E-10
3	0.10003E-04	0.27555E-04	0.10120E-09
4	0.17182E-04	0.47333E-04	0.17384E-09
5	0.26968E-04	0.74293E-04	0.27286E-09
6	0.39874E-04	0.10984E-03	0.40343E-09
7	0.56514E-04	0.15569E-03	0.57179E-09
8	0.77652E-04	0.21392E-03	0.78566E-09
9	0.10421E-03	0.28709E-03	0.10544E-08
10	0.13723E-03	0.37803E-03	0.13884E-08
11	0.17764E-03	0.48935E-03	0.17972E-08
12	0.22597E-03	0.62250E-03	0.22863E-08

13	0.28188E-03	0.77652E-03	0.28519E-08
14	0.34363E-03	0.94665E-03	0.34768E-08

Polygon I
Time: 33.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.14420E-05	0.39723E-05	0.14589E-10
2	0.40752E-05	0.11226E-04	0.41231E-10
3	0.81699E-05	0.22507E-04	0.82660E-10
4	0.14042E-04	0.38682E-04	0.14207E-09
5	0.22052E-04	0.60748E-04	0.22311E-09
6	0.32616E-04	0.89851E-04	0.33000E-09
7	0.46225E-04	0.12734E-03	0.46769E-09
8	0.63474E-04	0.17486E-03	0.64221E-09
9	0.85082E-04	0.23438E-03	0.86082E-09
10	0.11186E-03	0.30815E-03	0.11318E-08
11	0.14460E-03	0.39835E-03	0.14630E-08
12	0.18384E-03	0.50644E-03	0.18600E-08
13	0.22950E-03	0.63224E-03	0.23220E-08
14	0.28051E-03	0.77276E-03	0.28381E-08

Polygon I
Time: 34.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.11768E-05	0.32418E-05	0.11906E-10
2	0.33265E-05	0.91640E-05	0.33657E-10
3	0.66715E-05	0.18379E-04	0.67500E-10
4	0.11472E-04	0.31602E-04	0.11607E-09
5	0.18025E-04	0.49655E-04	0.18237E-09
6	0.26670E-04	0.73471E-04	0.26984E-09
7	0.37802E-04	0.10414E-03	0.38246E-09
8	0.51887E-04	0.14294E-03	0.52497E-09
9	0.69484E-04	0.19142E-03	0.70301E-09
10	0.91232E-04	0.25133E-03	0.92305E-09
11	0.11778E-03	0.32446E-03	0.11916E-08
12	0.14962E-03	0.41217E-03	0.15138E-08
13	0.18684E-03	0.51471E-03	0.18904E-08
14	0.22879E-03	0.63028E-03	0.23148E-08

Polygon I
Time: 35.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.96032E-06	0.26455E-05	0.97162E-11
2	0.27152E-05	0.74798E-05	0.27471E-10
3	0.54469E-05	0.15005E-04	0.55110E-10
4	0.93696E-05	0.25812E-04	0.94798E-10
5	0.14728E-04	0.40574E-04	0.14902E-09
6	0.21801E-04	0.60059E-04	0.22058E-09
7	0.30906E-04	0.85141E-04	0.31270E-09
8	0.42413E-04	0.11684E-03	0.42912E-09
9	0.56757E-04	0.15636E-03	0.57425E-09
10	0.74440E-04	0.20507E-03	0.75316E-09
11	0.95982E-04	0.26441E-03	0.97111E-09
12	0.12182E-03	0.33559E-03	0.12325E-08
13	0.15211E-03	0.41905E-03	0.15390E-08
14	0.18650E-03	0.51378E-03	0.18870E-08

Polygon I
Time: 36.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.78369E-06	0.21589E-05	0.79291E-11

2	0.22160E-05	0.61047E-05	0.22421E-10
3	0.44466E-05	0.12249E-04	0.44989E-10
4	0.76513E-05	0.21078E-04	0.77413E-10
5	0.12032E-04	0.33146E-04	0.12174E-09
6	0.17817E-04	0.49082E-04	0.18026E-09
7	0.25263E-04	0.69596E-04	0.25560E-09
8	0.34666E-04	0.95499E-04	0.35074E-09
9	0.46368E-04	0.12774E-03	0.46914E-09
10	0.60760E-04	0.16738E-03	0.61475E-09
11	0.78257E-04	0.21558E-03	0.79177E-09
12	0.99227E-04	0.27335E-03	0.10039E-08
13	0.12386E-03	0.34122E-03	0.12532E-08
14	0.15198E-03	0.41868E-03	0.15377E-08

Polygon I
Time: 37.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.63956E-06	0.17619E-05	0.64709E-11
2	0.18086E-05	0.49824E-05	0.18299E-10
3	0.36297E-05	0.99991E-05	0.36724E-10
4	0.62472E-05	0.17210E-04	0.63207E-10
5	0.98274E-05	0.27073E-04	0.99430E-10
6	0.14557E-04	0.40102E-04	0.14728E-09
7	0.20646E-04	0.56877E-04	0.20889E-09
8	0.28332E-04	0.78048E-04	0.28665E-09
9	0.37883E-04	0.10436E-03	0.38329E-09
10	0.49606E-04	0.13666E-03	0.50190E-09
11	0.63830E-04	0.17584E-03	0.64581E-09
12	0.80860E-04	0.22275E-03	0.81811E-09
13	0.10088E-03	0.27791E-03	0.10207E-08
14	0.12383E-03	0.34113E-03	0.12529E-08

Polygon I
Time: 38.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.52196E-06	0.14379E-05	0.52810E-11
2	0.14761E-05	0.40664E-05	0.14935E-10
3	0.29627E-05	0.81617E-05	0.29976E-10
4	0.51003E-05	0.14050E-04	0.51603E-10
5	0.80254E-05	0.22109E-04	0.81198E-10
6	0.11892E-04	0.32759E-04	0.12032E-09
7	0.16870E-04	0.46474E-04	0.17069E-09
8	0.23152E-04	0.63779E-04	0.23424E-09
9	0.30951E-04	0.85265E-04	0.31315E-09
10	0.40508E-04	0.11159E-03	0.40985E-09
11	0.52081E-04	0.14347E-03	0.52694E-09
12	0.65917E-04	0.18159E-03	0.66693E-09
13	0.82190E-04	0.22642E-03	0.83157E-09
14	0.10089E-03	0.27794E-03	0.10208E-08

Polygon I
Time: 39.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.42601E-06	0.11736E-05	0.43102E-11
2	0.12048E-05	0.33189E-05	0.12189E-10
3	0.24183E-05	0.66619E-05	0.24467E-10
4	0.41637E-05	0.11470E-04	0.42127E-10
5	0.65531E-05	0.18053E-04	0.66302E-10
6	0.97126E-05	0.26757E-04	0.98269E-10
7	0.13782E-04	0.37968E-04	0.13945E-09
8	0.18917E-04	0.52113E-04	0.19139E-09

9	0.25287E-04	0.69662E-04	0.25585E-09
10	0.33083E-04	0.91136E-04	0.33472E-09
11	0.42506E-04	0.11710E-03	0.43006E-09
12	0.53755E-04	0.14809E-03	0.54388E-09
13	0.66981E-04	0.18452E-03	0.67769E-09
14	0.82208E-04	0.22647E-03	0.83175E-09

Polygon I
Time: 40.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.34771E-06	0.95789E-06	0.35180E-11
2	0.98334E-06	0.27089E-05	0.99491E-11
3	0.19739E-05	0.54377E-05	0.19971E-10
4	0.33990E-05	0.93635E-05	0.34389E-10
5	0.53504E-05	0.14739E-04	0.54134E-10
6	0.79319E-05	0.21851E-04	0.80253E-10
7	0.11258E-04	0.31014E-04	0.11391E-09
8	0.15455E-04	0.42575E-04	0.15637E-09
9	0.20659E-04	0.56912E-04	0.20902E-09
10	0.27020E-04	0.74436E-04	0.27338E-09
11	0.34699E-04	0.95588E-04	0.35107E-09
12	0.43851E-04	0.12080E-03	0.44367E-09
13	0.54603E-04	0.15042E-03	0.55246E-09
14	0.66995E-04	0.18456E-03	0.67783E-09

Polygon I
Time: 41.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.28382E-06	0.78188E-06	0.28716E-11
2	0.80264E-06	0.22111E-05	0.81208E-11
3	0.16112E-05	0.44386E-05	0.16302E-10
4	0.27746E-05	0.76436E-05	0.28073E-10
5	0.43682E-05	0.12034E-04	0.44196E-10
6	0.64771E-05	0.17843E-04	0.65533E-10
7	0.91953E-05	0.25331E-04	0.93034E-10
8	0.12625E-04	0.34780E-04	0.12774E-09
9	0.16877E-04	0.46493E-04	0.17075E-09
10	0.22070E-04	0.60799E-04	0.22330E-09
11	0.28330E-04	0.78044E-04	0.28663E-09
12	0.35781E-04	0.98570E-04	0.36202E-09
13	0.44526E-04	0.12266E-03	0.45050E-09
14	0.54608E-04	0.15043E-03	0.55250E-09

Polygon I
Time: 42.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.23168E-06	0.63825E-06	0.23441E-11
2	0.65518E-06	0.18049E-05	0.66288E-11
3	0.13152E-05	0.36231E-05	0.13307E-10
4	0.22650E-05	0.62396E-05	0.22916E-10
5	0.35662E-05	0.98243E-05	0.36082E-10
6	0.52887E-05	0.14570E-04	0.53510E-10
7	0.75096E-05	0.20688E-04	0.75979E-10
8	0.10312E-04	0.28409E-04	0.10434E-09
9	0.13786E-04	0.37979E-04	0.13949E-09
10	0.18027E-04	0.49661E-04	0.18239E-09
11	0.23133E-04	0.63727E-04	0.23405E-09
12	0.29202E-04	0.80447E-04	0.29546E-09
13	0.36318E-04	0.10005E-03	0.36745E-09
14	0.44521E-04	0.12265E-03	0.45044E-09

Polygon I
Time: 43.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.18913E-06	0.52103E-06	0.19136E-11
2	0.53483E-06	0.14734E-05	0.54112E-11
3	0.10736E-05	0.29576E-05	0.10862E-10
4	0.18490E-05	0.50935E-05	0.18707E-10
5	0.29114E-05	0.80204E-05	0.29457E-10
6	0.43182E-05	0.11896E-04	0.43690E-10
7	0.61325E-05	0.16894E-04	0.62046E-10
8	0.84225E-05	0.23203E-04	0.85216E-10
9	0.11261E-04	0.31022E-04	0.11394E-09
10	0.14724E-04	0.40563E-04	0.14898E-09
11	0.18891E-04	0.52041E-04	0.19113E-09
12	0.23837E-04	0.65667E-04	0.24118E-09
13	0.29630E-04	0.81625E-04	0.29979E-09
14	0.36305E-04	0.10001E-03	0.36732E-09

Polygon I
Time: 44.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.15440E-06	0.42536E-06	0.15622E-11
2	0.43661E-06	0.12028E-05	0.44174E-11
3	0.87641E-06	0.24144E-05	0.88672E-11
4	0.15094E-05	0.41581E-05	0.15271E-10
5	0.23768E-05	0.65477E-05	0.24048E-10
6	0.35256E-05	0.97125E-05	0.35671E-10
7	0.50076E-05	0.13795E-04	0.50665E-10
8	0.68786E-05	0.18949E-04	0.69595E-10
9	0.91978E-05	0.25338E-04	0.93060E-10
10	0.12027E-04	0.33131E-04	0.12168E-09
11	0.15427E-04	0.42500E-04	0.15609E-09
12	0.19461E-04	0.53611E-04	0.19690E-09
13	0.24179E-04	0.66608E-04	0.24463E-09
14	0.29611E-04	0.81574E-04	0.29960E-09

Polygon I
Time: 45.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.12606E-06	0.34727E-06	0.12754E-11
2	0.35644E-06	0.98192E-06	0.36063E-11
3	0.71547E-06	0.19710E-05	0.72389E-11
4	0.12322E-05	0.33945E-05	0.12467E-10
5	0.19404E-05	0.53455E-05	0.19632E-10
6	0.28785E-05	0.79297E-05	0.29123E-10
7	0.40888E-05	0.11264E-04	0.41369E-10
8	0.56173E-05	0.15475E-04	0.56834E-10
9	0.75121E-05	0.20694E-04	0.76004E-10
10	0.98228E-05	0.27060E-04	0.99384E-10
11	0.12599E-04	0.34709E-04	0.12748E-09
12	0.15889E-04	0.43772E-04	0.16076E-09
13	0.19734E-04	0.54363E-04	0.19966E-09
14	0.24157E-04	0.66548E-04	0.24441E-09

Polygon I
Time: 46.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.10292E-06	0.28352E-06	0.10413E-11
2	0.29100E-06	0.80165E-06	0.29442E-11
3	0.58410E-06	0.16091E-05	0.59097E-11
4	0.10059E-05	0.27712E-05	0.10178E-10

5	0.15841E-05	0.43640E-05	0.16028E-10
6	0.23501E-05	0.64741E-05	0.23777E-10
7	0.33386E-05	0.91971E-05	0.33778E-10
8	0.45871E-05	0.12637E-04	0.46410E-10
9	0.61350E-05	0.16901E-04	0.62072E-10
10	0.80226E-05	0.22101E-04	0.81170E-10
11	0.10290E-04	0.28347E-04	0.10411E-09
12	0.12974E-04	0.35742E-04	0.13127E-09
13	0.16108E-04	0.44375E-04	0.16298E-09
14	0.19711E-04	0.54300E-04	0.19943E-09

Polygon I
Time: 47.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.84029E-07	0.23149E-06	0.85018E-12
2	0.23758E-06	0.65450E-06	0.24038E-11
3	0.47687E-06	0.13137E-05	0.48248E-11
4	0.82125E-06	0.22624E-05	0.83091E-11
5	0.12933E-05	0.35628E-05	0.13085E-10
6	0.19187E-05	0.52856E-05	0.19413E-10
7	0.27259E-05	0.75093E-05	0.27580E-10
8	0.37456E-05	0.10319E-04	0.37897E-10
9	0.50101E-05	0.13802E-04	0.50690E-10
10	0.65520E-05	0.18050E-04	0.66291E-10
11	0.84036E-05	0.23150E-04	0.85025E-10
12	0.10595E-04	0.29187E-04	0.10719E-09
13	0.13150E-04	0.36227E-04	0.13305E-09
14	0.16086E-04	0.44314E-04	0.16275E-09

Polygon I
Time: 48.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.68608E-07	0.18900E-06	0.69416E-12
2	0.19398E-06	0.53437E-06	0.19626E-11
3	0.38933E-06	0.10725E-05	0.39391E-11
4	0.67048E-06	0.18471E-05	0.67837E-11
5	0.10559E-05	0.29087E-05	0.10683E-10
6	0.15665E-05	0.43154E-05	0.15849E-10
7	0.22256E-05	0.61312E-05	0.22518E-10
8	0.30585E-05	0.84255E-05	0.30944E-10
9	0.40913E-05	0.11271E-04	0.41394E-10
10	0.53509E-05	0.14741E-04	0.54138E-10
11	0.68631E-05	0.18907E-04	0.69438E-10
12	0.86518E-05	0.23834E-04	0.87536E-10
13	0.10737E-04	0.29578E-04	0.10863E-09
14	0.13129E-04	0.36169E-04	0.13284E-09

Polygon I
Time: 49.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.56019E-07	0.15432E-06	0.56678E-12
2	0.15838E-06	0.43630E-06	0.16024E-11
3	0.31787E-06	0.87568E-06	0.32161E-11
4	0.54741E-06	0.15080E-05	0.55385E-11
5	0.86204E-06	0.23748E-05	0.87218E-11
6	0.12789E-05	0.35232E-05	0.12940E-10
7	0.18172E-05	0.50059E-05	0.18385E-10
8	0.24973E-05	0.68796E-05	0.25267E-10
9	0.33409E-05	0.92036E-05	0.33802E-10
10	0.43697E-05	0.12038E-04	0.44211E-10
11	0.56048E-05	0.15440E-04	0.56708E-10

12	0.70653E-05	0.19464E-04	0.71484E-10
13	0.87665E-05	0.24150E-04	0.88697E-10
14	0.10717E-04	0.29524E-04	0.10843E-09

Polygon I
Time: 50.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.45740E-07	0.12600E-06	0.46278E-12
2	0.12931E-06	0.35624E-06	0.13084E-11
3	0.25953E-06	0.71497E-06	0.26259E-11
4	0.44693E-06	0.12312E-05	0.45219E-11
5	0.70381E-06	0.19389E-05	0.71209E-11
6	0.10442E-05	0.28765E-05	0.10565E-10
7	0.14836E-05	0.40872E-05	0.15011E-10
8	0.20391E-05	0.56172E-05	0.20630E-10
9	0.27281E-05	0.75153E-05	0.27601E-10
10	0.35684E-05	0.98303E-05	0.36104E-10
11	0.45772E-05	0.12609E-04	0.46311E-10
12	0.57698E-05	0.15895E-04	0.58377E-10
13	0.71583E-05	0.19720E-04	0.72425E-10
14	0.87494E-05	0.24103E-04	0.88523E-10

Polygon I
Time: 51.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.37347E-07	0.10288E-06	0.37787E-12
2	0.10559E-06	0.29087E-06	0.10683E-11
3	0.21191E-06	0.58376E-06	0.21440E-11
4	0.36491E-06	0.10053E-05	0.36920E-11
5	0.57463E-06	0.15830E-05	0.58139E-11
6	0.85253E-06	0.23486E-05	0.86256E-11
7	0.12114E-05	0.33371E-05	0.12256E-10
8	0.16649E-05	0.45865E-05	0.16845E-10
9	0.22276E-05	0.61366E-05	0.22538E-10
10	0.29139E-05	0.80274E-05	0.29482E-10
11	0.37379E-05	0.10297E-04	0.37819E-10
12	0.47118E-05	0.12980E-04	0.47672E-10
13	0.58452E-05	0.16103E-04	0.59140E-10
14	0.71433E-05	0.19678E-04	0.72273E-10

Polygon I
Time: 52.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.30495E-07	0.84008E-07	0.30854E-12
2	0.86212E-07	0.23750E-06	0.87226E-12
3	0.17302E-06	0.47664E-06	0.17506E-11
4	0.29794E-06	0.82077E-06	0.30145E-11
5	0.46917E-06	0.12925E-05	0.47469E-11
6	0.69606E-06	0.19175E-05	0.70425E-11
7	0.98903E-06	0.27246E-05	0.10007E-10
8	0.13594E-05	0.37448E-05	0.13754E-10
9	0.18189E-05	0.50107E-05	0.18403E-10
10	0.23795E-05	0.65550E-05	0.24074E-10
11	0.30524E-05	0.84089E-05	0.30883E-10
12	0.38478E-05	0.10600E-04	0.38930E-10
13	0.47731E-05	0.13149E-04	0.48293E-10
14	0.58324E-05	0.16067E-04	0.59010E-10

Polygon I
Time: 53.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)

1	0.24900E-07	0.68595E-07	0.25193E-12
2	0.70393E-07	0.19392E-06	0.71221E-12
3	0.14127E-06	0.38918E-06	0.14293E-11
4	0.24327E-06	0.67016E-06	0.24613E-11
5	0.38307E-06	0.10553E-05	0.38757E-11
6	0.56831E-06	0.15656E-05	0.57500E-11
7	0.80752E-06	0.22246E-05	0.81702E-11
8	0.11099E-05	0.30576E-05	0.11230E-10
9	0.14852E-05	0.40913E-05	0.15026E-10
10	0.19430E-05	0.53525E-05	0.19658E-10
11	0.24926E-05	0.68667E-05	0.25219E-10
12	0.31422E-05	0.86561E-05	0.31791E-10
13	0.38977E-05	0.10738E-04	0.39436E-10
14	0.47622E-05	0.13119E-04	0.48182E-10

Polygon I
Time: 54.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.20332E-07	0.56010E-07	0.20571E-12
2	0.57478E-07	0.15834E-06	0.58154E-12
3	0.11535E-06	0.31777E-06	0.11671E-11
4	0.19863E-06	0.54718E-06	0.20096E-11
5	0.31277E-06	0.86163E-06	0.31645E-11
6	0.46402E-06	0.12783E-05	0.46948E-11
7	0.65933E-06	0.18163E-05	0.66708E-11
8	0.90623E-06	0.24965E-05	0.91689E-11
9	0.12126E-05	0.33406E-05	0.12269E-10
10	0.15865E-05	0.43706E-05	0.16052E-10
11	0.20354E-05	0.56072E-05	0.20594E-10
12	0.25659E-05	0.70686E-05	0.25961E-10
13	0.31829E-05	0.87683E-05	0.32203E-10
14	0.38886E-05	0.10712E-04	0.39343E-10

Polygon I
Time: 55.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.16601E-07	0.45734E-07	0.16797E-12
2	0.46932E-07	0.12929E-06	0.47484E-12
3	0.94186E-07	0.25947E-06	0.95294E-12
4	0.16218E-06	0.44678E-06	0.16409E-11
5	0.25538E-06	0.70352E-06	0.25838E-11
6	0.37887E-06	0.10437E-05	0.38332E-11
7	0.53833E-06	0.14830E-05	0.54466E-11
8	0.73993E-06	0.20384E-05	0.74864E-11
9	0.99014E-06	0.27276E-05	0.10018E-10
10	0.12955E-05	0.35687E-05	0.13107E-10
11	0.16621E-05	0.45787E-05	0.16816E-10
12	0.20953E-05	0.57722E-05	0.21199E-10
13	0.25991E-05	0.71601E-05	0.26297E-10
14	0.31752E-05	0.87472E-05	0.32126E-10

Polygon I
Time: 56.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.13556E-07	0.37343E-07	0.13715E-12
2	0.38321E-07	0.10557E-06	0.38772E-12
3	0.76905E-07	0.21186E-06	0.77810E-12
4	0.13242E-06	0.36480E-06	0.13398E-11
5	0.20852E-06	0.57442E-06	0.21097E-11
6	0.30934E-06	0.85218E-06	0.31298E-11
7	0.43954E-06	0.12109E-05	0.44471E-11

8	0.60415E-06	0.16643E-05	0.61126E-11
9	0.80845E-06	0.22271E-05	0.81796E-11
10	0.10578E-05	0.29140E-05	0.10702E-10
11	0.13572E-05	0.37387E-05	0.13731E-10
12	0.17110E-05	0.47135E-05	0.17311E-10
13	0.21224E-05	0.58469E-05	0.21474E-10
14	0.25928E-05	0.71427E-05	0.26233E-10

Polygon I
Time: 57.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.11068E-07	0.30492E-07	0.11199E-12
2	0.31290E-07	0.86200E-07	0.31659E-12
3	0.62795E-07	0.17299E-06	0.63534E-12
4	0.10813E-06	0.29787E-06	0.10940E-11
5	0.17026E-06	0.46902E-06	0.17226E-11
6	0.25258E-06	0.69581E-06	0.25555E-11
7	0.35888E-06	0.98866E-06	0.36311E-11
8	0.49328E-06	0.13589E-05	0.49909E-11
9	0.66010E-06	0.18185E-05	0.66787E-11
10	0.86369E-06	0.23793E-05	0.87385E-11
11	0.11082E-05	0.30528E-05	0.11212E-10
12	0.13971E-05	0.38489E-05	0.14136E-10
13	0.17331E-05	0.47745E-05	0.17535E-10
14	0.21172E-05	0.58325E-05	0.21421E-10

Polygon I
Time: 58.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.90378E-08	0.24897E-07	0.91441E-13
2	0.25550E-07	0.70385E-07	0.25850E-12
3	0.51274E-07	0.14125E-06	0.51877E-12
4	0.88287E-07	0.24321E-06	0.89325E-12
5	0.13902E-06	0.38296E-06	0.14065E-11
6	0.20623E-06	0.56813E-06	0.20866E-11
7	0.29303E-06	0.80724E-06	0.29648E-11
8	0.40277E-06	0.11095E-05	0.40750E-11
9	0.53898E-06	0.14848E-05	0.54532E-11
10	0.70522E-06	0.19427E-05	0.71351E-11
11	0.90487E-06	0.24927E-05	0.91551E-11
12	0.11408E-05	0.31428E-05	0.11543E-10
13	0.14152E-05	0.38987E-05	0.14319E-10
14	0.17289E-05	0.47627E-05	0.17492E-10

Polygon I
Time: 59.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.73796E-08	0.20329E-07	0.74664E-13
2	0.20862E-07	0.57471E-07	0.21107E-12
3	0.41866E-07	0.11533E-06	0.42359E-12
4	0.72088E-07	0.19859E-06	0.72936E-12
5	0.11351E-06	0.31270E-06	0.11484E-11
6	0.16839E-06	0.46388E-06	0.17037E-11
7	0.23926E-06	0.65911E-06	0.24207E-11
8	0.32886E-06	0.90595E-06	0.33273E-11
9	0.44007E-06	0.12123E-05	0.44525E-11
10	0.57582E-06	0.15863E-05	0.58259E-11
11	0.73885E-06	0.20354E-05	0.74754E-11
12	0.93156E-06	0.25663E-05	0.94252E-11
13	0.11556E-05	0.31836E-05	0.11692E-10
14	0.14117E-05	0.38891E-05	0.14284E-10

Polygon I
Time: 60.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.60256E-08	0.16600E-07	0.60965E-13
2	0.17034E-07	0.46927E-07	0.17235E-12
3	0.34185E-07	0.94173E-07	0.34587E-12
4	0.58862E-07	0.16215E-06	0.59554E-12
5	0.92682E-07	0.25532E-06	0.93772E-12
6	0.13749E-06	0.37877E-06	0.13911E-11
7	0.19536E-06	0.53817E-06	0.19765E-11
8	0.26851E-06	0.73971E-06	0.27167E-11
9	0.35932E-06	0.98987E-06	0.36355E-11
10	0.47016E-06	0.12952E-05	0.47569E-11
11	0.60329E-06	0.16620E-05	0.61039E-11
12	0.76066E-06	0.20955E-05	0.76961E-11
13	0.94365E-06	0.25996E-05	0.95475E-11
14	0.11528E-05	0.31757E-05	0.11663E-10

Polygon I
Time: 61.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.49201E-08	0.13554E-07	0.49780E-13
2	0.13909E-07	0.38317E-07	0.14073E-12
3	0.27913E-07	0.76895E-07	0.28241E-12
4	0.48062E-07	0.13240E-06	0.48627E-12
5	0.75676E-07	0.20848E-06	0.76567E-12
6	0.11226E-06	0.30927E-06	0.11359E-11
7	0.15951E-06	0.43942E-06	0.16139E-11
8	0.21924E-06	0.60398E-06	0.22182E-11
9	0.29339E-06	0.80823E-06	0.29684E-11
10	0.38389E-06	0.10576E-05	0.38841E-11
11	0.49260E-06	0.13570E-05	0.49839E-11
12	0.62110E-06	0.17110E-05	0.62841E-11
13	0.77054E-06	0.21227E-05	0.77961E-11
14	0.94132E-06	0.25932E-05	0.95240E-11

Polygon I
Time: 62.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.40174E-08	0.11067E-07	0.40646E-13
2	0.11357E-07	0.31287E-07	0.11491E-12
3	0.22792E-07	0.62787E-07	0.23060E-12
4	0.39244E-07	0.10811E-06	0.39705E-12
5	0.61791E-07	0.17022E-06	0.62518E-12
6	0.91666E-07	0.25252E-06	0.92745E-12
7	0.13024E-06	0.35879E-06	0.13177E-11
8	0.17901E-06	0.49315E-06	0.18112E-11
9	0.23955E-06	0.65993E-06	0.24237E-11
10	0.31345E-06	0.86350E-06	0.31714E-11
11	0.40221E-06	0.11080E-05	0.40695E-11
12	0.50715E-06	0.13971E-05	0.51312E-11
13	0.62918E-06	0.17333E-05	0.63658E-11
14	0.76864E-06	0.21175E-05	0.77769E-11

Polygon I
Time: 63.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.32803E-08	0.90366E-08	0.33189E-13
2	0.92733E-08	0.25546E-07	0.93824E-13
3	0.18610E-07	0.51267E-07	0.18829E-12

4	0.32043E-07	0.88274E-07	0.32420E-12
5	0.50454E-07	0.13899E-06	0.51048E-12
6	0.74847E-07	0.20619E-06	0.75728E-12
7	0.10634E-06	0.29296E-06	0.10760E-11
8	0.14617E-06	0.40266E-06	0.14789E-11
9	0.19560E-06	0.53884E-06	0.19790E-11
10	0.25594E-06	0.70506E-06	0.25895E-11
11	0.32841E-06	0.90472E-06	0.33228E-11
12	0.41410E-06	0.11408E-05	0.41897E-11
13	0.51375E-06	0.14153E-05	0.51980E-11
14	0.62764E-06	0.17290E-05	0.63502E-11

Polygon I
Time: 64.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.26784E-08	0.73786E-08	0.27099E-13
2	0.75719E-08	0.20859E-07	0.76610E-13
3	0.15195E-07	0.41861E-07	0.15374E-12
4	0.26164E-07	0.72078E-07	0.26472E-12
5	0.41197E-07	0.11349E-06	0.41681E-12
6	0.61114E-07	0.16836E-06	0.61833E-12
7	0.86832E-07	0.23921E-06	0.87854E-12
8	0.11935E-06	0.32878E-06	0.12075E-11
9	0.15971E-06	0.43997E-06	0.16159E-11
10	0.20897E-06	0.57569E-06	0.21143E-11
11	0.26815E-06	0.73872E-06	0.27131E-11
12	0.33812E-06	0.93147E-06	0.34210E-11
13	0.41950E-06	0.11556E-05	0.42443E-11
14	0.51249E-06	0.14118E-05	0.51852E-11

Polygon I
Time: 65.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.21870E-08	0.60248E-08	0.22127E-13
2	0.61826E-08	0.17032E-07	0.62553E-13
3	0.12407E-07	0.34180E-07	0.12553E-12
4	0.21364E-07	0.58853E-07	0.21615E-12
5	0.33638E-07	0.92667E-07	0.34034E-12
6	0.49901E-07	0.13747E-06	0.50488E-12
7	0.70900E-07	0.19532E-06	0.71734E-12
8	0.97448E-07	0.26845E-06	0.98595E-12
9	0.13040E-06	0.35924E-06	0.13194E-11
10	0.17063E-06	0.47005E-06	0.17264E-11
11	0.21895E-06	0.60317E-06	0.22153E-11
12	0.27608E-06	0.76056E-06	0.27933E-11
13	0.34253E-06	0.94361E-06	0.34656E-11
14	0.41847E-06	0.11528E-05	0.42340E-11

Polygon I
Time: 66.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.17857E-08	0.49193E-08	0.18067E-13
2	0.50482E-08	0.13907E-07	0.51076E-13
3	0.10131E-07	0.27909E-07	0.10250E-12
4	0.17444E-07	0.48055E-07	0.17649E-12
5	0.27466E-07	0.75665E-07	0.27789E-12
6	0.40745E-07	0.11225E-06	0.41224E-12
7	0.57891E-07	0.15948E-06	0.58572E-12
8	0.79568E-07	0.21920E-06	0.80504E-12
9	0.10648E-06	0.29332E-06	0.10773E-11
10	0.13932E-06	0.38380E-06	0.14096E-11

11	0.17878E-06	0.49250E-06	0.18088E-11
12	0.22543E-06	0.62101E-06	0.22808E-11
13	0.27968E-06	0.77048E-06	0.28298E-11
14	0.34170E-06	0.94132E-06	0.34572E-11

Polygon I
Time: 67.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.14581E-08	0.40167E-08	0.14752E-13
2	0.41220E-08	0.11355E-07	0.41705E-13
3	0.82721E-08	0.22788E-07	0.83694E-13
4	0.14243E-07	0.39238E-07	0.14411E-12
5	0.22427E-07	0.61782E-07	0.22691E-12
6	0.33269E-07	0.91651E-07	0.33661E-12
7	0.47269E-07	0.13022E-06	0.47825E-12
8	0.64969E-07	0.17898E-06	0.65733E-12
9	0.86939E-07	0.23950E-06	0.87962E-12
10	0.11376E-06	0.31338E-06	0.11510E-11
11	0.14597E-06	0.40213E-06	0.14769E-11
12	0.18406E-06	0.50706E-06	0.18623E-11
13	0.22837E-06	0.62912E-06	0.23106E-11
14	0.27901E-06	0.76862E-06	0.28229E-11

Polygon I
Time: 68.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.11905E-08	0.32797E-08	0.12046E-13
2	0.33657E-08	0.92718E-08	0.34053E-13
3	0.67543E-08	0.18607E-07	0.68338E-13
4	0.11630E-07	0.32038E-07	0.11767E-12
5	0.18312E-07	0.50446E-07	0.18527E-12
6	0.27165E-07	0.74835E-07	0.27485E-12
7	0.38596E-07	0.10633E-06	0.39050E-12
8	0.53048E-07	0.14614E-06	0.53672E-12
9	0.70987E-07	0.19556E-06	0.71822E-12
10	0.92884E-07	0.25588E-06	0.93977E-12
11	0.11919E-06	0.32834E-06	0.12059E-11
12	0.15029E-06	0.41403E-06	0.15206E-11
13	0.18647E-06	0.51369E-06	0.18866E-11
14	0.22782E-06	0.62760E-06	0.23050E-11

Polygon I
Time: 69.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.97210E-09	0.26780E-08	0.98354E-14
2	0.27481E-08	0.75706E-08	0.27805E-13
3	0.55150E-08	0.15193E-07	0.55799E-13
4	0.94961E-08	0.26160E-07	0.96078E-13
5	0.14952E-07	0.41190E-07	0.15128E-12
6	0.22181E-07	0.61104E-07	0.22442E-12
7	0.31514E-07	0.86817E-07	0.31885E-12
8	0.43315E-07	0.11932E-06	0.43824E-12
9	0.57962E-07	0.15967E-06	0.58644E-12
10	0.75841E-07	0.20893E-06	0.76733E-12
11	0.97320E-07	0.26810E-06	0.98464E-12
12	0.12271E-06	0.33806E-06	0.12416E-11
13	0.15225E-06	0.41943E-06	0.15405E-11
14	0.18602E-06	0.51245E-06	0.18821E-11

Polygon I
Time: 70.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.79374E-09	0.21866E-08	0.80308E-14
2	0.22439E-08	0.61816E-08	0.22703E-13
3	0.45031E-08	0.12405E-07	0.45561E-13
4	0.77538E-08	0.21360E-07	0.78450E-13
5	0.12209E-07	0.33633E-07	0.12352E-12
6	0.18111E-07	0.49893E-07	0.18324E-12
7	0.25732E-07	0.70888E-07	0.26035E-12
8	0.35367E-07	0.97430E-07	0.35783E-12
9	0.47327E-07	0.13038E-06	0.47884E-12
10	0.61925E-07	0.17059E-06	0.62654E-12
11	0.79463E-07	0.21891E-06	0.80398E-12
12	0.10020E-06	0.27603E-06	0.10138E-11
13	0.12432E-06	0.34247E-06	0.12578E-11
14	0.15189E-06	0.41843E-06	0.15368E-11

Polygon I
Time: 71.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.64810E-09	0.17854E-08	0.65573E-14
2	0.18322E-08	0.50474E-08	0.18537E-13
3	0.36769E-08	0.10129E-07	0.37202E-13
4	0.63311E-08	0.17441E-07	0.64056E-13
5	0.99686E-08	0.27462E-07	0.10086E-12
6	0.14788E-07	0.40738E-07	0.14962E-12
7	0.21011E-07	0.57881E-07	0.21258E-12
8	0.28878E-07	0.79554E-07	0.29218E-12
9	0.38643E-07	0.10645E-06	0.39098E-12
10	0.50563E-07	0.13929E-06	0.51158E-12
11	0.64882E-07	0.17874E-06	0.65646E-12
12	0.81813E-07	0.22538E-06	0.82776E-12
13	0.10151E-06	0.27964E-06	0.10270E-11
14	0.12402E-06	0.34165E-06	0.12548E-11

Polygon I
Time: 72.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.52919E-09	0.14578E-08	0.53541E-14
2	0.14960E-08	0.41213E-08	0.15136E-13
3	0.30023E-08	0.82707E-08	0.30376E-13
4	0.51695E-08	0.14241E-07	0.52303E-13
5	0.81396E-08	0.22423E-07	0.82353E-13
6	0.12075E-07	0.33264E-07	0.12217E-12
7	0.17156E-07	0.47261E-07	0.17358E-12
8	0.23579E-07	0.64957E-07	0.23857E-12
9	0.31553E-07	0.86922E-07	0.31924E-12
10	0.41286E-07	0.11373E-06	0.41771E-12
11	0.52977E-07	0.14594E-06	0.53601E-12
12	0.66802E-07	0.18403E-06	0.67588E-12
13	0.82883E-07	0.22833E-06	0.83858E-12
14	0.10126E-06	0.27897E-06	0.10246E-11

Polygon I
Time: 73.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.43209E-09	0.11903E-08	0.43717E-14
2	0.12215E-08	0.33651E-08	0.12359E-13
3	0.24514E-08	0.67532E-08	0.24802E-13
4	0.42210E-08	0.11628E-07	0.42706E-13
5	0.66461E-08	0.18309E-07	0.67243E-13
6	0.98592E-08	0.27160E-07	0.99752E-13

7	0.14008E-07	0.38589E-07	0.14173E-12
8	0.19253E-07	0.53039E-07	0.19480E-12
9	0.25763E-07	0.70974E-07	0.26067E-12
10	0.33710E-07	0.92866E-07	0.34107E-12
11	0.43257E-07	0.11917E-06	0.43766E-12
12	0.54545E-07	0.15026E-06	0.55186E-12
13	0.67675E-07	0.18643E-06	0.68471E-12
14	0.82684E-07	0.22778E-06	0.83657E-12

Polygon I
Time: 74.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.35281E-09	0.97193E-09	0.35696E-14
2	0.99740E-09	0.27477E-08	0.10091E-13
3	0.20016E-08	0.55141E-08	0.20252E-13
4	0.34465E-08	0.94945E-08	0.34870E-13
5	0.54267E-08	0.14950E-07	0.54905E-13
6	0.80502E-08	0.22177E-07	0.81449E-13
7	0.11438E-07	0.31509E-07	0.11572E-12
8	0.15720E-07	0.43307E-07	0.15905E-12
9	0.21036E-07	0.57951E-07	0.21284E-12
10	0.27525E-07	0.75827E-07	0.27849E-12
11	0.35320E-07	0.97300E-07	0.35735E-12
12	0.44537E-07	0.12269E-06	0.45061E-12
13	0.55258E-07	0.15223E-06	0.55908E-12
14	0.67513E-07	0.18599E-06	0.68308E-12

Polygon I
Time: 75.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.28808E-09	0.79360E-09	0.29146E-14
2	0.81439E-09	0.22435E-08	0.82397E-14
3	0.16343E-08	0.45023E-08	0.16536E-13
4	0.28141E-08	0.77524E-08	0.28472E-13
5	0.44310E-08	0.12207E-07	0.44831E-13
6	0.65732E-08	0.18108E-07	0.66505E-13
7	0.93392E-08	0.25728E-07	0.94490E-13
8	0.12836E-07	0.35361E-07	0.12987E-12
9	0.17177E-07	0.47318E-07	0.17379E-12
10	0.22475E-07	0.61914E-07	0.22739E-12
11	0.28839E-07	0.79447E-07	0.29179E-12
12	0.36365E-07	0.10018E-06	0.36793E-12
13	0.45119E-07	0.12429E-06	0.45650E-12
14	0.55126E-07	0.15186E-06	0.55774E-12

Polygon I
Time: 76.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.23522E-09	0.64798E-09	0.23799E-14
2	0.66497E-09	0.18319E-08	0.67279E-14
3	0.13345E-08	0.36762E-08	0.13502E-13
4	0.22978E-08	0.63300E-08	0.23248E-13
5	0.36180E-08	0.99669E-08	0.36605E-13
6	0.53671E-08	0.14785E-07	0.54303E-13
7	0.76256E-08	0.21007E-07	0.77153E-13
8	0.10481E-07	0.28873E-07	0.10604E-12
9	0.14025E-07	0.38636E-07	0.14190E-12
10	0.18351E-07	0.50554E-07	0.18567E-12
11	0.23548E-07	0.64870E-07	0.23825E-12
12	0.29692E-07	0.81797E-07	0.30042E-12
13	0.36840E-07	0.10149E-06	0.37274E-12

14	0.45011E-07	0.12400E-06	0.45541E-12

Polygon I
Time: 77.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.19206E-09	0.52909E-09	0.19432E-14
2	0.54296E-09	0.14957E-08	0.54934E-14
3	0.10896E-08	0.30017E-08	0.11024E-13
4	0.18762E-08	0.51685E-08	0.18982E-13
5	0.29541E-08	0.81381E-08	0.29889E-13
6	0.43823E-08	0.12073E-07	0.44339E-13
7	0.62264E-08	0.17153E-07	0.62997E-13
8	0.85578E-08	0.23575E-07	0.86585E-13
9	0.11452E-07	0.31547E-07	0.11586E-12
10	0.14984E-07	0.41278E-07	0.15160E-12
11	0.19227E-07	0.52967E-07	0.19453E-12
12	0.24244E-07	0.66789E-07	0.24530E-12
13	0.30081E-07	0.82867E-07	0.30434E-12
14	0.36752E-07	0.10125E-06	0.37185E-12

Polygon I
Time: 78.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.15682E-09	0.43201E-09	0.15867E-14
2	0.44333E-09	0.12213E-08	0.44855E-14
3	0.88969E-09	0.24510E-08	0.90016E-14
4	0.15319E-08	0.42202E-08	0.15500E-13
5	0.24121E-08	0.66449E-08	0.24405E-13
6	0.35783E-08	0.98575E-08	0.36204E-13
7	0.50840E-08	0.14006E-07	0.51438E-13
8	0.69876E-08	0.19250E-07	0.70698E-13
9	0.93505E-08	0.25759E-07	0.94605E-13
10	0.12235E-07	0.33704E-07	0.12379E-12
11	0.15699E-07	0.43249E-07	0.15884E-12
12	0.19796E-07	0.54534E-07	0.20029E-12
13	0.24561E-07	0.67662E-07	0.24850E-12
14	0.30009E-07	0.82669E-07	0.30362E-12

Polygon I
Time: 79.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.12805E-09	0.35275E-09	0.12955E-14
2	0.36199E-09	0.99721E-09	0.36625E-14
3	0.72645E-09	0.20012E-08	0.73500E-14
4	0.12508E-08	0.34459E-08	0.12656E-13
5	0.19695E-08	0.54257E-08	0.19927E-13
6	0.29217E-08	0.80488E-08	0.29561E-13
7	0.41512E-08	0.11436E-07	0.42000E-13
8	0.57055E-08	0.15718E-07	0.57726E-13
9	0.76348E-08	0.21033E-07	0.77246E-13
10	0.99898E-08	0.27520E-07	0.10107E-12
11	0.12819E-07	0.35313E-07	0.12970E-12
12	0.16164E-07	0.44528E-07	0.16354E-12
13	0.20055E-07	0.55247E-07	0.20291E-12
14	0.24503E-07	0.67500E-07	0.24791E-12

Polygon I
Time: 80.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.10455E-09	0.28802E-09	0.10578E-14
2	0.29557E-09	0.81424E-09	0.29905E-14

3	0.59316E-09	0.16341E-08	0.60014E-14
4	0.10213E-08	0.28136E-08	0.10334E-13
5	0.16082E-08	0.44302E-08	0.16271E-13
6	0.23856E-08	0.65720E-08	0.24137E-13
7	0.33895E-08	0.93375E-08	0.34294E-13
8	0.46587E-08	0.12834E-07	0.47135E-13
9	0.62340E-08	0.17173E-07	0.63073E-13
10	0.81568E-08	0.22471E-07	0.82528E-13
11	0.10467E-07	0.28834E-07	0.10590E-12
12	0.13198E-07	0.36358E-07	0.13353E-12
13	0.16375E-07	0.45110E-07	0.16568E-12
14	0.20007E-07	0.55115E-07	0.20242E-12

Polygon I
Time: 81.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.85369E-10	0.23518E-09	0.86373E-15
2	0.24134E-09	0.66484E-09	0.24418E-14
3	0.48433E-09	0.13342E-08	0.49002E-14
4	0.83394E-09	0.22974E-08	0.84375E-14
5	0.13131E-08	0.36173E-08	0.13285E-13
6	0.19479E-08	0.53662E-08	0.19708E-13
7	0.27676E-08	0.76242E-08	0.28002E-13
8	0.38039E-08	0.10479E-07	0.38486E-13
9	0.50901E-08	0.14022E-07	0.51500E-13
10	0.66602E-08	0.18348E-07	0.67386E-13
11	0.85463E-08	0.23543E-07	0.86468E-13
12	0.10776E-07	0.29687E-07	0.10903E-12
13	0.13370E-07	0.36833E-07	0.13528E-12
14	0.16336E-07	0.45002E-07	0.16528E-12

Polygon I
Time: 82.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.69705E-10	0.19202E-09	0.70525E-15
2	0.19706E-09	0.54286E-09	0.19938E-14
3	0.39546E-09	0.10894E-08	0.40011E-14
4	0.68093E-09	0.18758E-08	0.68894E-14
5	0.10722E-08	0.29536E-08	0.10848E-13
6	0.15905E-08	0.43816E-08	0.16092E-13
7	0.22598E-08	0.62253E-08	0.22864E-13
8	0.31059E-08	0.85563E-08	0.31425E-13
9	0.41562E-08	0.11450E-07	0.42051E-13
10	0.54382E-08	0.14981E-07	0.55022E-13
11	0.69782E-08	0.19224E-07	0.70603E-13
12	0.87991E-08	0.24240E-07	0.89026E-13
13	0.10917E-07	0.30075E-07	0.11046E-12
14	0.13339E-07	0.36745E-07	0.13495E-12

Polygon I
Time: 83.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.56915E-10	0.15679E-09	0.57585E-15
2	0.16090E-09	0.44325E-09	0.16279E-14
3	0.32290E-09	0.88953E-09	0.32670E-14
4	0.55599E-09	0.15317E-08	0.56253E-14
5	0.87544E-09	0.24117E-08	0.88574E-14
6	0.12987E-08	0.35776E-08	0.13140E-13
7	0.18452E-08	0.50831E-08	0.18669E-13
8	0.25360E-08	0.69864E-08	0.25659E-13
9	0.33936E-08	0.93488E-08	0.34335E-13

10	0.44404E-08	0.12232E-07	0.44926E-13
11	0.56978E-08	0.15696E-07	0.57648E-13
12	0.71846E-08	0.19792E-07	0.72691E-13
13	0.89141E-08	0.24557E-07	0.90189E-13
14	0.10891E-07	0.30003E-07	0.11019E-12

Polygon I
Time: 84.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.46472E-10	0.12802E-09	0.47019E-15
2	0.13138E-09	0.36192E-09	0.13292E-14
3	0.26365E-09	0.72632E-09	0.26676E-14
4	0.45398E-09	0.12506E-08	0.45932E-14
5	0.71481E-09	0.19692E-08	0.72322E-14
6	0.10604E-08	0.29212E-08	0.10729E-13
7	0.15066E-08	0.41504E-08	0.15243E-13
8	0.20707E-08	0.57045E-08	0.20951E-13
9	0.27709E-08	0.76335E-08	0.28035E-13
10	0.36256E-08	0.99880E-08	0.36683E-13
11	0.46524E-08	0.12816E-07	0.47071E-13
12	0.58663E-08	0.16161E-07	0.59354E-13
13	0.72785E-08	0.20051E-07	0.73641E-13
14	0.88928E-08	0.24498E-07	0.89974E-13

Polygon I
Time: 85.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.37946E-10	0.10453E-09	0.38392E-15
2	0.10727E-09	0.29552E-09	0.10853E-14
3	0.21528E-09	0.59305E-09	0.21781E-14
4	0.37068E-09	0.10212E-08	0.37504E-14
5	0.58365E-09	0.16079E-08	0.59052E-14
6	0.86583E-09	0.23852E-08	0.87602E-14
7	0.12302E-08	0.33889E-08	0.12446E-13
8	0.16908E-08	0.46578E-08	0.17107E-13
9	0.22625E-08	0.62328E-08	0.22891E-13
10	0.29604E-08	0.81554E-08	0.29952E-13
11	0.37987E-08	0.10465E-07	0.38434E-13
12	0.47900E-08	0.13196E-07	0.48463E-13
13	0.59430E-08	0.16372E-07	0.60129E-13
14	0.72611E-08	0.20003E-07	0.73465E-13

Polygon I
Time: 86.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.30983E-10	0.85353E-10	0.31348E-15
2	0.87590E-10	0.24129E-09	0.88620E-15
3	0.17578E-09	0.48424E-09	0.17785E-14
4	0.30267E-09	0.83379E-09	0.30623E-14
5	0.47656E-09	0.13128E-08	0.48217E-14
6	0.70696E-09	0.19476E-08	0.71528E-14
7	0.10045E-08	0.27671E-08	0.10163E-13
8	0.13806E-08	0.38032E-08	0.13968E-13
9	0.18474E-08	0.50892E-08	0.18691E-13
10	0.24172E-08	0.66590E-08	0.24457E-13
11	0.31017E-08	0.85447E-08	0.31382E-13
12	0.39111E-08	0.10774E-07	0.39571E-13
13	0.48526E-08	0.13368E-07	0.49097E-13
14	0.59288E-08	0.16333E-07	0.59986E-13

Polygon I

13	0.11742E-08	0.32346E-08	0.11880E-13
14	0.14346E-08	0.39520E-08	0.14515E-13

Polygon I
Time: 94.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.61214E-11	0.16863E-10	0.61934E-16
2	0.17305E-10	0.47673E-10	0.17509E-15
3	0.34729E-10	0.95672E-10	0.35137E-15
4	0.59798E-10	0.16473E-09	0.60502E-15
5	0.94156E-10	0.25938E-09	0.95263E-15
6	0.13968E-09	0.38478E-09	0.14132E-14
7	0.19845E-09	0.54670E-09	0.20079E-14
8	0.27276E-09	0.75140E-09	0.27597E-14
9	0.36499E-09	0.10055E-08	0.36929E-14
10	0.47758E-09	0.13156E-08	0.48319E-14
11	0.61282E-09	0.16882E-08	0.62003E-14
12	0.77272E-09	0.21287E-08	0.78181E-14
13	0.95873E-09	0.26411E-08	0.97001E-14
14	0.11714E-08	0.32269E-08	0.11851E-13

Polygon I
Time: 95.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.49982E-11	0.13769E-10	0.50570E-16
2	0.14130E-10	0.38926E-10	0.14296E-15
3	0.28357E-10	0.78118E-10	0.28690E-15
4	0.48826E-10	0.13451E-09	0.49401E-15
5	0.76880E-10	0.21179E-09	0.77784E-15
6	0.11405E-09	0.31418E-09	0.11539E-14
7	0.16204E-09	0.44639E-09	0.16395E-14
8	0.22271E-09	0.61353E-09	0.22533E-14
9	0.29802E-09	0.82100E-09	0.30153E-14
10	0.38995E-09	0.10742E-08	0.39454E-14
11	0.50038E-09	0.13784E-08	0.50626E-14
12	0.63094E-09	0.17381E-08	0.63837E-14
13	0.78282E-09	0.21565E-08	0.79203E-14
14	0.95644E-09	0.26348E-08	0.96769E-14

Polygon I
Time: 96.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.40812E-11	0.11243E-10	0.41292E-16
2	0.11537E-10	0.31784E-10	0.11673E-15
3	0.23154E-10	0.63784E-10	0.23426E-15
4	0.39868E-10	0.10983E-09	0.40337E-15
5	0.62774E-10	0.17293E-09	0.63512E-15
6	0.93122E-10	0.25654E-09	0.94218E-15
7	0.13231E-09	0.36449E-09	0.13387E-14
8	0.18185E-09	0.50096E-09	0.18399E-14
9	0.24334E-09	0.67036E-09	0.24620E-14
10	0.31840E-09	0.87713E-09	0.32215E-14
11	0.40857E-09	0.11255E-08	0.41337E-14
12	0.51518E-09	0.14192E-08	0.52124E-14
13	0.63919E-09	0.17609E-08	0.64671E-14
14	0.78095E-09	0.21514E-08	0.79014E-14

Polygon I
Time: 97.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.33323E-11	0.91800E-11	0.33715E-16

2	0.94205E-11	0.25952E-10	0.95314E-16
3	0.18905E-10	0.52081E-10	0.19128E-15
4	0.32553E-10	0.89677E-10	0.32936E-15
5	0.51256E-10	0.14120E-09	0.51859E-15
6	0.76036E-10	0.20947E-09	0.76931E-15
7	0.10803E-09	0.29761E-09	0.10930E-14
8	0.14848E-09	0.40904E-09	0.15023E-14
9	0.19869E-09	0.54736E-09	0.20103E-14
10	0.25998E-09	0.71620E-09	0.26304E-14
11	0.33360E-09	0.91901E-09	0.33753E-14
12	0.42065E-09	0.11588E-08	0.42560E-14
13	0.52191E-09	0.14378E-08	0.52805E-14
14	0.63766E-09	0.17566E-08	0.64516E-14

Polygon I
Time: 98.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.27209E-11	0.74956E-11	0.27529E-16
2	0.76920E-11	0.21190E-10	0.77825E-16
3	0.15437E-10	0.42525E-10	0.15618E-15
4	0.26580E-10	0.73222E-10	0.26892E-15
5	0.41851E-10	0.11529E-09	0.42344E-15
6	0.62085E-10	0.17103E-09	0.62815E-15
7	0.88210E-10	0.24300E-09	0.89248E-15
8	0.12124E-09	0.33399E-09	0.12267E-14
9	0.16224E-09	0.44693E-09	0.16414E-14
10	0.21228E-09	0.58479E-09	0.21478E-14
11	0.27239E-09	0.75039E-09	0.27560E-14
12	0.34347E-09	0.94619E-09	0.34751E-14
13	0.42615E-09	0.11740E-08	0.43116E-14
14	0.52066E-09	0.14343E-08	0.52679E-14

Polygon I
Time: 99.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.22217E-11	0.61203E-11	0.22478E-16
2	0.62807E-11	0.17302E-10	0.63546E-16
3	0.12604E-10	0.34723E-10	0.12753E-15
4	0.21703E-10	0.59787E-10	0.21958E-15
5	0.34172E-10	0.94139E-10	0.34574E-15
6	0.50693E-10	0.13965E-09	0.51290E-15
7	0.72025E-10	0.19842E-09	0.72873E-15
8	0.98994E-10	0.27271E-09	0.10016E-14
9	0.13247E-09	0.36493E-09	0.13403E-14
10	0.17333E-09	0.47749E-09	0.17537E-14
11	0.22241E-09	0.61271E-09	0.22503E-14
12	0.28045E-09	0.77258E-09	0.28375E-14
13	0.34796E-09	0.95856E-09	0.35205E-14
14	0.42513E-09	0.11712E-08	0.43013E-14

Polygon I
Time: 100.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.18140E-11	0.49973E-11	0.18354E-16
2	0.51283E-11	0.14128E-10	0.51886E-16
3	0.10292E-10	0.28352E-10	0.10413E-15
4	0.17721E-10	0.48818E-10	0.17929E-15
5	0.27902E-10	0.76866E-10	0.28231E-15
6	0.41392E-10	0.11403E-09	0.41879E-15
7	0.58810E-10	0.16201E-09	0.59502E-15
8	0.80830E-10	0.22267E-09	0.81781E-15

9	0.10816E-09	0.29797E-09	0.10944E-14
10	0.14153E-09	0.38988E-09	0.14319E-14
11	0.18160E-09	0.50029E-09	0.18374E-14
12	0.22899E-09	0.63083E-09	0.23169E-14
13	0.28411E-09	0.78268E-09	0.28746E-14
14	0.34713E-09	0.95627E-09	0.35121E-14

2/20/2001

VLEACH (Version 2.2a, 1996)

By:
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Robert S. Kerr Environmental Research Laboratory
U.S. Environmental Protection Agency
P.O. Box 1198
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Based on the original VLEACH (version 1.0)
developed by CH2M Hill, Redding, California
for USEPA Region IX

Cleanup Concentration = 0.4 mg/kg TCE

Polygon I
Time: 0.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.00000	0.00000	0.00000
2	0.00000	0.00000	0.00000
3	0.00000	0.00000	0.00000
4	0.00000	0.00000	0.00000
5	0.00000	0.00000	0.00000
6	0.18845E-01	0.51916E-01	0.19067E-06
7	0.18845E-01	0.51916E-01	0.19067E-06
8	0.94227E-02	0.25958E-01	0.95336E-07
9	0.94227E-02	0.25958E-01	0.95336E-07
10	0.35806E-03	0.98640E-03	0.36228E-08
11	0.35806E-03	0.98640E-03	0.36228E-08
12	0.00000	0.00000	0.00000
13	0.00000	0.00000	0.00000
14	0.00000	0.00000	0.00000

Polygon I
Time: 1.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.38451E-04	0.10593E-03	0.38903E-09
2	0.77789E-04	0.21430E-03	0.78704E-09
3	0.11892E-03	0.32761E-03	0.12032E-08
4	0.16280E-03	0.44849E-03	0.16472E-08
5	0.21044E-03	0.57971E-03	0.21291E-08
6	0.10866E-01	0.29934E-01	0.10994E-06
7	0.14771E-01	0.40692E-01	0.14945E-06
8	0.11008E-01	0.30325E-01	0.11137E-06
9	0.96557E-02	0.26600E-01	0.97693E-07
10	0.39814E-02	0.10968E-01	0.40282E-07
11	0.18582E-02	0.51190E-02	0.18801E-07
12	0.78487E-03	0.21622E-02	0.79410E-08
13	0.34109E-03	0.93964E-03	0.34510E-08
14	0.14302E-03	0.39400E-03	0.14471E-08

Polygon I
Time: 2.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.54501E-04	0.15014E-03	0.55142E-09
2	0.11811E-03	0.32536E-03	0.11950E-08
3	0.18744E-03	0.51637E-03	0.18965E-08

4	0.26212E-03	0.72209E-03	0.26520E-08
5	0.34300E-03	0.94490E-03	0.34703E-08
6	0.63973E-02	0.17623E-01	0.64725E-07
7	0.10824E-01	0.29817E-01	0.10951E-06
8	0.10392E-01	0.28629E-01	0.10515E-06
9	0.95109E-02	0.26201E-01	0.96228E-07
10	0.59640E-02	0.16430E-01	0.60342E-07
11	0.34323E-02	0.94554E-02	0.34727E-07
12	0.18317E-02	0.50460E-02	0.18533E-07
13	0.93919E-03	0.25873E-02	0.95024E-08
14	0.45692E-03	0.12587E-02	0.46230E-08

Polygon I
Time: 3.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.58677E-04	0.16164E-03	0.59367E-09
2	0.13425E-03	0.36983E-03	0.13583E-08
3	0.22047E-03	0.60734E-03	0.22306E-08
4	0.31500E-03	0.86778E-03	0.31871E-08
5	0.41777E-03	0.11509E-02	0.42268E-08
6	0.38865E-02	0.10706E-01	0.39322E-07
7	0.76627E-02	0.21109E-01	0.77528E-07
8	0.88448E-02	0.24366E-01	0.89488E-07
9	0.88174E-02	0.24290E-01	0.89211E-07
10	0.68061E-02	0.18750E-01	0.68862E-07
11	0.46203E-02	0.12728E-01	0.46747E-07
12	0.28691E-02	0.79039E-02	0.29029E-07
13	0.16729E-02	0.46084E-02	0.16925E-07
14	0.91640E-03	0.25245E-02	0.92718E-08

Polygon I
Time: 4.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.56805E-04	0.15649E-03	0.57473E-09
2	0.13564E-03	0.37366E-03	0.13723E-08
3	0.22961E-03	0.63253E-03	0.23231E-08
4	0.33499E-03	0.92285E-03	0.33894E-08
5	0.45055E-03	0.12412E-02	0.45585E-08
6	0.24652E-02	0.67912E-02	0.24942E-07
7	0.53437E-02	0.14721E-01	0.54065E-07
8	0.70919E-02	0.19537E-01	0.71753E-07
9	0.77466E-02	0.21341E-01	0.78377E-07
10	0.68617E-02	0.18903E-01	0.69425E-07
11	0.52953E-02	0.14588E-01	0.53576E-07
12	0.37017E-02	0.10198E-01	0.37452E-07
13	0.24004E-02	0.66128E-02	0.24287E-07
14	0.14528E-02	0.40021E-02	0.14698E-07

Polygon I
Time: 5.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.52083E-04	0.14348E-03	0.52696E-09
2	0.12862E-03	0.35432E-03	0.13013E-08
3	0.22355E-03	0.61583E-03	0.22618E-08
4	0.33264E-03	0.91636E-03	0.33655E-08
5	0.45374E-03	0.12500E-02	0.45908E-08
6	0.16490E-02	0.45426E-02	0.16684E-07
7	0.37213E-02	0.10251E-01	0.37651E-07
8	0.54852E-02	0.15111E-01	0.55498E-07
9	0.65236E-02	0.17971E-01	0.66003E-07
10	0.64178E-02	0.17680E-01	0.64933E-07

11	0.54939E-02	0.15135E-01	0.55585E-07
12	0.42365E-02	0.11671E-01	0.42863E-07
13	0.30085E-02	0.82879E-02	0.30439E-07
14	0.19846E-02	0.54671E-02	0.20079E-07

Polygon I
Time: 6.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.46250E-04	0.12741E-03	0.46794E-09
2	0.11728E-03	0.32308E-03	0.11866E-08
3	0.20851E-03	0.57440E-03	0.21096E-08
4	0.31595E-03	0.87038E-03	0.31967E-08
5	0.43699E-03	0.12038E-02	0.44213E-08
6	0.11683E-02	0.32185E-02	0.11821E-07
7	0.26156E-02	0.72055E-02	0.26464E-07
8	0.41546E-02	0.11445E-01	0.42035E-07
9	0.53214E-02	0.14660E-01	0.53840E-07
10	0.57020E-02	0.15708E-01	0.57691E-07
11	0.53230E-02	0.14664E-01	0.53856E-07
12	0.44632E-02	0.12295E-01	0.45157E-07
13	0.34308E-02	0.94513E-02	0.34712E-07
14	0.24415E-02	0.67260E-02	0.24703E-07

Polygon I
Time: 7.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.40228E-04	0.11082E-03	0.40701E-09
2	0.10416E-03	0.28696E-03	0.10539E-08
3	0.18880E-03	0.52011E-03	0.19102E-08
4	0.29085E-03	0.80124E-03	0.29427E-08
5	0.40766E-03	0.11230E-02	0.41246E-08
6	0.87401E-03	0.24077E-02	0.88430E-08
7	0.18708E-02	0.51538E-02	0.18928E-07
8	0.31150E-02	0.85812E-02	0.31516E-07
9	0.42420E-02	0.11686E-01	0.42919E-07
10	0.48808E-02	0.13446E-01	0.49382E-07
11	0.49057E-02	0.13514E-01	0.49634E-07
12	0.44237E-02	0.12187E-01	0.44758E-07
13	0.36471E-02	0.10047E-01	0.36900E-07
14	0.27773E-02	0.76509E-02	0.28100E-07

Polygon I
Time: 8.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.34489E-04	0.95012E-04	0.34895E-09
2	0.90803E-04	0.25015E-03	0.91871E-09
3	0.16730E-03	0.46088E-03	0.16927E-08
4	0.26157E-03	0.72059E-03	0.26465E-08
5	0.37127E-03	0.10228E-02	0.37564E-08
6	0.68388E-03	0.18840E-02	0.69193E-08
7	0.13692E-02	0.37719E-02	0.13853E-07
8	0.23309E-02	0.64211E-02	0.23583E-07
9	0.33290E-02	0.91707E-02	0.33681E-07
10	0.40642E-02	0.11196E-01	0.41120E-07
11	0.43527E-02	0.11991E-01	0.44039E-07
12	0.41839E-02	0.11526E-01	0.42332E-07
13	0.36717E-02	0.10115E-01	0.37149E-07
14	0.29717E-02	0.81866E-02	0.30067E-07

Polygon I
Time: 9.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.29257E-04	0.80598E-04	0.29601E-09
2	0.78060E-04	0.21504E-03	0.78979E-09
3	0.14583E-03	0.40173E-03	0.14754E-08
4	0.23103E-03	0.63646E-03	0.23375E-08
5	0.33180E-03	0.91405E-03	0.33570E-08
6	0.55291E-03	0.15232E-02	0.55941E-08
7	0.10279E-02	0.28316E-02	0.10399E-07
8	0.17516E-02	0.48253E-02	0.17722E-07
9	0.25876E-02	0.71283E-02	0.26180E-07
10	0.33160E-02	0.91350E-02	0.33550E-07
11	0.37504E-02	0.10332E-01	0.37946E-07
12	0.38137E-02	0.10506E-01	0.38585E-07
13	0.35394E-02	0.97505E-02	0.35811E-07
14	0.30274E-02	0.83399E-02	0.30630E-07

Polygon I
Time: 10.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.24616E-04	0.67812E-04	0.24905E-09
2	0.66389E-04	0.18289E-03	0.67170E-09
3	0.12549E-03	0.34570E-03	0.12696E-08
4	0.20115E-03	0.55413E-03	0.20351E-08
5	0.29204E-03	0.80450E-03	0.29547E-08
6	0.45659E-03	0.12578E-02	0.46196E-08
7	0.79106E-03	0.21792E-02	0.80037E-08
8	0.13279E-02	0.36581E-02	0.13435E-07
9	0.20023E-02	0.55160E-02	0.20259E-07
10	0.26662E-02	0.73448E-02	0.26975E-07
11	0.31586E-02	0.87014E-02	0.31958E-07
12	0.33749E-02	0.92973E-02	0.34146E-07
13	0.32938E-02	0.90737E-02	0.33325E-07
14	0.29623E-02	0.81606E-02	0.29972E-07

Polygon I
Time: 11.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.20575E-04	0.56681E-04	0.20817E-09
2	0.55983E-04	0.15422E-03	0.56641E-09
3	0.10688E-03	0.29443E-03	0.10813E-08
4	0.17310E-03	0.47685E-03	0.17513E-08
5	0.25382E-03	0.69924E-03	0.25681E-08
6	0.38161E-03	0.10513E-02	0.38610E-08
7	0.62238E-03	0.17145E-02	0.62970E-08
8	0.10184E-02	0.28056E-02	0.10304E-07
9	0.15489E-02	0.42670E-02	0.15671E-07
10	0.21224E-02	0.58467E-02	0.21473E-07
11	0.26137E-02	0.72002E-02	0.26444E-07
12	0.29163E-02	0.80339E-02	0.29506E-07
13	0.29775E-02	0.82024E-02	0.30125E-07
14	0.28031E-02	0.77220E-02	0.28361E-07

Polygon I
Time: 12.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.17105E-04	0.47122E-04	0.17306E-09
2	0.46883E-04	0.12915E-03	0.47434E-09
3	0.90267E-04	0.24867E-03	0.91329E-09
4	0.14753E-03	0.40642E-03	0.14926E-08
5	0.21831E-03	0.60140E-03	0.22087E-08
6	0.32075E-03	0.88362E-03	0.32453E-08

7	0.49848E-03	0.13732E-02	0.50435E-08
8	0.79120E-03	0.21796E-02	0.80051E-08
9	0.12016E-02	0.33103E-02	0.12158E-07
10	0.16791E-02	0.46257E-02	0.16989E-07
11	0.21339E-02	0.58786E-02	0.21590E-07
12	0.24720E-02	0.68099E-02	0.25011E-07
13	0.26276E-02	0.72386E-02	0.26585E-07
14	0.25788E-02	0.71040E-02	0.26091E-07

Polygon I
Time: 13.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.14157E-04	0.39000E-04	0.14324E-09
2	0.39040E-04	0.10755E-03	0.39499E-09
3	0.75713E-04	0.20858E-03	0.76604E-09
4	0.12474E-03	0.34362E-03	0.12620E-08
5	0.18610E-03	0.51268E-03	0.18829E-08
6	0.27000E-03	0.74381E-03	0.27318E-08
7	0.40462E-03	0.11146E-02	0.40938E-08
8	0.62251E-03	0.17149E-02	0.62983E-08
9	0.93709E-03	0.25815E-02	0.94811E-08
10	0.13246E-02	0.36489E-02	0.13401E-07
11	0.17252E-02	0.47526E-02	0.17455E-07
12	0.20633E-02	0.56841E-02	0.20876E-07
13	0.22730E-02	0.62616E-02	0.22997E-07
14	0.23165E-02	0.63814E-02	0.23437E-07

Polygon I
Time: 14.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.11674E-04	0.32159E-04	0.11811E-09
2	0.32357E-04	0.89138E-04	0.32738E-09
3	0.63142E-04	0.17395E-03	0.63885E-09
4	0.10476E-03	0.28859E-03	0.10599E-08
5	0.15746E-03	0.43378E-03	0.15932E-08
6	0.22706E-03	0.62551E-03	0.22973E-08
7	0.33146E-03	0.91312E-03	0.33536E-08
8	0.49547E-03	0.13649E-02	0.50129E-08
9	0.73562E-03	0.20265E-02	0.74427E-08
10	0.10444E-02	0.28772E-02	0.10567E-07
11	0.13852E-02	0.38161E-02	0.14015E-07
12	0.17013E-02	0.46868E-02	0.17213E-07
13	0.19339E-02	0.53275E-02	0.19566E-07
14	0.20391E-02	0.56175E-02	0.20631E-07

Polygon I
Time: 15.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.95961E-05	0.26436E-04	0.97090E-10
2	0.26714E-04	0.73592E-04	0.27028E-09
3	0.52408E-04	0.14437E-03	0.53025E-09
4	0.87485E-04	0.24100E-03	0.88514E-09
5	0.13238E-03	0.36469E-03	0.13394E-08
6	0.19050E-03	0.52479E-03	0.19274E-08
7	0.27311E-03	0.75238E-03	0.27633E-08
8	0.39822E-03	0.10970E-02	0.40291E-08
9	0.58165E-03	0.16023E-02	0.58849E-08
10	0.82486E-03	0.22723E-02	0.83456E-08
11	0.11075E-02	0.30509E-02	0.11205E-07
12	0.13897E-02	0.38284E-02	0.14060E-07
13	0.16231E-02	0.44713E-02	0.16422E-07

14	0.17644E-02	0.48607E-02	0.17852E-07

Polygon I
Time: 16.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.78684E-05	0.21676E-04	0.79610E-10
2	0.21984E-04	0.60563E-04	0.22243E-09
3	0.43326E-04	0.11936E-03	0.43836E-09
4	0.72714E-04	0.20031E-03	0.73569E-09
5	0.11069E-03	0.30493E-03	0.11199E-08
6	0.15935E-03	0.43897E-03	0.16122E-08
7	0.22575E-03	0.62191E-03	0.22841E-08
8	0.32256E-03	0.88859E-03	0.32635E-08
9	0.46322E-03	0.12761E-02	0.46867E-08
10	0.65338E-03	0.18000E-02	0.66107E-08
11	0.88347E-03	0.24338E-02	0.89386E-08
12	0.11272E-02	0.31052E-02	0.11405E-07
13	0.13472E-02	0.37113E-02	0.13630E-07
14	0.15047E-02	0.41452E-02	0.15224E-07

Polygon I
Time: 17.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.64387E-05	0.17737E-04	0.65144E-10
2	0.18045E-04	0.49710E-04	0.18257E-09
3	0.35700E-04	0.98348E-04	0.36120E-09
4	0.60196E-04	0.16583E-03	0.60905E-09
5	0.92124E-04	0.25379E-03	0.93208E-09
6	0.13286E-03	0.36601E-03	0.13443E-08
7	0.18685E-03	0.51475E-03	0.18905E-08
8	0.26279E-03	0.72395E-03	0.26588E-08
9	0.37136E-03	0.10230E-02	0.37573E-08
10	0.51956E-03	0.14313E-02	0.52567E-08
11	0.70441E-03	0.19405E-02	0.71269E-08
12	0.90977E-03	0.25063E-02	0.92047E-08
13	0.11083E-02	0.30531E-02	0.11213E-07
14	0.12676E-02	0.34921E-02	0.12825E-07

Polygon I
Time: 18.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.52603E-05	0.14491E-04	0.53222E-10
2	0.14780E-04	0.40716E-04	0.14954E-09
3	0.29338E-04	0.80820E-04	0.29683E-09
4	0.49669E-04	0.13683E-03	0.50253E-09
5	0.76372E-04	0.21039E-03	0.77271E-09
6	0.11043E-03	0.30421E-03	0.11173E-08
7	0.15467E-03	0.42609E-03	0.15649E-08
8	0.21498E-03	0.59222E-03	0.21750E-08
9	0.29945E-03	0.82493E-03	0.30297E-08
10	0.41492E-03	0.11430E-02	0.41980E-08
11	0.56208E-03	0.15484E-02	0.56870E-08
12	0.73193E-03	0.20163E-02	0.74054E-08
13	0.90545E-03	0.24944E-02	0.91611E-08
14	0.10571E-02	0.29120E-02	0.10695E-07

Polygon I
Time: 19.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.42924E-05	0.11825E-04	0.43429E-10
2	0.12086E-04	0.33294E-04	0.12228E-09

3	0.24056E-04	0.66270E-04	0.24339E-09
4	0.40870E-04	0.11259E-03	0.41350E-09
5	0.63104E-04	0.17384E-03	0.63846E-09
6	0.91511E-04	0.25210E-03	0.92588E-09
7	0.12794E-03	0.35244E-03	0.12944E-08
8	0.17632E-03	0.48574E-03	0.17840E-08
9	0.24262E-03	0.66838E-03	0.24548E-08
10	0.33279E-03	0.91678E-03	0.33671E-08
11	0.44930E-03	0.12377E-02	0.45459E-08
12	0.58784E-03	0.16194E-02	0.59475E-08
13	0.73589E-03	0.20272E-02	0.74455E-08
14	0.87414E-03	0.24081E-02	0.88443E-08

Polygon I
Time: 20.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.34995E-05	0.96406E-05	0.35407E-10
2	0.98699E-05	0.27190E-04	0.99860E-10
3	0.19691E-04	0.54245E-04	0.19923E-09
4	0.33554E-04	0.92434E-04	0.33948E-09
5	0.51997E-04	0.14324E-03	0.52608E-09
6	0.75630E-04	0.20835E-03	0.76520E-09
7	0.10570E-03	0.29118E-03	0.10694E-08
8	0.14484E-03	0.39900E-03	0.14654E-08
9	0.19733E-03	0.54360E-03	0.19965E-08
10	0.26802E-03	0.73834E-03	0.27117E-08
11	0.36000E-03	0.99173E-03	0.36423E-08
12	0.47186E-03	0.12999E-02	0.47741E-08
13	0.59585E-03	0.16415E-02	0.60286E-08
14	0.71803E-03	0.19780E-02	0.72647E-08

Polygon I
Time: 21.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.28514E-05	0.78552E-05	0.28850E-10
2	0.80527E-05	0.22184E-04	0.81475E-10
3	0.16096E-04	0.44342E-04	0.16285E-09
4	0.27497E-04	0.75750E-04	0.27821E-09
5	0.42746E-04	0.11776E-03	0.43249E-09
6	0.62356E-04	0.17178E-03	0.63090E-09
7	0.87200E-04	0.24022E-03	0.88226E-09
8	0.11906E-03	0.32798E-03	0.12046E-08
9	0.16094E-03	0.44337E-03	0.16284E-08
10	0.21665E-03	0.59683E-03	0.21920E-08
11	0.28923E-03	0.79677E-03	0.29263E-08
12	0.37891E-03	0.10438E-02	0.38337E-08
13	0.48129E-03	0.13259E-02	0.48695E-08
14	0.58668E-03	0.16162E-02	0.59359E-08

Polygon I
Time: 22.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.23225E-05	0.63981E-05	0.23498E-10
2	0.65657E-05	0.18087E-04	0.66430E-10
3	0.13144E-04	0.36209E-04	0.13299E-09
4	0.22501E-04	0.61987E-04	0.22766E-09
5	0.35074E-04	0.96623E-04	0.35487E-09
6	0.51306E-04	0.14134E-03	0.51909E-09
7	0.71834E-04	0.19789E-03	0.72679E-09
8	0.97873E-04	0.26962E-03	0.99025E-09
9	0.13153E-03	0.36235E-03	0.13308E-08

10	0.17568E-03	0.48396E-03	0.17775E-08
11	0.23302E-03	0.64192E-03	0.23576E-08
12	0.30460E-03	0.83912E-03	0.30818E-08
13	0.38821E-03	0.10695E-02	0.39278E-08
14	0.47745E-03	0.13153E-02	0.48307E-08

Polygon I
Time: 23.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.18914E-05	0.52105E-05	0.19137E-10
2	0.53510E-05	0.14741E-04	0.54139E-10
3	0.10725E-04	0.29546E-04	0.10851E-09
4	0.18392E-04	0.50668E-04	0.18609E-09
5	0.28736E-04	0.79162E-04	0.29074E-09
6	0.42139E-04	0.11608E-03	0.42635E-09
7	0.59091E-04	0.16278E-03	0.59786E-09
8	0.80435E-04	0.22158E-03	0.81381E-09
9	0.10764E-03	0.29654E-03	0.10891E-08
10	0.14283E-03	0.39346E-03	0.14451E-08
11	0.18824E-03	0.51858E-03	0.19046E-08
12	0.24524E-03	0.67560E-03	0.24813E-08
13	0.31299E-03	0.86222E-03	0.31667E-08
14	0.38744E-03	0.10673E-02	0.39200E-08

Polygon I
Time: 24.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.15403E-05	0.42432E-05	0.15584E-10
2	0.43599E-05	0.12011E-04	0.44112E-10
3	0.87469E-05	0.24096E-04	0.88498E-10
4	0.15021E-04	0.41380E-04	0.15198E-09
5	0.23514E-04	0.64777E-04	0.23791E-09
6	0.34558E-04	0.95202E-04	0.34965E-09
7	0.48542E-04	0.13372E-03	0.49113E-09
8	0.66067E-04	0.18200E-03	0.66844E-09
9	0.88160E-04	0.24287E-03	0.89197E-09
10	0.11636E-03	0.32054E-03	0.11773E-08
11	0.15245E-03	0.41998E-03	0.15424E-08
12	0.19781E-03	0.54492E-03	0.20013E-08
13	0.25238E-03	0.69527E-03	0.25535E-08
14	0.31380E-03	0.86446E-03	0.31749E-08

Polygon I
Time: 25.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.12545E-05	0.34559E-05	0.12693E-10
2	0.35521E-05	0.97855E-05	0.35939E-10
3	0.71311E-05	0.19645E-04	0.72150E-10
4	0.12260E-04	0.33774E-04	0.12404E-09
5	0.19223E-04	0.52956E-04	0.19449E-09
6	0.28307E-04	0.77980E-04	0.28640E-09
7	0.39828E-04	0.10972E-03	0.40297E-09
8	0.54229E-04	0.14939E-03	0.54867E-09
9	0.72232E-04	0.19899E-03	0.73082E-09
10	0.94941E-04	0.26154E-03	0.96058E-09
11	0.12374E-03	0.34087E-03	0.12519E-08
12	0.15985E-03	0.44036E-03	0.16173E-08
13	0.20366E-03	0.56104E-03	0.20605E-08
14	0.25387E-03	0.69937E-03	0.25686E-08

Polygon I

Time: 26.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.10219E-05	0.28152E-05	0.10339E-10
2	0.28941E-05	0.79726E-05	0.29281E-10
3	0.58129E-05	0.16013E-04	0.58812E-10
4	0.10002E-04	0.27555E-04	0.10120E-09
5	0.15703E-04	0.43260E-04	0.15888E-09
6	0.23163E-04	0.63810E-04	0.23436E-09
7	0.32644E-04	0.89927E-04	0.33028E-09
8	0.44480E-04	0.12253E-03	0.45003E-09
9	0.59186E-04	0.16305E-03	0.59882E-09
10	0.77553E-04	0.21364E-03	0.78465E-09
11	0.10062E-03	0.27719E-03	0.10180E-08
12	0.12942E-03	0.35654E-03	0.13095E-08
13	0.16451E-03	0.45320E-03	0.16645E-08
14	0.20530E-03	0.56556E-03	0.20771E-08

Polygon I

Time: 27.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.83264E-06	0.22938E-05	0.84243E-11
2	0.23582E-05	0.64963E-05	0.23859E-10
3	0.47380E-05	0.13052E-04	0.47937E-10
4	0.81581E-05	0.22474E-04	0.82541E-10
5	0.12822E-04	0.35321E-04	0.12972E-09
6	0.18939E-04	0.52174E-04	0.19162E-09
7	0.26731E-04	0.73638E-04	0.27045E-09
8	0.36457E-04	0.10043E-03	0.36886E-09
9	0.48491E-04	0.13358E-03	0.49061E-09
10	0.63397E-04	0.17465E-03	0.64143E-09
11	0.81946E-04	0.22575E-03	0.82910E-09
12	0.10497E-03	0.28919E-03	0.10621E-08
13	0.13306E-03	0.36655E-03	0.13462E-08
14	0.16603E-03	0.45739E-03	0.16799E-08

Polygon I

Time: 28.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.67860E-06	0.18694E-05	0.68658E-11
2	0.19218E-05	0.52943E-05	0.19445E-10
3	0.38620E-05	0.10639E-04	0.39075E-10
4	0.66529E-05	0.18328E-04	0.67312E-10
5	0.10465E-04	0.28828E-04	0.10588E-09
6	0.15476E-04	0.42633E-04	0.15658E-09
7	0.21872E-04	0.60253E-04	0.22129E-09
8	0.29860E-04	0.82260E-04	0.30212E-09
9	0.39718E-04	0.10942E-03	0.40185E-09
10	0.51850E-04	0.14284E-03	0.52459E-09
11	0.66819E-04	0.18407E-03	0.67605E-09
12	0.85280E-04	0.23493E-03	0.86284E-09
13	0.10777E-03	0.29688E-03	0.10903E-08
14	0.13434E-03	0.37008E-03	0.13592E-08

Polygon I

Time: 29.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.55321E-06	0.15240E-05	0.55971E-11
2	0.15666E-05	0.43156E-05	0.15850E-10
3	0.31483E-05	0.86731E-05	0.31854E-10
4	0.54252E-05	0.14945E-04	0.54890E-10
5	0.85388E-05	0.23523E-04	0.86393E-10

6	0.12640E-04	0.34821E-04	0.12789E-09
7	0.17885E-04	0.49270E-04	0.18095E-09
8	0.24442E-04	0.67334E-04	0.24730E-09
9	0.32521E-04	0.89590E-04	0.32904E-09
10	0.42415E-04	0.11685E-03	0.42914E-09
11	0.54535E-04	0.15023E-03	0.55176E-09
12	0.69378E-04	0.19112E-03	0.70194E-09
13	0.87402E-04	0.24078E-03	0.88430E-09
14	0.10878E-03	0.29966E-03	0.11006E-08

Polygon I
Time: 30.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.45110E-06	0.12427E-05	0.45641E-11
2	0.12772E-05	0.35186E-05	0.12923E-10
3	0.25669E-05	0.70712E-05	0.25971E-10
4	0.44241E-05	0.12188E-04	0.44761E-10
5	0.69664E-05	0.19191E-04	0.70484E-10
6	0.10320E-04	0.28431E-04	0.10442E-09
7	0.14617E-04	0.40268E-04	0.14789E-09
8	0.19996E-04	0.55086E-04	0.20231E-09
9	0.26619E-04	0.73330E-04	0.26932E-09
10	0.34700E-04	0.95594E-04	0.35109E-09
11	0.44539E-04	0.12270E-03	0.45063E-09
12	0.56507E-04	0.15567E-03	0.57171E-09
13	0.70978E-04	0.19553E-03	0.71813E-09
14	0.88160E-04	0.24286E-03	0.89197E-09

Polygon I
Time: 31.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.36794E-06	0.10136E-05	0.37226E-11
2	0.10416E-05	0.28694E-05	0.10538E-10
3	0.20931E-05	0.57662E-05	0.21178E-10
4	0.36079E-05	0.99392E-05	0.36504E-10
5	0.56831E-05	0.15656E-04	0.57500E-10
6	0.84244E-05	0.23208E-04	0.85235E-10
7	0.11942E-04	0.32898E-04	0.12083E-09
8	0.16351E-04	0.45044E-04	0.16543E-09
9	0.21779E-04	0.59998E-04	0.22036E-09
10	0.28387E-04	0.78202E-04	0.28721E-09
11	0.36391E-04	0.10025E-03	0.36820E-09
12	0.46067E-04	0.12691E-03	0.46609E-09
13	0.57710E-04	0.15898E-03	0.58389E-09
14	0.71522E-04	0.19703E-03	0.72363E-09

Polygon I
Time: 32.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.30017E-06	0.82692E-06	0.30370E-11
2	0.84959E-06	0.23405E-05	0.85959E-11
3	0.17071E-05	0.47028E-05	0.17272E-10
4	0.29427E-05	0.81065E-05	0.29773E-10
5	0.46362E-05	0.12772E-04	0.46908E-10
6	0.68756E-05	0.18941E-04	0.69565E-10
7	0.97534E-05	0.26869E-04	0.98681E-10
8	0.13365E-04	0.36818E-04	0.13522E-09
9	0.17813E-04	0.49073E-04	0.18023E-09
10	0.23220E-04	0.63967E-04	0.23493E-09
11	0.29743E-04	0.81937E-04	0.30093E-09
12	0.37585E-04	0.10354E-03	0.38027E-09

13	0.46972E-04	0.12940E-03	0.47524E-09
14	0.58083E-04	0.16001E-03	0.58766E-09

Polygon I
Time: 33.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.24493E-06	0.67475E-06	0.24782E-11
2	0.69313E-06	0.19094E-05	0.70128E-11
3	0.13926E-05	0.38362E-05	0.14089E-10
4	0.24004E-05	0.66125E-05	0.24286E-10
5	0.37823E-05	0.10420E-04	0.38268E-10
6	0.56111E-05	0.15458E-04	0.56771E-10
7	0.79641E-05	0.21940E-04	0.80578E-10
8	0.10921E-04	0.30085E-04	0.11049E-09
9	0.14565E-04	0.40123E-04	0.14736E-09
10	0.18990E-04	0.52314E-04	0.19213E-09
11	0.24313E-04	0.66978E-04	0.24599E-09
12	0.30682E-04	0.84523E-04	0.31043E-09
13	0.38266E-04	0.10542E-03	0.38716E-09
14	0.47215E-04	0.13007E-03	0.47771E-09

Polygon I
Time: 34.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.19990E-06	0.55068E-06	0.20225E-11
2	0.56558E-06	0.15581E-05	0.57224E-11
3	0.11361E-05	0.31299E-05	0.11495E-10
4	0.19582E-05	0.53946E-05	0.19813E-10
5	0.30858E-05	0.85009E-05	0.31221E-10
6	0.45790E-05	0.12614E-04	0.46328E-10
7	0.65020E-05	0.17912E-04	0.65785E-10
8	0.89212E-05	0.24576E-04	0.90262E-10
9	0.11905E-04	0.32796E-04	0.12045E-09
10	0.15527E-04	0.42775E-04	0.15710E-09
11	0.19875E-04	0.54753E-04	0.20109E-09
12	0.25057E-04	0.69027E-04	0.25352E-09
13	0.31198E-04	0.85944E-04	0.31565E-09
14	0.38416E-04	0.10583E-03	0.38868E-09

Polygon I
Time: 35.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.16317E-06	0.44949E-06	0.16508E-11
2	0.46158E-06	0.12716E-05	0.46701E-11
3	0.92708E-06	0.25540E-05	0.93799E-11
4	0.15978E-05	0.44016E-05	0.16166E-10
5	0.25178E-05	0.69361E-05	0.25474E-10
6	0.37367E-05	0.10294E-04	0.37806E-10
7	0.53077E-05	0.14622E-04	0.53702E-10
8	0.72863E-05	0.20072E-04	0.73720E-10
9	0.97286E-05	0.26801E-04	0.98431E-10
10	0.12694E-04	0.34969E-04	0.12843E-09
11	0.16247E-04	0.44759E-04	0.16439E-09
12	0.20469E-04	0.56388E-04	0.20710E-09
13	0.25450E-04	0.70112E-04	0.25750E-09
14	0.31283E-04	0.86179E-04	0.31651E-09

Polygon I
Time: 36.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.13320E-06	0.36694E-06	0.13477E-11

2	0.37675E-06	0.10379E-05	0.38118E-11
3	0.75660E-06	0.20843E-05	0.76550E-11
4	0.13038E-05	0.35918E-05	0.13192E-10
5	0.20545E-05	0.56598E-05	0.20787E-10
6	0.30494E-05	0.84006E-05	0.30853E-10
7	0.43326E-05	0.11935E-04	0.43835E-10
8	0.59500E-05	0.16391E-04	0.60200E-10
9	0.79483E-05	0.21896E-04	0.80418E-10
10	0.10375E-04	0.28581E-04	0.10497E-09
11	0.13281E-04	0.36586E-04	0.13437E-09
12	0.16724E-04	0.46072E-04	0.16921E-09
13	0.20772E-04	0.57223E-04	0.21016E-09
14	0.25492E-04	0.70226E-04	0.25792E-09

Polygon I
Time: 37.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.10875E-06	0.29958E-06	0.11003E-11
2	0.30755E-06	0.84724E-06	0.31116E-11
3	0.61754E-06	0.17012E-05	0.62481E-11
4	0.10641E-05	0.29313E-05	0.10766E-10
5	0.16766E-05	0.46188E-05	0.16964E-10
6	0.24886E-05	0.68557E-05	0.25179E-10
7	0.35364E-05	0.97423E-05	0.35781E-10
8	0.48582E-05	0.13384E-04	0.49154E-10
9	0.64926E-05	0.17886E-04	0.65690E-10
10	0.84782E-05	0.23356E-04	0.85779E-10
11	0.10855E-04	0.29903E-04	0.10982E-09
12	0.13666E-04	0.37646E-04	0.13826E-09
13	0.16959E-04	0.46720E-04	0.17159E-09
14	0.20786E-04	0.57261E-04	0.21030E-09

Polygon I
Time: 38.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.88789E-07	0.24460E-06	0.89833E-12
2	0.25108E-06	0.69167E-06	0.25403E-11
3	0.50410E-06	0.13887E-05	0.51003E-11
4	0.86849E-06	0.23925E-05	0.87871E-11
5	0.13684E-05	0.37696E-05	0.13845E-10
6	0.20311E-05	0.55953E-05	0.20550E-10
7	0.28866E-05	0.79521E-05	0.29206E-10
8	0.39665E-05	0.10927E-04	0.40131E-10
9	0.53027E-05	0.14608E-04	0.53651E-10
10	0.69270E-05	0.19083E-04	0.70085E-10
11	0.88708E-05	0.24437E-04	0.89752E-10
12	0.11167E-04	0.30763E-04	0.11298E-09
13	0.13850E-04	0.38155E-04	0.14013E-09
14	0.16956E-04	0.46712E-04	0.17156E-09

Polygon I
Time: 39.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.72498E-07	0.19972E-06	0.73351E-12
2	0.20499E-06	0.56472E-06	0.20740E-11
3	0.41153E-06	0.11337E-05	0.41637E-11
4	0.70893E-06	0.19530E-05	0.71727E-11
5	0.11169E-05	0.30768E-05	0.11300E-10
6	0.16578E-05	0.45669E-05	0.16773E-10
7	0.23562E-05	0.64909E-05	0.23839E-10
8	0.32382E-05	0.89208E-05	0.32763E-10

9	0.43304E-05	0.11930E-04	0.43814E-10
10	0.56588E-05	0.15589E-04	0.57254E-10
11	0.72486E-05	0.19969E-04	0.73339E-10
12	0.91248E-05	0.25137E-04	0.92322E-10
13	0.11313E-04	0.31165E-04	0.11446E-09
14	0.13838E-04	0.38122E-04	0.14001E-09

Polygon I
Time: 40.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.59198E-07	0.16308E-06	0.59895E-12
2	0.16737E-06	0.46109E-06	0.16934E-11
3	0.33598E-06	0.92556E-06	0.33993E-11
4	0.57873E-06	0.15943E-05	0.58554E-11
5	0.91169E-06	0.25115E-05	0.92241E-11
6	0.13531E-05	0.37277E-05	0.13691E-10
7	0.19233E-05	0.52983E-05	0.19459E-10
8	0.26436E-05	0.72827E-05	0.26747E-10
9	0.35361E-05	0.97413E-05	0.35777E-10
10	0.46222E-05	0.12733E-04	0.46766E-10
11	0.59223E-05	0.16315E-04	0.59920E-10
12	0.74559E-05	0.20540E-04	0.75436E-10
13	0.92415E-05	0.25459E-04	0.93503E-10
14	0.11297E-04	0.31121E-04	0.11430E-09

Polygon I
Time: 41.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.48340E-07	0.13317E-06	0.48908E-12
2	0.13667E-06	0.37649E-06	0.13827E-11
3	0.27431E-06	0.75569E-06	0.27754E-11
4	0.47247E-06	0.13016E-05	0.47803E-11
5	0.74424E-06	0.20502E-05	0.75299E-11
6	0.11046E-05	0.30428E-05	0.11175E-10
7	0.15700E-05	0.43250E-05	0.15884E-10
8	0.21582E-05	0.59454E-05	0.21836E-10
9	0.28873E-05	0.79540E-05	0.29213E-10
10	0.37751E-05	0.10400E-04	0.38195E-10
11	0.48381E-05	0.13328E-04	0.48951E-10
12	0.60918E-05	0.16782E-04	0.61634E-10
13	0.75498E-05	0.20798E-04	0.76386E-10
14	0.92242E-05	0.25411E-04	0.93327E-10

Polygon I
Time: 42.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.39473E-07	0.10874E-06	0.39938E-12
2	0.11159E-06	0.30742E-06	0.11291E-11
3	0.22398E-06	0.61702E-06	0.22661E-11
4	0.38575E-06	0.10627E-05	0.39028E-11
5	0.60758E-06	0.16738E-05	0.61473E-11
6	0.90168E-06	0.24840E-05	0.91229E-11
7	0.12816E-05	0.35306E-05	0.12967E-10
8	0.17619E-05	0.48536E-05	0.17826E-10
9	0.23574E-05	0.64943E-05	0.23852E-10
10	0.30829E-05	0.84929E-05	0.31192E-10
11	0.39520E-05	0.10887E-04	0.39985E-10
12	0.49769E-05	0.13710E-04	0.50354E-10
13	0.61678E-05	0.16991E-04	0.62403E-10
14	0.75330E-05	0.20752E-04	0.76216E-10

Polygon I
Time: 43.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.32234E-07	0.88798E-07	0.32613E-12
2	0.91124E-07	0.25103E-06	0.92196E-12
3	0.18288E-06	0.50381E-06	0.18503E-11
4	0.31495E-06	0.86763E-06	0.31866E-11
5	0.49604E-06	0.13665E-05	0.50187E-11
6	0.73611E-06	0.20278E-05	0.74477E-11
7	0.10462E-05	0.28822E-05	0.10585E-10
8	0.14383E-05	0.39624E-05	0.14553E-10
9	0.19247E-05	0.53023E-05	0.19474E-10
10	0.25175E-05	0.69353E-05	0.25471E-10
11	0.32279E-05	0.88923E-05	0.32659E-10
12	0.40657E-05	0.11200E-04	0.41135E-10
13	0.50387E-05	0.13881E-04	0.50980E-10
14	0.61526E-05	0.16949E-04	0.62250E-10

Polygon I
Time: 44.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.26322E-07	0.72512E-07	0.26631E-12
2	0.74409E-07	0.20498E-06	0.75285E-12
3	0.14933E-06	0.41138E-06	0.15109E-11
4	0.25716E-06	0.70842E-06	0.26018E-11
5	0.40499E-06	0.11157E-05	0.40976E-11
6	0.60096E-06	0.16555E-05	0.60803E-11
7	0.85412E-06	0.23529E-05	0.86416E-11
8	0.11742E-05	0.32348E-05	0.11880E-10
9	0.15714E-05	0.43290E-05	0.15899E-10
10	0.20557E-05	0.56631E-05	0.20799E-10
11	0.26363E-05	0.72624E-05	0.26673E-10
12	0.33210E-05	0.91489E-05	0.33601E-10
13	0.41161E-05	0.11339E-04	0.41646E-10
14	0.50254E-05	0.13844E-04	0.50845E-10

Polygon I
Time: 45.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.21494E-07	0.59212E-07	0.21747E-12
2	0.60761E-07	0.16739E-06	0.61476E-12
3	0.12194E-06	0.33592E-06	0.12337E-11
4	0.20997E-06	0.57844E-06	0.21244E-11
5	0.33067E-06	0.91093E-06	0.33456E-11
6	0.49064E-06	0.13516E-05	0.49642E-11
7	0.69730E-06	0.19209E-05	0.70551E-11
8	0.95864E-06	0.26409E-05	0.96992E-11
9	0.12830E-05	0.35344E-05	0.12981E-10
10	0.16785E-05	0.46240E-05	0.16983E-10
11	0.21529E-05	0.59309E-05	0.21782E-10
12	0.27126E-05	0.74727E-05	0.27445E-10
13	0.33624E-05	0.92627E-05	0.34019E-10
14	0.41048E-05	0.11308E-04	0.41531E-10

Polygon I
Time: 46.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.17552E-07	0.48352E-07	0.17758E-12
2	0.49616E-07	0.13668E-06	0.50200E-12
3	0.99569E-07	0.27429E-06	0.10074E-11
4	0.17145E-06	0.47232E-06	0.17347E-11

5	0.26999E-06	0.74377E-06	0.27316E-11
6	0.40059E-06	0.11036E-05	0.40530E-11
7	0.56930E-06	0.15683E-05	0.57599E-11
8	0.78265E-06	0.21560E-05	0.79185E-11
9	0.10475E-05	0.28856E-05	0.10598E-10
10	0.13705E-05	0.37755E-05	0.13866E-10
11	0.17581E-05	0.48432E-05	0.17788E-10
12	0.22155E-05	0.61032E-05	0.22415E-10
13	0.27465E-05	0.75660E-05	0.27788E-10
14	0.33529E-05	0.92367E-05	0.33924E-10

Polygon I
Time: 47.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.14332E-07	0.39483E-07	0.14501E-12
2	0.40515E-07	0.11161E-06	0.40992E-12
3	0.81304E-07	0.22398E-06	0.82261E-12
4	0.14000E-06	0.38567E-06	0.14164E-11
5	0.22045E-06	0.60730E-06	0.22304E-11
6	0.32707E-06	0.90103E-06	0.33092E-11
7	0.46480E-06	0.12804E-05	0.47027E-11
8	0.63897E-06	0.17603E-05	0.64649E-11
9	0.85519E-06	0.23559E-05	0.86525E-11
10	0.11190E-05	0.30827E-05	0.11322E-10
11	0.14356E-05	0.39549E-05	0.14525E-10
12	0.18093E-05	0.49844E-05	0.18306E-10
13	0.22433E-05	0.61798E-05	0.22697E-10
14	0.27387E-05	0.75446E-05	0.27709E-10

Polygon I
Time: 48.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.11703E-07	0.32240E-07	0.11841E-12
2	0.33083E-07	0.91139E-07	0.33473E-12
3	0.66390E-07	0.18289E-06	0.67171E-12
4	0.11431E-06	0.31491E-06	0.11566E-11
5	0.18000E-06	0.49587E-06	0.18212E-11
6	0.26705E-06	0.73568E-06	0.27020E-11
7	0.37949E-06	0.10454E-05	0.38396E-11
8	0.52169E-06	0.14372E-05	0.52782E-11
9	0.69821E-06	0.19235E-05	0.70643E-11
10	0.91365E-06	0.25169E-05	0.92439E-11
11	0.11722E-05	0.32293E-05	0.11860E-10
12	0.14776E-05	0.40705E-05	0.14950E-10
13	0.18322E-05	0.50473E-05	0.18537E-10
14	0.22369E-05	0.61623E-05	0.22632E-10

Polygon I
Time: 49.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.95564E-08	0.26326E-07	0.96688E-13
2	0.27015E-07	0.74420E-07	0.27332E-12
3	0.54211E-07	0.14934E-06	0.54849E-12
4	0.93343E-07	0.25714E-06	0.94441E-12
5	0.14698E-06	0.40489E-06	0.14871E-11
6	0.21805E-06	0.60069E-06	0.22062E-11
7	0.30985E-06	0.85357E-06	0.31349E-11
8	0.42594E-06	0.11734E-05	0.43095E-11
9	0.57006E-06	0.15704E-05	0.57677E-11
10	0.74597E-06	0.20550E-05	0.75474E-11
11	0.95716E-06	0.26368E-05	0.96843E-11

12	0.12066E-05	0.33240E-05	0.12208E-10
13	0.14963E-05	0.41221E-05	0.15139E-10
14	0.18270E-05	0.50331E-05	0.18485E-10

Polygon I
Time: 50.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.78033E-08	0.21497E-07	0.78951E-13
2	0.22059E-07	0.60769E-07	0.22319E-12
3	0.44267E-07	0.12195E-06	0.44788E-12
4	0.76219E-07	0.20997E-06	0.77116E-12
5	0.12001E-06	0.33061E-06	0.12142E-11
6	0.17804E-06	0.49047E-06	0.18014E-11
7	0.25299E-06	0.69694E-06	0.25596E-11
8	0.34776E-06	0.95803E-06	0.35185E-11
9	0.46543E-06	0.12822E-05	0.47091E-11
10	0.60906E-06	0.16778E-05	0.61622E-11
11	0.78153E-06	0.21530E-05	0.79073E-11
12	0.98529E-06	0.27143E-05	0.99688E-11
13	0.12220E-05	0.33664E-05	0.12364E-10
14	0.14922E-05	0.41107E-05	0.15097E-10

Polygon I
Time: 51.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.63718E-08	0.17553E-07	0.64467E-13
2	0.18012E-07	0.49621E-07	0.18224E-12
3	0.36146E-07	0.99576E-07	0.36571E-12
4	0.62237E-07	0.17145E-06	0.62969E-12
5	0.97994E-07	0.26996E-06	0.99147E-12
6	0.14538E-06	0.40048E-06	0.14709E-11
7	0.20657E-06	0.56905E-06	0.20900E-11
8	0.28394E-06	0.78221E-06	0.28728E-11
9	0.38001E-06	0.10469E-05	0.38448E-11
10	0.49728E-06	0.13699E-05	0.50313E-11
11	0.63812E-06	0.17579E-05	0.64563E-11
12	0.80454E-06	0.22164E-05	0.81401E-11
13	0.99791E-06	0.27491E-05	0.10096E-10
14	0.12187E-05	0.33572E-05	0.12330E-10

Polygon I
Time: 52.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.52028E-08	0.14333E-07	0.52640E-13
2	0.14708E-07	0.40518E-07	0.14881E-12
3	0.29515E-07	0.81309E-07	0.29862E-12
4	0.50819E-07	0.14000E-06	0.51417E-12
5	0.80016E-07	0.22043E-06	0.80958E-12
6	0.11870E-06	0.32701E-06	0.12010E-11
7	0.16866E-06	0.46463E-06	0.17065E-11
8	0.23184E-06	0.63867E-06	0.23456E-11
9	0.31027E-06	0.85473E-06	0.31392E-11
10	0.40602E-06	0.11185E-05	0.41079E-11
11	0.52102E-06	0.14353E-05	0.52715E-11
12	0.65694E-06	0.18097E-05	0.66467E-11
13	0.81489E-06	0.22449E-05	0.82448E-11
14	0.99523E-06	0.27417E-05	0.10069E-10

Polygon I
Time: 53.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)

1	0.42483E-08	0.11703E-07	0.42983E-13
2	0.12010E-07	0.33084E-07	0.12151E-12
3	0.24100E-07	0.66392E-07	0.24384E-12
4	0.41496E-07	0.11431E-06	0.41984E-12
5	0.65336E-07	0.17999E-06	0.66105E-12
6	0.96924E-07	0.26701E-06	0.98065E-12
7	0.13772E-06	0.37938E-06	0.13934E-11
8	0.18929E-06	0.52147E-06	0.19152E-11
9	0.25333E-06	0.69788E-06	0.25631E-11
10	0.33150E-06	0.91323E-06	0.33540E-11
11	0.42541E-06	0.11719E-05	0.43041E-11
12	0.53640E-06	0.14777E-05	0.54271E-11
13	0.66542E-06	0.18331E-05	0.67325E-11
14	0.81274E-06	0.22390E-05	0.82230E-11

Polygon I
Time: 54.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.34689E-08	0.95561E-08	0.35097E-13
2	0.98062E-08	0.27014E-07	0.99216E-13
3	0.19679E-07	0.54212E-07	0.19910E-12
4	0.33883E-07	0.93342E-07	0.34282E-12
5	0.53350E-07	0.14697E-06	0.53977E-12
6	0.79142E-07	0.21802E-06	0.80073E-12
7	0.11245E-06	0.30977E-06	0.11377E-11
8	0.15456E-06	0.42578E-06	0.15638E-11
9	0.20684E-06	0.56981E-06	0.20927E-11
10	0.27067E-06	0.74564E-06	0.27385E-11
11	0.34734E-06	0.95687E-06	0.35143E-11
12	0.43798E-06	0.12066E-05	0.44313E-11
13	0.54335E-06	0.14968E-05	0.54974E-11
14	0.66369E-06	0.18284E-05	0.67150E-11

Polygon I
Time: 55.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.28324E-08	0.78028E-08	0.28657E-13
2	0.80071E-08	0.22058E-07	0.81013E-13
3	0.16068E-07	0.44266E-07	0.16257E-12
4	0.27667E-07	0.76217E-07	0.27992E-12
5	0.43562E-07	0.12001E-06	0.44074E-12
6	0.64622E-07	0.17802E-06	0.65382E-12
7	0.91816E-07	0.25294E-06	0.92896E-12
8	0.12620E-06	0.34766E-06	0.12768E-11
9	0.16889E-06	0.46525E-06	0.17087E-11
10	0.22100E-06	0.60881E-06	0.22360E-11
11	0.28360E-06	0.78127E-06	0.28694E-11
12	0.35761E-06	0.98516E-06	0.36182E-11
13	0.44367E-06	0.12222E-05	0.44889E-11
14	0.54196E-06	0.14930E-05	0.54834E-11

Polygon I
Time: 56.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.23127E-08	0.63712E-08	0.23399E-13
2	0.65380E-08	0.18011E-07	0.66149E-13
3	0.13120E-07	0.36144E-07	0.13275E-12
4	0.22591E-07	0.62234E-07	0.22857E-12
5	0.35570E-07	0.97988E-07	0.35988E-12
6	0.52766E-07	0.14536E-06	0.53386E-12
7	0.74970E-07	0.20653E-06	0.75852E-12

8	0.10304E-06	0.28387E-06	0.10426E-11
9	0.13790E-06	0.37988E-06	0.13952E-11
10	0.18044E-06	0.49709E-06	0.18257E-11
11	0.23156E-06	0.63790E-06	0.23428E-11
12	0.29199E-06	0.80439E-06	0.29543E-11
13	0.36227E-06	0.99798E-06	0.36653E-11
14	0.44255E-06	0.12191E-05	0.44776E-11

Polygon I
Time: 57.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.18884E-08	0.52022E-08	0.19106E-13
2	0.53384E-08	0.14706E-07	0.54012E-13
3	0.10713E-07	0.29513E-07	0.10839E-12
4	0.18446E-07	0.50816E-07	0.18663E-12
5	0.29044E-07	0.80011E-07	0.29386E-12
6	0.43085E-07	0.11869E-06	0.43592E-12
7	0.61215E-07	0.16864E-06	0.61935E-12
8	0.84137E-07	0.23178E-06	0.85127E-12
9	0.11259E-06	0.31017E-06	0.11392E-11
10	0.14733E-06	0.40587E-06	0.14906E-11
11	0.18907E-06	0.52084E-06	0.19129E-11
12	0.23841E-06	0.65678E-06	0.24122E-11
13	0.29580E-06	0.81487E-06	0.29928E-11
14	0.36137E-06	0.99550E-06	0.36562E-11

Polygon I
Time: 58.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.15419E-08	0.42477E-08	0.15601E-13
2	0.43590E-08	0.12008E-07	0.44102E-13
3	0.87476E-08	0.24098E-07	0.88505E-13
4	0.15062E-07	0.41493E-07	0.15239E-12
5	0.23715E-07	0.65331E-07	0.23994E-12
6	0.35180E-07	0.96915E-07	0.35594E-12
7	0.49984E-07	0.13770E-06	0.50572E-12
8	0.68700E-07	0.18925E-06	0.69508E-12
9	0.91933E-07	0.25326E-06	0.93015E-12
10	0.12030E-06	0.33139E-06	0.12171E-11
11	0.15437E-06	0.42527E-06	0.15619E-11
12	0.19466E-06	0.53626E-06	0.19695E-11
13	0.24152E-06	0.66535E-06	0.24437E-11
14	0.29507E-06	0.81287E-06	0.29854E-11

Polygon I
Time: 59.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.12590E-08	0.34683E-08	0.12738E-13
2	0.35592E-08	0.98049E-08	0.36010E-13
3	0.71426E-08	0.19677E-07	0.72266E-13
4	0.12298E-07	0.33880E-07	0.12443E-12
5	0.19364E-07	0.53345E-07	0.19592E-12
6	0.28725E-07	0.79133E-07	0.29063E-12
7	0.40813E-07	0.11243E-06	0.41293E-12
8	0.56095E-07	0.15453E-06	0.56755E-12
9	0.75064E-07	0.20679E-06	0.75948E-12
10	0.98222E-07	0.27058E-06	0.99378E-12
11	0.12604E-06	0.34723E-06	0.12753E-11
12	0.15894E-06	0.43786E-06	0.16081E-11
13	0.19721E-06	0.54327E-06	0.19953E-11
14	0.24093E-06	0.66373E-06	0.24377E-11

Polygon I
Time: 60.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.10280E-08	0.28319E-08	0.10401E-13
2	0.29061E-08	0.80059E-08	0.29403E-13
3	0.58321E-08	0.16066E-07	0.59007E-13
4	0.10042E-07	0.27664E-07	0.10160E-12
5	0.15811E-07	0.43557E-07	0.15997E-12
6	0.23455E-07	0.64615E-07	0.23731E-12
7	0.33325E-07	0.91804E-07	0.33717E-12
8	0.45802E-07	0.12618E-06	0.46341E-12
9	0.61291E-07	0.16885E-06	0.62012E-12
10	0.80199E-07	0.22093E-06	0.81143E-12
11	0.10292E-06	0.28351E-06	0.10413E-11
12	0.12978E-06	0.35751E-06	0.13130E-11
13	0.16102E-06	0.44358E-06	0.16291E-11
14	0.19673E-06	0.54195E-06	0.19904E-11

Polygon I
Time: 61.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.83937E-09	0.23123E-08	0.84925E-14
2	0.23729E-08	0.65369E-08	0.24008E-13
3	0.47620E-08	0.13118E-07	0.48180E-13
4	0.81994E-08	0.22588E-07	0.82959E-13
5	0.12910E-07	0.35566E-07	0.13062E-12
6	0.19152E-07	0.52759E-07	0.19377E-12
7	0.27210E-07	0.74960E-07	0.27531E-12
8	0.37399E-07	0.10303E-06	0.37839E-12
9	0.50045E-07	0.13787E-06	0.50634E-12
10	0.65484E-07	0.18040E-06	0.66254E-12
11	0.84031E-07	0.23149E-06	0.85019E-12
12	0.10596E-06	0.29191E-06	0.10721E-11
13	0.13147E-06	0.36219E-06	0.13302E-11
14	0.16063E-06	0.44251E-06	0.16252E-11

Polygon I
Time: 62.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.68536E-09	0.18880E-08	0.69342E-14
2	0.19375E-08	0.53375E-08	0.19603E-13
3	0.38883E-08	0.10711E-07	0.39340E-13
4	0.66950E-08	0.18444E-07	0.67738E-13
5	0.10542E-07	0.29040E-07	0.10666E-12
6	0.15638E-07	0.43079E-07	0.15822E-12
7	0.22218E-07	0.61207E-07	0.22479E-12
8	0.30537E-07	0.84124E-07	0.30896E-12
9	0.40863E-07	0.11257E-06	0.41344E-12
10	0.53468E-07	0.14730E-06	0.54097E-12
11	0.68612E-07	0.18901E-06	0.69419E-12
12	0.86519E-07	0.23834E-06	0.87536E-12
13	0.10735E-06	0.29573E-06	0.10861E-11
14	0.13116E-06	0.36132E-06	0.13270E-11

Polygon I
Time: 63.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.55961E-09	0.15416E-08	0.56619E-14
2	0.15820E-08	0.43582E-08	0.16006E-13
3	0.31748E-08	0.87461E-08	0.32122E-13

4	0.54666E-08	0.15060E-07	0.55309E-13
5	0.86074E-08	0.23712E-07	0.87087E-13
6	0.12769E-07	0.35175E-07	0.12919E-12
7	0.18141E-07	0.49977E-07	0.18355E-12
8	0.24934E-07	0.68689E-07	0.25227E-12
9	0.33365E-07	0.91916E-07	0.33758E-12
10	0.43658E-07	0.12027E-06	0.44171E-12
11	0.56022E-07	0.15433E-06	0.56681E-12
12	0.70643E-07	0.19461E-06	0.71474E-12
13	0.87651E-07	0.24146E-06	0.88682E-12
14	0.10709E-06	0.29502E-06	0.10835E-11

Polygon I
Time: 64.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.45693E-09	0.12588E-08	0.46230E-14
2	0.12917E-08	0.35585E-08	0.13069E-13
3	0.25923E-08	0.71413E-08	0.26228E-13
4	0.44636E-08	0.12296E-07	0.45161E-13
5	0.70281E-08	0.19361E-07	0.71108E-13
6	0.10426E-07	0.28721E-07	0.10548E-12
7	0.14813E-07	0.40807E-07	0.14987E-12
8	0.20359E-07	0.56086E-07	0.20599E-12
9	0.27244E-07	0.75051E-07	0.27564E-12
10	0.35647E-07	0.98201E-07	0.36067E-12
11	0.45743E-07	0.12601E-06	0.46281E-12
12	0.57680E-07	0.15890E-06	0.58359E-12
13	0.71567E-07	0.19716E-06	0.72409E-12
14	0.87442E-07	0.24089E-06	0.88471E-12

Polygon I
Time: 65.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.37309E-09	0.10278E-08	0.37748E-14
2	0.10547E-08	0.29056E-08	0.10671E-13
3	0.21167E-08	0.58310E-08	0.21416E-13
4	0.36446E-08	0.10040E-07	0.36875E-13
5	0.57386E-08	0.15809E-07	0.58061E-13
6	0.85129E-08	0.23452E-07	0.86131E-13
7	0.12095E-07	0.33320E-07	0.12237E-12
8	0.16624E-07	0.45795E-07	0.16819E-12
9	0.22245E-07	0.61281E-07	0.22507E-12
10	0.29107E-07	0.80183E-07	0.29449E-12
11	0.37350E-07	0.10289E-06	0.37789E-12
12	0.47097E-07	0.12974E-06	0.47651E-12
13	0.58435E-07	0.16098E-06	0.59123E-12
14	0.71397E-07	0.19669E-06	0.72237E-12

Polygon I
Time: 66.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.30463E-09	0.83921E-09	0.30822E-14
2	0.86120E-09	0.23725E-08	0.87133E-14
3	0.17283E-08	0.47611E-08	0.17486E-13
4	0.29759E-08	0.81980E-08	0.30109E-13
5	0.46857E-08	0.12908E-07	0.47408E-13
6	0.69510E-08	0.19149E-07	0.70327E-13
7	0.98759E-08	0.27206E-07	0.99921E-13
8	0.13574E-07	0.37393E-07	0.13733E-12
9	0.18163E-07	0.50037E-07	0.18377E-12
10	0.23766E-07	0.65471E-07	0.24046E-12

11	0.30496E-07	0.84012E-07	0.30855E-12
12	0.38455E-07	0.10594E-06	0.38907E-12
13	0.47713E-07	0.13144E-06	0.48274E-12
14	0.58296E-07	0.16060E-06	0.58982E-12

Polygon I
Time: 67.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.24874E-09	0.68523E-09	0.25166E-14
2	0.70319E-09	0.19372E-08	0.71146E-14
3	0.14112E-08	0.38875E-08	0.14278E-13
4	0.24299E-08	0.66938E-08	0.24584E-13
5	0.38259E-08	0.10540E-07	0.38709E-13
6	0.56756E-08	0.15635E-07	0.57424E-13
7	0.80638E-08	0.22214E-07	0.81587E-13
8	0.11083E-07	0.30532E-07	0.11214E-12
9	0.14831E-07	0.40856E-07	0.15005E-12
10	0.19405E-07	0.53458E-07	0.19634E-12
11	0.24901E-07	0.68597E-07	0.25194E-12
12	0.31399E-07	0.86498E-07	0.31768E-12
13	0.38958E-07	0.10732E-06	0.39416E-12
14	0.47600E-07	0.13113E-06	0.48160E-12

Polygon I
Time: 68.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.20310E-09	0.55950E-09	0.20549E-14
2	0.57416E-09	0.15817E-08	0.58092E-14
3	0.11523E-08	0.31742E-08	0.11658E-13
4	0.19840E-08	0.54656E-08	0.20074E-13
5	0.31239E-08	0.86059E-08	0.31607E-13
6	0.46342E-08	0.12766E-07	0.46887E-13
7	0.65843E-08	0.18139E-07	0.66618E-13
8	0.90496E-08	0.24930E-07	0.91561E-13
9	0.12110E-07	0.33360E-07	0.12252E-12
10	0.15845E-07	0.43650E-07	0.16031E-12
11	0.20332E-07	0.56011E-07	0.20571E-12
12	0.25638E-07	0.70627E-07	0.25939E-12
13	0.31810E-07	0.87630E-07	0.32184E-12
14	0.38865E-07	0.10707E-06	0.39323E-12

Polygon I
Time: 69.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.16583E-09	0.45684E-09	0.16778E-14
2	0.46881E-09	0.12915E-08	0.47433E-14
3	0.94083E-09	0.25918E-08	0.95190E-14
4	0.16200E-08	0.44628E-08	0.16390E-13
5	0.25507E-08	0.70269E-08	0.25808E-13
6	0.37839E-08	0.10424E-07	0.38284E-13
7	0.53762E-08	0.14810E-07	0.54394E-13
8	0.73892E-08	0.20356E-07	0.74761E-13
9	0.98878E-08	0.27239E-07	0.10004E-12
10	0.12938E-07	0.35641E-07	0.13090E-12
11	0.16601E-07	0.45734E-07	0.16797E-12
12	0.20934E-07	0.57668E-07	0.21180E-12
13	0.25973E-07	0.71551E-07	0.26279E-12
14	0.31734E-07	0.87422E-07	0.32107E-12

Polygon I
Time: 70.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.13541E-09	0.37302E-09	0.13700E-14
2	0.38279E-09	0.10545E-08	0.38730E-14
3	0.76820E-09	0.21163E-08	0.77724E-14
4	0.13227E-08	0.36439E-08	0.13383E-13
5	0.20827E-08	0.57375E-08	0.21072E-13
6	0.30896E-08	0.85114E-08	0.31260E-13
7	0.43898E-08	0.12093E-07	0.44414E-13
8	0.60334E-08	0.16621E-07	0.61044E-13
9	0.80736E-08	0.22241E-07	0.81685E-13
10	0.10564E-07	0.29101E-07	0.10688E-12
11	0.13555E-07	0.37343E-07	0.13715E-12
12	0.17093E-07	0.47087E-07	0.17294E-12
13	0.21207E-07	0.58422E-07	0.21457E-12
14	0.25911E-07	0.71381E-07	0.26216E-12

Polygon I
Time: 71.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.11056E-09	0.30458E-09	0.11186E-14
2	0.31256E-09	0.86104E-09	0.31623E-14
3	0.62725E-09	0.17280E-08	0.63463E-14
4	0.10800E-08	0.29753E-08	0.10927E-13
5	0.17006E-08	0.46848E-08	0.17206E-13
6	0.25227E-08	0.69497E-08	0.25524E-13
7	0.35843E-08	0.98742E-08	0.36265E-13
8	0.49264E-08	0.13571E-07	0.49843E-13
9	0.65922E-08	0.18160E-07	0.66698E-13
10	0.86256E-08	0.23762E-07	0.87270E-13
11	0.11068E-07	0.30491E-07	0.11198E-12
12	0.13956E-07	0.38447E-07	0.14121E-12
13	0.17316E-07	0.47703E-07	0.17520E-12
14	0.21157E-07	0.58283E-07	0.21406E-12

Polygon I
Time: 72.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.90275E-10	0.24869E-09	0.91337E-15
2	0.25521E-09	0.70305E-09	0.25821E-14
3	0.51216E-09	0.14109E-08	0.51819E-14
4	0.88187E-09	0.24294E-08	0.89225E-14
5	0.13886E-08	0.38252E-08	0.14049E-13
6	0.20599E-08	0.56746E-08	0.20841E-13
7	0.29267E-08	0.80624E-08	0.29611E-13
8	0.40225E-08	0.11081E-07	0.40698E-13
9	0.53827E-08	0.14828E-07	0.54460E-13
10	0.70429E-08	0.19402E-07	0.71258E-13
11	0.90374E-08	0.24896E-07	0.91437E-13
12	0.11396E-07	0.31393E-07	0.11530E-12
13	0.14139E-07	0.38950E-07	0.14305E-12
14	0.17275E-07	0.47589E-07	0.17478E-12

Polygon I
Time: 73.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.73711E-10	0.20306E-09	0.74578E-15
2	0.20838E-09	0.57406E-09	0.21083E-14
3	0.41819E-09	0.11520E-08	0.42311E-14
4	0.72006E-09	0.19836E-08	0.72853E-14
5	0.11338E-08	0.31234E-08	0.11471E-13
6	0.16819E-08	0.46334E-08	0.17017E-13

7	0.23897E-08	0.65831E-08	0.24178E-13
8	0.32844E-08	0.90480E-08	0.33231E-13
9	0.43951E-08	0.12108E-07	0.44468E-13
10	0.57507E-08	0.15842E-07	0.58183E-13
11	0.73792E-08	0.20328E-07	0.74660E-13
12	0.93047E-08	0.25633E-07	0.94142E-13
13	0.11545E-07	0.31803E-07	0.11680E-12
14	0.14105E-07	0.38857E-07	0.14271E-12

Polygon I
Time: 74.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.60186E-10	0.16580E-09	0.60894E-15
2	0.17015E-09	0.46873E-09	0.17215E-14
3	0.34146E-09	0.94066E-09	0.34548E-14
4	0.58794E-09	0.16197E-08	0.59486E-14
5	0.92575E-09	0.25503E-08	0.93664E-14
6	0.13733E-08	0.37832E-08	0.13895E-13
7	0.19512E-08	0.53752E-08	0.19742E-13
8	0.26818E-08	0.73879E-08	0.27134E-13
9	0.35886E-08	0.98861E-08	0.36309E-13
10	0.46955E-08	0.12935E-07	0.47508E-13
11	0.60252E-08	0.16598E-07	0.60961E-13
12	0.75975E-08	0.20930E-07	0.76868E-13
13	0.94263E-08	0.25968E-07	0.95372E-13
14	0.11517E-07	0.31727E-07	0.11653E-12

Polygon I
Time: 75.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.49143E-10	0.13538E-09	0.49721E-15
2	0.13893E-09	0.38272E-09	0.14056E-14
3	0.27881E-09	0.76806E-09	0.28209E-14
4	0.48007E-09	0.13225E-08	0.48571E-14
5	0.75589E-09	0.20823E-08	0.76478E-14
6	0.11213E-08	0.30891E-08	0.11345E-13
7	0.15932E-08	0.43890E-08	0.16119E-13
8	0.21897E-08	0.60323E-08	0.22155E-13
9	0.29302E-08	0.80722E-08	0.29647E-13
10	0.38340E-08	0.10562E-07	0.38791E-13
11	0.49197E-08	0.13553E-07	0.49776E-13
12	0.62035E-08	0.17089E-07	0.62764E-13
13	0.76968E-08	0.21203E-07	0.77873E-13
14	0.94039E-08	0.25906E-07	0.95145E-13

Polygon I
Time: 76.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.40126E-10	0.11054E-09	0.40598E-15
2	0.11344E-09	0.31250E-09	0.11477E-14
3	0.22765E-09	0.62714E-09	0.23033E-14
4	0.39198E-09	0.10798E-08	0.39659E-14
5	0.61720E-09	0.17003E-08	0.62446E-14
6	0.91559E-09	0.25223E-08	0.92636E-14
7	0.13009E-08	0.35837E-08	0.13162E-13
8	0.17880E-08	0.49255E-08	0.18090E-13
9	0.23926E-08	0.65911E-08	0.24207E-13
10	0.31305E-08	0.86241E-08	0.31674E-13
11	0.40170E-08	0.11066E-07	0.40643E-13
12	0.50652E-08	0.13954E-07	0.51248E-13
13	0.62845E-08	0.17313E-07	0.63585E-13

14	0.76784E-08	0.21153E-07	0.77687E-13

Polygon I
Time: 77.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.32764E-10	0.90258E-10	0.33149E-15
2	0.92624E-10	0.25516E-09	0.93713E-15
3	0.18588E-09	0.51207E-09	0.18807E-14
4	0.32006E-09	0.88171E-09	0.32383E-14
5	0.50395E-09	0.13883E-08	0.50988E-14
6	0.74760E-09	0.20595E-08	0.75639E-14
7	0.10622E-08	0.29261E-08	0.10747E-13
8	0.14599E-08	0.40218E-08	0.14771E-13
9	0.19536E-08	0.53817E-08	0.19765E-13
10	0.25561E-08	0.70417E-08	0.25862E-13
11	0.32800E-08	0.90358E-08	0.33186E-13
12	0.41359E-08	0.11394E-07	0.41845E-13
13	0.51314E-08	0.14136E-07	0.51918E-13
14	0.62695E-08	0.17271E-07	0.63433E-13

Polygon I
Time: 78.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.26752E-10	0.73698E-10	0.27067E-15
2	0.75629E-10	0.20834E-09	0.76519E-15
3	0.15177E-09	0.41811E-09	0.15356E-14
4	0.26134E-09	0.71993E-09	0.26441E-14
5	0.41149E-09	0.11336E-08	0.41633E-14
6	0.61042E-09	0.16816E-08	0.61761E-14
7	0.86729E-09	0.23892E-08	0.87750E-14
8	0.11920E-08	0.32838E-08	0.12061E-13
9	0.15951E-08	0.43943E-08	0.16139E-13
10	0.20871E-08	0.57497E-08	0.21117E-13
11	0.26782E-08	0.73779E-08	0.27097E-13
12	0.33770E-08	0.93030E-08	0.34167E-13
13	0.41899E-08	0.11542E-07	0.42392E-13
14	0.51192E-08	0.14102E-07	0.51794E-13

Polygon I
Time: 79.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.21844E-10	0.60175E-10	0.22101E-15
2	0.61752E-10	0.17012E-09	0.62479E-15
3	0.12393E-09	0.34140E-09	0.12538E-14
4	0.21338E-09	0.58784E-09	0.21590E-14
5	0.33599E-09	0.92558E-09	0.33994E-14
6	0.49842E-09	0.13731E-08	0.50429E-14
7	0.70816E-09	0.19509E-08	0.71649E-14
8	0.97332E-09	0.26813E-08	0.98477E-14
9	0.13024E-08	0.35880E-08	0.13178E-13
10	0.17042E-08	0.46947E-08	0.17242E-13
11	0.21868E-08	0.60242E-08	0.22125E-13
12	0.27574E-08	0.75961E-08	0.27898E-13
13	0.34211E-08	0.94246E-08	0.34614E-13
14	0.41799E-08	0.11515E-07	0.42291E-13

Polygon I
Time: 80.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.17836E-10	0.49134E-10	0.18046E-15
2	0.50422E-10	0.13890E-09	0.51015E-15

3	0.10119E-09	0.27876E-09	0.10238E-14
4	0.17423E-09	0.47998E-09	0.17628E-14
5	0.27434E-09	0.75575E-09	0.27757E-14
6	0.40697E-09	0.11211E-08	0.41176E-14
7	0.57823E-09	0.15929E-08	0.58503E-14
8	0.79473E-09	0.21893E-08	0.80408E-14
9	0.10635E-08	0.29297E-08	0.10760E-13
10	0.13915E-08	0.38333E-08	0.14079E-13
11	0.17855E-08	0.49189E-08	0.18066E-13
12	0.22515E-08	0.62024E-08	0.22779E-13
13	0.27934E-08	0.76954E-08	0.28263E-13
14	0.34130E-08	0.94021E-08	0.34531E-13

Polygon I
Time: 81.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.14563E-10	0.40119E-10	0.14735E-15
2	0.41170E-10	0.11342E-09	0.41655E-15
3	0.82622E-10	0.22761E-09	0.83594E-15
4	0.14226E-09	0.39191E-09	0.14394E-14
5	0.22400E-09	0.61709E-09	0.22664E-14
6	0.33230E-09	0.91542E-09	0.33621E-14
7	0.47213E-09	0.13006E-08	0.47769E-14
8	0.64891E-09	0.17876E-08	0.65655E-14
9	0.86834E-09	0.23921E-08	0.87856E-14
10	0.11362E-08	0.31300E-08	0.11495E-13
11	0.14579E-08	0.40163E-08	0.14751E-13
12	0.18384E-08	0.50643E-08	0.18600E-13
13	0.22809E-08	0.62834E-08	0.23077E-13
14	0.27867E-08	0.76770E-08	0.28195E-13

Polygon I
Time: 82.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.11891E-10	0.32758E-10	0.12031E-15
2	0.33616E-10	0.92607E-10	0.34012E-15
3	0.67462E-10	0.18585E-09	0.68256E-15
4	0.11616E-09	0.32000E-09	0.11753E-14
5	0.18290E-09	0.50386E-09	0.18505E-14
6	0.27133E-09	0.74746E-09	0.27452E-14
7	0.38550E-09	0.10620E-08	0.39004E-14
8	0.52985E-09	0.14596E-08	0.53608E-14
9	0.70902E-09	0.19532E-08	0.71736E-14
10	0.92771E-09	0.25557E-08	0.93863E-14
11	0.11904E-08	0.32794E-08	0.12044E-13
12	0.15011E-08	0.41351E-08	0.15187E-13
13	0.18624E-08	0.51305E-08	0.18843E-13
14	0.22754E-08	0.62684E-08	0.23022E-13

Polygon I
Time: 83.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.97093E-11	0.26747E-10	0.98235E-16
2	0.27448E-10	0.75615E-10	0.27771E-15
3	0.55084E-10	0.15175E-09	0.55732E-15
4	0.94847E-10	0.26129E-09	0.95963E-15
5	0.14934E-09	0.41141E-09	0.15110E-14
6	0.22154E-09	0.61031E-09	0.22415E-14
7	0.31477E-09	0.86714E-09	0.31847E-14
8	0.43263E-09	0.11918E-08	0.43772E-14
9	0.57892E-09	0.15948E-08	0.58574E-14

10	0.75749E-09	0.20868E-08	0.76641E-14
11	0.97200E-09	0.26777E-08	0.98344E-14
12	0.12256E-08	0.33764E-08	0.12401E-13
13	0.15207E-08	0.41892E-08	0.15386E-13
14	0.18579E-08	0.51183E-08	0.18798E-13

Polygon I
Time: 84.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.79278E-11	0.21840E-10	0.80211E-16
2	0.22412E-10	0.61741E-10	0.22676E-15
3	0.44977E-10	0.12390E-09	0.45506E-15
4	0.77445E-10	0.21335E-09	0.78356E-15
5	0.12194E-09	0.33592E-09	0.12338E-14
6	0.18089E-09	0.49833E-09	0.18302E-14
7	0.25702E-09	0.70803E-09	0.26004E-14
8	0.35325E-09	0.97314E-09	0.35741E-14
9	0.47270E-09	0.13022E-08	0.47826E-14
10	0.61851E-09	0.17039E-08	0.62578E-14
11	0.79366E-09	0.21864E-08	0.80300E-14
12	0.10008E-08	0.27569E-08	0.10125E-13
13	0.12417E-08	0.34205E-08	0.12563E-13
14	0.15170E-08	0.41792E-08	0.15349E-13

Polygon I
Time: 85.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.64732E-11	0.17833E-10	0.65494E-16
2	0.18300E-10	0.50413E-10	0.18515E-15
3	0.36725E-10	0.10117E-09	0.37157E-15
4	0.63235E-10	0.17420E-09	0.63979E-15
5	0.99567E-10	0.27429E-09	0.10074E-14
6	0.14770E-09	0.40690E-09	0.14944E-14
7	0.20986E-09	0.57812E-09	0.21233E-14
8	0.28844E-09	0.79459E-09	0.29183E-14
9	0.38597E-09	0.10633E-08	0.39051E-14
10	0.50502E-09	0.13912E-08	0.51096E-14
11	0.64804E-09	0.17852E-08	0.65566E-14
12	0.81713E-09	0.22511E-08	0.82675E-14
13	0.10138E-08	0.27929E-08	0.10258E-13
14	0.12387E-08	0.34124E-08	0.12533E-13

Polygon I
Time: 86.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.52855E-11	0.14561E-10	0.53477E-16
2	0.14942E-10	0.41163E-10	0.15118E-15
3	0.29986E-10	0.82607E-10	0.30339E-15
4	0.51632E-10	0.14224E-09	0.52240E-15
5	0.81298E-10	0.22396E-09	0.82254E-15
6	0.12060E-09	0.33224E-09	0.12202E-14
7	0.17135E-09	0.47205E-09	0.17337E-14
8	0.23551E-09	0.64879E-09	0.23828E-14
9	0.31515E-09	0.86818E-09	0.31886E-14
10	0.41236E-09	0.11360E-08	0.41721E-14
11	0.52913E-09	0.14577E-08	0.53536E-14
12	0.66720E-09	0.18380E-08	0.67505E-14
13	0.82781E-09	0.22805E-08	0.83755E-14
14	0.10114E-08	0.27862E-08	0.10233E-13

Polygon I

Time: 87.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.43157E-11	0.11889E-10	0.43665E-16
2	0.12201E-10	0.33610E-10	0.12344E-15
3	0.24484E-10	0.67450E-10	0.24772E-15
4	0.42159E-10	0.11614E-09	0.42655E-15
5	0.66381E-10	0.18287E-09	0.67162E-15
6	0.98474E-10	0.27128E-09	0.99633E-15
7	0.13991E-09	0.38543E-09	0.14156E-14
8	0.19230E-09	0.52975E-09	0.19456E-14
9	0.25733E-09	0.70889E-09	0.26035E-14
10	0.33670E-09	0.92754E-09	0.34066E-14
11	0.43205E-09	0.11902E-08	0.43713E-14
12	0.54478E-09	0.15008E-08	0.55119E-14
13	0.67592E-09	0.18620E-08	0.68387E-14
14	0.82583E-09	0.22750E-08	0.83555E-14

Polygon I

Time: 88.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.35238E-11	0.97076E-11	0.35653E-16
2	0.99619E-11	0.27443E-10	0.10079E-15
3	0.19992E-10	0.55074E-10	0.20227E-15
4	0.34423E-10	0.94830E-10	0.34828E-15
5	0.54202E-10	0.14932E-09	0.54839E-15
6	0.80406E-10	0.22150E-09	0.81352E-15
7	0.11424E-09	0.31471E-09	0.11559E-14
8	0.15702E-09	0.43255E-09	0.15886E-14
9	0.21011E-09	0.57882E-09	0.21258E-14
10	0.27492E-09	0.75736E-09	0.27815E-14
11	0.35277E-09	0.97183E-09	0.35692E-14
12	0.44483E-09	0.12254E-08	0.45006E-14
13	0.55190E-09	0.15204E-08	0.55840E-14
14	0.67431E-09	0.18576E-08	0.68224E-14

Polygon I

Time: 89.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.28773E-11	0.79264E-11	0.29111E-16
2	0.81341E-11	0.22408E-10	0.82298E-16
3	0.16324E-10	0.44969E-10	0.16516E-15
4	0.28107E-10	0.77431E-10	0.28438E-15
5	0.44256E-10	0.12192E-09	0.44777E-15
6	0.65653E-10	0.18086E-09	0.66425E-15
7	0.93280E-10	0.25697E-09	0.94377E-15
8	0.12821E-09	0.35319E-09	0.12971E-14
9	0.17156E-09	0.47262E-09	0.17358E-14
10	0.22448E-09	0.61840E-09	0.22712E-14
11	0.28805E-09	0.79352E-09	0.29143E-14
12	0.36321E-09	0.10006E-08	0.36748E-14
13	0.45064E-09	0.12414E-08	0.45594E-14
14	0.55058E-09	0.15168E-08	0.55706E-14

Polygon I

Time: 90.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.23494E-11	0.64720E-11	0.23770E-16
2	0.66416E-11	0.18297E-10	0.67198E-16
3	0.13329E-10	0.36718E-10	0.13485E-15
4	0.22950E-10	0.63223E-10	0.23220E-15
5	0.36136E-10	0.99549E-10	0.36561E-15

6	0.53607E-10	0.14768E-09	0.54237E-15
7	0.76165E-10	0.20982E-09	0.77061E-15
8	0.10468E-09	0.28838E-09	0.10591E-14
9	0.14008E-09	0.38590E-09	0.14173E-14
10	0.18329E-09	0.50493E-09	0.18545E-14
11	0.23519E-09	0.64792E-09	0.23796E-14
12	0.29657E-09	0.81699E-09	0.30005E-14
13	0.36795E-09	0.10136E-08	0.37228E-14
14	0.44956E-09	0.12385E-08	0.45485E-14

Polygon I
Time: 91.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.19183E-11	0.52845E-11	0.19409E-16
2	0.54230E-11	0.14939E-10	0.54868E-16
3	0.10883E-10	0.29981E-10	0.11011E-15
4	0.18739E-10	0.51623E-10	0.18960E-15
5	0.29506E-10	0.81283E-10	0.29853E-15
6	0.43771E-10	0.12058E-09	0.44286E-15
7	0.62190E-10	0.17132E-09	0.62921E-15
8	0.85476E-10	0.23547E-09	0.86481E-15
9	0.11438E-09	0.31509E-09	0.11572E-14
10	0.14966E-09	0.41228E-09	0.15142E-14
11	0.19204E-09	0.52904E-09	0.19430E-14
12	0.24215E-09	0.66708E-09	0.24500E-14
13	0.30044E-09	0.82766E-09	0.30398E-14
14	0.36708E-09	0.10112E-08	0.37139E-14

Polygon I
Time: 92.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.15663E-11	0.43149E-11	0.15847E-16
2	0.44280E-11	0.12198E-10	0.44801E-16
3	0.88862E-11	0.24480E-10	0.89908E-16
4	0.15301E-10	0.42151E-10	0.15481E-15
5	0.24092E-10	0.66369E-10	0.24375E-15
6	0.35740E-10	0.98456E-10	0.36160E-15
7	0.50779E-10	0.13989E-09	0.51376E-15
8	0.69792E-10	0.19227E-09	0.70613E-15
9	0.93393E-10	0.25728E-09	0.94491E-15
10	0.12220E-09	0.33664E-09	0.12364E-14
11	0.15680E-09	0.43197E-09	0.15865E-14
12	0.19772E-09	0.54469E-09	0.20005E-14
13	0.24532E-09	0.67580E-09	0.24820E-14
14	0.29972E-09	0.82568E-09	0.30325E-14

Polygon I
Time: 93.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.12789E-11	0.35232E-11	0.12940E-16
2	0.36155E-11	0.99601E-11	0.36581E-16
3	0.72558E-11	0.19988E-10	0.73411E-16
4	0.12493E-10	0.34417E-10	0.12640E-15
5	0.19672E-10	0.54192E-10	0.19903E-15
6	0.29182E-10	0.80391E-10	0.29525E-15
7	0.41462E-10	0.11422E-09	0.41950E-15
8	0.56987E-10	0.15699E-09	0.57657E-15
9	0.76257E-10	0.21007E-09	0.77154E-15
10	0.99778E-10	0.27487E-09	0.10095E-14
11	0.12803E-09	0.35271E-09	0.12954E-14
12	0.16144E-09	0.44475E-09	0.16334E-14

13	0.20030E-09	0.55180E-09	0.20266E-14
14	0.24473E-09	0.67419E-09	0.24761E-14

Polygon I
Time: 94.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.10443E-11	0.28768E-11	0.10566E-16
2	0.29521E-11	0.81326E-11	0.29869E-16
3	0.59245E-11	0.16321E-10	0.59942E-16
4	0.10201E-10	0.28102E-10	0.10321E-15
5	0.16062E-10	0.44249E-10	0.16251E-15
6	0.23828E-10	0.65641E-10	0.24108E-15
7	0.33854E-10	0.93263E-10	0.34253E-15
8	0.46531E-10	0.12818E-09	0.47078E-15
9	0.62265E-10	0.17153E-09	0.62997E-15
10	0.81471E-10	0.22444E-09	0.82429E-15
11	0.10454E-09	0.28799E-09	0.10577E-14
12	0.13182E-09	0.36314E-09	0.13337E-14
13	0.16355E-09	0.45056E-09	0.16548E-14
14	0.19983E-09	0.55048E-09	0.20218E-14

Polygon I
Time: 95.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.85266E-12	0.23489E-11	0.86269E-17
2	0.24105E-11	0.66404E-11	0.24388E-16
3	0.48374E-11	0.13326E-10	0.48943E-16
4	0.83294E-11	0.22946E-10	0.84274E-16
5	0.13115E-10	0.36130E-10	0.13269E-15
6	0.19456E-10	0.53597E-10	0.19685E-15
7	0.27643E-10	0.76151E-10	0.27968E-15
8	0.37993E-10	0.10466E-09	0.38440E-15
9	0.50840E-10	0.14006E-09	0.51439E-15
10	0.66522E-10	0.18326E-09	0.67305E-15
11	0.85360E-10	0.23515E-09	0.86365E-15
12	0.10763E-09	0.29651E-09	0.10890E-14
13	0.13354E-09	0.36789E-09	0.13511E-14
14	0.16316E-09	0.44948E-09	0.16508E-14

Polygon I
Time: 96.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.69621E-12	0.19179E-11	0.70440E-17
2	0.19682E-11	0.54220E-11	0.19914E-16
3	0.39498E-11	0.10881E-10	0.39963E-16
4	0.68011E-11	0.18736E-10	0.68811E-16
5	0.10709E-10	0.29501E-10	0.10835E-15
6	0.15886E-10	0.43763E-10	0.16073E-15
7	0.22571E-10	0.62179E-10	0.22836E-15
8	0.31022E-10	0.85460E-10	0.31387E-15
9	0.41512E-10	0.11436E-09	0.42000E-15
10	0.54317E-10	0.14963E-09	0.54956E-15
11	0.69698E-10	0.19201E-09	0.70518E-15
12	0.87885E-10	0.24211E-09	0.88919E-15
13	0.10904E-09	0.30039E-09	0.11032E-14
14	0.13322E-09	0.36701E-09	0.13479E-14

Polygon I
Time: 97.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.56847E-12	0.15660E-11	0.57516E-17

2	0.16071E-11	0.44272E-11	0.16260E-16
3	0.32251E-11	0.88846E-11	0.32631E-16
4	0.55532E-11	0.15298E-10	0.56185E-16
5	0.87438E-11	0.24088E-10	0.88467E-16
6	0.12971E-10	0.35733E-10	0.13124E-15
7	0.18429E-10	0.50770E-10	0.18646E-15
8	0.25330E-10	0.69780E-10	0.25628E-15
9	0.33895E-10	0.93376E-10	0.34294E-15
10	0.44350E-10	0.12218E-09	0.44872E-15
11	0.56910E-10	0.15678E-09	0.57579E-15
12	0.71760E-10	0.19769E-09	0.72604E-15
13	0.89034E-10	0.24527E-09	0.90081E-15
14	0.10878E-09	0.29967E-09	0.11006E-14

Polygon I
Time: 98.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.46417E-12	0.12787E-11	0.46963E-17
2	0.13122E-11	0.36149E-11	0.13276E-16
3	0.26334E-11	0.72545E-11	0.26644E-16
4	0.45343E-11	0.12491E-10	0.45876E-16
5	0.71395E-11	0.19668E-10	0.72235E-16
6	0.10591E-10	0.29177E-10	0.10716E-15
7	0.15048E-10	0.41455E-10	0.15225E-15
8	0.20682E-10	0.56976E-10	0.20926E-15
9	0.27676E-10	0.76243E-10	0.28002E-15
10	0.36213E-10	0.99760E-10	0.36639E-15
11	0.46468E-10	0.12801E-09	0.47015E-15
12	0.58593E-10	0.16141E-09	0.59282E-15
13	0.72698E-10	0.20027E-09	0.73553E-15
14	0.88821E-10	0.24469E-09	0.89866E-15

Polygon I
Time: 99.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.37900E-12	0.10441E-11	0.38346E-17
2	0.10714E-11	0.29516E-11	0.10840E-16
3	0.21502E-11	0.59234E-11	0.21755E-16
4	0.37023E-11	0.10199E-10	0.37459E-16
5	0.58295E-11	0.16059E-10	0.58981E-16
6	0.86479E-11	0.23823E-10	0.87496E-16
7	0.12287E-10	0.33848E-10	0.12431E-15
8	0.16888E-10	0.46522E-10	0.17086E-15
9	0.22598E-10	0.62254E-10	0.22864E-15
10	0.29568E-10	0.81456E-10	0.29916E-15
11	0.37942E-10	0.10452E-09	0.38388E-15
12	0.47842E-10	0.13180E-09	0.48405E-15
13	0.59359E-10	0.16352E-09	0.60057E-15
14	0.72524E-10	0.19979E-09	0.73377E-15

Polygon I
Time: 100.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.30946E-12	0.85251E-12	0.31310E-17
2	0.87485E-12	0.24100E-11	0.88514E-17
3	0.17557E-11	0.48366E-11	0.17763E-16
4	0.30230E-11	0.83279E-11	0.30586E-16
5	0.47599E-11	0.13113E-10	0.48159E-16
6	0.70611E-11	0.19452E-10	0.71442E-16
7	0.10033E-10	0.27638E-10	0.10151E-15
8	0.13789E-10	0.37986E-10	0.13951E-15

9	0.18452E-10	0.50831E-10	0.18669E-15
10	0.24143E-10	0.66510E-10	0.24427E-15
11	0.30980E-10	0.85345E-10	0.31345E-15
12	0.39064E-10	0.10761E-09	0.39524E-15
13	0.48468E-10	0.13352E-09	0.49038E-15
14	0.59217E-10	0.16313E-09	0.59914E-15

2/20/2001

VLEACH (Version 2.2a, 1996)

By:
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Robert S. Kerr Environmental Research Laboratory
U.S. Environmental Protection Agency
P.O. Box 1198
Ada, OK 74820

Based on the original VLEACH (version 1.0)
developed by CH2M Hill, Redding, California
for USEPA Region IX

Cleanup concentration = 0.25 mg/kg TCE

Polygon I
Time: 0.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.00000	0.00000	0.00000
2	0.00000	0.00000	0.00000
3	0.00000	0.00000	0.00000
4	0.00000	0.00000	0.00000
5	0.00000	0.00000	0.00000
6	0.11307E-01	0.31150E-01	0.11440E-06
7	0.11307E-01	0.31150E-01	0.11440E-06
8	0.94227E-02	0.25958E-01	0.95336E-07
9	0.94227E-02	0.25958E-01	0.95336E-07
10	0.35806E-03	0.98640E-03	0.36228E-08
11	0.35806E-03	0.98640E-03	0.36228E-08
12	0.00000	0.00000	0.00000
13	0.00000	0.00000	0.00000
14	0.00000	0.00000	0.00000

Polygon I
Time: 1.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.27076E-04	0.74591E-04	0.27395E-09
2	0.54778E-04	0.15090E-03	0.55422E-09
3	0.83743E-04	0.23070E-03	0.84728E-09
4	0.11464E-03	0.31582E-03	0.11599E-08
5	0.14819E-03	0.40822E-03	0.14993E-08
6	0.65471E-02	0.18036E-01	0.66241E-07
7	0.88961E-02	0.24507E-01	0.90008E-07
8	0.87658E-02	0.24148E-01	0.88689E-07
9	0.87315E-02	0.24054E-01	0.88342E-07
10	0.35903E-02	0.98906E-02	0.36325E-07
11	0.16858E-02	0.46440E-02	0.17056E-07
12	-0.70495E-03	0.19420E-02	0.71325E-08
13	0.30297E-03	0.83464E-03	0.30654E-08
14	0.12628E-03	0.34789E-03	0.12777E-08

Polygon I
Time: 2.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.38362E-04	0.10568E-03	0.38814E-09
2	0.83136E-04	0.22903E-03	0.84114E-09
3	0.13194E-03	0.36348E-03	0.13350E-08

4	0.18451E-03	0.50829E-03	0.18668E-08
5	0.24144E-03	0.66514E-03	0.24428E-08
6	0.38832E-02	0.10698E-01	0.39289E-07
7	0.65492E-02	0.18042E-01	0.66262E-07
8	0.74949E-02	0.20647E-01	0.75831E-07
9	0.78446E-02	0.21611E-01	0.79369E-07
10	0.50716E-02	0.13971E-01	0.51313E-07
11	0.29683E-02	0.81771E-02	0.30032E-07
12	0.15925E-02	0.43870E-02	0.16112E-07
13	0.81684E-03	0.22503E-02	0.82645E-08
14	0.39765E-03	0.10955E-02	0.40233E-08

Polygon I
Time: 3.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.41274E-04	0.11370E-03	0.41759E-09
2	0.94439E-04	0.26016E-03	0.95550E-09
3	0.15510E-03	0.42727E-03	0.15692E-08
4	0.22161E-03	0.61051E-03	0.22422E-08
5	0.29392E-03	0.80969E-03	0.29737E-08
6	0.23867E-02	0.65750E-02	0.24148E-07
7	0.46652E-02	0.12852E-01	0.47201E-07
8	0.60600E-02	0.16694E-01	0.61313E-07
9	0.67900E-02	0.18705E-01	0.68699E-07
10	0.55000E-02	0.15152E-01	0.55647E-07
11	0.38351E-02	0.10565E-01	0.38802E-07
12	0.24164E-02	0.66567E-02	0.24448E-07
13	0.14202E-02	0.39124E-02	0.14369E-07
14	0.78250E-03	0.21557E-02	0.79171E-08

Polygon I
Time: 4.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.39918E-04	0.10997E-03	0.40388E-09
2	0.95336E-04	0.26263E-03	0.96458E-09
3	0.16140E-03	0.44464E-03	0.16330E-08
4	0.23550E-03	0.64876E-03	0.23827E-08
5	0.31675E-03	0.87258E-03	0.32047E-08
6	0.15385E-02	0.42384E-02	0.15566E-07
7	0.32799E-02	0.90354E-02	0.33184E-07
8	0.47222E-02	0.13009E-01	0.47778E-07
9	0.56805E-02	0.15649E-01	0.57474E-07
10	0.53138E-02	0.14639E-01	0.53763E-07
11	0.42397E-02	0.11680E-01	0.42896E-07
12	0.30261E-02	0.83365E-02	0.30617E-07
13	0.19889E-02	0.54792E-02	0.20123E-07
14	0.12156E-02	0.33489E-02	0.12299E-07

Polygon I
Time: 5.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.36554E-04	0.10070E-03	0.36984E-09
2	0.90302E-04	0.24877E-03	0.91365E-09
3	0.15698E-03	0.43246E-03	0.15883E-08
4	0.23362E-03	0.64359E-03	0.23637E-08
5	0.31870E-03	0.87797E-03	0.32245E-08
6	0.10494E-02	0.28910E-02	0.10618E-07
7	0.23077E-02	0.63573E-02	0.23349E-07
8	0.35949E-02	0.99034E-02	0.36372E-07
9	0.46214E-02	0.12731E-01	0.46757E-07
10	0.48007E-02	0.13225E-01	0.48571E-07

11	0.42630E-02	0.11744E-01	0.43132E-07
12	0.33702E-02	0.92843E-02	0.34099E-07
13	0.24353E-02	0.67087E-02	0.24639E-07
14	0.16275E-02	0.44835E-02	0.16467E-07

Polygon I
Time: 6.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.32410E-04	0.89285E-04	0.32792E-09
2	0.82229E-04	0.22653E-03	0.83196E-09
3	0.14624E-03	0.40287E-03	0.14796E-08
4	0.22165E-03	0.61060E-03	0.22426E-08
5	0.30661E-03	0.84464E-03	0.31021E-08
6	0.75900E-03	0.20909E-02	0.76793E-08
7	0.16423E-02	0.45241E-02	0.16616E-07
8	0.27015E-02	0.74422E-02	0.27333E-07
9	0.36797E-02	0.10137E-01	0.37230E-07
10	0.41483E-02	0.11428E-01	0.41971E-07
11	0.40208E-02	0.11076E-01	0.40681E-07
12	0.34645E-02	0.95441E-02	0.35053E-07
13	0.27171E-02	0.74850E-02	0.27490E-07
14	0.19638E-02	0.54098E-02	0.19869E-07

Polygon I
Time: 7.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.28141E-04	0.77523E-04	0.28472E-09
2	0.72920E-04	0.20088E-03	0.73777E-09
3	0.13223E-03	0.36428E-03	0.13379E-08
4	0.20377E-03	0.56136E-03	0.20617E-08
5	0.28568E-03	0.78700E-03	0.28904E-08
6	0.57865E-03	0.15941E-02	0.58545E-08
7	0.11912E-02	0.32815E-02	0.12052E-07
8	0.20207E-02	0.55667E-02	0.20445E-07
9	0.28850E-02	0.79476E-02	0.29189E-07
10	0.34737E-02	0.95693E-02	0.35145E-07
11	0.36218E-02	0.99773E-02	0.36644E-07
12	0.33596E-02	0.92551E-02	0.33991E-07
13	0.28307E-02	0.77981E-02	0.28640E-07
14	0.21931E-02	0.60415E-02	0.22189E-07

Polygon I
Time: 8.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.24080E-04	0.66336E-04	0.24363E-09
2	0.63455E-04	0.17481E-03	0.64201E-09
3	0.11699E-03	0.32228E-03	0.11836E-08
4	0.18300E-03	0.50412E-03	0.18515E-08
5	0.25982E-03	0.71577E-03	0.26288E-08
6	0.45978E-03	0.12666E-02	0.46519E-08
7	0.88464E-03	0.24370E-02	0.89505E-08
8	0.15144E-02	0.41720E-02	0.15323E-07
9	0.22394E-02	0.61691E-02	0.22657E-07
10	0.28433E-02	0.78329E-02	0.28768E-07
11	0.31523E-02	0.86839E-02	0.31894E-07
12	0.31168E-02	0.85862E-02	0.31535E-07
13	0.27978E-02	0.77076E-02	0.28308E-07
14	0.23066E-02	0.63543E-02	0.23337E-07

Polygon I
Time: 9.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.20385E-04	0.56157E-04	0.20625E-09
2	0.54448E-04	0.14999E-03	0.55089E-09
3	0.10180E-03	0.28044E-03	0.10300E-08
4	0.16138E-03	0.44456E-03	0.16327E-08
5	0.23186E-03	0.63874E-03	0.23459E-08
6	0.37595E-03	0.10357E-02	0.38037E-08
7	0.67361E-03	0.18557E-02	0.68153E-08
8	0.11431E-02	0.31489E-02	0.11565E-07
9	0.17293E-02	0.47638E-02	0.17496E-07
10	0.22897E-02	0.63078E-02	0.23167E-07
11	0.26729E-02	0.73634E-02	0.27044E-07
12	0.27934E-02	0.76954E-02	0.28263E-07
13	0.26526E-02	0.73073E-02	0.26838E-07
14	0.23126E-02	0.63709E-02	0.23398E-07

Polygon I
Time: 10.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.17115E-04	0.47149E-04	0.17316E-09
2	0.46217E-04	0.12732E-03	0.46761E-09
3	0.87443E-04	0.24089E-03	0.88472E-09
4	0.14027E-03	0.38641E-03	0.14192E-08
5	0.20376E-03	0.56132E-03	0.20616E-08
6	0.31283E-03	0.86179E-03	0.31651E-08
7	0.52510E-03	0.14465E-02	0.53127E-08
8	0.87193E-03	0.24020E-02	0.88219E-08
9	0.13339E-02	0.36746E-02	0.13496E-07
10	0.18233E-02	0.50228E-02	0.18447E-07
11	0.22217E-02	0.61203E-02	0.22478E-07
12	0.24361E-02	0.67111E-02	0.24648E-07
13	0.24318E-02	0.66992E-02	0.24604E-07
14	0.22299E-02	0.61431E-02	0.22562E-07

Polygon I
Time: 11.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.14276E-04	0.39327E-04	0.14444E-09
2	0.38896E-04	0.10715E-03	0.39354E-09
3	0.74339E-04	0.20479E-03	0.75214E-09
4	0.12050E-03	0.33196E-03	0.12192E-08
5	0.17682E-03	0.48710E-03	0.17890E-08
6	0.26270E-03	0.72370E-03	0.26580E-08
7	0.41758E-03	0.11504E-02	0.42250E-08
8	0.67350E-03	0.18554E-02	0.68142E-08
9	0.10312E-02	0.28409E-02	0.10434E-07
10	0.14415E-02	0.39710E-02	0.14584E-07
11	0.18189E-02	0.50107E-02	0.18403E-07
12	0.20788E-02	0.57266E-02	0.21032E-07
13	0.21692E-02	0.59757E-02	0.21947E-07
14	0.20820E-02	0.57354E-02	0.21064E-07

Polygon I
Time: 12.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.11844E-04	0.32629E-04	0.11984E-09
2	0.32510E-04	0.89561E-04	0.32893E-09
3	0.62671E-04	0.17265E-03	0.63408E-09
4	0.10253E-03	0.28244E-03	0.10373E-08
5	0.15183E-03	0.41827E-03	0.15362E-08
6	0.22140E-03	0.60992E-03	0.22401E-08

7	0.33729E-03	0.92919E-03	0.34126E-08
8	0.52702E-03	0.14519E-02	0.53322E-08
9	0.80107E-03	0.22068E-02	0.81050E-08
10	0.11354E-02	0.31277E-02	0.11487E-07
11	0.14726E-02	0.40567E-02	0.14899E-07
12	0.17433E-02	0.48025E-02	0.17638E-07
13	0.18918E-02	0.52116E-02	0.19141E-07
14	0.18921E-02	0.52123E-02	0.19143E-07

Polygon I
Time: 13.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.97842E-05	0.26954E-04	0.98993E-10
2	0.27021E-04	0.74439E-04	0.27339E-09
3	0.52472E-04	0.14455E-03	0.53089E-09
4	0.86539E-04	0.23840E-03	0.87557E-09
5	0.12923E-03	0.35600E-03	0.13075E-08
6	0.18661E-03	0.51407E-03	0.18880E-08
7	0.27550E-03	0.75896E-03	0.27875E-08
8	0.41749E-03	0.11501E-02	0.42241E-08
9	0.62632E-03	0.17254E-02	0.63369E-08
10	0.89334E-03	0.24610E-02	0.90385E-08
11	0.11828E-02	0.32585E-02	0.11968E-07
12	0.14421E-02	0.39727E-02	0.14591E-07
13	0.16196E-02	0.44617E-02	0.16386E-07
14	0.16810E-02	0.46308E-02	0.17007E-07

Polygon I
Time: 14.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.80536E-05	0.22186E-04	0.81483E-10
2	0.22356E-04	0.61588E-04	0.22619E-09
3	0.43685E-04	0.12034E-03	0.44199E-09
4	0.72560E-04	0.19989E-03	0.73413E-09
5	0.10917E-03	0.30075E-03	0.11046E-08
6	0.15698E-03	0.43247E-03	0.15883E-08
7	0.22669E-03	0.62450E-03	0.22936E-08
8	0.33429E-03	0.92091E-03	0.33822E-08
9	0.49331E-03	0.13590E-02	0.49911E-08
10	0.70374E-03	0.19387E-02	0.71202E-08
11	0.94526E-03	0.26040E-02	0.95638E-08
12	0.11803E-02	0.32516E-02	0.11942E-07
13	0.13656E-02	0.37620E-02	0.13817E-07
14	0.14651E-02	0.40362E-02	0.14824E-07

Polygon I
Time: 15.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.66098E-05	0.18209E-04	0.66876E-10
2	0.18427E-04	0.50764E-04	0.18644E-09
3	0.36200E-04	0.99723E-04	0.36625E-09
4	0.60500E-04	0.16667E-03	0.61212E-09
5	0.91644E-04	0.25246E-03	0.92722E-09
6	0.13168E-03	0.36275E-03	0.13323E-08
7	0.18733E-03	0.51607E-03	0.18954E-08
8	0.27003E-03	0.74387E-03	0.27320E-08
9	0.39148E-03	0.10785E-02	0.39609E-08
10	0.55591E-03	0.15314E-02	0.56245E-08
11	0.75325E-03	0.20751E-02	0.76211E-08
12	0.95839E-03	0.26402E-02	0.96967E-08
13	0.11373E-02	0.31330E-02	0.11507E-07

14	0.12566E-02	0.34617E-02	0.12714E-07

Polygon I
Time: 16.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.54122E-05	0.14910E-04	0.54758E-10
2	0.15143E-04	0.41715E-04	0.15321E-09
3	0.29882E-04	0.82319E-04	0.30233E-09
4	0.50211E-04	0.13832E-03	0.50802E-09
5	0.76518E-04	0.21079E-03	0.77418E-09
6	0.11008E-03	0.30326E-03	0.11138E-08
7	0.15513E-03	0.42736E-03	0.15696E-08
8	0.21959E-03	0.60492E-03	0.22217E-08
9	0.31290E-03	0.86198E-03	0.31658E-08
10	0.44082E-03	0.12144E-02	0.44601E-08
11	0.59966E-03	0.16520E-02	0.60672E-08
12	0.77374E-03	0.21315E-02	0.78284E-08
13	0.93776E-03	0.25834E-02	0.94879E-08
14	0.10633E-02	0.29291E-02	0.10758E-07

Polygon I
Time: 17.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.44234E-05	0.12186E-04	0.44754E-10
2	0.12413E-04	0.34195E-04	0.12559E-09
3	0.24589E-04	0.67738E-04	0.24878E-09
4	0.41511E-04	0.11436E-03	0.41999E-09
5	0.63599E-04	0.17520E-03	0.64347E-09
6	0.91714E-04	0.25266E-03	0.92793E-09
7	0.12853E-03	0.35407E-03	0.13004E-08
8	0.17944E-03	0.49432E-03	0.18155E-08
9	0.25169E-03	0.69336E-03	0.25465E-08
10	0.35110E-03	0.96722E-03	0.35523E-08
11	0.47764E-03	0.13158E-02	0.48326E-08
12	0.62228E-03	0.17143E-02	0.62960E-08
13	0.76724E-03	0.21136E-02	0.77627E-08
14	0.88961E-03	0.24507E-02	0.90008E-08

Polygon I
Time: 18.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.36102E-05	0.99455E-05	0.36527E-10
2	0.10156E-04	0.27977E-04	0.10275E-09
3	0.20182E-04	0.55598E-04	0.20420E-09
4	0.34209E-04	0.94239E-04	0.34611E-09
5	0.52659E-04	0.14507E-03	0.53278E-09
6	0.76163E-04	0.20982E-03	0.77059E-09
7	0.10643E-03	0.29321E-03	0.10769E-08
8	0.14711E-03	0.40525E-03	0.14884E-08
9	0.20354E-03	0.56072E-03	0.20594E-08
10	0.28093E-03	0.77390E-03	0.28423E-08
11	0.38105E-03	0.10497E-02	0.38553E-08
12	0.49938E-03	0.13757E-02	0.50525E-08
13	0.62402E-03	0.17191E-02	0.63136E-08
14	0.73745E-03	0.20316E-02	0.74613E-08

Polygon I
Time: 19.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.29435E-05	0.81088E-05	0.29781E-10
2	0.82963E-05	0.22855E-04	0.83939E-10

3	0.16532E-04	0.45541E-04	0.16726E-09
4	0.28117E-04	0.77458E-04	0.28448E-09
5	0.43461E-04	0.11973E-03	0.43973E-09
6	0.63060E-04	0.17372E-03	0.63802E-09
7	0.88041E-04	0.24254E-03	0.89077E-09
8	0.12084E-03	0.33288E-03	0.12226E-08
9	0.16532E-03	0.45542E-03	0.16726E-08
10	0.22577E-03	0.62196E-03	0.22843E-08
11	0.30471E-03	0.83942E-03	0.30830E-08
12	0.40040E-03	0.11030E-02	0.40511E-08
13	0.50536E-03	0.13922E-02	0.51130E-08
14	0.60676E-03	0.16715E-02	0.61390E-08

Polygon I
Time: 20.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.23982E-05	0.66066E-05	0.24264E-10
2	0.67698E-05	0.18650E-04	0.68495E-10
3	0.13520E-04	0.37244E-04	0.13679E-09
4	0.23062E-04	0.63531E-04	0.23333E-09
5	0.35775E-04	0.98554E-04	0.36196E-09
6	0.52071E-04	0.14345E-03	0.52684E-09
7	0.72722E-04	0.20034E-03	0.73577E-09
8	0.99356E-04	0.27371E-03	0.10053E-08
9	0.13472E-03	0.37112E-03	0.13630E-08
10	0.18218E-03	0.50188E-03	0.18433E-08
11	0.24434E-03	0.67312E-03	0.24722E-08
12	0.32110E-03	0.88456E-03	0.32487E-08
13	0.40807E-03	0.11242E-02	0.41287E-08
14	0.49628E-03	0.13672E-02	0.50212E-08

Polygon I
Time: 21.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.19531E-05	0.53803E-05	0.19760E-10
2	0.55199E-05	0.15206E-04	0.55848E-10
3	0.11043E-04	0.30422E-04	0.11173E-09
4	0.18883E-04	0.52020E-04	0.19105E-09
5	0.29384E-04	0.80947E-04	0.29730E-09
6	0.42897E-04	0.11817E-03	0.43402E-09
7	0.59974E-04	0.16522E-03	0.60680E-09
8	0.81717E-04	0.22511E-03	0.82678E-09
9	0.11004E-03	0.30315E-03	0.11134E-08
10	0.14753E-03	0.40641E-03	0.14926E-08
11	0.19652E-03	0.54136E-03	0.19883E-08
12	0.25775E-03	0.71005E-03	0.26078E-08
13	0.32895E-03	0.90620E-03	0.33282E-08
14	0.40409E-03	0.11132E-02	0.40884E-08

Polygon I
Time: 22.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.15902E-05	0.43807E-05	0.16089E-10
2	0.44983E-05	0.12392E-04	0.45512E-10
3	0.90121E-05	0.24827E-04	0.91181E-10
4	0.15441E-04	0.42538E-04	0.15623E-09
5	0.24092E-04	0.66368E-04	0.24375E-09
6	0.35268E-04	0.97158E-04	0.35683E-09
7	0.49384E-04	0.13604E-03	0.49965E-09
8	0.67195E-04	0.18511E-03	0.67985E-09
9	0.90036E-04	0.24803E-03	0.91096E-09

10	0.11981E-03	0.33006E-03	0.12122E-08
11	0.15851E-03	0.43667E-03	0.16038E-08
12	0.20722E-03	0.57084E-03	0.20965E-08
13	0.26497E-03	0.72995E-03	0.26809E-08
14	0.32793E-03	0.90339E-03	0.33179E-08

Polygon I
Time: 23.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.12947E-05	0.35667E-05	0.13099E-10
2	0.36647E-05	0.10096E-04	0.37078E-10
3	0.73500E-05	0.20248E-04	0.74365E-10
4	0.12614E-04	0.34750E-04	0.12763E-09
5	0.19725E-04	0.54338E-04	0.19957E-09
6	0.28947E-04	0.79744E-04	0.29288E-09
7	0.40604E-04	0.11186E-03	0.41082E-09
8	0.55226E-04	0.15214E-03	0.55875E-09
9	0.73741E-04	0.20314E-03	0.74608E-09
10	0.97536E-04	0.26870E-03	0.98684E-09
11	0.12820E-03	0.35318E-03	0.12971E-08
12	0.16690E-03	0.45978E-03	0.16886E-08
13	0.21344E-03	0.58800E-03	0.21596E-08
14	0.26553E-03	0.73148E-03	0.26865E-08

Polygon I
Time: 24.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.10542E-05	0.29041E-05	0.10666E-10
2	0.29852E-05	0.82236E-05	0.30203E-10
3	0.59921E-05	0.16507E-04	0.60625E-10
4	0.10297E-04	0.28366E-04	0.10418E-09
5	0.16131E-04	0.44439E-04	0.16321E-09
6	0.23726E-04	0.65360E-04	0.24005E-09
7	0.33340E-04	0.91845E-04	0.33732E-09
8	0.45357E-04	0.12495E-03	0.45891E-09
9	0.60426E-04	0.16646E-03	0.61137E-09
10	0.79545E-04	0.21913E-03	0.80481E-09
11	0.10395E-03	0.28636E-03	0.10517E-08
12	0.13470E-03	0.37107E-03	0.13628E-08
13	0.17204E-03	0.47395E-03	0.17407E-08
14	0.21471E-03	0.59148E-03	0.21723E-08

Polygon I
Time: 25.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.85853E-06	0.23651E-05	0.86863E-11
2	0.24317E-05	0.66988E-05	0.24603E-10
3	0.48838E-05	0.13454E-04	0.49413E-10
4	0.84012E-05	0.23144E-04	0.85000E-10
5	0.13181E-04	0.36312E-04	0.13336E-09
6	0.19424E-04	0.53509E-04	0.19652E-09
7	0.27343E-04	0.75324E-04	0.27664E-09
8	0.37224E-04	0.10255E-03	0.37662E-09
9	0.49525E-04	0.13643E-03	0.50108E-09
10	0.64958E-04	0.17895E-03	0.65722E-09
11	0.84456E-04	0.23266E-03	0.85450E-09
12	0.10893E-03	0.30009E-03	0.11021E-08
13	0.13882E-03	0.38242E-03	0.14045E-08
14	0.17351E-03	0.47798E-03	0.17555E-08

Polygon I

Time: 26.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.69935E-06	0.19266E-05	0.70757E-11
2	0.19810E-05	0.54572E-05	0.20043E-10
3	0.39802E-05	0.10965E-04	0.40270E-10
4	0.68520E-05	0.18876E-04	0.69327E-10
5	0.10764E-04	0.29652E-04	0.10890E-09
6	0.15887E-04	0.43766E-04	0.16074E-09
7	0.22401E-04	0.61711E-04	0.22664E-09
8	0.30525E-04	0.84091E-04	0.30884E-09
9	0.40587E-04	0.11181E-03	0.41065E-09
10	0.53095E-04	0.14627E-03	0.53719E-09
11	0.68740E-04	0.18937E-03	0.69548E-09
12	0.88265E-04	0.24315E-03	0.89304E-09
13	0.11216E-03	0.30897E-03	0.11348E-08
14	0.14021E-03	0.38624E-03	0.14185E-08

Polygon I

Time: 27.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.56983E-06	0.15698E-05	0.57654E-11
2	0.16141E-05	0.44465E-05	0.16331E-10
3	0.32438E-05	0.89362E-05	0.32820E-10
4	0.55875E-05	0.15392E-04	0.56532E-10
5	0.87858E-05	0.24203E-04	0.88892E-10
6	0.12985E-04	0.35772E-04	0.13138E-09
7	0.18336E-04	0.50514E-04	0.18552E-09
8	0.25013E-04	0.68907E-04	0.25307E-09
9	0.33255E-04	0.91611E-04	0.33646E-09
10	0.43423E-04	0.11962E-03	0.43934E-09
11	0.56026E-04	0.15434E-03	0.56685E-09
12	0.71646E-04	0.19737E-03	0.72489E-09
13	0.90746E-04	0.24999E-03	0.91813E-09
14	0.11334E-03	0.31224E-03	0.11468E-08

Polygon I

Time: 28.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.46444E-06	0.12795E-05	0.46991E-11
2	0.13154E-05	0.36238E-05	0.13309E-10
3	0.26439E-05	0.72835E-05	0.26750E-10
4	0.45559E-05	0.12551E-04	0.46095E-10
5	0.71691E-05	0.19749E-04	0.72534E-10
6	0.10607E-04	0.29222E-04	0.10732E-09
7	0.14999E-04	0.41318E-04	0.15175E-09
8	0.20482E-04	0.56425E-04	0.20723E-09
9	0.27238E-04	0.75035E-04	0.27558E-09
10	0.35525E-04	0.97866E-04	0.35943E-09
11	0.45712E-04	0.12593E-03	0.46250E-09
12	0.58247E-04	0.16046E-03	0.58932E-09
13	0.73530E-04	0.20256E-03	0.74395E-09
14	0.91694E-04	0.25260E-03	0.92773E-09

Polygon I

Time: 29.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.37865E-06	0.10431E-05	0.38311E-11
2	0.10723E-05	0.29540E-05	0.10849E-10
3	0.21552E-05	0.59373E-05	0.21806E-10
4	0.37148E-05	0.10234E-04	0.37585E-10
5	0.58487E-05	0.16112E-04	0.59175E-10

6	0.86616E-05	0.23861E-04	0.87635E-10
7	0.12261E-04	0.33777E-04	0.12405E-09
8	0.16762E-04	0.46176E-04	0.16959E-09
9	0.22301E-04	0.61435E-04	0.22563E-09
10	0.29067E-04	0.80075E-04	0.29409E-09
11	0.37327E-04	0.10283E-03	0.37766E-09
12	0.47416E-04	0.13062E-03	0.47974E-09
13	0.59666E-04	0.16437E-03	0.60368E-09
14	0.74251E-04	0.20455E-03	0.75125E-09

Polygon I
Time: 30.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.30879E-06	0.85067E-06	0.31243E-11
2	0.87430E-06	0.24086E-05	0.88459E-11
3	0.17572E-05	0.48408E-05	0.17779E-10
4	0.30291E-05	0.83447E-05	0.30647E-10
5	0.47711E-05	0.13143E-04	0.48272E-10
6	0.70707E-05	0.19478E-04	0.71539E-10
7	0.10019E-04	0.27600E-04	0.10137E-09
8	0.13710E-04	0.37768E-04	0.13871E-09
9	0.18251E-04	0.50280E-04	0.18466E-09
10	0.23783E-04	0.65518E-04	0.24063E-09
11	0.30497E-04	0.84013E-04	0.30856E-09
12	0.38641E-04	0.10645E-03	0.39096E-09
13	0.48480E-04	0.13355E-03	0.49050E-09
14	0.60190E-04	0.16581E-03	0.60898E-09

Polygon I
Time: 31.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.25189E-06	0.69390E-06	0.25485E-11
2	0.71304E-06	0.19643E-05	0.72143E-11
3	0.14329E-05	0.39475E-05	0.14498E-10
4	0.24703E-05	0.68051E-05	0.24993E-10
5	0.38919E-05	0.10721E-04	0.39377E-10
6	0.57708E-05	0.15898E-04	0.58387E-10
7	0.81835E-05	0.22544E-04	0.82797E-10
8	0.11208E-04	0.30877E-04	0.11340E-09
9	0.14931E-04	0.41134E-04	0.15107E-09
10	0.19457E-04	0.53601E-04	0.19686E-09
11	0.24925E-04	0.68665E-04	0.25218E-09
12	0.31518E-04	0.86825E-04	0.31888E-09
13	0.39438E-04	0.10864E-03	0.39902E-09
14	0.48845E-04	0.13456E-03	0.49420E-09

Polygon I
Time: 32.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.20551E-06	0.56615E-06	0.20793E-11
2	0.58165E-06	0.16023E-05	0.58849E-11
3	0.11687E-05	0.32197E-05	0.11825E-10
4	0.20148E-05	0.55503E-05	0.20385E-10
5	0.31748E-05	0.87460E-05	0.32121E-10
6	0.47094E-05	0.12974E-04	0.47648E-10
7	0.66826E-05	0.18409E-04	0.67612E-10
8	0.91600E-05	0.25234E-04	0.92678E-10
9	0.12211E-04	0.33639E-04	0.12355E-09
10	0.15915E-04	0.43844E-04	0.16103E-09
11	0.20376E-04	0.56132E-04	0.20615E-09
12	0.25724E-04	0.70866E-04	0.26027E-09

13	0.32115E-04	0.88470E-04	0.32493E-09
14	0.39681E-04	0.10931E-03	0.40148E-09

Polygon I
Time: 33.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.16771E-06	0.46201E-06	0.16968E-11
2	0.47457E-06	0.13073E-05	0.48015E-11
3	0.95343E-06	0.26265E-05	0.96465E-11
4	0.16435E-05	0.45275E-05	0.16628E-10
5	0.25900E-05	0.71349E-05	0.26204E-10
6	0.38430E-05	0.10587E-04	0.38882E-10
7	0.54560E-05	0.15030E-04	0.55202E-10
8	0.74837E-05	0.20616E-04	0.75717E-10
9	0.99828E-05	0.27501E-04	0.10100E-09
10	0.13016E-04	0.35856E-04	0.13169E-09
11	0.16658E-04	0.45890E-04	0.16854E-09
12	0.21006E-04	0.57868E-04	0.21253E-09
13	0.26174E-04	0.72105E-04	0.26482E-09
14	0.32269E-04	0.88895E-04	0.32648E-09

Polygon I
Time: 34.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.13688E-06	0.37709E-06	0.13849E-11
2	0.38727E-06	0.10669E-05	0.39182E-11
3	0.77792E-06	0.21430E-05	0.78707E-11
4	0.13408E-05	0.36937E-05	0.13566E-10
5	0.21130E-05	0.58211E-05	0.21379E-10
6	0.31360E-05	0.86390E-05	0.31729E-10
7	0.44539E-05	0.12270E-04	0.45063E-10
8	0.61127E-05	0.16839E-04	0.61846E-10
9	0.81589E-05	0.22476E-04	0.82549E-10
10	0.10642E-04	0.29317E-04	0.10767E-09
11	0.13619E-04	0.37517E-04	0.13779E-09
12	0.17159E-04	0.47271E-04	0.17361E-09
13	0.21347E-04	0.58807E-04	0.21598E-09
14	0.26265E-04	0.72355E-04	0.26574E-09

Polygon I
Time: 35.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.11174E-06	0.30782E-06	0.11305E-11
2	0.31607E-06	0.87073E-06	0.31979E-11
3	0.63481E-06	0.17488E-05	0.64228E-11
4	0.10941E-05	0.30139E-05	0.11069E-10
5	0.17241E-05	0.47496E-05	0.17444E-10
6	0.25590E-05	0.70497E-05	0.25891E-10
7	0.36356E-05	0.10015E-04	0.36784E-10
8	0.49919E-05	0.13752E-04	0.50506E-10
9	0.66666E-05	0.18365E-04	0.67450E-10
10	0.86992E-05	0.23965E-04	0.88015E-10
11	0.11133E-04	0.30670E-04	0.11264E-09
12	0.14020E-04	0.38623E-04	0.14185E-09
13	0.17420E-04	0.47989E-04	0.17625E-09
14	0.21395E-04	0.58940E-04	0.21647E-09

Polygon I
Time: 36.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.91221E-07	0.25130E-06	0.92295E-12

2	0.25800E-06	0.71075E-06	0.26104E-11
3	0.51811E-06	0.14273E-05	0.52420E-11
4	0.89281E-06	0.24595E-05	0.90331E-11
5	0.14069E-05	0.38757E-05	0.14234E-10
6	0.20883E-05	0.57530E-05	0.21129E-10
7	0.29675E-05	0.81749E-05	0.30024E-10
8	0.40761E-05	0.11229E-04	0.41240E-10
9	0.54461E-05	0.15003E-04	0.55101E-10
10	0.71096E-05	0.19586E-04	0.71933E-10
11	0.91005E-05	0.25070E-04	0.92075E-10
12	0.11456E-04	0.31560E-04	0.11591E-09
13	0.14221E-04	0.39177E-04	0.14388E-09
14	0.17440E-04	0.48045E-04	0.17646E-09

Polygon I
Time: 37.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.74478E-07	0.20517E-06	0.75355E-12
2	0.21062E-06	0.58023E-06	0.21310E-11
3	0.42290E-06	0.11650E-05	0.42788E-11
4	0.72867E-06	0.20073E-05	0.73724E-11
5	0.11482E-05	0.31630E-05	0.11617E-10
6	0.17043E-05	0.46950E-05	0.17243E-10
7	0.24221E-05	0.66725E-05	0.24506E-10
8	0.33279E-05	0.91679E-05	0.33671E-10
9	0.44483E-05	0.12254E-04	0.45006E-10
10	0.58094E-05	0.16004E-04	0.58778E-10
11	0.74379E-05	0.20490E-04	0.75254E-10
12	0.93621E-05	0.25791E-04	0.94722E-10
13	0.11613E-04	0.31993E-04	0.11750E-09
14	0.14225E-04	0.39186E-04	0.14392E-09

Polygon I
Time: 38.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.60812E-07	0.16753E-06	0.61528E-12
2	0.17196E-06	0.47371E-06	0.17398E-11
3	0.34523E-06	0.95104E-06	0.34929E-11
4	0.59477E-06	0.16385E-05	0.60176E-11
5	0.93709E-06	0.25815E-05	0.94811E-11
6	0.13910E-05	0.38319E-05	0.14073E-10
7	0.19770E-05	0.54463E-05	0.20003E-10
8	0.27170E-05	0.74847E-05	0.27489E-10
9	0.36328E-05	0.10008E-04	0.36756E-10
10	0.47462E-05	0.13075E-04	0.48021E-10
11	0.60783E-05	0.16745E-04	0.61498E-10
12	0.76506E-05	0.21076E-04	0.77406E-10
13	0.94857E-05	0.26131E-04	0.95973E-10
14	0.11607E-04	0.31975E-04	0.11743E-09

Polygon I
Time: 39.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.49656E-07	0.13679E-06	0.50240E-12
2	0.14040E-06	0.38678E-06	0.14205E-11
3	0.28184E-06	0.77643E-06	0.28516E-11
4	0.48551E-06	0.13375E-05	0.49122E-11
5	0.76489E-06	0.21071E-05	0.77389E-11
6	0.11353E-05	0.31276E-05	0.11487E-10
7	0.16137E-05	0.44455E-05	0.16327E-10
8	0.22181E-05	0.61103E-05	0.22441E-10

9	0.29665E-05	0.81723E-05	0.30014E-10
10	0.38770E-05	0.10681E-04	0.39227E-10
11	0.49666E-05	0.13682E-04	0.50250E-10
12	0.62517E-05	0.17222E-04	0.63253E-10
13	0.77489E-05	0.21347E-04	0.78401E-10
14	0.94744E-05	0.26100E-04	0.95858E-10

Polygon I
Time: 40.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.40548E-07	0.11170E-06	0.41025E-12
2	0.11464E-06	0.31581E-06	0.11599E-11
3	0.23011E-06	0.63391E-06	0.23282E-11
4	0.39636E-06	0.10919E-05	0.40102E-11
5	0.62438E-06	0.17200E-05	0.63172E-11
6	0.92671E-06	0.25529E-05	0.93761E-11
7	0.13172E-05	0.36287E-05	0.13327E-10
8	0.18107E-05	0.49882E-05	0.18320E-10
9	0.24223E-05	0.66730E-05	0.24508E-10
10	0.31666E-05	0.87235E-05	0.32039E-10
11	0.40577E-05	0.11178E-04	0.41054E-10
12	0.51083E-05	0.14072E-04	0.51684E-10
13	0.63306E-05	0.17440E-04	0.64050E-10
14	0.77356E-05	0.21310E-04	0.78266E-10

Polygon I
Time: 41.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.33111E-07	0.91214E-07	0.33500E-12
2	0.93608E-07	0.25787E-06	0.94709E-12
3	0.18788E-06	0.51758E-06	0.19009E-11
4	0.32359E-06	0.89145E-06	0.32740E-11
5	0.50971E-06	0.14042E-05	0.51571E-11
6	0.75648E-06	0.20840E-05	0.76538E-11
7	0.10753E-05	0.29621E-05	0.10879E-10
8	0.14782E-05	0.40722E-05	0.14956E-10
9	0.19778E-05	0.54484E-05	0.20010E-10
10	0.25862E-05	0.71244E-05	0.26166E-10
11	0.33147E-05	0.91315E-05	0.33537E-10
12	0.41737E-05	0.11498E-04	0.42228E-10
13	0.51720E-05	0.14248E-04	0.52328E-10
14	0.63172E-05	0.17403E-04	0.63915E-10

Polygon I
Time: 42.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.27038E-07	0.74485E-07	0.27356E-12
2	0.76437E-07	0.21057E-06	0.77336E-12
3	0.15341E-06	0.42262E-06	0.15521E-11
4	0.26420E-06	0.72783E-06	0.26731E-11
5	0.41613E-06	0.11464E-05	0.42102E-11
6	0.61755E-06	0.17012E-05	0.62481E-11
7	0.87776E-06	0.24181E-05	0.88808E-11
8	0.12067E-05	0.33243E-05	0.12209E-10
9	0.16148E-05	0.44484E-05	0.16338E-10
10	0.21119E-05	0.58180E-05	0.21368E-10
11	0.27075E-05	0.74587E-05	0.27394E-10
12	0.34097E-05	0.93932E-05	0.34499E-10
13	0.42254E-05	0.11640E-04	0.42751E-10
14	0.51595E-05	0.14214E-04	0.52202E-10

Polygon I
Time: 43.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.22079E-07	0.60824E-07	0.22339E-12
2	0.62417E-07	0.17195E-06	0.63151E-12
3	0.12526E-06	0.34508E-06	0.12674E-11
4	0.21572E-06	0.59427E-06	0.21826E-11
5	0.33974E-06	0.93593E-06	0.34374E-11
6	0.50416E-06	0.13889E-05	0.51009E-11
7	0.71656E-06	0.19740E-05	0.72499E-11
8	0.98514E-06	0.27139E-05	0.99673E-11
9	0.13184E-05	0.36318E-05	0.13339E-10
10	0.17245E-05	0.47508E-05	0.17448E-10
11	0.22114E-05	0.60919E-05	0.22374E-10
12	0.27854E-05	0.76733E-05	0.28182E-10
13	0.34519E-05	0.95094E-05	0.34925E-10
14	0.42143E-05	0.11610E-04	0.42639E-10

Polygon I
Time: 44.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.18030E-07	0.49669E-07	0.18242E-12
2	0.50968E-07	0.14041E-06	0.51568E-12
3	0.10229E-06	0.28178E-06	0.10349E-11
4	0.17614E-06	0.48523E-06	0.17821E-11
5	0.27739E-06	0.76415E-06	0.28065E-11
6	0.41160E-06	0.11339E-05	0.41645E-11
7	0.58499E-06	0.16115E-05	0.59187E-11
8	0.80425E-06	0.22156E-05	0.81371E-11
9	0.10764E-05	0.29652E-05	0.10890E-10
10	0.14081E-05	0.38792E-05	0.14247E-10
11	0.18060E-05	0.49751E-05	0.18272E-10
12	0.22752E-05	0.62678E-05	0.23020E-10
13	0.28199E-05	0.77683E-05	0.28531E-10
14	0.34424E-05	0.94833E-05	0.34829E-10

Polygon I
Time: 45.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.14723E-07	0.40559E-07	0.14896E-12
2	0.41620E-07	0.11465E-06	0.42109E-12
3	0.83522E-07	0.23009E-06	0.84505E-12
4	0.14382E-06	0.39620E-06	0.14551E-11
5	0.22648E-06	0.62392E-06	0.22915E-11
6	0.33605E-06	0.92576E-06	0.34001E-11
7	0.47759E-06	0.13157E-05	0.48321E-11
8	0.65659E-06	0.18088E-05	0.66432E-11
9	0.87876E-06	0.24208E-05	0.88910E-11
10	0.11498E-05	0.31674E-05	0.11633E-10
11	0.14748E-05	0.40628E-05	0.14922E-10
12	0.18583E-05	0.51193E-05	0.18802E-10
13	0.23035E-05	0.63457E-05	0.23306E-10
14	0.28119E-05	0.77463E-05	0.28450E-10

Polygon I
Time: 46.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.12023E-07	0.33120E-07	0.12164E-12
2	0.33986E-07	0.93624E-07	0.34386E-12
3	0.68202E-07	0.18788E-06	0.69004E-12
4	0.11744E-06	0.32352E-06	0.11882E-11

5	0.18493E-06	0.50944E-06	0.18710E-11
6	0.27438E-06	0.75586E-06	0.27760E-11
7	0.38992E-06	0.10742E-05	0.39451E-11
8	0.53605E-06	0.14767E-05	0.54236E-11
9	0.71745E-06	0.19764E-05	0.72589E-11
10	0.93876E-06	0.25861E-05	0.94981E-11
11	0.12043E-05	0.33177E-05	0.12185E-10
12	0.15177E-05	0.41810E-05	0.15356E-10
13	0.18815E-05	0.51832E-05	0.19037E-10
14	0.22969E-05	0.63275E-05	0.23239E-10

Polygon I
Time: 47.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.98173E-08	0.27045E-07	0.99328E-13
2	0.27752E-07	0.76451E-07	0.28078E-12
3	0.55691E-07	0.15342E-06	0.56346E-12
4	0.95892E-07	0.26417E-06	0.97020E-12
5	0.15100E-06	0.41597E-06	0.15277E-11
6	0.22402E-06	0.61715E-06	0.22666E-11
7	0.31835E-06	0.87701E-06	0.32210E-11
8	0.43765E-06	0.12057E-05	0.44280E-11
9	0.58575E-06	0.16136E-05	0.59264E-11
10	0.76648E-06	0.21115E-05	0.77550E-11
11	0.98339E-06	0.27091E-05	0.99496E-11
12	0.12395E-05	0.34145E-05	0.12540E-10
13	0.15368E-05	0.42335E-05	0.15548E-10
14	0.18761E-05	0.51684E-05	0.18982E-10

Polygon I
Time: 48.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.80165E-08	0.22084E-07	0.81108E-13
2	0.22661E-07	0.62428E-07	0.22928E-12
3	0.45475E-07	0.12528E-06	0.46010E-12
4	0.78301E-07	0.21571E-06	0.79222E-12
5	0.12329E-06	0.33965E-06	0.12474E-11
6	0.18292E-06	0.50390E-06	0.18507E-11
7	0.25993E-06	0.71605E-06	0.26299E-11
8	0.35732E-06	0.98435E-06	0.36152E-11
9	0.47823E-06	0.13174E-05	0.48386E-11
10	0.62581E-06	0.17240E-05	0.63317E-11
11	0.80297E-06	0.22120E-05	0.81241E-11
12	0.10122E-05	0.27884E-05	0.10241E-10
13	0.12551E-05	0.34576E-05	0.12699E-10
14	0.15324E-05	0.42215E-05	0.15504E-10

Polygon I
Time: 49.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.65459E-08	0.18033E-07	0.66229E-13
2	0.18504E-07	0.50976E-07	0.18722E-12
3	0.37133E-07	0.10230E-06	0.37570E-12
4	0.63937E-07	0.17613E-06	0.64689E-12
5	0.10067E-06	0.27734E-06	0.10186E-11
6	0.14935E-06	0.41144E-06	0.15111E-11
7	0.21223E-06	0.58465E-06	0.21472E-11
8	0.29174E-06	0.80369E-06	0.29517E-11
9	0.39045E-06	0.10756E-05	0.39505E-11
10	0.51095E-06	0.14076E-05	0.51696E-11
11	0.65563E-06	0.18062E-05	0.66335E-11

12	0.82653E-06	0.22769E-05	0.83626E-11
13	0.10250E-05	0.28238E-05	0.10371E-10
14	0.12516E-05	0.34479E-05	0.12663E-10

Polygon I
Time: 50.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.53451E-08	0.14725E-07	0.54080E-13
2	0.15110E-07	0.41625E-07	0.15288E-12
3	0.30321E-07	0.83530E-07	0.30678E-12
4	0.52208E-07	0.14382E-06	0.52822E-12
5	0.82204E-07	0.22646E-06	0.83171E-12
6	0.12195E-06	0.33595E-06	0.12339E-11
7	0.17328E-06	0.47736E-06	0.17532E-11
8	0.23820E-06	0.65619E-06	0.24100E-11
9	0.31879E-06	0.87821E-06	0.32254E-11
10	0.41717E-06	0.11492E-05	0.42208E-11
11	0.53533E-06	0.14747E-05	0.54162E-11
12	0.67492E-06	0.18593E-05	0.68286E-11
13	0.83709E-06	0.23060E-05	0.84693E-11
14	0.10222E-05	0.28159E-05	0.10342E-10

Polygon I
Time: 51.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.43645E-08	0.12023E-07	0.44158E-13
2	0.12338E-07	0.33989E-07	0.12483E-12
3	0.24759E-07	0.68207E-07	0.25050E-12
4	0.42630E-07	0.11744E-06	0.43132E-12
5	0.67123E-07	0.18491E-06	0.67912E-12
6	0.99576E-07	0.27431E-06	0.10075E-11
7	0.14149E-06	0.38977E-06	0.14315E-11
8	0.19448E-06	0.53577E-06	0.19677E-11
9	0.26028E-06	0.71704E-06	0.26335E-11
10	0.34061E-06	0.93832E-06	0.34462E-11
11	0.43709E-06	0.12041E-05	0.44223E-11
12	0.55110E-06	0.15182E-05	0.55758E-11
13	0.68358E-06	0.18831E-05	0.69162E-11
14	0.83481E-06	0.22997E-05	0.84463E-11

Polygon I
Time: 52.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.35638E-08	0.98176E-08	0.36057E-13
2	0.10074E-07	0.27753E-07	0.10193E-12
3	0.20217E-07	0.55694E-07	0.20455E-12
4	0.34810E-07	0.95894E-07	0.35219E-12
5	0.54808E-07	0.15099E-06	0.55453E-12
6	0.81307E-07	0.22399E-06	0.82263E-12
7	0.11553E-06	0.31825E-06	0.11689E-11
8	0.15880E-06	0.43745E-06	0.16066E-11
9	0.21252E-06	0.58544E-06	0.21502E-11
10	0.27810E-06	0.76611E-06	0.28137E-11
11	0.35688E-06	0.98314E-06	0.36108E-11
12	0.44999E-06	0.12396E-05	0.45528E-11
13	0.55820E-06	0.15377E-05	0.56477E-11
14	0.68175E-06	0.18781E-05	0.68977E-11

Polygon I
Time: 53.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)

1	0.29099E-08	0.80164E-08	0.29442E-13
2	0.82262E-08	0.22662E-07	0.83230E-13
3	0.16508E-07	0.45477E-07	0.16702E-12
4	0.28423E-07	0.78302E-07	0.28758E-12
5	0.44753E-07	0.12329E-06	0.45280E-12
6	0.66389E-07	0.18289E-06	0.67171E-12
7	0.94329E-07	0.25986E-06	0.95439E-12
8	0.12966E-06	0.35718E-06	0.13118E-11
9	0.17352E-06	0.47801E-06	0.17556E-11
10	0.22706E-06	0.62552E-06	0.22973E-11
11	0.29139E-06	0.80272E-06	0.29481E-11
12	0.36742E-06	0.10122E-05	0.37174E-11
13	0.45581E-06	0.12557E-05	0.46117E-11
14	0.55673E-06	0.15337E-05	0.56328E-11

Polygon I
Time: 54.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.23760E-08	0.65456E-08	0.24040E-13
2	0.67169E-08	0.18504E-07	0.67960E-13
3	0.13479E-07	0.37133E-07	0.13638E-12
4	0.23209E-07	0.63936E-07	0.23482E-12
5	0.36543E-07	0.10067E-06	0.36973E-12
6	0.54209E-07	0.14934E-06	0.54847E-12
7	0.77022E-07	0.21218E-06	0.77928E-12
8	0.10587E-06	0.29164E-06	0.10711E-11
9	0.14168E-06	0.39029E-06	0.14334E-11
10	0.18539E-06	0.51072E-06	0.18757E-11
11	0.23791E-06	0.65541E-06	0.24071E-11
12	0.30000E-06	0.82645E-06	0.30353E-11
13	0.37219E-06	0.10253E-05	0.37656E-11
14	0.45463E-06	0.12524E-05	0.45998E-11

Polygon I
Time: 55.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.19401E-08	0.53446E-08	0.19629E-13
2	0.54846E-08	0.15109E-07	0.55491E-13
3	0.11006E-07	0.30321E-07	0.11136E-12
4	0.18951E-07	0.52206E-07	0.19174E-12
5	0.29838E-07	0.82200E-07	0.30189E-12
6	0.44264E-07	0.12194E-06	0.44784E-12
7	0.62890E-07	0.17325E-06	0.63630E-12
8	0.86441E-07	0.23813E-06	0.87458E-12
9	0.11568E-06	0.31867E-06	0.11704E-11
10	0.15137E-06	0.41700E-06	0.15315E-11
11	0.19425E-06	0.53513E-06	0.19654E-11
12	0.24495E-06	0.67480E-06	0.24783E-11
13	0.30390E-06	0.83720E-06	0.30748E-11
14	0.37124E-06	0.10227E-05	0.37561E-11

Polygon I
Time: 56.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.15841E-08	0.43640E-08	0.16028E-13
2	0.44783E-08	0.12337E-07	0.45310E-13
3	0.89870E-08	0.24758E-07	0.90928E-13
4	0.15474E-07	0.42628E-07	0.15656E-12
5	0.24364E-07	0.67119E-07	0.24651E-12
6	0.36143E-07	0.99566E-07	0.36568E-12
7	0.51351E-07	0.14146E-06	0.51956E-12

8	0.70581E-07	0.19444E-06	0.71411E-12
9	0.94452E-07	0.26020E-06	0.95563E-12
10	0.12359E-06	0.34048E-06	0.12505E-11
11	0.15861E-06	0.43693E-06	0.16047E-11
12	0.20000E-06	0.55097E-06	0.20236E-11
13	0.24814E-06	0.68359E-06	0.25106E-11
14	0.30314E-06	0.83510E-06	0.30671E-11

Polygon I
Time: 57.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.12935E-08	0.35633E-08	0.13087E-13
2	0.36566E-08	0.10073E-07	0.36997E-13
3	0.73381E-08	0.20215E-07	0.74245E-13
4	0.12635E-07	0.34807E-07	0.12784E-12
5	0.19894E-07	0.54805E-07	0.20128E-12
6	0.29512E-07	0.81299E-07	0.29859E-12
7	0.41930E-07	0.11551E-06	0.42423E-12
8	0.57630E-07	0.15876E-06	0.58308E-12
9	0.77121E-07	0.21245E-06	0.78028E-12
10	0.10091E-06	0.27800E-06	0.10210E-11
11	0.12950E-06	0.35675E-06	0.13102E-11
12	0.16330E-06	0.44987E-06	0.16522E-11
13	0.20261E-06	0.55816E-06	0.20500E-11
14	0.24753E-06	0.68190E-06	0.25044E-11

Polygon I
Time: 58.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.10561E-08	0.29095E-08	0.10686E-13
2	0.29857E-08	0.82251E-08	0.30208E-13
3	0.59918E-08	0.16506E-07	0.60623E-13
4	0.10317E-07	0.28421E-07	0.10438E-12
5	0.16244E-07	0.44749E-07	0.16435E-12
6	0.24097E-07	0.66383E-07	0.24381E-12
7	0.34237E-07	0.94316E-07	0.34640E-12
8	0.47056E-07	0.12963E-06	0.47610E-12
9	0.62970E-07	0.17347E-06	0.63711E-12
10	0.82397E-07	0.22699E-06	0.83366E-12
11	0.10574E-06	0.29129E-06	0.10698E-11
12	0.13334E-06	0.36731E-06	0.13490E-11
13	0.16543E-06	0.45574E-06	0.16738E-11
14	0.20212E-06	0.55679E-06	0.20449E-11

Polygon I
Time: 59.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.86236E-09	0.23757E-08	0.87251E-14
2	0.24379E-08	0.67160E-08	0.24666E-13
3	0.48924E-08	0.13478E-07	0.49500E-13
4	0.84239E-08	0.23206E-07	0.85230E-13
5	0.13264E-07	0.36539E-07	0.13420E-12
6	0.19676E-07	0.54204E-07	0.19907E-12
7	0.27955E-07	0.77012E-07	0.28284E-12
8	0.38423E-07	0.10585E-06	0.38875E-12
9	0.51416E-07	0.14164E-06	0.52021E-12
10	0.67278E-07	0.18534E-06	0.68069E-12
11	0.86334E-07	0.23784E-06	0.87350E-12
12	0.10887E-06	0.29991E-06	0.11015E-11
13	0.13508E-06	0.37212E-06	0.13667E-11
14	0.16503E-06	0.45464E-06	0.16697E-11

Polygon I
Time: 60.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.70413E-09	0.19398E-08	0.71242E-14
2	0.19906E-08	0.54837E-08	0.20140E-13
3	0.39948E-08	0.11005E-07	0.40417E-13
4	0.68783E-08	0.18949E-07	0.69593E-13
5	0.10830E-07	0.29835E-07	0.10958E-12
6	0.16066E-07	0.44259E-07	0.16255E-12
7	0.22826E-07	0.62882E-07	0.23095E-12
8	0.31373E-07	0.86427E-07	0.31742E-12
9	0.41982E-07	0.11565E-06	0.42476E-12
10	0.54933E-07	0.15133E-06	0.55579E-12
11	0.70492E-07	0.19419E-06	0.71321E-12
12	0.88891E-07	0.24488E-06	0.89936E-12
13	0.11029E-06	0.30384E-06	0.11159E-11
14	0.13475E-06	0.37122E-06	0.13634E-11

Polygon I
Time: 61.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.57494E-09	0.15838E-08	0.58170E-14
2	0.16254E-08	0.44775E-08	0.16445E-13
3	0.32618E-08	0.89856E-08	0.33002E-13
4	0.56163E-08	0.15472E-07	0.56824E-13
5	0.88431E-08	0.24361E-07	0.89471E-13
6	0.13118E-07	0.36138E-07	0.13272E-12
7	0.18638E-07	0.51345E-07	0.18857E-12
8	0.25617E-07	0.70569E-07	0.25918E-12
9	0.34279E-07	0.94433E-07	0.34682E-12
10	0.44853E-07	0.12356E-06	0.45381E-12
11	0.57557E-07	0.15856E-06	0.58234E-12
12	0.72579E-07	0.19994E-06	0.73433E-12
13	0.90054E-07	0.24808E-06	0.91113E-12
14	0.11003E-06	0.30311E-06	0.11132E-11

Polygon I
Time: 62.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.46944E-09	0.12932E-08	0.47497E-14
2	0.13271E-08	0.36560E-08	0.13427E-13
3	0.26633E-08	0.73369E-08	0.26946E-13
4	0.45858E-08	0.12633E-07	0.46398E-13
5	0.72206E-08	0.19891E-07	0.73055E-13
6	0.10711E-07	0.29508E-07	0.10837E-12
7	0.15218E-07	0.41924E-07	0.15398E-12
8	0.20917E-07	0.57621E-07	0.21163E-12
9	0.27990E-07	0.77106E-07	0.28319E-12
10	0.36623E-07	0.10089E-06	0.37054E-12
11	0.46996E-07	0.12947E-06	0.47549E-12
12	0.59261E-07	0.16325E-06	0.59958E-12
13	0.73529E-07	0.20256E-06	0.74394E-12
14	0.89839E-07	0.24749E-06	0.90896E-12

Polygon I
Time: 63.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.38331E-09	0.10559E-08	0.38782E-14
2	0.10836E-08	0.29852E-08	0.10964E-13
3	0.21746E-08	0.59907E-08	0.22002E-13

4	0.37444E-08	0.10315E-07	0.37885E-13
5	0.58957E-08	0.16242E-07	0.59651E-13
6	0.87460E-08	0.24094E-07	0.88489E-13
7	0.12426E-07	0.34232E-07	0.12572E-12
8	0.17079E-07	0.47049E-07	0.17280E-12
9	0.22854E-07	0.62959E-07	0.23123E-12
10	0.29904E-07	0.82379E-07	0.30255E-12
11	0.38373E-07	0.10571E-06	0.38824E-12
12	0.48387E-07	0.13330E-06	0.48956E-12
13	0.60037E-07	0.16539E-06	0.60743E-12
14	0.73354E-07	0.20208E-06	0.74217E-12

Polygon I
Time: 64.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.31298E-09	0.86220E-09	0.31666E-14
2	0.88479E-09	0.24374E-08	0.89520E-14
3	0.17756E-08	0.48915E-08	0.17965E-13
4	0.30574E-08	0.84225E-08	0.30933E-13
5	0.48140E-08	0.13262E-07	0.48706E-13
6	0.71413E-08	0.19673E-07	0.72253E-13
7	0.10146E-07	0.27951E-07	0.10266E-12
8	0.13945E-07	0.38417E-07	0.14109E-12
9	0.18661E-07	0.51407E-07	0.18880E-12
10	0.24417E-07	0.67264E-07	0.24704E-12
11	0.31332E-07	0.86314E-07	0.31700E-12
12	0.39509E-07	0.10884E-06	0.39973E-12
13	0.49021E-07	0.13504E-06	0.49597E-12
14	0.59894E-07	0.16500E-06	0.60599E-12

Polygon I
Time: 65.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.25555E-09	0.70400E-09	0.25856E-14
2	0.72245E-09	0.19902E-08	0.73095E-14
3	0.14498E-08	0.39940E-08	0.14669E-13
4	0.24964E-08	0.68771E-08	0.25258E-13
5	0.39307E-08	0.10828E-07	0.39769E-13
6	0.58310E-08	0.16063E-07	0.58996E-13
7	0.82847E-08	0.22823E-07	0.83821E-13
8	0.11387E-07	0.31368E-07	0.11521E-12
9	0.15237E-07	0.41975E-07	0.15416E-12
10	0.19937E-07	0.54922E-07	0.20171E-12
11	0.25583E-07	0.70476E-07	0.25884E-12
12	0.32259E-07	0.88868E-07	0.32639E-12
13	0.40026E-07	0.11026E-06	0.40497E-12
14	0.48904E-07	0.13472E-06	0.49479E-12

Polygon I
Time: 66.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.20866E-09	0.57482E-09	0.21112E-14
2	0.58989E-09	0.16250E-08	0.59683E-14
3	0.11838E-08	0.32612E-08	0.11977E-13
4	0.20384E-08	0.56153E-08	0.20623E-13
5	0.32095E-08	0.88416E-08	0.32473E-13
6	0.47611E-08	0.13116E-07	0.48171E-13
7	0.67646E-08	0.18635E-07	0.68442E-13
8	0.92974E-08	0.25613E-07	0.94068E-13
9	0.12441E-07	0.34273E-07	0.12588E-12
10	0.16279E-07	0.44845E-07	0.16470E-12

11	0.20889E-07	0.57545E-07	0.21135E-12
12	0.26340E-07	0.72562E-07	0.26650E-12
13	0.32681E-07	0.90031E-07	0.33066E-12
14	0.39931E-07	0.11000E-06	0.40400E-12

Polygon I
Time: 67.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.17038E-09	0.46935E-09	0.17238E-14
2	0.48165E-09	0.13269E-08	0.48732E-14
3	0.96660E-09	0.26628E-08	0.97797E-14
4	0.16644E-08	0.45850E-08	0.16839E-13
5	0.26206E-08	0.72193E-08	0.26514E-13
6	0.38876E-08	0.10710E-07	0.39333E-13
7	0.55234E-08	0.15216E-07	0.55884E-13
8	0.75915E-08	0.20913E-07	0.76808E-13
9	0.10159E-07	0.27985E-07	0.10278E-12
10	0.13292E-07	0.36617E-07	0.13448E-12
11	0.17056E-07	0.46986E-07	0.17257E-12
12	0.21507E-07	0.59248E-07	0.21760E-12
13	0.26685E-07	0.73511E-07	0.26999E-12
14	0.32604E-07	0.89817E-07	0.32987E-12

Polygon I
Time: 68.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.13911E-09	0.38323E-09	0.14075E-14
2	0.39328E-09	0.10834E-08	0.39791E-14
3	0.78924E-09	0.21742E-08	0.79853E-14
4	0.13590E-08	0.37437E-08	0.13750E-13
5	0.21398E-08	0.58947E-08	0.21649E-13
6	0.31743E-08	0.87445E-08	0.32116E-13
7	0.45100E-08	0.12424E-07	0.45630E-13
8	0.61986E-08	0.17076E-07	0.62715E-13
9	0.82946E-08	0.22850E-07	0.83922E-13
10	0.10853E-07	0.29898E-07	0.10981E-12
11	0.13927E-07	0.38365E-07	0.14090E-12
12	0.17561E-07	0.48377E-07	0.17767E-12
13	0.21788E-07	0.60023E-07	0.22045E-12
14	0.26621E-07	0.73337E-07	0.26934E-12

Polygon I
Time: 69.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.11359E-09	0.31292E-09	0.11493E-14
2	0.32112E-09	0.88462E-09	0.32490E-14
3	0.64443E-09	0.17753E-08	0.65201E-14
4	0.11096E-08	0.30568E-08	0.11227E-13
5	0.17472E-08	0.48131E-08	0.17677E-13
6	0.25918E-08	0.71401E-08	0.26223E-13
7	0.36825E-08	0.10145E-07	0.37258E-13
8	0.50613E-08	0.13943E-07	0.51208E-13
9	0.67727E-08	0.18658E-07	0.68524E-13
10	0.88618E-08	0.24413E-07	0.89660E-13
11	0.11371E-07	0.31326E-07	0.11505E-12
12	0.14339E-07	0.39500E-07	0.14507E-12
13	0.17790E-07	0.49009E-07	0.18000E-12
14	0.21736E-07	0.59880E-07	0.21992E-12

Polygon I
Time: 70.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.92747E-10	0.25550E-09	0.93839E-15
2	0.26220E-09	0.72231E-09	0.26528E-14
3	0.52619E-09	0.14496E-08	0.53238E-14
4	0.90603E-09	0.24959E-08	0.91668E-14
5	0.14266E-08	0.39300E-08	0.14434E-13
6	0.21163E-08	0.58300E-08	0.21412E-13
7	0.30068E-08	0.82832E-08	0.30422E-13
8	0.41326E-08	0.11385E-07	0.41813E-13
9	0.55301E-08	0.15234E-07	0.55951E-13
10	0.72358E-08	0.19933E-07	0.73209E-13
11	0.92849E-08	0.25578E-07	0.93941E-13
12	0.11708E-07	0.32253E-07	0.11845E-12
13	0.14526E-07	0.40017E-07	0.14697E-12
14	0.17748E-07	0.48893E-07	0.17957E-12

Polygon I
Time: 71.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.75730E-10	0.20862E-09	0.76621E-15
2	0.21409E-09	0.58978E-09	0.21661E-14
3	0.42964E-09	0.11836E-08	0.43470E-14
4	0.73979E-09	0.20380E-08	0.74849E-14
5	0.11648E-08	0.32089E-08	0.11785E-13
6	0.17280E-08	0.47603E-08	0.17483E-13
7	0.24551E-08	0.67634E-08	0.24840E-13
8	0.33744E-08	0.92958E-08	0.34141E-13
9	0.45154E-08	0.12439E-07	0.45685E-13
10	0.59082E-08	0.16276E-07	0.59777E-13
11	0.75813E-08	0.20885E-07	0.76705E-13
12	0.95595E-08	0.26335E-07	0.96720E-13
13	0.11861E-07	0.32674E-07	0.12000E-12
14	0.14492E-07	0.39922E-07	0.14662E-12

Polygon I
Time: 72.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.61835E-10	0.17034E-09	0.62562E-15
2	0.17481E-09	0.48156E-09	0.17686E-14
3	0.35081E-09	0.96642E-09	0.35494E-14
4	0.60405E-09	0.16640E-08	0.61115E-14
5	0.95111E-09	0.26201E-08	0.96229E-14
6	0.14109E-08	0.38869E-08	0.14275E-13
7	0.20047E-08	0.55225E-08	0.20282E-13
8	0.27552E-08	0.75902E-08	0.27877E-13
9	0.36869E-08	0.10157E-07	0.37303E-13
10	0.48241E-08	0.13290E-07	0.48809E-13
11	0.61902E-08	0.17053E-07	0.62631E-13
12	0.78055E-08	0.21503E-07	0.78973E-13
13	0.96845E-08	0.26679E-07	0.97984E-13
14	0.11833E-07	0.32597E-07	0.11972E-12

Polygon I
Time: 73.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.50489E-10	0.13909E-09	0.51083E-15
2	0.14273E-09	0.39320E-09	0.14441E-14
3	0.28644E-09	0.78910E-09	0.28981E-14
4	0.49321E-09	0.13587E-08	0.49902E-14
5	0.77659E-09	0.21394E-08	0.78573E-14
6	0.11520E-08	0.31737E-08	0.11656E-13

7	0.16368E-08	0.45092E-08	0.16561E-13
8	0.22497E-08	0.61975E-08	0.22762E-13
9	0.30104E-08	0.82932E-08	0.30459E-13
10	0.39390E-08	0.10851E-07	0.39853E-13
11	0.50544E-08	0.13924E-07	0.51139E-13
12	0.63733E-08	0.17557E-07	0.64483E-13
13	0.79076E-08	0.21784E-07	0.80006E-13
14	0.96614E-08	0.26616E-07	0.97751E-13

Polygon I
Time: 74.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.41225E-10	0.11357E-09	0.41710E-15
2	0.11654E-09	0.32106E-09	0.11792E-14
3	0.23389E-09	0.64431E-09	0.23664E-14
4	0.40272E-09	0.11094E-08	0.40746E-14
5	0.63410E-09	0.17468E-08	0.64156E-14
6	0.94067E-09	0.25914E-08	0.95173E-14
7	0.13365E-08	0.36818E-08	0.13522E-13
8	0.18369E-08	0.50604E-08	0.18585E-13
9	0.24581E-08	0.67716E-08	0.24870E-13
10	0.32163E-08	0.88602E-08	0.32541E-13
11	0.41271E-08	0.11369E-07	0.41756E-13
12	0.52040E-08	0.14336E-07	0.52652E-13
13	0.64567E-08	0.17787E-07	0.65326E-13
14	0.78887E-08	0.21732E-07	0.79815E-13

Polygon I
Time: 75.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.33661E-10	0.92730E-10	0.34057E-15
2	0.95160E-10	0.26215E-09	0.96280E-15
3	0.19097E-09	0.52609E-09	0.19322E-14
4	0.32883E-09	0.90586E-09	0.33269E-14
5	0.51776E-09	0.14263E-08	0.52385E-14
6	0.76807E-09	0.21159E-08	0.77711E-14
7	0.10913E-08	0.30063E-08	0.11041E-13
8	0.14999E-08	0.41319E-08	0.15175E-13
9	0.20071E-08	0.55291E-08	0.20307E-13
10	0.26261E-08	0.72345E-08	0.26570E-13
11	0.33698E-08	0.92832E-08	0.34095E-13
12	0.42491E-08	0.11706E-07	0.42991E-13
13	0.52720E-08	0.14523E-07	0.53340E-13
14	0.64413E-08	0.17745E-07	0.65170E-13

Polygon I
Time: 76.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.27485E-10	0.75716E-10	0.27808E-15
2	0.77700E-10	0.21405E-09	0.78614E-15
3	0.15593E-09	0.42956E-09	0.15777E-14
4	0.26849E-09	0.73965E-09	0.27165E-14
5	0.42276E-09	0.11646E-08	0.42773E-14
6	0.62714E-09	0.17277E-08	0.63452E-14
7	0.89105E-09	0.24547E-08	0.90153E-14
8	0.12247E-08	0.33738E-08	0.12391E-13
9	0.16388E-08	0.45146E-08	0.16581E-13
10	0.21443E-08	0.59071E-08	0.21695E-13
11	0.27515E-08	0.75799E-08	0.27839E-13
12	0.34695E-08	0.95578E-08	0.35103E-13
13	0.43047E-08	0.11859E-07	0.43553E-13

14	0.52594E-08	0.14489E-07	0.53213E-13

Polygon I
Time: 77.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.22442E-10	0.61823E-10	0.22706E-15
2	0.63444E-10	0.17478E-09	0.64190E-15
3	0.12732E-09	0.35075E-09	0.12882E-14
4	0.21923E-09	0.60394E-09	0.22181E-14
5	0.34519E-09	0.95093E-09	0.34925E-14
6	0.51207E-09	0.14107E-08	0.51810E-14
7	0.72756E-09	0.20043E-08	0.73612E-14
8	0.99997E-09	0.27548E-08	0.10117E-13
9	0.13381E-08	0.36863E-08	0.13539E-13
10	0.17509E-08	0.48233E-08	0.17715E-13
11	0.22467E-08	0.61892E-08	0.22731E-13
12	0.28329E-08	0.78041E-08	0.28662E-13
13	0.35148E-08	0.96827E-08	0.35562E-13
14	0.42944E-08	0.11830E-07	0.43449E-13

Polygon I
Time: 78.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.18324E-10	0.50480E-10	0.18540E-15
2	0.51803E-10	0.14271E-09	0.52412E-15
3	0.10396E-09	0.28639E-09	0.10518E-14
4	0.17900E-09	0.49312E-09	0.18111E-14
5	0.28185E-09	0.77645E-09	0.28517E-14
6	0.41812E-09	0.11518E-08	0.42304E-14
7	0.59406E-09	0.16365E-08	0.60105E-14
8	0.81650E-09	0.22493E-08	0.82610E-14
9	0.10926E-08	0.30099E-08	0.11054E-13
10	0.14296E-08	0.39383E-08	0.14464E-13
11	0.18344E-08	0.50536E-08	0.18560E-13
12	0.23131E-08	0.63722E-08	0.23403E-13
13	0.28699E-08	0.79061E-08	0.29037E-13
14	0.35064E-08	0.96596E-08	0.35477E-13

Polygon I
Time: 79.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.14962E-10	0.41218E-10	0.15138E-15
2	0.42298E-10	0.11652E-09	0.42795E-15
3	0.84885E-10	0.23384E-09	0.85883E-15
4	0.14616E-09	0.40264E-09	0.14788E-14
5	0.23014E-09	0.63399E-09	0.23284E-14
6	0.34140E-09	0.94049E-09	0.34542E-14
7	0.48506E-09	0.13363E-08	0.49077E-14
8	0.66668E-09	0.18366E-08	0.67453E-14
9	0.89212E-09	0.24576E-08	0.90262E-14
10	0.11673E-08	0.32157E-08	0.11810E-13
11	0.14979E-08	0.41263E-08	0.15155E-13
12	0.18887E-08	0.52030E-08	0.19109E-13
13	0.23433E-08	0.64555E-08	0.23709E-13
14	0.28631E-08	0.78872E-08	0.28967E-13

Polygon I
Time: 80.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.12217E-10	0.33655E-10	0.12361E-15
2	0.34537E-10	0.95143E-10	0.34943E-15

3	0.69310E-10	0.19094E-09	0.70125E-15
4	0.11934E-09	0.32877E-09	0.12075E-14
5	0.18791E-09	0.51766E-09	0.19012E-14
6	0.27876E-09	0.76793E-09	0.28204E-14
7	0.39606E-09	0.10911E-08	0.40072E-14
8	0.54436E-09	0.14996E-08	0.55076E-14
9	0.72843E-09	0.20067E-08	0.73700E-14
10	0.95312E-09	0.26257E-08	0.96433E-14
11	0.12230E-08	0.33692E-08	0.12374E-13
12	0.15422E-08	0.42484E-08	0.15603E-13
13	0.19134E-08	0.52710E-08	0.19359E-13
14	0.23377E-08	0.64401E-08	0.23652E-13

Polygon I
Time: 81.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.99752E-11	0.27480E-10	0.10093E-15
2	0.28200E-10	0.77686E-10	0.28532E-15
3	0.56593E-10	0.15590E-09	0.57259E-15
4	0.97445E-10	0.26844E-09	0.98591E-15
5	0.15343E-09	0.42268E-09	0.15524E-14
6	0.22761E-09	0.62703E-09	0.23029E-14
7	0.32339E-09	0.89089E-09	0.32720E-14
8	0.44448E-09	0.12245E-08	0.44971E-14
9	0.59478E-09	0.16385E-08	0.60178E-14
10	0.77824E-09	0.21439E-08	0.78739E-14
11	0.99862E-09	0.27510E-08	0.10104E-13
12	0.12592E-08	0.34689E-08	0.12740E-13
13	0.15623E-08	0.43039E-08	0.15807E-13
14	0.19088E-08	0.52584E-08	0.19313E-13

Polygon I
Time: 82.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.81449E-11	0.22438E-10	0.82408E-16
2	0.23026E-10	0.63432E-10	0.23297E-15
3	0.46209E-10	0.12730E-09	0.46753E-15
4	0.79566E-10	0.21919E-09	0.80502E-15
5	0.12528E-09	0.34512E-09	0.12675E-14
6	0.18585E-09	0.51198E-09	0.18804E-14
7	0.26405E-09	0.72742E-09	0.26716E-14
8	0.36293E-09	0.99979E-09	0.36719E-14
9	0.48565E-09	0.13379E-08	0.49136E-14
10	0.63545E-09	0.17505E-08	0.64292E-14
11	0.81539E-09	0.22463E-08	0.82499E-14
12	0.10282E-08	0.28324E-08	0.10403E-13
13	0.12757E-08	0.35142E-08	0.12907E-13
14	0.15586E-08	0.42936E-08	0.15769E-13

Polygon I
Time: 83.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.66505E-11	0.18321E-10	0.67287E-16
2	0.18801E-10	0.51793E-10	0.19022E-15
3	0.37730E-10	0.10394E-09	0.38174E-15
4	0.64967E-10	0.17897E-09	0.65731E-15
5	0.10229E-09	0.28180E-09	0.10350E-14
6	0.15175E-09	0.41804E-09	0.15353E-14
7	0.21561E-09	0.59395E-09	0.21814E-14
8	0.29633E-09	0.81635E-09	0.29982E-14
9	0.39654E-09	0.10924E-08	0.40121E-14

10	0.51885E-09	0.14293E-08	0.52496E-14
11	0.66578E-09	0.18341E-08	0.67362E-14
12	0.83951E-09	0.23127E-08	0.84939E-14
13	0.10416E-08	0.28694E-08	0.10538E-13
14	0.12726E-08	0.35058E-08	0.12876E-13

Polygon I
Time: 84.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.54302E-11	0.14959E-10	0.54941E-16
2	0.15351E-10	0.42290E-10	0.15532E-15
3	0.30808E-10	0.84869E-10	0.31170E-15
4	0.53046E-10	0.14613E-09	0.53671E-15
5	0.83525E-10	0.23010E-09	0.84507E-15
6	0.12391E-09	0.34134E-09	0.12536E-14
7	0.17605E-09	0.48497E-09	0.17812E-14
8	0.24196E-09	0.66656E-09	0.24481E-14
9	0.32378E-09	0.89196E-09	0.32759E-14
10	0.42365E-09	0.11671E-08	0.42864E-14
11	0.54362E-09	0.14976E-08	0.55002E-14
12	0.68548E-09	0.18884E-08	0.69354E-14
13	0.85048E-09	0.23429E-08	0.86049E-14
14	0.10391E-08	0.28626E-08	0.10513E-13

Polygon I
Time: 85.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.44339E-11	0.12215E-10	0.44861E-16
2	0.12535E-10	0.34531E-10	0.12682E-15
3	0.25155E-10	0.69297E-10	0.25451E-15
4	0.43313E-10	0.11932E-09	0.43823E-15
5	0.68199E-10	0.18788E-09	0.69002E-15
6	0.10117E-09	0.27871E-09	0.10236E-14
7	0.14374E-09	0.39599E-09	0.14544E-14
8	0.19757E-09	0.54426E-09	0.19989E-14
9	0.26437E-09	0.72830E-09	0.26748E-14
10	0.34592E-09	0.95295E-09	0.34999E-14
11	0.44388E-09	0.12228E-08	0.44910E-14
12	0.55970E-09	0.15419E-08	0.56629E-14
13	0.69443E-09	0.19130E-08	0.70260E-14
14	0.84845E-09	0.23373E-08	0.85843E-14

Polygon I
Time: 86.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.36204E-11	0.99734E-11	0.36629E-16
2	0.10235E-10	0.28195E-10	0.10355E-15
3	0.20539E-10	0.56583E-10	0.20781E-15
4	0.35366E-10	0.97427E-10	0.35782E-15
5	0.55686E-10	0.15340E-09	0.56341E-15
6	0.82608E-10	0.22757E-09	0.83580E-15
7	0.11737E-09	0.32333E-09	0.11875E-14
8	0.16132E-09	0.44440E-09	0.16321E-14
9	0.21587E-09	0.59467E-09	0.21841E-14
10	0.28245E-09	0.77810E-09	0.28577E-14
11	0.36244E-09	0.99844E-09	0.36670E-14
12	0.45701E-09	0.12590E-08	0.46238E-14
13	0.56702E-09	0.15620E-08	0.57369E-14
14	0.69277E-09	0.19085E-08	0.70092E-14

Polygon I

Time: 87.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.29561E-11	0.81435E-11	0.29909E-16
2	0.83569E-11	0.23022E-10	0.84552E-16
3	0.16771E-10	0.46201E-10	0.16968E-15
4	0.28877E-10	0.79551E-10	0.29217E-15
5	0.45469E-10	0.12526E-09	0.46003E-15
6	0.67451E-10	0.18581E-09	0.68244E-15
7	0.95834E-10	0.26401E-09	0.96962E-15
8	0.13172E-09	0.36286E-09	0.13327E-14
9	0.17626E-09	0.48556E-09	0.17833E-14
10	0.23063E-09	0.63533E-09	0.23334E-14
11	0.29593E-09	0.81525E-09	0.29942E-14
12	0.37316E-09	0.10280E-08	0.37755E-14
13	0.46298E-09	0.12754E-08	0.46843E-14
14	0.56566E-09	0.15583E-08	0.57232E-14

Polygon I

Time: 88.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.24137E-11	0.66493E-11	0.24421E-16
2	0.68235E-11	0.18798E-10	0.69038E-16
3	0.13694E-10	0.37724E-10	0.13855E-15
4	0.23579E-10	0.64955E-10	0.23856E-15
5	0.37126E-10	0.10228E-09	0.37563E-15
6	0.55075E-10	0.15172E-09	0.55723E-15
7	0.78251E-10	0.21557E-09	0.79171E-15
8	0.10755E-09	0.29628E-09	0.10882E-14
9	0.14392E-09	0.39647E-09	0.14561E-14
10	0.18831E-09	0.51876E-09	0.19052E-14
11	0.24164E-09	0.66566E-09	0.24448E-14
12	0.30469E-09	0.83936E-09	0.30827E-14
13	0.37803E-09	0.10414E-08	0.38248E-14
14	0.46187E-09	0.12724E-08	0.46731E-14

Polygon I

Time: 89.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.19708E-11	0.54293E-11	0.19940E-16
2	0.55715E-11	0.15349E-10	0.56371E-16
3	0.11181E-10	0.30802E-10	0.11313E-15
4	0.19252E-10	0.53037E-10	0.19479E-15
5	0.30314E-10	0.83509E-10	0.30671E-15
6	0.44970E-10	0.12388E-09	0.45499E-15
7	0.63893E-10	0.17601E-09	0.64645E-15
8	0.87816E-10	0.24192E-09	0.88850E-15
9	0.11751E-09	0.32372E-09	0.11889E-14
10	0.15376E-09	0.42358E-09	0.15557E-14
11	0.19730E-09	0.54353E-09	0.19962E-14
12	0.24878E-09	0.68535E-09	0.25171E-14
13	0.30867E-09	0.85033E-09	0.31230E-14
14	0.37713E-09	0.10389E-08	0.38156E-14

Polygon I

Time: 90.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.16092E-11	0.44331E-11	0.16281E-16
2	0.45493E-11	0.12532E-10	0.46028E-16
3	0.91296E-11	0.25150E-10	0.92370E-16
4	0.15720E-10	0.43306E-10	0.15905E-15
5	0.24752E-10	0.68187E-10	0.25043E-15

6	0.36718E-10	0.10115E-09	0.37150E-15
7	0.52170E-10	0.14372E-09	0.52783E-15
8	0.71704E-10	0.19753E-09	0.72547E-15
9	0.95950E-10	0.26433E-09	0.97079E-15
10	0.12555E-09	0.34586E-09	0.12702E-14
11	0.16110E-09	0.44380E-09	0.16299E-14
12	0.20314E-09	0.55960E-09	0.20553E-14
13	0.25203E-09	0.69431E-09	0.25500E-14
14	0.30793E-09	0.84830E-09	0.31155E-14

Polygon I
Time: 91.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.13140E-11	0.36197E-11	0.13294E-16
2	0.37146E-11	0.10233E-10	0.37583E-16
3	0.74545E-11	0.20536E-10	0.75422E-16
4	0.12836E-10	0.35360E-10	0.12987E-15
5	0.20210E-10	0.55676E-10	0.20448E-15
6	0.29981E-10	0.82593E-10	0.30334E-15
7	0.42598E-10	0.11735E-09	0.43099E-15
8	0.58547E-10	0.16129E-09	0.59236E-15
9	0.78345E-10	0.21583E-09	0.79267E-15
10	0.10251E-09	0.28240E-09	0.10372E-14
11	0.13154E-09	0.36237E-09	0.13309E-14
12	0.16586E-09	0.45693E-09	0.16782E-14
13	0.20579E-09	0.56692E-09	0.20821E-14
14	0.25143E-09	0.69265E-09	0.25439E-14

Polygon I
Time: 92.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.10729E-11	0.29555E-11	0.10855E-16
2	0.30330E-11	0.83554E-11	0.30687E-16
3	0.60867E-11	0.16768E-10	0.61583E-16
4	0.10480E-10	0.28872E-10	0.10604E-15
5	0.16502E-10	0.45460E-10	0.16696E-15
6	0.24480E-10	0.67439E-10	0.24768E-15
7	0.34782E-10	0.95817E-10	0.35191E-15
8	0.47805E-10	0.13169E-09	0.48367E-15
9	0.63970E-10	0.17623E-09	0.64723E-15
10	0.83702E-10	0.23058E-09	0.84687E-15
11	0.10740E-09	0.29588E-09	0.10867E-14
12	0.13543E-09	0.37309E-09	0.13702E-14
13	0.16803E-09	0.46290E-09	0.17001E-14
14	0.20530E-09	0.56556E-09	0.20771E-14

Polygon I
Time: 93.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.87601E-12	0.24133E-11	0.88632E-17
2	0.24765E-11	0.68223E-11	0.25056E-16
3	0.49699E-11	0.13691E-10	0.50284E-16
4	0.85575E-11	0.23574E-10	0.86582E-16
5	0.13474E-10	0.37119E-10	0.13633E-15
6	0.19989E-10	0.55065E-10	0.20224E-15
7	0.28400E-10	0.78236E-10	0.28734E-15
8	0.39034E-10	0.10753E-09	0.39493E-15
9	0.52233E-10	0.14389E-09	0.52847E-15
10	0.68344E-10	0.18828E-09	0.69148E-15
11	0.87698E-10	0.24159E-09	0.88730E-15
12	0.11058E-09	0.30463E-09	0.11188E-14

13	0.13720E-09	0.37796E-09	0.13881E-14
14	0.16763E-09	0.46179E-09	0.16960E-14

Polygon I
Time: 94.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.71528E-12	0.19705E-11	0.72369E-17
2	0.20221E-11	0.55705E-11	0.20459E-16
3	0.40580E-11	0.11179E-10	0.41058E-16
4	0.69874E-11	0.19249E-10	0.70696E-16
5	0.11002E-10	0.30308E-10	0.11131E-15
6	0.16321E-10	0.44961E-10	0.16513E-15
7	0.23189E-10	0.63881E-10	0.23462E-15
8	0.31872E-10	0.87801E-10	0.32247E-15
9	0.42649E-10	0.11749E-09	0.43151E-15
10	0.55804E-10	0.15373E-09	0.56461E-15
11	0.71607E-10	0.19726E-09	0.72449E-15
12	0.90292E-10	0.24874E-09	0.91354E-15
13	0.11203E-09	0.30861E-09	0.11334E-14
14	0.13687E-09	0.37706E-09	0.13848E-14

Polygon I
Time: 95.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.58404E-12	0.16089E-11	0.59091E-17
2	0.16511E-11	0.45484E-11	0.16705E-16
3	0.33134E-11	0.91280E-11	0.33524E-16
4	0.57053E-11	0.15717E-10	0.57724E-16
5	0.89833E-11	0.24747E-10	0.90890E-16
6	0.13326E-10	0.36712E-10	0.13483E-15
7	0.18934E-10	0.52160E-10	0.19157E-15
8	0.26024E-10	0.71691E-10	0.26330E-15
9	0.34824E-10	0.95933E-10	0.35233E-15
10	0.45565E-10	0.12552E-09	0.46101E-15
11	0.58468E-10	0.16107E-09	0.59156E-15
12	0.73725E-10	0.20310E-09	0.74592E-15
13	0.91472E-10	0.25199E-09	0.92548E-15
14	0.11176E-09	0.30788E-09	0.11307E-14

Polygon I
Time: 96.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.47688E-12	0.13137E-11	0.48249E-17
2	0.13481E-11	0.37139E-11	0.13640E-16
3	0.27055E-11	0.74531E-11	0.27373E-16
4	0.46585E-11	0.12833E-10	0.47133E-16
5	0.73350E-11	0.20207E-10	0.74213E-16
6	0.10881E-10	0.29976E-10	0.11009E-15
7	0.15460E-10	0.42590E-10	0.15642E-15
8	0.21249E-10	0.58537E-10	0.21499E-15
9	0.28434E-10	0.78331E-10	0.28769E-15
10	0.37205E-10	0.10249E-09	0.37642E-15
11	0.47740E-10	0.13152E-09	0.48302E-15
12	0.60198E-10	0.16583E-09	0.60906E-15
13	0.74688E-10	0.20575E-09	0.75567E-15
14	0.91253E-10	0.25139E-09	0.92327E-15

Polygon I
Time: 97.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.38938E-12	0.10727E-11	0.39396E-17

2	0.11008E-11	0.30325E-11	0.11137E-16
3	0.22091E-11	0.60856E-11	0.22351E-16
4	0.38037E-11	0.10479E-10	0.38485E-16
5	0.59892E-11	0.16499E-10	0.60596E-16
6	0.88847E-11	0.24476E-10	0.89892E-16
7	0.12623E-10	0.34775E-10	0.12772E-15
8	0.17350E-10	0.47796E-10	0.17554E-15
9	0.23217E-10	0.63959E-10	0.23490E-15
10	0.30378E-10	0.83687E-10	0.30736E-15
11	0.38981E-10	0.10739E-09	0.39440E-15
12	0.49153E-10	0.13541E-09	0.49731E-15
13	0.60984E-10	0.16800E-09	0.61702E-15
14	0.74510E-10	0.20526E-09	0.75387E-15

Polygon I
Time: 98.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.31794E-12	0.87585E-12	0.32168E-17
2	0.89881E-12	0.24760E-11	0.90938E-17
3	0.18038E-11	0.49690E-11	0.18250E-16
4	0.31058E-11	0.85560E-11	0.31424E-16
5	0.48903E-11	0.13472E-10	0.49478E-16
6	0.72545E-11	0.19985E-10	0.73399E-16
7	0.10307E-10	0.28395E-10	0.10429E-15
8	0.14167E-10	0.39027E-10	0.14333E-15
9	0.18957E-10	0.52223E-10	0.19180E-15
10	0.24804E-10	0.68332E-10	0.25096E-15
11	0.31829E-10	0.87682E-10	0.32203E-15
12	0.40134E-10	0.11056E-09	0.40606E-15
13	0.49795E-10	0.13718E-09	0.50381E-15
14	0.60839E-10	0.16760E-09	0.61554E-15

Polygon I
Time: 99.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.25960E-12	0.71515E-12	0.26265E-17
2	0.73389E-12	0.20217E-11	0.74253E-17
3	0.14728E-11	0.40573E-11	0.14901E-16
4	0.25360E-11	0.69861E-11	0.25658E-16
5	0.39930E-11	0.11000E-10	0.40400E-16
6	0.59235E-11	0.16318E-10	0.59931E-16
7	0.84161E-11	0.23185E-10	0.85151E-16
8	0.11567E-10	0.31866E-10	0.11703E-15
9	0.15479E-10	0.42641E-10	0.15661E-15
10	0.20253E-10	0.55794E-10	0.20492E-15
11	0.25989E-10	0.71594E-10	0.26294E-15
12	0.32770E-10	0.90276E-10	0.33156E-15
13	0.40658E-10	0.11201E-09	0.41137E-15
14	0.49676E-10	0.13685E-09	0.50260E-15

Polygon I
Time: 100.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.21197E-12	0.58393E-12	0.21446E-17
2	0.59924E-12	0.16508E-11	0.60628E-17
3	0.12026E-11	0.33129E-11	0.12167E-16
4	0.20707E-11	0.57043E-11	0.20950E-16
5	0.32604E-11	0.89817E-11	0.32987E-16
6	0.48366E-11	0.13324E-10	0.48935E-16
7	0.68719E-11	0.18931E-10	0.69527E-16
8	0.94449E-11	0.26019E-10	0.95560E-16

9	0.12639E-10	0.34817E-10	0.12787E-15
10	0.16537E-10	0.45557E-10	0.16732E-15
11	0.21220E-10	0.58458E-10	0.21470E-15
12	0.26757E-10	0.73712E-10	0.27072E-15
13	0.33198E-10	0.91455E-10	0.33589E-15
14	0.40561E-10	0.11174E-09	0.41038E-15

2/20/2001

VLEACH (Version 2.2a, 1996)

By:
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Robert S. Kerr Environmental Research Laboratory
U.S. Environmental Protection Agency
P.O. Box 1198
Ada, OK 74820

Based on the original VLEACH (version 1.0)
developed by CH2M Hill, Redding, California
for USEPA Region IX

Cleanup Concentration = 0.20 mg/kg TCE

Polygon I
Time: 0.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.00000	0.00000	0.00000
2	0.00000	0.00000	0.00000
3	0.00000	0.00000	0.00000
4	0.00000	0.00000	0.00000
5	0.00000	0.00000	0.00000
6	0.00000	0.00000	0.00000
7	0.00000	0.00000	0.00000
8	0.94227E-02	0.25958E-01	0.95336E-07
9	0.94227E-02	0.25958E-01	0.95336E-07
10	0.35806E-03	0.98640E-03	0.36228E-08
11	0.35806E-03	0.98640E-03	0.36228E-08
12	0.00000	0.00000	0.00000
13	0.00000	0.00000	0.00000
14	0.00000	0.00000	0.00000

Polygon I
Time: 1.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.10015E-04	0.27589E-04	0.10132E-09
2	0.20260E-04	0.55814E-04	0.20499E-09
3	0.30974E-04	0.85327E-04	0.31338E-09
4	0.42402E-04	0.11681E-03	0.42901E-09
5	0.54809E-04	0.15099E-03	0.55453E-09
6	0.68480E-04	0.18865E-03	0.69286E-09
7	0.83732E-04	0.23067E-03	0.84717E-09
8	0.54025E-02	0.14883E-01	0.54661E-07
9	0.73452E-02	0.20235E-01	0.74316E-07
10	0.30036E-02	0.82745E-02	0.30390E-07
11	0.14271E-02	0.39315E-02	0.14439E-07
12	0.58508E-03	0.16118E-02	0.59196E-08
13	0.24580E-03	0.67714E-03	0.24869E-08
14	0.10118E-03	0.27873E-03	0.10237E-08

Polygon I
Time: 2.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.14155E-04	0.38993E-04	0.14321E-09
2	0.30680E-04	0.84518E-04	0.31041E-09
3	0.48696E-04	0.13415E-03	0.49269E-09

4	0.68099E-04	0.18760E-03	0.68900E-09
5	0.89114E-04	0.24549E-03	0.90163E-09
6	0.11212E-03	0.30887E-03	0.11344E-08
7	0.13759E-03	0.37903E-03	0.13921E-08
8	0.31489E-02	0.86747E-02	0.31860E-07
9	0.53452E-02	0.14725E-01	0.54080E-07
10	0.37330E-02	0.10284E-01	0.37770E-07
11	0.22723E-02	0.62597E-02	0.22990E-07
12	0.12336E-02	0.33984E-02	0.12481E-07
13	0.63333E-03	0.17447E-02	0.64078E-08
14	0.30874E-03	0.85052E-03	0.31237E-08

Polygon I
Time: 3.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.15169E-04	0.41788E-04	0.15348E-09
2	0.34727E-04	0.95667E-04	0.35136E-09
3	0.57050E-04	0.15716E-03	0.57721E-09
4	0.81530E-04	0.22460E-03	0.82489E-09
5	0.10814E-03	0.29791E-03	0.10941E-08
6	0.13718E-03	0.37789E-03	0.13879E-08
7	0.16911E-03	0.46587E-03	0.17110E-08
8	0.18828E-02	0.51869E-02	0.19050E-07
9	0.37489E-02	0.10328E-01	0.37930E-07
10	0.35408E-02	0.97543E-02	0.35825E-07
11	0.26573E-02	0.73203E-02	0.26885E-07
12	0.17373E-02	0.47859E-02	0.17577E-07
13	0.10412E-02	0.28684E-02	0.10535E-07
14	0.58166E-03	0.16024E-02	0.58851E-08

Polygon I
Time: 4.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.14588E-04	0.40189E-04	0.14760E-09
2	0.34882E-04	0.96094E-04	0.35293E-09
3	0.59095E-04	0.16280E-03	0.59790E-09
4	0.86260E-04	0.23763E-03	0.87275E-09
5	0.11605E-03	0.31970E-03	0.11741E-08
6	0.14856E-03	0.40926E-03	0.15031E-08
7	0.18417E-03	0.50736E-03	0.18634E-08
8	0.11677E-02	0.32168E-02	0.11814E-07
9	0.25814E-02	0.71114E-02	0.26118E-07
10	0.29919E-02	0.82421E-02	0.30271E-07
11	0.26564E-02	0.73180E-02	0.26877E-07
12	0.20128E-02	0.55449E-02	0.20365E-07
13	0.13717E-02	0.37787E-02	0.13878E-07
14	0.85996E-03	0.23690E-02	0.87008E-08

Polygon I
Time: 5.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.13261E-04	0.36531E-04	0.13417E-09
2	0.32826E-04	0.90429E-04	0.33212E-09
3	0.57136E-04	0.15740E-03	0.57808E-09
4	0.85098E-04	0.23443E-03	0.86099E-09
5	0.11615E-03	0.31997E-03	0.11751E-08
6	0.15016E-03	0.41368E-03	0.15193E-08
7	0.18735E-03	0.51613E-03	0.18956E-08
8	0.75943E-03	0.20921E-02	0.76836E-08
9	0.17681E-02	0.48707E-02	0.17889E-07
10	0.23749E-02	0.65425E-02	0.24029E-07

11	0.24168E-02	0.66579E-02	0.24453E-07
12	0.20708E-02	0.57048E-02	0.20952E-07
13	0.15754E-02	0.43399E-02	0.15939E-07
14	0.10919E-02	0.30081E-02	0.11048E-07

Polygon I
Time: 6.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.11651E-04	0.32098E-04	0.11789E-09
2	0.29653E-04	0.81689E-04	0.30002E-09
3	0.52843E-04	0.14557E-03	0.53465E-09
4	0.80197E-04	0.22093E-03	0.81141E-09
5	0.11103E-03	0.30588E-03	0.11234E-08
6	0.14505E-03	0.39958E-03	0.14675E-08
7	0.18226E-03	0.50210E-03	0.18441E-08
8	0.52187E-03	0.14376E-02	0.52801E-08
9	0.12171E-02	0.33529E-02	0.12314E-07
10	0.18178E-02	0.50078E-02	0.18392E-07
11	0.20674E-02	0.56955E-02	0.20918E-07
12	0.19664E-02	0.54172E-02	0.19896E-07
13	0.16464E-02	0.45356E-02	0.16658E-07
14	0.12471E-02	0.34354E-02	0.12617E-07

Polygon I
Time: 7.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.10010E-04	0.27577E-04	0.10128E-09
2	0.26051E-04	0.71767E-04	0.26358E-09
3	0.47379E-04	0.13052E-03	0.47937E-09
4	0.73158E-04	0.20154E-03	0.74019E-09
5	0.10270E-03	0.28293E-03	0.10391E-08
6	0.13560E-03	0.37354E-03	0.13719E-08
7	0.17170E-03	0.47299E-03	0.17372E-08
8	0.37929E-03	0.10449E-02	0.38376E-08
9	0.84940E-03	0.23400E-02	0.85940E-08
10	0.13630E-02	0.37548E-02	0.13790E-07
11	0.16959E-02	0.46719E-02	0.17158E-07
12	0.17634E-02	0.48579E-02	0.17842E-07
13	0.16061E-02	0.44246E-02	0.16250E-07
14	0.13168E-02	0.36275E-02	0.13323E-07

Polygon I
Time: 8.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.84656E-05	0.23321E-04	0.85652E-10
2	0.22433E-04	0.61799E-04	0.22697E-09
3	0.41520E-04	0.11438E-03	0.42009E-09
4	0.65128E-04	0.17942E-03	0.65894E-09
5	0.92652E-04	0.25524E-03	0.93742E-09
6	0.12363E-03	0.34059E-03	0.12509E-08
7	0.15781E-03	0.43475E-03	0.15967E-08
8	0.28978E-03	0.79830E-03	0.29319E-08
9	0.60505E-03	0.16668E-02	0.61217E-08
10	0.10121E-02	0.27881E-02	0.10240E-07
11	0.13516E-02	0.37234E-02	0.13675E-07
12	0.15161E-02	0.41766E-02	0.15339E-07
13	0.14871E-02	0.40967E-02	0.15046E-07
14	0.13089E-02	0.36058E-02	0.13243E-07

Polygon I
Time: 9.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.70767E-05	0.19495E-04	0.71599E-10
2	0.19030E-04	0.52424E-04	0.19254E-09
3	0.35756E-04	0.98503E-04	0.36177E-09
4	0.56889E-04	0.15672E-03	0.57558E-09
5	0.81953E-04	0.22577E-03	0.82918E-09
6	0.11051E-03	0.30443E-03	0.11181E-08
7	0.14224E-03	0.39184E-03	0.14391E-08
8	0.23023E-03	0.63424E-03	0.23294E-08
9	0.44184E-03	0.12172E-02	0.44703E-08
10	0.75036E-03	0.20671E-02	0.75919E-08
11	0.10566E-02	0.29108E-02	0.10691E-07
12	0.12631E-02	0.34796E-02	0.12780E-07
13	0.13223E-02	0.36426E-02	0.13378E-07
14	0.12405E-02	0.34173E-02	0.12551E-07

Polygon I
Time: 10.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.58640E-05	0.16154E-04	0.59330E-10
2	0.15960E-04	0.43966E-04	0.16147E-09
3	0.30377E-04	0.83683E-04	0.30734E-09
4	0.48949E-04	0.13485E-03	0.49525E-09
5	0.71347E-04	0.19655E-03	0.72186E-09
6	0.97192E-04	0.26775E-03	0.98336E-09
7	0.12615E-03	0.34753E-03	0.12764E-08
8	0.18796E-03	0.51780E-03	0.19017E-08
9	0.33127E-03	0.91259E-03	0.33517E-08
10	0.55891E-03	0.15397E-02	0.56548E-08
11	0.81623E-03	0.22486E-02	0.82583E-08
12	0.10280E-02	0.28319E-02	0.10401E-07
13	0.11389E-02	0.31375E-02	0.11523E-07
14	0.11314E-02	0.31168E-02	0.11447E-07

Polygon I
Time: 11.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.48268E-05	0.13297E-04	0.48836E-10
2	0.13267E-04	0.36547E-04	0.13423E-09
3	0.25531E-04	0.70333E-04	0.25831E-09
4	0.41609E-04	0.11463E-03	0.42099E-09
5	0.61310E-04	0.16890E-03	0.62031E-09
6	0.84342E-04	0.23235E-03	0.85334E-09
7	0.11040E-03	0.30412E-03	0.11169E-08
8	0.15606E-03	0.42993E-03	0.15790E-08
9	0.25472E-03	0.70170E-03	0.25771E-08
10	0.42014E-03	0.11574E-02	0.42509E-08
11	0.62670E-03	0.17265E-02	0.63408E-08
12	0.82247E-03	0.22657E-02	0.83214E-08
13	0.95673E-03	0.26356E-02	0.96799E-08
14	0.10002E-02	0.27555E-02	0.10120E-07

Polygon I
Time: 12.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.39528E-05	0.10889E-04	0.39993E-10
2	0.10952E-04	0.30171E-04	0.11081E-09
3	0.21276E-04	0.58611E-04	0.21526E-09
4	0.35023E-04	0.96483E-04	0.35435E-09
5	0.52122E-04	0.14359E-03	0.52735E-09
6	0.72372E-04	0.19937E-03	0.73223E-09

7	0.95512E-04	0.26312E-03	0.96635E-09
8	0.13076E-03	0.36022E-03	0.13230E-08
9	0.20021E-03	0.55155E-03	0.20257E-08
10	0.31967E-03	0.88064E-03	0.32343E-08
11	0.48053E-03	0.13238E-02	0.48618E-08
12	0.65028E-03	0.17914E-02	0.65793E-08
13	0.78813E-03	0.21711E-02	0.79740E-08
14	0.86206E-03	0.23748E-02	0.87220E-08

Polygon I
Time: 13.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.32248E-05	0.88837E-05	0.32627E-10
2	0.89935E-05	0.24776E-04	0.90993E-10
3	0.17610E-04	0.48512E-04	0.17817E-09
4	0.29245E-04	0.80565E-04	0.29589E-09
5	0.43918E-04	0.12099E-03	0.44435E-09
6	0.61516E-04	0.16947E-03	0.62240E-09
7	0.81836E-04	0.22544E-03	0.82799E-09
8	0.10997E-03	0.30295E-03	0.11127E-08
9	0.16018E-03	0.44126E-03	0.16206E-08
10	0.24652E-03	0.67913E-03	0.24942E-08
11	0.36930E-03	0.10174E-02	0.37365E-08
12	0.51027E-03	0.14057E-02	0.51628E-08
13	0.63954E-03	0.17618E-02	0.64706E-08
14	0.72772E-03	0.20047E-02	0.73628E-08

Polygon I
Time: 14.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.26236E-05	0.72274E-05	0.26544E-10
2	0.73553E-05	0.20263E-04	0.74418E-10
3	0.14498E-04	0.39940E-04	0.14669E-09
4	0.24262E-04	0.66838E-04	0.24548E-09
5	0.36733E-04	0.10119E-03	0.37165E-09
6	0.51872E-04	0.14290E-03	0.52482E-09
7	0.69538E-04	0.19157E-03	0.70356E-09
8	0.92528E-04	0.25490E-03	0.93617E-09
9	0.12985E-03	0.35772E-03	0.13138E-08
10	0.19269E-03	0.53082E-03	0.19495E-08
11	0.28527E-03	0.78587E-03	0.28863E-08
12	0.39883E-03	0.10987E-02	0.40353E-08
13	0.51319E-03	0.14137E-02	0.51922E-08
14	0.60409E-03	0.16642E-02	0.61120E-08

Polygon I
Time: 15.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.21304E-05	0.58687E-05	0.21554E-10
2	0.59974E-05	0.16522E-04	0.60680E-10
3	0.11887E-04	0.32746E-04	0.12027E-09
4	0.20024E-04	0.55162E-04	0.20259E-09
5	0.30537E-04	0.84124E-04	0.30896E-09
6	0.43446E-04	0.11969E-03	0.43957E-09
7	0.58668E-04	0.16162E-03	0.59359E-09
8	0.77731E-04	0.21413E-03	0.78645E-09
9	0.10623E-03	0.29266E-03	0.10748E-08
10	0.15249E-03	0.42008E-03	0.15428E-08
11	0.22189E-03	0.61126E-03	0.22450E-08
12	0.31143E-03	0.85795E-03	0.31510E-08
13	0.40856E-03	0.11255E-02	0.41336E-08

14	0.49481E-03	0.13631E-02	0.50063E-08

Polygon I
Time: 16.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.17278E-05	0.47598E-05	0.17481E-10
2	0.48798E-05	0.13443E-04	0.49372E-10
3	0.97153E-05	0.26764E-04	0.98296E-10
4	0.16458E-04	0.45338E-04	0.16651E-09
5	0.25260E-04	0.69586E-04	0.25557E-09
6	0.36184E-04	0.99680E-04	0.36609E-09
7	0.49196E-04	0.13553E-03	0.49775E-09
8	0.65131E-04	0.17942E-03	0.65897E-09
9	0.87422E-04	0.24083E-03	0.88450E-09
10	0.12197E-03	0.33601E-03	0.12341E-08
11	0.17395E-03	0.47921E-03	0.17600E-08
12	0.24353E-03	0.67089E-03	0.24640E-08
13	0.32362E-03	0.89152E-03	0.32743E-08
14	0.40109E-03	0.11049E-02	0.40581E-08

Polygon I
Time: 17.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.14005E-05	0.38581E-05	0.14170E-10
2	0.39648E-05	0.10922E-04	0.40115E-10
3	0.79220E-05	0.21824E-04	0.80152E-10
4	0.13483E-04	0.37143E-04	0.13642E-09
5	0.20810E-04	0.57328E-04	0.21055E-09
6	0.29993E-04	0.82626E-04	0.30346E-09
7	0.41039E-04	0.11305E-03	0.41522E-09
8	0.54406E-04	0.14988E-03	0.55046E-09
9	0.72178E-04	0.19884E-03	0.73028E-09
10	0.98415E-04	0.27112E-03	0.99573E-09
11	0.13748E-03	0.37875E-03	0.13910E-08
12	0.19105E-03	0.52631E-03	0.19330E-08
13	0.25567E-03	0.70433E-03	0.25868E-08
14	0.32260E-03	0.88870E-03	0.32639E-08

Polygon I
Time: 18.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.11350E-05	0.31268E-05	0.11484E-10
2	0.32187E-05	0.88669E-05	0.32566E-10
3	0.64493E-05	0.17767E-04	0.65251E-10
4	0.11019E-04	0.30355E-04	0.11149E-09
5	0.17089E-04	0.47077E-04	0.17290E-09
6	0.24765E-04	0.68222E-04	0.25056E-09
7	0.34083E-04	0.93892E-04	0.34484E-09
8	0.45304E-04	0.12481E-03	0.45837E-09
9	0.59682E-04	0.16441E-03	0.60384E-09
10	0.79938E-04	0.22022E-03	0.80879E-09
11	0.10950E-03	0.30167E-03	0.11079E-08
12	0.15054E-03	0.41472E-03	0.15232E-08
13	0.20187E-03	0.55612E-03	0.20425E-08
14	0.25804E-03	0.71087E-03	0.26108E-08

Polygon I
Time: 19.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.92006E-06	0.25346E-05	0.93088E-11
2	0.26120E-05	0.71957E-05	0.26428E-10

3	0.52447E-05	0.14448E-04	0.53064E-10
4	0.89891E-05	0.24763E-04	0.90948E-10
5	0.13997E-04	0.38560E-04	0.14162E-09
6	0.20382E-04	0.56150E-04	0.20622E-09
7	0.28200E-04	0.77686E-04	0.28532E-09
8	0.37609E-04	0.10361E-03	0.38052E-09
9	0.49361E-04	0.13598E-03	0.49942E-09
10	0.65245E-04	0.17974E-03	0.66013E-09
11	0.87827E-04	0.24195E-03	0.88860E-09
12	0.11924E-03	0.32848E-03	0.12064E-08
13	0.15956E-03	0.43955E-03	0.16143E-08
14	0.20569E-03	0.56664E-03	0.20811E-08

Polygon I
Time: 20.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.74616E-06	0.20555E-05	0.75494E-11
2	0.21197E-05	0.58393E-05	0.21446E-10
3	0.42626E-05	0.11743E-04	0.43127E-10
4	0.73238E-05	0.20176E-04	0.74100E-10
5	0.11443E-04	0.31523E-04	0.11578E-09
6	0.16732E-04	0.46094E-04	0.16929E-09
7	0.23260E-04	0.64077E-04	0.23533E-09
8	0.31133E-04	0.85766E-04	0.31499E-09
9	0.40803E-04	0.11241E-03	0.41283E-09
10	0.53429E-04	0.14719E-03	0.54058E-09
11	0.70860E-04	0.19521E-03	0.71693E-09
12	0.94951E-04	0.26157E-03	0.96068E-09
13	0.12640E-03	0.34820E-03	0.12788E-08
14	0.16367E-03	0.45088E-03	0.16559E-08

Polygon I
Time: 21.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.60551E-06	0.16681E-05	0.61263E-11
2	0.17206E-05	0.47399E-05	0.17408E-10
3	0.34636E-05	0.95415E-05	0.35043E-10
4	0.59622E-05	0.16425E-04	0.60323E-10
5	0.93412E-05	0.25733E-04	0.94511E-10
6	0.13708E-04	0.37762E-04	0.13869E-09
7	0.19135E-04	0.52715E-04	0.19360E-09
8	0.25706E-04	0.70815E-04	0.26008E-09
9	0.33695E-04	0.92823E-04	0.34091E-09
10	0.43843E-04	0.12078E-03	0.44358E-09
11	0.57447E-04	0.15826E-03	0.58123E-09
12	0.76008E-04	0.20939E-03	0.76902E-09
13	0.10044E-03	0.27670E-03	0.10162E-08
14	0.13019E-03	0.35865E-03	0.13172E-08

Polygon I
Time: 22.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.49174E-06	0.13546E-05	0.49752E-11
2	0.13972E-05	0.38492E-05	0.14137E-10
3	0.28144E-05	0.77532E-05	0.28475E-10
4	0.48514E-05	0.13365E-04	0.49085E-10
5	0.76177E-05	0.20985E-04	0.77073E-10
6	0.11212E-04	0.30887E-04	0.11344E-09
7	0.15709E-04	0.43275E-04	0.15894E-09
8	0.21177E-04	0.58339E-04	0.21426E-09
9	0.27790E-04	0.76555E-04	0.28116E-09

10	0.36017E-04	0.99219E-04	0.36440E-09
11	0.46748E-04	0.12878E-03	0.47298E-09
12	0.61138E-04	0.16842E-03	0.61857E-09
13	0.80106E-04	0.22068E-03	0.81049E-09
14	0.10365E-03	0.28553E-03	0.10487E-08

Polygon I
Time: 23.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.39965E-06	0.11010E-05	0.40435E-11
2	0.11353E-05	0.31276E-05	0.11487E-10
3	0.22875E-05	0.63015E-05	0.23144E-10
4	0.39468E-05	0.10873E-04	0.39933E-10
5	0.62079E-05	0.17102E-04	0.62809E-10
6	0.91596E-05	0.25233E-04	0.92674E-10
7	0.12874E-04	0.35466E-04	0.13026E-09
8	0.17412E-04	0.47968E-04	0.17617E-09
9	0.22888E-04	0.63053E-04	0.23157E-09
10	0.29600E-04	0.81543E-04	0.29948E-09
11	0.38148E-04	0.10509E-03	0.38597E-09
12	0.49387E-04	0.13605E-03	0.49968E-09
13	0.64132E-04	0.17667E-03	0.64887E-09
14	0.82657E-04	0.22771E-03	0.83630E-09

Polygon I
Time: 24.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.32506E-06	0.89548E-06	0.32888E-11
2	0.92305E-06	0.25428E-05	0.93391E-11
3	0.18599E-05	0.51236E-05	0.18817E-10
4	0.32110E-05	0.88457E-05	0.32488E-10
5	0.50570E-05	0.13931E-04	0.51165E-10
6	0.74764E-05	0.20596E-04	0.75643E-10
7	0.10536E-04	0.29026E-04	0.10660E-09
8	0.14293E-04	0.39375E-04	0.14461E-09
9	0.18826E-04	0.51862E-04	0.19047E-09
10	0.24326E-04	0.67013E-04	0.24612E-09
11	0.31191E-04	0.85925E-04	0.31558E-09
12	0.40038E-04	0.11030E-03	0.40509E-09
13	0.51537E-04	0.14198E-03	0.52144E-09
14	0.66071E-04	0.18201E-03	0.66848E-09

Polygon I
Time: 25.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.26458E-06	0.72888E-06	0.26770E-11
2	0.75096E-06	0.20688E-05	0.75979E-11
3	0.15129E-05	0.41677E-05	0.15307E-10
4	0.26128E-05	0.71978E-05	0.26435E-10
5	0.41186E-05	0.11346E-04	0.41671E-10
6	0.60987E-05	0.16801E-04	0.61704E-10
7	0.86142E-05	0.23731E-04	0.87155E-10
8	0.11716E-04	0.32276E-04	0.11854E-09
9	0.15465E-04	0.42603E-04	0.15647E-09
10	0.19984E-04	0.55051E-04	0.20219E-09
11	0.25535E-04	0.70344E-04	0.25835E-09
12	0.32553E-04	0.89677E-04	0.32936E-09
13	0.41562E-04	0.11450E-03	0.42051E-09
14	0.52955E-04	0.14588E-03	0.53578E-09

Polygon I

Time: 26.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.21550E-06	0.59367E-06	0.21804E-11
2	0.61133E-06	0.16841E-05	0.61852E-11
3	0.12313E-05	0.33919E-05	0.12457E-10
4	0.21266E-05	0.58585E-05	0.21516E-10
5	0.33543E-05	0.92406E-05	0.33938E-10
6	0.49729E-05	0.13700E-04	0.50314E-10
7	0.70370E-05	0.19386E-04	0.71198E-10
8	0.95933E-05	0.26428E-04	0.97062E-10
9	0.12689E-04	0.34957E-04	0.12839E-09
10	0.16408E-04	0.45200E-04	0.16601E-09
11	0.20920E-04	0.57632E-04	0.21166E-09
12	0.26527E-04	0.73077E-04	0.26839E-09
13	0.33623E-04	0.92627E-04	0.34019E-09
14	0.42563E-04	0.11725E-03	0.43064E-09

Polygon I

Time: 27.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.17563E-06	0.48383E-06	0.17770E-11
2	0.49796E-06	0.13718E-05	0.50382E-11
3	0.10025E-05	0.27618E-05	0.10143E-10
4	0.17315E-05	0.47700E-05	0.17519E-10
5	0.27321E-05	0.75264E-05	0.27642E-10
6	0.40541E-05	0.11168E-04	0.41018E-10
7	0.57453E-05	0.15827E-04	0.58129E-10
8	0.78478E-05	0.21619E-04	0.79401E-10
9	0.10401E-04	0.28653E-04	0.10524E-09
10	0.13463E-04	0.37087E-04	0.13621E-09
11	0.17145E-04	0.47233E-04	0.17347E-09
12	0.21653E-04	0.59651E-04	0.21908E-09
13	0.27275E-04	0.75139E-04	0.27596E-09
14	0.34307E-04	0.94511E-04	0.34711E-09

Polygon I

Time: 28.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.14321E-06	0.39451E-06	0.14489E-11
2	0.40582E-06	0.11180E-05	0.41060E-11
3	0.81673E-06	0.22499E-05	0.82633E-11
4	0.14103E-05	0.38852E-05	0.14269E-10
5	0.22257E-05	0.61314E-05	0.22519E-10
6	0.33047E-05	0.91039E-05	0.33436E-10
7	0.46888E-05	0.12917E-04	0.47439E-10
8	0.64152E-05	0.17673E-04	0.64907E-10
9	0.85180E-05	0.23466E-04	0.86182E-10
10	0.11039E-04	0.30410E-04	0.11169E-09
11	0.14052E-04	0.38712E-04	0.14218E-09
12	0.17696E-04	0.48749E-04	0.17904E-09
13	0.22176E-04	0.61091E-04	0.22437E-09
14	0.27726E-04	0.76381E-04	0.28052E-09

Polygon I

Time: 29.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.11682E-06	0.32182E-06	0.11819E-11
2	0.33089E-06	0.91154E-06	0.33478E-11
3	0.66564E-06	0.18337E-05	0.67348E-11
4	0.11491E-05	0.31657E-05	0.11627E-10
5	0.18136E-05	0.49960E-05	0.18349E-10

6	0.26939E-05	0.74212E-05	0.27256E-10
7	0.38255E-05	0.10539E-04	0.38705E-10
8	0.52413E-05	0.14439E-04	0.53029E-10
9	0.69706E-05	0.19203E-04	0.70526E-10
10	0.90452E-05	0.24918E-04	0.91516E-10
11	0.11516E-04	0.31723E-04	0.11651E-09
12	0.14473E-04	0.39871E-04	0.14644E-09
13	0.18063E-04	0.49759E-04	0.18275E-09
14	0.22461E-04	0.61877E-04	0.22726E-09

Polygon I
Time: 30.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.95328E-07	0.26261E-06	0.96450E-12
2	0.26990E-06	0.74352E-06	0.27307E-11
3	0.54273E-06	0.14951E-05	0.54912E-11
4	0.93667E-06	0.25803E-05	0.94769E-11
5	0.14781E-05	0.40719E-05	0.14955E-10
6	0.21961E-05	0.60499E-05	0.22220E-10
7	0.31207E-05	0.85970E-05	0.31574E-10
8	0.42803E-05	0.11792E-04	0.43307E-10
9	0.57006E-05	0.15704E-04	0.57677E-10
10	0.74069E-05	0.20405E-04	0.74940E-10
11	0.94341E-05	0.25989E-04	0.95451E-10
12	0.11843E-04	0.32626E-04	0.11982E-09
13	0.14733E-04	0.40587E-04	0.14906E-09
14	0.18235E-04	0.50234E-04	0.18449E-09

Polygon I
Time: 31.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.77812E-07	0.21436E-06	0.78727E-12
2	0.22022E-06	0.60668E-06	0.22281E-11
3	0.44267E-06	0.12195E-05	0.44788E-11
4	0.76374E-06	0.21040E-05	0.77272E-11
5	0.12050E-05	0.33196E-05	0.12192E-10
6	0.17906E-05	0.49327E-05	0.18116E-10
7	0.25456E-05	0.70126E-05	0.25755E-10
8	0.34945E-05	0.96268E-05	0.35357E-10
9	0.46597E-05	0.12837E-04	0.47145E-10
10	0.60618E-05	0.16699E-04	0.61332E-10
11	0.77261E-05	0.21284E-04	0.78170E-10
12	0.96930E-05	0.26703E-04	0.98071E-10
13	0.12030E-04	0.33140E-04	0.12171E-09
14	0.14830E-04	0.40854E-04	0.15004E-09

Polygon I
Time: 32.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.63527E-07	0.17501E-06	0.64275E-12
2	0.17974E-06	0.49515E-06	0.18185E-11
3	0.36117E-06	0.99495E-06	0.36542E-11
4	0.62292E-06	0.17160E-05	0.63025E-11
5	0.98265E-06	0.27070E-05	0.99421E-11
6	0.14601E-05	0.40224E-05	0.14773E-10
7	0.20764E-05	0.57202E-05	0.21009E-10
8	0.28524E-05	0.78579E-05	0.28860E-10
9	0.38073E-05	0.10488E-04	0.38521E-10
10	0.49585E-05	0.13660E-04	0.50169E-10
11	0.63248E-05	0.17424E-04	0.63992E-10
12	0.79336E-05	0.21856E-04	0.80269E-10

13	0.98296E-05	0.27079E-04	0.99452E-10
14	0.12078E-04	0.33274E-04	0.12220E-09

Polygon I
Time: 33.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.51873E-07	0.14290E-06	0.52483E-12
2	0.14673E-06	0.40420E-06	0.14845E-11
3	0.29474E-06	0.81196E-06	0.29821E-11
4	0.50821E-06	0.14000E-05	0.51419E-11
5	0.80150E-06	0.22080E-05	0.81093E-11
6	0.11909E-05	0.32807E-05	0.12049E-10
7	0.16938E-05	0.46662E-05	0.17137E-10
8	0.23280E-05	0.64131E-05	0.23554E-10
9	0.31099E-05	0.85671E-05	0.31464E-10
10	0.40542E-05	0.11169E-04	0.41019E-10
11	0.51757E-05	0.14258E-04	0.52365E-10
12	0.64929E-05	0.17887E-04	0.65693E-10
13	0.80357E-05	0.22137E-04	0.81303E-10
14	0.98488E-05	0.27132E-04	0.99646E-10

Polygon I
Time: 34.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.42361E-07	0.11670E-06	0.42860E-12
2	0.11980E-06	0.33002E-06	0.12121E-11
3	0.24058E-06	0.66277E-06	0.24341E-11
4	0.41471E-06	0.11425E-05	0.41959E-11
5	0.65389E-06	0.18014E-05	0.66159E-11
6	0.97144E-06	0.26761E-05	0.98287E-11
7	0.13818E-05	0.38066E-05	0.13981E-10
8	0.18998E-05	0.52337E-05	0.19222E-10
9	0.25396E-05	0.69960E-05	0.25694E-10
10	0.33136E-05	0.91285E-05	0.33526E-10
11	0.42337E-05	0.11663E-04	0.42835E-10
12	0.53130E-05	0.14636E-04	0.53755E-10
13	0.65711E-05	0.18102E-04	0.66484E-10
14	0.80379E-05	0.22143E-04	0.81324E-10

Polygon I
Time: 35.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.34596E-07	0.95306E-07	0.35003E-12
2	0.97821E-07	0.26948E-06	0.98972E-12
3	0.19641E-06	0.54107E-06	0.19872E-11
4	0.33848E-06	0.93244E-06	0.34246E-11
5	0.53357E-06	0.14699E-05	0.53985E-11
6	0.79257E-06	0.21834E-05	0.80189E-11
7	0.11274E-05	0.31057E-05	0.11406E-10
8	0.15504E-05	0.42710E-05	0.15686E-10
9	0.20735E-05	0.57121E-05	0.20979E-10
10	0.27075E-05	0.74587E-05	0.27394E-10
11	0.34619E-05	0.95370E-05	0.35027E-10
12	0.43465E-05	0.11974E-04	0.43976E-10
13	0.53741E-05	0.14805E-04	0.54373E-10
14	0.65642E-05	0.18083E-04	0.66414E-10

Polygon I
Time: 36.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.28256E-07	0.77839E-07	0.28588E-12

2	0.79883E-07	0.22006E-06	0.80822E-12
3	0.16036E-06	0.44177E-06	0.16225E-11
4	0.27630E-06	0.76116E-06	0.27955E-11
5	0.43546E-06	0.11996E-05	0.44058E-11
6	0.64673E-06	0.17816E-05	0.65434E-11
7	0.91989E-06	0.25341E-05	0.93071E-11
8	0.12652E-05	0.34854E-05	0.12801E-10
9	0.16928E-05	0.46632E-05	0.17127E-10
10	0.22117E-05	0.60929E-05	0.22377E-10
11	0.28300E-05	0.77961E-05	0.28633E-10
12	0.35549E-05	0.97932E-05	0.35967E-10
13	0.43951E-05	0.12108E-04	0.44468E-10
14	0.53631E-05	0.14774E-04	0.54262E-10

Polygon I
Time: 37.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.23077E-07	0.63574E-07	0.23349E-12
2	0.65237E-07	0.17972E-06	0.66005E-12
3	0.13094E-06	0.36073E-06	0.13248E-11
4	0.22557E-06	0.62141E-06	0.22823E-11
5	0.35544E-06	0.97918E-06	0.35962E-11
6	0.52780E-06	0.14540E-05	0.53401E-11
7	0.75066E-06	0.20679E-05	0.75949E-11
8	0.10325E-05	0.28444E-05	0.10447E-10
9	0.13818E-05	0.38067E-05	0.13981E-10
10	0.18064E-05	0.49762E-05	0.18276E-10
11	0.23128E-05	0.63713E-05	0.23400E-10
12	0.29068E-05	0.80077E-05	0.29410E-10
13	0.35943E-05	0.99016E-05	0.36366E-10
14	0.43830E-05	0.12074E-04	0.44346E-10

Polygon I
Time: 38.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.18848E-07	0.51923E-07	0.19070E-12
2	0.53278E-07	0.14677E-06	0.53905E-12
3	0.10693E-06	0.29457E-06	0.10819E-11
4	0.18417E-06	0.50737E-06	0.18634E-11
5	0.29016E-06	0.79934E-06	0.29357E-11
6	0.43079E-06	0.11867E-05	0.43586E-11
7	0.61262E-06	0.16877E-05	0.61983E-11
8	0.84267E-06	0.23214E-05	0.85258E-11
9	0.11280E-05	0.31073E-05	0.11412E-10
10	0.14751E-05	0.40636E-05	0.14924E-10
11	0.18896E-05	0.52056E-05	0.19119E-10
12	0.23763E-05	0.65462E-05	0.24042E-10
13	0.29390E-05	0.80964E-05	0.29736E-10
14	0.35826E-05	0.98695E-05	0.36248E-10

Polygon I
Time: 39.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.15394E-07	0.42407E-07	0.15575E-12
2	0.43512E-07	0.11987E-06	0.44024E-12
3	0.87321E-07	0.24055E-06	0.88348E-12
4	0.15038E-06	0.41428E-06	0.15215E-11
5	0.23689E-06	0.65259E-06	0.23968E-11
6	0.35165E-06	0.96872E-06	0.35578E-11
7	0.50002E-06	0.13775E-05	0.50590E-11
8	0.68776E-06	0.18947E-05	0.69585E-11

9	0.92072E-06	0.25364E-05	0.93155E-11
10	0.12044E-05	0.33180E-05	0.12186E-10
11	0.15436E-05	0.42524E-05	0.15618E-10
12	0.19421E-05	0.53502E-05	0.19650E-10
13	0.24028E-05	0.66193E-05	0.24311E-10
14	0.29286E-05	0.80678E-05	0.29631E-10

Polygon I
Time: 40.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.12572E-07	0.34634E-07	0.12720E-12
2	0.35536E-07	0.97895E-07	0.35954E-12
3	0.71310E-07	0.19645E-06	0.72149E-12
4	0.12280E-06	0.33829E-06	0.12424E-11
5	0.19341E-06	0.53281E-06	0.19569E-11
6	0.28707E-06	0.79082E-06	0.29044E-11
7	0.40814E-06	0.11244E-05	0.41295E-11
8	0.56136E-06	0.15465E-05	0.56797E-11
9	0.75156E-06	0.20704E-05	0.76040E-11
10	0.98335E-06	0.27090E-05	0.99492E-11
11	0.12608E-05	0.34732E-05	0.12756E-10
12	0.15870E-05	0.43718E-05	0.16056E-10
13	0.19641E-05	0.54108E-05	0.19872E-10
14	0.23939E-05	0.65949E-05	0.24221E-10

Polygon I
Time: 41.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.10268E-07	0.28285E-07	0.10388E-12
2	0.29022E-07	0.79949E-07	0.29363E-12
3	0.58236E-07	0.16043E-06	0.58921E-12
4	0.10028E-06	0.27624E-06	0.10146E-11
5	0.15792E-06	0.43505E-06	0.15978E-11
6	0.23437E-06	0.64563E-06	0.23712E-11
7	0.33318E-06	0.91784E-06	0.33710E-11
8	0.45822E-06	0.12623E-05	0.46361E-11
9	0.61348E-06	0.16900E-05	0.62070E-11
10	0.80282E-06	0.22116E-05	0.81227E-11
11	0.10296E-05	0.28364E-05	0.10417E-10
12	0.12965E-05	0.35717E-05	0.13118E-10
13	0.16053E-05	0.44222E-05	0.16241E-10
14	0.19568E-05	0.53905E-05	0.19798E-10

Polygon I
Time: 42.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.83852E-08	0.23100E-07	0.84839E-13
2	0.23701E-07	0.65292E-07	0.23980E-12
3	0.47558E-07	0.13101E-06	0.48118E-12
4	0.81887E-07	0.22558E-06	0.82850E-12
5	0.12895E-06	0.35524E-06	0.13047E-11
6	0.19135E-06	0.52713E-06	0.19360E-11
7	0.27199E-06	0.74930E-06	0.27519E-11
8	0.37405E-06	0.10304E-05	0.37845E-11
9	0.50079E-06	0.13796E-05	0.50668E-11
10	0.65541E-06	0.18055E-05	0.66312E-11
11	0.84078E-06	0.23162E-05	0.85067E-11
12	0.10591E-05	0.29176E-05	0.10716E-10
13	0.13117E-05	0.36136E-05	0.13272E-10
14	0.15993E-05	0.44058E-05	0.16181E-10

Polygon I
Time: 43.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.68477E-08	0.18864E-07	0.69283E-13
2	0.19355E-07	0.53321E-07	0.19583E-12
3	0.38838E-07	0.10699E-06	0.39295E-12
4	0.66870E-07	0.18421E-06	0.67657E-12
5	0.10530E-06	0.29007E-06	0.10653E-11
6	0.15623E-06	0.43040E-06	0.15807E-11
7	0.22206E-06	0.61174E-06	0.22467E-11
8	0.30535E-06	0.84119E-06	0.30894E-11
9	0.40880E-06	0.11262E-05	0.41361E-11
10	0.53506E-06	0.14740E-05	0.54136E-11
11	0.68651E-06	0.18912E-05	0.69459E-11
12	0.86502E-06	0.23830E-05	0.87520E-11
13	0.10717E-05	0.29524E-05	0.10843E-10
14	0.13070E-05	0.36005E-05	0.13224E-10

Polygon I
Time: 44.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.55920E-08	0.15405E-07	0.56578E-13
2	0.15806E-07	0.43544E-07	0.15992E-12
3	0.31716E-07	0.87373E-07	0.32090E-12
4	0.54607E-07	0.15043E-06	0.55249E-12
5	0.85982E-07	0.23687E-06	0.86994E-12
6	0.12757E-06	0.35143E-06	0.12907E-11
7	0.18130E-06	0.49945E-06	0.18343E-11
8	0.24928E-06	0.68674E-06	0.25222E-11
9	0.33373E-06	0.91936E-06	0.33765E-11
10	0.43681E-06	0.12033E-05	0.44195E-11
11	0.56053E-06	0.15442E-05	0.56712E-11
12	0.70645E-06	0.19461E-05	0.71476E-11
13	0.87553E-06	0.24119E-05	0.88583E-11
14	0.10680E-05	0.29420E-05	0.10805E-10

Polygon I
Time: 45.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.45664E-08	0.12580E-07	0.46202E-13
2	0.12908E-07	0.35558E-07	0.13060E-12
3	0.25900E-07	0.71351E-07	0.26205E-12
4	0.44592E-07	0.12284E-06	0.45117E-12
5	0.70211E-07	0.19342E-06	0.71037E-12
6	0.10416E-06	0.28695E-06	0.10539E-11
7	0.14803E-06	0.40779E-06	0.14977E-11
8	0.20352E-06	0.56066E-06	0.20591E-11
9	0.27245E-06	0.75054E-06	0.27565E-11
10	0.35661E-06	0.98239E-06	0.36080E-11
11	0.45765E-06	0.12607E-05	0.46303E-11
12	0.57689E-06	0.15892E-05	0.58368E-11
13	0.71515E-06	0.19701E-05	0.72357E-11
14	0.87256E-06	0.24037E-05	0.88283E-11

Polygon I
Time: 46.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.37289E-08	0.10272E-07	0.37727E-13
2	0.10540E-07	0.29037E-07	0.10664E-12
3	0.21150E-07	0.58265E-07	0.21399E-12
4	0.36414E-07	0.10031E-06	0.36843E-12

5	0.57333E-07	0.15794E-06	0.58008E-12
6	0.85055E-07	0.23431E-06	0.86056E-12
7	0.12086E-06	0.33296E-06	0.12229E-11
8	0.16616E-06	0.45775E-06	0.16812E-11
9	0.22243E-06	0.61275E-06	0.22504E-11
10	0.29113E-06	0.80201E-06	0.29456E-11
11	0.37364E-06	0.10293E-05	0.37804E-11
12	0.47107E-06	0.12977E-05	0.47661E-11
13	0.58410E-06	0.16091E-05	0.59097E-11
14	0.71283E-06	0.19637E-05	0.72122E-11

Polygon I
Time: 47.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.30449E-08	0.83881E-08	0.30807E-13
2	0.86071E-08	0.23711E-07	0.87083E-13
3	0.17271E-07	0.47579E-07	0.17474E-12
4	0.29736E-07	0.81916E-07	0.30085E-12
5	0.46817E-07	0.12897E-06	0.47368E-12
6	0.69452E-07	0.19133E-06	0.70269E-12
7	0.98687E-07	0.27187E-06	0.99848E-12
8	0.13567E-06	0.37374E-06	0.13726E-11
9	0.18159E-06	0.50026E-06	0.18373E-11
10	0.23768E-06	0.65477E-06	0.24048E-11
11	0.30505E-06	0.84037E-06	0.30864E-11
12	0.38464E-06	0.10596E-05	0.38916E-11
13	0.47702E-06	0.13141E-05	0.48263E-11
14	0.58228E-06	0.16041E-05	0.58913E-11

Polygon I
Time: 48.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.24863E-08	0.68493E-08	0.25156E-13
2	0.70283E-08	0.19362E-07	0.71109E-13
3	0.14103E-07	0.38852E-07	0.14269E-12
4	0.24282E-07	0.66891E-07	0.24567E-12
5	0.38230E-07	0.10532E-06	0.38680E-12
6	0.56712E-07	0.15623E-06	0.57379E-12
7	0.80581E-07	0.22199E-06	0.81529E-12
8	0.11077E-06	0.30515E-06	0.11207E-11
9	0.14826E-06	0.40843E-06	0.15001E-11
10	0.19405E-06	0.53456E-06	0.19633E-11
11	0.24905E-06	0.68610E-06	0.25198E-11
12	0.31406E-06	0.86517E-06	0.31775E-11
13	0.38954E-06	0.10731E-05	0.39412E-11
14	0.47560E-06	0.13102E-05	0.48119E-11

Polygon I
Time: 49.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.20302E-08	0.55928E-08	0.20541E-13
2	0.57390E-08	0.15810E-07	0.58065E-13
3	0.11516E-07	0.31725E-07	0.11652E-12
4	0.19828E-07	0.54622E-07	0.20061E-12
5	0.31218E-07	0.85999E-07	0.31585E-12
6	0.46308E-07	0.12757E-06	0.46853E-12
7	0.65797E-07	0.18126E-06	0.66571E-12
8	0.90443E-07	0.24915E-06	0.91507E-12
9	0.12105E-06	0.33347E-06	0.12247E-11
10	0.15843E-06	0.43644E-06	0.16029E-11
11	0.20334E-06	0.56016E-06	0.20573E-11

12	0.25642E-06	0.70639E-06	0.25944E-11
13	0.31809E-06	0.87628E-06	0.32183E-11
14	0.38843E-06	0.10700E-05	0.39300E-11

Polygon I
Time: 50.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.16577E-08	0.45667E-08	0.16772E-13
2	0.46861E-08	0.12909E-07	0.47412E-13
3	0.94036E-08	0.25905E-07	0.95143E-13
4	0.16191E-07	0.44602E-07	0.16381E-12
5	0.25491E-07	0.70224E-07	0.25791E-12
6	0.37813E-07	0.10417E-06	0.38258E-12
7	0.53726E-07	0.14800E-06	0.54358E-12
8	0.73848E-07	0.20344E-06	0.74717E-12
9	0.98834E-07	0.27227E-06	0.99997E-12
10	0.12935E-06	0.35633E-06	0.13087E-11
11	0.16601E-06	0.45733E-06	0.16796E-11
12	0.20936E-06	0.57674E-06	0.21182E-11
13	0.25973E-06	0.71552E-06	0.26279E-11
14	0.31721E-06	0.87387E-06	0.32095E-11

Polygon I
Time: 51.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.13536E-08	0.37288E-08	0.13695E-13
2	0.38264E-08	0.10541E-07	0.38714E-13
3	0.76785E-08	0.21153E-07	0.77688E-13
4	0.13220E-07	0.36420E-07	0.13376E-12
5	0.20815E-07	0.57342E-07	0.21060E-12
6	0.30877E-07	0.85060E-07	0.31240E-12
7	0.43869E-07	0.12085E-06	0.44385E-12
8	0.60298E-07	0.16611E-06	0.61007E-12
9	0.80697E-07	0.22231E-06	0.81646E-12
10	0.10561E-06	0.29093E-06	0.10685E-11
11	0.13554E-06	0.37339E-06	0.13713E-11
12	0.17093E-06	0.47089E-06	0.17294E-11
13	0.21208E-06	0.58423E-06	0.21457E-11
14	0.25904E-06	0.71362E-06	0.26209E-11

Polygon I
Time: 52.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.11052E-08	0.30447E-08	0.11182E-13
2	0.31244E-08	0.86070E-08	0.31611E-13
3	0.62698E-08	0.17272E-07	0.63436E-13
4	0.10795E-07	0.29739E-07	0.10922E-12
5	0.16997E-07	0.46822E-07	0.17196E-12
6	0.25212E-07	0.69456E-07	0.25509E-12
7	0.35821E-07	0.98681E-07	0.36243E-12
8	0.49235E-07	0.13563E-06	0.49814E-12
9	0.65889E-07	0.18151E-06	0.66664E-12
10	0.86225E-07	0.23753E-06	0.87239E-12
11	0.11066E-06	0.30485E-06	0.11196E-11
12	0.13956E-06	0.38446E-06	0.14120E-11
13	0.17316E-06	0.47703E-06	0.17520E-11
14	0.21153E-06	0.58272E-06	0.21402E-11

Polygon I
Time: 53.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)

1	0.90242E-09	0.24860E-08	0.91304E-14
2	0.25511E-08	0.70279E-08	0.25811E-13
3	0.51195E-08	0.14103E-07	0.51797E-13
4	0.88147E-08	0.24283E-07	0.89184E-13
5	0.13878E-07	0.38233E-07	0.14042E-12
6	0.20587E-07	0.56714E-07	0.20829E-12
7	0.29249E-07	0.80577E-07	0.29594E-12
8	0.40202E-07	0.11075E-06	0.40675E-12
9	0.53799E-07	0.14821E-06	0.54432E-12
10	0.70401E-07	0.19394E-06	0.71229E-12
11	0.90352E-07	0.24890E-06	0.91415E-12
12	0.11394E-06	0.31390E-06	0.11529E-11
13	0.14138E-06	0.38949E-06	0.14305E-11
14	0.17272E-06	0.47583E-06	0.17476E-11

Polygon I
Time: 54.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.73684E-09	0.20299E-08	0.74551E-14
2	0.20830E-08	0.57384E-08	0.21075E-13
3	0.41802E-08	0.11516E-07	0.42294E-13
4	0.71975E-08	0.19828E-07	0.72821E-13
5	0.11332E-07	0.31218E-07	0.11466E-12
6	0.16810E-07	0.46309E-07	0.17008E-12
7	0.23883E-07	0.65794E-07	0.24164E-12
8	0.32826E-07	0.90429E-07	0.33212E-12
9	0.43927E-07	0.12101E-06	0.44444E-12
10	0.57482E-07	0.15835E-06	0.58158E-12
11	0.73770E-07	0.20322E-06	0.74637E-12
12	0.93032E-07	0.25629E-06	0.94127E-12
13	0.11544E-06	0.31801E-06	0.11680E-11
14	0.14103E-06	0.38853E-06	0.14269E-11

Polygon I
Time: 55.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.60164E-09	0.16574E-08	0.60872E-14
2	0.17008E-08	0.46855E-08	0.17208E-13
3	0.34132E-08	0.94028E-08	0.34534E-13
4	0.58769E-08	0.16190E-07	0.59461E-13
5	0.92532E-08	0.25491E-07	0.93621E-13
6	0.13726E-07	0.37813E-07	0.13888E-12
7	0.19502E-07	0.53723E-07	0.19731E-12
8	0.26803E-07	0.73838E-07	0.27119E-12
9	0.35867E-07	0.98809E-07	0.36289E-12
10	0.46934E-07	0.12929E-06	0.47486E-12
11	0.60231E-07	0.16593E-06	0.60940E-12
12	0.75958E-07	0.20925E-06	0.76852E-12
13	0.94252E-07	0.25965E-06	0.95361E-12
14	0.11516E-06	0.31724E-06	0.11651E-11

Polygon I
Time: 56.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.49125E-09	0.13533E-08	0.49702E-14
2	0.13888E-08	0.38258E-08	0.14051E-13
3	0.27870E-08	0.76776E-08	0.28198E-13
4	0.47987E-08	0.13219E-07	0.48551E-13
5	0.75555E-08	0.20814E-07	0.76444E-13
6	0.11208E-07	0.30876E-07	0.11340E-12
7	0.15924E-07	0.43867E-07	0.16111E-12

8	0.21886E-07	0.60291E-07	0.22143E-12
9	0.29287E-07	0.80679E-07	0.29631E-12
10	0.38322E-07	0.10557E-06	0.38773E-12
11	0.49178E-07	0.13548E-06	0.49757E-12
12	0.62018E-07	0.17085E-06	0.62748E-12
13	0.76955E-07	0.21200E-06	0.77860E-12
14	0.94026E-07	0.25902E-06	0.95132E-12

Polygon I
Time: 57.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.40111E-09	0.11050E-08	0.40583E-14
2	0.11339E-08	0.31238E-08	0.11473E-13
3	0.22756E-08	0.62689E-08	0.23024E-13
4	0.39182E-08	0.10794E-07	0.39643E-13
5	0.61693E-08	0.16995E-07	0.62419E-13
6	0.91516E-08	0.25211E-07	0.92593E-13
7	0.13002E-07	0.35819E-07	0.13155E-12
8	0.17870E-07	0.49230E-07	0.18081E-12
9	0.23913E-07	0.65876E-07	0.24194E-12
10	0.31290E-07	0.86199E-07	0.31658E-12
11	0.40154E-07	0.11062E-06	0.40626E-12
12	0.50637E-07	0.13949E-06	0.51232E-12
13	0.62832E-07	0.17309E-06	0.63571E-12
14	0.76772E-07	0.21149E-06	0.77675E-12

Polygon I
Time: 58.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.32751E-09	0.90223E-09	0.33136E-14
2	0.92587E-09	0.25506E-08	0.93677E-14
3	0.18581E-08	0.51186E-08	0.18799E-13
4	0.31993E-08	0.88135E-08	0.32369E-13
5	0.50374E-08	0.13877E-07	0.50966E-13
6	0.74726E-08	0.20586E-07	0.75605E-13
7	0.10617E-07	0.29247E-07	0.10742E-12
8	0.14592E-07	0.40197E-07	0.14763E-12
9	0.19526E-07	0.53790E-07	0.19755E-12
10	0.25549E-07	0.70383E-07	0.25849E-12
11	0.32786E-07	0.90319E-07	0.33171E-12
12	0.41344E-07	0.11390E-06	0.41831E-12
13	0.51301E-07	0.14133E-06	0.51905E-12
14	0.62684E-07	0.17268E-06	0.63421E-12

Polygon I
Time: 59.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.26741E-09	0.73668E-09	0.27056E-14
2	0.75599E-09	0.20826E-08	0.76488E-14
3	0.15171E-08	0.41794E-08	0.15350E-13
4	0.26123E-08	0.71964E-08	0.26430E-13
5	0.41131E-08	0.11331E-07	0.41615E-13
6	0.61015E-08	0.16809E-07	0.61733E-13
7	0.86689E-08	0.23881E-07	0.87709E-13
8	0.11915E-07	0.32822E-07	0.12055E-12
9	0.15943E-07	0.43921E-07	0.16131E-12
10	0.20861E-07	0.57469E-07	0.21107E-12
11	0.26770E-07	0.73746E-07	0.27085E-12
12	0.33757E-07	0.92995E-07	0.34154E-12
13	0.41887E-07	0.11539E-06	0.42380E-12
14	0.51180E-07	0.14099E-06	0.51783E-12

Polygon I
Time: 60.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.21835E-09	0.60151E-09	0.22092E-14
2	0.61727E-09	0.17005E-08	0.62453E-14
3	0.12388E-08	0.34126E-08	0.12533E-13
4	0.21330E-08	0.58760E-08	0.21581E-13
5	0.33585E-08	0.92519E-08	0.33980E-13
6	0.49820E-08	0.13725E-07	0.50407E-13
7	0.70784E-08	0.19500E-07	0.71616E-13
8	0.97285E-08	0.26800E-07	0.98430E-13
9	0.13018E-07	0.35862E-07	0.13171E-12
10	0.17033E-07	0.46924E-07	0.17234E-12
11	0.21858E-07	0.60214E-07	0.22115E-12
12	0.27563E-07	0.75930E-07	0.27887E-12
13	0.34200E-07	0.94215E-07	0.34603E-12
14	0.41788E-07	0.11512E-06	0.42280E-12

Polygon I
Time: 61.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.17828E-09	0.49114E-09	0.18038E-14
2	0.50401E-09	0.13885E-08	0.50994E-14
3	0.10115E-08	0.27864E-08	0.10234E-13
4	0.17416E-08	0.47978E-08	0.17621E-13
5	0.27422E-08	0.75544E-08	0.27745E-13
6	0.40680E-08	0.11206E-07	0.41158E-13
7	0.57797E-08	0.15922E-07	0.58477E-13
8	0.79436E-08	0.21883E-07	0.80370E-13
9	0.10630E-07	0.29282E-07	0.10755E-12
10	0.13908E-07	0.38315E-07	0.14072E-12
11	0.17847E-07	0.49166E-07	0.18057E-12
12	0.22505E-07	0.61997E-07	0.22770E-12
13	0.27924E-07	0.76926E-07	0.28253E-12
14	0.34120E-07	0.93994E-07	0.34521E-12

Polygon I
Time: 62.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.14557E-09	0.40102E-09	0.14728E-14
2	0.41153E-09	0.11337E-08	0.41637E-14
3	0.82588E-09	0.22751E-08	0.83559E-14
4	0.14220E-08	0.39175E-08	0.14388E-13
5	0.22391E-08	0.61683E-08	0.22654E-13
6	0.33216E-08	0.91503E-08	0.33606E-13
7	0.47192E-08	0.13001E-07	0.47747E-13
8	0.64861E-08	0.17868E-07	0.65624E-13
9	0.86793E-08	0.23910E-07	0.87814E-13
10	0.11356E-07	0.31285E-07	0.11490E-12
11	0.14572E-07	0.40144E-07	0.14744E-12
12	0.18376E-07	0.50621E-07	0.18592E-12
13	0.22800E-07	0.62810E-07	0.23068E-12
14	0.27859E-07	0.76746E-07	0.28186E-12

Polygon I
Time: 63.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.11886E-09	0.32744E-09	0.12026E-14
2	0.33602E-09	0.92568E-09	0.33997E-14
3	0.67434E-09	0.18577E-08	0.68227E-14

4	0.11611E-08	0.31987E-08	0.11748E-13
5	0.18282E-08	0.50365E-08	0.18498E-13
6	0.27121E-08	0.74714E-08	0.27440E-13
7	0.38533E-08	0.10615E-07	0.38987E-13
8	0.52961E-08	0.14590E-07	0.53584E-13
9	0.70868E-08	0.19523E-07	0.71702E-13
10	0.92727E-08	0.25545E-07	0.93818E-13
11	0.11899E-07	0.32779E-07	0.12039E-12
12	0.15004E-07	0.41333E-07	0.15180E-12
13	0.18616E-07	0.51285E-07	0.18835E-12
14	0.22746E-07	0.62662E-07	0.23014E-12

Polygon I
Time: 64.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.97051E-10	0.26736E-09	0.98193E-15
2	0.27437E-09	0.75583E-09	0.27759E-14
3	0.55061E-09	0.15168E-08	0.55709E-14
4	0.94807E-09	0.26118E-08	0.95923E-14
5	0.14928E-08	0.41124E-08	0.15104E-13
6	0.22145E-08	0.61005E-08	0.22405E-13
7	0.31463E-08	0.86676E-08	0.31833E-13
8	0.43244E-08	0.11913E-07	0.43752E-13
9	0.57866E-08	0.15941E-07	0.58546E-13
10	0.75714E-08	0.20858E-07	0.76604E-13
11	0.97155E-08	0.26764E-07	0.98298E-13
12	0.12251E-07	0.33749E-07	0.12395E-12
13	0.15200E-07	0.41874E-07	0.15379E-12
14	0.18572E-07	0.51164E-07	0.18791E-12

Polygon I
Time: 65.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.79244E-10	0.21830E-09	0.80176E-15
2	0.22402E-09	0.61715E-09	0.22666E-14
3	0.44958E-09	0.12385E-08	0.45487E-14
4	0.77412E-09	0.21326E-08	0.78322E-14
5	0.12189E-08	0.33578E-08	0.12332E-13
6	0.18082E-08	0.49812E-08	0.18294E-13
7	0.25690E-08	0.70772E-08	0.25993E-13
8	0.35309E-08	0.97271E-08	0.35725E-13
9	0.47249E-08	0.13016E-07	0.47804E-13
10	0.61822E-08	0.17031E-07	0.62549E-13
11	0.79329E-08	0.21854E-07	0.80262E-13
12	0.10003E-07	0.27556E-07	0.10121E-12
13	0.12411E-07	0.34191E-07	0.12557E-12
14	0.15164E-07	0.41775E-07	0.15343E-12

Polygon I
Time: 66.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.64704E-10	0.17825E-09	0.65465E-15
2	0.18292E-09	0.50391E-09	0.18507E-14
3	0.36709E-09	0.10113E-08	0.37141E-14
4	0.63208E-09	0.17413E-08	0.63951E-14
5	0.99524E-09	0.27417E-08	0.10070E-13
6	0.14764E-08	0.40672E-08	0.14938E-13
7	0.20977E-08	0.57787E-08	0.21223E-13
8	0.28831E-08	0.79424E-08	0.29170E-13
9	0.38579E-08	0.10628E-07	0.39033E-13
10	0.50479E-08	0.13906E-07	0.51073E-13

11	0.64773E-08	0.17844E-07	0.65535E-13
12	0.81676E-08	0.22500E-07	0.82637E-13
13	0.10134E-07	0.27917E-07	0.10253E-12
14	0.12382E-07	0.34110E-07	0.12528E-12

Polygon I
Time: 67.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.52832E-10	0.14554E-09	0.53453E-15
2	0.14936E-09	0.41145E-09	0.15111E-14
3	0.29973E-09	0.82571E-09	0.30326E-14
4	0.51610E-09	0.14218E-08	0.52217E-14
5	0.81263E-09	0.22387E-08	0.82219E-14
6	0.12055E-08	0.33210E-08	0.12197E-13
7	0.17128E-08	0.47184E-08	0.17329E-13
8	0.23541E-08	0.64851E-08	0.23818E-13
9	0.31501E-08	0.86779E-08	0.31872E-13
10	0.41217E-08	0.11355E-07	0.41702E-13
11	0.52889E-08	0.14570E-07	0.53511E-13
12	0.66690E-08	0.18372E-07	0.67474E-13
13	0.82744E-08	0.22795E-07	0.83718E-13
14	0.10110E-07	0.27851E-07	0.10229E-12

Polygon I
Time: 68.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.43138E-10	0.11884E-09	0.43645E-15
2	0.12195E-09	0.33596E-09	0.12339E-14
3	0.24474E-09	0.67421E-09	0.24762E-14
4	0.42141E-09	0.11609E-08	0.42636E-14
5	0.66353E-09	0.18279E-08	0.67133E-14
6	0.98432E-09	0.27116E-08	0.99590E-14
7	0.13985E-08	0.38527E-08	0.14150E-13
8	0.19222E-08	0.52952E-08	0.19448E-13
9	0.25721E-08	0.70857E-08	0.26024E-13
10	0.33655E-08	0.92712E-08	0.34051E-13
11	0.43185E-08	0.11897E-07	0.43693E-13
12	0.54453E-08	0.15001E-07	0.55094E-13
13	0.67562E-08	0.18612E-07	0.68357E-13
14	0.82548E-08	0.22740E-07	0.83519E-13

Polygon I
Time: 69.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.35223E-10	0.97033E-10	0.35637E-15
2	0.99576E-10	0.27431E-09	0.10075E-14
3	0.19983E-09	0.55050E-09	0.20218E-14
4	0.34408E-09	0.94789E-09	0.34813E-14
5	0.54178E-09	0.14925E-08	0.54815E-14
6	0.80371E-09	0.22141E-08	0.81317E-14
7	0.11419E-08	0.31458E-08	0.11553E-13
8	0.15695E-08	0.43236E-08	0.15879E-13
9	0.21002E-08	0.57856E-08	0.21249E-13
10	0.27480E-08	0.75702E-08	0.27803E-13
11	0.35261E-08	0.97138E-08	0.35676E-13
12	0.44462E-08	0.12249E-07	0.44985E-13
13	0.55165E-08	0.15197E-07	0.55814E-13
14	0.67401E-08	0.18568E-07	0.68194E-13

Polygon I
Time: 70.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.28760E-10	0.79229E-10	0.29098E-15
2	0.81305E-10	0.22398E-09	0.82262E-15
3	0.16317E-09	0.44949E-09	0.16509E-14
4	0.28095E-09	0.77397E-09	0.28426E-14
5	0.44237E-09	0.12187E-08	0.44758E-14
6	0.65624E-09	0.18078E-08	0.66396E-14
7	0.93239E-09	0.25686E-08	0.94336E-14
8	0.12815E-08	0.35303E-08	0.12966E-13
9	0.17148E-08	0.47241E-08	0.17350E-13
10	0.22438E-08	0.61812E-08	0.22702E-13
11	0.28792E-08	0.79315E-08	0.29130E-13
12	0.36304E-08	0.10001E-07	0.36731E-13
13	0.45043E-08	0.12409E-07	0.45573E-13
14	0.55034E-08	0.15161E-07	0.55682E-13

Polygon I
Time: 71.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.23483E-10	0.64692E-10	0.23759E-15
2	0.66387E-10	0.18288E-09	0.67168E-15
3	0.13323E-09	0.36702E-09	0.13480E-14
4	0.22940E-09	0.63196E-09	0.23210E-14
5	0.36120E-09	0.99505E-09	0.36545E-14
6	0.53583E-09	0.14761E-08	0.54214E-14
7	0.76132E-09	0.20973E-08	0.77027E-14
8	0.10464E-08	0.28826E-08	0.10587E-13
9	0.14002E-08	0.38573E-08	0.14167E-13
10	0.18321E-08	0.50471E-08	0.18536E-13
11	0.23509E-08	0.64763E-08	0.23785E-13
12	0.29643E-08	0.81661E-08	0.29992E-13
13	0.36779E-08	0.10132E-07	0.37211E-13
14	0.44936E-08	0.12379E-07	0.45465E-13

Polygon I
Time: 72.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.19174E-10	0.52822E-10	0.19400E-15
2	0.54206E-10	0.14933E-09	0.54844E-15
3	0.10878E-09	0.29968E-09	0.11006E-14
4	0.18731E-09	0.51600E-09	0.18951E-14
5	0.29493E-09	0.81248E-09	0.29840E-14
6	0.43752E-09	0.12053E-08	0.44266E-14
7	0.62163E-09	0.17125E-08	0.62894E-14
8	0.85438E-09	0.23537E-08	0.86443E-14
9	0.11433E-08	0.31496E-08	0.11567E-13
10	0.14959E-08	0.41210E-08	0.15135E-13
11	0.19195E-08	0.52880E-08	0.19421E-13
12	0.24204E-08	0.66678E-08	0.24489E-13
13	0.30030E-08	0.82729E-08	0.30384E-13
14	0.36691E-08	0.10108E-07	0.37123E-13

Polygon I
Time: 73.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.15656E-10	0.43130E-10	0.15840E-15
2	0.44260E-10	0.12193E-09	0.44781E-15
3	0.88823E-10	0.24469E-09	0.89868E-15
4	0.15294E-09	0.42133E-09	0.15474E-14
5	0.24081E-09	0.66340E-09	0.24365E-14
6	0.35724E-09	0.98413E-09	0.36144E-14

7	0.50757E-09	0.13983E-08	0.51354E-14
8	0.69762E-09	0.19218E-08	0.70583E-14
9	0.93352E-09	0.25717E-08	0.94450E-14
10	0.12215E-08	0.33649E-08	0.12358E-13
11	0.15673E-08	0.43178E-08	0.15858E-13
12	0.19763E-08	0.54444E-08	0.19996E-13
13	0.24520E-08	0.67549E-08	0.24809E-13
14	0.29959E-08	0.82531E-08	0.30311E-13

Polygon I
Time: 74.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.12784E-10	0.35216E-10	0.12934E-15
2	0.36139E-10	0.99557E-10	0.36564E-15
3	0.72526E-10	0.19980E-09	0.73379E-15
4	0.12488E-09	0.34402E-09	0.12635E-14
5	0.19663E-09	0.54168E-09	0.19894E-14
6	0.29169E-09	0.80356E-09	0.29512E-14
7	0.41444E-09	0.11417E-08	0.41931E-14
8	0.56962E-09	0.15692E-08	0.57632E-14
9	0.76223E-09	0.20998E-08	0.77120E-14
10	0.99734E-09	0.27475E-08	0.10091E-13
11	0.12798E-08	0.35255E-08	0.12948E-13
12	0.16137E-08	0.44455E-08	0.16327E-13
13	0.20021E-08	0.55155E-08	0.20257E-13
14	0.24462E-08	0.67388E-08	0.24750E-13

Polygon I
Time: 75.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.10438E-10	0.28755E-10	0.10561E-15
2	0.29508E-10	0.81290E-10	0.29856E-15
3	0.59218E-10	0.16314E-09	0.59915E-15
4	0.10197E-09	0.28090E-09	0.10317E-14
5	0.16055E-09	0.44229E-09	0.16244E-14
6	0.23817E-09	0.65612E-09	0.24097E-14
7	0.33840E-09	0.93222E-09	0.34238E-14
8	0.46510E-09	0.12813E-08	0.47057E-14
9	0.62238E-09	0.17145E-08	0.62970E-14
10	0.81435E-09	0.22434E-08	0.82393E-14
11	0.10450E-08	0.28787E-08	0.10572E-13
12	0.13176E-08	0.36298E-08	0.13331E-13
13	0.16348E-08	0.45035E-08	0.16540E-13
14	0.19974E-08	0.55024E-08	0.20209E-13

Polygon I
Time: 76.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.85228E-11	0.23479E-10	0.86231E-16
2	0.24094E-10	0.66375E-10	0.24378E-15
3	0.48353E-10	0.13320E-09	0.48922E-15
4	0.83257E-10	0.22936E-09	0.84237E-15
5	0.13109E-09	0.36114E-09	0.13264E-14
6	0.19447E-09	0.53573E-09	0.19676E-14
7	0.27631E-09	0.76117E-09	0.27956E-14
8	0.37976E-09	0.10462E-08	0.38423E-14
9	0.50818E-09	0.13999E-08	0.51416E-14
10	0.66493E-09	0.18318E-08	0.67275E-14
11	0.85322E-09	0.23505E-08	0.86326E-14
12	0.10759E-08	0.29638E-08	0.10885E-13
13	0.13348E-08	0.36772E-08	0.13505E-13

14	0.16309E-08	0.44928E-08	0.16501E-13

Polygon I
Time: 77.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.69590E-11	0.19171E-10	0.70409E-16
2	0.19673E-10	0.54196E-10	0.19905E-15
3	0.39481E-10	0.10876E-09	0.39945E-15
4	0.67981E-10	0.18728E-09	0.68781E-15
5	0.10704E-09	0.29488E-09	0.10830E-14
6	0.15879E-09	0.43744E-09	0.16066E-14
7	0.22561E-09	0.62151E-09	0.22826E-14
8	0.31008E-09	0.85423E-09	0.31373E-14
9	0.41494E-09	0.11431E-08	0.41982E-14
10	0.54293E-09	0.14957E-08	0.54931E-14
11	0.69667E-09	0.19192E-08	0.70487E-14
12	0.87846E-09	0.24200E-08	0.88879E-14
13	0.10899E-08	0.30025E-08	0.11027E-13
14	0.13316E-08	0.36684E-08	0.13473E-13

Polygon I
Time: 78.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.56822E-11	0.15653E-10	0.57490E-16
2	0.16064E-10	0.44252E-10	0.16253E-15
3	0.32237E-10	0.88807E-10	0.32616E-15
4	0.55508E-10	0.15291E-09	0.56161E-15
5	0.87400E-10	0.24077E-09	0.88428E-15
6	0.12965E-09	0.35717E-09	0.13118E-14
7	0.18421E-09	0.50748E-09	0.18638E-14
8	0.25319E-09	0.69749E-09	0.25617E-14
9	0.33880E-09	0.93335E-09	0.34279E-14
10	0.44331E-09	0.12212E-08	0.44852E-14
11	0.56885E-09	0.15671E-08	0.57554E-14
12	0.71728E-09	0.19760E-08	0.72572E-14
13	0.88994E-09	0.24516E-08	0.90041E-14
14	0.10873E-08	0.29953E-08	0.11001E-13

Polygon I
Time: 79.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.46396E-11	0.12781E-10	0.46942E-16
2	0.13116E-10	0.36133E-10	0.13271E-15
3	0.26322E-10	0.72513E-10	0.26632E-15
4	0.45323E-10	0.12486E-09	0.45856E-15
5	0.71363E-10	0.19659E-09	0.72203E-15
6	0.10587E-09	0.29164E-09	0.10711E-14
7	0.15041E-09	0.41436E-09	0.15218E-14
8	0.20673E-09	0.56951E-09	0.20917E-14
9	0.27664E-09	0.76209E-09	0.27989E-14
10	0.36197E-09	0.99716E-09	0.36623E-14
11	0.46447E-09	0.12795E-08	0.46994E-14
12	0.58567E-09	0.16134E-08	0.59256E-14
13	0.72665E-09	0.20018E-08	0.73520E-14
14	0.88781E-09	0.24458E-08	0.89825E-14

Polygon I
Time: 80.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.37883E-11	0.10436E-10	0.38329E-16
2	0.10710E-10	0.29503E-10	0.10836E-15

3	0.21492E-10	0.59208E-10	0.21745E-15
4	0.37007E-10	0.10195E-09	0.37442E-15
5	0.58270E-10	0.16052E-09	0.58955E-15
6	0.86441E-10	0.23813E-09	0.87458E-15
7	0.12282E-09	0.33833E-09	0.12426E-14
8	0.16880E-09	0.46502E-09	0.17079E-14
9	0.22588E-09	0.62226E-09	0.22854E-14
10	0.29555E-09	0.81420E-09	0.29903E-14
11	0.37925E-09	0.10448E-08	0.38371E-14
12	0.47821E-09	0.13174E-08	0.48384E-14
13	0.59332E-09	0.16345E-08	0.60030E-14
14	0.72491E-09	0.19970E-08	0.73344E-14

Polygon I
Time: 81.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.30932E-11	0.85213E-11	0.31296E-16
2	0.87446E-11	0.24090E-10	0.88475E-16
3	0.17549E-10	0.48344E-10	0.17755E-15
4	0.30217E-10	0.83242E-10	0.30572E-15
5	0.47578E-10	0.13107E-09	0.48138E-15
6	0.70580E-10	0.19444E-09	0.71411E-15
7	0.10028E-09	0.27626E-09	0.10146E-14
8	0.13783E-09	0.37969E-09	0.13945E-14
9	0.18444E-09	0.50809E-09	0.18661E-14
10	0.24133E-09	0.66481E-09	0.24416E-14
11	0.30967E-09	0.85307E-09	0.31331E-14
12	0.39047E-09	0.10757E-08	0.39506E-14
13	0.48446E-09	0.13346E-08	0.49016E-14
14	0.59191E-09	0.16306E-08	0.59887E-14

Polygon I
Time: 82.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.25257E-11	0.69578E-11	0.25554E-16
2	0.71401E-11	0.19670E-10	0.72241E-16
3	0.14329E-10	0.39474E-10	0.14498E-15
4	0.24673E-10	0.67969E-10	0.24963E-15
5	0.38848E-10	0.10702E-09	0.39305E-15
6	0.57630E-10	0.15876E-09	0.58308E-15
7	0.81881E-10	0.22557E-09	0.82844E-15
8	0.11254E-09	0.31003E-09	0.11386E-14
9	0.15060E-09	0.41486E-09	0.15237E-14
10	0.19705E-09	0.54283E-09	0.19936E-14
11	0.25285E-09	0.69655E-09	0.25582E-14
12	0.31882E-09	0.87830E-09	0.32258E-14
13	0.39557E-09	0.10897E-08	0.40022E-14
14	0.48330E-09	0.13314E-08	0.48899E-14

Polygon I
Time: 83.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.20623E-11	0.56812E-11	0.20865E-16
2	0.58300E-11	0.16061E-10	0.58986E-16
3	0.11700E-10	0.32231E-10	0.11838E-15
4	0.20146E-10	0.55498E-10	0.20383E-15
5	0.31720E-10	0.87384E-10	0.32094E-15
6	0.47056E-10	0.12963E-09	0.47610E-15
7	0.66857E-10	0.18418E-09	0.67644E-15
8	0.91891E-10	0.25314E-09	0.92972E-15
9	0.12296E-09	0.33874E-09	0.12441E-14

10	0.16089E-09	0.44323E-09	0.16278E-14
11	0.20645E-09	0.56874E-09	0.20888E-14
12	0.26033E-09	0.71715E-09	0.26339E-14
13	0.32299E-09	0.88978E-09	0.32679E-14
14	0.39462E-09	0.10871E-08	0.39927E-14

Polygon I
Time: 84.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.16839E-11	0.46388E-11	0.17037E-16
2	0.47603E-11	0.13114E-10	0.48163E-16
3	0.95532E-11	0.26317E-10	0.96656E-16
4	0.16449E-10	0.45315E-10	0.16643E-15
5	0.25900E-10	0.71351E-10	0.26205E-15
6	0.38422E-10	0.10585E-09	0.38874E-15
7	0.54590E-10	0.15039E-09	0.55232E-15
8	0.75031E-10	0.20670E-09	0.75913E-15
9	0.10040E-09	0.27659E-09	0.10158E-14
10	0.13137E-09	0.36190E-09	0.13292E-14
11	0.16857E-09	0.46439E-09	0.17056E-14
12	0.21256E-09	0.58557E-09	0.21506E-14
13	0.26373E-09	0.72652E-09	0.26683E-14
14	0.32222E-09	0.88765E-09	0.32601E-14

Polygon I
Time: 85.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.13749E-11	0.37876E-11	0.13911E-16
2	0.38869E-11	0.10708E-10	0.39326E-16
3	0.78003E-11	0.21489E-10	0.78921E-16
4	0.13431E-10	0.37000E-10	0.13589E-15
5	0.21148E-10	0.58259E-10	0.21397E-15
6	0.31372E-10	0.86425E-10	0.31741E-15
7	0.44574E-10	0.12279E-09	0.45098E-15
8	0.61264E-10	0.16877E-09	0.61985E-15
9	0.81980E-10	0.22584E-09	0.82945E-15
10	0.10727E-09	0.29550E-09	0.10853E-14
11	0.13764E-09	0.37918E-09	0.13926E-14
12	0.17356E-09	0.47813E-09	0.17560E-14
13	0.21534E-09	0.59322E-09	0.21787E-14
14	0.26310E-09	0.72479E-09	0.26619E-14

Polygon I
Time: 86.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.11226E-11	0.30927E-11	0.11358E-16
2	0.31737E-11	0.87430E-11	0.32111E-16
3	0.63691E-11	0.17546E-10	0.64441E-16
4	0.10967E-10	0.30211E-10	0.11096E-15
5	0.17268E-10	0.47570E-10	0.17471E-15
6	0.25616E-10	0.70568E-10	0.25917E-15
7	0.36395E-10	0.10026E-09	0.36824E-15
8	0.50023E-10	0.13780E-09	0.50611E-15
9	0.66938E-10	0.18440E-09	0.67726E-15
10	0.87585E-10	0.24128E-09	0.88616E-15
11	0.11239E-09	0.30961E-09	0.11371E-14
12	0.14171E-09	0.39040E-09	0.14338E-14
13	0.17583E-09	0.48437E-09	0.17790E-14
14	0.21482E-09	0.59180E-09	0.21735E-14

Polygon I

Time: 87.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.91666E-12	0.25252E-11	0.92744E-17
2	0.25914E-11	0.71388E-11	0.26219E-16
3	0.52005E-11	0.14326E-10	0.52617E-16
4	0.89545E-11	0.24668E-10	0.90599E-16
5	0.14099E-10	0.38841E-10	0.14265E-15
6	0.20916E-10	0.57620E-10	0.21162E-15
7	0.29717E-10	0.81866E-10	0.30067E-15
8	0.40845E-10	0.11252E-09	0.41325E-15
9	0.54656E-10	0.15057E-09	0.55299E-15
10	0.71515E-10	0.19701E-09	0.72356E-15
11	0.91767E-10	0.25280E-09	0.92847E-15
12	0.11571E-09	0.31877E-09	0.11707E-14
13	0.14357E-09	0.39550E-09	0.14526E-14
14	0.17541E-09	0.48322E-09	0.17747E-14

Polygon I

Time: 88.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.74847E-12	0.20619E-11	0.75727E-17
2	0.21159E-11	0.58290E-11	0.21408E-16
3	0.42463E-11	0.11698E-10	0.42963E-16
4	0.73115E-11	0.20142E-10	0.73976E-16
5	0.11512E-10	0.31715E-10	0.11648E-15
6	0.17078E-10	0.47047E-10	0.17279E-15
7	0.24265E-10	0.66845E-10	0.24550E-15
8	0.33350E-10	0.91874E-10	0.33743E-15
9	0.44628E-10	0.12294E-09	0.45153E-15
10	0.58393E-10	0.16086E-09	0.59080E-15
11	0.74929E-10	0.20642E-09	0.75811E-15
12	0.94481E-10	0.26028E-09	0.95593E-15
13	0.11722E-09	0.32293E-09	0.11860E-14
14	0.14322E-09	0.39455E-09	0.14491E-14

Polygon I

Time: 89.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.61114E-12	0.16836E-11	0.61833E-17
2	0.17277E-11	0.47595E-11	0.17480E-16
3	0.34672E-11	0.95515E-11	0.35080E-16
4	0.59700E-11	0.16446E-10	0.60402E-16
5	0.94001E-11	0.25896E-10	0.95107E-16
6	0.13945E-10	0.38415E-10	0.14109E-15
7	0.19813E-10	0.54580E-10	0.20046E-15
8	0.27231E-10	0.75017E-10	0.27552E-15
9	0.36439E-10	0.10038E-09	0.36868E-15
10	0.47679E-10	0.13135E-09	0.48240E-15
11	0.61181E-10	0.16854E-09	0.61901E-15
12	0.77146E-10	0.21252E-09	0.78053E-15
13	0.95716E-10	0.26368E-09	0.96842E-15
14	0.11694E-09	0.32216E-09	0.11832E-14

Polygon I

Time: 90.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.49900E-12	0.13747E-11	0.50487E-17
2	0.14107E-11	0.38862E-11	0.14273E-16
3	0.28310E-11	0.77989E-11	0.28643E-16
4	0.48746E-11	0.13429E-10	0.49320E-16
5	0.76753E-11	0.21144E-10	0.77656E-16

6	0.11386E-10	0.31367E-10	0.11520E-15
7	0.16177E-10	0.44566E-10	0.16368E-15
8	0.22235E-10	0.61253E-10	0.22496E-15
9	0.29753E-10	0.81965E-10	0.30103E-15
10	0.38931E-10	0.10725E-09	0.39389E-15
11	0.49955E-10	0.13762E-09	0.50543E-15
12	0.62991E-10	0.17353E-09	0.63732E-15
13	0.78154E-10	0.21530E-09	0.79073E-15
14	0.95487E-10	0.26305E-09	0.96611E-15

Polygon I
Time: 91.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.40745E-12	0.11224E-11	0.41224E-17
2	0.11519E-11	0.31731E-11	0.11654E-16
3	0.23116E-11	0.63680E-11	0.23388E-16
4	0.39802E-11	0.10965E-10	0.40270E-16
5	0.62671E-11	0.17265E-10	0.63408E-16
6	0.92969E-11	0.25611E-10	0.94063E-16
7	0.13209E-10	0.36389E-10	0.13365E-15
8	0.18155E-10	0.50014E-10	0.18369E-15
9	0.24294E-10	0.66926E-10	0.24580E-15
10	0.31788E-10	0.87569E-10	0.32162E-15
11	0.40790E-10	0.11237E-09	0.41269E-15
12	0.51433E-10	0.14169E-09	0.52038E-15
13	0.63814E-10	0.17580E-09	0.64565E-15
14	0.77967E-10	0.21479E-09	0.78884E-15

Polygon I
Time: 92.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.33269E-12	0.91649E-12	0.33660E-17
2	0.94051E-12	0.25909E-11	0.95157E-17
3	0.18874E-11	0.51996E-11	0.19096E-16
4	0.32499E-11	0.89529E-11	0.32881E-16
5	0.51172E-11	0.14097E-10	0.51774E-16
6	0.75911E-11	0.20912E-10	0.76804E-16
7	0.10785E-10	0.29712E-10	0.10912E-15
8	0.14824E-10	0.40837E-10	0.14998E-15
9	0.19837E-10	0.54646E-10	0.20070E-15
10	0.25955E-10	0.71502E-10	0.26261E-15
11	0.33305E-10	0.91750E-10	0.33697E-15
12	0.41996E-10	0.11569E-09	0.42490E-15
13	0.52105E-10	0.14354E-09	0.52718E-15
14	0.63661E-10	0.17538E-09	0.64410E-15

Polygon I
Time: 93.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.27164E-12	0.74833E-12	0.27484E-17
2	0.76794E-12	0.21155E-11	0.77698E-17
3	0.15411E-11	0.42455E-11	0.15593E-16
4	0.26536E-11	0.73102E-11	0.26848E-16
5	0.41783E-11	0.11510E-10	0.42274E-16
6	0.61983E-11	0.17075E-10	0.62712E-16
7	0.88065E-11	0.24260E-10	0.89102E-16
8	0.12104E-10	0.33344E-10	0.12246E-15
9	0.16197E-10	0.44620E-10	0.16387E-15
10	0.21193E-10	0.58383E-10	0.21442E-15
11	0.27194E-10	0.74916E-10	0.27514E-15
12	0.34290E-10	0.94464E-10	0.34694E-15

13	0.42545E-10	0.11720E-09	0.43045E-15
14	0.51981E-10	0.14320E-09	0.52592E-15

Polygon I
Time: 94.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.22180E-12	0.61103E-12	0.22441E-17
2	0.62704E-12	0.17274E-11	0.63441E-17
3	0.12584E-11	0.34666E-11	0.12732E-16
4	0.21667E-11	0.59689E-11	0.21922E-16
5	0.34116E-11	0.93984E-11	0.34518E-16
6	0.50610E-11	0.13942E-10	0.51205E-16
7	0.71907E-11	0.19809E-10	0.72753E-16
8	0.98831E-11	0.27226E-10	0.99994E-16
9	0.13225E-10	0.36433E-10	0.13381E-15
10	0.17304E-10	0.47670E-10	0.17508E-15
11	0.22205E-10	0.61170E-10	0.22466E-15
12	0.27999E-10	0.77132E-10	0.28328E-15
13	0.34739E-10	0.95699E-10	0.35147E-15
14	0.42443E-10	0.11692E-09	0.42942E-15

Polygon I
Time: 95.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.18111E-12	0.49891E-12	0.18324E-17
2	0.51199E-12	0.14104E-11	0.51801E-17
3	0.10275E-11	0.28305E-11	0.10396E-16
4	0.17692E-11	0.48737E-11	0.17900E-16
5	0.27856E-11	0.76740E-11	0.28184E-16
6	0.41324E-11	0.11384E-10	0.41810E-16
7	0.58713E-11	0.16174E-10	0.59404E-16
8	0.80697E-11	0.22231E-10	0.81647E-16
9	0.10799E-10	0.29748E-10	0.10926E-15
10	0.14129E-10	0.38924E-10	0.14296E-15
11	0.18131E-10	0.49946E-10	0.18344E-15
12	0.22862E-10	0.62979E-10	0.23130E-15
13	0.28365E-10	0.78140E-10	0.28698E-15
14	0.34656E-10	0.95470E-10	0.35063E-15

Polygon I
Time: 96.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.14788E-12	0.40737E-12	0.14962E-17
2	0.41805E-12	0.11516E-11	0.42296E-17
3	0.83895E-12	0.23112E-11	0.84882E-17
4	0.14446E-11	0.39795E-11	0.14616E-16
5	0.22745E-11	0.62659E-11	0.23013E-16
6	0.33742E-11	0.92953E-11	0.34139E-16
7	0.47941E-11	0.13207E-10	0.48505E-16
8	0.65891E-11	0.18152E-10	0.66666E-16
9	0.88172E-11	0.24290E-10	0.89209E-16
10	0.11537E-10	0.31782E-10	0.11673E-15
11	0.14804E-10	0.40782E-10	0.14978E-15
12	0.18667E-10	0.51424E-10	0.18886E-15
13	0.23160E-10	0.63802E-10	0.23433E-15
14	0.28297E-10	0.77953E-10	0.28630E-15

Polygon I
Time: 97.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.12074E-12	0.33263E-12	0.12216E-17

2	0.34134E-12	0.94034E-12	0.34536E-17
3	0.68502E-12	0.18871E-11	0.69308E-17
4	0.11795E-11	0.32493E-11	0.11934E-16
5	0.18572E-11	0.51162E-11	0.18790E-16
6	0.27551E-11	0.75897E-11	0.27875E-16
7	0.39144E-11	0.10784E-10	0.39605E-16
8	0.53801E-11	0.14821E-10	0.54434E-16
9	0.71994E-11	0.19833E-10	0.72841E-16
10	0.94200E-11	0.25951E-10	0.95309E-16
11	0.12088E-10	0.33299E-10	0.12230E-15
12	0.15242E-10	0.41988E-10	0.15421E-15
13	0.18911E-10	0.52096E-10	0.19133E-15
14	0.23105E-10	0.63650E-10	0.23377E-15

Polygon I
Time: 98.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.98589E-13	0.27160E-12	0.99749E-18
2	0.27871E-12	0.76780E-12	0.28199E-17
3	0.55933E-12	0.15409E-11	0.56591E-17
4	0.96309E-12	0.26531E-11	0.97442E-17
5	0.15164E-11	0.41775E-11	0.15343E-16
6	0.22496E-11	0.61972E-11	0.22760E-16
7	0.31962E-11	0.88050E-11	0.32338E-16
8	0.43930E-11	0.12102E-10	0.44446E-16
9	0.58784E-11	0.16194E-10	0.59476E-16
10	0.76916E-11	0.21189E-10	0.77821E-16
11	0.98698E-11	0.27190E-10	0.99859E-16
12	0.12445E-10	0.34284E-10	0.12592E-15
13	0.15441E-10	0.42537E-10	0.15623E-15
14	0.18866E-10	0.51971E-10	0.19088E-15

Polygon I
Time: 99.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.80500E-13	0.22176E-12	0.81447E-18
2	0.22757E-12	0.62692E-12	0.23025E-17
3	0.45670E-12	0.12581E-11	0.46208E-17
4	0.78638E-12	0.21663E-11	0.79563E-17
5	0.12382E-11	0.34110E-11	0.12528E-16
6	0.18368E-11	0.50601E-11	0.18584E-16
7	0.26098E-11	0.71894E-11	0.26405E-16
8	0.35869E-11	0.98813E-11	0.36291E-16
9	0.47998E-11	0.13223E-10	0.48563E-16
10	0.62804E-11	0.17301E-10	0.63542E-16
11	0.80589E-11	0.22201E-10	0.81537E-16
12	0.10162E-10	0.27994E-10	0.10281E-15
13	0.12608E-10	0.34732E-10	0.12756E-15
14	0.15404E-10	0.42435E-10	0.15585E-15

Polygon I
Time: 100.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.65729E-13	0.18107E-12	0.66503E-18
2	0.18582E-12	0.51189E-12	0.18800E-17
3	0.37291E-12	0.10273E-11	0.37729E-17
4	0.64209E-12	0.17688E-11	0.64965E-17
5	0.10110E-11	0.27851E-11	0.10229E-16
6	0.14998E-11	0.41317E-11	0.15174E-16
7	0.21309E-11	0.58703E-11	0.21560E-16
8	0.29288E-11	0.80683E-11	0.29632E-16

9	0.39192E-11	0.10797E-10	0.39653E-16
10	0.51280E-11	0.14127E-10	0.51884E-16
11	0.65802E-11	0.18127E-10	0.66576E-16
12	0.82972E-11	0.22857E-10	0.83948E-16
13	0.10295E-10	0.28360E-10	0.10416E-15
14	0.12578E-10	0.34649E-10	0.12726E-15

2/20/2001

VLEACH (Version 2.2a, 1996)

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Based on the original VLEACH (version 1.0)
developed by CH2M Hill, Redding, California
for USEPA Region IX

Cleanup Concentration = 0.1 mg/kg TCE

Polygon I
Time: 0.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.00000	0.00000	0.00000
2	0.00000	0.00000	0.00000
3	0.00000	0.00000	0.00000
4	0.00000	0.00000	0.00000
5	0.00000	0.00000	0.00000
6	0.00000	0.00000	0.00000
7	0.00000	0.00000	0.00000
8	0.00000	0.00000	0.00000
9	0.00000	0.00000	0.00000
10	0.47114E-02	0.12979E-01	0.47668E-07
11	0.47114E-02	0.12979E-01	0.47668E-07
12	0.00000	0.00000	0.00000
13	0.00000	0.00000	0.00000
14	0.00000	0.00000	0.00000

Polygon I
Time: 1.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.31222E-05	0.86010E-05	0.31589E-10
2	0.63164E-05	0.17400E-04	0.63907E-10
3	0.96563E-05	0.26601E-04	0.97699E-10
4	0.13219E-04	0.36416E-04	0.13375E-09
5	0.17087E-04	0.47072E-04	0.17288E-09
6	0.21349E-04	0.58814E-04	0.21600E-09
7	0.26104E-04	0.71913E-04	0.26411E-09
8	0.31462E-04	0.86671E-04	0.31832E-09
9	0.37545E-04	0.10343E-03	0.37987E-09
10	0.26953E-02	0.74250E-02	0.27270E-07
11	0.36649E-02	0.10096E-01	0.37080E-07
12	0.13914E-02	0.38330E-02	0.14078E-07
13	0.56440E-03	0.15548E-02	0.57104E-08
14	0.22767E-03	0.62718E-03	0.23035E-08

Polygon I
Time: 2.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.43418E-05	0.11961E-04	0.43929E-10
2	0.94211E-05	0.25954E-04	0.95320E-10
3	0.14962E-04	0.41217E-04	0.15138E-09

4	0.20930E-04	0.57658E-04	0.21176E-09
5	0.27394E-04	0.75465E-04	0.27716E-09
6	0.34469E-04	0.94957E-04	0.34875E-09
7	0.42301E-04	0.11653E-03	0.42799E-09
8	0.51055E-04	0.14065E-03	0.51656E-09
9	0.60920E-04	0.16782E-03	0.61637E-09
10	0.15635E-02	0.43073E-02	0.15819E-07
11	0.26584E-02	0.73233E-02	0.26896E-07
12	0.17920E-02	0.49368E-02	0.18131E-07
13	0.10166E-02	0.28004E-02	0.10285E-07
14	0.52624E-03	0.14497E-02	0.53243E-08

Polygon I
Time: 3.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.45589E-05	0.12559E-04	0.46126E-10
2	0.10468E-04	0.28837E-04	0.10591E-09
3	0.17225E-04	0.47451E-04	0.17427E-09
4	0.24639E-04	0.67877E-04	0.24929E-09
5	0.32700E-04	0.90083E-04	0.33085E-09
6	0.41494E-04	0.11431E-03	0.41982E-09
7	0.51163E-04	0.14095E-03	0.51765E-09
8	0.61890E-04	0.17050E-03	0.62618E-09
9	0.73885E-04	0.20354E-03	0.74754E-09
10	0.92653E-03	0.25524E-02	0.93743E-08
11	0.18550E-02	0.51103E-02	0.18769E-07
12	0.17142E-02	0.47222E-02	0.17343E-07
13	0.12322E-02	0.33946E-02	0.12467E-07
14	0.77218E-03	0.21272E-02	0.78126E-08

Polygon I
Time: 4.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.42796E-05	0.11790E-04	0.43300E-10
2	0.10289E-04	0.28344E-04	0.10410E-09
3	0.17487E-04	0.48174E-04	0.17693E-09
4	0.25576E-04	0.70458E-04	0.25877E-09
5	0.34451E-04	0.94906E-04	0.34856E-09
6	0.44136E-04	0.12159E-03	0.44655E-09
7	0.54738E-04	0.15079E-03	0.55382E-09
8	0.66421E-04	0.18298E-03	0.67202E-09
9	0.79386E-04	0.21870E-03	0.80320E-09
10	0.56600E-03	0.15592E-02	0.57266E-08
11	0.12674E-02	0.34913E-02	0.12823E-07
12	0.14486E-02	0.39907E-02	0.14657E-07
13	0.12483E-02	0.34388E-02	0.12630E-07
14	0.91298E-03	0.25151E-02	0.92372E-08

Polygon I
Time: 5.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.37858E-05	0.10429E-04	0.38303E-10
2	0.94500E-05	0.26033E-04	0.95612E-10
3	0.16535E-04	0.45551E-04	0.16729E-09
4	0.24710E-04	0.68071E-04	0.25001E-09
5	0.33799E-04	0.93111E-04	0.34197E-09
6	0.43758E-04	0.12055E-03	0.44273E-09
7	0.54641E-04	0.15053E-03	0.55284E-09
8	0.66569E-04	0.18339E-03	0.67352E-09
9	0.79713E-04	0.21960E-03	0.80651E-09
10	0.35992E-03	0.99152E-03	0.36416E-08

11	0.85798E-03	0.23636E-02	0.86807E-08
12	0.11445E-02	0.31530E-02	0.11580E-07
13	0.11398E-02	0.31398E-02	0.11532E-07
14	0.94840E-03	0.26127E-02	0.95956E-08

Polygon I
Time: 6.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.32305E-05	0.88995E-05	0.32685E-10
2	0.83160E-05	0.22909E-04	0.84138E-10
3	0.14931E-04	0.41133E-04	0.15107E-09
4	0.22775E-04	0.62741E-04	0.23043E-09
5	0.31639E-04	0.87160E-04	0.32011E-09
6	0.41423E-04	0.11411E-03	0.41911E-09
7	0.52124E-04	0.14359E-03	0.52737E-09
8	0.63812E-04	0.17579E-03	0.64563E-09
9	0.76614E-04	0.21106E-03	0.77515E-09
10	0.24016E-03	0.66159E-03	0.24298E-08
11	0.58104E-03	0.16006E-02	0.58787E-08
12	0.86843E-03	0.23924E-02	0.87864E-08
13	0.97293E-03	0.26802E-02	0.98438E-08
14	0.90344E-03	0.24888E-02	0.91407E-08

Polygon I
Time: 7.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.26929E-05	0.74186E-05	0.27246E-10
2	0.71091E-05	0.19584E-04	0.71927E-10
3	0.13058E-04	0.35972E-04	0.13212E-09
4	0.20303E-04	0.55930E-04	0.20541E-09
5	0.28639E-04	0.78895E-04	0.28976E-09
6	0.37935E-04	0.10450E-03	0.38381E-09
7	0.48137E-04	0.13261E-03	0.48703E-09
8	0.59266E-04	0.16327E-03	0.59963E-09
9	0.71397E-04	0.19669E-03	0.72237E-09
10	0.16875E-03	0.46486E-03	0.17073E-08
11	0.39682E-03	0.10932E-02	0.40149E-08
12	0.64287E-03	0.17710E-02	0.65043E-08
13	0.79299E-03	0.21846E-02	0.80232E-08
14	0.80904E-03	0.22288E-02	0.81856E-08

Polygon I
Time: 8.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.22098E-05	0.60876E-05	0.22358E-10
2	0.59548E-05	0.16404E-04	0.60249E-10
3	0.11157E-04	0.30735E-04	0.11288E-09
4	0.17656E-04	0.48638E-04	0.17863E-09
5	0.25277E-04	0.69634E-04	0.25574E-09
6	0.33880E-04	0.93333E-04	0.34279E-09
7	0.43379E-04	0.11950E-03	0.43889E-09
8	0.53748E-04	0.14807E-03	0.54381E-09
9	0.65018E-04	0.17911E-03	0.65783E-09
10	0.12458E-03	0.34318E-03	0.12604E-08
11	0.27521E-03	0.75815E-03	0.27845E-08
12	0.46934E-03	0.12930E-02	0.47486E-08
13	0.62563E-03	0.17235E-02	0.63299E-08
14	0.69209E-03	0.19066E-02	0.70023E-08

Polygon I
Time: 9.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.17942E-05	0.49428E-05	0.18154E-10
2	0.49160E-05	0.13543E-04	0.49738E-10
3	0.93692E-05	0.25810E-04	0.94794E-10
4	0.15067E-04	0.41507E-04	0.15244E-09
5	0.21878E-04	0.60270E-04	0.22135E-09
6	0.29671E-04	0.81739E-04	0.30020E-09
7	0.38346E-04	0.10564E-03	0.38797E-09
8	0.47844E-04	0.13180E-03	0.48407E-09
9	0.58154E-04	0.16020E-03	0.58838E-09
10	0.95926E-04	0.26426E-03	0.97055E-09
11	0.19489E-03	0.53690E-03	0.19719E-08
12	0.34071E-03	0.93859E-03	0.34471E-08
13	0.48246E-03	0.13291E-02	0.48814E-08
14	0.57189E-03	0.15754E-02	0.57861E-08

Polygon I
Time: 10.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.14468E-05	0.39857E-05	0.14638E-10
2	0.40168E-05	0.11066E-04	0.40640E-10
3	0.77675E-05	0.21398E-04	0.78588E-10
4	0.12672E-04	0.34910E-04	0.12821E-09
5	0.18647E-04	0.51368E-04	0.18866E-09
6	0.25582E-04	0.70473E-04	0.25883E-09
7	0.33376E-04	0.91945E-04	0.33769E-09
8	0.41953E-04	0.11557E-03	0.42446E-09
9	0.51269E-04	0.14124E-03	0.51872E-09
10	0.76294E-04	0.21018E-03	0.77192E-09
11	0.14143E-03	0.38961E-03	0.14309E-08
12	0.24754E-03	0.68194E-03	0.25046E-08
13	0.36639E-03	0.10093E-02	0.37070E-08
14	0.46027E-03	0.12680E-02	0.46568E-08

Polygon I
Time: 11.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.11617E-05	0.32003E-05	0.11754E-10
2	0.32587E-05	0.89772E-05	0.32971E-10
3	0.63785E-05	0.17572E-04	0.64536E-10
4	0.10539E-04	0.29034E-04	0.10663E-09
5	0.15699E-04	0.43248E-04	0.15884E-09
6	0.21778E-04	0.59995E-04	0.22034E-09
7	0.28685E-04	0.79021E-04	0.29022E-09
8	0.36335E-04	0.10010E-03	0.36762E-09
9	0.44665E-04	0.12304E-03	0.45191E-09
10	0.62066E-04	0.17098E-03	0.62796E-09
11	0.10530E-03	0.29008E-03	0.10654E-08
12	0.18098E-03	0.49857E-03	0.18311E-08
13	0.27568E-03	0.75944E-03	0.27892E-08
14	0.36315E-03	0.10004E-02	0.36742E-08

Polygon I
Time: 12.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.93080E-06	0.25642E-05	0.94175E-11
2	0.26313E-05	0.72489E-05	0.26623E-10
3	0.52020E-05	0.14330E-04	0.52632E-10
4	0.86905E-05	0.23941E-04	0.87927E-10
5	0.13090E-04	0.36060E-04	0.13244E-09
6	0.18350E-04	0.50550E-04	0.18566E-09

7	0.24395E-04	0.67205E-04	0.24682E-09
8	0.31146E-04	0.85800E-04	0.31512E-09
9	0.38527E-04	0.10614E-03	0.38980E-09
10	0.51224E-04	0.14111E-03	0.51826E-09
11	0.80354E-04	0.22136E-03	0.81299E-09
12	0.13370E-03	0.36831E-03	0.13527E-08
13	0.20655E-03	0.56902E-03	0.20898E-08
14	0.28239E-03	0.77793E-03	0.28571E-08

Polygon I
Time: 13.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.74532E-06	0.20532E-05	0.75409E-11
2	0.21188E-05	0.58369E-05	0.21437E-10
3	0.42220E-05	0.11631E-04	0.42717E-10
4	0.71197E-05	0.19614E-04	0.72035E-10
5	0.10831E-04	0.29837E-04	0.10958E-09
6	0.15332E-04	0.42237E-04	0.15512E-09
7	0.20568E-04	0.56660E-04	0.20809E-09
8	0.26466E-04	0.72910E-04	0.26778E-09
9	0.32953E-04	0.90779E-04	0.33341E-09
10	0.42627E-04	0.11743E-03	0.43128E-09
11	0.62675E-04	0.17266E-03	0.63413E-09
12	0.10009E-03	0.27573E-03	0.10127E-08
13	0.15479E-03	0.42641E-03	0.15661E-08
14	0.21740E-03	0.59889E-03	0.21996E-08

Polygon I
Time: 14.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.59709E-06	0.16449E-05	0.60412E-11
2	0.17038E-05	0.46938E-05	0.17239E-10
3	0.34159E-05	0.94102E-05	0.34561E-10
4	0.58053E-05	0.15993E-04	0.58736E-10
5	0.89085E-05	0.24541E-04	0.90133E-10
6	0.12724E-04	0.35051E-04	0.12873E-09
7	0.17215E-04	0.47424E-04	0.17418E-09
8	0.22325E-04	0.61500E-04	0.22587E-09
9	0.27982E-04	0.77085E-04	0.28311E-09
10	0.35616E-04	0.98114E-04	0.36035E-09
11	0.49778E-04	0.13713E-03	0.50363E-09
12	0.76054E-04	0.20952E-03	0.76949E-09
13	0.11643E-03	0.32075E-03	0.11780E-08
14	0.16635E-03	0.45827E-03	0.16831E-08

Polygon I
Time: 15.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.47897E-06	0.13195E-05	0.48460E-11
2	0.13699E-05	0.37737E-05	0.13860E-10
3	0.27587E-05	0.75996E-05	0.27911E-10
4	0.47179E-05	0.12997E-04	0.47734E-10
5	0.72940E-05	0.20094E-04	0.73799E-10
6	0.10501E-04	0.28930E-04	0.10625E-09
7	0.14323E-04	0.39456E-04	0.14491E-09
8	0.18713E-04	0.51552E-04	0.18934E-09
9	0.23613E-04	0.65049E-04	0.23891E-09
10	0.29795E-04	0.82079E-04	0.30145E-09
11	0.40092E-04	0.11045E-03	0.40564E-09
12	0.58671E-04	0.16163E-03	0.59362E-09
13	0.88167E-04	0.24289E-03	0.89205E-09

14	0.12696E-03	0.34976E-03	0.12846E-08

Polygon I
Time: 16.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.38490E-06	0.10603E-05	0.38943E-11
2	0.11020E-05	0.30358E-05	0.11149E-10
3	0.22261E-05	0.61325E-05	0.22523E-10
4	0.38258E-05	0.10539E-04	0.38708E-10
5	0.59520E-05	0.16397E-04	0.60220E-10
6	0.86301E-05	0.23774E-04	0.87316E-10
7	0.11857E-04	0.32664E-04	0.11996E-09
8	0.15603E-04	0.42984E-04	0.15787E-09
9	0.19818E-04	0.54596E-04	0.20051E-09
10	0.24913E-04	0.68631E-04	0.25206E-09
11	0.32622E-04	0.89869E-04	0.33006E-09
12	0.45914E-04	0.12649E-03	0.46454E-09
13	0.67348E-04	0.18553E-03	0.68140E-09
14	0.96936E-04	0.26704E-03	0.98076E-09

Polygon I
Time: 17.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.30995E-06	0.85384E-06	0.31359E-11
2	0.88750E-06	0.24449E-05	0.89794E-11
3	0.17963E-05	0.49485E-05	0.18174E-10
4	0.30985E-05	0.85359E-05	0.31350E-10
5	0.48453E-05	0.13348E-04	0.49023E-10
6	0.70685E-05	0.19472E-04	0.71517E-10
7	0.97761E-05	0.26932E-04	0.98912E-10
8	0.12951E-04	0.35679E-04	0.13104E-09
9	0.16556E-04	0.45608E-04	0.16750E-09
10	0.20800E-04	0.57300E-04	0.21045E-09
11	0.26730E-04	0.73638E-04	0.27045E-09
12	0.36391E-04	0.10025E-03	0.36819E-09
13	0.51959E-04	0.14314E-03	0.52570E-09
14	0.74227E-04	0.20448E-03	0.75101E-09

Polygon I
Time: 18.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.25013E-06	0.68906E-06	0.25307E-11
2	0.71584E-06	0.19720E-05	0.72426E-11
3	0.14503E-05	0.39953E-05	0.14674E-10
4	0.25082E-05	0.69096E-05	0.25377E-10
5	0.39381E-05	0.10849E-04	0.39844E-10
6	0.57748E-05	0.15909E-04	0.58428E-10
7	0.80341E-05	0.22133E-04	0.81286E-10
8	0.10710E-04	0.29503E-04	0.10836E-09
9	0.13774E-04	0.37944E-04	0.13936E-09
10	0.17330E-04	0.47742E-04	0.17534E-09
11	0.22000E-04	0.60606E-04	0.22259E-09
12	0.29152E-04	0.80308E-04	0.29495E-09
13	0.40503E-04	0.11158E-03	0.40980E-09
14	0.57120E-04	0.15735E-03	0.57792E-09

Polygon I
Time: 19.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.20228E-06	0.55726E-06	0.20466E-11
2	0.57833E-06	0.15932E-05	0.58514E-11

3	0.11720E-05	0.32287E-05	0.11858E-10
4	0.20303E-05	0.55932E-05	0.20542E-10
5	0.31977E-05	0.88090E-05	0.32353E-10
6	0.47092E-05	0.12973E-04	0.47646E-10
7	0.65853E-05	0.18141E-04	0.66628E-10
8	0.88279E-05	0.24319E-04	0.89317E-10
9	0.11419E-04	0.31457E-04	0.11553E-09
10	0.14407E-04	0.39688E-04	0.14576E-09
11	0.18152E-04	0.50007E-04	0.18366E-09
12	0.23552E-04	0.64882E-04	0.23829E-09
13	0.31893E-04	0.87859E-04	0.32268E-09
14	0.44236E-04	0.12186E-03	0.44757E-09

Polygon I
Time: 20.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.16392E-06	0.45156E-06	0.16584E-11
2	0.46804E-06	0.12894E-05	0.47355E-11
3	0.94822E-06	0.26122E-05	0.95938E-11
4	0.16442E-05	0.45295E-05	0.16635E-10
5	0.25953E-05	0.71497E-05	0.26259E-10
6	0.38354E-05	0.10566E-04	0.38805E-10
7	0.53869E-05	0.14840E-04	0.54503E-10
8	0.72578E-05	0.19994E-04	0.73431E-10
9	0.94381E-05	0.26000E-04	0.95491E-10
10	0.11948E-04	0.32915E-04	0.12089E-09
11	0.14994E-04	0.41307E-04	0.15171E-09
12	0.19151E-04	0.52758E-04	0.19376E-09
13	0.25346E-04	0.69824E-04	0.25644E-09
14	0.34509E-04	0.95065E-04	0.34915E-09

Polygon I
Time: 21.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.13306E-06	0.36656E-06	0.13463E-11
2	0.37941E-06	0.10452E-05	0.38387E-11
3	0.76814E-06	0.21161E-05	0.77717E-11
4	0.13324E-05	0.36705E-05	0.13481E-10
5	0.21064E-05	0.58027E-05	0.21312E-10
6	0.31211E-05	0.85981E-05	0.31578E-10
7	0.43999E-05	0.12121E-04	0.44517E-10
8	0.59542E-05	0.16403E-04	0.60242E-10
9	0.77807E-05	0.21434E-04	0.78722E-10
10	0.98868E-05	0.27236E-04	0.10003E-09
11	0.12388E-04	0.34127E-04	0.12534E-09
12	0.15645E-04	0.43099E-04	0.15829E-09
13	0.20306E-04	0.55940E-04	0.20545E-09
14	0.27126E-04	0.74727E-04	0.27445E-09

Polygon I
Time: 22.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.10818E-06	0.29801E-06	0.10945E-11
2	0.30802E-06	0.84855E-06	0.31165E-11
3	0.62305E-06	0.17164E-05	0.63038E-11
4	0.10806E-05	0.29770E-05	0.10934E-10
5	0.17099E-05	0.47106E-05	0.17301E-10
6	0.25388E-05	0.69939E-05	0.25686E-10
7	0.35897E-05	0.98890E-05	0.36320E-10
8	0.48764E-05	0.13434E-04	0.49337E-10
9	0.64002E-05	0.17632E-04	0.64755E-10

10	0.81638E-05	0.22490E-04	0.82598E-10
11	0.10230E-04	0.28182E-04	0.10350E-09
12	0.12821E-04	0.35319E-04	0.12972E-09
13	0.16378E-04	0.45119E-04	0.16571E-09
14	0.21482E-04	0.59180E-04	0.21735E-09

Polygon I
Time: 23.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.88064E-07	0.24260E-06	0.89100E-12
2	0.25041E-06	0.68983E-06	0.25336E-11
3	0.50599E-06	0.13939E-05	0.51195E-11
4	0.87725E-06	0.24167E-05	0.88757E-11
5	0.13887E-05	0.38257E-05	0.14051E-10
6	0.20648E-05	0.56881E-05	0.20891E-10
7	0.29265E-05	0.80619E-05	0.29609E-10
8	0.39883E-05	0.10987E-04	0.40352E-10
9	0.52550E-05	0.14477E-04	0.53169E-10
10	0.67280E-05	0.18534E-04	0.68072E-10
11	0.84406E-05	0.23252E-04	0.85399E-10
12	0.10527E-04	0.29000E-04	0.10651E-09
13	0.13281E-04	0.36586E-04	0.13437E-09
14	0.17132E-04	0.47195E-04	0.17333E-09

Polygon I
Time: 24.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.71765E-07	0.19770E-06	0.72609E-12
2	0.20381E-06	0.56146E-06	0.20621E-11
3	0.41140E-06	0.11333E-05	0.41624E-11
4	0.71280E-06	0.19636E-05	0.72118E-11
5	0.11285E-05	0.31087E-05	0.11417E-10
6	0.16794E-05	0.46264E-05	0.16991E-10
7	0.23846E-05	0.65692E-05	0.24127E-10
8	0.32586E-05	0.89769E-05	0.32969E-10
9	0.43082E-05	0.11868E-04	0.43589E-10
10	0.55351E-05	0.15248E-04	0.56002E-10
11	0.69568E-05	0.19165E-04	0.70387E-10
12	0.86526E-05	0.23836E-04	0.87544E-10
13	0.10814E-04	0.29790E-04	0.10941E-09
14	0.13748E-04	0.37872E-04	0.13909E-09

Polygon I
Time: 25.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.58531E-07	0.16124E-06	0.59220E-12
2	0.16605E-06	0.45742E-06	0.16800E-11
3	0.33482E-06	0.92237E-06	0.33876E-11
4	0.57969E-06	0.15969E-05	0.58651E-11
5	0.91756E-06	0.25277E-05	0.92835E-11
6	0.13662E-05	0.37637E-05	0.13823E-10
7	0.19426E-05	0.53515E-05	0.19654E-10
8	0.26604E-05	0.73288E-05	0.26917E-10
9	0.35275E-05	0.97177E-05	0.35690E-10
10	0.45468E-05	0.12526E-04	0.46003E-10
11	0.57272E-05	0.15778E-04	0.57946E-10
12	0.71148E-05	0.19600E-04	0.71985E-10
13	0.88310E-05	0.24328E-04	0.89349E-10
14	0.11091E-04	0.30552E-04	0.11221E-09

Polygon I

Time: 26.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.47769E-07	0.13159E-06	0.48331E-12
2	0.13539E-06	0.37296E-06	0.13698E-11
3	0.27273E-06	0.75133E-06	0.27594E-11
4	0.47183E-06	0.12998E-05	0.47738E-11
5	0.74654E-06	0.20566E-05	0.75532E-11
6	0.11118E-05	0.30629E-05	0.11249E-10
7	0.15824E-05	0.43591E-05	0.16010E-10
8	0.21708E-05	0.59801E-05	0.21963E-10
9	0.28854E-05	0.79489E-05	0.29194E-10
10	0.37300E-05	0.10275E-04	0.37739E-10
11	0.47095E-05	0.12974E-04	0.47649E-10
12	0.58498E-05	0.16115E-04	0.59186E-10
13	0.72268E-05	0.19908E-04	0.73118E-10
14	0.89861E-05	0.24755E-04	0.90919E-10

Polygon I

Time: 27.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.39003E-07	0.10745E-06	0.39462E-12
2	0.11046E-06	0.30429E-06	0.11176E-11
3	0.22232E-06	0.61245E-06	0.22494E-11
4	0.38431E-06	0.10587E-05	0.38883E-11
5	0.60777E-06	0.16743E-05	0.61492E-11
6	0.90512E-06	0.24935E-05	0.91577E-11
7	0.12890E-05	0.35509E-05	0.13041E-10
8	0.17706E-05	0.48778E-05	0.17915E-10
9	0.23584E-05	0.64969E-05	0.23861E-10
10	0.30565E-05	0.84200E-05	0.30924E-10
11	0.38682E-05	0.10656E-04	0.39137E-10
12	0.48079E-05	0.13245E-04	0.48645E-10
13	0.59217E-05	0.16313E-04	0.59914E-10
14	0.73063E-05	0.20127E-04	0.73922E-10

Polygon I

Time: 28.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.31857E-07	0.87760E-07	0.32232E-12
2	0.90160E-07	0.24838E-06	0.91221E-12
3	0.18133E-06	0.49955E-06	0.18347E-11
4	0.31323E-06	0.86289E-06	0.31692E-11
5	0.49508E-06	0.13638E-05	0.50090E-11
6	0.73716E-06	0.20307E-05	0.74583E-11
7	0.10501E-05	0.28929E-05	0.10625E-10
8	0.14439E-05	0.39778E-05	0.14609E-10
9	0.19264E-05	0.53070E-05	0.19491E-10
10	0.25022E-05	0.68931E-05	0.25316E-10
11	0.31739E-05	0.87434E-05	0.32112E-10
12	0.39493E-05	0.10880E-04	0.39958E-10
13	0.48558E-05	0.13377E-04	0.49130E-10
14	0.59561E-05	0.16408E-04	0.60261E-10

Polygon I

Time: 29.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.26025E-07	0.71695E-07	0.26332E-12
2	0.73620E-07	0.20281E-06	0.74486E-12
3	0.14797E-06	0.40764E-06	0.14971E-11
4	0.25543E-06	0.70367E-06	0.25844E-11
5	0.40349E-06	0.11115E-05	0.40824E-11

6	0.60060E-06	0.16545E-05	0.60767E-11
7	0.85571E-06	0.23573E-05	0.86577E-11
8	0.11774E-05	0.32436E-05	0.11913E-10
9	0.15729E-05	0.43331E-05	0.15914E-10
10	0.20469E-05	0.56387E-05	0.20709E-10
11	0.26017E-05	0.71673E-05	0.26323E-10
12	0.32419E-05	0.89307E-05	0.32800E-10
13	0.39830E-05	0.10972E-04	0.40299E-10
14	0.48647E-05	0.13401E-04	0.49219E-10

Polygon I
Time: 30.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.21264E-07	0.58579E-07	0.21514E-12
2	0.60129E-07	0.16564E-06	0.60836E-12
3	0.12079E-06	0.33277E-06	0.12221E-11
4	0.20839E-06	0.57407E-06	0.21084E-11
5	0.32899E-06	0.90632E-06	0.33287E-11
6	0.48953E-06	0.13486E-05	0.49529E-11
7	0.69744E-06	0.19213E-05	0.70564E-11
8	0.96007E-06	0.26448E-05	0.97136E-11
9	0.12839E-05	0.35368E-05	0.12990E-10
10	0.16733E-05	0.46097E-05	0.16930E-10
11	0.21309E-05	0.58703E-05	0.21560E-10
12	0.26592E-05	0.73257E-05	0.26905E-10
13	0.32670E-05	0.90001E-05	0.33055E-10
14	0.39785E-05	0.10960E-04	0.40253E-10

Polygon I
Time: 31.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.17375E-07	0.47865E-07	0.17579E-12
2	0.49117E-07	0.13531E-06	0.49695E-12
3	0.98632E-07	0.27171E-06	0.99793E-12
4	0.17007E-06	0.46851E-06	0.17207E-11
5	0.26836E-06	0.73928E-06	0.27152E-11
6	0.39914E-06	0.10996E-05	0.40384E-11
7	0.56858E-06	0.15663E-05	0.57527E-11
8	0.78288E-06	0.21567E-05	0.79209E-11
9	0.10477E-05	0.28862E-05	0.10600E-10
10	0.13673E-05	0.37666E-05	0.13834E-10
11	0.17441E-05	0.48046E-05	0.17646E-10
12	0.21798E-05	0.60049E-05	0.22054E-10
13	0.26791E-05	0.73806E-05	0.27107E-10
14	0.32565E-05	0.89711E-05	0.32948E-10

Polygon I
Time: 32.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.14197E-07	0.39111E-07	0.14364E-12
2	0.40126E-07	0.11054E-06	0.40598E-12
3	0.80551E-07	0.22190E-06	0.81499E-12
4	0.13883E-06	0.38246E-06	0.14047E-11
5	0.21897E-06	0.60322E-06	0.22154E-11
6	0.32555E-06	0.89683E-06	0.32938E-11
7	0.46364E-06	0.12772E-05	0.46909E-11
8	0.63846E-06	0.17588E-05	0.64597E-11
9	0.85487E-06	0.23550E-05	0.86493E-11
10	0.11168E-05	0.30765E-05	0.11299E-10
11	0.14266E-05	0.39300E-05	0.14434E-10
12	0.17856E-05	0.49189E-05	0.18066E-10

13	0.21963E-05	0.60503E-05	0.22221E-10
14	0.26667E-05	0.73464E-05	0.26981E-10

Polygon I
Time: 33.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.11600E-07	0.31957E-07	0.11737E-12
2	0.32782E-07	0.90310E-07	0.33168E-12
3	0.65793E-07	0.18125E-06	0.66567E-12
4	0.11336E-06	0.31228E-06	0.11469E-11
5	0.17871E-06	0.49232E-06	0.18082E-11
6	0.26560E-06	0.73167E-06	0.26872E-11
7	0.37816E-06	0.10418E-05	0.38261E-11
8	0.52074E-06	0.14345E-05	0.52686E-11
9	0.69750E-06	0.19215E-05	0.70570E-11
10	0.91191E-06	0.25122E-05	0.92264E-11
11	0.11663E-05	0.32129E-05	0.11800E-10
12	0.14618E-05	0.40269E-05	0.14790E-10
13	0.17996E-05	0.49576E-05	0.18208E-10
14	0.21842E-05	0.60171E-05	0.22099E-10

Polygon I
Time: 34.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.94778E-08	0.26110E-07	0.95894E-13
2	0.26783E-07	0.73781E-07	0.27098E-12
3	0.53742E-07	0.14805E-06	0.54375E-12
4	0.92570E-07	0.25501E-06	0.93659E-12
5	0.14589E-06	0.40190E-06	0.14761E-11
6	0.21674E-06	0.59707E-06	0.21929E-11
7	0.30850E-06	0.84987E-06	0.31213E-11
8	0.42478E-06	0.11702E-05	0.42978E-11
9	0.56909E-06	0.15677E-05	0.57578E-11
10	0.74448E-06	0.20509E-05	0.75323E-11
11	0.95309E-06	0.26256E-05	0.96431E-11
12	0.11960E-05	0.32948E-05	0.12101E-10
13	0.14739E-05	0.40604E-05	0.14913E-10
14	0.17889E-05	0.49282E-05	0.18100E-10

Polygon I
Time: 35.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.77432E-08	0.21331E-07	0.78343E-13
2	0.21880E-07	0.60276E-07	0.22138E-12
3	0.43900E-07	0.12094E-06	0.44417E-12
4	0.75601E-07	0.20827E-06	0.76490E-12
5	0.11911E-06	0.32813E-06	0.12051E-11
6	0.17690E-06	0.48733E-06	0.17898E-11
7	0.25173E-06	0.69346E-06	0.25469E-11
8	0.34655E-06	0.95469E-06	0.35063E-11
9	0.46433E-06	0.12791E-05	0.46979E-11
10	0.60770E-06	0.16741E-05	0.61485E-11
11	0.77861E-06	0.21449E-05	0.78777E-11
12	0.97812E-06	0.26946E-05	0.98963E-11
13	0.12066E-05	0.33240E-05	0.12208E-10
14	0.14650E-05	0.40357E-05	0.14822E-10

Polygon I
Time: 36.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.63256E-08	0.17426E-07	0.64001E-13

2	0.17875E-07	0.49241E-07	0.18085E-12
3	0.35861E-07	0.98789E-07	0.36282E-12
4	0.61746E-07	0.17010E-06	0.62473E-12
5	0.97261E-07	0.26794E-06	0.98405E-12
6	0.14441E-06	0.39781E-06	0.14610E-11
7	0.20543E-06	0.56593E-06	0.20785E-11
8	0.28277E-06	0.77898E-06	0.28610E-11
9	0.37887E-06	0.10437E-05	0.38333E-11
10	0.49601E-06	0.13664E-05	0.50184E-11
11	0.63592E-06	0.17518E-05	0.64340E-11
12	0.79960E-06	0.22028E-05	0.80901E-11
13	0.98734E-06	0.27199E-05	0.99896E-11
14	0.11994E-05	0.33040E-05	0.12135E-10

Polygon I
Time: 37.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.51672E-08	0.14235E-07	0.52280E-13
2	0.14601E-07	0.40224E-07	0.14773E-12
3	0.29293E-07	0.80696E-07	0.29637E-12
4	0.50432E-07	0.13893E-06	0.51025E-12
5	0.79424E-07	0.21880E-06	0.80359E-12
6	0.11790E-06	0.32478E-06	0.11928E-11
7	0.16768E-06	0.46192E-06	0.16965E-11
8	0.23075E-06	0.63569E-06	0.23347E-11
9	0.30917E-06	0.85170E-06	0.31280E-11
10	0.40482E-06	0.11152E-05	0.40959E-11
11	0.51927E-06	0.14305E-05	0.52538E-11
12	0.65344E-06	0.18001E-05	0.66112E-11
13	0.80758E-06	0.22248E-05	0.81709E-11
14	0.98162E-06	0.27042E-05	0.99317E-11

Polygon I
Time: 38.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.42206E-08	0.11627E-07	0.42702E-13
2	0.11927E-07	0.32856E-07	0.12067E-12
3	0.23927E-07	0.65915E-07	0.24209E-12
4	0.41191E-07	0.11347E-06	0.41676E-12
5	0.64862E-07	0.17868E-06	0.65625E-12
6	0.96261E-07	0.26518E-06	0.97393E-12
7	0.13688E-06	0.37707E-06	0.13849E-11
8	0.18833E-06	0.51882E-06	0.19055E-11
9	0.25230E-06	0.69505E-06	0.25527E-11
10	0.33040E-06	0.91020E-06	0.33429E-11
11	0.42396E-06	0.11679E-05	0.42895E-11
12	0.53384E-06	0.14706E-05	0.54012E-11
13	0.66031E-06	0.18190E-05	0.66808E-11
14	0.80316E-06	0.22126E-05	0.81261E-11

Polygon I
Time: 39.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.34472E-08	0.94963E-08	0.34877E-13
2	0.97417E-08	0.26837E-07	0.98563E-13
3	0.19543E-07	0.53839E-07	0.19773E-12
4	0.33643E-07	0.92681E-07	0.34039E-12
5	0.52971E-07	0.14593E-06	0.53595E-12
6	0.78601E-07	0.21653E-06	0.79526E-12
7	0.11174E-06	0.30783E-06	0.11306E-11
8	0.15372E-06	0.42348E-06	0.15553E-11

9	0.20592E-06	0.56726E-06	0.20834E-11
10	0.26966E-06	0.74287E-06	0.27284E-11
11	0.34611E-06	0.95348E-06	0.35018E-11
12	0.43604E-06	0.12012E-05	0.44117E-11
13	0.53972E-06	0.14868E-05	0.54607E-11
14	0.65693E-06	0.18097E-05	0.66466E-11

Polygon I
Time: 40.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.28153E-08	0.77556E-08	0.28484E-13
2	0.79564E-08	0.21919E-07	0.80500E-13
3	0.15962E-07	0.43973E-07	0.16150E-12
4	0.27478E-07	0.75696E-07	0.27801E-12
5	0.43261E-07	0.11918E-06	0.43770E-12
6	0.64184E-07	0.17682E-06	0.64940E-12
7	0.91233E-07	0.25133E-06	0.92306E-12
8	0.12548E-06	0.34569E-06	0.12696E-11
9	0.16807E-06	0.46300E-06	0.17005E-11
10	0.22010E-06	0.60633E-06	0.22269E-11
11	0.28254E-06	0.77835E-06	0.28587E-11
12	0.35610E-06	0.98099E-06	0.36029E-11
13	0.44104E-06	0.12150E-05	0.44623E-11
14	0.53716E-06	0.14798E-05	0.54348E-11

Polygon I
Time: 41.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.22991E-08	0.63337E-08	0.23262E-13
2	0.64980E-08	0.17901E-07	0.65744E-13
3	0.13037E-07	0.35914E-07	0.13190E-12
4	0.22442E-07	0.61823E-07	0.22706E-12
5	0.35330E-07	0.97329E-07	0.35746E-12
6	0.52413E-07	0.14439E-06	0.53030E-12
7	0.74491E-07	0.20521E-06	0.75367E-12
8	0.10244E-06	0.28221E-06	0.10365E-11
9	0.13719E-06	0.37793E-06	0.13880E-11
10	0.17965E-06	0.49490E-06	0.18176E-11
11	0.23064E-06	0.63537E-06	0.23335E-11
12	0.29077E-06	0.80103E-06	0.29419E-11
13	0.36031E-06	0.99260E-06	0.36455E-11
14	0.43911E-06	0.12097E-05	0.44428E-11

Polygon I
Time: 42.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.18775E-08	0.51722E-08	0.18996E-13
2	0.53066E-08	0.14619E-07	0.53691E-13
3	0.10647E-07	0.29330E-07	0.10772E-12
4	0.18328E-07	0.50490E-07	0.18544E-12
5	0.28853E-07	0.79486E-07	0.29193E-12
6	0.42802E-07	0.11791E-06	0.43305E-12
7	0.60824E-07	0.16756E-06	0.61540E-12
8	0.83634E-07	0.23040E-06	0.84618E-12
9	0.11199E-06	0.30851E-06	0.11331E-11
10	0.14664E-06	0.40396E-06	0.14836E-11
11	0.18827E-06	0.51865E-06	0.19049E-11
12	0.23741E-06	0.65402E-06	0.24020E-11
13	0.29431E-06	0.81077E-06	0.29777E-11
14	0.35887E-06	0.98861E-06	0.36309E-11

Polygon I
Time: 43.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.15332E-08	0.42236E-08	0.15512E-13
2	0.43335E-08	0.11938E-07	0.43845E-13
3	0.86948E-08	0.23953E-07	0.87971E-13
4	0.14968E-07	0.41234E-07	0.15144E-12
5	0.23563E-07	0.64913E-07	0.23841E-12
6	0.34953E-07	0.96289E-07	0.35364E-12
7	0.49666E-07	0.13682E-06	0.50250E-12
8	0.68284E-07	0.18811E-06	0.69087E-12
9	0.91422E-07	0.25185E-06	0.92498E-12
10	0.11970E-06	0.32975E-06	0.12111E-11
11	0.15369E-06	0.42338E-06	0.15549E-11
12	0.19383E-06	0.53396E-06	0.19611E-11
13	0.24036E-06	0.66216E-06	0.24319E-11
14	0.29322E-06	0.80778E-06	0.29667E-11

Polygon I
Time: 44.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.12519E-08	0.34488E-08	0.12667E-13
2	0.35387E-08	0.97486E-08	0.35804E-13
3	0.71004E-08	0.19560E-07	0.71839E-13
4	0.12223E-07	0.33673E-07	0.12367E-12
5	0.19243E-07	0.53011E-07	0.19469E-12
6	0.28543E-07	0.78631E-07	0.28879E-12
7	0.40556E-07	0.11172E-06	0.41033E-12
8	0.55753E-07	0.15359E-06	0.56409E-12
9	0.74637E-07	0.20561E-06	0.75515E-12
10	0.97714E-07	0.26918E-06	0.98863E-12
11	0.12546E-06	0.34561E-06	0.12693E-11
12	0.15824E-06	0.43592E-06	0.16010E-11
13	0.19628E-06	0.54072E-06	0.19859E-11
14	0.23954E-06	0.65990E-06	0.24236E-11

Polygon I
Time: 45.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.10223E-08	0.28161E-08	0.10343E-13
2	0.28896E-08	0.79604E-08	0.29236E-13
3	0.57982E-08	0.15973E-07	0.58664E-13
4	0.99819E-08	0.27498E-07	0.10099E-12
5	0.15714E-07	0.43290E-07	0.15899E-12
6	0.23309E-07	0.64212E-07	0.23583E-12
7	0.33117E-07	0.91231E-07	0.33506E-12
8	0.45523E-07	0.12541E-06	0.46059E-12
9	0.60936E-07	0.16787E-06	0.61653E-12
10	0.79770E-07	0.21975E-06	0.80708E-12
11	0.10241E-06	0.28213E-06	0.10362E-11
12	0.12918E-06	0.35588E-06	0.13070E-11
13	0.16027E-06	0.44152E-06	0.16216E-11
14	0.19566E-06	0.53901E-06	0.19796E-11

Polygon I
Time: 46.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.83470E-09	0.22995E-08	0.84452E-14
2	0.23595E-08	0.65001E-08	0.23873E-13
3	0.47347E-08	0.13043E-07	0.47904E-13
4	0.81512E-08	0.22455E-07	0.82471E-13

5	0.12833E-07	0.35351E-07	0.12983E-12
6	0.19034E-07	0.52436E-07	0.19258E-12
7	0.27042E-07	0.74497E-07	0.27361E-12
8	0.37171E-07	0.10240E-06	0.37608E-12
9	0.49752E-07	0.13706E-06	0.50337E-12
10	0.65123E-07	0.17940E-06	0.65890E-12
11	0.83605E-07	0.23032E-06	0.84588E-12
12	0.10546E-06	0.29053E-06	0.10670E-11
13	0.13086E-06	0.36049E-06	0.13240E-11
14	0.15980E-06	0.44021E-06	0.16168E-11

Polygon I
Time: 47.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.68155E-09	0.18776E-08	0.68957E-14
2	0.19267E-08	0.53076E-08	0.19493E-13
3	0.38661E-08	0.10650E-07	0.39116E-13
4	0.66561E-08	0.18336E-07	0.67344E-13
5	0.10479E-07	0.28868E-07	0.10602E-12
6	0.15543E-07	0.42819E-07	0.15726E-12
7	0.22082E-07	0.60833E-07	0.22342E-12
8	0.30351E-07	0.83613E-07	0.30708E-12
9	0.40622E-07	0.11191E-06	0.41099E-12
10	0.53168E-07	0.14647E-06	0.53794E-12
11	0.68253E-07	0.18802E-06	0.69056E-12
12	0.86096E-07	0.23718E-06	0.87109E-12
13	0.10684E-06	0.29432E-06	0.10810E-11
14	0.13049E-06	0.35949E-06	0.13203E-11

Polygon I
Time: 48.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.55649E-09	0.15330E-08	0.56304E-14
2	0.15732E-08	0.43338E-08	0.15917E-13
3	0.31569E-08	0.86966E-08	0.31940E-13
4	0.54351E-08	0.14973E-07	0.54991E-13
5	0.85569E-08	0.23573E-07	0.86576E-13
6	0.12692E-07	0.34965E-07	0.12842E-12
7	0.18032E-07	0.49674E-07	0.18244E-12
8	0.24783E-07	0.68274E-07	0.25075E-12
9	0.33168E-07	0.91371E-07	0.33558E-12
10	0.43409E-07	0.11958E-06	0.43919E-12
11	0.55721E-07	0.15350E-06	0.56377E-12
12	0.70287E-07	0.19363E-06	0.71114E-12
13	0.87227E-07	0.24029E-06	0.88253E-12
14	0.10656E-06	0.29355E-06	0.10781E-11

Polygon I
Time: 49.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.45438E-09	0.12517E-08	0.45973E-14
2	0.12845E-08	0.35386E-08	0.12996E-13
3	0.25777E-08	0.71011E-08	0.26080E-13
4	0.44381E-08	0.12226E-07	0.44903E-13
5	0.69873E-08	0.19249E-07	0.70695E-13
6	0.10364E-07	0.28552E-07	0.10486E-12
7	0.14724E-07	0.40563E-07	0.14897E-12
8	0.20237E-07	0.55749E-07	0.20475E-12
9	0.27082E-07	0.74605E-07	0.27400E-12
10	0.35442E-07	0.97636E-07	0.35859E-12
11	0.45492E-07	0.12532E-06	0.46027E-12

12	0.57382E-07	0.15808E-06	0.58057E-12
13	0.71213E-07	0.19618E-06	0.72051E-12
14	0.87006E-07	0.23969E-06	0.88030E-12

Polygon I
Time: 50.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.37100E-09	0.10220E-08	0.37537E-14
2	0.10488E-08	0.28893E-08	0.10612E-13
3	0.21047E-08	0.57982E-08	0.21295E-13
4	0.36239E-08	0.99831E-08	0.36665E-13
5	0.57055E-08	0.15718E-07	0.57726E-13
6	0.84631E-08	0.23314E-07	0.85626E-13
7	0.12023E-07	0.33122E-07	0.12165E-12
8	0.16524E-07	0.45522E-07	0.16719E-12
9	0.22113E-07	0.60917E-07	0.22373E-12
10	0.28938E-07	0.79718E-07	0.29278E-12
11	0.37141E-07	0.10232E-06	0.37578E-12
12	0.46847E-07	0.12906E-06	0.47398E-12
13	0.58140E-07	0.16016E-06	0.58824E-12
14	0.71040E-07	0.19570E-06	0.71875E-12

Polygon I
Time: 51.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.30292E-09	0.83450E-09	0.30649E-14
2	0.85637E-09	0.23592E-08	0.86645E-14
3	0.17186E-08	0.47343E-08	0.17388E-13
4	0.29590E-08	0.81515E-08	0.29938E-13
5	0.46588E-08	0.12834E-07	0.47136E-13
6	0.69105E-08	0.19037E-07	0.69918E-13
7	0.98177E-08	0.27046E-07	0.99332E-13
8	0.13493E-07	0.37171E-07	0.13652E-12
9	0.18056E-07	0.49741E-07	0.18268E-12
10	0.23627E-07	0.65089E-07	0.23905E-12
11	0.30324E-07	0.83538E-07	0.30681E-12
12	0.38247E-07	0.10536E-06	0.38697E-12
13	0.47466E-07	0.13076E-06	0.48025E-12
14	0.58001E-07	0.15978E-06	0.58684E-12

Polygon I
Time: 52.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.24734E-09	0.68137E-09	0.25025E-14
2	0.69923E-09	0.19263E-08	0.70746E-14
3	0.14032E-08	0.38656E-08	0.14197E-13
4	0.24161E-08	0.66559E-08	0.24445E-13
5	0.38041E-08	0.10480E-07	0.38488E-13
6	0.56428E-08	0.15545E-07	0.57092E-13
7	0.80167E-08	0.22085E-07	0.81110E-13
8	0.11018E-07	0.30352E-07	0.11147E-12
9	0.14743E-07	0.40615E-07	0.14917E-12
10	0.19292E-07	0.53146E-07	0.19519E-12
11	0.24759E-07	0.68206E-07	0.25050E-12
12	0.31226E-07	0.86023E-07	0.31594E-12
13	0.38753E-07	0.10676E-06	0.39209E-12
14	0.47356E-07	0.13046E-06	0.47913E-12

Polygon I
Time: 53.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)

1	0.20195E-09	0.55634E-09	0.20433E-14
2	0.57093E-09	0.15728E-08	0.57764E-14
3	0.11457E-08	0.31563E-08	0.11592E-13
4	0.19728E-08	0.54347E-08	0.19960E-13
5	0.31061E-08	0.85568E-08	0.31427E-13
6	0.46076E-08	0.12693E-07	0.46618E-13
7	0.65460E-08	0.18033E-07	0.66230E-13
8	0.89965E-08	0.24784E-07	0.91023E-13
9	0.12038E-07	0.33163E-07	0.12180E-12
10	0.15752E-07	0.43394E-07	0.15937E-12
11	0.20215E-07	0.55689E-07	0.20453E-12
12	0.25495E-07	0.70233E-07	0.25795E-12
13	0.31639E-07	0.87160E-07	0.32011E-12
14	0.38663E-07	0.10651E-06	0.39118E-12

Polygon I
Time: 54.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.16489E-09	0.45425E-09	0.16683E-14
2	0.46616E-09	0.12842E-08	0.47165E-14
3	0.93551E-09	0.25772E-08	0.94652E-14
4	0.16108E-08	0.44375E-08	0.16298E-13
5	0.25362E-08	0.69869E-08	0.25661E-13
6	0.37622E-08	0.10364E-07	0.38065E-13
7	0.53451E-08	0.14725E-07	0.54080E-13
8	0.73460E-08	0.20237E-07	0.74325E-13
9	0.98297E-08	0.27079E-07	0.99454E-13
10	0.12862E-07	0.35432E-07	0.13013E-12
11	0.16505E-07	0.45470E-07	0.16700E-12
12	0.20816E-07	0.57343E-07	0.21060E-12
13	0.25831E-07	0.71161E-07	0.26135E-12
14	0.31567E-07	0.86960E-07	0.31938E-12

Polygon I
Time: 55.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.13464E-09	0.37090E-09	0.13622E-14
2	0.38062E-09	0.10486E-08	0.38510E-14
3	0.76385E-09	0.21043E-08	0.77284E-14
4	0.13152E-08	0.36233E-08	0.13307E-13
5	0.20709E-08	0.57049E-08	0.20952E-13
6	0.30720E-08	0.84627E-08	0.31081E-13
7	0.43644E-08	0.12023E-07	0.44158E-13
8	0.59983E-08	0.16524E-07	0.60689E-13
9	0.80263E-08	0.22111E-07	0.81208E-13
10	0.10502E-07	0.28931E-07	0.10626E-12
11	0.13477E-07	0.37126E-07	0.13635E-12
12	0.16995E-07	0.46819E-07	0.17195E-12
13	0.21090E-07	0.58100E-07	0.21338E-12
14	0.25772E-07	0.70998E-07	0.26076E-12

Polygon I
Time: 56.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.10993E-09	0.30284E-09	0.11122E-14
2	0.31078E-09	0.85615E-09	0.31444E-14
3	0.62369E-09	0.17182E-08	0.63103E-14
4	0.10739E-08	0.29584E-08	0.10865E-13
5	0.16909E-08	0.46582E-08	0.17108E-13
6	0.25083E-08	0.69100E-08	0.25378E-13
7	0.35637E-08	0.98174E-08	0.36056E-13

8	0.48978E-08	0.13493E-07	0.49555E-13
9	0.65538E-08	0.18055E-07	0.66309E-13
10	0.85752E-08	0.23623E-07	0.86761E-13
11	0.11004E-07	0.30314E-07	0.11133E-12
12	0.13877E-07	0.38227E-07	0.14040E-12
13	0.17219E-07	0.47436E-07	0.17422E-12
14	0.21042E-07	0.57967E-07	0.21290E-12

Polygon I
Time: 57.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.89760E-10	0.24727E-09	0.90816E-15
2	0.25376E-09	0.69905E-09	0.25674E-14
3	0.50925E-09	0.14029E-08	0.51524E-14
4	0.87686E-09	0.24156E-08	0.88718E-14
5	0.13807E-08	0.38035E-08	0.13969E-13
6	0.20481E-08	0.56422E-08	0.20722E-13
7	0.29099E-08	0.80162E-08	0.29441E-13
8	0.39992E-08	0.11017E-07	0.40463E-13
9	0.53514E-08	0.14742E-07	0.54143E-13
10	0.70019E-08	0.19289E-07	0.70843E-13
11	0.89849E-08	0.24752E-07	0.90906E-13
12	0.11330E-07	0.31212E-07	0.11463E-12
13	0.14059E-07	0.38731E-07	0.14225E-12
14	0.17180E-07	0.47328E-07	0.17382E-12

Polygon I
Time: 58.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.73290E-10	0.20190E-09	0.74152E-15
2	0.20719E-09	0.57078E-09	0.20963E-14
3	0.41581E-09	0.11455E-08	0.42070E-14
4	0.71597E-09	0.19724E-08	0.72439E-14
5	0.11273E-08	0.31056E-08	0.11406E-13
6	0.16723E-08	0.46069E-08	0.16920E-13
7	0.23760E-08	0.65454E-08	0.24039E-13
8	0.32655E-08	0.89959E-08	0.33039E-13
9	0.43696E-08	0.12037E-07	0.44210E-13
10	0.57172E-08	0.15750E-07	0.57845E-13
11	0.73363E-08	0.20210E-07	0.74226E-13
12	0.92511E-08	0.25485E-07	0.93599E-13
13	0.11479E-07	0.31623E-07	0.11614E-12
14	0.14027E-07	0.38642E-07	0.14192E-12

Polygon I
Time: 59.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.59842E-10	0.16485E-09	0.60546E-15
2	0.16918E-09	0.46605E-09	0.17117E-14
3	0.33951E-09	0.93529E-09	0.34350E-14
4	0.58459E-09	0.16105E-08	0.59147E-14
5	0.92047E-09	0.25357E-08	0.93130E-14
6	0.13655E-08	0.37616E-08	0.13815E-13
7	0.19400E-08	0.53445E-08	0.19629E-13
8	0.26664E-08	0.73454E-08	0.26977E-13
9	0.35679E-08	0.98289E-08	0.36099E-13
10	0.46683E-08	0.12860E-07	0.47232E-13
11	0.59902E-08	0.16502E-07	0.60607E-13
12	0.75536E-08	0.20809E-07	0.76424E-13
13	0.93726E-08	0.25820E-07	0.94828E-13
14	0.11453E-07	0.31550E-07	0.11587E-12

Polygon I
Time: 60.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.48862E-10	0.13460E-09	0.49436E-15
2	0.13813E-09	0.38053E-09	0.13976E-14
3	0.27721E-09	0.76367E-09	0.28047E-14
4	0.47733E-09	0.13150E-08	0.48294E-14
5	0.75158E-09	0.20705E-08	0.76042E-14
6	0.11149E-08	0.30714E-08	0.11281E-13
7	0.15841E-08	0.43639E-08	0.16027E-13
8	0.21772E-08	0.59977E-08	0.22028E-13
9	0.29133E-08	0.80256E-08	0.29476E-13
10	0.38118E-08	0.10501E-07	0.38566E-13
11	0.48912E-08	0.13474E-07	0.49487E-13
12	0.61676E-08	0.16991E-07	0.62401E-13
13	0.76527E-08	0.21082E-07	0.77427E-13
14	0.93508E-08	0.25760E-07	0.94608E-13

Polygon I
Time: 61.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.39896E-10	0.10991E-09	0.40365E-15
2	0.11279E-09	0.31071E-09	0.11411E-14
3	0.22635E-09	0.62355E-09	0.22901E-14
4	0.38974E-09	0.10737E-08	0.39433E-14
5	0.61367E-09	0.16906E-08	0.62089E-14
6	0.91036E-09	0.25079E-08	0.92107E-14
7	0.12934E-08	0.35632E-08	0.13086E-13
8	0.17777E-08	0.48972E-08	0.17986E-13
9	0.23788E-08	0.65531E-08	0.24068E-13
10	0.31124E-08	0.85742E-08	0.31490E-13
11	0.39938E-08	0.11002E-07	0.40407E-13
12	0.50359E-08	0.13873E-07	0.50952E-13
13	0.62484E-08	0.17213E-07	0.63219E-13
14	0.76348E-08	0.21033E-07	0.77247E-13

Polygon I
Time: 62.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.32576E-10	0.89740E-10	0.32959E-15
2	0.92093E-10	0.25370E-09	0.93176E-15
3	0.18482E-09	0.50913E-09	0.18699E-14
4	0.31823E-09	0.87667E-09	0.32197E-14
5	0.50107E-09	0.13804E-08	0.50697E-14
6	0.74332E-09	0.20477E-08	0.75207E-14
7	0.10561E-08	0.29094E-08	0.10685E-13
8	0.14515E-08	0.39987E-08	0.14686E-13
9	0.19423E-08	0.53508E-08	0.19652E-13
10	0.25414E-08	0.70010E-08	0.25713E-13
11	0.32610E-08	0.89835E-08	0.32994E-13
12	0.41119E-08	0.11328E-07	0.41603E-13
13	0.51019E-08	0.14055E-07	0.51619E-13
14	0.62338E-08	0.17173E-07	0.63071E-13

Polygon I
Time: 63.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.26599E-10	0.73274E-10	0.26912E-15
2	0.75195E-10	0.20715E-09	0.76080E-15
3	0.15090E-09	0.41572E-09	0.15268E-14

4	0.25984E-09	0.71581E-09	0.26290E-14
5	0.40913E-09	0.11271E-08	0.41395E-14
6	0.60693E-09	0.16720E-08	0.61407E-14
7	0.86233E-09	0.23756E-08	0.87248E-14
8	0.11852E-08	0.32650E-08	0.11991E-13
9	0.15860E-08	0.43690E-08	0.16046E-13
10	0.20751E-08	0.57165E-08	0.20995E-13
11	0.26627E-08	0.73352E-08	0.26940E-13
12	0.33575E-08	0.92492E-08	0.33970E-13
13	0.41657E-08	0.11476E-07	0.42148E-13
14	0.50899E-08	0.14022E-07	0.51498E-13

Polygon I
Time: 64.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.21718E-10	0.59830E-10	0.21974E-15
2	0.61398E-10	0.16914E-09	0.62120E-15
3	0.12322E-09	0.33944E-09	0.12467E-14
4	0.21216E-09	0.58447E-09	0.21466E-14
5	0.33406E-09	0.92028E-09	0.33799E-14
6	0.49557E-09	0.13652E-08	0.50140E-14
7	0.70411E-09	0.19397E-08	0.71239E-14
8	0.96774E-09	0.26660E-08	0.97913E-14
9	0.12950E-08	0.35674E-08	0.13102E-13
10	0.16944E-08	0.46677E-08	0.17143E-13
11	0.21741E-08	0.59894E-08	0.21997E-13
12	0.27414E-08	0.75522E-08	0.27737E-13
13	0.34014E-08	0.93702E-08	0.34414E-13
14	0.41559E-08	0.11449E-07	0.42048E-13

Polygon I
Time: 65.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.17733E-10	0.48852E-10	0.17942E-15
2	0.50132E-10	0.13811E-09	0.50722E-15
3	0.10061E-09	0.27716E-09	0.10179E-14
4	0.17323E-09	0.47723E-09	0.17527E-14
5	0.27277E-09	0.75142E-09	0.27598E-14
6	0.40464E-09	0.11147E-08	0.40940E-14
7	0.57492E-09	0.15838E-08	0.58168E-14
8	0.79018E-09	0.21768E-08	0.79947E-14
9	0.10574E-08	0.29129E-08	0.10698E-13
10	0.13835E-08	0.38113E-08	0.13998E-13
11	0.17752E-08	0.48905E-08	0.17961E-13
12	0.22384E-08	0.61665E-08	0.22648E-13
13	0.27773E-08	0.76509E-08	0.28100E-13
14	0.33933E-08	0.93481E-08	0.34333E-13

Polygon I
Time: 66.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.14480E-10	0.39888E-10	0.14650E-15
2	0.40934E-10	0.11277E-09	0.41415E-15
3	0.82148E-10	0.22630E-09	0.83114E-15
4	0.14145E-09	0.38966E-09	0.14311E-14
5	0.22272E-09	0.61355E-09	0.22534E-14
6	0.33040E-09	0.91018E-09	0.33428E-14
7	0.46943E-09	0.12932E-08	0.47495E-14
8	0.64519E-09	0.17774E-08	0.65278E-14
9	0.86336E-09	0.23784E-08	0.87352E-14
10	0.11296E-08	0.31120E-08	0.11429E-13

11	0.14495E-08	0.39932E-08	0.14666E-13
12	0.18277E-08	0.50351E-08	0.18492E-13
13	0.22677E-08	0.62471E-08	0.22944E-13
14	0.27707E-08	0.76328E-08	0.28033E-13

Polygon I
Time: 67.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.11823E-10	0.32570E-10	0.11962E-15
2	0.33423E-10	0.92075E-10	0.33816E-15
3	0.67075E-10	0.18478E-09	0.67864E-15
4	0.11549E-09	0.31817E-09	0.11685E-14
5	0.18185E-09	0.50097E-09	0.18399E-14
6	0.26977E-09	0.74318E-09	0.27295E-14
7	0.38330E-09	0.10559E-08	0.38780E-14
8	0.52681E-09	0.14513E-08	0.53301E-14
9	0.70495E-09	0.19420E-08	0.71324E-14
10	0.92238E-09	0.25410E-08	0.93323E-14
11	0.11836E-08	0.32605E-08	0.11975E-13
12	0.14924E-08	0.41113E-08	0.15100E-13
13	0.18516E-08	0.51009E-08	0.18734E-13
14	0.22623E-08	0.62323E-08	0.22889E-13

Polygon I
Time: 68.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.96535E-11	0.26594E-10	0.97671E-16
2	0.27291E-10	0.75181E-10	0.27612E-15
3	0.54768E-10	0.15088E-09	0.55412E-15
4	0.94303E-10	0.25979E-09	0.95412E-15
5	0.14849E-09	0.40905E-09	0.15023E-14
6	0.22027E-09	0.60681E-09	0.22287E-14
7	0.31297E-09	0.86217E-09	0.31665E-14
8	0.43015E-09	0.11850E-08	0.43521E-14
9	0.57560E-09	0.15857E-08	0.58238E-14
10	0.75314E-09	0.20748E-08	0.76200E-14
11	0.96641E-09	0.26623E-08	0.97778E-14
12	0.12186E-08	0.33569E-08	0.12329E-13
13	0.15119E-08	0.41650E-08	0.15297E-13
14	0.18472E-08	0.50888E-08	0.18690E-13

Polygon I
Time: 69.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.78823E-11	0.21714E-10	0.79750E-16
2	0.22283E-10	0.61386E-10	0.22545E-15
3	0.44719E-10	0.12319E-09	0.45245E-15
4	0.77000E-10	0.21212E-09	0.77906E-15
5	0.12124E-09	0.33400E-09	0.12267E-14
6	0.17986E-09	0.49547E-09	0.18197E-14
7	0.25554E-09	0.70397E-09	0.25855E-14
8	0.35123E-09	0.96756E-09	0.35536E-14
9	0.46999E-09	0.12947E-08	0.47552E-14
10	0.61496E-09	0.16941E-08	0.62219E-14
11	0.78910E-09	0.21738E-08	0.79838E-14
12	0.99499E-09	0.27410E-08	0.10067E-13
13	0.12345E-08	0.34008E-08	0.12490E-13
14	0.15083E-08	0.41551E-08	0.15260E-13

Polygon I
Time: 70.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.64360E-11	0.17730E-10	0.65117E-16
2	0.18195E-10	0.50123E-10	0.18409E-15
3	0.36514E-10	0.10059E-09	0.36943E-15
4	0.62872E-10	0.17320E-09	0.63611E-15
5	0.98995E-10	0.27271E-09	0.10016E-14
6	0.14686E-09	0.40456E-09	0.14858E-14
7	0.20865E-09	0.57481E-09	0.21111E-14
8	0.28678E-09	0.79003E-09	0.29016E-14
9	0.38376E-09	0.10572E-08	0.38827E-14
10	0.50212E-09	0.13833E-08	0.50803E-14
11	0.64431E-09	0.17750E-08	0.65189E-14
12	0.81243E-09	0.22381E-08	0.82199E-14
13	0.10080E-08	0.27768E-08	0.10198E-13
14	0.12315E-08	0.33927E-08	0.12460E-13

Polygon I
Time: 71.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.52551E-11	0.14477E-10	0.53170E-16
2	0.14856E-10	0.40926E-10	0.15031E-15
3	0.29814E-10	0.82133E-10	0.30165E-15
4	0.51336E-10	0.14142E-09	0.51940E-15
5	0.80831E-10	0.22268E-09	0.81782E-15
6	0.11991E-09	0.33033E-09	0.12132E-14
7	0.17037E-09	0.46934E-09	0.17237E-14
8	0.23416E-09	0.64507E-09	0.23692E-14
9	0.31334E-09	0.86320E-09	0.31703E-14
10	0.40999E-09	0.11295E-08	0.41482E-14
11	0.52609E-09	0.14493E-08	0.53228E-14
12	0.66337E-09	0.18275E-08	0.67117E-14
13	0.82304E-09	0.22673E-08	0.83273E-14
14	0.10056E-08	0.27702E-08	0.10174E-13

Polygon I
Time: 72.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.42909E-11	0.11821E-10	0.43414E-16
2	0.12130E-10	0.33417E-10	0.12273E-15
3	0.24344E-10	0.67063E-10	0.24630E-15
4	0.41917E-10	0.11547E-09	0.42410E-15
5	0.66000E-10	0.18182E-09	0.66777E-15
6	0.97909E-10	0.26972E-09	0.99061E-15
7	0.13911E-09	0.38322E-09	0.14075E-14
8	0.19120E-09	0.52671E-09	0.19345E-14
9	0.25585E-09	0.70482E-09	0.25886E-14
10	0.33477E-09	0.92222E-09	0.33871E-14
11	0.42957E-09	0.11834E-08	0.43462E-14
12	0.54165E-09	0.14922E-08	0.54802E-14
13	0.67203E-09	0.18513E-08	0.67994E-14
14	0.82108E-09	0.22619E-08	0.83074E-14

Polygon I
Time: 73.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.35036E-11	0.96518E-11	0.35448E-16
2	0.99047E-11	0.27286E-10	0.10021E-15
3	0.19877E-10	0.54758E-10	0.20111E-15
4	0.34226E-10	0.94286E-10	0.34628E-15
5	0.53890E-10	0.14846E-09	0.54524E-15
6	0.79944E-10	0.22023E-09	0.80885E-15

3	0.48097E-11	0.13250E-10	0.48662E-16
4	0.82816E-11	0.22814E-10	0.83790E-16
5	0.13040E-10	0.35922E-10	0.13193E-15
6	0.19344E-10	0.53289E-10	0.19572E-15
7	0.27484E-10	0.75714E-10	0.27807E-15
8	0.37775E-10	0.10406E-09	0.38219E-15
9	0.50549E-10	0.13925E-09	0.51143E-15
10	0.66140E-10	0.18220E-09	0.66918E-15
11	0.84870E-10	0.23380E-09	0.85869E-15
12	0.10702E-09	0.29481E-09	0.10828E-14
13	0.13278E-09	0.36578E-09	0.13434E-14
14	0.16222E-09	0.44690E-09	0.16413E-14

Polygon I
Time: 81.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.69222E-12	0.19069E-11	0.70036E-17
2	0.19569E-11	0.53909E-11	0.19799E-16
3	0.39272E-11	0.10819E-10	0.39734E-16
4	0.67620E-11	0.18628E-10	0.68416E-16
5	0.10647E-10	0.29331E-10	0.10772E-15
6	0.15795E-10	0.43512E-10	0.15981E-15
7	0.22441E-10	0.61822E-10	0.22705E-15
8	0.30844E-10	0.84969E-10	0.31207E-15
9	0.41274E-10	0.11370E-09	0.41759E-15
10	0.54005E-10	0.14877E-09	0.54640E-15
11	0.69298E-10	0.19090E-09	0.70113E-15
12	0.87381E-10	0.24072E-09	0.88409E-15
13	0.10841E-09	0.29866E-09	0.10969E-14
14	0.13246E-09	0.36490E-09	0.13402E-14

Polygon I
Time: 82.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.56521E-12	0.15570E-11	0.57186E-17
2	0.15978E-11	0.44018E-11	0.16166E-16
3	0.32066E-11	0.88336E-11	0.32443E-16
4	0.55213E-11	0.15210E-10	0.55863E-16
5	0.86936E-11	0.23949E-10	0.87959E-16
6	0.12897E-10	0.35528E-10	0.13048E-15
7	0.18324E-10	0.50478E-10	0.18539E-15
8	0.25185E-10	0.69379E-10	0.25481E-15
9	0.33701E-10	0.92840E-10	0.34097E-15
10	0.44096E-10	0.12148E-09	0.44615E-15
11	0.56583E-10	0.15588E-09	0.57249E-15
12	0.71348E-10	0.19655E-09	0.72187E-15
13	0.88523E-10	0.24386E-09	0.89564E-15
14	0.10816E-09	0.29795E-09	0.10943E-14

Polygon I
Time: 83.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.46150E-12	0.12714E-11	0.46693E-17
2	0.13047E-11	0.35941E-11	0.13200E-16
3	0.26183E-11	0.72128E-11	0.26491E-16
4	0.45083E-11	0.12419E-10	0.45613E-16
5	0.70985E-11	0.19555E-10	0.71820E-16
6	0.10530E-10	0.29009E-10	0.10654E-15
7	0.14962E-10	0.41216E-10	0.15138E-15
8	0.20564E-10	0.56649E-10	0.20806E-15
9	0.27517E-10	0.75805E-10	0.27841E-15

10	0.36005E-10	0.99187E-10	0.36429E-15
11	0.46201E-10	0.12728E-09	0.46745E-15
12	0.58257E-10	0.16049E-09	0.58942E-15
13	0.72280E-10	0.19912E-09	0.73131E-15
14	0.88311E-10	0.24328E-09	0.89350E-15

Polygon I
Time: 84.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.37682E-12	0.10381E-11	0.38126E-17
2	0.10653E-11	0.29347E-11	0.10778E-16
3	0.21378E-11	0.58894E-11	0.21630E-16
4	0.36811E-11	0.10141E-10	0.37244E-16
5	0.57961E-11	0.15967E-10	0.58642E-16
6	0.85982E-11	0.23687E-10	0.86994E-16
7	0.12216E-10	0.33654E-10	0.12360E-15
8	0.16791E-10	0.46255E-10	0.16988E-15
9	0.22468E-10	0.61896E-10	0.22733E-15
10	0.29399E-10	0.80988E-10	0.29745E-15
11	0.37724E-10	0.10392E-09	0.38168E-15
12	0.47568E-10	0.13104E-09	0.48127E-15
13	0.59018E-10	0.16258E-09	0.59712E-15
14	0.72107E-10	0.19864E-09	0.72956E-15

Polygon I
Time: 85.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.30768E-12	0.84761E-12	0.31130E-17
2	0.86982E-12	0.23962E-11	0.88006E-17
3	0.17456E-11	0.48088E-11	0.17661E-16
4	0.30057E-11	0.82801E-11	0.30410E-16
5	0.47326E-11	0.13037E-10	0.47883E-16
6	0.70206E-11	0.19341E-10	0.71032E-16
7	0.99749E-11	0.27479E-10	0.10092E-15
8	0.13710E-10	0.37768E-10	0.13871E-15
9	0.18346E-10	0.50539E-10	0.18562E-15
10	0.24005E-10	0.66128E-10	0.24287E-15
11	0.30802E-10	0.84855E-10	0.31165E-15
12	0.38840E-10	0.10700E-09	0.39297E-15
13	0.48189E-10	0.13275E-09	0.48756E-15
14	0.58877E-10	0.16220E-09	0.59570E-15

Polygon I
Time: 86.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.25123E-12	0.69209E-12	0.25418E-17
2	0.71023E-12	0.19565E-11	0.71858E-17
3	0.14253E-11	0.39265E-11	0.14421E-16
4	0.24542E-11	0.67608E-11	0.24831E-16
5	0.38642E-11	0.10645E-10	0.39097E-16
6	0.57325E-11	0.15792E-10	0.57999E-16
7	0.81447E-11	0.22437E-10	0.82405E-16
8	0.11194E-10	0.30838E-10	0.11326E-15
9	0.14980E-10	0.41266E-10	0.15156E-15
10	0.19600E-10	0.53995E-10	0.19831E-15
11	0.25151E-10	0.69286E-10	0.25447E-15
12	0.31713E-10	0.87365E-10	0.32087E-15
13	0.39347E-10	0.10840E-09	0.39810E-15
14	0.48074E-10	0.13244E-09	0.48640E-15

Polygon I

Time: 87.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.20513E-12	0.56510E-12	0.20755E-17
2	0.57991E-12	0.15976E-11	0.58674E-17
3	0.11638E-11	0.32060E-11	0.11775E-16
4	0.20039E-11	0.55203E-11	0.20275E-16
5	0.31552E-11	0.86921E-11	0.31923E-16
6	0.46806E-11	0.12894E-10	0.47357E-16
7	0.66503E-11	0.18320E-10	0.67285E-16
8	0.91404E-11	0.25180E-10	0.92479E-16
9	0.12231E-10	0.33695E-10	0.12375E-15
10	0.16004E-10	0.44088E-10	0.16192E-15
11	0.20536E-10	0.56573E-10	0.20778E-15
12	0.25895E-10	0.71335E-10	0.26199E-15
13	0.32128E-10	0.88507E-10	0.32506E-15
14	0.39253E-10	0.10814E-09	0.39715E-15

Polygon I

Time: 88.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.16749E-12	0.46142E-12	0.16947E-17
2	0.47351E-12	0.13044E-11	0.47908E-17
3	0.95025E-12	0.26178E-11	0.96143E-17
4	0.16362E-11	0.45075E-11	0.16555E-16
5	0.25763E-11	0.70972E-11	0.26066E-16
6	0.38218E-11	0.10528E-10	0.38668E-16
7	0.54301E-11	0.14959E-10	0.54940E-16
8	0.74633E-11	0.20560E-10	0.75511E-16
9	0.99870E-11	0.27512E-10	0.10104E-15
10	0.13067E-10	0.35999E-10	0.13221E-15
11	0.16768E-10	0.46193E-10	0.16965E-15
12	0.21143E-10	0.58246E-10	0.21392E-15
13	0.26233E-10	0.72267E-10	0.26542E-15
14	0.32051E-10	0.88295E-10	0.32428E-15

Polygon I

Time: 89.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.13676E-12	0.37676E-12	0.13837E-17
2	0.38663E-12	0.10651E-11	0.39118E-17
3	0.77590E-12	0.21375E-11	0.78503E-17
4	0.13360E-11	0.36804E-11	0.13517E-16
5	0.21036E-11	0.57950E-11	0.21283E-16
6	0.31206E-11	0.85967E-11	0.31573E-16
7	0.44338E-11	0.12214E-10	0.44859E-16
8	0.60939E-11	0.16788E-10	0.61656E-16
9	0.81545E-11	0.22464E-10	0.82505E-16
10	0.10670E-10	0.29393E-10	0.10795E-15
11	0.13691E-10	0.37717E-10	0.13852E-15
12	0.17264E-10	0.47559E-10	0.17467E-15
13	0.21420E-10	0.59007E-10	0.21672E-15
14	0.26170E-10	0.72094E-10	0.26478E-15

Polygon I

Time: 90.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.11167E-12	0.30763E-12	0.11298E-17
2	0.31569E-12	0.86967E-12	0.31940E-17
3	0.63354E-12	0.17453E-11	0.64099E-17
4	0.10909E-11	0.30051E-11	0.11037E-16
5	0.17176E-11	0.47317E-11	0.17378E-16

6	0.25480E-11	0.70193E-11	0.25780E-16
7	0.36202E-11	0.99731E-11	0.36628E-16
8	0.49758E-11	0.13707E-10	0.50343E-16
9	0.66583E-11	0.18342E-10	0.67367E-16
10	0.87121E-11	0.24000E-10	0.88146E-16
11	0.11179E-10	0.30797E-10	0.11311E-15
12	0.14096E-10	0.38833E-10	0.14262E-15
13	0.17490E-10	0.48181E-10	0.17695E-15
14	0.21369E-10	0.58866E-10	0.21620E-15

Polygon I
Time: 91.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.91180E-13	0.25118E-12	0.92252E-18
2	0.25777E-12	0.71010E-12	0.26080E-17
3	0.51729E-12	0.14250E-11	0.52338E-17
4	0.89071E-12	0.24537E-11	0.90119E-17
5	0.14025E-11	0.38635E-11	0.14190E-16
6	0.20805E-11	0.57314E-11	0.21050E-16
7	0.29560E-11	0.81432E-11	0.29908E-16
8	0.40628E-11	0.11192E-10	0.41106E-16
9	0.54366E-11	0.14977E-10	0.55006E-16
10	0.71136E-11	0.19597E-10	0.71973E-16
11	0.91280E-11	0.25146E-10	0.92354E-16
12	0.11510E-10	0.31708E-10	0.11645E-15
13	0.14281E-10	0.39340E-10	0.14449E-15
14	0.17448E-10	0.48065E-10	0.17653E-15

Polygon I
Time: 92.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.74450E-13	0.20510E-12	0.75326E-18
2	0.21047E-12	0.57981E-12	0.21295E-17
3	0.42238E-12	0.11636E-11	0.42735E-17
4	0.72728E-12	0.20035E-11	0.73583E-17
5	0.11451E-11	0.31547E-11	0.11586E-16
6	0.16988E-11	0.46798E-11	0.17188E-16
7	0.24136E-11	0.66491E-11	0.24420E-16
8	0.33174E-11	0.91387E-11	0.33564E-16
9	0.44391E-11	0.12229E-10	0.44913E-16
10	0.58084E-11	0.16001E-10	0.58767E-16
11	0.74532E-11	0.20532E-10	0.75409E-16
12	0.93980E-11	0.25890E-10	0.95086E-16
13	0.11660E-10	0.32122E-10	0.11797E-15
14	0.14246E-10	0.39246E-10	0.14414E-15

Polygon I
Time: 93.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.60790E-13	0.16746E-12	0.61505E-18
2	0.17185E-12	0.47342E-12	0.17387E-17
3	0.34488E-12	0.95008E-12	0.34894E-17
4	0.59384E-12	0.16359E-11	0.60082E-17
5	0.93503E-12	0.25758E-11	0.94603E-17
6	0.13871E-11	0.38211E-11	0.14034E-16
7	0.19708E-11	0.54291E-11	0.19939E-16
8	0.27087E-11	0.74619E-11	0.27405E-16
9	0.36246E-11	0.99852E-11	0.36673E-16
10	0.47426E-11	0.13065E-10	0.47984E-16
11	0.60857E-11	0.16765E-10	0.61573E-16
12	0.76737E-11	0.21140E-10	0.77639E-16

13	0.95208E-11	0.26228E-10	0.96329E-16
14	0.11632E-10	0.32045E-10	0.11769E-15

Polygon I
Time: 94.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.49636E-13	0.13674E-12	0.50220E-18
2	0.14032E-12	0.38656E-12	0.14197E-17
3	0.28160E-12	0.77576E-12	0.28491E-17
4	0.48488E-12	0.13357E-11	0.49058E-17
5	0.76347E-12	0.21032E-11	0.77245E-17
6	0.11326E-11	0.31200E-11	0.11459E-16
7	0.16092E-11	0.44330E-11	0.16281E-16
8	0.22117E-11	0.60928E-11	0.22377E-16
9	0.29596E-11	0.81531E-11	0.29944E-16
10	0.38724E-11	0.10668E-10	0.39180E-16
11	0.49691E-11	0.13689E-10	0.50275E-16
12	0.62657E-11	0.17261E-10	0.63394E-16
13	0.77739E-11	0.21416E-10	0.78654E-16
14	0.94981E-11	0.26166E-10	0.96098E-16

Polygon I
Time: 95.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.40528E-13	0.11165E-12	0.41005E-18
2	0.11457E-12	0.31563E-12	0.11592E-17
3	0.22993E-12	0.63342E-12	0.23264E-17
4	0.39591E-12	0.10907E-11	0.40057E-17
5	0.62338E-12	0.17173E-11	0.63072E-17
6	0.92476E-12	0.25476E-11	0.93564E-17
7	0.13139E-11	0.36196E-11	0.13294E-16
8	0.18059E-11	0.49749E-11	0.18271E-16
9	0.24165E-11	0.66571E-11	0.24450E-16
10	0.31619E-11	0.87105E-11	0.31991E-16
11	0.40573E-11	0.11177E-10	0.41051E-16
12	0.51160E-11	0.14094E-10	0.51762E-16
13	0.63476E-11	0.17486E-10	0.64222E-16
14	0.77554E-11	0.21365E-10	0.78466E-16

Polygon I
Time: 96.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.33092E-13	0.91163E-13	0.33482E-18
2	0.93552E-13	0.25772E-12	0.94653E-18
3	0.18774E-12	0.51720E-12	0.18995E-17
4	0.32327E-12	0.89055E-12	0.32707E-17
5	0.50900E-12	0.14022E-11	0.51499E-17
6	0.75509E-12	0.20801E-11	0.76397E-17
7	0.10728E-11	0.29555E-11	0.10855E-16
8	0.14745E-11	0.40621E-11	0.14919E-16
9	0.19731E-11	0.54357E-11	0.19964E-16
10	0.25818E-11	0.71123E-11	0.26121E-16
11	0.33129E-11	0.91264E-11	0.33519E-16
12	0.41773E-11	0.11508E-10	0.42265E-16
13	0.51829E-11	0.14278E-10	0.52439E-16
14	0.63324E-11	0.17445E-10	0.64069E-16

Polygon I
Time: 97.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.27020E-13	0.74436E-13	0.27338E-18

2	0.76387E-13	0.21043E-12	0.77286E-18
3	0.15330E-12	0.42230E-12	0.15510E-17
4	0.26395E-12	0.72715E-12	0.26706E-17
5	0.41561E-12	0.11449E-11	0.42050E-17
6	0.61654E-12	0.16985E-11	0.62380E-17
7	0.87599E-12	0.24132E-11	0.88629E-17
8	0.12040E-11	0.33168E-11	0.12181E-16
9	0.16111E-11	0.44383E-11	0.16301E-16
10	0.21081E-11	0.58073E-11	0.21329E-16
11	0.27050E-11	0.74519E-11	0.27368E-16
12	0.34109E-11	0.93963E-11	0.34510E-16
13	0.42319E-11	0.11658E-10	0.42817E-16
14	0.51705E-11	0.14244E-10	0.52313E-16

Polygon I
Time: 98.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.22063E-13	0.60779E-13	0.22322E-18
2	0.62371E-13	0.17182E-12	0.63105E-18
3	0.12517E-12	0.34482E-12	0.12664E-17
4	0.21552E-12	0.59373E-12	0.21806E-17
5	0.33935E-12	0.93486E-12	0.34335E-17
6	0.50342E-12	0.13868E-11	0.50934E-17
7	0.71526E-12	0.19704E-11	0.72367E-17
8	0.98307E-12	0.27082E-11	0.99464E-17
9	0.13155E-11	0.36240E-11	0.13310E-16
10	0.17213E-11	0.47418E-11	0.17415E-16
11	0.22087E-11	0.60846E-11	0.22347E-16
12	0.27850E-11	0.76723E-11	0.28178E-16
13	0.34554E-11	0.95191E-11	0.34961E-16
14	0.42218E-11	0.11630E-10	0.42715E-16

Polygon I
Time: 99.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.18015E-13	0.49627E-13	0.18226E-18
2	0.50927E-13	0.14030E-12	0.51526E-18
3	0.10220E-12	0.28155E-12	0.10340E-17
4	0.17598E-12	0.48479E-12	0.17805E-17
5	0.27709E-12	0.76333E-12	0.28035E-17
6	0.41105E-12	0.11324E-11	0.41589E-17
7	0.58402E-12	0.16089E-11	0.59089E-17
8	0.80270E-12	0.22113E-11	0.81214E-17
9	0.10741E-11	0.29590E-11	0.10868E-16
10	0.14054E-11	0.38717E-11	0.14220E-16
11	0.18034E-11	0.49682E-11	0.18247E-16
12	0.22740E-11	0.62645E-11	0.23008E-16
13	0.28214E-11	0.77725E-11	0.28546E-16
14	0.34472E-11	0.94964E-11	0.34877E-16

Polygon I
Time: 100.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.14709E-13	0.40521E-13	0.14882E-18
2	0.41583E-13	0.11455E-12	0.42072E-18
3	0.83450E-13	0.22989E-12	0.84432E-18
4	0.14369E-12	0.39584E-12	0.14538E-17
5	0.22625E-12	0.62327E-12	0.22891E-17
6	0.33563E-12	0.92460E-12	0.33958E-17
7	0.47686E-12	0.13137E-11	0.48247E-17
8	0.65542E-12	0.18056E-11	0.66313E-17

9	0.12639E-10	0.34817E-10	0.12787E-15
10	0.16537E-10	0.45557E-10	0.16732E-15
11	0.21220E-10	0.58458E-10	0.21470E-15
12	0.26757E-10	0.73712E-10	0.27072E-15
13	0.33198E-10	0.91455E-10	0.33589E-15
14	0.40561E-10	0.11174E-09	0.41038E-15

PES Environmental, Inc.
Engineering & Environmental Services

A Report Prepared For:

California Regional Water Quality Control Board
San Francisco Bay Region
1515 Clay Street, Suite 1400
Oakland, California 94612

Attention: Dr. Derek Whitworth, P.E.

CALIFORNIA REGIONAL WATER
JUL 26 2001
QUALITY CONTROL BOARD

DRAFT REMEDIAL ACTION PLAN
FORMER MERCER PROCESSING, INC. FACILITY
230 PORTAGE AVENUE
PALO ALTO, CALIFORNIA

VOLUME I

JULY 25, 2001

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EXECUTIVE SUMMARY

This Remedial Action Plan has been prepared by PES Environmental, Inc. on behalf of El Camino Center to address soil affected by chlorinated hydrocarbons, primarily trichloroethylene, at its property, located at 230 Portage Avenue in Palo Alto, California, formerly occupied by Mercer Processing, Inc. Planning for and implementation of remedial action at the facility are being performed under the supervision of the California Regional Water Quality Control Board - San Francisco Bay Region. The objectives of this Remedial Action Plan are to: (1) evaluate remedial alternatives and identify remedies that will mitigate the potential for adverse affects to human health and groundwater quality; and (2) recommend a remedial action to address chlorinated hydrocarbons in soil at the site. Specifically, the Remedial Action Plan:

- Summarizes the results of previous subsurface remedial investigations performed at the site;
- Presents an evaluation of risk to human health and the environment, principally groundwater resources;
- Develops a site-specific remedial goal for contaminated soil;
- Presents an evaluation of remedial alternatives;
- Recommends a remedial alternative for implementation; and
- Describes procedures to implement the recommended remedial action.

In addition, PES Environmental, Inc. and El Camino Center have prepared a Community Relations Plan (Appendix A of the Remedial Action Plan). The Community Relations Plan includes provisions for notifying the public of the availability of the Remedial Action Plan for review and comment, making the Remedial Action Plan available for public review and comment for a period of 30 days, publishing a brief analysis of the site and the proposed remedial action, holding a public meeting to discuss the history of the site and proposed remedial action, addressing comments received from concerned public, and publishing the selected final remedial action for the site following expiration of the public comment period.

The subject site is located in a primarily commercial and light industrial area with some nearby residences. The entire property, with the exception of landscaped areas and one onsite structure, is covered with asphalt-concrete parking lots and concrete sidewalks. The site is located within an area that is currently undergoing groundwater remediation through extraction and treatment due to releases of chlorinated hydrocarbons at other locations.

Mercer Processing, Inc. performed freeze-drying and food product packaging at the site between 1989 and 1999. These activities involved the use of trichloroethylene at the site for refrigeration equipment from approximately 1989 to 1991. During several subsurface remedial investigations performed at the site in 1999 and 2000, chlorinated hydrocarbons were identified in subsurface soil samples collected from the vicinity of the former refrigeration equipment. Trichloroethylene was the chlorinated hydrocarbon detected most frequently and at the most elevated concentrations. The highest concentration of trichloroethylene was detected in a soil sample collected beneath the former refrigeration unit at approximately four feet below ground surface. Concentrations of trichloroethylene decrease both laterally and vertically from this sample location. Based on the results of these remedial investigations, the lateral and vertical extent of chlorinated hydrocarbons in soil in the vicinity of the former refrigeration unit appears to be adequately defined for remedial planning purposes.

The Remedial Action Plan includes a health risk evaluation and assessment of the risk of contamination of groundwater resources due to releases of hazardous substances at the site ("site risk evaluation"). On the basis of this evaluation, a target soil cleanup level of 0.2 milligrams per kilogram trichloroethylene is recommended for the site.

Five soil remedial alternatives were considered as potentially applicable for this site: (1) no action; (2) soil excavation with offsite disposal; (3) soil excavation with ex-situ on-site treatment; (4) in-situ soil vapor extraction; and (5) enhanced in-situ bioremediation. These remedial alternatives were evaluated against criteria identified in the National Oil and Hazardous Substances Pollution Contingency Plan. Based on the results of this evaluation, soil excavation with offsite disposal is recommended for remediation of chlorinated hydrocarbons in soil. This approach will effectively and economically reduce the mass of contaminants in soil, thereby significantly reducing the risk to human health and the environment posed by the releases of hazardous substances at the site. Additionally, soil excavation with offsite disposal will require the shortest duration and is the least uncertain of the technically feasible remediation measures.

If the recommended remedial alternative is adopted, soil excavation will be performed in the vicinity of the former refrigeration unit. The in-place volume of trichloroethylene-affected soil requiring removal is estimated to be 470 cubic yards (approximately equivalent to 660 tons). The actual volume will depend on the distribution of trichloroethylene in soil, and inherent limitations of soil excavation equipment and techniques. The excavated soil will be characterized, and on the basis of the characterization, transported to an appropriately permitted landfill for disposal.

If the recommended remedial alternative is adopted after the 30-day public comment period, the remediation work will commence in seven to ten working days.

1.0 INTRODUCTION

PES Environmental, Inc. (PES) has prepared this Remedial Action Plan (RAP) on behalf of El Camino Center to address soil affected by volatile organic compounds (VOCs) at the former Mercer Processing (Mercer) facility (site). The former Mercer facility, which is owned by El Camino Center, is located at 230 Portage Avenue in Palo Alto, California (Plate 1). This RAP summarizes subsurface environmental investigations conducted at the subject property. In addition, the RAP: (1) presents an evaluation of risk to human health and the environment; (2) develops site-specific remedial goals; (3) presents an evaluation of remedial alternatives; (4) identifies a remedial alternative for implementation; and (5) describes procedures to implement the selected remedial action.

This document has been prepared in response to a letter dated May 9, 2001 from the staff of the California Regional Water Quality Control Board – San Francisco Bay Region (RWQCB) to Mr. Boyd Smith of El Camino Center. RWQCB asked El Camino Center to submit a RAP to address chemicals found in soil at the site. RWQCB's request was made in response to El Camino Center's March 22, 2001 submittal consisting of technical reports describing the results of prior environmental investigations at the site.

The activities described in this document are consistent with the National Oil and Hazardous Substances Pollution Contingency Plan[1] (NCP), and the California Health and Safety Code.

Remedial planning conducted by El Camino Center includes: (1) submittal of this RAP; (2) review, comment and approval of the RAP by the RWQCB; (3) preparation and implementation of a Community Relations Plan; and (4) finalizing and implementing the RAP, as appropriate.

The Community Relations Plan includes provisions for notifying the public of the availability of the RAP for review and comment, making the RAP available for public review and comment for a period of 30 days, publishing a brief analysis of the site and the proposed remedial action. The Community Relations Plan also includes provisions for holding a public meeting to discuss the history of the site and proposed remedial action, addressing comments received from concerned public, and publishing the selected final remedial action for the site following expiration of the public comment period. A copy of the Community Relations Plan, fact sheet, fact sheet distribution list and distribution map are presented in Appendix A. In the final RAP, copies of public notice, public comments and responses to these comments will be appended.

1.1 Objectives of Remedial Action Plan

The objectives of the RAP are to: (1) identify remediation strategies that will prevent adverse impact to human health and avoid degradation of groundwater quality; and (2) present a

[1] Title 40 Code of Federal Regulations, Part 300.

program for remediation of vadose zone soils affected by VOCs, primarily trichloroethylene (TCE), at the site. The RAP: (1) assesses the potential for TCE in unsaturated soil to migrate to groundwater beneath the site; (2) evaluates potential health risks to future site occupants associated with TCE in soil; (3) establishes a risk-based site-specific cleanup level for TCE in unsaturated soils; (4) evaluates applicable remedial alternatives; (5) recommends a remedial alternative; (6) outlines the tasks to implement the recommended remedial action; and (7) provides a preliminary schedule for implementation of the proposed remedial action.

1.2 Organization

The RAP includes the following sections:

Section 1.0 – Introduction. The introduction presents a general explanation of the objectives and organization of the RAP.

Section 2.0 – Site Background This section provides a description of the site and summarizes previous investigations performed at the site.

Section 3.0 – Evaluation of Applicable TCE Cleanup Level. A risk-based approach is used to develop a site-specific soil cleanup level in this section.

Section 4.0 – Evaluation of Remedial Alternatives. This section presents an evaluation of remedial action alternatives considered applicable for implementation at the site.

Section 5.0 – Remedial Action Plan Implementation. This section presents the procedures for implementation of the recommended remedial action alternative for the site and presents a schedule for remedial action implementation and reporting.

Section 6.0 – Administrative Records. This section presents a summary of letters and reports directly related to the site and regulatory guidance documents used during the preparation of the RAP.

2.0 SITE BACKGROUND

A description of the site and discussions of previous site investigations and the site geology and hydrogeology are presented below.

2.1 Site Description

The subject site is a vacant tenant space located within a larger commercial and light industrial building near the north end of Portage Avenue, in Palo Alto (Plate 1). It is located in a primarily commercial and light industrial area with some residences present. PES understands that the property is zoned for residential use but is being used for commercial purposes

pursuant to a variance that will expire in the year 2019, if it is not terminated earlier. The property is improved with one structure. The entire property, with the exception of landscaped areas and the onsite structure, is covered with asphalt-concrete parking lots and concrete sidewalks. A site plan is included as Plate 2.

Groundwater beneath and in the vicinity of the subject property has been affected by VOCs. The site is located within a regional groundwater plume (known as the California-Olive-Emerson [COE] Study Area and Perimeter Area) that is currently undergoing remediation through pumping and treatment (SECOR, 2000).

2.2 Site Use History

The Site, which is currently vacant, is a segment near the eastern end of a larger parcel that is used for retail and office operations. The largest tenant in the parcel is Frye's Electronics, located in the space immediately to the west of the Site in a common building structure. Two other tenants utilize portions of the building to the east for office purposes.

According to El Camino Center personnel, the use of the parcel can be traced to approximately the 1940s. The parcel, including the portion now comprising the Site, was reportedly used as a fruit cannery prior to World War II (Osborn, 2001). After World War II the parcel, including the Site, was used by Safeway as a food distribution warehouse and subsequently by Maximart as a strip mall consisting of numerous retail shops. The parcel was purchased by El Camino Center in the early 1970s. At the time of the purchase the parcel was occupied by Maximart and the retail shops, miscellaneous other warehouse and storage users, and Dura-Bond Manufacturing Company (Osborn, 2001). Following the purchase of the property by El Camino Center, Maximart left and the former Mercer tenant space was used as a warehouse for the storage of dry goods. That tenant space was reportedly used for the storage of dry goods until Mercer's occupancy commenced in 1989.

Dura-Bond Manufacturing Company (Dura-Bond) was located at the western end of the parcel. Dura-Bond conducted manufacturing operations at its portion of the parcel for a number of years, and vacated its site in the 1980s. Dura-Bond conducted an environmental investigation and remedial activities at its site under the supervision of the Regional Water Quality Control Board, which approved those activities and subsequently notified Dura-Bond that its site was closed.

In June 1997, El Camino Center personnel encountered an underground concrete vault located on the parcel in the parking lot area north of the existing retail/office building and west of the Site. The vault contained oil and sediment. The oil was characterized as a degraded fuel oil or motor oil. The liquid contents of the vault were removed and transported offsite for disposal. The vault was subsequently cleaned and inspected under direct observation of the Palo Alto Fire Department. The bottom of the vault was cored to allow sampling of the underlying soil. The verification soil samples did not contain fuel oil above the laboratory reporting limit. The Palo Alto Fire Department approved in-place abandonment of the vault. The vault was

abandoned by filling the core holes with sand and backfilling the vault to surface grade. The case was subsequently closed by the Palo Alto Fire Department.

According to information provided to PES during an inspection of the Mercer tenant space in December 1999, Mercer occupied this location between 1989 and 1999. Plate 3 shows the layout of the former Mercer Processing facility.

Operations performed by Mercer at this location included freeze-drying and packaging of food products. Refrigeration equipment used in the freeze-drying process contained solvents including trichloroethylene and Genesolv 2000. According to Mr. Dave Noland, the current president of Mercer, the refrigeration equipment utilized trichloroethylene from approximately 1989 until 1991, and Genesolv 2000 from 1991 until the facility ceased operations in December 1999. Genesolv 2000, also referred to as Refrigerant 141b, is composed of 1,1-dichloro-1-fluoroethane. Review of a Santa Clara County Hazardous Materials Compliance Division Hazardous Materials Business Plan for the facility dated September 11, 1998, indicates that the Mercer facility stored onsite approximately 650 gallons of Genesolv 2000, and smaller quantities (less than 55 gallons) of water treatment chemicals and lubricating oils.

On the basis of the site use history, the former Mercer operations are the likely source of trichloroethlene in soil beneath and in the vicinity of the tenant space used by Mercer.

2.3 Remedial Investigations

Several subsurface remedial investigations have been performed at the site and are summarized below. Laboratory analytical results for soil matrix samples collected from borings at the site are summarized in Table 1. Plate 3 presents the locations of soil borings relative to features associated with the Mercer operations. The remedial investigations were summarized in the following reports:

- *Facility Closure Assessment, Former Mercer Processing Facility, 230 Portage Avenue, Palo Alto, California* dated January 12, 2000 and prepared by PES;
- *Soil Sampling and Analysis Report, Former Mercer Processing Facility, 230 Portage Avenue, Palo Alto, California* dated July 24, 2000 and prepared by IT Corporation; and
- *Additional Definition Soil Sampling and Analysis Report, Former Mercer Processing Facility, 230 Portage Avenue, Palo Alto, California*, IT Corporation Project 806342, dated November 21, 2000 and prepared by IT Corporation.

The subsurface remedial investigations were performed after Mercer had vacated the site.

2.3.1 Facility Closure Assessment (PES, 2000)

In December 1999, PES performed a Facility Closure Assessment on behalf of El Camino Center to assess whether operations at the Mercer facility had adversely affected environmental conditions at the site. Ten soil samples were collected from four shallow soil borings in the vicinity of the former refrigeration unit (Plate 3). Acetone, methyl ethyl ketone, TCE, and tert-butanol were detected in the soil samples (PES, 2000). TCE was present in two of the ten soil samples at concentrations of 54 and 470 micrograms per kilogram (μg/kg).

2.3.2 Subsurface Investigations (IT Corporation, 2000)

In June and November of 2000, IT Corporation (IT) performed subsurface investigations on behalf of Mercer to further define the lateral and vertical extent of chemicals in the vadose zone beneath the site. In order to attempt to define the lateral and vertical extents of chlorinated hydrocarbon-affected soil, IT generally positioned soil borings on approximate 10-foot centers and collected soil samples for chemical analysis at 2-foot-depth intervals (Plate 3 and Table 1). During the investigations, IT collected 82 soil samples from 14 soil borings in the vicinity of the former refrigeration unit (IT, 2000a and 2000b). TCE, 1,1-dichloroethene, cis-1,2-dichloroethene, and trans-1,2-dichloroethene were detected in the soil samples. TCE was detected most frequently, and at the highest concentrations, and was present in 48 of the 82 soil samples at concentrations ranging from an estimated value of 3 μg/kg to 6,800 μg/kg (IT, 2000b).

Based on the results of these investigations, the lateral and vertical extent of chlorinated hydrocarbons in soil in the vicinity of the former refrigeration unit appears to be adequately defined for remedial planning purposes. The highest concentration of TCE is present within Boring B (located beneath the former refrigeration unit) at approximately four feet below ground surface (bgs) (Plate 3). Concentrations of TCE decrease both laterally and vertically from Boring B (IT, 2000b).

2.4 Regional and Site-Specific Geologic Conditions

2.4.1 Regional Geologic Conditions

The subject property is located in an area of Palo Alto that is generally underlain by medium-grained alluvium of Holocene age. According to the *Geologic Map of the Palo Alto and Part of the Redwood Point 7-1/2' Quadrangles, San Mateo and Santa Clara Counties, California* published in 1993, this alluvium is unconsolidated to moderately consolidated, moderately sorted fine sand, silt and clayey silt and is generally less than 20 feet thick. This alluvium is underlain by Holocene- to Pleistocene-aged alluvial and basinal deposits that are approximately 500 feet thick. The alluvial material may be underlain by bedrock consisting of Miocene-aged Ladera Sandstone or Franciscan Complex metasedimentary or meta-igneous rock (USGS, 1993).

2.4.2 Site Specific Geologic Conditions

On the basis of the findings presented in IT's reports, the vadose zone consists of concrete slab approximately ½-foot-thick, base course fill material approximately ½ foot-thick, underlain by sandy clay to approximately 16 feet bgs and low to medium plastic clay from 16 feet bgs to 28 feet bgs, the maximum depth investigated.

2.5 Regional and Site-Specific Hydrogeologic Conditions

2.5.1 Regional Hydrogeologic Conditions

In general, first encountered groundwater is located approximately 20 to 30 feet bgs, and the regional flow direction is to the north, towards San Francisco Bay. Matadero Canal, a concrete-lined canal, is located approximately 200 feet south of the property.

2.5.2 Site-Specific Hydrogeologic Conditions

Depth to first-encountered groundwater is estimated to be approximately 28 feet bgs (Secor, 2000 and IT, 2000b). The direction of groundwater flow in the first-encountered water-bearing zone beneath the site is towards the north (Secor, 2000). According to Secor's Semi-Annual Groundwater Monitoring Report dated October 21, 2000, VOC-affected groundwater in the COE Study Area and Perimeter Area is present in three water-bearing zones: (1) A1 Upper Zone, (2) A1 Zone, and (3) A2 Zone. On the basis of TCE isoconcentration contours presented in Secor's October 2000 monitoring report, TCE concentrations in the A1 Upper Zone beneath the subject site range from approximately 50 μg/L to 85 μg/L (Secor, 2000).

Groundwater within the COE Study Area and Perimeter Area is currently undergoing remediation through groundwater extraction and treatment. Groundwater is extracted for treatment from nine extraction wells positioned in the three water-bearing zones (Secor, 2000). The groundwater extraction and treatment system generally operates continuously with the exception of brief shutdowns for maintenance. Extracted groundwater is treated with granular activated carbon and is reused for landscape irrigation and/or discharged to the storm drain system under a National Pollutant Discharge Elimination System permit (Secor, 2000).

3.0 SITE RISK EVALUATION

This section presents the methodologies and results of evaluations of site risks related to chemical hazards and presents a site-specific cleanup level for TCE in unsaturated soil. The site risk evaluation presented herein consists of the following components: (1) evaluating regional water quality standards and goals; (2) evaluating target cleanup goals for VOC- and TCE -affected soil developed by RWQCB staff for sites in similar settings; (3) assessing potential health risks to future site occupants; (4) assessing the potential for TCE in soil at the

site to migrate vertically to groundwater beneath the property; and (5) selecting the appropriate TCE soil cleanup level.

As described above, unsaturated soil at the site has been affected by releases of VOCs from refrigeration equipment used at the former Mercer facility. The VOCs present at the site include TCE, 1,1-dichloroethene, cis-1,2-dichloroethene, trans-1,2-dichloroethene, acetone, MEK and tert-butanol. Refrigeration equipment used in the freeze-drying process contained solvents, including TCE. TCE is identified as the primary chemical of concern at the site because: (1) it is the most prevalent VOC detected at the site, (2) it is present at higher concentrations than other VOCs detected in site soil, (3) it possesses the lowest regulatory action level in groundwater of the detected contaminants, and (4) it represents the greatest human health risk to site users.

3.1 Assessment of Potential Risks to Human Health and the Environment

The risk assessment described herein evaluates potential health risks to site occupants and risks to the environment. The risk assessment process employs techniques approved by the U.S. Environmental Protection Agency (USEPA), and integrates these techniques with published risk-based screening levels applicable to the site and with the results of the site investigation, in order to determine applicable and appropriate measures for protection of human health and the environment. The risk assessment consists of: (1) an exposure assessment; (2) alternative methods of chemical fate and transport modeling; and (3) an evaluation of human health and environmental risks based on the results of the fate and transport modeling.

3.1.1 Exposure Assessment of Potential Human Health Risks

3.1.1.1 Site Setting

The site is located in a primarily commercial and light industrial region of Palo Alto. It is, however, zoned for residential use as stated above in Section 2.1.

Due to low yield soil formations, high total dissolved solids and high conductivity levels typical in shallow groundwater, first-encountered water is typically not used as a drinking water source. Furthermore, the groundwater beneath and in the vicinity of the site has been affected by VOCs, including TCE, and is currently undergoing remediation (SECOR, 2000).

The property is completely covered with a concrete slab. However, when the property is redeveloped for residential purposes the concrete and structure will likely be removed.

The premises are secured and cannot be accessed by trespassers.

3.1.1.2 Potential Exposure Pathways

The basic routes of contaminant exposure are oral, dermal and inhalation exposure. Consistent with the risk assessment process and USEPA risk guidelines, only those exposure pathways with potential human exposure were evaluated for the site.

3.1.1.2.1 Current Use Potential Exposure Pathways

Because the property is currently covered with a concrete slab, direct contact with soil is not considered currently feasible. Therefore, dermal contact and ingestion of affected soil is not considered an exposure pathway. Direct exposure to and ingestion of first-encountered groundwater beneath the property is not considered a viable exposure pathway due to conditional exclusion of permits required for installation of wells to be installed for industrial, irrigation or domestic use (RWQCB, 2001c). The current potential exposure pathway occurs from secondary exposure of volatilized airborne constituents of concern from subsurface soils to enclosed-space accumulation. The primary current route of contaminant exposure is considered to be through inhalation.

3.1.1.2.2 Future Use Potential Exposure Pathways

Upon redevelopment of the property for residential purposes the asphalt pavement, concrete and structure will likely be removed. Direct contact with soil is considered feasible; therefore, dermal contact and ingestion of affected soil are considered potential exposure pathways. Secondary exposure of volatilized airborne TCE from subsurface soils to enclosed-space accumulation is also considered a potential exposure pathway under future site use conditions. However, direct exposure to and ingestion of groundwater beneath the property following redevelopment is not considered an exposure pathway due to conditional exclusion of permits required for installation of wells to be installed for industrial, irrigation or domestic use (RWQCB, 2001c). The primary routes of contaminant exposure under future use conditions are therefore considered to be through dermal contact with affected soil, ingestion of affected soil and through inhalation of volatilized airborne TCE vapors.

3.2 RWQCB Preliminary Target Cleanup Goals

As noted above, the subject site is within the boundaries of the COE Study Area and Perimeter Area. On September 21, 1994, the RWQCB issued *Revised Site Cleanup Requirements, Order 94-130 for Hewlett-Packard Company, Varian Associates, and Stanford University* for the COE area ("the Order"). The Order contains a preliminary target cleanup goal of 1.0 milligram per kilogram (mg/kg) total VOCs. This preliminary target cleanup goal is discussed in the RWQCB document *Water Quality Control Plan* for the San Francisco Bay Basin dated June 21, 1995 (Basin Plan). The RWQCB's Basin Plan also states that target cleanup levels for individual constituents at polluted sites commonly are significantly lower than 1.0 mg/kg; therefore, individual target cleanup levels well below 1.0 mg/kg may be appropriate for these constituents (RWQCB, 1995).

RWQCB has established a screening level target soil cleanup concentration of 0.4 mg/kg TCE (RWQCB, 2000 and 2001b). The target cleanup level is listed in the RWQCB document *Application of Risk-Based Screening Levels and Decision Making to Sites With Impacted Soil and Groundwater* dated August 2000. The RWQCB document presents a tiered approach to environmental risk assessments that incorporates potential risks to human health and the environment. The screening level target soil cleanup concentration of 0.4 mg/kg TCE is a Tier 1 risk-based screening level (RBSL). Under Tier 1, site-specific sample data are directly compared to RBSLs for the site and decisions are made with respect to the requirement for additional site investigation, remedial action or a more detailed risk assessment. Additional risk assessments can be conducted under Tier 2, or alternative (Tier 3) method analyses.

The TCE concentration of 0.4 mg/kg is based on a Tier 1 RBSL concentration for TCE in surface soil (less than 3 meters [9.84 feet] bgs) and subsurface soil (greater than 3 meters [9.84 feet] bgs) in residential, industrial and commercial settings where groundwater is a current or potential source of drinking water. This RBSL is protective of human health and groundwater quality.

The Tier 1 RBSLs were developed by the RWQCB to be protective of human health and the environment. The RBSLs address the following concerns: (1) Groundwater quality, (a) Protection of human health, (i) Drinking water resources, (ii) Emission of vapors to building interiors, (b) Protection of aquatic life, and (c) Protection of nuisance concerns and general source degradation; and (2) Soil quality, (a) Protection of human health, (i) Direct and indirect contact with affected soil, (ii) Emission of vapors to building interiors, (b) Protection of groundwater quality, (c) Protection of terrestrial ecological receptors, and (d) Protection against nuisance concerns and General source degradation (RWQCB, 2000).

3.3 Alternative (Tier 3) Methods Environmental Risk Evaluation

PES further evaluated risks to groundwater quality and human health associated with TCE in vadose zone soil. These assessments were conducted to further evaluate secondary exposure of volatilized TCE from surface and subsurface soils to enclosed spaces and the potential for migration downward through the vadose zone to groundwater. Further evaluation of these risks is warranted due to the potential for inhalation of affected vapors in a residential setting and the potential for impact to the shallow aquifer which may adversely impact the groundwater and might result in requirements for groundwater remediation and/or participation in ongoing area-wide groundwater remediation efforts (see Section 2.4.2, above).[2]

[2] Dermal and ingestion pathways were not reevaluated with respect to the future residential land uses, due to the likelihood that concrete slabs, surface fill and landscaping would ensure that the conservative Tier 1 RBSL of 0.4 mg/kg trichloroethylene will be protective of human health insofar as these pathways are concerned.

3.3.1 Vapor Flux Modeling and Health Risk Calculation Methods

Potential health risk to future occupants of the property were assessed under various TCE target cleanup standards. Vapor phase migration simulations were performed to estimate indoor air concentrations following a standardized one-dimensional diffusion and air-mixing model summarized in the *Site Assessment and Mitigation Manual 1998 Update* (SDCDEH, 1998). The vapor phase migration model calculates exposure levels to site users from vapors migrating from VOCs in subsurface soil gas into building interiors. Three building slab-type scenarios (no concrete slab, weathered concrete slab, and new concrete slab) were evaluated for each cleanup concentration. Input parameters required for the calculations included: (1) compound-specific diffusion coefficients; (2) soil properties; (3) site specific data; (4) building properties, and (5) site user information.

Soil gas concentrations were calculated from the soil matrix data assuming local equilibrium conditions using the methodology developed by Jury, Spencer and Farmer (Jury, et al., 1983) and widely used by others (Feenstra et al., 1991). The equations used to estimate the indoor air concentrations from calculated soil gas concentrations were based on calculation of contaminant flux using Fick's First Law. The equations used to estimate contaminant intake and associated risk are recommended by the USEPA in its Risk Assessment Guidance Manual (USEPA, 1989). These equations utilize site-specific contaminant concentrations and conservative default parameters recommended by USEPA.

Table 2 summarizes the input parameters used for the vapor flux and human health risk calculations. The calculations for each scenario are provided in Appendix D in Volume II.

3.3.2 Vapor Flux Modeling and Health Risk Calculation Results

The calculated carcinogenic risks from exposure to TCE in soil beneath the subject property range from 2.84×10^{-4} to 3.76×10^{-9} as summarized on Table 3. The range of acceptable excess cancer risk in the NCP is 10^{-4} (one in ten thousand) to 10^{-6} (one in one million), however, 10^{-6} is most often associated with residential land use.

The results of the vapor flux modeling and human health risk calculations indicate that TCE cleanup concentrations that are protective of human health vary for each floor-type scenario. The modeling results for a residential scenario, including concrete slab on-grade structures, indicate that in order to achieve an excess incremental risk of 10^{-6} a maximum TCE concentration in soil between 0.2 and 0.4 mg/kg is required.

It should be noted that the method used to model indoor TCE concentrations is conservative for several reasons: (1) the method estimates emission flux and indoor air concentrations; (2) it was assumed that contaminant concentrations are uniform and ubiquitous in the emission flux area; (3) it was assumed that no adsorption of upward diffusing soil vapor occurs; and (4) it was assumed that no reduction in contaminant concentrations from biological or chemical degradation occurs over time.

3.3.3 Vadose Zone Vertical Migration Modeling

The behavior of TCE in soil was modeled to assess the potential for migration downward through the vadose zone to groundwater. PES evaluated regional and state water quality goals associated with TCE, the primary VOC detected in soil at the site, to assist in determining an appropriate target soil cleanup level. The State of California Maximum Contaminant Level (MCL) for TCE in groundwater is 5 μg/l (RWQCB, 1995 and CADHS, 2001). PES also evaluated local conditions to establish background TCE levels in the site vicinity within the COE Study Area and Perimeter Area. Cleanup of TCE in soil to levels that would result in impact to groundwater at or below the MCL for TCE is neither practical nor warranted due to the presence of TCE -affected groundwater in the site vicinity.

PES performed computer simulations using two models developed for the USEPA and commonly used by the USEPA and other regulatory agencies for this purpose. The models used to assess downward VOC migration are the VLEACH model (Ravi and Johnson, 1995) and the Seasonal Soil Compartment (SESOIL) model (GSC, 1995). Both models are one-dimensional, numerical transport models designed for evaluation of the unsaturated zone. The following general input parameters were required for each: (1) climatic data; (2) soil properties; (3) chemical properties; and (4) physical parameters describing the model simulation (e.g., number of layers, depth to groundwater, and cross sectional area).

3.3.4 Vertical Migration Model Input Parameters

Table 4 provides a summary of the input parameters for the VLEACH and SESOIL models. In general, input parameters were obtained from: (1) site-specific data collected during previous site investigations by PES and IT; (2) literature values for similar soil types; and (3) databases provided in the SESOIL and VLEACH model documentation. The vadose zone was modeled as sandy clay from the ground surface to 16 feet bgs and lean clay from 16 feet bgs to 28 feet bgs to be consistent with the lithology identified during the subsurface investigations performed at the site. Depth to groundwater was assumed to be 28 feet bgs based on site-specific subsurface conditions described in the November 21, 2000 report prepared by IT and information obtained from regional groundwater investigations (Secor, 2000).

Climatic data were obtained from a database containing information from the nearest weather station in Palo Alto. Soil properties were obtained from site-specific data collected during previous site investigations, SESOIL database and from literature for similar soil types. Chemical properties such as aqueous solubility, diffusion coefficient in air, Henry's Law Constant, adsorption coefficient, and chemical degradation were obtained from literature and from a database provided by the SESOIL and VLEACH model documentation. The parameters utilized in the modeling are presented in Table 4 along with the references.

The output data from the SESOIL model simulations were used to predict the contaminant concentration in the aquifer beneath the area of soil contamination. SESOIL uses the Summers model equation, which requires the following input parameters: (1) saturated hydraulic conductivity; (2) hydraulic gradient; (3) thickness of saturated zone; and (4) width of contaminated zone perpendicular to groundwater flow. These input parameters are also included in Table 2 and are derived from data collected from regional groundwater investigations and literature values for similar aquifers.

3.3.5 Vertical Migration Model Simulation Methods

VLEACH and SESOIL were used to simulate vertical migration of TCE over 100 years using the distribution of TCE observed in soil matrix samples collected from the site.

For the VLEACH model, the 28-foot thick vadose zone was represented by 14 cells, each measuring 2 feet in thickness. For the SESOIL model, the vadose zone was divided into the following two primary layers: 0 to 16 feet bgs as a sandy clay and 16 to 28 feet bgs as a lean clay. Each primary layer was further divided into three sublayers of equal thickness. The highest TCE soil matrix concentration detected in each depth interval (i.e., sublayer) at the site was applied as the initial condition to all cells or sublayers in the depth interval for the model. Accordingly, the initial concentrations of TCE ranged from 6,800 μg/kg (0 to 6 feet bgs) to approximately 8 μg/kg (22 to 24 feet bgs). The initial concentration below 24 feet bgs was set to zero for both models. Model simulations were performed to assess the predicted maximum pore water concentration at the top of the water table (28 feet bgs) under initial conditions and various target cleanup levels for TCE. The model simulation output for both VLEACH and SESOIL are provided in Appendix E in Volume II.

3.3.6 Vertical Migration Model Simulation Results

The various target TCE cleanup levels and the predicted maximum pore water concentrations at the groundwater surface are summarized on Table 5. In addition, the predicted concentrations of groundwater within the shallowest aquifer (A1 Upper Zone) beneath the property based on the SESOIL modeling are also presented on Table 5. The results of the modeling indicate that cleanup of TCE in the vadose zone to concentrations of 0.2 mg/kg or less, results in the predicted impact to the shallow aquifer beneath the site of 71 μg/l TCE or less. These concentrations include the lower estimated background concentration of 50 μg/l TCE and are within the approximate background TCE concentration range for the aquifer in the regional COE plume site vicinity (50-85 μg/l). As shown on Table 5, cleanup of TCE in the vadose zone to concentrations greater than 0.2 mg/kg results in a predicted impact to the shallow aquifer beneath the site greater than 85 μg/l, considered to be the upper limit of background TCE levels in groundwater in the site vicinity. For example, TCE target cleanup level of 0.25 mg/kg results in predicted impact to groundwater of 123 μg/l. Cleanup of TCE in the vadose zone to concentrations greater than 0.2 mg/kg will therefore not prevent future adverse impacts to groundwater and may result in requirements for groundwater remediation and/or participation in ongoing area-wide groundwater remediation efforts.

It should be noted that if no remediation of TCE in soil is conducted, the VLEACH and SESOIL models predict pore water concentrations of TCE at the water table of approximately 2,100 and 6,500 μg/l, respectively. These concentrations are both well above the California MCL for TCE (5 μg/l), and background concentrations of TCE in groundwater beneath the site (50 to 85 μg/l).

3.4 Discussion and Evaluation of Applicable TCE Cleanup Level

PES has evaluated the suitability of various target cleanup goals for TCE in the vadose zone beneath the site. Table 6 summarizes cleanup criteria evaluated and identifies which criteria are achieved for several target soil cleanup levels.

The RWQCB has indicated in the Order for the COE Study Area and Perimeter Area that a preliminary soil cleanup goal of 1.0 mg/kg total VOCs may be acceptable. Additionally, the RWQCB has established a Tier 1 risk-based screening level target soil cleanup concentration of 0.4 mg/kg TCE (RWQCB, 2000). The Tier 1 target cleanup level for TCE in surface and subsurface soil may be protective of human health in residential, commercial and industrial use settings and may be protective of groundwater that is a current or future source of drinking water.

However, based on the results of the alternative (Tier 3) method human health risk calculations and vertical migration modeling, a cleanup level of 0.2 mg/kg TCE is appropriate for the site. The results of the human health risk assessment indicate that removal of TCE -affected soil exceeding 0.2 to 0.4 mg/kg will be protective of human health for residences with a concrete floor slab. Based on the results of the vertical migration modeling, removal of TCE -affected soil exceeding 0.2 mg/kg is necessary to reduce the potential impact of TCE to groundwater to within background TCE levels present in groundwater at and in the vicinity of the site. A cleanup standard less stringent than 0.2 mg/kg TCE would not ensure that groundwater will not be adversely impacted by the TCE releases at the site, and might result in requirements for groundwater remediation and/or participation in ongoing area-wide groundwater remediation efforts. Accordingly, a target soil cleanup level of 0.2 mg/kg TCE is recommended for the site.

4.0 EVALUATION OF REMEDIAL ALTERNATIVES

Based on the evaluation of cleanup goals discussed in Section 3.0, above, vadose zone soil remediation is warranted. The following sections present an evaluation of potential remedial measures to reduce the human health and environmental risks to acceptable levels. Soil remedial alternatives are evaluated in terms of the criteria identified in the NCP as discussed in the following sections.

4.1 Criteria For Evaluation

Nine evaluation criteria are set forth in the NCP and accompanying USEPA guidance documents (NCP, 1990 and USEPA, 1998) for detailed evaluation of remedial action alternatives. These nine criteria are divided into three categories: "Threshold Criteria", "Primary Balancing Criteria", and "Modifying Criteria."

In accordance with USEPA guidance in the NCP, the selected alternative is required to meet the two threshold criteria. The five primary balancing criteria provide comparisons between the alternatives and identify tradeoffs between them. The two modifying criteria consider acceptance by the State and by the local community. The nine evaluation criteria are described below.

Threshold Criteria

1. **Overall Protection of Human Health and the Environment.** This criterion addresses whether a remedial alternative is protective of human health and the environment considering long-term and short-term site-specific characteristics. The remedy's short-term effectiveness, long-term effectiveness and permanence, and ability to reduce chemical toxicity, mobility and volume affect the evaluation under this criterion. This criterion considers the degree of certainty that an alternative can meet the site-specific remedial action goals.

2. **Compliance with Applicable or Relevant and Appropriate Requirements.** Remedial action objectives are developed by considering, among other things, Applicable or Relevant and Appropriate Requirements (ARARs). As defined in the NCP, Applicable Requirements are cleanup standards, standards of control, and other substantive requirements, criteria or limitations promulgated under federal environmental or state environmental or facility siting laws that specifically address a hazardous substance, pollutant, contaminant, remedial action, location or other circumstance found at a site.

   As defined in the NCP, Relevant and Appropriate Requirements are cleanup standards, standards of control, and other substantive environmental protection requirements, criteria or limitations promulgated under federal environmental or state environmental or facility siting laws that, while not "applicable" to a hazardous substance, pollutant, contaminant, remedial action, location or other circumstance found at a site, address problems or situations sufficiently similar to those encountered at the site that their use is well-suited to the particular site.

   ARARs can be separated into three categories: (1) Chemical-specific ARARs; (2) Location-specific ARARs; and (3) Action-specific ARARs. Federal and state non-promulgated standards, policies or guidance documents, and local requirements are not ARARs. However, according to NCP guidance, these items are to be considered

when evaluating and selecting removal actions necessary to protect human health and the environment. These factors are designated "To Be Considered" or "TBCs".

Balancing Criteria

1. **Long-Term Effectiveness and Permanence.** This criterion addresses how well a remedy maintains protection of human health and the environment after the site-specific remedial goals have been met to the extent feasible. Components to be addressed include the magnitude of residual risk, the adequacy and long-term reliability of institutional controls and containment systems, and potential consequences should the remedy or some portion of it fail.

2. **Reduction of Mobility, Toxicity, or Volume.** Under this criterion, the anticipated amount of the chemical of concern destroyed or treated and the amount remaining at the site are assessed, along with the degree of expected reduction in chemical mobility, toxicity, or volume.

3. **Short-Term Effectiveness.** This criterion concerns protection of human health and the environment during construction and implementation of the remedy.

4. **Implementability.** Implementability considers both the technical and administrative feasibility of implementation. The criterion also considers the ability to construct and operate remedial facilities, ease of undertaking additional remedial actions, ability to monitor remedial effectiveness, and the ability to obtain necessary approvals and permits.

5. **Cost.** The costs to be assessed include the capital cost, annual operation and maintenance costs.

Modifying Criteria

1. **State Acceptance.** The State Acceptance criterion incorporates input from state agencies to modify the alternative selection process. This input can be obtained via formal comments received during the project comment period.

2. **Community Acceptance.** This criterion addresses input from the local citizenry and can be obtained through formal comments received during the public comment period on the draft plan and through other means.

The NCP includes a requirement for treatability studies to be conducted during the remedial investigation phase of site work. Sufficient studies and documents have been previously prepared regarding treatability of TCE that additional treatability studies were not conducted as part of the previous site investigations. Furthermore, the soil would not be considered acutely hazardous, therefore, treatment of the affected soil prior to offsite disposal is not required.

Additionally, the NCP requires that an environmental evaluation of sensitive or critical habitats be conducted. In this site setting, there are no sensitive or critical habitats requiring environmental evaluation. The primary impact from TCE -affected soil at the site is to current and future site users and to groundwater beneath the site. The groundwater beneath the site is currently subject to remediation through pump and treatment (Secor, 2000).

4.2 Description of Remedial Alternatives

Five soil remedial alternatives were considered as potentially applicable for this site: (1) no action; (2) soil excavation with offsite disposal; (3) soil excavation with ex-situ on-site treatment; (4) in-situ soil vapor extraction (SVE); and (5) enhanced in-situ bioremediation. These alternatives are summarized in Table 7 and further described below.

4.2.1 Alternative 1 – No Action

Following RWQCB guidance at sites where the ecological and/or human health risk evaluation has determined that no significant risk to human health or the environment is present, a no action alternative may be appropriate if natural biological degradation of chemicals at the site could be demonstrated to be occurring. The no action alternative provides a basis of comparison for costs and benefits in the analysis of the need for, or utility of, attempting to perform remedial actions. In order to implement a "no action" alternative, strategies for administrative controls consistent with current residential zoning may need to be developed between the property owner and the RWQCB. Administrative controls could include land use restrictions and/or zoning restrictions.

4.2.2 Alternative 2 – Soil Excavation with Offsite Disposal

Soil excavation with offsite disposal consists of removal of soil exceeding the target cleanup goal to the extent practical and replacement with clean, imported fill materials. This alternative will result in the reduction of the volume of soil containing TCE and, therefore, lower the potential human health risks and potential for impact to groundwater beneath the site. Approximately two to three weeks will be required to complete the soil excavation. The excavated soil would be characterized, and based on the results of the characterization, sent to an appropriately permitted landfill for treatment, if necessary, and subsequent disposal. On the basis of the remedial investigations conducted at the site, the soil would likely be classified so that pre-treatment prior to transport would not be required. Soil excavation would remove much of the mass of the contaminants in soil and reduce the potential for groundwater contamination.

4.2.3 Alternative 3 – Soil Excavation with Ex-Situ Onsite Treatment

Soil excavation with ex-situ on-site treatment consists of: (1) excavating soil exceeding the target cleanup goal to the extent feasible; (2) replacement with clean, imported fill materials;

(3) on-site enhanced bioremediation of the VOC-affected excavated soil; and (4) subsequent offsite disposal at a Class III landfill. This alternative will also result in the reduction of the volume of soil containing TCE and, therefore, lower the potential human health risks and potential for impact to groundwater at the site. Implementation of this alternative would require use of a relatively large area of the site to perform treatment of the excavated soil, and is expected to require at least one year for completion.

Ex-situ enhanced bioremediation consists of stimulating the growth of naturally occurring, or introduced, microorganisms that can utilize organic chemicals as a food source. Microorganisms are stimulated by one of two methods: (1) co-metabolism and (2) reductive dehalogenation. Chlorinated hydrocarbons such as TCE are not generally used as a primary food source by microorganisms. However, in a co-metabolic bioremediation system, a co-metabolite (i.e., a primary food source other than the contaminants, such as phenol or methane) is introduced into the subsurface along with oxygen and micronutrients, if necessary. In the course of consuming the primary food source, some of the contaminants are also consumed (i.e., co-metabolized) by microorganisms. In a reductive dehalogenation bioremediation system, anaerobic conditions are established in the treatment area to stimulate the activity of anaerobic microorganisms.

The advantages of ex-situ bioremediation are that the contaminants are destroyed using biological processes rather than merely transferred to a different medium. Disadvantages of ex-situ bioremediation are: (1) it is relatively unproven in full-scale applications for chlorinated VOCs; (2) the introduction of additional chemicals to the affected soil may produce other contamination concerns as it is possible that incomplete biodegradation of contaminants may produce other toxic byproducts such as vinyl chloride; (3) chlorinated VOCs are relatively resistant to biodegradation; (4) the length of time required to conduct bioremediation; and (5) the loss of use of a relatively large portion of the property. Additionally, maintaining proper soil moisture conditions and distribution of nutrients in a heterogeneous soil stockpile environment are expected to be difficult to achieve.

4.2.4 Alternative 4 – Soil Vapor Extraction

Soil vapor extraction involves applying a vacuum to establish vapor flow in soil towards extraction wells screened in the vadose zone. A zone of influence is established around the extraction point in which vapor-phase compounds migrate and are extracted through the wells. Extracted vapors are then treated by activated carbon or another technology before release to the atmosphere. Soil vapor extraction is expected to require approximately three years to implement. The advantages of SVE are that the process can remove contaminants without large-scale excavation or significant disruption to the current structures and future operations. The disadvantages of SVE are that due to the fine-grained nature of the vadose zone soil and expected corresponding low vapor flow rates, the relatively small radius of effective vacuum influence, and the possible formation of preferential vapor flow pathways, the effectiveness of SVE is uncertain. Additionally, an SVE extraction and treatment system entails significant

capital and operating expenses. It may be disruptive to occupants and it requires that a portion of the property be set aside for treatment equipment.

4.2.5 Alternative 5 - Enhanced In-Situ Bioremediation

Enhanced in-situ bioremediation consists of stimulating the growth of naturally occurring, or introduced, microorganisms that can utilize organic chemicals as a food source. As in ex-situ bioremediation discussed above, microorganisms are stimulated by either co-metabolism or reductive dehalogenation. Chlorinated hydrocarbons such as TCE are not generally used as a primary food source by microorganisms. As noted above, a co-metabolite (phenol or methane) is introduced into the subsurface along with oxygen and micronutrients, if necessary. In the course of consuming the primary food source, some of the contaminants are also consumed (i.e., co-metabolized) by microorganisms. In a reductive dehalogenation bioremediation system, anaerobic conditions are established in the treatment area to stimulate the activity of anaerobic microorganisms. A treatment period of approximately five years is expected for this alternative.

The advantages of in-situ bioremediation are that the disruption to existing structures and operations is reduced relative to soil excavation or ex-situ treatment methods. Additionally, the contaminants are destroyed using in-situ bioremediation rather than merely transferred to a different medium. Disadvantages of in-situ bioremediation are: (1) it is relatively unproven in full-scale applications for chlorinated VOCs; (2) the introduction of additional chemicals to the subsurface may produce other contamination concerns as it is possible that incomplete biodegradation of contaminants may produce other toxic byproducts such as vinyl chloride; and (3) chlorinated VOCs are relatively recalcitrant to biodegradation. Additionally, maintaining proper soil moisture conditions and distribution of nutrients in a heterogeneous vadose zone environment are expected to be difficult to achieve.

4.3 Comparative Analysis of Remedial Alternatives

This section presents an analysis of each of the remedial alternatives relative to each of the nine NCP criteria described in Section 4.1, above. Table 8 presents a summary of these analyses.

Threshold Criteria

4.3.1 Overall Protection of Human Health and the Environment

Alternative 1 (No Action) is not considered protective of human health or the environment because levels of TCE in soil exceeding the cleanup goal would remain on-site. Alternatives 2 through 5 are considered protective of human health and the environment. Remedial actions proposed for these alternatives are designed to reduce the concentration of TCE in soil to below the cleanup goal of 0.2 mg/kg. Alternative 5 is considered less protective than

Alternatives 2 through 4, due to the potential for production of more toxic byproducts, such as vinyl chloride, during implementation of the remedial action.

4.3.2 Compliance with ARARs

The selected remedial alternative must comply with ARARs, TBCs and remedial action objectives. Table 9 presents a summary of ARARs and TBCs considered in evaluation of remedial alternatives. Alternative 1 (No Action) is not considered to comply with ARARs and TBCs because levels of TCE in soil exceeding the cleanup goal and other applicable criteria would remain on-site.

Alternative 2 complies with ARARs. Affected soil would be excavated from the site and disposed off-site in accordance with federal and state classifications and requirements. Soil with concentrations of TCE that may create adverse human health or groundwater impacts would be removed from the site.

Alternative 3 is believed to comply with ARARs. Affected soil would be removed from the site through excavation and subsequently treated to an acceptable level.

Alternative 4 is believed to comply with ARARs. TCE -affected soil would be treated in-situ thereby reducing the adverse human health or groundwater impacts related to the presence of the pollutant. However, there is some uncertainty regarding the effectiveness of SVE. As a result groundwater quality may be adversely affected in the future if unaffected regions of the vadose zone allow vertical migration of TCE to occur.

Alternative 5 is believed to comply with ARARs, although this alternative presents some uncertainty regarding non-degradation of groundwater due to the introduction of a co-metabolite and possible formation of other toxic byproducts as a result of incomplete biodegradation.

Balancing Criteria

4.3.3 Long-Term Effectiveness and Permanence

Alternative 1 (No Action) is not considered to provide long-term effectiveness or permanence. TCE -affected soil exceeding the cleanup goal would remain on-site and would not be treated or contained.

Alternative 2 provides the best performance in terms of long-term effectiveness and permanence.

Long-term effectiveness of Alternative 3 is questionable due to the relatively unproven status with respect to full-scale applications and the possibility of the formation of more toxic

byproducts. Soil containing TCE greater than the target cleanup goal would be excavated, treated (Alternative 3), and disposed offsite under this alternative.

Alternative 4 may provide long-term effectiveness and permanence, however due to the fine-grained nature of the vadose zone soil and corresponding low vapor flow rates, relatively small radius of effective vacuum influence and possible formation of preferential vapor flow pathways, the effectiveness of SVE is somewhat uncertain.

Alternative 5 is considered to provide uncertain long-term effectiveness and permanence due to its relatively unproven status with respect to full-scale applications and the possibility of the formation of more toxic byproducts.

4.3.4 Reduction of Mobility, Toxicity or Volume

Alternative 1 (No Action) provides no reduction of mobility, toxicity or volume of the impacted site soil. TCE -affected soil exceeding the cleanup goal would remain on-site and would not be treated or contained.

Alternative 2 results in a relocation of the TCE -affected soil from the site to an appropriate landfill. Through the excavation and placement of the TCE -affected soil in a controlled landfill environment there is a reduction of mobility and toxicity of TCE -affected soil.

Alternative 3 provides a reduction of mobility, toxicity and volume of the impacted soil provided enough time is allowed for bioremediation. Soil containing TCE greater than the cleanup goal would be excavated, treated (Alternative 3), and disposed off-site under these two alternatives.

Alternative 4 has the potential to significantly reduce the mobility, toxicity and volume of the impacted soil, however due to the fine-grained nature of the vadose zone soil, the effectiveness of SVE is somewhat uncertain.

While effective application of Alternative 5 would reduce the mobility and volume of impacted soil, it has the potential for production of more toxic byproducts, such as vinyl chloride, during implementation of the remedial action.

4.3.5 Short-Term Effectiveness

Alternative 1 (No Action) is not considered to provide short-term effectiveness, as no work would be performed to protect human health and the environment. TCE -affected soil exceeding the cleanup goal would remain on-site and would not be treated or contained.

Alternative 2 provides the best performance in terms of short-term effectiveness because significant amounts of impacted soils would be rapidly removed from the site.

Alternative 3 is not considered to provide short-term effectiveness, due to the potential risk and unacceptability to site users and nearby residents posed by the presence of stockpiled soil undergoing treatment. Additionally, Alternative 3 would require periodic soil treatments for moisture application and tilling which could result in potential exposure of site users or nearby residents of affected dust or vapor.

Due to the fine-grained nature of the vadose zone soil and the estimated three-year period required to complete the remediation, the short-term effectiveness of Alternative 4 is uncertain.

Alternative 5 is not expected to be an effective short-term alternative.

4.3.6 Implementability

All alternatives are believed to be implementable to various degrees. The variations in implementation between alternatives are primarily a function of working conditions (i.e. presence of on-site structures) and lithologic and biologic subsurface conditions.

Implementation of Alternatives 2 and 3 may be constrained by the location and structure of the building foundation relative to the area of excavation.

Alternative 3 requires use of a relatively large portion of the property and is contingent upon the availability of outdoor space, which is limited and is needed for site operations. Implementation of Alternative 3 is uncertain given its relatively unproven status with respect to full-scale applications and the possibility of the formation of more toxic byproducts.

Implementation of Alternative 4 may be constrained by the fine-grained nature of the vadose zone soils and the associated difficulties in conducting SVE in such soil. Additionally, Alternative 4 would require capital expenditures for purchase, installation and operation of SVE equipment and loss of usable property due to the space required for the SVE system.

Implementation of Alternative 5 is contingent upon the biologic and chemical characteristics of the vadose zone. Implementation of Alternative 5 is uncertain given its relatively unproven status with respect to full-scale applications and the possibility of the formation of more toxic byproducts.

4.3.7 Cost

Table 9 summarizes the estimated capital and annual costs for each of the remedial alternatives considered. As indicated on the table, costs for Alternatives 2 and 3 are estimated to be approximately $200,000. Costs for Alternatives 4 and 5 are approximately $388,000 and $285,000, respectively. While the cost of Alternatives 2 and 3 are the same, Alternative 2 is considered more cost effective due to the loss of usable space at the subject property associated with Alternative 3. The estimate of costs associated with Alternative 3 does not include the

loss of revenue associated with use of that portion of the property nor does it consider potential costs to repair the portion of the property utilized for bioremediation.

4.3.8 State Acceptance

Alternative 1 (No Action) is not expected to be acceptable to the California RWQCB. Alternatives 2 through 4 are likely to be acceptable to State regulators; they each have been demonstrated to effectively remove TCE from the subsurface. Alternative 5 may be acceptable to State regulators, depending upon their perspective on issues pertaining to the feasibility of successfully applying a technology that is relatively unproven with respect to full-scale application.

4.3.9 Community Acceptance

The acceptance of Alternatives 1 through 5 by the community is unknown at this time, but will be ascertained during the public comment period.

4.4 Summary Comparison of Remedial Alternatives

This section provides a summary of the factors leading to selection of a recommended remedial action alternative. Table 10 presents a summary of the comparative analysis of each remedial action alternative that focuses upon the relative performance of each alternative against the NCP criteria.

As shown on Table 10, Alternative 1 is judged not to pass the threshold criteria. In particular, this option would not be effective in reducing human health and environmental exposure risks, and does not satisfy ARARs because levels of TCE in soil exceeding the cleanup goal would remain on-site. The remaining NCP criteria are not considered further because Alternative 1 is eliminated due to failure on the threshold criteria.

Alternative 2 passes the threshold criteria and provides both long- and short-term effectiveness. Excavation and offsite disposal of TCE -affected soil removes the affected soil from the site and through the removal process and placement of this soil in a controlled landfill environment there is a reduction in the toxicity and mobility of the TCE. Because the site is currently unoccupied, the soil excavation alternative would be relatively simple to implement and would be effective in reducing the overall risk to human health and the environment. Alternative 2 has lower costs as compared to other alternatives and is believed to be viable under State and community acceptance criteria. The costs of Alternative 2 are the same as Alternative 3, however, additional costs associated with the loss of useable property associated with Alternative 3 are not considered. Therefore, the costs associated with Alternative 2 are deemed lower.

Alternative 3 passes the threshold criteria and provides both long- and short-term effectiveness in addition to a reduction in the mobility, toxicity, or volume of on-site contaminants. While

soil excavation with ex-situ on-site treatment is expected to be equally effective (given enough time for completion of Alternative 3) and comparable in cost relative to soil excavation with offsite disposal, there are uncertainties associated with the duration of operation and technical effectiveness of this approach. There are also practical drawbacks to this approach due to its use of a relatively large portion of the property. The cost of such use is not included in the cost estimate for this approach. As a result, soil excavation with on-site treatment is deemed less advantageous than soil excavation with off-site disposal.

Alternative 4 may pass the threshold criteria if SVE can be expected to reduce soil concentrations to the target cleanup level, and if as a result it could reduce the mobility, toxicity, or volume of on-site contaminants. However, Alternative 4 may not be effective in this setting because the soils underlying the site are predominantly fine-grained clays, which are generally not ideal for vapor movement and may reduce the effectiveness and/or increase the complexity of an extraction system. In addition, it is assumed that an SVE system will likely require three years of operation including use of an above-ground vapor extraction and treatment system, which will limit its short-term effectiveness. Implementability of Alternative 4 is uncertain due to the loss of usable property due to the space required for the SVE treatment system. The estimated cost for soil vapor extraction is high compared with the other alternatives. Due to the high cost and uncertainties associated with the duration of operation and technical effectiveness, Alternative 4 was not recommended.

Alternative 5 may also pass the threshold criteria and may also have the potential for long-term effectiveness in addition to a reduction in the mobility and volume of on-site contaminants. Alternative 5 may not, however, provide long-term effectiveness due its unproven full-scale applicability and the relative resistance of chlorinated VOCs to biodegradation. In addition, it is assumed that enhanced in-situ bioremediation will likely require five years of operation, which will limit its short-term effectiveness. Additionally, maintaining proper soil moisture conditions and distribution of nutrients in a heterogeneous vadose zone environment will be difficult to achieve. The estimated cost for enhanced in-situ bioremediation is relatively high compared with the other alternatives. Due to the uncertainties associated with the: (1) duration of operation; (2) technical effectiveness; and (3) regulatory acceptance, enhanced in-situ bioremediation was not recommended.

4.5 Recommended Remedial Alternative

Soil excavation with offsite disposal is the recommended remediation alternative for removal of VOCs in vadose zone soils. The technique will effectively and economically reduce the mass of contaminants in soil, providing reduced risk to human health and the environment. Additionally, soil excavation with offsite disposal will require the shortest duration and is the least uncertain of the technically feasible remediation measures. Balance is struck in favor of soil excavation and offsite disposal due to the uncertainty of in-situ treatment and excavation and ex-situ treatment, due to cost, implementability, short- and long-term effectiveness, and the ability of these means to reduce the mobility, toxicity and volume of contamination. As such, it is the recommended remedial alternative for the site.

Soil excavation will be performed in the vicinity of the former refrigeration unit. The excavated soil will be characterized, and on the basis of the characterization, transported to an appropriately permitted landfill for treatment, if necessary, and subsequent disposal. A more detailed discussion of the preferred remedial alternative is presented in Section 5.0, below.

5.0 REMEDIAL ACTION PLAN IMPLEMENTATION

This section discusses the conceptual design of the recommended remedial action. Schedules for remedial action implementation and reporting are also presented.

5.1 Conceptual Remedial Action Design

5.1.1 Remediation Procedures

Based on the results of the subsurface investigations conducted at the site (PES, 2000 and IT, 2000a and 2000b), the extent of soil with TCE concentrations in excess of the target cleanup goal (0.2 mg/kg) has been adequately estimated for remedial planning purposes. The proposed limits of excavation are presented on Plate 4. Plate 4 graphically presents the aerial extent of TCE -affected soil exceeding the proposed cleanup goal at 4-foot-depth intervals (i.e., 0 to 4, 4 to 8, 8 to 12, 12 to 16, and 16 to 20 feet bgs). On the basis of the data obtained from the previous subsurface investigations, TCE -affected soil exceeding 0.2 mg/kg is expected to extend to approximately 20 feet bgs. As shown on Plate 4, the areal extent of TCE -affected soil exceeding 0.2 mg/kg is expected to range from approximately 160 square feet (ft^2) from 16 feet to 20 feet bgs, to 800 ft^2 from approximately 0 to 4 feet bgs. As such, the in-place volume of TCE -affected soil requiring removal is estimated to be approximately 470 cubic yards (approximately equivalent to 660 tons). The actual volume will depend on the distribution of TCE in soil, and inherent limitations of soil excavation equipment and techniques. Soil excavation will be conducted to remove soil with TCE concentrations in excess of the target cleanup goal to the extent practical.

5.1.1.1 Permitting and Contractor Health and Safety

The work will be conducted in accordance with applicable federal, state and local regulations. These include, but are not limited to:

- National Fire Protection Association (NFPA) NFPA 30 Flammable and Combustible Liquids;
- Occupational Safety and Health Administration (OSHA), Title 29 Code of Federal (CFR) 1910.120. Regulations applicable to hazardous waste site operations (HAZWOPER);
- Health and Safety Code Division 20, Chapters 6.5 and 6.8;

- Title 8 California Code of Regulations (CCR) GISO 5192 Hazardous Materials Storage Ordinance, and Title 8 CCR 1532.1;
- Title 22, CCR Sections 66261.2 and 66261.3; and
- City of Palo Alto Grading Ordinance.

The excavation and soil handling will be conducted by a qualified, HAZWOPER-trained, contractor using conventional earthwork equipment. The contractor will prepare a Site Specific Health and Safety Plan (HSP), which will address identification of hazards, hazard mitigation, safe work practices and emergency response procedures for the project. The site-specific HSP will be prepared to comply with 29 CFR 1910.120 and 8 CCR GISO 5192. Additionally, any remediation subcontractors selected to perform remedial work onsite will be required to prepare a HSP for its activities.

PES will attempt to obtain as-built construction drawings from El Camino Center or the city building department prior to implementing remediation. Prior to initiating soil excavation, a structural engineer will be contracted to assess the stability of the onsite building, and provide recommendations regarding excavation procedures that are protective of the building structure. Necessary permits will be obtained by the remediation contractor prior to conducting remedial activities.

Prior to conducting the remediation, a private underground utility locating service will be hired to clear the proposed excavation of subsurface utilities. In addition, Underground Service Alert will be contacted to schedule visits by public and private utility companies.

5.1.1.2 General Excavation Procedures and Soil Management

Prior to initiating soil removal activities, a geotechnical/foundation engineer will be retained to assess the structural integrity of the building and foundation. While the design specifications for the excavation procedures will not be finalized until the structural evaluation is completed, it is anticipated that excavation of soils deeper than approximately 5 feet will be performed in narrow strips or "slots" to maintain the integrity of the foundation support. Depending on the results of the evaluation, each "slot" is expected to measure approximately 4 to 5 feet wide (actual width to be determined based on results of evaluation) and will be excavated and backfilled with a two-sack cement slurry prior to excavating the next adjacent "slot".

Prior to the excavation, the concrete pad overlying the soil removal area will be removed and segregated for disposal. The soil will be removed and segregated based on field screening into two separate stockpiles: (1) potentially reusable fill stockpile; and (2) impacted soil stockpile. Impacted soil and concrete will be placed on and covered with polyethylene or in locked and covered soil bins until characterization and disposal arrangements are completed. Soil and concrete samples will be collected and submitted for chemical analyses to evaluate onsite reuse and disposal alternatives. Soil samples to evaluate waste classification will be collected at a

frequency required by the disposal or recycling facility to which the waste will be transported. Soil samples collected to evaluate potential reuse as onsite fill will be collected at an approximate frequency of one 4-point composite sample per 100 cubic yards of soil. The composite samples will be analyzed for VOCs by USEPA Test Method 8260B. Offsite disposal of the impacted soil will be conducted based on the soil stockpile analytical results under appropriate documentation and in accordance with applicable Federal, State, and local regulations.

5.1.1.3 Verification Soil Sampling

Verification soil samples will be collected from each "slot" using a hand sampler and earthmoving equipment to evaluate whether the remedial goal has been met. The sidewall soil samples will be collected at depth intervals corresponding to areas exhibiting field indications of potential contamination and at depths where previous samples indicated contaminants were present. In addition, verification soil samples will be collected from the excavation bottom for analysis to evaluate whether soil removal has met the remedial goal. Sample locations and the number of samples collected per "slot" may be adjusted in the field if necessary. Deviation from this plan will be discussed with RWQCB staff and explained in the final report documenting the excavation. Verification sample analyses will likely be performed utilizing an expedited laboratory turn-around schedule or an onsite mobile laboratory in order to reduce the likelihood for significant delays to affect the remedial action schedule. Should laboratory analytical results indicate that the cleanup goal has not been attained, additional excavation will be performed to the extent feasible. Detailed descriptions of the verification sampling procedures and analytical program are discussed in the Verification Sampling and Analysis Plan (VSAP) provided in Appendix B.

The concrete removed from the excavation area will be sampled for VOCs for waste characterization. One composite sample of the concrete will be collected and submitted to the laboratory for VOC analysis using USEPA Test Method 8260B. The sampling will be conducted in accordance with the procedures discussed in the VSAP in Appendix B. Offsite disposal or recycling of the concrete will be conducted in accordance with applicable federal, state and local regulations.

5.1.1.4 Dust and Odor Control

During excavation activities, depending on soil conditions, there is potential to generate airborne dust. Therefore, as required, the contractor will apply a water mist to the excavation and soil handling and haul roads to reduce the potential for dust generation. Soils will be wetted as needed to reduce the occurrence of visible dust. Air monitoring will be conducted in accordance with local air quality management regulations as described in the contractor's HSP.

5.1.1.5 Decontamination

Equipment used to excavate, transport and manage the VOC-affected soil will be decontaminated prior to leaving the site. The equipment will first be decontaminated in an area designated for stockpiling excavated soil by removing visible soil by sweeping or brushing. Soil that cannot be removed by this procedure will be removed from equipment by washing in a prepared decontamination area. The decontamination area will be constructed in a to be determined location. Decontamination wash water will be collected, characterized and appropriately disposed or recycled in accordance with applicable federal, state and local regulations.

5.1.1.6 Excavation Backfilling

As described above, backfilling of deeper soils (i.e. greater than approximately 5 feet bgs) will be performed concurrent with excavation activities. Backfilling of each "slot" from the maximum depth of excavation to approximately 5 feet below grade will be accomplished using a soil/cement slurry (flowable fill). Once each "slot" is backfilled to approximately 5 feet below grade, the remainder of the excavation will be backfilled with either reusable onsite fill material or imported fill material. This material will be placed in 8- to 12-inch thick lifts, and compacted to a minimum of 95 percent relative maximum density. Once backfilling is completed, an approximately 6-inch thick concrete slab will be constructed over the excavation area to match existing surface conditions.

5.2 Schedule of Remedial Action Implementation and Reporting

It is anticipated that if the recommended remedial alternative is adopted after the 30-day public comment period, the remediation site work will commence in approximately seven to ten working days. The work is expected to be completed within approximately 10 to 15 working days.

5.3 Performance Criteria

PES will evaluate the progress of the soil remediation program throughout the excavation processes. The laboratory analytical results of the soil verification samples will be compared to the proposed remedial goal for TCE. If TCE is detected in verification soil sampling above the proposed cleanup goal and further excavation is not feasible, without compromising the structural integrity of the building, PES will consult with El Camino Center and RWQCB to determine the appropriateness of instituting additional remedial measures, if warranted.

5.4 Reporting

Following completion of soil excavation activities, PES will prepare an implementation report summarizing the work performed, verification soil sample analytical results, and the soil cleanup level achieved. Copies of laboratory reports and chain-of-custody forms will be

included. The report will be submitted approximately 4 to 6 weeks following completion of site remediation activities. A request to the RWQCB for case closure will be prepared once site data and regulatory environment indicate that closure is appropriate.

6.0 ADMINISTRATIVE RECORD

A summary of administrative records is presented in Appendix C. The administrative record list consists of letters and reports directly related to the site and regulatory guidance documents utilized during the preparation of the RAP.

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Table 1
Soil Sample Analytical Results
Former Mercer Processing Facility
230 Portage Avenue
Palo Alto California

Boring Designation	Sample Designation	Date	Sample Depth (feet bgs)	TCE (µg/kg)	1,1-DCE (µg/kg)	cis-1,2-DCE (µg/kg)	trans-1,2-DCE (µg/kg)	MEK (µg/kg)	t-butanol (µg/kg)	Acetone (µg/kg)
GS-2[1]	GS-2-0.5	12/21/99	0.5	<5	<5	<5	<5	<20	**23**	<100
	GS-2-3.5	12/21/99	3.5	***54***	<5	<5	<5	<20	<20	<100
GS-3[1]	GS-3-0.5	12/21/99	0.5	**470**	<25	<25	<25	<100	<100	<500
GS-4[1]	GS-4-0.5	12/21/99	0.5	<5	<5	<5	<5	**47**	<20	**230**
	GS-4-2.0	12/21/99	2.0	<5	<5	<5	<5	**24**	<20	**150**
	GS-4-4.0	12/21/99	4.0	<5	<5	<5	<5	<20	<20	<100
	GS-4-6.0	12/21/99	6.0	<5	<5	<5	<5	<20	<20	<100
GS-5[1]	GS-5-0.5	12/21/99	0.5	<5	<5	<5	<5	**52**	<20	**270**
	GS-5-2.0	12/21/99	2.0	<5	<5	<5	<5	**47**	<20	**330**
	GS-5-6.0	12/21/99	6.0	<5	<5	<5	<5	<20	<20	**120**
A[2]	A-0	6/1/00	0.0	<100	<100	<100	<100	<500	NA	<1000
	A-2	6/1/00	2.0	<100	<100	<100	<100	<500	NA	<1000
	A-4	6/1/00	4.0	<100	<100	<100	<100	<500	NA	<1000
	A-7	6/1/00	7.0	<100	<100	<100	<100	<500	NA	<1000
	A-8	6/1/00	8.0	<100	<100	<100	<100	<500	NA	<1000
	A-10	6/1/00	10.0	<100	<100	<100	<100	<500	NA	<1000
B[2]	B-0	6/1/00	0.0	**442**	<100	<100	<100	<500	NA	<1000
	B-4	6/1/00	4.0	**6800**	<100	<100	<100	<500	NA	<1000
	B-6	6/1/00	6.0	**4190**	<100	<100	**117**	<500	NA	<1000
B[2]	B-8	11/1/00	8.0	**810**	<5	**35**	**48**	NA	NA	<50
	B-10	11/1/00	10.0	**900**	<5	**32**	**48**	NA	NA	<50
	B-12	11/2/00	12.0	**240**	**19**	<5	<5	NA	NA	<50
	B-14	11/2/00	14.0	**240**	**26**	<5	<5	NA	NA	<50
	B-16	11/1/00	16.0	**200**	**28**	**3.5J**	<5	NA	NA	<50
	B-18	11/1/00	18.0	**240**	**39**	**4.9J**	<5	NA	NA	<50
	B-20	11/1/00	20.0	**180**	**32**	**4.4J**	<5	NA	NA	<50
	B-22	11/1/00	22.0	**6.1**	**3.5J**	**4.3J**	<5	NA	NA	<50
	B-24	11/1/00	24.0	**3.0J**	<5	**4.0J**	<5	NA	NA	<50
C[2]	C-0	6/1/00	0.0	<100	<100	<100	<100	<500	NA	<1000
	C-4	6/1/00	4.0	**270**	<100	<100	<100	<500	NA	<1000
	C-6	6/1/00	6.0	**659**	<100	<100	<100	<500	NA	<1000
D[2]	NL[3]	9/1/00	8.0	**470**	NL	NL	NL	NL	NL	NL
	NL[3]	9/1/00	10.0	**600**	NL	NL	NL	NL	NL	NL
	NL[3]	9/1/00	12.0	**460**	NL	NL	NL	NL	NL	NL
	NL[3]	9/1/00	14.0	**180**	NL	NL	NL	NL	NL	NL
	NL[3]	9/1/00	16.0	**46**	NL	NL	NL	NL	NL	NL
	NL[3]	9/1/00	18.0	**270**	NL	NL	NL	NL	NL	NL
	NL[3]	9/1/00	20.0	**170**	NL	NL	NL	NL	NL	NL
	NL[3]	9/1/00	22.0	**7.6**	NL	NL	NL	NL	NL	NL
	NL[3]	9/1/00	24.0	ND	NL	NL	NL	NL	NL	NL

Table 1
Soil Sample Analytical Results
Former Mercer Processing Facility
230 Portage Avenue
Palo Alto California

Boring Designation	Sample Designation	Date	Sample Depth (feet bgs)	TCE (µg/kg)	1,1-DCE (µg/kg)	cis-1,2-DCE (µg/kg)	trans-1,2-DCE (µg/kg)	MEK (µg/kg)	t-butanol (µg/kg)	Acetone (µg/kg)
E[2]	NL[3]	9/1/00	6.0	**34**	NL	NL	NL	NL	NL	NL
	NL[3]	9/1/00	8.0	**170**	NL	NL	NL	NL	NL	NL
	NL[3]	9/1/00	10.0	**69**	NL	NL	NL	NL	NL	NL
	NL[3]	9/1/00	12.0	**34**	NL	NL	NL	NL	NL	NL
F[2]	NL[3]	9/1/00	6.0	**33**	NL	NL	NL	NL	NL	NL
	NL[3]	9/1/00	8.0	**26**	NL	NL	NL	NL	NL	NL
	NL[3]	9/1/00	10.0	**15**	NL	NL	NL	NL	NL	NL
	NL[3]	9/1/00	12.0	**18**	NL	NL	NL	NL	NL	NL
	NL[3]	9/1/00	14.0	**25**	NL	NL	NL	NL	NL	NL
	NL[3]	9/1/00	16.0	**30**	NL	NL	NL	NL	NL	NL
	NL[3]	9/1/00	18.0	**24**	NL	NL	NL	NL	NL	NL
	NL[3]	9/1/00	20.0	**10**	NL	NL	NL	NL	NL	NL
	NL[3]	9/1/00	22.0	ND	NL	NL	NL	NL	NL	NL
	NL[3]	9/1/00	24.0	ND	NL	NL	NL	NL	NL	NL
G[2]	NL[3]	9/1/00	4.0	ND	NL	NL	NL	NL	NL	NL
	NL[3]	9/1/00	6.0	ND	NL	NL	NL	NL	NL	NL
	NL[3]	9/1/00	8.0	ND	NL	NL	NL	NL	NL	NL
	NL[3]	9/1/00	10.0	ND	NL	NL	NL	NL	NL	NL
	NL[3]	9/1/00	12.0	ND	NL	NL	NL	NL	NL	NL
	NL[3]	9/1/00	14.0	**74**	NL	NL	NL	NL	NL	NL
	NL[3]	9/1/00	16.0	ND	NL	NL	NL	NL	NL	NL
	NL[3]	9/1/00	18.0	**38**	NL	NL	NL	NL	NL	NL
	NL[3]	9/1/00	20.0	**43**	NL	NL	NL	NL	NL	NL
	NL[3]	9/1/00	22.0	**3.2**	NL	NL	NL	NL	NL	NL
	NL[3]	9/1/00	24.0	ND	NL	NL	NL	NL	NL	NL
H2	NL[3]	9/1/00	2.0	NR	NL	NL	NL	NL	NL	NL
	NL[3]	9/1/00	4.0	NR	NL	NL	NL	NL	NL	NL
	NL[3]	9/1/00	10.0	**41**	NL	NL	NL	NL	NL	NL
	NL[3]	9/1/00	12.0	**74**	NL	NL	NL	NL	NL	NL
H2[2]	NL[3]	11/1/00	6.0	ND	NL	NL	NL	NL	NL	NL
	H2-14	11/1/00	14.0	**91**	**55**	**4.0J**	<5	NA	NA	<50
	H2-16	11/1/00	16.0	**99**	**67**	**5.7**	<5	NA	NA	<50
	H2-18	11/1/00	18.0	**100**	**60**	**5.6**	<5	NA	NA	<50
	H2-20	11/1/00	20.0	**93**	**63**	**5.3**	<5	NA	NA	<50
	H2-22	11/1/00	22.0	<5	**2.7J**	**4.7J**	<5	NA	NA	<50
I[2]	NL[3]	9/1/00	10.0	ND	NL	NL	NL	NL	NL	NL
J[2]	NL[3]	9/1/00	2.0	ND	NL	NL	NL	NL	NL	NL
	NL[3]	9/1/00	6.0	ND	NL	NL	NL	NL	NL	NL
	NL[3]	9/1/00	8.0	ND	NL	NL	NL	NL	NL	NL

Table 1
Soil Sample Analytical Results
Former Mercer Processing Facility
230 Portage Avenue
Palo Alto California

Boring Designation	Sample Designation	Date	Sample Depth (feet bgs)	TCE (µg/kg)	1,1-DCE (µg/kg)	cis-1,2-DCE (µg/kg)	trans-1,2-DCE (µg/kg)	MEK (µg/kg)	t-butanol (µg/kg)	Acetone (µg/kg)
K[2]	K-(0.5-1)	11/1/00	0.5-1.0	**5.7**	<5	<5	<5	NA	NA	<50
	K-2	11/1/00	2.0	**210**	<5	**9.5**	<5	NA	NA	<50
	K-4	11/1/00	4.0	<5	<5	<5	<5	NA	NA	<50
	K-5.5	11/1/00	5.5	**97**	<5	**5.6**	<5	NA	NA	<50
	K-8	11/2/00	8.0	**100**	<5	**14**	**12**	NA	NA	<50
	K-10	11/2/00	10.0	<5	**4.4J**	<5	<5	NA	NA	<50
L[2]	L-1	11/1/00	1.0	<5	<5	<5	<5	NA	NA	<50
	L-2	11/2/00	2.0	<5	<5	<5	<5	NA	NA	<50
	L-4	11/1/00	4.0	<5	<5	<5	<5	NA	NA	<50
L2[2]	NL[3]	11/1/00	2.0	ND	NL	NL	NL	NL	NL	NL
	NL[3]	11/1/00	4.0	ND	NL	NL	NL	NL	NL	NL
L2[2]	L2-6	11/2/00	6.0	<5	<5	<5	<5	NA	NA	<50
	L2-8	11/2/00	8 0	<5	<5	<5	<5	NA	NA	<50

Notes:
µg/kg = micrograms per kilogram
bgs = below ground surface
< = compound not detected at or above the respective laboratory reporting limit
J = estimated value, less than the laboratory practical quantitation limit but greater than the method detection limit
NA = Not analyzed
NL = Not listed
NR = No sample recovery
TCE = trichloroethylene
MEK = methyl ethyl ketone
t-butanol = tert-butanol
1,1-DCE = 1,1,-dichloroethylene
cis-1,2-DCE = cis-1,2-dichloroethylene
trans-1,2-DCE = trans-1,2-dichloroethylene
[1] = Boring drilled and sampled by PES in December 1999
[2] = Boring drilled and sampled by IT Corp. in June, September or November 2000
[3] = Precise sample designation, sample depth, sample date, and laboratory reporting limits unknown; laboratory reports for these samples not provided in IT Corp. report dated November 21, 2000. Data presented graphically in IT Corp. November 21, 2000 Report.

Table 2
Summary of Input Parameters - SESOIL and VLEACH Models
Former Mercer Processing Facility
230 Portage Avenue
Palo Alto, California

Parameter	Units	Value	Reference
Vadose Zone and Chemical Properties			
Soil Type - 0 to 16 feet bgs	--	sandy clay	Reference 1
- 16 to 28 feet bgs		lean clay	Reference 1
Depth to Groundwater	ft	28	Reference 2
Bulk Soil Density	g/cm^3	1.6	SESOIL Database
Effective Porosity	unitless	0.24	SESOIL Database
Organic Carbon Content	percent	0.1	Assumption
Henry's Law Constant, K	m^3 - ATM/mole	0.0103	Reference 3 (Trichloroethene)
Solubility in Water	mg/L	1100	Reference 3 (Trichloroethene)
Adsorption Coefficient on Carbon (Koc)	unitless	94	SESOIL Database
Adsorption Coefficient on Soil (K)	unitless	0	SESOIL Database
Climate Data	--	--	SESOIL Database (Palo Alto Weather Station)
Diffusion Coefficient in Air	cm^2/sec	0.079	Reference 3 (Trichloroethene)
Recharge Rate	ft/year	0.4	Reference 4 and SESOIL Database
Degradation Rate	per day	0	Assumption
Aquifer Properties			
Horizontal Hydraulic Conductivity	cm/day	8.7	VLEACH Manual
Horizontal Hydraulic Gradient	ft/ft	0.004	Reference 2
Thickness of Groundwater Mixing Zone	ft	5	Reference 2
Width of Contaminated Zone Parallel to Groundwater Flow Direction	ft	25	Site-specific data
Background Concentration of TCE in Groundwater	µg/L	50	Reference 2

Notes:

Reference 1: IT Corporation, 2000. Additional Definition Soil Sampling and Analysis Report, Former Mercer Processing Facility, 230 Portage Avenue, Palo Alto, California, IT Corporation Project 80634. November 21.
Reference 2: Secor International, Inc. Semi-Annual Groundwater Self-Monitoring Report, First and Second Quarters 2000, California-Olive-Emerson (COE) Study area and Perimeter Area, Palo Alto, California. October 12, 2000
Reference 3: USEPA Region IX PRG spread sheet - November 22, 2000
Reference 4: Rosenbloom, J., et . Al. Application of VLEACH to Vadose Zone Transport of VOCs at an Arizona Superfund Site, Groundwater Monitoring and Remediation, Summer 1993

cm - centimeters
g/cm^3 - grams per cubic centimeter
m^3 - cubic meter
ATM/mole - atmospheric per mole
mg/L - milligrams per liter
cm^2/sec - square centimeter per second
ft = feet
cm/day = centimeters per day
ft/ft = foot per foot
µg/L = micrograms per liter

Table 3
Summary of SESOIL and VLEACH Simulations
Former Mercer Processsing Facility
230 Portage Avenue
Palo Alto, California

Modeled TCE Target Cleanup Concentration in Soil	Simulated Concentration of TCE in Pore Water at Groundwater Surface (28 feet bgs)		Estimated Groundwater Concentration (includes approximate background concentration of 50 µg/L[1])
	g/cu ft	µg/L	
VLEACH Model			
No Soil Remediation	0.059	2,082	NA
0.90 mg/kg TCE	0.016	565	NA
0.40 mg/kg TCE	0.0083	293	NA
0.25 mg/kg TCE	0.0063	222	NA
0.20 mg/kg TCE	0.0036	127	NA
0.10 mg/kg TCE	0.0026	92	NA
SESOIL Model			
No Soil Remediation	NA	6,500	1,140
0.90 mg/kg TCE	NA	1,400	280
0.40 mg/kg TCE	NA	651	157
0.25 mg/kg TCE	NA	460	123
0.20 mg/kg TCE	NA	170	71
0.10 mg/kg TCE	NA	96	58

Notes:

TCE = Trichloroethene
bgs = below ground surface
g/cu ft = grams per cubic foot
µg/L = micrograms per liter
mg/kg = milligrams per kilogram
NA = not applicable
[1] = Secor, October 12, 2000.

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Table 4
Summary of Input Parameters - Vapor Flux and Human Health Risk Calculations
Former Mercer Processing Facility
230 Portage Avenue
Palo Alto, California

Parameter	Symbol	Value	Units	Reference
contaminant concentration in soil vapor	Ci	various	$\mu g/m^3$	Reference 1 & 2
contaminant diffusion coefficient in air (TCE)	Da	0.2844	m^2/hr	Reference 3
air-filled porosity	P_a	0.2	unitless	Reference 2
total porosity	P_t	0.52	unitless	Reference 2 & 4
depth to the contamination in the vadose zone	X	1.22	m	Reference 1
slab attenuation factor (no concrete slab)	Slab	1.0	unitless	Reference 2
slab attenuation factor (weathered concrete slab)	Slab	0.1	unitless	Reference 2
slab attenuation factor (new concrete slab)	Slab	0.01	unitless	Reference 2
room height	height	3.050	m	Assumption
indoor air exchange rate per hour	E	0.83	1/hr	Reference 2
inhalation rate	IR	20	m^3/day	Reference 5
exposure time	ET	12	hrs/day	Reference 5
exposure frequency	EF	250	days/yr	Reference 5
exposure duration	ED	25	yr	Reference 5
body weight	BW	70	kg	Reference 5
averaging time	AT	25500	days	Reference 5
contaminant carcinogenic slope factor	Slope Factor	6.00×10^{-3}	$[mg/kg\text{-}day]^{-1}$	Reference 6

Notes:
TCE = Trichloroethene
μ/m^3 - micrograms per cubic meter
m^2/hr = square meters per hour
m = meters
1/hr = one per hour
m^3/day = cubic meters per day
hrs/day = hours per day
days/yr = days per year
yr = year
kg = kilograms
$[mg/kg\text{-}day]^{-1}$ = milligrams per kilogram per day

Reference 1: IT Corporation, 2000. *Additional Definition Soil Sampling and Analysis Report, Former Mercer Processing Facility, 230 Portage Avenue, Palo Alto, California, IT Corporation Project 806342.* November 21.
Reference 2: San Diego County Department of Environmental Health, Site Assessment and Mitigation Manual. 1996 (Revised 1998).
Reference 3: Attachment C, Chemical Properties for SSL Development, www.epa.gov/superfund/oerr/soil/attach.pdf
Reference 4: Driscoll, Fletcher G., 1986. *Groundwater and Wells, Second Edition.* Minnesota: Johnson Filtration Systems, Inc.
Reference 5: U.S. Environmental Protection Agency, 1989. *Risk Assessment Guidance* for Superfund, Volume 1, Human Health Evaluation Manual (Part A), Interim Final. December.
Reference 6: U.S. Environmental Protection Agency, Region IX, Preliminary Remediation Goals, November 22, 2000.

Table 5
Summary of Vapor Flux and Human Health Risk Calculation Results
Former Mercer Processing Facility
230 Portage Avenue
Palo Alto, California

Target Soil Cleanup Level for TCE	Estimated Incremental Carcinogenic Risk		
	No Concrete Slab	Weathered Concrete Slab	New Concrete Slab
Soil Matrix = 6.8 mg/kg Calculated Soil Gas = 844,622 µg/m^3	**2.84×10^{-4}**	**2.84×10^{-5}**	**2.84×10^{-6}**
Soil Matrix = 2.0 mg/kg Calculated Soil Gas = 248,418 µg/m^3	**8.37×10^{-5}**	**8.37×10^{-6}**	8.37×10^{-7}
Soil Matrix = 1.50 mg/kg Calculated Soil Gas = 186,313 µg/m^3	**6.27×10^{-5}**	**6.27×10^{-6}**	6.27×10^{-7}
Soil Matrix = 1.3 mg/kg Calculated Soil Gas = 161,472 µg/m^3	**5.44×10^{-5}**	**5.44×10^{-6}**	5.44×10^{-7}
Soil Matrix = 1.25 mg/kg Calculated Soil Gas = 155,261 µg/m^3	**5.23×10^{-5}**	**5.23×10^{-6}**	5.23×10^{-7}
Soil Matrix = 1.0 mg/kg Calculated Soil Gas = 124,209 µg/m^3	**4.18×10^{-5}**	**4.18×10^{-6}**	4.18×10^{-7}
Soil Matrix = 0.4 mg/kg Calculated Soil Gas = 49,684 µg/m^3	**1.67×10^{-5}**	**1.67×10^{-6}**	1.67×10^{-7}
Soil Matrix = 0.2 mg/kg Calculated Soil Gas = 24,841 µg/m^3	**8.36×10^{-6}**	8.36×10^{-7}	8.36×10^{-8}
Soil Matrix= 0.1 mg/kg Calculated Soil Gas = 12,421 µg/m^3	**4.18×10^{-6}**	4.18×10^{-7}	4.18×10^{-8}
Soil Matrix = 0.08 mg/kg Calculated Soil Gas = 9,937 µg/m^3	**3.35×10^{-6}**	3.35×10^{-7}	3.35×10^{-8}
Soil Matrix = 0.05 mg/kg Calculated Soil Gas = 6,210 µg/m^3	**2.09×10^{-6}**	2.09×10^{-7}	2.09×10^{-8}
Soil Matrix = 0.025 mg/kg Calculated Soil Gas = 3,105 µg/m^3	**1.05×10^{-6}**	1.05×10^{-7}	1.05×10^{-8}
Soil Matrix = 0.01 mg/kg Calculated Soil Gas = 1,242 µg/m^3	4.18×10^{-7}	4.18×10^{-8}	4.18×10^{-9}
Soil Matrix = 0.009 mg/kg Calculated Soil Gas = 1,118 µg/m^3	3.76×10^{-7}	3.76×10^{-8}	3.76×10^{-9}

Notes:
TCE = Trichloroethene
mg/kg = milligrams per kilogram
µg/m^3 = micrograms per cubic meter
Values in bold exceed the U.S. EPA's recommended 10^{-6} (i.e., 1 in 1 million) upper bound excess cancer risk.

Table 6
Soil Remediation Cleanup Criterion
Former Mercer Processing Facility
230 Portage Avenue
Palo Alto, California

Target Soil Cleanup Level	Meets RWQCB Recomended Cleanup Level[1]	Results in No Impact to Groundwater exceeding Background Levels[2]	Protective of Human Health with Current Use[3]	Protective of Human Health with Residential Use[3]
No Soil Remediation	No	No[4]	No	No
1.0 mg/kg TVOCs	Yes[5]	No[6]	Yes	No
0.4 mg/kg TCE	Yes	No[7]	Yes	No
0.2 mg/kg TCE	Yes	Yes[8]	Yes	Yes
0.1 mg/kg TCE	Yes	Yes[9]	Yes	Yes
0.0 mg/kg TCE	Yes	Yes	Yes	Yes

Notes:

1 Cleanup levels as recommended by California Regional Water Quality Control Board, San Francisco Bay Region for nearby sites (1.0 mg/kg total VOCs) or as listed in August 2000 Guidance Document and cited in May 9, 2001 RWQCB letter to El Camino Center (0.4 mg/kg TCE).
2 Criteria based on results of SESOIL and VLEACH modeling and quarterly groundwater monitoring results reported by SECOR.
3 Criterion based on results of vapor flux and human health risk calculations.
4 Results in impact to groundwater at 1,140 ug/L TCE with maximum impact after 9 years (pore water concentration is estimated at 6,500 ug/L TCE).
5 Meets RWQCB mandated cleanup level for nearby sites (Hewlet-Packard and Varian) but does not meet cleanup level in August 2000 Guidance Document.
6 Results in impact to groundwater at approximately 280 ug/L TCE with maximum impact after 8 years (pore water concentration is estimated at 1,400 ug/L TCE).
7 Results in impact to groundwater at 157 ug/L TCE with maximum impact after 7 years (pore water concentration is estimated at 651 ug/L TCE).
8 Results in impact to groundwater at 71 ug/L TCE with maximum impact after 7 years (pore water concentration is estimated at 170 ug/L TCE).
9 Results in impact to groundwater at 58 ug/L TCE with maximum impact after 7 years (pore water concentration is estimated at 96 ug/L TCE).

Table 7
Comparison of Remedial Alternatives
Former Mercer Processing Facility
230 Portage Avenue
Palo Alto, California

Alternative		Description of Remedial Actions (a)
NCP Required Alternative	1	No Action.
Excavation Alternatives	2	Excavate soil containing TCE concentrations exceeding 200 µg/kg and dispose at an offsite permitted landfill.
	3	Excavate soil containing TCE concentrations exceeding 200 µg/kg and treat on-site using ex-situ bioremediation.
In-Situ Alternatives	4	Install and operate a soil vapor extraction (SVE) system in the vadose zone soil.
	5	In-situ bioremediation using naturally occuring or introduced microorganisms.

Table 8
Summary -- Comparison of Remedial Alternatives -- NCP Criteria
Former Mercer Processing Facility
230 Portage Avenue
Palo Alto, California

ALTERNATIVE		THRESHOLD CRITERIA		PRIMARY BALANCING CRITERIA				COSTS			MODIFYING CRITERIA		
Number	Description of Remedial Actions	Overall Protection of Health/Environment	Compliance with ARARs	Long-Term Effectiveness	Reduce Mobility, Toxicity, Volume	Short-Term Effectiveness	Implementability	Capital Costs	Annual O&M Costs	Total Costs (Net Present Value[1])	State Acceptance	Community Acceptance	CONCLUSION
1	No Action	Not protective	Does not comply	N/E	N/E	N/E	N/E	-	-	-	N/E	N/E	N/E
2	Excavate soil containing greater than 200 µg/kg TCE and dispose offsite	Protective	Expected to comply	Effective	Reduction in on-site mobility, toxicity and volume	Effective	Implementable	$200,000	$0	$200,000	Acceptable	Thought to be Acceptable	Recommended alternative
3	Excavate soil containing greater than 200 µg/kg TCE and treat on-site using ex-situ bioremediation	Protective	Expected to comply	Potentially Effective	Potential reduction in on-site mobility, toxicity and volume	Effective	Potentially implementable	$200,000	$0	$200,000	Acceptable	Thought to be Not Acceptable	Uncertainty regarding implementability, community acceptance and lack of cost savings precludes selection.
4	Soil vapor extraction (SVE) and treatment	Protective	Expected to comply	Uncertain	Potential reduction in on-site mobility, toxicity and volume	Uncertain effectiveness	Potentially implementable	$170,000	$80,000/yr. for 3 years	$388,000	Acceptable	Thought to be Acceptable	Uncertainty associated with effectiveness and high cost precludes selection.
5	In-situ bioremediation using naturally occuring or introduced microorganisms	Protective	Expected to comply	Uncertain	Potential reduction in on-site mobility, volume, and potential short-term increase in toxicity.	Limited effectiveness	Potentially implementable	$155,000	$30,000/yr. for 5 years	$285,000	May not be Acceptable	Thought to be Acceptable	Uncertainty associated with effectiveness and high cost precludes selection.

Notes:

[1]Assumes interest rate of 7% and 2% annual inflation.
N/E = Alternative does not meet Threshold Criteria; no further evaluation required.

Table 9
Summary -- Comparison of Remedial Alternatives and Potential ARARs and TBCs
Former Mercer Processing Facility
230 Portage Avenue
Palo Alto, California

REMEDIAL ALTERNATIVE		Resource Conservation and Recovery Act (40 CFR Parts 261 through 268)	Land Disposal Unit Criteria (40 CFR Part 264.221. et seq.; 22 CCR Section 66264.221 et seq.	Federal Drinking Water Standards (40 CFR Part 141 & California Drinking Water Standards (22 CCR Section 64435)	Sources of Drinking Water esolution 88-63, Nondegradati Policy Resolution 68-16, and ntainment Zone Policy Resolut 92-49, CSWRCB	Safe Drinking Water Toxic Enforcement Act of 1986 ("Proposition 65")	Porter Cologne Water Quality Control Act, California Water Code, Division 7, Section 13000 et seq.	Occupational Safety and Health Administration (29 CFR Part 1910.120; 8 CCR Section 5192)	California Hazardous Waste Haulers Act (California Health and Safety Code, Section 25161.1, et seq.	San Francisco Bay Basin Plan, Water Quality Control Plan	Santa Clara Valley Water District Permits	City of Palo Alto Public Works Department
Number	Description											
1	No Action	ARAR	NA	TBC	TBC	TBC	ARAR	NA	NA	TBC	NA	NA
2	Excavate soil containing greater than 200 µg/kg TCE and dispose offsite	ARAR	ARAR	ARAR	ARAR	TBC	ARAR	ARAR	ARAR	TBC	TBC	ARAR
3	Excavate soil containing greater than 200 µg/kg TCE and treat on-site using ex-situ bioremediation	ARAR	ARAR	ARAR	ARAR	TBC	ARAR	ARAR	ARAR	TBC	TBC	ARAR
4	Soil vapor extraction (SVE) and treatment	ARAR	ARAR	ARAR	ARAR	TBC	ARAR	ARAR	ARAR	TBC	TBC	TBC
5	In-situ bioremediation using naturally occuring or introduced microorganisms	ARAR	ARAR	ARAR	ARAR	TBC	ARAR	ARAR	ARAR	TBC	TBC	TBC

Notes:
ARAR Applicable or Relevant and Appropriate Requirements
TBC To Be Considered
NA Not Applicable
CFR Code of Federal Regulations
CCR California Code of Regulations
CSWRCB California State Water Resources Control Board
TCE Trichloroethylene
SVE Soil Vapor Extraction

Table 10
Comparison Summary of Estimated Relative Costs of Alternatives
Former Mercer Processing Facility
230 Portage Avenue
Palo Alto, California

Alternative Number		Capital Costs (2001 Dollars)	Recurring Annual Costs (2001 Dollars)	Total Cost (Net Present Value[1])
NCP Required Alternative	1	-	-	-
Excavation Alternatives	2	$200,000	-	$200,000
	3	$200,000	-	$200,000
In-Situ Alternatives	4	$170,000	$80,000/yr. for 3 years	$388,000
	5	$155,000	$30,000/yr. for 5 years	$285,000

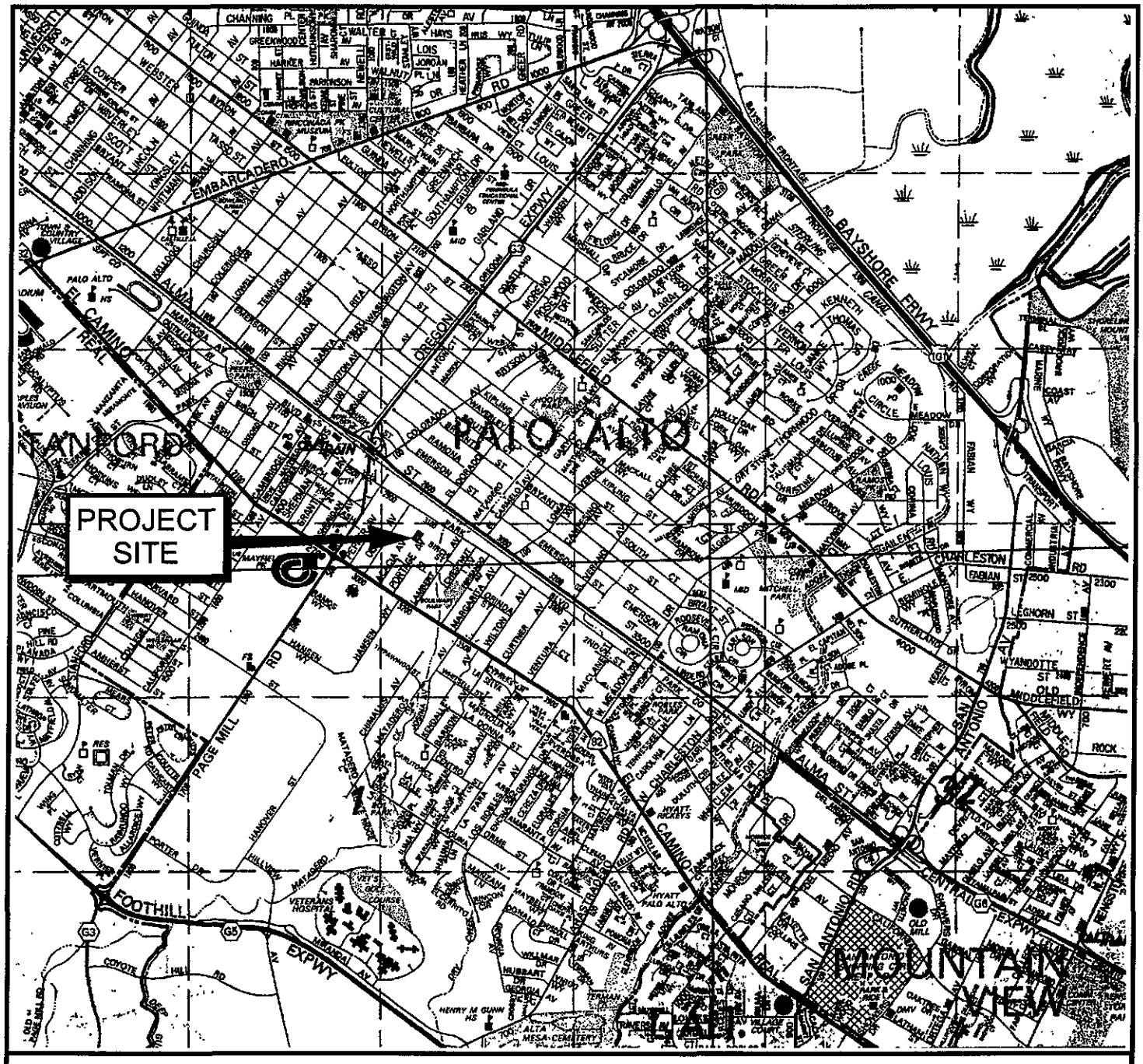
Notes:

[1]Assumes interest rate of 7% and annual inflation rate of 2%.

Table 11
Summary -- Comparison of Alternatives
Former Mercer Processing Facility
230 Portage Avenue
Palo Alto, California

Alternative Number	THRESHOLD CRITERIA		PRIMARY BALANCING CRITERIA					MODIFYING CRITERIA	
	Overall Protection of Health/Environment	Compliance with ARARs	Long-Term Effectiveness	Reduce Mobility, Toxicity, Volume	Short-Term Effectiveness	Cost	Implementability	State Acceptance	Community Acceptance
1	Fail	Fail	NE	NE	NE	NE	NE	NE	Not Known
2	Pass	Pass	Pass	Pass	Pass	Moderate	Pass	Pass	Not Known
3	Pass	Pass	Uncertain	Pass	Pass	Moderate	Uncertain	Pass	Not Known
4	Pass	Pass	Uncertain	Uncertain	Uncertain	High	Uncertain	Pass	Not Known
5	Pass	Pass	Uncertain	Uncertain	Fail	High	Uncertain	Pass	Not Known

NE: Alternative does not meet threshold criteria. No further evaluation required.



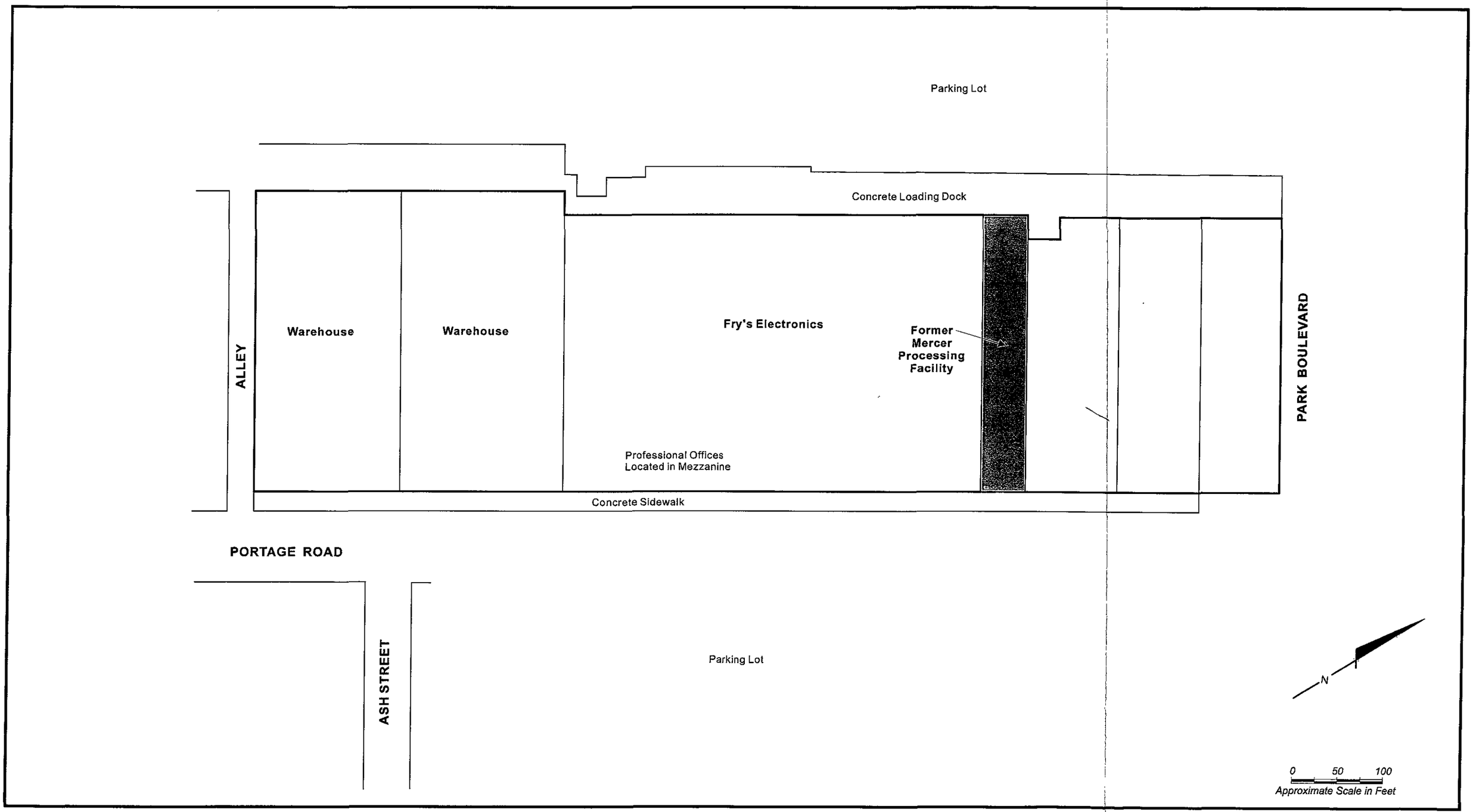
Ref: "The Thomas Guide- Golden Gate Street Guide and Directory" 1993 Edition.

PES Environmental, Inc.
Engineering & Environmental Services

Site Location Map
Former Mercer Processing Facility
230 Portage Avenue
Palo Alto, California

PLATE
1

500.009.02.001	50000902001V1.CDR	DRAFT	6/01
JOB NUMBER	DRAWING NUMBER	REVIEWED BY	DATE



PES Environmental, Inc.
Engineering & Environmental Services

Vicinity Map
Former Mercer Processing Facility
230 Portage Avenue
Palo Alto, California

PLATE
2

500.009.02.001	50000902001s2.CDR	DRAFT	6/01
JOB NUMBER	DRAWING NUMBER	REVIEWED BY	DATE

Explanation

SOIL BORING LOCATION (PES, DECEMBER, 1999)

SOIL BORING LOCATION (IT CORP., JUNE OR SEPTEMBER, 2000)

DETAIL SHOWN ON PLATE 4

ADJACENT TENANT SPACE

VACUUM CHAMBER

HANDWASH STATIONS (2)

CYCLONE FENCE

WATER COOLING TOWER

BOILER BLOWDOWN TANK

AIR COMPRESSOR

CART CARRIER

VACUUM PUMP

FLOOR DRAIN

FORMER REFRIGERATION SYSTEM

TRAY WASH AREA

DRY STORAGE

LOADING AREA

UNLOADING AREA

DRY STORAGE

DRY STORAGE

BOILER

SIDING

CART

BOILER FEED TANK

ADJACENT TENANT SPACE

CYCLONE FENCE

N

0 20

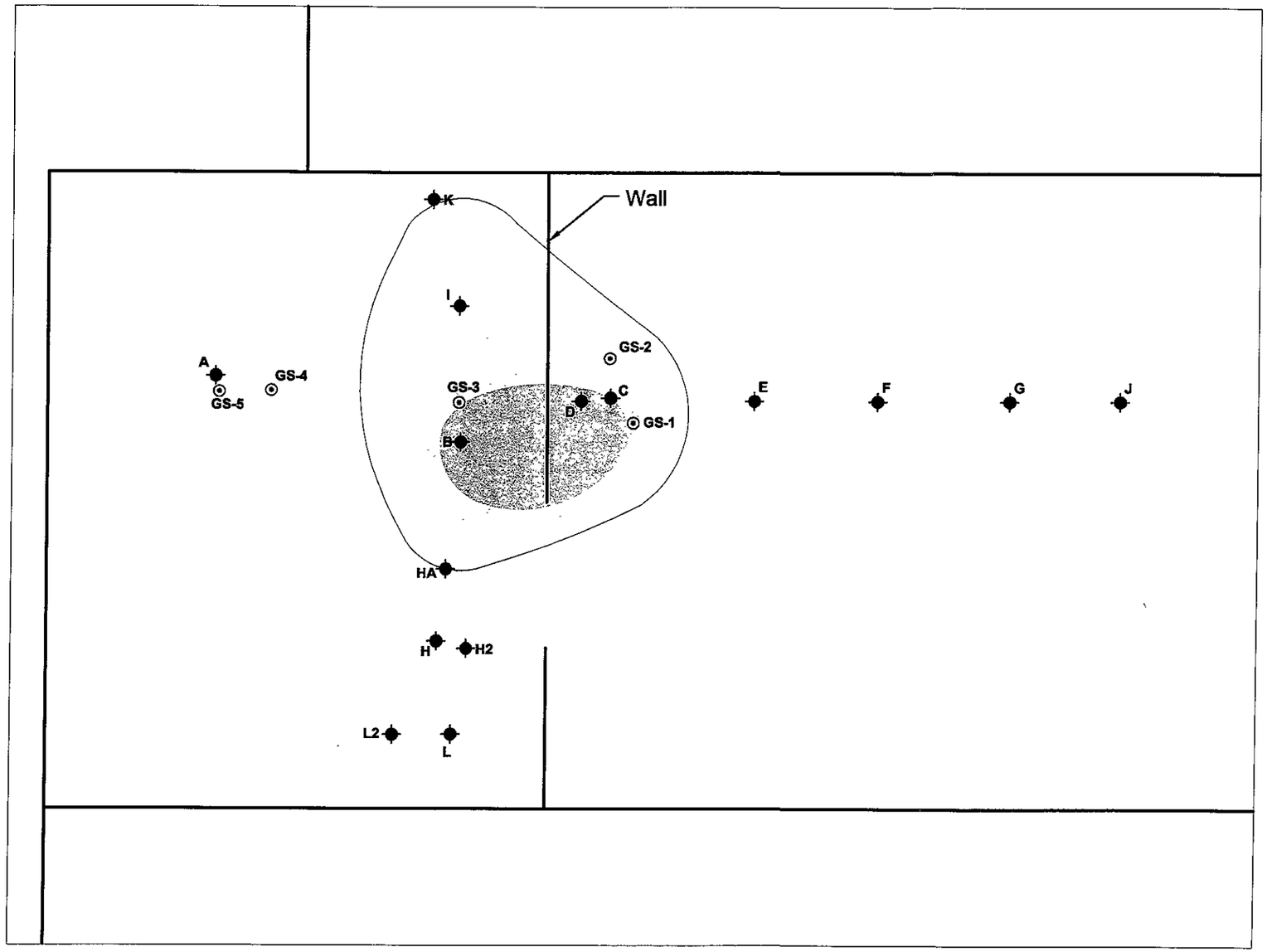
SCALE IN FEET

PES Environmental, Inc.
Engineering & Environmental Services

Boring Location Map with Former Facility Layout
Former Mercer Processing Facility
230 Portage Avenue
Palo Alto, California

PLATE 3

500.009.02.001	50000903001_0501-04.dwg	DRAFT	6/01
JOB NUMBER	DRAWING NUMBER	REVIEWED BY	DATE



Explanation

- SOIL BORING LOCATION (PES, DECEMBER, 1999)
- SOIL BORING LOCATION (IT CORP., JUNE, SEPTEMBER OR NOVEMBER, 2000)
- Estimated lateral extent of TCE in soil exceeding 200 µg/kg at 0-4-ft. bgs.
- Estimated lateral extent of TCE in soil exceeding 200 µg/kg at 4-8-ft. bgs.
- Estimated lateral extent of TCE in soil exceeding 200 µg/kg at 8-12-ft. bgs.
- Estimated lateral extent of TCE in soil exceeding 200 µg/kg at 12-16-ft. bgs.
- Estimated lateral extent of TCE in soil exceeding 200 µg/kg at 16-20-ft. bgs.

N

0 10

SCALE IN FEET

PES Environmental, Inc.
Engineering & Environmental Services

TCE Isoconcentration Contour Map
Former Mercer Processing Facility
230 Portage Avenue
Palo Alto, California

PLATE 4

500.009.02.001	50000903001_0501-04.dwg	DRAFT	6/01
JOB NUMBER	DRAWING NUMBER	REVIEWED BY	DATE

VOLUME I

APPENDIX A

COMMUNITY RELATIONS PLAN, FACT SHEET, FACT SHEET DISTRIBUTION LIST AND MAP, AND DISPLAY ADVERTISEMENT FOR PUBLIC MEETING (TO BE INSERTED IN FINAL RAP)

APPENDIX A

Community Relations Plan

1. A notice of the availability of the draft RAP, including a brief analysis of the proposed remedial alternative, shall be published in a major Peninsula newspaper of general circulation. The notice will indicate where the draft RAP and supporting materials are located for public review and comment. A copy of the notice will be included in the final RAP.

2. The draft RAP and the supporting materials, including the reports regarding the remedial investigation, shall be made available to the public for inspection and comment in the record for the site maintained by the RWQCB at its offices in Oakland, California, at the Palo Alto public library and at the offices of WSJ Properties, 3201 Ash Street, Palo Alto, California, which offices are located adjacent to the site (hereinafter, "Information Repositories").

3. A Fact Sheet will be circulated to local residences and businesses in the vicinity of the site. The Fact Sheet will briefly discuss the contaminant and risks, contain a map of the site location, discuss the remedial alternatives evaluated in the RAP and the recommended alternative.

4. Thirty calendar days shall be provided for submissions of written and oral comments on the draft RAP and the supporting analysis and information located in the Information Repositories.

5. A public meeting regarding the draft RAP, the supporting analysis and information shall be held at or near the Site, at a location to be advertised in the notice of availability of the draft RAP, during the public comment period. The meeting will be held within the 30-day comment period.

6. A transcript of the public meeting shall be prepared and made available to the public and will be appended to the final RAP.

7. A written summary of significant comments, criticisms, and new relevant information submitted during the public comment period, along with RWQCB's response to each issue, shall be prepared and shall be made available to the public and will be included in the final RAP.

8. If new information is made available that significantly changes the basic features of the proposed remedy in the draft RAP with respect to scope, performance or cost, such that the remedy significantly differs from the original proposal in the draft RAP and the supporting analysis and information, RWQCB shall either (A) include a discussion in its written decision approving a final RAP of the significant changes and reasons for such changes, if it determines

that such changes could be reasonably anticipated by the public based on the alternatives and other information available in the draft RAP or the supporting analysis and information, or (B) seek additional public comment on a revised RAP, if it determines that the change could not have been reasonably anticipated by the public based on the information available in the RAP or the supporting analysis and information. Under such circumstances, RWQCB shall, prior to approval of a final RAP, issue a revised draft RAP which shall include a discussion of the significant changes and the reasons for such changes from the original draft RAP, in accordance with the public participation requirements set forth above.

9. Upon approval of a final RAP, a copy of the final RAP shall be made available to the public for inspection and copying at the information repositories.

California Regional Water Quality Control Board
San Francisco Bay Region

Winston H. Hickox
Secretary for Environmental Protection

Internet Address: http://www.swrcb.ca.gov
1515 Clay Street, Suite 1400, Oakland, California 94612
Phone (510) 622-2300 • FAX (510) 622-2460

Gray Davis
Governor

FACT SHEET: DRAFT REMEDIAL ACTION PLAN 230 PORTAGE AVENUE, PALO ALTO, CALIFORNIA

Introduction

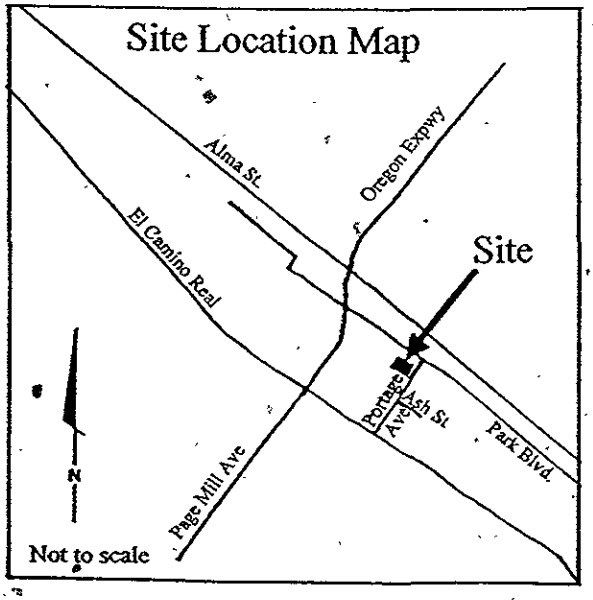
This fact sheet presents cleanup alternatives for soil contaminated with chlorinated hydrocarbons at 230 Portage Avenue in Palo Alto (site). The Site is currently owned by El Camino Center, a California partnership.

The fact sheet describes the contamination present at the site, specifies goals for cleanup and summarizes alternative methods to achieve these goals and the proposed cleanup alternatives. This information is discussed in more detail in the Draft Remedial Action Plan (RAP), which is available for public review and comment.

Site Location and Description

The site is located within the City of Palo Alto, in an area that is a primarily commercial and light industrial with some nearby residences. The site is a vacant space located within a larger commercial and light industrial building. The entire property, with the exception of landscaped areas and one onsite structure, is covered with asphalt-concrete parking lots and concrete sidewalks.

The site is located in an area that is currently undergoing groundwater remediation due to releases of chlorinated hydrocarbons at various other locations.



Background

The larger parcel that includes the site was reportedly used as a fruit cannery prior to World War II. After World War II the parcel was used by Safeway as a food distribution warehouse and subsequently as a strip mall consisting of numerous retail shops. By the early 1970s, the parcel was still occupied by the strip mall and the retail shops, miscellaneous other warehouse and storage users, and Dura-Bond Manufacturing Company. Following the purchase of the property in the early 1970s by El Camino Center, use of the property as a strip mall was discontinued and the property was subleased to various businesses. The site was reportedly used for storage of dry goods until 1989.

Mercer Processing, Inc. (Mercer) conducted freeze-drying and food product packaging at the site between 1989 and 1999. During a portion of that period, Mercer's operations involved refrigeration equipment that used TCE. Environmental investigations were conducted in 1999 and 2000 after Mercer vacated the site. The investigations included collection and testing of soil samples from various locations beneath the site. TCE was the chemical detected most frequently and at the highest concentrations, up to 6.8 parts per million in soil. The soil contamination did not extend to groundwater.

Risk Evaluation

Data from soil samples were used to prepare a risk evaluation. This study evaluated the potential health risks to people occupying the premises and risk to groundwater quality. This evaluation was used to develop levels for soil cleanup based on current and probable future site uses.

The risk evaluation concluded that a cleanup level of 0.2 parts per million TCE in soil would be appropriate to address potential future risks to human health and groundwater.

The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demand and cut your energy costs, see our Web-site at http://www.swrcb.ca.gov.

Evaluation of Cleanup Alternatives
The Draft RAP details cleanup alternatives for soil contamination. The five alternatives include:

Alternative 1 – No Action. Under this alternative no removal or cleanup activities would occur at the site. Administrative controls such as land use restrictions and/or zoning restrictions may need to be developed. The no action alternative provides a baseline for comparison of costs and benefits in the analysis of other remedial alternatives.

Alternative 2 – Soil Excavation with Offsite Disposal. This involves excavation of TCE contaminated soil that exceeds the cleanup level and disposal of the soil at a permitted landfill.

Alternative 3 – Soil Excavation with Ex-Situ Onsite Treatment. This alternative is similar to Alternative 2 but prior to offsite disposal the soil is treated on the site. After treatment to decrease contamination levels, the soil is disposed off site.

Alternative 4 – Soil Vapor Extraction. This method uses a vacuum to remove contaminated soil vapors in the area of contamination, treatment of the contaminated vapors with activated carbon, and subsequent off site disposal of the activated carbon. No excavation is required for this method.

Alternative 5 – Enhanced In-Situ Bioremediation. This alternative involves injection of nutrients to soil through a series of injection points to enhance biodegradation of the contamination. No excavation is required for this method.

These five alternatives were evaluated based on criteria developed by the U.S. Environmental Protection Agency for cleanup of contaminated sites. These criteria include the overall protection of human health and the environment, compliance with other standards known as "applicable or relevant and appropriate requirements," long-term effectiveness and permanence, reduction of mobility, toxicity, or volume of hazardous substances, short-term effectiveness, implementability, cost, and acceptance by the State and by the community.

Proposed Cleanup Alternative
Soil excavation with offsite disposal, Alternative 2, is the proposed remediation alternative for the TCE contaminated soil. This technique will effectively and economically reduce the majority of contaminants in soil in the timeliest manner. If approved, the process would be implemented by a qualified general contractor in accordance with a site-specific health and safety plan. This plan would comply with both the state and federal regulations and be designed to protect the health and safety of construction workers and the public during implementation of the alternative.

If the proposed alternative is adopted, the work could commence in seven to ten days following acceptance. The work could be completed within approximately 10 to 15 working days.

Once complete, a report would be submitted to the RWQCB documenting the remediation activities.

Public Comment Period
The RWQCB will hold a public comment period from July 28, 2001, through August 27, 2001.

California Environmental Quality Act
This remedial action is being pursued to comply with laws and regulations administered by the RWQCB. As such, this action is categorically exempt from the provisions of the California Environmental Quality Act (CEQA) pursuant to Section 15321 of the Resources Agency Guidelines.

For More Information
The Draft RAP is available for public review at the following locations:

RWQCB
1515 Clay Street
Suite 1400
Oakland, CA 94612
(510) 622-2300

Palo Alto Public Library
Main Branch
1213 Newell Road
Palo Alto, CA 94303
(650) 329-2436

WSJ Properties
3201 Ash Street
Palo Alto, CA 94306
(650) 493-5310
Attention: Ms. Elizabeth Moothart

A public meeting to describe the environmental conditions and proposed cleanup alternatives will be held at the site, 230 Portage Avenue, Palo Alto, California on August 8, 2001, at 6:30 P.M. Representatives of the RWQCB and the property owners will be available to receive comments on the proposed remediation.

If you would like to comment in writing on the Draft RAP or would like to receive more information, please contact Dr. Derek Whitworth at the RWQCB at (510) 622-2349 or email at dw@rb2.swrcb.ca.gov.

The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demand and cut your energy costs, see our Web-site at http://www.swrcb.ca.gov.

APPENDIX A

FACT SHEET DISTRIBUTION LIST

Bob Moss
Barron Park Association Foundation
4010 Orme Avenue
Palo Alto, CA 94306

Paula Lau
Environmental Specialist
Stanford Lands Management
2770 Sand Hill Road
Menlo Park, CA 94025

Marie Lacey
Region IX Superfund Program - USEPA
75 Hawthorne Street
San Francisco, CA 94105

Seena Hoose
Santa Clara Valley Water District
5150 Almaden Expressway
San Jose, CA 95118

Nancy Blair
U.S. Geological Survey Library
345 Middlefield Road, Mail Stop 955
Menlo Park, CA 94025

Mercer Processing, Inc.
c/o Pinnacle Law Group
425 California Street, Suite 1800
San Francisco, CA 94104
Attn: Andrew A. August, Esq.

Dr. Dana Bonta
Director
California Department of Health Services
714 P Street
Sacramento, CA 95814

Barbara Cook
California EPA
Department of Toxic Substances Control
700 Heinz Avenue, Suite 200
Berkeley, CA 94170-2737

Todd Bartz
Intevac
3550 Bassett Street
Santa Clara, CA 95054

Rick Thomasser
Montgomery Watson
1340 Treat Blvd., Suite 300
Walnut Creek, CA 94596

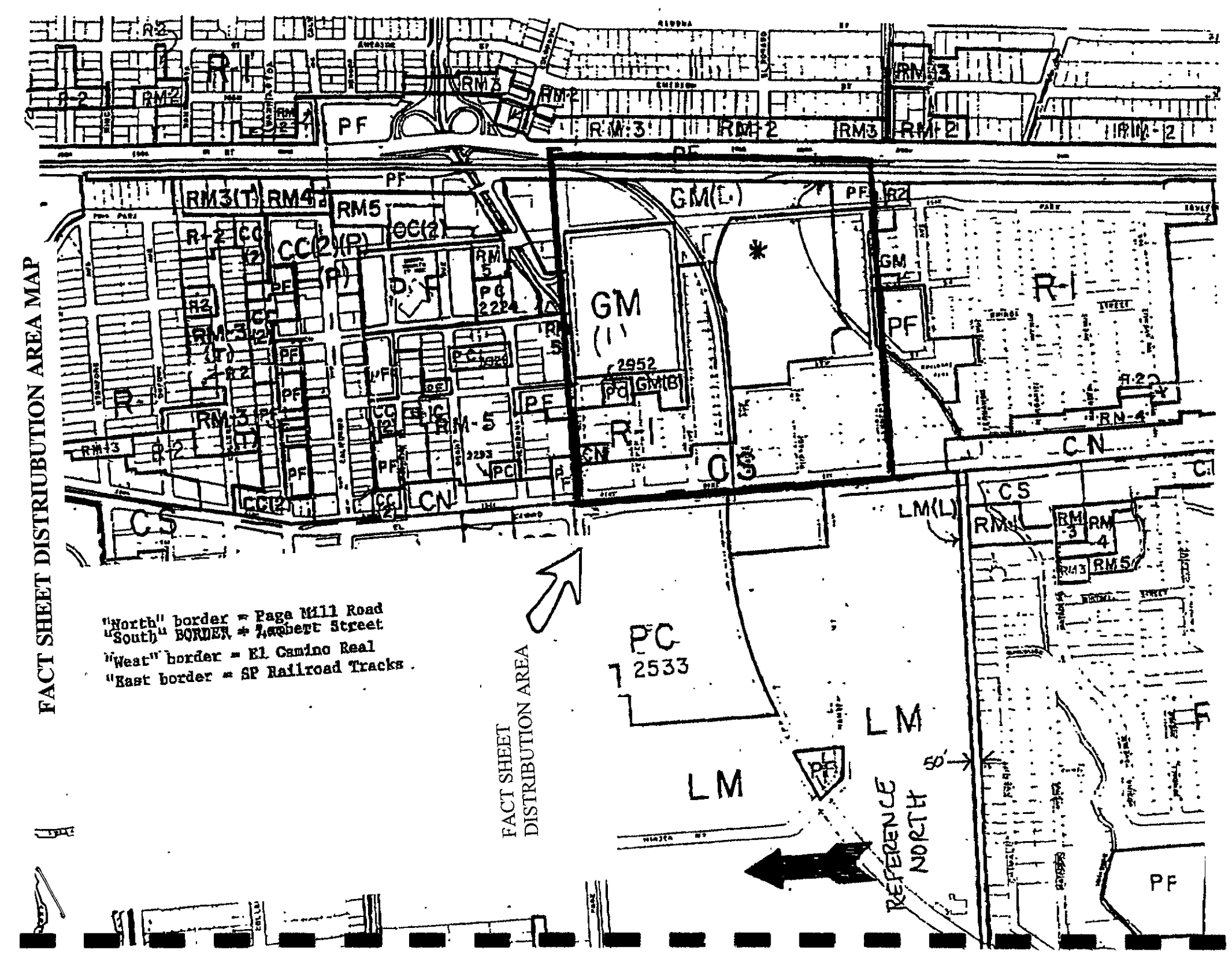
John Joynt
Barron Park Association Foundation
3589 Laguna Avenue
Palo Alto, CA 94306

Hazardous Materials Inspector
City of Palo Alto Fire Department
250 Hamilton Avenue
Palo Alto, CA 94301

Alan Jones
Manager, Roads and Engineering
County of Santa Clara Transportation
1505 Schallenberger Road
San Jose, CA 95131

Brian Hunter
Regional Manager
California Department of Fish and Game
Central Coast Region
P.O. Box 47
Yountville, CA 94599

Wayne White
U.S. Fish and Wildlife Service
2800 Cottage Way, Room West 2605
Sacramento, CA 95825


FACT SHEET DISTRIUBUTION AREA MAP
"North" border = Page Mill Road
"South" BORDER = Lambert Street
"West" border = El Camino Real
"East border = SP Railroad Tracks
FACT SHEET DISTRIBUTION AREA
REFERENCE NORTH
50'
GM
GM(L)
LM
LM(L)
PC 2533
PC 2952
PC 2224
PC 2293
PF
CN
C5
R-1
R-2
RM-2
RM-3
RM-4
RM-5
RM3(T)
RM4
RM5
CC(2)
CC(2)(P)

APPENDIX B

Verification Sampling and Analyses Plan

Performance Standards and Guidance

Work will be performed in accordance with applicable guidance and requirements set forth pursuant to Comprehensive Environmental Response Compensation Liability Act (CERCLA) as amended by Superfund Amendment and Reauthorization Act (SARA); applicable or relevant and appropriate requirements (ARARs); the National Contingency Plan (NCP); DTSC; and Superfund practices in effect at the time of performance of the activity or element of work.

Verification sampling will be conducted in general accordance with the following documents:

- Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA, U.S.EPA, Office of Emergency and Remedial Response, October 1988, OSWER Directive No. 9355.3-01;
- Interim Guidance on Potentially Responsible Party Participation in Remedial Investigation and Feasibility Studies, U.S.EPA, Office of Waste Programs Enforcement, Appendix A to October 1988 OSWER Directive No. 9355.3-01;
- A Compendium of Superfund Field Operations Methods, Two Volumes, USEPA, Office of Emergency and Remedial Response, EPA/540/P-87/001a, August 1987, OSWER Directive No. 9355.0-15;
- EPA NEIC Policies and Procedures Manual, May 1978, revised November 1984, EPA-330/9-78-001-R;
- OSHA Regulations in 29 CFR 1910.120 (Federal Register 45654, December 19, 1986); and
- Preparation of a U.S.EPA Region 9 Field Sampling Plan for Private and State-Lead Superfund Projects, Document Control Number 9QA-06-89, August 1993, U.S.EPA Region 9, Quality Assurance Management Section.

Design and Placement of the Sampling Locations

PES proposes a systematic verification sampling plan which will distribute sample locations uniformly over the removal area. Verification soil samples will be collected from the sidewalls of each "slot" using a hand sampler and the backhoe or excavator bucket to evaluate whether soil removal has met the remedial goal. The sidewall soil samples will be collected at depth intervals corresponding to areas exhibiting field indications of potential contamination

and at depths where previous samples indicated contaminants were present. In addition, four verification soil samples will be collected from the bottom of the excavation for chemical analysis to evaluate whether soil removal has met the remedial goal.

Concrete and Soil Sampling Field Procedures and Methodology

Following soil removal activities, the sampling locations will be identified using a graduated tape measure. One verification soil sample will be collected from each location. Samples will be collected from each location by using a hand sampler and the backhoe or excavator bucket. Sample locations and the number of samples collected per "slot" may be adjusted in the field if necessary.

The following is a summary of equipment that will be used during verification sampling activities:

- Hammer driven hand sampler;
- Tape line (in feet and inches or tenths);
- 2-inch-diameter precleaned, lab-supplied, stainless-steel tubes;
- Polypropylene end caps;
- Zip-lock plastic bags;
- Teflon and silicon tape;
- Personal protective equipment;
- Ice, insulated cooler and appropriate packing supplies;
- Buckets, brushes and detergents for equipment decontamination;
- Sample labels;
- Chain-of-custody forms; and
- Sample collection log, sub-area field map, water-resistant ink pen, and daily field report forms.

Verification soil samples will be collected from the excavation surfaces or backhoe or excavator bucket using a pre-cleaned hand sampler. Excavated concrete will be sampled for waste characterization purposes. Sampling will be conducted according to the procedures described below.

In order to avoid cross contamination of samples, soil samples will be collected from soil which does not come in direct contact with the backhoe bucket surface. Soil samples will be collected from the backhoe bucket using a hand-held drive sampler with stainless-steel liners. Following collection, each soil sample liner will be sealed with Teflon tape, polypropylene end caps and silicon tape to minimize the loss of volatile organic compounds (VOCs). The tubes will then be labeled, sealed in a zip-lock bag, and placed in a chilled, thermally-insulated cooler for shipment to a California Department of Health Services-approved laboratory for chemical analysis.

A composite sample of the removed concrete will be collected and submitted to the selected laboratory for chemical analysis. Concrete chips will be collected and placed into a resealable plastic bag and placed in a chilled, thermally-insulated cooler for shipment to a California Department of Health Services-approved laboratory for chemical analysis.

The sample collection equipment will be cleaned with a mild phosphate-free detergent solution and rinsed with potable water between sample locations. Decontamination fluids will be stored in drums or tanks pending characterization and disposal. Solid waste materials (i.e., gloves, paper towels, etc.) will be stored in drums or bins pending disposal.

Sample tubes will be labeled and placed in a thermally-insulated cooler that is chilled to a temperature of approximately four degrees Centigrade for transport to the project analytical laboratory under chain-of-custody protocol.

The samples will be identified using a numbering system, which will consist of: (1) the sample location; and (2) the date the sample was collected. Samples will be identified with a label affixed to the sample tube. The following information will be specified on each label:

- Project name;
- Project number;
- Date and time of sample collection;
- Sample identification number; and
- Analyses requested.

Individual sample tubes will be placed in sealed plastic bags to prevent intrusion of moisture into sample tubes and damage to sample labels. The coolers will be chilled using ice packaged in doubled plastic bags or "blue-ice" packs. The cooler will be sealed with strapping tape prior to transport to the analytical laboratory. Coolers will be transported to the laboratory either by laboratory couriers or field sampling personnel.

Samples will be accompanied by chain-of-custody documents. The form will accompany every sample shipment to the analytical laboratory to document sample possession from the time of collection. The form will contain the following information:

- Sample identification number;
- Signature of collector;
- Date and time of collection;
- Site name and project number;
- Sample matrix;
- Sample tube description;
- Analyses requested;
- Special analytical procedures requested;
- Remarks (expected interferences, hazards, unusual events at the time of sampling, if applicable);
- Preservatives added (if any);
- Any special sample preparation (if applicable);
- Destination of samples (laboratory name);
- Signature of persons involved in chain of possession (relinquished by and received by); and
- Date and time of sample receipt at laboratory.

The two top sheets of the chain-of-custody form will be placed in a water-tight, resealable plastic bag which will be taped to or placed in the cooler for transport.

When transferring samples, the individuals relinquishing and receiving the samples will sign, date, and record the time on the chain-of-custody form. A separate chain-of-custody form will accompany each sample shipment. The method of shipment and courier name(s) will be entered on the chain-of-custody form.

Daily field activities will be recorded on daily field report forms which indicate the date and time of field observations made by field personnel. All field forms will be signed by field personnel.

Information pertinent to soil sampling will be recorded in water-resistant ink in the daily field report. Entries in the field report will include the following information:

- Location of sampling site;
- Names and affiliations of all sampling team members;
- Surficial lithology of each sample;
- Date and time of sample collection;
- Description of deviations from sampling plan (if any);
- Sample destination (e.g., name of laboratory); and
- Signature of personnel responsible for sampling.

Original data recorded in field logs, chain-of-custody forms, and on other forms will be written in water-resistant ink. None of these documents will be destroyed or discarded, even if they are illegible or contain inaccuracies that require a replacement document.

If an error is made on a document assigned to one individual, that individual will make corrections by drawing a line through the error, entering the correct information, and initialing and dating the change. The erroneous information should not be obliterated. If possible, any subsequent error(s) discovered on a document will be corrected by the person who made the entry.

Laboratory Procedures and Methodology

Samples will be analyzed by a laboratory that is certified by the California Department of Health Services for performing the analyses specified. Sample handling procedures used by the laboratory may vary from the procedures specified herein as long as they fulfill the objective of maintaining sample integrity and traceability.

The sample custodian at the laboratory accepts custody of delivered samples and verifies the following information:

1. All samples are present;
2. All samples are in good condition;
3. All samples are accompanied by a properly completed chain-of-custody form;
4. The sample identification is complete and corresponds to the chain-of-custody form; and

5. The condition of custody seals and temperature of the chest.

If sample integrity is questionable, the sample custodian will immediately notify the laboratory's project administrator, who in turn will notify the PES project manager. Arrangements can then be made for sample replacements to be shipped to the laboratory. The sample custodian will document the sample condition on the sample custody log and sign the chain-of-custody form.

Logging of Laboratory Samples

After chain-of-custody procedures are complete and acceptable, the sample custodian will assign laboratory identification numbers to the samples. Laboratory sample identification numbers may be written on the chain-of-custody form for tracing purposes. The custodian will transfer the samples to the proper analyst(s) or store the samples in an appropriate secure area.

Laboratory personnel are responsible for the care and custody of samples from the time they are received until the sample is exhausted. Data sheets and laboratory records are retained as part of the permanent documentation for at least 3 years.

Sample Analysis

Verification soil and concrete samples will be analyzed for VOCs by U.S. EPA Test Method 8260B. The analyses may be performed utilizing expedited turn-around time in order to minimize subcontractor down-time.

Sample Storage

Samples and extracts are retained by the analytical laboratory for up to 30 days after the data are reported by the laboratory. Unless notified by the program managers, excess or unused samples will be disposed by the laboratory in a manner consistent with appropriate government regulations.

Corrective Measures Criteria

The site-specific cleanup goal for Mercer area has been established as 200 μg/kg TCE in soil.

Data Evaluation Procedures

Should the laboratory analytical results of the verification samples indicate that the soil cleanup goal is still exceeded, additional excavation may be performed, to the extent feasible.

Appendix C

Table 1
Administrative Record List – Letters and Reports
Former Mercer Processing, Inc. Facility
230 Portage Avenue, Palo Alto California

Title or Description	From	Date
Spills, Leaks, Investigations and Cleanup Program for Recovery of Oversight Costs for the Former Mercer Processing, Inc. Facility, 230 Portage Avenue, Palo Alto, Santa Clara County, California RWQCB File No. 43S0965 (DAW)	RWQCB	May 15, 2001
Request for a Remedial Action Plan for the Former Mercer Processing, Inc. Facility, 230 Portage Avenue, Palo Alto, Santa Clara County, California RWQCB File No. 43S0965 (DAW)	California Regional Water Quality Control Board, San Francisco Bay Region (RWQCB)	May 9, 2001
Additional Definition Soil Sampling and Analysis Report, Former Mercer Processing Facility, 230 Portage Avenue, Palo Alto, California, IT Corporation Project 806342	IT	November 21, 2000
Semi-Annual Groundwater Self-Monitoring Report, First and Second Quarters 2000, California-Olive-Emerson (COE) Study Area and Perimeter Area, Palo Alto, California	Secor International, Inc. (Secor)	October 12, 2000
Soil Sampling and Analysis Report. Former Mercer Processing Facility, 230 Portage Avenue, Palo Alto, California	IT Corporation (IT)	July 24, 2000
Facility Closure Assessment, Former Mercer Processing Facility, 230 Portage Avenue, Palo Alto, California	PES Environmental (PES)	January 12, 2000

Appendix C

Table 2
Administrative Record List – Guidance Documents
Former Mercer Processing, Inc. Facility
230 Portage Avenue, Palo Alto California

Title or Description	From	Date
www.dhs.cahwnet/ps/ddwem/ chemicals/mcl/mclindex.htm	RWQCB	June 19, 2001
Region IX Preliminary Remediation Goals, United States Environmental Protection Agency	U.S. Environmental Protection Agency (USEPA)	November 22, 2000
Application of Risk-Based Screening Levels and Decision Making to Sites With Impacted Soil and Groundwater	RWQCB	August 2000
Site Assessment and Mitigation Manual	San Diego County Department of Environmental Health (SDCDEH)	1996 (Revised 1998)
Remedial Action Plan Policy, State of California, Environmental Protection Agency, Department of Toxic Substances Control, Document No. EO-95-009-PP,5	Department of Toxic Substances Control (DTSC)	December 1995
RiskPro's SESOIL for Windows	General Sciences Corporation (GSC)	July 1995
Water Quality Control Plan for the San Francisco Bay Basin	California Regional Water Quality Control Board, San Francisco Bay Region (RWQCB)	June 21, 1995
VLEACH, A One-Dimensional Finite Difference Vadose Zone Leaching Model, Version 2.0, Center for Subsurface Modeling Support, Robert S. Kerr Environmental Research Laboratory, Ada, Oklahoma	Ravi, Varadhan and Johnson, Jeffrey	1995

Appendix C

Table 2
Administrative Record List – Guidance Documents
Former Mercer Processing, Inc. Facility
230 Portage Avenue, Palo Alto California

Title or Description	From	Date
Application of VLEACH to Vadose Zone Transport of VOCs at an Arizona Superfund Site, Groundwater Monitoring and Remediation	Rosenbloom, J., et al	1993
Risk Assessment Guidance for Superfund, Volume 1, Human Health Evaluation Manual (Part A), Interim Final	U.S. Environmental Protection Agency (USEPA)	December 1989
Attachment C, Chemical Properties of SSL Development, www.epa.gov/superfund/oerr/soil/attach/pdf	U.S. Environmental Protection Agency (USEPA)	-

Table 3
Administrative Record List – Regulations
Former Mercer Processing, Inc. Facility
230 Portage Avenue, Palo Alto California

Title – Federal Regulations	Citation
National Contingency Plan	40 CFR Part 300
RCRA Land Disposal Restrictions	40 CFR Parts 260-270
Safe Drinking Water Act	40 CFR Part 141
Occupational Safety and Health Administration	29 CFR Part 1910.120
Clean Water Act	40 CFR Part 100-149
Comprehensive Environmental Response Compensation and Liability Act (CERCLA)/Superfund Amendments and Reauthorization Act (SARA)	42 U.S.C Section 9601, et. seq.
Title – California Regulations	**Citation**
California Safe Drinking Water Act – Maximum Contaminant Levels (MCLs)	5, Part 1, Chapter 7, Section 4010, et. seq., HSC, DIV20, Chapter 66
California Hazardous Waste Control Act, California	22CCR 66261.24, 66262.1
Hazardous Waste Control Law	Health and Safety Code, Division 20, Chapters 6.5, 6.7, and 6.8
Porter Cologne Water Quality Control Act	*Water Code*, Division 7, Section 13000, et. seq.
California Occupational Health & Safety Act	Labor Code, Division 5, Section 6300, et. seq.
Sources of Drinking Water and Non-Degradation Policy, State Water Resources Control Board	Resolution 88-63, Resolution 68-16
Title – Local Regulations	**Citation**
City of Palo Alto Grading Permit	
Uniform Building Code	UBC Appendix, Chapter 70

Notes: CFR = Code of Federal Regulations
CCR = California Code of Regulations
USC = United States Code

PES Environmental, Inc.
Engineering & Environmental Services

COPY

March 14, 2002

500.009.03.005

Dr. Derek Whitworth, P.E.
California Regional Water Quality Control Board
San Francisco Bay Region
1515 Clay Street, Suite 1400
Oakland, California 94612

Re: Remedial Action Completion Report
Former Mercer Processing, Inc. Facility
230 Portage Avenue
Palo Alto, California

Dear Dr. Whitworth:

Transmitted herewith are two copies of the *Remedial Action Completion Report, Former Mercer Processing, Inc. Facility, 230 Portage Avenue, Palo Alto, California* prepared by PES Environmental, Inc. (PES). Please call us at (415) 899-1600 should you have any questions or comments.

Yours very truly,

PES ENVIRONMENTAL, INC.

Kyle S. Flory, R.G.
Associate Geologist

cc: David Cooke – Allen Matkins Leck Gamble & Mallory LLP
Boyd Smith – El Camino Center

1682 Novato Boulevard • Suite 100 • Novato, California 94947-7021 • Tel (415) 899-1600 • Fax (415) 899-1601

PES Environmental, Inc.
Engineering & Environmental Services

Report Prepared For:

California Regional Water Quality Control Board
San Francisco Bay Region
1515 Clay Street, Suite 1400
Oakland, California 94612

Attention: Dr. Derek Whitworth, P.E.

REMEDIAL ACTION COMPLETION REPORT
FORMER MERCER PROCESSING, INC. FACILITY
230 PORTAGE AVENUE
PALO ALTO, CALIFORNIA

MARCH 12, 2002

By:

Honor Hutton
Staff Engineer



Kyle S. Flory, R.G. No. 6472
Associate Geologist

Robert S. Creps, P.E. No. 45153
Principal Engineer



500.009.03.005

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1.0 INTRODUCTION

PES Environmental, Inc. (PES) has prepared this report on behalf of El Camino Center to describe soil remediation at the former Mercer Processing, Inc. (Mercer) facility at El Camino Center, 230 Portage Avenue, Palo Alto, California. The site location is shown on Plate 1. The remediation was performed in accordance with PES' document *Final Remedial Action Plan, Former Mercer Processing, Inc. Facility, 230 Portage Avenue, Palo Alto, California* dated October 18, 2001 (PES, 2001). The Remedial Action Plan (RAP) was approved by the Regional Water Quality Control Board - San Francisco Bay Region (RWQCB) in a letter dated October 18, 2001. A copy of the RWQCB approval letter is included in Appendix A.

Remedial planning conducted by El Camino Center included: (1) preparation of the RWQCB-approved RAP; and (2) preparation and implementation of a Community Relations Plan. The activities described in the RAP were consistent with the National Oil and Hazardous Substances Pollution Contingency Plan[1], and the California Health and Safety Code.

The Community Relations Plan included provisions for notifying the public of the availability of the RAP for review and comment, making the RAP available for public review and comment for a period of 30 days, and publishing a brief analysis of the site and the proposed remedial action. Following completion of the 30-day public comment period and minor revisions to the RAP, the RWQCB approved the RAP for implementation. The Community Relations Plan also included provisions for holding a public meeting to discuss the history of the site and proposed remedial action, addressing comments received from concerned public, and publishing the selected final remedial action for the site following expiration of the public comment period. A copy of the Community Relations Plan, public notice, fact sheet, fact sheet distribution list and distribution map, and public comments and responses were appended to the Final RAP.

This report summarizes the remedial actions performed in accordance with the Final RAP, and presents the results of verification soil sampling and waste management activities. This report also provides a brief overview of the results of previous investigations at the former Mercer facility. A more detailed overview of the previous investigations is presented in the RAP and previous investigation reports (PES, 2000; IT, 2000a and 2000b).

2.0 SITE BACKGROUND

2.1 Site Location and Description

The former Mercer facility is located at 230 Portage Avenue in Palo Alto, California within El Camino Center (Plate 1). The subject site is a vacant tenant space located within a larger commercial and light industrial building near the north end of Portage Avenue. It is located in

[1] Title 40 Code of Federal Regulations, Part 300.

a primarily commercial and light industrial area with some residences present. The property is zoned for residential use but is being used for commercial purposes pursuant to a variance that is scheduled to expire in the year 2019, if it is not terminated earlier. The property is improved with one structure. The entire property, with the exception of landscaped areas and the onsite structure, is covered with asphalt-concrete parking lots and concrete sidewalks. The floor of the former Mercer facility is elevated above the surrounding ground surface by approximately four feet. A site plan is included as Plate 2.

2.2 Former Site Use

The former Mercer tenant space is located in the eastern portion of the El Camino Center building (Plate 2). The tenant space is currently vacant. The major tenant at El Camino Center is Frye's Electronics (an electronics and appliance retailer), located west of the subject site. Two other tenants occupy segments of the building to the east for office purposes.

El Camino Center personnel approximated that the parcel has been in use since the 1940s. Prior to World War II, the parcel, including the tenant space formerly occupied by Mercer, was purportedly used as a fruit cannery (Osborn, 2001). Between World War II and the early 1970s when El Camino Center purchased the parcel, the area, including the subject site, was first used by Safeway, as a food distribution warehouse and subsequently by Maximart as a strip mall consisting of numerous retail shops (Osborn, 2001). Maximart left after El Camino Center purchased the property, and the former Mercer tenant space was reportedly used as a warehouse for the storage of dry goods until Mercer's occupancy commenced in 1989.

According to information provided to PES during an inspection of the Mercer tenant space in December 1999, Mercer occupied this location between 1989 and 1999. Plate 3 shows the layout of the former Mercer facility.

At this location, Mercer operated freeze-drying and food packing equipment. Solvents, including trichloroethylene (TCE) and Genesolv 2000, were used in the refrigeration equipment for the freeze-drying process. Documentation from Santa Clara County Hazardous Materials Compliance Division indicated that Mercer stored approximately 650 gallons of Genesolv 2000 on the site.

2.3 Previous Investigations

Several subsurface remedial investigations have been performed by PES and IT Corporation (IT) at the subject site to assess the lateral and vertical extent of contaminants in soil resulting from the former Mercer operations. The investigations are described in the RAP.

Soil samples were collected to a maximum depth of 24 feet bgs. The locations of previously sampled soil borings are shown on Plate 3. Soil samples were analyzed for volatile organic compounds (VOCs). Detected VOCs included: (1) TCE; (2) 1,1-dichloroethylene; (3) cis-1,

2-dichloroethylene; (4) trans-1,2-dichloroethylene; (5) acetone; (6) methylethyl ketone; and (7) tert-butanol.

TCE was detected at concentrations ranging from 3 micrograms per kilogram (μg/kg) to 6,800 μg/kg (IT, 2000b). In general, TCE concentrations in soil decreased laterally with increased distance away from the former location of the refrigeration equipment at the former Mercer facility. Concentrations in soil also generally decreased with depth. Tabulated soil sample analytical results from the investigations are included as Appendix B.

TCE was identified as the primary chemical of concern at the Site because: (1) it was the most prevalent VOC detected in soil; (2) it was present at higher concentrations than other VOCs detected in site soil; (3) it possesses the lowest regulatory action level in groundwater of the detected contaminants; and (4) it represented the greatest potential human health risk to site users.

2.4 Remedial Objectives

On the basis of results of previous investigations (PES, 2000; IT, 2000a and 2000b), PES prepared the RAP to: (1) select a risk-based TCE target soil cleanup concentration of 0.2 milligrams per kilogram (mg/kg); and (2) describe the procedures to implement the remedial activities. The RWQCB approved TCE target soil cleanup concentration in the final RAP is 0.2 mg/kg. The excavation area proposed in the RAP to achieve the cleanup goal was expected to range from approximately 160 square feet (ft^2) to 800 ft^2 in the vicinity of the former refrigeration unit in the former Mercer facility (Plate 3). The proposed maximum depth of the excavation was estimated to be 20 feet below grade based on analytical results from soil samples collected from previously drilled soil borings B and D (Plate 3 and Appendix B). A site plan showing the anticipated extent of the excavation is included as Plate 4.

3.0 REMEDIATION ACTIVITIES

Soil excavation was conducted at the former Mercer facility to remove soil containing concentrations of TCE exceeding the target soil cleanup concentration of 0.2 mg/kg.

Remedial activities at the site consisted of: (1) acquiring necessary permits; (2) preparing health and safety plans; (3) sawcutting and removing concrete from areas above the impacted soil; (4) excavating soil with TCE concentrations exceeding the target cleanup concentration; (5) collecting and analyzing verification soil samples from the excavation to verify the target cleanup concentration was met; (6) collecting and analyzing waste characterization samples of the concrete and excavated soil for offsite recycling and disposal; and (7) backfilling and resurfacing the excavation. These activities are described in the following sections.

3.1 Preliminary Activities

El Camino Center contracted with Cornerstone Environmental Contractors, Inc. (Cornerstone) of Lafayette, California to perform soil excavation and backfilling activities. The work was conducted between January 2 and January 19, 2002. PES was present to observe and document the work. Cornerstone and PES each prepared site-specific health and safety plans prior to the remediation in accordance with Occupational Safety and Health Administration regulations[2].

An underground utility service locator was hired to clear the proposed excavation of subsurface utilities. In addition, Underground Service Alert was contacted to schedule visits by public and private utility companies.

Cornerstone acquired permits from the City of Palo Alto prior to conducting remediation at the site. As part of the permit acquisition process, a structural analysis prepared by Hohbach-Lewin, Inc. of Palo Alto, California, was submitted to the City of Palo Alto. A copy of the permit is provided in Appendix C.

3.2 Site Preparation

Before conducting remediation activities, the walls and ceiling in the rear (northern) portion of the former Mercer facility were lined with plastic sheeting to reduce dust settlement on the surfaces. Cornerstone constructed a temporary ramp consisting of baserock to create an entrance from the rear parking lot to the elevated loading dock.

The concrete slab above the excavation was sawcut and removed by a Cornerstone subcontractor on January 2 and 3, 2002. The concrete was temporarily stockpiled on plastic sheeting in a bermed area within secured fencing in the rear parking lot.

3.3 Soil Excavation

The impacted soil above the target cleanup concentration was excavated between January 8 and January 15, 2002. A test pit was excavated adjacent to the wall located in the center of the excavation in order to verify the presence of a footing beneath the wall prior to excavation activities. A concrete foundation was present beneath the wall. The foundation is approximately 1-foot wide and extends approximately 4.5-feet below grade.

Approximately 285 cubic yards (cy) of TCE-impacted soil was removed from the facility. The excavation was conducted using two track-mounted mini-excavators, a rubber-tired Bobcat, and hand-held equipment. Excavated soil was placed on and covered with plastic sheeting inside a bermed area and secured fencing in the rear parking lot north of the facility.

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[2] Title 29 Code of Federal Regulations, 1910.120.

The TCE-impacted soil was excavated using conventional and "slot trench" techniques. Conventional excavation was first conducted to approximately 4 feet below grade across the entire excavation area. Slot trenching was then conducted to protect the integrity of the building and for worker safety when removing soil from deeper portions of the excavation (i.e., greater than 4 feet below grade). Approximately 5-foot wide slot trenches oriented in the northwest-southeast direction (parallel to the long axis of the tenant space) were excavated to remove TCE-impacted soil at depths greater than 4 feet below grade.

During excavation, several other concrete footings and inactive utilities were uncovered and removed. An active fire drain located along the wall was removed from the excavation and set aside for re-assembly during backfilling activities. A concrete footing located approximately 1 foot northwest of the wall foundation did not require removal. Soil located within the annular space between the two foundations was subsequently removed using hand excavation equipment.

In order to ensure the integrity of the wall separating the interior and exterior of the tenant space, excavation activities were performed concurrently on both sides of the wall. To reduce potential settlement during excavation, soil was excavated during benching to approximately 0.5 foot above the bottom of the foundations.

Verification of the excavation depth was performed during and after completion of each slot trench. Verification soil samples were collected from the bottom of the excavation to verify the target remedial concentration was met. Verification soil sampling was implemented by collecting samples at the bottom and the sidewalls of the slot trenches and the bottom and sidewalls of the "bench" area. The soil samples collected at the sidewalls of the slots were collected at depth intervals corresponding to areas exhibiting field indications of potential contamination and at depths where previous samples indicated the highest levels of contaminants were present. Excavation details are presented on Plate 5.

The excavated area inside of the former Mercer facility had surficial dimensions of approximately 33 feet by 50 feet (1,650 ft^2). The depth of the soil excavation ranged from approximately 4 feet below grade (bench area) to approximately 20.5 feet below grade (Plate 5). Excavation contours are depicted on Plate 5. Excavation cross-sections are shown on Plate 6. The locations of the cross-sections are shown on Plate 5.

The soil encountered during the excavation consisted of a gravelly clay fill to approximately 1.5 feet below grade. The gravelly clay fill was underlain by a sandy clay fill to approximately 6 feet below grade. Beneath the fill, a highly plastic clay was present to 20.5 feet below grade, the maximum depth of the excavation. The clay was dark gray in color to approximately 14 feet below grade where the color changed to a yellowish orange. No groundwater was encountered.

The final limits of the excavation and the verification sampling locations are presented on Plate 5. Photographs of the soil remediation activities are presented on Plates 6 through 8.

3.4 Verification Soil Sampling Methodology and Analytical Program

Verification soil samples were collected from the excavation for chemical analyses during remedial activities. The samples were collected to verify implementation of the target cleanup concentration. If the target cleanup concentration was exceeded, excavation of TCE-impacted soil was continued until the TCE concentration in soil samples was below the target concentration. The verification soil sample locations are shown on Plate 5. A total of 45 verification soil samples were collected from the bottom and sidewalls of excavated slots and benches. These samples were collected on January 9, 10 and 14, 2002.

Verification soil samples were collected directly from the bucket of the mini-excavator or exposed soil in the excavation by driving pre-cleaned 3-inch long stainless-steel tubes into the soil. After collection, the ends of the tube were sealed with Teflon™ sheeting and covered with plastic end caps. Sample tubes were labeled with project name and number, sample identification, sampling time and date.

Soil samples were transferred under chain-of-custody protocol to an onsite mobile laboratory operated by STL On-Site Technologies of Westfield, Massachusetts, a California Department of Health Services-certified laboratory. All samples were analyzed for VOCs using U.S. EPA Test Method 8260B. The laboratory analytical reports and chain of custody forms are presented in Appendix D.

3.5 Verification Soil Sample Results

Verification sample results are presented in Table 1. Results of the final verification samples are also presented on Plate 5.

As shown on Plate 5, the target cleanup concentration of 0.2 mg/kg TCE was, as anticipated, reached in the final verification samples collected from the bottom and sidewalls of the slot trenches and the bottom and the sidewalls of the bench area.

3.6 Waste Characterization Results and Waste Management

Soil excavated from the site was stockpiled in the parking lot at the rear of the facility. Excavated soil was characterized by collecting one four-point composite soil sample for VOC analyses per approximately 100 cy. The samples were collected directly from the soil stockpiles. These samples were capped, labeled, and handled under the same protocol as the verification soil samples collected from the excavation.

A total of four (4) four-point composite characterization samples were analyzed and TCE was not detected above the reporting limit of 0.025 mg/kg. The results of the chemical analyses conducted for waste characterization are presented in Appendix D.

A composite concrete sample was also collected for waste characterization purposes. Concrete was chipped from various locations within the stockpile using a clean chisel and hammer and placed in a sealed, re-sealable plastic bag. The sample was labeled with project name and number, sample identification, sampling time, and date.

The concrete sample was transported by courier under chain-of-custody protocol to STL San Francisco of Pleasanton, California, a state-certified laboratory. The composite sample was analyzed for VOCs using U.S. EPA Test Method 8260B. TCE was not detected above the reporting limit of .021 mg/kg. Total xylenes were detected at .022 mg/kg. The laboratory analytical report and chain of custody form are presented in Appendix D.

On February 6 and 7, 2002, the soil was transported to the Altamont Landfill in Livermore, California for disposal as non-hazardous solid waste. The soil was transported by Jervicon Inc. of Santa Maria, California. Approximately, 542 tons of soil was transported to and disposed at the Altamont Landfill. Soil transportation and disposal documentation is included in Appendix E.

Concrete removed from the area of excavation was transported to Harbor Sand & Gravel in Redwood City, California for recycling. On February 6 and 7, 2002 the concrete was transported by Greg's Trucking Service, Inc. of San Mateo, California. Approximately 20 tons of concrete were recycled. Concrete recycling documentation is presented in Appendix E.

3.7 Excavation Backfilling and Fire Drain Repair

The slot trench excavations were backfilled to a depth of approximately 4 feet below grade the same day they were excavated. A controlled density flowable fill was used, which consisted of a two-sack cement-sand slurry mixture. The slurry was used to rapidly stabilize the slot trenches in order to protect the integrity of the building and provide worker protection. The slurry was placed in slot trenches after final verification samples were collected and analyzed from each slot trench. A total of approximately 190 cubic yards of slurry was pumped into the slot excavations. Copies of the control density fill delivery tickets are presented in Appendix F.

Prior to backfilling the excavation using conventional earthwork techniques, two support columns in the vicinity of the excavation were reinforced by Cornerstone. The reinforcement of the columns was conducted to fulfill permit requirements.

Between January 15 and January 23, 2002, the upper four feet of the excavation was backfilled and compacted by Cornerstone. The fill material was an imported Class 2 aggregate base. Documentation of the imported Class 2 aggregate base is presented in Appendix G. Excavated soil was evaluated for geotechnical suitability by staff of Smith-Emery Company of San Francisco, California. Approximately 21 cy of the material was found to be suitable and was re-used as backfill. The backfill material was placed in lifts no greater than 8 inches thick and

compacted using a Bomag compactor. The backfill was compacted to at least 95 percent of the maximum relative dry density. Field density testing of the compacted fill was conducted by Smith-Emery Company. Copies of the field density test data are presented in Appendix H. The excavation was backfilled to within approximately 6 inches of the top of the existing concrete slab surface to allow construction of a replacement concrete floor slab.

The section of fire drain pipeline removed for the excavation was replaced by Cornerstone following placement of the underlying fill materials.

3.8 Concrete Replacement

After backfilling was completed, the concrete floor slab was replaced. Concrete was placed by Cornerstone on January 24, 2001 to match the surface of the existing slab. The concrete consisted of a 5-sack mix with a 28-day strength of 3,000 pounds per square inch, complying with ASTM C94. The replaced slab was reinforced and tied into the existing slab by drilling into the existing concrete slab, inserting and epoxying in Number 4 steel dowels in to the slab at approximately 12 inch centers. Wire mesh steel reinforcement was laid at approximately the center of the slab thickness throughout the excavation area prior to the concrete pour. A typical section of the concrete replacement is shown on Plate 5. A photograph of the replaced section of concrete is shown on Plate 7, Photograph 1. Copies of the concrete delivery tickets are presented in Appendix I.

4.0 SUMMARY AND CONCLUSIONS

Remedial action has been successfully implemented at the former Mercer facility at the El Camino Center. Approximately 285 cy of TCE-impacted soil has been excavated to a maximum depth of approximately 20.5 feet below grade. On the basis of verification soil samples collected from the bottom and sidewalls of the excavation, soil with TCE concentrations exceeding the target cleanup goal has been removed from the site. Groundwater was not encountered during the excavation of TCE-impacted soil. The excavation has been backfilled with sand cement slurry, imported clean fill, and re-usable excavated "clean" soil. The area of soil excavation has been capped with a concrete slab.

Accordingly, PES, on behalf of El Camino Center, requests a letter from the RWQCB stating that the remedial goal has been achieved and no further investigation or remedial action is required at the site.

5.0 REFERENCES

IT Corporation (IT), 2000a. *Soil Sampling and Analysis Report, Former Mercer Processing Facility, 230 Portage Avenue, Palo Alto, California.* July 24.

IT, 2000b. *Additional Definition Soil Sampling and Analysis Report, Former Mercer Processing Facility, 230 Portage Avenue, Palo Alto, California, IT Corporation Project 806342.* November 21.

NCP, 1990. *National Oil and Hazardous Substances Pollution Contingency Plan, 40 CFR Part 300.* March 8.

Osborn, Greg, 2001. Personal communication with Kyle Flory. July 13.

PES Environmental, Inc. (PES), 2000. *Facility Closure Assessment, Former Mercer Processing Facility, 230 Portage Avenue, Palo Alto, California.* January 12.

PES Environmental, Inc. (PES), 2001. *Final Remedial Action Plan, Former Mercer Processing, Inc. Facility, 230 Portage Avenue, Palo Alto, California.* October 18.

Regional Water Control Quality Control Board – San Francisco Bay Region, 2001. *Concurrence with the Remedial Action Plan for the Site at 230 Portage Avenue, Palo Alto, California, Santa Clara County.* October 18.

TABLE

Table 1
Verification Soil Sample Analytical Results
Former Mercer Processing, Inc. Facility
230 Portage Avenue
Palo Alto, California

Sample Identification	Sample Date	Depth of Sample (feet bg)	TCE (µg/kg)	trans-1,2-DCE (µg/kg)	cis-1,2-DCE (µg/kg)
Slot Bottom Samples					
A4-5.0	1/9/02	5	**150**	<25	<25
A5-5.0	1/9/02	5	**53**	<25	<25
A8-4.0	1/9/02	4	<25	<25	<25
B4-5.0	1/9/02	5	<25	<25	<25
B6-8.0	1/9/02	8	**190**	<25	<25
B7-8.0	1/9/02	8	**180**	<25	<25
C6-20.5	1/14/02	20.5	**90**	<25	<25
C8-20.0	1/14/02	20	**69**	<25	<25
D6-18.1	1/9/02	18	**220**	<25	<25
D6-19.5	1/9/02	19.5	**270**	<25	<25
D6-20.0	1/9/02	20	**36**	<25	<25
E5-4.0	1/10/02	4	**1,300E**	**125**	**67**
E5-8.0	1/10/02	8	**130**	<25	<25
E5-12.0	1/10/02	12	**54**	<25	<25
E7-8.5	1/10/02	8.5	**280**	<25	<25
E7-12.0	1/10/02	12	**140**	<25	<25
Slot Sidewall Samples					
B8-East-5.0	1/9/02	5	**100**	<25	<25
C4-West-6.0	1/14/02	6	<25	<25	<25
C8-East-8.0	1/14/02	8	**36**	<25	<25
D4-West-6.0	1/9/02	6	<25	<25	<25
D8-East-5.0	1/9/02	5	**67**	<25	<25
D8-East-5.0*	1/9/02	5	**100**	<25	<25
E4-West-6.0	1/14/02	6	**37**	<25	<25
E5-South-5.0	1/14/02	5	**61**	<25	<25
E7-South-8.5	1/14/02	8.5	**110**	<25	<25
E8-East-6.0	1/14/02	6	**88**	<25	<25
Bench Bottom Samples					
A10-4.0	1/10/02	4	<25	<25	<25
B2-4.0	1/9/02	4	**62**	<25	<25
B10-4.0	1/10/01	4	<25	<25	<25
C2-4.0	1/10/02	4	<25	<25	<25
C10-4.0	1/10/02	4	**43**	<25	<25
D2-4.0	1/10/02	4	<25	<25	<25
D10-4.0	1/10/02	4	**28**	<25	<25
E2-5.0	1/10/02	5	<25	<25	<25
E8-4.0	1/10/02	4	**49**	<25	<25
E10-4.0	1/10/02	4	**80**	<25	<25
F5-0.5	1/10/02	0.5	**160**	<25	<25
F8-0.5	1/10/02	0.5	<25	<25	<25

Table 1
Verification Soil Sample Analytical Results
Former Mercer Processing, Inc. Facility
230 Portage Avenue
Palo Alto, California

Sample Identification	Sample Date	Depth of Sample (feet bg)	TCE (µg/kg)	trans-1,2-DCE (µg/kg)	cis-1,2-DCE (µg/kg)
Bench Sidewall Samples					
A8-North3-2.0	1/14/02	2	<25	<25	<25
A5-North4-4.0	1/9/02	4	**170**	<25	<25
A4-North-4.0	1/9/02	4	**48**	<25	<25
A5-North-4.0	1/9/02	4	**99**	<25	<25
A8-North3-2.0	1/14/02	2	<25	<25	<25
C10-East-2.0	1/10/02	2	<25	<25	<25
D1-West-2.0	1/14/02	2	<25	<25	<25
F10-East-2.0	1/14/02	2	**69**	<25	<25

Notes:
TCE - trichloroethylene
trans-1,2-DCE - trans-1,2-Dichloroethylene
cis-1,2-DCE - cis-1,2-Dichloroethylene
bg - below grade
µg/kg - micrograms per kilogram
<25 - Not detected at or above indicated laboratory reporting limit.
Samples analyzed using an on-site laboratory by U.S. Environmental Protection Agency Method 8260B
E - Exceeds upper calibration limit of laboratory instrumentation
* - Duplicate sample of D8-East-5.0

Parking Lot

Concrete Loading Dock

ALLEY

Warehouse

Warehouse

Fry's Electronics

Former Mercer Processing Facility

PARK BOULEVARD

Professional Offices
Located in Mezzanine

Concrete Sidewalk

PORTAGE AVENUE

ASH STREET

Parking Lot

N

0 50 100

Approximate Scale in Feet

PES Environmental, Inc.
Engineering & Environmental Services

Vicinity Map
Former Mercer Processing Facility
230 Portage Avenue
Palo Alto, California

PLATE
2

500.009.03.001	50000902001s2.CDR	KSF	3/02
JOB NUMBER	DRAWING NUMBER	REVIEWED BY	DATE

Explanation

SOIL BORING LOCATION
(PES, DECEMBER, 1999)

SOIL BORING LOCATION
(IT CORP., JUNE OR SEPTEMBER, 2000)

DETAIL SHOWN ON PLATE 4

ADJACENT TENANT SPACE

VACUUM CHAMBER

HANDWASH STATIONS (2)

CYCLONE FENCE

WATER COOLING TOWER

BOILER BLOWDOWN TANK

AIR COMPRESSOR

CART CARRIER

VACUUM PUMP

FLOOR DRAIN

FORMER REFRIGERATION SYSTEM

TRAY WASH AREA

DRY STORAGE

K

I

A

GS-4

GS-3

GS-2

C

E

F

G

J

GS-5

D

GS-1

B

LOADING AREA

Approximate Location of Expansion Tank

H

H2

L2

DRY STORAGE

UNLOADING AREA

DRY STORAGE

SIDING

CART

BOILER

BOILER FEED TANK

ADJACENT TENANT SPACE

CYCLONE FENCE

N

0 20

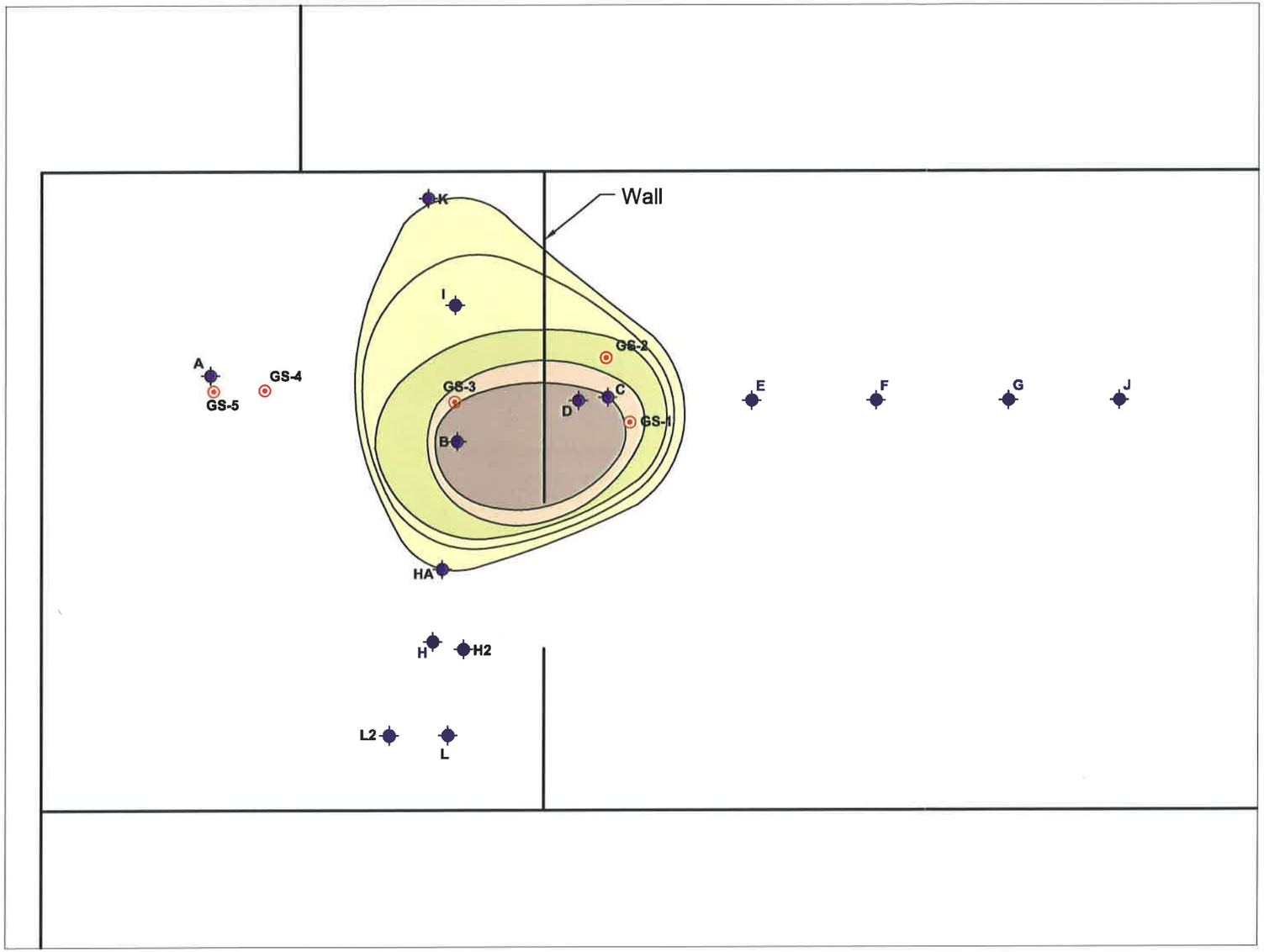
SCALE IN FEET

PES Environmental, Inc.
Engineering & Environmental Services

Boring Location Map with Former Facility Layout
Former Mercer Processing Facility
230 Portage Avenue
Palo Alto, California

PLATE 3

500.009.02.001	50000903001_0501-04.dwg	KSF	3/02
JOB NUMBER	DRAWING NUMBER	REVIEWED BY	DATE



Explanation

SOIL BORING LOCATION
(PES, DECEMBER, 1999)

SOIL BORING LOCATION
(IT CORP., JUNE, SEPTEMBER OR NOVEMBER, 2000)

Estimated lateral extent of TCE in soil exceeding 200 µg/kg at 0-4-ft. bgs.

Estimated lateral extent of TCE in soil exceeding 200 µg/kg at 4-8-ft. bgs.

Estimated lateral extent of TCE in soil exceeding 200 µg/kg at 8-12-ft. bgs.

Estimated lateral extent of TCE in soil exceeding 200 µg/kg at 12-16-ft. bgs.

Estimated lateral extent of TCE in soil exceeding 200 µg/kg at 16-20-ft. bgs.

N

0 10

SCALE IN FEET

PES Environmental, Inc.
Engineering & Environmental Services

TCE Isoconcentration Contour Map
Former Mercer Processing Facility
230 Portage Avenue
Palo Alto, California

PLATE
4

500.009.02.001	50000903001_0501-04.dwg	KSF	3/02
JOB NUMBER	DRAWING NUMBER	REVIEWED BY	DATE

ADJACENT TENANT SPACE

FIRE SUPPRESSION EQUIPMENT SUMP

Wall

A5-North4-4.0 | 4.0 | 170
A4-5.0 | 5.0 | 150
A4-North-4.0 | 4.0 | 48
A5-North-4.0 | 4.0 | 99
A5-5.0 | 5.0 | 53
B7-8.0 | 8.0 | 180
A8-North3-2.0 | 2.0 | <25
B6-8.0 | 8.0 | 190
A8-4.0 | 4.0 | <25
B4-5.0 | 5.0 | <25
C4-West-6.0 | 6.0 | <25
B2-4.0 | 4.0 | 62
C2-4.0 | 4.0 | <25
D2-4.0 | 4.0 | <25
D1-West-2.0 | 2.0 | <25
E2-5.0 | 5.0 | <25
B8-East-5.0 | 5.0 | 100
A10-4.0 | 4.0 | <25
B10-4.0 | 4.0 | <25
C10-4.0 | 4.0 | 43
C10-East-2.0 | 2.0 | <25
C8-East-8.0 | 8.0 | 36
D10-4.0 | 4.0 | 28
C8-20.0 | 20.0 | 69
D8-East-5.0 | 5.0 | 67
E10-4.0 | 4.0 | 80
F10-East-2.0 | 2.0 | 69
E8-4.0 | 4.0 | 49
F8-0.5 | 0.5 | <25
E7-12.0 | 12.0 | 140
E7-South-8.5 | 8.5 | 110
E8-East-6.0 | 6.0 | 88
D4-West-6.0 | 6.0 | <25
C6-20.5 | 20.5 | 90
D6-20.0 | 20.0 | 36
F5-0.5 | 0.5 | 160
E4-West-6.0 | 6.0 | 37
E5-South-5.0 | 5.0 | 61
E5-8.0 | 8.0 | 130
12.0 | 54

FORMER MERCER PROCESSING FACILITY

Explanation

A5-North4-4.0 Verification Soil Sample Location and Identification

Sample Identification	
Depth ft. bg	TCE Concentration

TCE - Trichloroethylene

Soil sample depth presented in feet below grade

Soil analytical results presented in micrograms per kilogram (µg/kg)

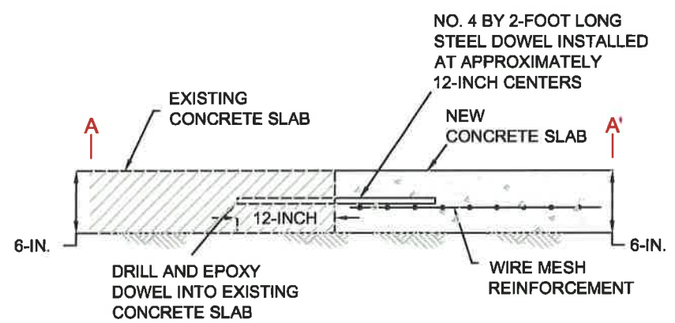
ft. bg - feet below grade

Approximate Area of Concrete Removal

Approximate Area of Soil Excavation

Excavation Contour Line

Refer to Plate 6 for Excavation Cross-Sections B-B' and C-C'



SECTION A-A'
Concrete Connection Detail
(Not to Scale)

N

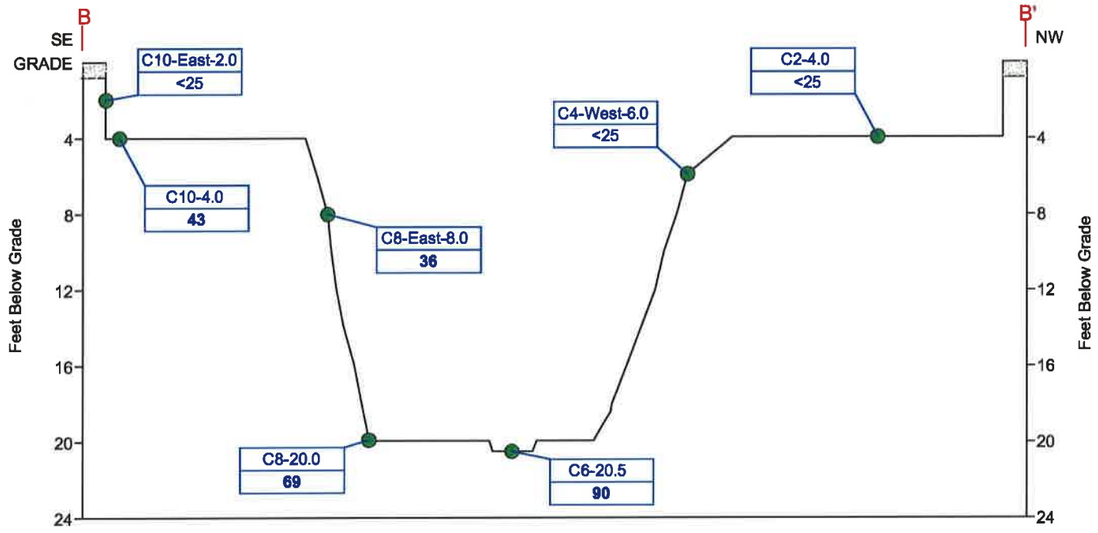
0 6
SCALE IN FEET

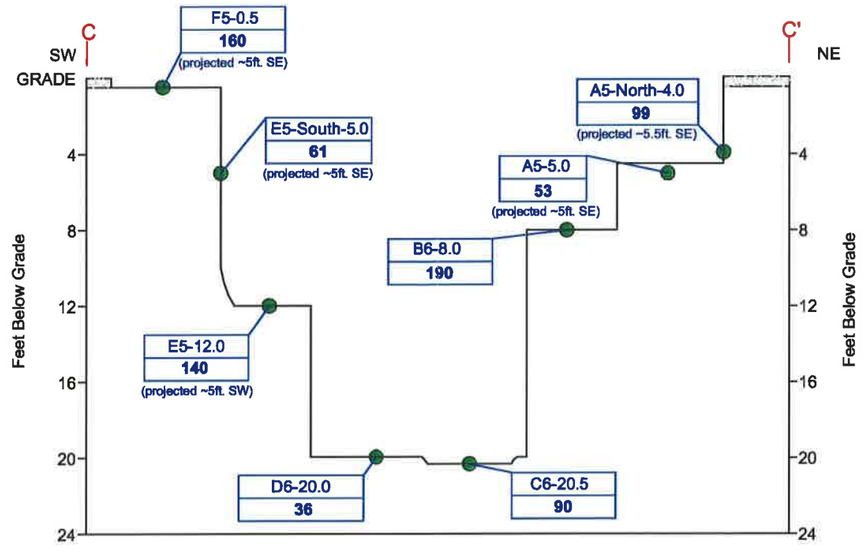
PES Environmental, Inc.
Engineering & Environmental Services

Limits of Excavation and Results of Final Verification Soil Sampling
Former Mercer Processing Facility
230 Portage Avenue
Palo Alto, California

PLATE 5

500.009.03.005	50000903005_0202	KSF	3/02
JOB NUMBER	DRAWING NUMBER	REVIEWED BY	DATE





Explanation

● A5-North4-4.0 Verification Soil Sample Location and Identification

Sample Identification
TCE Concentration

TCE - Trichloroethylene

Soil sample depth presented in feet below grade

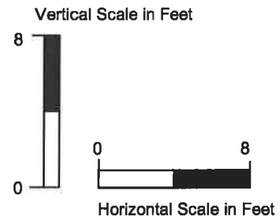
Soil analytical results presented in micrograms per kilogram (µg/kg)

NE - Northeast
SW - Southwest
SE - Southeast
NW - Northwest

The direction and duration of the projection of each verification sample location is noted in box beneath the TCE Concentration

Refer to Plate 5 for plan view of cross-section location

Concrete



PES Environmental, Inc.
Engineering & Environmental Services

Excavation Cross-Sections B-B' and C-C'
Former Mercer Processing Facility
230 Portage Avenue
Palo Alto, California

PLATE
6

500.009.03.005	50000903005_0202	KSF	3/02
JOB NUMBER	DRAWING NUMBER	REVIEWED BY	DATE



Photo 1.
Concrete removal and exposed underlying soil.



Photo 2.
Excavation of slot trench.



Photo 3.
Excavation of slot trench. Note concrete foundation at top of photograph.



Photo 1.
Placement of Control Density Fill within slot excavation.



Photo 2.
Backfilling with imported baserock fill material.



Photo 3.
Backfilling activities.

PES Environmental, Inc.
Engineering & Environmental Services

Site Photographs
Former Mercer Processing Facility
230 Portage Avenue
Palo Alto, California

PLATE
8

500.009.03.005	50000903005_photos-0202	KSF	3/02
JOB NUMBER	DRAWING NUMBER	REVIEWED BY	DATE



Photo 1.
Replaced section of concrete.



Photo 2.
Soil stockpiles in parking lot at rear of facility.

PES Environmental, Inc.
Engineering & Environmental Services

Site Photographs
Former Mercer Processing Facility
230 Portage Avenue
Palo Alto, California

PLATE
9

500.009.03.005	50000903005_photos-0202	KSF	3/02
JOB NUMBER	DRAWING NUMBER	REVIEWED BY	DATE

APPENDIX A

RWQCB APPROVAL LETTER

California Regional Water Quality Control Board
San Francisco Bay Region

Winston H. Hickox
Secretary for Environmental Protection

Internet Address: http://www.swrcb.ca.gov
1515 Clay Street, Suite 1400, Oakland, California 94612
Phone (510) 622-2300 • FAX (510) 622-2460

Gray Davis
Governor

RECEIVED OCT 2 3 2001

Date: October 18, 2001
File No. 43S0965 (DAW)

El Camino Center
Attn: Mr. Boyd Smith
3201 Ash Street
Palo Alto, CA 94306

Subject: Concurrence with the Remedial Action Plan for the site at 230 Portage Avenue, Palo Alto, Santa Clara County.

Dear Mr. Smith:

This letter responds to your final Remedial Action Plan (RAP) dated October 18, 2001, describing proposed remedial actions to address the soil contamination at a site formerly occupied by Mercer Processing Inc. at 230 Portage Avenue, Palo Alto. The submittal describes the remedial investigations conducted at the site, considers alternatives for mitigating the contamination, and recommends a course of action. Board staff concur with the recommended remedial action.

Investigation reports describing the extent of contamination by trichloroethylene at the site were submitted to the Board on March 22, 2001. A meeting was held on April 3, 2001, between Board staff, yourself, your consultants, PES Environmental Inc., and your attorney, Mr. David Cooke. At that meeting additional information on the site was presented which described the threat to groundwater due to the contamination. Based on the information submitted, the Board sent a letter to El Camino Center on May 9, 2001, requesting a RAP.

A draft RAP was first submitted on June 26, 2001. Board staff reviewed the RAP and it was subsequently revised and made available for public review on July 28, 2001. The RAP recommends excavation and off-site disposal of soils contaminated with trichloroethylene. To the extent practicable, all soils containing trichloroethylene at concentrations greater than 0.2 mg/kg will be excavated and disposed off-site. Modeling studies have indicated that, at this level, if the TCE in the soil leaches into the underlying aquifer it will not further degrade the existing beneficial uses of that water. The clean up level for soil is also fully protective of public health.

A public notice of the draft RAP was published and the public was invited to submit comments to the Board between July 28 and August 27, 2001. A public meeting was held on August 8, 2001, to facilitate and receive input from the community and other interested groups.

The Board received written comments on the draft RAP as well as oral comments at the public meeting. Board staff addressed these comments in an internal memorandum. A copy of this memorandum is included as an appendix in the final RAP. There were two responses that indicated changes and amendments to the RAP. These changes and amendments have been incorporated into the final RAP submitted to the Board on October 18, 2001. Board staff concur with the selected alternative described in the RAP.

Implementation of the RAP is anticipated to start in October 2001. Please give the Board three working days notice of the start of excavation and submit a completion report within 60 days of completing the remedial work.

If you have any questions, please contact Derek Whitworth of my staff at (510) 622 2349 [e-mail dw@rb2.swrcb.ca.gov].

Sincerely,

Stephen A. Hill
Toxics Cleanup Division Chief

For Loretta K. Barsamian
Executive Officer

cc:

PES Environmental, Inc.
Mr. Kyle S. Flory
1682 Novato Boulevard, Suite 100
Novato, CA 94947

Allen Matkins Leck Gamble & Mallory LLP
Mr. David D. Cooke
333 Bush Street, 17th Floor
San Francisco, CA 94104

Varian Medical Systems
Mr. Gary R. Kern
3100 Hansen Way
Palo Alto, CA 94304-1038

Erler & Kalinowski
Ms. Vera Nelson
1870 Ogden Drive
Burlingame, CA 94101

Hewlett Packard Company
Ms. Elizabeth McDonald
1501 Page Mill Road
Palo Alto, CA 94304

Santa Clara Valley Water District
Mr. Tom Mohr
5150 Almaden Expressway
San Jose, CA 95014

APPENDIX B

TABULATED PREVIOUS SOIL SAMPLING ANALYTICAL RESULTS

Table B-1
Soil Sample Analytical Results
Former Mercer Processing Facility
230 Portage Avenue
Palo Alto California

Boring Designation	Sample Designation	Date	Sample Depth (feet bgs)	TCE (µg/kg)	1,1-DCE (µg/kg)	cis-1,2-DCE (µg/kg)	trans-1,2-DCE (µg/kg)	MEK (µg/kg)	t-butanol (µg/kg)	Acetone (µg/kg)
GS-2[1]	GS-2-0.5	12/21/99	0.5	<5	<5	<5	<5	<20	**23**	<100
	GS-2-3.5	12/21/99	3.5	**54**	<5	<5	<5	<20	<20	<100
GS-3[1]	GS-3-0.5	12/21/99	0.5	**470**	<25	<25	<25	<100	<100	<500
GS-4[1]	GS-4-0.5	12/21/99	0.5	<5	<5	<5	<5	**47**	<20	**230**
	GS-4-2.0	12/21/99	2.0	<5	<5	<5	<5	**24**	<20	**150**
	GS-4-4.0	12/21/99	4.0	<5	<5	<5	<5	<20	<20	<100
	GS-4-6.0	12/21/99	6.0	<5	<5	<5	<5	<20	<20	<100
GS-5[1]	GS-5-0.5	12/21/99	0.5	<5	<5	<5	<5	**52**	<20	**270**
	GS-5-2.0	12/21/99	2.0	<5	<5	<5	<5	**47**	<20	**330**
	GS-5-6.0	12/21/99	6.0	<5	<5	<5	<5	<20	<20	**120**
A[2]	A-0	6/1/00	0.0	<100	<100	<100	<100	<500	NA	<1000
	A-2	6/1/00	2.0	<100	<100	<100	<100	<500	NA	<1000
	A-4	6/1/00	4.0	<100	<100	<100	<100	<500	NA	<1000
	A-7	6/1/00	7.0	<100	<100	<100	<100	<500	NA	<1000
	A-8	6/1/00	8.0	<100	<100	<100	<100	<500	NA	<1000
	A-10	6/1/00	10.0	<100	<100	<100	<100	<500	NA	<1000
B[2]	B-0	6/1/00	0.0	**442**	<100	<100	<100	<500	NA	<1000
	B-4	6/1/00	4.0	**6800**	<100	<100	<100	<500	NA	<1000
	B-6	6/1/00	6.0	**4190**	<100	<100	**117**	<500	NA	<1000
B[2]	B-8	11/1/00	8.0	**810**	<5	**35**	**48**	NA	NA	<50
	B-10	11/1/00	10.0	**900**	<5	**32**	**48**	NA	NA	<50
	B-12	11/2/00	12.0	**240**	**19**	<5	<5	NA	NA	<50
	B-14	11/2/00	14.0	**240**	**26**	<5	<5	NA	NA	<50
	B-16	11/1/00	16.0	**200**	**28**	**3.5J**	<5	NA	NA	<50
	B-18	11/1/00	18.0	**240**	**39**	**4.9J**	<5	NA	NA	<50
	B-20	11/1/00	20.0	**180**	**32**	**4.4J**	<5	NA	NA	<50
	B-22	11/1/00	22.0	**6.1**	**3.5J**	**4.3J**	<5	NA	NA	<50
	B-24	11/1/00	24.0	**3.0J**	<5	**4.0J**	<5	NA	NA	<50
C[2]	C-0	6/1/00	0.0	<100	<100	<100	<100	<500	NA	<1000
	C-4	6/1/00	4.0	**270**	<100	<100	<100	<500	NA	<1000
	C-6	6/1/00	6.0	**659**	<100	<100	<100	<500	NA	<1000
D[2]	NL[3]	9/1/00	8.0	**470**	NL	NL	NL	NL	NL	NL
	NL[3]	9/1/00	10.0	**600**	NL	NL	NL	NL	NL	NL
	NL[3]	9/1/00	12.0	**460**	NL	NL	NL	NL	NL	NL
	NL[3]	9/1/00	14.0	**180**	NL	NL	NL	NL	NL	NL
	NL[3]	9/1/00	16.0	**46**	NL	NL	NL	NL	NL	NL
	NL[3]	9/1/00	18.0	**270**	NL	NL	NL	NL	NL	NL
	NL[3]	9/1/00	20.0	**170**	NL	NL	NL	NL	NL	NL

Table B-1
Soil Sample Analytical Results
Former Mercer Processing Facility
230 Portage Avenue
Palo Alto California

Boring Designation	Sample Designation	Date	Sample Depth (feet bgs)	TCE (µg/kg)	1,1-DCE (µg/kg)	cis-1,2-DCE (µg/kg)	trans-1,2-DCE (µg/kg)	MEK (µg/kg)	t-butanol (µg/kg)	Acetone (µg/kg)
D[2]	NL[3]	9/1/00	22.0	**7.6**	NL	NL	NL	NL	NL	NL
	NL[3]	9/1/00	24.0	ND	NL	NL	NL	NL	NL	NL
E[2]	NL[3]	9/1/00	6.0	**34**	NL	NL	NL	NL	NL	NL
	NL[3]	9/1/00	8.0	**170**	NL	NL	NL	NL	NL	NL
	NL[3]	9/1/00	10.0	**69**	NL	NL	NL	NL	NL	NL
	NL[3]	9/1/00	12.0	**34**	NL	NL	NL	NL	NL	NL
F[2]	NL[3]	9/1/00	6.0	**33**	NL	NL	NL	NL	NL	NL
	NL[3]	9/1/00	8.0	**26**	NL	NL	NL	NL	NL	NL
	NL[3]	9/1/00	10.0	**15**	NL	NL	NL	NL	NL	NL
	NL[3]	9/1/00	12.0	**18**	NL	NL	NL	NL	NL	NL
	NL[3]	9/1/00	14.0	**25**	NL	NL	NL	NL	NL	NL
	NL[3]	9/1/00	16.0	**30**	NL	NL	NL	NL	NL	NL
	NL[3]	9/1/00	18.0	**24**	NL	NL	NL	NL	NL	NL
	NL[3]	9/1/00	20.0	**10**	NL	NL	NL	NL	NL	NL
	NL[3]	9/1/00	22.0	ND	NL	NL	NL	NL	NL	NL
	NL[3]	9/1/00	24.0	ND	NL	NL	NL	NL	NL	NL
G[2]	NL[3]	9/1/00	4.0	ND	NL	NL	NL	NL	NL	NL
	NL[3]	9/1/00	6.0	ND	NL	NL	NL	NL	NL	NL
	NL[3]	9/1/00	8.0	ND	NL	NL	NL	NL	NL	NL
	NL[3]	9/1/00	10.0	ND	NL	NL	NL	NL	NL	NL
	NL[3]	9/1/00	12.0	ND	NL	NL	NL	NL	NL	NL
	NL[3]	9/1/00	14.0	**74**	NL	NL	NL	NL	NL	NL
	NL[3]	9/1/00	16.0	ND	NL	NL	NL	NL	NL	NL
	NL[3]	9/1/00	18.0	**38**	NL	NL	NL	NL	NL	NL
	NL[3]	9/1/00	20.0	**43**	NL	NL	NL	NL	NL	NL
	NL[3]	9/1/00	22.0	**3.2**	NL	NL	NL	NL	NL	NL
	NL[3]	9/1/00	24.0	ND	NL	NL	NL	NL	NL	NL
H2	NL[3]	9/1/00	2.0	NR	NL	NL	NL	NL	NL	NL
	NL[3]	9/1/00	4.0	NR	NL	NL	NL	NL	NL	NL
	NL[3]	9/1/00	10.0	**41**	NL	NL	NL	NL	NL	NL
	NL[3]	9/1/00	12.0	**74**	NL	NL	NL	NL	NL	NL
H2[2]	NL[3]	11/1/00	6.0	ND	NL	NL	NL	NL	NL	NL
	H2-14	11/1/00	14.0	**91**	**55**	**4.0J**	<5	NA	NA	<50
	H2-16	11/1/00	16.0	**99**	**67**	**5.7**	<5	NA	NA	<50
	H2-18	11/1/00	18.0	**100**	**60**	**5.6**	<5	NA	NA	<50
	H2-20	11/1/00	20.0	**93**	**63**	**5.3**	<5	NA	NA	<50
	H2-22	11/1/00	22.0	<5	**2.7J**	**4.7J**	<5	NA	NA	<50
I[2]	NL[3]	9/1/00	10.0	ND	NL	NL	NL	NL	NL	NL
J[2]	NL[3]	9/1/00	2.0	ND	NL	NL	NL	NL	NL	NL

Table B-1
Soil Sample Analytical Results
Former Mercer Processing Facility
230 Portage Avenue
Palo Alto California

Boring Designation	Sample Designation	Date	Sample Depth (feet bgs)	TCE (µg/kg)	1,1-DCE (µg/kg)	cis-1,2-DCE (µg/kg)	trans-1,2-DCE (µg/kg)	MEK (µg/kg)	t-butanol (µg/kg)	Acetone (µg/kg)
J[2]	NL[3]	9/1/00	6.0	ND	NL	NL	NL	NL	NL	NL
	NL[3]	9/1/00	8.0	ND	NL	NL	NL	NL	NL	NL
K[2]	K-(0.5-1)	11/1/00	0.5-1.0	**5.7**	<5	<5	<5	NA	NA	<50
	K-2	11/1/00	2.0	**210**	<5	**9.5**	<5	NA	NA	<50
	K-4	11/1/00	4.0	<5	<5	<5	<5	NA	NA	<50
	K-5.5	11/1/00	5.5	**97**	<5	**5.6**	<5	NA	NA	<50
	K-8	11/2/00	8.0	**100**	<5	**14**	**12**	NA	NA	<50
	K-10	11/2/00	10.0	<5	**4.4J**	<5	<5	NA	NA	<50
L[2]	L-1	11/1/00	1.0	<5	<5	<5	<5	NA	NA	<50
	L-2	11/2/00	2.0	<5	<5	<5	<5	NA	NA	<50
	L-4	11/1/00	4.0	<5	<5	<5	<5	NA	NA	<50
L2[2]	NL[3]	11/1/00	2.0	ND	NL	NL	NL	NL	NL	NL
	NL[3]	11/1/00	4.0	ND	NL	NL	NL	NL	NL	NL
L2[2]	L2-6	11/2/00	6.0	<5	<5	<5	<5	NA	NA	<50
	L2-8	11/2/00	8.0	<5	<5	<5	<5	NA	NA	<50

Notes:
µg/kg = micrograms per kilogram
bgs = below ground surface
< = compound not detected at or above the respective laboratory reporting limit
J = estimated value, less than the laboratory practical quantitation limit but greater than the method detection limit
NA = Not analyzed
NL = Not listed
NR = No sample recovery
TCE = trichloroethylene
MEK = methyl ethyl ketone
t-butanol = tert-butanol
1,1-DCE = 1,1,-dichloroethylene
cis-1,2-DCE = cis-1,2-dichloroethylene
trans-1,2-DCE = trans-1,2-dichloroethylene
[1] = Boring drilled and sampled by PES in December 1999
[2] = Boring drilled and sampled by IT Corp. in June, September or November 2000
[3] = Precise sample designation, sample depth, sample date, and laboratory reporting limits unknown; laboratory reports for these samples not provided in IT Corp. report dated November 21, 2000. Data presented graphically in IT Corp. November 21, 2000 Report.

APPENDIX C

CITY OF PALO ALTO PERMIT

City of Palo Alto
Public Works Engineering
Phone: 650/329-2151 FAX: 650/329-2299
PW Inspection: 650/496-6929

JOB COPY
Approved plans must be kept on the job at all times
CITY OF PALO ALTO

BUILDING PERMIT CONDITIONS & ADVISORIES

ADDRESS/LOCATION: 230 Portage Avenue

Building Permit Number	Description of Project	Application Date	Rev? (✓)	Plan Date
01-2704	**Removal & Replacement of Floor in Commercial Building; Excavation of Contaminated Soil**	10/9/01	✓	8/01

This project is approved by the Public Works Department with the following Conditions & Advisories:

GENERAL:

✓ = Required Condition or Project Advisory

1	✓	These plans have been reviewed for compliance with applicable codes, but the design remains the responsibility of the architect/engineer who prepared them.
2	✓	Any changes to these plans, other than those provided in this review, must be reviewed by the Public Works Engineering Division.
3	✓	The attached "Logistics Plan" shall made part of the approved *Building Permit*.
4		

PRIOR TO BUILDING PERMIT ISSUANCE:

✓ = Required Condition or Project Advisory

1		Permittee must obtain a Grading and Excavation Permit from the CPA Building Inspection Division if excavating more than 100 cubic yards.
2		The building/property owner will be required to obtain an approved *Encroachment Permit* for the awning(s) and/or other architectural features that will encroach over the sidewalk. This must be obtained, prior to commencing the encroachment, from the CPA Public Works Engineering Division.
3		The proposed construction will impact the use of the sidewalk, street, alley or other easement. An *Encroachment Permit* must be obtained from the CPA Public Works Engineering Division prior to commencement of the work.
4		This project is within 50 feet from a creek over which the Santa Clara Valley Water District (SCVWD) has jurisdiction. These plans must be reviewed by and a permit obtained from the SCVWD prior to the start of this work.
5		A portion of the proposed work is within or impacts the State of California or County of Santa Clara right-of-way. A permit must be obtained from the applicable agency prior to commencement of the work described in this permit.
6		The Applicant will be required to obtain an *Encroachment Permit* from the California Department of Transportation if any lane closures are needed on El Camino Real in performance of this work.

ADDITIONAL CONDITIONS

DURING CONSTRUCTION:

√ = Required Condition or Project Advisory

1	√	If groundwater or runoff water is encountered and needs to be removed from the excavation area, all excavation and/or building activities shall immediately stop. The plan for the dewatering of the excavation must be implemented at that time. Once approval of the plan implementation has been received, then the excavation and/or building activities may recommence.
2	√	Permittee shall strictly conform to the City's Noise Abatement Ordinance, detailed in Chapter 9.10 of the Palo Alto Municipal Code. The Permittee is limited to construction activity during the following hours: **Monday – Friday...8AM to 6PM, Saturday.....9AM to 6PM and Sunday/Holidays....10AM to 6PM**
3	√	Any construction within CPA right-of-way, easements or other property under City jurisdiction shall conform to standards established in the CPA Standard Specifications for the Utilities Department and the Public Works Department.
4	√	Permittee must contact the CPA Public Works Inspector prior to any work performed in the public right-of-way (650/496-6929).
5	√	It is unlawful to discharge construction debris (soil, concrete, asphalt, sawcut slurry, paint, chemicals, etc.) or other waste materials into gutters or storm drains. The Permittee shall incorporate best management practices (BMP's) for stormwater pollution prevention into all construction operations. Typical BMP's are outlined in a series of brochures published by the Santa Clara Valley Nonpoint Source Pollution Control Program and are available from the City of Palo Alto Public Works Engineering office.
6	√	No storage of construction or household materials is permitted in the street or sidewalk area. This includes storage containers, dumpsters, trailers, etc.
7	√	All dumpsters used in this permitted activity are required to be ordered through the Palo Alto Sanitation Company (PASCO) who has an exclusive contract in Palo Alto for waste disposal services.
8	√	The Permittee shall provide protection to City trees at the work site to the satisfaction of the CPA Arborist (650/496-6974).
9	√	The Permittee shall not alter pre-existing drainage patterns existing to or from adjacent properties.
10	√	The Permittee is responsible for the repair, restoration or replacement of any and all City property damaged while performing this permitted activity. Permittee shall obtain a permit from the CPA Public Works Engineering Division to perform this work.
11	√	**An approved *Permit for Construction In the Public Street* must be obtained from the CPA Public Works Department prior to commencement of any work in the sidewalk or street area.**
12		An 'in progress' elevation of the lowest floor must be certified on a wet-stamped letter by a licensed surveyor or civil engineer and accepted by Public Works Engineering as meeting Special Flood Hazard Area requirements prior to the roofing inspection. This certification should be done at the stage of construction when the "as-built" elevation of that floor is first established and still correctable with minimum effort. An accepted FEMA *Elevation Certificate* will also be required for the finished construction. This certificate must be submitted to the Public Works Inspector and approved by Public Works prior to final sign-off of the permit.

PRIOR TO FINALIZATION OF BUILDING PERMIT AND OCCUPANCY SIGN-OFF:

√ = Required Condition or Project Advisory

1	√	**The CPA Public Works Inspector must sign off the Building Permit prior to the finalization of this permit. All off-site improvements and on-site grading shall be finished prior to this sign-off.**
2		The CPA Public Works Engineering must be presented a FEMA *Elevation Certificate* certifying the "as-built" elevation of the lowest floor meets the Special Flood Hazard Area requirements. This certificate must be certified by a licensed land surveyor or qualified civil engineer. This Certificate must be presented to and accepted by Public Works Engineering Department prior to this sign-off.
3		A Certificate of Compliance is required to be obtained to remove underlying lot lines, record lot line adjustments and/or to record that a certain lot or lots are lawfully existing and are in compliance with the provisions of the Subdivision Map Act. The recordation of this document must be performed prior to the final sign-off of this Building Permit.

REVIEWED BY: **Phil Plymale, (650) 329-2363** DATE: **November 2, 2001**

JOB COPY
These plans must be kept on the job at all times.
CITY OF PALO ALTO

Logistics Plan

for

JOB COPY
These plans must be kept on the job at all times
CITY OF PALO ALTO

230 Portage Ave. (El Camino Center)

Palo Alto California

1. Project Description – Note that all work is on private property and staging areas will be in the rear parking lot. (See Attachment 1)

2. Project Schedule – (See Attachment 2)

3. Working Hours – Cornerstone work hours will be from 8:00 am to as late as 6:00 pm Monday through Friday. No weekend work will occur.

4. Noise control – No heavy equipment and/or trucks will be allowed to deliver, enter or leave the site before or after the above hours, which conforms to the CPA Noise Ordinance.

5. Notification of Residences and Businesses – No residences will be directly impacted by this project. Businesses in the El Camino Center will be notified with both seven day and 48 hour notices. The property owner WSJ Properties will make the notifications to their tenants.

6. Traffic Control - All work is on private property. The only impact on public roadways will be deliveries and off-haul of both equipment and materials. All deliveries and off-haul will be directed to enter and exit the site off from El Camino to Portage Ave. Once they make a left on Portage, they'll turn right on Ash, then make a left on Lambert, make a left on Park Blvd., traffic will then make a left into the rear parking area. A flag man will be used,as necessary, when trucks are entering or exiting onto public streets. Work areas and/or storage areas will be delineated with cones, caution tape, temporary fencing, etc. Work areas and/or storage areas will be set up so that all vehicular, bicycle and/or pedestrian traffic will not be able to enter these areas. (See Attachment 3 for haul route)

7. Material delivery – To the extent possible material delivery wil be made before 10 am.

    1 - Vicinity Map and Haul Route (see See Attachment 3)
    2 - Frequency and of delivery trucks during operations – During most of the project, the only significant deliveries will be delivering equipment to the site and bringing in fill material. Equipment deliveries will be 1 to 3

loads for up to 4 total days. Backfill deliveries will occur for up to 4 total days and will be from 2 to 10 truck per day. For off-hauling of impacted soil, final truck volume will be a total of approximately 18 – 20 loads. This will occur over a 2 day period at the very end of the project.
3 - Traffic control plans for truck delivery operations (See above Item 6)

8. Materials storage – Storage of impacted soil excavated and stockpiled will be staged in the parking lot at predetermined areas. All soil will be stockpiled on and covered with plastic. In addition these stockpiles will be bermed with sand bags or other suitable material to prevent both run-on and run-off. This prevents any material from entering storm drains, etc. If any spillage occurs, it will be removed daily and placed in the stockpiles.

9. Storage in the City Right-of-Way and Parking Lots – At no time will equipment or materials be stored in City Right-of-Way or Parking Lots.

10. Protection of existing utilities – No trees will be impacted during this project. No private property other than the owner of this property will be impacted. USA Dig Alert will be notified a minimum of 5 working days prior to excavation operations. Since all work is on private property, a private utility locator will also be used to ensure all utility lines are marked.

11. Clean-up/Maintenance – For dust control measures, water is available at the site and the exposed soils will be watered, as necessary, to control dust. This will be for both excavations and stockpiles. Note that stockpiles will be covered with plastic and when these stockpiles are loaded out they will be watered, as necessary for dust control.

12. Storm Water Pollution Prevention Plans - As stated previously all soil will be stockpiled on plastic and covered with plastic. In addition, these stockpiles will be bermed to prevent any run-on or run-off. Note that should any activities during this project cause possible run-off, potentially impacted storm drains will be sand bagged. Sand bags will be draped with plastic to prevent any run-off from entering the storm drains. All excavation work is inside the building and/or under the roof at rear of building. No water can enter or exit these areas.

13. Refuse Disposal –

1 - Clean concrete rubble generated from this project will be sent off-site for recycling.
2 - All general refuse/debris will be disposed properly at the local landfill.
3 - Impacted soil excavated from the site will be profiled and disposed at the appropriate facility. This may include Class II disposal sites and/or Class I disposal sites, which depends on analysis of the stockpiled soil.

SCOPE OF WORK

Technical specifications for the construction work are included in Appendix A. The contractor's scope of work will include the following tasks:

- Prepare interior walls and ceiling of the tenant space by lining with plastic sheeting to prevent dust from settling on the surfaces. Access to the building interior is limited to an opening measuring approximately 12 feet wide by 12 feet high (to be assessed during contractor's site inspection).

- Contractor shall obtain all required permits and notify Underground Service Alert prior to start of work as required.

- Identify underground utilities, including a fire suppression main, in and around the area of excavation.

- Saw-cut and remove an area of approximately 2,092 square feet of 6-inch thick reinforced concrete flooring overlying the excavation area within the former Mercer facility (Plate 3). Stockpile concrete on contractor-supplied plastic sheeting. Concrete shall be covered with sheeting and placed within contractor-supplied secured fencing.

- Excavate via conventional excavation techniques approximately 116 in-place cubic yards of TCE-affected soil in the saw-cut area shown on Plate 3 to a depth of 2 feet below original concrete surface. This excavation area is expected to be approximately 51 feet by 42 feet and approximately 2 feet deep (Plate 3). The actual lateral and vertical extent of the area and corresponding volume of soil to be excavated will be determined in the field by the onsite engineer based on the results of samples collected from the perimeter of the area and analyzed by the onsite mobile laboratory. Stockpile and cover soil on and with plastic sheeting placed within a secured fenced area provided by contractor. The area for soil and concrete stockpiling is to be determined at a site inspection meeting.

- Excavate via conventional excavation techniques and stockpile approximately 26 cubic yards (measured in-place) of TCE-affected soil to a depth of 4 feet below original concrete surface or to the bottom of a spread-footing foundation located beneath the wall as shown on Plate 3. The shallow soils excavated via traditional excavation techniques (from surface to the bottom of the foundation) will be stockpiled and transported separately. As detailed on the attached bid form (Appendix B), the contractor will bill for the excavation and stockpiling of those soils on a volumetric basis.

- Additionally, excavate using slot trench techniques approximately 114 in-place cubic yards of soil to a depth of approximately 20 feet below original concrete surface as shown on Plate 3. The actual lateral and vertical extent of the slot trenches will be determined by the Engineer based on site observations and sample results. Therefore, the volume of soil excavated may be more or less than estimated in this request for bid. The soils excavated from beneath the base of the foundation using slot trenching

techniques and the soils excavated from shallower depths will be stockpiled and transported separately, to the extent practicable. The contractor will bill for the excavation and stockpiling of the deeper soils removed from the slot trenches on a tonnage basis.

Excavation should be performed in 4 to 5 foot wide slot trenches, oriented in the northwest-southeast direction (parallel to the long-axis of the former Mercer space). Each trench will be excavated and then backfilled before proceeding with the next trench. The next trench shall be completed a trench width away from the previous trench. For example, if five slots are required and are lettered A, B, C, D and E with increasing distance from the northeast wall of the tenant space, the order of excavation might be A-C-E-B-D. The depth of the excavation may be increased locally to remove additional TCE-affected soil as required and to the extent practical. PES will collect and analyze soil samples from each slot for verification. The soil samples will be analyzed with an onsite mobile laboratory or via rapid turnaround at a stationary laboratory.

- Backfill each slot trench following receipt of confirmation sample data. Due to limited access to the slot trench excavation areas, place a 2-sack cement-sand slurry in the excavation as backfill from the trench bottom up to the base of the exposed foundation. The upper boundary of the cured slurry needs to be no lower than the bottom of the foundation. The slurry shall be a quickset mixture which will allow the adjacent slot trench to be excavated within 24 hours of the placement of the 2-sack cement-sand slurry.

- Following completion of slot trenching activities, backfill the upper portion of the excavation area. Backfill with select import fill in loose lifts no more than 8 inches thick and compact to a minimum relative density as specified in Appendix A – Technical Specifications.

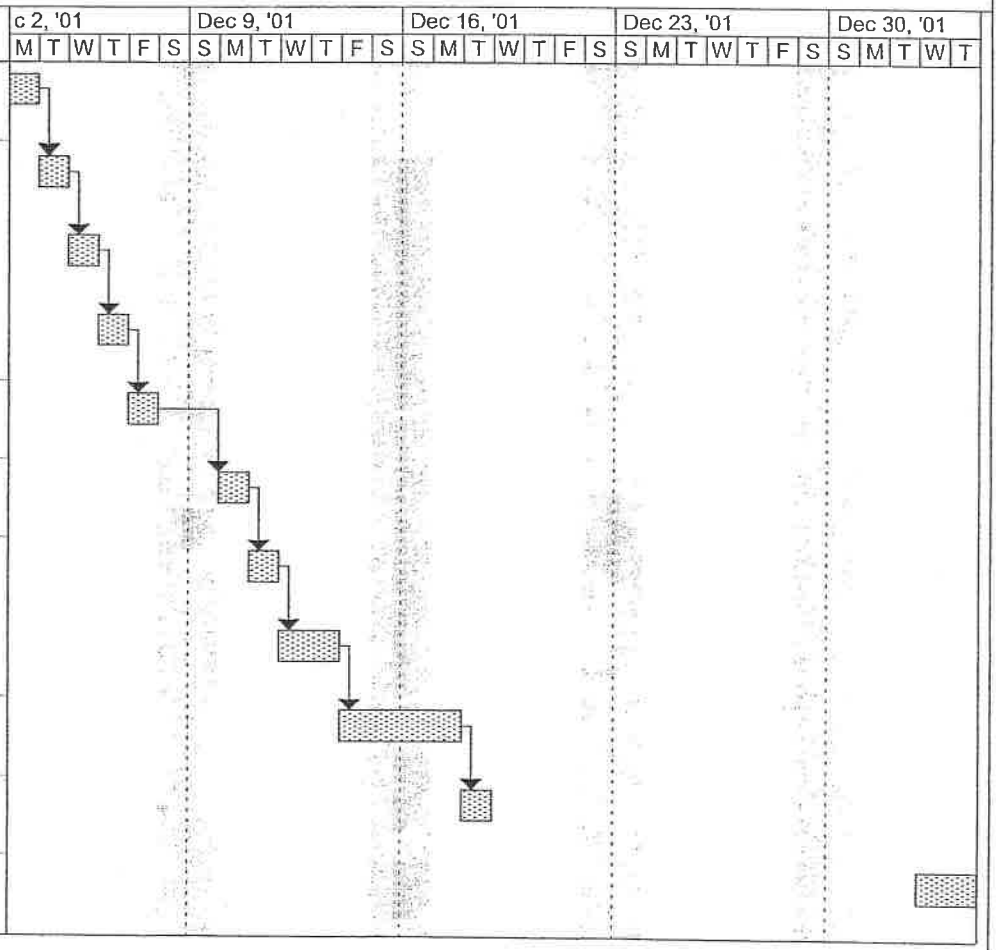
- After backfill and compaction of the upper portion of the excavation are complete, pour a 6-inch-thick concrete slab to replace concrete previously saw cut and removed. The concrete slab shall be reinforced with a wire mesh fabric and shall be tied into the existing concrete slab with No. 4 or 5 steel dowels. The concrete shall be finished to match the adjacent concrete finish.

- Transport and dispose or recycle stockpiled concrete and soil at an appropriately-licensed disposal or recycling facility, based on the results of waste characterization and profiling activities and with PES approval. Contractor to supply unit rates for transportation and disposal of soil and identify proposed disposal or recycling facility in Appendix B.

Attachment 2

PRELIMINARY PROGRESS SCHEDULE
FOR EL CAMINO CENTER SOIL EXCAVATION
230 PORTAGE AVE., PALO ALTO, CALIFORNIA

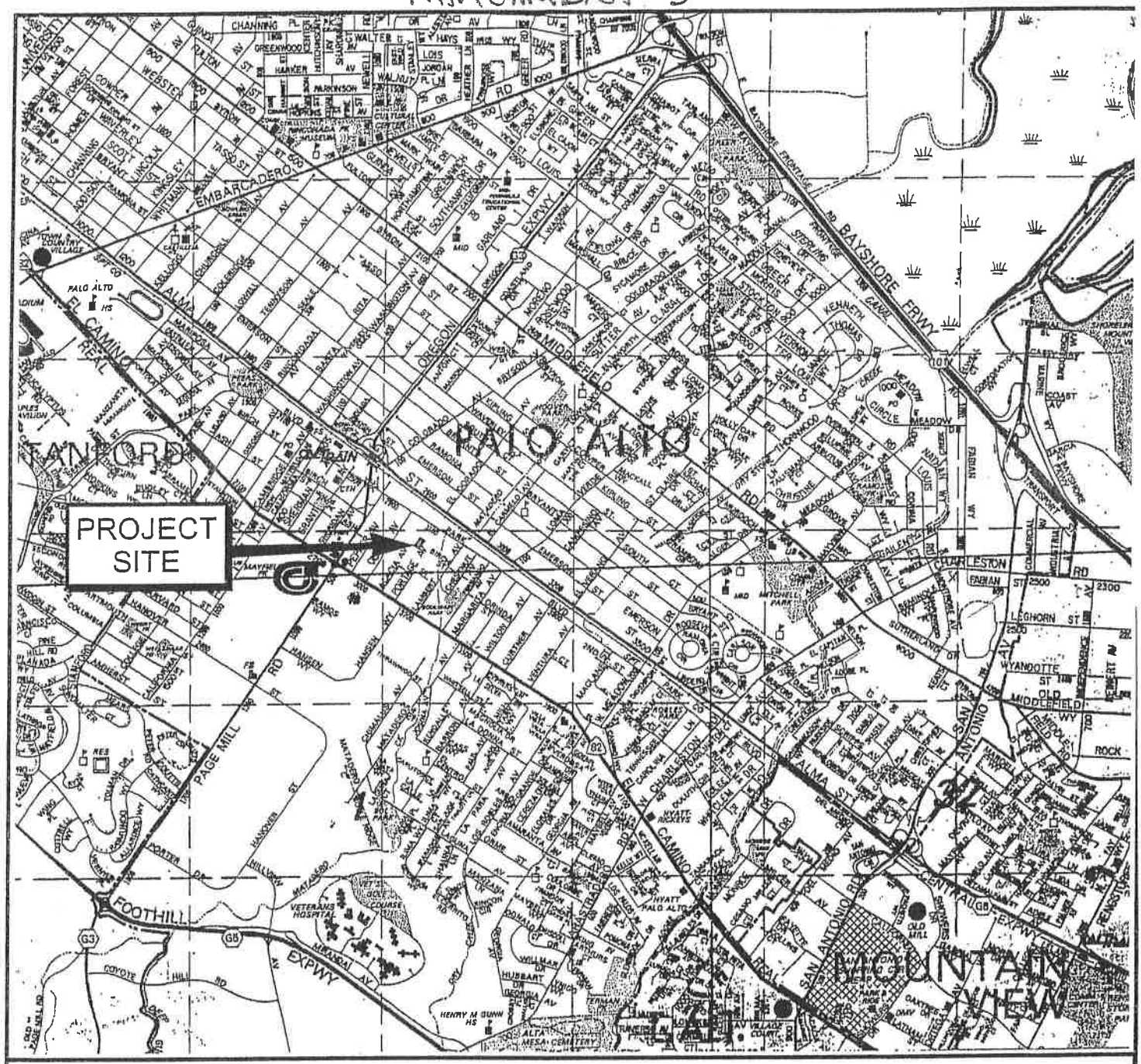
ID	Task Name	Duration	Start	Finish
1	Mobilization and Site Preparation	1 day	Mon 12/3/01	Mon 12/3/01
2	Saw cut and remove/demolish concrete	1 day	Tue 12/4/01	Tue 12/4/01
3	Excavate soil to a depth of approximately 4'	1 day	Wed 12/5/01	Wed 12/5/01
4	Using slot trench techniques, excavate first slot trench sections	1 day	Thu 12/6/01	Thu 12/6/01
5	Backfill first set of slot trench excavations with 2-sack cement/sand slurry	1 day	Fri 12/7/01	Fri 12/7/01
6	Excavate second set of slot trenches	1 day	Mon 12/10/01	Mon 12/10/01
7	Backfill second set of slot trenches with slurry	1 day	Tue 12/11/01	Tue 12/11/01
8	Backfill remaining open excavation from approximately 4' to bottom of new concrete	2 days	Wed 12/12/01	Thu 12/13/01
9	Resurface impacted area with concrete	2 days	Fri 12/14/01	Mon 12/17/01
10	Clean site and demoblize	1 day	Tue 12/18/01	Tue 12/18/01
11	Remobilize, load out impacted soil and clean site	2 days	Wed 1/2/02	Thu 1/3/02



Project: EQUIVA/NAPA
Date: Thu 11/15/01

Task
Split
Progress
Milestone
Summary
Rolled Up Task
Rolled Up Split
Rolled Up Milestone
Rolled Up Progress
External Tasks
Project Summary

ATTACHMENT 3



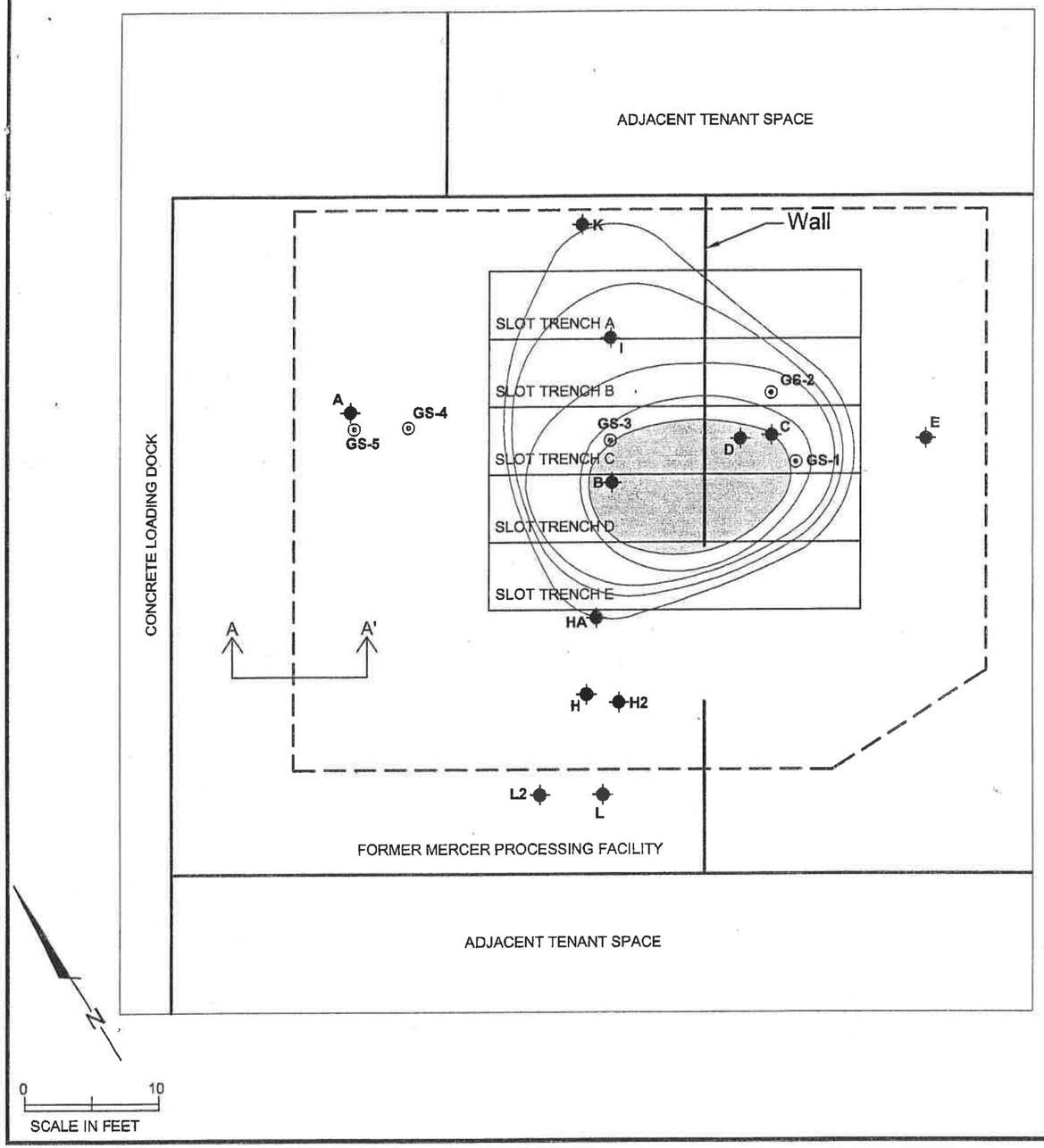
Ref: "The Thomas Guide- Golden Gate Street Guide and Directory" 1993 Edition.

PES Environmental, Inc.
Engineering & Environmental Services

Site Location Map AND HAUL ROUTE PLATE **1**
Former Mercer Processing Facility
230 Portage Avenue
Palo Alto, California

500.009.02.001	50000902001V1.CDR	DRAFT	6/01
JOB NUMBER	DRAWING NUMBER	REVIEWED BY	DATE

EXCAVATION AREA



Explanation

- SOIL BORING LOCATION (PES, DECEMBER, 1999)
- SOIL BORING LOCATION (IT CORP., JUNE, SEPTEMBER OR NOVEMBER, 2000)
- Estimated extent of concrete to be sawcut and soil to be excavated to a depth of 2-ft. bgs.
- Estimated extent of soil to be excavated at 2-4-ft. bgs.
- Estimated extent of soil to be excavated at 4-8-ft. bgs.
- Estimated extent of soil to be excavated at 8-12-ft. bgs.
- Estimated extent of soil to be excavated at 12-16-ft. bgs.
- Estimated extent of soil to be excavated at 16-20-ft. bgs.

DEPTH	DIMENSIONS	VOLUME
0-2'	51' x 42' x 1.5'	119 CY
2'-4'	20' x 18' x 2'	27 CY
4'-8'	18' x 18' x 4'	48 CY
8'-12'	20' x 13' x 4'	36 CY
12'-16'	12' x 10' x 4'	28 CY
16'-20'	13' x 8' x 4'	14 CY

TOTAL VOLUME = 272 CY

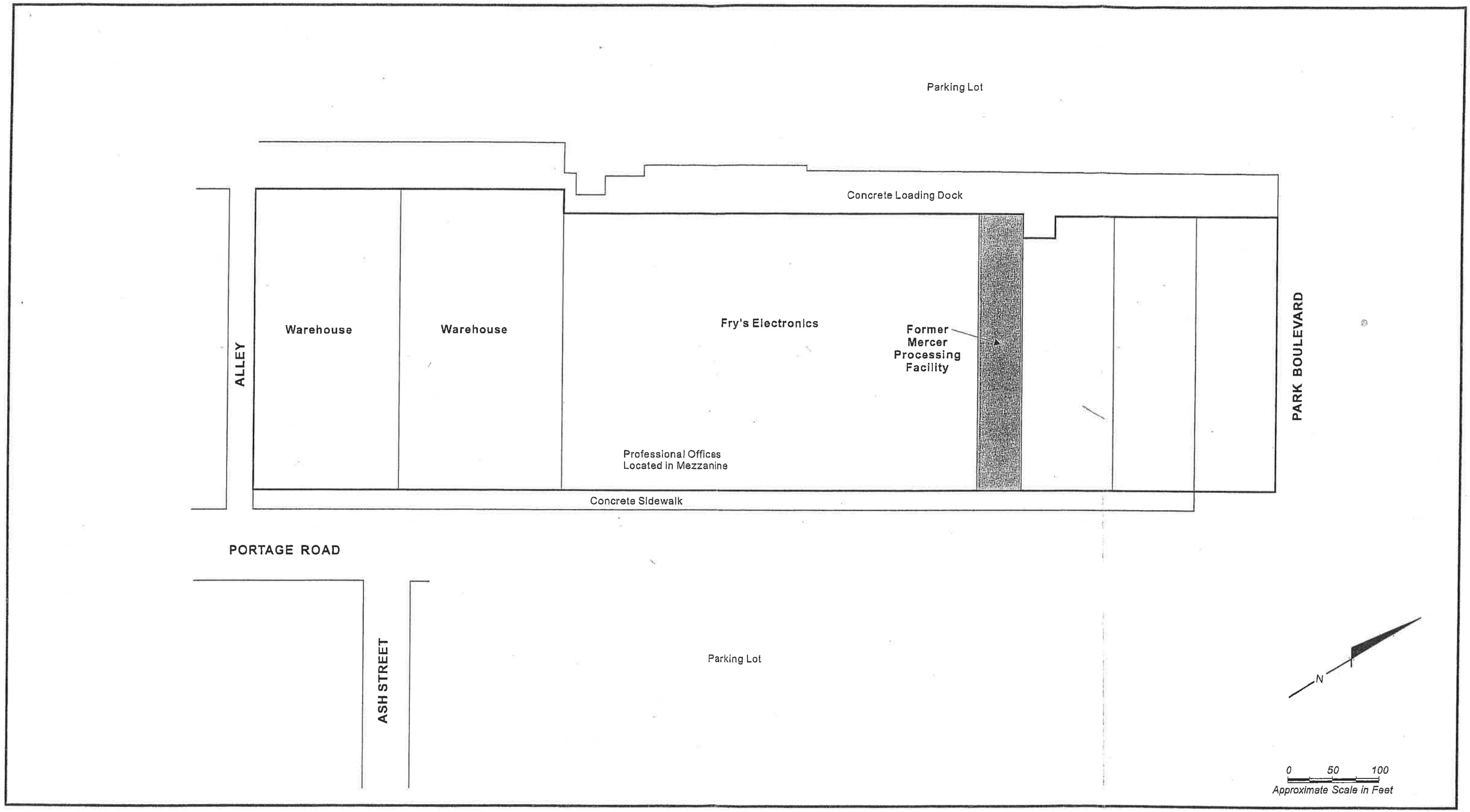
PES Environmental, Inc.
Engineering & Environmental Services

Site Excavation Plan and Concrete Detail
Former Mercer Processing Facility
230 Portage Avenue
Palo Alto, California

PLATE 1

500.009.03.001	50000903001_0801-03	KSF	10/01
JOB NUMBER	DRAWING NUMBER	REVIEWED BY	DATE

SITE PLAN



PES Environmental, Inc.
Engineering & Environmental Services

Vicinity Map
Former Mercer Processing Facility
230 Portage Avenue
Palo Alto, California

PLATE 2

500.009.02.001	50000902001s2.CDR	DRAFT	6/01
JOB NUMBER	DRAWING NUMBER	REVIEWED BY	DATE

APPENDIX D

LABORATORY ANALYTICAL REPORTS AND CHAIN OF CUSTODY FORMS

SEVERN TRENT SERVICES

STL On-Site Technologies
Westfield Executive Park
53 Southampton Road
Westfield, MA 01085

Tel: 413 572 4000
Fax: 413 572 3707
www.stl-inc.com

29 January 2002

Mr. Kyle Flories
PES
1682 Novato Blvd.
Suite 100
Novato, CA 94947

RE:
Field Analytical Report
Mercer Site
Palo Alto, CA
January 9 - 14, 2001

Dear Mr. Flories:

Enclosed please find the results for the field analytical project conducted at the Mercer Site in Palo Alto, CA for samples received from January 9 - 14, 2002. This nine-section report provides a narrative, a summary of results, the final data results, quality control results, raw data, standard prep logs, instrument logs, sample receipt logs and chain-of-custody forms.

It was a pleasure working with you and PES on this project and we look forward to working together again. If you have any questions on this report, please do not hesitate to contact me at (413) 572-4000 ext. 103.

Very truly yours,
SEVERN TRENT LABORATORIES

Gianina L. Burnett
Project Manager, On-Site Technologies

ost\reports\pesmerce.fin

SEVERN TRENT SERVICES

STL On-Site Technologies

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3.0	Data Results
4.0	QC Results
5.0	Raw Data
6.0	Standard Prep Logs
7.0	Intrument Logs
8.0	Sample Receipt Logs
9.0	Chain-of-Custody Forms

SECTION 1.0
NARRATIVE

SEVERN TRENT SERVICES

STL On-Site Technologies

Narrative

A field investigation was conducted at the Mercer Site in Palo Alto, CA. The intent of this field effort was to measure the levels of contamination in the surrounding soil for for Volatile Organic Compounds (VOCs). A total of forty-eight (48) samples were collected for 8260 and received between January 9 - 14, 2002 for the following list of target compounds.

Dichlorodifluoromethane	Chloromethane	Vinyl Chloride
Bromomethane	Chloroethane	Trichlorofluoromethane
1,1-Dichloroethene	Methylene Chloride	t-1,2-Dichloroethene
1,1-Dichloroethane	c-1,2-Dichloroethene	Chloroform
1,1,1-Trichloroethane	Carbon tetrachloride	Benzene
1,2-Dichloroethane	Trichloroethene	
1,2-Dichloropropane	Dibromomethane	Bromodichloromethane
c-1,3-Dichloropropene	Toluene	
t-1,3-Dichloropropene	1,1,2-Trichloroethane	Tetrachloroethene
Dibromochloromethane	1,2-Dibromoethane	Chlorobenzene
1,1,1,2-Tetrachloroethane	Ethylbenzene	m&p-Xylene
o-Xylene	Styrene	Bromoform
Isopropylbenzene	Bromobenzene	1,1,2,2-Tetrachloroethane
1,2,3-Trichloropropane	n-Propylbenzene	2-Chlorotoluene
4-Chlorotoluene	1,3,5-Trimethylbenzene	tert-butylbenzene
1,2,4-Trimethylbenzene	sec-butylbenzene	1,3-Dichlorobenzene
4-Isopropyltoluene	1,4-Dichlorobenzene	1,2-Dichlorobenzene
1,2-Dichlorobenzene	n-Butylbenzene	1,2,4-Trichlorobenzene
Hexachlorobutadiene	Naphthalene	1,2,3-Trichlorobenzene
1,2-Dibromo-3-chloropropane		

Sample Analysis

8260

All samples were analyzed for VOC's using a Hewlett-Packard Model 5890/5970, 5971 & 5972 II Gas Chromatograph-Mass Spectrometer (GC/MS). An OI Analytical Model 4560 Purge & Trap sample concentrator was used to purge the VOC's from the sample matrix, concentrate them onto a sorbent trap and desorb them onto the GC/MS system. An OI Analytical MPM-16 multi-sampler was used to allow sample analysis to continue while the mobile laboratory was unmanned. The analytical system and parameters are similar to those used in EPA Method 8260. Data was processed on a Personal Computer using HP Chemstation Software. Reports were generated with a customized Microsoft Excel reporting program.

SEVERN TRENT SERVICES

STL On-Site Technologies

Volatile Organics Quality Control

Listed below is a description of the QC analysis and the acceptance criteria for the volatile organics analysis conducted:

1. Initial Calibration - A 5-point initial calibration was conducted on the analytical system prior to project initiation. The instrument was calibrated and % RSD were calculated for each analyte. For all analytes the (%RSD) value for each compound should have been less than or equal to 15%. If the %RSD value was greater than 15%, then linear regression was performed and the r^2 value must be >0.990.

   Bromomethane, Dibromochloromethane and Chloroethane exceeded the 15% RSD criteria. All results for these compounds are reported as estimates.

2. Calibration Check Standards - At the beginning of each twelve-hour window, a mid-point calibration check standard was analyzed to verify that the analytical sensitivity did not change from the initial calibration. For all CCC analytes, the (%RSD) value for each compound should have been less than or equal to 20%. For the SPCC analytes Chloromethane, 1,1-DCA and Bromoform, the minimum RF should be 0.10. For the SPCC analytes Chlorobenzene and 1,1,2,2-TCA, the minimum RF should be 0.30. If significant variances were observed, the system was recalibrated.

   The following deviations have been noted in the calibration check standards:

1/9/02	Bromomethane @ 89.2 %D
	Chloroethane @ 95.4 %D
	Trichlorofluoromethane @ 89.2 %D
	Methylene Chloride @ 32.8 %D
	Carbon Tetrachloride @ 20.3 %D
1/10/02	Bromomethane @ -94.6 %D
	Chloroethane @ -45.6 %D
	Methylene Chloride @ 24.0 %D
	Bromobenzene @ -30.4 %D
	2-Chlorotoluene @ -24.1 %D
	1,2-dibromo-3-chloropropane @ 24.3 %D

3. LCS - An LCS standard was analyzed at least once per day and used to verify the accuracy of the calibration standards. The QC standard was a standard from a second source, other than the calibration standards. %R values were calculated and compared to the 75 - 125% criteria.

The following deviations have been noted in the LCS standards:

1/9 Bromomethane @ 40%
sec-Butylbenzene @ 137%
n-Butylbenzene @ 127%
1/10 Bromomethane @ 186%
Chloroethane @ 144%
1,1-Dichloroethene @ 133%
trans-1,3-Dichloropropene @ 71%
Bromoform @ 69%
Bromobenzene @ 139%
1,2,3-Trichloropropane @ 133%
sec-Butylbenzene @ 136%
n-Butylbenzene @ 143%
Hexachlorobutadiene @ 136%
1/14 Bromomethane @ 71%
Chloroethane @ 67%
1,1,2,2-Tetrachloroethane @ 138%
1,2-Dibromo-3-chloropropane @ 157%

4. Method Blanks - A sample of analyte free water was processed at the beginning of the day and after every ten sample analyses to verify that the analytical system was contaminant-free. Concentrations of detected analytes should have been less than 1/2 the method detection limit. Small contaminants may have been noted as detected in the blank and labelled with a "B". Significant contaminant levels necessitate corrective action, i.e. cleaning of the instrument.

5. Surrogate Standards - Surrogate standards were added to all samples, standards and method blanks to measure the potential for matrix interferences. % Recovery values were calculated and were compared to the criteria listed below: Small deviations were marked as outside control limits while large deviations necessitated reanalysis.

Compound	**Control Limits**
Dibromofluoromethane	80 - 120
1,2-Dichloroethane-d4	80 - 120
Toluene-d8	81 - 117
4-Bromofluorobenzene	74 - 121

All deviations in the surrogate standards have been flagged with an "*" and can be found under the accompanying result pages.

7. Matrix Spike/Matrix Spike Duplicate Analyses - Five percent (5%) of the samples analyzed are spiked with a mid-level standard. The %R values are calculated and should be 75 - 125%. Relative Percent Difference (RPD) values were calculated and compared to the 40% acceptance limit.

The following deviations have been noted in the MS/MSD analyses:

A8-4.0MS	Bromomethane @ 56 % Rec.
	Chloroethane @ 67 % Rec.
	1,1-Dichloroethene @ 73 % Rec.
	1,1,2,2-Tetrachloroethane @ 139 % Rec.
	1,2,3-Trichloropropane @ 127 % Rec.
	1,2-Dibromo-3-chloropropane @ 149 % Rec.
A8-4.0MSD	Chloroethane @ 66 % Rec.
	1,1-Dichloroethene @ 71 % Rec.
	1,1,2,2-Tetrachloroethane @ 136 % Rec.
	1,2-Dibromo-3-chloropropane @ 140 % Rec.
	1,2,4-Trichlorobenzene @ 53 %RPD
D2-4.0MS	Bromomethane @ 55 % Rec.
	Chloroethane @ 70 % Rec.
	Isopropylbenzene @ 133 % Rec.
	1,1,2,2-Tetrachloroethane @ 137 % Rec.
	1,2,3-Trichloropropane @ 151 % Rec.
	1,3,5-Trimethylbenzene @ 127 % Rec.
	1,2-Dibromo-3-chloropropane @ 173 % Rec.
D2-4.0MSD	Dichlorodifluoromethane @ 39% Rec.
	Bromomethane @ 48 % Rec.
	Chloroethane @ 59 % Rec.
	1,1-Dichloroethane @ 73 % Rec.
	1,1,2,2-Tetrachloroethane @ 154 % Rec.
	1,2,3-Trichloropropane @ 142 % Rec.
	1,2-Dibromo-3-chloropropane @ 161 % Rec.
	Dichlorodifluoromethane @ 91 % RPD
	Bromomethane @ 70 % RPD
	1,2,4-Trichlorobenzene @ 74 % RPD

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A8-North-3-2.0MS	Dichlorodifluoromethane @ 48 % Rec.
	Bromomethane @ 53 % Rec.
	Chloroethane @ 58 % Rec.
	1,1-Dichloroethene @ 73 % Rec.
	1,1,2,2-Tetrachloroethane @ 141 % Rec.
	1,2,3-Trichloropropane @ 129 % Rec.
	1,2-Dibromo-3-chloropropane @ 162 % Rec.
A8-North-3-2.0MSD	Bromomethane @ 74 % Rec.
	Chloroethane @ 68 % Rec.
	1,1,2,2-Tetrachloroethane @ 139 % Rec.
	1,2,3-Trichloropropane @ 126 % Rec.
	1,2-Dibromo-3-chloropropane @ 161 % Rec.
	Dichlorodifluoromethane @ 65 % RPD
	1,2,4-Trichlorobenzene @ 51 % RPD

General Comments:

1) Upon secondary review, it was discovered that the following compounds which were listed in the quote for this project were not reported in the field: Carbon Disulfide, 2,2-Dichloropropane, Bromochloromethane, 1,1-Dichloropropene and 1,3-Dichloropropane. These compounds were evaluated and all results were Not Detected.

2) The MS/MSD samples were not analyzed on a daily basis. On 1/14/02, the GC/MS instrument would not calibrate due to generator problems. The analyst ran a 2-point curve (this was approved by the client) which was above and below the site action limit. All results for these samples analyzed on 1/14/02 are screening level only. The MS/MSD samples were not able to be re-analyzed under accpetable protocol because all samples had been returned to the client for disposal.

All results are reported as obtained in the field unless otherwise noted above. This information is provided for your use in assessing overall data quality.

SECTION 2.0
SUMMARY OF RESULTS

PES
Mercer Site, Palo Alto, CA
January 9 - 14, 2002

VOCs by 8260B

ANALYTE	Detection Limit (soil) µg/kg	B7-8.0	B6-8.0	A8-4.0	A5-5.0	D6-18.1	B8-EAST-5.0	D6-19.5	D8-EAST-5.0	D6-20.0	D4-WEST-6.0	A4-5.0	B4-5.0
Dilution Factor		**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**
Dichlorodifluoromethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl Chloride	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene Chloride	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Tetrachloride	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	5	**180**	**190**	ND	**53**	**220**	**100**	**270**	**67**	**36**	ND	**150**	ND
1,2-Dichloropropane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromomethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromomethane (EDB)	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
m&p-Xylene	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
o-Xylene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Styrene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isopropyl benzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromobenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

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VOCs by 8260B

ANALYTE	Detection Limit (soil) µg/kg	B7-8.0	B6-8.0	A8-4.0	A5-5.0	D6-18.1	B8-EAST-5.0	D6-19.5	D8-EAST-5.0	D6-20.0	D4-WEST-6.0	A4-5.0	B4-5.0
Dilution Factor		**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**
1,1,2,2-Tetrachloroethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichloropropane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
n-Propylbenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chlorotoluene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chlorotoluene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
tert-Butyl benzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
sec-Butylbenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Isopropyltoluene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
n-Butylbenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromo-3-chloropropane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichlorobenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

ND = Not Detected
B = Detected in the laboratory blank

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Mercer Site, Palo Alto, CA
January 9 - 14, 2002

VOCs by 8260B

ANALYTE	Detection Limit (soil) µg/kg	A5-NORTH4-4.0	B2-4.0	A4-NORTH-4.0	A5-NORTH-4.0	D2-4.0	C2-4.0	E8-4.0	A10-4.0	E5-4.0	E7-8.5	E7-12.0	E5-8.0
Dilution Factor		**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**
Dichlorodifluoromethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl Chloride	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene Chloride	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	5	ND	ND	ND	ND	ND	ND	ND	ND	**125**	ND	ND	ND
1,1-Dichloroethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	5	ND	ND	ND	ND	ND	ND	ND	ND	**67**	ND	ND	ND
Chloroform	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Tetrachloride	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	.5	**170**	**62**	**48**	**99**	ND	ND	**49**	ND	**1300 E**	**280**	**140**	**130**
1,2-Dichloropropane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromomethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromomethane (EDB)	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
m&p-Xylene	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
o-Xylene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Styrene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isopropyl benzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromobenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

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Mercer Site, Palo Alto, CA
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VOCs by 8260B

ANALYTE	Detection Limit (soil) µg/kg	A5-NORTH4-4.0	B2-4.0	A4-NORTH-4.0	A5-NORTH-4.0	D2-4.0	C2-4.0	E8-4.0	A10-4.0	E5-4.0	E7-8.5	E7-12.0	E5-8.0
Dilution Factor		**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**
1,1,2,2-Tetrachloroethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichloropropane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
n-Propylbenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chlorotoluene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chlorotoluene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
tert-Butyl benzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
sec-Butylbenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Isopropyltoluene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
n-Butylbenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromo-3-chloropropane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichlorobenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

ND = Not Detected
B = Detected in the laboratory blank

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Mercer Site, Palo Alto, CA
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VOCs by 8260B

ANALYTE	Detection Limit (soil) µg/kg	E5-12.0	B10-4.0	E10-4.0	D10-4.0	C10-4.0	COMP-A	F5-0.5	F8-0.5	C10-EAST-2.0	E2-5.0	C6-20.5	E5-SOUTH-5.0	C8-20.0
Dilution Factor		**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**
Dichlorodifluoromethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl Chloride	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene Chloride	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Tetrachloride	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	5	**54**	ND	**80**	**28**	**43**	ND	**160**	ND	ND	ND	**90**	**61**	**69**
1,2-Dichloropropane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromomethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromomethane (EDB)	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
m&p-Xylene	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
o-Xylene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Styrene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isopropyl benzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromobenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

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VOCs by 8260B

ANALYTE	Detection Limit (soil) µg/kg	E5-12.0	B10-4.0	E10-4.0	D10-4.0	C10-4.0	COMP-A	F5-0.5	F8-0.5	C10-EAST-2.0	E2-5.0	C6-20.5	E5-SOUTH-5.0	C8-20.0
Dilution Factor		**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**
1,1,2,2-Tetrachloroethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichloropropane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
n-Propylbenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chlorotoluene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chlorotoluene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
tert-Butyl benzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
sec-Butylbenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Isopropyltoluene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
n-Butylbenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromo-3-chloropropane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichlorobenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

ND = Not Detected
B = Detected in the laboratory blank

PES
Mercer Site, Palo Alto, CA
January 9 - 14, 2002

VOCs by 8260B

3/4/02

ANALYTE	Detection Limit (soil) µg/kg	E4-WEST-6.0	E7-SOUTH-8.5	E8-EAST-6.0	C8-EAST-8.0	C4-WEST-6.0	COMP-B	COMP-C	COMP-E	D1-WEST-2.0 KF	F1-EAST-2.0	A8-NORTH3-2.0
Dilution Factor		**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**
Dichlorodifluoromethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl Chloride	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene Chloride	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Tetrachloride	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	5	**37**	**110**	**88**	**36**	ND	ND	ND	ND	ND	**69**	ND
1,2-Dichloropropane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromomethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromomethane (EDB)	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
m&p-Xylene	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
o-Xylene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Styrene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isopropyl benzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromobenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

PES
Mercer Site, Palo Alto, CA
January 9 - 14, 2002

VOCs by 8260B

3/4/02

ANALYTE	Detection Limit (soil) µg/kg	E4-WEST-6.0	E7-SOUTH-8.5	E8-EAST-6.0	C8-EAST-8.0	C4-WEST-6.0	COMP-B	COMP-C	COMP-E	D1-WEST-2.0	F1-EAST-2.0 KF	A8-NORTH3-2.0
Dilution Factor		**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**
1,1,2,2-Tetrachloroethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichloropropane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
n-Propylbenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chlorotoluene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chlorotoluene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
tert-Butyl benzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
sec-Butylbenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Isopropyltoluene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
n-Butylbenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromo-3-chloropropane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichlorobenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

ND = Not Detected
B = Detected in the laboratory blank

SECTION 3.0
SAMPLE RESULTS

SEVERN TRENT SERVICES

Field Report

Project: Mercer_Palo Alto
Client : PES

Client Sample ID: B7-8.0
Laboratory Sample ID: PES0109-01

Volume (g): 1

Matrix: Soil
Analyst: SLC
File#: 01090205.D
Instr. #: Alpha
Date Collected: 1/9/02
Date Analyzed: 1/9/02
Dilution Factor: 5
Method: 010702.M

Surrogate Recovery

COMPOUND	ng	ng spiked	% Recovery	Low CL	High CL
Dibromofluoromethane	217.7	250	87%	80	120
1,2-Dichloroethane -d4	202.3	250	81%	80	120
Toluene-d8	191.5	250	77% *	81	117
4-Bromofluorobenzene	275.0	250	110%	74	121

COMPOUND	ng	Reporting Limit (ng)	Reporting Limit (ug/Kg)	Result (ug/Kg)
Dichlorodifluoromethane		25	25	U
Chloromethane		25	25	U
Vinyl Chloride		25	25	U
Bromomethane		25	25	U
Chloroethane		25	25	U
Trichlorofluoromethane		25	25	U
1,1-Dichloroethene		25	25	U
Methylene Chloride		25	25	U
trans-1,2-Dichloroethene		25	25	U
1,1-Dichloroethane		25	25	U
cis-1,2-Dichloroethene		25	25	U
Chloroform		25	25	U
1,1,1-Trichloroethane		25	25	U
Carbon tetrachloride		25	25	U
Benzene		25	25	U
1,2-Dichloroethane		25	25	U
Trichloroethene	177.03	25	25	180
1,2-Dichloropropane		25	25	U
Dibromomethane		25	25	U
Bromodichloromethane		25	25	U
cis-1,3-Dichloropropene		25	25	U
Toluene		25	25	U
trans-1,3-Dichloropropene		25	25	U
1,1,2-Trichloroethane		25	25	U
Tetrachloroethene		25	25	U
Dibromochloromethane		25	25	U
1,2-Dibromoethane (EDB)		25	25	U
Chlorobenzene		25	25	U
1,1,1,2-Tetrachloroethane		25	25	U
Ethyl Benzene		25	25	U
m,p-Xylene		50	50	U
o-Xylene		25	25	U
Styrene		25	25	U
Bromoform		25	25	U
Isopropyl benzene		25	25	U
Bromobenzene		25	25	U
1,1,2,2-Tetrachloroethane		25	25	U
1,2,3-Trichloropropane		25	25	U
n-Propylbenzene		25	25	U
2-Chlorotoluene		25	25	U
4-Chlorotoluene		25	25	U
1,3,5-Trimethyl benzene		25	25	U
tert-Butyl benzene		25	25	U
1,2,4-Trimethylbenzene		25	25	U
sec-Butylbenzene		25	25	U
1,3-Dichlorobenzene		25	25	U
4-Isopropyltoluene		25	25	U
1,4-Dichlorobenzene		25	25	U
1,2-Dichlorobenzene		25	25	U
n-Butylbenzene		25	25	U
1,2-Dibromo-3-chloropropane		25	25	U
1,2,4-Trichlorobenzene		25	25	U
Hexachlorobutadiene		25	25	U
Naphthalene		25	25	U
1,2,3-Trichlorobenzene		25	25	U

Notes :
Volatile Organic Compounds analyzed using EPA method 8260B
Field report is preliminary until reviewed and signed

B = Detected in laboratory blank
E = Exceeds upper calibration limit
J = Below reporting limit
U = Undetected

* Outside QC Limits

SIGNED: [signature] SC 1/29/02 REVIEWED: [signature]

SEVERN TRENT SERVICES

Field Report

Project: Mercer_Palo Alto
Client : PES

Client Sample ID: B6-8.0
Laboratory Sample ID: PES0109-02

Volume (g): 1

Matrix: Soil
Analyst: SLC
File#: 01090206.D
Instr. #: Alpha
Date Collected: 1/9/02
Date Analyzed: 1/9/02
Dilution Factor: 5
Method: 010702.M

Surrogate Recovery COMPOUND	ng	ng spiked	% Recovery	Low CL	High CL
Dibromofluoromethane	214.3	250	86%	80	120
1,2-Dichloroethane -d4	203.2	250	81%	80	120
Toluene-d8	233.6	250	93%	81	117
4-Bromofluorobenzene	292.2	250	117%	74	121

COMPOUND	ng	Reporting Limit (ng)	Reporting Limit (ug/Kg)	Result (ug/Kg)
Dichlorodifluoromethane		25	25	U
Chloromethane		25	25	U
Vinyl Chloride		25	25	U
Bromomethane		25	25	U
Chloroethane		25	25	U
Trichlorofluoromethane		25	25	U
1,1-Dichloroethene		25	25	U
Methylene Chloride		25	25	U
trans-1,2-Dichloroethene		25	25	U
1,1-Dichloroethane		25	25	U
cis-1,2-Dichloroethene		25	25	U
Chloroform		25	25	U
1,1,1-Trichloroethane		25	25	U
Carbon tetrachloride		25	25	U
Benzene		25	25	U
1,2-Dichloroethane		25	25	U
Trichloroethene	193.79	25	25	190
1,2-Dichloropropane		25	25	U
Dibromomethane		25	25	U
Bromodichloromethane		25	25	U
cis-1,3-Dichloropropene		25	25	U
Toluene		25	25	U
trans-1,3-Dichloropropene		25	25	U
1,1,2-Trichloroethane		25	25	U
Tetrachloroethene		25	25	U
Dibromochloromethane		25	25	U
1,2-Dibromoethane (EDB)		25	25	U
Chlorobenzene		25	25	U
1,1,1,2-Tetrachloroethane		25	25	U
Ethyl Benzene		25	25	U
m,p-Xylene		50	50	U
o-Xylene		25	25	U
Styrene		25	25	U
Bromoform		25	25	U
Isopropyl benzene		25	25	U
Bromobenzene		25	25	U
1,1,2,2-Tetrachloroethane		25	25	U
1,2,3-Trichloropropane		25	25	U
n-Propylbenzene		25	25	U
2-Chlorotoluene		25	25	U
4-Chlorotoluene		25	25	U
1,3,5-Trimethyl benzene		25	25	U
tert-Butyl benzene		25	25	U
1,2,4-Trimethylbenzene		25	25	U
sec-Butylbenzene		25	25	U
1,3-Dichlorobenzene		25	25	U
4-Isopropyltoluene		25	25	U
1,4-Dichlorobenzene		25	25	U
1,2-Dichlorobenzene		25	25	U
n-Butylbenzene		25	25	U
1,2-Dibromo-3-chloropropane		25	25	U
1,2,4-Trichlorobenzene		25	25	U
Hexachlorobutadiene		25	25	U
Naphthalene		25	25	U
1,2,3-Trichlorobenzene		25	25	U

Notes :
Volatile Organic Compounds analyzed using EPA method 8260B
Field report is preliminary until reviewed and signed

B = Detected in laboratory blank
E = Exceeds upper calibration limit
J = Below reporting limit
U = Undetected

SIGNED: SLC 1/29/02 REVIEWED:

SEVERN TRENT SERVICES

Field Report

Project: Mercer_Palo Alto
Client : PES

Client Sample ID: A8-4.0
Laboratory Sample ID: PES0109-03

Volume (g): 1

Matrix: Soil
Analyst: SLC
File#: 01090207.D
Instr. #: Alpha
Date Collected: 1/9/02
Date Analyzed: 1/9/02
Dilution Factor: 5
Method: 010702.M

Surrogate Recovery

COMPOUND	ng	ng spiked	% Recovery	Low CL	High CL
Dibromofluoromethane	224.1	250	90%	80	120
1,2-Dichloroethane -d4	210.9	250	84%	80	120
Toluene-d8	231.5	250	93%	81	117
4-Bromofluorobenzene	257.9	250	103%	74	121

COMPOUND	ng	Reporting Limit (ng)	Reporting Limit (ug/Kg)	Result (ug/Kg)
Dichlorodifluoromethane		25	25	U
Chloromethane		25	25	U
Vinyl Chloride		25	25	U
Bromomethane		25	25	U
Chloroethane		25	25	U
Trichlorofluoromethane		25	25	U
1,1-Dichloroethene		25	25	U
Methylene Chloride		25	25	U
trans-1,2-Dichloroethene		25	25	U
1,1-Dichloroethane		25	25	U
cis-1,2-Dichloroethene		25	25	U
Chloroform		25	25	U
1,1,1-Trichloroethane		25	25	U
Carbon tetrachloride		25	25	U
Benzene		25	25	U
1,2-Dichloroethane		25	25	U
Trichloroethene		25	25	U
1,2-Dichloropropane		25	25	U
Dibromomethane		25	25	U
Bromodichloromethane		25	25	U
cis-1,3-Dichloropropene		25	25	U
Toluene		25	25	U
trans-1,3-Dichloropropene		25	25	U
1,1,2-Trichloroethane		25	25	U
Tetrachloroethene		25	25	U
Dibromochloromethane		25	25	U
1,2-Dibromoethane (EDB)		25	25	U
Chlorobenzene		25	25	U
1,1,1,2-Tetrachloroethane		25	25	U
Ethyl Benzene		25	25	U
m,p-Xylene		50	50	U
o-Xylene		25	25	U
Styrene		25	25	U
Bromoform		25	25	U
Isopropyl benzene		25	25	U
Bromobenzene		25	25	U
1,1,2,2-Tetrachloroethane		25	25	U
1,2,3-Trichloropropane		25	25	U
n-Propylbenzene		25	25	U
2-Chlorotoluene		25	25	U
4-Chlorotoluene		25	25	U
1,3,5-Trimethyl benzene		25	25	U
tert-Butyl benzene		25	25	U
1,2,4-Trimethylbenzene		25	25	U
sec-Butylbenzene		25	25	U
1,3-Dichlorobenzene		25	25	U
4-Isopropyltoluene		25	25	U
1,4-Dichlorobenzene		25	25	U
1,2-Dichlorobenzene		25	25	U
n-Butylbenzene		25	25	U
1,2-Dibromo-3-chloropropane		25	25	U
1,2,4-Trichlorobenzene		25	25	U
Hexachlorobutadiene		25	25	U
Naphthalene		25	25	U
1,2,3-Trichlorobenzene		25	25	U

Notes :
Volatile Organic Compounds analyzed using EPA method 8260B
Field report is preliminary until reviewed and signed

B = Detected in laboratory blank
E = Exceeds upper calibration limit
J = Below reporting limit
U = Undetected

SIGNED: SLC 1/29/02 REVIEWED:

SEVERN TRENT SERVICES

Field Report

Project: Mercer_Palo Alto
Client : PES

Client Sample ID: A5-5.0
Laboratory Sample ID: PES0109-04

Volume (g): 1

Matrix: Soil
Analyst: SLC
File#: 01090208.D
Instr. #: Alpha
Date Collected: 1/9/02
Date Analyzed: 1/9/02
Dilution Factor: 5
Method: 010702.M

Surrogate Recovery

COMPOUND	ng	ng spiked	% Recovery	Low CL	High CL
Dibromofluoromethane	225.9	250	90%	80	120
1,2-Dichloroethane -d4	212.9	250	85%	80	120
Toluene-d8	227.5	250	91%	81	117
4-Bromofluorobenzene	240.5	250	96%	74	121

COMPOUND	ng	Reporting Limit (ng)	Reporting Limit (ug/Kg)	Result (ug/Kg)
Dichlorodifluoromethane		25	25	U
Chloromethane		25	25	U
Vinyl Chloride		25	25	U
Bromomethane		25	25	U
Chloroethane		25	25	U
Trichlorofluoromethane		25	25	U
1,1-Dichloroethene		25	25	U
Methylene Chloride		25	25	U
trans-1,2-Dichloroethene		25	25	U
1,1-Dichloroethane		25	25	U
cis-1,2-Dichloroethene		25	25	U
Chloroform		25	25	U
1,1,1-Trichloroethane		25	25	U
Carbon tetrachloride		25	25	U
Benzene		25	25	U
1,2-Dichloroethane		25	25	U
Trichloroethene	53.18	25	25	53
1,2-Dichloropropane		25	25	U
Dibromomethane		25	25	U
Bromodichloromethane		25	25	U
cis-1,3-Dichloropropene		25	25	U
Toluene		25	25	U
trans-1,3-Dichloropropene		25	25	U
1,1,2-Trichloroethane		25	25	U
Tetrachloroethene		25	25	U
Dibromochloromethane		25	25	U
1,2-Dibromoethane (EDB)		25	25	U
Chlorobenzene		25	25	U
1,1,1,2-Tetrachloroethane		25	25	U
Ethyl Benzene		25	25	U
m,p-Xylene		50	50	U
o-Xylene		25	25	U
Styrene		25	25	U
Bromoform		25	25	U
Isopropyl benzene		25	25	U
Bromobenzene		25	25	U
1,1,2,2-Tetrachloroethane		25	25	U
1,2,3-Trichloropropane		25	25	U
n-Propylbenzene		25	25	U
2-Chlorotoluene		25	25	U
4-Chlorotoluene		25	25	U
1,3,5-Trimethyl benzene		25	25	U
tert-Butyl benzene		25	25	U
1,2,4-Trimethylbenzene		25	25	U
sec-Butylbenzene		25	25	U
1,3-Dichlorobenzene		25	25	U
4-Isopropyltoluene		25	25	U
1,4-Dichlorobenzene		25	25	U
1,2-Dichlorobenzene		25	25	U
n-Butylbenzene		25	25	U
1,2-Dibromo-3-chloropropane		25	25	U
1,2,4-Trichlorobenzene		25	25	U
Hexachlorobutadiene		25	25	U
Naphthalene		25	25	U
1,2,3-Trichlorobenzene		25	25	U

Notes :
Volatile Organic Compounds analyzed using EPA method 8260B
Field report is preliminary until reviewed and signed

B = Detected in laboratory blank
E = Exceeds upper calibration limit
J = Below reporting limit
U = Undetected

SIGNED: GLB for SLC 1/29/02

REVIEWED:

SEVERN TRENT SERVICES

Field Report

Project: Mercer_Palo Alto
Client : PES

Client Sample ID: D6-18.1
Laboratory Sample ID: PES0109-05

Volume (g): 1

Matrix: Soil
Analyst: SLC
File#: 01090209.D
Instr. #: Alpha
Date Collected: 1/9/02
Date Analyzed: 1/9/02
Dilution Factor: 5
Method: 010702.M

Surrogate Recovery COMPOUND	ng	ng spiked	% Recovery	Low CL	High CL
Dibromofluoromethane	233.6	250	93%	80	120
1,2-Dichloroethane -d4	223.3	250	89%	80	120
Toluene-d8	185.1	250	74% *	81	117
4-Bromofluorobenzene	277.2	250	111%	74	121

COMPOUND	ng	Reporting Limit (ng)	Reporting Limit (ug/Kg)	Result (ug/Kg)
Dichlorodifluoromethane		25	25	U
Chloromethane		25	25	U
Vinyl Chloride		25	25	U
Bromomethane		25	25	U
Chloroethane		25	25	U
Trichlorofluoromethane		25	25	U
1,1-Dichloroethene		25	25	U
Methylene Chloride		25	25	U
trans-1,2-Dichloroethene		25	25	U
1,1-Dichloroethane		25	25	U
cis-1,2-Dichloroethene		25	25	U
Chloroform		25	25	U
1,1,1-Trichloroethane		25	25	U
Carbon tetrachloride		25	25	U
Benzene		25	25	U
1,2-Dichloroethane		25	25	U
Trichloroethene	221.37	25	25	220
1,2-Dichloropropane		25	25	U
Dibromomethane		25	25	U
Bromodichloromethane		25	25	U
cis-1,3-Dichloropropene		25	25	U
Toluene		25	25	U
trans-1,3-Dichloropropene		25	25	U
1,1,2-Trichloroethane		25	25	U
Tetrachloroethene		25	25	U
Dibromochloromethane		25	25	U
1,2-Dibromoethane (EDB)		25	25	U
Chlorobenzene		25	25	U
1,1,1,2-Tetrachloroethane		25	25	U
Ethyl Benzene		25	25	U
m,p-Xylene		50	50	U
o-Xylene		25	25	U
Styrene		25	25	U
Bromoform		25	25	U
Isopropyl benzene		25	25	U
Bromobenzene		25	25	U
1,1,2,2-Tetrachloroethane		25	25	U
1,2,3-Trichloropropane		25	25	U
n-Propylbenzene		25	25	U
2-Chlorotoluene		25	25	U
4-Chlorotoluene		25	25	U
1,3,5-Trimethyl benzene		25	25	U
tert-Butyl benzene		25	25	U
1,2,4-Trimethylbenzene		25	25	U
sec-Butylbenzene		25	25	U
1,3-Dichlorobenzene		25	25	U
4-Isopropyltoluene		25	25	U
1,4-Dichlorobenzene		25	25	U
1,2-Dichlorobenzene		25	25	U
n-Butylbenzene		25	25	U
1,2-Dibromo-3-chloropropane		25	25	U
1,2,4-Trichlorobenzene		25	25	U
Hexachlorobutadiene		25	25	U
Naphthalene		25	25	U
1,2,3-Trichlorobenzene		25	25	U

Notes :
Volatile Organic Compounds analyzed using EPA method 8260B
Field report is preliminary until reviewed and signed

B = Detected in laboratory blank
E = Exceeds upper calibration limit
J = Below reporting limit
U = Undetected

* outside QC Limits

SIGNED: SLC 1/29/02 REVIEWED:

SEVERN TRENT SERVICES

Field Report

Project: Mercer_Palo Alto
Client : PES

Client Sample ID: B8-EAST-5.0
Laboratory Sample ID: PES0109-06

Volume (g): 1

Matrix: Soil
Analyst: SLC
File#: 01090210.D
Instr. #: Alpha
Date Collected: 1/9/02
Date Analyzed: 1/9/02
Dilution Factor: 5
Method: 010702.M

Surrogate Recovery

COMPOUND	ng	ng spiked	% Recovery	Low CL	High CL
Dibromofluoromethane	236.8	250	95%	80	120
1,2-Dichloroethane -d4	230.6	250	92%	80	120
Toluene-d8	183.2	250	73% *	81	117
4-Bromofluorobenzene	295.5	250	118%	74	121

COMPOUND	ng	Reporting Limit (ng)	Reporting Limit (ug/Kg)	Result (ug/Kg)
Dichlorodifluoromethane		25	25	U
Chloromethane		25	25	U
Vinyl Chloride		25	25	U
Bromomethane		25	25	U
Chloroethane		25	25	U
Trichlorofluoromethane		25	25	U
1,1-Dichloroethene		25	25	U
Methylene Chloride		25	25	U
trans-1,2-Dichloroethene		25	25	U
1,1-Dichloroethane		25	25	U
cis-1,2-Dichloroethene		25	25	U
Chloroform		25	25	U
1,1,1-Trichloroethane		25	25	U
Carbon tetrachloride		25	25	U
Benzene		25	25	U
1,2-Dichloroethane		25	25	U
Trichloroethene	102.23	25	25	100
1,2-Dichloropropane		25	25	U
Dibromomethane		25	25	U
Bromodichloromethane		25	25	U
cis-1,3-Dichloropropene		25	25	U
Toluene		25	25	U
trans-1,3-Dichloropropene		25	25	U
1,1,2-Trichloroethane		25	25	U
Tetrachloroethene		25	25	U
Dibromochloromethane		25	25	U
1,2-Dibromoethane (EDB)		25	25	U
Chlorobenzene		25	25	U
1,1,1,2-Tetrachloroethane		25	25	U
Ethyl Benzene		25	25	U
m,p-Xylene		50	50	U
o-Xylene		25	25	U
Styrene		25	25	U
Bromoform		25	25	U
Isopropyl benzene		25	25	U
Bromobenzene		25	25	U
1,1,2,2-Tetrachloroethane		25	25	U
1,2,3-Trichloropropane		25	25	U
n-Propylbenzene		25	25	U
2-Chlorotoluene		25	25	U
4-Chlorotoluene		25	25	U
1,3,5-Trimethyl benzene		25	25	U
tert-Butyl benzene		25	25	U
1,2,4-Trimethylbenzene		25	25	U
sec-Butylbenzene		25	25	U
1,3-Dichlorobenzene		25	25	U
4-Isopropyltoluene		25	25	U
1,4-Dichlorobenzene		25	25	U
1,2-Dichlorobenzene		25	25	U
n-Butylbenzene		25	25	U
1,2-Dibromo-3-chloropropane		25	25	U
1,2,4-Trichlorobenzene		25	25	U
Hexachlorobutadiene		25	25	U
Naphthalene		25	25	U
1,2,3-Trichlorobenzene		25	25	U

Notes :
Volatile Organic Compounds analyzed using EPA method 8260B
Field report is preliminary until reviewed and signed

B = Detected in laboratory blank
E = Exceeds upper calibration limit
J = Below reporting limit
U = Undetected

* Outside QC Limits

SIGNED: SLC 1/29/02 REVIEWED:

SEVERN TRENT SERVICES

Field Report

Project: Mercer_Palo Alto
Client : PES

Client Sample ID: D6-19.5
Laboratory Sample ID: PES0109-07

Volume (g): 1

Matrix: Soil
Analyst: SLC
File#: 01090211.D
Instr. #: Alpha
Date Collected: 1/9/02
Date Analyzed: 1/9/02
Dilution Factor: 5
Method: 010702.M

Surrogate Recovery COMPOUND	ng	ng spiked	% Recovery	Low CL	High CL
Dibromofluoromethane	237.2	250	95%	80	120
1,2-Dichloroethane -d4	227.2	250	91%	80	120
Toluene-d8	181.9	250	73% *	81	117
4-Bromofluorobenzene	120.5	250	48%	74	121

COMPOUND	ng	Reporting Limit (ng)	Reporting Limit (ug/Kg)	Result (ug/Kg)
Dichlorodifluoromethane		25	25	U
Chloromethane		25	25	U
Vinyl Chloride		25	25	U
Bromomethane		25	25	U
Chloroethane		25	25	U
Trichlorofluoromethane		25	25	U
1,1-Dichloroethene		25	25	U
Methylene Chloride		25	25	U
trans-1,2-Dichloroethene		25	25	U
1,1-Dichloroethane		25	25	U
cis-1,2-Dichloroethene		25	25	U
Chloroform		25	25	U
1,1,1-Trichloroethane		25	25	U
Carbon tetrachloride		25	25	U
Benzene		25	25	U
1,2-Dichloroethane		25	25	U
Trichloroethene	268.57	25	25	270
1,2-Dichloropropane		25	25	U
Dibromomethane		25	25	U
Bromodichloromethane		25	25	U
cis-1,3-Dichloropropene		25	25	U
Toluene		25	25	U
trans-1,3-Dichloropropene		25	25	U
1,1,2-Trichloroethane		25	25	U
Tetrachloroethene		25	25	U
Dibromochloromethane		25	25	U
1,2-Dibromoethane (EDB)		25	25	U
Chlorobenzene		25	25	U
1,1,1,2-Tetrachloroethane		25	25	U
Ethyl Benzene		25	25	U
m,p-Xylene		50	50	U
o-Xylene		25	25	U
Styrene		25	25	U
Bromoform		25	25	U
Isopropyl benzene		25	25	U
Bromobenzene		25	25	U
1,1,2,2-Tetrachloroethane		25	25	U
1,2,3-Trichloropropane		25	25	U
n-Propylbenzene		25	25	U
2-Chlorotoluene		25	25	U
4-Chlorotoluene		25	25	U
1,3,5-Trimethyl benzene		25	25	U
tert-Butyl benzene		25	25	U
1,2,4-Trimethylbenzene		25	25	U
sec-Butylbenzene		25	25	U
1,3-Dichlorobenzene		25	25	U
4-Isopropyltoluene		25	25	U
1,4-Dichlorobenzene		25	25	U
1,2-Dichlorobenzene		25	25	U
n-Butylbenzene		25	25	U
1,2-Dibromo-3-chloropropane		25	25	U
1,2,4-Trichlorobenzene		25	25	U
Hexachlorobutadiene		25	25	U
Naphthalene		25	25	U
1,2,3-Trichlorobenzene		25	25	U

Notes :
Volatile Organic Compounds analyzed using EPA method 8260B
Field report is preliminary until reviewed and signed

B = Detected in laboratory blank
E = Exceeds upper calibration limit
J = Below reporting limit
U = Undetected

* outside QC limits

SIGNED: SLC 1/29/02 REVIEWED:

SEVERN TRENT SERVICES

Field Report

Project: Mercer_Palo Alto
Client : PES

Client Sample ID: B2-4.0
Laboratory Sample ID: PES0109-14

Volume (g): 1

Matrix: Soil
Analyst: SLC
File#: 01090217.D
Instr. #: Alpha
Date Collected: 1/9/02
Date Analyzed: 1/9/02
Dilution Factor: 5
Method: 010702.M

Surrogate Recovery

COMPOUND	ng	ng spiked	% Recovery	Low CL	High CL
Dibromofluoromethane	237.4	250	95%	80	120
1,2-Dichloroethane -d4	232.6	250	93%	80	120
Toluene-d8	183.5	250	73% *	81	117
4-Bromofluorobenzene	283.8	250	114%	74	121

COMPOUND	ng	Reporting Limit (ng)	Reporting Limit (ug/Kg)	Result (ug/Kg)
Dichlorodifluoromethane		25	25	U
Chloromethane		25	25	U
Vinyl Chloride		25	25	U
Bromomethane		25	25	U
Chloroethane		25	25	U
Trichlorofluoromethane		25	25	U
1,1-Dichloroethene		25	25	U
Methylene Chloride		25	25	U
trans-1,2-Dichloroethene		25	25	U
1,1-Dichloroethane		25	25	U
cis-1,2-Dichloroethene		25	25	U
Chloroform		25	25	U
1,1,1-Trichloroethane		25	25	U
Carbon tetrachloride		25	25	U
Benzene		25	25	U
1,2-Dichloroethane		25	25	U
Trichloroethene	62.05	25	25	62
1,2-Dichloropropane		25	25	U
Dibromomethane		25	25	U
Bromodichloromethane		25	25	U
cis-1,3-Dichloropropene		25	25	U
Toluene		25	25	U
trans-1,3-Dichloropropene		25	25	U
1,1,2-Trichloroethane		25	25	U
Tetrachloroethene		25	25	U
Dibromochloromethane		25	25	U
1,2-Dibromoethane (EDB)		25	25	U
Chlorobenzene		25	25	U
1,1,1,2-Tetrachloroethane		25	25	U
Ethyl Benzene		25	25	U
m,p-Xylene		50	50	U
o-Xylene		25	25	U
Styrene		25	25	U
Bromoform		25	25	U
Isopropyl benzene		25	25	U
Bromobenzene		25	25	U
1,1,2,2-Tetrachloroethane		25	25	U
1,2,3-Trichloropropane		25	25	U
n-Propylbenzene		25	25	U
2-Chlorotoluene		25	25	U
4-Chlorotoluene		25	25	U
1,3,5-Trimethyl benzene		25	25	U
tert-Butyl benzene		25	25	U
1,2,4-Trimethylbenzene		25	25	U
sec-Butylbenzene		25	25	U
1,3-Dichlorobenzene		25	25	U
4-Isopropyltoluene		25	25	U
1,4-Dichlorobenzene		25	25	U
1,2-Dichlorobenzene		25	25	U
n-Butylbenzene		25	25	U
1,2-Dibromo-3-chloropropane		25	25	U
1,2,4-Trichlorobenzene		25	25	U
Hexachlorobutadiene		25	25	U
Naphthalene		25	25	U
1,2,3-Trichlorobenzene		25	25	U

Notes :
Volatile Organic Compounds analyzed using EPA method 8260B
Field report is preliminary until reviewed and signed

B = Detected in laboratory blank
E = Exceeds upper calibration limit
J = Below reporting limit
U = Undetected

* Outside QC Limits

SIGNED: SLC 1/29/02 REVIEWED:

SEVERN TRENT SERVICES

Field Report

Project: Mercer_Palo Alto
Client : PES

Client Sample ID: A4-NORTH-4.0
Laboratory Sample ID: PES0109-15

Volume (g): 1

Matrix: Soil
Analyst: SLC
File#: 01090218.D
Instr. #: Alpha
Date Collected: 1/9/02
Date Analyzed: 1/9/02
Dilution Factor: 5
Method: 010702.M

Surrogate Recovery

COMPOUND	ng	ng spiked	% Recovery	Low CL	High CL
Dibromofluoromethane	227.8	250	91%	80	120
1,2-Dichloroethane -d4	217.7	250	87%	80	120
Toluene-d8	233.5	250	93%	81	117
4-Bromofluorobenzene	240.2	250	96%	74	121

COMPOUND	ng	Reporting Limit (ng)	Reporting Limit (ug/Kg)	Result (ug/Kg)
Dichlorodifluoromethane		25	25	U
Chloromethane		25	25	U
Vinyl Chloride		25	25	U
Bromomethane		25	25	U
Chloroethane		25	25	U
Trichlorofluoromethane		25	25	U
1,1-Dichloroethene		25	25	U
Methylene Chloride		25	25	U
trans-1,2-Dichloroethene		25	25	U
1,1-Dichloroethane		25	25	U
cis-1,2-Dichloroethene		25	25	U
Chloroform		25	25	U
1,1,1-Trichloroethane		25	25	U
Carbon tetrachloride		25	25	U
Benzene		25	25	U
1,2-Dichloroethane		25	25	U
Trichloroethene	47.9	25	25	48
1,2-Dichloropropane		25	25	U
Dibromomethane		25	25	U
Bromodichloromethane		25	25	U
cis-1,3-Dichloropropene		25	25	U
Toluene		25	25	U
trans-1,3-Dichloropropene		25	25	U
1,1,2-Trichloroethane		25	25	U
Tetrachloroethene		25	25	U
Dibromochloromethane		25	25	U
1,2-Dibromoethane (EDB)		25	25	U
Chlorobenzene		25	25	U
1,1,1,2-Tetrachloroethane		25	25	U
Ethyl Benzene		25	25	U
m,p-Xylene		50	50	U
o-Xylene		25	25	U
Styrene		25	25	U
Bromoform		25	25	U
Isopropyl benzene		25	25	U
Bromobenzene		25	25	U
1,1,2,2-Tetrachloroethane		25	25	U
1,2,3-Trichloropropane		25	25	U
n-Propylbenzene		25	25	U
2-Chlorotoluene		25	25	U
4-Chlorotoluene		25	25	U
1,3,5-Trimethyl benzene		25	25	U
tert-Butyl benzene		25	25	U
1,2,4-Trimethylbenzene		25	25	U
sec-Butylbenzene		25	25	U
1,3-Dichlorobenzene		25	25	U
4-Isopropyltoluene		25	25	U
1,4-Dichlorobenzene		25	25	U
1,2-Dichlorobenzene		25	25	U
n-Butylbenzene		25	25	U
1,2-Dibromo-3-chloropropane		25	25	U
1,2,4-Trichlorobenzene		25	25	U
Hexachlorobutadiene		25	25	U
Naphthalene		25	25	U
1,2,3-Trichlorobenzene		25	25	U

Notes :
Volatile Organic Compounds analyzed using EPA method 8260B
Field report is preliminary until reviewed and signed

B = Detected in laboratory blank
E = Exceeds upper calibration limit
J = Below reporting limit
U = Undetected

SIGNED: QCB for SLC 1/29/02 REVIEWED:

SEVERN TRENT SERVICES

Field Report

Project: Mercer_Palo Alto
Client : PES

Client Sample ID: A5-NORTH-4.0
Laboratory Sample ID: PES0109-16

Volume (g): 1

Matrix: Soil
Analyst: SLC
File#: 01090219.D
Instr. #: Alpha
Date Collected: 1/9/02
Date Analyzed: 1/9/02
Dilution Factor: 5
Method: 010702.M

Surrogate Recovery

COMPOUND	ng	ng spiked	% Recovery	Low CL	High CL
Dibromofluoromethane	229.8	250	92%	80	120
1,2-Dichloroethane -d4	224.9	250	90%	80	120
Toluene-d8	228.1	250	91%	81	117
4-Bromofluorobenzene	233.4	250	93%	74	121

COMPOUND	ng	Reporting Limit (ng)	Reporting Limit (ug/Kg)	Result (ug/Kg)
Dichlorodifluoromethane		25	25	U
Chloromethane		25	25	U
Vinyl Chloride		25	25	U
Bromomethane		25	25	U
Chloroethane		25	25	U
Trichlorofluoromethane		25	25	U
1,1-Dichloroethene		25	25	U
Methylene Chloride		25	25	U
trans-1,2-Dichloroethene		25	25	U
1,1-Dichloroethane		25	25	U
cis-1,2-Dichloroethene		25	25	U
Chloroform		25	25	U
1,1,1-Trichloroethane		25	25	U
Carbon tetrachloride		25	25	U
Benzene		25	25	U
1,2-Dichloroethane		25	25	U
Trichloroethene	98.58	25	25	99
1,2-Dichloropropane		25	25	U
Dibromomethane		25	25	U
Bromodichloromethane		25	25	U
cis-1,3-Dichloropropene		25	25	U
Toluene		25	25	U
trans-1,3-Dichloropropene		25	25	U
1,1,2-Trichloroethane		25	25	U
Tetrachloroethene		25	25	U
Dibromochloromethane		25	25	U
1,2-Dibromoethane (EDB)		25	25	U
Chlorobenzene		25	25	U
1,1,1,2-Tetrachloroethane		25	25	U
Ethyl Benzene		25	25	U
m,p-Xylene		50	50	U
o-Xylene		25	25	U
Styrene		25	25	U
Bromoform		25	25	U
Isopropyl benzene		25	25	U
Bromobenzene		25	25	U
1,1,2,2-Tetrachloroethane		25	25	U
1,2,3-Trichloropropane		25	25	U
n-Propylbenzene		25	25	U
2-Chlorotoluene		25	25	U
4-Chlorotoluene		25	25	U
1,3,5-Trimethyl benzene		25	25	U
tert-Butyl benzene		25	25	U
1,2,4-Trimethylbenzene		25	25	U
sec-Butylbenzene		25	25	U
1,3-Dichlorobenzene		25	25	U
4-Isopropyltoluene		25	25	U
1,4-Dichlorobenzene		25	25	U
1,2-Dichlorobenzene		25	25	U
n-Butylbenzene		25	25	U
1,2-Dibromo-3-chloropropane		25	25	U
1,2,4-Trichlorobenzene		25	25	U
Hexachlorobutadiene		25	25	U
Naphthalene		25	25	U
1,2,3-Trichlorobenzene		25	25	U

Notes :
Volatile Organic Compounds analyzed using EPA method 8260B
Field report is preliminary until reviewed and signed

B = Detected in laboratory blank
E = Exceeds upper calibration limit
J = Below reporting limit
U = Undetected

SIGNED: SLC 1/29/02 REVIEWED:

SEVERN TRENT SERVICES

Field Report

Project: Mercer_Palo Alto
Client : PES

Client Sample ID: D2-4.0
Laboratory Sample ID: PES0110-01

Volume (g): 1

Matrix: Soil
Analyst: SLC
File#: 01100205.D
Instr. #: Alpha
Date Collected: 1/10/02
Date Analyzed: 1/10/02
Dilution Factor: 5
Method: 010702.M

Surrogate Recovery

COMPOUND	ng	ng spiked	% Recovery	Low CL	High CL
Dibromofluoromethane	226.8	250	91%	80	120
1,2-Dichloroethane -d4	215.4	250	86%	80	120
Toluene-d8	238.7	250	95%	81	117
4-Bromofluorobenzene	218.5	250	87%	74	121

COMPOUND	ng	Reporting Limit (ng)	Reporting Limit (ug/Kg)	Result (ug/Kg)
Dichlorodifluoromethane		25	25	U
Chloromethane		25	25	U
Vinyl Chloride		25	25	U
Bromomethane		25	25	U
Chloroethane		25	25	U
Trichlorofluoromethane		25	25	U
1,1-Dichloroethene		25	25	U
Methylene Chloride		25	25	U
trans-1,2-Dichloroethene		25	25	U
1,1-Dichloroethane		25	25	U
cis-1,2-Dichloroethene		25	25	U
Chloroform		25	25	U
1,1,1-Trichloroethane		25	25	U
Carbon tetrachloride		25	25	U
Benzene		25	25	U
1,2-Dichloroethane		25	25	U
Trichloroethene		25	25	U
1,2-Dichloropropane		25	25	U
Dibromomethane		25	25	U
Bromodichloromethane		25	25	U
cis-1,3-Dichloropropene		25	25	U
Toluene		25	25	U
trans-1,3-Dichloropropene		25	25	U
1,1,2-Trichloroethane		25	25	U
Tetrachloroethene		25	25	U
Dibromochloromethane		25	25	U
1,2-Dibromoethane (EDB)		25	25	U
Chlorobenzene		25	25	U
1,1,1,2-Tetrachloroethane		25	25	U
Ethyl Benzene		25	25	U
m,p-Xylene		50	50	U
o-Xylene		25	25	U
Styrene		25	25	U
Bromoform		25	25	U
Isopropyl benzene		25	25	U
Bromobenzene		25	25	U
1,1,2,2-Tetrachloroethane		25	25	U
1,2,3-Trichloropropane		25	25	U
n-Propylbenzene		25	25	U
2-Chlorotoluene		25	25	U
4-Chlorotoluene		25	25	U
1,3,5-Trimethyl benzene		25	25	U
tert-Butyl benzene		25	25	U
1,2,4-Trimethylbenzene		25	25	U
sec-Butylbenzene		25	25	U
1,3-Dichlorobenzene		25	25	U
4-Isopropyltoluene		25	25	U
1,4-Dichlorobenzene		25	25	U
1,2-Dichlorobenzene		25	25	U
n-Butylbenzene		25	25	U
1,2-Dibromo-3-chloropropane		25	25	U
1,2,4-Trichlorobenzene		25	25	U
Hexachlorobutadiene		25	25	U
Naphthalene		25	25	U
1,2,3-Trichlorobenzene		25	25	U

otes :

olatile Organic Compounds analyzed using EPA method 8260B
Field report is preliminary until reviewed and signed

B = Detected in laboratory blank
E = Exceeds upper calibration limit
J = Below reporting limit
U = Undetected

SIGNED: SLC 1/29/02 REVIEWED:

SEVERN TRENT SERVICES

Field Report

Project: Mercer_Palo Alto
Client : PES

Client Sample ID: C2-4.0
Laboratory Sample ID: PES0110-02

Volume (g): 1

Matrix: Soil
Analyst: SLC
File#: 01100206.D
Instr. #: Alpha
Date Collected: 1/10/02
Date Analyzed: 1/10/02
Dilution Factor: 5
Method: 010702.M

Surrogate Recovery

COMPOUND	ng	ng spiked	% Recovery	Low CL	High CL
Dibromofluoromethane	227.2	250	91%	80	120
1,2-Dichloroethane -d4	220.6	250	88%	80	120
Toluene-d8	233.1	250	93%	81	117
4-Bromofluorobenzene	227.4	250	91%	74	121

COMPOUND	ng	Reporting Limit (ng)	Reporting Limit (ug/Kg)	Result (ug/Kg)
Dichlorodifluoromethane		25	25	U
Chloromethane		25	25	U
Vinyl Chloride		25	25	U
Bromomethane		25	25	U
Chloroethane		25	25	U
Trichlorofluoromethane		25	25	U
1,1-Dichloroethene		25	25	U
Methylene Chloride		25	25	U
trans-1,2-Dichloroethene		25	25	U
1,1-Dichloroethane		25	25	U
cis-1,2-Dichloroethene		25	25	U
Chloroform		25	25	U
1,1,1-Trichloroethane		25	25	U
Carbon tetrachloride		25	25	U
Benzene		25	25	U
1,2-Dichloroethane		25	25	U
Trichloroethene		25	25	U
1,2-Dichloropropane		25	25	U
Dibromomethane		25	25	U
Bromodichloromethane		25	25	U
cis-1,3-Dichloropropene		25	25	U
Toluene		25	25	U
trans-1,3-Dichloropropene		25	25	U
1,1,2-Trichloroethane		25	25	U
Tetrachloroethene		25	25	U
Dibromochloromethane		25	25	U
1,2-Dibromoethane (EDB)		25	25	U
Chlorobenzene		25	25	U
1,1,1,2-Tetrachloroethane		25	25	U
Ethyl Benzene		25	25	U
m,p-Xylene		50	50	U
o-Xylene		25	25	U
Styrene		25	25	U
Bromoform		25	25	U
Isopropyl benzene		25	25	U
Bromobenzene		25	25	U
1,1,2,2-Tetrachloroethane		25	25	U
1,2,3-Trichloropropane		25	25	U
n-Propylbenzene		25	25	U
2-Chlorotoluene		25	25	U
4-Chlorotoluene		25	25	U
1,3,5-Trimethyl benzene		25	25	U
tert-Butyl benzene		25	25	U
1,2,4-Trimethylbenzene		25	25	U
sec-Butylbenzene		25	25	U
1,3-Dichlorobenzene		25	25	U
4-Isopropyltoluene		25	25	U
1,4-Dichlorobenzene		25	25	U
1,2-Dichlorobenzene		25	25	U
n-Butylbenzene		25	25	U
1,2-Dibromo-3-chloropropane		25	25	U
1,2,4-Trichlorobenzene		25	25	U
Hexachlorobutadiene		25	25	U
Naphthalene		25	25	U
1,2,3-Trichlorobenzene		25	25	U

otes :
olatile Organic Compounds analyzed using EPA method 8260B
Field report is preliminary until reviewed and signed

B = Detected in laboratory blank
E = Exceeds upper calibration limit
J = Below reporting limit
U = Undetected

SIGNED: SLC 1/29/02 REVIEWED:

SEVERN TRENT SERVICES

Field Report

Project: Mercer_Palo Alto
Client : PES

Client Sample ID: E8-4.0
Laboratory Sample ID: PES0110-03

Volume (g): 1

Matrix: Soil
Analyst: SLC
File#: 01100207.D
Instr. #: Alpha
Date Collected: 1/10/02
Date Analyzed: 1/10/02
Dilution Factor: 5
Method: 010702.M

Surrogate Recovery

COMPOUND	ng	ng spiked	% Recovery	Low CL	High CL
Dibromofluoromethane	230.2	250	92%	80	120
1,2-Dichloroethane -d4	227.7	250	91%	80	120
Toluene-d8	227.5	250	91%	81	117
4-Bromofluorobenzene	221.1	250	88%	74	121

COMPOUND	ng	Reporting Limit (ng)	Reporting Limit (ug/Kg)	Result (ug/Kg)
Dichlorodifluoromethane		25	25	U
Chloromethane		25	25	U
Vinyl Chloride		25	25	U
Bromomethane		25	25	U
Chloroethane		25	25	U
Trichlorofluoromethane		25	25	U
1,1-Dichloroethene		25	25	U
Methylene Chloride		25	25	U
trans-1,2-Dichloroethene		25	25	U
1,1-Dichloroethane		25	25	U
cis-1,2-Dichloroethene		25	25	U
Chloroform		25	25	U
1,1,1-Trichloroethane		25	25	U
Carbon tetrachloride		25	25	U
Benzene		25	25	U
1,2-Dichloroethane		25	25	U
Trichloroethene	49.01	25	25	49
1,2-Dichloropropane		25	25	U
Dibromomethane		25	25	U
Bromodichloromethane		25	25	U
cis-1,3-Dichloropropene		25	25	U
Toluene		25	25	U
trans-1,3-Dichloropropene		25	25	U
1,1,2-Trichloroethane		25	25	U
Tetrachloroethene		25	25	U
Dibromochloromethane		25	25	U
1,2-Dibromoethane (EDB)		25	25	U
Chlorobenzene		25	25	U
1,1,1,2-Tetrachloroethane		25	25	U
Ethyl Benzene		25	25	U
m,p-Xylene		50	50	U
o-Xylene		25	25	U
Styrene		25	25	U
Bromoform		25	25	U
Isopropyl benzene		25	25	U
Bromobenzene		25	25	U
1,1,2,2-Tetrachloroethane		25	25	U
1,2,3-Trichloropropane		25	25	U
n-Propylbenzene		25	25	U
2-Chlorotoluene		25	25	U
4-Chlorotoluene		25	25	U
1,3,5-Trimethyl benzene		25	25	U
tert-Butyl benzene		25	25	U
1,2,4-Trimethylbenzene		25	25	U
sec-Butylbenzene		25	25	U
1,3-Dichlorobenzene		25	25	U
4-Isopropyltoluene		25	25	U
1,4-Dichlorobenzene		25	25	U
1,2-Dichlorobenzene		25	25	U
n-Butylbenzene		25	25	U
1,2-Dibromo-3-chloropropane		25	25	U
1,2,4-Trichlorobenzene		25	25	U
Hexachlorobutadiene		25	25	U
Naphthalene		25	25	U
1,2,3-Trichlorobenzene		25	25	U

Notes :
Volatile Organic Compounds analyzed using EPA method 8260B
Field report is preliminary until reviewed and signed

B = Detected in laboratory blank
E = Exceeds upper calibration limit
J = Below reporting limit
U = Undetected

SIGNED: GLB for SLC 1/29/02 REVIEWED:

SEVERN TRENT SERVICES

Field Report

Project: Mercer_Palo Alto
Client : PES

Client Sample ID: A10-4.0
Laboratory Sample ID: PES0110-04

Volume (g): 1

Matrix: Soil
Analyst: SLC
File#: 01100208.D
Instr. #: Alpha
Date Collected: 1/10/02
Date Analyzed: 1/10/02
Dilution Factor: 5
Method: 010702.M

Surrogate Recovery COMPOUND	ng	ng spiked	% Recovery	Low CL	High CL
Dibromofluoromethane	228.8	250	92%	80	120
1,2-Dichloroethane -d4	222.5	250	89%	80	120
Toluene-d8	240.8	250	96%	81	117
4-Bromofluorobenzene	229.8	250	92%	74	121

COMPOUND	ng	Reporting Limit (ng)	Reporting Limit (ug/Kg)	Result (ug/Kg)
Dichlorodifluoromethane		25	25	U
Chloromethane		25	25	U
Vinyl Chloride		25	25	U
Bromomethane		25	25	U
Chloroethane		25	25	U
Trichlorofluoromethane		25	25	U
1,1-Dichloroethene		25	25	U
Methylene Chloride		25	25	U
trans-1,2-Dichloroethene		25	25	U
1,1-Dichloroethane		25	25	U
cis-1,2-Dichloroethene		25	25	U
Chloroform		25	25	U
1,1,1-Trichloroethane		25	25	U
Carbon tetrachloride		25	25	U
Benzene		25	25	U
1,2-Dichloroethane		25	25	U
Trichloroethene		25	25	U
1,2-Dichloropropane		25	25	U
Dibromomethane		25	25	U
Bromodichloromethane		25	25	U
cis-1,3-Dichloropropene		25	25	U
Toluene		25	25	U
trans-1,3-Dichloropropene		25	25	U
1,1,2-Trichloroethane		25	25	U
Tetrachloroethene		25	25	U
Dibromochloromethane		25	25	U
1,2-Dibromoethane (EDB)		25	25	U
Chlorobenzene		25	25	U
1,1,1,2-Tetrachloroethane		25	25	U
Ethyl Benzene		25	25	U
m,p-Xylene		50	50	U
o-Xylene		25	25	U
Styrene		25	25	U
Bromoform		25	25	U
Isopropyl benzene		25	25	U
Bromobenzene		25	25	U
1,1,2,2-Tetrachloroethane		25	25	U
1,2,3-Trichloropropane		25	25	U
n-Propylbenzene		25	25	U
2-Chlorotoluene		25	25	U
4-Chlorotoluene		25	25	U
1,3,5-Trimethyl benzene		25	25	U
tert-Butyl benzene		25	25	U
1,2,4-Trimethylbenzene		25	25	U
sec-Butylbenzene		25	25	U
1,3-Dichlorobenzene		25	25	U
4-Isopropyltoluene		25	25	U
1,4-Dichlorobenzene		25	25	U
1,2-Dichlorobenzene		25	25	U
n-Butylbenzene		25	25	U
1,2-Dibromo-3-chloropropane		25	25	U
1,2,4-Trichlorobenzene		25	25	U
Hexachlorobutadiene		25	25	U
Naphthalene		25	25	U
1,2,3-Trichlorobenzene		25	25	U

Notes :
Volatile Organic Compounds analyzed using EPA method 8260B
Field report is preliminary until reviewed and signed

B = Detected in laboratory blank
E = Exceeds upper calibration limit
J = Below reporting limit
U = Undetected

SIGNED: QCB & SLC 1/29/02 REVIEWED: [signature]

SEVERN TRENT SERVICES

Field Report

Project: Mercer_Palo Alto
Client : PES

Client Sample ID: E5-4.0
Laboratory Sample ID: PES0110-05

Volume (g): 1

Matrix: Soil
Analyst: SLC
File#: 01100209.D
Instr. #: Alpha
Date Collected: 1/10/02
Date Analyzed: 1/10/02
Dilution Factor: 5
Method: 010702.M

Surrogate Recovery

COMPOUND	ng	ng spiked	% Recovery	Low CL	High CL
Dibromofluoromethane	240.7	250	96%	80	120
1,2-Dichloroethane -d4	230.0	250	92%	80	120
Toluene-d8	237.7	250	95%	81	117
4-Bromofluorobenzene	245.1	250	98%	74	121

COMPOUND	ng	Reporting Limit (ng)	Reporting Limit (ug/Kg)	Result (ug/Kg)
Dichlorodifluoromethane		25	25	U
Chloromethane		25	25	U
Vinyl Chloride		25	25	U
Bromomethane		25	25	U
Chloroethane		25	25	U
Trichlorofluoromethane		25	25	U
1,1-Dichloroethene		25	25	U
Methylene Chloride		25	25	U
trans-1,2-Dichloroethene	125.03	25	25	125
1,1-Dichloroethane		25	25	U
cis-1,2-Dichloroethene	67.37	25	25	67
Chloroform		25	25	U
1,1,1-Trichloroethane		25	25	U
Carbon tetrachloride		25	25	U
Benzene		25	25	U
1,2-Dichloroethane		25	25	U
Trichloroethene	1292.54	25	25	1300 E
1,2-Dichloropropane		25	25	U
Dibromomethane		25	25	U
Bromodichloromethane		25	25	U
cis-1,3-Dichloropropene		25	25	U
Toluene		25	25	U
trans-1,3-Dichloropropene		25	25	U
1,1,2-Trichloroethane		25	25	U
Tetrachloroethene		25	25	U
Dibromochloromethane		25	25	U
1,2-Dibromoethane (EDB)		25	25	U
Chlorobenzene		25	25	U
1,1,1,2-Tetrachloroethane		25	25	U
Ethyl Benzene		25	25	U
m,p-Xylene		50	50	U
o-Xylene		25	25	U
Styrene		25	25	U
Bromoform		25	25	U
Isopropyl benzene		25	25	U
Bromobenzene		25	25	U
1,1,2,2-Tetrachloroethane		25	25	U
1,2,3-Trichloropropane		25	25	U
n-Propylbenzene		25	25	U
2-Chlorotoluene		25	25	U
4-Chlorotoluene		25	25	U
1,3,5-Trimethyl benzene		25	25	U
tert-Butyl benzene		25	25	U
1,2,4-Trimethylbenzene		25	25	U
sec-Butylbenzene		25	25	U
1,3-Dichlorobenzene		25	25	U
4-Isopropyltoluene		25	25	U
1,4-Dichlorobenzene		25	25	U
1,2-Dichlorobenzene		25	25	U
n-Butylbenzene		25	25	U
1,2-Dibromo-3-chloropropane		25	25	U
1,2,4-Trichlorobenzene		25	25	U
Hexachlorobutadiene		25	25	U
Naphthalene		25	25	U
1,2,3-Trichlorobenzene		25	25	U

Notes :
olatile Organic Compounds analyzed using EPA method 8260B
Field report is preliminary until reviewed and signed

B = Detected in laboratory blank
E = Exceeds upper calibration limit
J = Below reporting limit
U = Undetected

SIGNED: QCB/MSLC 1/29/02 REVIEWED:

SEVERN TRENT SERVICES

Field Report

Project: Mercer_Palo Alto
Client : PES

Client Sample ID: E7-8.5
Laboratory Sample ID: PES0110-06

Volume (g): 1

Matrix: Soil
Analyst: SLC
File#: 01100210.D
Instr. #: Alpha
Date Collected: 1/10/02
Date Analyzed: 1/10/02
Dilution Factor: 5
Method: 010702.M

Surrogate Recovery

COMPOUND	ng	ng spiked	% Recovery	Low CL	High CL
Dibromofluoromethane	239.2	250	96%	80	120
1,2-Dichloroethane -d4	237.1	250	95%	80	120
Toluene-d8	202.1	250	81%	81	117
4-Bromofluorobenzene	276.7	250	111%	74	121

COMPOUND	ng	Reporting Limit (ng)	Reporting Limit (ug/Kg)	Result (ug/Kg)
Dichlorodifluoromethane		25	25	U
Chloromethane		25	25	U
Vinyl Chloride		25	25	U
Bromomethane		25	25	U
Chloroethane		25	25	U
Trichlorofluoromethane		25	25	U
1,1-Dichloroethene		25	25	U
Methylene Chloride		25	25	U
trans-1,2-Dichloroethene		25	25	U
1,1-Dichloroethane		25	25	U
cis-1,2-Dichloroethene		25	25	U
Chloroform		25	25	U
1,1,1-Trichloroethane		25	25	U
Carbon tetrachloride		25	25	U
Benzene		25	25	U
1,2-Dichloroethane		25	25	U
Trichloroethene	277.34	25	25	280
1,2-Dichloropropane		25	25	U
Dibromomethane		25	25	U
Bromodichloromethane		25	25	U
cis-1,3-Dichloropropene		25	25	U
Toluene		25	25	U
trans-1,3-Dichloropropene		25	25	U
1,1,2-Trichloroethane		25	25	U
Tetrachloroethene		25	25	U
Dibromochloromethane		25	25	U
1,2-Dibromoethane (EDB)		25	25	U
Chlorobenzene		25	25	U
1,1,1,2-Tetrachloroethane		25	25	U
Ethyl Benzene		25	25	U
m,p-Xylene		50	50	U
o-Xylene		25	25	U
Styrene		25	25	U
Bromoform		25	25	U
Isopropyl benzene		25	25	U
Bromobenzene		25	25	U
1,1,2,2-Tetrachloroethane		25	25	U
1,2,3-Trichloropropane		25	25	U
n-Propylbenzene		25	25	U
2-Chlorotoluene		25	25	U
4-Chlorotoluene		25	25	U
1,3,5-Trimethyl benzene		25	25	U
tert-Butyl benzene		25	25	U
1,2,4-Trimethylbenzene		25	25	U
sec-Butylbenzene		25	25	U
1,3-Dichlorobenzene		25	25	U
4-Isopropyltoluene		25	25	U
1,4-Dichlorobenzene		25	25	U
1,2-Dichlorobenzene		25	25	U
n-Butylbenzene		25	25	U
1,2-Dibromo-3-chloropropane		25	25	U
1,2,4-Trichlorobenzene		25	25	U
Hexachlorobutadiene		25	25	U
Naphthalene		25	25	U
1,2,3-Trichlorobenzene		25	25	U

Notes :
Volatile Organic Compounds analyzed using EPA method 8260B
Field report is preliminary until reviewed and signed

B = Detected in laboratory blank
E = Exceeds upper calibration limit
J = Below reporting limit
U = Undetected

SIGNED: QCB for SLC 1/29/02 REVIEWED:

SEVERN TRENT SERVICES

Field Report

Project: Mercer_Palo Alto
Client : PES

Client Sample ID: E7-12.0
Laboratory Sample ID: PES0110-07

Volume (g): 1

Matrix: Soil
Analyst: SLC
File#: 01100211.D
Instr. #: Alpha
Date Collected: 1/10/02
Date Analyzed: 1/10/02
Dilution Factor: 5
Method: 010702.M

Surrogate Recovery

COMPOUND	ng	ng spiked	% Recovery	Low CL	High CL
Dibromofluoromethane	241.7	250	97%	80	120
1,2-Dichloroethane -d4	243.6	250	97%	80	120
Toluene-d8	176.4	250	71%*	81	117
4-Bromofluorobenzene	294.0	250	118%	74	121

COMPOUND	ng	Reporting Limit (ng)	Reporting Limit (ug/Kg)	Result (ug/Kg)
Dichlorodifluoromethane		25	25	U
Chloromethane		25	25	U
Vinyl Chloride		25	25	U
Bromomethane		25	25	U
Chloroethane		25	25	U
Trichlorofluoromethane		25	25	U
1,1-Dichloroethene		25	25	U
Methylene Chloride		25	25	U
trans-1,2-Dichloroethene		25	25	U
1,1-Dichloroethane		25	25	U
cis-1,2-Dichloroethene		25	25	U
Chloroform		25	25	U
1,1,1-Trichloroethane		25	25	U
Carbon tetrachloride		25	25	U
Benzene		25	25	U
1,2-Dichloroethane		25	25	U
Trichloroethene	142.57	25	25	140
1,2-Dichloropropane		25	25	U
Dibromomethane		25	25	U
Bromodichloromethane		25	25	U
cis-1,3-Dichloropropene		25	25	U
Toluene		25	25	U
trans-1,3-Dichloropropene		25	25	U
1,1,2-Trichloroethane		25	25	U
Tetrachloroethene		25	25	U
Dibromochloromethane		25	25	U
1,2-Dibromoethane (EDB)		25	25	U
Chlorobenzene		25	25	U
1,1,1,2-Tetrachloroethane		25	25	U
Ethyl Benzene		25	25	U
m,p-Xylene		50	50	U
o-Xylene		25	25	U
Styrene		25	25	U
Bromoform		25	25	U
Isopropyl benzene		25	25	U
Bromobenzene		25	25	U
1,1,2,2-Tetrachloroethane		25	25	U
1,2,3-Trichloropropane		25	25	U
n-Propylbenzene		25	25	U
2-Chlorotoluene		25	25	U
4-Chlorotoluene		25	25	U
1,3,5-Trimethyl benzene		25	25	U
tert-Butyl benzene		25	25	U
1,2,4-Trimethylbenzene		25	25	U
sec-Butylbenzene		25	25	U
1,3-Dichlorobenzene		25	25	U
4-Isopropyltoluene		25	25	U
1,4-Dichlorobenzene		25	25	U
1,2-Dichlorobenzene		25	25	U
n-Butylbenzene		25	25	U
1,2-Dibromo-3-chloropropane		25	25	U
1,2,4-Trichlorobenzene		25	25	U
Hexachlorobutadiene		25	25	U
Naphthalene		25	25	U
1,2,3-Trichlorobenzene		25	25	U

Notes :

Volatile Organic Compounds analyzed using EPA method 8260B
Field report is preliminary until reviewed and signed

B = Detected in laboratory blank
E = Exceeds upper calibration limit
J = Below reporting limit
U = Undetected

*Outside QC Limits

SIGNED: SLC 1/29/02 **REVIEWED:**

SEVERN TRENT SERVICES

Field Report

Project: Mercer_Palo Alto
Client : PES

Client Sample ID: E5-8.0
Laboratory Sample ID: PES0110-08

Volume (g): 1

Matrix: Soil
Analyst: SLC
File#: 01100212.D
Instr. #: Alpha
Date Collected: 1/10/02
Date Analyzed: 1/10/02
Dilution Factor: 5
Method: 010702.M

Surrogate Recovery COMPOUND	ng	ng spiked	% Recovery	Low CL	High CL
Dibromofluoromethane	259.7	250	104%	80	120
1,2-Dichloroethane -d4	268.4	250	107%	80	120
Toluene-d8	170.1	250	68% *	81	117
4-Bromofluorobenzene	308.2	250	123% *	74	121

COMPOUND	ng	Reporting Limit (ng)	Reporting Limit (ug/Kg)	Result (ug/Kg)
Dichlorodifluoromethane		25	25	U
Chloromethane		25	25	U
Vinyl Chloride		25	25	U
Bromomethane		25	25	U
Chloroethane		25	25	U
Trichlorofluoromethane		25	25	U
1,1-Dichloroethene		25	25	U
Methylene Chloride		25	25	U
trans-1,2-Dichloroethene		25	25	U
1,1-Dichloroethane		25	25	U
cis-1,2-Dichloroethene		25	25	U
Chloroform		25	25	U
1,1,1-Trichloroethane		25	25	U
Carbon tetrachloride		25	25	U
Benzene		25	25	U
1,2-Dichloroethane		25	25	U
Trichloroethene	125.33	25	25	130
1,2-Dichloropropane		25	25	U
Dibromomethane		25	25	U
Bromodichloromethane		25	25	U
cis-1,3-Dichloropropene		25	25	U
Toluene		25	25	U
trans-1,3-Dichloropropene		25	25	U
1,1,2-Trichloroethane		25	25	U
Tetrachloroethene		25	25	U
Dibromochloromethane		25	25	U
1,2-Dibromoethane (EDB)		25	25	U
Chlorobenzene		25	25	U
1,1,1,2-Tetrachloroethane		25	25	U
Ethyl Benzene		25	25	U
m,p-Xylene		50	50	U
o-Xylene		25	25	U
Styrene		25	25	U
Bromoform		25	25	U
Isopropyl benzene		25	25	U
Bromobenzene		25	25	U
1,1,2,2-Tetrachloroethane		25	25	U
1,2,3-Trichloropropane		25	25	U
n-Propylbenzene		25	25	U
2-Chlorotoluene		25	25	U
4-Chlorotoluene		25	25	U
1,3,5-Trimethyl benzene		25	25	U
tert-Butyl benzene		25	25	U
1,2,4-Trimethylbenzene		25	25	U
sec-Butylbenzene		25	25	U
1,3-Dichlorobenzene		25	25	U
4-Isopropyltoluene		25	25	U
1,4-Dichlorobenzene		25	25	U
1,2-Dichlorobenzene		25	25	U
n-Butylbenzene		25	25	U
1,2-Dibromo-3-chloropropane		25	25	U
1,2,4-Trichlorobenzene		25	25	U
Hexachlorobutadiene		25	25	U
Naphthalene		25	25	U
1,2,3-Trichlorobenzene		25	25	U

Notes :
Volatile Organic Compounds analyzed using EPA method 8260B
Field report is preliminary until reviewed and signed

B = Detected in laboratory blank
E = Exceeds upper calibration limit
J = Below reporting limit
U = Undetected

* outside qc limits

SIGNED: SLC 1/29/02 REVIEWED:

SEVERN TRENT SERVICES

Field Report

Project: Mercer_Palo Alto
Client : PES

Client Sample ID: E5-12.0
Laboratory Sample ID: PES0110-09

Volume (g): 1

Matrix: Soil
Analyst: SLC
File#: 01100213.D
Instr. #: Alpha
Date Collected: 1/10/02
Date Analyzed: 1/10/02
Dilution Factor: 5
Method: 010702.M

Surrogate Recovery COMPOUND	ng	ng spiked	% Recovery	Low CL	High CL
Dibromofluoromethane	252.6	250	101%	80	120
1,2-Dichloroethane -d4	255.4	250	102%	80	120
Toluene-d8	180.7	250	72% *	81	117
4-Bromofluorobenzene	291.3	250	117%	74	121

COMPOUND	ng	Reporting Limit (ng)	Reporting Limit (ug/Kg)	Result (ug/Kg)
Dichlorodifluoromethane		25	25	U
Chloromethane		25	25	U
Vinyl Chloride		25	25	U
Bromomethane		25	25	U
Chloroethane		25	25	U
Trichlorofluoromethane		25	25	U
1,1-Dichloroethene		25	25	U
Methylene Chloride		25	25	U
trans-1,2-Dichloroethene		25	25	U
1,1-Dichloroethane		25	25	U
cis-1,2-Dichloroethene		25	25	U
Chloroform		25	25	U
1,1,1-Trichloroethane		25	25	U
Carbon tetrachloride		25	25	U
Benzene		25	25	U
1,2-Dichloroethane		25	25	U
Trichloroethene	53.73	25	25	54
1,2-Dichloropropane		25	25	U
Dibromomethane		25	25	U
Bromodichloromethane		25	25	U
cis-1,3-Dichloropropene		25	25	U
Toluene		25	25	U
trans-1,3-Dichloropropene		25	25	U
1,1,2-Trichloroethane		25	25	U
Tetrachloroethene		25	25	U
Dibromochloromethane		25	25	U
1,2-Dibromoethane (EDB)		25	25	U
Chlorobenzene		25	25	U
1,1,1,2-Tetrachloroethane		25	25	U
Ethyl Benzene		25	25	U
m,p-Xylene		50	50	U
o-Xylene		25	25	U
Styrene		25	25	U
Bromoform		25	25	U
Isopropyl benzene		25	25	U
Bromobenzene		25	25	U
1,1,2,2-Tetrachloroethane		25	25	U
1,2,3-Trichloropropane		25	25	U
n-Propylbenzene		25	25	U
2-Chlorotoluene		25	25	U
4-Chlorotoluene		25	25	U
1,3,5-Trimethyl benzene		25	25	U
tert-Butyl benzene		25	25	U
1,2,4-Trimethylbenzene		25	25	U
sec-Butylbenzene		25	25	U
1,3-Dichlorobenzene		25	25	U
4-Isopropyltoluene		25	25	U
1,4-Dichlorobenzene		25	25	U
1,2-Dichlorobenzene		25	25	U
n-Butylbenzene		25	25	U
1,2-Dibromo-3-chloropropane		25	25	U
1,2,4-Trichlorobenzene		25	25	U
Hexachlorobutadiene		25	25	U
Naphthalene		25	25	U
1,2,3-Trichlorobenzene		25	25	U

Notes :
Volatile Organic Compounds analyzed using EPA method 8260B
Field report is preliminary until reviewed and signed

B = Detected in laboratory blank
E = Exceeds upper calibration limit
J = Below reporting limit
U = Undetected

* Outside QC limits

SIGNED: SLC 1/29/02 REVIEWED:

SEVERN TRENT SERVICES

Field Report

Project: Mercer_Palo Alto
Client : PES

Client Sample ID: B10-4.0
Laboratory Sample ID: PES0110-10

Volume (g): 1

Matrix: Soil
Analyst: SLC
File#: 01100214.D
Instr. #: Alpha
Date Collected: 1/10/02
Date Analyzed: 1/10/02
Dilution Factor: 5
Method: 010702.M

Surrogate Recovery

COMPOUND	ng	ng spiked	% Recovery	Low CL	High CL
Dibromofluoromethane	249.5	250	100%	80	120
1,2-Dichloroethane -d4	250.3	250	100%	80	120
Toluene-d8	182.9	250	73% *	81	117
4-Bromofluorobenzene	293.1	250	117%	74	121

COMPOUND	ng	Reporting Limit (ng)	Reporting Limit (ug/Kg)	Result (ug/Kg)
Dichlorodifluoromethane		25	25	U
Chloromethane		25	25	U
Vinyl Chloride		25	25	U
Bromomethane		25	25	U
Chloroethane		25	25	U
Trichlorofluoromethane		25	25	U
1,1-Dichloroethene		25	25	U
Methylene Chloride		25	25	U
trans-1,2-Dichloroethene		25	25	U
1,1-Dichloroethane		25	25	U
cis-1,2-Dichloroethene		25	25	U
Chloroform		25	25	U
1,1,1-Trichloroethane		25	25	U
Carbon tetrachloride		25	25	U
Benzene		25	25	U
1,2-Dichloroethane		25	25	U
Trichloroethene		25	25	U
1,2-Dichloropropane		25	25	U
Dibromomethane		25	25	U
Bromodichloromethane		25	25	U
cis-1,3-Dichloropropene		25	25	U
Toluene		25	25	U
trans-1,3-Dichloropropene		25	25	U
1,1,2-Trichloroethane		25	25	U
Tetrachloroethene		25	25	U
Dibromochloromethane		25	25	U
1,2-Dibromoethane (EDB)		25	25	U
Chlorobenzene		25	25	U
1,1,1,2-Tetrachloroethane		25	25	U
Ethyl Benzene		25	25	U
m,p-Xylene		50	50	U
o-Xylene		25	25	U
Styrene		25	25	U
Bromoform		25	25	U
Isopropyl benzene		25	25	U
Bromobenzene		25	25	U
1,1,2,2-Tetrachloroethane		25	25	U
1,2,3-Trichloropropane		25	25	U
n-Propylbenzene		25	25	U
2-Chlorotoluene		25	25	U
4-Chlorotoluene		25	25	U
1,3,5-Trimethyl benzene		25	25	U
tert-Butyl benzene		25	25	U
1,2,4-Trimethylbenzene		25	25	U
sec-Butylbenzene		25	25	U
1,3-Dichlorobenzene		25	25	U
4-Isopropyltoluene		25	25	U
1,4-Dichlorobenzene		25	25	U
1,2-Dichlorobenzene		25	25	U
n-Butylbenzene		25	25	U
1,2-Dibromo-3-chloropropane		25	25	U
1,2,4-Trichlorobenzene		25	25	U
Hexachlorobutadiene		25	25	U
Naphthalene		25	25	U
1,2,3-Trichlorobenzene		25	25	U

Notes :
Volatile Organic Compounds analyzed using EPA method 8260B
Field report is preliminary until reviewed and signed

B = Detected in laboratory blank
E = Exceeds upper calibration limit
J = Below reporting limit
U = Undetected

* Outside QC Limits

SIGNED: QLB#1 SLC 1/29/02 REVIEWED:

SEVERN TRENT SERVICES

Field Report

Project: Mercer_Palo Alto
Client : PES

Client Sample ID: E10-4.0
Laboratory Sample ID: PES0110-11

Volume (g): 1

Matrix: Soil
Analyst: SLC
File#: 01100215.D
Instr. #: Alpha
Date Collected: 1/10/02
Date Analyzed: 1/10/02
Dilution Factor: 5
Method: 010702.M

Surrogate Recovery

COMPOUND	ng	ng spiked	% Recovery	Low CL	High CL
Dibromofluoromethane	255.8	250	102%	80	120
1,2-Dichloroethane -d4	259.7	250	104%	80	120
Toluene-d8	182.3	250	73% *	81	117
4-Bromofluorobenzene	294.0	250	118%	74	121

COMPOUND	ng	Reporting Limit (ng)	Reporting Limit (ug/Kg)	Result (ug/Kg)
Dichlorodifluoromethane		25	25	U
Chloromethane		25	25	U
Vinyl Chloride		25	25	U
Bromomethane		25	25	U
Chloroethane		25	25	U
Trichlorofluoromethane		25	25	U
1,1-Dichloroethene		25	25	U
Methylene Chloride		25	25	U
trans-1,2-Dichloroethene		25	25	U
1,1-Dichloroethane		25	25	U
cis-1,2-Dichloroethene		25	25	U
Chloroform		25	25	U
1,1,1-Trichloroethane		25	25	U
Carbon tetrachloride		25	25	U
Benzene		25	25	U
1,2-Dichloroethane		25	25	U
Trichloroethene	79.76	25	25	80
1,2-Dichloropropane		25	25	U
Dibromomethane		25	25	U
Bromodichloromethane		25	25	U
cis-1,3-Dichloropropene		25	25	U
Toluene		25	25	U
trans-1,3-Dichloropropene		25	25	U
1,1,2-Trichloroethane		25	25	U
Tetrachloroethene		25	25	U
Dibromochloromethane		25	25	U
1,2-Dibromoethane (EDB)		25	25	U
Chlorobenzene		25	25	U
1,1,1,2-Tetrachloroethane		25	25	U
Ethyl Benzene		25	25	U
m,p-Xylene		50	50	U
o-Xylene		25	25	U
Styrene		25	25	U
Bromoform		25	25	U
Isopropyl benzene		25	25	U
Bromobenzene		25	25	U
1,1,2,2-Tetrachloroethane		25	25	U
1,2,3-Trichloropropane		25	25	U
n-Propylbenzene		25	25	U
2-Chlorotoluene		25	25	U
4-Chlorotoluene		25	25	U
1,3,5-Trimethyl benzene		25	25	U
tert-Butyl benzene		25	25	U
1,2,4-Trimethylbenzene		25	25	U
sec-Butylbenzene		25	25	U
1,3-Dichlorobenzene		25	25	U
4-Isopropyltoluene		25	25	U
1,4-Dichlorobenzene		25	25	U
1,2-Dichlorobenzene		25	25	U
n-Butylbenzene		25	25	U
1,2-Dibromo-3-chloropropane		25	25	U
1,2,4-Trichlorobenzene		25	25	U
Hexachlorobutadiene		25	25	U
Naphthalene		25	25	U
1,2,3-Trichlorobenzene		25	25	U

Notes :
Volatile Organic Compounds analyzed using EPA method 8260B
Field report is preliminary until reviewed and signed

B = Detected in laboratory blank
E = Exceeds upper calibration limit
J = Below reporting limit
U = Undetected

* outside QC limits

SIGNED: SLC 1/29/02 REVIEWED:

SEVERN TRENT SERVICES

Field Report

Project: Mercer_Palo Alto
Client : PES

Client Sample ID: D10-4.0
Laboratory Sample ID: PES0110-12

Volume (g): 1

Matrix: Soil
Analyst: SLC
File#: 01100216.D
Instr. #: Alpha
Date Collected: 1/10/02
Date Analyzed: 1/10/02
Dilution Factor: 5
Method: 010702.M

Surrogate Recovery

COMPOUND	ng	ng spiked	% Recovery	Low CL	High CL
Dibromofluoromethane	260.2	250	104%	80	120
1,2-Dichloroethane -d4	268.0	250	107%	80	120
Toluene-d8	169.1	250	68% *	81	117
4-Bromofluorobenzene	300.3	250	120%	74	121

COMPOUND	ng	Reporting Limit (ng)	Reporting Limit (ug/Kg)	Result (ug/Kg)
Dichlorodifluoromethane		25	25	U
Chloromethane		25	25	U
Vinyl Chloride		25	25	U
Bromomethane		25	25	U
Chloroethane		25	25	U
Trichlorofluoromethane		25	25	U
1,1-Dichloroethene		25	25	U
Methylene Chloride		25	25	U
trans-1,2-Dichloroethene		25	25	U
1,1-Dichloroethane		25	25	U
cis-1,2-Dichloroethene		25	25	U
Chloroform		25	25	U
1,1,1-Trichloroethane		25	25	U
Carbon tetrachloride		25	25	U
Benzene		25	25	U
1,2-Dichloroethane		25	25	U
Trichloroethene	28.38	25	25	28
1,2-Dichloropropane		25	25	U
Dibromomethane		25	25	U
Bromodichloromethane		25	25	U
cis-1,3-Dichloropropene		25	25	U
Toluene		25	25	U
trans-1,3-Dichloropropene		25	25	U
1,1,2-Trichloroethane		25	25	U
Tetrachloroethene		25	25	U
Dibromochloromethane		25	25	U
1,2-Dibromoethane (EDB)		25	25	U
Chlorobenzene		25	25	U
1,1,1,2-Tetrachloroethane		25	25	U
Ethyl Benzene		25	25	U
m,p-Xylene		50	50	U
o-Xylene		25	25	U
Styrene		25	25	U
Bromoform		25	25	U
Isopropyl benzene		25	25	U
Bromobenzene		25	25	U
1,1,2,2-Tetrachloroethane		25	25	U
1,2,3-Trichloropropane		25	25	U
n-Propylbenzene		25	25	U
2-Chlorotoluene		25	25	U
4-Chlorotoluene		25	25	U
1,3,5-Trimethyl benzene		25	25	U
tert-Butyl benzene		25	25	U
1,2,4-Trimethylbenzene		25	25	U
sec-Butylbenzene		25	25	U
1,3-Dichlorobenzene		25	25	U
4-Isopropyltoluene		25	25	U
1,4-Dichlorobenzene		25	25	U
1,2-Dichlorobenzene		25	25	U
n-Butylbenzene		25	25	U
1,2-Dibromo-3-chloropropane		25	25	U
1,2,4-Trichlorobenzene		25	25	U
Hexachlorobutadiene		25	25	U
Naphthalene		25	25	U
1,2,3-Trichlorobenzene		25	25	U

Notes :
Volatile Organic Compounds analyzed using EPA method 8260B
Field report is preliminary until reviewed and signed

B = Detected in laboratory blank
E = Exceeds upper calibration limit
J = Below reporting limit
U = Undetected

* outside QC Limits

SIGNER ALB 1/29/02 SLC 1/29/02 REVIEWER

SEVERN TRENT SERVICES

Field Report

Project: Mercer_Palo Alto
Client : PES

Client Sample ID: C10-4.0
Laboratory Sample ID: PES0110-13

Volume (g): 1

Matrix: Soil
Analyst: SLC
File#: 01100217.D
Instr. #: Alpha
Date Collected: 1/10/02
Date Analyzed: 1/10/02
Dilution Factor: 5
Method: 010702.M

Surrogate Recovery

COMPOUND	ng	ng spiked	% Recovery	Low CL	High CL
Dibromofluoromethane	254.4	250	102%	80	120
1,2-Dichloroethane -d4	261.7	250	105%	80	120
Toluene-d8	183.7	250	73% *	81	117
4-Bromofluorobenzene	289.8	250	116%	74	121

COMPOUND	ng	Reporting Limit (ng)	Reporting Limit (ug/Kg)	Result (ug/Kg)
Dichlorodifluoromethane		25	25	U
Chloromethane		25	25	U
Vinyl Chloride		25	25	U
Bromomethane		25	25	U
Chloroethane		25	25	U
Trichlorofluoromethane		25	25	U
1,1-Dichloroethene		25	25	U
Methylene Chloride		25	25	U
trans-1,2-Dichloroethene		25	25	U
1,1-Dichloroethane		25	25	U
cis-1,2-Dichloroethene		25	25	U
Chloroform		25	25	U
1,1,1-Trichloroethane		25	25	U
Carbon tetrachloride		25	25	U
Benzene		25	25	U
1,2-Dichloroethane		25	25	U
Trichloroethene	42.93	25	25	43
1,2-Dichloropropane		25	25	U
Dibromomethane		25	25	U
Bromodichloromethane		25	25	U
cis-1,3-Dichloropropene		25	25	U
Toluene		25	25	U
trans-1,3-Dichloropropene		25	25	U
1,1,2-Trichloroethane		25	25	U
Tetrachloroethene		25	25	U
Dibromochloromethane		25	25	U
1,2-Dibromoethane (EDB)		25	25	U
Chlorobenzene		25	25	U
1,1,1,2-Tetrachloroethane		25	25	U
Ethyl Benzene		25	25	U
m,p-Xylene		50	50	U
o-Xylene		25	25	U
Styrene		25	25	U
Bromoform		25	25	U
Isopropyl benzene		25	25	U
Bromobenzene		25	25	U
1,1,2,2-Tetrachloroethane		25	25	U
1,2,3-Trichloropropane		25	25	U
n-Propylbenzene		25	25	U
2-Chlorotoluene		25	25	U
4-Chlorotoluene		25	25	U
1,3,5-Trimethyl benzene		25	25	U
tert-Butyl benzene		25	25	U
1,2,4-Trimethylbenzene		25	25	U
sec-Butylbenzene		25	25	U
1,3-Dichlorobenzene		25	25	U
4-Isopropyltoluene		25	25	U
1,4-Dichlorobenzene		25	25	U
1,2-Dichlorobenzene		25	25	U
n-Butylbenzene		25	25	U
1,2-Dibromo-3-chloropropane		25	25	U
1,2,4-Trichlorobenzene		25	25	U
Hexachlorobutadiene		25	25	U
Naphthalene		25	25	U
1,2,3-Trichlorobenzene		25	25	U

Notes :
Volatile Organic Compounds analyzed using EPA method 8260B
Field report is preliminary until reviewed and signed

B = Detected in laboratory blank
E = Exceeds upper calibration limit
J = Below reporting limit
U = Undetected

* outside QC limits

SIGNED: QLB for SLC 1/29/02 REVIEWED:

SEVERN TRENT SERVICES

Field Report

Project: Mercer_Palo Alto
Client : PES

Client Sample ID: COMP-A
Laboratory Sample ID: PES0110-14

Volume (g): 1

Matrix: Soil
Analyst: SLC
File#: 01100218.D
Instr. #: Alpha
Date Collected: 1/10/02
Date Analyzed: 1/10/02
Dilution Factor: 5
Method: 010702.M

Surrogate Recovery COMPOUND	ng	ng spiked	% Recovery	Low CL	High CL
Dibromofluoromethane	225.1	250	90%	80	120
1,2-Dichloroethane -d4	228.5	250	91%	80	120
Toluene-d8	250.7	250	100%	81	117
4-Bromofluorobenzene	250.9	250	100%	74	121

COMPOUND	ng	Reporting Limit (ng)	Reporting Limit (ug/Kg)	Result (ug/Kg)
Dichlorodifluoromethane		25	25	U
Chloromethane		25	25	U
Vinyl Chloride		25	25	U
Bromomethane		25	25	U
Chloroethane		25	25	U
Trichlorofluoromethane		25	25	U
1,1-Dichloroethene		25	25	U
Methylene Chloride		25	25	U
trans-1,2-Dichloroethene		25	25	U
1,1-Dichloroethane		25	25	U
cis-1,2-Dichloroethene		25	25	U
Chloroform		25	25	U
1,1,1-Trichloroethane		25	25	U
Carbon tetrachloride		25	25	U
Benzene		25	25	U
1,2-Dichloroethane		25	25	U
Trichloroethene		25	25	U
1,2-Dichloropropane		25	25	U
Dibromomethane		25	25	U
Bromodichloromethane		25	25	U
cis-1,3-Dichloropropene		25	25	U
Toluene		25	25	U
trans-1,3-Dichloropropene		25	25	U
1,1,2-Trichloroethane		25	25	U
Tetrachloroethene		25	25	U
Dibromochloromethane		25	25	U
1,2-Dibromoethane (EDB)		25	25	U
Chlorobenzene		25	25	U
1,1,1,2-Tetrachloroethane		25	25	U
Ethyl Benzene		25	25	U
m,p-Xylene		50	50	U
o-Xylene		25	25	U
Styrene		25	25	U
Bromoform		25	25	U
Isopropyl benzene		25	25	U
Bromobenzene		25	25	U
1,1,2,2-Tetrachloroethane		25	25	U
1,2,3-Trichloropropane		25	25	U
n-Propylbenzene		25	25	U
2-Chlorotoluene		25	25	U
4-Chlorotoluene		25	25	U
1,3,5-Trimethyl benzene		25	25	U
tert-Butyl benzene		25	25	U
1,2,4-Trimethylbenzene		25	25	U
sec-Butylbenzene		25	25	U
1,3-Dichlorobenzene		25	25	U
4-Isopropyltoluene		25	25	U
1,4-Dichlorobenzene		25	25	U
1,2-Dichlorobenzene		25	25	U
n-Butylbenzene		25	25	U
1,2-Dibromo-3-chloropropane		25	25	U
1,2,4-Trichlorobenzene		25	25	U
Hexachlorobutadiene		25	25	U
Naphthalene		25	25	U
1,2,3-Trichlorobenzene		25	25	U

Notes :
Volatile Organic Compounds analyzed using EPA method 8260B
Field report is preliminary until reviewed and signed

B = Detected in laboratory blank
E = Exceeds upper calibration limit
J = Below reporting limit
U = Undetected

SIGNED: ORB du SLC 1/29/02 REVIEWED:

SEVERN TRENT SERVICES

Field Report

Project: Mercer_Palo Alto
Client : PES

Client Sample ID: F5-0.5
Laboratory Sample ID: PES0110-15

Volume (g): 1

Matrix: Soil
Analyst: SLC
File#: 01100219.D
Instr. #: Alpha
Date Collected: 1/10/02
Date Analyzed: 1/10/02
Dilution Factor: 5
Method: 010702.M

Surrogate Recovery

COMPOUND	ng	ng spiked	% Recovery	Low CL	High CL
Dibromofluoromethane	241.7	250	97%	80	120
1,2-Dichloroethane -d4	244.2	250	98%	80	120
Toluene-d8	181.0	250	72% *	81	117
4-Bromofluorobenzene	280.2	250	112%	74	121

COMPOUND	ng	Reporting Limit (ng)	Reporting Limit (ug/Kg)	Result (ug/Kg)
Dichlorodifluoromethane		25	25	U
Chloromethane		25	25	U
Vinyl Chloride		25	25	U
Bromomethane		25	25	U
Chloroethane		25	25	U
Trichlorofluoromethane		25	25	U
1,1-Dichloroethene		25	25	U
Methylene Chloride		25	25	U
trans-1,2-Dichloroethene		25	25	U
1,1-Dichloroethane		25	25	U
cis-1,2-Dichloroethene		25	25	U
Chloroform		25	25	U
1,1,1-Trichloroethane		25	25	U
Carbon tetrachloride		25	25	U
Benzene		25	25	U
1,2-Dichloroethane		25	25	U
Trichloroethene	163.26	25	25	160
1,2-Dichloropropane		25	25	U
Dibromomethane		25	25	U
Bromodichloromethane		25	25	U
cis-1,3-Dichloropropene		25	25	U
Toluene		25	25	U
trans-1,3-Dichloropropene		25	25	U
1,1,2-Trichloroethane		25	25	U
Tetrachloroethene		25	25	U
Dibromochloromethane		25	25	U
1,2-Dibromoethane (EDB)		25	25	U
Chlorobenzene		25	25	U
1,1,1,2-Tetrachloroethane		25	25	U
Ethyl Benzene		25	25	U
m,p-Xylene		50	50	U
o-Xylene		25	25	U
Styrene		25	25	U
Bromoform		25	25	U
Isopropyl benzene		25	25	U
Bromobenzene		25	25	U
1,1,2,2-Tetrachloroethane		25	25	U
1,2,3-Trichloropropane		25	25	U
n-Propylbenzene		25	25	U
2-Chlorotoluene		25	25	U
4-Chlorotoluene		25	25	U
1,3,5-Trimethyl benzene		25	25	U
tert-Butyl benzene		25	25	U
1,2,4-Trimethylbenzene		25	25	U
sec-Butylbenzene		25	25	U
1,3-Dichlorobenzene		25	25	U
4-Isopropyltoluene		25	25	U
1,4-Dichlorobenzene		25	25	U
1,2-Dichlorobenzene		25	25	U
n-Butylbenzene		25	25	U
1,2-Dibromo-3-chloropropane		25	25	U
1,2,4-Trichlorobenzene		25	25	U
Hexachlorobutadiene		25	25	U
Naphthalene		25	25	U
1,2,3-Trichlorobenzene		25	25	U

Notes :
Volatile Organic Compounds analyzed using EPA method 8260B
Field report is preliminary until reviewed and signed

B = Detected in laboratory blank
E = Exceeds upper calibration limit
J = Below reporting limit
U = Undetected

* outside qc limits

SIGNED: QRB for SLC 1/29/02 REVIEWED:

SEVERN TRENT SERVICES

Field Report

Project: Mercer_Palo Alto
Client : PES

Client Sample ID: F8-0.5
Laboratory Sample ID: PES0110-16

Volume (g): 1

Matrix: Soil
Analyst: SLC
File#: 01100220.D
Instr. #: Alpha
Date Collected: 1/10/02
Date Analyzed: 1/10/02
Dilution Factor: 5
Method: 010702.M

Surrogate Recovery COMPOUND	ng	ng spiked	% Recovery	Low CL	High CL
Dibromofluoromethane	258.6	250	103%	80	120
1,2-Dichloroethane -d4	264.0	250	106%	80	120
Toluene-d8	169.9	250	68% *	81	117
4-Bromofluorobenzene	302.7	250	121%	74	121

COMPOUND	ng	Reporting Limit (ng)	Reporting Limit (ug/Kg)	Result (ug/Kg)
Dichlorodifluoromethane		25	25	U
Chloromethane		25	25	U
Vinyl Chloride		25	25	U
Bromomethane		25	25	U
Chloroethane		25	25	U
Trichlorofluoromethane		25	25	U
1,1-Dichloroethene		25	25	U
Methylene Chloride		25	25	U
trans-1,2-Dichloroethene		25	25	U
1,1-Dichloroethane		25	25	U
cis-1,2-Dichloroethene		25	25	U
Chloroform		25	25	U
1,1,1-Trichloroethane		25	25	U
Carbon tetrachloride		25	25	U
Benzene		25	25	U
1,2-Dichloroethane		25	25	U
Trichloroethene		25	25	U
1,2-Dichloropropane		25	25	U
Dibromomethane		25	25	U
Bromodichloromethane		25	25	U
cis-1,3-Dichloropropene		25	25	U
Toluene		25	25	U
trans-1,3-Dichloropropene		25	25	U
1,1,2-Trichloroethane		25	25	U
Tetrachloroethene		25	25	U
Dibromochloromethane		25	25	U
1,2-Dibromoethane (EDB)		25	25	U
Chlorobenzene		25	25	U
1,1,1,2-Tetrachloroethane		25	25	U
Ethyl Benzene		25	25	U
m,p-Xylene		50	50	U
o-Xylene		25	25	U
Styrene		25	25	U
Bromoform		25	25	U
Isopropyl benzene		25	25	U
Bromobenzene		25	25	U
1,1,2,2-Tetrachloroethane		25	25	U
1,2,3-Trichloropropane		25	25	U
n-Propylbenzene		25	25	U
2-Chlorotoluene		25	25	U
4-Chlorotoluene		25	25	U
1,3,5-Trimethyl benzene		25	25	U
tert-Butyl benzene		25	25	U
1,2,4-Trimethylbenzene		25	25	U
sec-Butylbenzene		25	25	U
1,3-Dichlorobenzene		25	25	U
4-Isopropyltoluene		25	25	U
1,4-Dichlorobenzene		25	25	U
1,2-Dichlorobenzene		25	25	U
n-Butylbenzene		25	25	U
1,2-Dibromo-3-chloropropane		25	25	U
1,2,4-Trichlorobenzene		25	25	U
Hexachlorobutadiene		25	25	U
Naphthalene		25	25	U
1,2,3-Trichlorobenzene		25	25	U

Notes :
Volatile Organic Compounds analyzed using EPA method 8260B
Field report is preliminary until reviewed and signed

B = Detected in laboratory blank
E = Exceeds upper calibration limit
J = Below reporting limit
U = Undetected

*outside QC limits

SIGNED: QCB 1/29/01 SLC 1/29/02 REVIEWED:

SEVERN TRENT SERVICES

Field Report

Project: Mercer_Palo Alto
Client : PES

Client Sample ID: C10-EAST-2.0
Laboratory Sample ID: PES0110-17

Volume (g): 1

Matrix: Soil
Analyst: SLC
File#: 01100221.D
Instr. #: Alpha
Date Collected: 1/10/02
Date Analyzed: 1/10/02
Dilution Factor: 5
Method: 010702.M

Surrogate Recovery

COMPOUND	ng	ng spiked	% Recovery	Low CL	High CL
Dibromofluoromethane	262.2	250	105%	80	120
1,2-Dichloroethane -d4	269.4	250	108%	80	120
Toluene-d8	158.2	250	63% *	81	117
4-Bromofluorobenzene	309.5	250	124% *	74	121

COMPOUND	ng	Reporting Limit (ng)	Reporting Limit (ug/Kg)	Result (ug/Kg)
Dichlorodifluoromethane		25	25	U
Chloromethane		25	25	U
Vinyl Chloride		25	25	U
Bromomethane		25	25	U
Chloroethane		25	25	U
Trichlorofluoromethane		25	25	U
1,1-Dichloroethene		25	25	U
Methylene Chloride		25	25	U
trans-1,2-Dichloroethene		25	25	U
1,1-Dichloroethane		25	25	U
cis-1,2-Dichloroethene		25	25	U
Chloroform		25	25	U
1,1,1-Trichloroethane		25	25	U
Carbon tetrachloride		25	25	U
Benzene		25	25	U
1,2-Dichloroethane		25	25	U
Trichloroethene		25	25	U
1,2-Dichloropropane		25	25	U
Dibromomethane		25	25	U
Bromodichloromethane		25	25	U
cis-1,3-Dichloropropene		25	25	U
Toluene		25	25	U
trans-1,3-Dichloropropene		25	25	U
1,1,2-Trichloroethane		25	25	U
Tetrachloroethene		25	25	U
Dibromochloromethane		25	25	U
1,2-Dibromoethane (EDB)		25	25	U
Chlorobenzene		25	25	U
1,1,1,2-Tetrachloroethane		25	25	U
Ethyl Benzene		25	25	U
m,p-Xylene		50	50	U
o-Xylene		25	25	U
Styrene		25	25	U
Bromoform		25	25	U
Isopropyl benzene		25	25	U
Bromobenzene		25	25	U
1,1,2,2-Tetrachloroethane		25	25	U
1,2,3-Trichloropropane		25	25	U
n-Propylbenzene		25	25	U
2-Chlorotoluene		25	25	U
4-Chlorotoluene		25	25	U
1,3,5-Trimethyl benzene		25	25	U
tert-Butyl benzene		25	25	U
1,2,4-Trimethylbenzene		25	25	U
sec-Butylbenzene		25	25	U
1,3-Dichlorobenzene		25	25	U
4-Isopropyltoluene		25	25	U
1,4-Dichlorobenzene		25	25	U
1,2-Dichlorobenzene		25	25	U
n-Butylbenzene		25	25	U
1,2-Dibromo-3-chloropropane		25	25	U
1,2,4-Trichlorobenzene		25	25	U
Hexachlorobutadiene		25	25	U
Naphthalene		25	25	U
1,2,3-Trichlorobenzene		25	25	U

Notes :
Volatile Organic Compounds analyzed using EPA method 8260B
Field report is preliminary until reviewed and signed

B = Detected in laboratory blank
E = Exceeds upper calibration limit
J = Below reporting limit
U = Undetected

* OUTSIDE QC LIMITS

SIGNED: QCB 1/1 SLC 1/29/02 REVIEWED:

SEVERN TRENT SERVICES

Field Report

Project: Mercer_Palo Alto
Client : PES

Client Sample ID: E2-5.0
Laboratory Sample ID: PES0110-18

Volume (g): 1

Matrix: Soil
Analyst: SLC
File#: 01100222.D
Instr. #: Alpha
Date Collected: 1/10/02
Date Analyzed: 1/10/02
Dilution Factor: 5
Method: 010702.M

Surrogate Recovery COMPOUND	ng	ng spiked	% Recovery	Low CL	High CL
Dibromofluoromethane	265.1	250	106%	80	120
1,2-Dichloroethane -d4	275.4	250	110%	80	120
Toluene-d8	168.5	250	67% *	81	117
4-Bromofluorobenzene	301.5	250	121%	74	121

COMPOUND	ng	Reporting Limit (ng)	Reporting Limit (ug/Kg)	Result (ug/Kg)
Dichlorodifluoromethane		25	25	U
Chloromethane		25	25	U
Vinyl Chloride		25	25	U
Bromomethane		25	25	U
Chloroethane		25	25	U
Trichlorofluoromethane		25	25	U
1,1-Dichloroethene		25	25	U
Methylene Chloride		25	25	U
trans-1,2-Dichloroethene		25	25	U
1,1-Dichloroethane		25	25	U
cis-1,2-Dichloroethene		25	25	U
Chloroform		25	25	U
1,1,1-Trichloroethane		25	25	U
Carbon tetrachloride		25	25	U
Benzene		25	25	U
1,2-Dichloroethane		25	25	U
Trichloroethene		25	25	U
1,2-Dichloropropane		25	25	U
Dibromomethane		25	25	U
Bromodichloromethane		25	25	U
cis-1,3-Dichloropropene		25	25	U
Toluene		25	25	U
trans-1,3-Dichloropropene		25	25	U
1,1,2-Trichloroethane		25	25	U
Tetrachloroethene		25	25	U
Dibromochloromethane		25	25	U
1,2-Dibromoethane (EDB)		25	25	U
Chlorobenzene		25	25	U
1,1,1,2-Tetrachloroethane		25	25	U
Ethyl Benzene		25	25	U
m,p-Xylene		50	50	U
o-Xylene		25	25	U
Styrene		25	25	U
Bromoform		25	25	U
Isopropyl benzene		25	25	U
Bromobenzene		25	25	U
1,1,2,2-Tetrachloroethane		25	25	U
1,2,3-Trichloropropane		25	25	U
n-Propylbenzene		25	25	U
2-Chlorotoluene		25	25	U
4-Chlorotoluene		25	25	U
1,3,5-Trimethyl benzene		25	25	U
tert-Butyl benzene		25	25	U
1,2,4-Trimethylbenzene		25	25	U
sec-Butylbenzene		25	25	U
1,3-Dichlorobenzene		25	25	U
4-Isopropyltoluene		25	25	U
1,4-Dichlorobenzene		25	25	U
1,2-Dichlorobenzene		25	25	U
n-Butylbenzene		25	25	U
1,2-Dibromo-3-chloropropane		25	25	U
1,2,4-Trichlorobenzene		25	25	U
Hexachlorobutadiene		25	25	U
Naphthalene		25	25	U
1,2,3-Trichlorobenzene		25	25	U

Notes :
Volatile Organic Compounds analyzed using EPA method 8260B
Field report is preliminary until reviewed and signed

B = Detected in laboratory blank
E = Exceeds upper calibration limit
J = Below reporting limit
U = Undetected

* outside QC limits

SIGNED: QRB 01 SLC 1/29/02 REVIEWED:

SEVERN TRENT SERVICES

Field Report

Project: Mercer_Palo Alto
Client : PES

Client Sample ID: C6-20.5
Laboratory Sample ID: PES0114-01

Volume (g): 1

Matrix: Soil
Analyst: SLC
File#: 01140208.D
Instr. #: Alpha
Date Collected: 1/14/02
Date Analyzed: 1/14/02
Dilution Factor: 5
Method: 011402.M

Surrogate Recovery

COMPOUND	ng	ng spiked	% Recovery	Low CL	High CL
Dibromofluoromethane	260.6	250	104%	80	120
1,2-Dichloroethane -d4	220.6	250	88%	80	120
Toluene-d8	259.2	250	104%	81	117
4-Bromofluorobenzene	222.4	250	89%	74	121

COMPOUND	ng	Reporting Limit (ng)	Reporting Limit (ug/Kg)	Result (ug/Kg)
Dichlorodifluoromethane		25	25	U
Chloromethane		25	25	U
Vinyl Chloride		25	25	U
Bromomethane		25	25	U
Chloroethane		25	25	U
Trichlorofluoromethane		25	25	U
1,1-Dichloroethene		25	25	U
Methylene Chloride		25	25	U
trans-1,2-Dichloroethene		25	25	U
1,1-Dichloroethane		25	25	U
cis-1,2-Dichloroethene		25	25	U
Chloroform		25	25	U
1,1,1-Trichloroethane		25	25	U
Carbon tetrachloride		25	25	U
Benzene		25	25	U
1,2-Dichloroethane		25	25	U
Trichloroethene	90.07	25	25	90
1,2-Dichloropropane		25	25	U
Dibromomethane		25	25	U
Bromodichloromethane		25	25	U
cis-1,3-Dichloropropene		25	25	U
Toluene		25	25	U
trans-1,3-Dichloropropene		25	25	U
1,1,2-Trichloroethane		25	25	U
Tetrachloroethene		25	25	U
Dibromochloromethane		25	25	U
1,2-Dibromoethane (EDB)		25	25	U
Chlorobenzene		25	25	U
1,1,1,2-Tetrachloroethane		25	25	U
Ethyl Benzene		25	25	U
m,p-Xylene		50	50	U
o-Xylene		25	25	U
Styrene		25	25	U
Bromoform		25	25	U
Isopropyl benzene		25	25	U
Bromobenzene		25	25	U
1,1,2,2-Tetrachloroethane		25	25	U
1,2,3-Trichloropropane		25	25	U
n-Propylbenzene		25	25	U
2-Chlorotoluene		25	25	U
4-Chlorotoluene		25	25	U
1,3,5-Trimethyl benzene		25	25	U
tert-Butyl benzene		25	25	U
1,2,4-Trimethylbenzene		25	25	U
sec-Butylbenzene		25	25	U
1,3-Dichlorobenzene		25	25	U
4-Isopropyltoluene		25	25	U
1,4-Dichlorobenzene		25	25	U
1,2-Dichlorobenzene		25	25	U
n-Butylbenzene		25	25	U
1,2-Dibromo-3-chloropropane		25	25	U
1,2,4-Trichlorobenzene		25	25	U
Hexachlorobutadiene		25	25	U
Naphthalene		25	25	U
1,2,3-Trichlorobenzene		25	25	U

Notes :
Volatile Organic Compounds analyzed using EPA method 8260B
Field report is preliminary until reviewed and signed

B = Detected in laboratory blank
E = Exceeds upper calibration limit
J = Below reporting limit
U = Undetected

SIGNED: [signature] SLC 1/29/02 REVIEWED: [signature]

SEVERN TRENT SERVICES

Field Report

Project: Mercer_Palo Alto
Client : PES

Client Sample ID: E5-SOUTH-5.0
Laboratory Sample ID: PES0114-02

Volume (g): 1

Matrix: Soil
Analyst: SLC
File#: 01140211.D
Instr. #: Alpha
Date Collected: 1/14/02
Date Analyzed: 1/14/02
Dilution Factor: 5
Method: 011402.M

Surrogate Recovery

COMPOUND	ng	ng spiked	% Recovery	Low CL	High CL
Dibromofluoromethane	253.7	250	101%	80	120
1,2-Dichloroethane -d4	205.9	250	82%	80	120
Toluene-d8	244.5	250	98%	81	117
4-Bromofluorobenzene	233.0	250	93%	74	121

COMPOUND	ng	Reporting Limit (ng)	Reporting Limit (ug/Kg)	Result (ug/Kg)
Dichlorodifluoromethane		25	25	U
Chloromethane		25	25	U
Vinyl Chloride		25	25	U
Bromomethane		25	25	U
Chloroethane		25	25	U
Trichlorofluoromethane		25	25	U
1,1-Dichloroethene		25	25	U
Methylene Chloride		25	25	U
trans-1,2-Dichloroethene		25	25	U
1,1-Dichloroethane		25	25	U
cis-1,2-Dichloroethene		25	25	U
Chloroform		25	25	U
1,1,1-Trichloroethane		25	25	U
Carbon tetrachloride		25	25	U
Benzene		25	25	U
1,2-Dichloroethane		25	25	U
Trichloroethene	61.46	25	25	61
1,2-Dichloropropane		25	25	U
Dibromomethane		25	25	U
Bromodichloromethane		25	25	U
cis-1,3-Dichloropropene		25	25	U
Toluene		25	25	U
trans-1,3-Dichloropropene		25	25	U
1,1,2-Trichloroethane		25	25	U
Tetrachloroethene		25	25	U
Dibromochloromethane		25	25	U
1,2-Dibromoethane (EDB)		25	25	U
Chlorobenzene		25	25	U
1,1,1,2-Tetrachloroethane		25	25	U
Ethyl Benzene		25	25	U
m,p-Xylene		50	50	U
o-Xylene		25	25	U
Styrene		25	25	U
Bromoform		25	25	U
Isopropyl benzene		25	25	U
Bromobenzene		25	25	U
1,1,2,2-Tetrachloroethane		25	25	U
1,2,3-Trichloropropane		25	25	U
n-Propylbenzene		25	25	U
2-Chlorotoluene		25	25	U
4-Chlorotoluene		25	25	U
1,3,5-Trimethyl benzene		25	25	U
tert-Butyl benzene		25	25	U
1,2,4-Trimethylbenzene		25	25	U
sec-Butylbenzene		25	25	U
1,3-Dichlorobenzene		25	25	U
4-Isopropyltoluene		25	25	U
1,4-Dichlorobenzene		25	25	U
1,2-Dichlorobenzene		25	25	U
n-Butylbenzene		25	25	U
1,2-Dibromo-3-chloropropane		25	25	U
1,2,4-Trichlorobenzene		25	25	U
Hexachlorobutadiene		25	25	U
Naphthalene		25	25	U
1,2,3-Trichlorobenzene		25	25	U

Notes :
Volatile Organic Compounds analyzed using EPA method 8260B
Field report is preliminary until reviewed and signed

B = Detected in laboratory blank
E = Exceeds upper calibration limit
J = Below reporting limit
U = Undetected

SIGNER [signature] REVIEWER [signature]

SEVERN TRENT SERVICES

Field Report

Project: Mercer_Palo Alto
Client : PES

Client Sample ID: C8-20.0
Laboratory Sample ID: PES0114-03

Volume (g): 1

Matrix: Soil
Analyst: SLC
File#: 01140207.D
Instr. #: Alpha
Date Collected: 1/14/02
Date Analyzed: 1/14/02
Dilution Factor: 5
Method: 011402.M

Surrogate Recovery

COMPOUND	ng	ng spiked	% Recovery	Low CL	High CL
Dibromofluoromethane	253.5	250	101%	80	120
1,2-Dichloroethane -d4	210.9	250	84%	80	120
Toluene-d8	243.8	250	98%	81	117
4-Bromofluorobenzene	227.1	250	91%	74	121

COMPOUND	ng	Reporting Limit (ng)	Reporting Limit (ug/Kg)	Result (ug/Kg)
Dichlorodifluoromethane		25	25	U
Chloromethane		25	25	U
Vinyl Chloride		25	25	U
Bromomethane		25	25	U
Chloroethane		25	25	U
Trichlorofluoromethane		25	25	U
1,1-Dichloroethene		25	25	U
Methylene Chloride		25	25	U
trans-1,2-Dichloroethene		25	25	U
1,1-Dichloroethane		25	25	U
cis-1,2-Dichloroethene		25	25	U
Chloroform		25	25	U
1,1,1-Trichloroethane		25	25	U
Carbon tetrachloride		25	25	U
Benzene		25	25	U
1,2-Dichloroethane		25	25	U
Trichloroethene	69.49	25	25	69
1,2-Dichloropropane		25	25	U
Dibromomethane		25	25	U
Bromodichloromethane		25	25	U
cis-1,3-Dichloropropene		25	25	U
Toluene		25	25	U
trans-1,3-Dichloropropene		25	25	U
1,1,2-Trichloroethane		25	25	U
Tetrachloroethene		25	25	U
Dibromochloromethane		25	25	U
1,2-Dibromoethane (EDB)		25	25	U
Chlorobenzene		25	25	U
1,1,1,2-Tetrachloroethane		25	25	U
Ethyl Benzene		25	25	U
m,p-Xylene		50	50	U
o-Xylene		25	25	U
Styrene		25	25	U
Bromoform		25	25	U
Isopropyl benzene		25	25	U
Bromobenzene		25	25	U
1,1,2,2-Tetrachloroethane		25	25	U
1,2,3-Trichloropropane		25	25	U
n-Propylbenzene		25	25	U
2-Chlorotoluene		25	25	U
4-Chlorotoluene		25	25	U
1,3,5-Trimethyl benzene		25	25	U
tert-Butyl benzene		25	25	U
1,2,4-Trimethylbenzene		25	25	U
sec-Butylbenzene		25	25	U
1,3-Dichlorobenzene		25	25	U
4-Isopropyltoluene		25	25	U
1,4-Dichlorobenzene		25	25	U
1,2-Dichlorobenzene		25	25	U
n-Butylbenzene		25	25	U
1,2-Dibromo-3-chloropropane		25	25	U
1,2,4-Trichlorobenzene		25	25	U
Hexachlorobutadiene		25	25	U
Naphthalene		25	25	U
1,2,3-Trichlorobenzene		25	25	U

Notes :

Volatile Organic Compounds analyzed using EPA method 8260B
Field report is preliminary until reviewed and signed

B = Detected in laboratory blank
E = Exceeds upper calibration limit
J = Below reporting limit
U = Undetected

SIGNED: ARB for SLC 1/29/02 REVIEWED:

SEVERN TRENT SERVICES

Field Report

Project: Mercer_Palo Alto
Client : PES

Client Sample ID: E4-WEST-6.0
Laboratory Sample ID: PES0114-04

Volume (g): 1

Matrix: Soil
Analyst: SLC
File#: 01140209.D
Instr. #: Alpha
Date Collected: 1/14/02
Date Analyzed: 1/14/02
Dilution Factor: 5
Method: 011402.M

Surrogate Recovery COMPOUND	ng	ng spiked	% Recovery	Low CL	High CL
Dibromofluoromethane	262.5	250	105%	80	120
1,2-Dichloroethane -d4	213.1	250	85%	80	120
Toluene-d8	254.6	250	102%	81	117
4-Bromofluorobenzene	218.8	250	88%	74	121

COMPOUND	ng	Reporting Limit (ng)	Reporting Limit (ug/Kg)	Result (ug/Kg)
Dichlorodifluoromethane		25	25	U
Chloromethane		25	25	U
Vinyl Chloride		25	25	U
Bromomethane		25	25	U
Chloroethane		25	25	U
Trichlorofluoromethane		25	25	U
1,1-Dichloroethene		25	25	U
Methylene Chloride		25	25	U
trans-1,2-Dichloroethene		25	25	U
1,1-Dichloroethane		25	25	U
cis-1,2-Dichloroethene		25	25	U
Chloroform		25	25	U
1,1,1-Trichloroethane		25	25	U
Carbon tetrachloride		25	25	U
Benzene		25	25	U
1,2-Dichloroethane		25	25	U
Trichloroethene	36.58	25	25	37
1,2-Dichloropropane		25	25	U
Dibromomethane		25	25	U
Bromodichloromethane		25	25	U
cis-1,3-Dichloropropene		25	25	U
Toluene		25	25	U
trans-1,3-Dichloropropene		25	25	U
1,1,2-Trichloroethane		25	25	U
Tetrachloroethene		25	25	U
Dibromochloromethane		25	25	U
1,2-Dibromoethane (EDB)		25	25	U
Chlorobenzene		25	25	U
1,1,1,2-Tetrachloroethane		25	25	U
Ethyl Benzene		25	25	U
m,p-Xylene		50	50	U
o-Xylene		25	25	U
Styrene		25	25	U
Bromoform		25	25	U
Isopropyl benzene		25	25	U
Bromobenzene		25	25	U
1,1,2,2-Tetrachloroethane		25	25	U
1,2,3-Trichloropropane		25	25	U
n-Propylbenzene		25	25	U
2-Chlorotoluene		25	25	U
4-Chlorotoluene		25	25	U
1,3,5-Trimethyl benzene		25	25	U
tert-Butyl benzene		25	25	U
1,2,4-Trimethylbenzene		25	25	U
sec-Butylbenzene		25	25	U
1,3-Dichlorobenzene		25	25	U
4-Isopropyltoluene		25	25	U
1,4-Dichlorobenzene		25	25	U
1,2-Dichlorobenzene		25	25	U
n-Butylbenzene		25	25	U
1,2-Dibromo-3-chloropropane		25	25	U
1,2,4-Trichlorobenzene		25	25	U
Hexachlorobutadiene		25	25	U
Naphthalene		25	25	U
1,2,3-Trichlorobenzene		25	25	U

Notes :
Volatile Organic Compounds analyzed using EPA method 8260B
Field report is preliminary until reviewed and signed

B = Detected in laboratory blank
E = Exceeds upper calibration limit
J = Below reporting limit
U = Undetected

SIGNED: SLC 1/29/02 REVIEWED:

SEVERN TRENT SERVICES

Field Report

Project: Mercer_Palo Alto
Client : PES

Client Sample ID: E7-SOUTH-8.5
Laboratory Sample ID: PES0114-05

Volume (g): 1

Matrix: Soil
Analyst: SLC
File#: 01140212.D
Instr. #: Alpha
Date Collected: 1/14/02
Date Analyzed: 1/14/02
Dilution Factor: 5
Method: 011402.M

Surrogate Recovery

COMPOUND	ng	ng spiked	% Recovery	Low CL	High CL
Dibromofluoromethane	256.6	250	103%	80	120
1,2-Dichloroethane -d4	205.0	250	82%	80	120
Toluene-d8	248.7	250	99%	81	117
4-Bromofluorobenzene	227.8	250	91%	74	121

COMPOUND	ng	Reporting Limit (ng)	Reporting Limit (ug/Kg)	Result (ug/Kg)
Dichlorodifluoromethane		25	25	U
Chloromethane		25	25	U
Vinyl Chloride		25	25	U
Bromomethane		25	25	U
Chloroethane		25	25	U
Trichlorofluoromethane		25	25	U
1,1-Dichloroethene		25	25	U
Methylene Chloride		25	25	U
trans-1,2-Dichloroethene		25	25	U
1,1-Dichloroethane		25	25	U
cis-1,2-Dichloroethene		25	25	U
Chloroform		25	25	U
1,1,1-Trichloroethane		25	25	U
Carbon tetrachloride		25	25	U
Benzene		25	25	U
1,2-Dichloroethane		25	25	U
Trichloroethene	106.86	25	25	110
1,2-Dichloropropane		25	25	U
Dibromomethane		25	25	U
Bromodichloromethane		25	25	U
cis-1,3-Dichloropropene		25	25	U
Toluene		25	25	U
trans-1,3-Dichloropropene		25	25	U
1,1,2-Trichloroethane		25	25	U
Tetrachloroethene		25	25	U
Dibromochloromethane		25	25	U
1,2-Dibromoethane (EDB)		25	25	U
Chlorobenzene		25	25	U
1,1,1,2-Tetrachloroethane		25	25	U
Ethyl Benzene		25	25	U
m,p-Xylene		50	50	U
o-Xylene		25	25	U
Styrene		25	25	U
Bromoform		25	25	U
Isopropyl benzene		25	25	U
Bromobenzene		25	25	U
1,1,2,2-Tetrachloroethane		25	25	U
1,2,3-Trichloropropane		25	25	U
n-Propylbenzene		25	25	U
2-Chlorotoluene		25	25	U
4-Chlorotoluene		25	25	U
1,3,5-Trimethyl benzene		25	25	U
tert-Butyl benzene		25	25	U
1,2,4-Trimethylbenzene		25	25	U
sec-Butylbenzene		25	25	U
1,3-Dichlorobenzene		25	25	U
4-Isopropyltoluene		25	25	U
1,4-Dichlorobenzene		25	25	U
1,2-Dichlorobenzene		25	25	U
n-Butylbenzene		25	25	U
1,2-Dibromo-3-chloropropane		25	25	U
1,2,4-Trichlorobenzene		25	25	U
Hexachlorobutadiene		25	25	U
Naphthalene		25	25	U
1,2,3-Trichlorobenzene		25	25	U

Notes :
Volatile Organic Compounds analyzed using EPA method 8260B
Field report is preliminary until reviewed and signed

B = Detected in laboratory blank
E = Exceeds upper calibration limit
J = Below reporting limit
U = Undetected

SIGNED: GLB for SLC 1/29/02 REVIEWED:

SEVERN TRENT SERVICES

Field Report

Project: Mercer_Palo Alto
Client : PES

Client Sample ID: E8-EAST-6.0
Laboratory Sample ID: PES0114-06

Volume (g): 1

Matrix: Soil
Analyst: SLC
File#: 01140210.D
Instr. #: Alpha
Date Collected: 1/14/02
Date Analyzed: 1/14/02
Dilution Factor: 5
Method: 011402.M

Surrogate Recovery COMPOUND	ng	ng spiked	% Recovery	Low CL	High CL
Dibromofluoromethane	261.9	250	105%	80	120
1,2-Dichloroethane -d4	213.5	250	85%	80	120
Toluene-d8	249.3	250	100%	81	117
4-Bromofluorobenzene	222.7	250	89%	74	121

COMPOUND	ng	Reporting Limit (ng)	Reporting Limit (ug/Kg)	Result (ug/Kg)
Dichlorodifluoromethane		25	25	U
Chloromethane		25	25	U
Vinyl Chloride		25	25	U
Bromomethane		25	25	U
Chloroethane		25	25	U
Trichlorofluoromethane		25	25	U
1,1-Dichloroethene		25	25	U
Methylene Chloride		25	25	U
trans-1,2-Dichloroethene		25	25	U
1,1-Dichloroethane		25	25	U
cis-1,2-Dichloroethene		25	25	U
Chloroform		25	25	U
1,1,1-Trichloroethane		25	25	U
Carbon tetrachloride		25	25	U
Benzene		25	25	U
1,2-Dichloroethane		25	25	U
Trichloroethene	88.11	25	25	88
1,2-Dichloropropane		25	25	U
Dibromomethane		25	25	U
Bromodichloromethane		25	25	U
cis-1,3-Dichloropropene		25	25	U
Toluene		25	25	U
trans-1,3-Dichloropropene		25	25	U
1,1,2-Trichloroethane		25	25	U
Tetrachloroethene		25	25	U
Dibromochloromethane		25	25	U
1,2-Dibromoethane (EDB)		25	25	U
Chlorobenzene		25	25	U
1,1,1,2-Tetrachloroethane		25	25	U
Ethyl Benzene		25	25	U
m,p-Xylene		50	50	U
o-Xylene		25	25	U
Styrene		25	25	U
Bromoform		25	25	U
Isopropyl benzene		25	25	U
Bromobenzene		25	25	U
1,1,2,2-Tetrachloroethane		25	25	U
1,2,3-Trichloropropane		25	25	U
n-Propylbenzene		25	25	U
2-Chlorotoluene		25	25	U
4-Chlorotoluene		25	25	U
1,3,5-Trimethyl benzene		25	25	U
tert-Butyl benzene		25	25	U
1,2,4-Trimethylbenzene		25	25	U
sec-Butylbenzene		25	25	U
1,3-Dichlorobenzene		25	25	U
4-Isopropyltoluene		25	25	U
1,4-Dichlorobenzene		25	25	U
1,2-Dichlorobenzene		25	25	U
n-Butylbenzene		25	25	U
1,2-Dibromo-3-chloropropane		25	25	U
1,2,4-Trichlorobenzene		25	25	U
Hexachlorobutadiene		25	25	U
Naphthalene		25	25	U
1,2,3-Trichlorobenzene		25	25	U

Notes :
Volatile Organic Compounds analyzed using EPA method 8260B
Field report is preliminary until reviewed and signed

B = Detected in laboratory blank
E = Exceeds upper calibration limit
J = Below reporting limit
U = Undetected

SIGNED: SLC 1/29/02 REVIEWED:

SEVERN TRENT SERVICES

Field Report

Project: Mercer_Palo Alto
Client : PES

Client Sample ID: C8-EAST-8.0
Laboratory Sample ID: PES0114-07

Volume (g): 1

Matrix: Soil
Analyst: SLC
File#: 01140213.D
Instr. #: Alpha
Date Collected: 1/14/02
Date Analyzed: 1/14/02
Dilution Factor: 5
Method: 011402.M

Surrogate Recovery

COMPOUND	ng	ng spiked	% Recovery	Low CL	High CL
Dibromofluoromethane	250.8	250	100%	80	120
1,2-Dichloroethane -d4	209.9	250	84%	80	120
Toluene-d8	250.1	250	100%	81	117
4-Bromofluorobenzene	232.0	250	93%	74	121

COMPOUND	ng	Reporting Limit (ng)	Reporting Limit (ug/Kg)	Result (ug/Kg)
Dichlorodifluoromethane		25	25	U
Chloromethane		25	25	U
Vinyl Chloride		25	25	U
Bromomethane		25	25	U
Chloroethane		25	25	U
Trichlorofluoromethane		25	25	U
1,1-Dichloroethene		25	25	U
Methylene Chloride		25	25	U
trans-1,2-Dichloroethene		25	25	U
1,1-Dichloroethane		25	25	U
cis-1,2-Dichloroethene		25	25	U
Chloroform		25	25	U
1,1,1-Trichloroethane		25	25	U
Carbon tetrachloride		25	25	U
Benzene		25	25	U
1,2-Dichloroethane		25	25	U
Trichloroethene	36.04	25	25	36
1,2-Dichloropropane		25	25	U
Dibromomethane		25	25	U
Bromodichloromethane		25	25	U
cis-1,3-Dichloropropene		25	25	U
Toluene		25	25	U
trans-1,3-Dichloropropene		25	25	U
1,1,2-Trichloroethane		25	25	U
Tetrachloroethene		25	25	U
Dibromochloromethane		25	25	U
1,2-Dibromoethane (EDB)		25	25	U
Chlorobenzene		25	25	U
1,1,1,2-Tetrachloroethane		25	25	U
Ethyl Benzene		25	25	U
m,p-Xylene		50	50	U
o-Xylene		25	25	U
Styrene		25	25	U
Bromoform		25	25	U
Isopropyl benzene		25	25	U
Bromobenzene		25	25	U
1,1,2,2-Tetrachloroethane		25	25	U
1,2,3-Trichloropropane		25	25	U
n-Propylbenzene		25	25	U
2-Chlorotoluene		25	25	U
4-Chlorotoluene		25	25	U
1,3,5-Trimethyl benzene		25	25	U
tert-Butyl benzene		25	25	U
1,2,4-Trimethylbenzene		25	25	U
sec-Butylbenzene		25	25	U
1,3-Dichlorobenzene		25	25	U
4-Isopropyltoluene		25	25	U
1,4-Dichlorobenzene		25	25	U
1,2-Dichlorobenzene		25	25	U
n-Butylbenzene		25	25	U
1,2-Dibromo-3-chloropropane		25	25	U
1,2,4-Trichlorobenzene		25	25	U
Hexachlorobutadiene		25	25	U
Naphthalene		25	25	U
1,2,3-Trichlorobenzene		25	25	U

Notes :
Volatile Organic Compounds analyzed using EPA method 8260B
Field report is preliminary until reviewed and signed

B = Detected in laboratory blank
E = Exceeds upper calibration limit
J = Below reporting limit
U = Undetected

SIGNED: SLC 1/29/02 REVIEWED:

SEVERN TRENT SERVICES

Field Report

Project: Mercer_Palo Alto
Client : PES

Client Sample ID: C4-WEST-6.0
Laboratory Sample ID: PES0114-08

Volume (g): 1

Matrix: Soil
Analyst: SLC
File#: 01140214.D
Instr. #: Alpha
Date Collected: 1/14/02
Date Analyzed: 1/14/02
Dilution Factor: 5
Method: 011402.M

Surrogate Recovery

COMPOUND	ng	ng spiked	% Recovery	Low CL	High CL
Dibromofluoromethane	252.9	250	101%	80	120
1,2-Dichloroethane -d4	209.4	250	84%	80	120
Toluene-d8	251.0	250	100%	81	117
4-Bromofluorobenzene	224.6	250	90%	74	121

COMPOUND	ng	Reporting Limit (ng)	Reporting Limit (ug/Kg)	Result (ug/Kg)
Dichlorodifluoromethane		25	25	U
Chloromethane		25	25	U
Vinyl Chloride		25	25	U
Bromomethane		25	25	U
Chloroethane		25	25	U
Trichlorofluoromethane		25	25	U
1,1-Dichloroethene		25	25	U
Methylene Chloride		25	25	U
trans-1,2-Dichloroethene		25	25	U
1,1-Dichloroethane		25	25	U
cis-1,2-Dichloroethene		25	25	U
Chloroform		25	25	U
1,1,1-Trichloroethane		25	25	U
Carbon tetrachloride		25	25	U
Benzene		25	25	U
1,2-Dichloroethane		25	25	U
Trichloroethene		25	25	U
1,2-Dichloropropane		25	25	U
Dibromomethane		25	25	U
Bromodichloromethane		25	25	U
cis-1,3-Dichloropropene		25	25	U
Toluene		25	25	U
trans-1,3-Dichloropropene		25	25	U
1,1,2-Trichloroethane		25	25	U
Tetrachloroethene		25	25	U
Dibromochloromethane		25	25	U
1,2-Dibromoethane (EDB)		25	25	U
Chlorobenzene		25	25	U
1,1,1,2-Tetrachloroethane		25	25	U
Ethyl Benzene		25	25	U
m,p-Xylene		50	50	U
o-Xylene		25	25	U
Styrene		25	25	U
Bromoform		25	25	U
Isopropyl benzene		25	25	U
Bromobenzene		25	25	U
1,1,2,2-Tetrachloroethane		25	25	U
1,2,3-Trichloropropane		25	25	U
n-Propylbenzene		25	25	U
2-Chlorotoluene		25	25	U
4-Chlorotoluene		25	25	U
1,3,5-Trimethyl benzene		25	25	U
tert-Butyl benzene		25	25	U
1,2,4-Trimethylbenzene		25	25	U
sec-Butylbenzene		25	25	U
1,3-Dichlorobenzene		25	25	U
4-Isopropyltoluene		25	25	U
1,4-Dichlorobenzene		25	25	U
1,2-Dichlorobenzene		25	25	U
n-Butylbenzene		25	25	U
1,2-Dibromo-3-chloropropane		25	25	U
1,2,4-Trichlorobenzene		25	25	U
Hexachlorobutadiene		25	25	U
Naphthalene		25	25	U
1,2,3-Trichlorobenzene		25	25	U

Notes :
Volatile Organic Compounds analyzed using EPA method 8260B
Field report is preliminary until reviewed and signed

B = Detected in laboratory blank
E = Exceeds upper calibration limit
J = Below reporting limit
U = Undetected

SIGNED: SLC 1/29/02 REVIEWED:

SEVERN TRENT SERVICES

Field Report

Project: Mercer_Palo Alto
Client : PES

Client Sample ID: COMP-B
Laboratory Sample ID: PES0114-09

Volume (g): 1

Matrix: Soil
Analyst: SLC
File#: 01140215.D
Instr. #: Alpha
Date Collected: 1/14/02
Date Analyzed: 1/14/02
Dilution Factor: 5
Method: 011402.M

Surrogate Recovery

COMPOUND	ng	ng spiked	% Recovery	Low CL	High CL
Dibromofluoromethane	250.8	250	100%	80	120
1,2-Dichloroethane -d4	203.7	250	81%	80	120
Toluene-d8	242.5	250	97%	81	117
4-Bromofluorobenzene	228.4	250	91%	74	121

COMPOUND	ng	Reporting Limit (ng)	Reporting Limit (ug/Kg)	Result (ug/Kg)
Dichlorodifluoromethane		25	25	U
Chloromethane		25	25	U
Vinyl Chloride		25	25	U
Bromomethane		25	25	U
Chloroethane		25	25	U
Trichlorofluoromethane		25	25	U
1,1-Dichloroethene		25	25	U
Methylene Chloride		25	25	U
trans-1,2-Dichloroethene		25	25	U
1,1-Dichloroethane		25	25	U
cis-1,2-Dichloroethene		25	25	U
Chloroform		25	25	U
1,1,1-Trichloroethane		25	25	U
Carbon tetrachloride		25	25	U
Benzene		25	25	U
1,2-Dichloroethane		25	25	U
Trichloroethene		25	25	U
1,2-Dichloropropane		25	25	U
Dibromomethane		25	25	U
Bromodichloromethane		25	25	U
cis-1,3-Dichloropropene		25	25	U
Toluene		25	25	U
trans-1,3-Dichloropropene		25	25	U
1,1,2-Trichloroethane		25	25	U
Tetrachloroethene		25	25	U
Dibromochloromethane		25	25	U
1,2-Dibromoethane (EDB)		25	25	U
Chlorobenzene		25	25	U
1,1,1,2-Tetrachloroethane		25	25	U
Ethyl Benzene		25	25	U
m,p-Xylene		50	50	U
o-Xylene		25	25	U
Styrene		25	25	U
Bromoform		25	25	U
Isopropyl benzene		25	25	U
Bromobenzene		25	25	U
1,1,2,2-Tetrachloroethane		25	25	U
1,2,3-Trichloropropane		25	25	U
n-Propylbenzene		25	25	U
2-Chlorotoluene		25	25	U
4-Chlorotoluene		25	25	U
1,3,5-Trimethyl benzene		25	25	U
tert-Butyl benzene		25	25	U
1,2,4-Trimethylbenzene		25	25	U
sec-Butylbenzene		25	25	U
1,3-Dichlorobenzene		25	25	U
4-Isopropyltoluene		25	25	U
1,4-Dichlorobenzene		25	25	U
1,2-Dichlorobenzene		25	25	U
n-Butylbenzene		25	25	U
1,2-Dibromo-3-chloropropane		25	25	U
1,2,4-Trichlorobenzene		25	25	U
Hexachlorobutadiene		25	25	U
Naphthalene		25	25	U
1,2,3-Trichlorobenzene		25	25	U

Notes :
Volatile Organic Compounds analyzed using EPA method 8260B
Field report is preliminary until reviewed and signed

B = Detected in laboratory blank
E = Exceeds upper calibration limit
J = Below reporting limit
U = Undetected

SIGNED: SLC 1/29/02 REVIEWED:

SEVERN TRENT SERVICES

Field Report

Project: Mercer_Palo Alto
Client : PES

Client Sample ID: COMP-C
Laboratory Sample ID: PES0114-10

Volume (g): 1

Matrix: Soil
Analyst: SLC
File#: 01140217.D
Instr. #: Alpha
Date Collected: 1/14/02
Date Analyzed: 1/14/02
Dilution Factor: 5
Method: 011402.M

Surrogate Recovery COMPOUND	ng	ng spiked	% Recovery	Low CL	High CL
Dibromofluoromethane	248.6	250	99%	80	120
1,2-Dichloroethane -d4	206.0	250	82%	80	120
Toluene-d8	245.1	250	98%	81	117
4-Bromofluorobenzene	227.2	250	91%	74	121

COMPOUND	ng	Reporting Limit (ng)	Reporting Limit (ug/Kg)	Result (ug/Kg)
Dichlorodifluoromethane		25	25	U
Chloromethane		25	25	U
Vinyl Chloride		25	25	U
Bromomethane		25	25	U
Chloroethane		25	25	U
Trichlorofluoromethane		25	25	U
1,1-Dichloroethene		25	25	U
Methylene Chloride		25	25	U
trans-1,2-Dichloroethene		25	25	U
1,1-Dichloroethane		25	25	U
cis-1,2-Dichloroethene		25	25	U
Chloroform		25	25	U
1,1,1-Trichloroethane		25	25	U
Carbon tetrachloride		25	25	U
Benzene		25	25	U
1,2-Dichloroethane		25	25	U
Trichloroethene		25	25	U
1,2-Dichloropropane		25	25	U
Dibromomethane		25	25	U
Bromodichloromethane		25	25	U
cis-1,3-Dichloropropene		25	25	U
Toluene		25	25	U
trans-1,3-Dichloropropene		25	25	U
1,1,2-Trichloroethane		25	25	U
Tetrachloroethene		25	25	U
Dibromochloromethane		25	25	U
1,2-Dibromoethane (EDB)		25	25	U
Chlorobenzene		25	25	U
1,1,1,2-Tetrachloroethane		25	25	U
Ethyl Benzene		25	25	U
m,p-Xylene		50	50	U
o-Xylene		25	25	U
Styrene		25	25	U
Bromoform		25	25	U
Isopropyl benzene		25	25	U
Bromobenzene		25	25	U
1,1,2,2-Tetrachloroethane		25	25	U
1,2,3-Trichloropropane		25	25	U
n-Propylbenzene		25	25	U
2-Chlorotoluene		25	25	U
4-Chlorotoluene		25	25	U
1,3,5-Trimethyl benzene		25	25	U
tert-Butyl benzene		25	25	U
1,2,4-Trimethylbenzene		25	25	U
sec-Butylbenzene		25	25	U
1,3-Dichlorobenzene		25	25	U
4-Isopropyltoluene		25	25	U
1,4-Dichlorobenzene		25	25	U
1,2-Dichlorobenzene		25	25	U
n-Butylbenzene		25	25	U
1,2-Dibromo-3-chloropropane		25	25	U
1,2,4-Trichlorobenzene		25	25	U
Hexachlorobutadiene		25	25	U
Naphthalene		25	25	U
1,2,3-Trichlorobenzene		25	25	U

Notes :
Volatile Organic Compounds analyzed using EPA method 8260B
Field report is preliminary until reviewed and signed

B = Detected in laboratory blank
E = Exceeds upper calibration limit
J = Below reporting limit
U = Undetected

SIGNED: QC Bfld SLC 1/29/02 REVIEWED: D Sawyer

SEVERN TRENT SERVICES

Field Report

Project: Mercer_Palo Alto
Client : PES

Client Sample ID: COMP-E
Laboratory Sample ID: PES0114-12

Volume (g): 1

Matrix: Soil
Analyst: SLC
File#: 01140218.D
Instr. #: Alpha
Date Collected: 1/14/02
Date Analyzed: 1/14/02
Dilution Factor: 5
Method: 011402.M

Surrogate Recovery

COMPOUND	ng	ng spiked	% Recovery	Low CL	High CL
Dibromofluoromethane	255.7	250	102%	80	120
1,2-Dichloroethane -d4	212.9	250	85%	80	120
Toluene-d8	243.0	250	97%	81	117
4-Bromofluorobenzene	232.7	250	93%	74	121

COMPOUND	ng	Reporting Limit (ng)	Reporting Limit (ug/Kg)	Result (ug/Kg)
Dichlorodifluoromethane		25	25	U
Chloromethane		25	25	U
Vinyl Chloride		25	25	U
Bromomethane		25	25	U
Chloroethane		25	25	U
Trichlorofluoromethane		25	25	U
1,1-Dichloroethene		25	25	U
Methylene Chloride		25	25	U
trans-1,2-Dichloroethene		25	25	U
1,1-Dichloroethane		25	25	U
cis-1,2-Dichloroethene		25	25	U
Chloroform		25	25	U
1,1,1-Trichloroethane		25	25	U
Carbon tetrachloride		25	25	U
Benzene		25	25	U
1,2-Dichloroethane		25	25	U
Trichloroethene		25	25	U
1,2-Dichloropropane		25	25	U
Dibromomethane		25	25	U
Bromodichloromethane		25	25	U
cis-1,3-Dichloropropene		25	25	U
Toluene		25	25	U
trans-1,3-Dichloropropene		25	25	U
1,1,2-Trichloroethane		25	25	U
Tetrachloroethene		25	25	U
Dibromochloromethane		25	25	U
1,2-Dibromoethane (EDB)		25	25	U
Chlorobenzene		25	25	U
1,1,1,2-Tetrachloroethane		25	25	U
Ethyl Benzene		25	25	U
m,p-Xylene		50	50	U
o-Xylene		25	25	U
Styrene		25	25	U
Bromoform		25	25	U
Isopropyl benzene		25	25	U
Bromobenzene		25	25	U
1,1,2,2-Tetrachloroethane		25	25	U
1,2,3-Trichloropropane		25	25	U
n-Propylbenzene		25	25	U
2-Chlorotoluene		25	25	U
4-Chlorotoluene		25	25	U
1,3,5-Trimethyl benzene		25	25	U
tert-Butyl benzene		25	25	U
1,2,4-Trimethylbenzene		25	25	U
sec-Butylbenzene		25	25	U
1,3-Dichlorobenzene		25	25	U
4-Isopropyltoluene		25	25	U
1,4-Dichlorobenzene		25	25	U
1,2-Dichlorobenzene		25	25	U
n-Butylbenzene		25	25	U
1,2-Dibromo-3-chloropropane		25	25	U
1,2,4-Trichlorobenzene		25	25	U
Hexachlorobutadiene		25	25	U
Naphthalene		25	25	U
1,2,3-Trichlorobenzene		25	25	U

Notes :
Volatile Organic Compounds analyzed using EPA method 8260B
Field report is preliminary until reviewed and signed

B = Detected in laboratory blank
E = Exceeds upper calibration limit
J = Below reporting limit
U = Undetected

SIGNED: SLC 1/29/02 REVIEWED:

SEVERN TRENT SERVICES

Field Report

Project: Mercer_Palo Alto
Client : PES

Client Sample ID: D1-WEST-2.0
Laboratory Sample ID: PES0114-13

Volume (g): 1

Matrix: Soil
Analyst: SLC
File#: 01140219.D
Instr. #: Alpha
Date Collected: 1/14/02
Date Analyzed: 1/14/02
Dilution Factor: 5
Method: 011402.M

Surrogate Recovery COMPOUND	ng	ng spiked	% Recovery	Low CL	High CL
Dibromofluoromethane	256.5	250	103%	80	120
1,2-Dichloroethane -d4	215.5	250	86%	80	120
Toluene-d8	240.2	250	96%	81	117
4-Bromofluorobenzene	229.4	250	92%	74	121

COMPOUND	ng	Reporting Limit (ng)	Reporting Limit (ug/Kg)	Result (ug/Kg)
Dichlorodifluoromethane		25	25	U
Chloromethane		25	25	U
Vinyl Chloride		25	25	U
Bromomethane		25	25	U
Chloroethane		25	25	U
Trichlorofluoromethane		25	25	U
1,1-Dichloroethene		25	25	U
Methylene Chloride		25	25	U
trans-1,2-Dichloroethene		25	25	U
1,1-Dichloroethane		25	25	U
cis-1,2-Dichloroethene		25	25	U
Chloroform		25	25	U
1,1,1-Trichloroethane		25	25	U
Carbon tetrachloride		25	25	U
Benzene		25	25	U
1,2-Dichloroethane		25	25	U
Trichloroethene		25	25	U
1,2-Dichloropropane		25	25	U
Dibromomethane		25	25	U
Bromodichloromethane		25	25	U
cis-1,3-Dichloropropene		25	25	U
Toluene		25	25	U
trans-1,3-Dichloropropene		25	25	U
1,1,2-Trichloroethane		25	25	U
Tetrachloroethene		25	25	U
Dibromochloromethane		25	25	U
1,2-Dibromoethane (EDB)		25	25	U
Chlorobenzene		25	25	U
1,1,1,2-Tetrachloroethane		25	25	U
Ethyl Benzene		25	25	U
m,p-Xylene		50	50	U
o-Xylene		25	25	U
Styrene		25	25	U
Bromoform		25	25	U
Isopropyl benzene		25	25	U
Bromobenzene		25	25	U
1,1,2,2-Tetrachloroethane		25	25	U
1,2,3-Trichloropropane		25	25	U
n-Propylbenzene		25	25	U
2-Chlorotoluene		25	25	U
4-Chlorotoluene		25	25	U
1,3,5-Trimethyl benzene		25	25	U
tert-Butyl benzene		25	25	U
1,2,4-Trimethylbenzene		25	25	U
sec-Butylbenzene		25	25	U
1,3-Dichlorobenzene		25	25	U
4-Isopropyltoluene		25	25	U
1,4-Dichlorobenzene		25	25	U
1,2-Dichlorobenzene		25	25	U
n-Butylbenzene		25	25	U
1,2-Dibromo-3-chloropropane		25	25	U
1,2,4-Trichlorobenzene		25	25	U
Hexachlorobutadiene		25	25	U
Naphthalene		25	25	U
1,2,3-Trichlorobenzene		25	25	U

Notes :
Volatile Organic Compounds analyzed using EPA method 8260B
Field report is preliminary until reviewed and signed

B = Detected in laboratory blank
E = Exceeds upper calibration limit
J = Below reporting limit
U = Undetected

SIGNED: SLC 1/29/02 REVIEWED:

SEVERN TRENT SERVICES

Field Report

Project: Mercer_Palo Alto
Client : PES
Client Sample ID: F1-EAST-2.0 KF 3/4/02
Laboratory Sample ID: PES0114-14

Volume (g): 1

Matrix: Soil
Analyst: SLC
File#: 01140220.D
Instr. #: Alpha
Date Collected: 1/14/02
Date Analyzed: 1/14/02
Dilution Factor: 5
Method: 011402.M

Surrogate Recovery

COMPOUND	ng	ng spiked	% Recovery	Low CL	High CL
Dibromofluoromethane	255.6	250	102%	80	120
1,2-Dichloroethane -d4	219.8	250	88%	80	120
Toluene-d8	240.5	250	96%	81	117
4-Bromofluorobenzene	226.2	250	90%	74	121

COMPOUND	ng	Reporting Limit (ng)	Reporting Limit (ug/Kg)	Result (ug/Kg)
Dichlorodifluoromethane		25	25	U
Chloromethane		25	25	U
Vinyl Chloride		25	25	U
Bromomethane		25	25	U
Chloroethane		25	25	U
Trichlorofluoromethane		25	25	U
1,1-Dichloroethene		25	25	U
Methylene Chloride		25	25	U
trans-1,2-Dichloroethene		25	25	U
1,1-Dichloroethane		25	25	U
cis-1,2-Dichloroethene		25	25	U
Chloroform		25	25	U
1,1,1-Trichloroethane		25	25	U
Carbon tetrachloride		25	25	U
Benzene		25	25	U
1,2-Dichloroethane		25	25	U
Trichloroethene	69.4	25	25	69
1,2-Dichloropropane		25	25	U
Dibromomethane		25	25	U
Bromodichloromethane		25	25	U
cis-1,3-Dichloropropene		25	25	U
Toluene		25	25	U
trans-1,3-Dichloropropene		25	25	U
1,1,2-Trichloroethane		25	25	U
Tetrachloroethene		25	25	U
Dibromochloromethane		25	25	U
1,2-Dibromoethane (EDB)		25	25	U
Chlorobenzene		25	25	U
1,1,1,2-Tetrachloroethane		25	25	U
Ethyl Benzene		25	25	U
m,p-Xylene		50	50	U
o-Xylene		25	25	U
Styrene		25	25	U
Bromoform		25	25	U
Isopropyl benzene		25	25	U
Bromobenzene		25	25	U
1,1,2,2-Tetrachloroethane		25	25	U
1,2,3-Trichloropropane		25	25	U
n-Propylbenzene		25	25	U
2-Chlorotoluene		25	25	U
4-Chlorotoluene		25	25	U
1,3,5-Trimethyl benzene		25	25	U
tert-Butyl benzene		25	25	U
1,2,4-Trimethylbenzene		25	25	U
sec-Butylbenzene		25	25	U
1,3-Dichlorobenzene		25	25	U
4-Isopropyltoluene		25	25	U
1,4-Dichlorobenzene		25	25	U
1,2-Dichlorobenzene		25	25	U
n-Butylbenzene		25	25	U
1,2-Dibromo-3-chloropropane		25	25	U
1,2,4-Trichlorobenzene		25	25	U
Hexachlorobutadiene		25	25	U
Naphthalene		25	25	U
1,2,3-Trichlorobenzene		25	25	U

Notes :
Volatile Organic Compounds analyzed using EPA method 8260B
Field report is preliminary until reviewed and signed

B = Detected in laboratory blank
E = Exceeds upper calibration limit
J = Below reporting limit
U = Undetected

SIGNED: QLB 4U SLC 1/29/02 REVIEWED:

SEVERN TRENT SERVICES

Field Report

Project: Mercer_Palo Alto
Client : PES

Client Sample ID: F10-EAST-2.0
Laboratory Sample ID: PES0114-14

Volume (g): 1

Matrix: Soil
Analyst: SLC
File#: 01140220.D
Instr. #: Alpha
Date Collected: 1/14/02
Date Analyzed: 1/14/02
Dilution Factor: 5
Method: 011402.M

Surrogate Recovery

COMPOUND	ng	ng spiked	% Recovery	Low CL	High CL
Dibromofluoromethane	255.6	250	102%	80	120
1,2-Dichloroethane -d4	219.8	250	88%	80	120
Toluene-d8	240.5	250	96%	81	117
4-Bromofluorobenzene	226.2	250	90%	74	121

COMPOUND	ng	Reporting Limit (ng)	Reporting Limit (ug/Kg)	Result (ug/Kg)
Dichlorodifluoromethane		25	25	U
Chloromethane		25	25	U
Vinyl Chloride		25	25	U
Bromomethane		25	25	U
Chloroethane		25	25	U
Trichlorofluoromethane		25	25	U
1,1-Dichloroethene		25	25	U
Methylene Chloride		25	25	U
trans-1,2-Dichloroethene		25	25	U
1,1-Dichloroethane		25	25	U
cis-1,2-Dichloroethene		25	25	U
Chloroform		25	25	U
1,1,1-Trichloroethane		25	25	U
Carbon tetrachloride		25	25	U
Benzene		25	25	U
1,2-Dichloroethane		25	25	U
Trichloroethene	69.4	25	25	69
1,2-Dichloropropane		25	25	U
Dibromomethane		25	25	U
Bromodichloromethane		25	25	U
cis-1,3-Dichloropropene		25	25	U
Toluene		25	25	U
trans-1,3-Dichloropropene		25	25	U
1,1,2-Trichloroethane		25	25	U
Tetrachloroethene		25	25	U
Dibromochloromethane		25	25	U
1,2-Dibromoethane (EDB)		25	25	U
Chlorobenzene		25	25	U
1,1,1,2-Tetrachloroethane		25	25	U
Ethyl Benzene		25	25	U
m,p-Xylene		50	50	U
o-Xylene		25	25	U
Styrene		25	25	U
Bromoform		25	25	U
Isopropyl benzene		25	25	U
Bromobenzene		25	25	U
1,1,2,2-Tetrachloroethane		25	25	U
1,2,3-Trichloropropane		25	25	U
n-Propylbenzene		25	25	U
2-Chlorotoluene		25	25	U
4-Chlorotoluene		25	25	U
1,3,5-Trimethyl benzene		25	25	U
tert-Butyl benzene		25	25	U
1,2,4-Trimethylbenzene		25	25	U
sec-Butylbenzene		25	25	U
1,3-Dichlorobenzene		25	25	U
4-Isopropyltoluene		25	25	U
1,4-Dichlorobenzene		25	25	U
1,2-Dichlorobenzene		25	25	U
n-Butylbenzene		25	25	U
1,2-Dibromo-3-chloropropane		25	25	U
1,2,4-Trichlorobenzene		25	25	U
Hexachlorobutadiene		25	25	U
Naphthalene		25	25	U
1,2,3-Trichlorobenzene		25	25	U

Notes :
Volatile Organic Compounds analyzed using EPA method 8260B
Field report is preliminary until reviewed and signed

B = Detected in laboratory blank
E = Exceeds upper calibration limit
J = Below reporting limit
U = Undetected

SIGNED: Diane Sawyer for Shellie Abrams

REVIEWED: Sawyer

SEVERN TRENT SERVICES

Field Report

Project: Mercer_Palo Alto
Client : PES

Client Sample ID: A8-NORTH3-2.0
Laboratory Sample ID: PES0114-15

Volume (g): 1

Matrix: Soil
Analyst: SLC
File#: 01140221.D
Instr. #: Alpha
Date Collected: 1/14/02
Date Analyzed: 1/14/02
Dilution Factor: 5
Method: 011402.M

Surrogate Recovery COMPOUND	ng	ng spiked	% Recovery	Low CL	High CL
Dibromofluoromethane	242.2	250	97%	80	120
1,2-Dichloroethane -d4	208.7	250	83%	80	120
Toluene-d8	238.8	250	96%	81	117
4-Bromofluorobenzene	229.9	250	92%	74	121

COMPOUND	ng	Reporting Limit (ng)	Reporting Limit (ug/Kg)	Result (ug/Kg)
Dichlorodifluoromethane		25	25	U
Chloromethane		25	25	U
Vinyl Chloride		25	25	U
Bromomethane		25	25	U
Chloroethane		25	25	U
Trichlorofluoromethane		25	25	U
1,1-Dichloroethene		25	25	U
Methylene Chloride		25	25	U
trans-1,2-Dichloroethene		25	25	U
1,1-Dichloroethane		25	25	U
cis-1,2-Dichloroethene		25	25	U
Chloroform		25	25	U
1,1,1-Trichloroethane		25	25	U
Carbon tetrachloride		25	25	U
Benzene		25	25	U
1,2-Dichloroethane		25	25	U
Trichloroethene		25	25	U
1,2-Dichloropropane		25	25	U
Dibromomethane		25	25	U
Bromodichloromethane		25	25	U
cis-1,3-Dichloropropene		25	25	U
Toluene		25	25	U
trans-1,3-Dichloropropene		25	25	U
1,1,2-Trichloroethane		25	25	U
Tetrachloroethene		25	25	U
Dibromochloromethane		25	25	U
1,2-Dibromoethane (EDB)		25	25	U
Chlorobenzene		25	25	U
1,1,1,2-Tetrachloroethane		25	25	U
Ethyl Benzene		25	25	U
m,p-Xylene		50	50	U
o-Xylene		25	25	U
Styrene		25	25	U
Bromoform		25	25	U
Isopropyl benzene		25	25	U
Bromobenzene		25	25	U
1,1,2,2-Tetrachloroethane		25	25	U
1,2,3-Trichloropropane		25	25	U
n-Propylbenzene		25	25	U
2-Chlorotoluene		25	25	U
4-Chlorotoluene		25	25	U
1,3,5-Trimethyl benzene		25	25	U
tert-Butyl benzene		25	25	U
1,2,4-Trimethylbenzene		25	25	U
sec-Butylbenzene		25	25	U
1,3-Dichlorobenzene		25	25	U
4-Isopropyltoluene		25	25	U
1,4-Dichlorobenzene		25	25	U
1,2-Dichlorobenzene		25	25	U
n-Butylbenzene		25	25	U
1,2-Dibromo-3-chloropropane		25	25	U
1,2,4-Trichlorobenzene		25	25	U
Hexachlorobutadiene		25	25	U
Naphthalene		25	25	U
1,2,3-Trichlorobenzene		25	25	U

Notes :

Volatile Organic Compounds analyzed using EPA method 8260B
Field report is preliminary until reviewed and signed

B = Detected in laboratory blank
E = Exceeds upper calibration limit
J = Below reporting limit
U = Undetected

SIGNED: SLC 1/29/02 REVIEWED:

SECTION 4.0
QC RESULTS

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: SEVERN TRENT LABORATORIES Project No.: Former Delphi Chassis Facility

Lab File ID: 01090202.D Calibration Date: 1/9/02 Time: 0733

	COMPOUND	RRF	RRF050	MIN RRF	%D	MAX %D
	Dichlorodifluoromethane	0.397	0.414		-4.3	20.0
	Chloromethane	0.592	0.644		-8.8	20.0
	Vinyl Chloride	0.430	0.464		-7.9	20.0
	Bromomethane	0.130	0.014		89.2#	20.0
	Chloroethane	0.241	0.011		95.4#	20.0
	Trichlorofluoromethane	0.520	0.056		89.2#	20.0
	1,1-Dichloroethene	0.350	0.280		20.0	20.0
	Methylene Chloride	0.491	0.330		32.8#	20.0
	trans-1,2-Dichloroethene	0.397	0.323		18.6	20.0
**	1,1-Dichloroethane	0.658	0.579	0.100	12.0	20.0
	cis-1,2-Dichloroethene	0.375	0.328		12.5	20.0
	Chloroform	0.593	0.520		12.3	20.0
	1,1,1-Trichloroethane	0.457	0.386		15.5	20.0
	Carbon Tetrachloride	0.340	0.271		20.3#	20.0
	Benzene	1.227	1.110		2.4	20.0
	1,2-Dichloroethane	0.473	0.432		-2.1	20.0
	Trichloroethene	0.359	0.341		1.7	20.0
	1,2-Dichloropropane	0.312	0.285		1.0	20.0
	Dibromomethane	0.200	0.181		7.5	20.0
	Bromodichloromethane	0.389	0.338		7.2	20.0
	cis-1,3-Dichloropropene	0.305	0.302		12.1	20.0
	Toluene	0.593	0.550		-0.3	20.0
	trans-1,3-Dichloropropene	0.231	0.240		17.7	20.0
	1,1,2-Trichloroethane	0.228	0.210		8.8	20.0
	Tetrachloroethene	0.532	0.482		9.4	20.0
	Dibromochloromethane	0.458	0.415		9.4	20.0
	1,2-Dibromomethane (EDB)	0.295	0.308		-4.4	20.0
**	Chlorobenzene	1.145	1.193	0.300	-4.2	20.0
***	1,1,1,2-Tetrachloroethane	0.436	0.478	0.300	-9.6	20.0
	Ethylbenzene	1.356	1.423		-4.9	20.0
	m&p-Xylene	0.971	1.056		-8.8	20.0
	o-Xylene	0.471	0.516		-9.6	20.0
	Styrene	0.691	0.782		-13.2	20.0
**	Bromoform	0.238	0.211	0.100	11.3	20.0
	Isopropyl benzene	2.926	3.234		-10.5	20.0
	Bromobenzene	1.103	1.210		-9.7	20.0
	1,1,2,2-Tetrachloroethane	1.630	1.538		5.6	20.0
	1,2,3-Trichloropropane	1.136	1.286		-13.2	20.0
	n-Propylbenzene	3.023	3.110		-2.9	20.0
	2-Chlorotoluene	2.689	2.948		-9.6	20.0
	4-Chlorotoluene	2.182	2.383		-9.2	20.0
	1,3,5-Trimethylbenzene	2.733	2.784		-1.9	20.0
	tert-Butyl benzene	2.332	2.309		1.0	20.0
	1,2,4-Trimethylbenzene	2.819	2.793		0.9	20.0
	sec-Butylbenzene	2.772	2.829		-2.1	20.0
	1,3-Dichlorobenzene	1.501	1.639		-9.2	20.0
	4-Isopropyltoluene	2.334	2.309		1.1	20.0
	1,4-Dichlorobenzene	1.455	1.530		-5.2	20.0
	1,2-Dichlorobenzene	1.452	1.574		-8.4	20.0
	n-Butylbenzene	2.554	2.746		-7.5	20.0
	1,2-Dibromo-3-chloropropane	0.136	0.142		-4.4	20.0
	1,2,4-Trichlorobenzene	1.644	1.703		-3.6	20.0
	Hexachlorobutadiene	0.683	0.656		4.0	20.0
	Naphthalene	3.613	3.792		-5.0	20.0
	1,2,3-Trichlorobenzene	1.594	1.555		2.4	20.0

**Method criteria of min RF 0.10.
***Method criteria of min RF 0.30.
All other compounds - Method criteria of <20 %D

Outside Method criteria

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: SEVERN TRENT LABORATORIES Project No.: Former Delphi Chassis Facility

Lab File ID: 01100202.D Calibration Date: 1/10/02 Time: 0723

	COMPOUND	RRF	RRF050	MIN RRF	%D	MAX %D
	Dichlorodifluoromethane	0.397	0.458		-15.4	20.0
	Chloromethane	0.592	0.668		-12.8	20.0
	Vinyl Chloride	0.430	0.502		-16.7	20.0
	Bromomethane	0.130	0.253		-94.6#	20.0
	Chloroethane	0.241	0.351		-45.6#	20.0
	Trichlorofluoromethane	0.520	0.519		0.2	20.0
	1,1-Dichloroethene	0.350	0.384		-9.7	20.0
	Methylene Chloride	0.491	0.373		24.0#	20.0
	trans-1,2-Dichloroethene	0.397	0.367		7.6	20.0
**	1,1-Dichloroethane	0.658	0.647	0.100	1.7	20.0
	cis-1,2-Dichloroethene	0.375	0.353		5.9	20.0
	Chloroform	0.593	0.583		1.7	20.0
	1,1,1-Trichloroethane	0.457	0.440		3.7	20.0
	Carbon Tetrachloride	0.340	0.284		16.5	20.0
	Benzene	1.227	1.197		2.4	20.0
	1,2-Dichloroethane	0.473	0.483		-2.1	20.0
	Trichloroethene	0.359	0.353		1.7	20.0
	1,2-Dichloropropane	0.312	0.309		1.0	20.0
	Dibromomethane	0.200	0.185		7.5	20.0
	Bromodichloromethane	0.389	0.361		7.2	20.0
	cis-1,3-Dichloropropene	0.305	0.268		12.1	20.0
	Toluene	0.593	0.595		-0.3	20.0
	trans-1,3-Dichloropropene	0.231	0.190		17.7	20.0
	1,1,2-Trichloroethane	0.228	0.208		8.8	20.0
	Tetrachloroethene	0.532	0.559		-5.1	20.0
	Dibromochloromethane	0.458	0.382		16.6	20.0
	1,2-Dibromomethane (EDB)	0.295	0.261		11.5	20.0
**	Chlorobenzene	1.145	1.335	0.300	-16.6	20.0
***	1,1,1,2-Tetrachloroethane	0.436	0.422	0.300	3.2	20.0
	Ethylbenzene	1.356	1.351		0.4	20.0
	m&p-Xylene	0.971	0.958		1.3	20.0
	o-Xylene	0.471	0.440		6.6	20.0
	Styrene	0.691	0.632		8.5	20.0
**	Bromoform	0.238	0.156	0.100	34.5#	20.0
	Isopropyl benzene	2.926	3.403		-16.3	20.0
	Bromobenzene	1.103	1.438		-30.4#	20.0
	1,1,2,2-Tetrachloroethane	1.630	1.795		-10.1	20.0
	1,2,3-Trichloropropane	1.136	1.315		-15.8	20.0
	n-Propylbenzene	3.023	3.066		-1.4	20.0
	2-Chlorotoluene	2.689	3.338		-24.1#	20.0
	4-Chlorotoluene	2.182	2.471		-13.2	20.0
	1,3,5-Trimethylbenzene	2.733	3.123		-14.3	20.0
	tert-Butyl benzene	2.332	2.325		0.3	20.0
	1,2,4-Trimethylbenzene	2.819	3.171		-12.5	20.0
	sec-Butylbenzene	2.772	2.825		-1.9	20.0
	1,3-Dichlorobenzene	1.501	1.676		-11.7	20.0
	4-Isopropyltoluene	2.334	2.319		0.6	20.0
	1,4-Dichlorobenzene	1.455	1.567		-7.7	20.0
	1,2-Dichlorobenzene	1.452	1.584		-9.1	20.0
	n-Butylbenzene	2.554	2.929		-14.7	20.0
	1,2-Dibromo-3-chloropropane	0.136	0.103		24.3#	20.0
	1,2,4-Trichlorobenzene	1.644	1.803		-9.7	20.0
	Hexachlorobutadiene	0.683	0.737		-7.9	20.0
	Naphthalene	3.613	3.235		10.5	20.0
	1,2,3-Trichlorobenzene	1.594	1.629		-2.2	20.0

**Method criteria of min RF 0.10.
***Method criteria of min RF 0.30.
All other compounds - Method criteria of <20 %D

Outside Method criteria

VOLATILE LABORATORY CONTROL RECOVERY

Lab Name: SEVERN TRENT LABORATORIES Project No.: Mercer - Palo Alto, CA

Lab File ID: 01090203.D Date Analyzed: 1/9/2002 Time Analyzed: 7:57

LCS Sample ID: LCS 250 ng 1/9/02

COMPOUND	SPIKE ADDED (ng)	LCS CONCENTRATION (ng)	LCS % REC	#	QC. LIMITS REC.
Dichlorodifluoromethane	250	247.91	99		(75-125)
Chloromethane	250	258.28	103		(75-125)
Vinyl Chloride	250	263.18	105		(75-125)
Bromomethane	250	98.95	40	*	(75-125)
Chloroethane	250	189.49	76		(75-125)
Trichlorofluoromethane	250	192.95	77		(75-125)
1,1-Dichloroethene	250	277.38	111		(75-125)
Methylene Chloride	250	190.67	76		(75-125)
trans-1,2-Dichloroethene	250	212.65	85		(75-125)
1,1-Dichloroethane	250	216.43	87		(75-125)
cis-1,2-Dichloroethene	250	219.16	88		(75-125)
Chloroform	250	213.70	85		(75-125)
1,1,1-Trichloroethane	250	210.97	84		(75-125)
Carbon Tetrachloride	250	191.39	77		(75-125)
Benzene	250	226.55	91		(75-125)
1,2-Dichloroethane	250	219.13	88		(75-125)
Trichloroethene	250	229.06	92		(75-125)
1,2-Dichloropropane	250	226.33	91		(75-125)
Dibromomethane	250	211.56	85		(75-125)
Bromodichloromethane	250	207.76	83		(75-125)
cis-1,3-Dichloropropene	250	204.44	82		(75-125)
Toluene	250	223.43	89		(75-125)
trans-1,3-Dichloropropene	250	201.42	81		(75-125)
1,1,2-Trichloroethane	250	217.89	87		(75-125)
Tetrachloroethene	250	255.03	102		(75-125)
Dibromochloromethane	250	222.72	89		(75-125)
1,2-Dibromomethane (EDB)	250	224.11	90		(75-125)
Chlorobenzene	250	271.37	109		(75-125)
1,1,1,2-Tetrachloroethane	250	266.97	107		(75-125)
Ethylbenzene	250	256.51	103		(75-125)
m&p-Xylene	250	257.90	103		(75-125)
o-Xylene	250	260.23	104		(75-125)
Styrene	250	261.11	104		(75-125)
Bromoform	250	204.51	82		(75-125)
Isopropyl benzene	250	298.70	119		(75-125)
Bromobenzene	250	302.24	121		(75-125)
1,1,2,2-Tetrachloroethane	250	249.84	100		(75-125)
1,2,3-Trichloropropane	250	286.52	115		(75-125)
n-Propylbenzene	250	280.58	112		(75-125)
2-Chlorotoluene	250	299.94	120		(75-125)
4-Chlorotoluene	250	287.92	115		(75-125)
1,3,5-Trimethylbenzene	250	282.04	113		(75-125)
tert-Butyl benzene	250	305.80	122		(75-125)
1,2,4-Trimethylbenzene	250	271.72	109		(75-125)
sec-Butylbenzene	250	342.77	137	*	(75-125)
1,3-Dichlorobenzene	250	283.79	114		(75-125)
4-Isopropyltoluene	250	305.81	122		(75-125)
1,4-Dichlorobenzene	250	269.31	108		(75-125)
1,2-Dichlorobenzene	250	278.88	112		(75-125)
n-Butylbenzene	250	318.73	127	*	(75-125)
1,2-Dibromo-3-chloropropane	250	245.03	98		(75-125)
1,2,4-Trichlorobenzene	250	242.92	97		(75-125)
Hexachlorobutadiene	250	284.42	114		(75-125)
Naphthalene	250	212.60	85		(75-125)
1,2,3-Trichlorobenzene	250	221.69	89		(75-125)

* Values outside of QC limits

Spike recovery: 3 out of 55 outside limits

Comments: _____

VOLATILE LABORATORY CONTROL RECOVERY

Lab Name: SEVERN TRENT LABORATORIES Project No.: Mercer - Palo Alto, CA

Lab File ID: 01100203.D Date Analyzed: 1/10/2002 Time Analyzed: 7:47

LCS Sample ID: LCS 250 ng 1/10/02

COMPOUND	SPIKE ADDED (ng)	LCS CONCENTRATION (ng)	LCS % REC	#	QC. LIMITS REC.
Dichlorodifluoromethane	250	277.94	111		(75-125)
Chloromethane	250	279.35	112		(75-125)
Vinyl Chloride	250	287.47	115		(75-125)
Bromomethane	250	465.27	186	*	(75-125)
Chloroethane	250	360.73	144	*	(75-125)
Trichlorofluoromethane	250	240.21	96		(75-125)
1,1-Dichloroethene	250	333.05	133	*	(75-125)
Methylene Chloride	250	214.12	86		(75-125)
trans-1,2-Dichloroethene	250	234.98	94		(75-125)
1,1-Dichloroethane	250	243.79	98		(75-125)
cis-1,2-Dichloroethene	250	239.61	96		(75-125)
Chloroform	250	239.00	96		(75-125)
1,1,1-Trichloroethane	250	235.08	94		(75-125)
Carbon Tetrachloride	250	206.95	83		(75-125)
Benzene	250	243.73	97		(75-125)
1,2-Dichloroethane	250	245.12	98		(75-125)
Trichloroethene	250	243.27	97		(75-125)
1,2-Dichloropropane	250	243.68	97		(75-125)
Dibromomethane	250	230.34	92		(75-125)
Bromodichloromethane	250	224.11	90		(75-125)
cis-1,3-Dichloropropene	250	196.84	79		(75-125)
Toluene	250	239.32	96		(75-125)
trans-1,3-Dichloropropene	250	177.30	71	*	(75-125)
1,1,2-Trichloroethane	250	230.27	92		(75-125)
Tetrachloroethene	250	294.26	118		(75-125)
Dibromochloromethane	250	225.81	90		(75-125)
1,2-Dibromomethane (EDB)	250	229.54	92		(75-125)
Chlorobenzene	250	299.05	120		(75-125)
1,1,1,2-Tetrachloroethane	250	248.25	99		(75-125)
Ethylbenzene	250	247.22	99		(75-125)
m&p-Xylene	250	236.45	95		(75-125)
o-Xylene	250	231.31	93		(75-125)
Styrene	250	217.58	87		(75-125)
Bromoform	250	171.66	69	*	(75-125)
Isopropyl benzene	250	306.58	123		(75-125)
Bromobenzene	250	346.70	139	*	(75-125)
1,1,2,2-Tetrachloroethane	250	313.73	125		(75-125)
1,2,3-Trichloropropane	250	333.39	133	*	(75-125)
n-Propylbenzene	250	269.81	108		(75-125)
2-Chlorotoluene	250	313.33	125		(75-125)
4-Chlorotoluene	250	290.41	116		(75-125)
1,3,5-Trimethylbenzene	250	296.90	119		(75-125)
tert-Butyl benzene	250	307.95	123		(75-125)
1,2,4-Trimethylbenzene	250	295.97	118		(75-125)
sec-Butylbenzene	250	339.05	136	*	(75-125)
1,3-Dichlorobenzene	250	285.49	114		(75-125)
4-Isopropyltoluene	250	307.50	123		(75-125)
1,4-Dichlorobenzene	250	276.49	111		(75-125)
1,2-Dichlorobenzene	250	285.67	114		(75-125)
n-Butylbenzene	250	357.94	143	*	(75-125)
1,2-Dibromo-3-chloropropane	250	236.14	94		(75-125)
1,2,4-Trichlorobenzene	250	288.49	115		(75-125)
Hexachlorobutadiene	250	339.58	136	*	(75-125)
Naphthalene	250	241.69	97		(75-125)
1,2,3-Trichlorobenzene	250	264.92	106		(75-125)

* Values outside of QC limits

Spike recovery: 10 out of 55 outside limits

Comments: _____

VOLATILE LABORATORY CONTROL RECOVERY

Lab Name: SEVERN TRENT LABORATORIES Project No.: Mercer - Palo Alto, CA

Lab File ID: 01140229.D Date Analyzed: 1/14/2002 Time Analyzed: 21:53

LCS Sample ID: LCS 250 ng 1/14/02

COMPOUND	SPIKE ADDED (ng)	LCS CONCENTRATION (ng)	LCS % REC	#	QC. LIMITS REC.
Dichlorodifluoromethane	250	228.50	91		(75-125)
Chloromethane	250	221.75	89		(75-125)
Vinyl Chloride	250	232.95	93		(75-125)
Bromomethane	250	177.98	71	*	(75-125)
Chloroethane	250	166.59	67	*	(75-125)
Trichlorofluoromethane	250	208.62	83		(75-125)
1,1-Dichloroethene	250	197.33	79		(75-125)
Methylene Chloride	250	259.73	104		(75-125)
trans-1,2-Dichloroethene	250	243.64	97		(75-125)
1,1-Dichloroethane	250	229.49	92		(75-125)
cis-1,2-Dichloroethene	250	248.25	99		(75-125)
Chloroform	250	232.71	93		(75-125)
1,1,1-Trichloroethane	250	224.53	90		(75-125)
Carbon Tetrachloride	250	233.35	93		(75-125)
Benzene	250	255.25	102		(75-125)
1,2-Dichloroethane	250	208.01	83		(75-125)
Trichloroethene	250	202.80	81		(75-125)
1,2-Dichloropropane	250	241.85	97		(75-125)
Dibromomethane	250	270.69	108		(75-125)
Bromodichloromethane	250	230.17	92		(75-125)
cis-1,3-Dichloropropene	250	241.80	97		(75-125)
Toluene	250	232.89	93		(75-125)
trans-1,3-Dichloropropene	250	250.57	100		(75-125)
1,1,2-Trichloroethane	250	292.70	117		(75-125)
Tetrachloroethene	250	245.76	98		(75-125)
Dibromochloromethane	250	257.40	103		(75-125)
1,2-Dibromomethane (EDB)	250	282.11	113		(75-125)
Chlorobenzene	250	257.56	103		(75-125)
1,1,1,2-Tetrachloroethane	250	214.79	86		(75-125)
Ethylbenzene	250	249.89	100		(75-125)
m&p-Xylene	250	249.40	100		(75-125)
o-Xylene	250	257.14	103		(75-125)
Styrene	250	253.31	101		(75-125)
Bromoform	250	273.48	109		(75-125)
Isopropyl benzene	250	297.88	119		(75-125)
Bromobenzene	250	276.15	110		(75-125)
1,1,2,2-Tetrachloroethane	250	345.70	138	*	(75-125)
1,2,3-Trichloropropane	250	309.89	124		(75-125)
n-Propylbenzene	250	281.71	113		(75-125)
2-Chlorotoluene	250	271.78	109		(75-125)
4-Chlorotoluene	250	279.94	112		(75-125)
1,3,5-Trimethylbenzene	250	295.31	118		(75-125)
tert-Butyl benzene	250	275.18	110		(75-125)
1,2,4-Trimethylbenzene	250	288.53	115		(75-125)
sec-Butylbenzene	250	286.13	114		(75-125)
1,3-Dichlorobenzene	250	275.47	110		(75-125)
4-Isopropyltoluene	250	275.27	110		(75-125)
1,4-Dichlorobenzene	250	281.02	112		(75-125)
1,2-Dichlorobenzene	250	283.58	113		(75-125)
n-Butylbenzene	250	275.89	110		(75-125)
1,2-Dibromo-3-chloropropane	250	392.85	157	*	(75-125)
1,2,4-Trichlorobenzene	250	247.38	99		(75-125)
Hexachlorobutadiene	250	236.81	95		(75-125)
Naphthalene	250	307.92	123		(75-125)
1,2,3-Trichlorobenzene	250	254.58	102		(75-125)

* Values outside of QC limits

Spike recovery: 4 out of 55 outside limits

Comments: _____

SEVERN TRENT SERVICES

Field Report

Project: Mercer_Palo Alto
Client : PES

Client Sample ID: NA
Laboratory Sample ID: METHOD BLANK

Volume (mL): 5

Matrix: Soil
Analyst: SLC
File#: 01090204.D
Instr. #: Alpha
Date Collected: 1/9/02
Date Analyzed: 1/9/02
Dilution Factor: 1
Method: 010702.M

Surrogate Recovery

COMPOUND	ng	ng spiked	% Recovery	Low CL	High CL
Dibromofluoromethane	221.9	250	89%	80	120
1,2-Dichloroethane -d4	204.1	250	82%	80	120
Toluene-d8	232.7	250	93%	81	117
4-Bromofluorobenzene	224.5	250	90%	74	121

COMPOUND	ng	Reporting Limit (ng)	Reporting Limit (ug/L)	Result (ug/L)
Dichlorodifluoromethane		25	5.0	U
Chloromethane		25	5.0	U
Vinyl Chloride		25	5.0	U
Bromomethane		25	5.0	U
Chloroethane		25	5.0	U
Trichlorofluoromethane		25	5.0	U
1,1-Dichloroethene		25	5.0	U
Methylene Chloride		25	5.0	U
trans-1,2-Dichloroethene		25	5.0	U
1,1-Dichloroethane		25	5.0	U
cis-1,2-Dichloroethene		25	5.0	U
Chloroform		25	5.0	U
1,1,1-Trichloroethane		25	5.0	U
Carbon tetrachloride		25	5.0	U
Benzene		25	5.0	U
1,2-Dichloroethane		25	5.0	U
Trichloroethene		25	5.0	U
1,2-Dichloropropane		25	5.0	U
Dibromomethane		25	5.0	U
Bromodichloromethane		25	5.0	U
cis-1,3-Dichloropropene		25	5.0	U
Toluene		25	5.0	U
trans-1,3-Dichloropropene		25	5.0	U
1,1,2-Trichloroethane		25	5.0	U
Tetrachloroethene		25	5.0	U
Dibromochloromethane		25	5.0	U
1,2-Dibromoethane (EDB)		25	5.0	U
Chlorobenzene		25	5.0	U
1,1,1,2-Tetrachloroethane		25	5.0	U
Ethyl Benzene		25	5.0	U
m,p-Xylene		50	10	U
o-Xylene		25	5.0	U
Styrene		25	5.0	U
Bromoform		25	5.0	U
Isopropyl benzene		25	5.0	U
Bromobenzene		25	5.0	U
1,1,2,2-Tetrachloroethane		25	5.0	U
1,2,3-Trichloropropane		25	5.0	U
n-Propylbenzene		25	5.0	U
2-Chlorotoluene		25	5.0	U
4-Chlorotoluene		25	5.0	U
1,3,5-Trimethyl benzene		25	5.0	U
tert-Butyl benzene		25	5.0	U
1,2,4-Trimethylbenzene		25	5.0	U
sec-Butylbenzene		25	5.0	U
1,3-Dichlorobenzene		25	5.0	U
4-Isopropyltoluene		25	5.0	U
1,4-Dichlorobenzene		25	5.0	U
1,2-Dichlorobenzene		25	5.0	U
n-Butylbenzene		25	5.0	U
1,2-Dibromo-3-chloropropane		25	5.0	U
1,2,4-Trichlorobenzene		25	5.0	U
Hexachlorobutadiene		25	5.0	U
Naphthalene		25	5.0	U
1,2,3-Trichlorobenzene		25	5.0	U

Notes :
Volatile Organic Compounds analyzed using EPA method 8260B
Field report is preliminary until reviewed and signed

B = Detected in laboratory blank
E = Exceeds upper calibration limit
J = Below reporting limit
U = Undetected

SIGNED: gBfor SLC 1/29/02 REVIEWED:

SEVERN TRENT SERVICES

Field Report

Project: Mercer_Palo Alto
Client : PES

Client Sample ID: NA
Laboratory Sample ID: METHOD BLANK

Volume (mL): 5

Matrix: Soil
Analyst: SLC
File#: 01100204.D
Instr. #: Alpha
Date Collected: 1/10/02
Date Analyzed: 1/10/02
Dilution Factor: 1
Method: 010702.M

Surrogate Recovery

COMPOUND	ng	ng spiked	% Recovery	Low CL	High CL
Dibromofluoromethane	221.1	250	88%	80	120
1,2-Dichloroethane -d4	210.6	250	84%	80	120
Toluene-d8	237.8	250	95%	81	117
4-Bromofluorobenzene	221.1	250	88%	74	121

COMPOUND	ng	Reporting Limit (ng)	Reporting Limit (ug/L)	Result (ug/L)
Dichlorodifluoromethane		25	5.0	U
Chloromethane		25	5.0	U
Vinyl Chloride		25	5.0	U
Bromomethane		25	5.0	U
Chloroethane		25	5.0	U
Trichlorofluoromethane		25	5.0	U
1,1-Dichloroethene		25	5.0	U
Methylene Chloride		25	5.0	U
trans-1,2-Dichloroethene		25	5.0	U
1,1-Dichloroethane		25	5.0	U
cis-1,2-Dichloroethene		25	5.0	U
Chloroform		25	5.0	U
1,1,1-Trichloroethane		25	5.0	U
Carbon tetrachloride		25	5.0	U
Benzene		25	5.0	U
1,2-Dichloroethane		25	5.0	U
Trichloroethene		25	5.0	U
1,2-Dichloropropane		25	5.0	U
Dibromomethane		25	5.0	U
Bromodichloromethane		25	5.0	U
cis-1,3-Dichloropropene		25	5.0	U
Toluene		25	5.0	U
trans-1,3-Dichloropropene		25	5.0	U
1,1,2-Trichloroethane		25	5.0	U
Tetrachloroethene		25	5.0	U
Dibromochloromethane		25	5.0	U
1,2-Dibromoethane (EDB)		25	5.0	U
Chlorobenzene		25	5.0	U
1,1,1,2-Tetrachloroethane		25	5.0	U
Ethyl Benzene		25	5.0	U
m,p-Xylene		50	10	U
o-Xylene		25	5.0	U
Styrene		25	5.0	U
Bromoform		25	5.0	U
Isopropyl benzene		25	5.0	U
Bromobenzene		25	5.0	U
1,1,2,2-Tetrachloroethane		25	5.0	U
1,2,3-Trichloropropane		25	5.0	U
n-Propylbenzene		25	5.0	U
2-Chlorotoluene		25	5.0	U
4-Chlorotoluene		25	5.0	U
1,3,5-Trimethyl benzene		25	5.0	U
tert-Butyl benzene		25	5.0	U
1,2,4-Trimethylbenzene		25	5.0	U
sec-Butylbenzene		25	5.0	U
1,3-Dichlorobenzene		25	5.0	U
4-Isopropyltoluene		25	5.0	U
1,4-Dichlorobenzene		25	5.0	U
1,2-Dichlorobenzene		25	5.0	U
n-Butylbenzene		25	5.0	U
1,2-Dibromo-3-chloropropane		25	5.0	U
1,2,4-Trichlorobenzene		25	5.0	U
Hexachlorobutadiene		25	5.0	U
Naphthalene		25	5.0	U
1,2,3-Trichlorobenzene		25	5.0	U

Notes :
Volatile Organic Compounds analyzed using EPA method 8260B
Field report is preliminary until reviewed and signed

B = Detected in laboratory blank
E = Exceeds upper calibration limit
J = Below reporting limit
U = Undetected

SIGNED: GCB for SLC 1/29/02 REVIEWED:

SEVERN TRENT SERVICES

Field Report

Project: Mercer_Palo Alto
Client : PES

Client Sample ID: NA
Laboratory Sample ID: METHOD BLANK

Volume (mL): 5

Matrix: Soil
Analyst: SLC
File#: 01140230.D
Instr. #: Alpha
Date Collected: 1/14/02
Date Analyzed: 1/14/02
Dilution Factor: 1
Method: 011402.M

Surrogate Recovery

COMPOUND	ng	ng spiked	% Recovery	Low CL	High CL
Dibromofluoromethane	248.2	250	99%	80	120
1,2-Dichloroethane -d4	200.4	250	80%	80	120
Toluene-d8	246.4	250	99%	81	117
4-Bromofluorobenzene	234.2	250	94%	74	121

COMPOUND	ng	Reporting Limit (ng)	Reporting Limit (ug/L)	Result (ug/L)
Dichlorodifluoromethane		25	5.0	U
Chloromethane		25	5.0	U
Vinyl Chloride		25	5.0	U
Bromomethane		25	5.0	U
Chloroethane		25	5.0	U
Trichlorofluoromethane		25	5.0	U
1,1-Dichloroethene		25	5.0	U
Methylene Chloride		25	5.0	U
trans-1,2-Dichloroethene		25	5.0	U
1,1-Dichloroethane		25	5.0	U
cis-1,2-Dichloroethene		25	5.0	U
Chloroform		25	5.0	U
1,1,1-Trichloroethane		25	5.0	U
Carbon tetrachloride		25	5.0	U
Benzene		25	5.0	U
1,2-Dichloroethane		25	5.0	U
Trichloroethene		25	5.0	U
1,2-Dichloropropane		25	5.0	U
Dibromomethane		25	5.0	U
Bromodichloromethane		25	5.0	U
cis-1,3-Dichloropropene		25	5.0	U
Toluene		25	5.0	U
trans-1,3-Dichloropropene		25	5.0	U
1,1,2-Trichloroethane		25	5.0	U
Tetrachloroethene		25	5.0	U
Dibromochloromethane		25	5.0	U
1,2-Dibromoethane (EDB)		25	5.0	U
Chlorobenzene		25	5.0	U
1,1,1,2-Tetrachloroethane		25	5.0	U
Ethyl Benzene		25	5.0	U
m,p-Xylene		50	10	U
o-Xylene		25	5.0	U
Styrene		25	5.0	U
Bromoform		25	5.0	U
Isopropyl benzene		25	5.0	U
Bromobenzene		25	5.0	U
1,1,2,2-Tetrachloroethane		25	5.0	U
1,2,3-Trichloropropane		25	5.0	U
n-Propylbenzene		25	5.0	U
2-Chlorotoluene		25	5.0	U
4-Chlorotoluene		25	5.0	U
1,3,5-Trimethyl benzene		25	5.0	U
tert-Butyl benzene		25	5.0	U
1,2,4-Trimethylbenzene		25	5.0	U
sec-Butylbenzene		25	5.0	U
1,3-Dichlorobenzene		25	5.0	U
4-Isopropyltoluene		25	5.0	U
1,4-Dichlorobenzene		25	5.0	U
1,2-Dichlorobenzene		25	5.0	U
n-Butylbenzene		25	5.0	U
1,2-Dibromo-3-chloropropane		25	5.0	U
1,2,4-Trichlorobenzene		25	5.0	U
Hexachlorobutadiene		25	5.0	U
Naphthalene		25	5.0	U
1,2,3-Trichlorobenzene		25	5.0	U

Notes :
Volatile Organic Compounds analyzed using EPA method 8260B
Field report is preliminary until reviewed and signed

B = Detected in laboratory blank
E = Exceeds upper calibration limit
J = Below reporting limit
U = Undetected

SIGNED: SLC 1/29/02 **REVIEWED:**

SECTION 5.0
RAW DATA

VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: SEVERN TRENT LABORATORIES Project No.: Mercer - Palo Alto, CA

Lab File ID(s): 01140222.D/01140223.D Date Analyzed: 1/14/2002

MS/MSD - Sample No.: A8-4.0

COMPOUND	SPIKE ADDED (ng)	SAMPLE CONCENTRATION (ng)	MS CONCENTRATION (ng)	MS % REC	#	QC. LIMITS REC.
Dichlorodifluoromethane	250	ND	242.31	97		(75 - 125)
Chloromethane	250	ND	220.34	88		(75 - 125)
Vinyl Chloride	250	ND	228.88	92		(75 - 125)
Bromomethane	250	ND	140.18	56	*	(75 - 125)
Chloroethane	250	ND	166.52	67	*	(75 - 125)
Trichlorofluoromethane	250	ND	220.44	88		(75 - 125)
1,1-Dichloroethene	250	ND	182.37	73	*	(75 - 125)
Methylene Chloride	250	ND	262.26	105		(75 - 125)
trans-1,2-Dichloroethene	250	ND	234.31	94		(75 - 125)
1,1-Dichloroethane	250	ND	228.71	91		(75 - 125)
cis-1,2-Dichloroethene	250	ND	239.26	96		(75 - 125)
Chloroform	250	ND	232.96	93		(75 - 125)
1,1,1-Trichloroethane	250	ND	226.39	91		(75 - 125)
Carbon Tetrachloride	250	ND	239.89	96		(75 - 125)
Benzene	250	ND	248.10	99		(75 - 125)
1,2-Dichloroethane	250	ND	211.56	85		(75 - 125)
Trichloroethene	250	ND	196.86	79		(75 - 125)
1,2-Dichloropropane	250	ND	233.19	93		(75 - 125)
Dibromomethane	250	ND	250.36	100		(75 - 125)
Bromodichloromethane	250	ND	227.04	91		(75 - 125)
cis-1,3-Dichloropropene	250	ND	227.86	91		(75 - 125)
Toluene	250	ND	225.38	90		(75 - 125)
trans-1,3-Dichloropropene	250	ND	232.86	93		(75 - 125)
1,1,2-Trichloroethane	250	ND	277.66	111		(75 - 125)
Tetrachloroethene	250	ND	242.01	97		(75 - 125)
Dibromochloromethane	250	ND	255.05	102		(75 - 125)
1,2-Dibromomethane (EDB)	250	ND	268.94	108		(75 - 125)
Chlorobenzene	250	ND	250.13	100		(75 - 125)
1,1,1,2-Tetrachloroethane	250	ND	222.27	89		(75 - 125)
Ethylbenzene	250	ND	247.16	99		(75 - 125)
m&p-Xylene	250	ND	246.48	99		(75 - 125)
o-Xylene	250	ND	246.32	99		(75 - 125)
Styrene	250	ND	241.13	96		(75 - 125)
Bromoform	250	ND	263.71	105		(75 - 125)
Isopropyl benzene	250	ND	307.39	123		(75 - 125)
Bromobenzene	250	ND	278.40	111		(75 - 125)
1,1,2,2-Tetrachloroethane	250	ND	347.48	139	*	(75 - 125)
1,2,3-Trichloropropane	250	ND	317.36	127	*	(75 - 125)
n-Propylbenzene	250	ND	288.90	116		(75 - 125)
2-Chlorotoluene	250	ND	277.88	111		(75 - 125)
4-Chlorotoluene	250	ND	280.18	112		(75 - 125)
1,3,5-Trimethylbenzene	250	ND	294.87	118		(75 - 125)
tert-Butyl benzene	250	ND	282.60	113		(75 - 125)
1,2,4-Trimethylbenzene	250	ND	291.94	117		(75 - 125)
sec-Butylbenzene	250	ND	288.70	115		(75 - 125)
1,3-Dichlorobenzene	250	ND	275.59	110		(75 - 125)
4-Isopropyltoluene	250	ND	282.60	113		(75 - 125)
1,4-Dichlorobenzene	250	ND	278.01	111		(75 - 125)
1,2-Dichlorobenzene	250	ND	275.54	110		(75 - 125)
n-Butylbenzene	250	ND	272.66	109		(75 - 125)
1,2-Dibromo-3-chloropropane	250	ND	371.32	149	*	(75 - 125)
1,2,4-Trichlorobenzene	250	ND	227.34	91		(75 - 125)
Hexachlorobutadiene	250	ND	232.66	93		(75 - 125)
Naphthalene	250	ND	254.03	102		(75 - 125)
1,2,3-Trichlorobenzene	250	ND	226.34	91		(75 - 125)

COMPOUND	SPIKE ADDED (ng)	MSD CONCENTRATION (ng)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Dichlorodifluoromethane	250	224.93	90	7	40	(75 - 125)
Chloromethane	250	216.63	87	2	40	(75 - 125)
Vinyl Chloride	250	223.51	89	2	40	(75 - 125)
Bromomethane	250	190.15	76	18	40	(75 - 125)
Chloroethane	250	165.85	66 *	0	40	(75 - 125)
Trichlorofluoromethane	250	206.52	83	7	40	(75 - 125)
1,1-Dichloroethene	250	177.87	71 *	2	40	(75 - 125)
Methylene Chloride	250	220.19	88	17	40	(75 - 125)
trans-1,2-Dichloroethene	250	225.93	90	15	40	(75 - 125)
1,1-Dichloroethane	250	218.67	87	4	40	(75 - 125)
cis-1,2-Dichloroethene	250	234.87	94	2	40	(75 - 125)
Chloroform	250	221.73	89	5	40	(75 - 125)
1,1,1-Trichloroethane	250	215.39	86	5	40	(75 - 125)
Carbon Tetrachloride	250	225.53	90	0	40	(75 - 125)
Benzene	250	236.22	94	5	40	(75 - 125)
1,2-Dichloroethane	250	191.88	77	10	40	(75 - 125)
Trichloroethene	250	191.06	76	3	40	(75 - 125)
1,2-Dichloropropane	250	222.94	89	4	40	(75 - 125)
Dibromomethane	250	239.42	96	4	40	(75 - 125)
Bromodichloromethane	250	212.84	85	6	40	(75 - 125)
cis-1,3-Dichloropropene	250	215.71	86	5	40	(75 - 125)
Toluene	250	210.70	84	7	40	(75 - 125)
trans-1,3-Dichloropropene	250	217.67	87	7	40	(75 - 125)
1,1,2-Trichloroethane	250	252.47	101	10	40	(75 - 125)
Tetrachloroethene	250	243.04	97	0	40	(75 - 125)
Dibromochloromethane	250	247.28	99	2	40	(75 - 125)
1,2-Dibromomethane (EDB)	250	262.31	105	2	40	(75 - 125)
Chlorobenzene	250	239.90	96	4	40	(75 - 125)
1,1,1,2-Tetrachloroethane	250	211.87	85	5	40	(75 - 125)
Ethylbenzene	250	241.45	97	2	40	(75 - 125)
m&p-Xylene	250	237.66	95	4	40	(75 - 125)
o-Xylene	250	239.81	96	3	40	(75 - 125)
Styrene	250	230.89	92	4	40	(75 - 125)
Bromoform	250	251.51	101	5	40	(75 - 125)
Isopropyl benzene	250	313.15	125	2	40	(75 - 125)
Bromobenzene	250	279.80	112	1	40	(75 - 125)
1,1,2,2-Tetrachloroethane	250	339.46	136 *	2	40	(75 - 125)
1,2,3-Trichloropropane	250	309.65	124	12	40	(75 - 125)
n-Propylbenzene	250	289.21	116	0	40	(75 - 125)
2-Chlorotoluene	250	282.48	113	2	40	(75 - 125)
4-Chlorotoluene	250	278.57	111	1	40	(75 - 125)
1,3,5-Trimethylbenzene	250	300.96	120	2	40	(75 - 125)
tert-Butyl benzene	250	280.76	112	5	40	(75 - 125)
1,2,4-Trimethylbenzene	250	292.82	117	0	40	(75 - 125)
sec-Butylbenzene	250	285.20	114	1	40	(75 - 125)
1,3-Dichlorobenzene	250	267.26	107	3	40	(75 - 125)
4-Isopropyltoluene	250	280.76	112	1	40	(75 - 125)
1,4-Dichlorobenzene	250	267.53	107	5	40	(75 - 125)
1,2-Dichlorobenzene	250	267.58	107	3	40	(75 - 125)
n-Butylbenzene	250	264.99	106	3	40	(75 - 125)
1,2-Dibromo-3-chloropropane	250	350.97	140 *	6	40	(75 - 125)
1,2,4-Trichlorobenzene	250	215.00	86	53 *	40	(75 - 125)
Hexachlorobutadiene	250	221.86	89	5	40	(75 - 125)
Naphthalene	250	235.60	94	8	40	(75 - 125)
1,2,3-Trichlorobenzene	250	210.57	84	7	40	(75 - 125)

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD : 1 out of 17 outside limits

Spike recovery: 10 out of 34 outside limits

Comments: _____

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VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: SEVERN TRENT LABORATORIES Project No.: Mercer - Palo Alto, CA

Lab File ID(s): 01140225.D/01140226.D Date Analyzed: 1/14/2002

MS/MSD - Sample No.: D2-4.0

COMPOUND	SPIKE ADDED (ng)	SAMPLE CONCENTRATION (ng)	MS CONCENTRATION (ng)	MS % REC	#	QC. LIMITS REC.
Dichlorodifluoromethane	250	ND	256.77	103		(75 - 125)
Chloromethane	250	ND	241.42	97		(75 - 125)
Vinyl Chloride	250	ND	248.51	99		(75 - 125)
Bromomethane	250	ND	138.11	55	*	(75 - 125)
Chloroethane	250	ND	174.24	70	*	(75 - 125)
Trichlorofluoromethane	250	ND	227.40	91		(75 - 125)
1,1-Dichloroethene	250	ND	196.85	79		(75 - 125)
Methylene Chloride	250	ND	307.37	123		(75 - 125)
trans-1,2-Dichloroethene	250	ND	237.36	95		(75 - 125)
1,1-Dichloroethane	250	ND	244.42	98		(75 - 125)
cis-1,2-Dichloroethene	250	ND	248.69	99		(75 - 125)
Chloroform	250	ND	243.71	97		(75 - 125)
1,1,1-Trichloroethane	250	ND	242.89	97		(75 - 125)
Carbon Tetrachloride	250	ND	243.36	97		(75 - 125)
Benzene	250	ND	267.61	107		(75 - 125)
1,2-Dichloroethane	250	ND	226.15	90		(75 - 125)
Trichloroethene	250	ND	199.28	80		(75 - 125)
1,2-Dichloropropane	250	ND	256.66	103		(75 - 125)
Dibromomethane	250	ND	268.63	107		(75 - 125)
Bromodichloromethane	250	ND	243.53	97		(75 - 125)
cis-1,3-Dichloropropene	250	ND	242.24	97		(75 - 125)
Toluene	250	ND	229.41	92		(75 - 125)
trans-1,3-Dichloropropene	250	ND	239.12	96		(75 - 125)
1,1,2-Trichloroethane	250	ND	309.02	124		(75 - 125)
Tetrachloroethene	250	ND	246.88	99		(75 - 125)
Dibromochloromethane	250	ND	281.68	113		(75 - 125)
1,2-Dibromomethane (EDB)	250	ND	300.35	120		(75 - 125)
Chlorobenzene	250	ND	261.54	105		(75 - 125)
1,1,1,2-Tetrachloroethane	250	ND	233.95	94		(75 - 125)
Ethylbenzene	250	ND	255.74	102		(75 - 125)
m&p-Xylene	250	ND	251.60	101		(75 - 125)
o-Xylene	250	ND	251.48	101		(75 - 125)
Styrene	250	ND	242.45	97		(75 - 125)
Bromoform	250	ND	290.03	116		(75 - 125)
Isopropyl benzene	250	ND	332.82	133	*	(75 - 125)
Bromobenzene	250	ND	305.74	122		(75 - 125)
1,1,2,2-Tetrachloroethane	250	ND	417.79	167	*	(75 - 125)
1,2,3-Trichloropropane	250	ND	376.83	151	*	(75 - 125)
n-Propylbenzene	250	ND	306.66	123		(75 - 125)
2-Chlorotoluene	250	ND	300.48	120		(75 - 125)
4-Chlorotoluene	250	ND	298.49	119		(75 - 125)
1,3,5-Trimethylbenzene	250	ND	316.80	127	*	(75 - 125)
tert-Butyl benzene	250	ND	280.47	112		(75 - 125)
1,2,4-Trimethylbenzene	250	ND	310.52	124		(75 - 125)
sec-Butylbenzene	250	ND	289.74	116		(75 - 125)
1,3-Dichlorobenzene	250	ND	285.41	114		(75 - 125)
4-Isopropyltoluene	250	ND	280.47	112		(75 - 125)
1,4-Dichlorobenzene	250	ND	293.26	117		(75 - 125)
1,2-Dichlorobenzene	250	ND	288.70	115		(75 - 125)
n-Butylbenzene	250	ND	264.95	106		(75 - 125)
1,2-Dibromo-3-chloropropane	250	ND	432.87	173	*	(75 - 125)
1,2,4-Trichlorobenzene	250	ND	211.03	84		(75 - 125)
Hexachlorobutadiene	250	ND	192.27	77		(75 - 125)
Naphthalene	250	ND	250.23	100		(75 - 125)
1,2,3-Trichlorobenzene	250	ND	201.90	81		(75 - 125)

COMPOUND	SPIKE ADDED (ng)	MSD CONCENTRATION (ng)	MSD % REC	#	% RPD	#	QC LIMITS RPD	QC LIMITS REC.
Dichlorodifluoromethane	250	96.68	39	*	91	*	40	(75 - 125)
Chloromethane	250	213.72	85		12		40	(75 - 125)
Vinyl Chloride	250	227.82	91		9		40	(75 - 125)
Bromomethane	250	119.51	48	*	70	*	40	(75 - 125)
Chloroethane	250	147.45	59	*	17		40	(75 - 125)
Trichlorofluoromethane	250	201.15	80		12		40	(75 - 125)
1,1-Dichloroethene	250	182.59	73	*	8		40	(75 - 125)
Methylene Chloride	250	238.99	96		25		40	(75 - 125)
trans-1,2-Dichloroethene	250	218.59	87		34		40	(75 - 125)
1,1-Dichloroethane	250	223.67	89		9		40	(75 - 125)
cis-1,2-Dichloroethene	250	229.39	92		8		40	(75 - 125)
Chloroform	250	225.55	90		8		40	(75 - 125)
1,1,1-Trichloroethane	250	216.14	86		12		40	(75 - 125)
Carbon Tetrachloride	250	223.25	89		8		40	(75 - 125)
Benzene	250	243.59	97		9		40	(75 - 125)
1,2-Dichloroethane	250	203.30	81		11		40	(75 - 125)
Trichloroethene	250	191.74	77		4		40	(75 - 125)
1,2-Dichloropropane	250	232.91	93		10		40	(75 - 125)
Dibromomethane	250	248.54	99		8		40	(75 - 125)
Bromodichloromethane	250	222.66	89		9		40	(75 - 125)
cis-1,3-Dichloropropene	250	221.48	89		9		40	(75 - 125)
Toluene	250	206.21	82		11		40	(75 - 125)
trans-1,3-Dichloropropene	250	218.45	87		9		40	(75 - 125)
1,1,2-Trichloroethane	250	276.70	111		11		40	(75 - 125)
Tetrachloroethene	250	227.33	91		8		40	(75 - 125)
Dibromochloromethane	250	258.67	103		5		40	(75 - 125)
1,2-Dibromomethane (EDB)	250	278.24	111		8		40	(75 - 125)
Chlorobenzene	250	237.78	95		10		40	(75 - 125)
1,1,1,2-Tetrachloroethane	250	219.98	88		6		40	(75 - 125)
Ethylbenzene	250	233.69	93		9		40	(75 - 125)
m&p-Xylene	250	231.79	93		10		40	(75 - 125)
o-Xylene	250	231.18	92		8		40	(75 - 125)
Styrene	250	219.19	88		10		40	(75 - 125)
Bromoform	250	266.58	107		8		40	(75 - 125)
Isopropyl benzene	250	304.12	122		9		40	(75 - 125)
Bromobenzene	250	280.57	112		9		40	(75 - 125)
1,1,2,2-Tetrachloroethane	250	384.63	154	*	8		40	(75 - 125)
1,2,3-Trichloropropane	250	356.15	142	*	16		40	(75 - 125)
n-Propylbenzene	250	275.92	110		11		40	(75 - 125)
2-Chlorotoluene	250	271.27	109		10		40	(75 - 125)
4-Chlorotoluene	250	267.94	107		11		40	(75 - 125)
1,3,5-Trimethylbenzene	250	287.21	115		10		40	(75 - 125)
tert-Butyl benzene	250	258.99	104		20		40	(75 - 125)
1,2,4-Trimethylbenzene	250	284.04	114		9		40	(75 - 125)
sec-Butylbenzene	250	265.29	106		9		40	(75 - 125)
1,3-Dichlorobenzene	250	259.52	104		10		40	(75 - 125)
4-Isopropyltoluene	250	258.65	103		8		40	(75 - 125)
1,4-Dichlorobenzene	250	259.11	104		8		40	(75 - 125)
1,2-Dichlorobenzene	250	258.95	104		11		40	(75 - 125)
n-Butylbenzene	250	243.23	97		9		40	(75 - 125)
1,2-Dibromo-3-chloropropane	250	401.26	161	*	8		40	(75 - 125)
1,2,4-Trichlorobenzene	250	198.52	79		74	*	40	(75 - 125)
Hexachlorobutadiene	250	190.30	76		1		40	(75 - 125)
Naphthalene	250	239.81	96		4		40	(75 - 125)
1,2,3-Trichlorobenzene	250	197.58	79		2		40	(75 - 125)

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD : 3 out of 17 outside limits

Spike recovery: 15 out of 34 outside limits

Comments: _____

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VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: SEVERN TRENT LABORATORIES Project No.: Mercer - Palo Alto, CA

Lab File ID(s): 01140227.D/01140228.D Date Analyzed: 1/14/2002

MS/MSD - Sample No.: A8-NORTH3-2.0

COMPOUND	SPIKE ADDED (ng)	SAMPLE CONCENTRATION (ng)	MS CONCENTRATION (ng)	MS % REC	#	QC. LIMITS REC.
Dichlorodifluoromethane	250	ND	120.72	48	*	(75 - 125)
Chloromethane	250	ND	208.84	84		(75 - 125)
Vinyl Chloride	250	ND	222.66	89		(75 - 125)
Bromomethane	250	ND	132.59	53	*	(75 - 125)
Chloroethane	250	ND	145.87	58	*	(75 - 125)
Trichlorofluoromethane	250	ND	197.11	79		(75 - 125)
1,1-Dichloroethene	250	ND	182.61	73	*	(75 - 125)
Methylene Chloride	250	ND	210.18	84		(75 - 125)
trans-1,2-Dichloroethene	250	ND	216.45	87		(75 - 125)
1,1-Dichloroethane	250	ND	211.89	85		(75 - 125)
cis-1,2-Dichloroethene	250	ND	228.46	91		(75 - 125)
Chloroform	250	ND	213.76	86		(75 - 125)
1,1,1-Trichloroethane	250	ND	209.64	84		(75 - 125)
Carbon Tetrachloride	250	ND	223.17	89		(75 - 125)
Benzene	250	ND	242.89	97		(75 - 125)
1,2-Dichloroethane	250	ND	198.08	79		(75 - 125)
Trichloroethene	250	ND	193.83	78		(75 - 125)
1,2-Dichloropropane	250	ND	230.11	92		(75 - 125)
Dibromomethane	250	ND	248.46	99		(75 - 125)
Bromodichloromethane	250	ND	219.45	88		(75 - 125)
cis-1,3-Dichloropropene	250	ND	224.93	90		(75 - 125)
Toluene	250	ND	215.35	86		(75 - 125)
trans-1,3-Dichloropropene	250	ND	225.35	90		(75 - 125)
1,1,2-Trichloroethane	250	ND	277.18	111		(75 - 125)
Tetrachloroethene	250	ND	230.96	92		(75 - 125)
Dibromochloromethane	250	ND	251.92	101		(75 - 125)
1,2-Dibromomethane (EDB)	250	ND	274.32	110		(75 - 125)
Chlorobenzene	250	ND	246.27	99		(75 - 125)
1,1,1,2-Tetrachloroethane	250	ND	210.86	84		(75 - 125)
Ethylbenzene	250	ND	242.56	97		(75 - 125)
m&p-Xylene	250	ND	238.56	95		(75 - 125)
o-Xylene	250	ND	240.86	96		(75 - 125)
Styrene	250	ND	240.06	96		(75 - 125)
Bromoform	250	ND	271.95	109		(75 - 125)
Isopropyl benzene	250	ND	297.65	119		(75 - 125)
Bromobenzene	250	ND	270.92	108		(75 - 125)
1,1,2,2-Tetrachloroethane	250	ND	352.96	141	*	(75 - 125)
1,2,3-Trichloropropane	250	ND	322.64	129	*	(75 - 125)
n-Propylbenzene	250	ND	275.61	110		(75 - 125)
2-Chlorotoluene	250	ND	271.11	108		(75 - 125)
4-Chlorotoluene	250	ND	271.76	109		(75 - 125)
1,3,5-Trimethylbenzene	250	ND	289.88	116		(75 - 125)
tert-Butyl benzene	250	ND	271.15	108		(75 - 125)
1,2,4-Trimethylbenzene	250	ND	284.33	114		(75 - 125)
sec-Butylbenzene	250	ND	275.00	110		(75 - 125)
1,3-Dichlorobenzene	250	ND	269.03	108		(75 - 125)
4-Isopropyltoluene	250	ND	271.15	108		(75 - 125)
1,4-Dichlorobenzene	250	ND	275.61	110		(75 - 125)
1,2-Dichlorobenzene	250	ND	276.91	111		(75 - 125)
n-Butylbenzene	250	ND	262.48	105		(75 - 125)
1,2-Dibromo-3-chloropropane	250	ND	404.70	162	*	(75 - 125)
1,2,4-Trichlorobenzene	250	ND	235.18	94		(75 - 125)
Hexachlorobutadiene	250	ND	224.75	90		(75 - 125)
Naphthalene	250	ND	300.59	120		(75 - 125)
1,2,3-Trichlorobenzene	250	ND	241.72	97		(75 - 125)

COMPOUND	SPIKE ADDED (ng)	MSD CONCENTRATION (ng)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Dichlorodifluoromethane	250	236.23	94	65 *	40	(75 - 125)
Chloromethane	250	224.69	90	7	40	(75 - 125)
Vinyl Chloride	250	241.20	96	8	40	(75 - 125)
Bromomethane	250	185.64	74 *	18	40	(75 - 125)
Chloroethane	250	169.56	68 *	15	40	(75 - 125)
Trichlorofluoromethane	250	211.65	85	7	40	(75 - 125)
1,1-Dichloroethene	250	194.64	78	6	40	(75 - 125)
Methylene Chloride	250	259.03	104	21	40	(75 - 125)
trans-1,2-Dichloroethene	250	240.88	96	14	40	(75 - 125)
1,1-Dichloroethane	250	228.40	91	7	40	(75 - 125)
cis-1,2-Dichloroethene	250	243.27	97	6	40	(75 - 125)
Chloroform	250	230.43	92	8	40	(75 - 125)
1,1,1-Trichloroethane	250	225.64	90	7	40	(75 - 125)
Carbon Tetrachloride	250	234.19	94	11	40	(75 - 125)
Benzene	250	255.53	102	5	40	(75 - 125)
1,2-Dichloroethane	250	204.08	82	3	40	(75 - 125)
Trichloroethene	250	200.92	80	4	40	(75 - 125)
1,2-Dichloropropane	250	239.62	96	4	40	(75 - 125)
Dibromomethane	250	267.87	107	8	40	(75 - 125)
Bromodichloromethane	250	228.44	91	4	40	(75 - 125)
cis-1,3-Dichloropropene	250	237.13	95	8	40	(75 - 125)
Toluene	250	232.36	93	8	40	(75 - 125)
trans-1,3-Dichloropropene	250	238.87	96	6	40	(75 - 125)
1,1,2-Trichloroethane	250	289.13	116	4	40	(75 - 125)
Tetrachloroethene	250	243.76	98	5	40	(75 - 125)
Dibromochloromethane	250	255.41	102	10	40	(75 - 125)
1,2-Dibromomethane (EDB)	250	278.95	112	2	40	(75 - 125)
Chlorobenzene	250	256.21	102	4	40	(75 - 125)
1,1,1,2-Tetrachloroethane	250	221.49	89	5	40	(75 - 125)
Ethylbenzene	250	252.17	101	4	40	(75 - 125)
m&p-Xylene	250	253.20	101	4	40	(75 - 125)
o-Xylene	250	253.53	101	5	40	(75 - 125)
Styrene	250	253.33	101	5	40	(75 - 125)
Bromoform	250	274.45	110	1	40	(75 - 125)
Isopropyl benzene	250	302.07	121	1	40	(75 - 125)
Bromobenzene	250	276.68	111	2	40	(75 - 125)
1,1,2,2-Tetrachloroethane	250	348.21	139 *	1	40	(75 - 125)
1,2,3-Trichloropropane	250	313.85	126 *	12	40	(75 - 125)
n-Propylbenzene	250	284.85	114	3	40	(75 - 125)
2-Chlorotoluene	250	278.80	112	3	40	(75 - 125)
4-Chlorotoluene	250	278.79	112	3	40	(75 - 125)
1,3,5-Trimethylbenzene	250	298.40	119	3	40	(75 - 125)
tert-Butyl benzene	250	278.66	111	4	40	(75 - 125)
1,2,4-Trimethylbenzene	250	292.63	117	3	40	(75 - 125)
sec-Butylbenzene	250	283.18	113	3	40	(75 - 125)
1,3-Dichlorobenzene	250	274.11	110	2	40	(75 - 125)
4-Isopropyltoluene	250	278.35	111	3	40	(75 - 125)
1,4-Dichlorobenzene	250	279.40	112	3	40	(75 - 125)
1,2-Dichlorobenzene	250	285.39	114	3	40	(75 - 125)
n-Butylbenzene	250	271.51	109	3	40	(75 - 125)
1,2-Dibromo-3-chloropropane	250	401.60	161 *	1	40	(75 - 125)
1,2,4-Trichlorobenzene	250	239.98	96	51 *	40	(75 - 125)
Hexachlorobutadiene	250	228.92	92	2	40	(75 - 125)
Naphthalene	250	296.46	119	1	40	(75 - 125)
1,2,3-Trichlorobenzene	250	243.33	97	1	40	(75 - 125)

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD : 2 out of 17 outside limits

Spike recovery: 12 out of 34 outside limits

Comments: _____

_____

Sequence Name: C:\HPCHEM\1\SEQUENCE\010802.S
Comment: Alpha
Operator: MEG
Data Path: C:\HPCHEM\1\DATA\010802\
Pre-Seq Cmd:
Post-Seq Cmd:

Method Sections To Run
(X) Full Method
( ) Reprocessing Only

On A Barcode Mismatch
(X) Inject Anyway
( ) Don't Inject

Line	Type	Vial	DataFile	Method	Sample Name
1	BFB	2	01080201	8260	BFB TUNE ~~1/7/02~~ 1/8/02 SE 1/9/02
2	Calibration	3	01080202	8260	ICAL LVL1 25ng 1uL 25ppm SC
3	Calibration	4	01080203	8260	ICAL LVL2 100ng 4uL 25ppm SC
4	Calibration	5	01080204	8260	ICAL LVL3 250ng 10uL 25ppm SC
5	Calibration	6	01080205	8260	ICAL LVL4 500ng 20uL 25ppm SC
6	Calibration	7	01080206	8260	ICAL LVL5 1000ng 40uL 25ppm S
7	Calibration	8	01080207	8260	LCS 250ng 5uL 50ppm LCS SC002
8	Blank	9	01080208	8260	METHOD BLANK
9	Sample	10	01080209	8260	AP0102-19 5-3-ADD24-29 100
10	Sample	11	01080210	8260	AP0102-20 5-3-ADD24-29D 10
11	Sample	12	01080211	8260	AP0102-21 5-3-ADD94-8 100u
12	Sample	13	01080212	8260	AP0102-22 5-3-ADD94-12 100
13	Sample	14	01080213	8260	AP0102-23 5-3-ADD94-12D 10
14	Sample	15	01080214	8260	AP0102-24 5-3-ADD94-16 100
15	Sample	16	01080215	8260	AP0102-25 5-3-ADD94-21 100
16	Sample	17	01080216	8260	AP0102-26 5-3-ADD94-24 100
17	Sample	18	01080217	8260	AP0102-27 TB-1-2-02 5mL
18	Sample	19	01080218	8260	AP0102-04RR 4-1-ADD62-19 2
19	Sample	20	01080219	8260	AP0102-05RR 4-1-ADD62-24.5
20	Sample	21	01080220	8260	AP0102-06RR 4-1-ADD62-30 2
21	Sample	22	01080221	8260	AP0102-22RR 5-3-ADD94-12 5
22	Sample	23	01080222	8260	AP0102-23RR 5-3-ADD94-12D
23	Sample	24	01080223	8260	AP0108-01 SR-01-03-02A 5mL
24	Sample	26	01080224	8260	AP0102-01MS 5-1-ADD26-9 10
25	Sample	27	01080225	8260	AP0102-01MSD 5-1-ADD26-9 1
26	Sample	28	01080226	8260	AP0102-02MS 4-1-ADD62-10 1
27	Sample	29	01080227	8260	AP0102-02MSD 4-1-ADD62-10
28	BFB	13	01080228	8260	BFB TUNE ~~1/7/02~~ 2ND CLOCK 1/8/02 SE 1/9/02
29	Calibration	14	01080229	8260	CCV 250ng 10uL 25ppm SC00301
30	Calibration	15	01080230	8260	LCS 250ng 5uL 50ppm LCS_SC002
31	Blank	16	01080231	8260	METHOD BLANK
32	Blank	1	01080232	8260	DUMMY BLANK BLANK
33	Sample	2	01080233	8260	AP0108-02 5-3-ADD89-9 100uL
34	Sample	3	01080234	8260	AP0108-03 5-3-ADD89-13 100u
35	Sample	4	01080235	8260	AP0108-04 5-3-ADD89-16 100u
36	Sample	5	01080236	8260	AP0108-05 5-3-ADD89-26 100u
37	Sample	6	01080237	8260	AP0108-06 4-2-ADD28-10 100u
38	Sample	7	01080238	8260	AP0108-07 4-2-ADD28-25 100uL
39	Sample	8	01080239	8260	AP0108-08 4-2-ADD28-30 100uL
40	Sample	9	01080240	8260	AP0108-09 4-2-ADD28-30D 100u
41	Sample	10	01080241	8260	AP0108-10 4-2-ADD28-36 100uL

PES Project 5 Point.

* method is named 010702.M

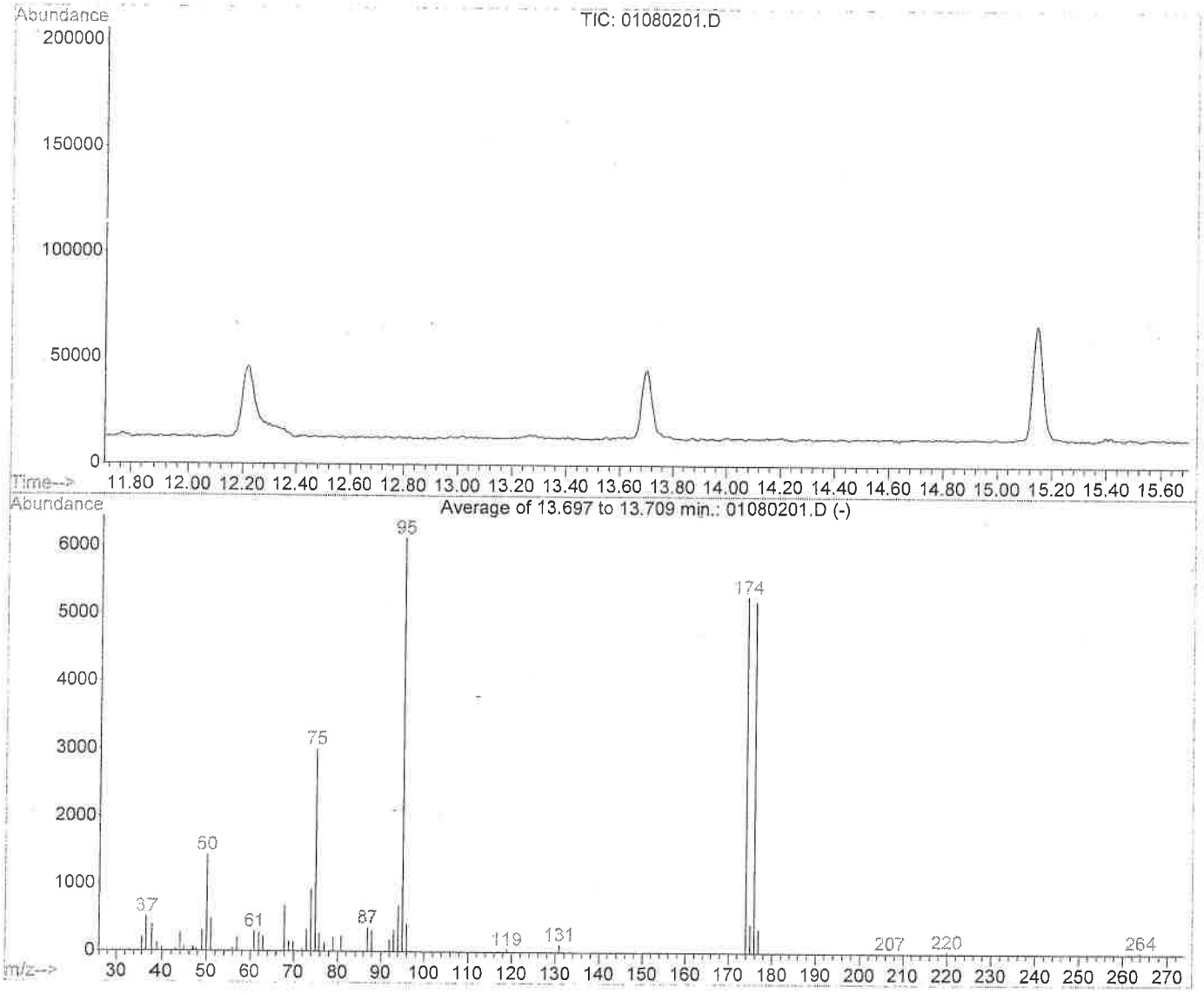
* This is the 5 point used for the PES project that started on 01/09/02. We were on stand-by this day & ran Alameda samples while we waited. D Jaw SE 1/17/02

Last Modified: Tue Jan 08 17:38:03 2002

BFB

Data File : C:\HPCHEM\1\DATA\010802\01080201.D
Acq On : 8 Jan 2002 7:00 am
Sample : BFB TUNE ~~1/7/02~~ 1/8/02 SL 1/17/02
Misc : 1uL SC00225
MS Integration Params: rteint.p
Method : C:\HPCHEM\1\METHODS\010702.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds

Vial: 2
Operator: MEG
Inst : Alpha
Multiplr: 1.00



AutoFind: Scans 1733, 1734, 1735; Background Corrected with Scan 1722

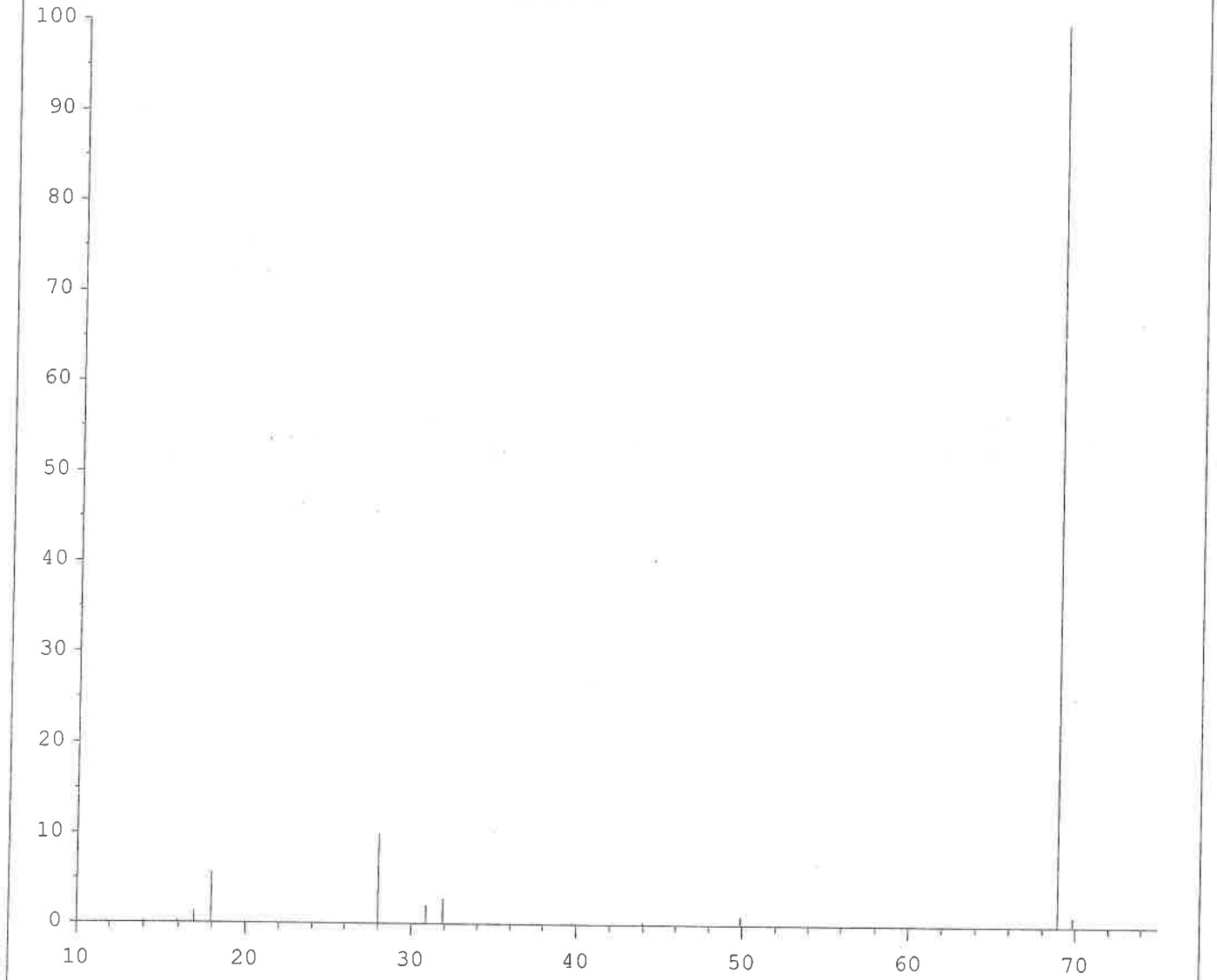
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	23.4	1431	PASS
75	95	30	60	49.1	3006	PASS
95	95	100	100	100.0	6127	PASS
96	95	5	9	6.7	413	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	86.1	5273	PASS
175	174	5	9	8.0	423	PASS
176	174	95	101	98.7	5204	PASS
177	176	5	9	6.9	357	PASS

SL 1/8/02

HP5972 Air and Water Check

Instrument: Alpha
Tue Jan 08 06:45:06 2002 C:\HPCHEM\1\5972\ATUNE.U

Scan: 10.00 - 75.00 Samples: 8 Thresh: 0
53 peaks Base: 68.95 Abundance: 4302336



Mass	Abund	Rel Abund	Iso Mass	Iso Abund	Iso Ratio
68.95	4302336	100.00	69.85	49104	1.14
17.95	243008	5.65	18.95	2574	1.06
28.00	432576	10.05	28.90	5352	1.24

Current Params used:
Rep = 25.2 Entl = 16.56 Entr = 21 FOCUS = 84 EMV = 1800

Relative abundances:

18/69 = 5.65	Water%
28/69 = 10.05	Nitrogen%
32/69 = 2.79	Oxygen%
44/69 = 0.34	Carbon Dioxide%
28/18 = 178.01	Nitrogen/Water%

01/21/02

1/17/02

Response Factor Report Alpha

Method : C:\HPCHEM\1\METHODS\010702.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Tue Jan 08 09:46:16 2002
Response via : Initial Calibration

Please note: Shelli named this method 010702.M but it curve was run on 01/08/02.

01/21/02

Calibration Files
1 =01080202.D 2 =01080203.D 3 =01080204.D
4 =01080205.D 5 =01080206.D

form/ analyte list check against calibration curve 01/21/02

		Compound	1	2	3	4	5	Avg	%RSD
1)	I	Fluorobenzene	----------ISTD----------						
2)		Dichlorodifluorometha	0.385	0.416	0.405	0.390	0.390	0.397	3.23
3)	P	Chloromethane	0.731	0.598	0.570	0.522	0.540	0.592	14.03
4)	C	Vinyl chloride	0.484	0.442	0.414	0.402	0.406	0.430	7.97#
5)		Bromomethane	0.424	0.102	0.067	0.044	0.015	0.130	128.27
6)		Chloroethane	0.422	0.383	0.208	0.129	0.065	0.241	64.72
7)		Trichlorofluoromethan	0.573	0.605	0.559	0.491	0.371	0.520	17.87
8)	m,	C1,1-Dichloroethene	0.422	0.429	0.328	0.302	0.270	0.350	20.49#
9)		Carbon Disulfide		0.061	0.035	0.027	0.019	0.036#	50.87 — NOT AN ANALYTE OF INTEST
10)		Methylene chloride	0.709	0.472	0.441	0.417	0.416	0.491	25.20
11)		trans-1,2-Dichloroeth	0.407	0.403	0.405	0.386	0.386	0.397	2.65
12)	P	1,1-Dichloroethane	0.684	0.666	0.669	0.636	0.636	0.658	3.21
13)		cis-1,2-Dichloroethen	0.389	0.369	0.383	0.362	0.371	0.375	2.97
14)		2,2-Dichloropropane	0.375	0.376	0.418	0.413	0.427	0.401	6.09
15)		Bromochloromethane	0.183	0.179	0.184	0.176	0.178	0.180	1.77
16)	C	Chloroform	0.614	0.601	0.610	0.571	0.568	0.593	3.69#
17)	S	Dibromofluoromethane	0.323	0.309	0.312	0.305	0.303	0.310	2.47
18)	S	1,2-Dichloroethane-d4	0.386	0.376	0.376	0.358	0.338	0.367	5.22
19)		1,1,1-Trichloroethane	0.462	0.458	0.473	0.450	0.442	0.457	2.60
20)		Carbon tetrachloride	0.329	0.324	0.349	0.335	0.363	0.340	4.63
21)		1,1-Dichloropropene	0.479	0.474	0.489	0.465	0.465	0.474	2.11
22)	m	Benzene	1.278	1.254	1.261	1.191	1.149	1.227	4.45
23)		1,2-Dichloroethane	0.474	0.475	0.488	0.472	0.458	0.473	2.23
24)	m	Trichloroethene	0.396	0.366	0.365	0.346	0.322	0.359	7.64
25)	C	1,2-Dichloropropane	0.336	0.317	0.316	0.298	0.296	0.312	5.18#
26)		Dibromomethane	0.203	0.200	0.208	0.196	0.192	0.200	3.12
27)		Bromodichloromethane	0.389	0.377	0.399	0.382	0.399	0.389	2.54
28)		cis-1,3-Dichloroprope	0.301	0.278	0.315	0.300	0.334	0.305	6.76
29)	m,	CToluene	0.664	0.603	0.674	0.559	0.468	0.593	14.23#
30)	S	Toluene-d8	0.754	0.735	0.871	0.739	0.634	0.747	11.31
31)		trans-1,3-Dichloropro	0.206	0.195	0.250	0.238	0.266	0.231	12.78
32)		1,1,2-Trichloroethane	0.219	0.225	0.239	0.228	0.227	0.228	3.22
33)	I	Chlorobenzene-d5	----------ISTD----------						
34)		Tetrachloroethene	0.533	0.547	0.489	0.514	0.579	0.532	6.38
35)		1,3-Dichloropropane	0.793	0.810	0.715	0.768	0.996	0.816	13.06
36)		Dibromochloromethane	0.375	0.415	0.393	0.445	0.659	0.458	25.30
37)		1,2-Dibromoethane	0.312	0.296	0.260	0.271	0.336	0.295	10.46
38)	m,P	Chlorobenzene	1.173	1.217	1.159	1.055	1.118	1.145	5.35
39)		1,1,1,2-Tetrachloroet	0.439	0.424	0.382	0.396	0.538	0.436	14.09
40)	C	Ethyl benzene	1.437	1.336	1.388	1.259	1.361	1.356	4.86#
41)		m,p-Xylene	1.057	0.933	1.010	0.883	0.971	0.971	6.91
42)		o-Xylene	0.517	0.445	0.481	0.432	0.482	0.471	7.15
43)		Styrene	0.667	0.616	0.753	0.669	0.751	0.691	8.59
44)	S	4-Bromofluorobenzene	0.373	0.352	0.405	0.381	0.395	0.381	5.41
45)	P	Bromoform	0.181	0.198	0.207	0.234	0.370	0.238	32.02
46)	I	1,4-Dichlorobenzene-d	----------ISTD----------						
47)		Isopropyl benzene	3.237	3.163	2.952	2.627	2.650	2.926	9.66
48)		Bromobenzene	1.008	1.109	1.207	1.115	1.076	1.103	6.53
49)	P	1,1,2,2-Tetrachloroet	1.187	1.673	1.571	1.817	1.899	1.630	17.05
50)		1,2,3-Trichloropropan	1.069	1.378	1.047	1.080	1.109	1.136	12.03

1/17/02

(#) = Out of Range

Response Factor Report Alpha

Method : C:\HPCHEM\1\METHODS\010702.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Tue Jan 08 09:46:16 2002
Response via : Initial Calibration

Calibration Files
1 =01080202.D 2 =01080203.D 3 =01080204.D
4 =01080205.D 5 =01080206.D

	Compound	1	2	3	4	5	Avg	%RSD
51)	n-Propylbenzene	3.694	2.995	2.878	2.752	2.796	3.023	12.78
52)	2-Chlorotoluene	2.735	2.858	2.793	2.530	2.527	2.689	5.66
53)	4-Chlorotoluene	2.185	2.177	2.262	2.146	2.137	2.182	2.27
54)	1,3,5-Trimethyl benze	2.942	3.015	2.608	2.587	2.512	2.733	8.37
55)	tert-Butyl benzene ✓	3.017	2.823	2.096	1.933	1.789	2.332	23.69
56)	1,2,4-Trimethyl benze	3.100	3.156	2.674	2.625	2.541	2.819	10.16
57)	sec-Butyl benzene ✓	3.873	3.346	2.499	2.175	1.966	2.772	29.20
58)	1,3-Dichlorobenzene ✓	1.541	1.526	1.528	1.468	1.444	1.501	2.85
59)	4-Isopropyl toluene ✓	3.017	2.823	2.109	1.933	1.789	2.334	23.60
60)	1,4-Dichlorobenzene	1.601	1.484	1.435	1.405	1.348	1.455	6.58
61)	1,2-Dichlorobenzene	1.435	1.494	1.477	1.454	1.400	1.452	2.52
62)	n-Butyl benzene ✓	2.888	3.352	2.397	2.237	1.895	2.554	22.38
63)	1,2-Dibromo-3-chlorop	0.107	0.141	0.128	0.147	0.159	0.136	14.44
64)	1,2,4-Trichlorobenzen ✓	0.990	1.893	1.684	1.831	1.823	1.644	22.72
65)	Hexachlorobutadiene ✓	0.738	0.880	0.673	0.610	0.516	0.683	20.08
66)	Naphthalene ✓	1.131	3.739	3.981	4.596	4.618	3.613	39.84
67)	1,2,3-Trichlorobenzen ✓	0.753	1.772	1.690	1.877	1.876	1.594	29.88

✓ Curve Provided.

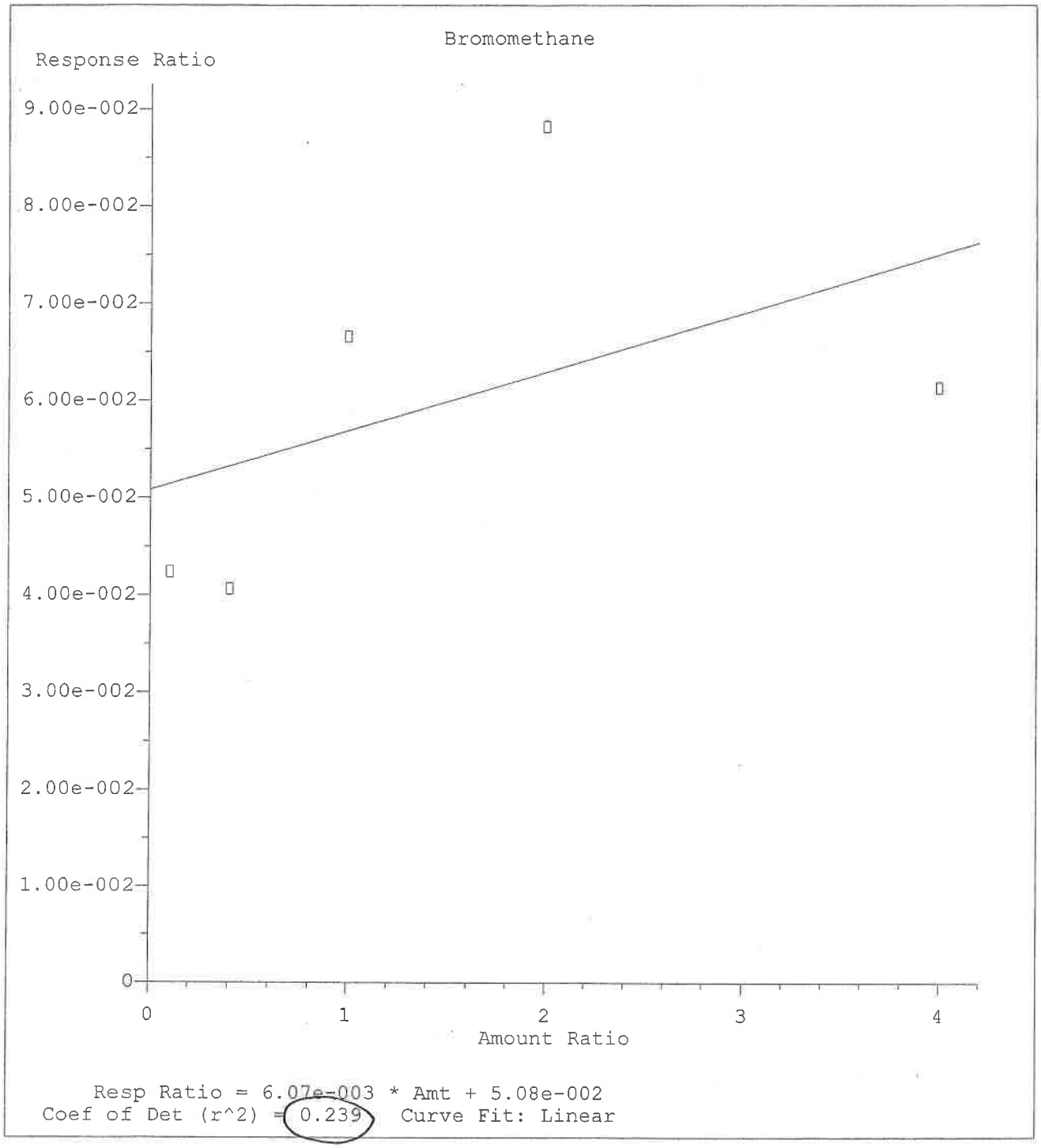
low level (25 ng) Calculation check:

$$(1\,\mu l)(25\,ppm) = (0.001\,ml)\left(25\,\frac{\mu g}{ml}\right)$$

$$= 0.025\,\mu g \times 1000\,\frac{ng}{\mu g}$$

$$= 25\,ng$$

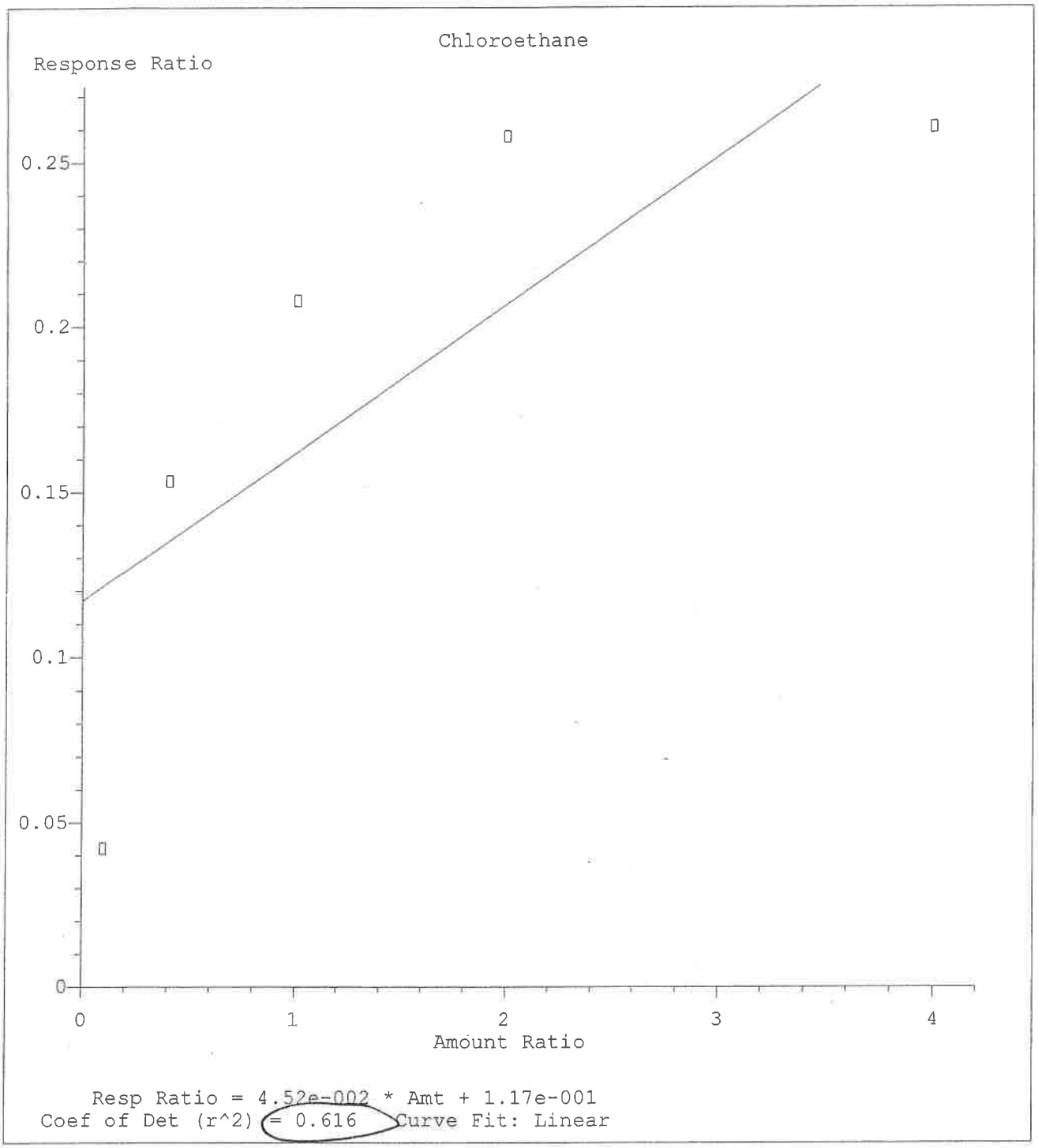
(#) = Out of Range



Method Name: C:\HPCHEM\1\METHODS\010702.M
Calibration Table Last Updated: Tue Jan 08 10:31:32 2002

Focus on this project is PCE & TCE. Need to narrate that bromomethane results are estimated.

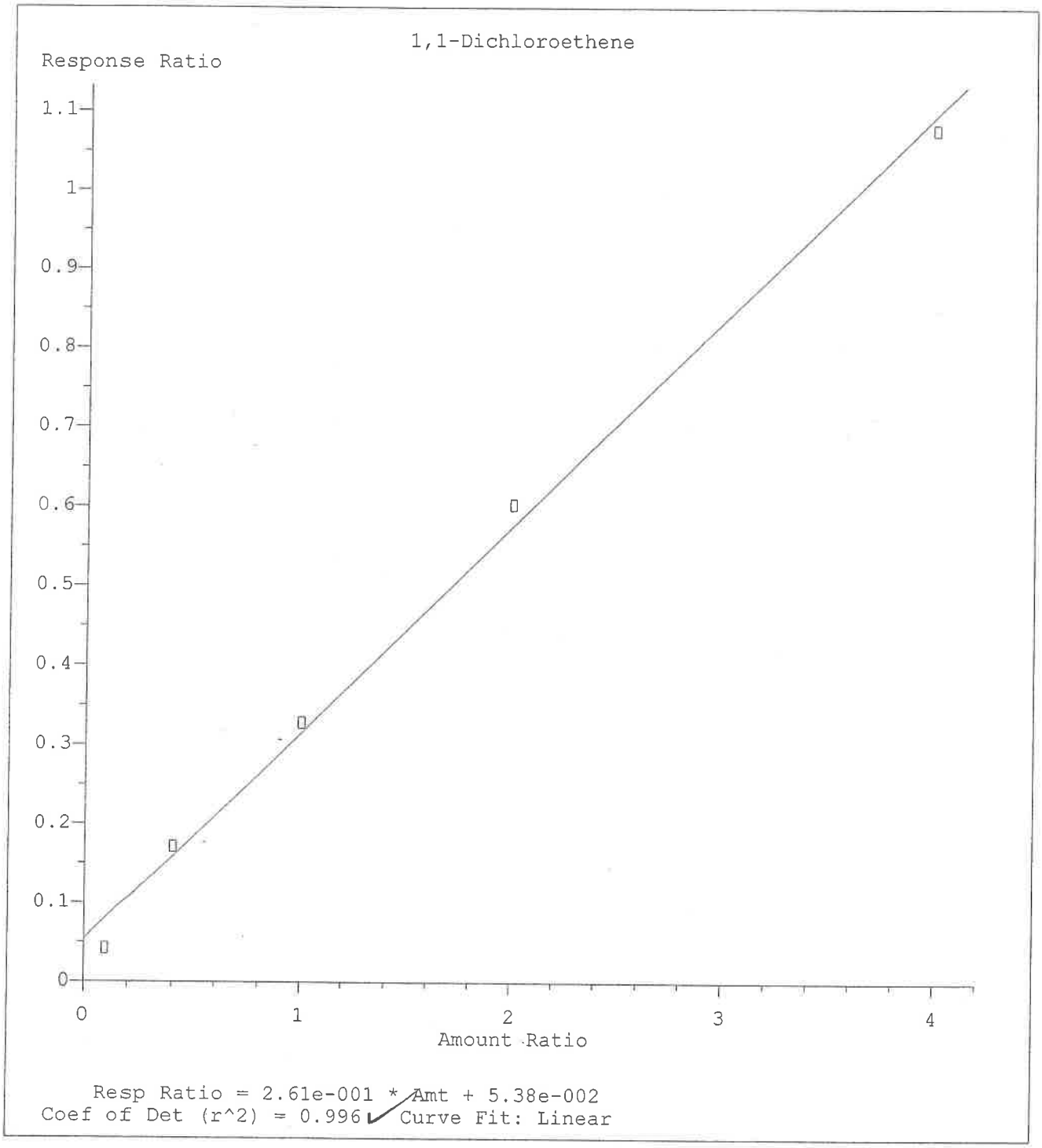
1/17/02



Method Name: C:\HPCHEM\1\METHODS\010702.M
Calibration Table Last Updated: Thu Jan 17 10:27:07 2002

Narrate results for chloroethane are estimated.

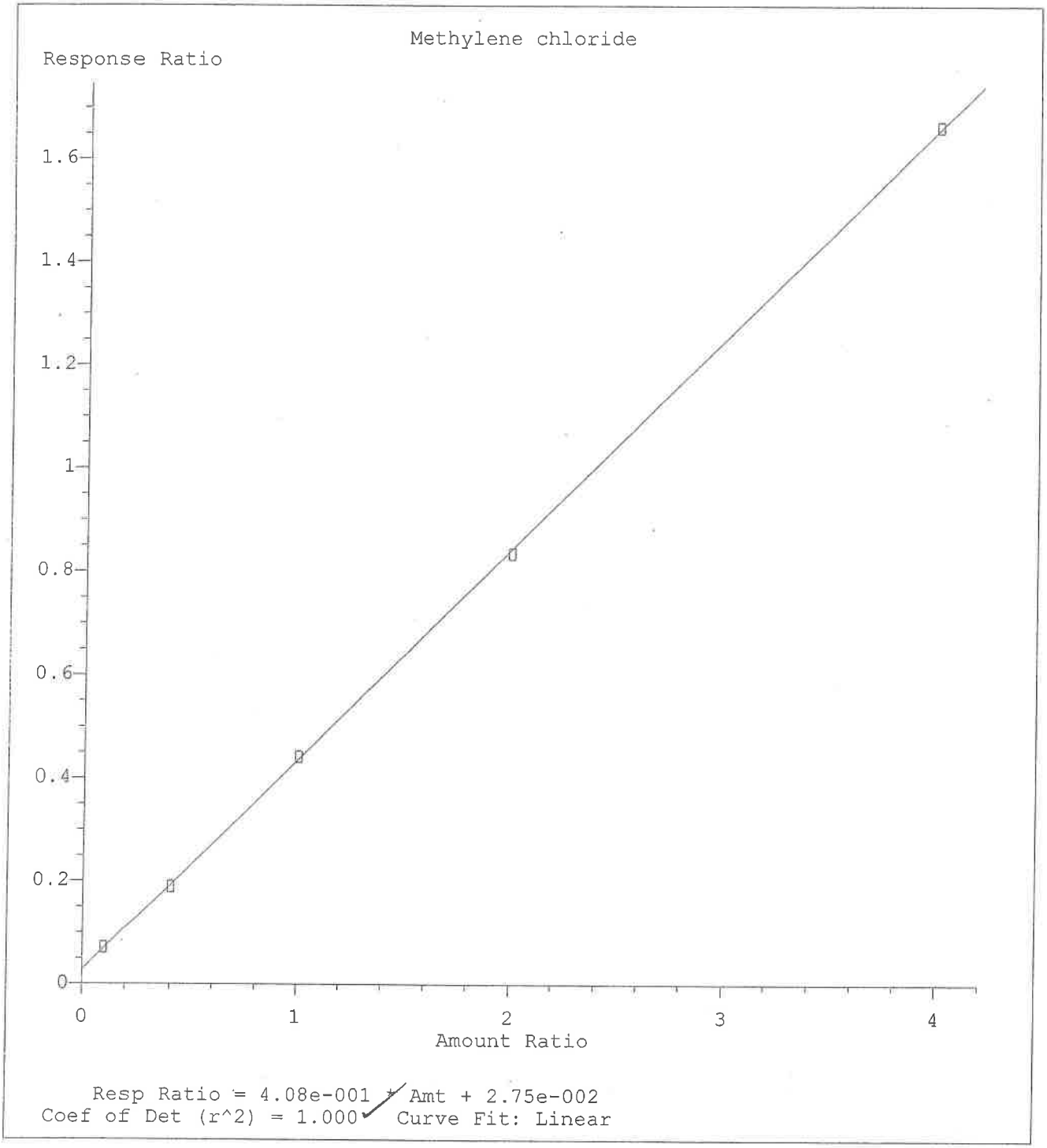
DL 1/17/02



Method Name: C:\HPCHEM\1\METHODS\010702.M
Calibration Table Last Updated: Thu Jan 17 10:27:40 2002

1/17/02

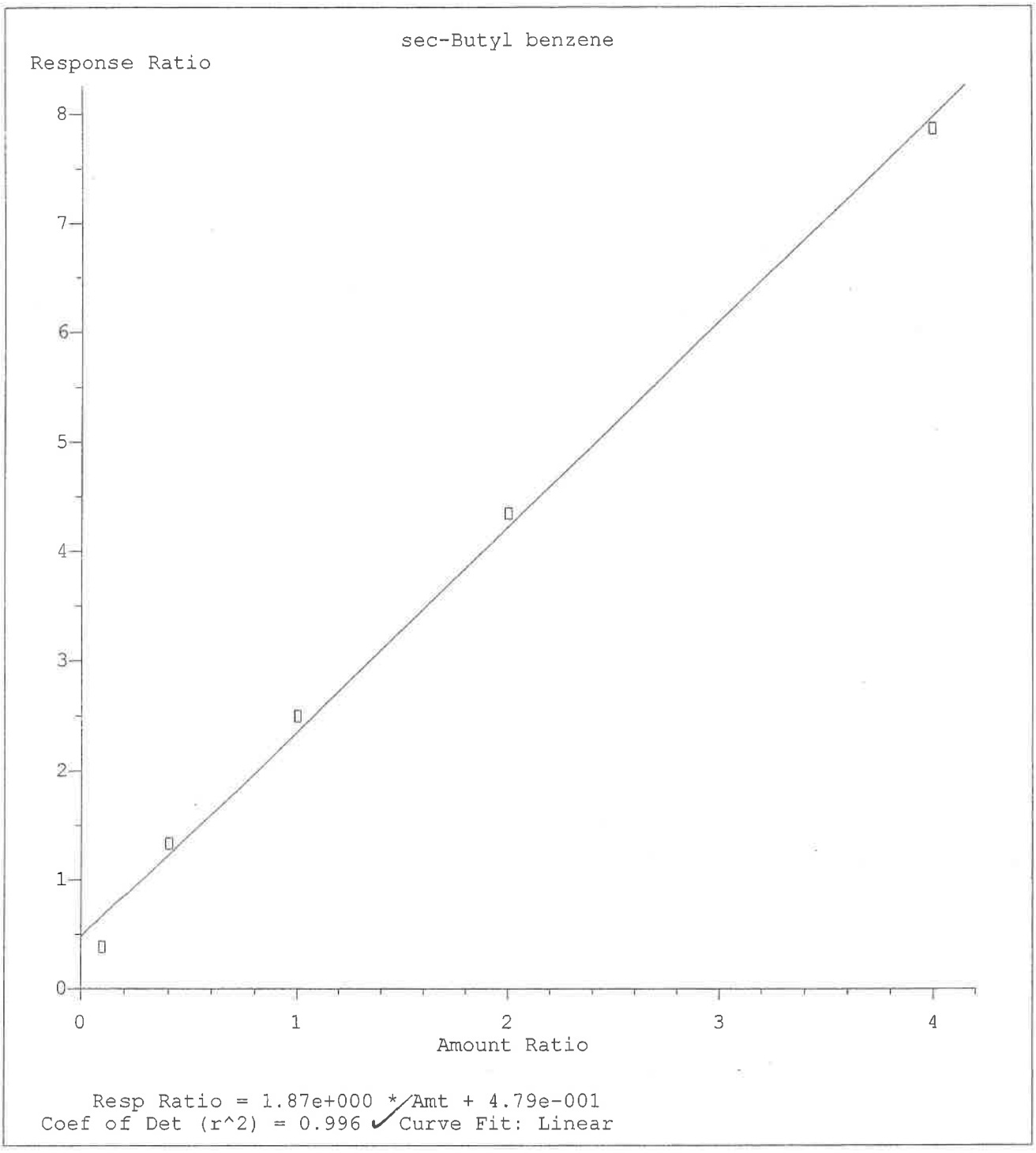
01/21/02



Method Name: C:\HPCHEM\1\METHODS\010702.M
Calibration Table Last Updated: Thu Jan 17 10:27:40 2002

1/17/02

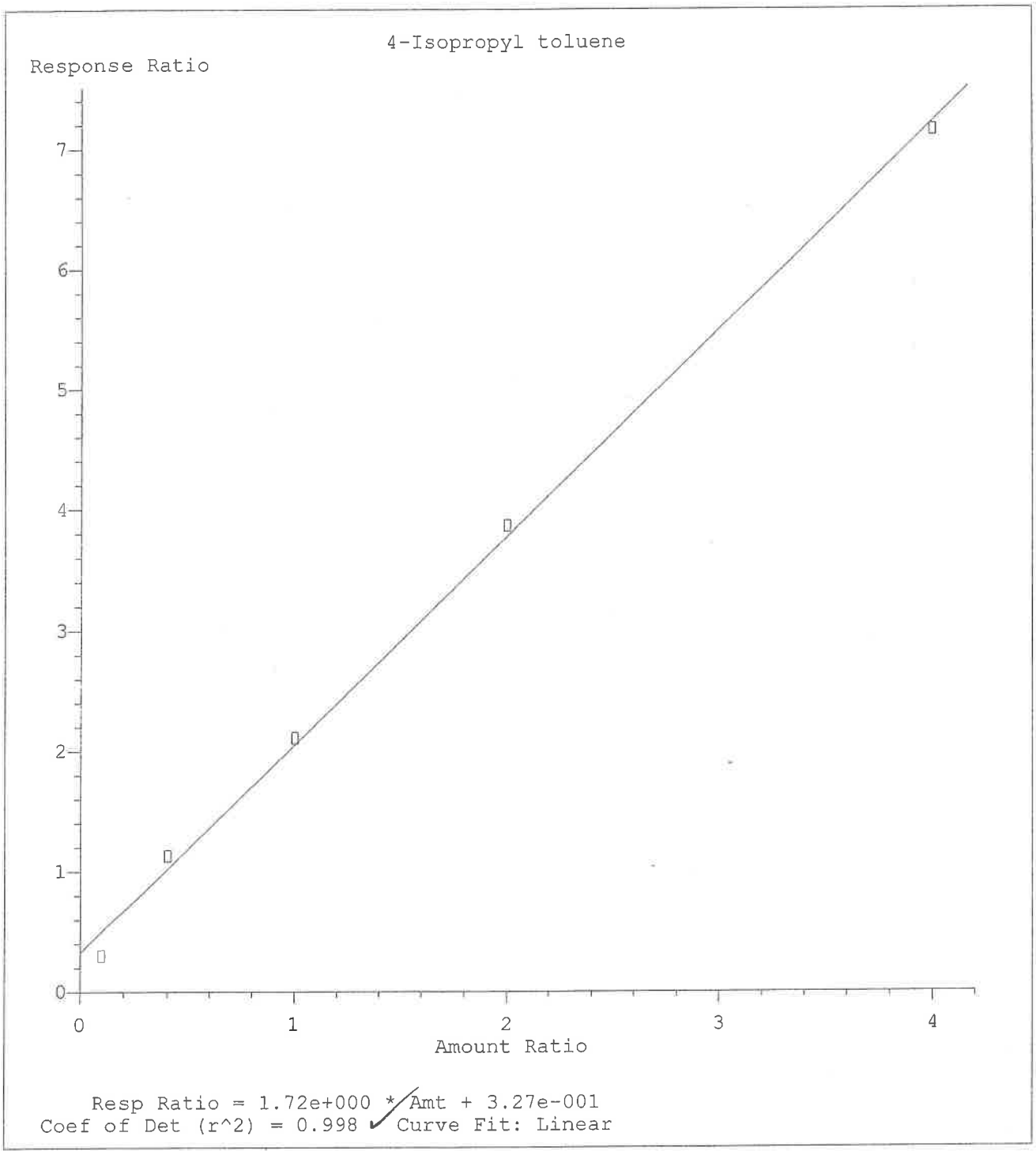
01/21/02



Method Name: C:\HPCHEM\1\METHODS\010702.M
Calibration Table Last Updated: Thu Jan 17 10:29:33 2002

01/21/02

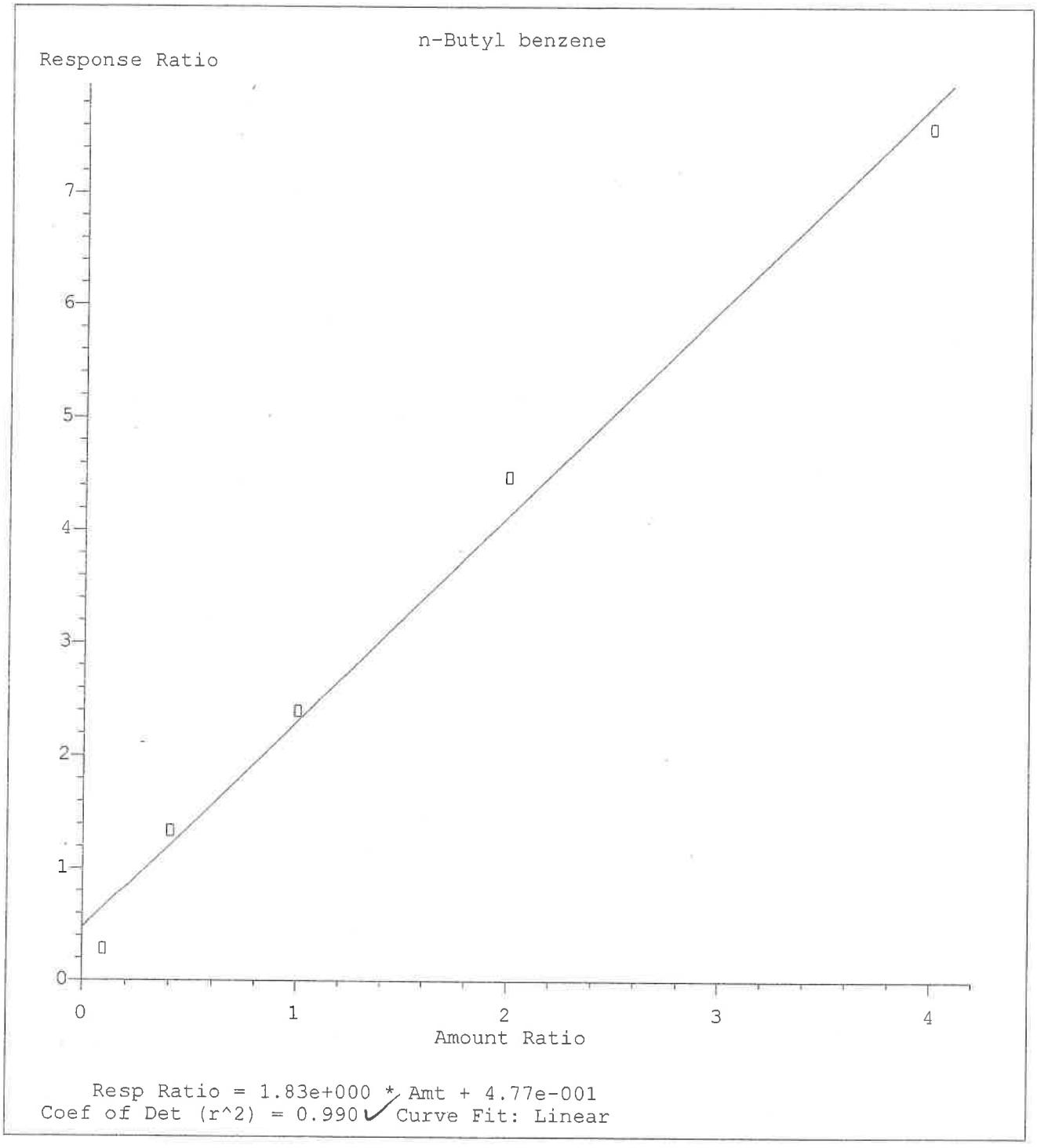
1/17/0



Method Name: C:\HPCHEM\1\METHODS\010702.M
Calibration Table Last Updated: Thu Jan 17 10:29:33 2002

01/21/02

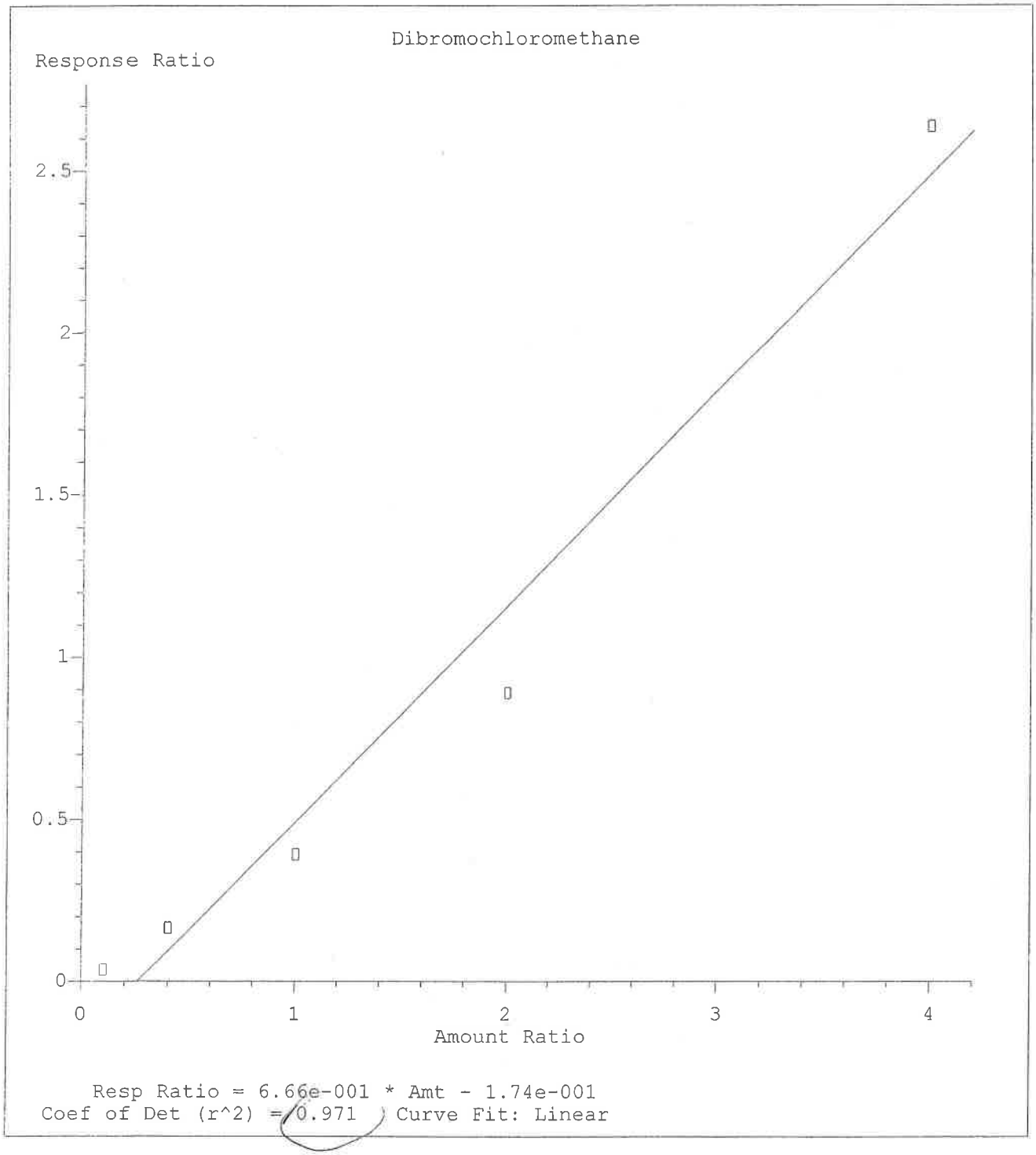
1/17/02



Method Name: C:\HPCHEM\1\METHODS\010702.M
Calibration Table Last Updated: Thu Jan 17 10:29:33 2002

01/21/02

1/17

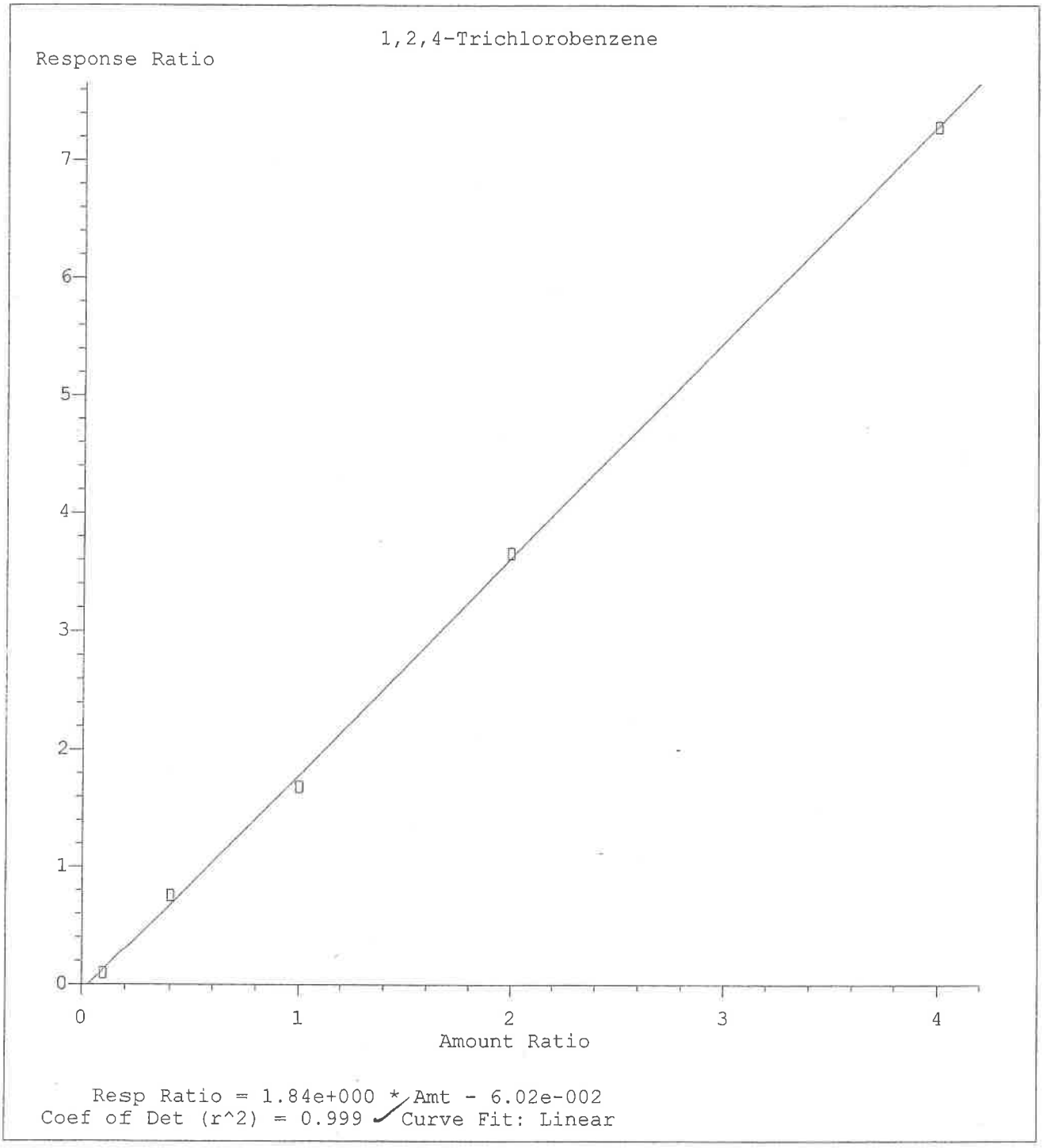


Method Name: C:\HPCHEM\1\METHODS\010702.M
Calibration Table Last Updated: Thu Jan 17 10:29:33 2002

✓

Does not meet linearity requirement.

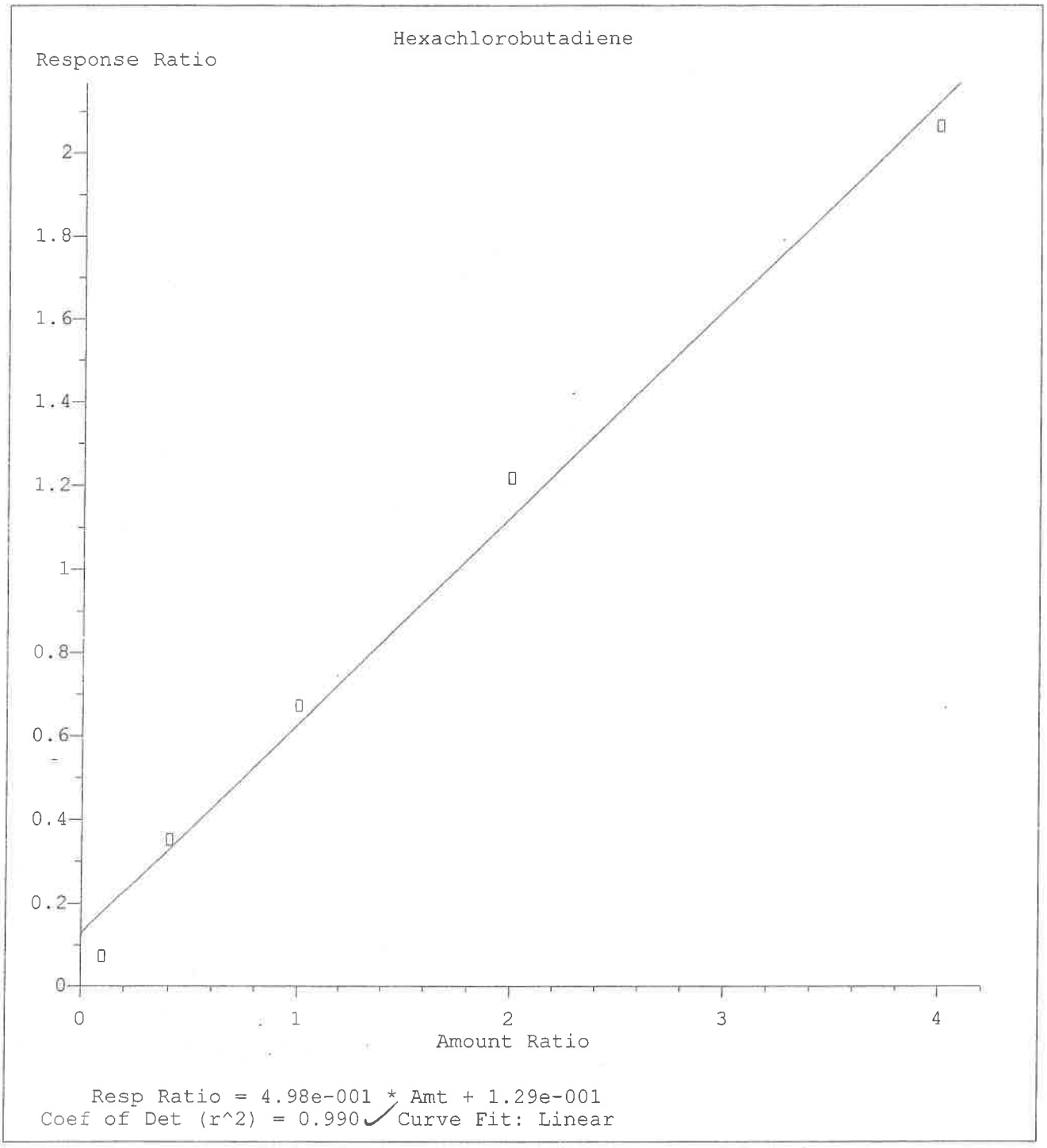
D Sauer



Method Name: C:\HPCHEM\1\METHODS\010702.M
Calibration Table Last Updated: Thu Jan 17 10:29:33 2002

01/21/02

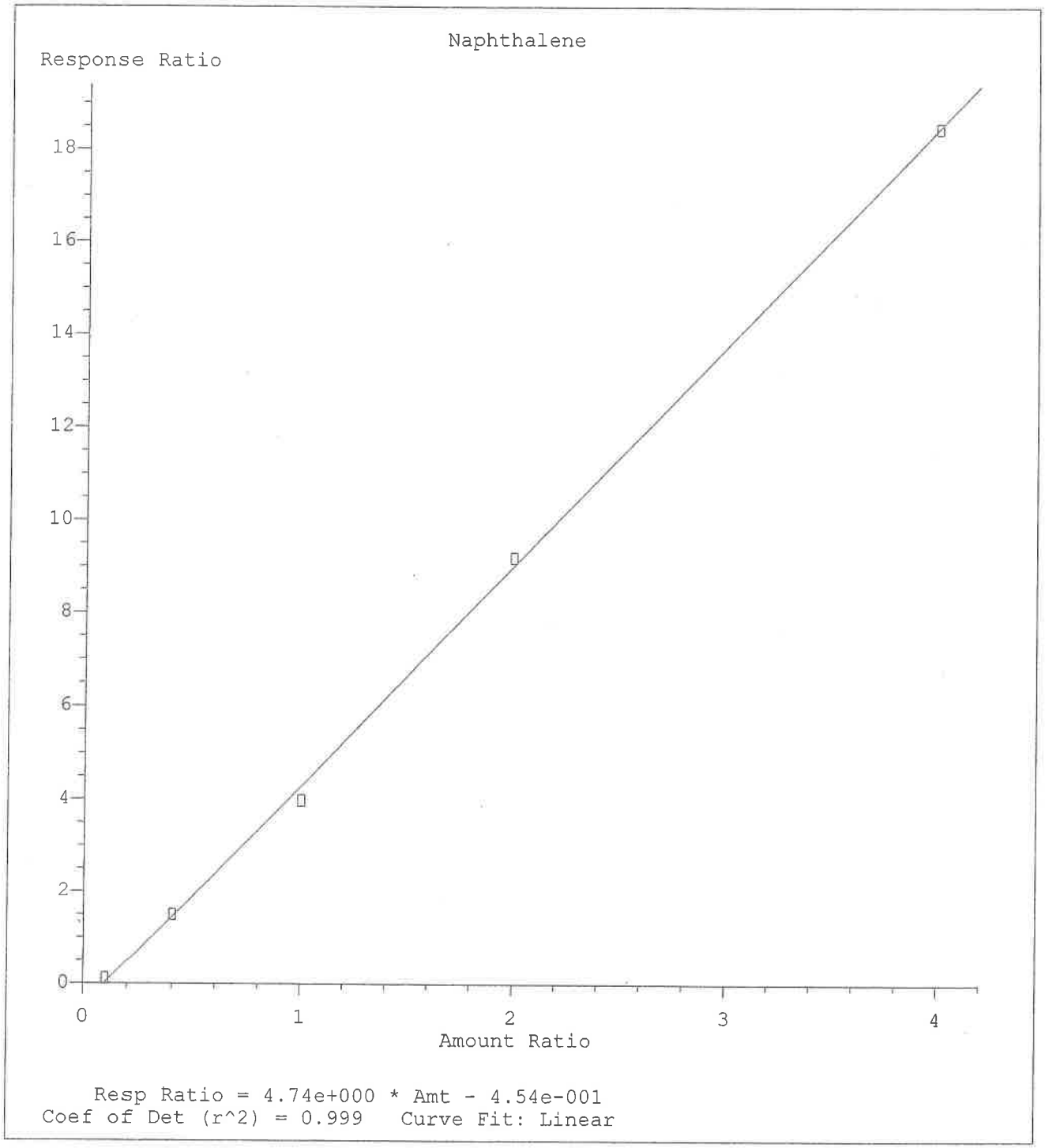
1/17/0



Method Name: C:\HPCHEM\1\METHODS\010702.M
Calibration Table Last Updated: Thu Jan 17 10:29:33 2002

02/21/02

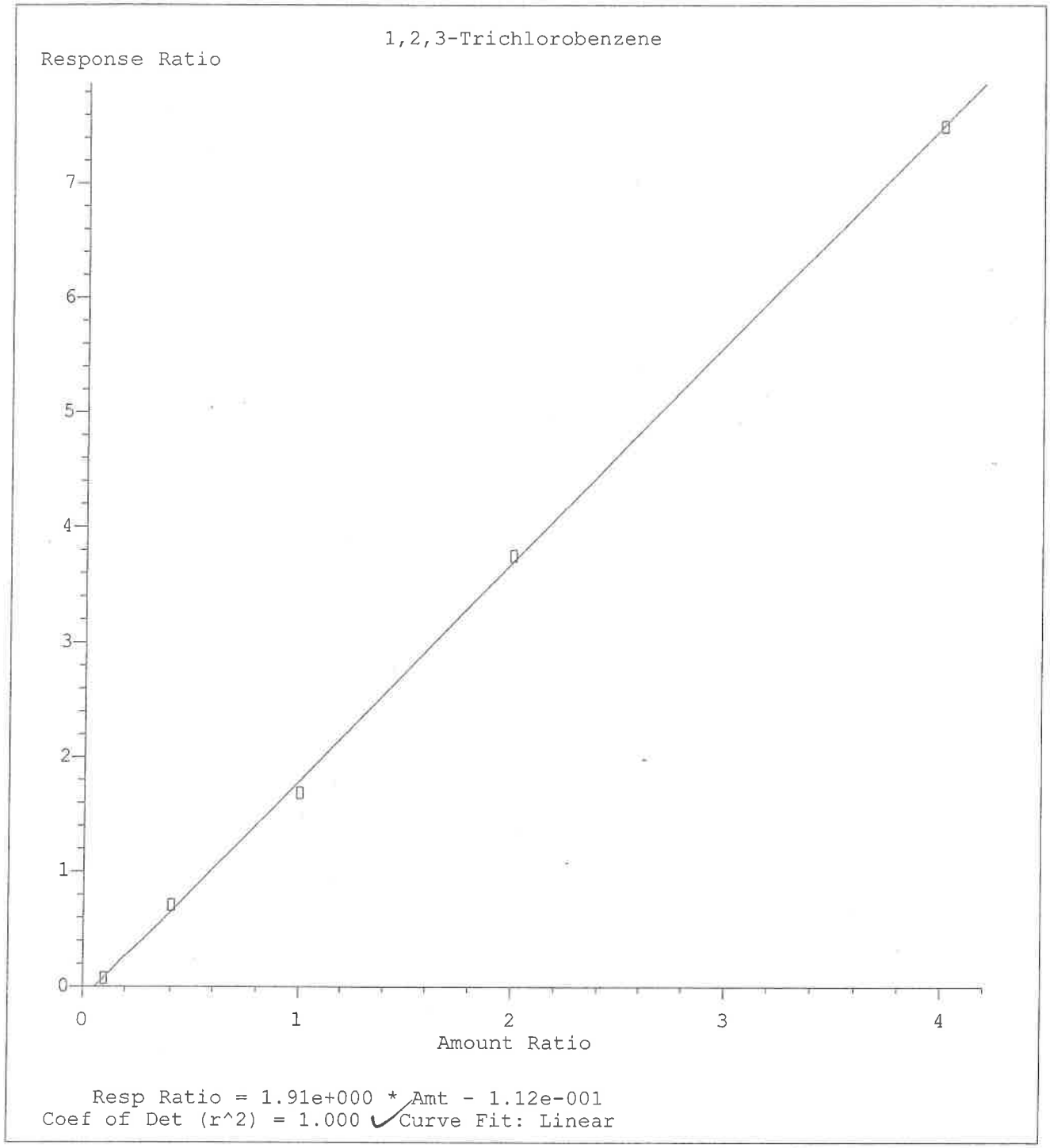
d17/02



Method Name: C:\HPCHEM\1\METHODS\010702.M
Calibration Table Last Updated: Thu Jan 17 10:29:33 2002

01/21/02

1/17/02



Method Name: C:\HPCHEM\1\METHODS\010702.M
Calibration Table Last Updated: Thu Jan 17 10:29:33 2002

01/21/02

1/17/02

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\010802\01080202.D Vial: 3
Acq On : 8 Jan 2002 7:33 am Operator: MEG
Sample : ICAL LVL1 25ng 1uL 25ppm SC00301 + SC0 Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS_SC00223 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 8 7:59 2002 Quant Results File: 010702.RES

Quant Method : C:\HPCHEM\1\METHODS\010702.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Thu Nov 15 09:04:15 2001
Response via : Initial Calibration
DataAcq Meth : 8260

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene	8.68	96	351956	250.00	ng		-0.05
37) Chlorobenzene-d5	12.22	117	173255	250.00	ng		-0.08
52) 1,4-Dichlorobenzene-d4	15.15	152	60515	250.00	ng		-0.10
System Monitoring Compounds							
19) Dibromofluoromethane	7.81	113	11358	23.41	ng		-0.06
Spiked Amount 500.000			Recovery = 4.68%				
20) 1,2-Dichloroethane-d4	8.39	65	13596	18.34	ng		-0.07
Spiked Amount 500.000			Recovery = 3.67%				
34) Toluene-d8	10.37	98	26528	54.15	ng		-0.07
Spiked Amount 500.000			Recovery = 10.83%				
50) 4-Bromofluorobenzene	13.70	95	6455	19.27	ng		-0.09
Spiked Amount 500.000			Recovery = 3.85%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	3.76	85	13546	164.82	ng		97
3) Chloromethane	4.09	50	25741	45.64	ng		98
4) Vinyl chloride	4.18	62	17034	45.78	ng		98
5) Bromomethane	4.63	94	14933	285.40	ng		94
6) Chloroethane	4.77	64	14860m	72.13	ng		
7) Trichlorofluoromethane	4.95	101	20150	36.68	ng		97
9) 1,1-Dichloroethene	5.51	96	14835	41.13	ng		88
11) Methylene chloride	6.06	84	24942	28.51	ng		91
13) trans-1,2-Dichloroethene	6.26	96	14314	27.12	ng		94
14) 1,1-Dichloroethane	6.86	63	24057	21.10	ng		100
15) cis-1,2-Dichloroethene	7.39	96	13702	23.81	ng	#	86
16) 2,2-Dichloropropane	7.51	77	13185	20.55	ng		97
17) Bromochloromethane	7.59	128	6431	24.81	ng	#	88
18) Chloroform	7.63	83	21623	60.13	ng		96
21) 1,1,1-Trichloroethane	7.90	97	16273	25.04	ng		95
24) Carbon tetrachloride	7.84	117	11566	21.31	ng		100
25) 1,1-Dichloropropene	8.02	75	16850	27.82	ng		98
26) Benzene	8.28	78	44971	70.34	ng		99
27) 1,2-Dichloroethane	8.47	62	16680	19.64	ng		95
28) Trichloroethene	8.87	95	13931	30.90	ng		95
29) 1,2-Dichloropropane	9.44	63	11810	19.12	ng		94
30) Dibromomethane	9.34	93	7157	22.99	ng	#	77
31) Bromodichloromethane	9.45	83	13686	20.11	ng		99
32) cis-1,3-Dichloropropene	10.14	75	10603	35.82	ng		92
33) Toluene	10.43	92	23358	22.21	ng		99
36) 1,1,2-Trichloroethane	11.07	83	7701	18.68	ng		98
40) Tetrachloroethene	10.89	164	9238	43.92	ng	#	88
41) 1,3-Dichloropropane	11.42	76	13737	27.14	ng		98
42) Dibromochloromethane	11.31	129	6499	22.66	ng		92
43) 1,2-Dibromoethane	11.65	107	5406	19.81	ng		96
44) Chlorobenzene	12.24	112	20328	32.00	ng		97
45) 1,1,1,2-Tetrachloroethane	12.29	131	7602	32.65	ng	#	74
46) Ethyl benzene	12.22	91	24897	21.87	ng		99
47) m,p-Xylene	12.37	106	18307	23.28	ng		94
48) o-Xylene	12.92	106	8963	22.13	ng	#	71
49) Styrene	12.98	104	11558	17.76	ng		90

(#) = qualifier out of range (m) = manual integration

01/21/02

1/17/02

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\010802\01080202.D Vial: 3
Acq On : 8 Jan 2002 7:33 am Operator: MEG
Sample : ICAL LVL1 25ng 1uL 25ppm SC00301 + SC0 Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS_SC00223 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 8 7:59 2002 Quant Results File: 010702.RES

Quant Method : C:\HPCHEM\1\METHODS\010702.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Thu Nov 15 09:04:15 2001
Response via : Initial Calibration
DataAcq Meth : 8260

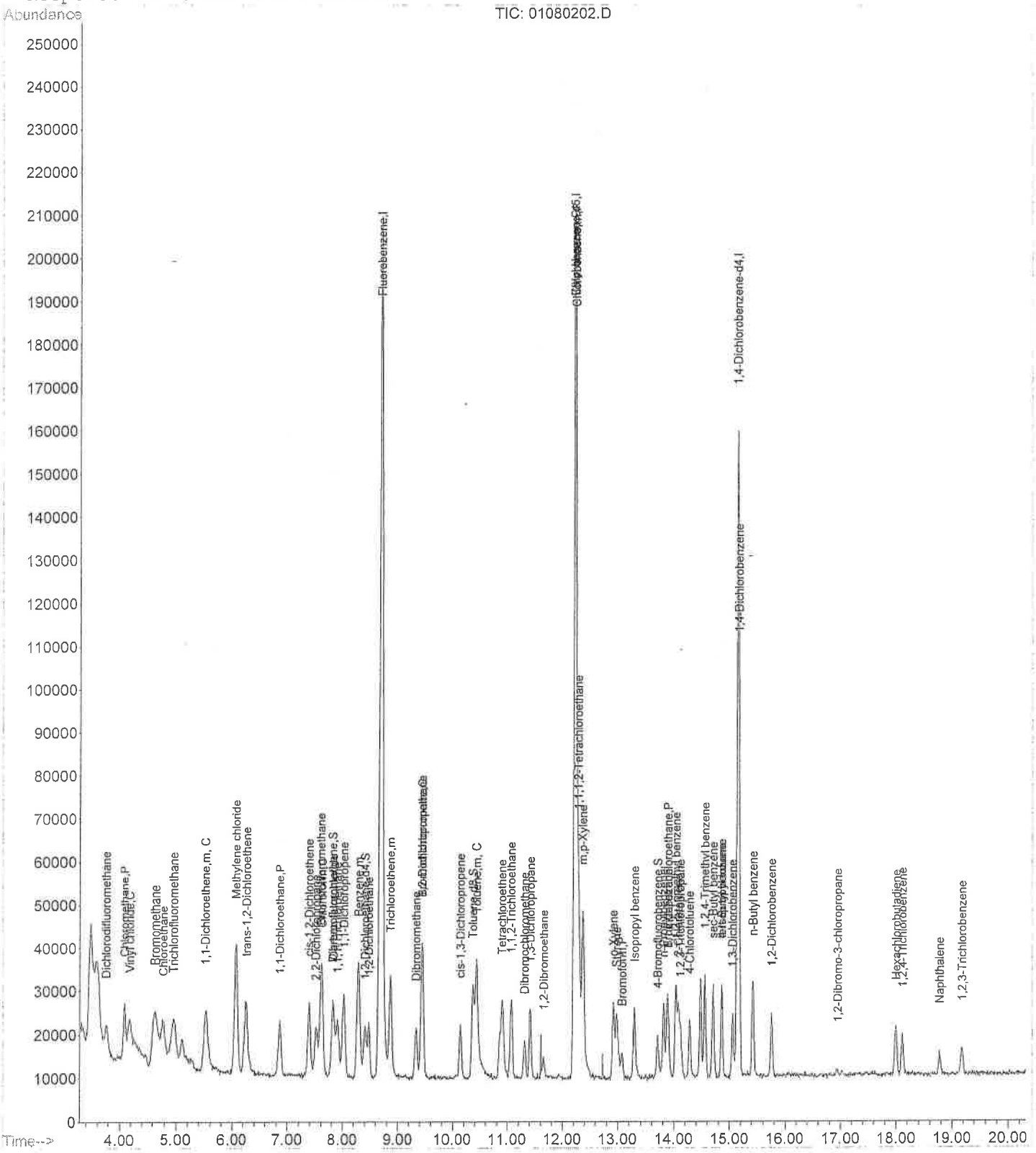
	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
51)	Bromoform	13.08	173	3142	13.89	ng		89
53)	Isopropyl benzene	13.29	105	19589	30.54	ng		98
54)	Bromobenzene	13.88	156	6100	34.28	ng	#	84
55)	1,1,2,2-Tetrachloroethane	13.89	83	7185	27.41	ng		99
56)	1,2,3-Trichloropropane	14.11	75	6468	19.80	ng	#	8
57)	n-Propylbenzene	13.81	91	22352	26.69	ng		100
58)	2-Chlorotoluene	14.07	91	16552	28.62	ng		98
59)	4-Chlorotoluene	14.28	91	13225	25.50	ng		96
60)	1,3,5-Trimethyl benzene	14.03	105	17806	33.77	ng		99
61)	tert-Butyl benzene	14.86	119	18260	32.15	ng	#	59
62)	1,2,4-Trimethyl benzene	14.55	105	18759	35.27	ng		96
63)	sec-Butyl benzene	14.70	105	23436	32.29	ng		100
64)	1,3-Dichlorobenzene	15.06	146	9326	29.37	ng		96
65)	4-Isopropyl toluene	14.86	119	18260	32.15	ng		98
66)	1,4-Dichlorobenzene	15.17	146	9690	30.37	ng		96
67)	1,2-Dichlorobenzene	15.75	146	8686	28.75	ng		96
68)	n-Butyl benzene	15.42	91	17476	28.16	ng		95
69)	1,2-Dibromo-3-chloropropan	16.94	75	649	11.11	ng		91
70)	1,2,4-Trichlorobenzene	18.11	180	5991	23.24	ng		94
71)	Hexachlorobutadiene	17.99	225	4467	32.54	ng		97
72)	Naphthalene	18.77	128	6846	10.57	ng		100
73)	1,2,3-Trichlorobenzene	19.18	180	4559	18.73	ng		97

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\010802\01080202.D Vial: 3
Acq On : 8 Jan 2002 7:33 am Operator: MEG
Sample : ICAL LVL1 25ng 1uL 25ppm SC00301 + SC0 Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS_SC00223 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 8 7:59 2002 Quant Results File: 010702.RES

Method : C:\HPCHEM\1\METHODS\010702.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Thu Jan 17 10:29:33 2002
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\010802\01080203.D Vial: 4
Acq On : 8 Jan 2002 7:57 am Operator: MEG
Sample : ICAL LVL2 100ng 4uL 25ppm SC00301 + SC0 Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS_SC00223 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 8 8:22 2002 Quant Results File: 010702.RES

Quant Method : C:\HPCHEM\1\METHODS\010702.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Tue Jan 08 08:07:42 2002
Response via : Initial Calibration
DataAcq Meth : 8260

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene	8.68	96	351812	250.00	ng		-0.05
33) Chlorobenzene-d5	12.22	117	156887	250.00	ng		-0.08
46) 1,4-Dichlorobenzene-d4	15.15	152	44975	250.00	ng		-0.10
System Monitoring Compounds							
17) Dibromofluoromethane	7.81	113	43491	95.77	ng		-0.06
Spiked Amount 500.000			Recovery = 19.15%				
18) 1,2-Dichloroethane-d4	8.40	65	52873	97.26	ng		-0.06
Spiked Amount 500.000			Recovery = 19.45%				
30) Toluene-d8	10.37	98	103430	97.51	ng		-0.07
Spiked Amount 500.000			Recovery = 19.50%				
44) 4-Bromofluorobenzene	13.70	95	22090	94.48	ng		-0.09
Spiked Amount 500.000			Recovery = 18.90%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	3.76	85	58503	108.02	ng		99
3) Chloromethane	4.09	50	84147	81.76	ng		100
4) Vinyl chloride	4.18	62	62195	91.32	ng		99
5) Bromomethane	4.60	94	14306m	23.96	ng		
6) Chloroethane	4.73	64	53952m	90.80	ng		
7) Trichlorofluoromethane	4.93	101	85122	105.65	ng		99
8) 1,1-Dichloroethene	5.50	96	60329	101.71	ng		97
10) Methylene chloride	6.06	84	66463	66.64	ng		94
11) trans-1,2-Dichloroethene	6.25	96	56680	99.03	ng		97
12) 1,1-Dichloroethane	6.85	63	93770	97.49	ng		98
13) cis-1,2-Dichloroethene	7.38	96	51969	94.86	ng		92
14) 2,2-Dichloropropane	7.51	77	52904	100.35	ng		97
15) Bromochloromethane	7.60	128	25154	97.82	ng		97
16) Chloroform	7.62	83	84544	97.79	ng		100
19) 1,1,1-Trichloroethane	7.91	97	64462	99.07	ng		95
20) Carbon tetrachloride	7.84	117	45602	98.61	ng		97
21) 1,1-Dichloropropene	8.01	75	66673	98.96	ng		96
22) Benzene	8.28	78	176535	98.18	ng		98
23) 1,2-Dichloroethane	8.47	62	66840	100.22	ng		96
24) Trichloroethene	8.86	95	51512	92.48	ng		93
25) 1,2-Dichloropropane	9.44	63	44557	94.36	ng		95
26) Dibromomethane	9.34	93	28213	98.59	ng	#	80
27) Bromodichloromethane	9.46	83	53013	96.88	ng		97
28) cis-1,3-Dichloropropene	10.14	75	39061	92.14	ng		86
29) Toluene	10.43	92	84846	90.85	ng		96
31) trans-1,3-Dichloropropene	10.85	75	27451	94.49	ng		89
32) 1,1,2-Trichloroethane	11.07	83	31703	102.96	ng		95
34) Tetrachloroethene	10.91	164	34341	102.63	ng	#	86
35) 1,3-Dichloropropane	11.41	76	50815	102.13	ng		97
36) Dibromochloromethane	11.31	129	26068	110.74	ng		97
37) 1,2-Dibromoethane	11.65	107	18555	94.76	ng		93
38) Chlorobenzene	12.24	112	76396	103.76	ng		99
39) 1,1,1,2-Tetrachloroethane	12.29	131	26603	96.61	ng		92
40) Ethyl benzene	12.21	91	83852	92.98	ng		97
41) m,p-Xylene	12.37	106	58554	88.30	ng		99
42) o-Xylene	12.92	106	27932	86.04	ng	#	85

(#) = qualifier out of range (m) = manual integration
01080203.D 010702.M Thu Jan 17 10:33:23 2002

01/21/02

1/17/02

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\010802\01080203.D Vial: 4
Acq On : 8 Jan 2002 7:57 am Operator: MEG
Sample : ICAL LVL2 100ng 4uL 25ppm SC00301 + SC0 Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS_SC00223 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 8 8:22 2002 Quant Results File: 010702.RES

Quant Method : C:\HPCHEM\1\METHODS\010702.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Tue Jan 08 08:07:42 2002
Response via : Initial Calibration
DataAcq Meth : 8260

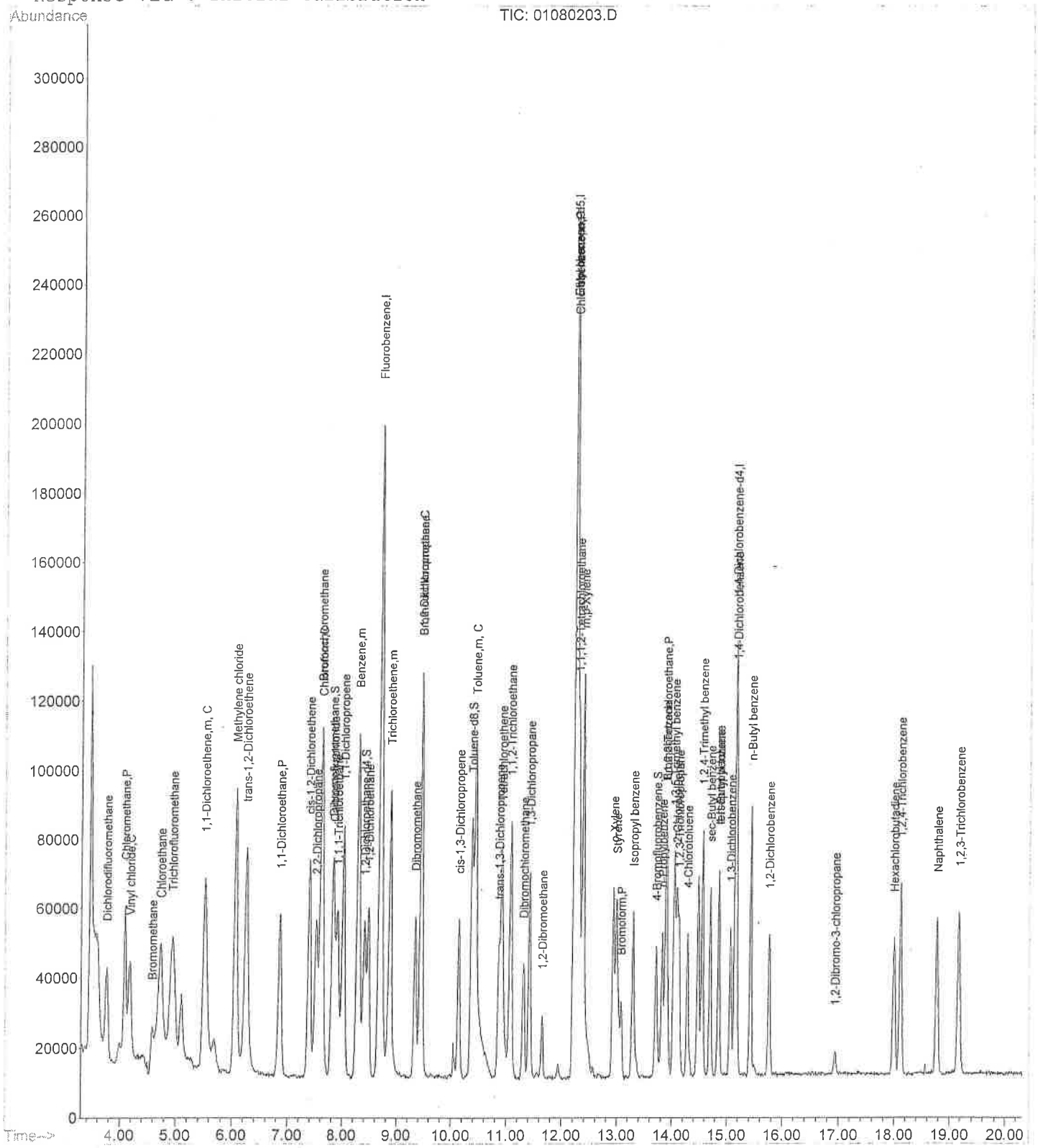
	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
43)	Styrene	12.98	104	38671	92.37	ng		93
45)	Bromoform	13.08	173	12404	108.99	ng		94
47)	Isopropyl benzene	13.29	105	56899	97.71	ng		96
48)	Bromobenzene	13.87	156	19945	109.99	ng	#	73
49)	1,1,2,2-Tetrachloroethane	13.89	83	30101	140.92	ng		99
50)	1,2,3-Trichloropropane	14.12	75	24784	128.89	ng	#	3
51)	n-Propylbenzene	13.81	91	53883	81.09	ng		99
52)	2-Chlorotoluene	14.07	91	51407	104.47	ng		98
53)	4-Chlorotoluene	14.28	91	39173	99.64	ng		97
54)	1,3,5-Trimethyl benzene	14.03	105	54240	102.47	ng		99
55)	tert-Butyl benzene	14.86	119	50781	93.55	ng	#	55
56)	1,2,4-Trimethyl benzene	14.55	105	56771	101.80	ng		98
57)	sec-Butyl benzene	14.70	105	60192	86.39	ng		96
58)	1,3-Dichlorobenzene	15.06	146	27455	99.03	ng		97
59)	4-Isopropyl toluene	14.86	119	50781	93.55	ng		96
60)	1,4-Dichlorobenzene	15.17	146	26697	92.68	ng		99
61)	1,2-Dichlorobenzene	15.75	146	26883	104.11	ng		97
62)	n-Butyl benzene	15.42	91	60304	116.07	ng		95
63)	1,2-Dibromo-3-chloropropan	16.93	75	2538	131.55	ng		96
64)	1,2,4-Trichlorobenzene	18.11	180	34059	191.23	ng		97
65)	Hexachlorobutadiene	17.99	225	15838	119.27	ng		98
66)	Naphthalene	18.77	128	67262	330.49	ng		100
67)	1,2,3-Trichlorobenzene	19.17	180	31877	235.20	ng		97

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\010802\01080203.D Vial: 4
Acq On : 8 Jan 2002 7:57 am Operator: MEG
Sample : ICAL LVL2 100ng 4uL 25ppm SC00301 + SC0 Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS_SC00223 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 8 8:22 2002 Quant Results File: 010702.RES

Method : C:\HPCHEM\1\METHODS\010702.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Thu Jan 17 10:29:33 2002
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\010802\01080204.D Vial: 5
Acq On : 8 Jan 2002 8:21 am Operator: MEG
Sample : ICAL LVL3 250ng 10uL 25ppm SC00301 + SC0 Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS_SC00223 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 8 8:52 2002 Quant Results File: 010702.RES

Quant Method : C:\HPCHEM\1\METHODS\010702.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Tue Jan 08 08:24:15 2002
Response via : Initial Calibration
DataAcq Meth : 8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	8.68	96	338563	250.00	ng	-0.05
33) Chlorobenzene-d5	12.22	117	184861	250.00	ng	-0.08
46) 1,4-Dichlorobenzene-d4	15.15	152	61102	250.00	ng	-0.09
System Monitoring Compounds						
17) Dibromofluoromethane	7.81	113	105615	246.89	ng	-0.07
Spiked Amount 500.000			Recovery = 49.38%			
18) 1,2-Dichloroethane-d4	8.40	65	127315	246.74	ng	-0.06
Spiked Amount 500.000			Recovery = 49.35%			
30) Toluene-d8	10.36	98	295016	292.66	ng	-0.07
Spiked Amount 500.000			Recovery = 58.53%			
44) 4-Bromofluorobenzene	13.71	95	74950	279.78	ng	-0.08
Spiked Amount 500.000			Recovery = 55.96%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	3.73	85	137149	244.67	ng	98
3) Chloromethane	4.08	50	192858	214.26	ng	99
4) Vinyl chloride	4.15	62	140124	232.81	ng	100
5) Bromomethane	4.60	94	22563m	138.11	ng	
6) Chloroethane	4.71	64	70357m	128.98	ng	
7) Trichlorofluoromethane	4.93	101	189143	237.25	ng	99
8) 1,1-Dichloroethene	5.49	96	111141	191.62	ng	92
9) Carbon Disulfide	5.07	76	11996m	145.44	ng	
10) Methylene chloride	6.04	84	149328	186.74	ng	91
11) trans-1,2-Dichloroethene	6.24	96	137186	251.36	ng	97
12) 1,1-Dichloroethane	6.86	63	226330	247.62	ng	98
13) cis-1,2-Dichloroethene	7.37	96	129837	252.76	ng	91
14) 2,2-Dichloropropane	7.51	77	141443	278.31	ng	98
15) Bromochloromethane	7.59	128	62189	254.08	ng	94
16) Chloroform	7.61	83	206365	250.81	ng	99
19) 1,1,1-Trichloroethane	7.90	97	160294	257.19	ng	97
20) Carbon tetrachloride	7.84	117	118011	267.03	ng	99
21) 1,1-Dichloropropene	8.01	75	165415	257.65	ng	99
22) Benzene	8.28	78	426862	248.95	ng	100
23) 1,2-Dichloroethane	8.47	62	165079	256.92	ng	96
24) Trichloroethene	8.86	95	123592	248.13	ng	92
25) 1,2-Dichloropropane	9.44	63	106823	241.90	ng	91
26) Dibromomethane	9.34	93	70502	257.83	ng #	79
27) Bromodichloromethane	9.45	83	135071	260.56	ng	97
28) cis-1,3-Dichloropropene	10.14	75	106502	271.73	ng	82
29) Toluene	10.42	92	228238	266.12	ng	97
31) trans-1,3-Dichloropropene	10.85	75	84520	310.88	ng	88
32) 1,1,2-Trichloroethane	11.07	83	80940	269.17	ng	97
34) Tetrachloroethene	10.90	164	90336	223.59	ng	92
35) 1,3-Dichloropropane	11.41	76	132131	220.95	ng	99
36) Dibromochloromethane	11.31	129	72577	248.32	ng	97
37) 1,2-Dibromoethane	11.65	107	48035	218.99	ng	99
38) Chlorobenzene	12.24	112	214304	238.58	ng	96
39) 1,1,1,2-Tetrachloroethane	12.29	131	70599	224.76	ng	98
40) Ethyl benzene	12.21	91	256657	258.62	ng	98
41) m,p-Xylene	12.37	106	186684	268.49	ng	98

(#) = qualifier out of range (m) = manual integration
01080204.D 010602A.M Tue Jan 08 16:56:04 2002

01/21/02

1/17/02

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\010802\01080204.D Vial: 5
Acq On : 8 Jan 2002 8:21 am Operator: MEG
Sample : ICAL LVL3 250ng 10uL 25ppm SC00301 + SC0 Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS_SC00223 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 8 8:52 2002 Quant Results File: 010702.RES

Quant Method : C:\HPCHEM\1\METHODS\010702.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Tue Jan 08 08:24:15 2002
Response via : Initial Calibration
DataAcq Meth : 8260

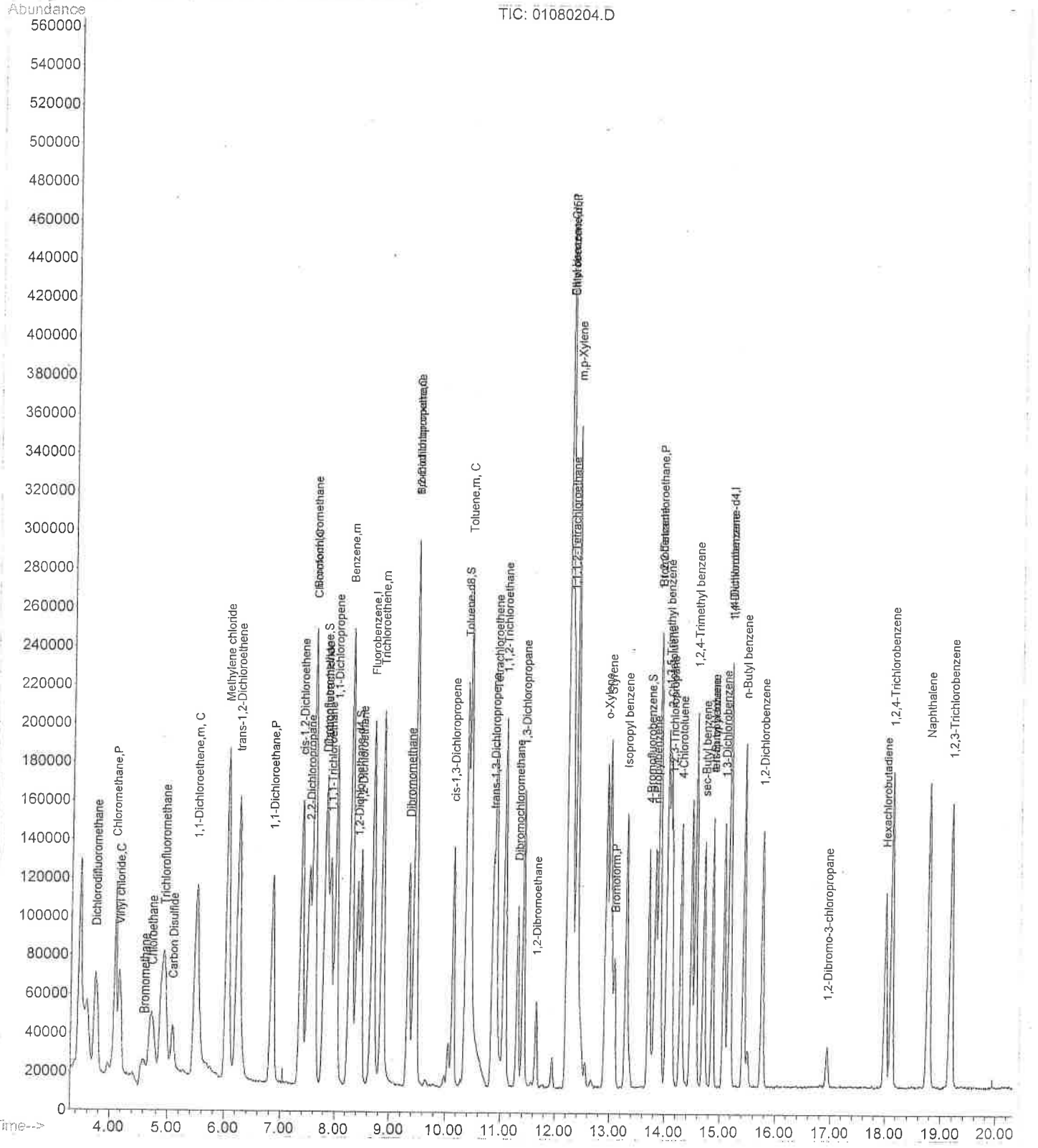
Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
42) o-Xylene	12.92	106	88939	267.67	ng	#	85
43) Styrene	12.98	104	139165	303.94	ng		91
45) Bromoform	13.07	173	38293	273.27	ng		97
47) Isopropyl benzéne	13.29	105	180365	233.00	ng		98
48) Bromobenzene	13.87	156	73758	273.66	ng	#	79
49) 1,1,2,2-Tetrachloroethane	13.89	83	96002	238.83	ng		99
50) 1,2,3-Trichloropropane	14.11	75	63953	192.47	ng	#	6
51) n-Propylbenzene	13.81	91	175841	236.96	ng		98
52) 2-Chlorotoluene	14.08	91	170643	244.95	ng		100
53) 4-Chlorotoluene	14.28	91	138225	259.67	ng		99
54) 1,3,5-Trimethyl benzene	14.03	105	159339	216.54	ng		98
55) tert-Butyl benzene	14.86	119	128040	184.84	ng	#	57
56) 1,2,4-Trimethyl benzene	14.55	105	163371	212.04	ng		99
57) sec-Butyl benzene	14.70	105	152720	185.04	ng		99
58) 1,3-Dichlorobenzene	15.06	146	93359	250.15	ng		99
59) 4-Isopropyl toluene	14.86	119	128883	186.06	ng		98
60) 1,4-Dichlorobenzene	15.17	146	87679	240.62	ng		98
61) 1,2-Dichlorobenzene	15.75	146	90244	247.67	ng		98
62) n-Butyl benzene	15.42	91	146445	180.22	ng		95
63) 1,2-Dibromo-3-chloropropan	16.94	75	7803	229.54	ng	#	76
64) 1,2,4-Trichlorobenzene	18.12	180	102881	228.76	ng		93
65) Hexachlorobutadiene	17.99	225	41099	192.84	ng		97
66) Naphthalene	18.77	128	243231	277.56	ng		100
67) 1,2,3-Trichlorobenzene	19.17	180	103281	246.83	ng		95

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\010802\01080204.D Vial: 5
Acq On : 8 Jan 2002 8:21 am Operator: MEG
Sample : ICAL LVL3 250ng 10uL 25ppm SC00301 + SC0 Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS_SC00223 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 8 8:52 2002 Quant Results File: 010702.RES

Method : C:\HPCHEM\1\METHODS\010602A.M (RTE Integrator)
Title : 8260 Purgable Organics
Last Update : Sun Jan 06 12:10:50 2002
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\010802\01080205.D Vial: 6
Acq On : 8 Jan 2002 8:46 am Operator: MEG
Sample : ICAL LVL4 500ng 20uL 25ppm SC00301 + SC0 Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS_SC00223 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 8 9:36 2002 Quant Results File: 010702.RES

Quant Method : C:\HPCHEM\1\METHODS\010702.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Tue Jan 08 08:54:41 2002
Response via : Initial Calibration
DataAcq Meth : 8260

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	8.68	96	340130	250.00 ng	0.00
33) Chlorobenzene-d5	12.22	117	160624	250.00 ng	0.00
46) 1,4-Dichlorobenzene-d4	15.15	152	51635	250.00 ng	0.00
System Monitoring Compounds					
17) Dibromofluoromethane	7.81	113	207574	485.01 ng	0.00
Spiked Amount 500.000			Recovery =	97.00%	
18) 1,2-Dichloroethane-d4	8.40	65	243223	471.25 ng	0.00
Spiked Amount 500.000			Recovery =	94.25%	
30) Toluene-d8	10.37	98	503034	469.99 ng	0.00
Spiked Amount 500.000			Recovery =	94.00%	
44) 4-Bromofluorobenzene	13.70	95	122315	505.41 ng	0.00
Spiked Amount 500.000			Recovery =	101.08%	
Target Compounds					Qvalue
2) Dichlorodifluoromethane	3.78	85	265265	479.79 ng	100
3) Chloromethane	4.08	50	355064	412.29 ng	99
4) Vinyl chloride	4.15	62	273226	449.67 ng	98
5) Bromomethane	4.60	94	30020	296.22 ng	100
6) Chloroethane	4.70	64	87701	190.83 ng	100
7) Trichlorofluoromethane	4.92	101	334237	424.53 ng	98
8) 1,1-Dichloroethene	5.49	96	205332	440.26 ng	98
9) Carbon Disulfide	5.08	76	18635	351.69 ng	83
10) Methylene chloride	6.03	84	283972	386.04 ng	99
11) trans-1,2-Dichloroethene	6.24	96	262276	476.13 ng	98
12) 1,1-Dichloroethane	6.85	63	432941	472.98 ng	99
13) cis-1,2-Dichloroethene	7.38	96	246309	475.55 ng	98
14) 2,2-Dichloropropane	7.51	77	280621	529.63 ng	100
15) Bromochloromethane	7.59	128	119769	484.44 ng	95
16) Chloroform	7.61	83	388207	469.13 ng	99
19) 1,1,1-Trichloroethane	7.90	97	305938	483.98 ng	99
20) Carbon tetrachloride	7.83	117	228217	502.61 ng	99
21) 1,1-Dichloropropene	8.01	75	316323	477.93 ng	96
22) Benzene	8.28	78	810287	471.05 ng	100
23) 1,2-Dichloroethane	8.47	62	321192	493.04 ng	100
24) Trichloroethene	8.86	95	235468	473.59 ng	99
25) 1,2-Dichloropropane	9.44	63	202557	461.56 ng	98
26) Dibromomethane	9.33	93	133157	479.71 ng	98
27) Bromodichloromethane	9.45	83	259969	492.25 ng	96
28) cis-1,3-Dichloropropene	10.14	75	203949	503.38 ng	95
29) Toluene	10.43	92	380187	431.97 ng	100
31) trans-1,3-Dichloropropene	10.85	75	161859	548.11 ng	95
32) 1,1,2-Trichloroethane	11.07	83	154762	499.53 ng	97
34) Tetrachloroethene	10.90	164	165047	516.81 ng	97
35) 1,3-Dichloropropane	11.41	76	246864	527.48 ng	99
36) Dibromochloromethane	11.31	129	143033	564.50 ng	98
37) 1,2-Dibromoethane	11.65	107	87164	511.58 ng	99
38) Chlorobenzene	12.24	112	339027	452.03 ng	95
39) 1,1,1,2-Tetrachloroethane	12.28	131	127130	509.79 ng	97
40) Ethyl benzene	12.21	91	404574	455.75 ng	99
41) m,p-Xylene	12.37	106	283706	441.68 ng	99

(#) = qualifier out of range (m) = manual integration

01080205.D 010702.M Thu Jan 17 10:34:52 2002

01/31/02

1/17/02

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\010802\01080205.D Vial: 6
Acq On : 8 Jan 2002 8:46 am Operator: MEG
Sample : ICAL LVL4 500ng 20uL 25ppm SC00301 + SC0 Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS_SC00223 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 8 9:36 2002 Quant Results File: 010702.RES

Quant Method : C:\HPCHEM\1\METHODS\010702.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Tue Jan 08 08:54:41 2002
Response via : Initial Calibration
DataAcq Meth : 8260

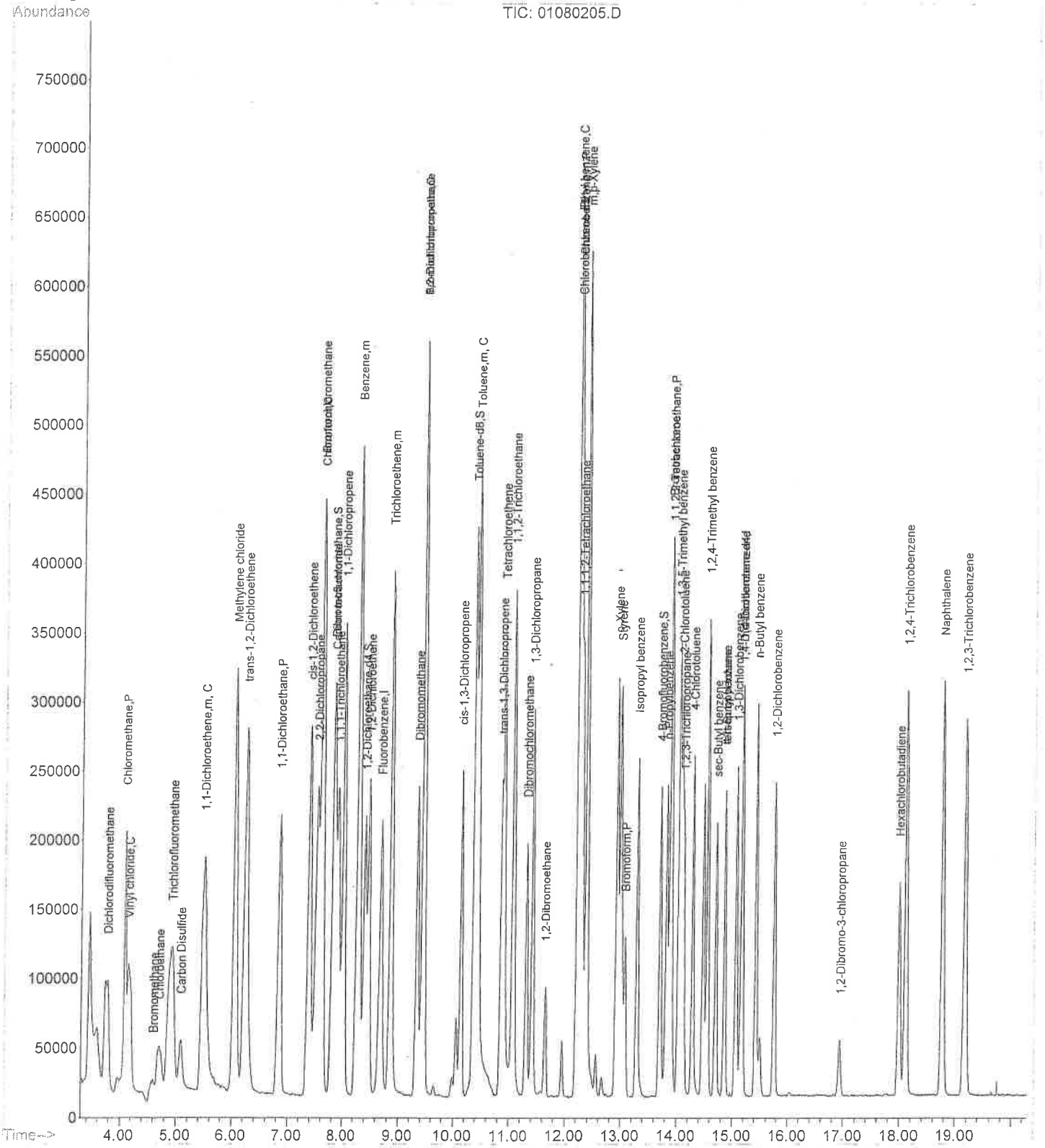
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
42)	o-Xylene	12.92	106	138806	453.40	ng	99
43)	Styrene	12.98	104	215071	456.43	ng	97
45)	Bromoform	13.08	173	75266	599.57	ng	99
47)	Isopropyl benzene	13.29	105	271306	440.33	ng	99
48)	Bromobenzene	13.87	156	115175	467.83	ng	99
49)	1,1,2,2-Tetrachloroethane	13.89	83	187659	574.38	ng	99
50)	1,2,3-Trichloropropane	14.12	75	111542	494.50	ng	96
51)	n-Propylbenzene	13.81	91	284180	474.31	ng	98
52)	2-Chlorotoluene	14.08	91	261320	451.69	ng	98
53)	4-Chlorotoluene	14.28	91	221603	476.87	ng	96
54)	1,3,5-Trimethyl benzene	14.03	105	267134	485.08	ng	99
55)	tert-Butyl benzene	14.86	119	199662	438.84	ng	99
56)	1,2,4-Trimethyl benzene	14.55	105	271089	478.45	ng	98
57)	sec-Butyl benzene	14.70	105	224589	413.94	ng	99
58)	1,3-Dichlorobenzene	15.06	146	151636	480.55	ng	100
59)	4-Isopropyl toluene	14.86	119	199662	436.51	ng	99
60)	1,4-Dichlorobenzene	15.17	146	145065	486.71	ng	100
61)	1,2-Dichlorobenzene	15.76	146	150158	491.57	ng	98
62)	n-Butyl benzene	15.42	91	231051	441.89	ng	99
63)	1,2-Dibromo-3-chloropropan	16.93	75	15161	567.45	ng	92
64)	1,2,4-Trichlorobenzene	18.11	180	189079	536.46	ng	97
65)	Hexachlorobutadiene	18.00	225	62944	434.37	ng	99
66)	Naphthalene	18.77	128	474635	585.74	ng	100
67)	1,2,3-Trichlorobenzene	19.17	180	193852	554.23	ng	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\010802\01080205.D Vial: 6
Acq On : 8 Jan 2002 8:46 am Operator: MEG
Sample : ICAL LVL4 500ng 20uL 25ppm SC00301 + SC0 Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS_SC00223 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 8 9:36 2002 Quant Results File: 010702.RES

Method : C:\HPCHEM\1\METHODS\010702.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Thu Jan 17 10:29:33 2002
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\010802\01080206.D Vial: 7
Acq On : 8 Jan 2002 9:10 am Operator: MEG
Sample : ICAL LVL5 1000ng 40uL 25ppm SC00301 + SC Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS_SC00223 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 8 9:42 2002 Quant Results File: 010702.RES

Quant Method : C:\HPCHEM\1\METHODS\010702.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Tue Jan 08 09:41:26 2002
Response via : Initial Calibration
DataAcq Meth : 8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	8.68	96	338678	250.00	ng	0.00
33) Chlorobenzene-d5	12.22	117	129144	250.00	ng	0.00
46) 1,4-Dichlorobenzene-d4	15.15	152	45948	250.00	ng	0.00
System Monitoring Compounds						
17) Dibromofluoromethane	7.81	113	410833	971.33	ng	0.00
Spiked Amount 500.000			Recovery = 194.27%			
18) 1,2-Dichloroethane-d4	8.39	65	457759	903.72	ng	0.00
Spiked Amount 500.000			Recovery = 180.74%			
30) Toluene-d8	10.36	98	858571	817.88	ng	0.00
Spiked Amount 500.000			Recovery = 163.58%			
44) 4-Bromofluorobenzene	13.70	95	203949	1045.32	ng	0.00
Spiked Amount 500.000			Recovery = 209.06%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	3.80	85	528791	978.50	ng	100
3) Chloromethane	4.09	50	730874	891.41	ng	99
4) Vinyl chloride	4.21	62	550328m	933.08	ng	
5) Bromomethane	4.58	94	20800	236.97	ng	99
6) Chloroethane	4.72	64	88225	228.04	ng	97
7) Trichlorofluoromethane	4.90	101	502605	666.26	ng	99
8) 1,1-Dichloroethene	5.47	96	365192	728.41	ng	98
9) Carbon Disulfide	5.07	76	25595	458.09	ng	78
10) Methylene chloride	6.04	84	563619	815.98	ng	98
11) trans-1,2-Dichloroethene	6.23	96	523099	965.20	ng	98
12) 1,1-Dichloroethane	6.84	63	861578	958.24	ng	100
13) cis-1,2-Dichloroethene	7.38	96	502253	985.91	ng	98
14) 2,2-Dichloropropane	7.51	77	577801	1079.19	ng	99
15) Bromochloromethane	7.58	128	241784	989.86	ng	95
16) Chloroform	7.61	83	769404	948.42	ng	99
19) 1,1,1-Trichloroethane	7.91	97	599451	960.05	ng	98
20) Carbon tetrachloride	7.84	117	491230	1085.07	ng	99
21) 1,1-Dichloropropene	8.02	75	629652	975.36	ng	98
22) Benzene	8.28	78	1556029	921.80	ng	99
23) 1,2-Dichloroethane	8.47	62	620301	959.60	ng	99
24) Trichloroethene	8.86	95	435570	873.07	ng	99
25) 1,2-Dichloropropane	9.44	63	401052	935.76	ng	99
26) Dibromomethane	9.33	93	260602	952.53	ng	98
27) Bromodichloromethane	9.45	83	540049	1030.97	ng	99
28) cis-1,3-Dichloropropene	10.14	75	452024	1118.56	ng	93
29) Toluene	10.42	92	633555	748.39	ng	98
31) trans-1,3-Dichloropropene	10.85	75	359809	1194.91	ng	97
32) 1,1,2-Trichloroethane	11.07	83	307483	996.96	ng	98
34) Tetrachloroethene	10.90	164	298899	1111.19	ng	98
35) 1,3-Dichloropropane	11.41	76	514490	1291.01	ng	99
36) Dibromochloromethane	11.31	129	340506	1619.21	ng	97
37) 1,2-Dibromoethane	11.64	107	173827	1181.86	ng	97
38) Chlorobenzene	12.24	112	577382	970.81	ng	95
39) 1,1,1,2-Tetrachloroethane	12.29	131	277832	1311.52	ng	95
40) Ethyl benzene	12.20	91	703114	1004.33	ng	99
41) m,p-Xylene	12.37	106	501671	1000.48	ng	100

(#) = qualifier out of range (m) = manual integration

01/21/02

1/17/02

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\010802\01080206.D Vial: 7
Acq On : 8 Jan 2002 9:10 am Operator: MEG
Sample : ICAL LVL5 1000ng 40uL 25ppm SC00301 + SC Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS_SC00223 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 8 9:42 2002 Quant Results File: 010702.RES

Quant Method : C:\HPCHEM\1\METHODS\010702.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Tue Jan 08 09:41:26 2002
Response via : Initial Calibration
DataAcq Meth : 8260

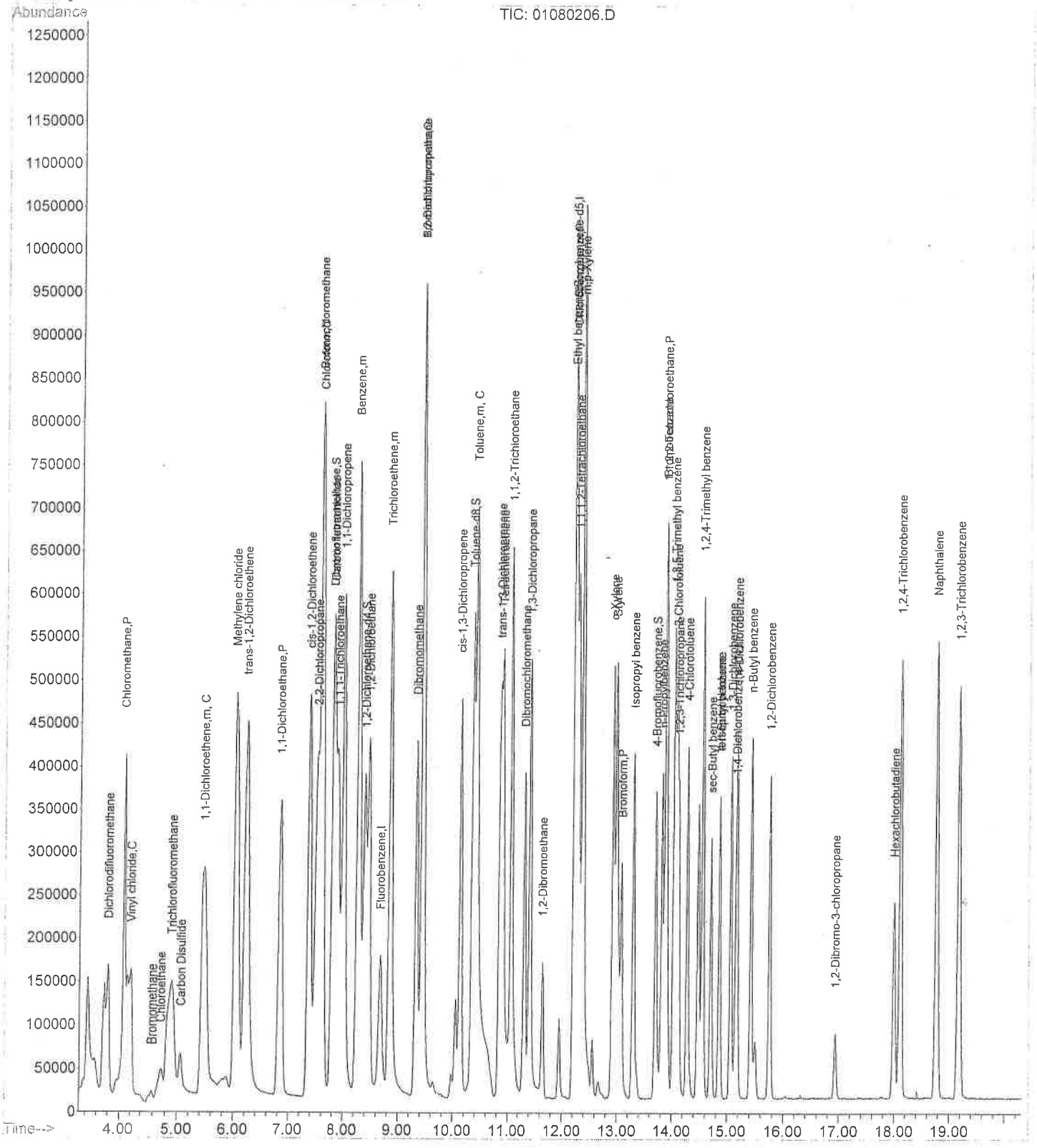
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
42)	o-Xylene	12.92	106	248844	1027.32	ng	100
43)	Styrene	12.98	104	388201	1111.00	ng	100
45)	Bromoform	13.08	173	191179	1804.33	ng	99
47)	Isopropyl benzene	13.29	105	486969	884.75	ng	99
48)	Bromobenzene	13.87	156	197763	969.58	ng	95
49)	1,1,2,2-Tetrachloroethane	13.89	83	349051	1215.69	ng	98
50)	1,2,3-Trichloropropane	14.11	75	203871	970.21	ng	99
51)	n-Propylbenzene	13.81	91	513893	907.93	ng	98
52)	2-Chlorotoluene	14.07	91	464476	926.05	ng	99
53)	4-Chlorotoluene	14.28	91	392684	974.38	ng	97
54)	1,3,5-Trimethyl benzene	14.03	105	461655	900.95	ng	98
55)	tert-Butyl benzene	14.86	119	328722	724.91	ng	98
56)	1,2,4-Trimethyl benzene	14.55	105	466983	879.60	ng	98
57)	sec-Butyl benzene	14.70	105	361423	661.40	ng	100
58)	1,3-Dichlorobenzene	15.06	146	265349	952.42	ng	98
59)	4-Isopropyl toluene	14.86	119	328722	723.90	ng	99
60)	1,4-Dichlorobenzene	15.17	146	247704	909.88	ng	100
61)	1,2-Dichlorobenzene	15.75	146	257399	955.86	ng	99
62)	n-Butyl benzene	15.42	91	348375	697.25	ng	99
63)	1,2-Dibromo-3-chloropropan	16.94	75	29157	1213.69	ng	90
64)	1,2,4-Trichlorobenzene	18.11	180	334999	1139.57	ng	98
65)	Hexachlorobutadiene	17.99	225	94868	711.79	ng	97
66)	Naphthalene	18.77	128	848842	1373.84	ng	100
67)	1,2,3-Trichlorobenzene	19.17	180	344763	1231.52	ng	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\010802\01080206.D Vial: 7
Acq On : 8 Jan 2002 9:10 am Operator: MEG
Sample : ICAL LVL5 1000ng 40uL 25ppm SC00301 + SC Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS_SC00223 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 8 9:42 2002 Quant Results File: 010702.RES

Method : C:\HPCHEM\1\METHODS\010702.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Thu Jan 17 10:29:33 2002
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\010802\01080207.D Vial: 8
Acq On : 8 Jan 2002 9:35 am Operator: MEG
Sample : LCS 250ng 5uL 50ppm LCS_SC00211 Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS/SS_SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 8 10:07 2002 Quant Results File: 010702.RES

Quant Method : C:\HPCHEM\1\METHODS\010702.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Tue Jan 08 09:58:23 2002
Response via : Initial Calibration
DataAcq Meth : 8260

Control limit: ±25%

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	8.69	96	412777	250.00	ng	0.00
32) Chlorobenzene-d5	12.22	117	158862	250.00	ng	0.00
45) 1,4-Dichlorobenzene-d4	15.15	152	42703	250.00	ng	0.00
System Monitoring Compounds						
16) Dibromofluoromethane	7.81	113	114283	222.97	ng	0.00
Spiked Amount 500.000			Recovery =	44.59%		
17) 1,2-Dichloroethane-d4	8.40	65	128256	211.83	ng	0.00
Spiked Amount 500.000			Recovery =	42.37%		
29) Toluene-d8	10.37	98	254104	206.12	ng	0.00
Spiked Amount 500.000			Recovery =	41.22%		
43) 4-Bromofluorobenzene	13.70	95	52806	218.05	ng	0.00
Spiked Amount 500.000			Recovery =	43.61%		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	3.74	85	113613	173.24	ng	99
3) Chloromethane	4.09	50	171174	175.10	ng	100
4) Vinyl chloride	4.15	62	136394	192.32	ng	100
5) Bromomethane	4.58	94	64424	299.19	ng	93
6) Chloroethane	4.72	64	57273	143.64	ng	97
7) Trichlorofluoromethane	4.93	101	171916	200.36	ng	97
8) 1,1-Dichloroethene	5.50	96	109738	203.40	ng	92
9) Methylene chloride	6.04	84	144185	197.02	ng	96
10) trans-1,2-Dichloroethene	6.24	96	138487	211.13	ng	95
11) 1,1-Dichloroethane	6.85	63	224548	206.64	ng	99
12) cis-1,2-Dichloroethene	7.38	96	133684	215.92	ng	99
13) 2,2-Dichloropropane	7.52	77	145126	218.93	ng	99
14) Bromochloromethane	7.59	128	65805	221.49	ng	94
15) Chloroform	7.62	83	206491	211.02	ng	98
18) 1,1,1-Trichloroethane	7.91	97	156665	207.52	ng	98
19) Carbon tetrachloride	7.83	117	114156	203.43	ng	98
20) 1,1-Dichloropropene	8.02	75	165137	210.92	ng	98
21) Benzene	8.29	78	431428	213.03	ng	100
22) 1,2-Dichloroethane	8.47	62	154387	197.56	ng	99
23) Trichloroethene	8.87	95	157545	265.85	ng	98
24) 1,2-Dichloropropane	9.44	63	106233	206.02	ng	98
25) Dibromomethane	9.34	93	66294	200.72	ng	96
26) Bromodichloromethane	9.46	83	131359	204.48	ng	98
27) cis-1,3-Dichloropropene	10.13	75	82352	163.33	ng	93
28) Toluene	10.43	92	182863	186.62	ng	97
30) trans-1,3-Dichloropropene	10.86	75	66083	173.31	ng	85
31) 1,1,2-Trichloroethane	11.07	83	81921	218.07	ng	99
33) Tetrachloroethene	10.91	164	139425	412.20	ng	99
34) 1,3-Dichloropropane	11.41	76	119172	229.73	ng	100
35) Dibromochloromethane	11.31	129	68278	234.86	ng	96
36) 1,2-Dibromoethane	11.64	107	24750	132.00	ng	97
37) Chlorobenzene	12.24	112	158165	217.46	ng	94
38) 1,1,1,2-Tetrachloroethane	12.29	131	65763	237.56	ng	94
39) Ethyl benzene	12.21	91	176698	205.00	ng	97
40) m,p-Xylene	12.38	106	124012	201.03	ng	96
41) o-Xylene	12.92	106	61801	206.28	ng	99

(#) = qualifier out of range (m) = manual integration
01080207.D 010702.M Thu Jan 17 10:35:44 2002

1/17/02

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\010802\01080207.D Vial: 8
Acq On : 8 Jan 2002 9:35 am Operator: MEG
Sample : LCS 250ng 5uL 50ppm LCS_SC00211 Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS/SS_SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 8 10:07 2002 Quant Results File: 010702.RES

Quant Method : C:\HPCHEM\1\METHODS\010702.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Tue Jan 08 09:58:23 2002
Response via : Initial Calibration
DataAcq Meth : 8260

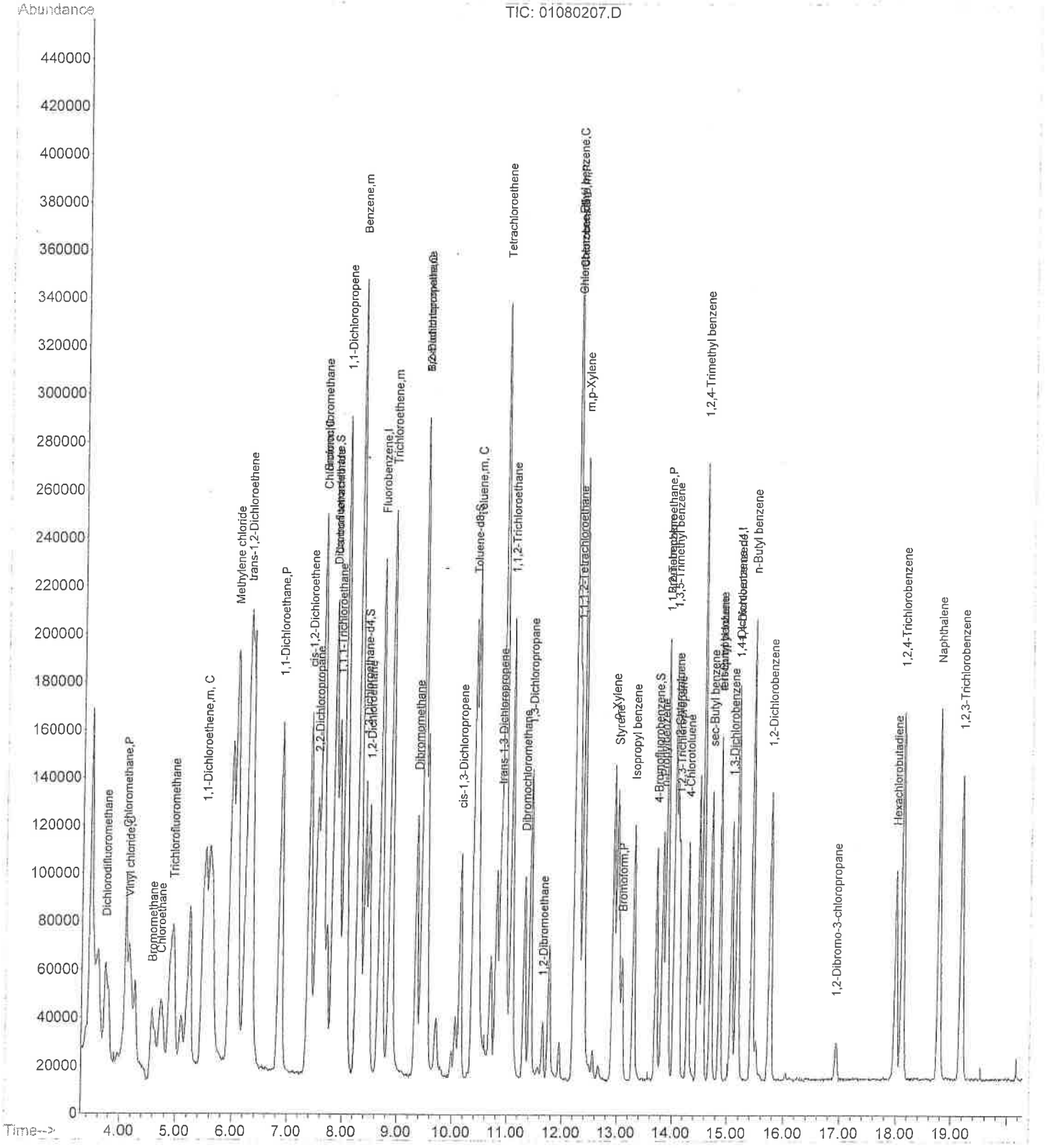
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
42) Styrene	12.98	104	88321	201.02	ng	98
44) Bromoform	13.08	173	32852	217.12	ng	100
46) Isopropyl benzene	13.29	105	120298	240.72	ng	99
47) Bromobenzene	13.88	156	48981	259.97	ng	99
48) 1,1,2,2-Tetrachloroethane	13.90	83	90355	296.90	ng	99
49) 1,2,3-Trichloropropane	14.12	75	55895	287.93	ng	99
50) n-Propylbenzene	13.81	91	132122	255.88	ng	98
51) 2-Chlorotoluene	14.07	91	118166	257.30	ng	99
52) 4-Chlorotoluene	14.28	91	92464	248.14	ng	97
53) 1,3,5-Trimethyl benzene	14.03	105	145225	311.12	ng	100
54) tert-Butyl benzene	14.86	119	123590	372.78	ng	99
55) 1,2,4-Trimethyl benzene	14.55	105	153855	319.52	ng	98
56) sec-Butyl benzene	14.70	105	137284	365.22	ng	98
57) 1,3-Dichlorobenzene	15.06	146	67306	262.44	ng	98
58) 4-Isopropyl toluene	14.86	119	123590	372.38	ng	99
59) 1,4-Dichlorobenzene	15.17	146	66297	266.84	ng	97
60) 1,2-Dichlorobenzene	15.75	146	66834	269.43	ng	99
61) n-Butyl benzene	15.42	91	155067	431.77	ng	99
62) 1,2-Dibromo-3-chloropropan	16.93	75	5890	253.00	ng	99
63) 1,2,4-Trichlorobenzene	18.11	180	98210	320.80	ng	97
64) Hexachlorobutadiene	18.00	225	36245	361.11	ng	99
65) Naphthalene	18.77	128	243256	324.61	ng	100
66) 1,2,3-Trichlorobenzene	19.17	180	89677	290.21	ng	99

(#) = qualifier out of range (m) = manual integration
01080207.D 010702.M Thu Jan 17 10:35:45 2002

Quantitation Report

Data File : C:\HPCHEM\1\DATA\010802\01080207.D Vial: 8
Acq On : 8 Jan 2002 9:35 am Operator: MEG
Sample : LCS 250ng 5uL 50ppm LCS_SC00211 Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS/SS_SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 8 10:07 2002 Quant Results File: 010702.RES

Method : C:\HPCHEM\1\METHODS\010702.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Thu Jan 17 10:29:33 2002
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\010802\01080208.D
Acq On : 8 Jan 2002 9:59 am
Sample : METHOD BLANK
Misc : 5mL purge 5uL 50ppm IS/SS_SC00225
MS Integration Params: rteint.p
Quant Time: Jan 8 10:34 2002

Vial: 9
Operator: MEG
Inst : Alpha
Multiplr: 1.00

Quant Results File: 010702.RES

Quant Method : C:\HPCHEM\1\METHODS\010702.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Tue Jan 08 10:31:32 2002
Response via : Initial Calibration
DataAcq Meth : 8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	8.68	96	403670	250.00	ng	0.00
32) Chlorobenzene-d5	12.22	117	174989	250.00	ng	0.00
45) 1,4-Dichlorobenzene-d4	15.15	152	87028	250.00	ng	0.00
System Monitoring Compounds						
16) Dibromofluoromethane	7.81	113	112096	223.64	ng	0.00
Spiked Amount 250.000			Recovery =	89.46%		
17) 1,2-Dichloroethane-d4	8.40	65	119176	201.27	ng	0.00
Spiked Amount 250.000			Recovery =	80.51%		
29) Toluene-d8	10.37	98	296055	245.56	ng	0.00
Spiked Amount 250.000			Recovery =	98.22%		
43) 4-Bromofluorobenzene	13.70	95	81599	305.88	ng	0.00
Spiked Amount 250.000			Recovery =	122.35%		

Target Compounds Qvalue

PES Validation
Stops here.

01/21/02

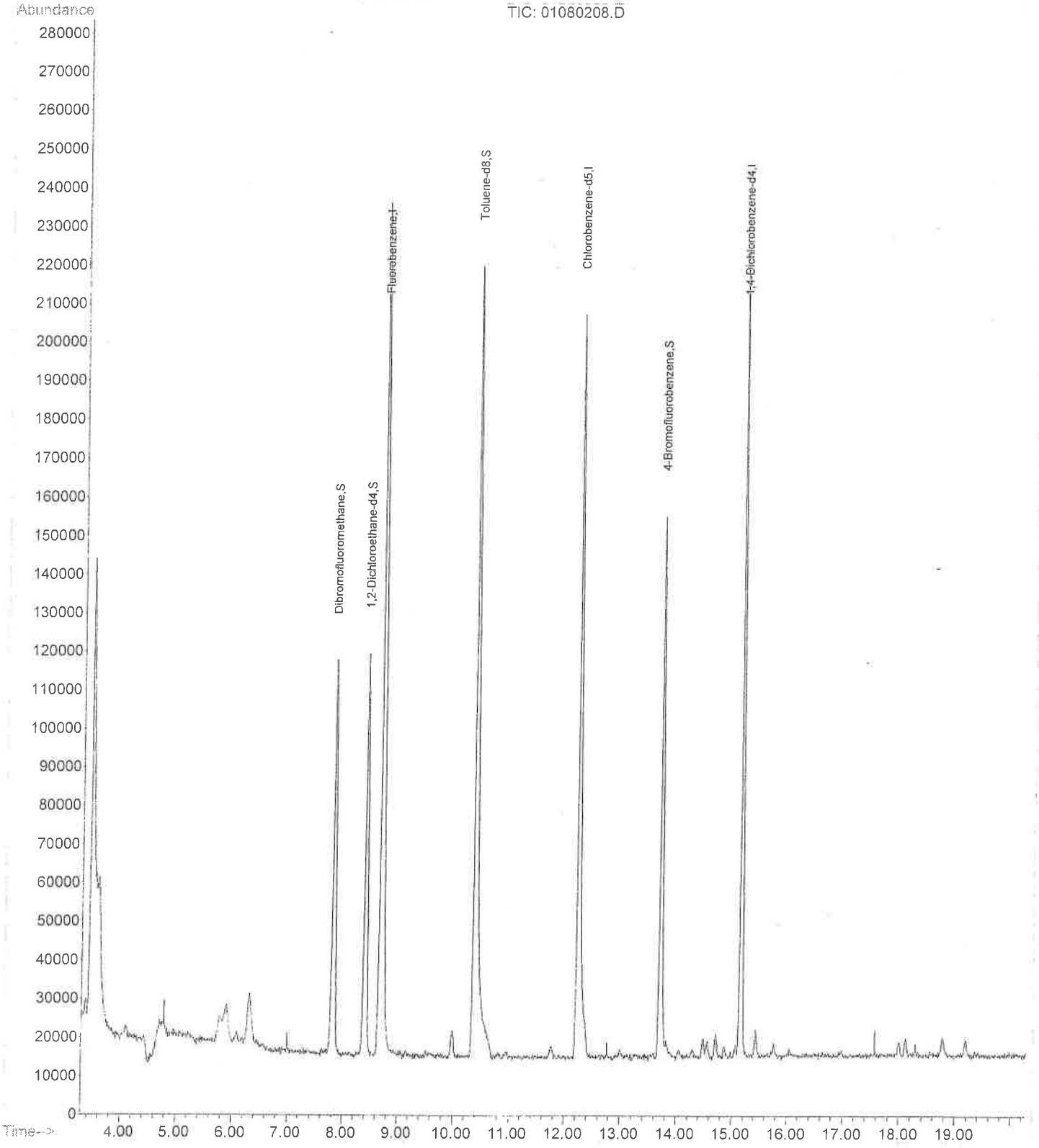
1/17/02

(#) = qualifier out of range (m) = manual integration
01080208.D 010702.M Tue Jan 08 10:38:18 2002

Quantitation Report

Data File : C:\HPCHEM\1\DATA\010802\01080208.D Vial: 9
Acq On : 8 Jan 2002 9:59 am Operator: MEG
Sample : METHOD BLANK Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS/SS_SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 8 10:34 2002 Quant Results File: 010702.RES

Method : C:\HPCHEM\1\METHODS\010702.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Tue Jan 08 10:31:32 2002
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\010802\01080209.D Vial: 10
Acq On : 8 Jan 2002 10:24 am Operator: MEG
Sample : AP0102-19 5-3-ADD24-29 100uL 50X Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS/SS_SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 8 11:53 2002 Quant Results File: 010602A.RES

Quant Method : C:\HPCHEM\1\METHODS\010602A.M (RTE Integrator)
Title : 8260 Purgable Organics
Last Update : Sun Jan 06 12:10:50 2002
Response via : Initial Calibration
DataAcq Meth : 8260

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	8.68	96	363551	250.00 ng	0.01
18) Chlorobenzene-d5	12.22	117	142334	250.00 ng	0.03
24) 1,4-Dichlorobenzene-d4	15.15	152	81615	250.00 ng	0.02
System Monitoring Compounds					
9) Dibromofluoromethane	7.80	113	102094	234.93 ng	0.01
Spiked Amount 250.000			Recovery =	93.97%	
10) 1,2-Dichloroethane-d4	8.39	65	110107	201.35 ng	0.01
Spiked Amount 250.000			Recovery =	80.54%	
16) Toluene-d8	10.36	98	233712	187.87 ng	0.02
Spiked Amount 250.000			Recovery =	75.15%	
22) 4-Bromofluorobenzene	13.70	95	67183	257.04 ng	0.02
Spiked Amount 250.000			Recovery =	102.82%	
Target Compounds					Qvalue
2) Chloromethane (SPCC)	4.10	50	4028	5.32 ng <	97
6) 1,1-Dichloroethane (SPCC)	6.84	63	202164	232.36 ng	100
12) 1,2-Dichloroethane	8.68	62	3964	5.38 ng <	95
13) Trichloroethene	8.68	95	24075	~~42.66 ng~~ ND	25
19) Tetrachloroethene	10.88	164	41	~~19.45 ng~~ ND	6

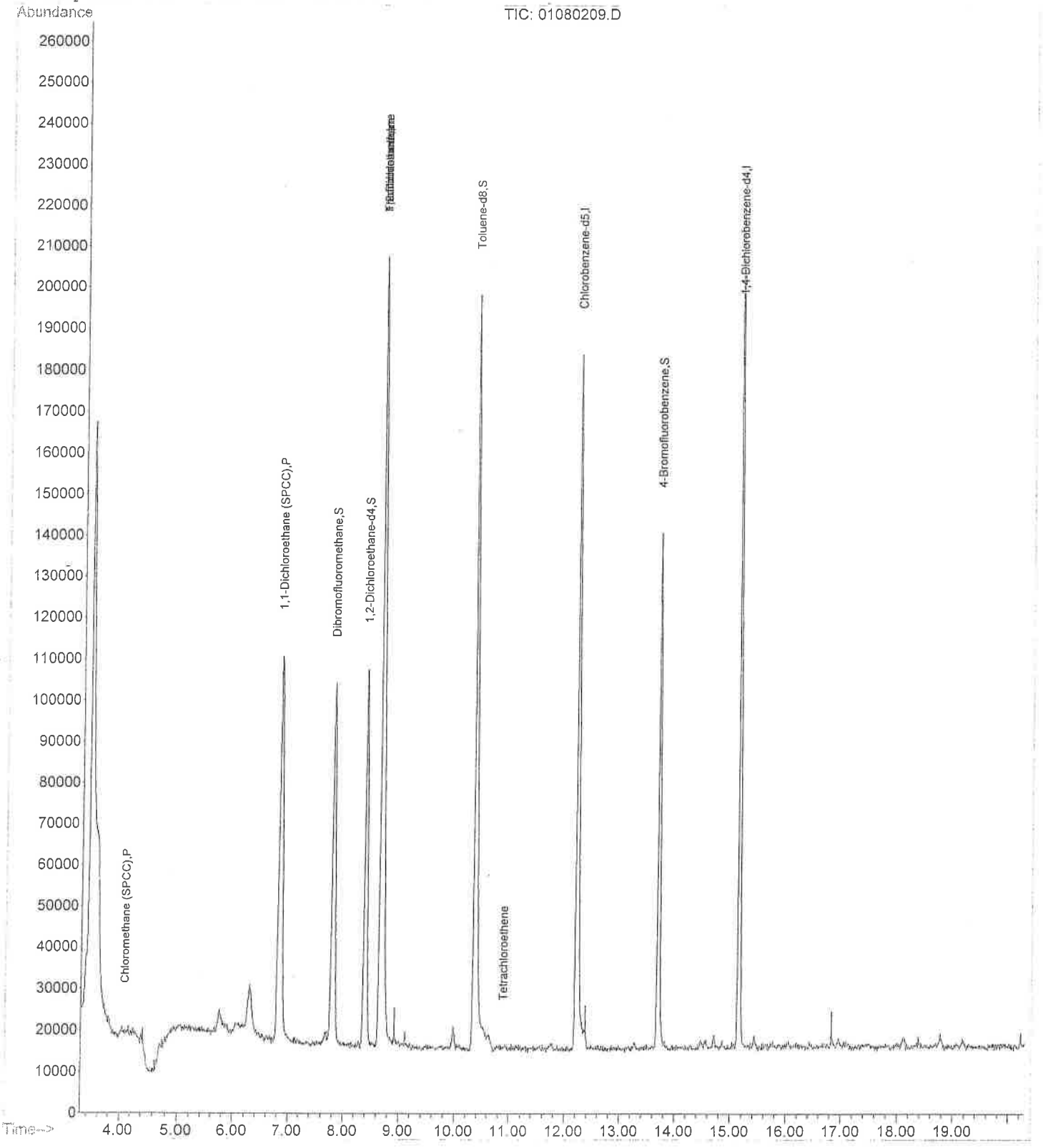
1/17/02

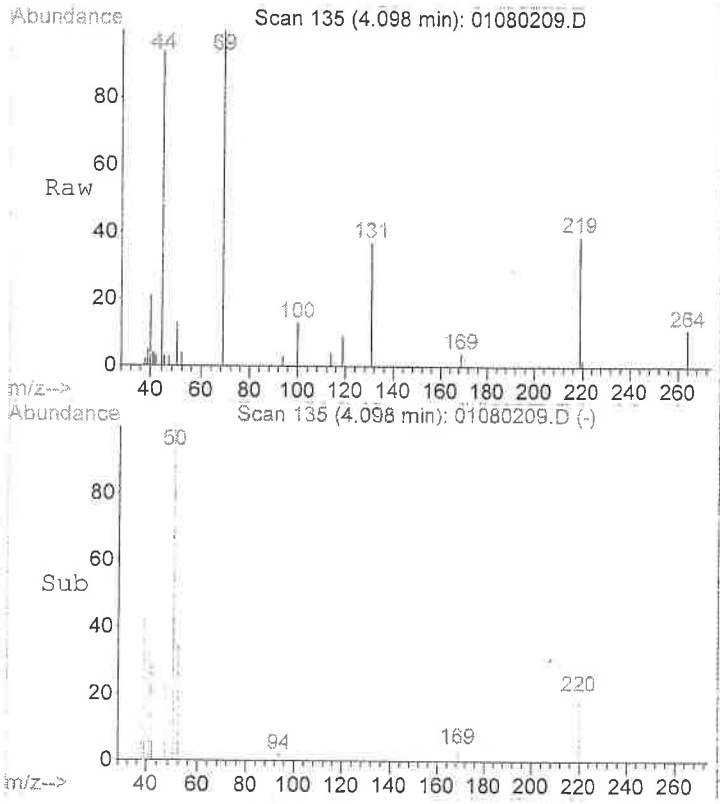
(#) = qualifier out of range (m) = manual integration
01080209.D 010602A.M Tue Jan 08 11:53:17 2002

Quantitation Report

Data File : C:\HPCHEM\1\DATA\010802\01080209.D Vial: 10
Acq On : 8 Jan 2002 10:24 am Operator: MEG
Sample : AP0102-19 5-3-ADD24-29 100uL 50X Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS/SS_SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 8 11:53 2002 Quant Results File: 010602A.RES

Method : C:\HPCHEM\1\METHODS\010602A.M (RTE Integrator)
Title : 8260 Purgable Organics
Last Update : Sun Jan 06 12:10:50 2002
Response via : Initial Calibration

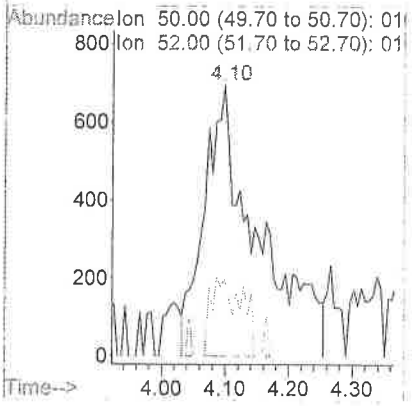


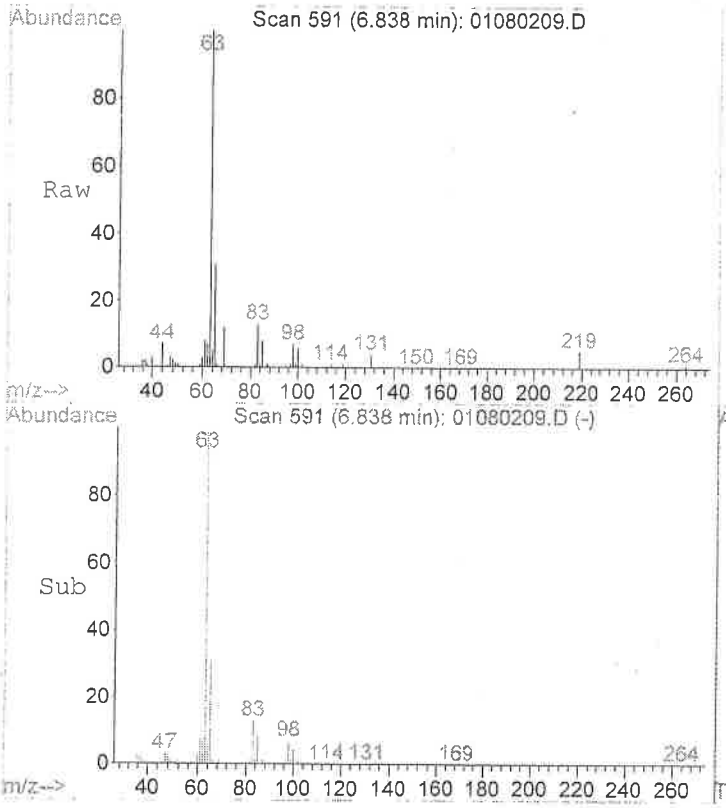


#2
Chloromethane (SPCC)
Concen: 5.32 ng
RT: 4.10 min Scan# 135
Delta R.T. 0.03 min
Lab File: 01080209.D
Acq: 8 Jan 2002 10:24 am

Tgt Ion: 50 Resp: 4028

Ion	Ratio	Lower	Upper
50	100		
52	33.8	12.3	52.3

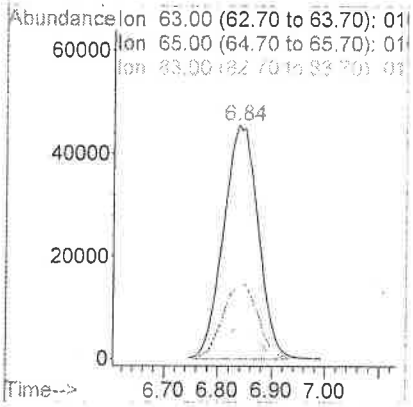


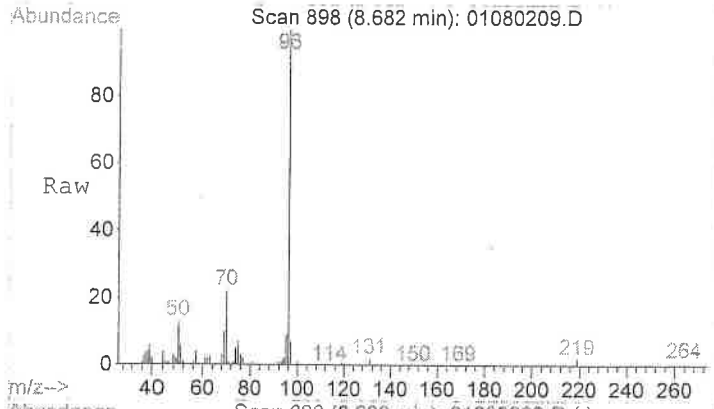


#6
1,1-Dichloroethane (SPCC)
Concen: 232.36 ng
RT: 6.84 min Scan# 591
Delta R.T. -0.00 min
Lab File: 01080209.D
Acq: 8 Jan 2002 10:24 am

Tgt Ion: 63 Resp: 202164

Ion	Ratio	Lower	Upper
63	100		
65	31.3	11.4	51.4
83	12.9	0.0	32.9

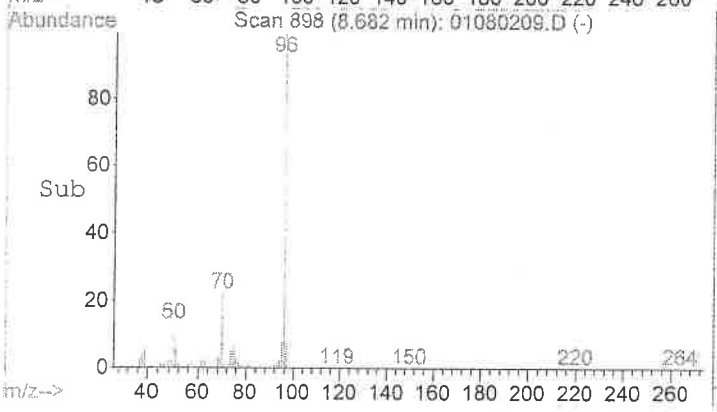


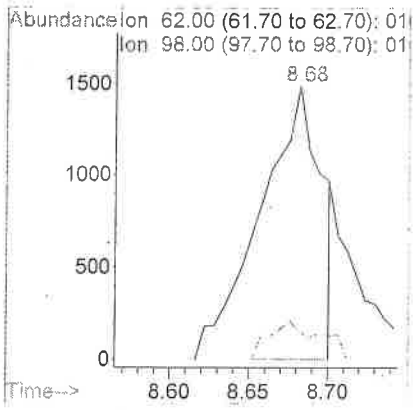


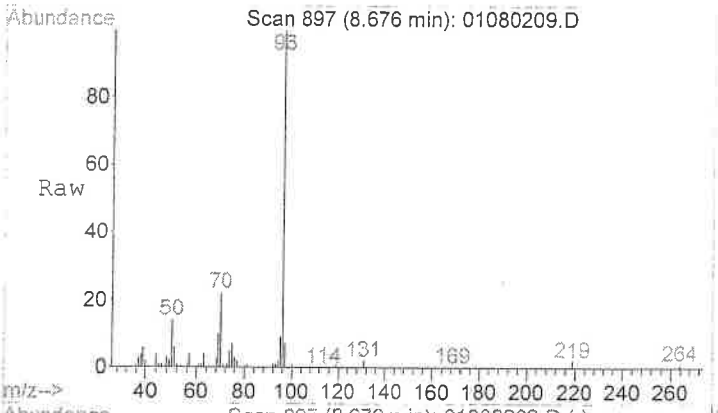
#12
1,2-Dichloroethane
Concen: 5.38 ng
RT: 8.68 min Scan# 898
Delta R.T. 0.22 min
Lab File: 01080209.D
Acq: 8 Jan 2002 10:24 am

Tgt Ion: 62 Resp: 3964

Ion	Ratio	Lower	Upper
62	100		
98	10.0	0.0	28.1



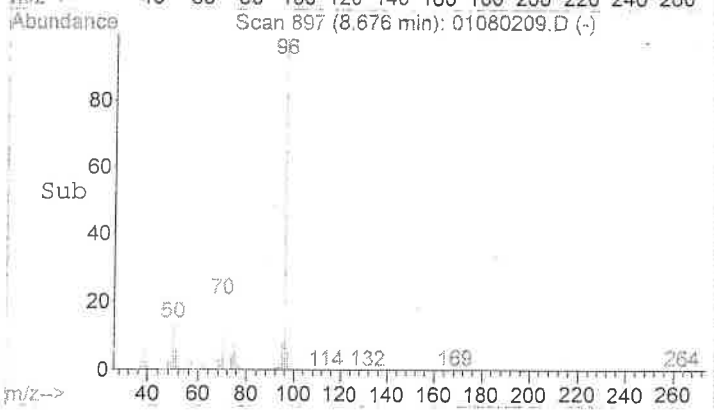


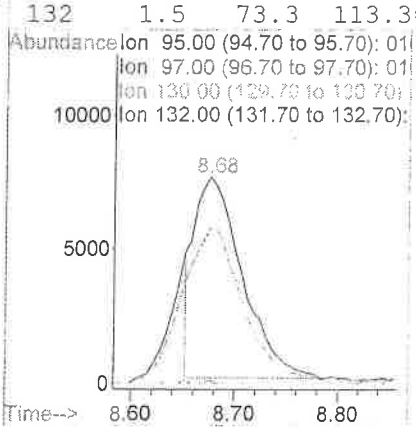


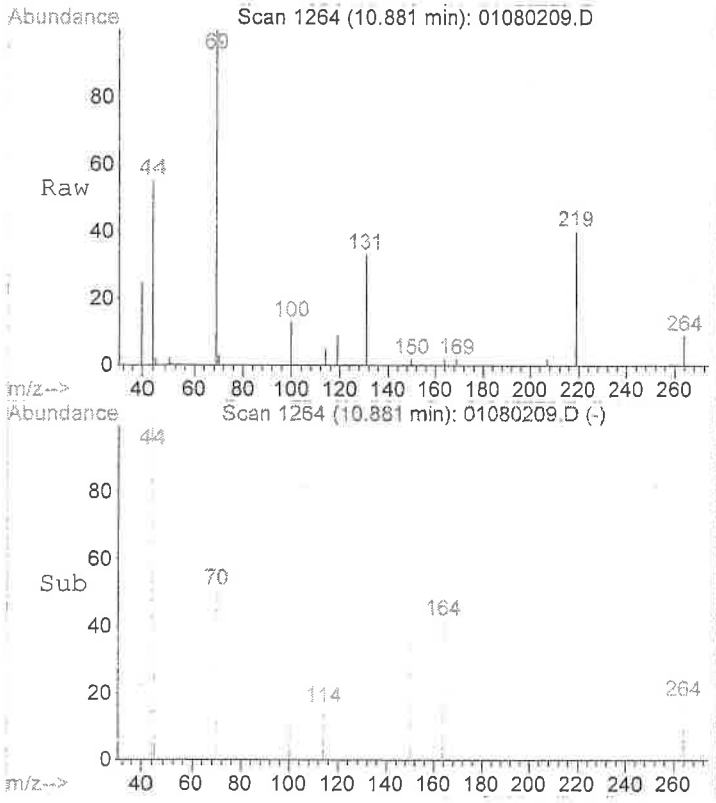
#13
Trichloroethene
Concen: 42.66 ng
RT: 8.68 min Scan# 897
Delta R.T. -0.17 min
Lab File: 01080209.D
Acq: 8 Jan 2002 10:24 am

Tgt Ion: 95 Resp: 24075

Ion	Ratio	Lower	Upper
-95	100		
97	75.3	45.8	85.8
130	0.0	75.0	115.0#
132	1.5	73.3	113.3#



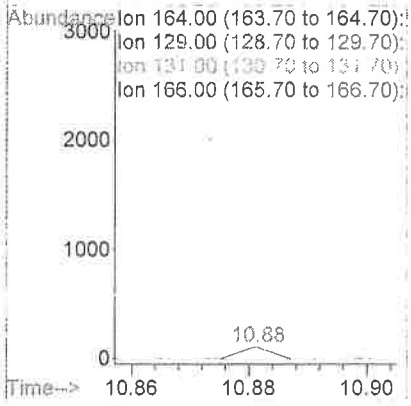




#19
Tetrachloroethene
Concen: 19.45 ng
RT: 10.88 min Scan# 1264
Delta R.T. -0.00 min
Lab File: 01080209.D
Acq: 8 Jan 2002 10:24 am

Tgt Ion:164 Resp: 41

Ion	Ratio	Lower	Upper
164	100		
129	0.0	62.7	102.7#
131	21.9	62.3	102.3#
166	0.0	111.1	151.1#



Sequence Name: C:\HPCHEM\1\SEQUENCE\010902.S
Comment: Alpha
Operator: MEG
Data Path: C:\HPCHEM\1\DATA\010902\
Pre-Seq Cmd:
Post-Seq Cmd:

Method Sections To Run
(X) Full Method
( ) Reprocessing Only

On A Barcode Mismatch
(X) Inject Anyway
( ) Don't Inject

Line	Type	Vial	DataFile	Method	Sample Name
1	BFB	2	01090201	8260	BFB TUNE 1/9/02
2	Calibration	3	01090202	AQ_8260	CCV 250ng 10uL 25ppm SC00301
3	Calibration	4	01090203	AQ_8260	LCS 250ng 5uL 50ppm LCS_SC002
4	Blank	5	01090204	AQ_8260	METHOD BLANK
5	Sample	6	01090205	AQ_8260	PES0109-01 B3-8.0 1.0g 5X
6	Sample	7	01090206	AQ_8260	PES0109-02 B2-8.0 1.0g 5X
7	Sample	8	01090207	AQ_8260	PES0109-03 A3-4.0 1.0g 5X
8	Sample	9	01090208	AQ_8260	PES0109-04 A2-5.0 1.0g 5X
9	Sample	10	01090209	AQ_8260	PES0109-05 D2-18.1 1.0g 5
10	Sample	11	01090210	AQ_8260	PES0109-06 B3-EAST-5.0 1.0g
11	Sample	12	01090211	AQ_8260	PES0109-07 D2-19.5 1.0g 5
12	Sample	13	01090212	AQ_8260	PES0109-08 D3-EAST-5.0 1.0g
13	Sample	14	01090213	AQ_8260	PES0109-10 D1-WEST-6.0 1.0g
14	Sample	15	01090214	AQ_8260	PES0109-12 B1-5.0 1.0g 5X
15	Sample	16	01090215	AQ_8260	PES0109-11 A1-5.0 1.0g 5X
16	Sample	17	01090216	AQ_8260	PES0109-13 A2-NORTH-4.0 1.0
17	Sample	18	01090217	AQ_8260	PES0109-14 BB-4.0 1.0g 5X
18	Sample	19	01090218	AQ_8260	PES0109-15 A1-NORTH-4.0 1.0
19	Sample	20	01090219	AQ_8260	PES0109-16 A2-NORTH-4.0 1.0
~~20~~	~~Sample~~	~~21~~	~~01090220~~	~~AQ_8260~~	~~AP0108-02RR 5-3-ADD89-9 50u~~
21	Sample	22	01090221	AQ_8260	AP0108-03RR 5-3-ADD89-13 10
22	Sample	23	01090222	AQ_8260	AP0108-12 4-2-ADD37-15 100u
~~23~~	~~Sample~~	~~24~~	~~01090223~~	~~AQ_8260~~	~~AP0108-13 4-2-ADD37-25 100u~~
24	BFB	6	01090224	8260	BFB TUNE 1/9/02 2ND CLOCK
25	Calibration	7	01090225	AQ_8260	CCV 250ng 10uL 25ppm SC00301
26	Calibration	8	01090226	AQ_8260	LCS 250ng 5uL 50ppm LCS_SC002
27	Blank	9	01090227	AQ_8260	METHOD BLANK
~~28~~	~~Sample~~	~~10~~	~~01090228~~	~~AQ_8260~~	~~AP0108-14 4-2-ADD37-35 100u~~
29	Sample	11	01090229	AQ_8260	AP0108-15 5-3-ADD95-12.5 10
30	Sample	12	01090230	AQ_8260	AP0108-16 5-3-ADD95-16 100u
31	Sample	13	01090231	AQ_8260	AP0108-17 5-3-ADD95-24 100u
32	Sample	14	01090232	AQ_8260	AP0108-18 4-1-ADD81-9 100uL
33	Sample	15	01090233	AQ_8260	AP0108-19 4-1-ADD81-17 100u
~~34~~	~~Sample~~	~~16~~	~~01090234~~	~~AQ_8260~~	~~AP0108-20 4-1-ADD81-21 100u~~

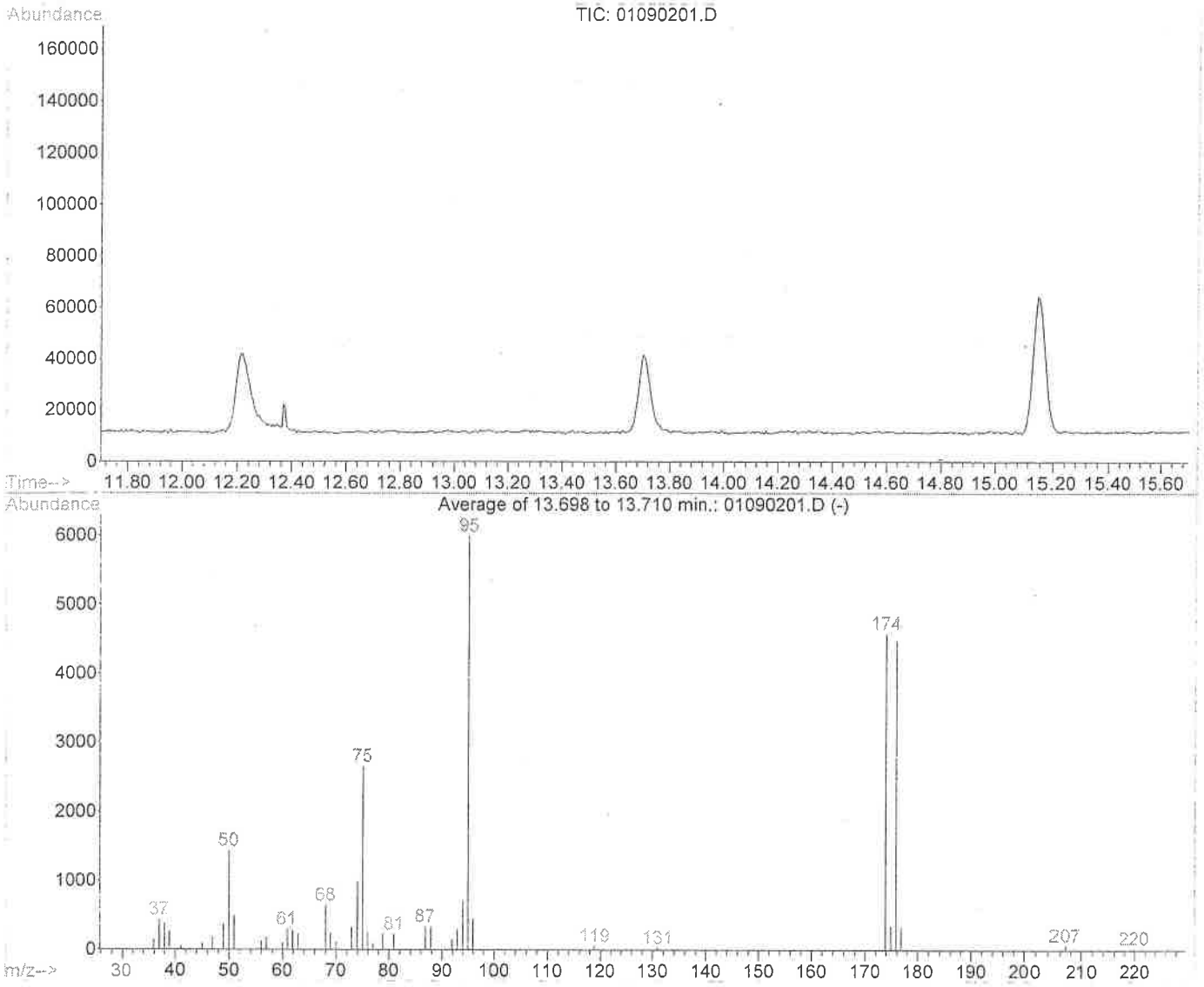
ALAMEDA PROJECT DATA

ALAMEDA PROJECT DATA.

1/17/02

BFB

Data File : C:\HPCHEM\1\DATA\010902\01090201.D Vial: 2
Acq On : 9 Jan 2002 7:09 am Operator: MEG
Sample : BFB TUNE 1/9/02 Inst : Alpha
Misc : 1uL SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Method : C:\HPCHEM\1\METHODS\010702.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds



AutoFind: Scans 1733, 1734, 1735; Background Corrected with Scan 1722

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	24.1	1445	PASS
75	95	30	60	44.2	2649	PASS
95	95	100	100	100.0	5991	PASS
96	95	5	9	7.6	454	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	76.3	4574	PASS
175	174	5	9	7.6	346	PASS
176	174	95	101	97.8	4472	PASS
177	176	5	9	7.3	328	PASS

01/21/02

1/9/02

01090201.D 010702.M Wed Jan 09 07:29:59 2002

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\010902\01090202.D Vial: 3
Acq On : 9 Jan 2002 7:33 am Operator: MEG
Sample : CCV 250ng 10uL 25ppm SC00301 + SC00224 Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS_SC00223 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\HPCHEM\1\METHODS\010702.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Tue Jan 08 10:31:32 2002
Response via : Multiple Level Calibration

Min. RRF : 0.100 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Fluorobenzene	1.000	1.000	0.0	121	0.00
2		Dichlorodifluoromethane	0.397	0.414	-4.3	123	0.10
3	P	Chloromethane	0.592	0.644	-8.8	137	0.03
4	C	Vinyl chloride	0.430	0.464	-7.9	135	0.09
5		Bromomethane	0.130	0.014#	89.2#	25#	0.00
6		Chloroethane	0.241	0.011#	95.4#	6#	-0.05
7		Trichlorofluoromethane	0.520	0.056#	89.2#	12#	-0.03
8	m, C	1,1-Dichloroethene	0.350	0.280	20.0	103	-0.03
9		Methylene chloride	0.491	0.330	32.8#	90	0.00
10		trans-1,2-Dichloroethene	0.397	0.323	18.6	96	0.00
11	P	1,1-Dichloroethane	0.658	0.579	12.0	105	0.00
12		cis-1,2-Dichloroethene	0.375	0.328	12.5	103	0.00
13		2,2-Dichloropropane	0.401	0.331	17.5	96	0.00
14		Bromochloromethane	0.180	0.152	15.6	100	0.00
15	C	Chloroform	0.593	0.520	12.3	103	0.00
16	S	Dibromofluoromethane	0.310	0.259	16.5	100	0.00
17	S	1,2-Dichloroethane-d4	0.367	0.332	9.5	106	0.00
18		1,1,1-Trichloroethane	0.457	0.386	15.5	99	0.00
19		Carbon tetrachloride	0.340	0.271	20.3#	94	0.00
20		1,1-Dichloropropene	0.474	0.412	13.1	102	0.00
21	m	Benzene	1.227	1.110	9.5	106	0.00
22		1,2-Dichloroethane	0.473	0.432	8.7	107	0.01
23	m	Trichloroethene	0.359	0.341	5.0	113	0.00
24	C	1,2-Dichloropropane	0.312	0.285	8.7	109	0.00
25		Dibromomethane	0.200	0.181	9.5	105	0.00
26		Bromodichloromethane	0.389	0.338	13.1	102	0.01
27		cis-1,3-Dichloropropene	0.305	0.302	1.0	116	0.00
28	m, C	Toluene	0.593	0.550	7.3	99	0.00
29	S	Toluene-d8	0.747	0.710	5.0	98	0.00
30		trans-1,3-Dichloropropene	0.231	0.240	-3.9	116	0.01
31		1,1,2-Trichloroethane	0.228	0.210	7.9	106	0.01
32	I	Chlorobenzene-d5	1.000	1.000	0.0	95	0.00
33		Tetrachloroethene	0.532	0.482	9.4	94	0.00
34		1,3-Dichloropropane	0.816	0.848	-3.9	113	0.01
35		Dibromochloromethane	0.458	0.415	9.4	101	0.01
36		1,2-Dibromoethane	0.295	0.308	-4.4	113	0.00
37	m,P	Chlorobenzene	1.145	1.193	-4.2	98	0.01
38		1,1,1,2-Tetrachloroethane	0.436	0.478	-9.6	119	0.01
39	C	Ethyl benzene	1.356	1.423	-4.9	98	0.01
40		m,p-Xylene	0.971	1.056	-8.8	100	0.01
41		o-Xylene	0.471	0.516	-9.6	102	0.00
42		Styrene	0.691	0.782	-13.2	99	0.00
43	S	4-Bromofluorobenzene	0.381	0.419	-10.0	98	0.00
44	P	Bromoform	0.238	0.211	11.3	97	0.02
45	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	93	0.00
46		Isopropyl benzene	2.926	3.234	-10.5	101	0.00
47		Bromobenzene	1.103	1.210	-9.7	93	0.02
48	P	1,1,2,2-Tetrachloroethane	1.630	1.538	5.6	91	0.01

(#) = Out of Range

01/21/02

1/9/02

Data File : C:\HPCHEM\1\DATA\010902\01090202.D Vial: 3
Acq On : 9 Jan 2002 7:33 am Operator: MEG
Sample : CCV 250ng 10uL 25ppm SC00301 + SC00224 Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS_SC00223 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\HPCHEM\1\METHODS\010702.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Tue Jan 08 10:31:32 2002
Response via : Multiple Level Calibration

Min. RRF : 0.100 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
49	1,2,3-Trichloropropane	1.136	1.286	-13.2	114	0.02
50	n-Propylbenzene	3.023	3.110	-2.9	100	0.00
51	2-Chlorotoluene	2.689	2.948	-9.6	98	0.00
52	4-Chlorotoluene	2.182	2.383	-9.2	98	0.00
53	1,3,5-Trimethyl benzene	2.733	2.784	-1.9	99	0.00
54	tert-Butyl benzene	2.332	2.309	1.0	102	0.00
55	1,2,4-Trimethyl benzene	2.819	2.793	0.9	97	0.00
56	sec-Butyl benzene	2.772	2.829	-2.1	105	0.00
57	1,3-Dichlorobenzene	1.501	1.639	-9.2	99	0.01
58	4-Isopropyl toluene	2.334	2.309	1.1	101	0.00
59	1,4-Dichlorobenzene	1.455	1.530	-5.2	99	0.01
60	1,2-Dichlorobenzene	1.452	1.574	-8.4	99	0.01
61	n-Butyl benzene	2.554	2.746	-7.5	106	0.00
62	1,2-Dibromo-3-chloropropane	0.136	0.142	-4.4	103	0.00
63	1,2,4-Trichlorobenzene	1.644	1.703	-3.6	94	0.00
64	Hexachlorobutadiene	0.683	0.656	4.0	90	0.00
65	Naphthalene	3.613	3.792	-5.0	88	0.01
66	1,2,3-Trichlorobenzene	1.594	1.555	2.4	85	0.01

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\010902\01090202.D Vial: 3
Acq On : 9 Jan 2002 7:33 am Operator: MEG
Sample : CCV 250ng 10uL 25ppm SC00301 + SC00224 Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS_SC00223 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 9 8:04 2002 Quant Results File: 010702.RES

Quant Method : C:\HPCHEM\1\METHODS\010702.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Tue Jan 08 10:31:32 2002
Response via : Initial Calibration
DataAcq Meth : AQ_8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	8.68	96	408898	250.00	ng	0.00
32) Chlorobenzene-d5	12.23	117	175918m	250.00	ng	0.00
45) 1,4-Dichlorobenzene-d4	15.16	152	56580	250.00	ng	0.00
System Monitoring Compounds						
16) Dibromofluoromethane	7.81	113	105751	208.28	ng	0.00
Spiked Amount 250.000			Recovery = 83.31%			
17) 1,2-Dichloroethane-d4	8.40	65	135590	226.07	ng	0.00
Spiked Amount 250.000			Recovery = 90.43%			
29) Toluene-d8	10.37	98	290272m	237.69	ng	0.00
Spiked Amount 250.000			Recovery = 95.08%			
43) 4-Bromofluorobenzene	13.71	95	73659	274.66	ng	0.00
Spiked Amount 250.000			Recovery = 109.86%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	3.83	85	169202m	260.45	ng	
3) Chloromethane	4.11	50	263255	271.84	ng	98
4) Vinyl chloride	4.24	62	189809m	270.17	ng	
5) Bromomethane	4.59	94	5560m	26.07	ng	
6) Chloroethane	4.66	64	4373	11.07	ng	95
7) Trichlorofluoromethane	4.90	101	22937	26.99	ng	97
8) 1,1-Dichloroethene	5.46	96	114431	216.82	ng	98
9) Methylene chloride	6.03	84	135011	185.31	ng	94
10) trans-1,2-Dichloroethene	6.23	96	131920	203.02	ng	96
11) 1,1-Dichloroethane	6.85	63	236919	220.09	ng	100
12) cis-1,2-Dichloroethene	7.38	96	133927	218.36	ng	95
13) 2,2-Dichloropropane	7.51	77	135228	205.94	ng	98
14) Bromochloromethane	7.59	128	61977	210.59	ng	99
15) Chloroform	7.62	83	212715	219.44	ng	99
18) 1,1,1-Trichloroethane	7.90	97	158001	211.28	ng	97
19) Carbon tetrachloride	7.83	117	110850	199.41	ng	99
20) 1,1-Dichloropropene	8.02	75	168346	217.06	ng	99
21) Benzene	8.28	78	454002	226.31	ng	99
22) 1,2-Dichloroethane	8.48	62	176784	228.36	ng	99
23) Trichloroethene	8.86	95	139427	237.51	ng	97
24) 1,2-Dichloropropane	9.45	63	116498	228.07	ng	100
25) Dibromomethane	9.34	93	74047	226.32	ng	87
26) Bromodichloromethane	9.46	83	138375	217.45	ng	97
27) cis-1,3-Dichloropropene	10.14	75	123553	247.37	ng	96
28) Toluene	10.43	92	225085	231.89	ng	99
30) trans-1,3-Dichloropropene	10.86	75	98223	260.04	ng	97
31) 1,1,2-Trichloroethane	11.08	83	85992	231.07	ng	98
33) Tetrachloroethene	10.91	164	84822	226.46	ng	98
34) 1,3-Dichloropropane	11.42	76	149114	259.58	ng	100
35) Dibromochloromethane	11.32	129	73028	226.84	ng	98
36) 1,2-Dibromoethane	11.65	107	54127	260.68	ng	97
37) Chlorobenzene	12.25	112	209811	260.50	ng	98
38) 1,1,1,2-Tetrachloroethane	12.30	131	84146m	274.50	ng	
39) Ethyl benzene	12.22	91	250418	262.36	ng	99
40) m,p-Xylene	12.38	106	185836	272.05	ng	94
41) o-Xylene	12.93	106	90790	273.66	ng	97

(#) = qualifier out of range (m) = manual integration

1/9/02

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\010902\01090202.D Vial: 3
Acq On : 9 Jan 2002 7:33 am Operator: MEG
Sample : CCV 250ng 10uL 25ppm SC00301 + SC00224 Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS_SC00223 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 9 8:04 2002 Quant Results File: 010702.RES

Quant Method : C:\HPCHEM\1\METHODS\010702.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Tue Jan 08 10:31:32 2002
Response via : Initial Calibration
DataAcq Meth : AQ_8260

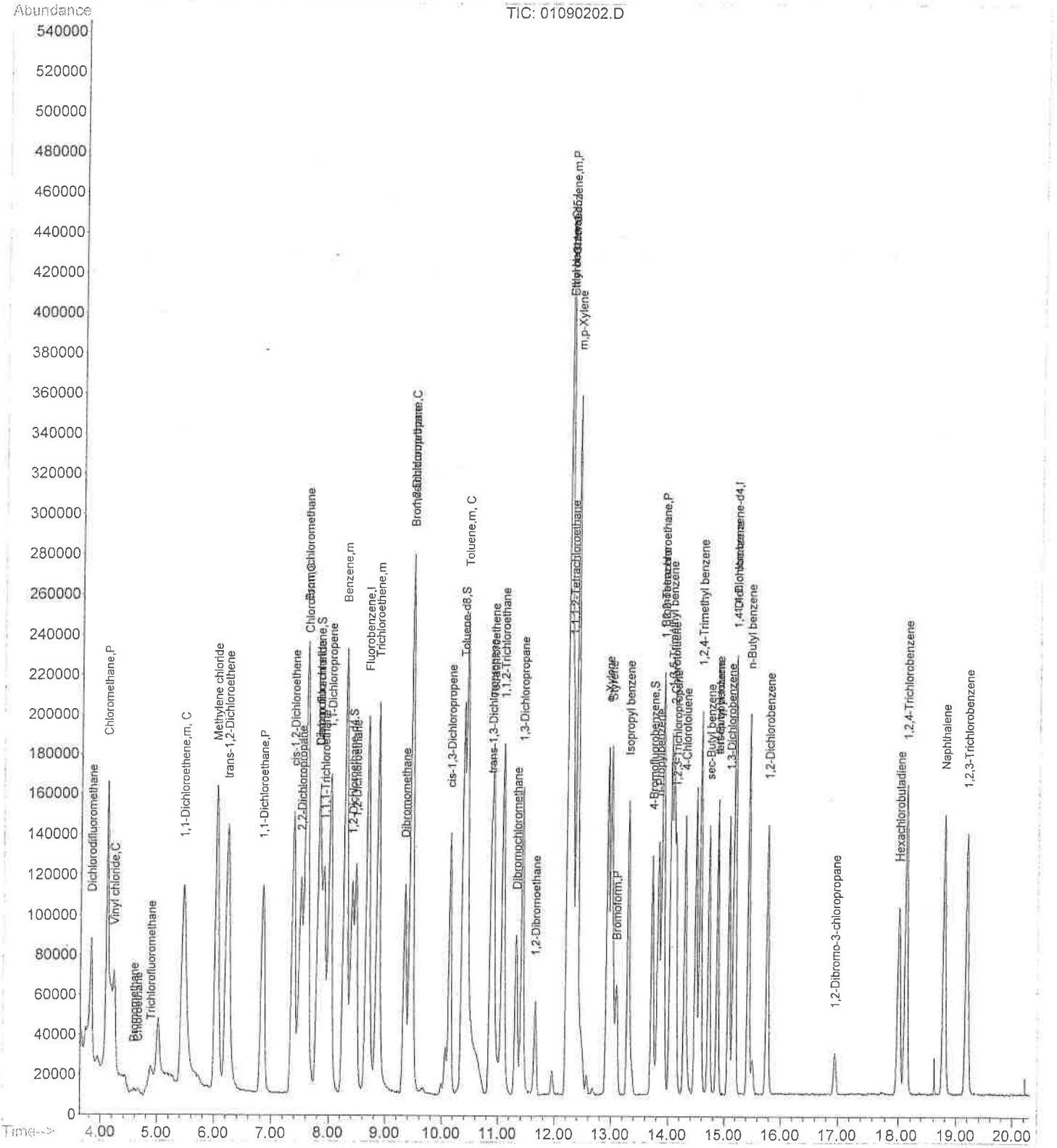
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
42) Styrene	12.99	104	137505	282.62	ng	100
44) Bromoform	13.09	173	37148	221.71	ng	97
46) Isopropyl benzene	13.30	105	182984	276.35	ng	98
47) Bromobenzene	13.89	156	68476	274.30	ng	99
48) 1,1,2,2-Tetrachloroethane	13.90	83	87019	221.94	ng	96
49) 1,2,3-Trichloropropane	14.13	75	72754	282.86	ng	97
50) n-Propylbenzene	13.82	91	175986	257.24	ng	99
51) 2-Chlorotoluene	14.08	91	166815	274.15	ng	98
52) 4-Chlorotoluene	14.29	91	134852	273.14	ng	99
53) 1,3,5-Trimethyl benzene	14.04	105	157540	254.72	ng	99
54) tert-Butyl benzene	14.87	119	130615	287.88	ng	99
55) 1,2,4-Trimethyl benzene	14.56	105	158046	247.72	ng	100
56) sec-Butyl benzene	14.71	105	160078	313.74	ng	96
57) 1,3-Dichlorobenzene	15.08	146	92716	272.85	ng	98
58) 4-Isopropyl toluene	14.87	119	130615	287.44	ng	99
59) 1,4-Dichlorobenzene	15.18	146	86583	263.02	ng	99
60) 1,2-Dichlorobenzene	15.77	146	89065	270.99	ng	97
61) n-Butyl benzene	15.43	91	155356	310.54	ng	99
62) 1,2-Dibromo-3-chloropropan	16.95	75	8060	261.29	ng	98
63) 1,2,4-Trichlorobenzene	18.12	180	96342	239.64	ng	97
64) Hexachlorobutadiene	18.00	225	37112	264.38	ng	99
65) Naphthalene	18.78	128	214559	224.10	ng	100
66) 1,2,3-Trichlorobenzene	19.19	180	88007	218.77	ng	97

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\010902\01090202.D Vial: 3
Acq On : 9 Jan 2002 7:33 am Operator: MEG
Sample : CCV 250ng 10uL 25ppm SC00301 + SC00224 Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS_SC00223 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 9 8:04 2002 Quant Results File: 010702.RES

Method : C:\HPCHEM\1\METHODS\010702.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Tue Jan 08 10:31:32 2002
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\010902\01090203.D Vial: 4
Acq On : 9 Jan 2002 7:57 am Operator: MEG
Sample : LCS 250ng 5uL 50ppm LCS_SC00211 Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS/SS_SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 9 8:24 2002 Quant Results File: 010702.RES

Quant Method : C:\HPCHEM\1\METHODS\010702.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Tue Jan 08 10:31:32 2002
Response via : Initial Calibration
DataAcq Meth : AQ_8260

Control Limit : 75% - 125%

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	8.69	96	444401	250.00	ng	0.01
32) Chlorobenzene-d5	12.23	117	176876	250.00	ng	0.00
45) 1,4-Dichlorobenzene-d4	15.16	152	48582	250.00	ng	0.00
System Monitoring Compounds						
16) Dibromofluoromethane	7.82	113	112618	204.09	ng	0.01
Spiked Amount 250.000			Recovery = 81.64%			
17) 1,2-Dichloroethane-d4	8.41	65	136428	209.29	ng	0.01
Spiked Amount 250.000			Recovery = 83.72%			
29) Toluene-d8	10.38	98	311565	234.74	ng	0.01
Spiked Amount 250.000			Recovery = 93.90%			
43) 4-Bromofluorobenzene	13.71	95	65818	244.10	ng	0.00
Spiked Amount 250.000			Recovery = 97.64%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	3.76	85	175036	247.91	ng	98
3) Chloromethane	4.10	50	271838	258.28	ng	100
4) Vinyl chloride	4.19	62	200949	263.18	ng	94
5) Bromomethane	4.56	94	22940m	98.95	ng	
6) Chloroethane	4.70	64	81345	189.49	ng	97
7) Trichlorofluoromethane	4.92	101	178249	192.95	ng	99
8) 1,1-Dichloroethene	5.50	96	152427	277.38	ng	96
9) Methylene chloride	6.06	84	150624	190.67	ng	99
10) trans-1,2-Dichloroethene	6.25	96	150172	212.65	ng	98
11) 1,1-Dichloroethane	6.87	63	253206	216.43	ng	99
12) cis-1,2-Dichloroethene	7.39	96	146087	219.16	ng	98
13) 2,2-Dichloropropane	7.52	77	140096	196.31	ng	98
14) Bromochloromethane	7.60	128	68662	214.66	ng	93
15) Chloroform	7.62	83	225131	213.70	ng	97
18) 1,1,1-Trichloroethane	7.92	97	171470	210.97	ng	97
19) Carbon tetrachloride	7.85	117	115628	191.39	ng	98
20) 1,1-Dichloropropene	8.02	75	186529	221.29	ng	99
21) Benzene	8.29	78	493959	226.55	ng	100
22) 1,2-Dichloroethane	8.48	62	184363	219.13	ng	100
23) Trichloroethene	8.87	95	146144	229.06	ng	99
24) 1,2-Dichloropropane	9.44	63	125644	226.33	ng	96
25) Dibromomethane	9.34	93	75229	211.56	ng	89
26) Bromodichloromethane	9.46	83	143688	207.76	ng	97
27) cis-1,3-Dichloropropene	10.15	75	110975	204.44	ng	95
28) Toluene	10.44	92	235700	223.43	ng	100
30) trans-1,3-Dichloropropene	10.86	75	82685	201.42	ng	96
31) 1,1,2-Trichloroethane	11.07	83	88127	217.89	ng	99
33) Tetrachloroethene	10.91	164	96046	255.03	ng	98
34) 1,3-Dichloropropane	11.42	76	146404	253.48	ng	99
35) Dibromochloromethane	11.31	129	72092	222.72	ng	99
36) 1,2-Dibromoethane	11.66	107	46786	224.11	ng	97
37) Chlorobenzene	12.25	112	219754	271.37	ng	95
38) 1,1,1,2-Tetrachloroethane	12.29	131	82285m	266.97	ng	
39) Ethyl benzene	12.21	91	246164	256.51	ng	99
40) m,p-Xylene	12.38	106	177132	257.90	ng	96
41) o-Xylene	12.93	106	86804	260.23	ng	94

(#) = qualifier out of range (m) = manual integration
01090203.D 010702.M Wed Jan 09 08:24:59 2002

1/17/02

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\010902\01090203.D Vial: 4
Acq On : 9 Jan 2002 7:57 am Operator: MEG
Sample : LCS 250ng 5uL 50ppm LCS_SC00211 Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS/SS_SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 9 8:24 2002 Quant Results File: 010702.RES

Quant Method : C:\HPCHEM\1\METHODS\010702.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Tue Jan 08 10:31:32 2002
Response via : Initial Calibration
DataAcq Meth : AQ_8260

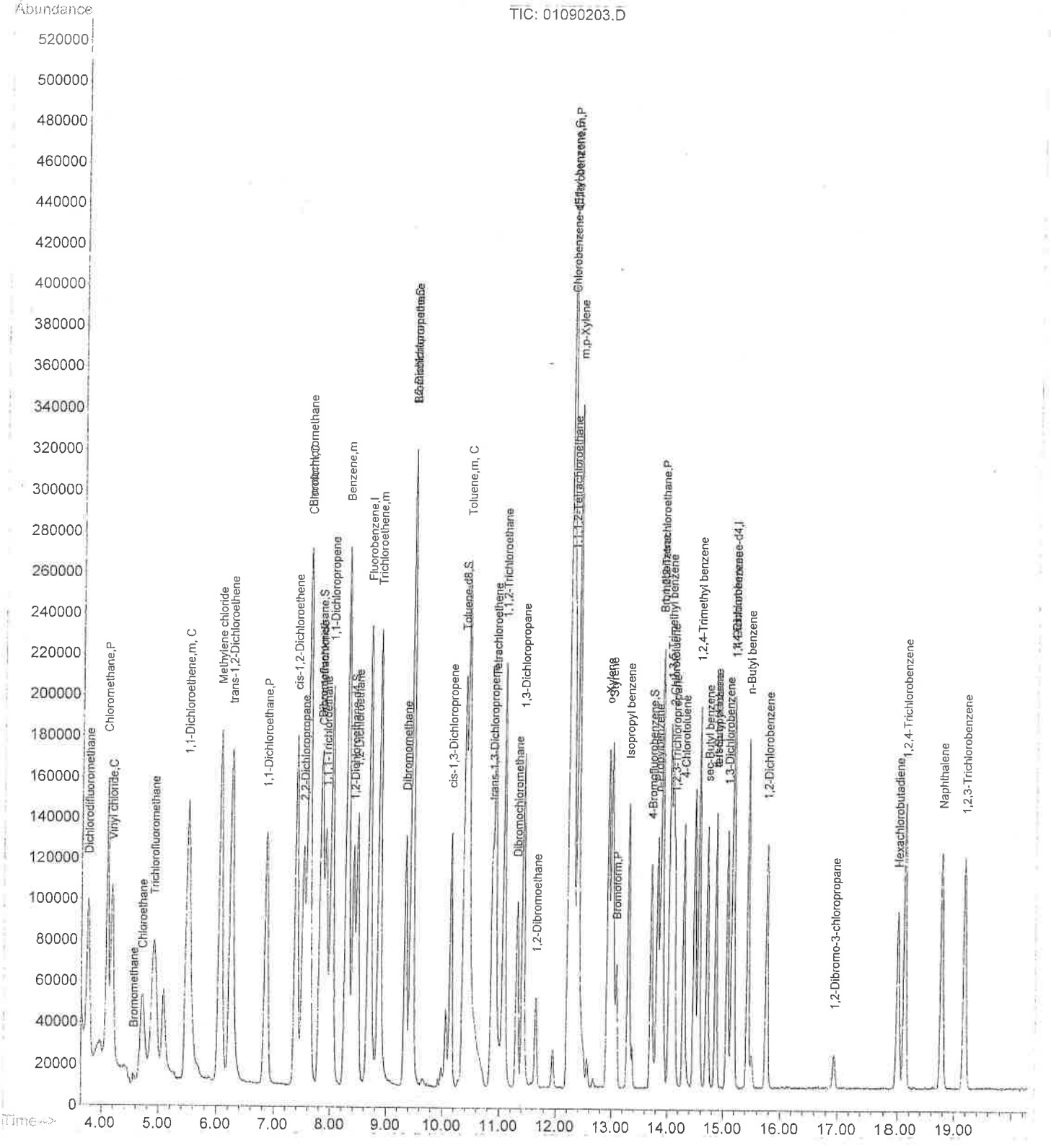
Compound	R.T.	QIon	Response	Conc Unit	Qvalue
42) Styrene	12.99	104	127732	261.11 ng	97
44) Bromoform	13.09	173	34452	204.51 ng	96
46) Isopropyl benzene	13.30	105	169823	298.70 ng	96
47) Bromobenzene	13.88	156	64785	302.24 ng	95
48) 1,1,2,2-Tetrachloroethane	13.90	83	85168	249.84 ng	98
49) 1,2,3-Trichloropropane	14.13	75	63278	286.52 ng	98
50) n-Propylbenzene	13.82	91	164824	280.58 ng	99
51) 2-Chlorotoluene	14.08	91	156713	299.94 ng	100
52) 4-Chlorotoluene	14.29	91	122058	287.92 ng	98
53) 1,3,5-Trimethyl benzene	14.04	105	149780	282.04 ng	100
54) tert-Butyl benzene	14.86	119	118157	305.80 ng	99
55) 1,2,4-Trimethyl benzene	14.56	105	148854	271.72 ng	98
56) sec-Butyl benzene	14.71	105	148016	342.77 ng	100
57) 1,3-Dichlorobenzene	15.07	146	82803	283.79 ng	99
58) 4-Isopropyl toluene	14.86	119	118305	305.81 ng	99
59) 1,4-Dichlorobenzene	15.18	146	76121	269.31 ng	100
60) 1,2-Dichlorobenzene	15.77	146	78701	278.88 ng	98
61) n-Butyl benzene	15.43	91	136302	318.73 ng	99
62) 1,2-Dibromo-3-chloropropan	16.94	75	6490	245.03 ng	89
63) 1,2,4-Trichlorobenzene	18.12	180	83896	242.92 ng	99
64) Hexachlorobutadiene	18.01	225	33807	284.42 ng	99
65) Naphthalene	18.78	128	173639	212.60 ng	100
66) 1,2,3-Trichlorobenzene	19.18	180	76647	221.69 ng	97

(#) = qualifier out of range (m) = manual integration
01090203.D 010702.M Wed Jan 09 08:24:59 2002

Quantitation Report

Data File : C:\HPCHEM\1\DATA\010902\01090203.D Vial: 4
Acq On : 9 Jan 2002 7:57 am Operator: MEG
Sample : LCS 250ng 5uL 50ppm LCS_SC00211 Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS/SS_SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 9 8:24 2002 Quant Results File: 010702.RES

Method : C:\HPCHEM\1\METHODS\010702.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Tue Jan 08 10:31:32 2002
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\010902\01090204.D Vial: 5
Acq On : 9 Jan 2002 8:21 am Operator: MEG
Sample : METHOD BLANK Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS/SS_SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 9 8:47 2002 Quant Results File: 010702.RES

Quant Method : C:\HPCHEM\1\METHODS\010702.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Tue Jan 08 10:31:32 2002
Response via : Initial Calibration
DataAcq Meth : AQ_8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	8.69	96	421429	250.00	ng	0.00
32) Chlorobenzene-d5	12.22	117	193332m	250.00	ng	0.00
45) 1,4-Dichlorobenzene-d4	15.15	152	71245	250.00	ng	0.00
System Monitoring Compounds						
16) Dibromofluoromethane	7.82	113	116118	221.90	ng	0.02
Spiked Amount 250.000			Recovery = 88.76%			
17) 1,2-Dichloroethane-d4	8.41	65	126137	204.05	ng	0.00
Spiked Amount 250.000			Recovery = 81.62%			
29) Toluene-d8	10.37	98	292948m	232.74	ng	0.00
Spiked Amount 250.000			Recovery = 93.10%			
43) 4-Bromofluorobenzene	13.71	95	66161	224.48	ng	0.00
Spiked Amount 250.000			Recovery = 89.79%			
Target Compounds						Qvalue

01/21/02

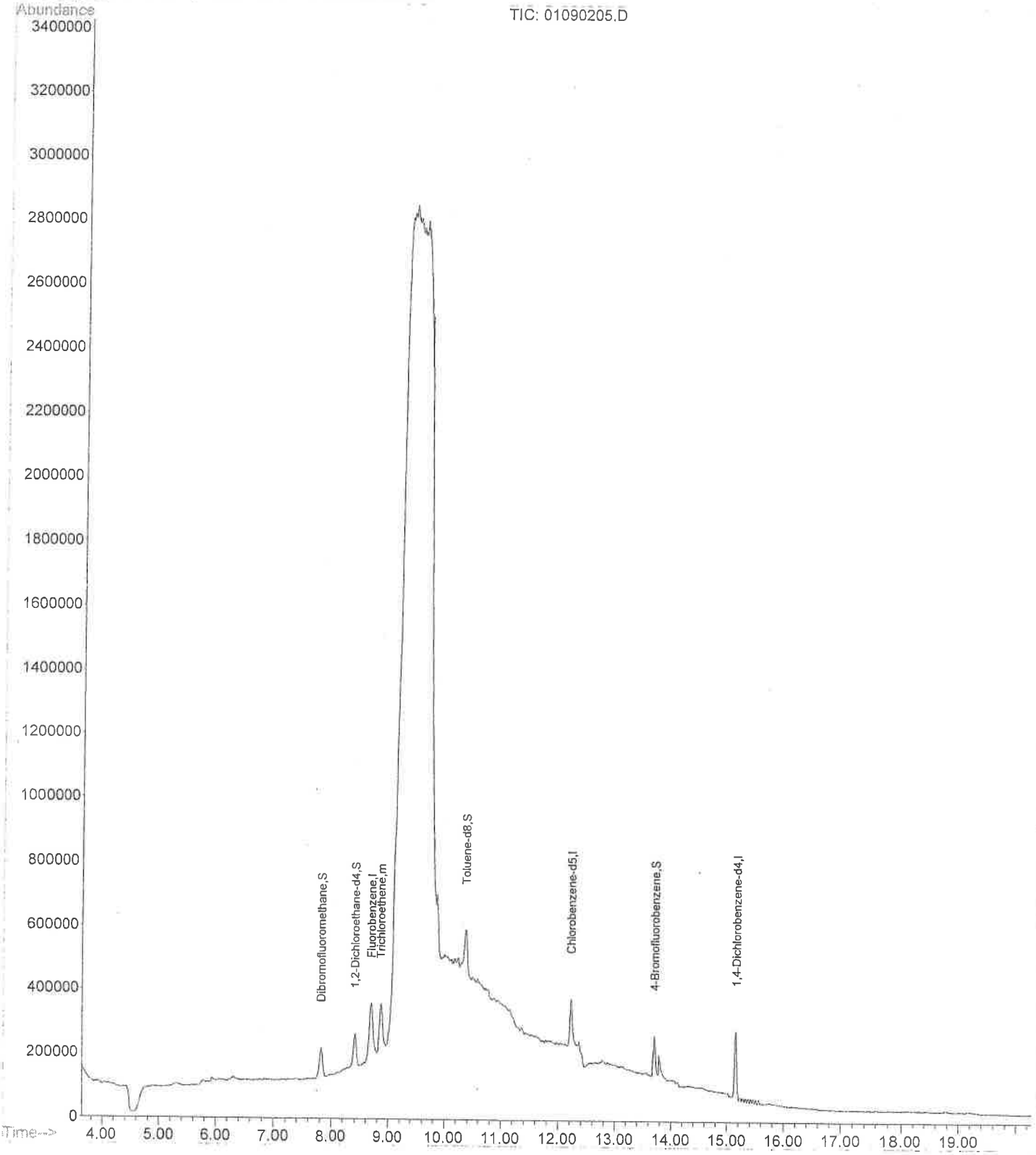
1/17/02

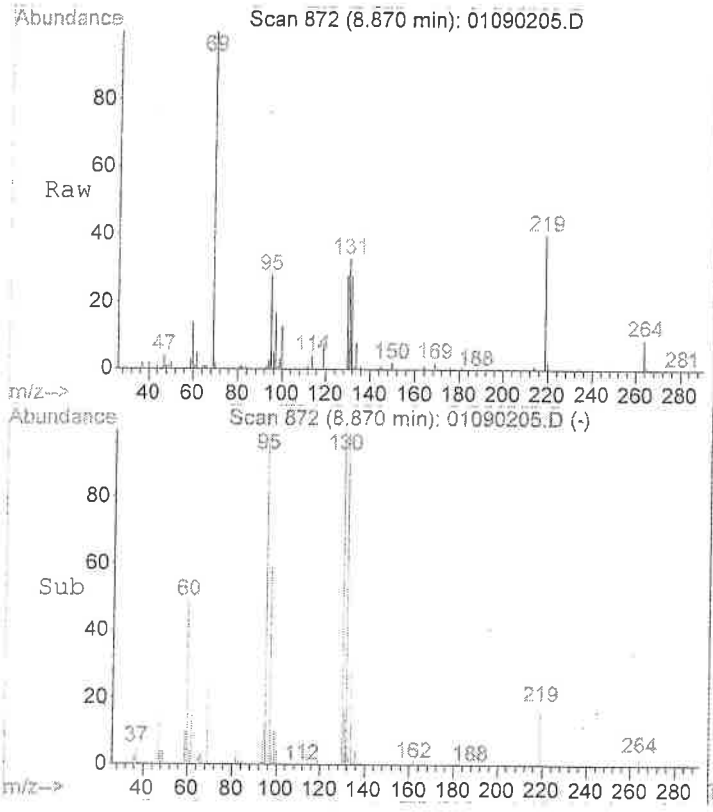
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\010902\01090205.D Vial: 6
Acq On : 9 Jan 2002 8:47 am Operator: MEG
Sample : PES0109-01 B3-8.0 1.0g 5X Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS/SS_SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 9 9:14 2002 Quant Results File: 010702.RES

Method : C:\HPCHEM\1\METHODS\010702.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Tue Jan 08 10:31:32 2002
Response via : Initial Calibration

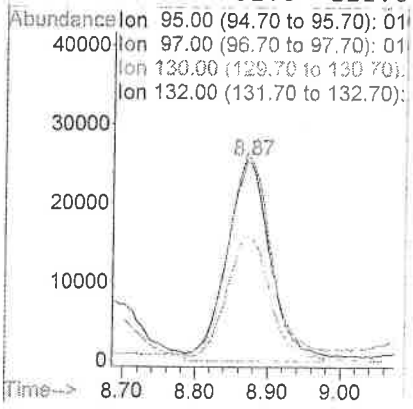




#23
Trichloroethene
Concen: 177.03 ng m
RT: 8.87 min Scan# 872
Delta R.T. 0.01 min
Lab File: 01090205.D
Acq: 9 Jan 2002 8:47 am

Tgt Ion: 95 Resp: 105877

Ion	Ratio	Lower	Upper
95	100		
97	61.4	41.9	81.9
130	100.3	84.9	124.9
132	102.2	81.8	121.8



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\010902\01090206.D Vial: 7
Acq On : 9 Jan 2002 9:16 am Operator: MEG
Sample : PES0109-02 B6-8.0 1.0g 5X Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS/SS_SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 9 9:39 2002 Quant Results File: 010702.RES

Quant Method : C:\HPCHEM\1\METHODS\010702.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Tue Jan 08 10:31:32 2002
Response via : Initial Calibration
DataAcq Meth : AQ_8260

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	8.69	96	416104	250.00 ng	0.00
32) Chlorobenzene-d5	12.22	117	179669	250.00 ng	0.00
45) 1,4-Dichlorobenzene-d4	15.15	152	90709	250.00 ng	0.00
System Monitoring Compounds					
16) Dibromofluoromethane	7.81	113	110745	214.34 ng	0.00
Spiked Amount 250.000			Recovery =	85.74%	
17) 1,2-Dichloroethane-d4	8.41	65	124033	203.22 ng	0.00
Spiked Amount 250.000			Recovery =	81.29%	
29) Toluene-d8	10.37	98	290348	233.63 ng	0.01
Spiked Amount 250.000			Recovery =	93.45%	
43) 4-Bromofluorobenzene	13.71	95	80038	292.22 ng	0.00
Spiked Amount 250.000			Recovery =	116.89%	
Target Compounds					Qvalue
23) Trichloroethene	8.87	95	115767	193.79 ng	97
54) tert-Butyl benzene	14.86	119	204	Below Cal #	51
56) sec-Butyl benzene	14.72	105	1182	Below Cal #	72
58) 4-Isopropyl toluene	14.86	119	327	Below Cal #	51
61) n-Butyl benzene	15.43	91	700	Below Cal #	69
64) Hexachlorobutadiene	17.99	225	48	Below Cal #	20
65) Naphthalene	18.79	128	2460	~~25.38 ng~~	100
66) 1,2,3-Trichlorobenzene	19.18	180	751	~~15.81 ng~~	86

Changed by client on COC.

ND

ND

ND

1/17/02

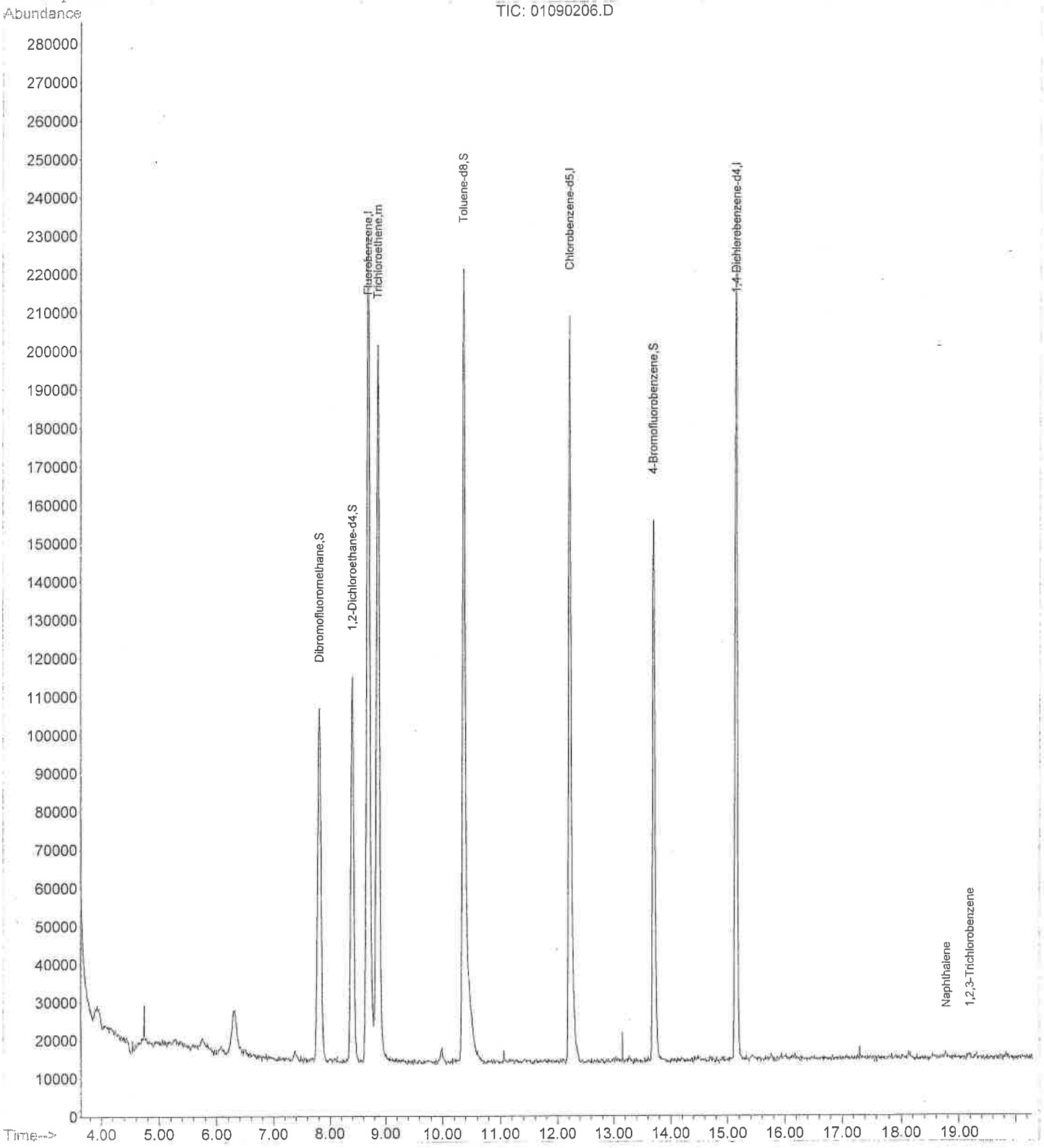
01/21/02

(#) = qualifier out of range (m) = manual integration
01090206.D 010702.M Wed Jan 09 10:13:15 2002

Quantitation Report

Data File : C:\HPCHEM\1\DATA\010902\01090206.D Vial: 7
Acq On : 9 Jan 2002 9:16 am Operator: MEG
Sample : PES0109-02 B2-8.0 1.0g 5X Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS/SS_SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 9 9:39 2002 Quant Results File: 010702.RES

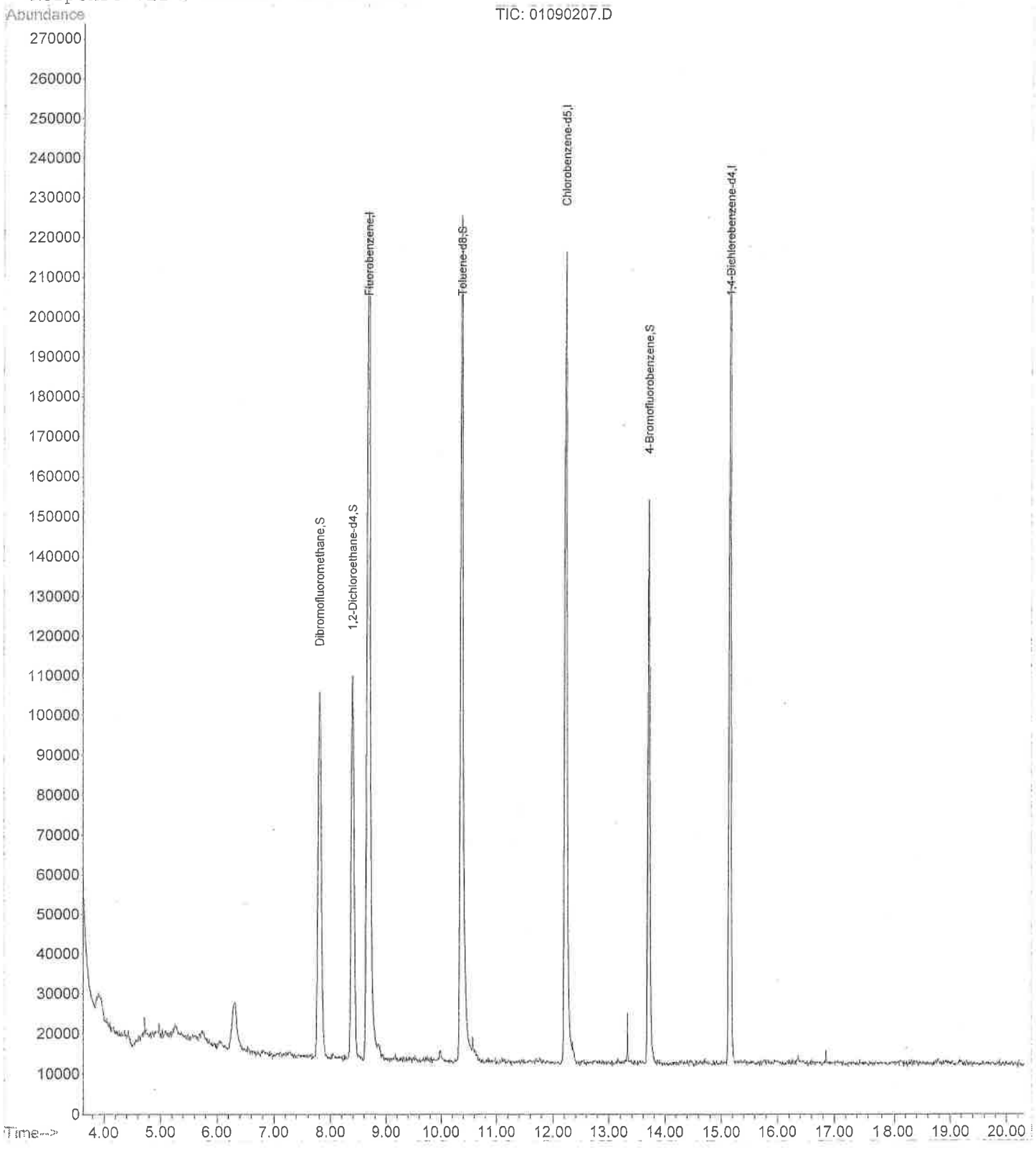
Method : C:\HPCHEM\1\METHODS\010702.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Tue Jan 08 10:31:32 2002
Response via : Initial Calibration



Quantitation Report

Data File : C:\HPCHEM\1\DATA\010902\01090207.D Vial: 8
Acq On : 9 Jan 2002 9:45 am Operator: MEG
Sample : PES0109-03 A3-4.0 1.0g 5X Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS/SS_SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 9 10:16 2002 Quant Results File: 010702.RES

Method : C:\HPCHEM\1\METHODS\010702.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Tue Jan 08 10:31:32 2002
Response via : Initial Calibration



(6) Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\010902\01090208.D Vial: 9
Acq On : 9 Jan 2002 10:22 am Operator: MEG
Sample : PES0109-04 A2-5.0 1.0g 5X Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS/SS_SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 9 10:48 2002 Quant Results File: 010702.RES

Quant Method : C:\HPCHEM\1\METHODS\010702.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Tue Jan 08 10:31:32 2002
Response via : Initial Calibration
DataAcq Meth : AQ_8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	8.69	96	379609	250.00	ng	0.00
32) Chlorobenzene-d5	12.23	117	167249m	250.00	ng	0.00
45) 1,4-Dichlorobenzene-d4	15.15	152	63720	250.00	ng	0.00
System Monitoring Compounds						
16) Dibromofluoromethane	7.82	113	106470	225.88	ng	0.02
Spiked Amount 250.000			Recovery =	90.35%		
17) 1,2-Dichloroethane-d4	8.41	65	118538	212.89	ng	0.00
Spiked Amount 250.000			Recovery =	85.16%		
29) Toluene-d8	10.37	98	257935	227.50	ng	0.00
Spiked Amount 250.000			Recovery =	91.00%		
43) 4-Bromofluorobenzene	13.71	95	61312	240.47	ng	0.00
Spiked Amount 250.000			Recovery =	96.19%		
Target Compounds						Qvalue
12) cis-1,2-Dichloroethene	7.40	96	5750	10.10	ng <	93
23) Trichloroethene	8.88	95	28982	53.18	ng	96

01/21/02

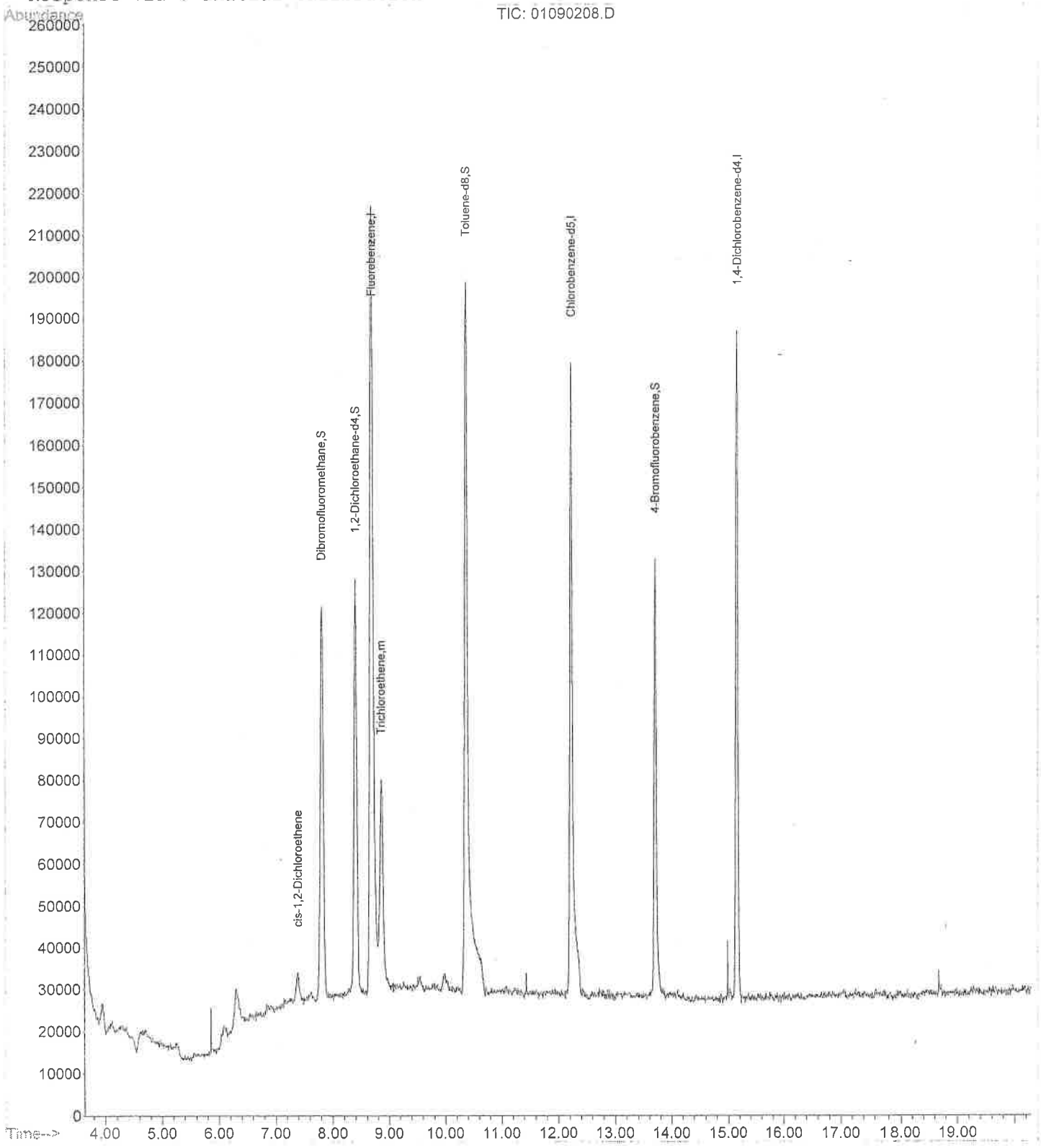
1/17/02

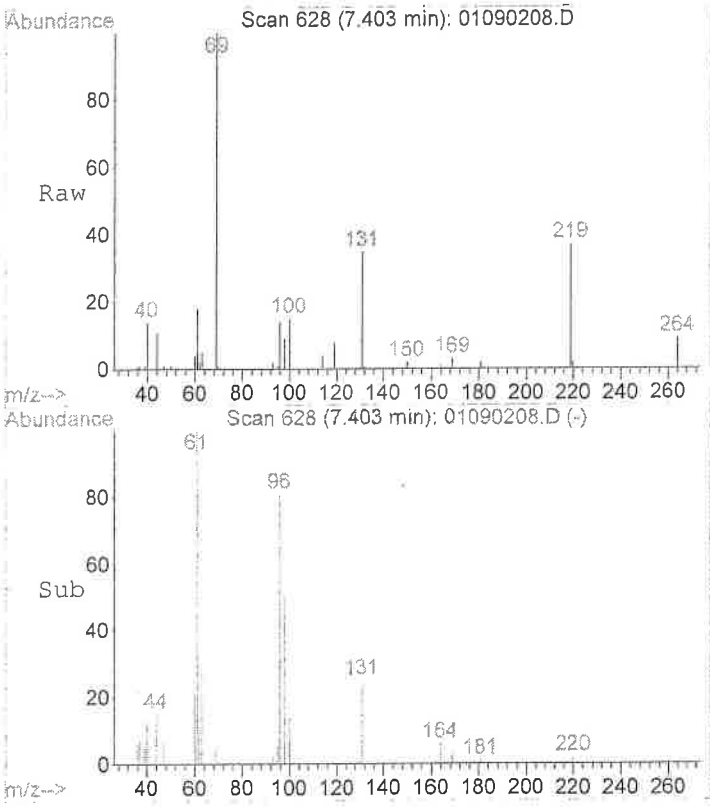
(#) = qualifier out of range (m) = manual integration
01090208.D 010702.M Wed Jan 09 10:48:28 2002

Quantitation Report

Data File : C:\HPCHEM\1\DATA\010902\01090208.D Vial: 9
Acq On : 9 Jan 2002 10:22 am Operator: MEG
Sample : PES0109-04 A2-5.0 1.0g 5X Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS/SS_SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 9 10:48 2002 Quant Results File: 010702.RES

Method : C:\HPCHEM\1\METHODS\010702.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Tue Jan 08 10:31:32 2002
Response via : Initial Calibration

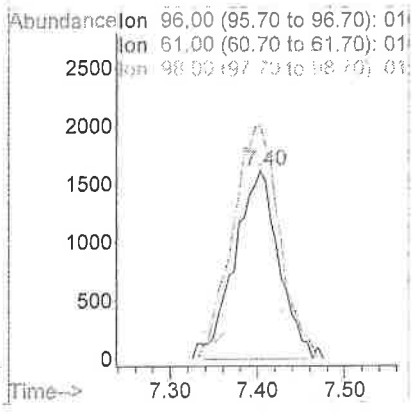


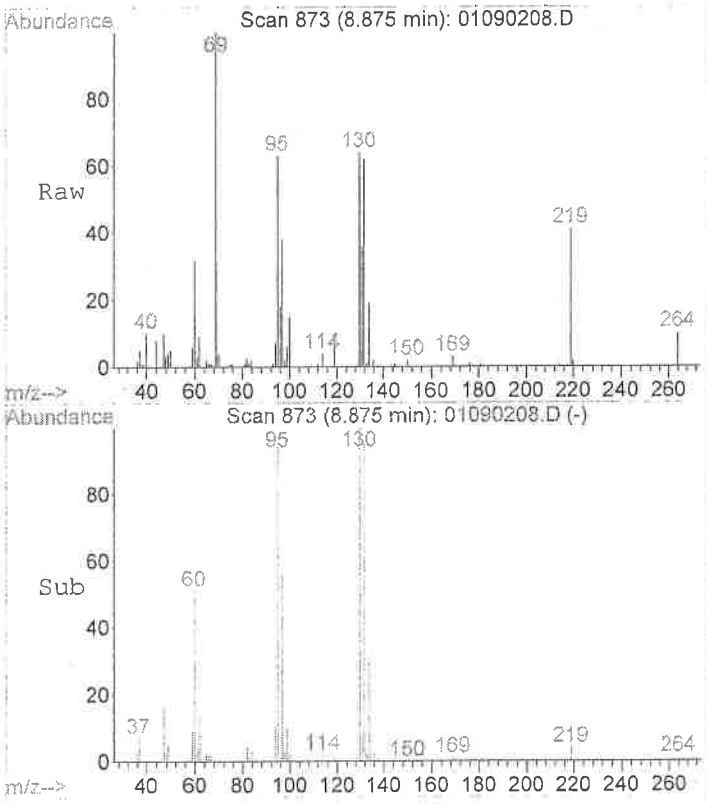


#12
cis-1,2-Dichloroethene
Concen: 10.10 ng
RT: 7.40 min Scan# 628
Delta R.T. 0.03 min
Lab File: 01090208.D
Acq: 9 Jan 2002 10:22 am

Tgt Ion: 96 Resp: 5750

Ion	Ratio	Lower	Upper
96	100		
61	123.6	114.0	154.0
98	61.4	43.9	83.9

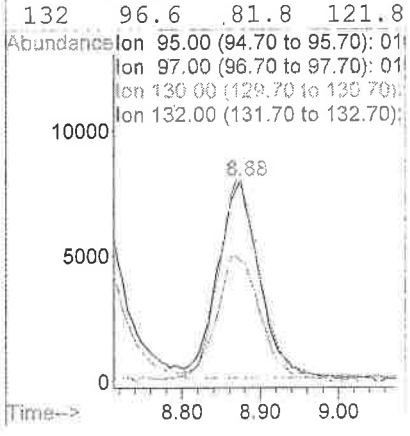




#23
Trichloroethene
Concen: 53.18 ng
RT: 8.88 min Scan# 873
Delta R.T. 0.01 min
Lab File: 01090208.D
Acq: 9 Jan 2002 10:22 am

Tgt Ion: 95 Resp: 28982

Ion	Ratio	Lower	Upper
95	100		
97	59.2	41.9	81.9
130	101.1	84.9	124.9
132	96.6	81.8	121.8



dqr 01/21/02 PeR COC

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\010902\01090209.D Vial: 10
Acq On : 9 Jan 2002 11:13 am Operator: MEG
Sample : PES0109-05 D2-18.1 1.0g 5X Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS/SS_SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 9 11:40 2002 Quant Results File: 010702.RES

Quant Method : C:\HPCHEM\1\METHODS\010702.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Tue Jan 08 10:31:32 2002
Response via : Initial Calibration
DataAcq Meth : AQ_8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	8.69	96	392735	250.00	ng	0.00
32) Chlorobenzene-d5	12.23	117	142707m	250.00	ng	0.00
45) 1,4-Dichlorobenzene-d4	15.15	152	81143	250.00	ng	0.00
System Monitoring Compounds						
16) Dibromofluoromethane	7.82	113	113928	233.62	ng	0.02
Spiked Amount 250.000			Recovery =	93.45%		
17) 1,2-Dichloroethane-d4	8.41	65	128636	223.30	ng	0.01
Spiked Amount 250.000			Recovery =	89.32%		
29) Toluene-d8	10.37	98	217149m	185.13	ng	0.00
Spiked Amount 250.000			Recovery =	74.05%		
43) 4-Bromofluorobenzene	13.71	95	60297	277.16	ng	0.00
Spiked Amount 250.000			Recovery =	110.86%		
Target Compounds						Qvalue
23) Trichloroethene	8.87	95	124814	221.37	ng	97

DQ 01/21/02

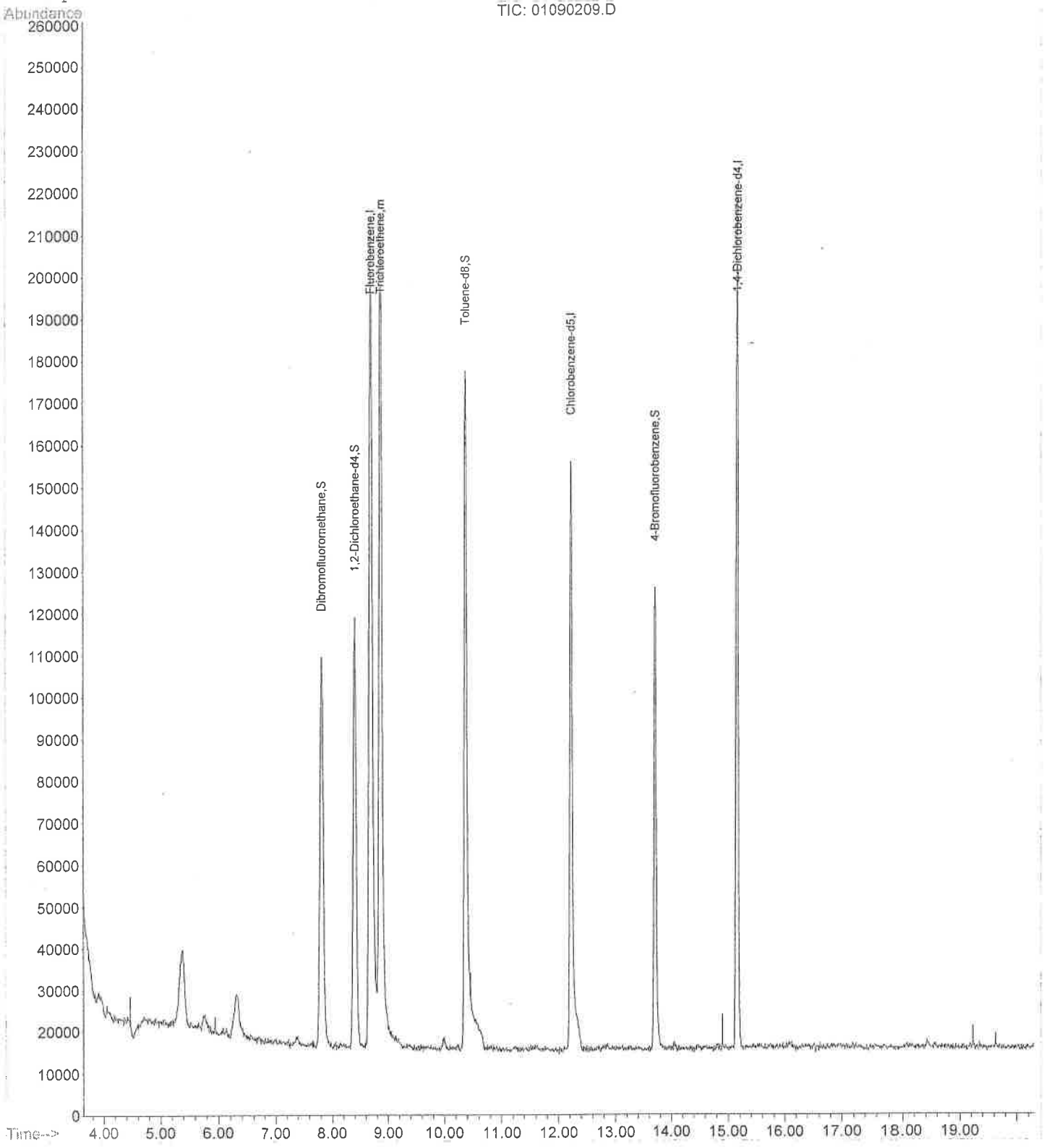
SK 1/17/02

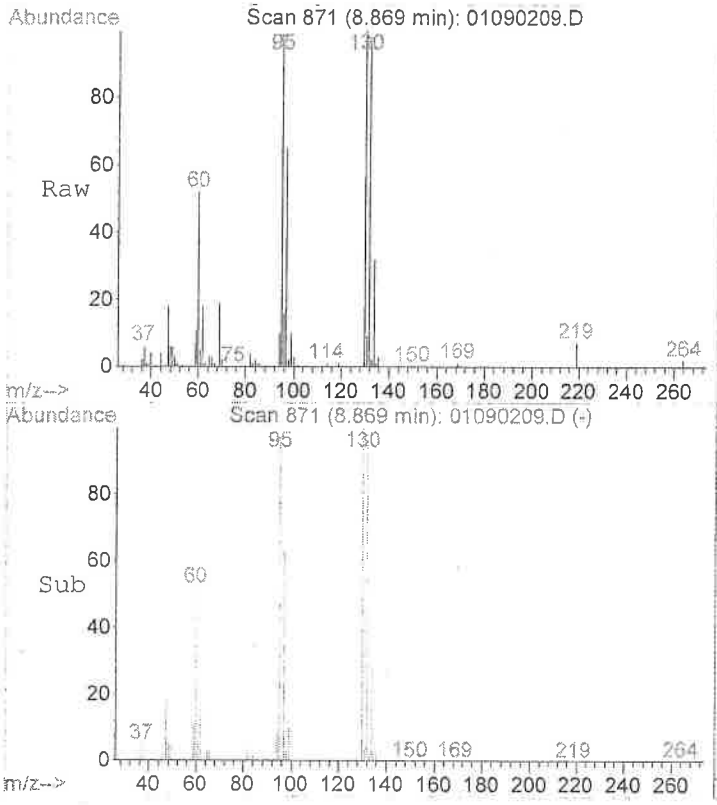
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01090209.D 010702.M Wed Jan 09 11:40:39 2002

Quantitation Report

Data File : C:\HPCHEM\1\DATA\010902\01090209.D Vial: 10
Acq On : 9 Jan 2002 11:13 am Operator: MEG
Sample : PES0109-05 D2-18.1 1.0g 5X Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS/SS_SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 9 11:40 2002 Quant Results File: 010702.RES

Method : C:\HPCHEM\1\METHODS\010702.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Tue Jan 08 10:31:32 2002
Response via : Initial Calibration

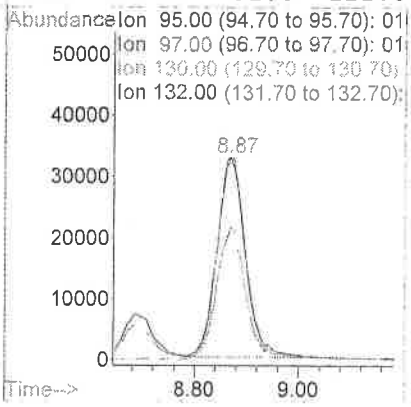




#23
Trichloroethene
Concen: 221.37 ng
RT: 8.87 min Scan# 871
Delta R.T. 0.01 min
Lab File: 01090209.D
Acq: 9 Jan 2002 11:13 am

Tgt Ion: 95 Resp: 124814

Ion	Ratio	Lower	Upper
95	100		
97	65.4	41.9	81.9
130	102.1	84.9	124.9
132	100.2	81.8	121.8



8 per coc DE 01/21/02

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\010902\01090210.D Vial: 11
Acq On : 9 Jan 2002 11:48 am Operator: MEG
Sample : PES0109-06 BJ-EAST-5.0 1.0g 5X Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS/SS_SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 9 12:15 2002 Quant Results File: 010702.RES

Quant Method : C:\HPCHEM\1\METHODS\010702.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Tue Jan 08 10:31:32 2002
Response via : Initial Calibration
DataAcq Meth : AQ_8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	8.70	96	373647	250.00	ng	0.01
32) Chlorobenzene-d5	12.23	117	133358m	250.00	ng	0.00
45) 1,4-Dichlorobenzene-d4	15.15	152	77215	250.00	ng	0.00
System Monitoring Compounds						
16) Dibromofluoromethane	7.82	113	109854	236.78	ng	0.02
Spiked Amount 250.000			Recovery = 94.71%			
17) 1,2-Dichloroethane-d4	8.41	65	126390	230.61	ng	0.01
Spiked Amount 250.000			Recovery = 92.24%			
29) Toluene-d8	10.37	98	204478m	183.23	ng	0.00
Spiked Amount 250.000			Recovery = 73.29%			
43) 4-Bromofluorobenzene	13.71	95	60070	295.48	ng	0.00
Spiked Amount 250.000			Recovery = 118.19%			
Target Compounds						Qvalue
23) Trichloroethene	8.87	95	54842	102.23	ng	97

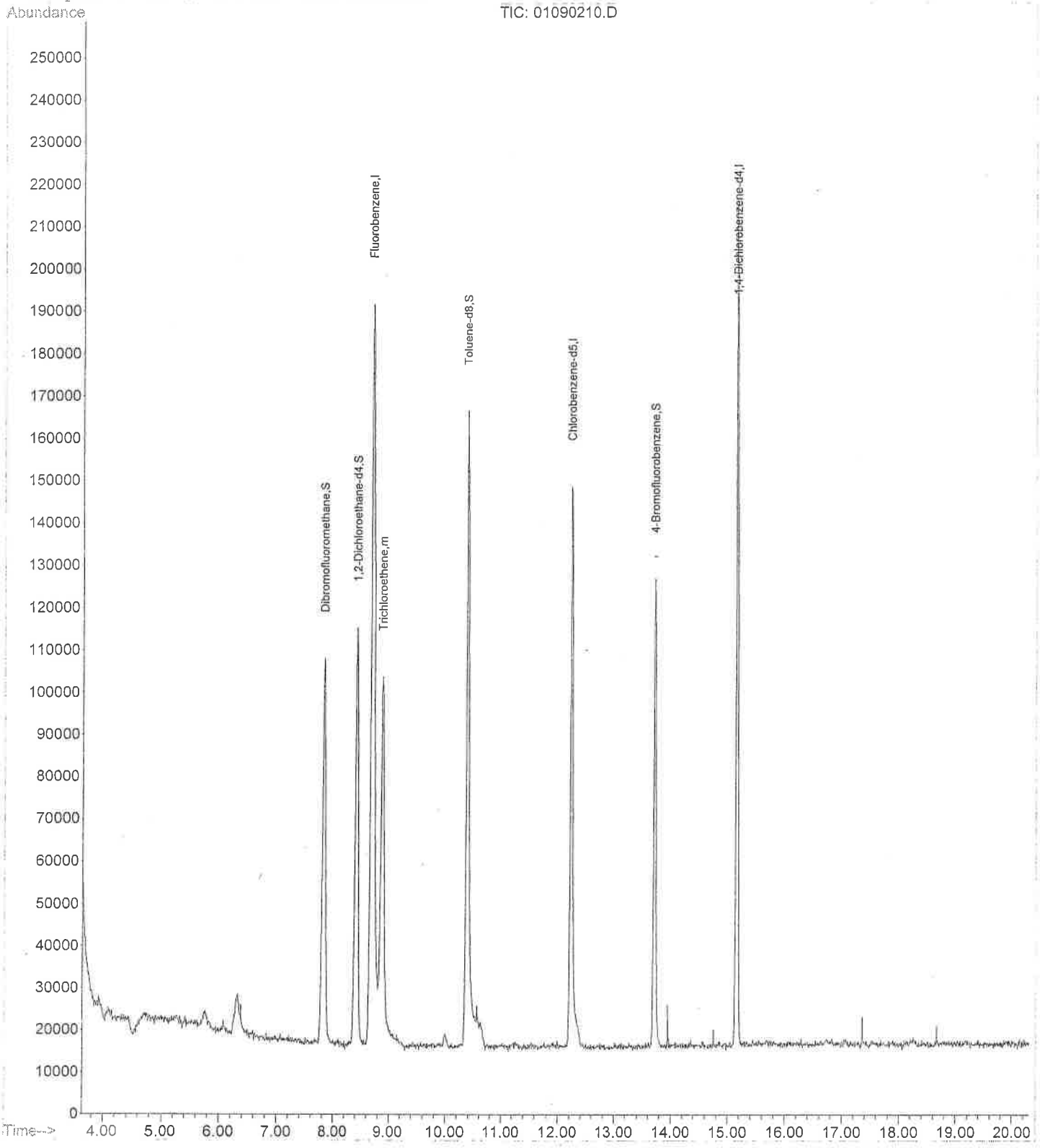
1/17/02

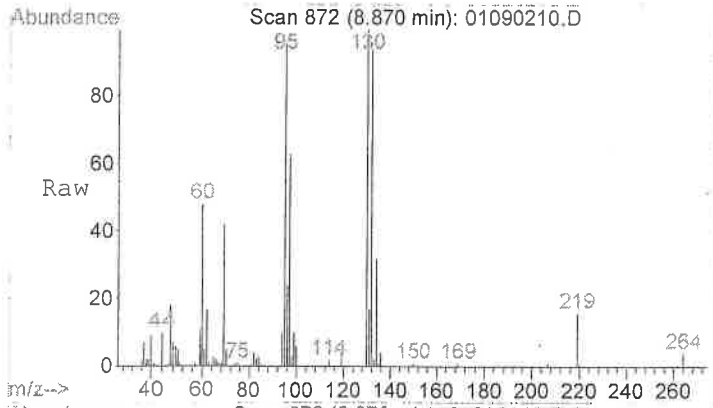
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01090210.D 010702.M Wed Jan 09 12:15:33 2002

Quantitation Report

Data File : C:\HPCHEM\1\DATA\010902\01090210.D Vial: 11
Acq On : 9 Jan 2002 11:48 am Operator: MEG
Sample : PES0109-06 B3-EAST-5.0 1.0g 5X Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS/SS_SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 9 12:15 2002 Quant Results File: 010702.RES

Method : C:\HPCHEM\1\METHODS\010702.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Tue Jan 08 10:31:32 2002
Response via : Initial Calibration

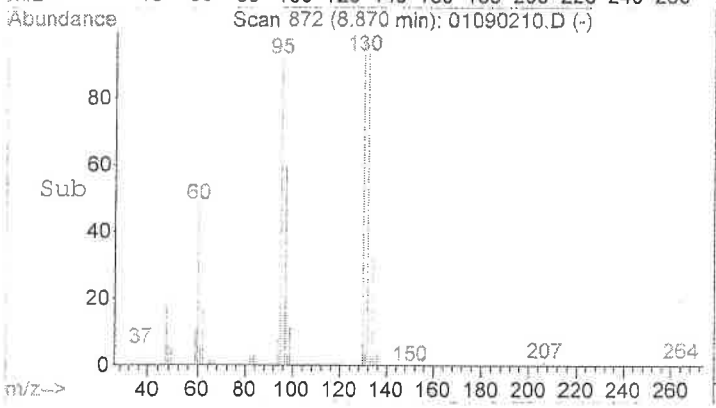


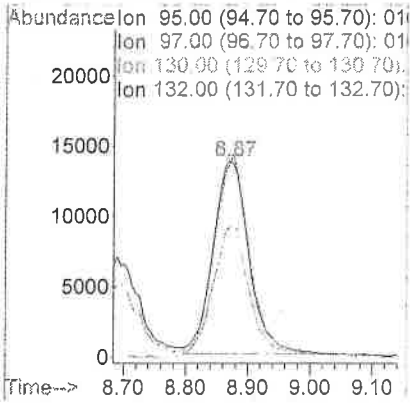


#23
Trichloroethene
Concen: 102.23 ng
RT: 8.87 min Scan# 872
Delta R.T. 0.01 min
Lab File: 01090210.D
Acq: 9 Jan 2002 11:48 am

Tgt Ion: 95 Resp: 54842

Ion	Ratio	Lower	Upper
95	100		
97	65.8	41.9	81.9
130	105.3	84.9	124.9
132	98.2	81.8	121.8





Per COC dm 01/21/02

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\010902\01090211.D Vial: 12
Acq On : 9 Jan 2002 12:23 pm Operator: MEG
Sample : PES0109-07 D2-19.5 1.0g 5X Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS/SS_SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 9 12:46 2002 Quant Results File: 010702.RES

Quant Method : C:\HPCHEM\1\METHODS\010702.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Tue Jan 08 10:31:32 2002
Response via : Initial Calibration
DataAcq Meth : AQ_8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	8.70	96	359591	250.00	ng	0.01
32) Chlorobenzene-d5	12.23	117	131538m	250.00	ng	0.00
45) 1,4-Dichlorobenzene-d4	15.15	152	79461	250.00	ng	0.00
System Monitoring Compounds						
16) Dibromofluoromethane	7.83	113	105921	237.22	ng	0.03
Spiked Amount 250.000			Recovery =	94.89%		
17) 1,2-Dichloroethane-d4	8.41	65	119809	227.15	ng	0.01
Spiked Amount 250.000			Recovery =	90.86%		
29) Toluene-d8	10.38	98	195373m	181.92	ng	0.01
Spiked Amount 250.000			Recovery =	72.77%		
43) 4-Bromofluorobenzene	13.71	95	60405	301.24	ng	0.00
Spiked Amount 250.000			Recovery =	120.50%		
Target Compounds						Qvalue
23) Trichloroethene	8.88	95	138648	268.57	ng	98

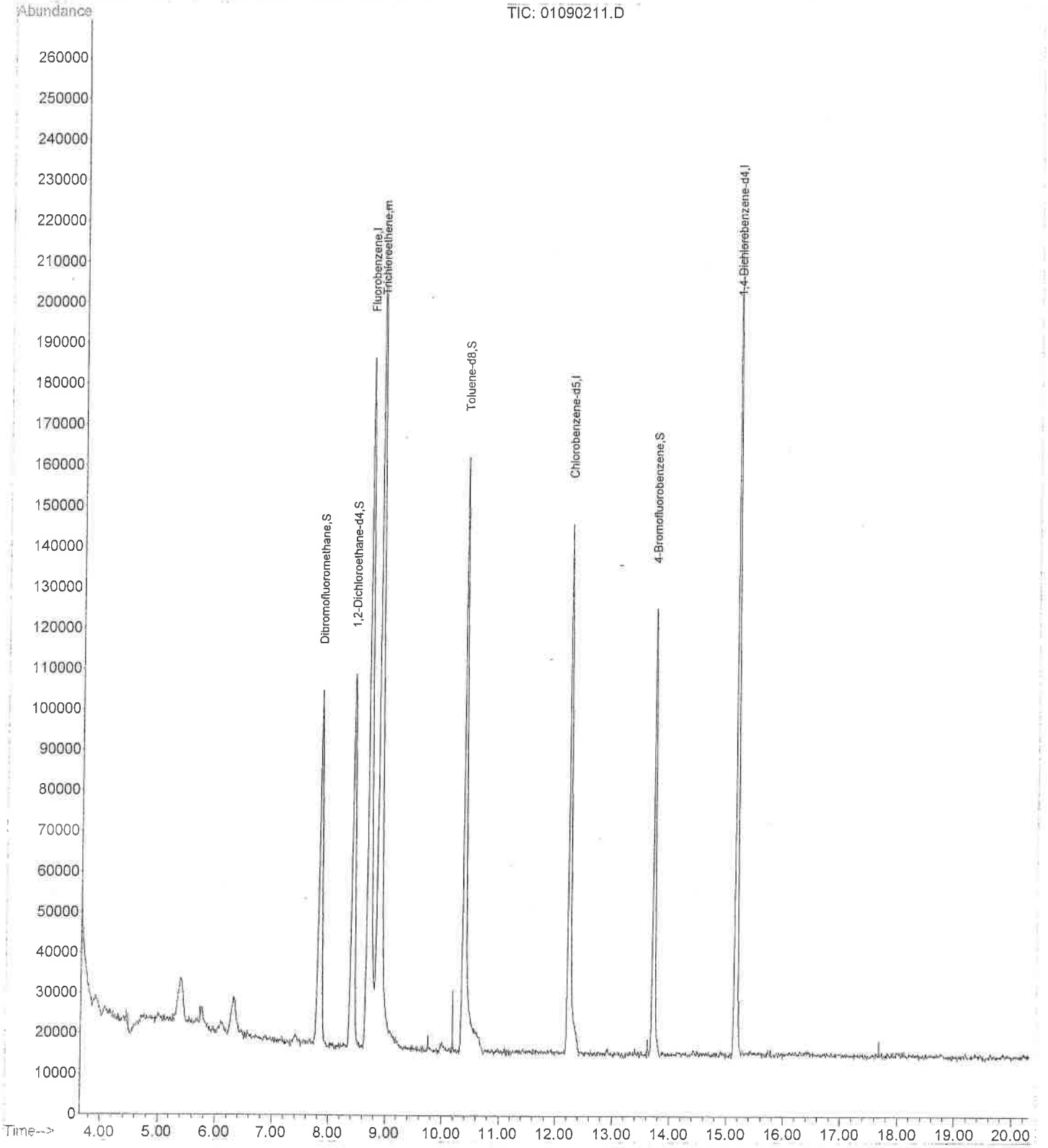
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01090211.D 010702.M Wed Jan 09 12:46:17 2002

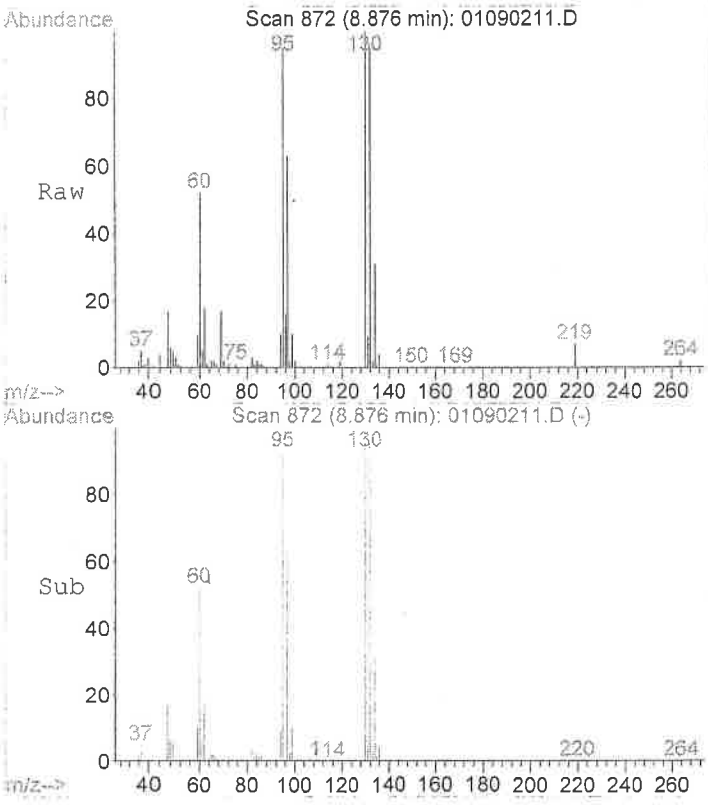
1/17/02

Quantitation Report

Data File : C:\HPCHEM\1\DATA\010902\01090211.D Vial: 12
Acq On : 9 Jan 2002 12:23 pm Operator: MEG
Sample : PES0109-07 D2-19.5 1.0g 5X Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS/SS_SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 9 12:46 2002 Quant Results File: 010702.RES

Method : C:\HPCHEM\1\METHODS\010702.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Tue Jan 08 10:31:32 2002
Response via : Initial Calibration

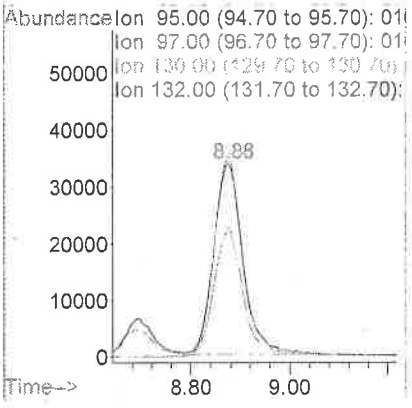




#23
Trichloroethene
Concen: 268.57 ng
RT: 8.88 min Scan# 872
Delta R.T. 0.01 min
Lab File: 01090211.D
Acq: 9 Jan 2002 12:23 pm

Tgt Ion: 95 Resp: 138648

Ion	Ratio	Lower	Upper
95	100		
97	66.9	41.9	81.9
130	107.0	84.9	124.9
132	101.4	81.8	121.8



8 per COC DH 01/21/02

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\010902\01090212.D Vial: 13
Acq On : 9 Jan 2002 12:48 pm Operator: MEG
Sample : PES0109-08 DI-EAST-5.0 1.0g 5X Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS/SS_SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 9 13:12 2002 Quant Results File: 010702.RES

Quant Method : C:\HPCHEM\1\METHODS\010702.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Tue Jan 08 10:31:32 2002
Response via : Initial Calibration
DataAcq Meth : AQ_8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	8.69	96	371909	250.00	ng	0.01
32) Chlorobenzene-d5	12.23	117	193352m	250.00	ng	0.00
45) 1,4-Dichlorobenzene-d4	15.15	152	68281	250.00	ng	0.00
System Monitoring Compounds						
16) Dibromofluoromethane	7.82	113	103963	225.13	ng	0.02
Spiked Amount 250.000			Recovery = 90.05%			
17) 1,2-Dichloroethane-d4	8.41	65	119090	218.31	ng	0.00
Spiked Amount 250.000			Recovery = 87.32%			
29) Toluene-d8	10.38	98	280216m	252.27	ng	0.01
Spiked Amount 250.000			Recovery = 100.91%			
43) 4-Bromofluorobenzene	13.71	95	67439	228.79	ng	0.00
Spiked Amount 250.000			Recovery = 91.52%			
Target Compounds						Qvalue
23) Trichloroethene	8.87	95	35980	67.39	ng	99

DH 01/21/02

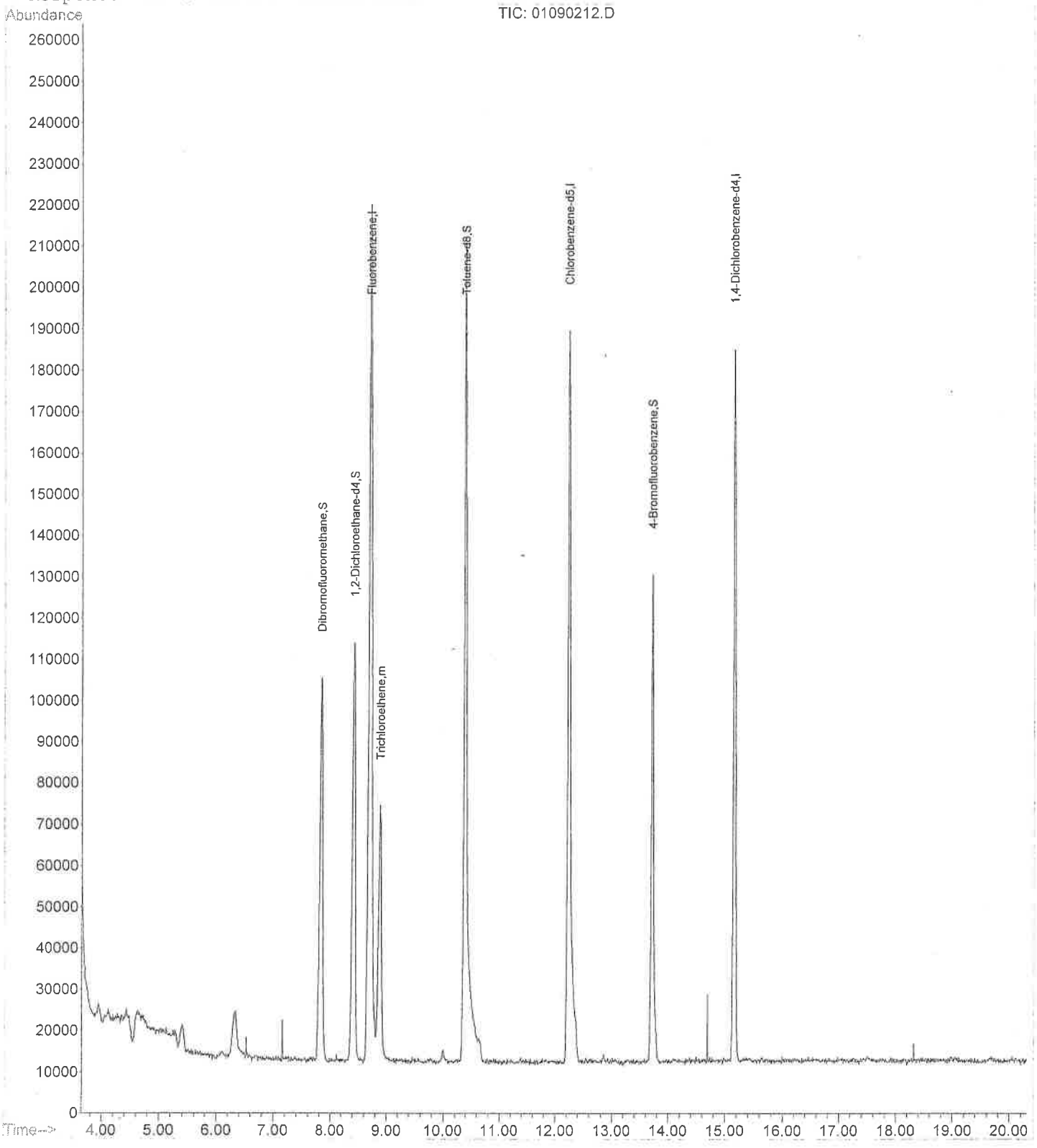
SL 1/17/02

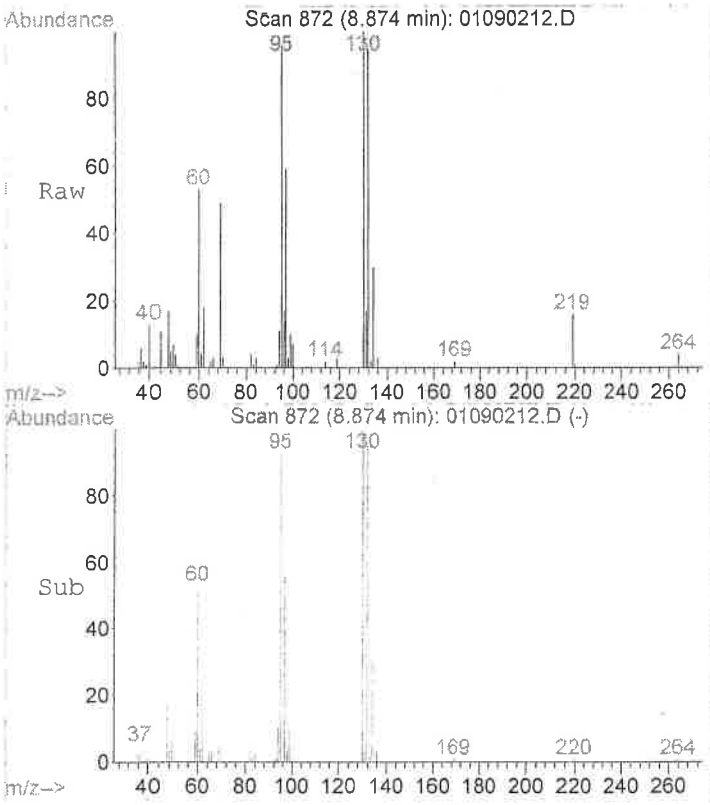
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01090212.D 010702.M Wed Jan 09 13:12:25 2002

Quantitation Report

Data File : C:\HPCHEM\1\DATA\010902\01090212.D Vial: 13
Acq On : 9 Jan 2002 12:48 pm Operator: MEG
Sample : PES0109-08 D3-EAST-5.0 1.0g 5X Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS/SS_SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 9 13:12 2002 Quant Results File: 010702.RES

Method : C:\HPCHEM\1\METHODS\010702.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Tue Jan 08 10:31:32 2002
Response via : Initial Calibration

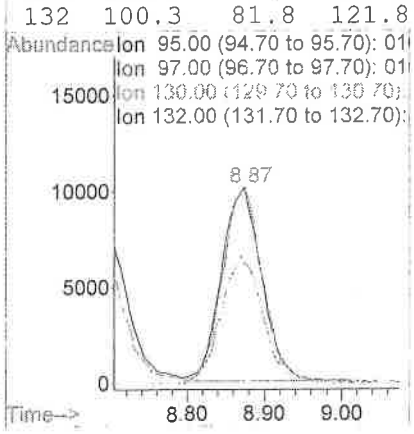




#23
Trichloroethene
Concen: 67.39 ng
RT: 8.87 min Scan# 872
Delta R.T. 0.01 min
Lab File: 01090212.D
Acq: 9 Jan 2002 12:48 pm

Tgt Ion: 95 Resp: 35980

Ion	Ratio	Lower	Upper
95	100		
97	60.5	41.9	81.9
130	105.5	84.9	124.9
132	100.3	81.8	121.8



per COC 01/21/02

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\010902\01090213.D Vial: 14
Acq On : 9 Jan 2002 1:33 pm Operator: MEG
Sample : PES0109-10 D1-WEST-6.0 1.0g 5X Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS/SS_SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 9 14:10 2002 Quant Results File: 010702.RES

Quant Method : C:\HPCHEM\1\METHODS\010702.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Tue Jan 08 10:31:32 2002
Response via : Initial Calibration
DataAcq Meth : AQ_8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	8.68	96	364896	250.00	ng	0.00
32) Chlorobenzene-d5	12.23	117	176776	250.00	ng	0.01
45) 1,4-Dichlorobenzene-d4	15.16	152	85233	250.00	ng	0.00
System Monitoring Compounds						
16) Dibromofluoromethane	7.81	113	99540	219.69	ng	0.00
Spiked Amount 250.000			Recovery =	87.88%		
17) 1,2-Dichloroethane-d4	8.40	65	115359	215.53	ng	0.00
Spiked Amount 250.000			Recovery =	86.21%		
29) Toluene-d8	10.38	98	292528	268.42	ng	0.01
Spiked Amount 250.000			Recovery =	107.37%		
43) 4-Bromofluorobenzene	13.71	95	84467	313.44	ng	0.00
Spiked Amount 250.000			Recovery =	125.38%		
Target Compounds						Qvalue

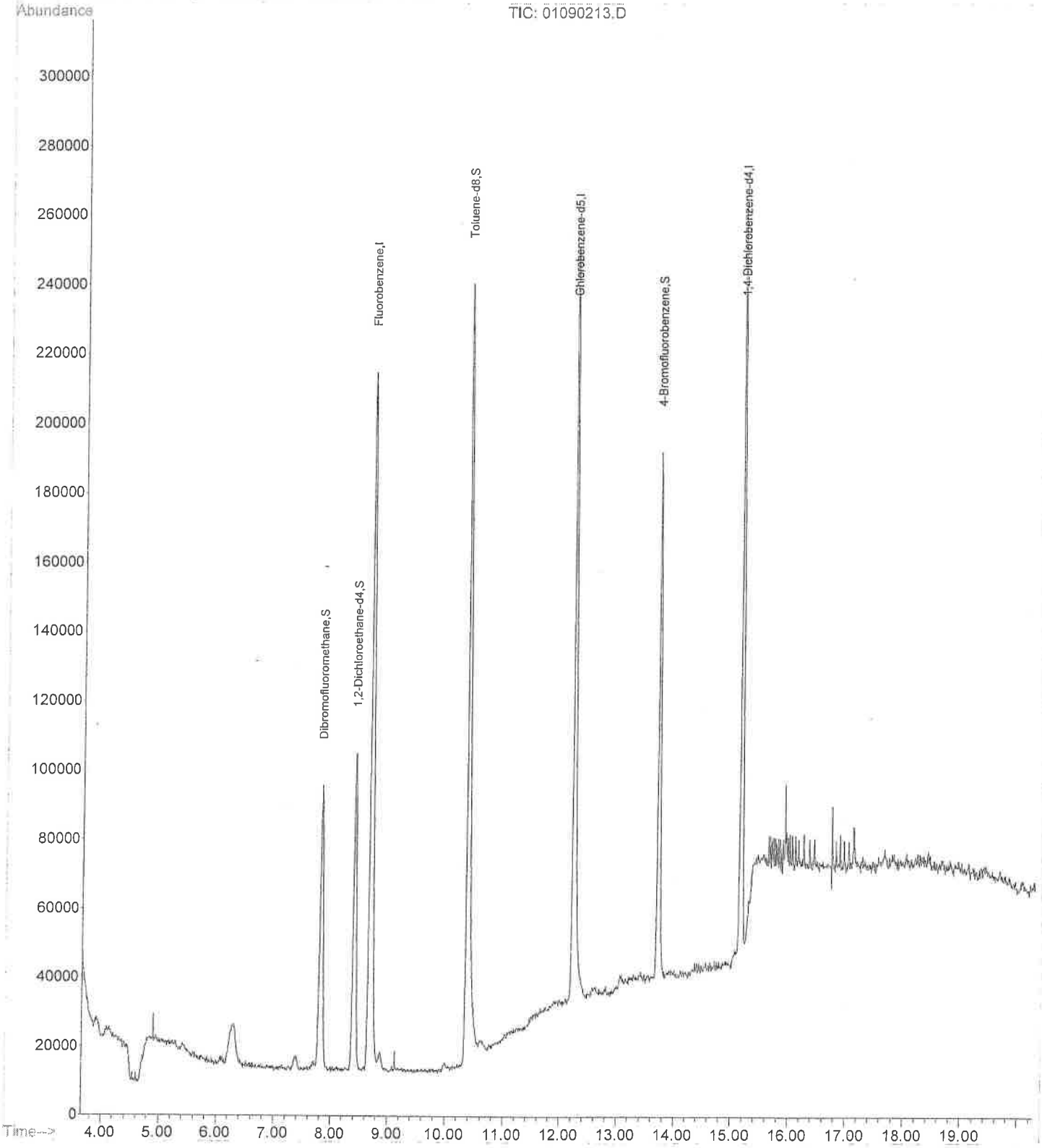
1/17/02

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\010902\01090213.D Vial: 14
Acq On : 9 Jan 2002 1:33 pm Operator: MEG
Sample : PES0109-10 D1-WEST-6.0 1.0g 5X Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS/SS_SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 9 14:10 2002 Quant Results File: 010702.RES

Method : C:\HPCHEM\1\METHODS\010702.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Tue Jan 08 10:31:32 2002
Response via : Initial Calibration



B4 per COC DF 01/24/02

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\010902\01090214.D Vial: 15
Acq On : 9 Jan 2002 2:11 pm Operator: MEG
Sample : PES0109-12 B1-5.0 1.0g 5X Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS/SS_SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 9 14:42 2002 Quant Results File: 010702.RES

Quant Method : C:\HPCHEM\1\METHODS\010702.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Tue Jan 08 10:31:32 2002
Response via : Initial Calibration
DataAcq Meth : AQ_8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	8.71	96	351020	250.00	ng	0.02
32) Chlorobenzene-d5	12.24	117	114432m	250.00	ng	0.02
45) 1,4-Dichlorobenzene-d4	15.16	152	74891	250.00	ng	0.01
System Monitoring Compounds						
16) Dibromofluoromethane	7.84	113	107955	247.68	ng	0.03
Spiked Amount 250.000			Recovery = 99.07%			
17) 1,2-Dichloroethane-d4	8.42	65	120571	234.17	ng	0.02
Spiked Amount 250.000			Recovery = 93.67%			
29) Toluene-d8	10.39	98	174468m	166.42	ng	0.02
Spiked Amount 250.000			Recovery = 66.57%			
43) 4-Bromofluorobenzene	13.72	95	54818	314.24	ng	0.01
Spiked Amount 250.000			Recovery = 125.70%			
Target Compounds						Qvalue
23) Trichloroethene	8.88	95	12099	24.01	ng	< 90

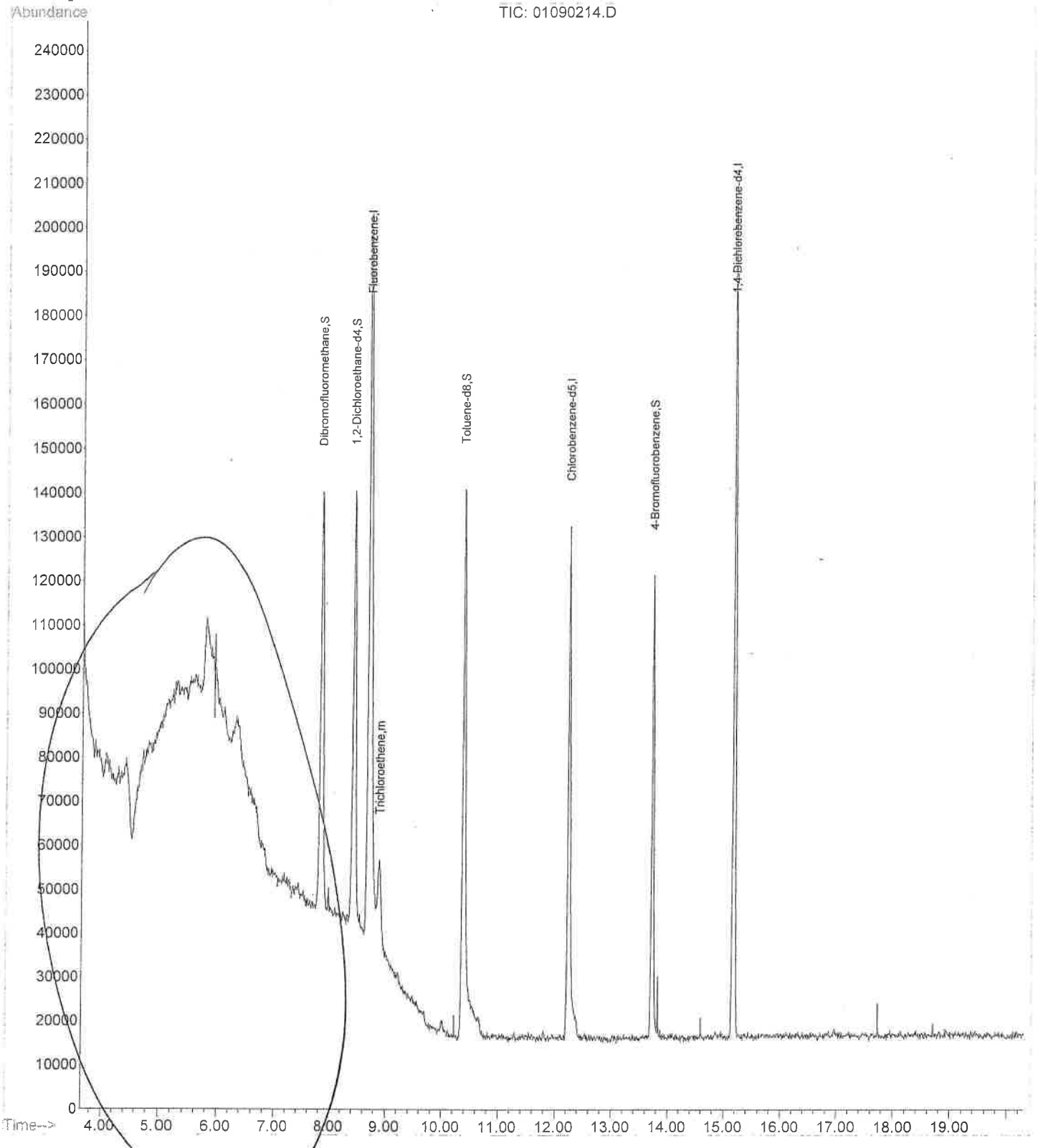
1/17/02

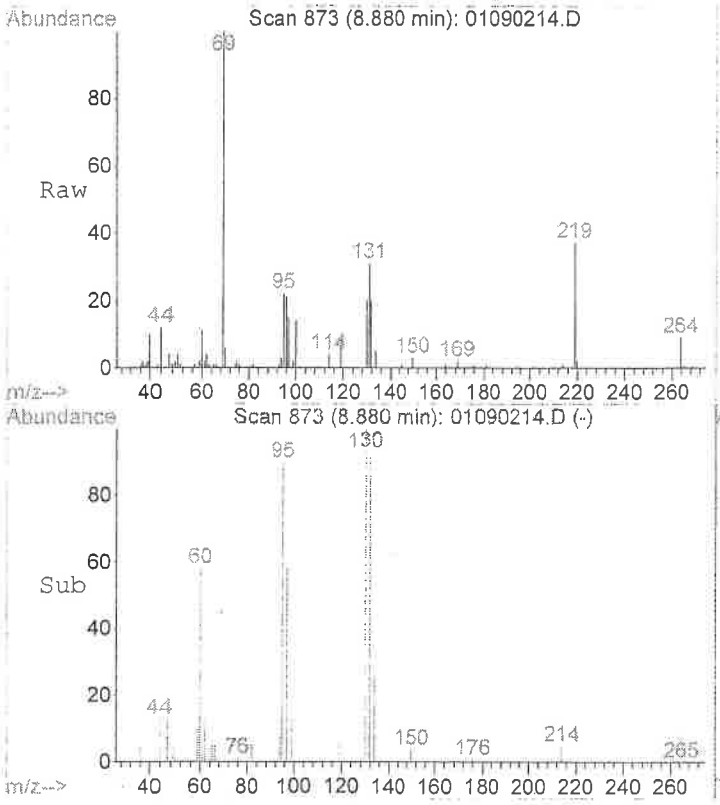
(#) = qualifier out of range (m) = manual integration
01090214.D 010702.M Wed Jan 09 14:43:06 2002

Quantitation Report

Data File : C:\HPCHEM\1\DATA\010902\01090214.D Vial: 15
Acq On : 9 Jan 2002 2:11 pm Operator: MEG
Sample : PES0109-12 B1-5.0 1.0g 5X Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS/SS_SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 9 14:42 2002 Quant Results File: 010702.RES

Method : C:\HPCHEM\1\METHODS\010702.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Tue Jan 08 10:31:32 2002
Response via : Initial Calibration

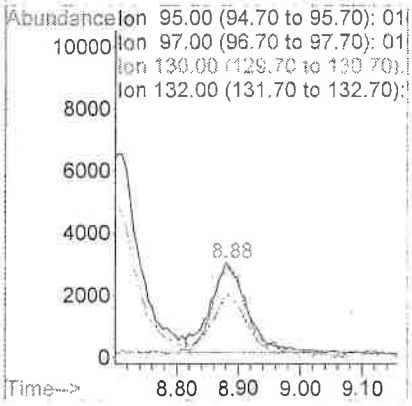




#23
Trichloroethene
Concen: 24.01 ng
RT: 8.88 min Scan# 873
Delta R.T. 0.02 min
Lab File: 01090214.D
Acq: 9 Jan 2002 2:11 pm

Tgt Ion: 95 Resp: 12099

Ion	Ratio	Lower	Upper
95	100		
97	69.2	41.9	81.9
130	95.9	84.9	124.9
132	90.4	81.8	121.8



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\010902\01090215.D Vial: 16
Acq On : 9 Jan 2002 2:36 pm Operator: MEG
Sample : PES0109-11 A1-5.0 1.0g 5X Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS/SS_SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 9 15:00 2002 Quant Results File: 010702.RES

Quant Method : C:\HPCHEM\1\METHODS\010702.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Tue Jan 08 10:31:32 2002
Response via : Initial Calibration
DataAcq Meth : AQ_8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	8.69	96	309727	250.00	ng	0.01
32) Chlorobenzene-d5	12.23	117	103576m	250.00	ng	0.00
45) 1,4-Dichlorobenzene-d4	15.16	152	65881	250.00	ng	0.00
System Monitoring Compounds						
16) Dibromofluoromethane	7.84	113	102699	267.04	ng	0.04
Spiked Amount 250.000			Recovery =	106.82%		
17) 1,2-Dichloroethane-d4	8.42	65	120351	264.91	ng	0.02
Spiked Amount 250.000			Recovery =	105.96%		
29) Toluene-d8	10.38	98	152970m	165.36	ng	0.01
Spiked Amount 250.000			Recovery =	66.14%		
43) 4-Bromofluorobenzene	13.71	95	50314	318.65	ng	0.00
Spiked Amount 250.000			Recovery =	127.46%		
Target Compounds						Qvalue
23) Trichloroethene	8.87	95	65820m	148.02	ng	

01/21/02

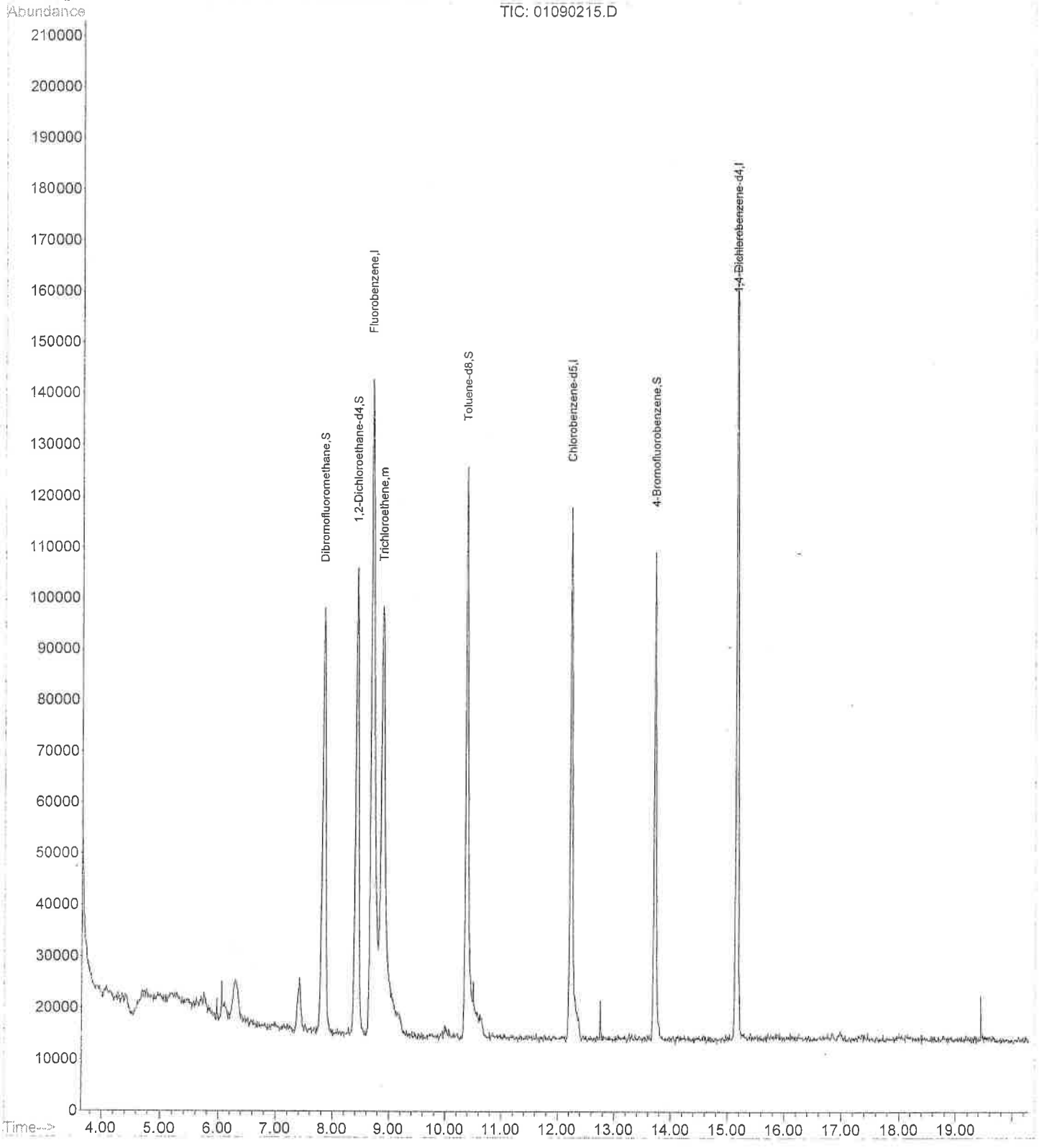
1/17/02

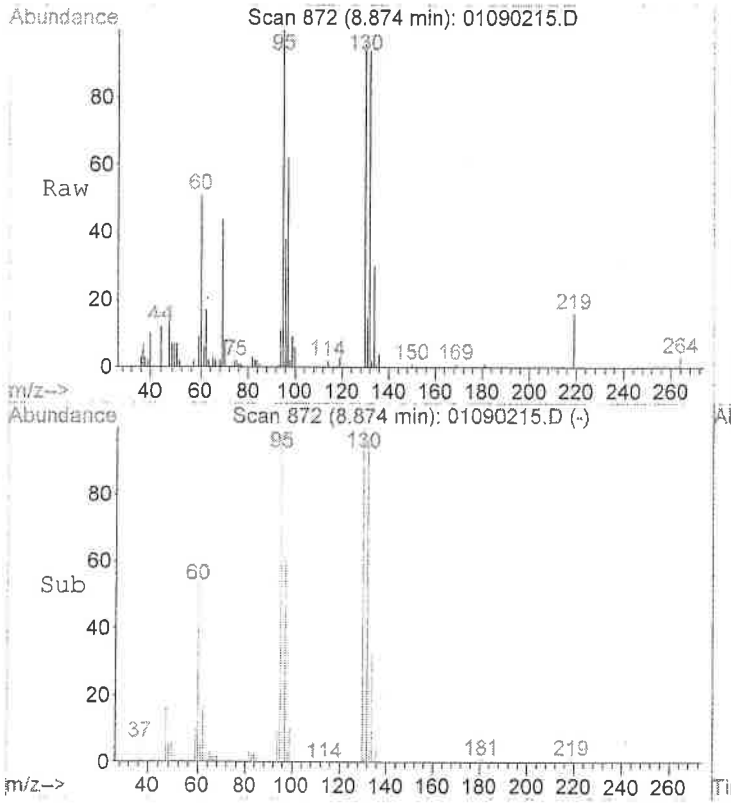
(#) = qualifier out of range (m) = manual integration
01090215.D 010702.M Wed Jan 09 15:00:59 2002

Quantitation Report

Data File : C:\HPCHEM\1\DATA\010902\01090215.D Vial: 16
Acq On : 9 Jan 2002 2:36 pm Operator: MEG
Sample : PES0109-11 A1-5.0 1.0g 5X Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS/SS_SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 9 15:00 2002 Quant Results File: 010702.RES

Method : C:\HPCHEM\1\METHODS\010702.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Tue Jan 08 10:31:32 2002
Response via : Initial Calibration

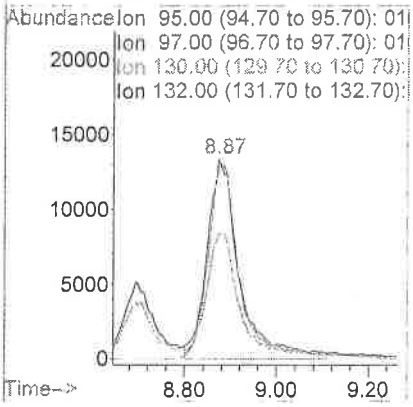




#23
Trichloroethene
Concen: 148.02 ng m
RT: 8.87 min Scan# 872
Delta R.T. 0.01 min
Lab File: 01090215.D
Acq: 9 Jan 2002 2:36 pm

Tgt Ion: 95 Resp: 65820

Ion	Ratio	Lower	Upper
95	100		
97	62.3	41.9	81.9
130	96.3	84.9	124.9
132	93.8	81.8	121.8



5 per COC DL

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\010902\01090216.D Vial: 17
Acq On : 9 Jan 2002 3:01 pm Operator: MEG
Sample : PES0109-13 A2-NORTH-4.0 1.0g 5X Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS/SS_SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 9 15:25 2002 Quant Results File: 010702.RES

Quant Method : C:\HPCHEM\1\METHODS\010702.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Tue Jan 08 10:31:32 2002
Response via : Initial Calibration
DataAcq Meth : AQ_8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	8.70	96	374052	250.00	ng	0.02
32) Chlorobenzene-d5	12.23	117	168101m	250.00	ng	0.00
45) 1,4-Dichlorobenzene-d4	15.16	152	74095	250.00	ng	0.00
System Monitoring Compounds						
16) Dibromofluoromethane	7.83	113	104505	225.00	ng	0.03
Spiked Amount 250.000			Recovery = 90.00%			
17) 1,2-Dichloroethane-d4	8.42	65	120670	219.94	ng	0.02
Spiked Amount 250.000			Recovery = 87.98%			
29) Toluene-d8	10.38	98	255173m	228.41	ng	0.02
Spiked Amount 250.000			Recovery = 91.36%			
43) 4-Bromofluorobenzene	13.71	95	62733	244.80	ng	0.00
Spiked Amount 250.000			Recovery = 97.92%			
Target Compounds						Qvalue
23) Trichloroethene	8.87	95	92846	172.89	ng	97

01/21/02

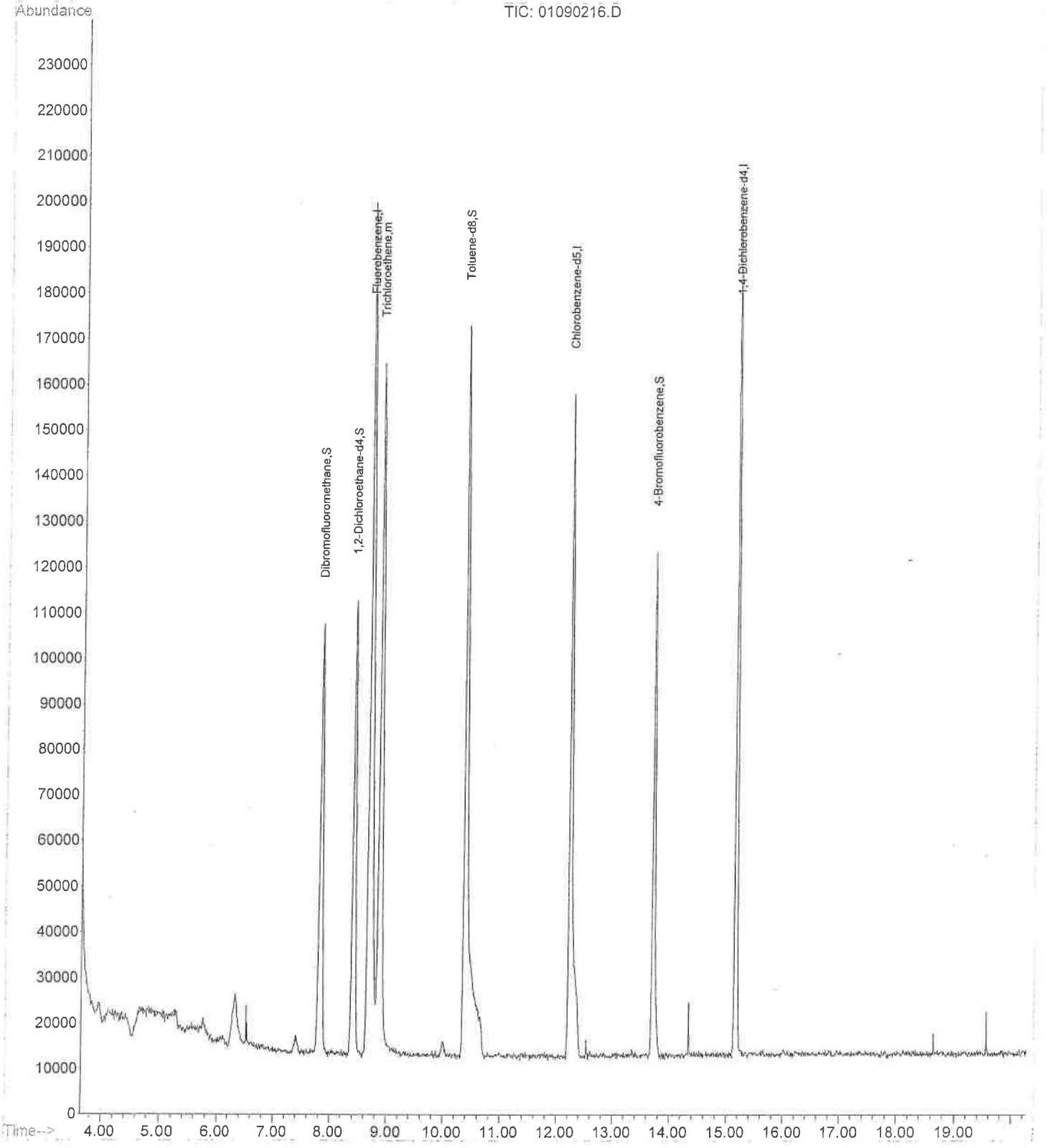
1/17/02

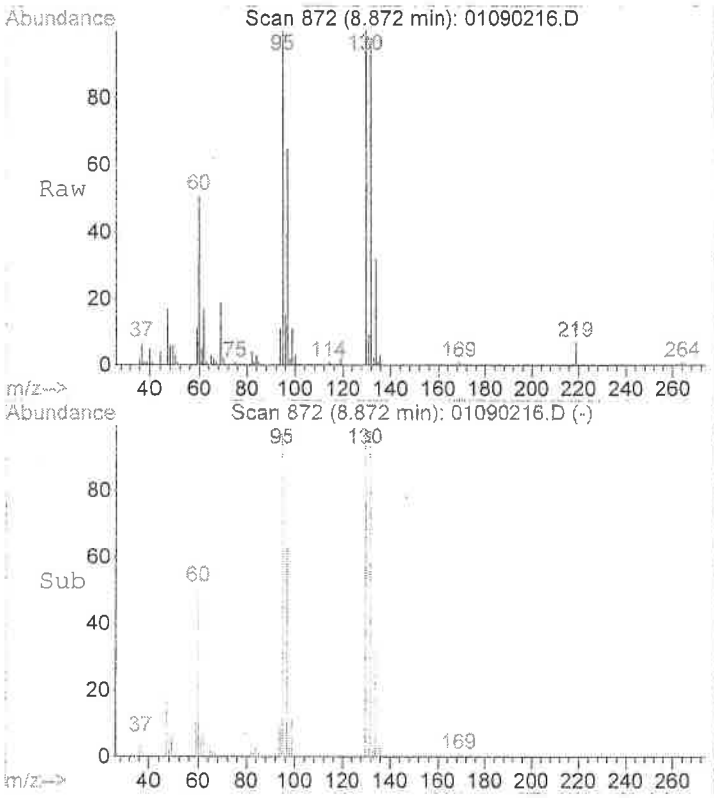
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01090216.D 010702.M Wed Jan 09 15:25:48 2002

Quantitation Report

Data File : C:\HPCHEM\1\DATA\010902\01090216.D Vial: 17
Acq On : 9 Jan 2002 3:01 pm Operator: MEG
Sample : PES0109-13 A2-NORTH-4.0 1.0g 5X Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS/SS_SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 9 15:25 2002 Quant Results File: 010702.RES

Method : C:\HPCHEM\1\METHODS\010702.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Tue Jan 08 10:31:32 2002
Response via : Initial Calibration

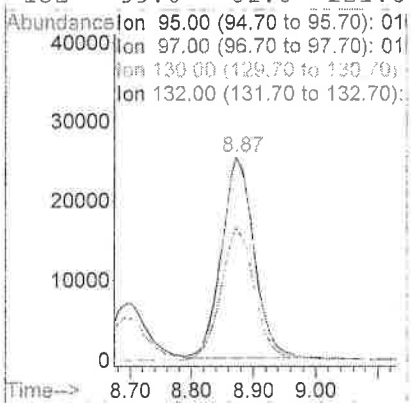




#23
Trichloroethene
Concen: 172.89 ng
RT: 8.87 min Scan# 872
Delta R.T. 0.01 min
Lab File: 01090216.D
Acq: 9 Jan 2002 3:01 pm

Tgt Ion: 95 Resp: 92846

Ion	Ratio	Lower	Upper
95	100		
97	65.4	41.9	81.9
130	101.5	84.9	124.9
132	99.0	81.8	121.8



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\010902\01090217.D Vial: 18
Acq On : 9 Jan 2002 3:50 pm Operator: MEG
Sample : PES0109-14 BB-4.0 1.0g 5X Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS/SS_SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 9 16:19 2002 Quant Results File: 010702.RES

Quant Method : C:\HPCHEM\1\METHODS\010702.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Tue Jan 08 10:31:32 2002
Response via : Initial Calibration
DataAcq Meth : AQ_8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	8.69	96	362469	250.00	ng	0.01
32) Chlorobenzene-d5	12.23	117	130610m	250.00	ng	0.00
45) 1,4-Dichlorobenzene-d4	15.16	152	73619	250.00	ng	0.00
System Monitoring Compounds						
16) Dibromofluoromethane	7.83	113	106860	237.43	ng	0.02
Spiked Amount 250.000			Recovery = 94.97%			
17) 1,2-Dichloroethane-d4	8.41	65	123645	232.56	ng	0.01
Spiked Amount 250.000			Recovery = 93.02%			
29) Toluene-d8	10.38	98	198695m	183.54	ng	0.01
Spiked Amount 250.000			Recovery = 73.42%			
43) 4-Bromofluorobenzene	13.71	95	56504	283.78	ng	0.00
Spiked Amount 250.000			Recovery = 113.51%			
Target Compounds						Qvalue
23) Trichloroethene	8.69	95	32292m	62.05	ng	

01/21/02

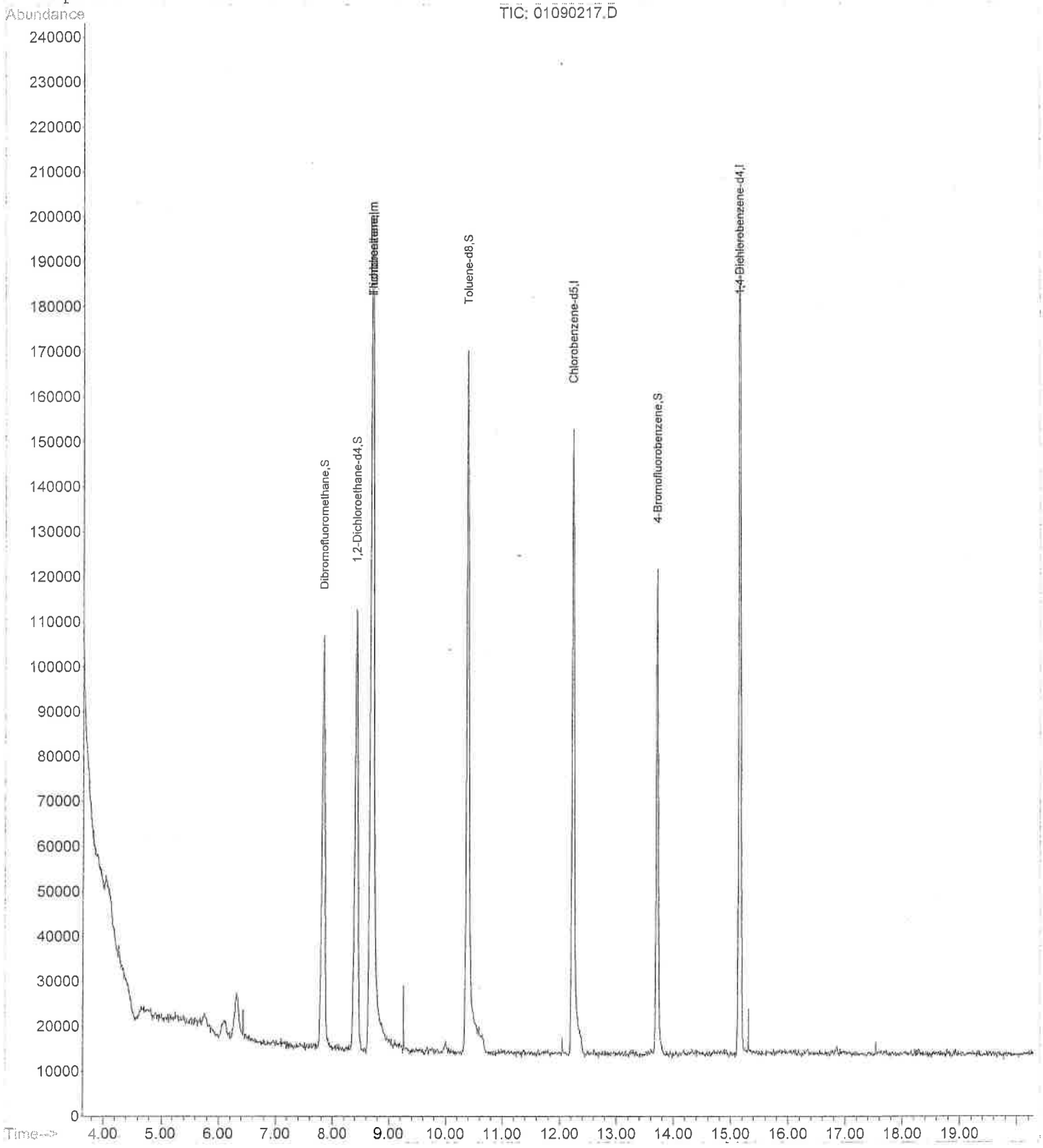
1/17/02

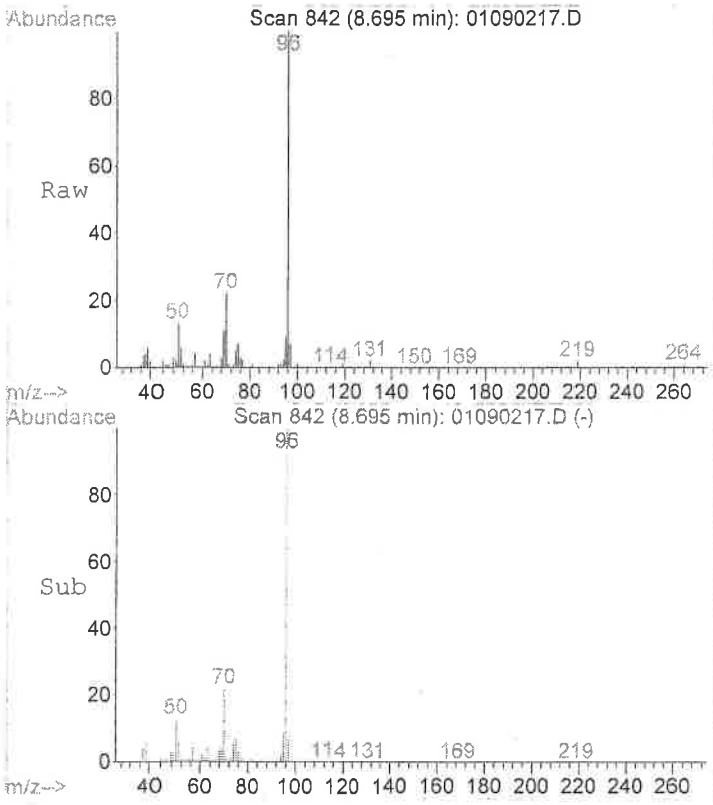
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01090217.D 010702.M Wed Jan 09 16:19:44 2002

Quantitation Report

Data File : C:\HPCHEM\1\DATA\010902\01090217.D Vial: 18
Acq On : 9 Jan 2002 3:50 pm Operator: MEG
Sample : PES0109-14 BB-4.0 1.0g 5X Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS/SS_SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 9 16:19 2002 Quant Results File: 010702.RES

Method : C:\HPCHEM\1\METHODS\010702.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Tue Jan 08 10:31:32 2002
Response via : Initial Calibration

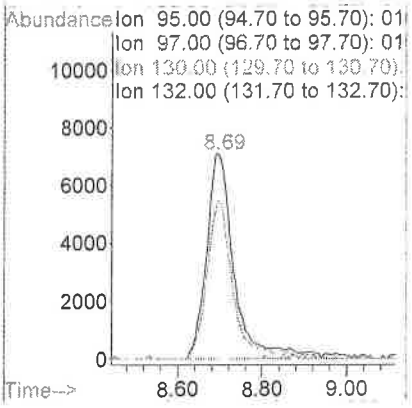




#23
Trichloroethene
Concen: 62.05 ng m
RT: 8.69 min Scan# 842
Delta R.T. -0.17 min
Lab File: 01090217.D
Acq: 9 Jan 2002 3:50 pm

Tgt Ion: 95 Resp: 32292

Ion	Ratio	Lower	Upper
95	100		
97	77.2	41.9	81.9
130	0.0	84.9	124.9#
132	0.0	81.8	121.8#



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\010902\01090218.D Vial: 19
Acq On : 9 Jan 2002 4:20 pm Operator: MEG
Sample : PES0109-15 A1-NORTH-4.0 1.0g 5X Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS/SS_SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 9 16:44 2002 Quant Results File: 010702.RES

Quant Method : C:\HPCHEM\1\METHODS\010702.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Tue Jan 08 10:31:32 2002
Response via : Initial Calibration
DataAcq Meth : AQ_8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	8.70	96	373603	250.00	ng	0.02
32) Chlorobenzene-d5	12.23	117	166106m	250.00	ng	0.01
45) 1,4-Dichlorobenzene-d4	15.16	152	73244	250.00	ng	0.00
System Monitoring Compounds						
16) Dibromofluoromethane	7.83	113	105697	227.84	ng	0.02
Spiked Amount 250.000			Recovery = 91.14%			
17) 1,2-Dichloroethane-d4	8.42	65	119278	217.66	ng	0.02
Spiked Amount 250.000			Recovery = 87.06%			
29) Toluene-d8	10.38	98	260510m	233.47	ng	0.02
Spiked Amount 250.000			Recovery = 93.39%			
43) 4-Bromofluorobenzene	13.71	95	60824	240.20	ng	0.00
Spiked Amount 250.000			Recovery = 96.08%			
Target Compounds						Qvalue
23) Trichloroethene	8.88	95	25693	47.90	ng	96

DL 01/21/02

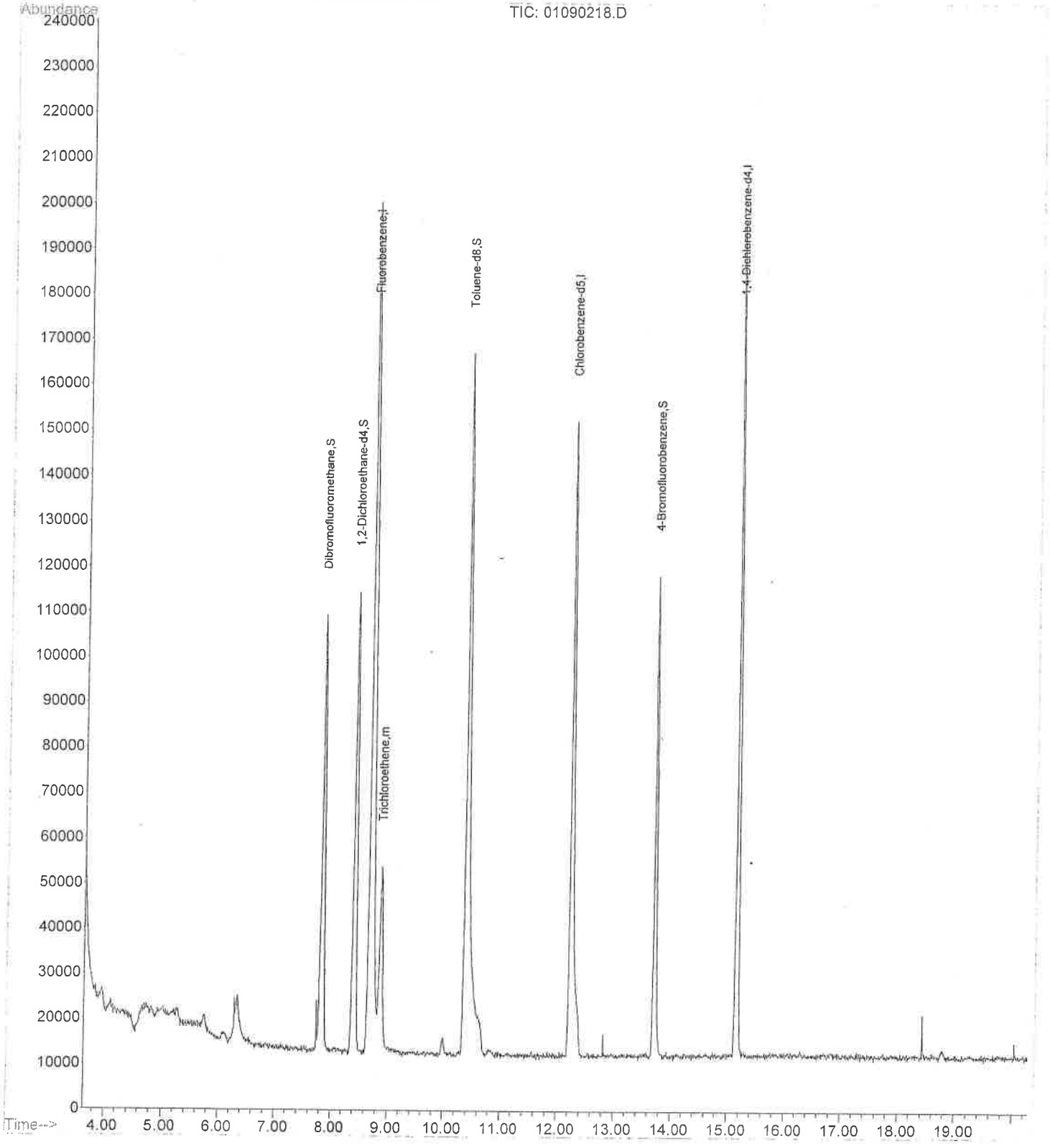
SH 1/17/02

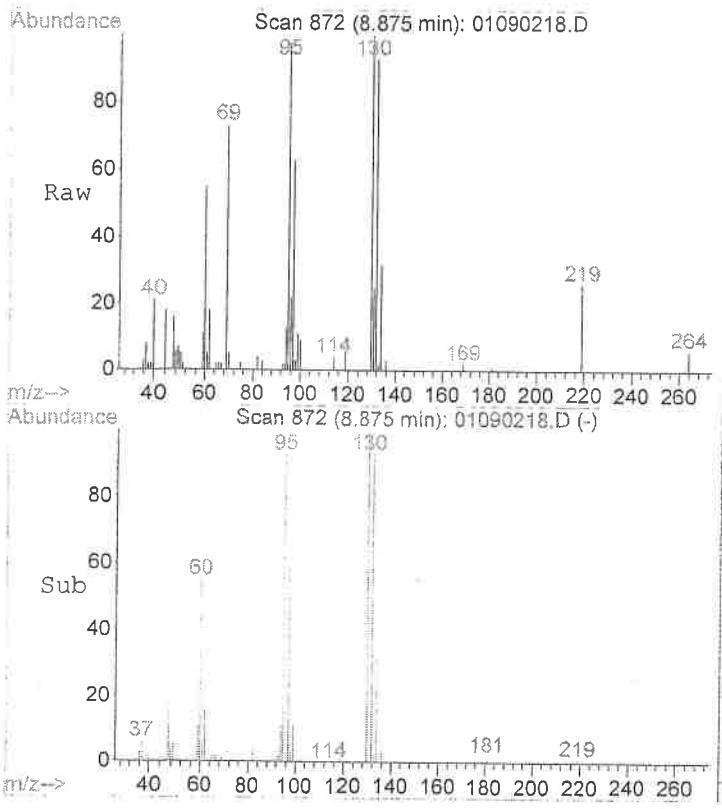
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01090218.D 010702.M Wed Jan 09 16:44:59 2002

Quantitation Report

Data File : C:\HPCHEM\1\DATA\010902\01090218.D Vial: 19
Acq On : 9 Jan 2002 4:20 pm Operator: MEG
Sample : PES0109-15 A1-NORTH-4.0 1.0g 5X Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS/SS_SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 9 16:44 2002 Quant Results File: 010702.RES

Method : C:\HPCHEM\1\METHODS\010702.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Tue Jan 08 10:31:32 2002
Response via : Initial Calibration

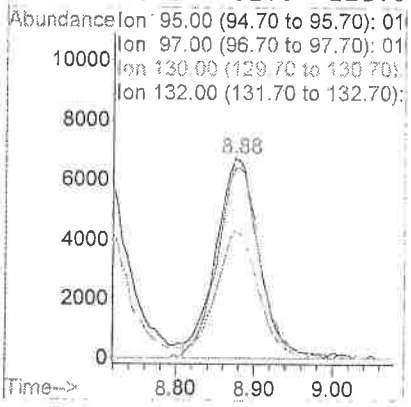




#23
Trichloroethene
Concen: 47.90 ng
RT: 8.88 min Scan# 872
Delta R.T. 0.01 min
Lab File: 01090218.D
Acq: 9 Jan 2002 4:20 pm

Tgt Ion: 95 Resp: 25693

Ion	Ratio	Lower	Upper
95	100		
97	63.8	41.9	81.9
130	101.6	84.9	124.9
132	95.0	81.8	121.8



5 per COC DS 01/21/02

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\010902\01090219.D Vial: 20
Acq On : 9 Jan 2002 4:44 pm Operator: MEG
Sample : PES0109-16 A2-NORTH-4.0 1.0g 5X Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS/SS_SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 9 17:08 2002 Quant Results File: 010702.RES

Quant Method : C:\HPCHEM\1\METHODS\010702.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Tue Jan 08 10:31:32 2002
Response via : Initial Calibration
DataAcq Meth : AQ_8260

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	8.70	96	369459	250.00 ng	0.01
32) Chlorobenzene-d5	12.23	117	161586m	250.00 ng	0.00
45) 1,4-Dichlorobenzene-d4	15.15	152	70595	250.00 ng	0.00
System Monitoring Compounds					
16) Dibromofluoromethane	7.82	113	105419	229.79 ng	0.02
Spiked Amount 250.000			Recovery =	91.92%	
17) 1,2-Dichloroethane-d4	8.41	65	121901	224.94 ng	0.01
Spiked Amount 250.000			Recovery =	89.98%	
29) Toluene-d8	10.38	98	251714m	228.12 ng	0.01
Spiked Amount 250.000			Recovery =	91.25%	
43) 4-Bromofluorobenzene	13.71	95	57481	233.35 ng	0.00
Spiked Amount 250.000			Recovery =	93.34%	
Target Compounds					Qvalue
23) Trichloroethene	8.87	95	52289	98.58 ng	95

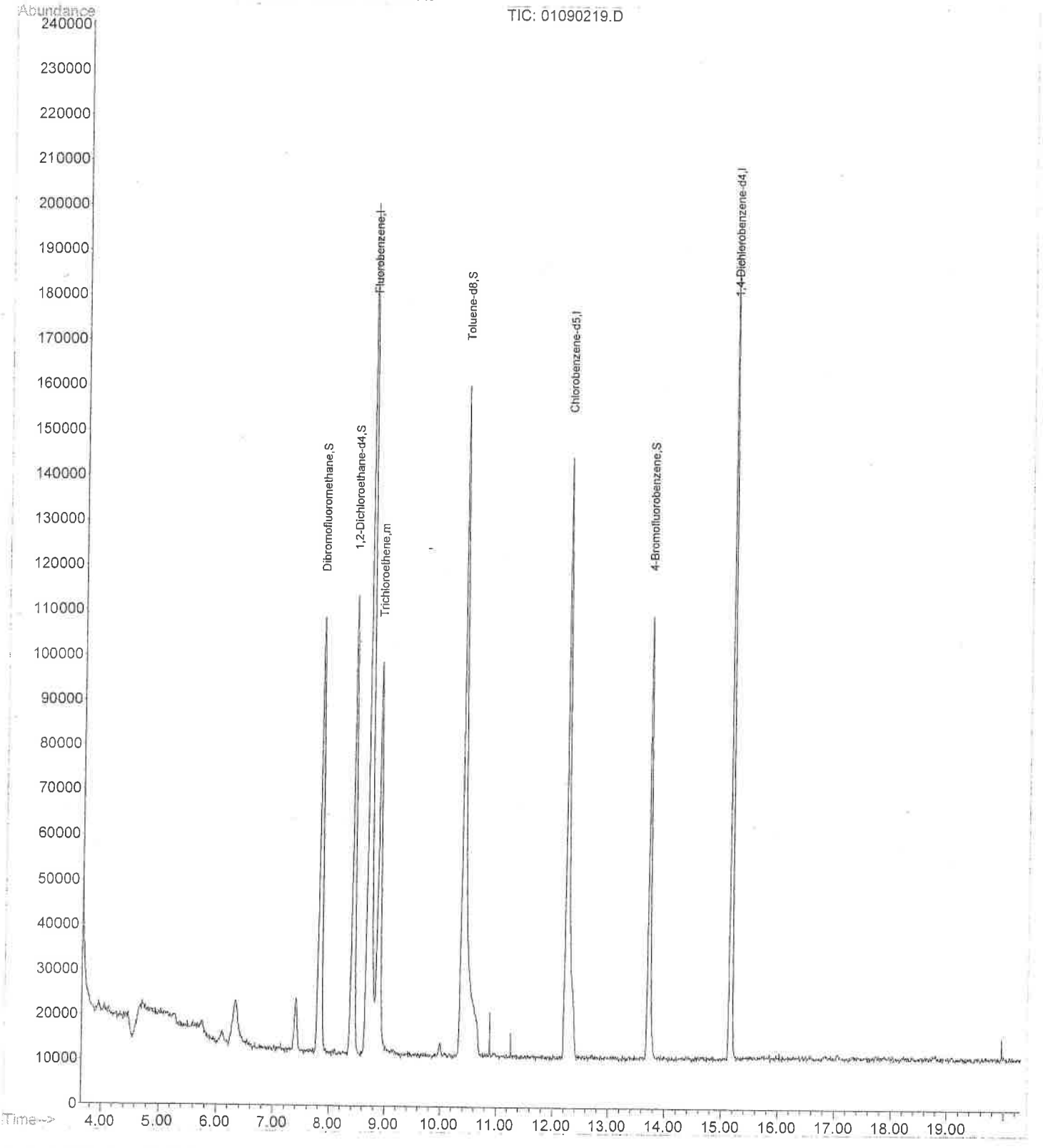
VALIDATION STOPS here for PES.
DS 01/21/02
SH 1/17/02

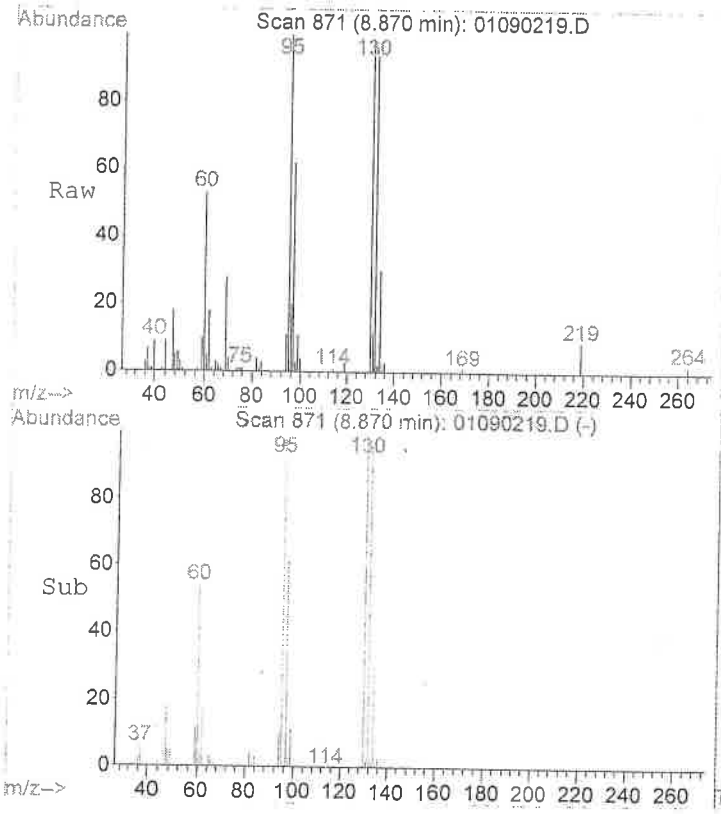
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01090219.D 010702.M Wed Jan 09 17:08:16 2002

Quantitation Report

Data File : C:\HPCHEM\1\DATA\010902\01090219.D Vial: 20
Acq On : 9 Jan 2002 4:44 pm Operator: MEG
Sample : PES0109-16 A2-NORTH-4.0 1.0g 5X Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS/SS_SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 9 17:08 2002 Quant Results File: 010702.RES

Method : C:\HPCHEM\1\METHODS\010702.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Tue Jan 08 10:31:32 2002
Response via : Initial Calibration

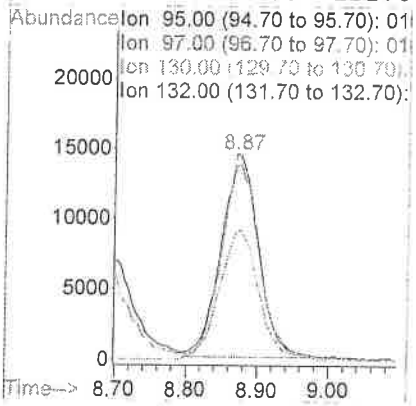




#23
Trichloroethene
Concen: 98.58 ng
RT: 8.87 min Scan# 871
Delta R.T. 0.01 min
Lab File: 01090219.D
Acq: 9 Jan 2002 4:44 pm

Tgt Ion: 95 Resp: 52289

Ion	Ratio	Lower	Upper
95	100		
97	62.9	41.9	81.9
130	99.5	84.9	124.9
132	94.0	81.8	121.8



Sequence Name: C:\HPCHEM\1\SEQUENCE\011002.S
Comment: Alpha
Operator: MEG
Data Path: C:\HPCHEM\1\DATA\011002\
Pre-Seq Cmd:
Post-Seq Cmd:

Method Sections To Run
(X) Full Method
( ) Reprocessing Only

On A Barcode Mismatch
(X) Inject Anyway
( ) Don't Inject

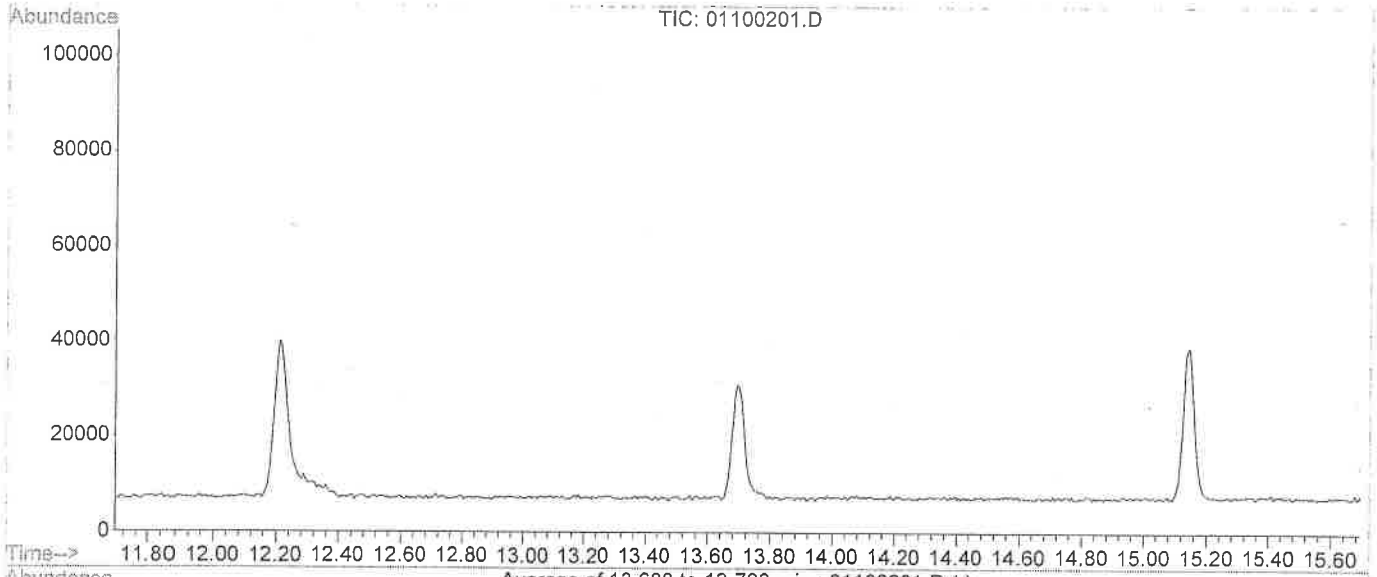
Line	Type	Vial	DataFile	Method	Sample Name
1	BFB	2	01100201	AQ_8260	BFB TUNE 1/10/02
2	Calibration	3	01100202	AQ_8260	CCV 250ng 10uL 25ppm SC00301
3	Calibration	4	01100203	AQ_8260	LCS 250ng 5uL 50ppm LCS_SC002
4	Blank	5	01100204	AQ_8260	METHOD BLANK
5	Sample	6	01100205	AQ_8260	PES0110-01 D2-4.0 1.0g 5X
6	Sample	7	01100206	AQ_8260	PES0110-02 C2-4.0 1.0g 5X
7	Sample	8	01100207	AQ_8260	PES0110-03 A8-4.0 1.0g 5X
8	Sample	9	01100208	AQ_8260	PES0110-04 A10-4.0 1.0g 5
9	Sample	10	01100209	AQ_8260	PES0110-05 E5-4.0 1.0g 5X
10	Sample	11	01100210	AQ_8260	PES0110-06 E8-8.5 1.0g 5X
11	Sample	12	01100211	AQ_8260	PES0110-07 E7-12.0 1.0g 5
12	Sample	13	01100212	AQ_8260	PES0110-08 E5-8.0 1.0g 5X
13	Sample	14	01100213	AQ_8260	PES0110-09 E5-12.0 1.0g 5
14	Sample	15	01100214	AQ_8260	PES0110-10 B10-4.0 1.0g 5
15	Sample	16	01100215	AQ_8260	PES0110-11 E10-4.0 1.0g 5
16	Sample	2	01100216	AQ_8260	PES0110-12 D10-4.0 1.0g 5
17	Sample	3	01100217	AQ_8260	PES0110-13 C10-4.0 1.0g 5
18	Sample	4	01100218	AQ_8260	PES0110-14 COMP-A 1.0g 5X
19	Sample	5	01100219	AQ_8260	PES0110-15 F5-0.5 1.0g 5X
20	Sample	6	01100220	AQ_8260	PES0110-16 F8-0.5 1.0g 5X
21	Sample	7	01100221	AQ_8260	PES0110-17 C10-EAST-2.0 1.0
22	Sample	8	01100222	AQ_8260	PES0110-18 E2-5.0 1.0g 5X
23	BFB	2	01100223	AQ_8260	BFB TUNE 1/10/02 2ND CLOCK
24	Calibration	3	01100224	AQ_8260	CCV 250ng 10uL 25ppm SC00301
25	Calibration	4	01100225	AQ_8260	LCS 250ng 5uL 50ppm LCS_SC002
26	Blank	5	01100226	AQ_8260	METHOD BLANK
27	Sample	6	01100227	AQ_8260	AP0108-21 4-1-ADD81-24 100u
28	Sample	7	01100228	AQ_8260	AP0108-22 4-1-ADD81-24D 100
29	Sample	8	01100229	AQ_8260	AP0108-23 SR-01-07-02A 5mL
30	Sample	9	01100230	AQ_8260	AP0108-24 4-2-ADD37-45 100u
31	Sample	10	01100231	AQ_8260	AP0108-25 5-3-ADD98-8.5 100
32	Sample	11	01100232	AQ_8260	AP0108-26 5-3-ADD98-12 100u
33	Sample	12	01100233	AQ_8260	AP0108-27 5-3-ADD98-16 100u
34	Sample	13	01100234	AQ_8260	AP0108-28 5-3-ADD98-21 100u
35	Sample	14	01100235	AQ_8260	AP0108-29 5-3-ADD98-25 100u
36	Sample	15	01100236	AQ_8260	AP0108-30 SR-01-08-02A 5mL
37	Sample	16	01100237	AQ_8260	AP0108-31 5-3-ADD98-25D 100

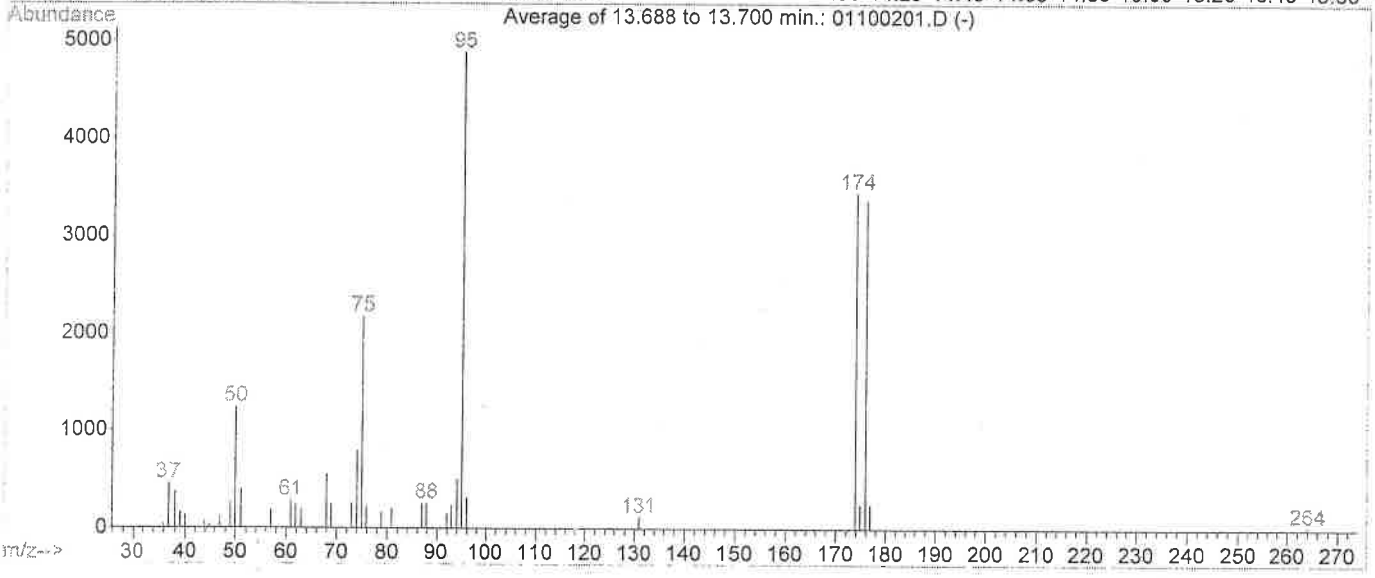
01/22/02

1/17/02

BFB

Data File : C:\HPCHEM\1\DATA\011002\01100201.D Vial: 2
Acq On : 10 Jan 2002 6:56 am Operator: MEG
Sample : BFB TUNE 1/10/02 Inst : Alpha
Misc : 1uL SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Method : C:\HPCHEM\1\METHODS\010702.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds





AutoFind: Scans 1674, 1675, 1676; Background Corrected with Scan 1665

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	25.4	1242	PASS
75	95	30	60	44.6	2178	PASS
95	95	100	100	100.0	4885	PASS
96	95	5	9	6.4	312	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	70.6	3449	PASS
175	174	5	9	7.3	253	PASS
176	174	95	101	97.7	3370	PASS
177	176	5	9	7.4	248	PASS

01/22/02

1/10/02

01100201.D 010702.M Thu Jan 10 07:20:10 2002

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\011002\01100202.D Vial: 3
Acq On : 10 Jan 2002 7:23 am Operator: MEG
Sample : CCV 250ng 10uL 25ppm SC00301 + SC00224 Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS_SC00223 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\HPCHEM\1\METHODS\010702.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Tue Jan 08 10:31:32 2002
Response via : Multiple Level Calibration

Min. RRF : 0.100 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Fluorobenzene	1.000	1.000	0.0	115	0.00
2		Dichlorodifluoromethane	0.397	0.458	-15.4	130	0.04
3	P	Chloromethane	0.592	0.668	-12.8	134	0.00
4	C	Vinyl chloride	0.430	0.502	-16.7	139	0.04
5		Bromomethane	0.130	0.253	-94.6#	435#	0.02
6		Chloroethane	0.241	0.351	-45.6#	194	0.05
7		Trichlorofluoromethane	0.520	0.519	0.2	107	0.02
8	m, C	1,1-Dichloroethene	0.350	0.384	-9.7	134	0.02
9		Methylene chloride	0.491	0.373	24.0#	97	0.03
10		trans-1,2-Dichloroethene	0.397	0.367	7.6	104	0.02
11	P	1,1-Dichloroethane	0.658	0.647	1.7	111	0.00
12		cis-1,2-Dichloroethene	0.375	0.353	5.9	105	0.01
13		2,2-Dichloropropane	0.401	0.359	10.5	99	0.00
14		Bromochloromethane	0.180	0.164	8.9	102	0.00
15	C	Chloroform	0.593	0.583	1.7	110	0.00
16	S	Dibromofluoromethane	0.310	0.280	9.7	103	0.00
17	S	1,2-Dichloroethane-d4	0.367	0.356	3.0	109	0.00
18		1,1,1-Trichloroethane	0.457	0.440	3.7	107	0.00
19		Carbon tetrachloride	0.340	0.284	16.5	93	0.00
20		1,1-Dichloropropene	0.474	0.454	4.2	107	0.00
21	m	Benzene	1.227	1.197	2.4	109	0.00
22		1,2-Dichloroethane	0.473	0.483	-2.1	114	0.00
23	m	Trichloroethene	0.359	0.353	1.7	111	0.00
24	C	1,2-Dichloropropane	0.312	0.309	1.0	112	0.00
25		Dibromomethane	0.200	0.185	7.5	102	0.00
26		Bromodichloromethane	0.389	0.361	7.2	104	0.00
27		cis-1,3-Dichloropropene	0.305	0.268	12.1	98	0.00
28	m, C	Toluene	0.593	0.595	-0.3	101	0.00
29	S	Toluene-d8	0.747	0.742	0.7	98	0.00
30		trans-1,3-Dichloropropene	0.231	0.190	17.7	87	0.00
31		1,1,2-Trichloroethane	0.228	0.208	8.8	100	0.00
32	I	Chlorobenzene-d5	1.000	1.000	0.0	87	0.00
33		Tetrachloroethene	0.532	0.559	-5.1	100	0.00
34		1,3-Dichloropropane	0.816	0.826	-1.2	101	0.00
35		Dibromochloromethane	0.458	0.382	16.6	85	0.00
36		1,2-Dibromoethane	0.295	0.261	11.5	88	0.00
37	m,P	Chlorobenzene	1.145	1.335	-16.6	101	0.00
38		1,1,1,2-Tetrachloroethane	0.436	0.422	3.2	97	0.00
39	C	Ethyl benzene	1.356	1.351	0.4	85	0.00
40		m,p-Xylene	0.971	0.958	1.3	83	0.00
41		o-Xylene	0.471	0.440	6.6	80	0.00
42		Styrene	0.691	0.632	8.5	73	0.00
43	S	4-Bromofluorobenzene	0.381	0.359	5.8	77	0.00
44	P	Bromoform	0.238	0.156	34.5#	66	0.00
45	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	65	-0.01
46		Isopropyl benzene	2.926	3.403	-16.3	75	0.00
47		Bromobenzene	1.103	1.438	-30.4#	77	0.00
48	P	1,1,2,2-Tetrachloroethane	1.630	1.795	-10.1	74	0.00

(#) = Out of Range

SL 1/17/02

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\011002\01100202.D Vial: 3
Acq On : 10 Jan 2002 7:23 am Operator: MEG
Sample : CCV 250ng 10uL 25ppm SC00301 + SC00224 Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS_SC00223 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\HPCHEM\1\METHODS\010702.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Tue Jan 08 10:31:32 2002
Response via : Multiple Level Calibration

Min. RRF : 0.100 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
49	1,2,3-Trichloropropane	1.136	1.315	-15.8	81	0.00
50	n-Propylbenzene	3.023	3.066	-1.4	69	0.00
51	2-Chlorotoluene	2.689	3.338	-24.1#	78	0.00
52	4-Chlorotoluene	2.182	2.471	-13.2	71	0.00
53	1,3,5-Trimethyl benzene	2.733	3.123	-14.3	78	0.00
54	tert-Butyl benzene	2.332	2.325	0.3	72	0.00
55	1,2,4-Trimethyl benzene	2.819	3.171	-12.5	77	0.00
56	sec-Butyl benzene	2.772	2.825	-1.9	73	0.00
57	1,3-Dichlorobenzene	1.501	1.676	-11.7	71	0.00
58	4-Isopropyl toluene	2.334	2.319	0.6	71	0.00
59	1,4-Dichlorobenzene	1.455	1.567	-7.7	71	0.00
60	1,2-Dichlorobenzene	1.452	1.584	-9.1	70	0.00
61	n-Butyl benzene	2.554	2.929	-14.7	79	0.00
62	1,2-Dibromo-3-chloropropane	0.136	0.103	24.3#	52	-0.01
63	1,2,4-Trichlorobenzene	1.644	1.803	-9.7	69	-0.01
64	Hexachlorobutadiene	0.683	0.737	-7.9	71	0.00
65	Naphthalene	3.613	3.235	10.5	53	-0.01
66	1,2,3-Trichlorobenzene	1.594	1.629	-2.2	63	-0.01

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\011002\01100202.D Vial: 3
Acq On : 10 Jan 2002 7:23 am Operator: MEG
Sample : CCV 250ng 10uL 25ppm SC00301 + SC00224 Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS_SC00223 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 10 7:47 2002 Quant Results File: 010702.RES

Quant Method : C:\HPCHEM\1\METHODS\010702.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Tue Jan 08 10:31:32 2002
Response via : Initial Calibration
DataAcq Meth : AQ_8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	8.68	96	388325	250.00	ng	0.00
32) Chlorobenzene-d5	12.22	117	161726	250.00	ng	0.00
45) 1,4-Dichlorobenzene-d4	15.14	152	39634	250.00	ng	-0.01
System Monitoring Compounds						
16) Dibromofluoromethane	7.81	113	108598	225.22	ng	0.00
Spiked Amount 250.000			Recovery =	90.09%		
17) 1,2-Dichloroethane-d4	8.39	65	138146	242.53	ng	0.00
Spiked Amount 250.000			Recovery =	97.01%		
29) Toluene-d8	10.37	98	288117m	248.42	ng	0.00
Spiked Amount 250.000			Recovery =	99.37%		
43) 4-Bromofluorobenzene	13.70	95	57994	235.23	ng	0.00
Spiked Amount 250.000			Recovery =	94.09%		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	3.77	85	177865	288.29	ng	99
3) Chloromethane	4.09	50	259262	281.90	ng	99
4) Vinyl chloride	4.19	62	194915	292.14	ng	96
5) Bromomethane	4.62	94	98240	484.96	ng	93
6) Chloroethane	4.76	64	136488	363.86	ng	97
7) Trichlorofluoromethane	4.95	101	201598	249.74	ng	100
8) 1,1-Dichloroethene	5.52	96	148970	316.35	ng	98
9) Methylene chloride	6.06	84	144930	211.66	ng	93
10) trans-1,2-Dichloroethene	6.26	96	142478	230.89	ng	96
11) 1,1-Dichloroethane	6.86	63	251336	245.85	ng	99
12) cis-1,2-Dichloroethene	7.39	96	136910	235.05	ng	93
13) 2,2-Dichloropropane	7.52	77	139584	223.83	ng	96
14) Bromochloromethane	7.60	128	63591	227.52	ng	95
15) Chloroform	7.61	83	226501	246.04	ng	98
18) 1,1,1-Trichloroethane	7.91	97	170931	240.68	ng	98
19) Carbon tetrachloride	7.84	117	110339	209.01	ng	99
20) 1,1-Dichloropropene	8.02	75	176421	239.52	ng	99
21) Benzene	8.29	78	464924	244.03	ng	99
22) 1,2-Dichloroethane	8.47	62	187754	255.38	ng	99
23) Trichloroethene	8.86	95	137111	245.94	ng	94
24) 1,2-Dichloropropane	9.44	63	120006	247.39	ng	98
25) Dibromomethane	9.33	93	71941	231.53	ng	88
26) Bromodichloromethane	9.45	83	140211	232.01	ng	99
27) cis-1,3-Dichloropropene	10.14	75	104264	219.81	ng	97
28) Toluene	10.43	92	231122	250.73	ng	99
30) trans-1,3-Dichloropropene	10.85	75	73812	205.77	ng	96
31) 1,1,2-Trichloroethane	11.06	83	80606	228.08	ng	97
33) Tetrachloroethene	10.90	164	90331	262.33	ng	99
34) 1,3-Dichloropropane	11.40	76	133610	253.00	ng	100
35) Dibromochloromethane	11.30	129	61725	208.56	ng	97
36) 1,2-Dibromoethane	11.64	107	42168	220.91	ng	95
37) Chlorobenzene	12.24	112	215967	291.67	ng	96
38) 1,1,1,2-Tetrachloroethane	12.28	131	68206	242.03	ng	98
39) Ethyl benzene	12.20	91	218542	249.06	ng	98
40) m,p-Xylene	12.37	106	154876	246.62	ng	94
41) o-Xylene	12.92	106	71159	233.31	ng	99

(#) = qualifier out of range (m) = manual integration

01/22/02

1/17/0

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\011002\01100202.D Vial: 3
Acq On : 10 Jan 2002 7:23 am Operator: MEG
Sample : CCV 250ng 10uL 25ppm SC00301 + SC00224 Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS_SC00223 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 10 7:47 2002 Quant Results File: 010702.RES

Quant Method : C:\HPCHEM\1\METHODS\010702.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Tue Jan 08 10:31:32 2002
Response via : Initial Calibration
DataAcq Meth : AQ_8260

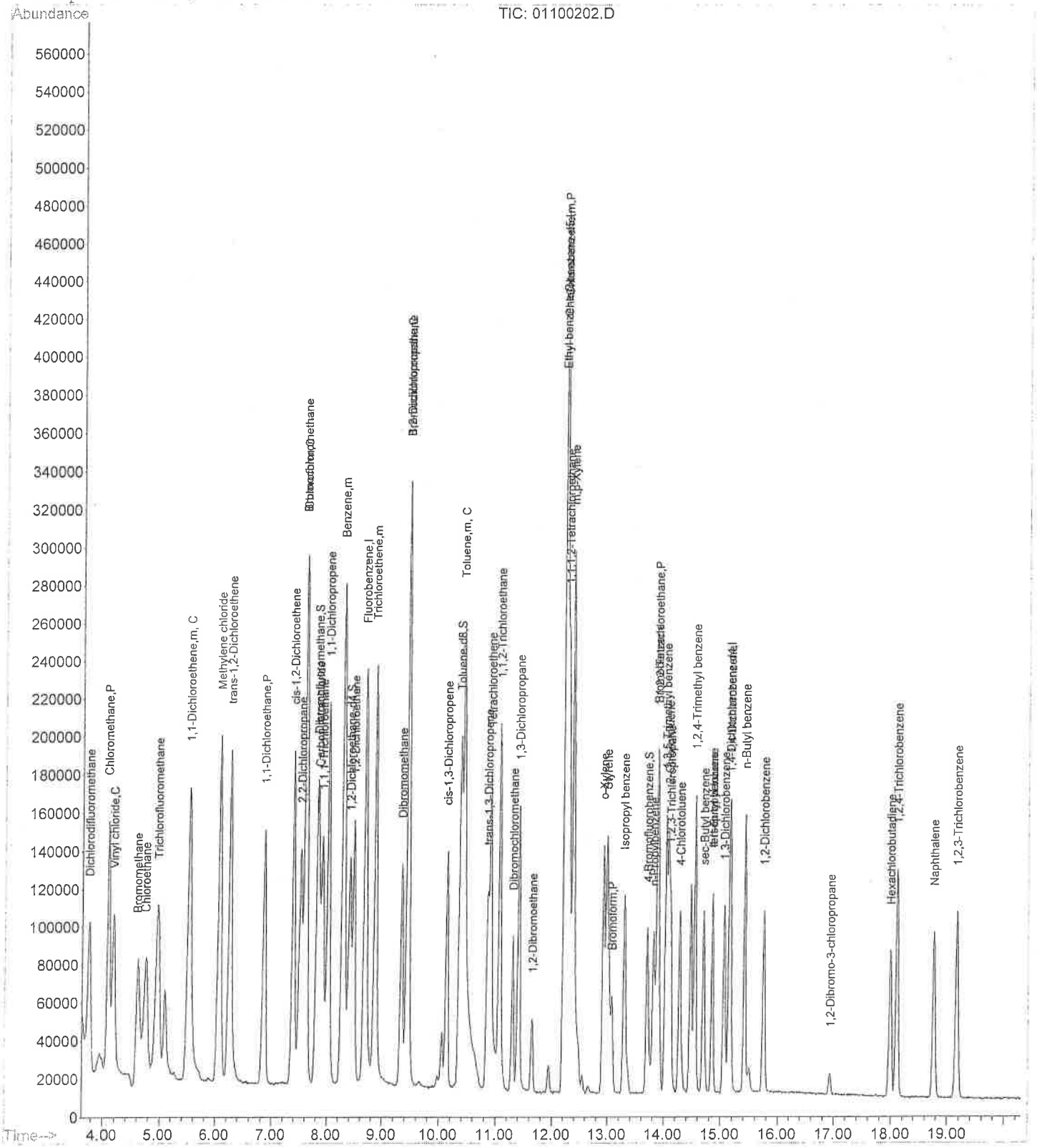
	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
42)	Styrene	12.98	104	102239	228.58 ng	91
44)	Bromoform	13.07	173	25158	163.33 ng	99
46)	Isopropyl benzene	13.29	105	134891	290.82 ng	96
47)	Bromobenzene	13.87	156	56989	325.90 ng	91
48)	1,1,2,2-Tetrachloroethane	13.89	83	71156	255.32 ng	99
49)	1,2,3-Trichloropropane	14.11	75	52108	289.21 ng	94
50)	n-Propylbenzene	13.81	91	121512	253.55 ng	97
51)	2-Chlorotoluene	14.07	91	132307	310.40 ng	99
52)	4-Chlorotoluene	14.28	91	97954	283.23 ng	98
53)	1,3,5-Trimethyl benzene	14.02	105	123770	285.68 ng	100
54)	tert-Butyl benzene	14.85	119	92148	290.26 ng	98
55)	1,2,4-Trimethyl benzene	14.55	105	125686	281.23 ng	100
56)	sec-Butyl benzene	14.70	105	111966	313.17 ng	99
57)	1,3-Dichlorobenzene	15.06	146	66441	279.12 ng	97
58)	4-Isopropyl toluene	14.85	119	91917	288.98 ng	98
59)	1,4-Dichlorobenzene	15.17	146	62099	269.30 ng	99
60)	1,2-Dichlorobenzene	15.75	146	62761	272.60 ng	98
61)	n-Butyl benzene	15.42	91	116072	335.57 ng	100
62)	1,2-Dibromo-3-chloropropan	16.93	75	4087	189.14 ng	99
63)	1,2,4-Trichlorobenzene	18.10	180	71466	253.29 ng	96
64)	Hexachlorobutadiene	17.99	225	29211	305.06 ng	94
65)	Naphthalene	18.76	128	128200	194.68 ng	100
66)	1,2,3-Trichlorobenzene	19.16	180	64560	228.41 ng	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\011002\01100202.D Vial: 3
Acq On : 10 Jan 2002 7:23 am Operator: MEG
Sample : CCV 250ng 10uL 25ppm SC00301 + SC00224 Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS_SC00223 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 10 7:47 2002 Quant Results File: 010702.RES

Method : C:\HPCHEM\1\METHODS\010702.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Tue Jan 08 10:31:32 2002
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\011002\01100203.D Vial: 4
Acq On : 10 Jan 2002 7:47 am Operator: MEG
Sample : LCS 250ng 5uL 50ppm LCS_SC00211 Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS/SS_SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 10 8:08 2002 Quant Results File: 010702.RES

Control Limit: +/-25%

Quant Method : C:\HPCHEM\1\METHODS\010702.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Tue Jan 08 10:31:32 2002
Response via : Initial Calibration
DataAcq Meth : AQ_8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	8.68	96	414948	250.00	ng	0.00
32) Chlorobenzene-d5	12.21	117	155483	250.00	ng	0.00
45) 1,4-Dichlorobenzene-d4	15.14	152	35373	250.00	ng	-0.01
System Monitoring Compounds						
16) Dibromofluoromethane	7.81	113	116945	226.97	ng	0.00
Spiked Amount 250.000			Recovery = 90.79%			
17) 1,2-Dichloroethane-d4	8.39	65	139663	229.46	ng	0.00
Spiked Amount 250.000			Recovery = 91.78%			
29) Toluene-d8	10.36	98	306530	247.34	ng	0.00
Spiked Amount 250.000			Recovery = 98.94%			
43) 4-Bromofluorobenzene	13.70	95	54330	229.21	ng	0.00
Spiked Amount 250.000			Recovery = 91.68%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	3.77	85	183234	277.94	ng	99
3) Chloromethane	4.08	50	274523	279.35	ng	99
4) Vinyl chloride	4.18	62	204951	287.47	ng	97
5) Bromomethane	4.61	94	100713	465.27	ng	88
6) Chloroethane	4.76	64	144590	360.73	ng	96
7) Trichlorofluoromethane	4.95	101	207196	240.21	ng	100
8) 1,1-Dichloroethene	5.51	96	166407	333.05	ng	94
9) Methylene chloride	6.06	84	156532	214.12	ng	98
10) trans-1,2-Dichloroethene	6.25	96	154944	234.98	ng	98
11) 1,1-Dichloroethane	6.85	63	266320	243.79	ng	99
12) cis-1,2-Dichloroethene	7.38	96	149135	239.61	ng	96
13) 2,2-Dichloropropane	7.51	77	149142	223.82	ng	100
14) Bromochloromethane	7.59	128	69952	234.22	ng	98
15) Chloroform	7.61	83	235100	239.00	ng	97
18) 1,1,1-Trichloroethane	7.90	97	178403	235.08	ng	99
19) Carbon tetrachloride	7.83	117	116742	206.95	ng	99
20) 1,1-Dichloropropene	8.01	75	189344	240.58	ng	99
21) Benzene	8.28	78	496201	243.73	ng	98
22) 1,2-Dichloroethane	8.46	62	192564	245.12	ng	100
23) Trichloroethene	8.85	95	144920	243.27	ng	97
24) 1,2-Dichloropropane	9.43	63	126312	243.68	ng	98
25) Dibromomethane	9.33	93	76478	230.34	ng	91
26) Bromodichloromethane	9.45	83	144722	224.11	ng	98
27) cis-1,3-Dichloropropene	10.13	75	99768	196.84	ng	93
28) Toluene	10.42	92	235729	239.32	ng	99
30) trans-1,3-Dichloropropene	10.85	75	67962	177.30	ng	94
31) 1,1,2-Trichloroethane	11.06	83	86962	230.27	ng	94
33) Tetrachloroethene	10.90	164	97416	294.26	ng	97
34) 1,3-Dichloropropane	11.41	76	136322	268.50	ng	99
35) Dibromochloromethane	11.30	129	64250	225.81	ng	98
36) 1,2-Dibromoethane	11.64	107	42124	229.54	ng	96
37) Chlorobenzene	12.24	112	212885	299.05	ng	97
38) 1,1,1,2-Tetrachloroethane	12.28	131	67259	248.25	ng	95
39) Ethyl benzene	12.20	91	208552	247.22	ng	100
40) m,p-Xylene	12.36	106	142755	236.45	ng	98
41) o-Xylene	12.92	106	67824	231.31	ng	94

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\011002\01100203.D Vial: 4
Acq On : 10 Jan 2002 7:47 am Operator: MEG
Sample : LCS 250ng 5uL 50ppm LCS_SC00211 Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS/SS_SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 10 8:08 2002 Quant Results File: 010702.RES

Quant Method : C:\HPCHEM\1\METHODS\010702.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Tue Jan 08 10:31:32 2002
Response via : Initial Calibration
DataAcq Meth : AQ_8260

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
42)	Styrene	12.98	104	93563	217.58 ng	96
44)	Bromoform	13.07	173	25421	171.66 ng	97
46)	Isopropyl benzene	13.28	105	126913	306.58 ng	97
47)	Bromobenzene	13.87	156	54109	346.70 ng	92
48)	1,1,2,2-Tetrachloroethane	13.88	83	79435	313.73 ng	98
49)	1,2,3-Trichloropropane	14.11	75	53611	333.39 ng	94
50)	n-Propylbenzene	13.81	91	115404	269.81 ng	99
51)	2-Chlorotoluene	14.07	91	119195	313.33 ng	99
52)	4-Chlorotoluene	14.27	91	89641	290.41 ng	100
53)	1,3,5-Trimethyl benzene	14.02	105	114799	296.90 ng	98
54)	tert-Butyl benzene	14.85	119	86556	307.95 ng	99
55)	1,2,4-Trimethyl benzene	14.54	105	118056	295.97 ng	99
56)	sec-Butyl benzene	14.69	105	106784	339.05 ng	99
57)	1,3-Dichlorobenzene	15.06	146	60650	285.49 ng	99
58)	4-Isopropyl toluene	14.85	119	86552	307.50 ng	99
59)	1,4-Dichlorobenzene	15.17	146	56903	276.49 ng	98
60)	1,2-Dichlorobenzene	15.75	146	58699	285.67 ng	97
61)	n-Butyl benzene	15.42	91	109372	357.94 ng	97
62)	1,2-Dibromo-3-chloropropan	16.93	75	4554	236.14 ng	95
63)	1,2,4-Trichlorobenzene	18.11	180	72944	288.49 ng	93
64)	Hexachlorobutadiene	17.98	225	28505	339.58 ng	99
65)	Naphthalene	18.76	128	145928	241.69 ng	100
66)	1,2,3-Trichlorobenzene	19.16	180	67466	264.92 ng	97

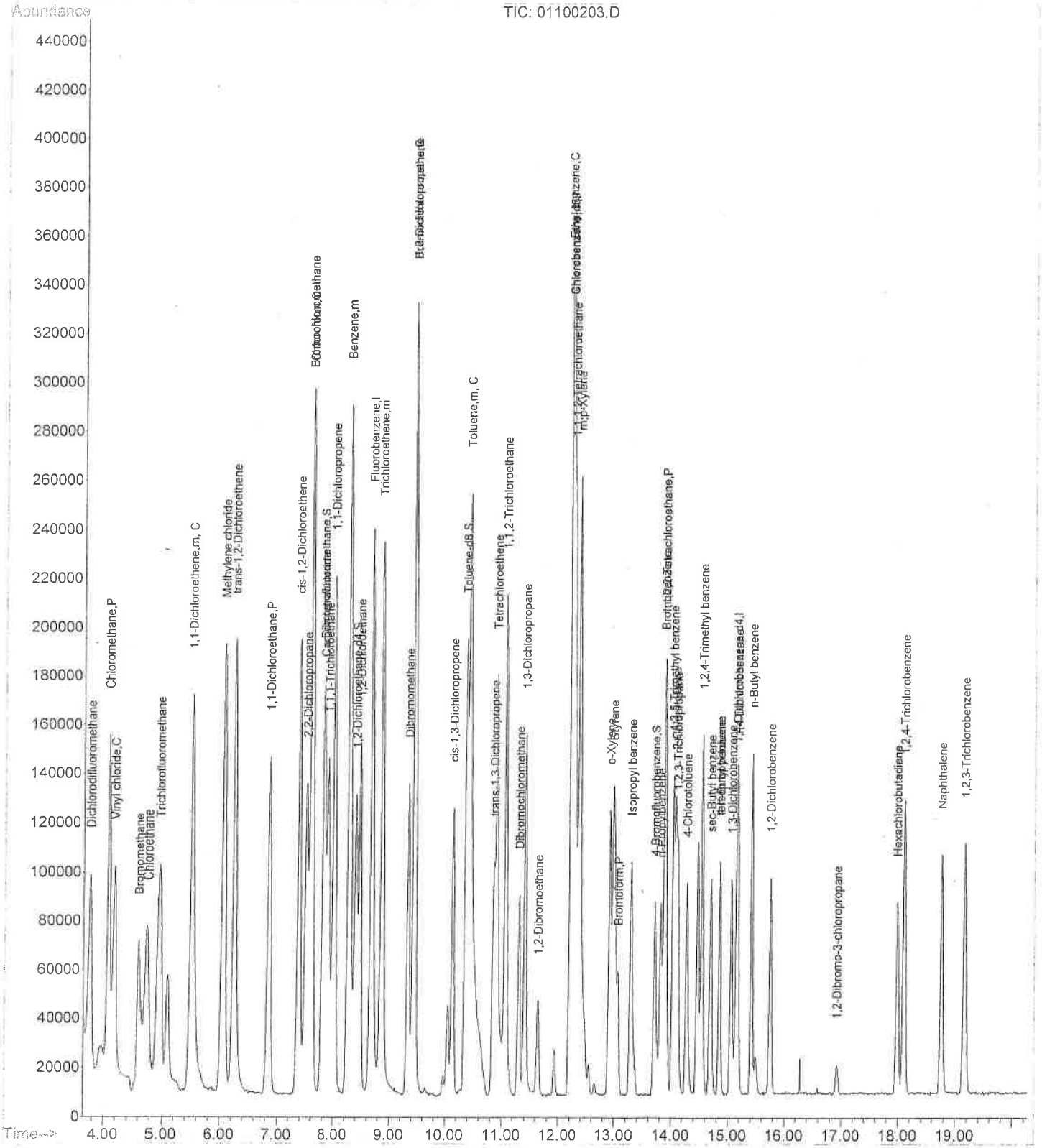
01/22/02

(#) = qualifier out of range (m) = manual integration
01100203.D 010702.M Thu Jan 10 08:19:17 2002

Quantitation Report

Data File : C:\HPCHEM\1\DATA\011002\01100203.D Vial: 4
Acq On : 10 Jan 2002 7:47 am Operator: MEG
Sample : LCS 250ng 5uL 50ppm LCS_SC00211 Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS/SS_SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 10 8:08 2002 Quant Results File: 010702.RES

Method : C:\HPCHEM\1\METHODS\010702.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Tue Jan 08 10:31:32 2002
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\011002\01100204.D Vial: 5
Acq On : 10 Jan 2002 8:11 am Operator: MEG
Sample : METHOD BLANK Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS/SS_SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 10 9:05 2002 Quant Results File: 010702.RES

Quant Method : C:\HPCHEM\1\METHODS\010702.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Tue Jan 08 10:31:32 2002
Response via : Initial Calibration
DataAcq Meth : AQ_8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	8.68	96	408499	250.00	ng	0.00
32) Chlorobenzene-d5	12.21	117	205043m	250.00	ng	-0.01
45) 1,4-Dichlorobenzene-d4	15.14	152	70827	250.00	ng	-0.01
System Monitoring Compounds						
16) Dibromofluoromethane	7.80	113	112164	221.13	ng	0.00
Spiked Amount 250.000			Recovery = 88.45%			
17) 1,2-Dichloroethane-d4	8.39	65	126210	210.63	ng	-0.01
Spiked Amount 250.000			Recovery = 84.25%			
29) Toluene-d8	10.36	98	290152	237.82	ng	0.00
Spiked Amount 250.000			Recovery = 95.13%			
43) 4-Bromofluorobenzene	13.69	95	69122	221.13	ng	-0.01
Spiked Amount 250.000			Recovery = 88.45%			

Target Compounds Qvalue

01/22/02

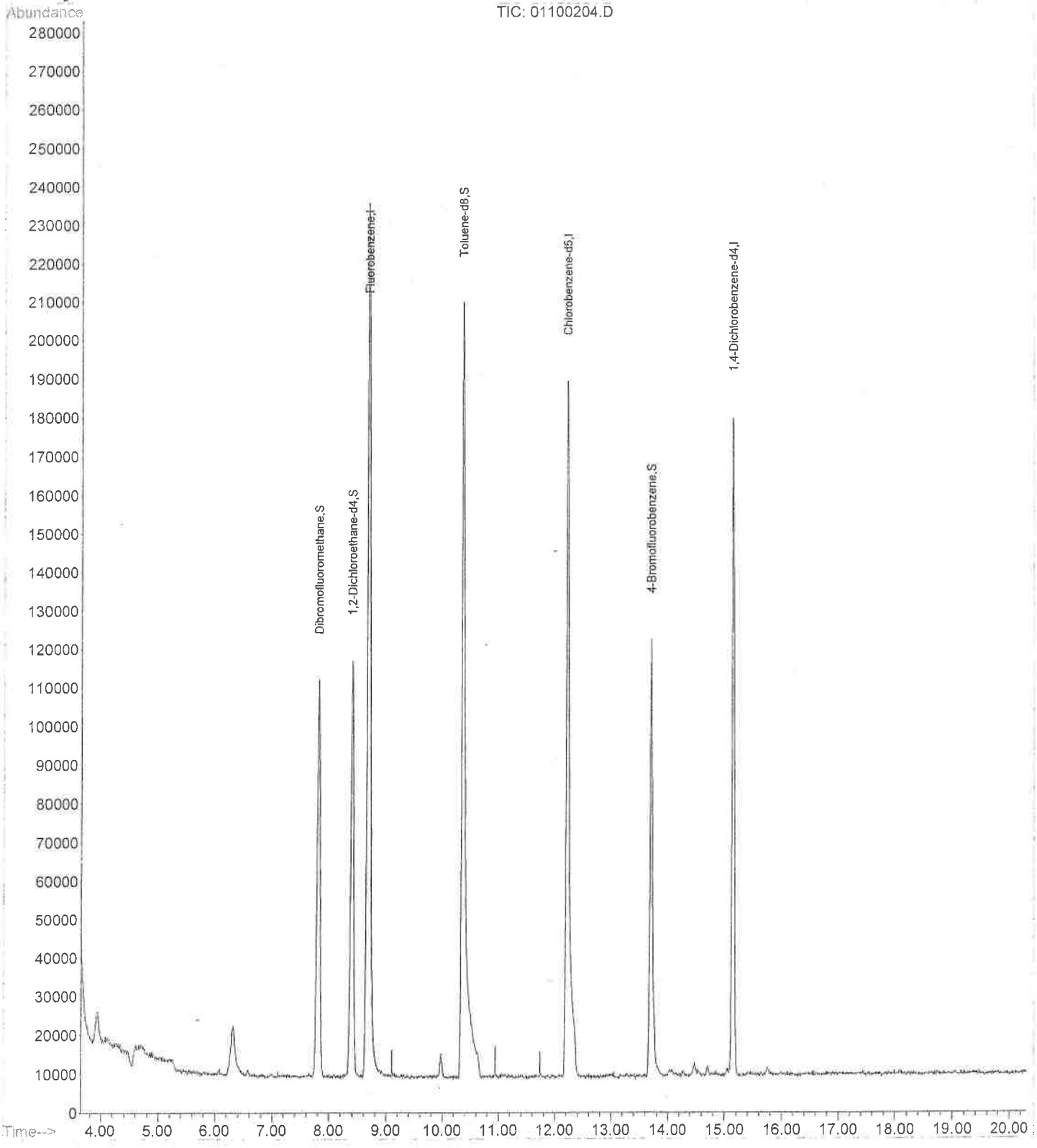
1/17/02

(#) = qualifier out of range (m) = manual integration
01100204.D 010702.M Thu Jan 10 09:05:38 2002

Quantitation Report

Data File : C:\HPCHEM\1\DATA\011002\01100204.D Vial: 5
Acq On : 10 Jan 2002 8:11 am Operator: MEG
Sample : METHOD BLANK Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS/SS_SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 10 9:05 2002 Quant Results File: 010702.RES

Method : C:\HPCHEM\1\METHODS\010702.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Tue Jan 08 10:31:32 2002
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\011002\01100205.D Vial: 6
Acq On : 10 Jan 2002 8:41 am Operator: MEG
Sample : PES0110-01 D2-4.0 1.0g 5X Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS/SS_SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 10 9:03 2002 Quant Results File: 010702.RES

Quant Method : C:\HPCHEM\1\METHODS\010702.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Tue Jan 08 10:31:32 2002
Response via : Initial Calibration
DataAcq Meth : AQ_8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	8.68	96	376951	250.00	ng	0.00
32) Chlorobenzene-d5	12.21	117	174409m	250.00	ng	-0.01
45) 1,4-Dichlorobenzene-d4	15.13	152	59923	250.00	ng	-0.02
System Monitoring Compounds						
16) Dibromofluoromethane	7.80	113	106143	226.77	ng	0.00
Spiked Amount 250.000			Recovery = 90.71%			
17) 1,2-Dichloroethane-d4	8.39	65	119111	215.42	ng	0.00
Spiked Amount 250.000			Recovery = 86.17%			
29) Toluene-d8	10.36	98	268772m	238.73	ng	0.00
Spiked Amount 250.000			Recovery = 95.49%			
43) 4-Bromofluorobenzene	13.69	95	58096	218.50	ng	-0.02
Spiked Amount 250.000			Recovery = 87.40%			
Target Compounds						Qvalue

01/22/02

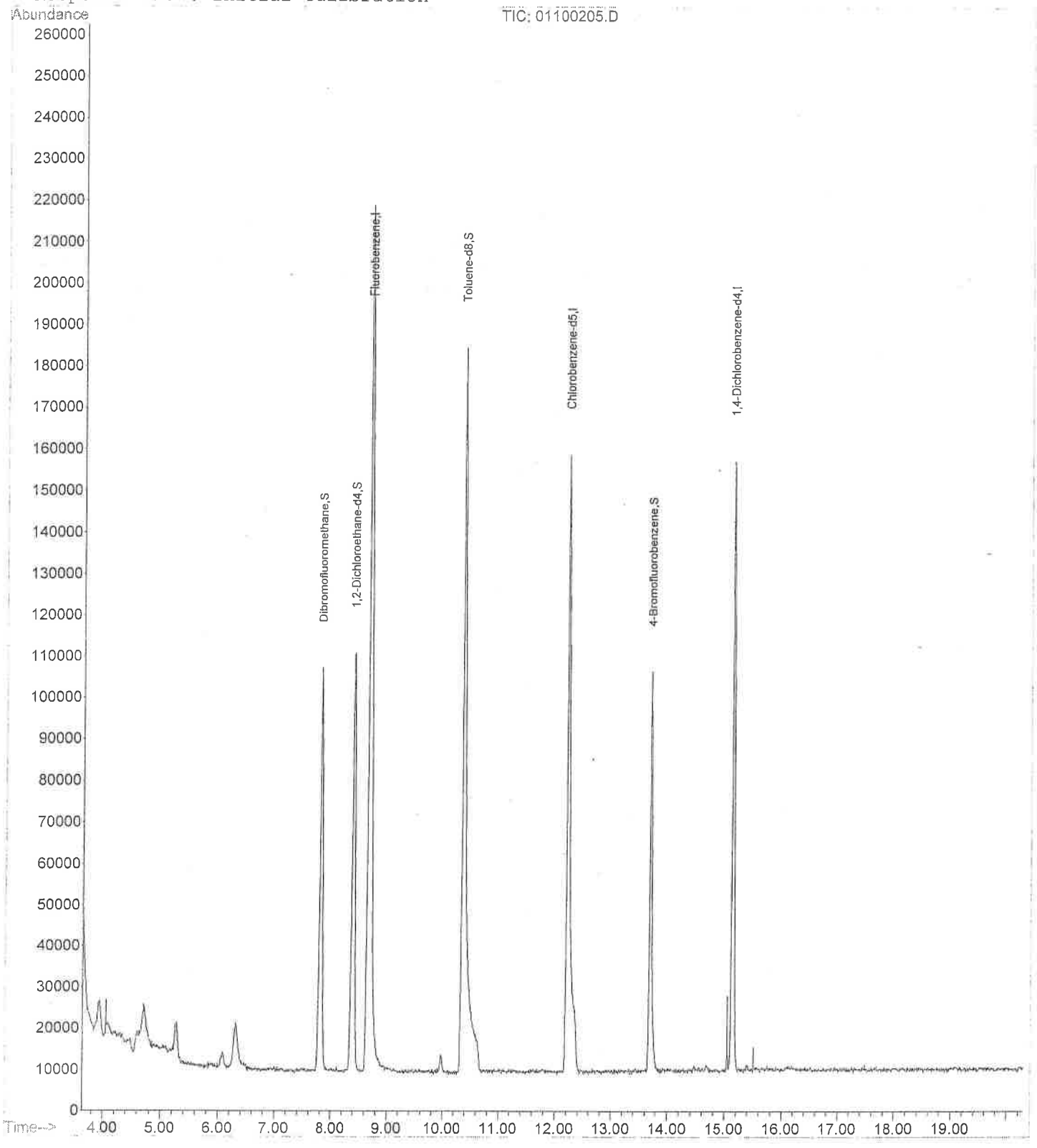
1/17/02

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\011002\01100205.D Vial: 6
Acq On : 10 Jan 2002 8:41 am Operator: MEG
Sample : PES0110-01 D2-4.0 1.0g 5X Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS/SS_SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 10 9:03 2002 Quant Results File: 010702.RES

Method : C:\HPCHEM\1\METHODS\010702.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Tue Jan 08 10:31:32 2002
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\011002\01100206.D Vial: 7
Acq On : 10 Jan 2002 9:05 am Operator: MEG
Sample : PES0110-02 C2-4.0 1.0g 5X Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS/SS_SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 10 9:31 2002 Quant Results File: 010702.RES

Quant Method : C:\HPCHEM\1\METHODS\010702.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Tue Jan 08 10:31:32 2002
Response via : Initial Calibration
DataAcq Meth : AQ_8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	8.67	96	363604	250.00	ng	-0.01
32) Chlorobenzene-d5	12.21	117	171091m	250.00	ng	-0.01
45) 1,4-Dichlorobenzene-d4	15.13	152	60048	250.00	ng	-0.02
System Monitoring Compounds						
16) Dibromofluoromethane	7.80	113	102582	227.21	ng	0.00
Spiked Amount 250.000			Recovery =	90.88%		
17) 1,2-Dichloroethane-d4	8.39	65	117659	220.61	ng	0.00
Spiked Amount 250.000			Recovery =	88.24%		
29) Toluene-d8	10.36	98	253129	233.09	ng	0.00
Spiked Amount 250.000			Recovery =	93.24%		
43) 4-Bromofluorobenzene	13.69	95	59322	227.44	ng	-0.02
Spiked Amount 250.000			Recovery =	90.98%		

Target Compounds Qvalue

01/22/02

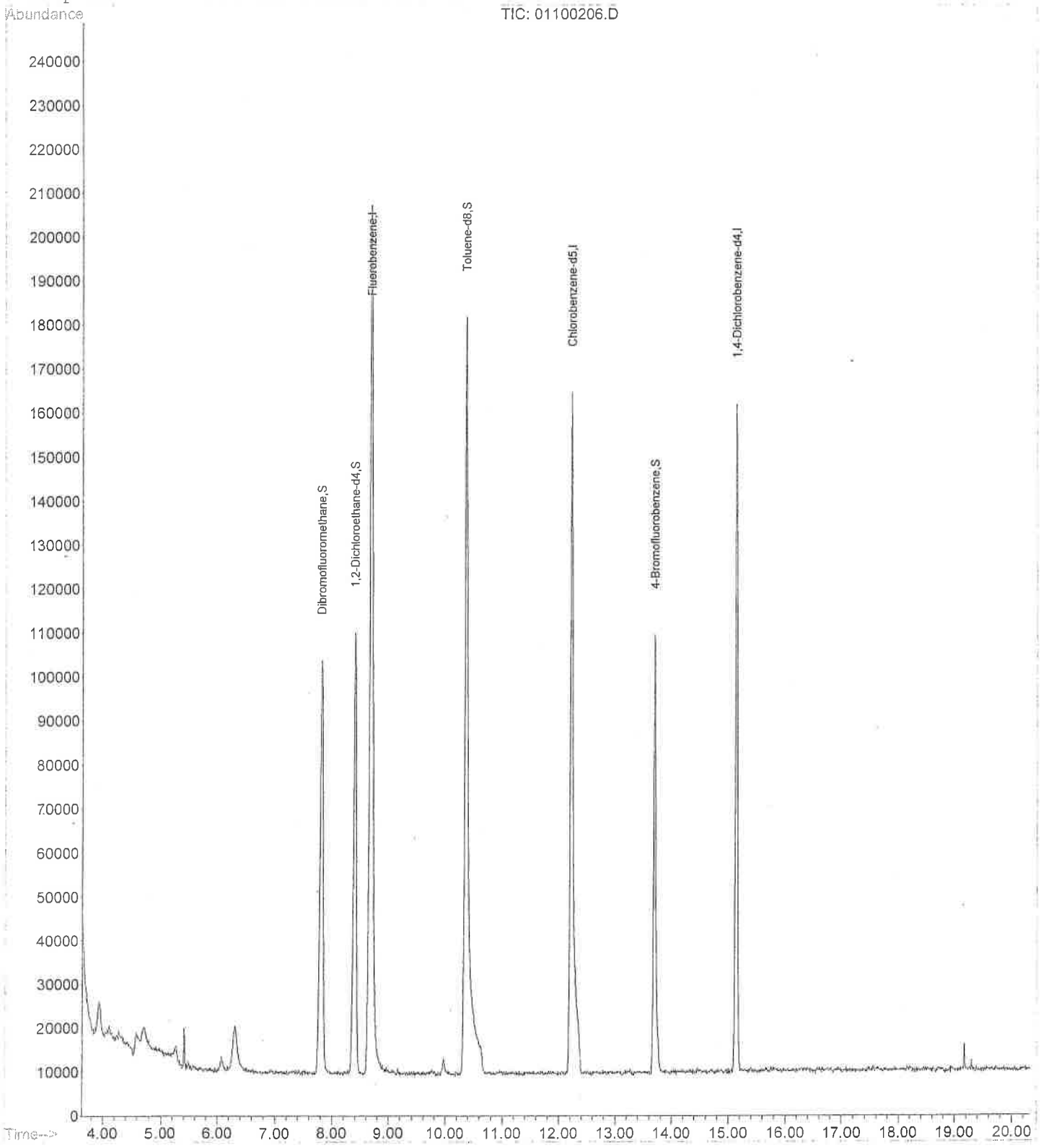
1/17/02

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\011002\01100206.D Vial: 7
Acq On : 10 Jan 2002 9:05 am Operator: MEG
Sample : PES0110-02 C2-4.0 1.0g 5X Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS/SS_SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 10 9:31 2002 Quant Results File: 010702.RES

Method : C:\HPCHEM\1\METHODS\010702.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Tue Jan 08 10:31:32 2002
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\011002\01100207.D Vial: 8
Acq On : 10 Jan 2002 9:33 am Operator: MEG
Sample : PES0110-03 A8-4.0 1.0g 5X Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS/SS_SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 10 10:02 2002 Quant Results File: 010702.RES

Quant Method : C:\HPCHEM\1\METHODS\010702.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Tue Jan 08 10:31:32 2002
Response via : Initial Calibration
DataAcq Meth : AQ_8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	8.68	96	364968	250.00	ng	0.00
32) Chlorobenzene-d5	12.20	117	152672m	250.00	ng	-0.02
45) 1,4-Dichlorobenzene-d4	15.13	152	58230	250.00	ng	-0.02
System Monitoring Compounds						
16) Dibromofluoromethane	7.80	113	104314	230.18	ng	0.00
Spiked Amount 250.000			Recovery = 92.07%			
17) 1,2-Dichloroethane-d4	8.40	65	121907	227.72	ng	0.00
Spiked Amount 250.000			Recovery = 91.09%			
29) Toluene-d8	10.35	98	247946m	227.47	ng	-0.01
Spiked Amount 250.000			Recovery = 90.99%			
43) 4-Bromofluorobenzene	13.69	95	51456	221.09	ng	-0.02
Spiked Amount 250.000			Recovery = 88.44%			
Target Compounds						Qvalue
23) Trichloroethene	8.85	95	25681	49.01	ng	92

01/22/02

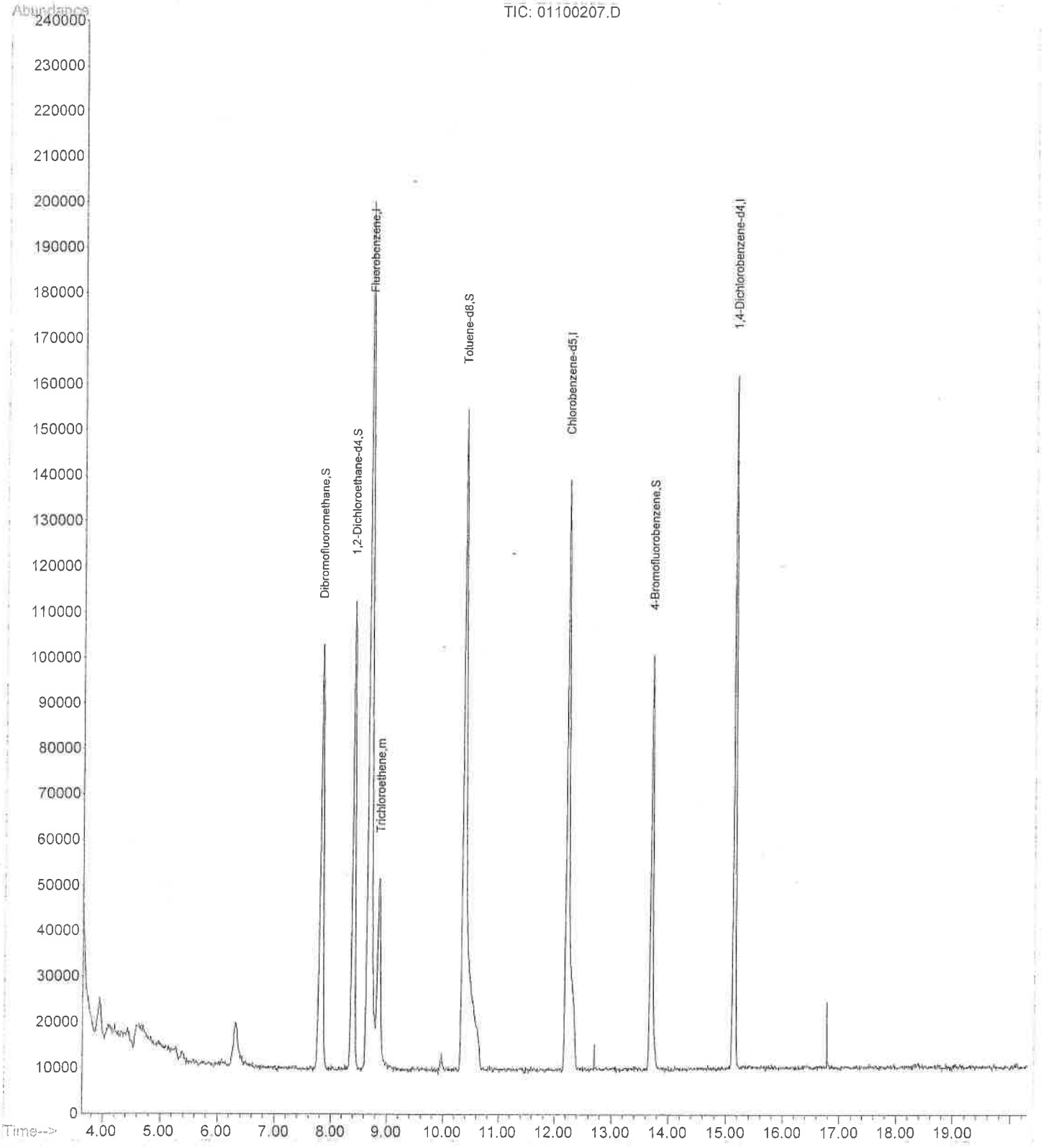
1/17/02

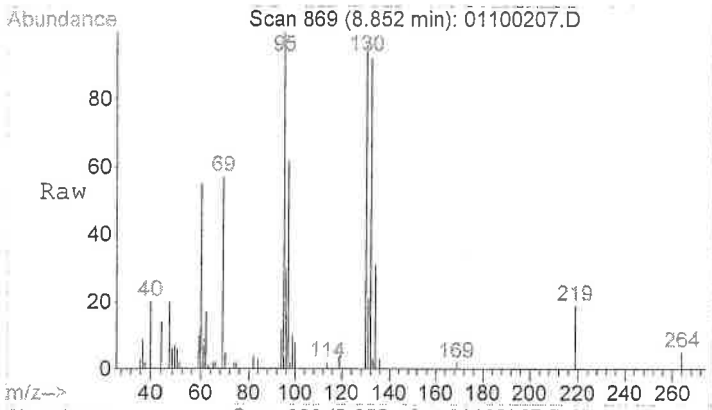
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01100207.D 010702.M Thu Jan 10 10:02:47 2002

Quantitation Report

Data File : C:\HPCHEM\1\DATA\011002\01100207.D Vial: 8
Acq On : 10 Jan 2002 9:33 am Operator: MEG
Sample : PES0110-03 A8-4.0 1.0g 5X Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS/SS_SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 10 10:02 2002 Quant Results File: 010702.RES

Method : C:\HPCHEM\1\METHODS\010702.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Tue Jan 08 10:31:32 2002
Response via : Initial Calibration

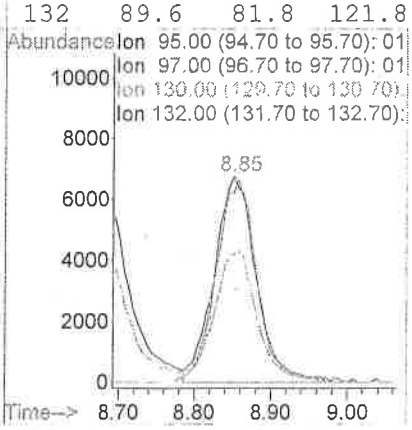




#23
Trichloroethene
Concen: 49.01 ng
RT: 8.85 min Scan# 869
Delta R.T. -0.01 min
Lab File: 01100207.D
Acq: 10 Jan 2002 9:33 am

Tgt Ion: 95 Resp: 25681

Ion	Ratio	Lower	Upper
95	100		
97	62.2	41.9	81.9
130	96.3	84.9	124.9
132	89.6	81.8	121.8



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\011002\01100208.D Vial: 9
Acq On : 10 Jan 2002 10:12 am Operator: MEG
Sample : PES0110-04 A10-4.0 1.0g 5X Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS/SS_SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 10 10:39 2002 Quant Results File: 010702.RES

Quant Method : C:\HPCHEM\1\METHODS\010702.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Tue Jan 08 10:31:32 2002
Response via : Initial Calibration
DataAcq Meth : AQ_8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	8.67	96	364550	250.00	ng	-0.01
32) Chlorobenzene-d5	12.20	117	172616m	250.00	ng	-0.02
45) 1,4-Dichlorobenzene-d4	15.13	152	68030	250.00	ng	-0.02
System Monitoring Compounds						
16) Dibromofluoromethane	7.80	113	103546	228.75	ng	0.00
Spiked Amount 250.000			Recovery =	91.50%		
17) 1,2-Dichloroethane-d4	8.39	65	118981	222.51	ng	-0.01
Spiked Amount 250.000			Recovery =	89.00%		
29) Toluene-d8	10.35	98	262124m	240.75	ng	0.00
Spiked Amount 250.000			Recovery =	96.30%		
43) 4-Bromofluorobenzene	13.68	95	60459	229.75	ng	-0.02
Spiked Amount 250.000			Recovery =	91.90%		

Target Compounds Qvalue

01/22/02

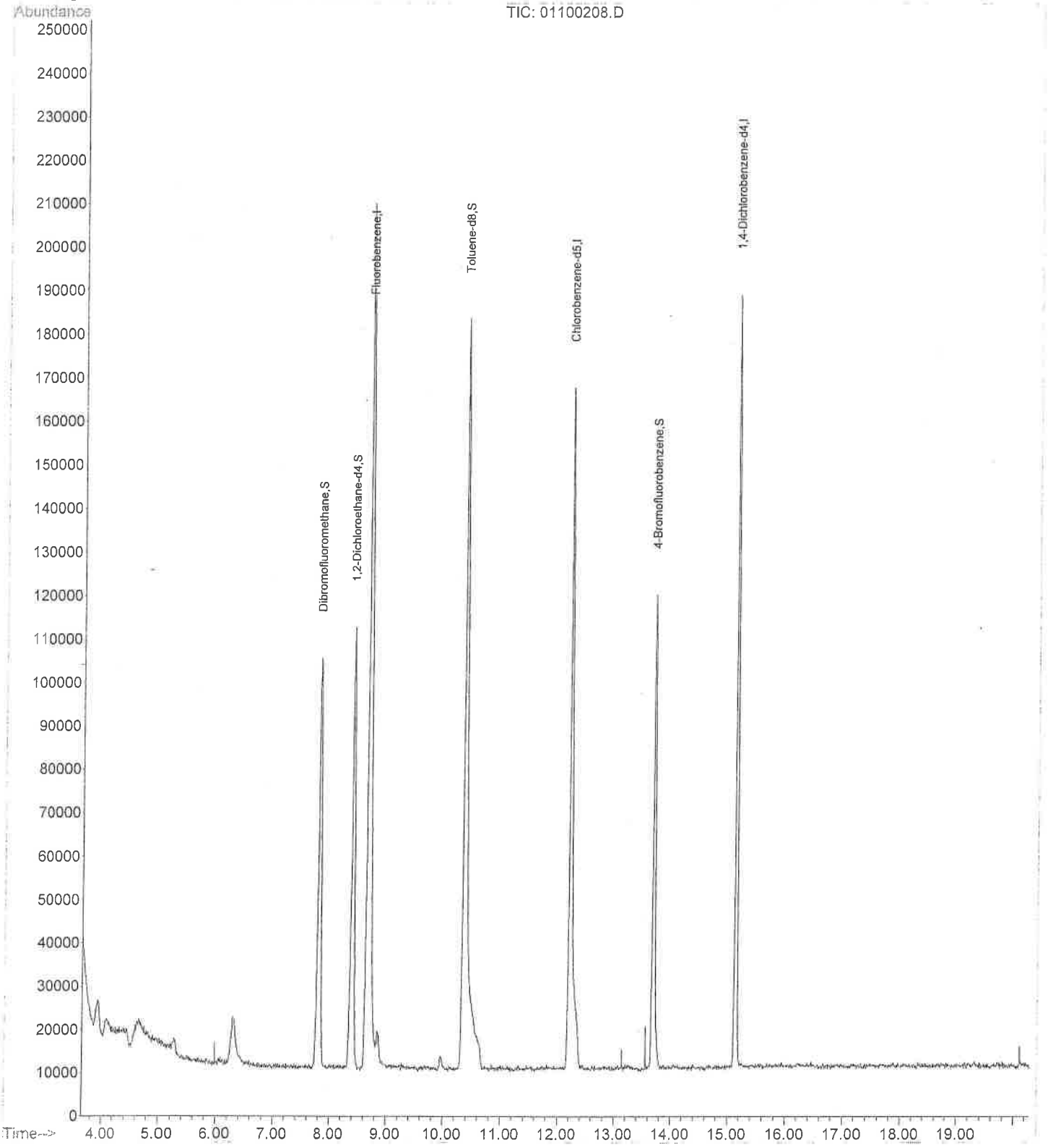
1/17/02

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\011002\01100208.D Vial: 9
Acq On : 10 Jan 2002 10:12 am Operator: MEG
Sample : PES0110-04 A10-4.0 1.0g 5X Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS/SS_SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 10 10:39 2002 Quant Results File: 010702.RES

Method : C:\HPCHEM\1\METHODS\010702.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Tue Jan 08 10:31:32 2002
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\011002\01100209.D Vial: 10
Acq On : 10 Jan 2002 10:48 am Operator: MEG
Sample : PES0110-05 E5-4.0 1.0g 5X Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS/SS_SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 10 11:11 2002 Quant Results File: 010702.RES

Quant Method : C:\HPCHEM\1\METHODS\010702.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Tue Jan 08 10:31:32 2002
Response via : Initial Calibration
DataAcq Meth : AQ_8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	8.67	96	352304	250.00	ng	-0.01
32) Chlorobenzene-d5	12.21	117	163796m	250.00	ng	-0.01
45) 1,4-Dichlorobenzene-d4	15.13	152	69659	250.00	ng	-0.02
System Monitoring Compounds						
16) Dibromofluoromethane	7.80	113	105272	240.65	ng	0.00
Spiked Amount 250.000			Recovery =	96.26%		
17) 1,2-Dichloroethane-d4	8.39	65	118869	230.03	ng	0.00
Spiked Amount 250.000			Recovery =	92.01%		
29) Toluene-d8	10.35	98	250091m	237.68	ng	-0.01
Spiked Amount 250.000			Recovery =	95.07%		
43) 4-Bromofluorobenzene	13.69	95	61193	245.07	ng	-0.02
Spiked Amount 250.000			Recovery =	98.03%		
Target Compounds						Qvalue
10) trans-1,2-Dichloroethene	6.24	96	69999	125.03	ng	98
12) cis-1,2-Dichloroethene	7.37	96	35599	67.37	ng	98
23) Trichloroethene	8.85	95	653754	1292.54	ng E	96

01/22/02

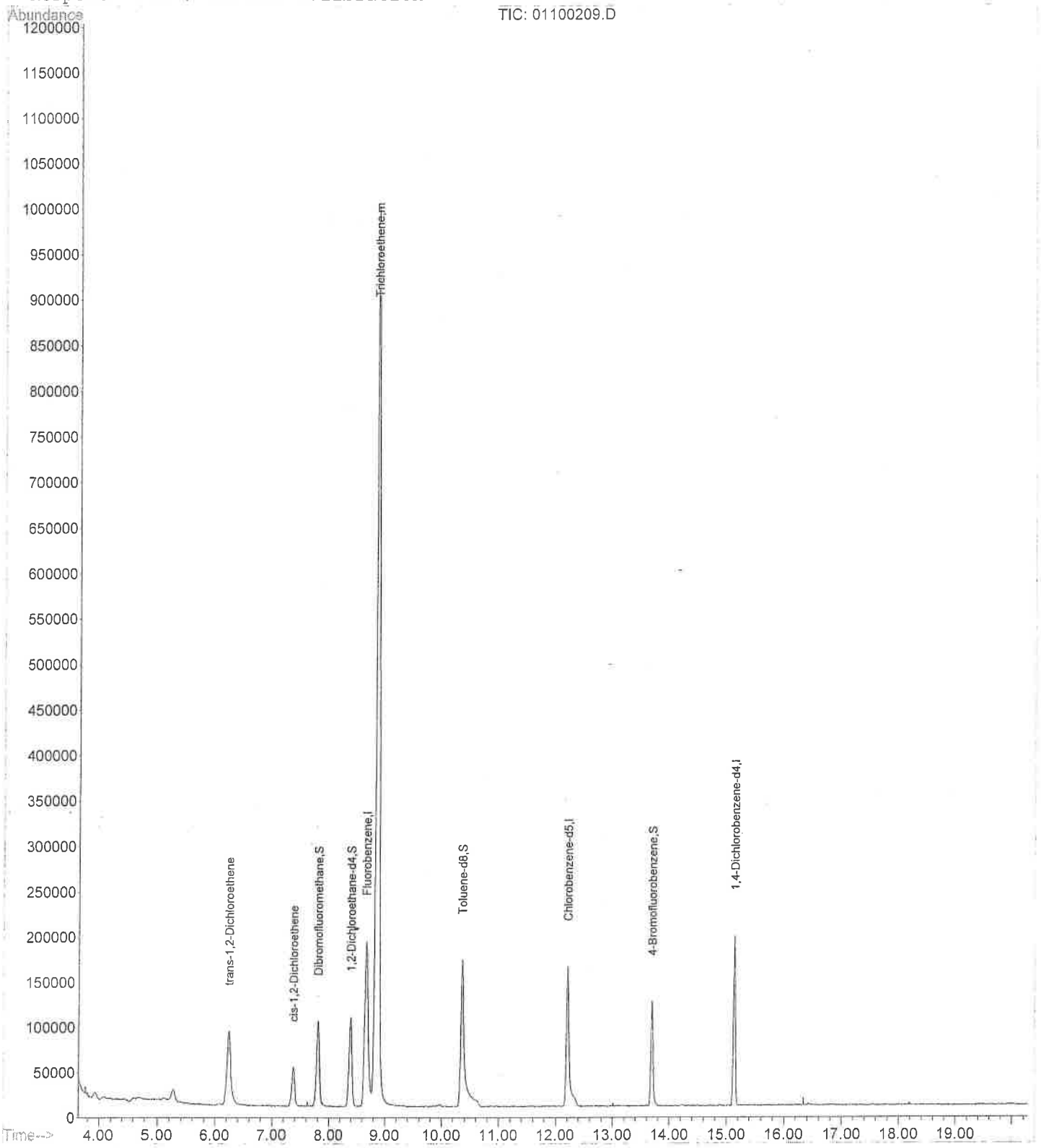
1/17/02

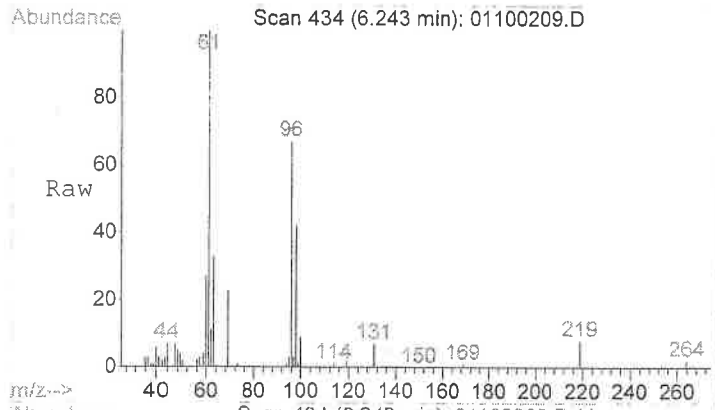
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\011002\01100209.D Vial: 10
Acq On : 10 Jan 2002 10:48 am Operator: MEG
Sample : PES0110-05 E5-4.0 1.0g 5X Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS/SS_SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 10 11:11 2002 Quant Results File: 010702.RES

Method : C:\HPCHEM\1\METHODS\010702.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Tue Jan 08 10:31:32 2002
Response via : Initial Calibration

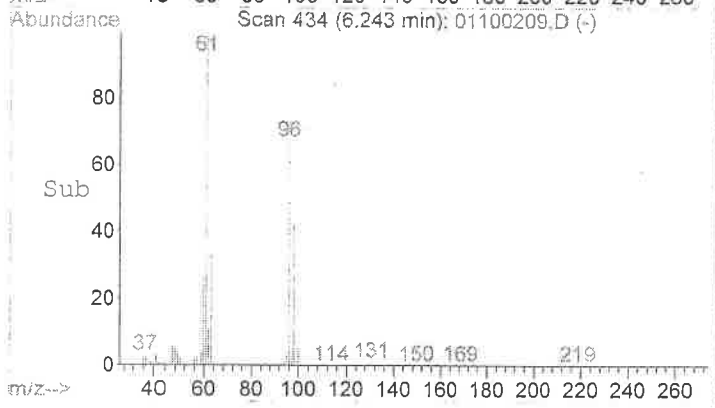


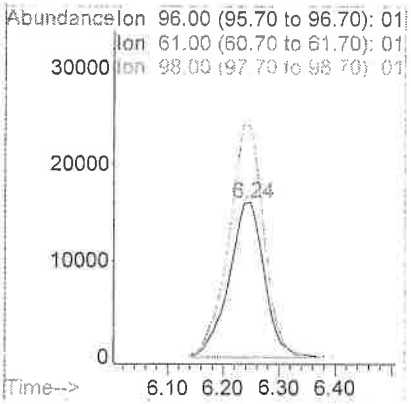


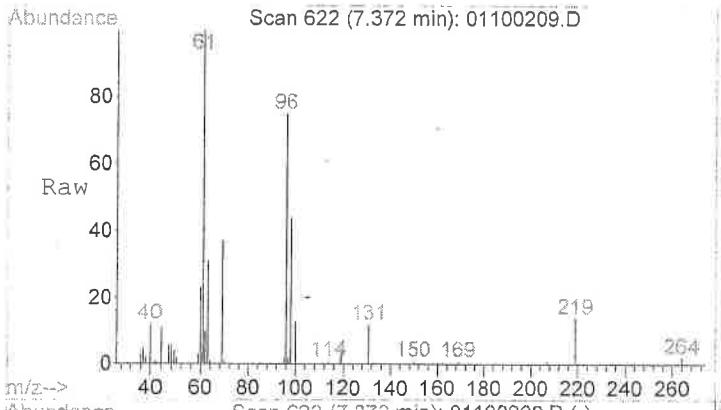
#10
trans-1,2-Dichloroethene
Concen: 125.03 ng
RT: 6.24 min Scan# 434
Delta R.T. 0.01 min
Lab File: 01100209.D
Acq: 10 Jan 2002 10:48 am

Tgt Ion: 96 Resp: 69999

Ion	Ratio	Lower	Upper
96	100		
61	149.8	127.5	167.5
98	62.7	44.2	84.2



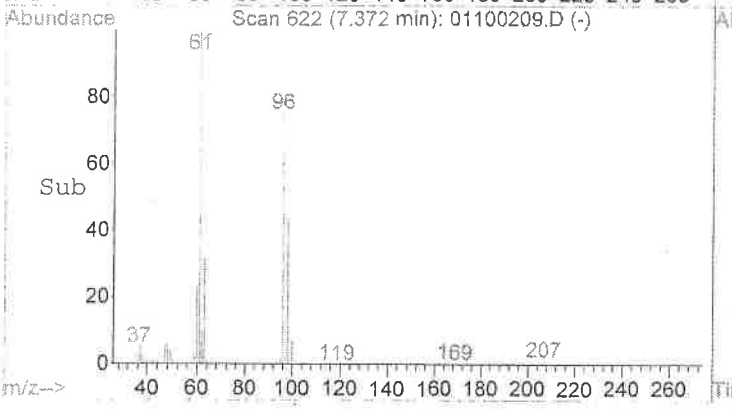


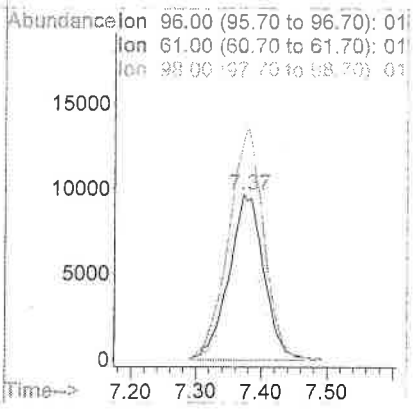


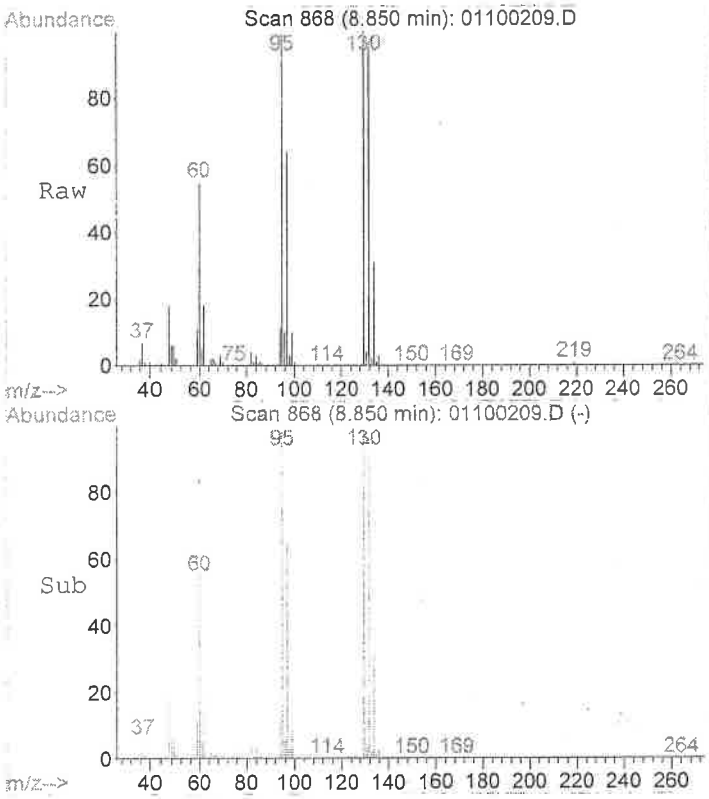
#12
cis-1,2-Dichloroethene
Concen: 67.37 ng
RT: 7.37 min Scan# 622
Delta R.T. -0.00 min
Lab File: 01100209.D
Acq: 10 Jan 2002 10:48 am

Tgt Ion: 96 Resp: 35599

Ion	Ratio	Lower	Upper
96	100		
61	134.1	114.0	154.0
98	58.8	43.9	83.9



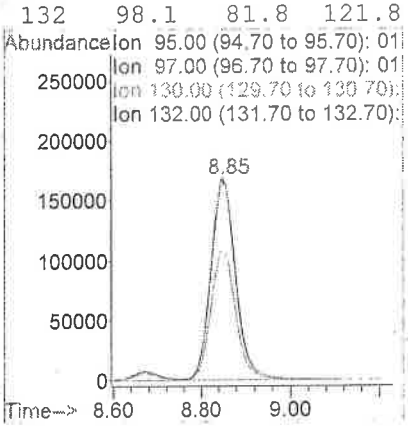




#23
Trichloroethene
Concen: 1292.54 ng
RT: 8.85 min Scan# 868
Delta R.T. -0.01 min
Lab File: 01100209.D
Acq: 10 Jan 2002 10:48 am

Tgt Ion: 95 Resp: 653754

Ion	Ratio	Lower	Upper
95	100		
97	64.6	41.9	81.9
130	101.3	84.9	124.9
132	98.1	81.8	121.8



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\011002\01100210.D Vial: 11
Acq On : 10 Jan 2002 11:14 am Operator: MEG
Sample : PES0110-06 ~~E7~~ 8-8.5 1.0g 5X Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS/SS_SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 10 11:37 2002 SC 1/16/02 Quant Results File: 010702.RES

Quant Method : C:\HPCHEM\1\METHODS\010702.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Tue Jan 08 10:31:32 2002
Response via : Initial Calibration
DataAcq Meth : AQ_8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	8.67	96	334021	250.00	ng	-0.01
32) Chlorobenzene-d5	12.21	117	131101m	250.00	ng	-0.01
45) 1,4-Dichlorobenzene-d4	15.14	152	67375	250.00	ng	-0.01
System Monitoring Compounds						
16) Dibromofluoromethane	7.81	113	99197	239.17	ng	0.00
Spiked Amount 250.000			Recovery = 95.67%			
17) 1,2-Dichloroethane-d4	8.40	65	116145	237.06	ng	0.00
Spiked Amount 250.000			Recovery = 94.82%			
29) Toluene-d8	10.36	98	201598m	202.08	ng	0.00
Spiked Amount 250.000			Recovery = 80.83%			
43) 4-Bromofluorobenzene	13.69	95	55309	276.74	ng	-0.01
Spiked Amount 250.000			Recovery = 110.70%			
Target Compounds						Qvalue
23) Trichloroethene	8.85	95	132994	277.34	ng	95

01/22/02

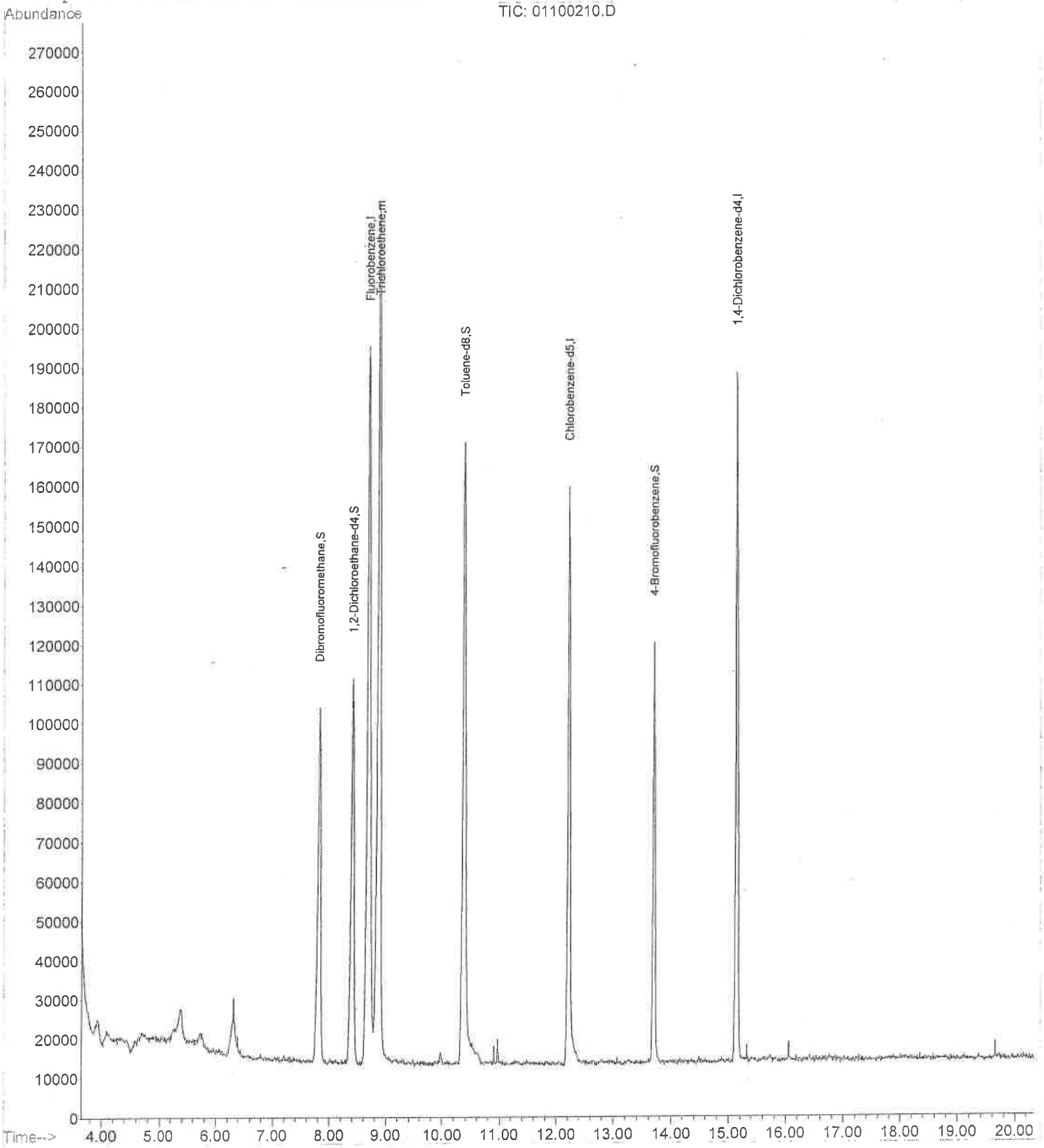
1/17/02

(#) = qualifier out of range (m) = manual integration
01100210.D 010702.M Thu Jan 10 11:37:15 2002

Quantitation Report

Data File : C:\HPCHEM\1\DATA\011002\01100210.D Vial: 11
Acq On : 10 Jan 2002 11:14 am Operator: MEG
Sample : PES0110-06 E8-8.5 1.0g 5X Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS/SS_SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 10 11:37 2002 Quant Results File: 010702.RES

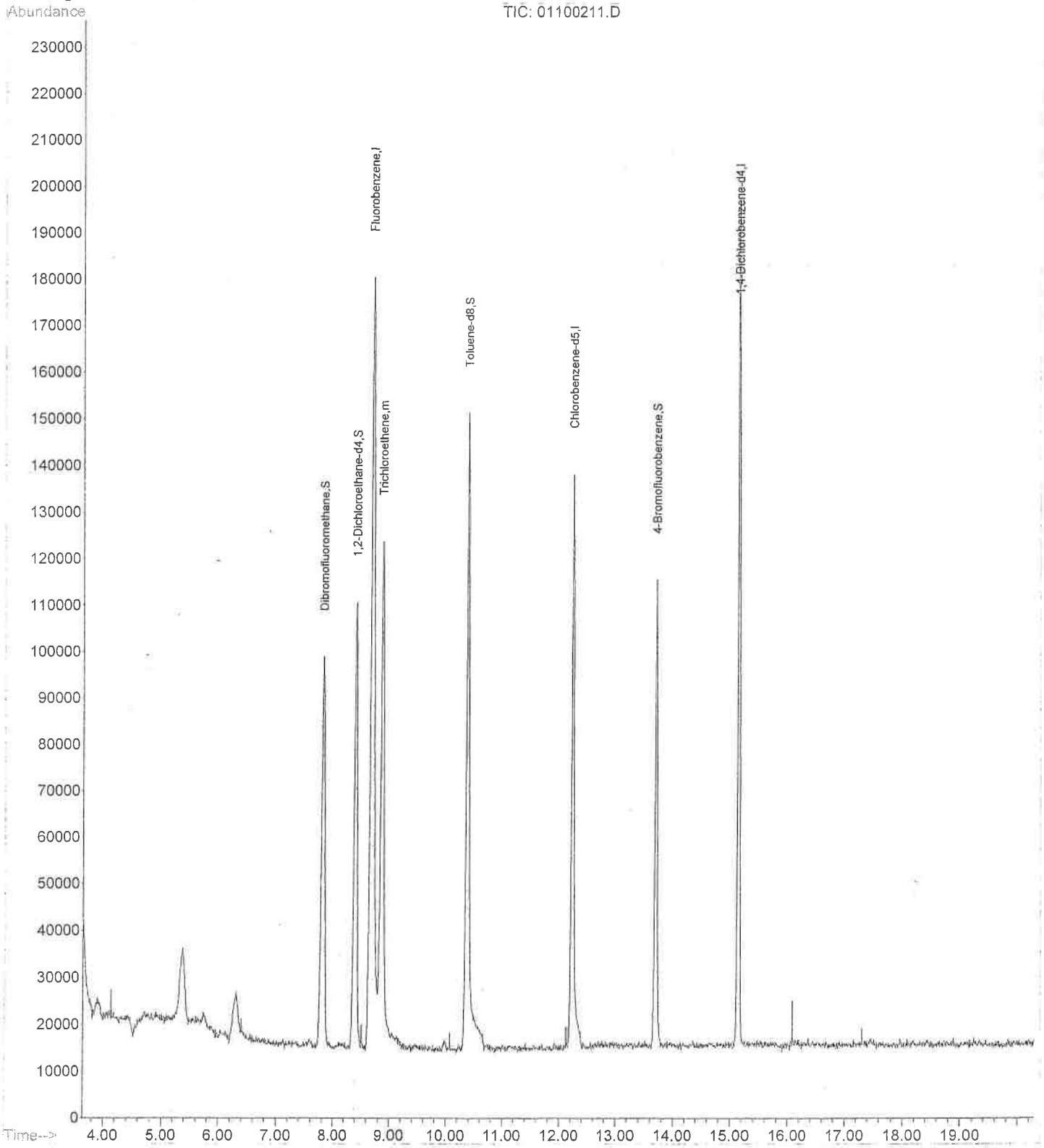
Method : C:\HPCHEM\1\METHODS\010702.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Tue Jan 08 10:31:32 2002
Response via : Initial Calibration

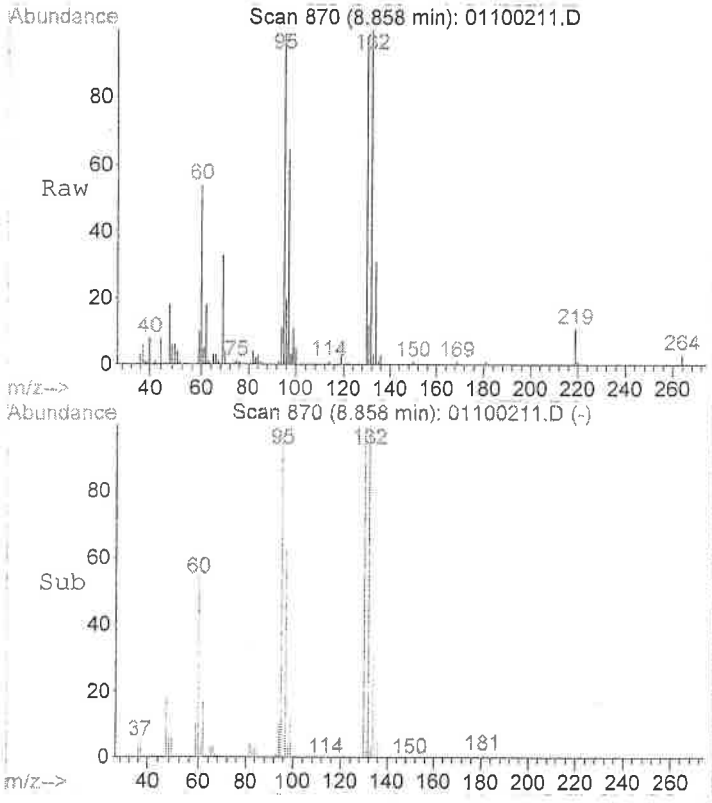


Quantitation Report

Data File : C:\HPCHEM\1\DATA\011002\01100211.D Vial: 12
Acq On : 10 Jan 2002 11:39 am Operator: MEG
Sample : PES0110-07 E7-12.0 1.0g 5X Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS/SS_SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 10 12:02 2002 Quant Results File: 010702.RES

Method : C:\HPCHEM\1\METHODS\010702.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Tue Jan 08 10:31:32 2002
Response via : Initial Calibration

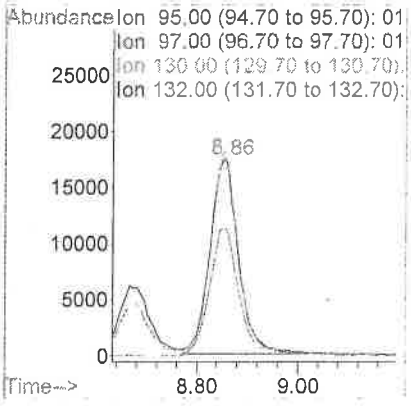




#23
Trichloroethene
Concen: 142.57 ng
RT: 8.86 min Scan# 870
Delta R.T. -0.00 min
Lab File: 01100211.D
Acq: 10 Jan 2002 11:39 am

Tgt Ion: 95 Resp: 68941

Ion	Ratio	Lower	Upper
95	100		
97	65.2	41.9	81.9
130	100.0	84.9	124.9
132	101.0	81.8	121.8



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\011002\01100212.D Vial: 13
Acq On : 10 Jan 2002 12:04 pm Operator: MEG
Sample : PES0110-08 / E5-8.0 / 1.0g 5X Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS/SS_SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 10 12:28 2002 Quant Results File: 010702.RES

Quant Method : C:\HPCHEM\1\METHODS\010702.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Tue Jan 08 10:31:32 2002
Response via : Initial Calibration
DataAcq Meth : AQ_8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	8.68	96	305150	250.00	ng	0.00
32) Chlorobenzene-d5	12.21	117	104301m	250.00	ng	-0.01
45) 1,4-Dichlorobenzene-d4	15.14	152	66932	250.00	ng	-0.01
System Monitoring Compounds						
16) Dibromofluoromethane	7.81	113	98397	259.69	ng	0.00
Spiked Amount 250.000			Recovery = 103.88%			
17) 1,2-Dichloroethane-d4	8.39	65	120147	268.43	ng	0.00
Spiked Amount 250.000			Recovery = 107.37%			
29) Toluene-d8	10.36	98	154999m	170.07	ng	0.00
Spiked Amount 250.000			Recovery = 68.03%			
43) 4-Bromofluorobenzene	13.69	95	48997	308.15	ng	-0.02
Spiked Amount 250.000			Recovery = 123.26%			
Target Compounds						Qvalue
23) Trichloroethene	8.86	95	54907m	125.33	ng	

DE 01/22/02

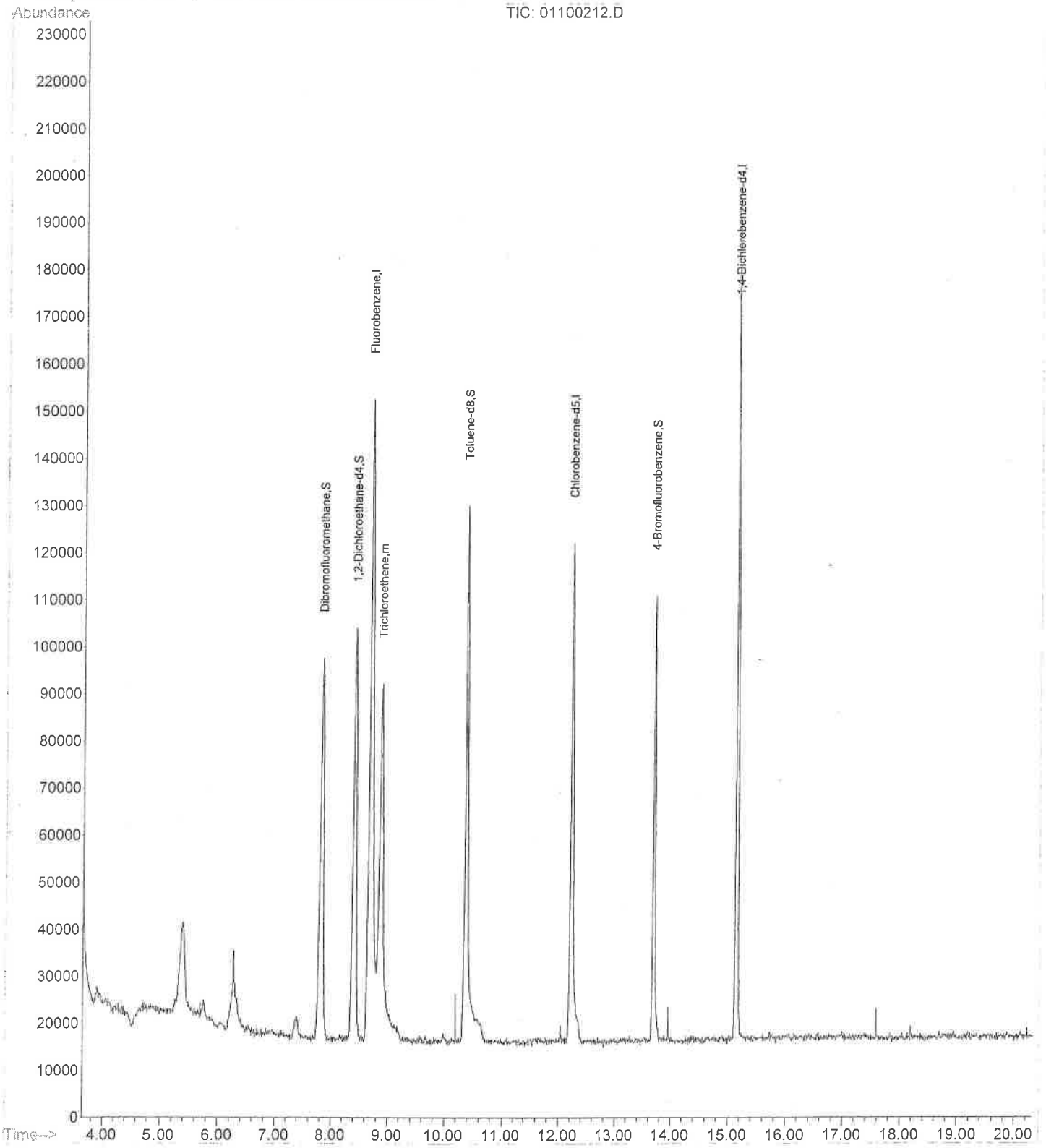
SE 1/17/02

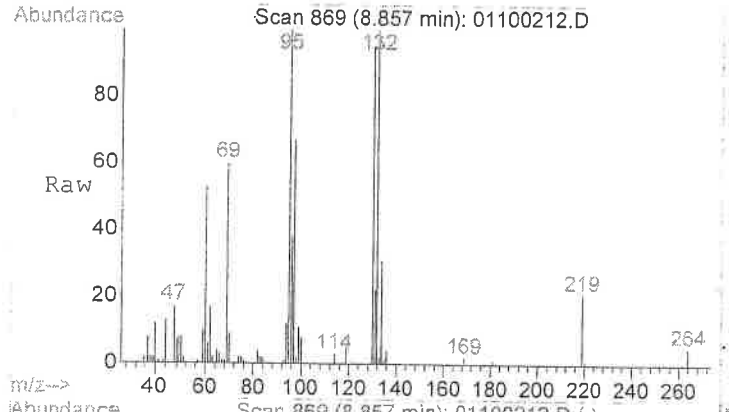
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01100212.D 010702.M Thu Jan 10 12:28:18 2002

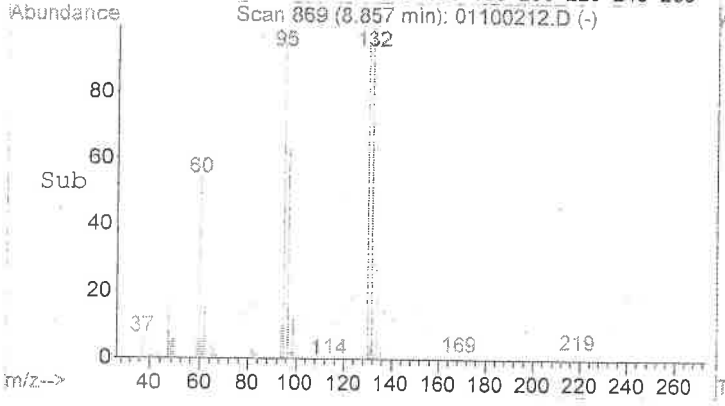
Quantitation Report

Data File : C:\HPCHEM\1\DATA\011002\01100212.D Vial: 13
Acq On : 10 Jan 2002 12:04 pm Operator: MEG
Sample : PES0110-08 E5-8.0 1.0g 5X Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS/SS_SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 10 12:28 2002 Quant Results File: 010702.RES

Method : C:\HPCHEM\1\METHODS\010702.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Tue Jan 08 10:31:32 2002
Response via : Initial Calibration



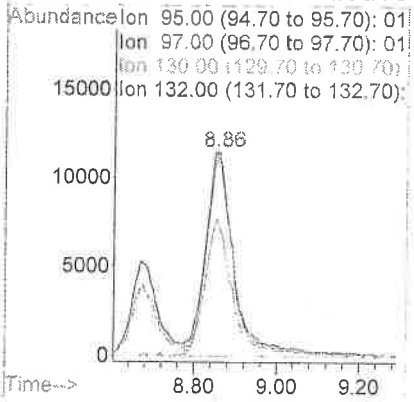




#23
Trichloroethene
Concen: 125.33 ng m
RT: 8.86 min Scan# 869
Delta R.T. -0.01 min
Lab File: 01100212.D
Acq: 10 Jan 2002 12:04 pm

Tgt Ion: 95 Resp: 54907

Ion	Ratio	Lower	Upper
95	100		
97	66.6	41.9	81.9
130	94.8	84.9	124.9
132	99.6	81.8	121.8



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\011002\01100213.D Vial: 14
Acq On : 10 Jan 2002 12:28 pm Operator: MEG
Sample : PES0110-09 E5-12.0 1.0g 5X Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS/SS_SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 10 13:18 2002 Quant Results File: 010702.RES

Quant Method : C:\HPCHEM\1\METHODS\010702.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Tue Jan 08 10:31:32 2002
Response via : Initial Calibration
DataAcq Meth : AQ_8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	8.68	96	315047	250.00	ng	0.00
32) Chlorobenzene-d5	12.21	117	111667m	250.00	ng	-0.01
45) 1,4-Dichlorobenzene-d4	15.14	152	66167	250.00	ng	-0.02
System Monitoring Compounds						
16) Dibromofluoromethane	7.81	113	98822	252.62	ng	0.00
Spiked Amount 250.000			Recovery = 101.05%			
17) 1,2-Dichloroethane-d4	8.40	65	118008	255.37	ng	0.00
Spiked Amount 250.000			Recovery = 102.15%			
29) Toluene-d8	10.36	98	170070m	180.74	ng	0.00
Spiked Amount 250.000			Recovery = 72.30%			
43) 4-Bromofluorobenzene	13.69	95	49591	291.31	ng	-0.01
Spiked Amount 250.000			Recovery = 116.52%			
Target Compounds						Qvalue
23) Trichloroethene	8.86	95	24304m	53.73	ng	

01/22/02

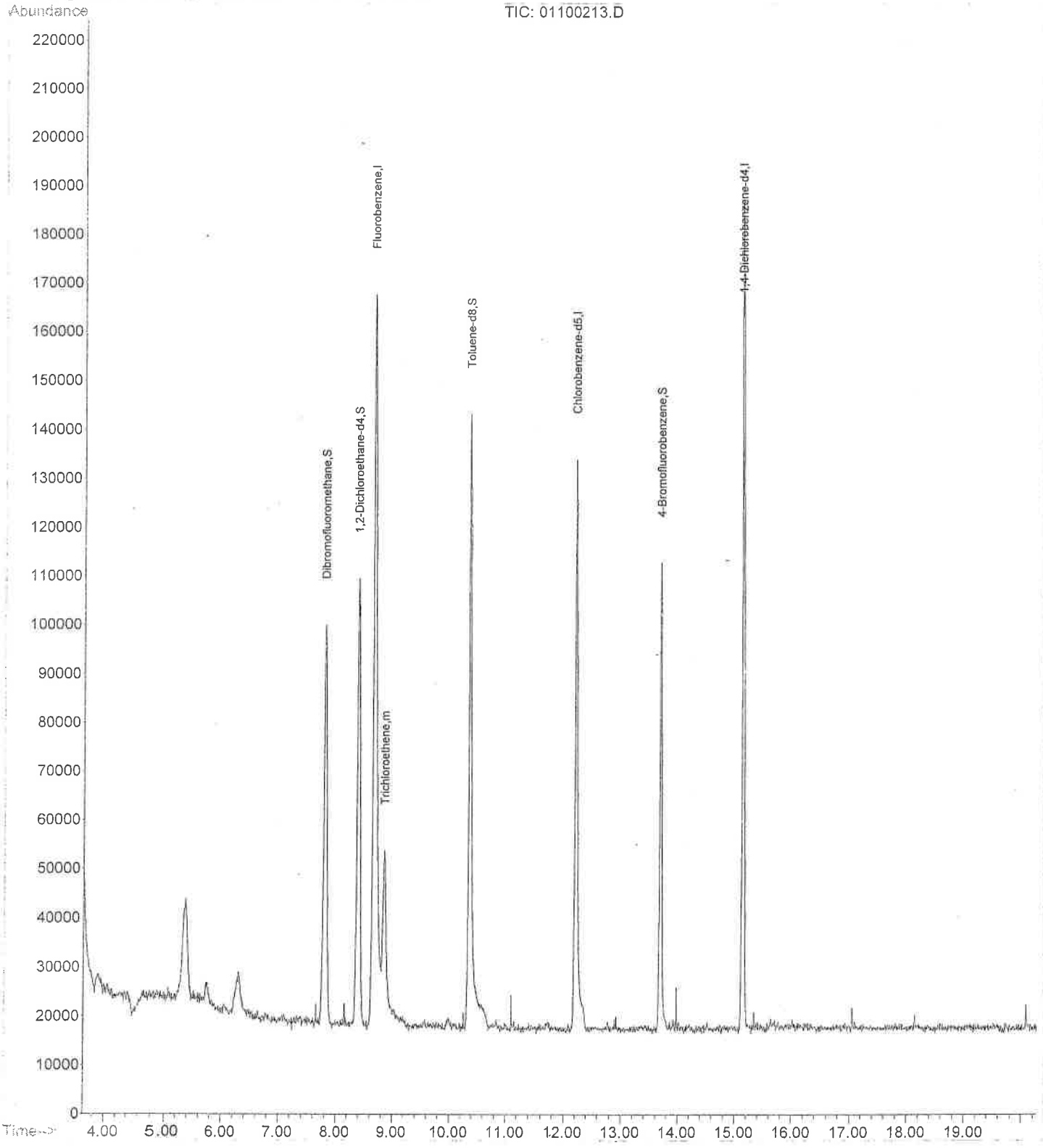
1/17/02

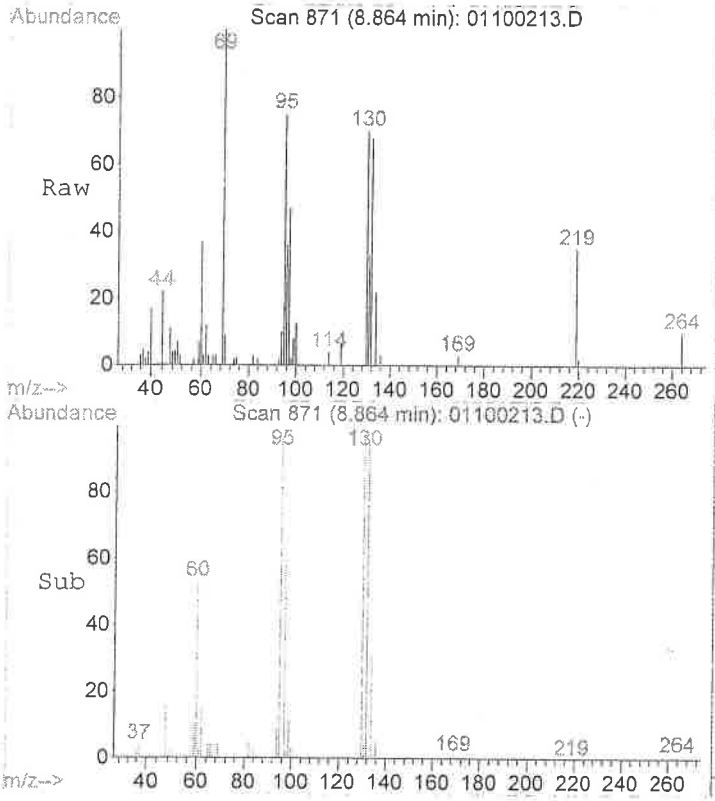
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01100213.D 010702.M Thu Jan 10 13:18:58 2002

Quantitation Report

Data File : C:\HPCHEM\1\DATA\011002\01100213.D Vial: 14
Acq On : 10 Jan 2002 12:28 pm Operator: MEG
Sample : PES0110-09 E5-12.0 1.0g 5X Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS/SS_SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 10 13:18 2002 Quant Results File: 010702.RES

Method : C:\HPCHEM\1\METHODS\010702.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Tue Jan 08 10:31:32 2002
Response via : Initial Calibration

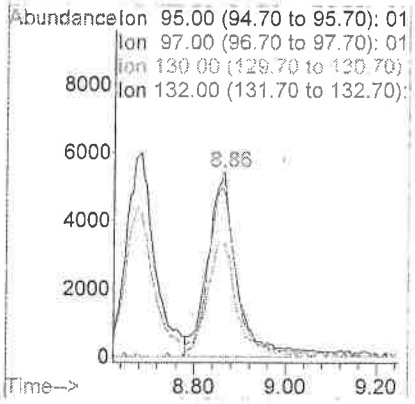




#23
Trichloroethene
Concen: 53.73 ng m
RT: 8.86 min Scan# 871
Delta R.T. 0.00 min
Lab File: 01100213.D
Acq: 10 Jan 2002 12:28 pm

Tgt Ion: 95 Resp: 24304

Ion	Ratio	Lower	Upper
95	100		
97	61.7	41.9	81.9
130	92.8	84.9	124.9
132	89.8	81.8	121.8



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\011002\01100214.D Vial: 15
Acq On : 10 Jan 2002 12:53 pm Operator: MEG
Sample : PES0110-10 B10-4.0 1.0g 5X Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS/SS_SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 10 13:20 2002 Quant Results File: 010702.RES

Quant Method : C:\HPCHEM\1\METHODS\010702.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Tue Jan 08 10:31:32 2002
Response via : Initial Calibration
DataAcq Meth : AQ_8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	8.68	96	306273	250.00	ng	0.00
32) Chlorobenzene-d5	12.21	117	106639m	250.00	ng	-0.01
45) 1,4-Dichlorobenzene-d4	15.14	152	59548	250.00	ng	-0.01
System Monitoring Compounds						
16) Dibromofluoromethane	7.81	113	94874	249.47	ng	0.00
Spiked Amount 250.000			Recovery = 99.79%			
17) 1,2-Dichloroethane-d4	8.40	65	112433	250.27	ng	0.00
Spiked Amount 250.000			Recovery = 100.11%			
29) Toluene-d8	10.36	98	167315m	182.91	ng	0.00
Spiked Amount 250.000			Recovery = 73.16%			
43) 4-Bromofluorobenzene	13.69	95	47647	293.09	ng	-0.01
Spiked Amount 250.000			Recovery = 117.24%			
Target Compounds						Qvalue

01/22/02

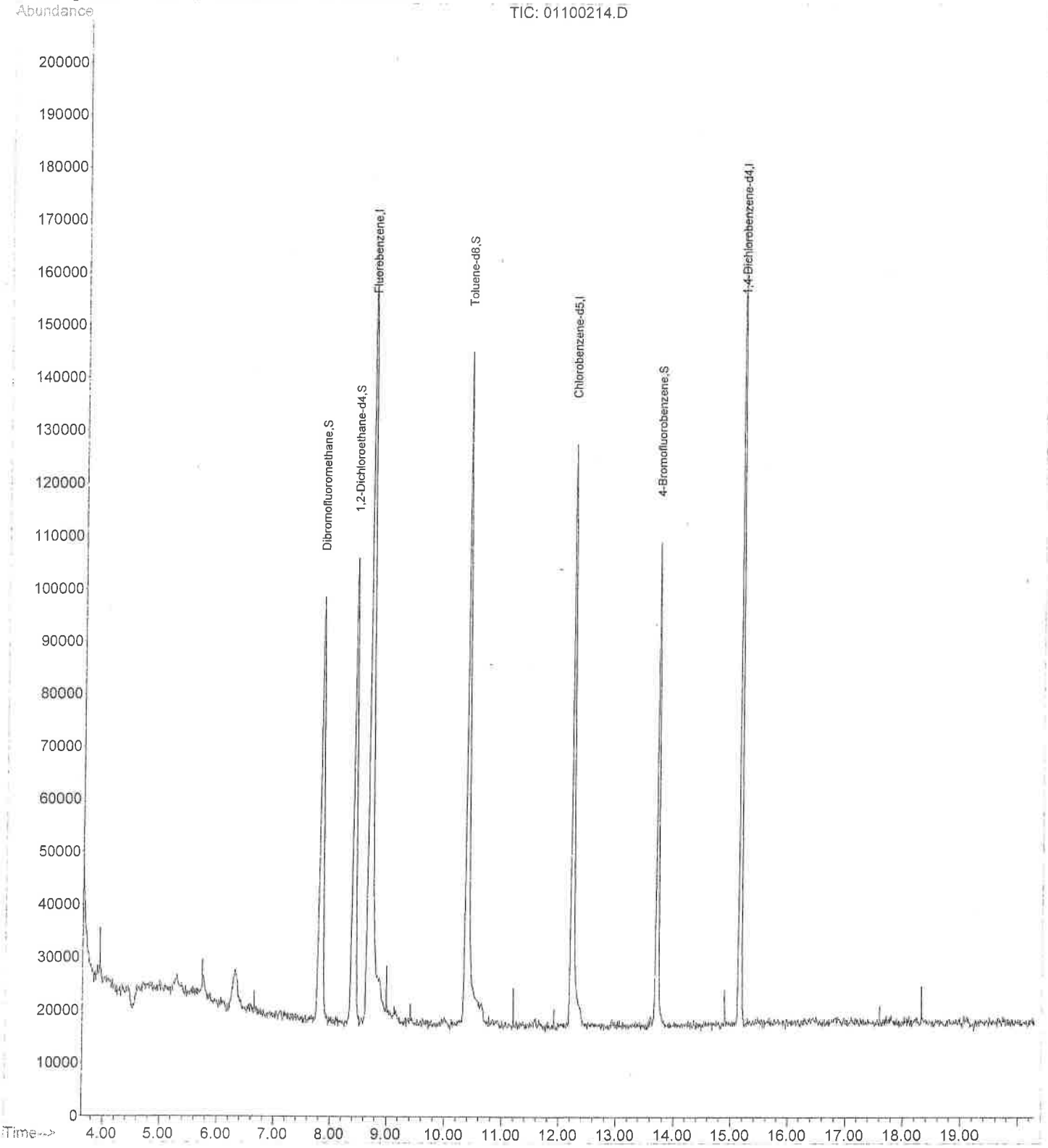
1/17/02

(#) = qualifier out of range (m) = manual integration
01100214.D 010702.M Thu Jan 10 13:21:09 2002

Quantitation Report

Data File : C:\HPCHEM\1\DATA\011002\01100214.D Vial: 15
Acq On : 10 Jan 2002 12:53 pm Operator: MEG
Sample : PES0110-10 B10-4.0 1.0g 5X Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS/SS_SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 10 13:20 2002 Quant Results File: 010702.RES

Method : C:\HPCHEM\1\METHODS\010702.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Tue Jan 08 10:31:32 2002
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\011002\01100215.D Vial: 16
Acq On : 10 Jan 2002 1:17 pm Operator: MEG
Sample : PES0110-11 E10-4.0 1.0g 5X Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS/SS_SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 10 13:42 2002 Quant Results File: 010702.RES

Quant Method : C:\HPCHEM\1\METHODS\010702.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Tue Jan 08 10:31:32 2002
Response via : Initial Calibration
DataAcq Meth : AQ_8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	8.68	96	301535	250.00	ng	0.00
32) Chlorobenzene-d5	12.21	117	104329m	250.00	ng	0.00
45) 1,4-Dichlorobenzene-d4	15.14	152	58511	250.00	ng	-0.01
System Monitoring Compounds						
16) Dibromofluoromethane	7.81	113	95786	255.83	ng	0.00
Spiked Amount 250.000			Recovery = 102.33%			
17) 1,2-Dichloroethane-d4	8.40	65	114843	259.65	ng	0.00
Spiked Amount 250.000			Recovery = 103.86%			
29) Toluene-d8	10.36	98	164194m	182.32	ng	0.00
Spiked Amount 250.000			Recovery = 72.93%			
43) 4-Bromofluorobenzene	13.69	95	46757	293.99	ng	-0.01
Spiked Amount 250.000			Recovery = 117.60%			
Target Compounds						Qvalue
23) Trichloroethene	8.86	95	34527m	79.76	ng	

01/22/02

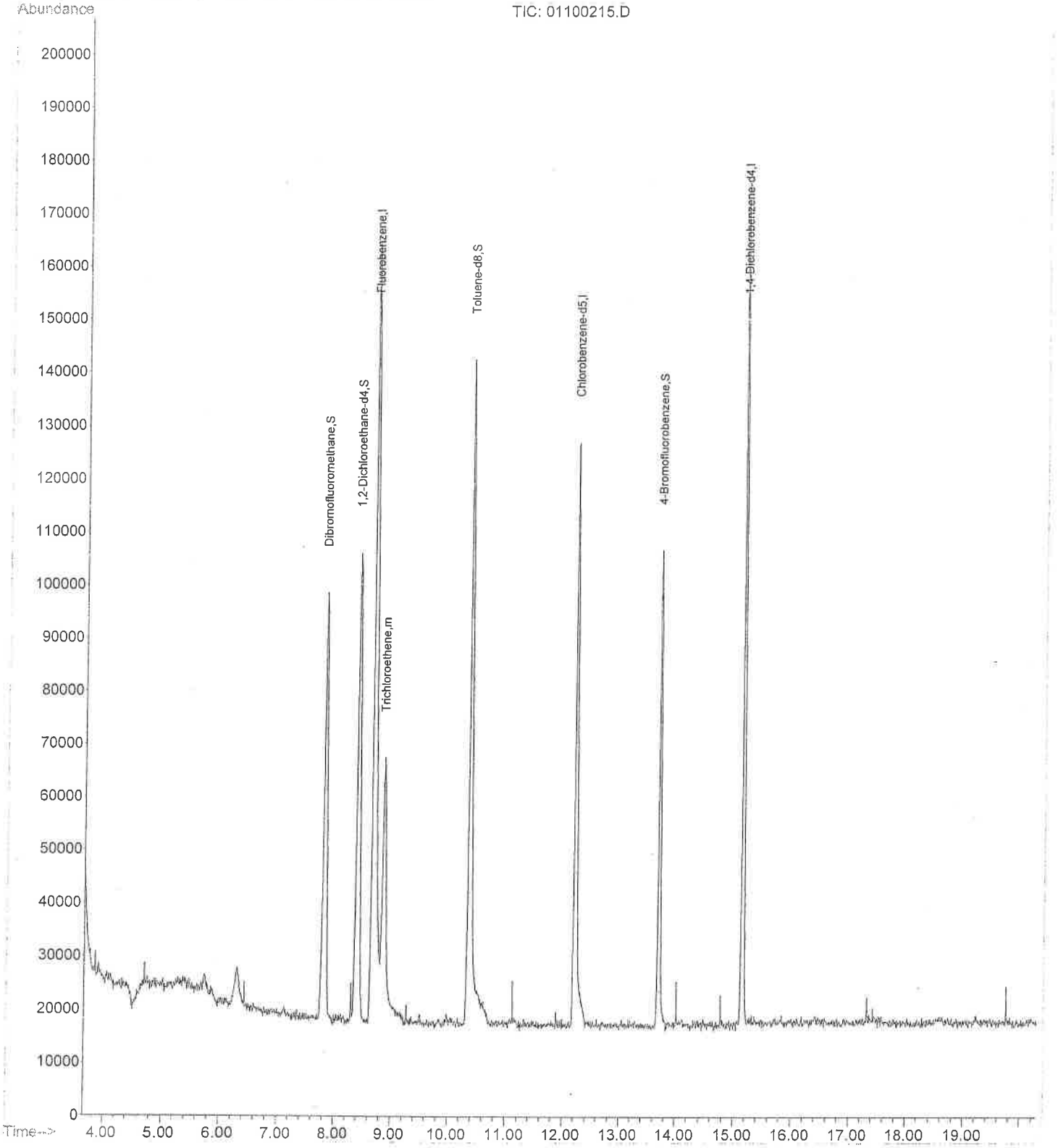
1/17/02

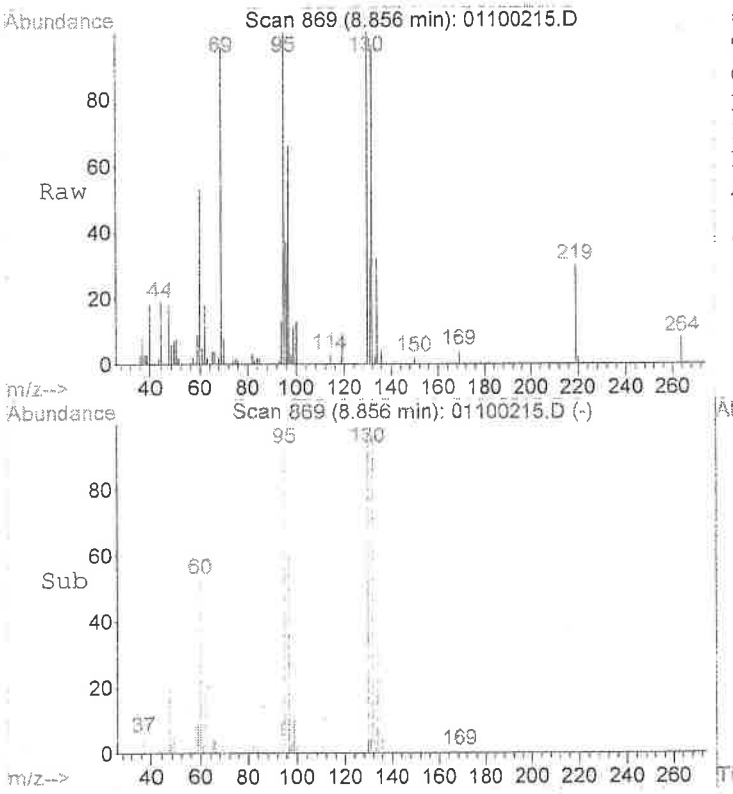
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\011002\01100215.D Vial: 16
Acq On : 10 Jan 2002 1:17 pm Operator: MEG
Sample : PES0110-11 E10-4.0 1.0g 5X Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS/SS_SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 10 13:42 2002 Quant Results File: 010702.RES

Method : C:\HPCHEM\1\METHODS\010702.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Tue Jan 08 10:31:32 2002
Response via : Initial Calibration

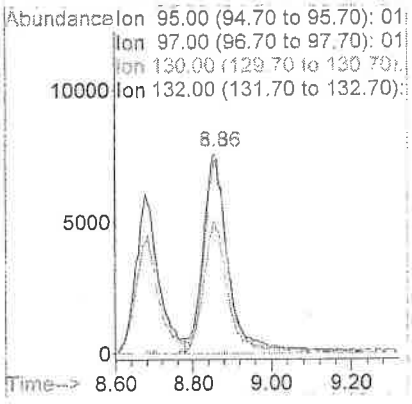




#23
Trichloroethene
Concen: 79.76 ng m
RT: 8.86 min Scan# 869
Delta R.T. -0.01 min
Lab File: 01100215.D
Acq: 10 Jan 2002 1:17 pm

Tgt Ion: 95 Resp: 34527

Ion	Ratio	Lower	Upper
95	100		
97	66.2	41.9	81.9
130	100.2	84.9	124.9
132	96.0	81.8	121.8



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\011002\01100216.D Vial: 2
Acq On : 10 Jan 2002 1:43 pm Operator: MEG
Sample : PES0110-12 D10-4.0 1.0g 5X Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS/SS_SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 10 14:06 2002 Quant Results File: 010702.RES

Quant Method : C:\HPCHEM\1\METHODS\010702.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Tue Jan 08 10:31:32 2002
Response via : Initial Calibration
DataAcq Meth : AQ_8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	8.68	96	295462m	250.00	ng	0.00
32) Chlorobenzene-d5	12.21	117	101179m	250.00	ng	0.00
45) 1,4-Dichlorobenzene-d4	15.14	152	62699	250.00	ng	0.00
System Monitoring Compounds						
16) Dibromofluoromethane	7.82	113	95472	260.23	ng	0.01
Spiked Amount 250.000			Recovery = 104.09%			
17) 1,2-Dichloroethane-d4	8.40	65	116133	267.97	ng	0.00
Spiked Amount 250.000			Recovery = 107.19%			
29) Toluene-d8	10.36	98	149184m	169.06	ng	0.00
Spiked Amount 250.000			Recovery = 67.62%			
43) 4-Bromofluorobenzene	13.70	95	46313	300.26	ng	0.00
Spiked Amount 250.000			Recovery = 120.10%			
Target Compounds						Qvalue
23) Trichloroethene	8.87	95	12038m	28.38	ng	

1/17/02

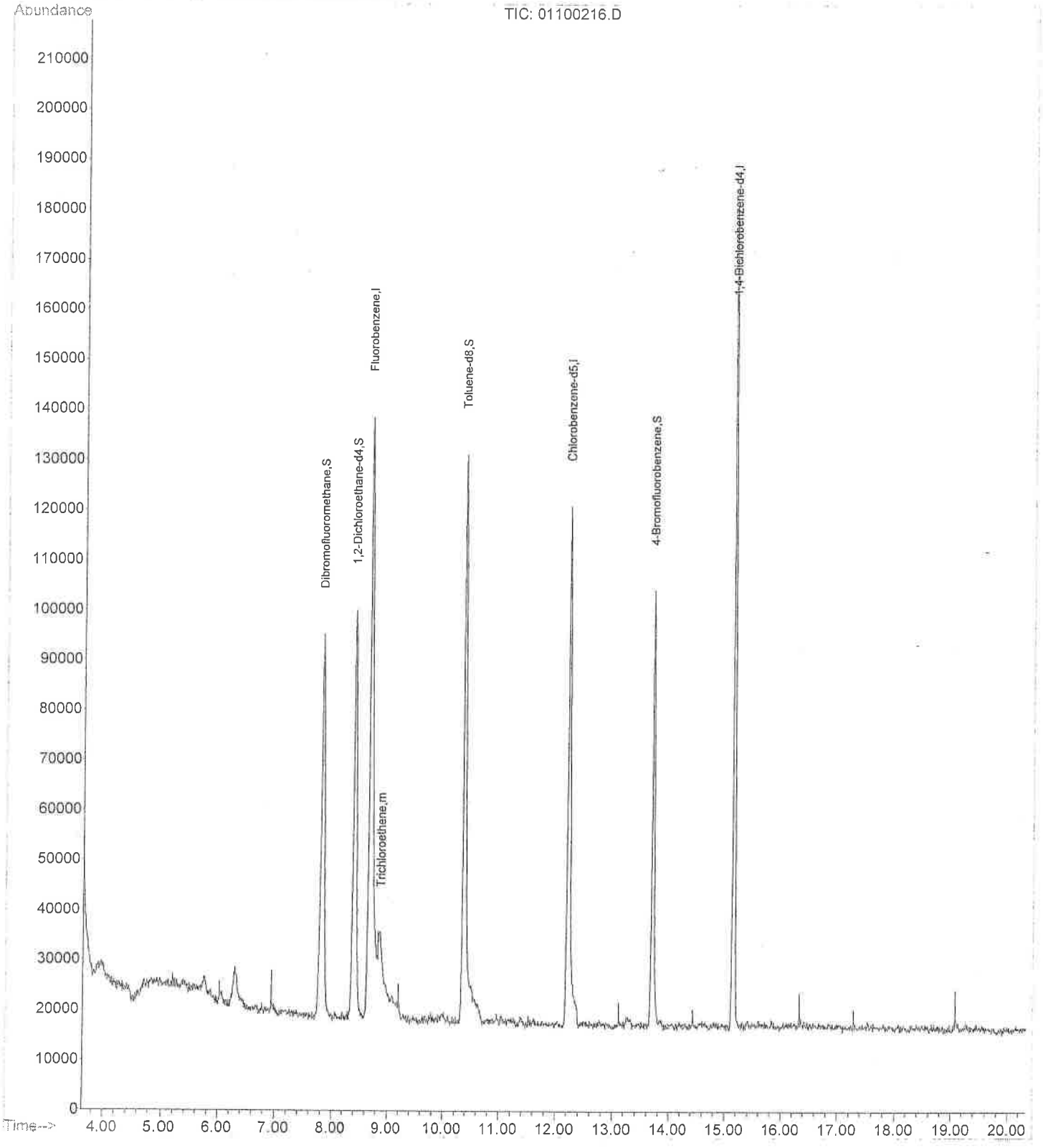
01/22/02

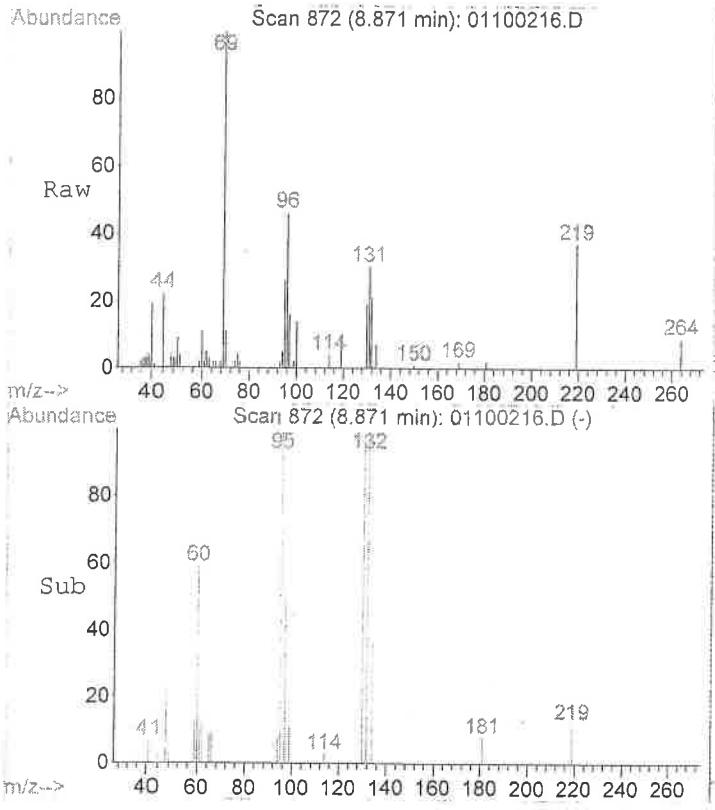
(#) = qualifier out of range (m) = manual integration
01100216.D 010702.M Thu Jan 10 14:06:26 2002

Quantitation Report

Data File : C:\HPCHEM\1\DATA\011002\01100216.D Vial: 2
Acq On : 10 Jan 2002 1:43 pm Operator: MEG
Sample : PES0110-12 D10-4.0 1.0g 5X Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS/SS_SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 10 14:06 2002 Quant Results File: 010702.RES

Method : C:\HPCHEM\1\METHODS\010702.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Tue Jan 08 10:31:32 2002
Response via : Initial Calibration

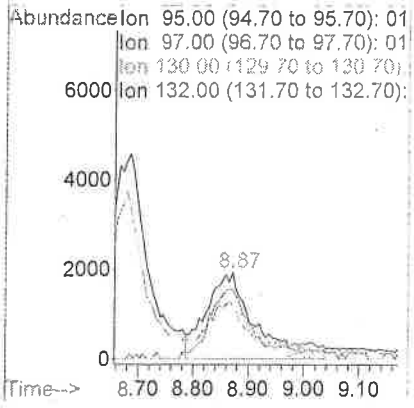




#23
Trichloroethene
Concen: 28.38 ng m
RT: 8.87 min Scan# 872
Delta R.T. 0.01 min
Lab File: 01100216.D
Acq: 10 Jan 2002 1:43 pm

Tgt Ion: 95 Resp: 12038

Ion	Ratio	Lower	Upper
95	100		
97	59.3	41.9	81.9
130	70.9	84.9	124.9#
132	80.8	81.8	121.8#



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\011002\01100217.D Vial: 3
Acq On : 10 Jan 2002 2:07 pm Operator: MEG
Sample : PES0110-13 C10-4.0 1.0g 5X Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS/SS_SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 10 14:29 2002 Quant Results File: 010702.RES

Quant Method : C:\HPCHEM\1\METHODS\010702.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Tue Jan 08 10:31:32 2002
Response via : Initial Calibration
DataAcq Meth : AQ_8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	8.68	96	296900	250.00	ng	0.00
32) Chlorobenzene-d5	12.21	117	101935m	250.00	ng	-0.01
45) 1,4-Dichlorobenzene-d4	15.14	152	55742	250.00	ng	-0.01
System Monitoring Compounds						
16) Dibromofluoromethane	7.81	113	93793	254.42	ng	0.00
Spiked Amount 250.000			Recovery = 101.77%			
17) 1,2-Dichloroethane-d4	8.40	65	113978	261.72	ng	0.00
Spiked Amount 250.000			Recovery = 104.69%			
29) Toluene-d8	10.36	98	162911m	183.72	ng	0.00
Spiked Amount 250.000			Recovery = 73.49%			
43) 4-Bromofluorobenzene	13.69	95	45038	289.83	ng	-0.01
Spiked Amount 250.000			Recovery = 115.93%			
Target Compounds						Qvalue
23) Trichloroethene	8.85	95	18299m	42.93	ng	

01/22/02

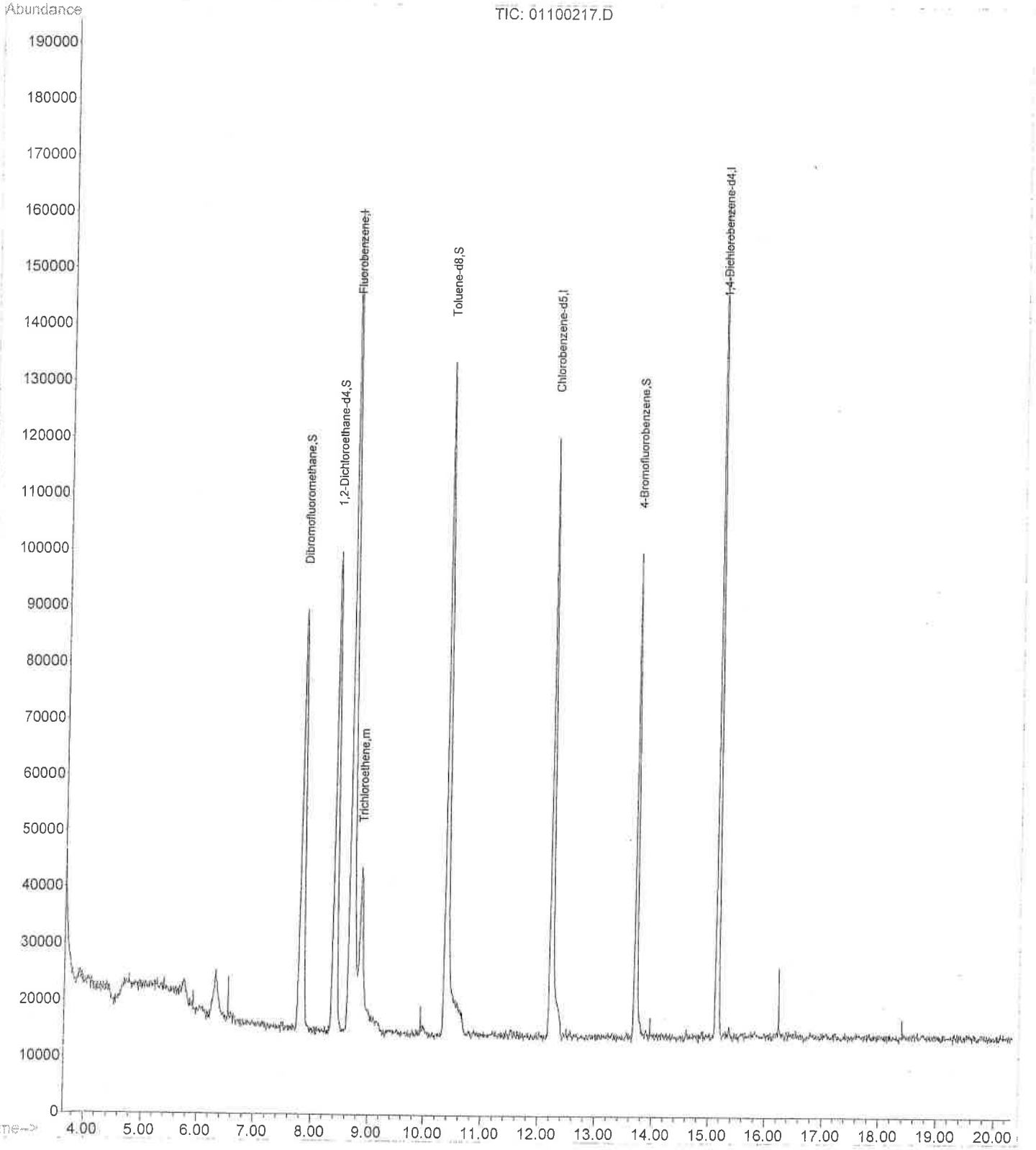
1/17/02

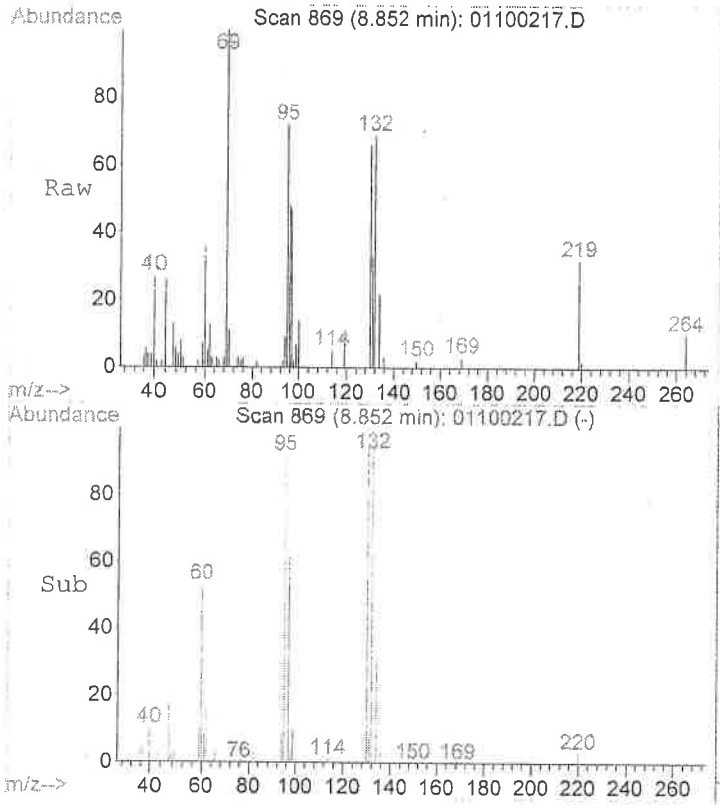
(#) = qualifier out of range (m) = manual integration
01100217.D 010702.M Thu Jan 10 14:29:59 2002

Quantitation Report

Data File : C:\HPCHEM\1\DATA\011002\01100217.D Vial: 3
Acq On : 10 Jan 2002 2:07 pm Operator: MEG
Sample : PES0110-13 C10-4.0 1.0g 5X Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS/SS_SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 10 14:29 2002 Quant Results File: 010702.RES

Method : C:\HPCHEM\1\METHODS\010702.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Tue Jan 08 10:31:32 2002
Response via : Initial Calibration

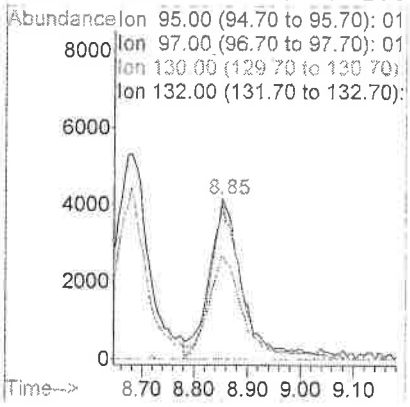




#23
Trichloroethene
Concen: 42.93 ng m
RT: 8.85 min Scan# 869
Delta R.T. -0.01 min
Lab File: 01100217.D
Acq: 10 Jan 2002 2:07 pm

Tgt Ion: 95 Resp: 18299

Ion	Ratio	Lower	Upper
95	100		
97	65.5	41.9	81.9
130	91.8	84.9	124.9
132	96.0	81.8	121.8



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\011002\01100218.D Vial: 4
Acq On : 10 Jan 2002 2:52 pm Operator: MEG
Sample : PES0110-14 COMP-A 1.0g 5X Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS/SS_SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 10 15:14 2002 Quant Results File: 010702.RES

Quant Method : C:\HPCHEM\1\METHODS\010702.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Tue Jan 08 10:31:32 2002
Response via : Initial Calibration
DataAcq Meth : AQ_8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	8.68	96	365597	250.00	ng	0.00
32) Chlorobenzene-d5	12.22	117	184695m	250.00	ng	0.00
45) 1,4-Dichlorobenzene-d4	15.14	152	76406	250.00	ng	-0.01
System Monitoring Compounds						
16) Dibromofluoromethane	7.80	113	102183	225.09	ng	0.00
Spiked Amount 250.000			Recovery = 90.04%			
17) 1,2-Dichloroethane-d4	8.39	65	122532	228.49	ng	-0.01
Spiked Amount 250.000			Recovery = 91.40%			
29) Toluene-d8	10.37	98	273732m	250.69	ng	0.00
Spiked Amount 250.000			Recovery = 100.28%			
43) 4-Bromofluorobenzene	13.69	95	70629	250.85	ng	-0.01
Spiked Amount 250.000			Recovery = 100.34%			
Target Compounds						Qvalue
23) Trichloroethene	8.86	95	7645	14.57	ng	91

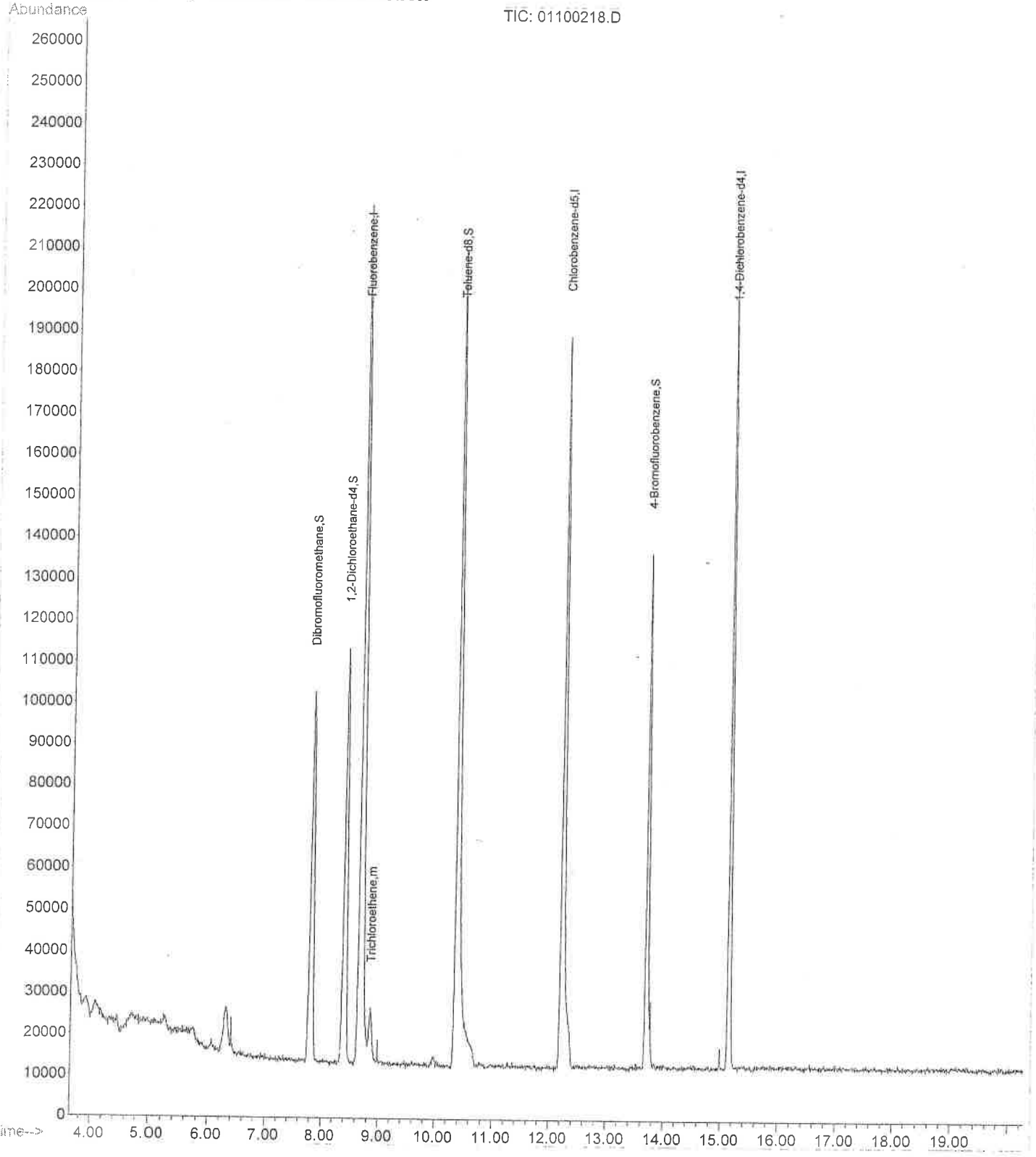
1/17/02

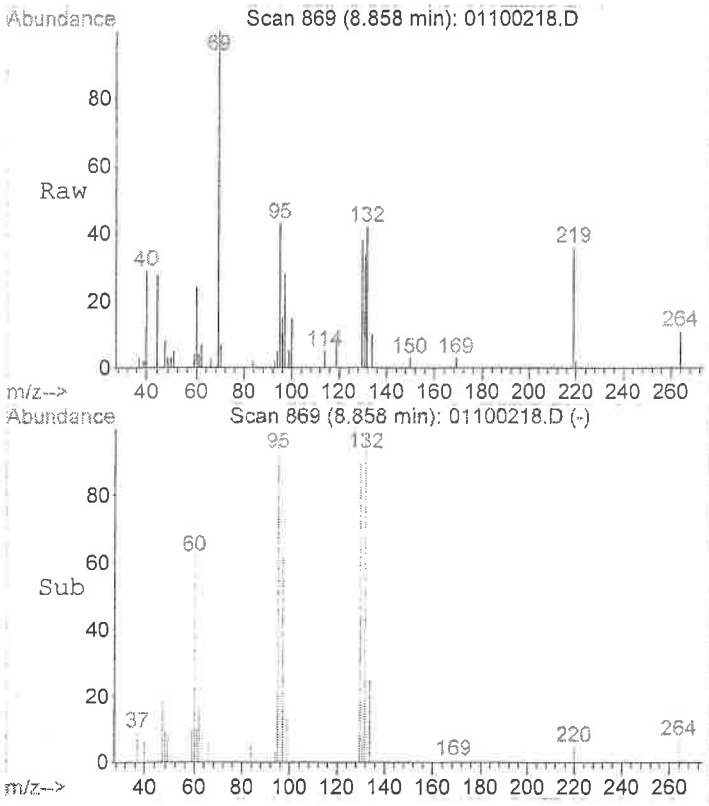
(#) = qualifier out of range (m) = manual integration
01100218.D 010702.M Thu Jan 10 15:14:47 2002

Quantitation Report

Data File : C:\HPCHEM\1\DATA\011002\01100218.D Vial: 4
Acq On : 10 Jan 2002 2:52 pm Operator: MEG
Sample : PES0110-14 COMP-A 1.0g 5X Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS/SS_SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 10 15:14 2002 Quant Results File: 010702.RES

Method : C:\HPCHEM\1\METHODS\010702.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Tue Jan 08 10:31:32 2002
Response via : Initial Calibration

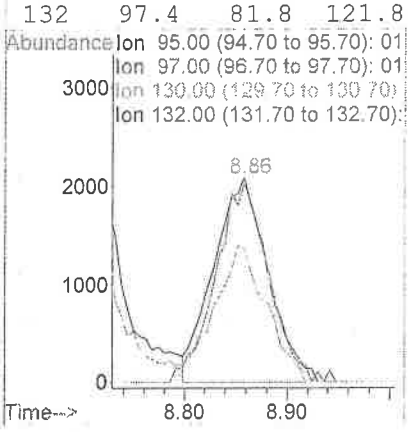




#23
Trichloroethene
Concen: 14.57 ng
RT: 8.86 min Scan# 869
Delta R.T. -0.00 min
Lab File: 01100218.D
Acq: 10 Jan 2002 2:52 pm

Tgt Ion: 95 Resp: 7645

Ion	Ratio	Lower	Upper
95	100		
97	65.0	41.9	81.9
130	88.4	84.9	124.9
132	97.4	81.8	121.8



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\011002\01100219.D Vial: 5
Acq On : 10 Jan 2002 3:40 pm Operator: MEG
Sample : PES0110-15 F5-0.5 1.0g 5X Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS/SS_SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 10 16:27 2002 Quant Results File: 010702.RES

Quant Method : C:\HPCHEM\1\METHODS\010702.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Tue Jan 08 10:31:32 2002
Response via : Initial Calibration
DataAcq Meth : AQ_8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	8.68	96	339029	250.00	ng	0.00
32) Chlorobenzene-d5	12.22	117	123041m	250.00	ng	0.00
45) 1,4-Dichlorobenzene-d4	15.15	152	69755	250.00	ng	0.00
System Monitoring Compounds						
16) Dibromofluoromethane	7.82	113	101742	241.69	ng	0.01
Spiked Amount 250.000			Recovery = 96.68%			
17) 1,2-Dichloroethane-d4	8.40	65	121434	244.19	ng	0.00
Spiked Amount 250.000			Recovery = 97.68%			
29) Toluene-d8	10.37	98	183222m	180.95	ng	0.00
Spiked Amount 250.000			Recovery = 72.38%			
43) 4-Bromofluorobenzene	13.70	95	52552	280.17	ng	0.00
Spiked Amount 250.000			Recovery = 112.07%			
Target Compounds						Qvalue
23) Trichloroethene	8.87	95	79462m	163.26	ng	

01/22/02

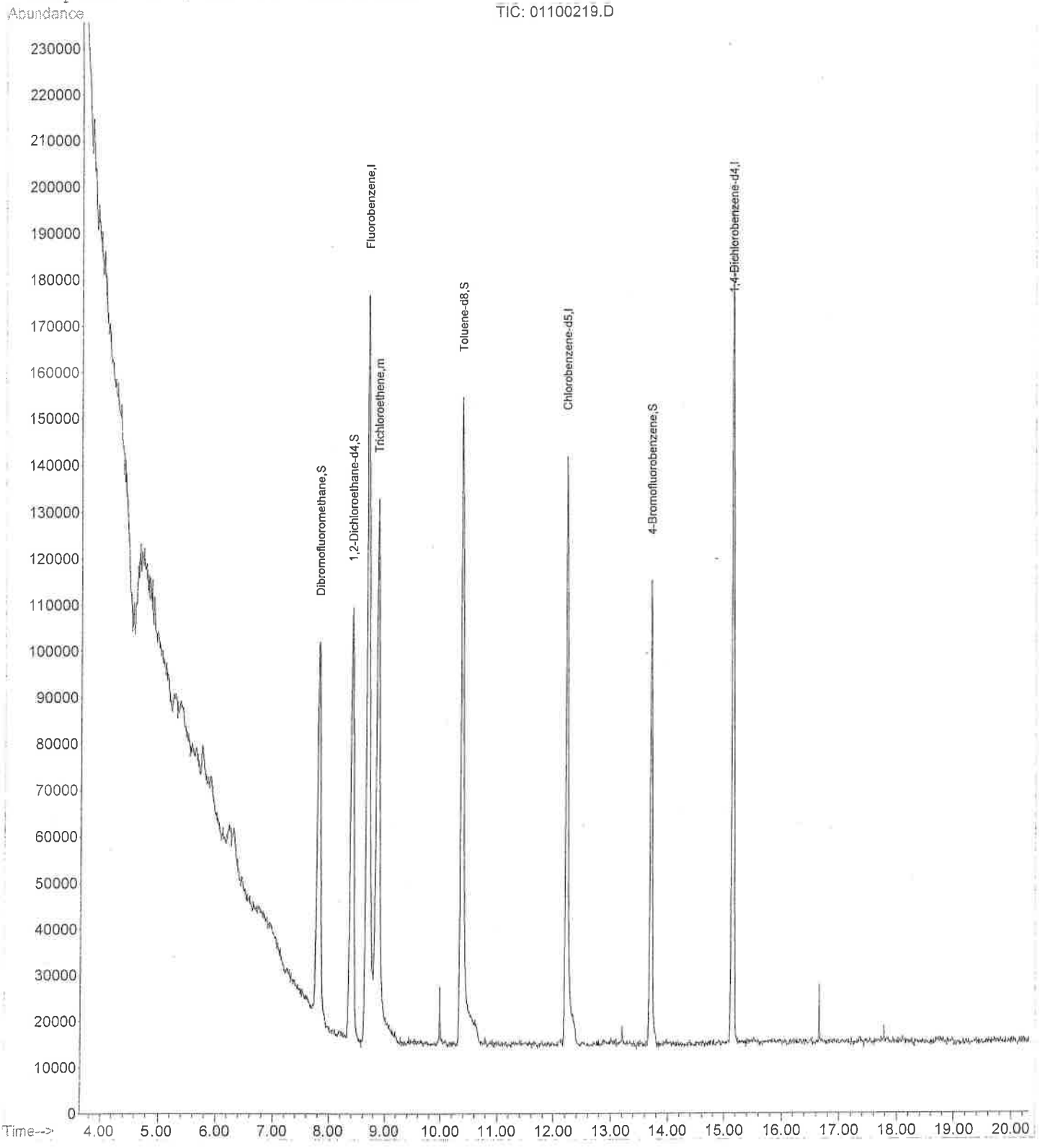
1/17/02

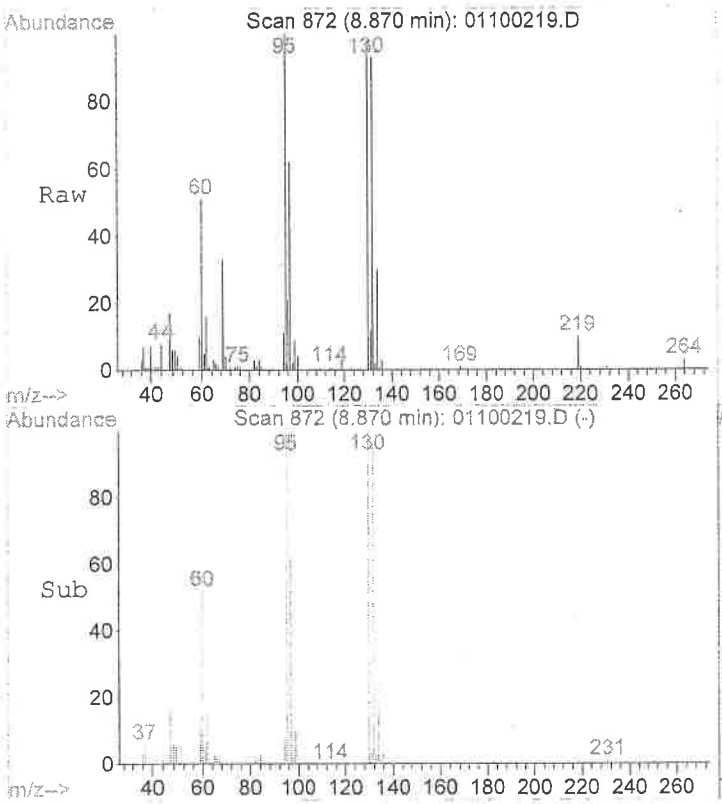
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01100219.D 010702.M Thu Jan 10 16:28:09 2002

Quantitation Report

Data File : C:\HPCHEM\1\DATA\011002\01100219.D Vial: 5
Acq On : 10 Jan 2002 3:40 pm Operator: MEG
Sample : PES0110-15 F5-0.5 1.0g 5X Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS/SS_SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 10 16:27 2002 Quant Results File: 010702.RES

Method : C:\HPCHEM\1\METHODS\010702.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Tue Jan 08 10:31:32 2002
Response via : Initial Calibration

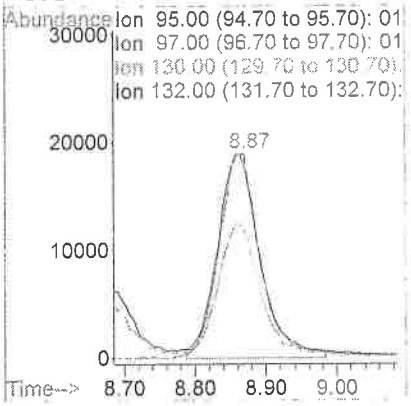




#23
Trichloroethene
Concen: 163.26 ng m
RT: 8.87 min Scan# 872
Delta R.T. 0.01 min
Lab File: 01100219.D
Acq: 10 Jan 2002 3:40 pm

Tgt Ion: 95 Resp: 79462

Ion	Ratio	Lower	Upper
95	100		
97	62.3	41.9	81.9
130	97.6	84.9	124.9
132	93.1	81.8	121.8



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\011002\01100220.D Vial: 6
Acq On : 10 Jan 2002 4:05 pm Operator: MEG
Sample : PES0110-16 F8-0.5 1.0g 5X Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS/SS_SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 10 16:32 2002 Quant Results File: 010702.RES

Quant Method : C:\HPCHEM\1\METHODS\010702.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Tue Jan 08 10:31:32 2002
Response via : Initial Calibration
DataAcq Meth : AQ_8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	8.68	96	305025	250.00	ng	0.00
32) Chlorobenzene-d5	12.21	117	100141m	250.00	ng	-0.01
45) 1,4-Dichlorobenzene-d4	15.14	152	63270	250.00	ng	-0.01
System Monitoring Compounds						
16) Dibromofluoromethane	7.81	113	97940	258.59	ng	0.00
Spiked Amount 250.000			Recovery = 103.44%			
17) 1,2-Dichloroethane-d4	8.40	65	118104	263.97	ng	0.00
Spiked Amount 250.000			Recovery = 105.59%			
29) Toluene-d8	10.36	98	154747m	169.86	ng	0.00
Spiked Amount 250.000			Recovery = 67.94%			
43) 4-Bromofluorobenzene	13.69	95	46215	302.73	ng	-0.01
Spiked Amount 250.000			Recovery = 121.09%			
Target Compounds						Qvalue
23) Trichloroethene	8.86	95	8441m	19.28	ng	

1/17/02

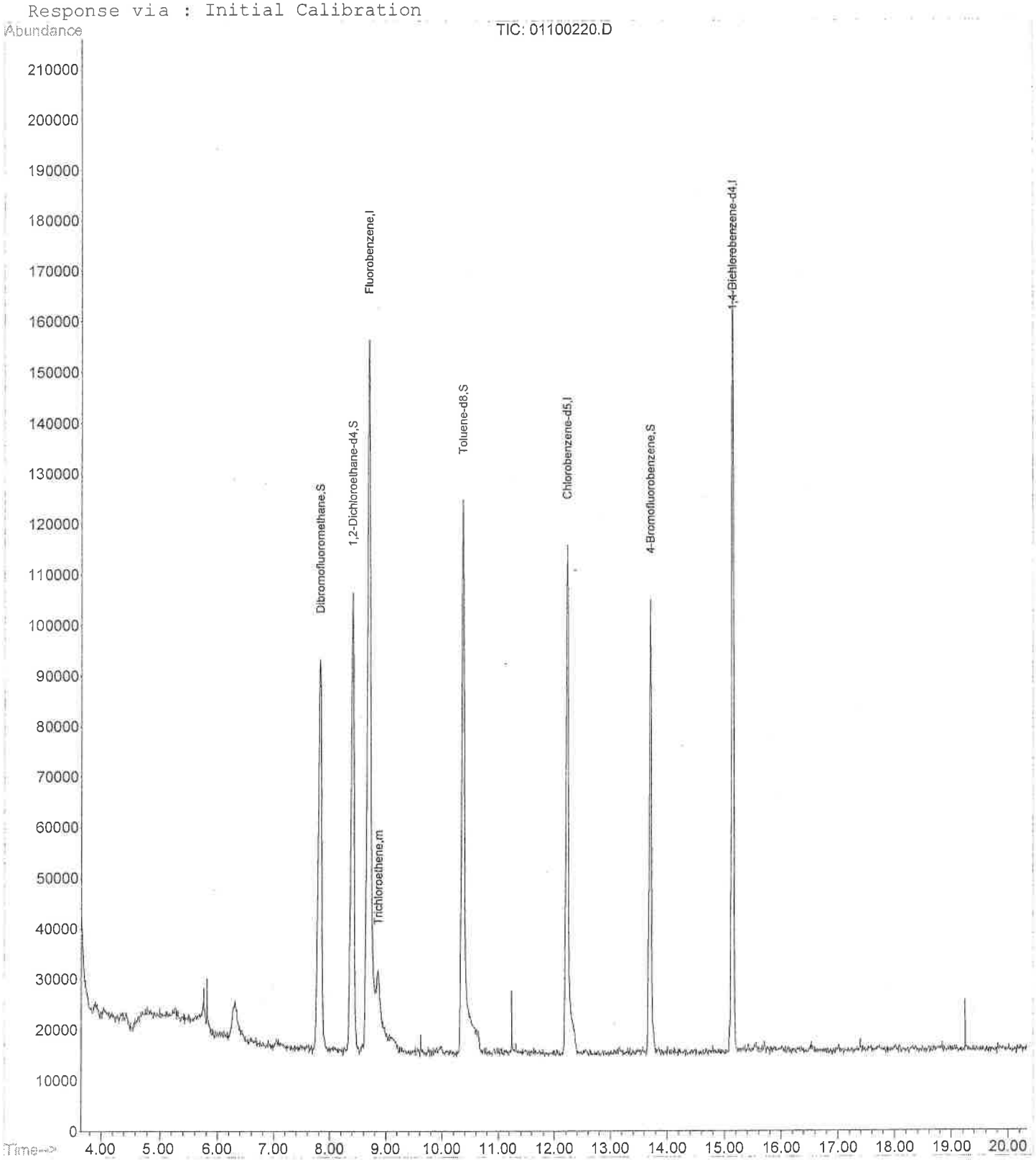
01/22/02

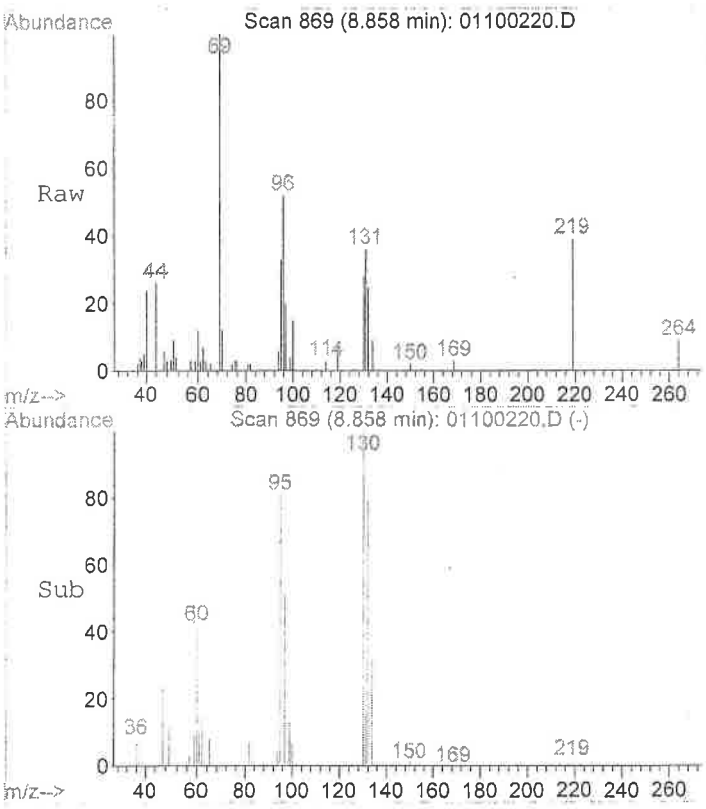
(#) = qualifier out of range (m) = manual integration
01100220.D 010702.M Thu Jan 10 16:32:38 2002

Quantitation Report

Data File : C:\HPCHEM\1\DATA\011002\01100220.D Vial: 6
Acq On : 10 Jan 2002 4:05 pm Operator: MEG
Sample : PES0110-16 F8-0.5 1.0g 5X Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS/SS_SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 10 16:32 2002 Quant Results File: 010702.RES

Method : C:\HPCHEM\1\METHODS\010702.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Tue Jan 08 10:31:32 2002
Response via : Initial Calibration

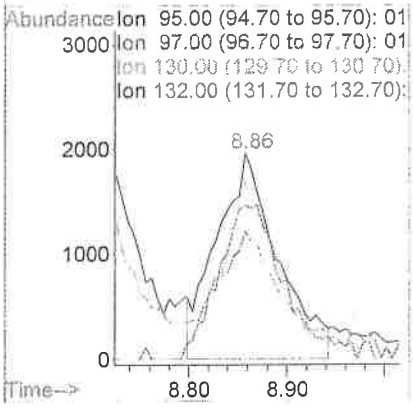




#23
Trichloroethene
Concen: 19.28 ng m
RT: 8.86 min Scan# 869
Delta R.T. -0.00 min
Lab File: 01100220.D
Acq: 10 Jan 2002 4:05 pm

Tgt Ion: 95 Resp: 8441

Ion	Ratio	Lower	Upper
95	100		
97	61.7	41.9	81.9
130	85.6	84.9	124.9
132	74.4	81.8	121.8#



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\011002\01100221.D Vial: 7
Acq On : 10 Jan 2002 4:29 pm Operator: MEG
Sample : PES0110-17 C10-EAST-2.0 1.0g 5X Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS/SS_SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 10 17:10 2002 Quant Results File: 010702.RES

Quant Method : C:\HPCHEM\1\METHODS\010702.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Tue Jan 08 10:31:32 2002
Response via : Initial Calibration
DataAcq Meth : AQ_8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	8.68	96	282533m	250.00	ng	0.00
32) Chlorobenzene-d5	12.22	117	90054m	250.00	ng	0.00
45) 1,4-Dichlorobenzene-d4	15.14	152	55495	250.00	ng	-0.01
System Monitoring Compounds						
16) Dibromofluoromethane	7.82	113	91990	262.22	ng	0.02
Spiked Amount 250.000			Recovery = 104.89%			
17) 1,2-Dichloroethane-d4	8.40	65	111636	269.38	ng	0.00
Spiked Amount 250.000			Recovery = 107.75%			
29) Toluene-d8	10.36	98	133526m	158.24	ng	0.00
Spiked Amount 250.000			Recovery = 63.30%			
43) 4-Bromofluorobenzene	13.70	95	42486	309.48	ng	0.00
Spiked Amount 250.000			Recovery = 123.79%			
Target Compounds						Qvalue

1/17/02

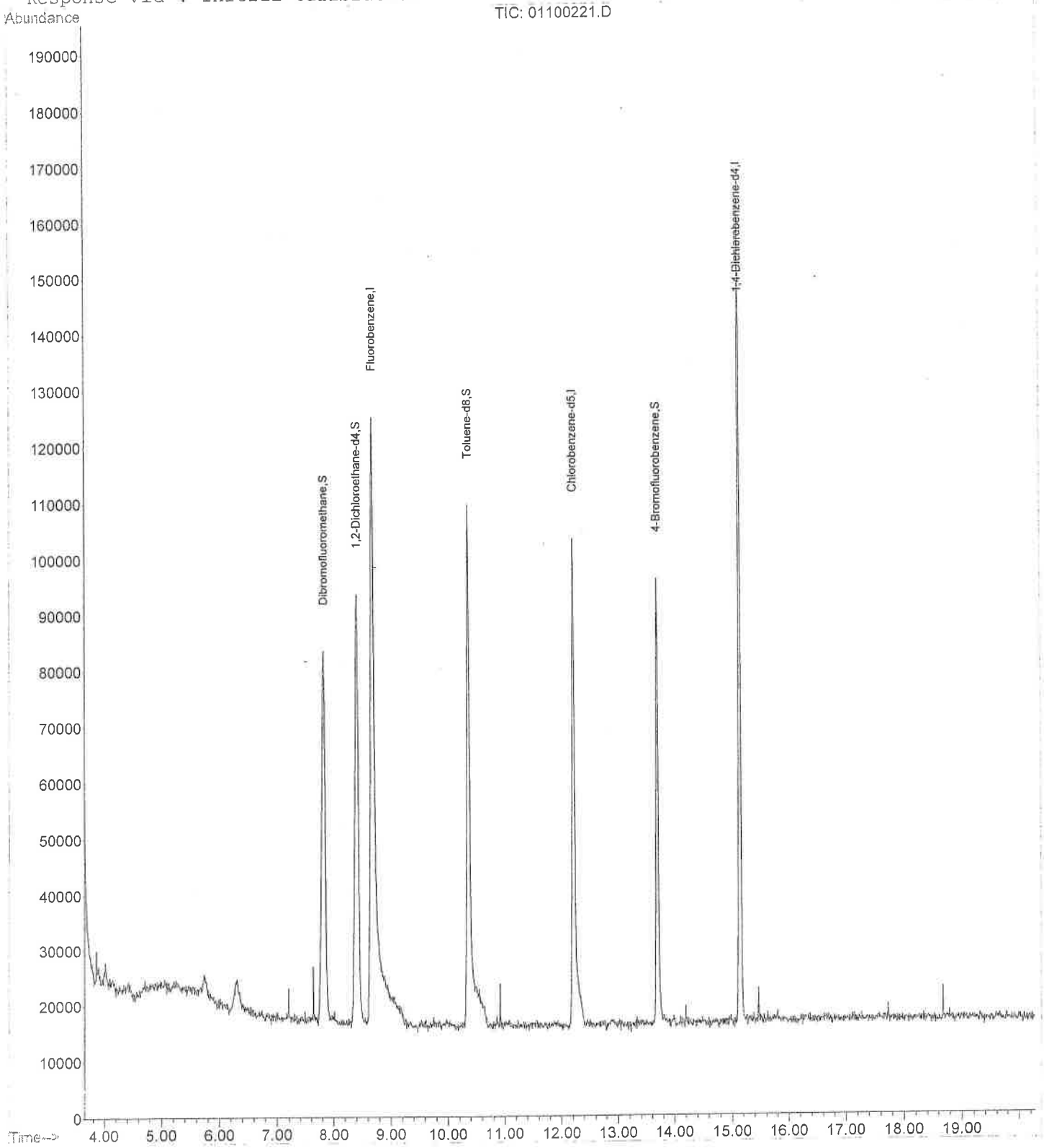
01/22/02

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\011002\01100221.D Vial: 7
Acq On : 10 Jan 2002 4:29 pm Operator: MEG
Sample : PES0110-17 C10-EAST-2.0 1.0g 5X Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS/SS_SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 10 17:10 2002 Quant Results File: 010702.RES

Method : C:\HPCHEM\1\METHODS\010702.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Tue Jan 08 10:31:32 2002
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\011002\01100222.D Vial: 8
Acq On : 10 Jan 2002 4:54 pm Operator: MEG
Sample : PES0110-18 E2-5.0 1.0g 5X Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS/SS_SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 10 17:17 2002 Quant Results File: 010702.RES

Quant Method : C:\HPCHEM\1\METHODS\010702.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Tue Jan 08 10:31:32 2002
Response via : Initial Calibration
DataAcq Meth : AQ_8260

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene	8.68	96	292595	250.00	ng		0.00
32) Chlorobenzene-d5	12.21	117	95222m	250.00	ng		-0.01
45) 1,4-Dichlorobenzene-d4	15.14	152	60534	250.00	ng		-0.01
System Monitoring Compounds							
16) Dibromofluoromethane	7.81	113	96318	265.11	ng	/	0.00
Spiked Amount 250.000			Recovery = 106.04%				
17) 1,2-Dichloroethane-d4	8.40	65	118213	275.44	ng	/	0.00
Spiked Amount 250.000			Recovery = 110.18%				
29) Toluene-d8	10.36	98	147214m	168.46	ng	/	0.00
Spiked Amount 250.000			Recovery = 67.38%				
43) 4-Bromofluorobenzene	13.69	95	43766	301.50	ng	/	-0.01
Spiked Amount 250.000			Recovery = 120.60%				
Target Compounds							Qvalue
10) trans-1,2-Dichloroethene	6.24	96	8315	17.88	ng	<	93
12) cis-1,2-Dichloroethene	7.39	96	6745	15.37	ng	<	89

VALIDATION STOPS here for the PES samples.

8h 1/17/02

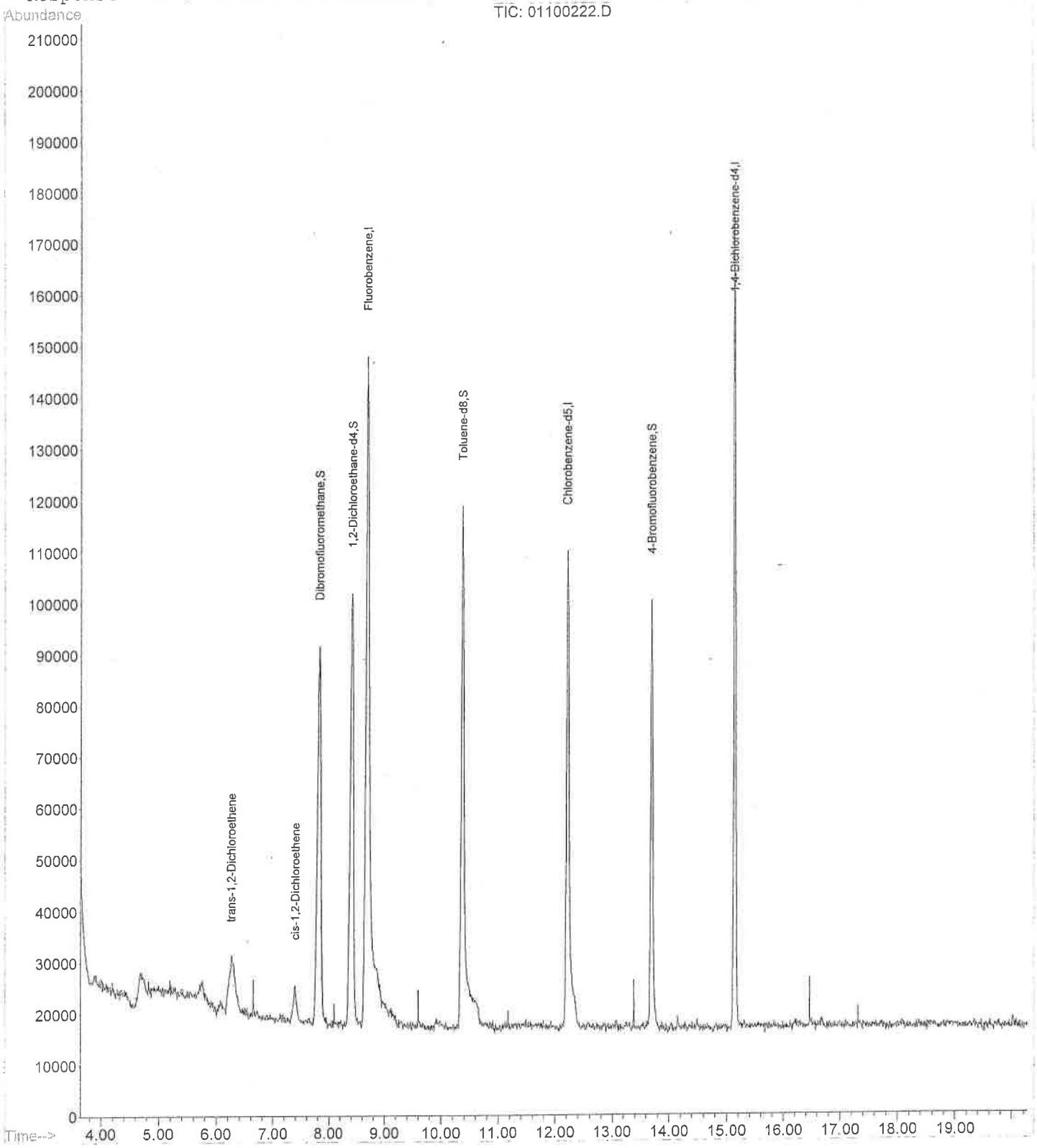
Qc 01/22/02

(#) = qualifier out of range (m) = manual integration
01100222.D 010702.M Thu Jan 10 17:17:36 2002

Quantitation Report

Data File : C:\HPCHEM\1\DATA\011002\01100222.D Vial: 8
Acq On : 10 Jan 2002 4:54 pm Operator: MEG
Sample : PES0110-18 E2-5.0 1.0g 5X Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS/SS_SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 10 17:17 2002 Quant Results File: 010702.RES

Method : C:\HPCHEM\1\METHODS\010702.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Tue Jan 08 10:31:32 2002
Response via : Initial Calibration



Sequence Name: C:\HPCHEM\1\SEQUENCE\011402.S
Comment: Alpha
Operator: MEG
Data Path: C:\HPCHEM\1\DATA\011402\
Pre-Seq Cmd:
Post-Seq Cmd:

Method Sections To Run
(X) Full Method
( ) Reprocessing Only

On A Barcode Mismatch
(X) Inject Anyway
( ) Don't Inject

Line	Type	Vial	DataFile	Method	Sample Name
1	BFB	2	01140201	AQ_8260	BFB TUNE 1/14/02
2	BFB	3	01140202	AQ_8260	BFB TUNE 1/14/02
3	BFB	4	01140203	AQ_8260	BFB TUNE 1/14/02
4	BFB	5	01140204	AQ_8260	BFB TUNE 1/14/02
5	Calibration	4	01140205	AQ_8260	CCV 250ng 10uL 25ppm SC00301
6	Calibration	5	01140206	AQ_8260	ICAL LEVEL 2 100ng
7	Sample	8	01140207	AQ_8260	PES0114-03 C8-20.0 1.0g 5
8	Sample	9	01140208	AQ_8260	PES0114-01 C6-20.5 1.0g 5
9	Sample	10	01140209	AQ_8260	PES0114-04 E4-WEST-6.0 1.0g
10	Sample	11	01140210	AQ_8260	PES0114-06 E8-EAST-6.0 1.0g
11	Sample	12	01140211	AQ_8260	PES0114-02 E5-SOUTH-5.0 1.0
12	Sample	13	01140212	AQ_8260	PES0114-05 E7-SOUTH-8.5 1.0
13	Sample	14	01140213	AQ_8260	PES0114-07 C8-EAST-8.0 1.0g
14	Sample	15	01140214	AQ_8260	PES0114-08 C4-WEST-6.0 1.0g
15	Sample	16	01140215	AQ_8260	PES0114-09 COMP-B 1.0g 5X
16	Sample	17	01140216	AQ_8260	PES0109-09 D6-20.0 1.0g 5
17	Sample	18	01140217	AQ_8260	PES0114-10 COMP-C 1.0g 5X
18	Sample	19	01140218	AQ_8260	PES0114-12 COMP-E 1.0g 5X
19	Sample	20	01140219	AQ_8260	PES0114-13 D1-WEST-2.0 1.0g
20	Sample	21	01140220	AQ_8260	PES0114-14 F1-EAST-2.0 1.0g
21	Sample	22	01140221	AQ_8260	PES0114-15 A8-NORTH3-2.0 1.
22	Sample	23	01140222	AQ_8260	PES0109-03MS A8-4.0 1.0g
23	Sample	24	01140223	AQ_8260	PES0109-03MSD A8-4.0 1.0g
24	Sample	25	01140224	AQ_8260	DUMMY BLANK
25	Sample	26	01140225	AQ_8260	PES0110-01MS D2-4.0 1.0g
26	Sample	27	01140226	AQ_8260	PES0110-01MSD D2-4.0 1.0g
27	Sample	28	01140227	AQ_8260	PES0114-15MS A8-NORTH3-2.0
28	Sample	29	01140228	AQ_8260	PES0114-15MSD A8-NORTH3-2.0
29	Calibration	30	01140229	AQ_8260	LCS 250ng
30	Blank	31	01140230	AQ_8260	METHOD BLANK

Note: Generator was not running on Monday morning the 14th the GC/MS was cold. It fell out of Calibration. the client needed results ASAP. A 250ng and 100ng Standard were analyzed. the client was interested in TCE. TCE is the only analyte found at the site.

SE 1/17/02

DC 01/23/02

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\011402\01140201.D Vial: 2
Acq On : 14 Jan 2002 8:19 am Operator: MEG
Sample : BFB TUNE 1/14/02 Inst : Alpha
Misc : 1uL SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 17 12:43 2002 Quant Results File: 011402.RES

Quant Method : C:\HPCHEM\1\METHODS\011402.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Mon Jan 14 14:44:40 2002
Response via : Initial Calibration
DataAcq Meth : AQ_8260

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	0.00	96	0	0.00 ng	-8.67
32) Chlorobenzene-d5	0.00	117	0	0.00 ng	-12.22
45) 1,4-Dichlorobenzene-d4	0.00	152	0	0.00 ng	-15.16
System Monitoring Compounds					
16) Dibromofluoromethane	0.00	113	0	0.00 ng	
Spiked Amount 250.000			Recovery =	0.00%	
17) 1,2-Dichloroethane-d4	0.00	65	0	0.00 ng	
Spiked Amount 250.000			Recovery =	0.00%	
29) Toluene-d8	0.00	98	0	0.00 ng	
Spiked Amount 250.000			Recovery =	0.00%	
43) 4-Bromofluorobenzene	0.00	95	0	0.00 ng	
Spiked Amount 250.000			Recovery =	0.00%	

Target Compounds Qvalue

01/23/02

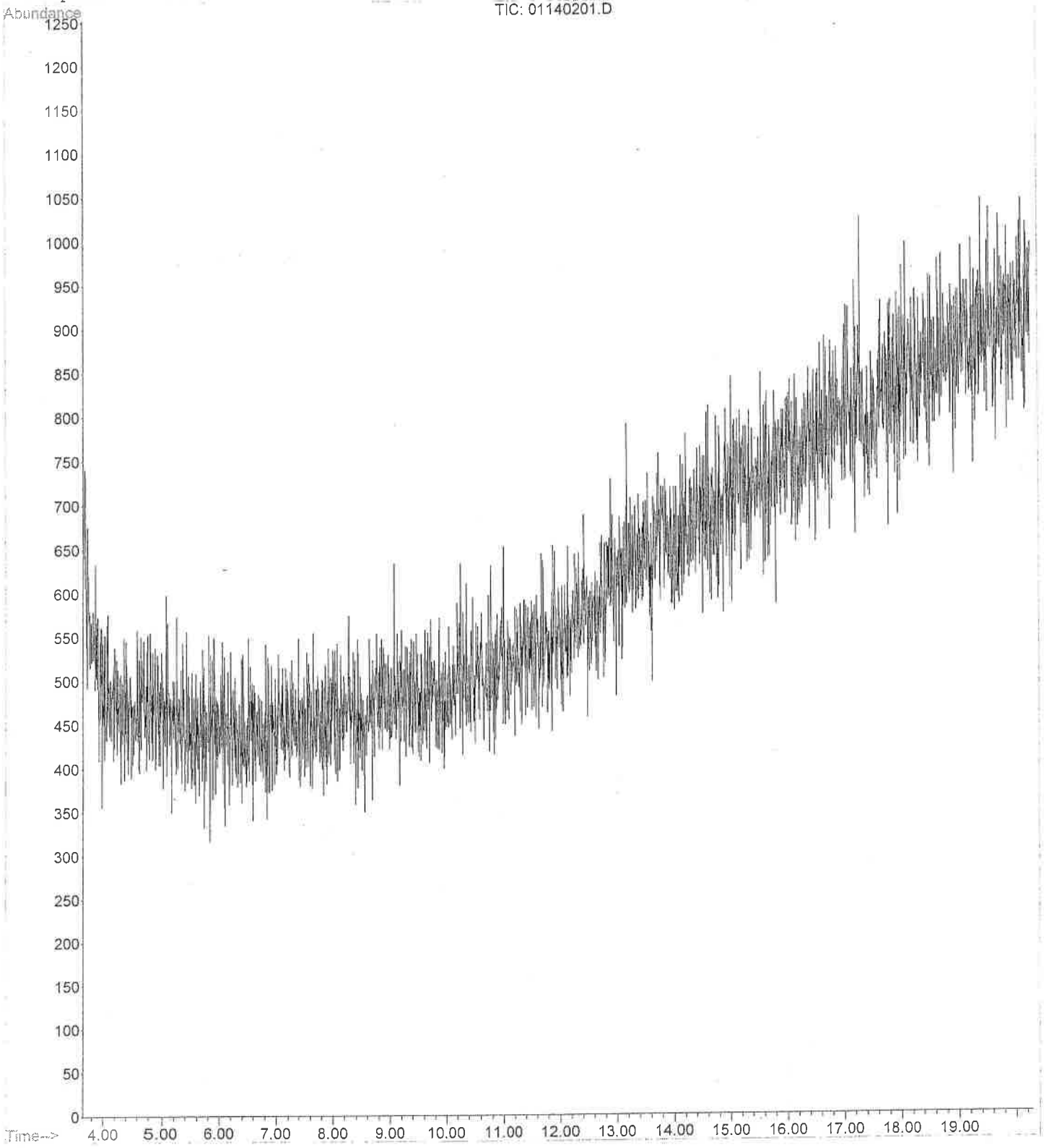
1/17/02

(#) = qualifier out of range (m) = manual integration
01140201.D 011402.M Thu Jan 17 12:43:23 2002

Quantitation Report

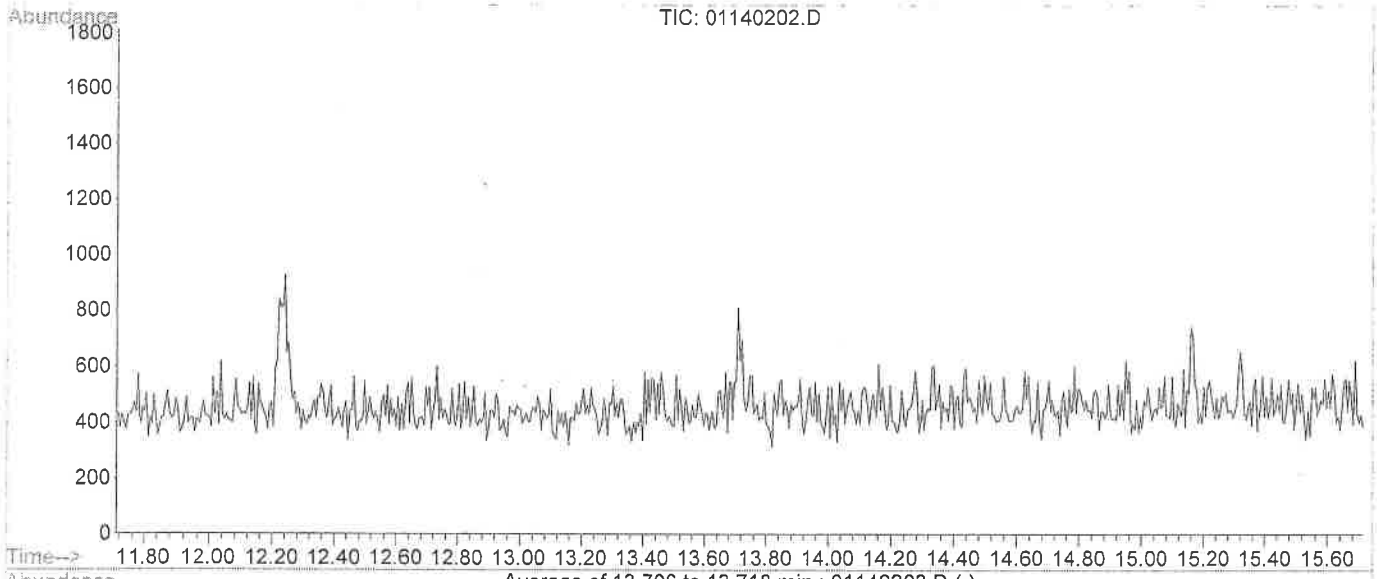
Data File : C:\HPCHEM\1\DATA\011402\01140201.D Vial: 2
Acq On : 14 Jan 2002 8:19 am Operator: MEG
Sample : BFB TUNE 1/14/02 Inst : Alpha
Misc : 1uL SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 17 12:43 2002 Quant Results File: 011402.RES

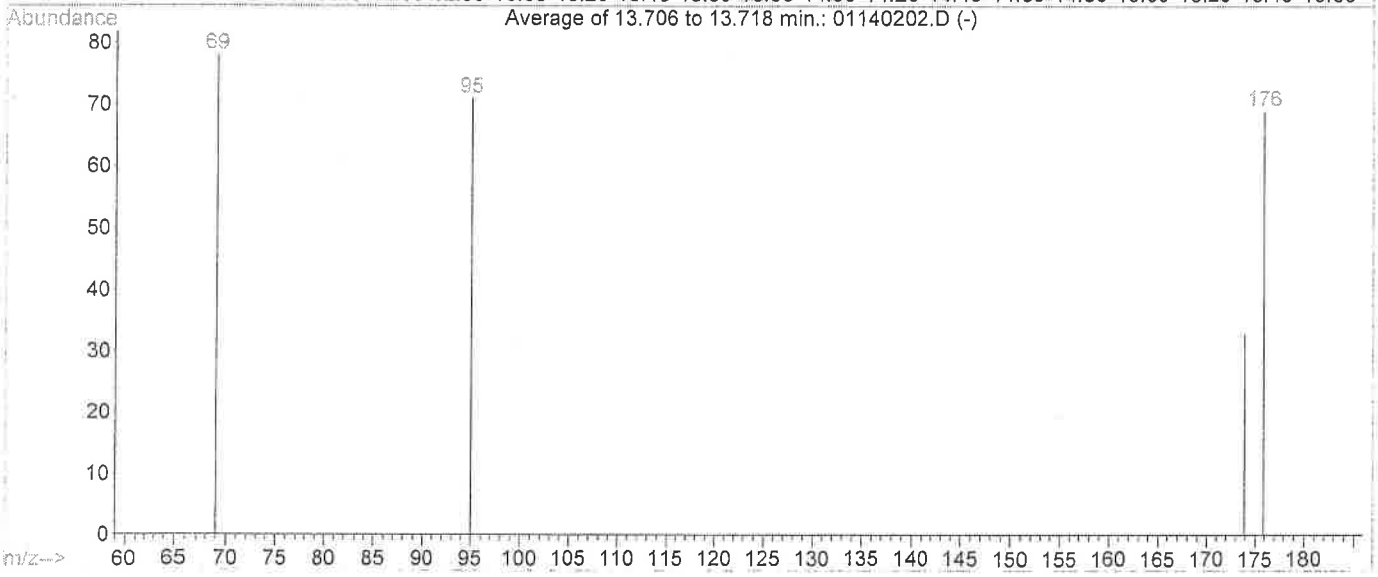
Method : C:\HPCHEM\1\METHODS\011402.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Mon Jan 14 14:44:40 2002
Response via : Initial Calibration



BFB

Data File : C:\HPCHEM\1\DATA\011402\01140202.D Vial: 3
Acq On : 14 Jan 2002 9:41 am Operator: MEG
Sample : BFB TUNE 1/14/02 Inst : Alpha
Misc : 1uL SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Method : C:\HPCHEM\1\METHODS\011402.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds





AutoFind: Scans 1677, 1678, 1679; Background Corrected with Scan 1675

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	0.0	0	FAIL*
75	95	30	60	0.0	0	FAIL*
95	95	100	100	100.0	71	PASS
96	95	5	9	0.0	0	FAIL*
173	174	0.00	2	0.0	0	PASS
174	95	50	100	46.5	33	FAIL*
175	174	5	9	0.0	0	FAIL*
176	174	95	101	209.1	69	FAIL*
177	176	5	9	0.0	0	FAIL*

01/22/02

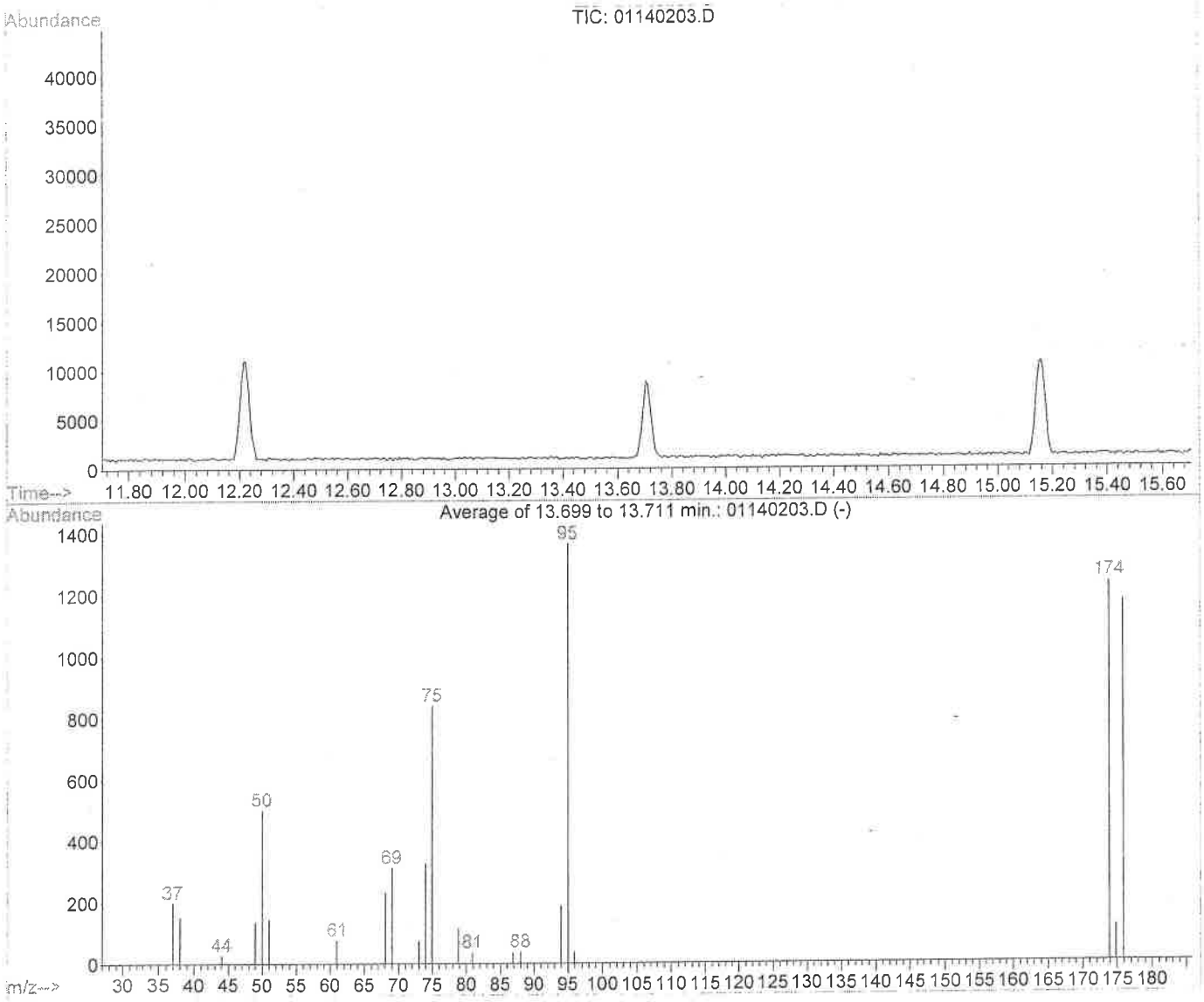
1/17/02

01140202.D 011402.M Thu Jan 17 12:43:53 2002

BFB

Data File : C:\HPCHEM\1\DATA\011402\01140203.D
Acq On : 14 Jan 2002 10:30 am
Sample : BFB TUNE 1/14/02
Misc : 1uL SC00225
MS Integration Params: rteint.p
Method : C:\HPCHEM\1\METHODS\011402.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds

Vial: 4
Operator: MEG
Inst : Alpha
Multiplr: 1.00



AutoFind: Scans 1675, 1676, 1677; Background Corrected with Scan 1667

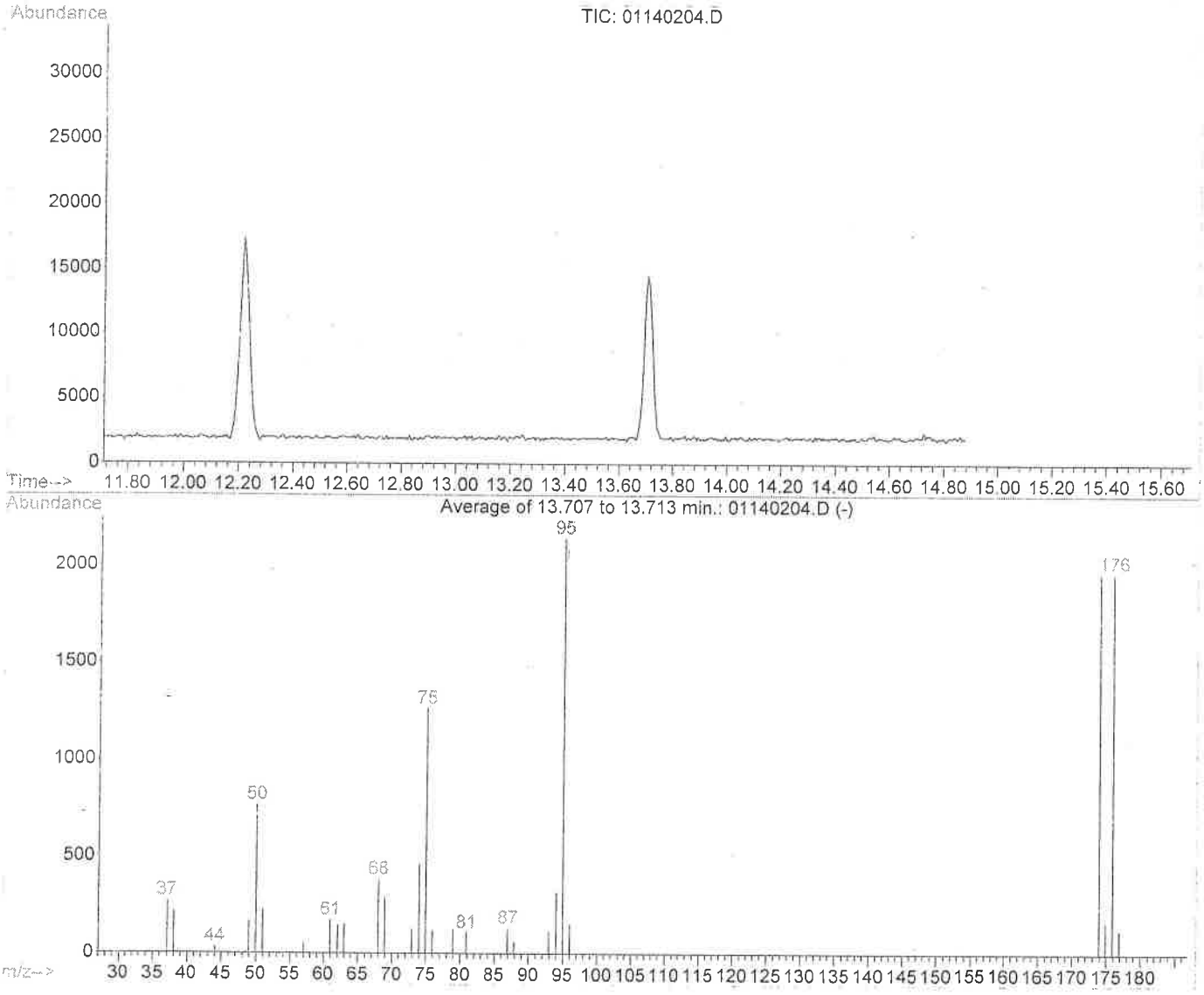
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	36.6	500	PASS
75	95	30	60	61.5	840	FAIL*
95	95	100	100	100.0	1366	PASS
96	95	5	9	2.8	38	FAIL*
173	174	0.00	2	0.0	0	PASS
174	95	50	100	90.4	1235	PASS
175	174	5	9	9.4	116	FAIL*
176	174	95	101	95.2	1176	PASS
177	176	5	9	0.0	0	FAIL*

1/17/02
01/22/02

BFB

Data File : C:\HPCHEM\1\DATA\011402\01140204.D
Acq On : 14 Jan 2002 11:01 am
Sample : BFB TUNE 1/14/02
Misc : 1uL SC00225
MS Integration Params: rteint.p
Method : C:\HPCHEM\1\METHODS\010702.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds

Vial: 5
Operator: MEG
Inst : Alpha
Multiplr: 1.00



Spectrum Information: Average of 13.707 to 13.713 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	35.7	766	PASS
75	95	30	60	58.9	1263	PASS
95	95	100	100	100.0	2144	PASS
96	95	5	9	7.3	157	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	91.4	1959	PASS
175	174	5	9	8.4	165	PASS
176	174	95	101	100.4	1967	PASS
177	176	5	9	6.5	128	PASS

01/22/02

1/14/02

Response Factor Report Alpha

Method : C:\HPCHEM\1\METHODS\011402.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Thu Jan 17 12:50:09 2002
Response via : Initial Calibration

Calibration Files
2 =01140206.D 3 =01140205.D =
= =

		Compound	2	3	Avg	%RSD
1)	I	Fluorobenzene	----------ISTD----------			
2)		Dichlorodifluorometha	0.667	0.465	0.566	25.31
3)	P	Chloromethane	0.881	0.635	0.758	23.00
4)	C	Vinyl chloride	0.676	0.465	0.571	26.06#
5)		Bromomethane	0.260	0.183	0.221	24.68
6)		Chloroethane	0.467	0.343	0.405	21.55
7)		Trichlorofluoromethan	0.845	0.614	0.729	22.35
8)	m, C	1,1-Dichloroethene	0.432	0.362	0.397	12.47#
9)		Methylene chloride	0.932	0.435	0.684	51.49
10)		trans-1,2-Dichloroeth	0.577	0.390	0.483	27.32
11)	P	1,1-Dichloroethane	0.993	0.689	0.841	25.56
12)		cis-1,2-Dichloroethen	0.545	0.362	0.453	28.58
13)		2,2-Dichloropropane	0.755	0.538	0.646	23.77
14)		Bromochloromethane	0.255	0.179	0.217	24.57
15)	C	Chloroform	0.858	0.611	0.734	23.84#
16)	S	Dibromofluoromethane	0.454	0.280	0.367	33.48
17)	S	1,2-Dichloroethane-d4	0.578	0.365	0.471	32.03
18)		1,1,1-Trichloroethane	0.662	0.464	0.563	24.87
19)		Carbon tetrachloride	0.635	0.447	0.541	24.55
20)		1,1-Dichloropropene	0.664	0.470	0.567	24.09
21)	m	Benzene	1.755	1.191	1.473	27.05
22)		1,2-Dichloroethane	0.714	0.516	0.615	22.73
23)	m	Trichloroethene	0.448	0.306	0.377	26.59
24)	C	1,2-Dichloropropane	0.475	0.334	0.405	24.63#
25)		Dibromomethane	0.298	0.207	0.252	25.50
26)		Bromodichloromethane	0.635	0.463	0.549	22.17
27)		cis-1,3-Dichloroprope	0.743	0.537	0.640	22.71
28)	m, C	Toluene	1.056	0.743	0.899	24.62#
29)	S	Toluene-d8	1.335	0.851	1.093	31.30
30)		trans-1,3-Dichloropro	0.664	0.478	0.571	23.00
31)		1,1,2-Trichloroethane	0.322	0.223	0.273	25.72
32)	I	Chlorobenzene-d5	----------ISTD----------			
33)		Tetrachloroethene	0.409	0.385	0.397	4.22
34)		1,3-Dichloropropane	0.805	0.753	0.779	4.66
35)		Dibromochloromethane	0.470	0.453	0.462	2.56
36)		1,2-Dibromoethane	0.442	0.427	0.435	2.36
37)	m,P	Chlorobenzene	1.139	1.053	1.096	5.52
38)		1,1,1,2-Tetrachloroet	0.487	0.472	0.479	2.12
39)	C	Ethyl benzene	2.014	1.923	1.969	3.29#
40)		m,p-Xylene	1.541	1.416	1.479	5.95
41)		o-Xylene	0.742	0.730	0.736	1.21
42)		Styrene	1.237	1.244	1.240	0.39
43)	S	4-Bromofluorobenzene	0.570	0.531	0.550	4.98
44)	P	Bromoform	0.343	0.330	0.336	2.60
45)	I	1,4-Dichlorobenzene-d	----------ISTD----------			
46)		Isopropyl benzene	2.282	3.038	2.660	20.09
47)		Bromobenzene	0.686	0.880	0.783	17.47
48)	P	1,1,2,2-Tetrachloroet	0.725	0.927	0.826	17.30
49)		1,2,3-Trichloropropan	0.598	0.772	0.685	17.89
50)		n-Propylbenzene	3.138	4.207	3.673	20.59

1/17/02

01/22/02

(#) = Out of Range

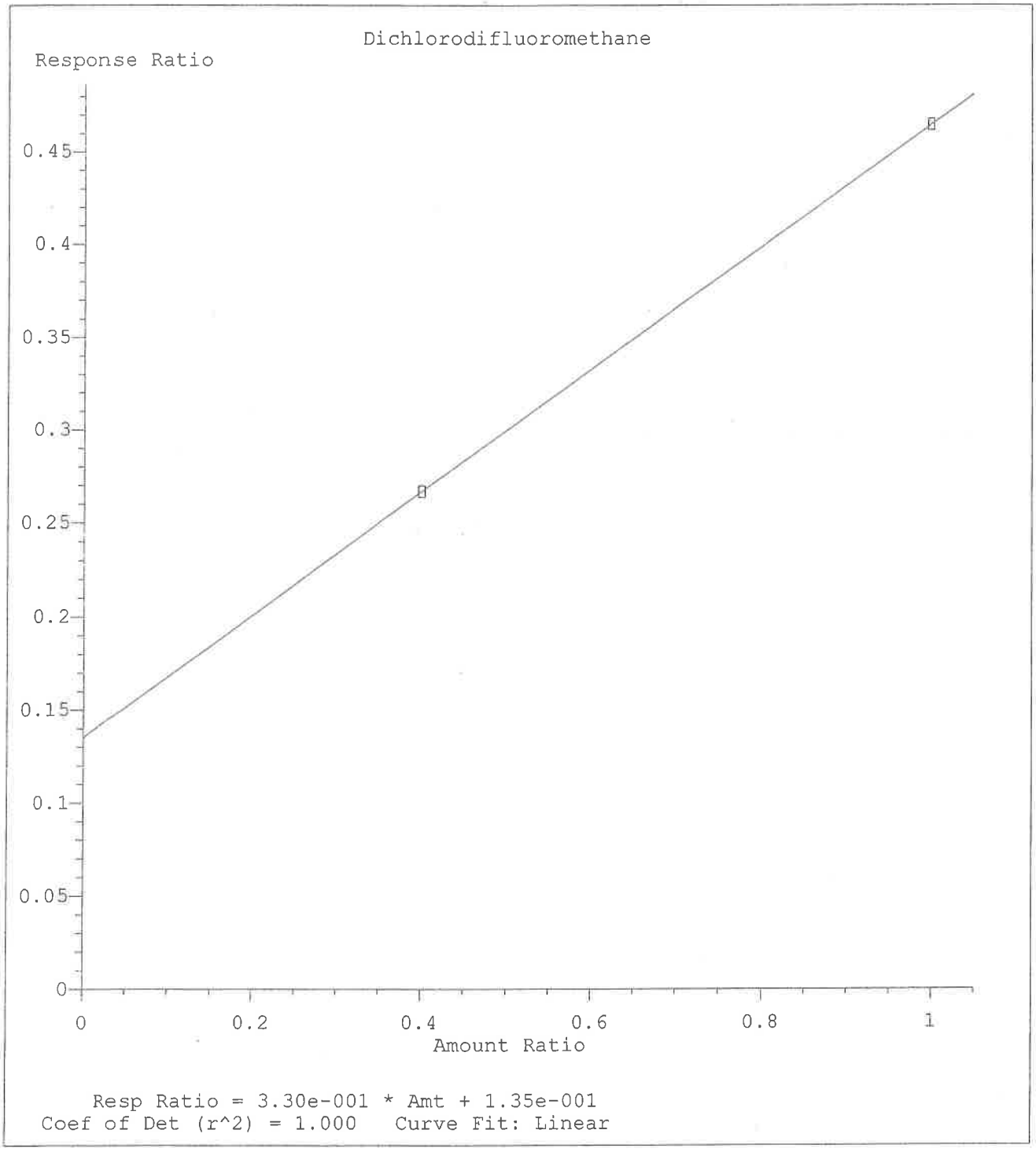
Response Factor Report Alpha

Method : C:\HPCHEM\1\METHODS\011402.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Thu Jan 17 12:50:09 2002
Response via : Initial Calibration

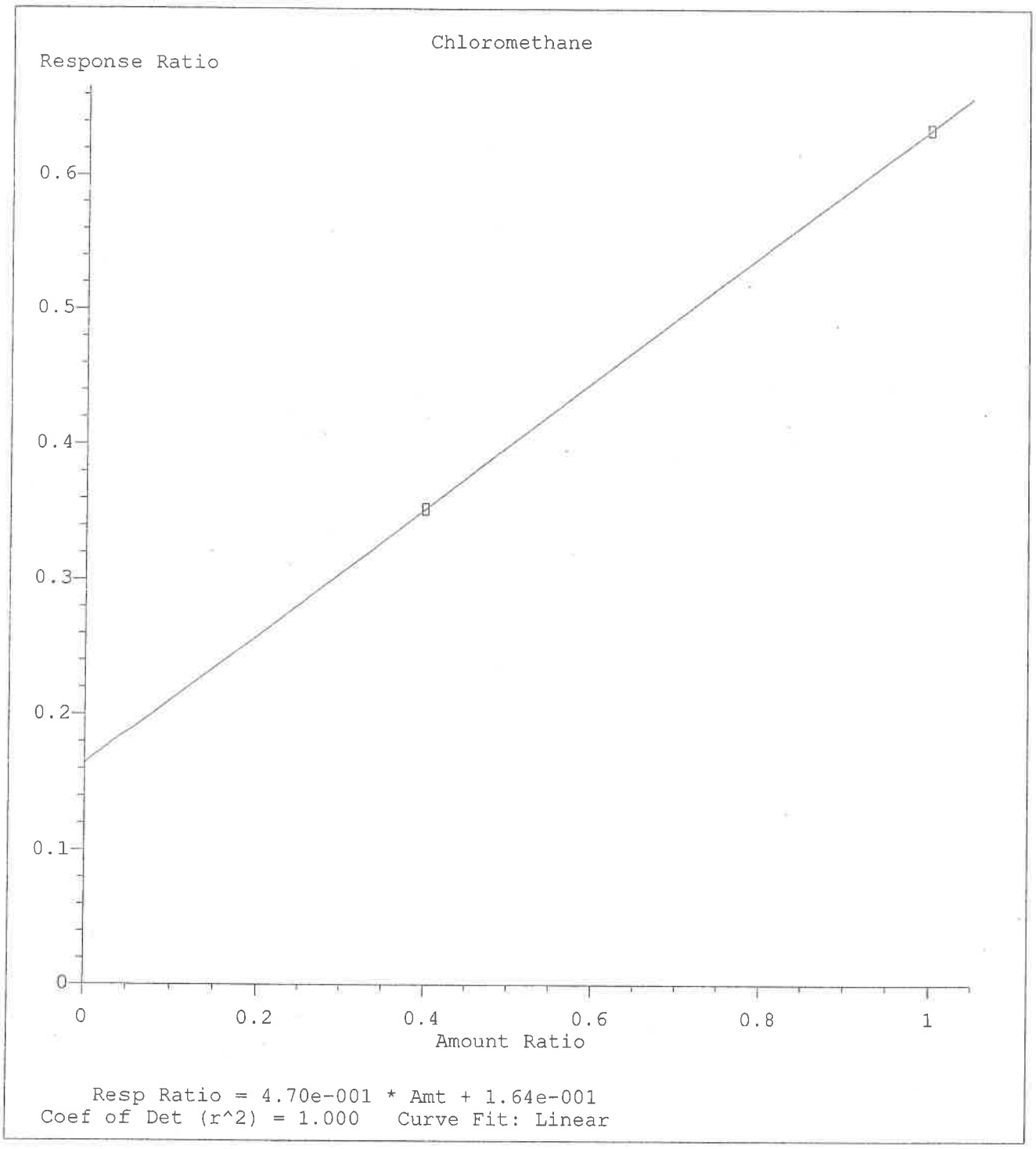
Calibration Files
2 =01140206.D 3 =01140205.D =
= =

	Compound	2	3	Avg	%RSD
51)	2-Chlorotoluene	2.134	2.788	2.461	18.79
52)	4-Chlorotoluene	1.939	2.571	2.255	19.83
53)	1,3,5-Trimethyl benze	1.919	2.526	2.223	19.32
54)	tert-Butyl benzene	2.322	3.041	2.681	18.98
55)	1,2,4-Trimethyl benze	2.017	2.686	2.352	20.13
56)	sec-Butyl benzene	2.912	3.732	3.322	17.46
57)	1,3-Dichlorobenzene	1.275	1.665	1.470	18.76
58)	4-Isopropyl toluene	2.322	3.041	2.681	18.98
59)	1,4-Dichlorobenzene	1.267	1.635	1.451	17.92
60)	1,2-Dichlorobenzene	1.211	1.572	1.392	18.33
61)	n-Butyl benzene	2.402	3.202	2.802	20.18
62)	1,2-Dibromo-3-chlorop	0.120	0.160	0.140	20.25
63)	1,2,4-Trichlorobenzen	0.911	1.252	1.082	22.25
64)	Hexachlorobutadiene	0.500	0.683	0.591	21.82
65)	Naphthalene	1.767	2.381	2.074	20.92
66)	1,2,3-Trichlorobenzen	0.840	1.175	1.007	23.49

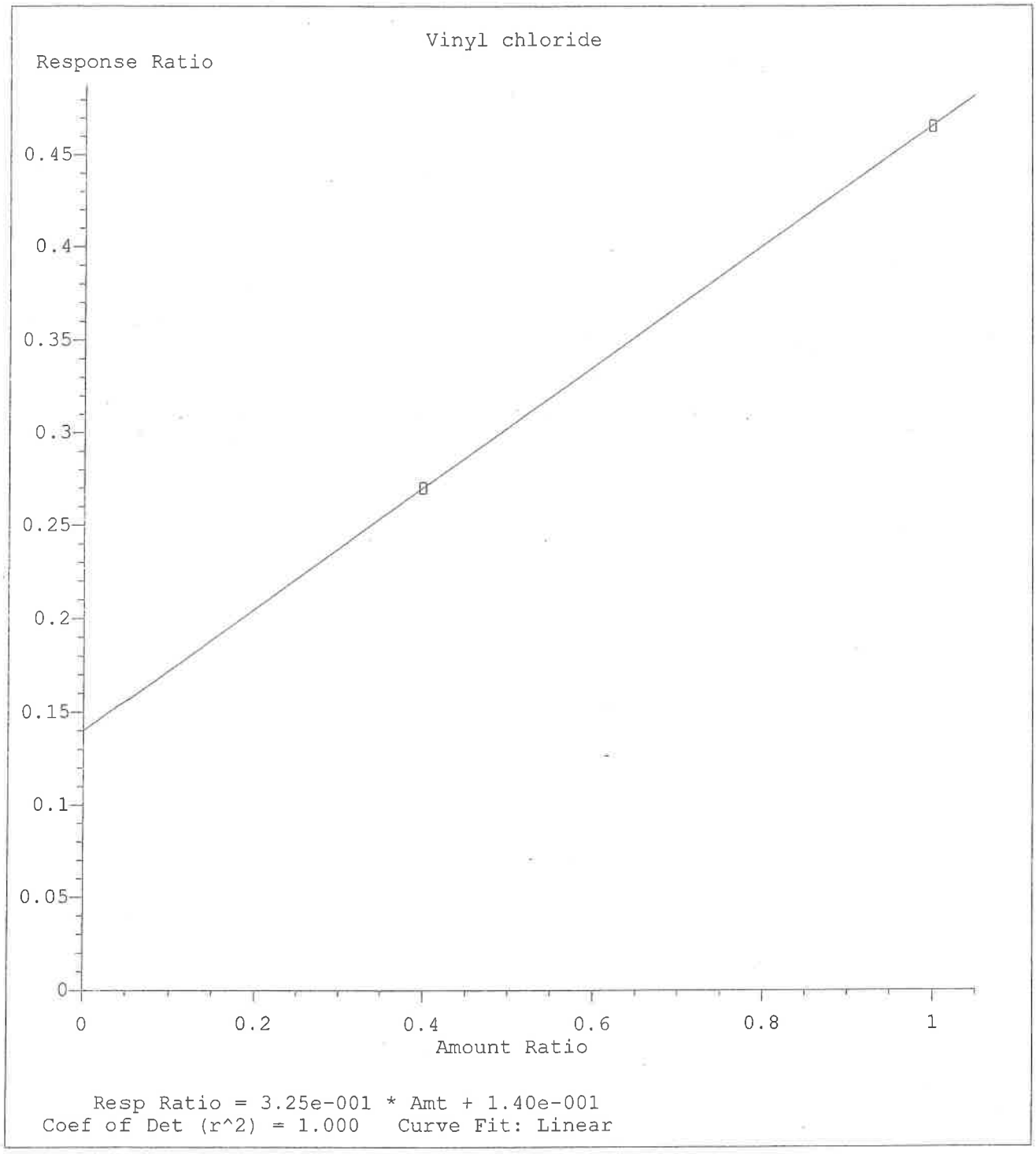
(#) = Out of Range



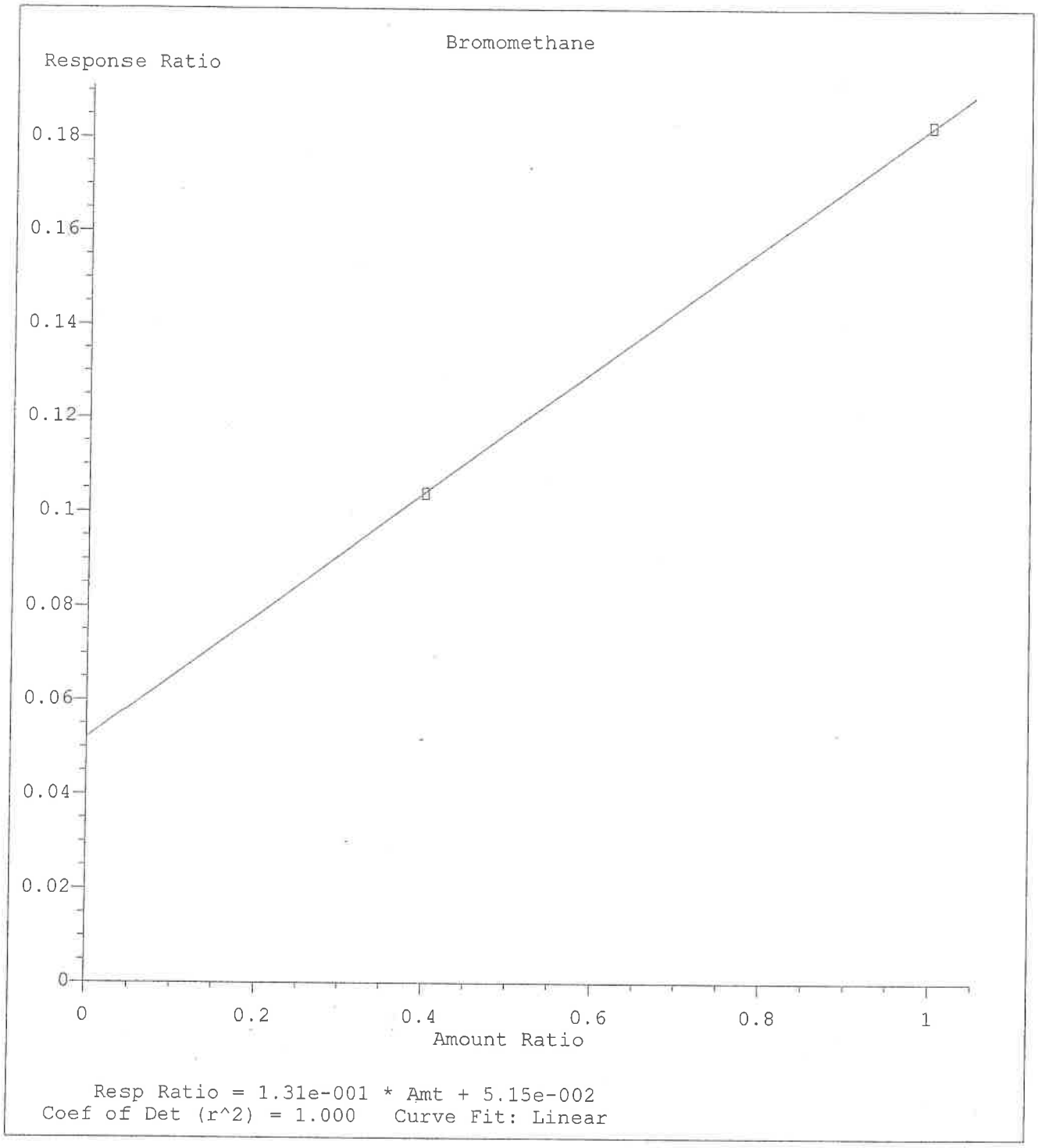
Method Name: C:\HPCHEM\1\METHODS\011402.M
Calibration Table Last Updated: Thu Jan 17 12:50:09 2002



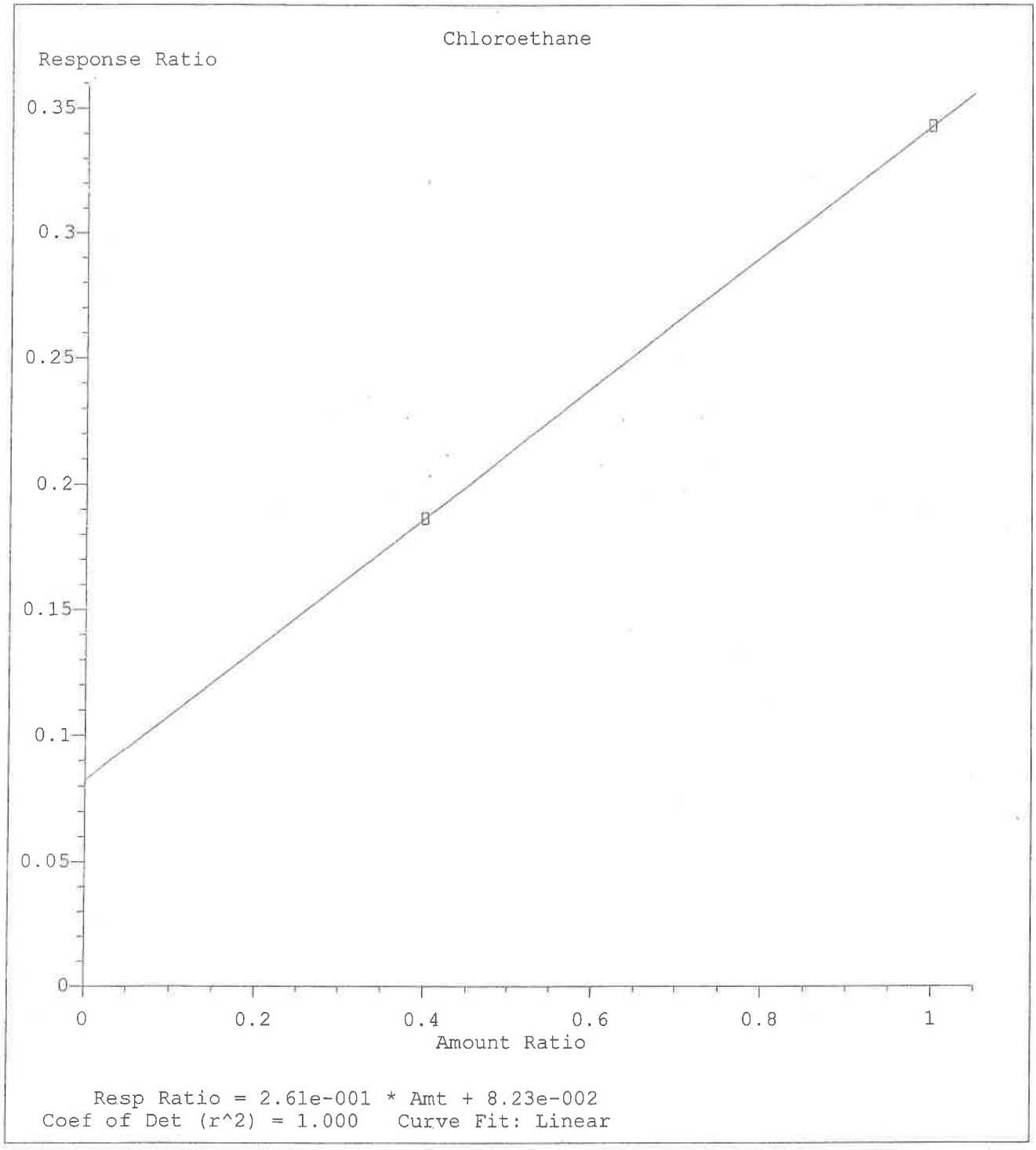
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Calibration Table Last Updated: Thu Jan 17 12:50:09 2002



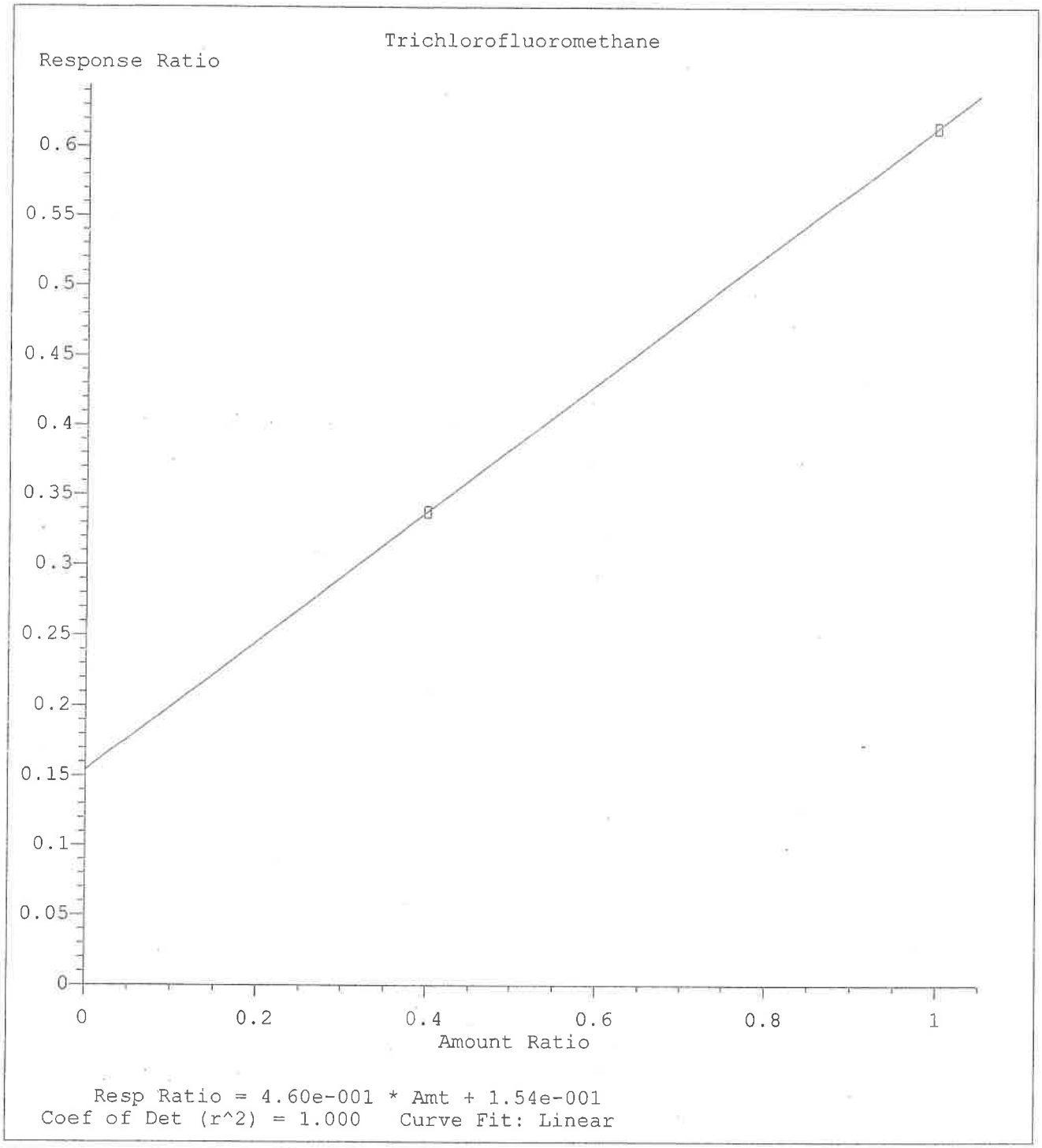
Method Name: C:\HPCHEM\1\METHODS\011402.M
Calibration Table Last Updated: Thu Jan 17 12:50:09 2002



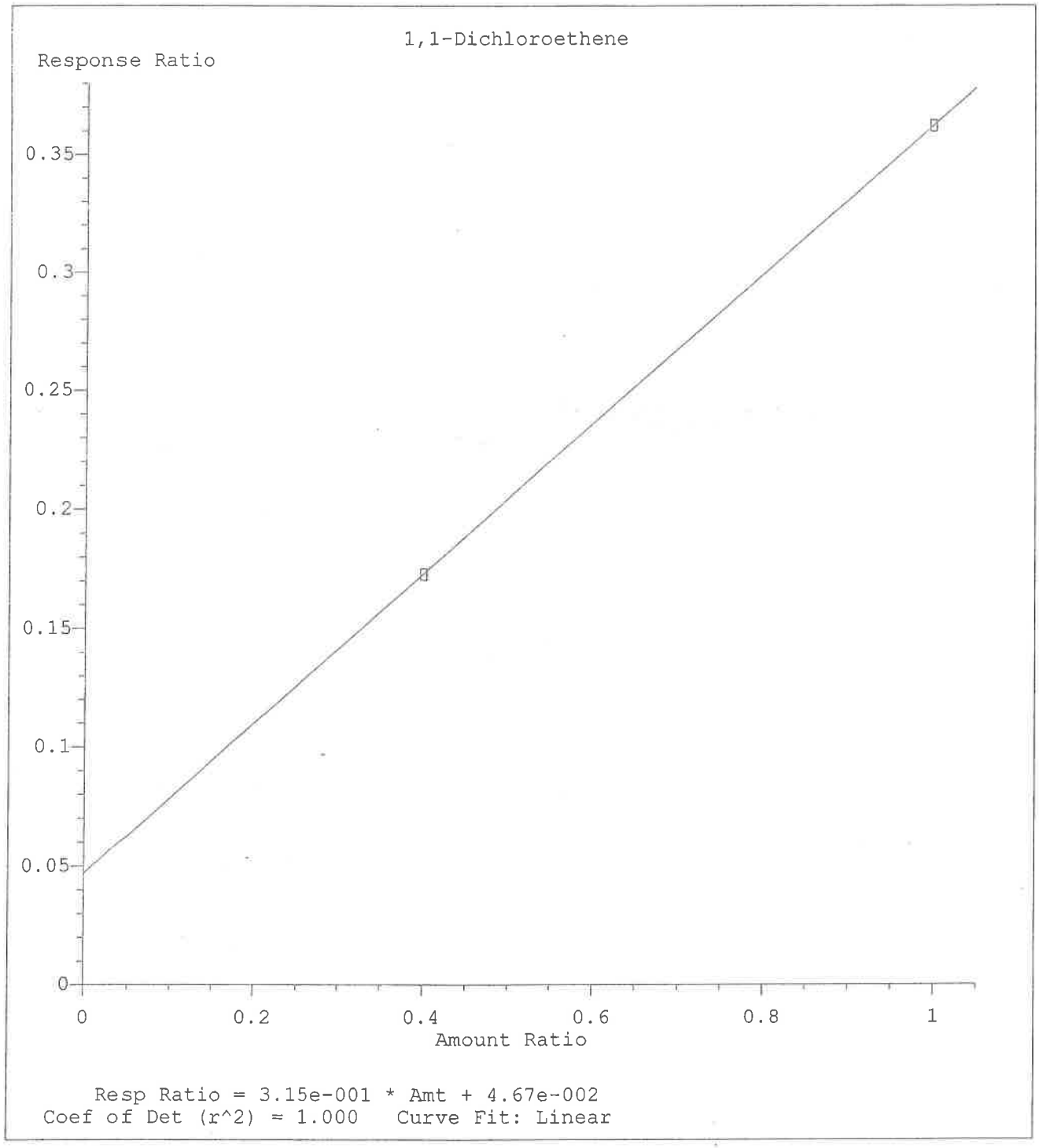
Method Name: C:\HPCHEM\1\METHODS\011402.M
Calibration Table Last Updated: Thu Jan 17 12:50:09 2002



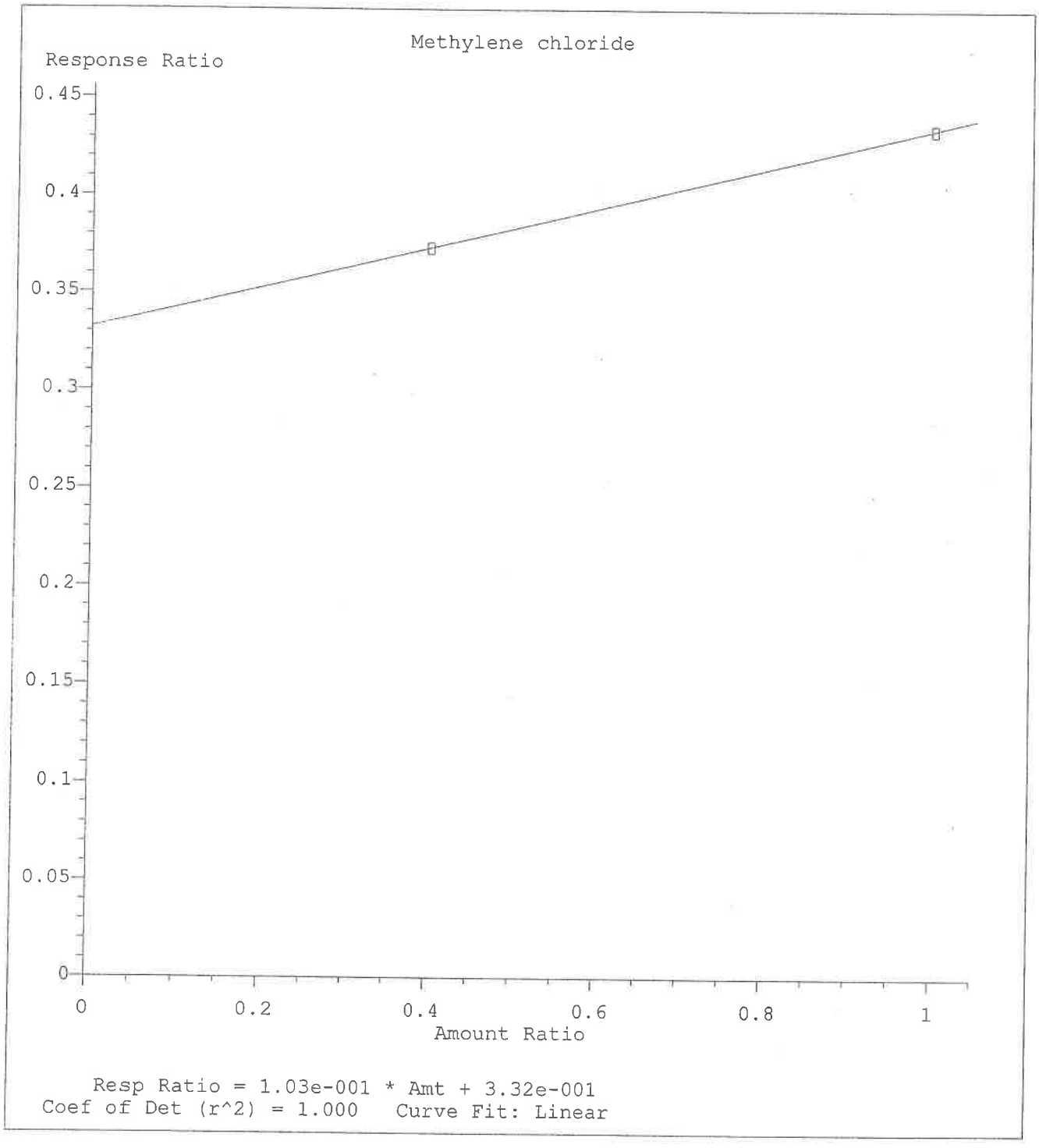
Method Name: C:\HPCHEM\1\METHODS\011402.M
Calibration Table Last Updated: Thu Jan 17 12:50:09 2002



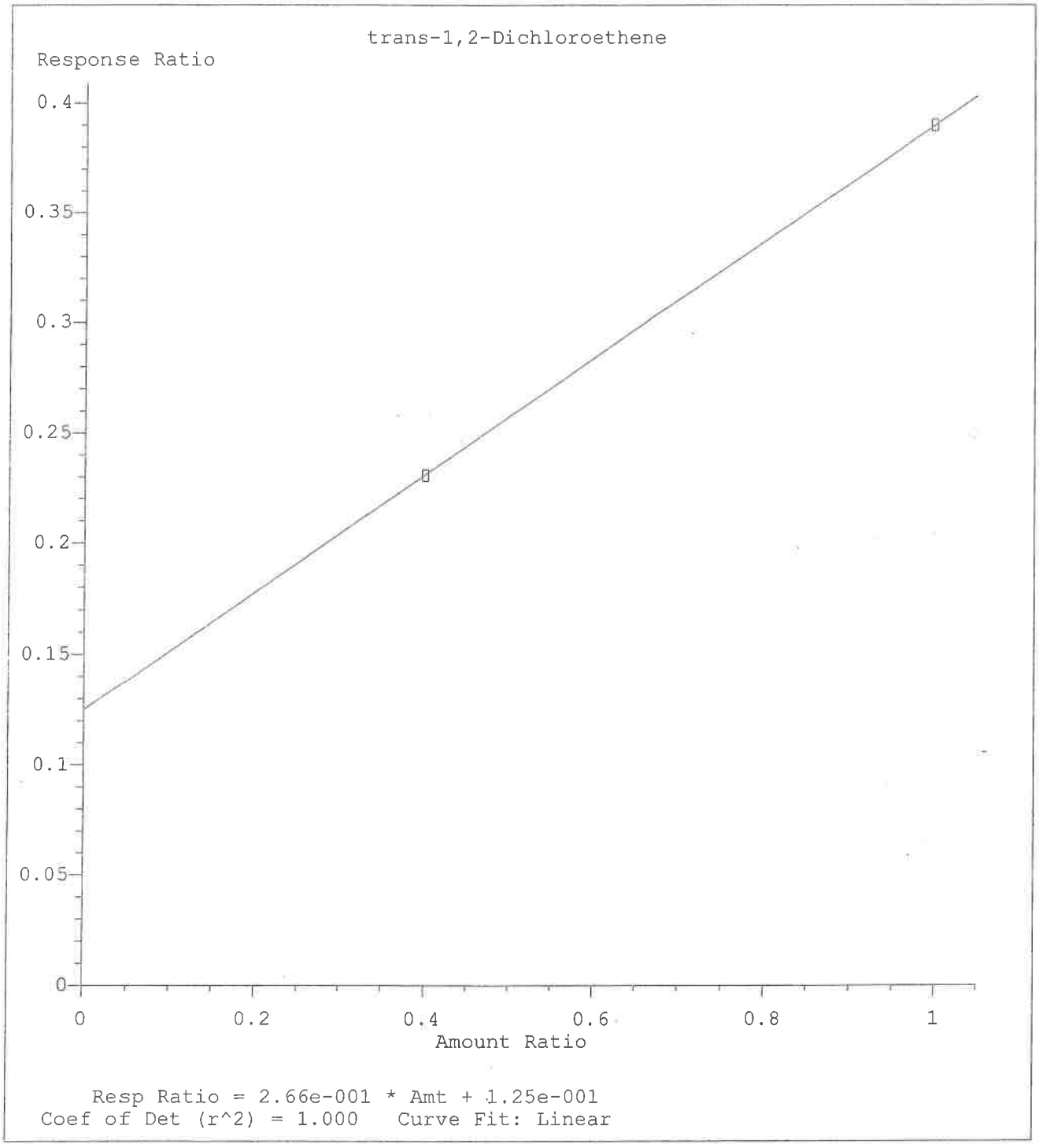
Method Name: C:\HPCHEM\1\METHODS\011402.M
Calibration Table Last Updated: Thu Jan 17 12:50:09 2002



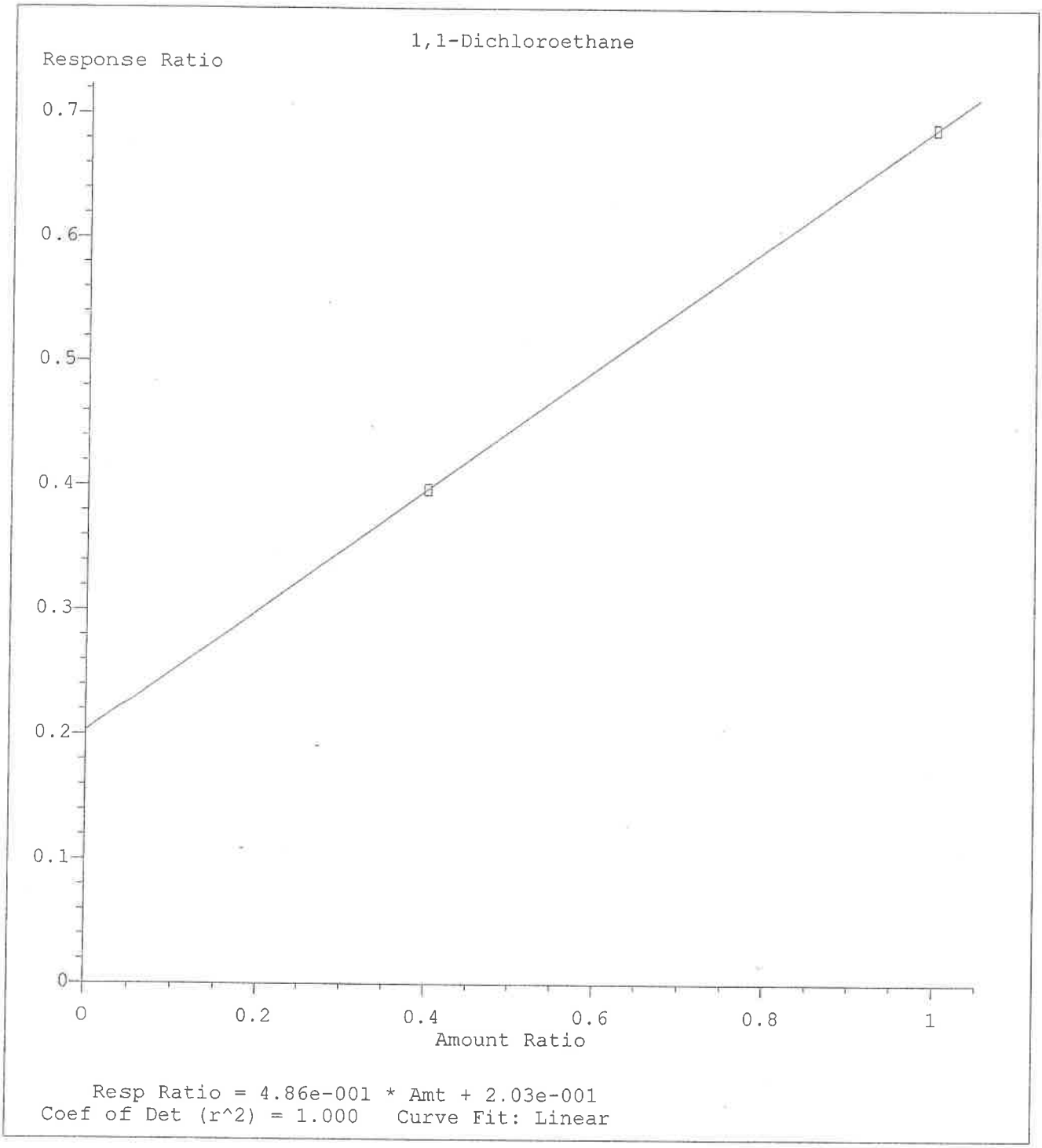
Method Name: C:\HPCHEM\1\METHODS\011402.M
Calibration Table Last Updated: Thu Jan 17 12:50:09 2002



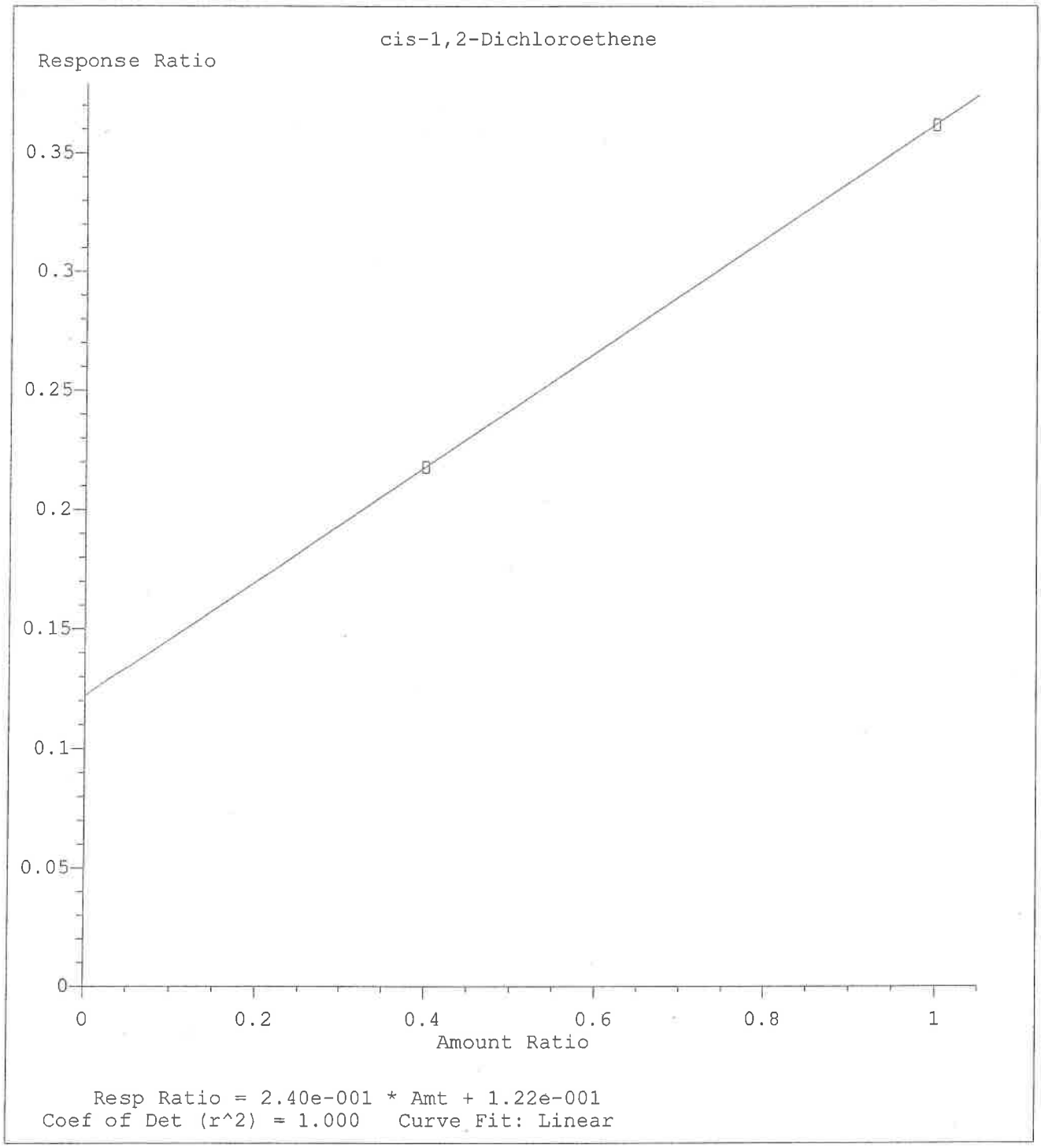
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Calibration Table Last Updated: Thu Jan 17 12:50:09 2002



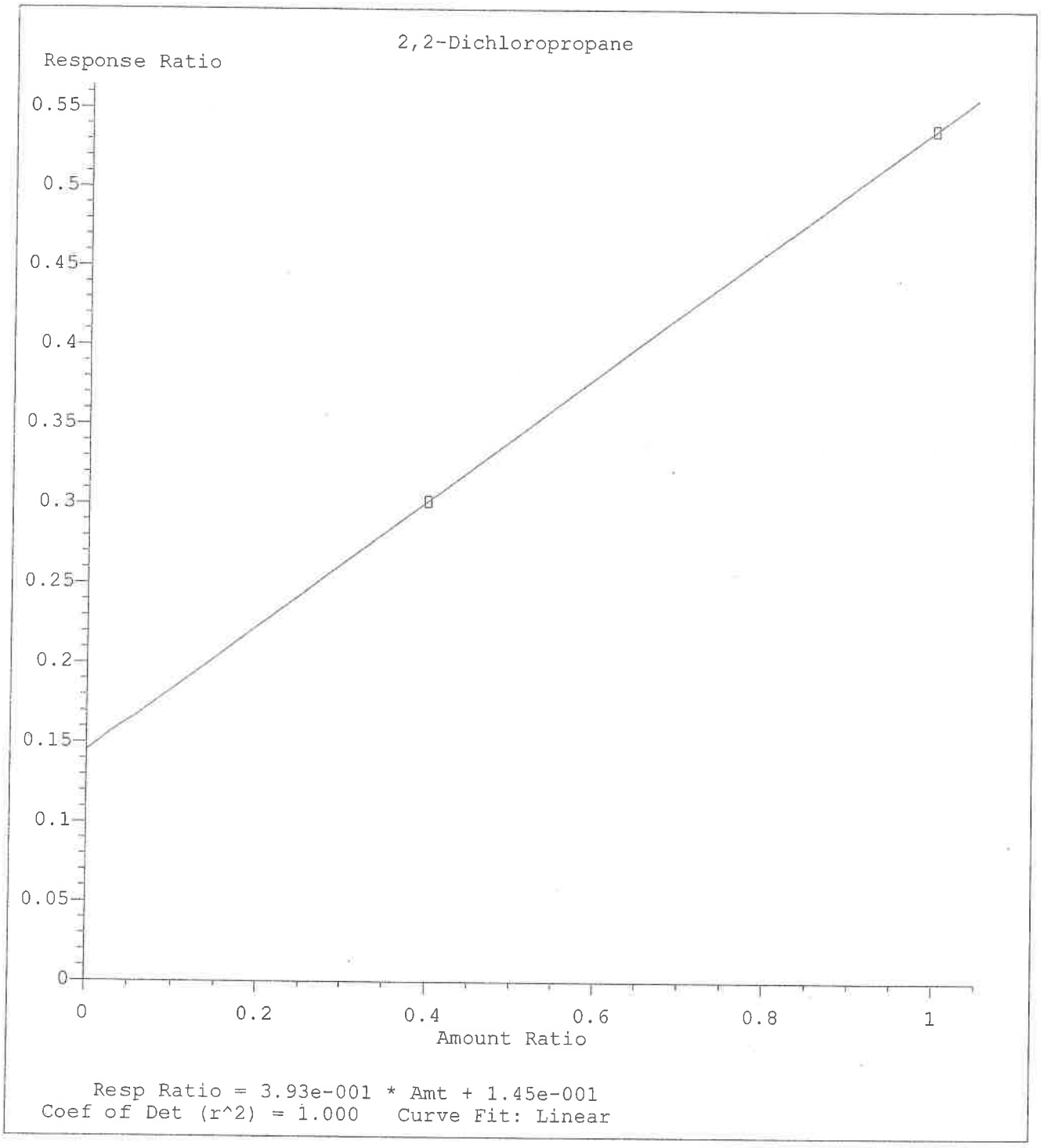
Method Name: C:\HPCHEM\1\METHODS\011402.M
Calibration Table Last Updated: Thu Jan 17 12:50:09 2002



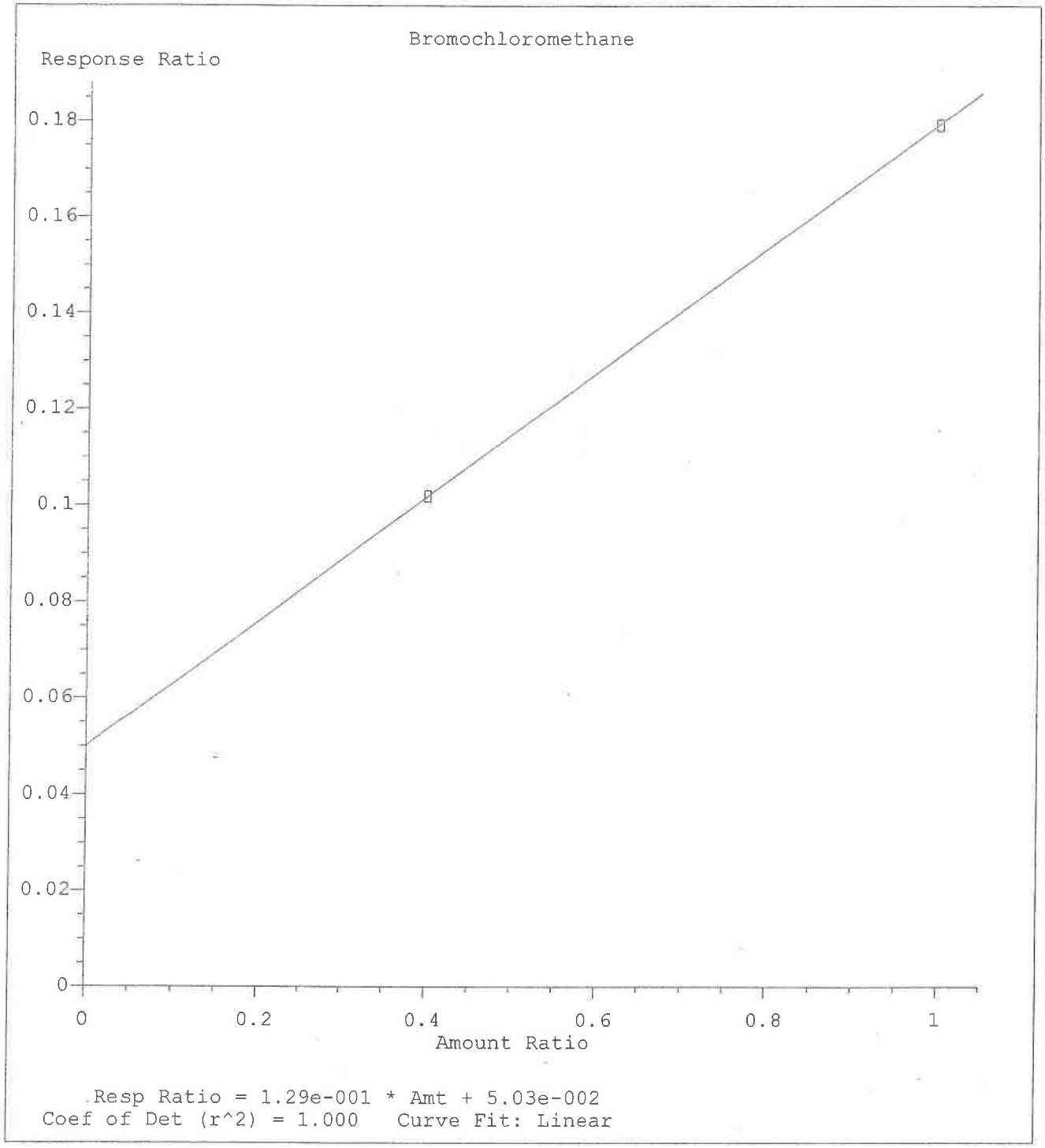
Method Name: C:\HPCHEM\1\METHODS\011402.M
Calibration Table Last Updated: Thu Jan 17 12:50:09 2002



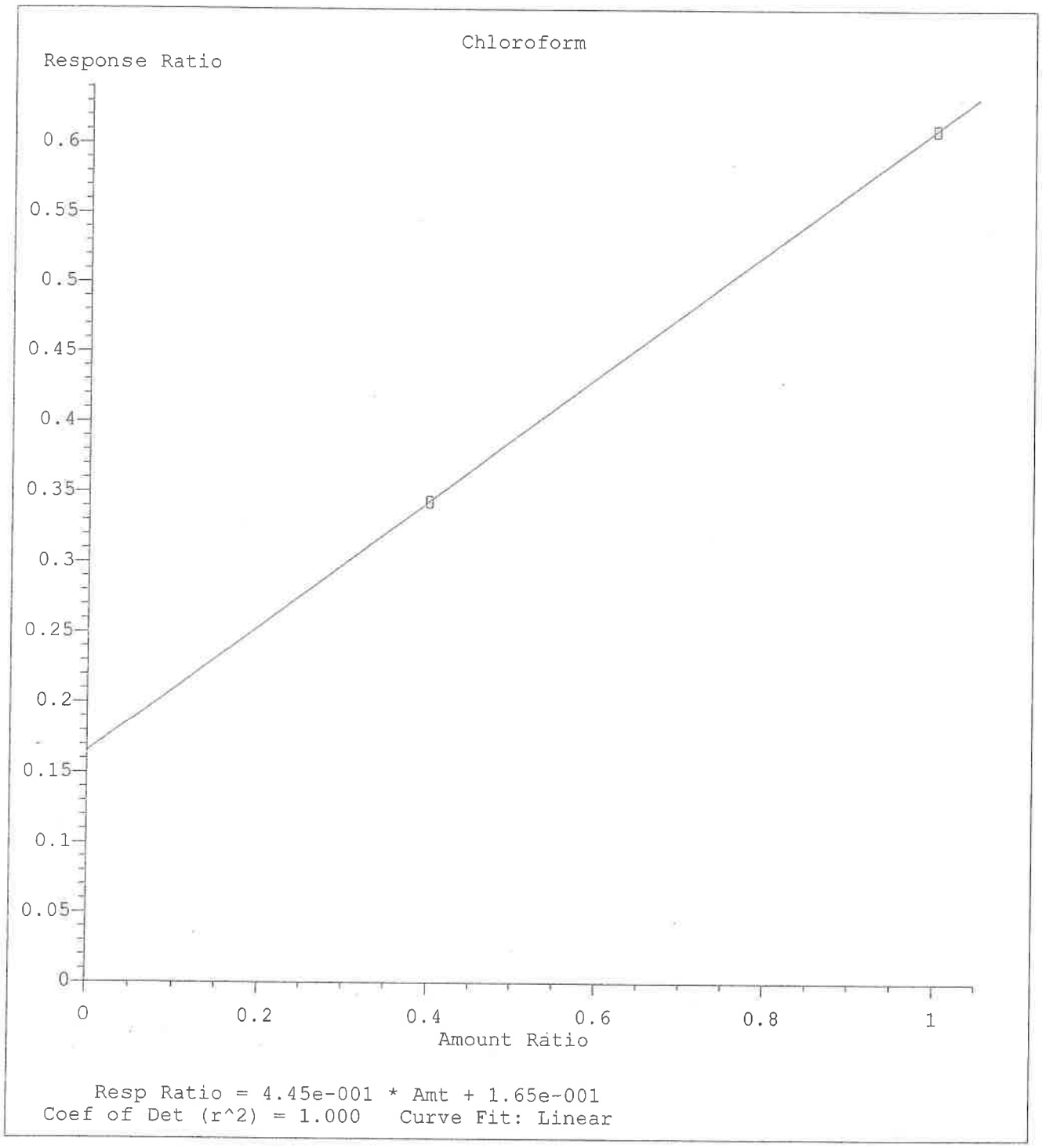
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Calibration Table Last Updated: Thu Jan 17 12:50:09 2002



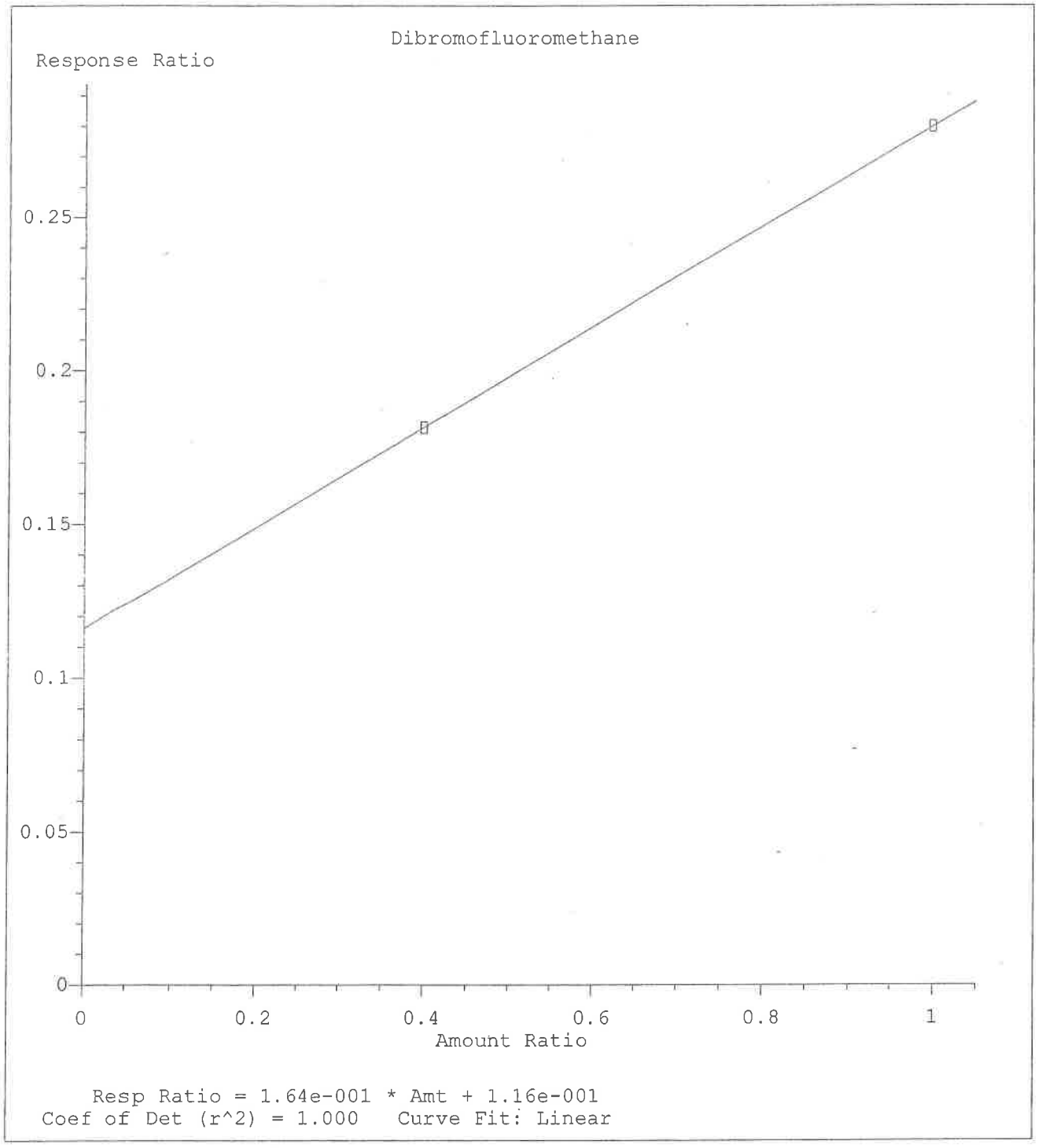
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Calibration Table Last Updated: Thu Jan 17 12:50:09 2002



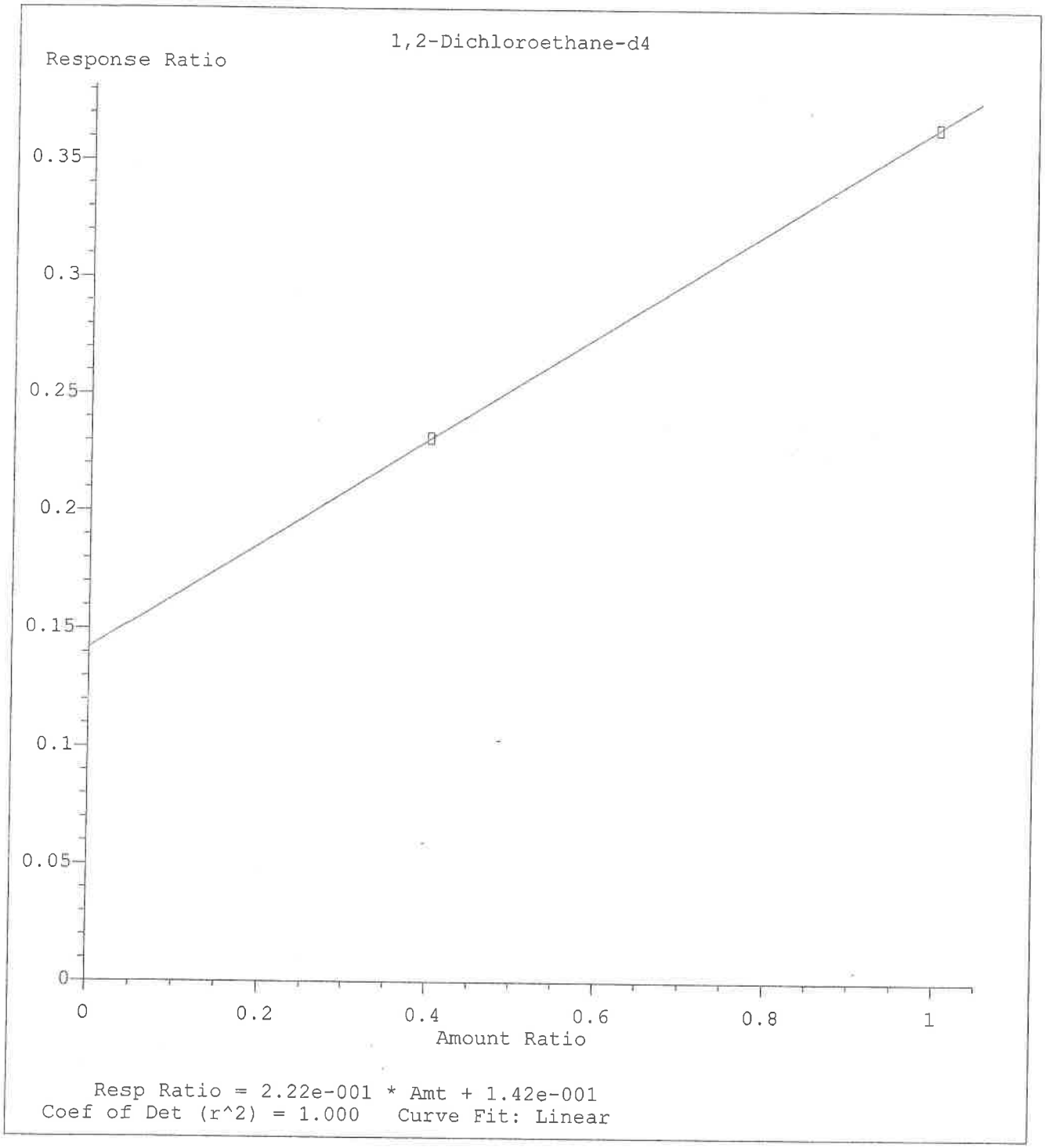
Method Name: C:\HPCHEM\1\METHODS\011402.M
Calibration Table Last Updated: Thu Jan 17 12:50:09 2002



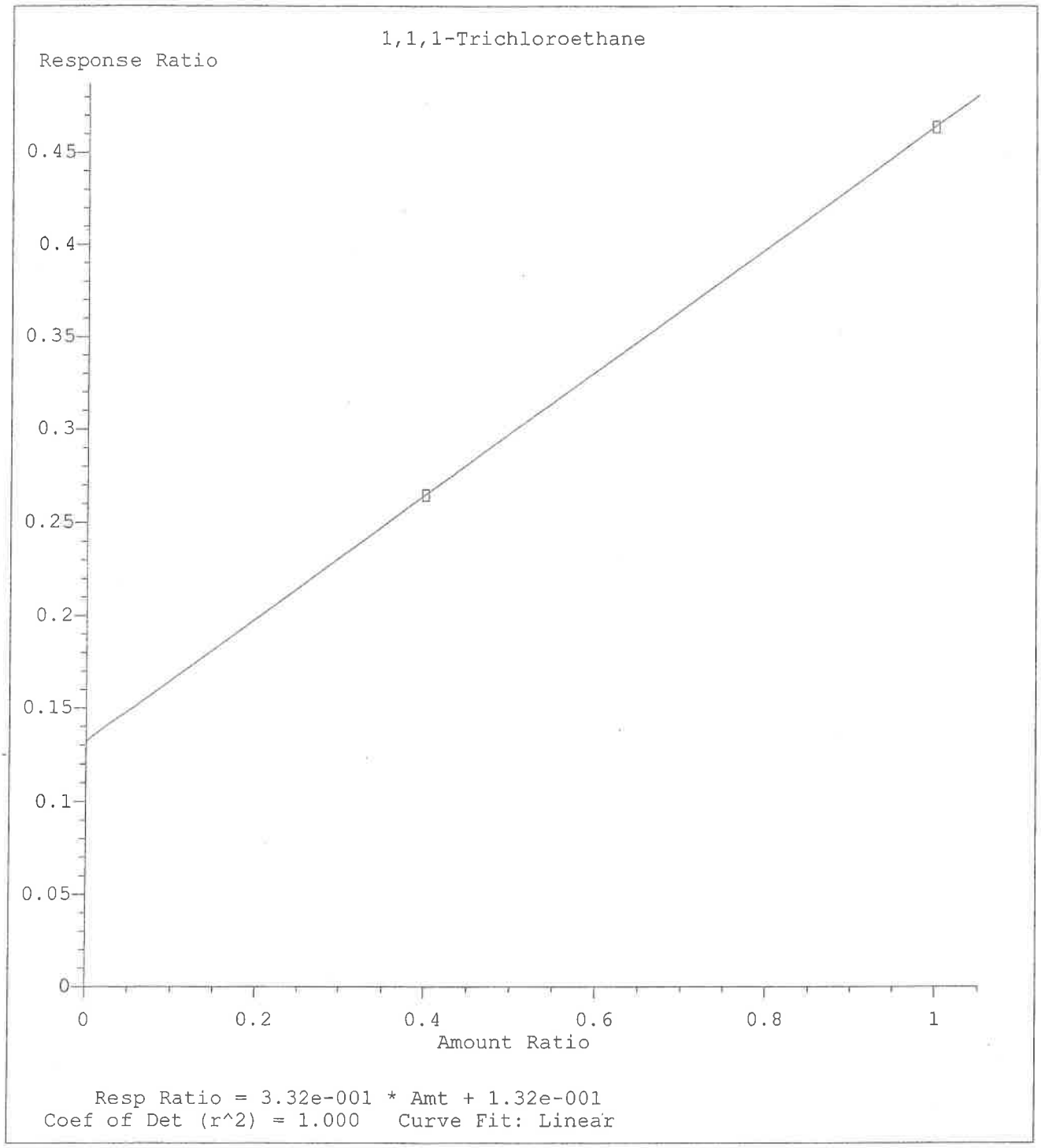
Method Name: C:\HPCHEM\1\METHODS\011402.M
Calibration Table Last Updated: Thu Jan 17 12:50:09 2002



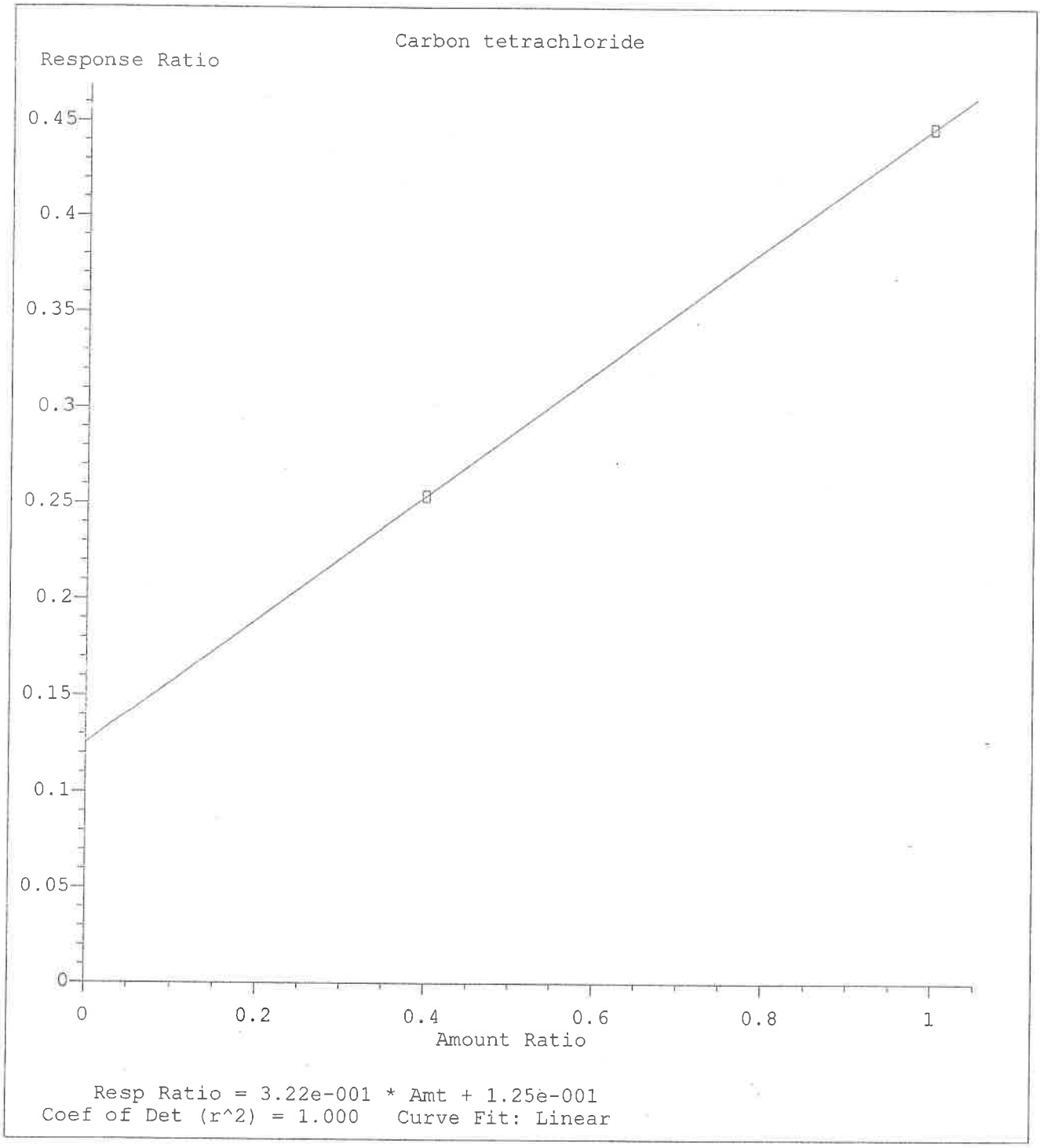
Method Name: C:\HPCHEM\1\METHODS\011402.M
Calibration Table Last Updated: Thu Jan 17 12:50:09 2002



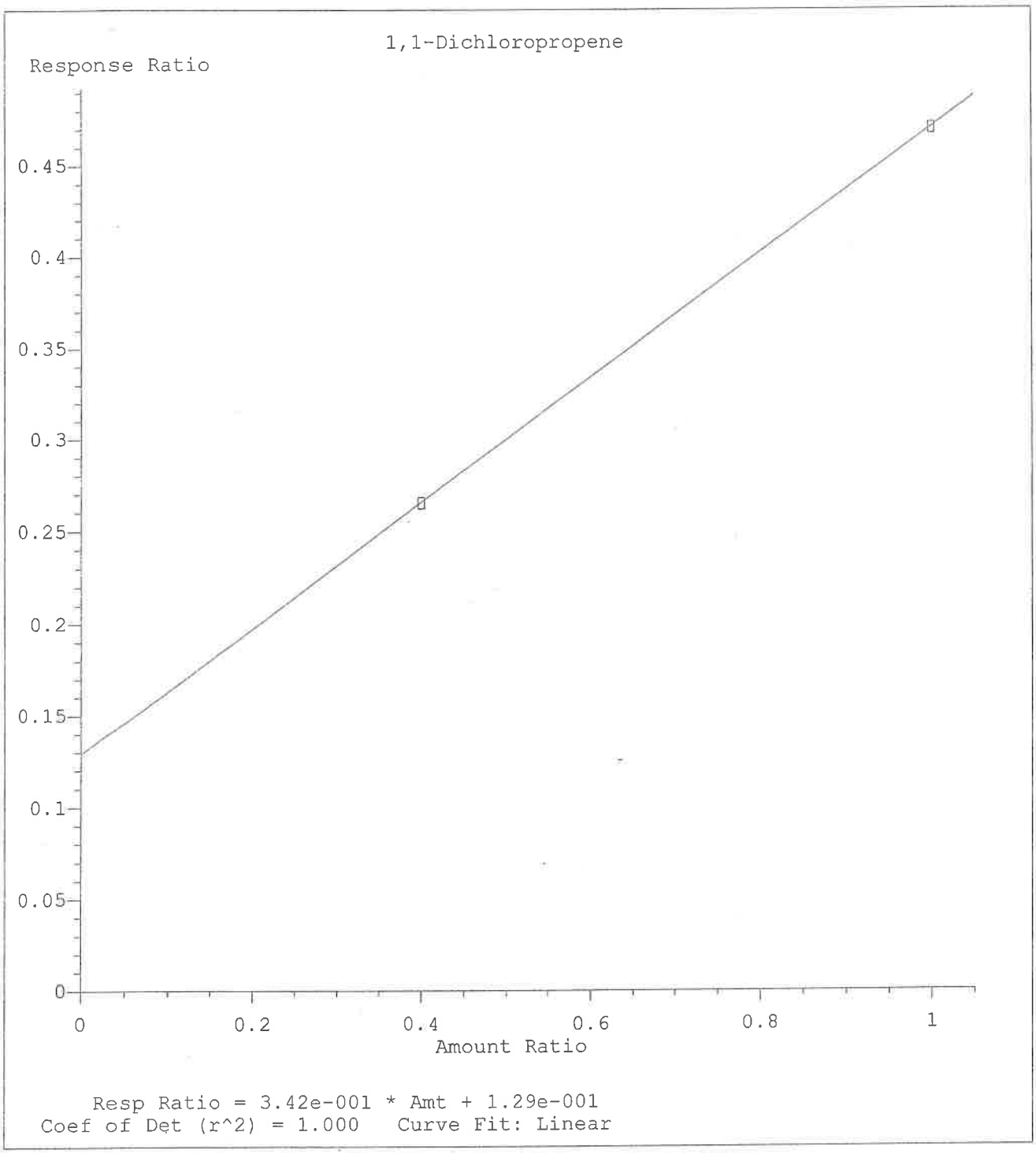
Method Name: C:\HPCHEM\1\METHODS\011402.M
Calibration Table Last Updated: Thu Jan 17 12:50:09 2002



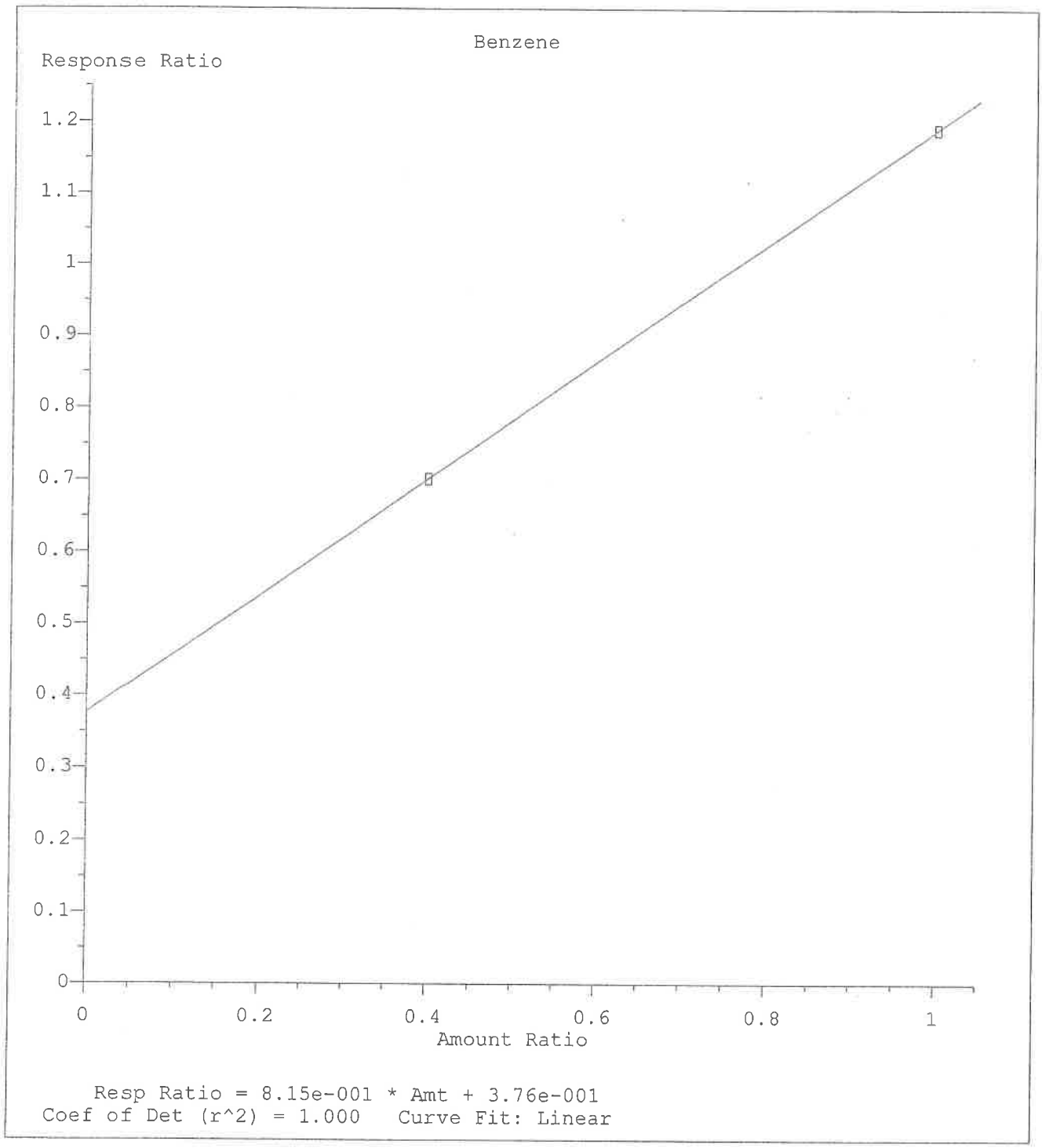
Method Name: C:\HPCHEM\1\METHODS\011402.M
Calibration Table Last Updated: Thu Jan 17 12:50:09 2002



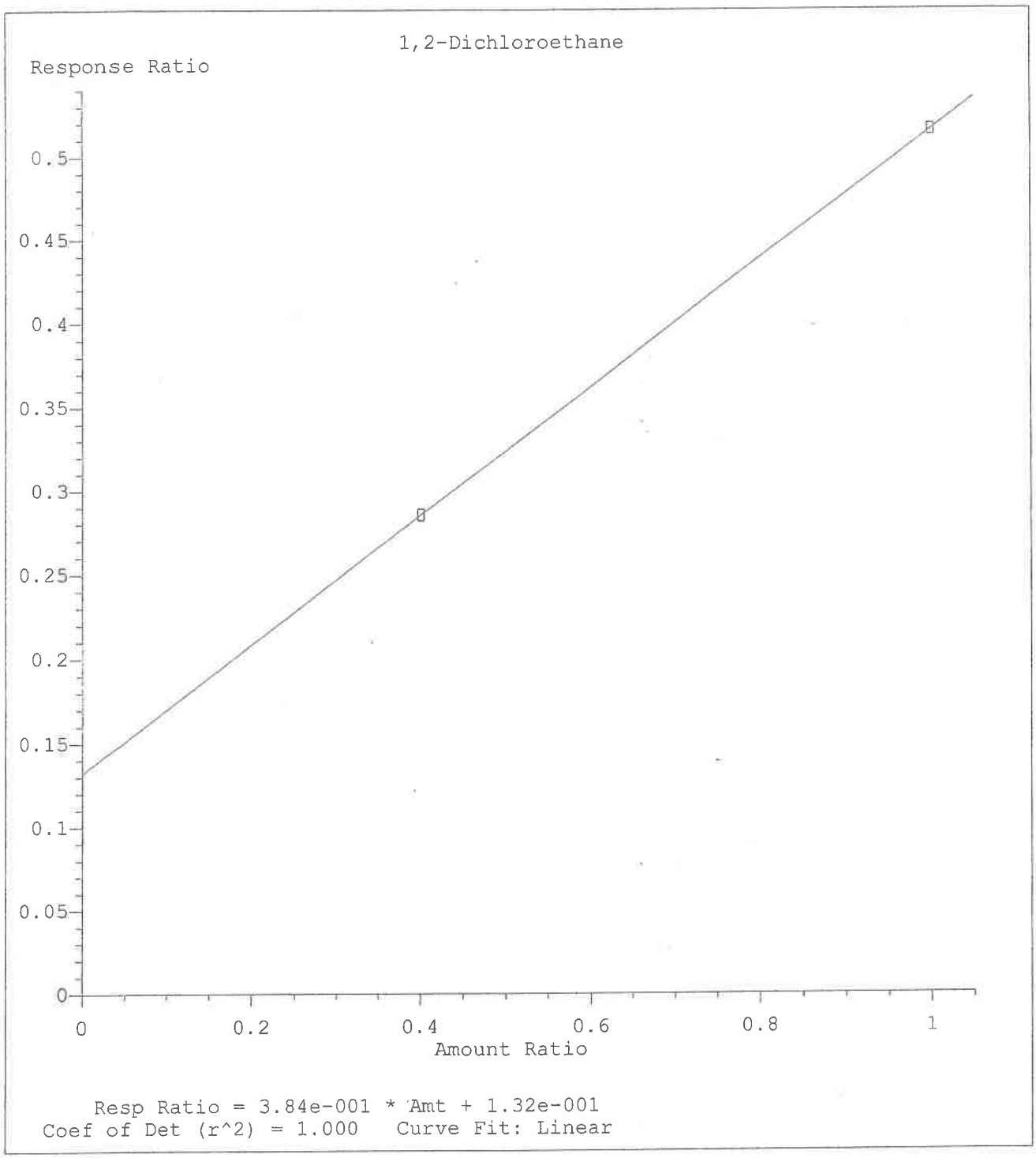
Method Name: C:\HPCHEM\1\METHODS\011402.M
Calibration Table Last Updated: Thu Jan 17 12:50:09 2002



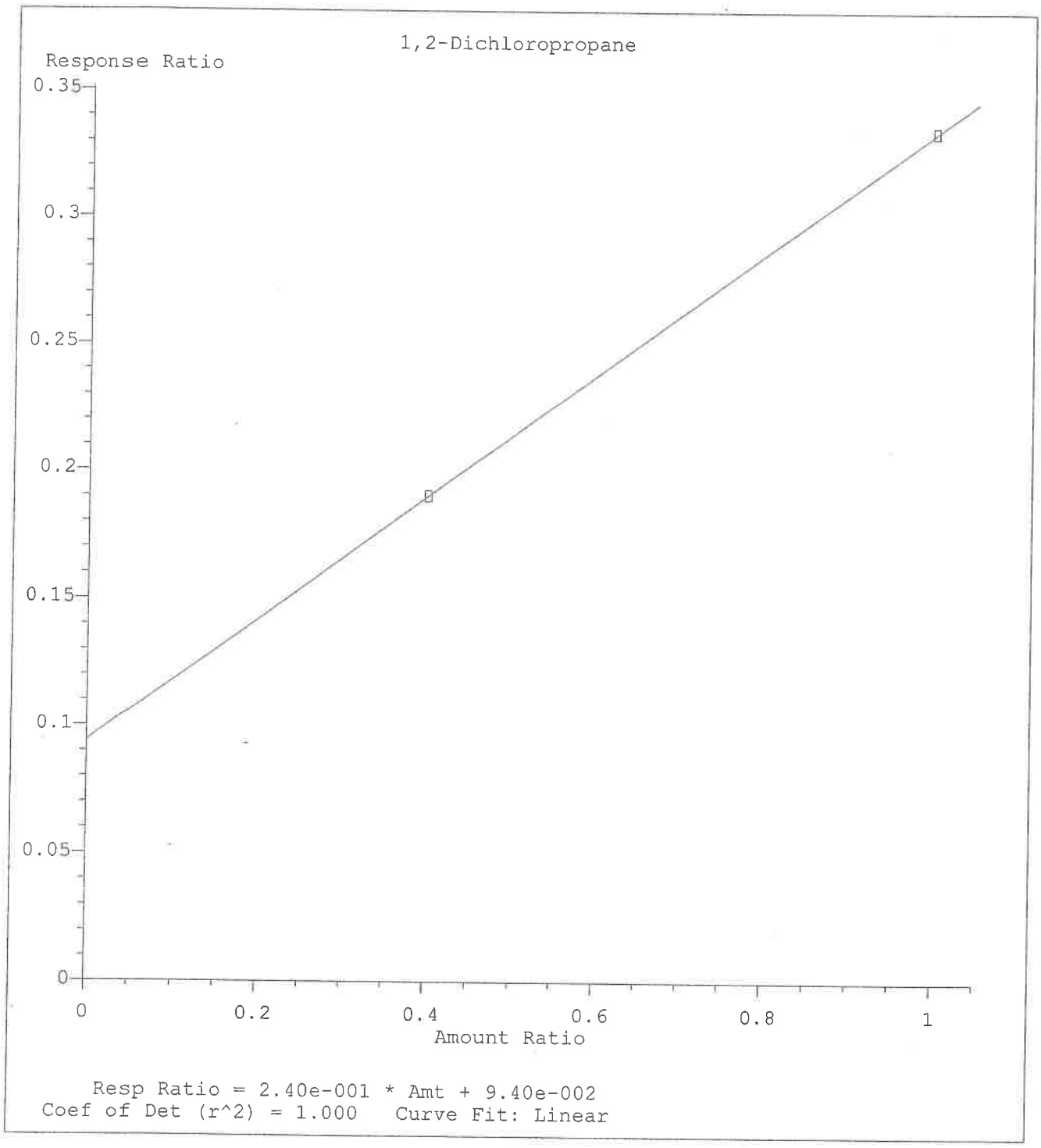
Method Name: C:\HPCHEM\1\METHODS\011402.M
Calibration Table Last Updated: Thu Jan 17 12:50:09 2002



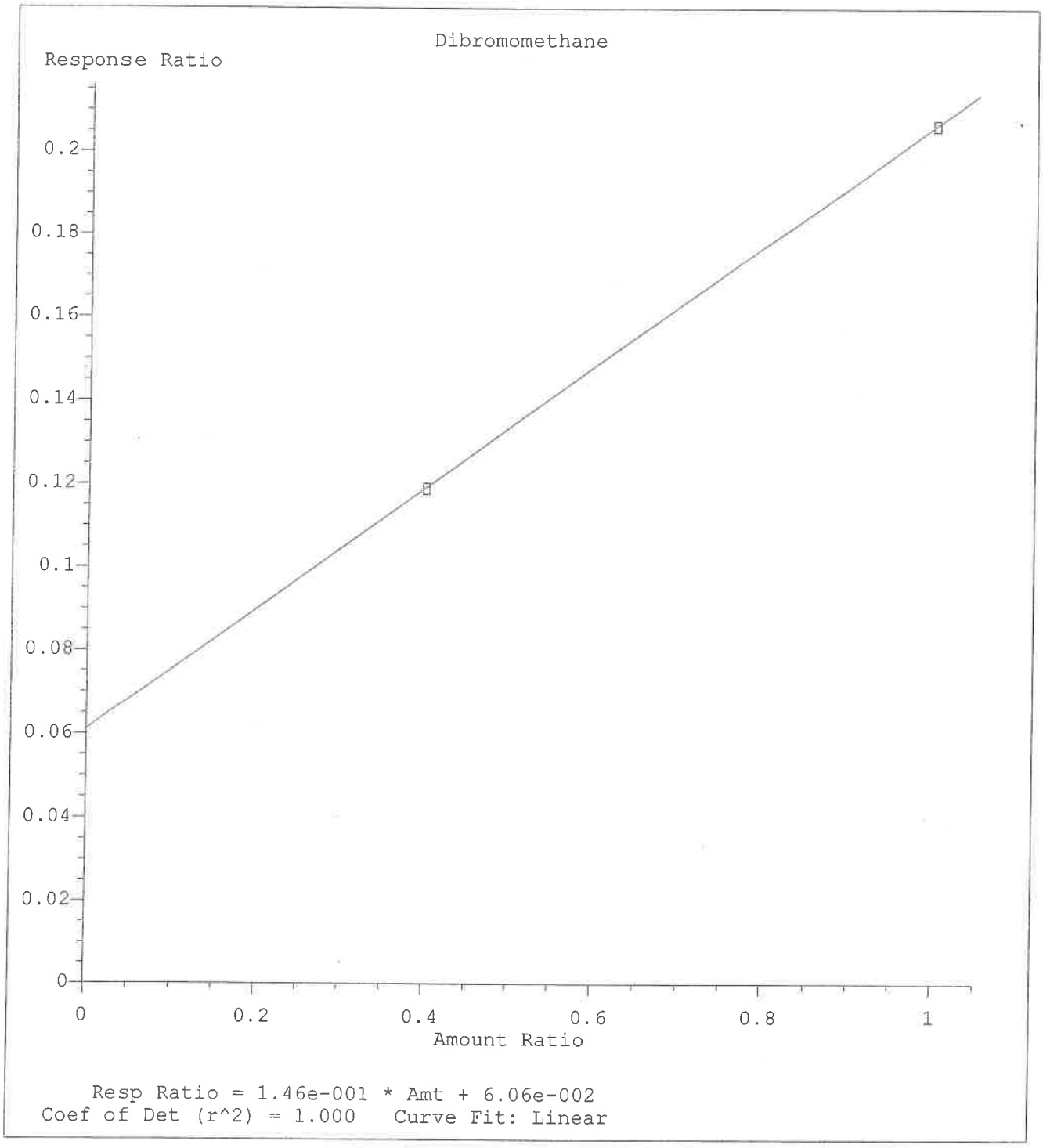
Method Name: C:\HPCHEM\1\METHODS\011402.M
Calibration Table Last Updated: Thu Jan 17 12:50:09 2002



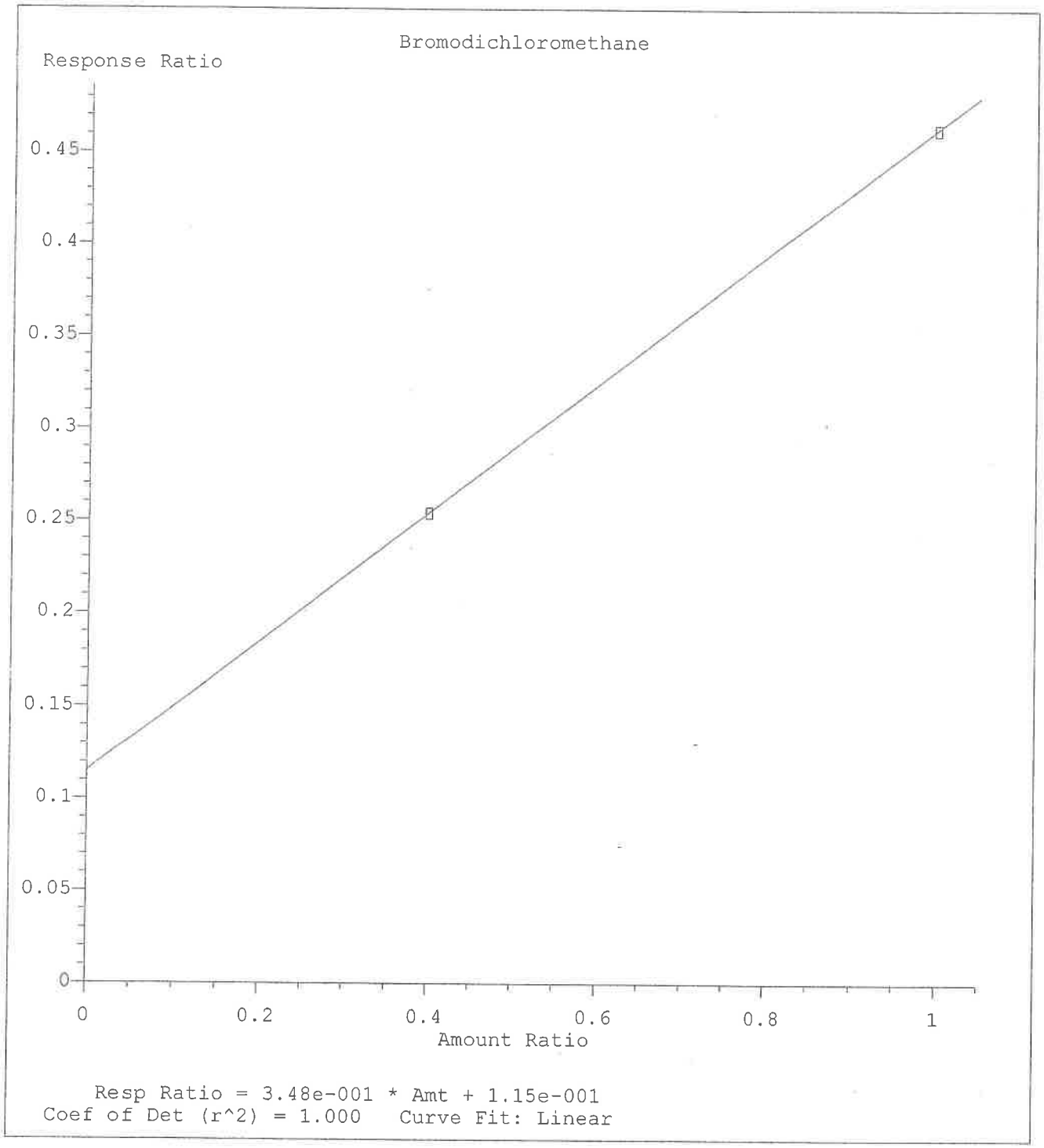
Method Name: C:\HPCHEM\1\METHODS\011402.M
Calibration Table Last Updated: Thu Jan 17 12:50:09 2002



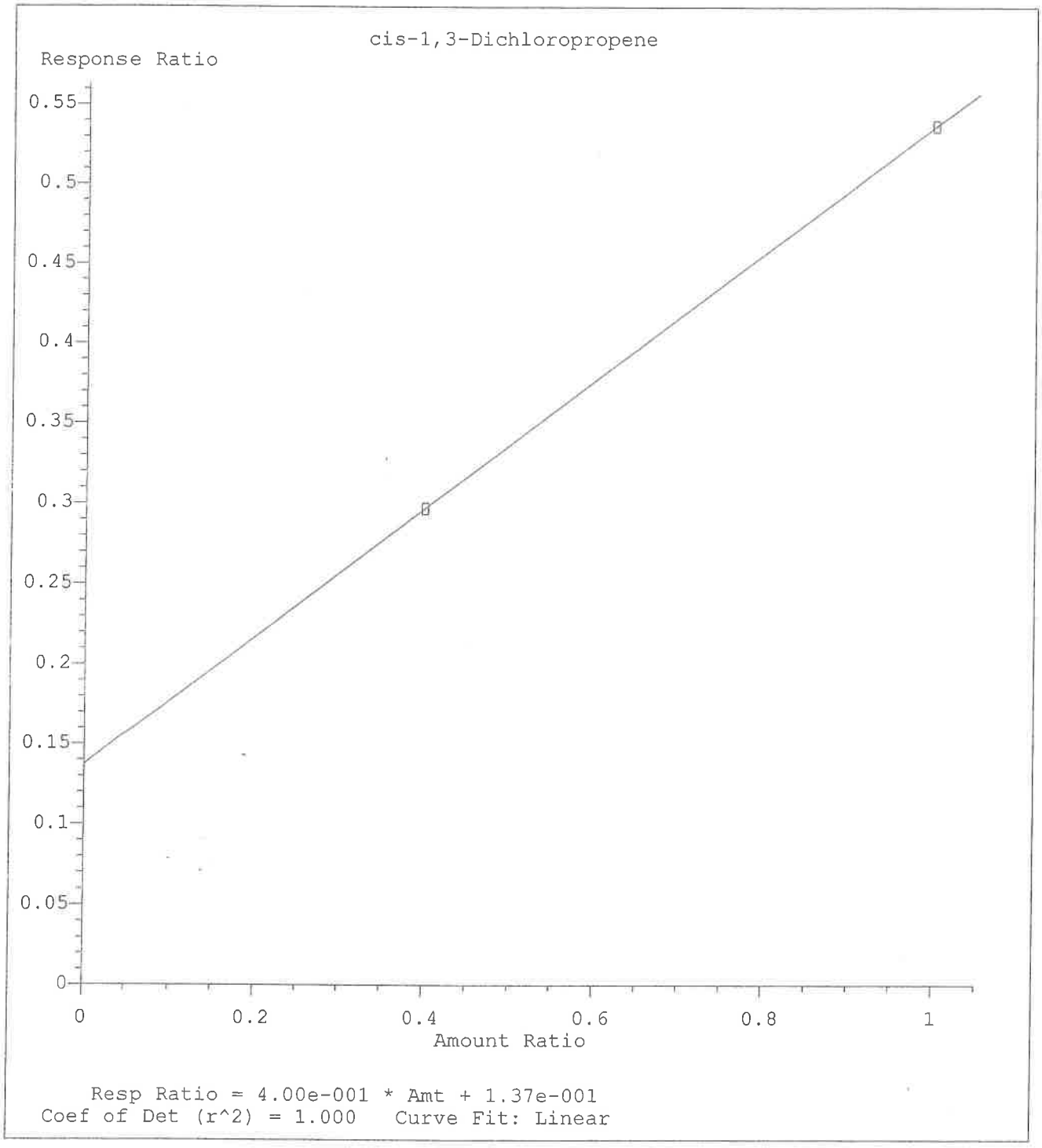
Method Name: C:\HPCHEM\1\METHODS\011402.M
Calibration Table Last Updated: Thu Jan 17 12:50:09 2002



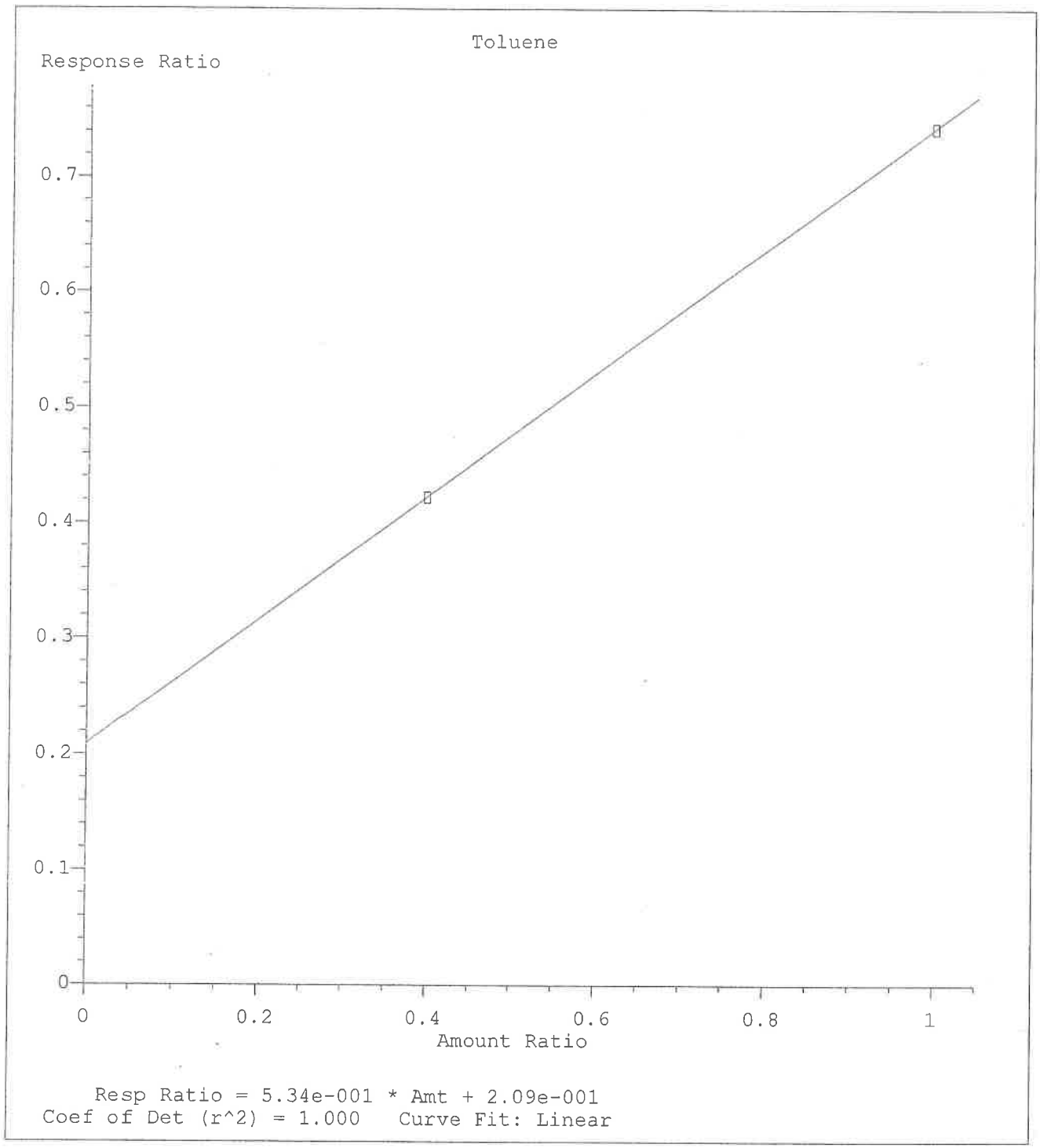
Method Name: C:\HPCHEM\1\METHODS\011402.M
Calibration Table Last Updated: Thu Jan 17 12:50:09 2002



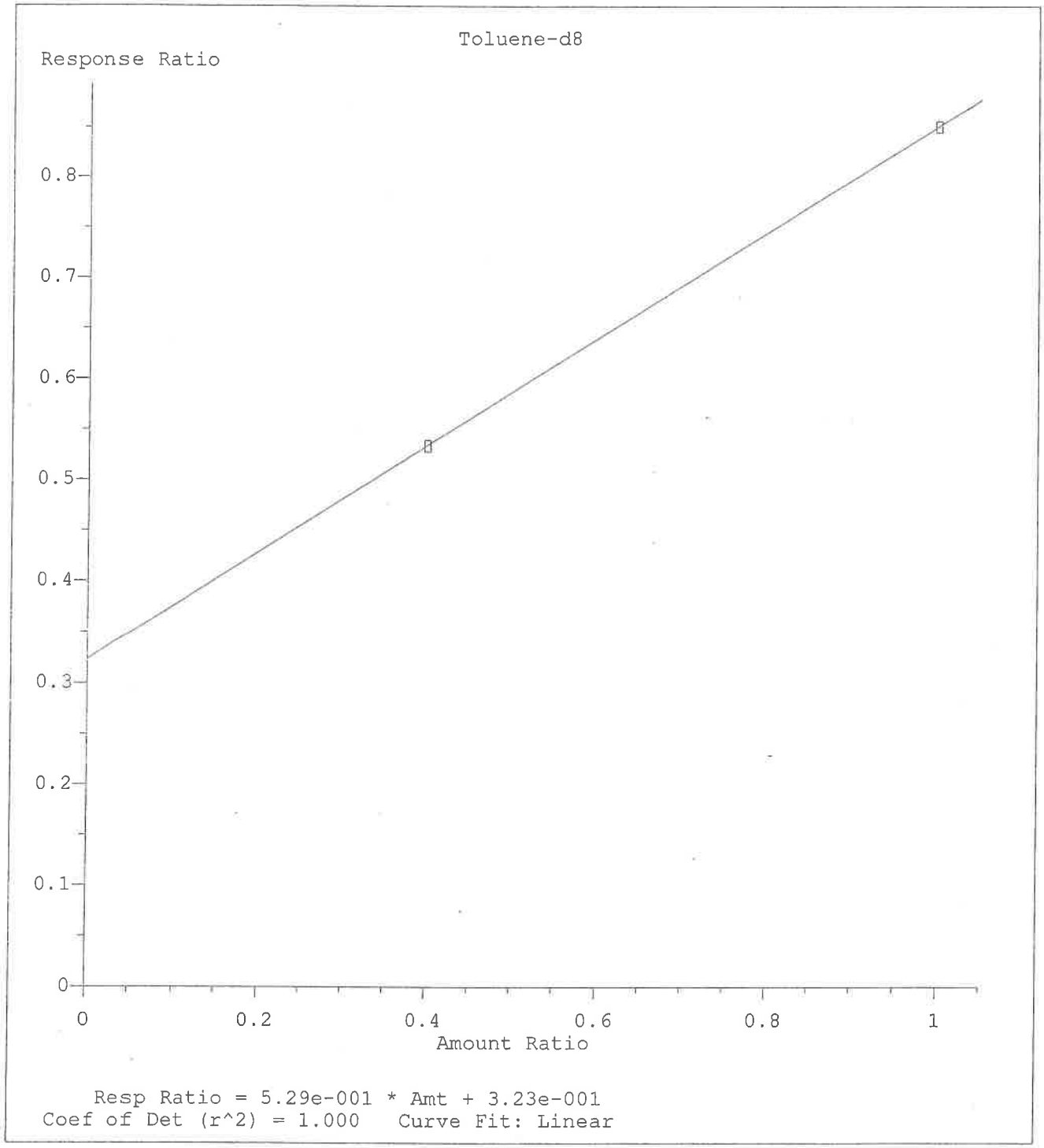
Method Name: C:\HPCHEM\1\METHODS\011402.M
Calibration Table Last Updated: Thu Jan 17 12:50:09 2002



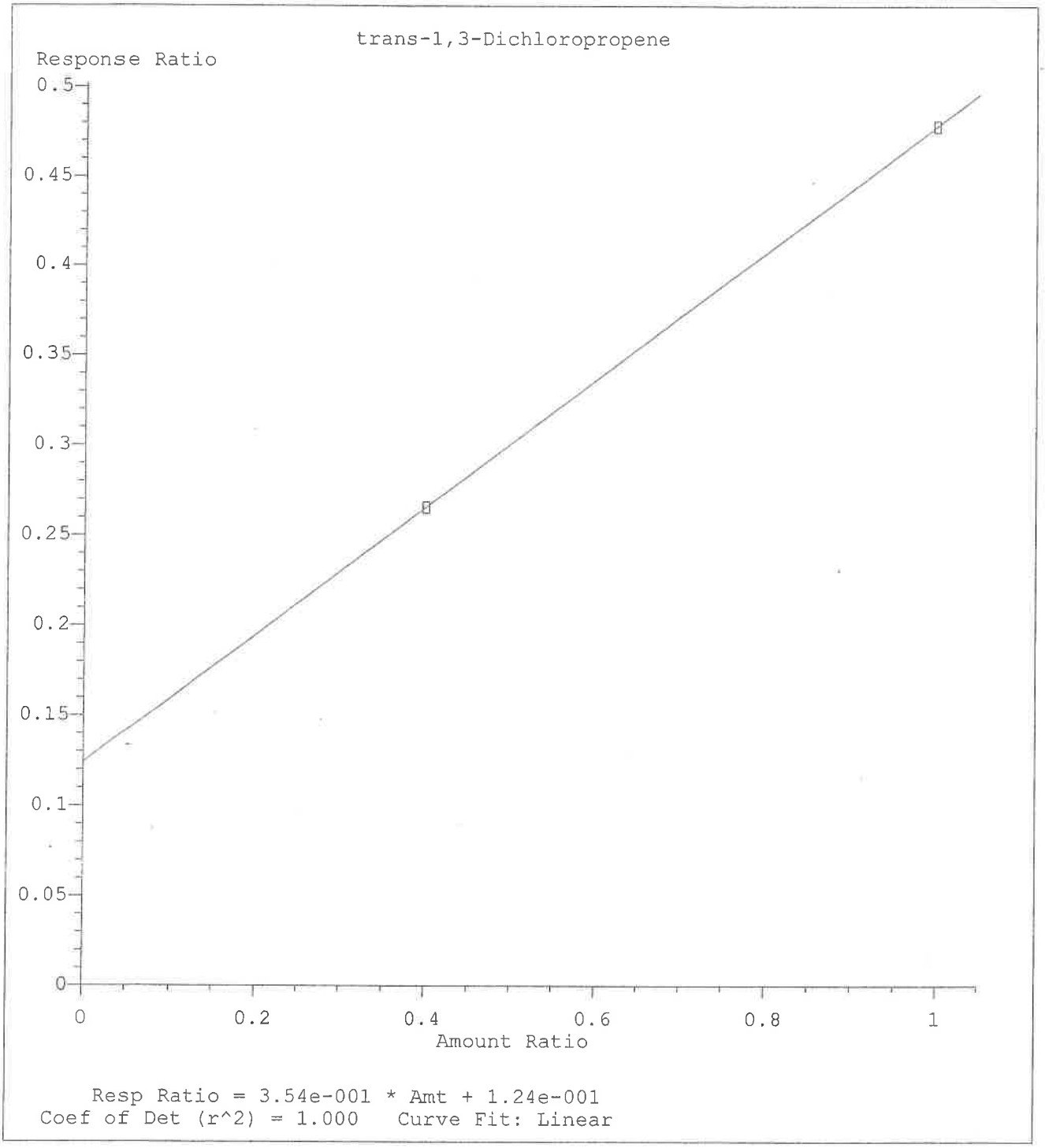
Method Name: C:\HPCHEM\1\METHODS\011402.M
Calibration Table Last Updated: Thu Jan 17 12:50:09 2002



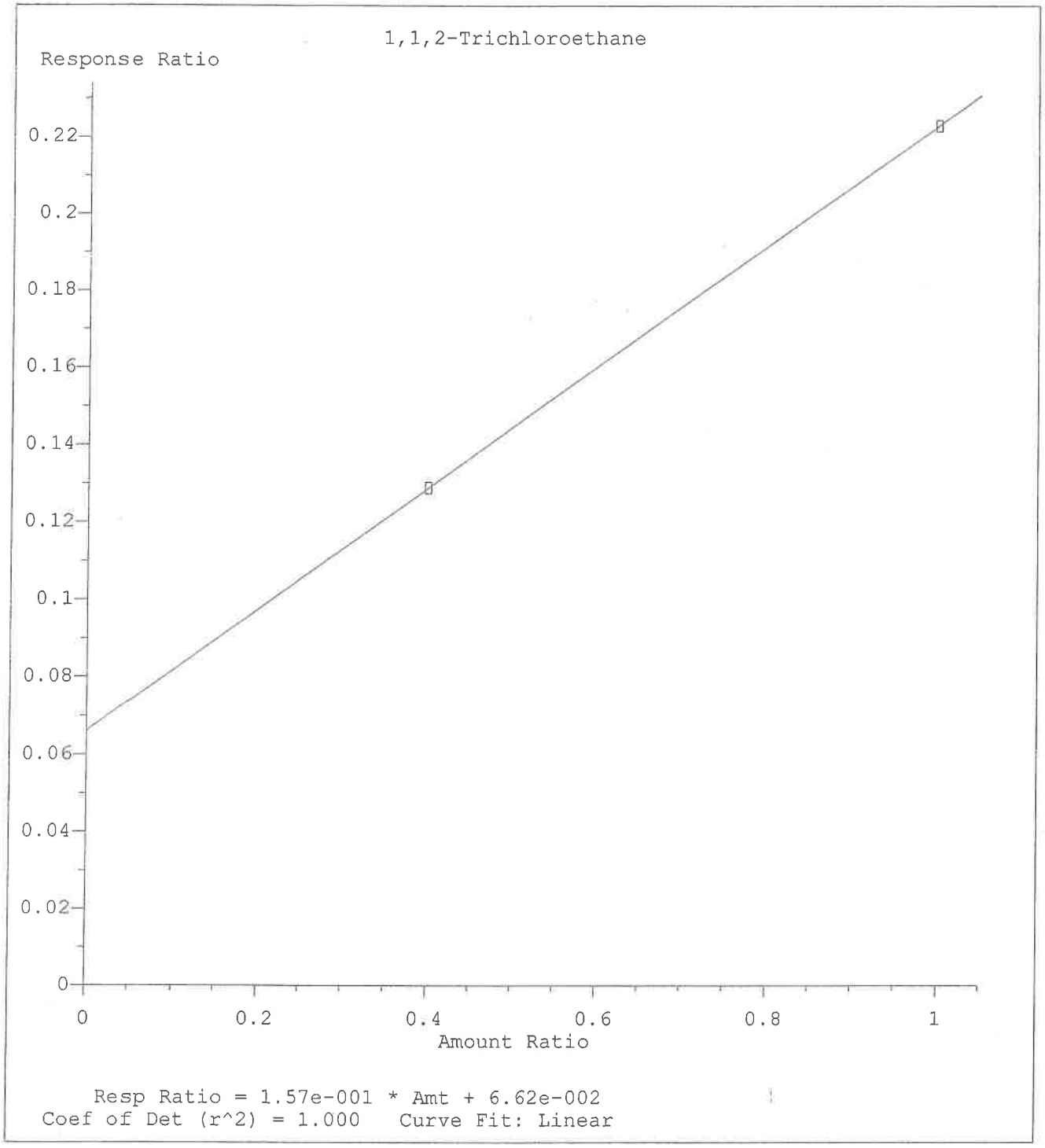
Method Name: C:\HPCHEM\1\METHODS\011402.M
Calibration Table Last Updated: Thu Jan 17 12:50:09 2002



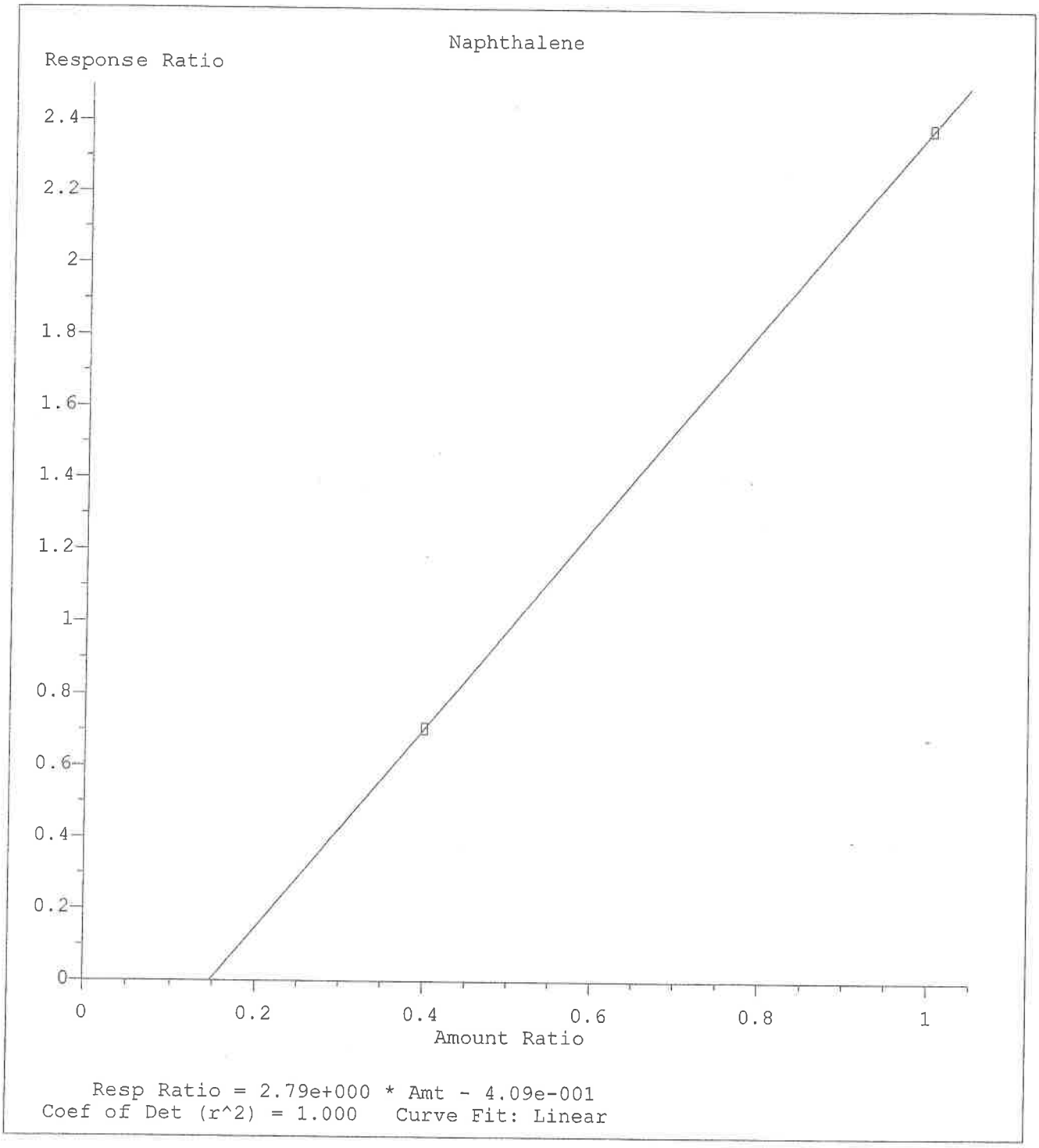
Method Name: C:\HPCHEM\1\METHODS\011402.M
Calibration Table Last Updated: Thu Jan 17 12:50:09 2002



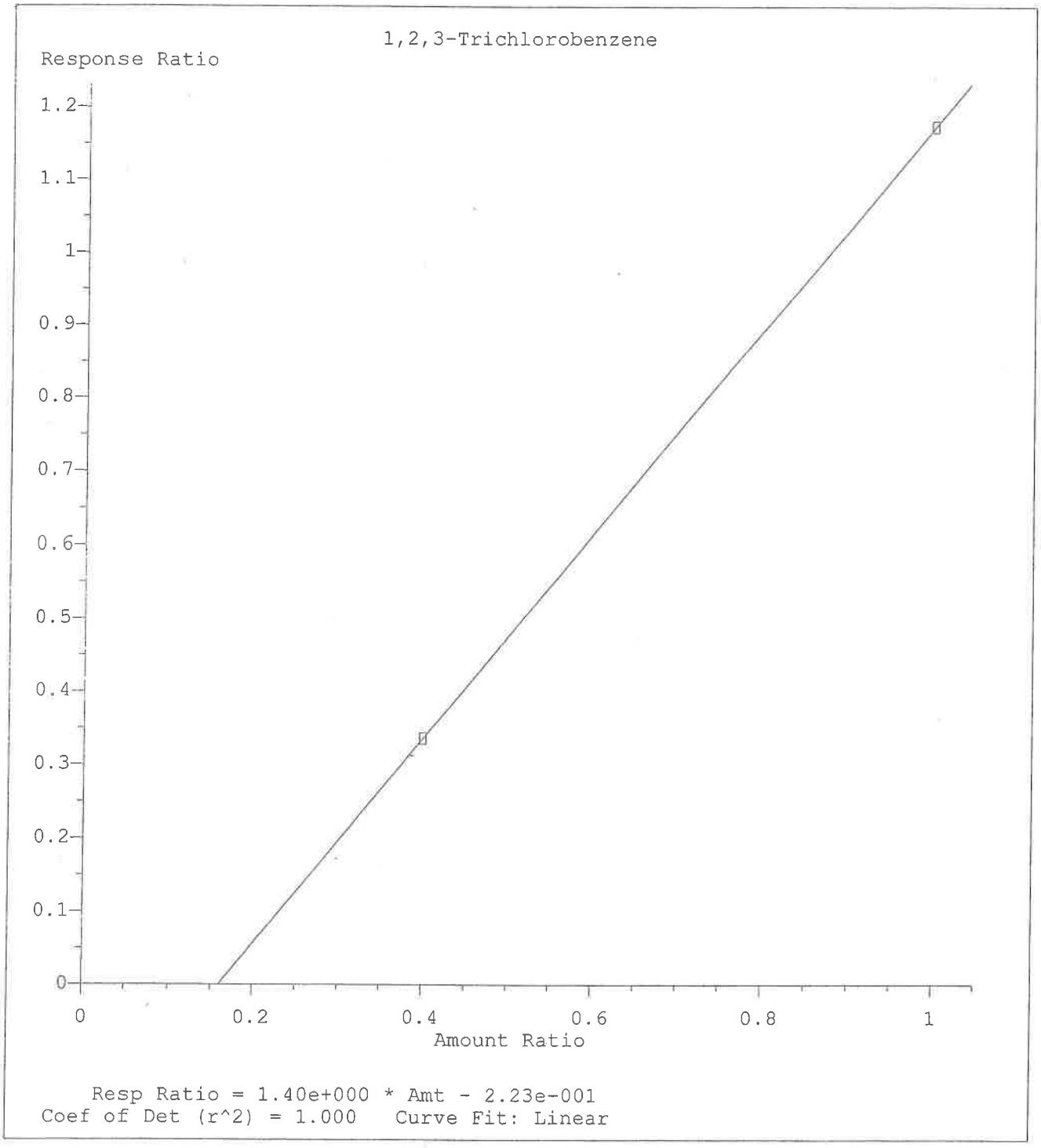
Method Name: C:\HPCHEM\1\METHODS\011402.M
Calibration Table Last Updated: Thu Jan 17 12:50:09 2002



Method Name: C:\HPCHEM\1\METHODS\011402.M
Calibration Table Last Updated: Thu Jan 17 12:50:09 2002



Method Name: C:\HPCHEM\1\METHODS\011402.M
Calibration Table Last Updated: Thu Jan 17 12:50:09 2002



Method Name: C:\HPCHEM\1\METHODS\011402.M
Calibration Table Last Updated: Thu Jan 17 12:50:09 2002

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\011402\01140205.D Vial: 4
Acq On : 14 Jan 2002 11:34 am Operator: MEG
Sample : CCV 250ng 10uL 25ppm SC00301 + SC00224 Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS_SC00223 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 17 12:50 2002 Quant Results File: 011402.RES

Quant Method : C:\HPCHEM\1\METHODS\011402.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Thu Jan 17 12:50:09 2002
Response via : Initial Calibration
DataAcq Meth : AQ_8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	8.67	96	27140	250.00	ng	0.00
32) Chlorobenzene-d5	12.22	117	17083	250.00	ng	0.00
45) 1,4-Dichlorobenzene-d4	15.16	152	10689	250.00	ng	0.00
System Monitoring Compounds						
16) Dibromofluoromethane	7.81	113	7600	250.00	ng	0.00
Spiked Amount 250.000			Recovery = 100.00%			
17) 1,2-Dichloroethane-d4	8.40	65	9898	250.00	ng	0.00
Spiked Amount 250.000			Recovery = 100.00%			
29) Toluene-d8	10.36	98	23099	250.00	ng	0.00
Spiked Amount 250.000			Recovery = 100.00%			
43) 4-Bromofluorobenzene	13.71	95	9520	253.21	ng	0.00
Spiked Amount 250.000			Recovery = 101.28%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	3.78	85	12613	250.00	ng	100
3) Chloromethane	4.11	50	17229	250.00	ng	100
4) Vinyl chloride	4.20	62	12633	250.00	ng	100
5) Bromomethane	4.62	94	4960	250.00	ng	100
6) Chloroethane	4.77	64	9314	250.00	ng	100
7) Trichlorofluoromethane	4.93	101	16668	250.00	ng	100
8) 1,1-Dichloroethene	5.51	96	9829	250.00	ng	100
9) Methylene chloride	6.08	84	11797	250.00	ng	100
10) trans-1,2-Dichloroethene	6.23	96	10587	250.00	ng	100
11) 1,1-Dichloroethane	6.85	63	18702	250.00	ng	100
12) cis-1,2-Dichloroethene	7.38	96	9818	250.00	ng	100
13) 2,2-Dichloropropane	7.50	77	14594	250.00	ng	100
14) Bromochloromethane	7.60	128	4868	250.00	ng	100
15) Chloroform	7.61	83	16571	250.00	ng	100
18) 1,1,1-Trichloroethane	7.88	97	12591	250.00	ng	100
19) Carbon tetrachloride	7.83	117	12132	250.00	ng	100
20) 1,1-Dichloropropene	8.00	75	12768	250.00	ng	100
21) Benzene	8.26	78	32329	250.00	ng	100
22) 1,2-Dichloroethane	8.46	62	14005	250.00	ng	100
23) Trichloroethene	8.85	95	8302	203.00	ng	100
24) 1,2-Dichloropropane	9.43	63	9073	250.00	ng	100
25) Dibromomethane	9.33	93	5608	250.00	ng	100
26) Bromodichloromethane	9.45	83	12569	250.00	ng	100
27) cis-1,3-Dichloropropene	10.14	75	14576	250.00	ng	100
28) Toluene	10.43	92	20161	250.00	ng	100
30) trans-1,3-Dichloropropene	10.86	75	12977	250.00	ng	100
31) 1,1,2-Trichloroethane	11.07	83	6057	250.00	ng	100
33) Tetrachloroethene	10.90	164	6908	254.62	ng	100
34) 1,3-Dichloropropane	11.42	76	13512	253.80	ng	100
35) Dibromochloromethane	11.32	129	8130	257.70	ng	100
36) 1,2-Dibromoethane	11.66	107	7664	258.07	ng	100
37) Chlorobenzene	12.25	112	18893	252.20	ng	100
38) 1,1,1,2-Tetrachloroethane	12.30	131	8468	258.52	ng	100
39) Ethyl benzene	12.22	91	34484	256.35	ng	100
40) m,p-Xylene	12.38	106	25403	251.41	ng	100
41) o-Xylene	12.93	106	13089	260.21	ng	100

(#) = qualifier out of range (m) = manual integration

01/23/02

11/17/02

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\011402\01140205.D Vial: 4
Acq On : 14 Jan 2002 11:34 am Operator: MEG
Sample : CCV 250ng 10uL 25ppm SC00301 + SC00224 Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS_SC00223 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 17 12:50 2002 Quant Results File: 011402.RES

Quant Method : C:\HPCHEM\1\METHODS\011402.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Thu Jan 17 12:50:09 2002
Response via : Initial Calibration
DataAcq Meth : AQ_8260

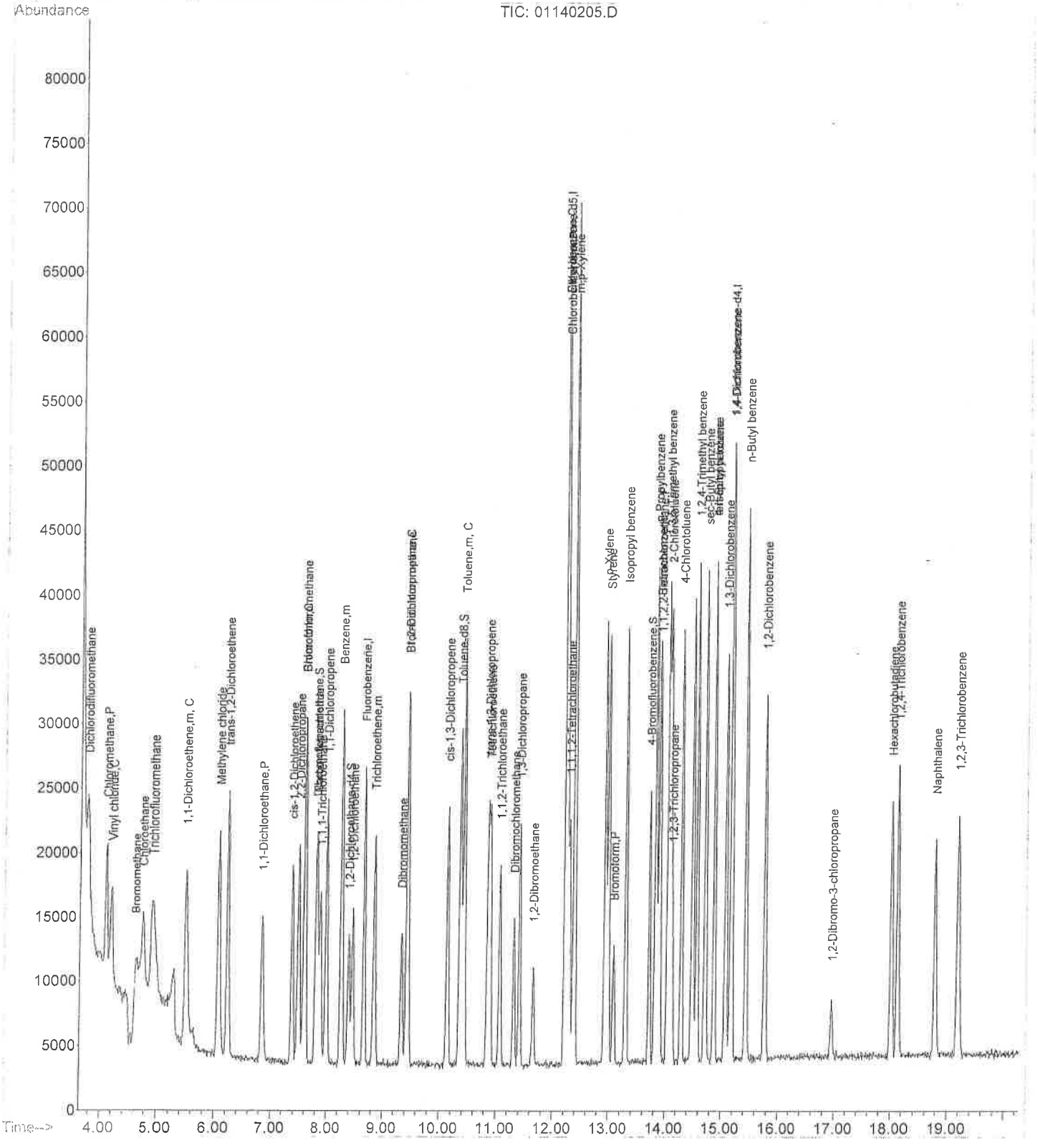
	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
42)	Styrene	12.99	104	22302	263.18 ng	100
44)	Bromoform	13.09	173	5921	257.63 ng	100
46)	Isopropyl benzene	13.30	105	32476	285.52 ng	100
47)	Bromobenzene	13.89	156	9404	280.88 ng	100
48)	1,1,2,2-Tetrachloroethane	13.90	83	9909	280.58 ng	100
49)	1,2,3-Trichloropropane	14.13	75	7676	262.10 ng	100
50)	n-Propylbenzene	13.83	91	44972	286.39 ng	100
51)	2-Chlorotoluene	14.08	91	29806	283.22 ng	100
52)	4-Chlorotoluene	14.30	91	27482	285.05 ng	100
53)	1,3,5-Trimethyl benzene	14.04	105	27004	284.15 ng	100
54)	tert-Butyl benzene	14.87	119	32507	283.55 ng	100
55)	1,2,4-Trimethyl benzene	14.57	105	28714	285.59 ng	100
56)	sec-Butyl benzene	14.72	105	39893	280.87 ng	100
57)	1,3-Dichlorobenzene	15.08	146	17798	283.17 ng	100
58)	4-Isopropyl toluene	14.87	119	32507	283.55 ng	100
59)	1,4-Dichlorobenzene	15.18	146	17477	281.68 ng	100
60)	1,2-Dichlorobenzene	15.77	146	16806	282.40 ng	100
61)	n-Butyl benzene	15.44	91	34224	285.68 ng	100
62)	1,2-Dibromo-3-chloropropan	16.96	75	1706	285.80 ng	100
63)	1,2,4-Trichlorobenzene	18.13	180	13380	250.00 ng	100
64)	Hexachlorobutadiene	18.01	225	7296	250.00 ng	100
65)	Naphthalene	18.80	128	25446	250.00 ng	100
66)	1,2,3-Trichlorobenzene	19.19	180	12557	250.00 ng	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\011402\01140205.D Vial: 4
Acq On : 14 Jan 2002 11:34 am Operator: MEG
Sample : CCV 250ng 10uL 25ppm SC00301 + SC00224 Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS_SC00223 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 17 12:50 2002 Quant Results File: 011402.RES

Method : C:\HPCHEM\1\METHODS\011402.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Thu Jan 17 12:50:09 2002
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\011402\01140206.D Vial: 5
Acq On : 14 Jan 2002 12:07 pm Operator: MEG
Sample : ICAL LEVEL 2 100ng Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS/SS_SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 17 12:52 2002 Quant Results File: 011402.RES

Quant Method : C:\HPCHEM\1\METHODS\011402.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Thu Jan 17 12:50:09 2002
Response via : Initial Calibration
DataAcq Meth : AQ_8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	8.67	96	32946	250.00	ng	0.00
32) Chlorobenzene-d5	12.22	117	36376	250.00	ng	0.00
45) 1,4-Dichlorobenzene-d4	15.16	152	23366	250.00	ng	0.00
System Monitoring Compounds						
16) Dibromofluoromethane	7.81	113	5980	100.00	ng	0.00
Spiked Amount 250.000			Recovery = 40.00%			
17) 1,2-Dichloroethane-d4	8.39	65	7621	100.00	ng	0.00
Spiked Amount 250.000			Recovery = 40.00%			
29) Toluene-d8	10.36	98	17592	100.00	ng	0.00
Spiked Amount 250.000			Recovery = 40.00%			
43) 4-Bromofluorobenzene	13.71	95	6805	85.00	ng	0.00
Spiked Amount 250.000			Recovery = 34.00%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	3.79	85	8795	100.00	ng	94
3) Chloromethane	4.10	50	11615	100.00	ng	90
4) Vinyl chloride	4.19	62	8906	100.00	ng	93
5) Bromomethane	4.62	94	3465m	102.20	ng	
6) Chloroethane	4.77	64	6149	100.00	ng	94
7) Trichlorofluoromethane	4.92	101	11132	100.00	ng	98
8) 1,1-Dichloroethene	5.49	96	5696	100.00	ng	98
9) Methylene chloride	6.07	84	12287	100.00	ng	98
10) trans-1,2-Dichloroethene	6.23	96	7602	100.00	ng	99
11) 1,1-Dichloroethane	6.84	63	13088	100.00	ng	97
12) cis-1,2-Dichloroethene	7.37	96	7182	100.00	ng	94
13) 2,2-Dichloropropane	7.50	77	9950	100.00	ng	99
14) Bromochloromethane	7.60	128	3358	100.00	ng	98
15) Chloroform	7.60	83	11310	100.00	ng	98
18) 1,1,1-Trichloroethane	7.89	97	8723	100.00	ng	93
19) Carbon tetrachloride	7.82	117	8366	100.00	ng	99
20) 1,1-Dichloropropene	7.99	75	8745	100.00	ng	99
21) Benzene	8.26	78	23125	100.00	ng	99
22) 1,2-Dichloroethane	8.46	62	9405	100.00	ng	99
23) Trichloroethene	8.85	95	5898	118.80	ng	90
24) 1,2-Dichloropropane	9.43	63	6264	100.00	ng	96
25) Dibromomethane	9.34	93	3921	100.00	ng	94
26) Bromodichloromethane	9.45	83	8373	100.00	ng	97
27) cis-1,3-Dichloropropene	10.14	75	9786	100.00	ng	94
28) Toluene	10.43	92	13916	100.00	ng	94
30) trans-1,3-Dichloropropene	10.86	75	8749	100.00	ng	94
31) 1,1,2-Trichloroethane	11.07	83	4249	100.00	ng	96
33) Tetrachloroethene	10.90	164	4885	84.56	ng	98
34) 1,3-Dichloropropane	11.42	76	9615	84.82	ng	87
35) Dibromochloromethane	11.32	129	5616	83.60	ng	99
36) 1,2-Dibromoethane	11.66	107	5279	83.48	ng	96
37) Chlorobenzene	12.25	112	13609	85.32	ng	97
38) 1,1,1,2-Tetrachloroethane	12.29	131	5813	83.34	ng	95
39) Ethyl benzene	12.21	91	24067	84.02	ng	99
40) m,p-Xylene	12.38	106	18409	85.56	ng	96
41) o-Xylene	12.93	106	8870	82.81	ng	91

(#) = qualifier out of range (m) = manual integration
01140206.D 011402.M Thu Jan 17 12:52:58 2002

01/23/02

1/17/02

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\011402\01140206.D Vial: 5
Acq On : 14 Jan 2002 12:07 pm Operator: MEG
Sample : ICAL LEVEL 2 100ng Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS/SS_SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 17 12:52 2002 Quant Results File: 011402.RES

Quant Method : C:\HPCHEM\1\METHODS\011402.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Thu Jan 17 12:50:09 2002
Response via : Initial Calibration
DataAcq Meth : AQ_8260

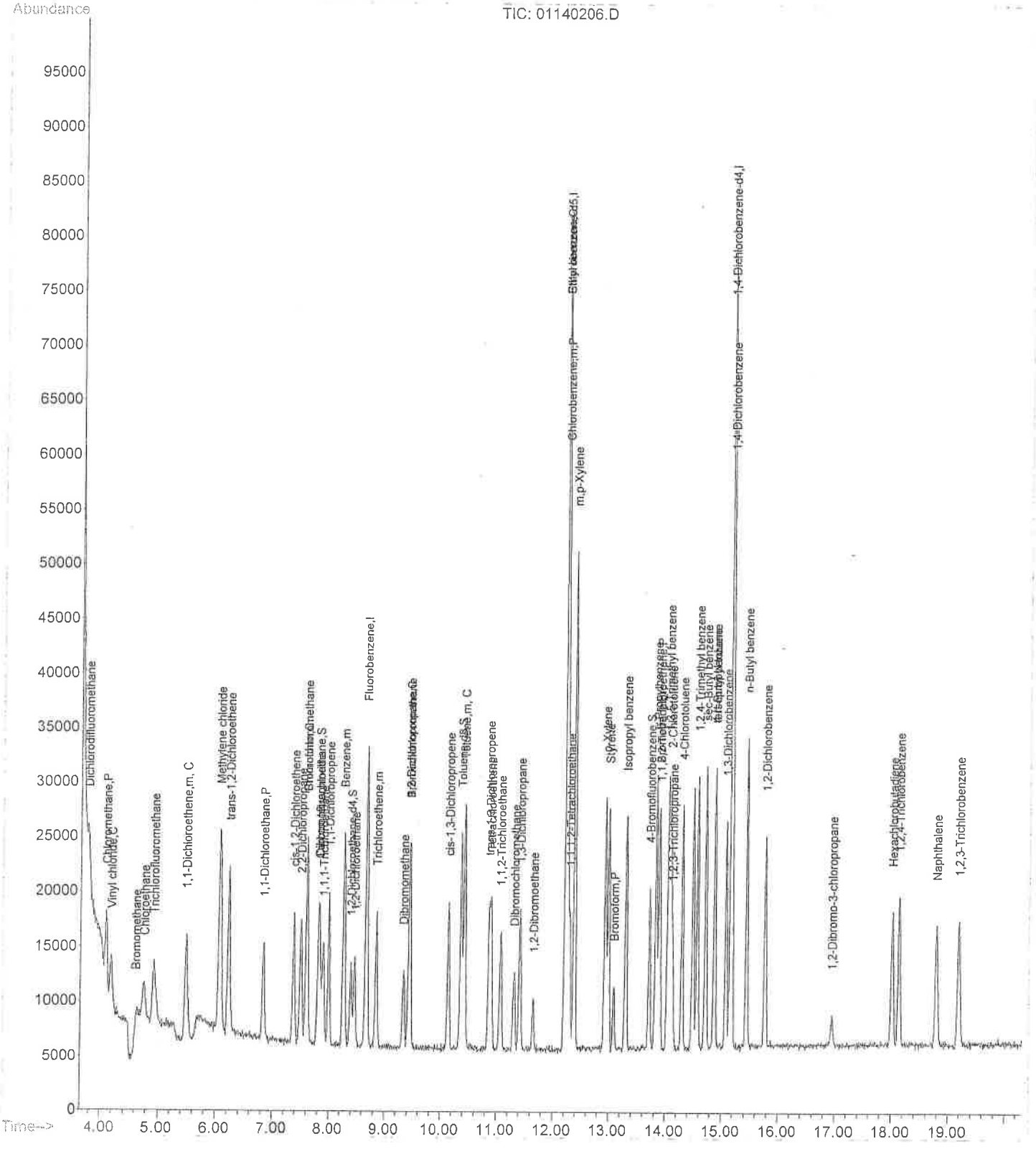
	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
42)	Styrene	12.99	104	14775	81.88	ng		97
44)	Bromoform	13.09	173	4092	83.62	ng		89
46)	Isopropyl benzene	13.30	105	21332	85.79	ng		100
47)	Bromobenzene	13.88	156	6415	87.65	ng		92
48)	1,1,2,2-Tetrachloroethane	13.90	83	6776	87.77	ng		99
49)	1,2,3-Trichloropropane	14.12	75	5183	80.96	ng		99
50)	n-Propylbenzene	13.83	91	29329	85.44	ng		95
51)	2-Chlorotoluene	14.09	91	19949	86.71	ng		100
52)	4-Chlorotoluene	14.29	91	18120	85.98	ng		98
53)	1,3,5-Trimethyl benzene	14.04	105	17937	86.34	ng		100
54)	tert-Butyl benzene	14.87	119	21698	86.58	ng		97
55)	1,2,4-Trimethyl benzene	14.57	105	18850	85.76	ng		100
56)	sec-Butyl benzene	14.71	105	27215	87.65	ng		100
57)	1,3-Dichlorobenzene	15.08	146	11917	86.73	ng		96
58)	4-Isopropyl toluene	14.87	119	21698	86.58	ng		97
59)	1,4-Dichlorobenzene	15.18	146	11844	87.33	ng		94
60)	1,2-Dichlorobenzene	15.77	146	11323	87.04	ng		95
61)	n-Butyl benzene	15.44	91	22451	85.73	ng		96
62)	1,2-Dibromo-3-chloropropan	16.94	75	1118	85.68	ng	#	75
63)	1,2,4-Trichlorobenzene	18.13	180	8518	100.00	ng		93
64)	Hexachlorobutadiene	18.01	225	4674	100.00	ng		92
65)	Naphthalene	18.79	128	16516	100.00	ng		100
66)	1,2,3-Trichlorobenzene	19.20	180	7852	100.00	ng		99

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\011402\01140206.D Vial: 5
Acq On : 14 Jan 2002 12:07 pm Operator: MEG
Sample : ICAL LEVEL 2 100ng Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS/SS_SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 17 12:52 2002 Quant Results File: 011402.RES

Method : C:\HPCHEM\1\METHODS\011402.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Thu Jan 17 12:50:09 2002
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\011402\01140207.D Vial: 8
Acq On : 14 Jan 2002 12:33 pm Operator: MEG
Sample : PES0114-03 / C8-20.0 / 1.0g 5X Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS/SS_SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 14 14:48 2002 Quant Results File: 011402.RES

Quant Method : C:\HPCHEM\1\METHODS\011402.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Mon Jan 14 14:44:40 2002
Response via : Initial Calibration
DataAcq Meth : AQ_8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	8.67	96	61778	250.00	ng	0.00
32) Chlorobenzene-d5	12.22	117	40795	250.00	ng	0.00
45) 1,4-Dichlorobenzene-d4	15.16	152	21809	250.00	ng	0.00
System Monitoring Compounds						
16) Dibromofluoromethane	7.81	113	17443	253.53	ng	0.00
Spiked Amount 250.000			Recovery = 101.41%			
17) 1,2-Dichloroethane-d4	8.39	65	20385	210.94	ng	0.00
Spiked Amount 250.000			Recovery = 84.38%			
29) Toluene-d8	10.36	98	51769	243.79	ng	0.00
Spiked Amount 250.000			Recovery = 97.52%			
43) 4-Bromofluorobenzene	13.71	95	20392	227.12	ng	0.00
Spiked Amount 250.000			Recovery = 90.85%			
Target Compounds						Qvalue
23) Trichloroethene	8.85	95	6469	69.49	ng	95

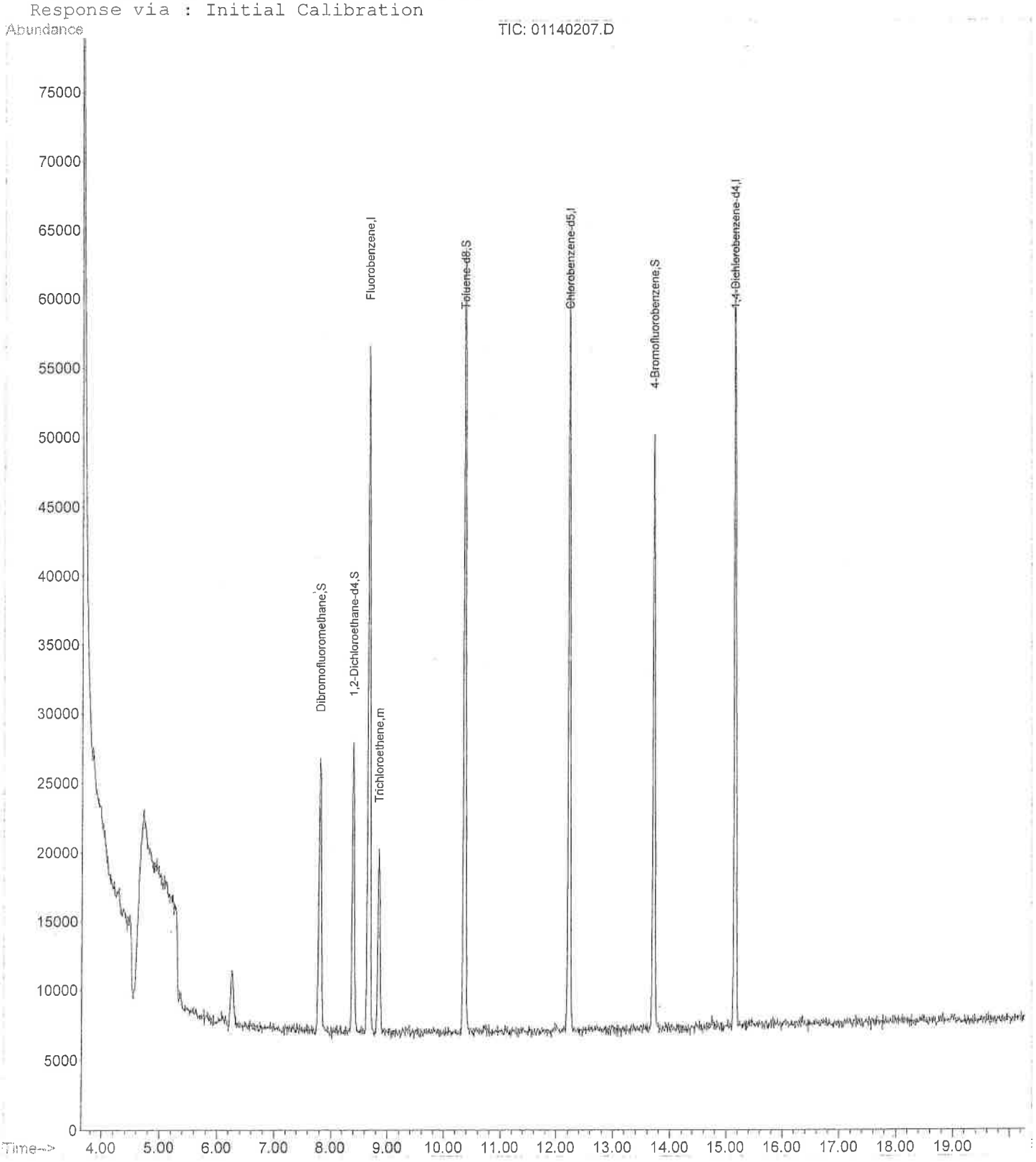
01/23/02

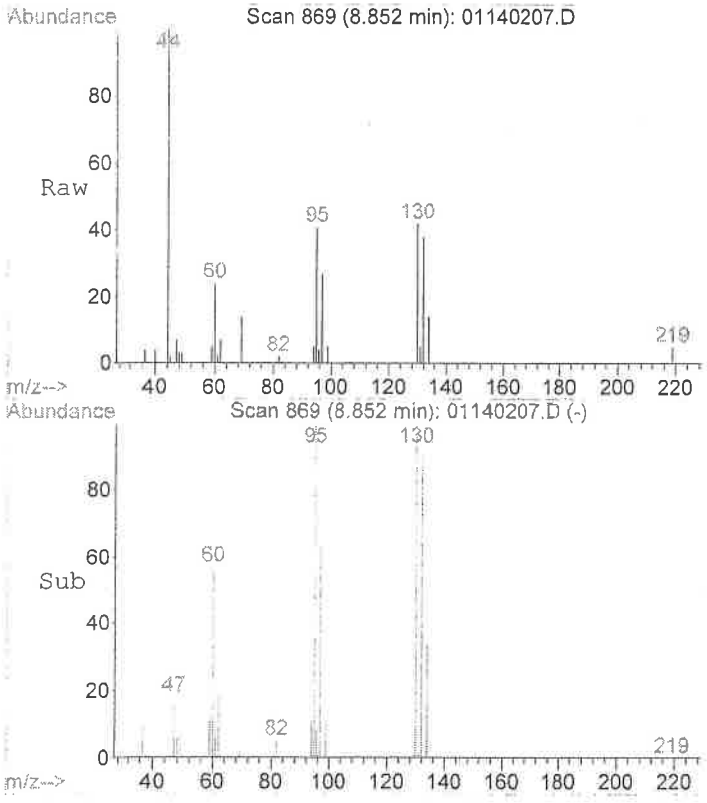
1/17/02

(#) = qualifier out of range (m) = manual integration
01140207.D 011402.M Mon Jan 14 14:48:30 2002

Data File : C:\HPCHEM\1\DATA\011402\01140207.D Vial: 8
Acq On : 14 Jan 2002 12:33 pm Operator: MEG
Sample : PES0114-03 C8-20.0 1.0g 5X Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS/SS_SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 14 14:48 2002 Quant Results File: 011402.RES

Method : C:\HPCHEM\1\METHODS\011402.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Mon Jan 14 14:44:40 2002
Response via : Initial Calibration

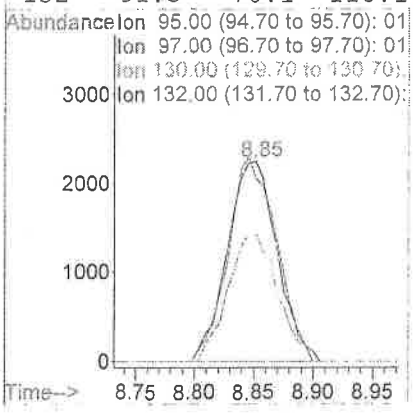




#23
Trichloroethene
Concen: 69.49 ng
RT: 8.85 min Scan# 869
Delta R.T. 0.00 min
Lab File: 01140207.D
Acq: 14 Jan 2002 12:33 pm

Tgt Ion: 95 Resp: 6469

Ion	Ratio	Lower	Upper
95	100		
97	64.2	47.4	87.4
130	101.4	72.0	112.0
132	91.5	70.1	110.1



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\011402\01140208.D Vial: 9
Acq On : 14 Jan 2002 1:04 pm Operator: MEG
Sample : PES0114-01 C6-20.5 1.0g 5X Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS/SS_SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 14 14:49 2002 Quant Results File: 011402.RES

Quant Method : C:\HPCHEM\1\METHODS\011402.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Mon Jan 14 14:44:40 2002
Response via : Initial Calibration
DataAcq Meth : AQ_8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	8.67	96	82830	250.00	ng	0.00
32) Chlorobenzene-d5	12.23	117	56858	250.00	ng	0.00
45) 1,4-Dichlorobenzene-d4	15.17	152	29869	250.00	ng	0.00
System Monitoring Compounds						
16) Dibromofluoromethane	7.81	113	23770	260.57	ng	0.00
Spiked Amount 250.000			Recovery =	104.23%		
17) 1,2-Dichloroethane-d4	8.40	65	28044	220.62	ng	0.00
Spiked Amount 250.000			Recovery =	88.25%		
29) Toluene-d8	10.37	98	72100	259.15	ng	0.00
Spiked Amount 250.000			Recovery =	103.66%		
43) 4-Bromofluorobenzene	13.71	95	27825	222.36	ng	0.00
Spiked Amount 250.000			Recovery =	88.94%		
Target Compounds						Qvalue
23) Trichloroethene	8.86	95	11242	90.07	ng	95

1/17/02

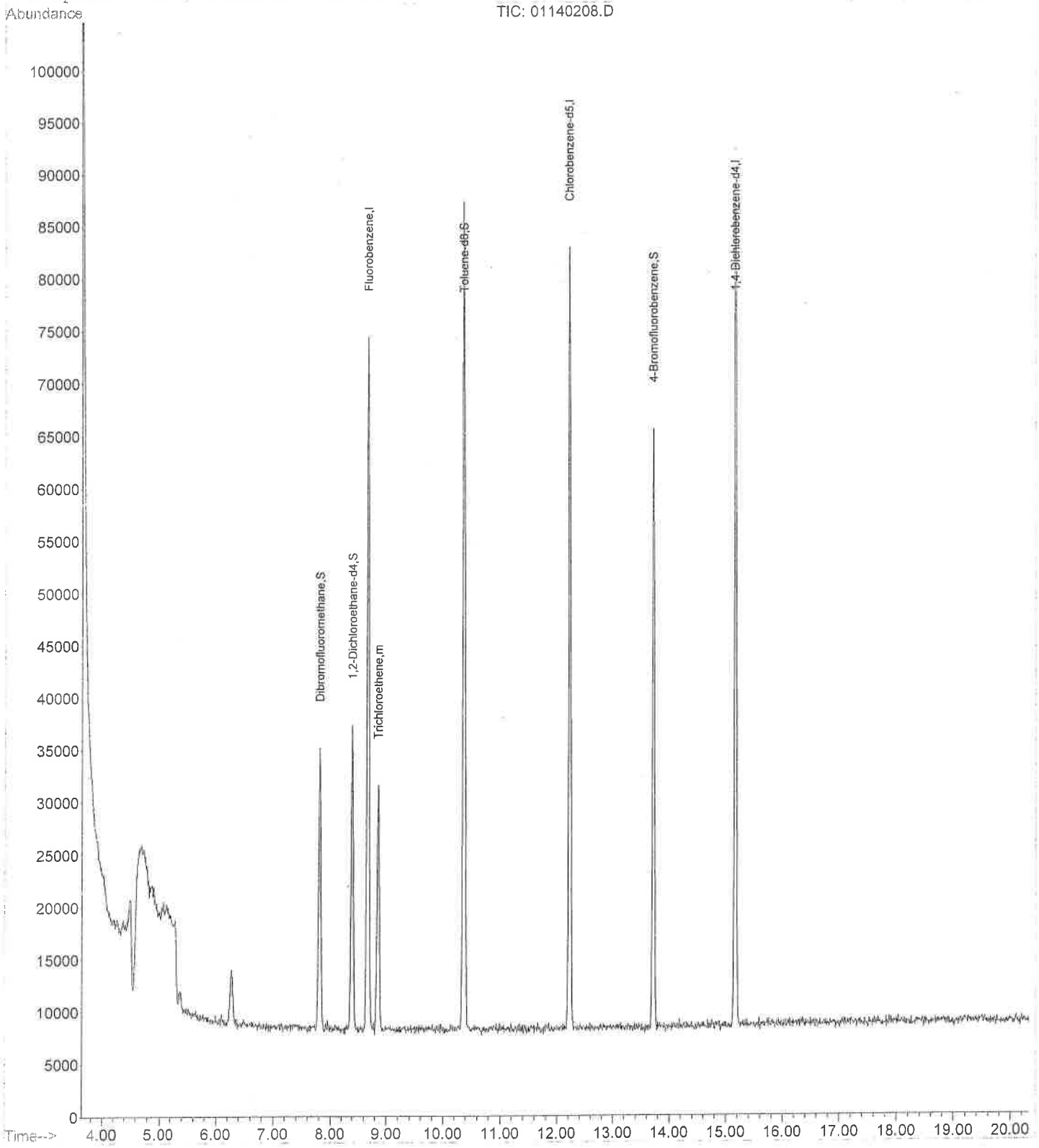
01/23/02

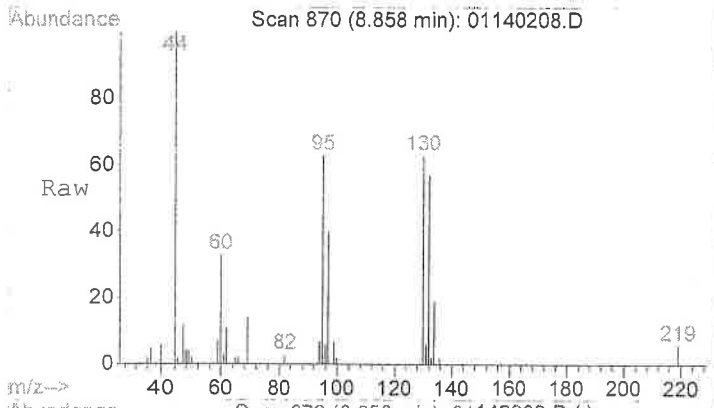
(#) = qualifier out of range (m) = manual integration
01140208.D 011402.M Mon Jan 14 14:49:37 2002

Quantitation Report

Data File : C:\HPCHEM\1\DATA\011402\01140208.D Vial: 9
Acq On : 14 Jan 2002 1:04 pm Operator: MEG
Sample : PES0114-01 C6-20.5 1.0g 5X Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS/SS_SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 14 14:49 2002 Quant Results File: 011402.RES

Method : C:\HPCHEM\1\METHODS\011402.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Mon Jan 14 14:44:40 2002
Response via : Initial Calibration

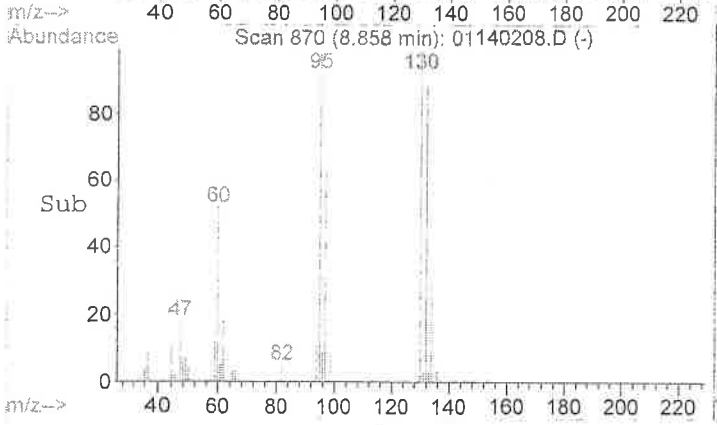


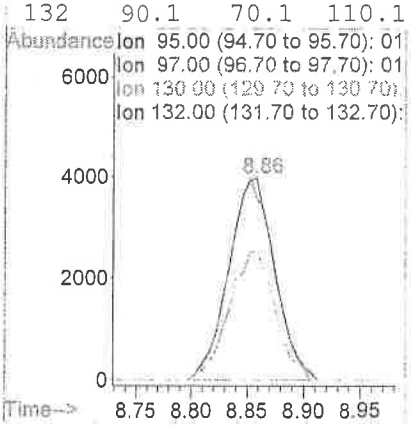


#23
Trichloroethene
Concen: 90.07 ng
RT: 8.86 min Scan# 870
Delta R.T. 0.01 min
Lab File: 01140208.D
Acq: 14 Jan 2002 1:04 pm

Tgt Ion: 95 Resp: 11242

Ion	Ratio	Lower	Upper
95	100		
97	63.6	47.4	87.4
130	100.7	72.0	112.0
132	90.1	70.1	110.1





Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\011402\01140209.D Vial: 10
Acq On : 14 Jan 2002 1:30 pm Operator: MEG
Sample : PES0114-04 E4-WEST-6.0 1.0g 5X Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS/SS_SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 14 14:50 2002 Quant Results File: 011402.RES

Quant Method : C:\HPCHEM\1\METHODS\011402.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Mon Jan 14 14:44:40 2002
Response via : Initial Calibration
DataAcq Meth : AQ_8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	8.67	96	96282	250.00	ng	0.00
32) Chlorobenzene-d5	12.23	117	63930	250.00	ng	0.00
45) 1,4-Dichlorobenzene-d4	15.16	152	32360	250.00	ng	0.00
System Monitoring Compounds						
16) Dibromofluoromethane	7.81	113	27749	262.45	ng	0.00
Spiked Amount 250.000			Recovery = 104.98%			
17) 1,2-Dichloroethane-d4	8.39	65	31956	213.11	ng	0.00
Spiked Amount 250.000			Recovery = 85.24%			
29) Toluene-d8	10.37	98	82873	254.55	ng	0.00
Spiked Amount 250.000			Recovery = 101.82%			
43) 4-Bromofluorobenzene	13.71	95	30788	218.82	ng	0.00
Spiked Amount 250.000			Recovery = 87.53%			
Target Compounds						Qvalue
23) Trichloroethene	8.85	95	5307	36.58	ng	95

1/17/02

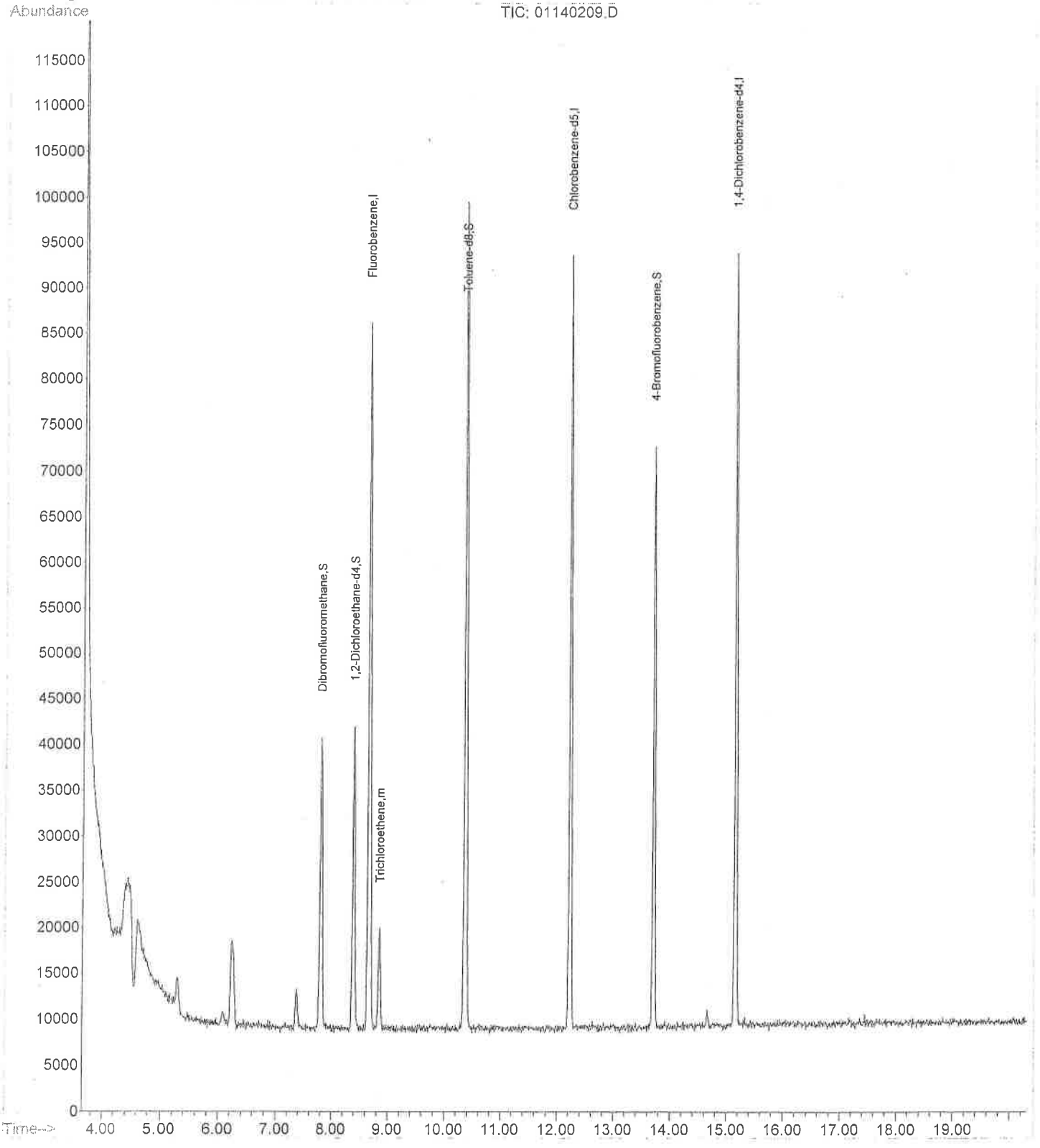
01/23/02

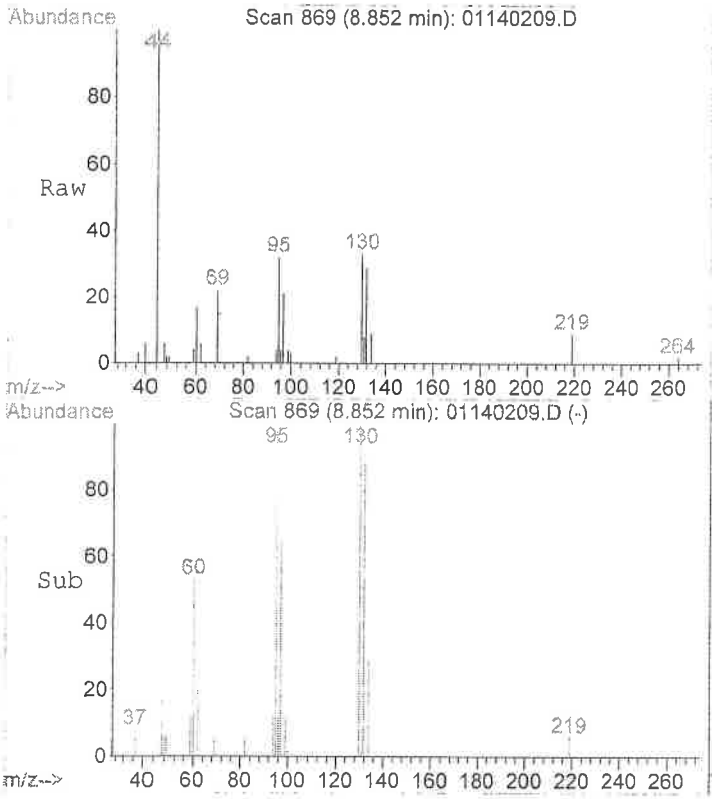
(#) = qualifier out of range (m) = manual integration
01140209.D 011402.M Mon Jan 14 14:50:57 2002 Page 1

Quantitation Report

Data File : C:\HPCHEM\1\DATA\011402\01140209.D Vial: 10
Acq On : 14 Jan 2002 1:30 pm Operator: MEG
Sample : PES0114-04 E4-WEST-6.0 1.0g 5X Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS/SS_SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 14 14:50 2002 Quant Results File: 011402.RES

Method : C:\HPCHEM\1\METHODS\011402.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Mon Jan 14 14:44:40 2002
Response via : Initial Calibration

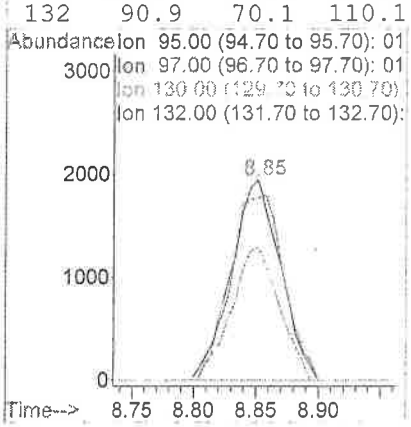




#23
Trichloroethene
Concen: 36.58 ng
RT: 8.85 min Scan# 869
Delta R.T. 0.00 min
Lab File: 01140209.D
Acq: 14 Jan 2002 1:30 pm

Tgt Ion: 95 Resp: 5307

Ion	Ratio	Lower	Upper
95	100		
97	66.2	47.4	87.4
130	102.0	72.0	112.0
132	90.9	70.1	110.1



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\011402\01140210.D Vial: 11
Acq On : 14 Jan 2002 1:56 pm Operator: MEG
Sample : PES0114-06 E8-EAST-6.0 1.0g 5X Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS/SS_SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 14 14:51 2002 Quant Results File: 011402.RES

Quant Method : C:\HPCHEM\1\METHODS\011402.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Mon Jan 14 14:44:40 2002
Response via : Initial Calibration
DataAcq Meth : AQ_8260

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene	8.67	96	107242	250.00	ng		0.00
32) Chlorobenzene-d5	12.22	117	68786	250.00	ng		0.00
45) 1,4-Dichlorobenzene-d4	15.16	152	35842	250.00	ng		0.00
System Monitoring Compounds							
16) Dibromofluoromethane	7.80	113	30871	261.93	ng	✓	0.00
Spiked Amount 250.000			Recovery = 104.77%				
17) 1,2-Dichloroethane-d4	8.40	65	35634	213.54	ng	✓	0.00
Spiked Amount 250.000			Recovery = 85.42%				
29) Toluene-d8	10.36	98	91108	249.27	ng	✓	0.00
Spiked Amount 250.000			Recovery = 99.71%				
43) 4-Bromofluorobenzene	13.71	95	33718	222.73	ng	✓	0.00
Spiked Amount 250.000			Recovery = 89.09%				
Target Compounds							Qvalue
23) Trichloroethene	8.85	95	14239	88.11	ng	✓	94

1/17/02

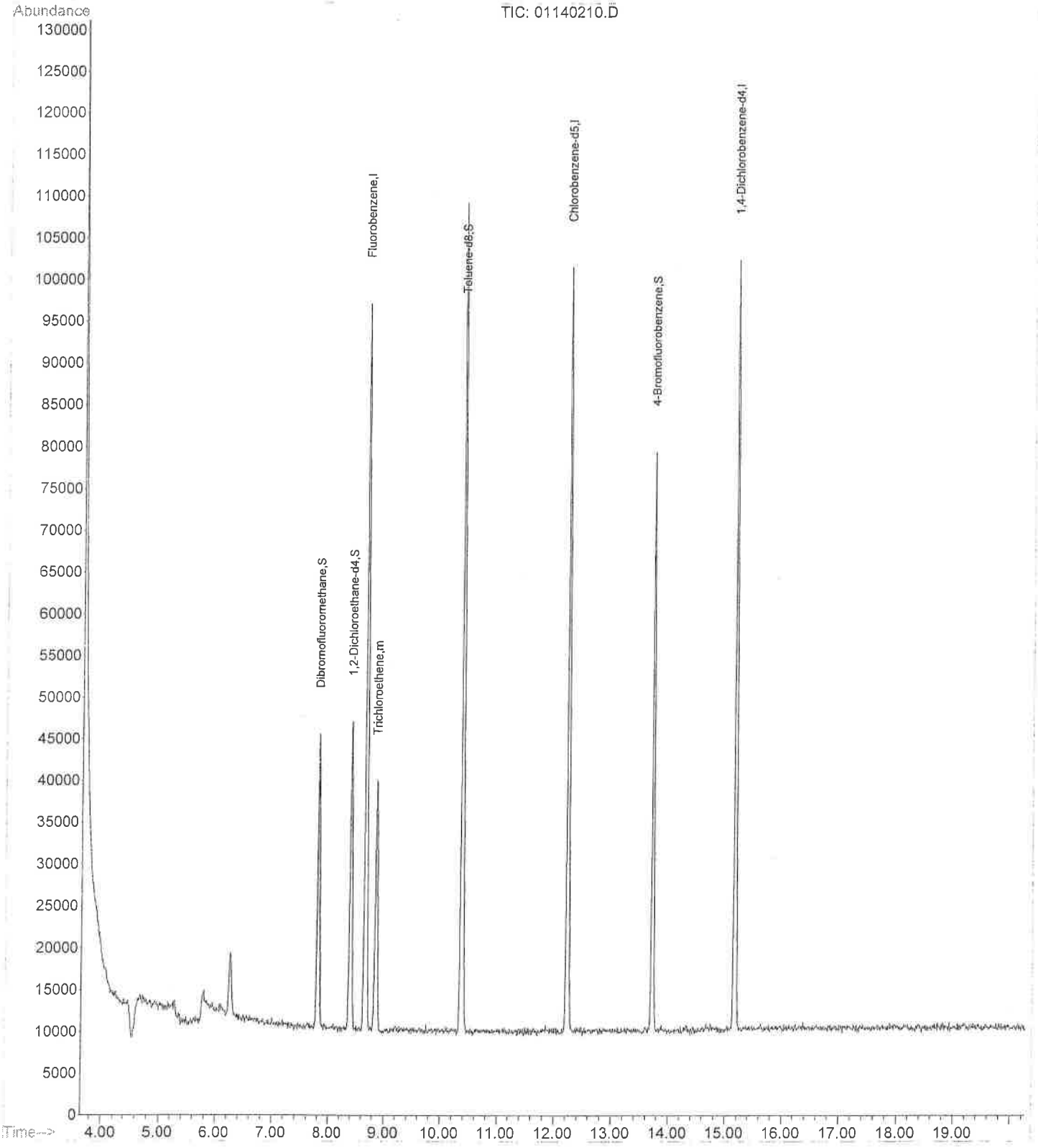
01/23/02

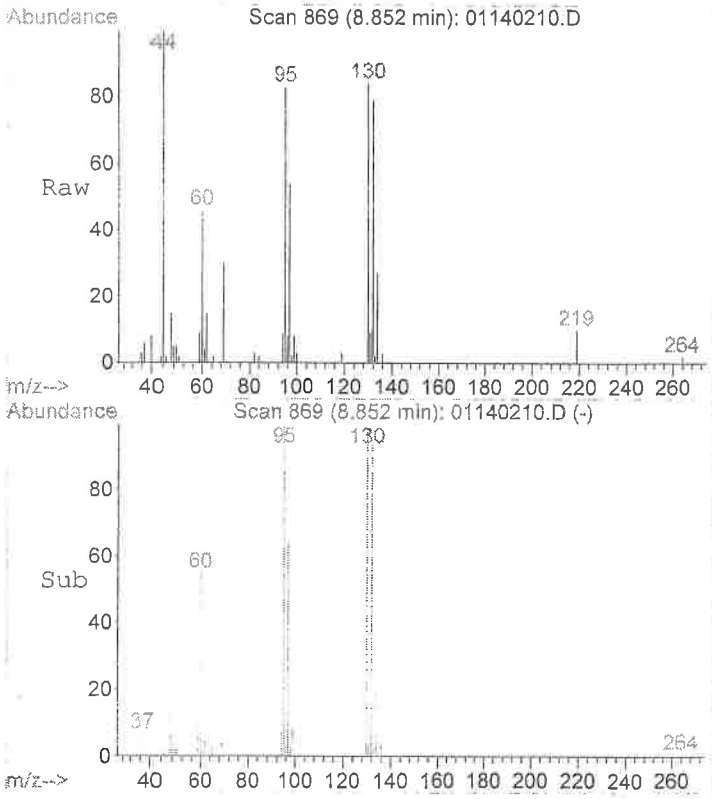
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01140210.D 011402.M Mon Jan 14 14:52:02 2002

Quantitation Report

Data File : C:\HPCHEM\1\DATA\011402\01140210.D Vial: 11
Acq On : 14 Jan 2002 1:56 pm Operator: MEG
Sample : PES0114-06 E8-EAST-6.0 1.0g 5X Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS/SS_SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 14 14:51 2002 Quant Results File: 011402.RES

Method : C:\HPCHEM\1\METHODS\011402.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Mon Jan 14 14:44:40 2002
Response via : Initial Calibration

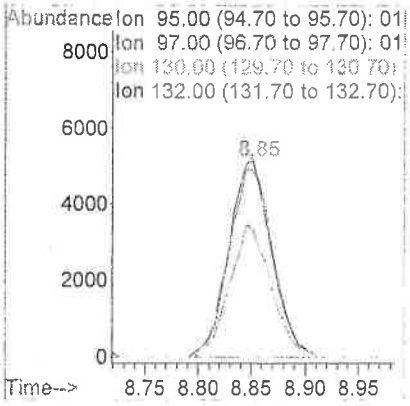




#23
Trichloroethene
Concen: 88.11 ng
RT: 8.85 min Scan# 869
Delta R.T. 0.00 min
Lab File: 01140210.D
Acq: 14 Jan 2002 1:56 pm

Tgt Ion: 95 Resp: 14239

Ion	Ratio	Lower	Upper
95	100		
97	64.7	47.4	87.4
130	100.7	72.0	112.0
132	94.8	70.1	110.1



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\011402\01140211.D Vial: 12
Acq On : 14 Jan 2002 2:20 pm Operator: MEG
Sample : PES0114-02 E5-SOUTH-5.0 1.0g 5X Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS/SS_SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 14 14:46 2002 Quant Results File: 011402.RES

Quant Method : C:\HPCHEM\1\METHODS\011402.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Mon Jan 14 14:44:40 2002
Response via : Initial Calibration
DataAcq Meth : AQ_8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	8.66	96	124069	250.00	ng	0.00
32) Chlorobenzene-d5	12.23	117	78771	250.00	ng	0.00
45) 1,4-Dichlorobenzene-d4	15.16	152	41902	250.00	ng	0.00
System Monitoring Compounds						
16) Dibromofluoromethane	7.81	113	35041	253.66	ng	0.00
Spiked Amount 250.000			Recovery = 101.46%			
17) 1,2-Dichloroethane-d4	8.39	65	40386	205.93	ng	0.00
Spiked Amount 250.000			Recovery = 82.37%			
29) Toluene-d8	10.36	98	104159	244.52	ng	0.00
Spiked Amount 250.000			Recovery = 97.81%			
43) 4-Bromofluorobenzene	13.72	95	40394	233.00	ng	0.00
Spiked Amount 250.000			Recovery = 93.20%			
Target Compounds						Qvalue
23) Trichloroethene	8.84	95	11491	61.46	ng	94

1/17/02

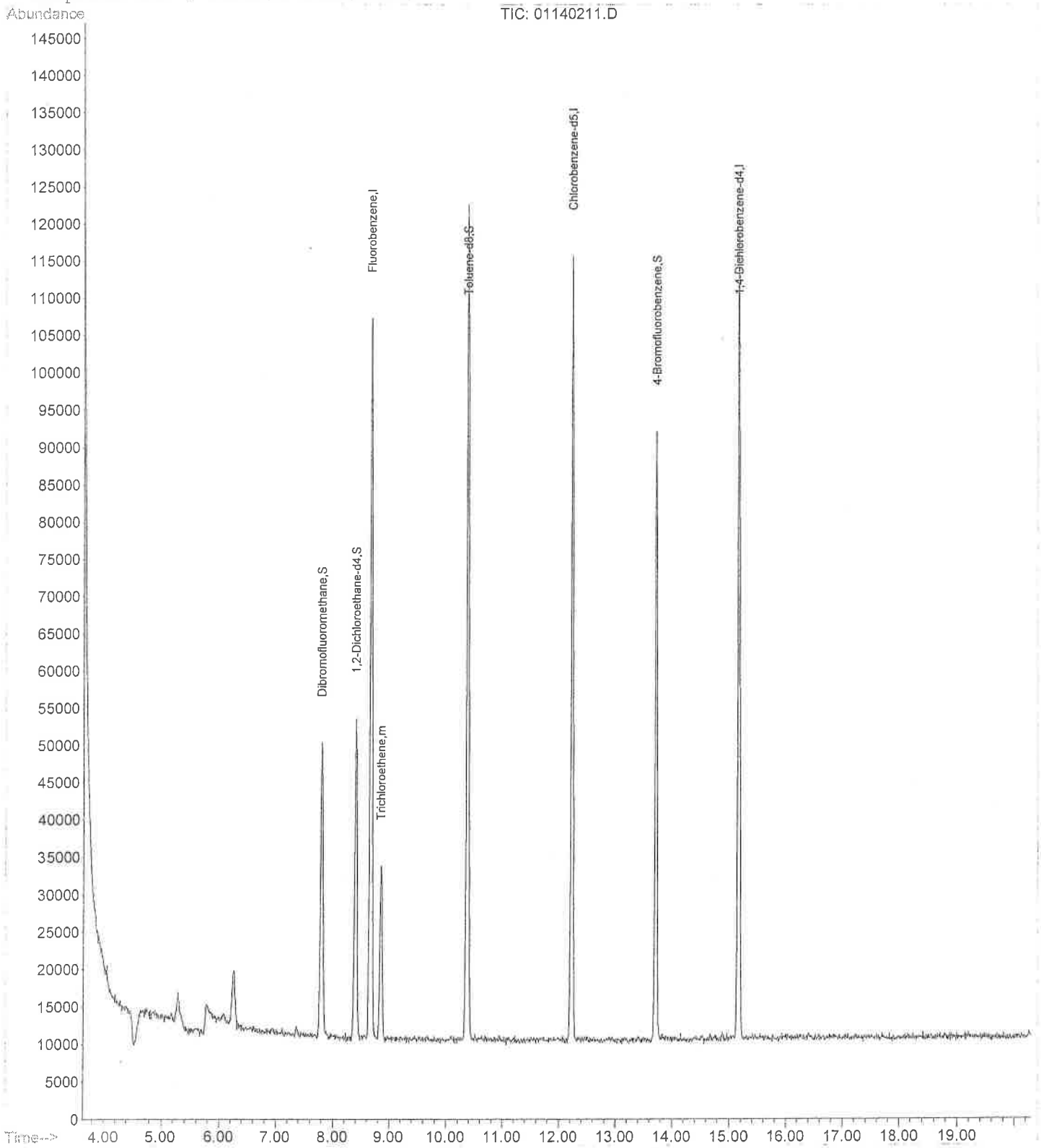
01/23/02

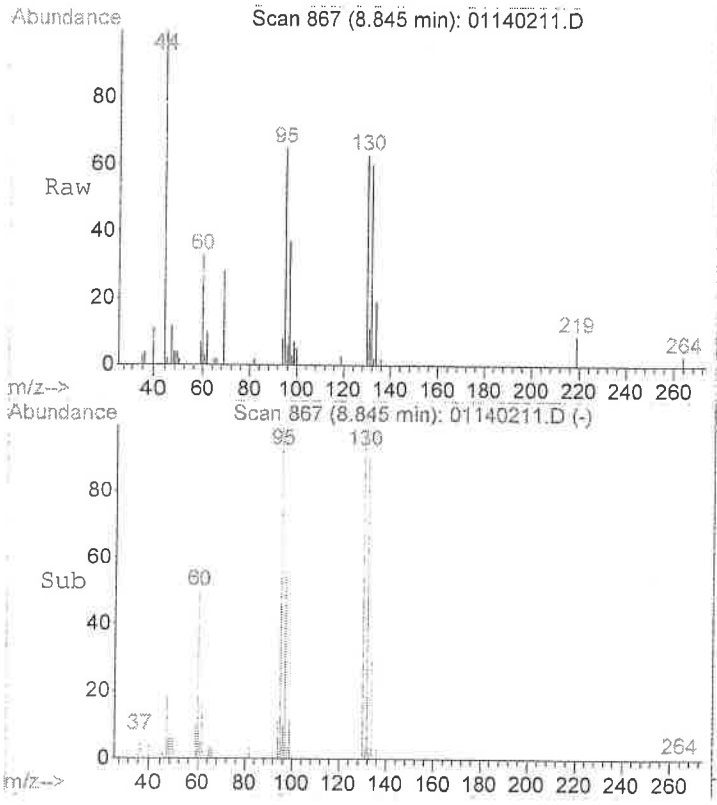
(#) = qualifier out of range (m) = manual integration
01140211.D 011402.M Mon Jan 14 14:46:34 2002

Quantitation Report

Data File : C:\HPCHEM\1\DATA\011402\01140211.D Vial: 12
Acq On : 14 Jan 2002 2:20 pm Operator: MEG
Sample : PES0114-02 E5-SOUTH-5.0 1.0g 5X Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS/SS_SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 14 14:46 2002 Quant Results File: 011402.RES

Method : C:\HPCHEM\1\METHODS\011402.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Mon Jan 14 14:44:40 2002
Response via : Initial Calibration

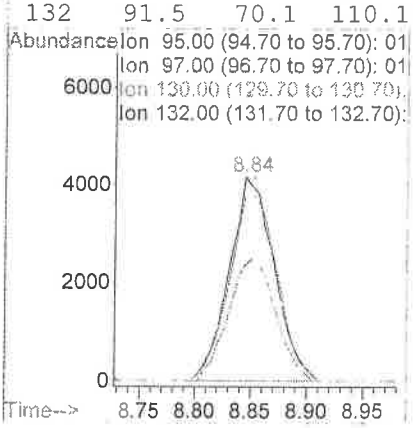




#23
Trichloroethene
Concen: 61.46 ng
RT: 8.84 min Scan# 867
Delta R.T. -0.01 min
Lab File: 01140211.D
Acq: 14 Jan 2002 2:20 pm

Tgt Ion: 95 Resp: 11491

Ion	Ratio	Lower	Upper
95	100		
97	56.4	47.4	87.4
130	95.9	72.0	112.0
132	91.5	70.1	110.1



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\011402\01140212.D Vial: 13
Acq On : 14 Jan 2002 2:45 pm Operator: MEG
Sample : PES0114-05 E7-SOUTH-8.5 1.0g 5X Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS/SS_SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 14 15:09 2002 Quant Results File: 011402.RES

Quant Method : C:\HPCHEM\1\METHODS\011402.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Mon Jan 14 14:44:40 2002
Response via : Initial Calibration
DataAcq Meth : AQ_8260

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	8.67	96	129530	250.00 ng	0.00
32) Chlorobenzene-d5	12.23	117	83924	250.00 ng	0.00
45) 1,4-Dichlorobenzene-d4	15.16	152	43977	250.00 ng	0.00
System Monitoring Compounds					
16) Dibromofluoromethane	7.80	113	36832	256.58 ng	0.00
Spiked Amount 250.000			Recovery =	102.63%	
17) 1,2-Dichloroethane-d4	8.39	65	42056	204.99 ng	0.00
Spiked Amount 250.000			Recovery =	82.00%	
29) Toluene-d8	10.36	98	109893	248.72 ng	0.00
Spiked Amount 250.000			Recovery =	99.49%	
43) 4-Bromofluorobenzene	13.72	95	42080	227.82 ng	0.00
Spiked Amount 250.000			Recovery =	91.13%	
Target Compounds					Qvalue
9) Methylene chloride	6.07	84	120	~~Below Cal~~ #ND	60
23) Trichloroethene	8.85	95	20857	106.86 ng	91

1/17/02

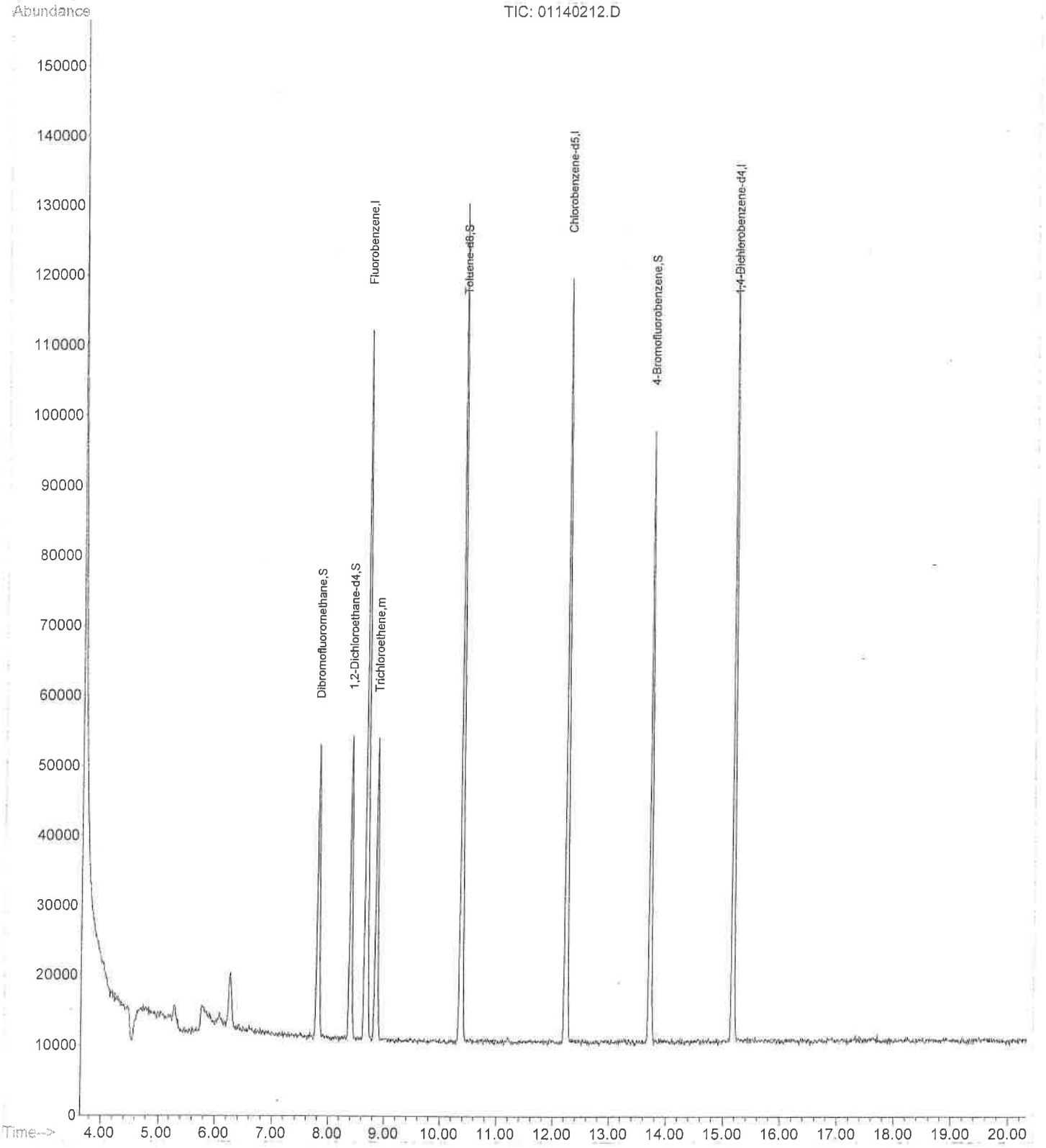
01/23/02

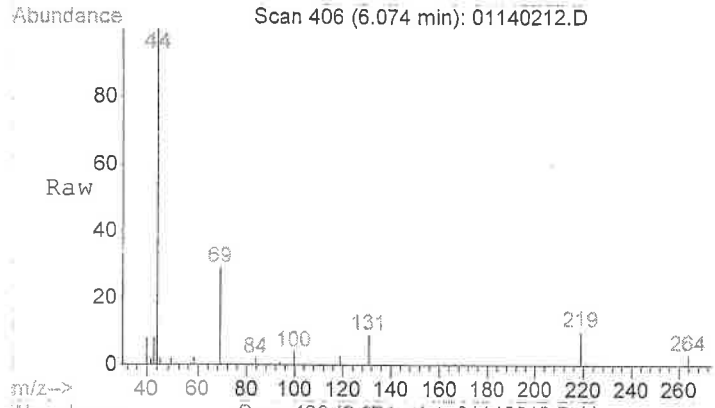
(#) = qualifier out of range (m) = manual integration
01140212.D 011402.M Mon Jan 14 15:09:30 2002

Quantitation Report

Data File : C:\HPCHEM\1\DATA\011402\01140212.D Vial: 13
Acq On : 14 Jan 2002 2:45 pm Operator: MEG
Sample : PES0114-05 E7-SOUTH-8.5 1.0g 5X Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS/SS_SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 14 15:09 2002 Quant Results File: 011402.RES

Method : C:\HPCHEM\1\METHODS\011402.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Mon Jan 14 14:44:40 2002
Response via : Initial Calibration

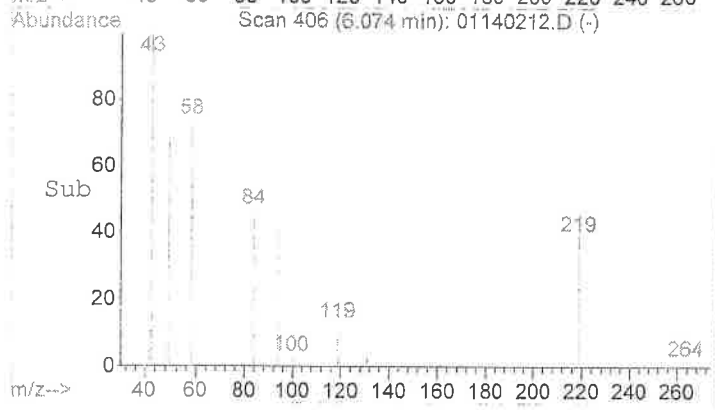


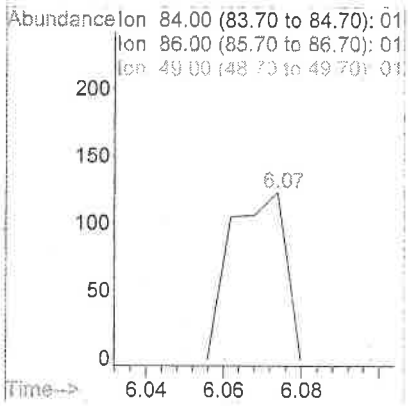


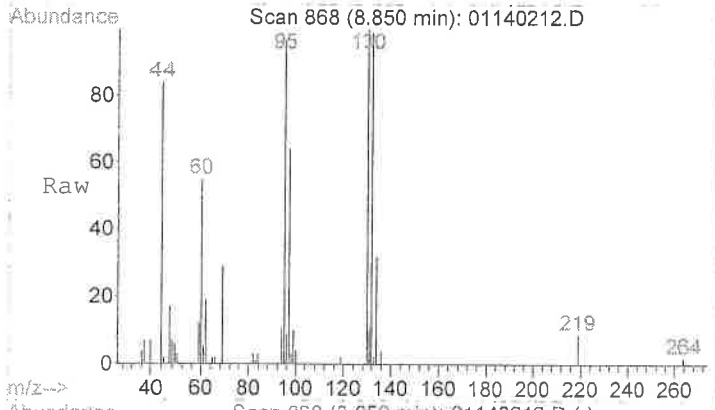
#9
Methylene chloride
Concen: Below Cal
RT: 6.07 min Scan# 406
Delta R.T. -0.00 min
Lab File: 01140212.D
Acq: 14 Jan 2002 2:45 pm

Tgt Ion: 84 Resp: 120

Ion	Ratio	Lower	Upper
84	100		
86	0.0	47.9	87.9#
49	140.7	151.7	191.7#



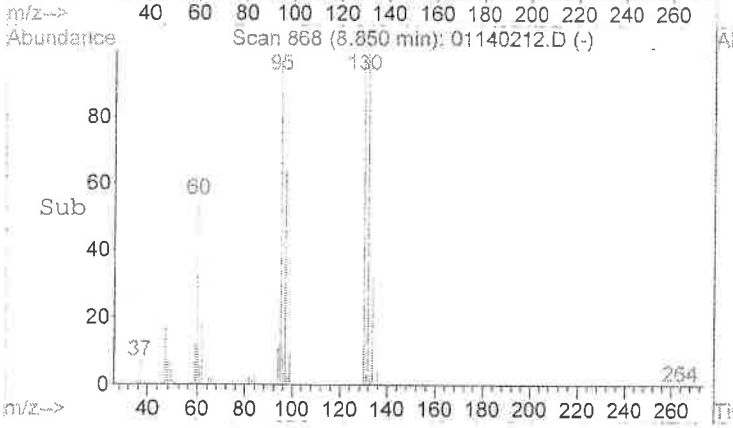


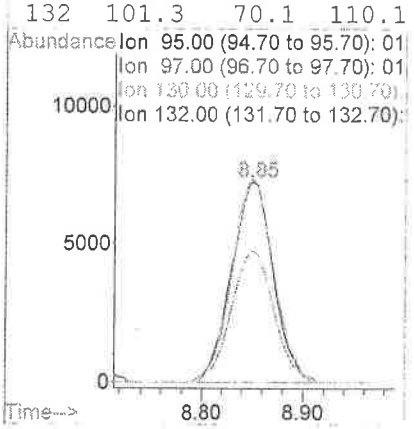


#23
Trichloroethene
Concen: 106.86 ng
RT: 8.85 min Scan# 868
Delta R.T. -0.00 min
Lab File: 01140212.D
Acq: 14 Jan 2002 2:45 pm

Tgt Ion: 95 Resp: 20857

Ion	Ratio	Lower	Upper
95	100		
97	66.0	47.4	87.4
130	102.7	72.0	112.0
132	101.3	70.1	110.1





Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\011402\01140213.D Vial: 14
Acq On : 14 Jan 2002 3:19 pm Operator: MEG
Sample : PES0114-07 C8-EAST-8.0 1.0g 5X Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS/SS_SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 14 15:40 2002 Quant Results File: 011402.RES

Quant Method : C:\HPCHEM\1\METHODS\011402.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Mon Jan 14 14:44:40 2002
Response via : Initial Calibration
DataAcq Meth : AQ_8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	8.67	96	143634	250.00	ng	0.00
32) Chlorobenzene-d5	12.22	117	89852	250.00	ng	0.00
45) 1,4-Dichlorobenzene-d4	15.16	152	47829	250.00	ng	0.00
System Monitoring Compounds						
16) Dibromofluoromethane	7.80	113	40300	250.83	ng	0.00
Spiked Amount 250.000			Recovery = 100.33%			
17) 1,2-Dichloroethane-d4	8.39	65	47263	209.91	ng	0.00
Spiked Amount 250.000			Recovery = 83.96%			
29) Toluene-d8	10.37	98	122279	250.10	ng	0.00
Spiked Amount 250.000			Recovery = 100.04%			
43) 4-Bromofluorobenzene	13.71	95	45871	231.96	ng	0.00
Spiked Amount 250.000			Recovery = 92.78%			
Target Compounds						Qvalue
23) Trichloroethene	8.85	95	7800	36.04	ng	92

1/17/02

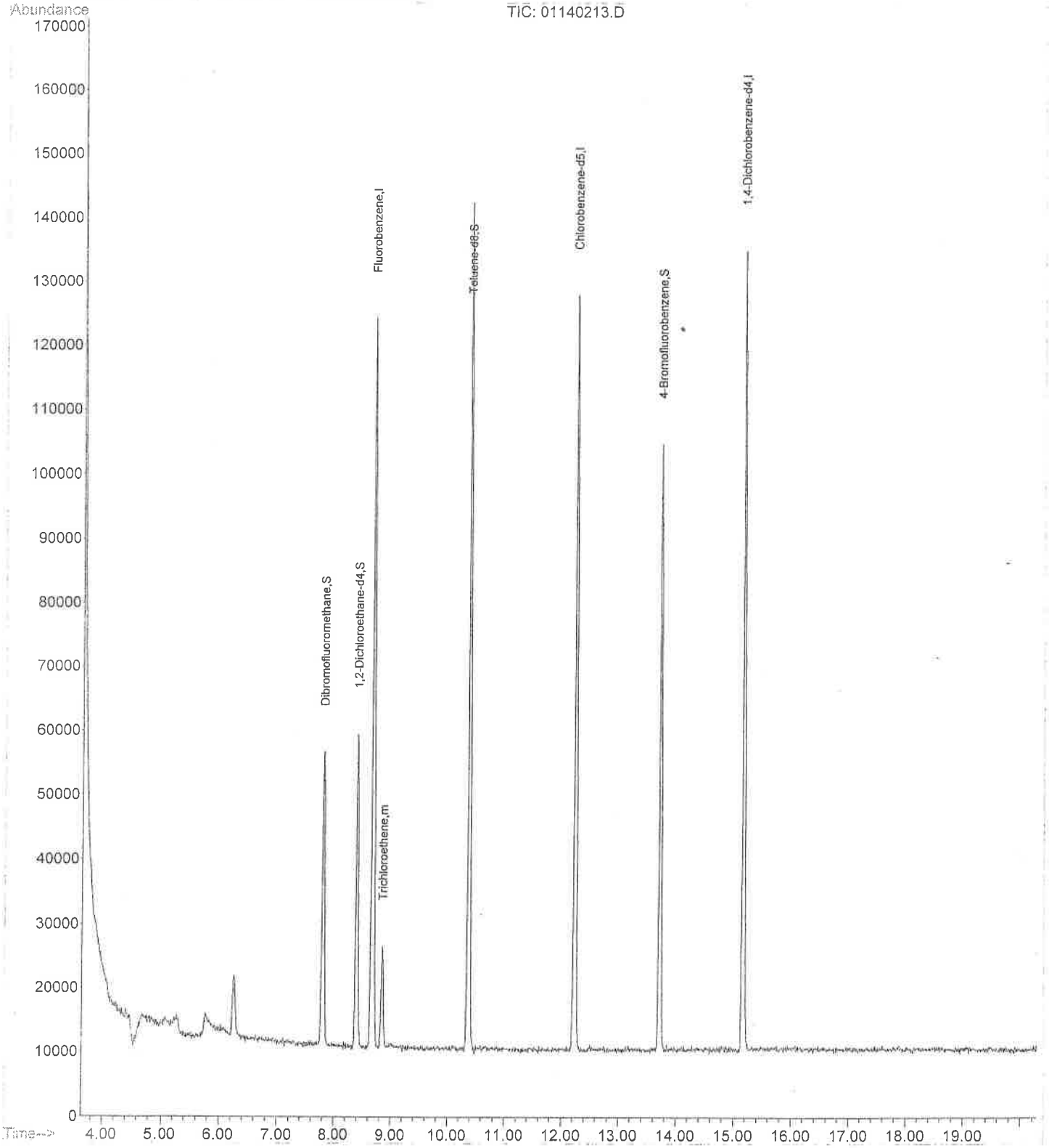
01/23/02

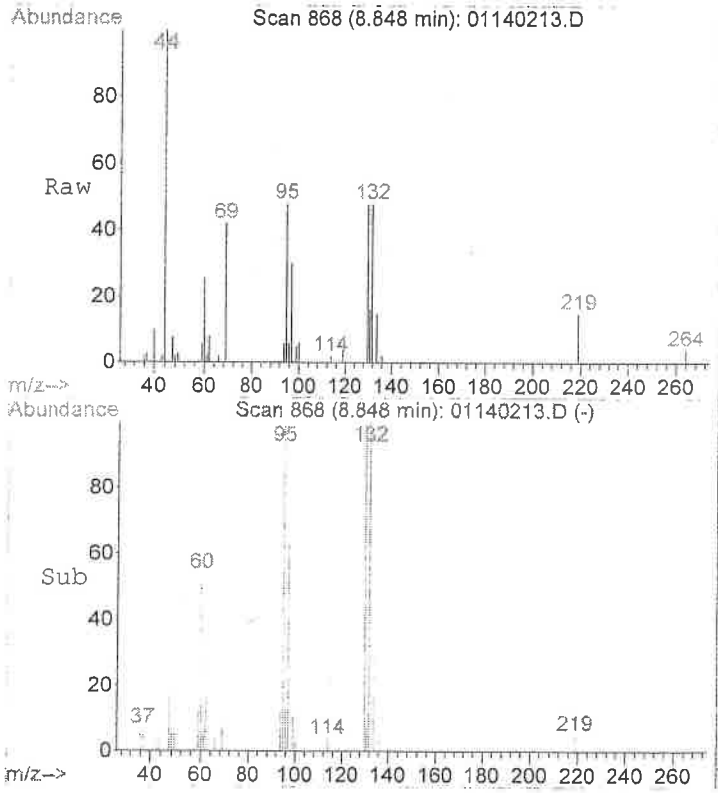
(#) = qualifier out of range (m) = manual integration
01140213.D 011402.M Mon Jan 14 15:40:46 2002

Quantitation Report

Data File : C:\HPCHEM\1\DATA\011402\01140213.D Vial: 14
Acq On : 14 Jan 2002 3:19 pm Operator: MEG
Sample : PES0114-07 C8-EAST-8.0 1.0g 5X Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS/SS_SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 14 15:40 2002 Quant Results File: 011402.RES

Method : C:\HPCHEM\1\METHODS\011402.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Mon Jan 14 14:44:40 2002
Response via : Initial Calibration

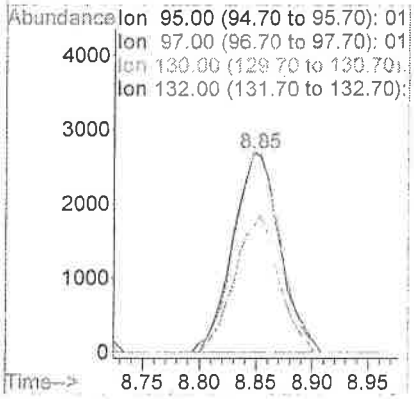




#23
Trichloroethene
Concen: 36.04 ng
RT: 8.85 min Scan# 868
Delta R.T. -0.00 min
Lab File: 01140213.D
Acq: 14 Jan 2002 3:19 pm

Tgt Ion: 95 Resp: 7800

Ion	Ratio	Lower	Upper
95	100		
97	63.5	47.4	87.4
130	99.8	72.0	112.0
132	100.7	70.1	110.1



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\011402\01140214.D Vial: 15
Acq On : 14 Jan 2002 3:43 pm Operator: MEG
Sample : PES0114-08 C4-WEST-6.0 1.0g 5X Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS/SS_SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 14 16:05 2002 Quant Results File: 011402.RES

Quant Method : C:\HPCHEM\1\METHODS\011402.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Mon Jan 14 14:44:40 2002
Response via : Initial Calibration
DataAcq Meth : AQ_8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	8.67	96	145443	250.00	ng	0.00
32) Chlorobenzene-d5	12.22	117	92592	250.00	ng	0.00
45) 1,4-Dichlorobenzene-d4	15.16	152	47903	250.00	ng	0.00
System Monitoring Compounds						
16) Dibromofluoromethane	7.80	113	41005	252.90	ng	0.00
Spiked Amount 250.000			Recovery = 101.16%			
17) 1,2-Dichloroethane-d4	8.39	65	47788	209.37	ng	0.00
Spiked Amount 250.000			Recovery = 83.75%			
29) Toluene-d8	10.37	98	124096	251.00	ng	0.00
Spiked Amount 250.000			Recovery = 100.40%			
43) 4-Bromofluorobenzene	13.71	95	45769	224.60	ng	0.00
Spiked Amount 250.000			Recovery = 89.84%			
Target Compounds						Qvalue
9) Methylene chloride	6.07	84	81	Below Cal		# ~~1~~ NP

1/17/02

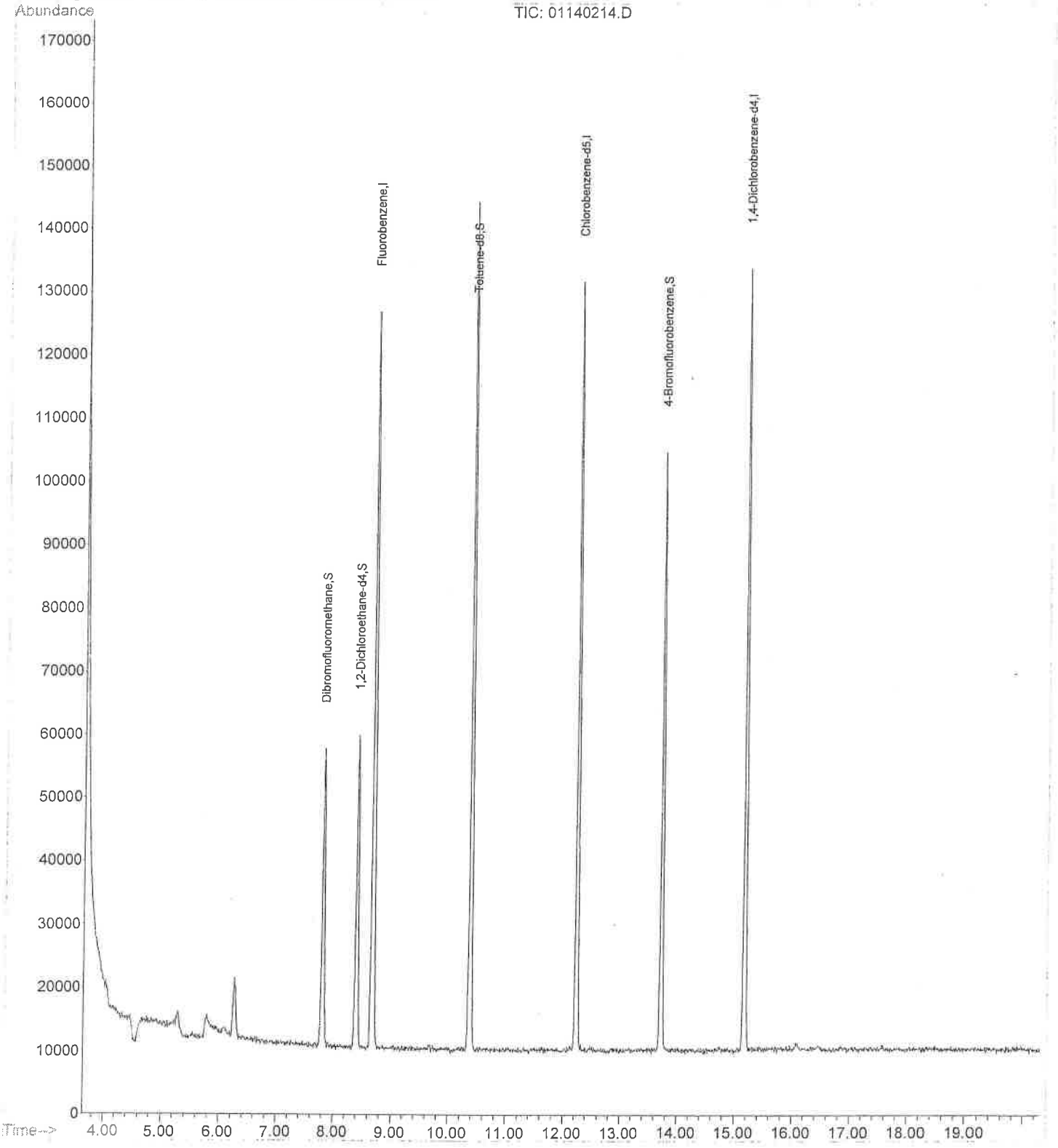
01/23/02

(#) = qualifier out of range (m) = manual integration
01140214.D 011402.M Mon Jan 14 16:05:37 2002

Quantitation Report

Data File : C:\HPCHEM\1\DATA\011402\01140214.D Vial: 15
Acq On : 14 Jan 2002 3:43 pm Operator: MEG
Sample : PES0114-08 C4-WEST-6.0 1.0g 5X Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS/SS_SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 14 16:05 2002 Quant Results File: 011402.RES

Method : C:\HPCHEM\1\METHODS\011402.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Mon Jan 14 14:44:40 2002
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\011402\01140215.D Vial: 16
Acq On : 14 Jan 2002 4:08 pm Operator: MEG
Sample : PES0114-09 COMP-B 1.0g 5X Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS/SS_SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 14 16:33 2002 Quant Results File: 011402.RES

Quant Method : C:\HPCHEM\1\METHODS\011402.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Mon Jan 14 14:44:40 2002
Response via : Initial Calibration
DataAcq Meth : AQ_8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	8.67	96	148842	250.00	ng	0.00
32) Chlorobenzene-d5	12.23	117	93577	250.00	ng	0.01
45) 1,4-Dichlorobenzene-d4	15.17	152	48336	250.00	ng	0.01
System Monitoring Compounds						
16) Dibromofluoromethane	7.81	113	41762	250.84	ng	0.00
Spiked Amount 250.000			Recovery = 100.34%			
17) 1,2-Dichloroethane-d4	8.40	65	48160	203.74	ng	0.00
Spiked Amount 250.000			Recovery = 81.50%			
29) Toluene-d8	10.37	98	124303	242.45	ng	0.01
Spiked Amount 250.000			Recovery = 96.98%			
43) 4-Bromofluorobenzene	13.72	95	47042	228.42	ng	0.01
Spiked Amount 250.000			Recovery = 91.37%			

Target Compounds Qvalue

1/17/02

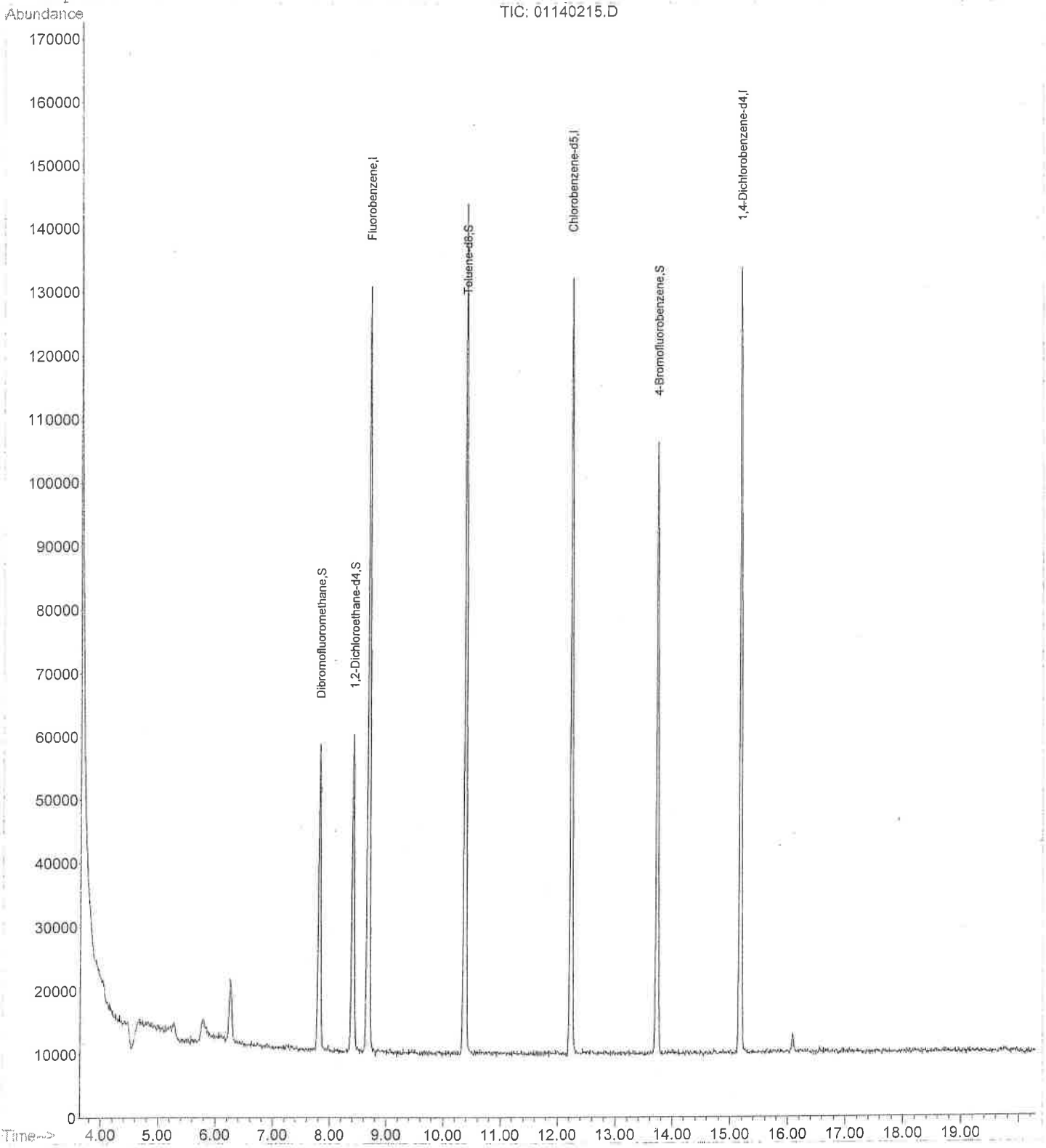
01/23/02

(#) = qualifier out of range (m) = manual integration
01140215.D 011402.M Mon Jan 14 16:33:15 2002 Page 1

Quantitation Report

Data File : C:\HPCHEM\1\DATA\011402\01140215.D Vial: 16
Acq On : 14 Jan 2002 4:08 pm Operator: MEG
Sample : PES0114-09 COMP-B 1.0g 5X Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS/SS_SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 14 16:33 2002 Quant Results File: 011402.RES

Method : C:\HPCHEM\1\METHODS\011402.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Mon Jan 14 14:44:40 2002
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\011402\01140216.D Vial: 17
Acq On : 14 Jan 2002 4:33 pm Operator: MEG
Sample : PES0109-09 D6-20.0 1.0g 5X Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS/SS_SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 15 7:06 2002 Quant Results File: 011402.RES

Quant Method : C:\HPCHEM\1\METHODS\011402.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Mon Jan 14 14:44:40 2002
Response via : Initial Calibration
DataAcq Meth : AQ_8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	8.67	96	148815	250.00	ng	0.00
32) Chlorobenzene-d5	12.23	117	94784	250.00	ng	0.00
45) 1,4-Dichlorobenzene-d4	15.17	152	50942	250.00	ng	0.00
System Monitoring Compounds						
16) Dibromofluoromethane	7.80	113	41868	252.00	ng	0.00
Spiked Amount 250.000			Recovery =	100.80%		
17) 1,2-Dichloroethane-d4	8.39	65	49212	211.75	ng	0.00
Spiked Amount 250.000			Recovery =	84.70%		
29) Toluene-d8	10.37	98	124926	244.50	ng	0.00
Spiked Amount 250.000			Recovery =	97.80%		
43) 4-Bromofluorobenzene	13.72	95	48680	233.36	ng	0.00
Spiked Amount 250.000			Recovery =	93.34%		
Target Compounds						Qvalue
23) Trichloroethene	8.85	95	8068	35.98	ng	93

1/17/02

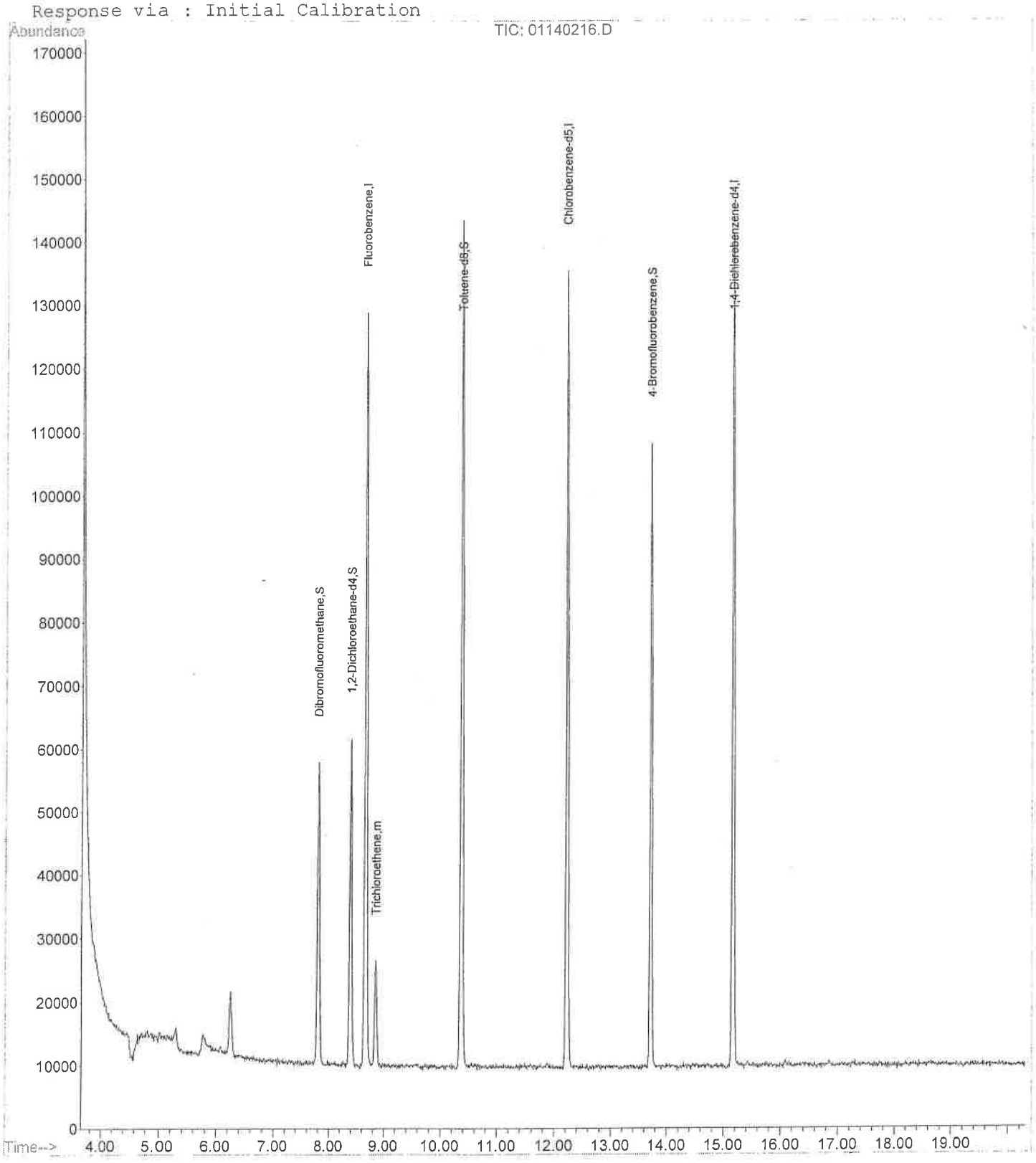
01/23/02

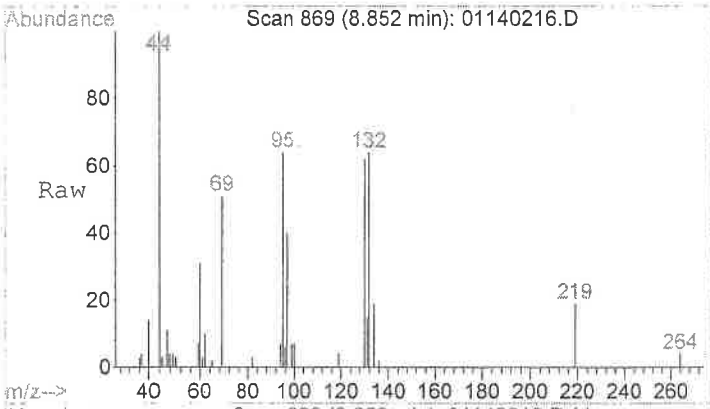
(#) = qualifier out of range (m) = manual integration
01140216.D 011402.M Tue Jan 15 07:06:17 2002

Quantitation Report

Data File : C:\HPCHEM\1\DATA\011402\01140216.D Vial: 17
Acq On : 14 Jan 2002 4:33 pm Operator: MEG
Sample : PES0109-09 D6-20.0 1.0g 5X Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS/SS_SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 15 7:06 2002 Quant Results File: 011402.RES

Method : C:\HPCHEM\1\METHODS\011402.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Mon Jan 14 14:44:40 2002
Response via : Initial Calibration

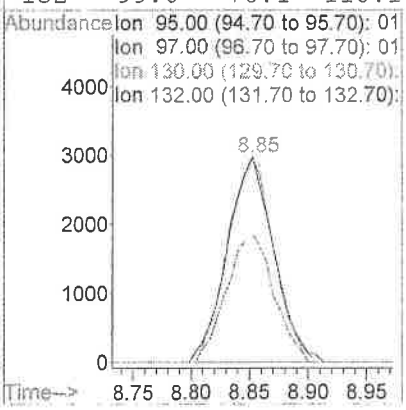




#23
Trichloroethene
Concen: 35.98 ng
RT: 8.85 min Scan# 869
Delta R.T. 0.00 min
Lab File: 01140216.D
Acq: 14 Jan 2002 4:33 pm

Tgt Ion: 95 Resp: 8068

Ion	Ratio	Lower	Upper
95	100		
97	62.5	47.4	87.4
130	95.8	72.0	112.0
132	99.0	70.1	110.1



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\011402\01140217.D Vial: 18
Acq On : 14 Jan 2002 4:58 pm Operator: MEG
Sample : PES0114-10 COMP-C 1.0g 5X Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS/SS_SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 15 7:08 2002 Quant Results File: 011402.RES

Quant Method : C:\HPCHEM\1\METHODS\011402.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Mon Jan 14 14:44:40 2002
Response via : Initial Calibration
DataAcq Meth : AQ_8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	8.67	96	151453	250.00	ng	0.00
32) Chlorobenzene-d5	12.23	117	97831	250.00	ng	0.00
45) 1,4-Dichlorobenzene-d4	15.17	152	50480	250.00	ng	0.00
System Monitoring Compounds						
16) Dibromofluoromethane	7.80	113	42276	248.64	ng	0.00
Spiked Amount 250.000			Recovery =	99.46%		
17) 1,2-Dichloroethane-d4	8.40	65	49305	205.97	ng	0.00
Spiked Amount 250.000			Recovery =	82.39%		
29) Toluene-d8	10.37	98	127321	245.06	ng	0.01
Spiked Amount 250.000			Recovery =	98.02%		
43) 4-Bromofluorobenzene	13.71	95	48988	227.52	ng	0.00
Spiked Amount 250.000			Recovery =	91.01%		
Target Compounds						Qvalue
23) Trichloroethene	8.85	95	4830	21.16	ng	94

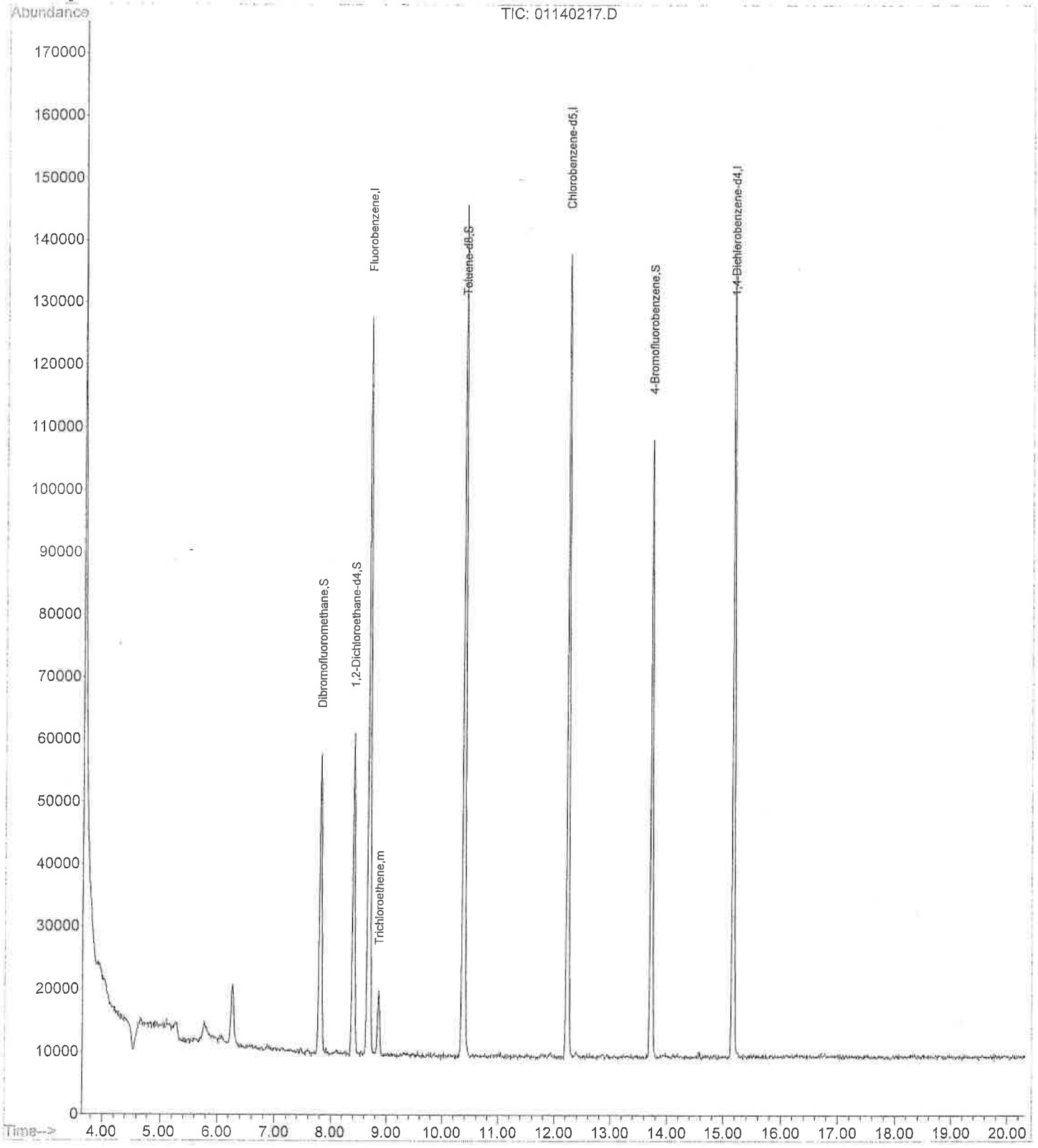
1/17/02

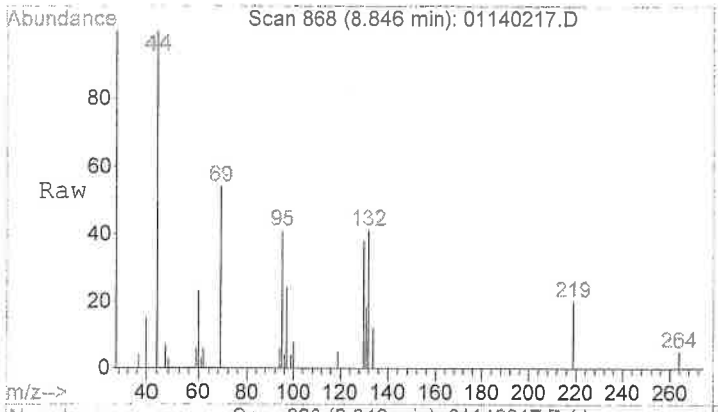
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01140217.D 011402.M Tue Jan 15 07:08:45 2002

Quantitation Report

Data File : C:\HPCHEM\1\DATA\011402\01140217.D Vial: 18
Acq On : 14 Jan 2002 4:58 pm Operator: MEG
Sample : PES0114-10 COMP-C 1.0g 5X Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS/SS_SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 15 7:08 2002 Quant Results File: 011402.RES

Method : C:\HPCHEM\1\METHODS\011402.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Mon Jan 14 14:44:40 2002
Response via : Initial Calibration

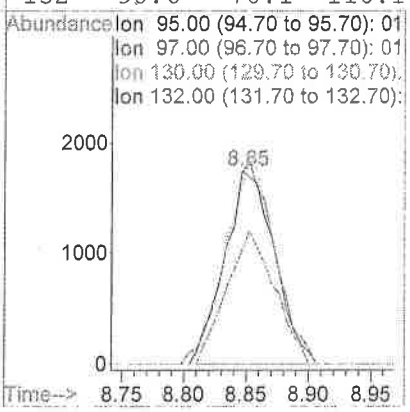




#23
Trichloroethene
Concen: 21.16 ng
RT: 8.85 min Scan# 868
Delta R.T. -0.00 min
Lab File: 01140217.D
Acq: 14 Jan 2002 4:58 pm

Tgt Ion: 95 Resp: 4830

Ion	Ratio	Lower	Upper
95	100		
97	58.4	47.4	87.4
130	91.5	72.0	112.0
132	98.6	70.1	110.1



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\011402\01140218.D Vial: 19
Acq On : 14 Jan 2002 5:22 pm Operator: MEG
Sample : PES0114-12 COMP-E 1.0g 5X Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS/SS_SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 15 7:09 2002 Quant Results File: 011402.RES

Quant Method : C:\HPCHEM\1\METHODS\011402.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Mon Jan 14 14:44:40 2002
Response via : Initial Calibration
DataAcq Meth : AQ_8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	8.67	96	151072	250.00	ng	0.00
32) Chlorobenzene-d5	12.23	117	91374	250.00	ng	0.00
45) 1,4-Dichlorobenzene-d4	15.17	152	48308	250.00	ng	0.00
System Monitoring Compounds						
16) Dibromofluoromethane	7.81	113	42866	255.66	ng	0.00
Spiked Amount 250.000			Recovery = 102.26%			
17) 1,2-Dichloroethane-d4	8.39	65	50114	212.91	ng	0.00
Spiked Amount 250.000			Recovery = 85.16%			
29) Toluene-d8	10.37	98	126339	242.99	ng	0.00
Spiked Amount 250.000			Recovery = 97.20%			
43) 4-Bromofluorobenzene	13.72	95	46793	232.68	ng	0.00
Spiked Amount 250.000			Recovery = 93.07%			
Target Compounds						Qvalue
23) Trichloroethene	8.85	95	3500	15.37	ng <	93

1/17/02

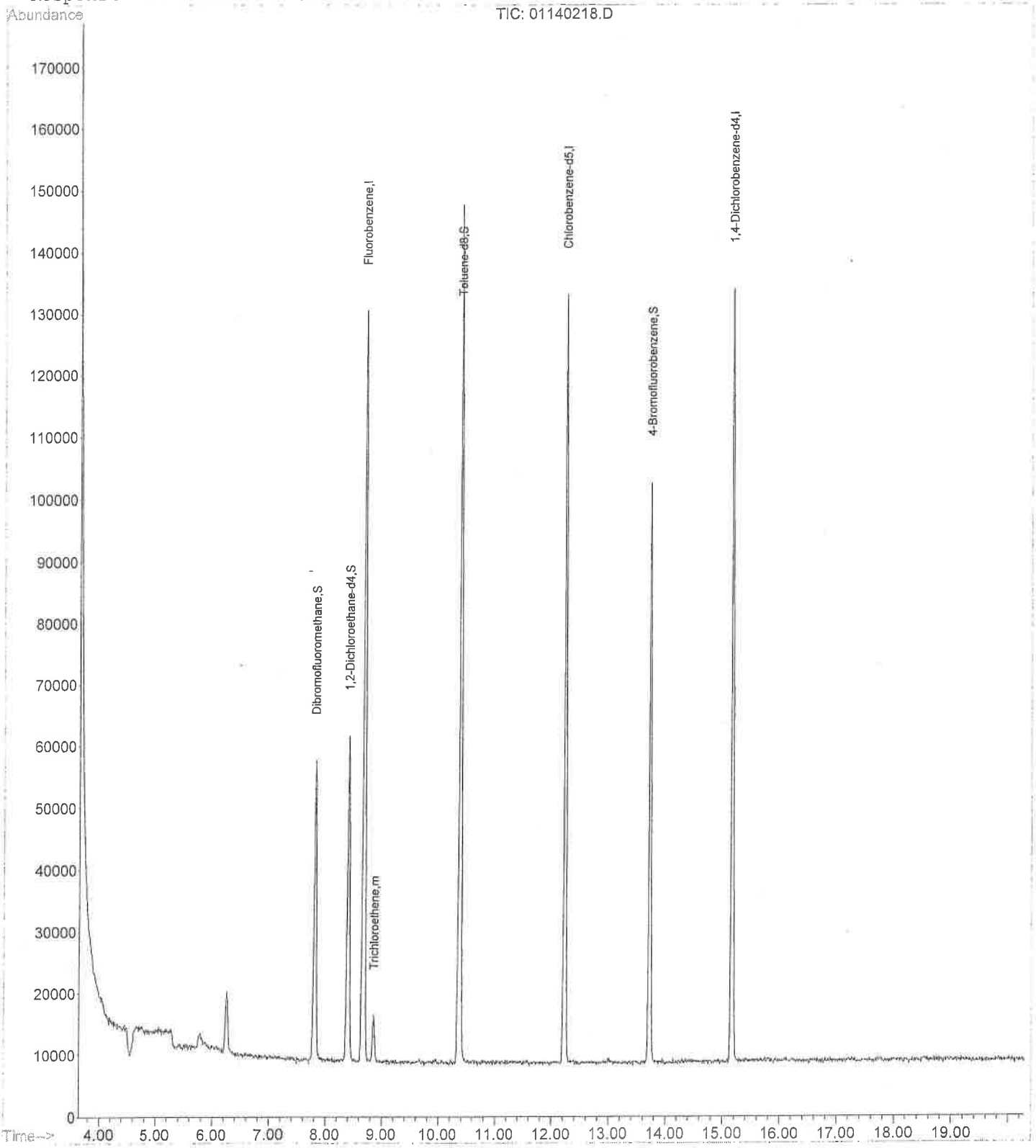
01/23/02

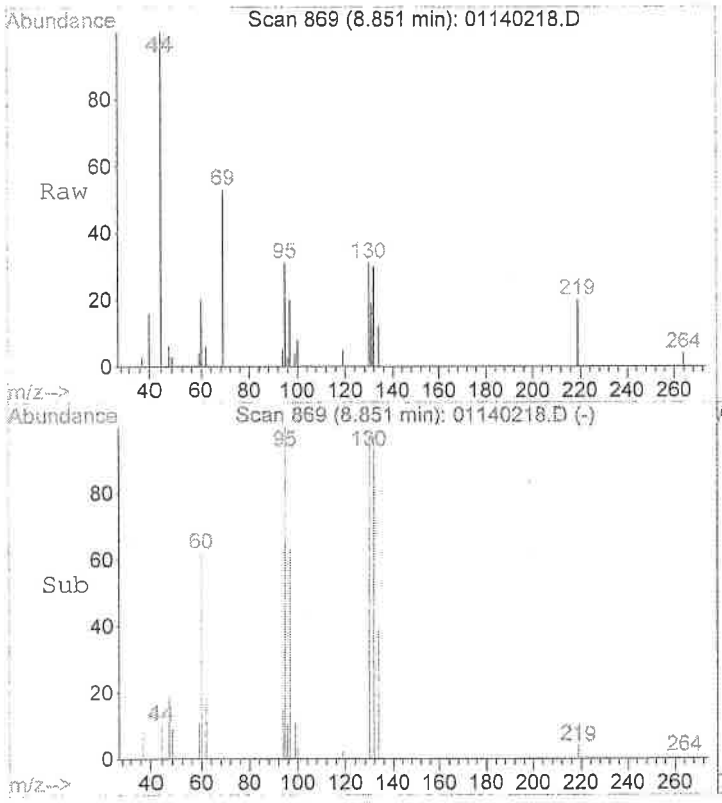
(#) = qualifier out of range (m) = manual integration
01140218.D 011402.M Tue Jan 15 07:09:53 2002

Quantitation Report

Data File : C:\HPCHEM\1\DATA\011402\01140218.D Vial: 19
Acq On : 14 Jan 2002 5:22 pm Operator: MEG
Sample : PES0114-12 COMP-E 1.0g 5X Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS/SS_SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 15 7:09 2002 Quant Results File: 011402.RES

Method : C:\HPCHEM\1\METHODS\011402.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Mon Jan 14 14:44:40 2002
Response via : Initial Calibration

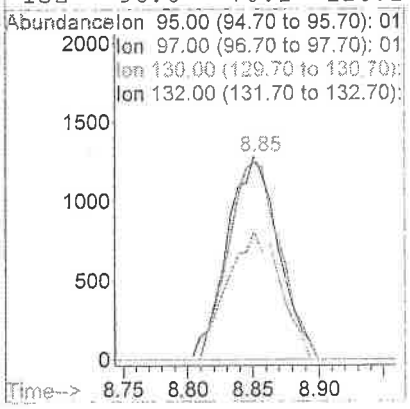




#23
Trichloroethene
Concen: 15.37 ng
RT: 8.85 min Scan# 869
Delta R.T. 0.00 min
Lab File: 01140218.D
Acq: 14 Jan 2002 5:22 pm

Tgt Ion: 95 Resp: 3500

Ion	Ratio	Lower	Upper
95	100		
97	62.7	47.4	87.4
130	100.0	72.0	112.0
132	96.6	70.1	110.1



Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\011402\01140219.D Vial: 20
Acq On : 14 Jan 2002 5:47 pm Operator: MEG
Sample : PES0114-13 D1-WEST-2.0 1.0g 5X Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS/SS_SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 15 7:10 2002 Quant Results File: 011402.RES

Quant Method : C:\HPCHEM\1\METHODS\011402.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Mon Jan 14 14:44:40 2002
Response via : Initial Calibration
DataAcq Meth : AQ_8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	8.67	96	148271	250.00	ng	0.00
32) Chlorobenzene-d5	12.22	117	90826	250.00	ng	0.00
45) 1,4-Dichlorobenzene-d4	15.16	152	46427	250.00	ng	0.00
System Monitoring Compounds						
16) Dibromofluoromethane	7.80	113	42150	256.47	ng	0.00
Spiked Amount 250.000			Recovery =	102.59%		
17) 1,2-Dichloroethane-d4	8.40	65	49519	215.45	ng	0.00
Spiked Amount 250.000			Recovery =	86.18%		
29) Toluene-d8	10.37	98	123107	240.15	ng	0.00
Spiked Amount 250.000			Recovery =	96.06%		
43) 4-Bromofluorobenzene	13.71	95	45849	229.37	ng	0.00
Spiked Amount 250.000			Recovery =	91.75%		
Target Compounds						Qvalue
3) Chloromethane	4.16	50	198	Below Cal	#	44
5) Bromomethane	4.65	94	38	Below Cal	#	3
23) Trichloroethene	8.67	95	10401	46.55	ng	# 25
54) tert-Butyl benzene	14.85	119	38	34.12	ng	# 52
58) 4-Isopropyl toluene	14.85	119	38	34.12	ng	# 52

ND

1/17/02

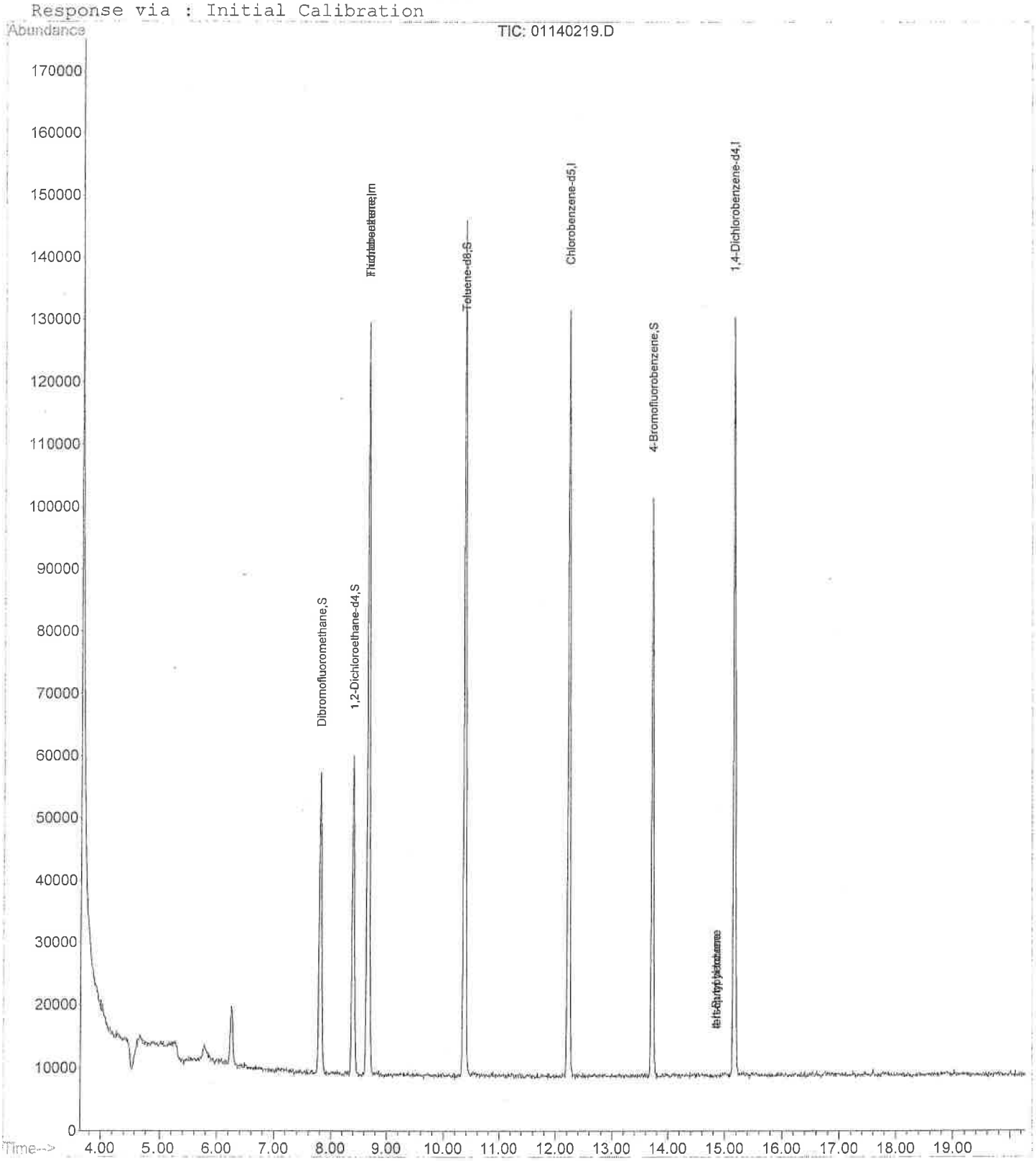
01/23/02

(#) = qualifier out of range (m) = manual integration
01140219.D 011402.M Tue Jan 15 07:10:23 2002

Quantitation Report

Data File : C:\HPCHEM\1\DATA\011402\01140219.D Vial: 20
Acq On : 14 Jan 2002 5:47 pm Operator: MEG
Sample : PES0114-13 D1-WEST-2.0 1.0g 5X Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS/SS_SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 15 7:10 2002 Quant Results File: 011402.RES

Method : C:\HPCHEM\1\METHODS\011402.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Mon Jan 14 14:44:40 2002
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\011402\01140220.D Vial: 21
Acq On : 14 Jan 2002 6:11 pm Operator: MEG
Sample : PES0114-14 F1-EAST-2.0 1.0g 5X Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS/SS_SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 15 7:11 2002 Quant Results File: 011402.RES

Quant Method : C:\HPCHEM\1\METHODS\011402.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Mon Jan 14 14:44:40 2002
Response via : Initial Calibration
DataAcq Meth : AQ_8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	8.66	96	144739	250.00	ng	0.00
32) Chlorobenzene-d5	12.23	117	85389	250.00	ng	0.00
45) 1,4-Dichlorobenzene-d4	15.17	152	41544	250.00	ng	0.00
System Monitoring Compounds						
16) Dibromofluoromethane	7.81	113	41060	255.56	ng	0.00
Spiked Amount 250.000			Recovery = 102.22%			
17) 1,2-Dichloroethane-d4	8.39	65	48899	219.80	ng	0.00
Spiked Amount 250.000			Recovery = 87.92%			
29) Toluene-d8	10.36	98	120267	240.45	ng	0.00
Spiked Amount 250.000			Recovery = 96.18%			
43) 4-Bromofluorobenzene	13.71	95	42515	226.23	ng	0.00
Spiked Amount 250.000			Recovery = 90.49%			
Target Compounds						Qvalue
23) Trichloroethene	8.85	95	15137	69.40	ng	95

1/17/02

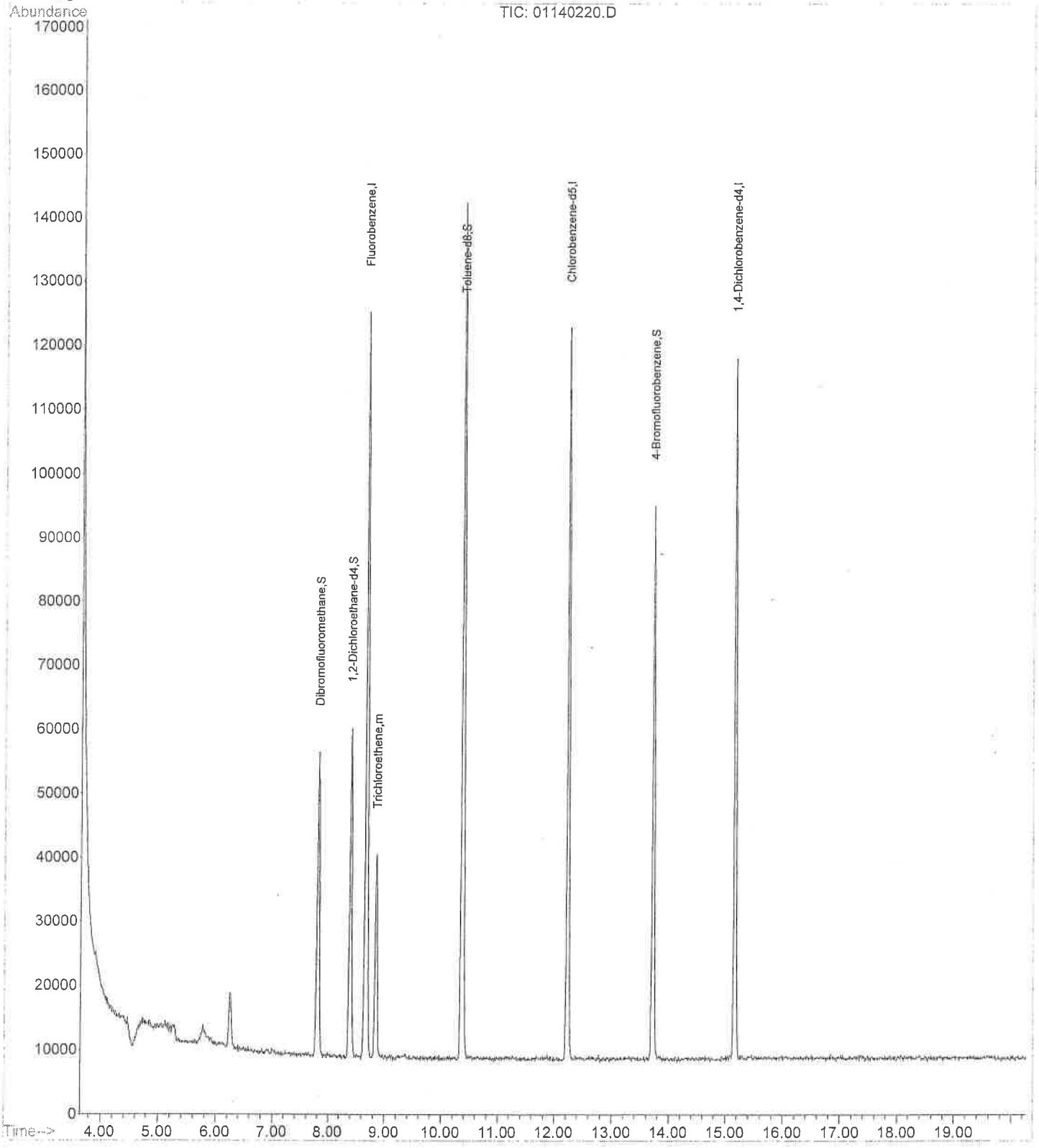
01/23/02

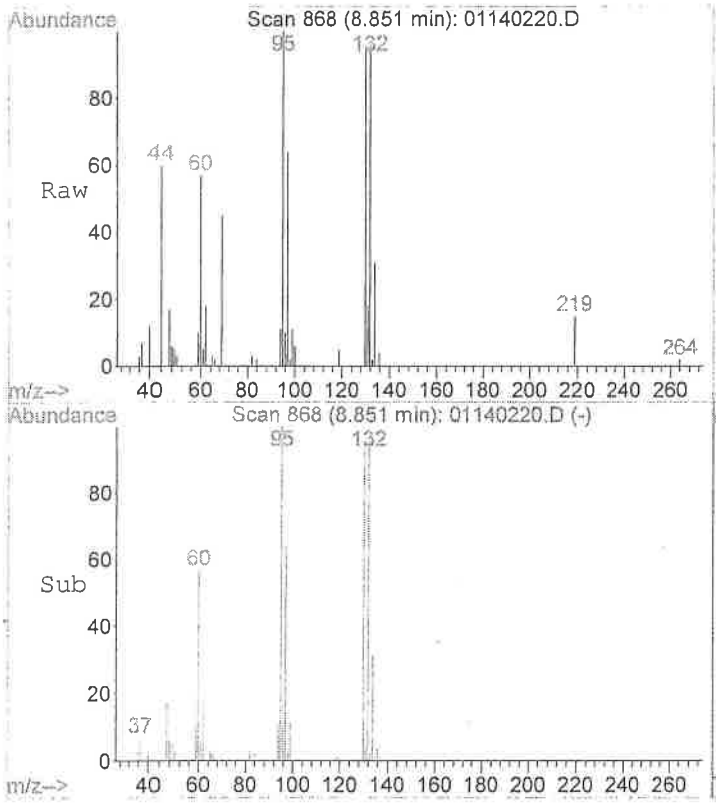
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01140220.D 011402.M Tue Jan 15 07:11:37 2002

Quantitation Report

Data File : C:\HPCHEM\1\DATA\011402\01140220.D Vial: 21
Acq On : 14 Jan 2002 6:11 pm Operator: MEG
Sample : PES0114-14 F1-EAST-2.0 1.0g 5X Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS/SS_SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 15 7:11 2002 Quant Results File: 011402.RES

Method : C:\HPCHEM\1\METHODS\011402.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Mon Jan 14 14:44:40 2002
Response via : Initial Calibration

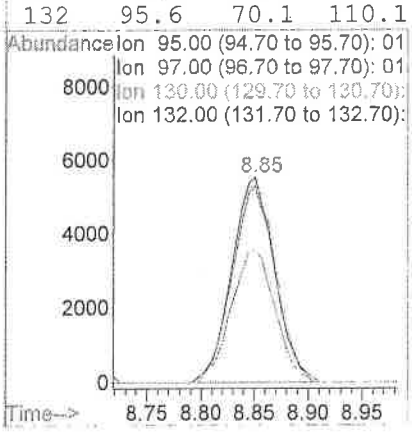




#23
Trichloroethene
Concen: 69.40 ng
RT: 8.85 min Scan# 868
Delta R.T. -0.00 min
Lab File: 01140220.D
Acq: 14 Jan 2002 6:11 pm

Tgt Ion: 95 Resp: 15137

Ion	Ratio	Lower	Upper
95	100		
97	63.8	47.4	87.4
130	95.3	72.0	112.0
132	95.6	70.1	110.1



Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\011402\01140221.D Vial: 22
Acq On : 14 Jan 2002 6:36 pm Operator: MEG
Sample : PES0114-15 A8-NORTH3-2.0 1.0g 5X Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS/SS_SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 15 7:11 2002 Quant Results File: 011402.RES

Quant Method : C:\HPCHEM\1\METHODS\011402.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Mon Jan 14 14:44:40 2002
Response via : Initial Calibration
DataAcq Meth : AQ_8260

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene	8.67	96	137886	250.00	ng		0.00
32) Chlorobenzene-d5	12.23	117	85424	250.00	ng		0.00
45) 1,4-Dichlorobenzene-d4	15.16	152	43949	250.00	ng		0.00
System Monitoring Compounds							
16) Dibromofluoromethane	7.80	113	37906	242.20	ng		0.00
Spiked Amount 250.000			Recovery =	96.88%			
17) 1,2-Dichloroethane-d4	8.39	65	45225	208.71	ng		0.00
Spiked Amount 250.000			Recovery =	83.48%			
29) Toluene-d8	10.36	98	114081	238.77	ng		0.00
Spiked Amount 250.000			Recovery =	95.51%			
43) 4-Bromofluorobenzene	13.72	95	43224	229.91	ng		0.00
Spiked Amount 250.000			Recovery =	91.96%			
Target Compounds						Qvalue	
3) Chloromethane	4.10	50	37	Below Cal	#		44
5) Bromomethane	4.64	94	466	Below Cal	#		3
23) Trichloroethene	8.67	95	9211	44.33	ng	ND	29
54) tert-Butyl benzene	14.89	119	89	34.21	ng	#	52
58) 4-Isopropyl toluene	14.89	119	109	34.24	ng	#	52

1/17/02

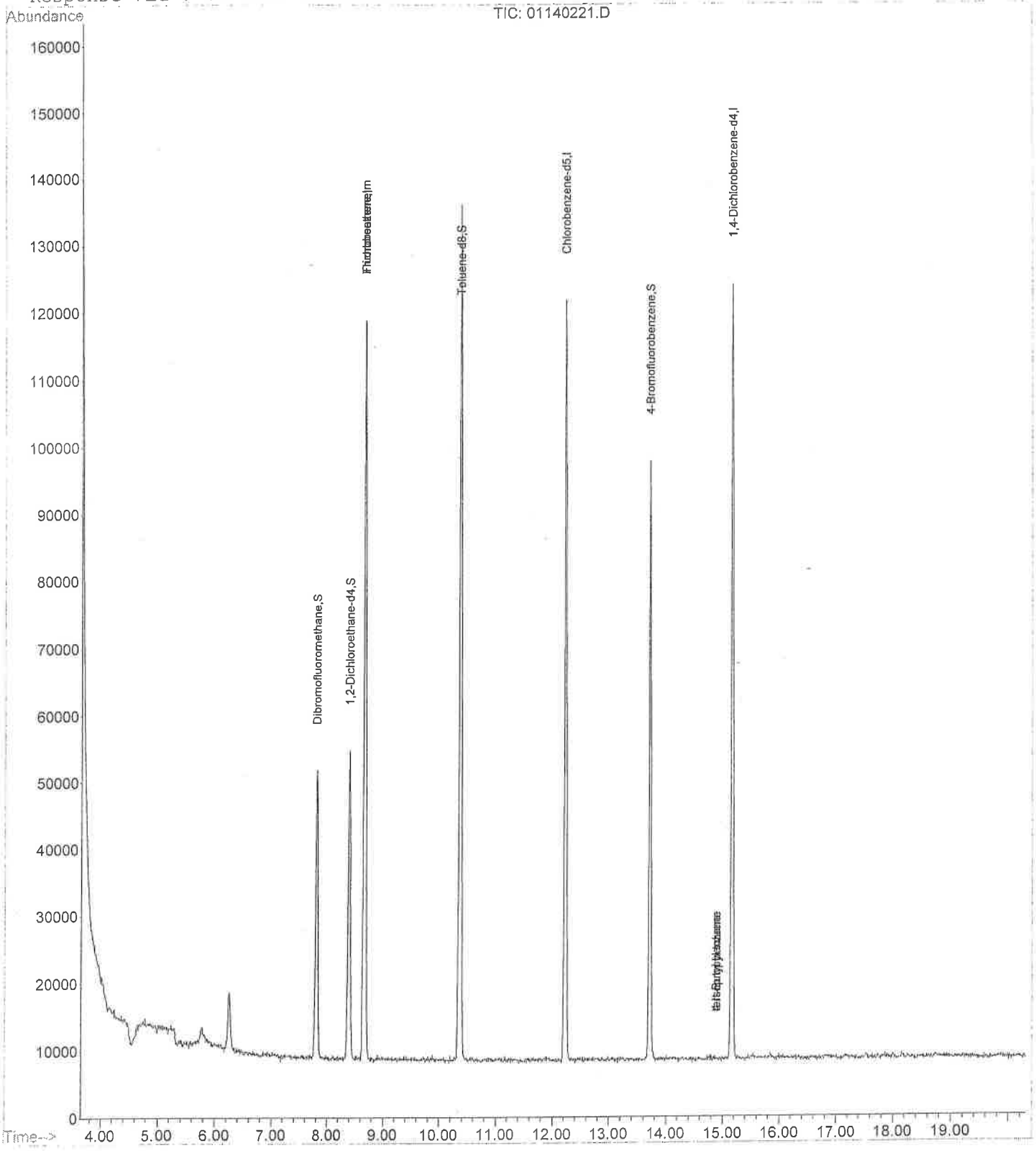
01/23/02

(#) = qualifier out of range (m) = manual integration
01140221.D 011402.M Tue Jan 15 07:11:53 2002

Quantitation Report

Data File : C:\HPCHEM\1\DATA\011402\01140221.D Vial: 22
Acq On : 14 Jan 2002 6:36 pm Operator: MEG
Sample : PES0114-15 A8-NORTH3-2.0 1.0g 5X Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS/SS_SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 15 7:11 2002 Quant Results File: 011402.RES

Method : C:\HPCHEM\1\METHODS\011402.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Mon Jan 14 14:44:40 2002
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\011402\01140222.D Vial: 23
Acq On : 14 Jan 2002 7:01 pm Operator: MEG
Sample : PES0109-03MS A8-4.0 1.0g 5X Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS/SS_SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 17 13:02 2002 Quant Results File: 011402.RES

Quant Method : C:\HPCHEM\1\METHODS\011402.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Thu Jan 17 12:50:09 2002
Response via : Initial Calibration
DataAcq Meth : AQ_8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	8.67	96	147998	250.00	ng	0.00
32) Chlorobenzene-d5	12.22	117	91056	250.00	ng	0.00
45) 1,4-Dichlorobenzene-d4	15.16	152	49812	250.00	ng	0.00
System Monitoring Compounds						
16) Dibromofluoromethane	7.80	113	42700	262.92	ng	0.00
Spiked Amount 250.000			Recovery = 105.17%			
17) 1,2-Dichloroethane-d4	8.39	65	52735	240.58	ng	0.00
Spiked Amount 250.000			Recovery = 96.23%			
29) Toluene-d8	10.36	98	122610	239.29	ng	0.00
Spiked Amount 250.000			Recovery = 95.72%			
43) 4-Bromofluorobenzene	13.71	95	46706	233.06	ng	0.00
Spiked Amount 250.000			Recovery = 93.22%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	3.82	85	67280	242.31	ng	99
3) Chloromethane	4.10	50	85692	220.34	ng	97
4) Vinyl chloride	4.22	62	64823	228.88	ng	98
5) Bromomethane	4.64	94	18516	140.18	ng	93
6) Chloroethane	4.80	64	37897	166.52	ng	95
7) Trichlorofluoromethane	4.91	101	82836	220.44	ng	97
8) 1,1-Dichloroethene	5.48	96	40969	182.37	ng	95
9) Methylene chloride	6.10	84	65077	262.26	ng	91
10) trans-1,2-Dichloroethene	6.22	96	55266	234.31	ng	98
11) 1,1-Dichloroethane	6.84	63	95854	228.71	ng	98
12) cis-1,2-Dichloroethene	7.38	96	52015	239.26	ng	97
13) 2,2-Dichloropropane	7.50	77	70595	211.35	ng	98
14) Bromochloromethane	7.60	128	25615	237.82	ng	94
15) Chloroform	7.60	83	85870	232.96	ng	100
18) 1,1,1-Trichloroethane	7.89	97	64020	226.39	ng	93
19) Carbon tetrachloride	7.83	117	64232	239.89	ng	94
20) 1,1-Dichloropropene	7.99	75	65879	231.48	ng	99
21) Benzene	8.26	78	175375	248.10	ng	99
22) 1,2-Dichloroethane	8.47	62	67627	211.56	ng	99
23) Trichloroethene	8.85	95	43904	196.86	ng	94
24) 1,2-Dichloropropane	9.44	63	47085	233.19	ng	98
25) Dibromomethane	9.33	93	30612	250.36	ng	98
26) Bromodichloromethane	9.45	83	63807	227.04	ng	93
27) cis-1,3-Dichloropropene	10.15	75	74242	227.86	ng	87
28) Toluene	10.42	92	102156	225.38	ng	99
30) trans-1,3-Dichloropropene	10.86	75	67171	232.86	ng	88
31) 1,1,2-Trichloroethane	11.07	83	35601	277.66	ng	93
33) Tetrachloroethene	10.90	164	34997	242.01	ng	99
34) 1,3-Dichloropropane	11.42	76	74120	261.20	ng	91
35) Dibromochloromethane	11.32	129	42890	255.05	ng	95
36) 1,2-Dibromoethane	11.66	107	42571	268.94	ng	92
37) Chlorobenzene	12.25	112	99874	250.13	ng	98
38) 1,1,1,2-Tetrachloroethane	12.30	131	38807	222.27	ng	94
39) Ethyl benzene	12.22	91	177221	247.16	ng	97
40) m,p-Xylene	12.38	106	132746	246.48	ng	94
41) o-Xylene	12.93	106	66042	246.32	ng	93

(#) = qualifier out of range (m) = manual integration

01/23/02

1/17/..

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\011402\01140222.D Vial: 23
Acq On : 14 Jan 2002 7:01 pm Operator: MEG
Sample : PES0109-03MS A8-4.0 1.0g 5X Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS/SS_SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 17 13:02 2002 Quant Results File: 011402.RES

Quant Method : C:\HPCHEM\1\METHODS\011402.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Thu Jan 17 12:50:09 2002
Response via : Initial Calibration
DataAcq Meth : AQ_8260

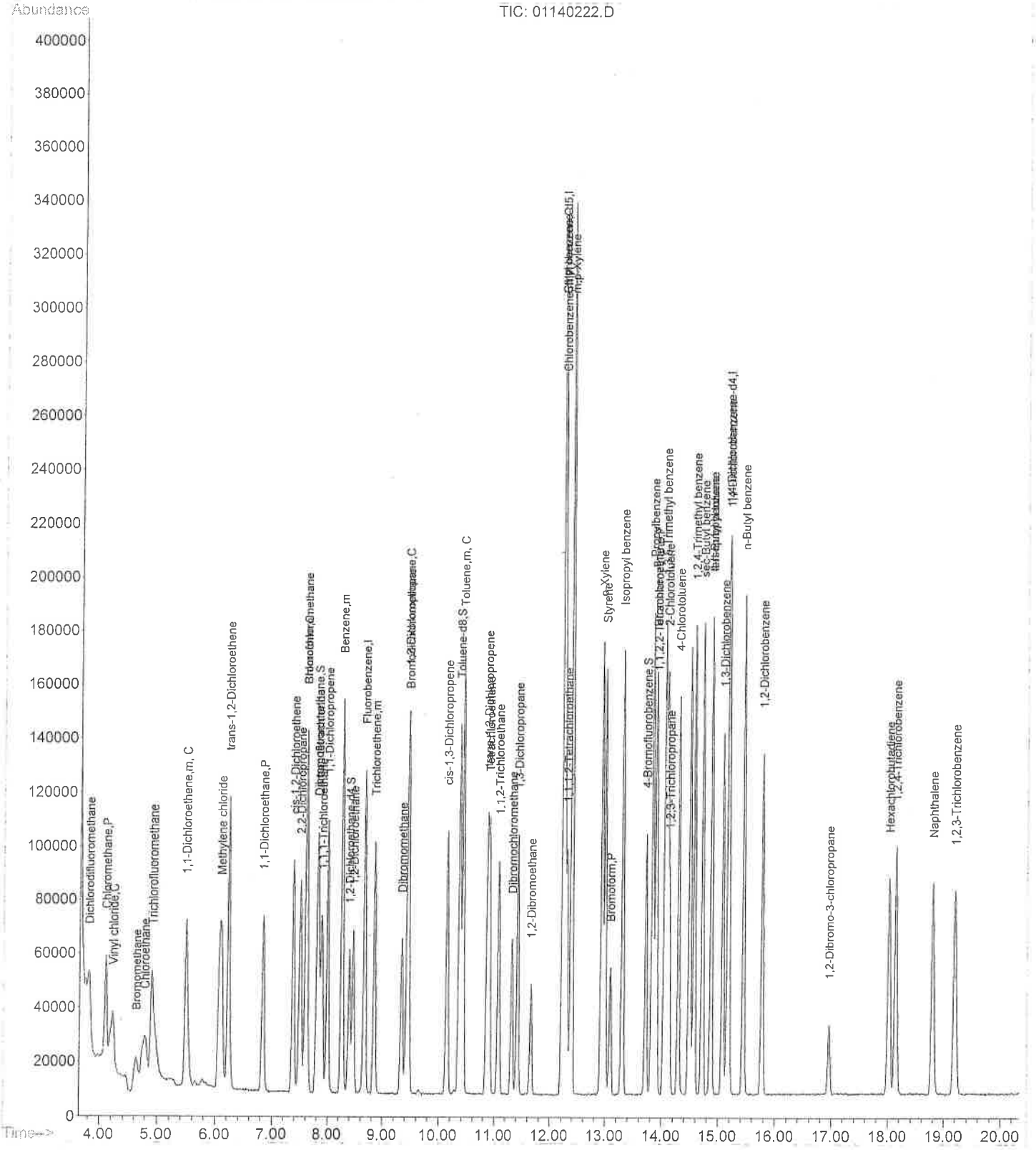
Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
42) Styrene	12.99	104	108916	241.13	ng		100
44) Bromoform	13.09	173	32305	263.71	ng		96
46) Isopropyl benzene	13.30	105	162936	307.39	ng		99
47) Bromobenzene	13.89	156	43437	278.40	ng		97
48) 1,1,2,2-Tetrachloroethane	13.91	83	57188	347.48	ng		97
49) 1,2,3-Trichloropropane	14.13	75	43313	317.36	ng		93
50) n-Propylbenzene	13.83	91	211407	288.90	ng		97
51) 2-Chlorotoluene	14.09	91	136281	277.88	ng		99
52) 4-Chlorotoluene	14.29	91	125881	280.18	ng		99
53) 1,3,5-Trimethyl benzene	14.04	105	130589	294.87	ng		98
54) tert-Butyl benzene	14.87	119	150982	282.60	ng		98
55) 1,2,4-Trimethyl benzene	14.57	105	136785	291.94	ng		98
56) sec-Butyl benzene	14.72	105	191090	288.70	ng		99
57) 1,3-Dichlorobenzene	15.08	146	80723	275.59	ng		98
58) 4-Isopropyl toluene	14.87	119	150982	282.60	ng		98
59) 1,4-Dichlorobenzene	15.19	146	80383	278.01	ng		99
60) 1,2-Dichlorobenzene	15.77	146	76414	275.54	ng		96
61) n-Butyl benzene	15.44	91	152222	272.66	ng		97
62) 1,2-Dibromo-3-chloropropan	16.95	75	10329	371.32	ng	#	91
63) 1,2,4-Trichlorobenzene	18.14	180	55677	227.34	ng		98
64) Hexachlorobutadiene	18.02	225	31221	232.66	ng		97
65) Naphthalene	18.80	128	120821	254.03	ng		100
66) 1,2,3-Trichlorobenzene	19.20	180	51926	226.34	ng		97

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\011402\01140222.D Vial: 23
Acq On : 14 Jan 2002 7:01 pm Operator: MEG
Sample : PES0109-03MS A8-4.0 1.0g 5X Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS/SS_SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 17 13:02 2002 Quant Results File: 011402.RES

Method : C:\HPCHEM\1\METHODS\011402.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Thu Jan 17 12:50:09 2002
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\011402\01140223.D Vial: 24
Acq On : 14 Jan 2002 7:25 pm Operator: MEG
Sample : PES0109-03MSD A8-4.0 1.0g 5X Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS/SS_SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 17 13:05 2002 Quant Results File: 011402.RES

Quant Method : C:\HPCHEM\1\METHODS\011402.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Thu Jan 17 12:50:09 2002
Response via : Initial Calibration
DataAcq Meth : AQ_8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	8.67	96	164319	250.00	ng	0.00
32) Chlorobenzene-d5	12.22	117	99625	250.00	ng	0.00
45) 1,4-Dichlorobenzene-d4	15.16	152	51955	250.00	ng	0.00
System Monitoring Compounds						
16) Dibromofluoromethane	7.81	113	46612	255.54	ng	0.00
Spiked Amount 250.000			Recovery = 102.22%			
17) 1,2-Dichloroethane-d4	8.40	65	56813	228.69	ng	0.00
Spiked Amount 250.000			Recovery = 91.48%			
29) Toluene-d8	10.37	98	135754	238.20	ng	0.00
Spiked Amount 250.000			Recovery = 95.28%			
43) 4-Bromofluorobenzene	13.71	95	50501	230.33	ng	0.00
Spiked Amount 250.000			Recovery = 92.13%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	3.81	85	70933	224.93	ng	98
3) Chloromethane	4.11	50	93993	216.63	ng	98
4) Vinyl chloride	4.22	62	70823	223.51	ng	93
5) Bromomethane	4.65	94	24868	190.15	ng	93
6) Chloroethane	4.80	64	41960	165.85	ng	96
7) Trichlorofluoromethane	4.91	101	87757	206.52	ng	98
8) 1,1-Dichloroethene	5.49	96	44555	177.87	ng	98
9) Methylene chloride	6.08	84	69409	220.19	ng	89
10) trans-1,2-Dichloroethene	6.22	96	59898	225.93	ng	97
11) 1,1-Dichloroethane	6.84	63	103216	218.67	ng	97
12) cis-1,2-Dichloroethene	7.37	96	57061	234.87	ng	99
13) 2,2-Dichloropropane	7.50	77	75689	200.93	ng	98
14) Bromochloromethane	7.60	128	28016	232.82	ng	92
15) Chloroform	7.61	83	92052	221.73	ng	97
18) 1,1,1-Trichloroethane	7.89	97	68682	215.39	ng	92
19) Carbon tetrachloride	7.83	117	68278	225.53	ng	95
20) 1,1-Dichloropropene	7.99	75	71097	222.36	ng	98
21) Benzene	8.26	78	188351	236.22	ng	98
22) 1,2-Dichloroethane	8.47	62	70115	191.88	ng	99
23) Trichloroethene	8.85	95	47309	191.06	ng	93
24) 1,2-Dichloropropane	9.43	63	50658	222.94	ng	98
25) Dibromomethane	9.34	93	32938	239.42	ng	97
26) Bromodichloromethane	9.45	83	67593	212.84	ng	94
27) cis-1,3-Dichloropropene	10.14	75	79233	215.71	ng	89
28) Toluene	10.43	92	108269	210.70	ng	97
30) trans-1,3-Dichloropropene	10.86	75	71039	217.67	ng	90
31) 1,1,2-Trichloroethane	11.07	83	36927	252.47	ng	98
33) Tetrachloroethene	10.90	164	38454	243.04	ng	99
34) 1,3-Dichloropropane	11.42	76	79102	254.78	ng	94
35) Dibromochloromethane	11.32	129	45497	247.28	ng	100
36) 1,2-Dibromoethane	11.66	107	45429	262.31	ng	94
37) Chlorobenzene	12.25	112	104803	239.90	ng	99
38) 1,1,1,2-Tetrachloroethane	12.30	131	40473	211.87	ng	94
39) Ethyl benzene	12.22	91	189416	241.45	ng	98
40) m,p-Xylene	12.39	106	140038	237.66	ng	92
41) o-Xylene	12.93	106	70351	239.82	ng	97

(#) = qualifier out of range (m) = manual integration

01/23/02

1/17/02

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\011402\01140223.D Vial: 24
Acq On : 14 Jan 2002 7:25 pm Operator: MEG
Sample : PES0109-03MSD A8-4.0 1.0g 5X Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS/SS_SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 17 13:05 2002 Quant Results File: 011402.RES

Quant Method : C:\HPCHEM\1\METHODS\011402.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Thu Jan 17 12:50:09 2002
Response via : Initial Calibration
DataAcq Meth : AQ_8260

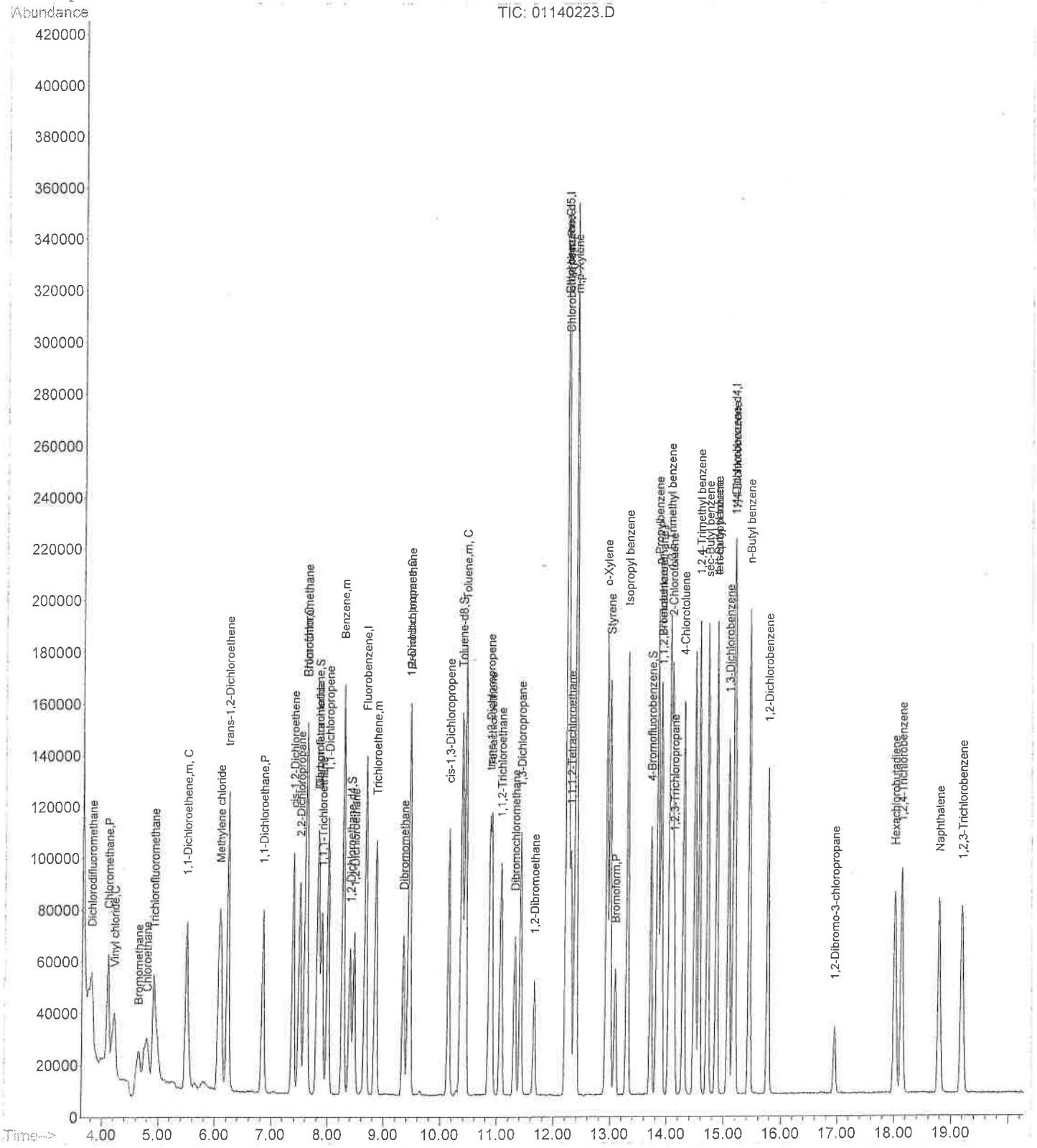
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
42) Styrene	12.99	104	114104	230.89	ng	99
44) Bromoform	13.09	173	33709	251.51	ng	96
46) Isopropyl benzene	13.30	105	173133	313.15	ng	99
47) Bromobenzene	13.89	156	45534	279.80	ng	97
48) 1,1,2,2-Tetrachloroethane	13.91	83	58272	339.46	ng	98
49) 1,2,3-Trichloropropane	14.13	75	44079	309.65	ng	94
50) n-Propylbenzene	13.83	91	220740	289.21	ng	97
51) 2-Chlorotoluene	14.09	91	144501	282.48	ng	100
52) 4-Chlorotoluene	14.29	91	130540	278.57	ng	98
53) 1,3,5-Trimethyl benzene	14.04	105	139022	300.96	ng	98
54) tert-Butyl benzene	14.87	119	156451	280.76	ng	97
55) 1,2,4-Trimethyl benzene	14.57	105	143103	292.82	ng	96
56) sec-Butyl benzene	14.72	105	196896	285.20	ng	98
57) 1,3-Dichlorobenzene	15.08	146	81650	267.26	ng	96
58) 4-Isopropyl toluene	14.87	119	156451	280.76	ng	97
59) 1,4-Dichlorobenzene	15.18	146	80679	267.53	ng	99
60) 1,2-Dichlorobenzene	15.77	146	77399	267.58	ng	98
61) n-Butyl benzene	15.44	91	154304	264.99	ng	97
62) 1,2-Dibromo-3-chloropropan	16.96	75	10183	350.97	ng	92
63) 1,2,4-Trichlorobenzene	18.13	180	54279	215.00	ng	98
64) Hexachlorobutadiene	18.01	225	30759	221.86	ng	98
65) Naphthalene	18.80	128	115337	235.60	ng	100
66) 1,2,3-Trichlorobenzene	19.20	180	49581	210.57	ng	96

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\011402\01140223.D Vial: 24
Acq On : 14 Jan 2002 7:25 pm Operator: MEG
Sample : PES0109-03MSD A8-4.0 1.0g 5X Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS/SS_SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 17 13:05 2002 Quant Results File: 011402.RES

Method : C:\HPCHEM\1\METHODS\011402.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Thu Jan 17 12:50:09 2002
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\011402\01140224.D Vial: 25
Acq On : 14 Jan 2002 7:50 pm Operator: MEG
Sample : DUMMY BLANK Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS/SS_SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 15 7:31 2002 Quant Results File: 011402.RES

Quant Method : C:\HPCHEM\1\METHODS\011402.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Mon Jan 14 14:44:40 2002
Response via : Initial Calibration
DataAcq Meth : AQ_8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	0.00	96	0	0.00	ng	-8.67
32) Chlorobenzene-d5	0.00	117	0	0.00	ng	-12.22
45) 1,4-Dichlorobenzene-d4	15.17	152	47	250.00	ng	0.00
System Monitoring Compounds						
16) Dibromofluoromethane	0.00	113	0	0.00	ng	
Spiked Amount 250.000			Recovery =	0.00%		
17) 1,2-Dichloroethane-d4	0.00	65	0	0.00	ng	
Spiked Amount 250.000			Recovery =	0.00%		
29) Toluene-d8	0.00	98	0	0.00	ng	
Spiked Amount 250.000			Recovery =	0.00%		
43) 4-Bromofluorobenzene	0.00	95	0	0.00	ng	
Spiked Amount 250.000			Recovery =	0.00%		
Target Compounds						Qvalue
54) tert-Butyl benzene	14.88	119	133	234.99	ng	# 52
58) 4-Isopropyl toluene	14.88	119	133	234.99	ng	# 52

01/23/02

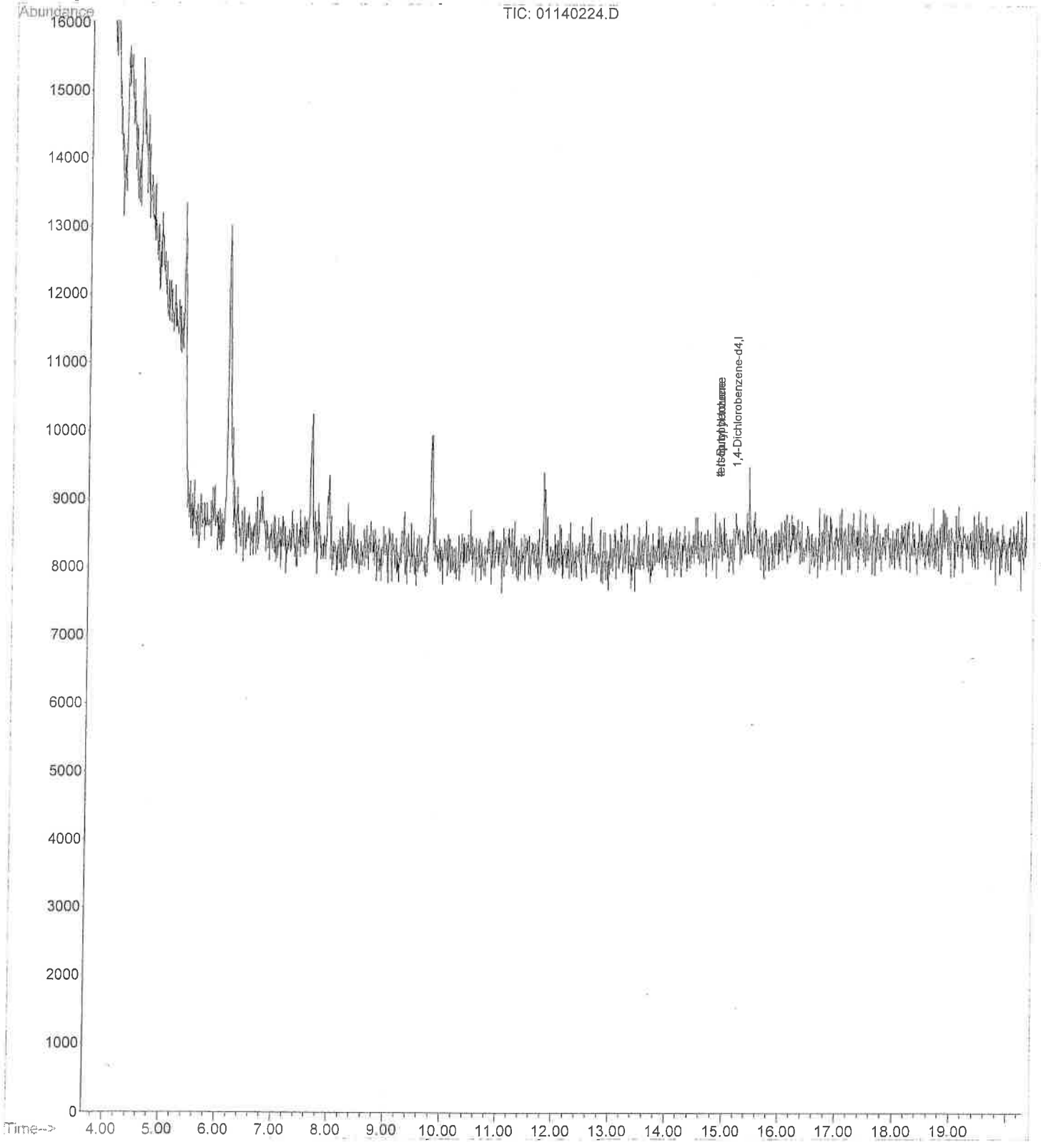
1/17/02

(#) = qualifier out of range (m) = manual integration
01140224.D 011402.M Tue Jan 15 07:31:25 2002

Quantitation Report

Data File : C:\HPCHEM\1\DATA\011402\01140224.D Vial: 25
Acq On : 14 Jan 2002 7:50 pm Operator: MEG
Sample : DUMMY BLANK Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS/SS_SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 15 7:31 2002 Quant Results File: 011402.RES

Method : C:\HPCHEM\1\METHODS\011402.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Mon Jan 14 14:44:40 2002
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\011402\01140225.D Vial: 26
Acq On : 14 Jan 2002 8:14 pm Operator: MEG
Sample : PES0110-01MS D2-4.0 1.0g 5X Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS/SS_SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 17 13:06 2002 Quant Results File: 011402.RES

Quant Method : C:\HPCHEM\1\METHODS\011402.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Thu Jan 17 12:50:09 2002
Response via : Initial Calibration
DataAcq Meth : AQ_8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	8.66	96	150124	250.00	ng	0.00
32) Chlorobenzene-d5	12.22	117	88274	250.00	ng	0.00
45) 1,4-Dichlorobenzene-d4	15.17	152	43995	250.00	ng	0.00
System Monitoring Compounds						
16) Dibromofluoromethane	7.80	113	42379	253.45	ng	0.00
Spiked Amount 250.000			Recovery = 101.38%			
17) 1,2-Dichloroethane-d4	8.39	65	53380	239.73	ng	0.00
Spiked Amount 250.000			Recovery = 95.89%			
29) Toluene-d8	10.36	98	122613	233.75	ng	0.00
Spiked Amount 250.000			Recovery = 93.50%			
43) 4-Bromofluorobenzene	13.71	95	43246	222.60	ng	0.00
Spiked Amount 250.000			Recovery = 89.04%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	3.82	85	71108	256.77	ng	97
3) Chloromethane	4.10	50	92879	241.42	ng	95
4) Vinyl chloride	4.23	62	69588	248.51	ng	97
5) Bromomethane	4.65	94	18619	138.11	ng	98
6) Chloroethane	4.81	64	39651	174.24	ng	99
7) Trichlorofluoromethane	4.91	101	85949	227.40	ng	99
8) 1,1-Dichloroethene	5.49	96	44301	196.85	ng	95
9) Methylene chloride	6.09	84	68799	307.37	ng	89
10) trans-1,2-Dichloroethene	6.22	96	56546	237.36	ng	97
11) 1,1-Dichloroethane	6.84	63	101820	244.42	ng	97
12) cis-1,2-Dichloroethene	7.37	96	54120	248.69	ng	97
13) 2,2-Dichloropropane	7.49	77	73090	217.63	ng	99
14) Bromochloromethane	7.60	128	27153	252.91	ng	92
15) Chloroform	7.60	83	89979	243.71	ng	99
18) 1,1,1-Trichloroethane	7.88	97	68229	242.89	ng	93
19) Carbon tetrachloride	7.82	117	65824	243.36	ng	97
20) 1,1-Dichloropropene	7.99	75	68676	240.50	ng	98
21) Benzene	8.26	78	187448	267.61	ng	97
22) 1,2-Dichloroethane	8.46	62	71965	226.15	ng	98
23) Trichloroethene	8.85	95	45082	199.28	ng	93
24) 1,2-Dichloropropane	9.43	63	51148	256.66	ng	96
25) Dibromomethane	9.33	93	32654	268.63	ng	97
26) Bromodichloromethane	9.45	83	68172	243.53	ng	95
27) cis-1,3-Dichloropropene	10.14	75	78763	242.24	ng	88
28) Toluene	10.42	92	104915	229.41	ng	97
30) trans-1,3-Dichloropropene	10.86	75	69466	239.12	ng	88
31) 1,1,2-Trichloroethane	11.07	83	39069	309.02	ng	94
33) Tetrachloroethene	10.90	164	34610	246.88	ng	98
34) 1,3-Dichloropropane	11.42	76	80223	291.61	ng	96
35) Dibromochloromethane	11.31	129	45921	281.68	ng	99
36) 1,2-Dibromoethane	11.66	107	46091	300.35	ng	92
37) Chlorobenzene	12.25	112	101239	261.54	ng	96
38) 1,1,1,2-Tetrachloroethane	12.29	131	39599	233.95	ng	90
39) Ethyl benzene	12.22	91	177772	255.74	ng	96
40) m,p-Xylene	12.38	106	131361	251.60	ng	95
41) o-Xylene	12.93	106	65367	251.48	ng	95

(#) = qualifier out of range (m) = manual integration

01/23/02

1/17/02

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\011402\01140225.D Vial: 26
Acq On : 14 Jan 2002 8:14 pm Operator: MEG
Sample : PES0110-01MS D2-4.0 1.0g 5X Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS/SS_SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 17 13:06 2002 Quant Results File: 011402.RES

Quant Method : C:\HPCHEM\1\METHODS\011402.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Thu Jan 17 12:50:09 2002
Response via : Initial Calibration
DataAcq Meth : AQ_8260

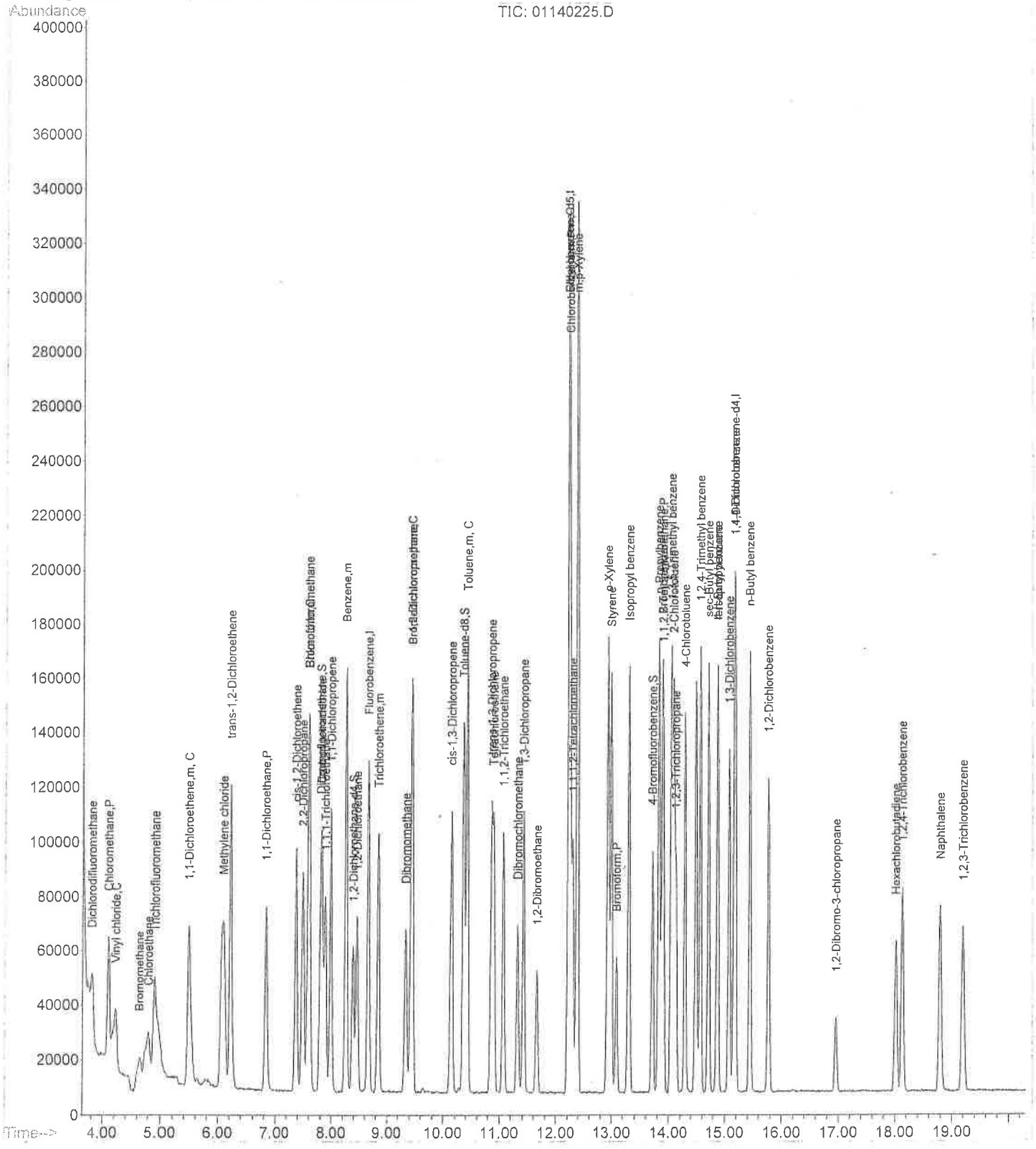
Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
42) Styrene	12.99	104	106166	242.45	ng		100
44) Bromoform	13.09	173	34443	290.03	ng		95
46) Isopropyl benzene	13.30	105	155814	332.82	ng		99
47) Bromobenzene	13.89	156	42133	305.74	ng		97
48) 1,1,2,2-Tetrachloroethane	13.90	83	60730	417.79	ng		98
49) 1,2,3-Trichloropropane	14.13	75	45424	376.83	ng		93
50) n-Propylbenzene	13.83	91	198198	306.66	ng		97
51) 2-Chlorotoluene	14.08	91	130157	300.48	ng		99
52) 4-Chlorotoluene	14.29	91	118444	298.49	ng		98
53) 1,3,5-Trimethyl benzene	14.04	105	123918	316.80	ng		99
54) tert-Butyl benzene	14.87	119	132343	280.47	ng		98
55) 1,2,4-Trimethyl benzene	14.56	105	128501	310.52	ng		97
56) sec-Butyl benzene	14.71	105	169382	289.74	ng		97
57) 1,3-Dichlorobenzene	15.08	146	73835	285.41	ng		97
58) 4-Isopropyl toluene	14.87	119	132345	280.47	ng		98
59) 1,4-Dichlorobenzene	15.18	146	74891	293.26	ng		99
60) 1,2-Dichlorobenzene	15.77	146	70716	288.70	ng		98
61) n-Butyl benzene	15.44	91	130643	264.95	ng		96
62) 1,2-Dibromo-3-chloropropan	16.95	75	10635	432.87	ng	#	89
63) 1,2,4-Trichlorobenzene	18.13	180	44930	211.03	ng		98
64) Hexachlorobutadiene	18.01	225	21860	192.27	ng		97
65) Naphthalene	18.79	128	104848	250.23	ng		100
66) 1,2,3-Trichlorobenzene	19.20	180	39851	201.90	ng		94

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\011402\01140225.D Vial: 26
Acq On : 14 Jan 2002 8:14 pm Operator: MEG
Sample : PES0110-01MS D2-4.0 1.0g 5X Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS/SS_SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 17 13:06 2002 Quant Results File: 011402.RES

Method : C:\HPCHEM\1\METHODS\011402.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Thu Jan 17 12:50:09 2002
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\011402\01140226.D Vial: 27
Acq On : 14 Jan 2002 8:39 pm Operator: MEG
Sample : PES0110-01MSD D2-4.0 1.0g 5X Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS/SS_SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 17 13:08 2002 Quant Results File: 011402.RES

Quant Method : C:\HPCHEM\1\METHODS\011402.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Thu Jan 17 12:50:09 2002
Response via : Initial Calibration
DataAcq Meth : AQ_8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	8.67	96	165264	250.00	ng	0.00
32) Chlorobenzene-d5	12.22	117	98848	250.00	ng	0.00
45) 1,4-Dichlorobenzene-d4	15.16	152	50009	250.00	ng	0.00
System Monitoring Compounds						
16) Dibromofluoromethane	7.80	113	46144	248.76	ng	0.00
Spiked Amount 250.000			Recovery = 99.50%			
17) 1,2-Dichloroethane-d4	8.39	65	58019	234.67	ng	0.00
Spiked Amount 250.000			Recovery = 93.87%			
29) Toluene-d8	10.36	98	132870	227.71	ng	0.00
Spiked Amount 250.000			Recovery = 91.08%			
43) 4-Bromofluorobenzene	13.71	95	48003	220.65	ng	0.00
Spiked Amount 250.000			Recovery = 88.26%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	3.82	85	43393	96.68	ng	96
3) Chloromethane	4.11	50	93631	213.72	ng	100
4) Vinyl chloride	4.23	62	72158	227.82	ng	97
5) Bromomethane	4.65	94	18883	119.51	ng	95
6) Chloroethane	4.80	64	39029	147.45	ng	99
7) Trichlorofluoromethane	4.91	101	86628	201.15	ng	99
8) 1,1-Dichloroethene	5.48	96	45795	182.59	ng	97
9) Methylene chloride	6.08	84	71087	238.99	ng	92
10) trans-1,2-Dichloroethene	6.22	96	58954	218.59	ng	97
11) 1,1-Dichloroethane	6.84	63	105417	223.67	ng	97
12) cis-1,2-Dichloroethene	7.37	96	56520	229.39	ng	99
13) 2,2-Dichloropropane	7.50	77	72496	186.96	ng	97
14) Bromochloromethane	7.60	128	27953	230.20	ng	91
15) Chloroform	7.60	83	93705	225.55	ng	98
18) 1,1,1-Trichloroethane	7.89	97	69240	216.14	ng	94
19) Carbon tetrachloride	7.83	117	68184	223.25	ng	93
20) 1,1-Dichloropropene	7.99	75	71619	222.86	ng	100
21) Benzene	8.26	78	193404	243.59	ng	98
22) 1,2-Dichloroethane	8.46	62	73418	203.30	ng	100
23) Trichloroethene	8.85	95	47749	191.74	ng	93
24) 1,2-Dichloropropane	9.43	63	52533	232.91	ng	96
25) Dibromomethane	9.33	93	34008	248.54	ng	98
26) Bromodichloromethane	9.45	83	70242	222.66	ng	95
27) cis-1,3-Dichloropropene	10.14	75	81215	221.48	ng	87
28) Toluene	10.43	92	107307	206.21	ng	98
30) trans-1,3-Dichloropropene	10.86	75	71630	218.45	ng	88
31) 1,1,2-Trichloroethane	11.07	83	39654	276.70	ng	98
33) Tetrachloroethene	10.90	164	35688	227.33	ng	96
34) 1,3-Dichloropropane	11.42	76	84371	273.88	ng	93
35) Dibromochloromethane	11.32	129	47221	258.67	ng	95
36) 1,2-Dibromoethane	11.65	107	47812	278.24	ng	90
37) Chlorobenzene	12.25	112	103068	237.78	ng	98
38) 1,1,1,2-Tetrachloroethane	12.30	131	41694	219.98	ng	96
39) Ethyl benzene	12.22	91	181904	233.69	ng	98
40) m,p-Xylene	12.38	106	135518	231.79	ng	92
41) o-Xylene	12.93	106	67287	231.18	ng	91

(#) = qualifier out of range (m) = manual integration

01/23/02

~~01/23/02~~

1/17/02

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\011402\01140226.D Vial: 27
Acq On : 14 Jan 2002 8:39 pm Operator: MEG
Sample : PES0110-01MSD D2-4.0 1.0g 5X Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS/SS_SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 17 13:08 2002 Quant Results File: 011402.RES

Quant Method : C:\HPCHEM\1\METHODS\011402.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Thu Jan 17 12:50:09 2002
Response via : Initial Calibration
DataAcq Meth : AQ_8260

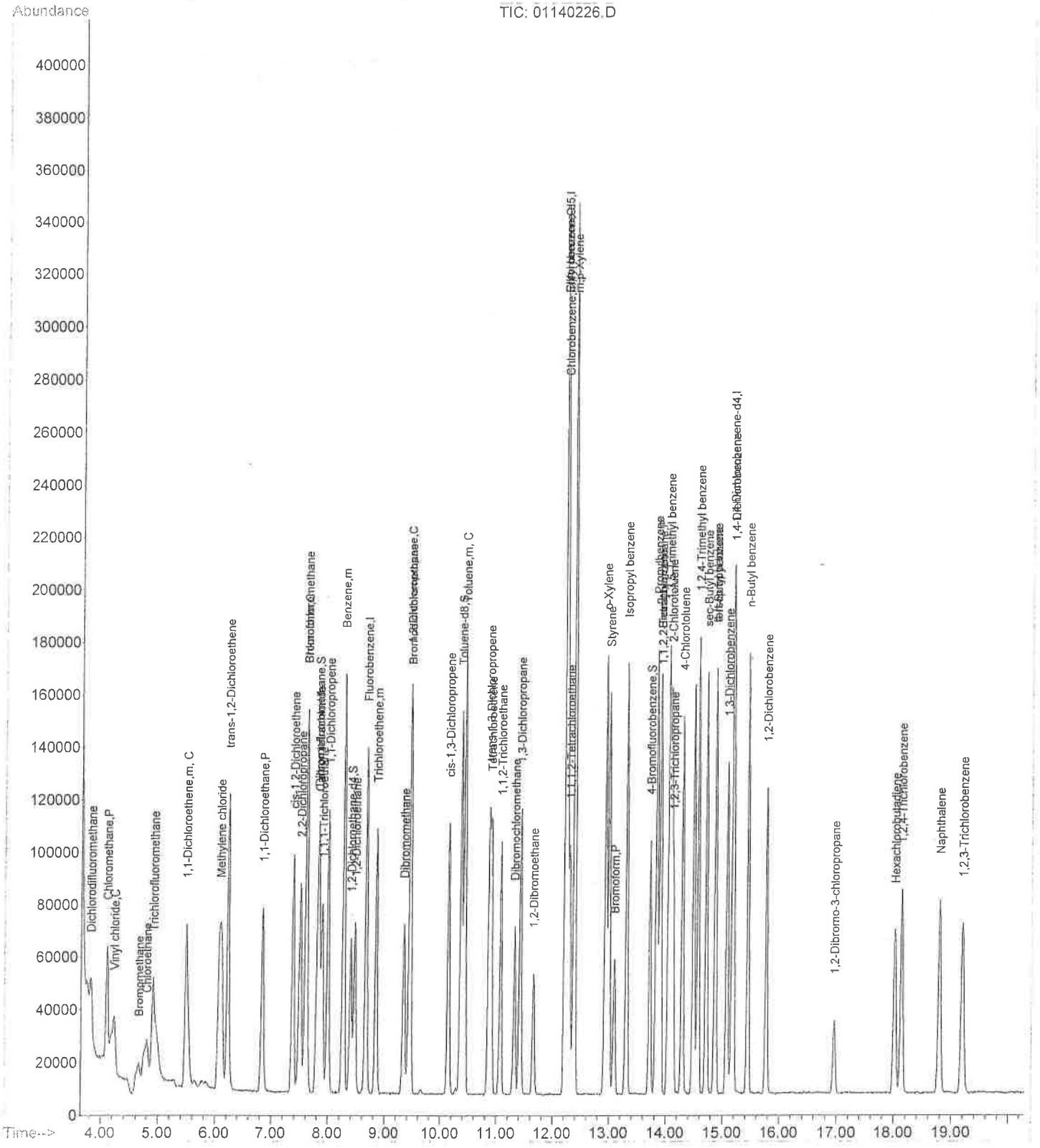
	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
42)	Styrene	12.99	104	107476	219.19 ng		99
44)	Bromoform	13.09	173	35450	266.58 ng		99
46)	Isopropyl benzene	13.30	105	161843	304.12 ng		100
47)	Bromobenzene	13.89	156	43949	280.57 ng		97
48)	1,1,2,2-Tetrachloroethane	13.91	83	63553	384.63 ng		97
49)	1,2,3-Trichloropropane	14.13	75	48799	356.15 ng		93
50)	n-Propylbenzene	13.83	91	202707	275.92 ng		97
51)	2-Chlorotoluene	14.09	91	133569	271.27 ng		99
52)	4-Chlorotoluene	14.29	91	120858	267.94 ng		98
53)	1,3,5-Trimethyl benzene	14.04	105	127703	287.21 ng		99
54)	tert-Butyl benzene	14.87	119	138916	258.99 ng		98
55)	1,2,4-Trimethyl benzene	14.57	105	133611	284.04 ng		96
56)	sec-Butyl benzene	14.72	105	176290	265.29 ng		100
57)	1,3-Dichlorobenzene	15.08	146	76316	259.52 ng		96
58)	4-Isopropyl toluene	14.87	119	138730	258.65 ng		98
59)	1,4-Dichlorobenzene	15.18	146	75215	259.11 ng		98
60)	1,2-Dichlorobenzene	15.77	146	72097	258.95 ng		97
61)	n-Butyl benzene	15.44	91	136328	243.23 ng		95
62)	1,2-Dibromo-3-chloropropan	16.95	75	11206	401.26 ng	#	91
63)	1,2,4-Trichlorobenzene	18.13	180	47371	198.52 ng		97
64)	Hexachlorobutadiene	18.01	225	24530	190.30 ng		96
65)	Naphthalene	18.80	128	113362	239.81 ng		100
66)	1,2,3-Trichlorobenzene	19.20	180	44091	197.58 ng		97

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\011402\01140226.D Vial: 27
Acq On : 14 Jan 2002 8:39 pm Operator: MEG
Sample : PES0110-01MSD D2-4.0 1.0g 5X Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS/SS_SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 17 13:08 2002 Quant Results File: 011402.RES

Method : C:\HPCHEM\1\METHODS\011402.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Thu Jan 17 12:50:09 2002
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\011402\01140227.D Vial: 28
Acq On : 14 Jan 2002 9:04 pm Operator: MEG
Sample : PES0114-15MS A8-NORTH3-2.0 1.0g 5X Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS/SS_SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 17 13:09 2002 Quant Results File: 011402.RES

Quant Method : C:\HPCHEM\1\METHODS\011402.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Thu Jan 17 12:50:09 2002
Response via : Initial Calibration
DataAcq Meth : AQ_8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	8.66	96	173083	250.00	ng	0.00
32) Chlorobenzene-d5	12.22	117	107600	250.00	ng	0.00
45) 1,4-Dichlorobenzene-d4	15.16	152	59508	250.00	ng	0.00
System Monitoring Compounds						
16) Dibromofluoromethane	7.80	113	47121	238.15	ng	0.00
Spiked Amount 250.000			Recovery = 95.26%			
17) 1,2-Dichloroethane-d4	8.39	65	58749	221.58	ng	0.00
Spiked Amount 250.000			Recovery = 88.63%			
29) Toluene-d8	10.36	98	142894	237.93	ng	0.00
Spiked Amount 250.000			Recovery = 95.17%			
43) 4-Bromofluorobenzene	13.71	95	56527	238.70	ng	0.00
Spiked Amount 250.000			Recovery = 95.48%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	3.83	85	50934	120.72	ng	97
3) Chloromethane	4.11	50	96469	208.84	ng	97
4) Vinyl chloride	4.23	62	74410	222.66	ng	95
5) Bromomethane	4.65	94	20965	132.59	ng	100
6) Chloroethane	4.81	64	40589	145.87	ng	99
7) Trichlorofluoromethane	4.91	101	89440	197.11	ng	98
8) 1,1-Dichloroethene	5.48	96	47966	182.61	ng	96
9) Methylene chloride	6.09	84	72398	210.18	ng	94
10) trans-1,2-Dichloroethene	6.22	96	61348	216.45	ng	97
11) 1,1-Dichloroethane	6.84	63	106436	211.89	ng	98
12) cis-1,2-Dichloroethene	7.37	96	59041	228.46	ng	97
13) 2,2-Dichloropropane	7.49	77	72768	175.35	ng	99
14) Bromochloromethane	7.60	128	29522	232.95	ng	93
15) Chloroform	7.60	83	94503	213.76	ng	98
18) 1,1,1-Trichloroethane	7.88	97	71024	209.64	ng	94
19) Carbon tetrachloride	7.82	117	71394	223.17	ng	95
20) 1,1-Dichloropropene	7.99	75	75699	225.79	ng	97
21) Benzene	8.26	78	202159	242.89	ng	98
22) 1,2-Dichloroethane	8.46	62	75504	198.08	ng	98
23) Trichloroethene	8.85	95	50553	193.83	ng	92
24) 1,2-Dichloropropane	9.43	63	54553	230.11	ng	96
25) Dibromomethane	9.34	93	35609	248.46	ng	98
26) Bromodichloromethane	9.45	83	72792	219.45	ng	97
27) cis-1,3-Dichloropropene	10.14	75	86013	224.93	ng	87
28) Toluene	10.42	92	115763	215.35	ng	100
30) trans-1,3-Dichloropropene	10.86	75	76713	225.35	ng	88
31) 1,1,2-Trichloroethane	11.07	83	41583	277.18	ng	96
33) Tetrachloroethene	10.90	164	39467	230.96	ng	97
34) 1,3-Dichloropropane	11.42	76	87640	261.36	ng	95
35) Dibromochloromethane	11.31	129	50060	251.92	ng	97
36) 1,2-Dibromoethane	11.66	107	51312	274.32	ng	93
37) Chlorobenzene	12.24	112	116200	246.27	ng	98
38) 1,1,1,2-Tetrachloroethane	12.29	131	43505	210.86	ng	93
39) Ethyl benzene	12.21	91	205520	242.56	ng	99
40) m,p-Xylene	12.38	106	151822	238.56	ng	91
41) o-Xylene	12.93	106	76314	240.86	ng	94

(#) = qualifier out of range (m) = manual integration

01/23/02

1/17/02

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\011402\01140227.D Vial: 28
Acq On : 14 Jan 2002 9:04 pm Operator: MEG
Sample : PES0114-15MS A8-NORTH3-2.0 1.0g 5X Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS/SS_SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 17 13:09 2002 Quant Results File: 011402.RES

Quant Method : C:\HPCHEM\1\METHODS\011402.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Thu Jan 17 12:50:09 2002
Response via : Initial Calibration
DataAcq Meth : AQ_8260

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
42) Styrene	12.99	104	128130	240.06 ng	98
44) Bromoform	13.09	173	39367	271.95 ng	98
46) Isopropyl benzene	13.30	105	188487	297.65 ng	99
47) Bromobenzene	13.88	156	50499	270.92 ng	95
48) 1,1,2,2-Tetrachloroethane	13.90	83	69397	352.96 ng	97
49) 1,2,3-Trichloropropane	14.13	75	52605	322.64 ng	92
50) n-Propylbenzene	13.82	91	240938	275.61 ng	97
51) 2-Chlorotoluene	14.08	91	158845	271.11 ng	99
52) 4-Chlorotoluene	14.29	91	145864	271.76 ng	99
53) 1,3,5-Trimethyl benzene	14.04	105	153368	289.88 ng	99
54) tert-Butyl benzene	14.87	119	173060	271.15 ng	98
55) 1,2,4-Trimethyl benzene	14.56	105	159153	284.33 ng	97
56) sec-Butyl benzene	14.71	105	217454	275.00 ng	99
57) 1,3-Dichlorobenzene	15.07	146	94138	269.03 ng	95
58) 4-Isopropyl toluene	14.87	119	173060	271.15 ng	98
59) 1,4-Dichlorobenzene	15.18	146	95201	275.61 ng	99
60) 1,2-Dichlorobenzene	15.77	146	91742	276.91 ng	98
61) n-Butyl benzene	15.43	91	175065	262.48 ng	96
62) 1,2-Dibromo-3-chloropropan	16.95	75	13449	404.70 ng	91
63) 1,2,4-Trichlorobenzene	18.13	180	69273	235.18 ng	99
64) Hexachlorobutadiene	18.01	225	35784	224.75 ng	96
65) Naphthalene	18.79	128	175253	300.59 ng	100
66) 1,2,3-Trichlorobenzene	19.20	180	67154	241.72 ng	95

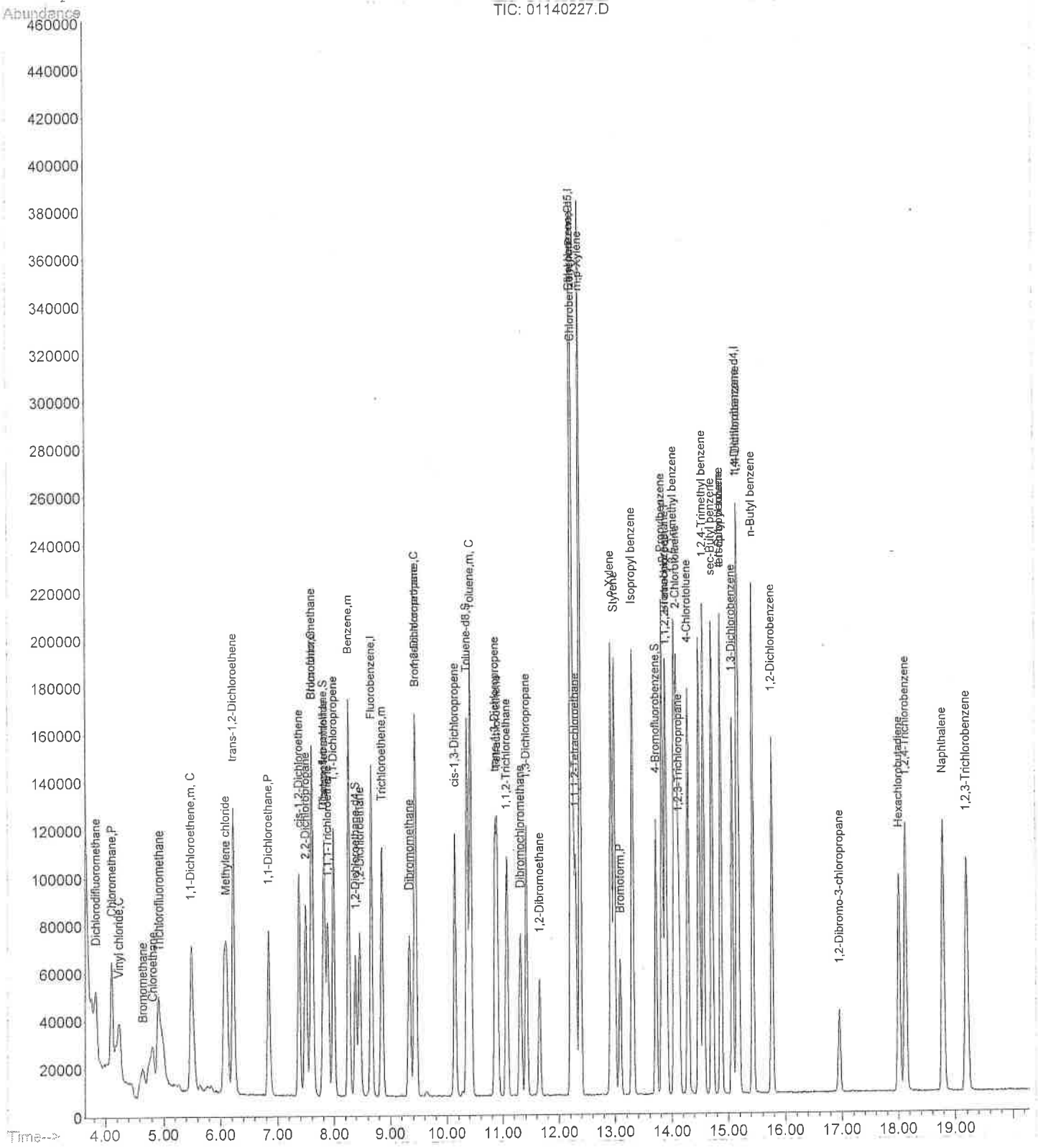
(#) = qualifier out of range (m) = manual integration
01140227.D 011402.M Thu Jan 17 13:09:50 2002

Quantitation Report

Data File : C:\HPCHEM\1\DATA\011402\01140227.D Vial: 28
Acq On : 14 Jan 2002 9:04 pm Operator: MEG
Sample : PES0114-15MS A8-NORTH3-2.0 1.0g 5X Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS/SS_SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 17 13:09 2002 Quant Results File: 011402.RES

Method : C:\HPCHEM\1\METHODS\011402.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Thu Jan 17 12:50:09 2002
Response via : Initial Calibration

TIC: 01140227.D



Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\011402\01140228.D Vial: 29
Acq On : 14 Jan 2002 9:28 pm Operator: MEG
Sample : PES0114-15MSD A8-NORTH3-2.0 1.0g 5X Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS/SS_SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 17 13:10 2002 Quant Results File: 011402.RES

Quant Method : C:\HPCHEM\1\METHODS\011402.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Thu Jan 17 12:50:09 2002
Response via : Initial Calibration
DataAcq Meth : AQ_8260

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene	8.66	96	166797	250.00	ng		0.00
32) Chlorobenzene-d5	12.22	117	105408	250.00	ng		0.00
45) 1,4-Dichlorobenzene-d4	15.16	152	59624	250.00	ng		0.00
System Monitoring Compounds							
16) Dibromofluoromethane	7.80	113	47118	253.74	ng		0.00
Spiked Amount 250.000			Recovery = 101.50%				
17) 1,2-Dichloroethane-d4	8.39	65	57249	225.85	ng		0.00
Spiked Amount 250.000			Recovery = 90.34%				
29) Toluene-d8	10.36	98	141276	248.06	ng		0.00
Spiked Amount 250.000			Recovery = 99.22%				
43) 4-Bromofluorobenzene	13.71	95	55702	240.11	ng		0.00
Spiked Amount 250.000			Recovery = 96.04%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	3.81	85	74489	236.23	ng		97
3) Chloromethane	4.10	50	97942	224.69	ng		99
4) Vinyl chloride	4.21	62	75730	241.20	ng		94
5) Bromomethane	4.65	94	24848	185.64	ng		96
6) Chloroethane	4.80	64	43240	169.56	ng		97
7) Trichlorofluoromethane	4.91	101	90658	211.65	ng		98
8) 1,1-Dichloroethene	5.48	96	48756	194.64	ng		93
9) Methylene chloride	6.08	84	73122	259.03	ng		91
10) trans-1,2-Dichloroethene	6.21	96	63449	240.88	ng		96
11) 1,1-Dichloroethane	6.84	63	107928	228.40	ng		99
12) cis-1,2-Dichloroethene	7.37	96	59263	243.27	ng		99
13) 2,2-Dichloropropane	7.49	77	72299	183.64	ng		100
14) Bromochloromethane	7.60	128	29414	244.15	ng	#	90
15) Chloroform	7.60	83	96025	230.43	ng		100
18) 1,1,1-Trichloroethane	7.88	97	71986	225.64	ng		92
19) Carbon tetrachloride	7.82	117	71167	234.19	ng		100
20) 1,1-Dichloropropene	7.99	75	76809	242.72	ng		98
21) Benzene	8.26	78	201698	255.53	ng		100
22) 1,2-Dichloroethane	8.46	62	74298	204.08	ng		99
23) Trichloroethene	8.84	95	50500	200.92	ng		92
24) 1,2-Dichloropropane	9.43	63	54096	239.62	ng		98
25) Dibromomethane	9.33	93	36207	267.87	ng		99
26) Bromodichloromethane	9.45	83	72236	228.44	ng		95
27) cis-1,3-Dichloropropene	10.14	75	86146	237.13	ng		87
28) Toluene	10.42	92	117621	232.36	ng		96
30) trans-1,3-Dichloropropene	10.86	75	77124	238.87	ng		88
31) 1,1,2-Trichloroethane	11.07	83	41324	289.13	ng		96
33) Tetrachloroethene	10.90	164	40806	243.76	ng		98
34) 1,3-Dichloropropane	11.42	76	88513	269.45	ng		96
35) Dibromochloromethane	11.31	129	49720	255.41	ng		98
36) 1,2-Dibromoethane	11.65	107	51116	278.95	ng		92
37) Chlorobenzene	12.25	112	118428	256.21	ng		97
38) 1,1,1,2-Tetrachloroethane	12.29	131	44766	221.49	ng		95
39) Ethyl benzene	12.22	91	209313	252.17	ng		98
40) m,p-Xylene	12.38	106	157859	253.20	ng		92
41) o-Xylene	12.93	106	78692	253.53	ng		94

(#) = qualifier out of range (m) = manual integration

01/23/02

1/17/02

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\011402\01140228.D Vial: 29
Acq On : 14 Jan 2002 9:28 pm Operator: MEG
Sample : PES0114-15MSD A8-NORTH3-2.0 1.0g 5X Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS/SS_SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 17 13:10 2002 Quant Results File: 011402.RES

Quant Method : C:\HPCHEM\1\METHODS\011402.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Thu Jan 17 12:50:09 2002
Response via : Initial Calibration
DataAcq Meth : AQ_8260

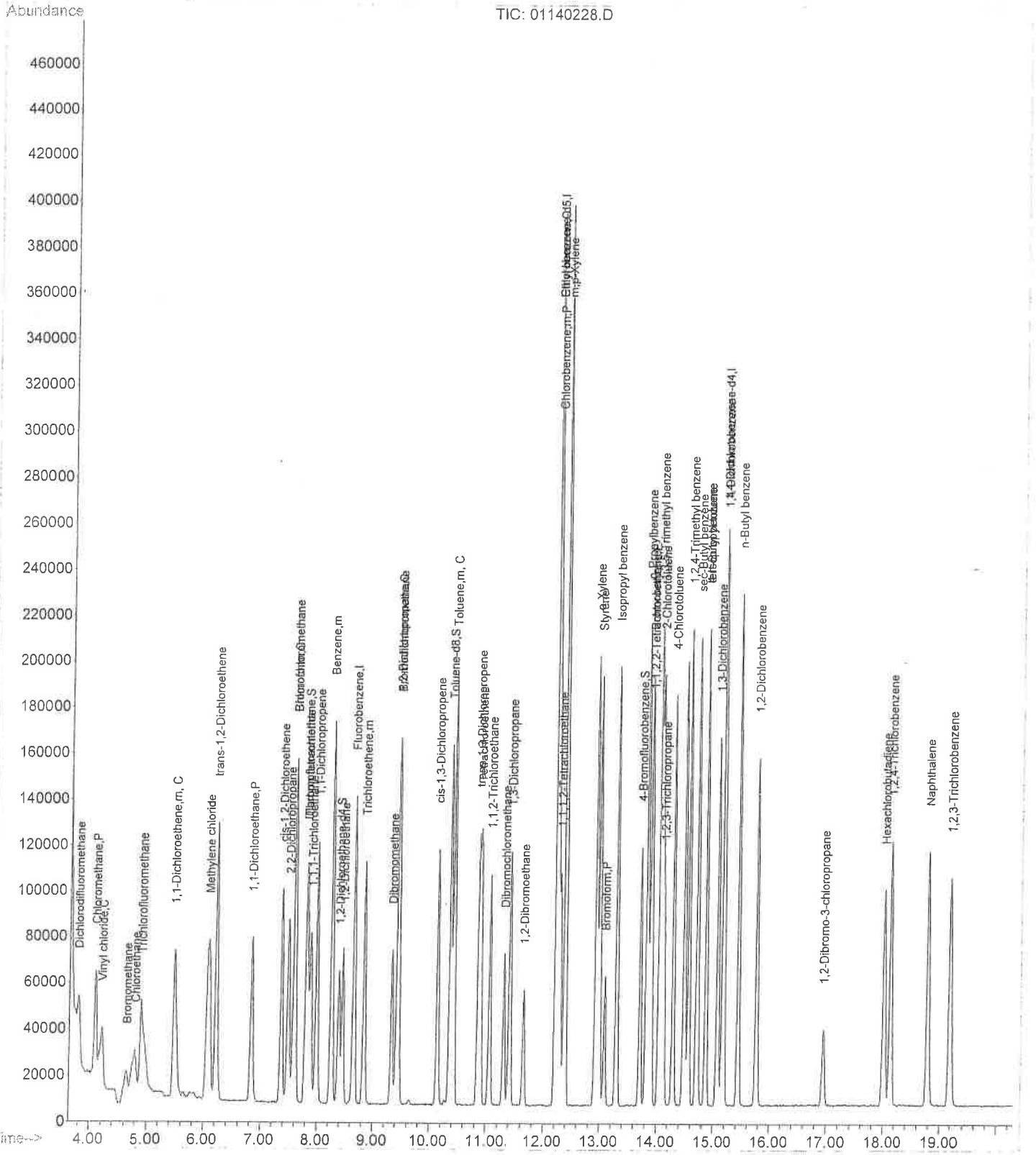
Compound	R.T.	QIon	Response	Conc Unit	Qvalue
42) Styrene	12.98	104	132458	253.33 ng	97
44) Bromoform	13.09	173	38919	274.45 ng	99
46) Isopropyl benzene	13.30	105	191659	302.07 ng	98
47) Bromobenzene	13.88	156	51672	276.68 ng	94
48) 1,1,2,2-Tetrachloroethane	13.90	83	68597	348.21 ng	95
49) 1,2,3-Trichloropropane	14.13	75	51272	313.85 ng	92
50) n-Propylbenzene	13.83	91	249501	284.85 ng	96
51) 2-Chlorotoluene	14.08	91	163665	278.80 ng	99
52) 4-Chlorotoluene	14.29	91	149928	278.79 ng	99
53) 1,3,5-Trimethyl benzene	14.04	105	158188	298.40 ng	100
54) tert-Butyl benzene	14.87	119	178198	278.66 ng	97
55) 1,2,4-Trimethyl benzene	14.56	105	164117	292.63 ng	97
56) sec-Butyl benzene	14.71	105	224358	283.18 ng	99
57) 1,3-Dichlorobenzene	15.07	146	96105	274.11 ng	97
58) 4-Isopropyl toluene	14.87	119	178000	278.35 ng	97
59) 1,4-Dichlorobenzene	15.18	146	96697	279.40 ng	98
60) 1,2-Dichlorobenzene	15.77	146	94736	285.39 ng	99
61) n-Butyl benzene	15.44	91	181439	271.51 ng	96
62) 1,2-Dibromo-3-chloropropan	16.96	75	13372	401.60 ng	92
63) 1,2,4-Trichlorobenzene	18.13	180	71101	239.98 ng	99
64) Hexachlorobutadiene	18.01	225	36654	228.92 ng	96
65) Naphthalene	18.79	128	172849	296.46 ng	100
66) 1,2,3-Trichlorobenzene	19.20	180	67820	243.33 ng	97

(#) = qualifier out of range (m) = manual integration
01140228.D 011402.M Thu Jan 17 13:10:15 2002

Quantitation Report

Data File : C:\HPCHEM\1\DATA\011402\01140228.D Vial: 29
Acq On : 14 Jan 2002 9:28 pm Operator: MEG
Sample : PES0114-15MSD A8-NORTH3-2.0 1.0g 5X Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS/SS_SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 17 13:10 2002 Quant Results File: 011402.RES

Method : C:\HPCHEM\1\METHODS\011402.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Thu Jan 17 12:50:09 2002
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\011402\01140229.D Vial: 30
Acq On : 14 Jan 2002 9:53 pm Operator: MEG
Sample : LCS 250ng Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS/SS_SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 17 13:10 2002 Quant Results File: 011402.RES

Quant Method : C:\HPCHEM\1\METHODS\011402.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Thu Jan 17 12:50:09 2002
Response via : Initial Calibration
DataAcq Meth : AQ_8260

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene	8.66	96	169309	250.00	ng		0.00
32) Chlorobenzene-d5	12.22	117	107636	250.00	ng		0.00
45) 1,4-Dichlorobenzene-d4	15.16	152	62265	250.00	ng		0.00
System Monitoring Compounds							
16) Dibromofluoromethane	7.80	113	47379	249.71	ng		-0.01
Spiked Amount 250.000			Recovery = 99.88%				
17) 1,2-Dichloroethane-d4	8.39	65	58378	227.62	ng		0.00
Spiked Amount 250.000			Recovery = 91.05%				
29) Toluene-d8	10.36	98	144559	251.28	ng		0.00
Spiked Amount 250.000			Recovery = 100.51%				
43) 4-Bromofluorobenzene	13.71	95	58263	245.95	ng		0.00
Spiked Amount 250.000			Recovery = 98.38%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	3.81	85	73884	228.50	ng		95
3) Chloromethane	4.11	50	98479	221.75	ng		98
4) Vinyl chloride	4.22	62	75053	232.95	ng		96
5) Bromomethane	4.65	94	24542	177.98	ng		95
6) Chloroethane	4.80	64	43366	166.59	ng		97
7) Trichlorofluoromethane	4.91	101	91079	208.62	ng		99
8) 1,1-Dichloroethene	5.48	96	50065	197.33	ng		94
9) Methylene chloride	6.08	84	74272	259.73	ng		88
10) trans-1,2-Dichloroethene	6.22	96	64902	243.64	ng		95
11) 1,1-Dichloroethane	6.84	63	109914	229.49	ng		97
12) cis-1,2-Dichloroethene	7.37	96	60965	248.25	ng		98
13) 2,2-Dichloropropane	7.50	77	73975	185.85	ng		99
14) Bromochloromethane	7.60	128	30434	250.75	ng	#	88
15) Chloroform	7.60	83	98161	232.71	ng		100
18) 1,1,1-Trichloroethane	7.89	97	72822	224.53	ng		94
19) Carbon tetrachloride	7.82	117	72054	233.35	ng		91
20) 1,1-Dichloropropene	7.99	75	78026	242.98	ng		99
21) Benzene	8.26	78	204581	255.25	ng		98
22) 1,2-Dichloroethane	8.46	62	76441	208.01	ng		98
23) Trichloroethene	8.85	95	51741	202.80	ng		93
24) 1,2-Dichloropropane	9.43	63	55275	241.85	ng		98
25) Dibromomethane	9.33	93	37031	270.69	ng		94
26) Bromodichloromethane	9.45	83	73733	230.17	ng		95
27) cis-1,3-Dichloropropene	10.14	75	88708	241.80	ng		85
28) Toluene	10.42	92	119581	232.89	ng		98
30) trans-1,3-Dichloropropene	10.86	75	81092	250.57	ng		88
31) 1,1,2-Trichloroethane	11.06	83	42326	292.70	ng		93
33) Tetrachloroethene	10.90	164	42011	245.76	ng		99
34) 1,3-Dichloropropane	11.41	76	90770	270.60	ng		97
35) Dibromochloromethane	11.31	129	51167	257.40	ng		99
36) 1,2-Dibromoethane	11.65	107	52788	282.11	ng		91
37) Chlorobenzene	12.25	112	121570	257.56	ng		95
38) 1,1,1,2-Tetrachloroethane	12.29	131	44331	214.79	ng		92
39) Ethyl benzene	12.21	91	211804	249.89	ng		97
40) m,p-Xylene	12.38	106	158779	249.40	ng		95
41) o-Xylene	12.93	106	81498	257.14	ng		94

(#) = qualifier out of range (m) = manual integration

01/23/02

1/17/02

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\011402\01140229.D Vial: 30
Acq On : 14 Jan 2002 9:53 pm Operator: MEG
Sample : LCS 250ng Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS/SS_SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 17 13:10 2002 Quant Results File: 011402.RES

Quant Method : C:\HPCHEM\1\METHODS\011402.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Thu Jan 17 12:50:09 2002
Response via : Initial Calibration
DataAcq Meth : AQ_8260

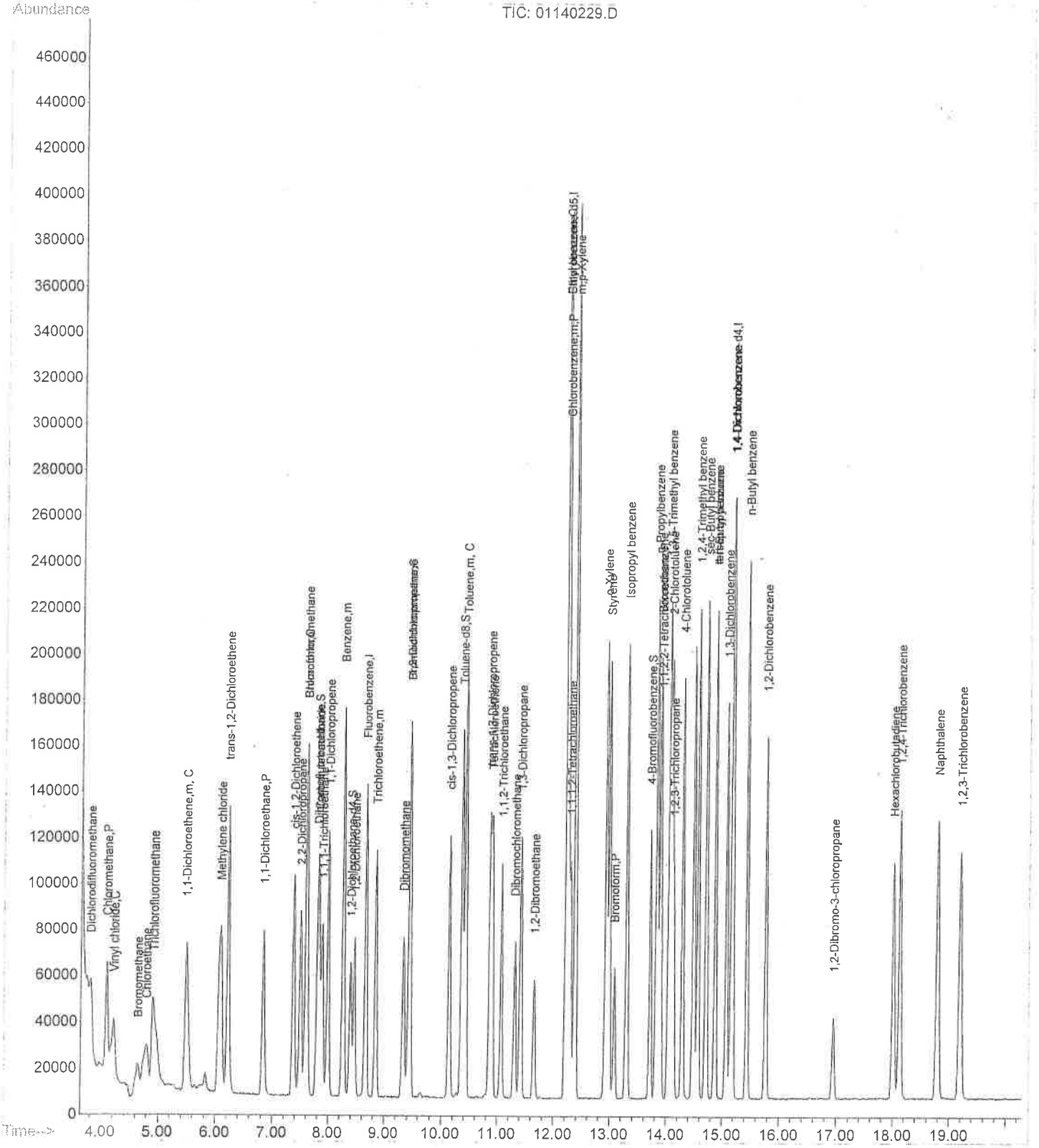
	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
42)	Styrene	12.99	104	135250	253.31	ng		100
44)	Bromoform	13.09	173	39602	273.48	ng		99
46)	Isopropyl benzene	13.30	105	197366	297.88	ng		99
47)	Bromobenzene	13.88	156	53858	276.15	ng		96
48)	1,1,2,2-Tetrachloroethane	13.91	83	71120	345.70	ng		95
49)	1,2,3-Trichloropropane	14.12	75	52866	309.89	ng		93
50)	n-Propylbenzene	13.82	91	257688	281.71	ng		97
51)	2-Chlorotoluene	14.08	91	166612	271.78	ng		100
52)	4-Chlorotoluene	14.29	91	157215	279.94	ng		98
53)	1,3,5-Trimethyl benzene	14.04	105	163484	295.31	ng		97
54)	tert-Butyl benzene	14.87	119	183767	275.18	ng		97
55)	1,2,4-Trimethyl benzene	14.57	105	168988	288.53	ng		98
56)	sec-Butyl benzene	14.71	105	236739	286.13	ng		99
57)	1,3-Dichlorobenzene	15.07	146	100858	275.47	ng		94
58)	4-Isopropyl toluene	14.87	119	183833	275.27	ng		97
59)	1,4-Dichlorobenzene	15.18	146	101566	281.02	ng		99
60)	1,2-Dichlorobenzene	15.77	146	98307	283.58	ng		97
61)	n-Butyl benzene	15.44	91	192534	275.89	ng		95
62)	1,2-Dibromo-3-chloropropan	16.95	75	13660	392.85	ng	#	89
63)	1,2,4-Trichlorobenzene	18.13	180	76974	247.38	ng		98
64)	Hexachlorobutadiene	18.01	225	39859	236.81	ng		95
65)	Naphthalene	18.79	128	188467	307.92	ng		100
66)	1,2,3-Trichlorobenzene	19.19	180	74742	254.58	ng		95

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\011402\01140229.D Vial: 30
Acq On : 14 Jan 2002 9:53 pm Operator: MEG
Sample : LCS 250ng Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS/SS_SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 17 13:10 2002 Quant Results File: 011402.RES

Method : C:\HPCHEM\1\METHODS\011402.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Thu Jan 17 12:50:09 2002
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\011402\01140230.D Vial: 31
Acq On : 14 Jan 2002 10:17 pm Operator: MEG
Sample : METHOD BLANK Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS/SS_SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 17 13:13 2002 Quant Results File: 011402.RES

Quant Method : C:\HPCHEM\1\METHODS\011402.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Thu Jan 17 12:50:09 2002
Response via : Initial Calibration
DataAcq Meth : AQ_8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	8.66	96	178707	250.00	ng	0.00
32) Chlorobenzene-d5	12.22	117	116447	250.00	ng	0.00
45) 1,4-Dichlorobenzene-d4	15.16	152	62229	250.00	ng	0.00
System Monitoring Compounds						
16) Dibromofluoromethane	7.80	113	49829	248.17	ng	0.00
Spiked Amount 250.000			Recovery = 99.27%			
17) 1,2-Dichloroethane-d4	8.39	65	57291	200.39	ng	0.00
Spiked Amount 250.000			Recovery = 80.16%			
29) Toluene-d8	10.36	98	150733	246.39	ng	0.00
Spiked Amount 250.000			Recovery = 98.56%			
43) 4-Bromofluorobenzene	13.71	95	60015	234.18	ng	0.00
Spiked Amount 250.000			Recovery = 93.67%			
Target Compounds						Qvalue
21) Benzene	8.25	78	38	Below Cal	ND	51
22) 1,2-Dichloroethane	8.66	62	2500	Below Cal		93

1/17/02

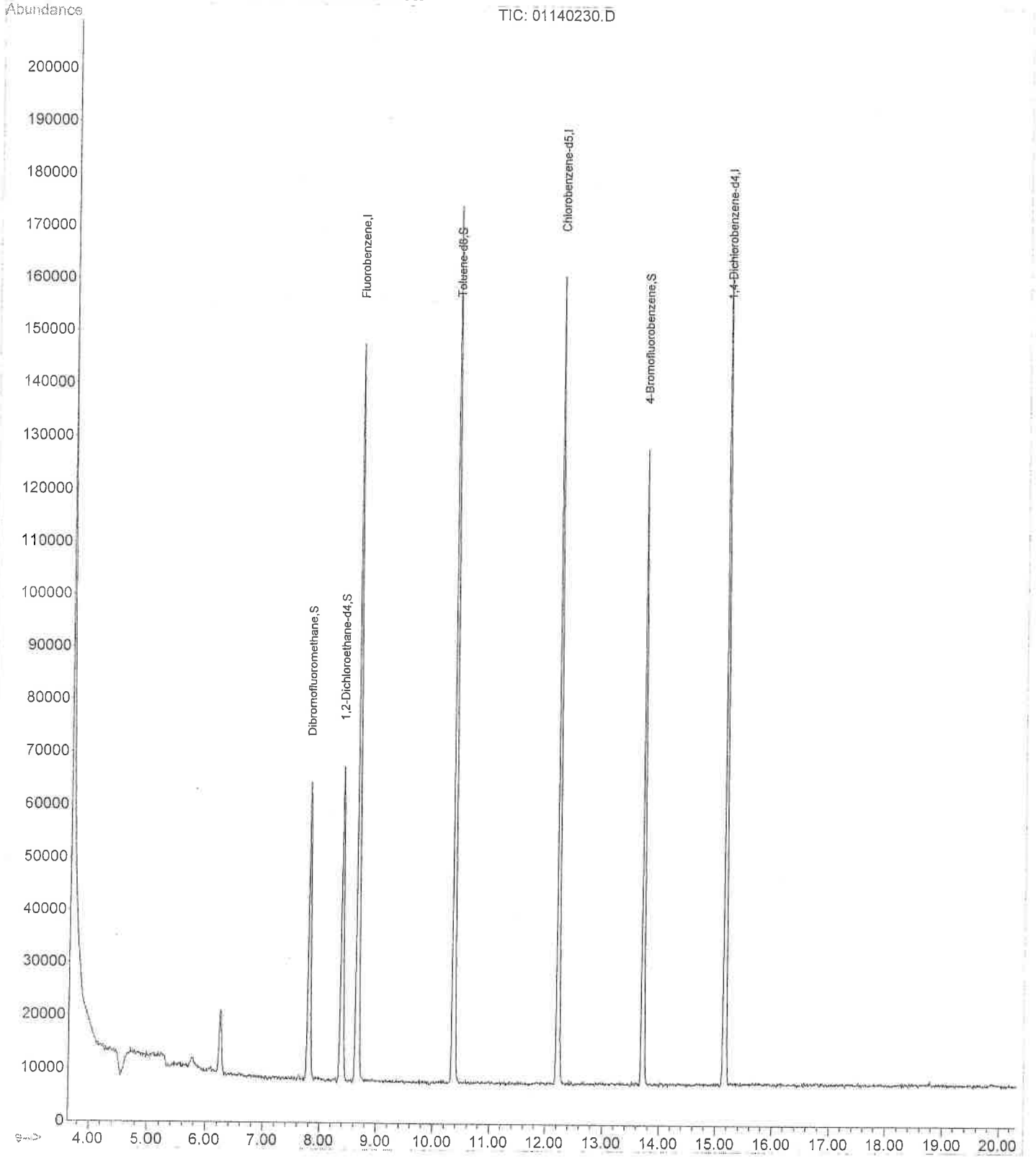
01/23/02

(#) = qualifier out of range (m) = manual integration
01140230.D 011402.M Thu Jan 17 13:13:30 2002 Page 1

Quantitation Report

Data File : C:\HPCHEM\1\DATA\011402\01140230.D Vial: 31
Acq On : 14 Jan 2002 10:17 pm Operator: MEG
Sample : METHOD BLANK Inst : Alpha
Misc : 5mL purge 5uL 50ppm IS/SS_SC00225 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 17 13:13 2002 Quant Results File: 011402.RES

Method : C:\HPCHEM\1\METHODS\011402.M (RTE Integrator)
Title : TO-14 Volatile Organics ompounds
Last Update : Thu Jan 17 12:50:09 2002
Response via : Initial Calibration



SECTION 6.0
STANDARD PREP LOGS

JAN 25 '02 02:58 FR STL SACRAMENTO 916 372 1059 TO 19256003002 P.02/02

** TOTAL PAGE.02 **

SEVERN TRENT SERVICES

Severn Trent Laboratories - OST Division

Standard Prep Log

Line #	Date Prepared	Standard ID	Description	Initial Conc	Conc Units	Aliquot Taken (uL)	Final Volume (mL)	Solvent ID	Solvent Lot	New Std ID	New Std Conc	Expiration Date	Prepared by	Comments
1	NA	SC00501	Diesel Fuel #2 Lot A016063	50,000	ug/mL					SC00501				Stock ICAL/MDL
2	NA	SC00502	Diesel Fuel #2 Lot 011B00	20	mg/mL					SC00502				Stock 2nd Source
3	NA	SC00503	O-Terp 041201 - Lot	10	mg/mL					SC00503				Stock
4	12/20/01	SC00504	O-Terp Surr.	10	mg/mL	2.5mL	10mL	~~MeOH~~	V03E71	SC00504	250mg/mL	3/20/01	SK	For Spiking
5	12/20/01	SC00503	O-Terp Level 1	10	mg/mL	10mL	1.0mL	MeOH	V03E71	SC00505	100ug/mL	3/20/01	SK	ICAL Level 1
6	12/20/01	SC00503	O-Terp Level 2	10	mg/mL	50mL	1.0mL	MeOH	V03E71	SC00506	500mg/mL	3/20/01	SK	ICAL Level 2
7	12/20/01	SC00503	O-Terp Level 3	10	mg/mL	125mL	1.0mL	MeOH	V03E71	SC00507	1250mg/mL	3/20/01	SK	ICAL Level 3
8	12/20/01	SC00503	O-Terp Level 4	10	mg/mL	200mL	1.0mL	MeOH	V03E71	SC00508	~~1250~~ 2000 mg/mL	3/20/01	SK	ICAL Level 4
9	12/20/01	SC00503	O-Terp Level 5	10	mg/mL	250mL	1.0mL	MeOH	V03E71	SC00509	2500mg/mL	3/20/01	SK	ICAL Level 5
10	12/20/01	SC00501	Diesel Level 1	50,000	ug/mL	100mL	1.0mL	MeOH	V03E71	SC00510	5mg/mL	3/20/01	SK	ICAL Level 1
11	12/20/01	SC00501	Diesel Level 2	50,000	ug/mL	200mL	1.0mL	MeOH	V03E71	SC00511	10mg/mL	3/20/01	SK	ICAL Level 2
12	12/20/01	SC00501	Diesel Level 3	50,000	ug/mL	500mL	1.0mL	MeOH	V03E71	SC00512	25mg/mL	3/20/01	SK	ICAL Level 3
13	12/20/01	SC00501	Diesel Level 4	50,000	ug/mL	800mL	1.0mL	MeOH	V03E71	SC00513	40mg/mL	3/20/01	SK	ICAL Level 4
14	1/4/02	Lot12040	8260 IS	2000	ug/mL	ALL				SC00514	200 ug/mL	1/4/02	MG	
15		Lot031101	8260 SS	2000	ug/mL	ALL				SC00515	2000 ug/mL	1/4/02	MG	
16		Lot122100	8260 TCL Cmpds	200	ug/mL	ALL				SC00516	200 ug/mL	1/4/02	MG	
17		Lot092501	8260 Calib	2000	ug/mL	ALL				SC00517	2000 ug/mL	1/4/02	MG	
18		Lot070501	8260 Purge & Surr	2000	ug/mL	ALL				SC00518	2000 ug/mL	1/4/02	MG	
19		Lot072501	8260 Calib Surr	2000	ug/mL	ALL				SC00519	2000 ug/mL	1/4/02	MG	
20		SC00514	IS for ICAL	200	ug/mL	50mL	2.0mL	MeOH	060701	SC00520	50 ug/mL	1/4/02	MG	
21		SC00515	SS for ICAL	2000	ug/mL	25mL	2.0mL	MeOH	060701	SC00521	25 ug/mL	1/4/02	MG	
22		SC00514 SC00515	IS/SS ~~Lot ICAL~~	2000	ug/mL	50mL	2.0mL	MeOH	060701	SC00522	50 ug/mL	1/4/02	MG	
23														
24					MG 1/7/02									
25														

005

SECTION 7.0
INSTRUMENT LOGS

SEVERN TRENT SERVICES

Severn Trent Laboratories - OST Division

Instrument Log

Instrument ID: Alpha

Analysis Date: 1/6/02

Analyst: SE

Reviewer:

Lab ID #	Field Sample ID	Data File	ALS #	Quant Method	Sample wt/vol (g/ml)	Dil. Factor	QC Batch	pH	Comments
BFB	NA	010602O1.D	2	010602.M	1uL/5mL	NA	QC001	NA	
ICAL Level 1 25ng	NA	010602O2.D	3		1uL/5mL				
ICAL Level 2 500ng		03	4		20uL/5mL				
ICAL Level 3 1000ng		04	5		40uL/5mL				
LCS 250 ng		05	6		5uL/5mL				
Method Blank		06	7		5mL				
AP0102-01	5-1-ADD26-9	07	8		100uL/5mL	50			
-02	4-1-ADD62-10	08	9						
-03	4-1-ADD62-15	09	10						
-04	4-1-ADD62-19	10	11						
-05	4-1-ADD62-24.5	11	12						
-06	4-1-ADD62-30	12	13						
-08	4-1-ADD62-35D	13	14		1uL/5mL	5000			
-09	SR-12-27-01A	14	15		5uL/5mL	5			
-10	4-2-ADD31-9	15	16		100uL/5mL	50			
-11	4-2-ADD31-14	16	2						
-12	4-2-ADD31-25	17	3						
-13	4-2-ADD31-30	18	4						

BFB: SC00522
Cal STD: SC00301
Internal STDs: SC00522
Surrogates: SC00522

IS ICAL SC00520
Surr ICAL SC00521

LCS: SC00211
MS/MSD: SC00211
Solvent ID: MeOH
Solvent Lot#: V30E40

SEVERN TRENT SERVICES

Severn Trent Laboratories - OST Division

Instrument Log

Instrument ID: Alpha

Analysis Date: 1/6/02

Analyst: SH

Reviewer: _____

Lab ID #	Field Sample ID	Data File	ALS #	Quant Method	Sample wt/vol (g/ml)	Dil. Factor	QC Batch	pH	Comments
AP0102-14	4-2-ADD31-36	01060219-D	5	010602.M	100mL/5mL	50	QC001	N/A	
-17	5-3-ADD42-29	20	6	↓	↓	↓	↓	↓	
-18	5-3-ADD42-34	21	7	↓	↓	↓	↓	↓	

SH 1/9/02

BFB: SC00522

Cal STD: SC00301

Internal STDs: SC00522

Surrogates: SC00522

LCS: SC00211

MS/MSD: SC00211

Solvent ID: MeOH

Solvent Lot#: V30E40

003

SEVERN TRENT SERVICES

Severn Trent Laboratories - OST Division

Instrument Log

Instrument ID: Alpha

Analysis Date: 1/8/02

Analyst: SC

Reviewer: SC 1/9/02

Lab ID #	Field Sample ID	Data File	ALS #	Quant Method	Sample wt/vol (g/ml)	Dil. Factor	QC Batch	pH	Comments
BFB	NA	01080201.D	2	010802.M	1mL/5mL	NA	QC002	NA	
ICAL Level 1		02	3		1mL/5mL				25ng
ICAL Level 2		03	4		4mL/5mL				100ng
ICAL Level 3		04	5		10mL/5mL				250ng
ICAL Level 4		05	6		20mL/5mL				500ng
ICAL Level 5		06	7		40mL/5mL				1000ng
LCS 250ng		07	8		5mL/5mL				
Method Blank		08	9		5mL				
AP0102-19	5-3-ADD24-29	09	10	010602.M	100mL/5mL	50			
-20	5-3-ADD 24-29D	10	11						
-21	5-3-ADD94-8	11	12						
-22	5-3-ADD94-12	SC 1/9/02 12	13						
-23	5-3-ADD94-12D	13	14						
-24	5-3-ADD 94-21	16 SC 1/9/02 14	15						
-25	5-3-ADD 94-24	21 SC 1/9/02 15	16						
-26	5-3-ADD94-24	16	2						
-27	TB-1-2-02	17	3		5mL/5mL	1			
AP0102-04RR	41-ADD62-19	18	4		25mL/5mL	200			

BFB: SC00522

Cal STD: SC00301

Internal STDs: SC00522

Surrogates: SC00522

LCS: SC00211

MS/MSD: SC00211

Solvent ID: MeOH

Solvent Lot#: V30E40

SEVERN TRENT SERVICES

Severn Trent Laboratories - OST Division

Instrument Log

Instrument ID: Alpha

Analysis Date: 1/8/02

Analyst: SR

Reviewer:

Lab ID #	Field Sample ID	Data File	ALS #	Quant Method	Sample wt/vol (g/ml)	Dil. Factor	QC Batch	pH	Comments
AP0102-05RR	4-1-ADD62-24.5	01080219.D	5	010602.M	25mL/5mL	200	QC002	NA	
-06RR	4-1-ADD62-30	20	6		25mL/5mL	200			
-22RR	5-3-ADD94-12	21	7		50mL/5mL	100			
-23RR	5-3-ADD94-12D	22	8		50mL/5mL	100			
AP0108-01	SR-01-03-02A	23	9		5mL/5mL	1			
AP0102-01MS	5-1-ADD26-9	24	10		100uL 5mL/5mL	50			
-01MSD		25	11						
-02MS	4-1-ADD62-10	26	12						
-02MSD		27	13						
BFB 2nd Clock	NA	28	14		1mL/5mL	NA			
CCV 250ng		29	15		10uL/5mL				
LCS 250ng		30	16		5mL/5mL				
Method Blank		31	2		5mL				
Dummy Blank		32	3		NA				
AP0108-02	5-3-ADD89-9	33	4		100uL/5mL	50			
-03	-13	34	5						
-04	-16	35	6						
-05	-26	36	7						

BFB: SC00522
Cal STD: SC00301
Internal STDs: SC00522
Surrogates: SC00522

LCS: SC00211
MS/MSD: SC00211
Solvent ID: MeOH
Solvent Lot#: V30E40

SEVERN TRENT SERVICES

Severn Trent Laboratories - OST Division

Instrument Log

Instrument ID: Alpha

Analysis Date: 1/8/02

Analyst: SK

Reviewer: _____

Lab ID #	4-2-AD028-10 Field Sample ID	Data File	ALS #	Quant Method	Sample wt/vol (g/ml)	Dil. Factor	QC Batch	pH	Comments
AP010B-06	~~010802 37.D~~	010B0237.D	8	010602A.M	100 uL/5mL	50	QC002	NA	
-07	4-2-AD028-25	38	9						
-08	-30	39	10						
-09	-30D	40	11						
-10	-36	41	12						

SK 1/17/02

BFB: SC00522

Cal STD: SC00301

Internal STDs: SC00522

Surrogates: SC00522

LCS: SC00211

MS/MSD: SC00211

Solvent ID: MeOH

Solvent Lot#: V30E40

SEVERN TRENT SERVICES

Severn Trent Laboratories - OST Division

Instrument Log

Instrument ID: Alpha

Analysis Date: 1/9/02

Analyst: SC

Reviewer: SC 1/9/02

Lab ID #	Field Sample ID	Data File	ALS #	Quant Method	Sample wt/vol (g/ml)	Dil. Factor	QC Batch	pH	Comments
BFB	NA	01090201.D	2	010702.M ~~010702-M~~	1uL/5mL	NA	QC003	NA	
CCV 250ng	↓	02	3	↓	10mL/5mL	↓	↓	↓	
LCS 250ng		03	4		5mL/5mL				
Method Blank		04	5		5mL				
PES0109-01	B3-8.0	05	6		1g/5mL	5			
-02	B2-8.0	06	7		↓	↓			
-03	A3-4.0	07	8						
-04	A2-5.0	08	9						
-05	P2-18.1	09	10		1g/5mL	5			
-06	B3-East-5.0	10	11		1g/5mL	5			
-07	D2-19.5	11	12		1g/5mL	5			
-08	D3-East-5.0	12	13		1g/5mL	5			
-10	D1-West-6.0	13	14		↓	↓			
-12	B1-5.0	14	15						
-11	A1-5.0	15	2						
-13	A2-North-4.0	16	3		↓	↓			
-14	BB-4.0	17	5		1g/5mL	5			
-15	A1-North-4.0	↓ 18	6	↓	1g/5mL	5	↓	↓	

BFB: SC00522

Cal STD: SC00301

Internal STDs: SC00522

Surrogates: SC00522

LCS: SC00211

MS/MSD: SC00211

Solvent ID: MeOH

Solvent Lot#: V30E40

SEVERN TRENT SERVICES

Severn Trent Laboratories - OST Division

Instrument Log

Instrument ID: Alpha

Analyst: SH

Analysis Date: 1/9/02

Reviewer:

Lab ID #	Field Sample ID	Data File	ALS #	Quant Method	Sample wt/vol (g/ml)	Dil. Factor	QC Batch	pH	Comments
PES0109-16	A2-NORTH-4.0	01090219.D	7	010702.M	1g/5mL	5	QC003	NA	
AP0108-02RR	5-3-ADD89-9	20	8		50µL/5mL	100			
AP0108-03RR	5-3-ADD89-13	21	9		10µL/5mL	500			
AP0108-12	4-2-ADD37-15	22	10		100µL/5mL	50			
AP0108-13	4-2-ADD37-25	23	11		100µL/5mL	50			
BFB 2nd Clock	—	24	12		1µL/5mL	NA			
CCV 250 ng	—	25	13		10µL/5mL	NA			
LCS 250 ng	—	26	14		5µL/5mL	NA			
Method Blank	—	27	15		5mL	NA			
AP0108-14	4-2-ADD37-35	28	16		100µL/5mL	50			
-15	5-3-ADD95-12.5	29	2						
-16	-16	30	3						
-17	-24	31	4						
-18	4-ADD81-9	32	5						
-19	-17	33	6						
-20	-21	34	7						
						SH 1/10/02			

BFB: SC00522

Cal STD: SC00301

Internal STDs: SC00522

Surrogates: SC00522

LCS: SC00211

MS/MSD: SC00211

Solvent ID: MeOH

Solvent Lot#: V30E40

SEVERN TRENT SERVICES

Severn Trent Laboratories - OST Division

Instrument Log

Instrument ID: Alpha

Analysis Date: 1/10/02

Analyst: SL

Reviewer:

Lab ID #	Field Sample ID	Data File	ALS #	Quant Method	Sample wt/vol (g/ml)	Dil. Factor	QC Batch	pH	Comments
BFB	NA	011002O1.D	2	010702-M	1mL/5mL	NA	QC004	NA	
CCV 250ng		02	3		10mL/5mL				
LCS 250ng		03	4		5mL/5mL				
Method Blank		04	5		5mL				
PES0110-01	D2-4.0	05	6		1g/5mL	5			
-02	C2-4.0	06	7						
-03	EB-4.0	07	8						
-04	A10-4.0	08	9						
-05	E5-4.0	09	10						
-06	E7-8.5	10	11						
-07	E7-12.0	11	12						
-08	E5-8.0	12	13						
-09	E5-12.0	13	14						
-10	B10-4.0	14	15		1g/5mL	5			
-11	E10-4.0	15	16						
-12	D10-4.0	16	2						
-13	C10-4.0	17	3						
-14	COMP-A	18	4		1g/5mL	5			

BFB: SC00522

Cal STD: SC00301

Internal STDs: SC00522

Surrogates: SC00522

LCS: SC00211

MS/MSD: SC00211

Solvent ID: MeOH

Solvent Lot#: V30E40

TRENT SERVICES

Severn Trent Laboratories - OST Division

Instrument Log

Instrument ID: Alpha

Analysis Date: 1/10/02

Analyst: SK

Reviewer:

Lab ID #	Field Sample ID	Data File	ALS #	Quant Method	Sample wt/vol (g/ml)	Dil. Factor	QC Batch	pH	Comments
PES0110-15	F5-0.5	0110021 9.D	5	010702.M	1g/5mL	5	QC004	NA	
-16	F8-0.5	20	6						
-17	C10-East-2.0	21	7						
-18	E2-5.0	22	8			SC,1/16/02			
BFB	—	23	9		~~1mL/5mL~~ NA				
CCV 250ng	—	24	10		10mL/5mL				
LCS 250ng	—	25	11		5mL/5mL				
Method Blank	—	26	12		5mL				
AP0108-21	4-1-ADD81-24	27	13		1g/5mL SK 1/16/02	50			
-22	4-1-ADD81-24P	28	14		100µL/5mL	50			
-23	SR-01-07-02A	29	15		5mL/5mL	1	SC,1/16/02		
-24	4-2-ADD37-45	30	16		100µL/5mL	50			
-25	5-3-ADD98-8.5	31	2						
-26	5-3-ADD98-12	32	3						
-27	5-3-ADD98-16	33	4						
-28	5-3-ADD98-21	34	5						
-29	5-3-ADD98-25	35	6						
-30	SR-01-08-02A	36	7		5mL/5mL	1	SC,1/16/02		

BFB: SC00522

Cal STD: SC00301

Internal STDs: SC00522

Surrogates: SC00522

LCS: SC00211

MS/MSD: SC00211

Solvent ID: MeOH

Solvent Lot#: V30E40

009

SEVERN TRENT SERVICES

Severn Trent Laboratories - OST Division

Instrument Log

Instrument ID: Alpha

Analysis Date: 1/10/02

Analyst: SE

Reviewer:

Lab ID #	Field Sample ID	Data File	ALS #	Quant Method	Sample wt/vol (g/ml)	Dil. Factor	QC Batch	pH	Comments
AP0108-31	5-3-AD098-250	011002 37.D	8	010702.M	100µL/5mL	50	QC004	NA	

SE 1/14/02

BFB: SC00522

Cal STD: SC00301

Internal STDs: SC00522

Surrogates: SC00522

LCS: SC00211

MS/MSD: SC00211

Solvent ID: MeOH

Solvent Lot#: V30E40

SEVERN TRENT SERVICES

Severn Trent Laboratories - OST Division

Instrument Log

Instrument ID: Alpha

Analysis Date: 1/14/02

Analyst: SE

Reviewer:

Lab ID #	Field Sample ID	Data File	ALS #	Quant Method	Sample wt/vol (g/ml)	Dil. Factor	QC Batch	pH	Comments
BFB	NA	01140201.D	2	010702.M	1ml/5mL	NA	QC005	NA	Fail
BFB		2	3						↓
BFB		3	4						Pass
BFB		4	5						
CCV 250ng *		5	6		10ml/5mL				
ICAL Level 2 *		6	7		4ml/5mL				
PES 0114-03	C8-20.0	7	8		1g/5mL	5			100ng
-01	C6-20.5	8	9						
-04	E4-WEST-6.0	9	10						
-06	C8-EAST-6.0	10	11						
-02	E5-South-5.0	11	12						
-05	E7-South-8.5	12	13						
-07	C8-EAST-8.0	13	14						
-08	C4-West-6.0	14	15						
-09	COMP-B	15	16						
PES0109-09	D6-20.0	16	2						
PES0114-10	COMP-C	17	3						
PES0114-12	COMP-E	18	4						

BFB: SC00522

Cal STD: SC00301

Internal STDs: SC00522

Surrogates: SC00522

LCS: SC00211

MS/MSD: SC00211

Solvent ID: MeOH

Solvent Lot#: V30E40

* Per Client, Run two point curve, analyze Samples. (Honor Hutton) SE 1/14/02

SEVERN TRENT SERVICES

Severn Trent Laboratories - OST Division

Instrument Log

Instrument ID: Alpha

Analysis Date: 1/14/02

Analyst: [signature]

Reviewer: _____

Lab ID #	Field Sample ID	Data File	ALS #	Quant Method	Sample wt/vol (g/ml)	Dil. Factor	QC Batch	pH	Comments
PES0114-13	D1-West-2.0	01140219.D	5	010402.M	19/5mL	5	QC005	NA	
-14	F1-East-2.0	20							
-15	A8-North3-2.0	21							
PES0109-03MS	A8-4.0	22			19/5mL/5mL				
-03MSD	A8-4.0	23							
Dummy Blank	—	24	1		—	—			
PES0110-01MS	D2-4.0	25	2		19/5mL/5mL	5			
-01MSD	D2-4.0	26	3						
PES0114-15MS	A8-North3-2.0	27	4						
-15MSD	A8-North3-2.0	28	5						
LCS 25ng	—	29	6		5mL/5mL	—			
Method Blank	—	30	7		5mL	—			

[signature] 1/17/02

BFB: SC00522

Cal STD: SC00301

Internal STDs: SC00522

Surrogates: SC00522

LCS: SC00211

MS/MSD: SC00211

Solvent ID: MeOH

Solvent Lot#: V30E40

SECTION 8.0
SAMPLE RECEIPT LOGS

TRENT SERVICES

Severn Trent Laboratories - OST Division

Sample Receipt Log

Date Received	Time Received	Received by	COC ID	Field Sample ID	STL Lab Sample ID	# Of Containers	Container Type	Analysis Requested	Comments
1/2/02	1430	MG	577443	S-1-ADD26-9	AP0102-01	2	VOA	8260M	
				4-1-ADD62-10	-02				
				4-1-ADD62-15	-03				
				4-1-ADD62-19	-04				
				4-1-ADD62-24.5	-05				
				4-1-ADD62-30	-06				
				4-1-ADD62-35	-07				Sediment. Unable to analyze
				4-1-ADD62-35D	-08				
				SR-12-27-01A	-09				
				4-2-ADD31-9	-10				
				4-2-ADD31-14	-11	1			
				4-2-ADD31-25	-12	2			
				4-2-ADD31-30	-13				
				4-2-ADD31-36	-14				
				4-2-ADD31-39	-15				Sediment. Unable to analyze
				4-2-ADD31-43.5	-16	3			
				5-3ADD42-29	-17	2			
				5-3ADD42-34	-18				
				5-3-ADD24-29	-19				
				5-3ADD24-29D	-20				
				5-3ADD94-08	-21				
				5-3ADD94-12	-22				
				5-3-ADD94-12D	-23				
				5-3-ADD94-16	-24				
				5-3-ADD94-21	-25				

TRENT SERVICES

Severn Trent Laboratories - OST Division

Sample Receipt Log

Date Received	Time Received	Received by	COC ID	Field Sample ID	STL Lab Sample ID	# Of Containers	Container Type	Analysis Requested	Comments
1/2/02	1430	MG	577443	5-3-ADD94-24	APO102-26	2	VOA	8260M	
↓	↓	↓	↓	TB-1-2-02	APO102-27	2	VOA	8260M	
1/8/02	1215	SRC	577475	SR-01-03-02A	APO108-01	|	VOA	8260M	
|	|	|	|	5-3-ADD89-9	-02	|	|	|	
				5-3-ADD89-13	-03				
				5-3-ADD-89-16	-04				
				5-3ADD 82-26	-05				
				4-2-ADD28-10	-06				
				4-2-ADD28-25	-07				
				4-2ADD28-30	-08				
				4-2ADD28-30D	-09				
				4-2-ADD28-36	-10				
				4-2-ADD28-42	-11				SEDIMENT. UNABLE TO ANALYZE. ONE VOA VIAL BROKEN.
				4-2ADD37-15	-12				
				4-2-ADD37-25	-13				
				4-2-ADD37-35	-14				
				5-3-ADD95-12-5	-15				
				5-3-ADD95-16	-16				
				53-ADD95-24	-17				
				4-1ADD81-9	-18				
				4-1ADD81-17	-19				
				4-1-ADD81-21	-20	↓			
				4-1-ADD81-24	-21	1			
				4-1ADD81-24D	-22	2			
↓	↓	↓	↓	SR-01-07-02A	-23	2	↓	↓	

TRENT SERVICES

Severn Trent Laboratories - OST Division

Sample Receipt Log

Date Received	Time Received	Received by	COC ID	Field Sample ID	STL Lab Sample ID	# Of Containers	Container Type	Analysis Requested	Comments
1/8/02	1215	SL	577475	4-2-ADD37-45	AP0108-24	2	VOA	8260M	
				5-3-ADD98-8.5	-25				
				5-3-ADD98-12	-26				
				5-3-ADD98-16	-27				
				5-3-ADD98-21	-28				
				5-3-ADD98-25	-29				
				SR-01-08-02A	-30				
				5-3-ADD98-25D	-31				

SL 1/9/02

SEVERN TRENT SERVICES

Severn Trent Laboratories - OST Division

Sample Receipt Log

Date Received	Time Received	Received by	* Sample ID ~~OCCTD~~	Field Sample ID	STL Lab Sample ID	# Of Containers	Container Type	Analysis Requested	Comments
1/9/02	0750	SE	B7-8.0	B3-8.0	PES0109-01	1	Brass	8260B	
			B6-8.0	B2-8.0	-02				
			A8-4.0	A3-4.0	-03				MS/MSD ✓
			A5-5.0	A2-5.0	-04				
			D6-18.1	D2-18.1	-05				
			B8-East-5.0	B3-East-5.0	-06				
			D6-19.5	D2-19.5	-07				
			D8-East-5.0	D3-East-5.0	-08				
			D6-20.0	B2-20.0	-09				HOLD (off Hold on 1/14/02)
			D4-West-6.0	D1-West-6.0	-10				
			A4-5.0	A1-5.0	-11				
			B4-5.0	B1-5.0	-12				
			A5-North-4.0	A2-North-4.0	-13				
			B2-4.0	BB-4.0	-14				
			A4-North-4.0	A1-NORTH-4.0	-15				
			A5-North-4.0	A2-NORTH-4.0	-16				
1/10/02	0830	SE		D2-4.0	PES0110-01	1	Brass	8260B	MS/MSD ✓
				C2-4.0	-02				
			SE 1/10/02	EA8-4.0	-03				
				A10-4.0	-04				
				E5-4.0	-05				
			SE 1/10/02	E7 ~~E8~~-8.5	-06				
				E7-12.0	-07				
				E5-8.0	-08				
				E5-12.0	-09				

* Sample ID's Changed by Client on 1/10/02. SE 1/10/02

TRENT SERVICES

Severn Trent Laboratories - OST Division

Sample Receipt Log

Date Received	Time Received	Received by	COC ID	Field Sample ID	STL Lab Sample ID	# Of Containers	Container Type	Analysis Requested	Comments
1/10/02	1230	SK		B10-4.0	PES0110-10	1	BRASS	8260B	
				E10-4.0	-11				
				D10-4.0	-12				
				C10-4.0	-13				
				COMP-A	-14				
				F5-0.5	-15				
				F8-0.5	-16				
				C10-East-2.0	-17				
				E2-5.0	-18				
1/14/02	0930	SK		C6-20.5	PES0114-01	1	BRASS	8260B	2
			SK 1/14/02	E5-South-5.0	-02				
				C8-20.0	-03				1
				E4-West-6.0	-04				
				E7-South-8.5	-05				
				E8-East-6.0	-06				
				C8-East-8.0	-07				
				C4-West-6.0	-08				
				Comp-B	-09				
				Comp-C	-10				
				Comp-D	-11				HOLD
				Comp-E	-12				
				D1-West-2.0	-13				
				F1-East-2.0	-14				
				A8-North3-2.0	-15				MS/MSD ✓

SECTION 9.0
CHAIN-OF-CUSTODY FORMS

PES ENVIRONMENTAL, Inc.
Engineering & Environmental Services

CHAIN OF CUSTODY RECORD

1682 NOVATO BOULEVARD, SUITE 100
NOVATO, CALIFORNIA 94947
(415) 899-1600 FAX (415) 899-1601

JOB NUMBER: 500.009.03.003

NAME / LOCATION: Mercer

PROJECT MANAGER: Kyle Flory

SAMPLERS: Honor Hutton

RECORDER: HH

DATE YR	MO	DY	TIME	SAMPLE NUMBER / DESIGNATION	SOURCE CODE	MATRIX: Water	Sedim't	Soil	Oil	#CONTAINERS & PRESERV.: Unpres.	H_2SO_4	HNO_3	HCl	Filtered	DEPTH IN FEET	COL MTD CD	QA CODE	ANALYSIS REQUESTED: EPA 601 / 8010	EPA 602 / 8020 (BTEX)	EPA 624 / 8240	EPA 625 / 8270	TPHg by 5030 / 8015 (mod)	TPH_d by 3550 / 8015 (mod) 8260B	
02	01	09	0745	B7-8.0	49			X		X					8.0	1	0						X	PES0109-01
			0755	B5-8.0											8.0									-02
			0920	AB-4.0											4.0									-03
			1010	A5-5.0											5.0									-04
			1100	D6-18.1											18.1									-05
			1115	BB-East-5.0											5.0									-06
			1210	D6-19.5											19.5									-07
			1225	D8-East-5.0											5.0									-08
			1255	D6-20.0											20.0								HOLD	-09
			1320	D4-West-6.0											6.0									-10
			1400	A4-5.0											5.0									-11
			1405	B4-5.0											5.0									-12

NOTE

TCE reporting limit of 0.2 mg/kg

CHAIN OF CUSTODY RECORD

RELINQUISHED BY: (Signature) Honor Hutton	RECEIVED BY: (Signature) Shelli L. Chi	DATE 1/9/02	TIME 750
RELINQUISHED BY: (Signature)	RECEIVED BY: (Signature)	DATE	TIME
RELINQUISHED BY: (Signature)	RECEIVED BY: (Signature)	DATE	TIME
RELINQUISHED BY: (Signature)	RECEIVED BY: (Signature)	DATE	TIME
DISPATCHED BY: (Signature) DATE TIME	RECEIVED FOR LAB BY: (Signature)	DATE	TIME
METHOD OF SHIPMENT:			

WHITE-Laboratory COPY YELLOW-Project Office Copy PINK-Field or Office Copy

PES ENVIRONMENTAL, Inc.
Engineering & Environmental Services

CHAIN OF CUSTODY RECORD

1682 NOVATO BOULEVARD, SUITE 100
NOVATO, CALIFORNIA 94947
(415) 899-1600 FAX (415) 899-1601

JOB NUMBER: 500.009.03.003

NAME / LOCATION: Mercer

PROJECT MANAGER: Kyle Flory

SAMPLERS: Honor Hutton

RECORDER: HH

DATE YR	MO	DY	TIME	SAMPLE NUMBER / DESIGNATION	SOURCE CODE	MATRIX: Water	Sedim't	Soil	Oil	#CONTAINERS & PRESERV.: Unpres.	H_2SO_4	HNO_3	HCl	Filtered	DEPTH IN FEET	COL MTD CD	QA CODE	ANALYSIS REQUESTED: EPA 601 / 8010	EPA 602 / 8020 (BTEX)	EPA 624 / 8240	EPA 625 / 8270	TPHg by 5030 / 8015 (mod)	TPH_d by 3550 / 8015 (mod)	B2-B8
20	09	07	1745	B2-8.0	49			X		X					8.0	-	0						X
"	"	"	1755	B6-8.0	"			"		"					8.0	-	2						"
"	"	"	0920	AB-8.0	"			"		"					8.0	-	2						"
"	"	"	1000	A5-5.0	"			"		"					5.0	-	2						"
"	"	"	1100	D6-18.5	"			"		"					18.5	-	2						"
"	"	"	1115	BB-East-5.0	"			"		"					5.0	-	2						"
"	"	"	1210	D4-14.5	"			"		"					14.5	-	2						"
"	"	"	1225	D8-Tos-5.0	"			"		"					5.0	-	2						"
"	"	"	1255	D4-20.0	"			"		"					20.0	-	2						"
"	"	"	1320	D4-West-4.0	"			"		"					4.0	-	2						"
"	"	"	1500	A4-5.0	"			"		"					5.0	-	2						"
"	"	"	1405	B4-5.0	"			"		"					5.0	-	2						"
																							Results
																							"
																							"
																							"
																							"
																							"
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																							"
																							"
																							"
																							"
																							"

NOTE

We reporting limit of 0.2 mg/kg

CHAIN OF CUSTODY RECORD

RELINQUISHED BY: (Signature) Honor Hutton	RECEIVED BY: (Signature) Kelli K. Ch	DATE 11/06	TIME 1750
RELINQUISHED BY: (Signature)	RECEIVED BY: (Signature)	DATE	TIME
RELINQUISHED BY: (Signature)	RECEIVED BY: (Signature)	DATE	TIME
RELINQUISHED BY: (Signature)	RECEIVED BY: (Signature)	DATE	TIME
DISPATCHED BY: (Signature) DATE TIME	RECEIVED FOR LAB BY: (Signature)	DATE	TIME
METHOD OF SHIPMENT:			

WHITE-Laboratory COPY YELLOW-Project Office Copy PINK-Field or Office Copy

PES ENVIRONMENTAL, Inc.
Engineering & Environmental Services

CHAIN OF CUSTODY RECORD

1682 NOVATO BOULEVARD, SUITE 100
NOVATO, CALIFORNIA 94947
(415) 899-1600 FAX (415) 899-1601

JOB NUMBER: 500.009.03.003

NAME / LOCATION: Mercer

PROJECT MANAGER: Kyle Flora

SAMPLERS: Honor Hutton

RECORDER: HH

DATE YR	MO	DY	TIME	SAMPLE NUMBER / DESIGNATION	SOURCE CODE	MATRIX: Water	Sediment	Soil	Oil	#CONTAINERS & PRESERV.: Unpres.	H_2SO_4	HNO_3	HCl	Filtered	DEPTH IN FEET	COL MTD CD	QA CODE	ANALYSIS REQUESTED: EPA 601 / 8010	EPA 602 / 8020 (BTEX)	EPA 624 / 8240	EPA 625 / 8270	TPH_g by 5030 / 8015 (mod)	TPH_d by 3550 / 8015 (mod)	8260B
20	10	09	0715	SB-1-3.0	19			X		X					3.0								X
"	"	"	0735	SB-2-3.0	2										3.0								
"	"	"	0820	SB-3-3.0	2										3.0								
"	"	"	0900	SB-4-3.0	2										3.0								
"	"	"	0930	SB-5-3.0	2										3.0								
"	"	"	1005	SB-6-3.0	2										3.0								
"	"	"	1055	SB-7-4.5	2										4.5								
"	"	"	1120	SB-8-5.0	2										5.0								
"	"	"	1155	SB-9-4.5	2										4.5								
"	"	"	1255	SB-10-3.0	2										3.0								
"	"	"	1320	SB-11-MW-4.0	2										4.0								
"	"	"	1400	SB-12-5.0	2										5.0								
"	"	"	1425	SB-13-4.0	2										4.0								

NOTE

TCE reporting limit of 0.2 mg/kg

CHAIN OF CUSTODY RECORD

RELINQUISHED BY: (Signature) Honor Hutton			RECEIVED BY: (Signature)	DATE 1/19/20	TIME 730
RELINQUISHED BY: (Signature)			RECEIVED BY: (Signature)	DATE	TIME
RELINQUISHED BY: (Signature)			RECEIVED BY: (Signature)	DATE	TIME
RELINQUISHED BY: (Signature)			RECEIVED BY: (Signature)	DATE	TIME
DISPATCHED BY: (Signature)	DATE	TIME	RECEIVED FOR LAB BY: (Signature)	DATE	TIME
METHOD OF SHIPMENT:					

WHITE-Laboratory COPY YELLOW-Project Office Copy PINK-Field or Office Copy

PES ENVIRONMENTAL, Inc.
Engineering & Environmental Services

CHAIN OF CUSTODY RECORD

1682 NOVATO BOULEVARD, SUITE 100
NOVATO, CALIFORNIA 94947
(415) 899-1600 FAX (415) 899-1601

JOB NUMBER: 500.009.03.003
NAME / LOCATION: Mercer
PROJECT MANAGER: Kyle Flory
SAMPLERS: Honor Hutton
RECORDER: HH

DATE YR	MO	DY	TIME	SAMPLE NUMBER / DESIGNATION	SOURCE CODE	MATRIX: Water	Sedim't	Soil	Oil	#CONTAINERS & PRESERV.: Unpres.	H_2SO_4	HNO_3	HCl	Filtered	DEPTH IN FEET	COL MTD CD	QA CODE
02	01	09	1420	AS-North4-4.0	49			X		X					4.0	10	10
			~~1530~~	~~AS-North-4.0~~	HH												
			1555	A4-North-4.0	49			X		X					4.0	10	10
			1600	AS-North-4.0											4.0		
			1530	B2-4.0											4.0		
02	10		0800	C2-4.0											4.0		
			0805	D2-4.0											4.0		
			0855	E9-4.0											4.0		
			1000	A10-4.0											4.0		
			1030	E5-4.0											4.0		
			1035	E6-8.5													
			1050	E7-12.0													

ANALYSIS REQUESTED

EPA 601 / 8010	EPA 602 / 8020 (BTEX)	EPA 624 / 8240	EPA 625 / 8270	TPH_g by 5030 / 8015 (mod)	TPH_d by 3550 / 8015 (mod)	8260B	
						X	PESOL09-13
							-15
						X	-16
							-14
							PESOL10-02
							-01
							-03
							-04
							-05
							-06
							-07

NOTE

TCE detection limit = 0.2 mg/kg

CHAIN OF CUSTODY RECORD

RELINQUISHED BY: (Signature) Honor Hutton	RECEIVED BY: (Signature) Shelli L. Chi	DATE 1/10/02	TIME 1135
RELINQUISHED BY: (Signature)	RECEIVED BY: (Signature)	DATE	TIME
RELINQUISHED BY: (Signature)	RECEIVED BY: (Signature)	DATE	TIME
RELINQUISHED BY: (Signature)	RECEIVED BY: (Signature)	DATE	TIME
DISPATCHED BY: (Signature) DATE TIME	RECEIVED FOR LAB BY: (Signature)	DATE	TIME
METHOD OF SHIPMENT:			

WHITE-Laboratory COPY YELLOW-Project Office Copy PINK-Field or Office Copy

PES ENVIRONMENTAL, Inc.
Engineering & Environmental Services

CHAIN OF CUSTODY RECORD

1682 NOVATO BOULEVARD, SUITE 100
NOVATO, CALIFORNIA 94947
(415) 899-1600 FAX (415) 899-1601

JOB NUMBER: 500.009.03.003

NAME / LOCATION: Mercer

PROJECT MANAGER: Kyle Flory

SAMPLERS: Honor Hutton

RECORDER: HH

DATE YR	MO	DY	TIME	SAMPLE NUMBER / DESIGNATION	SOURCE CODE	MATRIX Water	Sedim't	Soil	Oil	#CONTAINERS & PRESERV. Unpres.	H_2SO_4	HNO_3	HCl	Filtered*	DEPTH IN FEET	COL MTD CD	QA CODE	ANALYSIS REQUESTED EPA 601 / 8010	EPA 602 / 8020 (BTEX)	EPA 624 / 8240	EPA 625 / 8270	TPHg by 5030 / 8015 (mod)	TPHd by 3550 / 8015 (mod)	8260B
02	11	01	1110	E5-8.0	49			X		X					8.0	10	10							X	PES01110-08
			1146	E5-12.0											12.0										-09
			1215	B10-4.0											4.0										-10
			1220	E10-4.0											4.0										-11
			1225	D10-4.0											4.0										-12
			1230	C10-4.0											4.0										-13
			1440	COMP-A											-										-14
			1515	F5-0.5											0.5										-15
			1520	F8-0.5											0.5										-16
			1525	C10-East-2.0											2.0										-17
			1530	E2-5.0	2										5.0										-18

NOTE

0.2 mg/kg reporting limit for TCE

CHAIN OF CUSTODY RECORD

RELINQUISHED BY: (Signature) Honor Hutton	RECEIVED BY: (Signature) Shelli L. Chen	DATE 11/14/02	TIME 1640
RELINQUISHED BY: (Signature)	RECEIVED BY: (Signature)	DATE	TIME
RELINQUISHED BY: (Signature)	RECEIVED BY: (Signature)	DATE	TIME
RELINQUISHED BY: (Signature)	RECEIVED BY: (Signature)	DATE	TIME
DISPATCHED BY: (Signature) DATE TIME	RECEIVED FOR LAB BY: (Signature)	DATE	TIME
METHOD OF SHIPMENT:			

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PES ENVIRONMENTAL, Inc.
Engineering & Environmental Services

CHAIN OF CUSTODY RECORD

1682 NOVATO BOULEVARD, SUITE 100
NOVATO, CALIFORNIA 94947
(415) 899-1600 FAX (415) 899-1601

JOB NUMBER: 500.009.03.003

NAME / LOCATION: Mercer

PROJECT MANAGER: Kyle Flory

SAMPLERS: Honor Hutton

RECORDER: HH

DATE YR	MO	DY	TIME	SAMPLE NUMBER / DESIGNATION	SOURCE CODE	MATRIX: Water	Sedim't	Soil	Oil	#CONTAINERS & PRESERV.: Unpres.	H_2SO_4	HNO_3	HCl	Filtered	DEPTH IN FEET	COL MTD CD	QA CODE
02	01	10	1110	E5-8.0	49			X		X					8.0	10	10
"	"	"	1146	E5-12.0	"			"		"					12.0	"	"
"	"	"	1215	B10-4.0	"			"		"					4.0	"	"
"	"	"	1220	E10-4.0	"			"		"					4.0	"	"
"	"	"	1225	D10-4.0	"			"		"					4.0	"	"
"	"	"	1230	C10-4.0	"			"		"					4.0	"	"
"	"	"	1440	COMP-A	"			"		"					-	"	"
"	"	"	1515	E5-0.5	"			"		"					0.5	"	"
"	"	"	1520	E9-0.5	"			"		"					0.5	"	"
"	"	"	1525	C10-East-2.0	"			"		"					2.0	"	"
"	"	"	1530	E2-5.0	"			"		"					5.0	"	"

ANALYSIS REQUESTED	EPA 601 / 8010	EPA 602 / 8020 (BTEX)	EPA 624 / 8240	EPA 625 / 8270	TPHg by 5030 / 8015 (mod)	TPH_d by 3550 / 8015 (mod)	8260B									
							X									
							"									
							"									
							"									
							"									
							"									
							"									
							"									
							"									
							"									
							"									
							"									

NOTE

0.2 mg/kg reporting limit for TCE

CHAIN OF CUSTODY RECORD

RELINQUISHED BY: (Signature) Honor Hutton	RECEIVED BY: (Signature)	DATE 1/10/02	TIME 1615
RELINQUISHED BY: (Signature)	RECEIVED BY: (Signature)	DATE	TIME
RELINQUISHED BY: (Signature)	RECEIVED BY: (Signature)	DATE	TIME
RELINQUISHED BY: (Signature)	RECEIVED BY: (Signature)	DATE	TIME
DISPATCHED BY: (Signature) DATE TIME	RECEIVED FOR LAB BY: (Signature)	DATE	TIME
METHOD OF SHIPMENT:			

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PES ENVIRONMENTAL, Inc.
Engineering & Environmental Services

CHAIN OF CUSTODY RECORD

1682 NOVATO BOULEVARD, SUITE 100
NOVATO, CALIFORNIA 94947
(415) 899-1600 FAX (415) 899-1601

JOB NUMBER: 500.009.03.003

NAME / LOCATION: Mercer

PROJECT MANAGER: Kyle Flory

SAMPLERS: Honor Hutton

RECORDER: HH

DATE YR	MO	DY	TIME	SAMPLE NUMBER / DESIGNATION	SOURCE CODE	MATRIX: Water	Sedim't	Soil	Oil	#CONTAINERS & PRESERV.: Unpres.	H_2SO_4	HNO_3	HCl	Filtered	DEPTH IN FEET	COL MTD CD	QA CODE	ANALYSIS REQUESTED: EPA 601 / 8010	EPA 602 / 8020 (BTEX)	EPA 624 / 8240	EPA 625 / 8270	TPHg by 5030 / 8015 (mod)	TPHd by 3550 / 8015 (mod)	8260B
02	01	14	0930	C6-20.5	49			X		X					20.5	1	01						X
			1010	E5-South-5.0											5.0								
			1015	E8-20.0											20.0								
			1020	E4-West-6.0											6.0								
			1045	E7-South-8.5											8.5								
			1050	E8-East-6.0											6.0								
			1400	C8-East-8.0											8.0								
			1410	C4-West-6.0											6.0								
			1435	COMP-B											—								
			1455	COMP-C											—								
			1500	COMP-D	HH																		
↙			1515	COMP-E	49			↓		↓					—	↓	↓						↓

																							PES0114-01
																							-02
																							-03
																							-04
																							-05
																							-06
																							-07
																							-08
																							-09
																							-10
																							-11
								↓															-12

NOTE

0.2 mg/kg reporting limit for TCE

CHAIN OF CUSTODY RECORD

RELINQUISHED BY: (Signature) Honor Hutton	RECEIVED BY: (Signature) Shelli L. Chin	1/14/02	1640
RELINQUISHED BY: (Signature)	RECEIVED BY: (Signature)	DATE	TIME
RELINQUISHED BY: (Signature)	RECEIVED BY: (Signature)	DATE	TIME
RELINQUISHED BY: (Signature)	RECEIVED BY: (Signature)	DATE	TIME
DISPATCHED BY: (Signature) DATE TIME	RECEIVED FOR LAB BY: (Signature)	DATE	TIME
METHOD OF SHIPMENT:			

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PES ENVIRONMENTAL, Inc.
Engineering & Environmental Services

1682 NOVATO BOULEVARD, SUITE 100
NOVATO, CALIFORNIA 94947
(415) 899-1600 FAX (415) 899-1601

CHAIN OF CUSTODY RECORD

SAMPLERS: Honor Hutton

OB NUMBER: 500.009.03.003

IAME / LOCATION: Mercer

'ROJECT MANAGER: Kyle Flory

RECORDER: HH

DATE YR	MO	DY	TIME	SAMPLE NUMBER / DESIGNATION	SOURCE CODE	MATRIX: Water	Sedim't	Soil	Oil	#CONTAINERS & PRESERV.: Unpres.	H_2SO_4	HNO_3	HCl	Filtered	DEPTH IN FEET	COL MTD CD	QA CODE	ANALYSIS REQUESTED: EPA 601 / 8010	EPA 602 / 8020 (BTEX)	EPA 624 / 8240	EPA 625 / 8270	TPHg by 5030 / 8015 (mod)	TPH_d by 3550 / 8015 (mod)	8260B
02	01	14	0930	CB-20.5	SO			X		X					20.5	1	0							X
			1010	EB-South-8.0											8.0									
			1015	EB-20.0											20.0									
			1020	EW-West-6.0											6.0									
			1045	EJ-South-8.5											8.5									
			0950	EB-East-6.0											6.0									
			1400	CB-East-8.0											8.0									
			1410	CH-West-6.0											6.0									
			1425	COMP-B											—									
			1455	COMP-C											—									
			1500	COMP-D											—									
			1515	COMP-E											—									

BES0114-01
-02
-03
-04
-05
-06
-07
-08
-09
-10
-11
-12

NOTE

0.2 mg/kg reporting limit for TPH

CHAIN OF CUSTODY RECORD

RELINQUISHED BY: (Signature) Honor Hutton	RECEIVED BY: (Signature) Kelli L. Chin	DATE 1/14/10	TIME 1640
RELINQUISHED BY: (Signature)	RECEIVED BY: (Signature)	DATE	TIME
RELINQUISHED BY: (Signature)	RECEIVED BY: (Signature)	DATE	TIME
RELINQUISHED BY: (Signature)	RECEIVED BY: (Signature)	DATE	TIME
DISPATCHED BY: (Signature) DATE TIME	RECEIVED FOR LAB BY: (Signature)	DATE	TIME
METHOD OF SHIPMENT:			

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PES ENVIRONMENTAL, Inc.
Engineering & Environmental Services

CHAIN OF CUSTODY RECORD

1682 NOVATO BOULEVARD, SUITE 100
NOVATO, CALIFORNIA 94947
(415) 899-1600 FAX (415) 899-1601

JOB NUMBER: 500.009.03.003

NAME / LOCATION: Mercer

PROJECT MANAGER: Kyle Flory

SAMPLERS: Honor Hutton

RECORDER: HH

DATE YR	DATE MO	DATE DY	TIME	SAMPLE NUMBER / DESIGNATION	SOURCE CODE	MATRIX: Water	MATRIX: Sedim't	MATRIX: Soil	MATRIX: Oil	#CONTAINERS & PRESERV.: Unpres.	#CONTAINERS & PRESERV.: H_2SO_4	#CONTAINERS & PRESERV.: HNO_3	#CONTAINERS & PRESERV.: HCl	#CONTAINERS & PRESERV.: Filtered	DEPTH IN FEET	COL MTD CD	QA CODE	EPA 601 / 8010	EPA 602 / 8020 (BTEX)	EPA 624 / 8240	EPA 625 / 8270	TPHg by 5030 / 8015 (mod)	TPH_d by 3550 / 8015 (mod)	B260B	
01	14	16	15	D1-West-2.0	49			X		X					2.0	10	10							X	PES0114-13
			1620	F1-East-2.0											2.0										-14
			1625	AB-North3-2.0											2.0										-15

NOTE

0.2 mg/kg reporting limit for TLE

CHAIN OF CUSTODY RECORD

RELINQUISHED BY: (Signature) Honor Hutton	RECEIVED BY: (Signature) Shelli Chi	DATE 1/14/02	TIME 1640
RELINQUISHED BY: (Signature)	RECEIVED BY: (Signature)	DATE	TIME
RELINQUISHED BY: (Signature)	RECEIVED BY: (Signature)	DATE	TIME
RELINQUISHED BY: (Signature)	RECEIVED BY: (Signature)	DATE	TIME
DISPATCHED BY: (Signature) DATE TIME	RECEIVED FOR LAB BY: (Signature)	DATE	TIME
METHOD OF SHIPMENT:			

WHITE-Laboratory COPY YELLOW-Project Office Copy PINK-Field or Office Copy

Submission #: 2002-01-0194

Date: January 18, 2002

SEVERN TRENT SERVICES

STL San Francisco
1220 Quarry Lane
Pleasanton, CA 94566

Tel 925 484 1919
Fax 925 484 1096
www.stl-inc.com
www.chromalab.com
CA DHS ELAP#1094

PES

1682 Novato Blvd., Suite 10
Novato, CA 94947-7021

Attn: Kyle Flory

Project: 500.009.03.003
Mercer

Attached is our report for your samples received on Monday January 14, 2002
This report has been reviewed and approved for release. Reproduction of this report is permitted only in its entirety.

The report contains a Case Narrative detailing sample receipt and analysis.

Please note that any unused portion of the samples will be discarded after February 28, 2002 unless you have requested otherwise.
We appreciate the opportunity to be of service to you. If you have any questions, please call me at (925) 484-1919.
You can also contact me via email. My email address is: asalimpour@chromalab.com

Sincerely,

Afsaneh Salimpour

Afsaneh Salimpour
Project Manager

Submission #: 2002-01-0194 Date: January 18, 2002

SEVERN TRENT SERVICES

STL San Francisco
1220 Quarry Lane
Pleasanton, CA 94566

Tel 925 484 1919
Fax 925 484 1096
www.stl-inc.com
www.chromalab.com
CA DHS ELAP#1094

CASE NARRATIVE

General and Sample Comments

We (STL San Francisco) received 1 Solid samples, on Jan 14 2002 4:47PM.

Analysis Comments and Flags by QC Batch

Volatile Organic Compounds by 8260B	Solid	QC Batch#: 2002/01/16.01-06

CONC-COMP Lab#: 2002-01-0194-001

Analysis Flag(s)

rl Reporting limits raised due to reduced sample size.

Submission #: 2002-01-0194

SEVERN TRENT SERVICES

STL San Francisco
1220 Quarry Lane
Pleasanton, CA 94566

Tel 925 484 1919
Fax 925 484 1096
www.stl-inc.com
www.chromalab.com

CA DHS ELAP#1094

Volatile Organic Compounds by 8260B (Low Level)

PES	✉ 1682 Novato Blvd., Suite 10 Novato, CA 94947-7021
Attn: Kyle Flory	Phone: (415) 899-1600 Fax: (415) 899-1601
500.009.03.003	Project: Mercer

Samples Reported

Sample ID	Matrix	Date Sampled	Lab #
CONC-COMP	Solid	01/14/2002 11:50	1

Submission #: 2002-01-0194

SEVERN TRENT SERVICES

Volatile Organic Compounds by 8260B (Low Level)

PES
Attn: Kyle Flory

Test Method: 8260B
Prep Method: 5035

STL San Francisco
1220 Quarry Lane
Pleasanton, CA 94566

Tel 925 484 1919
Fax 925 484 1096
www.stl-inc.com
www.chromalab.com

CA DHS ELAP#1094

Sample ID: **CONC-COMP**
Project: 500.009.03.003 Mercer
Sampled: 01/14/2002 11:50
Matrix: Solid
Sample/Analysis Flag: rl (See Legend & Note section)

Lab Sample ID: 2002-01-0194-001
Received: 01/14/2002 16:47
Extracted: 01/16/2002 20:47
QC-Batch: 2002/01/16-01.06

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
MTBE	ND	21	ug/Kg	4.24	01/16/2002 20:47	
Acetone	ND	210	ug/Kg	4.24	01/16/2002 20:47	
Benzene	ND	21	ug/Kg	4.24	01/16/2002 20:47	
Bromodichloromethane	ND	21	ug/Kg	4.24	01/16/2002 20:47	
Bromobenzene	ND	21	ug/Kg	4.24	01/16/2002 20:47	
Bromochloromethane	ND	85	ug/Kg	4.24	01/16/2002 20:47	
Bromoform	ND	21	ug/Kg	4.24	01/16/2002 20:47	
Bromomethane	ND	42	ug/Kg	4.24	01/16/2002 20:47	
2-Butanone(MEK)	ND	210	ug/Kg	4.24	01/16/2002 20:47	
n-Butylbenzene	ND	21	ug/Kg	4.24	01/16/2002 20:47	
sec-Butylbenzene	ND	21	ug/Kg	4.24	01/16/2002 20:47	
tert-Butylbenzene	ND	21	ug/Kg	4.24	01/16/2002 20:47	
Carbon disulfide	ND	21	ug/Kg	4.24	01/16/2002 20:47	
Carbon tetrachloride	ND	21	ug/Kg	4.24	01/16/2002 20:47	
Chlorobenzene	ND	21	ug/Kg	4.24	01/16/2002 20:47	
Chloroethane	ND	42	ug/Kg	4.24	01/16/2002 20:47	
2-Chloroethylvinyl ether	ND	210	ug/Kg	4.24	01/16/2002 20:47	
Chloroform	ND	21	ug/Kg	4.24	01/16/2002 20:47	
Chloromethane	ND	42	ug/Kg	4.24	01/16/2002 20:47	
2-Chlorotoluene	ND	21	ug/Kg	4.24	01/16/2002 20:47	
4-Chlorotoluene	ND	21	ug/Kg	4.24	01/16/2002 20:47	
Dibromochloromethane	ND	21	ug/Kg	4.24	01/16/2002 20:47	
1,2-Dichlorobenzene	ND	21	ug/Kg	4.24	01/16/2002 20:47	
1,3-Dichlorobenzene	ND	21	ug/Kg	4.24	01/16/2002 20:47	
1,4-Dichlorobenzene	ND	21	ug/Kg	4.24	01/16/2002 20:47	
1,3-Dichloropropane	ND	21	ug/Kg	4.24	01/16/2002 20:47	
2,2-Dichloropropane	ND	21	ug/Kg	4.24	01/16/2002 20:47	
1,1-Dichloropropene	ND	21	ug/Kg	4.24	01/16/2002 20:47	
1,2-Dibromo-3-chloropropane	ND	210	ug/Kg	4.24	01/16/2002 20:47	
1,2-Dibromoethane	ND	42	ug/Kg	4.24	01/16/2002 20:47	
Dibromomethane	ND	42	ug/Kg	4.24	01/16/2002 20:47	
Dichlorodifluoromethane	ND	42	ug/Kg	4.24	01/16/2002 20:47	
1,1-Dichloroethane	ND	21	ug/Kg	4.24	01/16/2002 20:47	
1,2-Dichloroethane	ND	21	ug/Kg	4.24	01/16/2002 20:47	
1,1-Dichloroethene	ND	21	ug/Kg	4.24	01/16/2002 20:47	
cis-1,2-Dichloroethene	ND	21	ug/Kg	4.24	01/16/2002 20:47	
trans-1,2-Dichloroethene	ND	21	ug/Kg	4.24	01/16/2002 20:47	

Submission #: 2002-01-0194

SEVERN TRENT SERVICES

STL San Francisco
1220 Quarry Lane
Pleasanton, CA 94566

Tel 925 484 1919
Fax 925 484 1096
www.stl-inc.com
www.chromalab.com

CA DHS ELAP#1094

Volatile Organic Compounds by 8260B (Low Level)

PES
Attn: Kyle Flory

Test Method: 8260B
Prep Method: 5035

Sample ID: **CONC-COMP**
Project: 500.009.03.003 Mercer
Sampled: 01/14/2002 11:50
Matrix: Solid
Sample/Analysis Flag: rl (See Legend & Note section)

Lab Sample ID: 2002-01-0194-001
Received: 01/14/2002 16:47
Extracted: 01/16/2002 20:47
QC-Batch: 2002/01/16-01.06

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
1,2-Dichloropropane	ND	21	ug/Kg	4.24	01/16/2002 20:47	
cis-1,3-Dichloropropene	ND	21	ug/Kg	4.24	01/16/2002 20:47	
trans-1,3-Dichloropropene	ND	21	ug/Kg	4.24	01/16/2002 20:47	
Ethylbenzene	ND	21	ug/Kg	4.24	01/16/2002 20:47	
Hexachlorobutadiene	ND	21	ug/Kg	4.24	01/16/2002 20:47	
2-Hexanone	ND	210	ug/Kg	4.24	01/16/2002 20:47	
Isopropylbenzene	ND	21	ug/Kg	4.24	01/16/2002 20:47	
p-Isopropyltoluene	ND	21	ug/Kg	4.24	01/16/2002 20:47	
Methylene chloride	ND	21	ug/Kg	4.24	01/16/2002 20:47	
4-Methyl-2-pentanone (MIBK)	ND	210	ug/Kg	4.24	01/16/2002 20:47	
Naphthalene	ND	42	ug/Kg	4.24	01/16/2002 20:47	
n-Propylbenzene	ND	21	ug/Kg	4.24	01/16/2002 20:47	
Styrene	ND	21	ug/Kg	4.24	01/16/2002 20:47	
1,1,1,2-Tetrachloroethane	ND	21	ug/Kg	4.24	01/16/2002 20:47	
1,1,2,2-Tetrachloroethane	ND	21	ug/Kg	4.24	01/16/2002 20:47	
Tetrachloroethene	ND	21	ug/Kg	4.24	01/16/2002 20:47	
Toluene	ND	21	ug/Kg	4.24	01/16/2002 20:47	
1,2,3-Trichlorobenzene	ND	21	ug/Kg	4.24	01/16/2002 20:47	
1,2,4-Trichlorobenzene	ND	21	ug/Kg	4.24	01/16/2002 20:47	
1,1,1-Trichloroethane	ND	21	ug/Kg	4.24	01/16/2002 20:47	
1,1,2-Trichloroethane	ND	21	ug/Kg	4.24	01/16/2002 20:47	
Trichloroethene	ND	21	ug/Kg	4.24	01/16/2002 20:47	
Trichlorofluoromethane	ND	21	ug/Kg	4.24	01/16/2002 20:47	
Trichlorotrifluoroethane	ND	21	ug/Kg	4.24	01/16/2002 20:47	
1,2,4-Trimethylbenzene	ND	21	ug/Kg	4.24	01/16/2002 20:47	
1,3,5-Trimethylbenzene	ND	21	ug/Kg	4.24	01/16/2002 20:47	
Vinyl acetate	ND	210	ug/Kg	4.24	01/16/2002 20:47	
Vinyl chloride	ND	21	ug/Kg	4.24	01/16/2002 20:47	
Total xylenes	22	21	ug/Kg	4.24	01/16/2002 20:47	
Surrogate(s)						
4-Bromofluorobenzene	113.7	74-121	%	4.24	01/16/2002 20:47	
1,2-Dichloroethane-d4	102.7	70-121	%	4.24	01/16/2002 20:47	
Toluene-d8	103.4	81-117	%	4.24	01/16/2002 20:47	

Submission #: 2002-01-0194

SEVERN TRENT SERVICES

STL San Francisco
1220 Quarry Lane
Pleasanton, CA 94566

Tel 925 484 1919
Fax 925 484 1096
www.stl-inc.com
www.chromalab.com

CA DHS ELAP#1094

Volatile Organic Compounds by 8260B (Low Level)

Batch QC report

Test Method: 8260B Prep Method: 5035

Method Blank **Soil** **QC Batch # 2002/01/16-01.06**

MB: 2002/01/16-01.06-005 Date Extracted: 01/16/2002 12:19

Compound	Result	Rep.Limit	Unit	Analyzed	Flag
MTBE	ND	5.0	ug/Kg	01/16/2002 12:19	
Acetone	ND	50	ug/Kg	01/16/2002 12:19	
Benzene	ND	5.0	ug/Kg	01/16/2002 12:19	
Bromodichloromethane	ND	5.0	ug/Kg	01/16/2002 12:19	
Bromobenzene	ND	5.0	ug/Kg	01/16/2002 12:19	
Bromochloromethane	ND	20	ug/Kg	01/16/2002 12:19	
Bromoform	ND	5.0	ug/Kg	01/16/2002 12:19	
Bromomethane	ND	10	ug/Kg	01/16/2002 12:19	
2-Butanone(MEK)	ND	50	ug/Kg	01/16/2002 12:19	
n-Butylbenzene	ND	5.0	ug/Kg	01/16/2002 12:19	
sec-Butylbenzene	ND	5.0	ug/Kg	01/16/2002 12:19	
tert-Butylbenzene	ND	5.0	ug/Kg	01/16/2002 12:19	
Carbon disulfide	ND	5.0	ug/Kg	01/16/2002 12:19	
Carbon tetrachloride	ND	5.0	ug/Kg	01/16/2002 12:19	
Chlorobenzene	ND	5.0	ug/Kg	01/16/2002 12:19	
Chloroethane	ND	10	ug/Kg	01/16/2002 12:19	
2-Chloroethylvinyl ether	ND	50	ug/Kg	01/16/2002 12:19	
Chloroform	ND	5.0	ug/Kg	01/16/2002 12:19	
Chloromethane	ND	10	ug/Kg	01/16/2002 12:19	
2-Chlorotoluene	ND	5.0	ug/Kg	01/16/2002 12:19	
4-Chlorotoluene	ND	5.0	ug/Kg	01/16/2002 12:19	
Dibromochloromethane	ND	5.0	ug/Kg	01/16/2002 12:19	
1,2-Dichlorobenzene	ND	5.0	ug/Kg	01/16/2002 12:19	
1,3-Dichlorobenzene	ND	5.0	ug/Kg	01/16/2002 12:19	
1,4-Dichlorobenzene	ND	5.0	ug/Kg	01/16/2002 12:19	
1,3-Dichloropropane	ND	5.0	ug/Kg	01/16/2002 12:19	
2,2-Dichloropropane	ND	5.0	ug/Kg	01/16/2002 12:19	
1,1-Dichloropropene	ND	5.0	ug/Kg	01/16/2002 12:19	
1,2-Dibromo-3-chloropropane	ND	50	ug/Kg	01/16/2002 12:19	
1,2-Dibromoethane	ND	10	ug/Kg	01/16/2002 12:19	
Dibromomethane	ND	10	ug/Kg	01/16/2002 12:19	
Dichlorodifluoromethane	ND	10	ug/Kg	01/16/2002 12:19	
1,1-Dichloroethane	ND	5.0	ug/Kg	01/16/2002 12:19	
1,2-Dichloroethane	ND	5.0	ug/Kg	01/16/2002 12:19	
1,1-Dichloroethene	ND	5.0	ug/Kg	01/16/2002 12:19	
cis-1,2-Dichloroethene	ND	5.0	ug/Kg	01/16/2002 12:19	
trans-1,2-Dichloroethene	ND	5.0	ug/Kg	01/16/2002 12:19	
1,2-Dichloropropane	ND	5.0	ug/Kg	01/16/2002 12:19	
cis-1,3-Dichloropropene	ND	5.0	ug/Kg	01/16/2002 12:19	
trans-1,3-Dichloropropene	ND	5.0	ug/Kg	01/16/2002 12:19	
Ethylbenzene	ND	5.0	ug/Kg	01/16/2002 12:19	

Submission #: 2002-01-0194

SEVERN TRENT SERVICES

STL San Francisco
1220 Quarry Lane
Pleasanton, CA 94566

Tel 925 484 1919
Fax 925 484 1096
www.stl-inc.com
www.chromalab.com

CA DHS ELAP#1094

Volatile Organic Compounds by 8260B (Low Level)

Batch QC report

Test Method: 8260B Prep Method: 5035

Method Blank **Soil** **QC Batch # 2002/01/16-01.06**

MB: 2002/01/16-01.06-005 Date Extracted: 01/16/2002 12:19

Compound	Result	Rep.Limit	Unit	Analyzed	Flag
Hexachlorobutadiene	ND	5.0	ug/Kg	01/16/2002 12:19	
2-Hexanone	ND	50	ug/Kg	01/16/2002 12:19	
Isopropylbenzene	ND	5.0	ug/Kg	01/16/2002 12:19	
p-Isopropyltoluene	ND	5.0	ug/Kg	01/16/2002 12:19	
Methylene chloride	ND	5.0	ug/Kg	01/16/2002 12:19	
4-Methyl-2-pentanone (MIBK)	ND	50	ug/Kg	01/16/2002 12:19	
Naphthalene	ND	10	ug/Kg	01/16/2002 12:19	
n-Propylbenzene	ND	5.0	ug/Kg	01/16/2002 12:19	
Styrene	ND	5.0	ug/Kg	01/16/2002 12:19	
1,1,1,2-Tetrachloroethane	ND	5.0	ug/Kg	01/16/2002 12:19	
1,1,2,2-Tetrachloroethane	ND	5.0	ug/Kg	01/16/2002 12:19	
Tetrachloroethene	ND	5.0	ug/Kg	01/16/2002 12:19	
Toluene	ND	5.0	ug/Kg	01/16/2002 12:19	
1,2,3-Trichlorobenzene	ND	5.0	ug/Kg	01/16/2002 12:19	
1,2,4-Trichlorobenzene	ND	5.0	ug/Kg	01/16/2002 12:19	
1,1,1-Trichloroethane	ND	5.0	ug/Kg	01/16/2002 12:19	
1,1,2-Trichloroethane	ND	5.0	ug/Kg	01/16/2002 12:19	
Trichloroethene	ND	5.0	ug/Kg	01/16/2002 12:19	
Trichlorofluoromethane	ND	5.0	ug/Kg	01/16/2002 12:19	
Trichlorotrifluoroethane	ND	5.0	ug/Kg	01/16/2002 12:19	
1,2,4-Trimethylbenzene	ND	5.0	ug/Kg	01/16/2002 12:19	
1,3,5-Trimethylbenzene	ND	5.0	ug/Kg	01/16/2002 12:19	
Vinyl acetate	ND	50	ug/Kg	01/16/2002 12:19	
Vinyl chloride	ND	5.0	ug/Kg	01/16/2002 12:19	
Total xylenes	ND	5.0	ug/Kg	01/16/2002 12:19	
Surrogate(s)					
4-Bromofluorobenzene	106.6	74-121	%	01/16/2002 12:19	
1,2-Dichloroethane-d4	98.6	70-121	%	01/16/2002 12:19	
Toluene-d8	101.1	81-117	%	01/16/2002 12:19	

Submission #: 2002-01-0194

SEVERN TRENT SERVICES

STL San Francisco
1220 Quarry Lane
Pleasanton, CA 94566

Tel 925 484 1919
Fax 925 484 1096
www.stl-inc.com
www.chromalab.com

CA DHS ELAP#1094

Volatile Organic Compounds by 8260B (Low Level)

Batch QC report

Test Method: 8260B Prep Method: 5035

Laboratory Control Spike (LCS/LCSD) **Soil** **QC Batch # 2002/01/16-01.06**

LCS: 2002/01/16-01.06-003 Extracted: 01/16/2002 11:07 Analyzed: 01/16/2002 11:07

LCSD: 2002/01/16-01.06-004 Extracted: 01/16/2002 11:43 Analyzed: 01/16/2002 11:43

Compound	Conc. [ug/Kg]		Exp.Conc. [ug/Kg]		Recovery		RPD	Ctrl.Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD	[%]	Recover	RPD	LCS	LCSD
Benzene	104	97.5	100.0	100.0	104.0	97.5	6.5	69-129	20		
Chlorobenzene	110	102	100.0	100.0	110.0	102.0	7.5	61-121	20		
1,1-Dichloroethene	96.7	85.7	100.0	100.0	96.7	85.7	12.1	65-125	20		
Toluene	107	101	100.0	100.0	107.0	101.0	5.8	70-130	20		
Trichloroethene	106	101	100.0	100.0	106.0	101.0	4.8	74-134	20		
Surrogate(s)											
4-Bromofluorobenzene	517	531	500	500	103.4	106.2		74-121			
1,2-Dichloroethane-d4	489	503	500	500	97.8	100.6		70-121			
Toluene-d8	486	500	500	500	97.2	100.0		81-117			

Submission #: 2002-01-0194

SEVERN TRENT SERVICES

STL San Francisco
1220 Quarry Lane
Pleasanton, CA 94566

Tel 925 484 1919
Fax 925 484 1096
www.stl-inc.com
www.chromalab.com

CA DHS ELAP#1094

Volatile Organic Compounds by 8260B (Low Level)

Legend & Notes

Test Method: 8260B Prep Method: 5035

Analysis Flags

rl

Reporting limits raised due to reduced sample size.

APPENDIX E

NON-HAZARDOUS WASTE MANIFESTS

Cornerstone Env.

El Camino Center, Palo Alto to Altamont Landfill

Date	Man#	WT#	Weight	
2/6/2002	1	108012-1	26.12	soil from slot trench area
2/6/2002	2	107944-1	25.80	soil from slot trench area
2/6/2002	3	107943-1	23.90	soil from slot trench area
2/6/2002	4	107994-1	22.73	soil from slot trench area
2/6/2002	5	107962-1	23.36	soil from slot trench area
2/6/2002	6	107937-1	23.94	soil from slot trench area
2/6/2002	7	108013-1	23.77	soil from slot trench area
2/6/2002	8	108011-1	25.23	soil from slot trench area
2/6/2002	9	108019-1	23.95	soil from slot trench area
2/6/2002	10	108160-1	30.41	soil from slot trench area
2/6/2002	11	108053-1	23.63	soil from slot trench area
2/6/2002	12	108056-1	23.50	soil from slot trench area
2/6/2002	13	108057-1	24.38	soil from slot trench area
2/6/2002	14	108157-1	24.58	
2/7/2002	15	108159-1	24.70	
2/7/2002	16	108170-1	22.89	
2/7/2002	17	108217-1	24.18	
2/7/2002	18	108222-1	28.95	
2/7/2002	19	108225-1	24.86	
2/7/2002	20	108224-1	23.89	
2/7/2002	21	108276-1	23.82	
2/7/2002	22	108314-1	22.91	
	Total weight:		541.50	

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. | Manifest Doc. No. 00001 | 2. Page 1 of 1

GENERATOR

3. Generator's Name and Mailing Address: EL CAMINO CENTER, 3201 ASH STREET, PALO ALTO, CA. 94306

4. Generator's Phone (650) 493-5310

5. Transporter 1 Company Name: JERVICON | 6. US EPA ID Number | A. Transporter's Phone (805) 938-0991

7. Transporter 2 Company Name | 8. US EPA ID Number | B. Transporter's Phone

9. Designated Facility Name and Site Address: ALTAMONT LANDFILL, 10840 ALTAMONT PASS RD., LIVERMORE, CA 94550 | 10. US EPA ID Number: CAD981382732 | C. Facility's Phone (925) 449-6349

11. Waste Shipping Name and Description	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. SOIL - CLASS II COVER	001	DT	00.018	CY
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

PROFILE # 55023400

CUSTOMER NAME: CORNERSTONE ENVIRONMENTAL

FROM SLOT TRENCH AREA

16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name: CARL DAVIS | Signature | Month 2 | Day 6 | Year 02

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: Walt Hays | Signature | Month | Day | Year

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Month | Day | Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name: Ronald Rojas | Signature | Month 2 | Day 6 | Year 02

TRANSPORTER #1

Altamont Landfill & RSF
10840 Altamont Pass Road
Livermore CA 94550

DATE: 02/20/2002
TIME IN: 13:20
TIME OUT: 13:49

TICKET: 100812-1
T.O. 1
STATE TICKET: 112371

CARRIER: GTO / Gross Trucking
TRUCK: 7939 UNIT#:
CUSTOMER: CORNER / Cornerstone environmental
GENERATOR: EL CAM / El Camino Center CG:
ORIGIN: PALO / Palo Alto PROFILE: 55023460

CONTROL	WASTE / DESCRIPTION	QNTY	PER
00000	SOL / Class II Cover S	25.12	T

GROSS: 56620 LBS
TARE: 31300 LBS
NET: 25320 LBS TONS: 25.32

CUSTOMER: CORNER / Cornerstone environme

CUSTOMER:

DEPUTY WEIGHMASTER: DeNofrio, Frank DEPUTY WEIGHMASTER: DeNofrio, Frank

WEIGHMASTER CERTIFICATE

THIS IS TO CERTIFY that the following described commodity was weighed, measured or otherwise accounted by a weighmaster whose signature is affixed hereto, which is acting in official authority of ordinance, as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Vehicle Code, administered by the Division of Measurement Standards of the California Department of Food and Agriculture.

Please print or type
(Form designed for use on elite (12-pitch) typewriter.)

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.	Manifest Doc. No.	2. Page 1 of 1
	00002	

GENERATOR

3. Generator's Name and Mailing Address: EL CAMINO CENTER
3201 ASH STREET
PALO ALTO, CA 94306

4. Generator's Phone: (650) 493-5310

5. Transporter 1 Company Name	6. US EPA ID Number	A. Transporter's Phone
JERVICON		(805) 938-0991
7. Transporter 2 Company Name	8. US EPA ID Number	B. Transporter's Phone
9. Designated Facility Name and Site Address	10. US EPA ID Number	C. Facility's Phone
ALTAMONT LANDFILL 10840 ALTAMONT PASS RD. LIVERMORE, CA 94550	CAD981382732	(925) 449-6349

11. Waste Shipping Name and Description	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol
a. SOIL - CLASS II COVER	001	DT	00018	CY
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

PROFILE # 55023400

CUSTOMER NAME CORNERSTONE ENVIRONMENTAL

FROM SLOT TRENCH AREA

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name	Signature	Month	Day	Year
CARL DAVIS		2	6	02

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
TODD ACKLAND				

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month	Day	Year

Printed by J. J. KELLER & ASSOCIATES, INC.
Neenah, WI 54957-0368

TRANSPORTER #1

Altamont Landfill & RRF
10840 Altamont Pass Road
Livermore CA 94550

DATE: 02/06/2002
TIME IN: 09:41
TIME OUT: 09:41

TICKET: 107944-1
I/O: I
STAGE TICKET: 112309

CARRIER: BC / Acklam
TRUCK: AA TRAILER#:
CUSTOMER: CORNER / Cornerstone environmental
GENERATOR: EL CAM / El Camino CenterPO:
ORIGIN: PALO / Palo Alto PROFILE: 55023400

MANIFEST WASTE / DESCRIPTION	QNTY PER
WAF C2C / Class II Cover S	25.80 T

GROSS: 87200 LBS
TARE: 36700 LBS
NET: 51600 LBS TONS: 25.80

CUSTOMER: CORNER / Cornerstone environme

CUSTOMER:

DEPUTY WEIGHMASTER: Rojas, Rogelio

DEPUTY WEIGHMASTER: Rojas, Rogelio

WEIGHMASTER CERTIFICATE

THIS IS TO CERTIFY that the following described commodity was weighed, measured, or counted by a weighmaster whose signature is on this certificate, who is recognized authority of accuracy, as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professions Code administered by the Division of Measurements Standards of the California Department of Food and Agriculture.

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. . . . . Manifest Doc. No. 00003 2. Page 1 of 1

GENERATOR

3. Generator's Name and Mailing Address EL CAMINO CENTER
3201 ASH STREET
PALO ALTO, CA. 94306

4. Generator's Phone (650) 493-5310

5. Transporter 1 Company Name JERVICON 6. US EPA ID Number . . . . . A. Transporter's Phone (805) 938-0991

7. Transporter 2 Company Name 8. US EPA ID Number . . . . . B. Transporter's Phone

9. Designated Facility Name and Site Address
ALTAMONT LANDFILL
10840 ALTAMONT PASS RD.
LIVERMORE, CA 94550

10. US EPA ID Number CAD981382732

C. Facility's Phone (925) 449-6348

11. Waste Shipping Name and Description	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. SOIL - CLASS II COVER	001	DT	0.0.0.1.8	CY
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

PROFILE # 550234.00

CUSTOMER NAME CORNERSTONE ENVIRONMENTAL

SOIL FROM SLOT TRENCH AREA

16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name CARL DAVIS Signature [signature] Month 2 Day 6 Year 02

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name STEVE KRUEGER Signature [signature] Month 2 Day 6 Year 02

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name Signature Month Day Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name Roger Tio Ross Signature [signature] Month 2 Day 6 Year 02

TRANSPORTER #1

Altamont Landfill & SRF
10840 Altamont Pass Road
Livermore, CA 94550

DATE: 02/20/2002
TIME IN: 09:26
TIME OUT: 09:34

TICKET: 107343-1
I/O: I
SCALE TICKET: 112383

CARRIER: CRO / Cross trucking
TRUCK: 2011 TRAILER#:
CUSTOMER: CORNER / Cornerstone environmental
GENERATOR: EL CAM / El Camino CenterPO:
ORIGIN: PALO / Palo Alto PROFILE: 550-3100

MANIFEST WASTE / DESCRIPTION		QNTY PER	
80000	CDF / Class II Cover S	23.50	T

GROSS: 79660 LBS
TARE: 30860 LBS
NET: 47800 LBS TONS: 23.90

CUSTOMER: CORNER / Cornerstone environme

CUSTOMER:

SCALE METERMASTER: Rajeev,Pagalia

SCALE METERMASTER: Rajeev,Pagalia

METERMASTER CERTIFICATE

THIS IS TO CERTIFY that the following described commodity was weighed, measured or counted by a weighmaster whose signature is on this certificate, who is recognized authority of accuracy, as prescribed by Chapter 7 (commencing with Section 12500) of Division 5 of the California Business and Professions Code administered by the Division of Measurement Standards of the California Department of Food and Agriculture.

Please print or type
(Form designed for use on elite (12-pitch) typewriter.)

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.:

Manifest Doc. No.: 000044

2. Page 1 of 1

GENERATOR

3. Generator's Name and Mailing Address: EL CAMINO CENTER
3201 ASH STREET
PALO ALTO, CA. 94306

4. Generator's Phone: (650) 493-5310

5. Transporter 1 Company Name: SERVICON

6. US EPA ID Number:

A. Transporter's Phone: (801) 938-0991

7. Transporter 2 Company Name:

8. US EPA ID Number:

B. Transporter's Phone:

9. Designated Facility Name and Site Address:
ALTAMONT LANDFILL
10840 ALTAMONT PASS RD.
LIVERMORE, CA 94550

10. US EPA ID Number: CAD981382732

C. Facility's Phone: (925) 449-6349

11. Waste Shipping Name and Description	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol
a. SOIL - CLASS II COVER	0001	T	00018	CY
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

PROFILE # 550234001

CUSTOMER NAME CORNERSTONE ENVIRONMENTAL

SOIL FROM SLOT TRENCH AREA

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name	Signature	Month	Day	Year
CARL DACUS		2	6	02

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
DAN FACCHINO		2	6	02

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month	Day	Year
K. BROWN		2	6	02

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Neenah, WI 54957-0368

12-BLS-C5 Rev. 12/98

TRANSPORTER #1

[illegible]

[illegible] Bausch
[illegible] TPCO [illegible]
[illegible] / Corporate environmental
[illegible] El Cerro Central PO:
[illegible] to Bill, PROFILE: 500[illegible]

[illegible]	DESCRIPTION	UNIT PRICE
[illegible]	[illegible] II Cover [illegible]	2.73 T

[illegible] SHIPPER / Corporate [illegible]

[illegible] TIME: [illegible]

[illegible] SIGNATURE: [illegible]

[illegible] DATE: [illegible]

Please print or type
(Form designed for use on elite (12-pitch) typewriter.)

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. . . . . Manifest Doc. No. 00005 2. Page 1 of 1

GENERATOR

3. Generator's Name and Mailing Address EL CAMINO CENTER
3201 ASH STREET
PALO ALTO, CA.

4. Generator's Phone (650) 493-5310

5. Transporter 1 Company Name JERVICON 6. US EPA ID Number . . . . . A. Transporter's Phone (805) 938-0991

7. Transporter 2 Company Name 8. US EPA ID Number . . . . . B. Transporter's Phone

9. Designated Facility Name and Site Address
ALTAMONT LANDFILL
10840 ALTAMONT PASS RD.
LIVERMORE, CA 94550

10. US EPA ID Number CAD981382732

C. Facility's Phone (925) 449-6349

11. Waste Shipping Name and Description	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol
a. SOIL - CLASS II COVER	00	ID	T00018	CY
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

PROFILE # 55023400

CUSTOMER NAME CORNERSTONE ENVIRONMENTAL

SOIL FROM SLOT TRENCH AREA

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name ART DAVIS Signature [signature] Month 12 Day 6 Year 02

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name KRISTINE Signature [signature] Month 12 Day 06 Year 02

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name Signature Month Day Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name KEN BROWN Signature [signature] Month 12 Day 6 Year 02

Printed by J. J. KELLER & ASSOCIATES, INC.
Neenah, WI 54957-0368

TRANSPORTER #1

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. | Manifest Doc. No. 00006 | 2. Page 1 of 1

GENERATOR

3. Generator's Name and Mailing Address: EL CAMINO CENTER
3201 ASH STREET
PALO ALTO, CA. 94306

4. Generator's Phone (650) 493-5310

5. Transporter 1 Company Name: JERVICON | 6. US EPA ID Number | A. Transporter's Phone (805) 938-0991

7. Transporter 2 Company Name | 8. US EPA ID Number | B. Transporter's Phone

9. Designated Facility Name and Site Address:
ALTAMONT LANDFILL
10840 ALTAMONT PASS RD.
LIVERMORE, CA 94550

10. US EPA ID Number: CAD981382732

C. Facility's Phone: (925) 449-6349

11. Waste Shipping Name and Description	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. SOIL - CLASS II COVER	001	DT	00018	CY
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

PROFILE # 55023400

CUSTOMER NAME CORNERSTONE ENVIRONMENTAL

SOIL FROM SLOT TRENCH AREA

16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name: Carl Davis | Signature | Month 12 | Day 16 | Year 02

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: W. H. Hoop | Signature | Month 12 | Day 16 | Year 02

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Month | Day | Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name: Frank Dewitt | Signature | Month 12 | Day 16 | Year 02

TRANSPORTER #1

Ox Mountain Landfill & BFI
13032 Wilkerson Pass Road
Livermore CA 94550

DATE: 02/20/2002
TIME IN: 09:10
TIME OUT: 09:10

TICKET: 1073347-1
LIN: 7
SCALE TICKET: 132040

CARRIER: CRO / Cross Trucking
TRUCK: 7816 TRAILER#:
CUSTOMER: CORNER / Cornerstone environmental
GENERATOR: EL CAM / El Camino Center-PO:
ORIGIN: PALO / Palo Alto PROFILE: SSNON-HZ

MANIFEST NBR	DESCRIPTION	QNTY PER	
000000	CRO / Class II Cover @	23.94	T

GROSS: 48400 LBS
TARE: 24520 LBS
NET: 47880 LBS TONS: 23.94

CUSTOMER: CORNER / Cornerstone environmental

CUSTOMER:

DRIVER'S SIGNATURE: Raymond Pagel

WEIGHMASTER: [illegible]

I HEREBY CERTIFY that the following described commodity was weighed, measured, or counted by a weighmaster whose signature is on file with the Department, who is duly licensed authority of accuracy, as prescribed by Chapter 9 (commencing with Section 12700) of Division 5 of the California Harbors and Navigation Code administered by the Division of Measurement Standards of the California Department of Food and Agriculture.

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. . . . . Manifest Doc. No. 00007 2. Page 1 of 1

GENERATOR

3. Generator's Name and Mailing Address EL CAMINO CENTER
3201 ASH STREET
PALO ALTO, CA. 94306

4. Generator's Phone (650) 493-5310

5. Transporter 1 Company Name: JERVICON
6. US EPA ID Number: . . . . .
A. Transporter's Phone: (805) 938-0991

7. Transporter 2 Company Name:
8. US EPA ID Number: . . . . .
B. Transporter's Phone:

9. Designated Facility Name and Site Address
ALTAMONT LANDFILL
10840 ALTAMONT PASS RD.
LIVERMORE, CA 94550
10. US EPA ID Number: CAD981382732
C. Facility's Phone: (925) 449-6349

11. Waste Shipping Name and Description	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. SOIL - CLASS II COVER	001	DT	00018	CY
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

PROFILE # 55023400

CUSTOMER NAME CORNERSTONE ENVIRONMENTAL

SOIL FROM SLOT TRENCH AREA

16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name: CARL DAVIS — Signature: [signature] — Month 2 Day 16 Year 02

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: STEVE KNICKERBERG — Signature: [signature] — Month 2 Day 16 Year 02

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name: — Signature: — Month . Day . Year .

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name: FRANK DOMINGUEZ — Signature: [signature] — Month 2 Day 4 Year 02

TRANSPORTER #1

Altamont Landfill & RDF
10840 Altamont Pass Road
Livermore CA 94550

DATE: 02/20/2002
TIME IN: 12:51
TIME OUT: 13:51

TICKET: 1000[illegible]
LOD: 1
START TICKET: 110[illegible]

CARRIER: CAT / Cross Trucking
TRUCK: 2001 TRAILER:
CUSTOMER: CORNET / Cornerstone environmental
GENERATOR: EL CAM / El Camino CenterPJ:
ORIGIN: PAO / Palo Alto PROFILE: 55023[illegible]

MANIFEST WASTE / DESCRIPTION	QNTY	PER
000007 PJC / Class II Cover S	23.77	T

GROSS: 72480 LBS
TARE: 48060 LBS
NET: 24420 LBS TONS: 23.77

CUSTOMER: CORNET / Cornerstone environme

CUSTOMER:

DEPUTY WEIGHMASTER: Donofrio, Frank

DEPUTY WEIGHMASTER: Donofrio, Frank

[illegible]

THIS IS TO CERTIFY that the following described commodity was weighed, measured, or counted by a weighmaster whose signature is on this certificate, who is recognized authority of county or prescribed by Chapter 7 commencing with Section 12700) of Division 5 of the California Business and Professions Code administered by the Division of Measurement Standards of the California Department of Food and Agriculture.

Please print or type
(Form designed for use on elite (12-pitch) typewriter.)

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.	Manifest Doc. No.	2. Page 1 of 1
	00008	

GENERATOR

3. Generator's Name and Mailing Address: EL CAMINO CANTER
3201 ASH STREET
PALO ALTO, CA. 94306

4. Generator's Phone: 650)493-5310

5. Transporter 1 Company Name	6. US EPA ID Number	A. Transporter's Phone
JERVICON		(805)938-0991
7. Transporter 2 Company Name	8. US EPA ID Number	B. Transporter's Phone

9. Designated Facility Name and Site Address	10. US EPA ID Number	C. Facility's Phone
ALTAMONT LANDFILL 10840 ALTAMONT PASS RD. LIVERMORE, CA 94550	CAD981382732	(925) 449-6349

11. Waste Shipping Name and Description	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol
a. SOIL - CLASS II COVER	001	DT		CY
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above	E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

PROFILE # 55023400

CUSTOMER NAME CORNERSTONE ENVIRONMENTAL

SOIL FROM SLOT TRENCH AREA

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name	Signature	Month	Day	Year
CARL DAVIS		12	6	02

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
JODY ADELMAN		12	06	02

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month	Day	Year
FRANK DOMENICI		12	6	02

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Neenah, WI 54957-0368

12-BLS-C5 Rev. 12/98

TRANSPORTER #1

Altamont Landfill & RRF
10840 Altamont Pass Road
Livermore CA 94550

DATE: 02/06/2002
TIME IN: 13:48
TIME OUT: 13:48

TICKET: 100611
I/O: I
STAGE TICKET: 112370

CARRIER: OC / Ocklam
TRUCK: AA TRAILER#:
CUSTOMER: CORNER / Cornerstone environmental
GENERATOR: EL CAM / El Camino CenterPO:
ORIGIN: PALO / Palo Alto PROFILE: 55023400

MANIFEST WASTE / DESCRIPTION	QNTY	PER
000000 C2C / Class II Cover S	25.23	T

GROSS: 51200 LBS
TARE: 26780 LBS
NET: 50420 LBS TONS: 25.23

CUSTOMER:

CUSTOMER: CORNER / Cornerstone environme

DEPUTY WEIGHMASTER: Donofrio, Frank DEPUTY WEIGHMASTER: Donofrio, Frank

WEIGHMASTER CERTIFICATE

I, I DO CERTIFY that the following described commodity was weighed, measured and counted by a weighmaster whose signature is on this certificate, who is a duly appointed authority of accuracy, as prescribed by Chapter 7 (commencing with Section 12200) of Division 5 of the California Business and Professions Code and licensed by the Division of Measurements Standards of the California Department of Food and Agriculture.

Please print or type
(Form designed for use on elite (12-pitch) typewriter.)

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. . . . . Manifest Doc. No. 00009 | 2. Page 1 of 1

GENERATOR

3. Generator's Name and Mailing Address: EL CAMINO CENTER
3201 ASH STREET
PALO ALTO, CA. 94306

4. Generator's Phone (650) 493-5310

5. Transporter 1 Company Name: JERVICON | 6. US EPA ID Number . . . . . | A. Transporter's Phone (805) 938-0991

7. Transporter 2 Company Name | 8. US EPA ID Number . . . . . | B. Transporter's Phone

9. Designated Facility Name and Site Address: ALTAMONT LANDFILL
10840 ALTAMONT PASS RD.
LIVERMORE, CA 94550 | 10. US EPA ID Number: CAD981382732 | C. Facility's Phone: (925) 449-6349

11. Waste Shipping Name and Description	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol
a. SOIL - CLASS II COVER	001	DT	0018	CY
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

PROFILE # 55023400

CUSTOMER NAME CORNERSTONE ENVIRONMENTAL

From Slot trench Area

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name: Art Davis | Signature | Month 12 | Day 6 | Year 02

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: Kris Innis | Signature | Month 12 | Day 6 | Year 02

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Month | Day | Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name: Frank Dominio | Signature | Month 12 | Day 6 | Year 02

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Neenah, WI 54957-0368

12-BLS-C5 Rev. 12/98

TRANSPORTER #1

TIME IN: 14:2
TIME OUT: 14:10



CUSTOMER:

CUSTOMER:

C E R T I F I C A T E

Please print or type
(Form designed for use on elite (12-pitch) typewriter.)

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. . . . . Manifest Doc. No. 00010 | 2. Page 1 of 1

GENERATOR

3. Generator's Name and Mailing Address EL CAMINO CENTER
3201 ASH STREET
PALO ALTO, CA. 94306

4. Generator's Phone 650 493-5310

5. Transporter 1 Company Name: JERVICON | 6. US EPA ID Number | A. Transporter's Phone (805) 938-0991

7. Transporter 2 Company Name | 8. US EPA ID Number | B. Transporter's Phone

9. Designated Facility Name and Site Address
ALTAMONT LANDFILL
10840 ALTAMONT PASS RD.
LIVERMORE, CA 94550

10. US EPA ID Number: C.A.D.9.8.1.3.8.2.7.3.2

C. Facility's Phone: (925) 449-6349

11. Waste Shipping Name and Description	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. SOIL - CLASS II COVER	001	DT	00018	CY
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

PROFILE # 55023400

CUSTOMER NAME CORNERSTONE ENVIRONMENTAL

From Slot trench Area

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name: CARL DAVIS | Signature | Month 2 | Day 16 | Year 02

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: DAN FALCHINO | Signature | Month 02 | Day 16 | Year 02

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Month | Day | Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name: Rebecca Reis | Signature | Month 2 | Day 17 | Year 02

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Neenah, WI 54957-0368

12-BLS-C5 Rev. 12/98

TRANSPORTER #1

DATE: 02/07/2002

TIME IN: 08:40

TIME OUT: 08:40

Phone environmental

Palo Alto

PROFILE: 8500.3400

DESCRIPTION	QNTY PER	
Class II Cover	30.41	T

CUSTOMER: CORNER

CUSTOMER:

DEPUTY WEIGHMASTER:

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. . . . . Manifest Doc. No. 0001 1 | 2. Page 1 of 1

3. Generator's Name and Mailing Address EL CAMINO CENTER
3201 ASH STREET
PALO ALTO, CA. 94306

4. Generator's Phone (650) 493-5310

5. Transporter 1 Company Name SERVICON | 6. US EPA ID Number . . . . . | A. Transporter's Phone (805) 938-0991

7. Transporter 2 Company Name | 8. US EPA ID Number . . . . . | B. Transporter's Phone

9. Designated Facility Name and Site Address
ALTAMONT LANDFILL
10840 ALTAMONT PASS RD.
LIVERMORE, CA 94550 | 10. US EPA ID Number CAD981382732 | C. Facility's Phone (925) 449-6349

11. Waste Shipping Name and Description	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. SOIL - CLASS II COVER	001	DT	00018	CH
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above | E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

PROFILE # 55023400

CUSTOMER NAME CORNERSTONE ENVIRONMENTAL

From SLOT TRENCH AREA

16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name Carl Davis | Signature | Month 12 Day 20 Year 01

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name Will Hoop | Signature | Month 12 Day 20 Year 01

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Month | Day | Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name Frank Donahue | Signature | Month 12 Day 20 Year 01

GENERATOR

TRANSPORTER

FACILITY

TRANSPORTER #1

Altamont Landfill & RR
10840 Altamont Pass Road
Livermore CA 94550

DATE: 02/06/2002
TIME IN: 10:01
TIME OUT: 10:01

TICKET: 1080530-1
Pg: 1
SCALE TICKET: 119490

CARRIER: CSD / Cross Trucking
TRUCK: 2510 TRAILER:
CUSTOMER: CORNER / Cornerstone Environmental
DESTINATION: LL CAM / El Casino CenterPO:
ORIGIN: WALD / Walo Alto PROFILE: CSWW1400

MANIFEST	WASTE DESCRIPTION	QNTY	PER
00001	CSD / Class II Cover S	23.63	T

DRIVER: TAYLOR LEE
TARE: 31260 LBS
NET: 47250 LBS TONS: 23.63

CUSTOMER: CORNER / Cornerstone environment

CUSTOMER:

DEPUTY WEIGHMASTER: Donofrio, Frank DEPUTY WEIGHMASTER: Donofrio, Frank

CERTIFICATE

THIS IS TO CERTIFY that the following described commodity was weighed, measured, or counted by a weighmaster whose signature is on this certificate, who is recognized authority of authority, as prescribed by Chapter 7 commencing with Section 12700 of Division 5 of the California Business and Professions Code administered by the Division of Measurement Standards of the California Department of Food and Agriculture.

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. | Manifest Doc. No. 00012 | 2. Page 1 of 1

3. Generator's Name and Mailing Address: EL CAMINO CENTER, 3201 ASH STREET, PALO ALTO, CA. 94306

4. Generator's Phone: 650 493-5310

5. Transporter 1 Company Name: JERVICON | 6. US EPA ID Number | A. Transporter's Phone: (805) 938-0991

7. Transporter 2 Company Name | 8. US EPA ID Number | B. Transporter's Phone

9. Designated Facility Name and Site Address: ALTAMONT LANDFILL, 10840 ALTAMONT PASS RD., LIVERMORE, CA 94550 | 10. US EPA ID Number: CAD981382732 | C. Facility's Phone: (925) 449-6349

11. Waste Shipping Name and Description	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. SOIL - CLASS II COVER	001	DT	00018	T
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

PROFILE # 55023400

CUSTOMER NAME CORNERSTONE ENVIRONMENTAL

From Slot trench Area

16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name: Carl Davis | Signature | Month 2 Day 6 Year 02

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: STEVE KNICKERBEIN | Signature | Month 2 Day 6 Year 02

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name: Frank Dandrea | Signature | Month 2 Day 6 Year 02

GENERATOR

TRANSPORTER

FACILITY

TRANSPORTER #1

Altamont Landfill & RR
10840 Altamont Pass Road
Livermore, CA 94550

DATE: 02/20/2002
TIME IN: 10:20
TIME OUT: 10:23

TICKET: 1030[illegible]
LOG: 1
GROSS TIME: 3:03:03

CARRIER: 180 / Cross Trucking
TRUCK: 2015 TRAILER#:
CUSTOMER: CORNER / Cornerstone Environmental
GENERATOR: EL CAM / El Camino CenterPO:
OFFICE: PALO / Palo Alto PROFILE: 53023600

MATERIAL WASTE / DESCRIPTION	QNTY	PER
300201 DAY / Class II Cover S	23.50	T

GROSS: 77950 LBS
TARE: 54000 LBS
NET: 23950 LBS TONS: 23.50

CUSTOMER: CORNER / Cornerstone environmental

CUSTOMER: [signature]

DEPUTY WEIGHMASTER: DeNoble, Frank DEPUTY WEIGHMASTER: DeNoble, Frank

WEIGHMASTER CERTIFICATE

THIS IS TO CERTIFY that the following described commodity was weighed, measured or counted by a weighmaster whose signature is on this certificate, who is recognized authority of weighmaster as prescribed by Chapter 3 commencing with Section 12500) of Division 5 of the California Business and Professions Code administered by the Division of Measurement Standards of the California Department of Food and Agriculture. [illegible]

Please print or type
(Form designed for use on elite (12-pitch) typewriter.)

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Doc. No. 00013

2. Page 1 of 1

GENERATOR

3. Generator's Name and Malling Address
EL CAMINO CENTER
3201 ASH STREET
PALO ALTO, CA. 94306

4. Generator's Phone 650 493-5310

5. Transporter 1 Company Name
JERVICON

6. US EPA ID Number

A. Transporter's Phone (805) 938-0991

7. Transporter 2 Company Name

8. US EPA ID Number

B. Transporter's Phone

9. Designated Facility Name and Site Address
ALTAMONT LANDFILL
10840 ALTAMONT PASS RD.
LIVERMORE, CA 94550

10. US EPA ID Number
CAD981382732

C. Facility's Phone
(925) 449-6349

11. Waste Shipping Name and Description	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. SOIL - CLASS II COVER	0.01	DT	00018	CY
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

PROFILE # 55023400

CUSTOMER NAME CORNERSTONE ENVIRONMENTAL

From Slot Trench Area

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name CARL DAVIS — Signature — Month 12 Day 16 Year 02

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name TODD ADAMS — Signature — Month 12 Day 16 Year 02

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name — Signature — Month — Day — Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name FRANK DOMINGUEZ — Signature — Month 12 Day 16 Year 02

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Neenah, WI 54957-0368

TRANSPORTER #1

Altamont Landfill & RRF
10840 Altamont Pass Road
Livermore CA 94550

DATE: 02/06/2002
TIME IN: 18:26
TIME OUT: 18:27

TICKET: 108057-1
I/O: I
STAGE TICKET: 112424

CARRIER: GO / Goklan
TRUCK: 08 TRAILER#:
CUSTOMER: CORNER / Cornerstone environmental
GENERATOR: EL CAM / El Camino CenterPO:
ORIGIN: PALO / Palo Alto PROFILE: 55023400

MANIFEST WASTE / DESCRIPTION	QNTY PER
000113 C&D / Class II Cover S	24.38 T

GROSS: 79560 LBS
TARE: 30720 LBS
NET: 48760 LBS TONS: 24.38

CUSTOMER: CORNER / Cornerstone environme

CUSTOMER: _____

DEPUTY WEIGHMASTER: Donofrio, Frank DEPUTY WEIGHMASTER: Donofrio, Frank

W E I G H M A S T E R C E R T I F I C A T E

THIS IS TO CERTIFY that the following described commodity was weighed, measured, or counted by a weighmaster whose signature is on this certificate, who is recognized authority of accuracy, as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professions Code administered by the Division of Measurements Standards of the California Department of Food and Horticulture.

Please print or type
(Form designed for use on elite (12-pitch) typewriter.)

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. . . . . Manifest Doc. No. 00014 | 2. Page 1 of 1

GENERATOR

3. Generator's Name and Mailing Address EL CAMINO CENTER
3201 ASH STREET
PALO ALTO, CA. 94306

4. Generator's Phone (650) 493-5310

5. Transporter 1 Company Name: JERVICON | 6. US EPA ID Number: . . . . . | A. Transporter's Phone: (805) 938-0991

7. Transporter 2 Company Name | 8. US EPA ID Number: . . . . . | B. Transporter's Phone

9. Designated Facility Name and Site Address
ALTAMONT LANDFILL
10840 ALTAMONT PASS RD.
LIVERMORE, CA 94550

10. US EPA ID Number: CAD981382732

C. Facility's Phone: (925) 449-6349

11. Waste Shipping Name and Description	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol
a. SOIL - CLASS II COVER	001	DT	. . . .	CY
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

PROFILE # 55023400

CUSTOMER NAME CORNERSTONE ENVIRONMENTAL

~~From Slot Trench Area~~

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name CARL DAVIS | Signature | Month 2 | Day 6 | Year 02

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name ALIS TURNT | Signature | Month 02 | Day 06 | Year 02

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Month | Day | Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name Rogelio RSP | Signature | Month 2 | Day 7 | Year 02

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Neenah, WI 54957-0368

12-BLS-C5 Rev. 12/98

TRANSPORTER #1

DATE: 02/07/2002
TIME IN: 08:30
TIME OUT: 08:35

CUSTOMER / Comerstone environmental
COM / El Camino Center
PROFILE: 55x30-x2

DESCRIPTION	QNTY	PER	
Class II Cover	14.58	T	

CUSTOMER: CORNER / Cornerstone environmental

CUSTOMER:

FACILITY REPRESENTATIVE:

I, the undersigned commodity representative, do hereby certify that the above signature is on this scale ticket. The [illegible] described by Chapter [illegible] of the California Business and Professions Code [illegible] Standards of the California [illegible]

Please print or type
(Form designed for use on elite (12-pitch) typewriter.)

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.	Manifest Doc. No.	2. Page 1 of 1
	00015	

GENERATOR

3. Generator's Name and Mailing Address: EL CAMINO CENTER
3201 ASH Street
PALO ALTO, CA 94306

4. Generator's Phone (650) 493-5310

5. Transporter 1 Company Name	6. US EPA ID Number	A. Transporter's Phone
JERUICON		(805) 938-0991
7. Transporter 2 Company Name	8. US EPA ID Number	B. Transporter's Phone
9. Designated Facility Name and Site Address	10. US EPA ID Number	C. Facility's Phone
ALTAMONT LANDFILL 10840 ALTAMONT PASS RD. LIVERMORE, CA 94550	CAD981382732	(925) 449-6349

11. Waste Shipping Name and Description	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol
a. SOIL CLASS II COVER	001	DT	00.01	CY
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

PROFILE # 55023400

CUSTOMER NAME CORNERSTONE ENVIRONMENTAL

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name	Signature	Month	Day	Year
CARI DAVIS		12	7	02

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
TODD ACKLAM		12	7	02

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month	Day	Year
[illegible]		12	7	02

Printed by J. J. KELLER & ASSOCIATES, INC.
Neenah, WI 54957-0368

12-BLS-C5 Rev. 12/98

TRANSPORTER #1

Altamont Landfill & RRF
10840 Altamont Pass Road
Livermore CA 94550

DATE: 02/07/2002
TIME IN: 08:38
TIME OUT: 08:38

TICKET: 1081799-1
LOAD: 1
STORE TICKET: 112542

CARRIER: OC / Ochlam
TRUCK: 90 TRAILER#:
CUSTOMER: CORNER / Cornerstone environmental
GENERATOR: EL CAM / El Camino Center PO:
ORIGIN: PALO / Palo Alto PROFILE: 55003400

MATERIAL WASTE / DESCRIPTION	UNIT PER	
26015	CCC / Class II Cover S	24.70 T

GROSS: 96100 LBS
TARE: 36700 LBS
NET: 47400 LBS TONS: 24.70

CUSTOMER: CORNER / Cornerstone environme

CUSTOMER:

DEPUTY WEIGHMASTER: Brown, Ken Sr

DEPUTY WEIGHMASTER: Brown, Ken Sr

WEIGHMASTER CERTIFICATE

THIS IS TO CERTIFY that the following described commodity was weighed, measured, or counted by a weighmaster whose signature is on this certificate, who is recognized authority of accuracy, as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professions Code administered by the Division of Measurement Standards of the California Department of Food and Agriculture.

Please print or type
(Form designed for use on elite (12-pitch) typewriter.)

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. . . . . | Manifest Doc. No. 00016 | 2. Page 1 of 1

GENERATOR

3. Generator's Name and Mailing Address: EL CAMINO CENTER, 3201 ASH Street, PALO ALTO CA 94306

4. Generator's Phone (650) 493 - 5310

5. Transporter 1 Company Name: JERVICON | 6. US EPA ID Number . . . . . | A. Transporter's Phone (805) 938-0991

7. Transporter 2 Company Name | 8. US EPA ID Number . . . . . | B. Transporter's Phone

9. Designated Facility Name and Site Address: ALTAMONT LANDFILL, 10840 ALTAMONT PASS RD., LIVERMORE, CA 94550 | 10. US EPA ID Number: CAD981382732 | C. Facility's Phone: (925) 449-6349

11. Waste Shipping Name and Description	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. SOIL CLASS II COVER	001	DT	00018	CY
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

PROFILE # 55023400

CUSTOMER NAME CORNERSTONE ENVIRONMENTAL

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name: CARL DAVIS | Signature | Month 12 Day 17 Year 02

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: JOHN M. GOODWIN | Signature | Month 12 Day 17 Year 02

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Month . Day . Year .

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name: ROGER ROSS | Signature | Month 12 Day 17 Year 02

Printed by J. J. KELLER & ASSOCIATES, INC.
Neenah, WI 54957-0368

12-BLS-C5 Rev. 12/98

TRANSPORTER #1

Please print or type
(Form designed for use on elite (12-pitch) typewriter.)

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Doc. No. 00017

2. Page 1 of 1

GENERATOR

3. Generator's Name and Mailing Address El camino Center
3201 Ash Street
Palo Alto Ca 94306

4. Generator's Phone (650) 493-5310

5. Transporter 1 Company Name Vervicon

6. US EPA ID Number

A. Transporter's Phone (805) 938-0991

7. Transporter 2 Company Name

8. US EPA ID Number

B. Transporter's Phone

9. Designated Facility Name and Site Address
ALTAMONT LANDFILL
10840 ALTAMONT PASS RD.
LIVERMORE, CA 94550

10. US EPA ID Number
CAD981382732

C. Facility's Phone
(925) 449-6349

11. Waste Shipping Name and Description	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. Soil Class II Cover	001	DT	00018	CY
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

PROFILE # 55023400

CUSTOMER NAME Cornerstone Enviromental

16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name	Signature	Month	Day	Year
CARL DAVIS	C Davis	12	07	02

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
TODD Ackland	Todd Ackland	12	07	02

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month	Day	Year
K. BROWN	K Brown	12	7	02

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Neenah, WI 54957-0368

12-BLS-C5 Rev. 12/98

TRANSPORTER #1

Altamont Landfill & RNF
10840 Altamont Pass Road
Livermore CA 94550

DATE: 02/07/2002
TIME IN: 12:19
TIME OUT: 12:19

TICKET: 108217-1
I/O: I
STAGE TICKET: 112590

CARRIER: OC / Acklam
TRUCK: 80 TRAILER#:
CUSTOMER: CORNER / Cornerstone environmental
GENERATOR: EL CAM / El Camino CenterPO:
ORIGIN: PALO / Palo Alto PROFILE: 55023400

MANIFEST	WASTE / DESCRIPTION	QNTY	PER
00017	C2C / Class II Cover S	24.18	T

GROSS: 79140 LBS
TARE: 38780 LBS
NET: 40360 LBS TONS: 24.18

CUSTOMER: CORNER / Cornerstone environme

CUSTOMER:

DEPUTY WEIGHMASTER: Brown, Ken Sr

DEPUTY WEIGHMASTER: Brown, Ken Sr

WEIGHMASTER CERTIFICATE

THIS IS TO CERTIFY that the following described commodity was weighed, measured , or counted by a weighmaster whose signature is on this certificate, who is recognized authority of accuracy, as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professions Code administered by the Division of Measurements Standards of the California Department of Food and Agriculture.

Please print or type
(Form designed for use on elite (12-pitch) typewriter.)

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. . . . . Manifest Doc. No. 00018 2. Page 1 of 1

GENERATOR

3. Generator's Name and Mailing Address: El Camino Center, 3201 Asq Street, Palo Alto Ca 94306
4. Generator's Phone (650) 493-5310

5. Transporter 1 Company Name: Jerv.con — 6. US EPA ID Number . . . . . — A. Transporter's Phone (605) 938-0991

7. Transporter 2 Company Name — 8. US EPA ID Number . . . . . — B. Transporter's Phone

9. Designated Facility Name and Site Address: ALTAMONT LANDFILL, 10840 ALTAMONT PASS RD., LIVERMORE, CA 94550 — 10. US EPA ID Number: CAD 981382732 — C. Facility's Phone: (925) 449-6349

11. Waste Shipping Name and Description	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. Soil Class II Cover	001	DT	00018	CY
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

PROFILE # 55073400

CUSTOMER NAME Cornerstone Environmental

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name: CAPT DAVIS — Signature — Month 02 Day 07 Year 02

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name — Signature — Month . Day . Year .

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name: [illegible] — Signature — Month 02 Day 07 Year 02

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name: K. BROWN — Signature: Ken Brown — Month 02 Day 07 Year 02

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Neenah, WI 54957-0368

12-BLS-C5 Rev. 12/98

TRANSPORTER #1

Project:

PROFILE: SSCC1WD

DESCRIPTION	QNTY ORD
[illegible]	[illegible]

[illegible]

Please print or type
(Form designed for use on elite (12-pitch) typewriter.)

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. . . . . Manifest Doc. No. 0001 9 | 2. Page 1 of 1

GENERATOR

3. Generator's Name and Mailing Address El Camino Center
3201 Ash Street
Palo Alto CA 94306

4. Generator's Phone (650) 493-5310

5. Transporter 1 Company Name: Jervicon | 6. US EPA ID Number: . . . . . | A. Transporter's Phone: (805) 938-0991

7. Transporter 2 Company Name | 8. US EPA ID Number: . . . . . | B. Transporter's Phone

9. Designated Facility Name and Site Address
ALTAMONT LANDFILL
10840 ALTAMONT PASS RD.
LIVERMORE, CA 94550

10. US EPA ID Number: CAD 9 8 1 3 8 2 7 3 2

C. Facility's Phone: (925) 449-6349

11. Waste Shipping Name and Description	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol
a. Soil Class II cover	001	DT	0001	CY
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

PROFILE # 55023400

CUSTOMER NAME Cornerstone Environmental

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name: Carl Davis | Signature | Month 12 Day 07 Year 02

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: Kris Lunis | Signature | Month 12 Day 07 Year 02

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Month . Day . Year .

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name: L. Brown | Signature: Len Brown | Month 12 Day 17 Year 02

Printed by J. J. KELLER & ASSOCIATES, INC.
Neenah, WI 54957-0368

12-BLS-C5 Rev. 12/98

TRANSPORTER #1

Kirkwood Landfill & RPF
[illegible] Altamont Pass Road
[illegible], CA 94550

DATE: 02/07/2002
TIME IN: 12:43
TIME OUT: 12:47

TICKET: 190225-1
I/O: I
STAGE TICKET: 112507

OPERATOR: S.O. / T Bauerle
TRUCK: [illegible]
TRAILER#:
CUSTOMER: CORNER / Cornerstone environmental
DESTINATION: KI CAM / El Camino Center
PO: [illegible]
[illegible] / Palo Alt
PROFILE: 55023400

MATERIAL NAME / DESCRIPTION	QNTY PER
[illegible] / Class II Cover	24.86 T

GROSS: 49440 LBS
TARE: 45660 LBS
NET: 3780 LBS TONS: 24.86

CUSTOMER: CORNER / Cornerstone environme

CUSTOMER: _____
DEPUTY WEIGHMASTER: Donofrio, Frank

WEIGHMASTER: Brown, Ken Sr

WEIGHMASTER CERTIFICATE

I hereby certify that the following described commodity was weighed, measured or counted by a weighmaster whose signature is on this certificate, who is appointed authority of accuracy, as prescribed by Chapter 7 (commencing with Section 12500) of Division 5 of the California Business and Professions Code and enforced by the Division of Measurements Standards of the California Department of Food and Agriculture.

Please print or type
(Form designed for use on elite (12-pitch) typewriter.)

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. . . . . | Manifest Doc. No. 00020 | 2. Page 1 of 1

GENERATOR

3. Generator's Name and Mailing Address El Camino Center
3201 Ash Street
Palo Alto Ca. 94306

4. Generator's Phone (650) 493-5310

5. Transporter 1 Company Name: Vervcon | 6. US EPA ID Number . . . . . | A. Transporter's Phone (805) 938-0991

7. Transporter 2 Company Name | 8. US EPA ID Number . . . . . | B. Transporter's Phone

9. Designated Facility Name and Site Address
ALTAMONT LANDFILL
10840 ALTAMONT PASS RD.
LIVERMORE, CA 94550

10. US EPA ID Number: CAD981382732

C. Facility's Phone: (925) 449-6349

11. Waste Shipping Name and Description	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. Soil Class II Cover	001	DT	00018	CY
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

PROFILE # 55073400

CUSTOMER NAME Cornerstone Environmental

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name: CARL DAVIS | Signature | Month 02 Day 07 Year 02

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: David M. Goodwin | Signature | Month 02 Day 07 Year 02

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Month . Day . Year .

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name: K. BROWN | Signature: Ken Brown | Month 12 Day 17 Year 02

Printed by J. J. KELLER & ASSOCIATES, INC.
Neenah, WI 54957-0368

12-BLS-C5 Rev. 12/98

TRANSPORTER #1

DATE: 02/07/2002
TIME IN: 10:40
TIME OUT: 12:40

Goodwin Lumber
TRUCK:
CORNER / Corne Stone Environmental
EL Camino Center PO:
Palo Alto PROFILE: 55002300

DESCRIPTION	QNTY	PER
Class II Cover D	13.89	T

CUSTOMER: CORNER / Corne Stone Environmental

CUSTOMER:

DEPUTY WEIGHMASTER:

WEIGHMASTER CERTIFICATE

I certify that the following described commodity was weighed, measured or counted by a weighmaster whose signature is on this certificate, who is licensed or authorized by the accuracy as prescribed by Chapter 7 (commencing with Section 12500) of Division 3 of the California Business and Professions Code and in the Code of Regulations - Standards of the California

Please print or type
(Form designed for use on elite (12-pitch) typewriter.)

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Doc. No. 00021

2. Page 1 of 1

GENERATOR

3. Generator's Name and Mailing Address El camino center
3201 Ash Street
Palo Alto Ca. 94306

4. Generator's Phone (650) 493-5310

5. Transporter 1 Company Name: Jervicon

6. US EPA ID Number

A. Transporter's Phone: (805) 938-0991

7. Transporter 2 Company Name

8. US EPA ID Number

B. Transporter's Phone

9. Designated Facility Name and Site Address
ALTAMONT LANDFILL
10840 ALTAMONT PASS RD.
LIVERMORE, CA 94550

10. US EPA ID Number: CAD981382732

C. Facility's Phone: (925) 449-6349

11. Waste Shipping Name and Description	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol
a. Soil Class II cover	001	DT	0001.5	CY
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

PROFILE # 55023400

CUSTOMER NAME Cornerstone Environmental

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name	Signature	Month	Day	Year
CARL DAVIS		02	07	02

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
TODD ACKMAN		02	07	02

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month	Day	Year
FRANK DOMOKOS		2	7	02

Printed by J. J. KELLER & ASSOCIATES, INC.
Neenah, WI 54957-0368

TRANSPORTER #1

Altamont Landfill & RRF
10840 Altamont Pass Road
Livermore CA 94550

DATE: 02/07/2002
TIME IN: 17:05
TIME OUT: 17:05

TICKET: 108276-1
I/O: I
STAGE TICKET: 112647

CARRIER: AC / Acklam
TRUCK: 80 TRAILER#:
CUSTOMER: CORNER / Cornerstone environmental
GENERATOR: EL CAM / El Camino CenterPO:
ORIGIN: ALAM / Alameda PROFILE: 55023400

MANIFEST NUMBER	DESCRIPTION	QNTY PER	
WAF	(23) / Class II Cover S	23.82	T

GROSS: 70420 LBS
TARE: 30780 LBS
NET: 47640 LBS TONS: 23.82

CUSTOMER: CORNER / Cornerstone environme

CUSTOMER:

DEPUTY WEIGHMASTER: Dohotatu, Frank DEPUTY WEIGHMASTER: Dohotatu, Frank

WEIGHMASTER CERTIFICATE

THIS IS TO CERTIFY that the following described commodity was weighed, measured , or counted by a weighmaster whose signature is on this certificate, who is recognized authority of accuracy, as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professions Code administered by the Division of Measurements Standards of the California Department of Food and Agriculture.

Please print or type
(Form designed for use on elite (12-pitch) typewriter.)

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. . . . . Manifest Doc. No. 00022 | 2. Page 1 of 1

GENERATOR

3. Generator's Name and Mailing Address: El Camino Center, 3201 Ash Street, Palo Alto Ca 94306

4. Generator's Phone (650) 493-5390

5. Transporter 1 Company Name: Vericon | 6. US EPA ID Number . . . . . | A. Transporter's Phone (805) 938-0991

7. Transporter 2 Company Name | 8. US EPA ID Number . . . . . | B. Transporter's Phone

9. Designated Facility Name and Site Address
ALTAMONT LANDFILL
10840 ALTAMONT PASS RD.
LIVERMORE, CA 94550

10. US EPA ID Number: CAD981382732

C. Facility's Phone: (925) 449-6349

11. Waste Shipping Name and Description	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. Soil class II Cover	001	DT	00008	CY
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

PROFILE # 55023400

CUSTOMER NAME Cornerstone Environmental

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name: Carl Davis | Signature | Month 02 Day 07 Year 02

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: John M. Goodwin | Signature | Month 02 Day 07 Year 02

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Month . Day . Year .

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name: Ken Brown | Signature | Month 12 Day 18 Year 02

Printed by J. J. KELLER & ASSOCIATES, INC.
Neenah, WI 54957-0368

12-BLS-C5 Rev. 12/98

TRANSPORTER #1

DATE: 02/08/2002 TICKET: 108319
TIME IN: 08:46 I/O: I
TIME OUT: 08:46 STATE TICKET: 11260d

Goodwin Trucking
TRAILER#:
CUSTOMER / Cornerstone environmental
JOB/SITE: EL CAN / El Camino CenterPO:
Palo Alto PROFILE: 550230400

ITEM	DESCRIPTION	QNTY PER
	Class II Cover S	22.91 T.

Manual CUSTOMER: CORNER / Cornerstone environme
TONS: 22.91
CUSTOMER:
DEPUTY WEIGHMASTER:

CERTIFICATE

I HEREBY CERTIFY that the following described commodity was weighed, measured or counted by a weighmaster whose signature is on this certificate, who is duly authorized as to accuracy, as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professions Code and registered by the Division of Measurements Standards of the California Department of Food and Agriculture.

CA 83573

GREG'S *Trucking Service, Inc.* 214297

P.O. BOX 1626 • SAN MATEO, CA 94401 • (650) 343-5946

CONTRACTOR'S COPY

TRK LIC. NO. _____ CIRCLE ▶ MON. TUE. WED. THUR. FRI. SAT. SUN.

TRUCK NO. _____ ED HS TF IO LB BD FB DATE _____

UNDERLYING CARRIER _____ BRIDGE TOLLS

RECEIVED FROM (CONSIGNOR)	DELIVERED TO (CONSIGNEE)
ADDRESS	ADDRESS
CITY	CITY
BILL TO	JOB NO.
GREG'S P.O. #	PRECISE POINT OF ORIGIN
	PRECISE POINT OF DESTINATION

TAG NO.	WEIGHT	LOADING		UNLOADING	
		ARRIVE	DEPART	ARRIVE	DEPART
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					

NUMBER OF AXLES _____ OVER 66 FEET BETWEEN FIRST AND LAST AXLE ☐ TOTAL TONS: _____

COMMODITY TRANSPORTED _____ TYPE OF LOADING AT ORIGIN POWER ☐ HAND ☐ OTHER ☐

TIME DRIVER REPORTED FOR WORK _____ TIME TRUCK COMPLETED WORK _____

DISPATCH TIME				OVERALL TIME	
SIGN OUT TIME		INITIAL HERE FOR NO LUNCH		DEDUCTIBLE TIME FOR MEALS OR FAILURE OF CARRIER EQUIPMENT	
TRAVEL TIME				NET CHARGEABLE TIME	

DRIVER'S SIGNATURE _____ TARE _____

DEBTOR AGREES TO PAY ANY LEGAL FEES, COURT COSTS FOR COLLECTION OF DELINQUENT ACCOUNTS. LEGAL RATE OF INTEREST WILL CHARGED FOR ALL PAST DUE ACCOUNTS.

X _____

CUSTOMER SIGNATURE

		CHARGES
APPLICABLE HOURLY RATE		
RATE IN CENTS PER TON		
ACCESSORIAL HELPERS OTHER CHARGES		
TOTAL		

"These charges include taxes paid to California cities instead of excise or business license taxes they could otherwise impose."

GREG'S Trucking Service, Inc. is NOT Responsible for ANY HAZARDOUS MATERIAL

TRUCKER COPY

HARBOR SAND & GRAVEL

FORM #70-07 HSG 12/99

WEIGHMASTER CERTIFICATE

THIS IS TO CERTIFY that the following described commodity was weighed, measured, or counted by a weighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professions Code, administered by the Division of Measurement Standards of the California Department of Food an Agriculture.

DATE	HARBOR SAND & GRAVEL	WEIGHMASTER	TIME
		DUPTY	

CUSTOMER ID	OUR ORDER NO.	CUSTOMER ORDER NO.	SHIPPING NUMBER

SOLD TO:	DELIVERED TO:

CONTROL NO.

PRODUCT NO.	PRODUCT DESCRIPTION

HAULER NO.	HAULER DESCRIPTION
350	CUSTOMER TRUCK GRANTENBEIN TRUCKING

OUR TRUCK NO.	CUSTOMER TRUCK NO.	LOADS TODAY	TONS TODAY

WEIGHED AT: (SEE REVERSE SIDE FOR PLANT I.D.)	WEIGHTS

SCALE NO.	DRIVER ON OFF

RECEIVED BY:

X _____

CUSTOMER COPY

HARBOR SAND & GRAVEL

FORM # 70-67 HSG 12/93

WEIGHMASTER CERTIFICATE

THIS IS TO CERTIFY that the following described commodity was weighed, measured, or counted by a weighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professions Code, administered by the Division of Measurement Standards of the California Department of Food an Agriculture.

GROSS

DATE	HARBOR SAND & GRAVEL	WEIGHMASTER	TIME
02/28/02	Bunker, Dave	DUPTY	13:16

CUSTOMER ID	OUR ORDER NO	CUSTOMER ORDER NO.	SHIPPING NUMBER
CORNER	7138	02.101	110271C

SOLD TO:	DELIVERED TO:
CORNERSTONE ENVIRONMENTAL 3527 MT DIABLO BLVD, #200 LAFAYETTE, CA 94549-3913	236 PORTAGE PALO ALTO

PRODUCT NO.	PRODUCT DESCRIPTION
304	DUMP CONC - END DUMP

HAULER NO.	HAULER DESCRIPTION
999	CUSTOMER TRUCK - CONTENDER TRUCKING

OUR TRUCK NO.	CUSTOMER TRUCK NO.	LOADS TODAY	TONS TODAY
1274	9613206	2	22.00

WEIGHED AT: (SEE REVERSE SIDE FOR PLANT I.D.) Harbor Recycling 141

SCALE NO	DRIVER	ON	OFF
Scale 1			

RECEIVED BY:

X _____

WEIGHTS

NET: 1.00 LOAD

NET LBS: 0
TARE LBS: 0
GROSS LBS: 0
(Manual Weight

Post-it™ Fax Note 7671	Date 2/28	# of pages ▶ 4
To Kandy	From Chelsea	
Co./Dept. Cornerstone	Co. Greg's	
Phone #	Phone #	
Fax # 925-299-9418	Fax #	

CUSTOMER COPY

HARBOR SAND & GRAVEL

FORM #70-07 HSG 12/96

WEIGHMASTER CERTIFICATE

THIS IS TO CERTIFY that the following described commodity was weighed, measured, or inspected by a weighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professions Code, administered by the Division of Measurement Standards of the California Department of Food and Agriculture

GROSS

DATE	HARBOR SAND & GRAVEL	WEIGHMASTER	TIME
02/06/02	Parker, Dawn	DUPTY	13:53

CUSTOMER ID	OUR ORDER NO.	CUSTOMER ORDER NO.	SHIPPING NUMBER
CBOAK	7138	02121	110744

SOLD TO:	DELIVERED TO:
CORNERSTONE ENVIRONMENTAL 3527 MT DIABLO BLVD, #290 LAFAYETTE, CA 94549-3815	2300 PORTAGE PALO ALTO

PAID

PRODUCT NO.	PRODUCT DESCRIPTION
304	DUMP CONT. - END DUMP

HAULER NO.	HAULER DESCRIPTION
999	CUSTOMER TRUCK - CORNERSTONE TRUCKING

OUR TRUCK NO.	CUSTOMER TRUCK NO.	LOADS TODAY	TONS TODAY
1771	9A13266	2	3.00

WEIGHED AT-(SEE REVERSE SIDE FOR PLANT I.D.)				WEIGHTS
Harbor Recycling			141	
SCALE NO.	DRIVER	ON	OFF	NET: 1.00 LOAD
Scale 1				NET LBS: 0
RECEIVED BY:				TARE LBS: 0
X				GROSS LBS: 0
				* Manual Weight

CUSTOMER COPY

HARBOR SAND & GRAVEL

FORM #10-HSG 12/94

WEIGHMASTER CERTIFICATE

THIS IS TO CERTIFY that the following described commodity was weighed, measured, or counted by a weighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professions Code, administered by the Division of Measurement Standards of the California Department of Food an Agriculture.

GROSS

DATE	HARBOR SAND & GRAVEL	WEIGHMASTER	TIME
02/06/02	[illegible] Dunn	DUPTY	10:26

CUSTOMER ID	OUR ORDER NO.	CUSTOMER ORDER NO.	SHIPPING NUMBER
[illegible]	2130	[illegible]	[illegible]

SOLD TO:	DELIVERED TO:
CONCRETONE ENVIRONMENTAL 3527 MT DIABLO BLVD, #290 LAFAYETTE, CA 94549-3617	330 PORTAGE PALO ALTO

CANCELLED

PRODUCT NO.	PRODUCT DESCRIPTION
500	DUMP CONC - END DUMP

HAULER NO.	HAULER DESCRIPTION
999	CUSTOMER TRUCK - GANTNER TRUCKING

OUR TRUCK NO.	CUSTOMER TRUCK NO.	LOADS TODAY	TONS TODAY
4974	3015206	1	1.00

WEIGHED AT: (SEE REVERSE SIDE FOR PLANT I.D.)

Harbor Recycling 141

SCALE NO.	DRIVER ON	DRIVER OFF
Scale 1		

RECEIVED BY:

X [signature]

WEIGHTS

NET: 1.00 LOAD

NET LBS: 0
TARE LBS: 0
GROSS LBS: 0
* Manual Weight

CA 83573

GREG'S Trucking Service, Inc.

P.O. BOX 1626 • SAN MATEO, CA 94401 • (650) 343-5946

182474

DELIVERY RECEIPT

TRK LIC. NO. _____ CIRCLE ▶ MON. TUE. WED. THUR. FRI. SAT. SUN.

TRUCK NO. 16 ED HS TF IO LB BD

DATE 2-7-2002

UNDERLYING CARRIER Amaro Trucking

BRIDGE TOLLS

RECEIVED FROM (CONSIGNOR)	DELIVERED TO (CONSIGNEE)
Corner Stone Env	Harbor Sand
ADDRESS 230 Portage Ave	ADDRESS Seaport Blvd
CITY Palo Alto	CITY Redwood City

BILL TO (Loads) Gregs P.O. G-1541

JOB NO. 02101

(ZONE RATES ONLY) FOR USE WITH DISTANCE OR ZONE RATES (DISTANCE RATES ONLY)

PRODUCTION AREA LETTER

DELIVERY ZONE NO.

PRECISE POINT OF ORIGIN 230 Portage Ave P.A.

PRECISE POINT OF DESTINATION Harbor Sand R.C.

DISTANCE IN MILES

TAG NO.	WEIGHT	LOADING ARRIVE	LOADING DEPART	UNLOADING ARRIVE	UNLOADING DEPART
1 110787	Sand	7 30	8 00	8.35	8 45
2 110797	Sand	9 20	9 40	9.55	10:15
3 110817	Sand	10 45	11 20	11:50	12:05
4 110830	Sand	12 35	12:50	1 20	1 55
5 190960	Garbage	2 10	3:00	3:45	4:15
6		5:00			
7					
8					
9					
10					
11		Load	to	Yd.	AT.
12					
13					

NUMBER OF AXLES

OVER 36 FEET BETWEEN FIRST AND LAST AXLE ☐

TOTAL TONS:

COMMODITY TRANSPORTED

TYPE OF LOADING AT ORIGIN POWER ☐ HAND ☐ OTHER ☐

TIME DRIVER REPORTED FOR WORK

TIME TRUCK COMPLETED WORK

A. STARTING TIME OF 2ND TO LAST TRIP		B. STARTING TIME OF UNLOADING OF LAST TRIP		C. OVERALL TIME (FROM TIME REPORTING FOR WORK TO START OF LAST TRIP PLUS DOUBLE RUNNING TIME OF LAST TRIP PLUS UNLOADING TIME OF LAST LOAD)	9.5
ENDING TIME OF 2ND TO LAST TRIP		ENDING TIME OF UNLOADING TIME OF LAST TRIP		D. DEDUCTIBLE TIME FOR MEALS OR FAILURE OF CARRIER EQUIPMENT	
ELAPSED TIME OF THE RUNNING TIME OF LAST TRIP		ELAPSED TIME OF THE UNLOADING TIME OF LAST TRIP		NET CHARGEABLE TIME	9.5 Hrs

DRIVER'S SIGNATURE Tim Amaro

TARE

DEBTOR AGREES TO PAY ANY LEGAL FEES, COURT COSTS FOR COLLECTION OF DELINQUENT ACCOUNTS. LEGAL RATE OF INTEREST WILL BE CHARGED FOR ALL PAST DUE ACCOUNTS.

X _____

CUSTOMER SIGNATURE

PUC REQUIRES PAYMENT FOR THESE CHARGES NOT LATER THAN THE 15TH OF THE FOLLOWING MONTH

"These charges include (1) fees to pay for regulation of transportation companies by the California Public Utilities Commission and (2) taxes paid to California cities instead of excise or business license taxes they could otherwise impose."

CHARGES		
APPLICABLE HOURLY RATE		
RATE IN CENTS PER TON		3.75
ACCESSORIAL HELPERS OTHER CHARGES		34.80
TOTAL		34.80

GREG'S Trucking Service, Inc. is NOT Responsible for ANY HAZARDOUS MATERIAL

TRUCKER COPY

HARBOR SAND & GRAVEL

FORM #70-07 HSG 12/99

WEIGHMASTER CERTIFICATE

THIS IS TO CERTIFY that the following described commodity was weighed, measured, or counted by a weighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professions Code, administered by the Division of Measurement Standards of the California Department of Food an Agriculture.

DATE	HARBOR SAND & GRAVEL	WEIGHMASTER DUPTY	TIME

CUSTOMER ID	OUR ORDER NO.	CUSTOMER ORDER NO.	SHIPPING NUMBER

SOLD TO:	DELIVERED TO:

CONTROL NO. 4133

PRODUCT NO.	PRODUCT DESCRIPTION

HAULER NO.	HAULER DESCRIPTION

OUR TRUCK NO.	CUSTOMER TRUCK NO.	LOADS TODAY	TONS TODAY

WEIGHED AT: (SEE REVERSE SIDE FOR PLANT I.D.)

WEIGHTS

SCALE NO.	DRIVER ON OFF

RECEIVED BY:

X _____

TRUCKER COPY

HARBOR SAND & GRAVEL

FORM #70-07 HSG 12/99

WEIGHMASTER CERTIFICATE

THIS IS TO CERTIFY that the following described commodity was weighed, measured, or counted by a weighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professions Code, administered by the Division of Measurement Standards of the California Department of Food an Agriculture.

DATE	HARBOR SAND & GRAVEL	WEIGHMASTER DUPTY	TIME

CUSTOMER ID	OUR ORDER NO.	CUSTOMER ORDER NO.	SHIPPING NUMBER

SOLD TO:	DELIVERED TO:

CONTROL NO. 410771

PRODUCT NO.	PRODUCT DESCRIPTION

HAULER NO.	HAULER DESCRIPTION

OUR TRUCK NO.	CUSTOMER TRUCK NO.	LOADS TODAY	TONS TODAY

WEIGHED AT: (SEE REVERSE SIDE FOR PLANT I.D.)	WEIGHTS

SCALE NO.	DRIVER ON OFF

RECEIVED BY:

X _____

TRUCKER COPY

HARBOR SAND & GRAVEL

FORM #70-07 HSG 12/99

WEIGHMASTER CERTIFICATE

THIS IS TO CERTIFY that the following described commodity was weighed, measured, or counted by a weighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professions Code, administered by the Division of Measurement Standards of the California Department of Food an Agriculture.

CROSS IN

DATE	HARBOR SAND & GRAVEL	WEIGHMASTER / DUPTY	TIME
2/27/02	BUMPER		11:47

CUSTOMER ID	OUR ORDER NO.	CUSTOMER ORDER NO.	SHIPPING NUMBER
	1157	PO #41	10021

SOLD TO:
REED'S TRUCKING SERV. INC
P.O. BOX 1626
SAN MATEO, CA 94401

DELIVERED TO:
CORNERSTONE ENV.
PORTAGE, PALO ALTO

CONTROL NO. 10021

PRODUCT NO.	PRODUCT DESCRIPTION
02	BASE ROCK 3/4" MINUS

HAULER NO.	HAULER DESCRIPTION
001	CUSTOMER TRUCK AMADO TRUCKING

OUR TRUCK NO.	CUSTOMER TRUCK NO.	LOADS TODAY	TONS TODAY
7517	7517R1	3	2.00

WEIGHED AT: (SEE REVERSE SIDE FOR PLANT I.D.)
HSG #1 REDWOOD CITY

SCALE NO.	DRIVER ON OFF

RECEIVED BY:
X _____

WEIGHTS

NET: 2.00 TONS
NET SO:
TARE SS:
GROSS PS:

TRUCKER COPY

HARBOR SAND & GRAVEL

FORM #70-07 HSG 12/99

WEIGHMASTER CERTIFICATE

THIS IS TO CERTIFY that the following described commodity was weighed, measured, or counted by a weighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professions Code, administered by the Division of Measurement Standards of the California Department of Food an Agriculture.

ARGUS
TN

DATE	HARBOR SAND & GRAVEL	WEIGHMASTER	TIME
		DUPTY	

CUSTOMER ID	OUR ORDER NO.	CUSTOMER ORDER NO.	SHIPPING NUMBER
			110835

SOLD TO:	DELIVERED TO:
P.O. BOX 1226	COPPERSTONE ENV.
	PORTAGE, PALO ALTO

CONTROL NO. 110835

PRODUCT NO.	PRODUCT DESCRIPTION

HAULER NO.	HAULER DESCRIPTION
	CUSTOMER TRUCK SPARKS TRUCKING

OUR TRUCK NO.	CUSTOMER TRUCK NO.	LOADS TODAY	TONS TODAY
		4	4.20

WEIGHED AT: (SEE REVERSE SIDE FOR PLANT I.D.)

WEIGHTS

SCALE NO.	DRIVER ON	OFF

RECEIVED BY:

X _____

BFI

No: 1909613

Total

I hereby certify that this load does not contain any unauthorized waste.

SIGNATURE: _____

REORDER ONLY THROUGH BFI / STANDARD REGISTER CONTRACT

260-116LF (3)

APPENDIX F

CONTROL DENSITY FILL DOCUMENTATION

RMC PACIFIC MATERIALS, INC.

Ready Mix

INVOICE

CUSTOMER #	OUR ORDER #	INVOICE DATE	INVOICE #
103-06163	93453	1/14/02	2807000

SOLD TO:

R054 CORNERSTONE ENVIRONMENTAL CONTRACTORS
3527 MT DIABLO BLVD #290
LAFAYETTE, CA 94549-3815

SHIP TO:

230 PORTAGE, PALO ALTO

02-101

CUSTOMER ORDER #	SLS	SHIPPED FROM	SHIPPED VIA
	105	READY MIX 207 SAN CARLOS #1	RMC PACIFIC MATERIALS, INC.

DATE	SHIPPING NUMBER	PRODUCT CODE	DESCRIPTION	TX	VIA	QUANTITY SHIPPED	U M	UNIT PRICE	GROSS AMOUNT
1/14	832882	2581	FCF/2" PUMP	Y	858	9.50	CY	75.00	712.50
1/14	832883	2581	FCF/2" PUMP	Y	677	9.50	CY	75.00	712.50
1/14	832884	2581	FCF/2" PUMP	Y	685	9.50	CY	75.00	712.50
1/14	832885	2581	FCF/2" PUMP	Y	675	9.50	CY	75.00	712.50
1/14	832886	2581	FCF/2" PUMP	Y	858	9.50	CY	75.00	712.50
1/14	832887	2581	FCF/2" PUMP	Y	677	9.50	CY	75.00	712.50
1/14	832888	2581	FCF/2" PUMP	Y	685	9.50	CY	75.00	712.50
1/14	832889	2581	FCF/2" PUMP	Y	675	9.50	CY	75.00	712.50
1/14	832890	2581	FCF/2" PUMP	Y	858	9.50	CY	75.00	712.50
1/14	832891	2581	FCF/2" PUMP	Y	685	9.50	CY	75.00	712.50
		2581	PRODUCT TOTALS			95.00			7,125.00
1/14	832882	9022	CALCIUM CHLORIDE	Y	858	19.00	%	3.00	57.00
1/14	832883	9022	CALCIUM CHLORIDE	Y	677	19.00	%	3.00	57.00
1/14	832884	9022	CALCIUM CHLORIDE	Y	685	19.00	%	3.00	57.00
1/14	832885	9022	CALCIUM CHLORIDE	Y	675	19.00	%	3.00	57.00
1/14	832886	9022	CALCIUM CHLORIDE	Y	858	19.00	%	3.00	57.00
1/14	832887	9022	CALCIUM CHLORIDE	Y	677	19.00	%	3.00	57.00
1/14	832888	9022	CALCIUM CHLORIDE	Y	685	19.00	%	3.00	57.00
1/14	832889	9022	CALCIUM CHLORIDE	Y	675	19.00	%	3.00	57.00
1/14	832890	9022	CALCIUM CHLORIDE	Y	858	19.00	%	3.00	57.00
1/14	832891	9022	CALCIUM CHLORIDE	Y	685	19.00	%	3.00	57.00
		9022	PRODUCT TOTALS			190.00			570.00
1/14	832891	9912	PREMIUM TIME-PLANT / HOUR	Y	685	2.50	HR	100.00	250.00
1/14	832889	9927	DRIVER OVERTIME / HOUR	Y	675	.75	HR	40.00	30.00
1/14	832890	9927	DRIVER OVERTIME / HOUR	Y	858	1.25	HR	40.00	50.00
1/14	832891	9927	DRIVER OVERTIME / HOUR	Y	685	2.50	HR	40.00	100.00
		9927	PRODUCT TOTALS			4.50			180.00
			STATE & LOCAL TAXES 8.2500%						670.29

AG0

TO INSURE PROPER CREDIT TO YOUR ACCOUNT
PLEASE RETURN REMITTANCE COPY WITH YOUR PAYMENT.

REMIT TO:
RMC Pacific Materials
P.O. Box 44433
San Francisco, CA 94144

TELEPHONE: (925) 426-8787

WARNING - SEE LAST PARAGRAPH ON REVERSE SIDE FOR DETAILS

TOTAL QUANTITY	INVOICE TOTAL
95.00 C/Yds	$8,795.29

DISCOUNT ALLOWED	IF PAID ON OR BY
$102.80	2/10/02

RMC PACIFIC MATERIALS, INC.

INVOICE

Ready Mix

CUSTOMER #	OUR ORDER #	INVOICE DATE	INVOICE #
103-06163	93453	1/09/02	2806430

SOLD TO:

R035 CORNERSTONE ENVIRONMENTAL CONTRACTORS
3527 MT DIABLO BLVD #290
LAFAYETTE, CA 94549-3815

SHIP TO:

230 PORTAGE, PALO ALTO

02-101

CUSTOMER ORDER #	SLS	SHIPPED FROM	SHIPPED VIA
	105	READY MIX 207 SAN CARLOS #1	RMC PACIFIC MATERIALS, INC.

DATE	SHIPPING NUMBER	PRODUCT CODE	DESCRIPTION	TX	VIA	QUANTITY SHIPPED	U M	UNIT PRICE	GROSS AMOUNT
1/09	832698	2581	FCF/2" PUMP	Y	855	9.50	CY	75.00	712.50
1/09	832699	2581	FCF/2" PUMP	Y	733	9.50	CY	75.00	712.50
1/09	832700	2581	FCF/2" PUMP	Y	675	9.50	CY	75.00	712.50
1/09	832701	2581	FCF/2" PUMP	Y	734	9.50	CY	75.00	712.50
1/09	832702	2581	FCF/2" PUMP	Y	677	9.50	CY	75.00	712.50
1/09	832703	2581	FCF/2" PUMP	Y	867	9.50	CY	75.00	712.50
1/09	832704	2581	FCF/2" PUMP	Y	857	9.50	CY	75.00	712.50
1/09	832705	2581	FCF/2" PUMP	Y	642	9.50	CY	75.00	712.50
1/09	832706	2581	FCF/2" PUMP	Y	855	9.50	CY	75.00	712.50
1/09	832707	2581	FCF/2" PUMP	Y	733	3.00	CY	75.00	225.00
		2581	PRODUCT TOTALS			88.50			6,637.50
1/09	832698	9022	CALCIUM CHLORIDE	Y	855	19.00	%	3.00	57.00
1/09	832699	9022	CALCIUM CHLORIDE	Y	733	19.00	%	3.00	57.00
1/09	832700	9022	CALCIUM CHLORIDE	Y	675	19.00	%	3.00	57.00
1/09	832701	9022	CALCIUM CHLORIDE	Y	734	19.00	%	3.00	57.00
1/09	832702	9022	CALCIUM CHLORIDE	Y	677	19.00	%	3.00	57.00
1/09	832703	9022	CALCIUM CHLORIDE	Y	867	19.00	%	3.00	57.00
1/09	832704	9022	CALCIUM CHLORIDE	Y	857	19.00	%	3.00	57.00
1/09	832705	9022	CALCIUM CHLORIDE	Y	642	19.00	%	3.00	57.00
1/09	832706	9022	CALCIUM CHLORIDE	Y	855	19.00	%	3.00	57.00
1/09	832707	9022	CALCIUM CHLORIDE	Y	733	6.00	%	3.00	18.00
		9022	PRODUCT TOTALS			177.00			531.00
1/09	832707	9912	PREMIUM TIME-PLANT / HOUR	Y	733	2.00	HR	100.00	200.00
1/09	832702	9927	DRIVER OVERTIME / HOUR	Y	677	.25	HR	40.00	10.00
1/09	832703	9927	DRIVER OVERTIME / HOUR	Y	867	.50	HR	40.00	20.00
1/09	832704	9927	DRIVER OVERTIME / HOUR	Y	857	.50	HR	40.00	20.00
1/09	832705	9927	DRIVER OVERTIME / HOUR	Y	642	1.50	HR	40.00	60.00
1/09	832706	9927	DRIVER OVERTIME / HOUR	Y	855	1.25	HR	40.00	50.00
1/09	832707	9927	DRIVER OVERTIME / HOUR	Y	733	2.00	HR	40.00	80.00
		9927	PRODUCT TOTALS			6.00			240.00
			STATE & LOCAL TAXES 8.2500%						627.68

AG0

TO INSURE PROPER CREDIT TO YOUR ACCOUNT
PLEASE RETURN REMITTANCE COPY WITH YOUR PAYMENT.

REMIT TO:
RMC Pacific Materials
P.O. Box 44433
San Francisco, CA 94144

TELEPHONE: (925) 426-8787

WARNING - SEE LAST PARAGRAPH ON REVERSE SIDE FOR DETAILS

TOTAL QUANTITY	INVOICE TOTAL
88.50 C/Yds	$8,236.18

DISCOUNT ALLOWED	IF PAID ON OR BY
$95.77	2/10/02

RMC LONESTAR

Flowable Compacting Fill



RMC LONESTAR'S Flowable Compacting Fill (FCF) is a series of multipurpose fill materials consisting of a unique blend of aggregates, cement, pozzolans, water and admixtures. FCF is placed at a flowing to fluid consistency requiring no tamping or compacting to achieve desired density and strength. FCF's load capacity is typically higher than compacted soils yet it can be excavated by conventional means. The ease of placement of RMC LONESTAR'S FCF makes it superior to standard backfill.

Benefits

- **REQUIRES LESS INSPECTION** - Compacted-soil backfill requires spreading, compaction and time consuming inspection of individual lifts. FCF consistently exceeds the equivalent of 95% compaction in one pass (within a few hours) reducing extensive field testing.
- **WON'T SETTLE** - FCF does not form voids during placement and won't settle or rut under loading. This advantage reduces call backs to repair cracks, pot holes and dips in the road.
- **CAN BE EXCAVATED** - Flowable fill having compressive strengths of 50 to 200 psi can be excavated with conventional digging equipment yet is strong enough for most backfilling needs.
- **REDUCED COST** - FCF is easy to place and does not require spreading, compacting or shoring. It allows for narrower trenches reducing excavation. This speeds construction and reduces labor and equipment requirements.
- **IMPROVES WORKER SAFETY** - Workers can place flowable fill in a trench, without being in the trench, reducing their exposure to possible cave-ins.

Availability

Flowable compacting fill can easily be ordered from your RMC LONESTAR facilities. To order, simply select the appropriate FCF number on the guide below corresponding to the fill characteristics needed. Contact your local RMC LONESTAR representative for additional information.

MIX	DESCRIPTION	AGGREGATE	USE
2580	FCF TAILGATE	PEA GRAVEL	TAILGATE MIX
*2581	FCF 2" PUMP	PEA GRAVEL	FOR SMALL PUMPS OR LONG DISTANCES
2584	FCF 5" PUMP	PEA GRAVEL	PUMP MIX FOR BIG POURS AND PUMPS
2585	FCF SAND	SAND	BACKFILL
*2587	FCF PG AIR	PEA GRAVEL	STANDARD FCF TAILGATE
*2588	FCF 1" AIR	1" AGG.	STANDARD FCF TAILGATE
**2586	FCF *FAST SET*	PEA GRAVEL	FAST SET FOR ROADS I.E. TO PAVE OVER
**2589	FCF *FAST SET*	1" AGG.	SIMILAR TO 2586

* STANDARD FCF MIXES FOR BACKFILLING

** FAST SET FCF MIX, NO ACCELERATOR IN MIX.

(ACCELERATORS MAY BE ADDED TO THE ABOVE MIXES UPON REQUEST)

RMC PACIFIC MATERIALS RMC
TECHNICAL SERVICES
www.rmcpacific.com

4750 Norris Canyon Road, Suite A
San Ramon, CA 94583
(925) 866-2780
Fax (925) 866-2983

Group 207	Mix Number 2581

FCF/2" PUMP

Report No. 68213
02/04/2002
41034006

NOTRE DAME
BELMONT, CA.

MATERIALS DESCRIPTION

CEMENT TYPE II ASTM C-150
ISG RESOURCES - FLYASH ASTM C-618 CLASS F
ELIOT 3/8" X #4 ASTM C-33
ANGEL ISLAND WASHED SAND ASTM C-33
DARAVAIR 1000 ASTM C-260

This mix will produce concrete meeting the design criteria when produced, sampled and tested in accordance with ASTM C-94 and UBC.
Mix will be adjusted as required by UBC Section 1905 to maintain the noted strength level.

Cementitious Material	3.40	sk.
Maximum Size Aggregate	3/8	in.
Slump	See Note.	in.
W/C+F ratio	1.17	
Entrained Air	6.00	%

Code	Material	Solid Volume	SSD Quantity
1002	CEMENT TYPE II	0.15 cf	30 lbs
9001	ISG RESOURCES - FLYASH	2.02 cf	290 lbs
1153	ELIOT 3/8" X #4	5.38 cf	900 lbs
2105	ANGEL ISLAND WASHED SAND	11.82 cf	1932 lbs
9096	DARAVAIR 1000	0.00 cf	5 oz
	Air (6.00 %)	1.62 cf	
	Water (45.0 gal.)	6.01 cf	375 lb
	Totals.	27.00 cf	3527 lbs

Uses: FCF.
Note: SLUMP WILL BE FLOWABLE.

Additions

RMC LONESTAR
TECHNICAL SERVICES

4750 Norris Canyon Road, Suit
San Ramon, California 94
(415) 866-2

CERTIFICATION

Flowing Compacting Fill shipped by RMC Lonestar as Mix 2580 will produce a material with the following characteristics:

Modified R-Value	70 minimum @ 1 day	
	80 minimum @ 28 days	
Compressive Strength	4000 lbs/sq. ft.	1 day
	10,000 lbs/sq. ft.	28 days

Very truly yours,

Xavier Victoria

Xavier Victoria, P.E.
Technical Services

FLOWABLE COMPACTING FILL
GUIDE SPECIFICATIONS

(This is a guide for specifying the use of *flowable compacting fill* which may be used as an alternative to or a replacement for granular fill or lean cement slurries.)

FLOWABLE COMPACTING FILL

1. *Flowable Compacting Fill* shall be accepted in lieu of cement/sand slurry or granular fill as a backfill material in any excavation. It shall be the preferred method in all situations where the prevention of subsequent settlement after placement of backfill is required.

2. STRENGTH REQUIREMENTS

   2.1 Hand excavatable, non-structural *flowable compacting fill* shall produce unconfined compressive 28-day compressive strengths from 50 psi to a maximum of 150 psi. *Flowable compacting fill* that is to be hand excavatable shall contain aggregate no larger than 1/2" top size nor shall the 1/2" aggregate comprise more than 50% of the total aggregate content.

   2.2 Structural *flowable compacting fill* shall produce unconfined compressive 28-day strengths from 150 - 1,200 psi, as determined by the project requirements. Coarse aggregate top size and coarse to fine aggregate ratios and contents shall be determined by the clearances surrounding embedded members and the workability requirements.

3. MATERIALS

   3.1 Cement shall conform to ASTM C-150, type I or II.

   3.2 Fly Ash shall conform to ASTM C-618, Class F Pozzolan. The Fly Ash shall not inhibit the entrainment of air.

   3.3 Air Entraining Agent shall conform to ASTM C-260.

   3.4 Aggregates need not conform to ASTM C-33. Non-conforming aggregates will be acceptable except that minus #200 sieve shall not exceed 10% and no plastic fines may be present.

4. MIX PROPORTIONS

4.1 *Flowable compacting fill* shall be a mixture of cement, Class F pozzolan, sand and sometimes coarse aggregate, air entraining agent, and water. It is batched by a ready mixed concrete plant and delivered to the jobsite in transit mixer trucks.

4.2 The actual mix proportions shall be determined by the producer of the *flowable compacting fill* to meet jobsite conditions, minimum or maximum strengths and unit weight. Entrained air content shal be a minimum of 5%. The actual entrained air content shall be established for each particular job with the materials and aggregates to be used to meet the placing and unit weight requirements. Entrained air content may be as high as 25% for fluidity requirements.

5. 5.1 *Flowable compacting fill* shall be discharged from the mixer by any reasonable means into the area to be filled. The fill shall be brought uniformally to the elevation as shown on the plans. Trench sections to be filled with *flowable compacting fill* shall be contained at either end by bulkheads or earth fill.

6. PAVING

6.1 Permanent pavement may be placed directly upon the *flowable compacting fill* as soon as it has sufficiently self-consolidated so that the surface will withstand the process of paving without displacement or disruption. If the placement of the fill is not completed early enough to allow for permanent paving to be completed the same day, the contractor shall provide steel plates to span the trench and prevent traffic contact with the fill overnight or until permanent paving can be placed.

7. MIX APPROVAL

7.1 Mix requests must be submitted to the lab for approval in advance of placement, due to varying job-site conditions ie. Soil conditions, temperature, time of day, soil saturation and/or embedded materials.

APPENDIX G

IMPORTED CLASS 2 AGGREGATE BASE DOCUMENTATION

Stevens Creek Quarry, Inc.

12100 Stevens Canyon Road
Cupertino, CA 95014-5415
Tel. (408) 253-2512
FAX (408) 257-4614

INVOICE 134610
PAGE 1
DATE 01/02/02
TERMS DUE BY 25TH

ACCOUNT NO. 3105

SOLD TO CORNERSTONE ENVIRONMENTAL
3527 MT DIABLO BLVD #290
LAFAYETTE, CA 94549-3815

230 PORTAGE AVE,
PALO ALTO

TICKET	DATE	P.O.	ORDER	LOCATION	PRODUCT	--- MATERIAL --- QTY	RATE	AMOUNT	--- FREIGHT --- RATE	AMOUNT	TAX AMOUNT	TOTAL
576320	01/02/02	02-101	200	1	CLASS 2 AB	23.11	7.25	167.55	0.00	0.00	13.82	181.37
PRODUCT TOTAL			200	1	CLASS 2 AB	23.11 TON		$167.55		$0.00	$13.82	$181.37
INVOICE TOTAL						23.11 TON		$167.55		$0.00	$13.82	$181.37

TOTAL INVOICE ---> $181.37

DEDUCT DISCOUNT AMOUNT IF PAID BY 15TH OF MONTH FOLLOWING ---> $5.78

175.59

PAYMENT TERMS: DUE BY THE 25TH OF THE MONTH FOLLOWING THE DATE OF PURCHASE. Prompt payment discounts will be allowed on invoices paid on or before the 15th of the month following the date of purchase, PROVIDED buyer owes NO PAST DUE balance on said date of payments.

WEIGHMASTER CERTIFICATE

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STEVENS CREEK QUARRY, INC.

LOCATION 1
12100 STEVENS CANYON ROAD
CUPERTINO, CA 95014-5415
PH 408 253-2512 • FAX 408 257-4614

LOCATION 2
1275 ANZAR RD
SAN JUAN BAUTISTA, CA 95045
PH 408 623-9555 • FAX 408 623-1377

TICKET

DRIVER ☒ ON ☐ OFF

DATE / TIME	PRODUCT	HAULER / TRUCK	LOCATION

CUSTOMER	QTY.	UNIT	PRODUCT	PRICE	AMOUNT

ALL ACCOUNTS ARE DUE ON THE 25TH OF THE MONTH FOLLOWING THE DATE OF PURCHASE. BUYER AGREES TO PAY ANY COLLECTION COSTS INCURRED BY STEVENS CREEK QUARRY INCLUDING REASONABLE ATTORNEY'S FEES AND A SERVICE CHARGE OF 1½% PER MONTH ON ALL OVERDUE BALANCES.

GROSS:

TARE:

NET:

DELIVER TO:

WEIGHMASTER

DRIVER

IF DUMPING: NO HAZARDOUS CONTAMINATED OR ORGANIC MATERIAL ACCEPTED. WE RESERVE THE RIGHT TO REFUSE ANY LOAD RESPONSIBILITY AND OWNERSHIP OF MATERIAL BELONGS TO THE CUSTOMER WHEN LOADED INTO THE TRUCK.

CONTROL #

Stevens Creek Quarry, Inc.

12100 Stevens Canyon Road
Cupertino, CA 95014-5415
Tel. (408) 253-2512
FAX (408) 257-4614

INVOICE 135711
PAGE 1
DATE 01/15/02
TERMS DUE BY 25TH

ACCOUNT NO. 3105

SOLD TO

CORNERSTONE ENVIRONMENTAL
3527 MT DIABLO BLVD #290
LAFAYETTE, CA 94549-3815

230 PORTAGE AVE,
PALO ALTO

02-101

TICKET	DATE	P.O.	ORDER	LOCATION	PRODUCT	QTY	--- MATERIAL --- RATE	AMOUNT	--- FREIGHT --- RATE	AMOUNT	TAX AMOUNT	TOTAL
579257	01/15/02	02-101	230	1	CLASS 2 AG	22.70	7.25	164.58	0.00	0.00	13.58	178.16
579394	01/15/02	02-101	230	1	CLASS 2 AG	23.70	7.25	171.83	0.00	0.00	14.18	186.01
579529	01/15/02	02-101	230	1	CLASS 2 AG	23.18	7.25	168.06	0.00	0.00	13.86	181.92
579642	01/15/02	02-101	230	1	CLASS 2 AG	24.29	7.25	176.10	0.00	0.00	14.53	190.63
PRODUCT TOTAL			230	1	CLASS 2 AG	93.87 TON		$680.57		$0.00	$56.15	$736.7
INVOICE TOTAL						93.87 TON		$680.57		$0.00	$56.15	$736.7

TOTAL INVOICE ---> $736.

DEDUCT DISCOUNT AMOUNT IF PAID BY 15TH OF MONTH FOLLOWING ---> $23.

PAYMENT TERMS: DUE BY THE 25TH OF THE MONTH FOLLOWING THE DATE OF PURCHASE. Prompt payment discounts will be allowed on invoices paid on o the 15th of the month following the date of purchase, PROVIDED buyer owes NO PAST DUE balance on said date of payments.

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LOCATION 2
1275 ANZAR RD
SAN JUAN BAUTISTA, CA 95045
PH 408 623-9555 • FAX 408 623-1377

DRIVER ☒ ON ☐ OFF

TICKET

CONTROL #

DATE / TIME	PRODUCT	HAULER / TRUCK	LOCATION

CUSTOMER	QTY.	UNIT	PRODUCT	PRICE	AMOUNT

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GROSS:

TARE:

NET:

DELIVER TO:

WEIGHMASTER

DRIVER

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TICKET

DRIVER ☒ ON ☐ OFF

DATE / TIME	PRODUCT	HAULER / TRUCK	LOCATION

CUSTOMER	QTY.	UNIT	PRODUCT	PRICE	AMOUNT

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DRIVER ☒ ON ☐ OFF

DATE / TIME	PRODUCT	HAULER / TRUCK	LOCATION

CUSTOMER	QTY.	UNIT	PRODUCT	PRICE	AMOUNT

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TICKET

DRIVER ☒ ON ☐ OFF

DATE / TIME	PRODUCT	HAULER / TRUCK	LOCATION

CUSTOMER	QTY.	UNIT	PRODUCT	PRICE	AMOUNT

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CONTROL #

Stevens Creek Quarry, Inc.

12100 Stevens Canyon Road
Cupertino, CA 95014-5415
Tel. (408) 253-2512
FAX (408) 257-4614

INVOICE 135850
PAGE 1
DATE 01/16/02
TERMS DUE BY 25TH

ACCOUNT NO. 3105

SOLD TO
CORNERSTONE ENVIRONMENTAL
3527 MT DIABLO BLVD #290
LAFAYETTE, CA 94549-3815

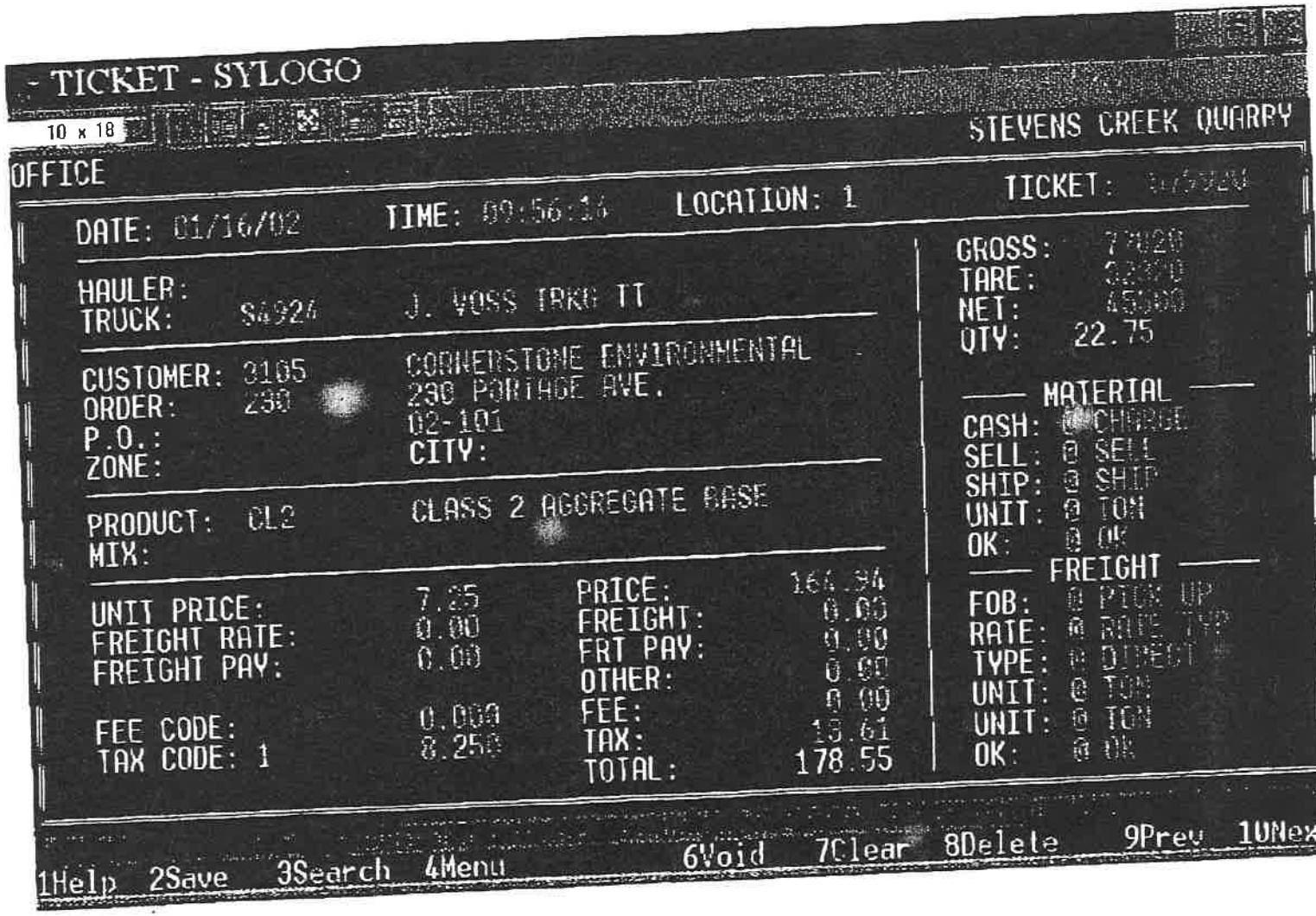
230 PORTAGE AVE,
PALO ALTO

TICKET	DATE	P.O.	ORDER	LOCATION	PRODUCT	QTY	--- MATERIAL --- RATE	AMOUNT	--- FREIGHT --- RATE	AMOUNT	TAX AMOUNT	TOTAL
579920	01/16/02	02-101	230	1	CLASS 2 AG	22.75	7.25	164.94	0.00	0.00	13.61	178.55
1508403	01/16/02	02-101	230	1	CLASS 2 AG	22.62	7.25	164.00	0.00	0.00	13.53	177.53
PRODUCT TOTAL			230	1	CLASS 2 AG	45.37 TON		$328.94		$0.00	$27.14	$356.08
INVOICE TOTAL						45.37 TON		$328.94		$0.00	$27.14	$356.08

TOTAL INVOICE ---> $356.(

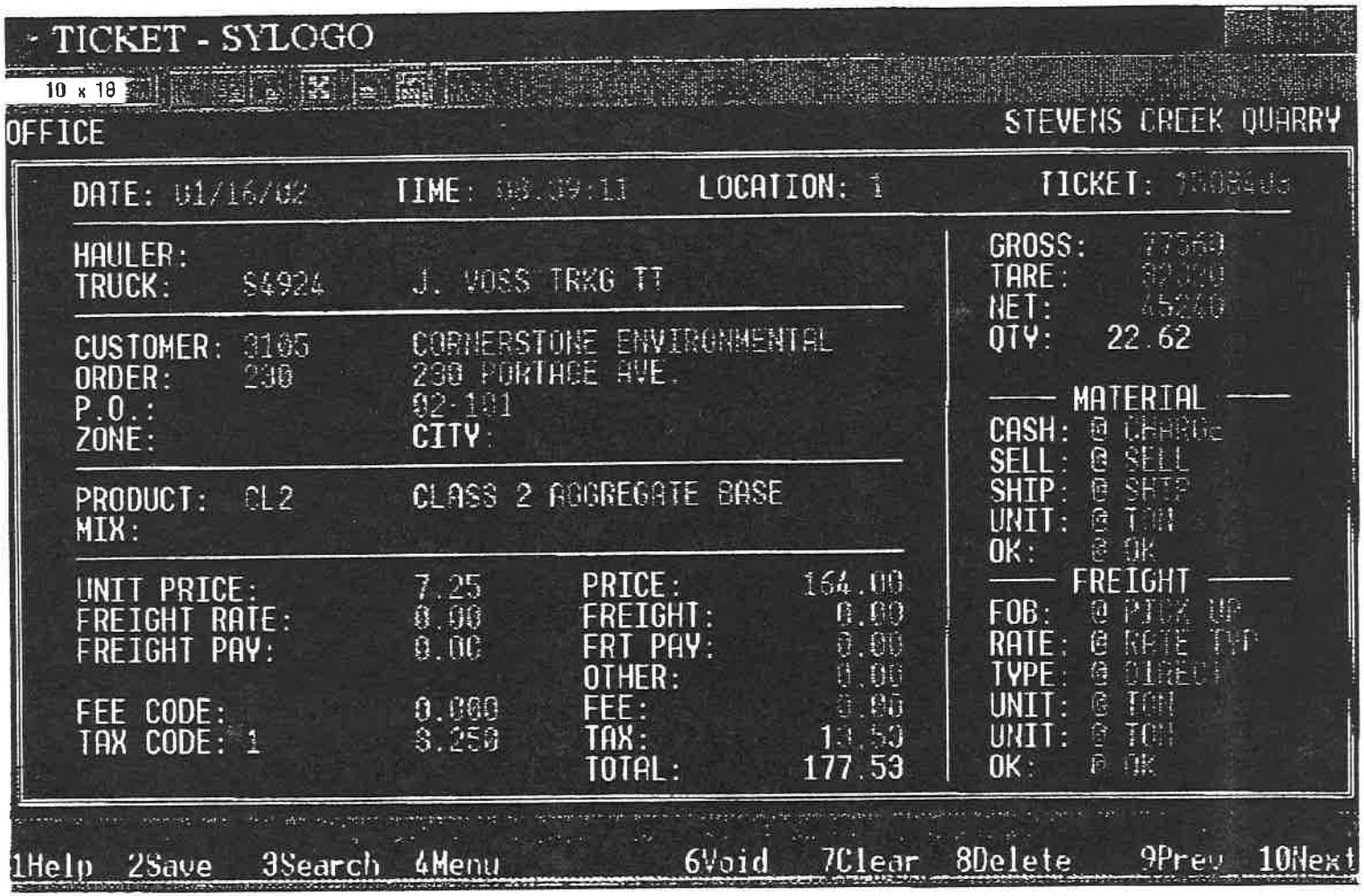
DEDUCT DISCOUNT AMOUNT IF PAID BY 15TH OF MONTH FOLLOWING ---> $11.

PAYMENT TERMS: DUE BY THE 25TH OF THE MONTH FOLLOWING THE DATE OF PURCHASE. Prompt payment discounts will be allowed on invoices paid on or the 15th of the month following the date of purchase, PROVIDED buyer owes NO PAST DUE balance on said date of payments.


- TICKET - SYLOGO
10 x 18
STEVENS CREEK QUARRY
OFFICE
DATE: 01/16/02
TIME: 09:56:14
LOCATION: 1
TICKET:
HAULER:
TRUCK: S4924
J. VOSS TRKG IT
CUSTOMER: 3105
ORDER: 230
P.O.:
ZONE:
CORNERSTONE ENVIRONMENTAL
230 PORTAGE AVE.
02-101
CITY:
PRODUCT: CL2
MIX:
CLASS 2 AGGREGATE BASE
UNIT PRICE: 7.25
FREIGHT RATE: 0.00
FREIGHT PAY: 0.00
FEE CODE: 0.000
TAX CODE: 1 8.250
PRICE: 164.94
FREIGHT: 0.00
FRT PAY: 0.00
OTHER: 0.00
FEE: 0.00
TAX: 13.61
TOTAL: 178.55
GROSS:
TARE:
NET:
QTY: 22.75
MATERIAL
CASH: @ CHARGE
SELL: @ SELL
SHIP: @ SHIP
UNIT: @ TON
OK: @ OK
FREIGHT
FOB: @ PICK UP
RATE: @ RATE TYP
TYPE: @ DIRECT
UNIT: @ TON
UNIT: @ TON
OK: @ OK
1Help 2Save 3Search 4Menu 6Void 7Clear 8Delete 9Prev 10Next

579920

1508403


TICKET - SYLOGO
10 x 18
OFFICE
STEVENS CREEK QUARRY
DATE: 01/16/02
TIME: 08:39:11
LOCATION: 1
TICKET: 1508403
HAULER:
TRUCK: S4924 J. VOSS TRKG TT
CUSTOMER: 3105 CORNERSTONE ENVIRONMENTAL
ORDER: 230 230 PORTAGE AVE.
P.O.: 02-101
ZONE: CITY:
PRODUCT: CL2 CLASS 2 AGGREGATE BASE
MIX:
UNIT PRICE: 7.25
FREIGHT RATE: 0.00
FREIGHT PAY: 0.00
FEE CODE: 0.000
TAX CODE: 1 8.250
PRICE: 164.00
FREIGHT: 0.00
FRT PAY: 0.00
OTHER: 0.00
FEE: 0.00
TAX: 13.53
TOTAL: 177.53
GROSS: 77560
TARE: 32340
NET: 45220
QTY: 22.62
MATERIAL
CASH: @ CHARGE
SELL: @ SELL
SHIP: @ SHIP
UNIT: @ TON
OK: @ OK
FREIGHT
FOB: @ PICK UP
RATE: @ RATE TYP
TYPE: @ DIRECT
UNIT: @ TON
UNIT: @ TON
OK: @ OK
1Help 2Save 3Search 4Menu 6Void 7Clear 8Delete 9Prev 10Next

Stevens Creek Quarry, Inc.

12100 Stevens Canyon Road
Cupertino, CA 95014-5415
Tel. (408) 253-2512
FAX (408) 257-4614

INVOICE 135992
PAGE 1
DATE 01/17/02
TERMS DUE BY 25TH

ACCOUNT NO. 3105

SOLD TO

CORNERSTONE ENVIRONMENTAL
3527 MT DIABLO BLVD #290
LAFAYETTE, CA 94549-3815

230 PORTAGE AVE,
PALO ALTO

TICKET	DATE	F.C.	ORDER	LOCATION	PRODUCT	QTY	--- MATERIAL --- RATE	AMOUNT	--- FREIGHT --- RATE	AMOUNT	TAX AMOUNT	TOTAL
580103	01/17/02	02-101	230	1	CLASS 2 AG	21.95	7.25	159.14	0.00	0.00	13.13	172.27
580131	01/17/02	02-101	230	1	CLASS 2 AG	24.01	7.25	174.07	0.00	0.00	14.36	188.43
580170	01/17/02	02-101	230	1	CLASS 2 AG	23.22	7.25	168.35	0.00	0.00	13.89	182.24
580191	01/17/02	02-101	230	1	CLASS 2 AG	24.33	7.25	176.39	0.00	0.00	14.55	190.94
580250	01/17/02	02-101	230	1	CLASS 2 AG	21.20	7.25	153.70	0.00	0.00	12.68	166.38
580273	01/17/02	02-101	230	1	CLASS 2 AG	24.13	7.25	174.94	0.00	0.00	14.43	189.37
580343	01/17/02	02-101	230	1	CLASS 2 AG	23.48	7.25	170.23	0.00	0.00	14.04	184.27
580366	01/17/02	02-101	230	1	CLASS 2 AG	23.90	7.25	173.28	0.00	0.00	14.30	187.58
580443	01/17/02	02-101	230	1	CLASS 2 AG	22.74	7.25	164.87	0.00	0.00	13.60	178.47
580469	01/17/02	02-101	230	1	CLASS 2 AG	24.11	7.25	174.80	0.00	0.00	14.42	189.22
PRODUCT TOTAL			230	1	CLASS 2 AG	233.07 TON		$1,689.77		$0.00	$139.40	$1,829.17
INVOICE TOTAL						233.07 TON		$1,689.77		$0.00	$139.40	$1,829.17

TOTAL INVOICE ---> $1,829.

DEDUCT DISCOUNT AMOUNT IF PAID BY 15TH OF MONTH FOLLOWING ---> $58.

PAYMENT TERMS: DUE BY THE 25TH OF THE MONTH FOLLOWING THE DATE OF PURCHASE. Prompt payment discounts will be allowed on invoices paid on o: the 15th of the month following the date of purchase. PROVIDED buyer owes NO PAST DUE balance on said date of payments.

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12100 STEVENS CANYON ROAD
CUPERTINO, CA 95014-5415
PH 408 253-2512 • FAX 408 257-4614

STEVENS CREEK QUARRY, INC.

LOCATION 2
1275 ANZAR RD
SAN JUAN BAUTISTA, CA 95045
PH 408 623-9555 • FAX 408 623-1377

DRIVER ☒ ON ☐ OFF

TICKET

CONTROL #

DATE / TIME	PRODUCT	HAULER / TRUCK	LOCATION

CUSTOMER	QTY.	UNIT	PRODUCT	PRICE	AMOUNT

ALL ACCOUNTS ARE DUE ON THE 25TH OF THE MONTH FOLLOWING THE DATE OF PURCHASE. BUYER AGREES TO PAY ANY COLLECTION COSTS INCURRED BY STEVENS CREEK QUARRY INCLUDING REASONABLE ATTORNEY'S FEES AND A SERVICE CHARGE OF 1½% PER MONTH ON ALL OVERDUE BALANCES.

DELIVER TO:

GROSS:

TARE:

NET:

WEIGHMASTER

DRIVER

IF DUMPING: NO HAZARDOUS CONTAMINATED OR ORGANIC MATERIAL ACCEPTED. WE RESERVE THE RIGHT TO REFUSE ANY LOAD. RESPONSIBILITY AND OWNERSHIP OF MATERIAL BELONGS TO THE CUSTOMER WHEN LOADED INTO THE TRUCK.

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TICKET

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DATE / TIME	PRODUCT	HAULER / TRUCK	LOCATION

CUSTOMER	QTY.	UNIT	PRODUCT	PRICE	AMOUNT

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CUSTOMER	QTY.	UNIT	PRODUCT	PRICE	AMOUNT

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DATE / TIME	PRODUCT	HAULER / TRUCK	LOCATION

CUSTOMER	QTY.	UNIT	PRODUCT	PRICE	AMOUNT

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DRIVER ☒ ON ☐ OFF

TICKET

CONTROL #

DATE / TIME	PRODUCT	HAULER / TRUCK	LOCATION

CUSTOMER	QTY.	UNIT	PRODUCT	PRICE	AMOUNT

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TICKET

DRIVER ☒ ON ☐ OFF

DATE / TIME	PRODUCT	HAULER / TRUCK	LOCATION

CUSTOMER	QTY.	UNIT	PRODUCT	PRICE	AMOUNT

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GROSS:

TARE:

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DELIVER TO:

WEIGHMASTER

DRIVER

IF DUMPING, NO HAZARDOUS CONTAMINATED OR ORGANIC MATERIAL ACCEPTED. WE RESERVE THE RIGHT TO REFUSE ANY LOAD. RESPONSIBILITY AND OWNERSHIP OF MATERIAL BELONGS TO THE CUSTOMER WHEN LOADED INTO THE TRUCK.

CONTROL #

WEIGHMASTER CERTIFICATE

THIS IS TO CERTIFY that the following described commodity was weighed, measured or counted by a weighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed by chapter 7 (commencing with section 12700) of division 5 of the California Business & professions code, administered by the California Department of Food & Agriculture.

STEVENS CREEK QUARRY, INC.

LOCATION 1
12100 STEVENS CANYON ROAD
CUPERTINO, CA 95014-5415
PH 408 253-2512 • FAX 408 257-4614

LOCATION 2
1275 ANZAR RD
SAN JUAN BAUTISTA, CA 95045
PH 408 623-9555 • FAX 408 623-1377

DRIVER ☒ ON ☐ OFF

TICKET

CONTROL #

DATE / TIME	PRODUCT	HAULER / TRUCK	LOCATION

CUSTOMER	QTY.	UNIT	PRODUCT	PRICE	AMOUNT

ALL ACCOUNTS ARE DUE ON THE 25TH OF THE MONTH FOLLOWING THE DATE OF PURCHASE. BUYER AGREES TO PAY ANY COLLECTION COSTS INCURRED BY STEVENS CREEK QUARRY INCLUDING REASONABLE ATTORNEY'S FEES AND A SERVICE CHARGE OF 1½% PER MONTH ON ALL OVERDUE BALANCES.

GROSS:

TARE:

NET:

DELIVER TO:

WEIGHMASTER

DRIVER

IF DUMPING: NO HAZARDOUS CONTAMINATED OR ORGANIC MATERIAL ACCEPTED. WE RESERVE THE RIGHT TO REFUSE ANY LOAD. RESPONSIBILITY AND OWNERSHIP OF MATERIAL BELONGS TO THE CUSTOMER WHEN LOADED INTO THE TRUCK.

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DRIVER ☒ ON ☐ OFF

TICKET

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DATE / TIME	PRODUCT	HAULER / TRUCK	LOCATION

CUSTOMER	QTY.	UNIT	PRODUCT	PRICE	AMOUNT

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STEVENS CREEK QUARRY, INC.

LOCATION 2
1275 ANZAR RD
SAN JUAN BAUTISTA, CA 95045
PH 408 623-9555 • FAX 408 623-1377

TICKET

DRIVER ☒ ON ☐ OFF

DATE / TIME	PRODUCT	HAULER / TRUCK	LOCATION

CUSTOMER	QTY.	UNIT	PRODUCT	PRICE	AMOUNT

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DELIVER TO:

GROSS:

TARE:

NET:

WEIGHMASTER

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IF DUMPING: NO HAZARDOUS CONTAMINATED OR ORGANIC MATERIAL ACCEPTED WE RESERVE THE RIGHT TO REFUSE ANY LOAD. RESPONSIBILITY AND OWNERSHIP OF MATERIAL BELONGS TO THE CUSTOMER WHEN LOADED INTO THE TRUCK.

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LOCATION 2
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SAN JUAN BAUTISTA, CA 95045
PH 408 623-9555 • FAX 408 623-1377

TICKET

DRIVER ☒ ON ☐ OFF

DATE / TIME	PRODUCT	HAULER / TRUCK	LOCATION

CUSTOMER	QTY.	UNIT	PRODUCT	PRICE	AMOUNT

ALL ACCOUNTS ARE DUE ON THE 25TH OF THE MONTH FOLLOWING THE DATE OF PURCHASE. BUYER AGREES TO PAY ANY COLLECTION COSTS INCURRED BY STEVENS CREEK QUARRY INCLUDING REASONABLE ATTORNEY'S FEES AND A SERVICE CHARGE OF 1½% PER MONTH ON ALL OVERDUE BALANCES.

DELIVER TO:

GROSS:

TARE:

NET:

WEIGHMASTER

DRIVER

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CONTROL #

REED & GRAHAM LABORATORY

SERVICES

September 19, 2001
RGLS #SCQ001

Richard A. Voss
Stevens Creek Quarry
12100 Stevens Canyon Road
Cupertino, CA 95014

Subject: *Class II Aggregate Base-Lime Treated, City of San Jose Specification*

Dear Mr. Voss:

On September 11, 2001, a sample of Lime Treated Class II Aggregate Base from Stevens Creek Quarry was received in our laboratory for testing. Aggregate was tested in accordance with Caltrans test methods and checked for conformance to the City of San Jose Standard Specifications, Section 26. Results are as follows:

Aggregate Gradation, California Test (CTM) 202

Sieve Size	% Passing	City of San Jose Specification
1"	100	100
3/4"	97	90-100
1/2"	86	
3/8"	76	
#4	54	35-55
#8	39	
#16	26	
#30	18	10-30
#50	12	
#100	8	
#200	3.3	3-9
Sand Equivalent, CTM 217	Result	
	42	30
Durability, CTM 229 Coarse	46	25
Fine	26	25
Resistance ('R') Value, CTM 301	78	78

If you have any questions, or need any additional information, please give me a call at 408-287-7722.

Best Regards,

REED & GRAHAM LABORATORY SERVICES

Frank R. Rancadore

Frank R. Rancadore
Technical Manager

APPENDIX H

COMPACTION TESTING REPORT

SMITH-EMERY COMPANY **GEOSERVICES DIVISION**
The Full Service Independent Testing Laboratory, Established 1904

Hunters Point Shipyard, Bldg. 114
P. O. Box 880550
San Francisco, California 94188
(415) 330-3000 Fax (415) 330-3030

791 East Washington Blvd.
Los Angeles, California 90021-3043
(213) 749-3411
Fax (213) 746-7228

January 30, 2002

SECo File No. 1826-3
SECo Report No. 02-088

Conerstone Environmental Construction, Inc.
3527 Mt. Diablo Boulevard, #290
Lafayette, California 64549-7009

Attention:

RE: WSJ PROPERTIES
PALO ALTO, CALIFORNIA

SUBJECT: COMPACTION TESTING

REPORT OF TESTS

In compliance with your request, Smith-Emery Company has conducted standard compaction testing for the above referenced project.

Field density tests to determine relative compaction were conducted in accordance with ASTM D2922-91, nuclear method and ASTM D1556-90, sandcone method. Test locations and results are presented on the attached Table 1.

Laboratory compaction characteristics of various soil types were determined in accordance with ASTM D1557-91, five layer method. Test results are presented on the attached Table 2.

Respectfully submitted,
SMITH-EMERY COMPANY

Patrick Morrison

PATRICK MORRISON
Geotechnical Manager, SF

PM/ng
cc: 2-Addressee

ALL REPORTS ARE SUBMITTED AS THE CONFIDENTIAL PROPERTY OF CLIENTS. AUTHORIZATION FOR PUBLICATION OF OUR REPORT, CONCLUSIONS, OR EXTRACTS FROM OR REGARDING THEM IS RESERVED PENDING OUR WRITTEN APPROVAL AS A MUTUAL PROTECTION TO CLIENTS, THE PUBLIC AND OURSELVES.

SMITH-EMERY COMPANY

January 30, 2002

SECo File No. 1826-3
SECo Report No. 02-088

Project: WSJ Properties
Palo Alto, California

TABLE NO. 1

ELEVATION KEY
SG-Subgrade FSG-Finished Subgrade
FG-Finish Grade FAB-Finish Agg. Base
AB-Aggregate Base BTM-Bottom

METHOD KEY
SC-Sandcone
NG-Nuclear Gauge

RESULTS OF DENSITY TESTS

Test No.	Date	Test Type	Elev. Depth (feet)	Moisture Content (%)	Dry Density (pcf)	Relative Compaction Field (%)	Relative Compaction Specified (%)	Soil Type
01	01/21/02	NG	-2.0	10.9	137.4	95	95	3
LOCATION: TRENCH BACKFILL, LINE A7								
02	01/21/02	NG	-2.0	10.3	138.7	96	95	3
LOCATION: TRENCH BACKFILL, LINE A10								
03	01/21/02	NG	-2.0	10.7	137.6	95	95	3
LOCATION: TRENCH BACKFILL, LINE C10								
04	01/21/02	NG	-1.5	11.0	137.7	95	95	3
LOCATION: TRENCH BACKFILL, LINE E10								
05	01/21/02	NG	-1.5	11.3	138.1	95	95	3
LOCATION: TRENCH BACKFILL, LINE A10								
06	01/21/02	NG	-1.5	11.2	137.8	95	95	3
LOCATION: TRENCH BACKFILL, LINE B8								
01	01/22/02	NG	-0.5	9.4	141.9	97	95	3
LOCATION: TRENCH BACKFILL, LINE D8								
08	01/22/02	NG	-0.5	11.0	139.1	96	95	3
LOCATION: TRENCH BACKFILL, LINE B10								
09	01/22/02	NG	-0.5	10.6	138.8	96	95	3
LOCATION: TRENCH BACKFILL, LINE A7								
10	01/22/02	NG	-0.5	10.4	137.7	95	95	3
LOCATION: TRENCH BACKFILL, LINE C9								
11	01/22/02	NG	FAB	10.3	138.1	95	95	3
LOCATION: TRENCH BACKFILL, LINE A9								

SMITH-EMERY COMPANY

January 30, 2002

SECo File No. 1826-3
SECo Report No. 02-088

Project: WSJ Properties
Palo Alto, California

TABLE NO. 1

ELEVATION KEY
SG-Subgrade FSG-Finished Subgrade
FG-Finish Grade FAB-Finish Agg. Base
AB-Aggregate Base BTM-Bottom

METHOD KEY
SC-Sandcone
NG-Nuclear Gauge

RESULTS OF DENSITY TESTS

Test No.	Date	Test Type	Elev. Depth (feet)	Moisture Content (%)	Dry Density (pcf)	Relative Compaction Field (%)	Relative Compaction Specified (%)	Soil Type
12	01/22/02	NG	FAB	10.1	137.9	95	95	3
LOCATION: TRENCH BACKFILL, LINE D9								
13	01/22/02	NG	FAB	11.0	138.9	96	95	3
LOCATION: TRENCH BACKFILL, LINE B7								
14	01/22/02	NG	FAB	10.8	137.5	96	95	3
LOCATION: TRENCH BACKFILL, LINE C8								

END of TABLE 1

SMITH-EMERY COMPANY

January 30,2002

SECo File No. 1826-3
SECo Report No. 02-088

Project: WSJ Properties
Palo Alto, California

TABLE NO. 2

RESULTS OF LABORATORY COMPACTION CHARACTERISTICS OF SOIL TESTS

Soil Type	Description	Maximum Dry Density (pcf)	Optimum Moisture (%)
3	GRAY GREEN SILTY SAND WITH GRAVEL	145.0	7.0

END of TABLE 2

APPENDIX I

CONCRETE DOCUMENTATION

HARBOR READY-MIX

123 Seaport Boulevard
Redwood City, CA 94063

415
365-4811

CONCRETE MIX PROPORTIONS

DATE 2/28/02

PROJECT OPEN

CONTRACTOR CORNERSTONE ENVIRONMENTAL

CONCRETE SUPPLIER Harbor Ready Mix

BASIC MIX DATA

Design Strength 2500

Concrete Class _____ Use Small Line Pump, All purpose Slump 4" to 6"

Cement Type II Brand Open Content, Sacks per Cubic Yard 6.0 (564 lbs.)

Pozzolan Type _____ Brand _____ " " " " " _____

Total Cementicious Material, Sk./cu. yd. 6 W/c Ratio ---

Coarse Aggregate 3/8" Maximum Pea Gravel % by Vol. 44

Fine Aggregate Olympia Sand + TOP (Washington) % by Vol. 56

Entrained Air, % 4.0 Dosage, oz./100 wt.* 1/4 Brand Darex

* Dosage varies as it is adjusted to obtain designed air content.

Admixture, Type _____ Dosage, oz./100 wt _____ Brand _____

" " _____ " " " " _____ "

MIX NUMBER 6 SACK PEA pump mix Mix # H221

Ingredient	Volume, Cu. Ft.	Weight, Lbs. S.S.D.
Cement	2.87	564
Pozzolan		
Water	5.74	358 (43 gallons)
Air	1.08	
Coarse Agg. ASTM C-33		
" " Size 8, 3/8" x #8	7.56	1250
" "		
Fine Agg. Oly. + TOP	9.75	1576
" "		
TOTALS	27.00	3748

Designed by Val Venuti

Title Consultant Signed C.M

PAY FROM THIS INVOICE Fax # 5500524000 1 + 4432 Exp. 2/03
#4302.95 auth. 066695
JAN 29 2002

HARBOR READY-MIX

123 Seaport Blvd. • Redwood City, CA 94063 • (650) 365-4811 or (800) 500-1755
ACCOUNTING (800) 500-5611 • FAX (831) 633-5799

SOLD TO:
199000
C. O. D. CUSTOMER

SHIP TO:
CORNER
CORNER STONE
230 PORTAGE
PA
X ECR SCL

"Rebuilds Fry's"

TIME	MIX #	LOAD SIZE	YARDS ORDERED	REV COUNTS	TRUCK #	USE	TICKET #
07:16:42	H221	9.00 yd	35.00 yd		51	flat	81292
DATE	CODE #	LOAD #	YARDS DEL.	BATCH #	WATER TRIM	MAP PAGE	SLUMP REQ'ST.
01-24-02		Today 1	9.00 yd	12805		grp	4.00 i

WARNING
IRRITATING TO THE SKIN AND EYES

Contains Portland Cement. Wear Rubber Boots and Gloves. PROLONGED CONTACT MAY CAUSE BURNS. Avoid Contact With Eyes and Prolonged Contact With Skin. In Case of Contact With Skin or Eyes, Flush Thoroughly With Water. If Irritation Persists, Get Medical Attention. KEEP CHILDREN AWAY.

CONCRETE is a PERISHABLE COMMODITY and BECOMES the PROPERTY of the PURCHASER UPON LEAVING the PLANT. ANY CHANGES or CANCELLATION of ORIGINAL INSTRUCTIONS MUST be TELEPHONED to the OFFICE BEFORE LOADING STARTS.

The undersigned promises to pay all costs, including reasonable attorneys' fees, incurred in collecting any sums owed.

All accounts not paid within 30 days of delivery will bear interest at the rate of 10% per annum.

Not Responsible for Relative Aggregate or Color Quality. No Claim Allowed Unless Made at Time Material is Delivered.

A $20.00 Service Charge will be Collected on all Returned Checks.

PROPOSITION 65 REQUIRES THIS NOTICE

DELIVERED MATERIALS CONTAIN CHEMICALS KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER, BIRTH DEFECTS AND OTHER REPRODUCTIVE HARM. FOR MORE INFORMATION GO TO WWW.P65WARNINGS.CA.GOV.

NEITHER THE SUBSTANCES NOR THE PRODUCTS THAT I HAVE ASKED THE DRIVER TO DELIVER TO ME AND WHICH I OR MY EMPLOYEES, AGENTS OR CONTRACTORS WILL USE ARE LISTED AS CAUSING CANCER OR REPRODUCTIVE HARM.

H_2O Added By Request/Authorized By

_____ GAL X _____

PROPERTY DAMAGE RELEASE

Dear Customer: The size and weight of this truck may possibly cause damage to the premises and/or adjacent property while the materials of this load are placed where you desire it. It is our wish to help you in every way we can, but by receiving this load you must release us from, as a supplier and not as a driver, all responsibility from any damage that may occur to the premises and/or adjacent property. Buildings, sidewalks, driveway slabs etc. by the delivery of these materials, and that you agree to help us remove mud from the wheels of the vehicle so that it cannot enter the public street. Further as additional consideration, the undersigned agrees to indemnify and hold harmless the owner of this truck and this supplier for any and all damage to the premises and/or adjacent property which may occur by anyone to have access out of delivery of this order.

I HAVE RECEIVED ON: X _____

QUANTITY	CODE	DESCRIPTION	UNIT PRICE	EXTENDED PRICE
9.00	(CUBIC YARDS) H221	6 SACK PEA PUMP MIX	106.00	954.00

RETURNED TO PLANT	LEFT JOB	FINISH UNLOADING	TIME ALLOWED
	7:41	8:11	50
LEFT PLANT	ARRIVED JOB	START UNLOADING	DELAY TIME
07:16:41	8:10	8:20	1
TOTAL ROUND TRIP	TOTAL AT JOB	UNLOADING TIME	ADDITIONAL CHARGE
		51	0

DELAY EXPLANATION/CYLINDER TEST TAKEN

1 JOB NOT READY
2 SLOW POUR OR PUMP
3 TRUCK AHEAD ON JOB
4 CONTRACTOR BROKE DOWN
5 ADDED WATER
6 TRUCK BROKE DOWN
7 ACCIDENT
8 CITATION
9 OTHER

TOTAL DUE DATE

DISCOUNT DUE DATE

SubTotal $	954.00
Tax % 8.250	78.71
Total $	1032.71
TOTAL	
DISCOUNT	
DISCOUNT TOTAL ▶	1032.71

[redacted]

WEIGHMASTER CERTIFICATE

THIS IS TO CERTIFY that the following described commodity was delivered, measured, or counted by a weighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professions Code, administered by the Division of Measurement Standards of the California Department of Food and Agriculture.

DEPUTY WEIGHMASTER SIGNATURE X _____

ORIGINAL OFFICE

81292

PAY FROM THIS INVOICE

HARBOR READY-MIX

123 Seaport Blvd. • Redwood City, CA 94063 • (650) 365-4811 or (800) 500-1755
ACCOUNTING (800) 500-5611 • FAX (831) 633-5799

199000
SOLD TO:
C.O.D. CUSTOMER

SHIP TO
CORNER STONE
230 PORTAGE
PA
X SCL

TIME	MIX #	LOAD SIZE	YARDS ORDERED	REV. COUNTS	TRUCK #	ON	TICKET #
10:46:34	H221	8.00 yd	35.00 yd		30		81301
DATE	**CODE #**	**LOAD #**	**YARDS DEL.**	**BATCH #**	**WATER TRIM**	**MAP PAGE**	**SLUMP REQ'ST.**
01-24-02		Today 4	34.00 yd	12814			4.00

WARNING
IRRITATING TO THE SKIN AND EYES

Contains Portland Cement. Wear Rubber Boots and Gloves. PROLONGED CONTACT MAY CAUSE BURNS. Avoid Contact With Eyes and Prolonged Contact With Skin. In Case of Contact With Skin or Eyes, Flush Thoroughly With Water. If Irritation Persists, Get Medical Attention. KEEP CHILDREN AWAY.

CONCRETE IS A PERISHABLE COMMODITY and BECOMES the PROPERTY of the PURCHASER UPON LEAVING the PLANT. ANY CHANGES or CANCELLATION of ORIGINAL INSTRUCTIONS MUST be TELEPHONED to the OFFICE BEFORE LOADING STARTS.

The undersigned promises to pay all costs, including reasonable attorneys fees incurred in collecting any sums owed.

All accounts not paid within 30 days of delivery will bear interest at the rate of 18% per annum.

Not Responsible for Massive Aggregate or Color Quality. No Claim Allowed Unless Made at Time Material is Delivered.

A $20.00 Service Charge will be Collected on all Returned Checks.

PROPOSITION 65 REQUIRES THIS NOTICE

[redacted]

H_2O Added By Request/Authorized By

____ GAL X

PROPERTY DAMAGE RELEASE

Dear Customer: The size and weight of this truck may possibly cause damage to the premises and/or adjacent property while the materials in this load are placed where you desire it. It is our wish to help you in every way we can, but by receiving this load you must release us from, as a supplier and as a driver, all and any responsibility from any damage that may occur to the premises and/or adjacent property, buildings, sidewalks, driveways, curbs, etc. by the delivery of these materials, and that you agree to help us remove mud from the wheels of this vehicle so that it cannot litter the public streets. Further, as additional consideration, the undersigned agrees to indemnify and hold harmless the driver of this truck and this supplier for any and all damage to the premises and/or adjacent property which may be claimed by anyone to have arisen out of delivery of this load.

LOAD RECEIVED BY

X ____

QUANTITY	CODE	DESCRIPTION	UNIT PRICE	EXTENDED PRICE
8.00 CUBIC YARDS	H221	6 SACK PEA PUMP MIX	106.00	848.00

RETURNED TO PLANT	LEFT JOB	FINISH UNLOADING	TIME ALLOWED
		1150	45
LEFT PLANT	**ARRIVED JOB**	**START UNLOADING**	**DELAY TIME**
10:46:33	1115	1115	0
TOTAL ROUND TRIP	**TOTAL AT JOB**	**UNLOADING TIME**	**ADDITIONAL CHARGE**
		35	0

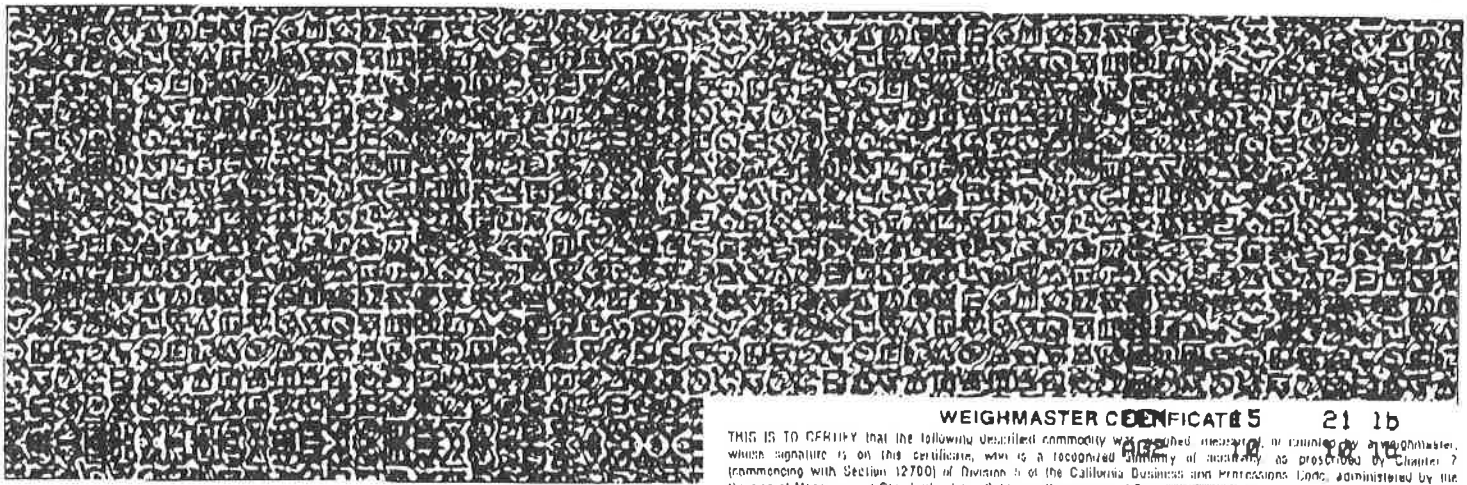
DELAY EXPLANATION/CYLINDER TEST TAKEN
1. JOB NOT READY
2. SLOW POUR OR PUMP
3. TRUCK AHEAD ON JOB
4. CONTRACTOR BROKE DOWN
5. ADDED WATER
6. TRUCK BROKE DOWN
7. ACCIDENT
8. CITATION
9. OTHER

TOTAL DUE DATE

DISCOUNT DUE DATE

SubTotal $	848.00
Tax % 8.250	69.96
Total $	917.96
TOTAL	
DISCOUNT	3901.34
DISCOUNT TOTAL	

Ticket No. 81301



WEIGHMASTER CERTIFICATE 15 21 lb

THIS IS TO CERTIFY that the following described commodity was weighed, measured, or counted by a weighmaster, whose signature is on this certificate, who is a recognized authority of ability as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professions Code, administered by the Division of Measurement Standards of the California Department of Food and Agriculture.

DEPUTY WEIGHMASTER SIGNATURE X

ORIGINAL-OFFICE

81301

PAY FROM THIS INVOICE

HARBOR READY-MIX

123 Seaport Blvd. • Redwood City, CA 94063 • (650) 365-4811 or (800) 500-1755
ACCOUNTING (800) 500-5611 • FAX (831) 633-5799

SOLD TO:
99000
C.O.D. CUSTOMER

SHIP TO:
CORNER
CORNER STONE
230 PORTAGE
PA
X SCL

TIME	MIX #	LOAD SIZE	YARDS ORDERED	REV COUNTS	TRUCK #	USE	TICKET #
09:33:52	H221	9.00 yd	35.00 yd		51		81297
DATE	CODE #	LOAD #	YARDS DEL.	BATCH #	WATER TRIM	MAP PAGE	SLUMP REQ'ST
01-24-02		Today 3	26.00 yd	12810			4.00 i

WARNING
IRRITATING TO THE SKIN AND EYES

Contains Portland Cement, Wear Rubber Boots and Gloves. PROLONGED CONTACT MAY CAUSE BURNS. Avoid Contact With Eyes and Prolonged Contact With Skin. In Case of Contact With Skin or Eyes, Flush Thoroughly With Water. If Irritation Persists, Get Medical Attention. KEEP CHILDREN AWAY.

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Not Responsible for Defective Aggregate or Color Quality. No Claim Allowed Unless Made at Time Material is Delivered.

A $20.00 Service Charge will be Collected on all Returned Checks.

PROPOSITION 65 REQUIRES THIS NOTICE

[redacted]

H_2O Added By Request/Authorized By

_____ CAL X _____

PROPERTY DAMAGE RELEASE

Dear Customer - The size and weight of this truck may possibly cause damage to the premises and/or adjacent property while the materials of this load are placed where you desire it. It is our wish to help you in every way we can but by receiving this load you must release us from all & supplier and be as a driver, all and any responsibility from any damage that may occur to the premises and/or adjacent property, buildings, sidewalks, driveway, curbs, etc. by the delivery of these materials. And that you agree to help us remove mud from the wheels of the vehicle so that it cannot litter the public street. Further, as additional consideration, the undersigned agrees to indemnify and hold harmless the driver of this truck and this supplier for any and all damage to the premises, public or private property which maybe claimed by anyone to have arisen out of the delivery of this order.

LOAD RECEIVED BY

X _____

QUANTITY	CODE	DESCRIPTION	UNIT PRICE	EXTENDED PRICE
9.00 CUBIC YARDS	H221	6 SACK PEA PUMP MIX	106.00	954.00

RETURNED TO PLANT	LEFT JOB	FINISH UNLOADING	TIME ALLOWED
	1050	1050	50
LEFT PLANT	ARRIVED JOB	START UNLOADING	DELAY TIME
09:33:52	1005	1015	0
TOTAL ROUND TRIP	TOTAL AT JOB	UNLOADING TIME	ADDITIONAL CHARGE
		35	0

DELAY EXPLANATION/CYLINDER TEST TAKEN

1 JOB NOT READY
2 SLOW POUR OR PUMP
3 TRUCK AHEAD ON JOB
4 CONTRACTOR BROKE DOWN
5 ADDED WATER
6 TRUCK BROKE DOWN
7 ACCIDENT
8 CITATION
9 OTHER

TOTAL DUE DATE

DISCOUNT DUE DATE

SubTotal $	954.00
Tax % 8.250	78.71
Total $	1032.71
TOTAL	
DISCOUNT	
DISCOUNT TOTAL ▶	2983.38

[redacted]

WEIGHTMASTER CERTIFICATE 0 40 lb
[redacted]

THIS IS TO CERTIFY that the following described commodity was weighed, measured, or counted by a weighmaster, whose signature is on this certificate, who is a recognized authority of competency, as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professions Code, administered by the Division of Measurement Standards of the California Department of Food and Agriculture.

DEPUTY WEIGHMASTER SIGNATURE X _____

ORIGINAL-OFFICE

81297

PAY FROM THIS INVOICE

HARBOR READY-MIX

123 Seaport Blvd. • Redwood City, CA 94063 • (650) 365-4811 or (800) 500-1755
ACCOUNTING (800) 500-5611 • FAX (831) 633-5799

SOLD TO:
I99000
C.O.D. CUSTOMER

SHIP TO:
CORNER
CORNER STONE
230 PORTAGE
PA
X SCL

TIME	MIX #	LOAD SIZE	YARDS ORDERED	REV. COUNTS	TRUCK #	ENG	TICKET #
08:04:18	H221	8.00 yd	35.00 yd		29		81294
DATE	**CODE #**	**LOAD #**	**YARDS DEL.**	**BATCH #**	**WATER TRIM**	**MAP PAGE**	**SLUMP REQ'S**
01-24-02		Today 2	17.00 yd	12807			4.00 i

WARNING
IRRITATING TO THE SKIN AND EYES

Contains Portland Cement. Wet Mortar Burns and Gloves Must Be Worn To Avoid Contact. PROLONGED CONTACT MAY CAUSE BURNS. Avoid Contact With Eyes and Prolonged Contact With Skin. In Case of Contact With Skin or Eyes, Flush Thoroughly With Water. If Irritation Persists, Get Medical Attention. KEEP CHILDREN AWAY.

CONCRETE IS A PERISHABLE COMMODITY and BECOMES the PROPERTY of the PURCHASER UPON LEAVING the PLANT. ANY CHANGES or CANCELLATION of ORIGINAL INSTRUCTIONS MUST be TELEPHONED to the OFFICE BEFORE LOADING STARTS.

The undersigned promises to pay all costs including reasonable attorneys' fees, incurred in collecting any sums owed.

All accounts not paid within 30 days of delivery will bear interest at the rate of 18% per annum.

Not Responsible for Defective Aggregate or Color Quality. No Claim Allowed Unless Made at Time Material is Delivered.

A $20.00 Service Charge will be Collected on all Returned Checks.

PROPOSITION 65 REQUIRES THIS NOTICE

DETECTABLE AMOUNTS OF CHEMICALS KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER, BIRTH DEFECTS, AND OTHER REPRODUCTIVE HARM MAY BE FOUND IN SOME CONCRETE MIXTURES.

NOTICE: My Signature on Right Indicates That I Have Read the Above Notice and Will Be Responsible for Any Damage Caused When Delivery Is Refused.

H_2O Added By Request/Authorized By

GAL X

PROPERTY DAMAGE RELEASE

Dear Customer – The size and weight of this truck may possibly cause damage to the premises and/or adjacent property while the materials of this load are placed where you desire it. It is our wish to help you in every way we can, but by requiring this load you must release us from as a supplier and we as a driver all and any responsibility from any damage that may occur to the premises, and/or adjacent property, buildings, sidewalks, driveways, curbs, etc. by the delivery of these materials and that you agree to help us remove mud from the wheels of this vehicle so that it cannot litter the public street. Further, as additional consideration, the undersigned agrees to indemnify and hold harmless the driver of this truck and this supplier for any and all damage to the premises and/or adjacent property which may occur by anyone to have arisen out of delivery of this order.

LOAD RECEIVED BY

X

QUANTITY	CODE	DESCRIPTION	UNIT PRICE	EXTENDED PRICE
8.00 CUBIC YARDS	H221	6 SACK PEA PUMP MIX	106.00	848.00

RETURNED TO PLANT	LEFT JOB	FINISH UNLOADING	TIME ALLOWED
	1000	950	45
LEFT PLANT	ARRIVED JOB	START UNLOADING	DELAY TIME
08:04:17	850	900	5
TOTAL ROUND TRIP	TOTAL AT JOB	UNLOADING TIME	ADDITIONAL CHARGE
		50	

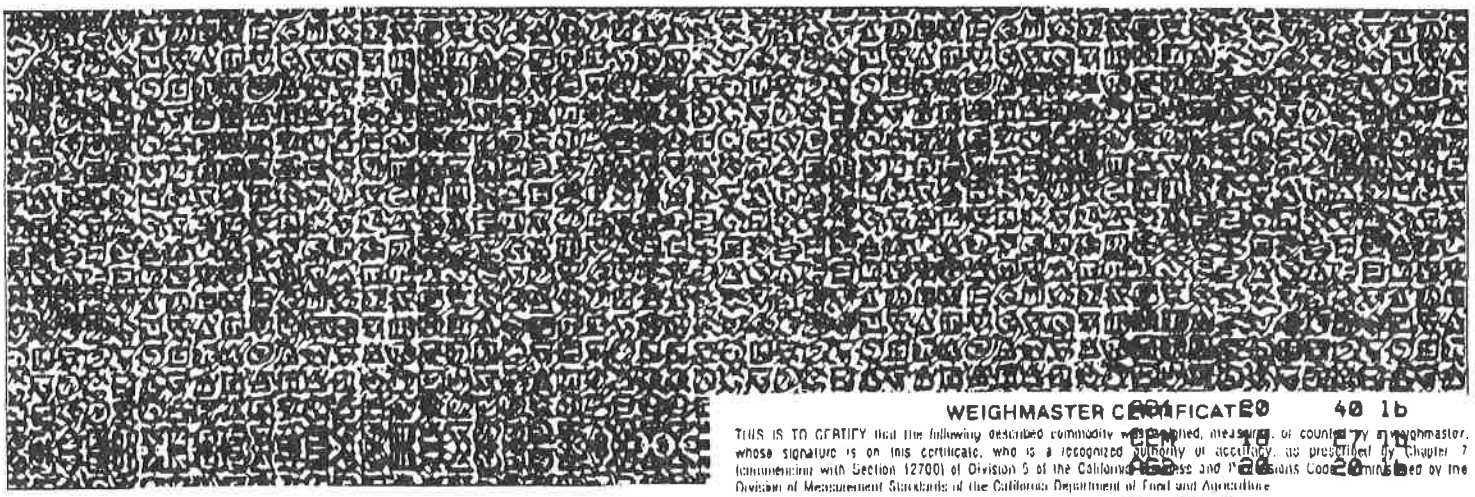
DELAY EXPLANATION/CYLINDER TEST TAKEN

1 JOB NOT READY 6 TRUCK BROKE DOWN
2 SLOW POUR OR PUMP 7 ACCIDENT
3 TRUCK AHEAD ON JOB 8 CITATION
4 CONTRACTOR CHOKE DOWN 9 OTHER
5 ADDED WATER

TOTAL DUE DATE

DISCOUNT DUE DATE

SubTotal $	848.00
Tax % 8.250	69.96
Total $	917.96
TOTAL	
DISCOUNT	
DISCOUNT TOTAL	1950.67



WEIGHMASTER CERTIFICATE 80 40 lb

THIS IS TO CERTIFY that the following described commodity was weighed, measured, or counted by a weighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professions Code, administered by the Division of Measurement Standards of the California Department of Food and Agriculture.

DEPUTY WEIGHMASTER SIGNATURE X

81294

OFFICE

PAY FROM THIS INVOICE

HARBOR READY-MIX

123 Seaport Blvd. • Redwood City, CA 94063 • (650) 366-4811 or (800) 500 1755
ACCOUNTING (800) 500-5611 • FAX (831) 633-5799

SOLD TO: ~~199000~~
C.O.D. CUSTOMER

SHIP TO: ~~CORNER~~
CORNER STONE
230 PORTAGE
PA
X SCL

TIME	MIX #	LOAD SIZE	YARDS ORDERED	REV. COUNTS	TRUCK #	USE	TICKET #
12:00:15	H221	3.50 yd	35.00 yd		24	FWK	81305
DATE	CODE #	LOAD #	YARDS DEL.	BATCH #	WATER TRIM	MAP PAGE	SLUMP REQ'ST.
01-24-02		Today 5	37.50 yd	12818		Pump	4.00 i

WARNING
IRRITATING TO THE SKIN AND EYES

Contains Portland Cement. Wear Rubber Boots and Gloves. PROLONGED CONTACT MAY CAUSE BURNS. Avoid Contact With Eyes and Prolonged Contact With Skin. In Case of Contact With Skin or Eyes, Flush Thoroughly With Water. If Irritation Persists, Get Medical Attention. KEEP CHILDREN AWAY.

CONCRETE IS A PERISHABLE COMMODITY and BECOMES the PROPERTY of the PURCHASER UPON LEAVING the PLANT. ANY CHANGES or CANCELLATION of ORIGINAL INSTRUCTIONS MUST be TELEPHONED to the OFFICE BEFORE LOADING STARTS.

The undersigned promises to pay all costs, including reasonable attorneys' fees incurred to collect and any sums owed.

All accounts not paid within 30 days of delivery will bear interest at the rate of 18% per annum.

Not Responsible for Reactive Aggregate or Color Quality. No Claim Allowed Unless Made at Time Material is Delivered.

A $20.00 Service Charge will be Collected on all Returned Checks.

PROPOSITION 65 REQUIRES THIS NOTICE

[redacted]

H_2O Added By Request/Authorized By

GAL X

PROPERTY DAMAGE RELEASE

Dear Customer – The size and weight of this truck may possibly cause damage to the pavement and/or adjacent property while the materials of the load are placed where you desire it. It is our wish to help you in every way we can, but by receiving this load you must release us from, as a supplier and tie as a driver, all and any responsibility from any damage that may occur to the premises and/or adjacent property, buildings, sidewalks, driveways, curbs etc. by the delivery of these materials, and that you agree to help us remove mud from the wheels of this vehicle so that it cannot litter the public streets. Further, as additional consideration, the undersigned agrees to indemnify and hold harmless the driver of this truck and the supplier for any and all damage to the premises and/or adjacent property which maybe claimed by anyone to have arisen out of delivery of this order.

LOAD RECEIVED BY X

QUANTITY	CODE	DESCRIPTION		UNIT PRICE	EXTENDED PRICE
3.50	CUBIC YARDS H221	6 SACK PEA PUMP MIX		106.00	371.00
~~1.00~~	~~H600~~	~~PUMP WASH CHARGE~~	~~1.00~~	~~0.00~~ N/C	~~0.00~~

RETURNED TO PLANT	LEFT JOB	FINISH UNLOADING	TIME ALLOWED
		12:50	20
LEFT PLANT	ARRIVED JOB	START UNLOADING	DELAY TIME
12:00:15	12:30	12:35	0
TOTAL ROUND TRIP	TOTAL AT JOB	UNLOADING TIME	ADDITIONAL CHARGE
		15	0

DELAY EXPLANATION/CYLINDER TEST TAKEN

1. JOB NOT READY
2. SLOW POUR OR PUMP
3. TRUCK AHEAD ON JOB
4. CONTRACTOR BROKE DOWN
5. ADDED WATER
6. TRUCK BROKE DOWN
7. ACCIDENT
8. CITATION
9. OTHER

TOTAL DUE DATE

DISCOUNT DUE DATE

SubTotal $	371.00
Tax % 8.250	~~30.61~~
Total $	401.61
TOTAL	
DISCOUNT	
DISCOUNT TOTAL	4302.95

Ticket No. 81305

[redacted]

WEIGHMASTER CERTIFICATE

THIS IS TO CERTIFY that the following described commodity was weighed, measured or counted by the weighmaster whose signature is on this certificate, who is a recognized [illegible] as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professions Code administered by the Division of Measurement Standards of the California Department of Food and Agriculture.

DEPUTY WEIGHMASTER SIGNATURE X

ORIGINAL-OFFICE

81305

DISTRIBUTION

FINAL REMEDIAL ACTION PLAN
FORMER MERCER PROCESSING, INC. FACILITY
230 PORTAGE AVENUE
PALO ALTO, CALIFORNIA

MARCH 12, 2002

COPY NO. 10

		Copy No.
2 Copies	California Regional Water Quality Control Board San Francisco Bay Region 1515 Clay Street, Suite 1400 Oakland, California 94612 Attention: Dr. Derek Whitworth, P.E.	1 - 2
2 Copies	El Camino Center 3201 Ash Street Palo Alto, California 94306 Attention: Mr. Boyd Smith	3 - 4
2 Copies	Allen Matkins Leck Gamble & Mallory LLP 333 Bush Street, 17th Floor San Francisco, California 94104-2806 Attention: Mr. David Cooke, Esq.	5 - 6
1 Copy	Mercer Processing, Inc. c/o Pinnacle Law Group 425 California Street, Suite 1800 San Francisco, California 94104 Attention: Andrew A. August, Esq.	7
1 Copy	Palo Alto Public Library Main Branch 1213 Newell Road Palo Alto, California 94303	8

DISTRIBUTION
(Continued)
FINAL REMEDIAL ACTION PLAN
FORMER MERCER PROCESSING, INC. FACILITY
230 PORTAGE AVENUE
PALO ALTO, CALIFORNIA

MARCH 12, 2002

COPY NO. 10

4 Copies	PES Files	9 - 12
1 Copy	Unbound Original	13

PES Environmental, Inc.
Engineering & Environmental Services

A Report Prepared for:

The Sobrato Companies
10600 North De Anza Boulevard
Cupertino, CA 95014-2075

Attention: Mr. Tim Steele

PHASE I
ENVIRONMENTAL SITE ASSESSMENT
EL CAMINO CENTER AND ASSOCIATED PROPERTIES
3201 AND 3225 ASH STREET, 200-382 PORTAGE AVENUE, 270 LAMBERT AVENUE AND 3250 PARK BOULEVARD
PALO ALTO, CALIFORNIA

MAY 12, 2011

By:

Julie L. Turnross, R.E.A.
Senior Environmental Scientist

William F. Frizzell, P.E.
Principal Engineer

126.076.01.001

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DISTRIBUTION

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1.0 INTRODUCTION

1.1 Purpose and Scope of Work

This report presents the results of a Phase I Environmental Site Assessment (ESA) of the El Camino Center and associated property in Palo Alto, California (the site or subject property). A site location map is presented as Plate 1. PES Environmental, Inc. (PES) was retained by The Sobrato Companies (Sobrato) to compile and evaluate available information to assess for Recognized Environmental Conditions[1] (RECs) in consideration of purchasing the property.

The ESA was performed pursuant to our proposal (Reference No. 126.076.01.P01) dated October 11, 2011, and in general accordance with ASTM International guidelines for Phase I Environmental Site Assessments (ASTM E 1527-05). These practice guidelines comply with the U.S. Environmental Protection Agency's All Appropriate Inquiries (AAI) rule adopted in November 2005. The following tasks were conducted during this ESA:

- Reviewed Federal, State and local agency databases to identify nearby sites which have reported the use, storage, or release of hazardous materials;
- Reviewed regulatory agency records regarding the site and adjacent properties;
- Reviewed historical aerial photographs of the site and surrounding area to evaluate prior land uses;
- Conducted historical research and reviewed historical information and for the site;
- Reviewed reports concerning historical environmental investigations performed on the subject property obtained from the property owner and regulatory agencies;
- Reviewed an environmental database search, which included expanded search radii as required by AAI;
- Interviewed individuals with knowledge of the site;
- Conducted an inspection of the site and a reconnaissance of surrounding properties to assess the potential for contamination of the site from onsite or offsite sources. The site inspections were conducted by environmental professionals with qualifying experience; and
- Prepared this report presenting the results of the Phase I ESA investigation.

[1] A REC is defined in the American Society for Testing and Materials guidelines for Phase I Environmental Site Assessments (ASTM E 1527-05) as *"the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property on into the ground, groundwater, or surface water of the property". RECs are equivalent to "environmental conditions" as that term is defined in Appendix A.*

1.2 Special Terms and Conditions

Chain-of-title documentation was not provided or obtained for this ESA.

1.3 Limitations and Exceptions

This Phase I ESA was performed in accordance with practices and procedures generally accepted in the consulting engineering field at the time they were performed. The findings, opinions, conclusions, and recommendations expressed herein are applicable as of the date the services were provided. Our professional judgment to assess the potential for contamination is based on limited data; no warranty is given or implied.

The Phase I ESA was prepared at the request of Sobrato as part of the due diligence for acquisition of the property and may be relied on only by Sobrato and the Sobrato affiliate(s) formed to acquire the property, if any. No other party may rely on this report without the express written permission of Sobrato and PES.

Additionally, PES was not provided information regarding the purchase price of the subject property nor prices of comparable properties in the site vicinity. An evaluation of the purchase price to those of comparable properties should be conducted by the user of this Phase I ESA in accordance with ASTM's All Appropriate Inquiry (AAI) guidelines.

2.0 SITE DESCRIPTION

2.1 Location and Site Access

The subject property contains four single-story buildings with the addresses of 3201 and 3225 Ash Street, 200 – 382 Portage Avenue (referred to as El Camino Center), 270 Lambert Avenue, and 3250 Park Boulevard in the City of Palo Alto, Santa Clara County, California (Plate 1). The tenant space at 200 Portage Avenue also has the addresses of 3180 – 3200 Park Boulevard. Onsite parking is accessed from Portage Avenue and Park Boulevard. Street parking is available in front of the Ash Street building, and the Lambert Avenue building is accessed via an access road emanating from Lambert Avenue.

2.2 Site and Vicinity Characteristics

The subject property, which comprises approximately 15.48 acres, contains four buildings, an access road, and associated paved parking and landscaped areas. Matadero Creek, under an easement from Santa Clara Valley Water District, traverses the eastern portion of the site. The site is referred to by Santa Clara County Assessor's Parcel Numbers 132-32-037, -042, -043; 132-37-054, -057; and 132-38-043 and -059.

The site is zoned as a Commercial Downtown Community (CDCP) and is located in a primarily commercial area. The site is bounded to the northeast by Park Boulevard and a commercial building, to the southeast by commercial buildings, to the southwest by Ash Street, El Camino Real and commercial buildings, and to the northwest by residences.

2.3 Physical Setting

According to the United States Geological Survey (USGS) *Palo Alto, California* Quadrangle 7.5-minute series topographic map produced in 1999, the site vicinity is situated at an elevation of approximately 25 feet above mean sea level. The ground surface is relatively flat, but gently slopes regionally to the northeast.

2.4 Regional Geology and Hydrogeology

Based on the results of investigations performed in the site vicinity, the site is underlain by alluvial fan deposits associated with San Francisquito Creek to the west and Matadero Creek to the east. Soils in the area consist primarily of sandy silt and silty sand with intermittent gravel lenses, and have been subdivided into several water-bearing zones, as described in Section 4.2.2. Shallow groundwater has been encountered at approximately 14 to 20 feet below ground surface (bgs) in the site vicinity, and groundwater flow to the north-northeast has been measured (Stantec, 2010).

The nearest surface water is Matadero Creek, which traverses the eastern portion of the site. According to Federal Emergency Management Agency (FEMA) map information presented in the EDR report, the subject property is located within a 500-year flood zone.

2.5 Descriptions of Existing On-site Structures and Improvements

2.5.1 Structures and Current Use

The subject property contains four single-story buildings, an access road, and associated paved parking and landscaped areas. The property is used primarily for retail sales, offices and for auto repair activities. The main building at the site (200 – 382 Portage Avenue), is referred to as El Camino Center, and is occupied by multiple tenants. A listing of tenants and building use is included on Table 1.

2.5.2 Other Improvements

Electricity, natural gas, water and sewage services are provided by the City of Palo Alto.

2.6 Current Uses of Adjoining Properties

PES conducted a reconnaissance of the surrounding area to assess whether neighboring properties pose potential environmental concerns to the subject property. Adjacent land uses

are identified on Plate 2. Adjacent properties are used for commercial purposes, as described below.

Properties to the Northeast

The site is bounded to the northeast by Park Boulevard and a commercial building occupied by Park Automotive. Across Park Boulevard are commercial businesses, including Park Avenue Motors, Vance Brown Builders, Microsoft and iControl.

Properties to the Southeast

The site is bounded to the southeast by commercial businesses, including GM Advanced Technology, Say Ray Auto, Windows Systems Group and offices.

Properties to the Southwest

The site is bounded to the south by Ash Street, El Camino Real and commercial buildings. Farther southwest are commercial buildings.

Properties to the Northwest

The site is bounded to the northwest by residences.

2.7 Past Uses of Property and Adjoining Properties

Historical site use information discussed below was obtained through a review of historical aerial photos, historical topographic maps, Sanborn fire insurance maps, city directories, Palo Alto Building and Fire Department records, and interviews with persons knowledgeable of the site.

2.7.1 Aerial Photographs

PES reviewed aerial photographs for the following years provided by EDR: 1939, 1948, 1956, 1965, 1976, 1982, 1993, 1998 and 2005. Additional photographs were obtained for the following years from Pacific Aerial Surveys in Oakland, California: 1955, 1961, 1969, 1972, 1977, 1981, 1985 and 1989. The photographs are presented in Appendix A. The aerial photographs reviewed are summarized below.

Subject Property

1930s – 1940s: The 1939 aerial photograph shows the northern two-thirds of the main subject property building present. Immediately southwest of the building is a parking lot through which the existing Ash Street extends. There may some small buildings or residences in the parking lot area, but the quality of the photograph prevents further definition of small features.

A railroad spur is present along the northwest side of the building; several railcars are present. A railroad track runs along the west side of the property, diverging and forming a "V" at the northwest corner of the site. Two small buildings are adjacent to the northwest side of the main building, between the railroad tracks and the spur. Another building is present near the southeast corner of the building. The building is rectangular with a square cutout in the northeast corner. A small residence or other building is present in the area of the current office buildings. Some small sheds or outbuilding may be present in this area. Matadero Creek is present along the east side of the property. The area currently occupied by Smythe European and Comcast may be occupied by some small buildings; the quality of the photograph prevents further identification. On the 1948 photograph, three additional features which appear to be sheds or buildings are present on the east side of the subject property, between the main building and Matadero Creek. Materials which appear to be crates or other containers are stored along the length of Matadero Creek. The current office building at 3201/3225 Ash Street appears to be present in its current configuration.

1950s: On the 1955 photograph, the three buildings east of the main building and material stored along Matadero Creek observed on the 1948 photograph are no longer present. The east side of the main building appears in use as a loading dock, and several truck trailers are present in the dock area and parked along Matadero Creek. Some materials appear stored between the existing office building and the building east of the main building. The area immediately south of the two buildings on the west side of the main building appears unpaved, and some stored objects or other small features are visible in this area. The area east of Matadero Creek where buildings were previously observed is now vacant. No significant changes are apparent on the 1956 photograph.

1960s: On the 1961 photograph, there are no longer any truck trailers parked along Matadero Creek. A small shed is visible at the northeast end of the current office buildings. The area immediately southwest of the two buildings on the east side of the main building appears darkened; several items appeared stored in this area. Several truck trailers are parked on the narrow strip of land adjacent to the railroad tracks southwest of the main subject property building. It appears that demolition or grading activities are in progress on the subject property east of Matadero Creek. On the 1965 photograph, the area east of Matadero Creek has been cleared and is use as a parking lot. No apparent changes to the subject property are apparent on the 1965 and 1969 photographs.

1970s: The 1972 photograph shows the strip of land southwest of the main subject property building occupied by numerous cars, and appears to be a auto sales or staging lot rather than a parking lot. Only a few vehicles are present in this area on the 1977 photograph. On the 1977 photograph, a rectangular area with a long narrow strip is visible, which could be a structure or pavement patching, is present in the parking lot on the east central portion of the site near Matadero Creek.

1980s: The 1981 photograph shows additional long strips emanating from the rectangular feature, which suggests it may be pavement patching. On the 1985 photograph, the railroad and spur lines and the two buildings northwest of the main building have been removed, and the parking areas on the east and west side of the main building have been repaved. The 1989 photograph shows the presence of the existing Comcast building east of Matadero Creek.

1990s to 2000s: No significant changes to the subject property are apparent on aerial photographs from the 1990s. The 2005 photograph shows that the building formerly present north of the existing office building has been demolished. The existing Smythe European building is now present east of Matadero Creek.

Subject Property Vicinity

On the 1939 photograph, the subject property vicinity is shown as partially developed. A commercial building is present immediately southwest of the main subject property building, and commercial buildings are present along El Camino Real. The remainder of the area is primarily residential and undeveloped, with some commercial buildings. The 1948 photograph shows increased development in the subject property vicinity, primarily residential. Commercial buildings are present immediately east of the site along Ash Street. The existing residences west of the railroad tracks are present. The 1955 and 1956 photographs show the area between El Camino Real and Alma Street fully developed with residences and commercial properties. Some undeveloped areas remain farther north and south of the subject property. Aerial photographs from the 1960s show residential development of the area north of Alma Street, and commercial development south of El Camino Real. The 1961 photograph shows the presence of the current Park Automotive building, and the channelization of Matadero Creek. The area east of the site across Matadero Creek appears to have been redeveloped with commercial buildings and a parking area. In the 1970s, the area north of the site across Park Boulevard has been redeveloped with new commercial buildings. No significant changes to the subject property vicinity are apparent on aerial photographs from the 1980s. On the 2005 photograph, a new commercial building campus is present west of the site.

2.7.2 Sanborn Fire Insurance Maps

Sanborn Fire Insurance Maps were obtained from Environmental Data Resources, Inc. (EDR) of Milford, Connecticut. Maps for the following years were reviewed: 1956, 1969, and 1978. Copies of the maps are presented in Appendix B. The following is a summary of the maps.

Subject Property

The 1956 Sanborn map shows the main subject property building present and in use for warehousing; one of the sections is labeled as a grocery warehouse. Two very small sheds or other features are present on the northwest side of the warehouse. A railroad spur is present along the northwest side of the building, and a Southern Pacific Railroad (SPRR) line is present next to the spur. Near Park Boulevard, the SPRR splits and continues to the northwest

and northeast. Near Park Boulevard, and between the spur and SPRR, two small buildings are present. One is labeled as a warehouse; the other is labeled as open and vacant. The currently existing building at 3201/3225 Ash Street is present, although the building appears to be in two sections; the labeled use of the building is illegible. Immediately northeast of the 3201/3225 Ash Street building is an L-shaped building which appears to be labeled as a warehouse. A small oval feature is shown southeast of the site. The area of the subject property west of Matadero Creek is vacant.

On the 1969 map, the uses of the main building shown, starting from the southwest end of the building, are an electronic parts warehouse, a bearing manufacturer and warehouse, a paper container manufacturer, a paper products warehouse, a display manufacturer, and a department store. The building between the rail spur and the SPRR is labeled as a foundry, and the building immediately northeast of the 3201/3225 building is shown as a packaging and crating facility. Two small sheds or other structures are shown adjacent to the oval feature.

On the 1978 map, the labeling of the bearing manufacturer, paper container manufacturer, and paper products warehouse have been manually crossed out and labeled as "M" (which often stands for manufacturing), although it is known that the bearing manufacturer was present in the building during this period (see Section3.1). The oval adjacent to the L-shaped building is gone, but the two small buildings remain. There are no other significant changes to the subject property from the 1969 map.

Subject Property Vicinity

The 1956 map shows a Safeway Stores food warehouse immediately southwest of the main subject property building. Residences and a dry cleaner (fronting on El Camino Real) are present across the SPRR. North of the subject property, across Park Boulevard, is a building labeled as a water softening service.

On the 1969 map, an electronic lab and electrical switch warehouse is present adjacent to the water softening service. In the "V" formed by the separation the SPRR lines, two small buildings are present, labeled as auto repair and railroad storage. East of the site, across Matadero Creek, a building labeled as "printing" is present. The building formerly occupied by Safeway Stores is now occupied by General Electric and used as microwave labs. An auto service facility is immediately southwest of the General Electric building. The former dry cleaner southwest of the site has been replaced by an auto repair facility and a billiard parlor. One of the residences west of the subject property across the SPRR tracks is labeled as a store with miscellaneous storage.

On the 1978 map, the former General Electric building is shown as a merchandise warehouse. A building labeled as "M" is present southwest of the office building, across Ash Street. An auto parts warehouse and an auto sales and service facility are present east of the site, across Matadero Creek. No other significant changes in the subject property vicinity are apparent.

2.7.3 Historical Topographic Maps

PES reviewed the USGS *Santa Cruz, California* Quadrangle 30-minute series topographic map produced in 1902; USGS *Palo Alto, California* Quadrangle 15-minute series topographic maps produced in 1899, 1943, 1947, 1948 and 1961; and the USGS *Palo Alto, California* Quadrangle 7.5-minute series topographic maps produced in 1953; 1961; 1968 and 1973 photorevised from 1961; 1991; and 1997. The maps are included in Appendix C. The following is a summary of the historical topographic map review.

The 1899 and 1902 maps show the subject property as vacant. Maps from 1943 through 1973 show the main subject property building present; the remainder of the site is shown in a developed urban area, and no building footprints are shown. The SPRR tracks formerly present on the subject property are also shown on topographic maps from 1943 through 1973. Subsequent maps show the subject property and vicinity as a developed urban area, and no building footprints are shown.

The 1899 and 1902 maps show the subject property vicinity as primarily vacant, however the 1902 map shows a building in the subject property vicinity. The scale of the map precludes determining the exact location of the building. The remaining maps show the subject property vicinity as a developed urban area, and no building footprints are shown, although the 1961 map shows the addition of a building immediately southwest of the main subject property building.

2.7.4 City Directories

PES contracted with EDR to perform a search of historical city telephone directories for the site address and adjacent addresses. A search of city directories was performed by EDR for the years from 1922 through 2001 in approximately 5-year intervals. The EDR city address directory abstract is presented in Appendix D.

The results of the search are summarized below. The designation of addresses to subject property buildings has changed over the years.

Subject Property

At 3201 Ash Street, Dura-Bond is listed from 1960 through 1986, including a listing for Eaton Corporation in 1975. In 1991 and 2001, WSJ Properties and California Family Foundation are listed. There was no listing for 3225 Ash Street.

The address of 3200 Park Boulevard (currently also known as 200 Portage) is listed in 1965, 1970, 1975 and 1978 as Maximart Department Store. Listed shops/tenants include automotive & bikes, camera, cleaners & laundry, hardware, furniture, jewelry, radio, clothing, sundries and a snack bar. Subsequent listings for this address include Advanced Technology (1985 and 1986), Computer Parts Mart (1986), Nyden Eclectic Construction (1986), Mid Peninsula

Access (1991), and Cable Co-op (1991 and 2001). There was no listing for 3250 Park Boulevard, the current address for Smythe European.

There were limited listings for Portage Avenue, which is typical for warehouse use areas. Basket Galleria was listed at 340 Portage in 1986 and 1991. Pacific Data Images was listed at 370 Portage in 2001, and Varian Associates was listed at 380 Portage in 1978.

Palo Alto Foundry is listed at 3180 Park Boulevard in 1970 and 1975, at 3295 Park Boulevard in 1955, 1960 and 1965, and at 292 Lambert Way in 1975.

Subject Property Vicinity

Listings in the surrounding area include numerous commercial businesses and residences. Listings for Lambert Avenue included a printing company, machine shops, several auto repair facilities, and other businesses. Listings for Park Boulevard included a water softening facility, BMW dealer, auto repair facilities, machine shops and contractors.

2.7.5 City of Palo Alto Building and Planning Department Records

PES reviewed Palo Alto Building Department records for the subject property. Original construction permits for the subject property buildings were not available, other than for the 3250 Park Boulevard building. Pertinent findings are summarized below.

- A 1959 building permit indicated the building at 3201 Ash was "remodeled completely". A 1977 occupancy report shows the building at 3201 Ash occupied by Dura-Bond and Eaton Corporation and was used as offices. In 1985, Dura-Bond leased half of the building space to Learning Live;

- A 1968 occupancy report shows Palo Alto Foundry at 3180 Park. A 2005 occupancy report lists Green Citizen at 3180 Park, which used the facility for electronics recycling;

- A 1976 occupancy report lists Maximart at 3200 Park;

- In 1986, a permit is issued for construction of a 1,650 square foot building with antenna tower for Cable Co-op; and

- In 2003, a permit was issued for construction of an auto repair facility at 3250 Park Boulevard (current location of Smythe European).

2.7.6 City of Palo Alto Fire Department Records

PES reviewed Palo Alto Fire Department (PAFD) records for the subject property. PAFD records identifying historical tenants or hazardous material use or storage information are summarized below.

- A 1975 incident report for Palo Alto Foundry at 3180 Park indicates that foundry ovens were issuing smoke, and PAFD had been called;

- Hazardous Materials Inventory Statements from 1982 through 1984 for Dura-Bond Bearing Company list use of Amsco Solvent 140 (propylene glycol/monobutyl ether), Tonna 68 machine oil (mineral oil, triazole derivative), Cimclean 30 (ethanolamine) Tellus 32 hydraulic oil, gasoline, Stoddard solvent, Oakite Special Protective Oil (petroleum hydrocarbons), Ferrocote 364 (aliphatic solvent, mineral oils, petroleum sulfanate salt, oxidized petroleum wax, glycol ethers), Cimperial #10 (water soluble cutting fluid), machine coolant, cutting fluids, machine and lubricating oils (petroleum hydrocarbons), Kolene Flakes #1 (sodium hydroxide, sodium chloride, sodium nitrate), hydrochloric acid, muriatic acid, zinc chloride, oxygen and acetylene gases. Listed generated wastes included filter press cake (from water treatment sludge), grinder swarf, waste oil, and unspecified liquid wastes;

- A 1984 El Camino Center tenant list included Varian Associates (warehouse), Dura-Bond (manufacturing and warehouse), Bemiss-Jason (manufacturing and warehouse), Beckman (warehouse), Ellis Enterprises (automotive and warehouse), and James Packing (manufacturing and warehouse);

- A 1993 El Camino Center tenant list included Varian Associates (warehouse), Cable Coop (warehouse and offices), Coherent (warehouse), Euphonix (electronic development and warehouse), Leong/Eberh (warehouse, mini-storage, exterior auto storage), Lanig Moran (office), Fry's (retail, offices, and warehouse), Mercer Processing (food processing and warehouse), Interior & Textiles (warehouse), and W&J (offices);

- An April 28, 1993 City of Palo Alto Memorandum reported that considerable lead contamination had been identified in soil at the Dura-Bond site. The memo, which cited attached data (but which was not present in PAFD files), noted that there was no key as to where the samples were taken, but were in the general babbitting or manufacturing area. The memo also referred to a $17,500 fine levied against Dura-Bond in 1989 for wastewater and hazardous materials violations. The author indicated that there should be a closure file on the site, but staff apparently couldn't find it as the file was a "mixed-up conglomeration";

- A 1998 El Camino Center tenant list included Fry's Electronics (retail, offices and warehouse), Varian/Tell Me (warehouse and shipping), Cable Co-op (office/studio and warehouse), Euphonix (office, research and development, are warehouse), Mercer Processing (food processing and warehouse), Pacific Data Images (offices), Lanig Moran (office), California Family Foundation (offices), Rescue Now (office), and WSJ Properties (office);

- Mercer Processing at 230 Portage was issued Hazardous Material Permits from 1990 through 1998. A 1998 Hazardous Waste Inventory for Mercer Processing listed use of Genesolv 2000 solvent (contains dichlorofluoroethane), sodium hydroxide, sodium metasulfite and hydraulic oil, and generation of waste oil, all with an average of 55 gallons onsite, except for an onsite average of 650 gallons of Genesolv 2000;

- During a 1999 facility closure inspection of Mercer Processing at 230 Portage, PAFD noted the following: Genesolv 2000 refrigerant was moved to the Park Boulevard building (no address specified); major staining – primarily oil – was observed which was absorbed with absorbent; PAFD was not concerned regarding contamination traveling through the concrete floor into soil because of the type of chemicals used; floor drains were inspected and appeared to be intact with no indication of corrosion or lack of integrity; and no indication of chemical contamination to piping that contained Genesolv 2000 was observed after refrigerant was evacuated from piping. The inspection report noted that a closure report was required (no copy in PAFD files), and that a determination would need to be made regarding the need for soil sampling in areas where chemical and rust staining on the floor was observed. No further determination regarding the need for soil sampling was located in PAFD records;

- During a 2005 inspection of Teak Patio at 230 Portage, PAFD warned Teak Patio that furniture "wastewater" and refinish "wastewater" should not enter the sanitary or storm sewer. No violations were issued. During a 2007 inspection of the facility, PAFD noted the presence of five 1-gallon containers of teak sealer, less than 10 gallons of latex paint, and less than 5 gallons of other (unspecified) materials; and

- Smythe European has a Hazardous Material Business Plan on file which lists storage of motor oil, gear lube, automatic transmission fluid, antifreeze, welding gases, and generation of waste motor oil and waste antifreeze. No violations were on file for the facility.

2.7.7 WSJ Properties Records

WSJ Properties supplied numerous historical site records to PES on DVD and electronically. Information contained in the records, but not discussed in Section 3.0, which discusses historical site investigations, are summarized below.

- A map dated October 1953 labeled as Safeway Stores, Inc. shows the presence of the main subject property building, which is noted as warehouse space. A notation indicates the presence of three transformers in the main building. A gas pump is shown at the northwest corner of the building. Two buildings are shown on the northwest side of the main building. One is shown as vacant, and the other is shown as a salvage building. A sump is shown between the two buildings. The existing office building is present on Ash Street (shown as First Street on the map), and is shown as an office. Two small sheds or other structures are shown near the northeast end of the building; both structures are shown as vacant. Scales and a scale house are shown between the

office and warehouse building. An additional building is shown on the site, north of the office building and east of the warehouse building. The building has two sections, labeled as warehouse and truck maintenance. Near the northeast corner of the building, notations list a 1,000-gallon diesel oil tank and pump, and two 1,000-gallon gas tanks and pump. A circular feature and what appears to be a canopied area is shown in the vicinity of the tanks;

- Plans from 1984 for the 3200 Park Boulevard tenant space show the presence of a darkroom, stripping room, plate-making room and type-setting area. The tenant space is noted as "printing facilities". Plans from 1986 and 1987 show this tenant space occupied by Cable Co-op. Areas shown include cable casting, an electronics lab, and a "tek" area;

- Removal of asbestos-containing tile and adhesive was conducted from 210 Portage in August 1993;

- Plans from 1997 show tenant improvements for Euphonix to the tenant space at 210 Portage. Use of the tenant space appears to be primarily office use;

- Tenant improvement plans from 1998 for 210 Portage indicate PayCycle as the tenant, and used as an office;

- Pacific Data Images is shown as the tenant at 350 Portage in 1995 and 1998. Pacific Data Images is also shown as a tenant at 370 Portage in 1997;

- Idealab! Is shown as a tenant at 380 Portage in 2000, with office use of the tenant space;

- Notes from a "Toxic Meeting" dated April 9,1992 report that the original test of the sewer discharge at the Mercer facility showed the presence of carbon tetrachloride, but that a second test showed that carbon tetrachloride had decreased, but that trichloroethene (TCE) was present at 15 parts per billion; and

- In February 1992, Environ Corporation notified WSJ Properties that, while drilling borings on the subject property for installation of groundwater monitoring wells associated with the Varian and Hewlett Packard investigation (see Section 4.2.2), fuel odors were noted, and elevated concentrations were detected with an organic vapor monitor in soil removed from the borehole (Environ, 1996). Environ subsequently grouted up the borehole and moved the well installation location.

2.7.8 Interviews with Persons Knowledgeable of the Subject Property

PES interviewed Mr. Boyd Smith and Mr. Robert Wheatley of WSJ Properties, property owner, concerning historical uses of the subject property. The results of our interviews are summarized below.

- Mr. Boyd Smith believed the main subject property building had been constructed sometime between the 1930s to 1950s;

- Mr. Robert Wheatley reported that WSJ Properties purchased the subject property in approximately 1974, and managed the property until 2002. Robert Wheatley Properties has been managing the property since 2002;

- Mr. Smith reported that the north end of the main building was occupied by a market which contained several stalls with different vendors, such as a snack bar, clothing stall, hardware stall, etc.;

- According to Mr. Smith, Dura-Bond made bearings at their facility. They performed babbitting operations wherein they immersed bearings in pits in the ground; he believed they used lead. He recalled that they had a concrete, sump-like storage pit in the back of the building, and that there was regulatory involvement in removing the pit sometime in the 1980s. He noted that when Dura-Bond vacated the facility in the late 1980s, their consultants collected wipe samples from the walls of the tenant space to confirm that there was no contamination. He indicated that no contamination was found on the walls or other surfaces of the building;

- Mr. Smith indicated that the Palo Alto Foundry vacated the site in approximately 1974 to 1975. The building was subsequently occupied by a business that rebuilt and painted vintage autos. They remained at the site one to two years. The building was demolished in the late 1970s;

- Mr. Smith reported that during demolition of the former James Packing building in approximately 2000 to 2001, a UST was encountered. To the best of his recollection, the UST was either already filled with sand, or was filled with sand when encountered. He was unsure as to whether the UST was removed or left in place. Mr. Smith was unaware of any regulatory documentation concerning the UST. He reported that the building was used by James Packing for packing and crating, and was previously used by Varian Associates for storage;

- Mr. Smith stated that Beemis Jason was a former tenant at 250 Portage. They were a paper fabricator which produced paper products and displays. Mr. Smith reported that they vacated the site in approximately 1979 to 1980;

- Mr. Smith further reported that, as far as he knew, the existing office building at 3201/3225 Ash Street had always been used for offices;

- Mr. Smith reported that several years ago they had some problems with Say Ray Auto, the facility immediately adjacent to the 3201/3225 Ash building, dumping liquids and other wastes out the back of their facility on to the subject property. Say Ray removed the materials, and a fence was constructed. They have had no further problems;

- Mr. Wheatley reported that during construction of a stairway on the northwest side of the main building. Some railroad track lines were encountered and removed; and

- Mr. Wheatley indicated that there had been no concerns regarding mold or indoor air quality at the subject property buildings.

3.0 RESULTS FROM PREVIOUS SITE INVESTIGATIONS

Several investigations and remedial activities have been performed on the subject property, including Phase I ESAs, soil and groundwater sampling, underground storage tank (UST) removals, soil excavation and other activities. Records concerning the subject property were provided by Wheatley Properties and/or obtained from the Santa Clara County Department of Environmental Health (SCCDEH) and the California State Water Resources Control Board's GeoTracker website located at http://geotracker.swrcb.ca.gov/. PES's review of these documents is summarized below, and selected documents are included in Appendix E on CD.

3.1 Former Dura-Bond Facility Investigation and Remedial Activities

Dura-Bond operated at the subject property since approximately 1960 manufacturing camshaft bearings for the automotive industry. Property addresses for the site have included 360, 370 and 395 Portage Avenue, as well as 3201 Ash Street. Manufacturing operations were performed at the Portage facility, and offices were maintained at 3201 Ash Street.

Wastewater Impoundment/Treatment Facility Remediation

Dura-Bond's manufacturing process produced a wastewater stream containing elevated concentrations of chromium, cadmium, iron, lead and zinc. From 1960 to 1971, the untreated wastewater was discharged to the sanitary sewer. From 1971 to 1980, the wastewater was neutralized and sediments allowed to settle. The treated wastewater was discharged to the sanitary sewer and the settled solids were discharged to an unlined sludge pond located immediately outside the west side of the building which measured approximately 20 feet by 25 feet (Emcon, 1981a). Until 1980, the sludge was allowed to dry and then disposed offsite. Beginning in 1980, the pond was no longer used and sludge was disposed offsite while still wet.

In 1981, in a preliminary investigation of the sludge pond performed to develop a plan for closure of the pond, elevated concentrations of lead, zinc, cadmium, chromium and iron, including up to 38,600 milligrams per kilogram (mg/kg) of zinc, was found in soil beneath the pond (Emcon, 1981a). Concentrations of metals decreased with depth, but elevated concentrations of zinc remained at approximately 6 feet bgs. In 1981, the pond was closed by removing soil beneath the pond to a depth of 5 feet bgs and backfilling the excavation with silty clay. Excavated soil was disposed offsite (Emcon, 1981b).

In 1983, Dura-Bond began using a new treatment system, and performed a soil investigation in preparation for closing the remainder of the old system, which included an acid storage tank, mixing tank, sedimentation tank, pH controller and associated pumps. Soil samples collected from three locations to depths of approximately 3 feet bgs indicated the presence of elevated concentrations of lead and zinc (Emcon, 1983a). In October 1983, soil was excavated from the wastewater treatment equipment area to a depth of approximately 4 feet bgs and disposed offsite. The excavation was backfilled with clean soil, with the upper 6 inches backfilled with drain rock to facilitate construction of a concrete pad over the area (Emcon, 1983b).

Also in 1983, spillage was discovered around the riser pipe and unlined vault box surrounding the riser pipe for a 5,000-gallon underground liquid waste tank used for accumulating waste oil, coolants and corrosion preventatives (Emcon, 1983c). Staining was observed on soil in the vicinity of the riser pipe after the concrete pad covering the UST and vault box was removed. Soil samples were collected at depths of approximately 10 to 11.5 feet bgs from an exploratory boring advanced adjacent to the UST. The boring was converted to a groundwater monitoring well (E-1), and a groundwater sample was collected from this well and another downgradient monitoring well (DM-1) previously installed as part of a leak detection system for USTs present at the site. All samples were analyzed for the presence of Stoddard solvent. No Stoddard solvent was detected in any of the samples, but other unidentified compounds were detected in the samples. Additional groundwater samples were subsequently collected from these two wells and analyzed for the presence of volatile organic compounds (VOCs) and semi-volatile organic compounds SVOCs. Elevated levels of VOCs were detected in both wells; TCE was detected at 239 and 708 micrograms per liter (μg/L).

In 1984, a 1,000-gallon Stoddard solvent UST, a 500-gallon gasoline UST, and a 500-gallon diesel UST were removed from the west side of the Dura-Bond facility (Emcon, 1984). Soil contamination was observed beneath the gasoline and diesel USTs which were present in a single excavation. Emcon reported excavation of the former gasoline and diesel UST excavation to approximately 10 feet bgs. Analysis of three soil samples collected from the bottom of the excavation indicated the presence of diesel fuel in one sample at 5,200 mg/kg, "hydrocarbons resulting from gasoline contamination" in two samples at 580 and 860 mg/kg, and lead in all three samples at concentrations ranging from 9 to 26 mg/kg. Stoddard solvent was not detected in soil. Groundwater samples were collected from two existing monitoring wells near the excavation, and analyzed for the presence of Stoddard solvent and hydrocarbons as diesel. Diesel was detected in one sample at 2,600 μg/L.

Following the excavation activities, a groundwater monitoring well (E-2) was installed in the backfilled excavation area, and groundwater samples were collected from this and the two previously-existing monitoring wells near the Dura-Bond facility (Emcon, 1985b). The samples were analyzed for the presence of gasoline, diesel, Stoddard solvent, lead, TCE, 1,1,1-trichloroethane (1,1,1-TCA), and perchloroethene (PCE). Volatile hydrocarbons (gasoline) and benzene were detected in Well E-2 at concentrations of 9,500 and 150 μg/L, respectively. Lead was present in two wells at 50 and 280 μg/L. TCE and 1,1,1-TCA were detected in all three wells at concentrations up to 540 and 130 μg/L, respectively. Stoddard

solvent was detected in one well at a concentration of 20 µg/L. Emcon reported that the volatile organics (TCE and 1,1,1-TCA) appeared to be migrating onto the site from an up gradient source, because Dura-Bond had never used these chemicals in their operations. Additional groundwater samples were collected from the three wells at the request of the California Regional Water Quality Control Board (RWQCB), and both filtered and unfiltered samples were analyzed for the presence of lead. No lead was detected in any of the samples (Emcon, 1985b). Also at the request of the RWQCB, Emcon developed a Remedial Action Plan for the Dura-Bond facility (Emcon, 1985). Emcon identified groundwater extraction and treatment as the most effective treatment, but concluded that the cost for treatment was high when the potential for migration of the contaminants to a location where they would have an adverse impact was low.

In 1986, an upgradient groundwater monitoring well (E-3) was installed to evaluate groundwater flow and the potential for the presence of upgradient sources of the VOCs previously detected in the Dura-Bond wells. The well was located near the southwest corner of the main subject property building, adjacent to the tenant space in use at the time by Varian for warehousing. A soil sample collected at a depth of approximately 14 to 15.5 feet bgs from immediately above groundwater and a groundwater sample from the newly-installed well were analyzed for the presence of VOCs. TCE was detected in the soil sample at a concentration of 70 mg/kg. Several VOCs were detected in groundwater, including TCE at a concentration of 340 µg/L and 1,1,1-TCA at a concentration of 25 µg/L. Groundwater level measurements confirmed that the well was located upgradient of the Dura-Bond facility. Emcon concluded that the source of VOCs identified in wells at the Dura-Bond facility was located upgradient of the facility. As a result, subsequent groundwater monitoring did not include analysis of VOCs because the VOCs detected in groundwater had reportedly not been used by Dura-Bond.

The results of semiannual groundwater monitoring from April 1986 through March 1988 indicated that total petroleum hydrocarbons quantified as gasoline (TPHg) was detected in groundwater in decreasing concentrations (4,300 µg/L in April 1986 to 1,300 µg/L in February 1987), but the well had been dry since the September 1987 sampling round. TPHg was not detected in the other two wells for the last four sampling rounds.

1989-90 Facility Closure Activities

In January 1989, in preparation for the impending closure of the Dura-Bond facility, an inspection of the Dura-Bond facility was performed on behalf of WSJ Properties by Safety Specialists, Inc. (SSI). SSI performed a preliminary reconnaissance of the facility to identify sites that may require additional investigation. SSI identified 17 such sites, including stained concrete flooring, various sumps, a drum storage area, an electrical transformer, dust-covered areas, various storage areas, a machine shop and welding area, a lead coating area, patched floor sections, gasoline pump and UST area, and an oil/water separator (SSI, 1989a). Recommended investigations included obtaining wipe, concrete chip, fluid and soil samples for analysis.

In March 1989, Dura-Bond prepared a Facility Closure Plan which described closure of USTs and the chemical storage area, manufacturing and warehouse area, and water treatment system area (Dura-Bond, 1989). The plan described soil sampling and analysis to be performed following removal of the existing USTs and associated piping, steam cleaning of the chemical storage area, wipe and soil sampling in the manufacturing and warehouse area, steam cleaning in the babbitting area, and dismantling the wastewater treatment system.

Undated draft figures and tables included in a transmittal from Emcon to Dura-Bond indicated that some soil sampling and analysis and soil excavation was performed inside the Dura-Bond facility (Emcon, 1989a). The excavation area indicated on a figure was located in the south central portion of the building, near where SSI observed concrete patching during their January 1989 inspection (SSI, 1989a). The figure suggests that the excavation was extended laterally until concentrations of high boiling point hydrocarbons (HBPH) as diesel and oil were at or below 100 mg/kg. The depth of the excavation is unknown, but a sample collected from 5 feet bgs contained HBPH as diesel and oil at 8,500 and 3,000 mg/kg, respectively. It appears that some wipe sampling was also performed, although no analytical results were included on the tables. No reports concerning these activities were identified in WSJ Properties' or regulatory agency files.

In April 1989, a 1,000-gallon Stoddard solvent UST, a 500-gallon unleaded gasoline UST, a 5,000-gallon waste oil UST and associated piping and aboveground pumps were removed from the Dura-Bond facility (Emcon, 1989b). The gasoline and Stoddard solvent USTs were in a single excavation. Three soil samples were collected from the joint excavation and analyzed for the presence of HBPH as Stoddard solvent and one sample was analyzed for low boiling point hydrocarbons (LBPH) as gasoline and benzene, toluene, ethylbenzene and xylenes (BTEX). Only low concentrations of HBPH as Stoddard solvent (up to 26 mg/kg) were detected in the three samples, and very low levels of LBPH as gasoline and BTEX in one sample. Iterative sampling was performed to determine the limits of excavation for the waste oil UST excavation. Total oil and grease (TOG), HBPH as diesel, oil and Stoddard solvent were detected in initial samples collected from the base and sidewalls of the excavation. The excavation was ultimately extended to approximately 17 to 18 feet bgs until no significant concentration of contaminants remained in soil samples collected from the bottom and sidewalls of the excavation. A groundwater sample collected from the bottom of the excavation contained TOG, HBPH as diesel and oil, TCE and 1,1,1-TCA at concentrations of 4,200; 42,000; 8,000; 133; and 19 μg/L, respectively. No concentrations of metals above background levels or select VOCs (including TCE and 1,1,1-TCA) were detected in any of the soil samples. Emcon concluded that contaminated soil associated with the USTs had been successfully removed, but that groundwater monitoring would continue. Groundwater samples were collected from two wells in September 1989, and no petroleum hydrocarbons as gasoline or BTEX were detected (Emcon, 1989b). One of the wells was dry, so no sample was collected. Emcon's presentation of analytical data indicated that no contaminants had been detected in two of the wells since 1986, and that one well had been dry since September 1988. Prior to being dry, gasoline and benzene were detected in the well at 1,300 and 5 μg/L, respectively, in February 1988.

In September 1989, Emcon and SSI collected soil samples for analysis from beneath and adjacent to the wastewater and babbitting areas (Emcon, 1989c). A total of 43 samples were collected from 26 locations at depths ranging from approximately 1 to 10.5 feet bgs. Samples were analyzed for one or more of the following: antimony, cadmium, chromium, lead, nickel, zinc, pH and a hydrocarbon scan. Elevated concentrations of lead and zinc were detected in the babbitting area, and elevated concentrations of lead were detected in the wastewater treatment area. Zinc concentrations ranged from not detected to 40,000 mg/kg (collected from approximately 1.5 feet bgs), and lead concentrations ranged from not detected to 10,000 mg/kg (collected from approximately 1 foot bgs). Several concentrations of both lead and zinc were above the current RWQCB residential Environmental Screening Levels (ESLs) for lead and zinc of 200 and 600 mg/kg, respectively. pH ranged from 4.59 to 12.11. No hydrocarbons were detected in any of the six samples analyzed.

Based on the results of the September 1989 soil sampling, Emcon excavated five areas in the babbitting room and one area in the wastewater treatment during the period from October to December 1989 (Emcon, 1989e). The criteria for excavation was areas with lead or zinc exceeding their respective TTLC (total threshold limit concentration; a hazardous waste determination criteria) of 1,000 and 5,000 mg/kg, respectively, and soil within 2 feet of the ground surface with concentrations of 1/10 the TTLC. The areas selected for excavation included: (1) soils beneath babbitting room pits to a minimum depth of 3 feet below each pit; (2) surface soils around and underneath the babbitting room wastewater sump to a depth of 3 feet below the sump; (3) surface soils beneath damaged concrete area to a minimum depth of six inches; and (4) soil in the wastewater treatment area (approximately 3 feet by 13 feet) to a depth of approximately 4 feet. The final excavation depths ranged from approximately 1 to 17 feet bgs. Based on the results of confirmation sampling, it appears that Emcon's cleanup criteria were met; however, in one excavation, a confirmation sample was not collected following additional excavation below a sample containing 7,400 mg/kg of zinc. Additionally, although the TTLC criteria were met, concentrations of zinc up to 2,400 mg/kg, which is significantly above the residential ESL of 600 mg/kg, remained in place at depths of approximately 17 feet bgs. The excavations were backfilled with clean pea gravel and capped with concrete.

During February 1990, ENSR performed an indoor surface contamination study of the vacant Dura-Bond facility (ENSR, 1990). ENSR collected 14 samples of settled dust and dirt from roof trusses and beams, rollup doors, electrical panels, light fixtures, and roof exhaust ducts. Samples were analyzed for 24 metals. The most predominant metals detected were aluminum, iron, manganese, lead, antimony, tin, tungsten and zinc, with lead detections ranging from 0.8 to 11.9%. Because of the relatively high concentrations of lead, and moderate levels of other metals, ENSR recommended that all horizontal surfaces be cleaned by a non-dispersive method.

Groundwater sampling was performed at four groundwater monitoring wells at the site in February 1990. Well E-1 had been decommissioned and replaced with Well E-5. All four wells were analyzed for filtered and unfiltered metals; no metals were detected above U.S. EPA Maximum Contaminant Levels (MCLs). Groundwater from Wells E-4 and DM-1 was analyzed for the presence of gasoline, BTEX, Stoddard solvent, and HBPH as kerosene, diesel and oil; none of these analytes were detected above reporting limits. Groundwater from Well E-5 was analyzed for gasoline and BTEX. Benzene was detected at 0.9 μg/L, but was not detected in a duplicate sample collected from the same well.

In approximately February 1990, soil sampling and analysis was performed at the former Dura-Bond facility on behalf of the property owner to verify the completeness of site remediation performed at the facility by Emcon during October through December 1989 (Parfitt, 1990a). Soil samples were collected from 67 locations from borings extended to either approximately 4 or 10 feet bgs. Samples were collected at intervals of approximately 4 to 5 feet in the deeper borings. Analytical results indicated the concentrations of zinc present in excess of the TTLC (5,000 mg/kg) in the former babbitt room to a depth of at least 10 feet. Lead was detected above the TTLC of 1,200 mg/kg in the area of the former waste treatment area. TCE was also detected in one sample from approximately 3 feet bgs in the former babbitt room above the reporting limit, although the concentration is not reported in the available documentation.

Tentative Site Cleanup Requirements

RWQCB records for Dura-Bond include a letter transmitting Tentative Site Cleanup Requirements for Dura-Bond Bearing Company (RWQCB, 1990). The letter cites a December 1989 site closure report which documented heavy metals in the soil beneath the babbitting room pits and wastewater sumps, and lists concentrations up to 35,700 mg/kg of zinc, 2,260 mg/kg of lead and potentially hazardous levels of chromium, vanadium and other metals. Elevated levels of zinc and lead were also reportedly detected in a grab groundwater sample. Additional metal contamination beneath the manufacturing area was reportedly identified in April 1990, and included soil concentration in excess of 10,000 mg/kg of zinc, 0.4 mg/kg of chromium VI, 100 mg/kg of chromium III and 100 mg/kg of nickel. The data correlate to that reported in Emcon and Parfitt reports as discussed above. The Tentative Site Cleanup Requirements call for the performance of additional investigation, a feasibility study, and preparation and implementation of a Remedial Action Plan. RWQCB records did not indicate that the Tentative Site Cleanup Requirements for Dura-Bond Bearing Company was ever filed.

1997 Groundwater Sampling

In July, September and December1997, groundwater samples were collected from Wells E-3, E-4 and E-6. Collected samples were analyzed for HBPH as hydraulic fluid, diesel, kerosene, jet fuel and Stoddard solvent, BTEX and VOCs. HBPH as hydraulic fluid was detected in Well E-3 at concentrations ranging from 100 μg/L to 6,700 μg/L. Some VOCs were detected

in all three wells, including TCE, which was detected in two wells at concentrations ranging from 7 to 190 μg/L. PCE was detected in one well at 30 μg/L.

In 1998, the RWQCB notified Dura-Bond that chlorinated VOCs detected at the site were consistent with the regional VOC plume (COE Study Area; see Section 4.2.2) mainly attributable to Hewlett-Packard and Varian Associates. Accordingly, the RWQCB reported that neither Dura-Bond nor the property owners would be responsible for any groundwater investigation, monitoring, or remediation associated with the offsite source (RWQCB, 1998).

In January 1998, the Santa Clara Valley Water District (SCVWD) issued regulatory case closure for the USTs that had been removed from the Dura-Bond facility in 1984 and 1989 (SCVWD, 1999). In a 2006 letter, SCVWD noted that five groundwater monitoring wells associated with the UST remediation monitoring had not been destroyed in accordance with applicable SCVWQD regulations (SCVWD, 2006). However, Dura-Bond had submitted invoice documentation indicating the wells had been destroyed. SCVWD noted that the wells had been destroyed in violation of SCVWD ordinance, but would not require further corrective action.

3.2 Say Ray Soil Contamination Removal Activities

Say Ray is an auto repair facility located adjacent to the east side of the subject property office building at 3251 Ash Street. In 1990, a soil investigation was performed by J.V. Lowney Associates (Lowney) to evaluate soil quality on the subject property as a result of wastewater containing oil and grease which had been allowed to run from the Say Ray facility across the subject property and into Matadero Creek. The discharge had reportedly been ongoing for a number of years and Lowney noted staining on the asphaltic concrete extending from the Say Ray facility to Matadero Creek (Lowney, 1990). Lowney collected soil samples from depths of approximately 1, 3 and 4.5 feet bgs from three borings along the creek boundary. All samples were analyzed for the presence of oil and grease, and some samples were also analyzed for VOCs. Oil and grease was detected in five of the six samples analyzed at concentrations ranging from 50 to 27,000 mg/kg. Some VOCs, including dichlorobenzenes, acetone, methylene chloride and toluene were also detected in soil.

Wahler Associates (Wahler) subsequently performed an additional investigation to further define the contamination on the subject property and Matadero Creek (Wahler, 1990a). Three soil borings were advanced to a depth of approximately 6.5 bgs, and one soil borings was advanced to a depth of approximately 11.5 feet bgs. Nine samples were collected from the borings at varying depths. All samples were analyzed for total oil and grease (TOG), and five samples were also analyzed for VOCs. The results of analysis indicated the presence of TOG in concentrations up to 6,600 mg/kg at depths less than 2 feet bgs, and 2,700 mg/kg at depths to approximately 6.3 feet bgs. Low levels of VOCs detected in soil were not considered a significant concern. Wahler recommended the soil be excavated and replaced with clean fill.

In August 1990, soil was excavated from the subject property adjacent to the flood control channel in an area approximately 18 feet long by 6 feet wide to a depth of approximately 6.5 feet bgs. Soil was also excavated from the SCVWD flood control channel property in an area approximately 6 feet by 8 feet to depths ranging from approximately 2 to 4 feet bgs. Confirmation samples collected from the excavation bottom and sidewalls indicated that remaining soil was below the 50 mg/kg TOG cleanup level identified by SCVWD. The excavation was backfilled, and the backfilled area on SCVWD property was compacted in accordance with SCVWD's requirements.

Subsequent documentation in WSJ Properties files indicates that SCVWD appeared to have encountered additional soil contamination within the SCVWD easement during channel improvement activities. No information was present in WSJ Properties files concerning the disposition of the discovered contamination.

3.3 Former Southern Pacific Right-of-Way

In 1992, Kennedy/Jenks Consultants (KJC) performed a Phase I ESA of the former SP Right-of-Way on behalf of WSJ Properties (KJC, 1992a). The Phase I ESA appeared to have been performed prior to acquisition of the property by WSJ Properties.

The property was described as an approximately 80 feet wide by 1,000 feet long railroad right-of-way from which tracks and rails had been removed. KJC reported that with the exception of a small storage shed located near Park Boulevard, the property was vacant. KJC noted that residences present west of the right-of-way appeared to have encroached on the right-of- way.

KJC historical research indicated that the tracks were constructed on the subject property in approximately 1911. The only structures on the property appeared to be a small storage shed adjacent to Park Boulevard. The rails were removed between 1985 and 1990. KJC reported that chemical usage on the property appeared to have been limited to use of herbicides for weed control along the tracks. KJC noted that switch plate lubricant, which contained graphite, kerosene and diesel oil, may have been use at the site; however, KJC did not note any hydrocarbon staining.

KJC reported that the subject property was not listed on any environmental databases. Several facilities were found to have releases in the site vicinity which had affected soil and groundwater quality.

To evaluate soil and groundwater quality at the site, KJC advanced eight soil borings along the former right-of-way. Soil samples were collected from four depth intervals in each boring: 5.0 to 6.5 feet, 10.0 to 11.5 feet, 15.0 to 16.5 feet and from 18.0 to 19.5 feet. Samples from each boring from the 5.0 to 6.5-foot and 18.0 to 19.5-foot intervals were composited and analyzed for the presence of TPHg, TPH quantified as diesel (TPHd), organochlorine pesticides (OCPs), VOCs, PCBS and Title 22 metals. Four of the composite samples were

also analyzed for the presence of SVOCs. The samples collected from the 5.0 to 6.5-foot were also analyzed for the presence of oil and grease.

TPHg, TPHd, PCBs, OCPs, VOCS, or SVOCs were not detected above laboratory detection limits in any of the samples analyzed. No metals were detected above background concentrations. Oil and grease was detected in three samples, each at 60 mg/kg. KJC concluded that the presence of oil and grease did not present a significant concern.

In February 1992, Environ Corporation (Environ) performed a cone penetration test (CPT) along the SP Right-of-Way on behalf of HP and Varian (see Section 4.2.2.). The CPT procedure consisted of advancing a probe to approximately 80 feet bgs at eight locations along the right-of-way (Environ, 1992). At six of the locations, a total of 13 grab groundwater samples were collected at depths ranging from approximately 22 to 48 bgs which were analyzed for the presence of VOCs. TCE was detected at concentrations ranging from 76 to 240 μg/L, and 1,1,1-TCA and dichloromethane (DCE) were detected in one location at 270 and 290 μg/L, respectively.

In April 1992, KJC performed additional soil sampling in the vicinity of Environ's CPT location in which TCE, 1,1,1-TCA and DCE were detected (KJC, 1992b). KJC advanced four borings to a depth of approximately 20 feet bgs, and collected 14 soil samples at approximately 5-foot intervals. TCE was detected in ten of the 14 samples at concentrations ranging from 2 to 10 μg/kg. KJC concluded that the concentrations were consistent with diffusion of soil gas through the capillary fringe (associated with the HP and Varian investigation) rather than evidence of a surface spill.

3.4 1998 Subsurface Vault Investigation and Remediation

In 1997, while excavating for a new storm sewer pipe installation, the property owner's contractor encountered a concrete structure and petroleum hydrocarbon-affected soil on the west side of the main building (Plate 2). An inspection of the vault was made through an access port; the presence of a black, oily liquid was observed at a depth of approximately 5 feet bgs. The investigation, abandonment and closure of the vault, performed by PES in 1997 (PES, 1998) under oversight of PAFD, is summarized below.

Analysis of a sample of the liquid in the vault indicated the presence of TPH in the motor oil range at a concentration of 440,000 mg/kg. The liquid also contained low levels of trimethylbenzenes, naphthalene and other common components of fuel oil and/or degraded motor or fuel oil. The liquid was pumped from the vault and disposed offsite. Approximately 8,157 gallons of liquid was removed from the vault.

Seven soil samples were collected from the sidewalls of the excavated storm sewer trench, which was later found to be within the interior of the vault. The samples were collected from areas with visible staining. An additional eleven soil samples were collected from borings located to better define the vault orientation and dimension, including some locations outside

the apparent extent of the vault. Samples collected were analyzed for VOCs and a full scan of TPH. The results of analysis indicated the presence of TPH quantified as motor oil (TPHmo) and TPHd at concentrations up to 2,400 mg/kg and 200 mg/kg, respectively. Maximum concentrations of VOCs detected include sec-butylbenzene at 0.3 mg/kg; n-butylbenzene at 0.93 mg/kg; ethylbenzene at 0.13 mg/kg; isopropylbenzene at 0.19 mg/kg; p-isopropyltoluene at 0.81 mg/kg; naphthalene at 3.4 mg/kg; n-propylbenzene at 0.33 mg/kg; 1,2,4-trimethylbenzene at 4.3 mg/kg; and total xylenes at 0.29 mg/kg. The results indicated that, with the exception of one sample, hydrocarbon-affected soil was confined within the concrete walls of the vault. The one exception was a sample collected from approximately 5.5 feet bgs approximately 5 feet from the west corner of the vault which contained TPHmo at 100 mg/kg.

After removing overburden from the vault, its dimensions were measured to be 13 feet wide by 36 feet long by 8 feet deep, with a capacity of approximately 28,000 gallons. The bottom, sidewalls and top of the vault were constructed of 8-inch thick reinforced concrete.

Approximately 282 tons of soil and concrete debris (from the vault top) were removed from the vault and disposed offsite. Pockets of residual liquids which remained in the vault were pumped out, and the vault sidewalls and bottom were then cleaned using a citrus-based degreaser and high pressure steam rinse. Rinseate was pumped out, and approximately 2,500 gallons of residual product and rinseate were disposed offsite.

The bottom and sidewall of the vault was subsequently inspected by PES and PAFD personnel. No cracks in the walls or bottom of the vault or other visual evidence indicating the integrity of the vault was compromised was observed during the inspection.

To evaluate soil quality beneath the vault, PES cored through the vault in eight locations, and collected soil samples from four of them. The samples were analyzed for VOCs and a full scan of TPH. No analytes were detected in any of the four samples.

PAFD gave approval to abandon the vault in place. The eight core holes were filled with sand to allow fluids entering the vault to drain into the subsurface. The vault was backfilled with clean native material obtained onsite during site improvements activities, and the storm sewer piping was replaced. The surface was covered with asphaltic concrete pavement.

The site received case closure from PAFD following confirmation sampling and abandonment of the vault (PAFD, 1998).

3.5 2002 Former Mercer Processing Remediation

Mercer Processing, Inc. (Mercer) occupied the tenant space at 230 Portage Avenue (currently occupied by Teak Patio) from 1989 to 1999. Operations performed by Mercer at this location included freeze-drying and packaging of food products. Refrigeration equipment used in the

freeze-drying process contained solvents, including TCE, and Genesolv 2000, also referred to as Refrigerant 141b and composed of 1,1-dichloro-1-fluoroethane.

In 1999, PES performed a Facility Closure Assessment to assess whether operations at the Mercer facility had adversely affected environmental conditions at the site (PES, 2000). The results of analysis performed on ten soil samples collected in the vicinity of the former refrigeration unit indicated the presence of acetone, methyl ethyl ketone, TCE, and tert-butanol in the soil samples. Additional investigations were performed to further define the lateral and vertical extent of chemicals in the vadose zone beneath the site (IT, 2000). Chemicals detected in the soil included TCE, 1,1-dichloroethene, cis-1,2-dichloroethene, and trans-1,2-dichloroethene. The highest concentrations were found beneath the former refrigeration unit.

A Remedial Action Plan (RAP) was subsequently developed to address contamination identified at the site (PES, 2001). The RAP included an evaluation of risk to human health and the environment, principally groundwater resources, development of a site-specific remedial goal for contaminated soil, an evaluation of remedial alternatives, and a description of the procedures to implement the recommended remedial alternative. Based on the results of the health and environmental risk assessment, a soil cleanup goal of 0.2 mg/kg of TCE was recommended. The risk assessment indicated that removal of TCE-affected soil exceeding 0.2 to 0.4 mg/kg would be protective of human health for residences with a concrete floor slab. Soil excavation was the selected remedial alternative. The RWQCB concurred with the RAP in a letter dated October 18, 2001.

Remedial activities were performed at the former Mercer facility during January 2002 (PES, 2002). Approximately 285 cubic yards of TCE-impacted soil was excavated to a maximum depth of approximately 20.5 feet below grade. Excavated soil was characterized and disposed offsite. On the basis of verification soil samples collected from the bottom and sidewalls of the excavation, soil with TCE concentrations exceeding the target cleanup goal was removed from the site. During excavation, several concrete footings and inactive utilities were uncovered and removed. Groundwater was not encountered during the excavation of TCE-impacted soil. The excavation was backfilled with sand cement slurry, imported clean fill, and re-usable excavated clean soil. The area of soil excavation was capped with a concrete slab. In a letter dated April 8, 2002, the RWQCB stated the remedial goal had been achieved, and that no further action was required (RWQCB, 2002).

Note that the current RWQCB residential ESL for TCE for shallow or deep soil where groundwater is a drinking water source is 0.46 mg/kg.

4.0 RECORDS REVIEW

4.1 Environmental Liens

Based on review of an environmental database search conducted by Environmental Data Resources, Inc. (EDR) there are no Federal Superfund (NPL) liens or State deed restrictions associated with the subject property.

4.2 Standard Environmental Record Sources

The discussion presented in this section is based on available information provided by government agencies and various databases. An EDR report dated October 19, 2010 contains listings of sites located within a 1-mile radius, which were selected in accordance with ASTM E 1527-05 standards. This information is obtained from computerized databases of Federal, State, and local records. Descriptions of the lists reviewed are presented below. The EDR database report is included as Appendix F.

The ASTM Standard Environmental Record Source regulatory agency databases for the following sites were searched and reported in the EDR report:

- U.S. Environmental Protection Agency (EPA) – National Priorities List (NPL) sites, proposed NPL sites, and Delisted NPL sites – within 1 mile of the subject property;
- U.S. EPA – Comprehensive Environmental Response Compensation, and Liability Information System (CERCLIS) sites and CERCLIS No Further Remedial Action Planned (NFRAP) sites – within ¼ mile of the subject property;
- U.S. EPA – RCRA Corrective Action Report (CORRACTS) facilities – within ¼ mile of the site;
- U.S. EPA – Resource Conservation and Recovery Act (RCRA), Treatment, Storage, or Disposal (TSD) facilities - within ½ mile of the subject property);
- U.S. EPA – RCRA Small Quantity and Large Quantity Generators of hazardous waste (SQG and LQG) - within ¼ mile of the subject property;
- U.S. EPA - Engineering Control sites and Institutional Control sites - within ½ mile of the subject property;
- U.S. EPA – Emergency Response Notification System (ERNS) sites –the subject property;
- California Department of Toxic Substances Control (DTSC) – State response sites – within 1 mile of the subject property;

- California Integrated Waste Management Board (IWMB) – Solid Waste Information System (SWIS) solid waste disposal and landfill sites – within ½ mile of the subject property;

- California State Water Resources Control Board (SWRCB) – Leaking Underground Storage Tank Listing (LUST) sites – within ½ mile of the subject property;

- U.S. EPA – LUST sites on Tribal Lands – within ½ mile of the subject property;

- SWRCB – Underground Storage Tank (UST) sites – within ¼ mile of the site;

- U.S. EPA – UST sites on Tribal Lands – within ½ mile of the subject property;

- DTSC – EnviroStor Database including known contamination, deed-restricted, and Brownsfield sites – within 1 mile of the subject property; and

- DTSC – Voluntary Cleanup Program (VCP) – within ½ mile of the site.

In addition, various non-ASTM, supplemental local, State, and Federal regulatory databases were searched (e.g., AST, Coal Gasification Plants, and Waste Discharge System databases) and summarized in the EDR report. The findings of the review of the EDR report are presented below.

4.2.1 Subject Property Records

Database Listings

Current and former businesses at the subject property are listed on the following environmental databases:

- **Dura-Bond Bearing**, 3201 Ash Street, is listed on the CERCLIS-NFRAP, SLIC and LUST databases. The 3201 Ash Street address was the location of Dura-Bond's former office. The CERCLIS-NFRAP database indicates that a CERCLA Preliminary Assessment was completed in 1987, resulting in a determination that no further remedial action was planned. The SLIC database lists the site as open, but inactive, as of March 17, 2009. Solvents are listed as the potential contaminants of concern. The LUST database reports that case closure was received in 1999, as was discussed further in Section 3.1;

- **Dura-Bond Bearing**, 370 Portage, is listed on the SLIC and EMI databases. The database and RWQCB records list the site as open but inactive as of August 1, 1997. The facility is also listed as having an air emission in 1987 permitted with Bay Area Air Quality Management District (BAAQMD);

- **Dura-Bond Bearing**, 395 Portage Avenue, is listed on the RCRA-SQG, CA FID UST, Historical UST, and ENVIROSTOR databases. The RCRA-SQG database indicates the facility was historically a Large Quantity Generator (LQG) in 1980. No violations are listed for the facility. The Historical UST database lists a 1,000-gallon gasoline UST and a 500-gallon unleaded gasoline UST installed in 1960, a 5,000-gallon waste UST installed in 1981, a 374-gallon waste UST installed in 1982, and a 224-gallon waste UST installed in 1983. The Envirostor database lists the site as de-certified as of November 15, 1993. The database notes closure of a surface impoundment and removal of 100 cy of contaminated soil in December 1983, closure of a water treatment system including removal of 28 cy of soil approved by DTSC, and reports that the facility had been working with RWQCB concerning fuel spills and groundwater contamination from an offsite source since 1984. The status of the site shows as referred to RWQCB. Historical remedial activities at the former Dura-Bond facility are discussed in Section 3.1;

- **Mercer Processing**, 230 Portage, is listed on the SLIC database. The listing refers to the soil excavation at the facility as discussed further in Section 3.5. The database lists the site as having received case closure as of April 8, 2002;

- **Park Avenue Motors**, 3250 Park Boulevard, is listed on the RCRA-SQG database. The database indicates the registration was initiated in 2004. No violations are listed. This site corresponds to the existing Smythe European facility;

- **Systems Control Inc**., 220 Portage, is listed on the RCRA-SQG database. No violations are listed for the site. WSJ Properties reported that they did not have any record of Systems Control Inc. as a tenant on the subject property. No hazardous material records concerning at this address were identified in PAFD records;

- **Varian Associates**, 380 Portage, is listed on the RCRA-Non-Generators and HAZNET databases. The facility is listed as a non-hazardous waste generator as of 1999; however, the database indicates the facility was historically listed as a generator as of 1996. No violations were listed for the facility. The HAZNET database lists offsite disposal of aqueous solutions with metals, laboratory waste chemicals, inorganic solid wastes, waste and mixed oil, and unspecified sludge waste; and

- **WSJ Properties**, 3200 Park Boulevard, is listed on the HAZNET database for offsite disposal of approximately 34 tons of oil-containing waste. This appears to be associated with the subsurface vault excavation activities described in Section 3.4.

Regulatory Agency Records

PES reviewed records for the subject property from the Santa Clara County Department of Environmental Health (SCCDEH); California State Water Resources Control Board's GeoTracker website located at http://geotracker.swrcb.ca.gov/; and Department of Toxic

Substances Control's (DTSC) EnviroStor website located at http://www.envirostor.dtsc.ca.gov/public/default.asp.

The discussion of regulatory agencies records for the subject property is included in Section 3.0.

4.2.2 Surrounding Area

The following is a discussion of sites listed on regulatory agency databases which have the potential to affect environmental conditions at the subject property.

Hewlett Packard (HP) at 395 and 640 Page Mill Road, Varian at 601 California Avenue

Hewlett Packard (HP) at 395 and 640 Page Mill Road, Varian at 601 California Avenue, and offsite areas (referred to as the California-Olive-Emerson (COE) Area and Perimeter Area) comprise the study area associated with a comingled VOC plume. The primary chemicals of concern are TCE, 1,1,1-TCA, 1,1-DCE, 1,1-DCA and PCE. TCE is the VOC most widely distributed and at the highest concentrations. The most recent groundwater monitoring report (2010 Annual Groundwater Monitoring) for the HP-Varian investigation is included in Appendix G.

Soil and groundwater investigations were initiated by HP in 1981 as a result of a leaking waste solvent UST (Environ, 1994). Investigations and remediation activities at HP-Varian and offsite areas are performed under oversight by the RWQCB and in accordance with RWQCB Order 94-130 (Order; RWQCB, 1994). Cleanup standards for groundwater are U.S. EPA MCLs, California Department of Environmental Protection MCLs, or, for acetone, a target level based upon toxicity characteristics. The cleanup standard for TCE in groundwater is 5 μg/L. Remedial activities associated with the plume have included soil vapor extraction, groundwater extraction and treatment, and injection.

Two water-bearing zones were identified during the investigations, termed the A aquifer (further divided into the A1 Upper [A1U], A1 and A2 Zones) which extends between approximate depths of 13 to 55 feet bgs, and the B aquifer (further divided into the B1 and B2 Zones) which was encountered between depths of approximately 60 and 120 feet bgs. Groundwater flow to the north-northeast has been measured in both zones.

The results of the most recent groundwater monitoring event (June 2010) indicates that the TCE plume in the A1 Upper and A1 Zones extend across the site to north of Alma Street, but does not extend to the site in the A2 or B Zones. In the A1 Upper Zone, the subject property is shown between the 10 and 100 μg/L contour intervals, and approximately within the 10 μg/L contour interval in the A1 Zone.

Four active monitoring wells associated with the COE investigations are present on the subject property as shown on Plate 2. Two of the wells are in the A1 Upper Zone (F77A1U and F138A1U), and two are in the A1 Zone (F139A1 and F140A1). Wells F138A1U and F139A1 are sampled annually, and wells F77A1U and F140A1 are sampled biennially. In Well F77A1U, TCE concentrations have ranged from 32 to 47 μg/L since 2005, but in Well F138A1U, TCE has not been detected since 2004. In Well F139A1, TCE has not been detected since 2004, and in Well F140A1, no TCE concentrations above the cleanup standard have been detected in the well since its 1996 installation.

A soil gas investigation was performed in 2008 in a residential area northwest of the subject property across Page Mill Road where TCE concentrations are relatively similar to those on the subject property (Secor, 2008). The results indicated that none of the shallow soil gas samples contained VOC concentrations above the corresponding RWQCB residential ESLs for potential migration of VOCs from soil gas to indoor air.

Say Ray Auto

Say Ray Auto is listed on the Historical UST database (as Sun Ray Foreign Auto Service at 325U Park Boulevard – an apparent typographical error). The database lists the facility with a waste oil UST. Regulatory agency records did not include any information regarding the potential removal of this UST. This facility is located potentially upgradient of the subject property, and has the potential to affect groundwater beneath the subject property.

Star Graphics

WSJ Properties files included a report prepared by J.V. Lowney Associates (Lowney) concerning a reconnaissance and soil quality investigation at the former Star Graphics facility at 3200 Park Boulevard. Lowney reported that Star Graphics had occupied the building from approximately 1974 through 1989, and used the building for production of color film negatives. A 2,000-gallon fiberglass UST (contents not specified) was present in the parking lot in front of the building, and was reportedly scheduled for removal during 1990 (Lowney, 1990). Floor drains were observed in the main processing area, and staining was observed on floors within the building. Lowney collected soil samples from approximately 1 foot beneath the concrete slab and collected liquid and residue present in floor drains. The six soil samples were composited into two samples and the four drain samples were composited into one sample. All samples were analyzed for VOCs, SVOCs, CAM-17 metal, and hexavalent chromium. One composted soil sample contained an elevated concentration of silver, but the concentration was below regulatory limits. Some organics were identified in the drain residue, suggesting that organics may have been discharged into the sanitary sewer. Lowney suggested that groundwater monitoring wells could be installed to further evaluate potential releases to the subsurface. No information was found in regulatory files concerning removal of the UST, however, a letter in WSJ Properties files indicated that the UST had been removed, and that analytical data from soil samples collected from beneath the UST indicated that the UST had not leaked (Parfitt, 1990b).

Several other sites in the subject property vicinity are listed on hazardous materials release and/or storage databases. However, the other sites listed in the databases are not expected to present significant environmental conditions to the subject property based on one or more of the following: (1) the listed site has received case closure by the appropriate regulatory agency; (2) the listed site is either crossgradient or downgradient of the subject property with respect to the inferred regional groundwater flow direction; (3) the listed site is a soils-only affected case; and (4) the listed site is located at too great a distance to represent a significant environmental condition with respect to the subject property.

5.0 SITE INSPECTION

Inspection of the subject property was conducted by Julie Turnross, R.E.A. of PES on October 27, 2010, accompanied by Mr. Lund Smith of WSJ Properties. All accessible areas of the site building common and exterior areas were inspected. Site photographs are provided on Plates 3 through 14.

The subject property contains four single-story buildings, an access road, and associated paved parking and landscaped areas. Uses of the subject property buildings, which include primarily office, retail and auto repair activities, are as listed on Table 1. Hazardous material use at the subject property is limited to *de minimis* quantities of typical cleaning and maintenance supplies, except for the tenant spaces listed below.

Regency Teak/The Teak Patio, 230 Portage Avenue

Regency Teak uses a water-based cleaner to rinse off imported furniture, and then occasionally seals the wood with a petroleum-based sealant (Semco Teak Sealer) before sold or placed on the showroom flow. The rinsing is performed in a bay at the rear of the building. It appears that runoff from the washing activities may enter storm drains in the parking area on the west side of El Camino Center.

Hazardous materials observed at the facility included one 5-gallon container of teak cleaner, one 5-gallon container of teak sealer, less than 10 1-gallon containers of paint, and small containers of adhesives. Approximately 100 1-gallon containers of teak sealer were also present at the site which were in factory-sealed containers for retail sale.

Fry's Electronics, 340 Portage Avenue

Fry's Electronics sells various computer cleaning materials, including acetone. All materials are stored and sold in original factory packing. No concerns were identified with the storage or handling of these materials.

Approximately 10 5-gallon and 15 1-gallon containers of latex paint were observed stored on the dock area behind Fry's Electronics. No paint staining was observed in the dock area.

Lyncean Technologies, 370 Portage Avenue

Lyncean Technologies is a start-up firm which develops x-ray light sources. Chemical use at the facility includes various chemicals in containers of 1-gallon or less which are stored in flammable cabinets. Stored chemicals included acetone, isopropyl alcohol, buffer, and various adhesives, cleaners and paints. No staining or other evidence of a release was observed in the vicinity of the cabinets or in laboratory areas. Two empty and one partially full container of an electrical insulating oil were stored on the floor without secondary containment. No staining was observed in the vicinity of the drums. The equipment which required the oil is no longer present at the facility, and the drums are awaiting disposal. A liquid nitrogen dewar is also present at the facility.

Smythe European, 3250 Park Boulevard

Smythe European performs auto repairs and maintenance, and sells parts, including batteries. Hazardous materials used and stored at the facility include two 240-gallon containers of motor oil, approximately 25 1-gallon containers of antifreeze, one 55-gallon container of automatic transmission fluid, one 55-gallon container of gear lubricant, welding gases, and small (1-quart or less) of various cleaners, lubricants and adhesives. All materials were stored in units with secondary containment. Hazardous wastes generated at the facility include waste antifreeze and waste motor oil, both of which were stored in labeled units of 55-gallons and 350 gallons, respectively, with secondary containment. Waste materials are transferred to the storage containers via mobile work station units. Some minor staining was observed on the floor in the shop area, however, the floor was coated with an epoxy-containing paint. No concerns regarding hazardous material use and storage at the facility were identified.

5.1 Undeveloped Area

No undeveloped areas are present at the site.

5.2 Chemicals/Hazardous Substances Containers

Other than the items discussed above in Section 5.0, there were no obvious indications of hazardous materials use or storage at the site.

5.3 Underground and Aboveground Storage Tanks

No USTs or ASTs were observed at the subject property. However, historical documents suggest one to two USTs are likely present at the site as discussed in Section 2.7.7. Additionally, USTs were formerly present on the site as discussed in Section 3.0.

5.4 Back-Up Generators

There are two back-up generators present at the subject property at the Comcast Cable tenant building at 270 Lambert. A newly-installed generator with a 50-gallon internal diesel tank is present on the site. The generator was not yet operational at the time of PES's site inspection; no fuel was present in the diesel tank. The diesel-powered generator had been installed to replace the existing natural gas-powered generator present at the site. No concerns were identified with either generator.

5.5 Elevators

There are no elevators on the subject property.

5.6 Hydraulic Trash Compactors

A hydraulic trash compactor is present at the Fry's tenant space. No leaks or other concerns were identified associated with the trash compactor.

5.7 Indications of Polychlorinated Biphenyls (PCBs)

Nine City of Palo Alto-owned transformers are present in parking and landscaped areas throughout the subject property. No leaks or stains were observed on the transformers or the concrete pads beneath the transformers. The transformers were not labeled as to PCB content.

As discussed in Section 2.7.7, a 1953 map indicated the presence of three transformers in the main building. This map was not available prior to our site inspection, and these transformers were not observed during our site inspection. WSJ Properties indicates that they are not aware as to whether the transformers have been removed.

5.8 Other Conditions

5.8.1 Asbestos

An assessment of asbestos-containing materials was not conducted as part of this Phase I ESA. Standards set by the Occupational Safety and Health Administration (OSHA) require building owners to presume that thermal system insulation (TSI) and surfacing asbestos containing material (ACM) found in buildings constructed before 1981, and floor tile installed in buildings through 1981, are asbestos containing, unless demonstrated to be less than 1 percent asbestos through sampling. The rule does not permit an assumption to be made that a material does not contain asbestos in buildings constructed after 1980. However, since the late 1970s to early 1980s, asbestos has been removed or substituted for in all but a small number of construction products. For example, asbestos is still used, although at low concentrations, in various mastics and roofing materials.

Based on the pre-1950 construction date of the El Camino Center and Ash Street buildings, ACM may be present in these buildings. ACM is not considered an environmental concern at the Comcast building (constructed in 1986) or the Smythe European building at 3250 Park Boulevard (constructed in 2003).

As discussed above in Section 2.7.7, removal of asbestos tile and adhesive was removed from 210 Portage in 1993.

5.8.2 Radon

The National Radon Database includes radon information from U.S. EPA/State Residential Radon Surveys conducted between 1986 and 1992. The database includes test results from 4 sites within the subject property zip code. The average value for radon level reported in this region was 2.525 pico curies per liter (pCi/l) of air for the first floor living area. This is lower than the U.S. EPA's recommended action level of 4 pCi/l.

Based on the U.S. EPA and California DHS surveys, it is unlikely that radon levels at the site exceed the U.S. EPA's action level.

5.8.3 Solid Waste

Solid wastes generated at the subject property are limited to non-hazardous solid office wastes. Wastes are collected in collection bins which are picked up by GreenWaste for offsite disposal. No concerns were identified with solid waste storage at the subject property.

5.8.4 Lead in Paint

The Consumer Products Safety Commission limited lead content in residential paint to 0.06 percent (600 parts per million) in 1978. The use of paint containing greater than 0.06 percent lead was also prohibited in areas where consumers have direct access to painted surfaces. Based on the pre-1950 construction date of the El Camino Center and Ash Street buildings, lead-containing paint may be present in these buildings. Lead-based paint is not considered an environmental concern at the Comcast building (constructed in 1986) or the Smythe European building at 3250 Park Boulevard (constructed in 2003).

5.8.5 Mold

Molds are simple, microscopic organisms, which can often be seen in the form of discoloration, frequently green, gray, brown, or black. Molds grow on virtually any organic substance, as long as moisture and oxygen are present. Mold spores primarily cause health problems through the inhalation of mold spores or the toxins they emit when they are present in large numbers. This can occur primarily when there is active mold growth within places where people live or work.

As discussed in Section 2.7.8, the property owners reported that mold has not been a concern at the subject property. No mold was observed during the site inspection.

5.8.6 Vapor Intrusion

As discussed above in Section 5.0, there is currently no reported use or storage of volatile organic compounds (VOCs) at the subject property. TCE was historically used by the former tenant Mercer Processing at 230 Portage Avenue, but TCE-contaminated soil was removed in 2002, and no impact to groundwater was identified (see Section 3.5). A regional VOC plume is present in the subject property vicinity, and VOCs have been detected in groundwater monitoring wells on the subject property which presents the potential for vapor intrusion to be a concern at the subject property. However, a soil gas study for VOCs was performed north of the subject in an area of the regional plume where concentrations are higher than those detected at the subject property was performed in 2008, and no concerns were identified regarding vapor intrusion (see Section 4.2.2).

6.0 FINDINGS AND CONCLUSIONS

6.1 Summary of Findings

The subject property has the addresses of 3201 and 3225 Ash Street, 200 – 382 Portage Avenue (referred to as El Camino Center), 270 Lambert Avenue, and 3250 Park Boulevard in the City of Palo Alto, Santa Clara County, California. The subject property, which comprises approximately 15.48 acres, contains four buildings, an access road, and associated paved parking and landscaped areas. Matadero Creek, under an easement from Santa Clara Valley Water District, traverses the eastern portion of the site. The site is located in a primarily commercial area. The site is bounded to the northeast by Park Boulevard and a commercial building, to the southeast by commercial buildings, to the southwest by Ash Street, El Camino Real and commercial buildings, and to the northwest by residences.

PES's historical research indicates that the subject property main and office buildings were constructed prior to the 1950s (likely in the 1930s to 1940s), the building at 270 Lambert was constructed in 1986, and the 3250 Park Boulevard building was constructed in 2003. A railroad spur and line were present on the west side of the main building until the 1980s. Historical site uses and tenants have included warehouse, a bearing manufacturer, a foundry (buildings no longer present), a food processor, a paper container manufacturer, a display manufacturer, a market, auto/truck maintenance, and offices. Historical maps indicate the potential presence of one or two USTs remaining at the subject property.

The bearing manufacturer, Dura-Bond, originally maintained a sludge pond associated with a wastewater treatment system, and had gasoline, diesel, Stoddard solvent and waste oil USTs, in addition to using other hazardous materials in the facility, such as lubricant oils, acids, and metals. During the 1980s, the wastewater treatment system was closed, and the USTs were

removed from the facility. Soil was excavated from beneath the sludge pond and USTs, but it did not appear that confirmation samples were collected from all areas of the excavations. Groundwater samples were collected from three to four monitoring wells installed as part of the removal activities, and were initially found to contain elevated levels of TPHg, TPHd and lead. After four years of groundwater monitoring, contaminant levels were below detectable limits. Regulatory case closure for the USTs was issued in 1998. During closure of the facility in 1989, soil sampling indicated the presence of elevated concentrations of lead and zinc within the facility. Soil excavation was performed, but confirmation sampling was not performed in all excavated areas. A subsequent soil investigation performed to investigate the completeness of the investigation identified the presence of elevated concentrations of lead and zinc remaining in soil at depths of up to 10 feet bgs. Tentative Site Cleanup Requirements were issued by the RWQCB for the Dura-Bond facility in 1990, but do not appear to have been filed.

Wastewater containing oil and grease was discharged from the Say Ray facility adjacent to the subject property office, and allowed to run across the subject property to Matadero Creek. A soil investigation and subsequent soil excavation was performed in the vicinity of Matadero Creek. The investigation, which was performed at the request of SCVWD, appeared to be limited to the Matadero Creek area.

During a 1992 investigation of the former SP right-of-way, soil samples were collected and composited to evaluate soil quality. Low levels of TCE detected immediately above the groundwater table were concluded to be associated with a known offsite source of contamination. No significant concerns were identified.

In 1997, an investigation, abandonment and closure of a subsurface vault encountered beneath the main building was performed. More than 8,000 gallons of a liquid with high concentrations of motor oil was removed from the vault, and approximately 282 tons of soil and concrete debris were removed and disposed offsite. With PAFD approval, the vault was abandoned in place by backfilling with clean soil.

In 2002, soil contaminated with TCE was removed from the former Mercer Processing facility at 230 Portage Avenue. A TCE cleanup goal of 0.2 mg/kg (below current residential RWQCB cleanup standards) was used in excavating approximately 285 cubic yards of soil from depths up to 20.5 feet below grade. Regulatory case closure was issued in 2002.

The subject property is currently used for offices, retail sales, an electronic hub, research, and auto repair and maintenance activities. Hazardous material use is limited to auto maintenance chemicals, laboratory chemicals, and teak sealer. No significant concerns regarding hazardous material use at the site was identified. There appears to be a potential for wastewater from teak cleaning activities at Teak Patio (230 Portage Avenue) to enter the storm sewer in the parking area.

Historical subject property tenants are listed on several environmental databases as a result of the remedial activities discussed above. Dura-Bond is listed on the SLIC database as an open, but inactive, site. Current tenants listed on regulatory databases are limited to Park Avenue Motors (Smythe European) listed as a RCRA small quantity generator, and WSJ Properties for offsite disposal of oil-containing waste apparently associated with the Mercer facility remediation discussed above.

Groundwater contamination associated with the offsite Hewlett Packard and Varian facilities has been identified at the subject property, and the facilities are listed on several environmental databases. A VOC plume associated with the facilities has been under investigation since 1981. Four active monitoring wells associated with the investigations are present on the subject property. In one well, TCE concentrations have ranged from 32 to 47 μg/L since 2005. A soil gas investigation performed in 2008 in a residential area northwest of the subject property indicated that none of the shallow soil gas samples contained chlorinated VOC concentrations above the corresponding RWQCB residential ESLs for potential migration of VOCs from soil gas to indoor air.

Say Ray Auto is listed on the Historical UST database with a waste oil UST. Regulatory agency records did not include any information regarding the potential removal of this UST. This facility is located potentially upgradient of the subject property, and has the potential to affect groundwater beneath the subject property.

6.2 Conclusions

PES has performed a *Phase I Environmental Site Assessment,* in conformance with the scope and limitations of ASTM Practice E 1527, of the El Camino Center and associated properties in Palo Alto, California. Any exceptions to, or deletions from, this practice are described in Section 1.3 of this report. This assessment revealed the following historical recognized environmental conditions (RECs) in connection with the property:

- Contaminated soil was excavated from the site in the 1980s during removal of a wastewater treatment system and seven USTs. Groundwater monitoring was performed until contaminant concentrations were below detectable limits. Regulatory case closure was issued in 1998;

- Contaminated soil was excavated from near Matadero Creek in 1990 as a result of a wastewater discharge from the Say Ray facility;

- A subsurface vault was abandoned in place beneath the main building in 1998 following removal of vault contents and excavation of contaminated soil. Regulatory approval was issued by PAFD; and

- In 2002, soil contaminated with TCE was removed from the former Mercer Processing facility at 230 Portage Avenue. Regulatory case closure was issued in 2002.

This assessment revealed the following recognized environmental conditions (RECs) in connection with the property:

- Historical maps show the former presence of historical USTs at the subject property, although no information concerning the potential removal of these USTs was identified. Soil contamination was encountered in this area during 1992 well installation activities performed as part of an offsite investigation;

- Elevated concentrations of lead and zinc remain in soil beneath the former Dura-Bond facility following 1989 excavation activities; and

- Groundwater contaminated with VOCs associated with the HP/Varian plume has been identified in groundwater monitoring wells present on the subject property.

PES makes the following noteworthy observations in connection with the subject property:

- It does not appear that adequate soil confirmation sampling was performed at the Dura-Bond facility during the wastewater treatment system closure and UST removals performed in the 1980s;

- It does not appear that a complete investigation of the subject property was performed during the 1990 investigation of the Say Ray facility wastewater discharge;

- During the 1990 investigation of the former SP right-of-way, no near-surface samples were collected; and

- Based on the age of the main and office buildings, the potential exists that asbestos-containing materials and lead-based paint may be present.

7.0 DATA GAPS

The following data gaps that may have affected our ability to identify RECs associated with the subject property were identified during the performance of this Phase I ESA are listed below:

- No information concerning activities and hazardous material use and storage practices at the foundry formerly present on the site was identified;

- No information concerning the removal of former USTs present on the east side of the subject property associated with historical Safeway Stores operations was identified; and

- A soil verification investigation was performed at the former Dura-Bond facility in 1990. Incomplete data was available regarding the investigation. The presence of TCE was reportedly detected in soil, but no data were available.

8.0 ADDITIONAL SERVICES

No additional services were performed as part of this Phase I ESA.

9.0 ENVIRONMENTAL PROFESSIONAL STATEMENT

We declare that to the best of our professional knowledge and belief, we meet the definition of Environmental Professional as defined in §312.10 of 40 CFR 312.

We have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. We have developed and performed the all appropriate inquires in conformance with the standards and practices set forth in 40 CFR Part 312.

Resumes of the Environmental Professionals signing this report are presented in Appendix H.

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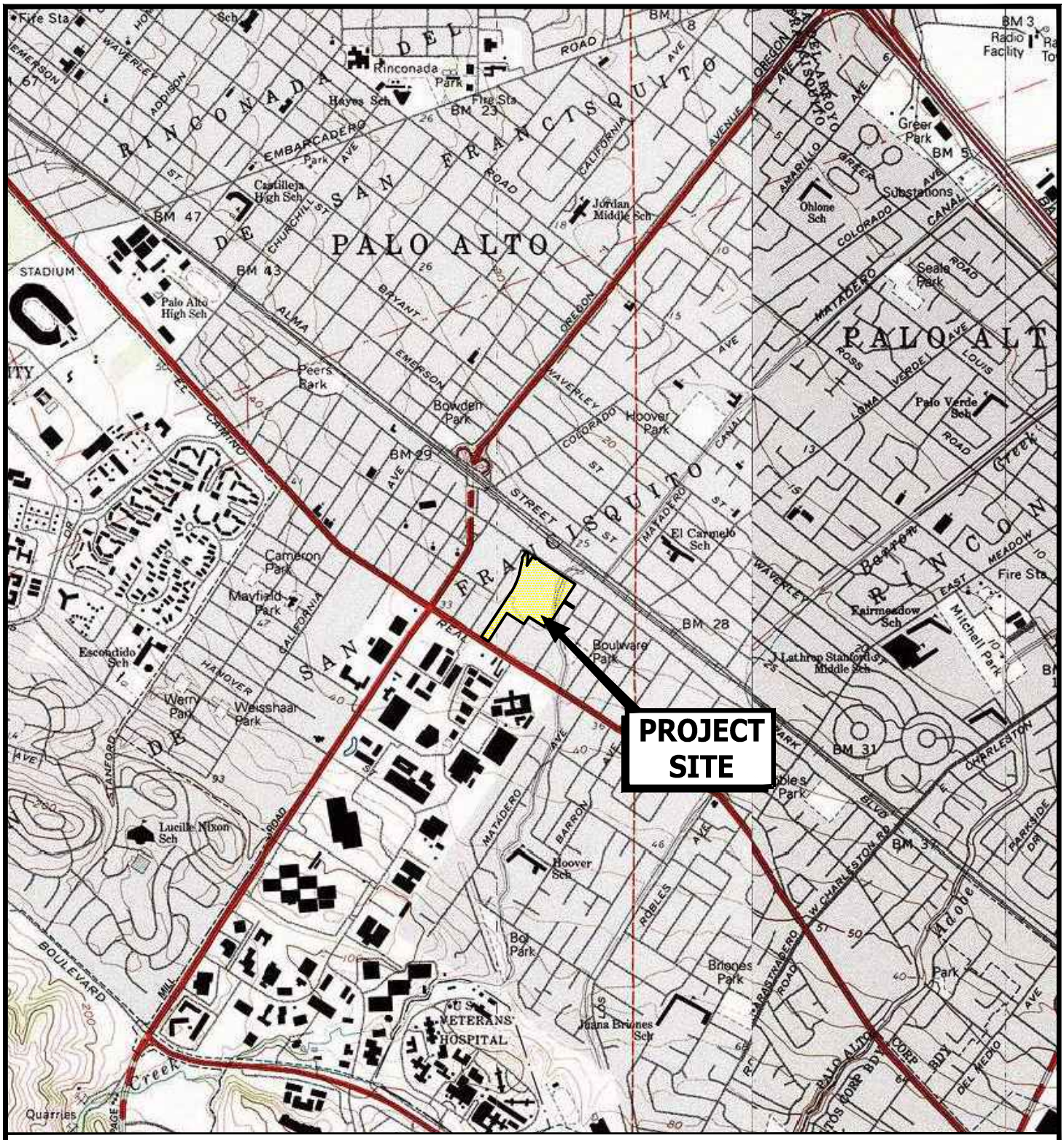
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ILLUSTRATIONS



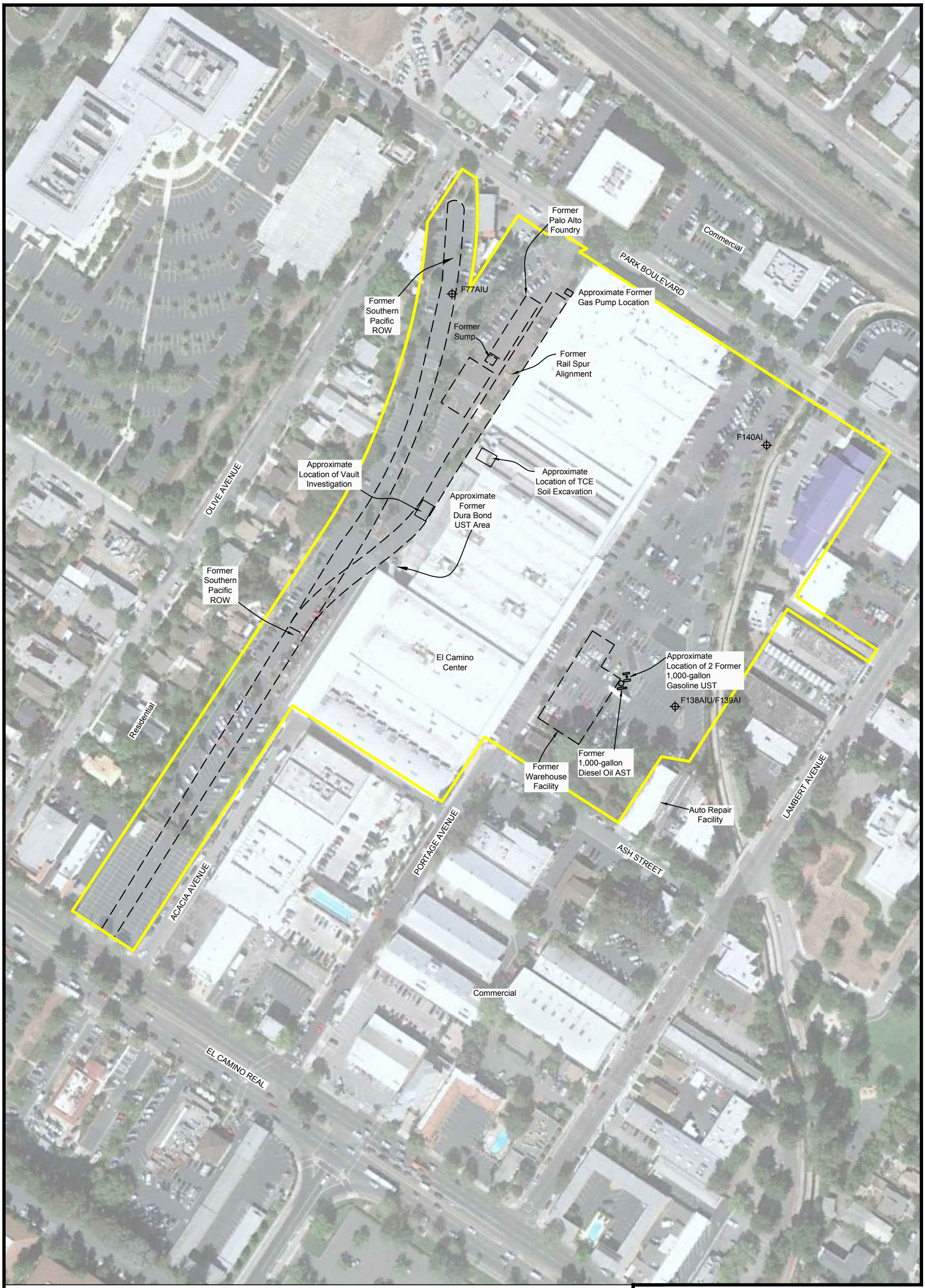
U.S.G.S. Topo Map - Palo Alto, California, 7.5-minute quadrangle. Map version 1997; current as of 1997.
U.S.G.S. Topo Map - Mountain View, California, 7.5-minute quadrangle. Map version 1997; current as of 1997.

PES Environmental, Inc.
Engineering & Environmental Services

Site Location Map
Phase 1 Environmental Site Assessment
El Camino Center
Palo Alto, California

PLATE
1

126.076.01.001	12607601001_ESA_1-2	*WFF*	10/11
JOB NUMBER	DRAWING NUMBER	REVIEWED BY	DATE



Explanation

- Approximate Boundary of Subject Property
- Approximate Location of Former Feature
- F76A2 ⊕ Approximate HP/Varian Well Location

N

0 150

SCALE IN FEET

PES Environmental, Inc.
Engineering & Environmental Services

Site Plan
Phase 1 Environmental Site Assessment
El Camino Center
Palo Alto, California

PLATE 2

126.076.01.001	12607601001_ESA_1-2	WFF	10/11
JOB NUMBER	DRAWING NUMBER	REVIEWED BY	DATE



Photo 1.
View of Fry's Electronics, looking northwest



Photo 2.
View of northern end of El Camino Center (Integration Appliance, 200 Portage)

PES Environmental, Inc.
Engineering & Environmental Services

Site Photographs
Phase I Environmental Site Assessment
El Camino Center
Palo Alto, California

PLATE
3

126.076.01.001	12607601001_photos.cdr	WFF	10/11
JOB NUMBER	DRAWING NUMBER	REVIEWED BY	DATE



Photo 1.
Dock area at rear of El Camino Center



Photo 2.
Storage enclosures on dock at rear of El Camino Center



Photo 1.
View of 3201/3225 Ash Street, looking west



Photo 2.
Garden area at rear of 3201/3225 Ash Street building



Photo 1.
Repair area at Integration Appliance, 200 Portage



Photo 2.
Shop area at The Teak Patio, 230 Portage



Photo 1.
Teak furniture rinsing area at The Teak Patio, 230 Portage



Photo 2.
Chemical storage area in teak finishing area at The Teak Patio, 230 Portage

PES Environmental, Inc.
Engineering & Environmental Services

Site Photographs
Phase I Environmental Site Assessment
El Camino Center
Palo Alto, California

PLATE
7

126.076.01.001	12607601001_photos.cdr	*WFF*	10/11
JOB NUMBER	DRAWING NUMBER	REVIEWED BY	DATE



Photo 1.
Warehouse area at Fry's Electronics, 340 Portage



Photo 2.
Paint storage at rear of Fry's Electronics, 340 Portage



Photo 1.
Chemical storage at Lyncean Technologies, 370 Portage



Photo 2.
Chemical storage at Lyncean Technologies, 370 Portage



Photo 1.
Chemical storage at Lyncean Technologies, 370 Portage



Photo 2.
Air compressor on dock area at Lyncean Technologies, 370 Portage



Photo 1.
View of Smythe European, 3250 Park Boulevard.



Photo 2.
Battery storage at Smythe European, 3250 Park Boulevard.



Photo 1.
Automotive chemical storage at Smythe European, 3250 Park Boulevard.



Photo 2.
Automotive chemical storage at Smythe European, 3250 Park Boulevard.

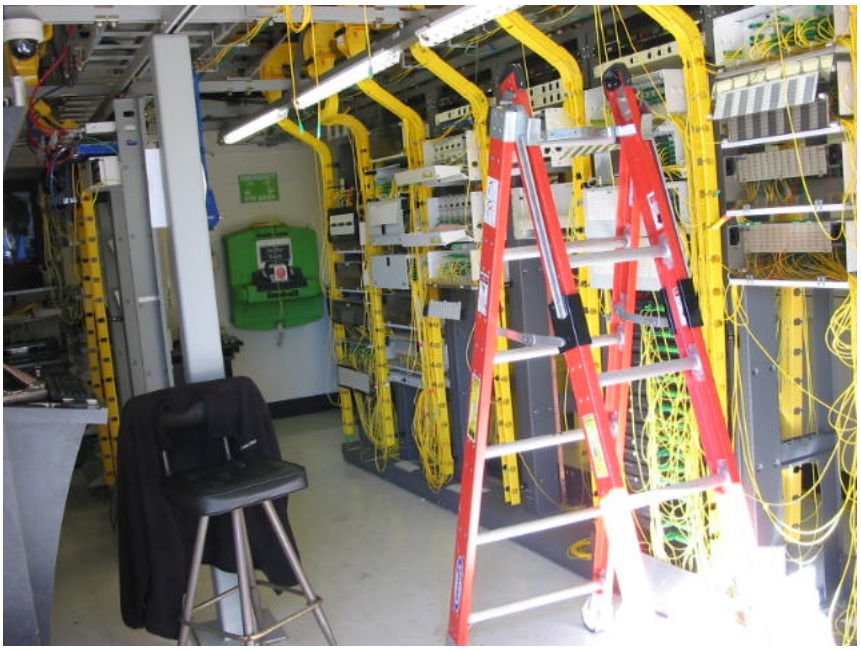


Photo 1.
Cable room at Comcast Cable (270 Lambert)



Photo 2.
Newly installed emergency generator at Comcast Cable (270 Lambert)

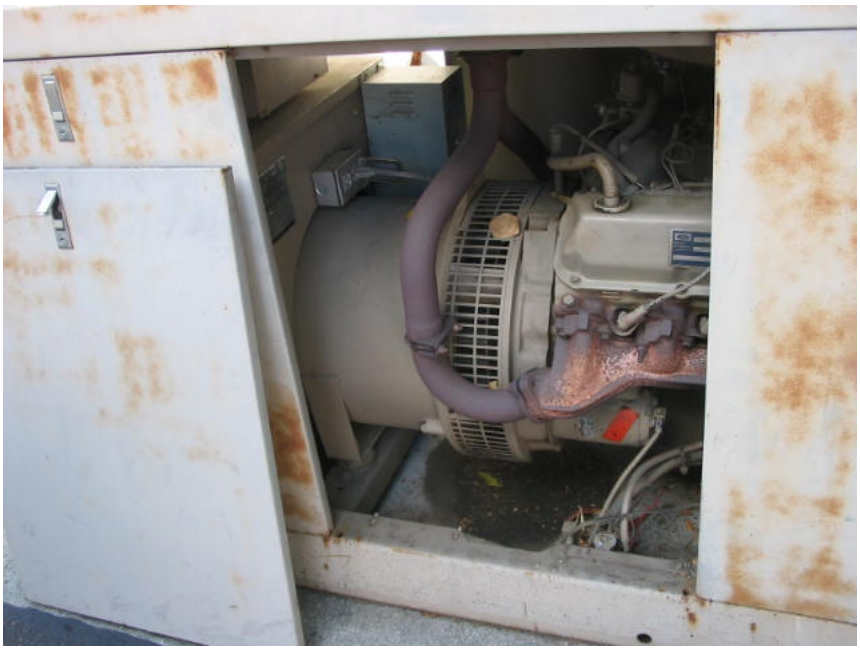


Photo 1.
Former emergency generator at Comcast Cable (270 Lambert)



Photo 2.
View of Park Automotive yard area at northwest corner of subject property

APPENDIX A

AERIAL PHOTOGRAPHS

15.5 Acre Retail Center
3200 Park Boulevard
Palo Alto, CA 94306

Inquiry Number: 2897822.5
October 22, 2010

The EDR Aerial Photo Decade Package

EDR® Environmental Data Resources Inc

440 Wheelers Farms Road
Milford, CT 06461
800.352.0050
www.edrnet.com

EDR Aerial Photo Decade Package

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Date EDR Searched Historical Sources:

Aerial Photography October 22, 2010

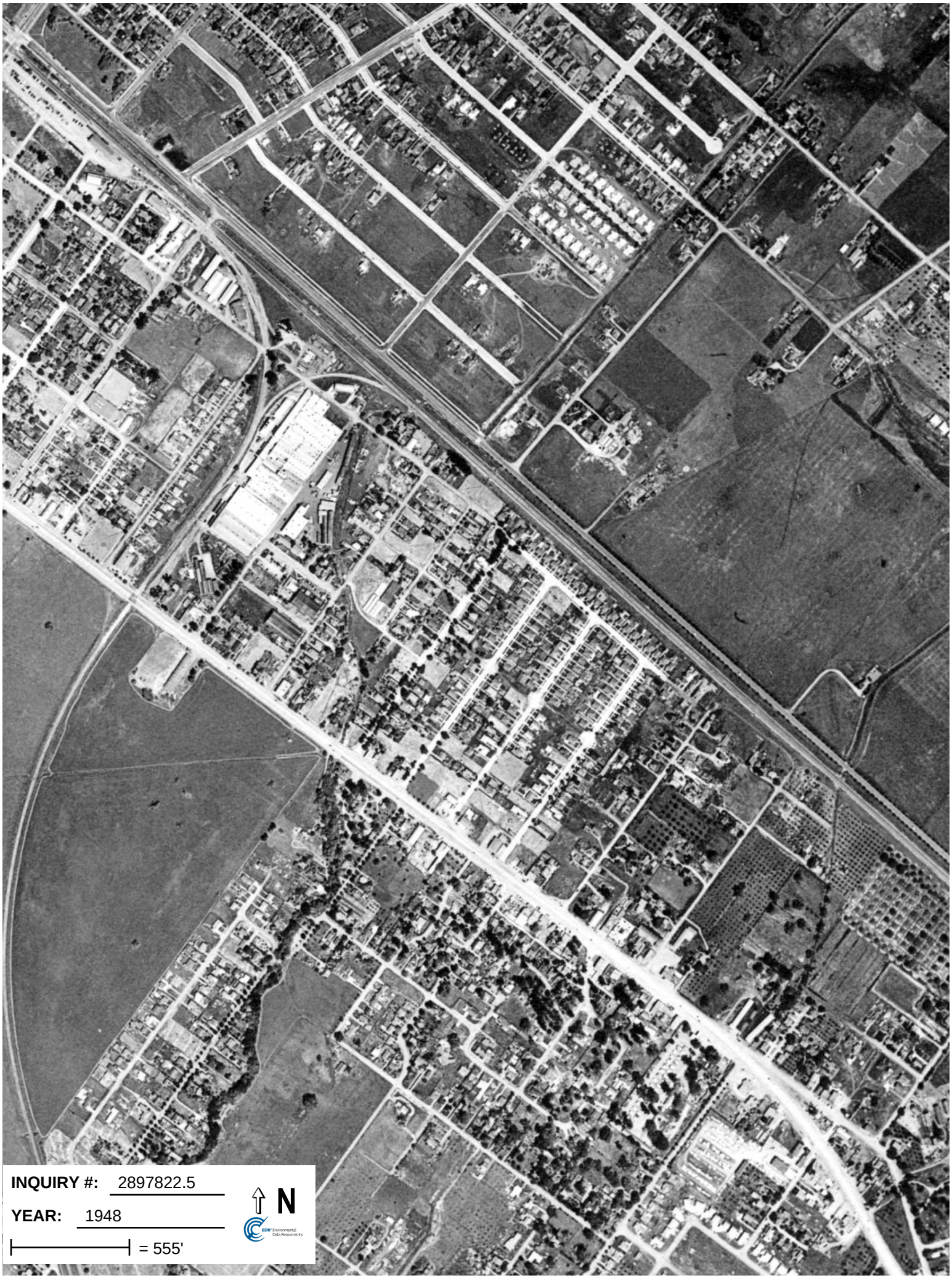
Target Property:

3200 Park Boulevard

Palo Alto, CA 94306

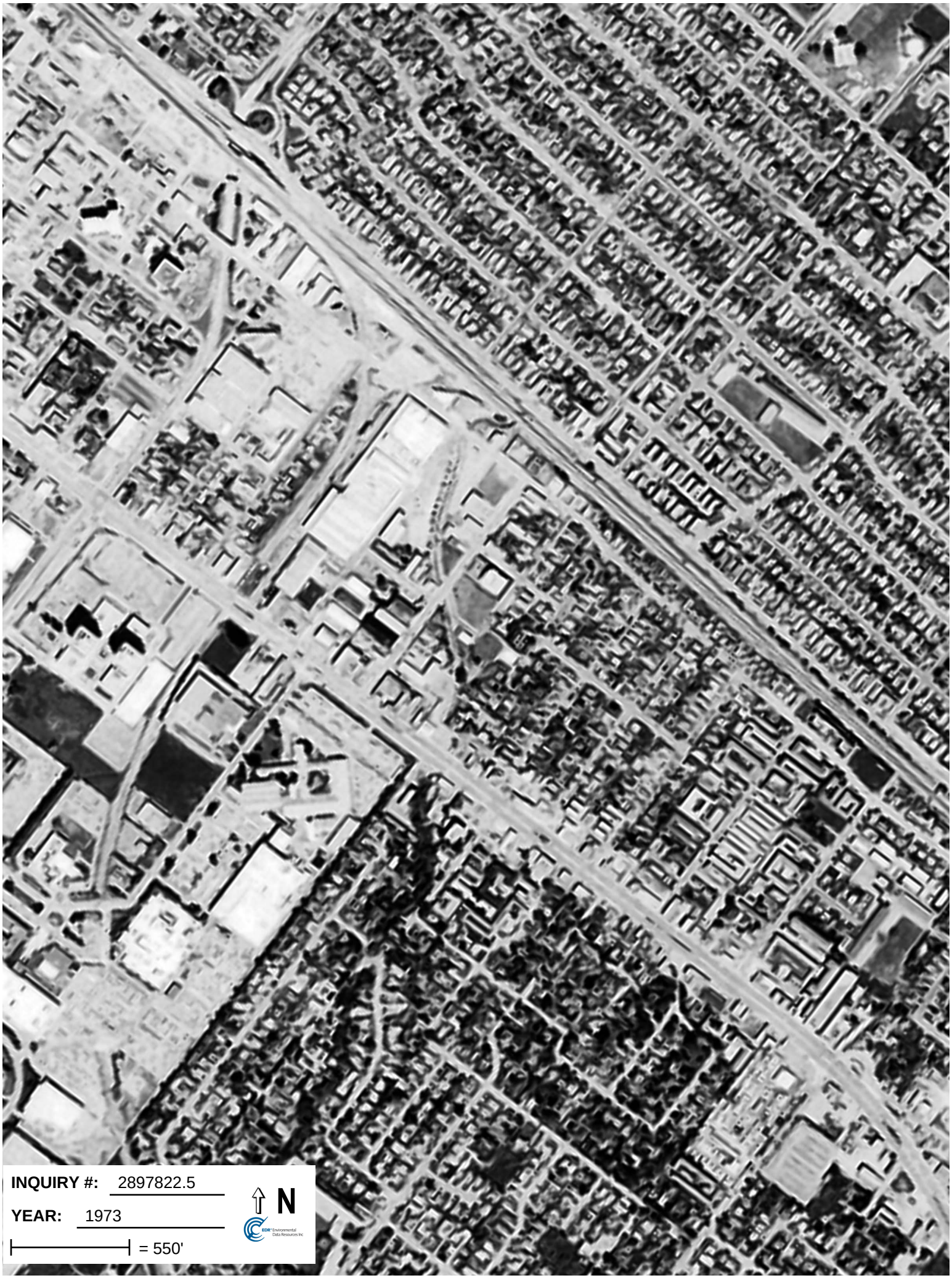
Year	*Scale*	*Details*	*Source*
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1956	Aerial Photograph. Scale: 1"=555'	Flight Year: 1956	Aero
1965	Aerial Photograph. Scale: 1"=333'	Flight Year: 1965	Cartwright
1973	Aerial Photograph. Scale: 1"=550'	Flight Year: 1973	NASA
1982	Aerial Photograph. Scale: 1"=690'	Flight Year: 1982	USGS
1993	Aerial Photograph. Scale: 1"=666'	Flight Year: 1993	USGS
1998	Aerial Photograph. Scale: 1"=666'	Flight Year: 1998	USGS
2005	Aerial Photograph. Scale: 1"=604'	Flight Year: 2005	EDR


INQUIRY #: 2897822.5
YEAR: 1939
= 555'
N


INQUIRY #: 2897822.5
YEAR: 1948
= 555'
N
EDR Environmental Data Resources Inc


INQUIRY #: 2897822.5
YEAR: 1956
= 555'
N


INQUIRY #: 2897822.5
YEAR: 1965
= 333'
N


INQUIRY #: 2897822.5
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INQUIRY #: 2897822.5
YEAR: 1982
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INQUIRY #: 2897822.5
YEAR: 1993
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N


INQUIRY #: 2897822.5
YEAR: 1998
= 666'
N


INQUIRY #: 2897822.5
YEAR: 2005
= 604'
N

APPENDIX B

SANBORN FIRE INSURANCE MAPS

15.5 Acre Retail Center
3200 Park Boulevard
Palo Alto, CA 94306

Inquiry Number: 2897822.3
October 21, 2010

Certified Sanborn® Map Report

EDR® Environmental Data Resources Inc

440 Wheelers Farms Road
Milford, CT 06461
800.352.0050
www.edrnet.com

Certified Sanborn® Map Report

10/21/10

Site Name:
15.5 Acre Retail Center
3200 Park Boulevard
Palo Alto, CA 94306

Client Name:
PES Environmental, Inc.
1682 Novato Boulevard
Novato, CA 94947

EDR Inquiry # 2897822.3

Contact: Chris Baldassari

EDR® Environmental Data Resources Inc

The complete Sanborn Library collection has been searched by EDR, and fire insurance maps covering the target property location provided by PES Environmental, Inc. were identified for the years listed below. The certified Sanborn Library search results in this report can be authenticated by visiting www.edrnet.com/sanborn and entering the certification number. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by Sanborn Library LLC, the copyright holder for the collection.

Certified Sanborn Results:

Site Name: 15.5 Acre Retail Center
Address: 3200 Park Boulevard
City, State, Zip: Palo Alto, CA 94306
Cross Street:
P.O. # 126.076.01.001
Project: 15.5 Acre Retai
Certification # 28EF-4307-A028

Maps Provided:

1978
1969
1956

Sanborn® Library search results
Certification # 28EF-4307-A028

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- ☑ Library of Congress
- ☑ University Publications of America
- ☑ EDR Private Collection

The Sanborn Library LLC Since 1866™

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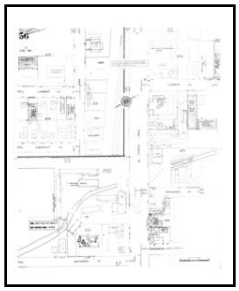
Sanborn Sheet Thumbnails

This Certified Sanborn Map Report is based upon the following Sanborn Fire Insurance map sheets.

1978 Source Sheets



Volume 1, Sheet 50

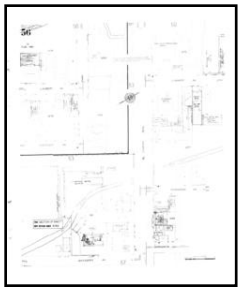


Volume 1, Sheet 56

1969 Source Sheets



Volume 1, Sheet 50



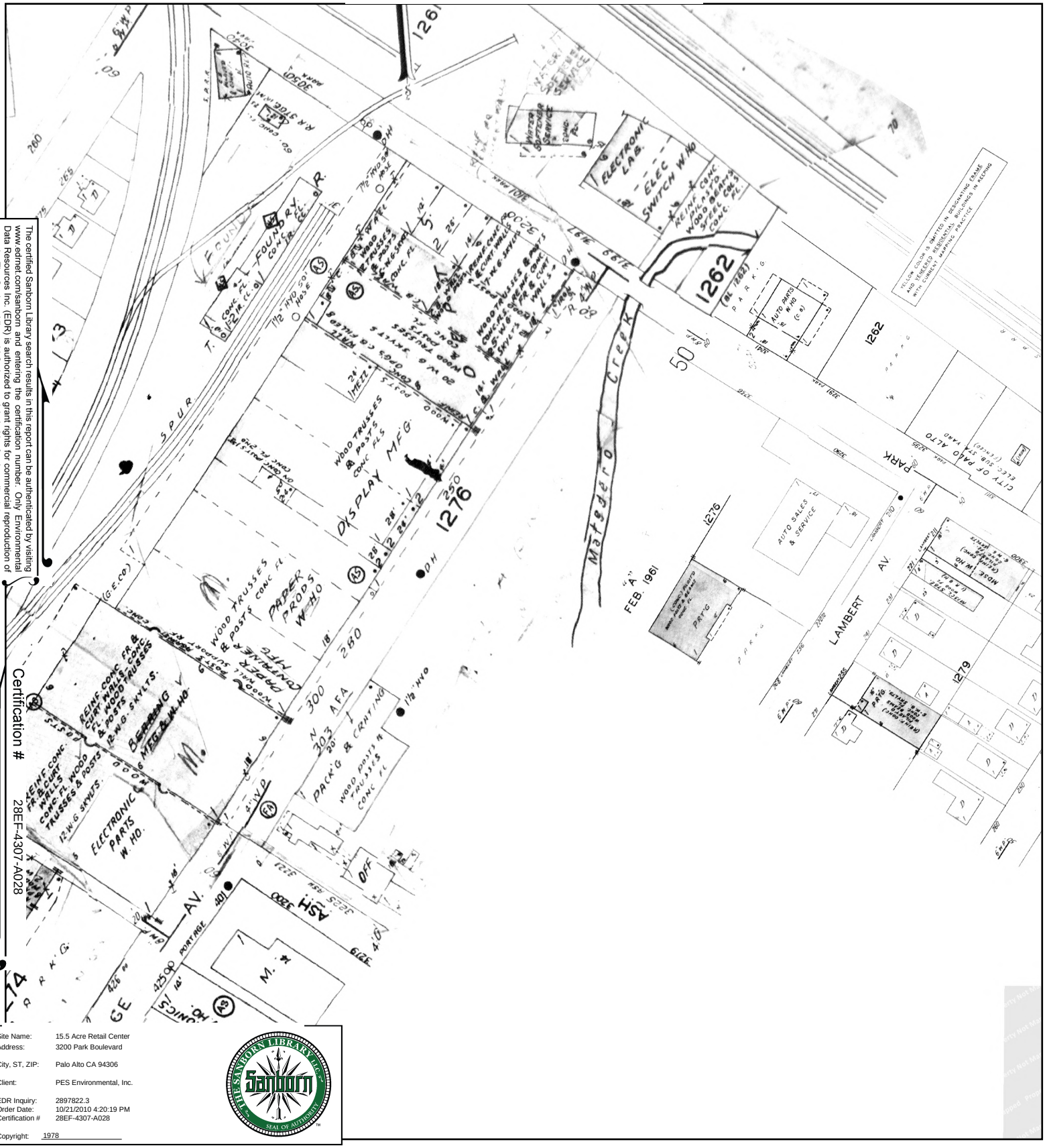
Volume 1, Sheet 56

1956 Source Sheets



Volume 1, Sheet 50

1978 Certified Sanborn Map



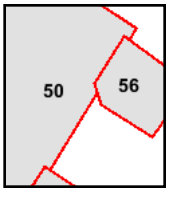
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Certification # 28EF-4307-A028

Site Name: 15.5 Acre Retail Center
Address: 3200 Park Boulevard
City, ST, ZIP: Palo Alto CA 94306
Client: PES Environmental, Inc.
EDR Inquiry: 2897822.3
Order Date: 10/21/2010 4:20:19 PM
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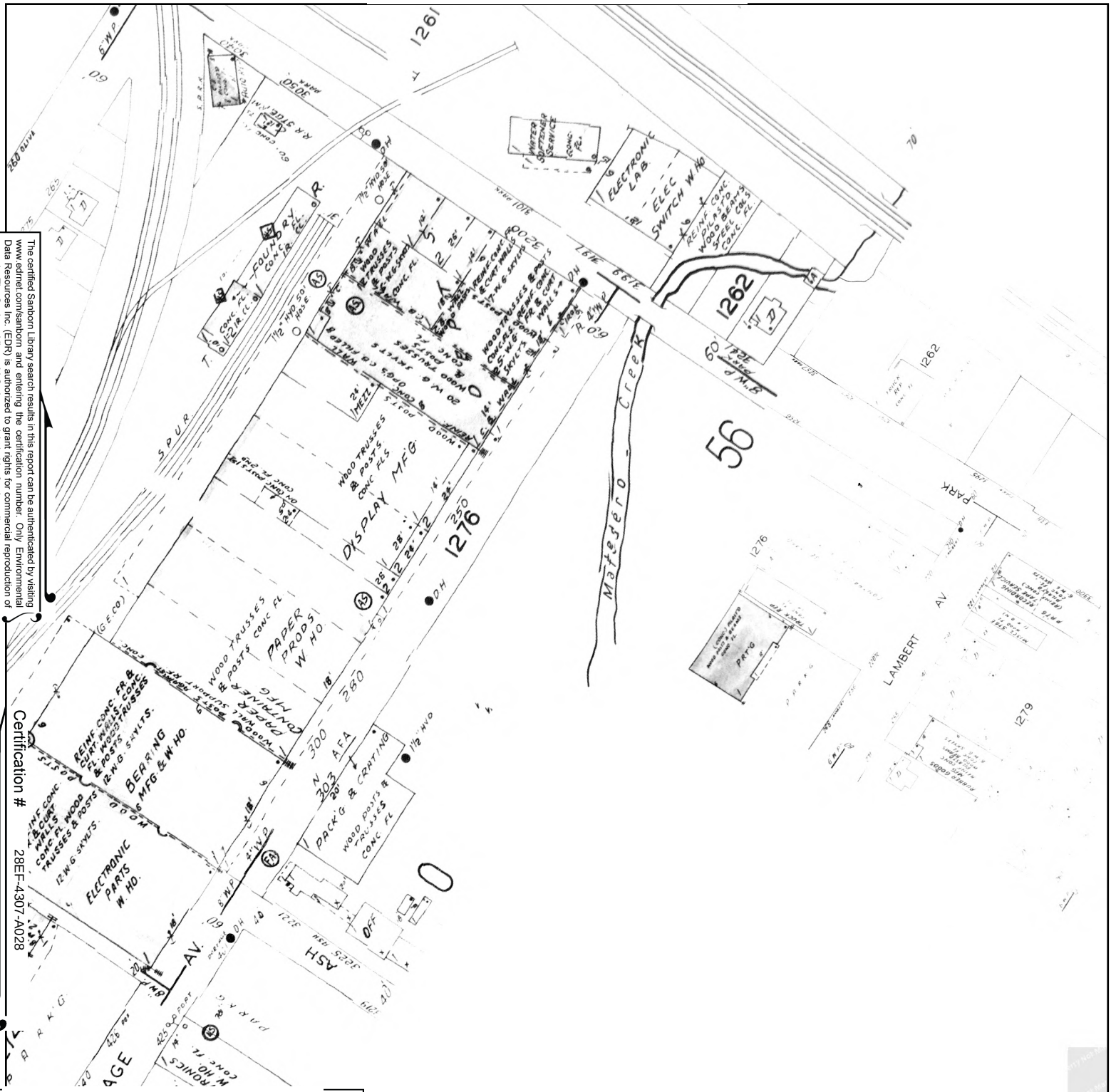


Volume 1, Sheet 50
Volume 1, Sheet 56

0 Feet 150 300 600

N

1969 Certified Sanborn Map



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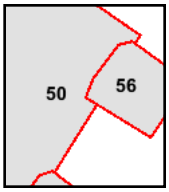
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Site Name:	15.5 Acre Retail Center
Address:	3200 Park Boulevard
City, ST, ZIP:	Palo Alto CA 94306
Client:	PES Environmental, Inc.
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Volume 1, Sheet 50
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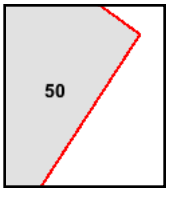
Certification # 28EF-4307-A028

Site Name: 15.5 Acre Retail Center
Address: 3200 Park Boulevard
City, ST, ZIP: Palo Alto CA 94306
Client: PES Environmental, Inc.
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0 Feet 150 300 600





Volume 1, Sheet 50

N

15.5 Acre Retail Center
3200 Park Boulevard
Palo Alto, CA 94306

Inquiry Number: 2897822.3
October 21, 2010

Certified Sanborn® Map Report

EDR® Environmental Data Resources Inc

440 Wheelers Farms Road
Milford, CT 06461
800.352.0050
www.edrnet.com

Certified Sanborn® Map Report

10/21/10

Site Name:
15.5 Acre Retail Center
3200 Park Boulevard
Palo Alto, CA 94306

Client Name:
PES Environmental, Inc.
1682 Novato Boulevard
Novato, CA 94947

EDR Inquiry # 2897822.3

Contact: Chris Baldassari

EDR® Environmental Data Resources Inc

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Site Name: 15.5 Acre Retail Center
Address: 3200 Park Boulevard
City, State, Zip: Palo Alto, CA 94306
Cross Street:
P.O. # 126.076.01.001
Project: 15.5 Acre Retai
Certification # 28EF-4307-A028

Maps Provided:

1978
1969
1956

Sanborn® Library search results
Certification # 28EF-4307-A028

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Sanborn Sheet Thumbnails

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1978 Source Sheets



Volume 1, Sheet 50

1969 Source Sheets



Volume 1, Sheet 50

1956 Source Sheets



Volume 1, Sheet 50

1978 Certified Sanborn Map

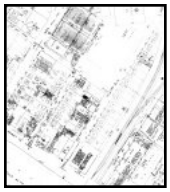


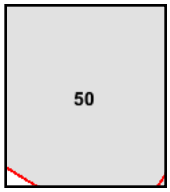
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City, ST, ZIP:	Palo Alto CA 94306
Client:	PES Environmental, Inc.
EDR Inquiry:	2897822.3
Order Date:	10/21/2010 4:20:19 PM
Certification #	28EF-4307-A028
Copyright:	1978

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Volume 1, Sheet 50

0 Feet 150 300 600

N

1969 Certified Sanborn Map



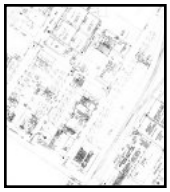
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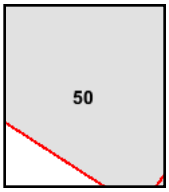
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Site Name:	15.5 Acre Retail Center
Address:	3200 Park Boulevard
City, ST, ZIP:	Palo Alto CA 94306
Client:	PES Environmental, Inc.
EDR Inquiry:	2897822.3
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Certification #	28EF-4307-A028
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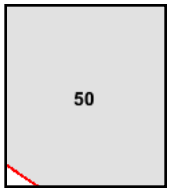
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Site Name:	15.5 Acre Retail Center
Address:	3200 Park Boulevard
City, ST, ZIP:	Palo Alto CA 94306
Client:	PES Environmental, Inc.
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Volume 1, Sheet 50

N

APPENDIX C

HISTORICAL TOPOGRAPHIC MAPS

15.5 Acre Retail Center
3200 Park Boulevard
Palo Alto, CA 94306

Inquiry Number: 2897822.4
October 19, 2010

EDR Historical Topographic Map Report

EDR® Environmental Data Resources Inc

440 Wheelers Farms Road
Milford, CT 06461
800.352.0050
www.edrnet.com

EDR Historical Topographic Map Report

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Please contact EDR at 1-800-352-0050
with any questions or comments.

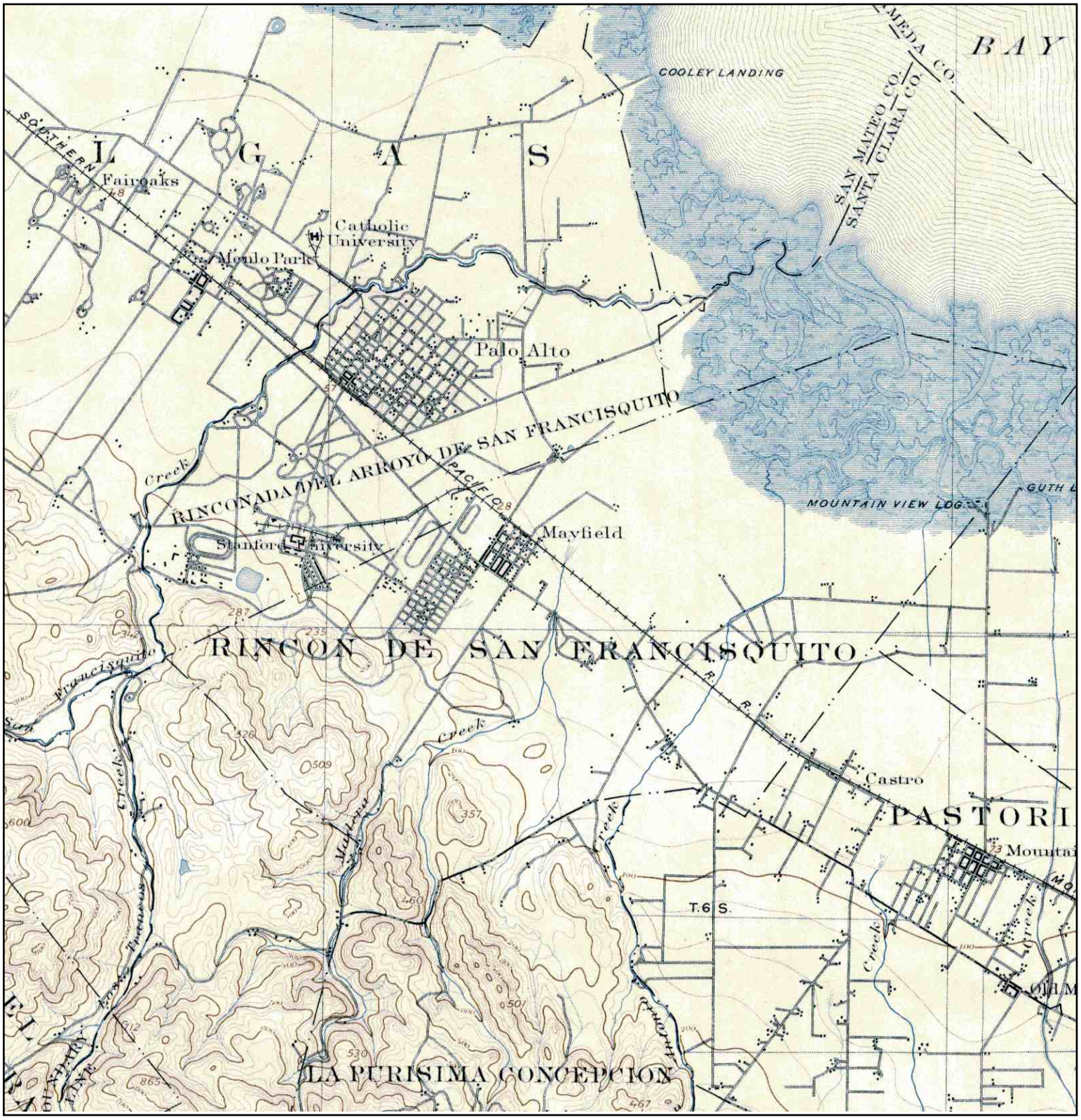
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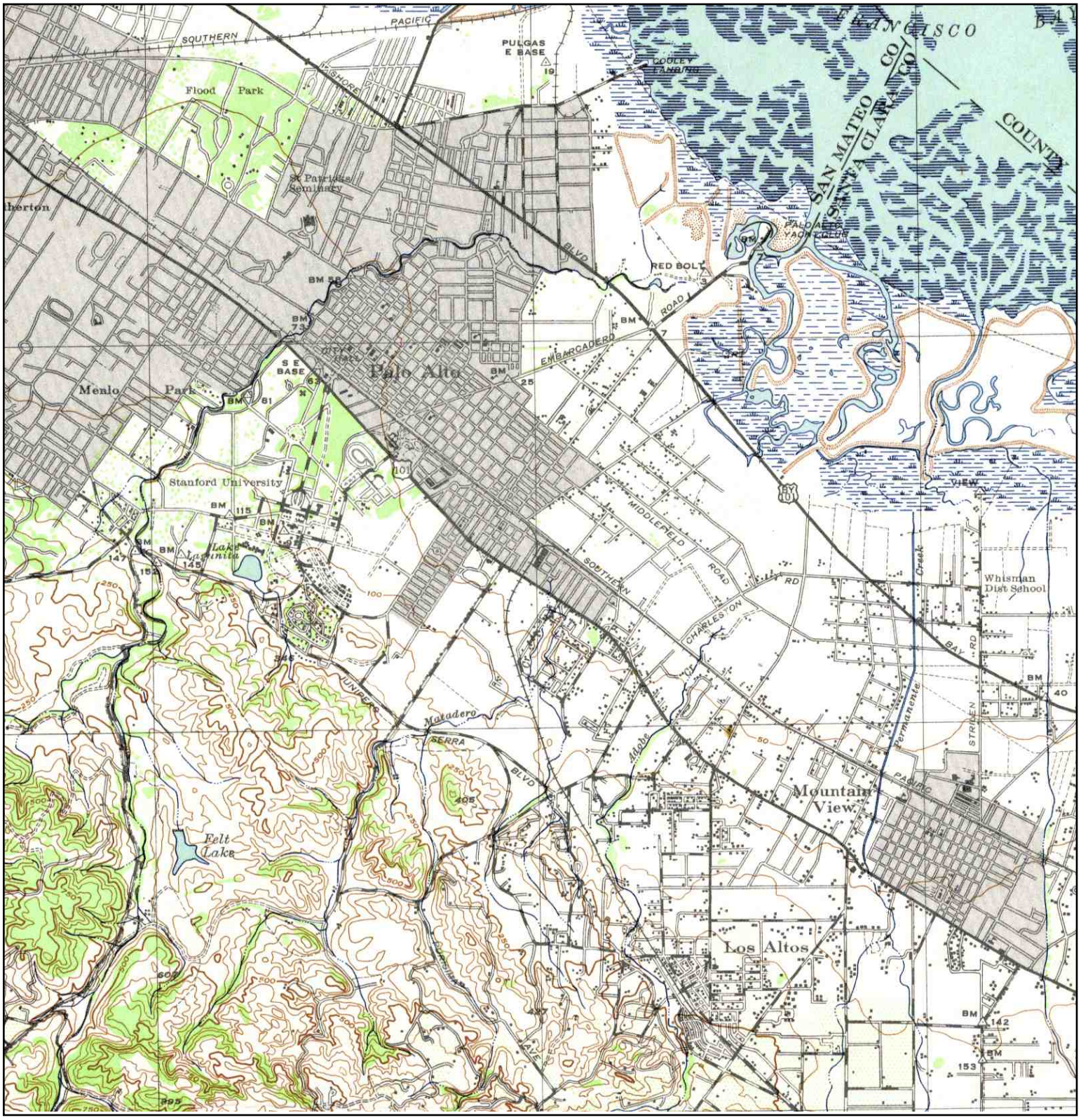
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	MAP YEAR:	1899		Palo Alto, CA 94306	INQUIRY#:	2897822.4
	SERIES:	15	LAT/LONG:	37.4235 / -122.136	RESEARCH DATE:	10/19/2010
	SCALE:	1:62500				

Historical Topographic Map



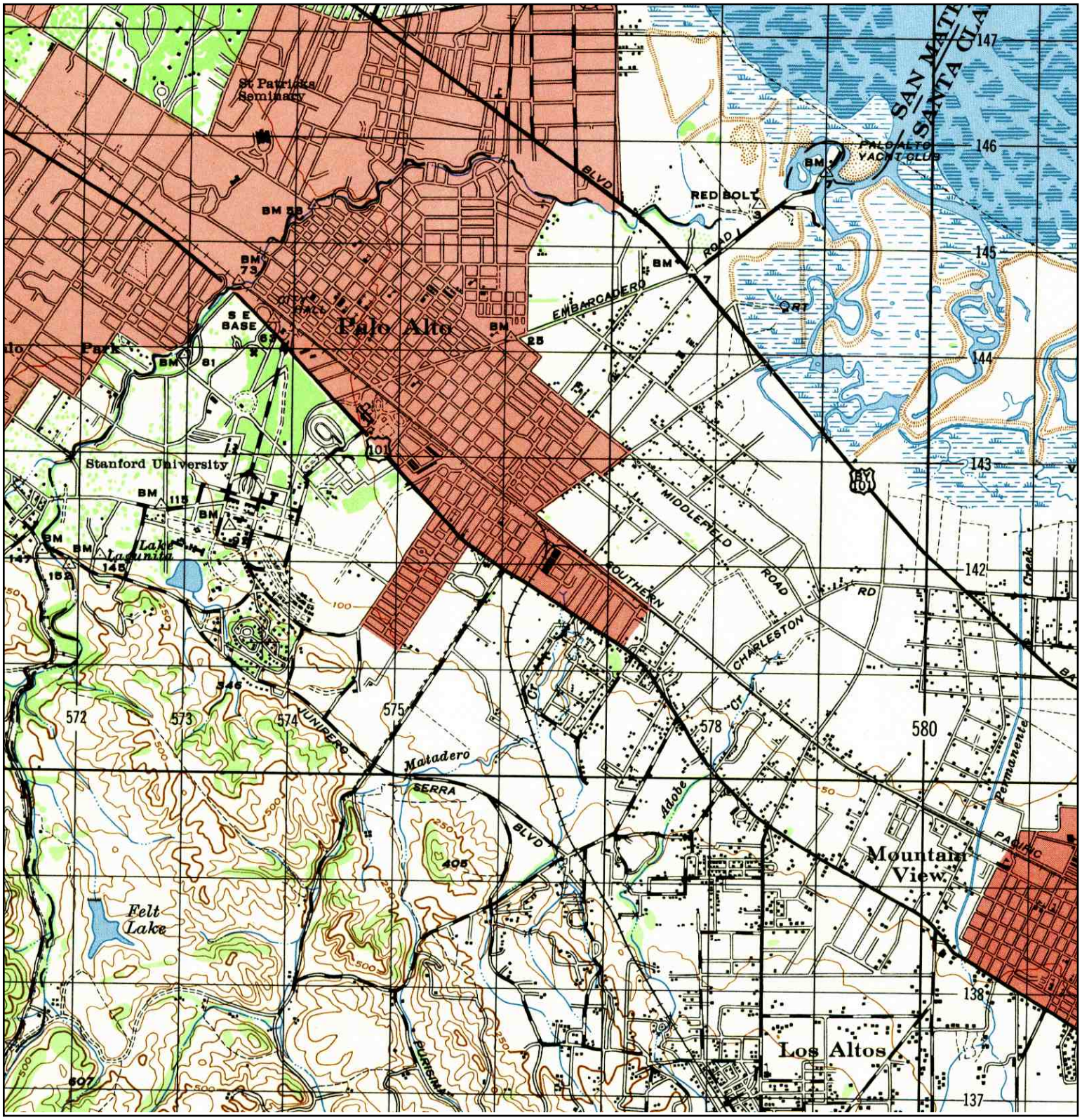
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Historical Topographic Map



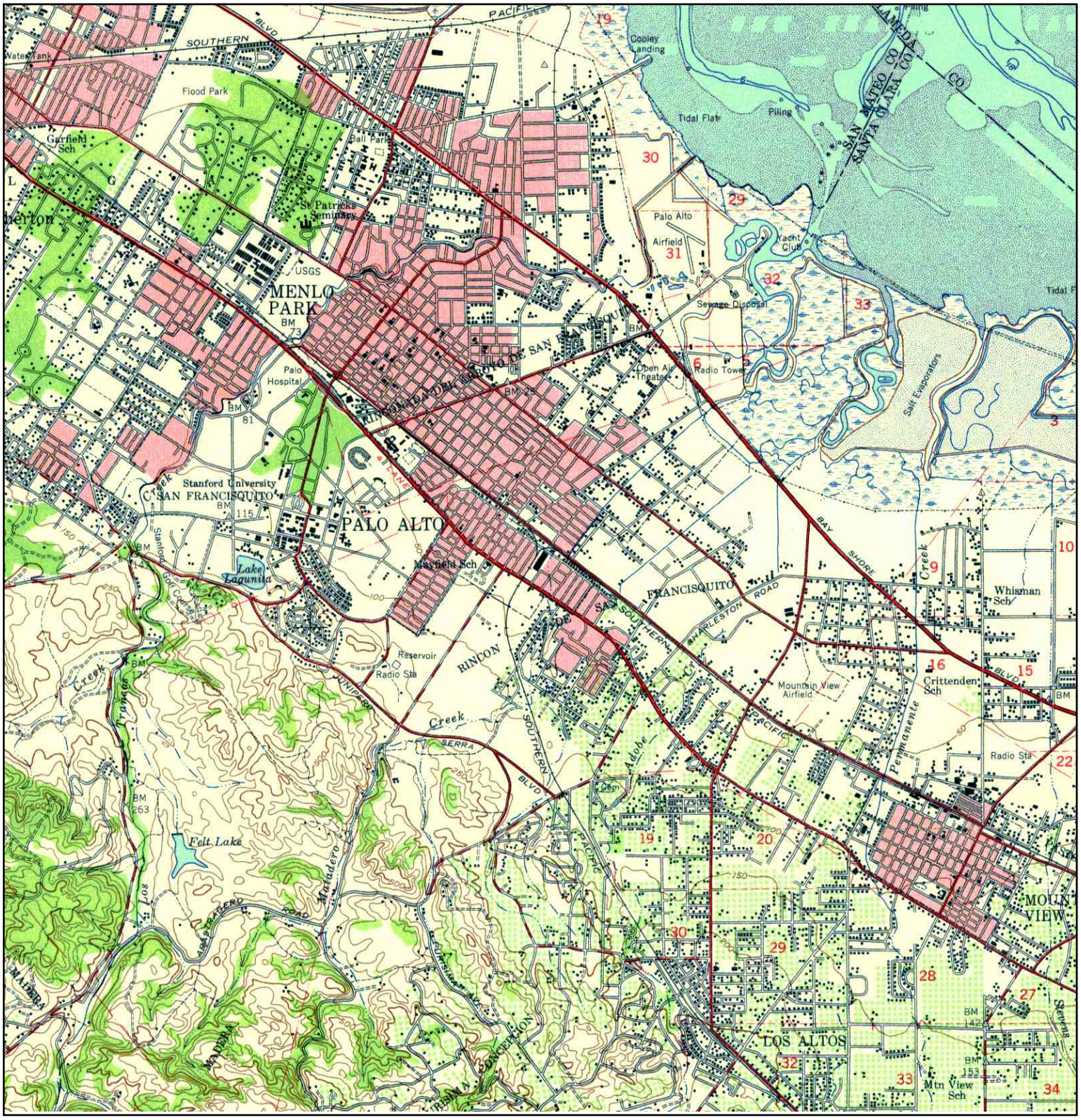
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Historical Topographic Map



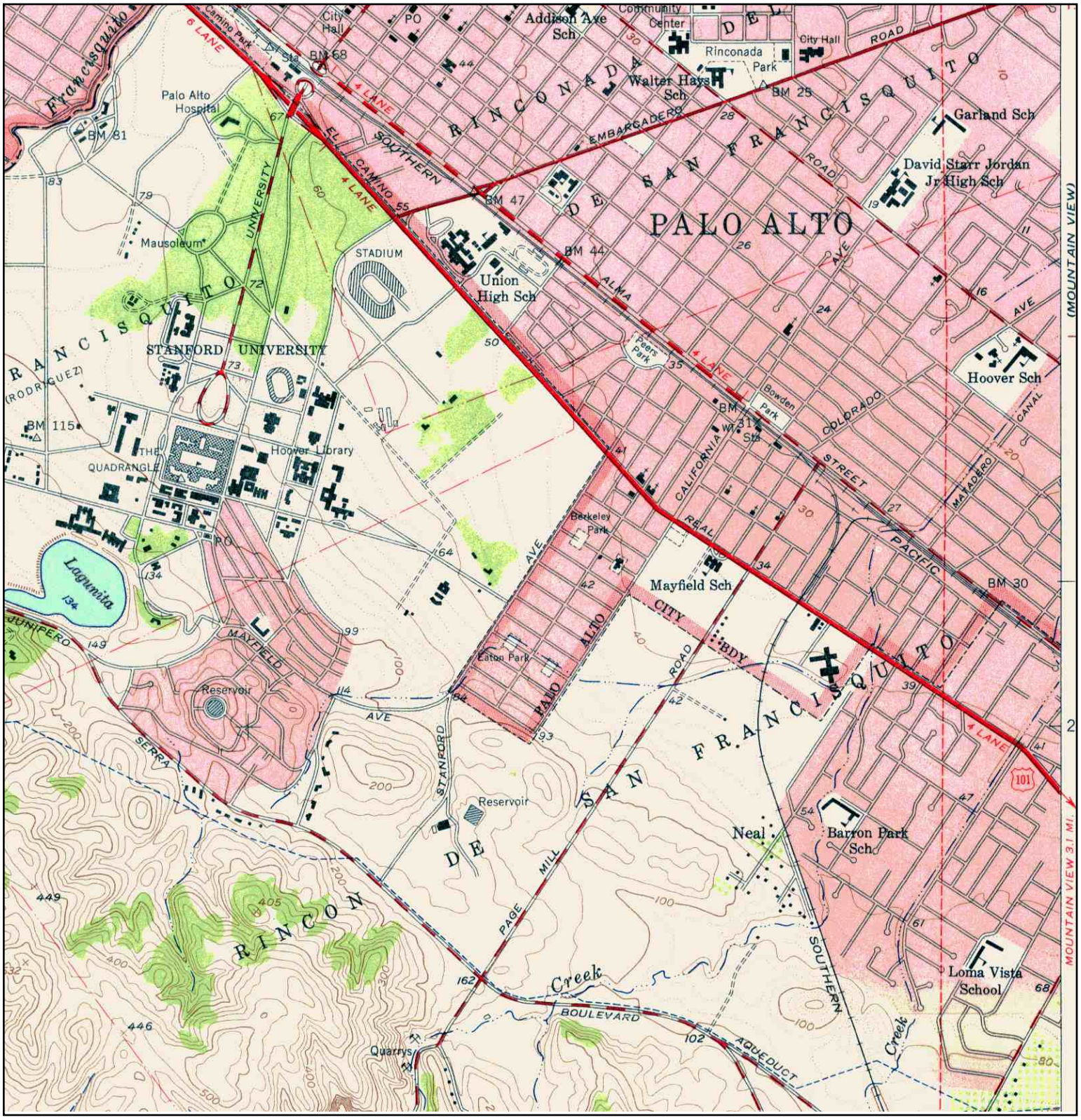
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				Palo Alto, CA 94306	INQUIRY#: 2897822.4
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Historical Topographic Map



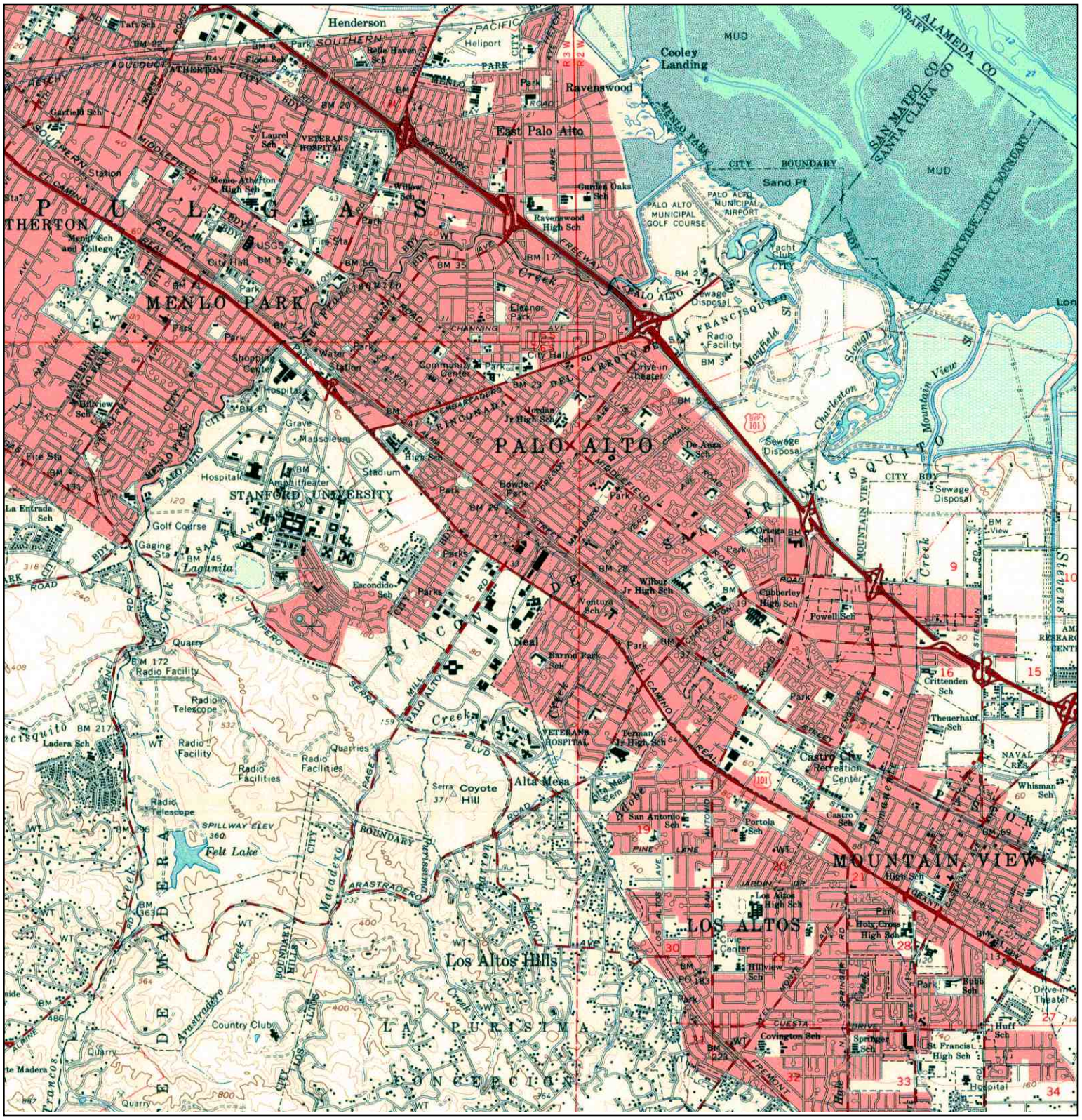
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Historical Topographic Map



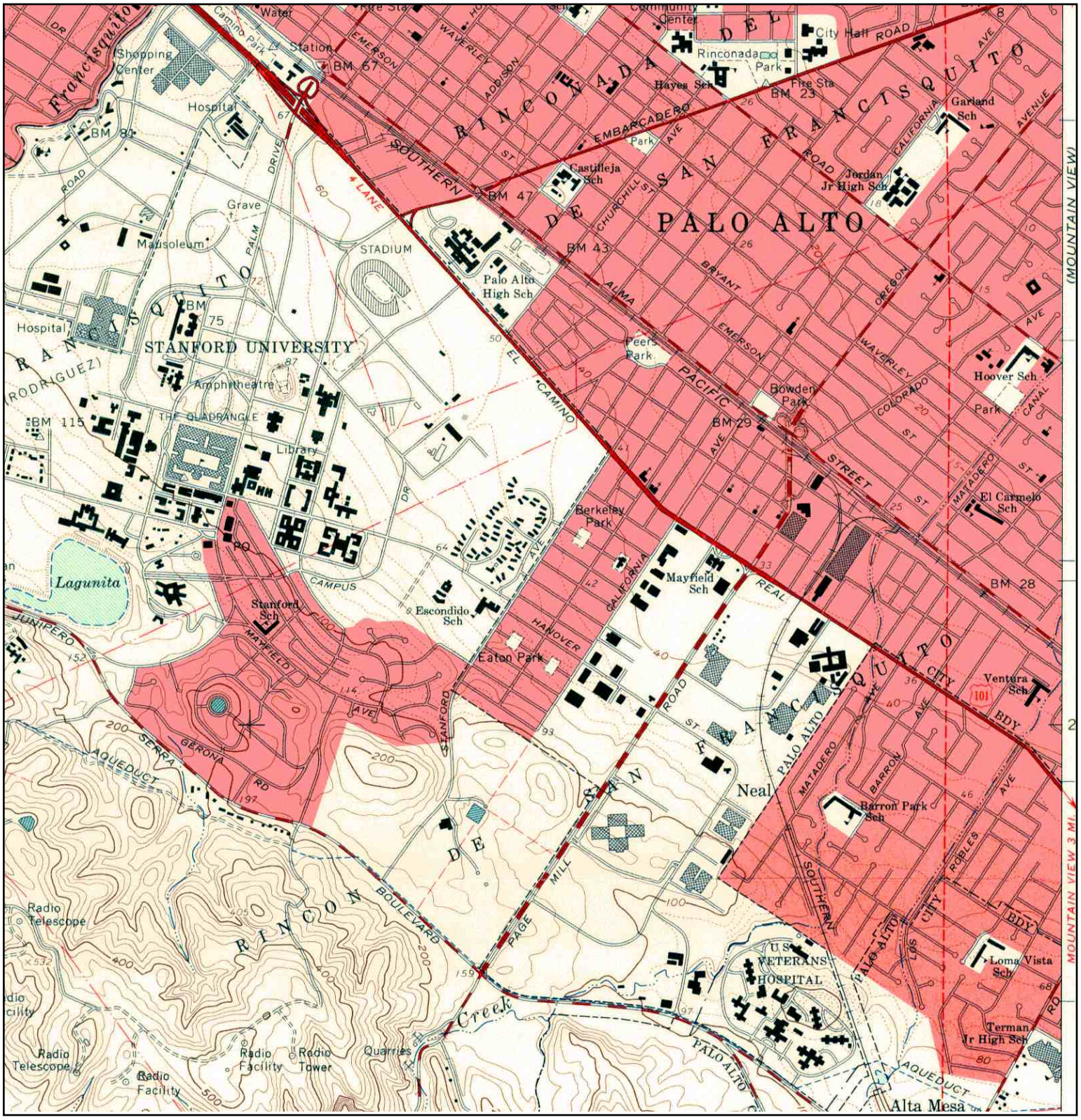
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Historical Topographic Map



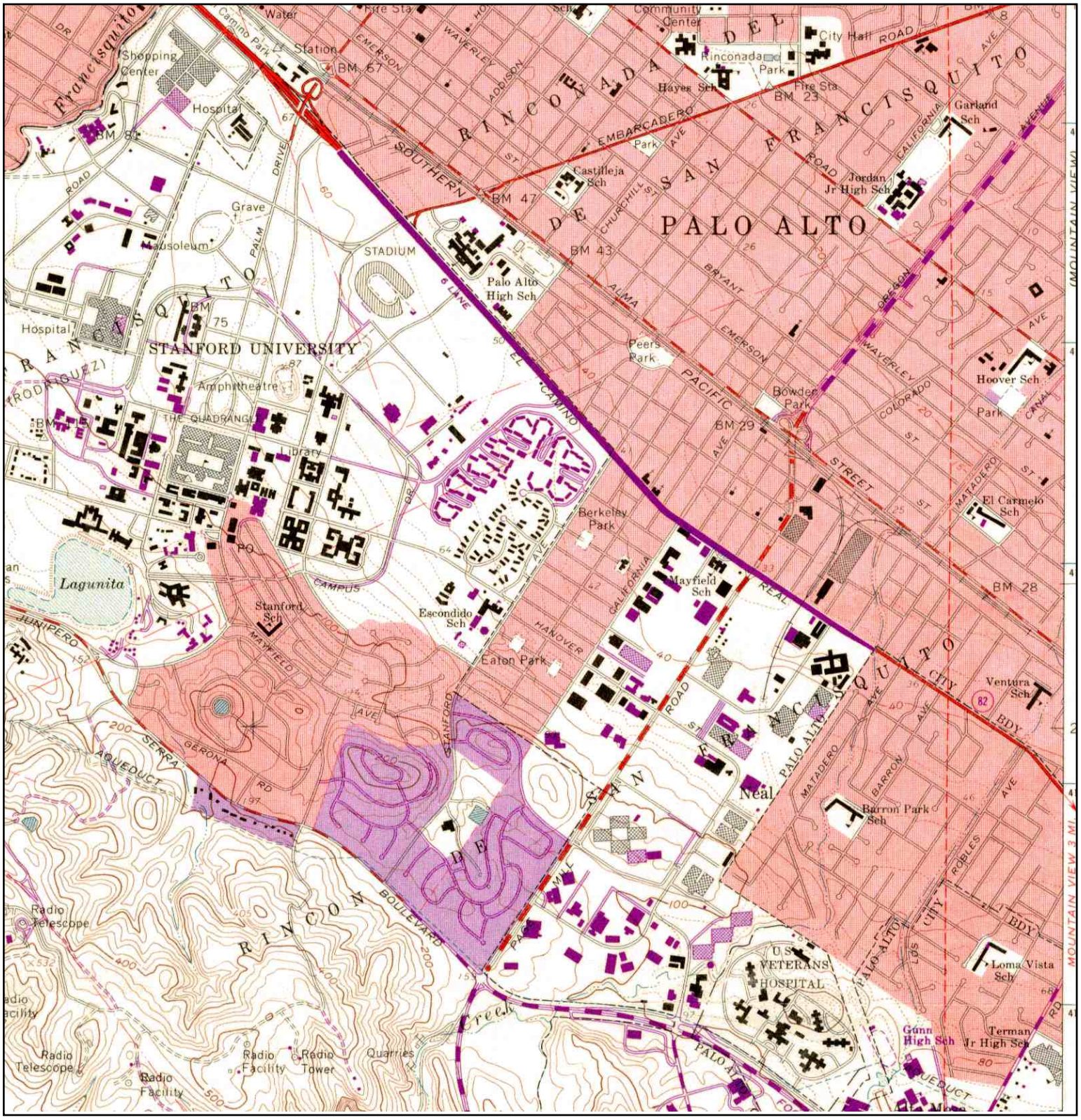
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Historical Topographic Map



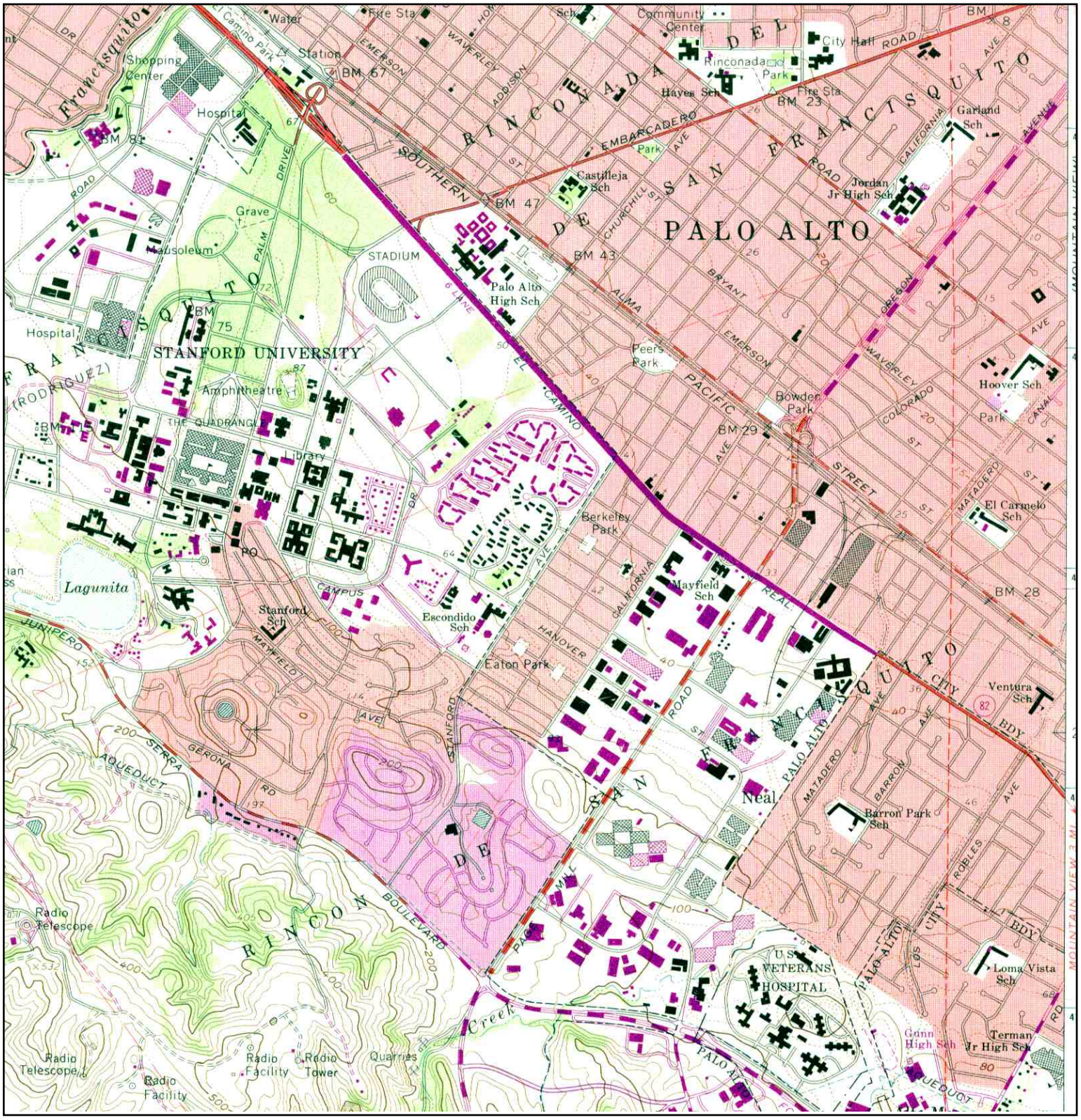
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Historical Topographic Map



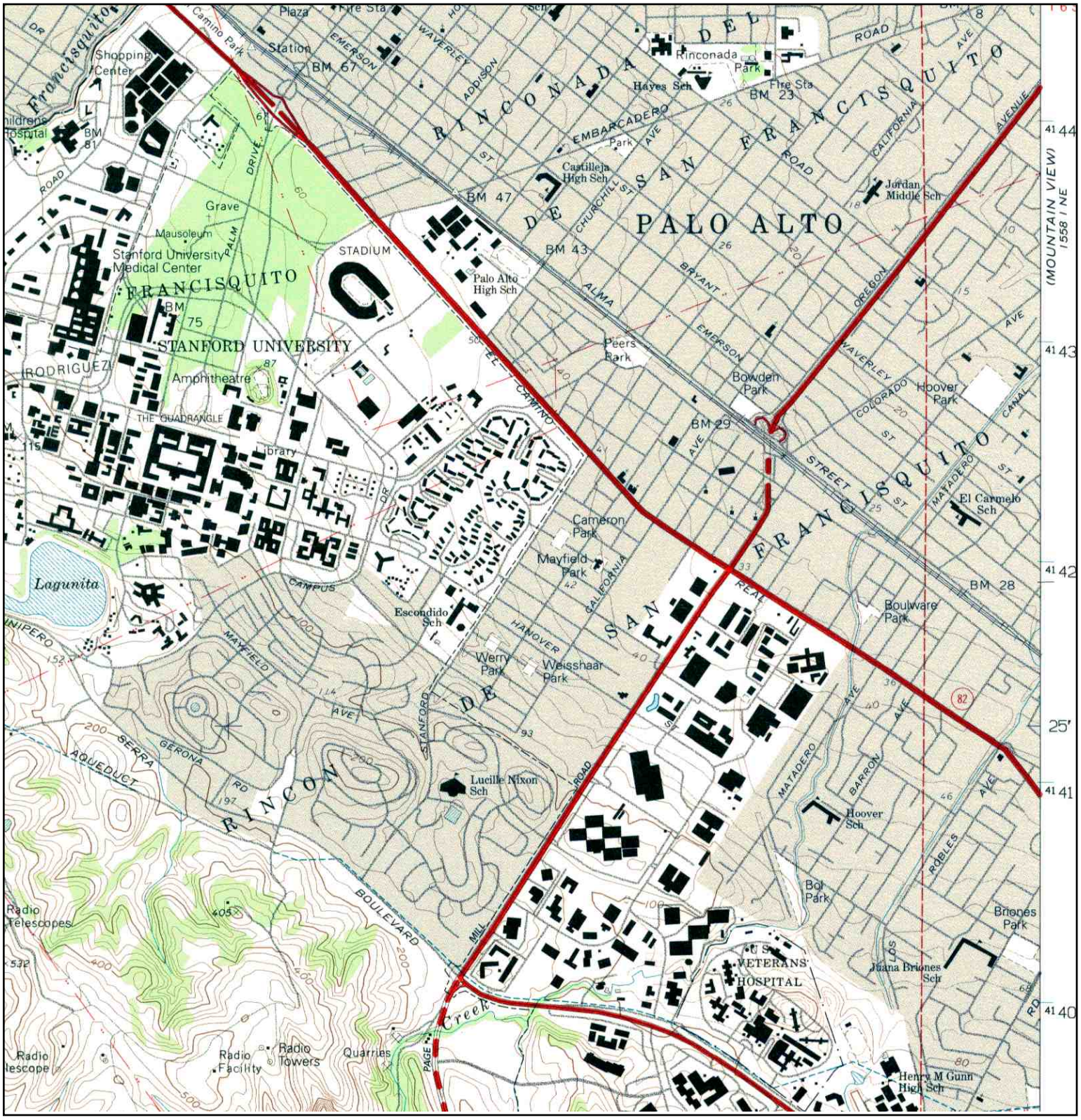
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	SCALE:	1:24000				

Historical Topographic Map



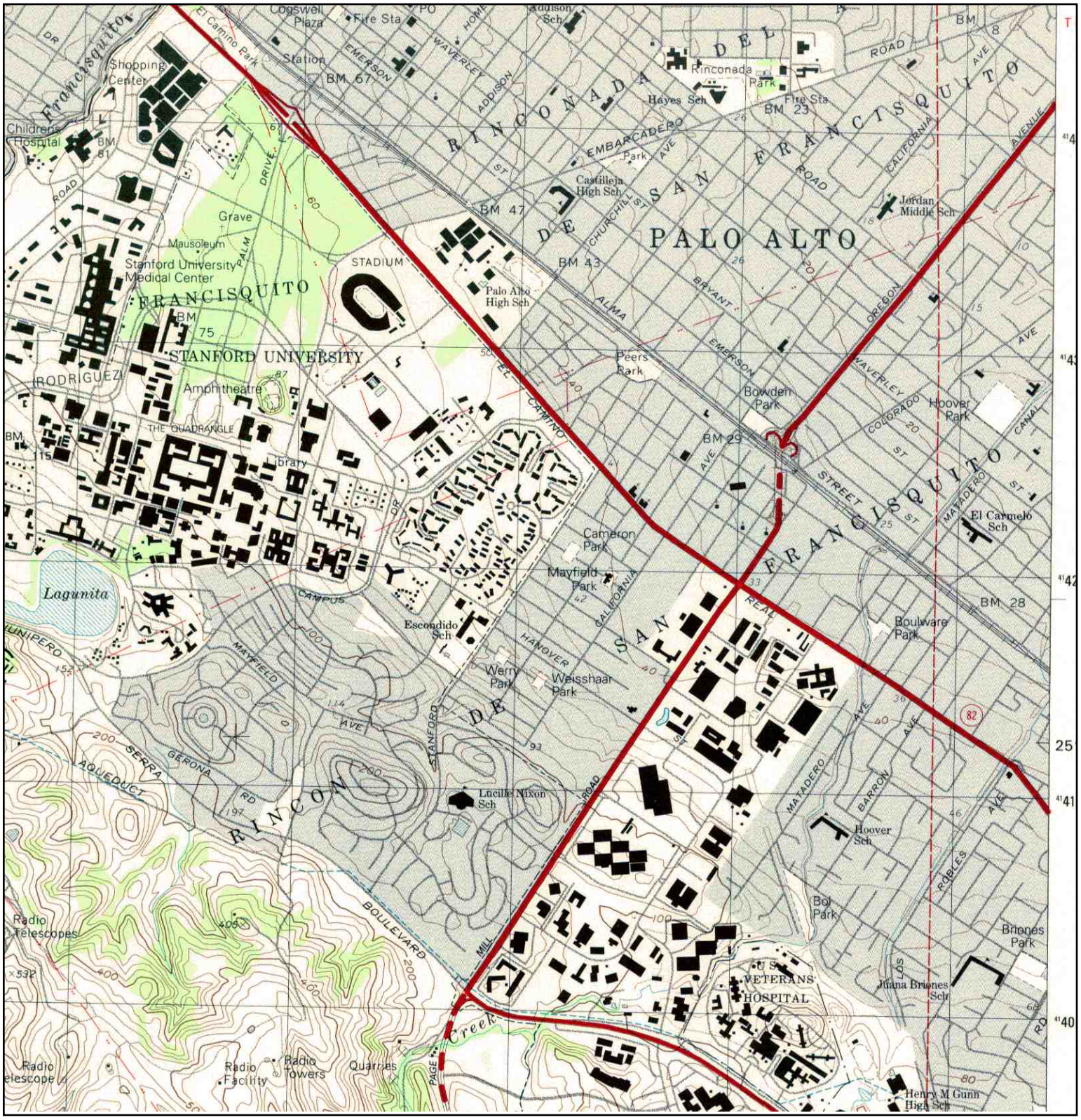
N	TARGET QUAD NAME: PALO ALTO MAP YEAR: 1973 PHOTOREVISED:1961 SERIES: 7.5 SCALE: 1:24000	SITE NAME: 15.5 Acre Retail Center ADDRESS: 3200 Park Boulevard Palo Alto, CA 94306 LAT/LONG: 37.4235 / -122.136	CLIENT: PES Environmental, Inc. CONTACT: Chris Baldassari INQUIRY#: 2897822.4 RESEARCH DATE: 10/19/2010

Historical Topographic Map



N	TARGET QUAD NAME: PALO ALTO MAP YEAR: 1991 SERIES: 7.5 SCALE: 1:24000	SITE NAME: 15.5 Acre Retail Center ADDRESS: 3200 Park Boulevard Palo Alto, CA 94306 LAT/LONG: 37.4235 / -122.136	CLIENT: PES Environmental, Inc. CONTACT: Chris Baldassari INQUIRY#: 2897822.4 RESEARCH DATE: 10/19/2010

Historical Topographic Map



N	TARGET QUAD NAME: PALO ALTO MAP YEAR: 1997 SERIES: 7.5 SCALE: 1:24000	SITE NAME: 15.5 Acre Retail Center ADDRESS: 3200 Park Boulevard Palo Alto, CA 94306 LAT/LONG: 37.4235 / -122.136	CLIENT: PES Environmental, Inc. CONTACT: Chris Baldassari INQUIRY#: 2897822.4 RESEARCH DATE: 10/19/2010

APPENDIX D

CITY ADDRESS DIRECTORY ABSTRACT

3159 El Camino Real
3159 El Camino Real
Palo Alto, CA 94306

Inquiry Number: 2943557.6
December 13, 2010

The EDR-City Directory Abstract

EDR® Environmental Data Resources Inc

440 Wheelers Farms Road
Milford, CT 06461
800.352.0050
www.edrnet.com

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Executive Summary

Findings

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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This Report contains certain information obtained from a variety of public and other sources reasonably available to Environmental Data Resources, Inc. It cannot be concluded from this Report that coverage information for the target and surrounding properties does not exist from other sources. **NO WARRANTY EXPRESSED OR IMPLIED, IS MADE WHATSOEVER IN CONNECTION WITH THIS REPORT. ENVIRONMENTAL DATA RESOURCES, INC. SPECIFICALLY DISCLAIMS THE MAKING OF ANY SUCH WARRANTIES, INCLUDING WITHOUT LIMITATION, MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE. ALL RISK IS ASSUMED BY THE USER. IN NO EVENT SHALL ENVIRONMENTAL DATA RESOURCES, INC. BE LIABLE TO ANYONE, WHETHER ARISING OUT OF ERRORS OR OMISSIONS, NEGLIGENCE, ACCIDENT OR ANY OTHER CAUSE, FOR ANY LOSS OR DAMAGE, INCLUDING, WITHOUT LIMITATION, SPECIAL, INCIDENTAL, CONSEQUENTIAL, OR EXEMPLARY DAMAGES. ANY LIABILITY ON THE PART OF ENVIRONMENTAL DATA RESOURCES, INC. IS STRICTLY LIMITED TO A REFUND OF THE AMOUNT PAID FOR THIS REPORT.** Purchaser accepts this Report "AS IS". Any analyses, estimates, ratings, environmental risk levels or risk codes provided in this Report are provided for illustrative purposes only, and are not intended to provide, nor should they be interpreted as providing any facts regarding, or prediction orforecast of, any environmental risk for any property. Only a Phase I Environmental Site Assessment performed by an environmental professional can provide information regarding the environmental risk for any property. Additionally, the information provided in this Report is not to be construed as legal advice.

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EXECUTIVE SUMMARY

DESCRIPTION

Environmental Data Resources, Inc.'s (EDR) City Directory Abstract is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's City Directory Abstract includes a search and abstract of available city directory data. For each address, the directory lists the name of the corresponding occupant at five year intervals.

Business directories including city, cross reference and telephone directories were reviewed, if available, at approximately five year intervals for the years spanning 1922 through 2006. This report compiles information gathered in this review by geocoding the latitude and longitude of properties identified and gathering information about properties within 660 feet of the target property.

A summary of the information obtained is provided in the text of this report.

RESEARCH SUMMARY

The following research sources were consulted in the preparation of this report. An "X" indicates where information was identified in the source and provided in this report.

Year	Source	TP	Adjoining	Text Abstract	Source Image
2006	Haines Company, Inc.	-	-	-	-
2001	Haines & Company, Inc.	X	X	X	-
2000	Haines & Company	-	X	X	-
1996	Pacific Bell	-	-	-	-
1991	PACIFIC BELL WHITE PAGES	X	X	X	-
1986	Pacific Bell	X	X	X	-
	Pacific Telephone	X	X	X	-
1985	Pacific Bell	-	X	X	-
1982	Pacific Telephone	-	X	X	-
1980	Pacific Telephone	-	X	X	-
1978	R. L. Polk & Co.	-	X	X	-
1975	Pacific Telephone	X	X	X	-
1974	R. L. Polk & Co.	-	-	-	-
1970	R. L. Polk & Co.	-	X	X	-
1968	R. L. Polk & Co.	-	-	-	-
1966	R. L. Polk & Co.	-	-	-	-
1965	R. L. Polk & Co.	-	X	X	-
1964	R. L. Polk & Co.	-	X	X	-
1963	Pacific Telephone	-	X	X	-
1962	R. L. Polk & Co.	-	-	-	-
1960	R. L. Polk & Co.	-	X	X	-
1957	Pacific Telephone	-	X	X	-
	R. L. Polk Co.	-	X	X	-
1955	R. L. Polk & Co.	X	X	X	-
1950	R. L. Polk Co.	X	X	X	-

EXECUTIVE SUMMARY

Year	Source	TP	Adjoining	Text Abstract	Source Image
1946	R. L. Polk & Co.	X	X	X	-
1945	R. L. Polk & Co.	-	-	-	-
1942	R. L. Polk & Co.	X	X	X	-
1940	R. L. Polk & Co.	-	-	-	-
1936	R. L. Polk & Co.	X	X	X	-
1935	R. L. Polk & Co. of California	-	-	-	-
1931	R. L. Polk & Co.	X	X	X	-
1930	R. L. Polk & Co. of California	-	-	-	-
1926	R. L. Polk Co.	-	-	-	-
1925	R. L. Polk & Co.	-	-	-	-
1922	R. L. Polk Co.	-	-	-	-

FINDINGS

TARGET PROPERTY INFORMATION

ADDRESS

3159 El Camino Real
Palo Alto, CA 94306

FINDINGS DETAIL

Target Property research detail.

Year	*Uses*	*Source*
2001	ALLAMAC	Haines & Company, Inc.
	WE FIX MACS	Haines & Company, Inc.
1991	PHOTO DRIVE UP	PACIFIC BELL WHITE PAGES
1986	PHOTO DRIVE UP	Pacific Bell
	PHOTO DRIVE UP	Pacific Telephone
1975	BANANA RECORDS	Pacific Telephone
1955	Apex Roofing & Tile Co da	R. L. Polk & Co.
1950	AProst C L lino	R. L. Polk Co.
1946	Frost C L Roofing Tiling & Flooring	R. L. Polk & Co.
1942	Frost C L Roofing & Tile Co	R. L. Polk & Co.
1936	Frost C L roofer	R. L. Polk & Co.
1931	Lockie J A clo clnr	R. L. Polk & Co.

FINDINGS

ADJOINING PROPERTY DETAIL

The following Adjoining Property addresses were researched for this report. Detailed findings are provided for each address.

ACACIA AVE

411 ACACIA AVE

Year	Uses	Source
1978	Palo Alto Datsun repr	R. L. Polk & Co.
1970	Grahams Auto Body Shop	R. L. Polk & Co.
1950	ASchantz B V	R. L. Polk Co.
1946	Mendoza M S	R. L. Polk & Co.
	Sanchez B V	R. L. Polk & Co.
1942	Sanchez Benito	R. L. Polk & Co.
1936	Sanchez Benito	R. L. Polk & Co.
1931	Romero B H Mrs	R. L. Polk & Co.

435 ACACIA AVE

Year	Uses	Source
1970	S L A C Whae	R. L. Polk & Co.

443 ACACIA AVE

Year	Uses	Source
1978	Hewlett Packard Whse	R. L. Polk & Co.

463 ACACIA AVE

Year	Uses	Source
1978	Varian Associates	R. L. Polk & Co.

473 ACACIA AVE

Year	Uses	Source
1970	Kodansha International	R. L. Polk & Co.

491 ACACIA AVE

Year	Uses	Source
1960	Kellum Roy A	R. L. Polk & Co.
1955	Lindsay Signa Mrs	R. L. Polk & Co.
1946	Davis D L	R. L. Polk & Co.
1942	Aherns I R	R. L. Polk & Co.
1936	Edwards E C	R. L. Polk & Co.

Year	Uses	Source
1931	Dale Smelts	R. L. Polk & Co.

ACACIA WAY

491 ACACIA WAY

Year	Uses	Source
1957	LINDSAY PAUL	Pacific Telephone

ASH

3200 ASH

Year	Uses	Source
1986	Star	Pacific Bell
	Star Graphic Arts Co Inc	Pacific Bell
1982	Pick Up & Delivery	Pacific Telephone
	STAR GRAPHIC ARTS CO INC	Pacific Telephone
	STAR GRAPHIC ARTS CO INC	Pacific Telephone
	Star Photoengraving Co See Star Graphic Arts Co Inc	Pacific Telephone
	General	Pacific Telephone

3201 ASH

Year	Uses	Source
1991	WSJ ASSOCIATES	PACIFIC BELL WHITE PAGES
	CALIFORNIA FAMILY FOUNDATION	PACIFIC BELL WHITE PAGES
1986	Dura Bond Bearing Co A Unit Of SKF Industries Inc	Pacific Bell
1982	Dura Bond Bearing Co A Unit Of SKF Industries Inc	Pacific Telephone
1975	Eaton Corporation Special Products Divislon	Pacific Telephone
1960	Dura Bond Engine Parts Co mfrs da	R. L. Polk & Co.
	Dura Bond Bearing Co mfrs da	R. L. Polk & Co.

3217 ASH

Year	Uses	Source
1955	Safeway Stores whse da	R. L. Polk & Co.

3221 ASH

Year	Uses	Source
1955	Cole Mfg Co rubber gds da	R. L. Polk & Co.

FINDINGS

3225 ASH

Year	Uses	Source
1955	Cellotape Prntrs da	R. L. Polk & Co.

ASH ST

3200 ASH ST

Year	Uses	Source
2001	a ELECTRIC PLANET	Haines & Company, Inc.
1986	STAR	Pacific Telephone
	STAR GRAPHIC ARTS CO INC	Pacific Telephone
1978	Star Graphic Arts Co Inc lithographic films	R. L. Polk & Co.

3201 ASH ST

Year	Uses	Source
2001	WSJ PROPERTIES	Haines & Company, Inc.
	CA FAMILY FNDHT	Haines & Company, Inc.
1986	DURA BOND BEARING CO A UNIT OF SKF INDUSTRIES INC	Pacific Telephone
1978	Me Quay Norris Inc Dura bond Div bearings	R. L. Polk & Co.
1970	Dura Bond Bearing Plant	R. L. Polk & Co.
1965	DURA BOND ENGINE PARTS CO	R. L. Polk & Co.
	AUTOMOTIVE PRODUCTS CO	R. L. Polk & Co.

3221 ASH ST

Year	Uses	Source
1957	COLE MFG CO RUBBR	Pacific Telephone

3225 ASH ST

Year	Uses	Source
1957	CELLOTAPE & TAG PRINTERS	Pacific Telephone

3250 ASH ST

Year	Uses	Source
2001	FANTASMA NETWORK	Haines & Company, Inc.
	FANTASMANEWORK	Haines & Company, Inc.
1986	BEMISS JASON CORP PAPR PRODS	Pacific Telephone
1978	Bemiss Jason Corp paper dlrs	R. L. Polk & Co.
1970	Bemiss Jason Corp paper dhrs	R. L. Polk & Co.
1965	BEMISS JASON CORP PAPER DLRS	R. L. Polk & Co.
1957	FRATERNAL ORDER OF EAGLES	Pacific Telephone

FINDINGS

3251 ASH ST

Year	Uses	Source
2001	0 LONGANECKERSarah SAY RAY FRGN ATO SV	Haines & Company, Inc.
1986	SAY RAY FOREIGN AUTO SERVICE	Pacific Telephone
1978	Say Ray Foreign Auto Service repr	R. L. Polk & Co.
1970	Say Ray Foreign Auto Service auto reyr	R. L. Polk & Co.
1965	SAY RAY FOREIGN AUTO SERVICE AUTO REPR	R. L. Polk & Co.

E EL CAMINO REAL

2550 E EL CAMINO REAL

Year	Uses	Source
1986	General Nutrition Center	Pacific Bell
	Fashion Conspiracy Inc	Pacific Bell
	Europa Fine Menswear	Pacific Bell
	Crescent Jewelers	Pacific Bell
	Creative Ventures Inc	Pacific Bell
	San Antonio Hobby Shop	Pacific Bell
	San Antonio Merchants Assn	Pacific Bell
	J Higbys Yogurt Shop	Pacific Bell

2570 E EL CAMINO REAL

Year	Uses	Source
1986	Staff Builders Temporary Personnel	Pacific Bell
	Palo Alto District Sales Office	Pacific Bell
	TYMSHARE INC	Pacific Bell
	Weinberger Edward L	Pacific Bell
	Mostyn Gregory R ri est analys	Pacific Bell
	Laventhol & Horwath	Pacific Bell
	Hunter Lynne B CPA	Pacific Bell
	Equity Development Co Inc 70	Pacific Bell
	Dynamic Travel Consultants	Pacific Bell
	Certified Flexstaff Temporary Personnel Service	Pacific Bell
	Cann Bryce I AIA archt	Pacific Bell
	Staff Builders Technical Service	Pacific Bell
	Nelson Dennis CPA	Pacific Bell
	Radofin Electronics USA Ltd I	Pacific Bell
	SRA Corporation	Pacific Bell

FINDINGS

Year	Uses	Source
1986	Polo Microsystems Inc	Pacific Bell

2580 E EL CAMINO REAL

Year	Uses	Source
1986	Quality Tune Up Shops	Pacific Bell

2600 E EL CAMINO REAL

Year	Uses	Source
1986	Lee Chilton H A Professional Corp	Pacific Bell

2651 E EL CAMINO REAL

Year	Uses	Source
1986	Fantail The	Pacific Bell
	CRUISER LOUNGE & RESTAURANT	Pacific Telephone

2656 E EL CAMINO REAL

Year	Uses	Source
1986	Mountain View Body Shop	Pacific Bell
	Chase Milton J	Pacific Bell

2680 E EL CAMINO REAL

Year	Uses	Source
1986	International Procurement Specialists Inc	Pacific Bell

2821 E EL CAMINO REAL

Year	Uses	Source
1986	Zion Christian Center	Pacific Bell

2900 E EL CAMINO REAL

Year	Uses	Source
1986	El Camino Keily Branch	Pacific Bell
	BANK OF AMERICA NT & SA	Pacific Bell

3000 E EL CAMINO REAL

Year	Uses	Source
1986	MITSUBISHI CHEMICAL INDUSTRIES AMERICA INT PALO ALTO 855 93	Pacific Telephone

3030 E EL CAMINO REAL

Year	Uses	Source
1991	LOVELY LADY NAILS	PACIFIC BELL WHITE PAGES
1985	LOVELY LADY COIFFURES-NAILS	Pacific Bell

Year	Uses	Source
1957	BILLINGS DONUT SHOP	Pacific Telephone

3033 E EL CAMINO REAL

Year	Uses	Source
1986	RAFFERTY JAMES F	Pacific Telephone

3044 E EL CAMINO REAL

Year	Uses	Source
1957	VESUVIO S PIZZERIA	Pacific Telephone

3100 E EL CAMINO REAL

Year	Uses	Source
1975	A & T AUTOMOTIVE	Pacific Telephone

3148 E EL CAMINO REAL

Year	Uses	Source
1985	MIGNOSA S WINE & FLOWERS	Pacific Bell

3160 E EL CAMINO REAL

Year	Uses	Source
1985	EL CAMINO GLASS & MIRROR	Pacific Bell

3216 E EL CAMINO REAL

Year	Uses	Source
1957	C G M STORE THE	Pacific Telephone

3232 E EL CAMINO REAL

Year	Uses	Source
1985	KODENKAN JU-JITSU SCHOOL	Pacific Bell
1975	TURLEY POPCORN CO	Pacific Telephone

3241 E EL CAMINO REAL

Year	Uses	Source
1985	BUGGY BATH OF SANTA CLARA	Pacific Bell

EL CAMINO

2600 EL CAMINO

Year	Uses	Source
1986	Stanford Financial Square Branch	Pacific Bell
	BANK OF AMERICA NT & SA AUJTOMATED TELLER MACHINES	Pacific Bell

FINDINGS

EL CAMINO REAL

2555 EL CAMINO REAL

Year	Uses	Source
1986	WROUGHT IRON SPECIALTIES	Pacific Telephone
	WROUGHT IRON SPECIALTIES	Pacific Bell

2560 EL CAMINO REAL

Year	Uses	Source
1986	Store	Pacific Bell
	STORE	Pacific Telephone
	Spinnaker Sailing	Pacific Bell

2580 EL CAMINO REAL

Year	Uses	Source
1986	BRICK OVEN PIZZA	Pacific Telephone
	MEL S REDWOOD BOWL	Pacific Telephone
	Bowlers Den At Mels Bowl	Pacific Bell
	Mels Redwood Bowl	Pacific Bell
	BOWLERS DEN AT MEL S BOWL	Pacific Telephone

2601 EL CAMINO REAL

Year	Uses	Source
1986	BACHELOR BOOKS	Pacific Telephone
	Eureka Enterprises Inc	Pacific Bell
	EUREKA ENTERPRISES INC	Pacific Telephone
	Bachelor Books	Pacific Bell

2627 EL CAMINO REAL

Year	Uses	Source
1986	TACOS EL CAMINO	Pacific Telephone
	Tacos El Camino	Pacific Bell

2633 EL CAMINO REAL

Year	Uses	Source
1986	V & J Upholstery	Pacific Bell
	V & J Upholstery	Pacific Bell
	KYS AUTO REPAIR	Pacific Bell
	V & J UPHOLSTERY	Pacific Telephone
	KY S AUTO REPAIR	Pacific Telephone
	V & J UPHOLSTERY	Pacific Telephone

FINDINGS

2650 EL CAMINO REAL

Year	Uses	Source
1986	CONTINENTAL GARDEN MOTEL	Pacific Bell
	CONTINENTAL GARDEN MOTEL	Pacific Telephone

2671 EL CAMINO REAL

Year	Uses	Source
1986	YOUR SCOOTER SHOP	Pacific Telephone
	YOUR SCOOTER SHOP	Pacific Bell
	VIVA VESPA SEE YOUR SCOOTER SHOP	Pacific Telephone

2675 EL CAMINO REAL

Year	Uses	Source
1986	Crocker Banking Card ATM Card	Pacific Bell
	South Palo Alto Industrial Park Office	Pacific Bell
1975	CROCKER NATIONAL BANK Contd Palo Alto I Contd	Pacific Telephone
	South Palo Alto Industrial Park Office	Pacific Telephone
1965	CROCKER CITIZENS NATIONAL BANK BR	R. L. Polk & Co.

2700 EL CAMINO REAL

Year	Uses	Source
1986	Calico Corners	Pacific Bell
	CLASS REUNION	Pacific Bell
	CLASS REUNION	Pacific Telephone
	CALICO CORNERS	Pacific Telephone

2701 EL CAMINO REAL

Year	Uses	Source
1986	B$URKE MOBILEHOME SALES	Pacific Telephone
	BURKE UPHOLSTERY CO	Pacific Telephone
	BURKE GRADY A REALTOR	Pacific Telephone
	Burke Upholstery Co	Pacific Bell
	B$urke Mobilehome Sales	Pacific Bell
	Burke Grady A Realtor	Pacific Bell
	Burke Mobilehome Appraisals	Pacific Bell

2710 EL CAMINO REAL

Year	Uses	Source
1986	AMITY TOURS	Pacific Telephone

FINDINGS

Year	Uses	Source
1986	Amity Tours	Pacific Bell

2711 EL CAMINO REAL

Year	Uses	Source
1986	Betts Christmas Trees	Pacific Bell
	BETTS CHRISTMAS TREES	Pacific Telephone
	ARROYO S & VINCENZO S AUTO BODY & PAINT	Pacific Telephone
	Arroyos & Vincenzos Auto Body & Paint	Pacific Bell
1965	PALO ALTO ONE STOP SERVICE GAS ST	R. L. Polk & Co.
1960	Sixitlh & Wttttlo htxtvo	R. L. Polk & Co.
	S trv AlA 6n	R. L. Polk & Co.
1955	Smith & Walton Texaco Serv da	R. L. Polk & Co.
1950	a Smith & Wal	R. L. Polk Co.
	ton gas sta	R. L. Polk Co.
1946	La Dues Serv Sta	R. L. Polk & Co.
1942	Vacant	R. L. Polk & Co.
1936	General Petroleum Corp gas sta	R. L. Polk & Co.

2727 EL CAMINO REAL

Year	Uses	Source
1986	GALLERIA LIGHTING	Pacific Telephone
	LIGHTING GALLERIA	Pacific Telephone
	LIGHTING GALLERIA	Pacific Bell

2747 EL CAMINO REAL

Year	Uses	Source
1986	Xaviers Restaurant	Pacific Bell
	XAVIER S RESTAURANT	Pacific Telephone

2750 EL CAMINO REAL

Year	Uses	Source
1986	Brick Warehouse The	Pacific Bell
	BRICK WAREHOUSE THE	Pacific Telephone
	CUSTOMER & DELIVERY SERVICE	Pacific Telephone
	Redwood City	Pacific Bell

2755 EL CAMINO REAL

Year	Uses	Source
1986	GARNERS PRO BICYCLE SHOP	Pacific Telephone

FINDINGS

Year	Uses	Source
1986	GARNERS PRO BICYCLE SHOP	Pacific Bell

2760 EL CAMINO REAL

Year	Uses	Source
1986	REDWOOD CITY NURSERY I	Pacific Telephone
	REDWOOD CITY NURSERY I	Pacific Bell

2762 EL CAMINO REAL

Year	Uses	Source
1986	Rotten Robbie	Pacific Bell
	ROTTEN ROBBIE	Pacific Telephone

2771 EL CAMINO REAL

Year	Uses	Source
1986	HONDA REDWOOD CITY	Pacific Telephone
	HONDA REDWOOD CITY	Pacific Bell

2780 EL CAMINO REAL

Year	Uses	Source
1986	Palo Alto Mobll	Pacific Bell
	PALO ALTO MOBLL	Pacific Telephone
1975	PAGE MILL MOBIL SERVICE	Pacific Telephone
	Mobil Service Station Dealers	Pacific Telephone
1965	COMBES BOB MOBIL SERVICE GAS ST	R. L. Polk & Co.
1960	Cah 1lo Mobil tirv	R. L. Polk & Co.
	gm rlia 4DAl 14t	R. L. Polk & Co.

2801 EL CAMINO REAL

Year	Uses	Source
1986	S Sharp Art Auto Clinic	Pacific Bell

2805 EL CAMINO REAL

Year	Uses	Source
1986	POLLY AND JAKE TURN	Pacific Telephone
	Polly And Jake turn	Pacific Bell
1975	POLLY AND JAKE furn	Pacific Telephone
1965	POLLY & JAKE ANTIQUES	R. L. Polk & Co.
1955	Polly & Jake antique	R. L. Polk & Co.
1950	antiques	R. L. Polk Co.
	a Polly & Jake	R. L. Polk Co.

FINDINGS

Year	Uses	Source
1946	Hewlett Packard Co shop	R. L. Polk & Co.
	Pepper intersects	R. L. Polk & Co.
1942	Olive intersects	R. L. Polk & Co.
	Pepper intersects	R. L. Polk & Co.
	Hewlett Packard Co Shop	R. L. Polk & Co.
1936	Tinker Bells antiques	R. L. Polk & Co.
	Pepper intersects	R. L. Polk & Co.
	Olive intersects	R. L. Polk & Co.

2808 EL CAMINO REAL

Year	Uses	Source
1986	BULANTI WORLD WIDE TRAVEL INC	Pacific Telephone
	BULANTI WORLD WIDE TRAVEL INC	Pacific Bell

2821 EL CAMINO REAL

Year	Uses	Source
1986	Zion Christian Center Bookstore	Pacific Bell
	ZION CHRISTIAN CENTER BOOKS	Pacific Telephone
	ZION CHRISTIAN CENTER BOOKSTORE	Pacific Telephone

2825 EL CAMINO REAL

Year	Uses	Source
1986	CHAPRALIS TOM REALTY	Pacific Bell
	BRITISH AUTOMOTIVE SERVICE	Pacific Telephone
	BURNETT BRITISH AUTOMOTIVE SERVICE	Pacific Telephone
	CHAPRALIS TOM REALTY	Pacific Telephone
	BURNETT BRITISH AUTOMOTIVE SERVICE	Pacific Bell
1975	BRITISH AUTOMOTIVE SERVICE	Pacific Telephone
	BURNETT BILL & SONS	Pacific Telephone
1965	BRITISH AUTOMOTIVE SERVICE REPR	R. L. Polk & Co.
1955	Bargain Center A 4D	R. L. Polk & Co.
1950	Vacant	R. L. Polk Co.

2826 EL CAMINO REAL

Year	Uses	Source
1986	Barsav Corp	Pacific Bell
	L AUBERGE FRENCH RESTAURANT	Pacific Bell
	L AUBERGE FRENCH RESTAURANT	Pacific Telephone

Year	Uses	Source
1986	BARSAV CORP	Pacific Telephone

2900 EL CAMINO REAL

Year	Uses	Source
1985	BANK OF AMERICA NT & SA (CONTD)	Pacific Bell
1980	El Camind Kiely Branch	Pacific Telephone
	BRANCH	Pacific Telephone

2930 EL CAMINO REAL

Year	Uses	Source
1963	Edgewater Lodge	Pacific Telephone

2951 EL CAMINO REAL

Year	Uses	Source
2001	BEHUNIN CECIL DDVM	Haines & Company, Inc.
	AGRAMONTERJRDVM	Haines & Company, Inc.
	HSP INKSMITHS	Haines & Company, Inc.
	SETO DESIGN	Haines & Company, Inc.
	ELCAMINO ANIMAL	Haines & Company, Inc.
1978	Carnes Piano & Organ Co	R. L. Polk & Co.
1970	Carnes Piano & Organ Co	R. L. Polk & Co.

2961 EL CAMINO REAL

Year	Uses	Source
1942	Garcia E H restr	R. L. Polk & Co.
	Sheridan intersects	R. L. Polk & Co.

2980 EL CAMINO REAL

Year	Uses	Source
2001	XXXX	Haines & Company, Inc.
1978	lConnolly Richd	R. L. Polk & Co.
	Cottages	R. L. Polk & Co.

2998 EL CAMINO REAL

Year	Uses	Source
1991	ATLANTIC FINANCIAL SAVINGS BANK SANTA CLARA 248 270	PACIFIC BELL WHITE PAGES
1985	CAPITAL FEDERAL SAVINGS & LOAN ASSOCIATION	Pacific Bell

FINDINGS

2999 EL CAMINO REAL

Year	Uses	Source
2001	GOULD Richard PIZZA HUT	Haines & Company, Inc.
1978	Redi Pasta restr	R. L. Polk & Co.
1970	Spaghetti Already restr	R. L. Polk & Co.

3000 EL CAMINO REAL

Year	Uses	Source
2001	CENTAUR PARTNERS	Haines & Company, Inc.
	LLC INTERIM PERSONNEL	Haines & Company, Inc.
	NIFPVENTURES USA	Haines & Company, Inc.
	TSAI MICHAEL I ATTY	Haines & Company, Inc.
	NUMBER	Haines & Company, Inc.
	SEE PALO ALTO SQUARE	Haines & Company, Inc.
1986	FEDERAL EXPRESS	Pacific Telephone
	HARTWELL CHRISTOPHER L WILSON SONSINI GOODRICH & I ROSATI PROFESSIONAL CORP	Pacific Telephone
	PENINSULA REPRODUCTION INC	Pacific Telephone
1978	Palo Alto Square ofc bldg Security Pacific Bank	R. L. Polk & Co.
1970	Bank Of California National Assn	R. L. Polk & Co.

3001 EL CAMINO REAL

Year	Uses	Source
2001	XXXX	Haines & Company, Inc.
1978	Town & Country Billiards	R. L. Polk & Co.
1975	Town & Country Billiards	Pacific Telephone
	TOWN & COUNTRY BILLIARD CENTER	Pacific Telephone
1970	Town & Country Billiards	R. L. Polk & Co.
1965	ACME CLEANERS	R. L. Polk & Co.
1960	Ac tu lw	R. L. Polk & Co.
1955	Acme Clns da	R. L. Polk & Co.
1946	Olive intersects	R. L. Polk & Co.
	Palo Alto Supp Co	R. L. Polk & Co.

3004 EL CAMINO REAL

Year	Uses	Source
1963	Eds Pharmacy	Pacific Telephone
1960	Seymours Rexall Drugs No	R. L. Polk & Co.

FINDINGS

3005 EL CAMINO REAL

Year	Uses	Source
2001	XXXX	Haines & Company, Inc.
1965	KANNEY FURNITURE	R. L. Polk & Co.
1960	Kaniy Purotin utltt	R. L. Polk & Co.
1955	Kanney Furn used furn da	R. L. Polk & Co.
1950	a Kanney Purn	R. L. Polk Co.
	used furn	R. L. Polk Co.

3007 EL CAMINO REAL

Year	Uses	Source
1950	plmbg sups	R. L. Polk Co.
	AUnger M R	R. L. Polk Co.

3014 EL CAMINO REAL

Year	Uses	Source
1985	EAT IT SUBMARINE SANDWICHES	Pacific Bell
1963	Hugh Mc Elhenny Markets	Pacific Telephone
1960	Grandview Super Mkt gro	R. L. Polk & Co.

3017 EL CAMINO REAL

Year	Uses	Source
2001	PALO ALTO NISSAN	Haines & Company, Inc.
	STANFORD NISSAN	Haines & Company, Inc.
	NISSAN OF PALO ALTO	Haines & Company, Inc.
	NISSAN	Haines & Company, Inc.
1978	Palo Alto Datsun	R. L. Polk & Co.
1970	Stigall Motors Inc	R. L. Polk & Co.

3024 EL CAMINO REAL

Year	Uses	Source
1980	FOTOMAT CORPORATION	Pacific Telephone
	Stores	Pacific Telephone

3030 EL CAMINO REAL

Year	Uses	Source
1985	LOVELY LADY COIFFURES	Pacific Bell
1960	Billings Donut Shop ax	R. L. Polk & Co.

FINDINGS

3034 EL CAMINO REAL

Year	Uses	Source
1963	CLEVES BEAUTY SALON	Pacific Telephone
1960	Kerrs Variety ch	R. L. Polk & Co.

3087 EL CAMINO REAL

Year	Uses	Source
1980	Cy s Realty	Pacific Telephone

3090 EL CAMINO REAL

Year	Uses	Source
1975	Palo Alto Square	Pacific Telephone

3100 EL CAMINO REAL

Year	Uses	Source
1960	Vacant	R. L. Polk & Co.

3105 EL CAMINO REAL

Year	Uses	Source
1986	Well Being Dateline	Pacific Bell
1985	FLY SOUND INTERNATIONAL INC	Pacific Bell
	WELL-BEING DATELINE	Pacific Bell

3111 EL CAMINO REAL

Year	Uses	Source
2001	XXXX	Haines & Company, Inc.
1965	MILAM TOM MOTOR CARS USED CAR LOT	R. L. Polk & Co.

3115 EL CAMINO REAL

Year	Uses	Source
1955	Coburn Edw D	R. L. Polk & Co.
1950	Rhodes CE	R. L. Polk Co.
1946	Lindsay Paul	R. L. Polk & Co.
1942	Moser Josephine Mrs	R. L. Polk & Co.
1936	Vacant	R. L. Polk & Co.
1931	De Laney L H	R. L. Polk & Co.

3124 EL CAMINO REAL

Year	Uses	Source
2001	XXXX	Haines & Company, Inc.

FINDINGS

3127 EL CAMINO REAL

Year	Uses	Source
2001	MILLER Michael PET FOOD DEPOT	Haines & Company, Inc.
1980	Palo Alto	Pacific Telephone
	Goodrow Moncrieff Relly & Mellema MOs	Pacific Telephone
1978	Goodwill Store used mdse	R. L. Polk & Co.
1970	Tire Outlet Stores	R. L. Polk & Co.

3128 EL CAMINO REAL

Year	Uses	Source
1978	Me Donalds restr	R. L. Polk & Co.

3129 EL CAMINO REAL

Year	Uses	Source
2001	MCDONALDS	Haines & Company, Inc.

3131 EL CAMINO REAL

Year	Uses	Source
2001	MILLER Michael	Haines & Company, Inc.
1978	Palo Alto Datsun Used Car Lot	R. L. Polk & Co.

3145 EL CAMINO REAL

Year	Uses	Source
1985	SILVER DOLLAR	Pacific Bell
1955	Under constn	R. L. Polk & Co.
1950	AWhitford H W	R. L. Polk Co.
1946	Whitford H W	R. L. Polk & Co.
1942	Lindsay Paul	R. L. Polk & Co.
1936	Malott I S	R. L. Polk & Co.
1931	Vacant	R. L. Polk & Co.

3150 EL CAMINO REAL

Year	Uses	Source
2001	FISH MARKET RSTRNT	Haines & Company, Inc.
	VOORHIESJoyce	Haines & Company, Inc.
1985	MIGNOSA S GYM	Pacific Bell
1978	Fish Market The sea food restr	R. L. Polk & Co.
1975	LUCERNE STAMP & COIN	Pacific Telephone
	W-B PRECIOUS METALS & DIAMONDS	Pacific Telephone
1970	Uncle Johns Pancake House restr	R. L. Polk & Co.

FINDINGS

Year	Uses	Source
1965	UNCLE JOHNS PANCAKE HOUSE RESTR	R. L. Polk & Co.
1963	Lichthardt Kurt F	Pacific Telephone
1960	Apartments	R. L. Polk & Co.
	Morrison Lynn	R. L. Polk & Co.
	Street continued	R. L. Polk & Co.
	Perez John	R. L. Polk & Co.
	Mc Neill Chas	R. L. Polk & Co.
	Smith Leonard	R. L. Polk & Co.

3160 EL CAMINO REAL

Year	Uses	Source
2001	VOORHIES Joyce	Haines & Company, Inc.
1970	Vacant	R. L. Polk & Co.
1965	REAR HALLIN CLARK 0 INS ADJ	R. L. Polk & Co.
	VACANT	R. L. Polk & Co.
1955	Hallin Clark da	R. L. Polk & Co.
	Filippi John M lwyr da	R. L. Polk & Co.

3166 EL CAMINO REAL

Year	Uses	Source
1970	Vacant	R. L. Polk & Co.
1965	VARIAN ASSOCIATES ADV DEPT	R. L. Polk & Co.
1955	Varian Assocs electronics research da	R. L. Polk & Co.
1950	AVoorhies W H	R. L. Polk Co.

3169 EL CAMINO REAL

Year	Uses	Source
1978	Banana Records	R. L. Polk & Co.

3170 EL CAMINO REAL

Year	Uses	Source
2001	XXXX	Haines & Company, Inc.
1978	Voorhies Wm H real est	R. L. Polk & Co.
1975	VOORHIES W H ri est	Pacific Telephone
	Ofc	Pacific Telephone
1970	Voorhies Wm H real est	R. L. Polk & Co.
1965	VOORHIES WM H REAL EST	R. L. Polk & Co.
1955	Voorhies W H real est da	R. L. Polk & Co.

FINDINGS

3190 EL CAMINO REAL

Year	Uses	Source
1980	Heiser Robert	Pacific Telephone

3200 EL CAMINO REAL

Year	Uses	Source
2001	PATELBipin SUPER 6 MOTEL	Haines & Company, Inc.
1978	Milner Wm W	R. L. Polk & Co.
	Currier Motel	R. L. Polk & Co.
1970	Currier Motel	R. L. Polk & Co.
	Milner Wm W	R. L. Polk & Co.

3208 EL CAMINO REAL

Year	Uses	Source
1963	Brochetti Luigi	Pacific Telephone
	Byers Margaret	Pacific Telephone
	Case Kenneth H	Pacific Telephone
	Clark Wilford H	Pacific Telephone
	Harrington Lloyd	Pacific Telephone
	Hopkins Ernest F	Pacific Telephone
	Hunt Willie	Pacific Telephone
	Mayfield Dewey E	Pacific Telephone
	Nelson John N	Pacific Telephone
	Petra Juanita	Pacific Telephone
	Pillow Eva	Pacific Telephone
	Presley Minnie G	Pacific Telephone
	Presley Willis	Pacific Telephone
	Rasico Duffy A	Pacific Telephone
	Rathburn A T	Pacific Telephone
	Scherf Ray A	Pacific Telephone
	Simpson J V	Pacific Telephone
	Schultz J W	Pacific Telephone
	Talburt Chris	Pacific Telephone
1960	Secluded Trailer Ct	R. L. Polk & Co.

3220 EL CAMINO REAL

Year	Uses	Source
1985	PEPPINO PIZZA	Pacific Bell
1975	PIPPIN PIZZA	Pacific Telephone
	PIPPIN PIZZA	Pacific Telephone

FINDINGS

Year	Uses	Source
1960	Pippino Pizza restr 4 AX	R. L. Polk & Co.
1946	Vacant	R. L. Polk & Co.
1942	Crowley Mary Mrs	R. L. Polk & Co.
1936	Crowley M J	R. L. Polk & Co.
1931	Crowley M J	R. L. Polk & Co.

3224 EL CAMINO REAL

Year	Uses	Source
1985	CALCOMINC	Pacific Bell
1963	Old Colony Paint Center C & H Paint Center	Pacific Telephone
1960	C&H Paint Center ch	R. L. Polk & Co.

3225 EL CAMINO REAL

Year	Uses	Source
2001	FOOT LOCKER	Haines & Company, Inc.
1978	Kinney Shoe Store	R. L. Polk & Co.
1970	Kinney Shoe Store	R. L. Polk & Co.
1931	Backus F W	R. L. Polk & Co.
	Coe W N	R. L. Polk & Co.

3227 EL CAMINO REAL

Year	Uses	Source
1960	supa 14 DA	R. L. Polk & Co.
	Prlltrouli Corp U ting	R. L. Polk & Co.

3228 EL CAMINO REAL

Year	Uses	Source
1960	Independent Clns ch	R. L. Polk & Co.
	Watanabe Tom T 4 CH	R. L. Polk & Co.
	Hoshi Embroidering 4 CH	R. L. Polk & Co.

3229 EL CAMINO REAL

Year	Uses	Source
1986	Champion Auto Body	Pacific Bell
1985	CHAMPION AUTO BODY	Pacific Bell

3231 EL CAMINO REAL

Year	Uses	Source
1980	Avis Used Car Sales	Pacific Telephone

FINDINGS

3232 EL CAMINO REAL

Year	Uses	Source
1985	ACADEMY OF MARTIAL ARTS	Pacific Bell

3239 EL CAMINO REAL

Year	Uses	Source
2001	CHIENJun	Haines & Company, Inc.
1978	Backus F W Co ofc equip	R. L. Polk & Co.
1970	Backus F W Co catering sups & ofc equip	R. L. Polk & Co.
1931	Moore H F	R. L. Polk & Co.

3240 EL CAMINO REAL

Year	Uses	Source
1985	T LOY S RESTAURANT	Pacific Bell
1975	LOY S RESTAURANT	Pacific Telephone
1960	Loys Restr 4 CH	R. L. Polk & Co.

3255 EL CAMINO REAL

Year	Uses	Source
2001	TRAVELODGE TRAVELODGE PALO	Haines & Company, Inc.
	JOSEPH Peter PALO ALTO	Haines & Company, Inc.
1970	Gant Vern	R. L. Polk & Co.
	Palo Alto Travelodge	R. L. Polk & Co.

3258 EL CAMINO REAL

Year	Uses	Source
1991	Korean Restaurant	PACIFIC BELL WHITE PAGES
1985	ME XI DELL	Pacific Bell
	RED BALLOON THE	Pacific Bell
1960	Camino Barber Shop	R. L. Polk & Co.

3265 EL CAMINO REAL

Year	Uses	Source
1978	Palo Alto Travelodge motel	R. L. Polk & Co.
	Travelodge Morgan Michl	R. L. Polk & Co.

3273 EL CAMINO REAL

Year	Uses	Source
1936	Graham D D	R. L. Polk & Co.
1931	Vacant	R. L. Polk & Co.

FINDINGS

3274 EL CAMINO REAL

Year	Uses	Source
1963	El Camino Woodwork	Pacific Telephone
1960	El Camino Woodwork 4 AX	R. L. Polk & Co.

3275 EL CAMINO REAL

Year	Uses	Source
1955	Spanish Kitchen The da	R. L. Polk & Co.
1950	Albright MP	R. L. Polk Co.
1946	Kelly W B	R. L. Polk & Co.
1942	Johnson H P	R. L. Polk & Co.

3280 EL CAMINO REAL

Year	Uses	Source
1991	JOSETTA DANCE STUDIO BALLRM & INTNATL FOLK DONCNG SANTA CLARA 296 32	PACIFIC BELL WHITE PAGES

3289 EL CAMINO REAL

Year	Uses	Source
1960	Chin Loy D	R. L. Polk & Co.

3295 EL CAMINO REAL

Year	Uses	Source
2001	STRAITSCAFE	Haines & Company, Inc.
	TACHAVIRATSam	Haines & Company, Inc.
1991	Auto Electronics Group	PACIFIC BELL WHITE PAGES
1978	El Pescador Sea Food Restaurant sea food restr	R. L. Polk & Co.
1970	Holms Septic Tank Service	R. L. Polk & Co.
	Holm & Elliott Inc grading & excavating contr	R. L. Polk & Co.

3298 EL CAMINO REAL

Year	Uses	Source
1960	Waynes Sunland Serv gas sta	R. L. Polk & Co.

3301 EL CAMINO REAL

Year	Uses	Source
2001	XXXX	Haines & Company, Inc.
1975	COTE D AZUR CONTINENTAL RESTAURANT	Pacific Telephone

FINDINGS

3305 EL CAMINO REAL

Year	Uses	Source
2001	NAIRS STANFRD MOTOR INN	Haines & Company, Inc.
1978	Nair Roger	R. L. Polk & Co.
	Stanford Motor Inn Friendship Inn	R. L. Polk & Co.
1970	Barber Andrew M	R. L. Polk & Co.
	Stanford Motor Inn	R. L. Polk & Co.
1931	Lincoln Garage	R. L. Polk & Co.

3310 EL CAMINO REAL

Year	Uses	Source
1957	Red & White Stores	R. L. Polk Co.

EL CAMINO REAL E

2900 EL CAMINO REAL E

Year	Uses	Source
1985	BANK OF AMERICA NT & SA AUTOMATED TELLER MACHINES PLUS SYSTEM-VERSATEL LOCA	Pacific Bell

3000 EL CAMINO REAL E

Year	Uses	Source
1986	PALO ALTO SQUARE THEATERS I & 11	Pacific Telephone
	FEDERAL EXPRESS	Pacific Telephone

3006 EL CAMINO REAL E

Year	Uses	Source
1985	TOKYO SEAFOOD AND STEAKS	Pacific Bell

3014 EL CAMINO REAL E

Year	Uses	Source
1991	QLC MART FOOD & LIQUOR	PACIFIC BELL WHITE PAGES
1975	GRANDVIEW LIQUORS	Pacific Telephone

3035 EL CAMINO REAL E

Year	Uses	Source
1985	KIPPER RECREATION RENTALS	Pacific Bell
1957	COPE & MC PHETRES INC	Pacific Telephone

FINDINGS

3070 EL CAMINO REAL E

Year	*Uses*	*Source*
1985	RECORD BARN THE	Pacific Bell

3091 EL CAMINO REAL E

Year	*Uses*	*Source*
1975	SANTA CLARA ARENA THEATRE	Pacific Telephone

3099 EL CAMINO REAL E

Year	*Uses*	*Source*
1975	PAINTERS PARADISE	Pacific Telephone

3100 EL CAMINO REAL E

Year	*Uses*	*Source*
1985	KRAIG AUTOMOTIVE	Pacific Bell

3127 EL CAMINO REAL E

Year	*Uses*	*Source*
1985	GOODWILL INDUSTRIES OF SANTA CLARA COUNTY ADMINISTRATION AND VOCATIONAL SER	Pacific Bell

3165 EL CAMINO REAL E

Year	*Uses*	*Source*
1985	CALABAZAS AUTOMOTIVE REPAIR	Pacific Bell

3175 EL CAMINO REAL E

Year	*Uses*	*Source*
1991	S PE CIALTY FORE IGN AUTO	PACIFIC BELL WHITE PAGES

3181 EL CAMINO REAL E

Year	*Uses*	*Source*
1975	CALIFORNIA MOBILE HOME BROKERS	Pacific Telephone

3193 EL CAMINO REAL E

Year	*Uses*	*Source*
1986	BMW SERVICE CENTER	Pacific Telephone

3199 EL CAMINO REAL E

Year	*Uses*	*Source*
1986	JACK LN THE BOX DRIVE THRU	Pacific Telephone

FINDINGS

3208 EL CAMINO REAL E

Year	Uses	Source
1957	WALDRON HULON JOHN : I	Pacific Telephone

3220 EL CAMINO REAL E

Year	Uses	Source
1991	PIPPINO PIZZA	PACIFIC BELL WHITE PAGES
1985	PIPPINO PIZZA	Pacific Bell

3221 EL CAMINO REAL E

Year	Uses	Source
1991	JORGE S TRAILER HITCH & ORNAMENTAL IRON WORKS	PACIFIC BELL WHITE PAGES

3232 EL CAMINO REAL E

Year	Uses	Source
1986	ALL JAPAN KARATE DO FEDERATION SHORINJI RENSHIKAN	Pacific Telephone

3280 EL CAMINO REAL E

Year	Uses	Source
1975	JOSETTA DANCE STUDIO HALIRM & INTNAT I FOLK DANCNG	Pacific Telephone

HANSEN WAY

600 HANSEN WAY

Year	Uses	Source
1991	Bouchier & Alexander attys	PACIFIC BELL WHITE PAGES
	BROWN & BAIN	PACIFIC BELL WHITE PAGES
	BOUCHIER & ALEXANDER ATTYS	PACIFIC BELL WHITE PAGES
1986	Barton Thomas L Holtzmann Wise & Shepard attys	Pacific Bell
	Chew Carolyn B Holtzmann Wise & Shepard attys	Pacific Bell
	Clasquin Lorraine A Holtmann Wise & Shepard attys	Pacific Bell
	Curlett Jim C Holtzmann Wise & Shepard attys	Pacific Bell
	Elsenhut Suzanne M Holtemann Wise & Shepard attys	Pacific Bell
	Arthur Young & Company	Pacific Bell
	HOLTZMANN WISE & SHEPARD attys	Pacific Bell
	Young Arthur & Company	Pacific Bell

FINDINGS

Year	Uses	Source
1986	ARTHUR YOUNG & COMPANY	Pacific Telephone
	BARTON THOMAS L HOLTZMANN WISE & SHEPARD ATTYS	Pacific Telephone
	CHEW CAROLYN B HOLTZMANN WISE & SHEPARD ATTYS	Pacific Telephone
	CLASQUIN LORRAINE A HOLTMANN WISE & SHEPARD ATTYS	Pacific Telephone
	CURLETT JIM C HOLTZMANN WISE & SHEPARD ATTYS	Pacific Telephone
	ELSENHUT SUZANNE M HOLTEMANN WISE & SHEPARD ATTYS	Pacific Telephone
	Richardson George B Holtzmann Wise & Shepard attys	Pacific Bell
	HERBST DAVID W HOLTZMANN WISE & SHEPARD ATTYS	Pacific Telephone
	HOLTZMANN WISE & SHEPARD ATTYS	Pacific Telephone
	HYDE PHILIP R HOLTZMANN WISE & SHEPARD ATTYS	Pacific Telephone
	JUDKINS RICHARD D HOLTZMANN WISE & SHEPARD ATTYS	Pacific Telephone
	MORAN WILLIAM J HOLTZMANN WISE & SHEPARD ATTYS	Pacific Telephone
	RICHARDSON GEORGE B HOLTZMANN WISE & SHEPARD ATTYS	Pacific Telephone
	YOUNG ARTHUR & COMPANY	Pacific Telephone
	FLANZRAICH NEIL ATTY HOLTZMANN WISE & SHEPARD	Pacific Telephone
	Judkins Richard D Holtzmann Wise & Shepard attys	Pacific Bell
	Hyde Philip R Holtzmann Wise & Shepard attys	Pacific Bell
	Herbst David W Holtzmann Wise & Shepard attys	Pacific Bell
	Flanzraich Neil atty Holtzmann Wise & Shepard	Pacific Bell
1982	Preformed Line Products Company	Pacific Telephone
1978	Preformed Line Products Co elec hdw mfrs	R. L. Polk & Co.
1975	Preformed Line Products Company	Pacific Telephone
1970	Preformed Line Products Co elec equip mfrs	R. L. Polk & Co.
1965	PREFORMED LINE PRODUCTS CO ELEC EQUIP MFRS	R. L. Polk & Co.
1960	Preformed Line Pro	R. L. Polk & Co.
	ducts elec equip mfrs da	R. L. Polk & Co.

FINDINGS

607 HANSEN WAY

Year	Uses	Source
2001	HEADQUARTERS COMNCTNS&POWER	Haines & Company, Inc.
	C PI CORPORATE	Haines & Company, Inc.
	APPLICATIONSGROUP	Haines & Company, Inc.
	INDUSTRIES HDG NIOLECULAR	Haines & Company, Inc.

611 HANSEN WAY

Year	Uses	Source
2001	SILICON VLY FEDERAL	Haines & Company, Inc.
	CREDIT UN	Haines & Company, Inc.
1991	VARIAN AS S OCIATE S CORPORATE HEADQUARTERS &MANUFACTURING	PACIFIC BELL WHITE PAGES
	VARIAN AS S OCIATE S CORPORATE HEADQUARTERS &MANUFACTURING	PACIFIC BELL WHITE PAGES
	SILICON VALLEY FEDERAL CREDIT UNION	PACIFIC BELL WHITE PAGES
	VARIAN ASSOCIATES Corporate Headquarters &Manufacturing	PACIFIC BELL WHITE PAGES
	Administration & Sales	PACIFIC BELL WHITE PAGES
	VARIAN ASSOCIATES Corporate Headquarters &Manufacturing	PACIFIC BELL WHITE PAGES
1986	VARIAN ASSOCIATES Corporate Headquarters & Manufacturing	Pacific Bell
	Frontier Plumbing & Heating Inc	Pacific Bell
	Oree Electric Company	Pacific Bell
	Administration & Sales	Pacific Bell
	VARIAN ASSOCIATES Corporate Headquarters & Manufacturing	Pacific Bell
	VARIAN ASSOCIATES Corporate Headquarters & Manufacturing	Pacific Bell
	FRONTIER PLUMBING & HEATING INC	Pacific Telephone
	OREE ELECTRIC COMPANY	Pacific Telephone
	VARIAN ASSOCIATES CORPORATE HEADQUARTERS & MANUFACTURING	Pacific Telephone
	VARIAN ASSOCIATES CORPORATE HEADQUARTERS & MANUFACTURING	Pacific Telephone
1985	VARIAN ASSOCIATES CORPORATE HEADQUARTERS & MANUFACTURING	Pacific Bell
	VARIAN ASSOCIATES CORPORATE HEADQUARTERS & MANUFACTURING	Pacific Bell
1982	VARIAN ASSOCIATES Corporate Headquarters & Manufacturing	Pacific Telephone
	Administration & Sales	Pacific Telephone

FINDINGS

Year	Uses	Source
1982	VARIAN ASSOCIATES Corporate Headquarters & Manufacturing	Pacific Telephone
1980	VARIAM ASSOCIATES . Corporate Headquarters & Manufacturing	Pacific Telephone
1978	Varian Associates electronic research	R. L. Polk & Co.
1975	VARIAN ASSOCIATES CORPORATE HEADQUARTERS & MANUFACTURING	Pacific Telephone
	VARIAN ASSOCIATES CORPORATE HEADQUARTERS & MANUFACTURING	Pacific Telephone
	VARIAN ASSOCIATES Corporate Headquarters & Manufacturing	Pacific Telephone
	Administration & Sales	Pacific Telephone
	VARIAN ASSOCIATES Corporate Headquarters & Manufacturing	Pacific Telephone
1970	Palo Alto Capitol Co	R. L. Polk & Co.
	Varian Associates electronic research	R. L. Polk & Co.
1965	VARIAN ASSOCIATES ELECTRONIC RESEARCH	R. L. Polk & Co.
1960	Varian Assoc electronic research da	R. L. Polk & Co.
1957	VARIAN ASSOCIATES	Pacific Telephone
1955	Varian Assoc da	R. L. Polk & Co.

620 HANSEN WAY

Year	Uses	Source
2001	XXXX	Haines & Company, Inc.
1986	WEIDLINGER ASSOCIATES	Pacific Telephone
	SHEARSON LEHMAN AMERICAN EXPRESS INC	Pacific Telephone
	Weidlinger Associates	Pacific Bell
	SHEARSON LEHMAN AMERICAN EXPRESS INC	Pacific Bell

630 HANSEN WAY

Year	Uses	Source
1991	MORRISON & FOERSTER	PACIFIC BELL WHITE PAGES
1986	BLOOD BANK American Red Cross Blood Center	Pacific Bell
	Grace Ventures Corporation	Pacific Bell
	Red Cross Palo Alto Donor Center	Pacific Bell
	RED CROSS BLOOD CENTER	Pacific Bell
	AMERICAN RED CROSS Santa Clara Valley Chapter	Pacific Bell
	Palo Alto Donor Center	Pacific Bell

Year	Uses	Source
1986	RED CROSS BLOOD CENTER	Pacific Telephone
	RED CROSS PALO ALTO DONOR CENTER	Pacific Telephone
	GRACE VENTURES CORPORATION	Pacific Telephone
	KEMPER CYMROT INC	Pacific Telephone
	BLOOD BANK AMERICAN RED CROSS BLOOD CENTER	Pacific Telephone
	AFT HRS EMERGENCY ONLY	Pacific Telephone

660 HANSEN WAY

Year	Uses	Source
2001	ATTYS BUMBACAMICHAEL	Haines & Company, Inc.
	BAKER&MCKENZIE	Haines & Company, Inc.
	AWADSUZANNEATTY	Haines & Company, Inc.
	CHESLER ROBIN ATTY	Haines & Company, Inc.
	ATTY CAPENERCOLEATTY	Haines & Company, Inc.
	ANDERSONERICAITY	Haines & Company, Inc.
	CROUSOREANDREW	Haines & Company, Inc.
	ATTY EANDI SUSAN ATTY	Haines & Company, Inc.
	EMMER MAURICE ATTY	Haines & Company, Inc.
	GAMLEN TODL ATTY	Haines & Company, Inc.
	HERSEY RACHEL ATTY	Haines & Company, Inc.
	JACKSON CYNTHIA	Haines & Company, Inc.
	HANSEN WAY 94304 CONT KLOTSCHEJOHNC	Haines & Company, Inc.
	ATTY KONSKI ANTOINETTE	Haines & Company, Inc.
	ATTY LIPELESSTEWARTR	Haines & Company, Inc.
	ATTY MADDA MICHAELJ	Haines & Company, Inc.
	ATTY MARTIN LANCEATTY	Haines & Company, Inc.
	MCGINNNATOHEW	Haines & Company, Inc.
	ATTY MERRILLCORP	Haines & Company, Inc.
	NOLD CHARLES ATTY	Haines & Company, Inc.
	NYCUM SUSAN ATTY	Haines & Company, Inc.
	OBERLOUISECATTY	Haines & Company, Inc.
	PARK SOPHIA ATTY	Haines & Company, Inc.
	PETERSON JOHN ATIY	Haines & Company, Inc.
	POWERSJOSEPH ATTY	Haines & Company, Inc.
	REIDTAYLOR S ATTY	Haines & Company, Inc.
	ROTH RACHEL ATTY	Haines & Company, Inc.
	SALTOUNANDREATTY	Haines & Company, Inc.

Year	Uses	Source
2001	SARMECANICLEILA 650 a	Haines & Company, Inc.
	ATTY SCHOTOENSTEIN	Haines & Company, Inc.
	TAMARA ATTY SNELJANAATTY T	Haines & Company, Inc.
	SPRAGUEGARYD	Haines & Company, Inc.
	ATTY WACHSMICHELLEI	Haines & Company, Inc.
	ATTY WONGCORINNAATTY	Haines & Company, Inc.
	WURSTERKIETHATTY	Haines & Company, Inc.
	WYNNE MARY ATTY	Haines & Company, Inc.
1991	ERNST & YOUNG	PACIFIC BELL WHITE PAGES
	BAKER & MCKENZIE	PACIFIC BELL WHITE PAGES
	YOUNG ARTHUR & COMPANY	PACIFIC BELL WHITE PAGES
1986	BAIN & COMPANY	Pacific Bell
	Medivision	Pacific Bell
	Westminster Software	Pacific Bell
	BAIN & COMPANY	Pacific Telephone
	MEDIVISION	Pacific Telephone
	WESTMINSTER SOFTWARE	Pacific Telephone

700 HANSEN WAY

Year	Uses	Source
2001	FARABOW LLP	Haines & Company, Inc.
	HENDERSON	Haines & Company, Inc.
	FINNEGAN	Haines & Company, Inc.
1978	Computer Curriculum lease & rent computer	R. L. Polk & Co.

HANSON WAY

600 HANSON WAY

Year	Uses	Source
1986	Moran William J Holtzmann Wise & Shepard attys	Pacific Bell

LAMBERT AVE

447 LAMBERT AVE

Year	Uses	Source
2001	STRAITSCAFE	Haines & Company, Inc.
	CA 9 ERING&BAN 50 UETS	Haines & Company, Inc.
1978	Elliot Leslie	R. L. Polk & Co.

Year	Uses	Source
1975	Reley John	Pacific Telephone
1960	Vacant	R. L. Polk & Co.
1957	AGUILAR PETER	Pacific Telephone
1955	Aguilar Camen F Mrs	R. L. Polk & Co.
1950	Vacant	R. L. Polk Co.
	Aguilar Peter	R. L. Polk Co.
1946	Aguilar Carmen Mrs	R. L. Polk & Co.
1942	Aguilar Carmen Mrs	R. L. Polk & Co.
1936	Aguilar Mucio	R. L. Polk & Co.
1931	Delar Manuel	R. L. Polk & Co.

450 LAMBERT AVE

Year	Uses	Source
2001	XXXX	Haines & Company, Inc.
1986	S B H CORPORATION LAZORLITE PALO ALTO	Pacific Telephone
1985	N G K SPARK PLUGS	Pacific Bell
	S B H CORPORATION	Pacific Bell
	LAZORLITE AUTO PARTS	Pacific Bell
1980	S B H Corporation	Pacific Telephone
	N G K Spark Plugs	Pacific Telephone
1978	S B H Corporation import distr Japanese auto pts	R. L. Polk & Co.
1957	COCA COLA BOTTLING CO OF PALO ALTO	Pacific Telephone

455 LAMBERT AVE

Year	Uses	Source
2001	TV&APPLIANCE	Haines & Company, Inc.
	COCHRAN Nina GREGGSBOUCHERS	Haines & Company, Inc.
	APPLIANCE	Haines & Company, Inc.
	BOUCHERS&GREGGS	Haines & Company, Inc.
1991	GREGGS TELEVISION & APPLIANCES	PACIFIC BELL WHITE PAGES
1986	OROURKE F	Pacific Telephone
	OROURKE F	Pacific Telephone
	OROWEAT FOODS COMPANY	Pacific Bell
	Bakery Thrift Stores	Pacific Bell
	OROWEAT FOODS COMPANY	Pacific Bell
	Distribution Centers	Pacific Bell
1982	OROWEAT FOODS COMPANY	Pacific Telephone

Year	Uses	Source
1982	Distribution Centers	Pacific Telephone
	OROWEAT FOODS COMPANY	Pacific Telephone
	Bakery Thrift Stores	Pacific Telephone
1978	Oroweat Bakery Thrift Store	R. L. Polk & Co.
1960	Adams Donald W da	R. L. Polk & Co.
1955	Garcia Shirley Mrs da	R. L. Polk & Co.
1950	Quintana W N	R. L. Polk Co.
	Serna Jas	R. L. Polk Co.
1946	Quinonez Otton	R. L. Polk & Co.
1942	Borbon Raymond	R. L. Polk & Co.
1936	Simonini F J	R. L. Polk & Co.
1931	Simonini Fred	R. L. Polk & Co.

458 LAMBERT AVE

Year	Uses	Source
1986	LAZORLLTE S B H CORPORATION PALO ALTO	Pacific Telephone
	Lazorllte S B H Corporation	Pacific Bell

459 LAMBERT AVE

Year	Uses	Source
1936	Hallson H O	R. L. Polk & Co.

460 LAMBERT AVE

Year	Uses	Source
2001	OSORi OOscar	Haines & Company, Inc.
	TACHAVIRATSam	Haines & Company, Inc.
	RODRIUUEZMireya G	Haines & Company, Inc.
	MENDOZADorolao	Haines & Company, Inc.
1991	Khounkham Ponthavy	PACIFIC BELL WHITE PAGES
1978	El Pescador Seafood Restaurant Office	R. L. Polk & Co.
1960	Aragon J Andrew da	R. L. Polk & Co.
1957	SWEENEY C C	Pacific Telephone
1955	Sweeney Chas da	R. L. Polk & Co.
1946	Young A J	R. L. Polk & Co.
	Contreras V M	R. L. Polk & Co.
1942	Contreras V M	R. L. Polk & Co.

FINDINGS

463 LAMBERT AVE

Year	Uses	Source
1960	Vacant	R. L. Polk & Co.
1955	Vacant	R. L. Polk & Co.
1946	Day J L Mrs	R. L. Polk & Co.
1942	Doporto Clem	R. L. Polk & Co.

OLIVE

425 OLIVE

Year	Uses	Source
1986	Lotz Mark	Pacific Bell
1982	Leonard Robt M	Pacific Telephone
1975	Leonard Robt M	Pacific Telephone

440 OLIVE

Year	Uses	Source
1986	Mc Sweeney Jack & Carmen	Pacific Bell
1982	Bogue Dorothea M	Pacific Telephone
1975	Bogue Dorothea M	Pacific Telephone

441 OLIVE

Year	Uses	Source
1986	Maddox Emily	Pacific Bell
	Liggett David & Emily	Pacific Bell
1975	Leeds B J	Pacific Telephone
	Leeds Daniel B	Pacific Telephone

456 OLIVE

Year	Uses	Source
1936	Thompson J N	R. L. Polk & Co.
1931	Connolly P M Mrs	R. L. Polk & Co.

460 OLIVE

Year	Uses	Source
1982	White Gerald S	Pacific Telephone
1975	White Gerald S	Pacific Telephone

FINDINGS

OLIVE AVE

430 OLIVE AVE

Year	Uses	Source
2001	JULStaanne	Haines & Company, Inc.
1991	Simmons Brent A	PACIFIC BELL WHITE PAGES
1986	SIMMONS BRENT A	Pacific Telephone
	Simmons Brent A	Pacific Bell
1982	Simmons Brent A	Pacific Telephone
1978	Tepperman James M	R. L. Polk & Co.
1975	Johnson Elizabeth Mrs	Pacific Telephone
1970	Johnson Eliz B Mrs	R. L. Polk & Co.
1965	JOHNSON ELIZ B MRS	R. L. Polk & Co.
1960	Johnson Eliz B Mrs	R. L. Polk & Co.
1955	Johnson Eliz B Mrs da	R. L. Polk & Co.
1950	AFrakes P T	R. L. Polk Co.

431 OLIVE AVE

Year	Uses	Source
2001	SSELTZ 9 RJodn	Haines & Company, Inc.
1986	Davis Thos F	Pacific Bell
	DAVIS THOS F	Pacific Telephone
1978	Davis Rosemarie	R. L. Polk & Co.
1975	Davis Thos F	Pacific Telephone
1970	Davis Thos F	R. L. Polk & Co.
1965	b AVIS THOS F	R. L. Polk & Co.
1960	Davis Thos F da	R. L. Polk & Co.
1955	Colby Harland H da	R. L. Polk & Co.
1950	a Colby H H	R. L. Polk Co.

440 OLIVE AVE

Year	Uses	Source
2001	OKLOr NBruce D	Haines & Company, Inc.
1991	PERSPECTIVES IN WOOD	PACIFIC BELL WHITE PAGES
1986	Heartwood House	Pacific Bell
	Modern Cabinet Systems	Pacific Bell
	Perspectives In Wood	Pacific Bell
	HEARTWOOD HOUSE	Pacific Telephone
	MODERN CABINET SYSTEMS	Pacific Telephone
	PERSPECTIVES IN WOOD	Pacific Telephone

FINDINGS

Year	Uses	Source
1982	Kashmir Carpet Mills	Pacific Telephone
1978	Zoecon Industries Specialty Products Div	R. L. Polk & Co.
1970	Hewlett Packard Stock Rm	R. L. Polk & Co.
1965	HEWLETT PACKARD STOCK RM	R. L. Polk & Co.
1960	Vacant	R. L. Polk & Co.
1955	Palo Alto Engineering Co da	R. L. Polk & Co.
1950	Peterson Bessie	R. L. Polk Co.

441 OLIVE AVE

Year	Uses	Source
2001	JOHNSON I Mchel B	Haines & Company, Inc.
1982	Dison Henry	Pacific Telephone
1978	Wade Wanda J	R. L. Polk & Co.
1975	Barton J	Pacific Telephone
1970	Fields Scotty	R. L. Polk & Co.
1965	KINNON LEROYAL	R. L. Polk & Co.
1960	Hatley Crafton J	R. L. Polk & Co.
1955	scape gdnr da	R. L. Polk & Co.
	Hatley Eliz Mrs	R. L. Polk & Co.
1950	a Rutledge W B	R. L. Polk Co.

450 OLIVE AVE

Year	Uses	Source
2001	BAJWARanlorden	Haines & Company, Inc.
1991	Herte L & M	PACIFIC BELL WHITE PAGES
1982	Church Of Energy	Pacific Telephone
1978	Harrington Roy	R. L. Polk & Co.
1975	Gilmore James	Pacific Telephone
1970	Toole Arnold E	R. L. Polk & Co.
1965	TOOLE ARNOLD E	R. L. Polk & Co.
1960	Toole Arnold E ad	R. L. Polk & Co.
1955	Toole Arnold E da	R. L. Polk & Co.
1950	a Eymann W C	R. L. Polk Co.
1946	Eymann W C	R. L. Polk & Co.

451 OLIVE AVE

Year	Uses	Source
1991	Sanchez F G	PACIFIC BELL WHITE PAGES
1982	Sanchez F G	Pacific Telephone

FINDINGS

Year	Uses	Source
1978	Sanchez Louis S	R. L. Polk & Co.
1975	Sanchez F G	Pacific Telephone
1970	Sanchez Louis S	R. L. Polk & Co.
1965	SONCHEZ LOUIS S	R. L. Polk & Co.
1960	Sanchez Louis E	R. L. Polk & Co.
1957	SANCHEZ F G	Pacific Telephone
1955	Sanchez Louis S da	R. L. Polk & Co.

455 OLIVE AVE

Year	Uses	Source
1950	a Lombard J A	R. L. Polk Co.

456 OLIVE AVE

Year	Uses	Source
2001	ALBANSfaven	Haines & Company, Inc.
1982	Clegg Nora Lee	Pacific Telephone
1978	Coolin Thos S	R. L. Polk & Co.
1970	Walker Susiemae	R. L. Polk & Co.
1965	MOSES BALLARO	R. L. Polk & Co.
	OLIVE AV	R. L. Polk & Co.
1960	Hart Freddie Ms	R. L. Polk & Co.
1955	Campbell Blonde da	R. L. Polk & Co.
1950	a Thornpson J N	R. L. Polk Co.
1946	Thompson J N	R. L. Polk & Co.
1942	OThompson J N	R. L. Polk & Co.

460 OLIVE AVE

Year	Uses	Source
1957	WHITE GERALD S	Pacific Telephone

461 OLIVE AVE

Year	Uses	Source
2001	SARANITIDavid	Haines & Company, Inc.
1986	GRAY GLORIA	Pacific Telephone
	Gray Gloria	Pacific Bell
1978	Gray Gloria	R. L. Polk & Co.
1975	Gooch Pearlie	Pacific Telephone
1970	Gooch John	R. L. Polk & Co.
	Ohs & Ahs Beauty Salon	R. L. Polk & Co.
1965	GRAY PEARLIE MRS	R. L. Polk & Co.

FINDINGS

Year	Uses	Source
1965	OHS & AHS BEAUTY SALON	R. L. Polk & Co.
1960	Hemphill Lloyd da	R. L. Polk & Co.
1955	Gray Moses	R. L. Polk & Co.
1950	Northeast f r o n	R. L. Polk Co.
	east end of Alma	R. L. Polk Co.
	to Bay Shore hway	R. L. Polk Co.
	a Kirouac A E	R. L. Polk Co.
	OREGON AV	R. L. Polk Co.

464 OLIVE AVE

Year	Uses	Source
1950	Prampton W D	R. L. Polk Co.

465 OLIVE AVE

Year	Uses	Source
1950	a Meyers C F	R. L. Polk Co.

470 OLIVE AVE

Year	Uses	Source
2001	AGRAMONTERobert	Haines & Company, Inc.
1955	Vacant	R. L. Polk & Co.
	Vacant	R. L. Polk & Co.

475 OLIVE AVE

Year	Uses	Source
1950	Case W M	R. L. Polk Co.

478 OLIVE AVE

Year	Uses	Source
1950	a Loveless B H	R. L. Polk Co.

490 OLIVE AVE

Year	Uses	Source
1950	Mrs int dec	R. L. Polk Co.
	ABray Nancy	R. L. Polk Co.
	a Bray G G	R. L. Polk Co.

491 OLIVE AVE

Year	Uses	Source
2001	Hf ANLONJe ISary	Haines & Company, Inc.
	LOCKHARTPeer ROBERT Huw Morgan	Haines & Company, Inc.

Year	Uses	Source
1965	GRAY PEARLIE MRS	R. L. Polk & Co.
	SAYERS DELIVERY SERVICE MOVING	R. L. Polk & Co.

OLIVE AVE E

450 OLIVE AVE E

Year	Uses	Source
1964	Sweeney Thos H	R. L. Polk & Co.

477 OLIVE AVE E

Year	Uses	Source
1991	VELOZ LIDIA	PACIFIC BELL WHITE PAGES
1964	Veloz Jose	R. L. Polk & Co.

480 OLIVE AVE E

Year	Uses	Source
1964	Furtado Manuel S jr	R. L. Polk & Co.

485 OLIVE AVE E

Year	Uses	Source
1991	AVENI VINCENT	PACIFIC BELL WHITE PAGES
1964	Sciortino Rose Mrs	R. L. Polk & Co.

490 OLIVE AVE E

Year	Uses	Source
1991	AREVALO GEO & SANDRA	PACIFIC BELL WHITE PAGES

491 OLIVE AVE E

Year	Uses	Source
1991	PUCCINELLI RALPH	PACIFIC BELL WHITE PAGES
1964	Venturi Louis	R. L. Polk & Co.

499 OLIVE AVE E

Year	Uses	Source
1964	Vacant	R. L. Polk & Co.

OLIVE AVE W

426 OLIVE AVE W

Year	Uses	Source
1964	Under constn	R. L. Polk & Co.

FINDINGS

427 OLIVE AVE W

Year	Uses	Source
1964	Under constn	R. L. Polk & Co.

428 OLIVE AVE W

Year	Uses	Source
1964	Under constn	R. L. Polk & Co.

429 OLIVE AVE W

Year	Uses	Source
1964	Under constn	R. L. Polk & Co.

430 OLIVE AVE W

Year	Uses	Source
1964	Under constn	R. L. Polk & Co.

431 OLIVE AVE W

Year	Uses	Source
1964	Under constn	R. L. Polk & Co.

432 OLIVE AVE W

Year	Uses	Source
1964	Under constn	R. L. Polk & Co.

433 OLIVE AVE W

Year	Uses	Source
1964	Under constn	R. L. Polk & Co.

434 OLIVE AVE W

Year	Uses	Source
1964	Under constn	R. L. Polk & Co.

435 OLIVE AVE W

Year	Uses	Source
1964	Under constn	R. L. Polk & Co.

436 OLIVE AVE W

Year	Uses	Source
1964	Under constn	R. L. Polk & Co.

437 OLIVE AVE W

Year	Uses	Source
1964	Under constn	R. L. Polk & Co.

FINDINGS

438 OLIVE AVE W

Year	Uses	Source
1964	Under constn	R. L. Polk & Co.

439 OLIVE AVE W

Year	Uses	Source
1964	Under constn	R. L. Polk & Co.

440 OLIVE AVE W

Year	Uses	Source
1964	Under constn	R. L. Polk & Co.

441 OLIVE AVE W

Year	Uses	Source
1964	Under constn	R. L. Polk & Co.

442 OLIVE AVE W

Year	Uses	Source
1964	Under constn	R. L. Polk & Co.

443 OLIVE AVE W

Year	Uses	Source
1964	Under constn	R. L. Polk & Co.

444 OLIVE AVE W

Year	Uses	Source
1964	Under constn	R. L. Polk & Co.

445 OLIVE AVE W

Year	Uses	Source
1964	Under constn	R. L. Polk & Co.

446 OLIVE AVE W

Year	Uses	Source
1964	Under constn	R. L. Polk & Co.

447 OLIVE AVE W

Year	Uses	Source
1964	Under constn	R. L. Polk & Co.

448 OLIVE AVE W

Year	Uses	Source
1964	Under constn	R. L. Polk & Co.

FINDINGS

449 OLIVE AVE W

Year	Uses	Source
1964	Under constn	R. L. Polk & Co.

450 OLIVE AVE W

Year	Uses	Source
1964	Under constn	R. L. Polk & Co.

451 OLIVE AVE W

Year	Uses	Source
1964	Under constn	R. L. Polk & Co.

452 OLIVE AVE W

Year	Uses	Source
1964	Under constn	R. L. Polk & Co.

453 OLIVE AVE W

Year	Uses	Source
1964	Under constn	R. L. Polk & Co.

454 OLIVE AVE W

Year	Uses	Source
1964	Under constn	R. L. Polk & Co.

455 OLIVE AVE W

Year	Uses	Source
1964	Under constn	R. L. Polk & Co.

456 OLIVE AVE W

Year	Uses	Source
1964	Attorney	R. L. Polk & Co.
	Dir of Planning	R. L. Polk & Co.
	Urban Renewal	R. L. Polk & Co.
	Parks & Recreation Dept	R. L. Polk & Co.
	Dept of Finance Purch Agt	R. L. Polk & Co.
	Dept of Pub Wks Eng	R. L. Polk & Co.
	bsmt City Print Shop	R. L. Polk & Co.
	Council Manager	R. L. Polk & Co.
	Street continued	R. L. Polk & Co.
	Mayor	R. L. Polk & Co.
	lobby Dept of Personnel Land Acquisition Ofcr	R. L. Polk & Co.

Year	Uses	Source
1964	City Hall	R. L. Polk & Co.
	Clerk	R. L. Polk & Co.

457 OLIVE AVE W

Year	Uses	Source
1964	Under constn	R. L. Polk & Co.

458 OLIVE AVE W

Year	Uses	Source
1964	Under constn	R. L. Polk & Co.

459 OLIVE AVE W

Year	Uses	Source
1964	Under constn	R. L. Polk & Co.

460 OLIVE AVE W

Year	Uses	Source
1964	Under constn	R. L. Polk & Co.

461 OLIVE AVE W

Year	Uses	Source
1964	Under constn	R. L. Polk & Co.

462 OLIVE AVE W

Year	Uses	Source
1964	Under constn	R. L. Polk & Co.

463 OLIVE AVE W

Year	Uses	Source
1964	Under constn	R. L. Polk & Co.

464 OLIVE AVE W

Year	Uses	Source
1964	Under constn	R. L. Polk & Co.

465 OLIVE AVE W

Year	Uses	Source
1964	Under constn	R. L. Polk & Co.

466 OLIVE AVE W

Year	Uses	Source
1964	Under constn	R. L. Polk & Co.

FINDINGS

467 OLIVE AVE W

Year	Uses	Source
1964	Under constn	R. L. Polk & Co.

468 OLIVE AVE W

Year	Uses	Source
1964	Under constn	R. L. Polk & Co.

469 OLIVE AVE W

Year	Uses	Source
1964	Under constn	R. L. Polk & Co.

470 OLIVE AVE W

Year	Uses	Source
1964	Under constn	R. L. Polk & Co.

471 OLIVE AVE W

Year	Uses	Source
1964	Under constn	R. L. Polk & Co.

472 OLIVE AVE W

Year	Uses	Source
1964	Under constn	R. L. Polk & Co.

473 OLIVE AVE W

Year	Uses	Source
1964	Under constn	R. L. Polk & Co.

474 OLIVE AVE W

Year	Uses	Source
1964	Under constn	R. L. Polk & Co.

475 OLIVE AVE W

Year	Uses	Source
1964	Under constn	R. L. Polk & Co.

476 OLIVE AVE W

Year	Uses	Source
1964	Under constn	R. L. Polk & Co.

477 OLIVE AVE W

Year	Uses	Source
1964	Under constn	R. L. Polk & Co.

478 OLIVE AVE W

Year	Uses	Source
1964	Under constn	R. L. Polk & Co.

479 OLIVE AVE W

Year	Uses	Source
1964	Under constn	R. L. Polk & Co.

480 OLIVE AVE W

Year	Uses	Source
1964	Under constn	R. L. Polk & Co.

OLIVE DR

433 OLIVE DR

Year	Uses	Source
2000	RODRIGUEZFloriano Jr RODRIGUEZGrace	Haines & Company
	RODRIGUEZFloriano Jr RODRIGUEZGrace	Haines & Company

436 OLIVE DR

Year	Uses	Source
2000	LALANI Nasruddin	Haines & Company
	LALANI Nasruddin	Haines & Company

445 OLIVE DR

Year	Uses	Source
2000	ROBINSON Samuel	Haines & Company
	ROBINSON Samuel	Haines & Company

448 OLIVE DR

Year	Uses	Source
2000	SSANCHEZSeralhn	Haines & Company
	SSANCHEZSeralhn	Haines & Company

457 OLIVE DR

Year	Uses	Source
2000	MARTINEZS	Haines & Company
	MARTINEZS	Haines & Company

FINDINGS

474 OLIVE DR

Year	Uses	Source
2000	VICK Godwin H	Haines & Company
	VICK Godwin H	Haines & Company

484 OLIVE DR

Year	Uses	Source
2000	LEFEBVRE Roger	Haines & Company
	LEFEBVRE Roger	Haines & Company

490 OLIVE DR

Year	Uses	Source
2000	OLGUINManuel	Haines & Company
	OLGUINManuel	Haines & Company

PORTAGE AVE

230 PORTAGE AVE

Year	Uses	Source
2001	XXXX	Haines & Company, Inc.

240 PORTAGE AVE

Year	Uses	Source
1978	National Press Mayfield Pub Co Whse	R. L. Polk & Co.

250 PORTAGE AVE

Year	Uses	Source
1978	Bemiss Jason Corp Whse	R. L. Polk & Co.
1970	Bemiss Jason Corp Whse	R. L. Polk & Co.
1965	MALANCO OF CALIFORNIA INC PAPER CONVERTERS	R. L. Polk & Co.

280 PORTAGE AVE

Year	Uses	Source
1978	Stanford Bookstore Whse	R. L. Polk & Co.
1970	Whse	R. L. Polk & Co.
	Westinghouse Learning Co ration	R. L. Polk & Co.
1965	BEMISS JASON CORP WHSE	R. L. Polk & Co.

300 PORTAGE AVE

Year	Uses	Source
1980	CEILCOTE CO INC	Pacific Telephone

Year	Uses	Source
1978	Ceilcote Company Inc Dist Ofc air pollution control	R. L. Polk & Co.
1975	CEILCOTE CO INC	Pacific Telephone
	CEILCOTE CO INC	Pacific Telephone
1970	Vacant	R. L. Polk & Co.
1965	TUBES & CORES INC PAPER PRODUCTS	R. L. Polk & Co.
1936	Sutter Packing Co fruit pkrs	R. L. Polk & Co.
	Vienna Antoinette Mrs	R. L. Polk & Co.
1931	Tambini Albt	R. L. Polk & Co.
	Sutter Packing Co	R. L. Polk & Co.

303 PORTAGE AVE

Year	Uses	Source
1982	James Packaging Corp	Pacific Telephone
1978	James R W Packaging	R. L. Polk & Co.
1970	James R W Packaging	R. L. Polk & Co.
1965	ADVANCE TRANSFORMER CO	R. L. Polk & Co.
	JAMES R W PACKAGING PKG	R. L. Polk & Co.

330 PORTAGE AVE

Year	Uses	Source
2001	XXXX	Haines & Company, Inc.

332 PORTAGE AVE

Year	Uses	Source
2001	XXXX	Haines & Company, Inc.

335 PORTAGE AVE

Year	Uses	Source
2001	RNI 60 S	Haines & Company, Inc.

336 PORTAGE AVE

Year	Uses	Source
2001	LANIQ ASSOCi ATES	Haines & Company, Inc.
	COMMUNICATIONS	Haines & Company, Inc.
	LANIG	Haines & Company, Inc.

340 PORTAGE AVE

Year	Uses	Source
2001	XXXX	Haines & Company, Inc.

FINDINGS

Year	Uses	Source
1991	Basket Galleria Inc	PACIFIC BELL WHITE PAGES
	BASKET GALLERIA INC	PACIFIC BELL WHITE PAGES
1986	Basket Galleria Inc	Pacific Bell
	BASKET GALLERIA INC	Pacific Telephone

350 PORTAGE AVE

Year	Uses	Source
1978	Eaton Special Products Div Shp & Rec	R. L. Polk & Co.
1970	Dura Plant Mc Quay Div Whse	R. L. Polk & Co.

360 PORTAGE AVE

Year	Uses	Source
2001	MATHEMATICS FRYS ELECTRONIC	Haines & Company, Inc.
	AMER INSTITUTE OF	Haines & Company, Inc.

370 PORTAGE AVE

Year	Uses	Source
2001	PAC DATA IMAGES	Haines & Company, Inc.

380 PORTAGE AVE

Year	Uses	Source
1978	Varian Associates Whse	R. L. Polk & Co.

382 PORTAGE AVE

Year	Uses	Source
2001	XXXX	Haines & Company, Inc.

395 PORTAGE AVE

Year	Uses	Source
1978	Me Quay Norris Inc Dura Bond Div	R. L. Polk & Co.
1936	Brown G L	R. L. Polk & Co.
1931	Vacant	R. L. Polk & Co.

401 PORTAGE AVE

Year	Uses	Source
1955	Ames Mach Co	R. L. Polk & Co.

425 PORTAGE AVE

Year	Uses	Source
1978	Hewlett Packard Whse	R. L. Polk & Co.
1970	Hewlett Packard Whse	R. L. Polk & Co.

Year	Uses	Source
1965	HEWLETT PACKARD WHSc	R. L. Polk & Co.
1960	Aero Mayflower Transit Co da	R. L. Polk & Co.
	Neal Moving & Stge Co da	R. L. Polk & Co.
1957	AERO MAYFLOWER TRANSIT CO AGCY	Pacific Telephone
	MAYFLOWER WAREHOUSE AGCY	Pacific Telephone
	NEAL MOVING & STORAGE CO	Pacific Telephone
	MAYFLOWER TRANSIT CO AGCY	Pacific Telephone
1955	Neal Moving & Stge Co ADA	R. L. Polk & Co.
	A 4 DA	R. L. Polk & Co.
	Aero Mayflower Transit Co da	R. L. Polk & Co.

426 PORTAGE AVE

Year	Uses	Source
1957	BEDINGER WELDING WORI(S	Pacific Telephone
1955	PORTAGE AV Contd	R. L. Polk & Co.
	Bedinger Welding Wks da	R. L. Polk & Co.

429 PORTAGE AVE

Year	Uses	Source
2001	BARTOLOWINDOW	Haines & Company, Inc.
	OMILLERMchael NICHOLS WINDOW	Haines & Company, Inc.
	SYSTEMS POZZI WOOD WINDOWS	Haines & Company, Inc.
	SYSTEMS MALINOWSKIWNDW	Haines & Company, Inc.

435 PORTAGE AVE

Year	Uses	Source
2001	MILLER Michael	Haines & Company, Inc.
	M 11 LLER Michael	Haines & Company, Inc.
1978	Center	R. L. Polk & Co.
	Varian Assocs Whse Laby & Records	R. L. Polk & Co.
1970	Center	R. L. Polk & Co.
	Varian Assocs Whse Laby & Records	R. L. Polk & Co.
1965	VARIAN ASSOCS WHSE & LABY	R. L. Polk & Co.
1960	R S Electronics Corp da	R. L. Polk & Co.
1957	RS ELECTRONICS CORPORATION	Pacific Telephone
1955	R S Electronics Corp da	R. L. Polk & Co.

FINDINGS

440 PORTAGE AVE

Year	Uses	Source
1955	Vacant	R. L. Polk & Co.
1950	Curtiss E C	R. L. Polk Co.
1946	Curtiss E C	R. L. Polk & Co.
1942	Henning Chas	R. L. Polk & Co.
1936	Wood L P Mrs	R. L. Polk & Co.
1931	Wood L P Mrs	R. L. Polk & Co.

442 PORTAGE AVE

Year	Uses	Source
1960	Genera L ELec whse	R. L. Polk & Co.

455 PORTAGE AVE

Year	Uses	Source
1978	Hewlett Packard Whse	R. L. Polk & Co.
1970	Hewlett Packard Whse	R. L. Polk & Co.
1960	Hewlett Packard Co	R. L. Polk & Co.
	whse	R. L. Polk & Co.
1955	Vacant	R. L. Polk & Co.

470 PORTAGE AVE

Year	Uses	Source
1965	GERVAIS HUBERT J	R. L. Polk & Co.
1960	Brisby James C da	R. L. Polk & Co.
1950	Northampton dr	R. L. Polk Co.
	Middlefield rd to	R. L. Polk Co.
	Northeast f r o m	R. L. Polk Co.
	PORTAL PLACE	R. L. Polk Co.
	Hill R D	R. L. Polk Co.
1946	Smarz Erwin	R. L. Polk & Co.
1942	Smarz Erwin	R. L. Polk & Co.
1936	Smarz Edwin	R. L. Polk & Co.
1931	Smarz Erwin	R. L. Polk & Co.

S EL CAMINO REAL

2600 S EL CAMINO REAL

Year	Uses	Source
1986	SPECIAL EDUCATION DIVISION (CONTD) TRAINABLE MENTALLY RETARDED PROGRAM PRIN	Pacific Telephone
	San Mateo County Education Office Contd Special Education Division Contd Trainable Mentally Retarded Program Principals Office Los Amigos North	Pacific Bell
	Youth Employment Program	Pacific Bell

2640 S EL CAMINO REAL

Year	Uses	Source
1986	GRAND AUTO	Pacific Bell
	San Mateo	Pacific Bell

2660 S EL CAMINO REAL

Year	Uses	Source
1986	MIDAS MUFFLER &	Pacific Bell
	San Mateo	Pacific Bell
	MIDAS MUFFLER &	Pacific Bell
	San Mateo	Pacific Bell

2745 S EL CAMINO REAL

Year	Uses	Source
1986	Winston Tire Company	Pacific Bell
	San Mateo	Pacific Bell

2750 S EL CAMINO REAL

Year	Uses	Source
1986	Sumitomo Bank Of Calif	Pacific Bell
	San Mateo Branch	Pacific Bell

W EL CAMINO REAL

2920 W EL CAMINO REAL

Year	Uses	Source
1975	MC CORMICK COMPANY THE realtor	Pacific Telephone

FINDINGS

TARGET PROPERTY: ADDRESS NOT IDENTIFIED IN RESEARCH SOURCE

The following Target Property addresses were researched for this report, and the addresses were not identified in the research source.

Address Researched	Address Not Identified in Research Source
3159 El Camino Real	2006, 2000, 1996, 1985, 1982, 1980, 1978, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1945, 1940, 1935, 1930, 1926, 1925, 1922

ADJOINING PROPERTY: ADDRESSES NOT IDENTIFIED IN RESEARCH SOURCE

The following Adjoining Property addresses were researched for this report, and the addresses were not identified in research source.

Address Researched	Address Not Identified in Research Source
230 PORTAGE AVE	2006, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
240 PORTAGE AVE	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
250 PORTAGE AVE	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1975, 1974, 1968, 1966, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
2550 E EL CAMINO REAL	2006, 2001, 2000, 1996, 1991, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
2555 EL CAMINO REAL	2006, 2001, 2000, 1996, 1991, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
2560 EL CAMINO REAL	2006, 2001, 2000, 1996, 1991, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
2570 E EL CAMINO REAL	2006, 2001, 2000, 1996, 1991, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
2580 E EL CAMINO REAL	2006, 2001, 2000, 1996, 1991, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
2580 EL CAMINO REAL	2006, 2001, 2000, 1996, 1991, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
2600 E EL CAMINO REAL	2006, 2001, 2000, 1996, 1991, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
2600 EL CAMINO	2006, 2001, 2000, 1996, 1991, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922

FINDINGS

Address Researched	Address Not Identified in Research Source
2600 S EL CAMINO REAL	2006, 2001, 2000, 1996, 1991, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
2601 EL CAMINO REAL	2006, 2001, 2000, 1996, 1991, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
2627 EL CAMINO REAL	2006, 2001, 2000, 1996, 1991, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
2633 EL CAMINO REAL	2006, 2001, 2000, 1996, 1991, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
2640 S EL CAMINO REAL	2006, 2001, 2000, 1996, 1991, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
2650 EL CAMINO REAL	2006, 2001, 2000, 1996, 1991, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
2651 E EL CAMINO REAL	2006, 2001, 2000, 1996, 1991, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
2656 E EL CAMINO REAL	2006, 2001, 2000, 1996, 1991, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
2660 S EL CAMINO REAL	2006, 2001, 2000, 1996, 1991, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
2671 EL CAMINO REAL	2006, 2001, 2000, 1996, 1991, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
2675 EL CAMINO REAL	2006, 2001, 2000, 1996, 1991, 1985, 1982, 1980, 1978, 1974, 1970, 1968, 1966, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
2680 E EL CAMINO REAL	2006, 2001, 2000, 1996, 1991, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
2700 EL CAMINO REAL	2006, 2001, 2000, 1996, 1991, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
2701 EL CAMINO REAL	2006, 2001, 2000, 1996, 1991, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
2710 EL CAMINO REAL	2006, 2001, 2000, 1996, 1991, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
2711 EL CAMINO REAL	2006, 2001, 2000, 1996, 1991, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1964, 1963, 1962, 1957, 1945, 1940, 1935, 1931, 1930, 1926, 1925, 1922
2727 EL CAMINO REAL	2006, 2001, 2000, 1996, 1991, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922

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Address Researched	Address Not Identified in Research Source
2745 S EL CAMINO REAL	2006, 2001, 2000, 1996, 1991, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
2747 EL CAMINO REAL	2006, 2001, 2000, 1996, 1991, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
2750 EL CAMINO REAL	2006, 2001, 2000, 1996, 1991, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
2750 S EL CAMINO REAL	2006, 2001, 2000, 1996, 1991, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
2755 EL CAMINO REAL	2006, 2001, 2000, 1996, 1991, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
2760 EL CAMINO REAL	2006, 2001, 2000, 1996, 1991, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
2762 EL CAMINO REAL	2006, 2001, 2000, 1996, 1991, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
2771 EL CAMINO REAL	2006, 2001, 2000, 1996, 1991, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
2780 EL CAMINO REAL	2006, 2001, 2000, 1996, 1991, 1985, 1982, 1980, 1978, 1974, 1970, 1968, 1966, 1964, 1963, 1962, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
280 PORTAGE AVE	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1975, 1974, 1968, 1966, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
2801 EL CAMINO REAL	2006, 2001, 2000, 1996, 1991, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
2805 EL CAMINO REAL	2006, 2001, 2000, 1996, 1991, 1985, 1982, 1980, 1978, 1974, 1970, 1968, 1966, 1964, 1963, 1962, 1960, 1957, 1945, 1940, 1935, 1931, 1930, 1926, 1925, 1922
2808 EL CAMINO REAL	2006, 2001, 2000, 1996, 1991, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
2821 E EL CAMINO REAL	2006, 2001, 2000, 1996, 1991, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
2821 EL CAMINO REAL	2006, 2001, 2000, 1996, 1991, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
2825 EL CAMINO REAL	2006, 2001, 2000, 1996, 1991, 1985, 1982, 1980, 1978, 1974, 1970, 1968, 1966, 1964, 1963, 1962, 1960, 1957, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
2826 EL CAMINO REAL	2006, 2001, 2000, 1996, 1991, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922

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Address Researched	Address Not Identified in Research Source
2900 E EL CAMINO REAL	2006, 2001, 2000, 1996, 1991, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
2900 EL CAMINO REAL	2006, 2001, 2000, 1996, 1991, 1986, 1982, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
2900 EL CAMINO REAL E	2006, 2001, 2000, 1996, 1991, 1986, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
2920 W EL CAMINO REAL	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
2930 EL CAMINO REAL	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
2951 EL CAMINO REAL	2006, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1975, 1974, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
2961 EL CAMINO REAL	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
2980 EL CAMINO REAL	2006, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
2998 EL CAMINO REAL	2006, 2001, 2000, 1996, 1986, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
2999 EL CAMINO REAL	2006, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1975, 1974, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
300 PORTAGE AVE	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1974, 1968, 1966, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1935, 1930, 1926, 1925, 1922
3000 E EL CAMINO REAL	2006, 2001, 2000, 1996, 1991, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
3000 EL CAMINO REAL	2006, 2000, 1996, 1991, 1985, 1982, 1980, 1975, 1974, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
3000 EL CAMINO REAL E	2006, 2001, 2000, 1996, 1991, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
3001 EL CAMINO REAL	2006, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1974, 1968, 1966, 1964, 1963, 1962, 1957, 1950, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
3004 EL CAMINO REAL	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1962, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
3005 EL CAMINO REAL	2006, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1964, 1963, 1962, 1957, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922

FINDINGS

Address Researched	Address Not Identified in Research Source
3006 EL CAMINO REAL E	2006, 2001, 2000, 1996, 1991, 1986, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
3007 EL CAMINO REAL	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
3014 EL CAMINO REAL	2006, 2001, 2000, 1996, 1991, 1986, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1962, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
3014 EL CAMINO REAL E	2006, 2001, 2000, 1996, 1986, 1985, 1982, 1980, 1978, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
3017 EL CAMINO REAL	2006, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1975, 1974, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
3024 EL CAMINO REAL	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
303 PORTAGE AVE	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1980, 1975, 1974, 1968, 1966, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
3030 E EL CAMINO REAL	2006, 2001, 2000, 1996, 1986, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
3030 EL CAMINO REAL	2006, 2001, 2000, 1996, 1991, 1986, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
3033 E EL CAMINO REAL	2006, 2001, 2000, 1996, 1991, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
3034 EL CAMINO REAL	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1962, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
3035 EL CAMINO REAL E	2006, 2001, 2000, 1996, 1991, 1986, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
3044 E EL CAMINO REAL	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
3070 EL CAMINO REAL E	2006, 2001, 2000, 1996, 1991, 1986, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
3087 EL CAMINO REAL	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
3090 EL CAMINO REAL	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
3091 EL CAMINO REAL E	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922

FINDINGS

Address Researched	Address Not Identified in Research Source
3099 EL CAMINO REAL E	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
3100 E EL CAMINO REAL	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
3100 EL CAMINO REAL	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
3100 EL CAMINO REAL E	2006, 2001, 2000, 1996, 1991, 1986, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
3105 EL CAMINO REAL	2006, 2001, 2000, 1996, 1991, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
3111 EL CAMINO REAL	2006, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
3115 EL CAMINO REAL	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1945, 1940, 1935, 1930, 1926, 1925, 1922
3124 EL CAMINO REAL	2006, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
3127 EL CAMINO REAL	2006, 2000, 1996, 1991, 1986, 1985, 1982, 1975, 1974, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
3127 EL CAMINO REAL E	2006, 2001, 2000, 1996, 1991, 1986, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
3128 EL CAMINO REAL	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
3129 EL CAMINO REAL	2006, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
3131 EL CAMINO REAL	2006, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
3145 EL CAMINO REAL	2006, 2001, 2000, 1996, 1991, 1986, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1945, 1940, 1935, 1930, 1926, 1925, 1922
3148 E EL CAMINO REAL	2006, 2001, 2000, 1996, 1991, 1986, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
3150 EL CAMINO REAL	2006, 2000, 1996, 1991, 1986, 1982, 1980, 1974, 1968, 1966, 1964, 1962, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
3160 E EL CAMINO REAL	2006, 2001, 2000, 1996, 1991, 1986, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922

FINDINGS

Address Researched	Address Not Identified in Research Source
3160 EL CAMINO REAL	2006, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1968, 1966, 1964, 1963, 1962, 1960, 1957, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
3165 EL CAMINO REAL E	2006, 2001, 2000, 1996, 1991, 1986, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
3166 EL CAMINO REAL	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1968, 1966, 1964, 1963, 1962, 1960, 1957, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
3169 EL CAMINO REAL	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
3170 EL CAMINO REAL	2006, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1974, 1968, 1966, 1964, 1963, 1962, 1960, 1957, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
3175 EL CAMINO REAL E	2006, 2001, 2000, 1996, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
3181 EL CAMINO REAL E	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
3190 EL CAMINO REAL	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
3193 EL CAMINO REAL E	2006, 2001, 2000, 1996, 1991, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
3199 EL CAMINO REAL E	2006, 2001, 2000, 1996, 1991, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
3200 ASH	2006, 2001, 2000, 1996, 1991, 1985, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
3200 ASH ST	2006, 2000, 1996, 1991, 1985, 1982, 1980, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
3200 EL CAMINO REAL	2006, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1975, 1974, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
3201 ASH	2006, 2001, 2000, 1996, 1985, 1980, 1978, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
3201 ASH ST	2006, 2000, 1996, 1991, 1985, 1982, 1980, 1975, 1974, 1968, 1966, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
3208 EL CAMINO REAL	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1962, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
3208 EL CAMINO REAL E	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922

FINDINGS

Address Researched	Address Not Identified in Research Source
3216 E EL CAMINO REAL	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
3217 ASH	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
3220 EL CAMINO REAL	2006, 2001, 2000, 1996, 1991, 1986, 1982, 1980, 1978, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1957, 1955, 1950, 1945, 1940, 1935, 1930, 1926, 1925, 1922
3220 EL CAMINO REAL E	2006, 2001, 2000, 1996, 1986, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
3221 ASH	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
3221 ASH ST	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
3221 EL CAMINO REAL E	2006, 2001, 2000, 1996, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
3224 EL CAMINO REAL	2006, 2001, 2000, 1996, 1991, 1986, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1962, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
3225 ASH	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
3225 ASH ST	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
3225 EL CAMINO REAL	2006, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1975, 1974, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1930, 1926, 1925, 1922
3227 EL CAMINO REAL	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
3228 EL CAMINO REAL	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
3229 EL CAMINO REAL	2006, 2001, 2000, 1996, 1991, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
3231 EL CAMINO REAL	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
3232 E EL CAMINO REAL	2006, 2001, 2000, 1996, 1991, 1986, 1982, 1980, 1978, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
3232 EL CAMINO REAL	2006, 2001, 2000, 1996, 1991, 1986, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922

FINDINGS

Address Researched	Address Not Identified in Research Source
3232 EL CAMINO REAL E	2006, 2001, 2000, 1996, 1991, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
3239 EL CAMINO REAL	2006, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1975, 1974, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1930, 1926, 1925, 1922
3240 EL CAMINO REAL	2006, 2001, 2000, 1996, 1991, 1986, 1982, 1980, 1978, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
3241 E EL CAMINO REAL	2006, 2001, 2000, 1996, 1991, 1986, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
3250 ASH ST	2006, 2000, 1996, 1991, 1985, 1982, 1980, 1975, 1974, 1968, 1966, 1964, 1963, 1962, 1960, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
3251 ASH ST	2006, 2000, 1996, 1991, 1985, 1982, 1980, 1975, 1974, 1968, 1966, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
3255 EL CAMINO REAL	2006, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
3258 EL CAMINO REAL	2006, 2001, 2000, 1996, 1986, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
3265 EL CAMINO REAL	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
3273 EL CAMINO REAL	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1935, 1930, 1926, 1925, 1922
3274 EL CAMINO REAL	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1962, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
3275 EL CAMINO REAL	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1945, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
3280 EL CAMINO REAL	2006, 2001, 2000, 1996, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
3280 EL CAMINO REAL E	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
3289 EL CAMINO REAL	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
3295 EL CAMINO REAL	2006, 2000, 1996, 1986, 1985, 1982, 1980, 1975, 1974, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
3298 EL CAMINO REAL	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922

FINDINGS

Address Researched	Address Not Identified in Research Source
330 PORTAGE AVE	2006, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
3301 EL CAMINO REAL	2006, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
3305 EL CAMINO REAL	2006, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1975, 1974, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1930, 1926, 1925, 1922
3310 EL CAMINO REAL	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
332 PORTAGE AVE	2006, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
335 PORTAGE AVE	2006, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
336 PORTAGE AVE	2006, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
340 PORTAGE AVE	2006, 2000, 1996, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
350 PORTAGE AVE	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1975, 1974, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
360 PORTAGE AVE	2006, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
370 PORTAGE AVE	2006, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
380 PORTAGE AVE	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
382 PORTAGE AVE	2006, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
395 PORTAGE AVE	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1935, 1930, 1926, 1925, 1922
401 PORTAGE AVE	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
411 ACACIA AVE	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1975, 1974, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1945, 1940, 1935, 1930, 1926, 1925, 1922
425 OLIVE	2006, 2001, 2000, 1996, 1991, 1985, 1980, 1978, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922

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Address Researched	Address Not Identified in Research Source
425 PORTAGE AVE	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1975, 1974, 1968, 1966, 1964, 1963, 1962, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
426 OLIVE AVE W	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
426 PORTAGE AVE	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
427 OLIVE AVE W	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
428 OLIVE AVE W	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
429 OLIVE AVE W	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
429 PORTAGE AVE	2006, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
430 OLIVE AVE	2006, 2000, 1996, 1985, 1980, 1974, 1968, 1966, 1964, 1963, 1962, 1957, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
430 OLIVE AVE W	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
431 OLIVE AVE	2006, 2000, 1996, 1991, 1985, 1982, 1980, 1974, 1968, 1966, 1964, 1963, 1962, 1957, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
431 OLIVE AVE W	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
432 OLIVE AVE W	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
433 OLIVE AVE W	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
433 OLIVE DR	2006, 2001, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
434 OLIVE AVE W	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
435 ACACIA AVE	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
435 OLIVE AVE W	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
435 PORTAGE AVE	2006, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1975, 1974, 1968, 1966, 1964, 1963, 1962, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922

FINDINGS

Address Researched	Address Not Identified in Research Source
436 OLIVE AVE W	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
436 OLIVE DR	2006, 2001, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
437 OLIVE AVE W	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
438 OLIVE AVE W	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
439 OLIVE AVE W	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
440 OLIVE	2006, 2001, 2000, 1996, 1991, 1985, 1980, 1978, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
440 OLIVE AVE	2006, 2000, 1996, 1985, 1980, 1975, 1974, 1968, 1966, 1964, 1963, 1962, 1957, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
440 OLIVE AVE W	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
440 PORTAGE AVE	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1945, 1940, 1935, 1930, 1926, 1925, 1922
441 OLIVE	2006, 2001, 2000, 1996, 1991, 1985, 1982, 1980, 1978, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
441 OLIVE AVE	2006, 2000, 1996, 1991, 1986, 1985, 1980, 1974, 1968, 1966, 1964, 1963, 1962, 1957, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
441 OLIVE AVE W	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
442 OLIVE AVE W	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
442 PORTAGE AVE	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
443 ACACIA AVE	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
443 OLIVE AVE W	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
444 OLIVE AVE W	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
445 OLIVE AVE W	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922

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Address Researched	Address Not Identified in Research Source
445 OLIVE DR	2006, 2001, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
446 OLIVE AVE W	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
447 LAMBERT AVE	2006, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1945, 1940, 1935, 1930, 1926, 1925, 1922
447 OLIVE AVE W	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
448 OLIVE AVE W	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
448 OLIVE DR	2006, 2001, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
449 OLIVE AVE W	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
450 LAMBERT AVE	2006, 2000, 1996, 1991, 1982, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
450 OLIVE AVE	2006, 2000, 1996, 1986, 1985, 1980, 1974, 1968, 1966, 1964, 1963, 1962, 1957, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
450 OLIVE AVE E	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
450 OLIVE AVE W	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
451 OLIVE AVE	2006, 2001, 2000, 1996, 1986, 1985, 1980, 1974, 1968, 1966, 1964, 1963, 1962, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
451 OLIVE AVE W	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
452 OLIVE AVE W	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
453 OLIVE AVE W	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
454 OLIVE AVE W	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
455 LAMBERT AVE	2006, 2000, 1996, 1985, 1980, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1957, 1945, 1940, 1935, 1930, 1926, 1925, 1922
455 OLIVE AVE	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922

FINDINGS

Address Researched	Address Not Identified in Research Source
455 OLIVE AVE W	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
455 PORTAGE AVE	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1975, 1974, 1968, 1966, 1965, 1964, 1963, 1962, 1957, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
456 OLIVE	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1935, 1930, 1926, 1925, 1922
456 OLIVE AVE	2006, 2000, 1996, 1991, 1986, 1985, 1980, 1975, 1974, 1968, 1966, 1964, 1963, 1962, 1957, 1945, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
456 OLIVE AVE W	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
457 OLIVE AVE W	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
457 OLIVE DR	2006, 2001, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
458 LAMBERT AVE	2006, 2001, 2000, 1996, 1991, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
458 OLIVE AVE W	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
459 LAMBERT AVE	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1935, 1931, 1930, 1926, 1925, 1922
459 OLIVE AVE W	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
460 LAMBERT AVE	2006, 2000, 1996, 1986, 1985, 1982, 1980, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1950, 1945, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
460 OLIVE	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1980, 1978, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
460 OLIVE AVE	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
460 OLIVE AVE W	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
461 OLIVE AVE	2006, 2000, 1996, 1991, 1985, 1982, 1980, 1974, 1968, 1966, 1964, 1963, 1962, 1957, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
461 OLIVE AVE W	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
462 OLIVE AVE W	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922

FINDINGS

Address Researched	Address Not Identified in Research Source
463 ACACIA AVE	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
463 LAMBERT AVE	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1957, 1950, 1945, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
463 OLIVE AVE W	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
464 OLIVE AVE	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
464 OLIVE AVE W	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
465 OLIVE AVE	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
465 OLIVE AVE W	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
466 OLIVE AVE W	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
467 OLIVE AVE W	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
468 OLIVE AVE W	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
469 OLIVE AVE W	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
470 OLIVE AVE	2006, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
470 OLIVE AVE W	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
470 PORTAGE AVE	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1964, 1963, 1962, 1957, 1955, 1945, 1940, 1935, 1930, 1926, 1925, 1922
471 OLIVE AVE W	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
472 OLIVE AVE W	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
473 ACACIA AVE	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922

FINDINGS

Address Researched	Address Not Identified in Research Source
473 OLIVE AVE W	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
474 OLIVE AVE W	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
474 OLIVE DR	2006, 2001, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
475 OLIVE AVE	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
475 OLIVE AVE W	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
476 OLIVE AVE W	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
477 OLIVE AVE E	2006, 2001, 2000, 1996, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
477 OLIVE AVE W	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
478 OLIVE AVE	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
478 OLIVE AVE W	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
479 OLIVE AVE W	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
480 OLIVE AVE E	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
480 OLIVE AVE W	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
484 OLIVE DR	2006, 2001, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
485 OLIVE AVE E	2006, 2001, 2000, 1996, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
490 OLIVE AVE	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
490 OLIVE AVE E	2006, 2001, 2000, 1996, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922

FINDINGS

Address Researched	Address Not Identified in Research Source
490 OLIVE DR	2006, 2001, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
491 ACACIA AVE	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1957, 1950, 1945, 1940, 1935, 1930, 1926, 1925, 1922
491 ACACIA WAY	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
491 OLIVE AVE	2006, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
491 OLIVE AVE E	2006, 2001, 2000, 1996, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
499 OLIVE AVE E	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
600 HANSEN WAY	2006, 2001, 2000, 1996, 1985, 1980, 1974, 1968, 1966, 1964, 1963, 1962, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
600 HANSON WAY	2006, 2001, 2000, 1996, 1991, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
607 HANSEN WAY	2006, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
611 HANSEN WAY	2006, 2000, 1996, 1974, 1968, 1966, 1964, 1963, 1962, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
620 HANSEN WAY	2006, 2000, 1996, 1991, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
630 HANSEN WAY	2006, 2001, 2000, 1996, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
660 HANSEN WAY	2006, 2000, 1996, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
700 HANSEN WAY	2006, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922

APPENDIX E

SELECTED REPORTS FROM PREVIOUS SITE INVESTIGATIONS (ON CD)

E.1 Excerpts from Durabond Facility Documents

El Camino Center
Ground Water Contamination Problem

EMCON
ASSOCIATES
Consultants in Waste Management and Environmental Control

July 12, 1985
Project 376-01.05

Regional Water Quality Control Board
Room 6040
1111 Jackson Street
Oakland, California 94617

Attention: Ms. Jennifer Haley

Gentlemen:

This letter report summarizes the results of our analyses of water samples from three ground-water monitoring wells at the Dura-Bond Bearing Company located at 3201 Ash Street, Palo Alto, California. The purpose of this investigation was to continue monitoring the water quality at the Dura-Bond facility, and to report any significant changes.

BACKGROUND

In September 1984, Dura-Bond reported to the California Regional Water Quality Control Board (RWQCB) a gasoline and diesel spill that had come from two 500 gallon underground storage tanks. The gasoline and a third tank used to store Stoddard solvent were used by Dura-Bond up to the time that the tanks were removed. The diesel fuel tank belonged to the property owner. The history of use for this tank is not known. Results of soil and ground-water analyses at the time the tanks were removed indicated that a spill of gasoline and diesel fuel had occurred. It was decided shortly after the tanks had been removed, that as a precaution, the soil beneath the tanks would be excavated to ground water and that a ground-water monitoring well should be installed in the north corner of the excavation (Figure 1). The three monitoring wells were sampled on June 4, 1985 and the ground water from the wells was tested for lead, gasoline, Stoddard solvent, diesel, Trichloroethylene (TCE), 1,1,1-Trichloroethane (TCA), and Tetrachloroethylene (PCE).

Testing of the ground-water samples for gasoline, Stoddard solvent, and lead were done because they are used by Dura-Bond. Testing for diesel was done to monitor changes in water quality from the spill of diesel from the landlord's tank, and the tests for solvents were done to monitor changes in water quality due to what is believed to be migration of contaminants from an offsite source or sources.

Headquarters:
90 Archer Street, San Jose, California 95112, (408) 275-1444
Branch office: 445 W. Garfield Avenue, Glendale, California 91204

SAMPLING PROCEDURE

The depth of water was measured in each of the wells and the water was checked for floating petroleum product. A minimum of one casing volume of water was purged from each well using a low discharge (0.5 gpm) submersible pump. The samples were collected from the pump's Teflon discharge tube and placed in EPA approved containers.

RESULTS

The results of the ground-water testing indicate that the highest concentration of gasoline is present in the former tank excavation and that the level of gasoline in monitoring Well DM-1 has decreased significantly since the tanks were removed. Ground water from Well E-1 was not tested for gasoline when the tanks were removed, however, the current concentration is similar to that found in Well DM-1.

All three monitoring wells were tested for Stoddard solvent. Stoddard solvent was present in Well E-2, and not detected in Well DM-1 and E-1.

Diesel was not detected in any of the monitoring wells, however, the detection limit for diesel was significantly higher in Well E-2 because of the relatively high concentration of gasoline in the well.

The concentration of lead found in Well DM-1 is considerably higher than the EPA Primary Drinking Water Standards, but much lower than lead levels found in soils tested from below the removed underground storage tanks. The concentration of lead in Well E-1 is at the EPA Primary Drinking Water Standard of 0.05 ppm and water from Well E-2 is below detection limits. The source of the lead in the two monitoring wells away from the tank excavation is not clear at this time. The high concentrations of lead found in the soils beneath the removed tanks may be the result of lead from leaded gasoline, from naturally occurring lead in the soil, or from past activities of Dura-Bond.

Solvents were tested because TCE has been detected in early 1984. Dura-Bond does not use this or any other related solvents in any of its manufacturing processes. Analyses for TCE, TCA, and PCE were done on all of the monitoring wells. These solvents are thought to be migrating on site from an offsite source or sources. Currently, the level of TCE is rising in Well DM-1 and has decreased in Well E-1. TCA, which was not detected in previous tests, has been detected in all three monitoring wells suggesting that contaminated water from an offsite source is migrating through the Dura-Bond site. The level of PCE has decreased in Well DM-1 and not changed in Well E-1.

CONCLUSIONS

Based on the evidence gathered to date, the major contaminant problem at the Dura-Bond site is the presence of solvents typically used in the electronics industry. The gasoline and diesel spill reported in

September 1984 are currently confined to the backfill of the tank excavation. The concentrations of gasoline, Stoddard solvent, and diesel should be monitored on a regular basis to detect any significant changes in water quality.

If you have any questions regarding this letter, please feel free to call.

Very truly yours,

EMCON Associates

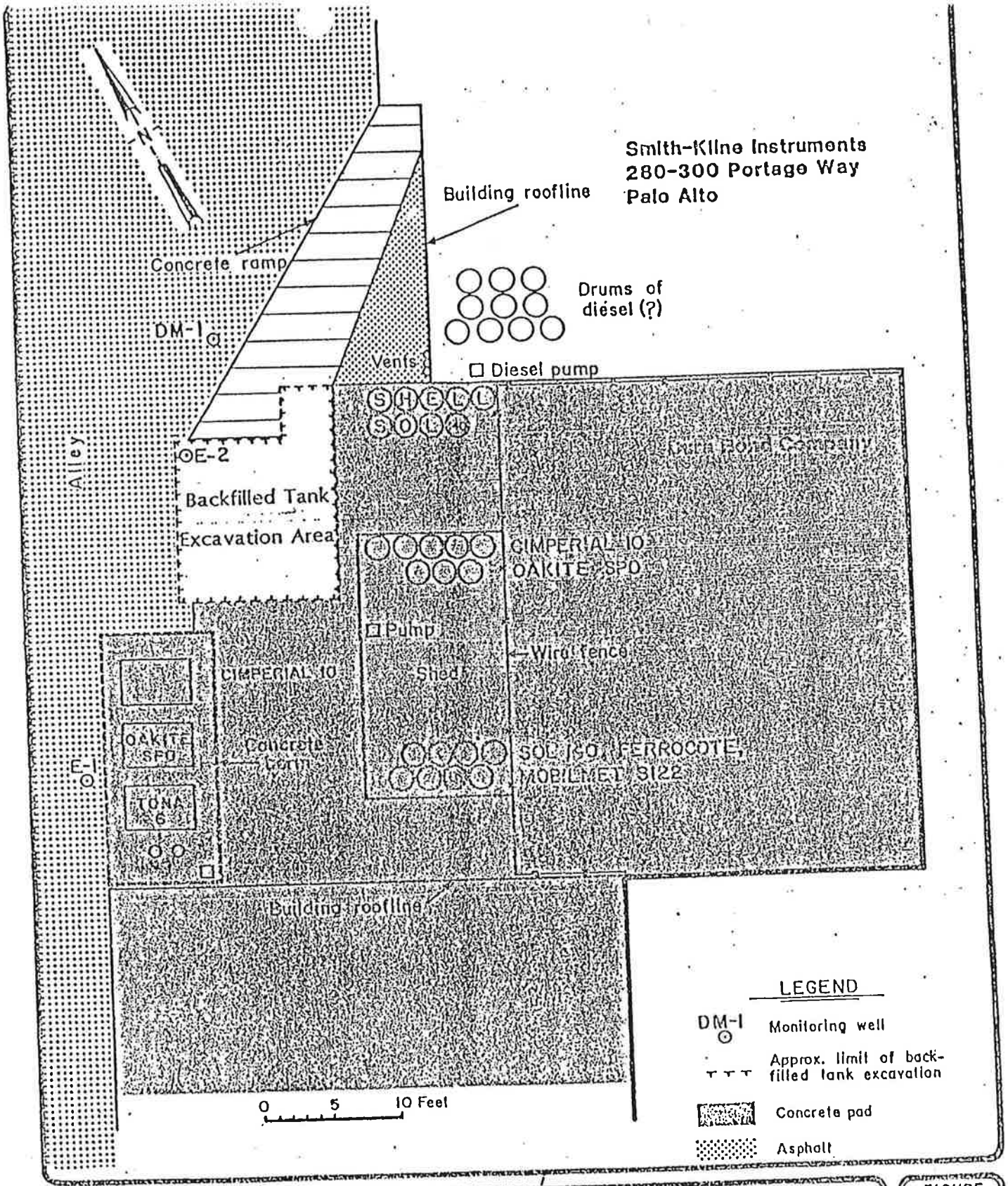
Robert H. Husk
Staff Geologist

Donald A. Andres
Senior Vice President

RHH/DAA:mtg

Enclosure

cc: Mr. T. Ko
Dura-Bond



EMCON Associates
San Jose, California

DURA-BOND BEARING COMPANY
TANK LEAKAGE INVESTIGATION
PALO ALTO, CALIFORNIA

MONITORING WELL LOCATION MAP

FIGURE 2

PROJECT NO. 376-01.05

STON R
LABORATORIES
397 MATHEW STREET, SANTA CLARA, CALIFORNIA 95050-3158 (408) 727-4277

June 21, 1985

Emcon Associates
90 Archer Street
San Jose, CA 95112

Reference: Purchase Order No. 4893

ATTN: Philip Murphy

Following are the results of our analyses for the presence of certain hydrocarbons in three samples of water received on June 4, 1985.

For the analysis of volatile fuel hydrocarbons, the samples were examined using the purge and trap technique and a gas chromatograph equipped with a flame ionization detector as well as a photoionization detector and a Carbopack B/3% SP-1500 column.

For the analysis of Stoddard solvent, the samples were examined using the purge and trap technique. Final detection was by gas chromatography using a flame ionization detector and a 5% AT-1200 + 1.75% Bentone 34/Chromosorb W column.

For the analysis of fuel hydrocarbons in the diesel range, the samples were partitioned with distilled hexane. Final detection was by gas chromatography using a flame ionization detector and a 10m SPB-1/ WCOT column.

= none detected

		Results						
		Micrograms per Liter						
ıber	Sample Identification	Volatile Hydrocarbons (includes benzene, toluene and xylenes	Benzene	Toluene	Xylene Isomers and ethyl benzene	Stoddard solvent	Die: ran:	
	Job 376-01.05 6/4/85							
.39	ØM-1	21.	nd	nd	nd	nd	n	
140	E-1	20.	nd	nd	nd	nd	n	
141	E-2	9,500.	150.	88.	1,200.	20.	n	
tection Limits			1.	1.	4.	10.	5 20	

Patricia L. Murphy

Patricia L. Murphy

M/jd

These results were obtained by following standard laboratory procedures. the liability of the corporation shall not exceed the amount paid for this report.

Analysis • Co...ilation • Research • Environmental ...dies
State Approved Water Laboratory

EMCON ASSOCIATES

CERTIFIED ANALYTICAL REPORT

Report to: Durabond Bearing Company
P.O. Box 11085
Palo Alto, CA 94306
Attn: Mr T. Ko

Date Received June 4, 1985

Laboratory Number E85-0424

Project Number 376-01.05

Date Sampled June 4, 1985

SAMPLE ID		DM-1	E-1	E-2
Lead, Total	mg/l	0.28	0.05	< .05

Reported by: Philip Murphy Date: 6-12-85

...obtained by following standard laboratory procedures; the liability of the corporation shall not exceed the amount paid for this report

Analysis • Co[illegible]llation • Research • Environmental [illegible]lies
State Approved Water Laboratory

EMCON ASSOCIATES

CERTIFIED ANALYTICAL REPORT

Report to: Dura-Bond Bearing Company
P.O. Box 11085
Palo Alto, CA 94306
Attn Mr. T. Ko

Date Received June 4, 1985

Laboratory Number E85-0424

Date Sampled June 4, 1985

Project Number 376-01.05

WATER

SAMPLE ID	E-1	E-2	DM-1	Pump Blank
PARAMETER				
Trichloroethylene ug/l	530.	250.	540.	< .1
Tetrachloroethylene ug/l	<.1	0.57	0.1	< .1
1,1,1-Trichloroethane ug/l	110.	7.2	130.	< .1

Reported by: Philip Murphy Date: 6-10-85

These results were obtained by following standard laboratory procedures; the liability of the corporation shall not exceed the amount paid for this report

STATE OF CALIFORNIA
GEORGE DEUKMEJIAN, Governor
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION
1111 JACKSON STREET, ROOM 6040
OAKLAND 94607
Phone: Area Code 415
464-1255

EL CAMINO CENTER
Ground Water Contamination Problem

July 18, 1985

File No. 2189.8055

T. L. Ko, Engineering Manager
Dura Bond Bearing Co.,
3201 Ash St.
Palo Alto, CA 94306

Dear Mr. Ko:

On July 12 we met to discuss the status of the groundwater contamination investigation going on at your site.

A history of the site beginning with Dura Bond's occupation of the site in 1960 was reviewed. The first monitoring well, DM-1, was installed in the approximate downgradient direction of groundwater flow from your underground waste storage tank pursuant to the Regional Board's underground tank leak detection program.

In 1983 you discovered that the filler pipe to this tank was not sealed properly, and some liquid had spilled into the sand beneath the overlaying cement layer. EMCON was contracted to construct well E-1 to determine if material had reached the ground water. None of the compounds listed as being used at the site were found in the water samples; however, other organic chemicals, subsequently identified as TCE and DCA, were found.

In the summer of 1984, 3 underground storage tanks containing gasoline, diesel fuel and Stoddard solvent were removed. At this time a casing was installed in the excavation approximately 14 feet below the ground surface to the top of the groundwater table. This unslotted well is referred to as E-2.

The most recent groundwater samples were taken in June 1985. Hydrocarbons characteristic of gasoline were found in the sample from E-2. Detectable levels of lead were found in the samples from DM-1 and E-1, and TCE and TCA were detected in all three samples at the 100 to 500 ppb level.

It is possible that the chlorinated hydrocarbons originated off-site and have migrated onto your property; however, unless further

investigation proves otherwise, Dura Bond is still considered a potential source. In order to determine contaminant levels in surrounding groundwater, Stanford Cleaners, a neighboring site, has been requested to run a scan for purgeable organic chemicals in a water sample from their well.

At this time I request the following for your site:

1. A proposal and time schedule for evaluating at least three alternatives, for clean-up of the remaining hydrocarbon compounds detected in the groundwater below the excavated area. The proposal will include the methods that will be used to evaluate different cleanup alternatives. A copy of the "Regional Board Staff Guidelines With Respect to Establishing A Procedure to Identify Water Quality Objectives For Hazardous Material Site Clean-up" is enclosed for your use in developing your proposal alternatives.

2. The wells should be resampled and analyzed for lead with both filtered and unfiltered samples tested to determine the amount of lead held on suspended sediment. Remedial action alternatives should be outlined for this contamination also.

3. As discussed in our meeting, to determine whether the Dura Bond site is a source of the chlorinated organics detected, the following information is requested.
   a) Soil borings in the vicinity of the waste storage tank analyzed for the compounds detected in the groundwater.
   b) A monitoring well located at the upgradient property boundary analyzed for the compounds detected in the groundwater.

Your proposal for Phase II of this investigation should be provided in about 30 days at which time another meeting may be arranged. If you have any questions you may call me at (415) 464-1247.

Sincerely,

Jennifer L. Haley
Water Resources Engineer

cc Robert Gilkey, President
Donald Andres, EMCON Assoc.
Tom Iwamura, SCVWD
R. M. Jacobson, Landowner
Steve Brooks, Santa Clara County Health Dept.

DURA-BOND BEARING COMPANY

J. Gorman

March 10, 1989

Mr. Robert Wall, Fire Chief
Palo Alto Fire Department
Bureau of Fire Prevention
250 Hamilton Avenue
Palo Alto, CA 94301

FACILITY CLOSURE PLAN

FACILITY NAME: DURA-BOND BEARING COMPANY
370 Portage Avenue
Palo Alto, CA 94306
PH. (415) 493-6546

Contact: Miro P. Pavkovic, Project Manager

FACILITY AND MANUFACTURING PROCESS

Dura-Bond Bearing Company has been manufacturing camshaft bearings at present location since 1958. The manufacturing process uses caustic and acidic material, machine coolants, lube oil, hydraulic oil, solvent, etc. (see attached list of material). Cleaning process generated waste water which contains iron, lead, zinc, cadmium, etc. Machining process generated hazardous waste, liquid and solid and also metal chips, shavings, etc.

In 1982, Dura-Bond installed one 5000-gal. underground tank for collection of hazardous waste.

Closure of old water treatment system has taken place in summer of 1982, following with installation of modern and compact water treatment system in September 1982.

At that time, there were two additional underground storage tank in use. One, 1000-gal. virgin solvent tank and one, 500-gal. unleaded gasoline tank. Both tanks were replaced with identical capacity but double-wall storage tanks in 1984. Above-ground storage facility included liquid hydrochloric acid and caustic soda tanks, lube oil, rust preventive oil, machine coolant concentrate, solid hazardous waste drums (17H), grease drums, etc.--see map for locations.

To comply with applicable regulations and minimize future liabilities, facility closure will address the following:

PHASE I - Underground storage tanks and chemical storage area

PHASE II - Manufacturing and warehouse area

PHASE III - Water treatment system area

TANK CLOSURE CONTRACTORS

1. EMCON Assoc. P. O. No.
   1921 Ringwood Avenue
   San Jose, CA 95131
   PH. (408) 275-1444
   Contact: Martha Watson, Project Eng.
   Consulting, Sampling and Analysis, Field Service, Closure Reporting

2. Miholovich Concrete Company P. O. No.
   506 South Bayview
   Sunnyvale, CA 94086
   PH. (408) 736-3702
   Contact: Don Miholovich
   Slab Removal, Tank Excavation, Backfilling, Resurface

3. Erickson Enterprises P. O. No.
   255 Parr Boulevard
   Richmond, CA 94801
   PH. (415) 235-1393
   EPA # CAD009466392

4. Excel Trans, Inc.
   Div. of Erickson Enterprises
   397 W. Channel Road
   Benicia, CA 94510
   PH. (707) 745-2770
   Contact: Dan Carroll and Jerry Sondree
   Hazardous Waste Transportation Services, Tank Transport, Cleaning, Test and Inspection
   Calif. Waste Hauler #2283
   EPA # CAD981982663

PHASE I

1. Underground Storage Tank Removal

The tanks must be closed according with RWQCB Guidelines and City of Palo Alto Fire Department Hazardous Materials Storage Ordinance.

Procedure

a. Permit Application - Secure permit to remove tanks.
b. Remove all pumpable liquids from three tanks and dispose of according to EPA regulations.
c. Break off concrete slab and excavate tanks.

d. Transport to hazardous waste facility for cleaning, testing and certification for future use/or dispose of at permitted hazardous waste disposal site.

e. SOIL SAMPLING

After each tank is removed, EMCON will collect samples of native soil at the soil/backfill interface at the base of each tank excavation. The soil will be brought to the surface with a backhoe, approximately 3 inches of soil will be scraped away from the surface, and a clean stainless steel ring will be driven into the soil. The ring will be removed from the soil and the ends of the ring will then be covered with Teflon® tape and capped with plastic end caps. The capped ring will be put in a glass jar, placed on ice, and transported to a state-certified laboratory for analysis. Chain-of custody documentation will be maintained and submitted for all samples.

After tank piping and product lines are removed, one soil sample will be taken for every 20 feet of piping trench. Soil samples from the piping trenches will be collected in rings, capped, kept cool, and transported as described above.

ANALYTICAL METHODS

The attached table lists the number of soil samples for each tank, their respective analyses, and the laboratory that will perform the analysis.

See Table 1

f. Backfill, compaction and resurfacing upon approval from local agencies.
g. Closure reporting including soil snalysis and chain-of-custody documentation, any manifest used to document final disposition of tank contain's, tanks, piping, etc.--by EMCON Assoc.

2. Chemical Storage Area

Chemical storage facility appears to be in good condition and according to Dura-Bond and EMCON site inspection and knowledge of plant operation, no sampling of concrete/asphalt surface will be conducted.

Procedure
a. Inspection of manufacturing and warehouse area.
b. Steam clean and scrub surface.
c. Analyze final rinse and dispose according to hazardous waste disposal requirement if necessary.
d. Include analytical reports if necessary.

PHASE II Manufacturing and Warehouse Area and
PHASE III Water Treatment System

A. Sampling and Analysis Plan

To determine whether facility operations have impacted structure surfaces or underlying soil, wipe and soil samples will be collected and analyzed. Wipe samples will be collected by wiping selected surface areas within the facility. The analysis of these samples will determine if surfaces within certain areas need to be cleaned during facility closure. Soil samples will be collected beneath or adjacent to the bottoms of most pits and sumps. The analysis of these samples will determine whether soils excavation will be required during facility closure. Wipe and soil samples will be analyzed for hazardous materials used or generated in the areas from which they were collected. The following sections outline how wipe and soil sampling will be conducted and what analyses will be used.

Wipe Sampling

Wipe samples will be collected from four areas to determine whether particulates generated during machining operations have affected the facility structure (see Figure 2). These locations are:

- On the ceiling structure outside of and adjacent to the southeast corner of the facility (background sample)
- On top of the southeast office
- On a support beam in the ceiling structure near the middle office
- On a support beam in the ceiling structure in the machining area

Wipe samples will no be taken from the cleaning and lead babbitting rooms since they are clearly stained from facility operations.

Samples will be collected by wiping a measured surface area with a moistened Whatman 541 filter paper (or equivalent). The wipe samples will then be placed in a glass jar, sealed with a Teflon® lined lid, and sent with chain-of-custody documentation to a state-certified laboratory for analysis.

Soil Sampling

Seven soil samples will be collected from six locations at the facility to determine the effectiveness of pits and sumps in preventing the migration of chemicals to underlying soils. These locations (see Figure 2) are generally

as close to the sumps or pits as access allows. Whereever possible, liners will be removed, the integrity of the sumps or pits will be inspected, and sampling locations adjusted as necessary before a sample is obtained. One soil sample will be collected beneath the sump in the wastewater treatment area and five soil samples will be collected along side the bottom of the four sumps in the cleaning and babbitting rooms. A background soil sample will also be collected. No soil samples will be taken beneath the coolant sumps in the manufacturing area because they are small (1 foot x 3 feet x 1/2 foot), clean, and without cracks or chips.

Soil samples will be collected using a small portable drill rig or hand augering equipment after coring through the concrete at the surface. In the wastewater treatment area, the sample will be collected at the native soil interface below the invert of the sump. In the cleaning and babbitting rooms, soil samples will be collected along side the pits between 12 and 18 inches below the elevation of the pit invert. In addition, a background sample will be collected from a sampling location in the babbitting room, at an approximate depth of 6 to 12 inches below the concrete at the surface.

Soil samples for inorganic analysis (metals and pH) will be collected from auger returns and placed in a 250 milliliter glass jar and sealed with a Teflon® lined screw-top lid. Samples for organic analysis (petroleum hydrocarbons) will be collected with a drive sampler equipped with stainless steel liners. The sampler will be driven into undisturbed soil beyond the tip of the auger. The liners will be removed, and Teflon® tape will be placed over the ends. The tape will be held in place with polypropylene caps. The samples will be placed in a Mason jar and transported on ice with chain-of-custody documentation to a state-certified laboratory for analysis.

ANALYSES

Wipe and soil samples will be generally analyzed for hazardous materials used or generated in the areas from which they were collected. All wipe samples will be analyzed for lead because it is the predominant hazardous metal machined at the site. Similarly, all soil samples will be analyzed for lead and high boiling point hydrocarbons (oils). Three of the soil samples will also be analyzed for pH and hazardous metals commonly associated with babbitting and machining operations (antimony, cadmium, chromium, copper, nickel, and zinc). The three samples to be analyzed will be (1) the wastewater treatment area sample, (2) the cleaning room sample, and (3) background sample from the babbitting room. The first two samples are from the areas with the highest potential for hazardous materials migrating into underlying soil, i.e., where process waters were stored or collected.

The attached Table 2 presents the number of samples that will be analyzed for

each parameter, the analytical methods that will be used, and the laboratory that will perform the analyses.

B. PHASE II and PHASE III WORK CLOSURE PLAN

1. Cleaning and Babbitting Room

- Dismantle Babbitt Machine and Prebore Machine
- Clean and prepare for transport
- Remove Kolene tank, rinse tank and acid tank. Inspect, clean and dispose of according to hazardous material regulations, if necessary. Transport to Dura-Bond for reuse.
- Disassemble, plug all natural gas pipeline, close gas valves and disconnect service.
- Drain, clean and transport wooden tank to Dura-Bond.
- Dismantle, clean and dispose babbitt room exhause fans.
- Steam clean walls, floor and pits in cleaning and babbitt room.
- Analyze and discharge according to local requirement/or dispose as hazardous waste.
- Implement sampling and analysis plan - babbitt room including core drilling.
- Backfill, and resurface as necessary.

2. Manufacturing Area and Warehouse Area

- Sampling and analysis plan.
- Implement wipe sample and analyze.
- Close concrete (epoxy coated) sumps.
- Clean floor in manufacturing area using mechanical scrubber, hot water blaster, and/or sandblasting.
- Dispose of sand and metal chips/or recycle.
- Remove 1/2 to 1" of surface using mechanical grinder if necessary and resurface.
- Alternative: Upon approval from local agency and or building owner, apply top coating.

- Leave floor as is upon approval from local agency and/or building owner.

WASTE TREATMENT FACILITY CLOSURE PLAN FOR:

DURA-BOND BEARING COMPANY

RE: Title 40 C.F.R., Part 264, Sub-part G.

S264.112.a.1.: Description of Facility Closure

A. When to close the facility:

1. When the Babbitting and Kolene operation are stopped permanently and no corrosive waste is generated anymore.

B. How to close the facility:

1. Close down the Babbitting and Kolene Operation.
2. Treat all chemicals and corrosive waste through the treatment system and then run fresh water through the treatment system until the fluid in the system is neutral.
3. Rinse the treatment system and pump all the sludges into the sludge thickening compartment.
4. De-water the sludge with the filter press until the sludge thickening compartment is rinsed and empty.

11-16 →

5. Turn the treatment system off by switching off the main circuit breakers.
6. Turn fused disconnect switch off and remove fuses.
7. Disconnect power line to the treatment system.
8. Empty the filter press and rinse and clean the filter press.
9. Discard the filter press cloth and filter press cake in solid waste barrels for disposal to a Class I disposal site.
10. Disconnect and remove all electrical panels, pumps, agitators, pH sensors, level controls, piping, and valves. Dura-Bond

WASTE TREATMENT FACILITY CLOSURE PLAN (continued)

11. Wash and rinse all pipes, valves, pumps, agitators, and all other components.

12. Rinse and clean water treatment area.

13. Rinse and clean wash down sump and pump the sump out into the liquid waste tank, for disposal to a Class I T.S.D.F.

14. All components for re-use must be thoroughly washed, cleaned and then tested for pH.

15. All contaminated material or components should be cut-up and strapped on pallets and covered with plastic or when applicable, kept in D.O.T. approved drums.

16. Call hazardous waste hauler to remove solid and liquid waste to a Class I disposal site. (See Hazardous Waste Shipping Procedures.)

S264.112.a.2.: Estimated Max. Waste Inventory

A. Rinse and wash down liquid - 4,000 gallons.

B. Solid Waste:

1. Filter Press Cake 5 drums

2. Discarded Material 10 cu. yards

FACILITY CLOSURE COST FOR:

DURA-BOND BEARING COMPANY

RE: TITLE 40 C.F.R., Part 264, Sub-part H.

S264.142: Cost Estimate, 1988

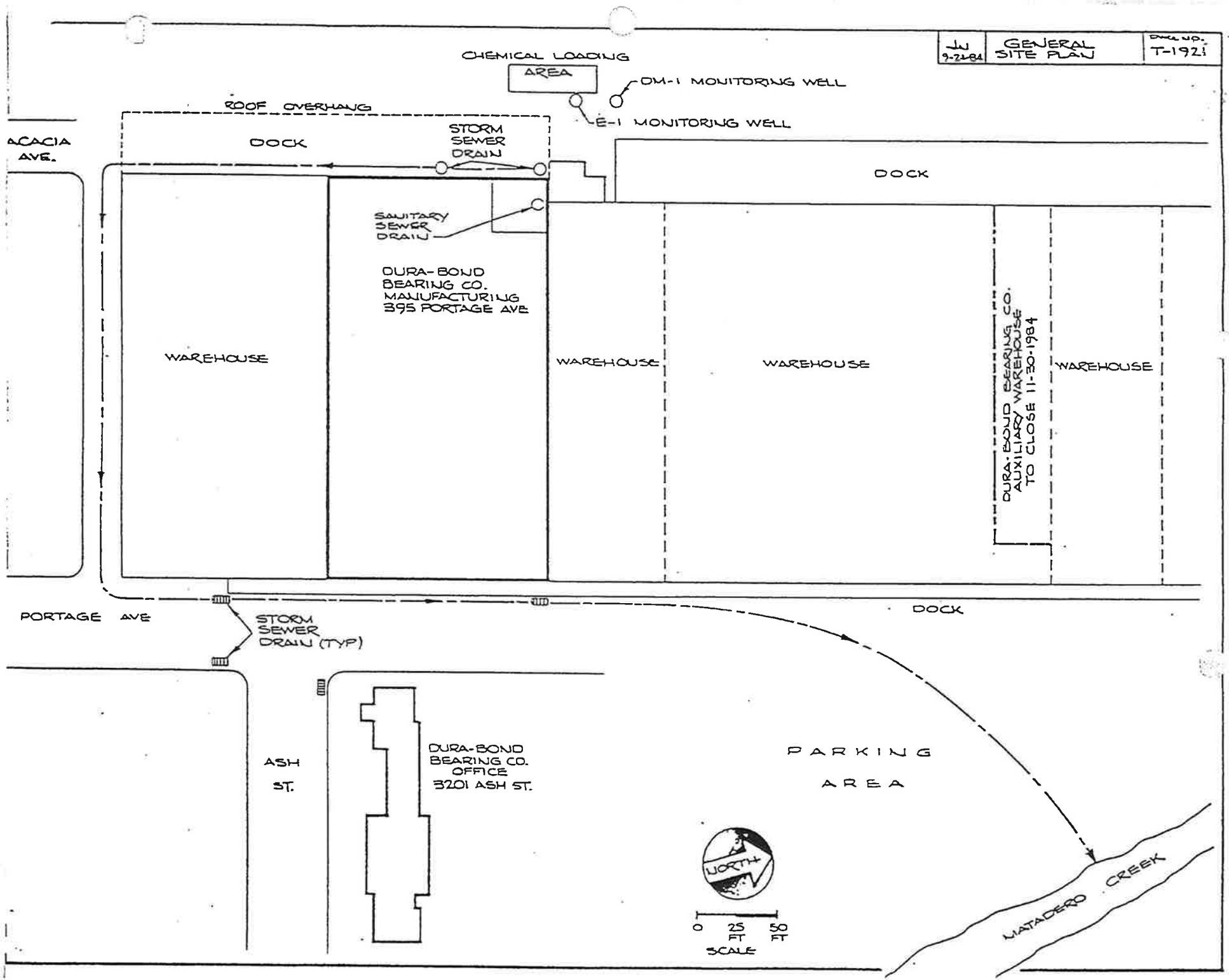
A.	Disposal of Waste Inventory	
	1. Liquid Waste	
	4,000 gallons: $1.00 (.70 + tax)/Gallon	$ 4,000.00
	2. Filter Press Cake	
	1.5 cu.yd.: $355/cu. yd.	532.00
	3. Contaminated Material	
	10 cu. yards: $355/cu. yd.	3,550.00
B.	Removing Structures	
	1. Roof Structure	2,000.00
	2. Removing concrete floor and back filling	4,000.00
C.	Laboratory Analysis	2,000.00
D.	Labor: 100 man hours	2,000.00
E.	Contingencies	2,000.00
		$ 20,000.00

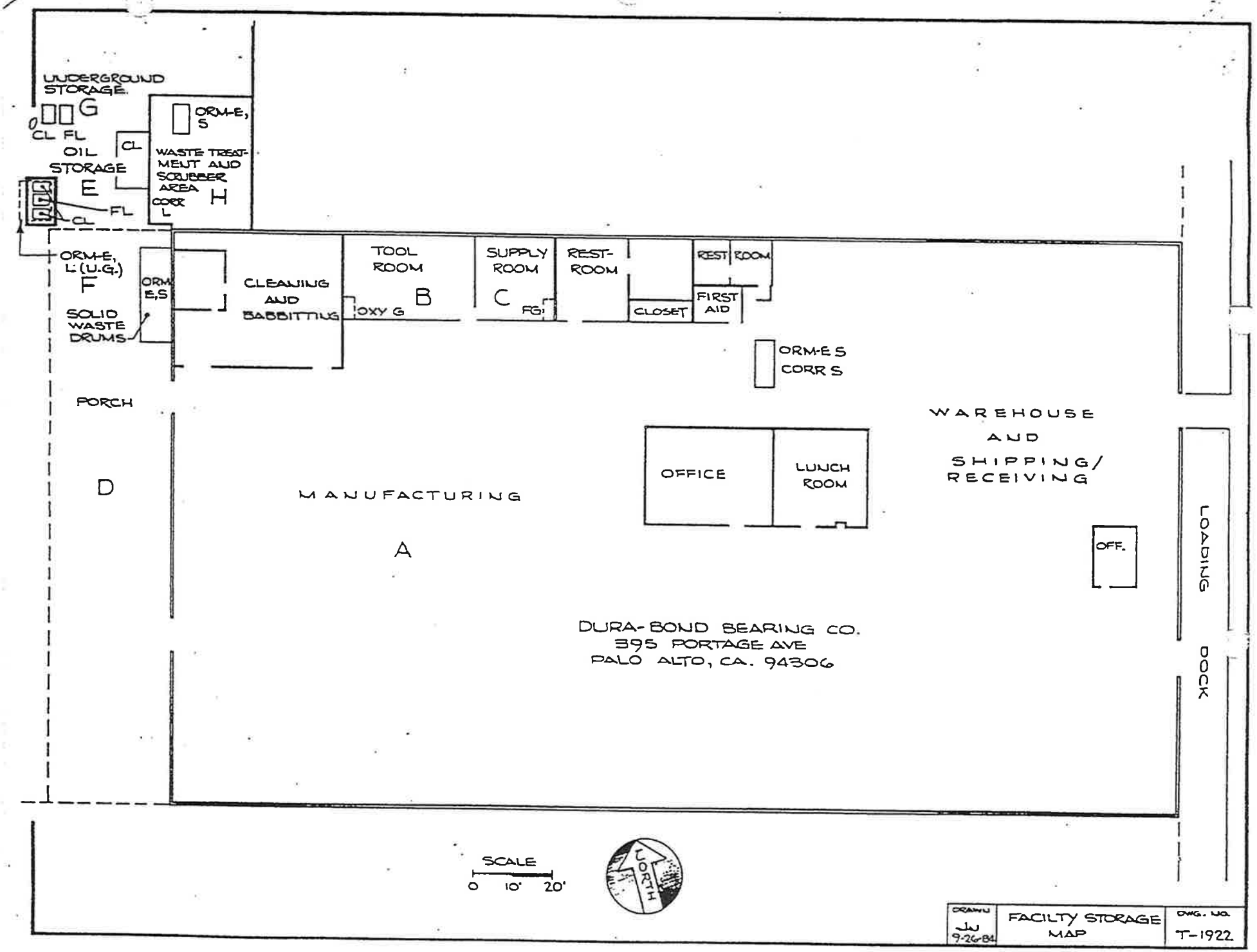
Miro P. Pavkovic, Project Manager

MPP:kk

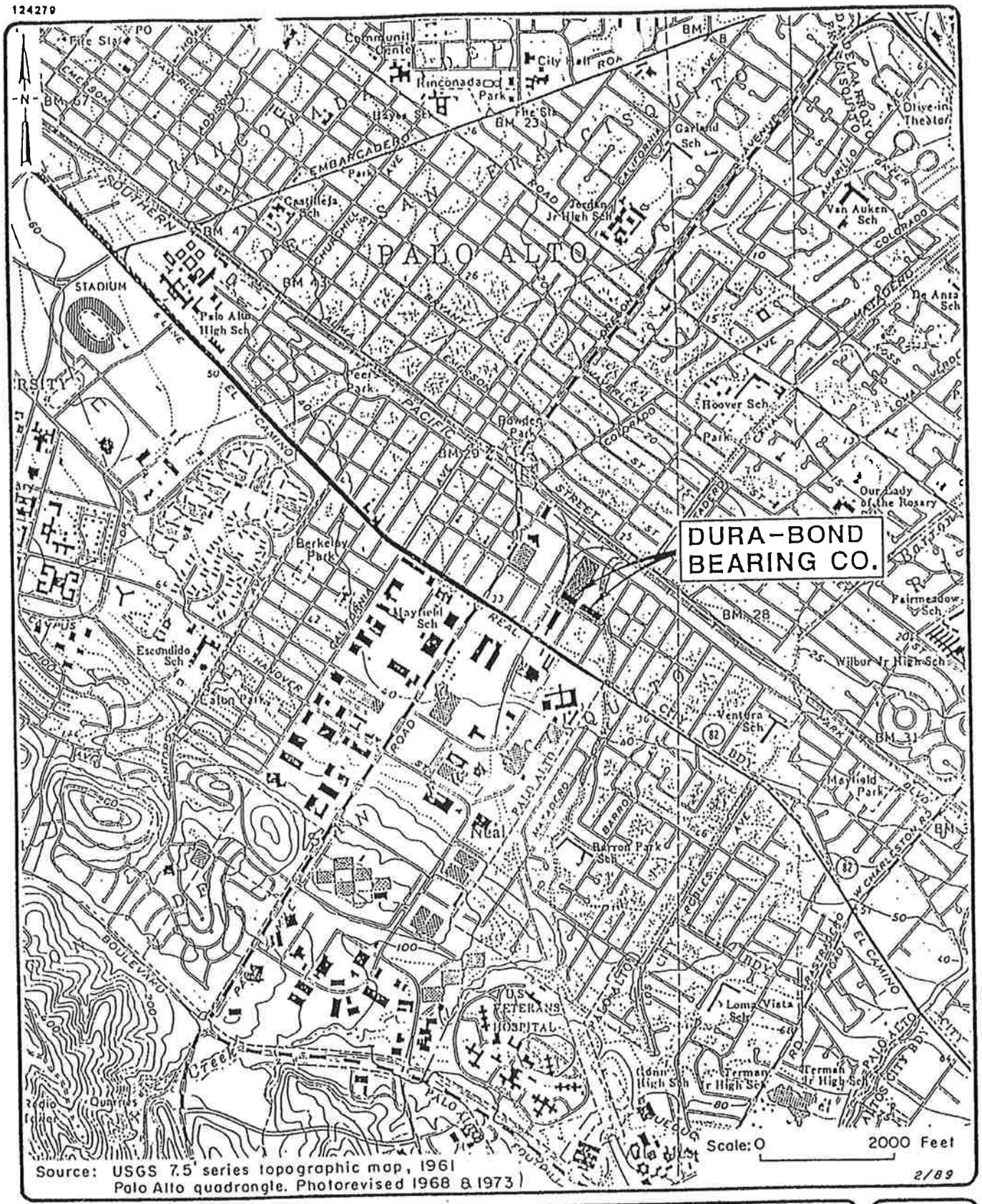
cc: R. W. Gilkey, President - Dura-Bond Bearing Company
A. G. Belenson, Secretary and General Counsel - SKF Industries - USA
R. A. Pfeiffer, Manager of Safety - SKF Industries - USA
W. C. McGlocklin, Corp. Environmental Manager - SKF Industries - USA
G. Osborn - WSJ Properties
M. D. Barett, Eng. Manager - Dura-Bond Bearing Company
Nicole Jacoby, County of Santa Clara, Dept. of Public Health
Mark Wilson, State of California Regional Water Quality Control Board
Frank Fiala, Fire Marshal, Palo Alto Fire Department
Dan Heiser, HazMat Specialist, Palo Alto Fire Department
Rosemary Manings, HazMat Investigator, Palo Alto Fire Department

Enclosure: Closure Plan
Application and Permit
Hazardous Materials Inventory Statement
Hazardous Materials Management Plan
Area Map
Facility Storage Map Drawing No. T-1922


JN 9-21-84
GENERAL SITE PLAN
DWG NO. T-1921
CHEMICAL LOADING AREA
DM-1 MONITORING WELL
E-1 MONITORING WELL
ROOF OVERHANG
ACACIA AVE.
DOCK
STORM SEWER DRAIN
DOCK
SANITARY SEWER DRAIN
DURA-BOND BEARING CO. MANUFACTURING 395 PORTAGE AVE
WAREHOUSE
WAREHOUSE
WAREHOUSE
DURA-BOND BEARING CO. AUXILIARY WAREHOUSE TO CLOSE 11-30-1984
WAREHOUSE
PORTAGE AVE
STORM SEWER DRAIN (TYP)
DOCK
ASH ST.
DURA-BOND BEARING CO. OFFICE 3201 ASH ST.
PARKING AREA
NORTH
0 25 50 FT
SCALE
MATADERO CREEK


UNDERGROUND STORAGE
G
CL FL
OIL STORAGE
E
CL
FL
CL
ORM-E, S
WASTE TREATMENT AND SCRUBBER AREA
CORR
L
H
ORM-E, L (U.G.)
F
ORM E,S
SOLID WASTE DRUMS
CLEANING AND BABBITTING
TOOL ROOM
OXY G
B
SUPPLY ROOM
C
FG
REST-ROOM
CLOSET
REST ROOM
FIRST AID
ORM-E S
CORR S
PORCH
D
MANUFACTURING
A
OFFICE
LUNCH ROOM
WAREHOUSE AND SHIPPING/ RECEIVING
OFF.
LOADING DOCK
DURA-BOND BEARING CO.
395 PORTAGE AVE
PALO ALTO, CA. 94306
SCALE
0 10' 20'
NORTH
DRAWN JW 9-26-84
FACILTY STORAGE MAP
DWG. NO. T-1922.

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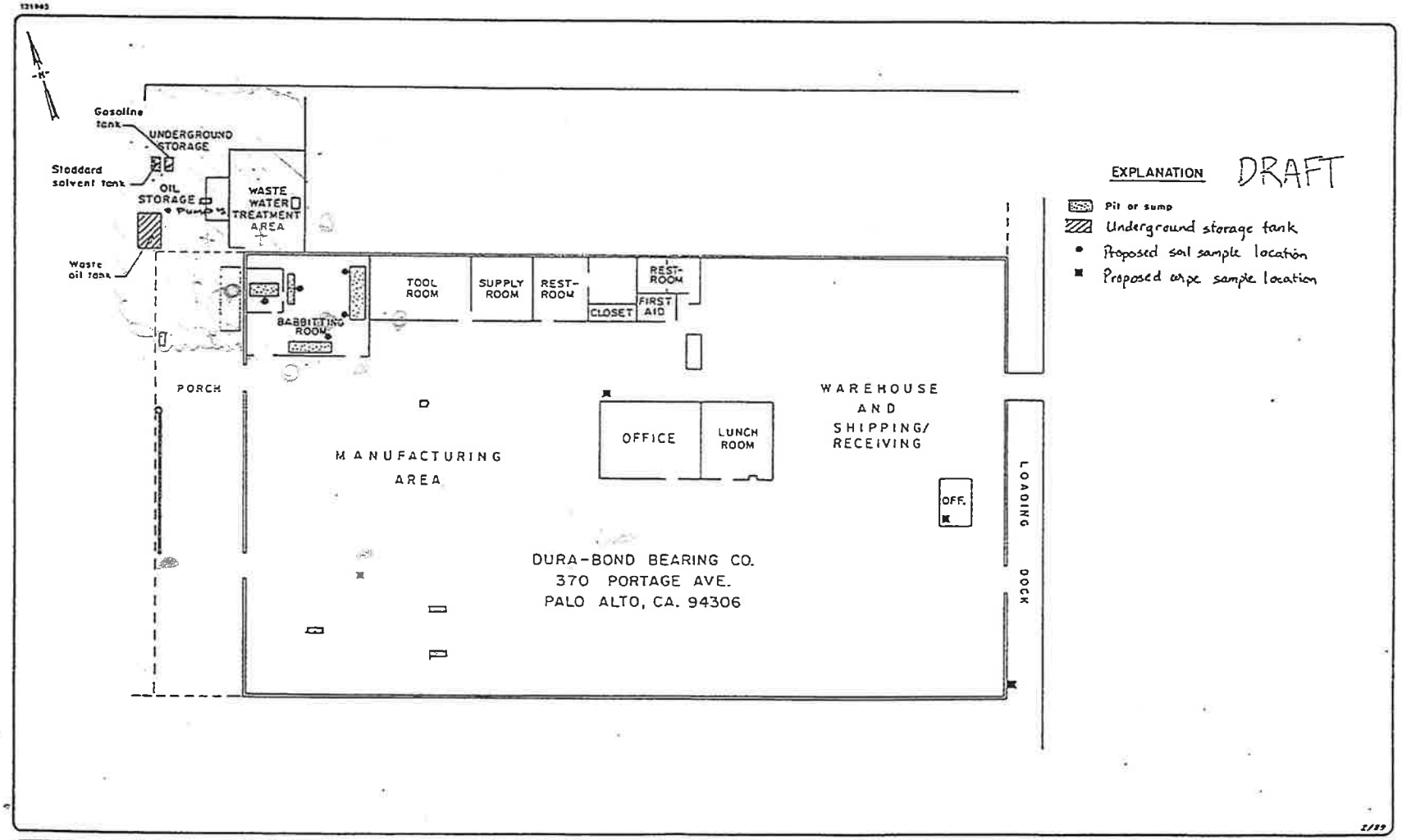
EMCON Associates

DURA-BOND BEARING COMPANY
SAMPLING AND ANALYSIS PLAN
PALO ALTO, CALIFORNIA

SITE LOCATION MAP

FIGURE 1

PROJECT NO. 376-01.08



EMCON Associates

Scale: 0 30 60 90 100 Feet

DURA-BOND BEARING COMPANY
SAMPLING AND ANALYSIS PLAN
PALO ALTO, CALIFORNIA

SAMPLING LOCATION MAP

FIGURE 2

PROJECT NO. 376 - 01.08

Table 1

SUMMARY OF TANK CLOSURE SAMPLING AND ANALYSIS
DURA-BOND BEARING COMPANY

Product	Size	Number of Samples	Analysis	Method	Laboratory (phone number)
Gasoline tank	500 gallons	1	Gasoline, benzene, toluene, xylene, and ethylbenzene	Modified EPA Method 5030/8020 (GC/FID, PID)	EMCON Associates (408/275-1444)
Piping	<20 feet	1[1]			
Stoddard solvent tank	1,000 gallons	1	High boiling point hydrocarbons as Stoddard solvent	LUFT Manual[2] (GC/FID)	International Technology (408/943-1540)
Piping	<20 feet	1[1]			
Waste oil tank	5,000 gallons	2	Oil and grease	EPA Method 418.1	International Technology
			High boiling point hydrocarbons as oil	LUFT Manual (GC/FID)	International Technology
			Benzene, toluene xylene, ethylbenzene, and chlorinated solvents	EPA Method 8240 (GC/MS)	Columbia Analytical (206/577-7222)
			Lead, zinc, cadmium, and chromium	Atomic Adsorption (flame)	EMCON Associates

1. Not required if the piping passes the pressure test specified by the Palo Alto Fire Department.
2. Leaking Underground Fuel Tanks Manual, pp. 60 - 61, Department of Health Services, December 1987

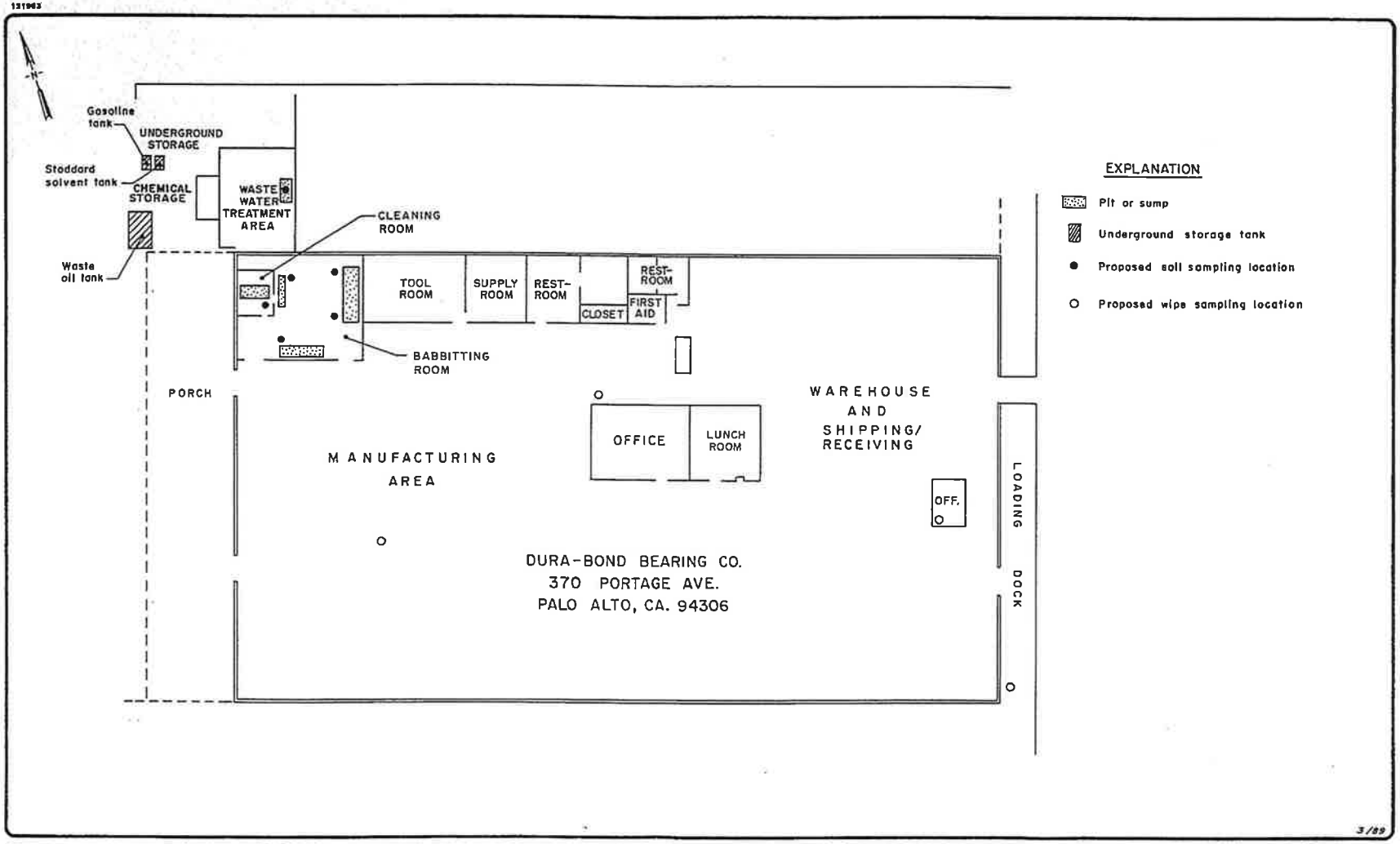
MJW 376-01.08

Table 2

SUMMARY OF FACILITY CLOSURE SAMPLING AND ANALYSIS
DURA-BOND BEARING COMPANY

Number of Samples	Parameter	Test Method	Laboratory
Wipe:			
4	Lead	EPA 7420	EMCON Associates [1]
Soil:			
3	pH	EPA 9040	EMCON Associates
3	Antimony	EPA 7040	EMCON Associates
3	Cadmium	EPA 7130	EMCON Associates
3	Chromium	EPA 7190	EMCON Associates
3	Copper	EPA 7210	EMCON Associates
7	Lead	EPA 7420	EMCON Associates
3	Nickel	EPA 7520	EMCON Associates
3	Zinc	EPA 7950	EMCON Associates
7	High boiling point hydrocarbons	LUFT Manual [2]	International Technology (IT) [3]

1. Phone number: (408) 275-1444
2. Leaking Underground Fuel Tanks Manual, pages 60-61, Department of Health Services, December 1987
3. Phone number: (408) 943-1444



EMCON Associates

Scale: 0 30 60 90 100 Feet

DURA-BOND BEARING COMPANY
SAMPLING AND ANALYSIS PLAN
PALO ALTO, CALIFORNIA

SAMPLING LOCATION MAP

FIGURE 2

PROJECT NO. 376 - 01.08

EMCON
ASSOCIATES
Consultants in Wastes
Management and
Environmental Control

December 22, 1989
Project 376-01.08

Mr. Miro Pavkovic
Dura-Bond Bearing Company
P.O. Box 60976
Palo Alto, California 94306

Re: Closure of Wastewater Treatment and Babbitting Areas

Dear Mr. Pavkovic:

This letter report presents EMCON Associates' (EMCON) documentation of closure activities performed in the wastewater treatment and babbitting areas at the former Dura-Bond Bearing Company (Dura-Bond) manufacturing facility, 360 Portage Avenue, Palo Alto, California (see Figure 1). This work satisfies the closure requirements for the facility as described in the closure plan approved by the Palo Alto Fire Department, and complies with specific closure recommendations presented in a September 20, 1989, EMCON letter.

Dura-Bond retained Miholovich Concrete Company to implement EMCON's recommendations for closure. These closure activities consisted of excavating impacted soil in the wastewater treatment and babbitting areas and backfilling the excavations. Hauling contractors were retained to dispose of the excavated soil. EMCON's consulting services consisted of collecting soil samples from the excavations, coordinating laboratory analyses, and observing and documenting closure activities.

ENV PJ3760108.DOC

BACKGROUND

Dura-Bond used the babbitting and wastewater treatment areas in its Palo Alto facility from 1960 to August 31, 1989. The manufacturing process consisted of babbitting steel pipes; wastewater was generated during this process. The wastewater treatment and babbitting areas, cover approximately 2,400 square feet in the southwest corner of the former Dura-Bond facility.

Closure recommendations were made based on the findings of a sampling and analysis program. The results of the investigation (letter report, EMCON September 20, 1989) indicated that metal-impacted soils were present in the former babbitting and wastewater treatment areas. The recommendations for closure included excavating the impacted soils until cleanup criteria were met, and backfilling the excavations with clean fill.

INITIAL SAMPLING AND ANALYSIS

During the previously mentioned sampling and analysis program, soil samples were collected from 26 locations within the wastewater treatment and babbitting areas and analyzed for selected metals and hydrocarbons (see Figure 2). The results of the analyses are summarized as follows:

- high concentrations of lead and zinc and pH extremes were found beneath the pits in the babbitting area except where soil had previously been removed for pit repair
- high concentrations of lead and zinc in shallow soil in the babbitting area were associated with areas of concrete damage
- high concentrations of lead in soil beneath the wastewater treatment area appeared limited to a 13-foot by 3-foot strip along one warehouse wall.

CLOSURE CRITERIA AND RECOMMENDATIONS

In the September 20, 1989, EMCON letter report, site closure criteria to minimize the future threat to human health and the environment were established in conjunction with closure recommendations. We recommended excavating the soil impacted with concentrations of zinc and lead exceeding the Total Threshold

Limit Concentration (TTLC) or Soluble Threshold Limit Concentration (STLC) to minimize the potential for impacting the ground water. We also recommended a cleanup criteria of 1/10 of the TTLCs for soil within 2 feet of the ground surface to limit direct contact and uptake by any future edible plants. The TTLCs for lead and zinc are 1,000 milligrams per kilogram (mg/kg) and 5,000 mg/kg respectively; their STLCs are 5 milligrams per liter (mg/l) and 250 mg/l.

The following areas were recommended to be excavated to minimum depths or until closure criteria were met, whichever depth was greater:

- the soils underneath the pits in the babbitting area, to a minimum depth of 3 feet below the bottom of each pit
- the surface soils around and underneath the wastewater sump in the babbitting area, to a depth of 3 feet below the sump
- the surface soils underneath old, damaged concrete areas, to a minimum depth of 6 inches.
- the soils in the wastewater treatment area (about 3 feet wide and 13 feet long), to a depth of approximately 4 feet.

CLOSURE ACTIVITIES

To gain access to the impacted soils in the former babbitting area, the floor slab and concrete pit linings were demolished. Two of the interior warehouse walls were also dismantled (see Figure 3) before excavation could proceed. Arbitrary excavation numbers have been assigned for clarity. The excavation areas referenced here are the babbitting pits (B-1 and B-2), the sump in the cleaning room (C-1), and the wastewater sump (WW-1). The area east of WW-1 was also excavated when potential contamination was noted in the field; this excavation is referred to as WW-2. Excavation in other areas (not designated by number) included the entire babbitting floor area and a small area in the wastewater treatment room.

Excavation of the impacted soils proceeded in stages. Soil samples were collected ahead of excavation, analyzed, and compared to the cleanup criteria. The subsurface soils were continually excavated to the minimum depths or until

the cleanup criteria were met, whichever depth was greater. The excavation limits are shown on Figure 3.

Verification Sampling and Analysis

Soil samples were collected from the base and sidewalls of the excavations using a backhoe, hand packed into glass jars, sealed, placed on ice, and transported to a state-certified laboratory for analysis. Discrete samples (S designation) were obtained from the base of the excavations and tested, and composite samples (SC designation) were obtained from the sidewalls of the excavations and analyzed. Two discrete samples (Sub Exc A and S26) and one ground-water sample (Exc 1) were obtained, by drilling with a hollow-stem auger drilling rig, from beneath B-2 after the excavation had been backfilled. Each soil sample was analyzed for total lead and zinc using either U.S. Environmental Protection Agency (EPA) atomic adsorption or Inductively Coupled Argon Plasma (ICAP) techniques. The water sample was tested for lead and zinc using EPA Methods 238.1 and 289.1, respectively. The soil test results are summarized in Table 1 and the certified analytical reports (CARs) are presented in Appendix A.

Babbitting Excavation B-1

Soil beneath the babbitting pit was excavated 3 feet below the bottom of the pit and sampled (S1, S2, and SC1), and the samples were analyzed. The results indicated that the cleanup criteria were met in the south half of B-1 for the sidewalls and the base at a depth of 15 feet. The south half of B-1 was excavated to 17 feet before it was backfilled. Additional soil was excavated and samples were collected (S14 and S18) from the north half of B-1. Analysis results indicated cleanup criteria were met at a depth of 12.5 feet. The north half of B-1 was excavated to a depth of 14 feet before it was backfilled.

Babbitting Excavation B-2

Soil beneath the babbitting pit was excavated to 3 feet below the bottom of the pit and sampled (S8, S9, S10, and SC2), and the samples were analyzed. The results for the sidewall sample met the cleanup criteria, but the results from the sample taken at a depth of 11 feet indicated that the cleanup criteria had not

been met. The excavation was continued to 14 feet and sampled (S17) before the excavation was completed to a depth of 16.5 feet. Two confirmation samples (Sub Exc A and S26) were taken at depths of 17.0 feet and 17.5 feet by drilling a boring after the excavation had been backfilled. Analysis of these samples indicated that the cleanup criteria were met. A sample (Exc 1) of ground water (encountered at a depth of 18.5 feet) was also collected from the boring and analyzed. Very low levels of lead (0.05 ppm) and zinc (3.1 ppm) were detected in the water sample.

Cleaning Room Excavation C-1

Soil beneath the sump in the cleaning room was excavated 3 feet below the bottom of the sump and sampled (S6 and SC3), and the samples were analyzed. The cleanup criteria were met for the sample obtained from the sidewall, but the criteria were not met for the sample obtained from the base of the excavation at 8 feet. The excavation was continued and analyses were performed on samples (S16 and S19) obtained at greater depths. The cleanup criteria were met at a depth of 10.5 feet and the excavation was completed to a depth of 14 feet before it was backfilled.

Wastewater Excavations WW-1 and WW-2

Soil samples (S3, S4, S5, and S7) collected from excavations WW-1 and WW-2 were analyzed and compared to the cleanup criteria. The soil sample obtained from WW-1 (4 feet deep) and WW-2 (15 feet deep) met the cleanup criteria. WW-1 and WW-2 were over-excavated to depths of 8 feet and 16 feet, respectively, before they were backfilled.

Babbitting Floor Area Excavation

Soil samples (S11, S12, and S13) obtained from the surficial 6 inches of the babbitting area were analyzed and met the cleanup criteria; however, 1 foot of soil was removed from the entire babbitting area before a new reinforced concrete floor was constructed.

Wastewater Treatment Area Excavation

A strip of soil (3.5 feet by 10 feet) in the wastewater treatment area was excavated to a depth of 3 feet, and a sample (W1) was collected and analyzed. The analyses indicated that the cleanup criteria were not met; the excavation was continued to a depth of 8 feet and another sample (S25) was collected and analyzed. The cleanup criteria were met for this sample and the excavation was backfilled.

Excavation Backfilling

The completed excavations were backfilled with clean pea gravel (washed free of fines) and capped with concrete. The gravel backfill was "rained" into the excavations to within 5 feet of the finished grades. The gravel was then placed in 2-foot lifts and compacted in place using vibration. The babbitting area's 6-inch-thick reinforced concrete floor slab was replaced when closure activities were completed. A 6-inch-thick reinforced concrete slab was also constructed in the wastewater treatment area.

Disposal of Excavated Soils

The soils excavated from the wastewater treatment and babbitting areas were stockpiled on site, tested, and properly disposed of. Because excavation proceeded in stages, two separate soil stockpiles were generated. One composite soil sample (comprising 4 discrete samples) from each stockpile was analyzed for each 50 cubic yards of soil to be disposed of. The analytical results are presented in Table 1. Analysis of the composited soil sample from the first stockpile (SP1-4), which was comprised primarily of surface material from the babbitting area, indicated that the concentrations were less than the TTLCs; the soil was disposed of at a Class III landfill. Analyses from the second soil stockpile (S21-24) detected concentrations exceeding the TTLCs; the soil was disposed of at a hazardous waste landfill. The CARs are in Appendix A and disposal manifests for the excavated soils are presented in Appendix B.

CONCLUSIONS

Based on the results of our observations and testing, we conclude that the wastewater treatment and babbitting areas of the Dura-Bond facility have been closed consistant with the approved closure plan and recommendations presented in the September 20, 1989, EMCON letter.

Please call if you have any questions.



Very truly yours,

EMCON Associates

Martha J. Watson
Senior Project Engineer

Russell J. Scharlin
Executive Manager

Attachments:

Table 1 - Verification Sampling and Stockpile Analytical Results, Wastewater Treatment and Babbitting Areas
Figure 1 - Site Location Map
Figure 2 - Initial Sampling Locations
Figure 3 - Excavation Limits and Verification Sampling Locations

Appendix A - Certified Analytical Reports
Appendix B - Waste Manifests

TABLE 1

VERIFICATION SAMPLING AND STOCKPILE RESULTS
WASTEWATER TREATMENT AND BABBITTING AREAS

EXCAVATION NUMBER	SAMPLE NUMBER	DEPTH (feet)	DATE SAMPLED	TOTAL LEAD (1) (mg/kg)	TOTAL ZINC (2) (mg/kg)
B-1	S1	15	10/26/89	5	83
B-1	S2	9	10/26/89	2,260	6,310
B-1	SC1	12	10/26/89	< 2	64
B-1	S14	12.5	11/1/89	7	50
B-1	S18	12	11/7/89	120	7,400
B-2	S8	10	10/26/89	1,110	17,200
B-2	S9	11	10/26/89	564	35,700
B-2	S10	1.5	10/26/89	8	138
B-2	SC2	7	10/26/89	< 2	65
B-2	S17	14	11/1/89	6	5,600
B-2	Sub Exc A	17	12/4/89	7	2,400
B-2	S26	17.5	12/4/89	10	980
C-1	S6	8	10/26/89	1,450	560
C-1	SC3	7	10/26/89	2	77
C-1	S16	10.5	11/1/89	41	250
C-1	S19	12	11/7/89	36	270
WW-1	S7	4	10/26/89	10	695
WW-2	S3	15	10/26/89	< 2	123
WW-2	S4	3	10/26/89	44	4,880
WW-2	S5	12	10/26/89	< 2	246
WW-2	S15	4	11/1/89	NA (3)	NA
FLOOR	S11	0.5	10/26/89	21	107
FLOOR	S12	0.5	10/26/89	72	87
FLOOR	S13	0.5	10/26/89	6	79
FLOOR	S20	1	11/7/89	12	61
WW TREAT.	W1	3	10/26/89	915	86
WW TREAT.	S25	8	11/9/89	11	45
STOCKPILE 1	SP1-4	---	10/26/89	97	1,340
STOCKPILE 2	S21-24	---	11/9/89	430	5,900

1. Total lead was analyzed using either EPA Method 6010 or 7420.
2. Total zinc was anlayzed using either EPA Method 6010 or 7950.
3. NA = Not Analyzed

124279



Source: USGS 7.5' series topographic map, 1961
Palo Alto quadrangle. Photorevised 1968 & 1973)

EMCON Associates

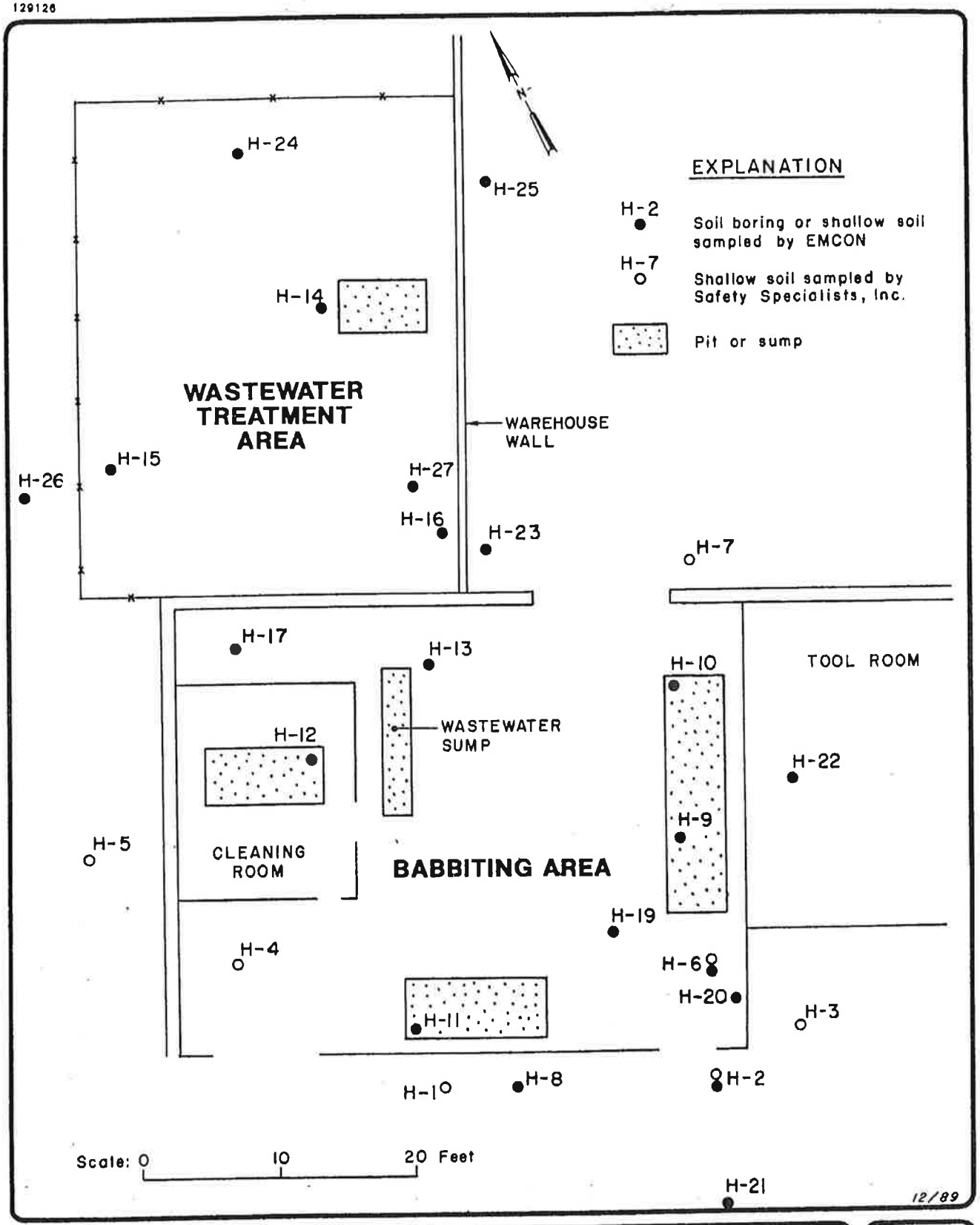
DURA-BOND BEARING COMPANY
BABBITTING AND WASTEWATER
TREATMENT AREA CLOSURE
PALO ALTO, CALIFORNIA

SITE LOCATION MAP

FIGURE
1

PROJECT NO.
376-01.08

129126



EMCON Associates

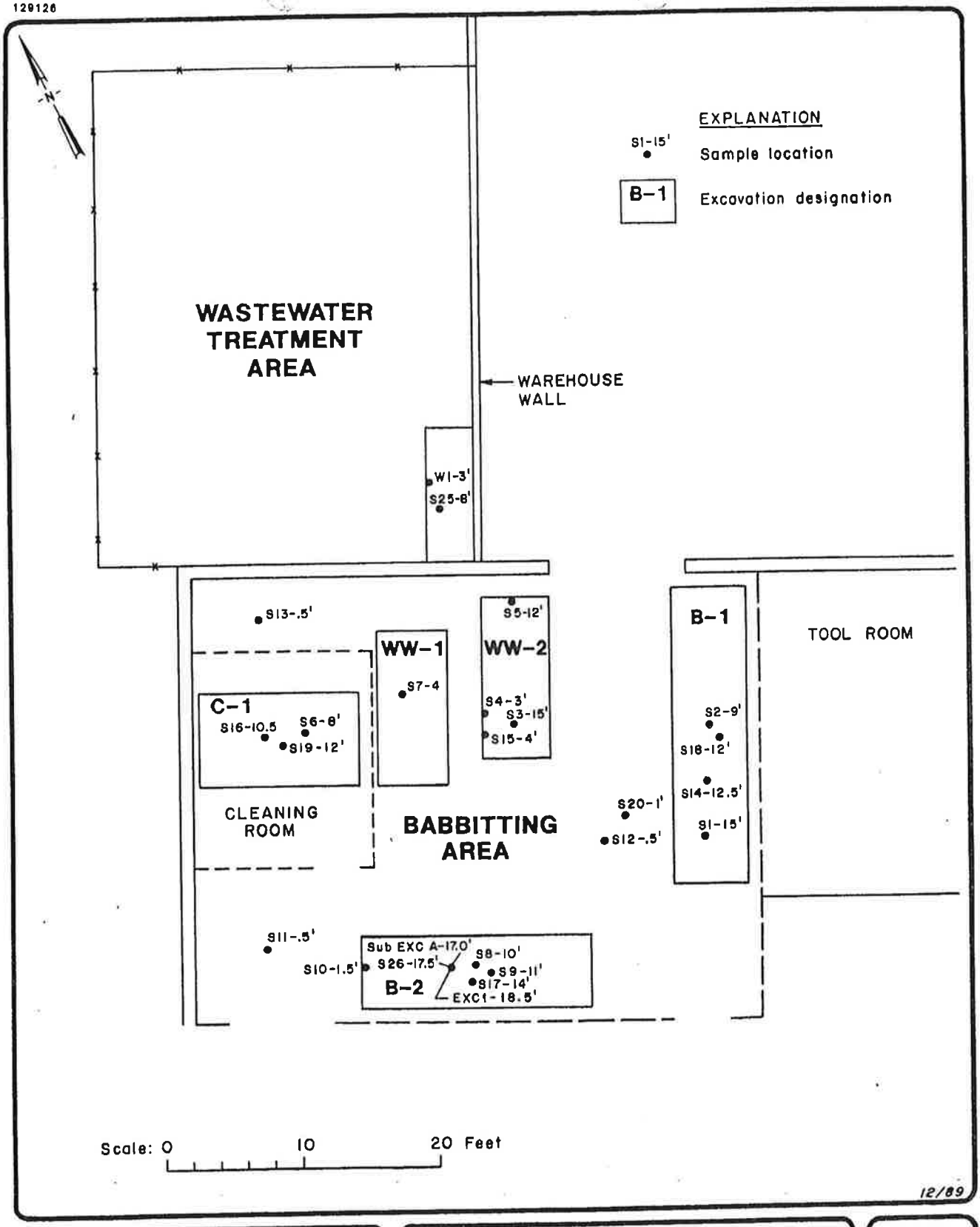
DURA-BOND BEARING COMPANY
BABBITTING AND WASTEWATER
TREATMENT AREA CLOSURE
PALO ALTO, CALIFORNIA

INITIAL SAMPLING LOCATIONS

FIGURE
2

PROJECT NO.
376-01.08

129126



EMCON Associates

DURA-BOND BEARING COMPANY
BABBITTING AND WASTEWATER
TREATMENT AREA CLOSURE
PALO ALTO, CALIFORNIA

EXCAVATION LIMITS AND VERIFICATION
SAMPLING LOCATIONS

FIGURE
3

PROJECT NO.
376-01.08

Appendix A

CERTIFIED ANALYTICAL REPORTS

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

CLIENT: EMCON Associates
SUBMITTED BY: Bill Woods
PROJECT: #376-01.08
SAMPLE DESCRIPTION: Soil

DATE RECEIVED: 10/27/89
WORK ORDER #: 892592C

Total Metals
mg/Kg
As Received Basis

Sample Name: / Lab Code:	Method	MRL	S-1 15' 2592C-1	S-2 9' 2592C-2	S-3 15' 2592C-3
Lead	7420	2	5	*2260	ND
Zinc	6010	3	83	6310	123
Solids, Total (%)	160.3	-	91.8	88.2	90.2

* Method 6010
ND means None Detected at or above MRL
MRL means Method Reporting Limit

Approved by Mike Shelton Date 10/31/89

CAS

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

CLIENT: EMCON Associates
SUBMITTED BY: Bill Woods
PROJECT: #376-01.08
SAMPLE DESCRIPTION: Soil

DATE RECEIVED: 10/27/89
WORK ORDER #: 892592C

Total Metals
mg/Kg
As Received Basis

Sample Name: / Lab Code:	Method	MRL	S-4 3' 2592C-4	S-5 12' 2592C-5	S-6 8' 2592C-6
Lead	7420	2	44	ND	*1450
Zinc	6010	3	4880	246	560
Solids, Total (%)	160.3	-	78.9	79.4	86.5

* Method 6010
ND means None Detected at or above MRL
MRL means Method Reporting Limit

Approved by Mike Shelton Date 10/31/89

CAS

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

CLIENT: EMCON Associates
SUBMITTED BY: Bill Woods
PROJECT: #376-01.08
SAMPLE DESCRIPTION: Soil

DATE RECEIVED: 10/27/89
WORK ORDER #: 892592C

Total Metals
mg/Kg
As Received Basis

Sample Name: / Lab Code:	Method	MRL	S-7 4' 2592C-7	S-8 10' 2592C-8	S-9 11' 2592C-9
Lead	7420	2	10	*1110	*564
Zinc	6010	3	695	17200	35700
Solids, Total (%)	160.3	-	78.9	79.7	80.1

* Method 6010
ND means None Detected at or above MRL
MRL means Method Reporting Limit

Approved by Mike Skelton Date 10/31/89

(206) 636-1068

CAS

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

CLIENT: EMCON Associates
SUBMITTED BY: Bill Woods
PROJECT: #376-01.08
SAMPLE DESCRIPTION: Soil

DATE RECEIVED: 10/27/89
WORK ORDER #: 892592C

Total Metals
mg/Kg
As Received Basis

Sample Name: / Lab Code:	Method	MRL	S-10 1.5' 2592C-10	S-11 .5' 2592C-11	S-12 .5' 2592C-12
Lead	7420	2	8	21	72
Zinc	6010	3	138	107	87
Solids, Total (%)	160.3	-	85.5	81.6	81.6

ND means None Detected at or above MRL
MRL means Method Reporting Limit

Approved by Mike Skelton Date 10/31/89

CAS

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

CLIENT: EMCON Associates
SUBMITTED BY: Bill Woods
PROJECT: #376-01.08
SAMPLE DESCRIPTION: Soil

DATE RECEIVED: 10/27/89
WORK ORDER #: 892592C

Total Metals
mg/Kg
As Received Basis

Sample Name: / Lab Code:	Method	MRL	S-13 .5' 2592C-13	W-1 2592C-14	SC-1 12' 2592C-15
Lead	7420	2	6	*915	ND
Zinc	6010	3	79	86	64
Solids, Total (%)	160.3	-	79.9	86.6	84.5

* Method 6010
ND means None Detected at or above MRL
MRL means Method Reporting Limit

Approved by Mike S Lefton Date 10/31/89

CAS

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

CLIENT: EMCON Associates
SUBMITTED BY: Bill Woods
PROJECT: #376-01.08
SAMPLE DESCRIPTION: Soil

DATE RECEIVED: 10/27/89
WORK ORDER #: 892592C

Total Metals
mg/Kg
As Received Basis

Sample Name: / Lab Code:	Method	MRL	SC-2 7' 2592C-16	SC-3 7' 2592C-17	SP1-4 2592C-18
Lead	7420	2	ND	2	97
Zinc	6010	3	65	77	1340
Solids, Total (%)	160.3	-	82.2	79.8	81.6

ND means None Detected at or above MRL
MRL means Method Reporting Limit

Approved by Mike Shelton Date 10/31/89

CAS

COLUMBIA ANALYTICAL SERVICES, INC.

CLIENT: EMCON Associates
SUBMITTED BY: Bill Woods
PROJECT: #376-01.08
SAMPLE DESCRIPTION: Soil

DATE RECEIVED: 10/27/89
WORK ORDER #: 892592C

QA/QC Report
Duplicate Matrix Spike Results
Total Metals
mg/Kg
As Received Basis

Sample Name: S-1 15'
Lab Code: 2592C-1DMS

Element	Spike Level	MRL	Sample Result	Spike Result	% Recovery
Lead	125	2	5	131	101
Zinc	50	3	83	126	86

ND means None Detected at or above MRL
MRL means Method Reporting Limit

Approved by Mike Skelton Date 10/31/89

Columbia Analytical Services, Inc.
1152 3rd Avenue • Longview, WA 98632 • (206) 577-7222

CAS

COLUMBIA ANALYTICAL SERVICES, INC.

CLIENT: EMCON Associates
SUBMITTED BY: Bill Woods
PROJECT: #376-01.08
SAMPLE DESCRIPTION: Soil

DATE RECEIVED: 10/27/89
WORK ORDER #: 892592C

QA/QC Report
Matrix Spike Results
Total Metals
mg/Kg
As Received Basis

Sample Name: S-1 15'
Lab Code: 2592C-1MS

Element	Spike Level	MRL	Sample Result	Spike Result	% Recovery
Lead	125	2	5	134	103
Zinc	50	3	83	138	110

ND means None Detected at or above MRL
MRL means Method Reporting Limit

Approved by Mike S Lelton Date 10/31/89

CAS

COLUMBIA ANALYTICAL SERVICES, INC.

CLIENT: EMCON Associates
SUBMITTED BY: Bill Woods
PROJECT: #376-01.08
SAMPLE DESCRIPTION: Soil

DATE RECEIVED: 10/27/89
WORK ORDER #: 892592C

QA/QC Report
Method Blank Summary
Total Metals
mg/Kg
As Received Basis

Sample Name:	Method	MRL	Method Blank
Lead	7420	2	ND
Zinc	6010	3	ND

ND means None Detected at or above MRL
MRL means Method Reporting Limit

Approved by Mike Shelton Date 10/31/89

Columbia Analytical Services, Inc.
1921 Ringwood Avenue • San Jose, CA 95131 • (408) 437-2400

CAS

CERTIFIED ANALYTICAL REPORT

Report to:

Project Number: 376-01.08
CAS Lab Number: E89-1527

EMCON Associates
1921 Ringwood Ave.
San Jose, CA 95111

Sample Type: Soil
Units: mg/kg

Sample Designation	S-14 12.5'	S-16 10.5'	S-17 14'	EPA
Field Date	11/1/89	11/1/89	11/1/89	Method
Lead, Total	7.2	41	6.4	7420
Zinc, Total	50	250	5600	7950

Reported by: _____ Date: _____

These results were obtained by following standard laboratory procedures; the liability of the corporation shall not exceed the amount paid for this report.

Columbia Analytical Services, Inc.
1921 Ringwood Avenue • San Jose, CA 95131 • (408) 437-2400

CAS

CERTIFIED ANALYTICAL REPORT

Report to:

Project Number: 376-01.08
CAS Lab Number: E89-1558

EMCON Associates
1921 Ringwood Ave.
San Jose, CA 95131

Sample Type: Soil
Units: mg/kg

Sample Designation	S-18 12'	S-19 12'	S-20 1'	EPA
Field Date	11/7/89	11/7/89	11/7/89	Method
Lead, Total	120	36	12	7420
Zinc, Total	7400	270	61	7950

Reported by: Kevin Murphy Date: November 9 1989

These results were obtained by following standard laboratory procedures; the liability of the corporation shall not exceed the amount paid for this report.

Columbia Analytical Services, Inc.
1921 Ringwood Avenue • San Jose, CA 95131 • (408) 437-2400

CAS

CERTIFIED ANALYTICAL REPORT

Report to:

Project Number: 376-01.08
CAS Lab Number: E89-1571

EMCON Associates
1921 Ringwood Ave.
San Jose, CA 95131

Sample Designation	S-25	Comp S-21-24	EPA
Field Date	11/9/89	11/9/89	Method
Lead, Total	11	430	7420
Zinc, Total	45	5900	7950

Sample Type: Soil
Units: mg/l

Sample Designation	Comp S-21-24	EPA
Field Date	11/9/89	Method
Lead, WET	310	7420
Zinc, WET	5100	7950

WET = Waste Extraction Test from California Administrative Code, Title 22.

Reported by: Timothy P. Olson Date: November 13, 1989

These results were obtained by following standard laboratory procedures; the liability of the corporation shall not exceed the amount paid for this report.

Columbia Analytical Services, Inc.
1921 Ringwood Avenue • San Jose, CA 95131 • (408) 437-2400

CAS

CERTIFIED ANALYTICAL REPORT

Report to:

Project Number: 376-01.08
CAS Lab Number: E89-1713

EMCON Associates
1921 Ringwood Ave.
San Jose, CA 95131

Sample Type: Soil
Units: mg/kg

Sample Designation	S26	EPA
Field Date	12/4/89	Method
Lead, Total	11	7420
Lead, Waste Extraction Test	<0.1	7420
Zinc, Total	980	7950
Zinc, Waste Extraction Test	0.13	7950

Reported by: Timothy P. Dean Date: December 5, 1989

These results were obtained by following standard laboratory procedures; the liability of the corporation shall not exceed the amount paid for this report.

Columbia Analytical Services, Inc.
1921 Ringwood Avenue • San Jose, CA 95131 • (408) 437-2400

CAS

CERTIFIED ANALYTICAL REPORT

Report to:

Project Number: 376-01.10
CAS Lab Number: E89-1682

EMCON Associates
1921 Ringwood Ave.
San Jose, CA 95131

Sample Type: Soil
Units: mg/kg

Sample Designation	Sub. Exc A	EPA
Field Date	12/4/89	Method
Lead, Total	7.4	7420
Zinc, Total	2400	7950

Reported by: Keomi Murphy Date: December 8, 1989

These results were obtained by following standard laboratory procedures; the liability of the corporation shall not exceed the amount paid for this report.

Columbia Analytical Services, Inc.
1921 Ringwood Avenue • San Jose, CA 95131 • (408) 437-2400

CAS

CERTIFIED ANALYTICAL REPORT

Report to:

Project Number: 376-01.10
CAS Lab Number: E89-1682

EMCON Associates
1921 Ringwood Ave.
San Jose, CA 95131

Sample Type: Water
Units: mg/L

Sample Designation	Exc. 1	EPA
Field Date	12/4/89	Method
Lead, Total	0.05	239.1
Zinc, Total	3.1	289.1

Reported by: Keem AMurphy Date: December 8, 1989

These results were obtained by following standard laboratory procedures; the liability of the corporation shall not exceed the amount paid for this report.

Appendix B
WASTE MANIFESTS

FOR HELP IN CHEMICAL EMERGEN[illegible]S INVOLVING SPILL, LEAK, FIRE OR EXPOSURE CALL TO[illegible]-FREE 1-800-424-9300 DAY OR NIGHT

THIS MEMORANDUM

is an acknowledgment that a bill of lading has been issued and is not the Original Bill of Lading, nor a copy or duplicate, covering the property named herein, and is intended solely for filing or record.

Shipper's No. NC 1732

Carrier's No. 6513 Date

CARRIER: UNIVERSAL ENGINEERING INC. SCAC

TO: Consignee / Street / Destination: GUADALUPE LANDFILL P.O. BOX 20957 SAN JOSE, CA. Zip 95160	FROM: Shipper / Street / Origin: DURABOND 370 PORTAGE AVE. PALOALTO, CA. Zip 94306

Route:

Vehicle Number 137-413

No. Shipping Units	HM	Kind of Packages, Description of Articles (IF HAZARDOUS MATERIALS - PROPER SHIPPING NAME)	HAZARD CLASS	I.D. Number	WEIGHT (subject to correction)	RATE	LABELS REQUIRED (or exemption)
16 CY		FILLDIRT					

Remit C.O.D. to:
Address:
City: State: Zip:

COD Amt: $

C.O.D. FEE: Prepaid ☐ Collect ☐ $

NOTE — Where the rate is dependent on value, shippers are required to state specifically in writing the agreed or declared value of the property. The agreed or declared value of the property is hereby specifically stated by the shipper to be not exceeding ( ) Per

Subject to Section 7 of the conditions, if this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement:
The carrier shall not make delivery of this shipment without payment of freight and all other lawful charges.
(Signature of Consignor)

FREIGHT CHARGES ☐ PREPAID ☐ COLLECT

RECEIVED, subject to the classifications and lawfully filed tariffs in effect on the date of issue of this Bill of Lading, the property described above in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned, and destined as indicated above which said carrier (the word carrier being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed as to each carrier of all or any of, said property over all or any portion of said route to destination and as to each party at any time interested in all or any said property, that every service to be performed hereunder shall be subject to all the bill of lading terms and conditions in the governing classification on the date of shipment.
Shipper hereby certifies that he is familiar with all the bill of lading terms and conditions in the governing classification and the said terms and conditions are hereby agreed to by the shipper and accepted for himself and his assigns.

This is to certify that the above-named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.
Per

PLACARDS REQUIRED

PLACARDS SUPPLIED ☐ YES ☐ NO — FURNISHED BY CARRIER
DRIVER SIGNATURE:

SHIPPER: DURABOND
PER:
DATE:

CARRIER: UNIVERSAL ENGINEERING INC.
PER:
DATE:

EMERGENCY RESPONSE TELEPHONE NUMBER: ( )

Manned 24 hours/day by a person with knowledge of the hazards of the material and emergency response information or who has access to a person with that knowledge.

9-BLS-A4 (Rev. 9/88)

FOR HELP IN CHEMICAL EMERGENCIES INVOLVING SPILL, LEAK, FIRE OR EXPOSURE CALL TOLL-FREE 1-800-424-9300 DAY OR NIGHT

FOR HELP IN CHEMICAL EMERGENCIES INVOLVING SPILL, LEAK, FIRE OR EXPOSURE CALL TOLL-FREE 1-800-424-9300 DAY OR NIGHT

THIS MEMORANDUM

is an acknowledgment that a bill of lading has been issued and is not the Original Bill of Lading, nor a copy or duplicate, covering the property named herein, and is intended solely for filing or record.

Shipper's No. NC 1731

Carrier's No. 6513

Date

CARRIER: UNIVERSAL ENGINEERING INC. SCAC

TO: Consignee	GUADALUPE LANDFILL	FROM: Shipper	DDURABOND
Street Destination	P.O. BOX 20957	Street Origin	370 PORTAGE AVE.
	SAN JOSE ,CA. Zip 95160		PALOALTO, CA. 94306 Zip

Route:

Vehicle Number 12-4

No. Shipping Units	HM	Kind of Packages Description of Articles (IF HAZARDOUS MATERIALS - PROPER SHIPPING NAME)	HAZARD CLASS	I.D. Number	WEIGHT (subject to correction)	RATE	LABELS REQUIRED (or exemption)
16 CY		FILLDIRT					

Remit C.O.D. to:
Address:
City: State: Zip:

COD Amt: $

C.O.D. FEE:
Prepaid ☐
Collect ☐ $

NOTE — Where the rate is dependent on value, shippers are required to state specifically in writing the agreed or declared value of the property. The agreed or declared value of the property is hereby specifically stated by the shipper to be not exceeding $ Per

Subject to Section 7 of the conditions, if this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement.
The carrier shall not make delivery of this shipment without payment of freight and all other lawful charges.
(Signature of Consignor)

FREIGHT CHARGES
☐ PREPAID ☐ COLLECT

RECEIVED, subject to the classifications and lawfully filed tariffs in effect on the date of issue of this Bill of Lading, the property described above in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned, and destined as indicated above which said carrier (the word carrier being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed as to each carrier of all or any of, said property over all or any portion of said route to destination and as to each party at any time interested in all or any said property, that every service to be performed hereunder shall be subject to all the bill of lading terms and conditions in the governing classification on the date of shipment.
Shipper hereby certifies that he is familiar with all the bill of lading terms and conditions in the governing classification and the said terms and conditions are hereby agreed to by the shipper and accepted for himself and his assigns.

This is to certify that the above-named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.
Per

PLACARDS REQUIRED

PLACARDS SUPPLIED ☐ YES ☐ NO — FURNISHED BY CARRIER
DRIVER SIGNATURE:

SHIPPER: DDURABOND
PER:
DATE:

CARRIER: UNIVERSAL ENGINEERING INC.
PER:
DATE: 11-16-21

EMERGENCY RESPONSE TELEPHONE NUMBER: ( )

Manned 24 hours/day by a person with knowledge of the hazards of the material and emergency response information or who has access to a person with that knowledge.

9-8LS-A4
(Rev 9/88)

FOR HELP IN CHEMICAL EMERGENCIES INVOLVING SPILL, LEAK,
FIRE OR EXPOSURE CALL TOLL-FREE 1-800-424-9300 DAY OR NIGHT

THIS MEMORANDUM

is an acknowledgment that a bill of lading has been issued and is not the Original Bill of Lading, nor a copy or duplicate, covering the property named herein, and is intended solely for filing or record.

Shipper's No. M2 1730

Carrier's No. 6513

CARRIER: Universal Engineering Inc. SCAC Date

TO: Consignee	GuadaLupe Landfill	FROM: Shipper	Durabond
Street Destination	P.O. Box 20957	Street Origin	370 Portage Ave. 6
	San Jose , Ca. 94160 Zip 95160		PaloAlto, Ca. 94306 Zip

Route:

Vehicle Number

No Shipping Units	HM	Kind of Packages, Description of Articles (IF HAZARDOUS MATERIALS - PROPER SHIPPING NAME)	HAZARD CLASS	I.D. Number	WEIGHT (subject to correction)	RATE	LABELS REQUIRED (or exemption)
16 CY		FILL DIRT					

Remit C.O.D. to:
Address:
City: State: Zip:

COD Amt: $

C.O.D. FEE:
Prepaid ☐
Collect ☐ $

NOTE — Where the rate is dependent on value, shippers are required to state specifically in writing the agreed or declared value of the property. The agreed or declared value of the property is hereby specifically stated by the shipper to be not exceeding $ Per

Subject to Section 7 of the conditions, if this shipment is to be delivered to the consignee without recourse on the consignor, the consignee shall sign the following statement:
The carrier shall not make delivery of this shipment without payment of freight and all other lawful charges.
(Signature of Consignee)

FREIGHT CHARGES
☐ PREPAID ☐ COLLECT

RECEIVED, subject to the classifications and lawfully filed tariffs in effect on the date of issue of this Bill of Lading, the property described above in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned, and destined as indicated above which said carrier (the word carrier being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its route; otherwise to deliver to another carrier on the route to said destination. It is mutually agreed as to each carrier of all or any of, said property over all or any portion of said route to destination and as to each party at any time interested in all or any said property, that every service to be performed hereunder shall be subject to all the bill of lading terms and conditions in the governing classification on the date of shipment.
Shipper hereby certifies that he is familiar with all the bill of lading terms and conditions in the governing classification and the said terms and conditions are hereby agreed to by the shipper and accepted for himself and his assigns.

This is to certify that the above-named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.
Per

PLACARDS REQUIRED

PLACARDS SUPPLIED ☐ YES ☐ NO — FURNISHED BY CARRIER
DRIVER SIGNATURE:

SHIPPER: DURABOND
PER:
DATE:

CARRIER: UNIVERSAL ENGINEERING INC.
PER:
DATE:

EMERGENCY RESPONSE TELEPHONE NUMBER: ( )

Manned 24 hours/day by a person with knowledge of the hazards of the material and emergency response information or who has access to a person with that knowledge.

9-BLS-A4
(Rev 9/88)

FOR HELP IN CHEMICAL EMERGENCIES INVOLVING SPILL, LEAK, FIRE OR EXPOSURE CALL TOLL-FREE 1-800-424-9300 DAY OR NIGHT

FOR HELP IN CHEMICAL EMERGENCIES INVOLVING SPILL, LEAK, FIRE OR EXPOSURE CALL TOLL-FREE 1-800-424-9300 DAY OR NIGHT

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Shipper's No. NI 1727

Carrier's No. 6513

Date

CARRIER: UNIVERSAL ENGINEERING INC. SCAC

TO: Consignee	GUADALUPE LANDFILL	FROM: Shipper	DURABOND
Street Destination	P.O. BOX 20957	Street Origin	370 PORTAGE AVE,
	SAN JOSE, CA Zip 95160		PALOALTO, CA. Zip 94306

Route:

Vehicle Number 13

No Shipping Units	HM	Kind of Packages, Description of Articles (IF HAZARDOUS MATERIALS - PROPER SHIPPING NAME)	HAZARD CLASS	I.D. Number	WEIGHT (subject to correction)	RATE	LABELS REQUIRED (or exemption)
16CY		FILLDIRT					

Remit C.O.D. to:
Address:
City: State: Zip:

COD Amt: $

C.O.D. FEE:
Prepaid ☐
Collect ☐ $

NOTE — Where the rate is dependent on value, shippers are required to state specifically in writing the agreed or declared value of the property. The agreed or declared value of the property is hereby specifically stated by the shipper to be not exceeding ¢ Per

Subject to Section 7 of the conditions, if this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement:
The carrier shall not make delivery of this shipment without payment of freight and all other lawful charges.
(Signature of Consignor)

FREIGHT CHARGES
☐ PREPAID ☐ COLLECT

RECEIVED, subject to the classifications and lawfully filed tariffs in effect on the date of issue of this Bill of Lading, the property described above in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned, and destined as indicated above which said carrier (the word carrier being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed as to each carrier of all or any of, said property over all or any portion of said route to destination and as to each party at any time interested in all or any said property, that every service to be performed hereunder shall be subject to all the bill of lading terms and conditions in the governing classification on the date of shipment.
Shipper hereby certifies that he is familiar with all the bill of lading terms and conditions in the governing classification and the said terms and conditions are hereby agreed to by the shipper and accepted for himself and his assigns.

This is to certify that the above-named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation

Per

PLACARDS REQUIRED

PLACARDS SUPPLIED ☐ YES ☐ NO — FURNISHED BY CARRIER

DRIVER SIGNATURE:

SHIPPER: DURABOND

PER:

DATE:

CARRIER: UNIVERSAL ENGINEERING INC.

PER:

DATE: 11/7/94

EMERGENCY RESPONSE TELEPHONE NUMBER: ( )

Manned 24 hours/day by a person with knowledge of the hazards of the material and emergency response information or who has access to a person with that knowledge

9-BLS-A4
(Rev 9/88)

FOR HELP IN CHEMICAL EMERGENCIES INVOLVING SPILL, LEAK, FIRE OR EXPOSURE CALL TOLL-FREE 1-800-424-9300 DAY OR NIGHT

FOR HELP IN CHEMICAL EMERGENCIES INVOLVING SPILL, LEAK, FIRE OR EXPOSURE CALL TOLL [illegible]

THIS MEMORANDUM

is an acknowledgment that a bill of lading has been issued and is not the Original Bill of Lading, nor a copy or duplicate, covering the property named herein, and is intended solely for filing or record.

Shipper's No. [illegible] 1726

Carrier's No. 6513
Date

CARRIER: UNIVERSAL ENGINEERING INC. SCAC

TO: Consignee	GUADALUPE LANDFILL	FROM: Shipper	DURABOND
Street	P.O. BOX 20957	Street	370 PORTAGE AVE.
Destination	SAN JOSE, CA. Zip 9[illegible]	Origin	PALOALTO,CA. Zip 94306

Route:

Vehicle Number 133-416

No Shipping Units	HM	Kind of Packages, Description of Articles (IF HAZARDOUS MATERIALS - PROPER SHIPPING NAME)	HAZARD CLASS	I.D. Number	WEIGHT (subject to correction)	RATE	LABELS REQUIRED (or exemption)
16CY		FILLDIRT					

Remit C.O.D. to:
Address:
City: State: Zip:

COD Amt: $

C.O.D. FEE:
Prepaid ☐
Collect ☐ $

NOTE — Where the rate is dependent on value, shippers are required to state specifically in writing the agreed or declared value of the property. The agreed or declared value of the property is hereby specifically stated by the shipper to be not exceeding $ Per

Subject to Section 7 of the conditions, if this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement.
The carrier shall not make delivery of this shipment without payment of freight and all other lawful charges.
(Signature of Consignor)

FREIGHT CHARGES
☐ PREPAID ☐ COLLECT

RECEIVED, subject to the classifications and lawfully filed tariffs in effect on the date of issue of this Bill of Lading, the property described above in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned, and destined as indicated above which said carrier (the word carrier being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed as to each carrier of all or any of, said property over all or any portion of said route to destination and as to each party at any time interested in all or any said property, that every service to be performed hereunder shall be subject to all the bill of lading terms and conditions in the governing classification on the date of shipment.
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Per

PLACARDS REQUIRED

PLACARDS SUPPLIED ☐ YES ☐ NO — FURNISHED BY CARRIER
DRIVER SIGNATURE:

SHIPPER: DURABOND
PER:
DATE:

CARRIER: UNIVERSAL ENGINEERING INC.
PER: [signature]
DATE: 11-9-89

EMERGENCY RESPONSE TELEPHONE NUMBER: ( )

Manned 24 hours/day by a person with knowledge of the hazards of the material and emergency response information or who has access to a person with that knowledge.

9-BLS-A4
(Rev. 9/88)

FOR HELP IN CHEMICAL EMERGENCIES INVOLVING SPILL, LEAK,
FIRE OR EXPOSURE CALL TOLL-FREE 1-800-424-9300 DAY OR NIGHT

THIS MEMORANDUM

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Shipper's No. 1720

Carrier's No. 6513

Date

CARRIER: UNIVERSAL ENGINEERING INC. SCAC

TO: Consignee Street Destination	GAUDALUPE LANDFILL P.O. BOX 2057 SAN JOSE, CALIF. Zip 95160	FROM: Shipper Street Origin	DURABOND 370 PORTAGE AVE, PALOALTO, CALIF. Zip 94306

Route:

Vehicle Number 414

No Shipping Units	HM	Kind of Packages—Description of Articles (IF HAZARDOUS MATERIALS - PROPER SHIPPING NAME)	HAZARD CLASS	ID Number	WEIGHT (subject to correction)	RATE	LABELS REQUIRED (or exemption)
16CY		FILLDIRT					

Remit C.O.D. to:
Address:
City: State: Zip:

COD Amt: $

C.O.D. FEE:
Prepaid ☐
Collect ☐ $

NOTE — Where the rate is dependent on value, shippers are required to state specifically in writing the agreed or declared value of the property. The agreed or declared value of the property is hereby specifically stated by the shipper to be not exceeding $ Per

Subject to Section 7 of the conditions, if this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement.
The carrier shall not make delivery of this shipment without payment of freight and all other lawful charges.
(Signature of Consignor)

FREIGHT CHARGES
☐ PREPAID ☐ COLLECT

RECEIVED, subject to the classifications and lawfully filed tariffs in effect on the date of issue of this Bill of Lading, the property described above in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned, and destined as indicated above which said carrier (the word carrier being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed as to each carrier of all or any of, said property over all or any portion of said route to destination and as to each party at any time interested in all or any said property, that every service to be performed hereunder shall be subject to all the bill of lading terms and conditions in the governing classification on the date of shipment.
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Per

PLACARDS REQUIRED

PLACARDS SUPPLIED ☐ YES ☐ NO — FURNISHED BY CARRIER
DRIVER SIGNATURE:

SHIPPER: DURABOND

PER:

DATE:

CARRIER: UNIVERSAL ENGINEERING INC.

PER:

DATE:

EMERGENCY RESPONSE TELEPHONE NUMBER: ( )

Manned 24 hours/day by a person with knowledge of the hazards of the material and emergency response information or who has access to a person with that knowledge.

9-8LS-A4
(Rev. 9/88)

FOR HELP IN CHEMICAL EMERGENCIES INVOLVING SPILL, LEAK, FIRE OR EXPOSURE CALL TOLL-FREE 1-800-424-9300 DAY OR NIGHT

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Shipper's No. 1718

CARRIER: UNIVERSAL ENGINEERING INC. SCAC

Carrier's No. 6513
Date

TO: Consignee Street Destination	GUADALUPE LANDFILL P.O. BOX 20957 SAN JOSE, CALIF. Zip 95160
FROM: Shipper Street Origin	DURABOND 370 PORTAGE AVE,. PALOALTO, CALIF. Zip 94306

Route:

Vehicle Number

No. Shipping Units	HM	Kind of Packages, Description of Articles (IF HAZARDOUS MATERIALS - PROPER SHIPPING NAME)	HAZARD CLASS	I.D. Number	WEIGHT (subject to correction)	RATE	LABELS REQUIRED (or exemption)
16 CY		FILLDIRT					

Remit C.O.D. to:
Address:
City: State: Zip:

COD Amt: $

C.O.D. FEE:
Prepaid ☐
Collect ☐ $

NOTE — Where the rate is dependent on value, shippers are required to state specifically in writing the agreed or declared value of the property. The agreed or declared value of the property is hereby specifically stated by the shipper to be not exceeding $ Per

Subject to Section 7 of the conditions, if this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement
The carrier shall not make delivery of this shipment without payment of freight and all other lawful charges.
(Signature of Consignor)

FREIGHT CHARGES
☐ PREPAID ☐ COLLECT

RECEIVED, subject to the classifications and lawfully filed tariffs in effect on the date of issue of this Bill of Lading, the property described above in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned, and destined as indicated above which said carrier (the word carrier being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed as to each carrier of all or any of, said property over all or any portion of said route to destination and as to each party at any time interested in all or any said property, that every service to be performed hereunder shall be subject to all the bill of lading terms and conditions in the governing classification on the date of shipment.
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This is to certify that the above-named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation
Per

PLACARDS REQUIRED

PLACARDS SUPPLIED ☐ YES ☐ NO — FURNISHED BY CARRIER
DRIVER SIGNATURE:

SHIPPER: DURABOND
PER:
DATE:

CARRIER: UNIVERSAL ENGINEERING INC.
PER:
DATE: 11.1.

EMERGENCY RESPONSE TELEPHONE NUMBER: ( )

Manned 24 hours/day by a person with knowledge of the hazards of the material and emergency response information or who has access to a person with that knowledge

9-BLS-A4
(Rev 9/88)

FOR HELP IN CHEMICAL EMERGENCIES INVOLVING SPILL, LEAK,
FIRE OR EXPOSURE CALL TOLL-FREE 1-800-424-9300 DAY OR NIGHT

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Shipper's No. NE 1717
6513

CARRIER: UNIVERSAL ENGINEERING INC. SCAC

Carrier's No.

Date 1-16-89

TO: Consignee Street Destination	GUADALUPE LANDFILL P.O. BOX 20957 SAN JOSE, CALIF. Zip 95160	FROM: Shipper Street Origin	DURABOND 370 PORTAGE AVE, PALOALTO, CALIF. Zip 94306

Route:

Vehicle Number 134-XJ

No Shipping Units	HM	Kind of Package; Description of Articles (IF HAZARDOUS MATERIALS PROPER SHIPPING NAME)	HAZARD CLASS	I.D. Number	WEIGHT (subject to correction)	RATE	LABELS REQUIRED (or exemption)
16CY		FILLDIRT					

Remit C.O.D. to:
Address:
City: State: Zip:

COD Amt: $

C.O.D. FEE:
Prepaid ☐
Collect ☐ $

NOTE — Where the rate is dependent on value, shippers are required to state specifically in writing the agreed or declared value of the property. The agreed or declared value of the property is hereby specifically stated by the shipper to be not exceeding $ Per

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The carrier shall not make delivery of this shipment without payment of freight and all other lawful charges.
(Signature of Consignor)

FREIGHT CHARGES
☐ PREPAID ☐ COLLECT

RECEIVED, subject to the classifications and lawfully filed tariffs in effect on the date of issue of this Bill of Lading, the property described above in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned, and destined as indicated above which said carrier (the word carrier being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed as to each carrier of all or any of, said property over all or any portion of said route to destination and as to each party at any time interested in all or any said property, that every service to be performed hereunder shall be subject to all the bill of lading terms and conditions in the governing classification on the date of shipment.
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Per

PLACARDS REQUIRED

PLACARDS SUPPLIED ☐ YES ☐ NO — FURNISHED BY CARRIER
DRIVER SIGNATURE:

SHIPPER: DURABOND
PER:
DATE:

CARRIER: UNIVERSAL ENGINEERING INC.
PER:
DATE: 1-16-89

EMERGENCY RESPONSE TELEPHONE NUMBER: ( )

Manned 24 hours/day by a person with knowledge of the hazards of the material and emergency response information or who has access to a person with that knowledge.

9-BLS-A4
(Rev. 9/88)

FOR HELP IN CHEMICAL EMERGENCIES INVOLVING SPILL, LEAK, FIRE OR EXPOSURE CALL TOLL-FREE 1-800-424-9300 DAY OR NIGHT

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Shipper's No. 1716

Carrier's No. 6513

Date

CARRIER: UNIVERSAL ENGINEERING INC. SCAC

TO: Consignee	GUADALUPE LANDFILL	FROM: Shipper	DURABOND
Street	P.O. BOX 20957	Street	370 PORTAGE AVE.
Destination	SAN JOSE, CALIF. Zip 95160	Origin	PALOALTO, CALIF. Zip 94306

Route:

Vehicle Number 43

No Shipping Units	HM	Kind of Packages Description of Articles (IF HAZARDOUS MATERIALS - PROPER SHIPPING NAME)	HAZARD CLASS	I.D. Number	WEIGHT (subject to correction)	RATE	LABELS REQUIRED (or exemption)
16CY		FILLDIRT					

Remit C.O.D. to:
Address:
City: State: Zip:

COD Amt: $

C.O.D. FEE:
Prepaid ☐
Collect ☐ $

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(Signature of Consignor)

FREIGHT CHARGES
☐ PREPAID ☐ COLLECT

RECEIVED, subject to the classifications and lawfully filed tariffs in effect on the date of issue of this Bill of Lading, the property described above in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned, and destined as indicated above which said carrier (the word carrier being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed as to each carrier of all or any of, said property over all or any portion of said route to destination and as to each party at any time interested in all or any said property, that every service to be performed hereunder shall be subject to all the bill of lading terms and conditions in the governing classification on the date of shipment.
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Per

PLACARDS REQUIRED

PLACARDS SUPPLIED ☐ YES ☐ NO — FURNISHED BY CARRIER

DRIVER SIGNATURE:

SHIPPER: DURABOND

PER:

DATE:

CARRIER: UNIVERSAL ENGINEERING INC.

PER: Byron Hamner

DATE: 4-10-89

EMERGENCY RESPONSE TELEPHONE NUMBER: ( )

Manned 24 hours/day by a person with knowledge of the hazards of the material and emergency response information or who has access to a person with that knowledge.

9-BLS-A4
(Rev. 9/88)

FOR HELP IN CHEMICAL EMERGENCIES INVOLVING SPILL, LEAK, FIRE OR EXPOSURE CALL TOLL-FREE 1-800-424-9300 DAY OR NIGHT

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Shipper's No. 1715

Carrier's No. 6513

Date

CARRIER: UNIVERSAL ENGINEERING INC. SCAC

TO: Consignee	GUADALUPE LANDFILL	FROM: Shipper	DURABOND
Street	P.O. BOX 20957	Street	370 [illegible]
Destination	SAN JOSE , CALIF. 95160	Origin	PALOALTO, CALIF. Zip 94306

Route:

Vehicle Number

No Shipping Units	HM	Kind of Packages, Description of Articles (IF HAZARDOUS MATERIALS - PROPER SHIPPING NAME)	HAZARD CLASS	I.D. Number	WEIGHT (subject to correction)	RATE	LABELS REQUIRED (or exemption)
15CY		FILLDIRT					

Remit C.O.D. to:
Address:
City: State: Zip:

COD Amt: $

C.O.D. FEE:
Prepaid ☐
Collect ☐ $

NOTE — Where the rate is dependent on value, shippers are required to state specifically in writing the agreed or declared value of the property. The agreed or declared value of the property is hereby specifically stated by the shipper to be not exceeding $ Per

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(Signature of Consignor)

FREIGHT CHARGES
☐ PREPAID ☐ COLLECT

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Per

PLACARDS REQUIRED

PLACARDS SUPPLIED ☐ YES ☐ NO — FURNISHED BY CARRIER
DRIVER SIGNATURE:

SHIPPER: DURABOND	CARRIER: UNIVERSAL ENGINEERING INC.
PER:	PER:
DATE:	DATE:

EMERGENCY RESPONSE TELEPHONE NUMBER: ( )

Manned 24 hours/day by a person with knowledge of the hazards of the material and emergency response information or who has access to a person with that knowledge.

9-BLS-A4
(Rev 9/88)

FOR HELP IN CHEMICAL EMERGENCIES INVOLVING SPILL, LEAK,
FIRE OR EXPOSURE CALL TOLL-FREE 1-800-424-9300 DAY OR NIGHT

FOR HELP IN CHEMICAL EMERGENCIES ...

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Shipper's No. NE 1714

Carrier's No. 6513

Date

CARRIER: UNIVERSAL ENGINEERING IC. SCAC

TO: Consignee	GUADALUPE LANDFILL	FROM: Shipper	DURABOND
Street Destination	P.O. BOX 20957	Street Origin	370 PORTAGE AVE.
	SAN JOSE, CALIF. Zip 95160		PALOALTO, CALIF. Zip 94306

Route:

Vehicle Number

No. Shipping Units	HM	Kind of Packages, Description of Articles (IF HAZARDOUS MATERIALS - PROPER SHIPPING NAME)	HAZARD CLASS	I.D. Number	WEIGHT (subject to correction)	RATE	LABELS REQUIRED (or exemption)
16CY		FILLDIRT					

Remit C.O.D. to:
Address:
City: State: Zip:

COD Amt: $

C.O.D. FEE:
Prepaid ☐
Collect ☐ $

NOTE — Where the rate is dependent on value, shippers are required to state specifically in writing the agreed or declared value of the property. The agreed or declared value of the property is hereby specifically stated by the shipper to be not exceeding $ Per

Subject to Section 7 of the conditions, if this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement:
The carrier shall not make delivery of this shipment without payment of freight and all other lawful charges.
(Signature of Consignor)

FREIGHT CHARGES
☐ PREPAID ☐ COLLECT

RECEIVED, subject to the classifications and lawfully filed tariffs in effect on the date of issue of this Bill of Lading, the property described above in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned, and destined as indicated above which said carrier (the word carrier being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed as to each carrier of all or any of, said property over all or any portion of said route to destination and as to each party at any time interested in all or any said property, that every service to be performed hereunder shall be subject to all the bill of lading terms and conditions in the governing classification on the date of shipment.
Shipper hereby certifies that he is familiar with all the bill of lading terms and conditions in the governing classification and the said terms and conditions are hereby agreed to by the shipper and accepted for himself and his assigns.

This is to certify that the above-named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation

Per

PLACARDS REQUIRED

PLACARDS SUPPLIED ☐ YES ☐ NO — FURNISHED BY CARRIER

DRIVER SIGNATURE:

SHIPPER: DURABOND

PER:

DATE:

CARRIER: UNIVERSAL ENGINEERING INC.

PER:

DATE: NOV 6

EMERGENCY RESPONSE TELEPHONE NUMBER: ( )

Manned 24 hours/day by a person with knowledge of the hazards of the material and emergency response information or who has access to a person with that knowledge.

9-BLS-A4
(Rev. 9/88)

FOR HELP IN CHEMICAL EMERGENCIES INVOLVING SPILL, LEAK, FIRE OR EXPOSURE CALL TOLL-FREE 1-800-424-9300 DAY OR NIGHT

FOR HELP IN CHEMICAL EMERGENCIES INVOLVING SPILL LEAK, FIRE OR EXPOSURE CALL [illegible]

THIS MEMORANDUM

is an acknowledgment that a bill of lading has been issued and is not the Original Bill of Lading, nor a copy or duplicate, covering the property named herein, and is intended solely for filing or record.

Shipper's No. [illegible] 1487

Carrier's No. 6513

Date

CARRIER: UNIVERSAL ENGINEERING INC. SCAC

TO: Consignee	GUADALUPE LANDFILL	FROM: Shipper	DURABOND
Street	P.O. BOX 20957	Street	370 PORTAGE AVE.
Destination	SAN JOSE, CALIF. 95160	Origin	PALOALTO, CALIF. Zip 94306

Route:

Vehicle Number 131 45

No Shipping Units	HM	Kind of Packages Description of Articles (IF HAZARDOUS MATERIALS PROPER SHIPPING NAME)	HAZARD CLASS	I.D. Number	WEIGHT (subject to correction)	RATE	LABELS REQUIRED (or exemption)
15CY		FILLDIRT					

Remit C.O.D. to:
Address:
City: State: Zip:

COD Amt: $

C.O.D. FEE:
Prepaid ☐
Collect ☐ $

NOTE — Where the rate is dependent on value, shippers are required to state specifically in writing the agreed or declared value of the property. The agreed or declared value of the property is hereby specifically stated by the shipper to be not exceeding $ Per

Subject to Section 7 of the conditions, if this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement:
The carrier shall not make delivery of this shipment without payment of freight and all other lawful charges.
(Signature of Consignor)

FREIGHT CHARGES
☐ PREPAID ☐ COLLECT

RECEIVED, subject to the classifications and lawfully filed tariffs in effect on the date of issue of this Bill of Lading, the property described above in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned, and destined as indicated above which said carrier (the word carrier being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed as to each carrier of all or any of, said property over all or any portion of said route to destination and as to each party at any time interested in all or any said property, that every service to be performed hereunder shall be subject to all the bill of lading terms and conditions in the governing classification on the date of shipment.
Shipper hereby certifies that he is familiar with all the bill of lading terms and conditions in the governing classification and the said terms and conditions are hereby agreed to by the shipper and accepted for himself and his assigns.

This is to certify that the above-named materials are property classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation

Per

PLACARDS REQUIRED

PLACARDS SUPPLIED ☐ YES ☐ NO — FURNISHED BY CARRIER
DRIVER SIGNATURE:

SHIPPER: DURABOND

PER:

DATE:

CARRIER: UNIVERSAL ENGINEERING INC.

PER:

DATE:

EMERGENCY RESPONSE TELEPHONE NUMBER: ( )

Manned 24 hours/day by a person with knowledge of the hazards of the material and emergency response information or who has access to a person with that knowledge.

9-BLS-A4
(Rev. 9/88)

FOR HELP IN CHEMICAL EMERGENCIES INVOLVING SPILL, LEAK, FIRE OR EXPOSURE CALL TOLL-FREE 1-800-424-9300 DAY OR NIGHT

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THIS SHIPPING ORDER must be legibly filled in, in Ink, in Indelible Pencil, or in Carbon, and retained by the Agent.

Shipper's No. N2 1486

Carrier's No. 6513

Date

CARRIER: UNIVERSAL ENGINEERING INC. SCAC

TO: Consignee Street Destination	GUADALUPE LANDFILL P.O. BOX 20957 SAN JOSE, CALIF. Zip 95160
FROM: Shipper Street Origin	DURABOND 370 PORTAGE AVE. PALOALTO, CALIF. Zip 94306

Route:

Vehicle Number 133-410

No Shipping Units	HM	Kind of Packages, Description of Articles (IF HAZARDOUS MATERIALS - PROPER SHIPPING NAME)	HAZARD CLASS	I.D. Number	WEIGHT (subject to correction)	RATE	LABELS REQUIRED (or exempt on)
15 CY		FILLDIRT					

Remit C.O.D. to:
Address:
City: State: Zip:

COD Amt: $

C.O.D. FEE:
Prepaid ☐
Collect ☐ $

NOTE — Where the rate is dependent on value, shippers are required to state specifically in writing the agreed or declared value of the property. The agreed or declared value of the property is hereby specifically stated by the shipper to be not exceeding $ Per

Subject to Section 7 of the conditions, if this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement
The carrier shall not make delivery of this shipment without payment of freight and all other lawful charges.
(Signature of Consignor)

FREIGHT CHARGES
☐ PREPAID ☐ COLLECT

RECEIVED, subject to the classifications and lawfully filed tariffs in effect on the date of issue of this Bill of Lading, the property described above in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned, and destined as indicated above which said carrier (the word carrier being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed as to each carrier of all or any of, said property over all or any portion of said route to destination and as to each party at any time interested in all or any said property, that every service to be performed hereunder shall be subject to all the bill of lading terms and conditions in the governing classification on the date of shipment.
Shipper hereby certifies that he is familiar with all the bill of lading terms and conditions in the governing classification and the said terms and conditions are hereby agreed to by the shipper and accepted for himself and his assigns.

This is to certify that the above-named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation

Per

PLACARDS REQUIRED

PLACARDS SUPPLIED ☐ YES ☐ NO — FURNISHED BY CARRIER

DRIVER SIGNATURE:

SHIPPER: DURABOND

PER:

DATE: 11-9-89

CARRIER: UNIVERSAL ENGINEERING INC.

PER:

DATE: 11-10-89

EMERGENCY RESPONSE TELEPHONE NUMBER: ( )

Manned 24 hours/day by a person with knowledge of the hazards of the material and emergency response information or who has access to a person with that knowledge.

Agent must detach and retain this Shipping Order and must sign the Original Bill of Lading.

9-BLS-A4
(Rev 9/88)

FOR HELP IN CHEMICAL EMERGENCIES INVOLVING SPILL, LEAK,
FIRE OR EXPOSURE CALL TOLL-FREE 1-800-424-9300 DAY OR NIGHT

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THIS MEMORANDUM

is an acknowledgment that a bill of lading has been issued and is not the Original Bill of Lading, nor a copy or duplicate, covering the property named herein, and is intended solely for filing or record.

Shipper's No. NC 1484

CARRIER: UNIVERSAL ENGINEERING INC. SCAC

Carrier's No. 6513
Date

TO: Consignee Street Destination	GUADALUPE LANDFILL P.O. BOX 20957 SAN JOSE, CA. Zip 95160	FROM: Shipper Street Origin	DURABOND 370 PORTAGE AVE. PALOALTO, CA. Zip 94306

Route:

Vehicle Number 114 + 14

No. Shipping Units	HM	Kind of Package, Description of Article, (IF HAZARDOUS MATERIALS - PROPER SHIPPING NAME)	HAZARD CLASS	I.D. Number	WEIGHT (subject to correction)	RATE	LABELS REQUIRED (or exemption)
16 CY		FILLDIRT					

Remit C.O.D. to:
Address:
City: State: Zip:

COD Amt: $

C.O.D. FEE:
Prepaid ☐
Collect ☐ $

NOTE — Where the rate is dependent on value, shippers are required to state specifically in writing the agreed or declared value of the property. The agreed or declared value of the property is hereby specifically stated by the shipper to be not exceeding $ Per

Subject to Section 7 of the conditions, if this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement:
The carrier shall not make delivery of this shipment without payment of freight and all other lawful charges.
(Signature of Consignor)

FREIGHT CHARGES
☐ PREPAID ☐ COLLECT

RECEIVED, subject to the classifications and lawfully filed tariffs in effect on the date of issue of this Bill of Lading, the property described above in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned, and destined as indicated above which said carrier (the word carrier being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed as to each carrier of all or any of, said property over all or any portion of said route to destination and as to each party at any time interested in all or any said property, that every service to be performed hereunder shall be subject to all the bill of lading terms and conditions in the governing classification on the date of shipment.
Shipper hereby certifies that he is familiar with all the bill of lading terms and conditions in the governing classification and the said terms and conditions are hereby agreed to by the shipper and accepted for himself and his assigns.

This is to certify that the above-named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.
Per

PLACARDS REQUIRED

PLACARDS SUPPLIED ☐ YES ☐ NO — FURNISHED BY CARRIER
DRIVER SIGNATURE:

SHIPPER: DURABOND
PER:
DATE:

CARRIER: UNIVERSAL ENGINEERING INC.
PER:
DATE: 11-10-84

EMERGENCY RESPONSE TELEPHONE NUMBER: ( )

Manned 24 hours/day by a person with knowledge of the hazards of the material and emergency response information or who has access to a person with that knowledge.

9-BLS-A4
(Rev. 9/88)

FOR HELP IN CHEMICAL EMERGENCIES INVOLVING SPILL, LEAK, FIRE OR EXPOSURE CALL TOLL-FREE 1-800-424-9300 DAY OR NIGHT

FOR HELP IN CHEMICAL EMERGENCIES INVOLVING SPILL, LEAK, FIRE OR EXPOSURE CALL TOLL-FREE 1-800-424-9300 DAY OR NIGHT

THIS MEMORANDUM

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Shipper's No. NE 1483

Carrier's No. 6513

Date

CARRIER: UNIVERSAL ENGINEERING INC. SCAC

TO: Consignee	GU[illegible]11	FROM: Shipper	DURABOND
Street	PO. BOX 20957	Street	370 PORTAGE AVE.
Destination	SAN JOSE , CA. Zip 95160	Origin	PALOALTO, CA. Zip 94306

Route:

Vehicle Number 137-423

No. Shipping Units	HM	Kind of Packages, Description of Articles (IF HAZARDOUS MATERIALS — PROPER SHIPPING NAME)	HAZARD CLASS	I.D. Number	WEIGHT (subject to correction)	RATE	LABELS REQUIRED (or exemption)
16 CY		FILLDIRT					

Remit C.O.D. to:
Address:
City: State: Zip:

COD Amt: $

C.O.D. FEE:
Prepaid ☐
Collect ☐ $

NOTE — Where the rate is dependent on value, shippers are required to state specifically in writing the agreed or declared value of the property. The agreed or declared value of the property is hereby specifically stated by the shipper to be not exceeding $ Per

Subject to Section 7 of the conditions, if this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement:
The carrier shall not make delivery of this shipment without payment of freight and all other lawful charges.
(Signature of Consignor)

FREIGHT CHARGES
☐ PREPAID ☐ COLLECT

RECEIVED, subject to the classifications and lawfully filed tariffs in effect on the date of issue of this Bill of Lading, the property described above in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned, and destined as indicated above which said carrier (the word carrier being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed as to each carrier of all or any of, said property over all or any portion of said route to destination and as to each party at any time interested in all or any said property, that every service to be performed hereunder shall be subject to all the bill of lading terms and conditions in the governing classification on the date of shipment.
Shipper hereby certifies that he is familiar with all the bill of lading terms and conditions in the governing classification and the said terms and conditions are hereby agreed to by the shipper and accepted for himself and his assigns.

This is to certify that the above-named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.

Per _____

PLACARDS REQUIRED

PLACARDS SUPPLIED ☐ YES ☐ NO — FURNISHED BY CARRIER

DRIVER SIGNATURE:

SHIPPER: DURABOND

PER:

DATE:

CARRIER: UNIVERSAL ENGINEERING INC.

PER:

DATE:

EMERGENCY RESPONSE TELEPHONE NUMBER: ( )

Manned 24 hours/day by a person with knowledge of the hazards of the material and emergency response information or who has access to a person with that knowledge.

9-BLS-A4 (Rev. 9/88)

FOR HELP IN CHEMICAL EMERGENCIES INVOLVING SPILL, LEAK, FIRE OR EXPOSURE CALL TOLL-FREE 1-800-424-9300 DAY OR NIGHT

INVOLVING SPILL, LEAK, FIRE OR EXPOSURE CALL TOLL-FREE 1-800-424-9300 DAY OR NIGHT

...t the Original Bill of Lading, nor ...ntended solely for filing or record.

Shipper's No. M2 1482

Carrier's No. 6513

Date 11/1/[illegible]

...ENGINEERING INC. SCAC

...ADALUPE LANDFILL
P.O. BOX 20957
SAN JOSE , CA. Zip 95160

FROM: Shipper / Street / Origin
DURABOND
370 PORTAGE AVE.
PALOA[illegible], CALIF. Zip 94306

Route:

Vehicle Number 132 - 136

No. Units	HM	Kind of Packages, Description of Articles (IF HAZARDOUS MATERIALS - PROPER SHIPPING NAME)	HAZARD CLASS	ID Number	WEIGHT (Subject to correction)	RATE	LABELS REQUIRED (for exemption)
~~16 CY~~		FILLDIRT					

Remit C.O.D. to:
Address:
City: State: Zip:

COD Amt: $

C.O.D. FEE:
Prepaid ☐
Collect ☐ $

NOTE — Where the rate is dependent on value, shippers are required to state specifically in writing the agreed or declared value of the property. The agreed or declared value of the property is hereby specifically stated by the shipper to be not exceeding $ Per

Subject to Section 7 of the conditions, if this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement:
The carrier shall not make delivery of this shipment without payment of freight and all other lawful charges.
(Signature of Consignor)

FREIGHT CHARGES
☐ PREPAID ☐ COLLECT

RECEIVED, subject to the classifications and lawfully filed tariffs in effect on the date of issue of this Bill of Lading, the property described above in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned, and destined as indicated above which said carrier (the word carrier being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed as to each carrier of all or any of, said property over all or any portion of said route to destination and as to each party at any time interested in all or any said property, that every service to be performed hereunder shall be subject to all the bill of lading terms and conditions in the governing classification on the date of shipment.
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This is to certify that the above-named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.
Per

PLACARDS REQUIRED

PLACARDS SUPPLIED ☐ YES ☐ NO — FURNISHED BY CARRIER
DRIVER SIGNATURE:

SHIPPER: DURABOND
PER:
DATE:

CARRIER: UNIVERSAL ENGINEERING INC.
PER:
DATE: 11/1/[illegible]

EMERGENCY RESPONSE TELEPHONE NUMBER: ( )

Manned 24 hours/day by a person with knowledge of the hazards of the material and emergency response information or who has access to a person with that knowledge.

9-BLS-A4
(Rev. 9/88)

FOR HELP IN CHEMICAL EMERGENCIES INVOLVING SPILL, LEAK,
FIRE OR EXPOSURE CALL TOLL-FREE 1-800-424-9300 DAY OR NIGHT

THIS MEMORANDUM

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Shipper's No. NC 1481

CARRIER: UNIVERSAL ENGINEERING INC. SCAC

Carrier's No. 6513
Date

TO: Consignee / Street / Destination: GUADALUPE LANDFILL, BOX 20957, SAN JOSE, CA. Zip 95160

FROM: Shipper / Street / Origin: DURABOND, 370 PORTAGE AVE., PALOALTO, CA. Zip 94306

Route:

Vehicle Number 138-423

No. Shipping Units	HM	Kind of Packages Description of Articles (IF HAZARDOUS MATERIALS - PROPER SHIPPING NAME)	HAZARD CLASS	I.D. Number	WEIGHT (subject to correction)	RATE	LABELS REQUIRED (or exemption)
16	CY	FILLDIRT					

Remit C.O.D. to:
Address:
City: State: Zip:

COD Amt: $

C.O.D. FEE:
Prepaid ☐
Collect ☐ $

NOTE — Where the rate is dependent on value, shippers are required to state specifically in writing the agreed or declared value of the property. The agreed or declared value of the property is hereby specifically stated by the shipper to be not exceeding $ Per

Subject to Section 7 of the conditions, if this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement:
The carrier shall not make delivery of this shipment without payment of freight and all other lawful charges.
(Signature of Consignor)

FREIGHT CHARGES
☐ PREPAID ☐ COLLECT

RECEIVED, subject to the classifications and lawfully filed tariffs in effect on the date of issue of this Bill of Lading, the property described above in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned, and destined as indicated above which said carrier (the word carrier being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed as to each carrier of all or any of, said property over all or any portion of said route to destination and as to each party at any time interested in all or any said property, that every service to be performed hereunder shall be subject to all the bill of lading terms and conditions in the governing classification on the date of shipment.
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Per

PLACARDS REQUIRED

PLACARDS SUPPLIED ☐ YES ☐ NO — FURNISHED BY CARRIER
DRIVER SIGNATURE:

SHIPPER: DURABOND
PER:
DATE:

CARRIER: UNIVERSAL ENGINEERING INC.
PER:
DATE:

EMERGENCY RESPONSE TELEPHONE NUMBER: ( )

Manned 24 hours/day by a person with knowledge of the hazards of the material and emergency response information or who has access to a person with that knowledge.

9-BLS-A4
(Rev 9/80)

FOR HELP IN CHEMICAL EMERGENCIES INVOLVING SPILL, LEAK, FIRE OR EXPOSURE CALL TOLL-FREE 1-800-424-9300 DAY OR NIGHT

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Shipper's No. 1480

Carrier's No. 6513

Date

CARRIER: UNIVERSAL ENGINEERING INC. SCAC

TO: Consignee / Street / Destination	GUADALUPE LANDFILL P.O. BOX 20957 SAN JOSE , CA. Zip 95160	FROM: Shipper / Street / Origin	DURABOND 370 PORTAGE AVE. PALOALTO, CA. Zip 94306

Route:

Vehicle Number 124-424

No. Shipping Units	HM	Kind of Packages, Description of Articles (IF HAZARDOUS MATERIALS - PROPER SHIPPING NAME)	HAZARD CLASS	I.D. Number	WEIGHT (subject to correction)	RATE	LABELS REQUIRED (or exemption)
16CY		FILLDIRT					

Remit C.O.D. to:
Address:
City: State: Zip:

COD Amt: $

C.O.D. FEE:
Prepaid ☐
Collect ☐ $

FREIGHT CHARGES
☐ PREPAID ☐ COLLECT

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(Signature of Consignor)

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Per

PLACARDS REQUIRED

PLACARDS SUPPLIED ☐ YES ☐ NO — FURNISHED BY CARRIER
DRIVER SIGNATURE:

SHIPPER: DURABOND
PER:
DATE:

CARRIER: UNIVERSAL ENGINEERING INC.
PER:
DATE:

EMERGENCY RESPONSE TELEPHONE NUMBER: ( )

Manned 24 hours/day by a person with knowledge of the hazards of the material and emergency response information or who has access to a person with that knowledge.

9-BLS-A4
(Rev 9/88)

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FIRE OR EXPOSURE CALL TOLL-FREE 1-800-424-9300 DAY OR NIGHT

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Shipper's No. M2 1478

Carrier's No. 6513

Date

CARRIER: UNIVERSAL ENGINEERING INC. SCAC

TO: Consignee / Street / Destination: GUADALUPE LANDFILL
P.O. BOX 20957
san jose , ca. Zip 95160

FROM: Shipper / Street / Origin: DURABOND
370 PORTAGE AVE.
PALOALTO, CA. Zip 94306

Route:

Vehicle Number

No Shipping Units	HM	Kind of Packages, Description of Articles (IF HAZARDOUS MATERIALS - PROPER SHIPPING NAME)	HAZARD CLASS	I.D. Number	WEIGHT (subject to correction)	RATE	LABELS REQUIRED (or exemption)
16CY		FILLDIRT					

Remit C.O.D. to:
Address:
City: State: Zip:

COD Amt: $

C.O.D. FEE:
Prepaid ☐
Collect ☐ $

NOTE — Where the rate is dependent on value, shippers are required to state specifically in writing the agreed or declared value of the property. The agreed or declared value of the property is hereby specifically stated by the shipper to be not exceeding $ Per

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(Signature of Consignor)

FREIGHT CHARGES
☐ PREPAID ☐ COLLECT

RECEIVED, subject to the classifications and lawfully filed tariffs in effect on the date of issue of this Bill of Lading, the property described above in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned, and destined as indicated above which said carrier (the word carrier being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed as to each carrier of all or any of, said property over all or any portion of said route to destination and as to each party at any time interested in all or any said property, that every service to be performed hereunder shall be subject to all the bill of lading terms and conditions in the governing classification on the date of shipment.
Shipper hereby certifies that he is familiar with all the bill of lading terms and conditions in the governing classification and the said terms and conditions are hereby agreed to by the shipper and accepted for himself and his assigns.

This is to certify that the above-named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.

Per OMD

PLACARDS REQUIRED

PLACARDS SUPPLIED ☐ YES ☐ NO — FURNISHED BY CARRIER
DRIVER SIGNATURE:

SHIPPER: DURABOND

PER:

DATE:

CARRIER: UNIVERSAL ENGINEERING INC.

PER:

DATE:

EMERGENCY RESPONSE TELEPHONE NUMBER: ( )

Manned 24 hours/day by a person with knowledge of the hazards of the material and emergency response information or who has access to a person with that knowledge.

9-8LS-A4
(Rev. 9/88)

FOR HELP IN CHEMICAL EMERGENCIES INVOLVING SPILL, LEAK,
FIRE OR EXPOSURE CALL TOLL-FREE 1-800-424-9300 DAY OR NIGHT

00564

NON-HAZARDOUS WASTE DATA FORM

TO BE COMPLETED BY GENERATOR

NAME Lura Bond

ADDRESS 370 Portage Ave

CITY, STATE, ZIP Palo Alto CA 94306

EPA I.D. NO. C A D 0 6 3 5 5 3 0 3 0

PHONE NO. (415) 493-6546

CONTAINERS: No. 1 VOLUME _____ WIEGHT 44320

TYPE: ☐ TANK TRUCK ☒ DUMP TRUCK ☐ DRUMS ☐ CARTONS ☐ OTHER _____

WASTE DESCRIPTION Soil contaminated with 1000 ppm Diesel & Oil GENERATING PROCESS Tank Removal

COMPONENTS OF WASTE	PPM	%	COMPONENTS OF WASTE	PPM	%
1. Soil		99.9%	5.		
2. Petroleum Hydrocarbons		0.1%	6.		
3.			7.		
4.			8.		

PROPERTIES: ph _____ ☒ SOLID ☐ LIQUID ☐ SLUDGE ☐ SLURRY ☐ OTHER _____

HANDLING INSTRUCTIONS: Approved # 111.35.251

THE GENERATOR CERTIFIES THAT THE WASTE AS DESCRIBED IS 100% NON-HAZARDOUS

Mirko Pavlovic Mirko Pavlovic 11-14-99

TYPED OR PRINTED NAME & SIGNATURE DATE

TRANSPORTER

NAME UNIVERSAL ENGINEERING, INC.

ADDRESS 610 INDUSTRIAL WAY

CITY, STATE, ZIP BENICIA, CA 94510

PHONE NO. (707) 746-6699

TRUCK, UNIT, I.D. NO. 115-414

EPA I.D. NO. C A T 0 8 0 0 1 3 4 6 9

SERVICE ORDER NO. 513

PICK UP DATE 11-14-99

Lisa Elliott-Jones Lisa 11-14-99

TYPED OR PRINTED FULL NAME & SIGNATURE DATE

TSD FACILITY

NAME Liquid Waste Management

ADDRESS State Highway 33258

CITY, STATE, ZIP McKittrick CA 93251

PHONE NO. (305) 762-7607

EPA I.D. NO. C A D 9 8 0 6 3 6 8 3 1

☐ LANDFILL ☐ OTHER _____

DISPOSAL METHOD _____

TYPED OR PRINTED FULL NAME & SIGNATURE DATE

DISCREPENCY:

TONS:

NON-HAZARDOUS WASTE DATA FORM

00563

TO BE COMPLETED BY GENERATOR

NAME Dura Bond

ADDRESS 370 Portage Ave

CITY, STATE, ZIP Palo Alto CA 94306

EPA I.D. NO. C A D 0 6 3 5 5 3 6 3 0

PHONE NO. 415) 493-6546

CONTAINERS: No. 1 VOLUME _____ WIEGHT 44000

TYPE: ☐ TANK TRUCK ☒ DUMP TRUCK ☐ DRUMS ☐ CARTONS ☐ OTHER _____

WASTE DESCRIPTION Soil contaminated with 1000 ppm Diesel & Oil

GENERATING PROCESS Tank Removal

COMPONENTS OF WASTE	PPM	%	COMPONENTS OF WASTE	PPM	%
1. Soil		99.9%	5.		
2. Petroleum Hydrocarbons		0.1%	6.		
3.			7.		
4.			8.		

PROPERTIES: ph _____ ☒ SOLID ☐ LIQUID ☐ SLUDGE ☐ SLURRY ☐ OTHER _____

HANDLING INSTRUCTIONS: APPROVAL # 111379-251

THE GENERATOR CERTIFIES THAT THE WASTE AS DESCRIBED IS 100% NON-HAZARDOUS

MICO PAVKOVIC 11-14-89

TYPED OR PRINTED NAME & SIGNATURE DATE

TRANSPORTER

NAME UNIVERSAL ENGINEERING, INC.

ADDRESS 610 INDUSTRIAL WAY

CITY, STATE, ZIP BENICIA, CA 94510

PHONE NO. (707) 746-6699

TRUCK, UNIT, I.D. NO. 101-411

EPA I.D. NO. C A T 0 8 0 0 1 3 4 6 9

SERVICE ORDER NO. 1503

PICK UP DATE 11-14-89

IRA GOLDBERG Ira Goldberg

TYPED OR PRINTED FULL NAME & SIGNATURE DATE 14-NOV-89

TSD FACILITY

NAME Liquid Waste Management

ADDRESS State Highway 33?58

CITY, STATE, ZIP McKittrick CA 93251

PHONE NO. (805) 762-7607

EPA I.D. NO. C A D 9 8 0 6 3 6 8 3 1

☐ LANDFILL ☐ OTHER _____

DISPOSAL METHOD _____

TYPED OR PRINTED FULL NAME & SIGNATURE DATE

DISCREPENCY:

TONS:

NON-HAZARDOUS WASTE DATA FORM

00549

TO BE COMPLETED BY GENERATOR

NAME Dura Bond

ADDRESS 370 Portage Ave

CITY, STATE, ZIP Palo Alto CA 94306

EPA I.D. NO. [| | | | | | | | | | | |]

PHONE NO. (415) 493-6546

CONTAINERS: No. 1 VOLUME _____ WIEGHT 43320

TYPE: ☐ TANK TRUCK ☒ DUMP TRUCK ☐ DRUMS ☐ CARTONS ☐ OTHER _____

WASTE DESCRIPTION Soil contaminated with 1000 ppm Diesel & Oil GENERATING PROCESS Tank Removal

COMPONENTS OF WASTE	PPM	%	COMPONENTS OF WASTE	PPM	%
1. Soil		99.9%	5.		
2. Petroleum Hydrocarbons		0.1%	6.		
3.			7.		
4.			8.		

PROPERTIES: ph _____ ☒ SOLID ☐ LIQUID ☐ SLUDGE ☐ SLURRY ☐ OTHER _____

HANDLING INSTRUCTIONS: 122Rmac # 111389.251

THE GENERATOR CERTIFIES THAT THE WASTE AS DESCRIBED IS 100% NON-HAZARDOUS

MIRO RAVKOVIC _____ 11-14-89

TYPED OR PRINTED NAME & SIGNATURE DATE

TRANSPORTER

NAME UNIVERSAL ENGINEERING, INC.

ADDRESS 610 INDUSTRIAL WAY

CITY, STATE, ZIP BENICIA, CA 94510

PHONE NO. (707) 746-6699

TRUCK, UNIT, I.D. NO. 131-468

EPA I.D. NO. [C | A | T | 0 | 8 | 0 | 0 | 1 | 3 | 4 | 6 | 9]

SERVICE ORDER NO. 6513

PICK UP DATE 11-14-89

_____

TYPED OR PRINTED FULL NAME & SIGNATURE

DATE 11/14/89

TSD FACILITY

NAME Liquid Waste Management

ADDRESS State Highway 33#58

CITY, STATE, ZIP McKittrick CA 93251

PHONE NO. (305) 762-7607

EPA I.D. NO. [C | A | D | 9 | 8 | 0 | 6 | 3 | 6 | 8 | 3 | 1]

☐ LANDFILL ☐ OTHER _____

DISPOSAL METHOD _____

_____

TYPED OR PRINTED FULL NAME & SIGNATURE DATE

DISCREPENCY:	TONS:

State of California—Health and Welfare Agency
Form Approved OMB No 2050—0039 (Expires 9-30-
Please print or type. (Form designed for use on elite 2-pitch typewriter).

Department of Health Services
Toxic Substances Control Division
Sacramento, California

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.	Manifest Document No.	2. Page 1 of 1	Information in the shaded areas is not required by Federal law
CAD983536306	817-814		

3. Generator's Name and Mailing Address
DURA-BOND BEARING CO.
370 PORTAGE AVE, PALO ALTO, CA 94306

4. Generator's Phone (415) 493-6546

A. State Manifest Document Number: 89631405

B. State Generator's ID: 44Q-36000772.5

5. Transporter 1 Company Name: STANICO, INC.

6. US EPA ID Number: CAD983547776

C. State Transporter's ID:

D. Transporter's Phone: 800-755-4211

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Transporter's ID:

F. Transporter's Phone:

9. Designated Facility Name and Site Address
USPCI CLASS III FACILITY
3MI. EAST/7MI. NORTH OF KNOLLS, EXIT 41 OFF I-80
CLIVE, UTAH

10. US EPA ID Number: UTD991301748

G. State Facility's ID:

H. Facility's Phone: 801-534-0054

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. HAZARDOUS WASTE, SOLID N.O.S. (D008) ORM-E NA 9189	001	DT	1118	Y	State 181 EPA/Other D008
b.					State EPA/Other
c.					State EPA/Other
d.					State EPA/Other

J. Additional Descriptions for Materials Listed Above
LEAD 310 PPM EPA WEN. ID 40380 11420
LEAD 5700 PPM -11- 7950
GM89-2216

K. Handling Codes for Wastes Listed Above
a. C2
b.
c.
d.

15. Special Handling Instructions and Additional Information
WEAR PROPER SAFETY EQUIPM.
USPCI PROFILE #2683Z

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name	Signature	Month	Day	Year
LIDO PAVLOVIC		1	11	89

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
ERIC KLOKOWSKI		1	11	89

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

19. Discrepancy Indication Space
S/L 6734

20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in item 19.

Printed/Typed Name	Signature	Month	Day	Year
A C ROMERO		1	11	89

GENERATOR
TRANSPORTER
FACILITY

IN CASE OF AN EMERGENCY OR SPILL, CALL THE NATIONAL RESPONSE CENTER 1-800-424-8802; WITHIN CALIFORNIA CALL 1-800-852-7550

89631405

DHS 8022 A (1/88)
EPA 8700—22
(Rev. 9-88) Previous editions are obsolete.

Do Not Write Below This Line

Yellow: TSDF SENDS THIS COPY TO GENERATOR WITHIN 30 DAYS

State of California—Health and Welfare Agency
Form Approved OMB No. 2050—0039 (Expires 9-30-9
Please print or type. *(Form designed for use on elite (12-pitch typewriter).*

Department of Health Services
Toxic Substances Control Division
Sacramento California

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. CAD063536330 Manifest Document No. 271013

2. Page 1 of 1 — Information in the shaded areas is not required by Federal law

3. Generator's Name and Mailing Address
DORA-DOND
370 PORTAGE AVE, PALO ALTO, CA 94306

A. State Manifest Document Number 89631404

4. Generator's Phone (415) 493-6546

B. State Generator's ID HAHW36-905721

5. Transporter 1 Company Name TAMCO, INC.

6. US EPA ID Number CAD063247776

C. State Transporter's ID 0065-TA

D. Transporter's Phone 209-757-4211

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address USPCI GRASSY MTN FACILITY
7 MI. EAST / 7 MI NORTH OF KNOLLS EXIT 41 OF I-80
CLIVE, UTAH

10. US EPA ID Number UTD 981391748

G. State Facility's ID

H. Facility's Phone 801-532-1330
801-225-2000

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt./Vol.	I. Waste No.
a. HAZARDOUS WASTE, SOLID, N.O.S. (D008) ORM-E N.A. 9189	001	DT	18	Y	State 121 EPA/Other D008
b.					State EPA/Other
c.					State EPA/Other
d.					State EPA/Other

J. Additional Descriptions for Materials Listed Above
LEAD 310 PPM — SW 846 7420
ZINC 5700 PPM — " — 7950
GM84-2716

K. Handling Codes for Wastes Listed Above
a. H3 b.
c. d.

15. Special Handling Instructions and Additional Information
WEAR PROTECTIVE CLOTHING, GLOVES, GOGGLES
USPCI PROFILE #76832

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

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Printed/Typed Name	Signature	Month	Day	Year
Vico Pavkovic		11	17	89

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
Jay Wichtendahl		11	17	89

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

FACILITY

19. Discrepancy Indication Space
396-6735
894-6733

20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month	Day	Year
H C Kenyon		11	17	89

IN CASE OF AN EMERGENCY OR SPILL, CALL THE NATIONAL RESPONSE CENTER 1-800-424-8802; WITHIN CALIFORNIA CALL 1-800-852-7550

DHS 8022 A (1/88)
EPA 8700—22
(Rev. 9-88) Previous editions are obsolete.

Do Not Write Below This Line

Yellow: TSDF SENDS THIS COPY TO GENERATOR WITHIN 30 DAYS

State of California—Health and Welfare Agency
Form Approved OMB No. 2050—0039 (Expires 9-30-
Please print or type. *(Form designed for use on elite (12-pitch typewriter).*

Department of Health Services
Toxic Substances Control Division
Sacramento, California

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. CAD063553630 Manifest Document No. 891-182
2. Page 1 of 1 — Information in the shaded areas is not required by Federal law

3. Generator's Name and Mailing Address: DURA-BOND BEARING COMPANY, 570 PORTAGE AVE, PALO ALTO, CA 94306
4. Generator's Phone (415) 493-6546

A. State Manifest Document Number: 89631403
B. State Generator's ID: 44436-09572

5. Transporter 1 Company Name: TAMCO, INC.
6. US EPA ID Number: CAD063471776
C. State Transporter's ID: 00672-00675
D. Transporter's Phone: 200-757-4211

7. Transporter 2 Company Name
8. US EPA ID Number
E. State Transporter's ID
F. Transporter's Phone

9. Designated Facility Name and Site Address: USPCI, GRASSY MTN FAC. UT
3MI. EAST/7MI. NORTH OF KNOLLS EXIT 41 OFF I-80
10. US EPA ID Number: UTD991301748
G. State Facility's ID
H. Facility's Phone: 534-0054 or 801-752-7000

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. HAZARDOUS WASTE, SOLID (D008) ORM-E, NA 3077	002	CM	18	Y	State 181 EPA/Other D008
b.					State EPA/Other
c.					State EPA/Other
d.					State EPA/Other

J. Additional Descriptions for Materials Listed Above: 47580P

K. Handling Codes for Wastes Listed Above
a. 03, D81
b.
c.
d.

15. Special Handling Instructions and Additional Information
WEAR PROPER SAFETY EQUIPM. - DO NOT INGEST

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

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GENERATOR — Printed/Typed Name: MILO PAVKOVIC — Signature — Month Day Year: 1 1 17 87

TRANSPORTER
17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: J.T. MACGREGOR — Signature — Month Day Year: 1 1 17 87
18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name — Signature — Month Day Year

FACILITY
19. Discrepancy Indication Space: 896-6739
20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name: ADAM CANZ — Signature — Month Day Year

IN CASE OF AN EMERGENCY OR SPILL, CALL THE NATIONAL RESPONSE CENTER 1-800-424-8802; WITHIN CALIFORNIA CALL 1-800-852-7550

DHS 8022 A (1/88)
EPA 8700—22
(Rev. 9-88) Previous editions are obsolete.

Do Not Write Below This Line

Yellow: TSDF SENDS THIS COPY TO GENERATOR WITHIN 30 DAYS

State of California—Health and Welfare Agency
Form Approved OMB No 2050—0039 (Expires 9-30-9
Please print or type. (Form designed for use on elite (12-pitch typewriter).

Department of Health Services
Toxic Substances Control Division
Sacramento California

UNIFORM HAZARDOUS WASTE MANIFEST

1 Generator's US EPA ID No. CAD063553639 Manifest Document No 89-191

2. Page 1 of 1 — Information in the shaded areas is not required by Federal law

A. State Manifest Document Number 89631402

3. Generator's Name and Mailing Address
DURA-BOND BEARING CO.
370 PORTAGE AVE. PALO ALTO, CA 94306

B. State Generator's ID 11149 3169005925

4. Generator's Phone (415) 493-6516

5. Transporter 1 Company Name STANCO, INC. 6. US EPA ID Number CAD063547996

C. State Transporter's ID 00167677

D. Transporter's Phone 800-755-4211

7. Transporter 2 Company Name 8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address
USPCI GRASSY MTN FACILITY EXIT 4 OFF I-80
3 MI. EAST & 7 MI. NORTH OF KNOLLS ON 40
LAKEPOINT UTAH 84074 10. US EPA ID Number UTD991301748

G. State Facility's ID

H. Facility's Phone 534-0054
801-277-2002

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. HAZARDOUS WASTE SOLID NOS (D008) ORM-E N.A. 7189	002	DT	1184		State 121 EPA/Other D008
b.					State EPA/Other
c.					State EPA/Other
d.					State EPA/Other

J. Additional Descriptions for Materials Listed Above
LEAD 310 PPM. EPA METHOD SW 846, 7420
ZINC 5700 PPM 7950

K. Handling Codes for Wastes Listed Above
a. R3 b.
c. d.

15. Special Handling Instructions and Additional Information
WEAR PROTECTIVE CLOTHING, GLOVES, & RESPIRATOR
USPCI PROFILE # 26832

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

GENERATOR

Printed/Typed Name: MIRO PANKOVIC — Signature — Month 11 Day 17 Year 89

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: S.H. ADAMS — Signature — Month 11 Day 17 Year 89

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name — Signature — Month Day Year

FACILITY

19. Discrepancy Indication Space
896-6735

20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in item 19.
Printed/Typed Name: A C KAMMEYER — Signature — Month 11 Day 18 Year 89

IN CASE OF AN EMERGENCY OR SPILL, CALL THE NATIONAL RESPONSE CENTER 1-800-424-8802; WITHIN CALIFORNIA CALL 1-800-852-7550

39631402

DHS 8022 A (1/88)
EPA 8700—22
(Rev. 9-88) Previous editions are obsolete.

Do Not Write Below This Line

Yellow: TSDF SENDS THIS COPY TO GENERATOR WITHIN 30 DAYS

of Database

January 19, 1999

Mr. Charles J. Barnett
Dura Bond Bearing Company
P.O. Box 2008
Carson City, NV 89702

El Camino Center
3200 Park Boulevard
Palo Alto, CA 94306

Ladies and Gentlemen:

Subject: Fuel Leak Site Case Closure—Dura Bond Bearing Company, 3201 Ash Street, Palo Alto, CA 94306; Case No. 14-216

This letter transmits the enclosed underground storage tank (UST) case closure letter in accordance with Chapter 6.75 (Article 4, Section 25299.37[h]). The State Water Resources Control Board adopted this letter on February 20, 1997. As of March 1, 1997, the Santa Clara Valley Water District is required to use this case closure letter for all UST leak sites. We are also transmitting to you the enclosed case closure summary. These documents confirm the completion of the investigation and cleanup of the reported release at the subject site. The subject fuel leak case is closed.

SITE INVESTIGATION AND CLEANUP SUMMARY

Please be advised that the following conditions exist at the site:

- Residual petroleum hydrocarbons exist in soil (10 parts per million [ppm] Total Petroleum Hydrocarbons as Diesel (TPHD), 8 ppm Total Petroleum Hydrocarbons as Gasoline, 26 ppm Total Petroleum Hydrocarbons [TPH] Stoddard Solvent, 0.54 ppm Benzene, 0.7 ppm Toluene, and 20 ppm Oil and Grease).

- TPHD and TPH Stoddard Solvent concentrations in groundwater are below the method detection limit of 500 parts per billion for both analytes. The levels that remain do not require further cleanup and are not of regulatory concern.

  This site is located within a regional solvent plume. The San Francisco Bay Regional Water Quality Control Board has concluded that the chlorinated volatile organic compounds detected beneath the property are likely the result of the migration of pollutants from upgradient site.

If you have any questions, please call Mr. Peter Thiemann at the Camden Office, (408) 927-0710, extension 2651. Thank you.

Sincerely,

ORIGINAL SIGNED BY

James S. Crowley, P.E.
Special Programs Engineer
Leaking Underground Storage Tank Oversight Program

Enclosures:
1. Case Closure Letter
2. Case Closure Summary

cc: Mr. Chuck Headlee (w/enc)
Regional Water Quality Control Board
San Francisco Bay Region
1515 Clay Street, Suite 1400
Oakland, CA 94612

Ms. Nancy Commoncho
Division of Clean Water Programs
Underground Storage Tank Cleanup Fund
State Water Resources Control Board
P.O. Box 944212
Sacramento, CA 94244-2120

P. Thiemann (w/orig enc), Database (w/enc)

Mr. Gordon Simpkinson
Palo Alto Fire Department
250 Hamilton Avenue
Palo Alto, CA 94301

Mr. Steve Mizera (w/enc)
Division of Clean Water
State Water Resources Control Board
P.O. Box 944212
Sacramento, CA 94244-2120

PT:fd:FL9482xa

January 19, 1999

Mr. Charles J. Barnett
Dura Bond Bearing Company
P.O. Box 2008
Carson City, NV 89702

El Camino Center
3200 Park Boulevard
Palo Alto, CA 94306

Ladies and Gentlemen:

Subject: Fuel Leak Site Case Closure—Dura Bond Bearing Company, 3201 Ash Street, Palo Alto, CA 94306; Case No. 14-216

This letter confirms the completion of a site investigation and remedial action for the underground storage tank(s) formerly located at the above-described location. Thank you for your cooperation throughout this investigation. Your willingness and promptness in responding to our inquiries concerning the former underground storage tank(s) are greatly appreciated.

Based on information in the above-referenced file and with the provision that the information provided to this agency was accurate and representative of site conditions, no further action related to the underground tank release is required.

This notice is issued pursuant to a regulation contained in Section 2721(e) of Title 23 of the California Code of Regulations.

Please contact our office if you have any questions regarding this matter.

Sincerely,

ORIGINAL SIGNED BY

James S. Crowley, P.E.
Special Programs Engineer
Leaking Underground Storage Tank Oversight Program

FL9482xa

Santa Clara Valley Water District

CASE CLOSURE SUMMARY
LEAKING UNDERGROUND FUEL STORAGE TANK PROGRAM

I. AGENCY INFORMATION

Date: January 6, 1999

Agency Name: Santa Clara Valley Water District	Address: 5750 Almaden Expressway
City/State/Zip: San Jose, CA 95118	Phone: (408) 265-2600
Responsible Staff Person: Peter A. Thiemann	Title: Water Quality Specialist

II. CASE INFORMATION

Site Facility Name: Dura Bond Bearing Company		
Site Facility Address: 3201 Ash Street, Palo Alto, CA 94306		
RB LUSTIS Case No.: —	Local Case No.: 06S2W12J01f	LOP Case No.: 14-216
URF Filing Date: —	SWEEPS No.: —	APN: 132-38-059

Responsible Parties	Addresses	Phone Number
Mr. Charles J. Barnett Dura Bond Bearing Company	P.O. Box 2008 Carson City, NV 89702	—
El Camino Center	3200 Park Boulevard Palo Alto, CA 94306	—

Tank I.D. No	Size in Gallons	Contents	Closed In-Place/Removed?	Date
1	500	Gasoline	Removed	1984
2	1,000	Stoddard solvent	Removed	1984
3	500	Diesel	Removed	1984
4	500	Gasoline	Removed	1989
5	1,000	Stoddard solvent	Removed	1989
6	5,000	Waste oil	Removed	1989
Piping			Assumed removed with tanks	—

III. RELEASE AND SITE CHARACTERIZATION INFORMATION

Cause and Type of Release: Unknown		
Site characterization complete? Yes	Date Approved By Oversight Agency: 07/21/98	
Monitoring wells installed? Yes	Number: 7	Proper screened interval? Yes
Highest GW Depth Below Ground Surface: 12.81	Lowest Depth: 19.24	Flow Direction: Northeasterly
Most Sensitive Current Use: Potential drinking water supply		

Summary of Production Wells in Vicinity: Several groundwater extraction wells used in the cleanup of a regional solvent plume were identified within ¼ mile of the site. One active water supply well, 06S03W12R010, is located 1,300 feet to the southwest. It is considered unlikely that the Dura Bond release will affect this well.	
Are drinking water wells affected? No	Aquifer Name: Santa Clara Valley Groundwater Basin
Is surface water affected? No	Nearest SW Name: Matadero Creek, 500 feet east
Off-Site Beneficial Use Impacts (Addresses/Locations): None reported	
Reports on file? Yes	Where are reports filed? Santa Clara Valley Water District

TREATMENT AND DISPOSAL OF AFFECTED MATERIAL			
Material	Amount (Include Units)	Action (Treatment or Disposal w/Destination)	Date
Tank	Two at 500-gallons One at 1,000-gallons	Presumed disposed of off site	1984
	One at 500-gallons One at 1,000-gallons One at 5,000-gallons	Hauled to Richmond, CA—Rinsed and transported to Dura Bond facility in Carson City, NV, to be reused	1989
Piping	Unknown	—	—
Free Product	N/A	—	—
Soil	Unknown volume	Presumed disposed of off site	1984
	150 cubic yards	Presumed disposed of off site	1989
Groundwater	N/A	—	—
Barrels	Unknown	—	—

1984 TANK REMOVALS (SOIL)
MAXIMUM DOCUMENTED CONTAMINANT CONCENTRATIONS

Contaminant	Soil (ppm)		Water (ppb)		Contaminant	Soil (ppm)		Water (ppb)	
	Before	After	Before	After		Before	After	Before	After
TPH (Gas)	860	—	—	—	Xylene	NA	—	—	—
TPH (Diesel)	5,200	—	—	—	Ethylbenzene	NA	—	—	—
Benzene	NA	—	—	—	Oil & Grease	NA	—	—	—
Toluene	NA	—	—	—	Heavy Metals	NA	—	—	—
Other (8240/8270)	#	—	—	—	MTBE	NA	—	—	—

Description of Interim Remediation Activities: An unknown amount of soil was overexcavated following tank removal in 1984. Confirmatory soil samples were not collected.

1989 TANK REMOVALS (SOIL); 1984 AND 1989 TANK REMOVAL (GROUNDWATER)
MAXIMUM DOCUMENTED CONTAMINANT CONCENTRATIONS—BEFORE AND AFTER CLEANUP

Contaminant	Soil (ppm)		Water (ppb)		Contaminant	Soil (ppm)		Water (ppb)	
	Before	After	Before	After		Before	After	Before	After
TPH (Gas)	8	—	9,500	ND	Xylene	0.022	ND	10	ND
TPH (Diesel)	2,100	10	42,000	<500	Ethylbenzene	0.017	ND	10	ND
Stoddard Solvent	790	26	20	ND (<500)					
Benzene	0.54	—	150	ND	Oil & Grease	1,200	20	4,200	NA
Toluene	0.7	—	88	ND	Heavy Metals	*	*	—	—
Other (8240/8270)	#	—	—	[2]	MTBE	NA	NA	NA	<3[1]

Description of Interim Remediation Activities: Information about interim remediation at the site is limited. Apparently overexcavation was performed following tank removal in 1984 and was performed following tank removal in 1989. It appears that no groundwater remediation was performed at the site.

NA = Not analyzed ND = Not detected — = No action performed (e.g., overexcavation)

[1]Method 8020

[2]1,1,1 Trichloroethane (TCA), Tetrachloroethylene, Trichloroethylene (TCE), and Chloroform detected in monitoring well groundwater samples. See Attachment 5.

#See Attachment 3 for information about the investigation of chlorinated solvents at the site.

*See Attachment 4, Table 4

IV. CLOSURE

Does completed corrective action protect existing beneficial uses per the Regional Board Basin Plan? Yes		
Does completed corrective action protect potential beneficial uses per the Regional Board Basin Plan? Yes		
Does corrective action protect public health for current land use? Santa Clara Valley Water District staff does not make specific determinations concerning public health risk. However, it does not appear that the release would present a risk to human health.		
Site Management Requirements: No specific requirements		
Should corrective action be reviewed if land use changes? No		
Monitoring Wells Decommissioned: Yes	Number Decommissioned: 2	Number Retained: 5
List Enforcement Actions Taken: None taken		
List Enforcement Actions Rescinded: None rescinded		

V. ADDITIONAL COMMENTS, DATA, ETC.

Background: Three underground storage tanks (UST), one 500-gallon capacity which stored gasoline, one 500-gallon capacity which stored diesel, and one 1,000-gallon capacity which stored Stoddard solvent were removed from the site in September 1984. The gasoline and diesel USTs were placed in a common excavation. The Stoddard solvent tank was placed in a separate excavation. Soil samples collected from beneath the tanks contained up to 5,200 parts per million (ppm) Total Petroleum Hydrocarbons as Diesel (TPHD) and 860 ppm Total Petroleum Hydrocarbons as Gasoline (TPHG). A sample from the soil stockpile contained 1,500 ppm of TPHG. Groundwater samples collected from two preexisting monitoring wells on site (DM-1 and E-1) contained up to 2,600 parts per billion (ppb) TPHG and 300 ppb unidentified compounds. Stoddard solvent was not detected in groundwater samples from either monitoring well. An undetermined amount of material above groundwater was overexcavated after the tanks were removed. A single excavation was created during removal of the three tanks. Soil samples quantifying residual contamination were not collected.

A monitoring well was placed in the backfilled tank pit (E-2). In June 1985, a sample from this well contained 150 ppb Benzene, 9,500 ppb volatile hydrocarbons, and 20 ppb Stoddard solvent. The two other wells at the site did not contain detectable concentrations of Benzene, Toluene, Ethylbenzene, Xylenes (BTEX), or Stoddard solvent during this sampling event. A fourth monitoring well (E-3) was installed upgradient of the former tank pit in November 1985. A soil sample from the well boring collected from immediately above groundwater contained 0.07 ppm TCE. A groundwater sample from this well contained 340 ppb TCE and relatively low concentrations of Chloroform, 1,1,1 TCA, 1,1 Dichloroethene, and 1,2 Dichloroethene (1,2 DCA).

In March 1988, Benzene was detected in groundwater samples from monitoring wells DM-1 and E-1 at a concentration of 0.5 ppb. No Toluene, Ethylbenzene, or Xylenes were detected in these groundwater samples. Monitoring well E-2 was not sampled because it was dry. From August 1988 to February 1989, samples from monitoring wells DM-1 and E-1 did not contain detectable concentrations of BTEX, and well E-2 was not sampled because it was dry. Monitoring well E-4 was installed as a replacement for decommissioned monitoring well E-1. A groundwater sample from this well contained 1,300 ppb TPHD.

In April 1989, one 500-gallon tank which stored unleaded gasoline and one 1,000-gallon tank which stored Stoddard solvent were removed from a common tank pit. A 5,000-gallon tank which stored waste oil was also removed from a separate tank pit. The floor and sidewalls of the waste oil tank pit were overexcavated.

Monitoring well E-5, immediately downgradient of the source area, and monitoring well E-6, located downgradient of the source area, were installed in November 1989.

Methyl tert-Butyl Ether was not detected by Environmental Protection Agency (EPA) Method 8020 analysis in groundwater samples from monitoring wells E-3, E-4, and E-6 during the September 1997 and December 1997 sampling events and was not detected in groundwater samples from monitoring wells E-4 and E-6 during the July 1997 sampling event.

1,2 DCA was not detected by EPA Method 8010 analysis in groundwater samples from monitoring wells E-4 and E-6 during the July 1997 sampling event. The 1,2 DCA method detection limit for the sample from E-4 was 5 ppb; that for the sample from E-6 was 0.5 ppb.

1,2 DCA was not detected by EPA Method 8010 analysis in groundwater samples from monitoring wells E-3, E-4, and E-6 during the December 1997 sampling event. The 1,2 DCA method detection limit for samples from E-3 and E-4 was 5 ppb; that for the sample from E-6 was 0.5 ppb.

Ethylene Dibromide (EDB) was not quantified during the July 1997 or the December 1997 analysis.

Conclusion: Based on the poorly documented amount of overexcavation performed in 1984 and the overexcavation performed in 1989, it appears that the residual petroleum hydrocarbon source for continued groundwater degradation has been effectively remediated. Groundwater monitoring activities demonstrate that the dissolved petroleum hydrocarbon plume was of limited extent and has attenuated to nondetectable concentrations. Analytical results from the latest monitoring events demonstrate that if 1,2 DCA is present in groundwater, it is of limited extent. Although EDB analytical data is not present for the most recent sampling events, we do not expect significant EDB contamination of groundwater. Relatively low concentrations of TPHG found in soil samples, groundwater analytical results indicating limited groundwater impact, and the small volumes of product stored in two 500-gallon tanks suggest that the mass of gasoline released is relatively minor and that significant EDB contamination of groundwater is unlikely. We expect that the residual mass of contamination in soil and groundwater will further decrease in the future due to natural attenuation processes.

The investigation was performed in accordance with State and local guidelines. Santa Clara Valley Water District staff has concluded that a continuing threat to groundwater, human health, and the environment from residual petroleum hydrocarbons does not exist at this site and that Regional Water Quality Control Board objectives have not been compromised. Santa Clara Valley Water District staff recommends closure for this case.

VI. LOCAL AGENCY REPRESENTATIVE DATA

Prepared by: Peter A. Thiemann	Title: Water Quality Specialist
Signature: Peter Thiemann	Date: 1/11/99
Approved by: James M. Crowley, P.E.	Title: Special Programs Engineer (acting)
Signature:	Date: 1/13/99

This closure approval is based upon the available information and with the provision that the information provided to this agency was accurate and representative of site conditions.

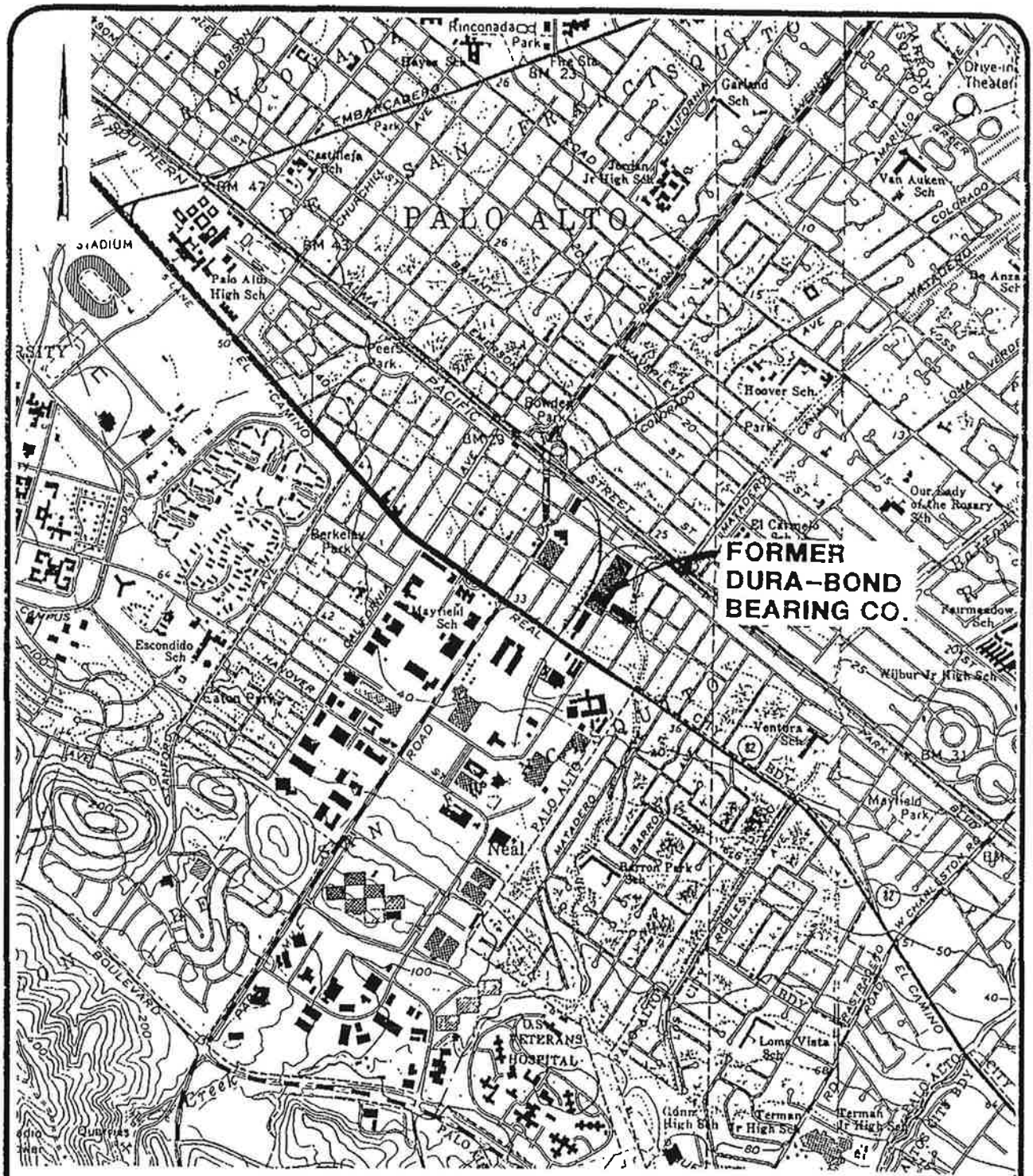
VII. REGIONAL BOARD NOTIFICATION

Regional Board Staff Name: Chuck Headlee	Title: Engineering Geologist
RB Response: Concur, based solely upon information contained in this case closure summary.	Date Submitted to RB: 1/13/99
Signature: Chuck Headlee	Date: 1/13/99

Attachments:
1. Site Vicinity Map
2. Site Plan
3. April 23, 1998, Letter "No Further Groundwater Monitoring for Chlorinated Volatile Organic Compounds" by California Environmental Protection Agency
4. July 31, 1989, "Underground Storage Tank Closure Report" by Emcon
5. Historical Groundwater Analytical Results

This document and the related CASE CLOSURE LETTER shall be retained by the lead agency as part of the official site file

Post-it® Fax Note 7671	Date	# of pages ▶ 10
To Peter Thiemann	From Chuck Headlee	
Co./Dept.	Co.	
Phone #	Phone #	
Fax # (408) 997-8769	Fax #	



Base map from USGS 7.5' Quad. Map:
Palo Alto, California. Photorevised 1973

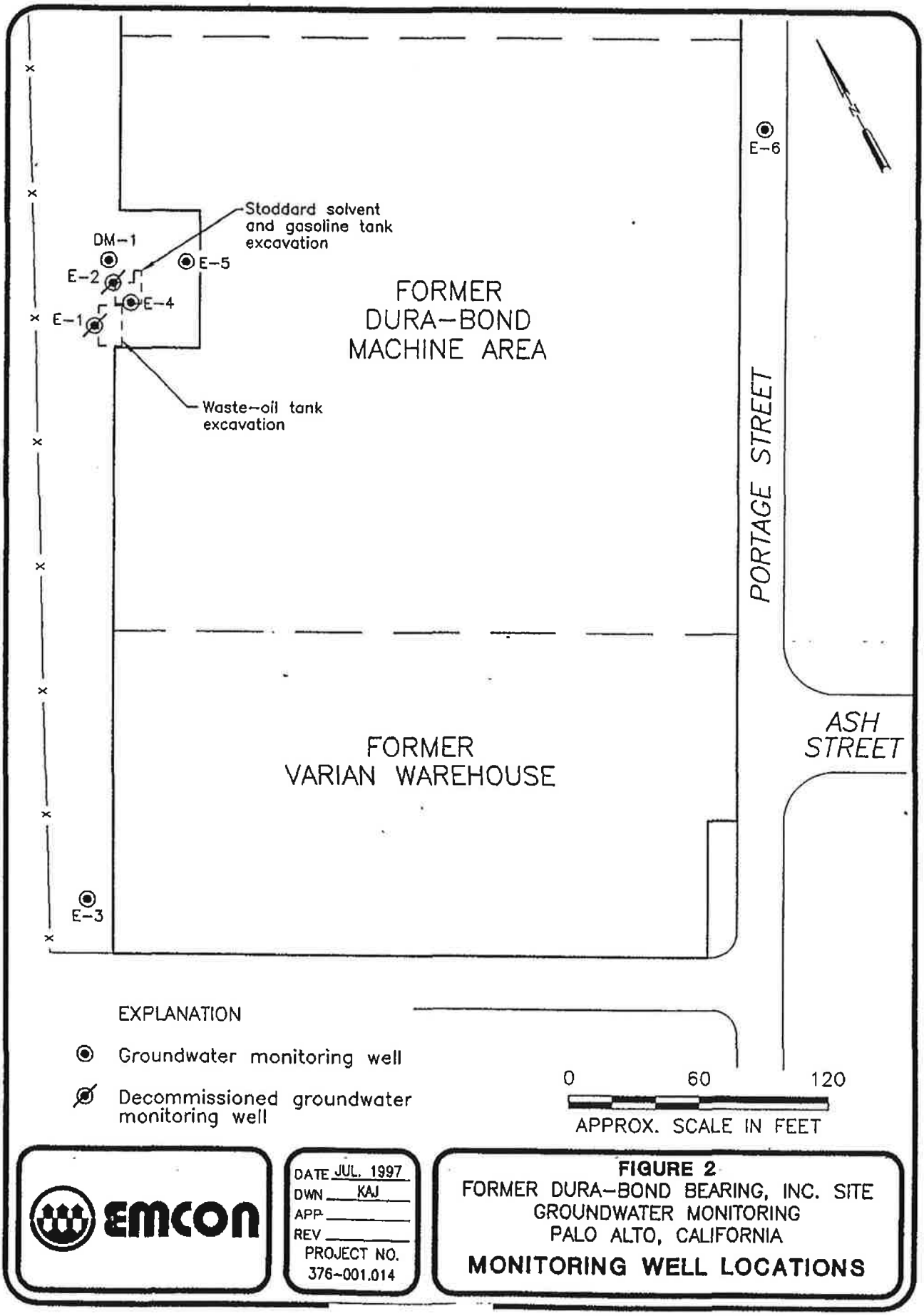
EMCON

DATE	JUL. 1997
DWN	KAJ
APP	
REV	
PROJECT NO.	376-001.014

FIGURE 1
FORMER DURA-BOND BEARING, INC. SITE
GROUNDWATER MONITORING
PALO ALTO, CALIFORNIA
SITE LOCATION

EA-SANJOSE-CAD/DRAWINGS: I:\376\01\SITELOC.dwg Xrefs: <NONE>
Scale: 1 = 1.00 DimScale. 1 = 1.00 Date. 8/5/97 Time: 2:31 PM Operator. KAJ

Attachment 1



EMCON

DATE JUL. 1997
DWN KAJ
APP
REV
PROJECT NO. 376-001.014

FIGURE 2
FORMER DURA-BOND BEARING, INC. SITE
GROUNDWATER MONITORING
PALO ALTO, CALIFORNIA
MONITORING WELL LOCATIONS

EA-SANJOSE-CAD/DRAWINGS: E:\37601\SJSITE.dwg Xrefs: <NONE>
Scale: 1 = 1.00 DimScale: 1 = 1.00 Date: 11/11/97 Time: 11:21 AM Operator: KAJ

Attachment 2

E.2 Excerpts from Kennedy Jenks Assessment

WSJ Properties
Final Report
PHASE I
ENVIRONMENTAL ASSESSMENT
SP Right-of-Way
Palo Alto, California

January 1992
(K/J 910056.00)

PREPARED BY:

KENNEDY/JENKS CONSULTANTS
MARATHON PLAZA, TENTH FLOOR NORTH
303 SECOND STREET
SAN FRANCISCO, CALIFORNIA 94107

K/J 910056.00

JANUARY 1992

Kennedy/Jenks Consultants

Engineers and Scientists
Marathon Plaza Tenth Floor
303 Second Street
San Francisco, California 94107
415-243-2150
FAX 415-896-0999

22 January 1991

Mr. Richard Jacobsen
WSJ Properties
3201 Ash Street
Palo Alto, CA 94306

Subject: Phase I Environmental Assessment
Palo Alto, California
K/J 910056.00-G-92

Dear Mr. Jacobsen:

Kennedy/Jenks Consultants (K/J) is pleased to submit this final report of the Phase I Environmental Site Assessment conducted for a Southern Pacific Railroad property located in Palo Alto, California.

If you have any questions regarding information presented in this report, please call.

Very truly yours,

KENNEDY/JENKS CONSULTANTS

Stephen E. Fox
Project Geologist

Bert Drews
Project Manager

INTRODUCTION

Kennedy/Jenks Consultants conducted a Phase I Environmental Site Assessment and subsurface investigation on a portion of an existing Southern Pacific Railroad (SP) right-of-way located in Palo Alto, California. The objectives of the Phase I Environmental Site Assessment and subsurface investigation were to assemble environmental information on the subject property and identify areas or issues that may represent potential environmental risks.

Site Description

The subject property is an approximately 80 feet wide by 1,000 feet long railroad right-of-way bounded by El Camino Real, Park Boulevard, Olive Avenue, and Acacia Avenue in Palo Alto, California. With the exception of a small storage shed located near Park Avenue, no structures are located on the property. The rails were removed between 1985 and 1990, and the property was graded.

The site is bounded by single family residences to the north. Some of these property owners appear to have encroached on the subject property. Palo Alto Nissan is located immediately west of the subject property. Durabond, listed on the Federal CERCLIS, and Fry's Electronics bound the property to the south. Park Automotive is located immediately west of the subject property. The location of the subject property is shown on Figure 1.

Site Visit

K/J investigated the subject property and the area located within a radius of 5000 feet of the subject property on 18 December 1991. K/J walked the subject property and conducted a reconnaissance of the area surrounding the subject property by vehicle.

During the site investigation, K/J personnel did not find evidence of the following:

- surface impoundments
- aboveground storage tanks
- treatment or disposal operations involving hazardous materials or wastes
- stained ground surfaces, and stressed vegetation
- underground storage tanks
- chemical handling or storage areas
- asbestos-containing building materials

- PCB-containing electrical equipment

Two monitoring wells are located on the subject property. These wells were installed by ENVIRON for Hewlett Packard. A description of these wells and results of analytical data are discussed below.

SITE HISTORY

Since the early 1900s, the subject property has historically been used as a railroad right-of-way. According to Steven Staiger, Palo Alto Historian, the City of Palo Alto was serviced by an Urban Trolley system in the early 1900s and his records indicate that the subject property was included in this electrical train system. Mr. John Ivawusich, an engineer with Southern Pacific Railroads, stated the main Southern Pacific Railroad line, San Francisco to Palo Alto, was constructed in 1864; however, the subject property was not purchased until 1911. Upon purchase, the subject property was developed into the Los Altos Railroad line that connected Palo Alto and Santa Cruz, California.

Since the 1911 purchase, the only structures recorded on the subject property is a Southern Pacific Railroad storage shed. The shed is located adjacent to Park Avenue. The railroad tracks and shed were identified on a 1924 Sanborn Map. This map did not indicate the presence of flammable materials or underground or aboveground storage tanks.

Available aerial photographs, since 1955, show the land use of the surrounding area as a mixture of residential and commercial. Steven Staiger, Palo Alto Historian, stated the general study area was never developed by heavy industry. Single family residences predominated in the early 1900s and commercial development has occurred in the most recent years. In the 1955 aerial photograph, agriculture land is visible to the west of the property. The railroad tracks are visible on the subject property in the aerial photograph taken as late as 1990.

A historical review of articles on train accidents, at the Palo Alto City Library, showed one accident occurred in the vicinity of the subject property since the 1950s. The accident was recorded in the Palo Alto Times Newspaper on Tuesday 17, 1969 when a cement truck collided with a backing train crossing El Camino Real. The article did not indicate that any chemical release had occurred as a result of the accident.

Chemical usage on the subject property appears to have been limited to the use of herbicides to the keep the tracks clear of weed and other obstructive vegetation and curve and switch greases.

According to information developed for SP Railroad by Brunsing Associates, Inc., the use of herbicides for weed control has occurred since before World War II. Since 1986 herbicides used on the subject property may have included atrazine, diuron, sulfometuron, and glyphosphate. These compounds are

usually applied during the fall or winter and rain-activated. Typically these herbicides are short-lived and are re-applied annually.

Curve rail oiling mechanisms have been in place on portions of the sp track since the late 1940s. The curve oilers were supplied by 30-gallon underground storage tanks. During the K/J site visit, there was no evidence that a curve oil mechanism and tank ever existed on the subject property.

Switch lubricant may have been used to lubricate any switch plates located on the subject property. Historically this graphite lubricant may have been mixed with kerosene, and diesel oil. During the site visit, no hydrocarbon staining was evident on the subject property.

Aerial Photographs

Information regarding past land use and configuration was obtained by reviewing available aerial photographs from the collection maintained by Pacific Aerial Survey located in Oakland, California. The photographs often provide useful information regarding the site at the time of the photograph; however, they do not provide information about the intervening period between photographs.

Aerial photographs of the site and vicinity were reviewed for the following years: 1955, 1963, 1968, 1972, 1977, 1981, and 1990.

1955 Photograph - The railroad tracks are visible on the subject property. A railroad spur connected to the subject property line terminates at the commercial building located to the south. Agriculture land is visible southwest of the property and production appears to be wheat. Land use surrounding the subject property is a mixture of residential and commercial.

1963 Photograph - Railroad tracks are visible onsite. A structure is visible on the eastern section of the property, adjacent to Park Avenue. Single family residential properties are located to the north of the property, on Olive Street and commercial land use is located to the south and west.

1968 Photograph - The photograph resolution was poor. The site configuration appears similar to the 1963 photograph.

1972 Photograph - The land use in the vicinity of the subject property is a mixture of residential and commercial. Auto parking is visible along the south east end of the property.

1977 Photograph - Photograph is similar to the 1972 photograph. A box-style railroad car is visible on the railroad spur. Two buildings are visible near Park Avenue.

1981 Photograph - Land use surrounding the subject property continues to be a mixture of residential and commercial.

1985 Photograph - Photograph is similar to the 1981 photograph.

1990 Photograph - The railroad tracks have been removed from the subject property. No structures except for the Southern Pacific storage shed previously mentioned are visible on the site. Land use surrounding the property continues to be a mixture of commercial and residential. The Park Avenue buildings are visible east of the subject property. The area adjacent to El Camino Road is an auto dealership.

REVIEW OF REGULATORY AGENCY LISTS AND RECORDS

The discussion presented in this section is based on available information provided by regulatory agencies. A review of available agency lists from the Regional Water Quality Control Board, the California Department of Health Services, and the Environmental Protection Agency was conducted by NATEC Environmental Reporting Service, Ltd., a subcontractor to K/J, to identify potential regulatory issues at the subject property and the area within a radius of 5000 feet of the property. The records search included the review of the following regulatory records and lists.

Records Searched	Date	Sources Lists
CERCLIS	7/91	EPA-Superfund Sites
NPL	10/91	EPA-National Priority List
LIENS	3/91	Federal Superfund Liens
SWIS	7/91	California Solid Waste Information System List
SWAT	7/91	California Solid Waste Assessment Program
LUST	1/91	California Leaking Underground Storage Tanks Lists
CORTESE	11/91	California Hazardous Waste Substances Sites
RCRA	1/91	EPA-Hazardous Waste Generators

BEP	1/91	California Bond Expenditure Plan
ASPIS	1/91	California Abandoned Site Program Information System
WDS	10/90	NPDES Permits-Waste Waste Discharge
SARA	12/90	EPA-Superfund Amendments and Reauthorization Act

The subject property was not listed on the above lists and records. The records review conducted by NATEC Environmental Reporting Service, Ltd. indicated that sixteen CERCLIS, one NPL, forty-one RCRA, twenty-one LUST, thirty-two CORTESE, eighteen ASPIS and twenty-three SARA sites are located within a 5000 foot radius of the subject property. Release of volatile organic chemicals (VOCs) at several of the listed sites have resulted in groundwater contamination in the immediate vicinity of the subject property. As discussed in greater detail below, VOCs have been detected in two on-site monitoring wells. Sites that are located within a 2500 foot radius of the subject property are shown on Figure 1. Summaries of the file review are presented in Appendix A.

CERCLIS

Sixteen sites have been identified on the CERCLIS list, which is complied by the U.S. Environmental Protection Agency of contaminated properties for designation under the Federal Superfund Program pursuant to the Comprehensive Environmental Response Compensation and Liability Act (CERCLA). Sites located in the immediate vicinity of the subject property include the following;

Alza Corporation

Alza Pharmaceutical is located at 1454 Page Mill Road. The site was included on the CERCLIS list in January 1987, because of soil and groundwater contamination. Apparently the contamination resulted from the improper handling of chemicals onsite. Initial subsurface sampling identified chloroform concentrations at 4100 parts per billion (ppb), carbon tetrachloride concentrations at 130 ppb and trichloroethylene (TCE) concentrations at 19 ppb in groundwater. Under the supervision of the RWQCB, a soil gas extraction and treatment system was used for interim remedial measures followed by a groundwater extraction and treatment system. The most recent analytical results showed chloroform concentrations at 200 ppb, carbon tetrachloride concentrations below detection limits, and TCE concentrations at 4.5 ppb. The site is active and RWQCB continues to review operations at the site.

Beckman Instruments

This site is located at 1050 Page Mill Road. The RWQCB listed the site in August 1986 because of trichloroethane (TCA) detected in groundwater. Beckman's records indicate TCE has not been used onsite for the past ten years, but TCA has been detected in downgradient wells of the site. Analytical data for the monitoring wells was not available for review during the records review conducted by K/J. Apparently, no enforcement action has been taken against Beckman at this time; however, the final remedial measures for the site have not been determined by the RWQCB.

Dura-Bond

The site is located at 3201 Ash Street. RWQCB included this site on the CERCLIS in February 1981. Apparently the sources of contamination onsite were an underground storage tank and a waste impoundment from the manufacture of bearings. Sixty cubic yards of contaminated soil from the waste impoundment area were removed. Monitoring wells were also installed on the site. Chemicals identified during initial groundwater sampling showed concentrations of TCE at 708 ppb, xylene isomers and ethyl benzene at 1200 ppb and volatile fuel hydrocarbons at 9500 ppb. Apparently chlorinated solvents were detected during sampling of an upgradient monitoring well, indicating a potential offsite plume. RWQCB has required the installation of additional monitoring wells to determine the extent of the hydrocarbon plume and continued monitoring for fuel hydrocarbons.

Eastman Kodak Company

Operations at the facility located at 925 Page Mill Road included photographic film and paper processing. RWQCB's review of facility files indicate TCE was used onsite. The facility is located upgradient of an unexplained chlorinated solvent source and groundwater sampling showed TCE concentrations at 610 ppb, tetrachloroethylene (PCE) at 63 ppb and 1,1-dichloroethene (1,1-DCE) at 150 ppb. RWQCB has not determined remedial measures for the facility, because the Kodak submittal to characterize the potential contamination sources was rejected by RWQCB in February 1990.

Hewlett Packard Facility

This Hewlett Packard facility, which manufactures electronics equipment, is located at 640 Page Mill Road. Initial site investigations began in 30 June 1981. The source of contamination identified onsite was a leaking solvent waste tank. The tank was removed in July 1981 with an additional 100 cubic feet of contaminated soil. Initial analytical results showed TCE and 1,1-dichloroethane (1,1-DCA) in groundwater. An air stripper system was used for interim remedial measures. Apparently, the identified chemicals have migrated offsite and may have been intercepted by the Highway Underpass Dewatering System. The June 1991 Analytical Groundwater Report summarized by the RWQCB showed TCA

concentrations at 8900 ppb, TCE concentrations at 680 ppb, and 1,1 DCA concentrations at 380 ppb. The site is active and final remedial measures are not completed.

Hewlett Packard Facility

A second Hewlett Packard facility, identified on the CERCLIS list, is located at 395 Page Mill Road. In June 1982, sources of groundwater contamination onsite were identified as a leaking underground storage tank, chemical storage areas, and degreaser pits. Initial groundwater sampling showed chemical concentrations of 1,1,1-TCA at 93 ppb, TCE at 320, and 1,1 DCA at 7 ppb. During site characterization, in addition to onsite sources, chemical pollutants were found to be migrating onto the site from another source. A soil vapor recovery system was installed for the underground tank contamination and according to the RWQCB's records this phase of operations was completed in February 1989. The most re ent subsurface analytical sample results showed 1,1,1-TCA concentrations at 46 ppb, TCE concentrations at 230 ppb and 1,1 DCA concentrations below the detection limit. The RWQCB has required additional investigations to determine on and offsite source contributions.

Stanford Cleaners

Stanford Cleaners is located at 2875 El Camino Boulevard approximately one-tenth of a mile northwest of the subject property. The RWQCB identified contaminated subsurface conditions on 30 April 1982. Apparently soils were impacted as result of a leaking waste solvent underground storage tank. The tank along with 360 cubic feet of contaminated soil was removed and the RWQCB recommended a program of semi-annual/annual monitoring of groundwater. Initial analytical results detected 140 F Solvent, trans-1,2-dichloroethene (trans-1,2-DCE) and 1,1,1-TCA in groundwater. The RWQCB did not require a groundwater extraction system for the site. The site currently is recorded with the RWQCB as inactive.

Varian Associates Corporation Headquarters

Varian Associates located at 611 Hansen Way manufactures electronic equipment. According to RWQCB's records, three areas are under investigation at this property. The areas include VOC chemical release near Building 1, gasoline contamination release near Building 4, and VOC contamination near Building 4. Initial groundwater analytical data showed concentrations of TCE at 4,100 ppb, 1,1-DCE at 180 ppb, and 1,1 DCA at 98 ppb. During the site characterization, analytical data collected in a upgradient well indicated a potential offsite source migrating on to the site. Apparently the RWQCB has not determined the final remedial measures for site and quarterly review of monitoring data continues. The most recent available analytical data for the groundwater showed TCE concentrations at 490 ppb, 1,1-DCE concentrations at 140 ppb and 1,1-DCA concentrations at 82 ppb.

Varian Associates

The second Varian property, identified on the CERCLIS list, is located at 601 California Avenue. This facility also manufactures electronic equipment. The RWQCB identified the site in May 1986. Contamination sources were identified as a leaking underground tank and improper chemical handling. Initial groundwater sampling data showed chemical concentrations of TCA at 62 ppb, TCE at 16,000 ppb, and 1,1 DCE at 28 ppb. RWQCB required the construction of a groundwater extraction system onsite and characterization of the downgradient plume. The RWQCB has not determined the final remedial measures for the site. The most recent available analytical data submitted to the RWQCB showed concentrations of TCA at 32 ppb, TCE at 120 ppb, and 1,1 DCE at 20 ppb. The RWQCB has taken enforcement actions against the site. These regulatory actions are being addressed by Varian.

NPL

The Hewlett Packard facility located at 640 Page Mill Road, also listed on the CERCLIS list, has been listed on the NPL list. The U.S. EPA selects sites from the CERCLIS list and prioritized the sites for their significant risk to human health and the environment. A NPL site can receive remedial funding under CERCLA, because the site is considered the highest priority for remedial action. The Hewlett Packard site is located two-tenths of a mile northwest of the subject property. As stated in the CERCLIS section, the VOCs have migrated off site and the RWQCB continues to investigate the site.

RCRA

Hazardous waste generators have been identified in the vicinity of the property. Generators in this classification are required to have a U.S. Environmental Protection Agency identification number and must comply with the provisions of the Resource Conservation and Recovery Act (RCRA).

Twenty-six hazardous waste generators have been identified in the vicinity of the subject property. Many of these RCRA facilities have released VOCs into groundwater and soils. As mentioned previously, VOCs have been detected in groundwater beneath the subject property. It is unlikely, given the historical use of the property, that activities on the subject property have resulted in the release of chemicals to groundwater.

LUST

The Regional Water Quality Control Board (RWQCB) of Santa Clara County provides a list of site names and addresses of reported leaks from underground storage tanks. Six sites with leaking underground storage tanks have been identified in the immediate vicinity of the property. The sites include the following:

The Palo Alto Nissan auto dealership located at 411 Acacia Street is immediately adjacent the subject property. The Nissan site is also listed on the RCRA list. A leaking waste oil underground storage tank has been identified on the site. The extent of contamination is not known and additional investigation is necessary. Palo Alto Nissan leases a portion of the subject property. Nissan uses the property to park new and used cars. The leaking underground waste oil storage tank mentioned above is not located on the subject property.

Jost Heating and Sheet Metal, Inc. is located at 412 Olive Avenue. The site is located one-tenth of a mile from the subject property. A leak of unleaded gasoline has not been characterized and no action taken since the initial report. The RWQCB is currently reviewing the site.

Bleiber Iron Works located at 411 Page Mill Road is located two-tenths of a mile northwest of the subject property. The substance released was gasoline. An initial release leak report was submitted to the RWQCB; however, no action has been taken by the responsible party since that report. It is not known if the groundwater has been impacted by the release.

The Varian Associates site at 425 Lambert Street is located three-tenths of mile from the subject property. The substance released on site is gasoline. It is unclear if the groundwater has been impacted. It is also not apparent if an initial release report has been filed with the RWQCB.

The Chevron Service Station at 775 Page Mill Road is located three-tenths of a mile from the site. An assortment of hydrocarbon products have been released to the soil. A remediation plan was approved by the RWQCB for the treatment of contaminated soils which included excavation and onsite aeration with disposal to an approved site. It is not known if the groundwater has been impacted at this site.

The Hohback site at 216 Page Mill Road is located two-tenths of a mile northeast of the subject property. Gasoline was released and groundwater has been impacted. An initial investigation report was submitted to the RWQCB; however, no action has been taken since that report.

The remaining sites on the LUST list are not in the immediate vicinity of the subject property.

CORTESE

The CORTESE list is complied by the California State Office of Planning and Research and provides listing of hazardous waste/substances sites within the State. Fifteen sites have been identified in the immediate vicinity of the subject property. These sites have also been identified on the LUST list with the exception of a listed site located at 2901 Park Avenue. This site is also listed on the ASPIS list as a Southern Pacific Railroad property. Both Randy Smith and Rob Cranse of Southern Pacific Railroad were unaware of a contaminated site belonging to Southern Pacific

at this address. Additional information will be requested from the California Department of Health Services (California Environmental Protection Agency). Any new information obtained will be forwarded to WSJ Properties when the information is received.

ASPIS

Sites in the vicinity of the property have been identified on the Abandoned Sites Program Information System (ASPIS). The list consists of potential hazardous waste sites and is not a documentation of an incident. The Hewlett Packard facility at 640 Page Mill Road is the closest site to the subject property as previously mentioned. The site is listed on the CERCLIS and NPL lists. The remaining sites listed on the ASPIS sites are also listed on the LUST, CORTESE and CERCLIS list.

SARA

Six SARA sites have been identified within the 5000 feet radius of the subject property. Section 313 of the Emergency Planning and Community Right to Know Act (Superfund Amendments and Reauthorization Act of 1986) requires certain facilities to file annual toxic chemical release inventory forms with the U.S. Environmental Protection Agency and the California Environmental Affairs Agency. The reports to the regulatory agencies include information on releases to air, water and land. The sites listed are also included on the CERCLIS List. The closest sites are Hewlett-Packard located at 395 Page Mill Road and Varian Associates located at 611 Hansen Way. The invertory release data is presented in the summarization report (Appendix A).

OTHER AGENCY CONTACTS

In conjunction with the environmental records review, K/J contacted other local and State agencies and individuals who may have knowledge of activities conducted on the subject property. The content of these telephone conversations are summarized in Appendix B.

DESCRIPTION OF FIELD ACTIVITIES

On 19 and 20 December 1991, eight soil borings (SB-1, SB-2, SB-3, SB-4, SB-5, SB-6, SB-7 and SB-8) were drilled at the site by HEW Drilling Inc. of East Palo Alto, using a CME-75 drill rig equipped with 8-inch hollow stem augers and split-spoon samplers. The boreholes were located on an east-west line across the SP right-of-way and the borings were drilled within 10 to 15 feet of the centerline of the old railbed. The locations of the soil borings are shown on Figure 2.

From each soil boring, four soil samples were driven at the following approximate depths: from 5.0 to 6.5 feet, 10.0 to 11.5-feet, 15.0 to 16.5-feet and from 18.0 to 19.5-feet below ground surface. At each sampling interval, the split spoon sampler, which was filled with three, 2-inch 6-inches brass liners was driven 1.5-

feet. From each drive interval, a soil sample was selected from the three brass liners for analysis for TPH as gas and diesel, VOCs, organochlorine pesticides, PCBs, 17 Title 22 Priority Metals, semi-volatile organics, and oil and grease. Each boring was logged noting the soil types, contacts between the different soil intervals and other such pertinent information such as color, and moisture content.

The boring installation and sampling procedures are described in greater detail in Appendix C. Boring logs of boreholes drilled during this investigation are presented in Appendix D.

RESULTS OF SOIL AND GROUNDWATER SAMPLING

As indicated above, four soil samples were collected from each soil boring, and retained for potential laboratory analysis. From each soil boring, selected soil samples from specific sampling intervals were composited by the laboratory and analyzed as one sample. In addition, selected soil samples from each boring were analyzed as individual samples. From each soil boring, soil samples collected from the 5.0 to 6.5-foot and 18.0 to 19.5-foot intervals were composited and analyzed as one sample. These composite samples were analyzed for TPH as gas and diesel (LUFT Mod. Method 8015), VOCs by EPA Method 8240, organochlorine pesticides and PCB's by EPA Method 8080 and 17 Title 22 Priority Metals. The shallow soil samples collected from the 5.0 to 6.5-foot interval from each boring were also analyzed as individual samples for oil and grease.

Composite soil samples from soil borings SB-1, SB-4, SB-7 and SB-8 were also analyzed for semi-volatile organics by EPA Method 8270. These borings were located adjacent to commercial or industrial activities.

No grab-groundwater samples were collected from the shallowest onsite aquifer during the investigation because previous investigations (ENVIRON data submittal to K/J on 6 January 1992), detected VOCs in groundwater from onsite monitoring wells F76A2 and F77A1. Monitoring well F77A1 was screened in the shallowest onsite water bearing zone from 18.5 to 28.5 feet below ground surface. Monitoring well F76A2 was screened from 40 to 50 feet below ground surface, in what appears to be the next deepest water bearing zone. The well specifications for the monitoring wells F76A2 and F77A1 also provided by ENVIRON on 13 January 1992 are presented in Appendix E.

Laboratory data was provided to K/J by ENVIRON (6 January 1992) on groundwater samples collected from the two above mentioned monitoring wells from February 1990 through August 1991. Trichloroethylene (TCE) appears to be the primary chemical of concern detected in groundwater samples collected from monitoring well F77A1. Concentrations of up to 260 ppb of TCE were detected in monitoring well F77A1 during the monitoring period. Other VOCs detected in groundwater samples collected from well F77A1 are Methylene Chloride, Acetone, 1,1,1-TCA, 1,1-DCE, c-1,2-DCE and 1,1-DCA.

Concentrations up to 2.6 ppb of TCE and 1.2 ppb of 1,1-DCA were detected in the groundwater samples collected from the deeper monitoring well, F76A2. Laboratory results provided by ENVIRON are presented in Appendix F.

Laboratory analytical reports and chain of custody forms for the soil samples collected during the Kennedy/Jenks investigation are presented in Appendix G.

VOCs

As mentioned above, groundwater samples collected from two onsite monitoring wells, indicate that the shallow groundwater onsite contains detectable concentrations of VOCs. However, VOCs were not detected above the laboratory detection limit in the eight composite soil samples collected.

PCBs

PCB's were not detected above the laboratory detection limit in the eight composite soil samples collected.

TPH as GAS AND DIESEL

TPH as gas and diesel was not detected above the laboratory detection limit in the eight composite soil samples collected.

ORGANOCHLORINE PESTICIDES

Organochlorine pesticides were not detected above the laboratory detection limit in the eight composite soil samples collected.

SEMI-VOLATILE ORGANICS

Semi-volatile organics were not detected above the laboratory detection limit in the four composite soil samples collected.

OIL AND GREASE

Oil and grease was detected at 60 ppm in samples SB-1A, SB-4A and SB-5A. The analytical results are presented in Table 1. The elevated concentrations of oil and grease detected may be attributed to either oil and grease associated with the track maintenance or may be attributed to background organics present in the soil. These oil and grease values do not appear to represent a significant problem throughout the site.

CALIFORNIA TITLE 22 METALS

Concentrations of metals detected in the soil samples are summarized in Table 2. The detected metal concentrations are compared to average metals concentrations

in soils reported by Lindsay, I.W.L Lindsay, 1979, Chemical Equilibria in Soil, John Wiley and Sons, New York and Total Threshold Limit Concentrations (TTLCs) established for the designation of hazardous wastes by the State of California. TTLCs for the metals of concern are not exceeded.

The concentrations of metals detected in the soil samples appear to be representative and consistent with metal background soil concentrations reported by Lindsay.

FINDINGS AND CONCLUSIONS

The following finding and conclusions are based on the data gathered during this investigation, the laboratory analytical results, the review of site history, and the review of regulatory agency lists and records.

- A review of the site history does not indicate that the subject site has had any other historical use other than a railroad right-of-way. The historical records also do not indicate that any major spills or industrial accidents have occurred on the site.

- A review of aerial photographs taken of the site from 1955 through 1990 do not indicate any use of the site other than as a railroad right-of-way. Between 1985 and 1990, the railroad tracks were removed from the site.

- A review of the regulatory lists and records was conducted for the subject property and the area within a radius of 5000 feet of the property. The records review indicated that sixteen CERCLIS, one NPL, forty-one RCRA, twenty-one LUST, thirty-two CORTESE, eighteen ASPIS and twenty-three SARA site are located within this 5000 foot radius. Activities at some of these listed sites have resulted in the release of chemicals to soil and groundwater in the immediate vicinity of the subject property.

- TPH as gas and diesel, VOCs, organochlorine pesticides, and PCBs were not detected above the detection limits of the analytical methods, in composite soil samples collected at the site to a depth of 19.5 feet below ground surface (borings SB-1, SB-2, SB-3, SB-4, SB-5, SB-6, SB-7 and SB-8)

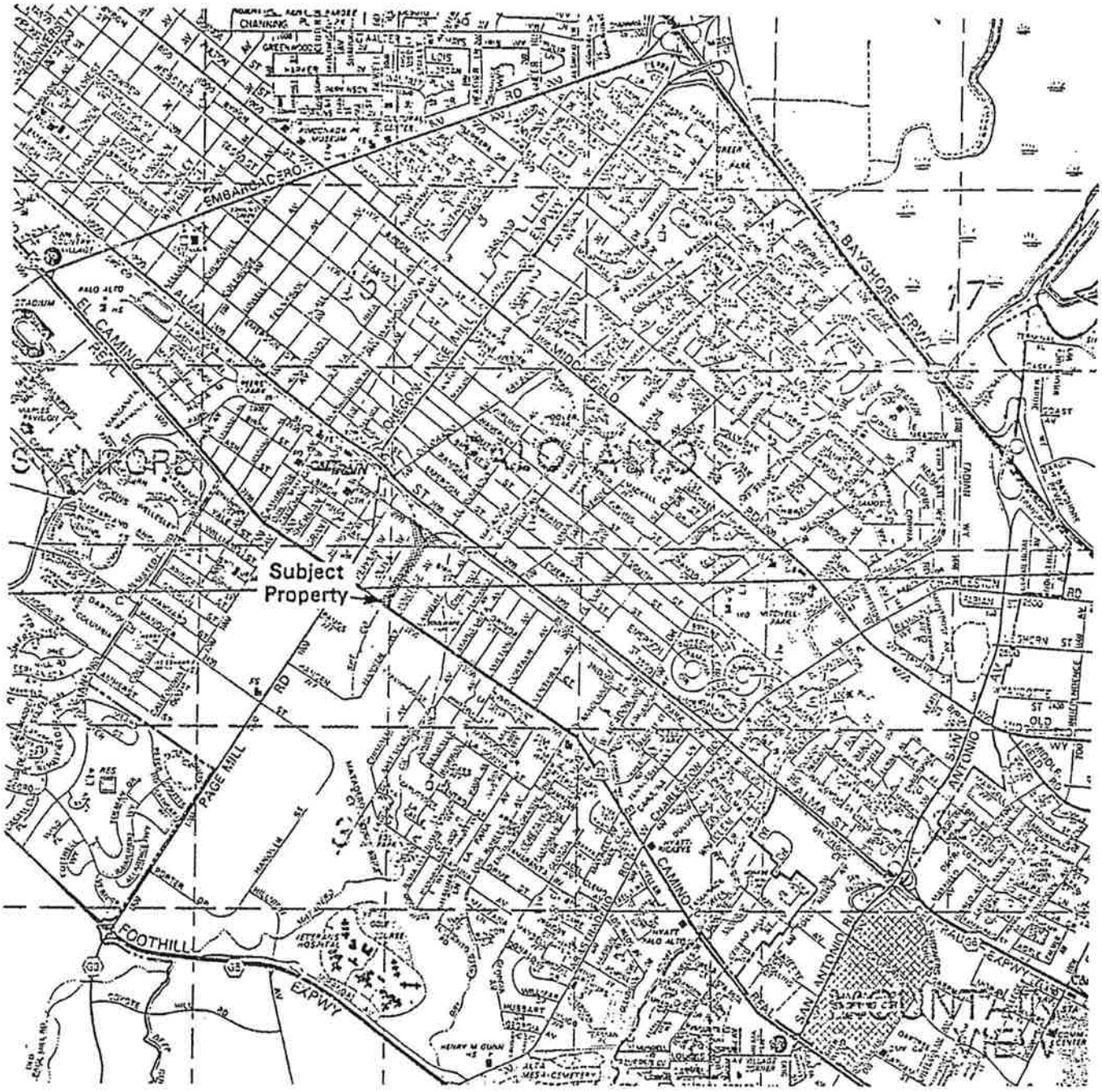
- Semi-Volatile Organics were not detected above the detection limits of the analytical methods, in selected shallow composite soil samples collected at the site (borings SB-1, SB-4, SB-7 and SB-8).

- Even though the shallow groundwater at the site contains VOCs at detectable concentrations, it does not appear that the unsaturated zone is significantly impacted by chemicals of concern.

- Detectable metal concentrations were present in all of the soil samples collected at the site. The concentrations of metals appear to be consistent with background soil concentrations (I.W.L Lindsay, New York, 1979).

- Concentrations of oil and grease were detected in three shallow soil samples collected at the site. The concentrations were only slightly elevated above detection limits and do not appear to represent a significant problem.

FIGURES



Legend:

▒▒ Subject Property

N

0 1/2 1

Approximate Scale in Miles

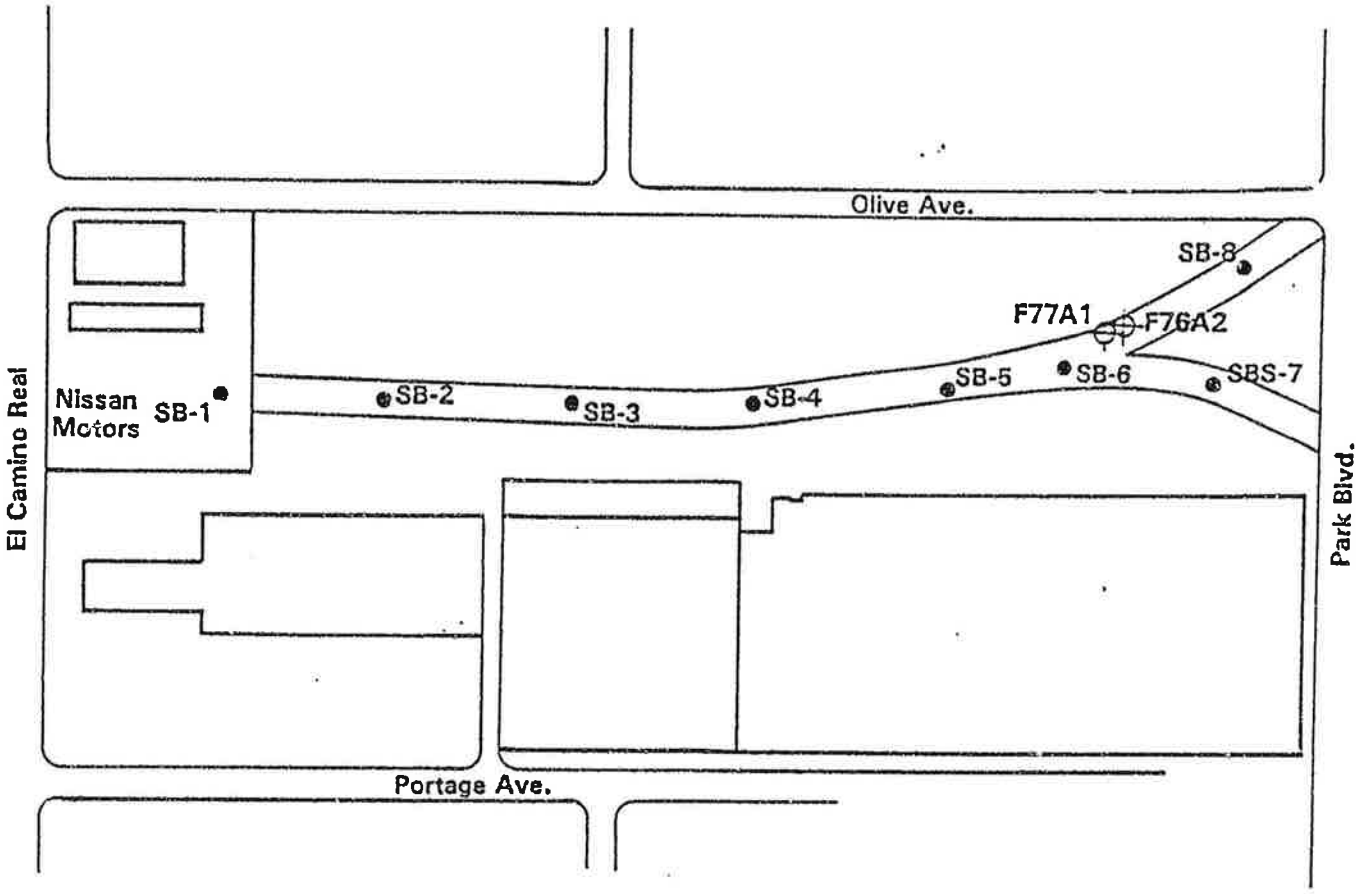
Kennedy/Jenks Consultants

WSJ Properties
SP Right-of-Way
Palo Alto, California

Vicinity Map

K/J 910056
January 1992

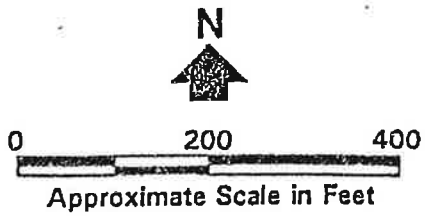
Figure 1



Legend:

SB-8 ● Soil Boring Location and Number

F77A1 ⊕ Monitoring Well Location and Number



Kennedy/Jenks Consultants

WSJ Properties
SP Right-of-Way
Palo Alto, California

Soil Boring Location Map

K/J 910056
January 1992

Figure 2

TABLES

DRAFT

TABLE 1
OIL AND GREASE DETECTED IN SOILS (mg/kg)
WSJ PROPERTIES
SP RIGHT-OF-WAY
PALO ALTO, CALIFORNIA
K/J 910056.00

SAMPLE #	OIL AND GREASE
SB-1A	60
SB-2A	<25
SB-3A	<25
SB-4A	60
SB-5A	60
SB-5A	<25
SB-6A	<25
SB-7A	<25
SB-8A	<25

TABLE 2

METALS DETECTED IN SOILS (mg/Kg)
WSJ PROOPERTIES
SP RIGHT-OF-WAY
PALO ALTO, CALIFORNIA
K/J 910056.00

SAMPLE #	Sb	As	Ba	Be	Cd	Cr	Co	Cu	Pb	Mo	Ni	Se	Ag	Tl	V	Zn	Hg
SB-1A/SB-1D	<5	<3	110	<0.2	<0.2	37	6.4	10	<2	<1	48	<3	<1	<3	12	25	<0.05
SB-2A/SB-2D	<5	<3	74	<0.2	<0.2	29	5.0	12	<5	<1	37	<3	<1	<3	7.6	25	0.52
SB-3A/SB-3D	<5	<3	93	<0.2	<0.2	34	6.5	22	<2	<1	45	<3	<1	<3	11	33	0.08
SB-4A/SB-4D	<5	<3	73	<0.2	<0.2	32	5.2	19	<2	<1	41	<3	<1	<3	10	28	<0.05
SB-5A/SB-5D	<5	<3	90	<0.2	<0.2	56	11	18	<2	<1	77	<3	<1	<3	12	39	<0.05
SB-6A/SB-6D	<5	<3	120	<0.2	<0.2	44	8.7	16	2.9	<1	59	<3	<1	<3	13	39	<0.05
SB-7A/SB-7D	<5	<3	59	<0.2	<0.2	40	8.3	11	<2	<1	53	<3	<1	<3	6.7	38	<0.05
SB-8A/SB-8D	<5	<3	74	<0.2	<0.2	38	5.9	9.7	<2	<1	45	<3	<1	<3	7.1	35	<0.05
TTLC[1]	500	500	10,000	75	100	2,500	8,000	2,500	1,000	3,500	2,000	100	500	-	2,400	5,000	20
Lindsay Average[2]	-	5	430	6	0.06	100	8	30	10	2	40	0.3	0.05	-	100	50	0.03

NOTES:

1. California Title 22 CCR 66699.
2. I.W.L. Lindsay, Chemical Equilibria in Soils, John Wiley and Sons, New York, 1979.
3. A previous sample was run for metals that detected lead at 350 ppm for SB-2A/SB-2D. The separate intervals were analyzed; however, lead concentrations above the limits of detection were not detected. The composite sample was re-analyzed after the entire core was mixed. Lead was below detection limits.

APPENDIX A

RECORDS REVIEW

E.3 Excerpts from Subsurface Vault Remediation

PES Environmental, Inc.
Engineering & Environmental Services

KSF

May 12, 1998

500.0601.002

Palo Alto Fire Department
Fire Prevention Bureau
250 Hamilton Avenue
Palo Alto, California 94301

Attention: Ms. Angela Sullivan

SUBSURFACE VAULT INVESTIGATION AND CLOSURE REPORT
EL CAMINO CENTER
3200 PARK BOULEVARD
PALO ALTO, CALIFORNIA

Dear Ms. Sullivan:

This letter report has been prepared by PES Environmental, Inc. (PES) to present the results of the investigation, abandonment and closure of an underground concrete vault (vault) located at El Camino Center, a commercial and retail center located at 3200 Park Boulevard in Palo Alto, California (Plate 1). PES conducted the site work on behalf of El Camino Center Partners, the owner of the subject property. Plate 2 presents a vicinity map showing the general area of the vault. Field activities at the site included: (1) chemical characterization, removal and disposal of residual liquid contents from within the vault; (2) verification of the dimensions and orientation of the vault; (3) evaluation and investigation to confirm surrounding soils had not been affected by the vault contents; and (4) abandonment and closure of the vault.

BACKGROUND INFORMATION

The subject property contains several structures including a large warehouse building currently occupied by Fry's Electronics (retail sales) and professional offices (Plate 2). Historical site use of the warehouse building was obtained through review of Sanborn Fire Insurance Maps. The subject property had been the location of a cannery prior to World War II, and after the war, was used as a warehouse by several businesses. The area of the vault, which is immediately north of the large warehouse building, was previously the location of a Southern Pacific Railroad and spur track. The railroad tracks are no longer present at ground surface in the area of the vault.

On June 13, 1997, El Camino Center Partners' building contractor encountered below-grade concrete structures and hydrocarbon-affected soil while excavating to install a new storm sewer conveyance pipe (Plate 3) in a new location. The original sewer pipe was not in the vicinity of the vault. PES conducted a site inspection on June 16, 1997, and inspected the interior of the vault through an access port located at the northeastern corner of the vault. The interior inspection indicated that the vault contained an unknown volume of a black-oily liquid. The depth to the liquid in the vault was approximately 5 feet below ground surface (bgs). Palo Alto Fire Department (PAFD) was notified and provided oversight during the investigation, abandonment and closure proceedings of the vault. The following presents the methods and results of PES' investigation, abandonment and closure of the vault.

MANAGEMENT OF LIQUID CONTENTS OF VAULT

Sampling of Vault Contents

To characterize the oily liquid in the vault, on June 16, 1997, PES collected a sample of the vault liquid using a disposable Teflon™ bailer. The sample was decanted into laboratory supplied containers, labeled and placed in a chilled, thermally-insulated cooler. The sample was submitted to Superior Analytical Laboratories (Superior) of San Francisco, California, a state certified laboratory, accompanied by chain-of-custody documentation. The sample was analyzed for full scan of total petroleum hydrocarbons (TPH) and volatile organic compounds (VOCs) using U.S. Environmental Protection Agency (U.S.EPA) Test Method 8015 Modified and 8260, respectively.

Results of Vault Sample Analyses

The results of the TPH analysis of the liquid sample indicated that TPH in the motor oil range was detected at a concentration of 440,000 milligrams per kilogram (mg/kg). No other TPH parameters (i.e., gasoline, diesel, and motor oil) were detected above the laboratory reporting limits. The following VOCs were detected above the laboratory reporting limits: (1) 1,3,5-Trimethylbenzene at 13 mg/kg; (2) total Xylenes at 12 mg/kg; (3) p-Isopropyltoluene at 31 mg/kg; (4) n-Butylbenzene at 40 mg/kg; (5) 1,2,4-Trimethylbenzene at 170 mg/kg; and (6) Naphthalene at 400 mg/kg. The laboratory report sheets and chain-of-custody form are included in Appendix A.

The chemical analyses indicated that the oily liquid in the vault was composed of approximately 44 percent petroleum hydrocarbons, quantified as motor oil. Ethylbenzene, trimethylbenzenes and naphthalene are common components of fuel oil and used motor oil. The suite of VOCs detected in the sample of oily liquid are indicative of a degraded fuel oil or motor oil.

Liquid Removal From Vault

Oily liquid in the vault was pumped out on June 17 and 18, 1997 by Allwaste of Benicia, California using a vacuum truck. Approximately 8,157 gallons of oily liquid were removed from the vault during purging of the vault contents.

Liquid Disposal

Based on analytical results of the liquid sample collected from the vault, the evacuated liquids were disposed of as a non-RCRA California-regulated hazardous waste. The liquid waste was transported to Americlean, Inc. in Silver Springs, Nevada for disposal. Copies of the Uniform Hazardous Waste Manifests for the management of the liquid are included in Appendix B.

STORM SEWER TRENCH SOIL SAMPLING

Sampling and Analytical Procedures

On June 17, 1997, PES conducted soil sampling of the sidewalls of the storm sewer trench at the subject property. At the time the sampling was conducted, the size of the vault and its relationship to the storm sewer trench was unknown. As will be later confirmed and described, the trench was routed over the vault, and all soil contamination described hereinafter was actually within the interior of the vault (Plate 4). Soil with visible hydrocarbon-staining was observed on the excavation sidewalls. PES personnel collected seven soil samples from the sidewalls for chemical analysis to confirm that the source of the hydrocarbon-staining on the trench sidewalls was the liquid in the vault and to evaluate the lateral extent of hydrocarbon-affected soil. Five soil samples were collected from the north wall of the excavation; and two samples were collected from the south wall of the excavation. The approximate extent of the visibility stained soil on the trench sidewalls is presented on Plate 3.

The soil samples were collected by driving pre-cleaned 2-inch-diameter by 6-inch-long stainless-steel tubes into the soil exposed in the trench sidewalls. Following sample collection, the tubes were covered with teflon sheets and plastic end caps and sealed with silicon tape. The sealed tubes were labeled, placed in a chilled, thermally-insulated, cooler and transported to Superior accompanied by chain-of-custody documentation. The samples were analyzed for full scan of TPH and VOCs using U.S.EPA Test Methods 8015 Modified and 8260, respectively. Copies of the laboratory analytical reports and chain-of-custody documentation are presented in Appendix A.

Storm Sewer Trench Soil Sampling Results

The results of the chemical analyses performed on the soil samples collected from the storm sewer trench sidewalls indicated hydrocarbon-affected soil was present in both trench sidewalls. TPH quantified as motor oil was detected in all samples at concentrations ranging from 32 mg/kg to 2,400 mg/kg. Maximum concentrations of VOCs detected above the laboratory reporting limits include: (1) sec-Butylbenzene at 0.3 mg/kg; (2) n-Butylbenzene at 0.93 mg/kg; (3) Ethylbenzene at 0.13 mg/kg; (4) Isopropylbenzene at 0.19 mg/kg; (5) p-Isopropyltoluene at 0.81 mg/kg; (6) Naphthalene at 3.4 mg/kg; (7) n-Propylbenzene at 0.33 mg/kg; (8) 1,2,4-Trimethylbenzene at 4.3 mg/kg; and (9) Total Xylenes at 0.29 mg/kg.

SUBSURFACE INVESTIGATION

On June 25, 1997, PES performed a subsurface investigation to better define the vault orientation and dimensions. In addition, the investigation was performed to ascertain whether soils at the perimeter of the vault had been affected by the tank contents due to releases from the vault. Precision Drilling of San Rafael, California was contracted by PES to perform soil borings at nine locations. Using a direct push method, four soil borings (B-1, B-2, B-3 and B-4) were advanced to a depth of 13 feet bgs. Soil borings B-5, B-7 and B-9 were terminated at approximately 10 to 11 feet bgs and soil borings B-6 and B-8 were terminated at approximately 2.5 feet bgs due to refusal. Soil boring locations are presented on Plate 3.

Soil samples were collected at approximately 3-foot intervals, when possible, for logging of the borehole lithology and field screening using a Photo Ionization Detector (PID). The boring logs are presented in Appendix C. Based on field screening observations, eleven soil samples from six boring locations were collected for chemical analyses. Samples were collected in 6-inch long pre-cleaned stainless-steel sample tubes.

Following sample collection, the tubes were covered with teflon sheets, plastic end caps and sealed with silicon tape. The samples were labeled, placed in a chilled, thermally-insulated, cooler and transported to Superior accompanied by chain-of-custody documentation. The samples were analyzed for full scan of TPH and VOCs by U.S.EPA Test Method 8015 Modified and 8260, respectively.

The full scan TPH analysis of the eleven soil samples detected only TPH quantified as diesel and TPH quantified as motor oil at concentrations ranging from below the reporting limit of 200 mg/kg and below laboratory reporting limit of 280 mg/kg, respectively. Low concentrations of the following VOCs were detected in soil sample B5-D: (1) p-Isopropyltoluene at 0.024 mg/kg; (2) n-Butylbenzene at 0.027 mg/kg; (3) 1,2,4-Trimethylbenzene at 0.12 mg/kg; and (4) Naphthalene at 0.2 mg/kg. Sample results

are presented on Plate 3 and summarized in Table 2. Laboratory reports and chain-of-custody forms are presented in Appendix A.

The results of the subsurface investigation indicated that, with one minor exception, soil north, east and west (Borings B-1, B-2, B-3, B-4 and B-7) of the vault had not been significantly affected by hydrocarbons. The one minor exception being 100 mg/kg TPH quantified as motor oil detected in the 5.5-foot-depth sample from boring B-1. The 12.5-foot-depth sample from boring B-1 did not contain detectable concentrations of petroleum hydrocarbons. Soil analytical results of samples from boring B-5 and visual observations made during the drilling of boring B-9 indicated that soil in the vicinity of these borings had been affected by hydrocarbons. Based on the results of the subsurface investigation, soil excavation was initiated.

On the basis of the soil analytical results, hydrocarbon-affected soil was confined within the concrete walls of the vault. As discussed below, chemical analysis of verification soil samples indicated that the oily liquid was not released into underlying soil through the concrete bottom of the vault.

VAULT ABANDONMENT ACTIVITIES

Initial Uncovering of Vault

On July 6, 1997, Allwaste of Benicia, California, under supervision of PES, began removal of overburden using a track-mounted excavator to expose the top of the vault. Upon exposing the vault, its dimensions were measured to be 13 feet wide by 36 feet long and 8 feet deep, having a potential capacity of approximately 28,000 gallons. Plate 4 presents a plan view displaying the dimensions and orientation of the vault. The bottom, sidewalls and top of the vault were constructed of 8-inch-thick reinforced concrete. Concrete reinforcement consisted of 1/4-inch-thick to 1-inch-thick steel rebar. The vault was found to contain the newly installed storm sewer pipe in addition to soil and debris. Inspections of the vault revealed that portions of the vault top had collapsed into the vault, potentially due to historical construction or demolition activities. Material consisting of soil and debris had accumulated in the vault through the collapsed sections of the vault top. El Camino Center Partners and PES determined that it was appropriate to close the vault through in-place abandonment.

Vault Abandonment Permitting

Vault abandonment activities were performed between July 7 and July 14, 1997, under Permit Number H002-98, issued by PAFD, Bureau of Fire Prevention. A copy of the Uniform Underground Storage Tank System Closure Permit, issued by PAFD, is provided in Appendix D.

Vault Opening and Removal of Contents

In order to expose the interior of the vault, the perimeter of the top was broken away from the vault sidewalls using a hydraulic hammer attached to a track-mounted excavator. The remainder of the concrete top was then removed from the vault. The storm sewer pipe and associated backfill material were removed from the area directly over the vault. To the greatest degree that was practical, debris generated during removal of the vault top was prevented from falling into the vault and coming in contact with residual liquids contained in the vault which were subsequently removed.

Soil and debris which fell into the vault during removal of the vault top or had fallen through collapsed portions prior to abandonment were removed from the vault using a track-mounted excavator and hand tools. Approximately 282 tons of soil and concrete debris were removed from the vault. Soil and debris removed from the vault were placed in 21 roll-off bins and stored onsite pending offsite disposal. Prior to placement of soil and debris in the bins, the bins were double-lined with plastic tarping and an absorbent was placed in the bottom of the bin to soak up potential free liquids. The bins were then covered and labeled.

Following removal of soil and debris from the vault interior, pockets of residual liquids which remained in the vault were pumped out by Allwaste using a vacuum truck. The vault sidewalls and bottom were then cleaned using a citrus-based degreasing agent and high pressure steam rinse. Rinsate which accumulated in the vault was pumped out using a vacuum truck. Approximately 2,500 gallons of residual product and rinsate were pumped out of the vault and subsequently transported by Allwaste for disposal at Americlean, Inc. in Silver Springs, Nevada (Appendix B).

Vault Inspection

On July 14, 1997, the bottom and sidewalls of the vault were inspected by Mr. Kyle Flory of PES and Ms. Angela Sullivan of the PAFD. No cracks in the walls or bottom of the vault or other visual evidence indicating that the integrity of the vault was compromised were observed during the inspection. During the July 14, 1997 vault inspection, PES recommended perforation of the vault floor by coring eight 4-inch-diameter holes through the bottom of the vault. Following coring of the concrete, confirmation soil samples would be collected from beneath four of the concrete cores. Each soil sample would be analyzed for full scan of TPH and VOCs using U.S.EPA Test Methods 8015 Modified and 8260, respectively. Upon receipt of the laboratory analytical results, the analytical results would be submitted by PES to Ms. Sullivan of the PAFD. Ms. Sullivan verbally concurred with PES' recommendation and indicated that backfilling of the concrete core holes with sand and subsequent backfilling of the vault could proceed pending the results of the chemical analyses performed on the confirmation soil samples.

Vault Bottom Coring and Verification Soil Sampling

On July 15, 1997, eight 4-inch-diameter holes were cored into the vault bottom. PES collected verification soil samples from four of the core locations using a slide hammer and stainless-steel sample tubes. Following sample collection, each sample tube was covered with teflon sheets and plastic end caps and sealed with silicon tape. The sample tubes were then labeled and placed in a chilled, thermally-insulated, cooler pending transport to the project laboratory. Sample locations are presented on Plate 4.

The verification soil samples were submitted to Superior on July 15, 1997, accompanied by chain-of-custody documentation. The samples were analyzed for full scan of TPH and VOCs by U.S.EPA Test Method 8015 Modified and 8260, respectively. The four verification soil samples did not contain TPH or VOCs above the respective laboratory reporting limits. The results of the soil sample analyses were submitted by PES to Ms. Sullivan of PAFD. Ms. Sullivan provided verbal authorization to abandon the vault in-place and proceed with backfilling. Laboratory report sheets and the chain-of-custody form are included in Appendix A.

Vault Backfilling

On July 17, 1997, El Camino Center Partners' construction contractor initiated backfilling of the former vault. The eight core holes were filled with sand to allow fluids entering the vault to drain into the subsurface. The remainder of the vault was backfilled with clean native material obtained onsite during site improvement activities. During backfilling activities, the new storm sewer piping which was removed during vault abandonment activities was replaced. Following the backfilling of the vault and replacement of the storm sewer piping, the surface was covered with asphaltic concrete pavement.

SOLID WASTE MANAGEMENT

Samples were collected from material in the bins to characterize soil and debris removed from the vault for waste disposal. Samples were collected in 6-inch long stainless steel sample tubes. The sample tubes were covered with teflon sheeting and plastic end caps and sealed with silicon tape. Bin samples were labeled and placed in a chilled, thermally-insulated, cooler pending transport to Superior and were accompanied by chain-of-custody documentation. The bin samples were composited and analyzed at the laboratory. Composited bin samples were analyzed for full scan of TPH using U.S.EPA Test Method 8015 Modified and VOCs using U.S.EPA Test Method 8260. In addition, the samples were also analyzed for total lead by U.S.EPA Test Method 7010. Copies of the laboratory reports and chain-of-custody forms are included in Appendix A.

The soil and debris were classified as a non-hazardous waste based on waste characterization sample results. The waste was transported for disposal to B and J Landfill at 6426 Hay Road in Vacaville, California. Bin transport was performed by Allwaste. Copies of the Non-Hazardous Waste Manifests and Weighmaster Certificates are provided in Appendix B.

Elsewhere on site, railroad ties were encountered during site improvement excavation activities conducted by El Camino Center Partners' building contractor. The railroad ties were placed by Allwaste into one roll-off bin for subsequent transportation and offsite disposal. Approximately 4.2 tons of railroad ties were transported by Allwaste to B and J Landfill for disposal as a non-hazardous waste. A copy of the Non-Hazardous Waste Manifest is presented in Appendix B.

RECOMMENDATION FOR CASE CLOSURE

PES recommends that case closure be granted for the in-place abandonment of the vault. The dimensions of the vault were 13 feet wide by 36 feet long and 8 feet deep, with a potential capacity of approximately 28,000 gallons. The bottom, sidewalls and top of the vault were constructed of 8-inch-thick reinforced concrete. No cracks in the vault bottom or walls or other visual evidence indicating that the vault integrity had been compromised were noted during inspection of the vault. Soil investigation results indicated that the surrounding soils were not affected by petroleum hydrocarbons, with the exception of one isolated sample with 100 mg/kg TPH quantified as motor oil. Chemical analysis of four soil samples collected beneath the vault bottom indicated no release of the vault contents into the underlying soil had occurred.

In accordance with PAFD's request, potential future use of the vault has been eliminated through perforation of the vault bottom. Prior to backfilling he vault, the eight core holes were filled with sand to allow drainage of surface water potentially seeping into the vault. The vault has been backfilled with clean native material and capped with asphalt concrete pavement. The new storm sewer piping was replaced during backfilling activities. On behalf of El Camino Center Partners, PES requests that PAFD grant case closure for the vault and provide written documentation to that effect.

We trust this information meets your needs at this time. If you have any questions, please call Kyle Flory at (415) 899-1600.

Very truly yours,

PES ENVIRONMENTAL, INC.

Chris Rossetto for
Donald J. Seymour
Project Engineer

Kyle Flory, R.G.
Associate Geologist



Attachments: Table 1 - Liquid Sample Analytical Results
Table 2 - Summary of Subsurface Analytical Results
Plate 1 - Site Location Map
Plate 2 - Vicinity Map
Plate 3 - Site Plan and Soil Boring Location Map
Plate 4 - Vault Location Map
Appendix A - Laboratory Reports and Chain of Custody Forms
Appendix B - Hazardous and Non-Hazardous Waste Manifests
Appendix C - Boring Logs
Appendix D - Uniform Underground Storage Tank System Closure Permit

cc: Mr. Greg Osborn, El Camino Center Partners
Mr. Joe Gorman, El Camino Center Partners

TABLES

Table 1.
Liquid Sample Analytical Results
El Camino Center
3200 Park Boulevard
Palo Alto, California

Sample dentificatio	Sample Location	Collection Date	TPH*	Volatile Organic Compounds*					
			Motor Oil (mg/kg)	p-Isopropyltoluene (mg/kg)	n-Butylbenzene (mg/kg)	1,2,4,-Trimethylbenzene (mg/kg)	Naphthalene (mg/kg)	1,3,5-Trimethylbenzene (mg/kg)	Xylenes (mg/kg)
WSJ-6-16-1	Concrete vault	6/16/97	440,000	31,000	4,000	170,000	400,000	13,000	12,000

Explanation:
mg/kg - milligrams per kilogram
µg/kg - micrograms per kilogram
TPH - Total Petroleum Hydrocarbons
TPH analysis conducted using U.S. Environmental Protection Agency (U.S.EPA) Test Method 8015 Modified.
Volatile Organic Compound analysis conducted using U.S.EPA Test Method 8260.
* All other TPH and Volatile Organic Compounds were not detected above their respective laboratory reporting limits.

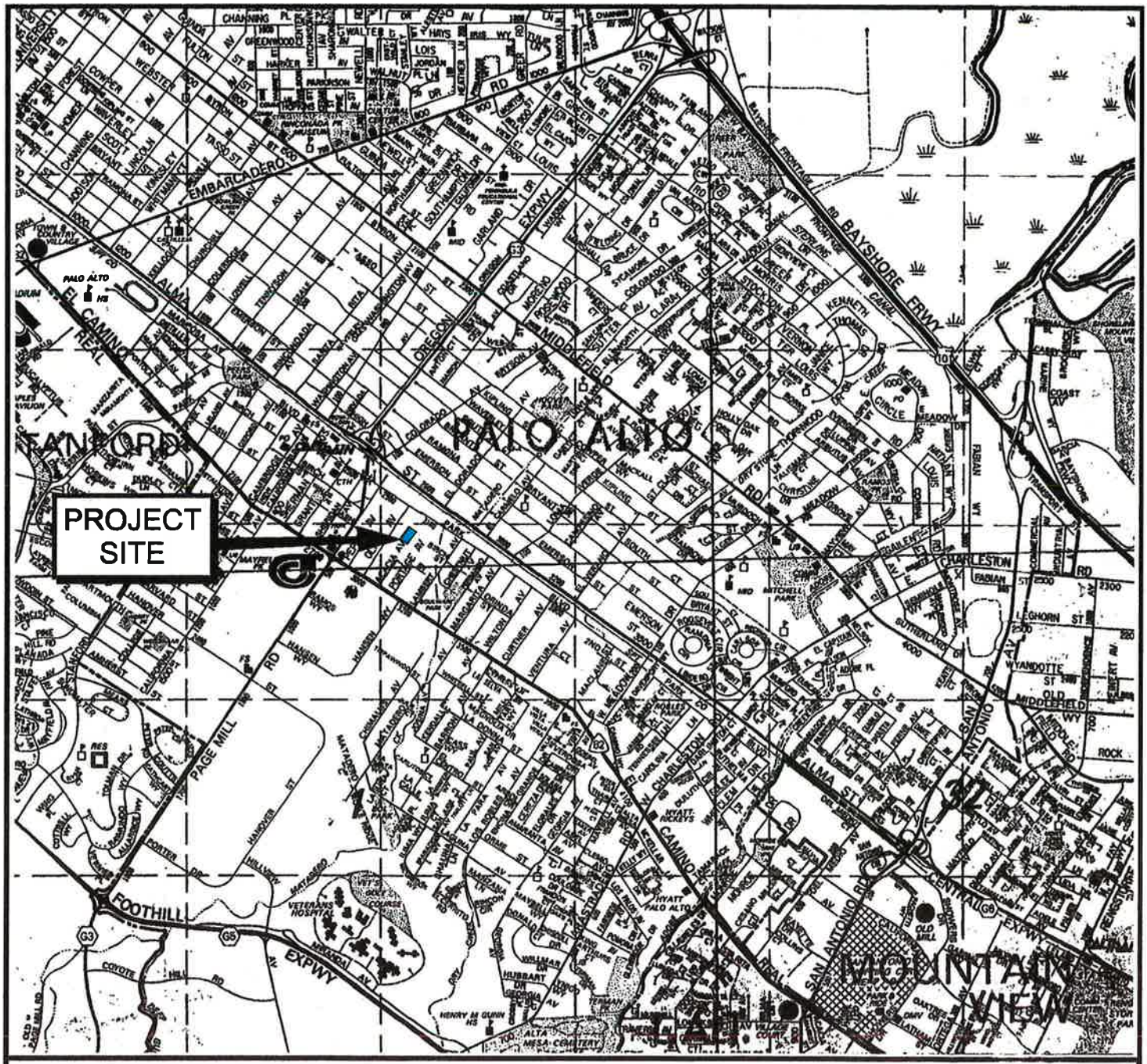
Table 2.
Summary of Subsurface Analytical Results
El Camino Center
3200 Park Boulevard
Palo Alto, California

Sample Identification	Soil Boring	Sample Collection Date	Sample Depth (feet-bgs)	Total Petroleum Hydrocarbons			8260 Compounds			
				gasoline (mg/kg)	diesel (mg/kg)	motor oil (mg/kg)	p-Isopropyltoluene (µg/kg)	n-Butylbenzene (µg/kg)	1,2,4,-Trimethylbenzene (µg/kg)	Naphthalene (µg/kg)
B1-B	B-1	6/24/97	5.5	<10	<1	**100**	<15	<15	<15	<30
B1-E	B-1	6/24/97	12.5	<10	<1	<20	<15	<15	<15	<30
B2-B	B-2	6/24/97	5.5	<10	<1	<20	<15	<15	<15	<30
B2-E	B-2	6/24/97	12.5	<10	<1	<20	<15	<15	<15	<30
B3-B	B-3	6/24/97	5.5	<10	<1	<20	<15	<15	<15	<30
B3-E	B-3	6/24/97	12.5	<10	<1	<20	<15	<15	<15	<30
B4-B	B-4	6/24/97	5.5	<10	<1	<20	<15	<15	<15	<30
B4-E	B-4	6/24/97	12.5	<10	<1	<20	<15	<15	<15	<30
B5-D	B-5	6/24/97	9.5	<50	**200**	**280**	**24**	**27**	**120**	**200**
B7-B	B-7	6/24/97	5.5	<10	<1	<20	<15	<15	<15	<30
B7-D	B-7	6/24/97	9.5	<10	<1	<20	<15	<15	<15	<30

Explanation:

feet-bgs - feet below ground surface
mg - milligrams per kilogram
µg - micrograms per kilogram
<10 - not detected above the stated laboratory reporting limit
TPH - Total Petroleum Hydrocarbons
TPH analysis conducted using U.S. Environmental Protection Agency (U.S. EPA) Test Method 8015 Modified.
Volatile Organic Compound analysis conducted using U.S. EPA Test Method 8260.
* All other TPH and Volatile Organic Compounds not detected above their respective laboratory reporting limits.

PLATES



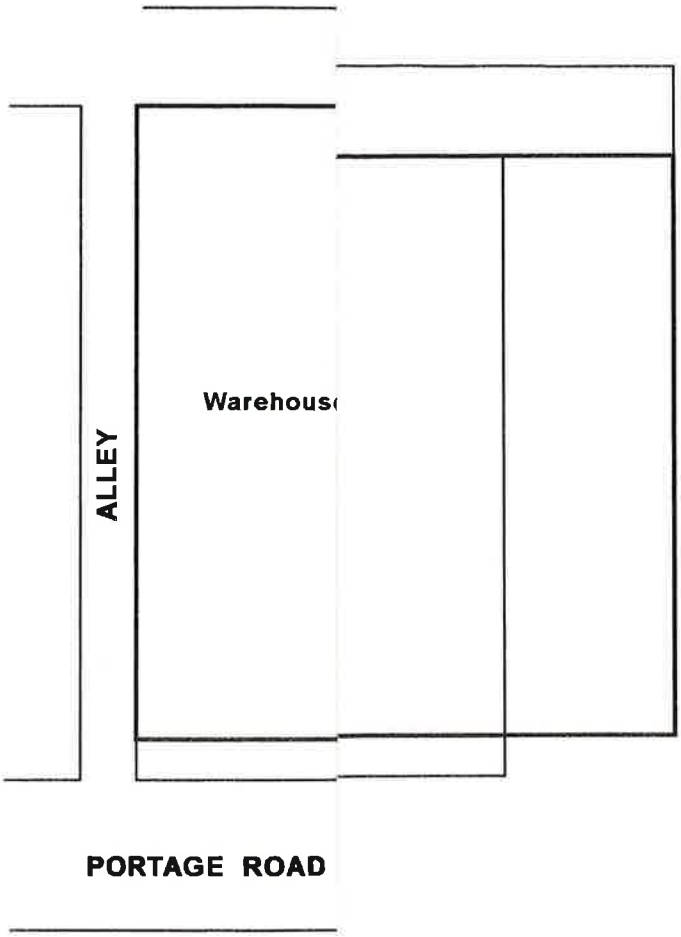
Ref: "The Thomas Guide- Golden Gate Street Guide and Directory" 1993 Edition.

PES Environmental, Inc.
Engineering & Environmental Services

Site Location Map
El Camino Center
3200 Park Boulevard
Palo Alto, California

PLATE
1

500.0601.001	500061V1.CDR	KSF	8/97
JOB NUMBER	DRAWING NUMBER	REVIEWED BY	DATE





0 50 100

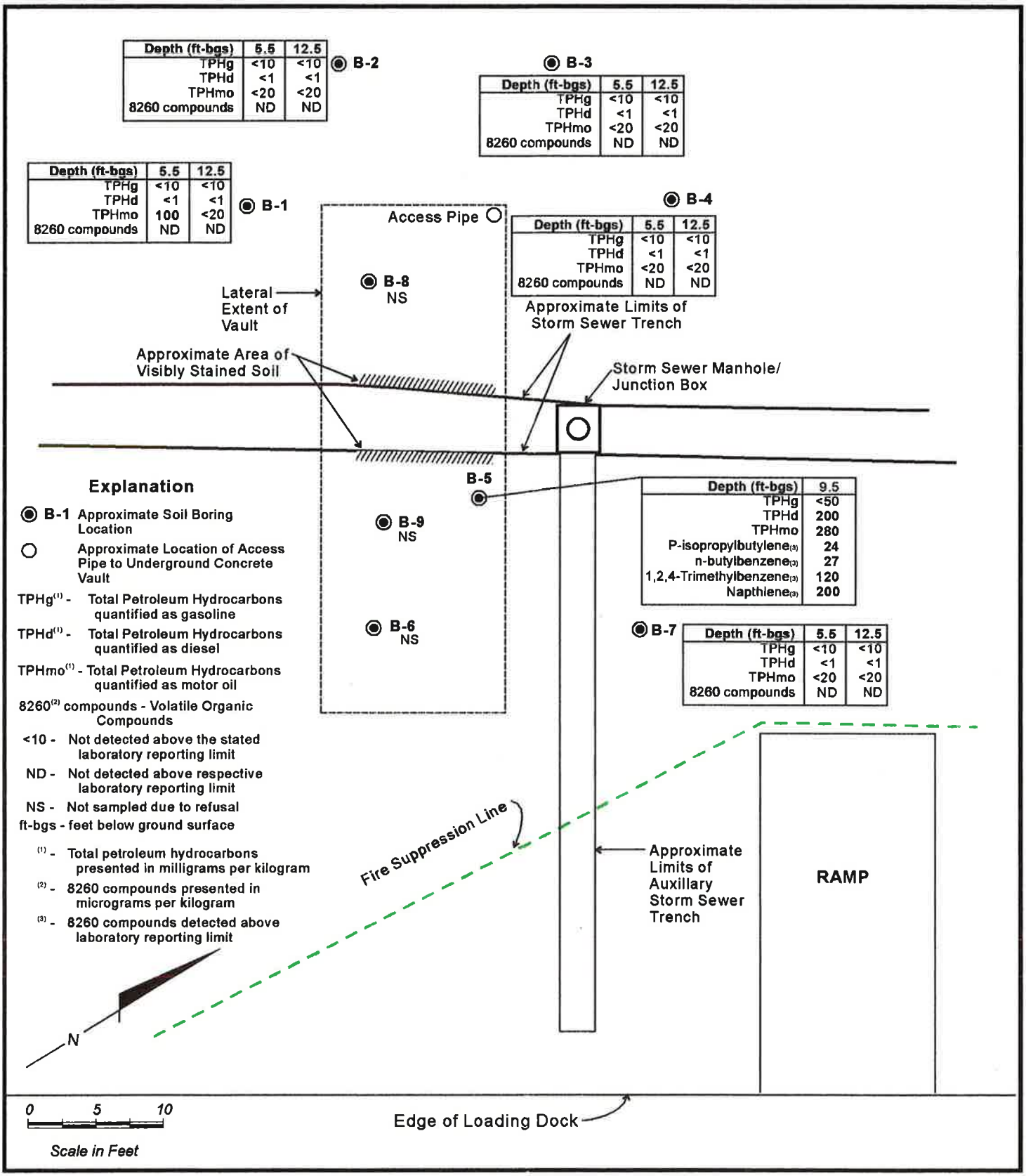
Approximate Scale in Feet

PES Environmental, Inc.
Engineering & Environmental Services

Vicinity Map
El Camino Center
3200 Park Boulevard
Palo Alto, California

PLATE
2

500.0601.001	50006_S1.CDR	KSP	8/97
JOB NUMBER	DRAWING NUMBER	REVIEWED BY	DATE

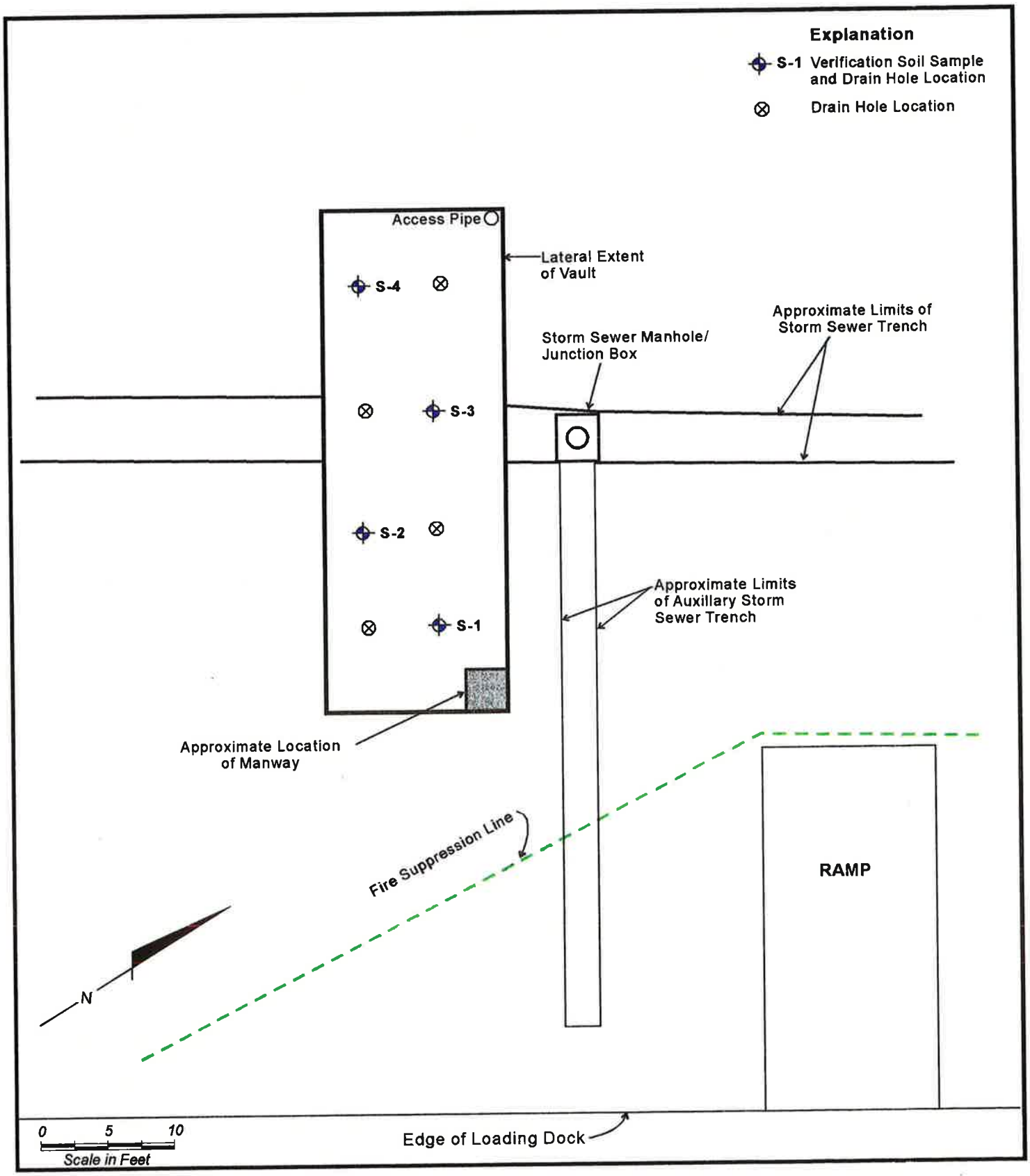


PES Environmental, Inc.
Engineering & Environmental Services

Site Plan and Soil Boring Location Map
El Camino Center
3200 Park Boulevard
Palo Alto, California

PLATE 3

500.0601.001	50006_S2.CDR	KSF	8/97
JOB NUMBER	DRAWING NUMBER	REVIEWED BY	DATE



PES Environmental, Inc.
Engineering & Environmental Services

Subsurface Concrete Vault Map
El Camino Center
3200 Park Boulevard
Palo Alto, California

PLATE
4

500.0601.001	50006_S3.CDR	KSF	8/97
JOB NUMBER	DRAWING NUMBER	REVIEWED BY	DATE

APPENDIX D

UNIFORM UNDERGROUND STORAGE TANK SYSTEM CLOSURE PERMIT

City of Palo Alto
FIRE PREVENTION BUREAU (415) 329-2184
250 HAMILTON AVENUE PALO ALTO, CALIFORNIA 94301

RECEIVED JUL 2 1 1997

H002-98

ID NUMBER

UNIFORM UNDERGROUND STORAGE TANK SYSTEM CLOSURE PERMIT APPLICATION/CLOSURE PLAN

For Use By All Jurisdictions, Cities and County, Within the Limits of the County of Santa Clara

1. Facility Name (Tank Site): EL CAMINO CENTER Bldg. No.: N/A
   Address: 3200 PARK BLVD. City: PALO ALTO Zip: 94306
   EPA ID No.: CAC009305584 Contact Person: JOE GORMAN Phone No.: (415) 493-5310
2. Tank Owner's Name: EL CAMINO CENTER PARTNERS
   Address: 3201 ASH ST. City: PALO ALTO Zip: 94306
3. Tank Operator's Name: NOT KNOWN
   Address: City: Zip:
4. Consultant (If Applicable): PES ENVIRONMENTAL, INC.
   Address: 1682 NOVATO BLVD City: NOVATO, CA Zip: 94947
   Contact Person: KYLE FLORY Phone No.: (415) 899-1600
5. Tank Closure Contractor: ALLWASTE
   Address: 395 WEST CHANNEL RD City: BENICIA, CA Zip: 94510
   Contact Person: FRED BOURRET Phone No.: (800) 800-7472

Hazardous Substance Removal Certificate: ____ on file; ____ attached
Worker's Compensation Declaration: ____ on file; ____ attached; ____ not applicable
Business License (if required): ____ on file; ____ attached; ____ not applicable

6. Firm that will take soil/water samples: PES ENVIRONMENTAL, INC Phone No.: (415) 899-1600
7. State-certified laboratory that will analyze samples: SUPERIOR ANALYTICAL Phone No.: (510) 313-0850

Shaded areas to be completed by local agency

Laboratory analyses shall test for:

	TPH G	TPH D	BTX&E	TE Lead	CL Hydro	O&G	EPA 8270	pH	Other (Specify)
Tank 1	✓	✓	✓		✓				TPH-Motor Oil
Tank 2									
Tank 3									
Tank 4									
Tank 5									
Tank 6									

Additional analyses may be required by inspector in field.

UGT Closure/Permit Ap./Closure Plan - p. 2 of 2 Tank Site Address (from page 1): 3200 PARK BLVD, PALO ALTO

8. Name of Licensed Transporter of Tanks: NOT APPLICABLE

EPA ID No.: _____ Phone No.: _____

9. Destination of Tanks and Piping: NOT APPLICABLE

10. Tank System:

	Size (gallons)	Substance(s) Previously Contained
CONCRETE VAULT Tank 1	~~35~~,000	NOT KNOWN
Tank 2		
Tank 3		
Tank 4		
Tank 5		
Tank 6		

If the owner/operator does not have a current Hazardous Materials Business Plan/HMMP which includes these tanks on file with the local agency, provide an 8-1/2" x 11" plot plan of the tanks to be closed. Indicate the nearest cross street to the facility, buildings immediately adjacent to the tanks, location(s) of tanks to be closed, and location of nearby utilities.

This Underground Tank Closure Permit expires 6 months from the date of closure plan approval. If tanks have not been closed within 6 months, a new closure permit application and appropriate fees may be required.

Facility closure inspections must be scheduled at least 48 hours in advance. Call the appropriate local agency to make necessary arrangements.

I certify that I have read the tank closure guidelines and declare that the above information is correct to the best of my knowledge. The owner of the tank(s) described above is aware of the pending closure. I agree to comply with all applicable city and county ordinances and state laws relating to hazardous materials/wastes, and hereby authorize representatives of local agencies to enter upon the within mentioned property for inspection purposes.

KYLE S. FLORY	K. S. Flory	7-9-97
Applicant/Agent's Name (Print)	Applicant/Agent's Signature	Date

THIS APPROVAL CONSTITUTES A PERMIT FOR REMOVAL OF THE ABOVE LISTED TANKS.

Agency: Palo Alto Fire Dept. Date: 7/14/97

Print Name: Angela Sullivan Sign Name: Angela Sullivan

THIS CERTIFIES THAT ALL TANK SYSTEM CLOSURE ACTIVITIES ARE COMPLETE.*

Agency: Palo Alto Fire Dept Date: 7/17/97

Print Name: ANGELA SULLIVAN Sign Name: Angela Sullivan

* If contamination of any detectable concentration is found, contact the Santa Clara Valley Water District and/or Regional Water Quality Control Board for cleanup and/or remediation requirements.

Rev. 9/30/94

E.4 Excerpts from Mercer Processing Remediation

PES Environmental, Inc.
Engineering & Environmental Services

Report Prepared For:

California Regional Water Quality Control Board
San Francisco Bay Region
1515 Clay Street, Suite 1400
Oakland, California 94612

Attention: Dr. Derek Whitworth, P.E.

REMEDIAL ACTION COMPLETION REPORT
FORMER MERCER PROCESSING, INC. FACILITY
230 PORTAGE AVENUE
PALO ALTO, CALIFORNIA

MARCH 12, 2002

By:

Honor Hutton
Staff Engineer

Kyle S. Flory, R.G. No. 6472
Associate Geologist

Robert S. Creps, P.E. No. 45153
Principal Engineer





500.009.03.005

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- 2.3 Previous Investigations 2
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1.0 INTRODUCTION

PES Environmental, Inc. (PES) has prepared this report on behalf of El Camino Center to describe soil remediation at the former Mercer Processing, Inc. (Mercer) facility at El Camino Center, 230 Portage Avenue, Palo Alto, California. The site location is shown on Plate 1. The remediation was performed in accordance with PES' document *Final Remedial Action Plan, Former Mercer Processing, Inc. Facility, 230 Portage Avenue, Palo Alto, California* dated October 18, 2001 (PES, 2001). The Remedial Action Plan (RAP) was approved by the Regional Water Quality Control Board – San Francisco Bay Region (RWQCB) in a letter dated October 18, 2001. A copy of the RWQCB approval letter is included in Appendix A.

Remedial planning conducted by El Camino Center included: (1) preparation of the RWQCB-approved RAP; and (2) preparation and implementation of a Community Relations Plan. The activities described in the RAP were consistent with the National Oil and Hazardous Substances Pollution Contingency Plan[1], and the California Health and Safety Code.

The Community Relations Plan included provisions for notifying the public of the availability of the RAP for review and comment, making the RAP available for public review and comment for a period of 30 days, and publishing a brief analysis of the site and the proposed remedial action. Following completion of the 30-day public comment period and minor revisions to the RAP, the RWQCB approved the RAP for implementation. The Community Relations Plan also included provisions for holding a public meeting to discuss the history of the site and proposed remedial action, addressing comments received from concerned public, and publishing the selected final remedial action for the site following expiration of the public comment period. A copy of the Community Relations Plan, public notice, fact sheet, fact sheet distribution list and distribution map, and public comments and responses were appended to the Final RAP.

This report summarizes the remedial actions performed in accordance with the Final RAP, and presents the results of verification soil sampling and waste management activities. This report also provides a brief overview of the results of previous investigations at the former Mercer facility. A more detailed overview of the previous investigations is presented in the RAP and previous investigation reports (PES, 2000; IT, 2000a and 2000b).

2.0 SITE BACKGROUND

2.1 Site Location and Description

The former Mercer facility is located at 230 Portage Avenue in Palo Alto, California within El Camino Center (Plate 1). The subject site is a vacant tenant space located within a larger commercial and light industrial building near the north end of Portage Avenue. It is located in

[1] Title 40 Code of Federal Regulations, Part 300.

a primarily commercial and light industrial area with some residences present. The property is zoned for residential use but is being used for commercial purposes pursuant to a variance that is scheduled to expire in the year 2019, if it is not terminated earlier. The property is improved with one structure. The entire property, with the exception of landscaped areas and the onsite structure, is covered with asphalt-concrete parking lots and concrete sidewalks. The floor of the former Mercer facility is elevated above the surrounding ground surface by approximately four feet. A site plan is included as Plate 2.

2.2 Former Site Use

The former Mercer tenant space is located in the eastern portion of the El Camino Center building (Plate 2). The tenant space is currently vacant. The major tenant at El Camino Center is Frye's Electronics (an electronics and appliance retailer), located west of the subject site. Two other tenants occupy segments of the building to the east for office purposes.

El Camino Center personnel approximated that the parcel has been in use since the 1940s. Prior to World War II, the parcel, including the tenant space formerly occupied by Mercer, was purportedly used as a fruit cannery (Osborn, 2001). Between World War II and the early 1970s when El Camino Center purchased the parcel, the area, including the subject site, was first used by Safeway, as a food distribution warehouse and subsequently by Maximart as a strip mall consisting of numerous retail shops (Osborn, 2001). Maximart left after El Camino Center purchased the property, and the former Mercer tenant space was reportedly used as a warehouse for the storage of dry goods until Mercer's occupancy commenced in 1989.

According to information provided to PES during an inspection of the Mercer tenant space in December 1999, Mercer occupied this location between 1989 and 1999. Plate 3 shows the layout of the former Mercer facility.

At this location, Mercer operated freeze-drying and food packing equipment. Solvents, including trichloroethylene (TCE) and Genesolv 2000, were used in the refrigeration equipment for the freeze-drying process. Documentation from Santa Clara County Hazardous Materials Compliance Division indicated that Mercer stored approximately 650 gallons of Genesolv 2000 on the site.

2.3 Previous Investigations

Several subsurface remedial investigations have been performed by PES and IT Corporation (IT) at the subject site to assess the lateral and vertical extent of contaminants in soil resulting from the former Mercer operations. The investigations are described in the RAP.

Soil samples were collected to a maximum depth of 24 feet bgs. The locations of previously sampled soil borings are shown on Plate 3. Soil samples were analyzed for volatile organic compounds (VOCs). Detected VOCs included: (1) TCE; (2) 1,1-dichloroethylene; (3) cis-1,

2-dichloroethylene; (4) trans-1,2-dichloroethylene; (5) acetone; (6) methylethyl ketone; and (7) tert-butanol.

TCE was detected at concentrations ranging from 3 micrograms per kilogram (μg/kg) to 6,800 μg/kg (IT, 2000b). In general, TCE concentrations in soil decreased laterally with increased distance away from the former location of the refrigeration equipment at the former Mercer facility. Concentrations in soil also generally decreased with depth. Tabulated soil sample analytical results from the investigations are included as Appendix B.

TCE was identified as the primary chemical of concern at the Site because: (1) it was the most prevalent VOC detected in soil; (2) it was present at higher concentrations than other VOCs detected in site soil; (3) it possesses the lowest regulatory action level in groundwater of the detected contaminants; and (4) it represented the greatest potential human health risk to site users.

2.4 Remedial Objectives

On the basis of results of previous investigations (PES, 2000; IT, 2000a and 2000b), PES prepared the RAP to: (1) select a risk-based TCE target soil cleanup concentration of 0.2 milligrams per kilogram (mg/kg); and (2) describe the procedures to implement the remedial activities. The RWQCB approved TCE target soil cleanup concentration in the final RAP is 0.2 mg/kg. The excavation area proposed in the RAP to achieve the cleanup goal was expected to range from approximately 160 square feet (ft^2) to 800 ft^2 in the vicinity of the former refrigeration unit in the former Mercer facility (Plate 3). The proposed maximum depth of the excavation was estimated to be 20 feet below grade based on analytical results from soil samples collected from previously drilled soil borings B and D (Plate 3 and Appendix B). A site plan showing the anticipated extent of the excavation is included as Plate 4.

3.0 REMEDIATION ACTIVITIES

Soil excavation was conducted at the former Mercer facility to remove soil containing concentrations of TCE exceeding the target soil cleanup concentration of 0.2 mg/kg.

Remedial activities at the site consisted of: (1) acquiring necessary permits; (2) preparing health and safety plans; (3) sawcutting and removing concrete from areas above the impacted soil; (4) excavating soil with TCE concentrations exceeding the target cleanup concentration; (5) collecting and analyzing verification soil samples from the excavation to verify the target cleanup concentration was met; (6) collecting and analyzing waste characterization samples of the concrete and excavated soil for offsite recycling and disposal; and (7) backfilling and resurfacing the excavation. These activities are described in the following sections.

3.1 Preliminary Activities

El Camino Center contracted with Cornerstone Environmental Contractors, Inc. (Cornerstone) of Lafayette, California to perform soil excavation and backfilling activities. The work was conducted between January 2 and January 19, 2002. PES was present to observe and document the work. Cornerstone and PES each prepared site-specific health and safety plans prior to the remediation in accordance with Occupational Safety and Health Administration regulations[2].

An underground utility service locator was hired to clear the proposed excavation of subsurface utilities. In addition, Underground Service Alert was contacted to schedule visits by public and private utility companies.

Cornerstone acquired permits from the City of Palo Alto prior to conducting remediation at the site. As part of the permit acquisition process, a structural analysis prepared by Hohbach-Lewin, Inc. of Palo Alto, California, was submitted to the City of Palo Alto. A copy of the permit is provided in Appendix C.

3.2 Site Preparation

Before conducting remediation activities, the walls and ceiling in the rear (northern) portion of the former Mercer facility were lined with plastic sheeting to reduce dust settlement on the surfaces. Cornerstone constructed a temporary ramp consisting of baserock to create an entrance from the rear parking lot to the elevated loading dock.

The concrete slab above the excavation was sawcut and removed by a Cornerstone subcontractor on January 2 and 3, 2002. The concrete was temporarily stockpiled on plastic sheeting in a bermed area within secured fencing in the rear parking lot.

3.3 Soil Excavation

The impacted soil above the target cleanup concentration was excavated between January 8 and January 15, 2002. A test pit was excavated adjacent to the wall located in the center of the excavation in order to verify the presence of a footing beneath the wall prior to excavation activities. A concrete foundation was present beneath the wall. The foundation is approximately 1-foot wide and extends approximately 4.5-feet below grade.

Approximately 285 cubic yards (cy) of TCE-impacted soil was removed from the facility. The excavation was conducted using two track-mounted mini-excavators, a rubber-tired Bobcat, and hand-held equipment. Excavated soil was placed on and covered with plastic sheeting inside a bermed area and secured fencing in the rear parking lot north of the facility.

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[2] Title 29 Code of Federal Regulations, 1910.120.

The TCE-impacted soil was excavated using conventional and "slot trench" techniques. Conventional excavation was first conducted to approximately 4 feet below grade across the entire excavation area. Slot trenching was then conducted to protect the integrity of the building and for worker safety when removing soil from deeper portions of the excavation (i.e., greater than 4 feet below grade). Approximately 5-foot wide slot trenches oriented in the northwest-southeast direction (parallel to the long axis of the tenant space) were excavated to remove TCE-impacted soil at depths greater than 4 feet below grade.

During excavation, several other concrete footings and inactive utilities were uncovered and removed. An active fire drain located along the wall was removed from the excavation and set aside for re-assembly during backfilling activities. A concrete footing located approximately 1 foot northwest of the wall foundation did not require removal. Soil located within the annular space between the two foundations was subsequently removed using hand excavation equipment.

In order to ensure the integrity of the wall separating the interior and exterior of the tenant space, excavation activities were performed concurrently on both sides of the wall. To reduce potential settlement during excavation, soil was excavated during benching to approximately 0.5 foot above the bottom of the foundations.

Verification of the excavation depth was performed during and after completion of each slot trench. Verification soil samples were collected from the bottom of the excavation to verify the target remedial concentration was met. Verification soil sampling was implemented by collecting samples at the bottom and the sidewalls of the slot trenches and the bottom and sidewalls of the "bench" area. The soil samples collected at the sidewalls of the slots were collected at depth intervals corresponding to areas exhibiting field indications of potential contamination and at depths where previous samples indicated the highest levels of contaminants were present. Excavation details are presented on Plate 5.

The excavated area inside of the former Mercer facility had surficial dimensions of approximately 33 feet by 50 feet (1,650 ft^2). The depth of the soil excavation ranged from approximately 4 feet below grade (bench area) to approximately 20.5 feet below grade (Plate 5). Excavation contours are depicted on Plate 5. Excavation cross-sections are shown on Plate 6. The locations of the cross-sections are shown on Plate 5.

The soil encountered during the excavation consisted of a gravelly clay fill to approximately 1.5 feet below grade. The gravelly clay fill was underlain by a sandy clay fill to approximately 6 feet below grade. Beneath the fill, a highly plastic clay was present to 20.5 feet below grade, the maximum depth of the excavation. The clay was dark gray in color to approximately 14 feet below grade where the color changed to a yellowish orange. No groundwater was encountered.

The final limits of the excavation and the verification sampling locations are presented on Plate 5. Photographs of the soil remediation activities are presented on Plates 6 through 8.

3.4 Verification Soil Sampling Methodology and Analytical Program

Verification soil samples were collected from the excavation for chemical analyses during remedial activities. The samples were collected to verify implementation of the target cleanup concentration. If the target cleanup concentration was exceeded, excavation of TCE-impacted soil was continued until the TCE concentration in soil samples was below the target concentration. The verification soil sample locations are shown on Plate 5. A total of 45 verification soil samples were collected from the bottom and sidewalls of excavated slots and benches. These samples were collected on January 9, 10 and 14, 2002.

Verification soil samples were collected directly from the bucket of the mini-excavator or exposed soil in the excavation by driving pre-cleaned 3-inch long stainless-steel tubes into the soil. After collection, the ends of the tube were sealed with Teflon™ sheeting and covered with plastic end caps. Sample tubes were labeled with project name and number, sample identification, sampling time and date.

Soil samples were transferred under chain-of-custody protocol to an onsite mobile laboratory operated by STL On-Site Technologies of Westfield, Massachusetts, a California Department of Health Services-certified laboratory. All samples were analyzed for VOCs using U.S. EPA Test Method 8260B. The laboratory analytical reports and chain of custody forms are presented in Appendix D.

3.5 Verification Soil Sample Results

Verification sample results are presented in Table 1. Results of the final verification samples are also presented on Plate 5.

As shown on Plate 5, the target cleanup concentration of 0.2 mg/kg TCE was, as anticipated, reached in the final verification samples collected from the bottom and sidewalls of the slot trenches and the bottom and the sidewalls of the bench area.

3.6 Waste Characterization Results and Waste Management

Soil excavated from the site was stockpiled in the parking lot at the rear of the facility. Excavated soil was characterized by collecting one four-point composite soil sample for VOC analyses per approximately 100 cy. The samples were collected directly from the soil stockpiles. These samples were capped, labeled, and handled under the same protocol as the verification soil samples collected from the excavation.

A total of four (4) four-point composite characterization samples were analyzed and TCE was not detected above the reporting limit of 0.025 mg/kg. The results of the chemical analyses conducted for waste characterization are presented in Appendix D.

A composite concrete sample was also collected for waste characterization purposes. Concrete was chipped from various locations within the stockpile using a clean chisel and hammer and placed in a sealed, re-sealable plastic bag. The sample was labeled with project name and number, sample identification, sampling time, and date.

The concrete sample was transported by courier under chain-of-custody protocol to STL San Francisco of Pleasanton, California, a state-certified laboratory. The composite sample was analyzed for VOCs using U.S. EPA Test Method 8260B. TCE was not detected above the reporting limit of .021 mg/kg. Total xylenes were detected at .022 mg/kg. The laboratory analytical report and chain of custody form are presented in Appendix D.

On February 6 and 7, 2002, the soil was transported to the Altamont Landfill in Livermore, California for disposal as non-hazardous solid waste. The soil was transported by Jervicon Inc. of Santa Maria, California. Approximately, 542 tons of soil was transported to and disposed at the Altamont Landfill. Soil transportation and disposal documentation is included in Appendix E.

Concrete removed from the area of excavation was transported to Harbor Sand & Gravel in Redwood City, California for recycling. On February 6 and 7, 2002 the concrete was transported by Greg's Trucking Service, Inc. of San Mateo, California. Approximately 20 tons of concrete were recycled. Concrete recycling documentation is presented in Appendix E.

3.7 Excavation Backfilling and Fire Drain Repair

The slot trench excavations were backfilled to a depth of approximately 4 feet below grade the same day they were excavated. A controlled density flowable fill was used, which consisted of a two-sack cement-sand slurry mixture. The slurry was used to rapidly stabilize the slot trenches in order to protect the integrity of the building and provide worker protection. The slurry was placed in slot trenches after final verification samples were collected and analyzed from each slot trench. A total of approximately 190 cubic yards of slurry was pumped into the slot excavations. Copies of the control density fill delivery tickets are presented in Appendix F.

Prior to backfilling the excavation using conventional earthwork techniques, two support columns in the vicinity of the excavation were reinforced by Cornerstone. The reinforcement of the columns was conducted to fulfill permit requirements.

Between January 15 and January 23, 2002, the upper four feet of the excavation was backfilled and compacted by Cornerstone. The fill material was an imported Class 2 aggregate base. Documentation of the imported Class 2 aggregate base is presented in Appendix G. Excavated soil was evaluated for geotechnical suitability by staff of Smith-Emery Company of San Francisco, California. Approximately 21 cy of the material was found to be suitable and was re-used as backfill. The backfill material was placed in lifts no greater than 8 inches thick and

compacted using a Bomag compactor. The backfill was compacted to at least 95 percent of the maximum relative dry density. Field density testing of the compacted fill was conducted by Smith-Emery Company. Copies of the field density test data are presented in Appendix H. The excavation was backfilled to within approximately 6 inches of the top of the existing concrete slab surface to allow construction of a replacement concrete floor slab.

The section of fire drain pipeline removed for the excavation was replaced by Cornerstone following placement of the underlying fill materials.

3.8 Concrete Replacement

After backfilling was completed, the concrete floor slab was replaced. Concrete was placed by Cornerstone on January 24, 2001 to match the surface of the existing slab. The concrete consisted of a 5-sack mix with a 28-day strength of 3,000 pounds per square inch, complying with ASTM C94. The replaced slab was reinforced and tied into the existing slab by drilling into the existing concrete slab, inserting and epoxying in Number 4 steel dowels in to the slab at approximately 12 inch centers. Wire mesh steel reinforcement was laid at approximately the center of the slab thickness throughout the excavation area prior to the concrete pour. A typical section of the concrete replacement is shown on Plate 5. A photograph of the replaced section of concrete is shown on Plate 7, Photograph 1. Copies of the concrete delivery tickets are presented in Appendix I.

4.0 SUMMARY AND CONCLUSIONS

Remedial action has been successfully implemented at the former Mercer facility at the El Camino Center. Approximately 285 cy of TCE-impacted soil has been excavated to a maximum depth of approximately 20.5 feet below grade. On the basis of verification soil samples collected from the bottom and sidewalls of the excavation, soil with TCE concentrations exceeding the target cleanup goal has been removed from the site. Groundwater was not encountered during the excavation of TCE-impacted soil. The excavation has been backfilled with sand cement slurry, imported clean fill, and re-usable excavated "clean" soil. The area of soil excavation has been capped with a concrete slab.

Accordingly, PES, on behalf of El Camino Center, requests a letter from the RWQCB stating that the remedial goal has been achieved and no further investigation or remedial action is required at the site.

5.0 REFERENCES

IT Corporation (IT), 2000a. *Soil Sampling and Analysis Report, Former Mercer Processing Facility, 230 Portage Avenue, Palo Alto, California.* July 24.

IT, 2000b. *Additional Definition Soil Sampling and Analysis Report, Former Mercer Processing Facility, 230 Portage Avenue, Palo Alto, California, IT Corporation Project 806342.* November 21.

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Osborn, Greg, 2001. Personal communication with Kyle Flory. July 13.

PES Environmental, Inc. (PES), 2000. *Facility Closure Assessment, Former Mercer Processing Facility, 230 Portage Avenue, Palo Alto, California.* January 12.

PES Environmental, Inc. (PES), 2001. *Final Remedial Action Plan, Former Mercer Processing, Inc. Facility, 230 Portage Avenue, Palo Alto, California.* October 18.

Regional Water Control Quality Control Board – San Francisco Bay Region, 2001. *Concurrence with the Remedial Action Plan for the Site at 230 Portage Avenue, Palo Alto, California, Santa Clara County.* October 18.

TABLE

Table 1
Verification Soil Sample Analytical Results
Former Mercer Processing, Inc. Facility
230 Portage Avenue
Palo Alto, California

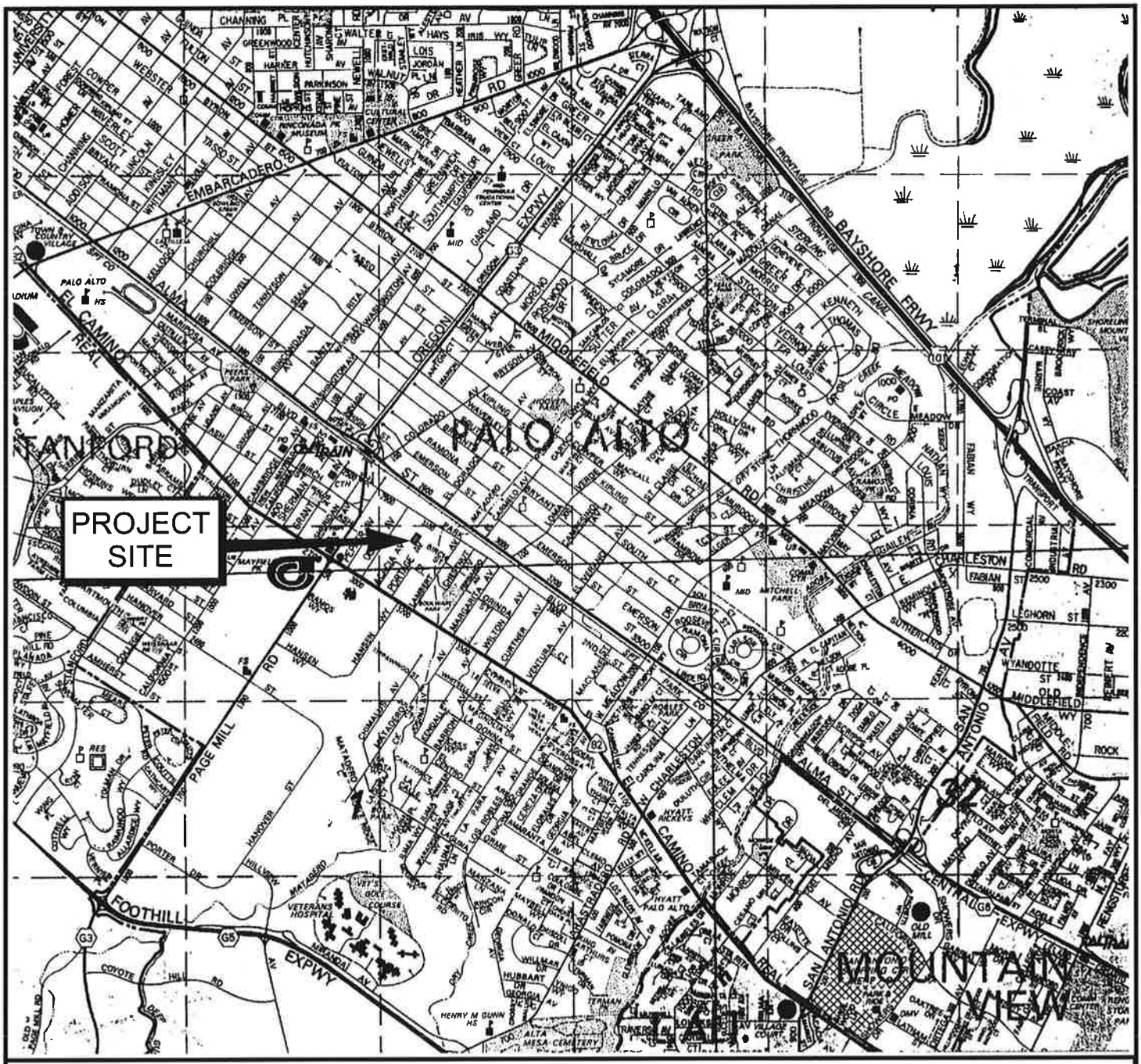
Sample Identification	Sample Date	Depth of Sample (feet bg)	TCE (µg/kg)	trans-1,2-DCE (µg/kg)	cis-1,2-DCE (µg/kg)
Slot Bottom Samples					
A4-5.0	1/9/02	5	**150**	<25	<25
A5-5.0	1/9/02	5	**53**	<25	<25
A8-4.0	1/9/02	4	<25	<25	<25
B4-5.0	1/9/02	5	<25	<25	<25
B6-8.0	1/9/02	8	**190**	<25	<25
B7-8.0	1/9/02	8	**180**	<25	<25
C6-20.5	1/14/02	20.5	**90**	<25	<25
C8-20.0	1/14/02	20	**69**	<25	<25
D6-18.1	1/9/02	18	**220**	<25	<25
D6-19.5	1/9/02	19.5	**270**	<25	<25
D6-20.0	1/9/02	20	**36**	<25	<25
E5-4.0	1/10/02	4	**1,300E**	**125**	**67**
E5-8.0	1/10/02	8	**130**	<25	<25
E5-12.0	1/10/02	12	**54**	<25	<25
E7-8.5	1/10/02	8.5	**280**	<25	<25
E7-12.0	1/10/02	12	**140**	<25	<25
Slot Sidewall Samples					
B8-East-5.0	1/9/02	5	**100**	<25	<25
C4-West-6.0	1/14/02	6	<25	<25	<25
C8-East-8.0	1/14/02	8	**36**	<25	<25
D4-West-6.0	1/9/02	6	<25	<25	<25
D8-East-5.0	1/9/02	5	**67**	<25	<25
D8-East-5.0*	1/9/02	5	**100**	<25	<25
E4-West-6.0	1/14/02	6	**37**	<25	<25
E5-South-5.0	1/14/02	5	**61**	<25	<25
E7-South-8.5	1/14/02	8.5	**110**	<25	<25
E8-East-6.0	1/14/02	6	**88**	<25	<25
Bench Bottom Samples					
A10-4.0	1/10/02	4	<25	<25	<25
B2-4.0	1/9/02	4	**62**	<25	<25
B10-4.0	1/10/01	4	<25	<25	<25
C2-4.0	1/10/02	4	<25	<25	<25
C10-4.0	1/10/02	4	**43**	<25	<25
D2-4.0	1/10/02	4	<25	<25	<25
D10-4.0	1/10/02	4	**28**	<25	<25
E2-5.0	1/10/02	5	<25	<25	<25
E8-4.0	1/10/02	4	**49**	<25	<25
E10-4.0	1/10/02	4	**80**	<25	<25
F5-0.5	1/10/02	0.5	**160**	<25	<25
F8-0.5	1/10/02	0.5	<25	<25	<25

Table 1
Verification Soil Sample Analytical Results
Former Mercer Processing, Inc. Facility
230 Portage Avenue
Palo Alto, California

Sample Identification	Sample Date	Depth of Sample (feet bg)	TCE (µg/kg)	trans-1,2-DCE (µg/kg)	cis-1,2-DCE (µg/kg)
Bench Sidewall Samples					
A8-North3-2.0	1/14/02	2	<25	<25	<25
A5-North4-4.0	1/9/02	4	**170**	<25	<25
A4-North-4.0	1/9/02	4	**48**	<25	<25
A5-North-4.0	1/9/02	4	**99**	<25	<25
A8-North3-2.0	1/14/02	2	<25	<25	<25
C10-East-2.0	1/10/02	2	<25	<25	<25
D1-West-2.0	1/14/02	2	<25	<25	<25
F10-East-2.0	1/14/02	2	**69**	<25	<25

Notes:
TCE - trichloroethylene
trans-1,2-DCE - trans-1,2-Dichloroethylene
cis-1,2-DCE - cis-1,2-Dichloroethylene
bg - below grade
µg/kg - micrograms per kilogram
<25 - Not detected at or above indicated laboratory reporting limit.
Samples analyzed using an on-site laboratory by U.S. Environmental Protection Agency Method 8260B
E - Exceeds upper calibration limit of laboratory instrumentation
* - Duplicate sample of D8-East-5.0

ILLUSTRATIONS



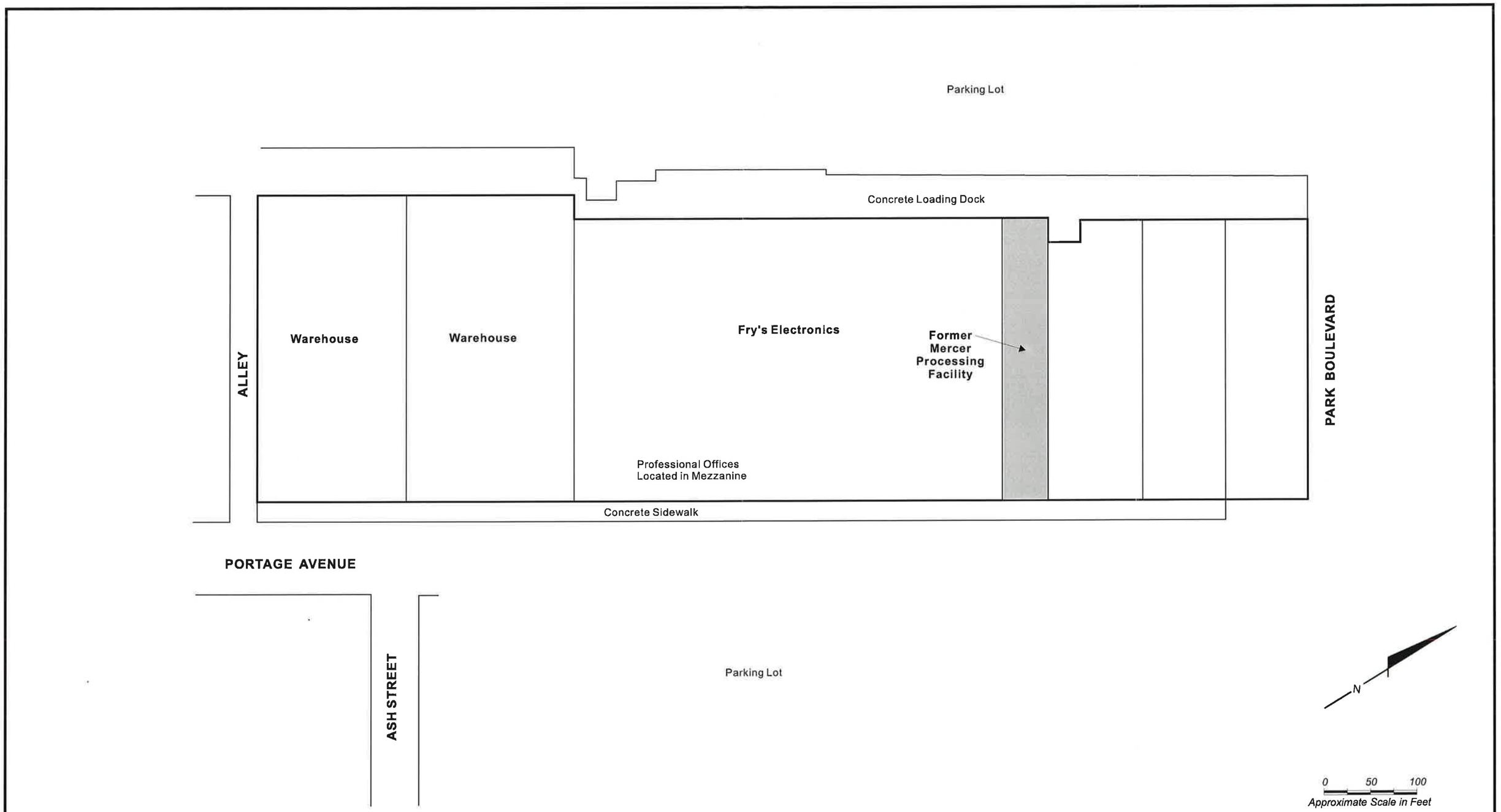
Ref: "The Thomas Guide- Golden Gate Street Guide and Directory" 1993 Edition.

PES Environmental, Inc.
Engineering & Environmental Services

Site Location Map
Former Mercer Processing Facility
230 Portage Avenue
Palo Alto, California

PLATE
1

500.009.03.001	50000902001V1.CDR	KSF	3/02
JOB NUMBER	DRAWING NUMBER	REVIEWED BY	DATE



PES Environmental, Inc.
Engineering & Environmental Services

Vicinity Map
Former Mercer Processing Facility
230 Portage Avenue
Palo Alto, California

PLATE
2

500.009.03.001	50000902001s2.CDR	KSF	3/02
JOB NUMBER	DRAWING NUMBER	REVIEWED BY	DATE

Explanation

SOIL BORING LOCATION
(PES, DECEMBER, 1999)

SOIL BORING LOCATION
(IT CORP., JUNE OR SEPTEMBER, 2000)

DETAIL SHOWN ON PLATE 4

ADJACENT TENANT SPACE

VACUUM CHAMBER

HANDWASH STATIONS (2)

CYCLONE FENCE

WATER COOLING TOWER

BOILER BLOWDOWN TANK

AIR COMPRESSOR

CART CARRIER

VACUUM PUMP

FLOOR DRAIN

FORMER REFRIGERATION SYSTEM

TRAY WASH AREA

DRY STORAGE

K

I

A

GS-4

GS-3

GS-2

C

D

GS-1

E

F

G

J

GS-5

B

LOADING AREA

Approximate Location of Expansion Tank

H

H2

L2

DRY STORAGE

UNLOADING AREA

DRY STORAGE

SIDING

CART

BOILER

BOILER FEED TANK

ADJACENT TENANT SPACE

CYCLONE FENCE

N

0 20

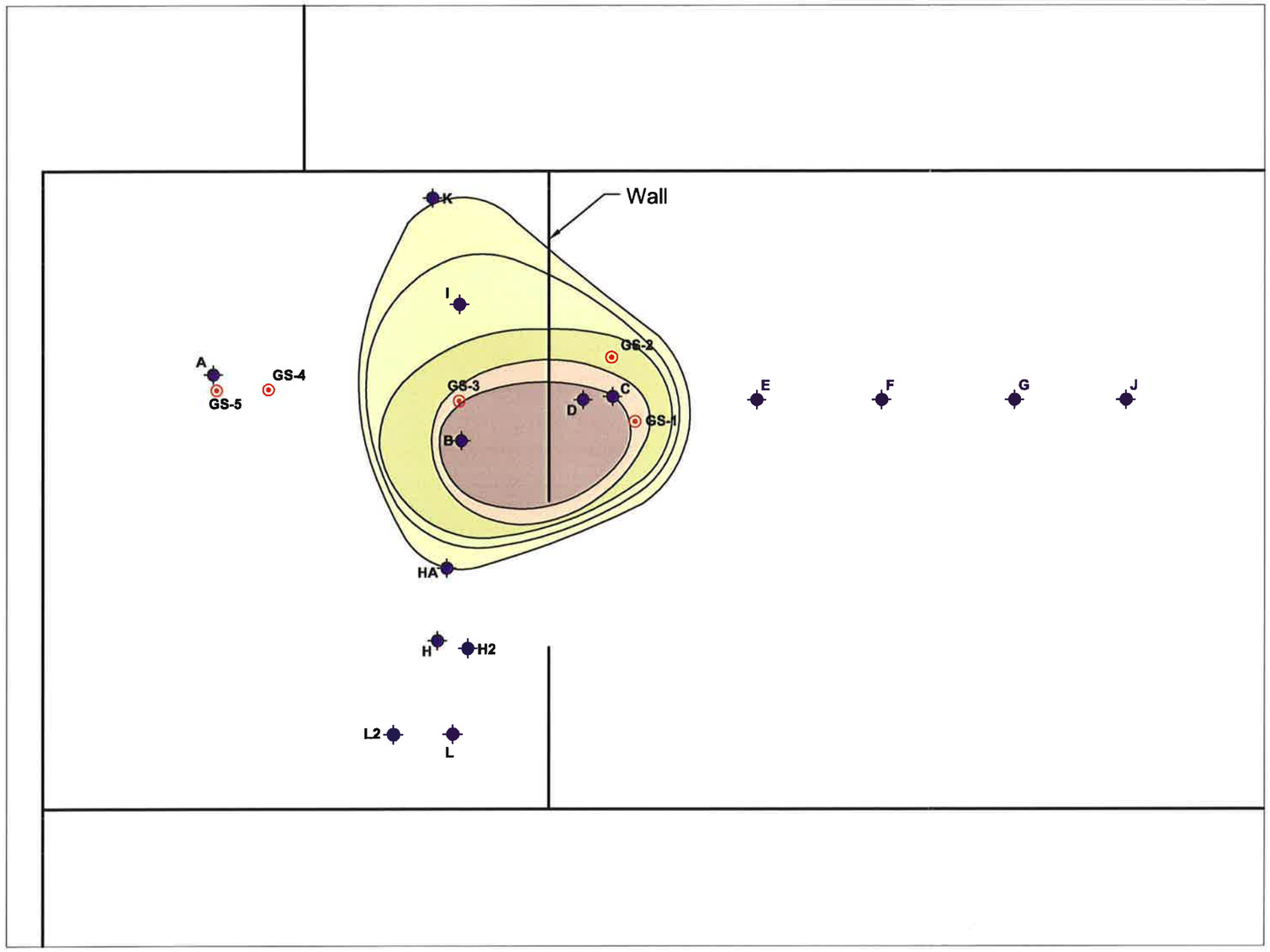
SCALE IN FEET

PES Environmental, Inc.
Engineering & Environmental Services

Boring Location Map with Former Facility Layout
Former Mercer Processing Facility
230 Portage Avenue
Palo Alto, California

PLATE 3

500.009.02.001	50000903001_0501-04.dwg	KSF	3/02
JOB NUMBER	DRAWING NUMBER	REVIEWED BY	DATE



Explanation

SOIL BORING LOCATION
(PES, DECEMBER, 1999)

SOIL BORING LOCATION
(IT CORP., JUNE, SEPTEMBER OR NOVEMBER, 2000)

Estimated lateral extent of TCE in soil exceeding 200 µg/kg at 0-4-ft. bgs.

Estimated lateral extent of TCE in soil exceeding 200 µg/kg at 4-8-ft. bgs.

Estimated lateral extent of TCE in soil exceeding 200 µg/kg at 8-12-ft. bgs.

Estimated lateral extent of TCE in soil exceeding 200 µg/kg at 12-16-ft. bgs.

Estimated lateral extent of TCE in soil exceeding 200 µg/kg at 16-20-ft. bgs.

N

0 10

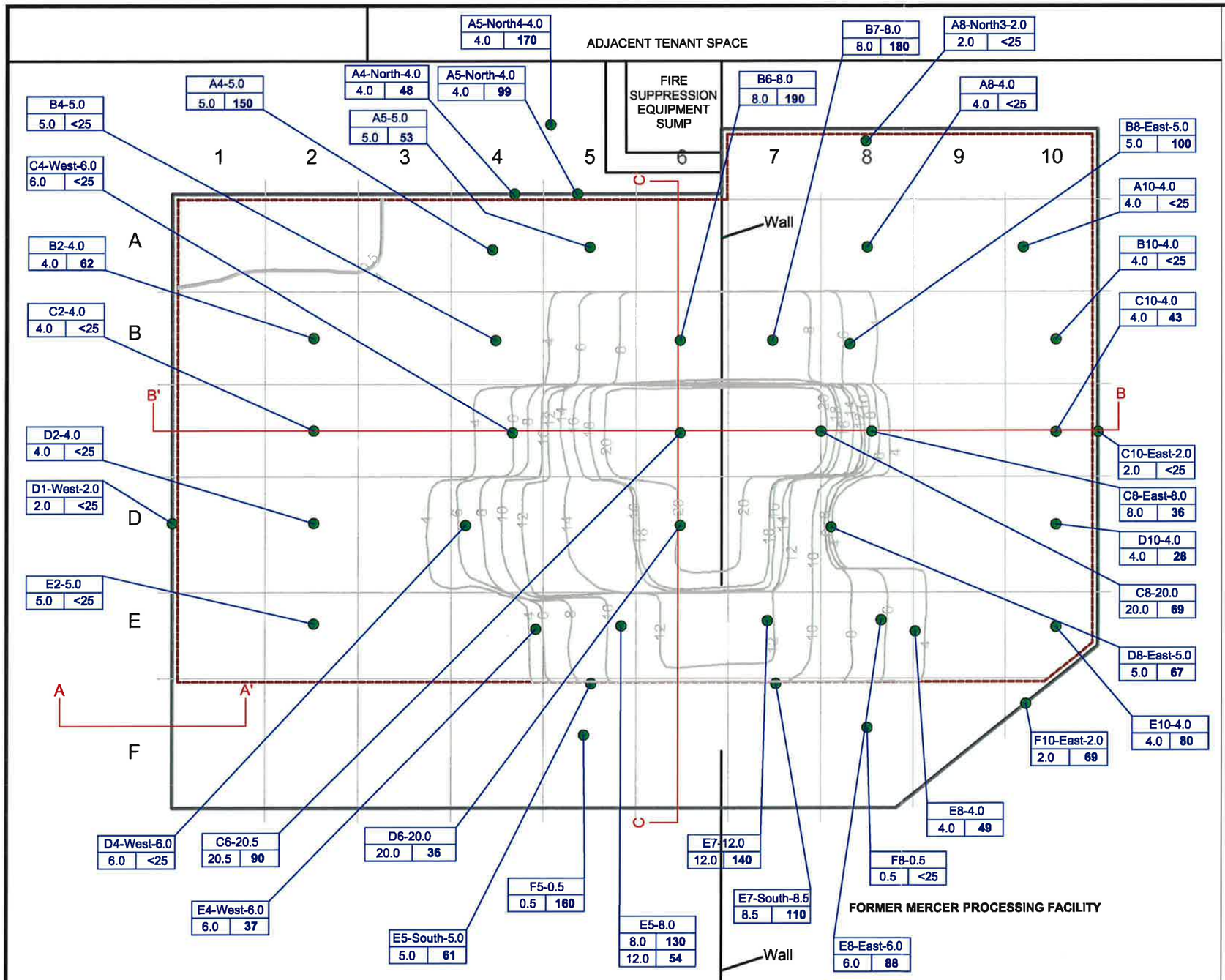
SCALE IN FEET

PES Environmental, Inc.
Engineering & Environmental Services

TCE Isoconcentration Contour Map
Former Mercer Processing Facility
230 Portage Avenue
Palo Alto, California

PLATE
4

500.009.02.001	50000903001_0501-04.dwg	KSF	3/02
JOB NUMBER	DRAWING NUMBER	REVIEWED BY	DATE



Explanation

A5-North4-4.0 Verification Soil Sample Location and Identification

Sample Identification	
Depth ft. bg	TCE Concentration

TCE - Trichloroethylene

Soil sample depth presented in feet below grade

Soil analytical results presented in micrograms per kilogram (µg/kg)

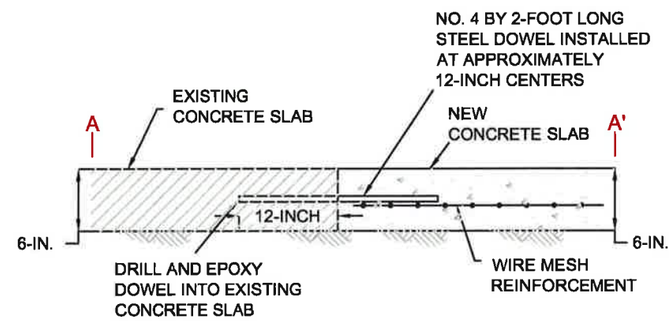
ft. bg - feet below grade

Approximate Area of Concrete Removal

Approximate Area of Soil Excavation

Excavation Contour Line

Refer to Plate 6 for Excavation Cross-Sections B-B' and C-C'



SECTION A-A'
Concrete Connection Detail
(Not to Scale)

N

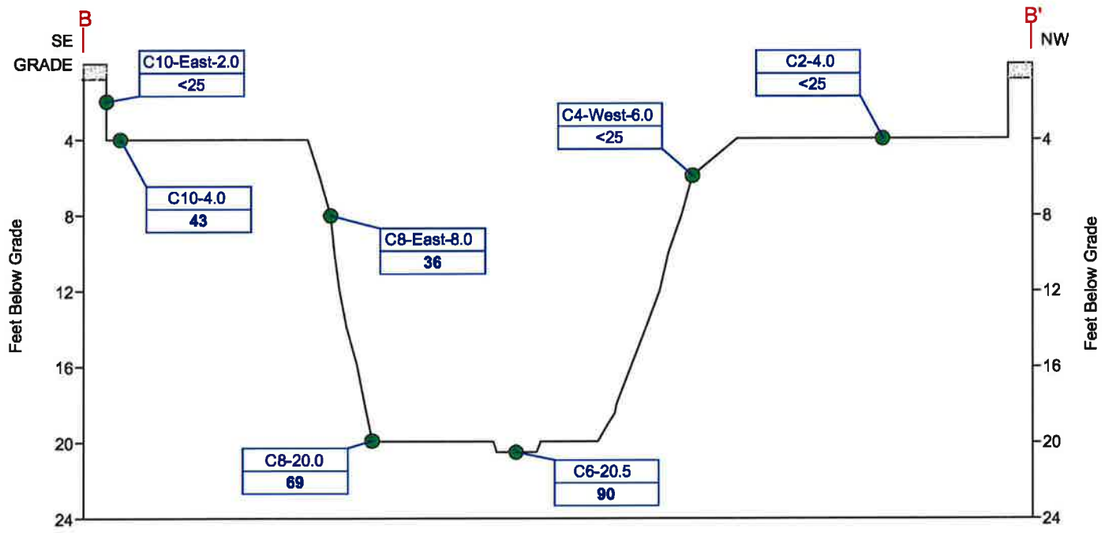
0 6
SCALE IN FEET

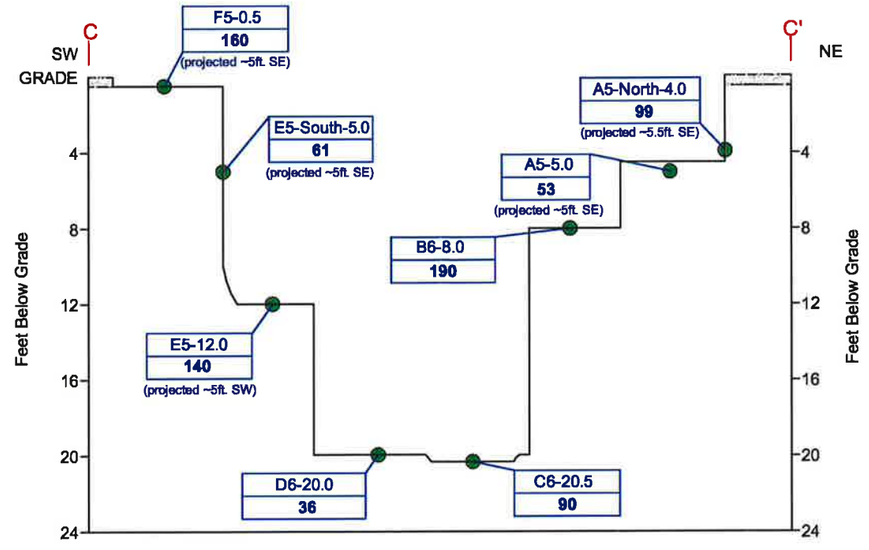
PES Environmental, Inc.
Engineering & Environmental Services

Limits of Excavation and Results of Final Verification Soil Sampling
Former Mercer Processing Facility
230 Portage Avenue
Palo Alto, California

PLATE 5

500.009.03.005	50000903005_0202	KSF	3/02
JOB NUMBER	DRAWING NUMBER	REVIEWED BY	DATE





Explanation

- A5-North4-4.0 — Verification Soil Sample Location and Identification

Sample Identification
TCE Concentration

TCE - Trichloroethylene

Soil sample depth presented in feet below grade

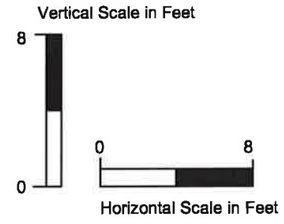
Soil analytical results presented in micrograms per kilogram (µg/kg)

NE - Northeast
SW - Southwest
SE - Southeast
NW - Northwest

The direction and duration of the projection of each verification sample location is noted in box beneath the TCE Concentration

Refer to Plate 5 for plan view of cross-section location

Concrete



PES Environmental, Inc.
Engineering & Environmental Services

Excavation Cross-Sections B-B' and C-C'
Former Mercer Processing Facility
230 Portage Avenue
Palo Alto, California

PLATE
6

500.009.03.005	50000903005_0202	KSF	3/02
JOB NUMBER	DRAWING NUMBER	REVIEWED BY	DATE



Photo 1.
Concrete removal and exposed underlying soil.



Photo 2.
Excavation of slot trench.



Photo 3.
Excavation of slot trench. Note concrete foundation at top of photograph.

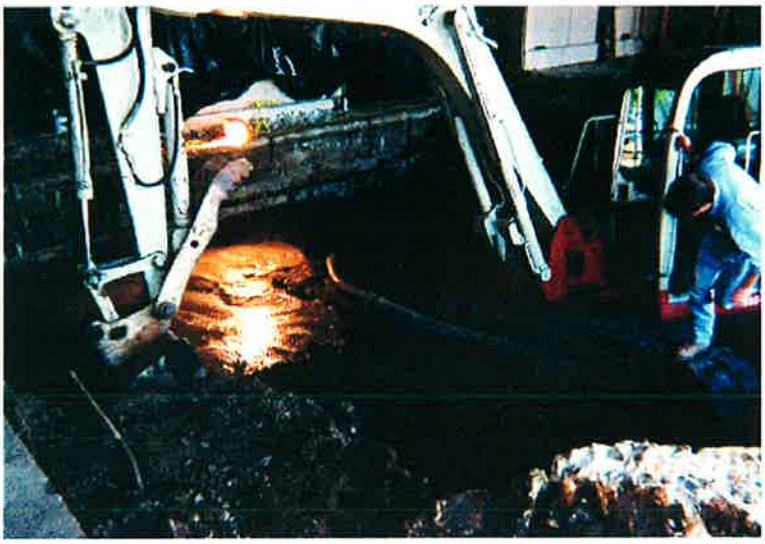


Photo 1.
Placement of Control Density Fill within slot excavation.



Photo 2.
Backfilling with imported baserock fill material.



Photo 3.
Backfilling activities.

PES Environmental, Inc.
Engineering & Environmental Services

Site Photographs
Former Mercer Processing Facility
230 Portage Avenue
Palo Alto, California

PLATE
8

500.009.03.005	50000903005_photos-0202	KSF	3/02
JOB NUMBER	DRAWING NUMBER	REVIEWED BY	DATE



Photo 1.
Replaced section of concrete.



Photo 2.
Soil stockpiles in parking lot at rear of facility.

APPENDIX A

RWQCB APPROVAL LETTER

California Regional Water Quality Control Board
San Francisco Bay Region

Winston H. Hickox
Secretary for Environmental Protection

Internet Address: http://www.swrcb.ca.gov
1515 Clay Street, Suite 1400, Oakland, California 94612
Phone (510) 622-2300 • FAX (510) 622-2460

Gray Davis
Governor

RECEIVED OCT 2 3 2001

Date: October 18, 2001
File No. 43S0965 (DAW)

El Camino Center
Attn: Mr. Boyd Smith
3201 Ash Street
Palo Alto, CA 94306

Subject: Concurrence with the Remedial Action Plan for the site at 230 Portage Avenue, Palo Alto, Santa Clara County.

Dear Mr. Smith:

This letter responds to your final Remedial Action Plan (RAP) dated October 18, 2001, describing proposed remedial actions to address the soil contamination at a site formerly occupied by Mercer Processing Inc. at 230 Portage Avenue, Palo Alto. The submittal describes the remedial investigations conducted at the site, considers alternatives for mitigating the contamination, and recommends a course of action. Board staff concur with the recommended remedial action.

Investigation reports describing the extent of contamination by trichloroethylene at the site were submitted to the Board on March 22, 2001. A meeting was held on April 3, 2001, between Board staff, yourself, your consultants, PES Environmental Inc., and your attorney, Mr. David Cooke. At that meeting additional information on the site was presented which described the threat to groundwater due to the contamination. Based on the information submitted, the Board sent a letter to El Camino Center on May 9, 2001, requesting a RAP.

A draft RAP was first submitted on June 26, 2001. Board staff reviewed the RAP and it was subsequently revised and made available for public review on July 28, 2001. The RAP recommends excavation and off-site disposal of soils contaminated with trichloroethylene. To the extent practicable, all soils containing trichloroethylene at concentrations greater than 0.2 mg/kg will be excavated and disposed off-site. Modeling studies have indicated that, at this level, if the TCE in the soil leaches into the underlying aquifer it will not further degrade the existing beneficial uses of that water. The clean up level for soil is also fully protective of public health.

A public notice of the draft RAP was published and the public was invited to submit comments to the Board between July 28 and August 27, 2001. A public meeting was held on August 8, 2001, to facilitate and receive input from the community and other interested groups.

The Board received written comments on the draft RAP as well as oral comments at the public meeting. Board staff addressed these comments in an internal memorandum. A copy of this memorandum is included as an appendix in the final RAP. There were two responses that indicated changes and amendments to the RAP. These changes and amendments have been incorporated into the final RAP submitted to the Board on October 18, 2001. Board staff concur with the selected alternative described in the RAP.

Implementation of the RAP is anticipated to start in October 2001. Please give the Board three working days notice of the start of excavation and submit a completion report within 60 days of completing the remedial work.

If you have any questions, please contact Derek Whitworth of my staff at (510) 622 2349 [e-mail dw@rb2.swrcb.ca.gov].

Sincerely,

Stephen A. Hill
Toxics Cleanup Division Chief

For Loretta K. Barsamian
Executive Officer

cc:

PES Environmental, Inc.
Mr. Kyle S. Flory
1682 Novato Boulevard, Suite 100
Novato, CA 94947

Erler & Kalinowski
Ms. Vera Nelson
1870 Ogden Drive
Burlingame, CA 94101

Allen Matkins Leck Gamble & Mallory LLP
Mr. David D. Cooke
333 Bush Street, 17th Floor
San Francisco, CA 94104

Hewlett Packard Company
Ms. Elizabeth McDonald
1501 Page Mill Road
Palo Alto, CA 94304

Varian Medical Systems
Mr. Gary R. Kern
3100 Hansen Way
Palo Alto, CA 94304-1038

Santa Clara Valley Water District
Mr. Tom Mohr
5150 Almaden Expressway
San Jose, CA 95014

APPENDIX B

TABULATED PREVIOUS SOIL SAMPLING ANALYTICAL RESULTS

Table B-1
Soil Sample Analytical Results
Former Mercer Processing Facility
230 Portage Avenue
Palo Alto California

Boring Designation	Sample Designation	Date	Sample Depth (feet bgs)	TCE (µg/kg)	1,1-DCE (µg/kg)	cis-1,2-DCE (µg/kg)	trans-1,2-DCE (µg/kg)	MEK (µg/kg)	t-butanol (µg/kg)	Acetone (µg/kg)
GS-2[1]	GS-2-0.5	12/21/99	0.5	<5	<5	<5	<5	<20	**23**	<100
	GS-2-3.5	12/21/99	3.5	**54**	<5	<5	<5	<20	<20	<100
GS-3[1]	GS-3-0.5	12/21/99	0.5	**470**	<25	<25	<25	<100	<100	<500
GS-4[1]	GS-4-0.5	12/21/99	0.5	<5	<5	<5	<5	**47**	<20	**230**
	GS-4-2.0	12/21/99	2.0	<5	<5	<5	<5	**24**	<20	**150**
	GS-4-4.0	12/21/99	4.0	<5	<5	<5	<5	<20	<20	<100
	GS-4-6.0	12/21/99	6.0	<5	<5	<5	<5	<20	<20	<100
GS-5[1]	GS-5-0.5	12/21/99	0.5	<5	<5	<5	<5	**52**	<20	**270**
	GS-5-2.0	12/21/99	2.0	<5	<5	<5	<5	**47**	<20	**330**
	GS-5-6.0	12/21/99	6.0	<5	<5	<5	<5	<20	<20	**120**
A[2]	A-0	6/1/00	0.0	<100	<100	<100	<100	<500	NA	<1000
	A-2	6/1/00	2.0	<100	<100	<100	<100	<500	NA	<1000
	A-4	6/1/00	4.0	<100	<100	<100	<100	<500	NA	<1000
	A-7	6/1/00	7.0	<100	<100	<100	<100	<500	NA	<1000
	A-8	6/1/00	8.0	<100	<100	<100	<100	<500	NA	<1000
	A-10	6/1/00	10.0	<100	<100	<100	<100	<500	NA	<1000
B[2]	B-0	6/1/00	0.0	**442**	<100	<100	<100	<500	NA	<1000
	B-4	6/1/00	4.0	**6800**	<100	<100	<100	<500	NA	<1000
	B-6	6/1/00	6.0	**4190**	<100	<100	**117**	<500	NA	<1000
B[2]	B-8	11/1/00	8.0	**810**	<5	**35**	**48**	NA	NA	<50
	B-10	11/1/00	10.0	**900**	<5	**32**	**48**	NA	NA	<50
	B-12	11/2/00	12.0	**240**	**19**	<5	<5	NA	NA	<50
	B-14	11/2/00	14.0	**240**	**26**	<5	<5	NA	NA	<50
	B-16	11/1/00	16.0	**200**	**28**	**3.5J**	<5	NA	NA	<50
	B-18	11/1/00	18.0	**240**	**39**	**4.9J**	<5	NA	NA	<50
	B-20	11/1/00	20.0	**180**	**32**	**4.4J**	<5	NA	NA	<50
	B-22	11/1/00	22.0	**6.1**	**3.5J**	**4.3J**	<5	NA	NA	<50
	B-24	11/1/00	24.0	**3.0J**	<5	**4.0J**	<5	NA	NA	<50
C[2]	C-0	6/1/00	0.0	<100	<100	<100	<100	<500	NA	<1000
	C-4	6/1/00	4.0	**270**	<100	<100	<100	<500	NA	<1000
	C-6	6/1/00	6.0	**659**	<100	<100	<100	<500	NA	<1000
D[2]	NL[3]	9/1/00	8.0	**470**	NL	NL	NL	NL	NL	NL
	NL[3]	9/1/00	10.0	**600**	NL	NL	NL	NL	NL	NL
	NL[3]	9/1/00	12.0	**460**	NL	NL	NL	NL	NL	NL
	NL[3]	9/1/00	14.0	**180**	NL	NL	NL	NL	NL	NL
	NL[3]	9/1/00	16.0	**46**	NL	NL	NL	NL	NL	NL
	NL[3]	9/1/00	18.0	**270**	NL	NL	NL	NL	NL	NL
	NL[3]	9/1/00	20.0	**170**	NL	NL	NL	NL	NL	NL

Table B-1
Soil Sample Analytical Results
Former Mercer Processing Facility
230 Portage Avenue
Palo Alto California

Boring Designation	Sample Designation	Date	Sample Depth (feet bgs)	TCE (µg/kg)	1,1-DCE (µg/kg)	cis-1,2-DCE (µg/kg)	trans-1,2-DCE (µg/kg)	MEK (µg/kg)	t-butanol (µg/kg)	Acetone (µg/kg)
D[2]	NL[3]	9/1/00	22.0	**7.6**	NL	NL	NL	NL	NL	NL
	NL[3]	9/1/00	24.0	ND	NL	NL	NL	NL	NL	NL
E[2]	NL[3]	9/1/00	6.0	**34**	NL	NL	NL	NL	NL	NL
	NL[3]	9/1/00	8.0	**170**	NL	NL	NL	NL	NL	NL
	NL[3]	9/1/00	10.0	**69**	NL	NL	NL	NL	NL	NL
	NL[3]	9/1/00	12.0	**34**	NL	NL	NL	NL	NL	NL
F[2]	NL[3]	9/1/00	6.0	**33**	NL	NL	NL	NL	NL	NL
	NL[3]	9/1/00	8.0	**26**	NL	NL	NL	NL	NL	NL
	NL[3]	9/1/00	10.0	**15**	NL	NL	NL	NL	NL	NL
	NL[3]	9/1/00	12.0	**18**	NL	NL	NL	NL	NL	NL
	NL[3]	9/1/00	14.0	**25**	NL	NL	NL	NL	NL	NL
	NL[3]	9/1/00	16.0	**30**	NL	NL	NL	NL	NL	NL
	NL[3]	9/1/00	18.0	**24**	NL	NL	NL	NL	NL	NL
	NL[3]	9/1/00	20.0	**10**	NL	NL	NL	NL	NL	NL
	NL[3]	9/1/00	22.0	ND	NL	NL	NL	NL	NL	NL
	NL[3]	9/1/00	24.0	ND	NL	NL	NL	NL	NL	NL
G[2]	NL[3]	9/1/00	4.0	ND	NL	NL	NL	NL	NL	NL
	NL[3]	9/1/00	6.0	ND	NL	NL	NL	NL	NL	NL
	NL[3]	9/1/00	8.0	ND	NL	NL	NL	NL	NL	NL
	NL[3]	9/1/00	10.0	ND	NL	NL	NL	NL	NL	NL
	NL[3]	9/1/00	12.0	ND	NL	NL	NL	NL	NL	NL
	NL[3]	9/1/00	14.0	**74**	NL	NL	NL	NL	NL	NL
	NL[3]	9/1/00	16.0	ND	NL	NL	NL	NL	NL	NL
	NL[3]	9/1/00	18.0	**38**	NL	NL	NL	NL	NL	NL
	NL[3]	9/1/00	20.0	**43**	NL	NL	NL	NL	NL	NL
	NL[3]	9/1/00	22.0	**3.2**	NL	NL	NL	NL	NL	NL
	NL[3]	9/1/00	24.0	ND	NL	NL	NL	NL	NL	NL
H2	NL[3]	9/1/00	2.0	NR	NL	NL	NL	NL	NL	NL
	NL[3]	9/1/00	4.0	NR	NL	NL	NL	NL	NL	NL
	NL[3]	9/1/00	10.0	**41**	NL	NL	NL	NL	NL	NL
	NL[3]	9/1/00	12.0	**74**	NL	NL	NL	NL	NL	NL
H2[2]	NL[3]	11/1/00	6.0	ND	NL	NL	NL	NL	NL	NL
	H2-14	11/1/00	14.0	**91**	**55**	**4.0J**	<5	NA	NA	<50
	H2-16	11/1/00	16.0	**99**	**67**	**5.7**	<5	NA	NA	<50
	H2-18	11/1/00	18.0	**100**	**60**	**5.6**	<5	NA	NA	<50
	H2-20	11/1/00	20.0	**93**	**63**	**5.3**	<5	NA	NA	<50
	H2-22	11/1/00	22.0	<5	**2.7J**	**4.7J**	<5	NA	NA	<50
I[2]	NL[3]	9/1/00	10.0	ND	NL	NL	NL	NL	NL	NL
J[2]	NL[3]	9/1/00	2.0	ND	NL	NL	NL	NL	NL	NL

Table B-1
Soil Sample Analytical Results
Former Mercer Processing Facility
230 Portage Avenue
Palo Alto California

Boring Designation	Sample Designation	Date	Sample Depth (feet bgs)	TCE (µg/kg)	1,1-DCE (µg/kg)	cis-1,2-DCE (µg/kg)	trans-1,2-DCE (µg/kg)	MEK (µg/kg)	t-butanol (µg/kg)	Acetone (µg/kg)
J[2]	NL[3]	9/1/00	6.0	ND	NL	NL	NL	NL	NL	NL
	NL[3]	9/1/00	8.0	ND	NL	NL	NL	NL	NL	NL
K[2]	K-(0.5-1)	11/1/00	0.5-1.0	**5.7**	<5	<5	<5	NA	NA	<50
	K-2	11/1/00	2.0	**210**	<5	**9.5**	<5	NA	NA	<50
	K-4	11/1/00	4.0	<5	<5	<5	<5	NA	NA	<50
	K-5.5	11/1/00	5.5	**97**	<5	**5.6**	<5	NA	NA	<50
	K-8	11/2/00	8.0	**100**	<5	**14**	**12**	NA	NA	<50
	K-10	11/2/00	10.0	<5	**4.4J**	<5	<5	NA	NA	<50
L[2]	L-1	11/1/00	1.0	<5	<5	<5	<5	NA	NA	<50
	L-2	11/2/00	2.0	<5	<5	<5	<5	NA	NA	<50
	L-4	11/1/00	4.0	<5	<5	<5	<5	NA	NA	<50
L2[2]	NL[3]	11/1/00	2.0	ND	NL	NL	NL	NL	NL	NL
	NL[3]	11/1/00	4.0	ND	NL	NL	NL	NL	NL	NL
L2[2]	L2-6	11/2/00	6.0	<5	<5	<5	<5	NA	NA	<50
	L2-8	11/2/00	8.0	<5	<5	<5	<5	NA	NA	<50

Notes:
µg/kg = micrograms per kilogram
bgs = below ground surface
< = compound not detected at or above the respective laboratory reporting limit
J = estimated value, less than the laboratory practical quantitation limit but greater than the method detection limit
NA = Not analyzed
NL = Not listed
NR = No sample recovery
TCE = trichloroethylene
MEK = methyl ethyl ketone
t-butanol = tert-butanol
1,1-DCE = 1,1,-dichloroethylene
cis-1,2-DCE = cis-1,2-dichloroethylene
trans-1,2-DCE = trans-1,2-dichloroethylene
[1] = Boring drilled and sampled by PES in December 1999
[2] = Boring drilled and sampled by IT Corp. in June, September or November 2000
[3] = Precise sample designation, sample depth, sample date, and laboratory reporting limits unknown; laboratory reports for these samples not provided in IT Corp. report dated November 21, 2000. Data presented graphically in IT Corp. November 21, 2000 Report.

APPENDIX F

REGULATORY AGENCY DATABASE REPORT

15.5 Acre Retail Center
3200 Park Boulevard
Palo Alto, CA 94306

Inquiry Number: 2897822.2s
October 19, 2010

The EDR Radius Map™ Report with GeoCheck®

EDR® Environmental Data Resources Inc

440 Wheelers Farms Road
Milford, CT 06461
Toll Free: 800.352.0050
www.edrnet.com

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GEOCHECK ADDENDUM

Physical Setting Source Addendum	A-1
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Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-05) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

3200 PARK BOULEVARD
PALO ALTO, CA 94306

COORDINATES

Latitude (North):	37.423500 - 37° 25' 24.6''
Longitude (West):	122.136000 - 122° 8' 9.6''
Universal Tranverse Mercator:	Zone 10
UTM X (Meters):	576449.5
UTM Y (Meters):	4142000.2
Elevation:	23 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map:	37122-D2 PALO ALTO, CA
Most Recent Revision:	1999
East Map:	37122-D1 MOUNTAIN VIEW, CA
Most Recent Revision:	1999

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from:	2006, 2005
Source:	USDA

TARGET PROPERTY SEARCH RESULTS

The target property was identified in the following records. For more information on this property see page 8 of the attached EDR Radius Map report:

Site	Database(s)	EPA ID
WSJ PROPERTIES 3200 PARK BLVD PALO ALTO, CA 94306	HAZNET	N/A

EXECUTIVE SUMMARY

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

Proposed NPL ---------- Proposed National Priority List Sites
NPL LIENS ---------- Federal Superfund Liens

Federal Delisted NPL site list

Delisted NPL ---------- National Priority List Deletions

Federal CERCLIS list

FEDERAL FACILITY ---------- Federal Facility Site Information listing

Federal RCRA generators list

RCRA-CESQG ---------- RCRA - Conditionally Exempt Small Quantity Generator

Federal ERNS list

ERNS ---------- Emergency Response Notification System

State and tribal landfill and/or solid waste disposal site lists

SWF/LF ---------- Solid Waste Information System

State and tribal leaking storage tank lists

INDIAN LUST ---------- Leaking Underground Storage Tanks on Indian Land

State and tribal registered storage tank lists

INDIAN UST ---------- Underground Storage Tanks on Indian Land
FEMA UST ---------- Underground Storage Tank Listing

State and tribal voluntary cleanup sites

INDIAN VCP ---------- Voluntary Cleanup Priority Listing
VCP ---------- Voluntary Cleanup Program Properties

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS ---------- A Listing of Brownfields Sites

EXECUTIVE SUMMARY

Local Lists of Landfill / Solid Waste Disposal Sites

DEBRIS REGION 9 ---- Torres Martinez Reservation Illegal Dump Site Locations
ODI ---- Open Dump Inventory
WMUDS/SWAT ---- Waste Management Unit Database
HAULERS ---- Registered Waste Tire Haulers Listing
INDIAN ODI ---- Report on the Status of Open Dumps on Indian Lands

Local Lists of Hazardous waste / Contaminated Sites

US CDL ---- Clandestine Drug Labs
SCH ---- School Property Evaluation Program
Toxic Pits ---- Toxic Pits Cleanup Act Sites
CDL ---- Clandestine Drug Labs
US HIST CDL ---- National Clandestine Laboratory Register

Local Land Records

LIENS 2 ---- CERCLA Lien Information
LUCIS ---- Land Use Control Information System
LIENS ---- Environmental Liens Listing
DEED ---- Deed Restriction Listing

Records of Emergency Release Reports

HMIRS ---- Hazardous Materials Information Reporting System
CHMIRS ---- California Hazardous Material Incident Report System
LDS ---- Land Disposal Sites Listing
MCS ---- Military Cleanup Sites Listing

Other Ascertainable Records

DOT OPS ---- Incident and Accident Data
DOD ---- Department of Defense Sites
FUDS ---- Formerly Used Defense Sites
CONSENT ---- Superfund (CERCLA) Consent Decrees
UMTRA ---- Uranium Mill Tailings Sites
MINES ---- Mines Master Index File
TRIS ---- Toxic Chemical Release Inventory System
TSCA ---- Toxic Substances Control Act
FTTS ---- FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
HIST FTTS ---- FIFRA/TSCA Tracking System Administrative Case Listing
SSTS ---- Section 7 Tracking Systems
ICIS ---- Integrated Compliance Information System
PADS ---- PCB Activity Database System
MLTS ---- Material Licensing Tracking System
RADINFO ---- Radiation Information Database
FINDS ---- Facility Index System/Facility Registry System
RAATS ---- RCRA Administrative Action Tracking System
NPDES ---- NPDES Permits Listing
WDS ---- Waste Discharge System
SAN JOSE HAZMAT ---- Hazardous Material Facilities
WIP ---- Well Investigation Program Case List

EMI ---------- Emissions Inventory Data
INDIAN RESERV ---------- Indian Reservations
SCRD DRYCLEANERS ---------- State Coalition for Remediation of Drycleaners Listing
PCB TRANSFORMER ---------- PCB Transformer Registration Database
PROC ---------- Certified Processors Database
MWMP ---------- Medical Waste Management Program Listing
COAL ASH DOE ---------- Sleam-Electric Plan Operation Data
COAL ASH EPA ---------- Coal Combustion Residues Surface Impoundments List
HWT ---------- Registered Hazardous Waste Transporter Database
FINANCIAL ASSURANCE ---------- Financial Assurance Information Listing

EDR PROPRIETARY RECORDS

EDR Proprietary Records

Manufactured Gas Plants ---------- EDR Proprietary Manufactured Gas Plants
EDR Historical Auto Stations ---------- EDR Proprietary Historic Gas Stations
EDR Historical Cleaners ---------- EDR Proprietary Historic Dry Cleaners

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL: Also known as Superfund, the National Priority List database is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund program. The source of this database is the U.S. EPA.

A review of the NPL list, as provided by EDR, and dated 07/02/2010 has revealed that there are 2 NPL sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
HEWLETT-PACKARD (620-640 PAGE	***620 - 640 PAGE MILL RD.***	***0 - 1/8 (0.000 mi.)***	***0***	***8***
HEWLETT PACKARD CO	***1501 PAGE MILL ROAD***	***SSW 1/2 - 1 (0.901 mi.)***	***T104***	***370***

EXECUTIVE SUMMARY

Federal CERCLIS list

CERCLIS: The Comprehensive Environmental Response, Compensation and Liability Information System contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA). CERCLIS contains sites which are either proposed to or on the National Priorities List (NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL.

A review of the CERCLIS list, as provided by EDR, and dated 01/29/2010 has revealed that there is 1 CERCLIS site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
HEWLETT-PACKARD (620-640 PAGE	***620 - 640 PAGE MILL RD.***	***0 - 1/8 (0.000 mi.)***	***0***	***8***

Federal CERCLIS NFRAP site List

CERC-NFRAP: Archived sites are sites that have been removed and archived from the inventory of CERCLIS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list this site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. This decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be a potential NPL site.

A review of the CERC-NFRAP list, as provided by EDR, and dated 06/23/2009 has revealed that there are 9 CERC-NFRAP sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
DURA-BOND	3201 ASH ST	SE 0 - 1/8 (0.007 mi.)	D11	33
VARIAN ASSOCIATES CORP HDQTRS	***611 HANSEN WAY***	***SSE 0 - 1/8 (0.095 mi.)***	***H40***	***126***
STANFORD CLEANERS	***2875 EL CAMINO REAL***	***WNW 0 - 1/8 (0.110 mi.)***	***41***	***142***
HEWLETT PACKARD CO MFG DIV	***395 PAGE MILL RD***	***WNW 1/8 - 1/4 (0.147 mi.)***	***J48***	***158***
GENENCOR INTERNATIONAL	***925 PAGE MILL ROAD***	***WSW 1/4 - 1/2 (0.315 mi.)***	***O78***	***223***
ALZA CORP	***950 PAGE MILL RD***	***WSW 1/4 - 1/2 (0.348 mi.)***	***O81***	***249***
VARIAN ASSOCIATES	***601 CALIFORNIA AVE***	***WNW 1/4 - 1/2 (0.422 mi.)***	***P86***	***279***
BECKMAN INSTRUMENTS	***1050 PAGE MILL RD***	***WSW 1/4 - 1/2 (0.422 mi.)***	***Q87***	***292***
BECKMAN INSTRUMENTS INC	1050 PAGE MILL RD	WSW 1/4 - 1/2 (0.422 mi.)	Q88	305

Federal RCRA CORRACTS facilities list

CORRACTS: CORRACTS is a list of handlers with RCRA Corrective Action Activity. This report shows which nationally-defined corrective action core events have occurred for every handler that has had corrective action activity.

A review of the CORRACTS list, as provided by EDR, and dated 05/25/2010 has revealed that there are 4 CORRACTS sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
VARIAN ASSOCIATES CORP HDQTRS	***611 HANSEN WAY***	***SSE 0 - 1/8 (0.095 mi.)***	***H40***	***126***
HEWLETT PACKARD CO MFG DIV	***395 PAGE MILL RD***	***WNW 1/8 - 1/4 (0.147 mi.)***	***J48***	***158***

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
VARIAN ASSOCIATES	***601 CALIFORNIA AVE***	***WNW 1/4 - 1/2 (0.422 mi.)***	***P86***	***279***
HEWLETT PACKARD CO	***1501 PAGE MILL ROAD***	***SSW 1/2 - 1 (0.901 mi.)***	***T104***	***370***

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

A review of the RCRA-TSDF list, as provided by EDR, and dated 02/17/2010 has revealed that there is 1 RCRA-TSDF site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
VARIAN ASSOCIATES CORP HDQTRS	***611 HANSEN WAY***	***SSE 0 - 1/8 (0.095 mi.)***	***H40***	***126***

Federal RCRA generators list

RCRA-LQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

A review of the RCRA-LQG list, as provided by EDR, and dated 02/17/2010 has revealed that there are 2 RCRA-LQG sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
COMMUNICATIONS & POWER INDUSTR	***607 HANSEN WAY***	***SSE 0 - 1/8 (0.094 mi.)***	***H37***	***83***
COMMUNICATIONS & POWER INDUSTR	607 HANSEN WAY	SSE 0 - 1/8 (0.094 mi.)	H38	91

RCRA-SQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

A review of the RCRA-SQG list, as provided by EDR, and dated 02/17/2010 has revealed that there are 21 RCRA-SQG sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
PALO ALTO NISSAN INC	***411 ACACIA***	***0 - 1/8 (0.000 mi.)***	***A3***	***18***
HELMINGS AUTO REPAIR	***300 LAMBERT AVE***	***0 - 1/8 (0.000 mi.)***	***6***	***23***
STANFORD NISSAN INC	***473 ACACIA***	***SE 0 - 1/8 (0.002 mi.)***	***B7***	***25***
SYSTEMS CONTROL INC	***220 PORTAGE***	***SE 0 - 1/8 (0.007 mi.)***	***D13***	***35***

EXECUTIVE SUMMARY

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
PARK AVENUE MOTORS	***3241 PARK AVE***	***ENE 0 - 1/8 (0.008 mi.)***	***E15***	***38***
SAY RAY	***3251 ASH ST***	***SSW 0 - 1/8 (0.012 mi.)***	***D18***	***41***
PARK AVE MOTORS	3250 PARK BLVD	ESE 0 - 1/8 (0.013 mi.)	E19	44
DURA-BOND BEARING COMPANY	***395 PORTAGE***	***S 0 - 1/8 (0.023 mi.)***	***D22***	***49***
WOLF CAMERA NO 955	***3159 EL CAMINO REAL***	***SSE 0 - 1/8 (0.041 mi.)***	***B28***	***62***
PACIFIC BELL	***3350 BIRCH STREET***	***ESE 0 - 1/8 (0.047 mi.)***	***29***	***63***
VARIAN ASSOCIATES- LAMBERT SIT	***425 LAMBERT***	***S 0 - 1/8 (0.056 mi.)***	***30***	***68***
AKINS BODY SHOP INCORPORATED	***2901 PARK BOULEVARD***	***NW 0 - 1/8 (0.057 mi.)***	***G31***	***70***
BIX	***2891 PARK BLVD***	***NW 0 - 1/8 (0.063 mi.)***	***G33***	***78***
PREFORMED LINE PCDT	***600 HANSEN WAY***	***SSE 0 - 1/8 (0.094 mi.)***	***H36***	***81***
VARIAN ASSOCIATES CORP HDQTRS	***611 HANSEN WAY***	***SSE 0 - 1/8 (0.095 mi.)***	***H40***	***126***
STANFORD CLEANERS	***2875 EL CAMINO REAL***	***WNW 0 - 1/8 (0.110 mi.)***	***41***	***142***
HEWLETT PACKARD CO MFG DIV	***395 PAGE MILL RD***	***WNW 1/8 - 1/4 (0.147 mi.)***	***J48***	***158***
LINUS PAULING INSTITUTE	***440 PAGE MILL RD***	***WNW 1/8 - 1/4 (0.161 mi.)***	***59***	***193***
HEWLETT-PACKARD COMPANY#	***620 PAGE MILL RD***	***WNW 1/8 - 1/4 (0.174 mi.)***	***K60***	***196***
PALO ALTO FIRESTONE	***3401 EL CAMINO REAL***	***SSE 1/8 - 1/4 (0.189 mi.)***	***67***	***207***
NATIONAL PRESS INC	***850 HANSEN WAY***	***SSW 1/8 - 1/4 (0.233 mi.)***	***M72***	***212***

Federal institutional controls / engineering controls registries

US ENG CONTROLS: A listing of sites with engineering controls in place.

A review of the US ENG CONTROLS list, as provided by EDR, and dated 12/20/2009 has revealed that there is 1 US ENG CONTROLS site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
HEWLETT-PACKARD (620-640 PAGE	***620 - 640 PAGE MILL RD.***	***0 - 1/8 (0.000 mi.)***	***0***	***8***

US INST CONTROL: A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

A review of the US INST CONTROL list, as provided by EDR, and dated 12/20/2009 has revealed that there is 1 US INST CONTROL site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
HEWLETT-PACKARD (620-640 PAGE	***620 - 640 PAGE MILL RD.***	***0 - 1/8 (0.000 mi.)***	***0***	***8***

State- and tribal - equivalent NPL

RESPONSE: Identifies confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity. These confirmed release sites are generally high-priority and high potential risk.

A review of the RESPONSE list, as provided by EDR, and dated 08/18/2010 has revealed that there are 4 RESPONSE sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
VARIAN	***611 HANSEN WAY***	***SSE 0 - 1/8 (0.095 mi.)***	***H39***	***94***
AYDIN ENERGY	***3180 HANOVER STREET***	***SSW 1/2 - 1 (0.830 mi.)***	***101***	***330***
HEWLETT PACKARD	***1501 PAGE MILL ROAD***	***SSW 1/2 - 1 (0.901 mi.)***	***T103***	***360***
HILLVIEW PORTER PLUME	***HILLVIEW AVENUE / PORTE***	***SSW 1/2 - 1 (0.981 mi.)***	***106***	***396***

State- and tribal - equivalent CERCLIS

ENVIROSTOR: The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifes sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

A review of the ENVIROSTOR list, as provided by EDR, and dated 08/18/2010 has revealed that there are 14 ENVIROSTOR sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
DURA-BOND BEARING COMPANY	***395 PORTAGE***	***S 0 - 1/8 (0.023 mi.)***	***D22***	***49***
Status: Refer: RWQCB				
VARIAN	***611 HANSEN WAY***	***SSE 0 - 1/8 (0.095 mi.)***	***H39***	***94***
Status: Certified / Operation & Maintenance				
HEWLETT PACKARD CO MFG DIV	***395 PAGE MILL RD***	***WNW 1/8 - 1/4 (0.147 mi.)***	***J48***	***158***
Status: Refer: RWQCB				
HEWLETT-PACKARD CO. - PALO ALT	***395 PAGE MILL ROAD***	***WNW 1/8 - 1/4 (0.147 mi.)***	***J49***	***181***
VARIAN NMR SYSTEMS	***3120 HANSEN WAY***	***SW 1/4 - 1/2 (0.366 mi.)***	***82***	***256***
Status: Certified / Operation & Maintenance				
VARIAN ASSOICATES, INC. ITD	***601 CALIFORNIA AVENUE***	***WNW 1/4 - 1/2 (0.421 mi.)***	***P83***	***267***
V M S 601 C A G W T S	***601 CALIFORNIA AVE REME***	***WNW 1/4 - 1/2 (0.421 mi.)***	***P85***	***273***
Status: Refer: RWQCB				
ALZA PHARMACEUTICALS	1454 PAGE MILL ROAD	SW 1/2 - 1 (0.652 mi.)	97	317
Status: Refer: RWQCB				
HEWLETT PACKARD CO. - CALIF. A	1601 CALIFORNIA AVENUE	WSW 1/2 - 1 (0.804 mi.)	S99	322
AYDIN ENERGY	***3180 HANOVER STREET***	***SSW 1/2 - 1 (0.830 mi.)***	***101***	***330***
Status: Certified / Operation & Maintenance				
HEWLETT-PACKARD COMPANY	***1501 PAGE MILL RD***	***SSW 1/2 - 1 (0.901 mi.)***	***T102***	***355***
Status: Refer: RWQCB				
HEWLETT PACKARD	***1501 PAGE MILL ROAD***	***SSW 1/2 - 1 (0.901 mi.)***	***T103***	***360***
Status: Refer: RWQCB				
HILLVIEW PORTER PLUME	***HILLVIEW AVENUE / PORTE***	***SSW 1/2 - 1 (0.981 mi.)***	***106***	***396***
Status: Certified / Operation & Maintenance				

Lower Elevation	Address	Direction / Distance	Map ID	Page
OREGON EXPRESSWAY UNDERPASS	XING OF OREGON EXPRESSW	NW 1/4 - 1/2 (0.260 mi.)	75	217
Status: Refer: RWQCB				

EXECUTIVE SUMMARY

State and tribal leaking storage tank lists

LUST: The Leaking Underground Storage Tank Incident Reports contain an inventory of reported leaking underground storage tank incidents. The data come from the State Water Resources Control Board Leaking Underground Storage Tank Information System.

A review of the LUST list, as provided by EDR, and dated 09/20/2010 has revealed that there are 25 LUST sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
CARMEAN TRUST	***411 ACACIA AVE***	***0 - 1/8 (0.000 mi.)***	***A5***	***20***
Status: Completed - Case Closed				
LOCKHEED MISSLES & SPACE CO	***3101 PARK BLVD***	***NE 0 - 1/8 (0.005 mi.)***	***C9***	***29***
Status: Completed - Case Closed				
DURA BOND	***3201 ASH ST***	***SE 0 - 1/8 (0.007 mi.)***	***D12***	***34***
Status: Completed - Case Closed				
GAVENMAN PROPERTY	***3017 EL CAMINO REAL***	***WNW 0 - 1/8 (0.028 mi.)***	***F23***	***55***
Status: Completed - Case Closed				
JOST HEATING & SHEET METAL	***412 OLIVE AVE***	***WNW 0 - 1/8 (0.031 mi.)***	***24***	***56***
Status: Completed - Case Closed				
PALO ALTO NISSAN	***3001 EL CAMINO REAL***	***WNW 0 - 1/8 (0.040 mi.)***	***F27***	***61***
Status: Completed - Case Closed				
HOHBACH	***200 PAGE MILL RD***	***NW 0 - 1/8 (0.119 mi.)***	***I43***	***155***
Status: Open - Site Assessment				
HEWLETT PACKARD CO MFG DIV	***395 PAGE MILL RD***	***WNW 1/8 - 1/4 (0.147 mi.)***	***J48***	***158***
Status: Completed - Case Closed				
BLEIBLER IRON WORKS	***411 PAGE MILL RD***	***WNW 1/8 - 1/4 (0.149 mi.)***	***J52***	***185***
Status: Completed - Case Closed				
BLEIBER IRON WORKS	411 PAGE MILL RD	WNW 1/8 - 1/4 (0.149 mi.)	J53	186
VANCE BROWN & SONS	***2747 PARK BLVD***	***NW 1/8 - 1/4 (0.153 mi.)***	***I57***	***191***
Status: Completed - Case Closed				
MOBIL (BP 11219)	***2780 EL CAMINO REAL***	***WNW 1/8 - 1/4 (0.178 mi.)***	***K62***	***201***
Status: Completed - Case Closed				
PALO ALTO FIRESTONE	***3401 EL CAMINO REAL***	***SSE 1/8 - 1/4 (0.189 mi.)***	***67***	***207***
Status: Completed - Case Closed				
GREEN WORLD NURSERY	***2711 EL CAMINO REAL***	***WNW 1/8 - 1/4 (0.216 mi.)***	***71***	***211***
Status: Completed - Case Closed				
CHEVRON	***775 PAGE MILL RD***	***WSW 1/4 - 1/2 (0.251 mi.)***	***73***	***213***
Status: Completed - Case Closed				
JOHN'S AUTOMOTIVE	***3508 EL CAMINO REAL***	***SSE 1/4 - 1/2 (0.253 mi.)***	***N74***	***216***
Status: Completed - Case Closed				
COMBES AUTO REPAIR	***3585 EL CAMINO REAL***	***SSE 1/4 - 1/2 (0.270 mi.)***	***N76***	***218***
Status: Open - Site Assessment				
SHELL	***3601 EL CAMINO REAL***	***SSE 1/4 - 1/2 (0.278 mi.)***	***N77***	***222***
Status: Open - Site Assessment				
EASTMAN KODAK COMPANY	***925 PAGE MILL RD***	***WSW 1/4 - 1/2 (0.315 mi.)***	***O79***	***245***
PALO ALTO TIRE & BRAKE	***306 CAMBRIDGE AVE***	***WNW 1/4 - 1/2 (0.440 mi.)***	***91***	***310***
Status: Completed - Case Closed				
OLD FIRE STATION	***2253 PARK BLVD***	***NW 1/4 - 1/2 (0.467 mi.)***	***R92***	***311***
Status: Completed - Case Closed				

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
ROYAL GLASS & MIRROR	***450 CAMBRIDGE AVE***	***WNW 1/4 - 1/2 (0.470 mi.)***	***93***	***312***
Status: Completed - Case Closed				
SNELL RESIDENCE	***2388 WAVERLY ST***	***N 1/4 - 1/2 (0.475 mi.)***	***94***	***314***
Status: Completed - Case Closed				
CO-OPT SERVICE STATION	***3897 EL CAMINO REAL***	***SE 1/4 - 1/2 (0.484 mi.)***	***95***	***315***
Status: Completed - Case Closed				
SHELL	***299 CALIFORNIA AVE***	***NNW 1/4 - 1/2 (0.493 mi.)***	***96***	***316***
Status: Open - Remediation				

SLIC: SLIC Region comes from the California Regional Water Quality Control Board.

A review of the SLIC list, as provided by EDR, and dated 09/20/2010 has revealed that there are 14 SLIC sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
DURA BOND	***3201 ASH ST***	***SE 0 - 1/8 (0.007 mi.)***	***D12***	***34***
Facility Status: Open - Inactive				
MERCER PROCESSING	230 PORTAGE AVE	SE 0 - 1/8 (0.008 mi.)	D14	37
Facility Status: Completed - Case Closed				
DURA-BOND BEARING	***370 PORTAGE AVENUE***	***S 0 - 1/8 (0.020 mi.)***	***D20***	***45***
Facility Status: Open - Inactive				
VARIAN INC. NPDES	611 HANSEN	SSE 0 - 1/8 (0.094 mi.)	H35	81
Facility Status: Open - Inactive				
STANFORD CLEANERS	***2875 EL CAMINO REAL***	***WNW 0 - 1/8 (0.110 mi.)***	***41***	***142***
Facility Status: Open - Inactive				
Facility Status: Open - Site Assessment				
PROPOSED PARK PLAZA APARTMENTS	2785 PARK BOULEVARD	NW 1/8 - 1/4 (0.128 mi.)	I46	158
Facility Status: Open - Site Assessment				
HEWLETT-PACKARD COMPANY	***395 PAGE MILL RD***	***WNW 1/8 - 1/4 (0.147 mi.)***	***J50***	***183***
Facility Status: Open - Remediation				
VANCE BROWN AND SONS	***2747 PARK BLVD***	***NW 1/8 - 1/4 (0.153 mi.)***	***I56***	***188***
Facility Status: Open - Inactive				
HEWLETT-PACKARD COMPANY	640 PAGE MILL RD	W 1/8 - 1/4 (0.185 mi.)	K65	205
Facility Status: Open - Remediation				
EASTMAN KODAK COMPANY	***925 PAGE MILL RD***	***WSW 1/4 - 1/2 (0.315 mi.)***	***O79***	***245***
Facility Status: Open - Inactive				
PREMIER PROPERTIES - 385-399 S	385-399 SHERMAN AVENUE	WNW 1/4 - 1/2 (0.331 mi.)	80	249
Facility Status: Open - Assessment & Interim Remedial Action				
VARIAN ASSOCIATES	601 S. CALIFORNIA AVE.	WNW 1/4 - 1/2 (0.421 mi.)	P84	272
Facility Status: Open - Verification Monitoring				
BECKMAN INSTRUMENTS	***1050 PAGE MILL RD***	***WSW 1/4 - 1/2 (0.422 mi.)***	***Q87***	***292***
Facility Status: Completed - Case Closed				
BECKMAN COULTER	***1050 PAGE MILL ROAD***	***WSW 1/4 - 1/2 (0.422 mi.)***	***Q89***	***306***
Facility Status: Open - Remediation				

HIST LUST: A listing of open and closed leaking underground storage tanks. This listing is no longer updated by the county. Leaking underground storage tanks are now handled by the Department of Environmental Health.

A review of the HIST LUST list, as provided by EDR, and dated 03/29/2005 has revealed that there are 24 HIST LUST sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
CARMEAN TRUST	*411 ACACIA AVE*	*0 - 1/8 (0.000 mi.)*	*A5*	*20*
LOCKHEED MISSLES & SPACE CO	*3101 PARK BLVD*	*NE 0 - 1/8 (0.005 mi.)*	*C9*	*29*
DURA BOND	*3201 ASH ST*	*SE 0 - 1/8 (0.007 mi.)*	*D12*	*34*
GAVENMAN PROPERTY	*3017 EL CAMINO REAL*	*WNW 0 - 1/8 (0.028 mi.)*	*F23*	*55*
JOST HEATING & SHEET METAL	*412 OLIVE AVE*	*WNW 0 - 1/8 (0.031 mi.)*	*24*	*56*
PALO ALTO NISSAN	*3001 EL CAMINO REAL*	*WNW 0 - 1/8 (0.040 mi.)*	*F27*	*61*
HOHBACH	*200 PAGE MILL RD*	*NW 0 - 1/8 (0.119 mi.)*	*I43*	*155*
HEWLETT PACKARD CO MFG DIV	*395 PAGE MILL RD*	*WNW 1/8 - 1/4 (0.147 mi.)*	*J48*	*158*
BLEIBLER IRON WORKS	*411 PAGE MILL RD*	*WNW 1/8 - 1/4 (0.149 mi.)*	*J52*	*185*
VANCE BROWN & SONS	*2747 PARK BLVD*	*NW 1/8 - 1/4 (0.153 mi.)*	*I57*	*191*
MOBIL (BP 11219)	*2780 EL CAMINO REAL*	*WNW 1/8 - 1/4 (0.178 mi.)*	*K62*	*201*
PALO ALTO FIRESTONE	*3401 EL CAMINO REAL*	*SSE 1/8 - 1/4 (0.189 mi.)*	*67*	*207*
GREEN WORLD NURSERY	*2711 EL CAMINO REAL*	*WNW 1/8 - 1/4 (0.216 mi.)*	*71*	*211*
CHEVRON	*775 PAGE MILL RD*	*WSW 1/4 - 1/2 (0.251 mi.)*	*73*	*213*
JOHN'S AUTOMOTIVE	*3508 EL CAMINO REAL*	*SSE 1/4 - 1/2 (0.253 mi.)*	*N74*	*216*
COMBES AUTO REPAIR	*3585 EL CAMINO REAL*	*SSE 1/4 - 1/2 (0.270 mi.)*	*N76*	*218*
SHELL	*3601 EL CAMINO REAL*	*SSE 1/4 - 1/2 (0.278 mi.)*	*N77*	*222*
EASTMAN KODAK COMPANY	*925 PAGE MILL RD*	*WSW 1/4 - 1/2 (0.315 mi.)*	*O79*	*245*
PALO ALTO TIRE & BRAKE	*306 CAMBRIDGE AVE*	*WNW 1/4 - 1/2 (0.440 mi.)*	*91*	*310*
OLD FIRE STATION	*2253 PARK BLVD*	*NW 1/4 - 1/2 (0.467 mi.)*	*R92*	*311*
ROYAL GLASS & MIRROR	*450 CAMBRIDGE AVE*	*WNW 1/4 - 1/2 (0.470 mi.)*	*93*	*312*
SNELL RESIDENCE	*2388 WAVERLY ST*	*N 1/4 - 1/2 (0.475 mi.)*	*94*	*314*
CO-OPT SERVICE STATION	*3897 EL CAMINO REAL*	*SE 1/4 - 1/2 (0.484 mi.)*	*95*	*315*
SHELL	*299 CALIFORNIA AVE*	*NNW 1/4 - 1/2 (0.493 mi.)*	*96*	*316*

State and tribal registered storage tank lists

UST: The Underground Storage Tank database contains registered USTs. USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA). The data come from the State Water Resources Control Board's Hazardous Substance Storage Container Database.

A review of the UST list, as provided by EDR, and dated 09/20/2010 has revealed that there is 1 UST site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
PACIFIC BELL	*3350 BIRCH STREET*	*ESE 0 - 1/8 (0.047 mi.)*	*29*	*63*

AST: The Aboveground Storage Tank database contains registered ASTs. The data come from the State Water Resources Control Board's Hazardous Substance Storage Container Database.

A review of the AST list, as provided by EDR, and dated 08/01/2009 has revealed that there are 2 AST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
CPA PARK BLVD SUBSTATION	3291 PARK BL	ESE 0 - 1/8 (0.037 mi.)	E26	61

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
COMMUNICATION & POWER IND.	811 HANSEN WAY	S 1/8 - 1/4 (0.205 mi.)	M70	210

ADDITIONAL ENVIRONMENTAL RECORDS

Local Lists of Landfill / Solid Waste Disposal Sites

SWRCY: A listing of recycling facilities in California.

A review of the SWRCY list, as provided by EDR, and dated 07/23/2010 has revealed that there is 1 SWRCY site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
TOMRA PACIFIC INC	164 S CALIFORNIA AVE	NW 1/4 - 1/2 (0.425 mi.)	R90	309

Local Lists of Hazardous waste / Contaminated Sites

HIST Cal-Sites: Formerly known as ASPIS, this database contains both known and potential hazardous substance sites. The source is the California Department of Toxic Substance Control. No longer updated by the state agency. It has been replaced by ENVIROSTOR.

A review of the HIST Cal-Sites list, as provided by EDR, and dated 08/08/2005 has revealed that there are 3 HIST Cal-Sites sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
VARIAN	***611 HANSEN WAY***	***SSE 0 - 1/8 (0.095 mi.)***	***H39***	***94***
AYDIN ENERGY	***3180 HANOVER STREET***	***SSW 1/2 - 1 (0.830 mi.)***	***101***	***330***
HILLVIEW PORTER PLUME	***HILLVIEW AVENUE / PORTE***	***SSW 1/2 - 1 (0.981 mi.)***	***106***	***396***

Local Lists of Registered Storage Tanks

CA FID UST: The Facility Inventory Database contains active and inactive underground storage tank locations. The source is the State Water Resource Control Board.

A review of the CA FID UST list, as provided by EDR, and dated 10/31/1994 has revealed that there are 11 CA FID UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
STAR GRAPHIC ARTS CO. INC.	***3200 ASH ST***	***SE 0 - 1/8 (0.008 mi.)***	***D17***	***40***
DURA-BOND BEARING COMPANY	***395 PORTAGE***	***S 0 - 1/8 (0.023 mi.)***	***D22***	***49***
PARK AVENUE MOTORS	***3290 PARK BLVD***	***ESE 0 - 1/8 (0.036 mi.)***	***E25***	***57***
PACIFIC BELL	***3350 BIRCH STREET***	***ESE 0 - 1/8 (0.047 mi.)***	***29***	***63***
VARIAN ASSOCIATES HANSEN WAY	***611 HANSEN WAY N MS-A12***	***SSE 0 - 1/8 (0.087 mi.)***	***H34***	***79***
STANFORD CLEANERS	***2875 EL CAMINO REAL***	***WNW 0 - 1/8 (0.110 mi.)***	***41***	***142***
PACIFIC READY MIX INC	***2785 PARK BLVD***	***NW 1/8 - 1/4 (0.128 mi.)***	***I44***	***156***
BLEIBLER IRON WORKS INC.	***411 PAGE MILL RD***	***WNW 1/8 - 1/4 (0.149 mi.)***	***J54***	***186***
OFFICES OF VANCE M. BROWN & SO	***2747 PARK BLVD***	***NW 1/8 - 1/4 (0.153 mi.)***	***I58***	***192***

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
OED/OCD	***640 PAGE MILL RD***	***W 1/8 - 1/4 (0.185 mi.)***	***K64***	***204***
ZZONTA	***2680 RAMONA***	***NE 1/8 - 1/4 (0.204 mi.)***	***L69***	***210***

HIST UST: Historical UST Registered Database.

A review of the HIST UST list, as provided by EDR, and dated 10/15/1990 has revealed that there are 13 HIST UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
PALO ALTO DATSUN INC	411 ACACIA AVE	0 - 1/8 (0.000 mi.)	A4	19
STAR GRAPHIC ARTS CO. INC.	***3200 ASH ST***	***SE 0 - 1/8 (0.008 mi.)***	***D16***	***39***
DURA-BOND BEARING COMPANY	***395 PORTAGE***	***S 0 - 1/8 (0.023 mi.)***	***D22***	***49***
PARK AVENUE MOTORS	***3290 PARK BLVD***	***ESE 0 - 1/8 (0.036 mi.)***	***E25***	***57***
PACIFIC BELL	***3350 BIRCH STREET***	***ESE 0 - 1/8 (0.047 mi.)***	***29***	***63***
VARIAN ASSOCIATES HANSEN WAY	***611 HANSEN WAY N MS-A12***	***SSE 0 - 1/8 (0.087 mi.)***	***H34***	***79***
STANFORD CLEANERS	***2875 EL CAMINO REAL***	***WNW 0 - 1/8 (0.110 mi.)***	***41***	***142***
PACIFIC READY MIX INC	2785 PARK BLVD	NW 1/8 - 1/4 (0.128 mi.)	I45	157
BLEIBLER IRON WORKS INC.	411-PAGE MILL ROAD	WNW 1/8 - 1/4 (0.149 mi.)	J51	185
OFFICES OF VANCE M. BROWN & SO	2747 PARK BLVD	NW 1/8 - 1/4 (0.153 mi.)	I55	188
MOBIL SERVICE STATION	***2780 EL CAMINO REAL***	***WNW 1/8 - 1/4 (0.178 mi.)***	***K61***	***200***
OED/OCD	640 PAGE MILL RD	W 1/8 - 1/4 (0.185 mi.)	K66	206
ZZONTA	2680 RAMONA ST	NE 1/8 - 1/4 (0.204 mi.)	L68	209

SWEEPS UST: Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

A review of the SWEEPS UST list, as provided by EDR, and dated 06/01/1994 has revealed that there are 12 SWEEPS UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
VACANT	411 ACACIA ST	0 - 1/8 (0.000 mi.)	A2	17
STAR GRAPHIC ARTS CO. INC.	***3200 ASH ST***	***SE 0 - 1/8 (0.008 mi.)***	***D17***	***40***
DURA-BOND BEARING COMPANY	***395 PORTAGE***	***S 0 - 1/8 (0.023 mi.)***	***D22***	***49***
PARK AVENUE MOTORS	***3290 PARK BLVD***	***ESE 0 - 1/8 (0.036 mi.)***	***E25***	***57***
PACIFIC BELL	***3350 BIRCH STREET***	***ESE 0 - 1/8 (0.047 mi.)***	***29***	***63***
VARIAN ASSOCIATES HANSEN WAY	***611 HANSEN WAY N MS-A12***	***SSE 0 - 1/8 (0.087 mi.)***	***H34***	***79***
STANFORD CLEANERS	***2875 EL CAMINO REAL***	***WNW 0 - 1/8 (0.110 mi.)***	***41***	***142***
PACIFIC READY MIX INC	***2785 PARK BLVD***	***NW 1/8 - 1/4 (0.128 mi.)***	***I44***	***156***
BLEIBLER IRON WORKS INC.	***411 PAGE MILL RD***	***WNW 1/8 - 1/4 (0.149 mi.)***	***J54***	***186***
OFFICES OF VANCE M. BROWN & SO	***2747 PARK BLVD***	***NW 1/8 - 1/4 (0.153 mi.)***	***I58***	***192***
OED/OCD	***640 PAGE MILL RD***	***W 1/8 - 1/4 (0.185 mi.)***	***K64***	***204***
ZZONTA	***2680 RAMONA***	***NE 1/8 - 1/4 (0.204 mi.)***	***L69***	***210***

Other Ascertainable Records

RCRA-NonGen: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

A review of the RCRA-NonGen list, as provided by EDR, and dated 02/17/2010 has revealed that there are 4 RCRA-NonGen sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
STANFORD BMW	***3045 PARK BOULEVARD***	***NE 0 - 1/8 (0.004 mi.)***	***C8***	***27***
LOCKHEED MISSLES & SPACE CO	***3101 PARK BLVD***	***NE 0 - 1/8 (0.005 mi.)***	***C9***	***29***
VARIAN ASSOCIATES INC	***380 PORTAGE AVENUE***	***S 0 - 1/8 (0.021 mi.)***	***D21***	***46***
PARK AVENUE MOTORS	***3290 PARK BLVD***	***ESE 0 - 1/8 (0.036 mi.)***	***E25***	***57***

ROD: Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid the cleanup.

A review of the ROD list, as provided by EDR, and dated 06/01/2010 has revealed that there is 1 ROD site within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
HEWLETT-PACKARD (620-640 PAGE	***620 - 640 PAGE MILL RD.***	***0 - 1/8 (0.000 mi.)***	***0***	***8***

CA BOND EXP. PLAN: Department of Health Services developed a site-specific expenditure plan as the basis for an appropriation of Hazardous Substance Cleanup Bond Act funds. It is not updated.

A review of the CA BOND EXP. PLAN list, as provided by EDR, and dated 01/01/1989 has revealed that there are 5 CA BOND EXP. PLAN sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
PARK BOULEVARD (NO. 2901) - PA	2901 PARK BLVD	NW 0 - 1/8 (0.057 mi.)	G32	77
VARIAN	***611 HANSEN WAY***	***SSE 0 - 1/8 (0.095 mi.)***	***H39***	***94***
HEWLETT-PACKARD OPTOELECTRIC D	***640 PAGE MILL ROAD***	***W 1/8 - 1/4 (0.185 mi.)***	***K63***	***202***
AYDIN ENERGY	***3180 HANOVER STREET***	***SSW 1/2 - 1 (0.830 mi.)***	***101***	***330***
HEWLETT PACKARD	***1501 PAGE MILL ROAD***	***SSW 1/2 - 1 (0.901 mi.)***	***T103***	***360***

Cortese: The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites). This listing is no longer updated by the state agency.

A review of the Cortese list, as provided by EDR, and dated 07/08/2010 has revealed that there is 1 Cortese site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
VARIAN	***611 HANSEN WAY***	***SSE 0 - 1/8 (0.095 mi.)***	***H39***	***94***

EXECUTIVE SUMMARY

HIST CORTESE: The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES].

A review of the HIST CORTESE list, as provided by EDR, and dated 04/01/2001 has revealed that there are 24 HIST CORTESE sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
HEWLETT-PACKARD (620-640 PAGE	***620 - 640 PAGE MILL RD.***	***0 - 1/8 (0.000 mi.)***	***0***	***8***
CARMEAN TRUST	***411 ACACIA AVE***	***0 - 1/8 (0.000 mi.)***	***A5***	***20***
LOCKHEED MISSLES & SPACE CO	***3101 PARK BLVD***	***NE 0 - 1/8 (0.005 mi.)***	***C9***	***29***
DURA BOND BEARING COMPANY	3201 ASH	SE 0 - 1/8 (0.007 mi.)	D10	33
JOST HEATING & SHEET METAL	***412 OLIVE AVE***	***WNW 0 - 1/8 (0.031 mi.)***	***24***	***56***
PALO ALTO NISSAN	***3001 EL CAMINO REAL***	***WNW 0 - 1/8 (0.040 mi.)***	***F27***	***61***
VARIAN	***611 HANSEN WAY***	***SSE 0 - 1/8 (0.095 mi.)***	***H39***	***94***
HOHBACK	216 PAGE MILL	WNW 0 - 1/8 (0.118 mi.)	I42	155
HEWLETT PACKARD CO MFG DIV	***395 PAGE MILL RD***	***WNW 1/8 - 1/4 (0.147 mi.)***	***J48***	***158***
BLEIBLER IRON WORKS	***411 PAGE MILL RD***	***WNW 1/8 - 1/4 (0.149 mi.)***	***J52***	***185***
VANCE BROWN & SONS	***2747 PARK BLVD***	***NW 1/8 - 1/4 (0.153 mi.)***	***I57***	***191***
MOBIL SERVICE STATION	***2780 EL CAMINO REAL***	***WNW 1/8 - 1/4 (0.178 mi.)***	***K61***	***200***
GREEN WORLD NURSERY	***2711 EL CAMINO REAL***	***WNW 1/8 - 1/4 (0.216 mi.)***	***71***	***211***
CHEVRON	***775 PAGE MILL RD***	***WSW 1/4 - 1/2 (0.251 mi.)***	***73***	***213***
JOHN'S AUTOMOTIVE	***3508 EL CAMINO REAL***	***SSE 1/4 - 1/2 (0.253 mi.)***	***N74***	***216***
COMBES AUTO REPAIR	***3585 EL CAMINO REAL***	***SSE 1/4 - 1/2 (0.270 mi.)***	***N76***	***218***
SHELL	***3601 EL CAMINO REAL***	***SSE 1/4 - 1/2 (0.278 mi.)***	***N77***	***222***
VARIAN ASSOCIATES	***601 CALIFORNIA AVE***	***WNW 1/4 - 1/2 (0.422 mi.)***	***P86***	***279***
PALO ALTO TIRE & BRAKE	***306 CAMBRIDGE AVE***	***WNW 1/4 - 1/2 (0.440 mi.)***	***91***	***310***
OLD FIRE STATION	***2253 PARK BLVD***	***NW 1/4 - 1/2 (0.467 mi.)***	***R92***	***311***
ROYAL GLASS & MIRROR	***450 CAMBRIDGE AVE***	***WNW 1/4 - 1/2 (0.470 mi.)***	***93***	***312***
SNELL RESIDENCE	***2388 WAVERLY ST***	***N 1/4 - 1/2 (0.475 mi.)***	***94***	***314***
CO-OPT SERVICE STATION	***3897 EL CAMINO REAL***	***SE 1/4 - 1/2 (0.484 mi.)***	***95***	***315***
SHELL	***299 CALIFORNIA AVE***	***NNW 1/4 - 1/2 (0.493 mi.)***	***96***	***316***

Notify 65: Notify 65 records contain facility notifications about any release that could impact drinking water and thereby expose the public to a potential health risk. The data come from the State Water Resources Control Board's Proposition 65 database.

A review of the Notify 65 list, as provided by EDR, and dated 10/21/1993 has revealed that there are 2 Notify 65 sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
HEWLETT-PACKARD	395 PAGE MILL RD.	WNW 1/8 - 1/4 (0.147 mi.)	J47	158
ARCO #0589	***1963 EL CAMINO REAL***	***WNW 1/2 - 1 (0.686 mi.)***	***98***	***319***

DRYCLEANERS: A list of drycleaner related facilities that have EPA ID numbers. These are facilities with certain SIC codes: power laundries, family and commercial; garment pressing and cleaners' agents; linen supply; coin-operated laundries and cleaning; drycleaning plants except rugs; carpet and upholster cleaning; industrial launderers; laundry and garment services.

A review of the DRYCLEANERS list, as provided by EDR, and dated 09/15/2010 has revealed that there is 1 DRYCLEANERS site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
STANFORD CLEANERS	***2875 EL CAMINO REAL***	***WNW 0 - 1/8 (0.110 mi.)***	***41***	***142***

EXECUTIVE SUMMARY

HWP: Detailed information on permitted hazardous waste facilities and corrective action ("cleanups") tracked in EnviroStor.

A review of the HWP list, as provided by EDR, and dated 08/09/2010 has revealed that there are 6 HWP sites within approximately 1 mile of the target property.

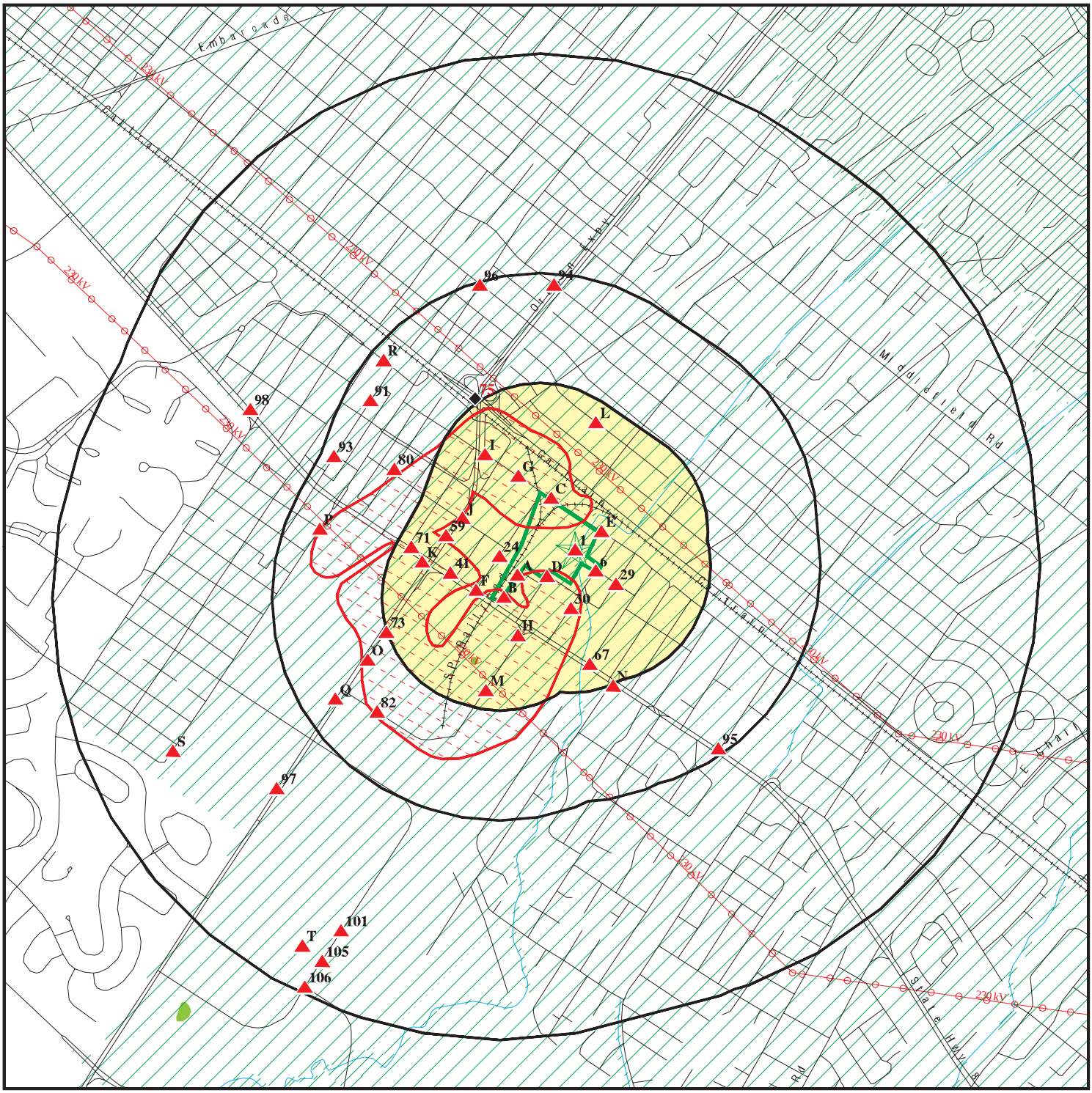
Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
COMMUNICATIONS & POWER INDUSTR	*607 HANSEN WAY*	*SSE 0 - 1/8 (0.094 mi.)*	*H37*	*83*
HEWLETT PACKARD CO MFG DIV	*395 PAGE MILL RD*	*WNW 1/8 - 1/4 (0.147 mi.)*	*J48*	*158*
VARIAN NMR SYSTEMS	*3120 HANSEN WAY*	*SW 1/4 - 1/2 (0.366 mi.)*	*82*	*256*
AGILENT TECHNOLOGIES INC	*1601 CALIFORNIA AVE*	*WSW 1/2 - 1 (0.804 mi.)*	*S100*	*323*
HEWLETT PACKARD CO	*1501 PAGE MILL ROAD*	*SSW 1/2 - 1 (0.901 mi.)*	*T104*	*370*
LOCKHEED MISSILES	*3251 HANOVER ST*	*SSW 1/2 - 1 (0.912 mi.)*	*105*	*394*

EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped:

Site Name	Database(s)
SUN RAY FOREIGN AUTO SERVICE	SWEEPS UST
CALIFORNIA PAGE MILL CENTER LP	DRYCLEANERS, HAZNET
CALMAC CHEMICAL	CERC-NFRAP
SMITH KLINE & FRENCH LABORATORIES	CERC-NFRAP
OREGON EXPY & ALMA ST	CERC-NFRAP
OLD QUARRY DISPOSAL SITE, STANDFOR	CERC-NFRAP
PSSI AG. MATERIAL STORAGE / HANDLI	SWF/LF
SUN RAY FOREIGN AUTO SERVICE	HIST UST
STANFORD SHOPPING CENTER	HAZNET
BIRCH PLAZA	SLIC
OREGON EXPRESSWAY UNDERPASS	SLIC
VARIAN MEDICAL SYSTEMS	ENVIROSTOR
COMMUNICATIONS & POWER IND, INC.	ENVIROSTOR

OVERVIEW MAP - 2897822.2s



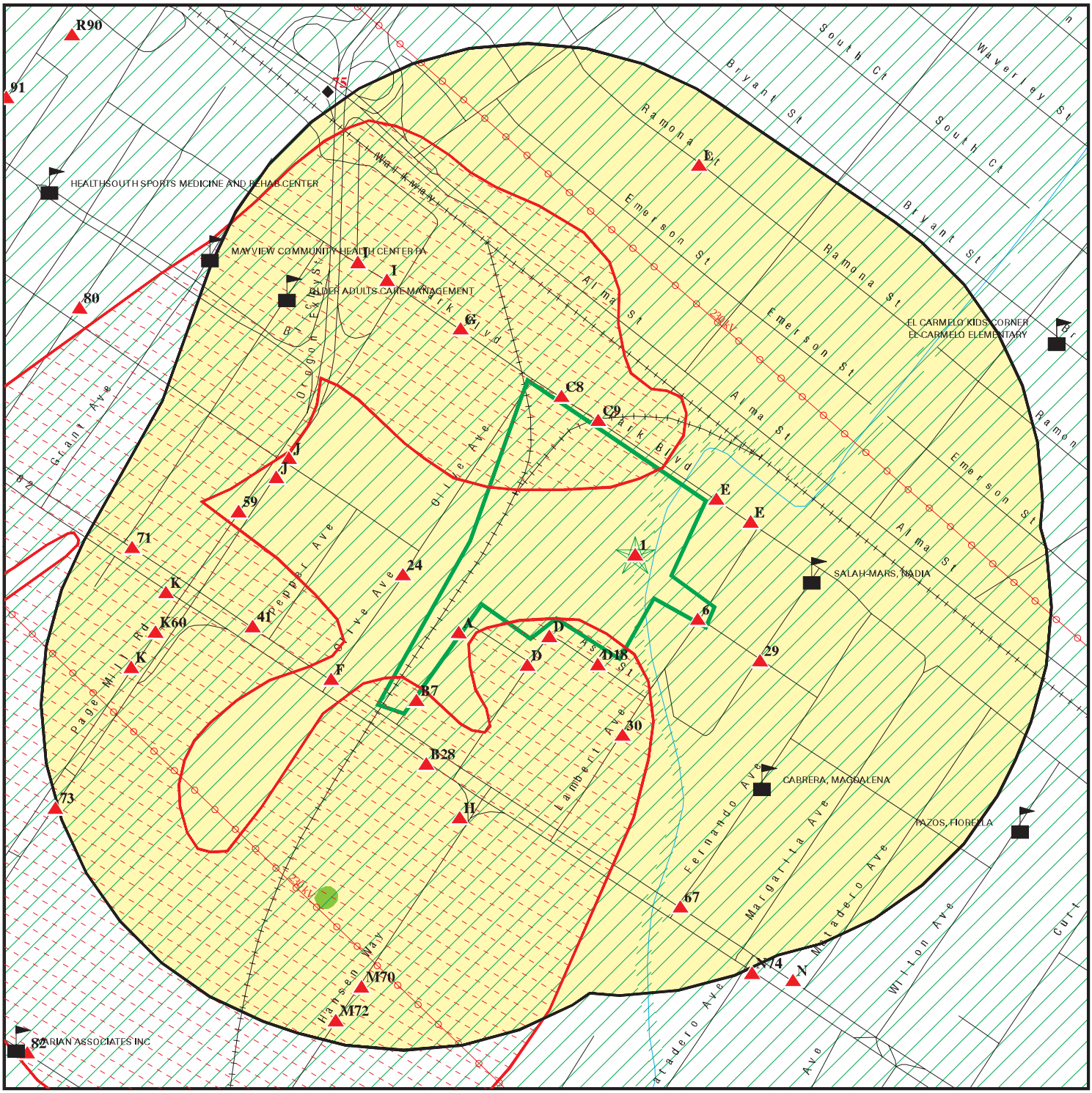
- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Power transmission lines
- Oil & Gas pipelines
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory
- Areas of Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: 15.5 Acre Retail Center ADDRESS: 3200 Park Boulevard Palo Alto CA 94306 LAT/LONG: 37.4235 / 122.1360	CLIENT: PES Environmental, Inc. CONTACT: Chris Baldassari INQUIRY #: 2897822.2s DATE: October 19, 2010 1:01 pm

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DETAIL MAP - 2897822.2s



Target Property

Sites at elevations higher than or equal to the target property

Sites at elevations lower than the target property

Manufactured Gas Plants

Sensitive Receptors

National Priority List Sites

Dept. Defense Sites

0 1/16 1/8 1/4 Miles

Indian Reservations BIA

Power transmission lines

Oil & Gas pipelines

100-year flood zone

500-year flood zone

National Wetland Inventory

Areas of Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME:	15.5 Acre Retail Center	CLIENT:	PES Environmental, Inc.
ADDRESS:	3200 Park Boulevard Palo Alto CA 94306	CONTACT:	Chris Baldassari
LAT/LONG:	37.4235 / 122.1360	INQUIRY #:	2897822.2s
		DATE:	October 19, 2010 1:02 pm

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MAP FINDINGS SUMMARY

Database	Target Property	Search Distance (Miles)	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Federal NPL site list								
NPL		1.000	1	0	0	1	NR	2
Proposed NPL		1.000	0	0	0	0	NR	0
NPL LIENS		TP	NR	NR	NR	NR	NR	0
Federal Delisted NPL site list								
Delisted NPL		1.000	0	0	0	0	NR	0
Federal CERCLIS list								
CERCLIS		0.500	1	0	0	NR	NR	1
FEDERAL FACILITY		1.000	0	0	0	0	NR	0
Federal CERCLIS NFRAP site List								
CERC-NFRAP		0.500	3	1	5	NR	NR	9
Federal RCRA CORRACTS facilities list								
CORRACTS		1.000	1	1	1	1	NR	4
Federal RCRA non-CORRACTS TSD facilities list								
RCRA-TSDF		0.500	1	0	0	NR	NR	1
Federal RCRA generators list								
RCRA-LQG		0.250	2	0	NR	NR	NR	2
RCRA-SQG		0.250	16	5	NR	NR	NR	21
RCRA-CESQG		0.250	0	0	NR	NR	NR	0
Federal institutional controls / engineering controls registries								
US ENG CONTROLS		0.500	1	0	0	NR	NR	1
US INST CONTROL		0.500	1	0	0	NR	NR	1
Federal ERNS list								
ERNS		TP	NR	NR	NR	NR	NR	0
State- and tribal - equivalent NPL								
RESPONSE		1.000	1	0	0	3	NR	4
State- and tribal - equivalent CERCLIS								
ENVIROSTOR		1.000	2	2	4	6	NR	14
State and tribal landfill and/or solid waste disposal site lists								
SWF/LF		0.500	0	0	0	NR	NR	0
State and tribal leaking storage tank lists								
LUST		0.500	7	7	11	NR	NR	25
SLIC		0.500	5	4	5	NR	NR	14

MAP FINDINGS SUMMARY

Database	Target Property	Search Distance (Miles)	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
HIST LUST		0.500	7	6	11	NR	NR	24
INDIAN LUST		0.500	0	0	0	NR	NR	0
State and tribal registered storage tank lists								
UST		0.250	1	0	NR	NR	NR	1
AST		0.250	1	1	NR	NR	NR	2
INDIAN UST		0.250	0	0	NR	NR	NR	0
FEMA UST		0.250	0	0	NR	NR	NR	0
State and tribal voluntary cleanup sites								
INDIAN VCP		0.500	0	0	0	NR	NR	0
VCP		0.500	0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS		0.500	0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
DEBRIS REGION 9		0.500	0	0	0	NR	NR	0
ODI		0.500	0	0	0	NR	NR	0
WMUDS/SWAT		0.500	0	0	0	NR	NR	0
SWRCY		0.500	0	0	1	NR	NR	1
HAULERS		TP	NR	NR	NR	NR	NR	0
INDIAN ODI		0.500	0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US CDL		TP	NR	NR	NR	NR	NR	0
HIST Cal-Sites		1.000	1	0	0	2	NR	3
SCH		0.250	0	0	NR	NR	NR	0
Toxic Pits		1.000	0	0	0	0	NR	0
CDL		TP	NR	NR	NR	NR	NR	0
US HIST CDL		TP	NR	NR	NR	NR	NR	0
Local Lists of Registered Storage Tanks								
CA FID UST		0.250	6	5	NR	NR	NR	11
HIST UST		0.250	7	6	NR	NR	NR	13
SWEEPS UST		0.250	7	5	NR	NR	NR	12
Local Land Records								
LIENS 2		TP	NR	NR	NR	NR	NR	0
LUCIS		0.500	0	0	0	NR	NR	0
LIENS		TP	NR	NR	NR	NR	NR	0
DEED		0.500	0	0	0	NR	NR	0
Records of Emergency Release Reports								
HMIRS		TP	NR	NR	NR	NR	NR	0
CHMIRS		TP	NR	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Target Property	Search Distance (Miles)	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
LDS		TP	NR	NR	NR	NR	NR	0
MCS		TP	NR	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA-NonGen		0.250	4	0	NR	NR	NR	4
DOT OPS		TP	NR	NR	NR	NR	NR	0
DOD		1.000	0	0	0	0	NR	0
FUDS		1.000	0	0	0	0	NR	0
CONSENT		1.000	0	0	0	0	NR	0
ROD		1.000	1	0	0	0	NR	1
UMTRA		0.500	0	0	0	NR	NR	0
MINES		0.250	0	0	NR	NR	NR	0
TRIS		TP	NR	NR	NR	NR	NR	0
TSCA		TP	NR	NR	NR	NR	NR	0
FTTS		TP	NR	NR	NR	NR	NR	0
HIST FTTS		TP	NR	NR	NR	NR	NR	0
SSTS		TP	NR	NR	NR	NR	NR	0
ICIS		TP	NR	NR	NR	NR	NR	0
PADS		TP	NR	NR	NR	NR	NR	0
MLTS		TP	NR	NR	NR	NR	NR	0
RADINFO		TP	NR	NR	NR	NR	NR	0
FINDS		TP	NR	NR	NR	NR	NR	0
RAATS		TP	NR	NR	NR	NR	NR	0
CA BOND EXP. PLAN		1.000	2	1	0	2	NR	5
NPDES		TP	NR	NR	NR	NR	NR	0
WDS		TP	NR	NR	NR	NR	NR	0
Cortese		0.500	1	0	0	NR	NR	1
HIST CORTESE		0.500	8	5	11	NR	NR	24
SAN JOSE HAZMAT		0.250	0	0	NR	NR	NR	0
Notify 65		1.000	0	1	0	1	NR	2
DRYCLEANERS		0.250	1	0	NR	NR	NR	1
WIP		0.250	0	0	NR	NR	NR	0
HAZNET	X	TP	NR	NR	NR	NR	NR	0
EMI		TP	NR	NR	NR	NR	NR	0
INDIAN RESERV		1.000	0	0	0	0	NR	0
SCRD DRYCLEANERS		0.500	0	0	0	NR	NR	0
PCB TRANSFORMER		TP	NR	NR	NR	NR	NR	0
PROC		0.500	0	0	0	NR	NR	0
MWMP		0.250	0	0	NR	NR	NR	0
COAL ASH DOE		TP	NR	NR	NR	NR	NR	0
COAL ASH EPA		0.500	0	0	0	NR	NR	0
HWT		0.250	0	0	NR	NR	NR	0
FINANCIAL ASSURANCE		TP	NR	NR	NR	NR	NR	0
HWP		1.000	1	1	1	3	NR	6
EDR PROPRIETARY RECORDS								
EDR Proprietary Records								
Manufactured Gas Plants		1.000	0	0	0	0	NR	0
EDR Historical Auto Stations		0.250	0	0	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Target Property	Search Distance (Miles)	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
EDR Historical Cleaners		0.250	0	0	NR	NR	NR	0

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

1 **WSJ PROPERTIES** **HAZNET** **S103652538**
Target **3200 PARK BLVD** **N/A**
Property **PALO ALTO, CA 94306**

Actual:
23 ft.

HAZNET:

Gepaid:	CAC001305584
Contact:	WSJ PROPERTIES
Telephone:	0000000000
Facility Addr2:	Not reported
Mailing Name:	Not reported
Mailing Address:	3201 ASH ST
Mailing City,St,Zip:	PALO ALTO, CA 943060000
Gen County:	Santa Clara
TSD EPA ID:	NVD982358483
TSD County:	99
Waste Category:	Unspecified oil-containing waste
Disposal Method:	Not reported
Tons:	34.0897
Facility County:	Santa Clara

NPL **HEWLETT-PACKARD (620-640 PAGE MILL ROAD)** **NPL** **1000281842**
Region **620 - 640 PAGE MILL RD.** **CERCLIS** **CAD980884209**
PALO ALTO, CA 94304 **US ENG CONTROLS**
US INST CONTROL
< 1/8 **ROD**
1 ft. **NPDES**
HIST CORTESE

NPL:

EPA ID:	CAD980884209
EPA Region:	09
Federal:	N
Final Date:	1990-02-21 00:00:00

Category Details:

NPL Status:	Currently on the Final NPL
Category Description:	Depth To Aquifer-> 10 And <= 25 Feet
Category Value:	20

NPL Status:	Currently on the Final NPL
Category Description:	Distance To Nearest Population-> 1/4 And <= 1/2 Mile
Category Value:	2640

Site Details:

Site Name:	HEWLETT-PACKARD (620-640 PAGE MILL ROAD)
Site Status:	Final
Site Zip:	94304
Site City:	PALO ALTO
Site State:	CA
Federal Site:	No
Site County:	SANTA CLARA
EPA Region:	09
Date Proposed:	06/24/88
Date Deleted:	Not reported
Date Finalized:	02/21/90

Substance Details:

NPL Status:	Currently on the Final NPL

HEWLETT-PACKARD (620-640 PAGE MILL ROAD) (Continued) **1000281842**

Substance ID: Not reported
Substance: Not reported
CAS #: Not reported
Pathway: Not reported
Scoring: Not reported

NPL Status: Currently on the Final NPL
Substance ID: U078
Substance: DICHLOROETHENE, 1,1-
CAS #: 75-35-4
Pathway: GROUND WATER PATHWAY
Scoring: 4

NPL Status: Currently on the Final NPL
Substance ID: U079
Substance: TRANS-DICHLOROETHYLENE, 1,2-
CAS #: 156-60-5
Pathway: GROUND WATER PATHWAY
Scoring: 2

NPL Status: Currently on the Final NPL
Substance ID: U226
Substance: TRICHLOROETHANE, 1,1,1-
CAS #: 71-55-6
Pathway: GROUND WATER PATHWAY
Scoring: 2

NPL Status: Currently on the Final NPL
Substance ID: U228
Substance: TRICHLOROETHYLENE (TCE)
CAS #: 79-01-6
Pathway: GROUND WATER PATHWAY
Scoring: 2

NPL Status: Currently on the Final NPL
Substance ID: U239
Substance: XYLENE
CAS #: 1330-20-7
Pathway: GROUND WATER PATHWAY
Scoring: 2

Summary Details:

Conditions at proposal June 24, 1988): Hewlett-Packard manufactured optoelectronic equipment on a 10-acre site at 620-640 Page Mill Road in Palo Alto, Santa Clara County, California, until 1986. In July 1981, at least 300 gallons of waste solvents, including 1,1,1-trichloroethane, trichloroethylene, toluene, xylene, and alcohols, leaked from a buried storage tank for a period of at least 3 weeks. The company excavated the tank and approximately 100 cubic yards of contaminated soil and transported the materials to a ha ardous waste facility regulated under Subtitle C of the Resource Conservation and Recovery Act. Since 1982, the company has been pumping and treating contaminated ground water. Tests conducted in 1986 by a consultant to Hewlett-Packard detected trans-1,2-dichloroethylene, 1,1-dichloroethylene, trichloroethylene, 1,1,1-trichloroethane, and xylene, several in high concentrations 290,000 parts per billion) in ground water under the tank area. An estimated 57,000 people obtain drinking water from municipal wells within 3 miles of the site. In 1987, Hewlett-Packard excavated an

HEWLETT-PACKARD (620-640 PAGE MILL ROAD) (Continued) **1000281842**

additional 810 cubic yards of soil around the former tank area. Status February 21, 1990): Hewlett-Packard is conducting a remedial investigation/feasibility study RI/FS) to determine the type and extent of off-site contamination and identify alternatives for remedial action. A report on the RI/FS is due in February 1990.

Site Status Details:
NPL Status: Final
Proposed Date: 06/24/1988
Final Date: 02/21/1990
Deleted Date: Not reported

Narratives Details:
NPL Name: HEWLETT-PACKARD (620-640 PAGE MILL ROAD)
City: PALO ALTO
State: CA

CERCLIS:
Site ID: 0902134
Federal Facility: Not a Federal Facility
NPL Status: Currently on the Final NPL
Non NPL Status: Not reported

CERCLIS Site Contact Name(s):
Contact Name: Marie Lacey
Contact Tel: (415) 972-3163
Contact Title: Remedial Project Manager (RPM)

Contact Name: Karen Jurist
Contact Tel: (415) 972-3219
Contact Title: Site Assessment Manager (SAM)

Contact Name: Jeff Inglis
Contact Tel: (415) 972-3095
Contact Title: Site Assessment Manager (SAM)

Contact Name: Carl Brickner
Contact Tel: (415) 972-3814
Contact Title: Site Assessment Manager (SAM)

Contact Name: Matt Salazar
Contact Tel: (415) 972-3982
Contact Title: Remedial Project Manager (RPM)

CERCLIS Site Alias Name(s):
Alias Name: HP 640 PAGE MILL ROAD
Alias Address: Not reported
CA
Alias Name: HEWLETT PACKARD/640
Alias Address: Not reported
CA
Alias Name: HEWLETT PACKARD/640
Alias Address: Not reported
CA
Alias Name: HEWLETT PACKARD I PALO ALTO

HEWLETT-PACKARD (620-640 PAGE MILL ROAD) (Continued) **1000281842**

Alias Address: Not reported
CA
Alias Name: HEWLETT-PACKARD (620-640 PAGE MILL ROAD)
Alias Address: 620 - 640 PAGE MILL RD.
PALO ALTO, CA 94304

Site Description: The Hewlett-Packard 620-640 Page Mill Road (HP-640 PMR) Superfund site is located in Palo Alto, California within the Stanford Research Park, a light-industrial and research area owned by Stanford University. Leaks from an underground waste solvent storage tank have resulted in soil and ground water contamination at the site. Land use in the vicinity of the site is predominantly commercial and industrial, with smaller areas of residential development. The nearest residential areas are located approximately 1/8 mile northeast of the facility. Five municipal backup supply wells drawing from a deep aquifer are within three miles of the site but are not currently used. All of the City of Palo Alto drinking water is supplied by the San Francisco Water Department's Hetch Hetchy System. The HP-640 PMR site is located near the western margin of the Santa Clara Valley. The valley surface in this area is a gently sloping alluvial plain that extends northeast from the foothills to San Francisco Bay, located approximately three miles to the northeast. The area is underlain by interbedded alluvial fan deposits and fine-grained floodplain deposits. The only surface water in the vicinity of HP-640 PMR is Matadero Creek, located to the east of the site. Matadero Creek is an intermittent stream that originates near the Los Altos Hills and flows in a northerly direction through the residential, commercial and industrial areas of Palo Alto. Two areas have been designated as ground water study areas: the California Olive Emerson (COE) Study Area (named by the bordering streets) and the Perimeter Area which represents the limits of the known ground water contamination plume. The COE and Perimeter Areas, are underlain by two primary aquifers, the upper A Aquifer and the lower B Aquifer. Each of these two aquifers contain distinct sand zones. The A Aquifer extends up to 55 feet below ground surface, and groundwater is first encountered at depths between 15 and 30 feet. Within the A Aquifer, the A1 Upper (A1U) Zone is generally found between the depths of 15 and 30 feet, the A1 Zone between 30 and 40 feet, and the A2 Zone between 40 and 55 feet. The general groundwater gradient in the A Aquifer is to the north-northeast. Within the B Aquifer, the B1 Zone occurs below an approximate depth of 60 feet below ground surface. This zone is typically about 10 feet thick. Where encountered, the B2 Zone begins at approximately 85 feet below the surface and is between six and 33 feet thick. The Oregon Expressway Underpass (OEU) serves as a subsurface roadway beneath the Southern Pacific Railroad tracks, Alma Street and Park Boulevard. The underpass, built in 1958, extends 24 feet below ground surface into the aquifer A1U Zone. A dewatering system installed beneath the underpass controls natural groundwater inflow and surface runoff. This dewatering appears to affect groundwater flow in the A1U, A1 and A2 Zones, and does not allow contaminants to bypass the subdrain to the north. During low flow periods, the average rate of groundwater discharge is typically 140 gallons per minute (gpm), with total Volatile Organic Compounds (VOCs) concentrations ranging between 200 and 300 parts per billion (ppb). This water is discharged to the City of Palo Alto sanitary sewer. The discharge during high flow periods consists of both surface water and groundwater; excess is pumped via auxiliary pumps and discharged to the City of Palo Alto storm drain system.Hewlett Packard Company (HP) manufactured gallium arsenide- and silicon-based semiconductors at the property from 1962 until operations ceased in 1986. The facility consisted of two main buildings (#10 and #11) and a storage building. Both buildings have since been demolished and the site redeveloped for an office building with an underground garage. Site investigation began in 1981 after a leaking 1000-gallon underground solvent

HEWLETT-PACKARD (620-640 PAGE MILL ROAD) (Continued) **1000281842**

storage tank was discovered between Building 11 and the storage building. Sources of metals were found in Building 10, associated with acid neutralization pumps, piping and operations areas in the building. The primary contaminants detected at the site were trichloroethene (TCE); 1,1,1-trichloroethane (1,1,1-TCA); tetrachloroethene (PCE); gallium; and arsenic. Interim Remedial Measures (IRMs) have been conducted since 1982. Soil excavations at the HP-640 PM) site between 1987 and 1992 removed approximately 7,700 cubic yards of contaminated soil to Class I landfills and approximately 3,000 cubic yards to Class III landfills. Additional areas of the site were also excavated to remove above-background concentrations of arsenic, gallium and several other metals. Groundwater remediation at HP-640 PMR was initiated in 1982 for seven months; extraction was restarted in 1987 and has continued to the present. On June 24, 1988, the U.S. EPA proposed adding the HP-640 PMR site to the National Priorities List (NPL), subject to the requirements of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). On February 1, 1990, the HP-640 PMR facility was added to the NPL. Since the listing, the groundwater contamination plume emanating from the HP-640 PMR site was found to be commingled in part with groundwater contamination plumes associated with other potential sources beyond the HP-640 PMR facility boundaries. Pursuant to the South Bay Multi-Site Cooperative Agreement and the South Bay Groundwater Contamination Enforcement Agreement entered into by the California Regional Water Quality Control Board (RWQCB), EPA and the California Department of Toxic Substances Control (DTSC) (formerly the California Department of Health Services (DHS)), the RWQCB has been acting as lead regulatory agency for the site. In July 1994, the RWQCB released a Proposed Plan fact sheet for the site that described the proposed remedy for the site. A public notice was published allowing 30 days for public comment on the RI/FS and Proposed Plan. A public meeting was held on July 26, 1994.

CERCLIS Assessment History:

Action:	PRELIMINARY ASSESSMENT
Date Started:	Not reported
Date Completed:	07/01/84
Priority Level:	Low priority for further assessment
Action:	DISCOVERY
Date Started:	Not reported
Date Completed:	07/01/84
Priority Level:	Not reported
Action:	HAZARD RANKING SYSTEM PACKAGE
Date Started:	Not reported
Date Completed:	06/01/87
Priority Level:	Not reported
Action:	SITE INSPECTION
Date Started:	Not reported
Date Completed:	06/01/87
Priority Level:	Higher priority for further assessment
Action:	PROPOSAL TO NATIONAL PRIORITIES LIST
Date Started:	Not reported
Date Completed:	06/24/88
Priority Level:	Not reported
Action:	REMOVAL ASSESSMENT
Date Started:	08/03/89
Date Completed:	08/03/89

HEWLETT-PACKARD (620-640 PAGE MILL ROAD) (Continued) **1000281842**

Priority Level: Not reported

Action: FINAL LISTING ON NATIONAL PRIORITIES LIST
Date Started: Not reported
Date Completed: 02/21/90
Priority Level: Not reported

Action: NATIONAL PRIORITIES LIST RESPONSIBLE PARTY SEARCH
Date Started: 08/04/89
Date Completed: 03/30/90
Priority Level: Not reported

Action: REMOVAL ASSESSMENT
Date Started: 08/14/90
Date Completed: 08/14/90
Priority Level: Not reported

Action: STATE ORDER
Date Started: Not reported
Date Completed: 03/15/91
Priority Level: Not reported

Action: ADMINISTATIVE/VOLUNTARY COST RECOVERY
Date Started: Not reported
Date Completed: 06/18/92
Priority Level: Not reported

Action: RISK/HEALTH ASSESSMENT
Date Started: Not reported
Date Completed: 09/30/92
Priority Level: Not reported

Action: REMOVAL ASSESSMENT
Date Started: Not reported
Date Completed: 12/29/92
Priority Level: Not reported

Action: POTENTIALLY RESPONSIBLE PARTY REMEDIAL DESIGN
Date Started: 09/21/94
Date Completed: 01/23/95
Priority Level: Not reported

Action: POTENTIALLY RESPONSIBLE PARTY REMEDIAL INVESTIGATION/FEASIBILITY STUDY
Date Started: 03/16/89
Date Completed: 03/24/95
Priority Level: Not reported

Action: ADMINISTRATIVE RECORDS
Date Started: 04/02/91
Date Completed: 03/24/95
Priority Level: Admin Record Compiled for a Remedial Event

Action: RECORD OF DECISION
Date Started: Not reported
Date Completed: 03/24/95
Priority Level: Final Remedy Selected at Site

HEWLETT-PACKARD (620-640 PAGE MILL ROAD) (Continued) **1000281842**

Action: ADMINISTATIVE/VOLUNTARY COST RECOVERY
Date Started: Not reported
Date Completed: 01/18/96
Priority Level: Not reported

Action: POTENTIALLY RESPONSIBLE PARTY REMEDIAL ACTION
Date Started: 01/23/95
Date Completed: 12/11/96
Priority Level: Not reported

Action: PRELIMINARY CLOSE-OUT REPORT PREPARED
Date Started: Not reported
Date Completed: 09/16/97
Priority Level: Not reported

Action: ADMINISTATIVE/VOLUNTARY COST RECOVERY
Date Started: Not reported
Date Completed: 04/02/98
Priority Level: Not reported

Action: ADMINISTATIVE/VOLUNTARY COST RECOVERY
Date Started: Not reported
Date Completed: 04/27/98
Priority Level: Not reported

Action: TECHNICAL ASSISTANCE GRANT
Date Started: 06/05/90
Date Completed: 07/31/98
Priority Level: Not reported

Action: ADMINISTATIVE/VOLUNTARY COST RECOVERY
Date Started: Not reported
Date Completed: 03/18/99
Priority Level: Not reported

Action: FIVE-YEAR REVIEW
Date Started: 08/01/00
Date Completed: 09/14/00
Priority Level: Not reported

Action: FIVE-YEAR REVIEW
Date Started: Not reported
Date Completed: 09/30/05
Priority Level: Not reported

Action: INITIAL REMEDIAL MEASURE
Date Started: 04/01/83
Date Completed: Not reported
Priority Level: Not reported

US ENG CONTROLS:
EPA ID: CAD980884209
Site ID: 0902134
Name: HEWLETT-PACKARD (620-640 PAGE MILL ROAD)
Address: 620 - 640 PAGE MILL RD.
PALO ALTO, CA 94304

HEWLETT-PACKARD (620-640 PAGE MILL ROAD) (Continued) **1000281842**

EPA Region: 09
County: SANTA CLARA
Event Code: Not reported
Actual Date: Not reported

Action ID: 001
Action Name: RECORD OF DECISION
Action Completion date: 3/24/1995
Planned Complet. date: 6/30/1995
Operable Unit: 01
Contaminated Media : Groundwater
Engineering Control: Air Stripping

Action ID: 001
Action Name: RECORD OF DECISION
Action Completion date: 3/24/1995
Planned Complet. date: 6/30/1995
Operable Unit: 01
Contaminated Media : Groundwater
Engineering Control: Carbon Adsorption

Action ID: 001
Action Name: RECORD OF DECISION
Action Completion date: 3/24/1995
Planned Complet. date: 6/30/1995
Operable Unit: 01
Contaminated Media : Groundwater
Engineering Control: Directional Wells (Enhancement)

Action ID: 001
Action Name: RECORD OF DECISION
Action Completion date: 3/24/1995
Planned Complet. date: 6/30/1995
Operable Unit: 01
Contaminated Media : Groundwater
Engineering Control: Discharge

Action ID: 001
Action Name: RECORD OF DECISION
Action Completion date: 3/24/1995
Planned Complet. date: 6/30/1995
Operable Unit: 01
Contaminated Media : Groundwater
Engineering Control: Monitoring

Action ID: 001
Action Name: RECORD OF DECISION
Action Completion date: 3/24/1995
Planned Complet. date: 6/30/1995
Operable Unit: 01
Contaminated Media : Groundwater
Engineering Control: Pump And Treat

Action ID: 001
Action Name: RECORD OF DECISION
Action Completion date: 3/24/1995
Planned Complet. date: 6/30/1995

HEWLETT-PACKARD (620-640 PAGE MILL ROAD) (Continued) **1000281842**

Operable Unit: 01
Contaminated Media : Soil
Engineering Control: Carbon Adsorption

Action ID: 001
Action Name: RECORD OF DECISION
Action Completion date: 3/24/1995
Planned Complet. date: 6/30/1995
Operable Unit: 01
Contaminated Media : Soil
Engineering Control: Physical Separation

Action ID: 001
Action Name: RECORD OF DECISION
Action Completion date: 3/24/1995
Planned Complet. date: 6/30/1995
Operable Unit: 01
Contaminated Media : Soil
Engineering Control: Soil Vapor Extraction (in-situ)

US INST CONTROL:
EPA ID: CAD980884209
Site ID: 0902134
Name: HEWLETT-PACKARD (620-640 PAGE MILL ROAD)
Action Name: RECORD OF DECISION
Address: 620 - 640 PAGE MILL RD.
PALO ALTO, CA 94304
EPA Region: 09
County: SANTA CLARA
Event Code: Not reported
Inst. Control: Deed Restriction
Actual Date: Not reported
Complet. Date: 3/24/1995
Operable Unit: 01
Contaminated Media : Groundwater

ROD:
Full-text of USEPA Record of Decision(s) is available from EDR.

NPDES:
Npdes Number: Not reported
Facility Status: Active
Agency Id: 20249
Region: 2
Regulatory Measure Id: 182992
Order No: R2-2004-0055
Regulatory Measure Type: Enrollee
Place Id: 203470
WDID: 2 438063004
Program Type: NPDES
Adoption Date Of Regulatory Measure: 1996-01-30 00:00:00
Effective Date Of Regulatory Measure: 1996-01-30 00:00:00
Expiration Date Of Regulatory Measure: Not reported
Termination Date Of Regulatory Measure: Not reported
Discharge Name: Hewlett Packard

HEWLETT-PACKARD (620-640 PAGE MILL ROAD) (Continued) **1000281842**

Discharge Address: 1501 Page Mill Road 117
Discharge City: Palo Alto
Discharge State: CA
Discharge Zip: 94304-1213

CORTESE:
Region: CORTESE
Facility County Code: 43
Reg By: WBC&D
Reg Id: 2 438063N02

A2 **VACANT** **SWEEPS UST** **S106933969**
411 ACACIA ST **N/A**
< 1/8 **PALO ALTO, CA 94304**
1 ft.

Site 1 of 4 in cluster A

Relative:
Higher

Actual:
35 ft.

SWEEPS UST:
Status: Not reported
Comp Number: 2752
Number: Not reported
Board Of Equalization: 44-034456
Ref Date: Not reported
Act Date: Not reported
Created Date: Not reported
Tank Status: Not reported
Owner Tank Id: Not reported
Swrcb Tank Id: 43-006-002752-000001
Actv Date: Not reported
Capacity: 1000
Tank Use: M.V. FUEL
Stg: PRODUCT
Content: REG UNLEADED
Number Of Tanks: 2

Status: Not reported
Comp Number: 2752
Number: Not reported
Board Of Equalization: 44-034456
Ref Date: Not reported
Act Date: Not reported
Created Date: Not reported
Tank Status: Not reported
Owner Tank Id: Not reported
Swrcb Tank Id: 43-006-002752-000002
Actv Date: Not reported
Capacity: 500
Tank Use: OIL
Stg: WASTE
Content: WASTE OIL
Number Of Tanks: Not reported

A3 **PALO ALTO NISSAN INC** **RCRA-SQG** **1000324046**
411 ACACIA **FINDS** **CAD981579691**
< 1/8 **PALO ALTO, CA 94306** **HAZNET**
1 ft.

Site 2 of 4 in cluster A

Relative: Higher

Actual: 35 ft.

RCRA-SQG:

Date form received by agency:	09/01/1996
Facility name:	PALO ALTO NISSAN INC
Facility address:	411 ACACIA PALO ALTO, CA 94306
EPA ID:	CAD981579691
Mailing address:	PO BOX 60310 PALO ALTO, CA 94306
Contact:	Not reported
Contact address:	Not reported Not reported
Contact country:	Not reported
Contact telephone:	Not reported
Contact email:	Not reported
EPA Region:	09
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	GENE ROE
Owner/operator address:	NOT REQUIRED NOT REQUIRED, ME 99999
Owner/operator country:	Not reported
Owner/operator telephone:	(415) 555-1212
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Owner/operator name:	NOT REQUIRED
Owner/operator address:	NOT REQUIRED NOT REQUIRED, ME 99999
Owner/operator country:	Not reported
Owner/operator telephone:	(415) 555-1212
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	Unknown
Mixed waste (haz. and radioactive):	Unknown
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	Unknown
Furnace exemption:	Unknown

PALO ALTO NISSAN INC (Continued) **1000324046**

Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No
Off-site waste receiver: Verified to be non-commercial

Historical Generators:
Date form received by agency: 09/26/1986
Facility name: PALO ALTO NISSAN INC
Classification: Large Quantity Generator

Violation Status: No violations found

FINDS:

Registry ID: 110002721886

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

HAZNET:
Gepaid: CAD981579691
Contact: HERBERT JAEHNICHEN PRES
Telephone: 6504930363
Facility Addr2: Not reported
Mailing Name: Not reported
Mailing Address: 411 ACACIA
Mailing City,St,Zip: PALO ALTO, CA 943060000
Gen County: Santa Clara
TSD EPA ID: CAD009452657
TSD County: San Mateo
Waste Category: Unspecified organic liquid mixture
Disposal Method: Recycler
Tons: 0.87
Facility County: Not reported

A4 **PALO ALTO DATSUN INC** **HIST UST** **U001595920**
411 ACACIA AVE **N/A**
< 1/8 **PALO ALTO, CA 94304**
1 ft.

Site 3 of 4 in cluster A

Relative: Higher

Actual: 35 ft.

HIST UST:
Region: STATE
Facility ID: 00000002752
Facility Type: Other
Other Type: AUTO DEALERSHIP
Total Tanks: 0002

PALO ALTO DATSUN INC (Continued) **U001595920**

Contact Name: EUGENE ROE
Telephone: 4154935100
Owner Name: PALO ALTO DATSUN INC.
Owner Address: 3017 EL CAMINO REAL
Owner City,St,Zip: PALO ALTO, CA 94304

Tank Num: 001
Container Num: 1
Year Installed: Not reported
Tank Capacity: 00001000
Tank Used for: PRODUCT
Type of Fuel: UNLEADED
Tank Construction: Not reported
Leak Detection: Visual

Tank Num: 002
Container Num: 2
Year Installed: Not reported
Tank Capacity: 00000000
Tank Used for: WASTE
Type of Fuel: WASTE OIL
Tank Construction: Not reported
Leak Detection: Visual

A5 **CARMEAN TRUST** **HIST CORTESE** **S104574311**
411 ACACIA AVE **LUST** **N/A**
< 1/8 **PALO ALTO, CA 94306** **HIST LUST**
1 ft. **HAZNET**

Site 4 of 4 in cluster A

Relative: Higher

Actual: 35 ft.

CORTESE:
Region: CORTESE
Facility County Code: 43
Reg By: LTNKA
Reg Id: 43-1725

LUST:
Region: STATE
Global Id: T0608501661
Latitude: 37.421928
Longitude: -122.138256
Case Type: LUST Cleanup Site
Status: Completed - Case Closed
Status Date: 1996-04-22 00:00:00
Lead Agency: SANTA CLARA COUNTY LOP
Case Worker: UST
Local Agency: SANTA CLARA COUNTY LOP
RB Case Number: Not reported
LOC Case Number: Not reported
File Location: Stored electronically as an E-file
Potential Media Affect: Soil
Potential Contaminants of Concern: Diesel
Site History: Not reported

Click here to access the California GeoTracker records for this facility:

CARMEAN TRUST (Continued) **S104574311**

LUST REG 2:
Region: 2
Facility Id: Not reported
Facility Status: Case Closed
Case Number: 06S3W12K04f
How Discovered: Not reported
Leak Cause: Not reported
Leak Source: Not reported
Date Leak Confirmed: Not reported
Oversight Program: LUST
Prelim. Site Assesment Wokplan Submitted: Not reported
Preliminary Site Assesment Began: Not reported
Pollution Characterization Began: Not reported
Pollution Remediation Plan Submitted: Not reported
Date Remediation Action Underway: Not reported
Date Post Remedial Action Monitoring Began: Not reported

LUST SANTA CLARA:
Region: SANTA CLARA
SCVWD ID: 06S3W12K04f
Closed Date: 4/22/1996

HIST LUST SANTA CLARA:
Region: SANTA CLARA
Region Code: 2
SCVWD ID: 06S3W12K04
Oversite Agency: SCVWD
Date Listed: 1992-12-14 00:00:00
Closed Date: 1996-04-22 00:00:00

HAZNET:
Gepaid: CAD981579691
Contact: HERBERT JAEHNICHEN PRES
Telephone: 0000000000
Facility Addr2: Not reported
Mailing Name: Not reported
Mailing Address: 411 ACACIA
Mailing City,St,Zip: PALO ALTO, CA 943060000
Gen County: Santa Clara
TSD EPA ID: CAD009452657
TSD County: San Mateo
Waste Category: Unspecified organic liquid mixture
Disposal Method: Recycler
Tons: 3.0023
Facility County: Santa Clara

Gepaid: CAD981579691
Contact: HERBERT JAEHNICHEN PRES
Telephone: 0000000000
Facility Addr2: Not reported
Mailing Name: Not reported
Mailing Address: 411 ACACIA
Mailing City,St,Zip: PALO ALTO, CA 943060000
Gen County: Santa Clara
TSD EPA ID: CAD009452657

CARMEAN TRUST (Continued) **S104574311**

TSD County: San Mateo
Waste Category: Unspecified organic liquid mixture
Disposal Method: Recycler
Tons: 4.9622
Facility County: Santa Clara

Gepaid: CAD981579691
Contact: HERBERT JAEHNICHEN PRES
Telephone: 0000000000
Facility Addr2: Not reported
Mailing Name: Not reported
Mailing Address: 411 ACACIA
Mailing City,St,Zip: PALO ALTO, CA 943060000
Gen County: Santa Clara
TSD EPA ID: CAD009452657
TSD County: San Mateo
Waste Category: Unspecified organic liquid mixture
Disposal Method: Recycler
Tons: 4.6912
Facility County: Santa Clara

Gepaid: CAD981579691
Contact: HERBERT JAEHNICHEN PRES
Telephone: 6504930363
Facility Addr2: Not reported
Mailing Name: Not reported
Mailing Address: 411 ACACIA
Mailing City,St,Zip: PALO ALTO, CA 943060000
Gen County: Santa Clara
TSD EPA ID: CAD009452657
TSD County: Santa Clara
Waste Category: Unspecified organic liquid mixture
Disposal Method: Recycler
Tons: 2.1
Facility County: Santa Clara

Gepaid: CAD981579691
Contact: HERBERT JAEHNICHEN PRES
Telephone: 6504930363
Facility Addr2: Not reported
Mailing Name: Not reported
Mailing Address: 411 ACACIA
Mailing City,St,Zip: PALO ALTO, CA 943060000
Gen County: Santa Clara
TSD EPA ID: Not reported
TSD County: San Mateo
Waste Category: Unspecified organic liquid mixture
Disposal Method: Recycler
Tons: 3.81
Facility County: Not reported

Click this hyperlink while viewing on your computer to access
Unspecified organic liquid mixture

6 **HELMINGS AUTO REPAIR** **RCRA-SQG** **1000300043**
300 LAMBERT AVE **FINDS** **CAD982496853**
< 1/8 **PALO ALTO, CA 94306** **HAZNET**
1 ft.

Relative:
Higher

Actual:
27 ft.

RCRA-SQG:

Date form received by agency:	05/16/1990
Facility name:	HELMINGS AUTO REPAIR
Facility address:	300 LAMBERT AVE PALO ALTO, CA 94306
EPA ID:	CAD982496853
Contact:	ENVIRONMENTAL MANAGER
Contact address:	300 LAMBERT AVE PALO ALTO, CA 94306
Contact country:	US
Contact telephone:	(415) 494-0908
Contact email:	Not reported
EPA Region:	09
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	HELMING ROBERT
Owner/operator address:	NOT REQUIRED NOT REQUIRED, ME 99999
Owner/operator country:	Not reported
Owner/operator telephone:	(415) 555-1212
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Owner/operator name:	NOT REQUIRED
Owner/operator address:	NOT REQUIRED NOT REQUIRED, ME 99999
Owner/operator country:	Not reported
Owner/operator telephone:	(415) 555-1212
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	Unknown
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No

HELMINGS AUTO REPAIR (Continued) **1000300043**

Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No
Off-site waste receiver: Verified to be non-commercial

Violation Status: No violations found

FINDS:

Registry ID: 110002831785

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

HAZNET:

Gepaid: CAD982496853
Contact: ROBERT HELMING
Telephone: 4154940908
Facility Addr2: Not reported
Mailing Name: Not reported
Mailing Address: 300 LAMBERT AVE
Mailing City,St,Zip: PALO ALTO, CA 943060000
Gen County: Santa Clara
TSD EPA ID: CAD009452657
TSD County: San Mateo
Waste Category: Unspecified organic liquid mixture
Disposal Method: Recycler
Tons: 2.0016
Facility County: Santa Clara

Gepaid: CAD982496853
Contact: ROBERT HELMING
Telephone: 4154940908
Facility Addr2: Not reported
Mailing Name: Not reported
Mailing Address: 300 LAMBERT AVE
Mailing City,St,Zip: PALO ALTO, CA 943060000
Gen County: Santa Clara
TSD EPA ID: CAD009452657
TSD County: San Mateo
Waste Category: Unspecified organic liquid mixture
Disposal Method: Not reported
Tons: .4170
Facility County: Santa Clara

Gepaid: CAD982496853
Contact: ROBERT HELMING
Telephone: 4154940908
Facility Addr2: Not reported
Mailing Name: Not reported

HELMINGS AUTO REPAIR (Continued) **1000300043**

Mailing Address:	300 LAMBERT AVE
Mailing City,St,Zip:	PALO ALTO, CA 943060000
Gen County:	Santa Clara
TSD EPA ID:	CAD009452657
TSD County:	San Mateo
Waste Category:	Unspecified organic liquid mixture
Disposal Method:	Recycler
Tons:	1.5846
Facility County:	Santa Clara

Gepaid:	CAD982496853
Contact:	ROBERT HELMING
Telephone:	4154940908
Facility Addr2:	Not reported
Mailing Name:	Not reported
Mailing Address:	300 LAMBERT AVE
Mailing City,St,Zip:	PALO ALTO, CA 943060000
Gen County:	Santa Clara
TSD EPA ID:	CA0000084517
TSD County:	Sacramento
Waste Category:	Aqueous solution with less than 10% total organic residues
Disposal Method:	Transfer Station
Tons:	.0332
Facility County:	Santa Clara

Gepaid:	CAD982496853
Contact:	ROBERT HELMING
Telephone:	4154940908
Facility Addr2:	Not reported
Mailing Name:	Not reported
Mailing Address:	300 LAMBERT AVE
Mailing City,St,Zip:	PALO ALTO, CA 943060000
Gen County:	Santa Clara
TSD EPA ID:	CA0000084517
TSD County:	Sacramento
Waste Category:	Aqueous solution with less than 10% total organic residues
Disposal Method:	Treatment, Tank
Tons:	.0830
Facility County:	Santa Clara

Click this hyperlink while viewing on your computer to access
Aqueous solution with less than 10% total organic residues

B7 **STANFORD NISSAN INC** **RCRA-SQG** **1000857643**
SE **473 ACACIA** **FINDS** **CAD983670860**
< 1/8 **PALO ALTO, CA 94306** **HAZNET**
0.002 mi.
10 ft. **Site 1 of 2 in cluster B**

Relative:
Higher

Actual:
38 ft.

RCRA-SQG:

Date form received by agency:	07/07/1993
Facility name:	STANFORD NISSAN INC
Facility address:	473 ACACIA PALO ALTO, CA 94306
EPA ID:	CAD983670860
Mailing address:	3001 EL CAMINO REAL PALO ALTO, CA 94306
Contact:	KIM SMITH

STANFORD NISSAN INC (Continued) **1000857643**

Contact address: 473 ACACIA
PALO ALTO, CA 94306
Contact country: US
Contact telephone: (415) 493-0363
Contact email: Not reported
EPA Region: 09
Classification: Small Small Quantity Generator
Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:
Owner/operator name: HERBERT T JAEHNICHEN
Owner/operator address: 3045 PARK BLVD
PALO ALTO, CA 94306
Owner/operator country: Not reported
Owner/operator telephone: (415) 324-4488
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): Unknown
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No
Off-site waste receiver: Verified to be non-commercial

Violation Status: No violations found

FINDS:

Registry ID: 110002901021

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

STANFORD NISSAN INC (Continued) **1000857643**

HAZNET:

Gepaid:	CAD983670860
Contact:	HERBERT T JAEHNICHEN
Telephone:	6504930363
Facility Addr2:	Not reported
Mailing Name:	Not reported
Mailing Address:	3001 EL CAMINO REAL
Mailing City,St,Zip:	PALO ALTO, CA 943062207
Gen County:	Santa Clara
TSD EPA ID:	CAD053044053
TSD County:	Santa Clara
Waste Category:	Hydrocarbon solvents (benzene, hexane, Stoddard, etc.)
Disposal Method:	Transfer Station
Tons:	0.18
Facility County:	Santa Clara

Gepaid:	CAD983670860
Contact:	HERBERT T JAEHNICHEN
Telephone:	6504930363
Facility Addr2:	Not reported
Mailing Name:	Not reported
Mailing Address:	3001 EL CAMINO REAL
Mailing City,St,Zip:	PALO ALTO, CA 943062207
Gen County:	Santa Clara
TSD EPA ID:	Not reported
TSD County:	Alameda
Waste Category:	Hydrocarbon solvents (benzene, hexane, Stoddard, etc.)
Disposal Method:	Transfer Station
Tons:	0.18
Facility County:	Not reported

C8 **STANFORD BMW** **RCRA-NonGen** **1000314834**
NE **3045 PARK BOULEVARD** **FINDS** **CAD981992639**
< 1/8 **PALO ALTO, CA 94306**
0.004 mi.
23 ft. **Site 1 of 2 in cluster C**

Relative:
Higher

Actual:
29 ft.

RCRA-NonGen:

Date form received by agency:	06/23/2006
Facility name:	STANFORD BMW
Facility address:	3045 PARK BLVD PALO ALTO, CA 94306
EPA ID:	CAD981992639
Contact:	ANTHONY JAEHNICHEN
Contact address:	3045 PARK BLVD PALO ATLO, CA 94306
Contact country:	US
Contact telephone:	650-324-4488
Contact email:	Not reported
EPA Region:	09
Classification:	Non-Generator
Description:	Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name:	H JAEHNICHEN
Owner/operator address:	NOT REQUIRED NOT REQUIRED, ME 99999

STANFORD BMW (Continued) **1000314834**

Owner/operator country: Not reported
Owner/operator telephone: (415) 555-1212
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: NOT REQUIRED
Owner/operator address: NOT REQUIRED
NOT REQUIRED, ME 99999
Owner/operator country: Not reported
Owner/operator telephone: (415) 555-1212
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No
Off-site waste receiver: Verified to be non-commercial

Historical Generators:
Date form received by agency: 02/24/1987
Facility name: STANFORD BMW
Classification: Small Quantity Generator

Violation Status: No violations found

FINDS:

Registry ID: 110001152305

Environmental Interest/Information System
The NEI (National Emissions Inventory) database contains information on stationary and mobile sources that emit criteria air pollutants and their precursors, as well as hazardous air pollutants (HAPs).

California Hazardous Waste Tracking System - Datamart (HWTS-DATAMART) provides California with information on hazardous waste shipments for generators, transporters, and treatment, storage, and disposal facilities.

RCRAInfo is a national information system that supports the Resource

STANFORD BMW (Continued) **1000314834**

Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

C9 **LOCKHEED MISSLES & SPACE CO** **RCRA-NonGen** **1000270369**
NE **3101 PARK BLVD** **FINDS** **CAD981994593**
< 1/8 **PALO ALTO, CA 94306** **HIST CORTESE**
0.005 mi. **LUST**
27 ft. **Site 2 of 2 in cluster C** **HIST LUST**
HAZNET

Relative:
Higher

Actual:
29 ft.

RCRA-NonGen:

Date form received by agency:	03/24/1996
Facility name:	LOCKHEED MISSLES & SPACE CO
Facility address:	3101 PARK BLVD PALO ALTO, CA 94306
EPA ID:	CAD981994593
Mailing address:	PO BOX 3504 B142 O2723 SUNNYVALE, CA 94088
Contact:	JAMES SEAVER
Contact address:	PO BOX 3504 B142 O2723 SUNNYVALE, CA 94088
Contact country:	US
Contact telephone:	(408) 742-7661
Contact email:	Not reported
EPA Region:	09
Classification:	Non-Generator
Description:	Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name:	LOCKHEED M&S CO
Owner/operator address:	NOT REQUIRED NOT REQUIRED, ME 99999
Owner/operator country:	Not reported
Owner/operator telephone:	(415) 555-1212
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Owner/operator name:	NOT REQUIRED
Owner/operator address:	NOT REQUIRED NOT REQUIRED, ME 99999
Owner/operator country:	Not reported
Owner/operator telephone:	(415) 555-1212
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	Unknown
Recycler of hazardous waste:	No

LOCKHEED MISSLES & SPACE CO (Continued) **1000270369**

Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No
Off-site waste receiver:	Verified to be non-commercial

Violation Status: No violations found

FINDS:

Registry ID: 110002770494

Environmental Interest/Information System

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

CORTESE:

Region:	CORTESE
Facility County Code:	43
Reg By:	LTNKA
Reg Id:	43-1799

LUST:

Region:	STATE
Global Id:	T0608501727
Latitude:	37.424732
Longitude:	-122.135113
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	1997-04-11 00:00:00
Lead Agency:	SANTA CLARA COUNTY LOP
Case Worker:	UST
Local Agency:	SANTA CLARA COUNTY LOP
RB Case Number:	Not reported
LOC Case Number:	Not reported
File Location:	Stored electronically as an E-file
Potential Media Affect:	Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern:	Diesel
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

LUST REG 2:

LOCKHEED MISSLES & SPACE CO (Continued) **1000270369**

Region: 2
Facility Id: Not reported
Facility Status: Case Closed
Case Number: 06S3W12H01f
How Discovered: Not reported
Leak Cause: Not reported
Leak Source: Not reported
Date Leak Confirmed: Not reported
Oversight Program: LUST
Prelim. Site Assesment Wokplan Submitted: Not reported
Preliminary Site Assesment Began: Not reported
Pollution Characterization Began: Not reported
Pollution Remediation Plan Submitted: Not reported
Date Remediation Action Underway: Not reported
Date Post Remedial Action Monitoring Began: Not reported

LUST SANTA CLARA:
Region: SANTA CLARA
SCVWD ID: 06S3W12H01f
Closed Date: 4/11/1997

HIST LUST SANTA CLARA:
Region: SANTA CLARA
Region Code: 2
SCVWD ID: 06S3W12H01
Oversite Agency: SCVWD
Date Listed: 1998-01-01 00:00:00
Closed Date: 1997-04-11 00:00:00

HAZNET:
Gepaid: CAD981994593
Contact: LOCKHEED MISSILES & SPACE CO B
Telephone: 4087428696
Facility Addr2: Not reported
Mailing Name: Not reported
Mailing Address: PO BOX 3504 B/101 0/47-10
Mailing City,St,Zip: SUNNYVALE, CA 940883504
Gen County: Santa Clara
TSD EPA ID: CAT080010101
TSD County: San Diego
Waste Category: Unspecified solvent mixture Waste
Disposal Method: Transfer Station
Tons: .0025
Facility County: Santa Clara

Gepaid: CAD981994593
Contact: LOCKHEED MISSILES & SPACE CO B
Telephone: 4087428696
Facility Addr2: Not reported
Mailing Name: Not reported
Mailing Address: PO BOX 3504 B/101 0/47-10
Mailing City,St,Zip: SUNNYVALE, CA 940883504
Gen County: Santa Clara
TSD EPA ID: CAT080010101
TSD County: San Diego
Waste Category: Hydrocarbon solvents (benzene, hexane, Stoddard, etc.)

LOCKHEED MISSLES & SPACE CO (Continued) **1000270369**

Disposal Method: Transfer Station
Tons: .0730
Facility County: Santa Clara

Gepaid: CAD981994593
Contact: LOCKHEED MISSILES & SPACE CO B
Telephone: 4087428696
Facility Addr2: Not reported
Mailing Name: Not reported
Mailing Address: PO BOX 3504 B/101 0/47-10
Mailing City,St,Zip: SUNNYVALE, CA 940883504
Gen County: Santa Clara
TSD EPA ID: CAT080010101
TSD County: San Diego
Waste Category: Waste oil and mixed oil
Disposal Method: Transfer Station
Tons: .0040
Facility County: Santa Clara

Gepaid: CAD981994593
Contact: LOCKHEED MISSILES & SPACE CO B
Telephone: 4087428696
Facility Addr2: Not reported
Mailing Name: Not reported
Mailing Address: PO BOX 3504 B/101 0/47-10
Mailing City,St,Zip: SUNNYVALE, CA 940883504
Gen County: Santa Clara
TSD EPA ID: CAT080010101
TSD County: San Diego
Waste Category: Other organic solids
Disposal Method: Transfer Station
Tons: .0010
Facility County: Santa Clara

Gepaid: CAD981994593
Contact: LOCKHEED MISSILES & SPACE CO B
Telephone: 4087428696
Facility Addr2: Not reported
Mailing Name: Not reported
Mailing Address: PO BOX 3504 B/101 0/47-10
Mailing City,St,Zip: SUNNYVALE, CA 940883504
Gen County: Santa Clara
TSD EPA ID: UTD981552177
TSD County: 99
Waste Category: Waste oil and mixed oil
Disposal Method: Not reported
Tons: .0030
Facility County: Santa Clara

Click this hyperlink while viewing on your computer to access
Waste oil and mixed oil

D10
SE
< 1/8
0.007 mi.
36 ft.

DURA BOND BEARING COMPANY
3201 ASH
PALO ALTO, CA 94306

Site 1 of 11 in cluster D

Relative:
Higher

Actual:
32 ft.

HIST CORTESE | **S102429005** | **N/A**

CORTESE:
Region: CORTESE
Facility County Code: 43
Reg By: LTNKA
Reg Id: 43-1824

D11
SE
< 1/8
0.007 mi.
36 ft.

DURA-BOND
3201 ASH ST
PALO ALTO, CA 94306

Site 2 of 11 in cluster D

Relative:
Higher

Actual:
32 ft.

CERC-NFRAP | **1003878305** | **CAD014440648**

CERC-NFRAP:
Site ID: 0901248
Federal Facility: Not a Federal Facility
NPL Status: Not on the NPL
Non NPL Status: NFRAP

CERCLIS-NFRAP Site Contact Name(s):
Contact Title: Not reported
Contact Name: Carl Brickner
Contact Tel: (415) 972-3814

Contact Title: Not reported
Contact Name: Brunilda Davila
Contact Tel: (415) 972-3162

Contact Title: Not reported
Contact Name: Jeff Inglis
Contact Tel: (415) 972-3095

Contact Title: Not reported
Contact Name: Karen Jurist
Contact Tel: (415) 972-3219

Contact Title: Not reported
Contact Name: Matt Mitguard
Contact Tel: (415) 972-3096

CERCLIS-NFRAP Assessment History:
Action: DISCOVERY
Date Started: Not reported
Date Completed: 04/01/1985
Priority Level: Not reported

Action: PRELIMINARY ASSESSMENT
Date Started: 09/01/1986
Date Completed: 09/01/1987
Priority Level: NFRAP: No further Remedial Action planned

Action: ARCHIVE SITE
Date Started: Not reported
Date Completed: 09/01/1987

DURA-BOND (Continued) **1003878305**

Priority Level: Not reported

D12 **DURA BOND** **LUST** **1000143482**
SE **3201 ASH ST** **SLIC** **N/A**
< 1/8 **PALO ALTO, CA 94306** **HIST LUST**
0.007 mi.
36 ft. **Site 3 of 11 in cluster D**

Relative:
Higher

Actual:
32 ft.

LUST:

Region:	STATE
Global Id:	T0608501751
Latitude:	37.422584
Longitude:	-122.136146
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	1999-01-19 00:00:00
Lead Agency:	SANTA CLARA COUNTY LOP
Case Worker:	UST
Local Agency:	SANTA CLARA COUNTY LOP
RB Case Number:	Not reported
LOC Case Number:	Not reported
File Location:	Stored electronically as an E-file
Potential Media Affect:	Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

LUST REG 2:

Region:	2
Facility Id:	Not reported
Facility Status:	Case Closed
Case Number:	06S3W12J01f
How Discovered:	Not reported
Leak Cause:	Not reported
Leak Source:	Not reported
Date Leak Confirmed:	Not reported
Oversight Program:	LUST
Prelim. Site Assesment Wokplan Submitted:	Not reported
Preliminary Site Assesment Began:	7/27/1984
Pollution Characterization Began:	11/22/1985
Pollution Remediation Plan Submitted:	Not reported
Date Remediation Action Underway:	Not reported
Date Post Remedial Action Monitoring Began:	Not reported

LUST SANTA CLARA:

Region:	SANTA CLARA
SCVWD ID:	06S3W12J01f
Closed Date:	1/19/1999

SLIC:

Region:	STATE
Facility Status:	**Open - Inactive**
Status Date:	2009-04-17 00:00:00
Global Id:	T0608591604
Lead Agency:	SAN FRANCISCO BAY RWQCB (REGION 2)

DURA BOND (Continued) **1000143482**

Lead Agency Case Number:	Not reported
Latitude:	37.422631
Longitude:	-122.136849
Case Type:	Cleanup Program Site
Case Worker:	UUU
Local Agency:	Not reported
RB Case Number:	43S0025
File Location:	Not reported
Potential Media Affected:	Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern:	* Solvents
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

SLIC:

Region:	2
Facility ID:	43S0025
Facility Status:	Preliminary site assessment underway
Date Closed:	Not reported
Local Case #:	Not reported
How Discovered:	Tank Closure
Leak Cause:	UNK
Leak Source:	UNK
Date Confirmed:	Not reported
Date Prelim Site Assmnt Workplan Submitted:	Not reported
Date Preliminary Site Assessment Began:	3/18/1999
Date Pollution Characterization Began:	Not reported
Date Remediation Plan Submitted:	Not reported
Date Remedial Action Underway:	Not reported
Date Post Remedial Action Monitoring Began:	Not reported

HIST LUST SANTA CLARA:

Region:	SANTA CLARA
Region Code:	2
SCVWD ID:	06S3W12J01
Oversite Agency:	SCVWD
Date Listed:	1989-01-01 00:00:00
Closed Date:	1999-01-19 00:00:00

D13 **SYSTEMS CONTROL INC** **RCRA-SQG 1000400299**
SE **220 PORTAGE** **FINDS CAD981657984**
< 1/8 **PALO ALTO, CA 94306**
0.007 mi.
39 ft. **Site 4 of 11 in cluster D**

Relative:
Higher

Actual:
33 ft.

RCRA-SQG:

Date form received by agency:	09/30/1986
Facility name:	SYSTEMS CONTROL INC
Facility address:	220 PORTAGE PALO ALTO, CA 94306
EPA ID:	CAD981657984
Mailing address:	PORTAGE PALO ALTO, CA 94306
Contact:	ENVIRONMENTAL MANAGER
Contact address:	220 PORTAGE PALO ALTO, CA 94306
Contact country:	US

SYSTEMS CONTROL INC (Continued) **1000400299**

Contact telephone: (415) 494-1165
Contact email: Not reported
EPA Region: 09
Classification: Small Small Quantity Generator
Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:
Owner/operator name: NOT REQUIRED
Owner/operator address: NOT REQUIRED
NOT REQUIRED, ME 99999
Owner/operator country: Not reported
Owner/operator telephone: (415) 555-1212
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: WSJ PROPERTIES
Owner/operator address: NOT REQUIRED
NOT REQUIRED, ME 99999
Owner/operator country: Not reported
Owner/operator telephone: (415) 555-1212
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): Unknown
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No
Off-site waste receiver: Verified to be non-commercial

Violation Status: No violations found

FINDS:

Registry ID: 110002740204

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource

SYSTEMS CONTROL INC (Continued) **1000400299**

Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

D14 **MERCER PROCESSING** **SLIC** **S106235059**
SE **230 PORTAGE AVE** **N/A**
< 1/8 **PALO ALTO, CA 94306**
0.008 mi.
41 ft. **Site 5 of 11 in cluster D**

Relative:
Higher

Actual:
33 ft.

SLIC:

Region:	STATE
Facility Status:	**Completed - Case Closed**
Status Date:	2002-04-08 00:00:00
Global Id:	SL0608568096
Lead Agency:	SAN FRANCISCO BAY RWQCB (REGION 2)
Lead Agency Case Number:	Not reported
Latitude:	37.4268740276364
Longitude:	-122.136880114909
Case Type:	Cleanup Program Site
Case Worker:	UUU
Local Agency:	SANTA CLARA VALLEY WATER DISTRICT
RB Case Number:	43S0965
File Location:	Regional Board
Potential Media Affected:	Soil
Potential Contaminants of Concern:	Other Chlorinated Hydrocarbons, Trichloroethylene (TCE)
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

SLIC:

Region:	2
Facility ID:	43S0965
Facility Status:	Case Closed
Date Closed:	Not reported
Local Case #:	Not reported
How Discovered:	Not reported
Leak Cause:	Not reported
Leak Source:	Not reported
Date Confirmed:	Not reported
Date Prelim Site Assmnt Workplan Submitted:	Not reported
Date Preliminary Site Assessment Began:	Not reported
Date Pollution Characterization Began:	Not reported
Date Remediation Plan Submitted:	Not reported
Date Remedial Action Underway:	Not reported
Date Post Remedial Action Monitoring Began:	Not reported

E15
ENE
< 1/8
0.008 mi.
43 ft.

PARK AVENUE MOTORS
3241 PARK AVE
PALO ALTO, CA 94306

Site 1 of 4 in cluster E

RCRA-SQG
FINDS

1004677569
CAR000098996

Relative:
Higher

Actual:
24 ft.

RCRA-SQG:

Date form received by agency:	06/25/2001
Facility name:	PARK AVENUE MOTORS
Facility address:	3241 PARK AVE PALO ALTO, CA 94306
EPA ID:	CAR000098996
Mailing address:	3290 PARK AVE PALO ALTO, CA 94306
Contact:	STEVE KIRKSEY
Contact address:	3290 PARK AVE PALO ALTO, CA 94306
Contact country:	US
Contact telephone:	(650) 494-0311
Contact email:	Not reported
EPA Region:	09
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	SMYTHE EUROPEAN INC
Owner/operator address:	4600 STEVENS CREEK SAN JOSE, CA 95117
Owner/operator country:	Not reported
Owner/operator telephone:	(408) 983-5220
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	Unknown
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No
Off-site waste receiver:	Verified to be non-commercial

PARK AVENUE MOTORS (Continued) **1004677569**

Hazardous Waste Summary:
Waste code: D001
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Waste code: D002
Waste name: A WASTE WHICH HAS A PH OF LESS THAN 2 OR GREATER THAN 12.5 IS CONSIDERED TO BE A CORROSIVE HAZARDOUS WASTE. SODIUM HYDROXIDE, A CAUSTIC SOLUTION WITH A HIGH PH, IS OFTEN USED BY INDUSTRIES TO CLEAN OR DEGREASE PARTS. HYDROCHLORIC ACID, A SOLUTION WITH A LOW PH, IS USED BY MANY INDUSTRIES TO CLEAN METAL PARTS PRIOR TO PAINTING. WHEN THESE CAUSTIC OR ACID SOLUTIONS BECOME CONTAMINATED AND MUST BE DISPOSED, THE WASTE WOULD BE A CORROSIVE HAZARDOUS WASTE.

Violation Status: No violations found

FINDS:

Registry ID: 110012202687

Environmental Interest/Information System
California Hazardous Waste Tracking System - Datamart (HWTS-DATAMART) provides California with information on hazardous waste shipments for generators, transporters, and treatment, storage, and disposal facilities.

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

D16 **STAR GRAPHIC ARTS CO. INC.** **HIST UST U001595969**
SE **3200 ASH ST** **HAZNET N/A**
< 1/8 **PALO ALTO, CA 94306**
0.008 mi.
44 ft. **Site 6 of 11 in cluster D**

Relative: Higher

Actual: 32 ft.

HIST UST:
Region: STATE
Facility ID: 00000060093
Facility Type: Other
Other Type: GRAPHIC ARTS
Total Tanks: 0001
Contact Name: GEO. GANANIAN
Telephone: 4154943351
Owner Name: STAR GRAPHIC ARTS CO. INC.
Owner Address: 3200 ASH ST.
Owner City,St,Zip: PALO ALTO, CA 94306

Tank Num: 001

STAR GRAPHIC ARTS CO. INC. (Continued) **U001595969**

Container Num: 1
Year Installed: 1979
Tank Capacity: 00002000
Tank Used for: PRODUCT
Type of Fuel: UNLEADED
Tank Construction: Not reported
Leak Detection: None

HAZNET:
Gepaid: CAL000216204
Contact: INTERVAL RESEARCH INC
Telephone: 6504240722
Facility Addr2: Not reported
Mailing Name: Not reported
Mailing Address: 1801 PAGE MILL DR
Mailing City,St,Zip: PALO ALTO, CA 943040000
Gen County: Santa Clara
TSD EPA ID: CAD059494310
TSD County: Santa Clara
Waste Category: Laboratory waste chemicals
Disposal Method: Transfer Station
Tons: .0675
Facility County: Santa Clara

Gepaid: CAL000216204
Contact: INTERVAL RESEARCH INC
Telephone: 6504240722
Facility Addr2: Not reported
Mailing Name: Not reported
Mailing Address: 1801 PAGE MILL DR
Mailing City,St,Zip: PALO ALTO, CA 943040000
Gen County: Santa Clara
TSD EPA ID: CAD059494310
TSD County: Santa Clara
Waste Category: Laboratory waste chemicals
Disposal Method: Disposal, Other
Tons: .0125
Facility County: Santa Clara

D17 **STAR GRAPHIC ARTS CO. INC.** **CA FID UST** **S101623439**
SE **3200 ASH ST** **SWEEPS UST** **N/A**
< 1/8 **PALO ALTO, CA 94306**
0.008 mi.
44 ft. **Site 7 of 11 in cluster D**

Relative:
Higher

Actual:
32 ft.

CA FID UST:
Facility ID: 43003314
Regulated By: UTNKA
Regulated ID: 00060093
Cortese Code: Not reported
SIC Code: Not reported
Facility Phone: 4154943351
Mail To: Not reported
Mailing Address: 3200 ASH ST
Mailing Address 2: Not reported
Mailing City,St,Zip: PALO ALTO 94306
Contact: Not reported

STAR GRAPHIC ARTS CO. INC. (Continued) **S101623439**

Contact Phone: Not reported
DUNs Number: Not reported
NPDES Number: Not reported
EPA ID: Not reported
Comments: Not reported
Status: Active

SWEEPS UST:
Status: A
Comp Number: 60093
Number: 9
Board Of Equalization: 44-026131
Ref Date: 07-01-85
Act Date: Not reported
Created Date: 02-29-88
Tank Status: A
Owner Tank Id: 1
Swrcb Tank Id: 43-006-060093-000001
Actv Date: 07-01-85
Capacity: 2000
Tank Use: M.V. FUEL
Stg: P
Content: REG UNLEADED
Number Of Tanks: 1

D18 **SAY RAY** **RCRA-SQG 1000596061**
SSW **3251 ASH ST** **FINDS CAD983600206**
< 1/8 **PALO ALTO, CA 94306** **HAZNET**
0.012 mi.
63 ft. **Site 8 of 11 in cluster D**

Relative:
Higher

Actual:
32 ft.

RCRA-SQG:
Date form received by agency: 08/05/1991
Facility name: SAY RAY
Facility address: 3251 ASH ST
PALO ALTO, CA 94306
EPA ID: CAD983600206
Contact: MERYL LONGANECKER
Contact address: 3251 ASH ST
PALO ALTO, CA 94306
Contact country: US
Contact telephone: (415) 493-8480
Contact email: Not reported
EPA Region: 09
Classification: Small Small Quantity Generator
Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:
Owner/operator name: M LOGANECKER
Owner/operator address: 3251 ASH ST
PALO ALTO, CA 94306
Owner/operator country: Not reported
Owner/operator telephone: (415) 493-8480

SAY RAY (Continued) **1000596061**

Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): Unknown
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No
Off-site waste receiver: Verified to be non-commercial

Violation Status: No violations found

FINDS:

Registry ID: 110002856963

Environmental Interest/Information System
California Hazardous Waste Tracking System - Datamart (HWTS-DATAMART) provides California with information on hazardous waste shipments for generators, transporters, and treatment, storage, and disposal facilities.

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HAZNET:
Gepaid: CAD983600206
Contact: SAY RAY INC
Telephone: 6504938480
Facility Addr2: Not reported
Mailing Name: Not reported
Mailing Address: 3251 ASH ST
Mailing City,St,Zip: PALO ALTO, CA 943062240
Gen County: Santa Clara
TSD EPA ID: CAD009452657
TSD County: San Mateo
Waste Category: Unspecified organic liquid mixture
Disposal Method: Not reported
Tons: .4170

SAY RAY (Continued) **1000596061**

Facility County: Santa Clara

Gepaid: CAD983600206
Contact: SAY RAY INC
Telephone: 6504938480
Facility Addr2: Not reported
Mailing Name: Not reported
Mailing Address: 3251 ASH ST
Mailing City,St,Zip: PALO ALTO, CA 943062240
Gen County: Santa Clara
TSD EPA ID: CAD009452657
TSD County: San Mateo
Waste Category: Unspecified organic liquid mixture
Disposal Method: Recycler
Tons: 2.4811
Facility County: Santa Clara

Gepaid: CAD983600206
Contact: SAY RAY INC
Telephone: 6504938480
Facility Addr2: Not reported
Mailing Name: Not reported
Mailing Address: 3251 ASH ST
Mailing City,St,Zip: PALO ALTO, CA 943062240
Gen County: Santa Clara
TSD EPA ID: CAD982446874
TSD County: Yolo
Waste Category: Aqueous solution with less than 10% total organic residues
Disposal Method: Transfer Station
Tons: 1.4178
Facility County: Santa Clara

Gepaid: CAD983600206
Contact: SAY RAY INC
Telephone: 6504938480
Facility Addr2: Not reported
Mailing Name: Not reported
Mailing Address: 3251 ASH ST
Mailing City,St,Zip: PALO ALTO, CA 943062240
Gen County: Santa Clara
TSD EPA ID: CA0000084517
TSD County: Sacramento
Waste Category: Aqueous solution with less than 10% total organic residues
Disposal Method: Treatment, Tank
Tons: .0498
Facility County: Santa Clara

Gepaid: CAD983600206
Contact: PETER LONGANECKER-TECH
Telephone: 6504938480
Facility Addr2: Not reported
Mailing Name: Not reported
Mailing Address: 3251 ASH ST
Mailing City,St,Zip: PALO ALTO, CA 943062240
Gen County: Santa Clara
TSD EPA ID: CA0000084517
TSD County: Sacramento

SAY RAY (Continued) **1000596061**

Waste Category: Aqueous solution with less than 10% total organic residues
Disposal Method: H141
Tons: 0.4074
Facility County: Santa Clara

Click this hyperlink while viewing on your computer to access
Aqueous solution with less than 10% total organic residues

E19 **PARK AVE MOTORS** **RCRA-SQG** **1007200763**
ESE **3250 PARK BLVD** **CAR000151357**
< 1/8 **PALO ALTO, CA 94306**
0.013 mi.
66 ft. **Site 2 of 4 in cluster E**

Relative:
Higher

Actual:
24 ft.

RCRA-SQG:
Date form received by agency: 02/24/2004
Facility name: PARK AVE MOTORS
Facility address: 3250 PARK BLVD
PALO ALTO, CA 94306
EPA ID: CAR000151357
Contact: STEVE KIRKSEY
Contact address: 3250 PARK BLVD
PALO ALTO, CA 94306
Contact country: US
Contact telephone: 650-494-0311
Contact email: KIRKSEYS@AUTONATION.COM
EPA Region: 09
Classification: Small Small Quantity Generator
Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:
Owner/operator name: PARK AVE MOTORS INC
Owner/operator address: Not reported
Not reported
Owner/operator country: US
Owner/operator telephone: Not reported
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: 03/01/2004
Owner/Op end date: Not reported

Owner/operator name: WSJ PROP
Owner/operator address: Not reported
Not reported
Owner/operator country: US
Owner/operator telephone: Not reported
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: 01/01/1980
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No

PARK AVE MOTORS (Continued) **1007200763**

Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No
Off-site waste receiver:	Commercial status unknown

Hazardous Waste Summary:

Waste code:	D001
Waste name:	IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.
Waste code:	D008
Waste name:	LEAD
Violation Status:	No violations found

D20 **DURA-BOND BEARING** **SLIC S106235183**
South **370 PORTAGE AVENUE** **EMI N/A**
< 1/8 **PALO ALTO, CA**
0.020 mi.
103 ft. **Site 9 of 11 in cluster D**

Relative:
Higher

Actual:
34 ft.

SLIC:

Region:	STATE
Facility Status:	**Open - Inactive**
Status Date:	1997-08-01 00:00:00
Global Id:	SL18361781
Lead Agency:	SAN FRANCISCO BAY RWQCB (REGION 2)
Lead Agency Case Number:	Not reported
Latitude:	37.422663
Longitude:	-122.136092
Case Type:	Cleanup Program Site
Case Worker:	UNA
Local Agency:	Not reported
RB Case Number:	SL18361781
File Location:	Not reported
Potential Media Affected:	Not reported
Potential Contaminants of Concern:	Not reported
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

DURA-BOND BEARING (Continued) **S106235183**

SLIC:

Region:	2
Facility ID:	SL18361781
Facility Status:	Not reported
Date Closed:	Not reported
Local Case #:	Not reported
How Discovered:	Not reported
Leak Cause:	Not reported
Leak Source:	Not reported
Date Confirmed:	Not reported
Date Prelim Site Assmnt Workplan Submitted:	Not reported
Date Preliminary Site Assessment Began:	Not reported
Date Pollution Characterization Began:	Not reported
Date Remediation Plan Submitted:	Not reported
Date Remedial Action Underway:	Not reported
Date Post Remedial Action Monitoring Began:	Not reported

EMI:

Year:	1987
County Code:	43
Air Basin:	SF
Facility ID:	525
Air District Name:	BA
SIC Code:	3714
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	9
Reactive Organic Gases Tons/Yr:	4
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

D21 **VARIAN ASSOCIATES INC** **RCRA-NonGen** **1000245644**
South **380 PORTAGE AVENUE** **FINDS** **CAD982510208**
< 1/8 **PALO ALTO, CA 94306** **HAZNET**
0.021 mi.
109 ft. **Site 10 of 11 in cluster D**

Relative:
Higher

Actual:
34 ft.

RCRA-NonGen:

Date form received by agency:	11/22/1999
Facility name:	VARIAN ASSOCIATES, INC
Facility address:	380 PORTAGE AVE PALO ALTO, CA 94303
EPA ID:	CAD982510208
Mailing address:	611 HANSEN WAY, MS-A129 PALO ALTO, CA 94303
Contact:	DENISE KATO
Contact address:	3100 HANSEN WAY PALO ALTO, CA 943041038
Contact country:	US
Contact telephone:	(650) 424-5812
Contact email:	Not reported
EPA Region:	09
Classification:	Non-Generator

VARIAN ASSOCIATES INC (Continued) **1000245644**

Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:
Owner/operator name: NOT REQUIRED
Owner/operator address: NOT REQUIRED
NOT REQUIRED, ME 99999
Owner/operator country: Not reported
Owner/operator telephone: (415) 555-1212
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: WSJ PROPERTIES
Owner/operator address: NOT REQUIRED
NOT REQUIRED, ME 99999
Owner/operator country: Not reported
Owner/operator telephone: (415) 555-1212
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): Unknown
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No
Off-site waste receiver: Verified to be non-commercial

Historical Generators:
Date form received by agency: 09/01/1996
Facility name: VARIAN ASSOCIATES, INC
Classification: Small Quantity Generator

Violation Status: No violations found

FINDS:

Registry ID: 110006480441

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport,

VARIAN ASSOCIATES INC (Continued) **1000245644**

and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

HAZNET:

Gepaid:	CAD982510208
Contact:	VARIAN ASSOCIATES INCORPORATED
Telephone:	6504244714
Facility Addr2:	Not reported
Mailing Name:	Not reported
Mailing Address:	3100 HANSEN WAY M/S F-095
Mailing City,St,Zip:	PALO ALTO, CA 943041030
Gen County:	Santa Clara
TSD EPA ID:	CAT000646117
TSD County:	Kings
Waste Category:	Aqueous solution with metals (restricted levels and Alkaline solution (pH <UN-> 12.5) with metals (antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, lead, mercury, molybdenum, nickel, selenium, silver, thallium, vanadium, and zinc))
Disposal Method:	Treatment, Tank
Tons:	1.4803
Facility County:	Santa Clara

Gepaid:	CAD982510208
Contact:	VARIAN ASSOCIATES INCORPORATED
Telephone:	6504244714
Facility Addr2:	Not reported
Mailing Name:	Not reported
Mailing Address:	3100 HANSEN WAY M/S F-095
Mailing City,St,Zip:	PALO ALTO, CA 943041030
Gen County:	Santa Clara
TSD EPA ID:	CAT080014079
TSD County:	7
Waste Category:	Not reported
Disposal Method:	Transfer Station
Tons:	.1250
Facility County:	Santa Clara

Gepaid:	CAD982510208
Contact:	VARIAN ASSOCIATES INCORPORATED
Telephone:	6504244714
Facility Addr2:	Not reported
Mailing Name:	Not reported
Mailing Address:	3100 HANSEN WAY M/S F-095
Mailing City,St,Zip:	PALO ALTO, CA 943041030
Gen County:	Santa Clara
TSD EPA ID:	CAT080014079
TSD County:	7
Waste Category:	Laboratory waste chemicals
Disposal Method:	Transfer Station
Tons:	.2155
Facility County:	Santa Clara

Gepaid:	CAD982510208
Contact:	VARIAN ASSOCIATES INCORPORATED
Telephone:	6504244714

VARIAN ASSOCIATES INC (Continued) **1000245644**

Facility Addr2:	Not reported
Mailing Name:	Not reported
Mailing Address:	3100 HANSEN WAY M/S F-095
Mailing City,St,Zip:	PALO ALTO, CA 943041030
Gen County:	Santa Clara
TSD EPA ID:	CAD009452657
TSD County:	San Mateo
Waste Category:	Not reported
Disposal Method:	Recycler
Tons:	2.5500
Facility County:	Santa Clara

Gepaid:	CAD982510208
Contact:	VARIAN ASSOCIATES INCORPORATED
Telephone:	6504244714
Facility Addr2:	Not reported
Mailing Name:	Not reported
Mailing Address:	3100 HANSEN WAY M/S F-095
Mailing City,St,Zip:	PALO ALTO, CA 943041030
Gen County:	Santa Clara
TSD EPA ID:	AZD009015389
TSD County:	99
Waste Category:	Unspecified sludge waste
Disposal Method:	Recycler
Tons:	.4505
Facility County:	Santa Clara

Click this hyperlink while viewing on your computer to access
Unspecified sludge waste

D22 **DURA-BOND BEARING COMPANY** **RCRA-SQG** **1000143481**
South **395 PORTAGE** **FINDS** **CAD063553630**
< 1/8 **PALO ALTO, CA 94306** **CA FID UST**
0.023 mi. **HIST UST**
122 ft. **Site 11 of 11 in cluster D** **SWEEPS UST**
ENVIROSTOR

Relative:
Higher

Actual:
34 ft.

RCRA-SQG:

Date form received by agency:	09/01/1996
Facility name:	DURA-BOND BEARING COMPANY
Facility address:	395 PORTAGE PALO ALTO, CA 94306
EPA ID:	CAD063553630
Mailing address:	P.O. BOX ELEVEN THOUSAND EIGHT PALO ALTO, CA 94306
Contact:	Not reported
Contact address:	Not reported Not reported
Contact country:	Not reported
Contact telephone:	Not reported
Contact email:	Not reported
EPA Region:	09
Land type:	Facility is not located on Indian land. Additional information is not known.
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of

DURA-BOND BEARING COMPANY (Continued) **1000143481**

hazardous waste at any time

Owner/Operator Summary:
Owner/operator name: DURA-BOND BEARING COMPANY
Owner/operator address: P.O. BOX 11085
CITY NOT REPORTED, CA 99999
Owner/operator country: Not reported
Owner/operator telephone: (415) 493-6546
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: MCQUAY-NORRIS INC.
Owner/operator address: 2320 MARCONI AVENUE
ST. LOUIS, MO 63110
Owner/operator country: Not reported
Owner/operator telephone: (314) 776-4800
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: Unknown
Mixed waste (haz. and radioactive): Unknown
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: Unknown
Furnace exemption: Unknown
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No
Off-site waste receiver: Verified to be non-commercial

Historical Generators:
Date form received by agency: 08/18/1980
Facility name: DURA-BOND BEARING COMPANY
Classification: Large Quantity Generator

Violation Status: No violations found

Evaluation Action Summary:
Evaluation date: 07/16/1985
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

DURA-BOND BEARING COMPANY (Continued) **1000143481**

FINDS:

Registry ID: 110002653557

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

CA FID UST:
Facility ID: 43006527
Regulated By: UTNKA
Regulated ID: 00001428
Cortese Code: Not reported
SIC Code: Not reported
Facility Phone: 4154936546
Mail To: Not reported
Mailing Address: P O BOX
Mailing Address 2: Not reported
Mailing City,St,Zip: PALO ALTO 94306
Contact: Not reported
Contact Phone: Not reported
DUNs Number: Not reported
NPDES Number: Not reported
EPA ID: Not reported
Comments: Not reported
Status: Active

HIST UST:
Region: STATE
Facility ID: 00000001428
Facility Type: Other
Other Type: MANUFACTURING
Total Tanks: 0005
Contact Name: JOHN A. MANGAN,JR., MFG. MANAG
Telephone: 4154936546
Owner Name: SKF INDUSTRIES, INC.
Owner Address: 1100 FIRST AVENUE
Owner City,St,Zip: KING OF PRUSSIA, PA 19406

Tank Num: 001
Container Num: 1
Year Installed: 1960
Tank Capacity: 00001000
Tank Used for: PRODUCT
Type of Fuel: Not reported
Tank Construction: Not reported
Leak Detection: Groundwater Monitoring Well

Tank Num: 002
Container Num: 2
Year Installed: 1960

DURA-BOND BEARING COMPANY (Continued) **1000143481**

Tank Capacity: 00000500
Tank Used for: PRODUCT
Type of Fuel: UNLEADED
Tank Construction: Not reported
Leak Detection: Groundwater Monitoring Well

Tank Num: 003
Container Num: 3
Year Installed: 1981
Tank Capacity: 00005000
Tank Used for: WASTE
Type of Fuel: Not reported
Tank Construction: 1/4 inches
Leak Detection: Groundwater Monitoring Well

Tank Num: 004
Container Num: 4
Year Installed: 1982
Tank Capacity: 00000374
Tank Used for: WASTE
Type of Fuel: Not reported
Tank Construction: 1/4 inches
Leak Detection: 10

Tank Num: 005
Container Num: 5
Year Installed: 1983
Tank Capacity: 00000224
Tank Used for: WASTE
Type of Fuel: Not reported
Tank Construction: 1/4 inches
Leak Detection: 10

SWEEPS UST:
Status: A
Comp Number: 1428
Number: 9
Board Of Equalization: 44-026035
Ref Date: 07-01-85
Act Date: Not reported
Created Date: 02-29-88
Tank Status: A
Owner Tank Id: 1
Swrcb Tank Id: 43-006-001428-000001
Actv Date: 07-01-85
Capacity: 1000
Tank Use: UNKNOWN
Stg: P
Content: Not reported
Number Of Tanks: 3

Status: A
Comp Number: 1428
Number: 9
Board Of Equalization: 44-026035
Ref Date: 07-01-85
Act Date: Not reported

DURA-BOND BEARING COMPANY (Continued) **1000143481**

Created Date: 02-29-88
Tank Status: A
Owner Tank Id: 2
Swrcb Tank Id: 43-006-001428-000002
Actv Date: 07-01-85
Capacity: 500
Tank Use: M.V. FUEL
Stg: P
Content: REG UNLEADED
Number Of Tanks: Not reported

Status: A
Comp Number: 1428
Number: 9
Board Of Equalization: 44-026035
Ref Date: 07-01-85
Act Date: Not reported
Created Date: 02-29-88
Tank Status: A
Owner Tank Id: 3
Swrcb Tank Id: 43-006-001428-000003
Actv Date: 07-01-85
Capacity: 5000
Tank Use: UNKNOWN
Stg: W
Content: Not reported
Number Of Tanks: Not reported

ENVIROSTOR:
Site Type: Historical
Site Type Detailed: * Historical
Acres: Not reported
NPL: NO
Regulatory Agencies: NONE SPECIFIED
Lead Agency: NONE SPECIFIED
Program Manager: Not reported
Supervisor: Referred - Not Assigned
Division Branch: Berkeley
Facility ID: 43370006
Site Code: Not reported
Assembly: 21
Senate: 11
Special Program: * Site Char & Assess Grant (CERCLA 104)
Status: Refer: RWQCB
Status Date: 11/15/1993
Restricted Use: NO
Site Mgmt. Req.: NONE SPECIFIED
Funding: Not reported
Latitude: 37.421666666666702
Longitude: -122.137777777778
APN: NONE SPECIFIED
Past Use: NONE SPECIFIED
Potential COC: 10009, 10034, 10093, 10120, 10199, 20001, 30001, 30013, 30108, 30153
Confirmed COC: NONE SPECIFIED
Potential Description: NONE SPECIFIED
Alias Name: CAD063553630
Alias Type: EPA Identification Number

DURA-BOND BEARING COMPANY (Continued) **1000143481**

Alias Name: 43370006
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: De-Certification
Completed Date: 1993-11-15 00:00:00
Comments: In September 1992; closure of surface impoundments and 100 cubic yards of contaminated soil ware removed. In December 1983; company closed a water treatment system which the Department of Toxic Substances Control approved and 28 cubic yards of soil were removed and disposed of during the closure of the water treatment system. Dura Bond has been working with RWQCB concerning fuel spills and some groundwater contamination problems from an off-site source since 1984. Therefore, the site has been "decertified" and the previous cert is considered a removal action. The status of the site shows as referred to the RWQCB.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Certification
Completed Date: 1983-01-01 00:00:00
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Completion Report
Completed Date: 1992-09-30 00:00:00
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Screening
Completed Date: 1987-06-11 00:00:00
Comments: Self-Monitoring: Four wells are tested semi-annually for RWQCB. Site Screening Done: Dura Bond Bearing Company consists of two facilities; 370 Portage Avenue - mfg, and 3201 Ash St - administrative.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Completion Report
Completed Date: 1983-12-30 00:00:00
Comments: Not reported

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

F23 **GAVENMAN PROPERTY** **LUST** **S106567973**
WNW **3017 EL CAMINO REAL** **HIST LUST** **N/A**
< 1/8 **PALO ALTO, CA 94306**
0.028 mi.
150 ft. **Site 1 of 2 in cluster F**

Relative:
Higher

Actual:
38 ft.

LUST:

Region:	STATE
Global Id:	T0608548811
Latitude:	37.422078
Longitude:	-122.13959
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	2004-08-30 00:00:00
Lead Agency:	SANTA CLARA COUNTY LOP
Case Worker:	UST
Local Agency:	SANTA CLARA COUNTY LOP
RB Case Number:	Not reported
LOC Case Number:	Not reported
File Location:	Stored electronically as an E-file
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Waste Oil / Motor / Hydraulic / Lubricating
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

LUST REG 2:

Region:	2
Facility Id:	Not reported
Facility Status:	Case Closed
Case Number:	06S3W12K06f
How Discovered:	Not reported
Leak Cause:	Unknown
Leak Source:	Not reported
Date Leak Confirmed:	Not reported
Oversight Program:	LUST
Prelim. Site Assesment Wokplan Submitted:	Not reported
Preliminary Site Assesment Began:	Not reported
Pollution Characterization Began:	Not reported
Pollution Remediation Plan Submitted:	Not reported
Date Remediation Action Underway:	Not reported
Date Post Remedial Action Monitoring Began:	Not reported

LUST SANTA CLARA:

Region:	SANTA CLARA
SCVWD ID:	06S3W12K06f
Closed Date:	8/30/2004

HIST LUST SANTA CLARA:

Region:	SANTA CLARA
Region Code:	2
SCVWD ID:	06S3W12K06
Oversite Agency:	SCVWD
Date Listed:	2004-08-26 00:00:00
Closed Date:	2004-08-30 00:00:00

24
WNW
< 1/8
0.031 mi.
166 ft.

JOST HEATING & SHEET METAL
412 OLIVE AVE
PALO ALTO, CA 94306

HIST CORTESE
LUST
HIST LUST

S102432015
N/A

Relative:
Higher

Actual:
33 ft.

CORTESE:

Region:	CORTESE
Facility County Code:	43
Reg By:	LTNKA
Reg Id:	43-0765

LUST:

Region:	STATE
Global Id:	T0608500788
Latitude:	37.423168
Longitude:	-122.138449
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	1992-07-09 00:00:00
Lead Agency:	SANTA CLARA COUNTY LOP
Case Worker:	UST
Local Agency:	SANTA CLARA COUNTY LOP
RB Case Number:	Not reported
LOC Case Number:	Not reported
File Location:	Stored electronically as an E-file
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

LUST REG 2:

Region:	2
Facility Id:	Not reported
Facility Status:	Case Closed
Case Number:	06S3W12K03f
How Discovered:	Not reported
Leak Cause:	Not reported
Leak Source:	Not reported
Date Leak Confirmed:	Not reported
Oversight Program:	LUST
Prelim. Site Assesment Wokplan Submitted:	Not reported
Preliminary Site Assesment Began:	5/28/1991
Pollution Characterization Began:	Not reported
Pollution Remediation Plan Submitted:	Not reported
Date Remediation Action Underway:	Not reported
Date Post Remedial Action Monitoring Began:	Not reported

LUST SANTA CLARA:

Region:	SANTA CLARA
SCVWD ID:	06S3W12K03f
Closed Date:	7/9/1992

HIST LUST SANTA CLARA:

Region:	SANTA CLARA
Region Code:	2

JOST HEATING & SHEET METAL (Continued) **S102432015**

SCVWD ID: 06S3W12K03
Oversite Agency: SCVWD
Date Listed: 1987-01-01 00:00:00
Closed Date: 1992-07-09 00:00:00

E25
ESE
< 1/8
0.036 mi.
192 ft.

Relative:
Higher

Actual:
26 ft.

PARK AVENUE MOTORS
3290 PARK BLVD
PALO ALTO, CA 94306

Site 3 of 4 in cluster E

RCRA-NonGen **1000265922**
FINDS **CAD063548655**
CA FID UST
HIST UST
SWEEPS UST
HAZNET

RCRA-NonGen:
Date form received by agency: 04/13/1999
Facility name: PARK AVENUE MOTORS
Facility address: 3290 PARK BLVD
PALO ALTO, CA 94306
EPA ID: CAD063548655
Contact: KEVIN HAGAR
Contact address: 4500 STEVENS CREEK BLVD
SAN JOSE, CA 95129
Contact country: US
Contact telephone: (408) 497-6087
Contact email: Not reported
EPA Region: 09
Classification: Non-Generator
Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:
Owner/operator name: KARL VAN KEMPER
Owner/operator address: NOT REQUIRED
NOT REQUIRED, ME 99999
Owner/operator country: Not reported
Owner/operator telephone: (415) 555-1212
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: NOT REQUIRED
Owner/operator address: NOT REQUIRED
NOT REQUIRED, ME 99999
Owner/operator country: Not reported
Owner/operator telephone: (415) 555-1212
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): Unknown
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No

PARK AVENUE MOTORS (Continued) **1000265922**

Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No
Off-site waste receiver: Verified to be non-commercial

Historical Generators:
Date form received by agency: 09/01/1996
Facility name: PARK AVENUE MOTORS
Classification: Small Quantity Generator

Violation Status: No violations found

FINDS:

Registry ID: 110002653539

Environmental Interest/Information System
California Hazardous Waste Tracking System - Datamart (HWTS-DATAMART) provides California with information on hazardous waste shipments for generators, transporters, and treatment, storage, and disposal facilities.

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

CA FID UST:
Facility ID: 43002979
Regulated By: UTNKA
Regulated ID: 00059666
Cortese Code: Not reported
SIC Code: Not reported
Facility Phone: 4154940311
Mail To: Not reported
Mailing Address: 3290 PARK BLVD
Mailing Address 2: Not reported
Mailing City,St,Zip: PALO ALTO 94306
Contact: Not reported
Contact Phone: Not reported
DUNs Number: Not reported
NPDES Number: Not reported
EPA ID: Not reported
Comments: Not reported
Status: Active

HIST UST:
Region: STATE

PARK AVENUE MOTORS (Continued) **1000265922**

Facility ID: 00000059666
Facility Type: Other
Other Type: AUTO DEALER
Total Tanks: 0001
Contact Name: KARL VAN KEMPEN
Telephone: 4154940311
Owner Name: PARKE AVENUE MOTORS
Owner Address: 3290 PARK BLVD.
Owner City,St,Zip: PALO ALTO, CA 94306

Tank Num: 001
Container Num: 1
Year Installed: 1973
Tank Capacity: 00000500
Tank Used for: WASTE
Type of Fuel: WASTE OIL
Tank Construction: Not reported
Leak Detection: None

SWEEPS UST:
Status: A
Comp Number: 59666
Number: 9
Board Of Equalization: 44-026129
Ref Date: 07-01-85
Act Date: Not reported
Created Date: 02-29-88
Tank Status: A
Owner Tank Id: 1
Swrcb Tank Id: 43-006-059666-000001
Actv Date: 07-01-85
Capacity: 500
Tank Use: OIL
Stg: W
Content: WASTE OIL
Number Of Tanks: 1

HAZNET:
Gepaid: CAD063548655
Contact: STEVE KIRKSEY
Telephone: 6504940311
Facility Addr2: Not reported
Mailing Name: Not reported
Mailing Address: 3290 PARK BLVD
Mailing City,St,Zip: PALO ALTO, CA 943062234
Gen County: Santa Clara
TSD EPA ID: CAD093459485
TSD County: Fresno
Waste Category: Unspecified solvent mixture Waste
Disposal Method: Not reported
Tons: 0.0216
Facility County: Santa Clara

Gepaid: CAD063548655
Contact: SMYTHE EUROPEAN INC DBA PARK
Telephone: 4089835220

PARK AVENUE MOTORS (Continued) **1000265922**

Facility Addr2:	Not reported
Mailing Name:	Not reported
Mailing Address:	3290 PARK BLVD
Mailing City,St,Zip:	PALO ALTO, CA 943062234
Gen County:	Santa Clara
TSD EPA ID:	CAL000161743
TSD County:	Santa Clara
Waste Category:	Aqueous solution with less than 10% total organic residues
Disposal Method:	Transfer Station
Tons:	3.7321
Facility County:	Santa Clara

Gepaid:	CAD063548655
Contact:	SMYTHE EUROPEAN INC DBA PARK
Telephone:	4089835220
Facility Addr2:	Not reported
Mailing Name:	Not reported
Mailing Address:	3290 PARK BLVD
Mailing City,St,Zip:	PALO ALTO, CA 943062234
Gen County:	Santa Clara
TSD EPA ID:	CAL000161743
TSD County:	Santa Clara
Waste Category:	Not reported
Disposal Method:	Transfer Station
Tons:	.4378
Facility County:	Santa Clara

Gepaid:	CAD063548655
Contact:	SMYTHE EUROPEAN INC DBA PARK
Telephone:	4089835220
Facility Addr2:	Not reported
Mailing Name:	Not reported
Mailing Address:	3290 PARK BLVD
Mailing City,St,Zip:	PALO ALTO, CA 943062234
Gen County:	Santa Clara
TSD EPA ID:	CAD059494310
TSD County:	Santa Clara
Waste Category:	Oil/water separation sludge
Disposal Method:	Transfer Station
Tons:	.2877
Facility County:	Santa Clara

Gepaid:	CAD063548655
Contact:	SMYTHE EUROPEAN INC DBA PARK
Telephone:	4089835220
Facility Addr2:	Not reported
Mailing Name:	Not reported
Mailing Address:	3290 PARK BLVD
Mailing City,St,Zip:	PALO ALTO, CA 943062234
Gen County:	Santa Clara
TSD EPA ID:	CAD009452657
TSD County:	San Mateo
Waste Category:	Unspecified organic liquid mixture
Disposal Method:	Recycler
Tons:	2.0224
Facility County:	Santa Clara

PARK AVENUE MOTORS (Continued) **1000265922**

Click this hyperlink while viewing on your computer to access
Unspecified organic liquid mixture

E26
ESE
< 1/8
0.037 mi.
194 ft.

CPA PARK BLVD SUBSTATION **AST** **A100323515**
3291 PARK BL **N/A**
PALO ALTO, CA 94306

Site 4 of 4 in cluster E

Relative: Higher

Actual: 26 ft.

AST:

Owner:	CITY OF PALO ALTO
Total Gallons:	10,150
Certified Unified Program Agencies:	Santa Clara County

F27
WNW
< 1/8
0.040 mi.
210 ft.

PALO ALTO NISSAN **HIST CORTESE** **S102434944**
3001 EL CAMINO REAL **LUST** **N/A**
PALO ALTO, CA 94306 **HIST LUST**

Site 2 of 2 in cluster F

Relative: Higher

Actual: 37 ft.

CORTESE:

Region:	CORTESE
Facility County Code:	43
Reg By:	LTNKA
Reg Id:	43-1031

LUST:

Region:	STATE
Global Id:	T0608555022
Latitude:	37.422164
Longitude:	-122.13977
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	1992-01-22 00:00:00
Lead Agency:	SANTA CLARA COUNTY LOP
Case Worker:	UST
Local Agency:	SANTA CLARA COUNTY LOP
RB Case Number:	Not reported
LOC Case Number:	Not reported
File Location:	Stored electronically as an E-file
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Not reported
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

LUST REG 2:

Region:	2
Facility Id:	Not reported
Facility Status:	Case Closed
Case Number:	06S3W12K02f
How Discovered:	Not reported
Leak Cause:	Not reported
Leak Source:	Not reported
Date Leak Confirmed:	Not reported

PALO ALTO NISSAN (Continued) **S102434944**

Oversight Program: LUST
Prelim. Site Assesment Wokplan Submitted: Not reported
Preliminary Site Assesment Began: Not reported
Pollution Characterization Began: Not reported
Pollution Remediation Plan Submitted: Not reported
Date Remediation Action Underway: Not reported
Date Post Remedial Action Monitoring Began: Not reported

LUST SANTA CLARA:
Region: SANTA CLARA
SCVWD ID: 06S3W12K02f
Closed Date: 1/22/1992

HIST LUST SANTA CLARA:
Region: SANTA CLARA
Region Code: 2
SCVWD ID: 06S3W12K02
Oversite Agency: SCVWD
Date Listed: 1991-01-01 00:00:00
Closed Date: 1992-01-22 00:00:00

B28 **WOLF CAMERA NO 955** **RCRA-SQG 1001231254**
SSE **3159 EL CAMINO REAL** **FINDS CAR000030353**
< 1/8 **PALO ALTO, CA 94304**
0.041 mi.
215 ft. **Site 2 of 2 in cluster B**

Relative:
Higher

Actual:
39 ft.

RCRA-SQG:
Date form received by agency: 07/24/1997
Facility name: WOLF CAMERA NO 955
Facility address: 3159 EL CAMINO REAL
PALO ALTO, CA 94304
EPA ID: CAR000030353
Contact: CARLTON WILLIAMS
Contact address: 3159 EL CAMINO REAL
PALO ALTO, CA 94304
Contact country: US
Contact telephone: (404) 633-9000
Contact email: Not reported
EPA Region: 09
Classification: Small Small Quantity Generator
Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:
Owner/operator name: WOLF CAMERA AND VIDEO
Owner/operator address: 1706 CHANTILLY DR N E
ATLANTA, GA 30324
Owner/operator country: Not reported
Owner/operator telephone: (404) 633-9000
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported

WOLF CAMERA NO 955 (Continued) **1001231254**

Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): Unknown
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No
Off-site waste receiver: Verified to be non-commercial

Hazardous Waste Summary:
Waste code: D000
Waste name: Not Defined

Waste code: D011
Waste name: SILVER

Violation Status: No violations found

FINDS:

Registry ID: 110002918585

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

29
ESE
< 1/8
0.047 mi.
249 ft.

Relative:
Higher

Actual:
31 ft.

PACIFIC BELL
3350 BIRCH STREET
PALO ALTO, CA 94306

RCRA-SQG **1000251157**
FINDS **CAT080019896**
CA FID UST
UST
HIST UST
SWEEPS UST
HAZNET

RCRA-SQG:
Date form received by agency: 09/01/1996
Facility name: PACIFIC BELL
Facility address: 3350 BIRCH STREET
PALO ALTO, CA 94306
EPA ID: CAT080019896
Mailing address: 2 NORTH SECOND ST ROOM 1125

PACIFIC BELL (Continued) **1000251157**

SAN JOSE, CA 95113
Contact: Not reported
Contact address: Not reported
Not reported
Contact country: Not reported
Contact telephone: Not reported
Contact email: Not reported
EPA Region: 09
Classification: Small Small Quantity Generator
Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:
Owner/operator name: THE PACIFIC TELEPHONE AND TELEGRAPH CO
Owner/operator address: NOT REQUIRED
NOT REQUIRED, ME 99999
Owner/operator country: Not reported
Owner/operator telephone: (415) 555-1212
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: NOT REQUIRED
Owner/operator address: NOT REQUIRED
NOT REQUIRED, ME 99999
Owner/operator country: Not reported
Owner/operator telephone: (415) 555-1212
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: Unknown
Mixed waste (haz. and radioactive): Unknown
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: Unknown
Furnace exemption: Unknown
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No
Off-site waste receiver: Verified to be non-commercial

Historical Generators:
Date form received by agency: 01/19/1981

PACIFIC BELL (Continued) **1000251157**

Facility name: PACIFIC BELL
Classification: Large Quantity Generator

Violation Status: No violations found

FINDS:

Registry ID: 110002948794

Environmental Interest/Information System
The NEI (National Emissions Inventory) database contains information on stationary and mobile sources that emit criteria air pollutants and their precursors, as well as hazardous air pollutants (HAPs).

California Hazardous Waste Tracking System - Datamart (HWTS-DATAMART) provides California with information on hazardous waste shipments for generators, transporters, and treatment, storage, and disposal facilities.

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

CA FID UST:
Facility ID: 43010954
Regulated By: UTNKA
Regulated ID: 00036909
Cortese Code: Not reported
SIC Code: Not reported
Facility Phone: 4155426758
Mail To: Not reported
Mailing Address: 370 003RD ST
Mailing Address 2: Not reported
Mailing City,St,Zip: PALO ALTO 94306
Contact: Not reported
Contact Phone: Not reported
DUNs Number: Not reported
NPDES Number: Not reported
EPA ID: Not reported
Comments: Not reported
Status: Active

UST:
Global ID: 249
Latitude: 37.4224465
Longitude: -122.13486

HIST UST:
Region: STATE
Facility ID: 00000036909
Facility Type: Other
Other Type: SIC 4800

PACIFIC BELL (Continued) **1000251157**

Total Tanks: 0001
Contact Name: E.J. KOEHLER
Telephone: 4155426758
Owner Name: PACIFIC BELL
Owner Address: 370 THIRD STREET
Owner City,St,Zip: SAN FRANCISCO, CA 94107

Tank Num: 001
Container Num: D-69-10K
Year Installed: 1969
Tank Capacity: 00010000
Tank Used for: PRODUCT
Type of Fuel: DIESEL
Tank Construction: Not reported
Leak Detection: Visual

Tank Num: 002
Container Num: 1
Year Installed: 1969
Tank Capacity: 00010000
Tank Used for: PRODUCT
Type of Fuel: DIESEL
Tank Construction: Not reported
Leak Detection: None

SWEEPS UST:
Status: Not reported
Comp Number: 36909
Number: Not reported
Board Of Equalization: 44-031914
Ref Date: Not reported
Act Date: Not reported
Created Date: Not reported
Tank Status: Not reported
Owner Tank Id: Not reported
Swrcb Tank Id: 43-006-036909-000001
Actv Date: Not reported
Capacity: 10000
Tank Use: M.V. FUEL
Stg: PRODUCT
Content: DIESEL
Number Of Tanks: 1

Status: A
Comp Number: 36909
Number: 1
Board Of Equalization: 44-031914
Ref Date: 10-10-93
Act Date: 03-04-94
Created Date: 02-29-88
Tank Status: A
Owner Tank Id: 1
Swrcb Tank Id: 43-006-036909-000002
Actv Date: 07-01-85
Capacity: 10000
Tank Use: M.V. FUEL
Stg: P

PACIFIC BELL (Continued) **1000251157**

Content: DIESEL
Number Of Tanks: 2

Status: A
Comp Number: 36909
Number: 1
Board Of Equalization: 44-031914
Ref Date: 10-10-93
Act Date: 03-04-94
Created Date: 02-29-88
Tank Status: A
Owner Tank Id: D-93-10K
Swrcb Tank Id: 43-006-036909-000003
Actv Date: 10-10-93
Capacity: 10000
Tank Use: M.V. FUEL
Stg: P
Content: DIESEL
Number Of Tanks: Not reported

HAZNET:
Gepaid: CAT080019896
Contact: SHARON BAYLE/STAFF ASSOC
Telephone: 9258675741
Facility Addr2: Not reported
Mailing Name: Not reported
Mailing Address: PO BOX 5095 RM 3E000
Mailing City,St,Zip: SAN RAMON, CA 945830995
Gen County: Santa Clara
TSD EPA ID: CAD009452657
TSD County: San Mateo
Waste Category: Liquids with pH <UN-> 2
Disposal Method: Recycler
Tons: 0.03
Facility County: Not reported

Gepaid: CAT080019896
Contact: PACIFIC BELL
Telephone: 9258236161
Facility Addr2: Not reported
Mailing Name: Not reported
Mailing Address: RM 3E000
Mailing City,St,Zip: SAN RAMON, CA 945830995
Gen County: Santa Clara
TSD EPA ID: CAD050806850
TSD County: Los Angeles
Waste Category: Polychlorinated biphenyls and material containing PCB’s
Disposal Method: Not reported
Tons: .0242
Facility County: Santa Clara

Gepaid: CAT080019896
Contact: PACIFIC BELL
Telephone: 9258236161
Facility Addr2: Not reported
Mailing Name: Not reported
Mailing Address: RM 3E000

PACIFIC BELL (Continued) **1000251157**

Mailing City,St,Zip:	SAN RAMON, CA 945830995
Gen County:	Santa Clara
TSD EPA ID:	CAD028409019
TSD County:	Los Angeles
Waste Category:	Other organic solids
Disposal Method:	Transfer Station
Tons:	.8428
Facility County:	Santa Clara

Gepaid:	CAT080019896
Contact:	PACIFIC BELL
Telephone:	9258236161
Facility Addr2:	Not reported
Mailing Name:	Not reported
Mailing Address:	RM 3E000
Mailing City,St,Zip:	SAN RAMON, CA 945830995
Gen County:	Santa Clara
TSD EPA ID:	CAD028409019
TSD County:	Los Angeles
Waste Category:	Other organic solids
Disposal Method:	Transfer Station
Tons:	0.4214
Facility County:	Santa Clara

Gepaid:	CAT080019896
Contact:	PACIFIC BELL
Telephone:	9258236161
Facility Addr2:	Not reported
Mailing Name:	Not reported
Mailing Address:	RM 3E000
Mailing City,St,Zip:	SAN RAMON, CA 945830995
Gen County:	Santa Clara
TSD EPA ID:	CAD981382732
TSD County:	1
Waste Category:	Asbestos-containing waste
Disposal Method:	Disposal, Land Fill
Tons:	3.3712
Facility County:	Santa Clara

Click this hyperlink while viewing on your computer to access
Asbestos-containing waste

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30 **VARIAN ASSOCIATES- LAMBERT SITE** **RCRA-SQG** **1000245633**
South **425 LAMBERT** **FINDS** **CAD981399835**
< 1/8 **PALO ALTO, CA 94306**
0.056 mi.
297 ft.

Relative:
Higher

Actual:
34 ft.

RCRA-SQG:

Date form received by agency:	09/01/1996
Facility name:	VARIAN ASSOCIATES- LAMBERT SITE
Facility address:	425 LAMBERT PALO ALTO, CA 94306
EPA ID:	CAD981399835
Mailing address:	611 HANSEN WY D-NINETY FIFTH PALO ALTO, CA 94303
Contact:	Not reported
Contact address:	Not reported

VARIAN ASSOCIATES- LAMBERT SITE (Continued) **1000245633**

Not reported
Contact country: Not reported
Contact telephone: Not reported
Contact email: Not reported
EPA Region: 09
Classification: Small Small Quantity Generator
Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:
Owner/operator name: NOT REQUIRED
Owner/operator address: NOT REQUIRED
NOT REQUIRED, ME 99999
Owner/operator country: Not reported
Owner/operator telephone: (415) 555-1212
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: VARIAN ASSOCIATES
Owner/operator address: NOT REQUIRED
NOT REQUIRED, ME 99999
Owner/operator country: Not reported
Owner/operator telephone: (415) 555-1212
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: Unknown
Mixed waste (haz. and radioactive): Unknown
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: Unknown
Furnace exemption: Unknown
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No
Off-site waste receiver: Verified to be non-commercial

Historical Generators:
Date form received by agency: 04/28/1986
Facility name: VARIAN ASSOCIATES- LAMBERT SITE
Classification: Large Quantity Generator

VARIAN ASSOCIATES- LAMBERT SITE (Continued) **1000245633**

Violation Status: No violations found

FINDS:

Registry ID: 110002694111

Environmental Interest/Information System

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

G31 **AKINS BODY SHOP INCORPORATED** **RCRA-SQG** **1000319009**
NW **2901 PARK BOULEVARD** **FINDS** **CAD064719859**
< 1/8 **PALO ALTO, CA 94306** **HAZNET**
0.057 mi. **EMI**
301 ft. **Site 1 of 3 in cluster G**

Relative: Higher

Actual: 30 ft.

RCRA-SQG:

Date form received by agency:	02/20/1986
Facility name:	AKINS BODY SHOP INC
Facility address:	2901 PARK BLVD PALO ALTO, CA 94306
EPA ID:	CAD064719859
Contact:	ENVIRONMENTAL MANAGER
Contact address:	2901 PARK BLVD PALO ALTO, CA 94306
Contact country:	US
Contact telephone:	(405) 321-1460
Contact email:	Not reported
EPA Region:	09
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	BILL RUPP
Owner/operator address:	NOT REQUIRED NOT REQUIRED, ME 99999
Owner/operator country:	Not reported
Owner/operator telephone:	(415) 555-1212
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported
Owner/operator name:	NOT REQUIRED
Owner/operator address:	NOT REQUIRED NOT REQUIRED, ME 99999
Owner/operator country:	Not reported
Owner/operator telephone:	(415) 555-1212
Legal status:	Private

AKINS BODY SHOP INCORPORATED (Continued) **1000319009**

Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): Unknown
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No
Off-site waste receiver: Verified to be non-commercial

Violation Status: No violations found

FINDS:

Registry ID: 110001197213

Environmental Interest/Information System

The NEI (National Emissions Inventory) database contains information on stationary and mobile sources that emit criteria air pollutants and their precursors, as well as hazardous air pollutants (HAPs).

California Hazardous Waste Tracking System - Datamart (HWTS-DATAMART) provides California with information on hazardous waste shipments for generators, transporters, and treatment, storage, and disposal facilities.

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

HAZNET:
Gepaid: CAD064719859
Contact: SHARON RUPP
Telephone: 6503211460
Facility Addr2: Not reported
Mailing Name: Not reported
Mailing Address: 2901 PARK BLVD
Mailing City,St,Zip: PALO ALTO, CA 943062230
Gen County: Santa Clara
TSD EPA ID: CAD009452657
TSD County: San Mateo

AKINS BODY SHOP INCORPORATED (Continued) **1000319009**

Waste Category: Oxygenated solvents (acetone, butanol, ethyl acetate, etc.)
Disposal Method: Recycler
Tons: 0.95
Facility County: Not reported

Gepaid: CAD064719859
Contact: SHARON RUPP
Telephone: 6503211460
Facility Addr2: Not reported
Mailing Name: Not reported
Mailing Address: 3045 PARK BLVD
Mailing City,St,Zip: PALO ALTO, CA 943062230
Gen County: Santa Clara
TSD EPA ID: CAD009452657
TSD County: San Mateo
Waste Category: Aqueous solution with 10% or more total organic residues
Disposal Method: Recycler
Tons: 0.22
Facility County: Santa Clara

Gepaid: CAD064719859
Contact: SHARON RUPP
Telephone: 5106518154
Facility Addr2: Not reported
Mailing Name: Not reported
Mailing Address: 2901 PARK BLVD
Mailing City,St,Zip: PALO ALTO, CA 943062230
Gen County: Santa Clara
TSD EPA ID: CAD009452657
TSD County: San Mateo
Waste Category: Unspecified solvent mixture Waste
Disposal Method: Not reported
Tons: .0000
Facility County: Santa Clara

Gepaid: CAD064719859
Contact: SHARON RUPP
Telephone: 5106518154
Facility Addr2: Not reported
Mailing Name: Not reported
Mailing Address: 2901 PARK BLVD
Mailing City,St,Zip: PALO ALTO, CA 943062230
Gen County: Santa Clara
TSD EPA ID: CAD009452657
TSD County: San Mateo
Waste Category: Other organic solids
Disposal Method: Disposal, Land Fill
Tons: .0750
Facility County: Santa Clara

Gepaid: CAD064719859
Contact: SHARON RUPP
Telephone: 5106518154
Facility Addr2: Not reported
Mailing Name: Not reported
Mailing Address: 2901 PARK BLVD
Mailing City,St,Zip: PALO ALTO, CA 943062230

AKINS BODY SHOP INCORPORATED (Continued) **1000319009**

Gen County: Santa Clara
TSD EPA ID: CAD009452657
TSD County: San Mateo
Waste Category: Waste oil and mixed oil
Disposal Method: Recycler
Tons: .2293
Facility County: Santa Clara

Click this hyperlink while viewing on your computer to access
Waste oil and mixed oil

EMI:

Year:	1990
County Code:	43
Air Basin:	SF
Facility ID:	5422
Air District Name:	BA
SIC Code:	7532
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	1
Reactive Organic Gases Tons/Yr:	1
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	1993
County Code:	43
Air Basin:	SF
Facility ID:	5422
Air District Name:	BA
SIC Code:	7532
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	1
Reactive Organic Gases Tons/Yr:	1
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	1995
County Code:	43
Air Basin:	SF
Facility ID:	5422
Air District Name:	BA
SIC Code:	7532
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	4
Reactive Organic Gases Tons/Yr:	3

AKINS BODY SHOP INCORPORATED (Continued) **1000319009**

Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	1996
County Code:	43
Air Basin:	SF
Facility ID:	5422
Air District Name:	BA
SIC Code:	7532
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	4
Reactive Organic Gases Tons/Yr:	3
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	1997
County Code:	43
Air Basin:	SF
Facility ID:	5422
Air District Name:	BA
SIC Code:	7532
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	4
Reactive Organic Gases Tons/Yr:	3
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	1998
County Code:	43
Air Basin:	SF
Facility ID:	5422
Air District Name:	BA
SIC Code:	7532
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	3
Reactive Organic Gases Tons/Yr:	3
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

AKINS BODY SHOP INCORPORATED (Continued) **1000319009**

Year:	1999
County Code:	43
Air Basin:	SF
Facility ID:	5422
Air District Name:	BA
SIC Code:	7532
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	3
Reactive Organic Gases Tons/Yr:	2
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	2000
County Code:	43
Air Basin:	SF
Facility ID:	5422
Air District Name:	BA
SIC Code:	7532
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	3
Reactive Organic Gases Tons/Yr:	2
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	2001
County Code:	43
Air Basin:	SF
Facility ID:	5422
Air District Name:	BA
SIC Code:	7532
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	2
Reactive Organic Gases Tons/Yr:	2
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	2002
County Code:	43
Air Basin:	SF
Facility ID:	5422
Air District Name:	BA
SIC Code:	7532

AKINS BODY SHOP INCORPORATED (Continued) **1000319009**

Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	2
Reactive Organic Gases Tons/Yr:	2
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	2003
County Code:	43
Air Basin:	SF
Facility ID:	5422
Air District Name:	BA
SIC Code:	7532
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	2
Reactive Organic Gases Tons/Yr:	2
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	2004
County Code:	43
Air Basin:	SF
Facility ID:	5422
Air District Name:	BA
SIC Code:	7532
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	2.028
Reactive Organic Gases Tons/Yr:	1.5377392
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	2005
County Code:	43
Air Basin:	SF
Facility ID:	5422
Air District Name:	BA
SIC Code:	7532
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	2.028
Reactive Organic Gases Tons/Yr:	1.5377392
Carbon Monoxide Emissions Tons/Yr:	0

AKINS BODY SHOP INCORPORATED (Continued) **1000319009**

NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0
Year:	2006
County Code:	43
Air Basin:	SF
Facility ID:	5422
Air District Name:	BA
SIC Code:	7532
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	2.028
Reactive Organic Gases Tons/Yr:	1.5377392
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

G32 **PARK BOULEVARD (NO. 2901) - PALO ALTO** **CA BOND EXP. PLAN** **S105960445**
NW **2901 PARK BLVD** **N/A**
< 1/8 **PALO ALTO, CA 94306**
0.057 mi.
301 ft. **Site 2 of 3 in cluster G**

Relative:
Higher

Actual:
30 ft.

CA BOND EXP. PLAN:

Reponsible Party:	TIER 3 (MINIMUM HAZARD THRESHOLD SITE) REPORT
Project Revenue Source Company:	Not reported
Project Revenue Source Addr:	Not reported
Project Revenue Source City,St,Zip:	Not reported
Project Revenue Source Desc:	Not reported
Site Description:	A ditch adjacent to an auto body shop located at the above address was identified by the Department as being contaminated with an oily black material containing lead. It is suspected that this material accumulated in the ditch from runoff at the auto body shop location. Subsequent to discovery, the area containing the ditch was graded and paved with asphalt. An auto dealership is now located on the site of the former ditch.
Hazardous Waste Desc:	Analysis of the oily material indicated the presence of petroleum products and moderate concentrations of lead.
Threat To Public Health & Env:	Not reported
Site Activity Status:	As a Tier 3 site, this site will be listed annually in this report. If the asphalt cap is removed and the property is proposed for development for other usage, DHS may order that some additional abatement be conducted.

G33 **BIX** **RCRA-SQG** **1000100224**
NW **2891 PARK BLVD** **FINDS** **CAD981394265**
< 1/8 **PALO ALTO, CA 94306**
0.063 mi.
331 ft. **Site 3 of 3 in cluster G**

Relative:
Higher

Actual:
30 ft.

RCRA-SQG:

Date form received by agency:	09/01/1996
Facility name:	BIX
Facility address:	2891 PARK BLVD PALO ALTO, CA 94306
EPA ID:	CAD981394265
Mailing address:	PARK BLVD PALO ALTO, CA 94306
Contact:	Not reported
Contact address:	Not reported Not reported
Contact country:	Not reported
Contact telephone:	Not reported
Contact email:	Not reported
EPA Region:	09
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	RICHARD DENNISON
Owner/operator address:	NOT REQUIRED NOT REQUIRED, ME 99999
Owner/operator country:	Not reported
Owner/operator telephone:	(415) 555-1212
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Owner/operator name:	NOT REQUIRED
Owner/operator address:	NOT REQUIRED NOT REQUIRED, ME 99999
Owner/operator country:	Not reported
Owner/operator telephone:	(415) 555-1212
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	Unknown
Mixed waste (haz. and radioactive):	Unknown
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	Unknown
Furnace exemption:	Unknown

BIX (Continued) **1000100224**

Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No
Off-site waste receiver:	Verified to be non-commercial

Violation Status: No violations found

FINDS:

Registry ID: 110002692417

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

H34 **VARIAN ASSOCIATES HANSEN WAY** **CA FID UST** **1000245623**
SSE **611 HANSEN WAY N MS-A12** **HIST UST** **N/A**
< 1/8 **PALO ALTO, CA 94303** **SWEEPS UST**
0.087 mi.
462 ft. **Site 1 of 7 in cluster H**

Relative:
Higher

Actual:
40 ft.

CA FID UST:

Facility ID:	43012189
Regulated By:	UTNKA
Regulated ID:	00004142
Cortese Code:	Not reported
SIC Code:	Not reported
Facility Phone:	4154934000
Mail To:	Not reported
Mailing Address:	611 HANSEN WAY N MS-A12
Mailing Address 2:	Not reported
Mailing City,St,Zip:	PALO ALTO 94303
Contact:	Not reported
Contact Phone:	Not reported
DUNs Number:	Not reported
NPDES Number:	Not reported
EPA ID:	Not reported
Comments:	Not reported
Status:	Active

HIST UST:

Region:	STATE
Facility ID:	00000004142
Facility Type:	Other
Other Type:	ELECTRICAL COMPONENT
Total Tanks:	0002
Contact Name:	JOHN JOHNSON
Telephone:	4154934000
Owner Name:	VARIAN ASSOCIATES

VARIAN ASSOCIATES HANSEN WAY (Continued) **1000245623**

Owner Address: 611 HANSEN WAY
Owner City,St,Zip: PALO ALTO, CA 94303

Tank Num: 001
Container Num: 1
Year Installed: 1967
Tank Capacity: 00002000
Tank Used for: PRODUCT
Type of Fuel: UNLEADED
Tank Construction: Not reported
Leak Detection: Stock Inventor

Tank Num: 002
Container Num: 2
Year Installed: 1974
Tank Capacity: 00010000
Tank Used for: PRODUCT
Type of Fuel: UNLEADED
Tank Construction: Not reported
Leak Detection: Stock Inventor

SWEEPS UST:
Status: A
Comp Number: 4142
Number: 9
Board Of Equalization: 44-026041
Ref Date: 07-01-85
Act Date: Not reported
Created Date: 02-29-88
Tank Status: A
Owner Tank Id: 1
Swrcb Tank Id: 43-006-004142-000001
Actv Date: 07-01-85
Capacity: 2000
Tank Use: M.V. FUEL
Stg: P
Content: REG UNLEADED
Number Of Tanks: 2

Status: A
Comp Number: 4142
Number: 9
Board Of Equalization: 44-026041
Ref Date: 07-01-85
Act Date: Not reported
Created Date: 02-29-88
Tank Status: A
Owner Tank Id: 2
Swrcb Tank Id: 43-006-004142-000002
Actv Date: 07-01-85
Capacity: 10000
Tank Use: M.V. FUEL
Stg: P
Content: REG UNLEADED
Number Of Tanks: Not reported

H35 **VARIAN INC. NPDES** **SLIC** **S106916863**
SSE **611 HANSEN** **N/A**
< 1/8 **MONTAIN VIEW, CA**
0.094 mi.
494 ft. **Site 2 of 7 in cluster H**

Relative:
Higher

Actual:
40 ft.

SLIC:

Region:	STATE
Facility Status:	**Open - Inactive**
Status Date:	1990-01-01 00:00:00
Global Id:	SL0608530107
Lead Agency:	SAN FRANCISCO BAY RWQCB (REGION 2)
Lead Agency Case Number:	Not reported
Latitude:	37.420047
Longitude:	-122.137047
Case Type:	Cleanup Program Site
Case Worker:	LG
Local Agency:	Not reported
RB Case Number:	43s1044
File Location:	Not reported
Potential Media Affected:	Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern:	* Solvents
Site History:	No Water Board oversight of cleanup at this site. This case is included in Geotracker because the site is covered by the Water Board s NPDES general permits for discharges from pump and treat systems to surface waters (one each for fuels- and VOC-impacted sites). This can happen for two reasons: (i) the site is overseen by another agency (e.g., USEPA or DTSC) and needs coverage under one of the NPDES general permits or (ii) construction dewatering in an area of groundwater contamination necessitates NPDES general permit coverage. Including this case in Geotracker helps staff to receive and review required NPDES reports.

Click here to access the California GeoTracker records for this facility:

H36 **PREFORMED LINE PCDT** **RCRA-SQG** **1000230394**
SSE **600 HANSEN WAY** **FINDS** **CAD009146184**
< 1/8 **PALO ALTO, CA 94306**
0.094 mi.
494 ft. **Site 3 of 7 in cluster H**

Relative:
Higher

Actual:
40 ft.

RCRA-SQG:

Date form received by agency:	09/01/1996
Facility name:	PREFORMED LINE PCDT
Facility address:	600 HANSEN WAY PALO ALTO, CA 94306
EPA ID:	CAD009146184
Mailing address:	PO BOX 11697-A PALO ALTO, CA 94306
Contact:	Not reported
Contact address:	Not reported Not reported
Contact country:	Not reported
Contact telephone:	Not reported
Contact email:	Not reported
EPA Region:	09
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous

PREFORMED LINE PCDT (Continued) **1000230394**

waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	NOT REQUIRED
Owner/operator address:	NOT REQUIRED
	NOT REQUIRED, ME 99999
Owner/operator country:	Not reported
Owner/operator telephone:	(415) 555-1212
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported
Owner/operator name:	PREFORMED LINE PRODUCTS COMPANY
Owner/operator address:	NOT REQUIRED
	NOT REQUIRED, ME 99999
Owner/operator country:	Not reported
Owner/operator telephone:	(415) 555-1212
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	Unknown
Mixed waste (haz. and radioactive):	Unknown
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	Unknown
Furnace exemption:	Unknown
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No
Off-site waste receiver:	Verified to be non-commercial

Historical Generators:

Date form received by agency:	08/15/1980
Facility name:	PREFORMED LINE PCDT
Classification:	Large Quantity Generator
Violation Status:	No violations found

FINDS:

Registry ID: 110002635550

Environmental Interest/Information System

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of

PREFORMED LINE PCDT (Continued) **1000230394**

events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

H37 **COMMUNICATIONS & POWER INDUSTRIES, INC.** **RCRA-LQG** **1001023035**
SSE **607 HANSEN WAY** **FINDS** **CAR000003863**
< 1/8 **PALO ALTO, CA 94304** **NPDES**
0.094 mi. **HWP**
497 ft. **Site 4 of 7 in cluster H** **FINANCIAL ASSURANCE**

Relative: Higher

Actual: 40 ft.

RCRA-LQG:

Date form received by agency:	02/28/2008
Facility name:	COMMUNICATIONS & POWER INDUSTRIES, INC.
Facility address:	607 HANSEN WAY PALO ALTO, CA 94304
EPA ID:	CAR000003863
Contact:	JOHN M DALE
Contact address:	Not reported Not reported
Contact country:	Not reported
Contact telephone:	(650) 846-3141
Contact email:	JOHN.DALE@CPII.COM
EPA Region:	09
Land type:	Private
Classification:	Large Quantity Generator
Description:	Handler: generates 1,000 kg or more of hazardous waste during any calendar month; or generates more than 1 kg of acutely hazardous waste during any calendar month; or generates more than 100 kg of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month; or generates 1 kg or less of acutely hazardous waste during any calendar month, and accumulates more than 1 kg of acutely hazardous waste at any time; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates more than 100 kg of that material at any time

Owner/Operator Summary:

Owner/operator name:	COMMUNICATIONS & POWER INDUSTRIES
Owner/operator address:	Not reported Not reported
Owner/operator country:	US
Owner/operator telephone:	Not reported
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	08/11/1995
Owner/Op end date:	Not reported
Owner/operator name:	CPI INTERNATIONAL, INC.
Owner/operator address:	607 HANSEN WAY PALO ALTO, CA 94304
Owner/operator country:	US
Owner/operator telephone:	Not reported
Legal status:	Private

COMMUNICATIONS & POWER INDUSTRIES, INC. (Continued) **1001023035**

Owner/Operator Type: Owner
Owner/Op start date: 08/11/1995
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No
Off-site waste receiver: Commercial status unknown

Universal Waste Summary:
Waste type: Batteries
Accumulated waste on-site: No
Generated waste on-site: Not reported

Waste type: Lamps
Accumulated waste on-site: No
Generated waste on-site: Not reported

Waste type: Pesticides
Accumulated waste on-site: No
Generated waste on-site: Not reported

Waste type: Thermostats
Accumulated waste on-site: No
Generated waste on-site: Not reported

Historical Generators:
Date form received by agency: 02/28/2006
Facility name: COMMUNICATIONS & POWER INDUSTRIES, INC.
Classification: Large Quantity Generator

Date form received by agency: 03/11/2004
Facility name: COMMUNICATIONS & POWER INDUSTRIES, INC.
Site name: COMMUNICATIONS AND POWER IND INC
Classification: Large Quantity Generator

Date form received by agency: 02/26/2004
Facility name: COMMUNICATIONS & POWER INDUSTRIES, INC.
Classification: Large Quantity Generator

Date form received by agency: 10/12/2000
Facility name: COMMUNICATIONS & POWER INDUSTRIES, INC.
Classification: Large Quantity Generator

COMMUNICATIONS & POWER INDUSTRIES, INC. (Continued) **1001023035**

Date form received by agency: 03/16/1999
Facility name: COMMUNICATIONS & POWER INDUSTRIES, INC.
Classification: Large Quantity Generator

Date form received by agency: 09/01/1996
Facility name: COMMUNICATIONS & POWER INDUSTRIES, INC.
Site name: COMMUNICATIONS AND POWER IND INC
Classification: Small Quantity Generator

Date form received by agency: 04/01/1996
Facility name: COMMUNICATIONS & POWER INDUSTRIES, INC.
Site name: COMMUNICATIONS AND POWER INDUSTRIES INC
Classification: Large Quantity Generator

Date form received by agency: 06/27/1995
Facility name: COMMUNICATIONS & POWER INDUSTRIES, INC.
Site name: COMMUNICATIONS AND POWER IND INC
Classification: Large Quantity Generator

Hazardous Waste Summary:

Waste code: D001
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Waste code: D002
Waste name: A WASTE WHICH HAS A PH OF LESS THAN 2 OR GREATER THAN 12.5 IS CONSIDERED TO BE A CORROSIVE HAZARDOUS WASTE. SODIUM HYDROXIDE, A CAUSTIC SOLUTION WITH A HIGH PH, IS OFTEN USED BY INDUSTRIES TO CLEAN OR DEGREASE PARTS. HYDROCHLORIC ACID, A SOLUTION WITH A LOW PH, IS USED BY MANY INDUSTRIES TO CLEAN METAL PARTS PRIOR TO PAINTING. WHEN THESE CAUSTIC OR ACID SOLUTIONS BECOME CONTAMINATED AND MUST BE DISPOSED, THE WASTE WOULD BE A CORROSIVE HAZARDOUS WASTE.

Waste code: D003
Waste name: A MATERIAL IS CONSIDERED TO BE A REACTIVE HAZARDOUS WASTE IF IT IS NORMALLY UNSTABLE, REACTS VIOLENTLY WITH WATER, GENERATES TOXIC GASES WHEN EXPOSED TO WATER OR CORROSIVE MATERIALS, OR IF IT IS CAPABLE OF DETONATION OR EXPLOSION WHEN EXPOSED TO HEAT OR A FLAME. ONE EXAMPLE OF SUCH WASTE WOULD BY WASTE GUNPOWDER.

Waste code: D005
Waste name: BARIUM

Waste code: D006
Waste name: CADMIUM

Waste code: D007
Waste name: CHROMIUM

Waste code: D008
Waste name: LEAD

COMMUNICATIONS & POWER INDUSTRIES, INC. (Continued) **1001023035**

Waste code: D011
Waste name: SILVER

Waste code: D018
Waste name: BENZENE

Waste code: D035
Waste name: METHYL ETHYL KETONE

Waste code: F003
Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NON-HALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS, AND, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste code: F005
Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste code: F006
Waste name: WASTEWATER TREATMENT SLUDGES FROM ELECTROPLATING OPERATIONS EXCEPT FROM THE FOLLOWING PROCESSES: (1) SULFURIC ACID ANODIZING OF ALUMINUM; (2) TIN PLATING ON CARBON STEEL; (3) ZINC PLATING (SEGREGATED BASIS) ON CARBON STEEL; (4) ALUMINUM OR ZINC-ALUMINUM PLATING ON CARBON STEEL; (5) CLEANING/STRIPPING ASSOCIATED WITH TIN, ZINC AND ALUMINUM PLATING ON CARBON STEEL; AND (6) CHEMICAL ETCHING AND MILLING OF ALUMINUM.

Waste code: F007
Waste name: SPENT CYANIDE PLATING BATH SOLUTIONS FROM ELECTROPLATING OPERATIONS

Waste code: F008
Waste name: PLATING BATH RESIDUES FROM THE BOTTOM OF PLATING BATHS FROM ELECTROPLATING OPERATIONS WHERE CYANIDES ARE USED IN THE PROCESS.

Waste code: LABP
Waste name: LAB PACK

Waste code: P098
Waste name: POTASSIUM CYANIDE

Biennial Reports:

Last Biennial Reporting Year: 2009

Annual Waste Handled:
Waste code: D001

COMMUNICATIONS & POWER INDUSTRIES, INC. (Continued) **1001023035**

Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.
Amount (Lbs): 37720

Waste code: D002
Waste name: A WASTE WHICH HAS A PH OF LESS THAN 2 OR GREATER THAN 12.5 IS CONSIDERED TO BE A CORROSIVE HAZARDOUS WASTE. SODIUM HYDROXIDE, A CAUSTIC SOLUTION WITH A HIGH PH, IS OFTEN USED BY INDUSTRIES TO CLEAN OR DEGREASE PARTS. HYDROCHLORIC ACID, A SOLUTION WITH A LOW PH, IS USED BY MANY INDUSTRIES TO CLEAN METAL PARTS PRIOR TO PAINTING. WHEN THESE CAUSTIC OR ACID SOLUTIONS BECOME CONTAMINATED AND MUST BE DISPOSED, THE WASTE WOULD BE A CORROSIVE HAZARDOUS WASTE.
Amount (Lbs): 206844

Waste code: D003
Waste name: A MATERIAL IS CONSIDERED TO BE A REACTIVE HAZARDOUS WASTE IF IT IS NORMALLY UNSTABLE, REACTS VIOLENTLY WITH WATER, GENERATES TOXIC GASES WHEN EXPOSED TO WATER OR CORROSIVE MATERIALS, OR IF IT IS CAPABLE OF DETONATION OR EXPLOSION WHEN EXPOSED TO HEAT OR A FLAME. ONE EXAMPLE OF SUCH WASTE WOULD BY WASTE GUNPOWDER.
Amount (Lbs): 3815

Waste code: D005
Waste name: BARIUM
Amount (Lbs): 2933

Waste code: D006
Waste name: CADMIUM
Amount (Lbs): 7494

Waste code: D007
Waste name: CHROMIUM
Amount (Lbs): 100029

Waste code: D008
Waste name: LEAD
Amount (Lbs): 9604

Waste code: D011
Waste name: SILVER
Amount (Lbs): 10594

Waste code: D018
Waste name: BENZENE
Amount (Lbs): 26644

Waste code: D035
Waste name: METHYL ETHYL KETONE
Amount (Lbs): 26644

Waste code: F003
Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL

COMMUNICATIONS & POWER INDUSTRIES, INC. (Continued) **1001023035**

ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NON-HALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS, AND, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
Amount (Lbs): 35434

Waste code: F005
Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
Amount (Lbs): 26644

Waste code: F006
Waste name: WASTEWATER TREATMENT SLUDGES FROM ELECTROPLATING OPERATIONS EXCEPT FROM THE FOLLOWING PROCESSES: (1) SULFURIC ACID ANODIZING OF ALUMINUM; (2) TIN PLATING ON CARBON STEEL; (3) ZINC PLATING (SEGREGATED BASIS) ON CARBON STEEL; (4) ALUMINUM OR ZINC-ALUMINUM PLATING ON CARBON STEEL; (5) CLEANING/STRIPPING ASSOCIATED WITH TIN, ZINC AND ALUMINUM PLATING ON CARBON STEEL; AND (6) CHEMICAL ETCHING AND MILLING OF ALUMINUM.
Amount (Lbs): 39352

Waste code: F007
Waste name: SPENT CYANIDE PLATING BATH SOLUTIONS FROM ELECTROPLATING OPERATIONS
Amount (Lbs): 83507

Waste code: F008
Waste name: PLATING BATH RESIDUES FROM THE BOTTOM OF PLATING BATHS FROM ELECTROPLATING OPERATIONS WHERE CYANIDES ARE USED IN THE PROCESS.
Amount (Lbs): 84313

Waste code: LABP
Waste name: LAB PACK
Amount (Lbs): 2286

Waste code: P098
Waste name: POTASSIUM CYANIDE
Amount (Lbs): 15

Facility Has Received Notices of Violations:
Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 05/22/2007
Date achieved compliance: 06/19/2007
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 05/22/2007

COMMUNICATIONS & POWER INDUSTRIES, INC. (Continued) **1001023035**

Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 04/06/2004
Date achieved compliance: 05/04/2004
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 04/06/2004
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Evaluation Action Summary:
Evaluation date: 05/22/2007
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 06/19/2007
Evaluation lead agency: State

Evaluation date: 04/06/2004
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 05/04/2004
Evaluation lead agency: State Contractor/Grantee

FINDS:

Registry ID: 110000621382

Environmental Interest/Information System

The NEI (National Emissions Inventory) database contains information on stationary and mobile sources that emit criteria air pollutants and their precursors, as well as hazardous air pollutants (HAPs).

California Hazardous Waste Tracking System - Datamart (HWTS-DATAMART) provides California with information on hazardous waste shipments for generators, transporters, and treatment, storage, and disposal facilities.

US EPA TRIS (Toxics Release Inventory System) contains information from facilities on the amounts of over 300 listed toxic chemicals that these facilities release directly to air, water, land, or that are transported off-site.

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA

COMMUNICATIONS & POWER INDUSTRIES, INC. (Continued) **1001023035**

program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

NPDES:

Npdes Number:	Not reported
Facility Status:	Active
Agency Id:	9115
Region:	2
Regulatory Measure Id:	184069
Order No:	97-03-DWQ
Regulatory Measure Type:	Storm water industrial
Place Id:	215311
WDID:	2 43I012031
Program Type:	INDSTW
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	1995-12-08 00:00:00
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Discharge Name:	Communications & Power Inc
Discharge Address:	Po Box 50750
Discharge City:	Palo Alto
Discharge State:	CA
Discharge Zip:	94303

HWP:

EPA Id:	CAR000003863
Latitude:	37.420527
Longitude:	-122.138502
Facility Type:	HAZ WASTE - NON-OPERATING
Cleanup Status:	Not reported
Region:	BERKELEY; STANDARDIZED PERMIT & CORRECTIVE ACTION
Permit Maintenance Lead:	Not reported
Permit Renewal Lead:	Not reported
Corrective Action Lead:	Not reported
Supervisor:	Not reported
Site Code:	Not reported
Assembly District:	Not reported
Senate District:	Not reported
Public Information Officer:	Not reported
Facility Status:	Not reported
Site History:	Not reported

HWP:

EPA Id:	CAR000003863
Unit Names:	TANKSTR1, TANKTRT1
Event Description:	Notice of Deficiency
Actual Date:	1996-05-28 00:00:00
Doc Comments:	Not reported

HWP:

EPA Id:	CAR000003863
Unit Names:	TANKSTR1, TANKTRT1
Event Description:	Closure Verification
Actual Date:	1998-10-28 00:00:00
Doc Comments:	Not reported

COMMUNICATIONS & POWER INDUSTRIES, INC. (Continued) **1001023035**

EPA Id: CAR000003863
Unit Names: TANKSTR1, TANKTRT1
Event Description: Receive Closure Certification
Actual Date: 1998-07-01 00:00:00
Doc Comments: Not reported

EPA Id: CAR000003863
Unit Names: TANKSTR1, TANKTRT1
Event Description: Plan Approved - Closure
Actual Date: 1995-01-11 00:00:00
Doc Comments: Not reported

FINANCIAL ASSURANCE:
EPA ID Number: CAR000003863
Closure Mechanism: Ins
Closure Amount: 211,716
Post Clousure Mechanism: Not reported
Post Clousure Amount: Not reported
Corrective Action Mechanism: Not reported
Corrective Action Amount: Not reported
Sudden Mecahanism Type: Ins
Sudden Mecahanism Amount: 2,000,000
Non Sudden Mecahanism Type: Not reported
Non Sudden Mecahanism Amount: Not reported

H38 **COMMUNICATIONS & POWER INDUSTRIES, INC.** **RCRA-LQG** **1007198605**
SSE **607 HANSEN WAY** **CAD000003863**
< 1/8 **PALO ALTO, CA 94304**
0.094 mi.
497 ft. **Site 5 of 7 in cluster H**

Relative:
Higher

Actual:
40 ft.

RCRA-LQG:
Date form received by agency: 02/26/2002
Facility name: COMMUNICATIONS & POWER INDUSTRIES, INC.
Facility address: 607 HANSEN WAY
PALO ALTO, CA 94304
EPA ID: CAD000003863
Contact: JOHN M DALE
Contact address: Not reported
Not reported
Contact country: Not reported
Contact telephone: (650) 846-3141
Contact email: Not reported
EPA Region: 09
Classification: Large Quantity Generator
Description: Handler: generates 1,000 kg or more of hazardous waste during any calendar month; or generates more than 1 kg of acutely hazardous waste during any calendar month; or generates more than 100 kg of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month; or generates 1 kg or less of acutely hazardous waste during any calendar month, and accumulates more than 1 kg of acutely hazardous waste at any time; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates more than

COMMUNICATIONS & POWER INDUSTRIES, INC. (Continued) **1007198605**

100 kg of that material at any time

Owner/Operator Summary:

Owner/operator name:	LEONARD GREEN & PARTNERS
Owner/operator address:	Not reported
	Not reported
Owner/operator country:	US
Owner/operator telephone:	Not reported
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	08/11/1995
Owner/Op end date:	Not reported

Owner/operator name:	COMMUNICATIONS & POWER
Owner/operator address:	Not reported
	Not reported
Owner/operator country:	US
Owner/operator telephone:	Not reported
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	08/11/1995
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	Unknown
Transporter of hazardous waste:	Unknown
Treater, storer or disposer of HW:	No
Underground injection activity:	Unknown
On-site burner exemption:	Unknown
Furnace exemption:	Unknown
Used oil fuel burner:	Unknown
Used oil processor:	Unknown
User oil refiner:	Unknown
Used oil fuel marketer to burner:	Unknown
Used oil Specification marketer:	Unknown
Used oil transfer facility:	Unknown
Used oil transporter:	Unknown
Off-site waste receiver:	Commercial status unknown

Universal Waste Summary:

Waste type:	Batteries
Accumulated waste on-site:	Unknown
Generated waste on-site:	Unknown

Waste type:	Lamps
Accumulated waste on-site:	Unknown
Generated waste on-site:	Unknown

Waste type:	Pesticides
Accumulated waste on-site:	Unknown
Generated waste on-site:	Unknown

Waste type:	Thermostats
Accumulated waste on-site:	Unknown

COMMUNICATIONS & POWER INDUSTRIES, INC. (Continued) **1007198605**

Generated waste on-site: Unknown

Hazardous Waste Summary:

Waste code: D001
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Waste code: D002
Waste name: A WASTE WHICH HAS A PH OF LESS THAN 2 OR GREATER THAN 12.5 IS CONSIDERED TO BE A CORROSIVE HAZARDOUS WASTE. SODIUM HYDROXIDE, A CAUSTIC SOLUTION WITH A HIGH PH, IS OFTEN USED BY INDUSTRIES TO CLEAN OR DEGREASE PARTS. HYDROCHLORIC ACID, A SOLUTION WITH A LOW PH, IS USED BY MANY INDUSTRIES TO CLEAN METAL PARTS PRIOR TO PAINTING. WHEN THESE CAUSTIC OR ACID SOLUTIONS BECOME CONTAMINATED AND MUST BE DISPOSED, THE WASTE WOULD BE A CORROSIVE HAZARDOUS WASTE.

Waste code: D007
Waste name: CHROMIUM

Waste code: D008
Waste name: LEAD

Waste code: D018
Waste name: BENZENE

Waste code: D035
Waste name: METHYL ETHYL KETONE

Waste code: F003
Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NON-HALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS, AND, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste code: F005
Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste code: F006
Waste name: WASTEWATER TREATMENT SLUDGES FROM ELECTROPLATING OPERATIONS EXCEPT FROM THE FOLLOWING PROCESSES: (1) SULFURIC ACID ANODIZING OF ALUMINUM;

COMMUNICATIONS & POWER INDUSTRIES, INC. (Continued) **1007198605**

(2) TIN PLATING ON CARBON STEEL; (3) ZINC PLATING (SEGREGATED BASIS) ON CARBON STEEL; (4) ALUMINUM OR ZINC-ALUMINUM PLATING ON CARBON STEEL; (5) CLEANING/STRIPPING ASSOCIATED WITH TIN, ZINC AND ALUMINUM PLATING ON CARBON STEEL; AND (6) CHEMICAL ETCHING AND MILLING OF ALUMINUM.

Waste code: F007
Waste name: SPENT CYANIDE PLATING BATH SOLUTIONS FROM ELECTROPLATING OPERATIONS

Waste code: F008
Waste name: PLATING BATH RESIDUES FROM THE BOTTOM OF PLATING BATHS FROM ELECTROPLATING OPERATIONS WHERE CYANIDES ARE USED IN THE PROCESS.

Waste code: LABP
Waste name: LAB PACK

Violation Status: No violations found

H39 **VARIAN** **HIST Cal-Sites** **S100833273**
SSE **611 HANSEN WAY** **CA BOND EXP. PLAN** **N/A**
< 1/8 **PALO ALTO, CA 94303** **NPDES**
0.095 mi. **Cortese**
501 ft. **Site 6 of 7 in cluster H** **HIST CORTESE**
RESPONSE
Relative: **ENVIROSTOR**
Higher

Actual: HISTORICAL CAL-SITES:
40 ft.

Facility ID: 43360086
Region: 2
Region Name: BERKELEY
Branch: NC
Branch Name: NORTH COAST
File Name: Not reported
State Senate District: 08211997
Status: COM - CERTIFIED OPERATION AND MAINTENANCE, ALL PLANNED ACTIVITIES IMPLEMENTED REMEDIATION CONTINUES
Status Name: CERTIFIED / OPERATION & MAINTENANCE
Lead Agency: DTSC
Lead Agency: DEPT OF TOXIC SUBSTANCES CONTROL
Facility Type: RP
Type Name: RESPONSIBLE PARTY
NPL: Not Listed
SIC Code: 36
SIC Name: MANU - ELECTRONIC & OTHER ELECTRIC EQUIP
Access: Controlled
Cortese: Not reported
Hazardous Ranking Score: Not reported
Date Site Hazard Ranked: Not reported
Groundwater Contamination: Confirmed
Staff Member Responsible for Site: JRANDENI
Supervisor Responsible for Site: Not reported
Region Water Control Board: SF
Region Water Control Board Name: SAN FRANCISCO BAY
Lat/Long Direction: Not reported
Lat/Long (dms): 0 0 0 / 0 0 0
Lat/long Method: Not reported
Lat/Long Description: Not reported
State Assembly District Code: 21
State Senate District Code: 11

VARIAN (Continued) **S100833273**

Facility ID:	43360086
Activity:	RA
Activity Name:	REMOVAL ACTION
AWP Code:	GWVOC
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	09051991
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	COM
Definition of Status:	CERTIFIED / OPERATION & MAINTENANCE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	N
Activity Comments:	A TEMPORARY GROUNDWATER TREATMENT SYSTEM RAN FOR ABOUT A MONTH.
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	43360086
Activity:	FRIFS
Activity Name:	FOCUSED REMEDIAL INVESTIGATION/FEASIBILITY STUDY
AWP Code:	PILOT
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	08311991
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	COM
Definition of Status:	CERTIFIED / OPERATION & MAINTENANCE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	43360086
Activity:	CEQA
Activity Name:	CEQA INCLUDING NEGATIVE DECS
AWP Code:	Not reported
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	12101991
Est Person-Yrs to complete:	0

VARIAN (Continued) **S100833273**

Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	COM
Definition of Status:	CERTIFIED / OPERATION & MAINTENANCE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	43360086
Activity:	RA
Activity Name:	REMOVAL ACTION
AWP Code:	SOIL
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	03301992
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	COM
Definition of Status:	CERTIFIED / OPERATION & MAINTENANCE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	N
Activity Comments:	A SOIL VAPOR EXTRACTION SYSTEM WAS INSTALLED. CUBIC FEET PER MINUTEUNKNOWN.
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	43360086
Activity:	RA
Activity Name:	REMOVAL ACTION
AWP Code:	GW
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	06121992
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	COM
Definition of Status:	CERTIFIED / OPERATION & MAINTENANCE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported

VARIAN (Continued) **S100833273**

Action Included Fencing:	Not reported
Removal Action Certification:	N
Activity Comments:	A GROUND WATER EXTRACTION SYSTEM WAS INSTALLED. GALLONS PER MINUTEUNKNOWN.
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	43360086
Activity:	COST
Activity Name:	COST RECOVERY
AWP Code:	SETT
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	05271993
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	COM
Definition of Status:	CERTIFIED / OPERATION & MAINTENANCE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	43360086
Activity:	RIFS
Activity Name:	REMEDIAL INVESTIGATION / FEASIBILITY STUDY
AWP Code:	GW
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	03291994
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	COM
Definition of Status:	CERTIFIED / OPERATION & MAINTENANCE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	43360086

VARIAN (Continued) **S100833273**

Activity:	RIFS
Activity Name:	REMEDIAL INVESTIGATION / FEASIBILITY STUDY
AWP Code:	GW
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	03311994
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	COM
Definition of Status:	CERTIFIED / OPERATION & MAINTENANCE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	43360086
Activity:	RIFS
Activity Name:	REMEDIAL INVESTIGATION / FEASIBILITY STUDY
AWP Code:	SOIL
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	06201994
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	COM
Definition of Status:	CERTIFIED / OPERATION & MAINTENANCE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	43360086
Activity:	CEQA
Activity Name:	CEQA INCLUDING NEGATIVE DECS
AWP Code:	Not reported
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	01051995
Est Person-Yrs to complete:	0
Estimated Size:	Not reported

VARIAN (Continued) **S100833273**

Request to Delete Activity:	Not reported
Activity Status:	COM
Definition of Status:	CERTIFIED / OPERATION & MAINTENANCE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	43360086
Activity:	RAP
Activity Name:	REMEDIAL ACTION PLAN / RECORD OF DECISION
AWP Code:	GW
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	01051995
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	COM
Definition of Status:	CERTIFIED / OPERATION & MAINTENANCE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	43360086
Activity:	RA
Activity Name:	REMOVAL ACTION
AWP Code:	SVE
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	04061995
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	COM
Definition of Status:	CERTIFIED / OPERATION & MAINTENANCE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	N

VARIAN (Continued) **S100833273**

Activity Comments:	A SOIL VAPOR EXTRACTION SYSTEM EXTRACTED A CUMULATIVE MASS OF APPROXI-MATELY 15,352 LBS OF TPH-G.
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	43360086
Activity:	DES
Activity Name:	DESIGN
AWP Code:	GW
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	07021995
Est Person-Yrs to complete:	0.32000
Estimated Size:	L
Request to Delete Activity:	Not reported
Activity Status:	COM
Definition of Status:	CERTIFIED / OPERATION & MAINTENANCE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	43360086
Activity:	RMDL
Activity Name:	REMEDIAL ACTION (RAP REQUIRED)
AWP Code:	GW
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	06111996
Est Person-Yrs to complete:	0.28000
Estimated Size:	L
Request to Delete Activity:	Not reported
Activity Status:	COM
Definition of Status:	CERTIFIED / OPERATION & MAINTENANCE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	N
Activity Comments:	APPROVED FINAL REMEDIAL ACTION FOR THE SITE. THE FRA INCLUDES GROUND-WATER EXTRACTION AND TREATMENT.
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	43360086
Activity:	5YEAR

VARIAN (Continued) **S100833273**

Activity Name:	FIVE-YEAR REVIEW REQUIRED BY CERCLA
AWP Code:	Not reported
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	04122002
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	COM
Definition of Status:	CERTIFIED / OPERATION & MAINTENANCE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	43360086
Activity:	OM
Activity Name:	OPERATION & MAINTENANCE
AWP Code:	PLAN
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	09061996
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	COM
Definition of Status:	CERTIFIED / OPERATION & MAINTENANCE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	43360086
Activity:	CERT
Activity Name:	CERTIFICATION
AWP Code:	Not reported
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	08211997
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported

VARIAN (Continued) **S100833273**

Activity Status:	COM
Definition of Status:	CERTIFIED / OPERATION & MAINTENANCE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	N
Activity Comments:	33.7 MILLION GALS. OF GROUNDWATER TREATED USING AN AIR STRIPPINGTREATMENT UNIT. GROUNDWATER EXTRACTION IS CONTINUING THROUGH THEOPERATION AND MAINTENANCE OF THE GROUNDWATER EXTRACTION SYSTEM.
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	43360086
Activity:	ORDER
Activity Name:	I/SE, IORSE, FFA, FFSRA, VCA, EA
AWP Code:	OM
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	08211997
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	COM
Definition of Status:	CERTIFIED / OPERATION & MAINTENANCE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	43360086
Activity:	CHP65
Activity Name:	AMENDED ORDER/AGREEMENT, CHAPTER 6.5 TRANSITION
AWP Code:	ORDER
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	12111998
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	COM
Definition of Status:	CERTIFIED / OPERATION & MAINTENANCE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported

VARIAN (Continued) **S100833273**

Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	43360086
Activity:	5YEAR
Activity Name:	FIVE-YEAR REVIEW REQUIRED BY CERCLA
AWP Code:	Not reported
Proposed Budget:	0
AWP Completion Date:	09302006
Revised Due Date:	04302007
Comments Date:	Not reported
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	COM
Definition of Status:	CERTIFIED / OPERATION & MAINTENANCE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	43360086
Activity:	ORDER
Activity Name:	I/SE, IORSE, FFA, FFSRA, VCA, EA
AWP Code:	CNSNT
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	05301989
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	COM
Definition of Status:	CERTIFIED / OPERATION & MAINTENANCE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	43360086
Activity:	RA
Activity Name:	REMOVAL ACTION

VARIAN (Continued) **S100833273**

AWP Code:	SOIL
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	11071989
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	COM
Definition of Status:	CERTIFIED / OPERATION & MAINTENANCE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	N
Activity Comments:	THIRTY 100 GALLONS OF 25% ETHYLENE GLYCOL WAS RELEASED BETWEEN 6/26 &6/30/89. SOME RESIDUAL WORK WAS DONE 11/89.
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	43360086
Activity:	PPP
Activity Name:	PUBLIC PARTICIPATION PLAN
AWP Code:	Not reported
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	01311990
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	COM
Definition of Status:	CERTIFIED / OPERATION & MAINTENANCE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	43360086
Activity:	FRIFS
Activity Name:	FOCUSED REMEDIAL INVESTIGATION/FEASIBILITY STUDY
AWP Code:	Not reported
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	05311991
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported

VARIAN (Continued) **S100833273**

Activity Status:	COM
Definition of Status:	CERTIFIED / OPERATION & MAINTENANCE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	43360086
Activity:	RA
Activity Name:	REMOVAL ACTION
AWP Code:	SOIL2
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	09051991
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	COM
Definition of Status:	CERTIFIED / OPERATION & MAINTENANCE
Liquids Removed (Gals):	100
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	N
Activity Comments:	EXCAVATION OF 100 CY OF CONTAMINATED SOIL.
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	43360086
Activity:	CEQA
Activity Name:	CEQA INCLUDING NEGATIVE DECS
AWP Code:	NEGD
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	08151991
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	COM
Definition of Status:	CERTIFIED / OPERATION & MAINTENANCE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported

VARIAN (Continued) **S100833273**

For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Alternate Address:	611 HANSEN WAY
Alternate City,St,Zip:	PALO ALTO, CA 94303
Alternate Address:	611 HANSEN WAY
Alternate City,St,Zip:	PALO ALTO, CA 94304
Background Info:	Varian is a diversified electronics company occupying 70 acres in the Stanford Research Park since 1952. Due to historical practices, gasoline, trichloroethylene (TCE) and percloroethylene (PCE) contaminated the soil and underlying groundwater.
Comments Date:	04281989
Comments:	Completed PA.
Comments Date:	05301989
Comments:	Consent Order signed.
Comments Date:	05311991
Comments:	Completed FRIFS.
Comments Date:	06111996
Comments:	Completed FRA for the site which includes groundwater extraction
Comments Date:	06111996
Comments:	and treatment.
Comments Date:	06201994
Comments:	Completed RIFS for Soil Operable Unit.
Comments Date:	07021995
Comments:	Approved Design documents for groundwater treatment system.
Comments Date:	08151991
Comments:	Completed CEQA Negative Declaration.
Comments Date:	08211997
Comments:	Certified Site. Amended Order to include operation and
Comments Date:	08211997
Comments:	maintenance of the remedial system. Groundwater extraction and
Comments Date:	08211997
Comments:	treatment will continue in accordance with the approved
Comments Date:	08211997
Comments:	operation and maintenance plan.
Comments Date:	08311991
Comments:	Completed FRIFS. This was an unplanned F-RI/FS. A pilot study
Comments Date:	08311991
Comments:	was completed with oxidation treatment system which utilizes
Comments Date:	08311991
Comments:	high intensity ultraviolet light and hydrogen peroxide to
Comments Date:	08311991
Comments:	oxidize VOCs.
Comments Date:	09051991
Comments:	Completed RA. Excavated 100 cubic yards of VOC contaminated
Comments Date:	09051991
Comments:	soil. Groundwater extraction and treatment system started.
Comments Date:	09051991
Comments:	Effluent is reused for on-site irrigation.
Comments Date:	09061996
Comments:	Approved O&M Plan for groundwater system. Treatment system
Comments Date:	09061996
Comments:	incorporates instrumentation for automatic operation which
Comments Date:	09061996
Comments:	requires only periodic observation and maintenance.

VARIAN (Continued) **S100833273**

Comments Date:	11071989
Comments:	Completed RA. Removal of ten cubic yards of soil contaminated
Comments Date:	11071989
Comments:	with 25% ethylene glycol.
Comments Date:	01051995
Comments:	Approved RAP. Implementation expected to be completed by April
Comments Date:	01051995
Comments:	1996. SVE and treatment system with activated carbon adsorption
Comments Date:	01051995
Comments:	was selected for soil. For groundwater treatment, using an
Comments Date:	01051995
Comments:	air-stripper was selected and treated water will be used on-site
Comments Date:	01051995
Comments:	for irrigation to the extent possible. Remainder will be
Comments Date:	01051995
Comments:	discharged to storm drain. CEQA Negative Declaration completed.
Comments Date:	01311990
Comments:	Completed Public Participation Plan.
Comments Date:	03301992
Comments:	Completed RA. A soil vapor extraction system (SVE) was
Comments Date:	03301992
Comments:	implemented as an IRM to remediate gasoline contaminated soil
Comments Date:	03301992
Comments:	near building 3 area. IRM was completed in December 1993. A
Comments Date:	03301992
Comments:	Verification sampling program was undertaken; samples indicated
Comments Date:	03301992
Comments:	that Removal Action was successful. Samples all non-detect.
Comments Date:	03311994
Comments:	Completed RIFS for Groundwater Operable Unit.
Comments Date:	04061995
Comments:	Completed RA. Soil Vapor Extraction (SVE) system treated soils
Comments Date:	04061995
Comments:	impacted with benzene, toluene, ethylbenzene, xylenes (BTEX) and
Comments Date:	04061995
Comments:	total extractable petroleum hydrocarbons (TPH-G) which were
Comments Date:	04061995
Comments:	detected near Building 3 onsite. Chemical concentrations have
Comments Date:	04061995
Comments:	been reduced below remedial action objectives for the site.
Comments Date:	04061995
Comments:	Verification sampling indicated that the SVE was successful in
Comments Date:	04061995
Comments:	remediating affected soils. SVE system was shut down and is
Comments Date:	04061995
Comments:	being removed from the site. The system extracted a cumulative
Comments Date:	04061995
Comments:	mass of about 15,352 pounds of TPH-G from February 1992 through
Comments Date:	04061995
Comments:	December 1993.
Comments Date:	04122002
Comments:	Completed Five-Year Review. Based on this review, Varian plans
Comments Date:	04122002
Comments:	to conduct an in-situ pilot test in 2003 to evaluate techniques
Comments Date:	04122002
Comments:	to reduce the high concentrations of PCE which remain in the
Comments Date:	04122002

VARIAN (Continued) **S100833273**

Comments: groundwater.
ID Name: CALSTARS CODE
ID Value: 200122
ID Name: BEP DATABASE PCODE
ID Value: P23026
ID Name: EPA IDENTIFICATION NUMBER
ID Value: CAD009120817
Alternate Name: VARIAN ASSOCIATESVARIANVARIAN - HANSEN WAY
Special Programs Code: CERC2
Special Programs Name: CERCLA II

CA BOND EXP. PLAN:
Reponsible Party: RESPONSIBLE PARTY-LEAD SITE CLEANUP WORKPLAN
Project Revenue Source Company: Not reported
Project Revenue Source Addr: Not reported
Project Revenue Source City,St,Zip: Not reported
Project Revenue Source Desc: The RPs will be issued a remedial action order and are expected to comply with it. DHS has budgeted $50,000 to provide for oversight and monitoring of investigation and cleanup efforts. DHS will recover 100 percent of direct costs plus staff costs and overhead related to the project. The responsible parties will pay all costs associated with remedial investigations and cleanup activities.
Site Description: Varian, an electronics manufacturing firm, has occupied the site since 1952. Investigations were initiated by Varian as part of a regional investigation in the Stanford Research Park.
Hazardous Waste Desc: Investigations are ongoing in three areas of the facility. At the north end of the site, chlorinated solvents, including up to 1,500 parts per billion (ppb) of trichloroethene (TCE) have been detected in shallow ground water. Gasoline contamination has been found in soil and shallow ground water near Building 4. Investigations at an adjacent site, Aydin, revealed TCE at up to 1,400 ppb and DCE an 190 ppb in shallow ground water at the south end of the Varian facility.
Threat To Public Health & Env: Contamination of shallow ground water poses a potential threat to deeper aquifers currently used as backup municipal water supplies. There are three municipal wells within a two mile radius of the site.
Site Activity Status: DHS will prepare a consent order or a remedial action order requiring further investigation and site cleanup. Varian is continuing its investigation work and is expected to comply with the order.

NPDES:
Npdes Number: Not reported
Facility Status: Historical
Agency Id: 60
Region: 2
Regulatory Measure Id: 183052
Order No: R2-2004-0055
Regulatory Measure Type: Enrollee
Place Id: 203443
WDID: 2 438252001
Program Type: NPDES
Adoption Date Of Regulatory Measure: Not reported
Effective Date Of Regulatory Measure: 2004-07-21 00:00:00
Expiration Date Of Regulatory Measure: 2009-07-21 00:00:00
Termination Date Of Regulatory Measure: 2009-05-01 00:00:00
Discharge Name: .VARIAN, INC>
Discharge Address: 3120 Hansen Way (Ms-D218)
Discharge City: Palo Alto

VARIAN (Continued) **S100833273**

Discharge State: CA
Discharge Zip: 94304

Cortese:
Region: CORTESE
Envirostor Id: 43360086
Site/Facility Type: STATE RESPONSE
Cleanup Status: CERTIFIED / OPERATION & MAINTENANCE
Status Date: 8/21/1997
Site Code: 200122
Latitude: 37.419990363375902
Longitude: -122.13715643799

CORTESE:
Region: CORTESE
Facility County Code: 43
Reg By: CALSI
Reg Id: 43360086

RESPONSE:
Facility ID: 43360086
Site Type: State Response
Site Type Detail: State Response or NPL
Acres: 70
National Priorities List: NO
Cleanup Oversight Agencies: SMBRP
Lead Agency: SMBRP
Lead Agency Description: DTSC - Site Mitigation And Brownfield Reuse Program
Project Manager: JOVANNE VILLAMATER
Supervisor: Mark Piros
Division Branch: Berkeley
Site Code: 200122
Site Mgmt. Req.: NONE SPECIFIED
Assembly: 21
Senate: 11
Special Program Status: Not reported
Status: Certified / Operation & Maintenance
Status Date: 8/21/1997
Restricted Use: NO
Funding: Responsible Party
Latitude: 37.419990363375902
Longitude: -122.13715643799
APN: 142-20-42, 142-20-44, 142-20-45, 142-20-46, 142-20-67, 142-20-68
Past Use: MANUFACTURING - ELECTRONIC
Potential COC: 30022, 30025, 30027, 30136, 30194, 30195, 30196
Confirmed COC: Not reported
Potential Description: OTH, SOIL
Alias Name: VARIAN - HANSEN WAY
Alias Type: Alternate Name
Alias Name: VARIAN ASSOCIATES
Alias Type: Alternate Name
Alias Name: 142-20-42
Alias Type: APN
Alias Name: 142-20-44
Alias Type: APN
Alias Name: 142-20-45

VARIAN (Continued) **S100833273**

Alias Type:	APN
Alias Name:	142-20-46
Alias Type:	APN
Alias Name:	142-20-67
Alias Type:	APN
Alias Name:	142-20-68
Alias Type:	APN
Alias Name:	CAD009120817
Alias Type:	EPA Identification Number
Alias Name:	110033613150
Alias Type:	EPA (FRS #)
Alias Name:	P23026
Alias Type:	PCode
Alias Name:	200122
Alias Type:	Project Code (Site Code)
Alias Name:	43360086
Alias Type:	Envirostor ID Number

Completed Info:

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Amendment - Order/Agreement
Completed Date:	2006-06-29 00:00:00
Comments:	Agreement was amendment to include submittals in electronic format.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Consent Order
Completed Date:	1997-08-21 00:00:00
Comments:	Amendment to consent order to add O & M of groundwater extraction and treatment system.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Certification
Completed Date:	1997-08-21 00:00:00
Comments:	Certified Site. Amended Order to include operation and maintenance of the remedial system. Groundwater extraction and treatment will continue in accordance with the approved operation and maintenance plan.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	CEQA - Initial Study/ Neg. Declaration
Completed Date:	1995-01-05 00:00:00
Comments:	Negative declaration approved for RAP.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	CEQA - Initial Study/ Neg. Declaration
Completed Date:	1991-12-10 00:00:00
Comments:	Completed negative declaration for Interim Removal Action of groundwater extraction and treatment in building 1 area.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	CEQA - Initial Study/ Neg. Declaration
Completed Date:	1991-08-15 00:00:00

VARIAN (Continued) **S100833273**

Comments:	Completed CEQA Negative Declaration for soil vapor extraction in building 3 area.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Consent Order
Completed Date:	1989-05-30 00:00:00
Comments:	Consent Order signed with Varian Associates to investigate and remediate soil and groundwater at the site.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Amendment - Order/Agreement
Completed Date:	1998-12-11 00:00:00
Comments:	Amendment to consent order per chapter 6.5 transition.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	CEQA - Notice of Exemption
Completed Date:	2007-04-04 00:00:00
Comments:	Notice of exemption approved for modification to the final remedy from groundwater extraction and treatment to injection of sodium permanganate.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	5 Year Review Reports
Completed Date:	2006-09-25 00:00:00
Comments:	Five-Year Review determined that treatment system continues to achieve plume containment but many areas remain above celanup goals. Based on the in-situ chemical oxidation pilot study results, site wide in-situ chemical oxidation is recommended.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Operations and Maintenance Report
Completed Date:	1996-09-06 00:00:00
Comments:	Approved O&M Plan for groundwater system. Treatment system incorporates instrumentation for automatic operation which requires only periodic observation and maintenance.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	5 Year Review Reports
Completed Date:	2002-04-12 00:00:00
Comments:	Completed Five-Year Review. Based on this review, Varian plans to conduct an in-situ pilot test in 2003 to evaluate techniques to reduce the high concentrations of PCE which remain in the groundwater. Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Remedial Action Completion Report
Completed Date:	1996-06-11 00:00:00
Comments:	Completed FRA for the site which includes groundwater extraction and treatment.

VARIAN (Continued) **S100833273**

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Design/Implementation Workplan
Completed Date:	1995-07-02 00:00:00
Comments:	Approved Design documents for groundwater treatment system.

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Removal Action Completion Report
Completed Date:	1995-04-06 00:00:00
Comments:	Completed RA. Soil Vapor Extraction (SVE) system treated soils impacted with benzene, toluene, ethylbenzene, xylenes (BTEX) and total extractable petroleum hydrocarbons (TPH-G) which were detected near Building 3 onsite. Chemical concentrations have been reduced below remedial action objectives for the site. Verification sampling indicated that the SVE was successful in remediating affected soils. SVE system was shut down and is being removed from the site. The system extracted a cumulative mass of about 15,352 pounds of TPH-G from February 1992 through December 1993.

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Remedial Investigation Report
Completed Date:	1992-05-22 00:00:00
Comments:	Several chlorinated VOCs, gasoline, and gasoline-related compounds have been detected in soil and groundwater at the site.

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Remedial Investigation Report
Completed Date:	1992-08-13 00:00:00
Comments:	Addendum to RI based on DTSC comments.

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Remedial Investigation Report
Completed Date:	1993-01-28 00:00:00
Comments:	Second Addendum to RI based on DTSC comments to First Amendment and results of additional fieldwork.

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Remedial Action Plan
Completed Date:	1995-01-05 00:00:00
Comments:	Approved RAP for groundwater. Implementation expected to be completed by April 1996. SVE and treatment system with activated carbon adsorption was selected for soil. For groundwater treatment, using an air-stripper was selected and treated water will be used on-site for irrigation to the extent possible. Remainder will be discharged to storm drain. CEQA Negative Declaration completed.

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Remedial Investigation / Feasibility Study
Completed Date:	1994-06-20 00:00:00
Comments:	Completed RIFS for Soil Operable Unit which found that there are no soil sources that would affect the groundwater quality except at

VARIAN (Continued) **S100833273**

building 4.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Investigation / Feasibility Study
Completed Date: 1994-03-31 00:00:00
Comments: Completed RIFS for Groundwater Operable Unit which found shallow groundwater is contaminated with VOCs.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Completion Report
Completed Date: 1992-06-12 00:00:00
Comments: Groundwater extraction and treatment system with granular activated carbon was installed in building 1 area.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Investigation / Feasibility Study
Completed Date: 1991-08-31 00:00:00
Comments: Completed FRIFS. This was an unplanned FRI/FS. A pilot study was completed with oxidation treatment system which utilizes high intensity ultraviolet light and hydrogen peroxide to oxidize VOCs.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Completion Report
Completed Date: 1991-09-05 00:00:00
Comments: A temporary Groundwater Extraction and Treatment System using activated carbon in Building 1 area.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Completion Report
Completed Date: 1991-09-05 00:00:00
Comments: Completed RA. Excavated 100 cubic yards of VOC contaminated soil.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Investigation / Feasibility Study
Completed Date: 1991-05-31 00:00:00
Comments: Completed FRIFS which found soil and groundwater is contaminated with VOCs and petrolium hydrocarbons.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Public Participation Plan / Community Relations Plan
Completed Date: 1990-01-31 00:00:00
Comments: Completed Public Participation Plan.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Completion Report
Completed Date: 1989-11-07 00:00:00
Comments: Completed RA. Removal of 10 cubic yards of soil contaminated with 25% ethylene glycol.

VARIAN (Continued) **S100833273**

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Assessment Report
Completed Date: 1989-04-28 00:00:00
Comments: Completed PA which found the soil and groundwater is contaminated with TCE and other VOCs.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Operations and Maintenance Report
Completed Date: 2006-10-05 00:00:00
Comments: Groundwater concentrations are consistent with historical results.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Action Completion Report
Completed Date: 1992-03-30 00:00:00
Comments: Completed RA. A soil vapor extraction system (SVE) was implemented as an IRM to remediate gasoline contaminated soil near building 3 area.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: 5 Year Review Workplan
Completed Date: 2006-03-10 00:00:00
Comments: Approved without comments.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fact Sheets
Completed Date: 1993-06-01 00:00:00
Comments: Fact sheet provides a project update and announces a community meeting on June 23.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fact Sheets
Completed Date: 1992-10-01 00:00:00
Comments: Fact sheet describes the progress made on site investigations.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fact Sheets
Completed Date: 1991-11-01 00:00:00
Comments: Fact Sheet describes progress made on site investigations.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fact Sheets
Completed Date: 1991-05-01 00:00:00
Comments: Fact sheet updating community on soil and groundwater investigations.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fact Sheets
Completed Date: 1989-06-01 00:00:00
Comments: Fact Sheet describing progress made on remedial investigations.

VARIAN (Continued) **S100833273**

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fact Sheets
Completed Date: 1994-11-01 00:00:00
Comments: Fact Sheet announcing the start of the public comment period for the draft Remedial Action Plan and the public meeting on December 1.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fact Sheets
Completed Date: 1996-02-01 00:00:00
Comments: Fact Sheet announces a change in the final remedial action plan and the need to use soil vapor extraction is no longer viable because of the water table. A new extraction well will be installed.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fact Sheets
Completed Date: 1990-09-01 00:00:00
Comments: Fact Sheet describes the progress made in site investigations.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fact Sheets
Completed Date: 1990-09-01 00:00:00
Comments: Fact Sheet describes site investigations activities that have occurred and outlines future evaluation and interim remedial acations.
Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Human Health Risk Assessment Report
Completed Date: 1992-05-21 00:00:00
Comments: .

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Action Plan w/ESD
Completed Date: 2007-04-04 00:00:00
Comments: ESD approved to stop groundwater extraction and treatment and to inject sodium permanganate into shallow groundwater.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fact Sheets
Completed Date: 2006-11-27 00:00:00
Comments: Public comment period starts on 11/27/06.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Public Notice
Completed Date: 2006-11-27 00:00:00
Comments: Public comment starts on 11/27/06.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Action Implementation Workplan

VARIAN (Continued) **S100833273**

Completed Date:	2007-06-01 00:00:00
Comments:	Sodium permanganate will be injected at 15 locations followed by performance monitoring events conducted 1, 3, 6 and 12- months after injections.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Fieldwork
Completed Date:	2007-09-29 00:00:00
Comments:	Permanganate injections completed.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Remedial Action Completion Report
Completed Date:	2007-12-12 00:00:00
Comments:	Sodium permanganate was injected into 15 wells. 1,050 gallons of 10 percent solution was injected into each well.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Fact Sheets
Completed Date:	1988-08-01 00:00:00
Comments:	Fact Sheet
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Fact Sheets
Completed Date:	1990-01-06 00:00:00
Comments:	Fact Sheet
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Remedial Investigation Report
Completed Date:	1993-03-19 00:00:00
Comments:	Third Addendum to RI based on DTSC comments to Second Amendment and results of additional fieldwork.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Pilot/Treatability Study Report
Completed Date:	2003-10-27 00:00:00
Comments:	The pilot study results showed VOCs in groundwater can be reduced by injecting sodium permanganate.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Pilot/Treatability Study Report
Completed Date:	2005-03-14 00:00:00
Comments:	In-situ chemical oxidation pilot study has successfully reduced the concentrations of VOCs in the immediate area of the permanganate injection.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Long Term Monitoring Report
Completed Date:	2007-10-09 00:00:00
Comments:	Groundwater concentrations are consistent with historical results.

VARIAN (Continued) **S100833273**

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Long Term Monitoring Report
Completed Date: 2008-11-07 00:00:00
Comments: Sodium permanganate injections have resulted in VOC concentration reductions in localized areas surrounding most injection wells. Sampling also demonstrate that injections did not mobilize hexavalent chromium at concentrations of concern.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 2007-05-17 00:00:00
Comments: DTSC approved the pilot study to collect groundwater samples using both the micropurge and passive diffusion bag (PBD) sampling techniques in certain wells.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Newsletter
Completed Date: 2007-07-12 00:00:00
Comments: Work notice for ESD implementation.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 2007-10-09 00:00:00
Comments: DTSC approved the recommendation for implementation of site-wide PBD sampling for the future sampling events.

Future Area Name: PROJECT WIDE
Future Sub Area Name: Not reported
Future Document Type: Public Notice
Future Due Date: 2011
Future Area Name: PROJECT WIDE
Future Sub Area Name: Not reported
Future Document Type: 5 Year Review Reports
Future Due Date: 2011
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

ENVIROSTOR:
Site Type: State Response
Site Type Detailed: State Response or NPL
Acres: 70
NPL: NO
Regulatory Agencies: SMBRP
Lead Agency: SMBRP
Program Manager: JOVANNE VILLAMATER
Supervisor: Mark Piros
Division Branch: Berkeley
Facility ID: 43360086
Site Code: 200122
Assembly: 21

VARIAN (Continued) **S100833273**

Senate: 11
Special Program: Not reported
Status: Certified / Operation & Maintenance
Status Date: 8/21/1997
Restricted Use: NO
Site Mgmt. Req.: NONE SPECIFIED
Funding: Responsible Party
Latitude: 37.419990363375902
Longitude: -122.13715643799
APN: 142-20-42, 142-20-44, 142-20-45, 142-20-46, 142-20-67, 142-20-68
Past Use: MANUFACTURING - ELECTRONIC
Potential COC: 30022, 30025, 30027, 30136, 30194, 30195, 30196
Confirmed COC: Not reported
Potential Description: OTH, SOIL
Alias Name: VARIAN - HANSEN WAY
Alias Type: Alternate Name
Alias Name: VARIAN ASSOCIATES
Alias Type: Alternate Name
Alias Name: 142-20-42
Alias Type: APN
Alias Name: 142-20-44
Alias Type: APN
Alias Name: 142-20-45
Alias Type: APN
Alias Name: 142-20-46
Alias Type: APN
Alias Name: 142-20-67
Alias Type: APN
Alias Name: 142-20-68
Alias Type: APN
Alias Name: CAD009120817
Alias Type: EPA Identification Number
Alias Name: 110033613150
Alias Type: EPA (FRS #)
Alias Name: P23026
Alias Type: PCode
Alias Name: 200122
Alias Type: Project Code (Site Code)
Alias Name: 43360086
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Amendment - Order/Agreement
Completed Date: 2006-06-29 00:00:00
Comments: Agreement was amendment to include submittals in electronic format.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Consent Order
Completed Date: 1997-08-21 00:00:00
Comments: Amendment to consent order to add O & M of groundwater extraction and treatment system.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Certification

VARIAN (Continued) **S100833273**

Completed Date: 1997-08-21 00:00:00
Comments: Certified Site. Amended Order to include operation and maintenance of the remedial system. Groundwater extraction and treatment will continue in accordance with the approved operation and maintenance plan.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: CEQA - Initial Study/ Neg. Declaration
Completed Date: 1995-01-05 00:00:00
Comments: Negative declaration approved for RAP.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: CEQA - Initial Study/ Neg. Declaration
Completed Date: 1991-12-10 00:00:00
Comments: Completed negative declaration for Interim Removal Action of groundwater extraction and treatment in building 1 area.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: CEQA - Initial Study/ Neg. Declaration
Completed Date: 1991-08-15 00:00:00
Comments: Completed CEQA Negative Declaration for soil vapor extraction in building 3 area.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Consent Order
Completed Date: 1989-05-30 00:00:00
Comments: Consent Order signed with Varian Associates to investigate and remediate soil and groundwater at the site.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Amendment - Order/Agreement
Completed Date: 1998-12-11 00:00:00
Comments: Amendment to consent order per chapter 6.5 transition.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: CEQA - Notice of Exemption
Completed Date: 2007-04-04 00:00:00
Comments: Notice of exemption approved for modification to the final remedy from groundwater extraction and treatment to injection of sodium permanganate.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: 5 Year Review Reports
Completed Date: 2006-09-25 00:00:00
Comments: Five-Year Review determined that treatment system continues to achieve plume containment but many areas remain above celanup goals. Based on the in-situ chemical oxidation pilot study results, site wide in-situ chemical oxidation is recommended.

Completed Area Name: PROJECT WIDE

VARIAN (Continued) **S100833273**

Completed Sub Area Name: Not reported
Completed Document Type: Operations and Maintenance Report
Completed Date: 1996-09-06 00:00:00
Comments: Approved O&M Plan for groundwater system. Treatment system incorporates instrumentation for automatic operation which requires only periodic observation and maintenance.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: 5 Year Review Reports
Completed Date: 2002-04-12 00:00:00
Comments: Completed Five-Year Review. Based on this review, Varian plans to conduct an in-situ pilot test in 2003 to evaluate techniques to reduce the high concentrations of PCE which remain in the groundwater.
Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Action Completion Report
Completed Date: 1996-06-11 00:00:00
Comments: Completed FRA for the site which includes groundwater extraction and treatment.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Design/Implementation Workplan
Completed Date: 1995-07-02 00:00:00
Comments: Approved Design documents for groundwater treatment system.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Completion Report
Completed Date: 1995-04-06 00:00:00
Comments: Completed RA. Soil Vapor Extraction (SVE) system treated soils impacted with benzene, toluene, ethylbenzene, xylenes (BTEX) and total extractable petroleum hydrocarbons (TPH-G) which were detected near Building 3 onsite. Chemical concentrations have been reduced below remedial action objectives for the site. Verification sampling indicated that the SVE was successful in remediating affected soils. SVE system was shut down and is being removed from the site. The system extracted a cumulative mass of about 15,352 pounds of TPH-G from February 1992 through December 1993.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Investigation Report
Completed Date: 1992-05-22 00:00:00
Comments: Several chlorinated VOCs, gasoline, and gasoline-related compounds have been detected in soil and groundwater at the site.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Investigation Report
Completed Date: 1992-08-13 00:00:00
Comments: Addendum to RI based on DTSC comments.

Completed Area Name: PROJECT WIDE

VARIAN (Continued) **S100833273**

Completed Sub Area Name: Not reported
Completed Document Type: Remedial Investigation Report
Completed Date: 1993-01-28 00:00:00
Comments: Second Addendum to RI based on DTSC comments to First Amendment and results of additional fieldwork.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Action Plan
Completed Date: 1995-01-05 00:00:00
Comments: Approved RAP for groundwater. Implementation expected to be completed by April 1996. SVE and treatment system with activated carbon adsorption was selected for soil. For groundwater treatment, using an air-stripper was selected and treated water will be used on-site for irrigation to the extent possible. Remainder will be discharged to storm drain. CEQA Negative Declaration completed.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Investigation / Feasibility Study
Completed Date: 1994-06-20 00:00:00
Comments: Completed RIFS for Soil Operable Unit which found that there are no soil sources that would affect the groundwater quality except at building 4.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Investigation / Feasibility Study
Completed Date: 1994-03-31 00:00:00
Comments: Completed RIFS for Groundwater Operable Unit which found shallow groundwater is contaminated with VOCs.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Completion Report
Completed Date: 1992-06-12 00:00:00
Comments: Groundwater extraction and treatment system with granular activated carbon was installed in building 1 area.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Investigation / Feasibility Study
Completed Date: 1991-08-31 00:00:00
Comments: Completed FRIFS. This was an unplanned FRI/FS. A pilot study was completed with oxidation treatment system which utilizes high intensity ultraviolet light and hydrogen peroxide to oxidize VOCs.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Completion Report
Completed Date: 1991-09-05 00:00:00
Comments: A temporary Groundwater Extraction and Treatment System using activated carbon in Building 1 area.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Completion Report

VARIAN (Continued) **S100833273**

Completed Date:	1991-09-05 00:00:00
Comments:	Completed RA. Excavated 100 cubic yards of VOC contaminated soil.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Remedial Investigation / Feasibility Study
Completed Date:	1991-05-31 00:00:00
Comments:	Completed FRIFS which found soil and groundwater is contaminated with VOCs and petrolium hydrocarbons.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Public Participation Plan / Community Relations Plan
Completed Date:	1990-01-31 00:00:00
Comments:	Completed Public Participation Plan.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Removal Action Completion Report
Completed Date:	1989-11-07 00:00:00
Comments:	Completed RA. Removal of 10 cubic yards of soil contaminated with 25% ethylene glycol.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Preliminary Assessment Report
Completed Date:	1989-04-28 00:00:00
Comments:	Completed PA which found the soil and groundwater is contaminated with TCE and other VOCs.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Operations and Maintenance Report
Completed Date:	2006-10-05 00:00:00
Comments:	Groundwater concentrations are consistent with historical results.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Remedial Action Completion Report
Completed Date:	1992-03-30 00:00:00
Comments:	Completed RA. A soil vapor extraction system (SVE) was implemented as an IRM to remediate gasoline contaminated soil near building 3 area.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	5 Year Review Workplan
Completed Date:	2006-03-10 00:00:00
Comments:	Approved without comments.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Fact Sheets
Completed Date:	1993-06-01 00:00:00
Comments:	Fact sheet provides a project update and announces a community meeting on June 23.
Completed Area Name:	PROJECT WIDE

VARIAN (Continued) **S100833273**

Completed Sub Area Name: Not reported
Completed Document Type: Fact Sheets
Completed Date: 1992-10-01 00:00:00
Comments: Fact sheet describes the progress made on site investigations.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fact Sheets
Completed Date: 1991-11-01 00:00:00
Comments: Fact Sheet describes progress made on site investigations.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fact Sheets
Completed Date: 1991-05-01 00:00:00
Comments: Fact sheet updating community on soil and groundwater investigations.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fact Sheets
Completed Date: 1989-06-01 00:00:00
Comments: Fact Sheet describing progress made on remedial investigations.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fact Sheets
Completed Date: 1994-11-01 00:00:00
Comments: Fact Sheet announcing the start of the public comment period for the draft Remedial Action Plan and the public meeting on December 1.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fact Sheets
Completed Date: 1996-02-01 00:00:00
Comments: Fact Sheet announces a change in the final remedial action plan and the need to use soil vapor extraction is no longer viable because of the water table. A new extraction well will be installed.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fact Sheets
Completed Date: 1990-09-01 00:00:00
Comments: Fact Sheet describes the progress made in site investigations.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fact Sheets
Completed Date: 1990-09-01 00:00:00
Comments: Fact Sheet describes site investigations activities that have occurred and outlines future evaluation and interim remedial acations.
Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Human Health Risk Assessment Report
Completed Date: 1992-05-21 00:00:00
Comments: .

VARIAN (Continued) **S100833273**

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Action Plan w/ESD
Completed Date: 2007-04-04 00:00:00
Comments: ESD approved to stop groundwater extraction and treatment and to inject sodium permanganate into shallow groundwater.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fact Sheets
Completed Date: 2006-11-27 00:00:00
Comments: Public comment period starts on 11/27/06.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Public Notice
Completed Date: 2006-11-27 00:00:00
Comments: Public comment starts on 11/27/06.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Action Implementation Workplan
Completed Date: 2007-06-01 00:00:00
Comments: Sodium permanganate will be injected at 15 locations followed by performance monitoring events conducted 1, 3, 6 and 12- months after injections.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fieldwork
Completed Date: 2007-09-29 00:00:00
Comments: Permanganate injections completed.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Action Completion Report
Completed Date: 2007-12-12 00:00:00
Comments: Sodium permanganate was injected into 15 wells. 1,050 gallons of 10 percent solution was injected into each well.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fact Sheets
Completed Date: 1988-08-01 00:00:00
Comments: Fact Sheet

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fact Sheets
Completed Date: 1990-01-06 00:00:00
Comments: Fact Sheet

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Investigation Report
Completed Date: 1993-03-19 00:00:00
Comments: Third Addendum to RI based on DTSC comments to Second Amendment and

VARIAN (Continued) **S100833273**

results of additional fieldwork.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Pilot/Treatability Study Report
Completed Date: 2003-10-27 00:00:00
Comments: The pilot study results showed VOCs in groundwater can be reduced by injecting sodium permanganate.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Pilot/Treatability Study Report
Completed Date: 2005-03-14 00:00:00
Comments: In-situ chemical oxidation pilot study has successfully reduced the concentrations of VOCs in the immediate area of the permanganate injection.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Long Term Monitoring Report
Completed Date: 2007-10-09 00:00:00
Comments: Groundwater concentrations are consistent with historical results.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Long Term Monitoring Report
Completed Date: 2008-11-07 00:00:00
Comments: Sodium permanganate injections have resulted in VOC concentration reductions in localized areas surrounding most injection wells. Sampling also demonstrate that injections did not mobilize hexavalent chromium at concentrations of concern.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 2007-05-17 00:00:00
Comments: DTSC approved the pilot study to collect groundwater samples using both the micropurge and passive diffusion bag (PBD) sampling techniques in certain wells.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Newsletter
Completed Date: 2007-07-12 00:00:00
Comments: Work notice for ESD implementation.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 2007-10-09 00:00:00
Comments: DTSC approved the recommendation for implementation of site-wide PBD sampling for the future sampling events.

Future Area Name: PROJECT WIDE
Future Sub Area Name: Not reported
Future Document Type: Public Notice
Future Due Date: 2011

VARIAN (Continued) **S100833273**

Future Area Name:	PROJECT WIDE
Future Sub Area Name:	Not reported
Future Document Type:	5 Year Review Reports
Future Due Date:	2011
Schedule Area Name:	Not reported
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Not reported
Schedule Due Date:	Not reported
Schedule Revised Date:	Not reported

H40 **VARIAN ASSOCIATES CORP HDQTRS** **RCRA-TSDF** **1000840764**
SSE **611 HANSEN WAY** **CERC-NFRAP** **94303VRNSS61**
< 1/8 **PALO ALTO, CA 94303** **CORRACTS**
0.095 mi. **RCRA-SQG**
501 ft. **Site 7 of 7 in cluster H** **TRIS**
PADS
Relative: **FINDS**
Higher

Actual: RCRA-TSDF:
40 ft.

Date form received by agency:	10/12/2000
Facility name:	VARIAN N M R INSTRUMENTS
Site name:	VARIAN ASSOCIATES, INC.
Facility address:	3120 HANSEN WAY PALO ALTO, CA 943041030
EPA ID:	CAD009120817
Mailing address:	911 HANSEN WAY PALO ALTO, CA 94304
Contact:	JIM WEBER
Contact address:	Not reported Not reported
Contact country:	Not reported
Contact telephone:	(650) 424-6272
Contact email:	Not reported
EPA Region:	09
Land type:	Private
Classification:	TSDF
Description:	Handler is engaged in the treatment, storage or disposal of hazardous waste
TSD commencement date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	Unknown
Mixed waste (haz. and radioactive):	Unknown
Recycler of hazardous waste:	Unknown
Transporter of hazardous waste:	Unknown
Treater, storer or disposer of HW:	No
Underground injection activity:	Unknown
On-site burner exemption:	Unknown
Furnace exemption:	Unknown
Used oil fuel burner:	Unknown
Used oil processor:	Unknown
User oil refiner:	Unknown
Used oil fuel marketer to burner:	Unknown
Used oil Specification marketer:	Unknown
Used oil transfer facility:	Unknown
Used oil transporter:	Unknown
Off-site waste receiver:	Verified to be non-commercial

VARIAN ASSOCIATES CORP HDQTRS (Continued) **1000840764**

Historical Generators:

Date form received by agency: 03/08/1999
Facility name: VARIAN N M R INSTRUMENTS
Classification: Small Quantity Generator

Date form received by agency: 03/04/1999
Facility name: VARIAN N M R INSTRUMENTS
Site name: VARIAN ASSOCIATES, INC.
Classification: Large Quantity Generator

Date form received by agency: 09/01/1996
Facility name: VARIAN N M R INSTRUMENTS
Classification: Large Quantity Generator

Date form received by agency: 02/20/1996
Facility name: VARIAN N M R INSTRUMENTS
Site name: VARIAN ASSOCIATES INC
Classification: Large Quantity Generator

Date form received by agency: 03/23/1994
Facility name: VARIAN N M R INSTRUMENTS
Site name: VARIAN ASSOCIATES-HANSEN WAY
Classification: Large Quantity Generator

Date form received by agency: 02/27/1992
Facility name: VARIAN N M R INSTRUMENTS
Site name: VARIAN ASSOCIATES INC
Classification: Large Quantity Generator

Date form received by agency: 04/12/1990
Facility name: VARIAN N M R INSTRUMENTS
Site name: VARIAN ASSOCIATES INC
Classification: Large Quantity Generator

Corrective Action Summary:

Event date: 06/13/1989
Event: CA049PA

Event date: 06/29/1989
Event: CMS Imposition

Event date: 06/29/1989
Event: RFI Imposition

Event date: 06/29/1989
Event: Stabilization Measures Implemented, Groundwater extraction and treatment (e.g., to achieve groundwater containment, to achieve MCL).

Event date: 06/29/1989
Event: Stabilization Measures Implemented, Primary measure is source removal and/or treatment (e.g., soil or waste excavation, in-situ soil treatment, off-site treatment).

Event date: 06/28/1990
Event: CA Prioritization, Facility or area was assigned a high corrective action priority.

VARIAN ASSOCIATES CORP HDQTRS (Continued) **1000840764**

Event date:	06/28/1990
Event:	CA049RE
Event date:	06/28/1990
Event:	CA029ST
Event date:	06/28/1990
Event:	CA074HI
Event date:	06/12/1992
Event:	Stabilization Construction Completed
Event date:	06/20/1994
Event:	CMS Approved
Event date:	06/20/1994
Event:	RFI Workplan Approved
Event date:	06/20/1994
Event:	RFA Completed, Assessment was an RFA.
Event date:	06/20/1994
Event:	RFI Approved
Event date:	06/20/1994
Event:	CMS Workplan Approved
Event date:	10/12/1994
Event:	Stabilization Measures Evaluation,This facility is not amenable to stabilization activity at the present time for reasons other than 1- it appears to be technically infeasible or inappropriate (NF) or 2- there is a lack of technical information (IN). Reasons for this conclusion may be the status of closure at the facility, the degree of risk, timing considerations, the status of corrective action work at the facility, or other administrative considerations.
Event date:	10/12/1994
Event:	CA Prioritization, Facility or area was assigned a medium corrective action priority.
Event date:	01/05/1995
Event:	Date For Remedy Selection (CM Imposed)
Event date:	07/02/1995
Event:	Corrective Measures Design Approved
Event date:	09/06/1996
Event:	CMI Workplan Approved
Event date:	08/21/1997
Event:	Certification Of Remedy Completion Or Construction Completion
Event date:	04/21/1998
Event:	Current Human Exposures under Control, Yes, Current Human Exposures Under Control has been verified. Based on a review of information contained in the EI determination, current human exposures are expected to be under control at the facility under current and

VARIAN ASSOCIATES CORP HDQTRS (Continued) **1000840764**

reasonably expected conditions. This determination will be re-evaluated when the Agency/State becomes aware of significant changes at the facility.

Event date: 04/21/1998
Event: Igration of Contaminated Groundwater under Control, Yes, Migration of Contaminated Groundwater Under Control has been verified. Based on a review of information contained in the EI determination, it has been determined that migration of contaminated groundwater is under control at the facility. Specifically, this determination indicates that the migration of contaminated groundwater is under control, and that monitoring will be conducted to confirm that contaminated groundwater remains within the existing area of contaminated groundwater. This determination will be re-evaluated when the Agency becomes aware of significant changes at the facility.

Event date: 04/21/1998
Event: CA Responsibility Referred To A Non-RCRA Federal Authority

Event date: 08/11/2000
Event: Igration of Contaminated Groundwater under Control, Yes, Migration of Contaminated Groundwater Under Control has been verified. Based on a review of information contained in the EI determination, it has been determined that migration of contaminated groundwater is under control at the facility. Specifically, this determination indicates that the migration of contaminated groundwater is under control, and that monitoring will be conducted to confirm that contaminated groundwater remains within the existing area of contaminated groundwater. This determination will be re-evaluated when the Agency becomes aware of significant changes at the facility.

Event date: 08/11/2000
Event: Current Human Exposures under Control, Yes, Current Human Exposures Under Control has been verified. Based on a review of information contained in the EI determination, current human exposures are expected to be under control at the facility under current and reasonably expected conditions. This determination will be re-evaluated when the Agency/State becomes aware of significant changes at the facility.

Event date: 09/22/2009
Event: CA800YE

Event date: Not reported
Event: CA021OP

Event date: Not reported
Event: CA036ST

Event date: Not reported
Event: CA048ST

Facility Has Received Notices of Violations:
Regulation violated: FR - 262.30-34.C
Area of violation: Generators - General
Date violation determined: 03/10/1994
Date achieved compliance: 06/30/1994

VARIAN ASSOCIATES CORP HDQTRS (Continued) **1000840764**

Violation lead agency: State
Enforcement action: INITIAL 3008(A) COMPLIANCE
Enforcement action date: 06/13/1994
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 3196
Final penalty amount: 3196
Paid penalty amount: 3196

Regulation violated: FR - 262.50-60
Area of violation: Generators - General
Date violation determined: 03/10/1994
Date achieved compliance: 06/30/1994
Violation lead agency: State
Enforcement action: INITIAL 3008(A) COMPLIANCE
Enforcement action date: 06/13/1994
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 3196
Final penalty amount: 3196
Paid penalty amount: 3196

Regulation violated: FR - 264.140-150.H
Area of violation: TSD - Financial Requirements
Date violation determined: 03/10/1994
Date achieved compliance: 06/30/1994
Violation lead agency: State
Enforcement action: INITIAL 3008(A) COMPLIANCE
Enforcement action date: 06/13/1994
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 3196
Final penalty amount: 3196
Paid penalty amount: 3196

Regulation violated: FR - 264.50-56.D
Area of violation: TSD - General
Date violation determined: 03/10/1994
Date achieved compliance: 06/30/1994
Violation lead agency: State
Enforcement action: INITIAL 3008(A) COMPLIANCE
Enforcement action date: 06/13/1994
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 3196
Final penalty amount: 3196
Paid penalty amount: 3196

Regulation violated: FR - 270
Area of violation: TSD - General
Date violation determined: 03/10/1994
Date achieved compliance: 06/30/1994
Violation lead agency: State

VARIAN ASSOCIATES CORP HDQTRS (Continued) **1000840764**

Enforcement action: INITIAL 3008(A) COMPLIANCE
Enforcement action date: 06/13/1994
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 3196
Final penalty amount: 3196
Paid penalty amount: 3196

Regulation violated: FR - 262.30-34.C
Area of violation: Generators - General
Date violation determined: 03/10/1994
Date achieved compliance: 06/30/1994
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 03/16/1994
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: FR - 270
Area of violation: TSD - General
Date violation determined: 03/10/1994
Date achieved compliance: 06/30/1994
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 03/16/1994
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: FR - 262.50-60
Area of violation: Generators - General
Date violation determined: 03/10/1994
Date achieved compliance: 06/30/1994
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 03/16/1994
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: FR - 264.50-56.D
Area of violation: TSD - General
Date violation determined: 03/10/1994
Date achieved compliance: 06/30/1994
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL

VARIAN ASSOCIATES CORP HDQTRS (Continued) **1000840764**

Enforcement action date: 03/16/1994
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: FR - 264.140-150.H
Area of violation: TSD - Financial Requirements
Date violation determined: 03/10/1994
Date achieved compliance: 06/30/1994
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 03/16/1994
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: F - 264.140-150.H
Area of violation: TSD - Financial Requirements
Date violation determined: 06/18/1991
Date achieved compliance: 06/18/1991
Violation lead agency: EPA
Enforcement action: Not reported
Enforcement action date: Not reported
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: Not reported
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: FR - 270
Area of violation: TSD - General
Date violation determined: 01/30/1991
Date achieved compliance: 04/09/1991
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 03/11/1991
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: FR - 270
Area of violation: TSD - General
Date violation determined: 01/30/1991
Date achieved compliance: 04/09/1991
Violation lead agency: State
Enforcement action: INITIAL 3008(A) COMPLIANCE
Enforcement action date: 03/11/1991

VARIAN ASSOCIATES CORP HDQTRS (Continued) **1000840764**

Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: FR - 270
Area of violation: TSD - General
Date violation determined: 01/24/1990
Date achieved compliance: 04/03/1990
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 02/21/1990
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: FR - 264.140-150.H
Area of violation: TSD - Financial Requirements
Date violation determined: 01/17/1990
Date achieved compliance: 01/30/1990
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 01/17/1990
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: FR - 270
Area of violation: TSD - General
Date violation determined: 08/10/1987
Date achieved compliance: 04/09/1991
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 09/04/1987
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Evaluation Action Summary:
Evaluation date: 11/20/1997
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 07/12/1996

VARIAN ASSOCIATES CORP HDQTRS (Continued) **1000840764**

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 12/21/1994
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 02/02/1994
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD - Financial Requirements
Date achieved compliance: 06/30/1994
Evaluation lead agency: State

Evaluation date: 02/02/1994
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 06/30/1994
Evaluation lead agency: State

Evaluation date: 02/02/1994
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD - General
Date achieved compliance: 06/30/1994
Evaluation lead agency: State

Evaluation date: 06/18/1991
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: TSD - Financial Requirements
Date achieved compliance: 06/18/1991
Evaluation lead agency: EPA Contractor/Grantee

Evaluation date: 01/30/1991
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD - General
Date achieved compliance: 04/09/1991
Evaluation lead agency: State

Evaluation date: 01/14/1991
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 01/24/1990
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD - General
Date achieved compliance: 04/03/1990
Evaluation lead agency: State

Evaluation date: 01/17/1990
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: TSD - Financial Requirements
Date achieved compliance: 01/30/1990

VARIAN ASSOCIATES CORP HDQTRS (Continued) **1000840764**

Evaluation lead agency: State

Evaluation date: 02/16/1988
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 02/05/1988
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 08/10/1987
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD - General
Date achieved compliance: 04/09/1991
Evaluation lead agency: State

CERC-NFRAP:
Site ID: 0900225
Federal Facility: Not a Federal Facility
NPL Status: Not on the NPL
Non NPL Status: NFRAP

CERCLIS-NFRAP Site Contact Name(s):
Contact Title: Not reported
Contact Name: Carl Brickner
Contact Tel: (415) 972-3814

Contact Title: Not reported
Contact Name: Brunilda Davila
Contact Tel: (415) 972-3162

Contact Title: Not reported
Contact Name: Jeff Inglis
Contact Tel: (415) 972-3095

Contact Title: Not reported
Contact Name: Karen Jurist
Contact Tel: (415) 972-3219

Contact Title: Not reported
Contact Name: Matt Mitguard
Contact Tel: (415) 972-3096

CERCLIS-NFRAP Assessment History:
Action: DISCOVERY
Date Started: Not reported
Date Completed: 04/01/1988
Priority Level: Not reported

Action: PRELIMINARY ASSESSMENT
Date Started: Not reported
Date Completed: 06/13/1989
Priority Level: Low priority for further assessment

VARIAN ASSOCIATES CORP HDQTRS (Continued) **1000840764**

Action: ARCHIVE SITE
Date Started: Not reported
Date Completed: 06/28/1990
Priority Level: Not reported

Action: PRELIMINARY ASSESSMENT
Date Started: Not reported
Date Completed: 06/28/1990
Priority Level: NFRAP: No further Remedial Action planned

CORRACTS:

EPA ID: CAD009120817
EPA Region: 9
Area Name: ENTIRE FACILITY
Actual Date: 1/5/1995
Action: CA400 - Date For Remedy Selection (CM Imposed)
NAICS Code(s): Not reported
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: CAD009120817
EPA Region: 9
Area Name: ENTIRE FACILITY
Actual Date: 4/21/1998
Action: CA210 - CA Responsibility Referred To A Non-RCRA Federal Authority
NAICS Code(s): Not reported
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: CAD009120817
EPA Region: 9
Area Name: ENTIRE FACILITY
Actual Date: 4/21/1998
Action: CA750YE - Migration of Contaminated Groundwater under Control, Yes, Migration of Contaminated Groundwater Under Control has been verified
NAICS Code(s): Not reported
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: CAD009120817
EPA Region: 9
Area Name: ENTIRE FACILITY
Actual Date: 4/21/1998
Action: CA725YE - Current Human Exposures Under Control, Yes, Current Human Exposures Under Control has been verified
NAICS Code(s): Not reported
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: CAD009120817
EPA Region: 9
Area Name: ENTIRE FACILITY
Actual Date: 6/12/1992
Action: CA650 - Stabilization Construction Completed
NAICS Code(s): Not reported

VARIAN ASSOCIATES CORP HDQTRS (Continued) **1000840764**

Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: CAD009120817
EPA Region: 9
Area Name: ENTIRE FACILITY
Actual Date: 6/13/1989
Action: CA049PA
NAICS Code(s): Not reported
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: CAD009120817
EPA Region: 9
Area Name: ENTIRE FACILITY
Actual Date: 6/20/1994
Action: CA300 - CMS Workplan Approved
NAICS Code(s): Not reported
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: CAD009120817
EPA Region: 9
Area Name: ENTIRE FACILITY
Actual Date: 6/20/1994
Action: CA050RF - RFA Completed, Assessment was an RFA
NAICS Code(s): Not reported
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: CAD009120817
EPA Region: 9
Area Name: ENTIRE FACILITY
Actual Date: 6/20/1994
Action: CA200 - RFI Approved
NAICS Code(s): Not reported
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: CAD009120817
EPA Region: 9
Area Name: ENTIRE FACILITY
Actual Date: 6/20/1994
Action: CA350 - CMS Approved
NAICS Code(s): Not reported
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: CAD009120817
EPA Region: 9
Area Name: ENTIRE FACILITY
Actual Date: 6/20/1994
Action: CA150 - RFI Workplan Approved
NAICS Code(s): Not reported
Original schedule date: Not reported
Schedule end date: Not reported

VARIAN ASSOCIATES CORP HDQTRS (Continued) **1000840764**

EPA ID: CAD009120817
EPA Region: 9
Area Name: ENTIRE FACILITY
Actual Date: 6/28/1990
Action: CA075HI - CA Prioritization, Facility or area was assigned a high corrective action priority
NAICS Code(s): Not reported
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: CAD009120817
EPA Region: 9
Area Name: ENTIRE FACILITY
Actual Date: 6/28/1990
Action: CA074HI
NAICS Code(s): Not reported
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: CAD009120817
EPA Region: 9
Area Name: ENTIRE FACILITY
Actual Date: 6/28/1990
Action: CA049RE
NAICS Code(s): Not reported
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: CAD009120817
EPA Region: 9
Area Name: ENTIRE FACILITY
Actual Date: 6/28/1990
Action: CA029ST
NAICS Code(s): Not reported
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: CAD009120817
EPA Region: 9
Area Name: ENTIRE FACILITY
Actual Date: 6/29/1989
Action: CA250 - CMS Imposition
NAICS Code(s): Not reported
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: CAD009120817
EPA Region: 9
Area Name: ENTIRE FACILITY
Actual Date: 6/29/1989
Action: CA100 - RFI Imposition
NAICS Code(s): Not reported
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: CAD009120817
EPA Region: 9

VARIAN ASSOCIATES CORP HDQTRS (Continued) **1000840764**

Area Name: ENTIRE FACILITY
Actual Date: 6/29/1989
Action: CA600SR - Stabilization Measures Implemented, Primary measure is source removal and/or treatment
NAICS Code(s): Not reported
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: CAD009120817
EPA Region: 9
Area Name: ENTIRE FACILITY
Actual Date: 6/29/1989
Action: CA600GW - Stabilization Measures Implemented, Groundwater extraction and treatment
NAICS Code(s): Not reported
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: CAD009120817
EPA Region: 9
Area Name: ENTIRE FACILITY
Actual Date: 7/2/1995
Action: CA450 - Corrective Measures Design Approved
NAICS Code(s): Not reported
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: CAD009120817
EPA Region: 9
Area Name: ENTIRE FACILITY
Actual Date: 8/11/2000
Action: CA750YE - Migration of Contaminated Groundwater under Control, Yes, Migration of Contaminated Groundwater Under Control has been verified
NAICS Code(s): Not reported
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: CAD009120817
EPA Region: 9
Area Name: ENTIRE FACILITY
Actual Date: 8/11/2000
Action: CA725YE - Current Human Exposures Under Control, Yes, Current Human Exposures Under Control has been verified
NAICS Code(s): Not reported
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: CAD009120817
EPA Region: 9
Area Name: ENTIRE FACILITY
Actual Date: 8/21/1997
Action: CA550 - Certification Of Remedy Completion Or Construction Completion
NAICS Code(s): Not reported
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: CAD009120817

VARIAN ASSOCIATES CORP HDQTRS (Continued) **1000840764**

EPA Region: 9
Area Name: ENTIRE FACILITY
Actual Date: 9/6/1996
Action: CA500 - CMI Workplan Approved
NAICS Code(s): Not reported
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: CAD009120817
EPA Region: 9
Area Name: ENTIRE FACILITY
Actual Date: 9/22/2009
Action: CA800YE
NAICS Code(s): Not reported
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: CAD009120817
EPA Region: 9
Area Name: ENTIRE FACILITY
Actual Date: 10/12/1994
Action: CA225NR - Stabilization Measures Evaluation, This facility is, not amenable to stabilization activity at the, present time for reasons other than (1) it appears to be technically, infeasible or inappropriate (NF) or (2) there is a lack of technical, information (IN). Reasons for this conclusion may be the status of, closure at the facility, the degree of risk, timing considerations, the status of corrective action work at the facility, or other, administrative considerations
NAICS Code(s): Not reported
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: CAD009120817
EPA Region: 9
Area Name: ENTIRE FACILITY
Actual Date: 10/12/1994
Action: CA075ME - CA Prioritization, Facility or area was assigned a medium corrective action priority
NAICS Code(s): Not reported
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: CAD009120817
EPA Region: 9
Area Name: ENTIRE FACILITY
Actual Date: Not reported
Action: CA048ST
NAICS Code(s): Not reported
Original schedule date: 06/28/1990
Schedule end date: Not reported

EPA ID: CAD009120817
EPA Region: 9
Area Name: ENTIRE FACILITY
Actual Date: Not reported
Action: CA036ST

VARIAN ASSOCIATES CORP HDQTRS (Continued) **1000840764**

NAICS Code(s): Not reported
Original schedule date: 07/05/1990
Schedule end date: Not reported

EPA ID: CAD009120817
EPA Region: 9
Area Name: ENTIRE FACILITY
Actual Date: Not reported
Action: CA021OP
NAICS Code(s): Not reported
Original schedule date: 07/12/1990
Schedule end date: Not reported

PADS:
EPAID: CAD009120817
Facility name: VARIAN ASSOCIATES INC
Facility Address: 611 HANSEN WAY A 129
PALO ALTO, CA 94303
Facility country: US
Generator: Yes
Storer: No
Transporter: No
Disposer: No
Research facility: No
Smelter: No
Facility owner name: VARIAN ASSOCIATES INC
Contact title: Not reported
Contact name: TSUDA DANI
Contact tel: (415)424-5531
Contact extension: Not reported
Mailing address: 611 HANSEN WAY A 129
PALO ALTO, CA 94303
Mailing country: US
Cert. title: Not reported
Cert. name: Not reported
Cert. date: 5/18/1990
Date received: 6/13/1990

FINDS:

Registry ID: 110000609280

Environmental Interest/Information System

The NEI (National Emissions Inventory) database contains information on stationary and mobile sources that emit criteria air pollutants and their precursors, as well as hazardous air pollutants (HAPs).

California Hazardous Waste Tracking System - Datamart (HWTS-DATAMART) provides California with information on hazardous waste shipments for generators, transporters, and treatment, storage, and disposal facilities.

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA

VARIAN ASSOCIATES CORP HDQTRS (Continued) **1000840764**

program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

41
WNW
< 1/8
0.110 mi.
580 ft.

Relative:
Higher

Actual:
36 ft.

STANFORD CLEANERS
2875 EL CAMINO REAL
PALO ALTO, CA 94306

Database(s): **CERC-NFRAP, RCRA-SQG, FINDS, CA FID UST, SLIC, HIST UST, SWEEPS UST, DRYCLEANERS, HAZNET, EMI**

EDR ID Number: **1000314828**
EPA ID Number: **CAD028879765**

CERC-NFRAP:
Site ID: 0901281
Federal Facility: Not a Federal Facility
NPL Status: Not on the NPL
Non NPL Status: NFRAP

CERCLIS-NFRAP Site Contact Name(s):
Contact Title: Not reported
Contact Name: Carl Brickner
Contact Tel: (415) 972-3814

Contact Title: Not reported
Contact Name: Brunilda Davila
Contact Tel: (415) 972-3162

Contact Title: Not reported
Contact Name: Jeff Inglis
Contact Tel: (415) 972-3095

Contact Title: Not reported
Contact Name: Karen Jurist
Contact Tel: (415) 972-3219

Contact Title: Not reported
Contact Name: Matt Mitguard
Contact Tel: (415) 972-3096

CERCLIS-NFRAP Assessment History:
Action: DISCOVERY
Date Started: Not reported
Date Completed: 05/01/1986
Priority Level: Not reported

Action: PRELIMINARY ASSESSMENT
Date Started: Not reported
Date Completed: 11/01/1987
Priority Level: NFRAP: No further Remedial Action planned

Action: ARCHIVE SITE
Date Started: Not reported
Date Completed: 11/01/1987
Priority Level: Not reported

STANFORD CLEANERS (Continued) **1000314828**

RCRA-SQG:
Date form received by agency: 09/01/1996
Facility name: STANFORD CLEANERS
Facility address: 2875 EL CAMINO REAL
PALO ALTO, CA 94306
EPA ID: CAD028879765
Mailing address: EL CAMINO REAL
PALO ALTO, CA 94306
Contact: Not reported
Contact address: Not reported
Not reported
Contact country: Not reported
Contact telephone: Not reported
Contact email: Not reported
EPA Region: 09
Classification: Small Small Quantity Generator
Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:
Owner/operator name: STANFORD CLEANERS
Owner/operator address: NOT REQUIRED
NOT REQUIRED, ME 99999
Owner/operator country: Not reported
Owner/operator telephone: (415) 555-1212
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: NOT REQUIRED
Owner/operator address: NOT REQUIRED
NOT REQUIRED, ME 99999
Owner/operator country: Not reported
Owner/operator telephone: (415) 555-1212
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: Unknown
Mixed waste (haz. and radioactive): Unknown
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: Unknown
Furnace exemption: Unknown
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No

STANFORD CLEANERS (Continued) **1000314828**

Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No
Off-site waste receiver: Verified to be non-commercial

Violation Status: No violations found

FINDS:

Registry ID: 110001168316

Environmental Interest/Information System
The NEI (National Emissions Inventory) database contains information on stationary and mobile sources that emit criteria air pollutants and their precursors, as well as hazardous air pollutants (HAPs).

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

CA FID UST:
Facility ID: 43006379
Regulated By: UTNKA
Regulated ID: 00020402
Cortese Code: Not reported
SIC Code: Not reported
Facility Phone: 4153222540
Mail To: Not reported
Mailing Address: 2875 EL CAMINO REAL
Mailing Address 2: Not reported
Mailing City,St,Zip: PALO ALTO 94306
Contact: Not reported
Contact Phone: Not reported
DUNs Number: Not reported
NPDES Number: Not reported
EPA ID: Not reported
Comments: Not reported
Status: Active

SLIC:
Region: STATE
Facility Status: **Open - Inactive**
Status Date: 2009-06-02 00:00:00
Global Id: T0608591756
Lead Agency: SAN FRANCISCO BAY RWQCB (REGION 2)
Lead Agency Case Number: Not reported
Latitude: 37.422722
Longitude: -122.140289
Case Type: Cleanup Program Site
Case Worker: UUU
Local Agency: Not reported
RB Case Number: 43-1928
File Location: Not reported

STANFORD CLEANERS (Continued) **1000314828**

Potential Media Affected: Under Investigation
Potential Contaminants of Concern: * Solvents
Site History: Not reported

Click here to access the California GeoTracker records for this facility:

Region: STATE
Facility Status: **Open - Site Assessment**
Status Date: 2009-06-03 00:00:00
Global Id: T0608591612
Lead Agency: SAN FRANCISCO BAY RWQCB (REGION 2)
Lead Agency Case Number: Not reported
Latitude: 37.423360946906
Longitude: -122.140696048737
Case Type: Cleanup Program Site
Case Worker: RWP
Local Agency: Not reported
RB Case Number: 43S0121
File Location: Regional Board
Potential Media Affected: Other Groundwater (uses other than drinking water), Soil
Potential Contaminants of Concern: Tetrachloroethylene (PCE)
Site History: The developer of this "Brownfield" site is in the proces of completing investigation - mostly to completely delineate the PCE soil gas and groundwater plumes. The remedial investigation report is due 31July09 with anticipated followup review and response by the end of Aug09. No public participation notification requirement is necessary until the developer has completed the site investigation. Based on investigative results, the developer will submit a Remedial Action Plan. After determining the RAP to be approve-able, our PPN protocol requires a Fact Sheet with a 30-day comment period on the RAP. With an RI report submittal at the end of July09 and anticipated review/response by the end of Aug09, the 30-day comment period would begin in either Sept09 or Oct09.

Click here to access the California GeoTracker records for this facility:

SLIC:
Region: 2
Facility ID: 43-1928
Facility Status: Post remedial action monitoring
Date Closed: Not reported
Local Case #: 43-1928
How Discovered: Tank Closure
Leak Cause: Structure Failure
Leak Source: Tank
Date Confirmed: Not reported
Date Prelim Site Assmnt Workplan Submitted: Not reported
Date Preliminary Site Assessment Began: Not reported
Date Pollution Characterization Began: Not reported
Date Remediation Plan Submitted: Not reported
Date Remedial Action Underway: Not reported
Date Post Remedial Action Monitoring Began: 5/11/1988

Region: 2
Facility ID: 43S0121
Facility Status: Preliminary site assessment workplan submitted
Date Closed: Not reported

STANFORD CLEANERS (Continued) **1000314828**

Local Case #: Not reported
How Discovered: Tank Closure
Leak Cause: UNK
Leak Source: UNK
Date Confirmed: Not reported
Date Prelim Site Assmnt Workplan Submitted: 7/18/1990
Date Preliminary Site Assessment Began: Not reported
Date Pollution Characterization Began: Not reported
Date Remediation Plan Submitted: Not reported
Date Remedial Action Underway: Not reported
Date Post Remedial Action Monitoring Began: Not reported

HIST UST:
Region: STATE
Facility ID: 00000020402
Facility Type: Other
Other Type: DRY CLEANER
Total Tanks: 0001
Contact Name: FRED FUJIKAWA OWNER
Telephone: 4153222540
Owner Name: STANFORD CLEANERS FRED FUJIKAW
Owner Address: 2875 EL CAMINO REAL
Owner City,St,Zip: PALO ALTO, CA 94306

Tank Num: 001
Container Num: 0001
Year Installed: 1959
Tank Capacity: 00000550
Tank Used for: PRODUCT
Type of Fuel: Not reported
Tank Construction: Not reported
Leak Detection: Groundwater Monitoring Well

SWEEPS UST:
Status: A
Comp Number: 20402
Number: 9
Board Of Equalization: Not reported
Ref Date: 07-01-85
Act Date: Not reported
Created Date: 02-29-88
Tank Status: A
Owner Tank Id: 1
Swrcb Tank Id: 43-006-020402-000001
Actv Date: 01-27-94
Capacity: 550
Tank Use: UNKNOWN
Stg: P
Content: Not reported
Number Of Tanks: 1

DRYCLEANERS:
EPA Id: CAD028879765
NAICS Code: 81232
NAICS Description: Drycleaning and Laundry Services (except Coin-Operated)
SIC Code: 7211

STANFORD CLEANERS (Continued) **1000314828**

SIC Description: Power Laundries, Family and Commercial
Create Date: 4/10/1987
Facility Active: Yes
Inactive Date: Not reported
Facility Addr2: Not reported
Mailing Name: Not reported
Mailing Address: 2875 EL CAMINO REAL
Mailing Address 2: Not reported
Mailing State: CA
Mailing Zip: 943062205
Region Code: 2
Owner Name: CHANG YIM
Owner Address: 2875 EL CAMINO REAL
Owner Address 2: Not reported
Owner Telephone: 6503222540
Contact Name: CHANG YIM/OWNER
Contact Address: 2875 EL CAMINO REAL
Contact Address 2: Not reported
Contact Telephone: 6503222540

EPA Id: CAD028879765
NAICS Code: 81232
NAICS Description: Drycleaning and Laundry Services (except Coin-Operated)
SIC Code: 7216
SIC Description: Drycleaning Plants, Except Rug Cleaning
Create Date: 4/10/1987
Facility Active: Yes
Inactive Date: Not reported
Facility Addr2: Not reported
Mailing Name: Not reported
Mailing Address: 2875 EL CAMINO REAL
Mailing Address 2: Not reported
Mailing State: CA
Mailing Zip: 943062205
Region Code: 2
Owner Name: CHANG YIM
Owner Address: 2875 EL CAMINO REAL
Owner Address 2: Not reported
Owner Telephone: 6503222540
Contact Name: CHANG YIM/OWNER
Contact Address: 2875 EL CAMINO REAL
Contact Address 2: Not reported
Contact Telephone: 6503222540

EPA Id: CAD028879765
NAICS Code: 81232
NAICS Description: Drycleaning and Laundry Services (except Coin-Operated)
SIC Code: 7212
SIC Description: Garment Pressing, and Agents for Laundries and Drycleaners
Create Date: 4/10/1987
Facility Active: Yes
Inactive Date: Not reported
Facility Addr2: Not reported
Mailing Name: Not reported
Mailing Address: 2875 EL CAMINO REAL
Mailing Address 2: Not reported
Mailing State: CA

STANFORD CLEANERS (Continued) **1000314828**

Mailing Zip:	943062205
Region Code:	2
Owner Name:	CHANG YIM
Owner Address:	2875 EL CAMINO REAL
Owner Address 2:	Not reported
Owner Telephone:	6503222540
Contact Name:	CHANG YIM/OWNER
Contact Address:	2875 EL CAMINO REAL
Contact Address 2:	Not reported
Contact Telephone:	6503222540

EPA Id:	CAD028879765
NAICS Code:	81232
NAICS Description:	Drycleaning and Laundry Services (except Coin-Operated)
SIC Code:	7389
SIC Description:	Business Services, NEC (apparel pressing service for the trade)
Create Date:	4/10/1987
Facility Active:	Yes
Inactive Date:	Not reported
Facility Addr2:	Not reported
Mailing Name:	Not reported
Mailing Address:	2875 EL CAMINO REAL
Mailing Address 2:	Not reported
Mailing State:	CA
Mailing Zip:	943062205
Region Code:	2
Owner Name:	CHANG YIM
Owner Address:	2875 EL CAMINO REAL
Owner Address 2:	Not reported
Owner Telephone:	6503222540
Contact Name:	CHANG YIM/OWNER
Contact Address:	2875 EL CAMINO REAL
Contact Address 2:	Not reported
Contact Telephone:	6503222540

EPA Id:	CAD028879765
NAICS Code:	81232
NAICS Description:	Drycleaning and Laundry Services (except Coin-Operated)
SIC Code:	7219
SIC Description:	Laundry and Garment Services, NEC (except diaper service and clothing alteration and repair)
Create Date:	4/10/1987
Facility Active:	Yes
Inactive Date:	Not reported
Facility Addr2:	Not reported
Mailing Name:	Not reported
Mailing Address:	2875 EL CAMINO REAL
Mailing Address 2:	Not reported
Mailing State:	CA
Mailing Zip:	943062205
Region Code:	2
Owner Name:	CHANG YIM
Owner Address:	2875 EL CAMINO REAL
Owner Address 2:	Not reported
Owner Telephone:	6503222540
Contact Name:	CHANG YIM/OWNER
Contact Address:	2875 EL CAMINO REAL
Contact Address 2:	Not reported

STANFORD CLEANERS (Continued) **1000314828**

Contact Telephone: 6503222540

HAZNET:

Gepaid:	CAD028879765
Contact:	CHANG YIM/OWNER
Telephone:	6503222540
Facility Addr2:	Not reported
Mailing Name:	Not reported
Mailing Address:	2875 EL CAMINO REAL
Mailing City,St,Zip:	PALO ALTO, CA 943062205
Gen County:	Santa Clara
TSD EPA ID:	CA0000084517
TSD County:	Sacramento
Waste Category:	Liquids with halogenated organic compounds > 1000 mg/l
Disposal Method:	Transfer Station
Tons:	0.09
Facility County:	Santa Clara

Gepaid:	CAD028879765
Contact:	Not reported
Telephone:	0000000000
Facility Addr2:	Not reported
Mailing Name:	Not reported
Mailing Address:	2875 EL CAMINO REAL
Mailing City,St,Zip:	PALO ALTO, CA 943062205
Gen County:	Santa Clara
TSD EPA ID:	CA0000084517
TSD County:	Sacramento
Waste Category:	Liquids with halogenated organic compounds > 1000 mg/l
Disposal Method:	Transfer Station
Tons:	1.8150
Facility County:	Santa Clara

Gepaid:	CAD028879765
Contact:	Not reported
Telephone:	0000000000
Facility Addr2:	Not reported
Mailing Name:	Not reported
Mailing Address:	2875 EL CAMINO REAL
Mailing City,St,Zip:	PALO ALTO, CA 943062205
Gen County:	Santa Clara
TSD EPA ID:	CA0000084517
TSD County:	Sacramento
Waste Category:	Liquids with halogenated organic compounds > 1000 mg/l
Disposal Method:	Transfer Station
Tons:	1.3650
Facility County:	Santa Clara

Gepaid:	CAD028879765
Contact:	Not reported
Telephone:	0000000000
Facility Addr2:	Not reported
Mailing Name:	Not reported
Mailing Address:	2875 EL CAMINO REAL
Mailing City,St,Zip:	PALO ALTO, CA 943062205
Gen County:	Santa Clara
TSD EPA ID:	CAT000613950

STANFORD CLEANERS (Continued) **1000314828**

TSD County:	Sacramento
Waste Category:	Liquids with halogenated organic compounds > 1000 mg/l
Disposal Method:	Transfer Station
Tons:	.4875
Facility County:	Santa Clara

Gepaid:	CAD028879765
Contact:	CHANG YIM/OWNER
Telephone:	6503222540
Facility Addr2:	Not reported
Mailing Name:	Not reported
Mailing Address:	2875 EL CAMINO REAL
Mailing City,St,Zip:	PALO ALTO, CA 943062205
Gen County:	Santa Clara
TSD EPA ID:	CA0000084517
TSD County:	Sacramento
Waste Category:	Liquids with halogenated organic compounds > 1000 mg/l
Disposal Method:	H141
Tons:	0.1375
Facility County:	Santa Clara

Click this hyperlink while viewing on your computer to access
Liquids with halogenated organic compounds > 1000 mg/l

EMI:

Year:	1987
County Code:	43
Air Basin:	SF
Facility ID:	383
Air District Name:	BA
SIC Code:	7216
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	1990
County Code:	43
Air Basin:	SF
Facility ID:	383
Air District Name:	BA
SIC Code:	7216
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0

STANFORD CLEANERS (Continued) **1000314828**

Part. Matter 10 Micrometers & Smllr Tons/Yr:	0
Year:	1996
County Code:	43
Air Basin:	SF
Facility ID:	383
Air District Name:	BA
SIC Code:	7216
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0
Year:	1997
County Code:	43
Air Basin:	SF
Facility ID:	383
Air District Name:	BA
SIC Code:	7216
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0
Year:	1998
County Code:	43
Air Basin:	SF
Facility ID:	383
Air District Name:	BA
SIC Code:	7216
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0
Year:	1999
County Code:	43
Air Basin:	SF
Facility ID:	383

STANFORD CLEANERS (Continued) **1000314828**

Air District Name:	BA
SIC Code:	7216
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	2000
County Code:	43
Air Basin:	SF
Facility ID:	383
Air District Name:	BA
SIC Code:	7216
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	2001
County Code:	43
Air Basin:	SF
Facility ID:	12932
Air District Name:	BA
SIC Code:	7216
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	2002
County Code:	43
Air Basin:	SF
Facility ID:	12932
Air District Name:	BA
SIC Code:	7216
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0

STANFORD CLEANERS (Continued) **1000314828**

Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	2003
County Code:	43
Air Basin:	SF
Facility ID:	12932
Air District Name:	BA
SIC Code:	7216
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	2004
County Code:	43
Air Basin:	SF
Facility ID:	12932
Air District Name:	BA
SIC Code:	7216
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0.217
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	2005
County Code:	43
Air Basin:	SF
Facility ID:	12932
Air District Name:	BA
SIC Code:	7216
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

STANFORD CLEANERS (Continued) **1000314828**

Year:	2006
County Code:	43
Air Basin:	SF
Facility ID:	12932
Air District Name:	BA
SIC Code:	7216
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	.067
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	2007
County Code:	43
Air Basin:	SF
Facility ID:	12932
Air District Name:	BA
SIC Code:	7216
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	.067
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	2007
County Code:	43
Air Basin:	SF
Facility ID:	12932
Air District Name:	BA
SIC Code:	7216
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	.067
Reactive Organic Gases Tons/Yr:	.0468062
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

I42 **HOHBACK** **HIST CORTESE** **S101309091**
WNW **216 PAGE MILL** **N/A**
< 1/8 **PALO ALTO, CA**
0.118 mi.
622 ft. **Site 1 of 9 in cluster I**

Relative:
Higher

Actual:
24 ft.

CORTESE:

Region:	CORTESE
Facility County Code:	43
Reg By:	LTNKA
Reg Id:	43-0703

I43 **HOHBACH** **LUST** **S105194787**
NW **200 PAGE MILL RD** **HIST LUST** **N/A**
< 1/8 **PALO ALTO, CA 94306**
0.119 mi.
627 ft. **Site 2 of 9 in cluster I**

Relative:
Higher

Actual:
25 ft.

LUST:

Region:	STATE
Global Id:	T0608500732
Latitude:	37.426136
Longitude:	-122.138566
Case Type:	LUST Cleanup Site
Status:	Open - Site Assessment
Status Date:	1984-11-07 00:00:00
Lead Agency:	SANTA CLARA COUNTY LOP
Case Worker:	GOR
Local Agency:	SANTA CLARA COUNTY LOP
RB Case Number:	14-369
LOC Case Number:	06S3W12G01f
File Location:	Stored electronically as an E-file
Potential Media Affect:	Aquifer used for drinking water supply, Soil
Potential Contaminants of Concern:	Benzene, Toluene, Xylene, Gasoline
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

LUST REG 2:

Region:	2
Facility Id:	Not reported
Facility Status:	Pollution Characterization
Case Number:	06S3W12G01f
How Discovered:	Not reported
Leak Cause:	Not reported
Leak Source:	Not reported
Date Leak Confirmed:	Not reported
Oversight Program:	LUST
Prelim. Site Assesment Wokplan Submitted:	Not reported
Preliminary Site Assesment Began:	11/7/1984
Pollution Characterization Began:	11/7/1984
Pollution Remediation Plan Submitted:	Not reported
Date Remediation Action Underway:	Not reported
Date Post Remedial Action Monitoring Began:	Not reported

LUST SANTA CLARA:

Region:	SANTA CLARA
SCVWD ID:	06S3W12G01f
Closed Date:	Not reported

HOHBACH (Continued) **S105194787**

HIST LUST SANTA CLARA:
- Region: SANTA CLARA
- Region Code: 2
- SCVWD ID: 06S3W12G01
- Oversite Agency: SCCDEH
- Date Listed: 1999-01-01 00:00:00
- Closed Date: Not reported

I44 **PACIFIC READY MIX INC** **CA FID UST** **S101630255**
NW **2785 PARK BLVD** **SWEEPS UST** **N/A**
1/8-1/4 **PALO ALTO, CA 94306**
0.128 mi.
677 ft. **Site 3 of 9 in cluster I**

Relative:
Higher

Actual:
24 ft.

CA FID UST:
- Facility ID: 43001972
- Regulated By: UTNKA
- Regulated ID: 00010312
- Cortese Code: Not reported
- SIC Code: Not reported
- Facility Phone: 4153230224
- Mail To: Not reported
- Mailing Address: 2785 PARK BLVD
- Mailing Address 2: Not reported
- Mailing City,St,Zip: PALO ALTO 94306
- Contact: Not reported
- Contact Phone: Not reported
- DUNs Number: Not reported
- NPDES Number: Not reported
- EPA ID: Not reported
- Comments: Not reported
- Status: Active

SWEEPS UST:
- Status: A
- Comp Number: 10312
- Number: 9
- Board Of Equalization: 44-018864
- Ref Date: 07-01-85
- Act Date: Not reported
- Created Date: 02-29-88
- Tank Status: A
- Owner Tank Id: 1
- Swrcb Tank Id: 43-006-010312-000001
- Actv Date: 07-01-85
- Capacity: 8000
- Tank Use: M.V. FUEL
- Stg: P
- Content: DIESEL
- Number Of Tanks: 2

- Status: A
- Comp Number: 10312
- Number: 9
- Board Of Equalization: 44-018864
- Ref Date: 07-01-85
- Act Date: Not reported

PACIFIC READY MIX INC (Continued) **S101630255**

Created Date:	02-29-88
Tank Status:	A
Owner Tank Id:	2
Swrcb Tank Id:	43-006-010312-000002
Actv Date:	07-01-85
Capacity:	1000
Tank Use:	M.V. FUEL
Stg:	P
Content:	LEADED
Number Of Tanks:	Not reported

I45 **PACIFIC READY MIX INC** **HIST UST** **U001595963**
NW **2785 PARK BLVD** **N/A**
1/8-1/4 **PALO ALTO, CA 94306**
0.128 mi.
677 ft. **Site 4 of 9 in cluster I**

Relative:
Higher

Actual:
24 ft.

HIST UST:

Region:	STATE
Facility ID:	00000010312
Facility Type:	Other
Other Type:	READY MIX CONCRETE
Total Tanks:	0002
Contact Name:	KEN GARINO
Telephone:	4153230224
Owner Name:	PACIFIC READY MIX INC
Owner Address:	850 SAN MATEO DR
Owner City,St,Zip:	SAN MATEO, CA 94401
Tank Num:	001
Container Num:	1
Year Installed:	Not reported
Tank Capacity:	00008000
Tank Used for:	PRODUCT
Type of Fuel:	DIESEL
Tank Construction:	Not reported
Leak Detection:	Visual, Stock Inventor
Tank Num:	002
Container Num:	2
Year Installed:	Not reported
Tank Capacity:	00001000
Tank Used for:	PRODUCT
Type of Fuel:	REGULAR
Tank Construction:	Not reported
Leak Detection:	Visual, Stock Inventor

I46 **PROPOSED PARK PLAZA APARTMENTS** **SLIC** **S107863254**
NW **2785 PARK BOULEVARD** **N/A**
1/8-1/4 **PALO ALTO, CA**
0.128 mi.
677 ft. **Site 5 of 9 in cluster I**

Relative:
Higher

Actual:
24 ft.

SLIC:

Region:	STATE
Facility Status:	**Open - Site Assessment**
Status Date:	1993-02-24 00:00:00
Global Id:	T0608572772
Lead Agency:	SAN FRANCISCO BAY RWQCB (REGION 2)
Lead Agency Case Number:	Not reported
Latitude:	37.4270246665062
Longitude:	-122.139322757721
Case Type:	Cleanup Program Site
Case Worker:	RWP
Local Agency:	Not reported
RB Case Number:	43S1079
File Location:	Regional Board
Potential Media Affected:	Soil
Potential Contaminants of Concern:	Arsenic, Diesel, Tetrachloroethylene (PCE)
Site History:	Water Board received and reviewed environmental site assessment from Versar (12April05) and required a revised report that was submitted on June08. Water Board approved the revised report in 22Aug08. Additional submittals required to complete the Water Boards document requirements have been incomplete and awaiting a Risk Management Plan. Not reported

Click here to access the California GeoTracker records for this facility:

J47 **HEWLETT-PACKARD** **Notify 65** **S100179147**
WNW **395 PAGE MILL RD.** **N/A**
1/8-1/4 **PALO ALTO, CA 92378**
0.147 mi.
778 ft. **Site 1 of 8 in cluster J**

Relative:
Higher

Actual:
32 ft.

Notify 65:

Date Reported:	Not reported
Staff Initials:	Not reported
Board File Number:	Not reported
Facility Type:	Not reported
Discharge Date:	Not reported
Incident Description:	92378

J48 **HEWLETT PACKARD CO MFG DIV** **CERC-NFRAP** **1000281823**
WNW **395 PAGE MILL RD** **CORRACTS** **CAD009122557**
1/8-1/4 **PALO ALTO, CA 94306** **RCRA-SQG**
0.147 mi. **FINDS**
778 ft. **Site 2 of 8 in cluster J** **HIST CORTESE**
LUST

Relative:
Higher

HIST LUST
ENVIROSTOR
FINANCIAL ASSURANCE

Actual:
32 ft.

HWP

CERC-NFRAP:

Site ID:	0901148

HEWLETT PACKARD CO MFG DIV (Continued) **1000281823**

Federal Facility: Not a Federal Facility
NPL Status: Not on the NPL
Non NPL Status: NFRAP

CERCLIS-NFRAP Site Contact Name(s):
Contact Title: Not reported
Contact Name: Carl Brickner
Contact Tel: (415) 972-3814

Contact Title: Not reported
Contact Name: Brunilda Davila
Contact Tel: (415) 972-3162

Contact Title: Not reported
Contact Name: Jeff Inglis
Contact Tel: (415) 972-3095

Contact Title: Not reported
Contact Name: Karen Jurist
Contact Tel: (415) 972-3219

Contact Title: Not reported
Contact Name: Matt Mitguard
Contact Tel: (415) 972-3096

CERCLIS-NFRAP Assessment History:
Action: DISCOVERY
Date Started: Not reported
Date Completed: 05/01/1986
Priority Level: Not reported

Action: PRELIMINARY ASSESSMENT
Date Started: Not reported
Date Completed: 10/01/1987
Priority Level: NFRAP: No further Remedial Action planned

Action: ARCHIVE SITE
Date Started: Not reported
Date Completed: 10/01/1987
Priority Level: Not reported

CORRACTS:

EPA ID: CAD009122557
EPA Region: 9
Area Name: ENTIRE FACILITY
Actual Date: 1/1/1986
Action: CA600SR - Stabilization Measures Implemented, Primary measure is source removal and/or treatment
NAICS Code(s): 325413 326199 331521 332322
In-Vitro Diagnostic Substance Manufacturing
All Other Plastics Product Manufacturing
Aluminum Die-Casting Foundries
Sheet Metal Work Manufacturing
Original schedule date: Not reported

HEWLETT PACKARD CO MFG DIV (Continued) **1000281823**

Schedule end date: Not reported

EPA ID: CAD009122557
EPA Region: 9
Area Name: ENTIRE FACILITY
Actual Date: 1/1/1986
Action: CA600GW - Stabilization Measures Implemented, Groundwater extraction and treatment
NAICS Code(s): 325413 326199 331521 332322
In-Vitro Diagnostic Substance Manufacturing
All Other Plastics Product Manufacturing
Aluminum Die-Casting Foundries
Sheet Metal Work Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: CAD009122557
EPA Region: 9
Area Name: ENTIRE FACILITY
Actual Date: 4/19/1989
Action: CA250 - CMS Imposition
NAICS Code(s): 325413 326199 331521 332322
In-Vitro Diagnostic Substance Manufacturing
All Other Plastics Product Manufacturing
Aluminum Die-Casting Foundries
Sheet Metal Work Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: CAD009122557
EPA Region: 9
Area Name: ENTIRE FACILITY
Actual Date: 4/19/1989
Action: CA100 - RFI Imposition
NAICS Code(s): 325413 326199 331521 332322
In-Vitro Diagnostic Substance Manufacturing
All Other Plastics Product Manufacturing
Aluminum Die-Casting Foundries
Sheet Metal Work Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: CAD009122557
EPA Region: 9
Area Name: ENTIRE FACILITY
Actual Date: 7/27/1994
Action: CA225NR - Stabilization Measures Evaluation, This facility is, not amenable to stabilization activity at the, present time for reasons other than (1) it appears to be technically, infeasible or inappropriate (NF) or (2) there is a lack of technical, information (IN). Reasons for this conclusion may be the status of, closure at the facility, the degree of risk, timing considerations, the status of corrective action work at the facility, or other, administrative considerations
NAICS Code(s): 325413 326199 331521 332322
In-Vitro Diagnostic Substance Manufacturing
All Other Plastics Product Manufacturing

HEWLETT PACKARD CO MFG DIV (Continued) **1000281823**

Aluminum Die-Casting Foundries
Sheet Metal Work Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: CAD009122557
EPA Region: 9
Area Name: ENTIRE FACILITY
Actual Date: 7/28/1994
Action: CA075ME - CA Prioritization, Facility or area was assigned a medium corrective action priority
NAICS Code(s): 325413 326199 331521 332322
In-Vitro Diagnostic Substance Manufacturing
All Other Plastics Product Manufacturing
Aluminum Die-Casting Foundries
Sheet Metal Work Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: CAD009122557
EPA Region: 9
Area Name: ENTIRE FACILITY
Actual Date: 9/9/1996
Action: CA550 - Certification Of Remedy Completion Or Construction Completion
NAICS Code(s): 325413 326199 331521 332322
In-Vitro Diagnostic Substance Manufacturing
All Other Plastics Product Manufacturing
Aluminum Die-Casting Foundries
Sheet Metal Work Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: CAD009122557
EPA Region: 9
Area Name: ENTIRE FACILITY
Actual Date: 9/19/1997
Action: CA210 - CA Responsibility Referred To A Non-RCRA Federal Authority
NAICS Code(s): 325413 326199 331521 332322
In-Vitro Diagnostic Substance Manufacturing
All Other Plastics Product Manufacturing
Aluminum Die-Casting Foundries
Sheet Metal Work Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: CAD009122557
EPA Region: 9
Area Name: ENTIRE FACILITY
Actual Date: 9/21/1994
Action: CA500 - CMI Workplan Approved
NAICS Code(s): 325413 326199 331521 332322
In-Vitro Diagnostic Substance Manufacturing
All Other Plastics Product Manufacturing
Aluminum Die-Casting Foundries
Sheet Metal Work Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

HEWLETT PACKARD CO MFG DIV (Continued) **1000281823**

EPA ID: CAD009122557
EPA Region: 9
Area Name: ENTIRE FACILITY
Actual Date: 9/21/1994
Action: CA450 - Corrective Measures Design Approved
NAICS Code(s): 325413 326199 331521 332322
In-Vitro Diagnostic Substance Manufacturing
All Other Plastics Product Manufacturing
Aluminum Die-Casting Foundries
Sheet Metal Work Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: CAD009122557
EPA Region: 9
Area Name: ENTIRE FACILITY
Actual Date: 9/21/1994
Action: CA400 - Date For Remedy Selection (CM Imposed)
NAICS Code(s): 325413 326199 331521 332322
In-Vitro Diagnostic Substance Manufacturing
All Other Plastics Product Manufacturing
Aluminum Die-Casting Foundries
Sheet Metal Work Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: CAD009122557
EPA Region: 9
Area Name: ENTIRE FACILITY
Actual Date: 9/21/1994
Action: CA350 - CMS Approved
NAICS Code(s): 325413 326199 331521 332322
In-Vitro Diagnostic Substance Manufacturing
All Other Plastics Product Manufacturing
Aluminum Die-Casting Foundries
Sheet Metal Work Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: CAD009122557
EPA Region: 9
Area Name: ENTIRE FACILITY
Actual Date: 9/21/1994
Action: CA200 - RFI Approved
NAICS Code(s): 325413 326199 331521 332322
In-Vitro Diagnostic Substance Manufacturing
All Other Plastics Product Manufacturing
Aluminum Die-Casting Foundries
Sheet Metal Work Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: CAD009122557
EPA Region: 9
Area Name: ENTIRE FACILITY
Actual Date: 9/22/2009
Action: CA800YE

HEWLETT PACKARD CO MFG DIV (Continued) **1000281823**

NAICS Code(s): 325413 326199 331521 332322
In-Vitro Diagnostic Substance Manufacturing
All Other Plastics Product Manufacturing
Aluminum Die-Casting Foundries
Sheet Metal Work Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: CAD009122557
EPA Region: 9
Area Name: ENTIRE FACILITY
Actual Date: 9/30/1992
Action: CA725YE - Current Human Exposures Under Control, Yes, Current Human Exposures Under Control has been verified
NAICS Code(s): 325413 326199 331521 332322
In-Vitro Diagnostic Substance Manufacturing
All Other Plastics Product Manufacturing
Aluminum Die-Casting Foundries
Sheet Metal Work Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: CAD009122557
EPA Region: 9
Area Name: ENTIRE FACILITY
Actual Date: 10/1/1987
Action: CA075HI - CA Prioritization, Facility or area was assigned a high corrective action priority
NAICS Code(s): 325413 326199 331521 332322
In-Vitro Diagnostic Substance Manufacturing
All Other Plastics Product Manufacturing
Aluminum Die-Casting Foundries
Sheet Metal Work Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: CAD009122557
EPA Region: 9
Area Name: ENTIRE FACILITY
Actual Date: 10/1/1987
Action: CA074HI
NAICS Code(s): 325413 326199 331521 332322
In-Vitro Diagnostic Substance Manufacturing
All Other Plastics Product Manufacturing
Aluminum Die-Casting Foundries
Sheet Metal Work Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: CAD009122557
EPA Region: 9
Area Name: ENTIRE FACILITY
Actual Date: 10/1/1987
Action: CA050 - RFA Completed
NAICS Code(s): 325413 326199 331521 332322
In-Vitro Diagnostic Substance Manufacturing
All Other Plastics Product Manufacturing

HEWLETT PACKARD CO MFG DIV (Continued) **1000281823**

Aluminum Die-Casting Foundries
Sheet Metal Work Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: CAD009122557
EPA Region: 9
Area Name: ENTIRE FACILITY
Actual Date: 10/1/1987
Action: CA049PA
NAICS Code(s): 325413 326199 331521 332322
In-Vitro Diagnostic Substance Manufacturing
All Other Plastics Product Manufacturing
Aluminum Die-Casting Foundries
Sheet Metal Work Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: CAD009122557
EPA Region: 9
Area Name: ENTIRE FACILITY
Actual Date: 10/1/1987
Action: CA029ST
NAICS Code(s): 325413 326199 331521 332322
In-Vitro Diagnostic Substance Manufacturing
All Other Plastics Product Manufacturing
Aluminum Die-Casting Foundries
Sheet Metal Work Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: CAD009122557
EPA Region: 9
Area Name: ENTIRE FACILITY
Actual Date: 12/28/2000
Action: CA725YE - Current Human Exposures Under Control, Yes, Current Human Exposures Under Control has been verified
NAICS Code(s): 325413 326199 331521 332322
In-Vitro Diagnostic Substance Manufacturing
All Other Plastics Product Manufacturing
Aluminum Die-Casting Foundries
Sheet Metal Work Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: CAD009122557
EPA Region: 9
Area Name: ENTIRE FACILITY
Actual Date: 12/28/2000
Action: CA750YE - Migration of Contaminated Groundwater under Control, Yes, Migration of Contaminated Groundwater Under Control has been verified
NAICS Code(s): 325413 326199 331521 332322
In-Vitro Diagnostic Substance Manufacturing
All Other Plastics Product Manufacturing
Aluminum Die-Casting Foundries
Sheet Metal Work Manufacturing
Original schedule date: Not reported

HEWLETT PACKARD CO MFG DIV (Continued) **1000281823**

Schedule end date: Not reported

EPA ID: CAD009122557
EPA Region: 9
Area Name: ENTIRE FACILITY
Actual Date: 12/31/1987
Action: CA750YE - Migration of Contaminated Groundwater under Control, Yes, Migration of Contaminated Groundwater Under Control has been verified
NAICS Code(s): 325413 326199 331521 332322
In-Vitro Diagnostic Substance Manufacturing
All Other Plastics Product Manufacturing
Aluminum Die-Casting Foundries
Sheet Metal Work Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: CAD009122557
EPA Region: 9
Area Name: ENTIRE FACILITY
Actual Date: 12/31/1992
Action: CA650 - Stabilization Construction Completed
NAICS Code(s): 325413 326199 331521 332322
In-Vitro Diagnostic Substance Manufacturing
All Other Plastics Product Manufacturing
Aluminum Die-Casting Foundries
Sheet Metal Work Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: CAD009122557
EPA Region: 9
Area Name: ENTIRE FACILITY
Actual Date: Not reported
Action: CA048ST
NAICS Code(s): 325413 326199 331521 332322
In-Vitro Diagnostic Substance Manufacturing
All Other Plastics Product Manufacturing
Aluminum Die-Casting Foundries
Sheet Metal Work Manufacturing
Original schedule date: 04/06/1990
Schedule end date: Not reported

RCRA-SQG:
Date form received by agency: 09/01/1996
Facility name: HEWLETT PACKARD MFG DIV
Facility address: 395 PAGE MILL RD
PALO ALTO, CA 94306
EPA ID: CAD009122557
Contact: Not reported
Contact address: Not reported
Not reported
Contact country: Not reported
Contact telephone: Not reported
Contact email: Not reported
EPA Region: 09
Land type: Private
Classification: Small Small Quantity Generator

HEWLETT PACKARD CO MFG DIV (Continued) **1000281823**

Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name: HEWLETT PACKARD CO
Owner/operator address: 395 PAGE MILL RD
PALO ALTO, CA 94306
Owner/operator country: Not reported
Owner/operator telephone: (415) 857-5809
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: HEWLETT PACKARD CO PALO ALTO FABRCTN
Owner/operator address: 395 PAGE MILL ROAD
CITY NOT REPORTED, CA 99999
Owner/operator country: Not reported
Owner/operator telephone: (415) 857-5785
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: Unknown
Mixed waste (haz. and radioactive): Unknown
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: Unknown
Furnace exemption: Unknown
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No
Off-site waste receiver: Verified to be non-commercial

Historical Generators:

Date form received by agency: 09/01/1996
Facility name: HEWLETT PACKARD MFG DIV
Classification: Small Quantity Generator

Date form received by agency: 02/12/1996
Facility name: HEWLETT PACKARD MFG DIV
Site name: HEWLETT-PACKARD - PAFC
Classification: Large Quantity Generator

Date form received by agency: 08/08/1995

HEWLETT PACKARD CO MFG DIV (Continued) **1000281823**

Facility name: HEWLETT PACKARD MFG DIV
Classification: Large Quantity Generator

Date form received by agency: 03/09/1994
Facility name: HEWLETT PACKARD MFG DIV
Site name: HEWLETT PACKARD PAFC
Classification: Large Quantity Generator

Date form received by agency: 02/25/1992
Facility name: HEWLETT PACKARD MFG DIV
Site name: HEWLETT PACKARD FABRICATION CE
Classification: Large Quantity Generator

Date form received by agency: 04/11/1990
Facility name: HEWLETT PACKARD MFG DIV
Site name: HEWLETT PACKARD FABRICATION CENTER
Classification: Large Quantity Generator

Corrective Action Summary:

Event date: 01/01/1986
Event: Stabilization Measures Implemented, Groundwater extraction and treatment (e.g., to achieve groundwater containment, to achieve MCL).

Event date: 01/01/1986
Event: Stabilization Measures Implemented, Primary measure is source removal and/or treatment (e.g., soil or waste excavation, in-situ soil treatment, off-site treatment).

Event date: 10/01/1987
Event: RFA Completed

Event date: 10/01/1987
Event: CA Prioritization, Facility or area was assigned a high corrective action priority.

Event date: 10/01/1987
Event: CA074HI

Event date: 10/01/1987
Event: CA049PA

Event date: 10/01/1987
Event: CA029ST

Event date: 12/31/1987
Event: Igration of Contaminated Groundwater under Control, Yes, Migration of Contaminated Groundwater Under Control has been verified. Based on a review of information contained in the EI determination, it has been determined that migration of contaminated groundwater is under control at the facility. Specifically, this determination indicates that the migration of contaminated groundwater is under control, and that monitoring will be conducted to confirm that contaminated groundwater remains within the existing area of contaminated groundwater. This determination will be re-evaluated when the Agency becomes aware of significant changes at the facility.

Event date: 04/19/1989

HEWLETT PACKARD CO MFG DIV (Continued) **1000281823**

Event:	CMS Imposition
Event date:	04/19/1989
Event:	RFI Imposition
Event date:	09/30/1992
Event:	Current Human Exposures under Control, Yes, Current Human Exposures Under Control has been verified. Based on a review of information contained in the EI determination, current human exposures are expected to be under control at the facility under current and reasonably expected conditions. This determination will be re-evaluated when the Agency/State becomes aware of significant changes at the facility.
Event date:	12/31/1992
Event:	Stabilization Construction Completed
Event date:	07/27/1994
Event:	Stabilization Measures Evaluation,This facility is not amenable to stabilization activity at the present time for reasons other than 1- it appears to be technically infeasible or inappropriate (NF) or 2- there is a lack of technical information (IN). Reasons for this conclusion may be the status of closure at the facility, the degree of risk, timing considerations, the status of corrective action work at the facility, or other administrative considerations.
Event date:	07/28/1994
Event:	CA Prioritization, Facility or area was assigned a medium corrective action priority.
Event date:	09/21/1994
Event:	CMI Workplan Approved
Event date:	09/21/1994
Event:	Corrective Measures Design Approved
Event date:	09/21/1994
Event:	CMS Approved
Event date:	09/21/1994
Event:	RFI Approved
Event date:	09/21/1994
Event:	Date For Remedy Selection (CM Imposed)
Event date:	09/09/1996
Event:	Certification Of Remedy Completion Or Construction Completion
Event date:	09/19/1997
Event:	CA Responsibility Referred To A Non-RCRA Federal Authority
Event date:	12/28/2000
Event:	Igration of Contaminated Groundwater under Control, Yes, Migration of Contaminated Groundwater Under Control has been verified. Based on a review of information contained in the EI determination, it has been determined that migration of contaminated groundwater is under control at the facility. Specifically, this determination indicates that the

HEWLETT PACKARD CO MFG DIV (Continued) **1000281823**

migration of contaminated groundwater is under control, and that monitoring will be conducted to confirm that contaminated groundwater remains within the existing area of contaminated groundwater. This determination will be re-evaluated when the Agency becomes aware of significant changes at the facility.

Event date: 12/28/2000
Event: Current Human Exposures under Control, Yes, Current Human Exposures Under Control has been verified. Based on a review of information contained in the EI determination, current human exposures are expected to be under control at the facility under current and reasonably expected conditions. This determination will be re-evaluated when the Agency/State becomes aware of significant changes at the facility.

Event date: 09/22/2009
Event: CA800YE

Event date: Not reported
Event: CA048ST

Facility Has Received Notices of Violations:
Regulation violated: Not reported
Area of violation: TSD - Tank System Standards
Date violation determined: 04/02/1992
Date achieved compliance: 04/27/1992
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 04/07/1992
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 04/02/1992
Date achieved compliance: 04/27/1992
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 04/07/1992
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: LDR - General
Date violation determined: 04/02/1992
Date achieved compliance: 04/27/1992
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 04/07/1992

HEWLETT PACKARD CO MFG DIV (Continued) **1000281823**

Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - Contingency Plan and Emergency Procedures
Date violation determined: 04/02/1992
Date achieved compliance: 04/27/1992
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 04/07/1992
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - General Facility Standards
Date violation determined: 04/02/1992
Date achieved compliance: 04/27/1992
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 04/07/1992
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: LDR - General
Date violation determined: 08/30/1990
Date achieved compliance: 04/27/1992
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 10/04/1990
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - General
Date violation determined: 08/30/1990
Date achieved compliance: 04/27/1992
Violation lead agency: State
Enforcement action: INITIAL 3008(A) COMPLIANCE
Enforcement action date: 01/16/1991
Enf. disposition status: Not reported

HEWLETT PACKARD CO MFG DIV (Continued) **1000281823**

Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - General
Date violation determined: 08/30/1990
Date achieved compliance: 04/27/1992
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 10/04/1990
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: LDR - General
Date violation determined: 08/30/1990
Date achieved compliance: 04/27/1992
Violation lead agency: State
Enforcement action: INITIAL 3008(A) COMPLIANCE
Enforcement action date: 01/16/1991
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - General
Date violation determined: 09/28/1988
Date achieved compliance: 04/27/1992
Violation lead agency: State
Enforcement action: REFERRAL TO ATTORNEY GENERAL
Enforcement action date: 05/31/1989
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - General
Date violation determined: 09/28/1988
Date achieved compliance: 04/27/1992
Violation lead agency: State
Enforcement action: FINAL CIVIL JUDICIAL ACTION FOR IMMINENT AND SUBSTANTIAL ENDANGERMENT
Enforcement action date: 05/30/1989
Enf. disposition status: Not reported
Enf. disp. status date: Not reported

HEWLETT PACKARD CO MFG DIV (Continued) **1000281823**

Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - Manifest/Records/Reporting
Date violation determined: 09/28/1988
Date achieved compliance: 04/27/1992
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 12/27/1988
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - Manifest/Records/Reporting
Date violation determined: 09/28/1988
Date achieved compliance: 04/27/1992
Violation lead agency: State
Enforcement action: REFERRAL TO ATTORNEY GENERAL
Enforcement action date: 05/31/1989
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - Closure/Post-Closure
Date violation determined: 09/28/1988
Date achieved compliance: 04/27/1992
Violation lead agency: State
Enforcement action: FINAL CIVIL JUDICIAL ACTION FOR IMMINENT AND SUBSTANTIAL ENDANGERMENT
Enforcement action date: 05/30/1989
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - Manifest/Records/Reporting
Date violation determined: 09/28/1988
Date achieved compliance: 04/27/1992
Violation lead agency: State
Enforcement action: FINAL CIVIL JUDICIAL ACTION FOR IMMINENT AND SUBSTANTIAL ENDANGERMENT
Enforcement action date: 05/30/1989
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State

HEWLETT PACKARD CO MFG DIV (Continued) **1000281823**

Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - Closure/Post-Closure
Date violation determined: 09/28/1988
Date achieved compliance: 04/27/1992
Violation lead agency: State
Enforcement action: REFERRAL TO ATTORNEY GENERAL
Enforcement action date: 05/31/1989
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: LDR - General
Date violation determined: 09/28/1988
Date achieved compliance: 04/27/1992
Violation lead agency: State
Enforcement action: FINAL CIVIL JUDICIAL ACTION FOR IMMINENT AND SUBSTANTIAL ENDANGERMENT
Enforcement action date: 05/30/1989
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - General
Date violation determined: 09/28/1988
Date achieved compliance: 04/27/1992
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 12/27/1988
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: LDR - General
Date violation determined: 09/28/1988
Date achieved compliance: 04/27/1992
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 12/27/1988
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported

HEWLETT PACKARD CO MFG DIV (Continued) **1000281823**

Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - Closure/Post-Closure
Date violation determined: 09/28/1988
Date achieved compliance: 04/27/1992
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 12/27/1988
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: LDR - General
Date violation determined: 09/28/1988
Date achieved compliance: 04/27/1992
Violation lead agency: State
Enforcement action: REFERRAL TO ATTORNEY GENERAL
Enforcement action date: 05/31/1989
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Evaluation Action Summary:
Evaluation date: 07/27/1994
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 02/26/1992
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 04/27/1992
Evaluation lead agency: State

Evaluation date: 02/26/1992
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD - Contingency Plan and Emergency Procedures
Date achieved compliance: 04/27/1992
Evaluation lead agency: State

Evaluation date: 02/26/1992
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD - Tank System Standards
Date achieved compliance: 04/27/1992
Evaluation lead agency: State

Evaluation date: 02/26/1992

HEWLETT PACKARD CO MFG DIV (Continued) **1000281823**

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: LDR - General
Date achieved compliance: 04/27/1992
Evaluation lead agency: State

Evaluation date: 02/26/1992
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD - General Facility Standards
Date achieved compliance: 04/27/1992
Evaluation lead agency: State

Evaluation date: 02/05/1992
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 08/30/1990
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD - General
Date achieved compliance: 04/27/1992
Evaluation lead agency: State

Evaluation date: 08/30/1990
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: LDR - General
Date achieved compliance: 04/27/1992
Evaluation lead agency: State

Evaluation date: 08/13/1990
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 09/28/1988
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD - Closure/Post-Closure
Date achieved compliance: 04/27/1992
Evaluation lead agency: State

Evaluation date: 09/28/1988
Evaluation: FOCUSED COMPLIANCE INSPECTION
Area of violation: LDR - General
Date achieved compliance: 04/27/1992
Evaluation lead agency: State

Evaluation date: 09/28/1988
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD - Manifest/Records/Reporting
Date achieved compliance: 04/27/1992
Evaluation lead agency: State

Evaluation date: 09/28/1988
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD - General
Date achieved compliance: 04/27/1992

HEWLETT PACKARD CO MFG DIV (Continued) **1000281823**

Evaluation lead agency: State

Evaluation date: 09/06/1988
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

FINDS:

Registry ID: 110000609299

Environmental Interest/Information System

The NEI (National Emissions Inventory) database contains information on stationary and mobile sources that emit criteria air pollutants and their precursors, as well as hazardous air pollutants (HAPs).

US EPA TRIS (Toxics Release Inventory System) contains information from facilities on the amounts of over 300 listed toxic chemicals that these facilities release directly to air, water, land, or that are transported off-site.

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

CORTESE:
Region: CORTESE
Facility County Code: 43
Reg By: WBC&D
Reg Id: 2 438131N01

LUST:
Region: STATE
Global Id: T0608502399
Latitude: 37.425053
Longitude: -122.138997
Case Type: LUST Cleanup Site
Status: Completed - Case Closed
Status Date: 1999-08-02 00:00:00
Lead Agency: SANTA CLARA COUNTY LOP
Case Worker: UST
Local Agency: SANTA CLARA COUNTY LOP
RB Case Number: Not reported
LOC Case Number: Not reported
File Location: Stored electronically as an E-file
Potential Media Affect: Soil
Potential Contaminants of Concern: Waste Oil / Motor / Hydraulic / Lubricating
Site History: Not reported

Click here to access the California GeoTracker records for this facility:

HEWLETT PACKARD CO MFG DIV (Continued) **1000281823**

LUST REG 2:
Region: 2
Facility Id: Not reported
Facility Status: Case Closed
Case Number: 06S3W12K05f
How Discovered: Not reported
Leak Cause: Not reported
Leak Source: Not reported
Date Leak Confirmed: Not reported
Oversight Program: LUST
Prelim. Site Assesment Wokplan Submitted: Not reported
Preliminary Site Assesment Began: 5/20/1999
Pollution Characterization Began: 6/3/1999
Pollution Remediation Plan Submitted: Not reported
Date Remediation Action Underway: Not reported
Date Post Remedial Action Monitoring Began: Not reported

LUST SANTA CLARA:
Region: SANTA CLARA
SCVWD ID: 06S3W12K05f
Closed Date: 8/2/1999

HIST LUST SANTA CLARA:
Region: SANTA CLARA
Region Code: 2
SCVWD ID: 06S3W12K05
Oversite Agency: SCVWD
Date Listed: 1999-08-02 00:00:00
Closed Date: 1999-08-02 00:00:00

ENVIROSTOR:
Site Type: Corrective Action
Site Type Detailed: Corrective Action
Acres: 1
NPL: NO
Regulatory Agencies: RWQCB 2 - San Francisco Bay
Lead Agency: RWQCB 2 - San Francisco Bay
Program Manager: Not reported
Supervisor: Referred - Not Assigned
Division Branch: Berkeley
Facility ID: 80001599
Site Code: Not reported
Assembly: 21
Senate: 21
Special Program: Not reported
Status: Refer: RWQCB
Status Date: 1/1/2008
Restricted Use: NO
Site Mgmt. Req.: NONE SPECIFIED
Funding: Not reported
Latitude: 37.424920179718903
Longitude: -122.13908672332801
APN: 132-32-047
Past Use: NONE SPECIFIED
Potential COC: NONE SPECIFIED

HEWLETT PACKARD CO MFG DIV (Continued) **1000281823**

Confirmed COC: NONE SPECIFIED
Potential Description: NONE SPECIFIED
Alias Name: 132-32-047
Alias Type: APN
Alias Name: CAD009122557
Alias Type: EPA Identification Number
Alias Name: 80001599
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: RCRA Facility Assessment Report
Completed Date: 1987-10-01 00:00:00
Comments: Not reported

Completed Area Name: Sites With No Operable Unit
Completed Sub Area Name: ENTIRE FACILITY
Completed Document Type: Remedy Selection and Statement of Basis
Completed Date: 1994-09-21 00:00:00
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: RCRA Facility Assessment Report
Completed Date: 1987-10-01 00:00:00
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Consent Agreement
Completed Date: 1994-09-21 00:00:00
Comments: Not reported

Completed Area Name: Sites With No Operable Unit
Completed Sub Area Name: ENTIRE FACILITY
Completed Document Type: Consent Agreement
Completed Date: 1989-04-19 00:00:00
Comments: Not reported

Completed Area Name: Sites With No Operable Unit
Completed Sub Area Name: ENTIRE FACILITY
Completed Document Type: Interim Measures Questionnaire
Completed Date: 1994-07-27 00:00:00
Comments: Not reported

Completed Area Name: Sites With No Operable Unit
Completed Sub Area Name: ENTIRE FACILITY
Completed Document Type: Interim Measures Workplan
Completed Date: 1986-01-01 00:00:00
Comments: Not reported

Completed Area Name: Sites With No Operable Unit
Completed Sub Area Name: ENTIRE FACILITY
Completed Document Type: Corrective Measure Implementation Workplan
Completed Date: 1994-09-21 00:00:00
Comments: Not reported

HEWLETT PACKARD CO MFG DIV (Continued) **1000281823**

Completed Area Name: Sites With No Operable Unit
Completed Sub Area Name: ENTIRE FACILITY
Completed Document Type: Design/Implementation Workplan
Completed Date: 1994-09-21 00:00:00
Comments: Not reported

Completed Area Name: Sites With No Operable Unit
Completed Sub Area Name: ENTIRE FACILITY
Completed Document Type: Preliminary Assessment Report
Completed Date: 1987-10-01 00:00:00
Comments: Not reported

Completed Area Name: Sites With No Operable Unit
Completed Sub Area Name: ENTIRE FACILITY
Completed Document Type: Interim Measures Implementation Report
Completed Date: 1992-12-31 00:00:00
Comments: Not reported

Completed Area Name: Sites With No Operable Unit
Completed Sub Area Name: ENTIRE FACILITY
Completed Document Type: RFI Report
Completed Date: 1994-09-21 00:00:00
Comments: Not reported

Completed Area Name: Sites With No Operable Unit
Completed Sub Area Name: ENTIRE FACILITY
Completed Document Type: Interim Measures Workplan
Completed Date: 1986-01-01 00:00:00
Comments: Not reported

Completed Area Name: Sites With No Operable Unit
Completed Sub Area Name: ENTIRE FACILITY
Completed Document Type: Remedy Constructed: Operating Properly & Successfully
Completed Date: 1996-09-09 00:00:00
Comments: Not reported

Completed Area Name: Sites With No Operable Unit
Completed Sub Area Name: ENTIRE FACILITY
Completed Document Type: Corrective Measures Study Report
Completed Date: 1994-09-21 00:00:00
Comments: Not reported

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

FINANCIAL ASSURANCE:
EPA ID Number: CAD009122557
Closure Mechanism: FT
Closure Amount: 187,302
Post Clousure Mechanism: Not reported

HEWLETT PACKARD CO MFG DIV (Continued) **1000281823**

Post Clousure Amount:	Not reported
Corrective Action Mechanism:	Not reported
Corrective Action Amount:	Not reported
Sudden Mecahanism Type:	Not reported
Sudden Mecahanism Amount:	Not reported
Non Sudden Mecahanism Type:	Not reported
Non Sudden Mecahanism Amount:	Not reported

HWP:

EPA Id:	CAD009122557
Latitude:	37.424455
Longitude:	-122.140892
Facility Type:	HAZ WASTE - NON-OPERATING
Cleanup Status:	Not reported
Region:	BERKELEY; STANDARDIZED PERMIT & CORRECTIVE ACTION
Permit Maintenance Lead:	Not reported
Permit Renewal Lead:	Not reported
Corrective Action Lead:	Not reported
Supervisor:	Not reported
Site Code:	Not reported
Assembly District:	Not reported
Senate District:	Not reported
Public Information Officer:	Not reported
Facility Status:	Not reported
Site History:	Not reported

HWP:

EPA Id:	CAD009122557
Unit Names:	SO1
Event Description:	Withdrawal Request Determination
Actual Date:	1994-06-10 00:00:00
Doc Comments:	Not reported

EPA Id:	CAD009122557
Unit Names:	SO1, SO2, TO1, TO4
Event Description:	Notice of Deficiency
Actual Date:	1989-02-16 00:00:00
Doc Comments:	Not reported

EPA Id:	CAD009122557
Unit Names:	SO1, SO2, TO1, TO4
Event Description:	Part A Received
Actual Date:	1985-12-20 00:00:00
Doc Comments:	Not reported

EPA Id:	CAD009122557
Unit Names:	SO1, SO2, TO1, TO4
Event Description:	Part A Received
Actual Date:	1980-11-18 00:00:00
Doc Comments:	Not reported

HWP:

EPA Id:	CAD009122557
Unit Names:	SO1
Event Description:	Closure Verification
Actual Date:	1994-06-10 00:00:00
Doc Comments:	Not reported

HEWLETT PACKARD CO MFG DIV (Continued) **1000281823**

EPA Id:	CAD009122557
Unit Names:	SO1
Event Description:	Plan Approved - Closure
Actual Date:	1994-06-10 00:00:00
Doc Comments:	Not reported

EPA Id:	CAD009122557
Unit Names:	SO1
Event Description:	Public Notice - Closure
Actual Date:	1994-05-04 00:00:00
Doc Comments:	Not reported

EPA Id:	CAD009122557
Unit Names:	SO1
Event Description:	Notice of Deficiency - Closure Plan
Actual Date:	1994-02-24 00:00:00
Doc Comments:	Not reported

J49 **HEWLETT-PACKARD CO. - PALO ALTO FABRICA CTR.** **EMI** **S107620078**
WNW **395 PAGE MILL ROAD** **ENVIROSTOR** **N/A**
1/8-1/4 **PALO ALTO, CA 94306**
0.147 mi.
778 ft. **Site 3 of 8 in cluster J**

Relative:
Higher

Actual:
32 ft.

EMI:

Year:	2004
County Code:	43
Air Basin:	SF
Facility ID:	14787
Air District Name:	BA
SIC Code:	3825
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0.004
Reactive Organic Gases Tons/Yr:	0.0033468
Carbon Monoxide Emissions Tons/Yr:	0.011
NOX - Oxides of Nitrogen Tons/Yr:	0.049
SOX - Oxides of Sulphur Tons/Yr:	0.001
Particulate Matter Tons/Yr:	0.004
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0.003904

Year:	2005
County Code:	43
Air Basin:	SF
Facility ID:	14787
Air District Name:	BA
SIC Code:	3825
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	.004
Reactive Organic Gases Tons/Yr:	.0033468
Carbon Monoxide Emissions Tons/Yr:	.011
NOX - Oxides of Nitrogen Tons/Yr:	.049
SOX - Oxides of Sulphur Tons/Yr:	.001
Particulate Matter Tons/Yr:	.004

HEWLETT-PACKARD CO. - PALO ALTO FABRICA CTR. (Continued) **S107620078**

Part. Matter 10 Micrometers & Smllr Tons/Yr: .003904

ENVIROSTOR:

Site Type:	Not reported
Site Type Detailed:	Tiered Permit
Acres:	Not reported
NPL:	NO
Regulatory Agencies:	NONE SPECIFIED
Lead Agency:	NONE SPECIFIED
Program Manager:	Not reported
Supervisor:	Not reported
Division Branch:	Cypress
Facility ID:	71002260
Site Code:	Not reported
Assembly:	21
Senate:	11
Special Program:	Not reported
Status:	Not reported
Status Date:	Not reported
Restricted Use:	NO
Site Mgmt. Req.:	NONE SPECIFIED
Funding:	Not reported
Latitude:	37.424930000000003
Longitude:	-122.13905200000001
APN:	NONE SPECIFIED
Past Use:	NONE SPECIFIED
Potential COC:	NONE SPECIFIED
Confirmed COC:	NONE SPECIFIED
Potential Description:	NONE SPECIFIED
Alias Name:	CAD009122557
Alias Type:	EPA Identification Number

Completed Info:

Completed Area Name:	Not reported
Completed Sub Area Name:	Not reported
Completed Document Type:	Not reported
Completed Date:	Not reported
Comments:	Not reported
Future Area Name:	Not reported
Future Sub Area Name:	Not reported
Future Document Type:	Not reported
Future Due Date:	Not reported
Schedule Area Name:	Not reported
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Not reported
Schedule Due Date:	Not reported
Schedule Revised Date:	Not reported

J50 **HEWLETT-PACKARD COMPANY** **SLIC** **S103657011**
WNW **395 PAGE MILL RD** **HAZNET** **N/A**
1/8-1/4 **PALO ALTO, CA 94306**
0.147 mi.
778 ft. **Site 4 of 8 in cluster J**

Relative:
Higher

Actual:
32 ft.

SLIC:

Region:	STATE
Facility Status:	**Open - Remediation**
Status Date:	1989-01-01 00:00:00
Global Id:	SL18321741
Lead Agency:	SAN FRANCISCO BAY RWQCB (REGION 2)
Lead Agency Case Number:	Not reported
Latitude:	37.4249287000276
Longitude:	-122.139000892639
Case Type:	Cleanup Program Site
Case Worker:	RWP
Local Agency:	SANTA CLARA VALLEY WATER DISTRICT
RB Case Number:	43S0053
File Location:	Regional Board
Potential Media Affected:	Other Groundwater (uses other than drinking water), Soil
Potential Contaminants of Concern:	1,1,1-Trichloroethane (TCA), Other Chlorinated Hydrocarbons, Tetrachloroethylene (PCE), Trichloroethylene (TCE)
Site History:	This site is part of the COE Study Area - bounded by California, Olive, and Emerson Streets - that includes HP 640 PMR (MSCA site) and Varian 601 California. As part of the dual phase extraction (DPE) system GWET was shut down after reaching asymptotic groundwater-CVOC levels in 2001. Subsequent In-Situ Chemical Oxidation (ISCO) began late 2007 when groundwater CVOC levels in well RW-5 were still peaking at over 800 parts per billion (ppb). ISCO baseline groundwater sampling indicated that well OB11-2 - that had not been sampled since 1997 - contained PCE at 120,000 ppb. Subsequent ISCO injections reduced PCE levels below 50 ppb that rebounded to over 1,000 ppb by the next ISCO monitoring event. When elevated groundwater-PCE levels were noted in OB11-2, the Water Board required a workplan to evaluate potential vapor intrusion assessment that was reviewed and approved in January 2008.

Click here to access the California GeoTracker records for this facility:

HAZNET:

Gepaid:	CAD009122557
Contact:	HEWLETT PACKARD COMPANY
Telephone:	4158576882
Facility Addr2:	Not reported
Mailing Name:	Not reported
Mailing Address:	1501 PAGE MILL ROAD MS 5UE
Mailing City,St,Zip:	PALO ALTO, CA 943041112
Gen County:	Santa Clara
TSD EPA ID:	AZD982441263
TSD County:	99
Waste Category:	Organic solids with halogens
Disposal Method:	Recycler
Tons:	1.1100
Facility County:	Santa Clara

Gepaid:	CAD009122557
Contact:	HEWLETT PACKARD COMPANY
Telephone:	4158576882

HEWLETT-PACKARD COMPANY (Continued) **S103657011**

Facility Addr2:	Not reported
Mailing Name:	Not reported
Mailing Address:	1501 PAGE MILL ROAD MS 5UE
Mailing City,St,Zip:	PALO ALTO, CA 943041112
Gen County:	Santa Clara
TSD EPA ID:	CAD059494310
TSD County:	Santa Clara
Waste Category:	Unspecified organic liquid mixture
Disposal Method:	Disposal, Other
Tons:	13.1561
Facility County:	Santa Clara

Gepaid:	CAD009122557
Contact:	HEWLETT PACKARD COMPANY
Telephone:	4158576882
Facility Addr2:	Not reported
Mailing Name:	Not reported
Mailing Address:	1501 PAGE MILL ROAD MS 5UE
Mailing City,St,Zip:	PALO ALTO, CA 943041112
Gen County:	Santa Clara
TSD EPA ID:	CAD059494310
TSD County:	Santa Clara
Waste Category:	Metal sludge - Alkaline solution (pH <UN-> 12.5) with metals (antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, lead, mercury, molybdenum, nickel, selenium, silver, thallium, vanadium, and zinc)
Disposal Method:	Disposal, Other
Tons:	.4720
Facility County:	Santa Clara

Gepaid:	CAD009122557
Contact:	HEWLETT PACKARD COMPANY
Telephone:	4158576882
Facility Addr2:	Not reported
Mailing Name:	Not reported
Mailing Address:	1501 PAGE MILL ROAD MS 5UE
Mailing City,St,Zip:	PALO ALTO, CA 943041112
Gen County:	Santa Clara
TSD EPA ID:	CAD059494310
TSD County:	Santa Clara
Waste Category:	Oxygenated solvents (acetone, butanol, ethyl acetate, etc.)
Disposal Method:	Disposal, Other
Tons:	.2918
Facility County:	Santa Clara

Gepaid:	CAD009122557
Contact:	HEWLETT PACKARD COMPANY
Telephone:	4158576882
Facility Addr2:	Not reported
Mailing Name:	Not reported
Mailing Address:	1501 PAGE MILL ROAD MS 5UE
Mailing City,St,Zip:	PALO ALTO, CA 943041112
Gen County:	Santa Clara
TSD EPA ID:	CAD059494310
TSD County:	Santa Clara
Waste Category:	Other organic solids
Disposal Method:	Transfer Station

HEWLETT-PACKARD COMPANY (Continued) **S103657011**

Tons: .0450
Facility County: Santa Clara

Click this hyperlink while viewing on your computer to access
Other organic solids

J51 **BLEIBLER IRON WORKS INC.** **HIST UST** **U001595946**
WNW **411-PAGE MILL ROAD** **N/A**
1/8-1/4 **PALO ALTO, CA 94306**
0.149 mi.
785 ft. **Site 5 of 8 in cluster J**

Relative:
Higher

Actual:
32 ft.

HIST UST:
Region: STATE
Facility ID: 00000010796
Facility Type: Other
Other Type: IRON FABRICATION
Total Tanks: 0001
Contact Name: ROBERT A. BLEIBLER
Telephone: 4153223941
Owner Name: BLEIBLER IRON WORKS INC.
Owner Address: 411-PAGE MILL ROAD
Owner City,St,Zip: PALO ALTO, CA 94306

Tank Num: 001
Container Num: 0001
Year Installed: 1958
Tank Capacity: 00000550
Tank Used for: PRODUCT
Type of Fuel: REGULAR
Tank Construction: Not reported
Leak Detection: None

J52 **BLEIBLER IRON WORKS** **HIST CORTESE** **S101440239**
WNW **411 PAGE MILL RD** **LUST** **N/A**
1/8-1/4 **PALO ALTO, CA 94306** **HIST LUST**
0.149 mi.
785 ft. **Site 6 of 8 in cluster J**

Relative:
Higher

Actual:
32 ft.

CORTESE:
Region: CORTESE
Facility County Code: 43
Reg By: LTNKA
Reg Id: 43-1820

LUST:
Region: STATE
Global Id: T0608501747
Latitude: 37.424047
Longitude: -122.140191
Case Type: LUST Cleanup Site
Status: Completed - Case Closed
Status Date: 1995-05-08 00:00:00
Lead Agency: SAN FRANCISCO BAY RWQCB (REGION 2)
Case Worker: UNK
Local Agency: SANTA CLARA COUNTY LOP

BLEIBLER IRON WORKS (Continued) **S101440239**

RB Case Number: 43-1820
LOC Case Number: Not reported
File Location: Not reported
Potential Media Affect: Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern: Gasoline
Site History: Not reported

Click here to access the California GeoTracker records for this facility:

LUST REG 2:
Region: 2
Facility Id: 43-1820
Facility Status: Case Closed
Case Number: 06S3W12K01
How Discovered: Tank Closure
Leak Cause: Structure Failure
Leak Source: Tank
Date Leak Confirmed: Not reported
Oversight Program: LUST
Prelim. Site Assesment Wokplan Submitted: 9/11/1990
Preliminary Site Assesment Began: 10/31/1990
Pollution Characterization Began: Not reported
Pollution Remediation Plan Submitted: Not reported
Date Remediation Action Underway: Not reported
Date Post Remedial Action Monitoring Began: Not reported

HIST LUST SANTA CLARA:
Region: SANTA CLARA
Region Code: 2
SCVWD ID: 06S3W12K01
Oversite Agency: SFRWQCB
Date Listed: 1990-01-01 00:00:00
Closed Date: 1995-05-08 00:00:00

J53 **BLEIBER IRON WORKS** **LUST** **S107995444**
WNW **411 PAGE MILL RD** **N/A**
1/8-1/4 **PALO ALTO, CA**
0.149 mi.
785 ft. **Site 7 of 8 in cluster J**

Relative:
Higher

Actual:
32 ft.

LUST SANTA CLARA:
Region: SANTA CLARA
SCVWD ID: 06S3W12K01f
Closed Date: 5/8/1995

J54 **BLEIBLER IRON WORKS INC.** **CA FID UST** **S101623426**
WNW **411 PAGE MILL RD** **SWEEPS UST** **N/A**
1/8-1/4 **PALO ALTO, CA 94306** **HAZNET**
0.149 mi.
785 ft. **Site 8 of 8 in cluster J**

Relative:
Higher

Actual:
32 ft.

CA FID UST:
Facility ID: 43012196
Regulated By: UTNKA
Regulated ID: 00010796

BLEIBLER IRON WORKS INC. (Continued) **S101623426**

Cortese Code: Not reported
SIC Code: Not reported
Facility Phone: 4153223941
Mail To: Not reported
Mailing Address: SAME
Mailing Address 2: Not reported
Mailing City,St,Zip: PALO ALTO 94306
Contact: Not reported
Contact Phone: Not reported
DUNs Number: Not reported
NPDES Number: Not reported
EPA ID: Not reported
Comments: Not reported
Status: Active

SWEEPS UST:
Status: A
Comp Number: 10796
Number: 9
Board Of Equalization: Not reported
Ref Date: 07-01-85
Act Date: Not reported
Created Date: 02-29-88
Tank Status: A
Owner Tank Id: 1
Swrcb Tank Id: 43-006-010796-000001
Actv Date: 07-01-85
Capacity: 550
Tank Use: M.V. FUEL
Stg: P
Content: LEADED
Number Of Tanks: 1

HAZNET:
Gepaid: CAC002299537
Contact: BLEIBLER IRON WORKS INC
Telephone: 6503223941
Facility Addr2: Not reported
Mailing Name: Not reported
Mailing Address: 411 PAGE MILL RD
Mailing City,St,Zip: PALO ALTO, CA 943060000
Gen County: Santa Clara
TSD EPA ID: CAD008252405
TSD County: Los Angeles
Waste Category: Liquids with halogenated organic compounds > 1000 mg/l
Disposal Method: Recycler
Tons: .0625
Facility County: Santa Clara

Gepaid: CAC002299537
Contact: BLEIBLER IRON WORKS INC
Telephone: 6503223941
Facility Addr2: Not reported
Mailing Name: Not reported
Mailing Address: 411 PAGE MILL RD
Mailing City,St,Zip: PALO ALTO, CA 943060000

BLEIBLER IRON WORKS INC. (Continued) **S101623426**

Gen County: Santa Clara
TSD EPA ID: CAD982444481
TSD County: San Bernardino
Waste Category: Waste oil and mixed oil
Disposal Method: Transfer Station
Tons: .0700
Facility County: Santa Clara

I55 **OFFICES OF VANCE M. BROWN & SO** **HIST UST** **U001595962**
NW **2747 PARK BLVD** **N/A**
1/8-1/4 **PALO ALTO, CA 94306**
0.153 mi.
809 ft. **Site 6 of 9 in cluster I**

Relative:
Higher

Actual:
23 ft.

HIST UST:
Region: STATE
Facility ID: 00000010713
Facility Type: Other
Other Type: GENERAL CONTRACTORS
Total Tanks: 0002
Contact Name: ALLAN F. BROWN
Telephone: 4153218432
Owner Name: BROWN INVESTMENT COMPANY
Owner Address: 2747 PARK BOULEVARD
Owner City,St,Zip: PALO ALTO, CA 94306

Tank Num: 001
Container Num: 1
Year Installed: 1964
Tank Capacity: 00000550
Tank Used for: PRODUCT
Type of Fuel: REGULAR
Tank Construction: 10OR12 gauge
Leak Detection: Stock Inventor

Tank Num: 002
Container Num: 2
Year Installed: 1977
Tank Capacity: 00001000
Tank Used for: PRODUCT
Type of Fuel: UNLEADED
Tank Construction: 10OR12 gauge
Leak Detection: Stock Inventor

I56 **VANCE BROWN AND SONS** **SLIC** **S101542369**
NW **2747 PARK BLVD** **HAZNET** **N/A**
1/8-1/4 **PALO ALTO, CA 94306**
0.153 mi.
809 ft. **Site 7 of 9 in cluster I**

Relative:
Higher

Actual:
23 ft.

SLIC:
Region: STATE
Facility Status: **Open - Inactive**
Status Date: 2009-04-17 00:00:00
Global Id: T0608591678
Lead Agency: SAN FRANCISCO BAY RWQCB (REGION 2)

VANCE BROWN AND SONS (Continued) **S101542369**

Lead Agency Case Number:	Not reported
Latitude:	37.426612
Longitude:	-122.139431
Case Type:	Cleanup Program Site
Case Worker:	UUU
Local Agency:	Not reported
RB Case Number:	43S0736
File Location:	Not reported
Potential Media Affected:	Under Investigation
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

SLIC:

Region:	2
Facility ID:	43S0736
Facility Status:	Leak being confirmed
Date Closed:	Not reported
Local Case #:	Not reported
How Discovered:	Tank Closure
Leak Cause:	UNK
Leak Source:	UNK
Date Confirmed:	1/1/1991
Date Prelim Site Assmnt Workplan Submitted:	Not reported
Date Preliminary Site Assessment Began:	Not reported
Date Pollution Characterization Began:	Not reported
Date Remediation Plan Submitted:	Not reported
Date Remedial Action Underway:	Not reported
Date Post Remedial Action Monitoring Began:	Not reported

HAZNET:

Gepaid:	CAC002633276
Contact:	LARRY OLVERA
Telephone:	4086870036
Facility Addr2:	Not reported
Mailing Name:	Not reported
Mailing Address:	2747 PARK BLVD
Mailing City,St,Zip:	PALO ALTO, CA 94306
Gen County:	Santa Clara
TSD EPA ID:	CAD028409019
TSD County:	Los Angeles
Waste Category:	Other inorganic solid waste
Disposal Method:	H141
Tons:	0.3
Facility County:	Santa Clara

Gepaid:	CAC002639755
Contact:	FILIP LILITIC
Telephone:	5107150163
Facility Addr2:	Not reported
Mailing Name:	Not reported
Mailing Address:	8201 EDGEWATER DR STE 202
Mailing City,St,Zip:	OAKLAND, CA 94621
Gen County:	Santa Clara
TSD EPA ID:	NVD982358483

VANCE BROWN AND SONS (Continued) **S101542369**

TSD County: 99
Waste Category: Waste oil and mixed oil
Disposal Method: H061
Tons: 0.0114
Facility County: Santa Clara

Gepaid: CAC002639755
Contact: FILIP LILITIC
Telephone: 5107150163
Facility Addr2: Not reported
Mailing Name: Not reported
Mailing Address: 8201 EDGEWATER DR STE 202
Mailing City,St,Zip: OAKLAND, CA 94621
Gen County: Santa Clara
TSD EPA ID: NVD982358483
TSD County: 99
Waste Category: Aqueous solution with less than 10% total organic residues
Disposal Method: H141
Tons: 0.0042
Facility County: Santa Clara

Gepaid: CAC002639755
Contact: FILIP LILITIC
Telephone: 5107150163
Facility Addr2: Not reported
Mailing Name: Not reported
Mailing Address: 8201 EDGEWATER DR STE 202
Mailing City,St,Zip: OAKLAND, CA 94621
Gen County: Santa Clara
TSD EPA ID: CAT080013352
TSD County: Los Angeles
Waste Category: Off-specification, aged, or surplus organics
Disposal Method: H061
Tons: 0.066
Facility County: Santa Clara

Gepaid: CAC002639755
Contact: FILIP LILITIC
Telephone: 5107150163
Facility Addr2: Not reported
Mailing Name: Not reported
Mailing Address: 8201 EDGEWATER DR STE 202
Mailing City,St,Zip: OAKLAND, CA 94621
Gen County: Santa Clara
TSD EPA ID: NVD982358483
TSD County: 99
Waste Category: Other organic solids
Disposal Method: H141
Tons: 0.0375
Facility County: Santa Clara

Click this hyperlink while viewing on your computer to access
Other organic solids

I57 **VANCE BROWN & SONS** **HIST CORTESE** **S101303810**
NW **2747 PARK BLVD** **LUST** **N/A**
1/8-1/4 **PALO ALTO, CA 94306** **HIST LUST**
0.153 mi.
809 ft. **Site 8 of 9 in cluster I**

Relative:
Higher

Actual:
23 ft.

CORTESE:
Region: CORTESE
Facility County Code: 43
Reg By: LTNKA
Reg Id: 43-1923

LUST:
Region: STATE
Global Id: T0608501823
Latitude: 37.426475
Longitude: -122.138588
Case Type: LUST Cleanup Site
Status: Completed - Case Closed
Status Date: 1997-02-06 00:00:00
Lead Agency: SANTA CLARA COUNTY LOP
Case Worker: UST
Local Agency: SANTA CLARA COUNTY LOP
RB Case Number: Not reported
LOC Case Number: Not reported
File Location: Stored electronically as an E-file
Potential Media Affect: Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern: Gasoline
Site History: Not reported

Click here to access the California GeoTracker records for this facility:

LUST REG 2:
Region: 2
Facility Id: Not reported
Facility Status: Case Closed
Case Number: 06S3W12G02f
How Discovered: Not reported
Leak Cause: Not reported
Leak Source: Not reported
Date Leak Confirmed: Not reported
Oversight Program: LUST
Prelim. Site Assesment Wokplan Submitted: Not reported
Preliminary Site Assesment Began: 10/22/1984
Pollution Characterization Began: 8/28/1989
Pollution Remediation Plan Submitted: Not reported
Date Remediation Action Underway: Not reported
Date Post Remedial Action Monitoring Began: Not reported

LUST SANTA CLARA:
Region: SANTA CLARA
SCVWD ID: 06S3W12G02f
Closed Date: 2/6/1997

HIST LUST SANTA CLARA:
Region: SANTA CLARA
Region Code: 2

VANCE BROWN & SONS (Continued) **S101303810**

SCVWD ID: 06S3W12G02
Oversite Agency: SCVWD
Date Listed: 1998-01-01 00:00:00
Closed Date: 1997-02-06 00:00:00

I58 **OFFICES OF VANCE M. BROWN & SO** **CA FID UST** **S101623434**
NW **2747 PARK BLVD** **SWEEPS UST** **N/A**
1/8-1/4 **PALO ALTO, CA 94306**
0.153 mi.
809 ft. **Site 9 of 9 in cluster I**

Relative:
Higher

Actual:
23 ft.

CA FID UST:
Facility ID: 43002187
Regulated By: UTNKA
Regulated ID: 00010713
Cortese Code: Not reported
SIC Code: Not reported
Facility Phone: 4153218432
Mail To: Not reported
Mailing Address: 2747 PARK BLVD
Mailing Address 2: Not reported
Mailing City,St,Zip: PALO ALTO 94306
Contact: Not reported
Contact Phone: Not reported
DUNs Number: Not reported
NPDES Number: Not reported
EPA ID: Not reported
Comments: Not reported
Status: Active

SWEEPS UST:
Status: A
Comp Number: 10713
Number: 9
Board Of Equalization: Not reported
Ref Date: 07-01-85
Act Date: Not reported
Created Date: 02-29-88
Tank Status: A
Owner Tank Id: 1
Swrcb Tank Id: 43-006-010713-000001
Actv Date: 07-01-85
Capacity: 550
Tank Use: M.V. FUEL
Stg: P
Content: LEADED
Number Of Tanks: 2

Status: A
Comp Number: 10713
Number: 9
Board Of Equalization: Not reported
Ref Date: 07-01-85
Act Date: Not reported
Created Date: 02-29-88
Tank Status: A
Owner Tank Id: 2

OFFICES OF VANCE M. BROWN & SO (Continued) **S101623434**

Swrcb Tank Id:	43-006-010713-000002
Actv Date:	07-01-85
Capacity:	1000
Tank Use:	M.V. FUEL
Stg:	P
Content:	REG UNLEADED
Number Of Tanks:	Not reported

59
WNW
1/8-1/4
0.161 mi.
848 ft.

LINUS PAULING INSTITUTE **RCRA-SQG 1000455716**
440 PAGE MILL RD **FINDS CAD982493801**
PALO ALTO, CA 94306 **HAZNET**

Relative:
Higher

Actual:
34 ft.

RCRA-SQG:

Date form received by agency:	07/13/1990
Facility name:	LINUS PAULING INSTITUTE
Facility address:	440 PAGE MILL RD PALO ALTO, CA 94306
EPA ID:	CAD982493801
Contact:	ENVIRONMENTAL MANAGER
Contact address:	440 PAGE MILL RD PALO ALTO, CA 94306
Contact country:	US
Contact telephone:	(415) 327-4064
Contact email:	Not reported
EPA Region:	09
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	L P I BOARD OF TRUSTEES
Owner/operator address:	NOT REQUIRED NOT REQUIRED, ME 99999
Owner/operator country:	Not reported
Owner/operator telephone:	(415) 555-1212
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Owner/operator name:	NOT REQUIRED
Owner/operator address:	NOT REQUIRED NOT REQUIRED, ME 99999
Owner/operator country:	Not reported
Owner/operator telephone:	(415) 555-1212
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No

LINUS PAULING INSTITUTE (Continued) **1000455716**

Mixed waste (haz. and radioactive):	Unknown
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No
Off-site waste receiver:	Verified to be non-commercial

Violation Status: No violations found

FINDS:

Registry ID: 110002830660

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

HAZNET:

Gepaid:	CAD982493801
Contact:	L P I BOARD OF TRUSTEES
Telephone:	4155551212
Facility Addr2:	Not reported
Mailing Name:	Not reported
Mailing Address:	440 PAGE MILL RD
Mailing City,St,Zip:	PALO ALTO, CA 943062025
Gen County:	Santa Clara
TSD EPA ID:	NVD981639826
TSD County:	99
Waste Category:	Alkaline solution (pH <UN-> 12.5) with metals (antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, lead, mercury, molybdenum, nickel, selenium, silver, thallium, vanadium, and zinc)
Disposal Method:	***
Tons:	.0625
Facility County:	Santa Clara

Gepaid:	CAD982493801
Contact:	L P I BOARD OF TRUSTEES
Telephone:	4155551212
Facility Addr2:	Not reported
Mailing Name:	Not reported
Mailing Address:	440 PAGE MILL RD
Mailing City,St,Zip:	PALO ALTO, CA 943062025
Gen County:	Santa Clara

LINUS PAULING INSTITUTE (Continued) **1000455716**

TSD EPA ID: NVD981639826
TSD County: 99
Waste Category: Not reported
Disposal Method: ***
Tons: .0000
Facility County: Santa Clara

Gepaid: CAD982493801
Contact: L P I BOARD OF TRUSTEES
Telephone: 4155551212
Facility Addr2: Not reported
Mailing Name: Not reported
Mailing Address: 440 PAGE MILL RD
Mailing City,St,Zip: PALO ALTO, CA 943062025
Gen County: Santa Clara
TSD EPA ID: NVD981639826
TSD County: 99
Waste Category: Not reported
Disposal Method: ***
Tons: .0000
Facility County: Santa Clara

Gepaid: CAD982493801
Contact: L P I BOARD OF TRUSTEES
Telephone: 4155551212
Facility Addr2: Not reported
Mailing Name: Not reported
Mailing Address: 440 PAGE MILL RD
Mailing City,St,Zip: PALO ALTO, CA 943062025
Gen County: Santa Clara
TSD EPA ID: NVD981639826
TSD County: 99
Waste Category: Alkaline solution (pH <UN-> 12.5) with metals (antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, lead, mercury, molybdenum, nickel, selenium, silver, thallium, vanadium, and zinc)
Disposal Method: ***
Tons: .0625
Facility County: Santa Clara

Gepaid: CAD982493801
Contact: L P I BOARD OF TRUSTEES
Telephone: 4155551212
Facility Addr2: Not reported
Mailing Name: Not reported
Mailing Address: 440 PAGE MILL RD
Mailing City,St,Zip: PALO ALTO, CA 943062025
Gen County: Santa Clara
TSD EPA ID: CAD000088252
TSD County: Los Angeles
Waste Category: Laboratory waste chemicals
Disposal Method: Transfer Station
Tons: .0416
Facility County: Santa Clara

Click this hyperlink while viewing on your computer to access
Laboratory waste chemicals

K60 WNW 1/8-1/4 0.174 mi. 919 ft. **HEWLETT-PACKARD COMPANY#**
620 PAGE MILL RD
PALO ALTO, CA 94304
Site 1 of 7 in cluster K

RCRA-SQG FINDS HAZNET **1000281830 CAD076314582**

Relative: Higher

Actual: 37 ft.

RCRA-SQG:

Date form received by agency:	10/12/2000
Facility name:	HEWLETT-PACKARD COMPANY#
Site name:	HEWLETT-PACKARD COMPANY
Facility address:	640 PAGE MILL ROAD PALO ALTO, CA 94304
EPA ID:	CAD076314582
Mailing address:	1501 PAGE MILL ROAD, MS 5UE PALO ALTO, CA 943041213
Contact:	JONATHAN BAUER
Contact address:	Not reported Not reported
Contact country:	Not reported
Contact telephone:	(650) 857-8805
Contact email:	Not reported
EPA Region:	09
Land type:	Facility is not located on Indian land. Additional information is not known.
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Handler Activities Summary:

U.S. importer of hazardous waste:	Unknown
Mixed waste (haz. and radioactive):	Unknown
Recycler of hazardous waste:	Unknown
Transporter of hazardous waste:	Unknown
Treater, storer or disposer of HW:	No
Underground injection activity:	Unknown
On-site burner exemption:	Unknown
Furnace exemption:	Unknown
Used oil fuel burner:	Unknown
Used oil processor:	Unknown
User oil refiner:	Unknown
Used oil fuel marketer to burner:	Unknown
Used oil Specification marketer:	Unknown
Used oil transfer facility:	Unknown
Used oil transporter:	Unknown
Off-site waste receiver:	Verified to be non-commercial

Historical Generators:

Date form received by agency:	03/04/1999
Facility name:	HEWLETT-PACKARD COMPANY#
Site name:	HEWLETT-PACKARD CO.
Classification:	Large Quantity Generator

Date form received by agency:	09/01/1996
Facility name:	HEWLETT-PACKARD COMPANY#
Classification:	Large Quantity Generator

HEWLETT-PACKARD COMPANY# (Continued) **1000281830**

Date form received by agency: 09/01/1996
Facility name: HEWLETT-PACKARD COMPANY#
Classification: Small Quantity Generator

Date form received by agency: 02/28/1996
Facility name: HEWLETT-PACKARD COMPANY#
Site name: HEWLETT- PACKARD CO
Classification: Large Quantity Generator

Facility Has Received Notices of Violations:
Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 12/02/1985
Date achieved compliance: 12/02/1985
Violation lead agency: State
Enforcement action: Not reported
Enforcement action date: Not reported
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: Not reported
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Evaluation Action Summary:
Evaluation date: 04/13/1988
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: EPA-Initiated Oversight/Observation/Training Actions

Evaluation date: 09/10/1986
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 06/06/1986
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 12/02/1985
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 12/02/1985
Evaluation lead agency: State

Evaluation date: 10/05/1984
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

FINDS:

HEWLETT-PACKARD COMPANY# (Continued) **1000281830**

Registry ID: 110002333216

Environmental Interest/Information System

California Department of Toxic Substances Control EnviroStor System (DTSC-EnviroStor) is an online search and Geographic Information System (GIS) tool for identifying sites that have known contamination or sites for which there may be reasons to investigate further. The EnviroStor database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites.

The NEI (National Emissions Inventory) database contains information on stationary and mobile sources that emit criteria air pollutants and their precursors, as well as hazardous air pollutants (HAPs).

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

CERCLIS (Comprehensive Environmental Response, Compensation, and Liability Information System) is the Superfund database that is used to support management in all phases of the Superfund program. The system contains information on all aspects of hazardous waste sites, including an inventory of sites, planned and actual site activities, and financial information.

HAZNET:

Gepaid:	CAD076314582
Contact:	JONATHAN BAUER
Telephone:	4082452142
Facility Addr2:	Not reported
Mailing Name:	Not reported
Mailing Address:	1501 PAGE MILL RD
Mailing City,St,Zip:	PALO ALTO, CA 943041126
Gen County:	Santa Clara
TSD EPA ID:	CAD059494310
TSD County:	Santa Clara
Waste Category:	Other organic solids
Disposal Method:	H141
Tons:	1.5
Facility County:	Santa Clara

Gepaid:	CAD076314582
Contact:	JONATHAN BAUER
Telephone:	4082452142
Facility Addr2:	Not reported
Mailing Name:	Not reported
Mailing Address:	1501 PAGE MILL RD
Mailing City,St,Zip:	PALO ALTO, CA 943041126
Gen County:	Santa Clara
TSD EPA ID:	CAD059494310
TSD County:	Santa Clara

HEWLETT-PACKARD COMPANY# (Continued) **1000281830**

Waste Category: Off-specification, aged, or surplus organics
Disposal Method: H141
Tons: 0.025
Facility County: Santa Clara

Gepaid: CAD076314582
Contact: JONATHAN BAUER
Telephone: 4082452142
Facility Addr2: Not reported
Mailing Name: Not reported
Mailing Address: 1501 PAGE MILL RD
Mailing City,St,Zip: PALO ALTO, CA 943041126
Gen County: Santa Clara
TSD EPA ID: AZD982441263
TSD County: 99
Waste Category: Organic solids with halogens
Disposal Method: H129
Tons: 12
Facility County: Santa Clara

Gepaid: CAD076314582
Contact: JONATHAN BAUER
Telephone: 4082452142
Facility Addr2: Not reported
Mailing Name: Not reported
Mailing Address: 1501 PAGE MILL RD
Mailing City,St,Zip: PALO ALTO, CA 943041126
Gen County: Santa Clara
TSD EPA ID: AZD982441263
TSD County: 99
Waste Category: Organic solids with halogens
Disposal Method: Not reported
Tons: 8.816
Facility County: Santa Clara

Gepaid: CAD076314582
Contact: ROBIN ROSS - PROJ MGR
Telephone: 6508576492
Facility Addr2: Not reported
Mailing Name: Not reported
Mailing Address: 1501 PAGE MILL RD
Mailing City,St,Zip: PALO ALTO, CA 950320000
Gen County: Santa Clara
TSD EPA ID: AZD982441263
TSD County: Santa Clara
Waste Category: Organic solids with halogens
Disposal Method: Treatment, Incineration
Tons: 33.69
Facility County: Santa Clara

Click this hyperlink while viewing on your computer to access
Organic solids with halogens

K61 **MOBIL SERVICE STATION** **HIST CORTESE** **U001595961**
WNW **2780 EL CAMINO REAL** **HIST UST** **N/A**
1/8-1/4 **PALO ALTO, CA 94306**
0.178 mi.
941 ft. **Site 2 of 7 in cluster K**

Relative:
Higher

Actual:
36 ft.

CORTESE:
Region: CORTESE
Facility County Code: 43
Reg By: LTNKA
Reg Id: 43-0150

HIST UST:
Region: STATE
Facility ID: 00000039546
Facility Type: Gas Station
Other Type: MOTOR VEHICLE FUEL S
Total Tanks: 0005
Contact Name: F. NAJMY
Telephone: 4158581422
Owner Name: MOBIL OIL CORPORATION
Owner Address: 612 SO. FLOWER STREET
Owner City,St,Zip: LOS ANGELES, CA 90017

Tank Num: 001
Container Num: 1
Year Installed: 1959
Tank Capacity: 00004000
Tank Used for: PRODUCT
Type of Fuel: UNLEADED
Tank Construction: Not reported
Leak Detection: Visual, Stock Inventor, Pressure Test

Tank Num: 002
Container Num: 2
Year Installed: 1959
Tank Capacity: 00004000
Tank Used for: PRODUCT
Type of Fuel: UNLEADED
Tank Construction: Not reported
Leak Detection: Visual, Stock Inventor, Pressure Test

Tank Num: 003
Container Num: 3
Year Installed: Not reported
Tank Capacity: 00004000
Tank Used for: PRODUCT
Type of Fuel: REGULAR
Tank Construction: Not reported
Leak Detection: Visual, Stock Inventor, Pressure Test

Tank Num: 004
Container Num: 4
Year Installed: 1963
Tank Capacity: 00004000
Tank Used for: PRODUCT
Type of Fuel: 06
Tank Construction: Not reported
Leak Detection: Visual, Stock Inventor, Pressure Test

MOBIL SERVICE STATION (Continued) **U001595961**

Tank Num: 005
Container Num: 0000000001
Year Installed: Not reported
Tank Capacity: 00000280
Tank Used for: WASTE
Type of Fuel: WASTE OIL
Tank Construction: Not reported
Leak Detection: Visual

K62 **MOBIL (BP 11219)** **LUST S105034837**
WNW **2780 EL CAMINO REAL** **HIST LUST N/A**
1/8-1/4 **PALO ALTO, CA 94306** **EMI**
0.178 mi.
941 ft. **Site 3 of 7 in cluster K**

Relative:
Higher

Actual:
36 ft.

LUST:
Region: STATE
Global Id: T0608500216
Latitude: 37.423095
Longitude: -122.141412
Case Type: LUST Cleanup Site
Status: Completed - Case Closed
Status Date: 2006-06-19 00:00:00
Lead Agency: SANTA CLARA COUNTY LOP
Case Worker: LL
Local Agency: SANTA CLARA COUNTY LOP
RB Case Number: Not reported
LOC Case Number: 06S3W12L01f
File Location: Stored electronically as an E-file
Potential Media Affect: Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern: Gasoline
Site History: Not reported

Click here to access the California GeoTracker records for this facility:

LUST REG 2:
Region: 2
Facility Id: Not reported
Facility Status: Post remedial action monitoring
Case Number: 06S3W12L01f
How Discovered: Not reported
Leak Cause: Not reported
Leak Source: Not reported
Date Leak Confirmed: Not reported
Oversight Program: LUST
Prelim. Site Assesment Wokplan Submitted: Not reported
Preliminary Site Assesment Began: 1/8/1986
Pollution Characterization Began: 4/8/1992
Pollution Remediation Plan Submitted: Not reported
Date Remediation Action Underway: Not reported
Date Post Remedial Action Monitoring Began: 2/28/1997

LUST SANTA CLARA:
Region: SANTA CLARA
SCVWD ID: 06S3W12L01f
Closed Date: 6/20/2006

MOBIL (BP 11219) (Continued) **S105034837**

HIST LUST SANTA CLARA:
- Region: SANTA CLARA
- Region Code: 2
- SCVWD ID: 06S3W12L01
- Oversite Agency: SCVWD
- Date Listed: 1989-12-02 00:00:00
- Closed Date: Not reported

EMI:

Year:	1997
County Code:	43
Air Basin:	SF
Facility ID:	8610
Air District Name:	BA
SIC Code:	4953
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

K63 **HEWLETT-PACKARD OPTOELECTRIC DIVISION** **CA BOND EXP. PLAN** **S100833464**
West **640 PAGE MILL ROAD** **EMI** **N/A**
1/8-1/4 **PALO ALTO, CA 94304**
0.185 mi.
978 ft. **Site 4 of 7 in cluster K**

Relative:
Higher

Actual:
37 ft.

CA BOND EXP. PLAN:

Reponsible Party:	RWQCB REFERRAL SITE
Project Revenue Source Company:	Not reported
Project Revenue Source Addr:	Not reported
Project Revenue Source City,St,Zip:	Not reported
Project Revenue Source Desc:	This site is proposed for the National Priority List. The RWQCB will continue to have lead responsibility for monitoring the RP's remedial actions. Until such time as the RWQCB refers the site to DHS for follow-up using Bond funds, no money will be budgeted from the fund for this site.
Site Description:	The Hewlett-Packard Optoelectric Division (OED) is located on a 10-acre site in Palo Alto on the western edge of the Santa Clara Valley. The surrounding land use is both industrial and commercial.
Hazardous Waste Desc:	Historic releases of 20 chemicals into the soil and ground water onsite have been observed. Waste chemicals including 1,1,1-trichloroethane (TCA) trichloroethylene (TCE), toluene, acetone, xylene, alcohols and other chemicals used in the manufacturing process at the facility were stored in a tank. The concentration of chemicals are highest in the areas immediately below the tank's former location, particularly in the unsaturated zone.
Threat To Public Health & Env:	There are six municipal standby wells as close as 4,000 feet from the site and several private wells located within a 3-mile radius. The standby wells serve a population of approximately 59,000 people during emergency situations. TCE has been detected in the ground water at concentrations as high as 340,000 parts per billion (ppb). Acetone and isopropyl (IPA) were also detected at high levels in the wells near the former tank area. The highest concentration detected in wells located approximately 800 feet down gradient from the source

HEWLETT-PACKARD OPTOELECTRIC DIVISION (Continued) **S100833464**

was 3800 ppb TCE in samples taken in November, 1985.

Site Activity Status: The subsurface soil and ground water at this site are contaminated with organic solvents believed to have leaked from an underground storage tank installed in 1967. The tank and 100 cubic yards of contaminated soil (to a maximum depth of 12.5 feet) were excavated and disposed of offsite in July, 1981. The RWQCB adopted site cleanup requirements for Hewlett-Packard on October 21, 1987.

EMI:

Year:	2003
County Code:	43
Air Basin:	SF
Facility ID:	14705
Air District Name:	BA
SIC Code:	3577
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	2004
County Code:	43
Air Basin:	SF
Facility ID:	14705
Air District Name:	BA
SIC Code:	3577
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0.098
Reactive Organic Gases Tons/Yr:	0.0684628
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	2005
County Code:	43
Air Basin:	SF
Facility ID:	14705
Air District Name:	BA
SIC Code:	3577
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	.098
Reactive Organic Gases Tons/Yr:	.0684628
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0

HEWLETT-PACKARD OPTOELECTRIC DIVISION (Continued) **S100833464**

Part. Matter 10 Micrometers & Smllr Tons/Yr: 0

Year:	2006
County Code:	43
Air Basin:	SF
Facility ID:	14705
Air District Name:	BA
SIC Code:	3577
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	.098
Reactive Organic Gases Tons/Yr:	.0684628
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	2007
County Code:	43
Air Basin:	SF
Facility ID:	14705
Air District Name:	BA
SIC Code:	3577
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	.098
Reactive Organic Gases Tons/Yr:	.0684628
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

K64 **OED/OCD** **CA FID UST** **S101623419**
West **640 PAGE MILL RD** **SWEEPS UST** **N/A**
1/8-1/4 **PALO ALTO, CA 94304**
0.185 mi.
978 ft. **Site 5 of 7 in cluster K**

Relative:
Higher

Actual:
37 ft.

CA FID UST:

Facility ID:	43003716
Regulated By:	UTNKA
Regulated ID:	00019360
Cortese Code:	Not reported
SIC Code:	Not reported
Facility Phone:	4158576205
Mail To:	Not reported
Mailing Address:	640 PAGE MILL RD
Mailing Address 2:	Not reported
Mailing City,St,Zip:	PALO ALTO 94304
Contact:	Not reported
Contact Phone:	Not reported
DUNs Number:	Not reported
NPDES Number:	Not reported
EPA ID:	Not reported

OED/OCD (Continued) **S101623419**

Comments: Not reported
Status: Active

SWEEPS UST:
Status: A
Comp Number: 19360
Number: 9
Board Of Equalization: 44-026078
Ref Date: 07-01-85
Act Date: Not reported
Created Date: 02-29-88
Tank Status: A
Owner Tank Id: 1
Swrcb Tank Id: 43-006-019360-000001
Actv Date: 07-01-85
Capacity: 2000
Tank Use: UNKNOWN
Stg: P
Content: Not reported
Number Of Tanks: 2

Status: A
Comp Number: 19360
Number: 9
Board Of Equalization: 44-026078
Ref Date: 07-01-85
Act Date: Not reported
Created Date: 02-29-88
Tank Status: A
Owner Tank Id: 2
Swrcb Tank Id: 43-006-019360-000002
Actv Date: 07-01-85
Capacity: 400
Tank Use: UNKNOWN
Stg: W
Content: Not reported
Number Of Tanks: Not reported

K65 **HEWLETT-PACKARD COMPANY** **SLIC** **S106235017**
West **640 PAGE MILL RD** **N/A**
1/8-1/4 **PALO ALTO, CA 94304**
0.185 mi.
978 ft. **Site 6 of 7 in cluster K**

Relative:
Higher

Actual:
37 ft.

SLIC:
Region: STATE
Facility Status: **Open - Remediation**
Status Date: 1987-01-01 00:00:00
Global Id: SL720511210
Lead Agency: SAN FRANCISCO BAY RWQCB (REGION 2)
Lead Agency Case Number: Not reported
Latitude: 37.422492
Longitude: -122.142701
Case Type: Cleanup Program Site
Case Worker: RWP
Local Agency: SANTA CLARA VALLEY WATER DISTRICT
RB Case Number: 43S0051

HEWLETT-PACKARD COMPANY (Continued) **S106235017**

File Location: Regional Board
Potential Media Affected: Other Groundwater (uses other than drinking water), Soil Vapor
Potential Contaminants of Concern: Trichloroethylene (TCE), 1,1,1-Trichloroethane (TCA), Arsenic, Tetrachloroethylene (PCE)
Site History: Not reported

Click here to access the California GeoTracker records for this facility:

SLIC:
Region: 2
Facility ID: 43S0051
Facility Status: Remedial action (cleanup) Underway
Date Closed: Not reported
Local Case #: Not reported
How Discovered: Not reported
Leak Cause: Not reported
Leak Source: Not reported
Date Confirmed: Not reported
Date Prelim Site Assmnt Workplan Submitted: Not reported
Date Preliminary Site Assessment Began: Not reported
Date Pollution Characterization Began: Not reported
Date Remediation Plan Submitted: Not reported
Date Remedial Action Underway: Not reported
Date Post Remedial Action Monitoring Began: Not reported

K66 **OED/OCD** **HIST UST** **U001595918**
West **640 PAGE MILL RD** **N/A**
1/8-1/4 **PALO ALTO, CA 94304**
0.185 mi.
978 ft. **Site 7 of 7 in cluster K**

Relative:
Higher

Actual:
37 ft.

HIST UST:
Region: STATE
Facility ID: 00000019360
Facility Type: Other
Other Type: MANUFACTOR
Total Tanks: 0002
Contact Name: PAUL SCERRI
Telephone: 4158576205
Owner Name: HEWLETT PACKARD COMPANY
Owner Address: 3000 HAVOVER STREET
Owner City,St,Zip: PALO ALTO, CA 94304

Tank Num: 001
Container Num: 1
Year Installed: Not reported
Tank Capacity: 00002000
Tank Used for: PRODUCT
Type of Fuel: Not reported
Tank Construction: Not reported
Leak Detection: Visual

Tank Num: 002
Container Num: 2
Year Installed: Not reported
Tank Capacity: 00000400
Tank Used for: WASTE

OED/OCD (Continued) **U001595918**

Type of Fuel: Not reported
Tank Construction: Not reported
Leak Detection: Visual

67
SSE
1/8-1/4
0.189 mi.
999 ft.

PALO ALTO FIRESTONE
3401 EL CAMINO REAL
PALO ALTO, CA 94304

RCRA-SQG **1000324041**
FINDS **CAD021189733**
LUST
HIST LUST

Relative:
Higher

Actual:
34 ft.

RCRA-SQG:
Date form received by agency: 09/01/1996
Facility name: PALO ALTO FIRESTONE
Facility address: 3401 EL CAMINO REAL
PALO ALTO, CA 94304
EPA ID: CAD021189733
Mailing address: EL CAMINO REAL
PALO ALTO, CA 94304
Contact: Not reported
Contact address: Not reported
Not reported
Contact country: Not reported
Contact telephone: Not reported
Contact email: Not reported
EPA Region: 09
Classification: Small Small Quantity Generator
Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:
Owner/operator name: HELEN LUNDT
Owner/operator address: NOT REQUIRED
NOT REQUIRED, ME 99999
Owner/operator country: Not reported
Owner/operator telephone: (415) 555-1212
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: NOT REQUIRED
Owner/operator address: NOT REQUIRED
NOT REQUIRED, ME 99999
Owner/operator country: Not reported
Owner/operator telephone: (415) 555-1212
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: Unknown
Mixed waste (haz. and radioactive): Unknown
Recycler of hazardous waste: No

PALO ALTO FIRESTONE (Continued) **1000324041**

Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	Unknown
Furnace exemption:	Unknown
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No
Off-site waste receiver:	Verified to be non-commercial

Violation Status: No violations found

FINDS:

Registry ID: 110002639093

Environmental Interest/Information System

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

LUST:

Region:	STATE
Global Id:	T0608501025
Latitude:	37.419709
Longitude:	-122.134427
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	1996-05-28 00:00:00
Lead Agency:	SANTA CLARA COUNTY LOP
Case Worker:	UST
Local Agency:	SANTA CLARA COUNTY LOP
RB Case Number:	Not reported
LOC Case Number:	Not reported
File Location:	Stored electronically as an E-file
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

LUST REG 2:

Region:	2
Facility Id:	Not reported
Facility Status:	Case Closed
Case Number:	06S3W12R03f
How Discovered:	Not reported
Leak Cause:	Not reported
Leak Source:	Not reported

PALO ALTO FIRESTONE (Continued) **1000324041**

Date Leak Confirmed: Not reported
Oversight Program: LUST
Prelim. Site Assesment Wokplan Submitted: Not reported
Preliminary Site Assesment Began: 9/16/1986
Pollution Characterization Began: Not reported
Pollution Remediation Plan Submitted: Not reported
Date Remediation Action Underway: Not reported
Date Post Remedial Action Monitoring Began: Not reported

LUST SANTA CLARA:
Region: SANTA CLARA
SCVWD ID: 06S3W12R03f
Closed Date: 5/28/1996

HIST LUST SANTA CLARA:
Region: SANTA CLARA
Region Code: 2
SCVWD ID: 06S3W12R03
Oversite Agency: SCVWD
Date Listed: 1987-01-01 00:00:00
Closed Date: 1996-05-28 00:00:00

L68 **ZZONTA** **HIST UST** **U001595974**
NE **2680 RAMONA ST** **N/A**
1/8-1/4 **PALO ALTO, CA 94306**
0.204 mi.
1076 ft. **Site 1 of 2 in cluster L**

Relative:
Higher

Actual:
26 ft.

HIST UST:
Region: STATE
Facility ID: 00000046598
Facility Type: Other
Other Type: HOME
Total Tanks: 0001
Contact Name: Not reported
Telephone: 4153241446
Owner Name: SCOTTIE HUNTER OR GERRY HUNTER
Owner Address: 2680 RAMONA
Owner City,St,Zip: PALO ALTO, CA 94306

Tank Num: 001
Container Num: #1
Year Installed: 1976
Tank Capacity: 00000500
Tank Used for: PRODUCT
Type of Fuel: DIESEL
Tank Construction: Not reported
Leak Detection: Visual

L69 **ZZONTA** **CA FID UST** **S101623444**
NE **2680 RAMONA** **SWEEPS UST** **N/A**
1/8-1/4 **PALO ALTO, CA 94306**
0.204 mi.
1076 ft. **Site 2 of 2 in cluster L**

Relative:
Higher

Actual:
26 ft.

CA FID UST:

Facility ID:	43012210
Regulated By:	UTNKA
Regulated ID:	00046598
Cortese Code:	Not reported
SIC Code:	Not reported
Facility Phone:	4153241446
Mail To:	Not reported
Mailing Address:	2680 RAMONA
Mailing Address 2:	Not reported
Mailing City,St,Zip:	PALO ALTO 94306
Contact:	Not reported
Contact Phone:	Not reported
DUNs Number:	Not reported
NPDES Number:	Not reported
EPA ID:	Not reported
Comments:	Not reported
Status:	Active

SWEEPS UST:

Status:	A
Comp Number:	46598
Number:	9
Board Of Equalization:	44-026112
Ref Date:	07-01-85
Act Date:	Not reported
Created Date:	02-29-88
Tank Status:	A
Owner Tank Id:	#1
Swrcb Tank Id:	43-006-046598-000001
Actv Date:	07-01-85
Capacity:	500
Tank Use:	M.V. FUEL
Stg:	P
Content:	DIESEL
Number Of Tanks:	1

M70 **COMMUNICATION & POWER IND.** **AST** **1001132046**
South **811 HANSEN WAY** **N/A**
1/8-1/4 **PALO ALTO, CA 94304**
0.205 mi.
1083 ft. **Site 1 of 2 in cluster M**

Relative:
Higher

Actual:
43 ft.

AST:

Owner:	COMMUNICATION & POWER IND.
Total Gallons:	75,520
Certified Unified Program Agencies:	Santa Clara County

71
WNW
1/8-1/4
0.216 mi.
1143 ft.

GREEN WORLD NURSERY
2711 EL CAMINO REAL
PALO ALTO, CA 94306

HIST CORTESE
LUST
HIST LUST

S101542451
N/A

Relative:
Higher

Actual:
36 ft.

CORTESE:

Region:	CORTESE
Facility County Code:	43
Reg By:	LTNKA
Reg Id:	43-1723

LUST:

Region:	STATE
Global Id:	T0608501659
Latitude:	37.423525
Longitude:	-122.141758
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	2000-10-30 00:00:00
Lead Agency:	SANTA CLARA COUNTY LOP
Case Worker:	UST
Local Agency:	SANTA CLARA COUNTY LOP
RB Case Number:	Not reported
LOC Case Number:	Not reported
File Location:	Stored electronically as an E-file
Potential Media Affect:	Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

LUST REG 2:

Region:	2
Facility Id:	Not reported
Facility Status:	Case Closed
Case Number:	06S3W12L02f
How Discovered:	Not reported
Leak Cause:	Not reported
Leak Source:	Not reported
Date Leak Confirmed:	Not reported
Oversight Program:	LUST
Prelim. Site Assesment Wokplan Submitted:	Not reported
Preliminary Site Assesment Began:	7/19/1990
Pollution Characterization Began:	1/5/1999
Pollution Remediation Plan Submitted:	Not reported
Date Remediation Action Underway:	Not reported
Date Post Remedial Action Monitoring Began:	Not reported

LUST SANTA CLARA:

Region:	SANTA CLARA
SCVWD ID:	06S3W12L02f
Closed Date:	10/30/2000

HIST LUST SANTA CLARA:

Region:	SANTA CLARA
Region Code:	2

GREEN WORLD NURSERY (Continued) **S101542451**

SCVWD ID: 06S3W12L02
Oversite Agency: SCVWD
Date Listed: 1992-02-27 00:00:00
Closed Date: 2000-10-30 00:00:00

M72 **NATIONAL PRESS INC** **RCRA-SQG 1000260557**
SSW **850 HANSEN WAY** **FINDS CAD009123688**
1/8-1/4 **PALO ALTO, CA 94304**
0.233 mi.
1231 ft. **Site 2 of 2 in cluster M**

Relative:
Higher

Actual:
44 ft.

RCRA-SQG:
Date form received by agency: 09/01/1996
Facility name: NATIONAL PRESS INC
Facility address: 850 HANSEN WAY
PALO ALTO, CA 94304
EPA ID: CAD009123688
Mailing address: 357 SUTTON PLACE
SANTA ROSA, CA 95407
Contact: Not reported
Contact address: Not reported
Not reported
Contact country: Not reported
Contact telephone: Not reported
Contact email: Not reported
EPA Region: 09
Classification: Small Small Quantity Generator
Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:
Owner/operator name: NOT REQUIRED
Owner/operator address: NOT REQUIRED
NOT REQUIRED, ME 99999
Owner/operator country: Not reported
Owner/operator telephone: (415) 555-1212
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: COLORGRAPHICS
Owner/operator address: NOT REQUIRED
NOT REQUIRED, ME 99999
Owner/operator country: Not reported
Owner/operator telephone: (415) 555-1212
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: Unknown
Mixed waste (haz. and radioactive): Unknown

NATIONAL PRESS INC (Continued) **1000260557**

Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	Unknown
Furnace exemption:	Unknown
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No
Off-site waste receiver:	Verified to be non-commercial

Historical Generators:

Date form received by agency:	06/11/1986
Facility name:	NATIONAL PRESS INC
Classification:	Large Quantity Generator

Violation Status: No violations found

FINDS:

Registry ID: 110002635140

Environmental Interest/Information System

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

73
WSW
1/4-1/2
0.251 mi.
1327 ft.

Relative:
Higher

Actual:
40 ft.

CHEVRON **HIST CORTESE** **S103880932**
775 PAGE MILL RD **LUST** **N/A**
PALO ALTO, CA 94304 **HIST LUST**
SWEEPS UST

CORTESE:

Region:	CORTESE
Facility County Code:	43
Reg By:	LTNKA
Reg Id:	43-0338

LUST:

Region:	STATE
Global Id:	T0608500394
Latitude:	37.421116
Longitude:	-122.142704
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	1996-10-04 00:00:00
Lead Agency:	SAN FRANCISCO BAY RWQCB (REGION 2)
Case Worker:	UNK

CHEVRON (Continued) **S103880932**

Local Agency:	SANTA CLARA COUNTY LOP
RB Case Number:	43-0338
LOC Case Number:	Not reported
File Location:	Not reported
Potential Media Affect:	Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

LUST REG 2:

Region:	2
Facility Id:	43-0338
Facility Status:	Case Closed
Case Number:	06S3W12P01
How Discovered:	Tank Closure
Leak Cause:	Structure Failure
Leak Source:	Tank
Date Leak Confirmed:	Not reported
Oversight Program:	LUST
Prelim. Site Assesment Wokplan Submitted:	Not reported
Preliminary Site Assesment Began:	Not reported
Pollution Characterization Began:	1/4/1990
Pollution Remediation Plan Submitted:	Not reported
Date Remediation Action Underway:	Not reported
Date Post Remedial Action Monitoring Began:	Not reported

LUST SANTA CLARA:

Region:	SANTA CLARA
SCVWD ID:	06S3W12P01f
Closed Date:	10/4/1996

HIST LUST SANTA CLARA:

Region:	SANTA CLARA
Region Code:	2
SCVWD ID:	06S3W12P01
Oversite Agency:	SFRWQCB
Date Listed:	1993-01-01 00:00:00
Closed Date:	1996-10-04 00:00:00

SWEEPS UST:

Status:	A
Comp Number:	63149
Number:	9
Board Of Equalization:	44-026138
Ref Date:	07-01-85
Act Date:	Not reported
Created Date:	02-29-88
Tank Status:	A
Owner Tank Id:	1
Swrcb Tank Id:	43-006-063149-000001
Actv Date:	07-01-85
Capacity:	9000
Tank Use:	UNKNOWN
Stg:	P

CHEVRON (Continued) **S103880932**

Content: Not reported
Number Of Tanks: 4

Status: A
Comp Number: 63149
Number: 9
Board Of Equalization: 44-026138
Ref Date: 07-01-85
Act Date: Not reported
Created Date: 02-29-88
Tank Status: A
Owner Tank Id: 2
Swrcb Tank Id: 43-006-063149-000002
Actv Date: 07-01-85
Capacity: 4000
Tank Use: UNKNOWN
Stg: P
Content: Not reported
Number Of Tanks: Not reported

Status: A
Comp Number: 63149
Number: 9
Board Of Equalization: 44-026138
Ref Date: 07-01-85
Act Date: Not reported
Created Date: 02-29-88
Tank Status: A
Owner Tank Id: 3
Swrcb Tank Id: 43-006-063149-000003
Actv Date: 07-01-85
Capacity: 9000
Tank Use: UNKNOWN
Stg: P
Content: Not reported
Number Of Tanks: Not reported

Status: A
Comp Number: 63149
Number: 9
Board Of Equalization: 44-026138
Ref Date: 07-01-85
Act Date: Not reported
Created Date: 02-29-88
Tank Status: A
Owner Tank Id: 4
Swrcb Tank Id: 43-006-063149-000004
Actv Date: 07-01-85
Capacity: 550
Tank Use: UNKNOWN
Stg: W
Content: Not reported
Number Of Tanks: Not reported

N74 **JOHN'S AUTOMOTIVE** **HIST CORTESE** **S103472949**
SSE **3508 EL CAMINO REAL** **LUST** **N/A**
1/4-1/2 **PALO ALTO, CA 94306** **HIST LUST**
0.253 mi.
1335 ft. **Site 1 of 3 in cluster N**

Relative:
Higher

Actual:
39 ft.

CORTESE:

Region:	CORTESE
Facility County Code:	43
Reg By:	LTNKA
Reg Id:	43-0206

LUST:

Region:	STATE
Global Id:	T0608500266
Latitude:	37.418963
Longitude:	-122.133448
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	1997-07-23 00:00:00
Lead Agency:	SANTA CLARA COUNTY LOP
Case Worker:	UST
Local Agency:	SANTA CLARA COUNTY LOP
RB Case Number:	Not reported
LOC Case Number:	Not reported
File Location:	Stored electronically as an E-file
Potential Media Affect:	Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern:	Not reported
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

LUST REG 2:

Region:	2
Facility Id:	Not reported
Facility Status:	Case Closed
Case Number:	06S3W12R04f
How Discovered:	Not reported
Leak Cause:	Not reported
Leak Source:	Not reported
Date Leak Confirmed:	Not reported
Oversight Program:	LUST
Prelim. Site Assesment Wokplan Submitted:	Not reported
Preliminary Site Assesment Began:	5/17/1987
Pollution Characterization Began:	1/24/1992
Pollution Remediation Plan Submitted:	Not reported
Date Remediation Action Underway:	Not reported
Date Post Remedial Action Monitoring Began:	Not reported

LUST SANTA CLARA:

Region:	SANTA CLARA
SCVWD ID:	06S3W12R04f
Closed Date:	7/23/1997

HIST LUST SANTA CLARA:

Region:	SANTA CLARA
Region Code:	2

JOHN'S AUTOMOTIVE (Continued) **S103472949**

SCVWD ID: 06S3W12R04
Oversite Agency: SCVWD
Date Listed: 1990-05-15 00:00:00
Closed Date: 1997-07-23 00:00:00

75
NW
1/4-1/2
0.260 mi.
1375 ft.

OREGON EXPRESSWAY UNDERPASS **ENVIROSTOR** **1000236244**
XING OF OREGON EXPRESSWAY / ALMA STREET **N/A**
PALO ALTO, CA 94304

Relative:
Lower

Actual:
12 ft.

ENVIROSTOR:
Site Type: Historical
Site Type Detailed: * Historical
Acres: Not reported
NPL: NO
Regulatory Agencies: RWQCB 2 - San Francisco Bay
Lead Agency: NONE SPECIFIED
Program Manager: Not reported
Supervisor: Referred - Not Assigned
Division Branch: Berkeley
Facility ID: 43170004
Site Code: Not reported
Assembly: 21
Senate: 11
Special Program: Not reported
Status: Refer: RWQCB
Status Date: 2/3/1993
Restricted Use: NO
Site Mgmt. Req.: NONE SPECIFIED
Funding: Not reported
Latitude: 0
Longitude: 0
APN: NONE SPECIFIED
Past Use: NONE SPECIFIED
Potential COC: NONE SPECIFIED
Confirmed COC: NONE SPECIFIED
Potential Description: NONE SPECIFIED
Alias Name: CAD982399800
Alias Type: EPA Identification Number
Alias Name: 43170004
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: * Discovery
Completed Date: 1989-04-27 00:00:00
Comments: FACILITY IDENTIFIED EPA FIT PRELIMINARY ASSESSMENT EPA COMPLETED PRELIMINARY ASSESSMENT AND RECOMMEND NO FURTHER ACTION; STATE RECOMMENDATION IS SITE SCREENING.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Screening
Completed Date: 1993-02-03 00:00:00
Comments: The Oregon Expressway Underpass site is the location of a dewatering system that collects local groundwater for discharge into a culvert.

OREGON EXPRESSWAY UNDERPASS (Continued) **1000236244**

This helps in maintaining a dry roadway and has been in operation since 1959. The site is adjacent to the Hewlett-Packard (HP) facility located at 640 Page Mill Road where groundwater con- tamination has been discovered. Contaminants have migrated from HP far enough to be intercepted by the Oregon Expressway Underpass dewatering system. In addition to HP, other faciliteies like Alza Corp, Aydin Energy, Commodoze, etc. are believed to have contributed to the plume. The RWQCB is the lead agency for the site and has issued order 87-129 to address the problem. Contaminants detected at this site include the following: trichloroethylene 190 PPB; perchloroethylene 110 PPB; trichloroetgabe 25 PPB; 1,-1-dichloroethylene 3.1 PPB; and TRANS -1,2-dichloroethylene 24 PPB; U.S. EPA FIT has recommended NFA under CERCLIS.

Future Area Name:	Not reported
Future Sub Area Name:	Not reported
Future Document Type:	Not reported
Future Due Date:	Not reported
Schedule Area Name:	Not reported
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Not reported
Schedule Due Date:	Not reported
Schedule Revised Date:	Not reported

N76 **COMBES AUTO REPAIR** **HIST CORTESE** **U001595948**
SSE **3585 EL CAMINO REAL** **LUST** **N/A**
1/4-1/2 **PALO ALTO, CA 94306** **HIST LUST**
0.270 mi. **HIST UST**
1425 ft. **Site 2 of 3 in cluster N** **SWEEPS UST**

Relative:
Higher

Actual:
39 ft.

CORTESE:

Region:	CORTESE
Facility County Code:	43
Reg By:	LTNKA
Reg Id:	43-0394

LUST:

Region:	STATE
Global Id:	T0608500445
Latitude:	37.418967
Longitude:	-122.133012
Case Type:	LUST Cleanup Site
Status:	Open - Site Assessment
Status Date:	1993-07-30 00:00:00
Lead Agency:	SANTA CLARA COUNTY LOP
Case Worker:	GOR
Local Agency:	SANTA CLARA COUNTY LOP
RB Case Number:	12-034
LOC Case Number:	06S3W12R01f
File Location:	Stored electronically as an E-file
Potential Media Affect:	Aquifer used for drinking water supply, Other Groundwater (uses other than drinking water), Soil
Potential Contaminants of Concern:	Benzene, Toluene, Xylene, Fuel Oxygenates, Gasoline
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

COMBES AUTO REPAIR (Continued) **U001595948**

LUST REG 2:
Region: 2
Facility Id: Not reported
Facility Status: Pollution Characterization
Case Number: 06S3W12R01f
How Discovered: Not reported
Leak Cause: Not reported
Leak Source: Not reported
Date Leak Confirmed: Not reported
Oversight Program: LUST
Prelim. Site Assesment Wokplan Submitted: Not reported
Preliminary Site Assesment Began: 1/28/1993
Pollution Characterization Began: 7/30/1993
Pollution Remediation Plan Submitted: Not reported
Date Remediation Action Underway: Not reported
Date Post Remedial Action Monitoring Began: Not reported

LUST SANTA CLARA:
Region: SANTA CLARA
SCVWD ID: 06S3W12R01f
Closed Date: Not reported

HIST LUST SANTA CLARA:
Region: SANTA CLARA
Region Code: 2
SCVWD ID: 06S3W12R01
Oversite Agency: SCVWD
Date Listed: 1987-01-01 00:00:00
Closed Date: Not reported

HIST UST:
Region: STATE
Facility ID: 00000009785
Facility Type: Other
Other Type: Not reported
Total Tanks: 0003
Contact Name: CHENG-CHING LIANG
Telephone: 0000000000
Owner Name: CHENG-CHING LIANG
Owner Address: 27330 URCULA LN
Owner City,St,Zip: LOS ALTOS HILLS, CA 94022

Tank Num: 001
Container Num: 1
Year Installed: Not reported
Tank Capacity: 00002000
Tank Used for: PRODUCT
Type of Fuel: UNLEADED
Tank Construction: Not reported
Leak Detection: Stock Inventor

Tank Num: 002
Container Num: 1
Year Installed: Not reported
Tank Capacity: 00010000

COMBES AUTO REPAIR (Continued) **U001595948**

Tank Used for: PRODUCT
Type of Fuel: REGULAR
Tank Construction: Not reported
Leak Detection: Stock Inventor

Tank Num: 003
Container Num: 2
Year Installed: Not reported
Tank Capacity: 00010000
Tank Used for: PRODUCT
Type of Fuel: UNLEADED
Tank Construction: Not reported
Leak Detection: Stock Inventor

SWEEPS UST:
Status: Not reported
Comp Number: 9785
Number: Not reported
Board Of Equalization: 44-026056
Ref Date: Not reported
Act Date: Not reported
Created Date: Not reported
Tank Status: Not reported
Owner Tank Id: Not reported
Swrcb Tank Id: 43-006-009785-000001
Actv Date: Not reported
Capacity: 2000
Tank Use: M.V. FUEL
Stg: PRODUCT
Content: REG UNLEADED
Number Of Tanks: 5

Status: Not reported
Comp Number: 9785
Number: Not reported
Board Of Equalization: 44-026056
Ref Date: Not reported
Act Date: Not reported
Created Date: Not reported
Tank Status: Not reported
Owner Tank Id: Not reported
Swrcb Tank Id: 43-006-009785-000002
Actv Date: Not reported
Capacity: 10000
Tank Use: M.V. FUEL
Stg: PRODUCT
Content: LEADED
Number Of Tanks: Not reported

Status: Not reported
Comp Number: 9785
Number: Not reported
Board Of Equalization: 44-026056
Ref Date: Not reported
Act Date: Not reported
Created Date: Not reported
Tank Status: Not reported

COMBES AUTO REPAIR (Continued) **U001595948**

Owner Tank Id:	Not reported
Swrcb Tank Id:	43-006-009785-000003
Actv Date:	Not reported
Capacity:	10000
Tank Use:	M.V. FUEL
Stg:	PRODUCT
Content:	REG UNLEADED
Number Of Tanks:	Not reported
Status:	Not reported
Comp Number:	9785
Number:	Not reported
Board Of Equalization:	44-026056
Ref Date:	Not reported
Act Date:	Not reported
Created Date:	Not reported
Tank Status:	Not reported
Owner Tank Id:	Not reported
Swrcb Tank Id:	43-006-009785-000004
Actv Date:	Not reported
Capacity:	1000
Tank Use:	M.V. FUEL
Stg:	PRODUCT
Content:	REG UNLEADED
Number Of Tanks:	Not reported
Status:	Not reported
Comp Number:	9785
Number:	Not reported
Board Of Equalization:	44-026056
Ref Date:	Not reported
Act Date:	Not reported
Created Date:	Not reported
Tank Status:	Not reported
Owner Tank Id:	Not reported
Swrcb Tank Id:	43-006-009785-000005
Actv Date:	Not reported
Capacity:	1000
Tank Use:	M.V. FUEL
Stg:	PRODUCT
Content:	LEADED
Number Of Tanks:	Not reported
Status:	A
Comp Number:	9785
Number:	3
Board Of Equalization:	44-026056
Ref Date:	03-13-93
Act Date:	06-07-94
Created Date:	02-29-88
Tank Status:	Not reported
Owner Tank Id:	Not reported
Swrcb Tank Id:	Not reported
Actv Date:	Not reported
Capacity:	Not reported
Tank Use:	Not reported
Stg:	Not reported

COMBES AUTO REPAIR (Continued) **U001595948**

Content: Not reported
Number Of Tanks: Not reported

N77 **SHELL** **HIST CORTESE** **S100234851**
SSE **3601 EL CAMINO REAL** **LUST** **N/A**
1/4-1/2 **PALO ALTO, CA 94306** **HIST LUST**
0.278 mi.
1468 ft. **Site 3 of 3 in cluster N**

Relative:
Higher

Actual:
39 ft.

CORTESE:
Region: CORTESE
Facility County Code: 43
Reg By: LTNKA
Reg Id: 43-1314

LUST:
Region: STATE
Global Id: T0608501292
Latitude: 37.418844
Longitude: -122.132766
Case Type: LUST Cleanup Site
Status: Open - Site Assessment
Status Date: 1985-12-23 00:00:00
Lead Agency: SANTA CLARA COUNTY LOP
Case Worker: MJ
Local Agency: SANTA CLARA COUNTY LOP
RB Case Number: 19-047
LOC Case Number: 06S3W12R02f
File Location: Stored electronically as an E-file
Potential Media Affect: Other Groundwater (uses other than drinking water), Soil
Potential Contaminants of Concern: Benzene, Toluene, Xylene, Fuel Oxygenates, Gasoline
Site History: Not reported

Click here to access the California GeoTracker records for this facility:

LUST REG 2:
Region: 2
Facility Id: Not reported
Facility Status: Pollution Characterization
Case Number: 06S3W12R02f
How Discovered: Not reported
Leak Cause: Not reported
Leak Source: Not reported
Date Leak Confirmed: Not reported
Oversight Program: LUST
Prelim. Site Assesment Wokplan Submitted: Not reported
Preliminary Site Assesment Began: 11/5/1985
Pollution Characterization Began: 12/23/1985
Pollution Remediation Plan Submitted: Not reported
Date Remediation Action Underway: Not reported
Date Post Remedial Action Monitoring Began: Not reported

LUST SANTA CLARA:
Region: SANTA CLARA
SCVWD ID: 06S3W12R02f
Closed Date: Not reported

SHELL (Continued) **S100234851**

HIST LUST SANTA CLARA:
Region: SANTA CLARA
Region Code: 2
SCVWD ID: 06S3W12R02
Oversite Agency: SCCDEH
Date Listed: 1986-01-01 00:00:00
Closed Date: Not reported

O78 **GENENCOR INTERNATIONAL** **CERC-NFRAP** **1000414981**
WSW **925 PAGE MILL ROAD** **RCRA-SQG** **CAD028874253**
1/4-1/2 **PALO ALTO, CA 94304** **FINDS**
0.315 mi. **MANIFEST**
1662 ft. **Site 1 of 3 in cluster O** **HAZNET**
EMI

Relative:
Higher

Actual:
42 ft.

CERC-NFRAP:
Site ID: 0901280
Federal Facility: Not a Federal Facility
NPL Status: Not on the NPL
Non NPL Status: NFRAP

CERCLIS-NFRAP Site Contact Name(s):
Contact Title: Not reported
Contact Name: Carl Brickner
Contact Tel: (415) 972-3814

Contact Title: Not reported
Contact Name: Brunilda Davila
Contact Tel: (415) 972-3162

Contact Title: Not reported
Contact Name: Jeff Inglis
Contact Tel: (415) 972-3095

Contact Title: Not reported
Contact Name: Karen Jurist
Contact Tel: (415) 972-3219

Contact Title: Not reported
Contact Name: Matt Mitguard
Contact Tel: (415) 972-3096

CERCLIS-NFRAP Assessment History:
Action: DISCOVERY
Date Started: Not reported
Date Completed: 01/01/1987
Priority Level: Not reported

Action: PRELIMINARY ASSESSMENT
Date Started: 02/01/1987
Date Completed: 04/01/1987
Priority Level: NFRAP: No further Remedial Action planned

Action: ARCHIVE SITE
Date Started: Not reported
Date Completed: 04/01/1987

GENENCOR INTERNATIONAL (Continued) **1000414981**

Priority Level: Not reported

RCRA-SQG:
Date form received by agency: 07/20/2009
Facility name: DANISCO US INC
Facility address: 925 PAGE MILL RD
PALO ALTO, CA 94304
EPA ID: CAD028874253
Contact: SONIA C WEISS
Contact address: 925 PAGE MILL RD
PALO ALTO, CA 94304
Contact country: US
Contact telephone: 650-846-5863
Contact email: SONIA.WEISS@DANISCO.COM
EPA Region: 09
Classification: Small Small Quantity Generator
Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:
Owner/operator name: DANISCO US INC
Owner/operator address: FOUR NEW CENTURY PARKWAY
NEW CENTURY, KS 66031
Owner/operator country: US
Owner/operator telephone: Not reported
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: 05/01/2005
Owner/Op end date: Not reported

Owner/operator name: GENENCOR A DANISCO DIVISION
Owner/operator address: Not reported
Not reported
Owner/operator country: Not reported
Owner/operator telephone: Not reported
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: 05/01/2005
Owner/Op end date: Not reported

Owner/operator name: NOT REQUIRED
Owner/operator address: NOT REQUIRED
NOT REQUIRED, ME 99999
Owner/operator country: Not reported
Owner/operator telephone: (415) 555-1212
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No

GENENCOR INTERNATIONAL (Continued) **1000414981**

Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No
Off-site waste receiver:	Verified to be non-commercial

Universal Waste Summary:

Waste type:	Other
Accumulated waste on-site:	No
Generated waste on-site:	No

Waste type:	Batteries
Accumulated waste on-site:	No
Generated waste on-site:	Not reported

Waste type:	Lamps
Accumulated waste on-site:	No
Generated waste on-site:	Not reported

Waste type:	Pesticides
Accumulated waste on-site:	No
Generated waste on-site:	Not reported

Waste type:	Thermostats
Accumulated waste on-site:	No
Generated waste on-site:	Not reported

Historical Generators:

Date form received by agency:	09/01/1996
Facility name:	DANISCO US INC
Site name:	GENENCOR INTERNATIONAL
Classification:	Large Quantity Generator

Date form received by agency:	09/01/1996
Facility name:	DANISCO US INC
Site name:	GENENCOR INTERNATIONAL
Classification:	Small Quantity Generator

Date form received by agency:	02/08/1996
Facility name:	DANISCO US INC
Site name:	GENENCOR INTERNATIONAL
Classification:	Small Quantity Generator

Hazardous Waste Summary:

Waste code:	D001
Waste name:	IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS

GENENCOR INTERNATIONAL (Continued) **1000414981**

CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Waste code: D002
Waste name: A WASTE WHICH HAS A PH OF LESS THAN 2 OR GREATER THAN 12.5 IS CONSIDERED TO BE A CORROSIVE HAZARDOUS WASTE. SODIUM HYDROXIDE, A CAUSTIC SOLUTION WITH A HIGH PH, IS OFTEN USED BY INDUSTRIES TO CLEAN OR DEGREASE PARTS. HYDROCHLORIC ACID, A SOLUTION WITH A LOW PH, IS USED BY MANY INDUSTRIES TO CLEAN METAL PARTS PRIOR TO PAINTING. WHEN THESE CAUSTIC OR ACID SOLUTIONS BECOME CONTAMINATED AND MUST BE DISPOSED, THE WASTE WOULD BE A CORROSIVE HAZARDOUS WASTE.

Waste code: D003
Waste name: A MATERIAL IS CONSIDERED TO BE A REACTIVE HAZARDOUS WASTE IF IT IS NORMALLY UNSTABLE, REACTS VIOLENTLY WITH WATER, GENERATES TOXIC GASES WHEN EXPOSED TO WATER OR CORROSIVE MATERIALS, OR IF IT IS CAPABLE OF DETONATION OR EXPLOSION WHEN EXPOSED TO HEAT OR A FLAME. ONE EXAMPLE OF SUCH WASTE WOULD BY WASTE GUNPOWDER.

Waste code: D009
Waste name: MERCURY

Waste code: D010
Waste name: SELENIUM

Waste code: D011
Waste name: SILVER

Waste code: D022
Waste name: CHLOROFORM

Waste code: F002
Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2-TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE LISTED IN F001, F004, OR F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste code: F003
Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NON-HALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS, AND, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

GENENCOR INTERNATIONAL (Continued) **1000414981**

Waste code: P094
Waste name: PHORATE

Waste code: U003
Waste name: ACETONITRILE (I,T)

Waste code: U044
Waste name: CHLOROFORM

Waste code: U108
Waste name: 1,4-DIETHYLENEOXIDE

Waste code: U123
Waste name: FORMIC ACID (C,T)

Waste code: U134
Waste name: HYDROFLUORIC ACID (C,T)

Waste code: U147
Waste name: 2,5-FURANDIONE

Waste code: U154
Waste name: METHANOL (I)

Waste code: U165
Waste name: NAPHTHALENE

Waste code: U188
Waste name: PHENOL

Waste code: U219
Waste name: THIOUREA

Waste code: U271
Waste name: BENOMYL (OR) CARBAMIC ACID,
[1-[(BUTYLAMINO)CARBONYL]-1H-BENZIMIDAZOL-2-YL]-, METHYL ESTER

Waste code: U404
Waste name: ETHANAMINE, N,N-DIETHYL- (OR) TRIETHYLAMINE

Violation Status: No violations found

FINDS:

Registry ID: 110002411257

Environmental Interest/Information System

The NEI (National Emissions Inventory) database contains information on stationary and mobile sources that emit criteria air pollutants and their precursors, as well as hazardous air pollutants (HAPs).

California Hazardous Waste Tracking System - Datamart (HWTS-DATAMART) provides California with information on hazardous waste shipments for generators, transporters, and treatment, storage, and disposal facilities.

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of

GENENCOR INTERNATIONAL (Continued) **1000414981**

events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

NY MANIFEST:

EPA ID:	CAD028874253
Country:	USA
Mailing Name:	EASTMAN KODAK COMPANY
Mailing Contact:	EASTMAN KODAK COMPANY
Mailing Address:	925 PAGE MILL ROAD
Mailing Address 2:	Not reported
Mailing City:	PALO ALTO
Mailing State:	CA
Mailing Zip:	94304
Mailing Zip4:	Not reported
Mailing Country:	USA
Mailing Phone:	415-494-7555

Document ID:	NYA1725741
Manifest Status:	Completed copy
Trans1 State ID:	Not reported
Trans2 State ID:	Not reported
Generator Ship Date:	860128
Trans1 Recv Date:	860128
Trans2 Recv Date:	860207
TSD Site Recv Date:	860207
Part A Recv Date:	860204
Part B Recv Date:	860221
Generator EPA ID:	CAD028874253
Trans1 EPA ID:	FLD007922578
Trans2 EPA ID:	Not reported
TSDF ID:	NYD980592497
Waste Code:	D001 - NON-LISTED IGNITABLE WASTES
Quantity:	00055
Units:	G - Gallons (liquids only)* (8.3 pounds)
Number of Containers:	001
Container Type:	DM - Metal drums, barrels
Handling Method:	B Incineration, heat recovery, burning.
Specific Gravity:	100
Year:	86
Manifest Tracking Num:	Not reported
Import Ind:	Not reported
Export Ind:	Not reported
Discr Quantity Ind:	Not reported
Discr Type Ind:	Not reported
Discr Residue Ind:	Not reported
Discr Partial Reject Ind:	Not reported
Discr Full Reject Ind:	Not reported
Manifest Ref Num:	Not reported
Alt Fac RCRA Id:	Not reported
Alt Fac Sign Date:	Not reported
Mgmt Method Type Code:	Not reported

GENENCOR INTERNATIONAL (Continued) **1000414981**

Document ID:	NYA1725723
Manifest Status:	Completed copy
Trans1 State ID:	80043-9
Trans2 State ID:	Not reported
Generator Ship Date:	870427
Trans1 Recv Date:	870427
Trans2 Recv Date:	870506
TSD Site Recv Date:	870506
Part A Recv Date:	870505
Part B Recv Date:	870511
Generator EPA ID:	CAD028874253
Trans1 EPA ID:	FLD007922578
Trans2 EPA ID:	Not reported
TSDF ID:	NYD980592497
Waste Code:	F001 - UNKNOWN
Quantity:	00055
Units:	G - Gallons (liquids only)* (8.3 pounds)
Number of Containers:	001
Container Type:	DM - Metal drums, barrels
Handling Method:	B Incineration, heat recovery, burning.
Specific Gravity:	100
Year:	87
Manifest Tracking Num:	Not reported
Import Ind:	Not reported
Export Ind:	Not reported
Discr Quantity Ind:	Not reported
Discr Type Ind:	Not reported
Discr Residue Ind:	Not reported
Discr Partial Reject Ind:	Not reported
Discr Full Reject Ind:	Not reported
Manifest Ref Num:	Not reported
Alt Fac RCRA Id:	Not reported
Alt Fac Sign Date:	Not reported
Mgmt Method Type Code:	Not reported

Document ID:	NYA1725714
Manifest Status:	Completed copy
Trans1 State ID:	2K71210
Trans2 State ID:	Not reported
Generator Ship Date:	870123
Trans1 Recv Date:	870123
Trans2 Recv Date:	870202
TSD Site Recv Date:	870202
Part A Recv Date:	870130
Part B Recv Date:	870210
Generator EPA ID:	CAD028874253
Trans1 EPA ID:	FLD007922578
Trans2 EPA ID:	Not reported
TSDF ID:	NYD980592497
Waste Code:	F001 - UNKNOWN
Quantity:	00023
Units:	G - Gallons (liquids only)* (8.3 pounds)
Number of Containers:	001
Container Type:	DM - Metal drums, barrels
Handling Method:	B Incineration, heat recovery, burning.
Specific Gravity:	100

GENENCOR INTERNATIONAL (Continued) **1000414981**

Year:	87
Manifest Tracking Num:	Not reported
Import Ind:	Not reported
Export Ind:	Not reported
Discr Quantity Ind:	Not reported
Discr Type Ind:	Not reported
Discr Residue Ind:	Not reported
Discr Partial Reject Ind:	Not reported
Discr Full Reject Ind:	Not reported
Manifest Ref Num:	Not reported
Alt Fac RCRA Id:	Not reported
Alt Fac Sign Date:	Not reported
Mgmt Method Type Code:	Not reported

Document ID:	NYA3164490
Manifest Status:	Completed after the designated time period for a TSDF to get a copy to the DEC
Trans1 State ID:	0109515
Trans2 State ID:	Not reported
Generator Ship Date:	871021
Trans1 Recv Date:	871021
Trans2 Recv Date:	871117
TSD Site Recv Date:	871117
Part A Recv Date:	871026
Part B Recv Date:	871123
Generator EPA ID:	CAD028874253
Trans1 EPA ID:	FLD007922578
Trans2 EPA ID:	Not reported
TSDF ID:	NYD980592497
Waste Code:	F001 - UNKNOWN
Quantity:	00032
Units:	G - Gallons (liquids only)* (8.3 pounds)
Number of Containers:	001
Container Type:	DM - Metal drums, barrels
Handling Method:	B Incineration, heat recovery, burning.
Specific Gravity:	100
Year:	87
Manifest Tracking Num:	Not reported
Import Ind:	Not reported
Export Ind:	Not reported
Discr Quantity Ind:	Not reported
Discr Type Ind:	Not reported
Discr Residue Ind:	Not reported
Discr Partial Reject Ind:	Not reported
Discr Full Reject Ind:	Not reported
Manifest Ref Num:	Not reported
Alt Fac RCRA Id:	Not reported
Alt Fac Sign Date:	Not reported
Mgmt Method Type Code:	Not reported

Document ID:	NYA3164512
Manifest Status:	Completed after the designated time period for a TSDF to get a copy to the DEC
Trans1 State ID:	FL0043677
Trans2 State ID:	Not reported
Generator Ship Date:	880122
Trans1 Recv Date:	880122

GENENCOR INTERNATIONAL (Continued) **1000414981**

Trans2 Recv Date:	880209
TSD Site Recv Date:	880209
Part A Recv Date:	880318
Part B Recv Date:	880222
Generator EPA ID:	CAD028874253
Trans1 EPA ID:	FLD007922578
Trans2 EPA ID:	Not reported
TSDF ID:	NYD980592497
Waste Code:	F001 - UNKNOWN
Quantity:	00040
Units:	G - Gallons (liquids only)* (8.3 pounds)
Number of Containers:	001
Container Type:	DM - Metal drums, barrels
Handling Method:	B Incineration, heat recovery, burning.
Specific Gravity:	100
Year:	88
Manifest Tracking Num:	Not reported
Import Ind:	Not reported
Export Ind:	Not reported
Discr Quantity Ind:	Not reported
Discr Type Ind:	Not reported
Discr Residue Ind:	Not reported
Discr Partial Reject Ind:	Not reported
Discr Full Reject Ind:	Not reported
Manifest Ref Num:	Not reported
Alt Fac RCRA Id:	Not reported
Alt Fac Sign Date:	Not reported
Mgmt Method Type Code:	Not reported

Document ID:	NYB4677705
Manifest Status:	Completed copy
Trans1 State ID:	11712PNY
Trans2 State ID:	Not reported
Generator Ship Date:	930128
Trans1 Recv Date:	930128
Trans2 Recv Date:	Not reported
TSD Site Recv Date:	930201
Part A Recv Date:	930211
Part B Recv Date:	930217
Generator EPA ID:	CAD028874253
Trans1 EPA ID:	NYD980769947
Trans2 EPA ID:	Not reported
TSDF ID:	NYD980592497
Waste Code:	D011 - SILVER 5.0 MG/L TCLP
Quantity:	04015
Units:	G - Gallons (liquids only)* (8.3 pounds)
Number of Containers:	073
Container Type:	DM - Metal drums, barrels
Handling Method:	T Chemical, physical, or biological treatment.
Specific Gravity:	100
Year:	93
Manifest Tracking Num:	Not reported
Import Ind:	Not reported
Export Ind:	Not reported
Discr Quantity Ind:	Not reported
Discr Type Ind:	Not reported

GENENCOR INTERNATIONAL (Continued) **1000414981**

Discr Residue Ind:	Not reported
Discr Partial Reject Ind:	Not reported
Discr Full Reject Ind:	Not reported
Manifest Ref Num:	Not reported
Alt Fac RCRA Id:	Not reported
Alt Fac Sign Date:	Not reported
Mgmt Method Type Code:	Not reported

Document ID:	NYB4677696
Manifest Status:	Completed copy
Trans1 State ID:	11783PNY
Trans2 State ID:	Not reported
Generator Ship Date:	930128
Trans1 Recv Date:	930128
Trans2 Recv Date:	Not reported
TSD Site Recv Date:	930202
Part A Recv Date:	930211
Part B Recv Date:	930217
Generator EPA ID:	CAD028874253
Trans1 EPA ID:	NYD980769947
Trans2 EPA ID:	Not reported
TSDF ID:	NYD980592497
Waste Code:	D001 - NON-LISTED IGNITABLE WASTES
Quantity:	00275
Units:	G - Gallons (liquids only)* (8.3 pounds)
Number of Containers:	005
Container Type:	DM - Metal drums, barrels
Handling Method:	B Incineration, heat recovery, burning.
Specific Gravity:	100
Waste Code:	Not reported
Quantity:	00275
Units:	G - Gallons (liquids only)* (8.3 pounds)
Number of Containers:	005
Container Type:	DM - Metal drums, barrels
Handling Method:	B Incineration, heat recovery, burning.
Specific Gravity:	100
Year:	93
Manifest Tracking Num:	Not reported
Import Ind:	Not reported
Export Ind:	Not reported
Discr Quantity Ind:	Not reported
Discr Type Ind:	Not reported
Discr Residue Ind:	Not reported
Discr Partial Reject Ind:	Not reported
Discr Full Reject Ind:	Not reported
Manifest Ref Num:	Not reported
Alt Fac RCRA Id:	Not reported
Alt Fac Sign Date:	Not reported
Mgmt Method Type Code:	Not reported

Document ID:	NYA1725633
Manifest Status:	Completed after the designated time period for a TSDF to get a copy to the DEC
Trans1 State ID:	0268
Trans2 State ID:	Not reported
Generator Ship Date:	850606

GENENCOR INTERNATIONAL (Continued) **1000414981**

Trans1 Recv Date:	850606
Trans2 Recv Date:	850613
TSD Site Recv Date:	850613
Part A Recv Date:	850614
Part B Recv Date:	850710
Generator EPA ID:	CAD028874253
Trans1 EPA ID:	FLD007922578
Trans2 EPA ID:	Not reported
TSDF ID:	NYD980592497
Waste Code:	F002 - HALO SOLV + STILL BOTTOMS FM REC OF SOLV
Quantity:	00030
Units:	G - Gallons (liquids only)* (8.3 pounds)
Number of Containers:	002
Container Type:	DM - Metal drums, barrels
Handling Method:	T Chemical, physical, or biological treatment.
Specific Gravity:	100
Waste Code:	Not reported
Quantity:	00055
Units:	G - Gallons (liquids only)* (8.3 pounds)
Number of Containers:	001
Container Type:	DM - Metal drums, barrels
Handling Method:	T Chemical, physical, or biological treatment.
Specific Gravity:	100
Year:	85
Manifest Tracking Num:	Not reported
Import Ind:	Not reported
Export Ind:	Not reported
Discr Quantity Ind:	Not reported
Discr Type Ind:	Not reported
Discr Residue Ind:	Not reported
Discr Partial Reject Ind:	Not reported
Discr Full Reject Ind:	Not reported
Manifest Ref Num:	Not reported
Alt Fac RCRA Id:	Not reported
Alt Fac Sign Date:	Not reported
Mgmt Method Type Code:	Not reported

Document ID:	NYA1724805
Manifest Status:	Completed after the designated time period for a TSDF to get a copy to the DEC
Trans1 State ID:	OK002
Trans2 State ID:	Not reported
Generator Ship Date:	850305
Trans1 Recv Date:	850305
Trans2 Recv Date:	Not reported
TSD Site Recv Date:	850311
Part A Recv Date:	850809
Part B Recv Date:	850329
Generator EPA ID:	CAD028874253
Trans1 EPA ID:	OKT410010474
Trans2 EPA ID:	Not reported
TSDF ID:	NYD980592497
Waste Code:	D001 - NON-LISTED IGNITABLE WASTES
Quantity:	00200
Units:	G - Gallons (liquids only)* (8.3 pounds)
Number of Containers:	004
Container Type:	DM - Metal drums, barrels

GENENCOR INTERNATIONAL (Continued) **1000414981**

Handling Method:	B Incineration, heat recovery, burning.
Specific Gravity:	100
Year:	85
Manifest Tracking Num:	Not reported
Import Ind:	Not reported
Export Ind:	Not reported
Discr Quantity Ind:	Not reported
Discr Type Ind:	Not reported
Discr Residue Ind:	Not reported
Discr Partial Reject Ind:	Not reported
Discr Full Reject Ind:	Not reported
Manifest Ref Num:	Not reported
Alt Fac RCRA Id:	Not reported
Alt Fac Sign Date:	Not reported
Mgmt Method Type Code:	Not reported

Document ID:	NYA1724814
Manifest Status:	Completed after the designated time period for a TSDF to get a copy to the DEC
Trans1 State ID:	OK002
Trans2 State ID:	Not reported
Generator Ship Date:	850305
Trans1 Recv Date:	850305
Trans2 Recv Date:	Not reported
TSD Site Recv Date:	850311
Part A Recv Date:	850808
Part B Recv Date:	850329
Generator EPA ID:	CAD028874253
Trans1 EPA ID:	OKT410010474
Trans2 EPA ID:	Not reported
TSDF ID:	NYD980592497
Waste Code:	B007 - OTHER MISCELLANEOUS PCB WASTES
Quantity:	00001
Units:	G - Gallons (liquids only)* (8.3 pounds)
Number of Containers:	001
Container Type:	DF - Fiberboard or plastic drums (glass)
Handling Method:	L Landfill.
Specific Gravity:	100
Year:	85
Manifest Tracking Num:	Not reported
Import Ind:	Not reported
Export Ind:	Not reported
Discr Quantity Ind:	Not reported
Discr Type Ind:	Not reported
Discr Residue Ind:	Not reported
Discr Partial Reject Ind:	Not reported
Discr Full Reject Ind:	Not reported
Manifest Ref Num:	Not reported
Alt Fac RCRA Id:	Not reported
Alt Fac Sign Date:	Not reported
Mgmt Method Type Code:	Not reported

Document ID:	NYB4814118
Manifest Status:	Completed copy
Trans1 State ID:	12076PNY
Trans2 State ID:	Not reported

GENENCOR INTERNATIONAL (Continued) **1000414981**

Generator Ship Date:	941214
Trans1 Recv Date:	941214
Trans2 Recv Date:	Not reported
TSD Site Recv Date:	941220
Part A Recv Date:	941228
Part B Recv Date:	950104
Generator EPA ID:	CAD028874253
Trans1 EPA ID:	NYD980769947
Trans2 EPA ID:	Not reported
TSDF ID:	NYD980592497
Waste Code:	D008 - LEAD 5.0 MG/L TCLP
Quantity:	00030
Units:	G - Gallons (liquids only)* (8.3 pounds)
Number of Containers:	001
Container Type:	DF - Fiberboard or plastic drums (glass)
Handling Method:	T Chemical, physical, or biological treatment.
Specific Gravity:	100
Year:	94
Manifest Tracking Num:	Not reported
Import Ind:	Not reported
Export Ind:	Not reported
Discr Quantity Ind:	Not reported
Discr Type Ind:	Not reported
Discr Residue Ind:	Not reported
Discr Partial Reject Ind:	Not reported
Discr Full Reject Ind:	Not reported
Manifest Ref Num:	Not reported
Alt Fac RCRA Id:	Not reported
Alt Fac Sign Date:	Not reported
Mgmt Method Type Code:	Not reported

Document ID:	NYA1725687
Manifest Status:	Completed copy
Trans1 State ID:	0268
Trans2 State ID:	Not reported
Generator Ship Date:	860417
Trans1 Recv Date:	860417
Trans2 Recv Date:	860425
TSD Site Recv Date:	860425
Part A Recv Date:	860422
Part B Recv Date:	860502
Generator EPA ID:	CAD028874253
Trans1 EPA ID:	FLD007922578
Trans2 EPA ID:	Not reported
TSDF ID:	NYD980592497
Waste Code:	D001 - NON-LISTED IGNITABLE WASTES
Quantity:	00055
Units:	G - Gallons (liquids only)* (8.3 pounds)
Number of Containers:	001
Container Type:	DM - Metal drums, barrels
Handling Method:	B Incineration, heat recovery, burning.
Specific Gravity:	100
Year:	86
Manifest Tracking Num:	Not reported
Import Ind:	Not reported
Export Ind:	Not reported

GENENCOR INTERNATIONAL (Continued) **1000414981**

Discr Quantity Ind:	Not reported
Discr Type Ind:	Not reported
Discr Residue Ind:	Not reported
Discr Partial Reject Ind:	Not reported
Discr Full Reject Ind:	Not reported
Manifest Ref Num:	Not reported
Alt Fac RCRA Id:	Not reported
Alt Fac Sign Date:	Not reported
Mgmt Method Type Code:	Not reported

Document ID:	NYA1725696
Manifest Status:	Completed after the designated time period for a TSDF to get a copy to the DEC
Trans1 State ID:	0268
Trans2 State ID:	X-17592NY
Generator Ship Date:	860716
Trans1 Recv Date:	860716
Trans2 Recv Date:	860815
TSD Site Recv Date:	860815
Part A Recv Date:	860721
Part B Recv Date:	860827
Generator EPA ID:	CAD028874253
Trans1 EPA ID:	FLD007922578
Trans2 EPA ID:	NYD980769947
TSDF ID:	NYD980592497
Waste Code:	F001 - UNKNOWN
Quantity:	00053
Units:	G - Gallons (liquids only)* (8.3 pounds)
Number of Containers:	001
Container Type:	DM - Metal drums, barrels
Handling Method:	B Incineration, heat recovery, burning.
Specific Gravity:	100
Year:	86
Manifest Tracking Num:	Not reported
Import Ind:	Not reported
Export Ind:	Not reported
Discr Quantity Ind:	Not reported
Discr Type Ind:	Not reported
Discr Residue Ind:	Not reported
Discr Partial Reject Ind:	Not reported
Discr Full Reject Ind:	Not reported
Manifest Ref Num:	Not reported
Alt Fac RCRA Id:	Not reported
Alt Fac Sign Date:	Not reported
Mgmt Method Type Code:	Not reported

Document ID:	NYA1725705
Manifest Status:	Completed copy
Trans1 State ID:	Not reported
Trans2 State ID:	Not reported
Generator Ship Date:	861024
Trans1 Recv Date:	861024
Trans2 Recv Date:	Not reported
TSD Site Recv Date:	861031
Part A Recv Date:	861030
Part B Recv Date:	861112

GENENCOR INTERNATIONAL (Continued) **1000414981**

Generator EPA ID:	CAD028874253
Trans1 EPA ID:	FLD007922578
Trans2 EPA ID:	Not reported
TSDF ID:	NYD980592497
Waste Code:	F001 - UNKNOWN
Quantity:	00055
Units:	G - Gallons (liquids only)* (8.3 pounds)
Number of Containers:	001
Container Type:	DM - Metal drums, barrels
Handling Method:	B Incineration, heat recovery, burning.
Specific Gravity:	100
Year:	86
Manifest Tracking Num:	Not reported
Import Ind:	Not reported
Export Ind:	Not reported
Discr Quantity Ind:	Not reported
Discr Type Ind:	Not reported
Discr Residue Ind:	Not reported
Discr Partial Reject Ind:	Not reported
Discr Full Reject Ind:	Not reported
Manifest Ref Num:	Not reported
Alt Fac RCRA Id:	Not reported
Alt Fac Sign Date:	Not reported
Mgmt Method Type Code:	Not reported

Document ID:	NYA1725732
Manifest Status:	Completed after the designated time period for a TSDF to get a copy to the DEC
Trans1 State ID:	35773
Trans2 State ID:	Not reported
Generator Ship Date:	870724
Trans1 Recv Date:	870724
Trans2 Recv Date:	Not reported
TSD Site Recv Date:	870813
Part A Recv Date:	870731
Part B Recv Date:	870821
Generator EPA ID:	CAD028874253
Trans1 EPA ID:	FLD007922578
Trans2 EPA ID:	Not reported
TSDF ID:	NYD980592497
Waste Code:	F001 - UNKNOWN
Quantity:	00040
Units:	G - Gallons (liquids only)* (8.3 pounds)
Number of Containers:	001
Container Type:	DM - Metal drums, barrels
Handling Method:	B Incineration, heat recovery, burning.
Specific Gravity:	100
Year:	87
Manifest Tracking Num:	Not reported
Import Ind:	Not reported
Export Ind:	Not reported
Discr Quantity Ind:	Not reported
Discr Type Ind:	Not reported
Discr Residue Ind:	Not reported
Discr Partial Reject Ind:	Not reported
Discr Full Reject Ind:	Not reported
Manifest Ref Num:	Not reported

GENENCOR INTERNATIONAL (Continued) **1000414981**

Alt Fac RCRA Id:	Not reported
Alt Fac Sign Date:	Not reported
Mgmt Method Type Code:	Not reported

Document ID:	NYB4752657
Manifest Status:	Completed copy
Trans1 State ID:	11341PNY
Trans2 State ID:	Not reported
Generator Ship Date:	930707
Trans1 Recv Date:	930707
Trans2 Recv Date:	Not reported
TSD Site Recv Date:	930712
Part A Recv Date:	930802
Part B Recv Date:	930728
Generator EPA ID:	CAD028874253
Trans1 EPA ID:	NYD980769947
Trans2 EPA ID:	Not reported
TSDF ID:	NYD980592497
Waste Code:	D001 - NON-LISTED IGNITABLE WASTES
Quantity:	00023
Units:	K - Kilograms (2.2 pounds)
Number of Containers:	002
Container Type:	DM - Metal drums, barrels
Handling Method:	B Incineration, heat recovery, burning.
Specific Gravity:	100
Waste Code:	Not reported
Quantity:	00012
Units:	K - Kilograms (2.2 pounds)
Number of Containers:	001
Container Type:	DM - Metal drums, barrels
Handling Method:	B Incineration, heat recovery, burning.
Specific Gravity:	100
Waste Code:	Not reported
Quantity:	00031
Units:	K - Kilograms (2.2 pounds)
Number of Containers:	001
Container Type:	DF - Fiberboard or plastic drums (glass)
Handling Method:	B Incineration, heat recovery, burning.
Specific Gravity:	100
Year:	93
Manifest Tracking Num:	Not reported
Import Ind:	Not reported
Export Ind:	Not reported
Discr Quantity Ind:	Not reported
Discr Type Ind:	Not reported
Discr Residue Ind:	Not reported
Discr Partial Reject Ind:	Not reported
Discr Full Reject Ind:	Not reported
Manifest Ref Num:	Not reported
Alt Fac RCRA Id:	Not reported
Alt Fac Sign Date:	Not reported
Mgmt Method Type Code:	Not reported

Document ID:	NYB5807259
Manifest Status:	Completed copy

GENENCOR INTERNATIONAL (Continued) **1000414981**

Trans1 State ID:	11341PNY
Trans2 State ID:	Not reported
Generator Ship Date:	930707
Trans1 Recv Date:	930707
Trans2 Recv Date:	Not reported
TSD Site Recv Date:	930712
Part A Recv Date:	930802
Part B Recv Date:	930728
Generator EPA ID:	CAD028874253
Trans1 EPA ID:	NYD980769947
Trans2 EPA ID:	Not reported
TSDF ID:	NYD980592497
Waste Code:	D002 - NON-LISTED CORROSIVE WASTES
Quantity:	00012
Units:	K - Kilograms (2.2 pounds)
Number of Containers:	001
Container Type:	DF - Fiberboard or plastic drums (glass)
Handling Method:	B Incineration, heat recovery, burning.
Specific Gravity:	100
Year:	93
Manifest Tracking Num:	Not reported
Import Ind:	Not reported
Export Ind:	Not reported
Discr Quantity Ind:	Not reported
Discr Type Ind:	Not reported
Discr Residue Ind:	Not reported
Discr Partial Reject Ind:	Not reported
Discr Full Reject Ind:	Not reported
Manifest Ref Num:	Not reported
Alt Fac RCRA Id:	Not reported
Alt Fac Sign Date:	Not reported
Mgmt Method Type Code:	Not reported

Document ID:	NYB4752666
Manifest Status:	Completed copy
Trans1 State ID:	11341PNY
Trans2 State ID:	Not reported
Generator Ship Date:	930707
Trans1 Recv Date:	930707
Trans2 Recv Date:	Not reported
TSD Site Recv Date:	930712
Part A Recv Date:	930802
Part B Recv Date:	930728
Generator EPA ID:	CAD028874253
Trans1 EPA ID:	NYD980769947
Trans2 EPA ID:	Not reported
TSDF ID:	NYD980592497
Waste Code:	D001 - NON-LISTED IGNITABLE WASTES
Quantity:	00010
Units:	K - Kilograms (2.2 pounds)
Number of Containers:	001
Container Type:	DF - Fiberboard or plastic drums (glass)
Handling Method:	B Incineration, heat recovery, burning.
Specific Gravity:	100
Year:	93
Manifest Tracking Num:	Not reported

GENENCOR INTERNATIONAL (Continued) **1000414981**

Import Ind:	Not reported
Export Ind:	Not reported
Discr Quantity Ind:	Not reported
Discr Type Ind:	Not reported
Discr Residue Ind:	Not reported
Discr Partial Reject Ind:	Not reported
Discr Full Reject Ind:	Not reported
Manifest Ref Num:	Not reported
Alt Fac RCRA Id:	Not reported
Alt Fac Sign Date:	Not reported
Mgmt Method Type Code:	Not reported

HAZNET:

Gepaid:	CAD028874253
Contact:	DEB MARTIN, EH & S MANAGER
Telephone:	6508467657
Facility Addr2:	Not reported
Mailing Name:	Not reported
Mailing Address:	925 PAGE MILL ROAD
Mailing City,St,Zip:	PALO ALTO, CA 943040000
Gen County:	Santa Clara
TSD EPA ID:	CAD008302903
TSD County:	Los Angeles
Waste Category:	Not reported
Disposal Method:	H14
Tons:	0
Facility County:	Santa Clara

Gepaid:	CAD028874253
Contact:	GENENCOR INTERNATIONAL INC
Telephone:	6508467618
Facility Addr2:	Not reported
Mailing Name:	Not reported
Mailing Address:	925 PAGE MILL ROAD
Mailing City,St,Zip:	PALO ALTO, CA 943040000
Gen County:	Santa Clara
TSD EPA ID:	CAT080014079
TSD County:	7
Waste Category:	Other organic solids
Disposal Method:	Transfer Station
Tons:	7.7605
Facility County:	Santa Clara

Gepaid:	CAD028874253
Contact:	GENENCOR INTERNATIONAL INC
Telephone:	6508467618
Facility Addr2:	Not reported
Mailing Name:	Not reported
Mailing Address:	925 PAGE MILL ROAD
Mailing City,St,Zip:	PALO ALTO, CA 943040000
Gen County:	Santa Clara
TSD EPA ID:	CAT080014079
TSD County:	7
Waste Category:	Photochemicals/photoprocessing waste
Disposal Method:	Transfer Station
Tons:	.1550
Facility County:	Santa Clara

GENENCOR INTERNATIONAL (Continued) **1000414981**

Gepaid: CAD028874253
Contact: GENENCOR INTERNATIONAL INC
Telephone: 6508467618
Facility Addr2: Not reported
Mailing Name: Not reported
Mailing Address: 925 PAGE MILL ROAD
Mailing City,St,Zip: PALO ALTO, CA 943040000
Gen County: Santa Clara
TSD EPA ID: CAT080014079
TSD County: 7
Waste Category: Off-specification, aged, or surplus inorganics
Disposal Method: Transfer Station
Tons: .0040
Facility County: Santa Clara

Gepaid: CAD028874253
Contact: GENENCOR INTERNATIONAL INC
Telephone: 6508467618
Facility Addr2: Not reported
Mailing Name: Not reported
Mailing Address: 925 PAGE MILL ROAD
Mailing City,St,Zip: PALO ALTO, CA 943040000
Gen County: Santa Clara
TSD EPA ID: CAT080014079
TSD County: 7
Waste Category: Off-specification, aged, or surplus organics
Disposal Method: Transfer Station
Tons: 3.2040
Facility County: Santa Clara

Click this hyperlink while viewing on your computer to access
Off-specification, aged, or surplus organics

EMI:
Year: 1996
County Code: 43
Air Basin: SF
Facility ID: 10656
Air District Name: BA
SIC Code: 8731
Air District Name: BAY AREA AQMD
Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: 0
Reactive Organic Gases Tons/Yr: 0
Carbon Monoxide Emissions Tons/Yr: 1
NOX - Oxides of Nitrogen Tons/Yr: 2
SOX - Oxides of Sulphur Tons/Yr: 0
Particulate Matter Tons/Yr: 0
Part. Matter 10 Micrometers & Smllr Tons/Yr: 0

Year: 1997
County Code: 43
Air Basin: SF
Facility ID: 10656
Air District Name: BA
SIC Code: 8731

GENENCOR INTERNATIONAL (Continued) **1000414981**

Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	2
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	1998
County Code:	43
Air Basin:	SF
Facility ID:	10656
Air District Name:	BA
SIC Code:	8731
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	1
NOX - Oxides of Nitrogen Tons/Yr:	2
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	1999
County Code:	43
Air Basin:	SF
Facility ID:	10656
Air District Name:	BA
SIC Code:	8731
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	1
NOX - Oxides of Nitrogen Tons/Yr:	2
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	2000
County Code:	43
Air Basin:	SF
Facility ID:	10656
Air District Name:	BA
SIC Code:	8731
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	1

GENENCOR INTERNATIONAL (Continued) **1000414981**

NOX - Oxides of Nitrogen Tons/Yr:	2
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0
Year:	2001
County Code:	43
Air Basin:	SF
Facility ID:	10656
Air District Name:	BA
SIC Code:	8731
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	1
NOX - Oxides of Nitrogen Tons/Yr:	3
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0
Year:	2002
County Code:	43
Air Basin:	SF
Facility ID:	10656
Air District Name:	BA
SIC Code:	8731
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	1
NOX - Oxides of Nitrogen Tons/Yr:	3
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0
Year:	2003
County Code:	43
Air Basin:	SF
Facility ID:	10656
Air District Name:	BA
SIC Code:	8731
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	1
NOX - Oxides of Nitrogen Tons/Yr:	2
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0
Year:	2004

GENENCOR INTERNATIONAL (Continued) **1000414981**

County Code:	43
Air Basin:	SF
Facility ID:	10656
Air District Name:	BA
SIC Code:	8731
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0.096
Reactive Organic Gases Tons/Yr:	0.0405312
Carbon Monoxide Emissions Tons/Yr:	0.576
NOX - Oxides of Nitrogen Tons/Yr:	2.302
SOX - Oxides of Sulphur Tons/Yr:	0.01
Particulate Matter Tons/Yr:	0.05
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0.05

Year:	2005
County Code:	43
Air Basin:	SF
Facility ID:	10656
Air District Name:	BA
SIC Code:	8731
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	.113
Reactive Organic Gases Tons/Yr:	.0497811
Carbon Monoxide Emissions Tons/Yr:	.669
NOX - Oxides of Nitrogen Tons/Yr:	2.682
SOX - Oxides of Sulphur Tons/Yr:	.011
Particulate Matter Tons/Yr:	.06
Part. Matter 10 Micrometers & Smllr Tons/Yr:	.059904

Year:	2006
County Code:	43
Air Basin:	SF
Facility ID:	10656
Air District Name:	BA
SIC Code:	8731
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	.157
Reactive Organic Gases Tons/Yr:	.0647536
Carbon Monoxide Emissions Tons/Yr:	.531
NOX - Oxides of Nitrogen Tons/Yr:	2.122
SOX - Oxides of Sulphur Tons/Yr:	.008
Particulate Matter Tons/Yr:	.046
Part. Matter 10 Micrometers & Smllr Tons/Yr:	.046

Year:	2007
County Code:	43
Air Basin:	SF
Facility ID:	10656
Air District Name:	BA
SIC Code:	8731
Air District Name:	BAY AREA AQMD

GENENCOR INTERNATIONAL (Continued) **1000414981**

Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	.157
Reactive Organic Gases Tons/Yr:	.0647536
Carbon Monoxide Emissions Tons/Yr:	.531
NOX - Oxides of Nitrogen Tons/Yr:	2.122
SOX - Oxides of Sulphur Tons/Yr:	.008
Particulate Matter Tons/Yr:	.046
Part. Matter 10 Micrometers & Smllr Tons/Yr:	.046
Year:	2007
County Code:	43
Air Basin:	SF
Facility ID:	19334
Air District Name:	BA
SIC Code:	8731
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	.198
Reactive Organic Gases Tons/Yr:	.0824783
Carbon Monoxide Emissions Tons/Yr:	.588
NOX - Oxides of Nitrogen Tons/Yr:	2.356
SOX - Oxides of Sulphur Tons/Yr:	.01
Particulate Matter Tons/Yr:	.051
Part. Matter 10 Micrometers & Smllr Tons/Yr:	.050976

O79 **EASTMAN KODAK COMPANY** **WDS S101542283**
WSW **925 PAGE MILL RD** **NPDES N/A**
1/4-1/2 **PALO ALTO, CA 94304** **LUST**
0.315 mi. **SLIC**
1662 ft. **Site 2 of 3 in cluster O** **HIST LUST**
HAZNET

Relative:
Higher

Actual:
42 ft.

CA WDS:

Facility ID:	San Francisco Bay 43I012289
Facility Type:	Industrial - Facility that treats and/or disposes of liquid or semisolid wastes from any servicing, producing, manufacturing or processing operation of whatever nature, including mining, gravel washing, geothermal operations, air conditioning, ship building and repairing, oil production, storage and disposal operations, water pumping.
Facility Status:	Active - Any facility with a continuous or seasonal discharge that is under Waste Discharge Requirements.
NPDES Number:	CAS000001 The 1st 2 characters designate the state. The remaining 7 are assigned by the Regional Board
Subregion:	2
Facility Telephone:	4158467500
Facility Contact:	AMY BOAS
Agency Name:	GENENCOR INT
Agency Address:	925 Page Mill Rd
Agency City,St,Zip:	Palo Alto 943041013
Agency Contact:	AMY BOAS
Agency Telephone:	4158467500
Agency Type:	Private
SIC Code:	0
SIC Code 2:	Not reported
Primary Waste:	Not reported

EASTMAN KODAK COMPANY (Continued) **S101542283**

Primary Waste Type: Not reported
Secondary Waste: Not reported
Secondary Waste Type: Not reported
Design Flow: 0
Baseline Flow: 0
Reclamation: Not reported
POTW: Not reported
Treat To Water: Minor Threat to Water Quality. A violation of a regional board order should cause a relatively minor impairment of beneficial uses compared to a major or minor threat. Not: All nurds without a TTWQ will be considered a minor threat to water quality unless coded at a higher Level. A Zero (0) may be used to code those NURDS that are found to represent no threat to water quality.
Complexity: Category C - Facilities having no waste treatment systems, such as cooling water dischargers or thosewho must comply through best management practices, facilities with passive waste treatment and disposal systems, such as septic systems with subsurface disposal, or dischargers having waste storage systems with land disposal such as dairy waste ponds.

NPDES:
Npdes Number: Not reported
Facility Status: Active
Agency Id: 18995
Region: 2
Regulatory Measure Id: 184080
Order No: 97-03-DWQ
Regulatory Measure Type: Storm water industrial
Place Id: 212416
WDID: 2 43I012289
Program Type: INDSTW
Adoption Date Of Regulatory Measure: Not reported
Effective Date Of Regulatory Measure: 1996-05-09 00:00:00
Expiration Date Of Regulatory Measure: Not reported
Termination Date Of Regulatory Measure: Not reported
Discharge Name: Genencor Int
Discharge Address: 925 Page Mill Rd
Discharge City: Palo Alto
Discharge State: CA
Discharge Zip: 94304-1013

LUST SANTA CLARA:
Region: SANTA CLARA
SCVWD ID: 06S3W12P02f
Closed Date: Not reported

SLIC:
Region: STATE
Facility Status: **Open - Inactive**
Status Date: 2009-06-02 00:00:00
Global Id: T0608591791
Lead Agency: SAN FRANCISCO BAY RWQCB (REGION 2)
Lead Agency Case Number: Not reported
Latitude: 37.418341
Longitude: -122.145026
Case Type: Cleanup Program Site

EASTMAN KODAK COMPANY (Continued) **S101542283**

Case Worker: UUU
Local Agency: Not reported
RB Case Number: 43-1969
File Location: Not reported
Potential Media Affected: Under Investigation
Potential Contaminants of Concern: * Solvents
Site History: Not reported

Click here to access the California GeoTracker records for this facility:

SLIC:
Region: 2
Facility ID: 43-1969
Facility Status: Leak being confirmed
Date Closed: Not reported
Local Case #: 2025500
How Discovered: Tank Closure
Leak Cause: Structure Failure
Leak Source: Tank
Date Confirmed: 4/20/1995
Date Prelim Site Assmnt Workplan Submitted: Not reported
Date Preliminary Site Assessment Began: Not reported
Date Pollution Characterization Began: Not reported
Date Remediation Plan Submitted: Not reported
Date Remedial Action Underway: Not reported
Date Post Remedial Action Monitoring Began: Not reported

HIST LUST SANTA CLARA:
Region: SANTA CLARA
Region Code: 2
SCVWD ID: 06S3W12P02
Oversite Agency: SFRWQCB
Date Listed: 1995-08-22 00:00:00
Closed Date: Not reported

HAZNET:
Gepaid: CAD028874253
Contact: DEBORAH MARTIN/EH & S MGR
Telephone: 6508467657
Facility Addr2: Not reported
Mailing Name: Not reported
Mailing Address: 925 PAGE MILL RD
Mailing City,St,Zip: PALO ALTO, CA 943040000
Gen County: Santa Clara
TSD EPA ID: CAT080014079
TSD County: Contra Costa
Waste Category: Other inorganic solid waste
Disposal Method: H141
Tons: 0.1015
Facility County: Santa Clara

Gepaid: CAD028874253
Contact: DEBORAH MARTIN/EH & S MGR
Telephone: 6508467657
Facility Addr2: Not reported
Mailing Name: Not reported

EASTMAN KODAK COMPANY (Continued) **S101542283**

Mailing Address: 925 PAGE MILL RD
Mailing City,St,Zip: PALO ALTO, CA 943040000
Gen County: Santa Clara
TSD EPA ID: CAT080014079
TSD County: Contra Costa
Waste Category: Off-specification, aged, or surplus organics
Disposal Method: H141
Tons: 0.3535
Facility County: Santa Clara

Gepaid: CAD028874253
Contact: DEBORAH MARTIN/EH & S MGR
Telephone: 6508467657
Facility Addr2: Not reported
Mailing Name: Not reported
Mailing Address: 925 PAGE MILL RD
Mailing City,St,Zip: PALO ALTO, CA 943040000
Gen County: Santa Clara
TSD EPA ID: CAD008302903
TSD County: Los Angeles
Waste Category: Alkaline solution without metals (pH > 12.5)
Disposal Method: H141
Tons: 0.084
Facility County: Santa Clara

Gepaid: CAD028874253
Contact: DEBORAH MARTIN/EH & S MGR
Telephone: 6508467657
Facility Addr2: Not reported
Mailing Name: Not reported
Mailing Address: 925 PAGE MILL RD
Mailing City,St,Zip: PALO ALTO, CA 943040000
Gen County: Santa Clara
TSD EPA ID: CAD008302903
TSD County: Los Angeles
Waste Category: Laboratory waste chemicals
Disposal Method: H061
Tons: 0.033
Facility County: Santa Clara

Gepaid: CAD028874253
Contact: DEBORAH MARTIN/EH & S MGR
Telephone: 6508467657
Facility Addr2: Not reported
Mailing Name: Not reported
Mailing Address: 925 PAGE MILL RD
Mailing City,St,Zip: PALO ALTO, CA 943040000
Gen County: Santa Clara
TSD EPA ID: CAT080014079
TSD County: Contra Costa
Waste Category: Aqueous solution with less than 10% total organic residues
Disposal Method: H141
Tons: 0.218
Facility County: Santa Clara

EASTMAN KODAK COMPANY (Continued) **S101542283**

Click this hyperlink while viewing on your computer to access
Aqueous solution with less than 10% total organic residues

80
WNW
1/4-1/2
0.331 mi.
1748 ft.

PREMIER PROPERTIES - 385-399 SHERMAN AVENUE **SLIC** **S110041799**
385-399 SHERMAN AVENUE **N/A**
PALO ALTO, CA 94301

Relative:
Higher

Actual:
36 ft.

SLIC:

Region:	STATE
Facility Status:	**Open - Assessment & Interim Remedial Action**
Status Date:	2009-11-03 00:00:00
Global Id:	T10000001638
Lead Agency:	SAN FRANCISCO BAY RWQCB (REGION 2)
Lead Agency Case Number:	Not reported
Latitude:	37.4261726546906
Longitude:	-122.143270969391
Case Type:	Cleanup Program Site
Case Worker:	RWP
Local Agency:	Not reported
RB Case Number:	43S1133
File Location:	Not reported
Potential Media Affected:	Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern:	Trichloroethylene (TCE)
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

O81
WSW
1/4-1/2
0.348 mi.
1835 ft.

ALZA CORP **CERC-NFRAP** **1000142170**
950 PAGE MILL RD **RCRA-NonGen** **CAD049231541**
PALO ALTO, CA 94304 **FINDS**
CA FID UST
Site 3 of 3 in cluster O **HIST UST**
SWEEPS UST
HAZNET

Relative:
Higher

Actual:
42 ft.

CERC-NFRAP:

Site ID:	0901397
Federal Facility:	Not a Federal Facility
NPL Status:	Not on the NPL
Non NPL Status:	NFRAP

CERCLIS-NFRAP Site Contact Name(s):

Contact Title:	Not reported
Contact Name:	Carl Brickner
Contact Tel:	(415) 972-3814
Contact Title:	Not reported
Contact Name:	Brunilda Davila
Contact Tel:	(415) 972-3162
Contact Title:	Not reported
Contact Name:	Jeff Inglis
Contact Tel:	(415) 972-3095

ALZA CORP (Continued) **1000142170**

Contact Title: Not reported
Contact Name: Karen Jurist
Contact Tel: (415) 972-3219

Contact Title: Not reported
Contact Name: Matt Mitguard
Contact Tel: (415) 972-3096

CERCLIS-NFRAP Assessment History:
Action: DISCOVERY
Date Started: Not reported
Date Completed: 01/01/1987
Priority Level: Not reported

Action: PRELIMINARY ASSESSMENT
Date Started: 02/01/1987
Date Completed: 02/01/1987
Priority Level: NFRAP: No further Remedial Action planned

Action: ARCHIVE SITE
Date Started: Not reported
Date Completed: 02/01/1987
Priority Level: Not reported

RCRA-NonGen:
Date form received by agency: 10/12/2000
Facility name: ALZA CORP
Site name: ALZA CORPORATION (A)
Facility address: 1900 CHARLESTON ROAD
P.O. BOX 7210
MOUNTAIN VIEW, CA 940397210
EPA ID: CAD049231541
Contact: ESTHER PHAM
Contact address: Not reported
Not reported
Contact country: Not reported
Contact telephone: (650) 564-2429
Contact email: Not reported
EPA Region: 09
Classification: Non-Generator
Description: Handler: Non-Generators do not presently generate hazardous waste

Handler Activities Summary:
U.S. importer of hazardous waste: Unknown
Mixed waste (haz. and radioactive): Unknown
Recycler of hazardous waste: Unknown
Transporter of hazardous waste: Unknown
Treater, storer or disposer of HW: No
Underground injection activity: Unknown
On-site burner exemption: Unknown
Furnace exemption: Unknown
Used oil fuel burner: Unknown
Used oil processor: Unknown
User oil refiner: Unknown
Used oil fuel marketer to burner: Unknown
Used oil Specification marketer: Unknown

ALZA CORP (Continued) **1000142170**

Used oil transfer facility: Unknown
Used oil transporter: Unknown
Off-site waste receiver: Verified to be non-commercial

Historical Generators:
Date form received by agency: 02/02/2000
Facility name: ALZA CORP
Classification: Not a generator, verified

Date form received by agency: 03/04/1999
Facility name: ALZA CORP
Site name: ALZA CORPORATION (A)
Classification: Large Quantity Generator

Date form received by agency: 09/01/1996
Facility name: ALZA CORP
Classification: Large Quantity Generator

Date form received by agency: 02/29/1996
Facility name: ALZA CORP
Site name: ALZA CORPORATION (A)
Classification: Large Quantity Generator

Date form received by agency: 03/31/1994
Facility name: ALZA CORP
Site name: ALZA CORPORATION
Classification: Large Quantity Generator

Date form received by agency: 02/27/1992
Facility name: ALZA CORP
Site name: ALZA CORPORATION
Classification: Large Quantity Generator

Date form received by agency: 08/24/1990
Facility name: ALZA CORP
Classification: Large Quantity Generator

Violation Status: No violations found

FINDS:

Registry ID: 110000886630

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

CA FID UST:
Facility ID: 43002387
Regulated By: UTNKA
Regulated ID: 00028661
Cortese Code: Not reported

ALZA CORP (Continued) **1000142170**

SIC Code: Not reported
Facility Phone: 4154945000
Mail To: Not reported
Mailing Address: P O BOX
Mailing Address 2: Not reported
Mailing City,St,Zip: PALO ALTO 94304
Contact: Not reported
Contact Phone: Not reported
DUNs Number: Not reported
NPDES Number: Not reported
EPA ID: Not reported
Comments: Not reported
Status: Active

HIST UST:
Region: STATE
Facility ID: 00000028661
Facility Type: Other
Other Type: PHARMACEUTICAL R&D
Total Tanks: 0006
Contact Name: Not reported
Telephone: 4154945000
Owner Name: ALZA CORPORATION
Owner Address: 950 PAGE MILL ROAD
Owner City,St,Zip: PALO ALTO, CA 94304

Tank Num: 001
Container Num: #1
Year Installed: 1976
Tank Capacity: 00000100
Tank Used for: WASTE
Type of Fuel: Not reported
Tank Construction: 3/16 inches
Leak Detection: None

Tank Num: 002
Container Num: #2
Year Installed: 1973
Tank Capacity: 00001500
Tank Used for: WASTE
Type of Fuel: Not reported
Tank Construction: Not reported
Leak Detection: None

Tank Num: 003
Container Num: #3
Year Installed: 1973
Tank Capacity: 00001500
Tank Used for: WASTE
Type of Fuel: Not reported
Tank Construction: Not reported
Leak Detection: None

Tank Num: 004
Container Num: #4
Year Installed: 1971
Tank Capacity: 00000400

ALZA CORP (Continued) **1000142170**

Tank Used for: WASTE
Type of Fuel: Not reported
Tank Construction: 6 inches
Leak Detection: None

Tank Num: 005
Container Num: #5
Year Installed: 1971
Tank Capacity: 00000400
Tank Used for: WASTE
Type of Fuel: Not reported
Tank Construction: 6 inches
Leak Detection: None

Tank Num: 006
Container Num: #6
Year Installed: 1973
Tank Capacity: 00000500
Tank Used for: WASTE
Type of Fuel: Not reported
Tank Construction: 6 inches
Leak Detection: None

SWEEPS UST:
Status: A
Comp Number: 28661
Number: 9
Board Of Equalization: 44-026101
Ref Date: 07-01-85
Act Date: Not reported
Created Date: 02-29-88
Tank Status: A
Owner Tank Id: #1
Swrcb Tank Id: 43-006-028661-000001
Actv Date: 07-01-85
Capacity: 100
Tank Use: UNKNOWN
Stg: W
Content: Not reported
Number Of Tanks: 6

Status: A
Comp Number: 28661
Number: 9
Board Of Equalization: 44-026101
Ref Date: 07-01-85
Act Date: Not reported
Created Date: 02-29-88
Tank Status: A
Owner Tank Id: #2
Swrcb Tank Id: 43-006-028661-000002
Actv Date: 07-01-85
Capacity: 1500
Tank Use: UNKNOWN
Stg: W
Content: Not reported
Number Of Tanks: Not reported

ALZA CORP (Continued) **1000142170**

Status: A
Comp Number: 28661
Number: 9
Board Of Equalization: 44-026101
Ref Date: 07-01-85
Act Date: Not reported
Created Date: 02-29-88
Tank Status: A
Owner Tank Id: #3
Swrcb Tank Id: 43-006-028661-000003
Actv Date: 07-01-85
Capacity: 1500
Tank Use: UNKNOWN
Stg: W
Content: Not reported
Number Of Tanks: Not reported

Status: A
Comp Number: 28661
Number: 9
Board Of Equalization: 44-026101
Ref Date: 07-01-85
Act Date: Not reported
Created Date: 02-29-88
Tank Status: A
Owner Tank Id: #4
Swrcb Tank Id: 43-006-028661-000004
Actv Date: 07-01-85
Capacity: 400
Tank Use: UNKNOWN
Stg: W
Content: Not reported
Number Of Tanks: Not reported

Status: A
Comp Number: 28661
Number: 9
Board Of Equalization: 44-026101
Ref Date: 07-01-85
Act Date: Not reported
Created Date: 02-29-88
Tank Status: A
Owner Tank Id: #5
Swrcb Tank Id: 43-006-028661-000005
Actv Date: 07-01-85
Capacity: 400
Tank Use: UNKNOWN
Stg: W
Content: Not reported
Number Of Tanks: Not reported

Status: A
Comp Number: 28661
Number: 9
Board Of Equalization: 44-026101
Ref Date: 07-01-85
Act Date: Not reported

ALZA CORP (Continued) **1000142170**

Created Date: 02-29-88
Tank Status: A
Owner Tank Id: #6
Swrcb Tank Id: 43-006-028661-000006
Actv Date: 07-01-85
Capacity: 500
Tank Use: UNKNOWN
Stg: W
Content: Not reported
Number Of Tanks: Not reported

HAZNET:
Gepaid: CAC002226705
Contact: WILSON,SONSINI,GOODRIDGE,AROSA
Telephone: 0000000000
Facility Addr2: Not reported
Mailing Name: Not reported
Mailing Address: 650 PAGE MILL
Mailing City,St,Zip: PALO ALTO, CA 943040000
Gen County: Santa Clara
TSD EPA ID: CAD044429835
TSD County: Los Angeles
Waste Category: Unspecified aqueous solution
Disposal Method: Disposal, Other
Tons: .2293
Facility County: Santa Clara

Gepaid: CAC002226705
Contact: WILSON,SONSINI,GOODRIDGE,AROSA
Telephone: 0000000000
Facility Addr2: Not reported
Mailing Name: Not reported
Mailing Address: 650 PAGE MILL
Mailing City,St,Zip: PALO ALTO, CA 943040000
Gen County: Santa Clara
TSD EPA ID: CAD028409019
TSD County: Los Angeles
Waste Category: Asbestos-containing waste
Disposal Method: Transfer Station
Tons: .4214
Facility County: Santa Clara

Gepaid: CAC002226705
Contact: WILSON,SONSINI,GOODRIDGE,AROSA
Telephone: 0000000000
Facility Addr2: Not reported
Mailing Name: Not reported
Mailing Address: 650 PAGE MILL
Mailing City,St,Zip: PALO ALTO, CA 943040000
Gen County: Santa Clara
TSD EPA ID: CAD980675276
TSD County: Kern
Waste Category: Other inorganic solid waste
Disposal Method: Disposal, Land Fill
Tons: 25.2840
Facility County: Santa Clara

ALZA CORP (Continued) **1000142170**

Gepaid:	CAC002226705
Contact:	WILSON,SONSINI,GOODRIDGE,AROSA
Telephone:	0000000000
Facility Addr2:	Not reported
Mailing Name:	Not reported
Mailing Address:	650 PAGE MILL
Mailing City,St,Zip:	PALO ALTO, CA 943040000
Gen County:	Santa Clara
TSD EPA ID:	CAD981382732
TSD County:	1
Waste Category:	Asbestos-containing waste
Disposal Method:	Disposal, Land Fill
Tons:	16.8560
Facility County:	Santa Clara

Gepaid:	CAC002226705
Contact:	WILSON,SONSINI,GOODRIDGE,AROSA
Telephone:	0000000000
Facility Addr2:	Not reported
Mailing Name:	Not reported
Mailing Address:	650 PAGE MILL
Mailing City,St,Zip:	PALO ALTO, CA 943040000
Gen County:	Santa Clara
TSD EPA ID:	CAL000827758
TSD County:	San Bernardino
Waste Category:	Polychlorinated biphenyls and material containing PCB’s
Disposal Method:	Not reported
Tons:	.0804
Facility County:	Santa Clara

Click this hyperlink while viewing on your computer to access
Polychlorinated biphenyls and material containing PCB’s

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82 **VARIAN NMR SYSTEMS** **WDS S104573830**
SW **3120 HANSEN WAY** **NPDES N/A**
1/4-1/2 **PALO ALTO, CA 94304** **HAZNET**
0.366 mi. **EMI**
1935 ft. **ENVIROSTOR**
HWP

Relative:
Higher

Actual:
45 ft.

CA WDS:

Facility ID:	San Francisco Bay 43I006791
Facility Type:	Industrial - Facility that treats and/or disposes of liquid or semisolid wastes from any servicing, producing, manufacturing or processing operation of whatever nature, including mining, gravel washing, geothermal operations, air conditioning, ship building and repairing, oil production, storage and disposal operations, water pumping.
Facility Status:	Active - Any facility with a continuous or seasonal discharge that is under Waste Discharge Requirements.
NPDES Number:	CAS000001 The 1st 2 characters designate the state. The remaining 7 are assigned by the Regional Board
Subregion:	2
Facility Telephone:	6504246272
Facility Contact:	JIM WEBER
Agency Name:	VARIAN MEDICAL SYSTEMS
Agency Address:	911 Hansen Way # C-102
Agency City,St,Zip:	Palo Alto 943041028

VARIAN NMR SYSTEMS (Continued) **S104573830**

Agency Contact:	JIM WEBER
Agency Telephone:	6504246272
Agency Type:	Private
SIC Code:	0
SIC Code 2:	Not reported
Primary Waste:	Not reported
Primary Waste Type:	Not reported
Secondary Waste:	Not reported
Secondary Waste Type:	Not reported
Design Flow:	0
Baseline Flow:	0
Reclamation:	Not reported
POTW:	Not reported
Treat To Water:	Minor Threat to Water Quality. A violation of a regional board order should cause a relatively minor impairment of beneficial uses compared to a major or minor threat. Not: All nurds without a TTWQ will be considered a minor threat to water quality unless coded at a higher Level. A Zero (0) may be used to code those NURDS that are found to represent no threat to water quality.
Complexity:	Category C - Facilities having no waste treatment systems, such as cooling water dischargers or thosewho must comply through best management practices, facilities with passive waste treatment and disposal systems, such as septic systems with subsurface disposal, or dischargers having waste storage systems with land disposal such as dairy waste ponds.
Facility ID:	San Francisco Bay 43I015026
Facility Type:	Industrial - Facility that treats and/or disposes of liquid or semisolid wastes from any servicing, producing, manufacturing or processing operation of whatever nature, including mining, gravel washing, geothermal operations, air conditioning, ship building and repairing, oil production, storage and disposal operations, water pumping.
Facility Status:	Active - Any facility with a continuous or seasonal discharge that is under Waste Discharge Requirements.
NPDES Number:	CAS000001 The 1st 2 characters designate the state. The remaining 7 are assigned by the Regional Board
Subregion:	2
Facility Telephone:	6504245503
Facility Contact:	DAVE KIASKI
Agency Name:	VARIAN NMR INSTRUMENTS
Agency Address:	3120 Hansen Way
Agency City,St,Zip:	Palo Alto 943041030
Agency Contact:	DAVE KIASKI
Agency Telephone:	6504245503
Agency Type:	Private
SIC Code:	0
SIC Code 2:	Not reported
Primary Waste:	Not reported
Primary Waste Type:	Not reported
Secondary Waste:	Not reported
Secondary Waste Type:	Not reported
Design Flow:	0
Baseline Flow:	0
Reclamation:	Not reported
POTW:	Not reported
Treat To Water:	Minor Threat to Water Quality. A violation of a regional board order

VARIAN NMR SYSTEMS (Continued) **S104573830**

should cause a relatively minor impairment of beneficial uses compared to a major or minor threat. Not: All nurds without a TTWQ will be considered a minor threat to water quality unless coded at a higher Level. A Zero (0) may be used to code those NURDS that are found to represent no threat to water quality.

Complexity: Category C - Facilities having no waste treatment systems, such as cooling water dischargers or thosewho must comply through best management practices, facilities with passive waste treatment and disposal systems, such as septic systems with subsurface disposal, or dischargers having waste storage systems with land disposal such as dairy waste ponds.

NPDES:

Npdes Number:	Not reported
Facility Status:	Active
Agency Id:	49712
Region:	2
Regulatory Measure Id:	184192
Order No:	97-03-DWQ
Regulatory Measure Type:	Storm water industrial
Place Id:	270267
WDID:	2 43I015026
Program Type:	INDSTW
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	1999-03-23 00:00:00
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Discharge Name:	Varian NMR Instruments
Discharge Address:	3120 Hansen Way
Discharge City:	Palo Alto
Discharge State:	CA
Discharge Zip:	94304-1030

HAZNET:

Gepaid:	CAD009120817
Contact:	DAVE KIASKI FAC MGR
Telephone:	6504245503
Facility Addr2:	Not reported
Mailing Name:	Not reported
Mailing Address:	3120 HANSEN WAY
Mailing City,St,Zip:	PALO ALTO, CA 943041030
Gen County:	Santa Clara
TSD EPA ID:	CAD009452657
TSD County:	San Mateo
Waste Category:	Aqueous solution with metals (restricted levels and Alkaline solution (pH <UN-> 12.5) with metals (antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, lead, mercury, molybdenum, nickel, selenium, silver, thallium, vanadium, and zinc))
Disposal Method:	Recycler
Tons:	0.22
Facility County:	Not reported

Gepaid:	CAD009120817
Contact:	MICHAEL WONG / FACILITIES MGR
Telephone:	6504244532
Facility Addr2:	Not reported

VARIAN NMR SYSTEMS (Continued) **S104573830**

Mailing Name:	Not reported
Mailing Address:	3120 HANSEN WAY
Mailing City,St,Zip:	PALO ALTO, CA 943041030
Gen County:	Santa Clara
TSD EPA ID:	CAD059494310
TSD County:	Santa Clara
Waste Category:	Liquids with pH <UN-> 2 with metals
Disposal Method:	H135
Tons:	3.10665
Facility County:	Santa Clara

Gepaid:	CAD009120817
Contact:	MICHAEL WONG / FACILITIES MGR
Telephone:	6504244532
Facility Addr2:	Not reported
Mailing Name:	Not reported
Mailing Address:	3120 HANSEN WAY
Mailing City,St,Zip:	PALO ALTO, CA 943041030
Gen County:	Santa Clara
TSD EPA ID:	ARD069748192
TSD County:	99
Waste Category:	Unspecified solvent mixture Waste
Disposal Method:	H050
Tons:	0.018
Facility County:	Santa Clara

Gepaid:	CAD009120817
Contact:	MICHAEL WONG / FACILITIES MGR
Telephone:	6504244532
Facility Addr2:	Not reported
Mailing Name:	Not reported
Mailing Address:	3120 HANSEN WAY
Mailing City,St,Zip:	PALO ALTO, CA 943041030
Gen County:	Santa Clara
TSD EPA ID:	ARD069748192
TSD County:	99
Waste Category:	Laboratory waste chemicals
Disposal Method:	H040
Tons:	0.106
Facility County:	Santa Clara

Gepaid:	CAD009120817
Contact:	MICHAEL WONG / FACILITIES MGR
Telephone:	6504244532
Facility Addr2:	Not reported
Mailing Name:	Not reported
Mailing Address:	3120 HANSEN WAY
Mailing City,St,Zip:	PALO ALTO, CA 943041030
Gen County:	Santa Clara
TSD EPA ID:	CAD059494310
TSD County:	Santa Clara
Waste Category:	Unspecified solvent mixture Waste
Disposal Method:	H141
Tons:	0.612
Facility County:	Santa Clara

VARIAN NMR SYSTEMS (Continued) **S104573830**

Click this hyperlink while viewing on your computer to access
Unspecified solvent mixture Waste

EMI:

Year:	1998
County Code:	43
Air Basin:	SF
Facility ID:	12137
Air District Name:	BA
SIC Code:	3826
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	3
Reactive Organic Gases Tons/Yr:	2
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	1999
County Code:	43
Air Basin:	SF
Facility ID:	12137
Air District Name:	BA
SIC Code:	3826
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	2000
County Code:	43
Air Basin:	SF
Facility ID:	12137
Air District Name:	BA
SIC Code:	3826
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	2001
County Code:	43

VARIAN NMR SYSTEMS (Continued) **S104573830**

Air Basin:	SF
Facility ID:	12137
Air District Name:	BA
SIC Code:	4931
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	2002
County Code:	43
Air Basin:	SF
Facility ID:	12137
Air District Name:	BA
SIC Code:	3826
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	1
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	2003
County Code:	43
Air Basin:	SF
Facility ID:	12137
Air District Name:	BA
SIC Code:	3826
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	1
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	2004
County Code:	43
Air Basin:	SF
Facility ID:	12137
Air District Name:	BA
SIC Code:	3826
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported

VARIAN NMR SYSTEMS (Continued) **S104573830**

Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0.548
Reactive Organic Gases Tons/Yr:	0.2760722
Carbon Monoxide Emissions Tons/Yr:	0.02
NOX - Oxides of Nitrogen Tons/Yr:	0.097
SOX - Oxides of Sulphur Tons/Yr:	0.001
Particulate Matter Tons/Yr:	0.007
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0.006832
Year:	2005
County Code:	43
Air Basin:	SF
Facility ID:	12137
Air District Name:	BA
SIC Code:	3826
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	.144
Reactive Organic Gases Tons/Yr:	.1127254
Carbon Monoxide Emissions Tons/Yr:	.009
NOX - Oxides of Nitrogen Tons/Yr:	.044
SOX - Oxides of Sulphur Tons/Yr:	.001
Particulate Matter Tons/Yr:	.003
Part. Matter 10 Micrometers & Smllr Tons/Yr:	.002928
Year:	2006
County Code:	43
Air Basin:	SF
Facility ID:	12137
Air District Name:	BA
SIC Code:	3826
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	.174
Reactive Organic Gases Tons/Yr:	.1181073
Carbon Monoxide Emissions Tons/Yr:	.011
NOX - Oxides of Nitrogen Tons/Yr:	.052
SOX - Oxides of Sulphur Tons/Yr:	.001
Particulate Matter Tons/Yr:	.003
Part. Matter 10 Micrometers & Smllr Tons/Yr:	.002928
Year:	2007
County Code:	43
Air Basin:	SF
Facility ID:	12137
Air District Name:	BA
SIC Code:	3826
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	.176
Reactive Organic Gases Tons/Yr:	.1197807
Carbon Monoxide Emissions Tons/Yr:	.017
NOX - Oxides of Nitrogen Tons/Yr:	.08
SOX - Oxides of Sulphur Tons/Yr:	.001

VARIAN NMR SYSTEMS (Continued) **S104573830**

Particulate Matter Tons/Yr:	.005
Part. Matter 10 Micrometers & Smllr Tons/Yr:	.00488
Year:	2007
County Code:	43
Air Basin:	SF
Facility ID:	12137
Air District Name:	BA
SIC Code:	3826
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	.173
Reactive Organic Gases Tons/Yr:	.1172706
Carbon Monoxide Emissions Tons/Yr:	.01
NOX - Oxides of Nitrogen Tons/Yr:	.047
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	.003
Part. Matter 10 Micrometers & Smllr Tons/Yr:	.002928

ENVIROSTOR:

Site Type:	Corrective Action
Site Type Detailed:	Corrective Action
Acres:	70
NPL:	NO
Regulatory Agencies:	SMBRP
Lead Agency:	MBR
Program Manager:	JOVANNE VILLAMATER
Supervisor:	Mark Piros
Division Branch:	Berkeley
Facility ID:	80001596
Site Code:	Not reported
Assembly:	21
Senate:	21
Special Program:	Not reported
Status:	Certified / Operation & Maintenance
Status Date:	6/22/2009
Restricted Use:	NO
Site Mgmt. Req.:	NONE SPECIFIED
Funding:	Not reported
Latitude:	37.417681999999999
Longitude:	-122.143501
APN:	NONE SPECIFIED
Past Use:	MANUFACTURING - ELECTRONIC
Potential COC:	30022, 30025, 30027, 30136, 30194, 30195, 30196
Confirmed COC:	Not reported
Potential Description:	AQUI
Alias Name:	CAD009120817
Alias Type:	EPA Identification Number
Alias Name:	80001596
Alias Type:	Envirostor ID Number

Completed Info:

Completed Area Name:	Sites With No Operable Unit
Completed Sub Area Name:	ENTIRE FACILITY
Completed Document Type:	RCRA Facility Assessment Report
Completed Date:	1994-06-20 00:00:00

VARIAN NMR SYSTEMS (Continued) **S104573830**

Comments: THERE IS NO RFA DOCUMENT. THE ANALOGOUS REVIEW TEAM FELT THAT THE RI DOCUMENTS SUFFICIENTLY IDENTIFIED AND INVESTIGATED AREAS OF CHEMICAL USAGE AT THE SITE. THIS EVENT IS A DETERMINATION OF AN ANALOGOUS RFA. RSARACINO 19980421.10:48S

Completed Area Name: Sites With No Operable Unit
Completed Sub Area Name: ENTIRE FACILITY
Completed Document Type: Remedy Selection and Statement of Basis
Completed Date: 1995-01-05 00:00:00
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Consent Agreement
Completed Date: 1997-08-21 00:00:00
Comments: Not reported

Completed Area Name: Sites With No Operable Unit
Completed Sub Area Name: ENTIRE FACILITY
Completed Document Type: Consent Agreement
Completed Date: 1989-06-29 00:00:00
Comments: Not reported

Completed Area Name: Sites With No Operable Unit
Completed Sub Area Name: ENTIRE FACILITY
Completed Document Type: Interim Measures Questionnaire
Completed Date: 1994-10-12 00:00:00
Comments: Not reported

Completed Area Name: Sites With No Operable Unit
Completed Sub Area Name: ENTIRE FACILITY
Completed Document Type: Interim Measures Workplan
Completed Date: 1989-06-29 00:00:00
Comments: Not reported

Completed Area Name: Sites With No Operable Unit
Completed Sub Area Name: ENTIRE FACILITY
Completed Document Type: Design/Implementation Workplan
Completed Date: 1995-07-02 00:00:00
Comments: Not reported

Completed Area Name: Sites With No Operable Unit
Completed Sub Area Name: ENTIRE FACILITY
Completed Document Type: Corrective Measures Study Report
Completed Date: 1994-06-20 00:00:00
Comments: Not reported

Completed Area Name: Sites With No Operable Unit
Completed Sub Area Name: ENTIRE FACILITY
Completed Document Type: Preliminary Assessment Report
Completed Date: 1990-06-28 00:00:00
Comments: Not reported

Completed Area Name: Sites With No Operable Unit
Completed Sub Area Name: ENTIRE FACILITY
Completed Document Type: Remedy Constructed: Operating Properly & Successfully
Completed Date: 1997-08-21 00:00:00

VARIAN NMR SYSTEMS (Continued) **S104573830**

Comments: Not reported

Completed Area Name: Sites With No Operable Unit
Completed Sub Area Name: ENTIRE FACILITY
Completed Document Type: Corrective Measures Study Workplan
Completed Date: 1994-06-20 00:00:00
Comments: Not reported

Completed Area Name: Sites With No Operable Unit
Completed Sub Area Name: ENTIRE FACILITY
Completed Document Type: Interim Measures Implementation Report
Completed Date: 1992-06-12 00:00:00
Comments: Not reported

Completed Area Name: Sites With No Operable Unit
Completed Sub Area Name: ENTIRE FACILITY
Completed Document Type: RFI Report
Completed Date: 1994-06-20 00:00:00
Comments: Not reported

Completed Area Name: Sites With No Operable Unit
Completed Sub Area Name: ENTIRE FACILITY
Completed Document Type: Interim Measures Workplan
Completed Date: 1989-06-29 00:00:00
Comments: Not reported

Completed Area Name: Sites With No Operable Unit
Completed Sub Area Name: ENTIRE FACILITY
Completed Document Type: Corrective Measure Implementation Workplan
Completed Date: 1996-09-06 00:00:00
Comments: Not reported

Completed Area Name: Sites With No Operable Unit
Completed Sub Area Name: ENTIRE FACILITY
Completed Document Type: RFI Workplan
Completed Date: 1994-06-20 00:00:00
Comments: Not reported

Completed Area Name: Sites With No Operable Unit
Completed Sub Area Name: ENTIRE FACILITY
Completed Document Type: Preliminary Assessment Report
Completed Date: 1989-06-13 00:00:00
Comments: Not reported

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

HWP:
EPA Id: CAD009120817
Latitude: 37.417682

VARIAN NMR SYSTEMS (Continued) **S104573830**

Longitude:	-122.143501
Facility Type:	HAZ WASTE - NON-OPERATING
Cleanup Status:	Not reported
Region:	BERKELEY; STANDARDIZED PERMIT & CORRECTIVE ACTION
Permit Maintenance Lead:	Not reported
Permit Renewal Lead:	Not reported
Corrective Action Lead:	Not reported
Supervisor:	Not reported
Site Code:	Not reported
Assembly District:	Not reported
Senate District:	Not reported
Public Information Officer:	Not reported
Facility Status:	Not reported
Site History:	Not reported

HWP:

EPA Id:	CAD009120817
Unit Names:	CONTAIN1, TANKSTR1, TANKTRT1
Event Description:	Part B Call-In
Actual Date:	1983-02-02 00:00:00
Doc Comments:	Not reported

EPA Id:	CAD009120817
Unit Names:	CONTAIN1, TANKSTR1, TANKTRT1
Event Description:	Determined To Be Complete and Technically Adequate
Actual Date:	1983-10-25 00:00:00
Doc Comments:	Not reported

EPA Id:	CAD009120817
Unit Names:	CONTAIN1, TANKSTR1, TANKTRT1
Event Description:	Draft Permit Issued
Actual Date:	1983-06-13 00:00:00
Doc Comments:	Not reported

EPA Id:	CAD009120817
Unit Names:	TANKSTR1
Event Description:	Clean Closure Acceptable
Actual Date:	1995-08-24 00:00:00
Doc Comments:	Not reported

EPA Id:	CAD009120817
Unit Names:	CONTAIN1, TANKSTR1
Event Description:	Receive Closure Certification
Actual Date:	1995-03-29 00:00:00
Doc Comments:	Not reported

EPA Id:	CAD009120817
Unit Names:	CONTAIN1, TANKSTR1
Event Description:	Initial Submittal
Actual Date:	1980-11-19 00:00:00
Doc Comments:	Not reported

EPA Id:	CAD009120817
Unit Names:	CONTAIN1
Event Description:	Approved Request
Actual Date:	1995-08-24 00:00:00
Doc Comments:	Not reported

VARIAN NMR SYSTEMS (Continued) **S104573830**

HWP:
- EPA Id: CAD009120817
- Unit Names: CONTAIN1, TANKSTR1, TANKTRT1
- Event Description: Clean Closure Acceptable
- Actual Date: 1998-10-28 00:00:00
- Doc Comments: Not reported

P83 **VARIAN ASSOICATES, INC. ITD** **HIST UST** **1000245629**
WNW **601 CALIFORNIA AVENUE** **EMI** **N/A**
1/4-1/2 **PALO ALTO, CA 94304** **ENVIROSTOR**
0.421 mi.
2224 ft. **Site 1 of 4 in cluster P**

Relative:
Higher

Actual:
41 ft.

HIST UST:
- Region: STATE
- Facility ID: 00000016654
- Facility Type: Other
- Other Type: ELECTRONIC MFG.
- Total Tanks: 0001
- Contact Name: Not reported
- Telephone: 4154931800
- Owner Name: VARIAN ASSOCIATES, INC.
- Owner Address: 611 HANSEN WAY
- Owner City,St,Zip: PALO ALTO, CA 94303

- Tank Num: 001
- Container Num: 4
- Year Installed: 1981
- Tank Capacity: 00000500
- Tank Used for: WASTE
- Type of Fuel: Not reported
- Tank Construction: Not reported
- Leak Detection: None

EMI:
- Year: 1987
- County Code: 43
- Air Basin: SF
- Facility ID: 728
- Air District Name: BA
- SIC Code: 3679
- Air District Name: BAY AREA AQMD
- Community Health Air Pollution Info System: Not reported
- Consolidated Emission Reporting Rule: Not reported
- Total Organic Hydrocarbon Gases Tons/Yr: 27
- Reactive Organic Gases Tons/Yr: 4
- Carbon Monoxide Emissions Tons/Yr: 0
- NOX - Oxides of Nitrogen Tons/Yr: 0
- SOX - Oxides of Sulphur Tons/Yr: 0
- Particulate Matter Tons/Yr: 0
- Part. Matter 10 Micrometers & Smllr Tons/Yr: 0

- Year: 1990
- County Code: 43
- Air Basin: SF
- Facility ID: 728

VARIAN ASSOICATES, INC. ITD (Continued) **1000245629**

Air District Name:	BA
SIC Code:	3671
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	22
Reactive Organic Gases Tons/Yr:	5
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	1993
County Code:	43
Air Basin:	SF
Facility ID:	728
Air District Name:	BA
SIC Code:	3679
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	14
Reactive Organic Gases Tons/Yr:	3
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	1995
County Code:	43
Air Basin:	SF
Facility ID:	728
Air District Name:	BA
SIC Code:	3679
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	13
Reactive Organic Gases Tons/Yr:	4
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	1996
County Code:	43
Air Basin:	SF
Facility ID:	6489
Air District Name:	BA
SIC Code:	3679
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0

VARIAN ASSOICATES, INC. ITD (Continued) **1000245629**

Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	1997
County Code:	43
Air Basin:	SF
Facility ID:	6489
Air District Name:	BA
SIC Code:	3679
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	1998
County Code:	43
Air Basin:	SF
Facility ID:	6489
Air District Name:	BA
SIC Code:	3679
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	1999
County Code:	43
Air Basin:	SF
Facility ID:	6489
Air District Name:	BA
SIC Code:	3679
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

VARIAN ASSOICATES, INC. ITD (Continued) **1000245629**

Year:	2000
County Code:	43
Air Basin:	SF
Facility ID:	6489
Air District Name:	BA
SIC Code:	3679
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	2001
County Code:	43
Air Basin:	SF
Facility ID:	6489
Air District Name:	BA
SIC Code:	3679
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	2002
County Code:	43
Air Basin:	SF
Facility ID:	6489
Air District Name:	BA
SIC Code:	3679
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	2003
County Code:	43
Air Basin:	SF
Facility ID:	6489
Air District Name:	BA
SIC Code:	3679

VARIAN ASSOICATES, INC. ITD (Continued) **1000245629**

Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	2004
County Code:	43
Air Basin:	SF
Facility ID:	6489
Air District Name:	BA
SIC Code:	3679
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0.114
Reactive Organic Gases Tons/Yr:	0.0796404
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	2005
County Code:	43
Air Basin:	SF
Facility ID:	6489
Air District Name:	BA
SIC Code:	3679
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	.114
Reactive Organic Gases Tons/Yr:	.0796404
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

ENVIROSTOR:

Site Type:	Not reported
Site Type Detailed:	Tiered Permit
Acres:	Not reported
NPL:	NO
Regulatory Agencies:	NONE SPECIFIED
Lead Agency:	NONE SPECIFIED
Program Manager:	Not reported
Supervisor:	Not reported
Division Branch:	Cypress
Facility ID:	71003512
Site Code:	Not reported

VARIAN ASSOICATES, INC. ITD (Continued) **1000245629**

Assembly: 21
Senate: 11
Special Program: Not reported
Status: Not reported
Status Date: Not reported
Restricted Use: NO
Site Mgmt. Req.: NONE SPECIFIED
Funding: Not reported
Latitude: 37.4361295
Longitude: -122.13672630000001
APN: NONE SPECIFIED
Past Use: NONE SPECIFIED
Potential COC: NONE SPECIFIED
Confirmed COC: NONE SPECIFIED
Potential Description: NONE SPECIFIED
Alias Name: CAT080010804
Alias Type: EPA Identification Number

Completed Info:
Completed Area Name: Not reported
Completed Sub Area Name: Not reported
Completed Document Type: Not reported
Completed Date: Not reported
Comments: Not reported

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

P84 **VARIAN ASSOCIATES** **SLIC** **S106235038**
WNW **601 S. CALIFORNIA AVE.** **N/A**
1/4-1/2 **PALO ALTO, CA 94304**
0.421 mi.
2224 ft. **Site 2 of 4 in cluster P**

Relative:
Higher

Actual:
41 ft.

SLIC:
Region: STATE
Facility Status: **Open - Verification Monitoring**
Status Date: 2005-06-21 00:00:00
Global Id: SL181201123
Lead Agency: SAN FRANCISCO BAY RWQCB (REGION 2)
Lead Agency Case Number: Not reported
Latitude: 37.4231564549483
Longitude: -122.146275043488
Case Type: Cleanup Program Site
Case Worker: RWP
Local Agency: SANTA CLARA VALLEY WATER DISTRICT
RB Case Number: 43S0188
File Location: Regional Board
Potential Media Affected: Other Groundwater (uses other than drinking water), Soil
Potential Contaminants of Concern: 1,1,1-Trichloroethane (TCA), Other Chlorinated Hydrocarbons, Trichloroethylene (TCE)

VARIAN ASSOCIATES (Continued) **S106235038**

Site History: The Varian site is a non-Superfund SCP site located within the COE plume - that includes the Hewlett Packard 395 and 640 Page Mill Road (PMR) sites - and is west of and adjacent to the 640 PMR site. Varian conducted remedial actions at the site including: - Soil excavation of the on-site dry well source in 1990 - On-site soil vapor extraction for a few years - On- and off-site groundwater extraction from 1987 until 2003. - On-site In-situ chemical oxidation (ISCO) for the last several years After several years of in-situ chemical oxidation (ISCO), TCE DNAPL conditions persist in the courtyard area through the present time. Varian is about to conduct additonal RI in preparation for changing the remedy from ISCO to enhanced in-situ bioremediation. The Water Board is in the process of reviewing a limited remedial investigationi workplan related to an anticipated EISB pilot study.

Click here to access the California GeoTracker records for this facility:

SLIC:

Region:	2
Facility ID:	43S0188
Facility Status:	Remediation Plan
Date Closed:	Not reported
Local Case #:	Not reported
How Discovered:	Not reported
Leak Cause:	Not reported
Leak Source:	Not reported
Date Confirmed:	Not reported
Date Prelim Site Assmnt Workplan Submitted:	Not reported
Date Preliminary Site Assessment Began:	Not reported
Date Pollution Characterization Began:	Not reported
Date Remediation Plan Submitted:	Not reported
Date Remedial Action Underway:	Not reported
Date Post Remedial Action Monitoring Began:	Not reported

P85 **V M S 601 C A G W T S** **RCRA-SQG** **1000905590**
WNW **601 CALIFORNIA AVE REMEDIATION** **FINDS** **CA0000876722**
1/4-1/2 **PALO ALTO, CA 94304** **CA FID UST**
0.421 mi. **SWEEPS UST**
2224 ft. **Site 3 of 4 in cluster P** **ENVIROSTOR**

Relative: Higher

Actual: 41 ft.

RCRA-SQG:

Date form received by agency:	12/27/2001
Facility name:	V M S 601 C A G W T S
Facility address:	601 CALIFORNIA AVE REMEDIATION PALO ALTO, CA 94304
EPA ID:	CA0000876722
Mailing address:	3130 HANSEN WAY M S F095 PALO ALTO, CA 94304
Contact:	DENISE KATO
Contact address:	3130 HANSEN WAY M S F095 PALO ALTO, CA 94304
Contact country:	US
Contact telephone:	(650) 424-5812
Contact email:	Not reported
EPA Region:	09
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous

V M S 601 C A G W T S (Continued) **1000905590**

waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:
Owner/operator name: VARIAN MEDICAL SYSTEMS INC
Owner/operator address: 3100 HANSEN WY
PALO ALTO, CA 94304
Owner/operator country: Not reported
Owner/operator telephone: (650) 493-4000
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): Unknown
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No
Off-site waste receiver: Verified to be non-commercial

Historical Generators:
Date form received by agency: 09/01/1996
Facility name: V M S 601 C A G W T S
Classification: Small Quantity Generator

Date form received by agency: 04/14/1994
Facility name: V M S 601 C A G W T S
Site name: VARIAN 601 CALIFORNIA AVE GROUNDWATER PT
Classification: Large Quantity Generator

Hazardous Waste Summary:
Waste code: D003
Waste name: A MATERIAL IS CONSIDERED TO BE A REACTIVE HAZARDOUS WASTE IF IT IS NORMALLY UNSTABLE, REACTS VIOLENTLY WITH WATER, GENERATES TOXIC GASES WHEN EXPOSED TO WATER OR CORROSIVE MATERIALS, OR IF IT IS CAPABLE OF DETONATION OR EXPLOSION WHEN EXPOSED TO HEAT OR A FLAME. ONE EXAMPLE OF SUCH WASTE WOULD BY WASTE GUNPOWDER.

Violation Status: No violations found

FINDS:

V M S 601 C A G W T S (Continued) **1000905590**

Registry ID: 110000610250

Environmental Interest/Information System

The NEI (National Emissions Inventory) database contains information on stationary and mobile sources that emit criteria air pollutants and their precursors, as well as hazardous air pollutants (HAPs).

US EPA TRIS (Toxics Release Inventory System) contains information from facilities on the amounts of over 300 listed toxic chemicals that these facilities release directly to air, water, land, or that are transported off-site.

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

CA FID UST:

Facility ID:	43000084
Regulated By:	UTNKA
Regulated ID:	00016654
Cortese Code:	Not reported
SIC Code:	Not reported
Facility Phone:	4154931800
Mail To:	Not reported
Mailing Address:	601 CALIFORNIA AVE
Mailing Address 2:	Not reported
Mailing City,St,Zip:	PALO ALTO 94304
Contact:	Not reported
Contact Phone:	Not reported
DUNs Number:	Not reported
NPDES Number:	Not reported
EPA ID:	Not reported
Comments:	Not reported
Status:	Active

SWEEPS UST:

Status:	A
Comp Number:	16654
Number:	9
Board Of Equalization:	44-026073
Ref Date:	07-01-85
Act Date:	Not reported
Created Date:	02-29-88
Tank Status:	A
Owner Tank Id:	4
Swrcb Tank Id:	43-006-016654-000001
Actv Date:	07-01-85
Capacity:	500
Tank Use:	UNKNOWN
Stg:	W
Content:	Not reported
Number Of Tanks:	4

V M S 601 C A G W T S (Continued) **1000905590**

Status: A
Comp Number: 16654
Number: 9
Board Of Equalization: 44-026073
Ref Date: 07-01-85
Act Date: Not reported
Created Date: 02-29-88
Tank Status: A
Owner Tank Id: 1
Swrcb Tank Id: 43-006-016654-000002
Actv Date: 07-01-85
Capacity: 500
Tank Use: UNKNOWN
Stg: W
Content: Not reported
Number Of Tanks: Not reported

Status: A
Comp Number: 16654
Number: 9
Board Of Equalization: 44-026073
Ref Date: 07-01-85
Act Date: Not reported
Created Date: 02-29-88
Tank Status: A
Owner Tank Id: 2
Swrcb Tank Id: 43-006-016654-000003
Actv Date: 07-01-85
Capacity: 500
Tank Use: UNKNOWN
Stg: W
Content: Not reported
Number Of Tanks: Not reported

Status: A
Comp Number: 16654
Number: 9
Board Of Equalization: 44-026073
Ref Date: 07-01-85
Act Date: Not reported
Created Date: 02-29-88
Tank Status: A
Owner Tank Id: 3
Swrcb Tank Id: 43-006-016654-000004
Actv Date: 07-01-85
Capacity: 500
Tank Use: UNKNOWN
Stg: W
Content: Not reported
Number Of Tanks: Not reported

ENVIROSTOR:
Site Type: Corrective Action
Site Type Detailed: Corrective Action
Acres: 0
NPL: NO
Regulatory Agencies: RWQCB

V M S 601 C A G W T S (Continued) **1000905590**

Lead Agency: WQC
Program Manager: Not reported
Supervisor: * Unknown
Division Branch: Berkeley
Facility ID: 80001826
Site Code: Not reported
Assembly: 21
Senate: 21
Special Program: Not reported
Status: Refer: RWQCB
Status Date: 1/1/2008
Restricted Use: NO
Site Mgmt. Req.: NONE SPECIFIED
Funding: Not reported
Latitude: 37.423233139497903
Longitude: -122.145824432373
APN: 142-20-011
Past Use: NONE SPECIFIED
Potential COC: NONE SPECIFIED
Confirmed COC: NONE SPECIFIED
Potential Description: NONE SPECIFIED
Alias Name: 142-20-011
Alias Type: APN
Alias Name: CAT080010804
Alias Type: EPA Identification Number
Alias Name: 80001826
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Consent Agreement
Completed Date: 1994-09-21 00:00:00
Comments: Not reported

Completed Area Name: Sites With No Operable Unit
Completed Sub Area Name: ENTIRE FACILITY
Completed Document Type: Consent Agreement
Completed Date: 1987-04-15 00:00:00
Comments: Not reported

Completed Area Name: Sites With No Operable Unit
Completed Sub Area Name: ENTIRE FACILITY
Completed Document Type: Remedy Selection and Statement of Basis
Completed Date: 1994-09-21 00:00:00
Comments: Not reported

Completed Area Name: Sites With No Operable Unit
Completed Sub Area Name: ENTIRE FACILITY
Completed Document Type: Interim Measures Questionnaire
Completed Date: 1994-08-12 00:00:00
Comments: Not reported

Completed Area Name: Sites With No Operable Unit
Completed Sub Area Name: ENTIRE FACILITY
Completed Document Type: RCRA Facility Assessment Report
Completed Date: 1994-05-02 00:00:00
Comments: Not reported

V M S 601 C A G W T S (Continued) **1000905590**

Completed Area Name: Sites With No Operable Unit
Completed Sub Area Name: ENTIRE FACILITY
Completed Document Type: Preliminary Assessment Report
Completed Date: 1987-06-01 00:00:00
Comments: Not reported

Completed Area Name: Sites With No Operable Unit
Completed Sub Area Name: ENTIRE FACILITY
Completed Document Type: Corrective Measure Implementation Workplan
Completed Date: 1994-09-21 00:00:00
Comments: Not reported

Completed Area Name: Sites With No Operable Unit
Completed Sub Area Name: ENTIRE FACILITY
Completed Document Type: Design/Implementation Workplan
Completed Date: 1994-09-21 00:00:00
Comments: Not reported

Completed Area Name: Sites With No Operable Unit
Completed Sub Area Name: ENTIRE FACILITY
Completed Document Type: Corrective Measures Study Report
Completed Date: 1994-09-21 00:00:00
Comments: Not reported

Completed Area Name: Sites With No Operable Unit
Completed Sub Area Name: ENTIRE FACILITY
Completed Document Type: RFI Report
Completed Date: 1994-09-21 00:00:00
Comments: Not reported

Completed Area Name: Sites With No Operable Unit
Completed Sub Area Name: ENTIRE FACILITY
Completed Document Type: Interim Measures Implementation Report
Completed Date: 1993-12-01 00:00:00
Comments: Not reported

Completed Area Name: Sites With No Operable Unit
Completed Sub Area Name: ENTIRE FACILITY
Completed Document Type: Interim Measures Implementation Report
Completed Date: 1993-12-01 00:00:00
Comments: Not reported

Completed Area Name: Sites With No Operable Unit
Completed Sub Area Name: ENTIRE FACILITY
Completed Document Type: Interim Measures Workplan
Completed Date: 1990-01-01 00:00:00
Comments: Not reported

Completed Area Name: Sites With No Operable Unit
Completed Sub Area Name: ENTIRE FACILITY
Completed Document Type: Preliminary Assessment Report
Completed Date: 1986-12-01 00:00:00
Comments: Not reported

Completed Area Name: Sites With No Operable Unit
Completed Sub Area Name: ENTIRE FACILITY
Completed Document Type: Interim Measures Workplan

V M S 601 C A G W T S (Continued) **1000905590**

Completed Date: 1990-01-01 00:00:00
Comments: Not reported

Completed Area Name: Sites With No Operable Unit
Completed Sub Area Name: ENTIRE FACILITY
Completed Document Type: Remedy Constructed: Operating Properly & Successfully
Completed Date: 1996-10-15 00:00:00
Comments: Not reported

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

P86 **VARIAN ASSOCIATES** **CERC-NFRAP 1000880997**
WNW **601 CALIFORNIA AVE** **CORRACTS CAT080010804**
1/4-1/2 **PALO ALTO, CA 94303** **RCRA-SQG**
0.422 mi. **HIST CORTESE**
2226 ft. **Site 4 of 4 in cluster P** **HAZNET**

Relative:
Higher

Actual:
41 ft.

CERC-NFRAP:
Site ID: 0902669
Federal Facility: Not a Federal Facility
NPL Status: Not on the NPL
Non NPL Status: NFRAP

CERCLIS-NFRAP Site Contact Name(s):
Contact Title: Not reported
Contact Name: Carl Brickner
Contact Tel: (415) 972-3814

Contact Title: Not reported
Contact Name: Brunilda Davila
Contact Tel: (415) 972-3162

Contact Title: Not reported
Contact Name: Jeff Inglis
Contact Tel: (415) 972-3095

Contact Title: Not reported
Contact Name: Karen Jurist
Contact Tel: (415) 972-3219

Contact Title: Not reported
Contact Name: Matt Mitguard
Contact Tel: (415) 972-3096

CERCLIS-NFRAP Site Alias Name(s):
Alias Name: VARIAN ASSOCIATES LSE DIV (RCRA)
Alias Address: Not reported
CA

VARIAN ASSOCIATES (Continued) **1000880997**

CERCLIS-NFRAP Assessment History:

Action:	DISCOVERY
Date Started:	Not reported
Date Completed:	10/01/1986
Priority Level:	Not reported
Action:	PRELIMINARY ASSESSMENT
Date Started:	Not reported
Date Completed:	12/01/1986
Priority Level:	Higher priority for further assessment
Action:	HRS PACKAGE
Date Started:	Not reported
Date Completed:	06/01/1987
Priority Level:	Not reported
Action:	SITE INSPECTION
Date Started:	Not reported
Date Completed:	06/01/1987
Priority Level:	NFRAP: No further Remedial Action planned
Action:	ARCHIVE SITE
Date Started:	Not reported
Date Completed:	11/02/1992
Priority Level:	Not reported
Action:	SH
Date Started:	Not reported
Date Completed:	11/02/1992
Priority Level:	Not reported

CORRACTS:

EPA ID:	CAT080010804
EPA Region:	9
Area Name:	ENTIRE FACILITY
Actual Date:	1/1/1990
Action:	CA600SR - Stabilization Measures Implemented, Primary measure is source removal and/or treatment
NAICS Code(s):	334419 334419 334419 Other Electronic Component Manufacturing Other Electronic Component Manufacturing Other Electronic Component Manufacturing
Original schedule date:	Not reported
Schedule end date:	Not reported
EPA ID:	CAT080010804
EPA Region:	9
Area Name:	ENTIRE FACILITY
Actual Date:	1/1/1990
Action:	CA600GW - Stabilization Measures Implemented, Groundwater extraction and treatment
NAICS Code(s):	334419 334419 334419 Other Electronic Component Manufacturing Other Electronic Component Manufacturing Other Electronic Component Manufacturing

VARIAN ASSOCIATES (Continued) **1000880997**

Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: CAT080010804
EPA Region: 9
Area Name: ENTIRE FACILITY
Actual Date: 4/15/1987
Action: CA250 - CMS Imposition
NAICS Code(s): 334419 334419 334419
Other Electronic Component Manufacturing
Other Electronic Component Manufacturing
Other Electronic Component Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: CAT080010804
EPA Region: 9
Area Name: ENTIRE FACILITY
Actual Date: 4/15/1987
Action: CA100 - RFI Imposition
NAICS Code(s): 334419 334419 334419
Other Electronic Component Manufacturing
Other Electronic Component Manufacturing
Other Electronic Component Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: CAT080010804
EPA Region: 9
Area Name: ENTIRE FACILITY
Actual Date: 5/2/1994
Action: CA050 - RFA Completed
NAICS Code(s): 334419 334419 334419
Other Electronic Component Manufacturing
Other Electronic Component Manufacturing
Other Electronic Component Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: CAT080010804
EPA Region: 9
Area Name: ENTIRE FACILITY
Actual Date: 6/1/1987
Action: CA049SI
NAICS Code(s): 334419 334419 334419
Other Electronic Component Manufacturing
Other Electronic Component Manufacturing
Other Electronic Component Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: CAT080010804
EPA Region: 9
Area Name: ENTIRE FACILITY
Actual Date: 8/12/1994
Action: CA225NR - Stabilization Measures Evaluation, This facility is, not amenable to stabilization activity at the, present time for reasons

VARIAN ASSOCIATES (Continued) **1000880997**

other than (1) it appears to be technically, infeasible or inappropriate (NF) or (2) there is a lack of technical, information (IN). Reasons for this conclusion may be the status of, closure at the facility, the degree of risk, timing considerations, the status of corrective action work at the facility, or other, administrative considerations
NAICS Code(s): 334419 334419 334419
Other Electronic Component Manufacturing
Other Electronic Component Manufacturing
Other Electronic Component Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: CAT080010804
EPA Region: 9
Area Name: ENTIRE FACILITY
Actual Date: 8/12/1994
Action: CA075HI - CA Prioritization, Facility or area was assigned a high corrective action priority
NAICS Code(s): 334419 334419 334419
Other Electronic Component Manufacturing
Other Electronic Component Manufacturing
Other Electronic Component Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: CAT080010804
EPA Region: 9
Area Name: ENTIRE FACILITY
Actual Date: 9/17/1997
Action: CA210 - CA Responsibility Referred To A Non-RCRA Federal Authority
NAICS Code(s): 334419 334419 334419
Other Electronic Component Manufacturing
Other Electronic Component Manufacturing
Other Electronic Component Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: CAT080010804
EPA Region: 9
Area Name: ENTIRE FACILITY
Actual Date: 9/21/1994
Action: CA200 - RFI Approved
NAICS Code(s): 334419 334419 334419
Other Electronic Component Manufacturing
Other Electronic Component Manufacturing
Other Electronic Component Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: CAT080010804
EPA Region: 9
Area Name: ENTIRE FACILITY
Actual Date: 9/21/1994
Action: CA450 - Corrective Measures Design Approved
NAICS Code(s): 334419 334419 334419
Other Electronic Component Manufacturing

VARIAN ASSOCIATES (Continued) **1000880997**

Other Electronic Component Manufacturing
Other Electronic Component Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: CAT080010804
EPA Region: 9
Area Name: ENTIRE FACILITY
Actual Date: 9/21/1994
Action: CA500 - CMI Workplan Approved
NAICS Code(s): 334419 334419 334419
Other Electronic Component Manufacturing
Other Electronic Component Manufacturing
Other Electronic Component Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: CAT080010804
EPA Region: 9
Area Name: ENTIRE FACILITY
Actual Date: 9/21/1994
Action: CA350 - CMS Approved
NAICS Code(s): 334419 334419 334419
Other Electronic Component Manufacturing
Other Electronic Component Manufacturing
Other Electronic Component Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: CAT080010804
EPA Region: 9
Area Name: ENTIRE FACILITY
Actual Date: 9/21/1994
Action: CA400 - Date For Remedy Selection (CM Imposed)
NAICS Code(s): 334419 334419 334419
Other Electronic Component Manufacturing
Other Electronic Component Manufacturing
Other Electronic Component Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: CAT080010804
EPA Region: 9
Area Name: ENTIRE FACILITY
Actual Date: 9/22/2009
Action: CA800YE
NAICS Code(s): 334419 334419 334419
Other Electronic Component Manufacturing
Other Electronic Component Manufacturing
Other Electronic Component Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: CAT080010804
EPA Region: 9
Area Name: ENTIRE FACILITY
Actual Date: 9/29/1988

VARIAN ASSOCIATES (Continued) **1000880997**

Action: CA036WQ
NAICS Code(s): 334419 334419 334419
Other Electronic Component Manufacturing
Other Electronic Component Manufacturing
Other Electronic Component Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: CAT080010804
EPA Region: 9
Area Name: ENTIRE FACILITY
Actual Date: 10/15/1996
Action: CA550 - Certification Of Remedy Completion Or Construction Completion
NAICS Code(s): 334419 334419 334419
Other Electronic Component Manufacturing
Other Electronic Component Manufacturing
Other Electronic Component Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: CAT080010804
EPA Region: 9
Area Name: ENTIRE FACILITY
Actual Date: 10/30/1996
Action: CA725YE - Current Human Exposures Under Control, Yes, Current Human Exposures Under Control has been verified
NAICS Code(s): 334419 334419 334419
Other Electronic Component Manufacturing
Other Electronic Component Manufacturing
Other Electronic Component Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: CAT080010804
EPA Region: 9
Area Name: ENTIRE FACILITY
Actual Date: 12/1/1986
Action: CA074HI
NAICS Code(s): 334419 334419 334419
Other Electronic Component Manufacturing
Other Electronic Component Manufacturing
Other Electronic Component Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: CAT080010804
EPA Region: 9
Area Name: ENTIRE FACILITY
Actual Date: 12/1/1986
Action: CA049PA
NAICS Code(s): 334419 334419 334419
Other Electronic Component Manufacturing
Other Electronic Component Manufacturing
Other Electronic Component Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

VARIAN ASSOCIATES (Continued) **1000880997**

EPA ID: CAT080010804
EPA Region: 9
Area Name: ENTIRE FACILITY
Actual Date: 12/1/1986
Action: CA029WQ
NAICS Code(s): 334419 334419 334419
Other Electronic Component Manufacturing
Other Electronic Component Manufacturing
Other Electronic Component Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: CAT080010804
EPA Region: 9
Area Name: ENTIRE FACILITY
Actual Date: 12/1/1986
Action: CA075HI - CA Prioritization, Facility or area was assigned a high corrective action priority
NAICS Code(s): 334419 334419 334419
Other Electronic Component Manufacturing
Other Electronic Component Manufacturing
Other Electronic Component Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: CAT080010804
EPA Region: 9
Area Name: ENTIRE FACILITY
Actual Date: 12/1/1993
Action: CA650 - Stabilization Construction Completed
NAICS Code(s): 334419 334419 334419
Other Electronic Component Manufacturing
Other Electronic Component Manufacturing
Other Electronic Component Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: CAT080010804
EPA Region: 9
Area Name: ENTIRE FACILITY
Actual Date: 12/1/1993
Action: CA750YE - Migration of Contaminated Groundwater under Control, Yes, Migration of Contaminated Groundwater Under Control has been verified
NAICS Code(s): 334419 334419 334419
Other Electronic Component Manufacturing
Other Electronic Component Manufacturing
Other Electronic Component Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: CAT080010804
EPA Region: 9
Area Name: ENTIRE FACILITY
Actual Date: 12/28/2000
Action: CA750YE - Migration of Contaminated Groundwater under Control, Yes, Migration of Contaminated Groundwater Under Control has been verified
NAICS Code(s): 334419 334419 334419

VARIAN ASSOCIATES (Continued) **1000880997**

Other Electronic Component Manufacturing
Other Electronic Component Manufacturing
Other Electronic Component Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: CAT080010804
EPA Region: 9
Area Name: ENTIRE FACILITY
Actual Date: 12/28/2000
Action: CA725YE - Current Human Exposures Under Control, Yes, Current Human Exposures Under Control has been verified
NAICS Code(s): 334419 334419 334419
Other Electronic Component Manufacturing
Other Electronic Component Manufacturing
Other Electronic Component Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

RCRA-SQG:
Date form received by agency: 09/01/1996
Facility name: INTEVAC
Facility address: 601 CALIFORNIA AVE
PALO ALTO, CA 943040883
EPA ID: CAT080010804
Contact: Not reported
Contact address: Not reported
Not reported
Contact country: Not reported
Contact telephone: Not reported
Contact email: Not reported
EPA Region: 09
Land type: Private
Classification: Small Small Quantity Generator
Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:
Owner/operator name: INTEVAC
Owner/operator address: 3550 BASSETT ST
SANTA CLARA, CA 95054
Owner/operator country: Not reported
Owner/operator telephone: (408) 986-9888
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: VARIAN ASSOCIATES INC
Owner/operator address: 611 HANSEN WAY
CITY NOT REPORTED, CA 99999
Owner/operator country: Not reported
Owner/operator telephone: (415) 493-4000

VARIAN ASSOCIATES (Continued) **1000880997**

Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: Unknown
Mixed waste (haz. and radioactive): Unknown
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: Unknown
Furnace exemption: Unknown
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No
Off-site waste receiver: Verified to be non-commercial

Historical Generators:
Date form received by agency: 09/01/1996
Facility name: INTEVAC
Classification: Small Quantity Generator

Date form received by agency: 03/01/1996
Facility name: INTEVAC
Site name: LITTON ELECTRON DEVICES
Classification: Large Quantity Generator

Date form received by agency: 02/26/1996
Facility name: INTEVAC
Classification: Large Quantity Generator

Date form received by agency: 03/01/1994
Facility name: INTEVAC
Site name: INTEVAC, EO SENSORS, INC.
Classification: Large Quantity Generator

Date form received by agency: 02/29/1992
Facility name: INTEVAC
Site name: INTEVAC - EOSD
Classification: Small Quantity Generator

Date form received by agency: 04/12/1990
Facility name: INTEVAC
Site name: VARIAN, ELECTOR OPTICAL SENSORS DIVISION
Classification: Large Quantity Generator

Corrective Action Summary:
Event date: 12/01/1986
Event: CA074HI

VARIAN ASSOCIATES (Continued) **1000880997**

Event date: 12/01/1986
Event: CA029WQ

Event date: 12/01/1986
Event: CA Prioritization, Facility or area was assigned a high corrective action priority.

Event date: 12/01/1986
Event: CA049PA

Event date: 04/15/1987
Event: CMS Imposition

Event date: 04/15/1987
Event: RFI Imposition

Event date: 06/01/1987
Event: CA049SI

Event date: 09/29/1988
Event: CA036WQ

Event date: 01/01/1990
Event: Stabilization Measures Implemented, Primary measure is source removal and/or treatment (e.g., soil or waste excavation, in-situ soil treatment, off-site treatment).

Event date: 01/01/1990
Event: Stabilization Measures Implemented, Groundwater extraction and treatment (e.g., to achieve groundwater containment, to achieve MCL).

Event date: 12/01/1993
Event: Stabilization Construction Completed

Event date: 12/01/1993
Event: Igration of Contaminated Groundwater under Control, Yes, Migration of Contaminated Groundwater Under Control has been verified. Based on a review of information contained in the EI determination, it has been determined that migration of contaminated groundwater is under control at the facility. Specifically, this determination indicates that the migration of contaminated groundwater is under control, and that monitoring will be conducted to confirm that contaminated groundwater remains within the existing area of contaminated groundwater. This determination will be re-evaluated when the Agency becomes aware of significant changes at the facility.

Event date: 12/01/1993
Event: Stabilization Construction Completed

Event date: 05/02/1994
Event: RFA Completed

Event date: 08/12/1994
Event: Stabilization Measures Evaluation,This facility is not amenable to stabilization activity at the present time for reasons other than 1- it appears to be technically infeasible or inappropriate (NF) or 2- there is a lack of technical information (IN). Reasons for this

VARIAN ASSOCIATES (Continued) **1000880997**

conclusion may be the status of closure at the facility, the degree of risk, timing considerations, the status of corrective action work at the facility, or other administrative considerations.

Event date: 08/12/1994
Event: CA Prioritization, Facility or area was assigned a high corrective action priority.

Event date: 09/21/1994
Event: RFI Approved

Event date: 09/21/1994
Event: Date For Remedy Selection (CM Imposed)

Event date: 09/21/1994
Event: Corrective Measures Design Approved

Event date: 09/21/1994
Event: CMI Workplan Approved

Event date: 09/21/1994
Event: CMS Approved

Event date: 10/15/1996
Event: Certification Of Remedy Completion Or Construction Completion

Event date: 10/30/1996
Event: Current Human Exposures under Control, Yes, Current Human Exposures Under Control has been verified. Based on a review of information contained in the EI determination, current human exposures are expected to be under control at the facility under current and reasonably expected conditions. This determination will be re-evaluated when the Agency/State becomes aware of significant changes at the facility.

Event date: 09/17/1997
Event: CA Responsibility Referred To A Non-RCRA Federal Authority

Event date: 12/28/2000
Event: Current Human Exposures under Control, Yes, Current Human Exposures Under Control has been verified. Based on a review of information contained in the EI determination, current human exposures are expected to be under control at the facility under current and reasonably expected conditions. This determination will be re-evaluated when the Agency/State becomes aware of significant changes at the facility.

Event date: 12/28/2000
Event: Igration of Contaminated Groundwater under Control, Yes, Migration of Contaminated Groundwater Under Control has been verified. Based on a review of information contained in the EI determination, it has been determined that migration of contaminated groundwater is under control at the facility. Specifically, this determination indicates that the migration of contaminated groundwater is under control, and that monitoring will be conducted to confirm that contaminated groundwater remains within the existing area of contaminated groundwater. This determination will be re-evaluated when the Agency becomes aware of

VARIAN ASSOCIATES (Continued) **1000880997**

significant changes at the facility.

Event date: 09/22/2009
Event: CA800YE

Violation Status: No violations found

Evaluation Action Summary:
Evaluation date: 01/30/1987
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 10/23/1985
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

CORTESE:
Region: CORTESE
Facility County Code: 43
Reg By: WBC&D
Reg Id: 2 438249N01

HAZNET:
Gepaid: CAT080010804
Contact: INTEVAC INC
Telephone: 4089869888
Facility Addr2: Not reported
Mailing Name: Not reported
Mailing Address: 3550 BASSETT ST
Mailing City,St,Zip: SANTA CLARA, CA 950542704
Gen County: Santa Clara
TSD EPA ID: CAD982042475
TSD County: Solano
Waste Category: Asbestos-containing waste
Disposal Method: Disposal, Land Fill
Tons: 60.6816
Facility County: Santa Clara

Gepaid: CAT080010804
Contact: INTEVAC INC
Telephone: 4089869888
Facility Addr2: Not reported
Mailing Name: Not reported
Mailing Address: 3550 BASSETT ST
Mailing City,St,Zip: SANTA CLARA, CA 950542704
Gen County: Santa Clara
TSD EPA ID: AZD009015389
TSD County: 99
Waste Category: Liquids with pH <UN-> 2 with metals
Disposal Method: Not reported
Tons: 3.4610
Facility County: Santa Clara

VARIAN ASSOCIATES (Continued) **1000880997**

Gepaid:	CAT080010804
Contact:	INTEVAC INC
Telephone:	4089869888
Facility Addr2:	Not reported
Mailing Name:	Not reported
Mailing Address:	3550 BASSETT ST
Mailing City,St,Zip:	SANTA CLARA, CA 950542704
Gen County:	Santa Clara
TSD EPA ID:	AZD009015389
TSD County:	99
Waste Category:	Liquids with pH <UN-> 2 with metals
Disposal Method:	Disposal, Other
Tons:	.6879
Facility County:	Santa Clara

Gepaid:	CAT080010804
Contact:	INTEVAC INC
Telephone:	4089869888
Facility Addr2:	Not reported
Mailing Name:	Not reported
Mailing Address:	3550 BASSETT ST
Mailing City,St,Zip:	SANTA CLARA, CA 950542704
Gen County:	Santa Clara
TSD EPA ID:	AZD009015389
TSD County:	99
Waste Category:	Liquids with arsenic > 500 mg/l
Disposal Method:	Disposal, Other
Tons:	.2293
Facility County:	Santa Clara

Gepaid:	CAT080010804
Contact:	INTEVAC INC
Telephone:	4089869888
Facility Addr2:	Not reported
Mailing Name:	Not reported
Mailing Address:	3550 BASSETT ST
Mailing City,St,Zip:	SANTA CLARA, CA 950542704
Gen County:	Santa Clara
TSD EPA ID:	CAD009452657
TSD County:	San Mateo
Waste Category:	Other organic solids
Disposal Method:	Disposal, Injection Well
Tons:	.1876
Facility County:	Santa Clara

Click this hyperlink while viewing on your computer to access
Other organic solids

Q87
WSW
1/4-1/2
0.422 mi.
2229 ft.

Relative:
Higher

Actual:
44 ft.

BECKMAN INSTRUMENTS
1050 PAGE MILL RD
PALO ALTO, CA 94304

Site 1 of 3 in cluster Q

Database(s): CERC-NFRAP, RCRA-SQG, FINDS, NPDES, SLIC, MANIFEST, HAZNET

EDR ID Number: 1000271467
EPA ID Number: CAD028872711

CERC-NFRAP:
Site ID: 0901279
Federal Facility: Not a Federal Facility
NPL Status: Not on the NPL
Non NPL Status: NFRAP

CERCLIS-NFRAP Site Contact Name(s):
Contact Title: Not reported
Contact Name: Carl Brickner
Contact Tel: (415) 972-3814

Contact Title: Not reported
Contact Name: Brunilda Davila
Contact Tel: (415) 972-3162

Contact Title: Not reported
Contact Name: Jeff Inglis
Contact Tel: (415) 972-3095

Contact Title: Not reported
Contact Name: Karen Jurist
Contact Tel: (415) 972-3219

Contact Title: Not reported
Contact Name: Matt Mitguard
Contact Tel: (415) 972-3096

CERCLIS-NFRAP Assessment History:
Action: DISCOVERY
Date Started: Not reported
Date Completed: 05/01/1986
Priority Level: Not reported

Action: PRELIMINARY ASSESSMENT
Date Started: Not reported
Date Completed: 12/01/1987
Priority Level: NFRAP: No further Remedial Action planned

Action: ARCHIVE SITE
Date Started: Not reported
Date Completed: 12/01/1987
Priority Level: Not reported

RCRA-SQG:
Date form received by agency: 02/23/2006
Facility name: BECKMAN COULTER INC
Facility address: 1050 PAGE MILL RD
PALO ALTO, CA 94304
EPA ID: CAD028872711
Contact: BILL L FREITAS

BECKMAN INSTRUMENTS (Continued) **1000271467**

Contact address: Not reported
Not reported
Contact country: Not reported
Contact telephone: (650) 859-1712
Contact email: WLFREITAS@BECKMAN.COM
EPA Region: 09
Land type: Private
Classification: Small Small Quantity Generator
Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:
Owner/operator name: LELAND STANFORD UNIVERSITY
Owner/operator address: 2770 SAND HILL RD
MENLO PARK, CA 94025
Owner/operator country: US
Owner/operator telephone: Not reported
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: 01/01/1956
Owner/Op end date: Not reported

Owner/operator name: BECKMAN COULTER INC
Owner/operator address: Not reported
Not reported
Owner/operator country: US
Owner/operator telephone: Not reported
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: 06/01/1956
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No
Off-site waste receiver: Commercial status unknown

Universal Waste Summary:
Waste type: Batteries
Accumulated waste on-site: No

BECKMAN INSTRUMENTS (Continued) **1000271467**

Generated waste on-site: No

Waste type: Lamps
Accumulated waste on-site: No
Generated waste on-site: No

Waste type: Pesticides
Accumulated waste on-site: No
Generated waste on-site: No

Waste type: Thermostats
Accumulated waste on-site: No
Generated waste on-site: No

Historical Generators:

Date form received by agency: 02/11/2004
Facility name: BECKMAN COULTER INC
Classification: Large Quantity Generator

Date form received by agency: 02/20/2002
Facility name: BECKMAN COULTER INC
Classification: Large Quantity Generator

Date form received by agency: 10/12/2000
Facility name: BECKMAN COULTER INC
Site name: BECKMAN COULTER
Classification: Large Quantity Generator

Date form received by agency: 05/27/1999
Facility name: BECKMAN COULTER INC
Classification: Large Quantity Generator

Date form received by agency: 03/04/1999
Facility name: BECKMAN COULTER INC
Site name: BECKMAN INSTRUMENTS
Classification: Large Quantity Generator

Date form received by agency: 09/01/1996
Facility name: BECKMAN COULTER INC
Classification: Large Quantity Generator

Date form received by agency: 02/27/1996
Facility name: BECKMAN COULTER INC
Site name: BECKMAN INSTRUMENTS, INC.
Classification: Large Quantity Generator

Date form received by agency: 03/21/1994
Facility name: BECKMAN COULTER INC
Site name: BECKMAN INSTRUMENTS, INC
Classification: Large Quantity Generator

Date form received by agency: 03/26/1992
Facility name: BECKMAN COULTER INC
Site name: BECKMAN INSTRUMENTS INC
Classification: Large Quantity Generator

Date form received by agency: 04/13/1990

BECKMAN INSTRUMENTS (Continued) **1000271467**

Facility name: BECKMAN COULTER INC
Site name: BECKMAN INSTRUMENTS INC
Classification: Large Quantity Generator

Hazardous Waste Summary:
Waste code: D001
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Waste code: F001
Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS USED IN DEGREASING: TETRACHLOROETHYLENE, TRICHLOROETHYLENE, METHYLENE CHLORIDE, 1,1,1-TRICHLOROETHANE, CARBON TETRACHLORIDE, AND CHLORINATED FLUOROCARBONS; ALL SPENT SOLVENT MIXTURES/BLENDS USED IN DEGREASING CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F002, F004, AND F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste code: F002
Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2-TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE LISTED IN F001, F004, OR F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste code: F003
Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NON-HALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS, AND, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Facility Has Received Notices of Violations:
Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 04/20/2006
Date achieved compliance: Not reported
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 04/20/2006
Enf. disposition status: Not reported

BECKMAN INSTRUMENTS (Continued) **1000271467**

Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: F - GPP
Area of violation: Generators - Pre-transport
Date violation determined: 01/11/2000
Date achieved compliance: 05/09/2000
Violation lead agency: EPA
Enforcement action: Not reported
Enforcement action date: 03/28/2000
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: F - GCP
Area of violation: Generators - Pre-transport
Date violation determined: 01/11/2000
Date achieved compliance: 05/09/2000
Violation lead agency: EPA
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 05/14/1999
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: F - GCP
Area of violation: Generators - Pre-transport
Date violation determined: 01/11/2000
Date achieved compliance: 05/09/2000
Violation lead agency: EPA
Enforcement action: Not reported
Enforcement action date: 03/28/2000
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: F - 262.40-43.D
Area of violation: Generators - General
Date violation determined: 01/11/2000
Date achieved compliance: 05/09/2000
Violation lead agency: EPA
Enforcement action: Not reported
Enforcement action date: 03/28/2000
Enf. disposition status: Not reported
Enf. disp. status date: Not reported

BECKMAN INSTRUMENTS (Continued) **1000271467**

Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: F - 262.40-43.D
Area of violation: Generators - General
Date violation determined: 01/11/2000
Date achieved compliance: 05/09/2000
Violation lead agency: EPA
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 05/14/1999
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: F - GPP
Area of violation: Generators - Pre-transport
Date violation determined: 01/11/2000
Date achieved compliance: 05/09/2000
Violation lead agency: EPA
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 05/14/1999
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: FR - 262.10-12.A
Area of violation: Generators - General
Date violation determined: 03/03/1993
Date achieved compliance: 09/01/1993
Violation lead agency: State
Enforcement action: Not reported
Enforcement action date: Not reported
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: Not reported
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Evaluation Action Summary:
Evaluation date: 04/20/2006
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: Not reported
Evaluation lead agency: Local

Evaluation date: 01/11/2000
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General

BECKMAN INSTRUMENTS (Continued) **1000271467**

Date achieved compliance: 05/09/2000
Evaluation lead agency: EPA

Evaluation date: 01/11/2000
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - Pre-transport
Date achieved compliance: 05/09/2000
Evaluation lead agency: EPA

Evaluation date: 03/03/1993
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 09/01/1993
Evaluation lead agency: State Contractor/Grantee

FINDS:

Registry ID: 110000902710

Environmental Interest/Information System

The NEI (National Emissions Inventory) database contains information on stationary and mobile sources that emit criteria air pollutants and their precursors, as well as hazardous air pollutants (HAPs).

California Hazardous Waste Tracking System - Datamart (HWTS-DATAMART) provides California with information on hazardous waste shipments for generators, transporters, and treatment, storage, and disposal facilities.

US EPA TRIS (Toxics Release Inventory System) contains information from facilities on the amounts of over 300 listed toxic chemicals that these facilities release directly to air, water, land, or that are transported off-site.

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

NPDES:

Npdes Number:	Not reported
Facility Status:	Active
Agency Id:	4298
Region:	2
Regulatory Measure Id:	183863
Order No:	97-03-DWQ
Regulatory Measure Type:	Storm water industrial
Place Id:	209069
WDID:	2 43I006626
Program Type:	INDSTW
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	1992-04-30 00:00:00
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported

BECKMAN INSTRUMENTS (Continued) **1000271467**

Discharge Name:	Beckman Instruments
Discharge Address:	1050 Page Mill Rd
Discharge City:	Palo Alto
Discharge State:	CA
Discharge Zip:	94304

SLIC:

Region:	STATE
Facility Status:	**Completed - Case Closed**
Status Date:	2002-01-31 00:00:00
Global Id:	SL0608587795
Lead Agency:	SAN FRANCISCO BAY RWQCB (REGION 2)
Lead Agency Case Number:	Not reported
Latitude:	37.417305
Longitude:	-122.145927
Case Type:	Cleanup Program Site
Case Worker:	UUU
Local Agency:	SANTA CLARA VALLEY WATER DISTRICT
RB Case Number:	43S0196
File Location:	Regional Board
Potential Media Affected:	Soil
Potential Contaminants of Concern:	1,1,1-Trichloroethane (TCA)
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

SLIC:

Region:	2
Facility ID:	43S0196
Facility Status:	Case Closed
Date Closed:	Not reported
Local Case #:	Not reported
How Discovered:	Not reported
Leak Cause:	Not reported
Leak Source:	Not reported
Date Confirmed:	Not reported
Date Prelim Site Assmnt Workplan Submitted:	Not reported
Date Preliminary Site Assessment Began:	Not reported
Date Pollution Characterization Began:	Not reported
Date Remediation Plan Submitted:	Not reported
Date Remedial Action Underway:	Not reported
Date Post Remedial Action Monitoring Began:	Not reported

NY MANIFEST:

EPA ID:	CAD028872711
Country:	USA
Mailing Name:	BECKMAN INSTRUMENTS
Mailing Contact:	BECKMAN INSTRUMENTS
Mailing Address:	1050 PAGE MILL ROAD
Mailing Address 2:	Not reported
Mailing City:	PALO ALTO
Mailing State:	CA
Mailing Zip:	94303
Mailing Zip4:	Not reported
Mailing Country:	USA
Mailing Phone:	415-859-1634

BECKMAN INSTRUMENTS (Continued) **1000271467**

Document ID:	NYA6091011
Manifest Status:	Completed copy
Trans1 State ID:	801079
Trans2 State ID:	NY-X17953
Generator Ship Date:	870720
Trans1 Recv Date:	870720
Trans2 Recv Date:	870721
TSD Site Recv Date:	870803
Part A Recv Date:	870728
Part B Recv Date:	870807
Generator EPA ID:	CAD028872711
Trans1 EPA ID:	NYD980769947
Trans2 EPA ID:	Not reported
TSDF ID:	NYD000632372
Waste Code:	D002 - NON-LISTED CORROSIVE WASTES
Quantity:	00125
Units:	P - Pounds
Number of Containers:	001
Container Type:	DM - Metal drums, barrels
Handling Method:	T Chemical, physical, or biological treatment.
Specific Gravity:	100
Waste Code:	Not reported
Quantity:	00485
Units:	P - Pounds
Number of Containers:	001
Container Type:	DM - Metal drums, barrels
Handling Method:	T Chemical, physical, or biological treatment.
Specific Gravity:	100
Year:	87
Manifest Tracking Num:	Not reported
Import Ind:	Not reported
Export Ind:	Not reported
Discr Quantity Ind:	Not reported
Discr Type Ind:	Not reported
Discr Residue Ind:	Not reported
Discr Partial Reject Ind:	Not reported
Discr Full Reject Ind:	Not reported
Manifest Ref Num:	Not reported
Alt Fac RCRA Id:	Not reported
Alt Fac Sign Date:	Not reported
Mgmt Method Type Code:	Not reported

Document ID:	NYA4067111
Manifest Status:	Completed after the designated time period for a TSDF to get a copy to the DEC
Trans1 State ID:	X17593
Trans2 State ID:	Not reported
Generator Ship Date:	870114
Trans1 Recv Date:	870114
Trans2 Recv Date:	870115
TSD Site Recv Date:	870128
Part A Recv Date:	870306
Part B Recv Date:	870306
Generator EPA ID:	CAD028872711
Trans1 EPA ID:	NYD980769947
Trans2 EPA ID:	Not reported
TSDF ID:	NYD000632372

BECKMAN INSTRUMENTS (Continued) **1000271467**

Waste Code:	D003 - NON-LISTED REACTIVE WASTES
Quantity:	00004
Units:	P - Pounds
Number of Containers:	001
Container Type:	DM - Metal drums, barrels
Handling Method:	B Incineration, heat recovery, burning.
Specific Gravity:	100
Waste Code:	Not reported
Quantity:	00001
Units:	P - Pounds
Number of Containers:	001
Container Type:	DM - Metal drums, barrels
Handling Method:	B Incineration, heat recovery, burning.
Specific Gravity:	100
Waste Code:	Not reported
Quantity:	00001
Units:	P - Pounds
Number of Containers:	001
Container Type:	DM - Metal drums, barrels
Handling Method:	B Incineration, heat recovery, burning.
Specific Gravity:	100
Waste Code:	Not reported
Quantity:	00002
Units:	P - Pounds
Number of Containers:	001
Container Type:	DM - Metal drums, barrels
Handling Method:	T Chemical, physical, or biological treatment.
Specific Gravity:	100
Waste Code:	Not reported
Quantity:	00015
Units:	P - Pounds
Number of Containers:	001
Container Type:	DM - Metal drums, barrels
Handling Method:	T Chemical, physical, or biological treatment.
Specific Gravity:	100
Waste Code:	D003 - NON-LISTED REACTIVE WASTES
Quantity:	00035
Units:	P - Pounds
Number of Containers:	001
Container Type:	DM - Metal drums, barrels
Handling Method:	T Chemical, physical, or biological treatment.
Specific Gravity:	100
Year:	87
Manifest Tracking Num:	Not reported
Import Ind:	Not reported
Export Ind:	Not reported
Discr Quantity Ind:	Not reported
Discr Type Ind:	Not reported
Discr Residue Ind:	Not reported
Discr Partial Reject Ind:	Not reported
Discr Full Reject Ind:	Not reported
Manifest Ref Num:	Not reported
Alt Fac RCRA Id:	Not reported
Alt Fac Sign Date:	Not reported
Mgmt Method Type Code:	Not reported

BECKMAN INSTRUMENTS (Continued) **1000271467**

Document ID:	NYA4067111
Manifest Status:	Completed after the designated time period for a TSDF to get a copy to the DEC
Trans1 State ID:	X17593
Trans2 State ID:	Not reported
Generator Ship Date:	870114
Trans1 Recv Date:	870114
Trans2 Recv Date:	870115
TSD Site Recv Date:	870128
Part A Recv Date:	870306
Part B Recv Date:	870306
Generator EPA ID:	CAD028872711
Trans1 EPA ID:	NYD980769947
Trans2 EPA ID:	Not reported
TSDF ID:	NYD000632372
Waste Code:	D002 - NON-LISTED CORROSIVE WASTES
Quantity:	00001
Units:	P - Pounds
Number of Containers:	001
Container Type:	DM - Metal drums, barrels
Handling Method:	T Chemical, physical, or biological treatment.
Specific Gravity:	100
Waste Code:	Not reported
Quantity:	00175
Units:	P - Pounds
Number of Containers:	001
Container Type:	DM - Metal drums, barrels
Handling Method:	B Incineration, heat recovery, burning.
Specific Gravity:	100
Waste Code:	Not reported
Quantity:	00071
Units:	P - Pounds
Number of Containers:	003
Container Type:	DM - Metal drums, barrels
Handling Method:	B Incineration, heat recovery, burning.
Specific Gravity:	100
Year:	87
Manifest Tracking Num:	Not reported
Import Ind:	Not reported
Export Ind:	Not reported
Discr Quantity Ind:	Not reported
Discr Type Ind:	Not reported
Discr Residue Ind:	Not reported
Discr Partial Reject Ind:	Not reported
Discr Full Reject Ind:	Not reported
Manifest Ref Num:	Not reported
Alt Fac RCRA Id:	Not reported
Alt Fac Sign Date:	Not reported
Mgmt Method Type Code:	Not reported

Document ID:	NYA4161958
Manifest Status:	Completed copy
Trans1 State ID:	706348
Trans2 State ID:	V-44083NY
Generator Ship Date:	860624
Trans1 Recv Date:	860624
Trans2 Recv Date:	860625

BECKMAN INSTRUMENTS (Continued) **1000271467**

TSD Site Recv Date:	860702
Part A Recv Date:	860702
Part B Recv Date:	860708
Generator EPA ID:	CAD028872711
Trans1 EPA ID:	NYD980769947
Trans2 EPA ID:	Not reported
TSDF ID:	NYD000632372
Waste Code:	D003 - NON-LISTED REACTIVE WASTES
Quantity:	00054
Units:	P - Pounds
Number of Containers:	001
Container Type:	DM - Metal drums, barrels
Handling Method:	B Incineration, heat recovery, burning.
Specific Gravity:	551
Waste Code:	Not reported
Quantity:	00063
Units:	P - Pounds
Number of Containers:	001
Container Type:	DM - Metal drums, barrels
Handling Method:	T Chemical, physical, or biological treatment.
Specific Gravity:	551
Waste Code:	Not reported
Quantity:	00126
Units:	P - Pounds
Number of Containers:	002
Container Type:	DM - Metal drums, barrels
Handling Method:	B Incineration, heat recovery, burning.
Specific Gravity:	551
Waste Code:	Not reported
Quantity:	00018
Units:	P - Pounds
Number of Containers:	001
Container Type:	DM - Metal drums, barrels
Handling Method:	T Chemical, physical, or biological treatment.
Specific Gravity:	551
Year:	86
Manifest Tracking Num:	Not reported
Import Ind:	Not reported
Export Ind:	Not reported
Discr Quantity Ind:	Not reported
Discr Type Ind:	Not reported
Discr Residue Ind:	Not reported
Discr Partial Reject Ind:	Not reported
Discr Full Reject Ind:	Not reported
Manifest Ref Num:	Not reported
Alt Fac RCRA Id:	Not reported
Alt Fac Sign Date:	Not reported
Mgmt Method Type Code:	Not reported

HAZNET:

Gepaid:	CAD028872711
Contact:	CHRIS ZDUNKIEWICZ
Telephone:	7147738541
Facility Addr2:	Not reported
Mailing Name:	Not reported
Mailing Address:	4300 N HARBOR BLVD
Mailing City,St,Zip:	FULLERTON, CA 928343100

BECKMAN INSTRUMENTS (Continued) **1000271467**

Gen County: Santa Clara
TSD EPA ID: CAT080014079
TSD County: Contra Costa
Waste Category: Off-specification, aged, or surplus organics
Disposal Method: H141
Tons: 0.5495
Facility County: Santa Clara

Gepaid: CAD028872711
Contact: CHRIS ZDUNKIEWICZ
Telephone: 7147738541
Facility Addr2: Not reported
Mailing Name: Not reported
Mailing Address: 4300 N HARBOR BLVD
Mailing City,St,Zip: FULLERTON, CA 928343100
Gen County: Santa Clara
TSD EPA ID: CAD008302903
TSD County: Los Angeles
Waste Category: Other organic solids
Disposal Method: H141
Tons: 0.805
Facility County: Santa Clara

Gepaid: CAD028872711
Contact: CHRIS ZDUNKIEWICZ
Telephone: 7147738541
Facility Addr2: Not reported
Mailing Name: Not reported
Mailing Address: 4300 N HARBOR BLVD
Mailing City,St,Zip: FULLERTON, CA 928343100
Gen County: Santa Clara
TSD EPA ID: CAT080014079
TSD County: Contra Costa
Waste Category: Off-specification, aged, or surplus inorganics
Disposal Method: H141
Tons: 0.009
Facility County: Santa Clara

Gepaid: CAD028872711
Contact: CHRIS ZDUNKIEWICZ
Telephone: 7147738541
Facility Addr2: Not reported
Mailing Name: Not reported
Mailing Address: 4300 N HARBOR BLVD
Mailing City,St,Zip: FULLERTON, CA 928343100
Gen County: Santa Clara
TSD EPA ID: CAT080014079
TSD County: Contra Costa
Waste Category: Liquids with mercury > 20 mg/l
Disposal Method: H141
Tons: 0.0125
Facility County: Santa Clara

Gepaid: CAD028872711
Contact: CHRIS ZDUNKIEWICZ
Telephone: 7147738541
Facility Addr2: Not reported

BECKMAN INSTRUMENTS (Continued) **1000271467**

Mailing Name:	Not reported
Mailing Address:	4300 N HARBOR BLVD
Mailing City,St,Zip:	FULLERTON, CA 928343100
Gen County:	Santa Clara
TSD EPA ID:	CAT080014079
TSD County:	Contra Costa
Waste Category:	Unspecified oil-containing waste
Disposal Method:	H141
Tons:	0.0625
Facility County:	Santa Clara

Click this hyperlink while viewing on your computer to access
Unspecified oil-containing waste

Q88 **BECKMAN INSTRUMENTS INC** **CERC-NFRAP** **1006812620**
WSW **1050 PAGE MILL RD** **CAD981616048**
1/4-1/2 **PALO ALTO, CA 94304**
0.422 mi.
2229 ft. **Site 2 of 3 in cluster Q**

Relative:
Higher

Actual:
44 ft.

CERC-NFRAP:

Site ID:	0902461
Federal Facility:	Not a Federal Facility
NPL Status:	Not on the NPL
Non NPL Status:	NFRAP

CERCLIS-NFRAP Site Contact Name(s):

Contact Title:	Not reported
Contact Name:	Carl Brickner
Contact Tel:	(415) 972-3814
Contact Title:	Not reported
Contact Name:	Brunilda Davila
Contact Tel:	(415) 972-3162
Contact Title:	Not reported
Contact Name:	Jeff Inglis
Contact Tel:	(415) 972-3095
Contact Title:	Not reported
Contact Name:	Karen Jurist
Contact Tel:	(415) 972-3219
Contact Title:	Not reported
Contact Name:	Matt Mitguard
Contact Tel:	(415) 972-3096

CERCLIS-NFRAP Assessment History:

Action:	DISCOVERY
Date Started:	Not reported
Date Completed:	01/01/1987
Priority Level:	Not reported
Action:	PRELIMINARY ASSESSMENT
Date Started:	02/01/1987
Date Completed:	08/01/1987
Priority Level:	NFRAP: No further Remedial Action planned

BECKMAN INSTRUMENTS INC (Continued) **1006812620**

Action:	ARCHIVE SITE
Date Started:	Not reported
Date Completed:	08/01/1987
Priority Level:	Not reported

Q89 **BECKMAN COULTER** **SLIC S106248051**
WSW **1050 PAGE MILL ROAD** **EMI N/A**
1/4-1/2 **PALO ALTO, CA 95501**
0.422 mi.
2229 ft. **Site 3 of 3 in cluster Q**

Relative:
Higher

Actual:
44 ft.

SLIC:

Region:	STATE
Facility Status:	**Open - Remediation**
Status Date:	2009-12-21 00:00:00
Global Id:	T10000001712
Lead Agency:	SAN FRANCISCO BAY RWQCB (REGION 2)
Lead Agency Case Number:	Not reported
Latitude:	37.41822
Longitude:	-122.147205
Case Type:	Cleanup Program Site
Case Worker:	RWP
Local Agency:	Not reported
RB Case Number:	43S0196
File Location:	Not reported
Potential Media Affected:	Soil
Potential Contaminants of Concern:	Diesel, Polynuclear aromatic hydrocarbons (PAHs)
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

EMI:

Year:	1996
County Code:	43
Air Basin:	SF
Facility ID:	684
Air District Name:	BA
SIC Code:	3826
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	1
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	1997
County Code:	43
Air Basin:	SF
Facility ID:	684
Air District Name:	BA
SIC Code:	3826
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported

BECKMAN COULTER (Continued) **S106248051**

Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	2002
County Code:	43
Air Basin:	SF
Facility ID:	684
Air District Name:	BA
SIC Code:	3826
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	3
Reactive Organic Gases Tons/Yr:	1
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	2003
County Code:	43
Air Basin:	SF
Facility ID:	684
Air District Name:	BA
SIC Code:	3826
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	1
Reactive Organic Gases Tons/Yr:	1
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	2004
County Code:	43
Air Basin:	SF
Facility ID:	684
Air District Name:	BA
SIC Code:	3826
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	1.306
Reactive Organic Gases Tons/Yr:	0.5204
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0

BECKMAN COULTER (Continued) **S106248051**

Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0
Year:	2005
County Code:	43
Air Basin:	SF
Facility ID:	684
Air District Name:	BA
SIC Code:	3826
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	1.341
Reactive Organic Gases Tons/Yr:	.524056
Carbon Monoxide Emissions Tons/Yr:	.012
NOX - Oxides of Nitrogen Tons/Yr:	.098
SOX - Oxides of Sulphur Tons/Yr:	.034
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0
Year:	2006
County Code:	43
Air Basin:	SF
Facility ID:	684
Air District Name:	BA
SIC Code:	3826
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	.88
Reactive Organic Gases Tons/Yr:	.3414914
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	.002
SOX - Oxides of Sulphur Tons/Yr:	.011
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0
Year:	2007
County Code:	43
Air Basin:	SF
Facility ID:	684
Air District Name:	BA
SIC Code:	3826
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	.915
Reactive Organic Gases Tons/Yr:	.3446904
Carbon Monoxide Emissions Tons/Yr:	.403
NOX - Oxides of Nitrogen Tons/Yr:	.186
SOX - Oxides of Sulphur Tons/Yr:	.006
Particulate Matter Tons/Yr:	.001
Part. Matter 10 Micrometers & Smllr Tons/Yr:	.000994
Year:	2007
County Code:	43
Air Basin:	SF

BECKMAN COULTER (Continued) **S106248051**

Facility ID:	684
Air District Name:	BA
SIC Code:	3826
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	.909
Reactive Organic Gases Tons/Yr:	.3692916
Carbon Monoxide Emissions Tons/Yr:	.403
NOX - Oxides of Nitrogen Tons/Yr:	.186
SOX - Oxides of Sulphur Tons/Yr:	.006
Particulate Matter Tons/Yr:	.001
Part. Matter 10 Micrometers & Smllr Tons/Yr:	.000994

R90 **TOMRA PACIFIC INC** **SWRCY** **S107137070**
NW **164 S CALIFORNIA AVE** **N/A**
1/4-1/2 **PALO ALTO, CA 94306**
0.425 mi.
2242 ft. **Site 1 of 2 in cluster R**

Relative:
Higher

Actual:
34 ft.

SWRCY:

Certification Status:	I
Facility Phone Number:	Not reported
Date facility became certified:	9/25/2009
Date facility began operating:	Never operational
Date facility ceased operating:	12/9/2009
Whether The Facility Is Grandfathered:	Not reported
Convenience Zone Where Faciltiy Located:	2387
Convenience Zone Where Faciltiy Located 2:	3198
Convenience Zone Where Faciltiy Located 3:	4975
Convenience Zone Where Faciltiy Located 4:	Not Accepted
Convenience Zone Where Faciltiy Located 5:	Not Accepted
Convenience Zone Where Faciltiy Located 6:	Not Accepted
Convenience Zone Where Faciltiy Located 7:	Not Accepted
Aluminum Beverage Containers Redeemed:	AL
Glass Beverage Containers Redeemed:	GL
Plastic Beverage Containers Redeemed:	PL
Other mat beverage containers redeemed:	Not reported
Refillable Beverage Containers Redeemed:	Not reported

Certification Status:	O
Facility Phone Number:	Not reported
Date facility became certified:	1/27/2010
Date facility began operating:	2/20/2010
Date facility ceased operating:	Still operating
Whether The Facility Is Grandfathered:	Not reported
Convenience Zone Where Faciltiy Located:	2387
Convenience Zone Where Faciltiy Located 2:	3198
Convenience Zone Where Faciltiy Located 3:	4975
Convenience Zone Where Faciltiy Located 4:	Not Accepted
Convenience Zone Where Faciltiy Located 5:	Not Accepted
Convenience Zone Where Faciltiy Located 6:	Not Accepted
Convenience Zone Where Faciltiy Located 7:	Not Accepted
Aluminum Beverage Containers Redeemed:	AL
Glass Beverage Containers Redeemed:	GL
Plastic Beverage Containers Redeemed:	PL
Other mat beverage containers redeemed:	Not reported
Refillable Beverage Containers Redeemed:	Not reported

TOMRA PACIFIC INC (Continued) **S107137070**

Certification Status:	D
Facility Phone Number:	(408) 998-5774
Date facility became certified:	3/2/1989
Date facility began operating:	2/3/1989
Date facility ceased operating:	10/26/2009
Whether The Facility Is Grandfathered:	Not reported
Convenience Zone Where Faciltiy Located:	2387
Convenience Zone Where Faciltiy Located 2:	3198
Convenience Zone Where Faciltiy Located 3:	4975
Convenience Zone Where Faciltiy Located 4:	Not Accepted
Convenience Zone Where Faciltiy Located 5:	Not Accepted
Convenience Zone Where Faciltiy Located 6:	Not Accepted
Convenience Zone Where Faciltiy Located 7:	Not Accepted
Aluminum Beverage Containers Redeemed:	AL
Glass Beverage Containers Redeemed:	GL
Plastic Beverage Containers Redeemed:	PL
Other mat beverage containers redeemed:	Not reported
Refillable Beverage Containers Redeemed:	Not reported

---

91 **PALO ALTO TIRE & BRAKE** **HIST CORTESE** **S104161936**
WNW **306 CAMBRIDGE AVE** **LUST** **N/A**
1/4-1/2 **PALO ALTO, CA 94306** **HIST LUST**
0.440 mi.
2324 ft.

Relative:
Higher

Actual:
36 ft.

CORTESE:

Region:	CORTESE
Facility County Code:	43
Reg By:	LTNKA
Reg Id:	43-1032

LUST:

Region:	STATE
Global Id:	T0608587383
Latitude:	37.428417
Longitude:	-122.144757
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	2006-12-14 00:00:00
Lead Agency:	SANTA CLARA COUNTY LOP
Case Worker:	MJ
Local Agency:	SANTA CLARA COUNTY LOP
RB Case Number:	Not reported
LOC Case Number:	06S3W12F01f
File Location:	Stored electronically as an E-file
Potential Media Affect:	Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

LUST REG 2:

Region:	2
Facility Id:	Not reported
Facility Status:	Pollution Characterization
Case Number:	06S3W12F01f
How Discovered:	Not reported

PALO ALTO TIRE & BRAKE (Continued) **S104161936**

Leak Cause: Not reported
Leak Source: Not reported
Date Leak Confirmed: Not reported
Oversight Program: LUST
Prelim. Site Assesment Wokplan Submitted: Not reported
Preliminary Site Assesment Began: 3/1/1986
Pollution Characterization Began: 4/15/1997
Pollution Remediation Plan Submitted: Not reported
Date Remediation Action Underway: Not reported
Date Post Remedial Action Monitoring Began: Not reported

LUST SANTA CLARA:
Region: SANTA CLARA
SCVWD ID: 06S3W12F01f
Closed Date: 12/14/2006

HIST LUST SANTA CLARA:
Region: SANTA CLARA
Region Code: 2
SCVWD ID: 06S3W12F01
Oversite Agency: SCCDEH
Date Listed: 1988-05-11 00:00:00
Closed Date: Not reported

R92 **OLD FIRE STATION** **HIST CORTESE** **S101309092**
NW **2253 PARK BLVD** **LUST** **N/A**
1/4-1/2 **PALO ALTO, CA 94306** **HIST LUST**
0.467 mi.
2466 ft. **Site 2 of 2 in cluster R**

Relative:
Higher

Actual:
35 ft.

CORTESE:
Region: CORTESE
Facility County Code: 43
Reg By: LTNKA
Reg Id: 43-1720

LUST:
Region: STATE
Global Id: T0608501658
Latitude: 37.429624
Longitude: -122.143031
Case Type: LUST Cleanup Site
Status: Completed - Case Closed
Status Date: 1995-12-29 00:00:00
Lead Agency: SANTA CLARA COUNTY LOP
Case Worker: UST
Local Agency: SANTA CLARA COUNTY LOP
RB Case Number: Not reported
LOC Case Number: Not reported
File Location: Stored electronically as an E-file
Potential Media Affect: Soil
Potential Contaminants of Concern: Gasoline
Site History: Not reported

Click here to access the California GeoTracker records for this facility:

OLD FIRE STATION (Continued) **S101309092**

LUST REG 2:
Region: 2
Facility Id: Not reported
Facility Status: Case Closed
Case Number: 06S3W12C01f
How Discovered: Not reported
Leak Cause: Not reported
Leak Source: Not reported
Date Leak Confirmed: Not reported
Oversight Program: LUST
Prelim. Site Assesment Wokplan Submitted: Not reported
Preliminary Site Assesment Began: Not reported
Pollution Characterization Began: Not reported
Pollution Remediation Plan Submitted: Not reported
Date Remediation Action Underway: Not reported
Date Post Remedial Action Monitoring Began: Not reported

LUST SANTA CLARA:
Region: SANTA CLARA
SCVWD ID: 06S3W12C01f
Closed Date: 12/29/1995

HIST LUST SANTA CLARA:
Region: SANTA CLARA
Region Code: 2
SCVWD ID: 06S3W12C01
Oversite Agency: SCVWD
Date Listed: 1992-08-12 00:00:00
Closed Date: 1995-12-29 00:00:00

93
WNW
1/4-1/2
0.470 mi.
2481 ft.

ROYAL GLASS & MIRROR
450 CAMBRIDGE AVE
PALO ALTO, CA 94306

HIST CORTESE **S100234830**
LUST **N/A**
HIST LUST
HAZNET

Relative:
Higher

Actual:
39 ft.

CORTESE:
Region: CORTESE
Facility County Code: 43
Reg By: LTNKA
Reg Id: 43-1154

LUST:
Region: STATE
Global Id: T0608501144
Latitude: 37.42571
Longitude: -122.145713
Case Type: LUST Cleanup Site
Status: Completed - Case Closed
Status Date: 1995-12-21 00:00:00
Lead Agency: SANTA CLARA COUNTY LOP
Case Worker: UST
Local Agency: SANTA CLARA COUNTY LOP
RB Case Number: Not reported
LOC Case Number: Not reported
File Location: Stored electronically as an E-file

ROYAL GLASS & MIRROR (Continued) **S100234830**

Potential Media Affect: Soil
Potential Contaminants of Concern: Not reported
Site History: Not reported

Click here to access the California GeoTracker records for this facility:

LUST REG 2:
Region: 2
Facility Id: Not reported
Facility Status: Case Closed
Case Number: 06S3W12E03f
How Discovered: Not reported
Leak Cause: Not reported
Leak Source: Not reported
Date Leak Confirmed: Not reported
Oversight Program: LUST
Prelim. Site Assesment Wokplan Submitted: Not reported
Preliminary Site Assesment Began: Not reported
Pollution Characterization Began: Not reported
Pollution Remediation Plan Submitted: Not reported
Date Remediation Action Underway: Not reported
Date Post Remedial Action Monitoring Began: Not reported

LUST SANTA CLARA:
Region: SANTA CLARA
SCVWD ID: 06S3W12E03f
Closed Date: 12/21/1995

HIST LUST SANTA CLARA:
Region: SANTA CLARA
Region Code: 2
SCVWD ID: 06S3W12E03
Oversite Agency: SCVWD
Date Listed: 1991-01-01 00:00:00
Closed Date: 1995-12-21 00:00:00

HAZNET:
Gepaid: CAC002631053
Contact: JAMES E BAER
Telephone: 6503297977
Facility Addr2: Not reported
Mailing Name: Not reported
Mailing Address: 172 UNIVERSITY AVE
Mailing City,St,Zip: PALO ALTO, CA 94301
Gen County: Santa Clara
TSD EPA ID: CAD981382732
TSD County: Alameda
Waste Category: Asbestos-containing waste
Disposal Method: H132
Tons: 6
Facility County: Santa Clara

94
North
1/4-1/2
0.475 mi.
2509 ft.

SNELL RESIDENCE
2388 WAVERLY ST
PALO ALTO, CA 94301

HIST CORTESE
LUST
HIST LUST

S103644896
N/A

Relative:
Higher

Actual:
23 ft.

CORTESE:

Region:	CORTESE
Facility County Code:	43
Reg By:	LTNKA
Reg Id:	43-0795

LUST:

Region:	STATE
Global Id:	T0608504754
Latitude:	37.376791
Longitude:	-122.108122
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	1995-03-30 00:00:00
Lead Agency:	SANTA CLARA COUNTY LOP
Case Worker:	UST
Local Agency:	SANTA CLARA COUNTY LOP
RB Case Number:	Not reported
LOC Case Number:	Not reported
File Location:	Stored electronically as an E-file
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Not reported
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

LUST REG 2:

Region:	2
Facility Id:	Not reported
Facility Status:	Case Closed
Case Number:	06S3W01Q01f
How Discovered:	Not reported
Leak Cause:	Not reported
Leak Source:	Not reported
Date Leak Confirmed:	Not reported
Oversight Program:	LUST
Prelim. Site Assesment Wokplan Submitted:	Not reported
Preliminary Site Assesment Began:	Not reported
Pollution Characterization Began:	Not reported
Pollution Remediation Plan Submitted:	Not reported
Date Remediation Action Underway:	Not reported
Date Post Remedial Action Monitoring Began:	Not reported

LUST SANTA CLARA:

Region:	SANTA CLARA
SCVWD ID:	06S3W01Q01f
Closed Date:	3/30/1995

HIST LUST SANTA CLARA:

Region:	SANTA CLARA
Region Code:	2

SNELL RESIDENCE (Continued) **S103644896**

SCVWD ID: 06S3W01Q01
Oversite Agency: SCVWD
Date Listed: 1993-04-08 00:00:00
Closed Date: 1995-03-30 00:00:00

95
SE
1/4-1/2
0.484 mi.
2556 ft.

CO-OPT SERVICE STATION
3897 EL CAMINO REAL
PALO ALTO, CA 94306

HIST CORTESE **S102428158**
LUST **N/A**
HIST LUST
HAZNET

Relative:
Higher

Actual:
42 ft.

CORTESE:
Region: CORTESE
Facility County Code: 43
Reg By: LTNKA
Reg Id: 43-0383

LUST:
Region: STATE
Global Id: T0608500434
Latitude: 37.417019
Longitude: -122.129295
Case Type: LUST Cleanup Site
Status: Completed - Case Closed
Status Date: 2007-09-12 00:00:00
Lead Agency: SANTA CLARA COUNTY LOP
Case Worker: UST
Local Agency: SANTA CLARA COUNTY LOP
RB Case Number: Not reported
LOC Case Number: 06S2W18D02f
File Location: Stored electronically as an E-file
Potential Media Affect: Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern: Gasoline
Site History: Not reported

Click here to access the California GeoTracker records for this facility:

LUST REG 2:
Region: 2
Facility Id: Not reported
Facility Status: Remedial action (cleanup) Underway
Case Number: 06S2W18D02f
How Discovered: Not reported
Leak Cause: Not reported
Leak Source: Not reported
Date Leak Confirmed: Not reported
Oversight Program: LUST
Prelim. Site Assesment Wokplan Submitted: Not reported
Preliminary Site Assesment Began: 9/18/1991
Pollution Characterization Began: 9/18/1991
Pollution Remediation Plan Submitted: Not reported
Date Remediation Action Underway: 5/15/1996
Date Post Remedial Action Monitoring Began: Not reported

LUST SANTA CLARA:
Region: SANTA CLARA

CO-OPT SERVICE STATION (Continued) **S102428158**

SCVWD ID: 06S2W18D02f
Closed Date: 9/12/2007

HIST LUST SANTA CLARA:
Region: SANTA CLARA
Region Code: 2
SCVWD ID: 06S2W18D02
Oversite Agency: SCVWD
Date Listed: 1992-02-20 00:00:00
Closed Date: Not reported

HAZNET:
Gepaid: CAC002275673
Contact: CHEVRON
Telephone: 4153916840
Facility Addr2: Not reported
Mailing Name: Not reported
Mailing Address: 3897 EL CAMINO REAL
Mailing City,St,Zip: PALO ALTO, CA 943060000
Gen County: Santa Clara
TSD EPA ID: CAD028409019
TSD County: Los Angeles
Waste Category: Not reported
Disposal Method: Transfer Station
Tons: .4587
Facility County: Santa Clara

96
NNW
1/4-1/2
0.493 mi.
2605 ft.

SHELL
299 CALIFORNIA AVE
PALO ALTO, CA 94301

HIST CORTESE **S105126354**
LUST **N/A**
HIST LUST

Relative:
Higher

Actual:
27 ft.

CORTESE:
Region: CORTESE
Facility County Code: Not reported
Reg By: Not reported
Reg Id: Not reported

LUST:
Region: STATE
Global Id: T0608502062
Latitude: 37.427433
Longitude: -122.143632
Case Type: LUST Cleanup Site
Status: Open - Remediation
Status Date: 2002-01-25 00:00:00
Lead Agency: SANTA CLARA COUNTY LOP
Case Worker: MJ
Local Agency: SANTA CLARA COUNTY LOP
RB Case Number: 19-097
LOC Case Number: 06S3W12F02f
File Location: Stored electronically as an E-file
Potential Media Affect: Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern: Gasoline
Site History: Not reported

SHELL (Continued) **S105126354**

Click here to access the California GeoTracker records for this facility:

LUST REG 2:

Region:	2
Facility Id:	Not reported
Facility Status:	Remedial action (cleanup) Underway
Case Number:	06S3W12F02f
How Discovered:	Not reported
Leak Cause:	Not reported
Leak Source:	Not reported
Date Leak Confirmed:	Not reported
Oversight Program:	LUST
Prelim. Site Assesment Wokplan Submitted:	Not reported
Preliminary Site Assesment Began:	3/26/1998
Pollution Characterization Began:	3/26/1998
Pollution Remediation Plan Submitted:	Not reported
Date Remediation Action Underway:	1/25/2002
Date Post Remedial Action Monitoring Began:	Not reported

LUST SANTA CLARA:

Region:	SANTA CLARA
SCVWD ID:	06S3W12F02f
Closed Date:	Not reported

HIST LUST SANTA CLARA:

Region:	SANTA CLARA
Region Code:	2
SCVWD ID:	06S3W12F02
Oversite Agency:	SCCDEH
Date Listed:	1998-04-21 00:00:00
Closed Date:	Not reported

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97 **ALZA PHARMACEUTICALS** **ENVIROSTOR** **S102519540**
SW **1454 PAGE MILL ROAD** **N/A**
1/2-1 **PALO ALTO, CA 94304**
0.652 mi.
3445 ft.

Relative:
Higher

Actual:
68 ft.

ENVIROSTOR:

Site Type:	Historical
Site Type Detailed:	* Historical
Acres:	Not reported
NPL:	NO
Regulatory Agencies:	NONE SPECIFIED
Lead Agency:	NONE SPECIFIED
Program Manager:	Not reported
Supervisor:	Referred - Not Assigned
Division Branch:	Berkeley
Facility ID:	43280115
Site Code:	Not reported
Assembly:	21
Senate:	11
Special Program:	* CERC2
Status:	Refer: RWQCB
Status Date:	6/8/1994

ALZA PHARMACEUTICALS (Continued) **S102519540**

Restricted Use:	NO
Site Mgmt. Req.:	NONE SPECIFIED
Funding:	Not reported
Latitude:	37.4163123077957
Longitude:	-122.149091751846
APN:	142-19-019
Past Use:	NONE SPECIFIED
Potential COC:	10003, 10009, 10067, 10097
Confirmed COC:	NONE SPECIFIED
Potential Description:	NONE SPECIFIED
Alias Name:	ADDISON WESLEY
Alias Type:	Alternate Name
Alias Name:	AEROTHERM CORPORATION
Alias Type:	Alternate Name
Alias Name:	CONSOLIDATED DEVELOPMENTS CORPORATION
Alias Type:	Alternate Name
Alias Name:	DNAX
Alias Type:	Alternate Name
Alias Name:	DYNAPOL (SUBSIDIARY OF ALZA)
Alias Type:	Alternate Name
Alias Name:	ITEK, OPTICAL SYSTEMS DIV
Alias Type:	Alternate Name
Alias Name:	KRATTER CORPORATION
Alias Type:	Alternate Name
Alias Name:	LITTON INDUSTRIES (ITEK, VIDYA DIVISION)
Alias Type:	Alternate Name
Alias Name:	NEUREX
Alias Type:	Alternate Name
Alias Name:	OPTIMUM SYSTEMS
Alias Type:	Alternate Name
Alias Name:	PAGE MILL PARTNERSHIP
Alias Type:	Alternate Name
Alias Name:	TELESENSORY SYSTEMS
Alias Type:	Alternate Name
Alias Name:	VARIAN ASSOCIATES
Alias Type:	Alternate Name
Alias Name:	VIDYA DIVISION OF ITEK
Alias Type:	Alternate Name
Alias Name:	142-19-019
Alias Type:	APN
Alias Name:	CAD982400061
Alias Type:	EPA Identification Number
Alias Name:	43280115
Alias Type:	Envirostor ID Number

Completed Info:

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Preliminary Assessment Report
Completed Date:	1989-01-31 00:00:00
Comments:	PRELIM ASSESS DONE DHS RECOMMENDATION IS PENDING, SINCE RWQCB IS THE LEAD AGENCY

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Site Screening
Completed Date:	1989-01-01 00:00:00
Comments:	SITE SCREENING DONE NEED MORE INFORMATION

ALZA PHARMACEUTICALS (Continued) **S102519540**

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Site Screening
Completed Date:	1993-03-30 00:00:00
Comments:	No further action per EPA's preliminary assessment for this site only determined that its hazard ranking score (hrs) would not admit it into the National Priority List (NPL). Recommentdation by dtsc on reevaluation of the site reflects DTSC's own criteria. This 3.6 acre currently active site, mostly paved or landscaped, has been the site of several interests associated with research and development in food, medicine, genetics and biology. Through various leases and subleases, Alza has been the lessee since 1972 and sole operator at the site since March 1986. Sampling since 1987 indicated that surface soil was contaminated with chloroform (520 mg/kg), carbon tetrachloride (250 mg/kg), freon (1.1 mg/kg) and DCE (120mg/kg) and groundwater in the uppermost interconnected aquifers was contaminated with chloroform (4100 mg/kg), carbon tetrachloride and TCE. Bore hole soil samples also detected presence of chloroform (2000mg/kg). Soil gas and groundwter treatment systems have been in operation at site under oversight of Regional Water Quality Control Board. Deeper potable aquifer of wide use as drinking water source has not been impacted. This site screening was based in part on the CERCLA screening site inspection report prepared by Ecology and Environment for USEPA (contained in DTSC file). DTSC files were reviewed. REQCB and county files were not located or reviewed. Extent of soil contamination was about 200 sf. groundwater contamination extends at least 200 feet from soil contamination area and one well screened in deeper aquifer detected 1.5 mg/l of chloroform.
Future Area Name:	Not reported
Future Sub Area Name:	Not reported
Future Document Type:	Not reported
Future Due Date:	Not reported
Schedule Area Name:	Not reported
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Not reported
Schedule Due Date:	Not reported
Schedule Revised Date:	Not reported

98
WNW
1/2-1
0.686 mi.
3620 ft.

ARCO #0589
1963 EL CAMINO REAL
PALO ALTO, CA 94306

LUST **S100178796**
HIST LUST **N/A**
Notify 65
HAZNET
EMI

Relative:
Higher

Actual:
44 ft.

LUST:

Region:	STATE
Global Id:	T0608500165
Latitude:	37.427957
Longitude:	-122.148617
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	2003-12-22 00:00:00
Lead Agency:	SANTA CLARA COUNTY LOP
Case Worker:	UST
Local Agency:	SANTA CLARA COUNTY LOP
RB Case Number:	Not reported
LOC Case Number:	Not reported

ARCO #0589 (Continued) **S100178796**

File Location: Stored electronically as an E-file
Potential Media Affect: Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern: Gasoline
Site History: Not reported

Click here to access the California GeoTracker records for this facility:

LUST REG 2:
Region: 2
Facility Id: Not reported
Facility Status: Case Closed
Case Number: 06S3W12E02f
How Discovered: Not reported
Leak Cause: Not reported
Leak Source: Not reported
Date Leak Confirmed: Not reported
Oversight Program: LUST
Prelim. Site Assesment Wokplan Submitted: Not reported
Preliminary Site Assesment Began: 9/27/1988
Pollution Characterization Began: 10/13/1989
Pollution Remediation Plan Submitted: Not reported
Date Remediation Action Underway: Not reported
Date Post Remedial Action Monitoring Began: Not reported

LUST SANTA CLARA:
Region: SANTA CLARA
SCVWD ID: 06S3W12E02f
Closed Date: 12/22/2003

HIST LUST SANTA CLARA:
Region: SANTA CLARA
Region Code: 2
SCVWD ID: 06S3W12E02
Oversite Agency: SCVWD
Date Listed: 1990-01-01 00:00:00
Closed Date: 2003-12-22 00:00:00

Notify 65:
Date Reported: Not reported
Staff Initials: Not reported
Board File Number: Not reported
Facility Type: Not reported
Discharge Date: Not reported
Incident Description: 92378

HAZNET:
Gepaid: CAL000244145
Contact: JACK OMAN
Telephone: 7146705402
Facility Addr2: Not reported
Mailing Name: Not reported
Mailing Address: PO BOX 6038
Mailing City,St,Zip: ARTESIA, CA 907026038
Gen County: Santa Clara
TSD EPA ID: Not reported

ARCO #0589 (Continued) **S100178796**

TSD County: Los Angeles
Waste Category: Aqueous solution with less than 10% total organic residues
Disposal Method: Not reported
Tons: 1.03
Facility County: Not reported

Gepaid: CAL000244145
Contact: JACK OMAN
Telephone: 7146705402
Facility Addr2: Not reported
Mailing Name: Not reported
Mailing Address: PO BOX 6038
Mailing City,St,Zip: ARTESIA, CA 907026038
Gen County: Santa Clara
TSD EPA ID: Not reported
TSD County: Los Angeles
Waste Category: Aqueous solution with less than 10% total organic residues
Disposal Method: Recycler
Tons: 1.03
Facility County: Not reported

Gepaid: CAL000244145
Contact: JACK OMAN WASTE SPECIALIST
Telephone: 7146703958
Facility Addr2: Not reported
Mailing Name: Not reported
Mailing Address: PO BOX 80249
Mailing City,St,Zip: RCHO STA MARG, CA 926880000
Gen County: Santa Clara
TSD EPA ID: CAT080013352
TSD County: Los Angeles
Waste Category: Aqueous solution with less than 10% total organic residues
Disposal Method: Recycler
Tons: 0.75
Facility County: Not reported

Gepaid: CAL000189517
Contact: KWANG KIM
Telephone: 6505661742
Facility Addr2: Not reported
Mailing Name: Not reported
Mailing Address: 1963 EL CAMINO REAL
Mailing City,St,Zip: PALO ALTO, CA 943060000
Gen County: Santa Clara
TSD EPA ID: Not reported
TSD County: Santa Clara
Waste Category: Aqueous solution with less than 10% total organic residues
Disposal Method: Recycler
Tons: 0.20
Facility County: Not reported

Gepaid: CAL000189517
Contact: KWANG KIM
Telephone: 6505661742
Facility Addr2: Not reported
Mailing Name: Not reported
Mailing Address: 1963 EL CAMINO REAL

ARCO #0589 (Continued) **S100178796**

Mailing City,St,Zip:	PALO ALTO, CA 943060000
Gen County:	Santa Clara
TSD EPA ID:	CAL000161743
TSD County:	Santa Clara
Waste Category:	Aqueous solution with less than 10% total organic residues
Disposal Method:	Recycler
Tons:	0.2
Facility County:	Santa Clara

Click this hyperlink while viewing on your computer to access
Aqueous solution with less than 10% total organic residues

EMI:

Year:	1996
County Code:	43
Air Basin:	SF
Facility ID:	9440
Air District Name:	BA
SIC Code:	4953
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	1
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

S99 **HEWLETT PACKARD CO. - CALIF. AVE., PALO ALTO** **ENVIROSTOR** **S110493903**
WSW **1601 CALIFORNIA AVENUE** **N/A**
1/2-1 **PALO ALTO, CA 94304**
0.804 mi.
4246 ft. **Site 1 of 2 in cluster S**

Relative:
Higher

Actual:
78 ft.

ENVIROSTOR:

Site Type:	Not reported
Site Type Detailed:	Tiered Permit
Acres:	Not reported
NPL:	NO
Regulatory Agencies:	NONE SPECIFIED
Lead Agency:	NONE SPECIFIED
Program Manager:	Not reported
Supervisor:	Not reported
Division Branch:	Cypress
Facility ID:	71002581
Site Code:	Not reported
Assembly:	21
Senate:	11
Special Program:	Not reported
Status:	Not reported
Status Date:	Not reported
Restricted Use:	NO
Site Mgmt. Req.:	NONE SPECIFIED
Funding:	Not reported
Latitude:	37.416032999999999

HEWLETT PACKARD CO. - CALIF. AVE., PALO ALTO (Continued) **S110493903**

Longitude: -122.15200419999999
APN: NONE SPECIFIED
Past Use: NONE SPECIFIED
Potential COC: NONE SPECIFIED
Confirmed COC: NONE SPECIFIED
Potential Description: NONE SPECIFIED
Alias Name: CAD076314640
Alias Type: EPA Identification Number

Completed Info:
Completed Area Name: Not reported
Completed Sub Area Name: Not reported
Completed Document Type: Not reported
Completed Date: Not reported
Comments: Not reported

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

S100 **AGILENT TECHNOLOGIES INC** **RCRA-SQG** **1000208805**
WSW **1601 CALIFORNIA AVE** **FINDS** **CAD076314640**
1/2-1 **PALO ALTO, CA 94304** **WDS**
0.804 mi. **CA FID UST**
4246 ft. **Site 2 of 2 in cluster S** **HIST UST**
SWEEPS UST
Relative: **HAZNET**
Higher **HWP**
FINANCIAL ASSURANCE
Actual:
78 ft.

RCRA-SQG:
Date form received by agency: 10/29/1999
Facility name: AGILENT TECHNOLOGIES INC
Facility address: 1601 CALIFORNIA AVE
PALO ALTO, CA 943041111
EPA ID: CAD076314640
Mailing address: P O BOX 10161
PALO ALTO, CA 943030871
Contact: JANICE NAKAO
Contact address: 1601 CALIFORNIA AVE
PALO ALTO, CA 943041111
Contact country: US
Contact telephone: (650) 857-3061
Contact email: Not reported
EPA Region: 09
Land type: Private
Classification: Small Small Quantity Generator
Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

AGILENT TECHNOLOGIES INC (Continued) **1000208805**

Owner/Operator Summary:
- Owner/operator name: HEWLETT PACKARD CO SCIENTIFIC INST DIV
- Owner/operator address: 1601 CALIFORNIA AVE
  CITY NOT REPORTED, CA 99999
- Owner/operator country: Not reported
- Owner/operator telephone: (415) 857-6111
- Legal status: Private
- Owner/Operator Type: Operator
- Owner/Op start date: Not reported
- Owner/Op end date: Not reported

- Owner/operator name: AGILENT TECHNOLOGIES INC
- Owner/operator address: 3000 HANOVER ST
  PALO ALTO, CA 94304
- Owner/operator country: Not reported
- Owner/operator telephone: (650) 857-1501
- Legal status: Private
- Owner/Operator Type: Owner
- Owner/Op start date: Not reported
- Owner/Op end date: Not reported

Handler Activities Summary:
- U.S. importer of hazardous waste: No
- Mixed waste (haz. and radioactive): Unknown
- Recycler of hazardous waste: No
- Transporter of hazardous waste: No
- Treater, storer or disposer of HW: No
- Underground injection activity: No
- On-site burner exemption: No
- Furnace exemption: No
- Used oil fuel burner: No
- Used oil processor: No
- User oil refiner: No
- Used oil fuel marketer to burner: No
- Used oil Specification marketer: No
- Used oil transfer facility: No
- Used oil transporter: No
- Off-site waste receiver: Verified to be non-commercial

Historical Generators:
- Date form received by agency: 09/01/1996
- Facility name: AGILENT TECHNOLOGIES INC
- Classification: Large Quantity Generator

- Date form received by agency: 03/29/1996
- Facility name: AGILENT TECHNOLOGIES INC
- Site name: HEWLETT PACKARD CALIF. ANALYTICAL DIV.
- Classification: Large Quantity Generator

- Date form received by agency: 03/31/1994
- Facility name: AGILENT TECHNOLOGIES INC
- Site name: HEWLETT PACKARD BAY ANALYTICAL OPER.
- Classification: Large Quantity Generator

- Date form received by agency: 02/26/1992
- Facility name: AGILENT TECHNOLOGIES INC

AGILENT TECHNOLOGIES INC (Continued) **1000208805**

Site name: HEWLETT PACKARD
Classification: Large Quantity Generator

Date form received by agency: 04/03/1990
Facility name: AGILENT TECHNOLOGIES INC
Site name: HEWLETT PACKARD/SCIENTIFIC INSTRUMENTS D
Classification: Large Quantity Generator

Hazardous Waste Summary:
Waste code: D000
Waste name: Not Defined

Waste code: D001
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Waste code: D002
Waste name: A WASTE WHICH HAS A PH OF LESS THAN 2 OR GREATER THAN 12.5 IS CONSIDERED TO BE A CORROSIVE HAZARDOUS WASTE. SODIUM HYDROXIDE, A CAUSTIC SOLUTION WITH A HIGH PH, IS OFTEN USED BY INDUSTRIES TO CLEAN OR DEGREASE PARTS. HYDROCHLORIC ACID, A SOLUTION WITH A LOW PH, IS USED BY MANY INDUSTRIES TO CLEAN METAL PARTS PRIOR TO PAINTING. WHEN THESE CAUSTIC OR ACID SOLUTIONS BECOME CONTAMINATED AND MUST BE DISPOSED, THE WASTE WOULD BE A CORROSIVE HAZARDOUS WASTE.

Waste code: D008
Waste name: LEAD

Waste code: F001
Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS USED IN DEGREASING: TETRACHLOROETHYLENE, TRICHLOROETHYLENE, METHYLENE CHLORIDE, 1,1,1-TRICHLOROETHANE, CARBON TETRACHLORIDE, AND CHLORINATED FLUOROCARBONS; ALL SPENT SOLVENT MIXTURES/BLENDS USED IN DEGREASING CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F002, F004, AND F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste code: F002
Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2-TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE LISTED IN F001, F004, OR F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste code: F003
Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL

AGILENT TECHNOLOGIES INC (Continued) **1000208805**

ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NON-HALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS, AND, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Facility Has Received Notices of Violations:
Regulation violated: FR - 262.10-12.A
Area of violation: Generators - General
Date violation determined: 05/05/1993
Date achieved compliance: 05/05/1998
Violation lead agency: State
Enforcement action: Not reported
Enforcement action date: Not reported
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: Not reported
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Evaluation Action Summary:
Evaluation date: 05/05/1993
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 05/05/1998
Evaluation lead agency: State Contractor/Grantee

FINDS:

Registry ID: 110001180481

Environmental Interest/Information System

The NEI (National Emissions Inventory) database contains information on stationary and mobile sources that emit criteria air pollutants and their precursors, as well as hazardous air pollutants (HAPs).

California Hazardous Waste Tracking System - Datamart (HWTS-DATAMART) provides California with information on hazardous waste shipments for generators, transporters, and treatment, storage, and disposal facilities.

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

CA WDS:
Facility ID: San Francisco Bay 43I015508
Facility Type: Industrial - Facility that treats and/or disposes of liquid or

AGILENT TECHNOLOGIES INC (Continued) **1000208805**

semisolid wastes from any servicing, producing, manufacturing or processing operation of whatever nature, including mining, gravel washing, geothermal operations, air conditioning, ship building and repairing, oil production, storage and disposal operations, water pumping.

Facility Status: Active - Any facility with a continuous or seasonal discharge that is under Waste Discharge Requirements.
NPDES Number: CAS000001 The 1st 2 characters designate the state. The remaining 7 are assigned by the Regional Board
Subregion: 2
Facility Telephone: 6504853061
Facility Contact: JANICE NAKAO
Agency Name: AGILENT TECHNOLOGIES
Agency Address: 1601 S California Ave
Agency City,St,Zip: Palo Alto 943041111
Agency Contact: JANICE NAKAO
Agency Telephone: 6504853061
Agency Type: Private
SIC Code: 0
SIC Code 2: Not reported
Primary Waste: Not reported
Primary Waste Type: Not reported
Secondary Waste: Not reported
Secondary Waste Type: Not reported
Design Flow: 0
Baseline Flow: 0
Reclamation: Not reported
POTW: Not reported
Treat To Water: Minor Threat to Water Quality. A violation of a regional board order should cause a relatively minor impairment of beneficial uses compared to a major or minor threat. Not: All nurds without a TTWQ will be considered a minor threat to water quality unless coded at a higher Level. A Zero (0) may be used to code those NURDS that are found to represent no threat to water quality.
Complexity: Category C - Facilities having no waste treatment systems, such as cooling water dischargers or thosewho must comply through best management practices, facilities with passive waste treatment and disposal systems, such as septic systems with subsurface disposal, or dischargers having waste storage systems with land disposal such as dairy waste ponds.

CA FID UST:
Facility ID: 43006590
Regulated By: UTNKA
Regulated ID: 00058493
Cortese Code: Not reported
SIC Code: Not reported
Facility Phone: 4158576100
Mail To: Not reported
Mailing Address: P O BOX
Mailing Address 2: Not reported
Mailing City,St,Zip: PALO ALTO 94304
Contact: Not reported
Contact Phone: Not reported
DUNs Number: Not reported
NPDES Number: Not reported
EPA ID: Not reported

AGILENT TECHNOLOGIES INC (Continued) **1000208805**

Comments: Not reported
Status: Active

HIST UST:
Region: STATE
Facility ID: 00000058493
Facility Type: Other
Other Type: MANFACTURE
Total Tanks: 0001
Contact Name: KARL SCHWARZ
Telephone: 4158576100
Owner Name: HEWLETT PACKARD CORPORATION
Owner Address: 3000 HANOVER STREET
Owner City,St,Zip: PALO ALTO, CA 94304

Tank Num: 001
Container Num: 1
Year Installed: 1962
Tank Capacity: 00002000
Tank Used for: PRODUCT
Type of Fuel: DIESEL
Tank Construction: 7 gauge
Leak Detection: Stock Inventor

SWEEPS UST:
Status: A
Comp Number: 58493
Number: 9
Board Of Equalization: Not reported
Ref Date: 07-01-85
Act Date: Not reported
Created Date: 02-29-88
Tank Status: A
Owner Tank Id: 1
Swrcb Tank Id: 43-006-058493-000001
Actv Date: 07-01-85
Capacity: 2000
Tank Use: M.V. FUEL
Stg: P
Content: DIESEL
Number Of Tanks: 1

HAZNET:
Gepaid: CAC002634608
Contact: JIM MERRYMAN
Telephone: 6508531300
Facility Addr2: Not reported
Mailing Name: Not reported
Mailing Address: 151 UNIVERSITY AVE
Mailing City,St,Zip: PALO ALTO, CA 94301
Gen County: Santa Clara
TSD EPA ID: CAD028409019
TSD County: Los Angeles
Waste Category: Asbestos-containing waste
Disposal Method: H141
Tons: 4.508

AGILENT TECHNOLOGIES INC (Continued) **1000208805**

Facility County: Santa Clara

Gepaid: CAC002634608
Contact: JIM MERRYMAN
Telephone: 6508531300
Facility Addr2: Not reported
Mailing Name: Not reported
Mailing Address: 151 UNIVERSITY AVE
Mailing City,St,Zip: PALO ALTO, CA 94301
Gen County: Santa Clara
TSD EPA ID: CAD982444481
TSD County: San Bernardino
Waste Category: Unspecified aqueous solution
Disposal Method: H141
Tons: 0.756
Facility County: Santa Clara

Gepaid: CAC002634608
Contact: JIM MERRYMAN
Telephone: 6508531300
Facility Addr2: Not reported
Mailing Name: Not reported
Mailing Address: 151 UNIVERSITY AVE
Mailing City,St,Zip: PALO ALTO, CA 94301
Gen County: Santa Clara
TSD EPA ID: CAD982444481
TSD County: San Bernardino
Waste Category: Other inorganic solid waste
Disposal Method: H141
Tons: 0.45
Facility County: Santa Clara

Gepaid: CAC002634608
Contact: JIM MERRYMAN
Telephone: 6508531300
Facility Addr2: Not reported
Mailing Name: Not reported
Mailing Address: 151 UNIVERSITY AVE
Mailing City,St,Zip: PALO ALTO, CA 94301
Gen County: Santa Clara
TSD EPA ID: CAD981382732
TSD County: Alameda
Waste Category: Asbestos-containing waste
Disposal Method: H132
Tons: 12
Facility County: Santa Clara

Gepaid: CAD076314640
Contact: JANICE NAKAO/EHS MGR
Telephone: 4085537817
Facility Addr2: Not reported
Mailing Name: Not reported
Mailing Address: 5301 STEVENS CREEK BLVD
Mailing City,St,Zip: SANTA CLARA, CA 950510000
Gen County: Santa Clara
TSD EPA ID: CAT080014079
TSD County: Santa Clara

AGILENT TECHNOLOGIES INC (Continued) **1000208805**

Waste Category: Liquids with halogenated organic compounds > 1000 mg/l
Disposal Method: Not reported
Tons: 0.2
Facility County: Santa Clara

Click this hyperlink while viewing on your computer to access
Liquids with halogenated organic compounds > 1000 mg/l

HWP:
EPA Id: CAD076314640
Latitude: 37.416853
Longitude: -122.15267
Facility Type: HAZ WASTE - NON-OPERATING
Cleanup Status: Not reported
Region: BERKELEY; STANDARDIZED PERMIT & CORRECTIVE ACTION
Permit Maintenance Lead: Not reported
Permit Renewal Lead: Not reported
Corrective Action Lead: Not reported
Supervisor: Not reported
Site Code: Not reported
Assembly District: Not reported
Senate District: Not reported
Public Information Officer: Not reported
Facility Status: Not reported
Site History: Not reported

FINANCIAL ASSURANCE:
EPA ID Number: CAD076314640
Closure Mechanism: FT
Closure Amount: 5,633
Post Clousure Mechanism: Not reported
Post Clousure Amount: Not reported
Corrective Action Mechanism: Not reported
Corrective Action Amount: Not reported
Sudden Mecahanism Type: Not reported
Sudden Mecahanism Amount: Not reported
Non Sudden Mecahanism Type: Not reported
Non Sudden Mecahanism Amount: Not reported

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101 SSW 1/2-1 0.830 mi. 4383 ft.

Relative: Higher

Actual: 137 ft.

AYDIN ENERGY
3180 HANOVER STREET
PALO ALTO, CA 94304

HIST Cal-Sites **S100833241**
CA BOND EXP. PLAN **N/A**
Cortese
DEED
RESPONSE
ENVIROSTOR

HISTORICAL CAL-SITES:
Facility ID: 43360085
Region: 2
Region Name: BERKELEY
Branch: NC
Branch Name: NORTH COAST
File Name: Not reported
State Senate District: 09301997
Status: COM - CERTIFIED OPERATION AND MAINTENANCE, ALL PLANNED ACTIVITIES IMPLEMENTED REMEDIATION CONTINUES
Status Name: CERTIFIED / OPERATION & MAINTENANCE

AYDIN ENERGY (Continued) **S100833241**

Lead Agency:	DTSC
Lead Agency:	DEPT OF TOXIC SUBSTANCES CONTROL
Facility Type:	RP
Type Name:	RESPONSIBLE PARTY
NPL:	Not Listed
SIC Code:	36
SIC Name:	MANU - ELECTRONIC & OTHER ELECTRIC EQUIP
Access:	Controlled
Cortese:	Not reported
Hazardous Ranking Score:	Not reported
Date Site Hazard Ranked:	Not reported
Groundwater Contamination:	Confirmed
Staff Member Responsible for Site:	VLASKY
Supervisor Responsible for Site:	Not reported
Region Water Control Board:	SF
Region Water Control Board Name:	SAN FRANCISCO BAY
Lat/Long Direction:	Not reported
Lat/Long (dms):	0 0 0 / 0 0 0
Lat/long Method:	Not reported
Lat/Long Description:	Not reported
State Assembly District Code:	21
State Senate District Code:	11
Facility ID:	43360085
Activity:	ORDER
Activity Name:	I/SE, IORSE, FFA, FFSRA, VCA, EA
AWP Code:	ISE
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	06301986
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	COM
Definition of Status:	CERTIFIED / OPERATION & MAINTENANCE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	43360085
Activity:	RA
Activity Name:	REMOVAL ACTION
AWP Code:	GWTRT
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	12301986
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported

AYDIN ENERGY (Continued) **S100833241**

Activity Status:	COM
Definition of Status:	CERTIFIED / OPERATION & MAINTENANCE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	43360085
Activity:	PPP
Activity Name:	PUBLIC PARTICIPATION PLAN
AWP Code:	Not reported
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	12301988
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	COM
Definition of Status:	CERTIFIED / OPERATION & MAINTENANCE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	43360085
Activity:	PRP
Activity Name:	POTENTIAL RESPONSIBLE PARTY SEARCH
AWP Code:	BASE
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	12051991
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	COM
Definition of Status:	CERTIFIED / OPERATION & MAINTENANCE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported

AYDIN ENERGY (Continued) **S100833241**

For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	43360085
Activity:	RA
Activity Name:	REMOVAL ACTION
AWP Code:	SOIL
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	11161992
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	COM
Definition of Status:	CERTIFIED / OPERATION & MAINTENANCE
Liquids Removed (Gals):	4500
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	N
Activity Comments:	REMOVAL OF APPROXIMATELY 4,500 CY OF CONTAMINATED SOIL.
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	43360085
Activity:	ORDER
Activity Name:	I/SE, IORSE, FFA, FFSRA, VCA, EA
AWP Code:	IORS
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	08201993
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	COM
Definition of Status:	CERTIFIED / OPERATION & MAINTENANCE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	43360085
Activity:	COST
Activity Name:	COST RECOVERY
AWP Code:	SETTL
Proposed Budget:	0

AYDIN ENERGY (Continued) **S100833241**

AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	11121993
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	COM
Definition of Status:	CERTIFIED / OPERATION & MAINTENANCE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	43360085
Activity:	RIFS
Activity Name:	REMEDIAL INVESTIGATION / FEASIBILITY STUDY
AWP Code:	Not reported
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	09161994
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	COM
Definition of Status:	CERTIFIED / OPERATION & MAINTENANCE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	43360085
Activity:	CEQA
Activity Name:	CEQA INCLUDING NEGATIVE DECS
AWP Code:	Not reported
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	04211995
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	COM
Definition of Status:	CERTIFIED / OPERATION & MAINTENANCE
Liquids Removed (Gals):	0

AYDIN ENERGY (Continued) **S100833241**

Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	43360085
Activity:	RAP
Activity Name:	REMEDIAL ACTION PLAN / RECORD OF DECISION
AWP Code:	Not reported
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	04211995
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	COM
Definition of Status:	CERTIFIED / OPERATION & MAINTENANCE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	43360085
Activity:	DES
Activity Name:	DESIGN
AWP Code:	Not reported
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	09211995
Est Person-Yrs to complete:	0
Estimated Size:	M
Request to Delete Activity:	Not reported
Activity Status:	COM
Definition of Status:	CERTIFIED / OPERATION & MAINTENANCE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0

AYDIN ENERGY (Continued) **S100833241**

Unknown Type:	0
Facility ID:	43360085
Activity:	RMDL
Activity Name:	REMEDIAL ACTION (RAP REQUIRED)
AWP Code:	Not reported
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	11151996
Est Person-Yrs to complete:	0
Estimated Size:	M
Request to Delete Activity:	Not reported
Activity Status:	COM
Definition of Status:	CERTIFIED / OPERATION & MAINTENANCE
Liquids Removed (Gals):	13500
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	N
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	43360085
Activity:	CERT
Activity Name:	CERTIFICATION
AWP Code:	Not reported
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	09301997
Est Person-Yrs to complete:	0
Estimated Size:	M
Request to Delete Activity:	Not reported
Activity Status:	COM
Definition of Status:	CERTIFIED / OPERATION & MAINTENANCE
Liquids Removed (Gals):	6282
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	N
Activity Comments:	6,282 CUBIC YARDS OF CONTAMINATED SOIL REMOVED.
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	43360085
Activity:	OM
Activity Name:	OPERATION & MAINTENANCE
AWP Code:	PLAN
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	05151997

AYDIN ENERGY (Continued) **S100833241**

Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	COM
Definition of Status:	CERTIFIED / OPERATION & MAINTENANCE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	43360085
Activity:	5YEAR
Activity Name:	FIVE-YEAR REVIEW REQUIRED BY CERCLA
AWP Code:	Not reported
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	06182002
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	COM
Definition of Status:	CERTIFIED / OPERATION & MAINTENANCE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	43360085
Activity:	DEED
Activity Name:	DEED RESTRICTIONS
AWP Code:	Not reported
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	06271997
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	COM
Definition of Status:	CERTIFIED / OPERATION & MAINTENANCE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported

AYDIN ENERGY (Continued) **S100833241**

Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	43360085
Activity:	ORDER
Activity Name:	I/SE, IORSE, FFA, FFSRA, VCA, EA
AWP Code:	OM
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	09251997
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	COM
Definition of Status:	CERTIFIED / OPERATION & MAINTENANCE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	43360085
Activity:	CHP65
Activity Name:	AMENDED ORDER/AGREEMENT, CHAPTER 6.5 TRANSITION
AWP Code:	Not reported
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	02081999
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	COM
Definition of Status:	CERTIFIED / OPERATION & MAINTENANCE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	43360085
Activity:	5YEAR

AYDIN ENERGY (Continued) **S100833241**

Activity Name:	FIVE-YEAR REVIEW REQUIRED BY CERCLA
AWP Code:	Not reported
Proposed Budget:	0
AWP Completion Date:	12152007
Revised Due Date:	Not reported
Comments Date:	Not reported
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	COM
Definition of Status:	CERTIFIED / OPERATION & MAINTENANCE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Alternate Address:	3180 HANOVER STREET
Alternate City,St,Zip:	PALO ALTO, CA 94304
Background Info:	The site is located in Stanford Industrial Park in Palo Alto and was formerly occupied by Aydin Energy Corporation. Aydin Energy Corporation is a manufacturing and repair firm for transformers and other electrical power equipment. The company began its operations in 1968, and vacated the site in 1984.
Comments Date:	04211995
Comments:	RAP - A Remedial action Plan was approved to address PCBs and
Comments Date:	04211995
Comments:	organic solvents in both soil and groundwater. The RAP required
Comments Date:	04211995
Comments:	partial excavation and capping of soils and enhancement of the
Comments Date:	04211995
Comments:	existing grounwater extraction and treatment system.
Comments Date:	06182002
Comments:	5YEAR - A Five Year Review was conducted to assess the
Comments Date:	06182002
Comments:	effectiveness of the groundwater monitoring, extraction and
Comments Date:	06182002
Comments:	treatment sysrem. The Five Year Report was approved on June 18,
Comments Date:	06182002
Comments:	2002 and found the system to effectively contain offsite
Comments Date:	06182002
Comments:	migration.
Comments Date:	06271997
Comments:	DEED - A Deed Restriction was recorded in June 1997 limiting
Comments Date:	06271997
Comments:	land use to commercial.
Comments Date:	06301986
Comments:	ORDER - ISE -
Comments Date:	09161994
Comments:	RIFS - Elevated levels of polychlorinated biphenyls (PCBs) were
Comments Date:	09161994
Comments:	found to a depth of 60 feet. Trichloroethane, dichloroethane,

AYDIN ENERGY (Continued) **S100833241**

Comments Date:	09161994
Comments:	trichloroethylene, perchloroethylene and chlorobenzene were
Comments Date:	09161994
Comments:	detected at the Site in soil and groundwater.
Comments Date:	09251997
Comments:	ORDER - OM - Ongoing operation and maintenance consists of the
Comments Date:	09251997
Comments:	continued extraction and treatment of the groundwater and
Comments Date:	09251997
Comments:	periodic inspections of the cap.
Comments Date:	09301997
Comments:	CERT - The Site was certified in September 1997. Ongoing
Comments Date:	09301997
Comments:	operation and maintenance consists of the continued extraction
Comments Date:	09301997
Comments:	and treatment of the groundwater and periodic inspections of the
Comments Date:	09301997
Comments:	cap.
Comments Date:	11151996
Comments:	RMDL - The soil remediation consisted of partial excavation and
Comments Date:	11151996
Comments:	installation of a multi-layer cap where cleanup levels could not
Comments Date:	11151996
Comments:	be achieved. The groundwater treatment system installed in 1986
Comments Date:	11151996
Comments:	was enhanced.
Comments Date:	11161992
Comments:	RA - SOIL - Removal actions were conducted to excavate and
Comments Date:	11161992
Comments:	dispose offsite soils contaminated with PCBs, organic compounds
Comments Date:	11161992
Comments:	and total petroleum hydrocarbons.
Comments Date:	12301986
Comments:	RA - GWTRT - An Interim Remedial Measure was initiated in 1986
Comments Date:	12301986
Comments:	to remediate the onsite shallow groundwater contamination which
Comments Date:	12301986
Comments:	consisted of extracting the groundwater and treating it in a
Comments Date:	12301986
Comments:	carbon absorption system.
ID Name:	CALSTARS CODE
ID Value:	200010
ID Name:	BEP DATABASE PCODE
ID Value:	P21073
ID Name:	EPA IDENTIFICATION NUMBER
ID Value:	CAD049236326
Alternate Name:	AYDIN ENERGY
Special Programs Code:	Not reported
Special Programs Name:	Not reported

CA BOND EXP. PLAN:

Reponsible Party:	RESPONSIBLE PARTY-LEAD SITE CLEANUP WORKPLAN
Project Revenue Source Company:	Not reported
Project Revenue Source Addr:	Not reported
Project Revenue Source City,St,Zip:	Not reported
Project Revenue Source Desc:	Aydin is complying with an order issued by the Department. DHS has budgeted $100,000 for related costs to the project. The responsible parties will pay all

AYDIN ENERGY (Continued) **S100833241**

costs associated with site cleanup.

Site Description: A manufacturer and repair firm for transformers and other electrical power equipment formerly operated on this site.

Hazardous Waste Desc: Polychlorinated biphenyls (PCBs) have been detected in soils and volatile organic compounds (VOCs) have been detected in soil and ground water at this site.

Threat To Public Health & Env: The volatile organic compounds in the ground water have migrated offsite. There are 29 water supply wells within a three mile radius of the site which could be impacted by contaminants.

Site Activity Status: The property is owned by Stanford University. Hewlett-Packard took over the lease in 1983. The site has been fenced and posted. A remedial action order has been issued to Aydin and Stanford University. Aydin Energy has nearly completed a remedial investigation and has prepared a FS/RAP workplan which is currently being implemented.

Cortese:

Region:	CORTESE
Envirostor Id:	43360085
Site/Facility Type:	STATE RESPONSE
Cleanup Status:	CERTIFIED / OPERATION & MAINTENANCE - LAND USE RESTRICTIONS
Status Date:	9/30/1997
Site Code:	200010
Latitude:	37.414648291232098
Longitude:	-122.14571599912099

DEED:

Area:	PROJECT WIDE
Sub Area:	Not reported
Site Type:	STATE RESPONSE
Status:	CERTIFIED / OPERATION & MAINTENANCE
Deed Date(s):	1997-06-27 00:00:00

RESPONSE:

Facility ID:	43360085
Site Type:	State Response
Site Type Detail:	State Response or NPL
Acres:	4
National Priorities List:	NO
Cleanup Oversight Agencies:	SMBRP
Lead Agency:	SMBRP
Lead Agency Description:	DTSC - Site Mitigation And Brownfield Reuse Program
Project Manager:	JOVANNE VILLAMATER
Supervisor:	Mark Piros
Division Branch:	Berkeley
Site Code:	200010
Site Mgmt. Req.:	REM, DAY, ELD, HOS, NOWN, NDAM, NDEV, NSUB, EXT, SCH, FOOD, COV, RES
Assembly:	21
Senate:	11
Special Program Status:	Not reported
Status:	Certified / Operation & Maintenance
Status Date:	9/30/1997
Restricted Use:	YES
Funding:	Responsible Party
Latitude:	37.414648291232098
Longitude:	-122.14571599912099
APN:	142-18-048, 142-18-48, 142-18-48

AYDIN ENERGY (Continued) **S100833241**

Past Use:	TRANSFORMER REPAIR
Potential COC:	30018, 30022, 30026, 30027, 30028, 30194
Confirmed COC:	Not reported
Potential Description:	OTH, SOIL
Alias Name:	142-18-048
Alias Type:	APN
Alias Name:	142-18-48
Alias Type:	APN
Alias Name:	142-18-48
Alias Type:	APN
Alias Name:	CAD049236326
Alias Type:	EPA Identification Number
Alias Name:	110002647565
Alias Type:	EPA (FRS #)
Alias Name:	P21073
Alias Type:	PCode
Alias Name:	200010
Alias Type:	Project Code (Site Code)
Alias Name:	43360085
Alias Type:	Envirostor ID Number

Completed Info:

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Land Use Restriction - Site Inspection/Visit
Completed Date:	2007-12-05 00:00:00
Comments:	Annual Inspection Report indicates that the existing system and the cap continue to be protective of human health and the environment.

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Operation & Maintenance Order/Agreement
Completed Date:	1997-09-25 00:00:00
Comments:	An enforceable agreement was entered into by DTSC and Aydin to implement the O&M plan and for Aydin to provide a financial assurance for the implementation of the O&M Plan.

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Land Use Restriction
Completed Date:	1997-06-27 00:00:00
Comments:	A Deed Restriction was recorded in June 1997 limiting land use to commercial.

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Certification
Completed Date:	1997-09-30 00:00:00
Comments:	Certification - Ongoing operation and maintenance consists of the continued extraction and treatment of the groundwater and periodic inspections of the cap.

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	CEQA - Initial Study/ Neg. Declaration
Completed Date:	1995-04-21 00:00:00
Comments:	A Negative Declaration was approved for the RAP.

AYDIN ENERGY (Continued) **S100833241**

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Amendment - Order/Agreement
Completed Date: 1993-08-20 00:00:00
Comments: An Amended Order was issued on August 20, 1993 to include Stanford University as a Responsible Party and to require the parties to submit a RI/FS Plan, a RI Report, a Baseline Risk Assessment, a Public Participation Plan, an Initial Study, a Remedial Action Plan (RAP) and a Design Plan after the approval of the RAP.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Unilateral Order (I/SE, RAO, CAO, EPA AO)
Completed Date: 1986-06-13 00:00:00
Comments: A Remedial Action Order issued on 6/13/1986 to require Aydin to conduct groundwater and soil investigations, remove underground tanks, prepare a Feasibility Study and a Remedial Action Plan.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Land Use Restriction - Site Inspection/Visit
Completed Date: 2006-11-08 00:00:00
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: * Cost Recovery Settlements/Decrees
Completed Date: 1993-11-12 00:00:00
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Amendment - Order/Agreement
Completed Date: 1999-02-08 00:00:00
Comments: The O&M Agreement was amended based on the requirements of sections 25187, 58009 and 58010 of the Health and Safety Code.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: 5 Year Review Reports
Completed Date: 2007-11-28 00:00:00
Comments: The cap and the existing treatment system continue to be effective in protecting the public and the environment.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: 5 Year Review Reports
Completed Date: 2002-06-18 00:00:00
Comments: A Five Year Review was conducted to assess the effectiveness of the groundwater monitoring, extraction and treatment sysrem and found the system to effectively contain offsite migration.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Operations and Maintenance Plan
Completed Date: 1997-05-15 00:00:00
Comments: O&M Plan for the soil cap and the groundwater monitoring and

AYDIN ENERGY (Continued) **S100833241**

extraction treatment system.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Action Completion Report
Completed Date: 1996-11-15 00:00:00
Comments: RMDL - The soil remediation consisted of partial excavation and installation of a multi-layer cap where cleanup levels could not be achieved. The groundwater treatment system installed in 1986 was enhanced.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Design/Implementation Workplan
Completed Date: 1995-09-21 00:00:00
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Action Plan
Completed Date: 1995-04-21 00:00:00
Comments: RAP - A Remedial action Plan was approved to address PCBs and organic solvents in both soil and groundwater. The RAP required partial excavation and capping of soils and enhancement of the existing grounwater extraction and treatment system.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Completion Report
Completed Date: 1992-11-16 00:00:00
Comments: RA - SOIL - Removal actions were conducted to excavate and dispose offsite soils contaminated with PCBs, organic compounds and total petroleum hydrocarbons.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Public Participation Plan / Community Relations Plan
Completed Date: 1988-12-30 00:00:00
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Completion Report
Completed Date: 1986-12-30 00:00:00
Comments: An Interim Remedial Measure was initiated in 1986 to remediate the onsite shallow groundwater contamination which consisted of extracting the groundwater and treating it in a carbon absorption system.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Operations and Maintenance Report
Completed Date: 2005-12-12 00:00:00
Comments: Aydin made revisions to the semi-annual groundwater monitoring report. Not reported

Completed Area Name: PROJECT WIDE

AYDIN ENERGY (Continued) **S100833241**

Completed Sub Area Name: Not reported
Completed Document Type: Remedial Investigation / Feasibility Study
Completed Date: 1994-09-16 00:00:00
Comments: RIFS - Elevated levels of polychlorinated biphenyls (PCBs) were found to a depth of 60 feet. Trichloroethane, dichloroethane, trichloroethylene, perchloroethylene and chlorobenzene were detected at the Site in soil and groundwater.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Operations and Maintenance Report
Completed Date: 2006-03-20 00:00:00
Comments: The Report indicates VOC concentrations are within historic variations.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Operations and Maintenance Report
Completed Date: 2006-08-21 00:00:00
Comments: Report approved with no comments or recommendations.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Operations and Maintenance Report
Completed Date: 2007-11-28 00:00:00
Comments: The Report indicates data consistent with historical concentration ranges.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Operations and Maintenance Report
Completed Date: 2007-09-27 00:00:00
Comments: VOC concentrations in groundwater are within historical ranges.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fact Sheets
Completed Date: 1989-06-01 00:00:00
Comments: Fact sheet describes progress on remedial investigations

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fact Sheets
Completed Date: 1991-05-01 00:00:00
Comments: Fact sheet updating the community on the soil and groundwater investigations.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fact Sheets
Completed Date: 1991-11-01 00:00:00
Comments: Fact Sheet describing the progress on site investigations.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fact Sheets
Completed Date: 1992-10-01 00:00:00

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Comments: Fact Sheet describing the progress made on the site investigations.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fact Sheets
Completed Date: 1993-06-01 00:00:00
Comments: Fact sheet provides project update and announces a community meeting on June 23.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fact Sheets
Completed Date: 1988-08-18 00:00:00
Comments: Fact sheet summarizes site investigations done to date.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fact Sheets
Completed Date: 1988-09-09 00:00:00
Comments: Fact Sheet presents the proposed criteria for evaluating remedial action alternatives.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fact Sheets
Completed Date: 1990-12-01 00:00:00
Comments: Fact Sheet updates the community on the ongoing investigations and evaluating of potential remedial options.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fact Sheets
Completed Date: 1988-08-01 00:00:00
Comments: Fact Sheet

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fact Sheets
Completed Date: 1990-01-06 00:00:00
Comments: Fact Sheet

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Public Participation Plan / Community Relations Plan
Completed Date: 1992-01-31 00:00:00
Comments: The PP plan was approved to ensure that the affected public and community are involved in the decision making process.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Operations and Maintenance Report
Completed Date: 2008-04-28 00:00:00
Comments: Data is within historical trends, except for TPH which is higher. This could be caused by the shutdown of the system.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported

AYDIN ENERGY (Continued) **S100833241**

Completed Document Type:	Long Term Monitoring Report
Completed Date:	2008-11-25 00:00:00
Comments:	Report indicates data within historical trend. RP will evaluate sampling procedures and will submit evaluation to DTSC.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Long Term Monitoring Report
Completed Date:	2009-07-31 00:00:00
Comments:	Groundwater monitoring changes have been approved. Groundwater data is within historical ranges.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Long Term Monitoring Report
Completed Date:	2009-10-05 00:00:00
Comments:	Report approved with some comments and the following additional monitoring: Based on the revised MCL for 1,2,4-trichlorobenzene (1,2,4-TCB), and the concentrations of this compound in wells W6R and W6A1, DTSC requires that wells W2, W3, and W5R be analyzed for 1,2,4-TCB during the next groundwater monitoring event.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Annual Oversight Cost Estimate
Completed Date:	2009-09-29 00:00:00
Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Fence & Post Order
Completed Date:	1985-12-18 00:00:00
Comments:	Fence & Post Order issued
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Land Use Restriction - Site Inspection/Visit
Completed Date:	2010-04-12 00:00:00
Comments:	The property is the location of a parking lot that is fenced and vacant. Upon inspection, the asphalt parking lot appeared in good condition. However some minor cracks were observed on the western portion of the site. Additionally, there was no evidence of any activities prohibited by the Deed Restriction.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Land Use Restriction - Site Inspection/Visit
Completed Date:	2008-12-22 00:00:00
Comments:	Annual Inspection Report indicates that the existing system and the cap continue to be protective of human health and the environment.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Land Use Restriction - Site Inspection/Visit
Completed Date:	2005-10-20 00:00:00
Comments:	An annual site inspection was conducted.

AYDIN ENERGY (Continued) **S100833241**

Future Area Name:	PROJECT WIDE
Future Sub Area Name:	Not reported
Future Document Type:	5 Year Review Reports
Future Due Date:	2012
Future Area Name:	PROJECT WIDE
Future Sub Area Name:	Not reported
Future Document Type:	5 Year Review Reports
Future Due Date:	2017
Future Area Name:	PROJECT WIDE
Future Sub Area Name:	Not reported
Future Document Type:	Operations and Maintenance Report
Future Due Date:	2011
Schedule Area Name:	PROJECT WIDE
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Operations and Maintenance Report
Schedule Due Date:	2010-05-31 00:00:00
Schedule Revised Date:	Not reported
Schedule Area Name:	PROJECT WIDE
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Operations and Maintenance Report
Schedule Due Date:	2011-05-31 00:00:00
Schedule Revised Date:	Not reported
Schedule Area Name:	PROJECT WIDE
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Operations and Maintenance Report
Schedule Due Date:	2010-10-30 00:00:00
Schedule Revised Date:	Not reported

ENVIROSTOR:

Site Type:	State Response
Site Type Detailed:	State Response or NPL
Acres:	4
NPL:	NO
Regulatory Agencies:	SMBRP
Lead Agency:	SMBRP
Program Manager:	JOVANNE VILLAMATER
Supervisor:	Mark Piros
Division Branch:	Berkeley
Facility ID:	43360085
Site Code:	200010
Assembly:	21
Senate:	11
Special Program:	Not reported
Status:	Certified / Operation & Maintenance
Status Date:	9/30/1997
Restricted Use:	YES
Site Mgmt. Req.:	REM, DAY, ELD, HOS, NOWN, NDAM, NDEV, NSUB, EXT, SCH, FOOD, COV, RES
Funding:	Responsible Party
Latitude:	37.414648291232098
Longitude:	-122.14571599912099
APN:	142-18-048, 142-18-48, 142-18-48
Past Use:	TRANSFORMER REPAIR
Potential COC:	30018, 30022, 30026, 30027, 30028, 30194
Confirmed COC:	Not reported
Potential Description:	OTH, SOIL
Alias Name:	142-18-048
Alias Type:	APN

AYDIN ENERGY (Continued) **S100833241**

Alias Name: 142-18-48
Alias Type: APN
Alias Name: 142-18-48
Alias Type: APN
Alias Name: CAD049236326
Alias Type: EPA Identification Number
Alias Name: 110002647565
Alias Type: EPA (FRS #)
Alias Name: P21073
Alias Type: PCode
Alias Name: 200010
Alias Type: Project Code (Site Code)
Alias Name: 43360085
Alias Type: Envirostor ID Number

Completed Info:

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Land Use Restriction - Site Inspection/Visit
Completed Date: 2007-12-05 00:00:00
Comments: Annual Inspection Report indicates that the existing system and the cap continue to be protective of human health and the environment.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Operation & Maintenance Order/Agreement
Completed Date: 1997-09-25 00:00:00
Comments: An enforceable agreement was entered into by DTSC and Aydin to implement the O&M plan and for Aydin to provide a financial assurance for the implementation of the O&M Plan.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Land Use Restriction
Completed Date: 1997-06-27 00:00:00
Comments: A Deed Restriction was recorded in June 1997 limiting land use to commercial.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Certification
Completed Date: 1997-09-30 00:00:00
Comments: Certification - Ongoing operation and maintenance consists of the continued extraction and treatment of the groundwater and periodic inspections of the cap.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: CEQA - Initial Study/ Neg. Declaration
Completed Date: 1995-04-21 00:00:00
Comments: A Negative Declaration was approved for the RAP.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Amendment - Order/Agreement
Completed Date: 1993-08-20 00:00:00
Comments: An Amended Order was issued on August 20, 1993 to include Stanford University as a Responsible Party and to require the parties to

AYDIN ENERGY (Continued) **S100833241**

submit a RI/FS Plan, a RI Report, a Baseline Risk Assessment, a Public Participation Plan, an Initial Study, a Remedial Action Plan (RAP) and a Design Plan after the approval of the RAP.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Unilateral Order (I/SE, RAO, CAO, EPA AO)
Completed Date: 1986-06-13 00:00:00
Comments: A Remedial Action Order issued on 6/13/1986 to require Aydin to conduct groundwater and soil investigations, remove underground tanks, prepare a Feasibility Study and a Remedial Action Plan.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Land Use Restriction - Site Inspection/Visit
Completed Date: 2006-11-08 00:00:00
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: * Cost Recovery Settlements/Decrees
Completed Date: 1993-11-12 00:00:00
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Amendment - Order/Agreement
Completed Date: 1999-02-08 00:00:00
Comments: The O&M Agreement was amended based on the requirements of sections 25187, 58009 and 58010 of the Health and Safety Code.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: 5 Year Review Reports
Completed Date: 2007-11-28 00:00:00
Comments: The cap and the existing treatment system continue to be effective in protecting the public and the environment.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: 5 Year Review Reports
Completed Date: 2002-06-18 00:00:00
Comments: A Five Year Review was conducted to assess the effectiveness of the groundwater monitoring, extraction and treatment sysrem and found the system to effectively contain offsite migration.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Operations and Maintenance Plan
Completed Date: 1997-05-15 00:00:00
Comments: O&M Plan for the soil cap and the groundwater monitoring and extraction treatment system.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Action Completion Report
Completed Date: 1996-11-15 00:00:00

AYDIN ENERGY (Continued) **S100833241**

Comments:	RMDL - The soil remediation consisted of partial excavation and installation of a multi-layer cap where cleanup levels could not be achieved. The groundwater treatment system installed in 1986 was enhanced.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Design/Implementation Workplan
Completed Date:	1995-09-21 00:00:00
Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Remedial Action Plan
Completed Date:	1995-04-21 00:00:00
Comments:	RAP - A Remedial action Plan was approved to address PCBs and organic solvents in both soil and groundwater. The RAP required partial excavation and capping of soils and enhancement of the existing grounwater extraction and treatment system.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Removal Action Completion Report
Completed Date:	1992-11-16 00:00:00
Comments:	RA - SOIL - Removal actions were conducted to excavate and dispose offsite soils contaminated with PCBs, organic compounds and total petroleum hydrocarbons.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Public Participation Plan / Community Relations Plan
Completed Date:	1988-12-30 00:00:00
Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Removal Action Completion Report
Completed Date:	1986-12-30 00:00:00
Comments:	An Interim Remedial Measure was initiated in 1986 to remediate the onsite shallow groundwater contamination which consisted of extracting the groundwater and treating it in a carbon absorption system.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Operations and Maintenance Report
Completed Date:	2005-12-12 00:00:00
Comments:	Aydin made revisions to the semi-annual groundwater monitoring report. Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Remedial Investigation / Feasibility Study
Completed Date:	1994-09-16 00:00:00
Comments:	RIFS - Elevated levels of polychlorinated biphenyls (PCBs) were found to a depth of 60 feet. Trichloroethane, dichloroethane, trichloroethylene, perchloroethylene and chlorobenzene were detected

AYDIN ENERGY (Continued) **S100833241**

at the Site in soil and groundwater.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Operations and Maintenance Report
Completed Date: 2006-03-20 00:00:00
Comments: The Report indicates VOC concentrations are within historic variations.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Operations and Maintenance Report
Completed Date: 2006-08-21 00:00:00
Comments: Report approved with no comments or recommendations.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Operations and Maintenance Report
Completed Date: 2007-11-28 00:00:00
Comments: The Report indicates data consistent with historical concentration ranges.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Operations and Maintenance Report
Completed Date: 2007-09-27 00:00:00
Comments: VOC concentrations in groundwater are within historical ranges.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fact Sheets
Completed Date: 1989-06-01 00:00:00
Comments: Fact sheet describes progress on remedial investigations

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fact Sheets
Completed Date: 1991-05-01 00:00:00
Comments: Fact sheet updating the community on the soil and groundwater investigations.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fact Sheets
Completed Date: 1991-11-01 00:00:00
Comments: Fact Sheet describing the progress on site investigations.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fact Sheets
Completed Date: 1992-10-01 00:00:00
Comments: Fact Sheet describing the progress made on the site investigations.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fact Sheets
Completed Date: 1993-06-01 00:00:00

AYDIN ENERGY (Continued) **S100833241**

Comments:	Fact sheet provides project update and announces a community meeting on June 23.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Fact Sheets
Completed Date:	1988-08-18 00:00:00
Comments:	Fact sheet summarizes site investigations done to date.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Fact Sheets
Completed Date:	1988-09-09 00:00:00
Comments:	Fact Sheet presents the proposed criteria for evaluating remedial action alternatives.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Fact Sheets
Completed Date:	1990-12-01 00:00:00
Comments:	Fact Sheet updates the community on the ongoing investigations and evaluating of potential remedial options.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Fact Sheets
Completed Date:	1988-08-01 00:00:00
Comments:	Fact Sheet
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Fact Sheets
Completed Date:	1990-01-06 00:00:00
Comments:	Fact Sheet
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Public Participation Plan / Community Relations Plan
Completed Date:	1992-01-31 00:00:00
Comments:	The PP plan was approved to ensure that the affected public and community are involved in the decision making process.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Operations and Maintenance Report
Completed Date:	2008-04-28 00:00:00
Comments:	Data is within historical trends, except for TPH which is higher. This could be caused by the shutdown of the system.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Long Term Monitoring Report
Completed Date:	2008-11-25 00:00:00
Comments:	Report indicates data within historical trend. RP will evaluate sampling procedures and will submit evaluation to DTSC.
Completed Area Name:	PROJECT WIDE

AYDIN ENERGY (Continued) **S100833241**

Completed Sub Area Name: Not reported
Completed Document Type: Long Term Monitoring Report
Completed Date: 2009-07-31 00:00:00
Comments: Groundwater monitoring changes have been approved. Groundwater data is within historical ranges.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Long Term Monitoring Report
Completed Date: 2009-10-05 00:00:00
Comments: Report approved with some comments and the following additional monitoring: Based on the revised MCL for 1,2,4-trichlorobenzene (1,2,4-TCB), and the concentrations of this compound in wells W6R and W6A1, DTSC requires that wells W2, W3, and W5R be analyzed for 1,2,4-TCB during the next groundwater monitoring event.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 2009-09-29 00:00:00
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fence & Post Order
Completed Date: 1985-12-18 00:00:00
Comments: Fence & Post Order issued

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Land Use Restriction - Site Inspection/Visit
Completed Date: 2010-04-12 00:00:00
Comments: The property is the location of a parking lot that is fenced and vacant. Upon inspection, the asphalt parking lot appeared in good condition. However some minor cracks were observed on the western portion of the site. Additionally, there was no evidence of any activities prohibited by the Deed Restriction.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Land Use Restriction - Site Inspection/Visit
Completed Date: 2008-12-22 00:00:00
Comments: Annual Inspection Report indicates that the existing system and the cap continue to be protective of human health and the environment.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Land Use Restriction - Site Inspection/Visit
Completed Date: 2005-10-20 00:00:00
Comments: An annual site inspection was conducted.

Future Area Name: PROJECT WIDE
Future Sub Area Name: Not reported
Future Document Type: 5 Year Review Reports
Future Due Date: 2012
Future Area Name: PROJECT WIDE
Future Sub Area Name: Not reported

AYDIN ENERGY (Continued) **S100833241**

Future Document Type:	5 Year Review Reports
Future Due Date:	2017
Future Area Name:	PROJECT WIDE
Future Sub Area Name:	Not reported
Future Document Type:	Operations and Maintenance Report
Future Due Date:	2011
Schedule Area Name:	PROJECT WIDE
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Operations and Maintenance Report
Schedule Due Date:	2010-05-31 00:00:00
Schedule Revised Date:	Not reported
Schedule Area Name:	PROJECT WIDE
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Operations and Maintenance Report
Schedule Due Date:	2011-05-31 00:00:00
Schedule Revised Date:	Not reported
Schedule Area Name:	PROJECT WIDE
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Operations and Maintenance Report
Schedule Due Date:	2010-10-30 00:00:00
Schedule Revised Date:	Not reported

T102 **HEWLETT-PACKARD COMPANY** **NPDES** **S103631891**
SSW **1501 PAGE MILL RD** **HIST CORTESE** **N/A**
1/2-1 **PALO ALTO, CA 94304** **SLIC**
0.901 mi. **HAZNET**
4757 ft. **Site 1 of 3 in cluster T** **ENVIROSTOR**

Relative:
Higher

Actual:
131 ft.

NPDES:

Npdes Number:	Not reported
Facility Status:	Active
Agency Id:	20249
Region:	2
Regulatory Measure Id:	182991
Order No:	R2-2004-0055
Regulatory Measure Type:	Enrollee
Place Id:	201661
WDID:	2 438063003
Program Type:	NPDES
Adoption Date Of Regulatory Measure:	1995-04-07 00:00:00
Effective Date Of Regulatory Measure:	1995-04-07 00:00:00
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Discharge Name:	Hewlett Packard
Discharge Address:	1501 Page Mill Road 117
Discharge City:	Palo Alto
Discharge State:	CA
Discharge Zip:	94304-1213

CORTESE:

Region:	CORTESE
Facility County Code:	43
Reg By:	WBC&D
Reg Id:	2 438063N01

SLIC:

Region:	STATE

HEWLETT-PACKARD COMPANY (Continued) **S103631891**

Facility Status:	**Open - Remediation**
Status Date:	1990-12-31 00:00:00
Global Id:	SL720501209
Lead Agency:	SAN FRANCISCO BAY RWQCB (REGION 2)
Lead Agency Case Number:	Not reported
Latitude:	37.414607
Longitude:	-122.148143
Case Type:	Cleanup Program Site
Case Worker:	RWP
Local Agency:	SANTA CLARA VALLEY WATER DISTRICT
RB Case Number:	43S0050
File Location:	Regional Board
Potential Media Affected:	Other Groundwater (uses other than drinking water), Soil
Potential Contaminants of Concern:	1,1,1-Trichloroethane (TCA), Other Chlorinated Hydrocarbons, Acetone, Benzene, Other Solvent or Non-Petroleum Hydrocarbon, * * ETHYLENE DIBROMIDE (EDB), Trichloroethylene (TCE), Xylene
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

SLIC:

Region:	2
Facility ID:	43S0050
Facility Status:	Remedial action (cleanup) Underway
Date Closed:	Not reported
Local Case #:	Not reported
How Discovered:	Not reported
Leak Cause:	Not reported
Leak Source:	Not reported
Date Confirmed:	Not reported
Date Prelim Site Assmnt Workplan Submitted:	Not reported
Date Preliminary Site Assessment Began:	Not reported
Date Pollution Characterization Began:	Not reported
Date Remediation Plan Submitted:	Not reported
Date Remedial Action Underway:	Not reported
Date Post Remedial Action Monitoring Began:	Not reported

HAZNET:

Gepaid:	CAD009122532
Contact:	ANNA PAYNE
Telephone:	6506915212
Facility Addr2:	Not reported
Mailing Name:	Not reported
Mailing Address:	1501 PAGE MILL ROAD M/S 1129
Mailing City,St,Zip:	PALO ALTO, CA 943040000
Gen County:	Santa Clara
TSD EPA ID:	AZD009015389
TSD County:	99
Waste Category:	Hydrocarbon solvents (benzene, hexane, Stoddard, etc.)
Disposal Method:	Transfer Station
Tons:	0.01
Facility County:	Not reported

Gepaid:	CAD009122532
Contact:	SCOTT JOHNSON EHS CONSULTANT
Telephone:	6508575493

HEWLETT-PACKARD COMPANY (Continued) **S103631891**

Facility Addr2: Not reported
Mailing Name: Not reported
Mailing Address: 1501 PAGE MILL ROAD M/S 1129
Mailing City,St,Zip: PALO ALTO, CA 943040000
Gen County: Santa Clara
TSD EPA ID: CAD059494310
TSD County: Santa Clara
Waste Category: Aqueous solution with less than 10% total organic residues
Disposal Method: H141
Tons: 0.231
Facility County: Santa Clara

Gepaid: CAD009122532
Contact: SCOTT JOHNSON EHS CONSULTANT
Telephone: 6508575493
Facility Addr2: Not reported
Mailing Name: Not reported
Mailing Address: 1501 PAGE MILL ROAD M/S 1129
Mailing City,St,Zip: PALO ALTO, CA 943040000
Gen County: Santa Clara
TSD EPA ID: CAD059494310
TSD County: Santa Clara
Waste Category: Unspecified oil-containing waste
Disposal Method: H141
Tons: 0.339
Facility County: Santa Clara

Gepaid: CAD009122532
Contact: SCOTT JOHNSON EHS CONSULTANT
Telephone: 6508575493
Facility Addr2: Not reported
Mailing Name: Not reported
Mailing Address: 1501 PAGE MILL ROAD M/S 1129
Mailing City,St,Zip: PALO ALTO, CA 943040000
Gen County: Santa Clara
TSD EPA ID: UTD981552177
TSD County: 99
Waste Category: Laboratory waste chemicals
Disposal Method: H040
Tons: 0.033
Facility County: Santa Clara

Gepaid: CAD009122532
Contact: SCOTT JOHNSON EHS CONSULTANT
Telephone: 6508575493
Facility Addr2: Not reported
Mailing Name: Not reported
Mailing Address: 1501 PAGE MILL ROAD M/S 1129
Mailing City,St,Zip: PALO ALTO, CA 943040000
Gen County: Santa Clara
TSD EPA ID: CAD059494310
TSD County: Santa Clara
Waste Category: Contaminated soil from site clean-ups
Disposal Method: H141
Tons: 0.6
Facility County: Santa Clara

HEWLETT-PACKARD COMPANY (Continued) **S103631891**

Click this hyperlink while viewing on your computer to access
Contaminated soil from site clean-ups

ENVIROSTOR:
Site Type: Corrective Action
Site Type Detailed: Corrective Action
Acres: 0
NPL: NO
Regulatory Agencies: RWQCB
Lead Agency: WQC
Program Manager: Not reported
Supervisor: * Unknown
Division Branch: Berkeley
Facility ID: 80001598
Site Code: Not reported
Assembly: 21
Senate: 21
Special Program: Not reported
Status: Refer: RWQCB
Status Date: 1/1/2008
Restricted Use: NO
Site Mgmt. Req.: NONE SPECIFIED
Funding: Not reported
Latitude: 37.411891493670097
Longitude: -122.148184776306
APN: 142-18-007
Past Use: NONE SPECIFIED
Potential COC: NONE SPECIFIED
Confirmed COC: NONE SPECIFIED
Potential Description: NONE SPECIFIED
Alias Name: 142-18-007
Alias Type: APN
Alias Name: CAD009122532
Alias Type: EPA Identification Number
Alias Name: SL720501209
Alias Type: GeoTracker Global ID
Alias Name: 43350081
Alias Type: Envirostor ID Number
Alias Name: 80001598
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: Sites With No Operable Unit
Completed Sub Area Name: ENTIRE FACILITY
Completed Document Type: Remedy Selection and Statement of Basis
Completed Date: 1994-08-17 00:00:00
Comments: Not reported

Completed Area Name: Sites With No Operable Unit
Completed Sub Area Name: ENTIRE FACILITY
Completed Document Type: Consent Agreement
Completed Date: 1986-03-19 00:00:00
Comments: Not reported

Completed Area Name: Sites With No Operable Unit
Completed Sub Area Name: ENTIRE FACILITY
Completed Document Type: RCRA Facility Assessment Report

HEWLETT-PACKARD COMPANY (Continued) **S103631891**

Completed Date: 1997-06-01 00:00:00
Comments: RCRA Facility Assessment Completed

Completed Area Name: Sites With No Operable Unit
Completed Sub Area Name: ENTIRE FACILITY
Completed Document Type: Interim Measures Questionnaire
Completed Date: 1994-07-27 00:00:00
Comments: Not reported

Completed Area Name: Sites With No Operable Unit
Completed Sub Area Name: ENTIRE FACILITY
Completed Document Type: Preliminary Assessment Report
Completed Date: 1984-08-01 00:00:00
Comments: Not reported

Completed Area Name: Sites With No Operable Unit
Completed Sub Area Name: ENTIRE FACILITY
Completed Document Type: Remedy Constructed: Operating Properly & Successfully
Completed Date: 1996-02-28 00:00:00
Comments: Not reported

Completed Area Name: Sites With No Operable Unit
Completed Sub Area Name: ENTIRE FACILITY
Completed Document Type: Corrective Measure Implementation Workplan
Completed Date: 1994-08-17 00:00:00
Comments: Not reported

Completed Area Name: Sites With No Operable Unit
Completed Sub Area Name: ENTIRE FACILITY
Completed Document Type: Corrective Measures Study Report
Completed Date: 1994-08-17 00:00:00
Comments: Not reported

Completed Area Name: Sites With No Operable Unit
Completed Sub Area Name: ENTIRE FACILITY
Completed Document Type: RFI Report
Completed Date: 1994-08-17 00:00:00
Comments: Not reported

Completed Area Name: Sites With No Operable Unit
Completed Sub Area Name: ENTIRE FACILITY
Completed Document Type: Preliminary Assessment Report
Completed Date: 1984-07-01 00:00:00
Comments: Not reported

Completed Area Name: Sites With No Operable Unit
Completed Sub Area Name: ENTIRE FACILITY
Completed Document Type: Design/Implementation Workplan
Completed Date: 1994-08-17 00:00:00
Comments: Not reported

Completed Area Name: Sites With No Operable Unit
Completed Sub Area Name: ENTIRE FACILITY
Completed Document Type: Interim Measures Workplan
Completed Date: 1982-01-01 00:00:00
Comments: Not reported

HEWLETT-PACKARD COMPANY (Continued) **S103631891**

Completed Area Name:	Sites With No Operable Unit
Completed Sub Area Name:	ENTIRE FACILITY
Completed Document Type:	Interim Measures Workplan
Completed Date:	1982-01-01 00:00:00
Comments:	Not reported
Completed Area Name:	Sites With No Operable Unit
Completed Sub Area Name:	ENTIRE FACILITY
Completed Document Type:	Interim Measures Implementation Report
Completed Date:	1988-12-31 00:00:00
Comments:	Not reported
Future Area Name:	Not reported
Future Sub Area Name:	Not reported
Future Document Type:	Not reported
Future Due Date:	Not reported
Schedule Area Name:	Not reported
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Not reported
Schedule Due Date:	Not reported
Schedule Revised Date:	Not reported

T103 **HEWLETT PACKARD** **CA BOND EXP. PLAN** **S100833463**
SSW **1501 PAGE MILL ROAD** **CHMIRS** **N/A**
1/2-1 **PALO ALTO, CA 94304** **RESPONSE**
0.901 mi. **EMI**
4757 ft. **Site 2 of 3 in cluster T** **ENVIROSTOR**

Relative:
Higher

Actual:
131 ft.

CA BOND EXP. PLAN:

Reponsible Party:	RWQCB REFERRAL SITE
Project Revenue Source Company:	Not reported
Project Revenue Source Addr:	Not reported
Project Revenue Source City,St,Zip:	Not reported
Project Revenue Source Desc:	Hewlett Packard, the responsible party, has assumed responsibility for cleanup activities under the direction of the RWQCB. The RWQCB will continue to have lead responsibility for monitoring Hewlett Packard's progress under an existing South Bay Enforcement Agreement betweeen the RWQCB, EPA and DHS. The RWQCB is conducting the work with support from the EPA through a Cooperative Agreement. Until such time as the RWQCB refers the site for follow-up using Bond funds, no money will be budgeted from the fund for this site. The DHS regional facilities permitting unit is maintaining liaison with RWQCB and EPA.
Site Description:	Two divisions of this corporation share the facility's 50 acre site: Stanford Park Division, principally a plating and chemical millings shop, and the Hewlett-Packard Laboratories, a research and development branch for microelectronic components. The surrounding land use is both industrial and commercial. Several underground storage tanks existed at the site from 1965 to 1983. These tanks stored chemical products and wastes.
Hazardous Waste Desc:	In 1981 Chlorinated and aromatic solvents were discovered in soil and ground water. The following chemicals have been detected in soil and ground water: Freon, benzene, toluene, dichloroethane (DCA), trichloroethylene (TCE), ethylbenzene, methylcyclohexane and methylene chloride.
Threat To Public Health & Env:	About 56,000 people live within a 3 mile radius of the facility and depend on ground water as a standby source of drinking water. To date, no contamination of nearby wells has been detected. The closest well to the site is the Matadero well located near the southeast corner of Matadero Creek and Whitsell Street, a distance of 4,530 feet from contaminated monitoring wells.
Site Activity Status:	As an initial remedial measure, leaking tanks and contaminated soil have been removed.

HEWLETT PACKARD (Continued) **S100833463**

CHMIRS:

OES Incident Number:	1181	
OES notification:	Not reported	
OES Date:	3/9/1994	
OES Time:	03:29:30 PM	
Incident Date:	Not reported	
Date Completed:	**Not reported**	
Property Use:	Not reported	
Agency Id Number:	Not reported	
Agency Incident Number:	Not reported	
Time Notified:	Not reported	
Time Completed:	Not reported	
Surrounding Area:	Not reported	
Estimated Temperature:	Not reported	
Property Management:	Not reported	
Special Studies 1:	Not reported	
Special Studies 2:	Not reported	
Special Studies 3:	Not reported	
Special Studies 4:	Not reported	
Special Studies 5:	Not reported	
Special Studies 6:	Not reported	
More Than Two Substances Involved?:		Not reported
Resp Agncy Personel # Of Decontaminated:		Not reported
Responding Agency Personel # Of Injuries:		Not reported
Responding Agency Personel # Of Fatalities:		Not reported
Others Number Of Decontaminated:		Not reported
Others Number Of Injuries:		Not reported
Others Number Of Fatalities:		Not reported
Vehicle Make/year:	Not reported	
Vehicle License Number:	Not reported	
Vehicle State:	Not reported	
Vehicle Id Number:	Not reported	
CA/DOT/PUC/ICC Number:	Not reported	
Company Name:	Not reported	
Reporting Officer Name/ID:	Not reported	
Report Date:	Not reported	
Comments:	Not reported	
Facility Telephone:	Not reported	
Waterway Involved:	NO	
Waterway:	Not reported	
Spill Site:	Not reported	
Cleanup By:	resporting party	
Containment:	Not reported	
What Happened:	Not reported	
Type:	CHEMICAL	
Measure:	Not reported	
Other:	Not reported	
Date/Time:	Not reported	
Year:	1994	
Agency:	hewlett packard	
Incident Date:	0900/03-09-94	
Admin Agency:	Not reported	
Amount:	530 gallons	
Contained:	YES	
Site Type:	Not reported	
E Date:	Not reported	
Substance:	contaminated groundwater (chlorinated organic compounds) 400 p/p/b -	

HEWLETT PACKARD (Continued) **S100833463**

TCE

Quantity Released:	Not reported
BBLS:	Not reported
Cups:	Not reported
CUFT:	Not reported
Gallons:	Not reported
Grams:	Not reported
Pounds:	Not reported
Liters:	Not reported
Ounces:	Not reported
Pints:	Not reported
Quarts:	Not reported
Sheen:	Not reported
Tons:	Not reported
Unknown:	Not reported
Evacuations:	Not reported
Number of Injuries:	Not reported
Number of Fatalities:	Not reported
Description:	pipe ruptured - spilled to excavated area - contained in hole in ground and spill is leeching into groundwater

RESPONSE:

Facility ID:	43350081
Site Type:	State Response
Site Type Detail:	State Response or NPL
Acres:	50
National Priorities List:	NO
Cleanup Oversight Agencies:	RWQCB 2 - San Francisco Bay
Lead Agency:	NONE SPECIFIED
Lead Agency Description:	Not reported
Project Manager:	Not reported
Supervisor:	Referred - Not Assigned
Division Branch:	Berkeley
Site Code:	200046
Site Mgmt. Req.:	NONE SPECIFIED
Assembly:	21
Senate:	11
Special Program Status:	Not reported
Status:	Refer: RWQCB
Status Date:	6/8/1994
Restricted Use:	NO
Funding:	Responsible Party
Latitude:	37.411851428711898
Longitude:	-122.148077287419
APN:	142-18-007
Past Use:	NONE SPECIFIED
Potential COC:	NONE SPECIFIED
Confirmed COC:	NONE SPECIFIED
Potential Description:	NONE SPECIFIED
Alias Name:	STANFORD PARK DIV OF HEWLETT PACKARD
Alias Type:	Alternate Name
Alias Name:	142-18-007
Alias Type:	APN
Alias Name:	CAD009122532
Alias Type:	EPA Identification Number
Alias Name:	110000621131
Alias Type:	EPA (FRS #)

HEWLETT PACKARD (Continued) **S100833463**

Alias Name: 200046
Alias Type: Project Code (Site Code)
Alias Name: 43350081
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: * Cost Recovery Settlements/Decrees
Completed Date: 1993-12-15 00:00:00
Comments: Not reported

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

EMI:
Year: 1987
County Code: 43
Air Basin: SF
Facility ID: 246
Air District Name: BA
SIC Code: 3679
Air District Name: BAY AREA AQMD
Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: 33
Reactive Organic Gases Tons/Yr: 13
Carbon Monoxide Emissions Tons/Yr: 0
NOX - Oxides of Nitrogen Tons/Yr: 2
SOX - Oxides of Sulphur Tons/Yr: 0
Particulate Matter Tons/Yr: 2
Part. Matter 10 Micrometers & Smllr Tons/Yr: 2

Year: 1990
County Code: 43
Air Basin: SF
Facility ID: 246
Air District Name: BA
SIC Code: 3671
Air District Name: BAY AREA AQMD
Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: 14
Reactive Organic Gases Tons/Yr: 8
Carbon Monoxide Emissions Tons/Yr: 0
NOX - Oxides of Nitrogen Tons/Yr: 3
SOX - Oxides of Sulphur Tons/Yr: 0
Particulate Matter Tons/Yr: 3
Part. Matter 10 Micrometers & Smllr Tons/Yr: 3

HEWLETT PACKARD (Continued) **S100833463**

Year:	1993
County Code:	43
Air Basin:	SF
Facility ID:	246
Air District Name:	BA
SIC Code:	3679
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	3
Reactive Organic Gases Tons/Yr:	2
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	1
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	3
Part. Matter 10 Micrometers & Smllr Tons/Yr:	3

Year:	1995
County Code:	43
Air Basin:	SF
Facility ID:	246
Air District Name:	BA
SIC Code:	3679
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	2
Reactive Organic Gases Tons/Yr:	1
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	1
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	3
Part. Matter 10 Micrometers & Smllr Tons/Yr:	1

Year:	1996
County Code:	43
Air Basin:	SF
Facility ID:	246
Air District Name:	BA
SIC Code:	3679
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	2
Reactive Organic Gases Tons/Yr:	1
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	1
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	3
Part. Matter 10 Micrometers & Smllr Tons/Yr:	1

Year:	1997
County Code:	43
Air Basin:	SF
Facility ID:	246
Air District Name:	BA
SIC Code:	3679

HEWLETT PACKARD (Continued) **S100833463**

Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	2
Reactive Organic Gases Tons/Yr:	1
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	1
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	3
Part. Matter 10 Micrometers & Smllr Tons/Yr:	1

Year:	1998
County Code:	43
Air Basin:	SF
Facility ID:	246
Air District Name:	BA
SIC Code:	3679
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	1
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	1999
County Code:	43
Air Basin:	SF
Facility ID:	246
Air District Name:	BA
SIC Code:	5171
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	1
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	2000
County Code:	43
Air Basin:	SF
Facility ID:	246
Air District Name:	BA
SIC Code:	5171
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	1
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0

HEWLETT PACKARD (Continued) **S100833463**

NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0
Year:	2001
County Code:	43
Air Basin:	SF
Facility ID:	246
Air District Name:	BA
SIC Code:	5171
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	2
Reactive Organic Gases Tons/Yr:	1
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0
Year:	2002
County Code:	43
Air Basin:	SF
Facility ID:	246
Air District Name:	BA
SIC Code:	3679
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	2
Reactive Organic Gases Tons/Yr:	1
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0
Year:	2003
County Code:	43
Air Basin:	SF
Facility ID:	246
Air District Name:	BA
SIC Code:	3679
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	1
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0
Year:	2004

HEWLETT PACKARD (Continued) **S100833463**

County Code:	43
Air Basin:	SF
Facility ID:	246
Air District Name:	BA
SIC Code:	3679
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0.811
Reactive Organic Gases Tons/Yr:	0.2945773
Carbon Monoxide Emissions Tons/Yr:	0.01
NOX - Oxides of Nitrogen Tons/Yr:	0.052
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0.003
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0.002928

Year:	2005
County Code:	43
Air Basin:	SF
Facility ID:	246
Air District Name:	BA
SIC Code:	3679
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	.533
Reactive Organic Gases Tons/Yr:	.2244025
Carbon Monoxide Emissions Tons/Yr:	.004
NOX - Oxides of Nitrogen Tons/Yr:	.019
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	2006
County Code:	43
Air Basin:	SF
Facility ID:	246
Air District Name:	BA
SIC Code:	3679
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	.625
Reactive Organic Gases Tons/Yr:	.2244025
Carbon Monoxide Emissions Tons/Yr:	.004
NOX - Oxides of Nitrogen Tons/Yr:	.019
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	2007
County Code:	43
Air Basin:	SF
Facility ID:	246
Air District Name:	BA
SIC Code:	3679
Air District Name:	BAY AREA AQMD

HEWLETT PACKARD (Continued) **S100833463**

Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	1.054
Reactive Organic Gases Tons/Yr:	.2622383
Carbon Monoxide Emissions Tons/Yr:	.082
NOX - Oxides of Nitrogen Tons/Yr:	.283
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	.018
Part. Matter 10 Micrometers & Smllr Tons/Yr:	.017568

Year:	2007
County Code:	43
Air Basin:	SF
Facility ID:	246
Air District Name:	BA
SIC Code:	3679
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	.625
Reactive Organic Gases Tons/Yr:	.2886737
Carbon Monoxide Emissions Tons/Yr:	.004
NOX - Oxides of Nitrogen Tons/Yr:	.012
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

ENVIROSTOR:

Site Type:	State Response
Site Type Detailed:	State Response or NPL
Acres:	50
NPL:	NO
Regulatory Agencies:	RWQCB 2 - San Francisco Bay
Lead Agency:	NONE SPECIFIED
Program Manager:	Not reported
Supervisor:	Referred - Not Assigned
Division Branch:	Berkeley
Facility ID:	43350081
Site Code:	200046
Assembly:	21
Senate:	11
Special Program:	Not reported
Status:	Refer: RWQCB
Status Date:	6/8/1994
Restricted Use:	NO
Site Mgmt. Req.:	NONE SPECIFIED
Funding:	Responsible Party
Latitude:	37.411851428711898
Longitude:	-122.148077287419
APN:	142-18-007
Past Use:	NONE SPECIFIED
Potential COC:	NONE SPECIFIED
Confirmed COC:	NONE SPECIFIED
Potential Description:	NONE SPECIFIED
Alias Name:	STANFORD PARK DIV OF HEWLETT PACKARD
Alias Type:	Alternate Name
Alias Name:	142-18-007

HEWLETT PACKARD (Continued) **S100833463**

Alias Type: APN
Alias Name: CAD009122532
Alias Type: EPA Identification Number
Alias Name: 110000621131
Alias Type: EPA (FRS #)
Alias Name: 200046
Alias Type: Project Code (Site Code)
Alias Name: 43350081
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: * Cost Recovery Settlements/Decrees
Completed Date: 1993-12-15 00:00:00
Comments: Not reported

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

Site Type: Not reported
Site Type Detailed: Tiered Permit
Acres: Not reported
NPL: NO
Regulatory Agencies: NONE SPECIFIED
Lead Agency: NONE SPECIFIED
Program Manager: Not reported
Supervisor: Not reported
Division Branch: Cypress
Facility ID: 71002259
Site Code: Not reported
Assembly: 21
Senate: 11
Special Program: Not reported
Status: Not reported
Status Date: Not reported
Restricted Use: NO
Site Mgmt. Req.: NONE SPECIFIED
Funding: Not reported
Latitude: 37.4128033
Longitude: -122.1486998
APN: NONE SPECIFIED
Past Use: NONE SPECIFIED
Potential COC: NONE SPECIFIED
Confirmed COC: NONE SPECIFIED
Potential Description: NONE SPECIFIED
Alias Name: CAD009122532
Alias Type: EPA Identification Number

Completed Info:
Completed Area Name: Not reported

HEWLETT PACKARD (Continued) **S100833463**

Completed Sub Area Name:	Not reported
Completed Document Type:	Not reported
Completed Date:	Not reported
Comments:	Not reported
Future Area Name:	Not reported
Future Sub Area Name:	Not reported
Future Document Type:	Not reported
Future Due Date:	Not reported
Schedule Area Name:	Not reported
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Not reported
Schedule Due Date:	Not reported
Schedule Revised Date:	Not reported

T104 **HEWLETT PACKARD CO** **RCRA-TSDF** **1000281820**
SSW **1501 PAGE MILL ROAD** **NPL** **CAD009122532**
1/2-1 **PALO ALTO, CA 94303** **CERCLIS**
0.901 mi. **CORRACTS**
4757 ft. **Site 3 of 3 in cluster T** **RCRA-LQG**
FINDS
Relative: **MANIFEST**
Higher **FINANCIAL ASSURANCE**
HWP

Actual:
131 ft.

RCRA-TSDF:

Date form received by agency:	02/26/2008
Facility name:	HEWLETT PACKARD
Facility address:	1501 PAGE MILL ROAD PALO ALTO, CA 94304
EPA ID:	CAD009122532
Contact:	SCOTT G JOHNSON
Contact address:	Not reported Not reported
Contact country:	Not reported
Contact telephone:	(650) 857-5493
Contact email:	SCOTT.JOHNSON4@HP.COM
EPA Region:	09
Land type:	Private
Classification:	TSDF
Description:	Handler is engaged in the treatment, storage or disposal of hazardous waste
TSD commencement date:	Not reported
Classification:	Large Quantity Generator
Description:	Handler: generates 1,000 kg or more of hazardous waste during any calendar month; or generates more than 1 kg of acutely hazardous waste during any calendar month; or generates more than 100 kg of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month; or generates 1 kg or less of acutely hazardous waste during any calendar month, and accumulates more than 1 kg of acutely hazardous waste at any time; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates more than 100 kg of that material at any time

HEWLETT PACKARD CO (Continued) **1000281820**

Owner/Operator Summary:
Owner/operator name: STANFORD LANDS MANAGEMENT
Owner/operator address: 2770 SAND HILL ROAD
MENLO PARK, CA 94025
Owner/operator country: US
Owner/operator telephone: Not reported
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: 01/02/1850
Owner/Op end date: Not reported

Owner/operator name: HEWLETT PACKARD
Owner/operator address: Not reported
Not reported
Owner/operator country: US
Owner/operator telephone: Not reported
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: 01/02/1950
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No
Off-site waste receiver: Commercial status unknown

Universal Waste Summary:
Waste type: Batteries
Accumulated waste on-site: Yes
Generated waste on-site: Not reported

Waste type: Lamps
Accumulated waste on-site: Yes
Generated waste on-site: Not reported

Waste type: Pesticides
Accumulated waste on-site: No
Generated waste on-site: Not reported

Waste type: Thermostats
Accumulated waste on-site: No
Generated waste on-site: Not reported

HEWLETT PACKARD CO (Continued) **1000281820**

Historical Generators:
Date form received by agency: 02/24/2006
Facility name: HEWLETT PACKARD
Classification: Small Quantity Generator

Date form received by agency: 02/24/2006
Facility name: HEWLETT PACKARD
Classification: Large Quantity Generator

Date form received by agency: 02/24/2004
Facility name: HEWLETT PACKARD
Classification: Large Quantity Generator

Date form received by agency: 02/25/2002
Facility name: HEWLETT PACKARD
Classification: Large Quantity Generator

Date form received by agency: 10/12/2000
Facility name: HEWLETT PACKARD
Site name: HEWLETT-PACKARD
Classification: Large Quantity Generator

Date form received by agency: 03/04/1999
Facility name: HEWLETT PACKARD
Site name: HEWLETT-PACKARD
Classification: Large Quantity Generator

Date form received by agency: 09/01/1996
Facility name: HEWLETT PACKARD
Site name: HEWLETT PACKARD STANFORD PK DIV
Classification: Large Quantity Generator

Date form received by agency: 03/25/1996
Facility name: HEWLETT PACKARD
Site name: HEWLETT-PACKARD COMPANY
Classification: Large Quantity Generator

Date form received by agency: 03/28/1994
Facility name: HEWLETT PACKARD
Site name: HEWLETT PACKARD CO
Classification: Large Quantity Generator

Date form received by agency: 02/28/1992
Facility name: HEWLETT PACKARD
Site name: HEWLETT PACKARD STANFORD PARK
Classification: Large Quantity Generator

Date form received by agency: 04/14/1990
Facility name: HEWLETT PACKARD
Site name: HEWLETT PACKARD STANFORD PARK DIV
Classification: Large Quantity Generator

Date form received by agency: 04/07/1986
Facility name: HEWLETT PACKARD
Site name: HEWLETT PACKARD STANFORD PK DIV
Classification: Conditionally Exempt Small Quantity Generator

HEWLETT PACKARD CO (Continued) **1000281820**

Hazardous Waste Summary:

Waste code: D001
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Waste code: D002
Waste name: A WASTE WHICH HAS A PH OF LESS THAN 2 OR GREATER THAN 12.5 IS CONSIDERED TO BE A CORROSIVE HAZARDOUS WASTE. SODIUM HYDROXIDE, A CAUSTIC SOLUTION WITH A HIGH PH, IS OFTEN USED BY INDUSTRIES TO CLEAN OR DEGREASE PARTS. HYDROCHLORIC ACID, A SOLUTION WITH A LOW PH, IS USED BY MANY INDUSTRIES TO CLEAN METAL PARTS PRIOR TO PAINTING. WHEN THESE CAUSTIC OR ACID SOLUTIONS BECOME CONTAMINATED AND MUST BE DISPOSED, THE WASTE WOULD BE A CORROSIVE HAZARDOUS WASTE.

Waste code: D003
Waste name: A MATERIAL IS CONSIDERED TO BE A REACTIVE HAZARDOUS WASTE IF IT IS NORMALLY UNSTABLE, REACTS VIOLENTLY WITH WATER, GENERATES TOXIC GASES WHEN EXPOSED TO WATER OR CORROSIVE MATERIALS, OR IF IT IS CAPABLE OF DETONATION OR EXPLOSION WHEN EXPOSED TO HEAT OR A FLAME. ONE EXAMPLE OF SUCH WASTE WOULD BY WASTE GUNPOWDER.

Waste code: D004
Waste name: ARSENIC

Waste code: D007
Waste name: CHROMIUM

Waste code: D008
Waste name: LEAD

Waste code: D009
Waste name: MERCURY

Waste code: D021
Waste name: CHLOROBENZENE

Waste code: D022
Waste name: CHLOROFORM

Waste code: F001
Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS USED IN DEGREASING: TETRACHLOROETHYLENE, TRICHLOROETHYLENE, METHYLENE CHLORIDE, 1,1,1-TRICHLOROETHANE, CARBON TETRACHLORIDE, AND CHLORINATED FLUOROCARBONS; ALL SPENT SOLVENT MIXTURES/BLENDS USED IN DEGREASING CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F002, F004, AND F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste code: F002
Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE,

HEWLETT PACKARD CO (Continued) **1000281820**

CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2-TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE LISTED IN F001, F004, OR F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste code: F003
Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NON-HALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS, AND, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste code: F005
Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste code: U134
Waste name: HYDROFLUORIC ACID (C,T)

Waste code: U213
Waste name: FURAN, TETRAHYDRO-(I)

Biennial Reports:

Last Biennial Reporting Year: 2009

Annual Waste Handled:
Waste code: D001
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.
Amount (Lbs): 2533

Waste code: D002
Waste name: A WASTE WHICH HAS A PH OF LESS THAN 2 OR GREATER THAN 12.5 IS CONSIDERED TO BE A CORROSIVE HAZARDOUS WASTE. SODIUM HYDROXIDE, A CAUSTIC SOLUTION WITH A HIGH PH, IS OFTEN USED BY INDUSTRIES TO CLEAN OR DEGREASE PARTS. HYDROCHLORIC ACID, A SOLUTION WITH A LOW PH, IS USED BY MANY INDUSTRIES TO CLEAN METAL PARTS PRIOR TO PAINTING. WHEN THESE CAUSTIC OR ACID SOLUTIONS BECOME CONTAMINATED AND MUST BE DISPOSED, THE WASTE WOULD BE A CORROSIVE HAZARDOUS WASTE.

HEWLETT PACKARD CO (Continued) **1000281820**

Amount (Lbs): 874

Waste code: D003
Waste name: A MATERIAL IS CONSIDERED TO BE A REACTIVE HAZARDOUS WASTE IF IT IS NORMALLY UNSTABLE, REACTS VIOLENTLY WITH WATER, GENERATES TOXIC GASES WHEN EXPOSED TO WATER OR CORROSIVE MATERIALS, OR IF IT IS CAPABLE OF DETONATION OR EXPLOSION WHEN EXPOSED TO HEAT OR A FLAME. ONE EXAMPLE OF SUCH WASTE WOULD BY WASTE GUNPOWDER.
Amount (Lbs): 21

Waste code: D004
Waste name: ARSENIC
Amount (Lbs): 14171

Waste code: D007
Waste name: CHROMIUM
Amount (Lbs): 10119

Waste code: D008
Waste name: LEAD
Amount (Lbs): 31

Waste code: D009
Waste name: MERCURY
Amount (Lbs): 9

Waste code: D021
Waste name: CHLOROBENZENE
Amount (Lbs): 57

Waste code: D022
Waste name: CHLOROFORM
Amount (Lbs): 374

Waste code: F001
Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS USED IN DEGREASING: TETRACHLOROETHYLENE, TRICHLOROETHYLENE, METHYLENE CHLORIDE, 1,1,1-TRICHLOROETHANE, CARBON TETRACHLORIDE, AND CHLORINATED FLUOROCARBONS; ALL SPENT SOLVENT MIXTURES/BLENDS USED IN DEGREASING CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F002, F004, AND F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
Amount (Lbs): 17710

Waste code: F002
Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2-TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE LISTED IN F001, F004, OR F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
Amount (Lbs): 18236

HEWLETT PACKARD CO (Continued) **1000281820**

Waste code: F003
Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NON-HALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS, AND, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
Amount (Lbs): 5294

Waste code: F005
Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
Amount (Lbs): 957

Waste code: U134
Waste name: HYDROFLUORIC ACID (C,T)
Amount (Lbs): 45

Waste code: U213
Waste name: FURAN, TETRAHYDRO-(I)
Amount (Lbs): 57

Corrective Action Summary:

Event date: 01/01/1982
Event: Stabilization Measures Implemented, Primary measure is source removal and/or treatment (e.g., soil or waste excavation, in-situ soil treatment, off-site treatment).

Event date: 01/01/1982
Event: Stabilization Measures Implemented, Groundwater extraction and treatment (e.g., to achieve groundwater containment, to achieve MCL).

Event date: 07/01/1984
Event: CA Prioritization, Facility or area was assigned a high corrective action priority.

Event date: 07/01/1984
Event: CA074HI

Event date: 07/01/1984
Event: CA029WQ

Event date: 07/01/1984
Event: CA049PA

Event date: 08/01/1984
Event: CA049SI

HEWLETT PACKARD CO (Continued) **1000281820**

Event date:	03/19/1986
Event:	CMS Imposition
Event date:	03/19/1986
Event:	RFI Imposition
Event date:	12/31/1988
Event:	Stabilization Construction Completed
Event date:	06/04/1990
Event:	CA036WQ
Event date:	04/30/1994
Event:	Current Human Exposures under Control, Yes, Current Human Exposures Under Control has been verified. Based on a review of information contained in the EI determination, current human exposures are expected to be under control at the facility under current and reasonably expected conditions. This determination will be re-evaluated when the Agency/State becomes aware of significant changes at the facility.
Event date:	07/27/1994
Event:	Stabilization Measures Evaluation,This facility is not amenable to stabilization activity at the present time for reasons other than 1- it appears to be technically infeasible or inappropriate (NF) or 2- there is a lack of technical information (IN). Reasons for this conclusion may be the status of closure at the facility, the degree of risk, timing considerations, the status of corrective action work at the facility, or other administrative considerations.
Event date:	07/27/1994
Event:	CA Prioritization, Facility or area was assigned a medium corrective action priority.
Event date:	08/17/1994
Event:	Date For Remedy Selection (CM Imposed)
Event date:	08/17/1994
Event:	RFI Approved
Event date:	08/17/1994
Event:	CMS Approved
Event date:	08/17/1994
Event:	CMI Workplan Approved
Event date:	08/17/1994
Event:	Corrective Measures Design Approved
Event date:	02/28/1996
Event:	Certification Of Remedy Completion Or Construction Completion
Event date:	04/09/1997
Event:	Igration of Contaminated Groundwater under Control, Yes, Migration of Contaminated Groundwater Under Control has been verified. Based on a review of information contained in the EI determination, it has been determined that migration of contaminated groundwater is under control

HEWLETT PACKARD CO (Continued) **1000281820**

at the facility. Specifically, this determination indicates that the migration of contaminated groundwater is under control, and that monitoring will be conducted to confirm that contaminated groundwater remains within the existing area of contaminated groundwater. This determination will be re-evaluated when the Agency becomes aware of significant changes at the facility.

Event date: 06/01/1997
Event: RFA Completed, Assessment was an RFA.

Event date: 09/19/1997
Event: CA Responsibility Referred To A Non-RCRA Federal Authority

Event date: 12/28/2000
Event: Igration of Contaminated Groundwater under Control, Yes, Migration of Contaminated Groundwater Under Control has been verified. Based on a review of information contained in the EI determination, it has been determined that migration of contaminated groundwater is under control at the facility. Specifically, this determination indicates that the migration of contaminated groundwater is under control, and that monitoring will be conducted to confirm that contaminated groundwater remains within the existing area of contaminated groundwater. This determination will be re-evaluated when the Agency becomes aware of significant changes at the facility.

Event date: 12/28/2000
Event: Current Human Exposures under Control, More information is needed to make a determination.

Event date: 09/25/2002
Event: Current Human Exposures under Control, Yes, Current Human Exposures Under Control has been verified. Based on a review of information contained in the EI determination, current human exposures are expected to be under control at the facility under current and reasonably expected conditions. This determination will be re-evaluated when the Agency/State becomes aware of significant changes at the facility.

Event date: 09/22/2009
Event: CA800YE

Facility Has Received Notices of Violations:
Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 05/14/2008
Date achieved compliance: 07/15/2008
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 05/14/2008
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported

HEWLETT PACKARD CO (Continued) **1000281820**

Area of violation: Generators - General
Date violation determined: 03/29/2005
Date achieved compliance: 05/02/2005
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 03/29/2005
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - General
Date violation determined: 03/13/1991
Date achieved compliance: 04/30/1991
Violation lead agency: State
Enforcement action: INITIAL 3008(A) COMPLIANCE
Enforcement action date: 04/18/1991
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 800
Final penalty amount: 800
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - General
Date violation determined: 05/23/1989
Date achieved compliance: 09/01/1989
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 07/07/1989
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - General
Date violation determined: 12/23/1986
Date achieved compliance: 09/01/1989
Violation lead agency: State
Enforcement action: REFERRAL TO ATTORNEY GENERAL
Enforcement action date: 05/31/1988
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - Manifest/Records/Reporting

HEWLETT PACKARD CO (Continued) **1000281820**

Date violation determined: 12/23/1986
Date achieved compliance: 05/23/1989
Violation lead agency: State
Enforcement action: REFERRAL TO ATTORNEY GENERAL
Enforcement action date: 05/31/1988
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - Closure/Post-Closure
Date violation determined: 12/23/1986
Date achieved compliance: 05/23/1989
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 07/31/1987
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - Manifest/Records/Reporting
Date violation determined: 12/23/1986
Date achieved compliance: 05/23/1989
Violation lead agency: State
Enforcement action: INITIAL 3008(A) COMPLIANCE
Enforcement action date: 04/22/1988
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - Closure/Post-Closure
Date violation determined: 12/23/1986
Date achieved compliance: 05/23/1989
Violation lead agency: State
Enforcement action: INITIAL 3008(A) COMPLIANCE
Enforcement action date: 04/22/1988
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - General
Date violation determined: 12/23/1986

HEWLETT PACKARD CO (Continued) **1000281820**

Date achieved compliance: 09/01/1989
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 07/31/1987
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - Manifest/Records/Reporting
Date violation determined: 12/23/1986
Date achieved compliance: 05/23/1989
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 07/31/1987
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - Closure/Post-Closure
Date violation determined: 12/23/1986
Date achieved compliance: 05/23/1989
Violation lead agency: State
Enforcement action: REFERRAL TO ATTORNEY GENERAL
Enforcement action date: 05/31/1988
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - General
Date violation determined: 12/23/1986
Date achieved compliance: 09/01/1989
Violation lead agency: State
Enforcement action: INITIAL 3008(A) COMPLIANCE
Enforcement action date: 04/22/1988
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Evaluation Action Summary:
Evaluation date: 05/14/2008
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General

HEWLETT PACKARD CO (Continued) **1000281820**

Date achieved compliance: 07/15/2008
Evaluation lead agency: State

Evaluation date: 03/29/2005
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 05/02/2005
Evaluation lead agency: State Contractor/Grantee

Evaluation date: 06/04/1991
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 03/13/1991
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD - General
Date achieved compliance: 04/30/1991
Evaluation lead agency: State

Evaluation date: 02/07/1991
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 05/23/1989
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD - General
Date achieved compliance: 09/01/1989
Evaluation lead agency: State

Evaluation date: 05/09/1989
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 12/23/1986
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD - Closure/Post-Closure
Date achieved compliance: 05/23/1989
Evaluation lead agency: State

Evaluation date: 12/23/1986
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD - Manifest/Records/Reporting
Date achieved compliance: 05/23/1989
Evaluation lead agency: State

Evaluation date: 12/23/1986
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD - General
Date achieved compliance: 09/01/1989
Evaluation lead agency: State

HEWLETT PACKARD CO (Continued) **1000281820**

CERCLIS:
Site ID: 0901147
Federal Facility: Not a Federal Facility
NPL Status: Removed from Proposed NPL
Non NPL Status: Not reported

CERCLIS Site Contact Name(s):
Contact Name: Karen Jurist
Contact Tel: (415) 972-3219
Contact Title: Site Assessment Manager (SAM)

Contact Name: Jeff Inglis
Contact Tel: (415) 972-3095
Contact Title: Site Assessment Manager (SAM)

Contact Name: Raymond Chavira
Contact Tel: (415) 947-4218
Contact Title: Remedial Project Manager (RPM)

Contact Name: Carl Brickner
Contact Tel: (415) 972-3814
Contact Title: Site Assessment Manager (SAM)

CERCLIS Site Alias Name(s):
Alias Name: HEWLETT PACKARD STANFORD PARK DIV
Alias Address: 1501 PAGE MILL ROAD
PALO ALTO, CA 94304
Alias Name: HEWLETT PACKARD - 1501 PAGE MILL ROAD
Alias Address: Not reported
CA
Alias Name: HEWLETT PACKARD/1501
Alias Address: Not reported
CA
Alias Name: HEWLETT-PACKARD
Alias Address: 1501 PAGE MILL RD
PALO ALTO, CA 94304
Site Description: HEWLETT-PACKARD MFG'S OPTICAL INSTRU AT A PLT IN PALO ALTO, CA,SURROUNDED BY INDUS/BUSINESS AREAS.MONITORING WELLS ON- SITE CONTAMINATED WITH SOLVENTS BELIEVED TO HAVE RESULTED FRLEAKING TANKS.56,000 USE GRD WTR AS SOURCE OF DRK WTR.

CERCLIS Assessment History:
Action: DISCOVERY
Date Started: Not reported
Date Completed: 08/01/81
Priority Level: Not reported

Action: PRELIMINARY ASSESSMENT
Date Started: Not reported
Date Completed: 07/01/84
Priority Level: Higher priority for further assessment

Action: SITE INSPECTION
Date Started: Not reported
Date Completed: 08/01/84
Priority Level: NFRAP-Site does not qualify for the NPL based on existing information

HEWLETT PACKARD CO (Continued) **1000281820**

Action: HAZARD RANKING SYSTEM PACKAGE
Date Started: Not reported
Date Completed: 08/01/84
Priority Level: Not reported

Action: PROPOSAL TO NATIONAL PRIORITIES LIST
Date Started: Not reported
Date Completed: 10/15/84
Priority Level: Not reported

Action: STATE ORDER
Date Started: Not reported
Date Completed: 05/17/89
Priority Level: Not reported

Action: REMOVED FROM THE PROPOSED NATIONAL PRIORITIES LIST
Date Started: Not reported
Date Completed: 10/04/89
Priority Level: Not reported

Action: REMOVAL ASSESSMENT
Date Started: 08/14/90
Date Completed: 08/14/90
Priority Level: Not reported

Action: ADMINISTATIVE/VOLUNTARY COST RECOVERY
Date Started: Not reported
Date Completed: 06/18/92
Priority Level: Not reported

Action: REMOVAL ASSESSMENT
Date Started: Not reported
Date Completed: 12/29/92
Priority Level: Not reported

Action: INITIAL REMEDIAL MEASURE
Date Started: 04/01/83
Date Completed: Not reported
Priority Level: Not reported

Action: POTENTIALLY RESPONSIBLE PARTY REMEDIAL INVESTIGATION/FEASIBILITY STUDY
Date Started: 05/18/89
Date Completed: Not reported
Priority Level: Not reported

CORRACTS:

EPA ID: CAD009122532
EPA Region: 9
Area Name: ENTIRE FACILITY
Actual Date: 1/1/1982
Action: CA600SR - Stabilization Measures Implemented, Primary measure is source removal and/or treatment
NAICS Code(s): 541711 541519

HEWLETT PACKARD CO (Continued) **1000281820**

Other Computer Related Services
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: CAD009122532
EPA Region: 9
Area Name: ENTIRE FACILITY
Actual Date: 1/1/1982
Action: CA600GW - Stabilization Measures Implemented, Groundwater extraction and treatment
NAICS Code(s): 541711 541519
Other Computer Related Services
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: CAD009122532
EPA Region: 9
Area Name: ENTIRE FACILITY
Actual Date: 2/28/1996
Action: CA550 - Certification Of Remedy Completion Or Construction Completion
NAICS Code(s): 541711 541519
Other Computer Related Services
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: CAD009122532
EPA Region: 9
Area Name: ENTIRE FACILITY
Actual Date: 3/19/1986
Action: CA250 - CMS Imposition
NAICS Code(s): 541711 541519
Other Computer Related Services
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: CAD009122532
EPA Region: 9
Area Name: ENTIRE FACILITY
Actual Date: 3/19/1986
Action: CA100 - RFI Imposition
NAICS Code(s): 541711 541519
Other Computer Related Services
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: CAD009122532
EPA Region: 9
Area Name: ENTIRE FACILITY
Actual Date: 4/9/1997
Action: CA750YE - Migration of Contaminated Groundwater under Control, Yes, Migration of Contaminated Groundwater Under Control has been verified
NAICS Code(s): 541711 541519
Other Computer Related Services
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: CAD009122532

HEWLETT PACKARD CO (Continued) **1000281820**

EPA Region: 9
Area Name: ENTIRE FACILITY
Actual Date: 4/30/1994
Action: CA725YE - Current Human Exposures Under Control, Yes, Current Human Exposures Under Control has been verified
NAICS Code(s): 541711 541519
Other Computer Related Services
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: CAD009122532
EPA Region: 9
Area Name: ENTIRE FACILITY
Actual Date: 6/1/1997
Action: CA050RF - RFA Completed, Assessment was an RFA
NAICS Code(s): 541711 541519
Other Computer Related Services
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: CAD009122532
EPA Region: 9
Area Name: ENTIRE FACILITY
Actual Date: 6/4/1990
Action: CA036WQ
NAICS Code(s): 541711 541519
Other Computer Related Services
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: CAD009122532
EPA Region: 9
Area Name: ENTIRE FACILITY
Actual Date: 7/1/1984
Action: CA074HI
NAICS Code(s): 541711 541519
Other Computer Related Services
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: CAD009122532
EPA Region: 9
Area Name: ENTIRE FACILITY
Actual Date: 7/1/1984
Action: CA029WQ
NAICS Code(s): 541711 541519
Other Computer Related Services
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: CAD009122532
EPA Region: 9
Area Name: ENTIRE FACILITY
Actual Date: 7/1/1984
Action: CA049PA
NAICS Code(s): 541711 541519
Other Computer Related Services

HEWLETT PACKARD CO (Continued) **1000281820**

Original schedule date: 08/22/1989
Schedule end date: Not reported

EPA ID: CAD009122532
EPA Region: 9
Area Name: ENTIRE FACILITY
Actual Date: 7/1/1984
Action: CA075HI - CA Prioritization, Facility or area was assigned a high corrective action priority
NAICS Code(s): 541711 541519
Other Computer Related Services
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: CAD009122532
EPA Region: 9
Area Name: ENTIRE FACILITY
Actual Date: 7/27/1994
Action: CA225NR - Stabilization Measures Evaluation, This facility is, not amenable to stabilization activity at the, present time for reasons other than (1) it appears to be technically, infeasible or inappropriate (NF) or (2) there is a lack of technical, information (IN). Reasons for this conclusion may be the status of, closure at the facility, the degree of risk, timing considerations, the status of corrective action work at the facility, or other, administrative considerations
NAICS Code(s): 541711 541519
Other Computer Related Services
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: CAD009122532
EPA Region: 9
Area Name: ENTIRE FACILITY
Actual Date: 7/27/1994
Action: CA075ME - CA Prioritization, Facility or area was assigned a medium corrective action priority
NAICS Code(s): 541711 541519
Other Computer Related Services
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: CAD009122532
EPA Region: 9
Area Name: ENTIRE FACILITY
Actual Date: 8/1/1984
Action: CA049SI
NAICS Code(s): 541711 541519
Other Computer Related Services
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: CAD009122532
EPA Region: 9
Area Name: ENTIRE FACILITY
Actual Date: 8/17/1994
Action: CA500 - CMI Workplan Approved

HEWLETT PACKARD CO (Continued) **1000281820**

NAICS Code(s): 541711 541519
Other Computer Related Services
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: CAD009122532
EPA Region: 9
Area Name: ENTIRE FACILITY
Actual Date: 8/17/1994
Action: CA400 - Date For Remedy Selection (CM Imposed)
NAICS Code(s): 541711 541519
Other Computer Related Services
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: CAD009122532
EPA Region: 9
Area Name: ENTIRE FACILITY
Actual Date: 8/17/1994
Action: CA200 - RFI Approved
NAICS Code(s): 541711 541519
Other Computer Related Services
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: CAD009122532
EPA Region: 9
Area Name: ENTIRE FACILITY
Actual Date: 8/17/1994
Action: CA350 - CMS Approved
NAICS Code(s): 541711 541519
Other Computer Related Services
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: CAD009122532
EPA Region: 9
Area Name: ENTIRE FACILITY
Actual Date: 8/17/1994
Action: CA450 - Corrective Measures Design Approved
NAICS Code(s): 541711 541519
Other Computer Related Services
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: CAD009122532
EPA Region: 9
Area Name: ENTIRE FACILITY
Actual Date: 9/19/1997
Action: CA210 - CA Responsibility Referred To A Non-RCRA Federal Authority
NAICS Code(s): 541711 541519
Other Computer Related Services
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: CAD009122532
EPA Region: 9

HEWLETT PACKARD CO (Continued) **1000281820**

Area Name: ENTIRE FACILITY
Actual Date: 9/22/2009
Action: CA800YE
NAICS Code(s): 541711 541519
Other Computer Related Services
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: CAD009122532
EPA Region: 9
Area Name: ENTIRE FACILITY
Actual Date: 9/25/2002
Action: CA725YE - Current Human Exposures Under Control, Yes, Current Human Exposures Under Control has been verified
NAICS Code(s): 541711 541519
Other Computer Related Services
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: CAD009122532
EPA Region: 9
Area Name: ENTIRE FACILITY
Actual Date: 12/28/2000
Action: CA725IN - Current Human Exposures Under Control, More information is needed to make a determination
NAICS Code(s): 541711 541519
Other Computer Related Services
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: CAD009122532
EPA Region: 9
Area Name: ENTIRE FACILITY
Actual Date: 12/28/2000
Action: CA750YE - Migration of Contaminated Groundwater under Control, Yes, Migration of Contaminated Groundwater Under Control has been verified
NAICS Code(s): 541711 541519
Other Computer Related Services
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: CAD009122532
EPA Region: 9
Area Name: ENTIRE FACILITY
Actual Date: 12/31/1988
Action: CA650 - Stabilization Construction Completed
NAICS Code(s): 541711 541519
Other Computer Related Services
Original schedule date: Not reported
Schedule end date: Not reported

FINDS:

Registry ID: 110000621131

Environmental Interest/Information System
California Department of Toxic Substances Control EnviroStor System

HEWLETT PACKARD CO (Continued) **1000281820**

(DTSC-EnviroStor) is an online search and Geographic Information System (GIS) tool for identifying sites that have known contamination or sites for which there may be reasons to investigate further. The EnviroStor database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites.

NCDB (National Compliance Data Base) supports implementation of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) and the Toxic Substances Control Act (TSCA). The system tracks inspections in regions and states with cooperative agreements, enforcement actions, and settlements.

The NEI (National Emissions Inventory) database contains information on stationary and mobile sources that emit criteria air pollutants and their precursors, as well as hazardous air pollutants (HAPs).

California Hazardous Waste Tracking System - Datamart (HWTS-DATAMART) provides California with information on hazardous waste shipments for generators, transporters, and treatment, storage, and disposal facilities.

US EPA TRIS (Toxics Release Inventory System) contains information from facilities on the amounts of over 300 listed toxic chemicals that these facilities release directly to air, water, land, or that are transported off-site.

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

CERCLIS (Comprehensive Environmental Response, Compensation, and Liability Information System) is the Superfund database that is used to support management in all phases of the Superfund program. The system contains information on all aspects of hazardous waste sites, including an inventory of sites, planned and actual site activities, and financial information.

NY MANIFEST:

EPA ID:	CAD009122532
Country:	USA
Mailing Name:	HEWLETT PACKARD
Mailing Contact:	HEWLETT PACKARD
Mailing Address:	1651 PAGE MILL ROAD
Mailing Address 2:	Not reported
Mailing City:	PALO ALTO
Mailing State:	CA
Mailing Zip:	94303
Mailing Zip4:	Not reported
Mailing Country:	USA
Mailing Phone:	415-857-8592

HEWLETT PACKARD CO (Continued) **1000281820**

Document ID:	NYA5048307
Manifest Status:	Completed after the designated time period for a TSDF to get a copy to the DEC
Trans1 State ID:	902617
Trans2 State ID:	74492BNY
Generator Ship Date:	880323
Trans1 Recv Date:	880323
Trans2 Recv Date:	Not reported
TSD Site Recv Date:	880408
Part A Recv Date:	880331
Part B Recv Date:	880418
Generator EPA ID:	CAD009122532
Trans1 EPA ID:	NYD980769947
Trans2 EPA ID:	Not reported
TSDF ID:	NYD000632372
Waste Code:	D003 - NON-LISTED REACTIVE WASTES
Quantity:	00080
Units:	G - Gallons (liquids only)* (8.3 pounds)
Number of Containers:	004
Container Type:	DM - Metal drums, barrels
Handling Method:	T Chemical, physical, or biological treatment.
Specific Gravity:	100
Year:	88
Manifest Tracking Num:	Not reported
Import Ind:	Not reported
Export Ind:	Not reported
Discr Quantity Ind:	Not reported
Discr Type Ind:	Not reported
Discr Residue Ind:	Not reported
Discr Partial Reject Ind:	Not reported
Discr Full Reject Ind:	Not reported
Manifest Ref Num:	Not reported
Alt Fac RCRA Id:	Not reported
Alt Fac Sign Date:	Not reported
Mgmt Method Type Code:	Not reported

Document ID:	NYA8012889
Manifest Status:	Completed copy
Trans1 State ID:	000000000
Trans2 State ID:	0000000
Generator Ship Date:	880926
Trans1 Recv Date:	880926
Trans2 Recv Date:	Not reported
TSD Site Recv Date:	881006
Part A Recv Date:	881004
Part B Recv Date:	881014
Generator EPA ID:	CAD009122532
Trans1 EPA ID:	NYD980769947
Trans2 EPA ID:	Not reported
TSDF ID:	NYD000632372
Waste Code:	D003 - NON-LISTED REACTIVE WASTES
Quantity:	00080
Units:	P - Pounds
Number of Containers:	008
Container Type:	DM - Metal drums, barrels
Handling Method:	T Chemical, physical, or biological treatment.
Specific Gravity:	100

HEWLETT PACKARD CO (Continued) **1000281820**

Year: 88
Manifest Tracking Num: Not reported
Import Ind: Not reported
Export Ind: Not reported
Discr Quantity Ind: Not reported
Discr Type Ind: Not reported
Discr Residue Ind: Not reported
Discr Partial Reject Ind: Not reported
Discr Full Reject Ind: Not reported
Manifest Ref Num: Not reported
Alt Fac RCRA Id: Not reported
Alt Fac Sign Date: Not reported
Mgmt Method Type Code: Not reported

FINANCIAL ASSURANCE:
EPA ID Number: CAD009122532
Closure Mechanism: FT
Closure Amount: 79,883
Post Clousure Mechanism: Not reported
Post Clousure Amount: Not reported
Corrective Action Mechanism: Not reported
Corrective Action Amount: Not reported
Sudden Mecahanism Type: Not reported
Sudden Mecahanism Amount: Not reported
Non Sudden Mecahanism Type: Not reported
Non Sudden Mecahanism Amount: Not reported

HWP:
EPA Id: CAD009122532
Latitude: 37.414144
Longitude: -122.149682
Facility Type: HAZ WASTE - NON-OPERATING
Cleanup Status: Not reported
Region: BERKELEY; STANDARDIZED PERMIT & CORRECTIVE ACTION
Permit Maintenance Lead: Not reported
Permit Renewal Lead: Not reported
Corrective Action Lead: Not reported
Supervisor: Not reported
Site Code: Not reported
Assembly District: Not reported
Senate District: Not reported
Public Information Officer: Not reported
Facility Status: Not reported
Site History: Not reported

HWP:
EPA Id: CAD009122532
Unit Names: CONTAIN1, TANKSTR1, TANKTRT1
Event Description: INTENDS/CLOSED ALL WASTE HANDLING FACILITY
Actual Date: 1992-01-29 00:00:00
Doc Comments: Not reported

EPA Id: CAD009122532
Unit Names: CONTAIN1, TANKSTR1, TANKTRT1
Event Description: Part B Call-In
Actual Date: 1988-05-01 00:00:00
Doc Comments: Not reported

HEWLETT PACKARD CO (Continued) **1000281820**

EPA Id: CAD009122532
Unit Names: CONTAIN1, TANKSTR1, TANKTRT1
Event Description: Initial Submittal
Actual Date: 1980-11-11 00:00:00
Doc Comments: Not reported

HWP:
EPA Id: CAD009122532
Unit Names: CONTAIN1, TANKSTR1, TANKTRT1
Event Description: Plan Approved - Closure
Actual Date: 1991-03-19 00:00:00
Doc Comments: Not reported

EPA Id: CAD009122532
Unit Names: CONTAIN1, TANKSTR1
Event Description: Notice of Deficiency - Closure Plan
Actual Date: 1993-08-16 00:00:00
Doc Comments: Not reported

EPA Id: CAD009122532
Unit Names: CONTAIN1, TANKSTR1
Event Description: Plan Approved - Closure
Actual Date: 1994-01-10 00:00:00
Doc Comments: Not reported

EPA Id: CAD009122532
Unit Names: CONTAIN1, TANKSTR1
Event Description: Public Notice - Closure
Actual Date: 1993-11-05 00:00:00
Doc Comments: Not reported

EPA Id: CAD009122532
Unit Names: CONTAIN1, TANKSTR1
Event Description: Closure Notice Received
Actual Date: 1993-09-29 00:00:00
Doc Comments: Not reported

EPA Id: CAD009122532
Unit Names: CONTAIN1, TANKSTR1, TANKTRT1
Event Description: Public Notice - Closure
Actual Date: 1990-07-06 00:00:00
Doc Comments: Not reported

EPA Id: CAD009122532
Unit Names: CONTAIN1, TANKSTR1, TANKTRT1
Event Description: Receive Closure Certification
Actual Date: 1994-09-01 00:00:00
Doc Comments: Not reported

EPA Id: CAD009122532
Unit Names: CONTAIN1, TANKSTR1, TANKTRT1
Event Description: Clean Closure Acceptable
Actual Date: 1994-09-06 00:00:00
Doc Comments: Not reported

105
SSW
1/2-1
0.912 mi.
4814 ft.

LOCKHEED MISSILES
3251 HANOVER ST
PALO ALTO, CA

WDS **S103879417**
NPDES **N/A**
LUST
HIST LUST
HWP

Relative:
Higher

Actual:
122 ft.

CA WDS:

Facility ID:	San Francisco Bay 43I006606
Facility Type:	Industrial - Facility that treats and/or disposes of liquid or semisolid wastes from any servicing, producing, manufacturing or processing operation of whatever nature, including mining, gravel washing, geothermal operations, air conditioning, ship building and repairing, oil production, storage and disposal operations, water pumping.
Facility Status:	Active - Any facility with a continuous or seasonal discharge that is under Waste Discharge Requirements.
NPDES Number:	CAS000001 The 1st 2 characters designate the state. The remaining 7 are assigned by the Regional Board
Subregion:	2
Facility Telephone:	4087420195
Facility Contact:	KORBUS K M
Agency Name:	LOCKHEED MARTIN MISSILES & SPA
Agency Address:	PO Box 3504
Agency City,St,Zip:	Sunnyvale 940883504
Agency Contact:	WESTON MARK
Agency Telephone:	4087420164
Agency Type:	Private
SIC Code:	0
SIC Code 2:	Not reported
Primary Waste:	Not reported
Primary Waste Type:	Not reported
Secondary Waste:	Not reported
Secondary Waste Type:	Not reported
Design Flow:	0
Baseline Flow:	0
Reclamation:	Not reported
POTW:	Not reported
Treat To Water:	Minor Threat to Water Quality. A violation of a regional board order should cause a relatively minor impairment of beneficial uses compared to a major or minor threat. Not: All nurds without a TTWQ will be considered a minor threat to water quality unless coded at a higher Level. A Zero (0) may be used to code those NURDS that are found to represent no threat to water quality.
Complexity:	Category C - Facilities having no waste treatment systems, such as cooling water dischargers or thosewho must comply through best management practices, facilities with passive waste treatment and disposal systems, such as septic systems with subsurface disposal, or dischargers having waste storage systems with land disposal such as dairy waste ponds.

NPDES:

Npdes Number:	Not reported
Facility Status:	Terminated
Agency Id:	27026
Region:	2
Regulatory Measure Id:	183858
Order No:	97-03-DWQ
Regulatory Measure Type:	Storm water industrial
Place Id:	238489

LOCKHEED MISSILES (Continued) **S103879417**

WDID:	2 43I006606
Program Type:	INDSTW
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	1992-04-30 00:00:00
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	2007-05-16 00:00:00
Discharge Name:	Lockheed Martin Missiles & Space
Discharge Address:	Po Box 3504 Ms B157 9k2s
Discharge City:	Sunnyvale
Discharge State:	CA
Discharge Zip:	94088-3504

LUST:

Region:	STATE
Global Id:	T0608501683
Latitude:	37.411593
Longitude:	-122.144228
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	2004-12-22 00:00:00
Lead Agency:	SANTA CLARA COUNTY LOP
Case Worker:	UST
Local Agency:	SANTA CLARA COUNTY LOP
RB Case Number:	Not reported
LOC Case Number:	Not reported
File Location:	Stored electronically as an E-file
Potential Media Affect:	Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern:	Diesel
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

HIST LUST SANTA CLARA:

Region:	SANTA CLARA
Region Code:	2
SCVWD ID:	06S3W13M03
Oversite Agency:	SCVWD
Date Listed:	1994-01-14 00:00:00
Closed Date:	2004-12-22 00:00:00

HWP:

EPA Id:	CAD009129354
Latitude:	37.409772
Longitude:	-122.14659
Facility Type:	HAZ WASTE - NON-OPERATING
Cleanup Status:	Not reported
Region:	BERKELEY; STANDARDIZED PERMIT & CORRECTIVE ACTION
Permit Maintenance Lead:	Not reported
Permit Renewal Lead:	Not reported
Corrective Action Lead:	Not reported
Supervisor:	Not reported
Site Code:	200558
Assembly District:	21
Senate District:	11
Public Information Officer:	Not reported
Facility Status:	Not reported

LOCKHEED MISSILES (Continued) **S103879417**

Site History: Not reported

HWP:
EPA Id: CAD009129354
Unit Names: CONTAIN1
Event Description: Closure Notice Received
Actual Date: 1994-10-30 00:00:00
Doc Comments: Not reported

EPA Id: CAD009129354
Unit Names: CONTAIN1
Event Description: Clean Closure Acceptable
Actual Date: 1995-01-10 00:00:00
Doc Comments: Not reported

EPA Id: CAD009129354
Unit Names: CONTAIN1
Event Description: Closure Plan Requested
Actual Date: 1994-11-09 00:00:00
Doc Comments: Not reported

EPA Id: CAD009129354
Unit Names: CONTAIN1
Event Description: Plan Approved - Closure
Actual Date: 1995-01-10 00:00:00
Doc Comments: Not reported

EPA Id: CAD009129354
Unit Names: CONTAIN1
Event Description: Public Notice - Closure
Actual Date: 1994-11-09 00:00:00
Doc Comments: Not reported

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106 SSW 1/2-1 0.981 mi. 5182 ft. **HILLVIEW PORTER PLUME**
HILLVIEW AVENUE / PORTER DRIVE
PALO ALTO, CA 94304

HIST Cal-Sites **S101272882**
Cortese **N/A**
RESPONSE
ENVIROSTOR

Relative: Higher

Actual: 100 ft.

HISTORICAL CAL-SITES:
Facility ID: 43360077
Region: 2
Region Name: BERKELEY
Branch: NC
Branch Name: NORTH COAST
File Name: Not reported
State Senate District: 06301997
Status: COM - CERTIFIED OPERATION AND MAINTENANCE, ALL PLANNED ACTIVITIES IMPLEMENTED REMEDIATION CONTINUES
Status Name: CERTIFIED / OPERATION & MAINTENANCE
Lead Agency: DTSC
Lead Agency: DEPT OF TOXIC SUBSTANCES CONTROL
Facility Type: RP
Type Name: RESPONSIBLE PARTY
NPL: Not Listed
SIC Code: 36
SIC Name: MANU - ELECTRONIC & OTHER ELECTRIC EQUIP

HILLVIEW PORTER PLUME (Continued) **S101272882**

Access:	Not reported
Cortese:	Not reported
Hazardous Ranking Score:	Not reported
Date Site Hazard Ranked:	Not reported
Groundwater Contamination:	Confirmed
Staff Member Responsible for Site:	JNAITO
Supervisor Responsible for Site:	Not reported
Region Water Control Board:	SF
Region Water Control Board Name:	SAN FRANCISCO BAY
Lat/Long Direction:	Not reported
Lat/Long (dms):	0 0 0 / 0 0 0
Lat/long Method:	Not reported
Lat/Long Description:	Not reported
State Assembly District Code:	21
State Senate District Code:	11
Facility ID:	43360077
Activity:	PPP
Activity Name:	PUBLIC PARTICIPATION PLAN
AWP Code:	Not reported
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	12301986
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	COM
Definition of Status:	CERTIFIED / OPERATION & MAINTENANCE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	43360077
Activity:	ORDER
Activity Name:	I/SE, IORSE, FFA, FFSRA, VCA, EA
AWP Code:	ISE
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	12301988
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	COM
Definition of Status:	CERTIFIED / OPERATION & MAINTENANCE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported

HILLVIEW PORTER PLUME (Continued) **S101272882**

Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	43360077
Activity:	ORDER
Activity Name:	I/SE, IORSE, FFA, FFSRA, VCA, EA
AWP Code:	ISE
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	06301990
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	COM
Definition of Status:	CERTIFIED / OPERATION & MAINTENANCE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	43360077
Activity:	FRIFS
Activity Name:	FOCUSED REMEDIAL INVESTIGATION/FEASIBILITY STUDY
AWP Code:	BP
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	12301990
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	COM
Definition of Status:	CERTIFIED / OPERATION & MAINTENANCE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	43360077
Activity:	FRIFS
Activity Name:	FOCUSED REMEDIAL INVESTIGATION/FEASIBILITY STUDY

HILLVIEW PORTER PLUME (Continued) **S101272882**

AWP Code:	MC-GW
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	06301991
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	COM
Definition of Status:	CERTIFIED / OPERATION & MAINTENANCE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	43360077
Activity:	FRIFS
Activity Name:	FOCUSED REMEDIAL INVESTIGATION/FEASIBILITY STUDY
AWP Code:	BP
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	09151991
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	COM
Definition of Status:	CERTIFIED / OPERATION & MAINTENANCE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	43360077
Activity:	PPP
Activity Name:	PUBLIC PARTICIPATION PLAN
AWP Code:	AMEND
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	02211992
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	COM

HILLVIEW PORTER PLUME (Continued) **S101272882**

Definition of Status:	CERTIFIED / OPERATION & MAINTENANCE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	43360077
Activity:	ORDER
Activity Name:	I/SE, IORSE, FFA, FFSRA, VCA, EA
AWP Code:	AMEND
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	04011992
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	COM
Definition of Status:	CERTIFIED / OPERATION & MAINTENANCE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	43360077
Activity:	FDNC
Activity Name:	FINAL DETERMINATION OF NON-COMPLIANCE
AWP Code:	FDNC
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	06181992
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	COM
Definition of Status:	CERTIFIED / OPERATION & MAINTENANCE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0

HILLVIEW PORTER PLUME (Continued) **S101272882**

For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	43360077
Activity:	RA
Activity Name:	REMOVAL ACTION
AWP Code:	CREEK
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	03171993
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	COM
Definition of Status:	CERTIFIED / OPERATION & MAINTENANCE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	N
Activity Comments:	TREATMENT WITH AN INSTREAM AERATION SYSTEM. CREEK FLOW RATES AVERAGES35 GPM AND THE AIR FLOW FROM THE AERATION SYSTEM INTO THE TREATMENT IS200 CU FEET PER MINUTE.
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	43360077
Activity:	COST
Activity Name:	COST RECOVERY
AWP Code:	REFER
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	07301993
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	COM
Definition of Status:	CERTIFIED / OPERATION & MAINTENANCE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	43360077
Activity:	DES
Activity Name:	DESIGN
AWP Code:	RA

HILLVIEW PORTER PLUME (Continued) **S101272882**

Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	10181993
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	COM
Definition of Status:	CERTIFIED / OPERATION & MAINTENANCE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	43360077
Activity:	CEQA
Activity Name:	CEQA INCLUDING NEGATIVE DECS
AWP Code:	NEGD
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	10201993
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	COM
Definition of Status:	CERTIFIED / OPERATION & MAINTENANCE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	43360077
Activity:	DES
Activity Name:	DESIGN
AWP Code:	RA#2
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	01271994
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	COM
Definition of Status:	CERTIFIED / OPERATION & MAINTENANCE

HILLVIEW PORTER PLUME (Continued) **S101272882**

Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	43360077
Activity:	DES
Activity Name:	DESIGN
AWP Code:	RA#3
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	01271994
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	COM
Definition of Status:	CERTIFIED / OPERATION & MAINTENANCE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	43360077
Activity:	RIFS
Activity Name:	REMEDIAL INVESTIGATION / FEASIBILITY STUDY
AWP Code:	Not reported
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	05181994
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	COM
Definition of Status:	CERTIFIED / OPERATION & MAINTENANCE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0

HILLVIEW PORTER PLUME (Continued) **S101272882**

For Residential Reuse:	0
Unknown Type:	0
Facility ID:	43360077
Activity:	CEQA
Activity Name:	CEQA INCLUDING NEGATIVE DECS
AWP Code:	Not reported
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	12131994
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	COM
Definition of Status:	CERTIFIED / OPERATION & MAINTENANCE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	43360077
Activity:	ORDER
Activity Name:	I/SE, IORSE, FFA, FFSRA, VCA, EA
AWP Code:	AMEND
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	12191994
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	COM
Definition of Status:	CERTIFIED / OPERATION & MAINTENANCE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	43360077
Activity:	RAP
Activity Name:	REMEDIAL ACTION PLAN / RECORD OF DECISION
AWP Code:	Not reported
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported

HILLVIEW PORTER PLUME (Continued) **S101272882**

Comments Date:	12191994
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	COM
Definition of Status:	CERTIFIED / OPERATION & MAINTENANCE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	43360077
Activity:	RA
Activity Name:	REMOVAL ACTION
AWP Code:	Not reported
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	01251995
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	COM
Definition of Status:	CERTIFIED / OPERATION & MAINTENANCE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	N
Activity Comments:	GROUNDWATER EXTRACTION SYSTEM.
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	43360077
Activity:	RA
Activity Name:	REMOVAL ACTION
AWP Code:	Not reported
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	03311995
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	COM
Definition of Status:	CERTIFIED / OPERATION & MAINTENANCE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported

HILLVIEW PORTER PLUME (Continued) **S101272882**

Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	N
Activity Comments:	GROUNDWATER EXTRACTION SYSTEM.
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	43360077
Activity:	DES
Activity Name:	DESIGN
AWP Code:	Not reported
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	05191995
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	COM
Definition of Status:	CERTIFIED / OPERATION & MAINTENANCE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	43360077
Activity:	RA
Activity Name:	REMOVAL ACTION
AWP Code:	Not reported
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	06211995
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	COM
Definition of Status:	CERTIFIED / OPERATION & MAINTENANCE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	N
Activity Comments:	ELEVEN EXTRACTION WELLS AND TREATMENT SYSTEM BEGAN OPERATION.
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	43360077

HILLVIEW PORTER PLUME (Continued) **S101272882**

Activity:	DES
Activity Name:	DESIGN
AWP Code:	AMEND
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	10021995
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	COM
Definition of Status:	CERTIFIED / OPERATION & MAINTENANCE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	43360077
Activity:	COST
Activity Name:	COST RECOVERY
AWP Code:	SETTL
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	10121995
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	COM
Definition of Status:	CERTIFIED / OPERATION & MAINTENANCE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	43360077
Activity:	RMDL
Activity Name:	REMEDIAL ACTION (RAP REQUIRED)
AWP Code:	Not reported
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	09051996
Est Person-Yrs to complete:	0
Estimated Size:	L

HILLVIEW PORTER PLUME (Continued) **S101272882**

Request to Delete Activity:	Not reported
Activity Status:	COM
Definition of Status:	CERTIFIED / OPERATION & MAINTENANCE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	43360077
Activity:	CERT
Activity Name:	CERTIFICATION
AWP Code:	Not reported
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	06301997
Est Person-Yrs to complete:	0
Estimated Size:	L
Request to Delete Activity:	Not reported
Activity Status:	COM
Definition of Status:	CERTIFIED / OPERATION & MAINTENANCE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	N
Activity Comments:	34 MILLION GALLONS OF GROUNDWATER TREATED USING AN ACTIVATED CARBONTREATMENT UNIT. 5.3 MILLION GALLONS EXTRACTED AND DISCHARGED TO THESANITARY SEWER.
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	43360077
Activity:	OM
Activity Name:	OPERATION & MAINTENANCE
AWP Code:	PLAN
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	11061996
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	COM
Definition of Status:	CERTIFIED / OPERATION & MAINTENANCE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported

HILLVIEW PORTER PLUME (Continued) **S101272882**

Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	43360077
Activity:	5YEAR
Activity Name:	FIVE-YEAR REVIEW REQUIRED BY CERCLA
AWP Code:	Not reported
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	05232001
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	COM
Definition of Status:	CERTIFIED / OPERATION & MAINTENANCE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	43360077
Activity:	ORDER
Activity Name:	I/SE, IORSE, FFA, FFSRA, VCA, EA
AWP Code:	OM
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	06301997
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	COM
Definition of Status:	CERTIFIED / OPERATION & MAINTENANCE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	43360077
Activity:	5YEAR

HILLVIEW PORTER PLUME (Continued) **S101272882**

Activity Name:	FIVE-YEAR REVIEW REQUIRED BY CERCLA
AWP Code:	Not reported
Proposed Budget:	0
AWP Completion Date:	06302006
Revised Due Date:	Not reported
Comments Date:	Not reported
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	COM
Definition of Status:	CERTIFIED / OPERATION & MAINTENANCE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Alternate Address:	STANFORD INDUSTRIAL PARK
Alternate City,St,Zip:	PALO ALTO, CA
Alternate Address:	HILLVIEW AVENUE AND PORTER DRIVE
Alternate City,St,Zip:	PALO ALTO, CA 94304
Background Info:	The Hillview Porter site is a regional problem of commingled groundwater and surface water contamination. The site boundaries encompass several sources of contamination within about 320 acres of the Stanford Research Park (SRP). The Hillview Porter region is divided into the "site" and "area of investigation." The "site" is comprised of nine separate sites within the SRP which represents the source areas of groundwater contamination within the SRP. Commingled plumes migrating from the sites have impacted groundwater beneath the "area of investigation" (comprised of the adjoining Barron Park neighborhood, Veterans Administration, Matadero Creek). Groundwater flow from the site follows the direction of Matadero Creek towards Barron Park. Since the late 1950's, SRP has been occupied primarily by companies conducting electronics research and manufacturing operations. Many current and historic tenants used volatile organic chemicals (VOCs) in their operations. The site was referred to the Department by the Regional Water Control Board in November 1985, as the sources of groundwater contamination in the region were unknown. The Department conducted a preliminary assessment, a regional soil gas survey, sampled Matadero Creek and private wells within the Barron Park, conducted an extensive potential responsible party search, and began overseeing site-specific investigations at facilities which were potential sources of contamination. DTSC also oversees remedial actions at the nine facilities identified as source areas for the regional problem. Contaminants found in the region are primarily chlorinated VOCs such as trichloroethene (TCE), perchloroethene (PCE), 1,1,1, -trichloroethane (1,1,1-TCA), and freon. These chemicals have been found in monitoring wells within SRP at depths up to about 100 feet. They have also been detected in Matadero Creek and/or several private

HILLVIEW PORTER PLUME (Continued) **S101272882**

wells in Barron Park. Currently, the Department is continuing to separately oversee remedial actions at the nine facilities identified as source areas for the regional problem. Specific details on each site can be found in the specific profile report as identified below. The nine facilities are: Teledyne-Singer, 3176 Porter Drive; Lockheed Building 255, 3170 Porter Drive; Hewlett Packard Build ing 15, 3215 Porter Drive; Hewlett Packard Buildings 28A, B and C, corner of Page Mill Road and Porter Drive; Teledyne MEC, 3165 Porter Drive; Coherent, Inc., 3210 Porter Drive; Watkins Johnson, 3333 Hillview Avenue; Syntex, 3300 Hillview Avenue; and Smith- Kline & French Laboratories, 3400 Hillview Avenue. Groundwater and surface water sampling and water level measurements are collected simultaneously by RPs for the site-specific and regional investigations. DTSC will continue to review periodic performance evaluation reports for the groundwater extraction and treatment system.

Comments Date: 02211992
Comments: Amended PPP.
Comments Date: 03171993
Comments: Completed RA.
Comments Date: 05232001
Comments: Completed Five-Year Review.
Comments Date: 06301991
Comments: Completed FRIFS on Matadero Creek groundwater.
Comments Date: 06301997
Comments: Certified Site.
Comments Date: 09051996
Comments: Completed Remedial Action. The final remedial action for the
Comments Date: 09051996
Comments: Hillview Porter Regional Plume consisted of installation and
Comments Date: 09051996
Comments: operation of a groundwater extraction and treatment system.
Comments Date: 09051996
Comments: Groundwater is extracted from two 750-foot long horizontal
Comments Date: 09051996
Comments: extraction wells and 15 vertical extraction wells and is treated
Comments Date: 09051996
Comments: using activated carbon at a treatment system located at 3215
Comments Date: 09051996
Comments: Porter Drive. Treated water is discharged to Matadero Creek
Comments Date: 09051996
Comments: under an NPDES permit. Three additional wells discharge
Comments Date: 09051996
Comments: extracted water directly to the sanitary sewer under a permit
Comments Date: 09051996
Comments: from the Palo Alto Regional Water Quality Control Plant.
Comments Date: 11061996
Comments: Approved O&M Plan.
Comments Date: 12191994
Comments: Approved RAP.
Comments Date: 12301986
Comments: Completed Public Participation Plan.
Comments Date: 12301988
Comments: Issued I or SE and RAO. Seventeen of the 21 RPs are in
Comments Date: 12301988
Comments: compliance with the Order.
Comments Date: 12301990

HILLVIEW PORTER PLUME (Continued) **S101272882**

Comments: Completed FRIFS on Barron Park.
ID Name: CALSTARS CODE
ID Value: 200048
ID Name: BEP DATABASE PCODE
ID Value: P22109
ID Name: CALSITES ID NUMBER
ID Value: 43-36-0076
Alternate Name: WATKINS JOHNSONHILLVIEW PORTER PLUME
Special Programs Code: Not reported
Special Programs Name: Not reported

Cortese:
Region: CORTESE
Envirostor Id: 43360077
Site/Facility Type: STATE RESPONSE
Cleanup Status: CERTIFIED / OPERATION & MAINTENANCE
Status Date: 6/30/1997
Site Code: 200048
Latitude: 37.407777777777802
Longitude: -122.149722222222

RESPONSE:
Facility ID: 43360077
Site Type: State Response
Site Type Detail: State Response or NPL
Acres: 320
National Priorities List: NO
Cleanup Oversight Agencies: SMBRP
Lead Agency: SMBRP
Lead Agency Description: DTSC - Site Mitigation And Brownfield Reuse Program
Project Manager: JOVANNE VILLAMATER
Supervisor: Mark Piros
Division Branch: Berkeley
Site Code: 200048
Site Mgmt. Req.: NONE SPECIFIED
Assembly: 21
Senate: 11
Special Program Status: Not reported
Status: Certified / Operation & Maintenance
Status Date: 6/30/1997
Restricted Use: NO
Funding: Responsible Party
Latitude: 37.407777777777802
Longitude: -122.149722222222
APN: NONE SPECIFIED
Past Use: LABORATORIES- CHEMICAL, MANUFACTURING - ELECTRONIC, MANUFACTURING - INDUSTRIAL MACHINERY
Potential COC: 30027, 30195
Confirmed COC: Not reported
Potential Description: OTH, SURFW
Alias Name: WATKINS JOHNSON
Alias Type: Alternate Name
Alias Name: 110033614872
Alias Type: EPA (FRS #)
Alias Name: P22109
Alias Type: PCode

HILLVIEW PORTER PLUME (Continued) **S101272882**

Alias Name: 200048
Alias Type: Project Code (Site Code)
Alias Name: 43-36-0076
Alias Type: Envirostor ID Number
Alias Name: 43360077
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Amendment - Order/Agreement
Completed Date: 1997-06-30 00:00:00
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Certification
Completed Date: 1997-06-30 00:00:00
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Amendment - Order/Agreement
Completed Date: 1994-12-19 00:00:00
Comments: Amend Order to require implementation of the Remedial Action Plan and to remove Bicoastal Corporation as a responsible party.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: CEQA - Initial Study/ Neg. Declaration
Completed Date: 1994-12-13 00:00:00
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: CEQA - Initial Study/ Neg. Declaration
Completed Date: 1993-10-20 00:00:00
Comments: Approve Negative Declaration for the proposed groundwater extraction and treatment systems (IRMs #2, #3 and #4).

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Final Determination of Non-Compliance
Completed Date: 1992-06-18 00:00:00
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Amendment - Order/Agreement
Completed Date: 1992-04-01 00:00:00
Comments: Order amended to remove master lessees as respondents and to update the findings within the Order for the Teledyne-Singer Site located at 3176 Porter Drive in Palo Alto.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Amendment - Order/Agreement
Completed Date: 1990-06-05 00:00:00

HILLVIEW PORTER PLUME (Continued) **S101272882**

Comments:	Order amended to add three additional facilities and additional responsible parties, including master lessees, as respondents.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Unilateral Order (I/SE, RAO, CAO, EPA AO)
Completed Date:	1988-12-08 00:00:00
Comments:	Issued I or SE and RAO. Seventeen of the 21 RPs are in compliance with the Order.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Removal Action Design
Completed Date:	1994-01-28 00:00:00
Comments:	Approve design for interim action #2 (installation of one of two horizontal wells)
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Removal Action Design
Completed Date:	1993-10-18 00:00:00
Comments:	Approve Design for the Groundwater Treatment System
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Public Participation Plan / Community Relations Plan
Completed Date:	1992-02-21 00:00:00
Comments:	Amended PPP.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	*Engineering Evaluation / Cost Analysis - Non-Time Critical
Completed Date:	1991-09-15 00:00:00
Comments:	Approve pilot study to evaluate use of bubblers to aerate Matadero Creek to remove low levels of VOCs in Creek water.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	5 Year Review Reports
Completed Date:	2006-05-09 00:00:00
Comments:	The groundwater extraction and treatment system removed 3.7 pounds of VOCs in 2005. The consultant estimates that if the system had not been shutdown for five months in 2005, it would have removed approximately five pounds of VOCs.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	5 Year Review Reports
Completed Date:	2001-05-23 00:00:00
Comments:	Completed Five-Year Review.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Operations and Maintenance Plan
Completed Date:	1996-11-06 00:00:00
Comments:	Approved O&M Plan.

HILLVIEW PORTER PLUME (Continued) **S101272882**

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Design/Implementation Workplan
Completed Date: 1995-05-19 00:00:00
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Investigation / Feasibility Study
Completed Date: 1994-05-18 00:00:00
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Design
Completed Date: 1994-01-28 00:00:00
Comments: Approve Design for installation of one of two horizontal wells.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedy Constructed: Operating Properly & Successfully
Completed Date: 1996-09-05 00:00:00
Comments: Completed Remedial Action. The final remedial action for the Hillview Porter Regional Plume consisted of installation and operation of a groundwater extraction and treatment system. Groundwater is extracted from two 750-foot long horizontal extraction wells and 15 vertical extraction wells and is treated using activated carbon at a treatment system located at 3215 Porter Drive. Treated water is discharged to Matadero Creek under an NPDES permit. Three additional wells discharge extracted water directly to the sanitary sewer under a permit from the Palo Alto Regional Water Quality Control Plant.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Design/Implementation Workplan
Completed Date: 1995-10-02 00:00:00
Comments: Approved revised remedial design to allow groundwater extracted from three wells located on McGregor Way to be discharge directly to the sanitary sewer under a permit from the Palo Alto Regional Water Quality Control Plant. This modification was required due to unresolvable access issues.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Completion Report
Completed Date: 1995-06-21 00:00:00
Comments: Installation of a second horizontal extraction well located beneath portion of the VA Hospital property and the Watkins-Johnson Site. Extracted groundwater is conveyed via pipeline to a treatment plant located at 3215 Porter Drive where it is treated with granular activated carbon before being discharged to Matadero Creek via the storm drain under an NPDES permit from the Water Board.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Completion Report
Completed Date: 1995-03-31 00:00:00

HILLVIEW PORTER PLUME (Continued) **S101272882**

Comments:	Groundwater extraction system installed consisting of a horizontal extraction well located beneath portions of the VA Hospital property. Extracted groundwater is conveyed via a pipeline to a treatment system located at 3215 Porter Drive in Palo Alto.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Removal Action Completion Report
Completed Date:	1995-01-25 00:00:00
Comments:	Groundwater is extracted from 11 extraction wells near the Bike Path in Bol Park and conveyed via pipeline to a treatment plant located at 3215 Porter Drive in Palo Alto. Extracted groundwater is treated with granular activated carbon and discharged to matadero Creek via the storm drain under an NPDES permit from the Water Board.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Remedial Action Plan
Completed Date:	1994-12-19 00:00:00
Comments:	Remedial Action Plan approved. Public comment period ran from October 7 through November 7, 1994, with a pubilc meeting held October 20, 1994. The approved remedy incorporates the interim remedial measures installed and adds more extraction wells on the Veterans Administration property and in the Barron Park Neighborhood.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Removal Action Completion Report
Completed Date:	1993-03-17 00:00:00
Comments:	Interim action to treat VOCs in Matadero Creek surface water using instream aeration system to bubble air into the Creek through diffusers, stripping the VOCs from the Creek. System was required to prevent contaminated creek water from recharging groundwater and further contaminating groundwater and to prevent contaminated creek water from flowing into the Barron Park Neighborhood.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Supplemental Site Investigation Report
Completed Date:	1991-06-30 00:00:00
Comments:	Completed FRIFS on Matadero Creek groundwater.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Supplemental Site Investigation Report
Completed Date:	1990-12-30 00:00:00
Comments:	Completed FRIFS on Barron Park.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Public Participation Plan / Community Relations Plan
Completed Date:	1986-12-30 00:00:00
Comments:	Completed Public Participation Plan.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	5 Year Review Workplan

HILLVIEW PORTER PLUME (Continued) **S101272882**

Completed Date: 2005-11-04 00:00:00
Comments: DTSC approved implementation of the Five-Year Review Workplan. Five-Year Report to be submitted by 2/28/05. Financial assurance for continued O&M also due at that time.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Operations and Maintenance Report
Completed Date: 2007-03-15 00:00:00
Comments: Approved with modifications.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Long Term Monitoring Report
Completed Date: 2008-04-14 00:00:00
Comments: Report acceptable. No VOCs detected in shallow groundwater under the Barron Park Neighborhood above drinking water standards for the first time.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Long Term Monitoring Report
Completed Date: 2009-09-17 00:00:00
Comments: Report accepted. Groundwater monitoring will continue.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fact Sheets
Completed Date: 2001-04-17 00:00:00
Comments: Fact Sheet describes the progress made toward cleanup of chemical releases into the groundwater.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fact Sheets
Completed Date: 2000-08-01 00:00:00
Comments: Fact Sheet - Annual Performance Review Summary.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fact Sheets
Completed Date: 1993-06-01 00:00:00
Comments: Fact Sheet provides project update and announces a community meeting on June 23, 1993.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fact Sheets
Completed Date: 1998-06-01 00:00:00
Comments: Fact Sheet describes progress made on cleanup.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fact Sheets
Completed Date: 1997-04-01 00:00:00
Comments: Fact Sheet describes the progress made a cleanup.

HILLVIEW PORTER PLUME (Continued) **S101272882**

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fact Sheets
Completed Date: 1996-10-01 00:00:00
Comments: Fact Sheet outlines progress made on cleanup over the last year.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fact Sheets
Completed Date: 1995-10-01 00:00:00
Comments: Fact sheet updating the community on remedial activities.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fact Sheets
Completed Date: 1989-06-01 00:00:00
Comments: Fact Sheet describing progress on remedial investigation.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fact Sheets
Completed Date: 1991-05-01 00:00:00
Comments: Fact Sheet updating community on soil and groundwater investigations.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fact Sheets
Completed Date: 1991-11-01 00:00:00
Comments: Fact Sheet describing progress made on site investigations.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fact Sheets
Completed Date: 1992-10-01 00:00:00
Comments: Fact Sheet describing the progess made on site investigations.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fact Sheets
Completed Date: 1994-02-01 00:00:00
Comments: Fact Sheet informing the community about the feasibility study and announcing a community meeting on February 24.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fact Sheets
Completed Date: 1994-10-01 00:00:00
Comments: Fact Sheet announces the availability of the draft Remedial Action Plan and the upcoming public meeting.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fact Sheets
Completed Date: 1986-12-01 00:00:00
Comments: Fact Sheet provides site background, description of the process, and where to go for more information.

HILLVIEW PORTER PLUME (Continued) **S101272882**

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Operations and Maintenance Report
Completed Date: 2006-08-03 00:00:00
Comments: Document reviewed, no comments or questions.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Operations and Maintenance Report
Completed Date: 2006-09-26 00:00:00
Comments: Groundwater flow patterns within Zone D and E are returning to prepumping conditions with no evidence of significant VOC concentration rebounds. Okay to continue the trial shutdown.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fact Sheets
Completed Date: 1999-06-01 00:00:00
Comments: Fact sheet describes progress made on cleanup over the past year.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fact Sheets
Completed Date: 1988-08-01 00:00:00
Comments: Fact Sheet

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fact Sheets
Completed Date: 1990-01-06 00:00:00
Comments: Fact Sheet

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Public Participation Plan / Community Relations Plan
Completed Date: 2008-11-05 00:00:00
Comments: Updated Mailing List approved by PPS.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Operations and Maintenance Plan Amendment
Completed Date: 2008-08-18 00:00:00
Comments: DTSC engineer conducted site inspection on 8/8/2008 to view changes to the groundwater extraction and treatment system and ensure that the changes are reflected in the updated operation and maintenance manual. DTSC engineer discussed results of his site visit with PM on 8/18/2008. DTSC engineer indicated that the O&M Manual reflected current system and the procedures discussed were sufficient.

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: PROJECT WIDE
Schedule Sub Area Name: Not reported
Schedule Document Type: 5 Year Review Reports
Schedule Due Date: 2011-06-30 00:00:00

HILLVIEW PORTER PLUME (Continued) **S101272882**

Schedule Revised Date: Not reported

ENVIROSTOR:
Site Type: State Response
Site Type Detailed: State Response or NPL
Acres: 320
NPL: NO
Regulatory Agencies: SMBRP
Lead Agency: SMBRP
Program Manager: JOVANNE VILLAMATER
Supervisor: Mark Piros
Division Branch: Berkeley
Facility ID: 43360077
Site Code: 200048
Assembly: 21
Senate: 11
Special Program: Not reported
Status: Certified / Operation & Maintenance
Status Date: 6/30/1997
Restricted Use: NO
Site Mgmt. Req.: NONE SPECIFIED
Funding: Responsible Party
Latitude: 37.407777777777802
Longitude: -122.149722222222
APN: NONE SPECIFIED
Past Use: LABORATORIES- CHEMICAL, MANUFACTURING - ELECTRONIC, MANUFACTURING - INDUSTRIAL MACHINERY
Potential COC: 30027, 30195
Confirmed COC: Not reported
Potential Description: OTH, SURFW
Alias Name: WATKINS JOHNSON
Alias Type: Alternate Name
Alias Name: 110033614872
Alias Type: EPA (FRS #)
Alias Name: P22109
Alias Type: PCode
Alias Name: 200048
Alias Type: Project Code (Site Code)
Alias Name: 43-36-0076
Alias Type: Envirostor ID Number
Alias Name: 43360077
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Amendment - Order/Agreement
Completed Date: 1997-06-30 00:00:00
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Certification
Completed Date: 1997-06-30 00:00:00
Comments: Not reported

Completed Area Name: PROJECT WIDE

HILLVIEW PORTER PLUME (Continued) **S101272882**

Completed Sub Area Name: Not reported
Completed Document Type: Amendment - Order/Agreement
Completed Date: 1994-12-19 00:00:00
Comments: Amend Order to require implementation of the Remedial Action Plan and to remove Bicoastal Corporation as a responsible party.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: CEQA - Initial Study/ Neg. Declaration
Completed Date: 1994-12-13 00:00:00
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: CEQA - Initial Study/ Neg. Declaration
Completed Date: 1993-10-20 00:00:00
Comments: Approve Negative Declaration for the proposed groundwater extraction and treatment systems (IRMs #2, #3 and #4).

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Final Determination of Non-Compliance
Completed Date: 1992-06-18 00:00:00
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Amendment - Order/Agreement
Completed Date: 1992-04-01 00:00:00
Comments: Order amended to remove master lessees as respondents and to update the findings within the Order for the Teledyne-Singer Site located at 3176 Porter Drive in Palo Alto.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Amendment - Order/Agreement
Completed Date: 1990-06-05 00:00:00
Comments: Order amended to add three additional facilities and additional responsible parties, including master lessees, as respondents.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Unilateral Order (I/SE, RAO, CAO, EPA AO)
Completed Date: 1988-12-08 00:00:00
Comments: Issued I or SE and RAO. Seventeen of the 21 RPs are in compliance with the Order.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Design
Completed Date: 1994-01-28 00:00:00
Comments: Approve design for interim action #2 (installation of one of two horizontal wells)

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Design

HILLVIEW PORTER PLUME (Continued) **S101272882**

Completed Date: 1993-10-18 00:00:00
Comments: Approve Design for the Groundwater Treatment System

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Public Participation Plan / Community Relations Plan
Completed Date: 1992-02-21 00:00:00
Comments: Amended PPP.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: *Engineering Evaluation / Cost Analysis - Non-Time Critical
Completed Date: 1991-09-15 00:00:00
Comments: Approve pilot study to evaluate use of bubblers to aerate Matadero Creek to remove low levels of VOCs in Creek water.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: 5 Year Review Reports
Completed Date: 2006-05-09 00:00:00
Comments: The groundwater extraction and treatment system removed 3.7 pounds of VOCs in 2005. The consultant estimates that if the system had not been shutdown for five months in 2005, it would have removed approximately five pounds of VOCs.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: 5 Year Review Reports
Completed Date: 2001-05-23 00:00:00
Comments: Completed Five-Year Review.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Operations and Maintenance Plan
Completed Date: 1996-11-06 00:00:00
Comments: Approved O&M Plan.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Design/Implementation Workplan
Completed Date: 1995-05-19 00:00:00
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Investigation / Feasibility Study
Completed Date: 1994-05-18 00:00:00
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Design
Completed Date: 1994-01-28 00:00:00
Comments: Approve Design for installation of one of two horizontal wells.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported

HILLVIEW PORTER PLUME (Continued) **S101272882**

Completed Document Type:	Remedy Constructed: Operating Properly & Successfully
Completed Date:	1996-09-05 00:00:00
Comments:	Completed Remedial Action. The final remedial action for the Hillview Porter Regional Plume consisted of installation and operation of a groundwater extraction and treatment system. Groundwater is extracted from two 750-foot long horizontal extraction wells and 15 vertical extraction wells and is treated using activated carbon at a treatment system located at 3215 Porter Drive. Treated water is discharged to Matadero Creek under an NPDES permit. Three additional wells discharge extracted water directly to the sanitary sewer under a permit from the Palo Alto Regional Water Quality Control Plant.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Design/Implementation Workplan
Completed Date:	1995-10-02 00:00:00
Comments:	Approved revised remedial design to allow groundwater extracted from three wells located on McGregor Way to be discharge directly to the sanitary sewer under a permit from the Palo Alto Regional Water Quality Control Plant. This modification was required due to unresolvable access issues.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Removal Action Completion Report
Completed Date:	1995-06-21 00:00:00
Comments:	Installation of a second horizontal extraction well located beneath portion of the VA Hospital property and the Watkins-Johnson Site. Extracted groundwater is conveyed via pipeline to a treatment plant located at 3215 Porter Drive where it is treated with granular activated carbon before being discharged to Matadero Creek via the storm drain under an NPDES permit from the Water Board.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Removal Action Completion Report
Completed Date:	1995-03-31 00:00:00
Comments:	Groundwater extraction system installed consisting of a horizontal extraction well located beneath portions of the VA Hospital property. Extracted groundwater is conveyed via a pipeline to a treatment system located at 3215 Porter Drive in Palo Alto.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Removal Action Completion Report
Completed Date:	1995-01-25 00:00:00
Comments:	Groundwater is extracted from 11 extraction wells near the Bike Path in Bol Park and conveyed via pipeline to a treatment plant located at 3215 Porter Drive in Palo Alto. Extracted groundwater is treated with granular activated carbon and discharged to matadero Creek via the storm drain under an NPDES permit from the Water Board.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Remedial Action Plan
Completed Date:	1994-12-19 00:00:00
Comments:	Remedial Action Plan approved. Public comment period ran from October

HILLVIEW PORTER PLUME (Continued) **S101272882**

7 through November 7, 1994, with a pubilc meeting held October 20, 1994. The approved remedy incorporates the interim remedial measures installed and adds more extraction wells on the Veterans Administration property and in the Barron Park Neighborhood.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Completion Report
Completed Date: 1993-03-17 00:00:00
Comments: Interim action to treat VOCs in Matadero Creek surface water using instream aeration system to bubble air into the Creek through diffusers, stripping the VOCs from the Creek. System was required to prevent contaminated creek water from recharging groundwater and further contaminating groundwater and to prevent contaminated creek water from flowing into the Barron Park Neighborhood.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Supplemental Site Investigation Report
Completed Date: 1991-06-30 00:00:00
Comments: Completed FRIFS on Matadero Creek groundwater.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Supplemental Site Investigation Report
Completed Date: 1990-12-30 00:00:00
Comments: Completed FRIFS on Barron Park.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Public Participation Plan / Community Relations Plan
Completed Date: 1986-12-30 00:00:00
Comments: Completed Public Participation Plan.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: 5 Year Review Workplan
Completed Date: 2005-11-04 00:00:00
Comments: DTSC approved implementation of the Five-Year Review Workplan. Five-Year Report to be submitted by 2/28/05. Financial assurance for continued O&M also due at that time.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Operations and Maintenance Report
Completed Date: 2007-03-15 00:00:00
Comments: Approved with modifications.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Long Term Monitoring Report
Completed Date: 2008-04-14 00:00:00
Comments: Report acceptable. No VOCs detected in shallow groundwater under the Barron Park Neighborhood above drinking water standards for the first time.

Completed Area Name: PROJECT WIDE

HILLVIEW PORTER PLUME (Continued) **S101272882**

Completed Sub Area Name: Not reported
Completed Document Type: Long Term Monitoring Report
Completed Date: 2009-09-17 00:00:00
Comments: Report accepted. Groundwater monitoring will continue.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fact Sheets
Completed Date: 2001-04-17 00:00:00
Comments: Fact Sheet describes the progress made toward cleanup of chemical releases into the groundwater.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fact Sheets
Completed Date: 2000-08-01 00:00:00
Comments: Fact Sheet - Annual Performance Review Summary.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fact Sheets
Completed Date: 1993-06-01 00:00:00
Comments: Fact Sheet provides project update and announces a community meeting on June 23, 1993.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fact Sheets
Completed Date: 1998-06-01 00:00:00
Comments: Fact Sheet describes progress made on cleanup.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fact Sheets
Completed Date: 1997-04-01 00:00:00
Comments: Fact Sheet describes the progress made a cleanup.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fact Sheets
Completed Date: 1996-10-01 00:00:00
Comments: Fact Sheet outlines progress made on cleanup over the last year.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fact Sheets
Completed Date: 1995-10-01 00:00:00
Comments: Fact sheet updating the community on remedial activities.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fact Sheets
Completed Date: 1989-06-01 00:00:00
Comments: Fact Sheet describing progress on remedial investigation.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported

HILLVIEW PORTER PLUME (Continued) **S101272882**

Completed Document Type: Fact Sheets
Completed Date: 1991-05-01 00:00:00
Comments: Fact Sheet updating community on soil and groundwater investigations.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fact Sheets
Completed Date: 1991-11-01 00:00:00
Comments: Fact Sheet describing progress made on site investigations.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fact Sheets
Completed Date: 1992-10-01 00:00:00
Comments: Fact Sheet describing the progess made on site investigations.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fact Sheets
Completed Date: 1994-02-01 00:00:00
Comments: Fact Sheet informing the community about the feasibility study and announcing a community meeting on February 24.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fact Sheets
Completed Date: 1994-10-01 00:00:00
Comments: Fact Sheet announces the availability of the draft Remedial Action Plan and the upcoming public meeting.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fact Sheets
Completed Date: 1986-12-01 00:00:00
Comments: Fact Sheet provides site background, description of the process, and where to go for more information.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Operations and Maintenance Report
Completed Date: 2006-08-03 00:00:00
Comments: Document reviewed, no comments or questions.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Operations and Maintenance Report
Completed Date: 2006-09-26 00:00:00
Comments: Groundwater flow patterns within Zone D and E are returning to prepumping conditions with no evidence of significant VOC concentration rebounds. Okay to continue the trial shutdown.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fact Sheets
Completed Date: 1999-06-01 00:00:00
Comments: Fact sheet describes progress made on cleanup over the past year.

HILLVIEW PORTER PLUME (Continued) **S101272882**

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Fact Sheets
Completed Date:	1988-08-01 00:00:00
Comments:	Fact Sheet

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Fact Sheets
Completed Date:	1990-01-06 00:00:00
Comments:	Fact Sheet

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Public Participation Plan / Community Relations Plan
Completed Date:	2008-11-05 00:00:00
Comments:	Updated Mailing List approved by PPS.

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Operations and Maintenance Plan Amendment
Completed Date:	2008-08-18 00:00:00
Comments:	DTSC engineer conducted site inspection on 8/8/2008 to view changes to the groundwater extraction and treatment system and ensure that the changes are reflected in the updated operation and maintenance manual. DTSC engineer discussed results of his site visit with PM on 8/18/2008. DTSC engineer indicated that the O&M Manual reflected current system and the procedures discussed were sufficient.

Future Area Name:	Not reported
Future Sub Area Name:	Not reported
Future Document Type:	Not reported
Future Due Date:	Not reported
Schedule Area Name:	PROJECT WIDE
Schedule Sub Area Name:	Not reported
Schedule Document Type:	5 Year Review Reports
Schedule Due Date:	2011-06-30 00:00:00
Schedule Revised Date:	Not reported

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
E PALO ALTO	1003879293	CALMAC CHEMICAL	END OF WEEKS ST	94303	CERC-NFRAP
PALO ALTO	S109934687	CALIFORNIA PAGE MILL CENTER LP	1500TH & 1530 PAGE ILL RD	94304	DRYCLEANERS, HAZNET
PALO ALTO	S110326779	BIRCH PLAZA	2640TH & 2650 BIRCH ST	94304	SLIC
PALO ALTO	S110494441	VARIAN MEDICAL SYSTEMS	911TH & 3140 HANSEN WAY	94304	ENVIROSTOR
PALO ALTO	S106235040	OREGON EXPRESSWAY UNDERPASS	ALMA ST	94301	SLIC
PALO ALTO	U001595970	SUN RAY FOREIGN AUTO SERVICE	325 ASH ST	94306	HIST UST
PALO ALTO	S106932675	SUN RAY FOREIGN AUTO SERVICE	325 ASH ST	94306	SWEEPS UST
PALO ALTO	S110493749	COMMUNICATIONS & POWER IND, INC.	607 HANSEN WAY CONTIGUOUS PR	94304	ENVIROSTOR
PALO ALTO	1003879673	SMITH KLINE & FRENCH LABORATORIES	3900 HILLVIEW AVE	94304	CERC-NFRAP
PALO ALTO	1003877979		OREGON EXPY & ALMA ST	94304	CERC-NFRAP
PALO ALTO	S103679816	STANFORD SHOPPING CENTER	SANDHILL & ARBORETUM		HAZNET
PALO ALTO	1003879613	OLD QUARRY DISPOSAL SITE, STANDFOR	215 NW YARDSOFOLDPAGEMILL RD	94304	CERC-NFRAP
STANFORD	S107591772	PSSI AG. MATERIAL STORAGE / HANDLI	3185 ALPINE RD	94305	SWF/LF

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 07/02/2010
Date Data Arrived at EDR: 07/14/2010
Date Made Active in Reports: 10/04/2010
Number of Days to Update: 82

Source: EPA
Telephone: N/A
Last EDR Contact: 10/13/2010
Next Scheduled EDR Contact: 01/24/2011
Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 6
Telephone: 214-655-6659

EPA Region 3
Telephone 215-814-5418

EPA Region 7
Telephone: 913-551-7247

EPA Region 4
Telephone 404-562-8033

EPA Region 8
Telephone: 303-312-6774

EPA Region 5
Telephone 312-886-6686

EPA Region 9
Telephone: 415-947-4246

EPA Region 10
Telephone 206-553-8665

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 07/02/2010
Date Data Arrived at EDR: 07/14/2010
Date Made Active in Reports: 10/04/2010
Number of Days to Update: 82

Source: EPA
Telephone: N/A
Last EDR Contact: 10/13/2010
Next Scheduled EDR Contact: 01/24/2011
Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991
Date Data Arrived at EDR: 02/02/1994
Date Made Active in Reports: 03/30/1994
Number of Days to Update: 56

Source: EPA
Telephone: 202-564-4267
Last EDR Contact: 08/16/2010
Next Scheduled EDR Contact: 11/29/2010
Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Federal Delisted NPL site list

DELISTED NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 07/02/2010
Date Data Arrived at EDR: 07/14/2010
Date Made Active in Reports: 10/04/2010
Number of Days to Update: 82

Source: EPA
Telephone: N/A
Last EDR Contact: 10/13/2010
Next Scheduled EDR Contact: 01/24/2011
Data Release Frequency: Quarterly

Federal CERCLIS list

CERCLIS: Comprehensive Environmental Response, Compensation, and Liability Information System

CERCLIS contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). CERCLIS contains sites which are either proposed to or on the National Priorities List (NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 01/29/2010
Date Data Arrived at EDR: 02/09/2010
Date Made Active in Reports: 04/12/2010
Number of Days to Update: 62

Source: EPA
Telephone: 703-412-9810
Last EDR Contact: 10/01/2010
Next Scheduled EDR Contact: 01/10/2011
Data Release Frequency: Quarterly

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPAa??s Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 06/23/2009
Date Data Arrived at EDR: 01/15/2010
Date Made Active in Reports: 02/10/2010
Number of Days to Update: 26

Source: Environmental Protection Agency
Telephone: 703-603-8704
Last EDR Contact: 10/13/2010
Next Scheduled EDR Contact: 01/24/2011
Data Release Frequency: Varies

Federal CERCLIS NFRAP site List

CERCLIS-NFRAP: CERCLIS No Further Remedial Action Planned

Archived sites are sites that have been removed and archived from the inventory of CERCLIS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list this site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. This decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be a potential NPL site.

Date of Government Version: 06/23/2009
Date Data Arrived at EDR: 09/02/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 19

Source: EPA
Telephone: 703-412-9810
Last EDR Contact: 10/01/2010
Next Scheduled EDR Contact: 12/13/2010
Data Release Frequency: Quarterly

Federal RCRA CORRACTS facilities list

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 05/25/2010
Date Data Arrived at EDR: 06/02/2010
Date Made Active in Reports: 10/04/2010
Number of Days to Update: 124

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 08/16/2010
Next Scheduled EDR Contact: 11/29/2010
Data Release Frequency: Quarterly

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 02/17/2010
Date Data Arrived at EDR: 02/19/2010
Date Made Active in Reports: 05/17/2010
Number of Days to Update: 87

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 10/07/2010
Next Scheduled EDR Contact: 01/17/2011
Data Release Frequency: Quarterly

Federal RCRA generators list

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 02/17/2010
Date Data Arrived at EDR: 02/19/2010
Date Made Active in Reports: 05/17/2010
Number of Days to Update: 87

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 10/07/2010
Next Scheduled EDR Contact: 01/17/2011
Data Release Frequency: Quarterly

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 02/17/2010
Date Data Arrived at EDR: 02/19/2010
Date Made Active in Reports: 05/17/2010
Number of Days to Update: 87

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 10/07/2010
Next Scheduled EDR Contact: 01/17/2011
Data Release Frequency: Quarterly

RCRA-CESQG: RCRA - Conditionally Exempt Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 02/17/2010
Date Data Arrived at EDR: 02/19/2010
Date Made Active in Reports: 05/17/2010
Number of Days to Update: 87

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 10/07/2010
Next Scheduled EDR Contact: 01/17/2011
Data Release Frequency: Varies

Federal institutional controls / engineering controls registries

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 12/20/2009
Date Data Arrived at EDR: 01/20/2010
Date Made Active in Reports: 04/12/2010
Number of Days to Update: 82

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 09/13/2010
Next Scheduled EDR Contact: 12/27/2010
Data Release Frequency: Varies

US INST CONTROL: Sites with Institutional Controls

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 12/20/2009
Date Data Arrived at EDR: 01/20/2010
Date Made Active in Reports: 04/12/2010
Number of Days to Update: 82

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 09/13/2010
Next Scheduled EDR Contact: 12/27/2010
Data Release Frequency: Varies

Federal ERNS list

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 07/09/2010
Date Data Arrived at EDR: 07/09/2010
Date Made Active in Reports: 08/17/2010
Number of Days to Update: 39

Source: National Response Center, United States Coast Guard
Telephone: 202-267-2180
Last EDR Contact: 10/06/2010
Next Scheduled EDR Contact: 01/17/2011
Data Release Frequency: Annually

State- and tribal - equivalent NPL

RESPONSE: State Response Sites

Identifies confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity. These confirmed release sites are generally high-priority and high potential risk.

Date of Government Version: 08/18/2010
Date Data Arrived at EDR: 09/16/2010
Date Made Active in Reports: 09/29/2010
Number of Days to Update: 13

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 09/16/2010
Next Scheduled EDR Contact: 11/22/2010
Data Release Frequency: Quarterly

State- and tribal - equivalent CERCLIS

ENVIROSTOR: EnviroStor Database

The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifes sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

Date of Government Version: 08/18/2010
Date Data Arrived at EDR: 09/16/2010
Date Made Active in Reports: 09/29/2010
Number of Days to Update: 13

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 09/16/2010
Next Scheduled EDR Contact: 11/22/2010
Data Release Frequency: Quarterly

State and tribal landfill and/or solid waste disposal site lists

SWF/LF (SWIS): Solid Waste Information System

Active, Closed and Inactive Landfills. SWF/LF records typically contain an inve ntory of solid waste disposal facilities or landfills. These may be active or i nactive facilities or open dumps that failed to meet RCRA Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 08/23/2010
Date Data Arrived at EDR: 08/24/2010
Date Made Active in Reports: 09/29/2010
Number of Days to Update: 36

Source: Department of Resources Recycling and Recovery
Telephone: 916-341-6320
Last EDR Contact: 08/24/2010
Next Scheduled EDR Contact: 12/06/2010
Data Release Frequency: Quarterly

State and tribal leaking storage tank lists

LUST REG 9: Leaking Underground Storage Tank Report

Orange, Riverside, San Diego counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 03/01/2001
Date Data Arrived at EDR: 04/23/2001
Date Made Active in Reports: 05/21/2001
Number of Days to Update: 28

Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-637-5595
Last EDR Contact: 09/27/2010
Next Scheduled EDR Contact: 01/10/2011
Data Release Frequency: No Update Planned

LUST REG 7: Leaking Underground Storage Tank Case Listing

Leaking Underground Storage Tank locations. Imperial, Riverside, San Diego, Santa Barbara counties.

Date of Government Version: 02/26/2004
Date Data Arrived at EDR: 02/26/2004
Date Made Active in Reports: 03/24/2004
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Colorado River Basin Region (7)
Telephone: 760-776-8943
Last EDR Contact: 08/02/2010
Next Scheduled EDR Contact: 11/15/2010
Data Release Frequency: No Update Planned

LUST REG 6V: Leaking Underground Storage Tank Case Listing

Leaking Underground Storage Tank locations. Inyo, Kern, Los Angeles, Mono, San Bernardino counties.

Date of Government Version: 06/07/2005
Date Data Arrived at EDR: 06/07/2005
Date Made Active in Reports: 06/29/2005
Number of Days to Update: 22

Source: California Regional Water Quality Control Board Victorville Branch Office (6)
Telephone: 760-241-7365
Last EDR Contact: 09/13/2010
Next Scheduled EDR Contact: 09/27/2010
Data Release Frequency: No Update Planned

LUST REG 6L: Leaking Underground Storage Tank Case Listing

For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/09/2003
Date Data Arrived at EDR: 09/10/2003
Date Made Active in Reports: 10/07/2003
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Lahontan Region (6)
Telephone: 530-542-5572
Last EDR Contact: 09/13/2010
Next Scheduled EDR Contact: 12/27/2010
Data Release Frequency: No Update Planned

LUST REG 5: Leaking Underground Storage Tank Database

Leaking Underground Storage Tank locations. Alameda, Alpine, Amador, Butte, Colusa, Contra Costa, Calveras, El Dorado, Fresno, Glenn, Kern, Kings, Lake, Lassen, Madera, Mariposa, Merced, Modoc, Napa, Nevada, Placer, Plumas, Sacramento, San Joaquin, Shasta, Solano, Stanislaus, Sutter, Tehama, Tulare, Tuolumne, Yolo, Yuba counties.

Date of Government Version: 07/01/2008
Date Data Arrived at EDR: 07/22/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 9

Source: California Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-4834
Last EDR Contact: 10/04/2010
Next Scheduled EDR Contact: 01/17/2011
Data Release Frequency: Quarterly

LUST REG 4: Underground Storage Tank Leak List

Los Angeles, Ventura counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35

Source: California Regional Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6710
Last EDR Contact: 09/07/2010
Next Scheduled EDR Contact: 12/20/2010
Data Release Frequency: No Update Planned

LUST REG 3: Leaking Underground Storage Tank Database

Leaking Underground Storage Tank locations. Monterey, San Benito, San Luis Obispo, Santa Barbara, Santa Cruz counties.

Date of Government Version: 05/19/2003
Date Data Arrived at EDR: 05/19/2003
Date Made Active in Reports: 06/02/2003
Number of Days to Update: 14

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-542-4786
Last EDR Contact: 10/18/2010
Next Scheduled EDR Contact: 01/31/2011
Data Release Frequency: No Update Planned

LUST REG 2: Fuel Leak List

Leaking Underground Storage Tank locations. Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, Sonoma counties.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: California Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-622-2433
Last EDR Contact: 09/20/2010
Next Scheduled EDR Contact: 01/03/2011
Data Release Frequency: Quarterly

LUST REG 1: Active Toxic Site Investigation

Del Norte, Humboldt, Lake, Mendocino, Modoc, Siskiyou, Sonoma, Trinity counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/01/2001
Date Data Arrived at EDR: 02/28/2001
Date Made Active in Reports: 03/29/2001
Number of Days to Update: 29

Source: California Regional Water Quality Control Board North Coast (1)
Telephone: 707-570-3769
Last EDR Contact: 08/02/2010
Next Scheduled EDR Contact: 11/15/2010
Data Release Frequency: No Update Planned

LUST: Geotracker's Leaking Underground Fuel Tank Report

Leaking Underground Storage Tank Incident Reports. LUST records contain an inventory of reported leaking underground storage tank incidents. Not all states maintain these records, and the information stored varies by state. For more information on a particular leaking underground storage tank sites, please contact the appropriate regulatory agency.

Date of Government Version: 09/20/2010
Date Data Arrived at EDR: 09/21/2010
Date Made Active in Reports: 10/18/2010
Number of Days to Update: 27

Source: State Water Resources Control Board
Telephone: see region list
Last EDR Contact: 09/21/2010
Next Scheduled EDR Contact: 01/03/2011
Data Release Frequency: Quarterly

LUST REG 8: Leaking Underground Storage Tanks

California Regional Water Quality Control Board Santa Ana Region (8). For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/14/2005
Date Data Arrived at EDR: 02/15/2005
Date Made Active in Reports: 03/28/2005
Number of Days to Update: 41

Source: California Regional Water Quality Control Board Santa Ana Region (8)
Telephone: 909-782-4496
Last EDR Contact: 10/18/2010
Next Scheduled EDR Contact: 01/31/2011
Data Release Frequency: Varies

SLIC: Statewide SLIC Cases

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/20/2010
Date Data Arrived at EDR: 09/21/2010
Date Made Active in Reports: 10/18/2010
Number of Days to Update: 27

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/21/2010
Next Scheduled EDR Contact: 01/03/2011
Data Release Frequency: Varies

SLIC REG 1: Active Toxic Site Investigations

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2003
Date Data Arrived at EDR: 04/07/2003
Date Made Active in Reports: 04/25/2003
Number of Days to Update: 18

Source: California Regional Water Quality Control Board, North Coast Region (1)
Telephone: 707-576-2220
Last EDR Contact: 08/02/2010
Next Scheduled EDR Contact: 11/15/2010
Data Release Frequency: No Update Planned

SLIC REG 2: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-286-0457
Last EDR Contact: 09/20/2010
Next Scheduled EDR Contact: 01/03/2011
Data Release Frequency: Quarterly

SLIC REG 3: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/18/2006
Date Data Arrived at EDR: 05/18/2006
Date Made Active in Reports: 06/15/2006
Number of Days to Update: 28

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-549-3147
Last EDR Contact: 10/18/2010
Next Scheduled EDR Contact: 01/31/2011
Data Release Frequency: Semi-Annually

SLIC REG 4: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/17/2004
Date Data Arrived at EDR: 11/18/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 47

Source: Region Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6600
Last EDR Contact: 10/04/2010
Next Scheduled EDR Contact: 01/17/2011
Data Release Frequency: Varies

SLIC REG 5: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/01/2005
Date Data Arrived at EDR: 04/05/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 16

Source: Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-3291
Last EDR Contact: 09/13/2010
Next Scheduled EDR Contact: 12/27/2010
Data Release Frequency: Semi-Annually

SLIC REG 6V: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/24/2005
Date Data Arrived at EDR: 05/25/2005
Date Made Active in Reports: 06/16/2005
Number of Days to Update: 22

Source: Regional Water Quality Control Board, Victorville Branch
Telephone: 619-241-6583
Last EDR Contact: 08/16/2010
Next Scheduled EDR Contact: 11/29/2010
Data Release Frequency: Semi-Annually

SLIC REG 6L: SLIC Sites
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35

Source: California Regional Water Quality Control Board, Lahontan Region
Telephone: 530-542-5574
Last EDR Contact: 08/16/2010
Next Scheduled EDR Contact: 11/29/2010
Data Release Frequency: No Update Planned

SLIC REG 7: SLIC List
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/24/2004
Date Data Arrived at EDR: 11/29/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 36

Source: California Regional Quality Control Board, Colorado River Basin Region
Telephone: 760-346-7491
Last EDR Contact: 08/02/2010
Next Scheduled EDR Contact: 11/15/2010
Data Release Frequency: No Update Planned

SLIC REG 8: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2008
Date Data Arrived at EDR: 04/03/2008
Date Made Active in Reports: 04/14/2008
Number of Days to Update: 11

Source: California Region Water Quality Control Board Santa Ana Region (8)
Telephone: 951-782-3298
Last EDR Contact: 09/13/2010
Next Scheduled EDR Contact: 12/27/2010
Data Release Frequency: Semi-Annually

SLIC REG 9: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/10/2007
Date Data Arrived at EDR: 09/11/2007
Date Made Active in Reports: 09/28/2007
Number of Days to Update: 17

Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-467-2980
Last EDR Contact: 08/09/2010
Next Scheduled EDR Contact: 11/22/2010
Data Release Frequency: Annually

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 08/05/2010
Date Data Arrived at EDR: 08/06/2010
Date Made Active in Reports: 10/04/2010
Number of Days to Update: 59

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 08/02/2010
Next Scheduled EDR Contact: 11/15/2010
Data Release Frequency: Quarterly

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land
A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 02/19/2009
Date Data Arrived at EDR: 02/19/2009
Date Made Active in Reports: 03/16/2009
Number of Days to Update: 25

Source: EPA Region 1
Telephone: 617-918-1313
Last EDR Contact: 08/02/2010
Next Scheduled EDR Contact: 11/15/2010
Data Release Frequency: Varies

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 05/24/2010
Date Data Arrived at EDR: 05/27/2010
Date Made Active in Reports: 08/09/2010
Number of Days to Update: 74

Source: EPA Region 8
Telephone: 303-312-6271
Last EDR Contact: 08/02/2010
Next Scheduled EDR Contact: 11/15/2010
Data Release Frequency: Quarterly

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 08/05/2010
Date Data Arrived at EDR: 08/06/2010
Date Made Active in Reports: 10/04/2010
Number of Days to Update: 59

Source: EPA Region 6
Telephone: 214-665-6597
Last EDR Contact: 08/02/2010
Next Scheduled EDR Contact: 11/15/2010
Data Release Frequency: Varies

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 08/27/2010
Date Data Arrived at EDR: 08/30/2010
Date Made Active in Reports: 10/04/2010
Number of Days to Update: 35

Source: EPA Region 4
Telephone: 404-562-8677
Last EDR Contact: 08/02/2010
Next Scheduled EDR Contact: 11/15/2010
Data Release Frequency: Semi-Annually

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 08/30/2010
Date Data Arrived at EDR: 08/30/2010
Date Made Active in Reports: 10/04/2010
Number of Days to Update: 35

Source: Environmental Protection Agency
Telephone: 415-972-3372
Last EDR Contact: 08/02/2010
Next Scheduled EDR Contact: 11/15/2010
Data Release Frequency: Quarterly

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 11/04/2009
Date Data Arrived at EDR: 05/04/2010
Date Made Active in Reports: 07/07/2010
Number of Days to Update: 64

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 08/11/2010
Next Scheduled EDR Contact: 11/15/2010
Data Release Frequency: Varies

State and tribal registered storage tank lists

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

UST: Active UST Facilities
Active UST facilities gathered from the local regulatory agencies

Date of Government Version: 09/20/2010
Date Data Arrived at EDR: 09/21/2010
Date Made Active in Reports: 09/30/2010
Number of Days to Update: 9

Source: SWRCB
Telephone: 916-480-1028
Last EDR Contact: 09/21/2010
Next Scheduled EDR Contact: 01/03/2011
Data Release Frequency: Semi-Annually

AST: Aboveground Petroleum Storage Tank Facilities
Registered Aboveground Storage Tanks.

Date of Government Version: 08/01/2009
Date Data Arrived at EDR: 09/10/2009
Date Made Active in Reports: 10/01/2009
Number of Days to Update: 21

Source: State Water Resources Control Board
Telephone: 916-341-5712
Last EDR Contact: 10/12/2010
Next Scheduled EDR Contact: 01/24/2011
Data Release Frequency: Quarterly

INDIAN UST R10: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 08/05/2010
Date Data Arrived at EDR: 08/06/2010
Date Made Active in Reports: 10/04/2010
Number of Days to Update: 59

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 08/02/2010
Next Scheduled EDR Contact: 11/15/2010
Data Release Frequency: Quarterly

INDIAN UST R9: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 08/30/2010
Date Data Arrived at EDR: 08/30/2010
Date Made Active in Reports: 10/04/2010
Number of Days to Update: 35

Source: EPA Region 9
Telephone: 415-972-3368
Last EDR Contact: 08/02/2010
Next Scheduled EDR Contact: 11/15/2010
Data Release Frequency: Quarterly

INDIAN UST R8: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 05/24/2010
Date Data Arrived at EDR: 05/27/2010
Date Made Active in Reports: 08/09/2010
Number of Days to Update: 74

Source: EPA Region 8
Telephone: 303-312-6137
Last EDR Contact: 08/02/2010
Next Scheduled EDR Contact: 11/15/2010
Data Release Frequency: Quarterly

INDIAN UST R7: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 04/01/2008
Date Data Arrived at EDR: 12/30/2008
Date Made Active in Reports: 03/16/2009
Number of Days to Update: 76

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 08/11/2010
Next Scheduled EDR Contact: 11/15/2010
Data Release Frequency: Varies

INDIAN UST R6: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 08/03/2010
Date Data Arrived at EDR: 08/04/2010
Date Made Active in Reports: 10/04/2010
Number of Days to Update: 61

Source: EPA Region 6
Telephone: 214-665-7591
Last EDR Contact: 08/02/2010
Next Scheduled EDR Contact: 11/15/2010
Data Release Frequency: Semi-Annually

INDIAN UST R5: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 02/11/2010
Date Data Arrived at EDR: 02/11/2010
Date Made Active in Reports: 04/12/2010
Number of Days to Update: 60

Source: EPA Region 5
Telephone: 312-886-6136
Last EDR Contact: 08/02/2010
Next Scheduled EDR Contact: 11/15/2010
Data Release Frequency: Varies

INDIAN UST R4: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 08/27/2010
Date Data Arrived at EDR: 08/30/2010
Date Made Active in Reports: 10/04/2010
Number of Days to Update: 35

Source: EPA Region 4
Telephone: 404-562-9424
Last EDR Contact: 08/02/2010
Next Scheduled EDR Contact: 11/15/2010
Data Release Frequency: Semi-Annually

INDIAN UST R1: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 02/19/2009
Date Data Arrived at EDR: 02/19/2009
Date Made Active in Reports: 03/16/2009
Number of Days to Update: 25

Source: EPA, Region 1
Telephone: 617-918-1313
Last EDR Contact: 08/02/2010
Next Scheduled EDR Contact: 11/15/2010
Data Release Frequency: Varies

FEMA UST: Underground Storage Tank Listing

A listing of all FEMA owned underground storage tanks.

Date of Government Version: 01/01/2010
Date Data Arrived at EDR: 02/16/2010
Date Made Active in Reports: 04/12/2010
Number of Days to Update: 55

Source: FEMA
Telephone: 202-646-5797
Last EDR Contact: 07/19/2010
Next Scheduled EDR Contact: 11/01/2010
Data Release Frequency: Varies

State and tribal voluntary cleanup sites

INDIAN VCP R7: Voluntary Cleanup Priority Lisitng

A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008
Date Data Arrived at EDR: 04/22/2008
Date Made Active in Reports: 05/19/2008
Number of Days to Update: 27

Source: EPA, Region 7
Telephone: 913-551-7365
Last EDR Contact: 04/20/2009
Next Scheduled EDR Contact: 07/20/2009
Data Release Frequency: Varies

VCP: Voluntary Cleanup Program Properties

Contains low threat level properties with either confirmed or unconfirmed releases and the project proponents have request that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs.

Date of Government Version: 08/18/2010
Date Data Arrived at EDR: 09/16/2010
Date Made Active in Reports: 09/29/2010
Number of Days to Update: 13

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 09/16/2010
Next Scheduled EDR Contact: 11/22/2010
Data Release Frequency: Quarterly

INDIAN VCP R1: Voluntary Cleanup Priority Listing
A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 04/02/2008
Date Data Arrived at EDR: 04/22/2008
Date Made Active in Reports: 05/19/2008
Number of Days to Update: 27

Source: EPA, Region 1
Telephone: 617-918-1102
Last EDR Contact: 10/04/2010
Next Scheduled EDR Contact: 01/17/2011
Data Release Frequency: Varies

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites
Included in the listing are brownfields properties addresses by Cooperative Agreement Recipients and brownfields properties addressed by Targeted Brownfields Assessments. Targeted Brownfields Assessments-EPA's Targeted Brownfields Assessments (TBA) program is designed to help states, tribes, and municipalities--especially those without EPA Brownfields Assessment Demonstration Pilots--minimize the uncertainties of contamination often associated with brownfields. Under the TBA program, EPA provides funding and/or technical assistance for environmental assessments at brownfields sites throughout the country. Targeted Brownfields Assessments supplement and work with other efforts under EPA's Brownfields Initiative to promote cleanup and redevelopment of brownfields. Cooperative Agreement Recipients-States, political subdivisions, territories, and Indian tribes become Brownfields Cleanup Revolving Loan Fund (BCRLF) cooperative agreement recipients when they enter into BCRLF cooperative agreements with the U.S. EPA. EPA selects BCRLF cooperative agreement recipients based on a proposal and application process. BCRLF cooperative agreement recipients must use EPA funds provided through BCRLF cooperative agreement for specified brownfields-related cleanup activities.

Date of Government Version: 06/24/2010
Date Data Arrived at EDR: 06/25/2010
Date Made Active in Reports: 08/17/2010
Number of Days to Update: 53

Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 09/29/2010
Next Scheduled EDR Contact: 01/10/2011
Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

ODI: Open Dump Inventory
An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985
Date Data Arrived at EDR: 08/09/2004
Date Made Active in Reports: 09/17/2004
Number of Days to Update: 39

Source: Environmental Protection Agency
Telephone: 800-424-9346
Last EDR Contact: 06/09/2004
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations
A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009
Date Data Arrived at EDR: 05/07/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 137

Source: EPA, Region 9
Telephone: 415-947-4219
Last EDR Contact: 10/18/2010
Next Scheduled EDR Contact: 01/10/2011
Data Release Frequency: Varies

WMUDS/SWAT: Waste Management Unit Database

Waste Management Unit Database System. WMUDS is used by the State Water Resources Control Board staff and the Regional Water Quality Control Boards for program tracking and inventory of waste management units. WMUDS is composed of the following databases: Facility Information, Scheduled Inspections Information, Waste Management Unit Information, SWAT Program Information, SWAT Report Summary Information, SWAT Report Summary Data, Chapter 15 (formerly Subchapter 15) Information, Chapter 15 Monitoring Parameters, TPCA Program Information, RCRA Program Information, Closure Information, and Interested Parties Information.

Date of Government Version: 04/01/2000
Date Data Arrived at EDR: 04/10/2000
Date Made Active in Reports: 05/10/2000
Number of Days to Update: 30

Source: State Water Resources Control Board
Telephone: 916-227-4448
Last EDR Contact: 08/16/2010
Next Scheduled EDR Contact: 11/29/2010
Data Release Frequency: Quarterly

SWRCY: Recycler Database

A listing of recycling facilities in California.

Date of Government Version: 07/23/2010
Date Data Arrived at EDR: 09/21/2010
Date Made Active in Reports: 09/29/2010
Number of Days to Update: 8

Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 09/21/2010
Next Scheduled EDR Contact: 01/03/2011
Data Release Frequency: Quarterly

HAULERS: Registered Waste Tire Haulers Listing

A listing of registered waste tire haulers.

Date of Government Version: 09/27/2010
Date Data Arrived at EDR: 09/28/2010
Date Made Active in Reports: 10/18/2010
Number of Days to Update: 20

Source: Integrated Waste Management Board
Telephone: 916-341-6422
Last EDR Contact: 09/20/2010
Next Scheduled EDR Contact: 12/06/2010
Data Release Frequency: Varies

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands

Location of open dumps on Indian land.

Date of Government Version: 12/31/1998
Date Data Arrived at EDR: 12/03/2007
Date Made Active in Reports: 01/24/2008
Number of Days to Update: 52

Source: Environmental Protection Agency
Telephone: 703-308-8245
Last EDR Contact: 09/07/2010
Next Scheduled EDR Contact: 11/22/2010
Data Release Frequency: Varies

Local Lists of Hazardous waste / Contaminated Sites

US CDL: Clandestine Drug Labs

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 05/07/2010
Date Data Arrived at EDR: 06/18/2010
Date Made Active in Reports: 08/17/2010
Number of Days to Update: 60

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 09/17/2010
Next Scheduled EDR Contact: 12/20/2010
Data Release Frequency: Quarterly

HIST CAL-SITES: Calsites Database

The Calsites database contains potential or confirmed hazardous substance release properties. In 1996, California EPA reevaluated and significantly reduced the number of sites in the Calsites database. No longer updated by the state agency. It has been replaced by ENVIROSTOR.

Date of Government Version: 08/08/2005
Date Data Arrived at EDR: 08/03/2006
Date Made Active in Reports: 08/24/2006
Number of Days to Update: 21

Source: Department of Toxic Substance Control
Telephone: 916-323-3400
Last EDR Contact: 02/23/2009
Next Scheduled EDR Contact: 05/25/2009
Data Release Frequency: No Update Planned

SCH: School Property Evaluation Program

This category contains proposed and existing school sites that are being evaluated by DTSC for possible hazardous materials contamination. In some cases, these properties may be listed in the CalSites category depending on the level of threat to public health and safety or the environment they pose.

Date of Government Version: 08/18/2010
Date Data Arrived at EDR: 09/16/2010
Date Made Active in Reports: 09/29/2010
Number of Days to Update: 13

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 09/16/2010
Next Scheduled EDR Contact: 11/22/2010
Data Release Frequency: Quarterly

TOXIC PITS: Toxic Pits Cleanup Act Sites

Toxic PITS Cleanup Act Sites. TOXIC PITS identifies sites suspected of containing hazardous substances where cleanup has not yet been completed.

Date of Government Version: 07/01/1995
Date Data Arrived at EDR: 08/30/1995
Date Made Active in Reports: 09/26/1995
Number of Days to Update: 27

Source: State Water Resources Control Board
Telephone: 916-227-4364
Last EDR Contact: 01/26/2009
Next Scheduled EDR Contact: 04/27/2009
Data Release Frequency: No Update Planned

CDL: Clandestine Drug Labs

A listing of drug lab locations. Listing of a location in this database does not indicate that any illegal drug lab materials were or were not present there, and does not constitute a determination that the location either requires or does not require additional cleanup work.

Date of Government Version: 08/19/2010
Date Data Arrived at EDR: 08/23/2010
Date Made Active in Reports: 09/29/2010
Number of Days to Update: 37

Source: Department of Toxic Substances Control
Telephone: 916-255-6504
Last EDR Contact: 10/04/2010
Next Scheduled EDR Contact: 01/17/2011
Data Release Frequency: Varies

US HIST CDL: National Clandestine Laboratory Register

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 09/01/2007
Date Data Arrived at EDR: 11/19/2008
Date Made Active in Reports: 03/30/2009
Number of Days to Update: 131

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 03/23/2009
Next Scheduled EDR Contact: 06/22/2009
Data Release Frequency: No Update Planned

Local Lists of Registered Storage Tanks

CA FID UST: Facility Inventory Database

The Facility Inventory Database (FID) contains a historical listing of active and inactive underground storage tank locations from the State Water Resource Control Board. Refer to local/county source for current data.

Date of Government Version: 10/31/1994
Date Data Arrived at EDR: 09/05/1995
Date Made Active in Reports: 09/29/1995
Number of Days to Update: 24

Source: California Environmental Protection Agency
Telephone: 916-341-5851
Last EDR Contact: 12/28/1998
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

UST MENDOCINO: Mendocino County UST Database
A listing of underground storage tank locations in Mendocino County.

Date of Government Version: 09/23/2009
Date Data Arrived at EDR: 09/23/2009
Date Made Active in Reports: 10/01/2009
Number of Days to Update: 8
Source: Department of Public Health
Telephone: 707-463-4466
Last EDR Contact: 09/07/2010
Next Scheduled EDR Contact: 12/20/2010
Data Release Frequency: Annually

HIST UST: Hazardous Substance Storage Container Database
The Hazardous Substance Storage Container Database is a historical listing of UST sites. Refer to local/county source for current data.

Date of Government Version: 10/15/1990
Date Data Arrived at EDR: 01/25/1991
Date Made Active in Reports: 02/12/1991
Number of Days to Update: 18
Source: State Water Resources Control Board
Telephone: 916-341-5851
Last EDR Contact: 07/26/2001
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

SWEEPS UST: SWEEPS UST Listing
Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

Date of Government Version: 06/01/1994
Date Data Arrived at EDR: 07/07/2005
Date Made Active in Reports: 08/11/2005
Number of Days to Update: 35
Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/03/2005
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

Local Land Records

LIENS 2: CERCLA Lien Information
A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 05/06/2010
Date Data Arrived at EDR: 05/11/2010
Date Made Active in Reports: 08/09/2010
Number of Days to Update: 90
Source: Environmental Protection Agency
Telephone: 202-564-6023
Last EDR Contact: 08/02/2010
Next Scheduled EDR Contact: 11/15/2010
Data Release Frequency: Varies

LUCIS: Land Use Control Information System
LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 12/09/2005
Date Data Arrived at EDR: 12/11/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 31
Source: Department of the Navy
Telephone: 843-820-7326
Last EDR Contact: 09/08/2010
Next Scheduled EDR Contact: 12/06/2010
Data Release Frequency: Varies

LIENS: Environmental Liens Listing
A listing of property locations with environmental liens for California where DTSC is a lien holder.

Date of Government Version: 07/27/2010
Date Data Arrived at EDR: 08/13/2010
Date Made Active in Reports: 08/20/2010
Number of Days to Update: 7
Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 10/18/2010
Next Scheduled EDR Contact: 01/31/2011
Data Release Frequency: Varies

DEED: Deed Restriction Listing

Site Mitigation and Brownfields Reuse Program Facility Sites with Deed Restrictions & Hazardous Waste Management Program Facility Sites with Deed / Land Use Restriction. The DTSC Site Mitigation and Brownfields Reuse Program (SMBRP) list includes sites cleaned up under the program's oversight and generally does not include current or former hazardous waste facilities that required a hazardous waste facility permit. The list represents deed restrictions that are active. Some sites have multiple deed restrictions. The DTSC Hazardous Waste Management Program (HWMP) has developed a list of current or former hazardous waste facilities that have a recorded land use restriction at the local county recorder's office. The land use restrictions on this list were required by the DTSC HWMP as a result of the presence of hazardous substances that remain on site after the facility (or part of the facility) has been closed or cleaned up. The types of land use restriction include deed notice, deed restriction, or a land use restriction that binds current and future owners.

Date of Government Version: 09/14/2010
Date Data Arrived at EDR: 09/15/2010
Date Made Active in Reports: 09/29/2010
Number of Days to Update: 14

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 09/15/2010
Next Scheduled EDR Contact: 12/27/2010
Data Release Frequency: Semi-Annually

Records of Emergency Release Reports

HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 04/06/2010
Date Data Arrived at EDR: 04/07/2010
Date Made Active in Reports: 05/27/2010
Number of Days to Update: 50

Source: U.S. Department of Transportation
Telephone: 202-366-4555
Last EDR Contact: 10/07/2010
Next Scheduled EDR Contact: 01/17/2011
Data Release Frequency: Annually

CHMIRS: California Hazardous Material Incident Report System

California Hazardous Material Incident Reporting System. CHMIRS contains information on reported hazardous material incidents (accidental releases or spills).

Date of Government Version: 12/31/2009
Date Data Arrived at EDR: 07/21/2010
Date Made Active in Reports: 08/20/2010
Number of Days to Update: 30

Source: Office of Emergency Services
Telephone: 916-845-8400
Last EDR Contact: 08/02/2010
Next Scheduled EDR Contact: 11/15/2010
Data Release Frequency: Varies

LDS: Land Disposal Sites Listing

The Land Disposal program regulates of waste discharge to land for treatment, storage and disposal in waste management units.

Date of Government Version: 09/20/2010
Date Data Arrived at EDR: 09/21/2010
Date Made Active in Reports: 10/18/2010
Number of Days to Update: 27

Source: State Water Qualilty Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/21/2010
Next Scheduled EDR Contact: 01/03/2011
Data Release Frequency: Quarterly

MCS: Military Cleanup Sites Listing

The State Water Resources Control Board and nine Regional Water Quality Control Boards partner with the Department of Defense (DoD) through the Defense and State Memorandum of Agreement (DSMOA) to oversee the investigation and remediation of water quality issues at military facilities.

Date of Government Version: 09/20/2010
Date Data Arrived at EDR: 09/21/2010
Date Made Active in Reports: 10/18/2010
Number of Days to Update: 27

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/21/2010
Next Scheduled EDR Contact: 01/03/2011
Data Release Frequency: Quarterly

Other Ascertainable Records

RCRA-NonGen: RCRA - Non Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 02/17/2010
Date Data Arrived at EDR: 02/19/2010
Date Made Active in Reports: 05/17/2010
Number of Days to Update: 87

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 10/07/2010
Next Scheduled EDR Contact: 01/17/2011
Data Release Frequency: Varies

DOT OPS: Incident and Accident Data

Department of Transporation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 01/12/2010
Date Data Arrived at EDR: 02/09/2010
Date Made Active in Reports: 04/12/2010
Number of Days to Update: 62

Source: Department of Transporation, Office of Pipeline Safety
Telephone: 202-366-4595
Last EDR Contact: 08/11/2010
Next Scheduled EDR Contact: 11/22/2010
Data Release Frequency: Varies

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 11/10/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 62

Source: USGS
Telephone: 703-692-8801
Last EDR Contact: 07/22/2010
Next Scheduled EDR Contact: 11/01/2010
Data Release Frequency: Semi-Annually

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 12/31/2008
Date Data Arrived at EDR: 09/30/2009
Date Made Active in Reports: 12/01/2009
Number of Days to Update: 62

Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 09/14/2010
Next Scheduled EDR Contact: 12/27/2010
Data Release Frequency: Varies

CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 04/11/2010
Date Data Arrived at EDR: 04/19/2010
Date Made Active in Reports: 05/17/2010
Number of Days to Update: 28

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 10/04/2010
Next Scheduled EDR Contact: 01/17/2011
Data Release Frequency: Varies

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 06/01/2010
Date Data Arrived at EDR: 06/16/2010
Date Made Active in Reports: 08/17/2010
Number of Days to Update: 62

Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 09/15/2010
Next Scheduled EDR Contact: 12/27/2010
Data Release Frequency: Annually

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 12/14/2009
Date Data Arrived at EDR: 09/29/2010
Date Made Active in Reports: 10/04/2010
Number of Days to Update: 5

Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 09/01/2010
Next Scheduled EDR Contact: 12/13/2010
Data Release Frequency: Varies

MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 05/07/2010
Date Data Arrived at EDR: 06/09/2010
Date Made Active in Reports: 08/30/2010
Number of Days to Update: 82

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 09/09/2010
Next Scheduled EDR Contact: 12/20/2010
Data Release Frequency: Semi-Annually

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2008
Date Data Arrived at EDR: 01/13/2010
Date Made Active in Reports: 02/18/2010
Number of Days to Update: 36

Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 09/01/2010
Next Scheduled EDR Contact: 12/13/2010
Data Release Frequency: Annually

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2002
Date Data Arrived at EDR: 04/14/2006
Date Made Active in Reports: 05/30/2006
Number of Days to Update: 46

Source: EPA
Telephone: 202-260-5521
Last EDR Contact: 10/01/2010
Next Scheduled EDR Contact: 01/10/2011
Data Release Frequency: Every 4 Years

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Telephone: 202-566-1667
Last EDR Contact: 08/30/2010
Next Scheduled EDR Contact: 12/13/2010
Data Release Frequency: Quarterly

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA
Telephone: 202-566-1667
Last EDR Contact: 08/30/2010
Next Scheduled EDR Contact: 12/13/2010
Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing

A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2007
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing

A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2008
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 12/31/2008
Date Data Arrived at EDR: 01/06/2010
Date Made Active in Reports: 02/10/2010
Number of Days to Update: 35

Source: EPA
Telephone: 202-564-4203
Last EDR Contact: 08/16/2010
Next Scheduled EDR Contact: 11/15/2010
Data Release Frequency: Annually

ICIS: Integrated Compliance Information System

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 04/24/2010
Date Data Arrived at EDR: 04/29/2010
Date Made Active in Reports: 05/17/2010
Number of Days to Update: 18

Source: Environmental Protection Agency
Telephone: 202-564-5088
Last EDR Contact: 09/27/2010
Next Scheduled EDR Contact: 01/10/2011
Data Release Frequency: Quarterly

PADS: PCB Activity Database System

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 02/01/2010
Date Data Arrived at EDR: 04/22/2010
Date Made Active in Reports: 08/09/2010
Number of Days to Update: 109

Source: EPA
Telephone: 202-566-0500
Last EDR Contact: 07/30/2010
Next Scheduled EDR Contact: 11/01/2010
Data Release Frequency: Annually

MLTS: Material Licensing Tracking System

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 03/18/2010
Date Data Arrived at EDR: 04/06/2010
Date Made Active in Reports: 05/27/2010
Number of Days to Update: 51

Source: Nuclear Regulatory Commission
Telephone: 301-415-7169
Last EDR Contact: 09/13/2010
Next Scheduled EDR Contact: 12/27/2010
Data Release Frequency: Quarterly

RADINFO: Radiation Information Database

The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 07/13/2010
Date Data Arrived at EDR: 07/14/2010
Date Made Active in Reports: 08/09/2010
Number of Days to Update: 26

Source: Environmental Protection Agency
Telephone: 202-343-9775
Last EDR Contact: 10/14/2010
Next Scheduled EDR Contact: 01/24/2011
Data Release Frequency: Quarterly

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 04/14/2010
Date Data Arrived at EDR: 04/16/2010
Date Made Active in Reports: 05/27/2010
Number of Days to Update: 41

Source: EPA
Telephone: (415) 947-8000
Last EDR Contact: 09/15/2010
Next Scheduled EDR Contact: 12/27/2010
Data Release Frequency: Quarterly

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995
Date Data Arrived at EDR: 07/03/1995
Date Made Active in Reports: 08/07/1995
Number of Days to Update: 35

Source: EPA
Telephone: 202-564-4104
Last EDR Contact: 06/02/2008
Next Scheduled EDR Contact: 09/01/2008
Data Release Frequency: No Update Planned

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2007
Date Data Arrived at EDR: 02/25/2010
Date Made Active in Reports: 05/12/2010
Number of Days to Update: 76

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 08/24/2010
Next Scheduled EDR Contact: 12/06/2010
Data Release Frequency: Biennially

CA BOND EXP. PLAN: Bond Expenditure Plan

Department of Health Services developed a site-specific expenditure plan as the basis for an appropriation of Hazardous Substance Cleanup Bond Act funds. It is not updated.

Date of Government Version: 01/01/1989
Date Data Arrived at EDR: 07/27/1994
Date Made Active in Reports: 08/02/1994
Number of Days to Update: 6

Source: Department of Health Services
Telephone: 916-255-2118
Last EDR Contact: 05/31/1994
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

WDS: Waste Discharge System

Sites which have been issued waste discharge requirements.

Date of Government Version: 06/19/2007
Date Data Arrived at EDR: 06/20/2007
Date Made Active in Reports: 06/29/2007
Number of Days to Update: 9

Source: State Water Resources Control Board
Telephone: 916-341-5227
Last EDR Contact: 08/30/2010
Next Scheduled EDR Contact: 12/13/2010
Data Release Frequency: Quarterly

NPDES: NPDES Permits Listing

A listing of NPDES permits, including stormwater.

Date of Government Version: 08/24/2010
Date Data Arrived at EDR: 08/24/2010
Date Made Active in Reports: 09/29/2010
Number of Days to Update: 36

Source: State Water Resources Control Board
Telephone: 916-445-9379
Last EDR Contact: 08/24/2010
Next Scheduled EDR Contact: 12/06/2010
Data Release Frequency: Quarterly

CORTESE: "Cortese" Hazardous Waste & Substances Sites List

The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites). This listing is no longer updated by the state agency.

Date of Government Version: 07/08/2010
Date Data Arrived at EDR: 07/09/2010
Date Made Active in Reports: 08/12/2010
Number of Days to Update: 34

Source: CAL EPA/Office of Emergency Information
Telephone: 916-323-3400
Last EDR Contact: 10/06/2010
Next Scheduled EDR Contact: 01/17/2011
Data Release Frequency: Quarterly

HIST CORTESE: Hazardous Waste & Substance Site List

The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES].

Date of Government Version: 04/01/2001
Date Data Arrived at EDR: 01/22/2009
Date Made Active in Reports: 04/08/2009
Number of Days to Update: 76

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 01/22/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

NOTIFY 65: Proposition 65 Records

Proposition 65 Notification Records. NOTIFY 65 contains facility notifications about any release which could impact drinking water and thereby expose the public to a potential health risk.

Date of Government Version: 10/21/1993
Date Data Arrived at EDR: 11/01/1993
Date Made Active in Reports: 11/19/1993
Number of Days to Update: 18

Source: State Water Resources Control Board
Telephone: 916-445-3846
Last EDR Contact: 09/27/2010
Next Scheduled EDR Contact: 01/10/2011
Data Release Frequency: No Update Planned

DRYCLEANERS: Cleaner Facilities

A list of drycleaner related facilities that have EPA ID numbers. These are facilities with certain SIC codes: power laundries, family and commercial; garment pressing and cleaner's agents; linen supply; coin-operated laundries and cleaning; drycleaning plants, except rugs; carpet and upholster cleaning; industrial launderers; laundry and garment services.

Date of Government Version: 09/15/2010
Date Data Arrived at EDR: 09/16/2010
Date Made Active in Reports: 09/29/2010
Number of Days to Update: 13

Source: Department of Toxic Substance Control
Telephone: 916-327-4498
Last EDR Contact: 09/13/2010
Next Scheduled EDR Contact: 12/27/2010
Data Release Frequency: Annually

WIP: Well Investigation Program Case List

Well Investigation Program case in the San Gabriel and San Fernando Valley area.

Date of Government Version: 07/03/2009
Date Data Arrived at EDR: 07/21/2009
Date Made Active in Reports: 08/03/2009
Number of Days to Update: 13

Source: Los Angeles Water Quality Control Board
Telephone: 213-576-6726
Last EDR Contact: 10/05/2010
Next Scheduled EDR Contact: 01/17/2011
Data Release Frequency: Varies

HAZNET: Facility and Manifest Data

Facility and Manifest Data. The data is extracted from the copies of hazardous waste manifests received each year by the DTSC. The annual volume of manifests is typically 700,000 - 1,000,000 annually, representing approximately 350,000 - 500,000 shipments. Data are from the manifests submitted without correction, and therefore many contain some invalid values for data elements such as generator ID, TSD ID, waste category, and disposal method.

Date of Government Version: 12/31/2009
Date Data Arrived at EDR: 07/07/2010
Date Made Active in Reports: 08/12/2010
Number of Days to Update: 36

Source: California Environmental Protection Agency
Telephone: 916-255-1136
Last EDR Contact: 10/19/2010
Next Scheduled EDR Contact: 01/31/2011
Data Release Frequency: Annually

EMI: Emissions Inventory Data

Toxics and criteria pollutant emissions data collected by the ARB and local air pollution agencies.

Date of Government Version: 12/31/2008
Date Data Arrived at EDR: 09/29/2010
Date Made Active in Reports: 10/18/2010
Number of Days to Update: 19

Source: California Air Resources Board
Telephone: 916-322-2990
Last EDR Contact: 09/29/2010
Next Scheduled EDR Contact: 01/10/2011
Data Release Frequency: Varies

INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 12/08/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 34

Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 07/22/2010
Next Scheduled EDR Contact: 11/01/2010
Data Release Frequency: Semi-Annually

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 05/12/2010
Date Data Arrived at EDR: 05/13/2010
Date Made Active in Reports: 08/17/2010
Number of Days to Update: 96

Source: Environmental Protection Agency
Telephone: 615-532-8599
Last EDR Contact: 08/23/2010
Next Scheduled EDR Contact: 11/08/2010
Data Release Frequency: Varies

PROC: Certified Processors Database
A listing of certified processors.

Date of Government Version: 07/23/2010
Date Data Arrived at EDR: 09/21/2010
Date Made Active in Reports: 09/29/2010
Number of Days to Update: 8
Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 09/21/2010
Next Scheduled EDR Contact: 01/03/2011
Data Release Frequency: Quarterly

MWMP: Medical Waste Management Program Listing
The Medical Waste Management Program (MWMP) ensures the proper handling and disposal of medical waste by permitting and inspecting medical waste Offsite Treatment Facilities (PDF) and Transfer Stations (PDF) throughout the state. MWMP also oversees all Medical Waste Transporters.

Date of Government Version: 09/03/2010
Date Data Arrived at EDR: 09/16/2010
Date Made Active in Reports: 09/29/2010
Number of Days to Update: 13
Source: Department of Public Health
Telephone: 916-558-1784
Last EDR Contact: 09/14/2010
Next Scheduled EDR Contact: 12/27/2010
Data Release Frequency: Varies

COAL ASH DOE: Sleam-Electric Plan Operation Data
A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 08/07/2009
Date Made Active in Reports: 10/22/2009
Number of Days to Update: 76
Source: Department of Energy
Telephone: 202-586-8719
Last EDR Contact: 07/21/2010
Next Scheduled EDR Contact: 11/01/2010
Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List
A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 11/09/2009
Date Data Arrived at EDR: 12/18/2009
Date Made Active in Reports: 02/10/2010
Number of Days to Update: 54
Source: Environmental Protection Agency
Telephone: N/A
Last EDR Contact: 09/15/2010
Next Scheduled EDR Contact: 12/27/2010
Data Release Frequency: Varies

HWT: Registered Hazardous Waste Transporter Database
A listing of hazardous waste transporters. In California, unless specifically exempted, it is unlawful for any person to transport hazardous wastes unless the person holds a valid registration issued by DTSC. A hazardous waste transporter registration is valid for one year and is assigned a unique registration number.

Date of Government Version: 07/21/2010
Date Data Arrived at EDR: 07/21/2010
Date Made Active in Reports: 08/12/2010
Number of Days to Update: 22
Source: Department of Toxic Substances Control
Telephone: 916-440-7145
Last EDR Contact: 07/21/2010
Next Scheduled EDR Contact: 11/01/2010
Data Release Frequency: Quarterly

HWP: EnviroStor Permitted Facilities Listing
Detailed information on permitted hazardous waste facilities and corrective action ("cleanups") tracked in EnviroStor.

Date of Government Version: 08/09/2010
Date Data Arrived at EDR: 08/11/2010
Date Made Active in Reports: 08/20/2010
Number of Days to Update: 9
Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 08/11/2010
Next Scheduled EDR Contact: 11/22/2010
Data Release Frequency: Quarterly

FINANCIAL ASSURANCE 2: Financial Assurance Information Listing
A listing of financial assurance information for solid waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 09/27/2010
Date Data Arrived at EDR: 09/28/2010
Date Made Active in Reports: 10/18/2010
Number of Days to Update: 20

Source: California Integrated Waste Management Board
Telephone: 916-341-6066
Last EDR Contact: 09/20/2010
Next Scheduled EDR Contact: 12/06/2010
Data Release Frequency: Varies

FINANCIAL ASSURANCE: Financial Assurance Information Listing
Financial Assurance information

Date of Government Version: 03/01/2007
Date Data Arrived at EDR: 06/01/2007
Date Made Active in Reports: 06/29/2007
Number of Days to Update: 28

Source: Department of Toxic Substances Control
Telephone: 916-255-3628
Last EDR Contact: 08/13/2010
Next Scheduled EDR Contact: 11/15/2010
Data Release Frequency: Varies

FEDLAND: Federal and Indian Lands
Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 02/06/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 339

Source: U.S. Geological Survey
Telephone: 888-275-8747
Last EDR Contact: 07/22/2010
Next Scheduled EDR Contact: 11/01/2010
Data Release Frequency: N/A

PCB TRANSFORMER: PCB Transformer Registration Database
The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 01/01/2008
Date Data Arrived at EDR: 02/18/2009
Date Made Active in Reports: 05/29/2009
Number of Days to Update: 100

Source: Environmental Protection Agency
Telephone: 202-566-0517
Last EDR Contact: 08/10/2010
Next Scheduled EDR Contact: 11/15/2010
Data Release Frequency: Varies

EDR PROPRIETARY RECORDS

EDR Proprietary Records

Manufactured Gas Plants: EDR Proprietary Manufactured Gas Plants
The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

EDR Historical Auto Stations: EDR Proprietary Historic Gas Stations
EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR Historical Cleaners: EDR Proprietary Historic Dry Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

COUNTY RECORDS

ALAMEDA COUNTY:

Contaminated Sites

A listing of contaminated sites overseen by the Toxic Release Program (oil and groundwater contamination from chemical releases and spills) and the Leaking Underground Storage Tank Program (soil and ground water contamination from leaking petroleum USTs).

Date of Government Version: 07/14/2010
Date Data Arrived at EDR: 07/16/2010
Date Made Active in Reports: 08/12/2010
Number of Days to Update: 27

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 10/04/2010
Next Scheduled EDR Contact: 01/17/2011
Data Release Frequency: Semi-Annually

Underground Tanks

Underground storage tank sites located in Alameda county.

Date of Government Version: 07/14/2010
Date Data Arrived at EDR: 07/16/2010
Date Made Active in Reports: 08/12/2010
Number of Days to Update: 27

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 10/04/2010
Next Scheduled EDR Contact: 01/17/2011
Data Release Frequency: Semi-Annually

CONTRA COSTA COUNTY:

Site List

List includes sites from the underground tank, hazardous waste generator and business plan/2185 programs.

Date of Government Version: 08/16/2010
Date Data Arrived at EDR: 08/17/2010
Date Made Active in Reports: 08/20/2010
Number of Days to Update: 3

Source: Contra Costa Health Services Department
Telephone: 925-646-2286
Last EDR Contact: 08/09/2010
Next Scheduled EDR Contact: 11/22/2010
Data Release Frequency: Semi-Annually

FRESNO COUNTY:

CUPA Resources List

Certified Unified Program Agency. CUPA's are responsible for implementing a unified hazardous materials and hazardous waste management regulatory program. The agency provides oversight of businesses that deal with hazardous materials, operate underground storage tanks or aboveground storage tanks.

Date of Government Version: 07/19/2010
Date Data Arrived at EDR: 07/21/2010
Date Made Active in Reports: 08/12/2010
Number of Days to Update: 22

Source: Dept. of Community Health
Telephone: 559-445-3271
Last EDR Contact: 10/18/2010
Next Scheduled EDR Contact: 01/31/2011
Data Release Frequency: Semi-Annually

KERN COUNTY:

Underground Storage Tank Sites & Tank Listing
Kern County Sites and Tanks Listing.

Date of Government Version: 08/31/2010
Date Data Arrived at EDR: 09/01/2010
Date Made Active in Reports: 09/30/2010
Number of Days to Update: 29

Source: Kern County Environment Health Services Department
Telephone: 661-862-8700
Last EDR Contact: 08/30/2010
Next Scheduled EDR Contact: 11/29/2010
Data Release Frequency: Quarterly

LOS ANGELES COUNTY:

San Gabriel Valley Areas of Concern
San Gabriel Valley areas where VOC contamination is at or above the MCL as designated by region 9 EPA office.

Date of Government Version: 03/30/2009
Date Data Arrived at EDR: 03/31/2009
Date Made Active in Reports: 10/23/2009
Number of Days to Update: 206

Source: EPA Region 9
Telephone: 415-972-3178
Last EDR Contact: 09/27/2010
Next Scheduled EDR Contact: 01/10/2011
Data Release Frequency: No Update Planned

HMS: Street Number List
Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 12/31/2009
Date Data Arrived at EDR: 04/13/2010
Date Made Active in Reports: 05/18/2010
Number of Days to Update: 35

Source: Department of Public Works
Telephone: 626-458-3517
Last EDR Contact: 10/18/2010
Next Scheduled EDR Contact: 01/31/2011
Data Release Frequency: Semi-Annually

List of Solid Waste Facilities
Solid Waste Facilities in Los Angeles County.

Date of Government Version: 07/26/2010
Date Data Arrived at EDR: 08/10/2010
Date Made Active in Reports: 08/20/2010
Number of Days to Update: 10

Source: La County Department of Public Works
Telephone: 818-458-5185
Last EDR Contact: 07/26/2010
Next Scheduled EDR Contact: 11/08/2010
Data Release Frequency: Varies

City of Los Angeles Landfills
Landfills owned and maintained by the City of Los Angeles.

Date of Government Version: 03/05/2009
Date Data Arrived at EDR: 03/10/2009
Date Made Active in Reports: 04/08/2009
Number of Days to Update: 29

Source: Engineering & Construction Division
Telephone: 213-473-7869
Last EDR Contact: 08/25/2010
Next Scheduled EDR Contact: 12/06/2010
Data Release Frequency: Varies

Site Mitigation List
Industrial sites that have had some sort of spill or complaint.

Date of Government Version: 02/09/2010
Date Data Arrived at EDR: 02/12/2010
Date Made Active in Reports: 03/04/2010
Number of Days to Update: 20

Source: Community Health Services
Telephone: 323-890-7806
Last EDR Contact: 07/26/2010
Next Scheduled EDR Contact: 11/08/2010
Data Release Frequency: Annually

City of El Segundo Underground Storage Tank
Underground storage tank sites located in El Segundo city.

Date of Government Version: 07/27/2010
Date Data Arrived at EDR: 07/28/2010
Date Made Active in Reports: 08/12/2010
Number of Days to Update: 15

Source: City of El Segundo Fire Department
Telephone: 310-524-2236
Last EDR Contact: 07/26/2010
Next Scheduled EDR Contact: 11/08/2010
Data Release Frequency: Semi-Annually

City of Long Beach Underground Storage Tank
Underground storage tank sites located in the city of Long Beach.

Date of Government Version: 03/28/2003
Date Data Arrived at EDR: 10/23/2003
Date Made Active in Reports: 11/26/2003
Number of Days to Update: 34

Source: City of Long Beach Fire Department
Telephone: 562-570-2563
Last EDR Contact: 08/02/2010
Next Scheduled EDR Contact: 11/15/2010
Data Release Frequency: Annually

City of Torrance Underground Storage Tank
Underground storage tank sites located in the city of Torrance.

Date of Government Version: 07/07/2010
Date Data Arrived at EDR: 07/30/2010
Date Made Active in Reports: 08/12/2010
Number of Days to Update: 13

Source: City of Torrance Fire Department
Telephone: 310-618-2973
Last EDR Contact: 10/18/2010
Next Scheduled EDR Contact: 01/31/2011
Data Release Frequency: Semi-Annually

MARIN COUNTY:

Underground Storage Tank Sites
Currently permitted USTs in Marin County.

Date of Government Version: 07/19/2010
Date Data Arrived at EDR: 08/16/2010
Date Made Active in Reports: 09/30/2010
Number of Days to Update: 45

Source: Public Works Department Waste Management
Telephone: 415-499-6647
Last EDR Contact: 10/12/2010
Next Scheduled EDR Contact: 01/24/2011
Data Release Frequency: Semi-Annually

NAPA COUNTY:

Sites With Reported Contamination
A listing of leaking underground storage tank sites located in Napa county.

Date of Government Version: 07/09/2008
Date Data Arrived at EDR: 07/09/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 22

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 09/07/2010
Next Scheduled EDR Contact: 12/20/2010
Data Release Frequency: No Update Planned

Closed and Operating Underground Storage Tank Sites
Underground storage tank sites located in Napa county.

Date of Government Version: 01/15/2008
Date Data Arrived at EDR: 01/16/2008
Date Made Active in Reports: 02/08/2008
Number of Days to Update: 23

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 09/07/2010
Next Scheduled EDR Contact: 12/20/2010
Data Release Frequency: No Update Planned

ORANGE COUNTY:

List of Industrial Site Cleanups
Petroleum and non-petroleum spills.

Date of Government Version: 08/05/2010
Date Data Arrived at EDR: 08/23/2010
Date Made Active in Reports: 09/29/2010
Number of Days to Update: 37

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 08/17/2010
Next Scheduled EDR Contact: 11/29/2010
Data Release Frequency: Annually

List of Underground Storage Tank Cleanups
Orange County Underground Storage Tank Cleanups (LUST).

Date of Government Version: 08/05/2010
Date Data Arrived at EDR: 08/23/2010
Date Made Active in Reports: 09/29/2010
Number of Days to Update: 37

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 08/17/2010
Next Scheduled EDR Contact: 11/29/2010
Data Release Frequency: Quarterly

List of Underground Storage Tank Facilities
Orange County Underground Storage Tank Facilities (UST).

Date of Government Version: 08/05/2010
Date Data Arrived at EDR: 08/23/2010
Date Made Active in Reports: 09/30/2010
Number of Days to Update: 38

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 08/17/2010
Next Scheduled EDR Contact: 11/29/2010
Data Release Frequency: Quarterly

PLACER COUNTY:

Master List of Facilities
List includes aboveground tanks, underground tanks and cleanup sites.

Date of Government Version: 09/13/2010
Date Data Arrived at EDR: 09/14/2010
Date Made Active in Reports: 09/29/2010
Number of Days to Update: 15

Source: Placer County Health and Human Services
Telephone: 530-889-7312
Last EDR Contact: 09/13/2010
Next Scheduled EDR Contact: 12/27/2010
Data Release Frequency: Semi-Annually

RIVERSIDE COUNTY:

Listing of Underground Tank Cleanup Sites
Riverside County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 08/04/2010
Date Data Arrived at EDR: 08/13/2010
Date Made Active in Reports: 08/20/2010
Number of Days to Update: 7

Source: Department of Public Health
Telephone: 951-358-5055
Last EDR Contact: 09/27/2010
Next Scheduled EDR Contact: 01/10/2011
Data Release Frequency: Quarterly

Underground Storage Tank Tank List
Underground storage tank sites located in Riverside county.

Date of Government Version: 08/04/2010
Date Data Arrived at EDR: 08/13/2010
Date Made Active in Reports: 09/30/2010
Number of Days to Update: 48

Source: Health Services Agency
Telephone: 951-358-5055
Last EDR Contact: 09/27/2010
Next Scheduled EDR Contact: 01/10/2011
Data Release Frequency: Quarterly

SACRAMENTO COUNTY:

Toxic Site Clean-Up List
List of sites where unauthorized releases of potentially hazardous materials have occurred.

Date of Government Version: 06/30/2010
Date Data Arrived at EDR: 07/21/2010
Date Made Active in Reports: 08/12/2010
Number of Days to Update: 22

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 10/12/2010
Next Scheduled EDR Contact: 01/24/2011
Data Release Frequency: Quarterly

Master Hazardous Materials Facility List
Any business that has hazardous materials on site - hazardous material storage sites, underground storage tanks, waste generators.

Date of Government Version: 07/26/2010
Date Data Arrived at EDR: 08/16/2010
Date Made Active in Reports: 08/20/2010
Number of Days to Update: 4

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 10/12/2010
Next Scheduled EDR Contact: 01/24/2011
Data Release Frequency: Quarterly

SAN BERNARDINO COUNTY:

Hazardous Material Permits
This listing includes underground storage tanks, medical waste handlers/generators, hazardous materials handlers, hazardous waste generators, and waste oil generators/handlers.

Date of Government Version: 09/07/2010
Date Data Arrived at EDR: 09/08/2010
Date Made Active in Reports: 09/29/2010
Number of Days to Update: 21

Source: San Bernardino County Fire Department Hazardous Materials Division
Telephone: 909-387-3041
Last EDR Contact: 08/16/2010
Next Scheduled EDR Contact: 11/29/2010
Data Release Frequency: Quarterly

SAN DIEGO COUNTY:

Hazardous Materials Management Division Database
The database includes: HE58 - This report contains the business name, site address, business phone number, establishment 'H' permit number, type of permit, and the business status. HE17 - In addition to providing the same information provided in the HE58 listing, HE17 provides inspection dates, violations received by the establishment, hazardous waste generated, the quantity, method of storage, treatment/disposal of waste and the hauler, and information on underground storage tanks. Unauthorized Release List - Includes a summary of environmental contamination cases in San Diego County (underground tank cases, non-tank cases, groundwater contamination, and soil contamination are included.)

Date of Government Version: 09/09/2010
Date Data Arrived at EDR: 09/15/2010
Date Made Active in Reports: 09/29/2010
Number of Days to Update: 14

Source: Hazardous Materials Management Division
Telephone: 619-338-2268
Last EDR Contact: 09/15/2010
Next Scheduled EDR Contact: 12/27/2010
Data Release Frequency: Quarterly

Solid Waste Facilities
San Diego County Solid Waste Facilities.

Date of Government Version: 10/01/2009
Date Data Arrived at EDR: 12/04/2009
Date Made Active in Reports: 01/18/2010
Number of Days to Update: 45
Source: Department of Health Services
Telephone: 619-338-2209
Last EDR Contact: 08/02/2010
Next Scheduled EDR Contact: 11/15/2010
Data Release Frequency: Varies

Environmental Case Listing
The listing contains all underground tank release cases and projects pertaining to properties contaminated with hazardous substances that are actively under review by the Site Assessment and Mitigation Program.

Date of Government Version: 03/23/2010
Date Data Arrived at EDR: 06/15/2010
Date Made Active in Reports: 07/09/2010
Number of Days to Update: 24
Source: San Diego County Department of Environmental Health
Telephone: 619-338-2371
Last EDR Contact: 09/23/2010
Next Scheduled EDR Contact: 12/27/2010
Data Release Frequency: Varies

SAN FRANCISCO COUNTY:

Local Oversite Facilities
A listing of leaking underground storage tank sites located in San Francisco county.

Date of Government Version: 09/19/2008
Date Data Arrived at EDR: 09/19/2008
Date Made Active in Reports: 09/29/2008
Number of Days to Update: 10
Source: Department Of Public Health San Francisco County
Telephone: 415-252-3920
Last EDR Contact: 08/16/2010
Next Scheduled EDR Contact: 11/29/2010
Data Release Frequency: Quarterly

Underground Storage Tank Information
Underground storage tank sites located in San Francisco county.

Date of Government Version: 09/08/2010
Date Data Arrived at EDR: 09/10/2010
Date Made Active in Reports: 09/30/2010
Number of Days to Update: 20
Source: Department of Public Health
Telephone: 415-252-3920
Last EDR Contact: 08/30/2010
Next Scheduled EDR Contact: 11/29/2010
Data Release Frequency: Quarterly

SAN JOAQUIN COUNTY:

San Joaquin Co. UST
A listing of underground storage tank locations in San Joaquin county.

Date of Government Version: 05/14/2010
Date Data Arrived at EDR: 06/09/2010
Date Made Active in Reports: 07/09/2010
Number of Days to Update: 30
Source: Environmental Health Department
Telephone: N/A
Last EDR Contact: 09/27/2010
Next Scheduled EDR Contact: 01/10/2011
Data Release Frequency: Semi-Annually

SAN MATEO COUNTY:

Business Inventory
List includes Hazardous Materials Business Plan, hazardous waste generators, and underground storage tanks.

Date of Government Version: 07/15/2010
Date Data Arrived at EDR: 07/16/2010
Date Made Active in Reports: 08/12/2010
Number of Days to Update: 27
Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 06/21/2010
Next Scheduled EDR Contact: 01/03/2011
Data Release Frequency: Annually

Fuel Leak List
A listing of leaking underground storage tank sites located in San Mateo county.

Date of Government Version: 09/20/2010
Date Data Arrived at EDR: 09/21/2010
Date Made Active in Reports: 09/29/2010
Number of Days to Update: 8
Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 09/20/2010
Next Scheduled EDR Contact: 10/04/2010
Data Release Frequency: Semi-Annually

SANTA CLARA COUNTY:

HIST LUST - Fuel Leak Site Activity Report
A listing of open and closed leaking underground storage tanks. This listing is no longer updated by the county. Leaking underground storage tanks are now handled by the Department of Environmental Health.

Date of Government Version: 03/29/2005
Date Data Arrived at EDR: 03/30/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 22
Source: Santa Clara Valley Water District
Telephone: 408-265-2600
Last EDR Contact: 03/23/2009
Next Scheduled EDR Contact: 06/22/2009
Data Release Frequency: No Update Planned

LOP Listing
A listing of leaking underground storage tanks located in Santa Clara county.

Date of Government Version: 05/29/2009
Date Data Arrived at EDR: 06/01/2009
Date Made Active in Reports: 06/15/2009
Number of Days to Update: 14
Source: Department of Environmental Health
Telephone: 408-918-3417
Last EDR Contact: 09/07/2010
Next Scheduled EDR Contact: 12/20/2010
Data Release Frequency: Annually

Hazardous Material Facilities
Hazardous material facilities, including underground storage tank sites.

Date of Government Version: 08/31/2009
Date Data Arrived at EDR: 08/31/2009
Date Made Active in Reports: 09/18/2009
Number of Days to Update: 18
Source: City of San Jose Fire Department
Telephone: 408-535-7694
Last EDR Contact: 09/13/2010
Next Scheduled EDR Contact: 11/29/2010
Data Release Frequency: Annually

SOLANO COUNTY:

Leaking Underground Storage Tanks
A listing of leaking underground storage tank sites located in Solano county.

Date of Government Version: 09/07/2010
Date Data Arrived at EDR: 09/10/2010
Date Made Active in Reports: 09/29/2010
Number of Days to Update: 19
Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 09/07/2010
Next Scheduled EDR Contact: 12/20/2010
Data Release Frequency: Quarterly

Underground Storage Tanks
Underground storage tank sites located in Solano county.

Date of Government Version: 09/07/2010
Date Data Arrived at EDR: 09/14/2010
Date Made Active in Reports: 09/30/2010
Number of Days to Update: 16
Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 09/07/2010
Next Scheduled EDR Contact: 12/20/2010
Data Release Frequency: Quarterly

SONOMA COUNTY:

Leaking Underground Storage Tank Sites
A listing of leaking underground storage tank sites located in Sonoma county.

Date of Government Version: 07/12/2010
Date Data Arrived at EDR: 07/13/2010
Date Made Active in Reports: 08/12/2010
Number of Days to Update: 30

Source: Department of Health Services
Telephone: 707-565-6565
Last EDR Contact: 10/04/2010
Next Scheduled EDR Contact: 01/17/2011
Data Release Frequency: Quarterly

SUTTER COUNTY:

Underground Storage Tanks
Underground storage tank sites located in Sutter county.

Date of Government Version: 09/13/2010
Date Data Arrived at EDR: 09/14/2010
Date Made Active in Reports: 09/30/2010
Number of Days to Update: 16

Source: Sutter County Department of Agriculture
Telephone: 530-822-7500
Last EDR Contact: 09/13/2010
Next Scheduled EDR Contact: 12/27/2010
Data Release Frequency: Semi-Annually

VENTURA COUNTY:

Business Plan, Hazardous Waste Producers, and Operating Underground Tanks
The BWT list indicates by site address whether the Environmental Health Division has Business Plan (B), Waste Producer (W), and/or Underground Tank (T) information.

Date of Government Version: 07/26/2010
Date Data Arrived at EDR: 09/01/2010
Date Made Active in Reports: 09/29/2010
Number of Days to Update: 28

Source: Ventura County Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 08/24/2010
Next Scheduled EDR Contact: 12/06/2010
Data Release Frequency: Quarterly

Inventory of Illegal Abandoned and Inactive Sites
Ventura County Inventory of Closed, Illegal Abandoned, and Inactive Sites.

Date of Government Version: 08/01/2009
Date Data Arrived at EDR: 10/05/2009
Date Made Active in Reports: 10/13/2009
Number of Days to Update: 8

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 09/27/2010
Next Scheduled EDR Contact: 11/15/2010
Data Release Frequency: Annually

Listing of Underground Tank Cleanup Sites
Ventura County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 05/29/2008
Date Data Arrived at EDR: 06/24/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 37

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 08/24/2010
Next Scheduled EDR Contact: 12/06/2010
Data Release Frequency: Quarterly

Underground Tank Closed Sites List
Ventura County Operating Underground Storage Tank Sites (UST)/Underground Tank Closed Sites List.

Date of Government Version: 08/31/2010
Date Data Arrived at EDR: 09/21/2010
Date Made Active in Reports: 09/30/2010
Number of Days to Update: 9

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 09/21/2010
Next Scheduled EDR Contact: 01/03/2011
Data Release Frequency: Quarterly

YOLO COUNTY:

Underground Storage Tank Comprehensive Facility Report
Underground storage tank sites located in Yolo county.

Date of Government Version: 07/20/2010
Date Data Arrived at EDR: 09/16/2010
Date Made Active in Reports: 09/30/2010
Number of Days to Update: 14

Source: Yolo County Department of Health
Telephone: 530-666-8646
Last EDR Contact: 09/27/2010
Next Scheduled EDR Contact: 01/10/2011
Data Release Frequency: Annually

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data
Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 12/31/2007
Date Data Arrived at EDR: 08/26/2009
Date Made Active in Reports: 09/11/2009
Number of Days to Update: 16

Source: Department of Environmental Protection
Telephone: 860-424-3375
Last EDR Contact: 08/25/2010
Next Scheduled EDR Contact: 12/06/2010
Data Release Frequency: Annually

NJ MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2009
Date Data Arrived at EDR: 07/22/2010
Date Made Active in Reports: 08/26/2010
Number of Days to Update: 35

Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 10/19/2010
Next Scheduled EDR Contact: 01/31/2011
Data Release Frequency: Annually

NY MANIFEST: Facility and Manifest Data
Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 07/28/2010
Date Data Arrived at EDR: 08/11/2010
Date Made Active in Reports: 09/24/2010
Number of Days to Update: 44

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 08/11/2010
Next Scheduled EDR Contact: 11/22/2010
Data Release Frequency: Annually

PA MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2008
Date Data Arrived at EDR: 12/01/2009
Date Made Active in Reports: 12/14/2009
Number of Days to Update: 13

Source: Department of Environmental Protection
Telephone: 717-783-8990
Last EDR Contact: 08/23/2010
Next Scheduled EDR Contact: 12/06/2010
Data Release Frequency: Annually

RI MANIFEST: Manifest information
Hazardous waste manifest information

Date of Government Version: 12/31/2009
Date Data Arrived at EDR: 07/19/2010
Date Made Active in Reports: 08/26/2010
Number of Days to Update: 38

Source: Department of Environmental Management
Telephone: 401-222-2797
Last EDR Contact: 08/30/2010
Next Scheduled EDR Contact: 12/13/2010
Data Release Frequency: Annually

WI MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2009
Date Data Arrived at EDR: 07/06/2010
Date Made Active in Reports: 07/26/2010
Number of Days to Update: 20

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 09/20/2010
Next Scheduled EDR Contact: 01/03/2011
Data Release Frequency: Annually

Oil/Gas Pipelines: This data was obtained by EDR from the USGS in 1994. It is referred to by USGS as GeoData Digital Line Graphs from 1:100,000-Scale Maps. It was extracted from the transportation category including some oil, but primarily gas pipelines.

Electric Power Transmission Line Data
Source: Rextag Strategies Corp.
Telephone: (281) 769-2247
U.S. Electric Transmission and Power Plants Systems Digital GIS Data

Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:
Source: American Hospital Association, Inc.
Telephone: 312-280-5991
The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing
Source: Centers for Medicare & Medicaid Services
Telephone: 410-786-3000
A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes
Source: National Institutes of Health
Telephone: 301-594-6248
Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on private school locations in the United States.

Daycare Centers: Licensed Facilities
Source: Department of Social Services
Telephone: 916-657-4041

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 2003 & 2009 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002 and 2005 from the U.S. Fish and Wildlife Service.

Scanned Digital USGS 7.5' Topographic Map (DRG)
Source: United States Geologic Survey
A digital raster graphic (DRG) is a scanned image of a U.S. Geological Survey topographic map. The map images are made by scanning published paper maps on high-resolution scanners. The raster image is georeferenced and fit to the Universal Transverse Mercator (UTM) projection.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

STREET AND ADDRESS INFORMATION

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GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

15.5 ACRE RETAIL CENTER
3200 PARK BOULEVARD
PALO ALTO, CA 94306

TARGET PROPERTY COORDINATES

Latitude (North):	37.42350 - 37° 25' 24.6''
Longitude (West):	122.136 - 122° 8' 9.6''
Universal Tranverse Mercator:	Zone 10
UTM X (Meters):	576449.5
UTM Y (Meters):	4142000.2
Elevation:	23 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	37122-D2 PALO ALTO, CA
Most Recent Revision:	1999
East Map:	37122-D1 MOUNTAIN VIEW, CA
Most Recent Revision:	1999

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principle investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

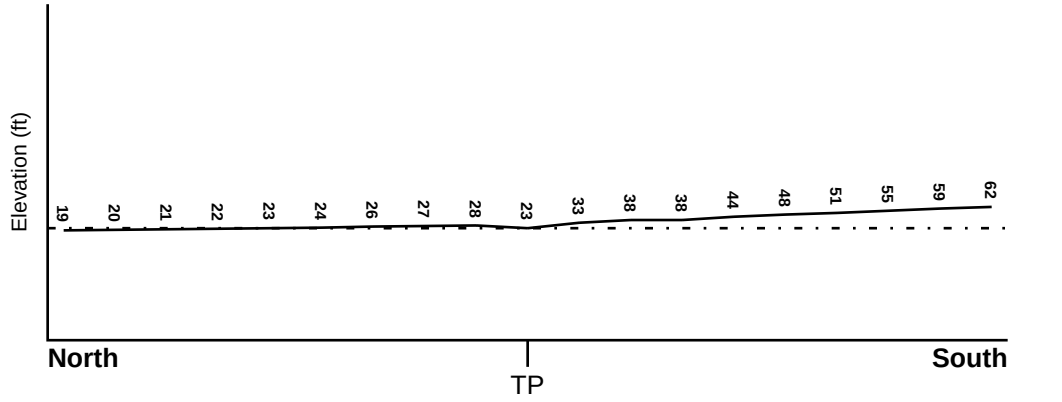
TOPOGRAPHIC INFORMATION

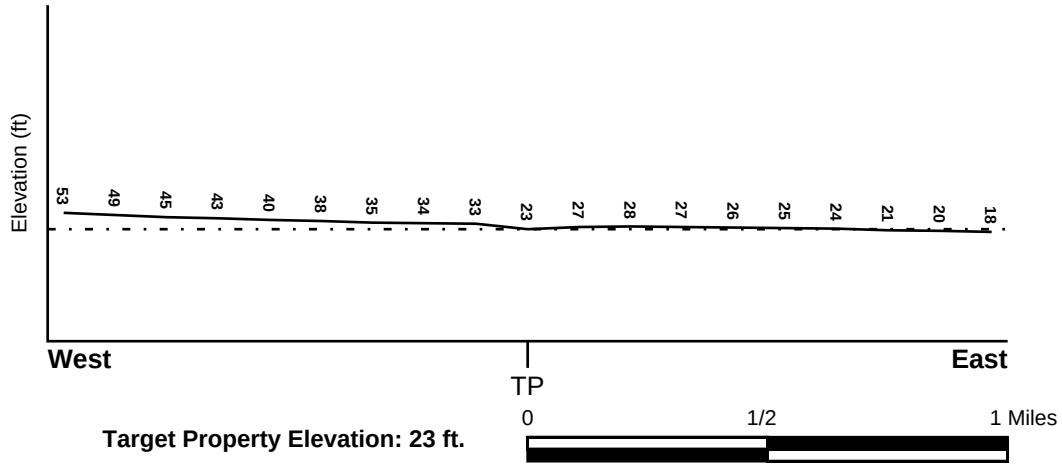
Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General NNE

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES





Target Property Elevation: 23 ft.

0 1/2 1 Miles

Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Target Property County	FEMA Flood Electronic Data
SANTA CLARA, CA	YES - refer to the Overview Map and Detail Map

Flood Plain Panel at Target Property: 06085C - FEMA DFIRM Flood data

Additional Panels in search area: Not Reported

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
PALO ALTO	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Site-Specific Hydrogeological Data*:

Search Radius:	1.25 miles
Location Relative to TP:	1/4 - 1/2 Mile WSW
Site Name:	STANFORD CLEANERS
Site EPA ID Number:	CAD028879765
Groundwater Flow Direction:	Northeast
Measured Depth to Water:	15.7 feet.
Hydraulic Connection:	Information is not available regarding the hydraulic connection between aquifers underlying the site.
Sole Source Aquifer:	No information about a sole source aquifer is available
Data Quality:	Information based on site-specific subsurface investigations is documented in the CERCLIS investigation report(s)

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
Not Reported		

* ©1996 Site--specific hydrogeological data gathered by CERCLIS Alerts, Inc., Bainbridge Island, WA. All rights reserved. All of the information and opinions presented are those of the cited EPA report(s), which were completed under a Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS) investigation.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

Era:	Cenozoic
System:	Quaternary
Series:	Quaternary
Code:	Q *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: Stratifed Sequence

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps. The following information is based on Soil Conservation Service STATSGO data.

Soil Component Name:	BOTELLA
Soil Surface Texture:	clay loam
Hydrologic Group:	Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.
Soil Drainage Class:	Not reported

Hydric Status: Soil does not meet the requirements for a hydric soil.

Corrosion Potential - Uncoated Steel:	MODERATE
Depth to Bedrock Min:	> 60 inches
Depth to Bedrock Max:	> 60 inches

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
	Boundary			Classification			
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil	Permeability Rate (in/hr)	Soil Reaction (pH)
1	0 inches	9 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 0.60 Min: 0.20	Max: 7.30 Min: 5.60
2	9 inches	41 inches	silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 0.60 Min: 0.20	Max: 7.80 Min: 5.60
3	41 inches	76 inches	sandy clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand.	Max: 0.60 Min: 0.20	Max: 7.80 Min: 5.60

OTHER SOIL TYPES IN AREA

Based on Soil Conservation Service STATSGO data, the following additional subordinant soil types may appear within the general area of target property.

Soil Surface Textures: No Other Soil Types

Surficial Soil Types: No Other Soil Types

Shallow Soil Types: No Other Soil Types

Deeper Soil Types: No Other Soil Types

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
1	USGS3236108	1/8 - 1/4 Mile SSE
2	USGS3236107	1/4 - 1/2 Mile South

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

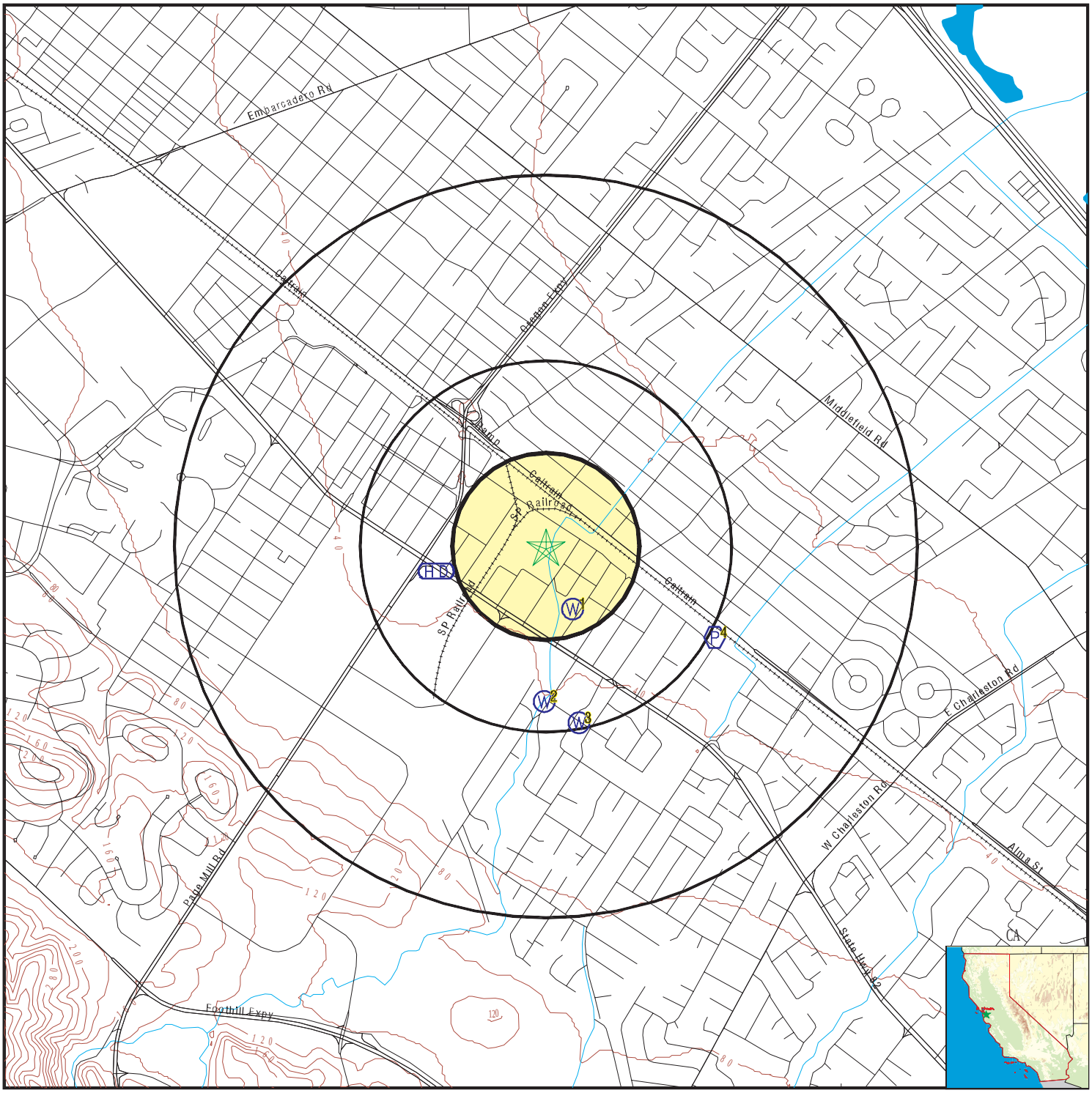
MAP ID	WELL ID	LOCATION FROM TP
4	CA4100514	1/2 - 1 Mile ESE

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
3	6931	1/4 - 1/2 Mile South

PHYSICAL SETTING SOURCE MAP - 2897822.2s



- County Boundary
- Major Roads
- Contour Lines
- Earthquake Fault Lines
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons

- Groundwater Flow Direction
- GI Indeterminate Groundwater Flow at Location
- GV Groundwater Flow Varies at Location
- HD Closest Hydrogeological Data
- Oil, gas or related wells

SITE NAME: 15.5 Acre Retail Center	CLIENT: PES Environmental, Inc.
ADDRESS: 3200 Park Boulevard Palo Alto CA 94306	CONTACT: Chris Baldassari
LAT/LONG: 37.4235 / 122.1360	INQUIRY #: 2897822.2s DATE: October 19, 2010 1:02 pm

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GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

1
SSE
1/8 - 1/4 Mile
Higher | **FED USGS** | **USGS3236108**

Agency cd:	USGS	Site no:	372516122080101
Site name:	006S003W12R001M		
Latitude:	372516	EDR Site id:	USGS3236108
Longitude:	1220801	Dec lat:	37.42105068
Dec lon:	-122.13468595	Coor meth:	M
Coor accr:	S	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	06
State:	06	County:	085
Country:	US	Land net:	SESENWS12T06SR03WM
Location map:	PALO ALTO	Map scale:	24000
Altitude:	31		
Altitude method:	Level or other surveying method		
Altitude accuracy:	1		
Altitude datum:	National Geodetic Vertical Datum of 1929		
Hydrologic:	Coyote. California. Area = 831 sq.mi.		
Topographic:	Alluvial fan		
Site type:	Ground-water other than Spring	Date construction:	19541011
Date inventoried:	19940511	Mean greenwich time offset:	PST
Local standard time flag:	Y		
Type of ground water site:	Single well, other than collector or Ranney type		
Aquifer Type:	Mixed - confined and unconfined multiple aquifers		
Aquifer:	Not Reported		
Well depth:	1020	Hole depth:	1179
Source of depth data:	driller		
Project number:	470649331		
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00
Peak flow data count:	0	Water quality data begin date:	0000-00-00
Water quality data end date:	0000-00-00	Water quality data count:	0
Ground water data begin date:	1994-05-11	Ground water data end date:	1994-05-11
Ground water data count:	1		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1994-05-11	10.99	

2
South
1/4 - 1/2 Mile
Higher | **FED USGS** | **USGS3236107**

Agency cd:	USGS	Site no:	372503122080601
Site name:	006S003W13A003M		
Latitude:	372503	EDR Site id:	USGS3236107
Longitude:	1220806	Dec lat:	37.41743964
Dec lon:	-122.13607486	Coor meth:	M
Coor accr:	S	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	06
State:	06	County:	085
Country:	US	Land net:	NENENWS13T06SR03WM
Location map:	PALO ALTO	Map scale:	24000
Altitude:	40		
Altitude method:	Level or other surveying method		
Altitude accuracy:	1		
Altitude datum:	National Geodetic Vertical Datum of 1929		
Hydrologic:	Coyote. California. Area = 831 sq.mi.		
Topographic:	Alluvial fan		
Site type:	Ground-water other than Spring	Date construction:	19561008
Date inventoried:	19940511	Mean greenwich time offset:	PST
Local standard time flag:	Y		
Type of ground water site:	Single well, other than collector or Ranney type		
Aquifer Type:	Mixed - confined and unconfined multiple aquifers		
Aquifer:	Not Reported		
Well depth:	1066	Hole depth:	1186
Source of depth data:	driller		
Project number:	470649331		
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00
Peak flow data count:	0	Water quality data begin date:	0000-00-00
Water quality data end date:	0000-00-00	Water quality data count:	0
Ground water data begin date:	1994-05-11	Ground water data end date:	1994-05-11
Ground water data count:	1		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1994-05-11	15.56	

3
South
1/4 - 1/2 Mile
Higher

CA WELLS **6931**

Water System Information:

Prime Station Code:	06S/03W-13A10 M	User ID:	HEN
FRDS Number:	4310009003	County:	Santa Clara
District Number:	05	Station Type:	WELL/AMBNT/MUN/INTAKE/SUPPLY
Water Type:	Well/Groundwater	Well Status:	Standby Raw
Source Lat/Long:	372500.0 1220800.0	Precision:	Undefined
Source Name:	MATADERO - STANDBY		
System Number:	4310009		
System Name:	City of Palo Alto		
Organization That Operates System:			
	P.O. BOX 10250		
	PALO ALTO, CA 94303		
Pop Served:	57000	Connections:	19021
Area Served:	PALO ALTO		

Sample Collected:	04/10/2006	Findings:	30.3 PCI/L
Chemical:	GROSS ALPHA		
Sample Collected:	04/10/2006	Findings:	4.01 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	04/10/2006	Findings:	92. UG/L
Chemical:	ALUMINUM		
Sample Collected:	04/10/2006	Findings:	25. C
Chemical:	SOURCE TEMPERATURE C		
Sample Collected:	04/10/2006	Findings:	1100. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	04/10/2006	Findings:	7.71
Chemical:	PH, LABORATORY		
Sample Collected:	04/10/2006	Findings:	230. MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		
Sample Collected:	04/10/2006	Findings:	220. MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	04/10/2006	Findings:	110. MG/L
Chemical:	HARDNESS (TOTAL) AS CACO3		
Sample Collected:	04/10/2006	Findings:	27. MG/L
Chemical:	CALCIUM		
Sample Collected:	04/10/2006	Findings:	10. MG/L
Chemical:	MAGNESIUM		
Sample Collected:	04/10/2006	Findings:	130. MG/L
Chemical:	SODIUM		
Sample Collected:	04/10/2006	Findings:	120. MG/L
Chemical:	CHLORIDE		
Sample Collected:	04/10/2006	Findings:	0.14 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	04/10/2006	Findings:	450. UG/L
Chemical:	IRON		
Sample Collected:	04/10/2006	Findings:	210. UG/L
Chemical:	MANGANESE		
Sample Collected:	04/10/2006	Findings:	490. MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	04/10/2006	Findings:	2.4 NTU
Chemical:	TURBIDITY, FIELD		
Sample Collected:	11/15/2006	Findings:	1.42 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	11/15/2006	Findings:	0.317 PCI/L
Chemical:	RADIUM 226 COUNTING ERROR		
Sample Collected:	11/15/2006	Findings:	0.273 PCI/L
Chemical:	RADIUM 228 COUNTING ERROR		
Sample Collected:	11/15/2006	Findings:	2.6e-002 PCI/L
Chemical:	URANIUM COUNTING ERROR		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

	Database	EDR ID Number
4 **ESE** **1/2 - 1 Mile** **Higher**	**FRDS PWS**	**CA4100514**

PWS ID: CA4100514
Date Initiated: 7706 Date Deactivated: Not Reported
PWS Name: SAN FRANCISCO VENTURE
SAN FRANCISCO VENTURE
EDEN WEST RD
PESCADERO, CA 94060

Addressee / Facility: System Owner/Responsible Party
SAN FRANCISCO VENTURE
P O BOX 608
PALO ALTO, CA 94306

Facility Latitude: 37 25 12 Facility Longitude: 122 07 36
City Served: Not Reported
Treatment Class: Untreated Population: 00000030

Violations information not reported.

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

State Database: CA Radon

Radon Test Results

Zip	Total Sites	> 4 Pci/L	Pct. > 4 Pci/L
94306	16	3	18.75

Federal EPA Radon Zone for SANTA CLARA County: 2

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for Zip Code: 94306

Number of sites tested: 4

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	2.525 pCi/L	75%	25%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	Not Reported	Not Reported	Not Reported	Not Reported

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Scanned Digital USGS 7.5' Topographic Map (DRG)
Source: United States Geologic Survey
A digital raster graphic (DRG) is a scanned image of a U.S. Geological Survey topographic map. The map images are made by scanning published paper maps on high-resolution scanners. The raster image is georeferenced and fit to the Universal Transverse Mercator (UTM) projection.

HYDROLOGIC INFORMATION

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 2003 & 2009 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002 and 2005 from the U.S. Fish and Wildlife Service.

HYDROGEOLOGIC INFORMATION

AQUIFLOW^{R} Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Services
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Services (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Services, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

STATE RECORDS

Water Well Database
Source: Department of Water Resources
Telephone: 916-651-9648

California Drinking Water Quality Database
Source: Department of Health Services
Telephone: 916-324-2319
The database includes all drinking water compliance and special studies monitoring for the state of California since 1984. It consists of over 3,200,000 individual analyses along with well and water system information.

OTHER STATE DATABASE INFORMATION

California Oil and Gas Well Locations
Source: Department of Conservation
Telephone: 916-323-1779
Oil and Gas well locations in the state.

RADON

State Database: CA Radon
Source: Department of Health Services
Telephone: 916-324-2208
Radon Database for California

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

California Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines, prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

STREET AND ADDRESS INFORMATION

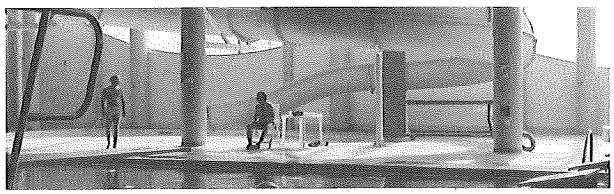
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APPENDIX G

HP-VARIAN 2010 ANNUAL GROUNDWATER MONITORING REPORT







Third Five-Year Status Report and Effectiveness Evaluation



Stantec

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February 19, 2010

Mr. Roger Papler
California Regional Water Quality Control Board
San Francisco Bay Region
1515 Clay Street, Suite1400
Oakland, CA 94612

Transmittal of the Thrid Five-Year Status Report and Effectiveness Evaluation for 640 Page Mill Road, 395 Page Mill Road, 601 California Avenue, and the Off-Site Area, Palo Alto, California.

Dear Mr. Papler:

Hewlett-Packard Company and Varian Medical Systems, Inc. are pleased to submit the attached "Third Five-Year Status Report and Effectiveness Evaluation" for the above referenced sites and the Off-Site Area (the California-Olive-Emerson (COE) Area and Perimeter Area), Palo Alto, California. This document is submitted in accordance with Provision 7(a) of Revised Site Cleanup Requirements Order 94-130 dated September 21, 1994, issued by the San Francisco Bay Regional Water Quality Control Board.

To the best of our knowledge, the contents of this report are true and correct. Please call if you have any questions regarding this report.

Please call if you have any questions regarding this report.

Sincerely,

Hewlett-Packard Company

Jonathan Bauer
Project Manager

Varian Medical Systems, Inc.

John Buchanan
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Third Five-Year Status Report and Effectiveness Evaluation

640 Page Mill Road Site
395 Page Mill Road Site,
601 California Avenue Site and
California-Olive-Emerson (COE)
Off-Site Areas, Palo Alto, California

Prepared for:
Hewlett-Packard Company and
Varian Medical Systems, Inc.

Stantec

February 19, 2010

Limitations and Certifications

This report was prepared in accordance with generally accepted professional engineering and environmental consulting practices existing at the time this report was prepared and applicable to the location of the site. It was prepared for the exclusive use of Hewlett-Packard Company (HP) and the Regional Water Quality Control Board (RWQCB). Any re-use of this report for a different purpose or by others not identified above shall be at the user's sole risk without liability to Stantec Consulting Corporation (Stantec). The opinions expressed and data collected are based on the conditions of the site existing at the time of the field investigation. No other warranties, expressed or implied are made by Stantec.

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Reviewed by:

Mark Becker, REA
Senior Project Manager

Information, conclusions, and recommendations provided by Stantec in this document has been prepared under the supervision of and reviewed by the licensed professional whose signature appears below.

Bruce E. Scarbrough, PG #4931
Principal Geologist

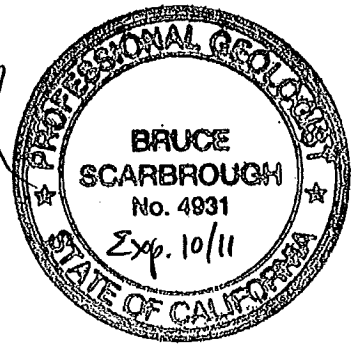


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1.0 Introduction

This *Third Five-Year Status Report and Effectiveness Evaluation* (the "Evaluation") has been prepared on behalf of Hewlett-Packard Company (HP) and Varian Medical Systems, Inc. (Varian) by Stantec Consulting Corporation (Stantec). This Evaluation is for the:

- HP 640 Page Mill Road Site, Palo Alto, California (the "640 PMR Site");
- HP 395 Page Mill Road Site, Palo Alto, California (the "395 PMR Site");
- Varian 601 California Avenue Site, Palo Alto, California (the "601 CA Site"); and
- Off-Site Area

The 640 PMR Site, 395 PMR Site and 601 CA Site are collectively referred to as "the Sites." The Off-Site Area consists of the California-Olive-Emerson (COE) Area (the "COE Area") and the "Perimeter Area." The Off-Site Area is described in Section 2.1. Figure 1-1 shows the location of the Sites and the Off-Site Area. The Sites and Off-Site Area are collectively referred to as the "Study Area."

The *Five-Year Status Report and Effectiveness Evaluation* (First Five-Year Report; SECOR, 2000) was submitted to the California Regional Water Quality Control Board, San Francisco Bay Region (RWQCB) on June 1, 2000 and covered the period from January 1, 1995 through December 31, 1999 (the "first five-year reporting period"). The RWQCB approved the First Five-Year Report in August 2000 (RWQCB, 2000). The *Second Five-Year Status Report and Effectiveness Evaluation* (Second Five-Year Report; SECOR, 2005b) was submitted to the RWQCB on November 17, 2005 and covered the period from January 1, 2000 through August 31, 2005 (the "second five-year reporting period"). An *Addendum to the Second Five-Year Status Report and Effectiveness Evaluation* (Addendum; SECOR, 2006a) was submitted to the RWQCB on June 16, 2006 to convey additional recommendations for the 395 PMR Site. The RWQCB approved the Second Five-Year Report and Addendum in a Letter to HP and Varian dated February 9, 2007 (Second Five-Year Approval Letter, RWQCB, 2007). A September 2008 letter from the RWQCB specified February 1, 2010 as the due date for the current Evaluation (RWQCB, 2008c). An extension to this due date was authorized by RWQCB staff via email correspondence with HP.

This Evaluation is submitted in accordance with Provision C.7(a) of the *Revised Site Cleanup Requirements, Order No. 94-130* (the "Order"), issued on September 21, 1994, by the RWQCB. This Evaluation covers the period from September 1, 2005 through December 31, 2009 (the "Reporting Period").

Consistent with the requirements of Provision 7(a) of the Order, this Evaluation presents:

- Results of additional investigation (completed since the Second Five-Year Report was issued);

- An evaluation of the effectiveness of installed final cleanup measures and final cleanup costs;
- Additional recommended measures to achieve final cleanup objectives, if necessary;
- Estimated projected costs necessary to achieve cleanup objectives and standards;
- Tasks and estimated time schedule necessary to implement any additional final cleanup measures, if necessary;
- A description of the reuse of extracted groundwater; and
- A discussion regarding the feasibility of achieving cleanup objectives using the existing remedial systems.

The remaining portions of this Evaluation are organized as follows.

- Section 2.0 presents background information on the Sites and Off-Site Area, a summary of the chemicals of concern and cleanup objectives for both soil and groundwater, a summary of the local hydrogeology, and a review of the extent of volatile organic compounds (VOCs) in groundwater (and soil) at the Sites and in the Off-Site Area.
- Section 3.0 presents a summary of soil and groundwater remedial measures implemented at the Sites and the Off-Site Area to date (both interim and final), including reuse measures for extracted and treated groundwater, and discusses the current groundwater self-monitoring program (SMP).
- Section 4.0 describes additional investigative activities conducted at the Sites and Off-Site Area during this reporting period.
- Section 5.0 presents an evaluation of the effectiveness the final groundwater cleanup remedy and recorded land use restrictions, and provides information regarding projected costs to achieve cleanup objectives.
- Section 6.0 presents conclusions regarding the effectiveness of the remedial systems in making progress towards achieving the remedial objectives, and recommendations.

2.0 Project Background

Unless otherwise noted below, the information presented in Section 2.0 is taken from the *Remedial Investigation Report – Revised* for the Study Area (the Area RI; ENVIRON, 1994b).

2.1 SITE SETTING AND HISTORY

Figure 1-1 shows the location of the Sites and the Off-Site Area, which is subdivided into the COE Area and the Perimeter Area. The COE Area excludes the Sites and is bounded by California Avenue to the west, Olive Avenue to the east, Emerson Avenue to the north, and the southernmost extent of the 640 PMR Site to the south. The southernmost extent is also defined by a line that extends eastward from Cornell Street and terminates at California Avenue in the southwest corner of the Study Area. Figure 1-1 also identifies the Perimeter Area that adjoins the COE Area to the east. The Perimeter Area is bounded to the south by the Varian 611 Hansen Way General Study Area boundary (Fluor-Daniel GTI, 1996). Emerson Street defines the limits of the Perimeter Area to the north, and Fernando, Margarita, and El Carmelo Avenues define the eastern extent. HP and Varian have cooperated in implementing remedial measures for the Off-Site Area with oversight from the RWQCB.

2.2 HYDROGEOLOGY

The local hydrogeology has been studied extensively. Figure 2-1 indicates the locations of existing wells installed at the Sites and Off-Site Area. The following sections describe the local stratigraphy and groundwater flow.

2.2.1 Stratigraphy

The Sites and Off-Site Area are underlain by alluvial fan deposits associated with the San Francisquito Creek to the west and Matadero Creek to the east. Two primary water-bearing aquifers were identified within the alluvial fan deposits. These have been termed the A aquifer (A1 Upper [A1U], A1, and A2 Zones), which extends between approximate depths of 13 to 55 feet below ground surface (bgs), and the B aquifer (B1 and B2 Zones), which was encountered between depths of approximately 60 to 120 feet bgs. Thin sandy lenses that extend into the upper portion of the A/B aquitard have been designated as A2 Deep (A2D).

Predominant directions of deposition were identified based on the occurrence and distribution of the alluvial fan deposits. The predominant depositional directions correspond generally with current ground surface topography at the Sites and within the Off-Site Area, which indicates they are situated along the transition zone between the San Francisquito Creek alluvial fan to the west and the Matadero Creek fan to the east. As a result, the predominant depositional orientation of channels developed is easterly in the general area west of Page Mill Road, becoming northerly in the vicinity of Matadero Creek, particularly southeast of the Off-Site Area.

2.2.2 Groundwater Flow

The regional direction of groundwater flow is northeasterly, from the hills toward San Francisco Bay. Within the Off-Site Area (and at the Sites to varying degrees), groundwater flow patterns in the A aquifer are affected by the Oregon Expressway Underpass (OEU) dewatering system (Figures 2-2 through 2-4), which draws groundwater toward the subdrain collection system. The general direction of groundwater flow in the A aquifer within the Off-Site Area is from south to north toward the OEU. The groundwater flow direction in the deeper B aquifer is from south-southwest to north-northeast (Figure 2-5).

The OEU dewatering system has a substantial hydraulic effect on groundwater flow within the Study Area. Previously presented hydraulic evaluations, including a computerized groundwater flow model, indicated that the capture area created by pumping from the subdrain was effective in capturing chemicals in the A aquifer, particularly in the northern portion of the COE Area and portions of the Perimeter Area.

2.3 CHEMICALS OF CONCERN IN GROUNDWATER

The principal chemicals of concern in groundwater at the Sites and within the Off-Site Area are chlorinated VOCs, including trichloroethene (TCE), 1,1,1-trichloroethane (1,1,1-TCA), 1,1-dichloroethene (1,1-DCE), 1,2-dichloroethene (1,2-DCE), 1,1-dichloroethane (1,1-DCA), and tetrachloroethene (PCE). TCE is the VOC most widely distributed and detected at highest concentrations (Figures 2-6 through 2-8). The primary VOC originating at the 395 PMR Site, however, is PCE.

At the time the Area RI was finalized, analytical results indicated that VOCs were restricted vertically to depths less than 45 feet, or within the A aquifer, except at the 640 PMR Site where VOCs had been detected at the base of the A aquifer at an approximate depth of 55 feet bgs. VOCs generally had not been detected in the B aquifer, except at the 640 PMR Site in the immediate vicinity of the location of a former underground storage tank (UST). Confirmed detections of VOCs in the B aquifer at this location had been at concentrations below Primary Drinking Water Standard Maximum Contaminant Levels (MCLs). VOCs were also detected at concentrations above MCLs in five groundwater grab samples collected from the B aquifer at or near Clocktower Plaza in the Perimeter Area. Data collected since 1994 indicate that the chemicals of concern listed in Table 2-1 have been detected only sporadically in the B Zone and generally at concentrations near the method detection limits, which are below MCLs. None of the chemicals of concern listed in Table 2-1 were detected in the samples collected from B Zone wells during this reporting period.

2.4 CLEANUP STANDARDS

Chemicals of concern at the Sites and within the Off-Site Area are VOCs. Finding 18 of the Order stipulates the cleanup standards for VOCs in soil and groundwater. For unsaturated zone soil, the cleanup standard is one (1) milligram per kilogram (mg/kg) total VOCs. This standard is based on groundwater protection. Groundwater cleanup standards established pursuant to

the Order are U.S. Environmental Protection Agency (USEPA) MCLs, California Department of Environmental Protection MCLs, or for acetone, a target level based on toxicity characteristics published by USEPA. The chemical specific groundwater cleanup standards are listed in Table 2-1.

3.0 Remedial Measures and Monitoring Program

The following sections describe remedial measures implemented for soil and groundwater. Reuse of extracted and treated groundwater and the groundwater SMP are also discussed.

3.1 REMEDIAL MEASURES FOR SOIL

3.1.1 640 Page Mill Road

Details of the remedial investigation and historical remedial actions completed at the 640 PMR Site through 1994 were previously presented in Appendix B of the Area RI, and Appendix A of the Study Area *Feasibility Study – Revised* (ENVIRON, 1994c), hereinafter referred to as the "Area FS." Pre-1994 remedial actions primarily involved removal of tanks, piping, and other facilities associated with past site activities, and excavation of impacted soils with off-site treatment or disposal. During April 1994 through August 1997, soil vapor extraction and treatment (SVET) was used to remove residual VOCs from soil at the 640 PMR Site. The SVET system includes 28 soil vapor extraction (SVE) wells screened in an upper coarse-grained unit (16 to 21 feet bgs), a lower coarse-grained unit (26 to 38 feet bgs), or an intermediate fine-grained unit located between the upper and lower (ENVIRON, 1996). VOCs were removed from extracted vapors by vapor-phase granular activated carbon (GAC).

An effectiveness evaluation of SVET system operation was submitted per requirements of the Order in a July 1995 report to the RWQCB (ENVIRON, 1995b), and was subsequently approved.

Conclusions presented in the Effectiveness Evaluation included:

- The influent VOC concentration to the SVET system had decreased by approximately 99 percent and the remediation goals for VOCs and acetone had likely been achieved in the upper zone soils; and
- Groundwater levels had risen since installation of the SVE wells, partially or completely re-saturating the gravel packed intervals for most of the lower zone SVE wells.

The SVET system has not operated for any significant time since August 1997.

3.1.2 395 Page Mill Road

Details of the remedial investigation and remedial action activities completed at the 395 PMR Site through 1995 were previously presented in Appendix C of the Area RI, Appendix B of the Area FS, *Vadose Zone Soil Remediation and Additional Soil Investigation Report* (Montgomery-Watson, 1993), *Area X Remedial Design Sampling Report* (ENVIRON, 1994a), *Area X Remediation Work Plan* (ENVIRON, 1995a) and *Addendum to Area X Remediation Work Plan* (ENVIRON, 1995c).

Several areas beneath buildings at the 395 PMR Site were inaccessible during the above referenced investigation and remediation activities. These areas were identified and addressed in 1998 and 1999 during building demolition and site redevelopment activities. Data and information regarding soil investigation and remediation activities completed during and after demolition of 395 PMR Site buildings was provided to the RWQCB in a report titled *Soil Investigation of Areas Exposed by Building Demolition* (ENVIRON, 2001). Based on these results, remaining areas underlying the buildings that were previously inaccessible were investigated and no further investigation or remediation of soils in those areas was deemed necessary.

Two underground storage tanks, not identified during previous investigations, were encountered in 1999 during the site redevelopment activities. The tanks (approximately 350 gallons each in capacity) contained accumulated rainwater with low concentrations of petroleum hydrocarbons. The tanks were subsequently removed, and appropriate sampling and investigation activities were performed. Data and information regarding the tanks, the removal operation, and post-removal sampling were forwarded to the Santa Clara Valley Water District (SCVWD) at various times as the work progressed. Based on a review of those data, and with the concurrence from the RWQCB, the SCVWD issued a case closure letter to HP in August 1999 (SCVWD, 1999).

Construction of the Area X (ten) remedial system was completed in July 1996 to address soil and groundwater impacted by VOCs. The Area X soil remediation consisted of the following:

- Dual-phase extraction (DPE) of soil vapors and groundwater from six A1U Zone extraction wells (RW-1 through RW-6) screened from 10 to 30 feet bgs using a high vacuum blower;
- SVE from seven vertical and one shallow horizontal vadose zone wells extending to less than 10 feet bgs using the DPE blower; and
- Treatment of the soil vapors from the DPE and SVE wells by vapor-phase GAC.

Full time operation of the DPE system began in September 1996. Vapor extraction from the SVE wells was conducted for a period during 1997 and then permanently curtailed with approval from the RWQCB (RWQCB, 1998).

The DPE system was operated until June 7, 2001, when it was shut down as part of a RWQCB-approved trial shutdown (RWQCB, 2001a). The system has remained shut down since that time in accordance with the findings and recommendations of the DPE system trial shutdown evaluation report (SECOR, 2002b).

Based on results of October 2007 soil sampling and analysis results, the RWQCB concurred that the soil cleanup standard of 1 mg/kg had been achieved in Area X (SECOR, 2007e, RWQCB, 2008b). However, the RWQCB did not approve decommissioning the DPE system due to concerns about potential for vapor intrusion at the 395 PMR Site. Potential for vapor intrusion has since been evaluated (see Section 4.2.2), and Decommissioning of the DPE system is expected to be re-evaluated by the RWQCB during 2010.

3.1.3 601 California Avenue

Details of the remedial investigation and remedial action activities completed at the 601 CA Site are presented in Appendix D of the Area RI, and Section 2.2 and Appendix C of the Area FS.

Remedial measures for soil at the 601 CA Site began as an SVET interim remedial measure (IRM) in 1991 (Erler and Kalinowski [EKI], 1991). The IRM was expanded in 1992 as the final remedial measure and implemented in four areas: Areas A, B, C and D (EKI, 1992). The system consisted of 18 extraction points and a central blower/treatment compound.

The SVET system was shut down and the extraction points for Areas A, B and C were decommissioned, per RWQCB approval, in February 1996 prior to site redevelopment (EKI, 1996). The remaining Area D SVET system extraction wells were decommissioned after the RWQCB approved completion of the soil cleanup at the 601 CA Site in August 1996 (EKI, 1997).

3.2 REMEDIAL MEASURES FOR GROUNDWATER

3.2.1 640 Page Mill Road and COE Area

Groundwater extraction as an IRM was implemented at the 640 PMR Site from 1982 through December 1993. Groundwater extraction and treatment was performed from wells O1A, O47A, OB5-2 and OB5-5, which were installed near the 640 PMR source area in the A1 and/or A2 Zones.

The expanded groundwater extraction and treatment (GWET) system for the 640 PMR Site and COE Area final groundwater remedy began full time operation in 1994, and originally included three on-site and six off-site extraction wells.

<u>On-Site Wells</u>

- EW-4 – screened in the A1 and A2 Zones
- EW-5 – screened in the A1 and A2 Zones
- EW-7 – screened in the A1 Zone

<u>Off-Site Wells</u>

- EW-1 – screened in A1U Zone on the former Mayfield School property
- EW-2 – screened in the A1U Zone on the former Mayfield School property
- EW-6 – Screened in the A1/A2 Zone on the former Mayfield School property
- EW-8 – Screened in the A1 Zone on the Palo Alto Square property
- EW-9 – Screened in the A1U Zone northeast of the Palo Alto Square property
- EW-10 – Screened in the A1 Zone northeast of the Palo Alto Square property

Locations of these wells are shown on Figure 2-1 and corresponding water bearing zone-specific figures.

Extraction wells of the expanded groundwater extraction network were connected to the groundwater treatment system located in the southwest corner of the 640 PMR Site. The 640 PMR groundwater treatment system has a maximum capacity of 160 gallons per minute (gpm) and was designed to remove of VOCs from extracted groundwater. Treatment currently consists of ozone followed by GAC. Treated groundwater may be discharged to Matadero Creek or reused on-site to satisfy landscape irrigation needs (to the extent practical) pursuant to the requirements of the National Pollution Discharge Elimination System (NPDES), VOC General Permit (RWQCB, 2009e). Treated groundwater may also be discharged to the City of Palo Alto sanitary sewer system (i.e., publicly owned treatment works or POTW) per Groundwater Discharge Permit #061238.

Per RWQCB approval, groundwater extraction from the following extraction wells has been permanently curtailed: EW-1, EW-2, EW-6 (RWQCB 2005a), and EW-9 (RWQCB 2007). Wells EW-1, EW-2 and EW-6 have been decommissioned. During the reporting period, extraction at wells EW-4, EW-5, and EW-10 has been curtailed on a trial basis with RWQCB concurrence (RWQCB, 2008a).

In situ chemical oxidation (ISCO) was conducted in the vicinity of extraction well EW-6 in 2005 prior to that well being decommissioned. ISCO work, and decommissioning of wells EW-1, EW-2, EW-6, F23A, F43A1U, F45A1U, O24A1U, OB6-1, OB6-2, F44A, and T2A, was conducted with RWQCB approval in association with redevelopment of the area known as the Former Mayfield School site by Stanford University (Stanford, the property owner). Redevelopment plans involved constructing a soccer complex on the site. Details of this work are provided in the December 2005 *Site Status and Six-Month Post-Treatment Effectiveness Evaluation Report, Former Mayfield School Site and Northeast End of 640 Page Mill Road Site, Palo Alto, California* (SECOR, 2005c).

3.2.2 395 Page Mill Road

Investigation and remediation of groundwater at the 395 PMR Site was primarily addressed as part of the Area RI and Area FS. VOC impacted groundwater (and soil) in Area X (ten) was addressed separately because investigations were not complete at the time the RI and FS documents were finalized.

Groundwater remediation in Area X has consisted of A1U and A1 Zone groundwater extraction and treatment, and ISCO in the vicinity of A1U Zone DPE well RW-5. Extraction of groundwater and soil vapor from DPE wells RW-1 through RW-6 began in September 1996. Well RW-3 was decommissioned and well RW-5 was taken out of service in May 1998, per RWQCB approval (RWQCB, 1998). Groundwater extraction from well EW-11R began in 1996. Extracted groundwater from the DPE system and well EW-11R was discharged to the sanitary sewer system under the requirements of a Groundwater Discharge Permit issued by the City of Palo Alto. Locations of the existing DPE wells and well 11R are shown on Figure 2-1.

The DPE system was shut down on a trial basis on June 7, 2001 per RWQCB approval (RWQCB, 2001a), and has remained shut down since that time. Extraction well EW-11R was shut down on June 14, 2003, per verbal authorization from the RWQCB.

Results of the trial shutdown were initially submitted to the RWQCB on August 9, 2002 (SECOR, 2002a). Based on the trial shutdown results, permanent shutdown of the DPE system and extraction well EW-11R was recommended in a report submitted to the RWQCB on September 27, 2002 (SECOR, 2002b). It was also recommended that the groundwater extraction and treatment system at the OEU be used to continue to contain and remediate VOC-impacted groundwater originating from the 395 PMR Site. During a teleconference on January 17, 2007, RWQCB staff conveyed to HP their concurrence with permanent shutdown of the DPE system and extraction well EW-11R for the purpose of groundwater remediation.

Consistent with recommendations in the Addendum to the Second Five Year Report, ISCO injections were conducted to address localized elevated PCE concentrations in the vicinity of well RW-5. SECOR directed one-time injections of sodium permanganate into three temporary injection points and one observation well, OB11-2 in October 2007. A report describing the injection activities and the results of the one-, three-, and six-month post-treatment monitoring was submitted to the RWQCB in July 2008 (Stantec, 2008b).

3.2.3 601 California Avenue

Remedial measures for groundwater at the 601 CA Site began in 1987 with extraction from a single well, V8-2X screened in the combined A1/ A2 Zone (see Figure 2-3 for well location). Extracted groundwater from V8-2X was treated by liquid-phase GAC and discharged to the sanitary sewer system. The system was expanded and modified in 1992 to include four A1/A2 extraction wells: V8-2X, V8-8X and V-9X, and V8-14X. The system was shutdown in July 2003 while Varian implemented ISCO using permanganate.

MWH conducted an ISCO pilot study in November 2000, to evaluate the potential for ISCO to expedite groundwater cleanup at the 601 CA Site. Injections of permanganate were conducted in the courtyard area and the west parking lot. Findings of the pilot study indicated that *in situ* oxidation was a viable treatment technology (MWH, 2001).

MWH and SECOR, as part of the pilot study and subsequent full-scale ISCO program, installed 20 wells with the dual purpose of facilitating ISCO treatment and further defining the distribution of VOCs in the courtyard and west parking lot. These wells include:

- P1 through P4, TW-1/P7, TW-2/OBS, and TW-3/P8 in the west parking lot area; and
- P9 through P14, P16 through P21, and OBS in the courtyard area.

A figure showing ISCO injection well locations and plume configuration is provided in Appendix A.

MWH and SECOR conducted three full-scale ISCO treatments as follows.

- December 2003/January 2004 (MWH, 2005).
- July 2005 (SECOR, 2006b).
- September 2006 (SECOR, 2007c).

ISCO treatment was successful at reducing the overall size of the VOC-impacted area although VOC concentrations in the center of the courtyard, around well P17, persisted following treatment.

In November of 2007, SECOR submitted a work plan to the RWQCB (SECOR, 2007d) proposing additional ISCO injections in the vicinity of well P17 and the installation of an injection well in the courtyard upgradient of P17 (well P21). Additional ISCO injections were not completed as proposed because evidence of separate-phase TCE was identified in the vicinity of well P21 (TCE concentration of 200,000 µg/L). Because of this, in a July 2008 memorandum to the RWQCB (Stantec, 2008c), Stantec proposed a change from ISCO to enhanced *in situ* bioremediation (EISB). The change was proposed due to the anticipated limited effectiveness of ISCO to treat separate-phase TCE.

In May 2009, Stantec proposed to the RWQCB that additional borings be advanced to characterize the extent of VOC impacts in the vicinity of well P21 and that a bench scale study be conducted to evaluate treatment requirements for EISB (Stantec, 2009a). The RWQCB approved the work plan in June 25, 2009 (RWQCB, 2009c). Implementation of the work plan has been delayed by Site access and permitting issues. It is anticipated that field work will be initiated in February 2010. Implementation of EISB is expected to occur in August 2010, assuming that the bench scale study results are favorable. EISB would be designed to address on-site areas of elevated concentration and to mitigate off-site migration.

3.2.4 OEU Dewatering System

The OEU serves as a subsurface roadway beneath the Southern Pacific Railroad tracks, Alma Street and Park Boulevard. The underpass, built in 1958, extends approximately 24 feet bgs into the A1 Zone. A dewatering system was constructed to control (prevent) flooding of the underpass from groundwater seepage and storm water accumulation. The dewatering system has a substantial impact on groundwater flow in the Off-Site Area. The OEU dewatering system effectively captures groundwater from surrounding areas and acts to limit the potential for the migration of VOC-affected groundwater in the A aquifer beyond the OEU subdrain.

Groundwater captured by the OEU dewatering system, along with surface water from the underpass and surrounding area is directed to a sump within the OEU pump station located at the corner of the transition road from eastbound Oregon Expressway to southbound Alma Street. The OEU pump station is shown on Figure 2-2. Historically, VOC-impacted water collected in the OEU pump station sump was discharged to the sanitary sewer system under a

permit from the City of Palo Alto POTW. Periodically, during times of high surface water inflow, water was pumped into a box culvert approximately 25 feet above the OEU, which discharges to Matadero Creek approximately 2200 feet downstream (southeast) of the OEU pump station.

National Pollutant Discharge Elimination System (NPDES) Permit No. CA0038784 was issued to the County of Santa Clara Roads and Airports Division (the County) by the RWQCB on August 16, 2000, allowing further discharge of water from the OEU pump station to Matadero Creek. The permit required the installation of a VOC removal system, on or in the box culvert that transports groundwater and surface water from the pump station to Matadero Creek.

SECOR subsequently designed and constructed a VOC treatment system. The treatment system consists of two sequential operations: the first being removal of VOCs by pumping water through a vacuum air stripping unit that discharges under gravity into the box culvert. The second operation is further removal of VOCs by passive air stripping as water flows approximately 2200 feet in the box culvert toward Matadero Creek. This system was put into operation during the first quarter of 2002.

On June 29, 2007 the County of Santa Clara submitted a NOI to the RWQCB proposing the OEU discharge be covered under the VOC General Permit. The RWQCB authorized discharge of treated groundwater from OEU under the requirement of Order No. R2-2004-0055, NPDES Permit No. CAG912003 in a letter dated July 27, 2009. Coverage under the General Permit was renewed in 2009. Water from the OEU dewatering system is also periodically discharged to the sanitary sewer system under a POTW discharge permit.

3.2.5 Perimeter Area

Groundwater remedial measures in the Perimeter Area began in March 1993 with the installation of IRM extraction well EW-13 (A1 Zone) near the intersection of Lambert and Ash Avenues. EW-13 operated temporarily as an IRM extraction well from January 1995 through December 1, 1995. EW-13 was connected to the IRM treatment system at the Varian 611 Hansen Way site, treated via GAC, and reused onsite for either landscape irrigation or to fill ornamental ponds. EW-13 was subsequently connected to the 611 Hansen Way treatment system as part of the final remedy. The 611 Hansen Way treatment system began full-time operation on March 28, 1996. Connection of extraction well EW-13 was completed in September 1996 with full-time operation of the well beginning in December 1996 (Flour-Daniel GTI, 1997; ENVIRON, 1997).

Four additional wells were proposed as part of the final groundwater remedy approved in the FS. Extraction well EW-12 (A1U Zone) was installed in August 1996 near the intersection of Lambert and Ash Avenues. Extraction well EW-14 (A1 Zone) was installed in October 1995 near the intersection of Portage Avenue and Ash Street. Both EW-12 and EW-14 were connected to the 611 Hansen Way treatment system in November 1996 and began full-time operation on November 15, 1996 (ENVIRON, 1997). The 611 Hansen Way treatment system operated continuously until March 2006 when a power spike damaged the treatment plant control system.

When operational, up to 12.5 percent of the groundwater treated at the 611 Hansen Way treatment system was reused at that site (Table 3-1).

Extraction wells EW-15 (A1U Zone) and EW-16 (A1 Zone) were installed in October 1995 near the intersection of Park Boulevard and Portage Avenue and began full-time operation in June 1996. Extracted groundwater from these two wells is discharged directly to the POTW without treatment under a Groundwater Discharge Permit issued by the City of Palo Alto.

Extraction well EW-12 operated until January 2006 when flooding of the control vault rendered well EW-12 non-operational. The well was left off with RWQCB approval pending authorization from the RWQCB to permanently shutdown the extraction well. The RWQCB approved permanent shut down of EW-12 in the Second Five-Year Report approval letter (RWQCB, 2007).

Extraction wells EW-13 and EW-14 operated until March 2006 when these wells were shut down due to the 611 Hansen Way treatment system shutdown. The RWQCB approved trial shut down of well EW-13 in the Second Five-Year Report approval letter. Extraction well EW-13 has remained off throughout the remainder of this reporting period.

In situ chemical oxidation work (one-time permanganate injection) and decommissioning of extraction well EW-14 was completed pursuant to RWQCB approval in an email from Mr. Roger Papler of the RWQCB to Ms. Denise Kato of Varian, dated June 26, 2006. The *in situ* chemical oxidation work was completed on July 10, 2006. Well EW-14 was destroyed (pressure grouted) on July 11, 2006. This work is documented in the report titled *Chemical Oxidation and Well Decommissioning at Extraction Well EW-14, located on Portage Avenue, Palo Alto, California*, submitted to the RWQCB on September 12, 2006 (SECOR, 2006c).

Extraction wells EW-15 and EW-16 operated throughout the reporting period with no major changes.

3.3 GROUNDWATER SELF-MONITORING PROGRAM

Revised Site Cleanup Requirements, Order 94-130, was adopted by the RWQCB on September 21, 1994. A groundwater Self-Monitoring Program (SMP) was also adopted on this date. The SMP specified that ground water elevations would be measured quarterly and provided a schedule for groundwater sampling and analysis. In response to requests from Hewlett Packard and Varian, a revised SMP was approved on December 18, 1997 (RWQCB, 1997). The revisions included discontinuing sampling from selected wells, reducing the sampling frequency in selected wells, and changing the analytical methods used.

The RWQCB approved a modified SMP in a letter to HP, Varian, and Stanford Management Company dated May 4, 2001 (RWQCB, 2001b). There have been no further RWQCB-approved modifications to the SMP. The current SMP consists of the following elements:

- Annual groundwater level measurements for 177 wells in June of each year;

- Annual groundwater sample collection and analysis for 28 wells (sampling in June, analysis using EPA Method 8021B or equivalent);
- Biennial groundwater sample collection and analysis for 131 wells and the OEU Manhole (sampling in June, analysis using EPA Method 8021B or equivalent); and
- Submittal of Annual groundwater self-monitoring reports to the RWQCB by September 30 of each year

Table 3-2 presents the wells from which the groundwater levels are collected along with the annual groundwater elevation data for 2006 through 2009. Table 3-3 summarizes the SMP sampling schedule for the Sites ("Annual" sampling occurs during June-second quarter).

Pursuant to RWQCB concurrence (RWQCB, 2005b) with the recommendations from a 2004 passive diffusion bag sampler (PDBS) demonstration study (SECOR, 2005a), PDBS have been used as the primary method of collecting ground water samples since June 2005.

The Second Five-Year Report included the following recommendations to modify the existing SMP:

- Increase the monitoring frequency for select wells from biennial to annual (EW-7, O67A2, O120A1, V8-1, V8-5, V8-8, F21A1U and F22A1U);
- Remove extraction wells EW-1, EW-2 and EW-6, and EW-9 and monitoring wells F44A1, F45A1U, OB6-1, OB6-2, O24A1U, F23A and F43A1U from the SMP; and
- Add monitoring well T1A and F29A1U to the SMP and monitor on an annual basis.

The RWQCB did not specifically approve the changes to the SMP in the February 9, 2007 Second Five-Year Report approval letter. However, HP and Varian have implemented most of these recommendations on a self-directed basis.

The following wells are listed in the May 2001 SMP but have since been approved by RWQCB for destruction, and thus are no longer sampled.

- W9A1U (destroyed 1998)
- BW-4 (destroyed March 2002)
- EW-1, EW-2, EW-6, F23A, F43A1U, F44A and F45A1U (destroyed July 2005)
- EW-14 (destroyed July 2006)
- EW-9 (not yet destroyed)

During June 2009, the following 19 wells that are not included in the SMP were monitored on a self-directed basis:

- Well F29A1U, which was sampled to monitor VOC concentrations northeast of the Stanford/Palo Alto Community Playing Fields (the "soccer complex" – also known as the former Mayfield School Site);

- Well O152B, which was constructed at the 640 Page Mill Road site in June 2009 to assess B Zone water quality in the east portion of that Site;
- Wells P1-A1, P2-A2, P3-A2, P4A2, and P5A2, which are located on the 640 Page Mill Road site, were sampled to monitor VOC concentrations in the east and northeast portion of that Site;
- Wells OB5-2, OB5-3, OB5-4 and OB5-5 were sampled to assess VOC concentrations in the immediate vicinity of the building located on the 640 Page Mill Road site;
- Well T1A1, which was constructed in the vicinity of wells EW-6 and F44A, which were decommissioned when the soccer complex was constructed in 2005, is typically monitored biennially; and
- Wells F126A2, F137A1, P13, P17, TW-2 and F86A2 were sampled in support of the Third Five-Year Report.

3.4 LAND USE RESTRICTIONS

Pursuant to Provisions C.3(c), C.4(c), and C.5(b) of the Order, each of the Sites has had a *Covenant and Environmental Restriction of Property* Covenant recorded with the Santa Clara County Recorder (Agilent, 2006; Stanford, 2003a; Stanford, 2003b). Each of the restrictions enumerated in the covenants "run with the land" and is enforceable by the RWQCB. Restrictions on development and use specified in each covenant include the following:

- The integrity of remedial measures, equipment and groundwater monitoring systems must be preserved; and
- Owners and occupants of the Site shall not extract contaminated groundwater for any use unless expressly permitted in writing by the RWQCB.

An additional restriction is included in the 395 PMR Site covenant: "No residential buildings shall be constructed over the area of RW-5 and OB11-2, located in the east corner of the site, without further evaluation of potential vapor intrusion."

4.0 Additional Investigative Activities During the Reporting Period

Additional investigative activities were completed by HP at the 640 PMR and 395 PMR Sites, by Varian at the 601 CA Site, and by HP and Varian in the COE Area during the reporting period.

4.1 640 PMR SITE INVESTIGATIVE ACTIVITIES

The 0investigative activities described below were conducted for the 640 PMR Site during the reporting period. The primary focus of these investigative activities was to assess VOC concentration increases in the vicinity of A1 Zone well O119A1 and A2 Zone wells O67A2 and O52A2, located east of the current building at the site, which were noted in the Second Five-Year Report.

- During January and February 2007, six groundwater monitoring wells were installed in the northeast portion of the 640 PMR Site parking lot (wells P1-A1, P1-A2, P2-A2, P3-A2, P4-A2 and P5-A2). Details of this work are reported in the *Groundwater Monitoring Well Installation Report for Hewlett-Packard Company* (SECOR, 2007a).

- During January 2007, groundwater samples were collected and analyzed from eight soil vapor extraction points in the basement parking garage of the 640 PMR Site building. Five membrane interface probe (MIP) borings were completed in the vicinity of O119A1, O68A1 and O67A2 in February 2007, and selected groundwater monitoring and extraction wells on the 640 PMR Site were sampled and analyzed for VOCs in March 2007. Results of this work were submitted to the RWQCB in the report titled *Results of Additional Investigation in the Vicinity of Wells O119A1, O68A1 and O67A2, 640 Page Mill Road, Palo Alto, California* (SECOR, 2007b).

- During September 2007 through August 2008, the following additional work was conducted:

    - Redevelopment, down-hole video logging and groundwater pump replacement at EW-7;
    - Step drawdown and constant rate pumping test at EW-7; Tracer testing at well O119A1, including tracer monitoring at various wells in the vicinity of O119A1 and EW-7;
    - A total of 27 additional MIP borings in the vicinity of wells O119A1 and O67A2 including 37 grab groundwater samples for VOC analysis;
    - A total of 5 cone penetrometer (CPT) borings along Page Mill Road and collection of 18 grab groundwater samples for VOC analysis;
    - Groundwater elevation data were collected in the A1 and A2 zones in the vicinity of the 640 PMR Site; and

- Additional groundwater samples were collected from wells O28A1, O52A2, F123A1, F124A2, EW-5, EW-7 and EW-8, i.e. in addition to sampling conducted as part of the current self-monitoring program (SMP).

Methodologies and results of the above investigations, along with remedial pumping system optimization activities, were provided to the RWQCB in the October 2008 *Report of Recent Investigation Activities, Hewlett-Packard Company, 640 Page Mill Road Site, Palo Alto, California* (Stantec, 2008e). The RWQCB approved the October 2008 report in a letter issued to HP on April 30, 2009 (RWQCB, 2009b)

- During June 2009, one B Zone groundwater monitoring well (well O152B) was installed in the northeast portion of the 640 PMR Site. Details regarding the well construction, and subsequent development and sampling are reported in the *Installation Report for B-Zone Well O152B, Hewlett-Packard Company, 640 Page Mill Road Site, Palo Alto, California* (Stantec, 2009c). A letter was issued by the RWQCB on November 12, 2009 approving the B Zone well installation report (RWQCB, 2009d). The letter, however, expressed concern that the newly installed well did not characterize the upper portion of the B Zone, and required that an updated conceptual site model (CSM) be submitted, and include an evaluation, based on the model, of the need for additional characterization. The RWQCB letter also included a request to evaluate the potential influence and proper decommissioning of long screened wells that were constructed near the former on-site underground solvent storage tank in the late 1980s.

- A report titled *Updated Conceptual Site Model - A1 Zone near Well O119A1 and A2 Zone near Well O67A2* was submitted to the RWQCB on January 19, 2010 (Stantec, 2010b) in compliance with the November 12, 2009 RWQCB letter. The report also included documentation of proper well decommissioning as requested by the Water Board.

Key conclusions from the above investigative activities are as follows.

- The lateral and vertical limits of chlorinated VOCs in the A1, A2, and A2D zones have been defined. No further investigation is required to evaluate the extent of chlorinated VOCs in these zones.
- Operation of wells EW-7 and EW-8 at higher than originally designed flow rates is providing improved hydraulic control of the VOC plume and has substantially increased the VOC mass removal rate from the A1 Zone.
- Water quality monitoring data and MIP data suggest that the VOC plume in the A2 Zone in the vicinity of well 067A2 is not currently expanding (i.e., is stable). It is possible that groundwater extraction at A1 Zone well EW-7 is causing upwelling of groundwater from the A2 Zone to the A1 Zone resulting in localized hydraulic influence of A2 zone groundwater.

- Groundwater collected from well O152B in June 2009 did not contain detectable concentrations of VOCs. No additional evaluation of the B Zone is warranted.

4.2 395 PMR INVESTIGATIVE ACTIVITIES

The following investigative activities were completed at the 395 PMR Site during the reporting period.

4.2.1 Area X Soil Sampling

Soil boring and sampling was conducted in October 2007 at nine locations in the portion of Area X that was previously identified as containing soil concentrations above the 1 mg/Kg total VOC cleanup standard. The objective of this work was to assess whether soil remediation efforts had reduced concentrations to below the cleanup standard. As reported in the December 14, 2007 *Report of Soil Sampling to Assess Achievement of Final Cleanup Standards in Soil in Area X (ten), Former Hewlett-Packard Company 395 Page Mill Road Site, Palo Alto, California* (SECOR, 2007e), none of the soil samples collected contained total VOC concentrations above the soil cleanup standard. Based on these results decommissioning of the DPE system was recommended.

The RWQCB approved the portion of the December 2007 report that documents achievement of the final soil clean up standards (RWQCB, 2008b). RWQCB did not approve decommissioning of the DPE system due to elevated PCE concentrations in a groundwater sample collected from OB11-2 in October 2007, and required HP to submit a work plan to assess the potential for vapor intrusion at the 395 PMR Site. The RWQCB letter states that the recommendation for DPE system decommissioning would be re-evaluated by the RWQCB after the results of post-*in situ* chemical oxidation treatment groundwater sampling and results and the vapor intrusion evaluation are submitted.

4.2.2 Soil Gas Sampling to Assess Potential for Vapor Intrusion

Soil gas sampling and analysis was conducted at the 395 PMR Site during May and October 2009 in accordance with a work plan approved by the RWQCB (Stantec, 2008a, Stantec 2008f, RWQCB, 2009a). Initial soil gas sampling was conducted in May 2009, and a report documenting that effort was submitted to the RWQCB on June 30, 2009 (Stantec, 2009b). As conveyed in the May 30 report, low- or no-flow conditions were encountered at each sampling location. Data from just one of four samples collected (location SG-1) was considered acceptable for quantitative comparison to corresponding RWQCB Commercial/Industrial Land-Use Environmental Screening Levels (ESLs) for potential migration of VOCs from soil gas to indoor air, as specified in the RWQCB approved work plan. The sample from SG-1 did not contain VOC concentrations above corresponding ESLs.

As described in the January 14, 2010 report, *Results of October 2009 Soil Gas Sampling to Assess Potential for Vapor Intrusion at 395 Page Mill Road, Palo Alto, California* (Stantec 2010a), additional soil gas sampling and analysis was conducted October 2009. Soil gas

samples were obtained each of eight intended locations, and data were determined to be acceptable for quantitative evaluation. VOCs were not detected at concentrations above corresponding Commercial/Industrial Land-Use ESLs in any of the samples. The report concluded that since VOCs were not detected in soil gas samples at concentrations exceeding Commercial/Industrial ESLs, no additional investigation to complete characterization was necessary.

4.3 601 CA INVESTIGATIVE ACTIVITIES

In 2005 SECOR installed 16 additional wells at the 601 CA Site for the dual purpose of facilitating ISCO injections and evaluating the lateral distribution of VOCs in the west parking lot and the courtyard (see section 3.2.3 for well names, and Appendix A for a well location and VOC distribution map).

The well installations confirmed the conceptual site model which identified the courtyard as the primary area of concern. The highest concentrations were observed in wells P17, P13, and P16. As a result of persistent elevated VOC concentrations in well P17, SECOR proposed installation of well P21 in the courtyard upgradient of well P17. As described in Section 3.2.3, evidence of separate-phase TCE was observed in well P21.

In an effort to evaluate the extent of the elevated VOC concentrations in the vicinity of well P21, Stantec has proposed additional investigation activities (Stantec, 2009a), both in the courtyard and along the eastern downgradient side of the Site building. The purpose of the downgradient borings is to evaluate VOC migration for future implementation of EISB to mitigate potential off-site migration. The work plan for further characterization and EISB bench scale study was approved by the RWQCB (RWQCB, 2009c) in August of 2009; however, implementation has been delayed by Site access and permitting issues. Work is expected to begin in February of 2010.

4.4 COE AREA INVESTIGATIVE ACTIVITIES

Soil gas samples were collected at 14 locations within the COE area In April, 2008. Fourteen shallow and four deep soil gas samples were collected and submitted for laboratory analysis for VOCs. A *Report of Soil Gas Sampling, California-Olive-Emerson Study Area, Palo Alto, California* was submitted to the RWQCB in May 2008 (SECOR, 2008). The results indicated that none of the shallow soil gas samples contained VOC concentrations greater than the corresponding RWQCB Residential Land-Use ESLs for potential migration of VOCs from soil gas to indoor air. TCE was detected above the Residential ESL in one deep (11 feet bgs) sample, near a subterranean parking garage. An addendum to the soil gas report (Stantec, 2008d) was submitted to the RWQCB to provide additional information regarding sampling locations, building structures and the ventilation system of the parking garage. The soil gas report and addendum were approved by the RWQCB in a letter to HP and Varian dated November 18, 2008 (RWQCB, 2008d) and no further soil gas investigations in the COE Study Area were required.

5.0 Effectiveness Evaluation

The following sections present an evaluation of the effectiveness of the final groundwater remediation remedy and recorded land use restrictions, and information regarding projected costs.

5.1 GROUNDWATER REMEDIATION

The Study Area generally consists of the Sites, with associated historic VOC sources, and subsequent downgradient commingling of the off-site VOC plumes in the Off-Site Areas. Historic remedial activities at the Sites and in the Off-Site Area have reduced VOC concentrations in groundwater throughout the Study Area. VOC concentrations in groundwater have been reduced at the individual Sites, in groundwater of the commingled down-gradient areas, and in the groundwater captured at the OEU.

Table 5-1 provides a summary of VOC mass removed, groundwater volumes extracted and VOC mass removal efficiencies for the remediation systems at the Sites and the Off-Site Area. Figures 5-1 through 5-7 graphically depict groundwater remediation system performance information. Table 4-1 is a historical summary of data for VOCs detected most frequently and extensively in groundwater samples from the Sites and the Off-Site Area. Concentration versus time plots showing PCE, 1,1,1-TCA, TCE and 1,1-DCE concentration trends for A1U, A1 and A2 wells currently in the SMP are provided in Appendix B. Graphs for B Zone wells were not prepared because chemicals of concern have not been detected in the B Zone at significant concentrations: VOCs were not detected in samples collected from B Zone wells during the reporting period.

5.1.1 395 PMR Site

Remedies implemented at the 395 PMR Site, including soil vapor, groundwater extraction and localized *in situ* chemical oxidation, have been effective at reducing VOC concentrations in soil and groundwater. Active remedial systems have been shut down with regulatory agency approval. Concentrations of VOCs in groundwater at the 395 PMR Site and immediately down-gradient of this site are stable to decreasing. For example, as shown on the trend graph in Appendix B, concentrations of PCE, 1,1,1-TCA, and 1,1-DCE at down-gradient well W-10A1U have decreased to near non-detectable levels. TCE concentrations at this well, which are not directly associated with the 395 PMR site, are also stable to decreasing.

5.1.2 OEU and Off-Site Areas

The influent concentrations of groundwater to the OEU are an indication of remedial progress in the Study Area. As shown on the trend graph in Appendix B, the VOC concentrations at the OEU decreased consistently between about 1996 and 2003 demonstrating significant remedial progress throughout the Off-Site Area. Since that time, PCE, 1,1,1-TCA, and 1,1-DCE

concentrations have remained very low (17 µg/L, 3.2 µg/L and 1.6, respectively), and have exhibited a stable to decreasing trend. The trend data for these compounds, particularly PCE, is a reflection of remedial effectiveness at the 395 PMR site.

The TCE concentrations at the OEU have remained stable since 2003, with a concentration of 68 µg/L in both the 2003 and 2009 sampling events. These data suggest that the localized increased TCE concentrations observed at and downgradient of the 601 CA and 640 PMR Sites has not resulted in similar concentration increases at the OEU. TCE concentrations at monitoring wells down-gradient of El Camino Real (not including F127A1 and F129A1 which are discussed below) have for the most part also remained stable over this same time period. The TCE concentration at well F34A has ranged from 41 µg/L to 58 µg/L between 2004 and 2009. Similarly, the TCE concentration at F62A1 ranged from 82 µg/L to 97 µg/L over this same time period not including the potentially anomalously low 18 µg/L result for the 2009 event. Data collected over the next five-year period will determine if the lower 2009 TCE result at F62A1 is anomalous or represents improved remedial effectiveness in the COE Area.

5.1.3 Wells F127A1 and F129A1

Wells F127A1 and F129A1 are located northeast and downgradient of El Camino Real and extraction well EW-8. As shown on the graphs in Appendix B, concentrations of TCE, 1,1,1-TCA, and 1,1-DCE increased over the last five years at well F127A1. Concentrations of 1,1,1-TCA and 1,1-DCE also increased at well F129A1, which is located approximately 300 feet down-gradient of F127A1. These increases are directly associated with plume migration from the 640 PMR Site, which is discussed in the following paragraph. VOC concentrations at further downgradient well F145A1 do not exhibit increasing trends. These data, coupled with the minimal VOC increase at F129A1, suggest that the F129A1 location represents the down-gradient limit of recent VOC plume expansion. Stable VOC concentrations in the downgradient Off-Site Area and at the OEU as discussed above further support this. HP is currently implementing increased pumping at wells EW-7 and EW-8, as discussed below, to both reduce the VOC concentrations in these pumping areas and to improve hydraulic control and thus further minimize downgradient migration of VOC mass.

5.1.4 640 PMR – A1 Zone

Several monitoring wells of the A1 and A2 Zones on and immediately downgradient of the 640 PMR site exhibited increasing VOC concentrations over the last 5 to 10 years. Key monitoring wells exhibiting increasing trends include O119A1 and O67A2 on the 640 PMR Site, and F123A1 and F42A1 downgradient of the Site (see trend graphs in Appendix B). Data from the A1 Zone monitoring wells indicate expansion of the VOC plume, including both TCE and 1,1,1-TCA at and downgradient of the 640 PMR Site. As detailed in Section 4.1 of this report, HP completed several actions between 2007 and 2009 to address this plume expansion including modifications to pumping rates at wells EW-7 and EW-8. As shown in Appendix B, VOC concentrations have decreased substantially at off-Site well F123A1 since the pumping rate at well EW-7 was increased in December 2007. Similar reductions in VOC concentrations are

anticipated at wells F42A1, F127A1, and F129A1 over the next several years with continued pumping at EW-7 and the increase in pumping rate at EW-8 that was initiated in late 2009.

Table 5-1 provides a summary of VOC mass removed, groundwater volumes extracted and VOC mass removal efficiencies. Figures 5-1 through 5-5 graphically depict GWET system performance information. The increased pumping rate at EW-7 and EW-8 and the associated improvement in remedial effectiveness is evident on this table and associated figures. For example, the average mass removal rate for the 640 PMR GWET system has increased from 7.4 pounds per/million gallons (lbs/mgal) during January 2000 through December 2004 to 20.1 lbs/mgal for January 2005 to December 2009 period. This improvement in mass removal efficiency is a result of the shutdown of extraction wells that had low VOC concentrations (wells EW-4 and EW-5) and increasing the pumping rate of wells EW-7 and EW-8.

5.1.5 640 PMR – A2 Zone

VOC concentrations in well O67A2 on the 640 PMR Site increased substantially between June 1998 and June 2001, and again between June 2005 and June 2006. Since that time, VOC concentrations at this well have decreased and then have remained relatively stable since about June 2008. Downgradient A2 Zone monitoring well O52A2 exhibited a VOC concentration increase in a similar timeframes as O67A2, although at much lower concentrations, and well F124A2 exhibited a VOC concentration increase between June 2005 and June 2007 with a maximum TCE concentration of 61 µg/L. Well F126A2, located southeast of F124A2, remains non-detect for VOCs. VOC concentrations at O67A2, F124A2, and O52A2 have remained stable to decreasing in concentration since June 2007.

Although VOC concentrations remain elevated at the O67A2 location, data do not suggest continued migration of the A2 Zone VOC plume to the downgradient areas. As shown on the trend graphs in Appendix B, VOC concentrations at wells P1-A2 to P5-A2 indicate stable to decreasing concentrations since their installation was completed and sampling was initiated in February 2007. Further, VOC concentrations at wells O111A2 and O114A2 located on the 640 PMR Site to the northwest of O67A2 did not indicate a VOC increase in the same timeframe as well O67A2. VOC concentrations at these two wells have remained stable to decreasing in concentration over the last 10 years.

In summary, the VOC plume in the A2 Zone expanded from 1998 until approximately 2007 and has since stabilized. There is no indication the VOC plume is migrating further or contributing substantial VOC mass to the downgradient areas. Additional monitoring well sampling will be conducted to monitor temporal trends in the A2 Zone wells.

5.1.6 601 California

Pursuant to RWQCB authorization, the GWET system was shut down on July 15, 2003. Three full-scale *in situ* chemical oxidation injection events were subsequently completed, two with potassium permanganate (December 2003/January 2004, and October 2005) and one with sodium permanganate (September 2006). To date, injections have resulted in TCE

concentration reductions in wells along the entrance to the courtyard and in the parking lot west of the building. However, VOC concentrations rebounded to pre-treatment levels in wells located within the interior of the courtyard area. The most significant VOC concentration rebound has been observed around wells P13 and P17 (39,000 and 34,000 µg/L, respectively in March 2008). The newly installed well (P21), located between P13 and P17, was found to contain a TCE concentration of 200,000 µg/L. Based on the results of the March 2008 sampling, Varian has proposed to discontinue ISCO and evaluate further *in situ* treatment using EISB.

As shown on trend graphs in Appendix B, data from downgradient monitoring wells V-9, V-9X, and F98A suggest migration of the TCE plume from the 601 California Site to the area immediately downgradient of the Site. The concentration increase in F98A appears to have started in the 2003 to 2005 timeframe. Well F97A, located down and cross-gradient of F98A has also exhibited a minor TCE increase over this same time period (1.9 µg/L in 2003 to 35 µg/L in 2009). The goal of the proposed EISB program is to reduce VOC concentrations within the source area and mitigate potential migration of VOCs from the Site to downgradient areas.

5.1.7 Perimeter Area Extraction Wells EW-15 and EW-16

Extraction wells EW-15 and EW-16 are located in the north portion of the Perimeter Area. These extraction wells supplement hydraulic capture of the OEU and remove VOCs, primarily PCE (see Appendix B). VOC concentrations at both pumping wells are stable to decreasing over the last 10 years. Operation of these wells does not provide appreciable hydraulic capture or VOC mass removal, and the downgradient OEU would provide equivalent effectiveness. In the recommendations section below, it is proposed to shut down both wells on a trial basis and monitor downgradient wells to observe conditions and confirm continued capture of low VOC concentrations in this area by the OEU.

5.1.8 Summary of Effectiveness Evaluation

VOC concentrations at the OEU and monitoring wells in the downgradient Off-Site Area are stable to decreasing. These data suggest that the localized VOC concentration increases and plume migration observed in the vicinity of the 601 CA and 640 PMR Sites over the last five years has not adversely impacted water quality in the downgradient Off-Site Area. Actions taken by HP at the 640 PMR Site since 2008 have increased mass removal rates, stabilized and/or are reduced concentrations, and have mitigated further plume migration to the downgradient areas. This is expected to continue with ongoing remedial pumping at wells EW-7 and EW-8. Remedial plans by Varian at the 601 CA Site (EISB) are also intended to provide further VOC treatment and mitigate potential VOC migration to downgradient areas.

5.2 LAND USE RESTRICTIONS

Stantec retained Old Republic National Title Insurance Company (Old Republic) to provide Recorded Document Guarantee (RDG) reports, similar to property transaction Title Searches, for the 640 PMR Site, 395 PMR Site and 601 CA Site. The RDG reports were obtained to

assess whether the institutional controls (land use restrictions) specified in the Order were recorded. The RDG reports identify the Covenant and Land Use Restriction recorded for each of the Sites. Copies of the RDG reports are provided in Appendix C.

5.3 PROJECTED COSTS

Costs incurred to date and projected future costs, assuming an additional 15 years of operation, maintenance and/or monitoring, are on the order of those projected in the RI/FS.

6.0 Conclusions and Recommendations

Remedial measures for the Sites and Off-Site Area are generally performing as intended. VOC concentrations at the OEU and monitoring wells in the downgradient Off-Site Area are stable to decreasing. These data suggest that the localized VOC concentration increases and plume migration observed in the vicinity of the 601 CA and 640 PMR Sites over the last five years has not adversely impacted water quality in the downgradient Off-Site Area. Actions taken by HP at the 640 PMR Site since 2008 have increased mass removal rates, stabilized and/or are reduced concentrations, and have mitigated further plume migration to the downgradient areas. Remedial plans by Varian at the 601 CA Site (EISB) are also intended to provide further VOC treatment and mitigate potential plume migration to downgradient areas.

As anticipated in the discussion of the selected remedy in the Order, concentrations of VOCs remaining after over 15 years of operation of the groundwater remedial systems are still above cleanup standards in many areas. As observed at many other VOC impacted groundwater sites, groundwater pump and treat technology is generally effective at removing dissolved chemicals and controlling plume migration, but requires very long periods of time to achieve groundwater cleanup objectives. This is discussed in the Area FS and recognized by the RWQCB in the Order as part of the discussion of long-term effectiveness of the selected alternative.

Per applicable provisions of the Order, a *Covenant and Environmental Restriction of Property* has been recorded with the Santa Clara County Recorder for each of the Sites. RDG reports by Old Republic identify the recorded Covenant and Land Use Restriction for each of the Sites.

Specific recommendations for each of the Sites, the COE Area and the Perimeter Area are presented in the following subsections.

6.1 640 PAGE MILL ROAD AND COE AREA

A1 Zone extraction well EW-7 will continue to be operated to reduce on-site VOC concentrations and mitigate off-site migration of VOC-impacted groundwater. COE Area extraction well EW-8 will continue to be operated to address the portion of the A1 Zone plume that extends off-site northeast of the 640 PMR Site. Operational adjustments and modifications, such as extraction flow rates, will continue to be made as necessary to improve and/or maintain the performance and efficiency of the GWET system. Investigations recommended in the Updated CSM include the following.

- Collect water level measurements at key A1 and A2 Zone monitoring wells on a monthly basis through June 2010 to document the hydraulic conditions of the aquifer associated with the increased pumping rates at extraction wells EW-7 and EW-8;
- Sample the following on- and off-site A1 and A2 Zone wells in March 2010 to supplement the June 2010 COE annual monitoring event: on-site wells EW-7, O52A2,

O67A2, and O119A1; and off-site wells EW-8, F123A1, F124A2, F125A1, F42A1, F127A1, and F129A1;

- Conduct a tracer test by injecting tracer dye in well F127A1 and monitoring for tracer at extraction well EW-8 and down-gradient well F129A1; and
- Conduct an eight-hour groundwater pumping test at well O67A2 to define the hydraulic properties of the associated A2 Zone sediments (water levels will be collected at surrounding wells, and groundwater samples will be collected from O67A2 during pumping to observe potential changes in groundwater chemistry over time).

These recommendations are expected to be conducted during 2010 pursuant to RWQCB approval.

It is recommended that the SMP be modified as follows.

- Remove extraction wells EW-1, EW-2 and EW-6 and monitoring wells F23A, F43A1U, F44A1, F45A1U, OB6-1, OB6-2 and O24A1U from the current SMP. These wells were decommissioned in July 2005 pursuant to RWQCB approval.
- Add monitoring well T1A to the current SMP and monitor on an annual basis to provide long-term performance monitoring data for the in situ chemical oxidation treatment.
- Add monitoring wells P1-A1, P1-A2, P2-A2, P3-A2, P4-A2, and P5-A2 to the current SMP and monitor on an annual basis.
- Add monitoring well F29A1U to the current SMP to provide additional groundwater quality data downgradient of where extraction well EW-1 was formerly located.
- Increase the monitoring frequency for wells F21A1U, F22A1U, F97A and F98A from biennial to annual, to provide more frequent groundwater quality data for the area immediately downgradient of the former Mayfield School Site, where extraction wells EW-1, EW-2 and EW-6 were decommissioned.

6.2 395 PAGE MILL ROAD

No change to remediation activities associated with the 395 PMR Site is recommended at this time. Given the results of the 2009 vapor intrusion assessment, existing land use restrictions, and use of the 395 PMR Site (i.e., office building, parking lot and open-air parking garage), further assessment of potential vapor intrusion is not warranted at this time.

Permanent shutdown of the remedial systems at the 395 Page Mill Road site was proposed in September 2002, and reiterated in the Second Five Year Report and Work Plan for Assessing Achievement of Final Cleanup Standards in Soil in Area X. The RWQCB has concurred that soil cleanup standard have been achieved in Area X, but has not yet approved decommissioning of the remedial systems, pending completion of a vapor intrusion assessment and post-chemical oxidation treatment monitoring. Decommissioning of the DPE system is recommended.

6.3 601 CALIFORNIA AVENUE

The GWET system shutdown should continue and the RWQCB-approved work plan for site investigations and EISB pilot study should be implemented. This work is currently scheduled to begin in February of 2010 once access and work permit issues have been resolved.

6.4 OEU DEWATERING SYSTEM

Operation of the OEU dewatering and treatment system should be continued with no significant modifications.

6.5 PERIMETER AREA

Based on the stable and relatively low VOC concentrations in extraction well EW-13, a change in the shutdown status of this well from temporary to permanent is recommended. Well EW-13 should continue to be monitored on an annual basis.

It is recommended that A1U Zone extraction well EW-15 and A1-Zone well EW-16 be shut down on a trial basis. VOC concentrations in these wells have been stable to decreasing, neither well provides appreciable hydraulic capture or VOC mass removal, and the downgradient OEU dewatering system would provide equivalent remedial effectiveness. Wells EW-15 and EW-16 will continue to be monitored on a routine basis per the SMP. Concentrations in wells downgradient of wells EW-15 and EW-15 will be monitored to confirm continued capture of low VOC concentrations in this area by the OEU dewatering system.

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FIGURES

601 CA SITE

COE STUDY AREA BOUNDARY

640 PMR SITE

395 PMR SITE

OEU DEWATERING SYSTEM

VARIAN GENERAL STUDY AREA

PERIMETER AREA BOUNDARY

ALZA (DYNAPOL)

HEWLETT-PACKARD CORPORATION

BLDG. 20

AYDIN ENERGY SITE

LOCKHEED

FORMER KODALUX

FORMER VARIAN BLDG. 7

ESSEX

FORMER BLDG. 8

FORMER BLDG. 8A

FORMER STORAGE BUILDING

FORMER MAYFIELD SCHOOL

FORMER BUILDING 11

650 PMR

FORMER BUILDING 10

PALO ALTO MAYFIELD SOCCER COMPLEX

FORMER BP GAS STATION

FORMER BLDG. 7B

FORMER BLDG. 7A

FORMER CHEVRON GAS STATION

PAGE MILL PLACE

PALO ALTO SQUARE

CLOCKTOWER PLAZA

BLEIBLER

FORMER BLDG. 7C

FORMER BLDG. 7D

FORMER BLDG. 8

FORMER BLDG. 12

PALO ALTO NISSAN

JOST HEATING AND AIR

FORMER DURA-BOND BEARING CO.

DURA-BOND BEARING CO.

HOHBACH

FORMER STANDARD OIL FUEL TRANSFER FACILITY

O.E.U. PUMP STATION

VANCE BROWN AND SON

BLDG. 5B

5C

5A

BLDG. 4

BLDG. 4A

BLDG. 4B

4C

BLDG. 6

BLDG. 3

3A

BLDG. 2

2A

BLDG. 1A

1C

BLDG. 1B

CALIFORNIA AVE.

SHERMAN AVE.

GRANT AVE.

SHERIDAN AVE.

PAGE MILL ROAD

PEPPER AVE.

OLIVE AVE

PORTAGE AVE.

LAMBERT AVE.

FERNANDO

MARGARITA

COLORADO AVE.

EL DORADO AVE.

EL CARMELO

HANOVER ST.

HANSEN WAY

OLD SPT CO. RR. GRADE

SPT CO.

CHIMALUS AVE.

MATADERO AVE.

MATADERO CREEK

MATADERO CANAL

ASH ST.

BIRCH STREET

PARK BLVD.

HIGH ST.

EMERSON ST.

ALMA ST.

EL CAMINO REAL

BIRCH

ORPHEA

LOMA VERDE

LEGEND:

- STUDY AREA BOUNDARY
- PERIMETER AREA BOUNDARY
- 601 CA SITE
- 395 AND 640 PMR SITES
- SITE AREAS
- OREGON EXPRESSWAY UNDERPASS (OEU) DEWATERING SYSTEM

SCALE IN FEET

0 500 1000

Stantec

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MOUNTAIN VIEW, CALIFORNIA
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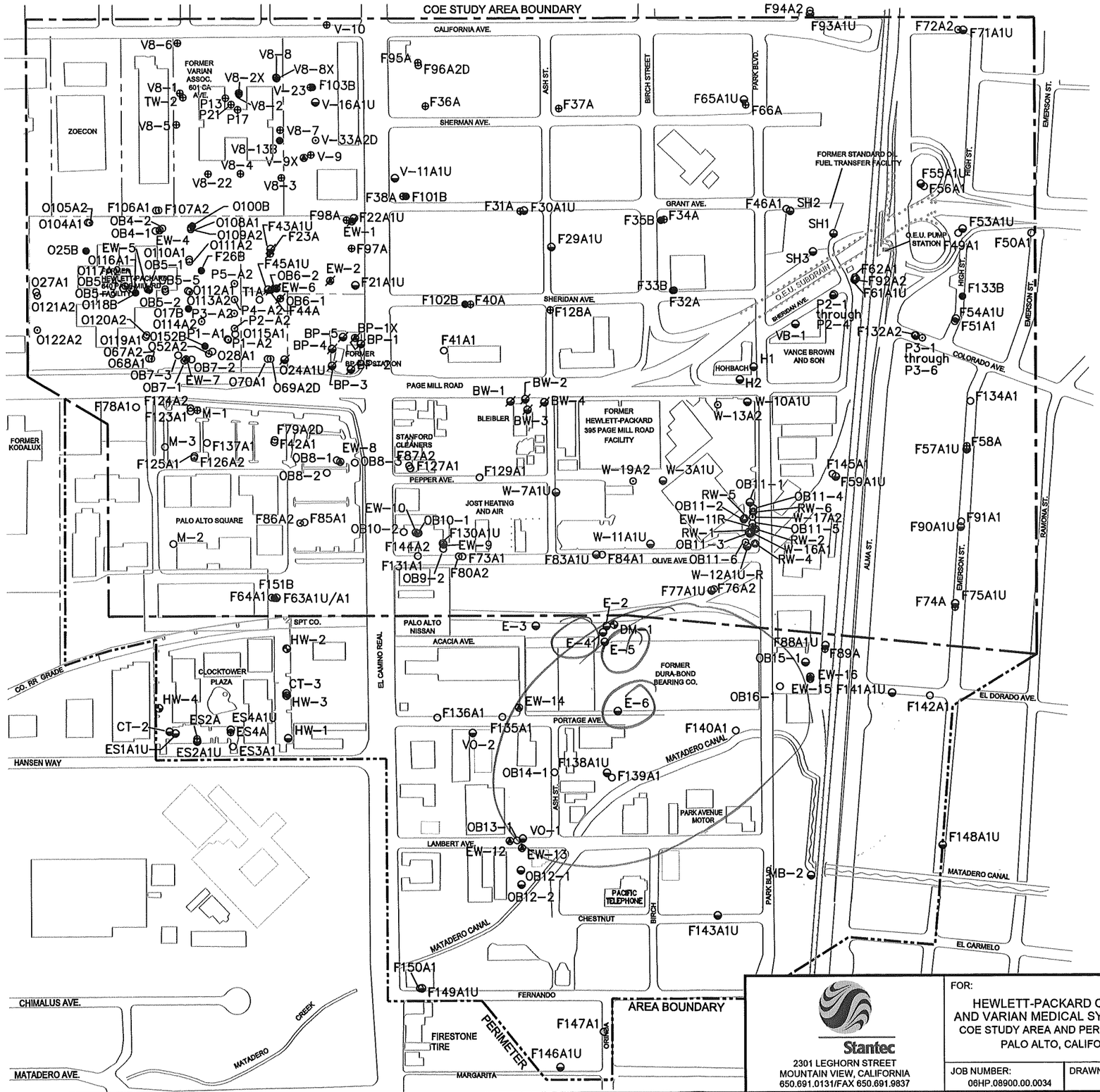
FOR:
HEWLETT-PACKARD COMPANY
AND VARIAN MEDICAL SYSTEMS, INC.
COE STUDY AREA AND PERIMETER AREA
PALO ALTO, CALIFORNIA

SITE LOCATION MAP

FIGURE: 1-1

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
185702092.200.0002	JBL	NK	BS	01/12/10

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LEGEND:

W-12A1U	A1U ZONE MONITORING WELL
F38A	A AQUIFER MONITORING WELL
O115A1	A1 ZONE MONITORING WELL
O122A2	A2 ZONE MONITORING WELL
F35B	B AQUIFER MONITORING WELL
EW-2	GROUND WATER EXTRACTION WELL
RW-1	VADOSE/A1U ZONE EXTRACTION WELL
Ø	DECOMMISSIONED MONITORING OR EXTRACTION WELL

NOTES:

(1) "D" SUFFIX INDICATES WELL SCREENED IN DEEP SUBUNIT.

(2) "OB" PREFIXES INDICATES OBSERVATION WELL FOR EXTRACTION PUMPING.

(3) "P" PREFIX INDICATES OBSERVATION WELL FOR OREGON EXPRESSWAY SUBDRAIN PUMPING.

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AND VARIAN MEDICAL SYSTEMS, INC.
COE STUDY AREA AND PERIMETER AREA
PALO ALTO, CALIFORNIA

WELL LOCATION MAP

FIGURE: 2-1

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
06HP.08900.00.0034	JBL	NK	BS	01/19/10

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COE STUDY AREA BOUNDARY

CALIFORNIA AVE.

FORMER VARIAN ASSOC. 601 CA AVE.

ZOECON

ASH ST.

BIRCH STREET

SHERMAN AVE.

APPROXIMATE EXTENT OF UNSATURATED A1 UPPER ZONE

PARK BLVD.

EMERSON ST.

HIGH ST.

FORMER STANDARD OIL FUEL TRANSFER FACILITY

GRANT AVE.

O.E.V. PUMP STATION

FORMER HEWLETT-PACKARD 640 PAGE MILL RD FACILITY

SHERIDAN AVE.

FORMER BP GAS STATION

HOHBACH

VANCE BROWN AND SON

COLORADO AVE.

PAGE MILL ROAD

FORMER KODALUX

BLEIBLER

STANFORD CLEANERS

FORMER HEWLETT-PACKARD 395 PAGE MILL ROAD FACILITY

PEPPER AVE.

JOST HEATING AND AIR

PALO ALTO SQUARE

OLIVE AVE

ALMA ST.

RAMONA ST.

SPT CO.

CO. RR. GRADE

CLOCKTOWER PLAZA

EL CAMINO REAL

PALO ALTO NISSAN

ACACIA AVE.

FORMER DURA-BOND BEARING CO.

EL DORADO AVE.

PORTAGE AVE.

MATADERO CANAL

HANSEN WAY

ASH ST.

PARK AVENUE MOTOR

LAMBERT AVE.

PACIFIC TELEPHONE

CHESTNUT

BIRCH

PARK BLVD.

EL CARMELO

CHIMALUS AVE.

MATADERO CREEK

MATADERO AVE.

FERNANDO

PERIMETER

ORINDA

MARGARITA

FIRESTONE TIRE

AREA BOUNDARY

V-16A1U 15.04

F22A1U 15.35

EW-1

EW-2

F43A1U

F45A1U

F21A1U 15.36

024A1U

F29A1U 12.37

F93A1U 10.00

F71A1U 9.34

F65A1U 8.99

F55A1U 7.07

SH1 6.79

F53A1U 7.56

F61A1U 4.77

P2-1 5.05

VB-1 6.86

F54A1U 7.46

P3-1 6.28

W-10A1U 8.96

F59A1U 7.83

F57A1U 7.91

W-7A1U 14.31

W-3A1U 12.79

F130A1U 14.95

EW-9

W-11A1U 13.62

RW-1 10.45

F77A1U 11.59

RW-5 10.44

OB11-1 9.92

OB11-2 10.35

RW-6 10.00

RW-2 10.38

OB11-3 10.45

RW-4 10.54

W-12A1U-R 9.94

F88A1U 9.55

OB15-1 9.35

F90A1U 8.02

F75A1U 8.18

F141A1U 8.45

EW-15 5.67

F63A1U/A1 15.84

F138A1U 15.10

EW-12 15.22

OB12-1 15.24

OB12-2 15.27

F143A1U 12.80

F149A1U 15.83

10 9 8 7 6 15 14 13 12 11 10 9 8 6 9 10 11 12 15 14 13

LEGEND:

F83A1U	A1 UPPER ZONE MONITORING WELL
W-4A1U/A1	A1U/A1 ZONE MONITORING WELL
EW-15	EXTRACTION WELL
12.37	GROUNDWATER ELEVATION (FEET MSL)
10	GROUNDWATER ELEVATION CONTOUR
NM	NOT MEASURED
ø	DECOMMISSIONED MONITORING OR EXTRACTION WELL
- - - - -	ESTIMTED EXTENT OF CAPTURE ZONE

NOTES:

(1) EXTRACTION WELL EW-12 WAS INOPERATIONAL BEGINNING MARCH 21, 2006 THROUGH THE END OF THE REPORTING PERIOD.

SCALE IN FEET

0 400 800

Stantec

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650.691.0131/FAX 650.691.9837

FOR:
HEWLETT-PACKARD COMPANY
AND VARIAN MEDICAL SYSTEMS, INC.
COE STUDY AREA AND PERIMETER AREA
PALO ALTO, CALIFORNIA

GROUNDWATER ELEVATION CONTOURS
A1 UPPER ZONE
JUNE 8, 2009

FIGURE: 2-2

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
185702017	JBL	NK	BS	01/19/10

FILEPATH:M:\00_OTHER OFFICES\04-Mt_View\2009-COE_Annual_Figures\DWG\FIG 2-2.dwg|jlieberman|Feb 05, 2010 at 10:02|Layout: Layout1

Within this area, A1 and A2 sands are in direct contact and form a single A1/A2 hydraulic unit. Within this area, the water level data are representative of this single A1/A2 Zone and are shown on both the A1 and A2 Zone maps. Where the A1 and A2 sands are not in direct contact outside this area, data for the A1 Zone are shown only on the A1 Zone map, while data for the A2 Zone are presented on the A2 Zone map.

COE STUDY AREA BOUNDARY

AREA BOUNDARY

LEGEND:

○F42A1	A1 ZONE MONITORING WELL
⊕F40A	A ZONE MONITORING WELL
⊛V8–8X	EXTRACTION WELL
7.70	GROUNDWATER ELEVATION (FEET MSL)
10	GROUNDWATER ELEVATION CONTOUR
NM	NOT MEASURED
(a)	WATER LEVEL DATA WAS NOT USED IN CONTOURING.
⌀	DECOMMISSIONED MONITORING OR EXTRACTION WELL
– – – – –	ESTIMTED EXTENT OF CAPTURE ZONE

NOTES:

(1) EXTRACTION WELL EW–6 WAS SHUT DOWN ON FEBRUARY 22, 2005 DUE TO REDEVELOPMENT ACTIVITIES AND DECOMMISSIONED ON JULY 11, 2005.

(2) EXTRACTION WELLS V8–2X, V8–8X AND V8–9X WERE SHUTDOWN ON JULY 15, 2003 IN PREPARATION FOR THE FULL–SCALE IN SITU CHEMICAL OXIDATION TREATMENT PROGRAM.

(3) EXTRACTION WELL EW–11R WAS SHUTDOWN ON JULY 14, 2003.

(4) EXTRACTION WELLS EW–4 AND EW–5 WERE INOPERATIONAL BEGINNING JANUARY 28, 2008 THROUGH THE END OF THE REPORTING PERIOD.

(5) EXTRACTION WELLS EW–13 AND EW–14 WERE INOPERATIONAL BEGINNING JANUARY 28, 2008 THROUGH THE END OF THE REPORTING PERIOD.

SCALE IN FEET

0 400 800

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FOR:
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AND VARIAN MEDICAL SYSTEMS, INC.
COE STUDY AREA AND PERIMETER AREA
PALO ALTO, CALIFORNIA

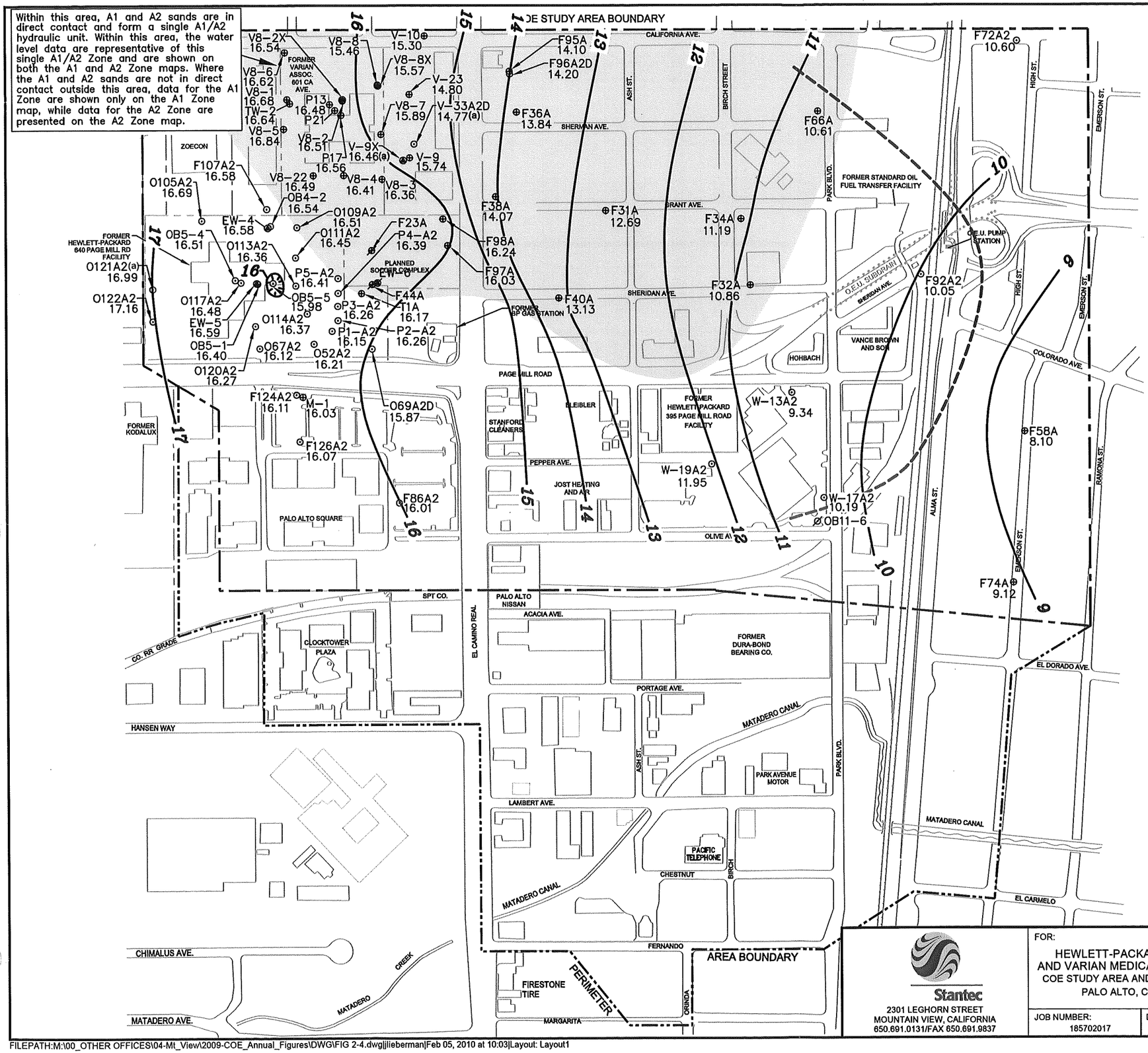
GROUNDWATER ELEVATION CONTOURS
A1 ZONE
JUNE 8, 2009

FIGURE: 2-3

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
185702017	JBL	NK	BS	01/19/10

FILEPATH:M:\00_OTHER OFFICES\04-Mt_View\2009-COE_Annual_Figures\DWG\FIG 2-3.dwg|jlieberman|Feb 05, 2010 at 10:03|Layout: Layout1

Within this area, A1 and A2 sands are in direct contact and form a single A1/A2 hydraulic unit. Within this area, the water level data are representative of this single A1/A2 Zone and are shown on both the A1 and A2 Zone maps. Where the A1 and A2 sands are not in direct contact outside this area, data for the A1 Zone are shown only on the A1 Zone map, while data for the A2 Zone are presented on the A2 Zone map.



LEGEND:

⊕F36A	A ZONE MONITORING WELL
⊙W-19A2	A2 ZONE MONITORING WELL
⊛V8-8X	EXTRACTION WELL
10.86	GROUNDWATER ELEVATION (FEET MSL)
10	GROUNDWATER ELEVATION CONTOUR
(a)	WATER LEVEL DATA WAS NOT USED IN CONTOURING.
⌀	DECOMMISSIONED MONITORING OR EXTRACTION WELL
- - - - -	ESTIMTED EXTENT OF CAPTURE ZONE

NOTES:

(1) "D" SUFFIX INDICATES WELL SCREENED IN DEEP SUBUNIT.

(2) EXTRACTION WELL EW-6 WAS SHUTDOWN ON FEBRUARY 22, 2005 DUE TO REDEVELOPMENT ACTIVITIES AND DECOMMISSIONED ON JULY 11, 2005.

(3) EXTRACTION WELLS V8-2X, V8-8X AND V8-9X WERE SHUTDOWN ON JULY 15, 2003 IN PREPARATION FOR THE FULL-SCALE IN SITU CHEMICAL OXIDATION TREATMENT PROGRAM.

(4) EXTRACTION WELLS EW-4 AND EW-5 WERE INOPERATIONAL BEGINNING JANUARY 28, 2008 THROUGH THE END OF THE REPORTING PERIOD.

SCALE IN FEET
0 400 800

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FOR:
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AND VARIAN MEDICAL SYSTEMS, INC.
COE STUDY AREA AND PERIMETER AREA
PALO ALTO, CALIFORNIA

GROUNDWATER ELEVATION CONTOURS
A2 ZONE
JUNE 8, 2009

FIGURE: 2-4

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
185702017	JBL	NK	BS	01/19/10

FILEPATH:M:\00_OTHER OFFICES\04-Mt_View\2009-COE_Annual_Figures\DWG\FIG 2-4.dwg|jlieberman|Feb 05, 2010 at 10:03|Layout: Layout1

COE STUDY AREA BOUNDARY

CALIFORNIA AVE.

ZOECON

FORMER VARIAN ASSOC. 601 CA AVE.

V8–13B 17.09

FORMER HEWLETT-PACKARD 640 PAGE MILL RD FACILITY

0100B 17.02

017B 16.90

0118B 17.52

0152B 14.27*

FORMER BP GAS STATION

F102B 17.17 (a)

SHERIDAN AVE.

F35B 11.76

F33B 13.83

GRANT AVE.

SHERMAN AVE.

ASH ST.

BIRCH STREET

PARK BLVD.

FORMER STANDARD OIL FUEL TRANSFER FACILITY

O.E.U. PUMP STATION

O.E.U. SHERMAN

SHERMAN AVE.

HIGH ST.

EMERSON ST.

F133B 9.60

VANCE BROWN AND SON

HIGHBACH

COLORADO AVE.

PAGE MILL ROAD

FORMER KODALUX

STANFORD CLEANERS

BLEIBLER

FORMER HEWLETT-PACKARD 395 PAGE MILL ROAD FACILITY

PEPPER AVE.

JOST HEATING AND AIR

PALO ALTO SQUARE

OLIVE AVE

EL CAMINO REAL

ALMA ST.

RAMONA ST.

F151B 17.41

SPT CO.

PALO ALTO NISSAN

ACACIA AVE.

FORMER DURA-BOND BEARING CO.

CLOCKTOWER PLAZA

CO. RR GRADE

EL DORADO AVE.

PORTAGE AVE.

HANSEN WAY

MATADERO CANAL

PARK AVENUE MOTOR

LAMBERT AVE.

PACIFIC TELEPHONE

CHESTNUT

MATADERO CANAL

EL CARMELO

CHIMALUS AVE.

MATADERO CREEK

MATADERO AVE.

FIRESTONE TIRE

PERIMETER

AREA BOUNDARY

ORINDA

MARGARITA

FERNANDO

17 16 15 13 12 11 10 01

LEGEND:

●F35B	B ZONE MONITORING WELL
11.41	GROUNDWATER ELEVATION (FEET MSL)
10	GROUNDWATER ELEVATION CONTOUR
(a)	GROUNDWATER LEVEL NOT USED IN CONTOURING. WELL F102B IS COMPLETED IN THE B2 ZONE OF THE B AQUIFER. ALL OTHER WELLS SHOWN ARE COMPLETED IN THE B1 ZONE.
*	DATA NOT USED IN CONTOURING

SCALE IN FEET

0 400 800

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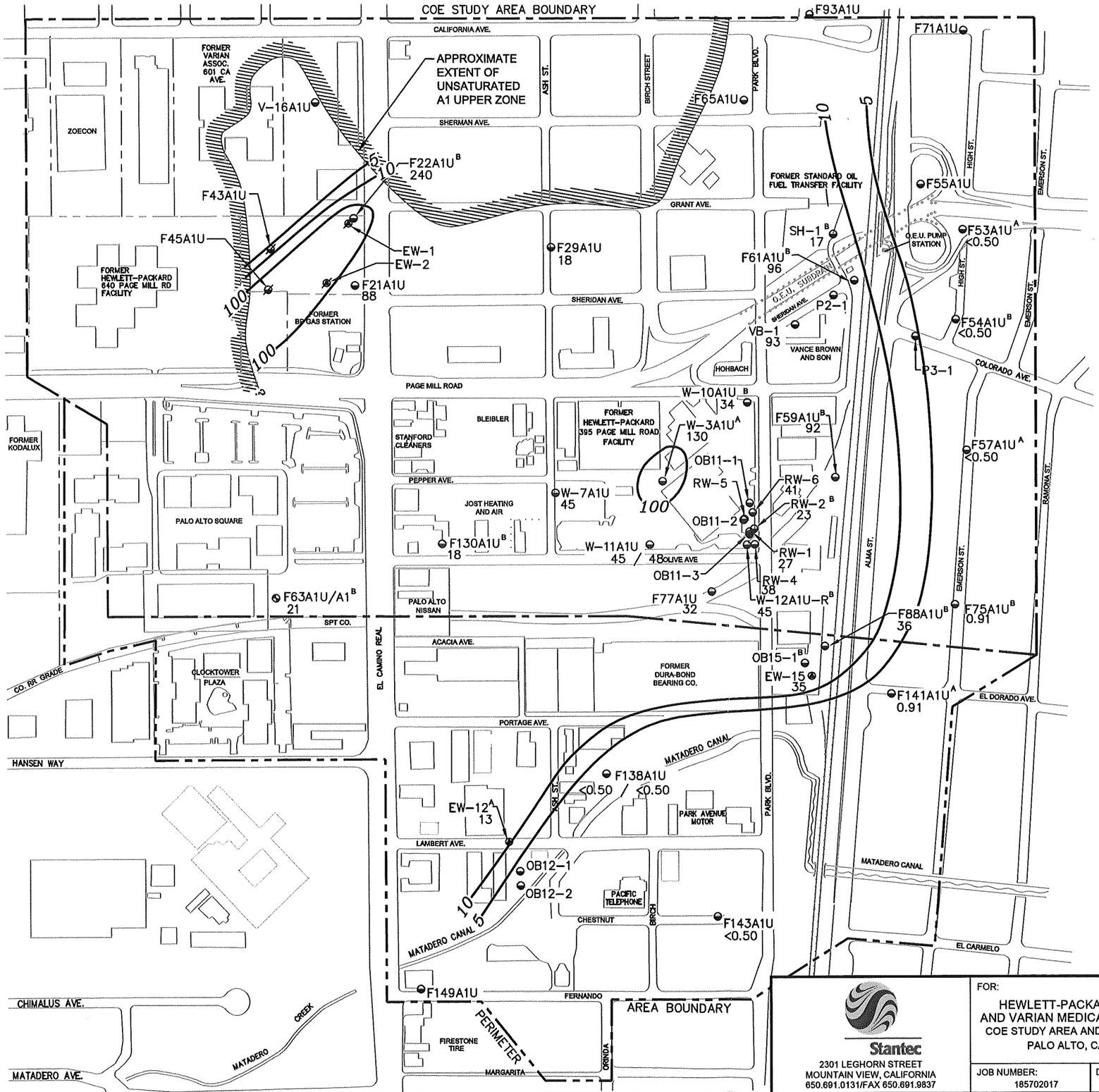
FOR:
HEWLETT-PACKARD COMPANY
AND VARIAN MEDICAL SYSTEMS, INC.
COE STUDY AREA AND PERIMETER AREA
PALO ALTO, CALIFORNIA

GROUNDWATER ELEVATION CONTOURS
B ZONE
JUNE 8, 2009

FIGURE: 2-5

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
185702017	JBL	NK	BS	01/19/10

FILEPATH:M:\00_OTHER OFFICES\04-Mt_View\2009-COE_Annual_Figures\DWG\FIG 2-5.dwg|jlieberman|Feb 05, 2010 at 10:04|Layout: Layout1



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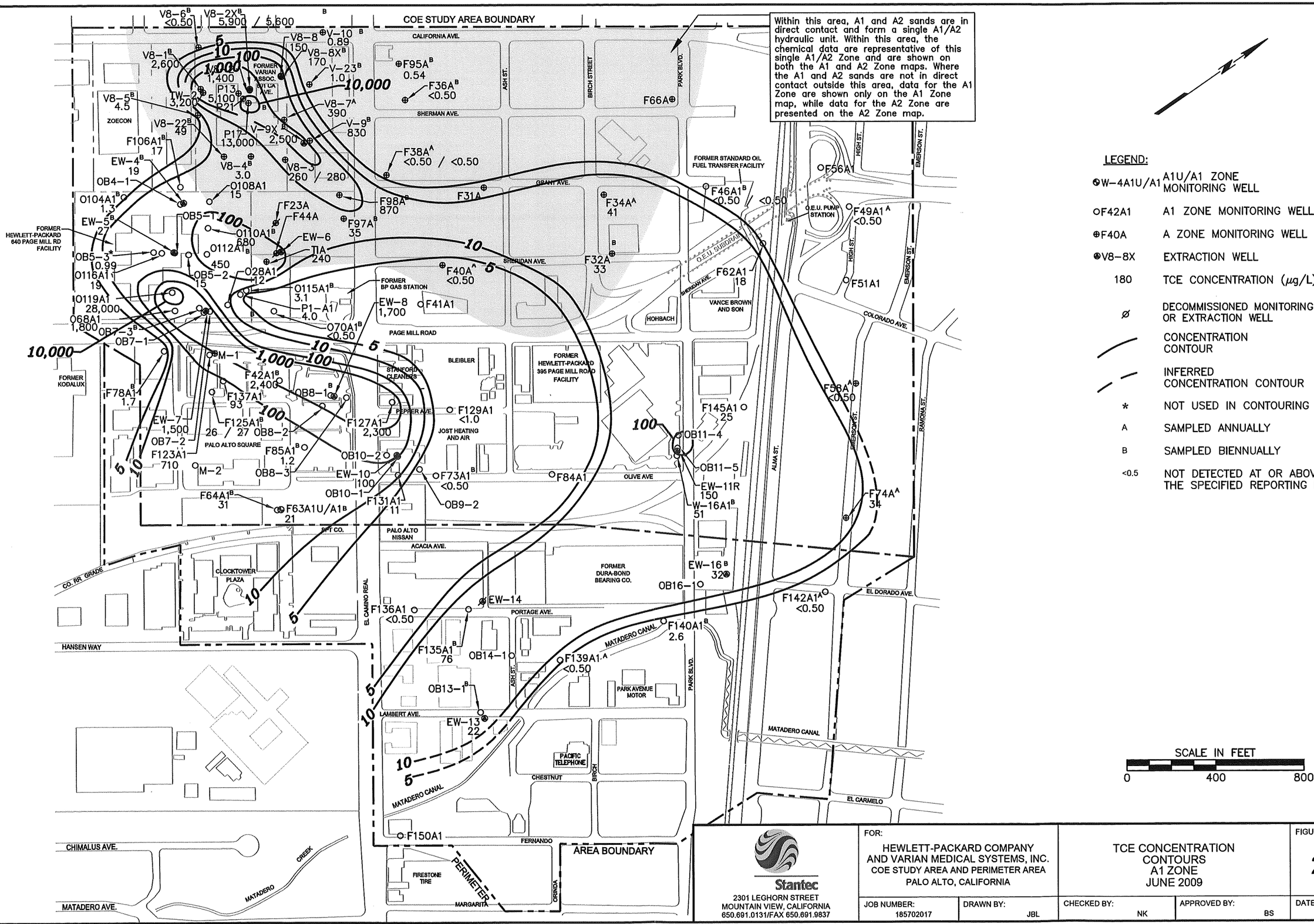
FOR:
HEWLETT-PACKARD COMPANY
AND VARIAN MEDICAL SYSTEMS, INC.
COE STUDY AREA AND PERIMETER AREA
PALO ALTO, CALIFORNIA

TCE CONCENTRATION CONTOURS
A1 UPPER ZONE
JUNE 2009

FIGURE: 2-6

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
185702017	JBL	NK	BS	01/19/10

FILEPATH:M:\00_OTHER OFFICES\04-Mt_View\2009-COE_Annual_Figures\DWG\FIG 2-6.dwg|jlieberman|Feb 05, 2010 at 10:04|Layout: Layout1



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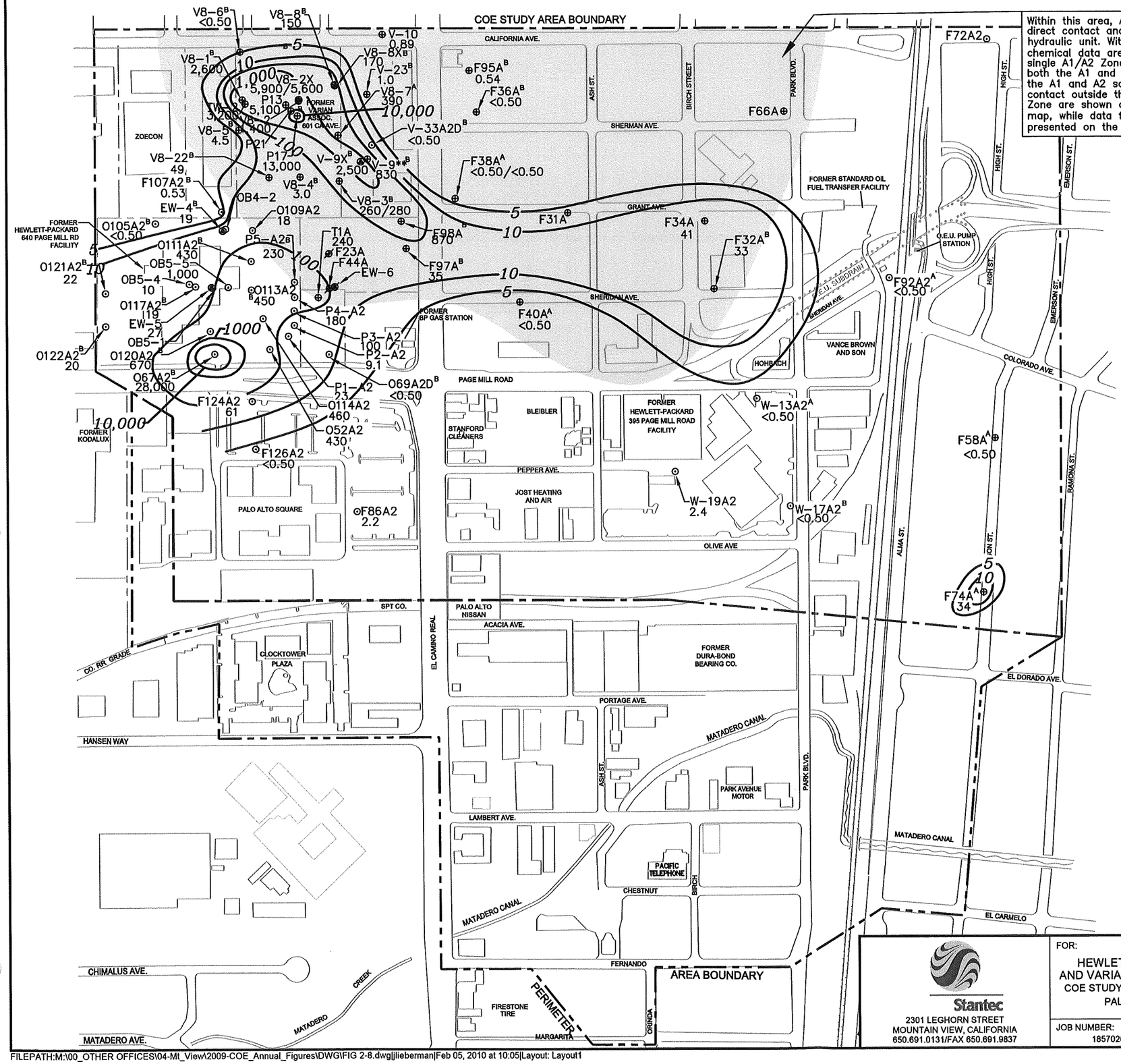
FOR:
HEWLETT-PACKARD COMPANY
AND VARIAN MEDICAL SYSTEMS, INC.
COE STUDY AREA AND PERIMETER AREA
PALO ALTO, CALIFORNIA

TCE CONCENTRATION CONTOURS
A1 ZONE
JUNE 2009

FIGURE: 2-7

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
185702017	JBL	NK	BS	01/19/10

FILEPATH:M:\00_OTHER OFFICES\04-Mt_View\2009-COE_Annual_Figures\DWG\FIG 2-7.dwg|jlieberman|Feb 05, 2010 at 10:05|Layout: Layout1



LEGEND:

⊕F36A	A ZONE MONITORING WELL
⊙F87A2	A2 ZONE MONITORING WELL
⊕V8-8X	EXTRACTION WELL
180	TCE CONCENTRATION ($\mu g/L$)
⌀	DECOMMISSIONED MONITORING OR EXTRACTION WELL
	CONCENTRATION CONTOUR
	INFERRED CONCENTRATION CONTOUR
A	SAMPLED ANNUALLY
B	SAMPLED BIENNUALLY
<0.5	NOT DETECTED AT OR ABOVE THE SPECIFIED REPORTING LIMIT

NOTES:

(1) "D" SUFFIX INDICATES WELL SCREENED IN DEEP SUBUNIT. "OB" PREFIX INDICATES OBSERVATION WELL FOR EXTRACTION PUMPING.

SCALE IN FEET

0 400 800

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FOR:
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COE STUDY AREA AND PERIMETER AREA
PALO ALTO, CALIFORNIA

TCE CONCENTRATION CONTOURS
A2 ZONE
JUNE 2009

FIGURE: 2-8

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
185702017	JBL	NK	BS	01/19/10

FILEPATH:M:\00_OTHER OFFICES\04-Mt_View\2009-COE_Annual_Figures\DWG\FIG 2-8.dwg|jlieberman|Feb 05, 2010 at 10:05|Layout: Layout1

FIGURE 5-1:
GROUNDWATER VOC MASS REMOVAL

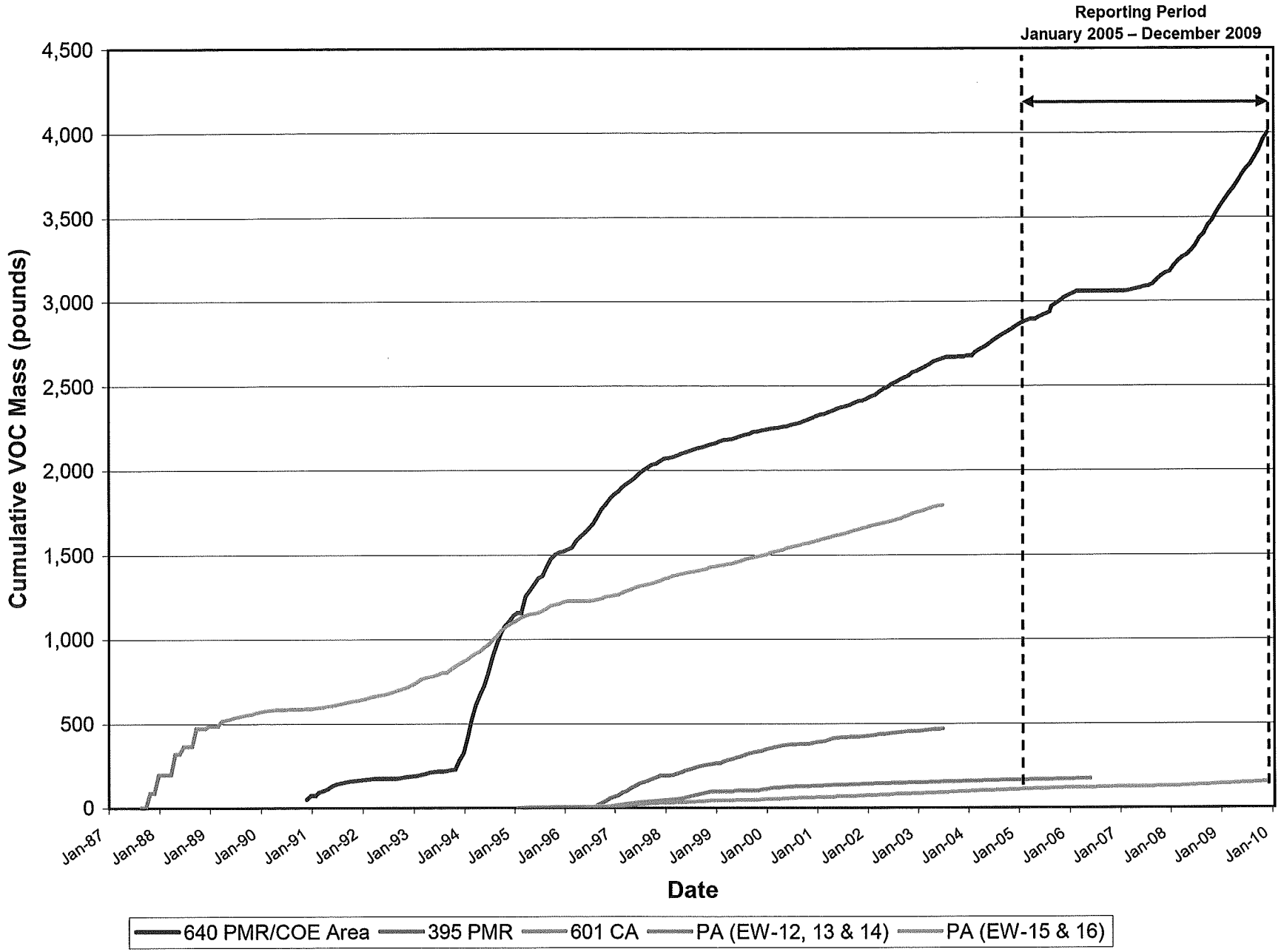


FIGURE 5-2:
GROUNDWATER VOLUME REMOVAL

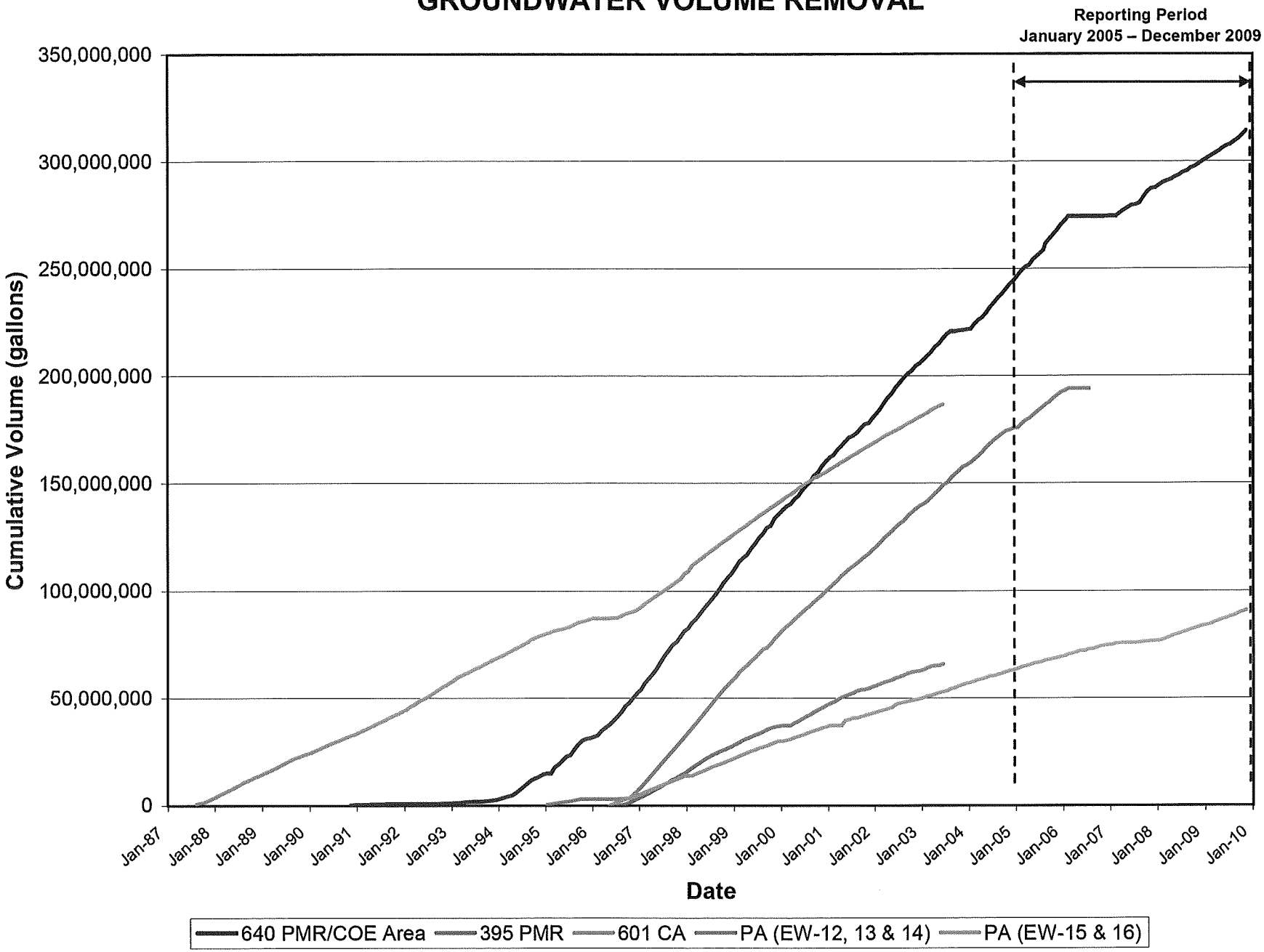


FIGURE 5-3:
VOC MASS REMOVAL EFFICIENCY

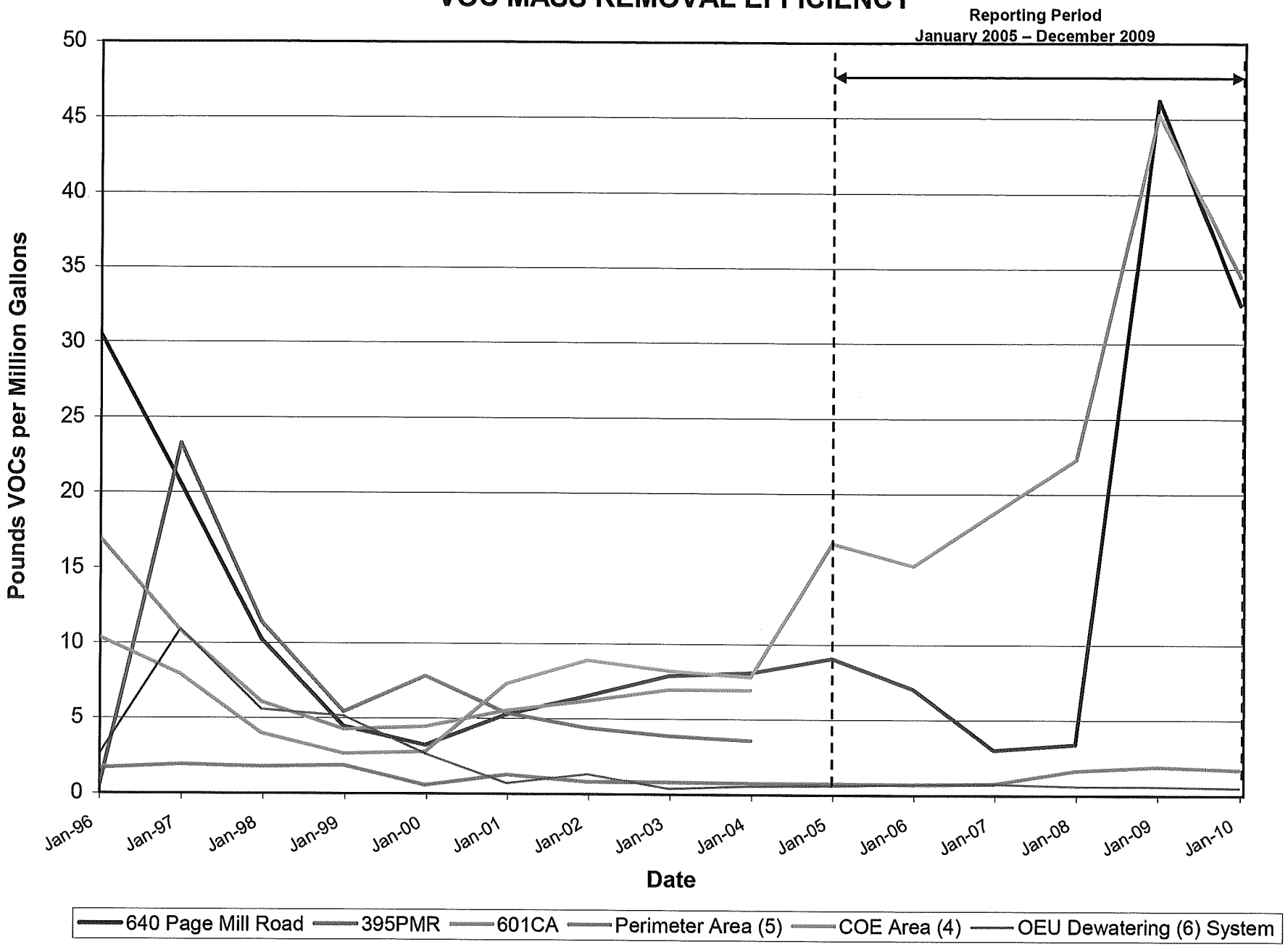
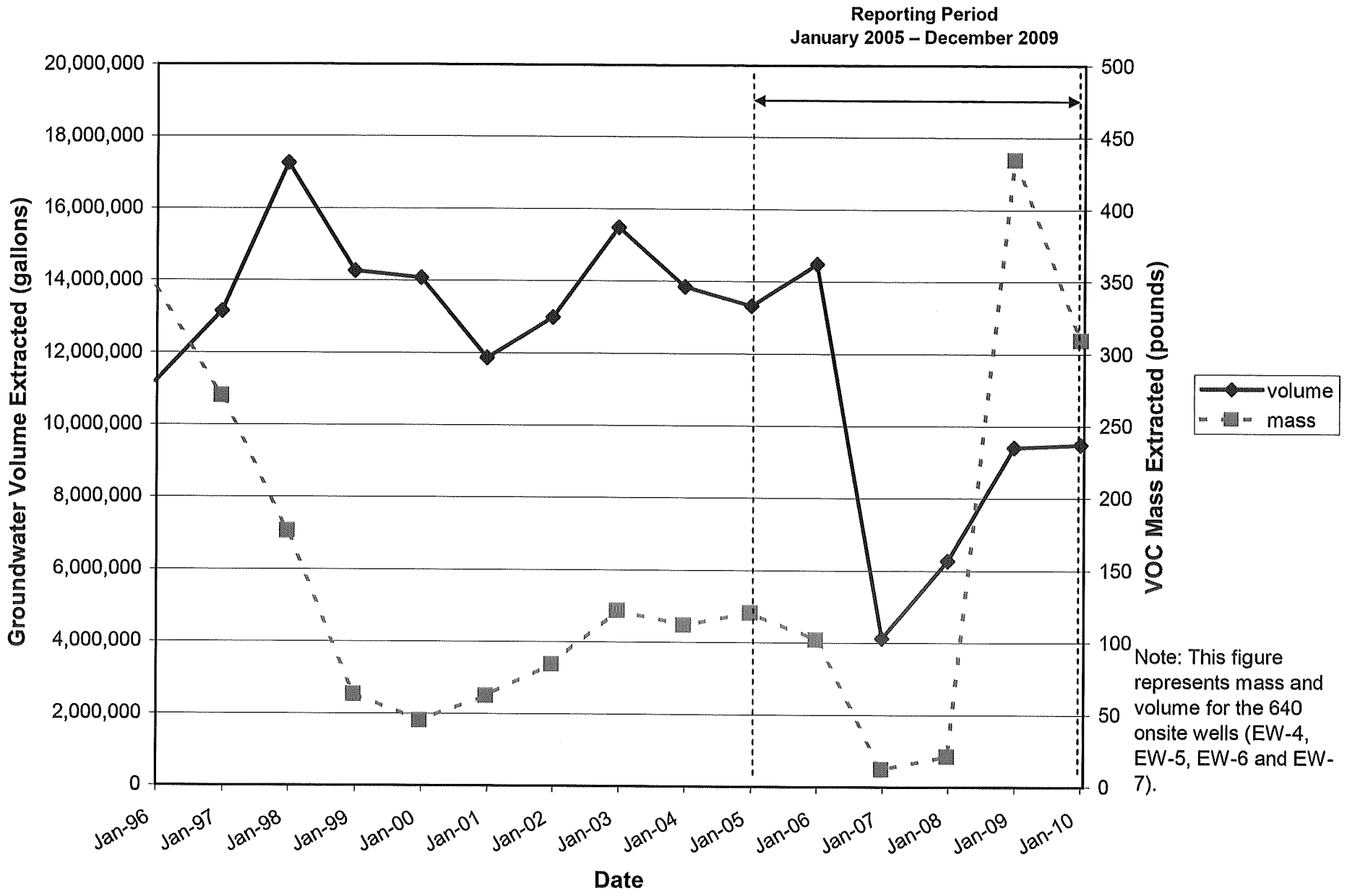
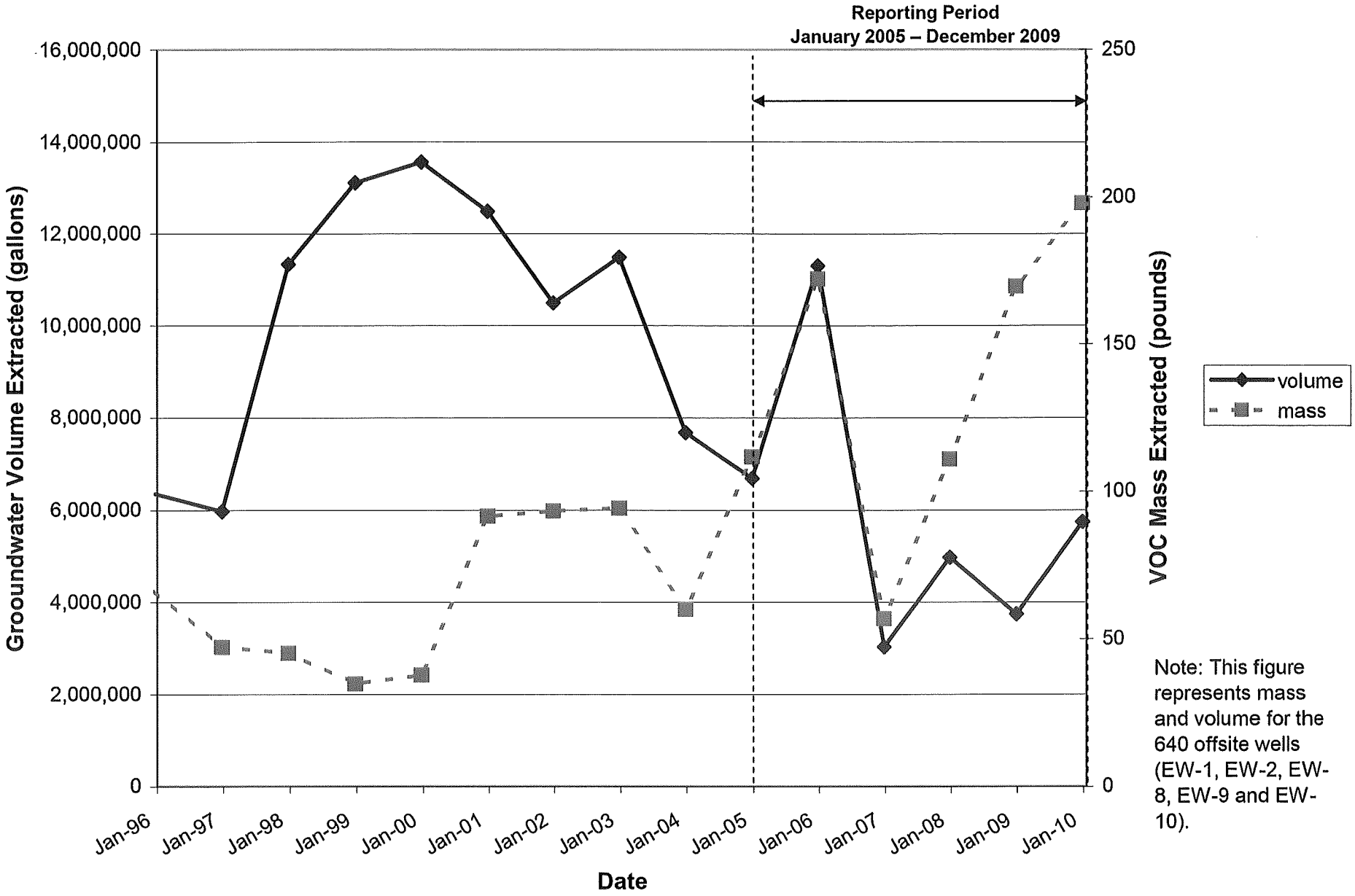


FIGURE 5-4:
640 PMR SYSTEM ANNUAL PERFORMANCE



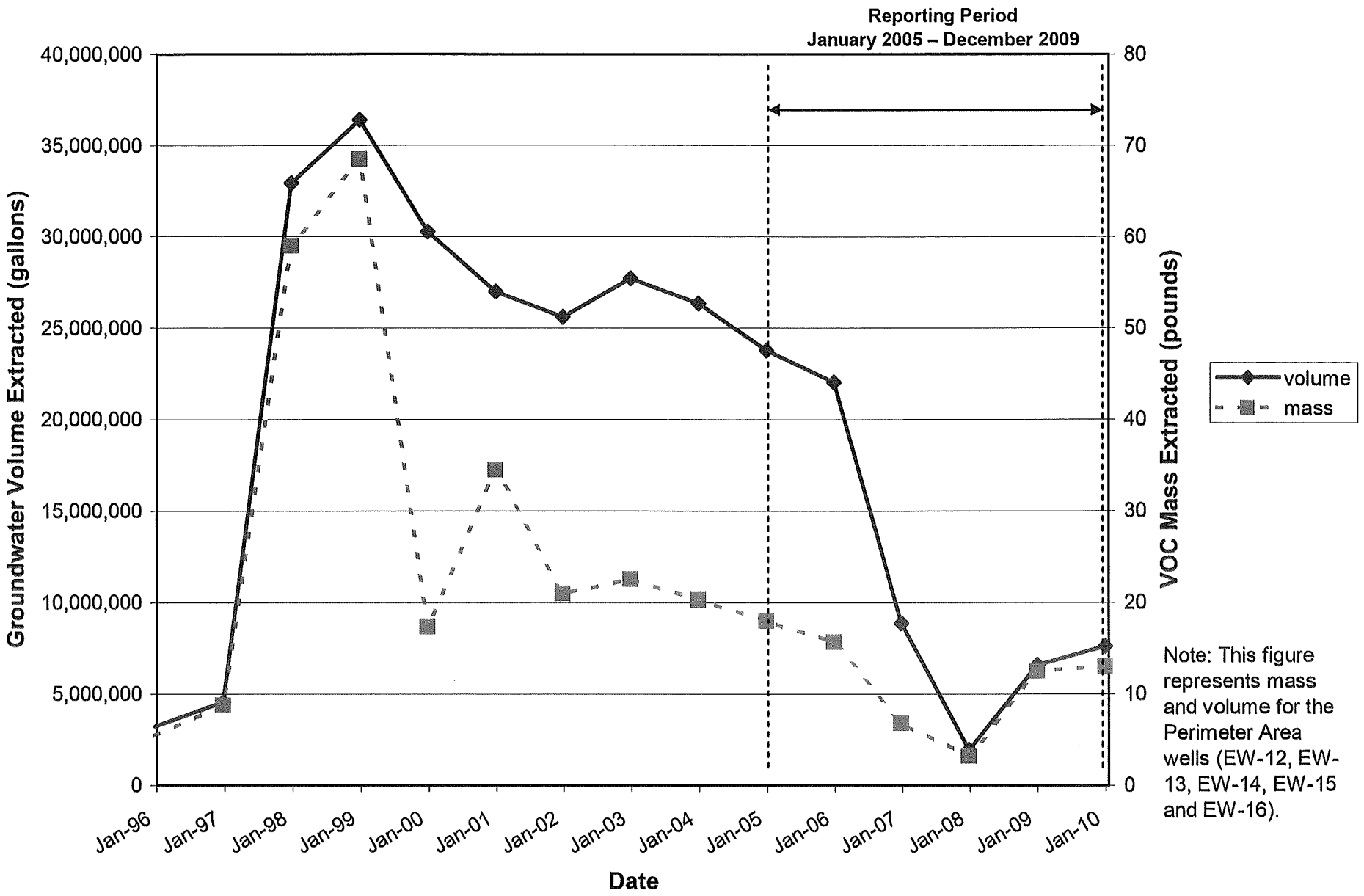
Note: This figure represents mass and volume for the 640 onsite wells (EW-4, EW-5, EW-6 and EW-7).

FIGURE 5-5:
COE AREA SYSTEM ANNUAL PERFORMANCE



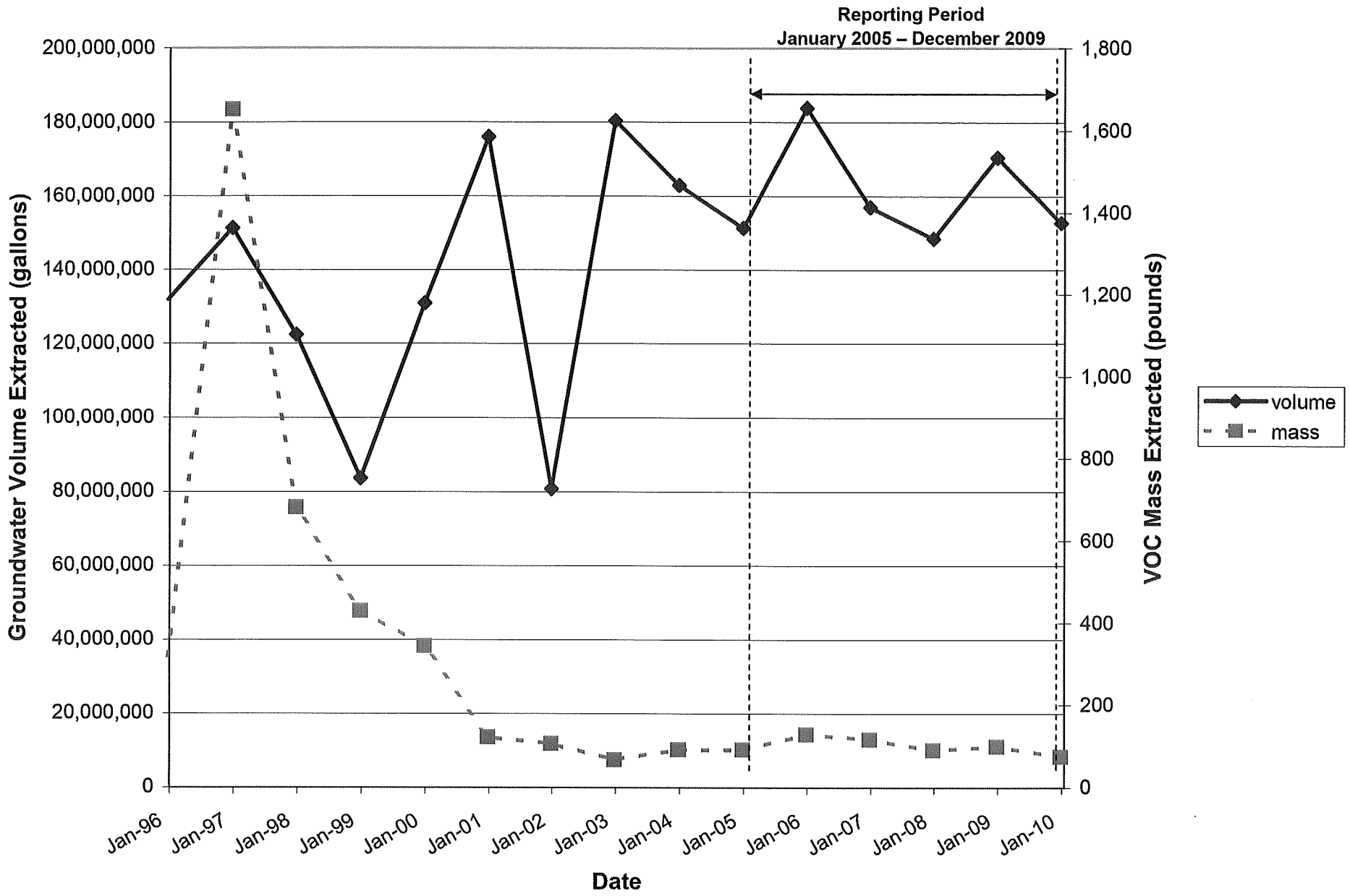
Note: This figure represents mass and volume for the 640 offsite wells (EW-1, EW-2, EW-8, EW-9 and EW-10).

FIGURE 5-6:
PERIMETER AREA SYSTEM ANNUAL PERFORMANCE



Note: This figure represents mass and volume for the Perimeter Area wells (EW-12, EW-13, EW-14, EW-15 and EW-16).

FIGURE 5-7:
OEU SYSTEM ANNUAL PERFORMANCE



APPENDIX H

RESUMES OF ENVIRONMENTAL PROFESSIONALS

JULIE TURNROSS

Senior Hydrogeologist

Ms. Turnross has over 26 years experience serving in technical and management capacities on a variety of projects in the areas of groundwater hydrogeology and geophysics. Her projects have included Phase I environmental site assessments, remedial investigations, feasibility studies, risk characterizations, and implementation of remedial alternatives at RCRA, CERCLA, and other facilities with soil, groundwater, surface water, and air contamination. Contaminants of concern have included organic solvents, petroleum hydrocarbons, metals, and explosives.

Ms. Turnross has provided litigation support and peer review for a wide variety of cases, and has served as an expert witness. She has also worked extensively with regulatory agencies throughout California and the west coast.

EDUCATION

University of California, Berkeley: M.S., Engineering Geoscience, 1984
University of Arizona, Tucson: B.S., Geoscience, 1982

EXPERIENCE

2005 – present	PES Environmental, Inc., Novato, California
1995 - present	JTEC Environmental, Sebastopol, California
1991 - 1995	Treadwell and Rollo, San Francisco, California
1984 - 1991	Harding Lawson Associates, Novato, California
1982 - 1984	U.S. Geological Survey, Denver, Colorado & Berkeley, California
1983	Laurence Berkeley Laboratory, Berkeley, California
1981	ARCO Exploration Company, Lafayette, Louisiana

REGISTRATION

California Registered Environmental Assessor No. 7862

REPRESENTATIVE PROJECTS

Naval Air Station: Performed review of remedial investigation, risk characterization, remedial alternative selection, remediation, and remediation verification for a Naval facility. Contaminants of concern included ordnance, solvents, metals, and petroleum hydrocarbons.

Litigation Support: Provided peer review of soil and groundwater investigation and remediation in support of lawsuit resulting from incomplete site cleanup. Analyzed investigation design and procedures, remedial alternative evaluation, cleanup methods, and confirmation testing.

Phase I Environmental Site Assessments: Performed or reviewed over 250 Phase I Environmental Site Assessments using ASTM standards. Clients have included lending institutions, real estate developers, insurance companies, law firms, and property owners. Properties assessed have included manufacturing facilities, office buildings, industrial sites, residential properties, and shopping centers.

Navy Shipyard: Provided technical review of Navy investigation and remedial activities and support for developer of former Navy shipyard. Site contaminants included metals, solvents, PCBs, and radiological material. Remediation included innovative technologies and implementation of land use controls.

Explosives Manufacturing Facility: Project manager for demolition of former explosives manufacturing facility, soil and groundwater investigation, and preparation of remedial investigation report. Project included development of facility use history, preparation of bid specifications, and coordination and documentation of demolition, and hazardous waste identification and disposal process.

Semiconductor Facility: Project manager for remedial investigation and feasibility study at CERCLA facility in Mountain View, California. Investigations included soil gas surveys, geophysical surveys, and soil, groundwater, and air sampling. Soil vapor extraction and groundwater extraction and treatment were used as interim remedial measures. Monitored effectiveness of 100-foot-deep, 3400-foot-perimeter slurry wall to be used to isolate contaminant source to allow dewatering and subsequent remediation by soil vapor extraction.

Chemical Facility: Project manager for remedial field investigation and corrective measures study for highly contaminated RCRA facility in Oregon. Contamination included presence of numerous free-phase and dissolved chemicals. Investigation included soil gas survey, soil borings, monitoring well installations, and air monitoring. Part of the investigation was conducted in Level B protection.

Geothermal Investigation: Performed integrated analysis of geophysical, hydrogeologic, and geologic data to develop conceptual model for geothermal basin. Designed geophysical field program using prototype equipment to evaluate geothermal reserve.

Water Supply Study: Provided water supply evaluation for proposed 300-family development with golf course and conference facility. Project included investigation of groundwater resources and water quality, and aquifer testing.

Oil Refinery: Served as technical advisor for remedial investigation and cleanup at oil refinery in southern California. Tasks included aquifer testing, investigating potential of supplying water supply well, estimating effects of saltwater intrusion on contaminant movement, and designing groundwater extraction system.

Groundwater Flow Modeling: Used three-dimensional finite-difference groundwater flow model to optimize groundwater extraction well locations and to evaluate extraction system efficiency at electronics facility in Santa Clara, California. The site was comprised of multiple discontinuous aquifers with considerable variances in thickness and hydraulic conductivity.

WILLIAM F. FRIZZELL

President
Principal Engineer

Mr. Frizzell is a civil/environmental engineer with 30 years of experience, specializing in environmental assessments of properties, soil and groundwater investigations and remediation, and hazardous and solid waste management. He has been the project manager responsible for all phases of Remedial Investigations/Feasibility Studies and remedial action planning and design. He has evaluated hazardous waste disposal facilities throughout the U.S., focusing on facilities' compliance with Federal and State regulations, and hydrogeological characteristics of the disposal sites. For real estate transfer projects, Mr. Frizzell has performed and/or managed more than 200 environmental assessments for developers, lenders, and attorneys. He has worked closely with developers on residential and commercial projects, which require environmental cleanup strategies and remediation of soils and/or groundwater. He also provides third party review of environmental projects for preparation of Environmental Impact Reports and litigation support. Mr. Frizzell has developed plans and specifications for hazardous waste site closures and has been involved in the design of gas, leachate, and surface water control systems. In addition, he has designed and prepared plans and specifications for slurry walls to control the migration of contaminated groundwater, and have been responsible for the selection and installation of synthetic liners for hazardous waste applications.

Mr. Frizzell's project experience also includes dredging feasibility studies for open water and land disposal sites. These projects have included characterization of sediments in contaminated and uncontaminated environments, biological and water quality assessments, monitoring programs and maintenance of disposal areas.

Mr. Frizzell has also performed site investigations for foundation studies and has experience in design and construction of projects involving structural grouting, dam construction, and earthwork.

EDUCATION

B.S., Civil Engineering, University of California, Berkeley, 1978

Postgraduate education has included courses and seminars in Storm Water Management, Geotechnical Engineering of Waste Management Systems, Groundwater Hydrology, Hazardous Materials Management and Handling, Stabilization and Solidification of Hazardous Waste, and Management Training.

SAFETY TRAINING

Health and safety training and update courses following EPA and OSHA requirements. Courses included training in physical, chemical, and toxicological properties of hazardous materials; hazard evaluation and control; selection and use of personal protective equipment; sampling and monitoring techniques and equipment; site entrance and decontamination procedures; and safety plan development.

EXPERIENCE

1989 - Present:	PES Environmental, Inc., Novato, California
1981 - 1989:	Harding Lawson Associates, Novato, California
1978 - 1981:	Woodward Clyde Consultants, San Francisco, California.

REGISTRATION

Civil Engineer - California, Arizona, Washington

Environmental Assessor - California, Washington

REPRESENTATIVE PROJECTS

Storm Water Management – Program manager for assisting various clients in compliance with the State of California Industrial Activities Storm Water General Permit. Activities included preparation of storm water pollution prevention plans, storm water monitoring plans and annual reports.

Litigation Support/Expert Witness Projects - Litigation support and expert witness services have included the areas of soil and groundwater remediation cost recovery actions; standard of care evaluations for environmental site assessments; assessment of damages due to releases from underground storage tanks; and claims due to a residential development over contaminated soils and groundwater. Client: Various Law Firms

Real Estate Assessment Projects - Program and project manager responsible for all phases of numerous real estate transfer assessment projects. Projects involve evaluating properties for potential liability due to hazardous waste contamination, site history evaluations, site inspections, regulatory review, and preparation of assessment reports. Program responsibilities include marketing, business development, training, and quality assurance/

quality control program development. Clients: Various Lending Institutions, Insurance Companies, Attorneys, Finance Companies and Developers

Dredging Feasibility Studies, Port of Oakland, California - Project manager responsible for dredged sediment disposal project involving site characterization and geochemical and surface water modeling to predict effluent water quality. Project involved conducting a feasibility study to dispose highly saline and contaminated sediments in an upland environment and development of control measures. Client: Port of Oakland

Richmond Marsh Restoration, Richmond, California - Large amounts of paint residue were uncovered during construction of new channels to restore marshland on edge of San Francisco Bay. As project manager: developed and implemented site-characterization plans; developed, tested, and analyzed potential remedial actions; selected preferred remedial action; prepared draft and final Remedial Action Plans; attended public hearings; developed community Relations Plan; and developed construction plans and specifications and post-construction monitoring plans. Managed all negotiations with state regulatory agencies. Client: City of Richmond

Hazardous-Waste Investigation, State Superfund Site, Richmond, California - Project manager for investigation at former pesticide formulating and packaging site. Responsible for all phases of investigation, including hydrogeological studies, analytical testing program, contaminant transport evaluations, study of offshore contaminant migration in marine sediments, evaluation of bioavailability of contaminants to marine organisms, and dredging of contaminated sediments. Planned and implemented remedial actions involving construction of temporary waste piles, installing synthetic membranes, and removing and transporting contaminated soils and debris. Project has included close coordination and involvement with various state regulatory agencies. Client: Levin Richmond Terminal Corporation

PCB Spill Investigation and Cleanup, Northern California State Superfund Site - Engineer for study to determine extent of contamination from PCB spill. Organized hydrogeologic study to determine contaminant migration potential, examined cleanup options, and prepared economic analysis of alternatives. Client: MGM Brakes

Landfill Closure Plans and Specifications, Alameda, California - Project manager responsible for preparing plans and specifications for closing 43-acre sanitary landfill adjacent to San Francisco Bay. Project included construction of surface impoundments for placing dredge spoils for use as cover material and preparation of earthwork plans and specifications for cover system. Project also included designing and installing post-closure groundwater monitoring system and performing leachate characterization study and contingency plan. Client: City of Alameda

Soil Process and Treatment Program, Richmond, California - Project manager for site remediation involving processing and treatment of 35,000 cubic yards of lead-contaminated

soil. Processing involved physical separation through screening; treatment involved proprietary fixation process. Responsible for regulatory negotiations, contractor selection, and quality control program. Client: City of Richmond

Site Remediation Program, Pittsburg, California - Project engineer responsible for plans and specifications to remediate 4-acre asbestos-contaminated site. Project involved examination and evaluation of cover options, selection of contractors, regulatory negotiations, and construction observation. Client: John Mansville

Slurry-Wall Design, Martinez, California - Project engineer responsible for designing 3300-foot-long slurry wall through existing surface impoundments containing effluent from oil refinery. Responsible for setting up and evaluating effluent/bentonite slurry permeability testing program for development of design criteria. Duties also included preparing plans and specifications, evaluating contractors' bids, and reviewing construction-control program for slurry-wall installation. Client: Shell Oil

Surveys of Hazardous-Waste Treatment, Storage, and Disposal Sites, Nationwide - Project manager responsible for conducting surveys and preparing evaluation reports for over 50 commercial hazardous-waste facilities. Evaluations focus on hydrogeologic, managerial, environmental, regulatory, financial, and safety aspects of disposal-site operations. Projects have been performed in response to generator concern for "cradle to grave" responsibility for hazardous waste. Clients: Shell Oil Company, Chevron U.S.A. Inc., and IBM Corporation

Landfill Assessment and Geotechnical Studies, Albany and Berkeley, California - Project manager for investigating and evaluating inactive sanitary landfills in regard to generation and migration of leachate and methane, providing recommendations for developing landfills to support various structures, assessing potential impact of landfill on future development, and preparing preliminary closure plans. Project has also included preliminary geotechnical studies for landfills involving geohazards evaluation, general foundation recommendations, and slope-stability studies. Client: Hall, Goodhue, Haisley and Barker, for Santa Fe Land Improvement Company

Closure Plan Development, Tucson, Arizona - Project engineer for closure plan for 18 sludge-drying beds from wastewater treatment plant. Project included developing analytical testing program, decontamination procedures, and plans for closing system. Client: Hughes Aircraft Company

Hazardous-Waste Investigation, State Superfund Site, Richmond, California - Project manager for site investigation and remedial-action planning at site contaminated with heavy metals from uncontrolled releases from waste piles and buried drums. Duties included setting up field investigations and analytical programs for site characterization and planning remedial actions. Client: Summer del Caribe

RCRA Part B Permit Application Review, Hazardous-Waste Facility - Responsible for reviewing Part B permit applications for various treatment, storage, and disposal facilities.

Reviews focus on operators' compliance with federal regulations. Client: A. T. Kearney, for U.S. Environmental Protection Agency

Hydrogeological and Geotechnical Investigation of Dioxin Contamination, Times Beach, Missouri - Served as alternate field operations manager. Conducted drilling and sampling and implemented decontamination and chain-of-custody procedures. Client: CH2M Hill, for U.S. EPA

Environmental Risk Assessment, Santa Rosa, California - Developed risk assessment report focusing on environmental risks associated with City of Santa Rosa operations, including sewer treatment plants, sludge disposal, and hazardous-material storage. Client: Environmental Risk Assessors, U.S.A.

Hazardous Waste Investigation, Sacramento, California - Engineer and assistant project manager for site investigation to characterize unknown wastes and to determine lateral and vertical extent of contamination due to unmanaged-disposal practices. Client: Aerojet

Hazardous Waste Investigation, Santa Rosa, California - Engineer for site investigation to determine existence and direction of migration of organic solvents from point sources of pollution. Organized analytical testing program to determine amounts and extent of groundwater pollution. Client: Hewlett-Packard

Landfill Closure, Alameda, California - Project engineer responsible for preparing all phases of plans and specifications for combination sanitary landfill closure and dredge spoils pond construction on 110-acre site. Project involved design of landfill closure system, slurry wall for leachate control, passive methane gas venting system, dike construction, seawall repair, decant structure, and hydraulic control systems. Client: U.S. Navy

Hazardous Waste Investigation, Martinez, California - Field engineer during investigation to determine extent of contamination due to leaching from disposal pond containing tetra ethyl lead. Supervised drilling activities and safety procedures for initial phase of cleanup study. Client: E.I. DuPont Nemours

Gasoline Spill Investigation, Novato, California - Project engineer during investigation conducted to determine extent of groundwater and soil contamination resulting from leaking underground gasoline storage ranks. Project involved using soil-gas and groundwater monitoring techniques. Client: Texaco Incorporated

Gasoline Spill Investigation, Stockton, California - Conducted post-remedial-action investigation to assess potential for future migration of gasoline from service station with residual soil contamination. Client: Exxon Company U.S.A.

Tailings Dam, Green River, Wyoming - Resident engineer during construction of tailings dam for solid-waste management program. Responsible for quality control, redesigned plans to accommodate field conditions, and prepared final earthwork report. Client: Allied Chemical

Hillside Development, Walnut Creek, California - Resident engineer in charge of construction for many phases of earthwork. Supervised mass grading operations including landslide repair, installation of subsurface drainage, and rebuilding of cut slopes. Installed and monitored hydraugers and piezometers for groundwater control. Client: Terra California

Gravel Island, Beaufort Sea, Alaska - Design verification agent during construction of island for drilling platform. Reviewed design criteria and observed construction in arctic environment. Client: Exxon Company, U.S.A.

Foundation Construction, Oakland, California - Field engineer during construction of drilled-pier foundations. Client: Peralta Hospital

Structural Grouting, Port Clinton, Ohio - Field engineer for stabilization of power plant foundation. Designed grout mixes according to varying subsurface conditions, supervised grouting batch plant operation, and installed extensometers to measure rock displacement during construction. Client: Toledo Edison Company

Earthquake Engineering, San Francisco, California - Developed seismic-response spectra for several sites in California using various computer programs and data-retrieval systems. Client: Nuclear Regulatory Commission

MEMBERSHIPS

American Society of Civil Engineers
Hazardous Materials Control Resources Institute

PRESENTATIONS

1987. "Conducting Environmental Audits of Treatment, Storage, and Disposal Facilities." Environmental Auditing Forum, Concord, California, July.

1988. "Toxic Waste and Real Estate Transactions." Building Industries Association, Continuing Education Seminar, Dublin, California, August.

PUBLICATION

1987. *New Use of Existing Technologies In On-Site Decontamination of Soil - A Case Study*. Haz Mat Central Conference (with J. C. Davies and R. S. Creps).

DISTRIBUTION

PHASE I
ENVIRONMENTAL SITE ASSESSMENT
EL CAMINO CENTER AND ASSOCIATED PROPERTIES
3201 AND 3225 ASH STREET, 200-382 PORTAGE AVENUE,
270 LAMBERT AVENUE AND 3250 PARK BOULEVARD
PALO ALTO, CALIFORNIA

MAY 12, 2011

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ENVIRONMENTAL SUMMARY
EL CAMINO CENTER
PALO ALTO, CALIFORNIA

MAY 24, 2019

The subject property has the addresses of 3201 and 3225 Ash Street, 200 – 382 Portage Avenue (referred to as El Camino Center), 270 Lambert Avenue, and 3250 Park Boulevard in the City of Palo Alto, Santa Clara County, California (see Plate 1). The subject property, which comprises approximately 15.48 acres, contains four buildings, an access road, and associated paved parking and landscaped areas. Matadero Creek, under an easement from Santa Clara Valley Water District, traverses the eastern portion of the site. The site is located in a primarily commercial area. The site is bounded to the northeast by Park Boulevard and a commercial building, to the southeast by commercial buildings, to the southwest by Ash Street, El Camino Real and commercial buildings, and to the northwest by residences.

OVERVIEW OF HISTORICAL SITE ENVIRONMENTAL ACTIVITIES

PES's historical research indicates that the subject property main and office buildings were constructed prior to the 1950s (likely in the 1930s to 1940s), the building at 270 Lambert was constructed in 1986, and the 3250 Park Boulevard building was constructed in 2003. A railroad spur and line were present on the west side of the main building until the 1980s. Historical site uses and tenants have included warehouse, a bearing manufacturer, a foundry (buildings no longer present), a food processor, a paper container manufacturer, a display manufacturer, a market, produce packing and transportation, auto/truck maintenance, and offices. Environmental information for selected historical on-site and adjacent property uses as well as off-site regional environmental concerns are discussed in the following sections. See Plate 2 for the locations of these areas.

Historical Site Use - Dura-Bond

Dura-Bond operated at the subject property since approximately 1960 manufacturing camshaft bearings for the automotive industry. Property addresses for the site have included 360, 370 and 395 Portage Avenue, as well as 3201 Ash Street. Manufacturing operations were performed at the Portage facility, and offices were maintained at 3201 Ash Street.

Wastewater Impoundment/Treatment Facility Remediation

Dura-Bond's manufacturing process produced a wastewater stream containing elevated concentrations of chromium, cadmium, iron, lead and zinc. From 1960 to 1971, the untreated wastewater was discharged directly to the sanitary sewer. From 1971 to 1980, the wastewater was neutralized, and solids allowed to settle prior to discharge. The treated wastewater was discharged to the sanitary sewer and the settled solids were discharged to an unlined sludge pond located immediately outside the west side of the building which measured approximately 20 feet by 25 feet (Emcon, 1981a). Until 1980, the sludge was allowed to dry and then disposed offsite. Beginning in 1980, the pond was no longer used, and sludge was disposed offsite while still wet.

In 1981, in a preliminary investigation of the sludge pond performed to develop a plan for closure of the pond, elevated concentrations of lead, zinc, cadmium, chromium and iron, including up to 38,600 milligrams per kilogram (mg/kg) of zinc, was found in soil beneath the pond (Emcon, 1981a). Concentrations of metals decreased with depth, but elevated concentrations of zinc remained at approximately 6 feet below ground surface (bgs). In 1981, the pond was closed by removing soil beneath the pond to a depth of 5 feet bgs and backfilling the excavation with silty clay. Excavated soil was disposed offsite (Emcon, 1981b).

In 1983, Dura-Bond began using a new treatment system, and performed a soil investigation in preparation for closing the remainder of the old system, which included an acid storage tank, mixing tank, sedimentation tank, pH controller and associated pumps. Soil samples collected from three locations to depths of approximately 3 feet bgs indicated the presence of elevated concentrations of lead and zinc (Emcon, 1983a). In October 1983, soil was excavated from the wastewater treatment equipment area to a depth of approximately 4 feet bgs and disposed offsite. The excavation was backfilled with clean soil, with the upper 6 inches backfilled with drain rock to facilitate construction of a concrete pad over the area (Emcon, 1983b).

Underground Storage Tank Investigations and Removals

In 1983, spillage was discovered around the riser pipe and unlined vault box surrounding the riser pipe for a 5,000-gallon underground liquid waste tank used for accumulating waste oil, coolants and corrosion preventatives (Emcon, 1983c). Staining was observed on soil in the vicinity of the riser pipe after the concrete pad covering the UST and vault box was removed. Soil samples were collected at depths of approximately 10 to 11.5 feet bgs from an exploratory boring advanced adjacent to the UST. The boring was converted to a groundwater monitoring well (E-1), and a groundwater sample was collected from this well and another downgradient monitoring well (DM-1) previously installed as part of a leak detection system for USTs present at the site. All samples were analyzed for the presence of Stoddard solvent. No Stoddard solvent was detected in any of the samples, but other unidentified compounds were detected in the samples. Additional groundwater samples were subsequently collected from

these two wells and analyzed for the presence of volatile organic compounds (VOCs) and semi-volatile organic compounds (SVOCs). Elevated levels of VOCs were detected in both wells; TCE was detected at 239 and 708 micrograms per liter (μg/L).

In 1984, a 1,000-gallon Stoddard solvent UST, a 500-gallon gasoline UST, and a 500-gallon diesel UST were removed from the west side of the Dura-Bond facility (Emcon, 1984). Soil contamination was observed beneath the gasoline and diesel USTs which were present in a single excavation.

Following tank removals and affected-soil excavation activities, a groundwater monitoring well was installed in the backfilled excavation area, and groundwater samples were collected from this and the two previously-existing monitoring wells near the Dura-Bond facility (Emcon, 1985b). Volatile hydrocarbons (gasoline) and benzene were detected in Well E-2 as well as lead being present in two wells at low concentrations. Chlorinated solvents (trichloroethene [TCE] and 1,1,1-trichloroethane [TCA]) detected in all three wells appeared to be migrating onto the site from an up gradient source, because Dura-Bond had never used these chemicals in their operations. In 1986, an upgradient groundwater monitoring well (E-3) was installed to evaluate groundwater flow and the potential for the presence of upgradient sources of the VOCs previously detected in the Dura-Bond wells. The well was located near the southwest corner of the main subject property building, adjacent to the tenant space in use at the time by Varian for warehousing. VOCs were detected in groundwater sampled from this upgradient well confirmed that the well that the source of VOCs identified in wells at the Dura-Bond facility was located upgradient of the facility (see discussion of regional groundwater plume below).

The results of semiannual groundwater monitoring from April 1986 through March 1988 indicated that total petroleum hydrocarbons quantified as gasoline (TPHg) was detected in groundwater in decreasing concentrations at the former UST location. TPHg was not detected in the other two wells for the last four sampling rounds.

In April 1989, a second set of USTs were removed from the Dura-Bond facility (Emcon, 1989b). The gasoline and Stoddard solvent USTs were in a single excavation. During removal, the excavation was ultimately extended to approximately 17 to 18 feet bgs until no significant concentration of contaminants remained in soil samples collected from the bottom and sidewalls of the excavation. Groundwater monitoring in September 1989 did not detect petroleum hydrocarbons as gasoline or BTEX at this former UST location.

In January 1998, the Santa Clara Valley Water District (SCVWD) issued regulatory case closure for the USTs that had been removed from the Dura-Bond facility in 1984 and 1989 (SCVWD, 1999).

1989-90 Facility Closure Activities

In January 1989, in preparation for the impending closure of the Dura-Bond facility, an inspection of the Dura-Bond facility was performed on behalf of WSJ Properties by Safety Specialists, Inc. (SSI). SSI performed a preliminary reconnaissance of the facility to identify sites that may require additional investigation. SSI identified 17 such sites, including stained concrete flooring, various sumps, a drum storage area, an electrical transformer, dust-covered areas, various storage areas, a machine shop and welding area, a lead coating area, patched floor sections, gasoline pump and UST area, and an oil/water separator (SSI, 1989a). Recommended investigations included obtaining wipe, concrete chip, fluid and soil samples for analysis.

In March 1989, Dura-Bond prepared a Facility Closure Plan which described closure of USTs and the chemical storage area, manufacturing and warehouse area, and water treatment system area (Dura-Bond, 1989). The plan described soil sampling and analysis to be performed following removal of the existing USTs and associated piping, steam cleaning of the chemical storage area, wipe and soil sampling in the manufacturing and warehouse area, steam cleaning in the babbitting area, and dismantling the wastewater treatment system.

Undated draft figures and tables included in a transmittal from Emcon to Dura-Bond indicated that some soil sampling and analysis and soil excavation was performed inside the Dura-Bond facility (Emcon, 1989a). The excavation area indicated on a figure was located in the south-central portion of the building, near where SSI observed concrete patching during their January 1989 inspection (SSI, 1989a). The figure suggests that the excavation was extended laterally until concentrations of TPH quantified as diesel (TPHd) and oil (TPHmo) were at or below 100 mg/kg. The depth of the excavation is unknown, but a sample collected from 5 feet bgs contained TPH as diesel and oil at 8,500 and 3,000 mg/kg, respectively. It appears that some wipe sampling was also performed, although no analytical results were included on the tables.

In September 1989, Emcon and SSI collected soil samples for analysis from beneath and adjacent to the wastewater and babbitting areas (Emcon, 1989c). A total of 43 samples were collected from 26 locations at depths ranging from approximately 1 to 10.5 feet bgs. Samples were analyzed for one or more of the following: antimony, cadmium, chromium, lead, nickel, zinc, pH, and a hydrocarbon scan. Elevated concentrations of lead and zinc were detected in the babbitting area, and elevated concentrations of lead were detected in the wastewater treatment area. Zinc concentrations ranged from not detected to 40,000 mg/kg (collected from approximately 1.5 feet bgs), and lead concentrations ranged from not detected to 10,000 mg/kg (collected from approximately 1-foot bgs). Several concentrations of both lead and zinc were above residential screening levels for lead and zinc.

Based on the results of the September 1989 soil sampling, Emcon excavated five areas in the babbitting room and one area in the wastewater treatment during the period from October to December 1989 (Emcon, 1989e). The criteria for excavation was areas with lead or zinc exceeding their respective TTLC (total threshold limit concentration; a hazardous waste determination criteria) of 1,000 and 5,000 mg/kg, respectively, and soil within 2 feet of the ground surface with concentrations of 1/10 the TTLC. The areas selected for excavation included: (1) soils beneath babbitting room pits to a minimum depth of 3 feet below each pit; (2) surface soils around and underneath the babbitting room wastewater sump to a depth of 3 feet below the sump; (3) surface soils beneath damaged concrete area to a minimum depth of six inches; and (4) soil in the wastewater treatment area (approximately 3 feet by 13 feet) to a depth of approximately 4 feet. The final excavation depths ranged from approximately 1 to 17 feet bgs. Based on the results of confirmation sampling, it appears that Emcon's cleanup criteria were met. Although the TTLC criteria were met, concentrations of zinc up to 2,400 mg/kg, which is significantly above the residential screening level, remained in place at depths of approximately 17 feet bgs. The excavations were backfilled with clean pea gravel and capped with concrete.

Groundwater sampling was performed at four groundwater monitoring wells at the site in February 1990. All four wells were analyzed for filtered and unfiltered metals; no metals were detected above U.S. EPA Maximum Contaminant Levels (MCLs). Groundwater from two wells were analyzed for the presence of gasoline, petroleum hydrocarbon aromatics such as benzene, toluene, ethylbenzene and xylenes (BTEX), Stoddard solvent, and TPH as kerosene, TPHd, TPHmo; none of these analytes were detected above reporting limits. Groundwater from one well was analyzed for TPHg and BTEX. Benzene was detected at very low concentrations but was not detected in a duplicate sample collected from the same well.

In approximately February 1990, soil sampling and analysis was performed at the former Dura-Bond facility on behalf of the property owner to verify the completeness of site remediation performed at the facility by Emcon during October through December 1989 (Parfitt, 1990a). Soil samples were collected from 67 locations from borings extended to either approximately 4 or 10 feet bgs. Samples were collected at intervals of approximately 4 to 5 feet in the deeper borings. Analytical results indicated the concentrations of zinc present in excess of the TTLC (5,000 mg/kg) in the former babbitt room to a depth of at least 10 feet. Lead was detected above the TTLC of 1,200 mg/kg in the area of the former waste treatment area. TCE was also detected in one sample from approximately 3 feet bgs in the former babbitt room above the reporting limit, although the concentration is not reported in the available documentation.

In July, September and December 1997, groundwater samples were again collected from three monitoring wells associated with the Dura-Bond facility. Collected samples were analyzed for total petroleum hydrocarbons quantified as diesel, kerosene, jet fuel and Stoddard solvent, BTEX and VOCs. TPH as hydraulic fluid was detected in one well at concentrations ranging

from 100 μg/L to 6,700 μg/L. Some VOCs were detected in all three wells, including TCE, which was detected in two wells at concentrations ranging from 7 to 190 μg/L. PCE was detected in one well at 30 μg/L.

In 1998, the RWQCB notified Dura-Bond that chlorinated VOCs detected at the site were consistent with the regional VOC plume (COE Study Area; see below) mainly attributable to Hewlett-Packard and Varian Associates. Accordingly, the RWQCB reported that neither Dura-Bond nor the property owners would be responsible for any groundwater investigation, monitoring, or remediation associated with the offsite source (RWQCB, 1998).

Historical Site Use – Subsurface Vault

In 1997, while excavating for a new storm sewer pipe installation, the former property owner encountered a concrete structure and petroleum hydrocarbon-affected soil on the west side of the main building. It is unclear what on-site operation used this vault. An inspection of the vault was made through an access port; the presence of a black, oily liquid was observed at a depth of approximately 5 feet bgs. Analysis of a sample of the liquid in the vault indicated the presence of petroleum hydrocarbons in the motor oil range at a concentration of 440,000 mg/kg. The liquid also contained low levels of trimethylbenzenes, naphthalene and other common components of fuel oil and/or degraded motor or fuel oil. The liquid was pumped from the vault and disposed offsite. Approximately 8,157 gallons of liquid was removed from the vault.

Soil samples were collected from the sidewalls of the excavated storm sewer trench, which was later found to be within the interior of the vault. The samples were collected from areas with visible staining. Additional eleven soil samples were collected from borings located to better define the vault orientation and dimension, including some locations outside the apparent extent of the vault. Samples collected were analyzed for VOCs and a full scan of TPH. The results of analysis indicated the presence of residual TPHmo and TPHd and selected VOCs related to petroleum hydrocarbons. The results indicated that, with the exception of one sample, hydrocarbon-affected soil was confined within the concrete walls of the vault. The one exception was a sample collected from approximately 5.5 feet bgs approximately 5 feet from the west corner of the vault which contained TPHmo at 100 mg/kg.

After removing overburden from the vault, its dimensions were measured to be 13 feet wide by 36 feet long by 8 feet deep, with a capacity of approximately 28,000 gallons. The bottom, sidewalls and top of the vault were constructed of 8-inch thick reinforced concrete.

Approximately 282 tons of soil and concrete debris (from the vault top) were removed from the vault and disposed offsite. Pockets of residual liquids which remained in the vault were pumped out, and the vault sidewalls and bottom were then cleaned using a citrus-based degreaser and high-pressure steam rinse. Rinsate was pumped out, and approximately 2,500 gallons of residual product and rinsate were disposed offsite.

The bottom and sidewall of the vault was subsequently inspected by Palo Alto Fire Department (PAFD) personnel. No cracks in the walls or bottom of the vault or other visual evidence indicating the integrity of the vault was compromised was observed during the inspection.

To evaluate soil quality beneath the vault, the vault was cored in eight locations and soil samples were collected from four of them. The samples were analyzed for VOCs and a full scan of TPH. No analytes were detected in any of the four samples.

PAFD gave approval to abandon the vault in place. The vault was backfilled with clean native material obtained onsite during site improvements activities, and the storm sewer piping was replaced. The surface was covered with asphaltic concrete pavement. The site received case closure from PAFD following confirmation sampling and abandonment of the vault (PAFD, 1998).

Historical Site Use - Mercer Processing

Mercer Processing, Inc. (Mercer) occupied the tenant space at 230 Portage Avenue from 1989 to 1999. Operations performed by Mercer at this location included freeze-drying and packaging of food products. Refrigeration equipment used in the freeze-drying process contained solvents, including TCE, and Genesolv 2000, also referred to as Refrigerant 141b and composed of 1,1-dichloro-1-fluoroethane.

In 1999, a Facility Closure Assessment to assess whether operations at the Mercer facility had adversely affected environmental conditions at the site (PES, 2000). The results of analysis performed on ten soil samples collected in the vicinity of the former refrigeration unit indicated the presence of acetone, methyl ethyl ketone, TCE, and tert-butanol in the soil samples. Additional investigations were performed to further define the lateral and vertical extent of chemicals in the vadose zone beneath the site (IT, 2000). Chemicals detected in the soil included TCE, 1,1-dichloroethene, cis-1,2-dichloroethene, and trans-1,2-dichloroethene. The highest concentrations were found beneath the former refrigeration unit.

A Remedial Action Plan (RAP) was subsequently developed to address contamination identified at the site (PES, 2001). The RAP included an evaluation of risk to human health and the environment, principally groundwater resources, development of a site-specific remedial goal for contaminated soil, an evaluation of remedial alternatives, and a description of the procedures to implement the recommended remedial alternative. Based on the results of the health and environmental risk assessment, a soil cleanup goal of 0.2 mg/kg of TCE was recommended. The risk assessment indicated that removal of TCE-affected soil exceeding 0.2 to 0.4 mg/kg would be protective of human health for residences with a concrete floor slab. Soil excavation was the selected remedial alternative. The RWQCB concurred with the RAP in a letter dated October 18, 2001.

Remedial activities were performed at the former Mercer facility during January 2002 (PES, 2002). Approximately 285 cubic yards of TCE-impacted soil was excavated to a maximum depth of approximately 20.5 feet below grade. Excavated soil was characterized and disposed offsite. On the basis of verification soil samples collected from the bottom and sidewalls of the excavation, soil with TCE concentrations exceeding the target cleanup goal was removed from the site. During excavation, several concrete footings and inactive utilities were uncovered and removed. Groundwater was not encountered during the excavation of TCE-impacted soil. The excavation was backfilled with sand cement slurry, imported clean fill, and re-usable excavated clean soil. The area of soil excavation was capped with a concrete slab. In a letter dated April 8, 2002, the RWQCB stated the remedial goal had been achieved, and that no further action was required (RWQCB, 2002).

Historical Site Use – USTs Associated with Former Produce Packing Business

During a 2010 subsurface investigation, two undocumented USTs, with approximate capacities of 1,000 and 1150 gallons, were identified in southwestern portion of the main parking area of the El Camino Center. The USTs are believed to have stored gasoline and/or diesel fuels related to historical vehicle fueling activities conducted as part of produce packing and transportation operations formerly conducted on the site sometime in the 1950s, until an uncertain date.

The USTs and surrounding tank backfill materials were removed in October 2011 under oversight of the Santa Clara County Department of Environmental Health. Additional hydrocarbon-affected soils were also excavated to a depth of first encountered groundwater. The UST removals are documented in PES' December 22, 2011 report, *Underground Storage Tank Removal Report, El Camino Center, 340 Portage Avenue, Palo Alto, California*.

Following the UST removal, which included excavation of approximately 750 cubic yards of hydrocarbon-affected soil and application of approximately 500 pounds of oxygen-releasing compound (ORC) to assist in degradation of residual hydrocarbons in the subsurface, a series of subsurface investigations were conducted in the vicinity of the former location of the USTs to document soil and groundwater conditions following the UST removals.

Petroleum residuals in soil appeared to be limited to the vicinity of the former tank and were present in three locations at concentrations slightly above 2008 environmental screening levels (ESLs)[1]. The extent of residual petroleum hydrocarbons in groundwater appears to be generally controlled by lateral groundwater flow in the downgradient north-to-northeast groundwater flow direction. Mobile non-aqueous phase liquid (NAPL) has not been observed in any groundwater samples. Dissolved residual petroleum hydrocarbons appeared to be

[1] California Regional Water Quality Control Board (RWQCB) Environmental Screening Levels (ESLs), May 2008.

depleted via natural attenuation, advection, and diffusion. The highest concentrations of petroleum hydrocarbon residuals in groundwater was found to be in the near vicinity of the former tanks, represented by and the downgradient extent of the residual hydrocarbon plume was documented to be less than 150 feet in length. No significant concentrations of volatile organic compounds were identified in soil or groundwater associated with the former USTs. Based on these findings, the County of Santa Clara Environmental Health Department (SCCDEH) granted case closure[2] for this UST issue on July 7, 2015.

Adjacent Property Use - Say Ray Auto Facility

Say Ray is an auto repair facility located adjacent to the east side of the subject property office building at 3251 Ash Street. Say Ray Auto is listed on the Historical UST database with a waste oil UST. Regulatory agency records did not include any information regarding the potential removal of this UST. This facility is located potentially upgradient of the subject property and had the potential to affect groundwater beneath the subject property.

In addition, wastewater containing oil and grease was discharged from the Say Ray facility adjacent to the subject property office, and allowed to run across the subject property to Matadero Creek. A soil investigation and subsequent soil excavation was performed in the vicinity of Matadero Creek. The investigation, which was performed at the request of SCVWD, appeared to be limited to the Matadero Creek area.

In 1997, an investigation, abandonment and closure of a subsurface vault encountered beneath the main building was performed. More than 8,000 gallons of a liquid with high concentrations of motor oil was removed from the vault, and approximately 282 tons of soil and concrete debris were removed and disposed offsite. With PAFD approval, the vault was abandoned in place by backfilling with clean soil.

In 2002, soil contaminated with TCE was removed from the former Mercer Processing facility at 230 Portage Avenue. A TCE cleanup goal of 0.2 mg/kg (below current residential RWQCB cleanup standards) was used in excavating approximately 285 cubic yards of soil from depths up to 20.5 feet below grade. Regulatory case closure was issued in 2002.

California-Olive-Emerson Regional Groundwater Plume

Groundwater contamination associated with the California-Olive-Emerson (COE) regional chlorinated solvent plume has been identified at the subject property. The VOC plume associated with the up-gradient Varian, Eastman Kodak and Dura Bond [not related to site activities] facilities has been under investigation since 1981. Four active monitoring wells

[2] County of Santa Clara Department of Environmental Health, 2015. *Fuel Leak Site Case Closure at El Camino Center, 340 Portage Avenue, Palo Alto, CA; Case No. 14-825, SCVWDID No. 06S3W12J02f, July 7.*

associated with the investigations are present on the subject property and are sampled on a biannual basis. In one well located near the southern corner of the main building, TCE concentrations have ranged from 32 to 65 μg/L since 2005. A soil gas investigation performed in 2008 in a residential area northwest of the subject property indicated that none of the shallow soil gas samples contained chlorinated VOC concentrations above the corresponding RWQCB residential ESLs for potential migration of VOCs from soil gas to indoor air.

SUMMARY OF SITE ENVIRONMENTAL CONDITIONS

Based on a review of prior environmental site assessments and subsurface investigations, the following can be established for the subject property:

- Historical industrial and commercial uses have occurred on the site that included the use of hazardous materials and has resulted in documented releases to the subsurface;

- Several historical USTs present at the site have been removed in accordance with regulatory guidelines by prior tenants and former property owners. No information or site evidence exists to suggest that other USTs remain on the site. During removal of the USTs, residual petroleum hydrocarbons have been identified in subsurface soils and shallow groundwater in close proximity to the former USTs. Where sampled and analyzed, concentrations of petroleum hydrocarbons in soil and groundwater were typically below current environmental screening levels for residential use except in close proximity to the former UST locations. However, because the source of these hydrocarbons [USTs and surrounding significantly-affected soil] were removed, it is likely that the remaining residual petroleum hydrocarbons are naturally degrading, and concentrations are decreasing over time. For the produce packing USTs, introduction of ORC has likely accelerated this degradation process. Regulatory oversight agencies overseeing these closures concur and have granted case closure for all UST removals conducted at the site;

- Extensive remediation has been conducted at the Dura-Bond facility to remove soils containing elevated concentrations of regulated metals. However, based on available data, it appears that soils containing elevated concentrations of zinc and other regulated metals remain under the floor slab of the main site building in the Dura-Bond area. It has been estimated that approximately 500 cubic yards of metal-affected soil is present in this area and it is anticipated that the residual soils containing lead and zinc above ESLs would be removed at the time of site redevelopment. To initiate process, a Removal Action Plan (RAP) would likely be required for agency review and approval. Upon implementation of the removal activity, the results of the removal activity and all the previous data collected on the former Dura-Bond site would be compiled in a request for case closure report with the objective of having the site formally closed;

- Based on available information, the Mercer Processing and Subsurface Vault remediation appear to be successful and were granted case closure by the overseeing regulatory agencies. Residual chemicals of concern left in these areas that contained concentrations below clean up goals are below current residential regulatory screening levels;

- Much of the site investigation and remediation activities were conducted over 5 years ago prior to the regulatory agency increased focus of vapor intrusion issues. Limited sampling that was completed at the site (in 2008) identified the presence of VOCs (typically benzene and TCE) at concentrations in excess of current regulatory screening levels. Benzene vapors were primarily found in close proximity and downgradient of the UST area associated with the former produce packing facility (southern main parking area). Since these vapor samples were collected, the USTs were removed, and it expected that the source of the benzene vapors is naturally degrading. The TCE in soil vapor is likely the result of the low-level VOCs present in the shallow groundwater from the COE plume. Another potential area of elevated TCE vapors is associated with the Mercer Processing remediation area where residual TCE (below the approved clean up goal) likely remains in shallow soil;

- Based on subsurface investigations conducted in 2010, no residual affects were identified from the adjacent Say Ray Auto facility operations; and

- The subject property is located with the identified area of the regional COE solvent plume. Shallow groundwater beneath the site has been affected and is currently undergoing annual monitoring by responsible parties. While present at low concentrations, the VOCs represent a potential vapor intrusion concern for the subject property.

RECOMMENDATIONS (EXCLUDE IF NOT NEEDED)

Based on historical uses and environmental conditions at the subject property, the following recommendations are provided:

- Based on the varied historical use of the property, it is recommended that a project-specific site management plan (SMP) be prepared to address unexpected discovery of chemically-affected soils, if any, during development. The SMP will provide procedures and protocols for the proper characterization, handling, management, and disposal of the discovered chemically-affected soil and groundwater; and

- With the location of the subject property within the regional COE plume and the identification of chemical vapors in soil above the regulatory screening level, it is recommended that future occupied structures planned for the subject property take into consideration the incorporation of vapor mitigation systems into their design. These passive (convertible to active) systems typically consist of a vapor mitigation sub-slab barrier and vent piping to convey any captured chemical vapors to the atmosphere.

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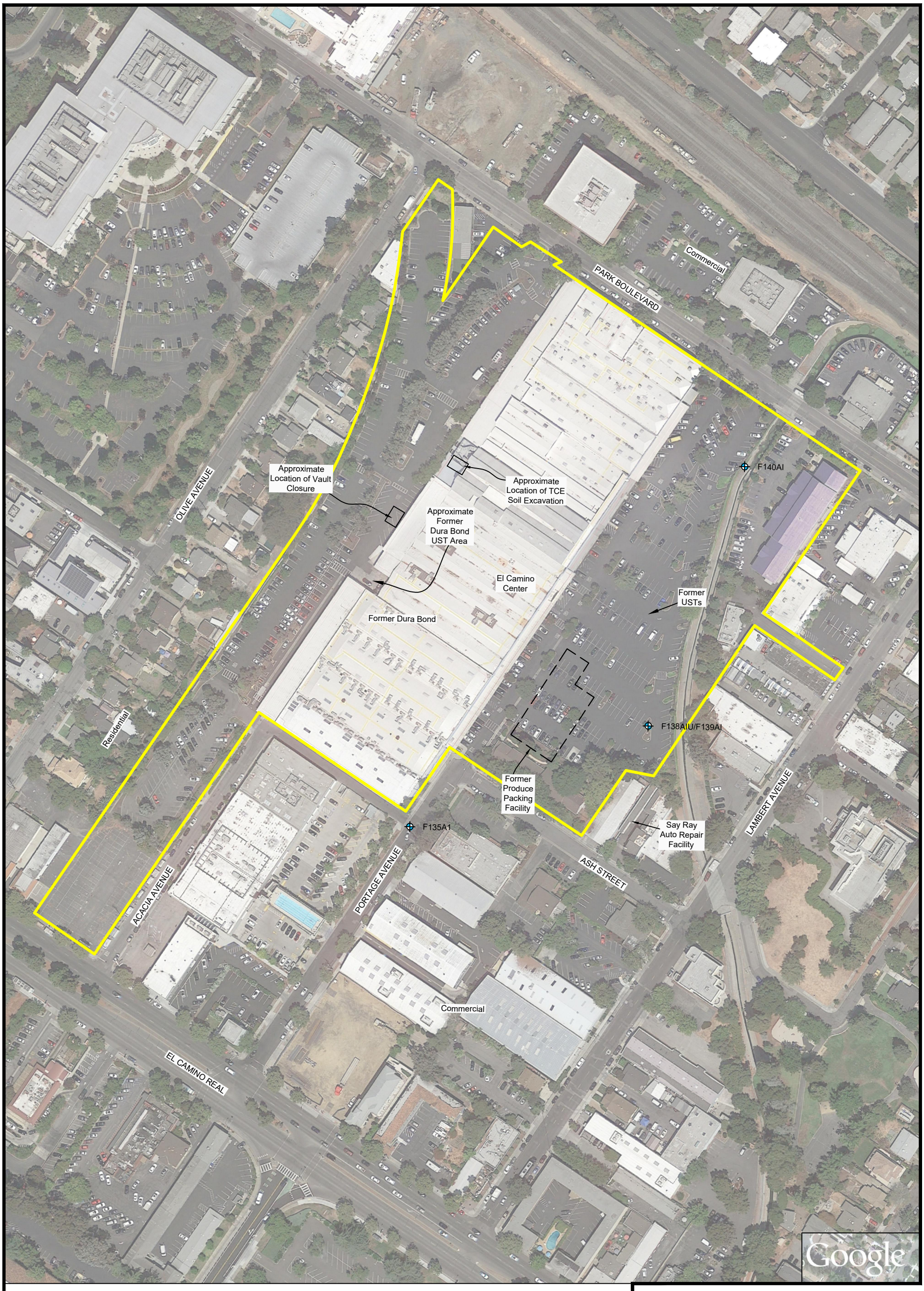


PES Environmental, Inc.
Engineering & Environmental Services

Site Location Map
Phase 1 Environmental Site Assessment
El Camino Center
Palo Alto, California

PLATE
1

126.076.01.005	12607601005_ES_1-2	*JPD*	5/19
JOB NUMBER	DRAWING NUMBER	REVIEWED BY	DATE



Explanation

- Approximate Boundary of Subject Property
- Approximate Location of Former Feature
- F76A2 — Approximate HP/Varian Well Location

N

0 150

SCALE IN FEET

Aerial Photo: August 9, 2018 (Google 2019)

PES Environmental, Inc.
Engineering & Environmental Services

Site Plan
Environmental Survey
El Camino Center
Palo Alto, California

PLATE 2

126.076.01.005	12607601005_ES_1-2	JPD	5/19
JOB NUMBER	DRAWING NUMBER	REVIEWED BY	DATE

Stantec Consulting Services Inc.
75 East Santa Clara Street Suite 1225, San Jose CA 95113-1836

September 30, 2020
File: 185704840

Attention: Mr. Roger Papler
California Regional Water Quality Control Board
San Francisco Bay Region
1515 Clay Street, Suite 1400
Oakland, CA 94612

Dear Mr. Papler,

Reference: 2020 Annual Groundwater Self-Monitoring Report, California-Olive-Emerson (COE) Study Area and Perimeter Area, Palo Alto, California

Stantec Consulting Services Inc., on behalf of Varian Medical Systems, Inc. (Varian) and HP Inc. (HP) and as HP's designated authorized representative, is submitting the attached 2020 Annual Groundwater Self-Monitoring Report for the California-Olive-Emerson (COE) Study Area and Perimeter Area, Palo Alto, California. This document is submitted in accordance with the San Francisco Regional Water Quality Control Board Site Cleanup Requirements, Order 94-130 (the "Order"), dated September 21, 1994, as revised by the Self-Monitoring Program dated May 4, 2001. To the best of my knowledge, the contents of this report are true and correct. Please contact me if you have any questions regarding this report.

Regards,

Stantec Consulting Services Inc.

Bruce Scarbrough
Digitally signed by Bruce Scarbrough
Date: 2020.09.22 14:37:31 -07'00'

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Attachment: 2020 Annual Groundwater Self-Monitoring Report, California-Olive-Emerson (COE) Study Area and Perimeter Area, Palo Alto, California

c. COE Site Mailing List (Attached)

COE SITE MAILING LIST

Full Report: All reports were transmitted electronically.

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2020 Annual Groundwater Self-Monitoring Report

California-Olive-Emerson (COE) Study Area
and Perimeter Area, Palo Alto, California

September 30, 2020

Prepared for:

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and

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Prepared by:

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Sign-off Sheet

This document entitled 2020 Annual Groundwater Self-Monitoring Report, California-Olive-Emerson (COE) Study Area and Perimeter Area, Palo Alto, California was prepared by Stantec Consulting Services Inc. ("Stantec") for the account of HP Inc. and Varian Medical Systems, Inc. (the "Clients"). Any reliance on this document by any third party is strictly prohibited. The material in it reflects Stantec's professional judgment in light of the scope, schedule and other limitations stated in the document and in the contract between Stantec and the Clients. The opinions in the document are based on conditions and information existing at the time the document was published and do not take into account any subsequent changes. In preparing the document, Stantec did not verify information supplied to it by others. Any use which a third party makes of this document is the responsibility of such third party. Such third party agrees that Stantec shall not be responsible for costs or damages of any kind, if any, suffered by it or any other third party as a result of decisions made or actions taken based on this document.

Prepared by Brittany Demmer 2020.09.22 13:30:11 -07'00'

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Bruce Scarbrough, P.G. # 4931
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September 30, 2020

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1.0 INTRODUCTION

This *2020 Annual Groundwater Self-Monitoring Report* for California-Olive-Emerson (COE) Study Area and Perimeter Area (Annual Report) has been prepared by Stantec Consulting Services Inc. (Stantec) on behalf of HP Inc. (HP) and Varian Medical Systems, Inc. (Varian). The COE Study Area and Perimeter Area (hereinafter referred to collectively as the "Site") are located in Palo Alto, California. The Site location is depicted on Figure 1. This Annual Report is submitted in accordance with San Francisco Regional Water Quality Control Board (Water Board) Site Cleanup Requirements Order 94-130, dated September 21, 1994, as revised by the Self-Monitoring Program (SMP) dated May 4, 2001.

This report is organized as follows:

- Section 2.0 summarizes work completed during the reporting period (September 2019 through August 2020), and tasks anticipated to be completed during the next reporting period (September 2020 through August 2021); and,

- Section 3.0 presents the results of groundwater monitoring activities conducted during the reporting period.

Supporting documents are attached as figures, tables, and appendices to this report.

2.0 SITE STATUS REPORT

This section details work performed, with the exception of groundwater monitoring, during the reporting period and describes work anticipated to be completed during the next reporting period. Groundwater monitoring conducted during the reporting period is discussed in Section 3.0.

2.1 OPERATION AND MAINTENANCE OF THE REMEDIAL SYSTEMS

2.1.1 640 Page Mill Road Soil Vapor Extraction and Treatment System

A soil vapor extraction and treatment (SVET) system was historically operated at the 640 Page Mill Road Site. SVET system operation began in 1994. An SVET system effectiveness evaluation report was submitted to the Water Board in July 1995 and was subsequently approved. The report concluded that the influent volatile organic compounds (VOCs) concentration to the SVET system had decreased by approximately 99 percent, and the remediation goals for VOCs and acetone had likely been achieved in the upper zone soils. The SVET system was shut down in August 1997 as groundwater partially or completely saturated the gravel-packed intervals at most of the lower zone SVE wells. The SVET system remained shut down throughout this reporting period. Based on groundwater levels recorded in monitoring wells, the soil surrounding the lower zone SVE wells remains fully or partially saturated.

2.1.2 640 Page Mill Road/COE Groundwater Extraction and Treatment System

Groundwater was extracted from four of the seven 640 Page Mill Road/COE groundwater extraction and treatment (GWET) system extraction wells (EW-8, EW-10, TW-1, and TW-2) from September 1, 2019 through August 31, 2020. Wells EW-8, EW-10, and TW-1 are screened across the A1 zone and well TW-2 is screened across the A2 zone. Well EW-8 operated at an average pumping rate of 17 gallons per minute (gpm); EW-10 operated at an average pumping rate of 4.9 gpm; TW-1 operated at an average pumping rate of 2.8 gpm; and TW-2 operated at an average pumping rate of 19 gpm.

Extracted groundwater was treated using advanced oxidation, which consists of ozone and hydrogen peroxide, and granular activated carbon (GAC) as a polish. Treated groundwater was discharged to Matadero Creek via the City of Palo Alto storm drain system pursuant to the requirements of Water Board Order No. R2-2018-0050 (National Pollutant Discharge Elimination System [NPDES] Permit No. CAG912002, the VOC and Fuel General Permit). Notice of Coverage Under the Requirements of Order No. R2-2018-0050 was issued to HP on December 18, 2018. Periodically (e.g., during GAC change-outs) treated groundwater was discharged to the sanitary sewer under Groundwater Discharge Permit No. 181238 issued by the Palo Alto Public Works Department.

The GWET system operated continuously from September 1, 2019 through August 31, 2020, except for planned and unplanned downtime for periodic maintenance including carbon change outs. Carbon change outs took place on September 9, 2019, December 16, 2019, March 28, 2020, and June 23, 2020. There were no shutdowns that lasted for more than one day during the reporting period.

Table 1 presents flow volumes and average flow rates for individual extraction wells and the entire extraction system during the reporting period. Estimated total VOC mass removal and VOC mass removal rates are also included in Table 1. Historical annual VOC mass removal estimates and VOC mass removal rates for the GWET system are presented in Appendix A. The average daily VOC removal rate for the reporting period was approximately 0.67 pounds per day (lbs/day).

2.1.3 395 Page Mill Road Area X Remediation

A dual phase extraction and treatment (DPET) system was historically operated in Area X at the 395 Page Mill Road Site. While operating, the DPET system simultaneously extracted soil vapor and groundwater from five A1 Upper zone dual phase extraction (DPE) wells (wells RW-1, RW-2, RW-4, RW-5, and RW-6). The system also included a single A1 zone groundwater-only extraction well (well EW-11R). The DPE wells and well EW-11R were shutdown with Water Board approval in June 2001 and June 2003, respectively Vadose zone soil sampling conducted in 2007 demonstrated that the cleanup standard for soil had been achieved in Area X. The Water Board authorized curtailment and decommissioning of the DPET system in a letter to HP dated March 20, 2017, and decommissioning was completed between November 27 to December 5, 2017. Historical annual groundwater VOC mass removal estimates and VOC mass removal rates are presented in Appendix A.

In October 2007, in situ chemical oxidation (ISCO) was implemented in Area X to address localized elevated VOC concentrations near A1 Upper zone well RW-5. ISCO injections were effective in reducing dissolved phase VOC concentrations in the treatment area; however, contaminant concentrations subsequently rebounded.

An enhanced in situ bioremediation (EISB) program was implemented in Area X beginning in 2013 pursuant to Water Board approval of a March 5, 2013 work plan titled *Enhanced In Situ Bioremediation (EISB) Work Plan*. The EISB program was designed to reduce residual VOC concentrations in the A1 Upper zone near wells RW-5 and OB11-2, and in the A1 zone near well EW-11R. EISB injections took place in May 2013, August 2014, December 2015, September 2017, and November 2019. Area X EISB performance monitoring results are discussed in Section 3.5.

2.1.4 601 California Groundwater Remediation

A GWET system was historically operated at the 601 California Avenue Site. While operational, the GWET system extracted groundwater from three wells (V8-2X, V8-8X, and V-9X). The GWET system was shutdown with Water Board approval in July 2003, prior to implementing an ISCO program consisting of potassium permanganate injections into the subsurface. The GWET system remained inactive throughout the reporting period. Historical annual VOC mass removal estimates and VOC mass removal rates are presented in Appendix A.

EISB has been implemented in two phases and in two areas of the 601 California Avenue Site. The Phase 1 EISB pilot study area is located northeast and hydraulically downgradient of the 601 California Avenue Site building and on-Site source area. The Phase 1 EISB pilot study was implemented in 2012 to test EISB efficacy in reducing groundwater VOC concentrations and inhibiting off-site migration of VOC-impacted



groundwater (i.e., as a bio-barrier). Supplemental treatment injections were completed in the Phase I bio-barrier area in October 2013, August 2014, December 2015, November 2017, and August 2019. Based on the success of the Phase 1 pilot study, the Phase 2 EISB pilot study was implemented in 2014 in the northwestern facing courtyard of the Site building. Supplemental treatment injections have been completed in the Phase 2 (i.e., "courtyard area") pilot study area in November and December 2014, April 2015, September 2015, September 2016, December 2017, and July 2019 based on the positive performance data from the initial treatment. EISB performance monitoring results for the 601 California Avenue Site are discussed in Section 3.6.

2.1.5 COE Perimeter Area Groundwater Extraction Wells

Extraction Wells EW-12, EW-13, and EW-14: Groundwater was historically extracted from three wells (EW-12, EW-13, and EW-14) located in the Perimeter Area, southeast of the COE Study Area. Extracted groundwater was conveyed to and treated at the Varian 611 Hansen Way site. Well EW-14 was decommissioned with Water Board authorization in 2006. Permanent shutdown of well EW-12 and trial shutdown of well EW-13 was authorized by Water Board in February 2007. Final shutdown and destruction of extraction well EW-13 was authorized by the Water Board in September 2017 and well EW-13 was destroyed in December 2017. Historical annual VOC mass removal estimates and VOC mass removal rates for wells EW-12, EW-13, and EW-14 are presented in Appendix A.

Extraction Wells EW-15 and EW-16: In November 2013, groundwater extraction wells EW-15 and EW-16, located in the Perimeter Area at 3101 Park Boulevard, were shut down with Water Board authorization. The Water Board approved a 12-month trial shutdown in a letter dated October 8, 2013. During the 12-month long trial shutdown, wells EW-15 and EW-16 and several nearby monitoring wells were sounded for depth to water and sampled for VOCs on a quarterly basis. In December 2014, HP and Varian submitted a report titled *Trial Shutdown Evaluation Report for California-Olive-Emerson (COE) Perimeter Area Groundwater Extraction Wells EW-15 and EW-16* documenting the trial shutdown results. The report recommended that trial shutdown continue and that the associated groundwater monitoring program continue on a semi-annual basis. As specified in the *2016 Annual Groundwater Monitoring Report*, monitoring frequency has been changed to annual. Wells EW-15 and EW-16 remained shut down throughout the reporting period. Trial shutdown monitoring results are discussed in Section 3.6. Historical annual VOC mass removal estimates and VOC mass removal rates are presented in Appendix A.

2.2 OTHER WORK COMPLETED DURING THE REPORTING PERIOD

Other work completed by HP and Varian during the reporting period is described in the following sections.

2.2.1 640 Page Mill Road Site/COE Off-Site Area

The following work was completed at the 640 Page Mill Road Site and the Off-Site Area.

- Stantec periodically collected depth to groundwater measurements and groundwater samples from select wells on a self-directed basis in support of ongoing extraction well flow rate optimization.



Analytical results for the additionally collected samples are included in Appendix B. Groundwater elevation and chemical data are used to optimize extraction well pumping rates.

- Windy Hill Property Ventures, with support from TRC Companies (TRC), secured authorization from the Water Board on June 6, 2019 to destroy well F41A1 in advance of a planned property redevelopment. Well F41A1 was destroyed on June 10, 2019. Stantec uploaded to GeoTracker well destruction documentation provided by TRC.

- Groundwater monitoring wells F65A1U and F66A were destroyed on July 14, 2020 pursuant to Water Board approval in email correspondence dated April 15, 2020. The wells were destroyed to accommodate a City of Palo Alto redevelopment project. Stantec submitted a well destruction report for wells F65A and F66A to the Water Board on behalf of HP and Varian on July 31, 2020.

2.2.2 395 Page Mill Road Site

Supplemental EISB treatment injections were performed in November 2019. EISB performance monitoring was conducted between June 2 and 5, 2020. Table C-1 in Appendix C summarizes the Area X EISB injection activities completed to date. Table C-2 in Appendix C summarizes the performance monitoring activities.

2.2.3 601 California Site

The following work was completed at the 601 California site.

- Injection wells IW-9, IW-10, and IW-14, located on the northeast side of the Site building (bio-barrier area), were redeveloped in August 2019 to remove sediment and biofilm accumulation.

- An additional round of substrate injections (the sixth round) was completed in the Phase 1 (bio-barrier) pilot study area August 17 through 18, 2019, and in the Phase 2 (courtyard) pilot study area July 20, 27 and 28, 2019.

- EISB performance monitoring was completed in May 2020.

2.3 WORK TO BE CONDUCTED DURING THE NEXT REPORTING PERIOD

It is anticipated that the following work will be performed during the next reporting period.

- Continue operation and maintenance of the 640 Page Mill Road/COE GWET system.

- Submit and, pursuant to Water Board approval, implement a revised 640 Page Mill Road Site EISB pilot testing work plan. The revised work plan will supersede the EISB work plan previously approved by the Water Board.

- Conduct EISB performance monitoring at the 395 Page Mill Road Site concurrent with the annual COE monitoring event in June 2021.

- Conduct 601 California Ave. Site Phase 1 and Phase 2 EISB area performance monitoring during the fourth quarter of 2020. Monitoring will include collection and laboratory analysis of groundwater and soil vapor, as well as field-measured parameters. Post-injection monitoring data will be evaluated to assess whether additional injections are warranted.

- Conduct routine annual COE monitoring in June 2021.



3.0 GROUNDWATER MONITORING

3.1 GROUNDWATER ELEVATION MONITORING

Site-wide water level measurements were recorded during the second quarter, on June 2, 2020. Water levels were measured using battery-powered water level meters. Downhole equipment was decontaminated prior to use and between each well to minimize the potential for cross-contamination. Water levels measured during the second quarter 2020 are shown on Table 2. Well locations are shown on Figure 2.

Historically, a separate groundwater elevation contour map for the A1 Upper zone was prepared and included in the self-monitoring reports. Since a large portion of the A1 Upper zone underlying the southern and western portions of the COE Study Area is unsaturated, a groundwater elevation contour map referred to as the first-encountered groundwater zone is now included as Figure 3. The first-encountered groundwater zone map includes data from saturated A1 Upper zone wells and data from A1 zone wells located in portions of the COE Study Area where the A1 Upper zone is unsaturated. Groundwater elevation contour maps for the A1 zone, the A2 zone, and the B zone are presented on Figures 4 through 6, respectively.

Groundwater flow direction in each of these zones is generally to the north-northeast towards the Oregon Expressway Underpass (OEU). Groundwater flow patterns in the second quarter 2020 are consistent with previous interpretations. Cones of depression are evident around extraction wells TW-1 and EW-10 in the A1 zone and TW-2 in the A2 zone. A cone of depression is created by the OEU dewatering system in both the saturated A1 Upper zone and A1 zone.

3.2 GROUNDWATER QUALITY MONITORING ACTIVITIES

Table 3 summarizes the SMP sampling schedule for the Site (sampling occurs during the second quarter). Table 4 presents a summary of the specific sampling activities conducted during second quarter 2020. A total of 88 wells were sampled from June 2 through 4, with additional sampling at two locations on June 23, 2020. This total included 22 wells scheduled to be sampled in accordance with the Revised SMP and 66 wells that were monitored on a self-directed basis. Additionally, monitoring data for four well locations (P17, P21, V8-2, and V-9) sampled in May 2020, as part of the quarterly EISB monitoring at the 601 California Site, are also included in this report.

Groundwater sampling methods are described below.

- Four (4) active extraction wells (EW-8, EW-10, TW-1, and TW-2) were sampled directly from a sample port located in the wellhead piping.
- Three (3) inactive extraction wells (EW-4, EW-7, and EW-16) were purged and sampled from sample ports located in wellhead piping.



- Five (5) monitoring wells were sampled using a low-flow purge method.
- Ten (10) wells, including two (2) inactive extraction wells (EW-12 and EW-15) and eight (8) monitoring wells (F29A1U, F40A, F83A1U, F126A2, F137A1, F145A1, O28A1, OB11-2), were sampled using a conventional three-volume purge method.
- Sixty-four (64) monitoring wells were sampled using a passive diffusive bag sampler (PDBS).
- Six (6) monitoring wells were sampled using a PDBS followed by a Hydrasleeve™ sampling device for non-volatile analytes.

Active/Inactive Extraction Well Sampling Method: Active extraction wells are regularly refreshed with formation water so specific purging procedures are not required. Inactive wells were purged of a sufficient volume of water to obtain a representative sample of formation water. See Table 5 for specific volumes removed prior to sampling. Samples were collected by opening a sample port located in the wellhead piping. Temperature, pH, and specific conductance were measured at the time of sample collection.

Low-Flow Sampling Method: Groundwater samples were collected using a 2-inch-diameter bladder pump with dedicated tubing. A flow-through cell was utilized to collect indicator parameter data to confirm stabilization prior to sampling.

Conventional 3-Volume Purge Method: Wells were purged of at least three casing volumes prior to sampling to obtain samples characteristic of formation water. Temperature, pH, and specific conductance were measured while purging. Wells were purged using an existing extraction well pump, a portable submersible pump, or a new disposable bailer. Following purging, groundwater samples were collected from the sample port located in the wellhead piping or using a new disposable bailer.

PDBS Method: Each PDBS was filled with laboratory-supplied analyte-free de-ionized water, sealed, attached to the PDBS assembly, and lowered to a predetermined deployment depth within the saturated screened interval of a well. The PDBS was subsequently removed from the well after a minimum of two weeks, and the water in the PDBS was transferred directly to sample containers.

Hydrasleeve™ Method: A Hydrasleeve™ sampling device was utilized for non-volatile analytes. The sleeve was deployed to the center of the screened interval and then retrieved for sample container filling.

Purge water and excess PDBS and Hydrasleeve™ groundwater were collected in temporary storage tanks and subsequently treated at the groundwater treatment system located at 640 Page Mill Road.

Sampling details, water quality parameters (as applicable), and chain-of-custody documentation were recorded on Field Data Sheets and Chain-of-Custody forms. Groundwater samples were packed on ice and delivered under chain-of-custody documentation to Eurofins TestAmerica (TestAmerica), a California State Certified laboratory, in Pleasanton, California.



Water quality indicator parameters measured during purging (for wells sampled by the conventional sampling method) are presented in Table 5. Table 6 lists the PDBS deployment depths and respective well screen intervals.

A total of 107 water samples were submitted for analysis as follows.

- Ninety-two (92) primary samples.
- Nine (9) duplicate samples.
- One (1) equipment blank sample.
- Four (4) trip blank samples.
- One (1) Source Blank sample.

All groundwater samples were analyzed for the former U.S. Environmental Protection Agency (USEPA) Method 8010 list of VOCs and Freon® 113 using USEPA Method 8260B. Select wells were additionally analyzed for EISB parameters as described in Section 3.5. Results were reported by the laboratory in an electronic data deliverable format.

3.3 QUALITY ASSURANCE / QUALITY CONTROL MEASURES

Quality assurance/quality control (QA/QC) measures were implemented during the sample collection and chemical analysis process. The objective of these QA/QC measures is to ensure that the data are valid and are of adequate quality for their intended purpose. Tables 7 and 8 summarize the field sample collection and laboratory QA/QC findings for the current reporting period. Data quality issues and associated resolutions relative to those issues are identified therein.

During the second quarter 2020 monitoring event, field QA/QC samples included: nine (9) field duplicate samples from wells F29A1U, F58A, F85A1, F126A2, F145A1, O28A1, O120A2, V8-4 and W-3A1U; one (1) equipment blank sample collected prior to sampling well EW-15; and four (4) trip blank samples.

Review of the field and laboratory QA/QC results indicate that data are valid and of adequate quality for their intended purpose.

3.4 GROUNDWATER QUALITY MONITORING RESULTS

A summary of analytes detected during the second quarter 2020 monitoring event is presented in Table 9. Trichloroethene (TCE) and tetrachloroethene (PCE) isoconcentration contour maps for the first-encountered groundwater zone, the A1 zone, and the A2 zone are presented in Figures 7 through 12, respectively. Tabulated historical analytical data are presented in Appendix B.

3.4.1 Identification of Significant Increases

Significant increases in analyte concentrations are identified and discussed below. To be consistent with the historical methods, a "significant increase" is noted if the current sample result is greater than two times the historical maximum concentration for each well/analyte pair, or if an analyte is detected for the first time at a given location.

Table 10 identifies wells that had first-time detections (i.e., the respective compound was not previously detected at or above the laboratory reporting limit indicated on the table) and/or a significant concentration increase for one or more compounds. Those wells with first time detections and/or significant concentration increases are identified below by well location.

640 Page Mill Road Site: Three (3) wells (O67A2, O111A2, and O120A2)

- Increased concentrations of 1,3-dichlorobenzene and 1,4-dichlorobenzene in well O67A2 (15 µg/L and 82 µg/L in June 2020, respectively; prior maximum detections were 5.4 µg/L and 7.3 µg/L, respectively). Groundwater in the vicinity of well O67A2 is expected to be captured by extraction well TW-2.

- First time detection of trans-1,2-dichloroethene (trans-1,2-DCE) concentration in A2 zone well O111A2 (0.90 µg/L in June 2020). This concentration is below the corresponding cleanup level.

- First time detection of 1,3-dichlorobenzene in A2 zone well O120A2 (0.54/0.59 µg/L in June 2020).

395 Page Mill Road Site: One (1) well (OB11-2).

- Increased concentration of cis-1,2-dichloroethene (cis-1,2-DCE) in well OB11-2 (3,800 µg/L in June 2020; prior maximum detection was 720 µg/L) is attributed to anaerobic degradation of PCE due to ongoing EISB treatment.

601 California Site: Three (3) wells (V8-4, V8-7, and V8-8).

- Increased concentrations of trans-1,2-DCE and VC in well V8-4 (51/55 µg/L and 61/64 µg/L in June 2020, respectively; prior maximum detections were 3.7 µg/L and 0.30 µg/L, respectively), is attributable to anaerobic degradation of TCE due to ongoing EISB treatment.

- Increased concentrations of trans-1,2-DCE in well V8-7 (56 µg/L in June 2020; prior maximum detection was 12 µg/L) is attributable to anaerobic degradation of TCE due to ongoing EISB treatment.

- Increased concentrations of trans-1,2-DCE in well V8-8 (16 µg/L in June 2020; prior maximum detection was 6.7 µg/L) is attributable to anaerobic degradation of TCE due to ongoing EISB treatment.



Off-Site Area: Five (5) wells (F127A1R, F129A1, F156A1U, F166A1 and V-9).

- First time detection of trichlorofluoromethane (Freon 113) in A1 Upper zone wells F127A1R and F129A1 (0.84 µg/L and 1.3 µg/L in June 2020, respectively). These concentrations are below the corresponding clean-up level.

- First time detection of chloroform in A1 Upper zone well F156A1U (0.54 µg/L in June 2020). This concentration is below the corresponding cleanup level.

- Increased concentrations of 1,1,1-trichloroethane (1,1,1-TCA), 1,1-Dichloroethene (1,1-DCE), and cis-1,2-DCE in A1 zone well F166A1 (28 µg/L, 21 µg/L, and 61 µg/L in June 2020, respectively; prior maximum detections were 11 µg/L, 8.2 µg/L, 13 µg/L, respectively).

The significant increases identified above are being addressed by on-going remedial actions.

3.5 395 PAGE MILL ROAD AREA X EISB PERFORMANCE MONITORING

Performance monitoring results and planned future work related to the 395 Page Mill Road Area X EISB program are discussed below. The EISB pilot study treatment areas are shown on Figures C-1 and C-2 in Appendix C.

Field Measured Parameters: Parameters measured in the field at the time of sample collection included temperature, pH, electrical conductivity, dissolved oxygen (DO), oxidation-reduction potential (ORP), and ferrous iron (Fe^{+2}). These parameters provide information on groundwater geochemical conditions and are indicators for the suitability for biologically-mediated reductive de-chlorination processes. Groundwater field parameter measurement results are presented in Table C-3 in Appendix C.

Field parameter results reveal that geochemical conditions within the treatment areas remain favorable for biologically-mediated reductive de-chlorination. ORP values were negative in all wells, indicating reducing conditions. Fe^{+2} was detected in all wells at concentrations up to 3.8 milligrams per liter (mg/L) also indicating reducing conditions. pH levels remain circumneutral and favorable for biodegradation, ranging from 6.34 to 7.27.

Laboratory Measured Parameters: Groundwater samples were analyzed for VOCs, volatile dissolved gases, and total organic carbon (TOC). Samples from wells RW-1, RW-5, and W-16A1 were additionally analyzed for the presence of Dehalococcoides and vinyl chloride reductase gene (Dhc and vcrA). VOC results are summarized in Table C-4 in Appendix C. Results for other groundwater analytes are tabulated in Table C-5 in Appendix C.

PCE is the primary groundwater contaminant present in Area X. Concentration trend plots for A1 Upper zone and A1 zone treatment area wells depicting PCE, TCE, cis-1,2-DCE, VC, and ethene concentrations over time are presented in Figures C-3 and C-6 in Appendix C, respectively. Molarity trend plots for the A1 Upper zone and A1 zone treatment area wells depicting molar trends for PCE, TCE, cis-1,2-DCE, VC, and



ethene are presented in Figures C-4 and C-7 in Appendix C, respectively. PCE, TCE, and cis-1,2-DCE concentration trend plots for wells RW-2 and RW-6, which are located down gradient from the A1 Upper zone treatment areas, are presented in Figure C-5 in Appendix C.

A1 Upper Zone: PCE concentrations in treatment area wells RW-1 and RW-5 remain below the cleanup goal (5 µg/L) in June 2020. The PCE concentration in treatment area well OB11-2 has fluctuated between 15 µg/L and 89,000 µg/L since beginning EISB treatment. In June 2020, PCE was reported in OB11-2 at 89,000 µg/L, which is the highest level reported since beginning EISB. Fluctuations in dissolved phase PCE concentration in well OB11-2 indicate EISB treatment is enhancing the solubilization of sorbed-phase contaminant mass in the vicinity of the well. PCE concentrations in well OB11-2 are expected to eventually stabilize and decline over time, as the sorbed-phase contaminant is depleted. TCE concentrations in treatment area wells remain below the cleanup goal (5 µg/L) in June 2020.

Concentration increases in daughter products (cis- and trans-1,2-DCE, VC, and ethene) in treatment area wells demonstrate complete reductive de-chlorination of PCE is occurring. Since beginning EISB treatment, total chlorinated ethenes (molar basis) in treatment area wells RW-1 and RW-5 have declined by 99 percent and 98 percent, respectively, while total chlorinated ethenes in treatment area well OB11-2 have increased by nearly 1,000 percent. As depicted on Figure C-3, PCE and TCE concentrations in down gradient wells RW-2 and RW-6 have declined to below the cleanup goal.

June 2020 microbe test results were positive for Dhc and vcrA in treatment area wells RW-1 and RW-5. As expected, microbe populations increased following the most recent bioaugmentation event in November 2019 but remain below historical high population values reported during prior EISB monitoring events. The lower population values observed in RW-1 and RW-5 are attributed to chlorinated ethene depletion in these two monitoring wells. TOC concentrations in June 2020 remain above baseline values, ranging from 6.4 milligrams per liter (mg/L) to 53 mg/L.

A1 Zone: The PCE concentration in treatment area well EW-11R has steadily declined from a baseline of 450 µg/L to below the laboratory reporting limit (e.g., not detected) and has remained not detected since 2017. The PCE concentration in treatment area well W-16A1 declined from a baseline of 510 µg/L to below the laboratory reporting limit within three months after beginning EISB treatment and has remained not detected since 2013. TCE concentration trends in wells EW-11R and W-16A1 are similar to PCE trends.

Concentration increases in daughter products (cis- and trans-1,2-DCE, VC, and ethene) in treatment area wells demonstrate complete reductive de-chlorination of PCE is occurring. Since beginning EISB treatment, the total chlorinated ethenes (molar basis) in treatment area well EW-11R and W-16A1 have increased by 68% and 15%, respectively. The molarity increase is attributable to daughter product increases in response to ongoing treatment.

June 2020 microbe test results for W-16A1 were positive for both Dhc and vcrA. Microbial populations increased following the most recent bioaugmentation event in November 2019 to levels favorable for robust de-chlorination. TOC concentrations in June 2020 remain above baseline values, with a maximum value of 5.9 mg/L in W-16A1.



The next EISB performance monitoring event will be conducted in June 2021 concurrent with the annual COE monitoring event.

3.6 601 CALIFORNIA AVENUE EISB PERFORMANCE MONITORING

Two EISB pilot studies have been implemented at the 601 California Avenue site, both of which are currently active. As noted in Section 2.1, the Phase I EISB pilot study area is located northeast and hydraulically down gradient of the on-site building and is intended as a bio-barrier to reduce VOC concentrations in this area and inhibit downgradient migration of VOC-impacted groundwater. The Phase 2 (courtyard) EISB pilot study was implemented in the northwest courtyard of the on-site building to reduce groundwater VOC concentrations in that area. The locations and layout of the EISB pilot study areas are illustrated in Figure D-1 in Appendix D.

Stantec conducted EISB performance monitoring in both study areas on May 3 and May 4, 2020, following the sixth injection event in July and August 2019. Data associated with the 601 California Avenue EISB program are presented in Appendix D

Field Measured Parameters: Temperature, pH, conductivity, DO, ORP, and Fe^{+2} measurements are collected in the field at the time of sample collection to provide information on geochemical conditions in groundwater and suitability for biologically-mediated anaerobic degradation processes. Groundwater field parameter measurement results are presented in Table D-1 in Appendix D.

Field parameter results reveal that geochemical conditions remain favorable for anaerobic degradation in both treatment zones.

Laboratory Measured Parameters: Groundwater samples were analyzed for VOCs, and select wells were analyzed for dissolved gases and/or TOC. VOC results are summarized in Table D-2 in Appendix D. Results for other groundwater analytes are tabulated in Table D-3 in Appendix D.

TCE is the primary groundwater contaminant present in groundwater beneath the 601 California site. Concentration and molarity trend plots for select treatment area wells depicting TCE and degradation products over time are presented in Figures D-2 and D-3 in Appendix D, respectively.

Soil vapor probes SVP-1 through SVP-7 were scheduled for sampling in May 2020; however, SVP-5, SVP-6, and SVP-7 were unable to be sampled due to saturated conditions observed in the vapor probes. Soil vapor probes SVP-1 through SVP-4 were successfully sampled in May 2020. Soil vapor data are summarized in Tables D-4a and D-4b.

EISB Program Conditions: Groundwater chemical data from courtyard-area monitoring wells indicate that reductive de-chlorination of TCE is occurring at a robust rate in response to iterative injections of carbon substrate. The significant spikes in TCE concentrations originally observed in several wells during the December 2014 monitoring event, approximately one month after initial substrate injections in November 2014, have steadily attenuated over time to near historical low concentrations in many wells. Significant increases in concentrations of degradation products (cis-1,2-DCE and vinyl chloride) in key site wells indicate that reductive de-chlorination processes are robust (particularly in wells P21, and P26) and do not

appear to be stalled. However, significant concentrations of TCE remain in several wells (P13, P17, P18, P21, and P26), and TOC concentrations were low in several wells, including P17, P21 and P26. These elevated concentrations may reflect an increased dissolution gradient for TCE mass sorbed to subsurface soils, driven by the strong anaerobic degradation observed in the treatment area and presence of EVO and the surfactant used to emulsify it. This effect is illustrated by the fluctuating TCE concentrations in wells P13, and P21 over time. Based on the persistent high TCE concentrations and low TOC concentrations observed in several wells, a sixth injection event was completed in the courtyard area in July 2019 to provide additional substrate to drive the de-chlorination process and further reduce these concentrations.

Groundwater chemical data from the Phase 1 bio-barrier area indicate that TCE concentrations in this area have remained relatively low over the last several years. TCE concentrations in May 2020 ranged from 20 µg/L to 510 µg/L in bio-barrier wells P25, P27, P28, and P29, with the reported TCE concentration in well P25 (510 µg/L) representing a historical low in this well. Well P-25 is located down gradient of the Phase 2 treatment area and up gradient of the Phase 1 bio-barrier area. Although the concentration of TCE in well P29 (located immediately downgradient of the bio-barrier area) was low (20 µg/L) in May 2020, TCE concentrations in well V-9 (located off-site to the northeast and downgradient of the bio-barrier area) was 430 µg/L during the same sampling event. TCE concentrations in well V-9 have decreased significantly since the start of EISB treatment. These results confirm that the bio-barrier treatment area is functioning as intended to inhibit off-site migration of VOC-impacted groundwater.

Samples collected in May 2020 from soil vapor probes SVP-1 and SVP-2 indicate that TCE concentrations have declined to historical low concentrations of 1,200 µg/m^3, and 470 µg/m^3, respectively. Soil vapor TCE concentrations near SVP-3 and SVP-4 have also significantly decreased to near-historic and historic low concentrations of 100 µg/m^3 and 580 µg/m^3, respectively, since the previous sampling event in December 2018. A consequence of this enhanced de-chlorination process was a noted increase in vinyl chloride concentration at SVP-4 (from 7,200 µg/m^3 in August 2018 to 24,800 µg/m^3 in December 2018, and 42,000 µg/m^3 in May 2020). These results, and those from the upcoming 13-month post-treatment monitoring event will be used to determine whether additional treatment is warranted.

Despite efforts to withhold irrigation of the area, monitoring of soil vapor probes SVP-5 and SVP-6 has repeatedly been hampered by saturated subsurface conditions, precluding collection of soil vapor samples from the vadose zone in these locations. Stantec will continue to monitor the status of soil vapor probes SVP-1 through SVP-7 and sample as scheduled when field conditions permit.

3.7 EW-15 AND EW-16 TRIAL SHUTDOWN RESULTS

A data table summarizing VOC results from the eight wells included in the trial shutdown monitoring program is included in Table E-1 in Appendix E. VOC concentration versus time plots for the trial shutdown monitoring wells are also included as Figures E-1 and E-2 in Appendix E. The plots illustrate VOC concentration trends over time, starting in 1995, when the wells in the area were first sampled. The plots also illustrate how VOC concentrations have changed since beginning the trial shutdown in November 2013. Notable VOC trends are described below.

An increase in PCE concentration was observed in both wells EW-15 and EW-16 after pumping began in 1996. Following the initial PCE increase, PCE concentrations in the extraction wells remained relatively stable. The lateral extent of PCE within the A1 Upper zone appears to extend about 140 feet down gradient to well F88A1U. In the A1 zone, PCE occurrence is limited to extraction well EW-16.

Following cessation of pumping at EW-15 and EW-16, PCE concentrations in wells EW-15 and EW-16 declined rapidly. Approximately 7 years after beginning the trial shutdown, the PCE concentration in well EW-15 has declined from a baseline of 230 µg/L to below the laboratory reporting limit (<0.5 µg/L) in June 2020. Over the same period, the PCE concentration in well EW-16 has declined from a baseline of 270 µg/L to 7.1 µg/L in June 2020. The concentration declines are in part attributed to sequential reductive de-chlorination to less chlorinated daughter products (predominantly cis- and trans-1,2-DCE and VC). TCE concentrations in well EW-15 increased following the shutdown, but subsequently declined to 3.5 µg/L in June 2020. TCE concentrations in well EW-16 steadily declined from a baseline of 56 µg/L to 4.9 µg/L in June 2020. Other daughter products (cis- and trans-1,2-DCE and VC) concentrations in EW-15 and EW-16 initially increased following the shutdown and have since declined to near or below pre-shutdown levels.

The PCE concentration in the nearest downgradient A1 Upper zone well F88A1U initially increased after pumping ceased in November 2013. Since February 2014, the PCE concentration has declined reaching a trial shutdown low of 9.6 µg/L in June 2018. VOC data from well F141A1U, located approximately 330 feet northeast of EW-15 and near the estimated OEU capture boundary indicate this well has not historically nor is presently impacted by VOCs above cleanup goals. Well F161A1U, which is located approximately 300 feet north of EW-15 and within the estimated OEU capture area, has been sampled since August 2011 and has not been impacted by PCE. Relatively low concentrations of TCE, ranging from around 10 to 20 µg/L have been detected in this well since sampling began in 2011. The TCE concentration reported in well F161A1U in June 2020 (7.3 µg/L) is a historical low since beginning the trial shutdown.

PCE has not been detected in A1 zone well F89A, located approximately 120 feet northwest of EW-16. Low concentrations of TCE have historically been detected in A1 zone well F89A. Since turning off well EW-16, the TCE concentration increased to a maximum of 14 µg/L in June 2014. Well F89A, which is located within the CalTrain railroad right-of-way, was not sampled in June 2020. VOC data from well F142A1, located approximately 480 feet northeast and outside the estimated OEU capture area for the A1 zone indicate this well has not historically nor is presently impacted by VOCs [note that samples from 1995 and 1996 are non-detect for VOCs at elevated detection limits]. Well F74A, also located outside the estimated OEU capture area for the A1 zone and approximately 640 feet north and downgradient of EW-16, appears to be impacted historically by TCE at concentrations ranging from non-detect to 42 µg/L. Since the cessation of pumping at EW-16, TCE concentrations have remained unchanged, ranging between 31 to 42 µg/L (34 µg/L in June 2020).

Post-shutdown monitoring results reveal contaminant concentrations in former pumping wells EW-15 and EW-16 have declined to below or near cleanup levels and contaminant concentration trends in downgradient wells are stable or declining. Based on the favorable post-shutdown monitoring results, it is recommended that the status of former extraction wells EW-15 and EW-16 16 be modified from trial shutdown to permanent curtailment and trial shutdown monitoring be discontinued.



TABLES

2020 Annual Groundwater Self-Monitoring Report
California-Olive-Emerson (COE) Study Area
and Perimeter Area, Palo Alto, California
September 30, 2020

Table 1
Summary of 640 Page Mill Road/COE Extraction System Flow Data - Annual 2020
COE Study Area and Perimeter Area, Palo Alto, California

Wells		Date of Reading											
		23-Sep-19	21-Oct-19	25-Nov-19	18-Dec-19	20-Jan-20	24-Feb-20	25-Mar-20	29-Apr-20	26-May-20	24-Jun-20	22-Jul-20	24-Aug-20
EW-4	Meter Reading	2,821,733	2,821,733	2,821,733	2,821,733	2,821,733	2,821,733	2,821,733	2,821,733	2,821,733	2,821,913	2,821,913	2,821,913
	Volume per Period (gal) [1]	0	0	0	0	0	0	0	0	0	180	0	0
	Average Flow Rate (gpm) [2]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
EW-5	Meter Reading	7,111,025	7,111,025	7,111,025	7,111,025	7,111,025	7,111,025	7,111,025	7,111,025	7,111,025	7,111,025	7,111,025	7,111,025
	Volume per Period (gal)	0	0	0	0	0	0	0	0	0	0	0	0
	Average Flow Rate (gpm)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
EW-7	Meter Reading	28,624,130	28,624,130	28,624,130	28,624,130	28,624,130	28,624,130	28,624,130	28,624,130	28,624,130	28,624,310	28,624,310	28,624,310
	Volume per Period (gal)	0	0	0	0	0	0	0	0	0	180	0	0
	Average Flow Rate (gpm)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
EW-8	Meter Reading	71,111,230	71,843,204	72,721,974	73,113,934	73,973,560	74,883,418	75,663,755	76,522,492	77,227,795	77,950,323	78,630,379	79,462,274
	Volume per Period (gal)	635,476	731,974	878,770	391,960	859,626	909,858	780,337	858,737	705,303	722,528	680,056	831,895
	Average Flow Rate (gpm)	16.97	18.15	17.44	11.83	18.09	18.05	18.06	17.04	18.14	17.30	16.87	17.51
EW-10	Meter Reading	34,297,210	34,512,380	34,769,070	34,883,080	35,134,080	35,400,850	35,629,930	35,880,910	36,087,230	36,299,470	36,496,940	36,742,580
	Volume per Period (gal)	151,800	215,170	256,690	114,010	251,000	266,770	229,080	250,980	206,320	212,240	197,470	245,640
	Average Flow Rate (gpm)	4.05	5.34	5.09	3.44	5.28	5.29	5.30	4.98	5.31	5.08	4.90	5.17
TW-1	Meter Reading	16,099,600	16,237,750	16,387,970	16,452,740	16,598,010	16,749,730	16,878,090	17,027,320	17,144,930	17,254,070	17,348,400	17,454,440
	Volume per Period (gal)	102,520	138,150	150,220	64,770	145,270	151,720	128,360	149,230	117,610	109,140	94,330	106,040
	Average Flow Rate (gpm)	2.74	3.43	2.98	1.96	3.06	3.01	2.97	2.96	3.02	2.61	2.34	2.23
TW-2	Meter Reading	56,571,540	57,369,650	58,324,640	58,748,020	59,684,520	60,664,890	61,505,510	62,484,230	63,331,510	64,207,850	65,025,290	66,050,410
	Volume per Period (gal)	705,180	798,110	954,990	423,380	936,500	980,370	840,620	978,720	847,280	876,340	817,440	1,025,120
	Average Flow Rate (gpm)	18.83	19.79	18.95	12.78	19.71	19.45	19.46	19.42	21.79	20.99	20.27	21.57
Total System Flow													
	Meter Reading [3]	251,806,420	253,631,050	255,803,020	256,766,500	258,895,320	261,140,030	263,072,370	264,739,580	266,478,000	268,236,815	269,881,880	271,883,950
	Volume per Period (gal)	1,528,980	1,824,630	2,171,970	963,480	2,128,820	2,244,710	1,932,340	1,667,210	1,738,420	1,758,815	1,645,065	2,002,070
	Average Flow Rate (gpm)	40.84	45.25	43.09	29.09	44.80	44.54	44.73	33.08	44.71	42.12	40.80	42.13

Reporting Period Totals

Total system flow volume treated: [4]	21,606,510	gallons
Treated flow volume discharged to the storm drain:	21,519,530	gallons
Treated flow volume diverted to POTW: [5]	14,640	gallons
Treated flow volume diverted for reuse:	0	gallons
Approximate percent of treated water reused:	0	%
Average system flow rate for reporting period: [6]	41.4	gpm
VOC mass removed:	243.1	lbs
VOC mass removal rate per day: [7]	0.67	lbs/day

Notes:

(1) Volume per Period = volume of water extracted over the period.
(2) Average Flow Rate = volume per period divided by the period duration.
(3) Total system flow is the influent water totalizer reading.
(4) The "Treatment System" flow volume may not match the sum of the individual well flow volumes due to the minor inherent differences expected between the electronic flow measuring devices (wellheads) and the mechanical flow measuring device (treatment system).
(5) This value represents city water discharged from the slurry truck to the POTW during Carbon Change Out Events.
(6) The average system flow rate is calculated by dividing the total flow volume for the period by the duration of the period.
(7) VOC mass removal rate per day equals the VOC mass removed for the period divided by the number of days in the year.

Abbreviations:

lbs/day = pounds per day
gal = gallons
gpm = gallons per minute
VOC = volatile organic compounds
lbs = pounds

Table 2
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COE Study Area and Perimeter Area, Palo Alto, California

Well	TOC Elevation (msl)	Top of Screen Elevation (msl)	Bottom of Screen Elevation (msl)	Depth to Water (ft btoc) 2-Jun-20	Groundwater Elevation (ft msl) 2-Jun-20
EW-4	34.52	9.22	-7.28	19.38	15.14
EW-5	27.41	10.70	-9.30	11.87	15.54
EW-7	35.48	10.43	-0.58	20.23	15.25
EW-8	29.07	6.79	-1.21	15.05	14.02
EW-10	29.11	3.75	-4.25	15.20	13.91
EW-11R	26.90	-4.32	-9.32	17.56	9.34
EW-12	29.76	13.09	3.09	15.33	14.43
EW-15	24.84	2.84	-2.16	15.29	9.55
EW-16	24.89	-7.60	-10.10	15.08	9.81
F21A1U	34.53	14.00	4.00	20.41	14.12
F22A1U	34.56	19.10	9.10	20.54	14.02
F29A1U	30.06	14.56	4.56	18.74	11.32
F30A1U	30.83	15.33	5.33	19.01	11.82
F31A	30.89	0.75	-19.25	19.23	11.66
F32A	27.99	-1.33	-20.33	17.93	10.06
F33B	27.97	-37.37	-47.37	14.40	13.57
F34A	28.99	5.44	-16.06	18.63	10.36
F35B	28.94	-33.41	-42.91	17.95	10.99
F36A	34.35	5.21	-7.29	21.41	12.94
F40A	30.86	9.06	-11.44	19.00	11.86
F41A1	33.01	8.19	-1.81	Destroyed	NA
F42A1R	33.19	4.19	-1.81	18.15	15.04
F46A1	27.88	-4.93	-14.93	18.55	9.33
F49A1	25.63	-6.10	-16.10	18.06	7.57
F51A1	24.18	-6.32	-21.32	16.59	7.59
F53A1U	25.61	8.86	-1.14	17.54	8.07
F54A1U	24.13	2.56	-4.44	17.16	6.97
F55A1U	26.26	5.01	-2.49	19.72	6.54
F56A1	26.23	-6.42	-15.42	18.38	7.85
F57A1U	22.41	8.89	-3.61	14.92	7.49
F58A	22.26	-15.10	-25.10	14.69	7.57
F59A1U	31.42	8.52	-1.48	NM	NA
F61A1U	28.29	6.20	-3.80	NM	NA
F62A1	28.25	-4.20	-14.20	NM	NA
F63A1U/A1	33.55	16.64	1.64	18.37	15.18
F64A1	33.17	1.20	-8.80	17.94	15.23
F65A1U	29.76	-2.74	-10.24	DRY	NA
F66A	29.40	-2.41	-9.91	19.56	9.84
F71A1U	26.68	9.00	3.00	17.89	8.79
F72A2	26.55	-12.98	-18.98	16.61	9.94
F73A1	31.48	-0.43	-5.93	18.23	13.25
F74A	21.73	-12.98	-22.98	12.97	8.76
F75A1U	22.06	7.46	-4.29	14.10	7.96
F77A1U	28.94	11.10	1.10	17.79	11.15
F78A1	35.95	14.49	2.49	20.54	15.41

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F79A2D	33.06	-17.67	-23.67	19.12	13.94
F83A1U	29.67	12.17	7.17	16.08	13.59
F84A1	29.48	-2.52	-10.52	16.22	13.26
F85A1	34.36	7.75	-4.25	19.45	14.91
F87A2R	33.09	-4.91	-14.91	24.59	8.50
F88A1U	26.57	13.26	-1.74	NM	NA
F89A	26.45	-9.05	-20.55	NM	NA
F90A1U	21.33	10.33	-4.67	13.73	7.60
F91A1	21.55	-8.45	-16.95	13.49	9.54
F92A2	28.37	-17.86	-26.86	NM	NA
F93A1U	28.92	14.55	4.55	19.17	9.75
F95A	35.61	11.48	-3.52	22.35	13.26
F96A2D	35.30	-6.12	-12.12	22.01	13.29
F97A	34.11	-1.93	-9.93	20.90	13.21
F98A	34.44	0.61	-8.39	21.01	13.43
F102B	31.04	-55.45	-61.45	14.46	16.58
F106A1	36.67	12.08	2.08	20.91	15.76
F107A2	36.70	-0.82	-5.82	20.91	15.79
F123A1	34.16	6.77	-3.23	18.80	15.36
F124A2	34.31	-7.07	-12.07	18.96	15.35
F125A1	34.16	14.69	4.69	18.84	15.32
F126A2	34.28	0.78	-14.22	18.96	15.32
F127A1R	32.70	4.73	2.70	18.57	14.13
F128A	29.73	-0.77	-7.77	18.07	11.66
F129A1	31.48	0.50	-4.50	17.57	13.91
F130A1U	32.86	20.27	10.27	18.75	14.11
F131A1	32.61	5.21	-4.79	18.23	14.38
F132A2	25.23	-20.77	-23.77	17.07	8.16
F133B	24.32	-40.39	-45.39	15.27	9.05
F134A1	22.84	-10.66	-20.66	15.26	7.58
F135A1	30.15	1.29	-8.73	15.68	14.47
F136A1	31.66	0.11	-9.89	17.10	14.56
F137A1	33.75	8.75	-1.25	18.45	15.30
F138A1U	28.73	4.31	0.31	14.25	14.48
F139A1	28.21	-6.05	-10.05	14.60	13.61
F140A1	27.16	-7.15	-12.15	16.15	11.01
F141A1U	23.64	0.24	-4.76	15.60	8.04
F142A1	22.43	-12.80	-17.80	13.79	8.64
F143A1U	25.49	0.42	-4.58	13.35	12.14
F145A1	31.86	-3.72	-8.72	22.57	9.29
F149A1U	33.79	12.49	2.49	18.88	14.91
F150A1	33.75	-0.75	-4.75	18.77	14.98
F151B	33.42	-40.71	-45.71	16.70	16.72
F153A1U	30.88	19.38	14.38	DRY	DRY
F154A1U	29.10	19.60	14.60	DRY	DRY

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F155A1U	27.52	16.02	6.02	16.73	10.79
F156A1U	32.45	18.45	8.45	18.37	14.08
F159A1U	26.79	10.79	0.79	17.31	9.48
F160A1U	24.45	8.49	-1.55	16.88	7.57
F161A1U	24.43	7.43	-2.57	16.47	7.96
F163A1	21.42	-11.58	-16.58	13.88	7.54
F164A1	22.32	-9.68	-14.68	14.46	7.86
F165A1	32.16	1.16	-1.85	19.04	13.12
F166A1	30.83	3.83	1.17	16.61	14.22
F167A1U	32.51	20.51	10.51	18.53	13.98
F168A1U	34.30	23.30	17.30	16.71	17.59
F169A2	36.64	-7.16	-12.16	20.62	16.02
M-1	34.26	14.65	-14.85	18.81	15.45
M-2	36.68	17.11	-7.89	21.20	15.48
O17B	38.31	-27.35	-36.85	22.36	15.95
O27A1	40.04	18.04	8.04	23.53	16.51
O28A1	38.55	13.95	3.95	23.20	15.35
O52A2	38.59	-3.08	-16.58	23.16	15.43
O67A2	36.66	-7.44	-22.44	21.35	15.31
O68A1	37.27	10.81	-4.19	21.87	15.40
O69A2D	34.98	-14.30	-25.80	21.10	13.88
O70A1	35.20	5.64	0.14	20.21	14.99
O100B	36.10	-24.51	-30.51	19.99	16.11
O104A1	36.67	16.58	6.58	20.65	16.02
O105A2	36.51	1.48	-6.52	20.51	16.00
O108A1	35.74	15.46	5.46	20.02	15.72
O109A2	35.86	-1.62	-9.62	20.19	15.67
O110A1	37.04	13.70	3.70	21.38	15.66
O111A2	37.20	-1.16	-9.16	21.57	15.63
O112A1	37.80	11.33	3.33	22.23	15.57
O113A2	37.61	-1.21	-11.21	22.05	15.56
O114A2	35.99	-2.71	-7.71	20.49	15.50
O115A1	34.78	10.36	4.36	19.77	15.01
O116A1	30.42	11.70	4.70	14.76	15.66
O117A2	30.36	-2.40	-10.40	14.65	15.71
O118B	30.26	-32.70	-42.70	13.45	16.81
O119A1	39.82	9.40	-0.60	24.40	15.42
O120A2	40.04	-5.40	-15.40	24.62	15.42
O121A2	38.10	1.90	-8.11	21.67	16.43
O122A2	37.91	0.66	-9.34	21.37	16.54
O152B	35.45	-34.55	-39.55	19.57	15.88
O162A2	37.71	-7.79	-11.29	20.92	16.79
OB4-1	37.34	9.29	1.29	21.55	15.79
OB4-2	36.94	-1.55	-9.55	21.18	15.76
OB5-1	30.57	11.70	-8.30	14.91	15.66

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OB5-2	40.02	12.77	3.77	24.43	15.59
OB5-3	30.24	11.80	4.30	14.61	15.63
OB5-4	30.32	-1.10	-8.60	14.56	15.76
OB5-5	39.83	0.27	-8.43	24.25	15.58
OB7-1	38.63	9.48	-0.52	23.29	15.34
OB7-2	39.85	9.22	-0.78	24.44	15.41
OB7-3	40.14	10.30	0.30	24.79	15.35
OB8-1	32.44	6.82	-3.18	18.04	14.40
OB8-2	33.14	7.41	-2.60	18.45	14.69
OB8-3	32.08	6.38	-3.62	17.59	14.49
OB9-2	32.56	4.71	-5.29	18.38	14.18
OB10-1	33.02	5.55	-4.45	19.00	14.02
OB10-2	33.96	5.51	-4.49	19.77	14.19
OB11-1	27.60	6.35	-3.65	18.18	9.42
OB11-2	23.87	7.12	-2.88	14.02	9.85
OB11-3	28.38	8.96	-1.04	18.53	9.85
OB11-4	28.00	-5.28	-10.28	18.69	9.31
OB11-5	28.80	-3.76	-9.76	19.42	9.38
OB13-1	29.86	-3.02	-7.52	15.44	14.42
OB14-1	27.94	-3.09	-8.09	14.15	13.79
OB15-1	26.15	4.67	-0.33	16.65	9.50
OB16-1	26.25	-6.60	-11.60	16.04	10.21
P17	39.84	7.84	-5.16	23.52	16.32
P21	39.57	7.57	-5.43	24.40	15.17
P1-A1	34.33	10.13	0.13	19.29	15.04
P1-A2	34.16	-1.84	-11.84	18.75	15.41
P2-A2	33.98	-1.02	-11.02	18.56	15.42
P3-1	25.06	6.84	1.84	19.05	6.01
P3-A2	34.59	-0.41	-10.41	19.14	15.45
P4-A2	34.93	0.93	-9.07	19.44	15.49
P5-A2	34.85	-3.15	-10.15	19.33	15.52
RW-1	25.63	18.90	-1.10	15.41	10.22
RW-2	25.84	19.20	-0.80	16.21	9.63
RW-4	25.16	18.87	-1.13	15.33	9.83
RW-5	22.96	19.03	-0.97	13.13	9.83
RW-6	25.56	18.73	-1.27	16.16	9.40
SH1	27.99	9.69	-5.31	21.54	6.45
T1A	34.25	-0.75	-10.75	19.80	14.45
TW-1	37.79	9.03	14.03	27.40	10.39
TW-2	37.67	-5.18	-19.18	obst. at 32.50	NA
V8-1	37.38	13.16	-6.84	21.49	15.89
V8-2	39.43	12.77	-7.23	23.90	15.53
V8-2X	35.59	14.01	-5.99	20.01	15.58
V8-3	36.71	1.45	-8.55	22.20	14.51
V8-4	37.16	14.17	-5.83	22.10	15.06

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V8-5	37.98	12.43	-7.57	22.25	15.73
V8-6	37.57	11.32	-8.18	21.65	15.92
V8-7	36.92	9.84	-10.16	22.14	14.78
V8-8	36.83	14.07	-5.93	22.19	14.64
V8-8X	33.69	2.48	-7.52	18.61	15.08
V8-13B	36.37	-21.81	-31.81	19.99	16.38
V8-22	36.60	3.50	-6.50	21.11	15.49
V8-34	35.96	6.96	-8.04	20.59	15.37
V-9	34.41	-1.20	-21.20	19.44	14.97
V-9X	32.90	-2.15	-7.15	Destroyed	NA
V-10	36.34	7.00	-8.00	21.80	14.54
V-16A1UR	39.31	24.31	14.31	21.71	17.60
V-23R	39.21	6.21	-4.79	21.69	17.52
W-3A1U	28.89	14.19	-0.81	16.71	12.18
W-7A1U	31.09	16.55	4.05	17.61	13.48
W-10A1U	27.80	5.91	0.91	19.41	8.39
W-11A1U	34.72	2.76	-2.24	21.72	13.00
W-12A1UR	28.38	10.56	0.56	18.41	9.97
W-13A2	27.92	-12.73	-22.73	19.39	8.53
W-16A1	28.56	-2.93	-10.43	19.00	9.56
W-17A2	28.19	-12.59	-17.59	18.66	9.53
W-19A2	30.75	-11.46	-21.46	20.18	10.57
W157A1U	30.96	21.96	11.96	18.05	12.91
W158A1U	29.19	14.19	9.19	17.77	11.42

Abbreviations:
NA = not applicable
ft msl = feet above mean sea level
TOC = top of casing
msl = mean sea level
ft btoc = feet below top of casing

Table 3
Self-Monitoring Program Sampling and Analysis Schedule
COE Study Area and Perimeter Area, Palo Alto, California

Well	Annual (even years)	Biennial (odd years)
BW-4 (1)		
EW-1 (2)		
EW-2 (2)		
EW-4		8010+Freon® 113
EW-5		8010+Freon® 113
EW-6 (2)		
EW-7 *		8010+Freon® 113
EW-8 *		8010+Freon® 113
EW-9 (3)		
EW-10		8010+Freon® 113
EW-11R	8010+Freon® 113	
EW-12	8010+Freon® 113	
EW-13 (4)		
EW-14 (5)		
EW-15		8010+Freon® 113
EW-16		8010+Freon® 113
F21A1U		8010+Freon® 113
F22A1U *		8010+Freon® 113
F23A (2)		
F32A		8010+Freon® 113
F33B		8010+Freon® 113
F34A	8010+Freon® 113	
F36A		8010+Freon® 113
F38A (6)		
F40A	8010+Freon® 113	
F42A1R (7) *		8010+Freon® 113
F43A1U (2)		
F44A (2)		
F45A1U (2)		
F46A1		8010+Freon® 113
F49A1	8010+Freon® 113	
F53A1U	8010+Freon® 113	
F54A1U		8010+Freon® 113
F57A1U	8010+Freon® 113	
F58A	8010+Freon® 113	
F59A1U		8010+Freon® 113
F61A1U		8010+Freon® 113
F62A1		8010+Freon® 113 (13)
F63A1U/A1		8010+Freon® 113
F64A1		8010+Freon® 113
F73A1		8010+Freon® 113
F74A	8010+Freon® 113	
F75A1U		8010+Freon® 113
F77A1U		8010+Freon® 113
F78A1		8010+Freon® 113
F85A1		8010+Freon® 113
F88A1U		8010+Freon® 113
F92A2		8010+Freon® 113 (13)
F95A		8010+Freon® 113
F97A		8010+Freon® 113

Table 3
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Well	Annual (even years)	Biennial (odd years)
F98A		8010+Freon® 113
F106A1		8010+Freon® 113
F107A2		8010+Freon® 113
F123A1		8010+Freon® 113
F124A2		8010+Freon® 113
F125A1		8010+Freon® 113
F127A1R [8]	8010+Freon® 113	
F129A1		8010+Freon® 113
F130A1U		8010+Freon® 113
F131A1		8010+Freon® 113
F133B		8010+Freon® 113
F135A1		8010+Freon® 113
F136A1		8010+Freon® 113
F138A1U	8010+Freon® 113	
F139A1	8010+Freon® 113	
F140A1		8010+Freon® 113
F141A1U	8010+Freon® 113	
F142A1	8010+Freon® 113	
F143A1U		8010+Freon® 113
F145A1		8010+Freon® 113
F151B		8010+Freon® 113
O17B		8010+Freon® 113
O28A1		8010+Freon® 113
O52A2	8010+Freon® 113	
O67A2 *		8010+Freon® 113
O68A1 *		8010+Freon® 113
O69A2D	8010+Freon® 113	
O70A1		8010+Freon® 113
O100B		8010+Freon® 113
O104A1		8010+Freon® 113
O105A2		8010+Freon® 113
O108A1		8010+Freon® 113
O109A2		8010+Freon® 113
O110A1		8010+Freon® 113
O111A2		8010+Freon® 113
O112A1		8010+Freon® 113
O113A2		8010+Freon® 113
O114A2	8010+Freon® 113	
O115A1		8010+Freon® 113
O116A1		8010+Freon® 113
O117A2		8010+Freon® 113
O118B	8010+Freon® 113	
O119A1	8010+Freon® 113	
O120A2 *		8010+Freon® 113
O121A2		8010+Freon® 113
O122A2		8010+Freon® 113
RW-1		8010+Freon® 113
RW-2		8010+Freon® 113
RW-4		8010+Freon® 113
RW-5 *		8010+Freon® 113

Table 3
Self-Monitoring Program Sampling and Analysis Schedule
COE Study Area and Perimeter Area, Palo Alto, California

Well	Annual (even years)	Biennial (odd years)
RW-6		8010+Freon® 113
SH1		8010+Freon® 113
V8-1 *		8010+Freon® 113
V8-2		8010+Freon® 113
V8-2X		8010+Freon® 113
V8-3		8010+Freon® 113
V8-4		8010+Freon® 113
V8-5 *		8010+Freon® 113
V8-6		8010+Freon® 113
V8-7	8010+Freon® 113	
V8-8 *		8010+Freon® 113
V8-8X		8010+Freon® 113
V8-13B		8010+Freon® 113
V8-22		8010+Freon® 113
V-9		8010+Freon® 113
V-9X (9)		8010+Freon® 113
V-10		8010+Freon® 113
V-23R (10)		8010+Freon® 113
V-33A2D (10)		
VB-1 (11)		
W-3A1U	8010+Freon® 113	
W-7A1U		8010+Freon® 113
W-9A1U (12)		
W-10A1U		8010+Freon® 113
W-11A1U		8010+Freon® 113
W-12A1U-R		8010+Freon® 113
W-13A2	8010+Freon® 113	
W-16A1		8010+Freon® 113
W-17A2		8010+Freon® 113
W-19A2	8010+Freon® 113	
OEU - Manhole		8010+Freon® 113

Notes:

(1) Well BW-4 was decommissioned on March 15, 2002.

(2) Wells F23A, F43A1U, F44A, F45A1U, EW-1, EW-2, and EW-6 were decommissioned in July 2005.

(3) Approved for removal from SMP on February 9, 2007.

(4) To facilitate property redevelopment monitoring well EW-13 was destroyed on December 14, 2017.

(5) Well EW-14 was decommissioned in July of 2006, per RWQCB approval.

(6) To facilitate property redevelopment monitoring wells F38A and F101B were destroyed on April 5, 2018. A replacement well is to be installed once property development is complete.

(7) At the request of the RWQCB, F42A1 was overdrilled and replaced with F42A1R in the same borehole on March 12, 2013.

(8) To facilitate property redevelopment monitoring well F127A1 was destroyed and replaced with F127A1R just outside of the property boundary on January 24, 2012.

(9) To facilitate property redevelopment former extraction well V-9X was destroyed on August 30, 2019 per RWQCB approval.

(10) To facilitate property redevelopment monitoring wells V-23 and V-33A2D were destroyed. Replacement monitoring well V-23R was installed within the property boundary on February 6, 2017.

(11) To facilitate property redevelopment, monitoring well VB-1 was destroyed on October 5, 2017 per RWQCB approval.

(12) Well W-9A1U/A1 was decomissioned in 1998, per RWQCB approval.

(13) Per RWQCB approval on May 14, 2020, monitoring frequency of wells F62A1 and F92A2, located in the Caltrain right of way, were reduced to biennial.

* Well is being monitored more frequently on a self-directed basis.

Abbreviations:

8010+Freon® 113 = Reporting EPA Method 8010 analytes plus Freon® 113 analyzed by EPA Method 8260B

OEU = Oregon Expressway Underpass

Biennial = Sampled in odd years (e.g. 2019, 2021)

Table 4
Summary of Groundwater Quality Sampling Activities- June 2020
COE Study Area and Perimeter Area, Palo Alto, California

Well	Sample Date	Sample Method	Sampled on a Self-Directed Basis	Volatile Organic Compounds (VOCs) [1]	EISB Parameters	Field Duplicate	Equipment Blank
EW-4	6/2/2020	IE	X	X			
EW-7	6/3/2020	IE	X	X			
EW-8	6/2/2020	AE	X	X			
EW-10	6/2/2020	AE	X	X			
EW-11R	6/4/2020	PDBS/HS		X	X[2]		
EW-12	6/4/2020	Conventional		X			
EW-15	6/3/2020	Conventional	X	X			X
EW-16	6/3/2020	IE	X	X			
F21A1U	6/3/2020	PDBS	X	X			
F22A1U	NS	NS					
F29A1U	6/3/2020	Conventional	X	X		X	
F32A	6/2/2020	PDBS	X	X			
F34A	6/2/2020	PDBS		X			
F40A	6/3/2020	Conventional		X			
F42A1R	6/2/2020	PDBS	X	X			
F49A1	6/2/2020	PDBS		X			
F53A1U	6/2/2020	PDBS		X			
F57A1U	6/4/2020	PDBS		X			
F58A	6/4/2020	PDBS		X		X	
F63A1U/A1	6/4/2020	PDBS	X	X			
F73A1	6/2/2020	PDBS	X	X			
F74A	6/4/2020	PDBS		X			
F75A1U	6/4/2020	PDBS	X	X			
F77A1U	6/2/2020	PDBS	X	X			
F83A1U	6/3/2020	Conventional	X	X			
F85A1	6/4/2020	PDBS	X	X		X	
F97A	6/3/2020	PDBS	X	X			
F98A	6/3/2020	PDBS	X	X			
F123A1	6/4/2020	PDBS	X	X			
F124A2	6/4/2020	PDBS	X	X			
F126A2	6/3/2020	Conventional	X	X		X	
F127A1R	6/3/2020	PDBS		X			
F129A1	6/3/2020	PDBS	X	X			
F130A1U	6/2/2020	PDBS	X	X			
F137A1	6/3/2020	Conventional	X	X			
F138A1U	6/2/2020	PDBS		X			
F139A1	6/2/2020	PDBS		X			
F141A1U	6/4/2020	PDBS		X			
F142A1	6/4/2020	PDBS		X			
F145A1	6/3/2020	Conventional	X	X		X	
F155A1U	6/2/2020	PDBS	X	X			
F156A1U	6/2/2020	PDBS	X	X			
F160A1U	6/4/2020	PDBS	X	X			

Table 4
Summary of Groundwater Quality Sampling Activities- June 2020
COE Study Area and Perimeter Area, Palo Alto, California

Well	Sample Date	Sample Method	Sampled on a Self-Directed Basis	Volatile Organic Compounds (VOCs) [1]	EISB Parameters	Field Duplicate	Equipment Blank
F161A1U	6/4/2020	PDBS	X	X			
F166A1	6/4/2020	PDBS	X	X			
F167A1U	6/3/2020	PDBS	X	X			
O28A1	6/4/2020	Conventional	X	X		X	
O52A2	6/3/2020	PDBS		X			
O67A2	6/3/2020	PDBS	X	X			
O68A1	6/3/2020	PDBS	X	X			
O108A1	6/4/2020	PDBS	X	X			
O109A2	6/4/2020	PDBS	X	X			
O110A1	6/4/2020	PDBS	X	X			
O111A2	6/4/2020	PDBS	X	X			
O112A1	6/4/2020	PDBS	X	X			
O114A2	6/3/2020	PDBS		X			
O115A1	6/4/2020	PDBS	X	X			
O118B	6/2/2020	PDBS		X			
O119A1	6/23/2020	PDBS		X			
O120A2	6/23/2020	PDBS	X	X		X	
O121A2	6/4/2020	PDBS	X	X			
O162A2	6/3/2020	Conventional	X	X			
OB11-2	6/2/2020	Conventional	X	X	X[2]		
P3-A2	6/3/2020	PDBS	X	X			
P5-A2	6/3/2020	PDBS	X	X			
P17	5/4/2020	Conventional	X	X			
P21	5/4/2020	Conventional	X	X			
RW-1	6/2/2020	PDBS/HS	X	X	X[2]		
RW-2	6/4/2020	PDBS/HS	X	X	X[2]		
RW-4	6/4/2020	PDBS	X	X			
RW-5	6/2/2020	PDBS/HS	X	X	X[2]		
RW-6	6/4/2020	PDBS/HS	X	X	X[2]		
SH1	6/4/2020	PDBS	X	X			
T1A	6/4/2020	PDBS	X	X			
TW-1	6/2/2020	AE	X	X			
TW-2	6/2/2020	AE	X	X			
V8-1	6/3/2020	PDBS	X	X			
V8-2	5/3/2020	Conventional	X	X			
V8-3	6/3/2020	PDBS	X	X			
V8-4	6/3/2020	PDBS	X	X		X	
V8-7	6/3/2020	PDBS		X			
V8-8	6/3/2020	PDBS	X	X			
V-9	5/3/2020	Conventional	X	X			
V-10	6/3/2020	PDBS	X	X			
V-16A1UR	6/3/2020	PDBS	X	X			
V-23R	6/3/2020	PDBS	X	X			

Table 4
Summary of Groundwater Quality Sampling Activities- June 2020
COE Study Area and Perimeter Area, Palo Alto, California

Well	Sample Date	Sample Method	Sampled on a Self-Directed Basis	Volatile Organic Compounds (VOCs) (1)	EISB Parameters	Field Duplicate	Equipment Blank
W-3A1U	6/4/2020	PDBS		X		X	
W-7A1U	6/4/2020	PDBS	X	X			
W-11A1U	6/4/2020	PDBS	X	X			
W-12A1U-R	6/4/2020	PDBS	X	X			
W-13A2	6/4/2020	PDBS		X			
W-16A1	6/2/2020	PDBS/HS	X	X	X(2)		
W-19A2	6/4/2020	PDBS		X			

Notes and Abbreviations:

(1) Analyzed using EPA Method 8260B for the EPA Method 8010 list of halogenated VOCs, including Freon 113. EPA Method 8260B superseded EPA Method 8010, which is the analytical method specified in the modified Self-Monitoring Program dated May 4, 2001.

(2) Field tested for temperature, pH, conductivity, DO, ORP, and Fe(II) and lab tested for TOC, dissolved gases, and Dhc & vcrA (wells RW-1, RW-5, and W-16A1 only)

PDBS - Passive Diffusive Bag Sampler
HS - Hydrasleeve Sampler
AE - Active Extraction Well
IE - Inactive Extraction Well
NS - Not Sampled

Table 5
Groundwater Purging and Sampling Records - June 2020
COE Study Area and Perimeter Area, Palo Alto, California

Well	Well Diameter (inches)	Purge Method	Date Sampled	Time Sampled	Depth to Water (ft btoc)	Depth to Bottom of Well (ft btoc)	Three Well Volumes [1] (gal)	Amount of Water Removed (gal)	Purged Dry [2] (Y/N)	Temp. (deg C)	Electrical Conductivity (µmoh/cm)	pH (units)
EW-4	6	IE	6/2/2020	10:00 AM	19.38	NA	NA	180	N	21.7	1,315	7.31
EW-7	6	IE	6/3/2020	9:15 AM	20.23	NA	NA	180	N	21.4	1,368	6.64
EW-12	6	Conventional	6/4/2020	7:30 AM	15.36	26.55	50.4	50.4	N	19.4	1,525	6.94
EW-15	6	Conventional	6/3/2020	8:40 AM	15.25	25.76	47.4	47.4	N	21.4	1,563	6.69
EW-16	6	IE	6/2/2020	9:30 AM	15.08	NA	NA	32.5	N	22.8	1,257	7.51
F29A1U	2	Conventional	6/3/2020	11:49 AM	18.77	25.45	3.0	3.0	N	24.1	1,161	6.91
F40A	2	Conventional	6/3/2020	1:04 PM	19.00	42.35	11	11	N	22.8	1,063	7.38
F83A1U	4	Conventional	6/3/2020	10:05 AM	16.12	22.04	11.7	11.7	N	20.8	1,537	7.26
F126A2	4	Conventional	6/3/2020	10:50 AM	19.21	48.14	58.2	58.2	N	21.0	1,393	7.79
F137A1	2	Conventional	6/3/2020	12:10 PM	18.52	35.13	8.4	8.4	N	26.9	1,751	7.39
F145A1	4	Conventional	6/2/2020	1:00 PM	22.55	NA	NA	15	N	21.5	1,492	7.60
O28A1	2	Conventional	6/4/2020	7:45 AM	23.20	32.88	4.8	4.8	N	18.7	1,391	6.58
O162A2	2	Low-flow [3]	6/3/2020	8:32 AM	20.92	47.70	NA	1.8 L	N	21.4	1,417	6.83
OB11-2	2	Conventional	6/2/2020	9:55 AM	14.02	27.18	6.6	6.6	N	18.3	1,987	6.99
P17	2	Low-flow	5/4/2020	9:50 AM	23.52	44.50	NA	5.0 L	N	19.2	1,523	6.77
P21	2	Low-flow	5/4/2020	1:50 PM	24.40*	44.50	NA	3.5 L	N	20.0	2,245	5.58
V8-2	4	Low-flow	5/3/2020	11:15 AM	23.14	46.70	NA	5.0 L	N	19.7	1,314	6.71
V-9	4	Low-flow	5/3/2020	9:00 AM	17.36	50.10	NA	3.5 L	N	19.6	1,304	6.76

Notes:

(1) Well Volume = The volume of one well interval is used in calculating the total pre-sample purge. This interval is generally considered to be the length of submerged casing.

(2) Purged Dry = Well completely evacuated and allowed to recharge.

(3) Well purged using low-flow method

* = approximate depth to water; Oily layer caused difficulty in collected water level

Abbreviations:

IE - Inactive Extraction Well

gal = gallons

deg C = degrees Celsius

µmhos/cm = micromhos per centimeter

ft btoc = feet below top of casing

L = liters

NA = Not available/applicable

Table 6
Passive Diffusion Bag Sampler Deployment Depths - June 2020
COE Study Area and Perimeter Area, Palo Alto, California

Well I.D.	Well Diameter (in.)	Well Depth (ft bgs)	Screened Interval (ft bgs)	Screen Length (ft)	PDBS Deployment Depth [1] (ft bgs)
EW-11R	6	38.5	33.5 - 38.5	5.0	32.0
F21A1U	2	35.0	20.0 - 30.0	10.0	25.0
F22A1U	2	30.0	15.0 - 25.0	10.0	21.0
F32A	2	49.5	30.0 - 49.0	19.0	40.0
F34A	2	46.0	24.0 - 45.5	21.5	36.0
F42A1R	2	35.0	29.0 - 35.0	6.0	30.0
F49A1	4	42.0	32.0 - 42.0	10.0	38.0
F53A1U	4	27.0	17.0 - 27.0	10.0	23.0
F57A1U	4	26.5	14.0 - 26.5	12.5	20.0
F58A	4	48.5	38.0 - 48.0	10.0	44.0
F63A1U/A1	4	32.5	17.5 - 32.5	15.0	23.5
F73A1	4	38.0	32.5 - 38.0	5.5	34.0
F74A	4	46.0	35.5 - 45.5	10.0	40.0
F75A1U	4	27.0	15.0 - 26.8	11.75	21.0
F77A1U	4	29.0	18.5 - 28.5	10.0	23.0
F85A1	4	39.0	27.0 - 39.0	12.0	31.7
F97A	4	44.0	36.0 - 44.0	8.0	40.0
F98A	4	42.5	33.5 - 42.5	9.0	39.0
F123A1	4	38.5	28.0 - 38.0	10.0	34.0
F124A2	4	47.5	42.0 - 47.0	5.0	44.5
F127A1R	4	37.5	32.0 - 37.0	5.0	27.25
F129A1	4	37.0	31.5 - 36.5	5.0	34.0
F130A1U	4	23.4	13.0 - 23.0	10.0	21.0
F138A1U	4	28.5	24.5 - 28.5	4.0	26.5
F139A1	4	38.5	34.5 - 38.5	4.0	36.5
F141A1U	4	29.2	24.0 - 29.0	5.0	26.75
F142A1	4	41.5	36.0 - 41.0	5.0	39.0
F155A1U	2	21.5	11.5 - 21.5	10.0	17.5
F156A1U	2	24.0	14.0 - 24.0	10.0	19.0
F160A1U	2	26.0	16.0 - 26.0	10.0	22.0
F161A1U	2	17.0	17.0 - 27.0	10.0	23.0
F166A1	2	32.0	27.0 - 32.0	5.0	30.5
F167A1U	2	22.5	12.0 - 22.0	10.0	19.5
O52A2	4	52.5	39.0 - 52.5	13.5	42.75
O67A2	4	60.0	45.0 - 60.0	15.0	52.0
O68A1	4	42.0	27.0 - 42.0	15.0	34.0
O108A1	4	30.5	20.0 - 30.0	10.0	25.0
O109A2	4	45.0	37.0 - 45.0	8.0	41.0
O110A1	4	33.0	23.0 - 33.0	10.0	28.0
O111A2	4	46.0	38.0 - 46.0	8.0	42.0
O112A1	4	33.0	25.0 - 33.0	8.0	28.0
O114A2	4	43.0	38.0 - 43.0	5.0	40.5
O115A1	4	31.0	25.0 - 31.0	6.0	27.5
O118B	4	70.5	60.0 - 70.0	10.0	64.0
O119A1	4	39.5	29.0 - 39.0	10.0	34.0
O120A2	4	54.5	44.0 - 54.0	10.0	49.0
O121A2	4	47.0	37.0 - 47.0	10.0	41.0
P3-A2	2	45.0	35.0 - 45.0	10.0	41.0
P5-A2	2	45.0	38.0 - 45.0	7.0	42.5
RW-1	4	30.0	10.0 - 30.0	20.0	29.4
RW-2	4	30.0	10.0 - 30.0	20.0	29.3
RW-4	4	30.0	10.0 - 30.0	20.0	29.7

Table 6
Passive Diffusion Bag Sampler Deployment Depths - June 2020
COE Study Area and Perimeter Area, Palo Alto, California

Well I.D.	Well Diameter (in.)	Well Depth (ft bgs)	Screened Interval (ft bgs)	Screen Length (ft)	PDBS Deployment Depth [(1)] (ft bgs)
RW-5	4	30.0	10.0 - 30.0	20.0	22.0
RW-6	4	30.0	10.0 - 30.0	20.0	29.5
SH1	4	35.0	20.0 - 35.0	15.0	28.0
T1A	2	45.0	35.0 - 45.0	10.0	33.0
V8-1	2	45.0	25.0 - 45.0	20.0	35.0
V8-2	2	45.0	25.0 - 45.0	20.0	35.0
V8-3	2	44.0	34.0 - 44.0	10.0	39.0
V8-4	2	43.0	23.0 - 43.0	20.0	35.0
V8-7	4	46.5	26.5 - 46.5	20.0	39.5
V8-8	4	44.0	24.0 - 44.0	20.0	35.0
V-9	4	56.0	36.0 - 56.0	20.0	39.5
V-10	2	45.0	30.0 - 45.0	15.0	37.0
V-16A1UR	2	25.0	15.0 - 25.0	10.0	22.5
V-23R	2	43.0	33.0 - 43.0	10.0	38.0
W-3A1U	4	32.5	17.5 - 32.5	15.0	27.0
W-7A1U	4	27.5	15.0 - 27.5	12.5	21.0
W-11A1U	4	33.0	28.0 - 33.0	5.0	30.0
W-12A1U-R	4	28.0	18.0 - 28.0	10.0	24.0
W-13A2	4	52.0	42.0 - 52.0	10.0	48.0
W-16A1	4	39.5	32.0 - 39.5	7.5	36.0
W-19A2	4	53.5	43.0 - 53.0	10.0	50.0

Notes:

(1) PDBS deployment depth equates to the midpoint of the PDBS. The PDBS is 18 inches long.

Abbreviations:

in. = inches

ft bgs = Feet below ground surface

PDBS = Passive diffusion bag sampler

Table 7
Groundwater Sample Collection QA/QC Results - June 2020
COE Study Area and Perimeter Area, Palo Alto, California

Who performed the sampling? **(i.e., firm name, address, phone)**	Blaine Tech Services 1680 Rogers Avenue San Jose, California 95112 Phone: (408) 573-0555 Fax: (408) 573-7771 Contact: Greg Roberts
Chain-of-custody forms were completed for all samples?	Yes
Field parameters stabilized prior to taking samples?	Yes, where applicable to sampling method
Zero head space in sample containers (VOCs only)?	No
Samples were preserved according to analytical method?	No
Required field QA/QC samples were taken?	
Appropriate number of field duplicates taken?	Yes
Trip blanks included with all sample shipments?	Yes
Appropriate number of equipment blank samples taken?	Yes

Explain any "Exception" answers below:

The following volatile sample was analyzed with significant headspace in the sample vial(s) due to multiple runs performed: C0620-V84, C0620-DUP4, and C0620-TB4. Significant headspace is defined as a bubble greater than 6 mm in diameter.

The following sample(s) was collected in a properly preserved vial; however, the pH of 3 was outside the required criteria when verified by the laboratory. The sample was analyzed within the 7-day holding time specified for unpreserved samples: C0620-OB112.

The following sample was collected in a properly preserved vial; however, the sample pH of 4 was outside the required criteria when verified by the laboratory. The sample was analyzed within the 7-day holding time specified for unpreserved sample: C0620-OB112

Abbreviations:

QA/QC = Quality assurance/quality control

VOCs = Volatile organic compounds

Table 8
Groundwater Sample Chemical Analysis QA/QC Results - June 2020
COE Study Area and Perimeter Area, Palo Alto, California

Who performed analysis? **(i.e., lab name, address, contact, phone)**	Eurofins TestAmerica 1220 Quarry Lane Pleasanton, California 94566 Phone: (925) 484-1919 Fax: (925) 484-1096 contact: Afsaneh Salimpour Pace Analytical 7979 Innovation Park Dr. Baton Rouge, LA 70820 Phone: (225) 769-4900 Contact: Ruth Welch SiREM 130 Stone Rd. West Guelph, Ontario, Canada N1G 3Z2 Phone: +1 (519) 822-2265 Contact: Ximena Druar
Analytical methods used? **(method number and chemical category)**	EPA Method 8260B for Halogenated Volatile Organic Compounds (former EPA Method 8010 list) + Freon® 113 EPA SM 5310C for Total Organic Carbon EPA Method RSK175 Gene-Trac® Dehalococcoides Assay Gene-Trac® Functional Gene Assay
Is the lab state-certified for the above analytical methods?	Yes
Analysis performed according to standard methods?	Yes
Sample holding times met?	Yes
QA/QC analyses run consistent with analytical methods (includes blanks, MS/MSDs, etc.)	Yes
QA/QC results meet all acceptance criteria?	
Trip blank samples non-detect for all analytes?	Yes
Surrogate recovery acceptable to analytical laboratory?	No
MS/MSD samples within acceptance criteria?	No
LCS/LCSD samples within acceptance criteria?	No
Field duplicate within acceptable relative percent difference?	Yes
QA/QC results and acceptance criteria on file?	Yes

Explain any "No" answers below:

Surrogate recovery for the following sample was outside the upper control limit: C0620-TB4. This sample did not contain any target analytes; therefore, re-analysis was not performed. 1,2-dichloroethane (Surr) high.

The MS/MSD recoveries for the following sample associated with analytical batch 440-612852 were outside control limits: (720-98776-B-5 MS) and (720-98776-B-5 MSD). The associated LCS recovery met acceptance criteria.

The MS/MSD recoveries for analytical batch 440-611759 were outside control limits. Sample matrix interference is suspected because the associated LCS recovery was within acceptance limits.

Table 8
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Explain any "No" answers below (continued):

Reanalysis of the following sample was performed outside of the analytical holding time due to client requesting confirmation analysis after hold time: C0620-DUP6.

Sample C0620-RW2 was analyzed outside holding time. The sample was originally analyzed within holding time but required re-analysis at a 2X to bracket the concentration of Methane within the calibration range of the instrument. The dilution is reflected in elevated detection limits.

The continuing calibration verification (CCV) associated with batch 440-611759 recovered above the upper control limit for Chloromethane, Dichlorodifluoromethane, Bromomethane and Chloroethane. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated samples are impacted: C0620-EW11R and (CCVIS 440-611759/2).

The CCV associated with batch 440-612163 recovered above the upper control limit for Vinyl chloride. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated samples are impacted: C0620-O28A1, C0620-DUP3, C0620-O67A2 and (CCVIS 440-612163/2).

The CCV associated with batch 440-612410 recovered above the upper control limit for Vinyl chloride. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated samples are impacted: C0620-O115A1, C0620-O121A2, C0620-O162A2, C0620-P5A2, C0620-T1A and (CCVIS 440-612410/2).

The CCV associated with batch 440-611396 recovered above the upper control limit for Vinyl chloride, Chloroethane, Dichlorodifluoromethane, Chloromethane and Bromomethane. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated samples are impacted: C0620-EW10, C0620-TB1, C0620-F77A1U, C0620-EW8, C0620-F155A1U, C0620-F73A1, C0620-F34A, C0620-F53A1U, C0620-F49A1, C0620-F32A, C0620-F42A1R, C0620-F156A1U, C0620-F130A1U, C0620-TW1, C0620-TW2, C0620-EW4, C0620-O118B (CCVIS 440-611396/2) and (720-98726-A-4).

The CCV associated with batch 440-611750 recovered above the upper control limit for Tetrachloroethene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated samples are impacted: C0620-F98A, C0620-F124A2, C0620-F126A2, C0620-DUP8, C0620-F127A1R, C0620-F129A1 and (CCVIS 440-611750/2).

The continuing calibration verification (CCV) associated with batch 440-611625 recovered above the upper control limit for Vinyl chloride. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

The LCS for analytical batch 440-611396 recovered outside control limits for the following analytes: Vinyl chloride, Chloroethane, Dichlorodifluoromethane, Chloromethane and Bromomethane. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

The LCS for analytical batch 440-611750 recovered outside control limits for the following analyte: Tetrachloroethene. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data have been reported.

The LCS for analytical batch 440-611759 recovered outside control limits for the following analytes: Chloromethane, Dichlorodifluoromethane, Vinyl chloride and Bromomethane. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Abbreviations:
QA/QC = Quality assurance/quality control
MS/MSD = Matrix spike/matrix spike duplicate
LCS/LCSD = Laboratory control sample/laboratory control sample duplicate
CCV = Continuing calibration verification
RPD = Relative percent difference

Table 9
Summary of Compounds Detected in Groundwater - June 2020
COE Study Area and Perimeter Area, Palo Alto, California

Location	Type	Date	PCE	TCE	1,1,1-TCA	1,1-DCA	1,1-DCE	1,2-DCA	1,2-DCB	cis-1,2-DCE	trans-1,2-DCE	Freon 113	VC	Other Constituents
EW-4		2-Jun-20	**37**	**16**	**2.5**	**2.5**	**11**	ND (<0.50)	ND (<0.50)	**2.7**	ND (<0.50)	ND (<2.0)	ND (<0.50)	
EW-7		3-Jun-20	**36**	**150**	**15**	**2.3**	**11**	ND (<0.50)	**96**	**9.4**	ND (<0.50)	**97**	ND (<0.50)	**1,2,4-TCB = 12; 1,4-DCB = 1.3; Freon 11 = 0.57**
EW-8		2-Jun-20	**8.5**	**300**	**49**	**4.0**	**17**	ND (<2.5)	ND (<2.5)	**30**	ND (<2.5)	**250**	ND (<2.5)	
EW-10		2-Jun-20	ND (<0.50)	**17**	**1.5**	ND (<0.50)	**1.2**	ND (<0.50)	ND (<0.50)	**1.7**	ND (<0.50)	**2.3**	ND (<0.50)	
EW-11R		4-Jun-20	ND (<2.5)	ND (<2.5)	ND (<2.5)	**6.3**	**11**	ND (<2.5)	ND (<2.5)	**440**	**4.6**	ND (<10)	**110**	
EW-12		4-Jun-20	ND (<0.50)	**3.4**	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	
EW-15		3-Jun-20	ND (<0.50)	**3.5**	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	**0.88**	ND (<0.50)	ND (<2.0)	ND (<0.50)	
EW-16		3-Jun-20	**7.1**	**4.9**	ND (<0.50)	**0.62**	ND (<0.50)	ND (<0.50)	ND (<0.50)	**14**	**2.7**	ND (<2.0)	ND (<0.50)	
F21A1U		3-Jun-20	ND (<0.50)	**65**	ND (<0.50)	**0.58**	ND (<0.50)	ND (<0.50)	ND (<0.50)	**22**	**1.1**	ND (<2.0)	ND (<0.50)	
F29A1U		3-Jun-20	ND (<0.50)	**11**	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	**2.2**	ND (<0.50)	ND (<2.0)	ND (<0.50)	
	Dup	3-Jun-20	ND (<0.50)	**11**	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	**2.0**	ND (<0.50)	ND (<2.0)	ND (<0.50)	
F32A		2-Jun-20	ND (<0.50)	**1.3**	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	
F34A		2-Jun-20	ND (<0.50)	**40**	ND (<0.50)	**4.6**	**1.7**	ND (<0.50)	ND (<0.50)	**0.83**	ND (<0.50)	ND (<2.0)	ND (<0.50)	
F40A		3-Jun-20	ND (<0.50)	**150**	ND (<0.50)	**1.0**	ND (<0.50)	ND (<0.50)	ND (<0.50)	**10**	**1.1**	ND (<2.0)	ND (<0.50)	
F42A1R		2-Jun-20	**4.5**	**130**	**17**	**3.7**	**11**	ND (<1.0)	ND (<1.0)	**20**	ND (<1.0)	**50**	ND (<1.0)	
F49A1		2-Jun-20	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	
F53A1U		2-Jun-20	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	
F57A1U		4-Jun-20	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	
F58A		4-Jun-20	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	
	Dup	4-Jun-20	ND (<0.50)	ND (<0.50) H	ND (<0.50)	ND (<0.50) H	ND (<0.50) H	ND (<0.50)	ND (<0.50)	ND (<0.50) H	ND (<0.50)	ND (<2.0)	ND (<0.50)	
F63A1U/A1		4-Jun-20	ND (<0.50)	**9.1**	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	
F73A1		2-Jun-20	ND (<0.50)	**0.58**	ND (<0.50)	**12**	**2.6**	ND (<0.50)	ND (<0.50)	**21**	**1.6**	ND (<2.0)	**6.8**	
F74A		4-Jun-20	ND (<0.50)	**34**	ND (<0.50)	**1.2**	**2.1**	ND (<0.50)	ND (<0.50)	**1.7**	ND (<0.50)	ND (<2.0)	ND (<0.50)	
F75A1U		4-Jun-20	ND (<0.50)	**0.61**	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	
F77A1U		2-Jun-20	ND (<0.50)	**21**	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	
F83A1U		3-Jun-20	ND (<0.50)	**50**	**1.0**	**0.61**	**1.5**	ND (<0.50)	ND (<0.50)	**3.0**	ND (<0.50)	ND (<2.0)	ND (<0.50)	
F85A1		4-Jun-20	ND (<0.50)	**5.6**	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	
	Dup	4-Jun-20	ND (<0.50)	**5.9**	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	
F97A		3-Jun-20	ND (<0.50)	**130**	**10**	**16**	**21**	ND (<0.50)	ND (<0.50)	**130**	**1.0**	**35**	**4.2**	
F98A		3-Jun-20	ND (<0.50)	**440**	**3.3**	**12**	**8.6**	ND (<0.50)	ND (<0.50)	**120**	**0.99**	**6.1**	**12**	
F123A1		4-Jun-20	**3.9**	**42**	**3.0**	**0.59**	**1.8**	ND (<0.50)	ND (<0.50)	**2.4**	ND (<0.50)	**6.5**	ND (<0.50)	
F124A2		4-Jun-20	ND (<0.50)	**270**	**40**	**9.4**	**22**	ND (<0.50)	ND (<0.50)	**40**	**0.79**	**39**	ND (<0.50)	**CHLFM = 0.52; Freon 11 = 0.54**
F126A2		3-Jun-20	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	
	Dup	3-Jun-20	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	
F127A1R		3-Jun-20	ND (<0.50)	**410**	**54**	**21**	**65**	ND (<0.50)	ND (<0.50)	**98**	**1.3**	**110**	ND (<0.50)	**CHLFM = 1.1; Freon 11 = 0.84**
F129A1		3-Jun-20	ND (<0.50)	**1.8**	**39**	**28**	**41**	ND (<0.50)	ND (<0.50)	**110**	**4.4**	ND (<2.0)	ND (<0.50)	**CHLFM = 1.1; Freon 11 = 1.3**
F130A1U		2-Jun-20	ND (<0.50)	**23**	ND (<0.50)	ND (<0.50)	**0.93**	ND (<0.50)	ND (<0.50)	**4.1**	**0.89**	ND (<2.0)	ND (<0.50)	
F137A1		3-Jun-20	**5.2**	**14**	**0.88**	ND (<0.50)	**0.90**	ND (<0.50)	ND (<0.50)	**1.1**	ND (<0.50)	ND (<2.0)	ND (<0.50)	
F138A1U		2-Jun-20	ND (<0.50)	ND (<0.50)	ND (<0.50)	**1.2**	**1.5**	ND (<0.50)	ND (<0.50)	**4.9**	ND (<0.50)	ND (<2.0)	**3.9**	
F139A1		2-Jun-20	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	
F141A1U		4-Jun-20	ND (<0.50)	**0.88**	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	
F142A1		4-Jun-20	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	
F145A1		3-Jun-20	**3.9**	**110**	**14**	**1.7**	**6.3**	ND (<0.50)	ND (<0.50)	**14**	ND (<0.50)	**2.8**	ND (<0.50)	
	Dup	3-Jun-20	**3.6**	**96**	**18**	**1.8**	**6.4**	ND (<0.50)	ND (<0.50)	**14**	ND (<0.50)	**3.1**	ND (<0.50)	**CHLFM = 0.51**
F155A1U		2-Jun-20	**4.0**	**47**	**1.8**	ND (<0.50)	**0.59**	ND (<0.50)	ND (<0.50)	**3.6**	ND (<0.50)	ND (<2.0)	ND (<0.50)	**CHLFM = 2.3**
F156A1U		2-Jun-20	ND (<0.50)	**75**	**0.56**	**0.52**	ND (<0.50)	ND (<0.50)	ND (<0.50)	**4.5**	ND (<0.50)	ND (<2.0)	ND (<0.50)	**CHLFM = 0.54**
F160A1U		4-Jun-20	**55**	**17**	ND (<0.50)	ND (<0.50)	**0.87**	ND (<0.50)	ND (<0.50)	**3.2**	ND (<0.50)	ND (<2.0)	ND (<0.50)	
F161A1U		4-Jun-20	ND (<0.50)	**7.3**	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	**0.96**	ND (<0.50)	ND (<2.0)	ND (<0.50)	
F166A1		4-Jun-20	ND (<0.50)	**120**	**28**	**9.3**	**21**	ND (<0.50)	ND (<0.50)	**61**	ND (<0.50)	**21**	ND (<0.50)	
F167A1U		3-Jun-20	ND (<0.50)	**130**	**15**	**2.5**	**12**	ND (<0.50)	ND (<0.50)	**21**	ND (<0.50)	**18**	ND (<0.50)	**CHLFM = 0.57**
O28A1		4-Jun-20	ND (<0.50)	**140**	**1.1**	**3.5**	**5.0**	ND (<0.50)	ND (<0.50)	**5.5**	ND (<0.50)	**5.1**	ND (<0.50)	
	Dup	4-Jun-20	ND (<0.50)	**140**	**1.3**	**3.9**	**5.4**	ND (<0.50)	ND (<0.50)	**5.7**	ND (<0.50)	**5.5**	ND (<0.50)	
O52A2		3-Jun-20	ND (<1.0)	**170**	**18**	**9.7**	**16**	ND (<1.0)	ND (<1.0)	**27**	ND (<1.0)	**65**	ND (<1.0)	

Table 9
Summary of Compounds Detected in Groundwater - June 2020
COE Study Area and Perimeter Area, Palo Alto, California

Location	Type	Date	PCE	TCE	1,1,1-TCA	1,1-DCA	1,1-DCE	1,2-DCA	1,2-DCB	cis-1,2-DCE	trans-1,2-DCE	Freon 113	VC	Other Constituents
O67A2		3-Jun-20	**11**	**16**	**14**	ND (<10)	ND (<10)	ND (<10)	**1,200**	**2,300**	ND (<10)	**810**	ND (<10)	**1,2,4-TCB = 1,500; 1,3-DCB = 15; 1,4-DCB = 82**
O68A1		3-Jun-20	**14**	**44**	**6.2**	**1.9**	**3.6**	ND (<0.50)	**28**	**11**	ND (<0.50)	**38**	ND (<0.50)	**1,2,4-TCB = 12; 1,4-DCB = 0.69; CHLFM = 0.53; Freon 11 = 1.1**
O108A1		4-Jun-20	ND (<0.50)	**15**	**1.5**	**3.1**	**17**	ND (<0.50)	ND (<0.50)	**6.6**	ND (<0.50)	**2.7**	ND (<0.50)	
O109A2		4-Jun-20	ND (<0.50)	**3.2**	**0.62**	**1.1**	**2.8**	ND (<0.50)	ND (<0.50)	**3.2**	ND (<0.50)	ND (<2.0)	ND (<0.50)	
O110A1		4-Jun-20	ND (<0.50)	**63**	**1.9**	**4.7**	**12**	ND (<0.50)	ND (<0.50)	**7.8**	ND (<0.50)	**3.7**	ND (<0.50)	
O111A2		4-Jun-20	ND (<0.50)	**96**	**27**	**8.6**	**27**	ND (<0.50)	ND (<0.50)	**32**	**0.90**	**43**	ND (<0.50)	**Freon 11 = 0.52**
O112A1		4-Jun-20	ND (<5.0)	**160**	ND (<5.0)	ND (<5.0)	**6.0**	ND (<5.0)	ND (<5.0)	**6.8**	ND (<5.0)	ND (<20)	ND (<5.0)	
O114A2		3-Jun-20	ND (<0.50)	**160**	**10**	**7.1**	**13**	ND (<0.50)	ND (<0.50)	**18**	ND (<0.50)	**37**	ND (<0.50)	
O115A1		4-Jun-20	ND (<0.50)	**1.6**	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	
O118B		2-Jun-20	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	
O119A1		23-Jun-20	**100**	**1,300**	**2,100**	**130**	**85**	ND (<20)	**130**	**1,400**	ND (<20)	**3,500**	ND (<20)	**1,2,4-TCB = 77**
O120A2		23-Jun-20	**16**	**470**	**120**	**10**	**11**	ND (<0.50)	**32**	**140**	ND (<0.50)	**280**	ND (<0.50)	**1,2,4-TCB = 7.1; 1,4-DCB = 0.54; CHLFM = 1.1; Freon 11 = 7.0**
	Dup	23-Jun-20	**17**	**400**	**120**	**10**	**11**	ND (<0.50)	**35**	**150**	ND (<0.50)	**220**	ND (<0.50)	**1,2,4-TCB = 7.9; 1,4-DCB = 0.59; CHLFM = 1.1; Freon 11 = 7.3**
O121A2		4-Jun-20	**4.4**	**37**	**3.7**	**1.7**	**4.7**	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	**CHLFM = 0.88; Freon 11 = 1.8**
O162A2		3-Jun-20	**19**	**22**	ND (<0.50)	**0.56**	**1.7**	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	**Freon 11 = 0.56**
OB11-2		2-Jun-20	**89,000**	ND (<500)	**12,000**	ND (<500)	ND (<500)	ND (<500)	ND (<500)	**3,800**	ND (<500)	ND (<2,000)	ND (<500)	
P3-A2		3-Jun-20	ND (<0.50)	**120**	**17**	**11**	**14**	ND (<0.50)	ND (<0.50)	**27**	**0.68**	**67**	ND (<0.50)	
P5-A2		3-Jun-20	ND (<0.50)	**96**	**9.1**	**9.1**	**13**	ND (<0.50)	ND (<0.50)	**22**	ND (<0.50)	**42**	ND (<0.50)	
P17		4-May-20	**0.90**	**16,000**	**2.1 J**	**7.1**	**26**	**1.9 J**	ND (<5.0)	**1,900**	**14**	**0.70 J**	ND (<5.0)	**EC = 39; Benzene = 0.20 J; 1,1,2-TCA = 1.7 J**
P21		4-May-20	**72**	**500,000**	**1,600**	**100**	**610**	**75**	ND (<25)	**220,000**	**3,400**	ND (<25)	**31,000**	**Acetone = 400J; MC = 39; 2-Butanone = 210J; Benzene = 23J; 1,2-DCP = 2.1J; Toluene = 14J; 1,1,2-TCA = 110; Ethylbenzene = 11J; m,p-Xylene = 140; o-Xylene = 15J; Xylene (tot) = 160; 1,1,2,2-PCA = 29; 1,2,3-TCP = 25J; PB = 1.8J; 1,3,5-TMB = 3.4J; 1,2,4-TMB = 12J**
RW-1		2-Jun-20	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	**1.1**	**1.1**	ND (<2.0)	ND (<0.50)	
RW-2		4-Jun-20	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	**1.1**	ND (<0.50)	ND (<2.0)	ND (<0.50)	
RW-4		4-Jun-20	**6.6**	**24**	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	**0.82**	ND (<0.50)	ND (<2.0)	ND (<0.50)	
RW-5		2-Jun-20	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	**EC = 1.0**
RW-6		4-Jun-20	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	**5.9**	ND (<0.50)	ND (<2.0)	**2.9**	
SH1		4-Jun-20	ND (<0.50)	**26**	ND (<0.50)	**0.84**	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	
T1A		4-Jun-20	ND (<10)	**1,300**	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	**420**	**17**	ND (<40)	ND (<10)	
TW-1		2-Jun-20	**26**	**530**	**650**	**39**	**120**	ND (<5.0)	**180**	**350**	ND (<5.0)	**860**	ND (<5.0)	**1,2,4-TCB = 140**
TW-2		2-Jun-20	**45**	**1,000**	**770**	**40**	**140**	ND (<5.0)	**150**	**410**	ND (<5.0)	**840**	ND (<5.0)	**1,2,4-TCB = 89**
V8-1		3-Jun-20	**0.55**	**170**	ND (<0.50)	**3.5**	**8.9**	ND (<0.50)	ND (<0.50)	**29**	**1.0**	ND (<2.0)	ND (<0.50)	
V8-2		3-May-20	ND (<5.0)	**110**	ND (<5.0)	**7.6**	**11**	ND (<5.0)	ND (<5.0)	**370**	**5.2**	ND (<5.0)	**150**	**MTBE = 0.20 J;**
V8-3		3-Jun-20	ND (<0.50)	**320**	**3.6**	**5.2**	**7.7**	ND (<0.50)	ND (<0.50)	**14**	ND (<0.50)	**3.3**	**0.64**	
V8-4		3-Jun-20	ND (<0.50)	**10**	ND (<0.50)	**10**	**3.1**	ND (<0.50)	ND (<0.50)	**460**	**51**	ND (<2.0)	**61**	
	Dup	3-Jun-20	ND (<0.50)	**10**	ND (<0.50)	**11**	**4.0**	ND (<0.50)	ND (<0.50)	**330**	**55**	ND (<2.0)	**64**	
V8-7		3-Jun-20	ND (<1.3)	**9.1**	ND (<1.3)	**11**	**4.1**	ND (<1.3)	ND (<1.3)	**440**	**56**	ND (<5.0)	**67**	
V8-8		3-Jun-20	ND (<0.50)	**4.7**	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	**160**	**16**	ND (<2.0)	ND (<0.50)	
V-9		3-May-20	ND (<5.0)	**430**	**1.0 J**	**12**	**8.0**	ND (<5.0)	ND (<5.0)	**490**	**2.5 J**	**1.2 J**	**28**	
V-10		3-Jun-20	ND (<0.50)	**0.55**	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	
V-16A1UR		3-Jun-20	ND (<0.50)	**6.2**	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	
V-23R		3-Jun-20	ND (<2.5)	**430**	**5.3**	**16**	**9.0**	ND (<2.5)	ND (<2.5)	**260**	ND (<2.5)	ND (<10)	**42**	
W-3A1U		4-Jun-20	ND (<0.50)	**52**	**0.68**	ND (<0.50)	**1.1**	ND (<0.50)	ND (<0.50)	**0.94**	ND (<0.50)	ND (<2.0)	ND (<0.50)	
	Dup	4-Jun-20	ND (<0.50)	**46**	**0.60**	ND (<0.50)	**0.89**	ND (<0.50)	ND (<0.50)	**0.68**	ND (<0.50)	ND (<2.0)	ND (<0.50)	
W-7A1U		4-Jun-20	**0.58**	**47**	**0.98**	ND (<0.50)	**0.90**	ND (<0.50)	ND (<0.50)	**2.7**	ND (<0.50)	ND (<2.0)	ND (<0.50)	

Table 9
Summary of Compounds Detected in Groundwater - June 2020
COE Study Area and Perimeter Area, Palo Alto, California

Location	Type	Date	PCE	TCE	1,1,1-TCA	1,1-DCA	1,1-DCE	1,2-DCA	1,2-DCB	cis-1,2-DCE	trans-1,2-DCE	Freon 113	VC	Other Constituents
W-11A1U		4-Jun-20	ND (<0.50)	**12**	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	
W-12A1U-R		4-Jun-20	**3.3**	**24**	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	
W-13A2		4-Jun-20	ND (<0.50)	**1.4**	ND (<0.50)	**1.3**	ND (<0.50)	ND (<0.50)	ND (<0.50)	**1.6**	ND (<0.50)	ND (<2.0)	ND (<0.50)	
W-16A1		2-Jun-20	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	**200**	**4.9**	ND (<2.0)	**110**	
W-19A2		4-Jun-20	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	**3.6**	ND (<0.50)	ND (<2.0)	ND (<0.50)	
EB1		3-Jun-20	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	
SB1		3-Jun-20	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	
TB1		2-Jun-20	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	
TB2		3-Jun-20	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	
TB3		4-Jun-20	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	
TB4		23-Jun-20	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	

Notes:

Analyzed using EPA Method 8260B for the EPA Method 8010 list of halogenated VOCs, including Freon 113. EPA Method 8260B superseded EPA Method 8010, which is the analytical method specified in the modified Self-Monitoring Program dated May 4, 2001.

All data reported in µg/L unless otherwise noted.

H = Sample was prepped or analysed beyond the specified holding time.

J = Estimated value; Result is less than the laboratory reporting limit (RL) but more than the method detection limit (MDL).

Abbreviations:

DUP = Field Duplicate
EB = Equipment Blank
SB = Source Blank
TB = Trip Blank
PCE = Tetrachloroethene
TCE = Trichloroethene
1,1,1-TCA = 1,1,1-Trichloroethane
1,1-DCA = 1,1-Dichloroethane
1,1-DCE = 1,1-Dichloroethene
1,2-DCA = 1,2-Dichloroethane
1,2-DCB = 1,2-Dichlorobenzene
cis-1,2-DCE = cis-1,2-Dichloroethene
trans-1,2-DCE = trans-1,2-Dichloroethene
Freon 113 = 1,1,2-Trichloro-1,2,2-Trifluoroethane
VC = Vinyl Chloride
EC = Chloroethane
1,2,4-TCB = 1,2,4-Trichlorobenzene
1,3,5-TCB = 1,3,5-Trichlorobenzene
1,3-DCB = 1,3-Dichlorobenzene
1,4-DCB = 1,4-Dichlorobenzene
Freon 11 = Trichlorofluoromethane
CHLFM = Chloroform
MC = Methylene Chloride
1,2-DCP = 1,2-Dichloropropane
1,1,2-TCA = 1,1,2-Trichloroethane
1,1,2,2-PCA = 1,1,2,2-Tetrachloroethane
1,2,3-TCP = 1,2,3-Trichloropropane
PB = Propylbenzene

Table 10
Summary of Significant Increases* and First Time Detections - June 2020
COE Study Area and Perimeter Area, Palo Alto, California

Well	Date Sampled	Analyte	Current Detection (µg/L)	Previous Maximum Detection (µg/L)	Maximum Contaminant Limit (µg/L)	Comment
F127A1R	6/3/2020	Freon 11	0.84	ND	150	first time detection
F129A1	6/3/2020	Freon 11	1.3	ND	150	first time detection
F156A1U	6/2/2020	Chloroform	0.54	ND	NA	first time detection
F166A1	6/4/2020	1,1,1-Trichloroethane	28	11	200	
		1,1-Dichloroethene	21	8.2	6.0	
		cis-1,2-Dichloroethene	61	13	6.0	
O67A2	6/3/2020	1,3-Dichlorobenzene	15	5.3	NA	
		1,4-Dichlorobenzene	82	7.3	5.0	
O111A2	6/4/2020	trans-1,2-Dichloroethene	0.90	ND	10	first time detection
O120A2	6/23/2020	1,4-Dichlorobenzene	0.54/0.59	ND	5.0	first time detection
OB11-2	6/2/2020	cis-1,2-Dichloroethene	3,800	720	6.0	
V8-4	6/3/2020	trans-1,2-Dichloroethene	51/55	3.7	10	
		Vinyl Chloride	61/64	0.30	0.50	
V8-7	6/3/2020	trans-1,2-Dichloroethene	56	12	10	
V8-8	6/3/2020	trans-1,2-Dichloroethene	16	6.7	10	
V-9	5/3/2020	trans-1,2-Dichloroethene	2.5 J	ND	10	first time detection

Notes:

* A signicant increase is noted if the current sample result is greater than two times the historical maximum concentration for each well/analyte pair, or if an analyte is detected above the corresponding laboratory reporting limit for the first time.

ND = Not previously detected above laboratory reporting limit(s). See Appendix B for laboratory reporting limits.

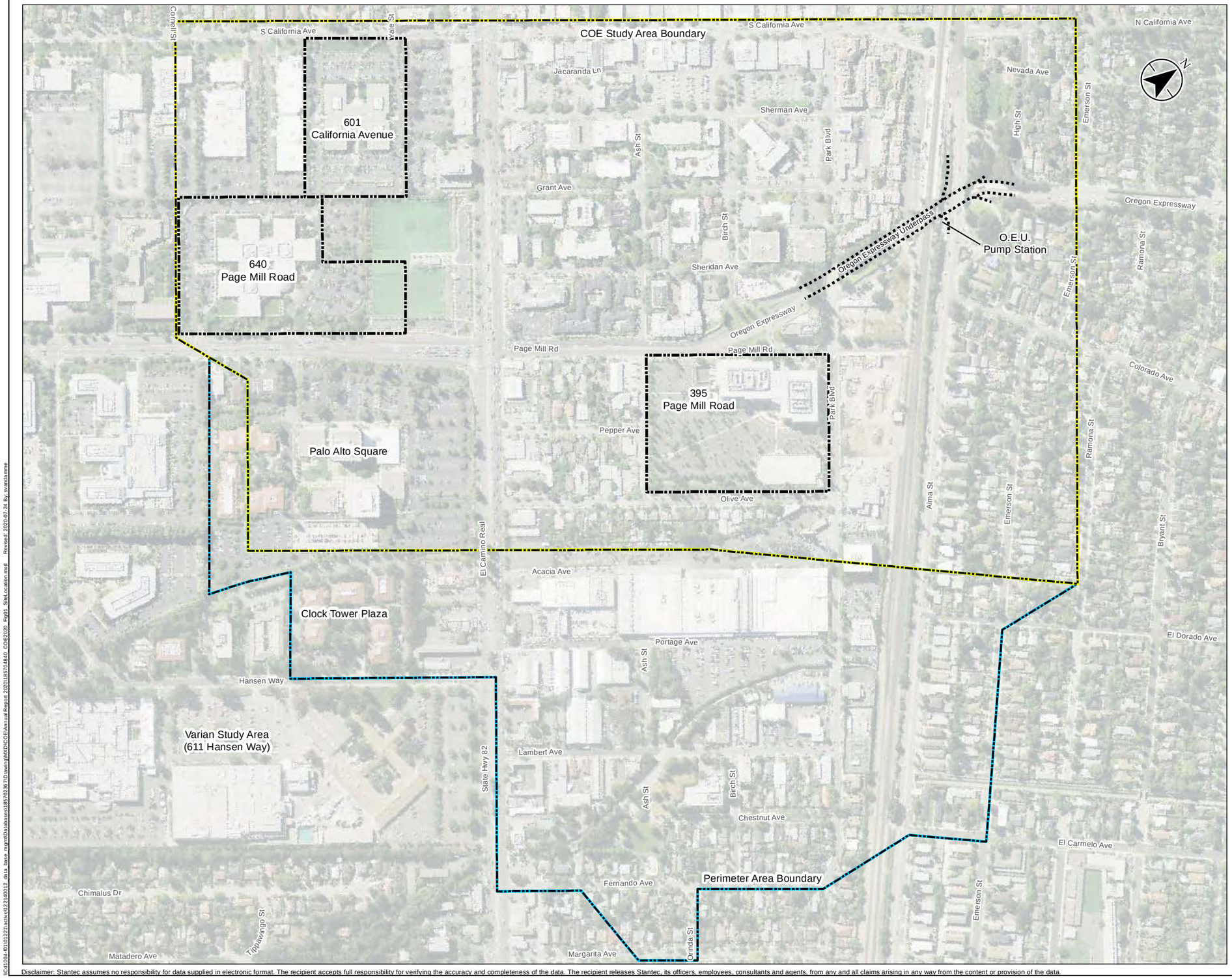
NA = Not available/applicable

XX/XX = Duplicate Pair values

J = Estimated value; Result is less than the laboratory reporting limit (RL) but more than the method detection limit (MDL).

FIGURES

2020 Annual Groundwater Self-Monitoring Report
California-Olive-Emerson (COE) Study Area
and Perimeter Area, Palo Alto, California
September 30, 2020



Stantec

Legend

- Site Boundary
- COE Study Area Boundary
- Perimeter Area Boundary

0 400 800 Feet

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Notes

1. Coordinate System: NAD 1983 StatePlane California III FIPS 0403 Feet
2. Aerial imagery provided by Digital Globe, 2010.
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Project Location
Palo Alto, California

185704840 REVA
Prepared by SVD on 7/24/2020
Technical Review by BD on 7/15/2020

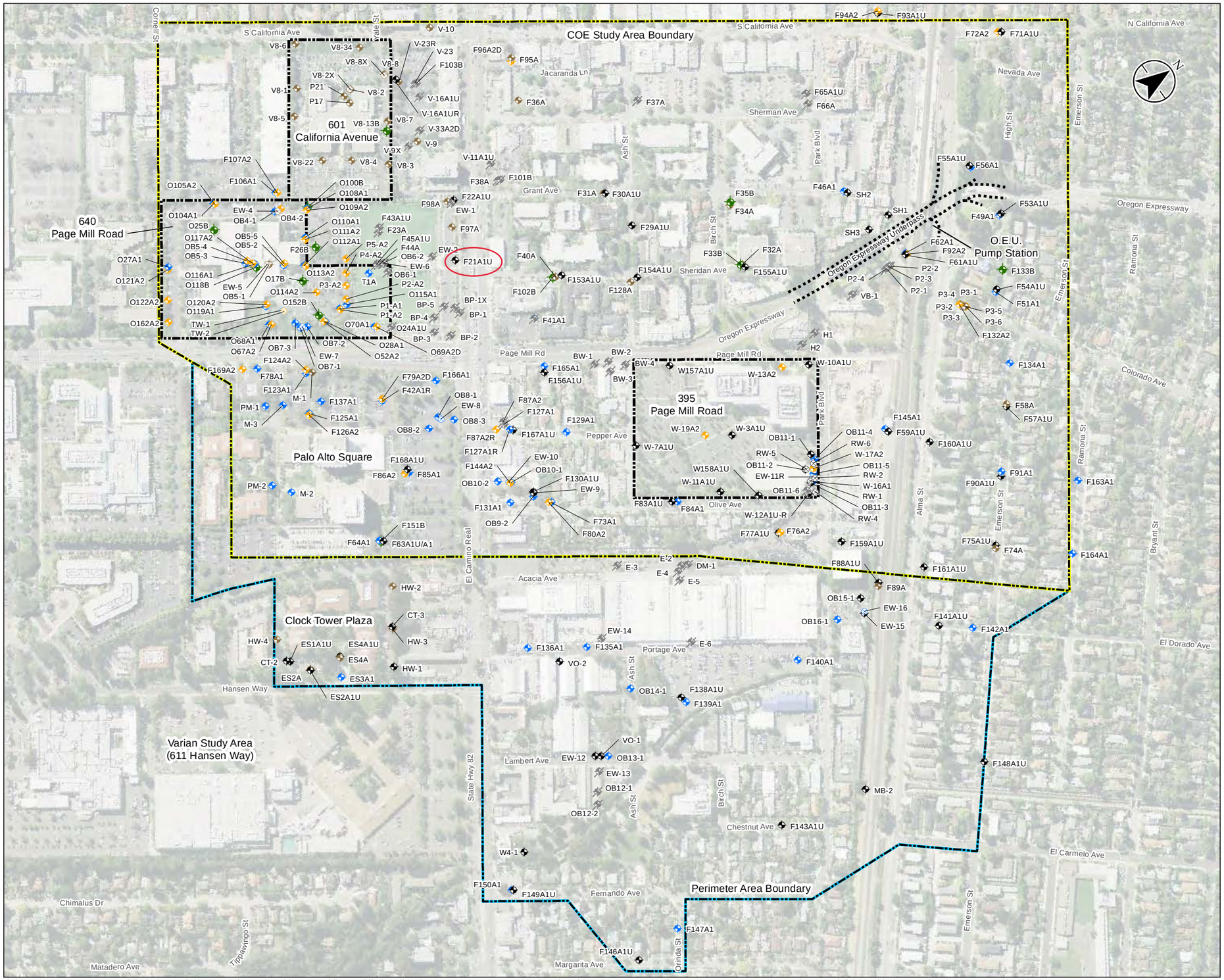
Client/Project
HP Inc. and Varian Medical Systems, Inc.
COE Study Area and Perimeter Area
Palo Alto, Santa Clara County, California

Figure No.
1

Title
Site Location

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Stantec

Legend

- A1U Zone Monitoring Well
- A1U Zone Extraction Well
- A1 Zone Monitoring Well
- A1 Zone Extraction Well
- A Zone Monitoring Well
- A Zone Extraction Well
- A2 Zone Monitoring Well
- A2 Zone Extraction Well
- B Zone Monitoring Well
- Destroyed Monitoring or Extraction Well
- Site Boundary
- COE Study Area Boundary
- Perimeter Area Boundary

0 400 800 Feet

1:5,000 (At original document size of 11x17)

Notes

1. Coordinate System: NAD 1983 StatePlane California III FIPS 0403 Feet
2. Aerial imagery provided by Digital Globe, 2010.
3. "D" suffix indicates well screened in deep subunit.
4. "OB" prefix indicates observation well for extraction pumping.
5. "P" prefix indicates observation well for Oregon Expressway Subdrain Pumping.

Project Location
Palo Alto, California

185704840 REVA
Prepared by SVD on 7/24/2020
Technical Review by BD on 7/15/2020

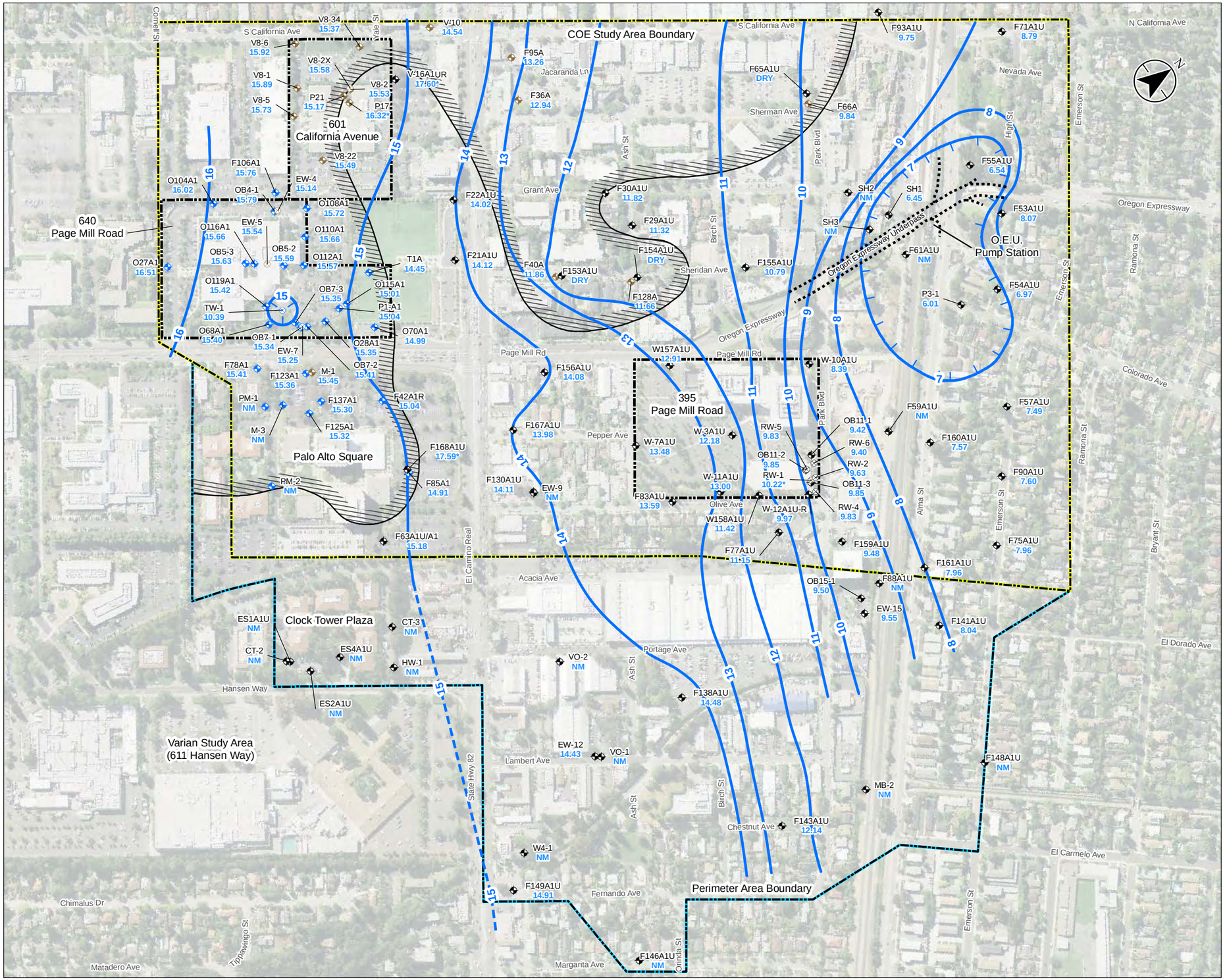
Client/Project
HP Inc. and Varian Medical Systems, Inc.
COE Study Area and Perimeter Area
Palo Alto, Santa Clara County, California

Figure No.
2

Title
Well Locations

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Stantec

Legend

- A1U Zone Monitoring Well
- A1U Zone Extraction Well
- A1 Zone Monitoring Well
- A1 Zone Extraction Well
- A Zone Monitoring Well
- A Zone Extraction Well
- Groundwater Depression
- 13.22 Groundwater Elevation (Feet MSL)
- NM Not Measured
- DRY Well Dry When Monitored
- * Data Not Used in Contouring
- 8 Groundwater Elevation Contour (Feet MSL)- dashed where inferred
- Site Boundary
- COE Study Area Boundary
- Perimeter Area Boundary
- Approximate Extent of Unsaturated A1 Upper Zone

0 400 800 Feet

1:5,000 (At original document size of 11x17)

Notes

1. Coordinate System: NAD 1983 StatePlane California III FIPS 0403 Feet
2. Aerial imagery provided by Digital Globe, 2010.
3. "D" suffix indicates well screened in deep subunit.
4. "OB" prefix indicates observation well for extraction pumping.
5. "P" prefix indicates observation well for Oregon Expressway Subdrain Pumping.

Project Location
Palo Alto, California

185704840 REVA
Prepared by SVD on 8/20/2020
Technical Review by BD on 7/15/2020

Client/Project
HP Inc. and Varian Medical Systems, Inc.
COE Study Area and Perimeter Area
Palo Alto, Santa Clara County, California

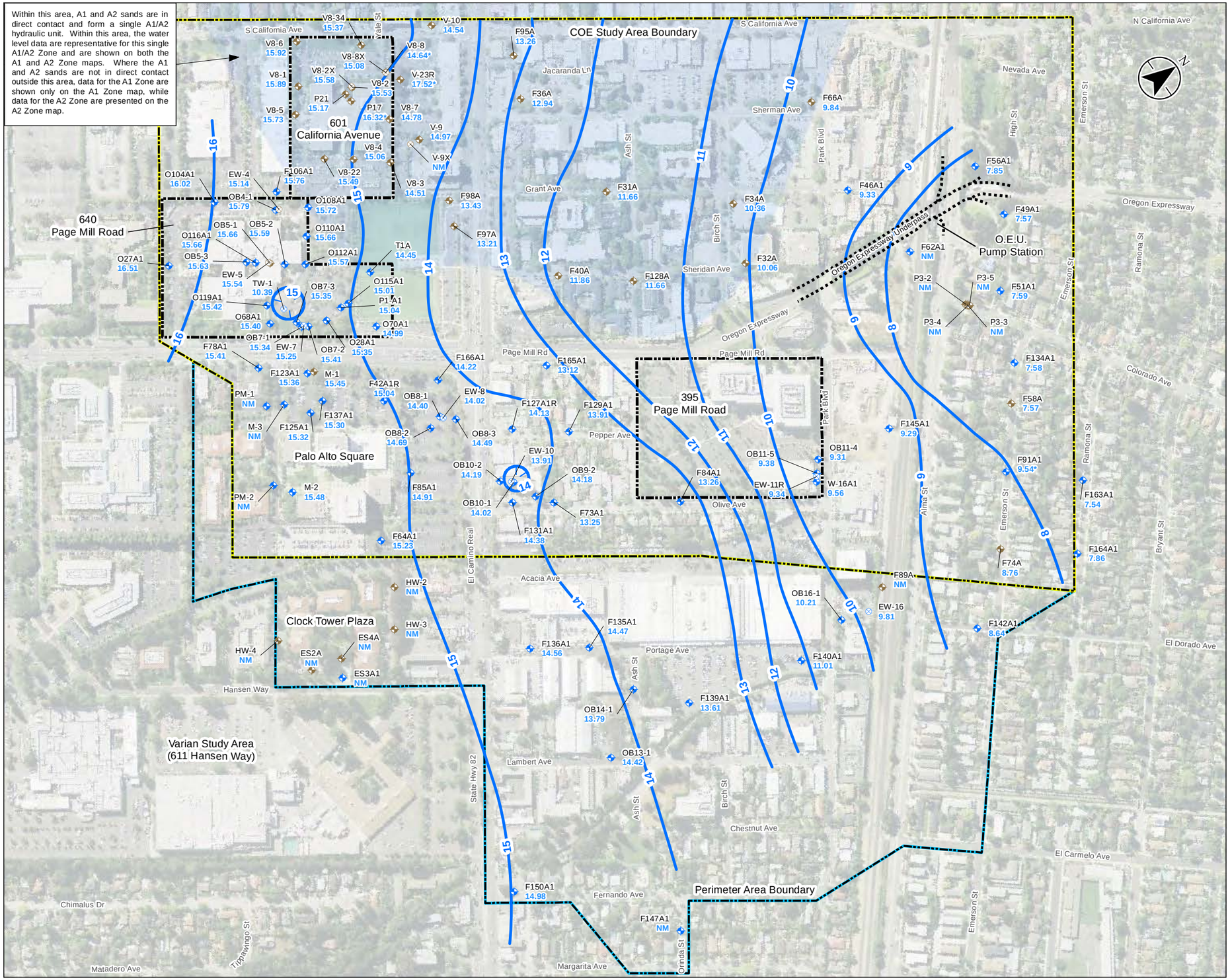
Figure No.
3

Title
Groundwater Elevation Contours First Encountered Groundwater - June 2, 2020

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Within this area, A1 and A2 sands are in direct contact and form a single A1/A2 hydraulic unit. Within this area, the water level data are representative for this single A1/A2 Zone and are shown on both the A1 and A2 Zone maps. Where the A1 and A2 sands are not in direct contact outside this area, data for the A1 Zone are shown only on the A1 Zone map, while data for the A2 Zone are presented on the A2 Zone map.



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Revised: 2020-09-28 By: svandamme
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Stantec

Legend

- A1 Zone Monitoring Well
- A1 Zone Extraction Well
- A Zone Monitoring Well
- A Zone Extraction Well
- Groundwater Depression
- 13.22 Groundwater Elevation (Feet MSL)
- NM Not Measured
- * Data Not Used in Contouring
- 8 Groundwater Elevation Contour (Feet MSL) - Dashed Where Inferred
- Site Boundary
- COE Study Area Boundary
- Perimeter Area Boundary

0 400 800 Feet

1:5,000 (At original document size of 11x17)

Notes

1. Coordinate System: NAD 1983 StatePlane California III FIPS 0403 Feet
2. Aerial imagery provided by Digital Globe, 2010.
3. "D" suffix indicates well screened in deep subunit.
4. "OB" prefix indicates observation well for extraction pumping.
5. "P" prefix indicates observation well for Oregon Expressway Subdrain Pumping.

Project Location
Palo Alto, California

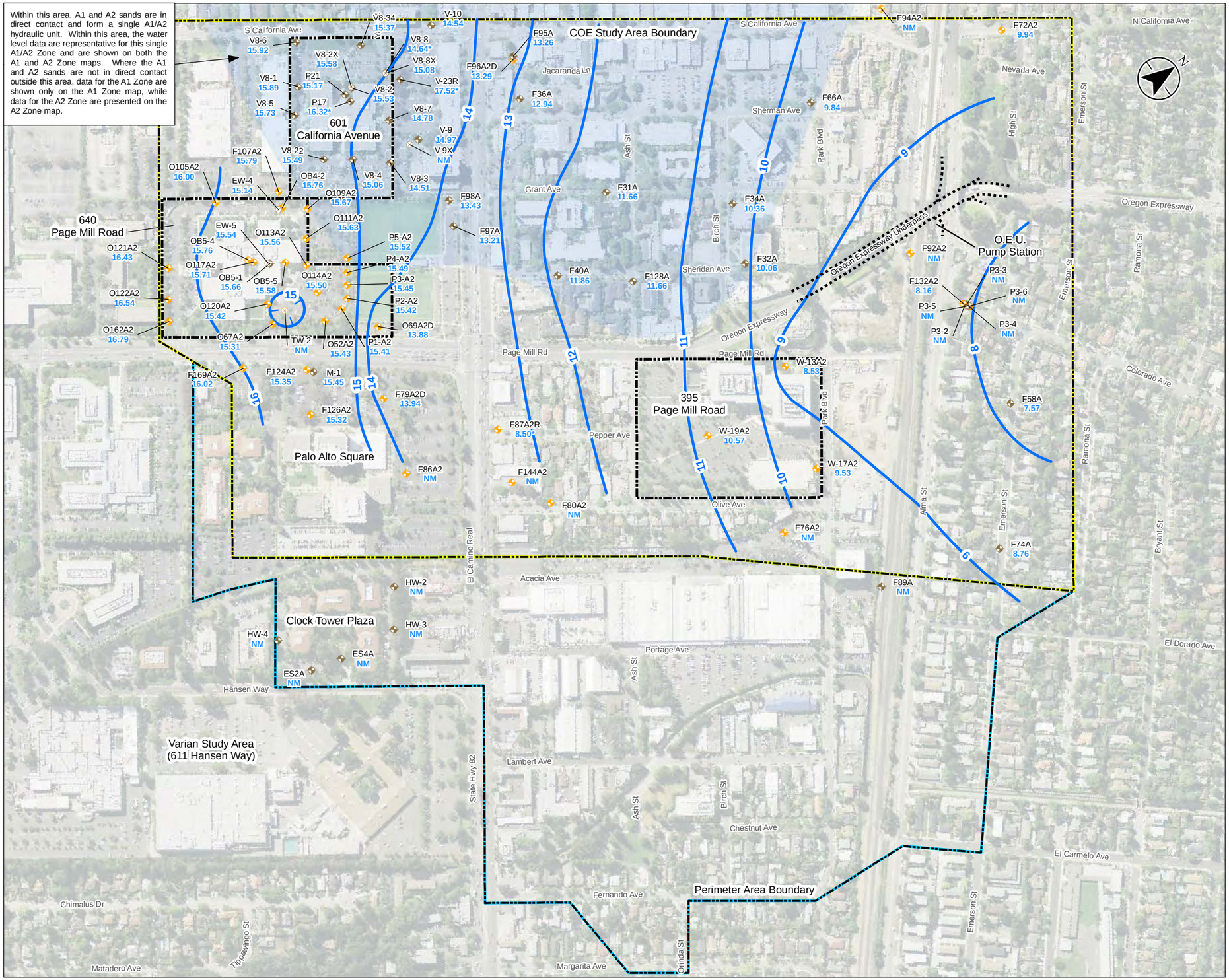
185704840 REVA
Prepared by SVD on 9/28/2020
Technical Review by BD on 7/15/2020

Client/Project
HP Inc. and Varian Medical Systems, Inc.
COE Study Area and Perimeter Area
Palo Alto, Santa Clara County, California

Figure No.
4

Title
Groundwater Elevation Contours A1 Zone - June 4, 2020

Within this area, A1 and A2 sands are in direct contact and form a single A1/A2 hydraulic unit. Within this area, the water level data are representative for this single A1/A2 Zone and are shown on both the A1 and A2 Zone maps. Where the A1 and A2 sands are not in direct contact outside this area, data for the A1 Zone are shown only on the A1 Zone map, while data for the A2 Zone are presented on the A2 Zone map.



Stantec

Legend

- A Zone Monitoring Well
- A Zone Extraction Well
- A2 Zone Monitoring Well
- A2 Zone Extraction Well
- Groundwater Depression
- 13.22 Groundwater Elevation (Feet MSL)
- NM Not Measured
- * Data Not Used in Contouring
- 8 Groundwater Elevation Contour (Feet MSL) - Dashed Where Inferred
- Site Boundary
- COE Study Area Boundary
- Perimeter Area Boundary

0 400 800 Feet

1:5,000 (At original document size of 11x17)

Notes

1. Coordinate System: NAD 1983 StatePlane California III FIPS 0403 Feet
2. Aerial imagery provided by Digital Globe, 2010.
3. "D" suffix indicates well screened in deep subunit.
4. "OB" prefix indicates observation well for extraction pumping.
5. "P" prefix indicates observation well for Oregon Expressway Subdrain Pumping.

Project Location
Palo Alto, California

185704840 REVA
Prepared by SVD on 8/20/2020
Technical Review by BD on 7/15/2020

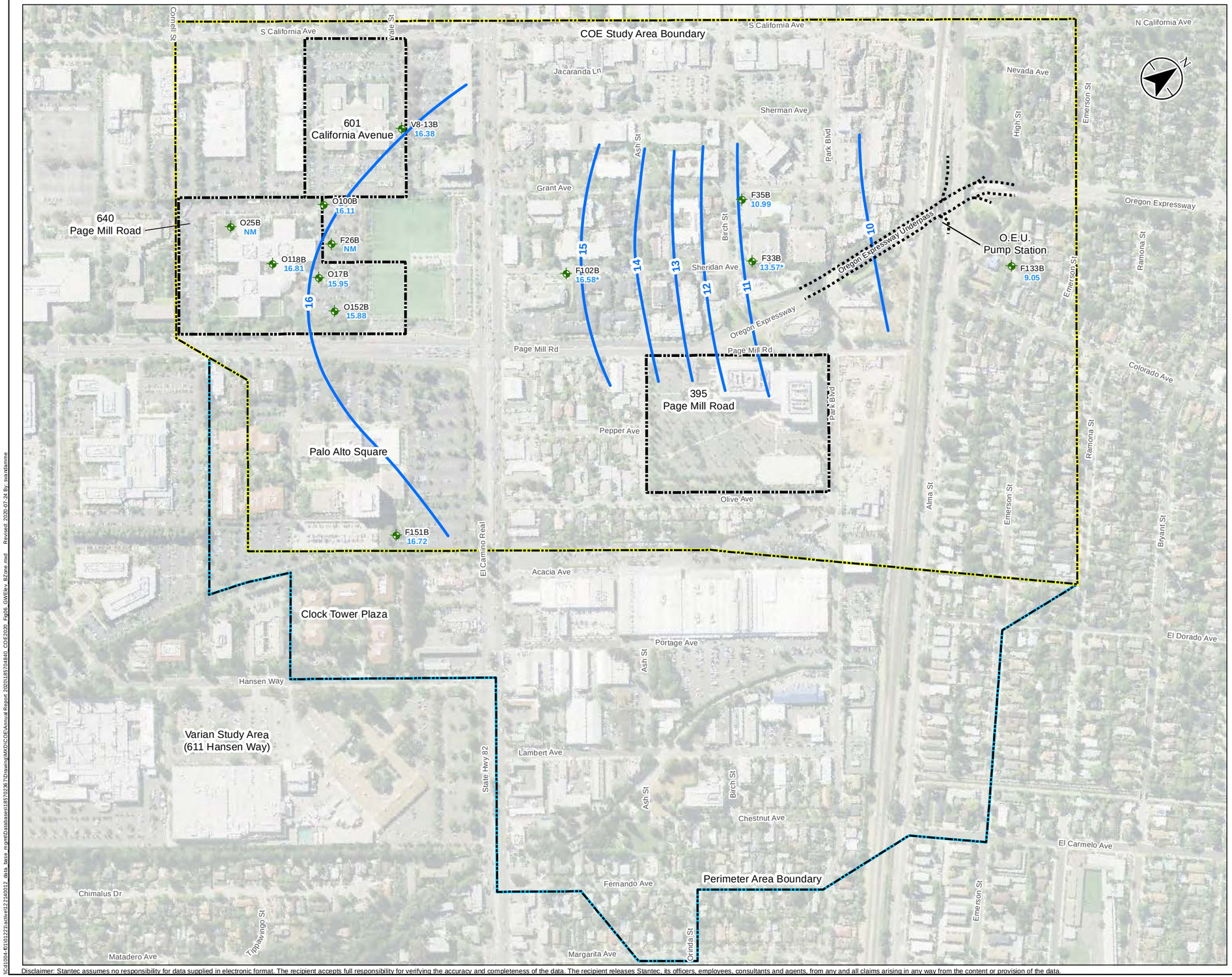
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COE Study Area and Perimeter Area
Palo Alto, Santa Clara County, California

Figure No.
5

Title
Groundwater Elevation Contours
A2 Zone - June 2, 2020

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Stantec

Legend

- B Zone Monitoring Well
- 13.22 Groundwater Elevation (Feet MSL)
- NM Not Measured
- * Data Not Used in Contouring
- 8 Groundwater Elevation Contour (Feet MSL) - Dashed Where Inferred
- Site Boundary
- COE Study Area Boundary
- Perimeter Area Boundary

0 400 800 Feet

1:5,000 (At original document size of 11x17)

Notes

1. Coordinate System: NAD 1983 StatePlane California III FIPS 0403 Feet
2. Aerial imagery provided by Digital Globe, 2010.
3. "D" suffix indicates well screened in deep subunit.
4. "OB" prefix indicates observation well for extraction pumping.
5. "P" prefix indicates observation well for Oregon Expressway Subdrain Pumping.

Project Location
Palo Alto, California

185704840 REVA
Prepared by SVD on 7/24/2020
Technical Review by BD on 7/15/2020

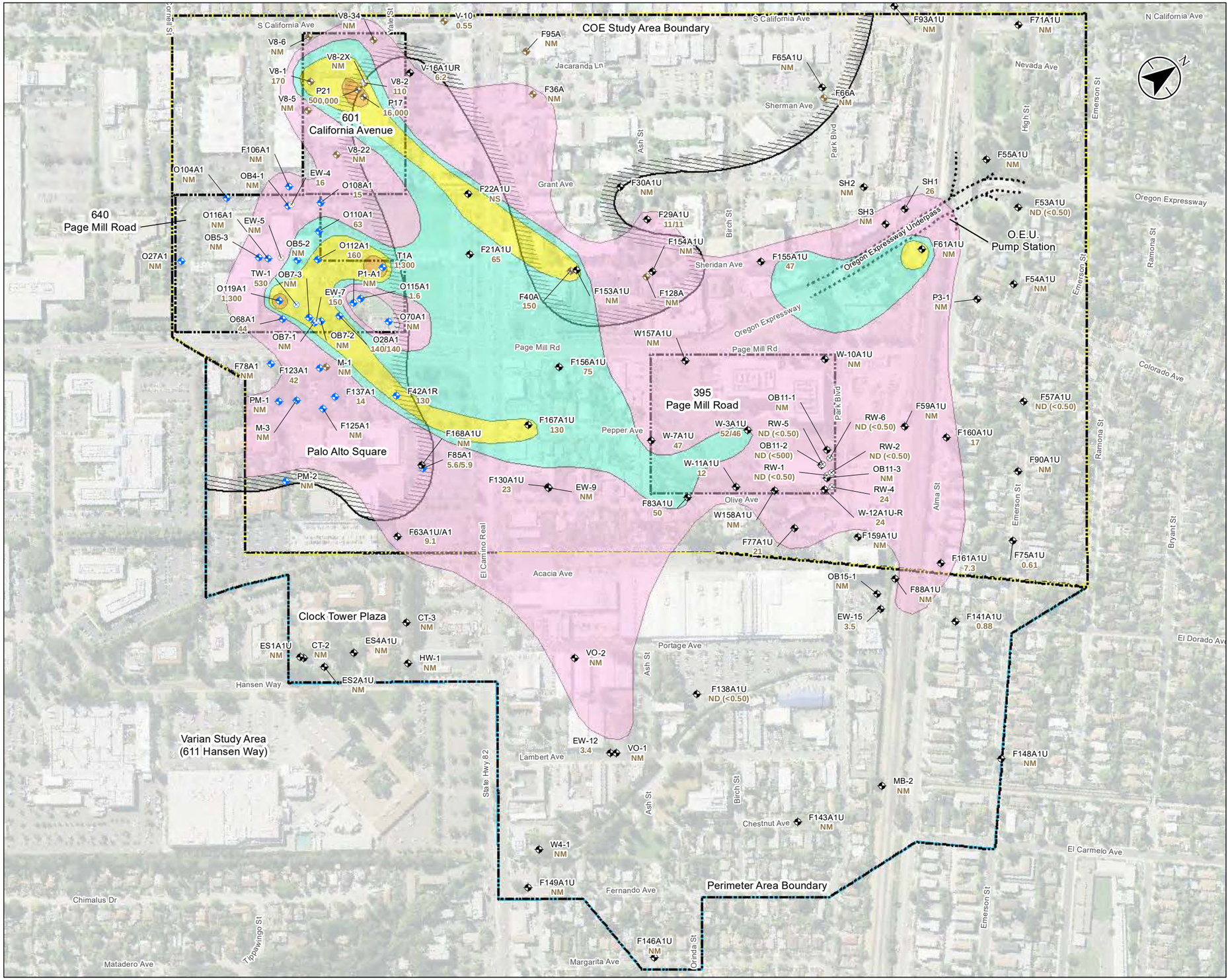
Client/Project
HP Inc. and Varian Medical Systems, Inc.
COE Study Area and Perimeter Area
Palo Alto, Santa Clara County, California

Figure No.
6

Title
Groundwater Elevation Contours
B Zone - June 2, 2020

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Revised: 2020-07-24 By: svandamme
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Stantec

Legend

- A1U Zone Monitoring Well
- A1U Zone Extraction Well
- A1 Zone Monitoring Well
- A1 Zone Extraction Well
- A Zone Monitoring Well
- A Zone Extraction Well
- 25 TCE Concentration (µg/L)
- NM Not Measured
- 240/230 Sample Concentration (µg/L) / Duplicate Sample Concentration (µg/L)
- * Data Not Used in Contouring
- Site Boundary
- COE Study Area Boundary
- Perimeter Area Boundary
- Approximate Extent of Unsaturated A1 Upper Zone

TCE Isoconcentration Values

- < 5 µg/L (Blank/No Color)
- 5 - 49 µg/L
- 50 - 99 µg/L
- 100 - 999 µg/L
- > 1,000 µg/L

0 400 800 Feet

1:5,000 (At original document size of 11x17)

Notes

1. Coordinate System: NAD 1983 StatePlane California III FIPS 0403 Feet
2. Aerial imagery provided by Digital Globe, 2010.
3. "D" suffix indicates well screened in deep subunit.
4. "OB" prefix indicates observation well for extraction pumping.
5. "P" prefix indicates observation well for Oregon Expressway Subdrain Pumping.
6. Contours are based on most recent analytical data for that well location.

Project Location
Palo Alto, California

185704840 REVA
Prepared by SVD on 9/23/2020
Technical Review by BD on 7/15/2020

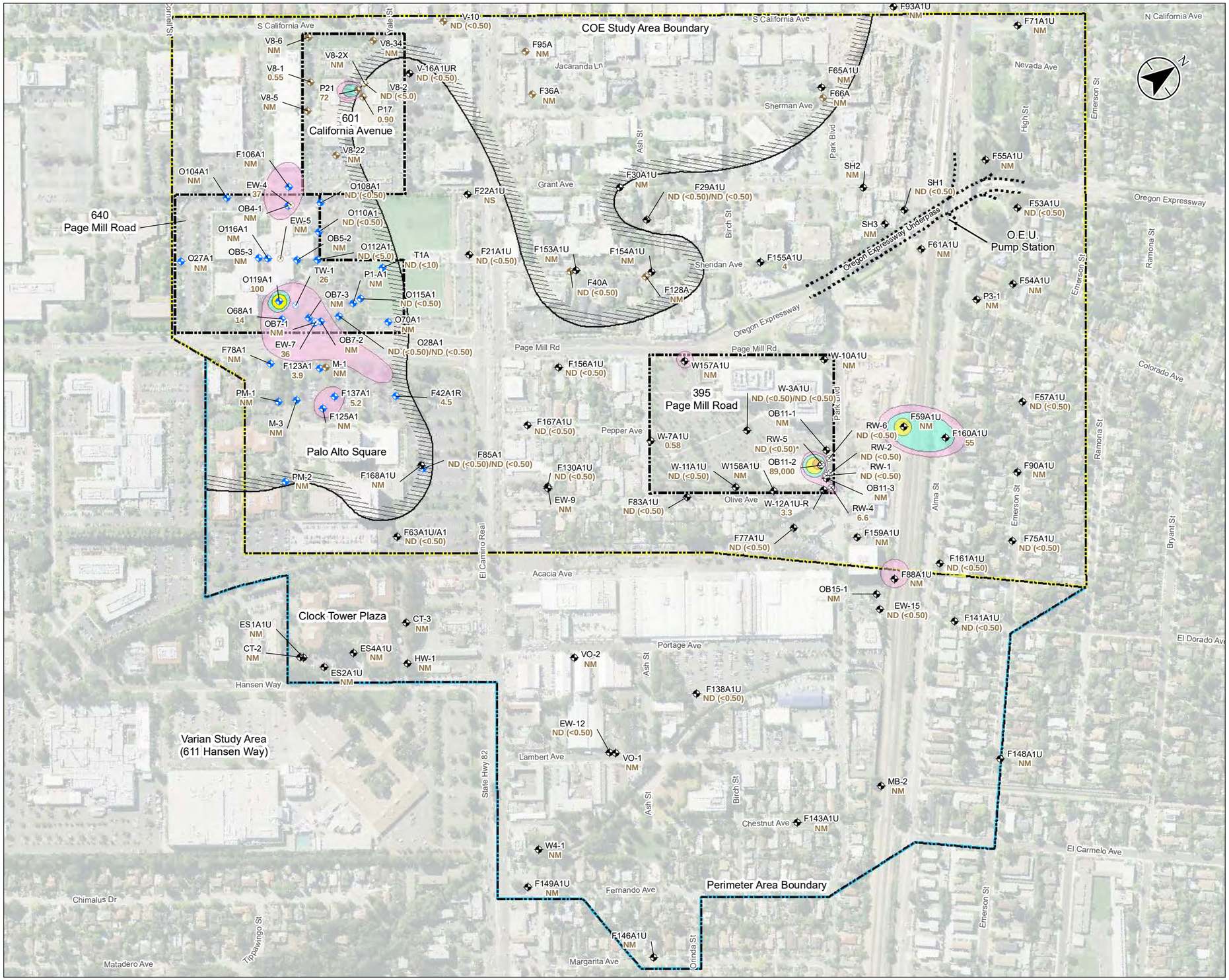
Client/Project
HP Inc. and Varian Medical Systems, Inc.
COE Study Area and Perimeter Area
Palo Alto, Santa Clara County, California

Figure No.
7

Title
TCE Concentration Contours First Encountered Groundwater - June 2020

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Stantec

Legend

- A1U Zone Monitoring Well
- A1U Zone Extraction Well
- A1 Zone Monitoring Well
- A1 Zone Extraction Well
- A Zone Monitoring Well
- A Zone Extraction Well
- 25 PCE Concentration (µg/L)
- NM Not Measured
- 240/230 Sample Concentration (µg/L) / Duplicate Sample Concentration (µg/L)
- * Data Not Used for Contouring
- Site Boundary
- COE Study Area Boundary
- Perimeter Area Boundary
- Approximate Extent of Unsaturated A1 Upper Zone

PCE Isoconcentration Values

- < 5 µg/L (Blank/No Color)
- 5 - 49 µg/L
- 50 - 99 µg/L
- 100 - 999 µg/L
- > 1,000 µg/L

Notes

1. Coordinate System: NAD 1983 StatePlane California III FIPS 0403 Feet
2. Aerial imagery provided by Digital Globe, 2010.
3. "D" suffix indicates well screened in deep subunit.
4. "OB" prefix indicates observation well for extraction pumping.
5. "P" prefix indicates observation well for Oregon Expressway Subdrain Pumping.

Project Location
Palo Alto, California

185704840 REVA
Prepared by SVD on 9/8/2020
Technical Review by BD on 7/15/2020

Client/Project
HP Inc. and Varian Medical Systems, Inc.
COE Study Area and Perimeter Area
Palo Alto, Santa Clara County, California

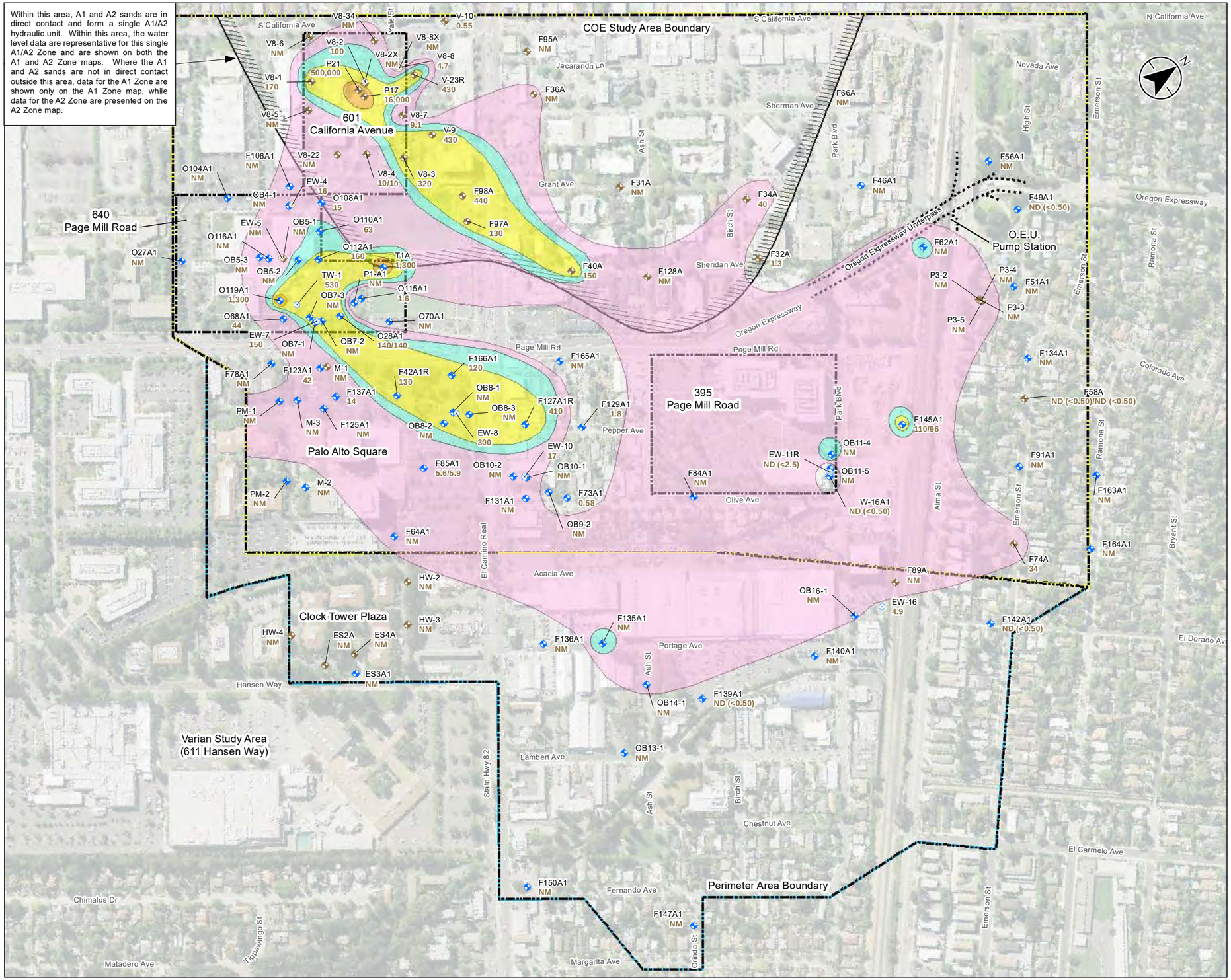
Figure No.
8

Title
PCE Concentration Contours First Encountered Groundwater - June 2020

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\\cd1004-0101221\active\122140012_data_base_mgmt\Databases\185702367\Drawing\MXD\COE\Annual Report 2020\185704840_COE2020_Fig08_PCEConcs.mxd Revised: 2020-09-08 By: svandamme

Within this area, A1 and A2 sands are in direct contact and form a single A1/A2 hydraulic unit. Within this area, the water level data are representative for this single A1/A2 Zone and are shown on both the A1 and A2 Zone maps. Where the A1 and A2 sands are not in direct contact outside this area, data for the A1 Zone are shown only on the A1 Zone map, while data for the A2 Zone are presented on the A2 Zone map.



Stantec

Legend

- A1 Zone Monitoring Well
- A1 Zone Extraction Well
- A Zone Monitoring Well
- A Zone Extraction Well
- 25 TCE Concentration (µg/L)
- NM Not Measured
- * Data Not Used in Contouring
- 240/230 Sample Concentration (µg/L) / Duplicate Sample Concentration (µg/L)
- Site Boundary
- COE Study Area Boundary
- Perimeter Area Boundary

TCE Isoconcentration Values

- < 5 µg/L (Blank/No Color)
- 5 - 49 µg/L
- 50 - 99 µg/L
- 100 - 999 µg/L
- > 1,000 µg/L

0 400 800 Feet

1:5,000 (At original document size of 11x17)

Notes

1. Coordinate System: NAD 1983 StatePlane California III FIPS 0403 Feet
2. Aerial imagery provided by Digital Globe, 2010.
3. "D" suffix indicates well screened in deep subunit.
4. "OB" prefix indicates observation well for extraction pumping.
5. "P" prefix indicates observation well for Oregon Expressway Subdrain Pumping.

Project Location
Palo Alto, California

185704840 REVA
Prepared by SVD on 9/23/2020
Technical Review by BD on 7/15/2020

Client/Project
HP Inc. and Varian Medical Systems, Inc.
COE Study Area and Perimeter Area
Palo Alto, Santa Clara County, California

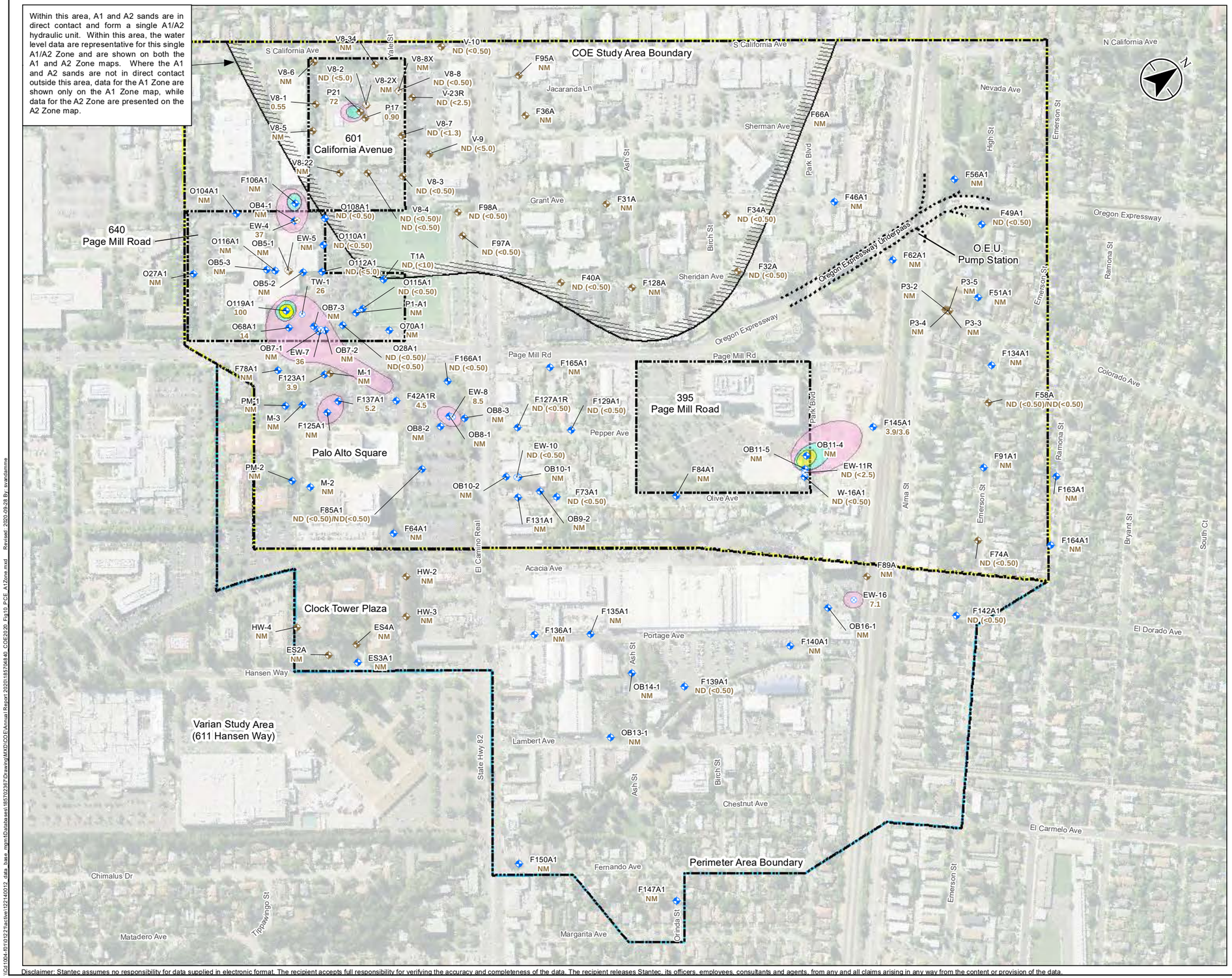
Figure No.
9

Title
TCE Concentration Contours
A1 Zone - June 2020

Disclaimer: Stantec assumes no responsibility for data supplied in electronic format. The recipient accepts full responsibility for verifying the accuracy and completeness of the data. The recipient releases Stantec, its officers, employees, consultants and agents, from any and all claims arising in any way from the content or provision of the data.

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Within this area, A1 and A2 sands are in direct contact and form a single A1/A2 hydraulic unit. Within this area, the water level data are representative for this single A1/A2 Zone and are shown on both the A1 and A2 Zone maps. Where the A1 and A2 sands are not in direct contact outside this area, data for the A1 Zone are shown only on the A1 Zone map, while data for the A2 Zone are presented on the A2 Zone map.



Stantec

Legend

- A1 Zone Monitoring Well
- A1 Zone Extraction Well
- A Zone Monitoring Well
- A Zone Extraction Well
- 25 PCE Concentration (µg/L)
- NM Not Measured
- 240/230 Sample Concentration (µg/L) / Duplicate Sample Concentration (µg/L)
- Site Boundary
- COE Study Area Boundary
- Perimeter Area Boundary

PCE Isoconcentration Values

- < 5 µg/L (Blank/No Color)
- 5 - 49 µg/L
- 50 - 99 µg/L
- 100 - 999 µg/L
- > 1,000 µg/L

0 400 800 Feet

1:5,220 (At original document size of 11x17)

Notes

1. Coordinate System: NAD 1983 StatePlane California III FIPS 0403 Feet
2. Aerial imagery provided by Digital Globe, 2010.
3. "D" suffix indicates well screened in deep subunit.
4. "OB" prefix indicates observation well for extraction pumping.
5. "P" prefix indicates observation well for Oregon Expressway Subdrain Pumping.

Project Location
Palo Alto, California

185704840 REVA
Prepared by SVD on 9/28/2020
Technical Review by BD on 7/15/2020

Client/Project
HP Inc. and Varian Medical Systems, Inc.
COE Study Area and Perimeter Area
Palo Alto, Santa Clara County, California

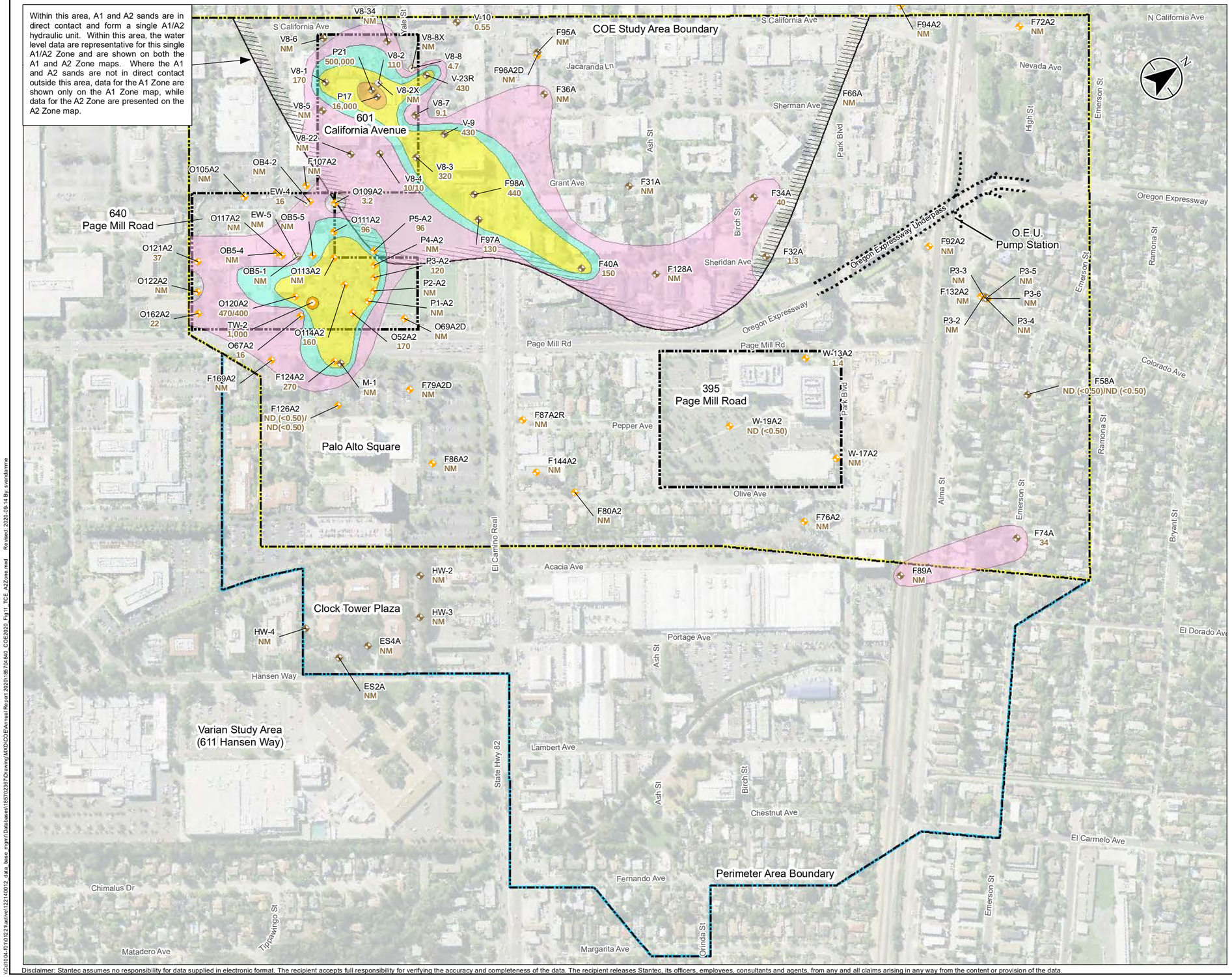
Figure No.
10

Title
PCE Concentration Contours
A1 Zone - June 2020

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Within this area, A1 and A2 sands are in direct contact and form a single A1/A2 hydraulic unit. Within this area, the water level data are representative for this single A1/A2 Zone and are shown on both the A1 and A2 Zone maps. Where the A1 and A2 sands are not in direct contact outside this area, data for the A1 Zone are shown only on the A1 Zone map, while data for the A2 Zone are presented on the A2 Zone map.



Stantec

Legend

- A Zone Monitoring Well
- A Zone Extraction Well
- A2 Zone Monitoring Well
- A2 Zone Extraction Well
- 25 TCE Concentration (µg/L)
- NM Not Measured
- 240/230 Sample Concentration (µg/L) / Duplicate Sample Concentration (µg/L)
- * Data Not Used in Contouring
- Site Boundary
- COE Study Area Boundary
- Perimeter Area Boundary

TCE Isoconcentration Values

- < 5 µg/L (Blank/No Color)
- 5 - 49 µg/L
- 50 - 99 µg/L
- 100 - 999 µg/L
- > 1,000 µg/L

0 400 800 Feet

1:5,000 (At original document size of 11x17)

Notes

1. Coordinate System: NAD 1983 StatePlane California III FIPS 0403 Feet
2. Aerial imagery provided by Digital Globe, 2010.
3. "D" suffix indicates well screened in deep subunit.
4. "OB" prefix indicates observation well for extraction pumping.
5. "P" prefix indicates observation well for Oregon Expressway Subdrain Pumping.

Project Location
Palo Alto, California

185704840 REVA
Prepared by SVD on 9/14/2020
Technical Review by BD on 9/14/2020

Client/Project
HP Inc. and Varian Medical Systems, Inc.
COE Study Area and Perimeter Area
Palo Alto, Santa Clara County, California

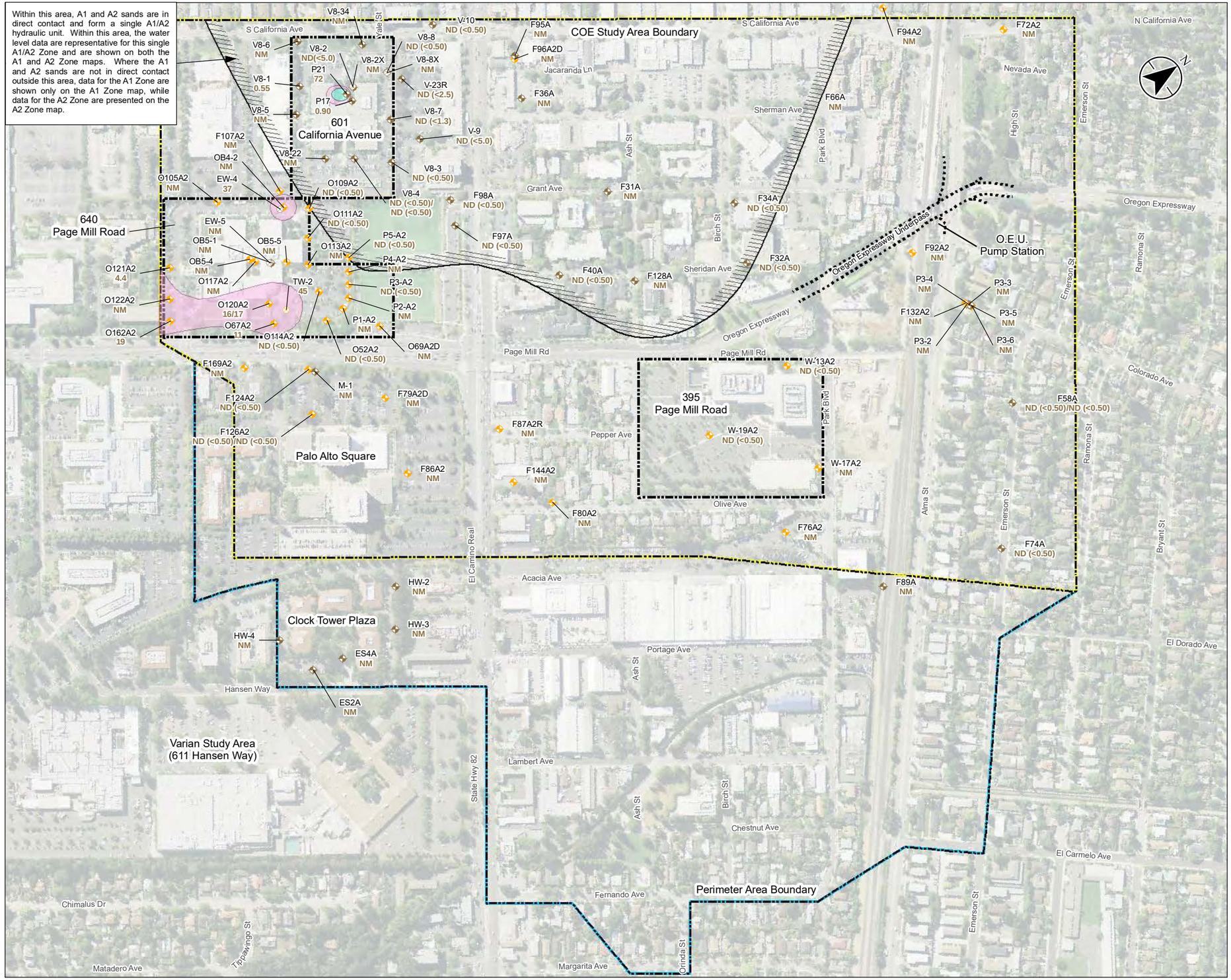
Figure No.
11

Title
TCE Concentration Contours
A2 Zone - June 2020

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Within this area, A1 and A2 sands are in direct contact and form a single A1/A2 hydraulic unit. Within this area, the water level data are representative for this single A1/A2 Zone and are shown on both the A1 and A2 Zone maps. Where the A1 and A2 sands are not in direct contact outside this area, data for the A1 Zone are shown only on the A1 Zone map, while data for the A2 Zone are presented on the A2 Zone map.



Stantec

Legend

- A Zone Monitoring Well
- A Zone Extraction Well
- A2 Zone Monitoring Well
- A2 Zone Extraction Well
- 25 PCE Concentration (µg/L)
- NM Not Measured
- 240/230 Sample Concentration (µg/L) / Duplicate Sample Concentration (µg/L)
- Site Boundary
- COE Study Area Boundary
- Perimeter Area Boundary

PCE Isoconcentration Values

- < 5 µg/L (Blank/No Color)
- 5 - 49 µg/L
- 50 - 99 µg/L
- 100 - 999 µg/L
- > 1000 µg/L

0 400 800 Feet

1:5,000 (At original document size of 11x17)

Notes

1. Coordinate System: NAD 1983 StatePlane California III FIPS 0403 Feet
2. Aerial imagery provided by Digital Globe, 2010.
3. "D" suffix indicates well screened in deep subunit.
4. "OB" prefix indicates observation well for extraction pumping.
5. "P" prefix indicates observation well for Oregon Expressway Subdrain Pumping.

Project Location
Palo Alto, California

185704840 REVA
Prepared by SVD on 9/9/2020
Technical Review by BD on 7/15/2020

Client/Project
HP Inc. and Varian Medical Systems, Inc.
COE Study Area and Perimeter Area
Palo Alto, Santa Clara County, California

Figure No.
12

Title
PCE Concentration Contours
A2 Zone - June 2020

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APPENDIX A

Annual GWET System VOC Mass Removal by Site

2020 Annual Groundwater Self-Monitoring Report
California-Olive-Emerson (COE) Study Area
and Perimeter Area, Palo Alto, California
September 30, 2020

Appendix A
Annual GWET System VOC Mass Removal by Site
COE Study Area and Perimeter Area, Palo Alto, California

Year	640 Page Mill Road	601 California Avenue	395 Page Mill Road	EW-12, EW-13[1], EW-14	EW-15, EW-16
Sept 1999 - Aug 2000	82.06 lbs 0.22 lbs/day [2]	92.27 lbs 0.25 lbs/day	78 lbs 0.21 lbs/day	47.72 lbs 0.13 lbs/day	17.32 lbs 0.05 lbs/day
Sept 2000 - Aug 2001	64.61 lbs 0.18 lbs/day	79.39 lbs 0.22 lbs/day	22.24 lbs 0.06 lbs/day	21.09 lbs [3] 0.06 lbs/day [3]	12.38 lbs 0.03 lbs/day
Sept 2001 - Aug 2002	98.45 lbs 0.27 lbs/day	81.80 lbs 0.22 lbs/day	25.17 lbs 0.07 lbs/day	10.64 lbs [3] 0.03 lbs/day [3]	11.27 lbs 0.03 lbs/day
Sept 2002 - Aug 2003	158.2 lbs 0.43 lbs/day	87.54 lbs 0.25 lbs/day	22.23 lbs 0.06 lbs/day	9.97 lbs [3] 0.03 lbs/day [3]	10.40 lbs 0.03 lbs/day
Sept 2003 - Aug 2004	122.53 lbs 0.33 lbs/day	0.00 lbs 0.00 lbs/day	0.00 lbs 0.00 lbs/day	8.15 lbs [3] 0.02 lbs/day [3]	12.97 lbs 0.04 lbs/day
Sept 2004 - Aug 2005	191.64 lbs 0.53 lbs/day	0.00 lbs 0.00 lbs/day	0.00 lbs 0.00 lbs/day	7.09 lbs 0.02 lbs/day	11.13 lbs 0.03 lbs/day
Sept 2005 - Aug 2006	171.91 lbs 0.47 lbs/day	0.00 lbs 0.00 lbs/day	0.00 lbs 0.00 lbs/day	36.18 lbs 0.10 lbs/day	13.24 lbs 0.04 lbs/day
Sept 2006 - Aug 2007	38.45 lbs 0.10 lbs/day	0.00 lbs 0.00 lbs/day	0.00 lbs 0.00 lbs/day	0.00 lbs 0.00 lbs/day	4.42 lbs 0.01 lbs/day
Sept 2007 - Aug 2008	287.29 lbs 0.80 lbs/day	0.00 lbs 0.00 lbs/day	0.00 lbs 0.00 lbs/day	0.00 lbs 0.00 lbs/day	8.39 lbs 0.02 lbs/day
Sept 2008 - Aug 2009	342.43 lbs 0.95 lbs/day	0.00 lbs 0.00 lbs/day	0.00 lbs 0.00 lbs/day	0.00 lbs 0.00 lbs/day	12.90 lbs 0.04 lbs/day
Sept 2009 - Aug 2010	487.98 lbs 1.34 lbs/day	0.00 lbs 0.00 lbs/day	0.00 lbs 0.00 lbs/day	0.00 lbs 0.00 lbs/day	14.03 lbs 0.04 lbs/day
Sept 2010 - Aug 2011	375.33 lbs 1.03 lbs/day [3]	0.00 lbs 0.00 lbs/day	0.00 lbs 0.00 lbs/day	0.00 lbs 0.00 lbs/day	7.23 lbs 0.02 lbs/day
Sept 2011 - Aug 2012	186.96 lbs 0.51 lbs/day [3]	0.00 lbs 0.00 lbs/day	0.00 lbs 0.00 lbs/day	0.00 lbs 0.00 lbs/day	8.77 lbs 0.02 lbs/day
Sept 2012 - Aug 2013	260.33 lbs 0.71 lbs/day [3]	0.00 lbs 0.00 lbs/day	0.00 lbs 0.00 lbs/day	0.00 lbs 0.00 lbs/day	10.85 lbs 0.02 lbs/day
Sept 2013 - Aug 2014	552.91 lbs 1.52 lbs/day	0.00 lbs 0.00 lbs/day	0.00 lbs 0.00 lbs/day	0.00 lbs 0.00 lbs/day	2.30 lbs 0.03 lbs/day
Sept 2014 - Aug 2015	468.71 lbs [3] 1.28 lbs/day [3]	0.00 lbs 0.00 lbs/day	0.00 lbs 0.00 lbs/day	0.00 lbs 0.00 lbs/day	0.00 lbs 0.00 lbs/day
Sept 2015 - Aug 2016	364.48 lbs 1.00 lbs/day [3]	0.00 lbs 0.00 lbs/day	0.00 lbs 0.00 lbs/day	0.00 lbs 0.00 lbs/day	0.00 lbs 0.00 lbs/day
Sept 2016 - Aug 2017	395.18 lbs 1.08 lbs/day	0.00 lbs 0.00 lbs/day	0.00 lbs 0.00 lbs/day	0.00 lbs 0.00 lbs/day	0.00 lbs 0.00 lbs/day
Sept 2017 - Aug 2018	327.80 lbs 0.90 lbs/day	0.00 lbs 0.00 lbs/day	0.00 lbs 0.00 lbs/day	0.00 lbs 0.00 lbs/day	0.00 lbs 0.00 lbs/day
Sept 2018 - Aug 2019	245.33 lbs 0.67 lbs/day	0.00 lbs 0.00 lbs/day	0.00 lbs 0.00 lbs/day	0.00 lbs 0.00 lbs/day	0.00 lbs 0.00 lbs/day
Sept 2019 - Aug 2020	243.14 lbs 0.67 lbs/day	0.00 lbs 0.00 lbs/day	0.00 lbs 0.00 lbs/day	0.00 lbs 0.00 lbs/day	0.00 lbs 0.00 lbs/day

Notes:

(1) Extraction well EW-13 was destroyed on December 14, 2017.

(2) lbs/day was calculated by dividing the mass removal at a site by the number of days in the year.

(3) The estimated mass/removal rate has been revised from that presented in previous monitoring reports in order to correct a calculation error.

Abbreviations:

lbs = pounds

lbs/day = pounds per day

GWET = Groundwater Extraction and Treatment

APPENDIX B

Selected Compounds from Historical Records

2020 Annual Groundwater Self-Monitoring Report
California-Olive-Emerson (COE) Study Area
and Perimeter Area, Palo Alto, California
September 30, 2020



Appendix B
Selected Compounds from Historical Records
COE Study Area and Perimeter Area, Palo Alto, California

Location	Type	Date	TCE	1,1,1-TCA	1,1-DCA	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	PCE	Freon 113	1,2-DCB	1,2-DCA	VC	Other Constituents
1-1		3/5/15	2,200	ND (<20)	ND (<20)	ND (<20)	2,000	67	ND (<20)	ND (<80)	ND (<20)	ND (<20)	ND (<20)	
3-1		3/5/15	ND (<3.6)	ND (<3.6)	ND (<3.6)	ND (<3.6)	ND (<3.6)	ND (<3.6)	ND (<3.6)	ND (<14)	ND (<3.6)	ND (<3.6)	ND (<3.6)	CARBD = 32
5-1		3/5/15	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<4.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	
6-1		3/5/15	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
BP-3		10/25/91	19	ND (<0.50)	0.70	ND (<0.50)	17	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	1.6	
BP-3		12/10/91	32	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	Acetone = 13; Benzene = 28;
BP-3		3/12/92	23	ND (<1.0)	ND (<1.0)	ND (<1.0)	10	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	
BP-3		6/3/92	7.9	ND (<0.50)	ND (<0.50)	ND (<0.50)	6.4	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.50	
BP-3		9/10/92	9.9	ND (<0.50)	ND (<0.50)	ND (<0.50)	9.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
BP-3		12/2/92	7.1	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	Benzene = 8.9;
BP-3		3/2/93	15	ND (<0.50)	ND (<0.50)	ND (<0.50)	4.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
BW-1		7/30/91	110	16	12	ND (<1.0)	18	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.50	ND (<0.50)	CHLFM = 1.2;
BW-4		11/7/91	420	170	16	ND (<10)	160	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	
BW-4		12/12/91	420	160	16	-	-	-	ND (<5.0)	7.0	-	ND (<5.0)	ND (<10)	MC = 24;
BW-4		3/4/92	300	100	10	ND (<2.5)	100	ND (<0.50)	ND (<0.50)	4.0	ND (<0.50)	0.60	ND (<0.50)	CHLFM = 2.6;
BW-4		6/8/92	300	130	15	-	140	1.1	ND (<0.50)	6.5	ND (<0.50)	1.0	ND (<0.50)	CHLFM = 5.0;
BW-4		9/18/92	330	140	14	-	140	1.0	ND (<5.0)	6.6	ND (<5.0)	ND (<5.0)	ND (<5.0)	CHLFM = 4.8;
BW-4		12/14/92	330	110	12	ND (<10)	150	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
BW-4		3/5/93	330	150	15	ND (<5.0)	110	ND (<5.0)	ND (<5.0)	3.4	ND (<5.0)	ND (<5.0)	ND (<5.0)	CHLFM = 5.2;
BW-4		6/9/93	220	100	11	ND (<5.0)	140	ND (<5.0)	ND (<5.0)	2.8	ND (<5.0)	ND (<5.0)	ND (<5.0)	
BW-4		9/10/93	230	64	5.9	ND (<5.0)	86	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
BW-4	Dup	9/10/93	220	52	6.2	ND (<5.0)	68	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	CHLFM = 1.9;
BW-4		12/2/93	250	55	7.3	-	77	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
BW-4		3/2/94	360	57	9.9	-	85	ND (<1.0)	ND (<1.0)	2.2	ND (<1.0)	ND (<1.0)	ND (<1.0)	CHLFM = 1.9;
BW-4	Dup	3/2/94	380	58	9.7	-	85	ND (<1.0)	ND (<1.0)	2.2	ND (<1.0)	ND (<1.0)	ND (<1.0)	CHLFM = 2.0;
BW-4		6/8/94	300	57	4.9	-	81	ND (<1.0)	ND (<1.0)	2.0	ND (<1.0)	ND (<1.0)	ND (<1.0)	CHLFM = 2.6;
BW-4		12/5/94	260	22	ND (<10)	ND (<10)	47	ND (<10)	ND (<10)	ND (<10)	-	ND (<10)	ND (<20)	
BW-4		6/8/95	180	28	2.8	-	34	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 1.0;
BW-4		12/6/95	150	11	ND (<5.0)	ND (<5.0)	22	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
BW-4		6/5/96	150	21	8.4	ND (<2.5)	37	3.5	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	CBMA = 117; CHLFM = 6.2;
BW-4		12/12/96	130	19	6.3	6.5	39	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	CHLFM = 11;
BW-4		12/5/97	73	3.4	ND (<2.5)	ND (<2.5)	5.3	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	CBMA = 101;
BW-4	Dup	12/5/97	75	3.7	ND (<2.5)	ND (<2.5)	5.7	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	CBMA = 95;
BW-4		12/9/98	143	34	14	13	72	ND (<2.5)	ND (<2.5)	2.8	ND (<2.5)	ND (<2.5)	ND (<2.5)	CBMA = 102; CHLFM = 8.7;
BW-4		12/8/99	143	28	12	13	59	ND (<4.17)	ND (<4.17)	ND (<8.33)	ND (<4.17)	ND (<4.17)	ND (<4.17)	CHLFM = 8.4;
BW-4		12/8/00	100	19	5.0	8.2	32	ND (<1.0)	ND (<1.0)	ND (<4.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	CHLFM = 4.7;
BW-4		6/21/01	160	20	6.2	7.7	41	ND (<2.5)	ND (<2.5)	ND (<10)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
E-3		11/6/91	86	25	4.2	ND (<1.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	1.3	ND (<0.50)	CHLFM = 1.1;
E-5		11/6/91	300	50	4.8	ND (<5.0)	4.6	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
EW-1		6/9/94	36	0.70	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	BDCMe = 2.8; CHLFM = 27;
EW-1		7/14/94	45	0.98	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	BDCMe = 3.3; CHLFM = 37;
EW-1		10/17/94	31	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	BDCMe = 3.9; CHLFM = 44;
EW-1		12/16/94	37	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	CHLFM = 40;
EW-1	Dup	12/16/94	32	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	CHLFM = 38;
EW-1		3/3/95	26	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	BDCMe = 1.1; CHLFM = 40;
EW-1		6/5/95	22	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 39;
EW-1		9/6/95	24	0.78	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 51;
EW-1		12/11/95	20	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	CHLFM = 45;
EW-1		3/7/96	29	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 31;
EW-1		8/16/96	27	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 40;
EW-1		9/11/96	27	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	CBMA = 110; CHLFM = 40;
EW-1		12/10/96	18	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	CHLFM = 59;
EW-1		3/5/97	23	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 107; CHLFM = 35;
EW-1		6/4/97	27	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 109; CHLFM = 35; MC = 1.5;
EW-1		9/10/97	43	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.67	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 106; CHLFM = 32;
EW-1		12/4/97	39	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.66	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 100; CHLFM = 32;
EW-1		6/4/98	89	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	CBMA = 107; CHLFM = 14;
EW-1		12/10/98	111	2.8	ND (<2.5)	ND (<2.5)	10	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	CBMA = 103; CHLFM = 12;
EW-1		6/8/99	160	ND (<10)	ND (<10)	ND (<10)	12	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	
EW-1		12/15/99	210	5.8	ND (<5.0)	ND (<5.0)	9.1	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	CHLFM = 5.1;
EW-1		6/8/00	130	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
EW-1		12/11/00	220	5.1	ND (<0.50)	ND (<0.50)	11	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 6.2;
EW-1		6/22/01	290	ND (<5.0)	ND (<5.0)	ND (<5.0)	13	ND (<5.0)	ND (<5.0)	ND (<20)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
EW-1		6/27/02	130	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
EW-1		6/25/03	60	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.89	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 3.5;
EW-1		6/22/04	350	ND (<5.0)	ND (<5.0)	ND (<5.0)	14	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
EW-1		6/28/05	480	110	7.8	12	29	ND (<5.0)	ND (<5.0)	73	ND (<5.0)	ND (<5.0)	ND (<5.0)	
EW-2		6/9/94	170	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	
EW-2		7/14/94	260	ND (<0.50)	ND (<0.50)	ND (<0.50)	2.6	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.56;
EW-2		8/16/94	180	ND (<0.50)	ND (<0.50)	ND (<0.50)	1.9	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.76;
EW-2		9/14/94	190	ND (<0.50)	ND (<0.50)	ND (<0.50)	38	ND (<0.50)	1.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.91;
EW-2		5/31/95	3.5	ND (<0.50)	ND (<0.50)	ND (<0.50)	47	ND (<0.50)	0.63	ND (<0.50)	0.97	0.58	ND (<0.50)	1,1,2-TCA = 0.53; 1,3-DCB = 0.65;
EW-2		6/7/95	85	ND (<1.0)	ND (<1.0)	ND (<1.0)	4.6	ND (<1.0)	2.8	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	
EW-2		9/6/95	91	ND (<0.50)	ND (<0.50)	ND (<0.50)	2.8	ND (<0.50)	2.6	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.92;
EW-2		12/11/95	200	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
EW-2		3/7/96	100	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
EW-2		8/16/96	200	ND (<5.0)	ND (<5.0)	ND (<5.0)	5.4	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
EW-2		9/11/96	230	5.3	ND (<5.0)	ND (<5.0)	6.1	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	CBMA = 103; MC = 7.8;
EW-2		12/10/96	61	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
EW-2		9/10/97	6.7	ND (<2.5)	ND (<2.5)	ND (<2.5)	110	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	45	CBMA = 114;
EW-2		12/10/98	94	ND (<5.0)	ND (<5.0)	ND (<5.0)	10	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	CBMA = 118;
EW-2		6/21/01	2.8	ND (<0.50)	ND (<0.50)	ND (<0.50)	22	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
EW-2		6/24/05	26	ND (<0.50)	ND (<0.50)	ND (<0.50)	12	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
EW-3		1/7/91	3.4	7.2	1.9	2.0	-	-	0.20	2.5	0.50	0.30	0.30	1,1,2,2-TCA = 0.30; 1,1,2-TCA = 0.20; 1,2-DCPA = 0.20; 1,3-DCB = 0.50; 1,4-DCB = 0.50; 2-CVE = 0.40; Acetone = 30; BDCMe = 0.40; Benzene = 0.50; BRFM = 0.50; BRMA = 0.50; CHLBZ = 0.40; CHLEA (EC) = 0.50; CHLFM = 3.5; CHLMA = 0.50; cis-1,3-DCP = 0.30; CT = 0.30; DBCMe = 0.40; EDB = 1.0; Ethylbenzene = 0.50; MC = 5.0; m-Xylene = 0.50; o-Xylene = 0.50; TCFMe (Freon 11) = 0.50; Toluene = 0.50; trans-1,3-DCP = 0.30; Xylenes = 0.50;
EW-3		2/5/91	3.3	12	1.3	4.8	-	-	0.20	2.2	1.0	0.30	0.30	1,1,2,2-TCA = 0.30; 1,1,2-TCA = 0.20; 1,2-DCPA = 0.20; 1,3-DCB = 1.0; 1,4-DCB = 1.0; 2-CVE = 0.40; Acetone = 30; BDCMe = 0.40; Benzene = 0.50; BRFM = 0.50; BRMA = 0.50; CHLBZ = 0.40; CHLEA (EC) = 0.50; CHLFM = 2.4; CHLMA = 0.50; cis-1,3-DCP = 0.30; CT = 0.30; DBCMe = 0.40; EDB = 1.0; Ethylbenzene = 0.50; MC = 5.0; m-Xylene = 0.50; o-Xylene = 0.50; TCFMe (Freon 11) = 0.80; Toluene = 0.50; trans-1,3-DCP = 0.30; Xylenes = 0.50;
EW-4		12/7/93	120	540	71	-	530	3.8	ND (<1.0)	350	ND (<1.0)	2.0	ND (<1.0)	CHLFM = 6.9; TCFMe (Freon 11) = 12;
EW-4		6/9/94	2,200	4,500	130	-	1,500	ND (<10)	19	1,500	ND (<10)	ND (<10)	ND (<10)	
EW-4		7/14/94	2,400	3,400	73	4.9	1,200	4.9	24	1,200	-	3.1	ND (<0.50)	1,1,2-TCA = 0.70; CHLFM = 6.4; TCFMe (Freon 11) = 22;
EW-4	Dup	7/14/94	2,000	3,300	78	4.9	1,200	4.9	23	1,200	-	3.7	ND (<0.50)	1,1,2-TCA = 0.65; CHLFM = 6.8; TCFMe (Freon 11) = 22;
EW-4		8/16/94	1,200	1,800	62	-	790	ND (<10)	15	890	ND (<10)	ND (<10)	ND (<10)	TCFMe (Freon 11) = 12;
EW-4		9/14/94	1,200	1,600	71	-	460	ND (<5.0)	25	1,100	ND (<5.0)	ND (<5.0)	ND (<5.0)	TCFMe (Freon 11) = 19;
EW-4		5/31/95	450	500	25	-	200	ND (<1.0)	14	370	4.1	ND (<1.0)	ND (<1.0)	1,3-DCB = 1.9; CHLFM = 3.0; TCFMe (Freon 11) = 11;
EW-4		6/9/95	590	620	29	-	240	ND (<5.0)	12	380	ND (<5.0)	ND (<5.0)	ND (<5.0)	TCFMe (Freon 11) = 8.8;
EW-4	Dup	6/9/95	570	600	31	-	250	ND (<5.0)	12	370	ND (<5.0)	ND (<5.0)	ND (<5.0)	TCFMe (Freon 11) = 8.9;
EW-4		9/8/95	420	440	32	-	210	ND (<5.0)	14	310	ND (<5.0)	ND (<5.0)	ND (<5.0)	CHLFM = 8.0; TCFMe (Freon 11) = 8.4;
EW-4		12/11/95	260	280	22	-	120	ND (<5.0)	8.4	180	-	ND (<5.0)	ND (<10)	
EW-4	Dup	12/11/95	270	280	23	-	120	ND (<5.0)	8.5	190	-	ND (<5.0)	ND (<10)	
EW-4		3/7/96	260	240	28	74	120	ND (<5.0)	18	190	5.7	ND (<5.0)	ND (<5.0)	CHLFM = 7.1; MC = 7.5; TCFMe (Freon 11) = 12;
EW-4		6/11/96	150	140	20	44	78	ND (<2.5)	7.6	120	ND (<2.5)	ND (<2.5)	ND (<2.5)	CBMA = 98; CHLFM = 5.8; MC = 2.8; TCFMe (Freon 11) = 8.3;
EW-4		9/13/96	120	120	20	43	69	ND (<2.5)	6.0	65	2.7	ND (<2.5)	ND (<2.5)	CBMA = 104; CHLFM = 4.2; TCFMe (Freon 11) = 8.5;
EW-4		12/13/96	120	140	17	35	68	ND (<5.0)	ND (<5.0)	140	-	ND (<5.0)	ND (<10)	
EW-4		3/6/97	110	110	15	33	53	ND (<5.0)	ND (<5.0)	100	ND (<5.0)	ND (<5.0)	ND (<5.0)	CBMA = 107; TCFMe (Freon 11) = 7.9;
EW-4		6/5/97	77	78	14	26	41	ND (<2.5)	4.6	70	ND (<2.5)	ND (<2.5)	ND (<2.5)	CBMA = 89; CHLFM = 3.0; TCFMe (Freon 11) = 8.2;
EW-4		9/11/97	80	75	13	ND (<1.0)	40	ND (<1.0)	3.9	60	1.2	ND (<1.0)	ND (<1.0)	CBMA = 111; CHLFM = 3.7; TCFMe (Freon 11) = 6.4;
EW-4		12/3/97	49	49	8.8	19	27	ND (<0.50)	2.2	49	1.1	ND (<0.50)	ND (<0.50)	CBMA = 96; CHLFM = 1.4; TCFMe (Freon 11) = 5.7;
EW-4		6/4/98	34	38	7.2	18	21	ND (<1.0)	1.3	36	ND (<1.0)	ND (<1.0)	ND (<1.0)	CBMA = 111; CHLFM = 1.6; TCFMe (Freon 11) = 2.7;
EW-4		12/11/98	199	119	12	37	95	ND (<5.0)	ND (<5.0)	60	6.8	ND (<5.0)	ND (<5.0)	CBMA = 96;
EW-4		6/8/99	25	19	4.9	13	12	ND (<0.50)	0.99	17	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.60; TCFMe (Freon 11) = 1.5;
EW-4		12/15/99	22	20	5.2	14	9.5	ND (<1.3)	ND (<1.3)	10	ND (<1.3)	ND (<1.3)	ND (<1.3)	
EW-4	Dup	12/15/99	22	21	4.9	13	8.9	ND (<0.50)	0.63	8.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	TCFMe (Freon 11) = 1.1;
EW-4		6/7/00	11	11	3.6	10	7.1	ND (<0.50)	ND (<0.50)	6.7	ND (<0.50)	ND (<0.50)	ND (<0.50)	TCFMe (Freon 11) = 0.63;
EW-4		12/11/00	16	16	4.6	14	9.5	ND (<0.50)	ND (<0.50)	9.5	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.70; TCFMe (Freon 11) = 1.6;
EW-4	Dup	12/11/00	21	20	4.9	19	11	ND (<0.50)	ND (<0.50)	13	ND (<0.50)	ND (<0.50)	ND (<0.50)	TCFMe (Freon 11) = 1.3;
EW-4		6/21/01	16	16	3.9	18	10	ND (<0.50)	ND (<0.50)	14	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.61; TCFMe (Freon 11) = 1.3;
EW-4	Dup	6/21/01	17	16	3.9	18	10	ND (<0.50)	ND (<0.50)	13	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.62; TCFMe (Freon 11) = 1.2;
EW-4		6/25/03	9.3	7.3	2.8	11	4.5	ND (<0.50)	ND (<0.50)	3.6	ND (<0.50)	ND (<0.50)	ND (<0.50)	TCFMe (Freon 11) = 1.2;
EW-4	Dup	6/25/03	9.8	7.7	3.1	11	4.8	ND (<0.50)	ND (<0.50)	3.5	ND (<0.50)	ND (<0.50)	ND (<0.50)	TCFMe (Freon 11) = 1.2;
EW-4		6/22/05	17	7.9	7.5	29	8.1	ND (<0.50)	3.2	6.3	ND (<0.50)	ND (<0.50)	0.67	CHLFM = 0.51;
EW-4		3/22/07	13	4.3	5.7	14	6.4	ND (<0.50)	9.1	2.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	
EW-4		3/30/07	15	4.2	6.7	14	6.5	ND (<0.50)	8.8	2.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	
EW-4		6/12/07	15	4.2	7.5	19	6.3	ND (<0.50)	8.4	2.9	ND (<0.50)	0.51	ND (<0.50)	
EW-4		6/9/09	19	3.4	4.2	25	8.8	ND (<0.50)	11	1.7	ND (<0.50)	ND (<0.50)	0.87	
EW-4		6/14/11	26	3.2	5.9	39	9.4	ND (<0.50)	20	1.9	ND (<0.50)	ND (<0.50)	1.1	
EW-4		6/14/13	30	2.3	5.9	50	9.1	ND (<0.50)	20	1.4	ND (<0.50)	ND (<0.50)	0.62	
EW-4		6/10/15	48	3.0	7.3	74	12	ND (<0.50)	27	2.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	
EW-4	Dup	6/10/15	48	3.0	7.0	71	12	ND (<0.50)	28	2.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	
EW-4		6/5/17	35	1.9	4.7	34	6.4	ND (<0.50)	33	1.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	
EW-4		6/4/18	39	2.2	4.8	37	7.2	ND (<0.50)	49	2.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	
EW-4		6/4/19	18	2.1	1.9	11	2.7	ND (<0.50)	35	0.82	ND (<0.50)	ND (<0.50)	ND (<0.50)	
EW-4		6/2/20	16	2.5	2.5	11	2.7	ND (<0.50)	37	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
EW-5		3/23/93	1,600	340	21	ND (<25)	150	ND (<5.0)	63	200	ND (<5.0)	ND (<5.0)	ND (<5.0)	
EW-5	Dup	3/23/93	1,500	360	20	ND (<25)	150	ND (<5.0)	47	210	ND (<5.0)	ND (<5.0)	ND (<5.0)	
EW-5		6/9/94	8,400	5,300	58	-	490	ND (<50)	160	1,900	160	ND (<50)	ND (<50)	Ethylbenzene = 70; Toluene = 51; Xylenes = 330;
EW-5	Dup	6/9/94	8,000	5,200	55	-	490	ND (<50)	150	1,700	160	ND (<50)	ND (<50)	Ethylbenzene = 59; Xylenes = 310;
EW-5		7/14/94	9,600	6,000	62	-	630	ND (<50)	180	2,300	-	ND (<50)	ND (<50)	Ethylbenzene = 93; MC = 50; Toluene = 59; Xylenes = 470;
EW-5		8/18/94	8,800	9,700	160	-	1,100	ND (<50)	200	3,400	-	ND (<50)	ND (<50)	Ethylbenzene = 150; MC = 56; Toluene = 120; Xylenes = 690;
EW-5		9/14/94	5,700	5,400	180	-	750	ND (<10)	270	2,900	-	ND (<10)	ND (<10)	Ethylbenzene = 160; MC = 44; Toluene = 100; Xylenes = 720;

Appendix B
Selected Compounds from Historical Records
COE Study Area and Perimeter Area, Palo Alto, California

Location	Type	Date	TCE	1,1,1-TCA	1,1-DCA	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	PCE	Freon 113	1,2-DCB	1,2-DCA	VC	Other Constituents
EW-5	Dup	9/14/94	5,600	5,300	180	-	750	ND (<10)	270	2,900	-	ND (<10)	ND (<10)	Ethylbenzene = 160; MC = 44; TCFMe (Freon 11) = 18; Toluene = 100; Xylenes = 710;
EW-5		12/16/94	6,200	4,100	110	-	580	ND (<50)	210	1,900	-	ND (<50)	ND (<100)	Ethylbenzene = 140; Toluene = 72; Xylenes = 680;
EW-5		3/6/95	10,000	6,500	76	-	620	ND (<50)	230	2,800	270	ND (<50)	ND (<50)	
EW-5		6/9/95	6,300	5,500	98	-	770	ND (<50)	180	2,200	230	ND (<50)	ND (<50)	
EW-5		9/8/95	5,800	5,400	140	-	970	ND (<120)	820	2,300	460	ND (<120)	ND (<120)	MC = 120;
EW-5	Dup	9/8/95	5,600	5,100	ND (<120)	-	810	ND (<120)	320	1,900	440	ND (<120)	ND (<120)	
EW-5		12/8/95	5,400	5,100	100	ND (<250)	660	ND (<5.0)	180	1,900	-	ND (<5.0)	ND (<10)	Ethylbenzene = 120; MC = 22; Toluene = 81; Xylenes = 500;
EW-5		3/6/96	5,800	6,400	300	420	1,800	ND (<100)	420	2,800	520	ND (<100)	ND (<100)	MC = 220;
EW-5		6/10/96	4,100	3,100	91	160	560	ND (<50)	170	1,400	280	ND (<50)	ND (<50)	CBMA = 118;
EW-5		9/13/96	3,400	3,400	130	220	640	ND (<50)	180	1,000	330	ND (<50)	ND (<50)	CBMA = 104; MC = 69;
EW-5		12/13/96	3,600	3,500	ND (<120)	ND (<120)	430	ND (<120)	ND (<120)	1,600	-	ND (<120)	ND (<250)	Xylenes = 230;
EW-5		3/7/97	2,300	1,900	81	130	380	ND (<25)	140	1,300	240	ND (<25)	ND (<25)	CBMA = 102; MC = 28;
EW-5		6/6/97	1,800	1,700	85	120	380	ND (<25)	120	980	190	ND (<25)	ND (<25)	CBMA = 96; TCFMe (Freon 11) = 28;
EW-5		9/11/97	2,000	1,700	64	160	340	ND (<25)	140	880	230	ND (<25)	ND (<25)	CBMA = 100;
EW-5		12/4/97	1,300	760	29	64	200	ND (<25)	74	580	180	ND (<25)	ND (<25)	CBMA = 95; TFT = 108;
EW-5		6/3/98	440	160	ND (<25)	ND (<25)	95	ND (<25)	33	200	130	ND (<25)	ND (<25)	CBMA = 115;
EW-5		12/11/98	285	134	ND (<25)	26	52	ND (<25)	28	38	99	ND (<25)	ND (<25)	CBMA = 97; TFT = 105;
EW-5		6/9/99	150	47	12	23	36	ND (<10)	22	58	93	ND (<10)	ND (<10)	
EW-5		12/15/99	150	46	14	30	40	ND (<2.5)	19	37	-	ND (<2.5)	ND (<2.5)	TCFMe (Freon 11) = 6.5;
EW-5		6/13/00	130	40	ND (<2.5)	28	34	ND (<2.5)	21	56	92	ND (<2.5)	ND (<2.5)	
EW-5		12/5/00	140	42	10	30	34	ND (<2.5)	23	61	87	ND (<2.5)	ND (<2.5)	TCFMe (Freon 11) = 5.2;
EW-5		6/22/01	130	41	12	28	39	ND (<2.5)	22	41	94	ND (<2.5)	ND (<2.5)	TCFMe (Freon 11) = 8.2;
EW-5		6/25/03	82	18	8.4	13	47	ND (<0.50)	10	27	48	ND (<0.50)	1.5	CHLFM = 0.94; TCFMe (Freon 11) = 4.7;
EW-5		6/20/05	52	18	6.0	13	22	ND (<0.50)	11	23	47	ND (<0.50)	0.81	1,4-DCB = 0.64; CHLFM = 0.74; TCFMe (Freon 11) = 5.6;
EW-5		3/22/07	29	15	4.5	11	3.9	ND (<0.50)	4.4	8.4	22	ND (<0.50)	ND (<0.50)	1,2,3-TCB = 2.1; 1,2,4-TCB = 10; TCFMe (Freon 11) = 5.5;
EW-5		3/30/07	34	14	5.2	14	11	ND (<0.50)	3.8	11	24	ND (<0.50)	ND (<0.50)	1,2,4-TCB = 17; TCFMe (Freon 11) = 5.0;
EW-5		6/12/07	35	13	5.2	18	11	ND (<0.50)	3.8	12	27	ND (<0.50)	ND (<0.50)	1,2,4-TCB = 22; TCFMe (Freon 11) = 5.2;
EW-5		2/11/08	48	34	4.6	11	14	ND (<0.50)	3.5	29	24	ND (<0.50)	ND (<0.50)	1,2,3-TCB = 4.7; 1,2,4-TCB = 26; 1,4-DCB = 0.52; TCFMe (Freon 11) = 4.2;
EW-5		2/19/08	58	39	4.6	12	17	ND (<0.50)	3.7	38	26	ND (<0.50)	ND (<0.50)	1,2,3-TCB = 5.7; 1,2,4-TCB = 32; TCFMe (Freon 11) = 4.1;
EW-5		6/9/09	27	9.5	3.4	8.3	5.4	ND (<0.50)	1.9	5.4	13	ND (<0.50)	ND (<0.50)	1,2,4-TCB = 9.1; TCFMe (Freon 11) = 3.8;
EW-5		6/14/11	35	13	4.4	12	7.1	ND (<0.50)	2.4	7.6	12	ND (<0.50)	ND (<0.50)	1,2,4-TCB = 7.3; CHLFM = 1.1; TCFMe (Freon 11) = 4.2;
EW-5		6/18/13	22	9.2	3.2	7.1	1.7	ND (<0.50)	1.8	3.8	7.9	ND (<0.50)	ND (<0.50)	1,2,4-TCB = 4.1; TCFMe (Freon 11) = 3.5;
EW-5		6/10/15	21	8.8	3.5	6.6	2.1	ND (<0.50)	1.7	3.8	7.0	ND (<0.50)	ND (<0.50)	1,2,4-TCB = 3.7; TCFMe (Freon 11) = 3.6;
EW-5		6/5/17	19	6.9	3.0	5.8	1.3	ND (<0.50)	1.4	2.8	5.6	ND (<0.50)	ND (<0.50)	1,2,4-TCB = 2.8; Freon 11 = 3.1
EW-5		6/4/19	22	6.0	2.0	5.3	1.5	ND (<0.50)	1.5	3.1	5.7	ND (<0.50)	ND (<0.50)	1,2,4-TCB = 3.2; Freon 11 = 2.6
EW-6		2/2/93	210	ND (<0.50)	ND (<0.50)	ND (<0.50)	2.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
EW-6		10/17/94	1,200	ND (<2.5)	4.8	-	21	3.5	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
EW-6		12/16/94	700	ND (<5.0)	9.1	ND (<5.0)	9.9	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
EW-6		5/31/95	3,000	ND (<0.50)	ND (<0.50)	-	81	4.3	1.4	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
EW-6		6/7/95	470	3.7	8.4	-	8.2	1.5	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
EW-6		9/7/95	320	ND (<50)	ND (<50)	ND (<50)	ND (<50)	ND (<50)	ND (<50)	ND (<50)	ND (<50)	ND (<50)	ND (<50)	MC = 120;
EW-6		11/17/95	160	31	28	-	310	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	CHLFM = 11; MC = 5.8;
EW-6		12/8/95	2,600	ND (<5.0)	ND (<5.0)	ND (<100)	170	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
EW-6		3/7/96	910	33	12	ND (<12)	13	ND (<12)	ND (<12)	ND (<12)	ND (<12)	ND (<12)	ND (<12)	
EW-6		6/6/96	160	32	32	22	5.3	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	CBMA = 118;
EW-6	Dup	6/6/96	150	32	32	22	5.1	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	CBMA = 119;
EW-6		9/12/96	130	42	40	34	17	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	CBMA = 106; MC = 7.4;
EW-6		12/16/96	110	34	35	27	23	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
EW-6		3/6/97	110	53	46	40	47	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	2.7	ND (<2.5)	CBMA = 98; CHLFM = 3.0; MC = 3.0; TCFMe (Freon 11) = 3.5;
EW-6		6/5/97	100	97	53	58	100	ND (<2.5)	ND (<2.5)	3.9	ND (<2.5)	ND (<2.5)	ND (<2.5)	CBMA = 101; CHLFM = 3.7; TCFMe (Freon 11) = 7.9;
EW-6		9/9/97	100	160	56	72	170	ND (<2.5)	ND (<2.5)	2.8	ND (<2.5)	2.7	ND (<2.5)	CBMA = 107; CHLFM = 5.6; TCFMe (Freon 11) = 9.5;
EW-6		12/5/97	100	180	51	80	180	ND (<2.5)	ND (<2.5)	7.1	ND (<2.5)	2.7	ND (<2.5)	CBMA = 96; CHLFM = 6.5; TCFMe (Freon 11) = 9.9;
EW-6		6/2/98	86	380	46	110	310	ND (<12)	ND (<12)	18	ND (<12)	ND (<12)	ND (<12)	CBMA = 112;
EW-6		12/8/98	101	482	ND (<25)	108	328	ND (<25)	ND (<25)	44	ND (<25)	ND (<25)	ND (<25)	CBMA = 114;
EW-6		6/8/99	112	406	33	86	258	ND (<12.5)	ND (<12.5)	69	ND (<12.5)	ND (<12.5)	ND (<12.5)	
EW-6		12/15/99	100	410	24	74	220	ND (<5.0)	ND (<5.0)	67	ND (<5.0)	ND (<5.0)	ND (<5.0)	MC = 5.4;
EW-6		6/8/00	120	350	21	69	210	ND (<10)	ND (<10)	67	ND (<10)	ND (<10)	ND (<10)	
EW-6		12/11/00	120	270	18	53	170	ND (<10)	ND (<10)	130	ND (<10)	ND (<10)	ND (<10)	
EW-6	Dup	12/11/00	180	25	ND (<10)	11	29	ND (<10)	180	ND (<40)	ND (<10)	ND (<10)	ND (<10)	
EW-6		6/21/01	160	290	21	80	180	ND (<10)	ND (<10)	170	ND (<10)	ND (<10)	ND (<10)	
EW-6		6/25/03	120	100	11	34	74	1.1	ND (<1.0)	91	ND (<1.0)	ND (<1.0)	ND (<1.0)	
EW-6		6/24/05	290	160	11	19	41	ND (<5.0)	ND (<5.0)	67	ND (<5.0)	ND (<5.0)	ND (<5.0)	
EW-7		8/16/94	740	190	ND (<10)	-	98	ND (<10)	ND (<10)	240	ND (<10)	ND (<10)	ND (<10)	MC = 14;
EW-7	Dup	8/16/94	810	170	ND (<10)	-	84	ND (<10)	ND (<10)	190	ND (<10)	ND (<10)	ND (<10)	
EW-7		9/14/94	570	210	9.7	-	75	ND (<1.0)	9.6	230	-	ND (<1.0)	ND (<1.0)	CHLFM = 4.1; Xylenes = 2.2;
EW-7		10/17/94	730	200	8.4	-	90	ND (<5.0)	10	200	ND (<5.0)	ND (<5.0)	ND (<5.0)	
EW-7		12/16/94	670	160	7.5	-	76	ND (<5.0)	8.8	150	-	ND (<5.0)	ND (<10)	Acetone = 12;
EW-7		3/6/95	700	140	ND (<5.0)	-	65	ND (<5.0)	8.5	150	ND (<5.0)	ND (<5.0)	ND (<5.0)	
EW-7		6/9/95	560	130	ND (<5.0)	-	54	ND (<5.0)	5.9	150	ND (<5.0)	ND (<5.0)	ND (<5.0)	
EW-7		9/7/95	640	160	ND (<25)	-	63	ND (<25)	ND (<25)	130	ND (<25)	ND (<25)	ND (<25)	
EW-7		11/17/95	500	130	ND (<12)	-	50	ND (<12)	12	140	ND (<12)	ND (<12)	ND (<12)	CHLFM = 14; MC = 14;
EW-7		12/11/95	440	70	ND (<5.0)	-	35	ND (<5.0)	6.8	83	-	ND (<5.0)	ND (<10)	
EW-7		3/7/96	360	74	5.7	32	38	ND (<5.0)	16	76	ND (<5.0)	ND (<5.0)	ND (<5.0)	MC = 6.7;
EW-7		6/6/96	480	82	5.4	29	40	ND (<5.0)	10	110	ND (<5.0)	ND (<5.0)	ND (<5.0)	CBMA = 118; MC = 5.0;
EW-7		9/12/96	330	66	6.8	29	37	ND (<5.0)	12	60	ND (<5.0)	ND (<5.0)	ND (<5.0)	CBMA = 105; MC = 15;
EW-7		12/11/96	360	52	ND (<10)	21	31	ND (<10)	ND (<10)	120	-	ND (<10)	ND (<20)	
EW-7		3/6/97	350	76	8.3	30	40	ND (<5.0)	12	120	ND (<5.0)	ND (<5.0)	ND (<5.0)	CBMA = 108;
EW-7		6/5/97	240	62	7.6	23	34	ND (<5.0)	10	91	ND (<5.0)	ND (<5.0)	ND (<5.0)	CBMA = 96; TCFMe (Freon 11) = 5.9;
EW-7		9/12/97	410	110	9.9	42	53	ND (<5.0)	16	140	ND (<5.0)	ND (<5.0)	ND (<5.0)	CBMA = 106; TCFMe (Freon 11) = 5.5;
EW-7		12/3/97	300	92	12	34	51	ND (<5.0)	13	140	ND (<5.0)	ND (<5.0)	ND (<5.0)	CBMA = 90; TCFMe (Freon 11) = 8.2;
EW-7		6/2/98	620	910	37	88	150	ND (<25)	ND (<25)	270	ND (<25)	ND (<25)	ND (<25)	CBMA = 111;
EW-7		12/10/98	837	381	ND (<25)	46	84	ND (<25)	ND (<25)	252	ND (<25)	ND (<25)	ND (<25)	CBMA = 129;
EW-7		6/8/99	1,050	276	ND (<50)	52	81	ND (<50)	ND (<50)	220	ND (<50)	ND (<50)	ND (<50)	
EW-7		12/15/99	1,400	260	ND (<25)	55	85	ND (<25)	ND (<25)	210	ND (<25)	ND (<25)	ND (<25)	
EW-7	Dup	12/15/99	1,300	280	ND (<25)	55	80	ND (<25)	ND (<25)	220	ND (<25)	ND (<25)	ND (<25)	
EW-7		6/7/00	1,200	230	ND (<25)	31	48	ND (<25)	ND (<25)	340	ND (<25)	ND (<25)	ND (<25)	
EW-7		12/5/00	2,200	500	ND (<25)	91	91	ND (<25)	ND (<25)	650	ND (<25)	ND (<25)	ND (<25)	
EW-7		6/22/01	1,800	300	ND (<25)	62	65	ND (<25)	ND (<25)	420	ND (<25)	ND (<25)	ND (<25)	
EW-7		6/26/03	6,500	4,800	220	380	570	ND (<50)	77	2,200	ND (<50)	ND (<50)	ND (<50)	
EW-7		6/22/05	620	69	ND (<10)	41	20	ND (<10)	16	240	ND (<10)	ND (<10)	ND (<10)	
EW-7		6/29/06	550	64	8.0	24	36	ND (<5.0)	5.8	140	ND (<5.0)	ND (<5.0)	ND (<5.0)	
EW-7		3/22/07	410	45	6.3	26	27	ND (<5.0)	5.4	150	ND (<5.0)	ND (<5.0)	ND (<5.0)	
EW-7		3/30/07	250	28	4.1	20	18	ND (<2.0)	3.9	84	ND (<2.0)	ND (<2.0)	ND (<2.0)	
EW-7		6/12/07	370	41	6.5	28	24	ND (<5.0)	5.5	150	ND (<5.0)	ND (<5.0)	ND (<5.0)	
EW-7	Dup	6/12/07	350	39	6.3	26	23	ND (<5.0)	5.1	120	ND (<5.0)	ND (<5.0)	ND (<5.0)	
EW-7		1/15/08	760	320	43	26	290	ND (<5.0)	14	190	10	ND (<5.0)	ND (<5.0)	
EW-7		1/16/08	1,100	560	64	47	410	ND (<10)	26	340	13	ND (<10)	ND (<10)	
EW-7		2/11/08	1,500	1,000	81	73	420	ND (<20)	36	1,100	ND (<20)	ND (<20)	ND (<20)	
EW-7		2/19/08	1,700	1,300	70	81	460	ND (<20)	42	1,300	27	ND (<20)	ND (<20)	
EW-7		4/22/08	2,200	1,600	54	79	390	ND (<20)	68	1,500	53	ND (<20)	ND (<20)	
EW-7		6/11/08	2,400	1,500	55	75	390	ND (<25)	80	1,600	69	ND (<25)	ND (<25)	
EW-7		12/10/08	1,900	1,200	50	70	440	ND (<20)	72	1,700	100	ND (<20)	ND (<20)	
EW-7		6/9/09	1,500	950	37	81	340	1.0	57	890	95	ND (<0.50)	1.4	1,2,4-TCB = 1.6; 1,4-DCB = 1.2; CHLBZ = 0.60; TCFMe (Freon 11) = 1.7;
EW-7		4/5/10	1,400	870	37	87	370	ND (<25)	64	900	110	ND (<25)	ND (<25)	
EW-7		6/9/10	1,300	610	26	77	250	ND (<25)	56	760	87	ND (<25)	ND (<25)	
EW-7		6/14/11	1,100	690	39	62	330	ND (<25)	70	900	100	ND (<25)	ND (<25)	
EW-7		8/26/11	290	44	6.1	18	27	ND (<0.50)	16	110	31	ND (<0.50)	ND (<0.50)	1,2,4-TCB = 3.3;
EW-7		9/29/11	810	230	17	31	170	ND (<10)	46	370	76	ND (<10)	ND (<10)	
EW-7		10/17/11	750	220	15	30	170	ND (<10)	41	390	74	ND (<10)	ND (<10)	
EW-7		3/5/12	600	89	12	32	100	ND (<10)	33	280	70	ND (<10)	ND (<10)	
EW-7		6/13/12	580	110	16	23	180	ND (<10)	32	240	74	ND (<10)	ND (<10)	
EW-7	Dup	6/13/12	580	130	17	21	190	ND (<0.50)	28	240	72	ND (<0.50)	0.54	1,2,4-TCB = 6.8; 1,4-DCB = 0.91; TCFMe (Freon 11) = 1.4;
EW-7		6/20/13	570	230	22	30	250	ND (<10)	31	320	63	ND (<10)	ND (<10)	
EW-7		6/16/14	920	600	57	62	530	ND (<10)	56	780	120	ND (<10)	ND (<10)	
EW-7		6/10/15	2,000	1,000	26	77	450	ND (<25)	130	2,100	260	ND (<25)	ND (<25)	
EW-7		6/7/16	1,400	440	ND (<25)	65	170	ND (<25)	140	1,100	260	ND (<25)	ND (<25)	
EW-7		6/6/17	790	180	ND (<25)	54	72	ND (<25)	79	670	170	ND (<25)	ND (<25)	
EW-7	Dup	6/6/17	790	180	ND (<25)	57	71	ND (<25)	79	660	170	ND (<25)	ND (<25)	
EW-7		6/5/18	380	49	ND (<10)	22	28	ND (<10)	48	300	110	ND (<10)	ND (<10)	
EW-7		6/7/19	320	59	ND (<10)	15	41	ND (<10)	70	260	160	ND (<10)	ND (<10)	
EW-7	Dup	6/7/19	320	57	ND (<10)	15	40	ND (<10)	70	260	160	ND (<10)	ND (<10)	
EW-7		6/3/20	150	15	2.3	11	9.4	ND (<0.50)	36	97	96	ND (<0.50)	ND (<0.50)	1,2,4-TCB = 12; 1,4-DCB = 1.3; Freon 11 = 0.57
EW-8		5/6/93	190	26	11	ND (<2.5)	36	ND (<0.50)	ND (<0.50)	0.50	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 1.9; Toluene = 0.60;
EW-8		7/14/94	1,500	570	26	-	380	ND (<10)	ND (<10)	160	ND (<10)	ND (<10)	ND (<10)	
EW-8		8/16/94	1,300	470	ND (<10)	-	310	ND (<10)	ND (<10)	160	ND (<10)	ND (<10)	ND (<10)	
EW-8		9/14/94	1,200	400	23	1.1	260	1.1	ND (<0.50)	260	ND (<0.50)	0.66	ND (<0.50)	CHLFM = 3.7; TCFMe (Freon 11) = 2.2;
EW-8		12/16/94	1,500	460	24	-	310	ND (<10)	ND (<10)	220	-	ND (<10)	ND (<20)	
EW-8		3/3/95	1,200	450	14	-	280	ND (<12)	ND (<12)	210	ND (<12)	ND (<12)	ND (<12)	
EW-8	Dup	3/3/95	1,200	480	15	-	300	ND (<12)	ND (<12)	240	ND (<12)	ND (<12)	ND (<12)	
EW-8		6/5/95	800	260	ND (<12)	-	180	ND (<12)	ND (<12)	170	ND (<12)	ND (<12)	ND (<12)	MC = 20;
EW-8		9/7/95	1,100	390	ND (<25)	-	210	ND (<25)	ND (<25)	270	ND (<25)	ND (<25)	ND (<25)	MC = 58;
EW-8		11/17/95	720	250	15	-	160	ND (<12)	ND (<12)	180	ND (<12)	ND (<12)	ND (<12)	CHLFM = 20; MC = 14;
EW-8		12/11/95	820	190	12	-	130	ND (<5.0)	ND (<5.0)	150	-	ND (<5.0)	ND (<10)	
EW-8		3/7/96	990	280	15	72	160	ND (<12)	ND (<12)	230	ND (<12)	ND (<12)	ND (<12)	MC = 16;
EW-8	Dup	3/7/96	960	240	ND (<12)	56	150	ND (<12)	ND (<12)	170	ND (<12)	ND (<12)	ND (<12)	
EW-8		7/17/96	990	290	ND (<25)	62	150	ND (<25)	ND (<25)	150	ND (<25)	ND (<25)	ND (<25)	CBMA = 93; MC = 26;
EW-8		9/13/96	650	200	14	62	140	ND (<12)	ND (<12)	130	ND (<12)	ND (<12)	ND (<12)	CBMA = 106;
EW-8		12/16/96	500	150	ND (<25)	39	110	ND (<25)	ND (<25)	180	-	ND (<25)	ND (<50)	
EW-8		3/6/97	540	160	ND (<12)	49	120	ND (<12)	ND (<12)	170	ND (<12)	ND (<12)	ND (<12)	CBMA = 104;
EW-8		6/5/97	380	110	ND (<10)	35	80	ND (<10)	ND (<10)	120	ND (<10)	ND (<10)	ND (<10)	CBMA = 92;
EW-8		9/9/97	370	96	ND (<10)	30	69	ND (<10)	ND (<10)	110	ND (<10)	ND (<10)	ND (<10)	CBMA = 98;
EW-8		12/5/97	320	87	ND (<10)	28	64	ND (<10)	ND (<10)	100	ND (<10)	ND (<10)	ND (<10)	CBMA = 92;
EW-8		6/3/98	330	68	ND (<10)	24	68	ND (<10)	ND (<10)	110	ND (<10)	ND (<10)	ND (<10)	CBMA = 115;
EW-8		12/10/98	262	59	ND (<10)	19	54	ND (<10)	ND (<10)	89	ND (<10)	ND (<10)	ND (<10)	CBMA = 120;
EW-8		6/8/99	331	53	ND (<10)	20	44	ND (<10)	ND (<10)	83	ND (<10)	ND (<10)	ND (<10)	
EW-8		12/15/99	300	200	33	50	74	ND (<5.0)	ND (<5.0)	63	ND (<5.0)	ND (<5.0)	ND (<5.0)	
EW-8		6/8/00	280	530	28	82	120	ND (<5.0)	ND (<5.0)	130	ND (<5.0)	ND (<5.0)	ND (<5.0)	
EW-8		12/5/00	630	1,400	47	170	220	ND (<25)	ND (<25)	300	ND (<25)	ND (<25)	ND (<25)	
EW-8		6/22/01	910	1,200	38	150	170	ND (<13)	ND (<13)	380	ND (<13)	ND (<13)	ND (<13)	
EW-8		6/26/03	750	610	30	79	100	ND (<5.0)	ND (<5.0)	170	ND (<5.0)	ND (<5.0)	ND (<5.0)	
EW-8		6/22/05	1,500	1,100	63	320	190	ND (<50)	ND (<50)	800	ND (<50)	ND (<50)	ND (<50)	
EW-8		3/22/07	3,500	1,300	ND (<50)	120	220	ND (<50)	ND (<50)	1,600	ND (<50)	ND (<50)	ND (<50)	
EW-8		3/30/07	2,800	1,200	ND (<50)	100	190	ND (<50)	ND (<50)	1,100	ND (<50)	ND (<50)	ND (<50)	
EW-8		6/13/07	3,300	1,600	33	150	230	ND (<25)	ND (<25)	1,700	ND (<25)	ND (<25)	ND (<25)	
EW-8	Dup	6/13/07	3,200	1,600	33	150	240	ND (<25)	ND (<25)	1,600	ND (<25)	ND (<25)	ND (<25)	
EW-8		2/11/08	1,500	530	ND (<20)	53	83	ND (<20)	ND (<20)	830	ND (<20)	ND (<20)	ND (<20)	

Appendix B
Selected Compounds from Historical Records
COE Study Area and Perimeter Area, Palo Alto, California

Location	Type	Date	TCE	1,1,1-TCA	1,1-DCA	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	PCE	Freon 113	1,2-DCB	1,2-DCA	VC	Other Constituents
EW-8		2/19/08	2,000	750	ND (<20)	76	120	ND (<20)	ND (<20)	1,100	ND (<20)	ND (<20)	ND (<20)	
EW-8		4/22/08	2,500	1,100	38	120	230	ND (<20)	ND (<20)	1,300	ND (<20)	ND (<20)	ND (<20)	
EW-8		6/12/08	2,500	1,200	51	160	290	ND (<25)	ND (<25)	1,400	ND (<25)	ND (<25)	ND (<25)	
EW-8	Dup	6/12/08	2,200	1,200	47	140	290	ND (<25)	ND (<25)	1,200	ND (<25)	ND (<25)	ND (<25)	
EW-8		12/10/08	1,900	1,100	47	160	380	ND (<20)	ND (<20)	1,300	ND (<20)	ND (<20)	ND (<20)	
EW-8		6/10/09	1,700	1,200	ND (<50)	140	240	ND (<50)	ND (<50)	860	ND (<50)	ND (<50)	ND (<50)	
EW-8		4/5/10	930	530	ND (<25)	83	110	ND (<25)	ND (<25)	420	ND (<25)	ND (<25)	ND (<25)	
EW-8		6/9/10	1,100	510	ND (<10)	99	90	ND (<10)	ND (<10)	490	ND (<10)	ND (<10)	ND (<10)	
EW-8		6/15/11	730	240	11	38	52	ND (<5.0)	7.4	390	ND (<5.0)	ND (<5.0)	ND (<5.0)	
EW-8		8/26/11	710	230	14	40	69	ND (<5.0)	8.5	390	ND (<5.0)	ND (<5.0)	ND (<5.0)	
EW-8		9/29/11	740	270	16	46	95	ND (<5.0)	9.0	410	ND (<5.0)	ND (<5.0)	ND (<5.0)	
EW-8		10/17/11	820	340	17	53	120	ND (<5.0)	10	390	ND (<5.0)	ND (<5.0)	ND (<5.0)	
EW-8	Dup	10/17/11	720	310	15	45	98	ND (<5.0)	8.2	360	ND (<5.0)	ND (<5.0)	ND (<5.0)	
EW-8		3/5/12	620	330	17	64	110	ND (<5.0)	7.9	350	ND (<5.0)	ND (<5.0)	ND (<5.0)	
EW-8		6/13/12	540	350	20	41	140	ND (<5.0)	6.6	290	ND (<5.0)	ND (<5.0)	ND (<5.0)	
EW-8		6/20/13	920	870	36	79	360	ND (<5.0)	17	660	ND (<5.0)	ND (<5.0)	ND (<5.0)	
EW-8		1/16/14	1,500	1,700	69	170	740	ND (<5.0)	29	1,400	ND (<5.0)	ND (<5.0)	ND (<5.0)	
EW-8		6/10/14	950	660	36	68	350	ND (<10)	20	810	ND (<10)	ND (<10)	ND (<10)	
EW-8		6/8/15	660	350	16	46	190	ND (<10)	16	510	ND (<10)	ND (<10)	ND (<10)	
EW-8		6/6/16	500	220	ND (<10)	40	130	ND (<10)	ND (<10)	300	ND (<10)	ND (<10)	ND (<10)	
EW-8		10/26/16	600	270	10	44	130	ND (<0.50)	13	500	ND (<0.50)	ND (<0.50)	ND (<0.50)	
EW-8		1/19/17	430	250	7.5	43	100	ND (<5.0)	12	440	ND (<5.0)	ND (<5.0)	ND (<5.0)	
EW-8		4/19/17	520	190	7.9	38	94	ND (<5.0)	12	400	ND (<5.0)	ND (<5.0)	ND (<5.0)	
EW-8		6/5/17	510	190	ND (<10)	37	95	ND (<10)	10	400	ND (<10)	ND (<10)	ND (<10)	MC = 150
EW-8	Dup	6/5/17	530	200	ND (<10)	39	99	ND (<10)	11	410	ND (<10)	ND (<10)	ND (<10)	MC = 150
EW-8		10/25/17	500	170	7.4	32	84	ND (<5.0)	11	390	ND (<5.0)	ND (<5.0)	ND (<5.0)	
EW-8		1/17/18	390	150	6.8	29	74	ND (<0.50)	10	270	ND (<0.50)	ND (<0.50)	ND (<0.50)	
EW-8		4/26/18	390	100	ND (<5.0)	22	52	ND (<5.0)	9.7	310	ND (<5.0)	ND (<5.0)	ND (<5.0)	
EW-8		6/4/18	490	130	ND (<10)	26	68	ND (<10)	13	400	ND (<10)	ND (<10)	ND (<10)	
EW-8		11/27/2018	390	86	ND (<10)	20	45	ND (<10)	ND (<10)	290	ND (<10)	ND (<10)	ND (<10)	
EW-8		1/31/2019	310	66	ND (<5.0)	16	39	ND (<5.0)	7.6	230	ND (<5.0)	ND (<5.0)	ND (<5.0)	
EW-8		6/5/19	290	55	ND (<10)	15	30	ND (<10)	ND (<10)	230	ND (<10)	ND (<10)	ND (<10)	
EW-8	Dup	6/5/19	310	60	ND (<10)	15	30	ND (<10)	ND (<10)	240	ND (<10)	ND (<10)	ND (<10)	
EW-8		9/23/2019	280	53	ND (<5.0)	15	32	ND (<5.0)	8.2	210	ND (<5.0)	ND (<5.0)	ND (<5.0)	
EW-8		12/11/2019	25	3.7	ND (<0.50)	0.87	2.4	ND (<0.50)	0.72	13	ND (<0.50)	ND (<0.50)	ND (<0.50)	
EW-8		6/2/20	300	49	4.0	17	30	ND (<2.5)	8.5	250	ND (<2.5)	ND (<2.5)	ND (<2.5)	
EW-9		5/31/95	85	44	6.5	-	45	ND (<0.50)	ND (<0.50)	4.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 4.7; TCFMe (Freon 11) = 0.52;
EW-9	Dup	5/31/95	86	44	6.8	-	44	ND (<0.50)	ND (<0.50)	4.4	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 4.8; TCFMe (Freon 11) = 0.57;
EW-9		6/6/95	92	42	7.4	-	51	ND (<0.50)	ND (<0.50)	4.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 5.5; TCFMe (Freon 11) = 0.51;
EW-9		3/7/96	22	13	3.2	3.6	18	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 1.9;
EW-9		7/17/96	47	24	4.9	8.1	27	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	CBMA = 93; CHLFM = 3.9;
EW-9		9/11/96	42	23	4.2	10	26	ND (<1.0)	ND (<1.0)	1.9	ND (<1.0)	ND (<1.0)	ND (<1.0)	CBMA = 109; CHLFM = 2.6; MC = 1.1;
EW-9		3/6/97	32	15	2.7	6.0	15	ND (<0.50)	ND (<0.50)	2.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 108; CHLFM = 2.1;
EW-9		9/10/97	24	4.9	12	5.2	35	0.54	ND (<0.50)	0.54	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 105; CHLFM = 1.5;
EW-9		6/4/98	20	7.2	1.6	4.1	7.1	ND (<0.50)	ND (<0.50)	1.5	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 107; CHLFM = 0.69;
EW-9		12/8/98	22	ND (<5.0)	ND (<5.0)	ND (<5.0)	11	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	CBMA = 107;
EW-9		6/10/99	2.9	ND (<0.50)	2.3	0.67	17	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLEA (EC) = 1.4;
EW-9		6/22/05	23	1.8	0.53	2.2	2.8	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
EW-10		2/3/93	190	43	7.0	ND (<2.5)	55	ND (<2.5)	ND (<2.5)	ND (<0.50)	ND (<0.50)	ND (<2.5)	ND (<0.50)	Benzene = 0.60; Toluene = 0.90;
EW-10	Dup	2/3/93	180	42	6.8	ND (<2.5)	55	ND (<0.50)	ND (<0.50)	0.80	ND (<0.50)	ND (<0.50)	ND (<0.50)	Benzene = 0.60; Toluene = 0.90;
EW-10		9/14/94	1,700	590	42	-	500	ND (<5.0)	ND (<5.0)	320	ND (<5.0)	ND (<5.0)	ND (<5.0)	CHLFM = 7.4;
EW-10		10/17/94	1,500	560	27	-	410	ND (<10)	ND (<10)	300	ND (<10)	ND (<10)	ND (<10)	
EW-10	Dup	10/17/94	1,600	580	27	-	410	ND (<10)	ND (<10)	320	ND (<10)	ND (<10)	ND (<10)	
EW-10		12/16/94	1,600	530	32	-	430	ND (<10)	ND (<10)	230	-	ND (<10)	ND (<20)	
EW-10		3/3/95	1,300	540	29	1.6	420	1.6	ND (<0.50)	250	ND (<0.50)	1.6	ND (<0.50)	1,1,2-TCA = 0.58; CHLFM = 6.8; TCFMe (Freon 11) = 2.9;
EW-10		6/6/95	650	230	6.9	-	180	ND (<5.0)	ND (<5.0)	200	ND (<5.0)	ND (<5.0)	ND (<5.0)	
EW-10		11/17/95	370	150	9.2	-	110	ND (<5.0)	ND (<5.0)	100	ND (<5.0)	ND (<5.0)	ND (<5.0)	CHLFM = 9.3; MC = 5.1;
EW-10	Dup	11/17/95	390	160	9.8	-	110	ND (<5.0)	ND (<5.0)	110	ND (<5.0)	ND (<5.0)	ND (<5.0)	CHLFM = 10; MC = 5.4;
EW-10		12/7/95	420	130	7.1	ND (<25)	92	ND (<5.0)	ND (<5.0)	100	-	ND (<5.0)	ND (<10)	
EW-10		3/7/96	760	270	ND (<12)	64	150	ND (<12)	ND (<12)	180	ND (<12)	ND (<12)	ND (<12)	
EW-10		7/17/96	330	110	6.1	31	63	ND (<5.0)	ND (<5.0)	60	ND (<5.0)	ND (<5.0)	ND (<5.0)	CBMA = 88; CHLFM = 7.2;
EW-10		9/11/96	240	84	5.6	29	58	ND (<5.0)	ND (<5.0)	55	ND (<5.0)	ND (<5.0)	ND (<5.0)	CBMA = 106; MC = 7.8;
EW-10		12/10/96	180	52	ND (<5.0)	15	39	ND (<5.0)	ND (<5.0)	65	-	ND (<5.0)	ND (<10)	
EW-10		3/6/97	170	60	6.0	27	50	ND (<2.5)	ND (<2.5)	66	ND (<2.5)	ND (<2.5)	ND (<2.5)	CBMA = 98; MC = 3.2;
EW-10		6/6/97	120	46	4.4	18	38	ND (<2.5)	ND (<2.5)	46	ND (<2.5)	ND (<2.5)	ND (<2.5)	CBMA = 93; CHLFM = 2.5;
EW-10		9/10/97	130	49	5.2	21	34	ND (<2.5)	ND (<2.5)	33	ND (<2.5)	4.2	ND (<2.5)	CBMA = 87; CHLFM = 4.0; MC = 4.5;
EW-10		12/5/97	99	37	3.1	15	30	ND (<2.5)	ND (<2.5)	36	ND (<2.5)	ND (<2.5)	ND (<2.5)	CBMA = 103;
EW-10		6/4/98	83	30	ND (<2.5)	8.2	29	ND (<2.5)	ND (<2.5)	29	ND (<2.5)	ND (<2.5)	ND (<2.5)	CBMA = 110;
EW-10		12/8/98	61	19	ND (<5.0)	18	20	ND (<5.0)	ND (<5.0)	16	ND (<5.0)	ND (<5.0)	ND (<5.0)	CBMA = 108;
EW-10		6/8/99	55	15	1.7	7.5	15	ND (<1.0)	ND (<1.0)	13	ND (<1.0)	ND (<1.0)	ND (<1.0)	
EW-10		12/15/99	50	11	ND (<1.3)	6.0	10	ND (<1.3)	ND (<1.3)	9.3	ND (<1.3)	ND (<1.3)	ND (<1.3)	
EW-10	Dup	12/15/99	50	10	ND (<1.3)	6.0	9.0	ND (<1.3)	ND (<1.3)	9.8	ND (<1.3)	ND (<1.3)	ND (<1.3)	
EW-10		6/8/00	51	14	1.3	7.8	14	ND (<0.50)	ND (<0.50)	15	ND (<0.50)	ND (<0.50)	ND (<0.50)	
EW-10	Dup	6/8/00	49	14	1.3	8.0	14	ND (<0.50)	ND (<0.50)	15	ND (<0.50)	ND (<0.50)	ND (<0.50)	
EW-10		12/5/00	47	12	1.3	6.0	13	ND (<1.0)	ND (<1.0)	13	ND (<1.0)	ND (<1.0)	ND (<1.0)	
EW-10		6/22/01	52	11	1.4	6.3	13	ND (<1.0)	ND (<1.0)	9.0	ND (<1.0)	ND (<1.0)	ND (<1.0)	
EW-10	Dup	6/22/01	45	8.3	ND (<2.5)	3.0	10	ND (<2.5)	ND (<2.5)	ND (<10)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
EW-10		6/26/03	34	5.3	1.0	3.9	7.5	ND (<0.50)	ND (<0.50)	5.8	ND (<0.50)	ND (<0.50)	ND (<0.50)	
EW-10	Dup	6/26/03	36	5.8	1.4	4.0	8.1	ND (<0.50)	ND (<0.50)	4.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	
EW-10		6/22/05	39	7.5	1.6	7.9	8.4	ND (<0.50)	ND (<0.50)	11	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.59;
EW-10		6/13/07	85	540	42	91	160	ND (<5.0)	ND (<5.0)	110	ND (<5.0)	ND (<5.0)	ND (<5.0)	
EW-10	Dup	6/13/07	77	460	37	78	130	ND (<5.0)	ND (<5.0)	98	ND (<5.0)	ND (<5.0)	ND (<5.0)	
EW-10		6/12/08	140	370	26	53	92	ND (<5.0)	ND (<5.0)	110	ND (<5.0)	ND (<5.0)	ND (<5.0)	
EW-10	Dup	6/12/08	160	420	30	62	110	ND (<10)	ND (<10)	130	ND (<10)	ND (<10)	ND (<10)	
EW-10		12/10/08	55	180	24	12	66	ND (<1.0)	ND (<1.0)	56	ND (<1.0)	ND (<1.0)	ND (<1.0)	
EW-10		6/11/09	100	210	13	28	47	ND (<5.0)	ND (<5.0)	58	ND (<5.0)	ND (<5.0)	ND (<5.0)	
EW-10		6/16/11	19	11	1.3	4.5	5.0	ND (<0.50)	ND (<0.50)	5.8	ND (<0.50)	ND (<0.50)	ND (<0.50)	
EW-10		3/5/12	16	6.6	0.99	4.3	4.0	ND (<0.50)	ND (<0.50)	4.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	
EW-10		6/20/13	22	8.8	1.2	4.6	6.7	ND (<0.50)	ND (<0.50)	5.4	ND (<0.50)	ND (<0.50)	ND (<0.50)	
EW-10		1/16/14	18	6.5	0.96	3.4	4.5	ND (<0.50)	ND (<0.50)	4.4	ND (<0.50)	ND (<0.50)	ND (<0.50)	
EW-10		6/11/14	26	8.6	1.4	5.0	6.7	ND (<0.50)	ND (<0.50)	6.8	ND (<0.50)	ND (<0.50)	ND (<0.50)	
EW-10		6/8/15	28	7.7	1.2	4.7	6.6	ND (<0.50)	ND (<0.50)	7.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	
EW-10		6/5/17	18	2.9	0.60	2.3	3.1	ND (<0.50)	ND (<0.50)	2.8	ND (<0.50)	ND (<0.50)	ND (<0.50)	
EW-10		6/4/18	18	2.1	ND (<0.50)	2.1	2.3	ND (<0.50)	ND (<0.50)	2.6	ND (<0.50)	ND (<0.50)	ND (<0.50)	
EW-10		6/4/19	17	1.5	ND (<0.50)	1.6	1.7	ND (<0.50)	ND (<0.50)	2.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	
EW-10		6/2/20	17	1.5	ND (<0.50)	1.2	1.7	ND (<0.50)	ND (<0.50)	2.3	ND (<0.50)	ND (<0.50)	ND (<0.50) *	
EW-11		2/1/93	160	160	ND (<50)	ND (<50)	ND (<50)	ND (<50)	3,300	ND (<50)	ND (<50)	ND (<50)	ND (<50)	
EW-11		9/8/94	200	230	4.7	ND (<0.50)	6.4	ND (<0.50)	3,000	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	1,1,2-TCA = 0.61; CHLBZ = 20; CHLFM = 0.97;
EW-11		12/6/94	180	120	ND (<100)	ND (<100)	ND (<100)	ND (<100)	2,000	ND (<100)	-	ND (<100)	ND (<200)	
EW-11		3/7/95	180	160	ND (<5.0)	-	9.8	ND (<5.0)	3,000	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
EW-11		6/8/95	170	170	ND (<5.0)	-	14	ND (<5.0)	3,300	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	CHLBZ = 20;
EW-11		9/8/95	280	320	ND (<50)	-	ND (<50)	ND (<50)	3,000	ND (<50)	ND (<50)	ND (<50)	ND (<50)	
EW-11		12/11/95	150	100	ND (<5.0)	-	5.6	ND (<5.0)	1,600	ND (<5.0)	-	ND (<5.0)	ND (<10)	
EW-11R		11/17/95	170	120	ND (<12)	-	ND (<12)	ND (<12)	1,000	ND (<12)	ND (<12)	ND (<12)	ND (<12)	BDCMe = 12; CHLFM = 13; MC = 14;
EW-11R		3/7/96	360	76	ND (<12)	31	ND (<12)	ND (<12)	650	ND (<12)	ND (<12)	ND (<12)	ND (<12)	
EW-11R		6/7/96	200	30	5.1	15	7.4	ND (<5.0)	370	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	CBMA = 111;
EW-11R		9/12/96	340	67	ND (<12)	74	ND (<12)	ND (<12)	1,100	ND (<12)	ND (<12)	ND (<12)	ND (<12)	CBMA = 97; MC = 17;
EW-11R		12/13/96	260	49	ND (<25)	47	ND (<25)	ND (<25)	1,000	ND (<25)	-	ND (<25)	ND (<50)	
EW-11R		3/7/97	290	56	10	45	38	ND (<10)	660	ND (<10)	ND (<10)	ND (<10)	ND (<10)	CBMA = 99;
EW-11R		6/6/97	270	53	11	39	55	ND (<10)	520	ND (<10)	ND (<10)	ND (<10)	ND (<10)	CBMA = 100;
EW-11R		9/12/97	310	75	ND (<10)	30	54	ND (<10)	500	ND (<10)	ND (<10)	10	ND (<10)	CBMA = 100;
EW-11R		12/4/97	210	42	ND (<10)	24	41	ND (<10)	340	ND (<10)	ND (<10)	ND (<10)	ND (<10)	CBMA = 91;
EW-11R		6/3/98	170	27	ND (<10)	18	38	ND (<10)	280	ND (<10)	ND (<10)	ND (<10)	ND (<10)	CBMA = 111;
EW-11R		12/11/98	171	35	6.5	14	44	ND (<5.0)	208	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	CBMA = 96;
EW-11R		6/10/99	150	25	ND (<10)	16	34	ND (<10)	211	ND (<10)	ND (<10)	ND (<10)	ND (<10)	
EW-11R	Dup	6/10/99	156	28	ND (<12.5)	18	36	ND (<12.5)	222	ND (<12.5)	ND (<12.5)	ND (<12.5)	ND (<12.5)	
EW-11R		12/15/99	220	33	5.5	21	43	ND (<2.5)	230	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
EW-11R		6/9/00	200	25	ND (<5.0)	14	25	ND (<5.0)	230	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
EW-11R	Dup	6/9/00	260	35	ND (<5.0)	22	35	ND (<5.0)	280	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
EW-11R		12/12/00	180	26	ND (<10)	13	30	ND (<10)	170	ND (<40)	ND (<10)	ND (<10)	ND (<10)	
EW-11R		6/22/01	230	ND (<5.0)	ND (<5.0)	6.1	5.7	ND (<5.0)	27	ND (<20)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
EW-11R		6/27/02	140	29	3.1	21	20	ND (<2.0)	250	ND (<2.0)	ND (<2.0)	ND (<2.0)	ND (<2.0)	
EW-11R	Dup	6/27/02	140	28	3.1	20	20	ND (<2.0)	230	ND (<2.0)	ND (<2.0)	ND (<2.0)	ND (<2.0)	
EW-11R		6/26/03	130	29	ND (<2.5)	13	11	ND (<2.5)	260	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
EW-11R		6/22/04	160	19	ND (<2.5)	15	13	ND (<2.5)	230	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
EW-11R	Dup	6/22/04	180	25	3.0	19	18	ND (<2.5)	250	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
EW-11R		6/29/05	150	21	ND (<2.5)	22	13	ND (<2.5)	250	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
EW-11R	Dup	6/29/05	160	20	ND (<2.5)	21	12	ND (<2.5)	210	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
EW-11R		6/29/06	150	18	ND (<2.5)	18	10	ND (<2.5)	300	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
EW-11R		6/19/07	170	20	ND (<2.0)	19	10	ND (<2.0)	380	2.1	ND (<2.0)	ND (<2.0)	ND (<2.0)	
EW-11R	Dup	6/19/07	160	19	ND (<2.0)	20	11	ND (<2.0)	390	ND (<2.0)	ND (<2.0)	ND (<2.0)	ND (<2.0)	
EW-11R		6/10/08	140	15	ND (<5.0)	16	8.8	ND (<5.0)	360	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
EW-11R		6/10/09	150	16	2.1	16	8.2	ND (<0.50)	360	1.4	ND (<0.50)	ND (<0.50)	ND (<0.50)	
EW-11R		6/8/10	170	13	ND (<5.0)	17	7.7	ND (<5.0)	500	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
EW-11R		6/14/11	150	12	ND (<5.0)	19	8.8	ND (<5.0)	470	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
EW-11R		6/12/12	150	12	ND (<5.0)	12	13	ND (<5.0)	480	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
EW-11R		4/4/13	120	8.4	2.5	11	12	ND (<0.50)	450	1.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	
EW-11R		6/18/13	80	5.6	8.0	14	840	ND (<5.0)	250	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
EW-11R		8/23/13	19	3.5	5.8	11	1,700	7.2	55	ND (<2.5)	ND (<2.5)	ND (<2.5)	170	
EW-11R	Dup	8/23/13	12	2.7	5.1	7.9	1,600	5.5	27	ND (<2.5)	ND (<2.5)	ND (<2.5)	140	
EW-11R		11/22/13	13	ND (<2.5)	3.9	3.1	280	5.3	42	ND (<2.5)	ND (<2.5)	ND (<2.5)	200	
EW-11R		5/22/14	22	2.6	3.0	ND (<2.5)	110	ND (<2.5)	46	ND (<2.5)	ND (<2.5)	ND (<2.5)	130	
EW-11R	Dup	5/22/14	23	2.6	3.1	2.6	110	ND (<2.5)	48	ND (<2.5)	ND (<2.5)	ND (<2.5)	140	
EW-11R		6/11/14	28	ND (<5.0)	ND (<5.0)	ND (<5.0)	170	ND (<5.0)	51	ND (<5.0)	ND (<5.0)	ND (<5.0)	200	
EW-11R		2/23/15	2.8	ND (<2.5)	ND (<2.5)	ND (<2.5)	40	4.8	3.2	ND (<2.5)	ND (<2.5)	ND (<2.5)	66	
EW-11R	Dup	2/23/15	2.8	ND (<2.5)	ND (<2.5)	ND (<2.5)	41	4.6	3.3	ND (<2.5)	ND (<2.5)	ND (<2.5)	63	
EW-11R		6/9/15	ND (<2.5)	ND (<2.5)	3.3	ND (<2.5)	86	3.0	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	87	
EW-11R		8/10/15	1.2	ND (<0.50)	3.6	ND (<0.50)	63	2.0	0.81	ND (<0.50)	ND (<0.50)	ND (<0.50)	60	
EW-11R	Dup	8/10/15	1.1	ND (<0.50)	3.3	ND (<0.50)	58	1.9	0.73	ND (<0.50)	ND (<0.50)	ND (<0.50)	57	
EW-11R		6/7/16	0.98	ND (<0.50)	3.2	ND (<0.50)	80	2.1	0.71	ND (<0.50)	ND (<0.50)	ND (<0.50)	70	
EW-11R		6/6/17	ND (<2.5)	ND (<2.5)	6.1	6.4	280	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	42	
EW-11R		6/4/18	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	74	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	38	
EW-11R		6/5/19	ND (<0.50)	ND (<0.50)	6.1	15	400	3.6	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	35	
EW-11R		6/4/20	ND (<2.5)	ND (<2.5)	6.3	11	440	4.6	ND (<2.5)	ND (<10)	ND (<2.5)	ND (<2.5)	110	
EW-12		9/12/96	30	3.4	1.3	2.8	0.84	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 104; CHLFM = 2.2;

Appendix B
Selected Compounds from Historical Records
COE Study Area and Perimeter Area, Palo Alto, California

Location	Type	Date	TCE	1,1,1-TCA	1,1-DCA	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	PCE	Freon 113	1,2-DCB	1,2-DCA	VC	Other Constituents
EW-12		11/19/96	70	9.2	3.1	7.1	2.0	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	CBMA = 106; CHLFM = 5.4; MC = 1.1;
EW-12		12/16/96	63	5.6	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
EW-12		3/6/97	41	5.6	1.3	3.0	1.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 103;
EW-12		6/4/97	38	5.6	1.2	2.7	0.93	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 104;
EW-12		9/9/97	31	3.8	0.90	1.9	0.67	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 103;
EW-12		12/5/97	25	3.0	0.76	1.6	0.59	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 100;
EW-12		6/4/98	17	1.4	ND (<0.50)	0.85	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 108;
EW-12		12/9/98	18	2.2	ND (<0.50)	0.95	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 98;
EW-12		6/9/99	14	1.1	ND (<0.50)	0.87	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
EW-12		12/15/99	15	0.88	ND (<0.50)	0.67	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
EW-12		6/8/00	15	0.88	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
EW-12		12/11/00	14	0.85	ND (<0.50)	0.81	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
EW-12		6/22/01	17	1.1	ND (<0.50)	0.78	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
EW-12		6/27/02	13	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
EW-12		6/26/03	8.4	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
EW-12		6/25/04	10	ND (<0.50)	ND (<0.50)	0.71	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
EW-12		6/21/05	11	0.61	ND (<0.50)	0.74	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
EW-12		7/7/06	3.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
EW-12		6/20/07	5.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
EW-12		6/12/08	3.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
EW-12		6/16/09	13	0.70	1.2	1.6	0.64	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
EW-12		6/9/10	5.9	ND (<0.50)	ND (<0.50)	0.87	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
EW-12		6/16/11	7.1	0.51	ND (<0.50)	1.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
EW-12		6/14/12	12	0.54	0.77	1.5	0.52	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
EW-12		6/20/13	5.4	ND (<0.50)	ND (<0.50)	0.56	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
EW-12	Dup	6/20/13	4.9	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
EW-12		6/11/14	5.0	ND (<0.50)	ND (<0.50)	0.51	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
EW-12		6/10/15	4.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
EW-12		6/7/16	3.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
EW-12		6/7/17	3.7	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
EW-12		6/6/18	3.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
EW-12		6/6/19	3.6	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
EW-12		6/4/20	3.4	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
EW-13		4/30/93	46	4.4	3.9	-	1.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	Toluene = 0.50;
EW-13		6/11/93	55	4.1	4.2	-	1.9	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
EW-13		9/8/93	71	9.3	6.3	ND (<1.0)	2.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
EW-13		12/13/93	62	5.9	5.4	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
EW-13		3/3/94	73	6.2	5.0	-	2.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
EW-13		6/3/94	36	3.4	3.2	-	2.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
EW-13		2/8/95	150	22	7.3	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
EW-13		3/6/95	190	29	6.6	-	3.8	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
EW-13		8/16/95	160	23	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
EW-13		9/8/95	130	25	4.5	-	3.2	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	MC = 5.2;
EW-13		3/5/97	85	9.4	3.3	7.7	2.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 99;
EW-13		6/4/97	85	13	4.0	9.8	2.7	ND (<1.0)	ND (<1.0)	1.1	ND (<1.0)	ND (<1.0)	ND (<1.0)	CBMA = 106;
EW-13		9/9/97	33	5.0	1.5	3.5	0.95	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 106;
EW-13		12/5/97	52	7.6	2.6	6.5	1.6	ND (<0.50)	ND (<0.50)	0.54	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 97;
EW-13		6/4/98	51	5.2	ND (<2.5)	4.8	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	CBMA = 113;
EW-13		12/9/98	60	8.8	ND (<2.5)	5.1	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	CBMA = 95;
EW-13		6/9/99	40	4.0	1.6	4.1	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	
EW-13		12/15/99	45	2.8	ND (<1.3)	3.2	ND (<1.3)	ND (<1.3)	ND (<1.3)	ND (<1.3)	ND (<1.3)	ND (<1.3)	ND (<1.3)	
EW-13		6/8/00	43	3.5	1.0	3.6	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<4.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	
EW-13		12/11/00	35	3.0	ND (<1.0)	2.9	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<4.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	
EW-13		6/22/01	38	2.9	ND (<1.0)	3.6	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<4.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	
EW-13		6/26/03	22	1.8	0.81	2.5	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
EW-13		6/21/05	23	1.8	1.2	3.0	0.90	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
EW-13		6/12/07	22	1.2	2.9	6.3	2.5	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
EW-13		6/15/09	22	1.3	3.9	7.3	3.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
EW-13		6/9/10	0.53	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
EW-13	Dup	6/9/10	0.59	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
EW-13		6/16/11	0.69	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
EW-13	Dup	6/16/11	0.67	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
EW-13		6/14/12	24	1.1	4.4	7.2	4.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
EW-13		6/20/13	1.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
EW-13		6/11/14	29	1.3	4.8	10	4.5	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
EW-13		6/10/15	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
EW-13		6/7/16	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
EW-13		6/5/17	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
EW-13	Dup	6/5/17	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	MC = 6.1
EW-14		10/16/95	24	6.9	ND (<0.50)	-	0.54	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	BDCMe = 3.2; CHLFM = 39;
EW-14		12/8/95	33	7.7	ND (<5.0)	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	CHLFM = 24;
EW-14		3/6/96	260	52	ND (<5.0)	36	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	CHLFM = 8.3;
EW-14		6/11/96	200	32	ND (<5.0)	25	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	CBMA = 116; CHLFM = 8.0;
EW-14		9/12/96	170	32	4.4	28	4.1	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	CBMA = 103; CHLFM = 5.9; MC = 6.9;
EW-14		11/19/96	560	100	16	83	14	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	CBMA = 105;
EW-14		12/16/96	320	52	ND (<10)	38	ND (<10)	ND (<10)	ND (<10)	ND (<10)	-	ND (<10)	ND (<20)	
EW-14		3/5/97	250	41	ND (<5.0)	27	6.2	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	CBMA = 91;
EW-14		6/4/97	230	41	6.5	27	7.7	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	CBMA = 98; MC = 2.9;
EW-14		9/11/97	270	47	ND (<5.0)	25	7.0	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	CBMA = 104;
EW-14		12/2/97	220	27	3.4	21	4.5	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	CBMA = 93;
EW-14		6/4/98	200	22	ND (<5.0)	18	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	CBMA = 124;
EW-14		12/9/98	186	24	ND (<5.0)	14	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	CBMA = 98;
EW-14		6/9/99	160	17	ND (<10)	14	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	
EW-14	Dup	6/9/99	145	15	ND (<10)	12	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	
EW-14		12/15/99	160	7.5	ND (<2.5)	6.5	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
EW-14		6/9/00	190	11	ND (<2.5)	12	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
EW-14		12/11/00	140	9.8	ND (<2.5)	8.2	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<10)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
EW-14		6/22/01	200	46	ND (<2.5)	22	4.3	ND (<2.5)	ND (<2.5)	ND (<10)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
EW-14		6/27/02	120	7.2	ND (<2.5)	6.5	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
EW-14		6/26/03	85	4.8	1.2	5.6	1.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
EW-14		6/25/04	99	5.2	1.4	5.5	2.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
EW-14		6/21/05	87	5.0	1.3	6.3	2.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
EW-14		6/28/06	75	2.0	0.84	2.5	1.4	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
EW-14	Dup	6/28/06	80	2.2	0.94	2.7	1.6	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
EW-15		10/16/95	63	ND (<0.50)	0.94	-	12	11	5.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 1.7;
EW-15		12/6/95	62	ND (<5.0)	ND (<5.0)	-	13	8.2	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
EW-15		3/6/96	100	ND (<2.5)	ND (<2.5)	ND (<2.5)	9.8	14	13	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
EW-15		6/11/96	85	ND (<2.5)	ND (<2.5)	ND (<2.5)	8.0	9.6	9.0	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	CBMA = 104;
EW-15		9/10/96	33	12	ND (<2.5)	15	9.0	ND (<2.5)	230	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	CBMA = 99;
EW-15		12/11/96	25	6.4	ND (<5.0)	9.1	14	ND (<5.0)	170	ND (<5.0)	-	ND (<5.0)	ND (<10)	MEK = 130;
EW-15		3/5/97	21	7.5	ND (<1.2)	10	9.0	1.7	130	ND (<1.2)	ND (<1.2)	ND (<1.2)	ND (<1.2)	CBMA = 89;
EW-15		6/3/97	3.5	2.0	ND (<0.50)	2.2	1.2	ND (<0.50)	36	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 91;
EW-15		9/9/97	17	10	2.5	11	5.0	ND (<2.5)	160	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	CBMA = 95;
EW-15		12/3/97	15	7.8	ND (<2.5)	8.4	4.5	ND (<2.5)	120	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	CBMA = 85;
EW-15		6/3/98	15	5.2	ND (<2.5)	7.8	8.8	ND (<2.5)	110	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	CBMA = 111;
EW-15		12/8/98	13	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	186	ND (<10)	ND (<10)	ND (<10)	ND (<10)	CBMA = 103;
EW-15		6/9/99	11	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	152	ND (<10)	ND (<10)	ND (<10)	ND (<10)	
EW-15		12/15/99	92	ND (<5.0)	ND (<5.0)	8.6	40	ND (<5.0)	290	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	MC = 6.4;
EW-15		6/9/00	7.4	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	61	ND (<10)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
EW-15		12/11/00	12	ND (<5.0)	ND (<5.0)	6.2	ND (<5.0)	ND (<5.0)	160	ND (<20)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
EW-15		6/22/01	18	ND (<5.0)	ND (<5.0)	6.1	6.7	ND (<5.0)	180	ND (<20)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
EW-15		6/26/03	13	2.8	ND (<2.5)	4.0	4.9	ND (<2.5)	140	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
EW-15		6/20/05	12	2.7	ND (<1.0)	5.7	7.8	ND (<1.0)	150	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	
EW-15		6/18/07	16	ND (<0.50)	ND (<0.50)	ND (<0.50)	3.4	2.8	9.4	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
EW-15	Dup	6/18/07	21	ND (<0.50)	0.64	ND (<0.50)	4.3	4.3	13	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
EW-15		6/10/09	35	ND (<5.0)	ND (<5.0)	ND (<5.0)	16	ND (<5.0)	140	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
EW-15		6/15/11	12	0.93	0.73	2.1	9.2	1.2	73	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
EW-15		6/18/13	8.5	0.63	0.54	1.6	9.5	0.61	100	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
EW-15		11/13/13	18	2.8	1.0	5.4	9.4	1.1	230	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
EW-15		2/25/14	17	ND (<0.50)	0.81	1.2	75	5.3	15	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.62	
EW-15		5/13/14	29	ND (<0.50)	1.2	1.2	11	4.4	12	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.98	
EW-15		8/13/14	31	ND (<0.50)	1.3	1.9	16	3.5	13	ND (<0.50)	ND (<0.50)	ND (<0.50)	1.7	
EW-15		11/12/14	22	ND (<0.50)	2.0	2.0	29	3.5	20	ND (<0.50)	ND (<0.50)	ND (<0.50)	2.8	
EW-15		6/9/15	39	ND (<0.50)	1.3	1.8	9.0	5.6	3.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.66	
EW-15		1/12/16	11	ND (<0.50)	ND (<0.50)	ND (<0.50)	2.8	1.6	0.63	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
EW-15		6/6/16	2.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
EW-15		6/5/17	23	ND (<0.50)	0.79	0.67	4.2	3.2	2.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
EW-15		6/5/18	14	ND (<0.50)	ND (<0.50)	ND (<0.50)	2.3	1.6	2.7	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
EW-15		6/5/19	3.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.63	ND (<0.50)	0.63	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
EW-15		6/3/20	3.5	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.88	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
EW-16		10/16/95	0.86	ND (<0.50)	2.3	ND (<0.50)	0.86	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
EW-16		12/6/95	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
EW-16		3/5/96	0.73	ND (<0.50)	2.7	ND (<0.50)	0.91	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
EW-16		6/7/96	1.2	ND (<0.50)	2.7	ND (<0.50)	0.98	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 119;
EW-16		6/24/96	85	ND (<1.0)	1.2	ND (<1.0)	16	11	9.4	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	CBMA = 116;
EW-16		10/11/96	140	4.6	3.0	12	32	-	340	ND (<0.50)	ND (<1.0)	-	-	
EW-16		3/5/97	110	ND (<5.0)	ND (<5.0)	11	23	ND (<5.0)	270	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	CBMA = 106;
EW-16		6/3/97	110	6.9	ND (<5.0)	5.7	42	6.7	290	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	CBMA = 91;
EW-16		9/9/97	91	8.9	ND (<5.0)	9.1	40	5.2	270	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	CBMA = 104;
EW-16		12/3/97	84	8.4	ND (<5.0)	9.1	36	5.2	250	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	CBMA = 95;
EW-16		6/3/98	93	ND (<10)	ND (<10)	ND (<10)	21	ND (<10)	300	ND (<10)	ND (<10)	ND (<10)	ND (<10)	CBMA = 110;
EW-16		12/8/98	84	ND (<10)	ND (<10)	ND (<10)	46	ND (<10)	299	ND (<10)	ND (<10)	ND (<10)	ND (<10)	CBMA = 124;
EW-16		6/9/99	58	ND (<10)	ND (<10)	ND (<10)	62	ND (<10)	218	ND (<10)	ND (<10)	ND (<10)	ND (<10)	
EW-16		12/15/99	11	3.2	ND (<2.5)	6.5	2.5	ND (<2.5)	120	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
EW-16		6/9/00	54	ND (<5.0)	ND (<5.0)	ND (<5.0)	20	ND (<5.0)	220	ND (<20)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
EW-16		12/11/00	80	ND (<5.0)	ND (<5.0)	6.3	36	ND (<5.0)	310	ND (<20)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
EW-16		6/22/01	74	ND (<5.0)	ND (<5.0)	6.0	59	ND (<5.0)	270	ND (<20)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
EW-16		7/7/03	58	ND (<1.0)	1.9	1.3	12	2.8	140	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	
EW-16		6/20/05	49	2.8	3.0	8.8	33	2.6	270	ND (<2.0)	ND (<2.0)	ND (<2.0)	ND (<2.0)	
EW-16		6/19/07	41	ND (<2.0)	ND (<2.0)	4.3	6.3	ND (<2.0)	100	ND (<2.0)	ND (<2.0)	ND (<2.0)	ND (<2.0)	
EW-16		6/10/09	32	1.4	1.3	3.0	13	1.7	110	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	
EW-16		6/15/11	45	1.5	1.8	5.2	14	2.0	140	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
EW-16	Dup	6/15/11	44	1.5	1.9	4.9	14	2.0	120	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
EW-16		6/18/13	45	1.4	1.7	3.6	10	1.2	170	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
EW-16		11/13/13	56	2.2	2.2	5.5	10	1.2	270	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
EW-16	Dup	11/13/13	46	1.7	1.8	3.8	9.5	1.1	180	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	

Appendix B
Selected Compounds from Historical Records
COE Study Area and Perimeter Area, Palo Alto, California

Location	Type	Date	TCE	1,1,1-TCA	1,1-DCA	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	PCE	Freon 113	1,2-DCB	1,2-DCA	VC	Other Constituents
EW-16		2/25/14	40	1.6	1.6	3.4	34	2.1	130	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
EW-16		5/13/14	9.6	0.50	1.1	1.9	190	1.9	28	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
EW-16		8/13/14	9.0	ND (<2.5)	ND (<2.5)	ND (<2.5)	200	ND (<2.5)	22	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
EW-16		11/12/14	9.9	ND (<2.5)	ND (<2.5)	ND (<2.5)	200	ND (<2.5)	14	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
EW-16		6/9/15	5.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	25	ND (<0.50)	9.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
EW-16		1/12/16	18	ND (<0.50)	0.98	0.94	25	2.8	34	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
EW-16		6/6/16	7.1	ND (<0.50)	0.61	0.51	31	1.9	13	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
EW-16		6/5/17	4.9	ND (<0.50)	ND (<0.50)	ND (<0.50)	9.5	0.85	8.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
EW-16		6/4/18	9.3	ND (<0.50)	0.50	ND (<0.50)	9.1	0.78	17	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
EW-16		6/5/19	5.4	ND (<0.50)	ND (<0.50)	ND (<0.50)	6.7	1.0	8.9	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
EW-16		6/3/20	4.9	ND (<0.50)	0.62	ND (<0.50)	14	2.7	7.1	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F20A		12/17/90	5.0	29	15	20	-	-	2.0	10	10	3.0	3.0	1,1,2,2-TCA = 3.0; 1,1,2-TCA = 2.0; 1,2-DCPA = 2.0; 1,3-DCB = 10; 1,4-DCB = 10; 2-CVE = 4.0; Acetone = 30; BDCMe = 4.0; Benzene = 0.50; BRFM = 5.0; BRMA = 5.0; CHLBZ = 4.0; CHLEA (EC) = 5.0; CHLFM = 3.4; CHLMA = 5.0; cis-1,3-DCP = 3.0; CT = 3.0; DBCMe = 4.0; EDB = 10; Ethylbenzene = 0.50; MC = 50; m-Xylene = 0.30; o-Xylene = 0.30; TCFMe (Freon 11) = 10; Toluene = 0.50; trans-1,3-DCP = 3.0; Xylenes = 0.90;
F20A		4/16/91	ND (<0.50)	38	26	-	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 4.0; TCFMe (Freon 11) = 13;
F20A		8/2/91	1.3	51	30	-	0.90	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.50	ND (<0.50)	CHLFM = 5.5; TCFMe (Freon 11) = 12;
F20A		10/14/91	ND (<0.50)	44	25	-	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 3.0; TCFMe (Freon 11) = 8.8;
F20A		12/4/91	ND (<5.0)	56	25	-	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	CHLFM = 5.9;
F20A		2/24/92	ND (<0.50)	31	21	-	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 2.4; TCFMe (Freon 11) = 6.4;
F21A1U		12/18/90	81	3.0	4.0	3.0	-	-	2.0	10	10	3.0	3.0	1,1,2,2-TCA = 3.0; 1,1,2-TCA = 2.0; 1,2-DCPA = 2.0; 1,3-DCB = 10; 1,4-DCB = 10; 2-CVE = 4.0; Acetone = 30; BDCMe = 4.0; Benzene = 0.30; BRFM = 5.0; BRMA = 5.0; CHLBZ = 4.0; CHLEA (EC) = 5.0; CHLFM = 3.4; CHLMA = 5.0; cis-1,3-DCP = 3.0; CT = 3.0; DBCMe = 4.0; EDB = 10; Ethylbenzene = 0.30; MC = 50; m-Xylene = 0.30; o-Xylene = 0.30; TCFMe (Freon 11) = 5.0; Toluene = 0.30; trans-1,3-DCP = 3.0; Xylenes = 0.90;
F21A1U		5/3/91	370	ND (<5.0)	ND (<5.0)	ND (<5.0)	3.0	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
F21A1U	Dup	5/3/91	340	ND (<5.0)	ND (<5.0)	ND (<5.0)	3.0	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
F21A1U		7/26/91	270	ND (<0.50)	ND (<0.50)	ND (<0.50)	2.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F21A1U		10/3/91	200	ND (<0.50)	ND (<0.50)	ND (<0.50)	1.7	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F21A1U		12/10/91	250	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F21A1U		3/11/92	290	0.50	ND (<0.50)	ND (<0.50)	2.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.50;
F21A1U		6/11/92	410	ND (<5.0)	ND (<5.0)	ND (<5.0)	2.0	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
F21A1U		9/15/92	260	ND (<0.50)	ND (<0.50)	ND (<0.50)	1.9	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.50;
F21A1U		12/7/92	210	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F21A1U		3/8/93	560	ND (<12)	ND (<12)	ND (<12)	ND (<12)	ND (<12)	ND (<12)	ND (<12)	ND (<12)	ND (<12)	ND (<12)	
F21A1U		6/2/93	360	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	CHLFM = 1.8;
F21A1U		9/8/93	190	0.93	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	BDCMe = 1.7; CHLFM = 17;
F21A1U		12/7/93	140	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	CHLFM = 42;
F21A1U		3/2/94	110	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 40;
F21A1U		6/7/94	52	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	BDCMe = 5.7; CHLFM = 49; DBCMe = 0.56;
F21A1U		9/2/94	33	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	BDCMe = 5.8; CHLFM = 53;
F21A1U		12/7/94	29	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	CHLFM = 51;
F21A1U		3/2/95	21	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	BDCMe = 2.6; CHLFM = 43;
F21A1U		6/8/95	19	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	CHLFM = 81;
F21A1U		11/9/95	11	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 35;
F21A1U		12/8/95	14	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	CHLFM = 57;
F21A1U	Dup	12/8/95	14	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	CHLFM = 57;
F21A1U		3/6/96	46	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 32;
F21A1U		6/6/96	36	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 121; CHLFM = 38;
F21A1U		9/12/96	18	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 115; CHLFM = 55;
F21A1U		12/12/96	12	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	CHLFM = 66;
F21A1U		3/5/97	15	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 111; CHLFM = 39;
F21A1U		6/5/97	22	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 110; CHLFM = 48;
F21A1U		9/11/97	31	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 109; CHLFM = 37;
F21A1U		12/4/97	44	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.51	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 95; CHLFM = 21;
F21A1U		12/10/98	95	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	CBMA = 102; CHLFM = 24.8;
F21A1U		12/13/99	81	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
F21A1U		12/7/00	150	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<10)	ND (<2.5)	ND (<2.5)	ND (<2.5)	CHLFM = 8.6;
F21A1U		6/20/01	94	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<4.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	CHLFM = 1.4;
F21A1U	Dup	6/20/01	90	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<4.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	CHLFM = 2.3;
F21A1U		6/24/03	100	ND (<1.0)	ND (<1.0)	ND (<1.0)	5.1	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	CHLFM = 4.4;
F21A1U	Dup	6/24/03	110	ND (<2.5)	ND (<2.5)	ND (<2.5)	6.5	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	CHLFM = 4.9;
F21A1U		6/21/05	67	ND (<0.50)	ND (<0.50)	ND (<0.50)	3.4	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F21A1U		7/5/07	24	ND (<0.50)	ND (<0.50)	ND (<0.50)	1.9	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F21A1U		6/26/08	70	ND (<0.50)	ND (<0.50)	ND (<0.50)	3.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F21A1U		6/11/09	88	ND (<0.50)	ND (<0.50)	ND (<0.50)	3.6	0.56	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F21A1U		6/9/10	81	ND (<0.50)	ND (<0.50)	ND (<0.50)	2.6	0.53	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F21A1U		6/15/11	77	ND (<0.50)	ND (<0.50)	ND (<0.50)	4.1	0.66	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F21A1U		6/13/12	74	ND (<0.50)	ND (<0.50)	ND (<0.50)	4.1	0.65	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F21A1U		6/19/13	79	ND (<0.50)	ND (<0.50)	ND (<0.50)	4.1	0.82	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F21A1U	Dup	6/19/13	69	ND (<0.50)	ND (<0.50)	ND (<0.50)	3.6	0.60	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F21A1U		6/11/14	69	ND (<0.50)	ND (<0.50)	ND (<0.50)	6.7	0.81	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F21A1U		6/9/15	71	ND (<0.50)	ND (<0.50)	ND (<0.50)	2.6	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F21A1U		6/7/16	56	ND (<0.50)	ND (<0.50)	ND (<0.50)	3.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F21A1U	Dup	6/7/16	60	ND (<0.50)	ND (<0.50)	ND (<0.50)	2.7	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F21A1U		6/7/17	7.5	ND (<0.50)	ND (<0.50)	ND (<0.50)	43	1.4	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F21A1U		6/6/18	15	ND (<0.50)	ND (<0.50)	ND (<0.50)	41	1.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F21A1U		6/6/19	12	ND (<0.50)	ND (<0.50)	ND (<0.50)	44	1.8	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F21A1U	Dup	6/6/19	11	ND (<0.50)	ND (<0.50)	ND (<0.50)	49	1.9	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F21A1U		6/3/20	65	ND (<0.50)	0.58	ND (<0.50)	22	1.1	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F22A1U		12/7/90	92	3.0	4.0	3.0	-	-	2.0	10	0.50	3.0	3.0	1,1,2,2-TCA = 3.0; 1,1,2-TCA = 2.0; 1,2,4-TCB = 10; 1,2-DCPA = 2.0; 1,3-DCB = 10; 1,4-DCB = 10; 2-CVE = 4.0; Acetone = 30; BDCMe = 4.0; Benzene = 0.50; BRFM = 5.0; BRMA = 5.0; CHLBZ = 0.50; CHLEA (EC) = 5.0; CHLFM = 2.2; CHLMA = 5.0; cis-1,3-DCP = 3.0; CT = 3.0; DBCMe = 4.0; EDB = 10; Ethylbenzene = 0.50; MC = 50; m-Xylene = 0.50; Naphthalene = 10; o-Xylene = 0.50; TCFMe (Freon 11) = 5.0; Toluene = 0.50; trans-1,3-DCP = 3.0; Xylenes = 0.50;
F22A1U		4/17/91	91	1.4	ND (<1.0)	-	4.6	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<10)	ND (<1.0)	ND (<1.0)	
F22A1U	Dup	4/17/91	120	1.4	0.80	2.7	-	-	0.20	1.0	1.0	0.30	0.30	1,1,2,2-TCA = 0.30; 1,1,2-TCA = 0.20; 1,2,4-TCB = 10; 1,2-DCPA = 0.20; 1,3-DCB = 1.0; 1,4-DCB = 1.0; 2-CVE = 2.0; Acetone = 30; BDCMe = 0.40; Benzene = 0.50; BRFM = 0.50; BRMA = 0.50; CHLBZ = 0.50; CHLEA (EC) = 0.50; CHLFM = 0.30; CHLMA = 0.50; cis-1,3-DCP = 0.30; CT = 0.30; DBCMe = 2.0; EDB = 1.0; Ethylbenzene = 0.50; MC = 5.0; m-Xylene = 0.50; Naphthalene = 10; o-Xylene = 0.50; TCFMe (Freon 11) = 0.50; Toluene = 0.50; trans-1,3-DCP = 0.30; Xylenes = 0.50;
F22A1U		7/25/91	190	2.2	0.80	ND (<2.5)	7.7	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F22A1U	Dup	7/25/91	210	2.2	0.90	ND (<2.5)	7.4	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F22A1U		10/3/91	230	4.9	1.2	ND (<2.5)	9.5	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F22A1U		12/5/91	320	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F22A1U		3/9/92	220	3.0	1.3	ND (<2.5)	10	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F22A1U		6/5/92	350	2.3	0.80	ND (<5.0)	10	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F22A1U		9/23/92	520	4.4	ND (<5.0)	ND (<5.0)	6.8	ND (<1.0)	ND (<1.0)	ND (<5.0)	ND (<5.0)	ND (<1.0)	ND (<1.0)	
F22A1U		12/4/92	430	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F22A1U		3/10/93	420	2.4	ND (<5.0)	ND (<5.0)	5.0	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	CHLFM = 1.2;
F22A1U		6/2/93	110	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.60	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.80;
F22A1U		9/8/93	110	0.63	ND (<0.50)	ND (<0.50)	0.93	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 6.3;
F22A1U		12/7/93	130	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	CHLFM = 18;
F22A1U		3/7/94	67	0.66	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 24;
F22A1U		6/13/94	47	0.76	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	BDCMe = 3.6; CHLFM = 32;
F22A1U		9/2/94	36	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	BDCMe = 6.0; CHLFM = 47; DBCMe = 0.80;
F22A1U		12/13/94	32	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	CHLFM = 75;
F22A1U		3/6/95	29	1.1	ND (<0.50)	ND (<0.50)	1.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	BDCMe = 2.0; CHLFM = 45;
F22A1U		6/7/95	26	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.74	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	BDCMe = 0.94; CHLFM = 50;
F22A1U		9/6/95	26	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	CHLFM = 64; MC = 5.8;
F22A1U		12/7/95	17	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	CHLFM = 39;
F22A1U		3/6/96	41	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.59	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	BDCMe = 1.0; CHLFM = 28;
F22A1U		6/6/96	32	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.51	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	BDCMe = 0.98; CBMA = 113; CHLFM = 30;
F22A1U		9/11/96	26	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 103; CHLFM = 33;
F22A1U		12/12/96	19	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	CHLFM = 51;
F22A1U		3/5/97	23	1.2	ND (<0.50)	ND (<0.50)	0.74	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 109; CHLFM = 24;
F22A1U	Dup	3/5/97	22	1.3	ND (<0.50)	ND (<0.50)	0.66	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 103; CHLFM = 23;
F22A1U		6/5/97	33	1.5	ND (<0.50)	ND (<0.50)	0.60	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 109; CHLFM = 33; MC = 1.3;
F22A1U		9/11/97	120	3.6	ND (<1.0)	ND (<1.0)	2.5	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	CBMA = 101; CHLFM = 28;
F22A1U	Dup	9/11/97	120	1.8	ND (<1.0)	ND (<1.0)	2.5	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	CBMA = 97; CHLFM = 28;
F22A1U		12/9/97	120	1.6	ND (<0.50)	ND (<0.50)	2.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 97; CHLFM = 24;
F22A1U		12/11/98	156	ND (<5.0)	ND (<5.0)	ND (<5.0)	5.7	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	CBMA = 100; CHLFM = 15;
F22A1U		12/13/99	191	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	CHLFM = 36;
F22A1U		12/7/00	180	3.1	ND (<2.5)	ND (<2.5)	8.6	ND (<2.5)	ND (<2.5)	ND (<10)	ND (<2.5)	ND (<2.5)	ND (<2.5)	CHLFM = 9.2;
F22A1U		6/20/01	220	ND (<5.0)	ND (<5.0)	ND (<5.0)	9.7	ND (<5.0)	ND (<5.0)	ND (<20)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
F22A1U		6/25/03	160	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
F22A1U		6/21/05	200	4.7	ND (<2.0)	ND (<2.0)	9.9	ND (<2.0)	ND (<2.0)	ND (<2.0)	ND (<2.0)	ND (<2.0)	ND (<2.0)	
F22A1U		7/5/07	280	ND (<5.0)	ND (<5.0)	ND (<5.0)	12	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
F22A1U		6/26/08	240	ND (<2.0)	ND (<2.0)	ND (<2.0)	8.7	ND (<2.0)	ND (<2.0)	ND (<2.0)	ND (<2.0)	ND (<2.0)	ND (<2.0)	
F22A1U		6/11/09	240	ND (<2.5)	ND (<2.5)	ND (<2.5)	6.4	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
F22A1U		6/9/10	210	ND (<2.5)	ND (<2.5)	ND (<2.5)	6.6	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
F22A1U		6/15/11	180	ND (<2.5)	ND (<2.5)	ND (<2.5)	4.3	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
F22A1U		6/13/12	160	ND (<2.5)	ND (<2.5)	ND (<2.5)	4.6	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
F22A1U		6/18/13	120	ND (<2.5)	ND (<2.5)	ND (<2.5)	4.2	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
F22A1U		6/11/14	240	ND (<5.0)	ND (<5.0)	ND (<5.0)	24	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
F22A1U	Dup	6/11/14	230	ND (<0.50)	1.0	ND (<0.50)	27	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F22A1U		6/9/15	290	ND (<5.0)	ND (<5.0)	ND (<5.0)	24	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
F22A1U		6/7/16	260	ND (<5.0)	ND (<5.0)	ND (<5.0)	15	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
F22A1U		6/7/17	240	ND (<5.0)	ND (<5.0)	ND (<5.0)	16	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
F22A1U		6/5/18	260	ND (<5.0)	ND (<5.0)	ND (<5.0)	17	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
F22A1U	Dup	6/5/18	260	ND (<5.0)	ND (<5.0)	ND (<5.0)	17	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
F22A1U		6/6/19	240	ND (<5.0)	ND (<5.0)	ND (<5.0)	14	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
F23A		12/7/90	0.50	20	22	10	-	-	0.20	1.0	0.50	0.30	0.30	1,1,2,2-TCA = 0.30; 1,1,2-TCA = 0.20; 1,2-DCPA = 0.20; 1,3-DCB = 0.50; 1,4-DCB = 0.50; 2-CVE = 0.40; Acetone = 30; BDCMe = 0.40; Benzene = 0.50; BRFM = 0.50; BRMA = 0.50; CHLBZ = 0.40; CHLEA (EC) = 0.50; CHLFM = 0.80; CHLMA = 0.50; cis-1,3-DCP = 0.30; CT = 0.30; DBCMe = 0.40; EDB = 1.0; Ethylbenzene = 0.50; MC = 5.0; m-Xylene = 0.50; o-Xylene = 0.50; TCFMe (Freon 11) = 0.50; Toluene = 0.50; trans-1,3-DCP = 0.30; Xylenes = 0.50;
F23A		4/9/91	ND (<0.50)	11	16	-	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	

Appendix B
Selected Compounds from Historical Records
COE Study Area and Perimeter Area, Palo Alto, California

Location	Type	Date	TCE	1,1,1-TCA	1,1-DCA	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	PCE	Freon 113	1,2-DCB	1,2-DCA	VC	Other Constituents
F23A		7/23/91	ND (<0.50)	13	12	-	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F23A		10/3/91	ND (<0.50)	15	13	-	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F23A		12/4/91	ND (<5.0)	ND (<5.0)	18	ND (<5.0)	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F23A		3/9/92	2.3	8.5	15	-	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F23A		6/3/92	4.4	7.5	ND (<0.50)	-	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F23A		9/18/92	0.90	5.2	6.4	-	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F23A		12/4/92	15	ND (<5.0)	9.0	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F23A		3/4/93	8.4	8.5	14	-	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F23A		6/2/93	38	1.7	1.9	ND (<0.50)	0.50	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F23A		9/7/93	46	1.3	1.8	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	MC = 1.2;
F23A		12/2/93	20	ND (<5.0)	7.7	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F23A		3/8/94	34	3.9	5.5	-	0.56	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F23A		6/13/94	64	1.3	2.4	ND (<0.50)	1.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F23A		9/8/94	91	0.95	1.9	ND (<0.50)	1.6	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F23A		12/12/94	19	5.2	12	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F23A		3/6/95	22	2.9	5.4	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F23A		6/7/95	190	ND (<0.50)	ND (<0.50)	ND (<0.50)	2.5	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F23A		11/9/95	59	2.0	4.3	-	1.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F23A		12/8/95	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F23A		3/6/96	13	1.7	2.8	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F23A		6/11/96	110	2.6	6.4	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	CBMA = 115;
F23A		9/12/96	110	2.0	4.4	ND (<1.2)	2.1	ND (<1.2)	ND (<1.2)	ND (<1.2)	ND (<1.2)	ND (<1.2)	ND (<1.2)	CBMA = 100;
F23A		12/12/96	22	ND (<5.0)	7.7	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F23A		3/6/97	56	1.1	2.9	ND (<0.50)	1.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 109;
F23A	Dup	3/6/97	58	1.2	2.9	ND (<0.50)	1.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 110;
F23A		6/5/97	140	1.3	1.1	ND (<0.50)	2.9	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 103;
F23A		9/11/97	62	2.1	3.4	0.76	2.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 90;
F23A		12/4/97	77	1.7	2.4	ND (<1.0)	2.3	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	CBMA = 98;
F23A		6/2/98	97	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	CBMA = 104;
F23A		12/11/98	139	12	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	CBMA = 96;
F23A	Dup	12/11/98	122	ND (<2.5)	2.5	ND (<2.5)	2.7	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	CBMA = 90;
F23A		6/10/99	97	6.6	ND (<5.0)	ND (<5.0)	5.1	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
F23A		12/13/99	18	30	11	14	27	ND (<0.50)	ND (<0.50)	2.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 1.7;
F23A		6/6/00	97	6.9	1.6	1.5	4.9	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	
F23A	Dup	6/6/00	110	5.0	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
F23A		12/7/00	45	9.0	3.7	2.5	7.9	ND (<1.0)	ND (<1.0)	ND (<4.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	
F23A		6/20/01	57	49	8.6	15	30	ND (<1.0)	ND (<1.0)	8.4	ND (<1.0)	ND (<1.0)	ND (<1.0)	
F23A		6/24/03	43	14	2.4	3.1	5.7	ND (<0.50)	ND (<0.50)	3.6	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F23A		6/23/05	48	58	8.8	21	37	ND (<0.50)	ND (<0.50)	30	ND (<0.50)	ND (<0.50)	ND (<0.50)	MC = 5.3;
F29A1U		12/17/90	94	29	5.5	17	-	-	2.0	10	10	3.0	3.0	1,1,2,2-TCA = 3.0; 1,1,2-TCA = 2.0; 1,2-DCPA = 2.0; 1,3-DCB = 10; 1,4-DCB = 10; 2-CVE = 4.0; Acetone = 30; BDCMe = 4.0; Benzene = 0.50; BRFM = 5.0; BRMA = 5.0; CHLBZ = 4.0; CHLEA (EC) = 5.0; CHLFM = 2.8; CHLMA = 5.0; cis-1,3-DCP = 3.0; CT = 3.0; DBCMe = 4.0; EDB = 10; Ethylbenzene = 0.50; MC = 50; m-Xylene = 0.30; o-Xylene = 0.30; TCFMe (Freon 11) = 5.0; Toluene = 0.50; trans-1,3-DCP = 3.0; Xylenes = 0.90;
F29A1U		4/9/91	160	32	9.0	ND (<5.0)	50	5.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 4.0;
F29A1U		7/30/91	67	11	1.3	-	12	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F29A1U		12/10/91	23	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F29A1U		6/9/92	16	2.1	ND (<0.50)	ND (<0.50)	0.50	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F29A1U		12/15/92	5.0	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F29A1U		6/2/93	2.7	1.7	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F29A1U		12/2/93	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F29A1U		6/6/94	5.2	1.4	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F29A1U		12/5/94	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F29A1U		6/6/95	13	4.3	1.1	-	12	0.56	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F29A1U		12/7/95	8.9	ND (<5.0)	ND (<5.0)	ND (<5.0)	9.3	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F29A1U		6/10/96	7.1	3.1	ND (<0.50)	ND (<0.50)	3.8	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 115; MC = 0.16;
F29A1U	Dup	6/10/96	6.7	3.1	ND (<0.50)	ND (<0.50)	3.5	0.57	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 113; MC = 0.15;
F29A1U		12/12/96	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F29A1U	Dup	12/12/96	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F29A1U		12/2/97	4.3	1.6	ND (<0.50)	ND (<0.50)	1.4	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 94;
F29A1U		12/8/99	1.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<1.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F29A1U		6/21/07	26	1.1	ND (<0.50)	ND (<0.50)	0.55	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F29A1U		6/26/08	24	0.81	ND (<0.50)	ND (<0.50)	0.52	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F29A1U		6/11/09	18	0.54	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F29A1U		6/9/10	17	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F29A1U		6/16/11	21	0.51	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F29A1U		6/13/12	18	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F29A1U	Dup	6/13/12	17	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F29A1U		6/20/13	25	0.53	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F29A1U		6/11/14	30	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F29A1U		6/10/15	36	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F29A1U		6/7/17	11	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.58	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F29A1U	Dup	6/7/17	11	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.57	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F29A1U		6/6/18	15	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F29A1U		6/5/19	15	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F29A1U		6/3/20	11	ND (<0.50)	ND (<0.50)	ND (<0.50)	2.2	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F29A1U	Dup	6/3/20	11	ND (<0.50)	ND (<0.50)	ND (<0.50)	2.0	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F30A1U		2/7/91	40	3.1	0.4	3.1	-	-	0.20	1.0	1.0	0.3	0.3	1,1,2,2-TCA = 0.30; 1,1,2-TCA = 0.20; 1,2-DCPA = 0.20; 1,3-DCB = 1.0; 1,4-DCB = 1.0; 2-CVE = 0.40; BDCMe = 0.40; BRFM = 0.50; BRMA = 0.50; CHLBZ = 0.40; CHLEA (EC) = 0.50; CHLFM = 0.30; CHLMA = 0.50; cis-1,3-DCP = 0.30; CT = 0.30; DBCMe = 0.40; EDB = 1.0; MC = 5.0; TCFMe (Freon 11) = 0.50; trans-1,3-DCP = 0.30;
F30A1U		4/19/91	50	5.0	ND (<1.0)	1.0	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	
F30A1U		7/30/91	50	4.6	ND (<0.50)	-	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F30A1U	Dup	7/30/91	52	4.7	ND (<0.50)	-	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F30A1U		11/5/91	48	5.4	ND (<0.50)	ND (<1.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F30A1U		12/13/91	55	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F30A1U		3/10/92	44	3.6	ND (<0.50)	-	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F30A1U		6/11/92	48	3.3	ND (<0.50)	-	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F30A1U		9/22/92	37	2.2	ND (<0.50)	-	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F30A1U		12/9/92	46	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	Acetone = 29;
F30A1U		3/4/93	24	1.6	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F30A1U		6/15/93	27	1.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F30A1U	Dup	6/15/93	27	1.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F30A1U		9/14/93	25	1.8	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F30A1U		12/13/93	29	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F30A1U		3/9/94	12	0.72	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F30A1U		6/7/94	23	1.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F30A1U		12/9/94	16	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F30A1U		3/6/95	9.8	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F30A1U		6/6/95	3.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F30A1U		9/6/95	6.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F30A1U		12/6/95	7.6	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F30A1U		3/5/96	8.7	1.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F30A1U		6/6/96	5.2	1.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 107;
F30A1U		9/10/96	6.1	0.76	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 99;
F30A1U		12/11/96	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F30A1U		6/16/11	1.7	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F30A1U		6/5/19	0.98	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F31A		2/7/91	0.50	0.3	0.4	0.3	-	-	0.20	1.0	1.0	0.3	0.3	1,1,2,2-TCA = 0.30; 1,1,2-TCA = 0.20; 1,2-DCPA = 0.20; 1,3-DCB = 1.0; 1,4-DCB = 1.0; 2-CVE = 0.40; BDCMe = 0.40; BRFM = 0.50; BRMA = 0.50; CHLBZ = 0.40; CHLEA (EC) = 0.50; CHLFM = 0.20; CHLMA = 0.50; cis-1,3-DCP = 0.30; CT = 0.30; DBCMe = 0.40; EDB = 1.0; MC = 5.0; TCFMe (Freon 11) = 0.50; trans-1,3-DCP = 0.30;
F31A		4/19/91	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F31A		7/23/91	42	1.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F31A		11/5/91	0.50	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F31A		12/13/91	6.0	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F31A		3/11/92	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 1.1;
F31A		6/11/92	27	0.70	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F31A		9/22/92	25	0.70	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F31A		12/9/92	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F31A		3/4/93	11	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F31A		6/15/93	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F31A		9/14/93	0.83	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F31A	Dup	9/14/93	1.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F31A		12/13/93	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F31A		3/9/94	1.4	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F31A		6/7/94	10	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F31A		12/9/94	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F31A		6/6/95	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	MC = 0.72;
F31A		6/5/19	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F32A		12/12/90	14	20	5.0	6.5	-	-	2.0	10	0.50	3.0	3.0	1,1,2,2-TCA = 3.0; 1,1,2-TCA = 2.0; 1,2-DCPA = 2.0; 1,3-DCB = 0.50; 1,4-DCB = 0.50; 2-CVE = 4.0; Acetone = 75; BDCMe = 4.0; Benzene = 0.50; BRFM = 5.0; BRMA = 5.0; CHLBZ = 0.50; CHLEA (EC) = 5.0; CHLFM = 4.0; CHLMA = 5.0; cis-1,3-DCP = 3.0; CT = 3.0; DBCMe = 4.0; EDB = 10; Ethylbenzene = 0.50; MC = 50; m-Xylene = 0.50; o-Xylene = 0.50; TCFMe (Freon 11) = 5.0; Toluene = 1.2; trans-1,3-DCP = 3.0; Xylenes = 0.50;
F32A		4/9/91	53	43	10	-	61	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 1.0;
F32A	Dup	4/9/91	83	60	13	ND (<1.0)	79	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 1.0;
F32A		7/30/91	93	69	13	ND (<1.0)	99	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.70	ND (<0.50)	
F32A		11/12/91	130	100	12	ND (<2.5)	110	ND (<0.50)	ND (<0.50)	0.60	ND (<0.50)	0.50	ND (<0.50)	CHLFM = 1.5;
F32A		12/13/91	130	100	15	-	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F32A		3/11/92	86	74	9.8	ND (<2.5)	84	ND (<0.50)	ND (<0.50)	1.1	ND (<0.50)	0.60	ND (<0.50)	CHLFM = 3.7;
F32A		6/3/92	120	84	10	ND (<2.5)	90	ND (<0.50)	ND (<0.50)	1.1	ND (<0.50)	1.0	ND (<0.50)	CHLFM = 6.1;
F32A		9/15/92	160	99	8.1	ND (<2.5)	85	ND (<0.50)	ND (<0.50)	1.8	ND (<0.50)	1.0	ND (<0.50)	BDCMe = 1.6; CHLFM = 7.8;
F32A		12/11/92	170	88	8.1	-	95	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	CHLFM = 6.9;
F32A		3/5/93	66	55	7.6	ND (<2.5)	50	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.60	ND (<0.50)	CHLFM = 5.3;
F32A		6/11/93	80	40	5.6	ND (<2.5)	51	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 3.8;
F32A		9/10/93	58	31	6.1	ND (<2.5)	40	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 4.0;
F32A		12/8/93	59	24	5.5	-	42	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F32A		3/4/94	68	36	7.6	-	47	ND (<0.50)	ND (<0.50)	0.80	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 4.9;
F32A		6/6/94	97	42	8.0	-	57	ND (<0.50)	ND (<0.50)	0.92	ND (<0.50)	0.52	ND (<0.50)	CHLFM = 4.7;
F32A		12/6/94	170	40	7.3	-	54	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	Benzene = 12; Ethylbenzene = 6.5; Toluene = 51; Xylenes = 26;
F32A		4/10/95	-	-	-	-	-	-	-	-	ND (<0.50)	-	-	

Appendix B
Selected Compounds from Historical Records
COE Study Area and Perimeter Area, Palo Alto, California

Location	Type	Date	TCE	1,1,1-TCA	1,1-DCA	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	PCE	Freon 113	1,2-DCB	1,2-DCA	VC	Other Constituents
F32A		6/8/95	130	31	5.0	-	38	ND (<0.50)	ND (<0.50)	1.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 1.7;
F32A		12/7/95	130	25	5.6	-	39	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F32A		6/11/96	77	14	2.6	3.7	20	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	CBMA = 113;
F32A		12/12/96	51	8.1	ND (<5.0)	ND (<5.0)	16	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F32A		12/2/97	37	4.7	2.0	1.5	11	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 103;
F32A		12/8/98	23	1.6	1.2	0.94	7.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 99;
F32A		12/8/99	16	ND (<0.50)	0.50	ND (<0.50)	3.5	ND (<0.50)	ND (<0.50)	ND (<1.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F32A		12/7/00	130	5.2	ND (<2.5)	ND (<2.5)	9.9	ND (<2.5)	ND (<2.5)	ND (<10)	ND (<2.5)	ND (<2.5)	ND (<2.5)	CHLFM = 4.7;
F32A	Dup	12/7/00	120	4.8	ND (<2.5)	ND (<2.5)	9.1	ND (<2.5)	ND (<2.5)	ND (<10)	ND (<2.5)	ND (<2.5)	ND (<2.5)	CHLFM = 4.8;
F32A		6/21/01	55	2.4	1.6	0.54	6.9	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 1.4;
F32A		6/27/03	28	0.83	0.90	0.52	2.9	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F32A		6/21/05	7.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.51	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F32A		6/14/07	130	4.8	1.2	2.0	7.9	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	
F32A		6/15/09	33	1.1	ND (<0.50)	ND (<0.50)	1.6	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F32A		6/15/11	7.8	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.83	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F32A		8/26/11	83	3.4	1.8	2.7	6.9	ND (<0.50)	ND (<0.50)	0.73	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F32A		6/19/13	3.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F32A		6/10/15	150	12	3.3	4.4	11	ND (<0.50)	ND (<0.50)	2.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F32A		6/5/17	26	1.6	ND (<0.50)	ND (<0.50)	0.88	ND (<0.50)	ND (<0.50)	0.63	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F32A		6/4/18	12	0.66	ND (<0.50)	0.54	1.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F32A		6/4/19	12	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.70	ND (<0.50)	ND (<0.50)	0.54	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F32A		6/2/20	1.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F33B		12/12/90	0.50	0.30	0.40	0.30	-	-	0.20	1.0	1.0	0.30	0.30	1,1,2,2-TCA = 0.30; 1,1,2-TCA = 0.20; 1,2-DCPA = 0.20; 1,3-DCB = 1.0; 1,4-DCB = 1.0; 2-CVE = 0.40; Acetone = 30; BDCMe = 0.40; Benzene = 0.50; BRFM = 0.50; BRMA = 0.50; CHLBZ = 0.40; CHLEA (EC) = 0.50; CHLFM = 0.20; CHLMA = 0.50; cis-1,3-DCP = 0.30; CT = 0.30; DBCMe = 0.40; EDB = 1.0; Ethylbenzene = 0.50; MC = 5.0; m-Xylene = 0.50; o-Xylene = 0.50; TCFMe (Freon 11) = 0.50; Toluene = 0.50; trans-1,3-DCP = 0.30; Xylenes = 0.50;
F33B		4/9/91	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F33B		7/30/91	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F33B		10/9/91	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F33B		12/13/91	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F33B		3/11/92	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F33B		6/3/92	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F33B		9/15/92	1.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F33B		12/14/92	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F33B		6/11/93	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F33B		12/8/93	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F33B	Dup	12/8/93	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F33B		6/6/94	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F33B		12/6/94	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	Toluene = 7.3; Xylenes = 18;
F33B		2/1/95	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F33B		12/5/95	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F33B		12/10/96	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F33B		12/2/97	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.63	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 100;
F33B		12/8/99	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<1.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F33B		6/21/01	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F33B		6/26/03	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F33B		6/21/05	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F33B		6/14/07	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F33B		6/15/09	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F33B		6/15/11	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F33B		6/19/13	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F33B		6/10/15	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F33B		6/5/17	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F33B		6/4/19	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F34A		12/17/90	16	0.50	0.40	0.30	-	-	0.20	1.0	1.0	0.30	0.30	1,1,2,2-TCA = 0.30; 1,1,2-TCA = 0.20; 1,2-DCPA = 0.20; 1,3-DCB = 1.0; 1,4-DCB = 1.0; 2-CVE = 0.40; Acetone = 30; BDCMe = 0.40; Benzene = 0.50; BRFM = 0.50; BRMA = 0.50; CHLBZ = 0.40; CHLEA (EC) = 0.50; CHLFM = 0.20; CHLMA = 0.50; cis-1,3-DCP = 0.30; CT = 0.30; DBCMe = 0.40; EDB = 1.0; Ethylbenzene = 0.50; MC = 5.0; m-Xylene = 0.30; o-Xylene = 0.30; TCFMe (Freon 11) = 0.50; Toluene = 0.50; trans-1,3-DCP = 0.30; Xylenes = 0.90;
F34A	Dup	12/17/90	19	0.60	0.40	0.30	-	-	0.20	1.0	1.0	0.30	0.30	1,1,2,2-TCA = 0.30; 1,1,2-TCA = 0.20; 1,2-DCPA = 0.20; 1,3-DCB = 1.0; 1,4-DCB = 1.0; 2-CVE = 0.40; Acetone = 30; BDCMe = 0.40; Benzene = 0.50; BRFM = 0.50; BRMA = 0.50; CHLBZ = 0.40; CHLEA (EC) = 0.50; CHLFM = 0.20; CHLMA = 0.50; cis-1,3-DCP = 0.30; CT = 0.30; DBCMe = 0.40; EDB = 1.0; Ethylbenzene = 0.50; MC = 5.0; m-Xylene = 0.30; o-Xylene = 0.30; TCFMe (Freon 11) = 0.50; Toluene = 0.50; trans-1,3-DCP = 0.30; Xylenes = 0.90;
F34A		4/9/91	9.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F34A		7/31/91	29	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F34A		11/12/91	120	2.9	ND (<0.50)	ND (<0.50)	1.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F34A		12/13/91	73	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F34A		3/6/92	71	1.2	ND (<0.50)	ND (<1.0)	0.90	ND (<0.50)	ND (<0.50)	ND (<1.0)	ND (<1.0)	ND (<0.50)	ND (<0.50)	
F34A		6/5/92	59	0.50	ND (<0.50)	ND (<0.50)	0.60	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F34A	Dup	6/5/92	67	0.50	ND (<0.50)	ND (<0.50)	0.70	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F34A		9/15/92	54	1.1	ND (<0.50)	ND (<0.50)	0.50	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F34A		12/8/92	130	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F34A		3/4/93	70	1.0	ND (<0.50)	ND (<0.50)	0.50	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F34A		6/14/93	110	4.2	ND (<0.50)	ND (<0.50)	1.4	ND (<0.50)	4.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F34A		9/10/93	110	2.5	0.55	ND (<0.50)	1.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F34A		12/2/93	24	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F34A		3/3/94	90	0.92	ND (<0.50)	ND (<0.50)	0.60	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F34A		6/9/94	70	1.1	ND (<0.50)	ND (<0.50)	0.67	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F34A		9/6/94	58	1.2	ND (<0.50)	ND (<0.50)	0.76	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F34A		12/8/94	81	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F34A	Dup	12/8/94	78	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F34A		3/6/95	59	0.75	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F34A		6/8/95	14	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F34A	Dup	6/8/95	16	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F34A		9/6/95	22	0.59	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F34A		12/7/95	35	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F34A		3/5/96	6.9	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F34A		6/5/96	7.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 102;
F34A		9/11/96	20	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.65	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 102;
F34A		12/11/96	13	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F34A	Dup	12/11/96	18	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F34A		6/4/97	6.7	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 97;
F34A		12/2/97	16	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 93;
F34A	Dup	12/2/97	16	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 95;
F34A		12/8/98	7.6	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 99;
F34A		12/8/99	63	ND (<1.25)	ND (<1.25)	ND (<1.25)	ND (<1.25)	ND (<1.25)	ND (<1.25)	ND (<2.5)	ND (<1.25)	ND (<1.25)	ND (<1.25)	
F34A		12/7/00	27	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<4.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	
F34A		6/21/01	56	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<4.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	
F34A		6/27/02	10	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F34A		6/27/03	16	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F34A		6/23/04	48	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F34A	Dup	6/23/04	50	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F34A		6/21/05	58	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F34A		6/27/06	47	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F34A		6/18/07	51	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.54	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F34A		6/11/08	47	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.56	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F34A		6/15/09	41	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F34A		6/15/10	49	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F34A		6/15/11	49	ND (<0.50)	0.67	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F34A		6/17/13	41	ND (<0.50)	0.95	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F34A		6/10/14	50	ND (<0.50)	0.92	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F34A	Dup	6/10/14	39	ND (<0.50)	0.69	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F34A		6/10/15	50	ND (<0.50)	0.87	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F34A		6/6/16	45	ND (<0.50)	2.7	1.2	0.76	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F34A		6/5/17	43	ND (<0.50)	1.3	0.68	0.57	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F34A		6/4/18	45	ND (<0.50)	2.1	0.97	0.52	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F34A		6/4/19	38	ND (<0.50)	1.9	1.1	0.51	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F34A	Dup	6/4/19	40	ND (<0.50)	2.0	1.2	0.53	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F34A		6/2/20	40	ND (<0.50)	4.6	1.7	0.83	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F35B		2/8/91	0.50	0.30	0.40	0.30	-	-	0.20	1.0	1.0	0.30	0.30	1,1,2,2-TCA = 0.30; 1,1,2-TCA = 0.20; 1,2-DCPA = 0.20; 1,3-DCB = 1.0; 1,4-DCB = 1.0; 2-CVE = 0.40; BDCMe = 0.40; BRFM = 0.50; BRMA = 0.50; CHLBZ = 0.40; CHLEA (EC) = 0.50; CHLFM = 0.20; CHLMA = 0.50; cis-1,3-DCP = 0.30; CT = 0.30; DBCMe = 0.40; EDB = 1.0; MC = 5.0; TCFMe (Freon 11) = 0.50; trans-1,3-DCP = 0.30;
F35B		4/9/91	4.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F35B		7/31/91	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F35B	Dup	7/31/91	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F35B		10/9/91	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F35B		12/13/91	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F35B		3/6/92	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F35B		6/5/92	0.60	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F35B		9/15/92	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F35B		12/8/92	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	Acetone = 17;
F35B		3/4/93	0.80	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F35B		6/15/93	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F35B		9/10/93	1.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F35B		12/2/93	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F35B		3/3/94	0.69	3.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F35B		6/9/94	0.97	1.4	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F35B	Dup	6/9/94	1.0	1.6	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F35B		12/8/94	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F35B		6/6/95	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F35B		12/4/95	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F35B		6/4/96	1.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 103;
F35B		12/10/96	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F36A		2/7/91	5.9	0.30	0.40	0.30	-	-	0.80	1.0	1.0	0.30	0.30	1,1,2,2-TCA = 0.30; 1,1,2-TCA = 0.20; 1,2-DCPA = 0.20; 1,3-DCB = 1.0; 1,4-DCB = 1.0; 2-CVE = 0.40; BDCMe = 0.40; BRFM = 0.50; BRMA = 0.50; CHLBZ = 0.40; CHLEA (EC) = 0.50; CHLFM = 0.20; CHLMA = 0.50; cis-1,3-DCP = 0.30; CT = 0.30; DBCMe = 0.40; EDB = 1.0; MC = 5.0; TCFMe (Freon 11) = 0.50; trans-1,3-DCP = 0.30;
F36A		4/17/91	13	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.50	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	

Appendix B
Selected Compounds from Historical Records
COE Study Area and Perimeter Area, Palo Alto, California

Location	Type	Date	TCE	1,1,1-TCA	1,1-DCA	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	PCE	Freon 113	1,2-DCB	1,2-DCA	VC	Other Constituents
F36A	Dup	4/17/91	13	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.50	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F36A		7/29/91	17	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F36A		10/14/91	16	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.80	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.50;
F36A		12/11/91	19	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F36A		3/6/92	17	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.80	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.50;
F36A		6/10/92	16	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.50	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F36A	Dup	6/10/92	15	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.60	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F36A		10/13/92	12	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.90	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F36A		12/4/92	14	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F36A		3/5/93	17	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.60	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F36A		6/10/93	12	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F36A		9/9/93	15	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.73	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F36A		12/9/93	13	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F36A		3/3/94	17	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.52	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F36A		6/8/94	15	ND (<0.50)	ND (<0.50)	ND (<0.50)	3.6	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F36A		9/6/94	16	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.60	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F36A		12/5/94	14	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F36A	Dup	12/5/94	15	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F36A		3/2/95	9.6	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F36A		6/7/95	17	ND (<0.50)	0.90	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.58;
F36A		9/6/95	21	ND (<0.50)	1.6	-	0.50	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 1.0;
F36A		12/7/95	15	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F36A		3/5/96	17	ND (<0.50)	1.4	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.59;
F36A		6/5/96	11	ND (<0.50)	1.6	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 104; CHLFM = 0.59;
F36A		9/11/96	15	0.91	2.6	1.5	0.77	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 101; CHLFM = 0.77;
F36A		12/11/96	10	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F36A		3/5/97	11	0.54	1.9	0.58	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 89;
F36A		6/4/97	14	0.72	2.5	0.96	1.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 94;
F36A		9/10/97	13	0.70	1.4	ND (<0.50)	1.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 108;
F36A		12/5/97	11	ND (<0.50)	0.60	ND (<0.50)	0.50	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 96;
F36A		12/8/98	7.8	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 106;
F36A		12/8/99	5.4	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<1.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F36A		12/7/00	7.6	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F36A		6/20/01	6.6	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F36A		6/24/03	4.6	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F36A		7/23/03	5.6	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F36A		6/21/05	6.6	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F36A		6/20/07	5.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F36A		6/11/09	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F36A		6/16/11	5.8	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F36A		6/20/13	7.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F36A		6/11/14	7.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F36A		6/9/15	7.7	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F36A	Dup	6/9/15	5.4	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F36A		6/5/17	1.6	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F36A		6/6/19	6.1	ND (<0.50)	1.5	0.83	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F37A		12/11/90	0.50	0.30	0.40	0.30	-	-	0.20	1.0	0.50	0.30	0.30	1,1,2,2-TCA = 0.30; 1,1,2-TCA = 0.20; 1,2-DCPA = 0.20; 1,3-DCB = 0.50; 1,4-DCB = 0.50; 2-CVE = 0.40; Acetone = 30; BDCMe = 0.40; Benzene = 0.50; BRFM = 0.50; BRMA = 0.50; CHLBZ = 0.40; CHLEA (EC) = 0.50; CHLFM = 0.20; CHLMA = 0.50; cis-1,3-DCP = 0.30; CT = 0.30; DBCMe = 0.40; EDB = 1.0; Ethylbenzene = 0.50; MC = 5.0; m-Xylene = 0.50; o-Xylene = 0.50; TCFMe (Freon 11) = 0.50; Toluene = 0.50; trans-1,3-DCP = 0.30; Xylenes = 0.50;
F37A	Dup	12/11/90	2.0	3.0	3.0	2.0	5.0	2.0	2.0	1.0	0.50	2.0	3.0	1,1,2,2-TCA = 3.0; 1,1,2-TCA = 2.0; 1,2-DCPA = 3.0; 1,3-DCB = 0.50; 1,4-DCB = 0.50; 2-CVE = 0.40; Acetone = 5.0; BDCMe = 3.0; Benzene = 2.0; BRFM = 2.0; BRMA = 2.0; CARBD = 3.0; CHLBZ = 2.0; CHLEA (EC) = 2.0; CHLFM = 2.0; CHLMA = 3.0; cis-1,3-DCP = 3.0; CT = 3.0; DBCMe = 2.0; EDB = 1.0; Ethylbenzene = 2.0; MBK = 5.0; MC = 2.0; MEK = 5.0; MIBK = 5.0; m-Xylene = 0.50; o-Xylene = 0.50; Styrene = 2.0; TCFMe (Freon 11) = 0.50; Toluene = 2.0; trans-1,3-DCP = 2.0; Vinyl Acetate = 5.0; Xylenes = 2.0;
F37A		4/9/91	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F37A		8/1/91	0.80	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F37A		10/31/91	0.70	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F37A		12/11/91	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F37A		3/11/92	0.50	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F37A		6/15/92	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F37A		9/18/92	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F37A		12/8/92	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F37A		6/10/93	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F37A		12/8/93	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F37A		6/9/94	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F37A		12/5/94	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F37A		6/2/95	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F37A		12/4/95	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F37A		6/4/96	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 106;
F37A		12/10/96	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F37A		12/2/97	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 92;
F37A		12/8/99	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<1.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F38A		2/6/91	19	0.70	0.40	0.30	-	-	0.20	1.0	1.0	0.30	0.30	1,1,2,2-TCA = 0.30; 1,1,2-TCA = 0.20; 1,2-DCPA = 0.20; 1,3-DCB = 1.0; 1,4-DCB = 1.0; 2-CVE = 0.40; BDCMe = 0.40; BRFM = 0.50; BRMA = 0.50; CHLBZ = 0.40; CHLEA (EC) = 0.50; CHLFM = 0.20; CHLMA = 0.50; cis-1,3-DCP = 0.30; CT = 0.30; DBCMe = 0.40; EDB = 1.0; MC = 5.0; TCFMe (Freon 11) = 0.50; trans-1,3-DCP = 0.30;
F38A		4/22/91	81	6.0	2.0	ND (<3.0)	1.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F38A		7/23/91	83	2.1	0.50	ND (<0.50)	1.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F38A		11/4/91	7.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F38A		12/5/91	67	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F38A		3/12/92	5.4	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F38A		6/12/92	33	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F38A	Dup	6/12/92	31	0.60	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F38A		10/12/92	59	2.1	ND (<0.50)	ND (<0.50)	2.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F38A		12/9/92	74	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F38A		3/5/93	58	2.0	0.70	ND (<2.5)	1.5	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F38A		6/2/93	23	0.60	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.90	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F38A		9/10/93	16	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F38A		12/3/93	9.3	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F38A	Dup	12/3/93	9.1	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F38A		3/8/94	22	ND (<0.50)	ND (<0.50)	-	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F38A		6/6/94	8.5	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F38A		12/7/94	18	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F38A		6/6/95	56	0.55	ND (<0.50)	-	0.73	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F38A		12/8/95	18	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F38A		6/6/96	160	4.9	ND (<2.5)	3.4	2.6	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	CBMA = 106; CHLFM = 6.0; MC = 2.8;
F38A		12/11/96	31	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F38A		6/5/97	36	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	CBMA = 105;
F38A	Dup	6/5/97	33	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	CBMA = 105;
F38A		12/8/97	12	ND (<0.50)	ND (<0.50)	0.73	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 92;
F38A		6/4/98	24	ND (<0.50)	0.92	ND (<0.50)	0.95	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 103;
F38A		12/10/98	16	ND (<0.50)	ND (<0.50)	0.64	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 101;
F38A		6/10/99	6.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F38A		12/8/99	2.6	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<1.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F38A		6/8/00	19	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F38A		12/7/00	32	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F38A		6/20/01	5.6	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F38A		6/26/02	14	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F38A		6/24/03	23	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F38A		6/23/04	34	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F38A		6/21/05	0.65	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F38A		6/27/06	0.68	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F38A		6/20/07	4.4	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F38A		6/20/07	6.9	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F38A	Dup	6/20/07	4.4	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F38A		6/11/08	0.52	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F38A		6/15/09	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F38A	Dup	6/15/09	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F38A		6/9/10	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F38A		6/16/11	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F38A		6/13/12	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F38A		6/17/13	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F38A		6/10/14	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F38A		6/9/15	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F38A		6/7/16	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F38A		6/8/17	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F38A		3/27/18	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F39A		12/14/90	82	32	4.0	3.5	-	-	2.0	3.8	10	3.0	3.0	1,1,2,2-TCA = 3.0; 1,1,2-TCA = 2.0; 1,2-DCPA = 2.0; 1,3-DCB = 10; 1,4-DCB = 10; 2-CVE = 4.0; Acetone = 30; BDCMe = 4.0; Benzene = 0.50; BRFM = 5.0; BRMA = 5.0; CHLBZ = 4.0; CHLEA (EC)=5.0; CHLFM = 3.6; CHLMA = 5.0; cis-1,3-DCP = 3.0; CT = 3.0; DBCMe = 4.0; EDB = 10; Ethylbenzene = 0.50; MC = 50; m-Xylene = 0.30; o-Xylene = 0.30; TCFMe (Freon 11) = 5.0; Toluene = 0.50; trans-1,3-DCP = 3.0; Xylenes = 0.90;
F39A		4/9/91	40	8.0	2.0	-	12	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F39A		7/30/91	54	18	ND (<0.50)	ND (<0.50)	18	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F39A		11/4/91	12	2.6	ND (<0.50)	-	3.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F39A	Dup	11/4/91	11	2.4	ND (<0.50)	-	2.7	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F39A		12/5/91	220	74	8.9	ND (<10)	-	ND (<5.0)	ND (<5.0)	8.3	-	ND (<5.0)	ND (<10)	
F39A		12/16/91	180	63	7.9	-	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F39A		3/4/92	10	0.50	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F39A		6/3/92	180	41	9.5	-	58	0.60	ND (<0.50)	3.7	ND (<0.50)	0.50	ND (<0.50)	CHLFM = 2.8;
F39A		9/22/92	37	9.8	2.5	-	18	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 1.0;
F39A		12/4/92	10	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F39A		3/10/93	9.0	3.0	0.50	-	2.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F39A	Dup	3/10/93	9.3	3.1	0.50	-	2.6	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F39A		6/2/93	3.8	1.7	ND (<0.50)	ND (<0.50)	1.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F39A		9/8/93	8.0	3.1	0.64	-	2.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F39A		12/8/93	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F39A		3/7/94	10	2.8	ND (<0.50)	-	3.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F39A		6/6/94	22	4.0	0.69	-	4.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F39A		9/6/94	2.8	0.75	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	

Appendix B
Selected Compounds from Historical Records
COE Study Area and Perimeter Area, Palo Alto, California

Location	Type	Date	TCE	1,1,1-TCA	1,1-DCA	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	PCE	Freon 113	1,2-DCB	1,2-DCA	VC	Other Constituents
F39A		12/6/94	66	8.5	ND (<5.0)	ND (<5.0)	12	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F39A		3/2/95	3.8	0.70	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F39A		6/7/95	5.6	1.2	ND (<0.50)	ND (<0.50)	0.65	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F39A		9/5/95	48	5.2	1.2	-	6.8	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.55;
F39A	Dup	9/5/95	47	5.1	1.2	-	6.5	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.52;
F39A		12/6/95	22	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F39A		4/4/96	5.7	1.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F39A		6/5/96	75	8.4	1.3	ND (<1.0)	7.7	ND (<1.0)	ND (<1.0)	1.0	ND (<1.0)	ND (<1.0)	ND (<1.0)	CBMA = 103; CHLFM = 1.1;
F39A	Dup	6/5/96	92	11	ND (<2.5)	ND (<2.5)	8.3	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	CBMA = 106;
F39A		9/11/96	58	2.7	ND (<2.5)	ND (<2.5)	6.0	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	CBMA = 104; CHLFM = 3.4;
F39A	Dup	9/11/96	56	ND (<2.5)	ND (<2.5)	ND (<2.5)	5.8	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	CBMA = 102; CHLFM = 2.8;
F39A		12/11/96	28	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F40A		12/11/90	35	6.3	4.0	3.0	-	-	2.0	10	0.50	3.0	3.0	1,1,2,2-TCA = 3.0; 1,1,2-TCA = 2.0; 1,2-DCPA = 2.0; 1,3-DCB = 0.50; 1,4-DCB = 0.50; 2-CVE = 4.0; Acetone = 30; BDCMe = 4.0; Benzene = 0.50; BRFM = 5.0; BRMA = 5.0; CHLBZ = 0.50; CHLEA (EC) = 5.0; CHLFM = 2.0; CHLMA = 5.0; cis-1,3-DCP = 3.0; CT = 3.0; DBCMe = 4.0; EDB = 10; Ethylbenzene = 0.50; MC = 50; m-Xylene = 0.50; o-Xylene = 0.50; TCFMe (Freon 11) = 5.0; Toluene = 0.50; trans-1,3-DCP = 3.0; Xylenes = 0.50;
F40A		4/9/91	790	15	ND (<0.50)	ND (<10)	9.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F40A		7/29/91	13	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F40A		11/12/91	200	5.1	ND (<0.50)	ND (<2.5)	3.7	ND (<0.50)	ND (<0.50)	ND (<2.5)	ND (<2.5)	ND (<0.50)	ND (<0.50)	
F40A	Dup	11/12/91	200	6.2	ND (<0.50)	ND (<0.50)	4.8	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F40A		12/13/91	19	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F40A		3/10/92	22	0.50	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F40A		6/11/92	5.2	0.60	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F40A		9/17/92	870	17	ND (<5.0)	ND (<5.0)	12	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
F40A		12/9/92	960	17	ND (<5.0)	ND (<25)	21	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F40A		3/5/93	36	1.0	ND (<0.50)	ND (<0.50)	0.50	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F40A		6/10/93	10	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F40A		9/10/93	410	9.3	ND (<5.0)	ND (<5.0)	16	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
F40A	Dup	9/10/93	410	8.2	ND (<5.0)	ND (<5.0)	15	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
F40A		12/3/93	70	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F40A		3/9/94	24	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F40A		6/9/94	45	0.63	ND (<0.50)	ND (<0.50)	0.78	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F40A	Dup	6/9/94	47	0.64	ND (<0.50)	ND (<0.50)	0.79	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F40A		9/7/94	20	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F40A		12/7/94	14	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F40A	Dup	12/7/94	14	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F40A		3/7/95	48	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.63	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F40A	Dup	3/7/95	45	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.55	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F40A		6/7/95	56	ND (<0.50)	ND (<0.50)	ND (<0.50)	1.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F40A		9/6/95	60	ND (<0.50)	ND (<0.50)	-	4.1	0.64	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.51;
F40A		12/8/95	43	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F40A		3/6/96	52	ND (<0.50)	ND (<0.50)	ND (<0.50)	3.5	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.85;
F40A		6/5/96	88	ND (<2.5)	ND (<2.5)	ND (<2.5)	4.6	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	CBMA = 105; CHLFM = 12;
F40A		9/11/96	67	ND (<2.5)	ND (<2.5)	ND (<2.5)	2.8	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	CBMA = 106; CHLFM = 11;
F40A		12/12/96	44	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	CHLFM = 7.2;
F40A		6/4/97	12	ND (<1.0)	ND (<1.0)	ND (<1.0)	1.8	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	CBMA = 93; CHLFM = 3.7; MC = 3.2;
F40A		12/3/97	24	ND (<0.50)	ND (<0.50)	ND (<0.50)	1.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 92; CHLFM = 5.6;
F40A		12/8/98	29	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 105; CHLFM = 4.6;
F40A		12/8/99	54	ND (<1.25)	ND (<1.25)	ND (<1.25)	1.82	ND (<1.25)	ND (<1.25)	ND (<2.5)	ND (<1.25)	ND (<1.25)	ND (<1.25)	CHLFM = 7.1;
F40A		12/7/00	5.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F40A		6/20/01	3.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F40A		6/27/02	5.6	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F40A		6/24/03	13	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F40A		9/1/04	29	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.81	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.86;
F40A		9/1/04	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F40A		6/29/05	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F40A	Dup	6/29/05	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F40A		6/30/06	8.8	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	7.9	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F40A		6/20/07	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F40A		9/13/07	14	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.55	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F40A		6/11/08	7.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F40A		6/11/09	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F40A		6/8/10	0.94	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F40A		6/16/11	21	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.58	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F40A	Dup	6/16/11	21	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.70	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F40A		6/13/12	45	ND (<0.50)	ND (<0.50)	ND (<0.50)	1.9	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F40A		6/20/13	14	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F40A		6/11/14	1.6	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F40A		6/10/15	9.4	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.64	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F40A		6/7/16	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F40A		6/7/17	3.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F40A		6/5/18	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F40A		6/6/19	1.7	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F40A		6/3/20	150	ND (<0.50)	1.0	ND (<0.50)	10	1.1	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F41A1		12/14/92	7.9	ND (<5.0)	ND (<5.0)	ND (<5.0)	34	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F41A1		1/17/11	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	1.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F41A1		6/16/11	0.72	ND (<0.50)	ND (<0.50)	ND (<0.50)	2.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F41A1		6/13/12	0.81	ND (<0.50)	ND (<0.50)	ND (<0.50)	2.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F41A1		6/19/13	1.7	ND (<0.50)	ND (<0.50)	ND (<0.50)	4.8	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F41A1		6/11/14	2.4	ND (<0.50)	ND (<0.50)	ND (<0.50)	6.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F41A1		6/6/19	2.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	4.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F42A1		12/10/90	850	760	24	54	-	-	2.0	460	0.50	3.6	3.0	1,1,2,2-TCA = 3.0; 1,1,2-TCA = 2.0; 1,2,4-TCB = 10; 1,2-DCPA = 2.0; 1,3-DCB = 0.50; 1,4-DCB = 0.50; 2-CVE = 4.0; Acetone = 75; BDCMe = 4.0; Benzene = 0.50; BRFM = 5.0; BRMA = 5.0; CHLBZ = 0.50; CHLEA (EC) = 5.0; CHLFM = 2.0; CHLMA = 5.0; cis-1,3-DCP = 3.0; CT = 3.0; DBCMe = 4.0; EDB = 10; Ethylbenzene = 0.50; MC = 50; m-Xylene = 0.50; Naphthalene = 10; o-Xylene = 0.50; TCFMe (Freon 11) = 5.0; Toluene = 0.50; trans-1,3-DCP = 3.0; Xylenes = 0.50;
F42A1	Dup	12/10/90	870	800	4.0	65	-	-	2.0	600	0.50	3.0	3.0	1,1,2,2-TCA = 3.0; 1,1,2-TCA = 2.0; 1,2,4-TCB = 10; 1,2-DCPA = 2.0; 1,3-DCB = 10; 1,4-DCB = 10; 2-CVE = 20; Acetone = 75; BDCMe = 4.0; Benzene = 0.50; BRFM = 5.0; BRMA = 5.0; CHLBZ = 0.50; CHLEA (EC) = 5.0; CHLFM = 2.0; CHLMA = 5.0; cis-1,3-DCP = 3.0; CT = 3.0; DBCMe = 20; EDB = 50; Ethylbenzene = 0.50; MC = 50; m-Xylene = 0.50; Naphthalene = 10; o-Xylene = 0.50; TCFMe (Freon 11) = 5.0; Toluene = 0.50; trans-1,3-DCP = 3.0; Xylenes = 0.50;
F42A1		4/9/91	1,300	740	24	ND (<25)	300	ND (<25)	ND (<25)	780	ND (<3.0)	ND (<25)	ND (<25)	
F42A1		7/25/91	1,100	680	29	ND (<5.0)	370	ND (<5.0)	ND (<5.0)	240	ND (<5.0)	ND (<5.0)	ND (<5.0)	
F42A1		10/8/91	1,100	640	ND (<25)	-	310	ND (<25)	ND (<25)	320	ND (<25)	ND (<25)	ND (<25)	
F42A1		12/10/91	1,400	670	30	ND (<50)	-	ND (<5.0)	ND (<5.0)	560	-	ND (<5.0)	ND (<10)	
F42A1		3/11/92	210	92	7.1	ND (<2.5)	100	ND (<0.50)	ND (<0.50)	39	ND (<0.50)	1.0	ND (<0.50)	
F42A1		6/10/92	1,200	690	20	ND (<12)	340	ND (<12)	ND (<12)	480	ND (<12)	ND (<12)	ND (<12)	
F42A1		9/14/92	1,300	670	30	ND (<25)	400	ND (<5.0)	ND (<5.0)	580	ND (<5.0)	ND (<5.0)	ND (<5.0)	
F42A1		12/11/92	1,100	470	32	ND (<50)	420	ND (<5.0)	ND (<5.0)	260	-	ND (<5.0)	ND (<10)	
F42A1		3/9/93	1,200	720	35	ND (<25)	350	ND (<5.0)	ND (<5.0)	370	ND (<5.0)	ND (<5.0)	ND (<5.0)	
F42A1		6/8/93	750	300	14	ND (<25)	240	ND (<2.5)	ND (<2.5)	370	ND (<2.5)	ND (<2.5)	ND (<2.5)	
F42A1		9/14/93	680	360	13	ND (<25)	180	ND (<5.0)	ND (<5.0)	390	ND (<5.0)	ND (<5.0)	ND (<5.0)	
F42A1		12/9/93	610	220	17	-	190	ND (<5.0)	ND (<5.0)	140	-	ND (<5.0)	ND (<10)	
F42A1		3/7/94	450	300	16	-	170	12	ND (<2.5)	150	ND (<2.5)	ND (<2.5)	ND (<2.5)	CHLFM = 4.6;
F42A1		6/6/94	560	200	9.4	-	130	ND (<2.5)	3.4	280	ND (<2.5)	ND (<2.5)	ND (<2.5)	CHLFM = 7.2;
F42A1		9/2/94	440	170	8.1	-	97	ND (<1.0)	2.5	270	ND (<1.0)	ND (<1.0)	ND (<1.0)	CHLFM = 6.2;
F42A1	Dup	9/2/94	420	160	7.8	-	94	ND (<1.0)	2.4	250	ND (<1.0)	ND (<1.0)	ND (<1.0)	CHLFM = 5.9; TCFMe (Freon 11) = 1.1;
F42A1		12/9/94	300	110	ND (<10)	-	73	ND (<10)	ND (<10)	200	-	ND (<10)	ND (<20)	
F42A1		3/3/95	250	61	5.1	-	60	ND (<1.0)	1.0	24	ND (<1.0)	ND (<1.0)	ND (<1.0)	CHLFM = 4.6;
F42A1		6/8/95	260	76	4.4	-	50	ND (<2.0)	3.0	140	ND (<2.0)	ND (<2.0)	ND (<2.0)	CHLFM = 5.5; MC = 11;
F42A1		9/7/95	270	78	7.1	-	70	ND (<5.0)	ND (<5.0)	110	ND (<5.0)	ND (<5.0)	ND (<5.0)	CHLFM = 8.0;
F42A1		12/8/95	150	47	5.2	-	41	ND (<5.0)	ND (<5.0)	75	-	ND (<5.0)	ND (<10)	CARBD = 6.9;
F42A1		3/7/96	230	82	9.8	38	75	ND (<5.0)	ND (<5.0)	90	ND (<5.0)	ND (<5.0)	ND (<5.0)	CHLFM = 6.4;
F42A1		6/11/96	120	48	8.2	24	61	ND (<2.5)	ND (<2.5)	39	ND (<2.5)	ND (<2.5)	ND (<2.5)	CBMA = 103; CHLFM = 4.0;
F42A1		9/13/96	160	60	11	42	74	ND (<1.2)	3.8	54	ND (<1.2)	1.9	ND (<1.2)	CBMA = 107; CHLFM = 5.1; MC = 1.8; TCFMe (Freon 11) = 2.6;
F42A1		12/13/96	160	64	11	36	96	ND (<5.0)	ND (<5.0)	81	-	ND (<5.0)	ND (<10)	
F42A1		3/6/97	190	60	10	50	83	ND (<5.0)	ND (<5.0)	48	ND (<5.0)	ND (<5.0)	ND (<5.0)	CBMA = 114;
F42A1		6/9/97	310	95	21	33	110	ND (<5.0)	5.9	130	ND (<5.0)	ND (<5.0)	ND (<5.0)	CBMA = 104; CHLFM = 7.0;
F42A1		9/12/97	230	59	16	37	87	ND (<5.0)	ND (<5.0)	87	ND (<5.0)	ND (<5.0)	ND (<5.0)	CBMA = 101;
F42A1		12/8/97	230	52	20	36	90	ND (<5.0)	ND (<5.0)	120	ND (<5.0)	ND (<5.0)	ND (<5.0)	CBMA = 99;
F42A1	Dup	12/8/97	240	52	19	17	90	ND (<5.0)	ND (<5.0)	120	ND (<5.0)	ND (<5.0)	ND (<5.0)	CBMA = 104;
F42A1		6/2/98	140	28	6.5	12	62	ND (<5.0)	ND (<5.0)	17	ND (<5.0)	ND (<5.0)	ND (<5.0)	CBMA = 112;
F42A1		12/10/98	158	38	7.1	22	64	ND (<5.0)	ND (<5.0)	46	ND (<5.0)	ND (<5.0)	ND (<5.0)	CBMA = 109;
F42A1		6/10/99	160	34	ND (<12.5)	20	56	ND (<12.5)	ND (<12.5)	44	ND (<12.5)	ND (<12.5)	ND (<12.5)	
F42A1		12/9/99	180	24	14.9	29	76	ND (<5.0)	ND (<5.0)	43	ND (<5.0)	ND (<5.0)	ND (<5.0)	
F42A1	Dup	12/9/99	146	39	13	21	62	ND (<4.17)	ND (<4.17)	37	ND (<4.17)	ND (<4.17)	ND (<4.17)	
F42A1		6/6/00	170	200	25	45	87	ND (<2.5)	ND (<2.5)	72	ND (<2.5)	ND (<2.5)	ND (<2.5)	
F42A1		12/8/00	200	450	40	56	100	ND (<25)	ND (<25)	ND (<100)	ND (<25)	ND (<25)	ND (<25)	
F42A1		6/19/01	240	640	68	80	140	ND (<10)	ND (<10)	92	ND (<10)	ND (<10)	ND (<10)	
F42A1		6/26/03	290	370	15	50	77	ND (<10)	ND (<10)	200	ND (<10)	ND (<10)	ND (<10)	
F42A1		6/22/05	980	2,400	130	320	520	ND (<25)	ND (<25)	750	ND (<25)	130	ND (<25)	
F42A1		6/13/07	2,600	1,400	40	150	240	ND (<25)	ND (<25)	1,800	ND (<25)	ND (<25)	ND (<25)	
F42A1		6/27/08	2,600	1,100	49	150	470	ND (<25)	ND (<25)	1,100	ND (<25)	ND (<25)	ND (<25)	
F42A1		12/10/08	2,200	1,500	41	180	420	ND (<20)	ND (<20)	1,200	ND (<20)	ND (<20)	ND (<20)	
F42A1		6/10/09	2,400	2,100	ND (<25)	180	260	ND (<25)	27	1,700	ND (<25)	ND (<25)	ND (<25)	
F42A1		6/9/10	1,300	670	ND (<25)	110	93	ND (<25)	ND (<25)	750	ND (<25)	ND (<25)	ND (<25)	
F42A1		6/15/11	790	340	9.2	58	74	ND (<5.0)	6.8	530	ND (<5.0)	ND (<5.0)	ND (<5.0)	
F42A1		8/26/11	690	280	8.9	59	73	ND (<5.0)	6.6	490	ND (<5.0)	ND (<5.0)	ND (<5.0)	
F42A1		9/29/11	670	260	9.4	55	80	ND (<5.0)	6.3	430	ND (<5.0)	ND (<5.0)	ND (<5.0)	
F42A1		10/17/11	750	300	11	63	94	ND (<5.0)	6.1	420	ND (<5.0)	ND (<5.0)	ND (<5.0)	
F42A1		3/5/12	610	170	8.2	55	66	ND (<5.0)	8.2	390	ND (<5.0)	ND (<5.0)	ND (<5.0)	
F42A1		6/13/12	600	190	8.7	43	74	ND (<5.0)	6.4	330	ND (<5.0)	ND (<5.0)	ND (<5.0)	
F42A1		3/12/13	530	250	29	52	190	ND (<5.0)	9.4	290	ND (<5.0)	ND (<5.0)	ND (<5.0)	
F42A1R		6/19/13	650	430	30	51	210	ND (<5.0)	14	350	ND (<5.0)	ND (<5.0)	ND (<5.0)	
F42A1R	Dup	6/19/13	630	390	32	56	210	0.92	16	330	ND (<0.50)	ND (<0.50)	1.1	TCFMe (Freon 11) = 1.2;
F42A1R		6/10/14	780	800	23	58	260	ND (<10)	19	650	ND (<10)	ND (<10)	ND (<10)	
F42A1R		6/9/15	410	130	ND (<10)	23	45	ND (<10)	14	260	ND (<10)	ND (<10)	ND (<10)	
F42A1R		6/6/16	240	43	3.8	9.6	21	ND (<2.5)	8.6	120	ND (<2.5)	ND (<2.5)	ND (<2.5)	
F42A1R		6/5/17	210	31	ND (<5.0)	13	23	ND (<5.0)	6.0	96	ND (<5.0)	ND (<5.0)	ND (<5.0)	
F42A1R	Dup	6/5/17	210	30	ND (<5.0)	14	22	ND (<5.0)	6.5	100	ND (<5.0)	ND (<5.0)	ND (<5.0)	

Appendix B
Selected Compounds from Historical Records
COE Study Area and Perimeter Area, Palo Alto, California

Location	Type	Date	TCE	1,1,1-TCA	1,1-DCA	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	PCE	Freon 113	1,2-DCB	1,2-DCA	VC	Other Constituents
F42A1R		6/7/18	190	25	ND (<5.0)	9.9	22	ND (<5.0)	6.2	85	ND (<5.0)	ND (<5.0)	ND (<5.0)	
F42A1R		6/6/19	120	13	ND (<5.0)	5.7	10	ND (<5.0)	6.0	46	ND (<5.0)	ND (<5.0)	ND (<5.0)	
F42A1R		6/2/20	130	17	3.7	11	20	ND (<1.0)	4.5	50	ND (<1.0)	ND (<1.0)	ND (<1.0)	
F43A1U		12/20/90	0.50	1.1	1.5	0.30	-	-	0.20	2.6	0.50	0.30	0.30	1,1,2,2-TCA = 0.30; 1,1,2-TCA = 0.20; 1,2-DCPA = 0.20; 1,3-DCB = 0.50; 1,4-DCB = 0.50; 2-CVE = 0.40; Acetone = 30; BDCMe = 0.40; Benzene = 0.50; BRFM = 0.50; BRMA = 0.50; CHLBZ = 0.40; CHLEA (EC) = 0.50; CHLFM = 0.20; CHLMA = 0.50; cis-1,3-DCP = 0.30; CT = 0.30; DBCMe = 0.40; EDB = 1.0; Ethylbenzene = 0.50; MC = 5.0; m-Xylene = 0.50; o-Xylene = 0.50; TCFMe (Freon 11) = 0.50; Toluene = 0.50; trans-1,3-DCP = 0.30; Xylenes = 0.50;
F43A1U		4/9/91	ND (<0.50)	1.0	1.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	1.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F43A1U		7/23/91	19	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	1.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F43A1U		10/3/91	72	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.8	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F43A1U	Dup	10/3/91	63	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F43A1U		12/4/91	45	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F43A1U		3/9/92	24	0.80	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F43A1U		6/3/92	33	0.60	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F43A1U		10/12/92	54	ND (<0.50)	ND (<0.50)	ND (<0.50)	1.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F43A1U		12/17/92	68	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F43A1U		3/8/93	15	0.80	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.50	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F43A1U		6/2/93	53	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F43A1U	Dup	6/2/93	53	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F43A1U		9/13/93	120	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.97	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F43A1U	Dup	9/13/93	100	ND (<0.50)	ND (<0.50)	ND (<0.50)	1.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F43A1U		12/2/93	150	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F43A1U	Dup	12/2/93	150	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F43A1U		3/9/94	110	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F43A1U		6/13/94	190	ND (<0.50)	ND (<0.50)	ND (<0.50)	1.4	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F43A1U		9/8/94	290	ND (<0.50)	ND (<0.50)	ND (<0.50)	2.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F43A1U		12/12/94	220	ND (<8.4)	ND (<8.4)	ND (<8.4)	ND (<8.4)	ND (<8.4)	ND (<8.4)	ND (<8.4)	-	ND (<8.4)	ND (<17)	
F43A1U		3/3/95	150	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.73	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F43A1U		6/8/95	81	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F43A1U		9/6/95	120	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
F43A1U	Dup	9/6/95	130	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
F43A1U		12/8/95	240	ND (<50)	ND (<50)	ND (<50)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<50)	-	ND (<5.0)	ND (<100)	
F43A1U	Dup	9/6/95	130	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
F43A1U		12/8/95	240	ND (<50)	ND (<50)	ND (<50)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<50)	-	ND (<5.0)	ND (<100)	
F43A1U		3/6/96	8.6	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F43A1U	Dup	3/6/96	10	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F43A1U		6/6/96	18	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 105;
F43A1U		9/12/96	27	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 105;
F43A1U		12/12/96	130	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F43A1U		3/5/97	93	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	CBMA = 92;
F43A1U		6/5/97	54	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	CBMA = 101;
F43A1U		9/10/97	95	ND (<1.0)	ND (<1.0)	ND (<1.0)	1.3	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	CBMA = 102;
F43A1U		12/2/97	66	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	CBMA = 92;
F43A1U		12/9/98	28	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 92;
F43A1U		12/13/99	19	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F43A1U		12/7/00	17	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F43A1U		6/20/01	13	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F43A1U		6/24/03	8.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F43A1U		6/23/05	3.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<5.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.54;
F44A		12/17/90	1,700	3.0	4.0	6.1	-	-	2.0	10	10	3.0	3.0	1,1,2,2-TCA = 3.0; 1,1,2-TCA = 2.0; 1,2-DCPA = 2.0; 1,3-DCB = 10; 1,4-DCB = 10; 2-CVE = 4.0; Acetone = 30; BDCMe = 4.0; Benzene = 0.50; BRFM = 5.0; BRMA = 5.0; CHLBZ = 4.0; CHLEA (EC) = 5.0; CHLFM = 2.0; CHLMA = 5.0; cis-1,3-DCP = 3.0; CT = 3.0; DBCMe = 4.0; EDB = 10; Ethylbenzene = 0.50; MC = 50; m-Xylene = 0.30; o-Xylene = 0.30; TCFMe (Freon 11) = 50; Toluene = 0.50; trans-1,3-DCP = 3.0; Xylenes = 0.90;
F44A	Dup	12/17/90	780	3.0	4.0	6.0	-	-	2.0	10	10	3.0	3.0	1,1,2,2-TCA = 3.0; 1,1,2-TCA = 20; 1,2-DCPA = 2.0; 1,3-DCB = 10; 1,4-DCB = 10; 2-CVE = 4.0; Acetone = 30; BDCMe = 40; Benzene = 0.50; BRFM = 5.0; BRMA = 5.0; CHLBZ = 4.0; CHLEA (EC) = 5.0; CHLFM = 2.0; CHLMA = 50; cis-1,3-DCP = 3.0; CT = 3.0; DBCMe = 4.0; EDB = 10; Ethylbenzene = 0.50; MC = 50; m-Xylene = 0.30; o-Xylene = 0.30; TCFMe (Freon 11) = 5.0; Toluene = 0.50; trans-1,3-DCP = 3.0; Xylenes = 0.90;
F44A		4/9/91	5,000	ND (<10)	ND (<10)	ND (<100)	110	20	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	
F44A		7/23/91	420	ND (<5.0)	ND (<5.0)	ND (<5.0)	10	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
F44A		10/7/91	3,400	ND (<0.50)	0.70	ND (<50)	63	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F44A		12/4/91	5,100	ND (<50)	ND (<50)	ND (<50)	-	ND (<50)	ND (<50)	ND (<50)	-	ND (<50)	ND (<100)	
F44A		3/12/92	4,600	ND (<5.0)	ND (<5.0)	-	59	11	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
F44A	Dup	3/12/92	4,500	ND (<5.0)	ND (<5.0)	-	68	12	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
F44A		6/4/92	7,500	ND (<100)	ND (<100)	ND (<100)	40	ND (<100)	ND (<100)	ND (<100)	ND (<100)	ND (<100)	ND (<100)	
F44A		9/14/92	7,600	ND (<100)	ND (<100)	ND (<100)	100	ND (<100)	ND (<100)	ND (<100)	ND (<100)	ND (<100)	ND (<100)	
F44A	Dup	9/14/92	7,400	ND (<100)	ND (<100)	ND (<100)	100	ND (<100)	ND (<100)	ND (<100)	ND (<100)	ND (<100)	ND (<100)	
F44A		12/8/92	5,100	ND (<25)	ND (<25)	26	130	26	ND (<25)	ND (<25)	-	ND (<25)	ND (<50)	
F44A		3/8/93	500	ND (<12)	ND (<12)	ND (<12)	4.0	ND (<12)	ND (<12)	ND (<12)	ND (<12)	ND (<12)	ND (<12)	
F44A		6/2/93	1,700	ND (<5.0)	ND (<5.0)	ND (<5.0)	25	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
F44A		9/13/93	4,700	ND (<50)	ND (<50)	ND (<50)	77	14	ND (<50)	ND (<50)	ND (<50)	ND (<50)	ND (<50)	
F44A		12/2/93	6,700	ND (<50)	ND (<50)	ND (<50)	75	ND (<50)	ND (<50)	ND (<50)	-	ND (<50)	ND (<100)	
F44A		3/10/94	6,300	ND (<25)	ND (<25)	ND (<25)	78	ND (<25)	ND (<25)	ND (<25)	ND (<25)	ND (<25)	ND (<25)	
F44A	Dup	3/10/94	6,200	ND (<25)	ND (<25)	ND (<25)	76	ND (<25)	ND (<25)	ND (<25)	ND (<25)	ND (<25)	ND (<25)	
F44A		6/13/94	8,900	ND (<25)	ND (<25)	ND (<25)	98	ND (<25)	ND (<25)	ND (<25)	ND (<25)	ND (<25)	ND (<25)	
F44A	Dup	3/10/94	6,200	ND (<25)	ND (<25)	ND (<25)	76	ND (<25)	ND (<25)	ND (<25)	ND (<25)	ND (<25)	ND (<25)	
F44A		6/13/94	8,900	ND (<25)	ND (<25)	ND (<25)	98	ND (<25)	ND (<25)	ND (<25)	ND (<25)	ND (<25)	ND (<25)	
F44A		9/7/94	7,400	ND (<2.5)	ND (<2.5)	-	110	18	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
F44A		12/13/94	5,300	ND (<33)	ND (<33)	ND (<33)	73	ND (<33)	ND (<33)	ND (<33)	-	ND (<33)	ND (<67)	
F44A	Dup	12/13/94	5,300	ND (<33)	ND (<33)	ND (<33)	76	ND (<33)	ND (<33)	ND (<33)	-	ND (<33)	ND (<67)	
F44A		3/6/95	1,900	ND (<10)	ND (<10)	ND (<10)	35	ND (<10)	14	ND (<10)	ND (<10)	ND (<10)	ND (<10)	
F44A		6/9/95	6,500	ND (<50)	ND (<50)	ND (<50)	53	ND (<50)	ND (<50)	ND (<50)	ND (<50)	ND (<50)	ND (<50)	
F44A		9/8/95	4,900	ND (<25)	ND (<25)	ND (<25)	95	ND (<25)	ND (<25)	ND (<25)	ND (<25)	ND (<25)	ND (<25)	
F44A		12/11/95	3,400	ND (<5.0)	ND (<5.0)	-	37	5.3	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F44A		3/7/96	3,200	ND (<50)	ND (<50)	ND (<50)	ND (<50)	ND (<50)	ND (<50)	ND (<50)	ND (<50)	ND (<50)	ND (<50)	
F44A		6/11/96	5,600	ND (<100)	ND (<100)	ND (<100)	ND (<100)	ND (<100)	ND (<100)	ND (<100)	ND (<100)	ND (<100)	ND (<100)	CBMA = 105;
F44A		9/13/96	4,400	ND (<50)	ND (<50)	ND (<50)	ND (<50)	ND (<50)	ND (<50)	ND (<50)	ND (<50)	ND (<50)	ND (<50)	CBMA = 101; MC = 100;
F44A		12/16/96	3,100	ND (<100)	ND (<100)	ND (<100)	ND (<100)	ND (<100)	ND (<100)	ND (<100)	-	ND (<100)	ND (<200)	
F44A		3/7/97	1,600	ND (<25)	ND (<25)	ND (<25)	ND (<25)	ND (<25)	ND (<25)	ND (<25)	ND (<25)	ND (<25)	ND (<25)	CBMA = 96;
F44A		6/9/97	2,700	ND (<25)	ND (<25)	ND (<25)	46	ND (<25)	ND (<25)	ND (<25)	ND (<25)	ND (<25)	ND (<25)	CBMA = 98;
F44A		9/12/97	2,600	ND (<50)	ND (<50)	ND (<50)	ND (<50)	ND (<50)	ND (<50)	ND (<50)	ND (<50)	ND (<50)	ND (<50)	CBMA = 101;
F44A		12/4/97	2,000	ND (<50)	ND (<50)	ND (<50)	ND (<50)	ND (<50)	ND (<50)	ND (<50)	ND (<50)	ND (<50)	ND (<50)	CBMA = 97;
F44A		6/5/98	1,700	ND (<50)	ND (<50)	ND (<50)	ND (<50)	ND (<50)	ND (<50)	ND (<50)	ND (<50)	ND (<50)	ND (<50)	CBMA = 102;
F44A		12/11/98	2,460	ND (<50)	ND (<50)	ND (<50)	ND (<50)	ND (<50)	ND (<50)	ND (<50)	ND (<50)	ND (<50)	ND (<50)	CBMA = 72.3;
F44A		6/10/99	1,780	ND (<125)	ND (<125)	ND (<125)	ND (<125)	ND (<125)	ND (<125)	ND (<125)	ND (<125)	ND (<125)	ND (<125)	
F44A		12/13/99	1,880	ND (<100)	ND (<100)	ND (<100)	ND (<100)	ND (<100)	ND (<100)	ND (<100)	ND (<100)	ND (<100)	ND (<100)	BDCMe = 139;
F44A		6/8/00	2,500	ND (<25)	ND (<25)	ND (<25)	ND (<25)	ND (<25)	ND (<25)	ND (<25)	ND (<25)	ND (<25)	ND (<25)	
F44A		12/7/00	2,500	ND (<25)	ND (<25)	ND (<25)	ND (<25)	ND (<25)	ND (<25)	ND (<100)	ND (<25)	ND (<25)	ND (<25)	
F44A		6/21/01	2,800	ND (<25)	ND (<25)	ND (<25)	43	ND (<25)	ND (<25)	ND (<100)	ND (<25)	ND (<25)	ND (<25)	
F44A		6/27/02	2,100	ND (<25)	ND (<25)	ND (<25)	32	ND (<25)	ND (<25)	ND (<25)	ND (<25)	ND (<25)	ND (<25)	
F44A		6/27/03	1,700	ND (<25)	ND (<25)	ND (<25)	ND (<25)	ND (<25)	ND (<25)	ND (<25)	ND (<25)	ND (<25)	ND (<25)	
F44A		9/2/04	2,200	ND (<20)	ND (<20)	ND (<20)	34	ND (<20)	ND (<20)	ND (<20)	ND (<20)	ND (<20)	ND (<20)	
F44A		9/2/04	2,600	ND (<20)	ND (<20)	ND (<20)	39	ND (<20)	ND (<20)	ND (<20)	ND (<20)	ND (<20)	ND (<20)	
F44A	Dup	9/2/04	2,500	ND (<20)	ND (<20)	ND (<20)	38	ND (<20)	ND (<20)	ND (<20)	ND (<20)	ND (<20)	ND (<20)	
F44A		3/23/05	740	ND (<0.50)	14	3.3	13	-	ND (<0.50)	ND (<1.0)	ND (<0.50)	-	-	
F44A		4/29/05	370	ND (<5.0)	11	ND (<5.0)	13	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
F44A		6/28/05	260	ND (<5.0)	16	ND (<5.0)	22	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
F45A1U		12/17/90	1,000	3.3	4.0	3.0	-	-	2.0	10	10	3.0	3.0	1,1,2,2-TCA = 3.0; 1,1,2-TCA = 2.0; 1,2,4-TCB = 10; 1,2-DCPA = 2.0; 1,3-DCB = 10; 1,4-DCB = 10; 2-CVE = 4.0; Acetone = 30; BDCMe = 4.0; Benzene = 0.50; BRFM = 5.0; BRMA = 5.0; CHLBZ = 4.0; CHLEA (EC) = 5.0; CHLFM = 2.0; CHLMA = 5.0; cis-1,3-DCP = 3.0; CT = 3.0; DBCMe = 4.0; EDB = 10; Ethylbenzene = 0.50; MC = 50; m-Xylene = 0.30; Naphthalene = 10; o-Xylene = 0.30; TCFMe (Freon 11) = 5.0; Toluene = 0.50; trans-1,3-DCP = 3.0; Xylenes = 0.90;
F45A1U		2/6/91	1,500	30	40	30	-	-	20	100	100	30	30	1,1,2,2-TCA = 30; 1,1,2-TCA = 20; 1,2-DCPA = 20; 1,3-DCB = 100; 1,4-DCB = 100; 2-CVE = 40; BDCMe = 40; BRFM = 50; BRMA = 50; CHLBZ = 40; CHLEA (EC) = 50; CHLFM = 20; CHLMA = 50; cis-1,3-DCP = 30; CT = 30; DBCMe = 40; EDB = 100; MC = 500; TCFMe (Freon 11) = 50; trans-1,3-DCP = 30;
F45A1U		4/9/91	3,100	ND (<50)	ND (<50)	ND (<50)	ND (<50)	ND (<50)	ND (<50)	ND (<50)	ND (<10)	ND (<50)	ND (<50)	
F45A1U		3/3/93	2,400	6.0	ND (<5.0)	ND (<5.0)	15	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
F45A1U		6/7/93	1,100	ND (<5.0)	ND (<5.0)	ND (<5.0)	8.0	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
F45A1U		9/9/93	1,400	ND (<5.0)	ND (<5.0)	ND (<5.0)	8.9	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
F45A1U		12/2/93	1,200	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	-	ND (<10)	ND (<20)	
F45A1U		3/8/94	1,400	ND (<5.0)	ND (<5.0)	ND (<5.0)	9.5	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
F45A1U		6/7/94	2,900	ND (<5.0)	ND (<5.0)	ND (<5.0)	18	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
F45A1U		9/7/94	1,200	ND (<5.0)	ND (<5.0)	ND (<5.0)	17	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
F45A1U		12/13/94	2,700	ND (<5.0)	ND (<5.0)	-	22	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F45A1U		3/6/95	1,300	ND (<5.0)	ND (<5.0)	ND (<5.0)	8.5	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
F45A1U		6/9/95	1,200	ND (<5.0)	ND (<5.0)	ND (<5.0)	6.2	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
F45A1U		9/8/95	1,100	ND (<25)	ND (<25)	ND (<25)	ND (<25)	ND (<25)	ND (<25)	-	ND (<25)	ND (<25)	ND (<25)	MC = 130;
F45A1U		11/17/95	740	ND (<5.0)	ND (<5.0)	ND (<5.0)	7.3	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	13	ND (<5.0)	CHLFM = 9.0;
F45A1U		12/11/95	790	ND (<5.0)	ND (<5.0)	ND (<5.0)	5.8	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F45A1U		3/7/96	650	ND (<12)	ND (<18)	ND (<25)	ND (<12)	ND (<25)	ND (<12)	ND (<25)	ND (<25)	ND (<12)	ND (<45)	MC = 66;
F45A1U	Dup	3/7/96	600	ND (<12)	ND (<18)	ND (<25)	ND (<12)	ND (<25)	ND (<12)	ND (<25)	ND (<25)	ND (<12)	ND (<45)	
F45A1U		6/10/96	510	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	10	ND (<10)	ND (<10)	ND (<10)	ND (<10)	CBMA = 104; MC = 10; TFT = 96;
F45A1U		9/13/96	460	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	CBMA = 101;
F45A1U		9/13/96	630	ND (<25)	ND (<25)	ND (<25)	ND (<25)	ND (<25)	ND (<25)	ND (<25)	ND (<25)	ND (<25)	ND (<25)	CBMA = 107; MC = 66; TFT = 103;
F45A1U		12/16/96	250	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	-	ND (<10)	ND (<20)	
F45A1U		3/7/97	530	ND (<5.0)	ND (<5.0)	ND (<5.0)	6.0	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	CBMA = 116; CHLFM = 5.3;
F45A1U		6/9/97	390	ND (<5.0)	ND (<5.0)	ND (<5.0)	6.2	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	CBMA = 100; CHLFM = 9.6;
F45A1U		9/12/97	310	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	CBMA = 103; CHLFM = 9.6;
F45A1U		12/4/97	240	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	CBMA = 93;
F45A1U		6/2/98	270	ND (<12)	ND (<12)	ND (<12)	ND (<12)	ND (<12)	ND (<12)	ND (<12)	ND (<12)	ND (<12)	ND (<12)	CBMA = 109;
F45A1U		12/11/98	465	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	CBMA = 101;
F45A1U		6/10/99	308	ND (<12.5)	ND (<12.5)	ND (<12.5)	ND (<12.5)	ND (<12.5)	ND (<12.5)	ND (<12.5)	ND (<12.5)	ND (<12.5)	ND (<12.5)	
F45A1U		12/13/99	409	ND (<25)	ND (<25)	ND (<25)	ND (<25)	ND (<25)	ND (<25)	ND (<25)	ND (<25)	ND (<25)	ND (<25)	
F45A1U		6/6/00	320	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
F45A1U		12/7/00	340	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<20)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
F45A1U		6/20/01	360	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<20)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
F45A1U		6/25/03	300	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
F45A1U		6/23/05	150	ND (<0.50)	ND (<0.50)	ND (<0.50)	1.2	ND (<0.50)	ND (<0.50)	ND (<5.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 1.8; MC = 5.2;
F45A1U	Dup	6/23/05	150	ND (<0.50)	ND (<0.50)	ND (<0.50)	1.2	ND (<0.50)	ND (<0.50)	ND (<5.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 1.7; MC = 5.8;

Appendix B
Selected Compounds from Historical Records
COE Study Area and Perimeter Area, Palo Alto, California

Location	Type	Date	TCE	1,1,1-TCA	1,1-DCA	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	PCE	Freon 113	1,2-DCB	1,2-DCA	VC	Other Constituents
F46A1		12/11/90	0.6	0.50	0.40	0.30	-	-	0.20	1.0	1.0	0.30	0.30	1,1,2,2-TCA = 0.30; 1,1,2-TCA = 0.20; 1,2-DCPA = 0.20; 1,3-DCB = 1.0; 1,4-DCB = 1.0; 2-CVE = 0.40; Acetone = 30; BDCMe = 0.50; Benzene = 0.50; BRFM = 0.50; BRMA = 0.50; CHLBZ = 0.40; CHLEA (EC) = 0.50; CHLFM = 1.4; CHLMA = 0.50; cis-1,3-DCP = 0.30; CT = 0.30; DBCMe = 0.40; EDB = 1.0; Ethylbenzene = 0.50; MC = 5.0; m-Xylene = 0.50; o-Xylene = 0.50; TCFMe (Freon 11) = 0.50; Toluene = 0.50; trans-1,3-DCP = 0.30; Xylenes = 0.50;
F46A1		4/15/91	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F46A1		8/1/91	25	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F46A1		10/14/91	26	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F46A1		12/13/91	28	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F46A1		3/6/92	0.70	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F46A1		6/11/92	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F46A1		9/16/92	33	0.70	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F46A1		12/15/92	30	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F46A1		3/5/93	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F46A1		8/16/93	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F46A1	Dup	8/16/93	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F46A1		9/13/93	0.55	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F46A1		12/9/93	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F46A1		3/3/94	0.76	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F46A1		6/7/94	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F46A1		9/8/94	1.4	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F46A1		12/5/94	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F46A1		3/3/95	3.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F46A1		6/2/95	6.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.51	ND (<0.50)	
F46A1		9/5/95	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F46A1		12/7/95	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	CARBD = 15;
F46A1		3/5/96	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F46A1		6/7/96	0.75	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 110;
F46A1		9/11/96	2.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 106;
F46A1		12/11/96	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F46A1		3/4/97	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 103;
F46A1		6/4/97	1.7	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 103; MC = 1.4;
F46A1		9/9/97	7.5	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 110;
F46A1		12/5/97	0.69	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 100;
F46A1		12/10/98	2.8	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 115;
F46A1		12/8/99	3.9	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<1.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F46A1		12/7/00	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F46A1		6/21/01	1.9	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F46A1		6/26/03	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F46A1		6/21/05	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F46A1		6/14/07	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F46A1		6/15/09	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F46A1	Dup	6/15/09	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F46A1		6/15/11	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F46A1		6/20/13	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F46A1		6/10/15	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F46A1	Dup	6/10/15	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F46A1		6/7/17	0.51	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F46A1		6/6/19	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F49A1		2/8/91	0.50	0.30	0.40	0.30	-	-	0.20	1.0	1.0	0.30	0.30	1,1,2,2-TCA = 0.30; 1,1,2-TCA = 0.20; 1,2-DCPA = 0.20; 1,3-DCB = 1.0; 1,4-DCB = 1.0; 2-CVE = 0.40; Acetone = 30; BDCMe = 0.40; Benzene = 0.50; BRFM = 0.50; BRMA = 0.50; CHLBZ = 0.40; CHLEA (EC) = 0.50; CHLFM = 0.20; CHLMA = 0.50; cis-1,3-DCP = 0.30; CT = 0.30; DBCMe = 0.40; EDB = 1.0; Ethylbenzene = 0.50; MC = 5.0; m-Xylene = 0.50; o-Xylene = 0.50; TCFMe (Freon 11) = 0.50; Toluene = 0.50; trans-1,3-DCP = 0.30; Xylenes = 0.50;
F49A1		4/16/91	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F49A1		7/31/91	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F49A1		11/4/91	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	BDCMe = 2.1; BRFM = 3.6; CHLFM = 0.70; DBCMe = 5.2;
F49A1		12/6/91	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F49A1		3/9/92	ND (<0.50)	0.70	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F49A1		6/15/92	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F49A1	Dup	6/15/92	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F49A1		9/15/92	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F49A1		12/7/92	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F49A1		3/8/93	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F49A1		6/14/93	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F49A1		9/14/93	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F49A1		12/2/93	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F49A1		3/10/94	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F49A1		6/10/94	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F49A1		9/7/94	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F49A1		12/12/94	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F49A1		3/6/95	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F49A1		6/2/95	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F49A1		9/5/95	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F49A1		12/4/95	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F49A1		3/4/96	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F49A1		6/4/96	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 111;
F49A1		9/10/96	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 99;
F49A1	Dup	9/10/96	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 99;
F49A1		12/11/96	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F49A1		3/4/97	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 101;
F49A1		6/3/97	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 109; MC = 0.77;
F49A1		9/9/97	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 111;
F49A1		12/9/97	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 100;
F49A1		6/3/98	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 113;
F49A1		12/8/98	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 103;
F49A1		6/10/99	14	1.6	ND (<0.50)	ND (<0.50)	0.53	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F49A1		7/29/99	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F49A1		12/7/99	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F49A1		6/8/00	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F49A1		12/7/00	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F49A1		6/21/01	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F49A1	Dup	6/21/01	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F49A1		6/26/02	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F49A1		6/26/03	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F49A1	Dup	6/26/03	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F49A1		6/22/04	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F49A1		6/21/05	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F49A1		6/27/06	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F49A1		6/18/07	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F49A1		6/11/08	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F49A1		6/15/09	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F49A1		6/9/10	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F49A1		6/15/11	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F49A1	Dup	6/15/11	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F49A1		6/14/12	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F49A1		6/19/13	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F49A1		6/11/14	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F49A1		6/10/15	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F49A1		6/7/16	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F49A1	Dup	6/7/16	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	1,2,4-TCB = 1.4;
F49A1		6/7/17	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F49A1		6/6/18	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F49A1		6/6/19	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F49A1		6/2/20	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F50A1		2/8/91	0.50	0.30	0.40	0.30	-	-	0.20	1.0	1.0	0.30	0.30	1,1,2,2-TCA = 0.30; 1,1,2-TCA = 0.20; 1,2-DCPA = 0.20; 1,3-DCB = 1.0; 1,4-DCB = 1.0; 2-CVE = 0.40; BDCMe = 0.40; BRFM = 0.50; BRMA = 0.50; CHLBZ = 0.40; CHLEA (EC) = 0.50; CHLFM = 0.20; CHLMA = 0.50; cis-1,3-DCP = 0.30; CT = 0.30; DBCMe = 0.40; EDB = 1.0; MC = 5.0; TCFMe (Freon 11) = 0.50; trans-1,3-DCP = 0.30;
F50A1		2/8/91	0.50	0.30	0.40	0.30	-	-	0.20	1.0	1.0	0.30	0.30	1,1,2,2-TCA = 0.30; 1,1,2-TCA = 0.20; 1,2-DCPA = 0.20; 1,3-DCB = 1.0; 1,4-DCB = 1.0; 2-CVE = 0.40; BDCMe = 0.40; BRFM = 0.50; BRMA = 0.50; CHLBZ = 0.40; CHLEA (EC) = 0.50; CHLFM = 0.20; CHLMA = 0.50; cis-1,3-DCP = 0.30; CT = 0.30; DBCMe = 0.40; EDB = 1.0; MC = 5.0; TCFMe (Freon 11) = 0.50; trans-1,3-DCP = 0.30;
F50A1		4/16/91	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F50A1		7/29/91	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F50A1		11/5/91	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F50A1		12/6/91	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F50A1		3/9/92	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F50A1		6/11/92	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F50A1		10/12/92	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F50A1		2/3/93	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F50A1		12/7/93	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F51A1		12/13/90	5.0	3.0	4.0	3.0	-	-	2.0	10	0.50	3.0	3.0	1,1,2,2-TCA = 3.0; 1,1,2-TCA = 2.0; 1,2-DCPA = 2.0; 1,3-DCB = 0.50; 1,4-DCB = 0.50; 2-CVE = 4.0; Acetone = 30; BDCMe = 4.0; Benzene = 0.50; BRFM = 5.0; BRMA = 5.0; CHLBZ = 0.50; CHLEA (EC) = 5.0; CHLFM = 2.0; CHLMA = 5.0; cis-1,3-DCP = 3.0; CT = 3.0; DBCMe = 4.0; EDB = 10; Ethylbenzene = 0.50; MC = 50; m-Xylene = 0.50; o-Xylene = 0.50; TCFMe (Freon 11) = 5.0; Toluene = 0.50; trans-1,3-DCP = 3.0; Xylenes = 0.50;
F51A1		4/17/91	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F51A1		7/29/91	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F51A1		10/10/91	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F51A1		12/6/91	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F51A1		3/10/92	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F51A1		6/12/92	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F51A1		9/15/92	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F51A1		12/7/92	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F51A1		6/15/93	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F51A1		12/13/93	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F51A1		6/10/94	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F51A1		12/12/94	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F51A1		6/2/95	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F51A1		12/4/95	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F51A1		6/4/96	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 109;

Appendix B
Selected Compounds from Historical Records
COE Study Area and Perimeter Area, Palo Alto, California

Location	Type	Date	TCE	1,1,1-TCA	1,1-DCA	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	PCE	Freon 113	1,2-DCB	1,2-DCA	VC	Other Constituents
F51A1		12/11/96	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F51A1		6/3/97	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 114; MC = 0.74;
F51A1		12/2/97	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 97;
F51A1		12/11/98	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 100;
F51A1	Dup	12/11/98	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 99;
F51A1		12/7/99	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F51A1		12/7/00	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F51A1		6/6/19	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F53A1U		11/4/91	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F53A1U		12/13/91	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F53A1U		3/9/92	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F53A1U		6/15/92	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F53A1U		9/16/92	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F53A1U		12/7/92	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F53A1U	Dup	12/7/92	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F53A1U		3/8/93	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F53A1U		6/14/93	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F53A1U		9/14/93	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F53A1U		12/2/93	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F53A1U		6/10/94	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F53A1U		12/12/94	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F53A1U		6/2/95	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F53A1U		12/4/95	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F53A1U	Dup	12/4/95	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F53A1U		6/4/96	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 109;
F53A1U		12/11/96	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F53A1U		6/3/97	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 108;
F53A1U		12/5/97	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 98;
F53A1U		6/3/98	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 122;
F53A1U		12/8/98	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 102;
F53A1U		6/10/99	16	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
F53A1U		12/7/99	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F53A1U		6/8/00	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F53A1U		12/7/00	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F53A1U		6/21/01	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F53A1U		6/27/02	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F53A1U		6/26/03	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F53A1U		6/22/04	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F53A1U		6/21/05	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F53A1U		6/27/06	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F53A1U		6/18/07	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F53A1U		6/11/08	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F53A1U		6/16/09	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F53A1U		6/9/10	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F53A1U		6/15/11	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F53A1U		6/14/12	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F53A1U		6/19/13	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F53A1U		6/11/14	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F53A1U		6/10/15	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F53A1U		6/7/16	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F53A1U		6/7/17	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F53A1U		6/6/18	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F53A1U		6/6/19	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F53A1U		6/2/20	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F54A1U		12/13/90	2.0	3.0	3.0	2.0	5.0	2.0	2.0	-	0.50	2.0	3.0	1,1,2,2-TCA = 3.0; 1,1,2-TCA = 2.0; 1,2-DCPA = 3.0; 1,3-DCB = 0.50; 1,4-DCB = 0.50; 2-CVE = 5.0; Acetone = 5.0; BDCMe = 3.0; Benzene = 2.0; BRFM = 2.0; BRMA = 2.0; CARBD = 3.0; CHLBZ = 2.0; CHLEA (EC) = 2.0; CHLFM = 3.0; CHLMA = 3.0; cis-1,3-DCP = 3.0; CT = 3.0; DBCMe = 2.0; Ethylbenzene = 2.0; MBK = 5.0; MC = 5.0; MEK = 5.0; MIBK = 5.0; m-Xylene = 0.50; o-Xylene = 0.50; Styrene = 2.0; Toluene = 2.0; trans-1,3-DCP = 2.0; Vinyl Acetate = 5.0; Xylenes = 2.0;
F54A1U	Dup	12/13/90	3.3	3.0	4.0	3.0	-	-	2.0	10	0.50	3.0	3.0	1,1,2,2-TCA = 3.0; 1,1,2-TCA = 2.0; 1,2-DCPA = 2.0; 1,3-DCB = 0.50; 1,4-DCB = 0.50; 2-CVE = 4.0; Acetone = 30; BDCMe = 4.0; Benzene = 0.50; BRFM = 5.0; BRMA = 5.0; CHLBZ = 0.50; CHLEA (EC) = 5.0; CHLFM = 17; cis-1,3-DCP = 3.0; CT = 6.3; DBCMe = 4.0; EDB = 10; Ethylbenzene = 0.50; MC = 50; m-Xylene = 0.50; o-Xylene = 0.50; TCFMe (Freon 11) = 5.0; Toluene = 0.50; trans-1,3-DCP = 3.0; Xylenes = 0.50;
F54A1U		2/7/91	0.50	0.30	0.40	0.30	-	-	0.20	1.0	1.0	0.30	0.30	1,1,2,2-TCA = 0.30; 1,1,2-TCA = 0.20; 1,2-DCPA = 0.20; 1,3-DCB = 1.0; 1,4-DCB = 1.0; 2-CVE = 0.40; BDCMe = 0.40; BRFM = 0.50; BRMA = 0.50; CHLBZ = 0.40; CHLEA (EC) = 0.50; CHLFM = 0.60; CHLMA = 0.50; cis-1,3-DCP = 0.30; CT = 0.30; DBCMe = 0.40; EDB = 1.0; MC = 5.0; TCFMe (Freon 11) = 0.50; trans-1,3-DCP = 0.30;
F54A1U		4/17/91	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 4.0;
F54A1U	Dup	4/17/91	0.50	0.30	0.40	0.30	-	-	0.20	1.0	1.0	0.30	0.30	1,1,2,2-TCA = 0.30; 1,1,2-TCA = 0.20; 1,2-DCPA = 0.20; 1,3-DCB = 1.0; 1,4-DCB = 1.0; 2-CVE = 0.40; Acetone = 30; BDCMe = 0.40; Benzene = 0.50; BRFM = 0.50; BRMA = 0.50; CHLBZ = 0.40; CHLEA (EC) = 0.50; CHLFM = 3.3; CHLMA = 0.50; cis-1,3-DCP = 0.30; CT = 0.30; DBCMe = 0.40; EDB = 1.0; Ethylbenzene = 0.50; MC = 5.0; m-Xylene = 0.50; o-Xylene = 0.50; TCFMe (Freon 11) = 0.50; Toluene = 0.50; trans-1,3-DCP = 0.30; Xylenes = 0.50;
F54A1U		7/29/91	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 5.7;
F54A1U		10/11/91	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 2.3;
F54A1U		12/6/91	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F54A1U		3/10/92	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.50;
F54A1U		6/12/92	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F54A1U		9/16/92	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 1.3;
F54A1U		12/10/92	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F54A1U		3/8/93	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 2.3;
F54A1U		6/14/93	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.90;
F54A1U		9/13/93	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 1.0;
F54A1U		12/7/93	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F54A1U		3/4/94	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 2.1;
F54A1U		6/10/94	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 1.2;
F54A1U		12/12/94	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F54A1U		6/5/95	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F54A1U		12/4/95	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F54A1U		6/4/96	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 106;
F54A1U		12/11/96	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F54A1U		6/3/97	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 110;
F54A1U		12/2/97	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 92; MC = 0.77;
F54A1U		6/5/98	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 113;
F54A1U		12/11/98	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 100;
F54A1U		6/10/99	15	1.7	ND (<0.50)	ND (<0.50)	0.64	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F54A1U		7/29/99	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F54A1U		12/7/99	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F54A1U		6/7/00	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F54A1U		12/7/00	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F54A1U		6/21/01	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F54A1U		6/26/03	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F54A1U		6/21/05	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F54A1U		6/18/07	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F54A1U		6/16/09	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F54A1U		6/15/11	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F54A1U		6/19/13	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F54A1U		6/10/15	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F54A1U		6/7/17	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F54A1U		6/7/19	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F55A1U		8/26/11	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	1,2,4-TCB = 1.7;
F55A1U		6/6/19	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F55A1U	Dup	6/6/19	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F57A1U		12/13/90	-	-	-	-	-	-	-	-	0.50	-	-	1,3-DCB = 0.50; 1,4-DCB = 0.50; Acetone = 30; Benzene = 0.50; CHLBZ = 0.50; Ethylbenzene = 0.50; m-Xylene = 0.50; o-Xylene = 0.50; Toluene = 0.50; Xylenes = 0.50;
F57A1U		2/7/91	0.50	0.30	0.80	0.30	-	-	0.20	1.0	1.0	0.30	0.30	1,1,2,2-TCA = 0.30; 1,1,2-TCA = 0.20; 1,2-DCPA = 0.20; 1,3-DCB = 1.0; 1,4-DCB = 1.0; 2-CVE = 0.40; BDCMe = 0.40; BRFM = 0.50; BRMA = 0.50; CHLBZ = 0.40; CHLEA (EC) = 0.50; CHLFM = 0.20; CHLMA = 0.50; cis-1,3-DCP = 0.30; CT = 0.30; DBCMe = 0.40; EDB = 1.0; MC = 5.0; TCFMe (Freon 11) = 0.50; trans-1,3-DCP = 0.30;
F57A1U		4/16/91	ND (<0.50)	ND (<0.50)	1.0	ND (<0.50)	1.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F57A1U		7/25/91	ND (<0.50)	ND (<0.50)	1.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F57A1U		10/10/91	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F57A1U		12/13/91	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F57A1U		3/12/92	ND (<0.50)	ND (<0.50)	1.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F57A1U	Dup	3/12/92	ND (<0.50)	ND (<0.50)	1.5	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F57A1U		6/11/92	ND (<0.50)	ND (<0.50)	0.90	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F57A1U		9/17/92	ND (<0.50)	ND (<0.50)	1.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F57A1U		12/8/92	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F57A1U		3/9/93	ND (<0.50)	ND (<0.50)	1.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F57A1U	Dup	3/9/93	ND (<0.50)	ND (<0.50)	1.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F57A1U		6/15/93	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F57A1U		9/13/93	ND (<0.50)	ND (<0.50)	1.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F57A1U		12/7/93	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F57A1U		3/8/94	ND (<0.50)	ND (<0.50)	1.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F57A1U		6/10/94	ND (<0.50)	ND (<0.50)	1.5	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F57A1U		9/7/94	ND (<0.50)	ND (<0.50)	1.5	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F57A1U		12/8/94	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F57A1U		3/2/95	ND (<0.50)	ND (<0.50)	0.90	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F57A1U		6/5/95	ND (<0.50)	ND (<0.50)	1.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F57A1U		9/5/95	ND (<0.50)	ND (<0.50)	2.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F57A1U		12/5/95	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F57A1U		3/4/96	ND (<0.50)	ND (<0.50)	2.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F57A1U		6/5/96	ND (<0.50)	ND (<0.50)	2.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 111;
F57A1U		9/10/96	ND (<0.50)	ND (<0.50)	2.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 103;
F57A1U		12/11/96	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F57A1U		3/4/97	ND (<0.50)	ND (<0.50)	1.8	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 106;
F57A1U		6/3/97	ND (<0.50)	ND (<0.50)	2.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 108; MC = 0.62;
F57A1U	Dup	6/3/97	ND (<0.50)	ND (<0.50)	2.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 110; MC = 0.68;

Appendix B
Selected Compounds from Historical Records
COE Study Area and Perimeter Area, Palo Alto, California

Location	Type	Date	TCE	1,1,1-TCA	1,1-DCA	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	PCE	Freon 113	1,2-DCB	1,2-DCA	VC	Other Constituents
F57A1U		9/9/97	ND (<0.50)	ND (<0.50)	1.7	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 113;
F57A1U		12/9/97	ND (<0.50)	ND (<0.50)	0.79	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 103;
F57A1U		6/5/98	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 115;
F57A1U		12/11/98	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 94.3;
F57A1U		6/9/99	ND (<0.50)	ND (<0.50)	0.62	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F57A1U		12/7/99	ND (<0.50)	ND (<0.50)	0.53	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F57A1U		6/7/00	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F57A1U		12/8/00	ND (<0.50)	ND (<0.50)	0.63	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F57A1U		6/21/01	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F57A1U		6/25/02	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F57A1U		6/26/03	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F57A1U		6/22/04	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F57A1U		6/21/05	ND (<0.50)	ND (<0.50)	0.81	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F57A1U		6/14/07	ND (<0.50)	ND (<0.50)	0.81	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F57A1U		6/10/08	ND (<0.50)	ND (<0.50)	0.71	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F57A1U		6/15/09	ND (<0.50)	ND (<0.50)	0.82	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F57A1U		6/9/10	ND (<0.50)	ND (<0.50)	0.60	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F57A1U		6/15/11	ND (<0.50)	ND (<0.50)	0.60	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F57A1U		6/14/12	ND (<0.50)	ND (<0.50)	0.67	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F57A1U		6/19/13	ND (<0.50)	ND (<0.50)	0.68	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F57A1U	Dup	6/19/13	ND (<0.50)	ND (<0.50)	0.60	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F57A1U		6/10/14	ND (<0.50)	ND (<0.50)	0.50	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F57A1U		6/10/15	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F57A1U		6/7/16	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F57A1U		6/8/17	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F57A1U		6/7/18	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F57A1U		6/7/19	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F57A1U		6/4/20	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F58A		12/13/90	-	-	-	-	-	-	-	-	0.50	-	-	1,3-DCB = 0.50; 1,4-DCB = 0.50; Acetone = 30; Benzene = 0.50; CHLBZ = 0.50; Ethylbenzene = 0.50; m-Xylene = 0.50; o-Xylene = 0.50; Toluene = 0.50; Xylenes = 0.50;
F58A		2/7/91	0.50	0.30	0.40	0.30	-	-	0.20	1.0	1.0	0.30	0.30	1,1,2,2-TCA = 0.30; 1,1,2-TCA = 0.20; 1,2-DCPA = 0.20; 1,3-DCB = 1.0; 1,4-DCB = 1.0; 2-CVE = 0.40; BDCMe = 0.40; BRFM = 0.50; BRMA = 0.50; CHLBZ = 0.40; CHLEA (EC) = 0.50; CHLFM = 0.20; CHLMA = 0.50; cis-1,3-DCP = 0.30; CT = 0.30; DBCMe = 0.40; EDB = 1.0; MC = 5.0; TCFMe (Freon 11) = 0.50; trans-1,3-DCP = 0.30;
F58A		2/7/91	0.50	0.30	0.40	0.30	-	-	0.20	1.0	1.0	0.30	0.30	1,1,2,2-TCA = 0.30; 1,1,2-TCA = 0.20; 1,2-DCPA = 0.20; 1,3-DCB = 1.0; 1,4-DCB = 1.0; 2-CVE = 0.40; Acetone = 30; BDCMe = 0.40; Benzene = 0.50; BRFM = 0.50; BRMA = 0.50; CHLBZ = 0.40; CHLEA (EC) = 0.50; CHLFM = 0.20; CHLMA = 0.50; cis-1,3-DCP = 0.30; CT = 0.30; DBCMe = 0.40; EDB = 1.0; Ethylbenzene = 0.50; MC = 5.0; m-Xylene = 0.50; o-Xylene = 0.50; TCFMe (Freon 11) = 0.50; Toluene = 0.50; trans-1,3-DCP = 0.30; Xylenes = 0.50;
F58A		4/16/91	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F58A		7/25/91	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F58A		10/10/91	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F58A		12/13/91	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F58A		3/12/92	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F58A		6/11/92	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F58A		9/17/92	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F58A		12/8/92	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F58A		6/15/93	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F58A		12/7/93	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F58A		6/10/94	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F58A		12/8/94	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F58A		6/2/95	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F58A		12/5/95	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F58A	Dup	12/5/95	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F58A		6/4/96	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 112;
F58A		12/11/96	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F58A		6/3/97	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 112; MC = 0.62;
F58A		12/5/97	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 100;
F58A		12/11/98	0.75	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 101;
F58A		12/7/99	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F58A		12/8/00	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F58A		6/21/01	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F58A		6/26/02	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F58A		6/26/03	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F58A		6/22/04	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F58A		6/21/05	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F58A	Dup	6/21/05	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F58A		6/27/06	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F58A		6/14/07	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F58A		6/10/08	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F58A		6/15/09	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F58A		6/9/10	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F58A		6/15/11	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F58A		6/14/12	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F58A		6/19/13	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F58A		6/14/12	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F58A		6/19/13	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F58A		6/10/14	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F58A		6/10/15	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F58A		6/7/16	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F58A		6/8/17	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F58A		6/7/18	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F58A	Dup	6/7/18	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F58A		6/7/19	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F58A		6/4/20	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F58A	Dup	6/4/20	ND (<0.50) H	ND (<0.50)	ND (<0.50) H	ND (<0.50) H	ND (<0.50) H	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F59A1U		12/18/90	240	38	4.0	22	-	-	710	6.1	10	3.0	3.0	1,1,2,2-TCA = 3.0; 1,1,2-TCA = 2.0; 1,2-DCPA = 2.0; 1,3-DCB = 10; 1,4-DCB = 10; 2-CVE = 4.0; Acetone = 30; BDCMe = 4.0; Benzene = 0.30; BRFM = 5.0; BRMA = 5.0; CHLBZ = 4.0; CHLEA (EC) = 5.0; CHLFM = 2.0; CHLMA = 5.0; cis-1,3-DCP = 3.0; CT = 3.0; DBCMe = 4.0; EDB = 10; Ethylbenzene = 0.30; MC = 50; m-Xylene = 0.30; o-Xylene = 0.30; TCFMe (Freon 11) = 5.0; Toluene = 0.30; trans-1,3-DCP = 3.0; Xylenes = 0.90;
F59A1U	Dup	12/18/90	220	36	4.0	26	-	-	680	6.9	10	3.0	3.0	1,1,2,2-TCA = 3.0; 1,1,2-TCA = 2.0; 1,2-DCPA = 2.0; 1,3-DCB = 10; 1,4-DCB = 10; 2-CVE = 4.0; Acetone = 30; BDCMe = 4.0; Benzene = 0.30; BRFM = 5.0; BRMA = 5.0; CHLBZ = 4.0; CHLEA (EC) = 5.0; CHLFM = 2.0; CHLMA = 5.0; cis-1,3-DCP = 3.0; CT = 3.0; DBCMe = 4.0; EDB = 10; Ethylbenzene = 0.30; MC = 50; m-Xylene = 0.30; o-Xylene = 0.30; TCFMe (Freon 11) = 5.0; Toluene = 0.30; trans-1,3-DCP = 3.0; Xylenes = 0.90;
F59A1U		2/7/91	930	40	40	74	-	-	680	100	100	30	30	1,1,2,2-TCA = 30; 1,1,2-TCA = 20; 1,2-DCPA = 20; 1,3-DCB = 100; 1,4-DCB = 100; 2-CVE = 40; BDCMe = 40; BRFM = 50; BRMA = 50; CHLBZ = 40; CHLEA (EC) = 50; CHLFM = 20; CHLMA = 50; cis-1,3-DCP = 30; CT = 30; DBCMe = 40; EDB = 100; MC = 500; TCFMe (Freon 11) = 50; trans-1,3-DCP = 30;
F59A1U		4/15/91	1,100	27	ND (<5.0)	-	400	57	450	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
F59A1U		7/29/91	1,300	32	ND (<10)	ND (<25)	190	ND (<10)	2,600	30	ND (<10)	ND (<10)	ND (<10)	
F59A1U		11/1/91	1,700	36	6.5	-	260	39	2,700	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
F59A1U		12/16/91	1,200	42	5.6	-	-	27	1,900	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F59A1U		3/11/92	2,400	10	5.0	-	980	99	3,100	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
F59A1U		6/8/92	840	11	ND (<5.0)	-	220	31	2,300	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
F59A1U		9/17/92	420	16	ND (<5.0)	-	47	10	1,400	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
F59A1U		12/14/92	430	23	5.2	-	120	22	820	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F59A1U		3/8/93	1,500	9.0	6.0	-	470	120	2,100	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
F59A1U		6/14/93	530	5.0	ND (<5.0)	ND (<25)	190	37	1,500	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
F59A1U		9/13/93	400	ND (<5.0)	ND (<5.0)	ND (<25)	110	26	1,600	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
F59A1U		12/3/93	390	ND (<10)	ND (<10)	-	110	36	1,400	ND (<10)	-	ND (<10)	ND (<20)	
F59A1U		3/10/94	450	ND (<5.0)	ND (<5.0)	-	260	41	910	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
F59A1U		6/13/94	580	7.4	ND (<5.0)	-	210	49	1,700	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
F59A1U		9/9/94	580	7.5	ND (<5.0)	-	160	31	1,600	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
F59A1U	Dup	9/9/94	510	6.7	ND (<5.0)	-	150	28	1,500	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
F59A1U		12/13/94	790	12	ND (<8.4)	-	240	53	1,200	ND (<8.4)	-	ND (<8.4)	ND (<17)	
F59A1U		3/6/95	680	11	ND (<5.0)	-	210	52	1,300	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
F59A1U		6/8/95	300	5.7	ND (<5.0)	-	34	6.3	910	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	MC = 29;
F59A1U		9/8/95	460	ND (<12)	ND (<12)	-	75	18	1,200	ND (<12)	ND (<12)	ND (<12)	ND (<12)	
F59A1U		12/8/95	540	9.6	ND (<5.0)	ND (<50)	120	29	1,400	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F59A1U		3/7/96	640	48	ND (<25)	ND (<25)	57	ND (<25)	1,600	ND (<25)	ND (<25)	ND (<25)	ND (<25)	
F59A1U		6/10/96	360	ND (<25)	ND (<25)	ND (<25)	29	ND (<25)	1,300	ND (<25)	ND (<25)	ND (<25)	ND (<25)	CBMA = 116; MC = 19;
F59A1U	Dup	6/10/96	370	ND (<25)	ND (<25)	ND (<25)	32	ND (<25)	1,300	ND (<25)	ND (<25)	ND (<25)	ND (<25)	CBMA = 122; MC = 20;
F59A1U		9/13/96	500	25	ND (<12)	ND (<12)	46	15	1,700	ND (<12)	ND (<12)	ND (<12)	ND (<12)	CBMA = 97; MC = 20;
F59A1U		12/16/96	170	ND (<25)	ND (<25)	ND (<25)	ND (<25)	ND (<25)	800	ND (<25)	-	ND (<25)	ND (<50)	
F59A1U		3/7/97	300	44	ND (<25)	ND (<25)	35	ND (<25)	1,400	ND (<25)	ND (<25)	ND (<25)	ND (<25)	CBMA = 95;
F59A1U		6/9/97	360	ND (<25)	ND (<25)	ND (<25)	47	ND (<25)	1,300	ND (<25)	ND (<25)	ND (<25)	ND (<25)	CBMA = 100;
F59A1U		9/12/97	280	ND (<25)	ND (<25)	ND (<25)	44	ND (<25)	1,400	ND (<25)	ND (<25)	ND (<25)	ND (<25)	CBMA = 95;
F59A1U	Dup	9/12/97	270	ND (<25)	ND (<25)	ND (<25)	45	ND (<25)	1,300	ND (<25)	ND (<25)	ND (<25)	ND (<25)	CBMA = 95;
F59A1U		12/5/97	410	ND (<25)	ND (<25)	ND (<25)	110	42	1,100	ND (<25)	ND (<25)	ND (<25)	ND (<25)	CBMA = 87;
F59A1U		6/2/98	95	ND (<50)	ND (<50)	ND (<50)	ND (<50)	ND (<50)	670	ND (<50)	ND (<50)	ND (<50)	ND (<50)	CBMA = 99;
F59A1U		12/10/98	113	ND (<25)	ND (<25)	ND (<25)	ND (<25)	ND (<25)	584	ND (<25)	ND (<25)	ND (<25)	ND (<25)	CBMA = 106;
F59A1U		6/8/99	93	ND (<10)	ND (<10)	ND (<10)	17	ND (<10)	318	ND (<10)	ND (<10)	ND (<10)	ND (<10)	
F59A1U		1/28/00	146	ND (<10)	ND (<10)	ND (<10)	32	13	488	ND (<10)	ND (<10)	ND (<10)	ND (<10)	
F59A1U		6/8/00	57	ND (<5.0)	ND (<5.0)	ND (<5.0)	6.5	ND (<5.0)	310	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
F59A1U		6/30/06	66	3.2	ND (<0.50)	2.0	7.0	2.2	190	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F59A1U	Dup	6/30/06	63	3.3	ND (<2.0)	ND (<2.0)	7.6	-	180	ND (<2.0)	ND (<2.0)	-	-	
F59A1U		6/20/07	96	8.1	ND (<2.0)	5.8	8.5	ND (<2.0)	260	ND (<2.0)	ND (<2.0)	ND (<2.0)	ND (<2.0)	
F59A1U		6/10/09	92	6.9	ND (<2.5)	3.9	6.1	ND (<2.5)	180	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
F59A1U		7/11/11	60	4.4	ND (<2.5)	3.0	3.9	ND (<2.5)	140	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
F59A1U		7/25/13	54	1.9	ND (<1.0)	1.3	2.7	1.4	130	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	
F59A1U		6/10/14	51	1.2	ND (<1.0)	1.2	6.4	1.1	120	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	
F59A1U	Dup	6/10/14	44	1.2	ND (<0.50)	1.0	6.0	0.96	110	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.74	
F59A1U		6/8/15	49	1.8	ND (<1.0)	1.4	27	1.7	130	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	
F59A1U		6/6/16	56	1.3	ND (<1.0)	1.0	20	2.0	180	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	
F59A1U		6/5/17	47	ND (<1.0)	ND (<1.0)	ND (<1.0)	18	2.2	240	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	
F59A1U		6/4/18	42	1.1	ND (<1.0)	1.7	31	1.3	190	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	
F59A1U		6/4/19	33	ND (<2.5)	ND (<2.5)	ND (<2.5)	21	ND (<2.5)	170	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	

Appendix B
Selected Compounds from Historical Records
COE Study Area and Perimeter Area, Palo Alto, California

Location	Type	Date	TCE	1,1,1-TCA	1,1-DCA	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	PCE	Freon 113	1,2-DCB	1,2-DCA	VC	Other Constituents
F60A		12/18/90	29	4.1	4.0	3.0	-	-	8.3	10	10	3.0	3.0	1,1,2,2-TCA = 3.0; 1,1,2-TCA = 2.0; 1,2-DCPA = 2.0; 1,3-DCB = 10; 1,4-DCB = 10; 2-CVE = 4.0; Acetone = 30; BDCMe = 4.0; Benzene = 0.30; BRFM = 5.0; BRMA = 5.0; CHLBZ = 4.0; CHLEA (EC) = 5.0; CHLFM = 2.0; CHLMA = 5.0; cis-1,3-DCP = 3.0; CT = 3.0; DBCMe = 4.0; EDB = 10; Ethylbenzene = 0.30; MC = 50; m-Xylene = 0.30; o-Xylene = 0.30; TCFMe (Freon 11) = 5.0; Toluene = 0.30; trans-1,3-DCP = 3.0; Xylenes = 0.90;
F60A		4/15/91	38	2.0	1.0	-	1.0	ND (<0.50)	1.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F60A		7/29/91	430	23	3.8	ND (<5.0)	9.7	ND (<0.50)	3.0	5.8	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F60A		11/12/91	240	13	2.5	ND (<5.0)	6.5	ND (<0.50)	2.1	1.5	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F60A		12/16/91	200	11	ND (<5.0)	-	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F60A		3/11/92	150	14	2.7	ND (<2.5)	6.5	ND (<0.50)	1.7	2.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F60A		6/10/92	130	7.4	1.5	ND (<2.5)	5.4	ND (<0.50)	0.70	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F60A		9/16/92	290	23	4.0	ND (<2.5)	9.7	ND (<0.50)	1.5	2.5	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.90;
F61A1U		12/13/90	470	34	4.0	4.4	-	-	3.4	10	0.50	3.0	3.0	1,1,2,2-TCA = 3.0; 1,1,2-TCA = 2.0; 1,2-DCPA = 2.0; 1,3-DCB = 0.50; 1,4-DCB = 0.50; 2-CVE = 4.0; Acetone = 200; BDCMe = 4.0; Benzene = 0.50; BRFM = 5.0; BRMA = 5.0; CHLBZ = 0.50; CHLEA (EC) = 5.0; CHLFM = 2.3; CHLMA = 5.0; cis-1,3-DCP = 3.0; CT = 3.0; DBCMe = 4.0; EDB = 10; Ethylbenzene = 0.50; MC = 50; m-Xylene = 0.50; o-Xylene = 0.50; TCFMe (Freon 11) = 5.0; Toluene = 0.50; trans-1,3-DCP = 3.0; Xylenes = 0.50;
F61A1U		2/7/91	630	36	20	15	-	-	10	50	50	15	15	1,1,2,2-TCA = 15; 1,1,2-TCA = 10; 1,2-DCPA = 10; 1,3-DCB = 50; 1,4-DCB = 50; 2-CVE = 20; BDCMe = 20; BRFM = 25; BRMA = 25; CHLBZ = 20; CHLEA (EC) = 25; CHLFM = 10; CHLMA = 25; cis-1,3-DCP = 15; CT = 15; DBCMe = 20; EDB = 50; MC = 250; TCFMe (Freon 11) = 25; trans-1,3-DCP = 15;
F61A1U		4/18/91	850	71	7.0	ND (<10)	44	ND (<10)	21	ND (<10)	ND (<10)	ND (<10)	ND (<10)	
F61A1U		7/24/91	870	64	5.0	ND (<10)	52	ND (<10)	53	ND (<10)	ND (<10)	ND (<10)	ND (<10)	
F61A1U		11/4/91	1,000	70	5.0	ND (<10)	52	ND (<10)	10	ND (<10)	ND (<10)	ND (<10)	ND (<10)	
F61A1U		12/11/91	980	55	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F61A1U		3/6/92	680	71	5.6	ND (<10)	55	ND (<1.0)	4.2	2.4	ND (<1.0)	ND (<1.0)	ND (<1.0)	CHLFM = 2.4;
F61A1U		6/5/92	680	65	4.0	ND (<10)	59	ND (<10)	6.0	4.5	ND (<10)	ND (<10)	ND (<10)	
F61A1U		9/11/92	580	76	6.6	ND (<5.0)	63	ND (<5.0)	8.2	2.2	ND (<5.0)	ND (<5.0)	ND (<5.0)	CHLFM = 3.6;
F61A1U		12/10/92	670	62	5.8	ND (<25)	62	ND (<5.0)	8.6	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F61A1U		3/8/93	570	99	8.8	ND (<5.0)	63	ND (<5.0)	12	2.6	ND (<5.0)	ND (<5.0)	ND (<5.0)	CHLFM = 5.4;
F61A1U		6/4/93	480	100	7.4	ND (<5.0)	86	ND (<5.0)	4.8	1.6	ND (<5.0)	ND (<5.0)	ND (<5.0)	CHLFM = 2.2;
F61A1U		9/13/93	440	89	7.3	-	68	ND (<1.0)	14	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	CHLFM = 1.5;
F61A1U		12/9/93	430	75	7.4	-	63	ND (<5.0)	34	6.9	-	ND (<5.0)	ND (<10)	
F61A1U		3/8/94	420	62	5.8	-	52	ND (<1.0)	25	2.7	ND (<1.0)	ND (<1.0)	ND (<1.0)	CHLFM = 2.1;
F61A1U		6/10/94	540	80	7.6	-	67	ND (<1.0)	2.0	4.1	ND (<1.0)	ND (<1.0)	ND (<1.0)	CHLFM = 2.2;
F61A1U		9/8/94	430	62	9.6	-	63	0.96	56	5.4	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 2.2;
F61A1U		12/13/94	390	74	7.4	-	58	ND (<5.0)	17	6.7	-	ND (<5.0)	ND (<10)	
F61A1U		3/3/95	360	63	5.3	-	66	ND (<2.5)	94	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
F61A1U		6/6/95	360	74	7.7	-	69	ND (<2.5)	21	5.4	ND (<2.5)	ND (<2.5)	ND (<2.5)	1,2-DCPA = 2.8; CHLFM = 3.0;
F61A1U	Dup	6/6/95	340	76	7.4	-	67	ND (<2.5)	25	5.3	3.4	ND (<2.5)	ND (<2.5)	CHLFM = 3.3;
F61A1U		11/9/95	320	44	6.2	-	40	2.4	23	6.3	ND (<0.50)	0.83	ND (<0.50)	CHLFM = 2.5;
F61A1U		12/8/95	-	46	ND (<5.0)	ND (<50)	37	ND (<5.0)	23	8.1	-	ND (<5.0)	ND (<10)	
F61A1U		3/7/96	390	50	7.3	15	62	ND (<5.0)	360	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
F61A1U		6/6/96	320	61	8.4	9.4	61	5.6	120	6.3	ND (<5.0)	ND (<5.0)	ND (<5.0)	CBMA = 101; CHLFM = 5.6; MC = 5.8;
F61A1U		9/13/96	340	61	8.4	20	65	ND (<5.0)	19	7.3	ND (<5.0)	ND (<5.0)	ND (<5.0)	CBMA = 104; MC = 9.7;
F61A1U		12/13/96	280	39	ND (<10)	ND (<10)	46	ND (<10)	ND (<10)	ND (<10)	-	ND (<10)	ND (<20)	
F61A1U		3/7/97	310	41	ND (<5.0)	5.1	41	ND (<5.0)	65	5.9	ND (<5.0)	ND (<5.0)	ND (<5.0)	CBMA = 112;
F61A1U		6/9/97	280	42	ND (<5.0)	8.0	33	ND (<5.0)	35	5.2	ND (<5.0)	ND (<5.0)	ND (<5.0)	CBMA = 102; CHLFM = 5.4;
F61A1U		9/12/97	350	41	ND (<5.0)	7.4	31	ND (<5.0)	57	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	CBMA = 102; CHLFM = 8.5;
F61A1U		12/4/97	210	21	ND (<5.0)	ND (<5.0)	14	ND (<5.0)	23	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	CBMA = 93;
F61A1U		6/3/98	290	14	ND (<12)	ND (<12)	12	ND (<12)	ND (<12)	ND (<12)	ND (<12)	ND (<12)	ND (<12)	CBMA = 102;
F61A1U	Dup	6/3/98	280	14	ND (<12)	ND (<12)	13	ND (<12)	ND (<12)	ND (<12)	ND (<12)	ND (<12)	ND (<12)	CBMA = 105;
F61A1U		12/9/98	294	19	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	CBMA = 93;
F61A1U	Dup	12/9/98	284	21	ND (<5.0)	ND (<5.0)	8.6	ND (<5.0)	6.2	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	CBMA = 106; CHLFM = 5.1;
F61A1U		6/9/99	240	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	12	ND (<10)	ND (<10)	ND (<10)	ND (<10)	
F61A1U		12/8/99	245	ND (<5.0)	ND (<5.0)	ND (<5.0)	9.9	ND (<5.0)	13	ND (<10)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
F61A1U	Dup	12/8/99	263	ND (<6.25)	ND (<6.25)	ND (<6.25)	8.4	ND (<6.25)	14	ND (<12.5)	ND (<6.25)	ND (<6.25)	ND (<6.25)	
F61A1U		6/8/00	270	ND (<5.0)	ND (<5.0)	ND (<5.0)	5.1	ND (<5.0)	48	ND (<20)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
F61A1U		12/7/00	100	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	6.6	ND (<20)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
F61A1U		6/21/01	160	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	5.5	ND (<20)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
F61A1U		6/27/03	160	3.1	ND (<2.0)	ND (<2.0)	5.5	ND (<2.0)	7.6	ND (<2.0)	ND (<2.0)	ND (<2.0)	ND (<2.0)	
F61A1U		6/20/05	180	3.0	ND (<2.0)	ND (<2.0)	5.1	ND (<2.0)	ND (<2.0)	ND (<2.0)	ND (<2.0)	ND (<2.0)	ND (<2.0)	
F61A1U		6/14/07	100	1.2	ND (<1.0)	ND (<1.0)	2.1	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	
F61A1U		6/10/08	82	ND (<0.50)	ND (<0.50)	ND (<0.50)	1.3	-	ND (<0.50)	ND (<0.50)	ND (<0.50)	-	-	
F61A1U		6/16/09	96	0.75	ND (<0.50)	0.53	2.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F61A1U		7/11/11	80	0.82	1.5	0.74	2.7	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F61A1U		6/17/13	84	0.96	2.9	0.82	2.5	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F61A1U		6/8/15	77	1.1	2.7	1.5	2.7	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F61A1U		6/5/17	120	5.4	3.7	4.0	8.5	ND (<0.50)	ND (<0.50)	0.87	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F61A1U		6/4/18	110	10	4.6	4.8	11	ND (<0.50)	ND (<0.50)	2.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F61A1U		6/4/19	120	4.8	3.7	3.9	6.7	ND (<0.50)	ND (<0.50)	2.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F62A1		12/13/90	510	32	4.0	3.0	-	-	2.0	10	0.50	3.0	3.0	1,1,2,2-TCA = 3.0; 1,1,2-TCA = 2.0; 1,2-DCPA = 2.0; 1,3-DCB = 0.50; 1,4-DCB = 0.50; 2-CVE = 20; Acetone = 70; BDCMe = 4.0; Benzene = 0.50; BRFM = 5.0; BRMA = 5.0; CHLBZ = 0.50; CHLEA (EC) = 5.0; CHLFM = 17; CHLMA = 5.0; cis-1,3-DCP = 3.0; CT = 6.5; DBCMe = 4.0; EDB = 10; Ethylbenzene = 0.50; MC = 50; m-Xylene = 0.50; o-Xylene = 0.50; TCFMe (Freon 11) = 5.0; Toluene = 0.50; trans-1,3-DCP = 3.0; Xylenes = 0.50;
F62A1		4/18/91	460	24	ND (<5.0)	ND (<5.0)	13	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
F62A1		7/24/91	1,000	46	ND (<10)	ND (<10)	20	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	
F62A1	Dup	7/24/91	1,000	44	ND (<10)	ND (<10)	20	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	
F62A1		11/1/91	1,100	32	ND (<12)	ND (<12)	14	ND (<12)	ND (<12)	ND (<12)	ND (<12)	ND (<12)	ND (<12)	
F62A1		12/11/91	890	26	ND (<5.0)	ND (<25)	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F62A1		3/6/92	560	34	1.8	ND (<5.0)	18	ND (<5.0)	ND (<5.0)	2.0	ND (<5.0)	ND (<5.0)	ND (<5.0)	
F62A1		6/5/92	840	30	3.0	ND (<10)	18	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	
F62A1		9/11/92	830	24	ND (<12)	ND (<12)	14	ND (<12)	ND (<12)	ND (<12)	ND (<12)	ND (<12)	ND (<12)	
F62A1		12/14/92	650	34	ND (<5.0)	ND (<5.0)	24	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F62A1		3/8/93	510	22	ND (<12)	ND (<12)	14	ND (<12)	ND (<12)	ND (<12)	ND (<12)	ND (<12)	ND (<12)	
F62A1		6/7/93	390	19	1.4	ND (<5.0)	18	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
F62A1		9/13/93	650	35	ND (<12)	ND (<12)	20	ND (<12)	ND (<12)	ND (<12)	ND (<12)	ND (<12)	ND (<12)	
F62A1		12/9/93	560	25	ND (<5.0)	-	18	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F62A1		3/8/94	590	23	2.1	-	16	ND (<1.0)	ND (<1.0)	3.4	ND (<1.0)	ND (<1.0)	ND (<1.0)	
F62A1		6/10/94	54	2.0	ND (<0.50)	ND (<0.50)	2.7	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F62A1		9/8/94	380	16	2.2	-	14	ND (<0.50)	ND (<0.50)	2.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F62A1		12/13/94	110	ND (<5.0)	ND (<5.0)	ND (<5.0)	7.7	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F62A1		3/3/95	310	13	1.5	-	15	ND (<0.50)	ND (<0.50)	0.60	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.69;
F62A1	Dup	3/3/95	290	13	1.5	-	15	ND (<0.50)	ND (<0.50)	1.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.72;
F62A1		6/7/95	460	23	ND (<2.5)	-	20	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
F62A1		11/9/95	270	11	1.9	-	12	ND (<0.50)	ND (<0.50)	2.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.91;
F62A1		12/8/95	290	12	ND (<5.0)	ND (<5.0)	13	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F62A1		3/7/96	330	20	ND (<5.0)	ND (<5.0)	15	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
F62A1	Dup	3/7/96	340	20	ND (<5.0)	ND (<5.0)	16	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
F62A1		6/6/96	140	14	ND (<2.5)	3.6	14	ND (<2.5)	2.9	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	CBMA = 102; MC = 2.6;
F62A1		9/13/96	200	18	2.5	3.1	19	ND (<1.2)	2.4	ND (<1.2)	ND (<1.2)	ND (<1.2)	ND (<1.2)	CBMA = 98; CHLFM = 1.9;
F62A1		12/13/96	170	9.7	ND (<5.0)	ND (<5.0)	16	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F62A1	Dup	12/13/96	170	9.7	ND (<5.0)	ND (<5.0)	16	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F62A1		3/6/97	76	4.3	ND (<1.0)	ND (<1.0)	8.7	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	CBMA = 109; CHLFM = 2.1;
F62A1		6/6/97	80	5.3	1.1	1.1	8.3	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	CBMA = 96; CHLFM = 2.7;
F62A1		9/11/97	95	5.3	ND (<1.0)	ND (<1.0)	6.9	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	CBMA = 92; CHLFM = 2.6;
F62A1		12/4/97	97	5.1	1.1	1.6	6.2	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	CBMA = 95; CHLFM = 1.2;
F62A1		6/5/98	100	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	CBMA = 106;
F62A1		12/9/98	100	6.8	ND (<2.5)	ND (<2.5)	5.1	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	CBMA = 95; CHLFM = 3.3;
F62A1		6/9/99	85	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
F62A1		12/8/99	134	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<10)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
F62A1		6/8/00	110	ND (<2.0)	ND (<2.0)	ND (<2.0)	ND (<2.0)	ND (<2.0)	ND (<2.0)	ND (<8.0)	ND (<2.0)	ND (<2.0)	ND (<2.0)	
F62A1		12/7/00	98	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<10)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
F62A1		6/21/01	110	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<10)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
F62A1		6/26/02	75	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
F62A1		6/27/03	59	ND (<0.50)	ND (<0.50)	ND (<0.50)	1.1	ND (<0.50)	0.66	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F62A1		6/23/04	97	1.2	ND (<1.0)	ND (<1.0)	1.8	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	
F62A1		6/20/05	83	0.83	ND (<0.50)	0.54	1.5	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F62A1		6/27/06	90	0.62	ND (<0.50)	ND (<0.50)	1.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F62A1		6/14/07	75	0.51	ND (<0.50)	ND (<0.50)	1.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F62A1		6/10/08	82	ND (<0.50)	ND (<0.50)	ND (<0.50)	1.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F62A1		6/15/09	18	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F62A1		6/9/10	77	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.91	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F62A1		7/11/11	57	ND (<0.50)	0.81	ND (<0.50)	0.99	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F62A1		6/11/12	59	ND (<0.50)	1.5	ND (<0.50)	0.86	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F62A1		6/17/13	54	ND (<0.50)	1.7	ND (<0.50)	0.89	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F62A1		6/10/14	51	ND (<0.50)	1.6	ND (<0.50)	0.87	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F62A1		6/8/15	49	ND (<0.50)	1.3	0.51	0.81	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F62A1		6/7/16	57	ND (<0.50)	3.1	1.2	2.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F62A1		6/5/17	65	ND (<0.50)	2.8	1.7	1.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F62A1		6/4/18	100	6.4	5.0	3.9	5.4	ND (<0.50)	ND (<0.50)	1.4	ND (<0.50)	ND (<0.50)	0.61	
F62A1		6/4/19	86	1.0	3.4	2.4	1.8	ND (<0.50)	ND (<0.50)	0.64	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F63A1U/A1		12/10/90	21	0.30	0.40	0.30	-	-	0.20	1.0	0.50	0.30	0.30	1,1,2,2-TCA = 0.30; 1,1,2-TCA = 0.20; 1,2-DCPA = 0.20; 1,3-DCB = 0.50; 1,4-DCB = 0.50; 2-CVE = 0.40; Acetone = 30; BDCMe = 0.40; Benzene = 0.50; BRFM = 0.50; BRMA = 0.50; CHLBZ = 0.40; CHLEA (EC) = 0.50; CHLFM = 0.30; CHLMA = 0.50; cis-1,3-DCP = 0.30; CT = 0.30; DBCMe = 0.40; EDB = 1.0; Ethylbenzene = 0.50; MC = 5.0; m-Xylene = 0.50; o-Xylene = 0.50; TCFMe (Freon 11) = 0.50; Toluene = 0.50; trans-1,3-DCP = 0.30; Xylenes = 0.50;
F63A1U/A1		4/10/91	21	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F63A1U/A1	Dup	4/10/91	17	0.30	0.40	0.30	-	-	0.20	1.0	1.0	0.30	0.30	1,1,2,2-TCA = 0.30; 1,1,2-TCA = 0.20; 1,2-DCPA = 0.20; 1,3-DCB = 1.0; 1,4-DCB = 1.0; 2-CVE = 0.40; Acetone = 30; BDCMe = 0.40; Benzene = 0.50; BRFM = 0.50; BRMA = 0.5; CHLBZ = 0.40; CHLEA (EC) = 0.50; CHLFM = 0.20; CHLMA = 0.50; cis-1,3-DCP = 0.30; CT = 0.30; DBCMe = 0.40; EDB = 1.0; Ethylbenzene = 0.50; MC = 5.0; m-Xylene = 0.50; o-Xylene = 0.50; TCFMe (Freon 11) = 0.50; Toluene = 0.50; trans-1,3-DCP = 0.30; Xylenes = 0.50;
F63A1U/A1		7/29/91	14	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F63A1U/A1		10/7/91	16	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F63A1U/A1		12/11/91	15	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F63A1U/A1		3/11/92	60	0.80	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.70	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.50;
F63A1U/A1		6/12/92	4.4	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F63A1U/A1		9/18/92	6.7	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F63A1U/A1		12/15/92	74	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F63A1U/A1		3/11/93	3.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	

Appendix B
Selected Compounds from Historical Records
COE Study Area and Perimeter Area, Palo Alto, California

Location	Type	Date	TCE	1,1,1-TCA	1,1-DCA	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	PCE	Freon 113	1,2-DCB	1,2-DCA	VC	Other Constituents
F63A1U/A1		6/8/93	32	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F63A1U/A1		9/14/93	12	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F63A1U/A1		12/9/93	6.0	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F63A1U/A1		3/7/94	2.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F63A1U/A1		6/6/94	4.4	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F63A1U/A1		9/6/94	22	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F63A1U/A1	Dup	9/6/94	23	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F63A1U/A1		12/9/94	11	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F63A1U/A1		3/3/95	12	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F63A1U/A1		6/6/95	11	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F63A1U/A1		9/6/95	10	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F63A1U/A1		12/7/95	13	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F63A1U/A1		3/5/96	7.8	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F63A1U/A1		6/7/96	22	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.50	0.58	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 104;
F63A1U/A1		9/11/96	9.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 103;
F63A1U/A1	Dup	9/11/96	8.8	0.65	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 101;
F63A1U/A1		12/11/96	7.2	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F63A1U/A1		3/4/97	3.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 100;
F63A1U/A1		6/4/97	11	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 104;
F63A1U/A1	Dup	6/4/97	11	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 95;
F63A1U/A1		9/10/97	2.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 98;
F63A1U/A1		12/3/97	14	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 87;
F63A1U/A1		12/10/98	26.7	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	CBMA = 118;
F63A1U/A1		12/9/99	43.5	ND (<1.25)	ND (<1.25)	ND (<1.25)	ND (<1.25)	ND (<1.25)	ND (<1.25)	ND (<1.25)	ND (<1.25)	ND (<1.25)	ND (<1.25)	
F63A1U/A1		12/7/00	34	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F63A1U/A1		6/19/01	34	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.50	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F63A1U/A1	Dup	6/19/01	36	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.55	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F63A1U/A1		6/25/03	27	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F63A1U/A1	Dup	6/25/03	24	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F63A1U/A1		6/22/05	27	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F63A1U/A1		6/13/07	34	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.65	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F63A1U/A1		6/15/09	21	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F63A1U/A1		6/15/11	19	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F63A1U/A1		6/20/13	15	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F63A1U/A1		6/10/15	16	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F63A1U/A1		6/5/17	16	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F63A1U/A1		6/6/18	14	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F63A1U/A1		6/6/19	16	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F63A1U/A1		6/4/20	9.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F64A1		12/11/90	47	0.70	0.40	0.60	-	-	0.40	0.50	1.0	0.30	0.30	1,1,2,2-TCA = 0.30; 1,1,2-TCA = 0.20; 1,2-DCPA = 0.20; 1,3-DCB = 1.0; 1,4-DCB = 1.0; 2-CVE = 0.40; Acetone = 30; BDCMe = 0.40; Benzene = 0.50; BRFM = 0.50; BRMA = 0.50; CHLBZ = 0.40; CHLEA (EC) = 0.50; CHLFM = 0.40; CHLMA = 0.50; cis-1,3-DCP = 0.30; CT = 0.30; DBCMe = 0.40; EDB = 1.0; Ethylbenzene = 0.50; MC = 5.0; m-Xylene = 0.50; o-Xylene = 0.50; TCFMe (Freon 11) = 0.50; Toluene = 0.50; trans-1,3-DCP = 0.30; Xylenes = 0.50;
F64A1		4/10/91	39	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	MC = 2.0;
F64A1		7/26/91	76	ND (<0.50)	ND (<0.50)	ND (<1.0)	ND (<0.50)	ND (<0.50)	0.90	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F64A1		10/7/91	80	0.90	ND (<0.50)	ND (<1.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.50	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F64A1		12/11/91	68	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F64A1		3/11/92	60	1.0	ND (<0.50)	ND (<2.5)	ND (<0.50)	ND (<0.50)	0.70	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F64A1		6/12/92	74	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.60	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F64A1	Dup	6/12/92	71	0.60	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.70	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F64A1		9/18/92	77	0.80	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.90	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F64A1		12/15/92	81	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F64A1		3/11/93	74	1.5	ND (<0.50)	ND (<2.5)	ND (<0.50)	ND (<0.50)	1.4	0.60	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F64A1		6/8/93	74	0.70	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.50	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F64A1		9/14/93	56	1.3	ND (<0.50)	-	ND (<0.50)	ND (<0.50)	0.57	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F64A1		12/9/93	69	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F64A1		3/7/94	84	0.85	ND (<0.50)	-	ND (<0.50)	ND (<0.50)	0.92	1.5	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.51;
F64A1		6/6/94	96	0.84	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	1.3	1.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.78;
F64A1		9/6/94	74	0.86	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.99	1.6	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F64A1		12/9/94	97	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F64A1	Dup	12/9/94	77	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F64A1		3/3/95	84	0.73	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	1.2	1.5	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F64A1		6/8/95	78	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	1.2	1.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F64A1		9/6/95	44	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
F64A1		12/8/95	33	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F64A1		3/6/96	52	1.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	1.6	0.93	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F64A1		6/11/96	41	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	1.1	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	CBMA = 99;
F64A1		9/12/96	41	1.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.90	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 99;
F64A1		12/12/96	6	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F64A1		3/5/97	25	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 101;
F64A1		6/5/97	36	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	1.5	0.80	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 94;
F64A1	Dup	6/5/97	34	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	1.1	1.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 100;
F64A1		9/10/97	42	0.78	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	1.4	1.4	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 100; MC = 1.6;
F64A1		12/3/97	29	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.83	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 88;
F64A1		12/10/98	44	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	CBMA = 109;
F64A1		12/9/99	2.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F64A1		12/5/00	40	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.93	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F64A1		6/19/01	39	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	1.3	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F64A1		6/25/03	38	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.99	0.93	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F64A1		6/22/05	37	ND (<0.50)	ND (<0.50)	ND (<0.50)	1.4	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F64A1		6/13/07	36	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.59	ND (<0.50)	1.2	1.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F64A1		6/15/09	31	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.72	ND (<0.50)	1.0	0.55	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F64A1		6/15/11	29	ND (<0.50)	ND (<0.50)	ND (<0.50)	3.8	ND (<0.50)	0.82	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F64A1		6/20/13	25	ND (<0.50)	ND (<0.50)	ND (<0.50)	2.3	ND (<0.50)	0.84	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F64A1	Dup	6/20/13	28	ND (<0.50)	ND (<0.50)	ND (<0.50)	2.7	ND (<0.50)	1.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F64A1		6/10/15	25	ND (<0.50)	ND (<0.50)	ND (<0.50)	2.1	ND (<0.50)	0.88	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F64A1		6/5/17	6.5	ND (<0.50)	ND (<0.50)	ND (<0.50)	15	1.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F64A1	Dup	6/5/17	6.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	15	1.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F64A1		6/6/19	22	ND (<0.50)	ND (<0.50)	ND (<0.50)	2.5	ND (<0.50)	0.73	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F65A1U		12/10/90	23	0.30	0.40	0.30	-	-	23	1.0	0.50	0.30	0.30	1,1,2,2-TCA = 0.30; 1,1,2-TCA = 0.20; 1,2-DCPA = 0.20; 1,3-DCB = 0.50; 1,4-DCB = 0.50; 2-CVE = 0.40; Acetone = 30; BDCMe = 0.40; Benzene = 0.50; BRFM = 0.50; BRMA = 0.50; CHLBZ = 0.40; CHLEA (EC) = 0.50; CHLFM = 0.20; CHLMA = 0.50; cis-1,3-DCP = 0.30; CT = 0.30; DBCMe = 0.40; EDB = 1.0; Ethylbenzene = 0.50; MC = 5.0; m-Xylene = 0.50; o-Xylene = 0.50; TCFMe (Freon 11) = 0.50; Toluene = 0.50; trans-1,3-DCP = 0.30; Xylenes = 0.50;
F65A1U		4/9/91	48	ND (<0.50)	ND (<0.50)	ND (<0.50)	7.9	ND (<0.50)	26	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	Toluene = 0.70;
F65A1U		7/31/91	40	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	18	ND (<10)	ND (<10)	ND (<10)	ND (<10)	
F65A1U		10/11/91	45	ND (<0.50)	ND (<0.50)	ND (<0.50)	5.4	ND (<0.50)	21	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F65A1U		12/11/91	46	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	29	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F65A1U		3/6/92	34	ND (<0.50)	ND (<0.50)	ND (<0.50)	3.2	ND (<0.50)	15	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F65A1U		6/3/92	40	ND (<0.50)	ND (<0.50)	0.50	2.9	0.50	17	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F65A1U		9/14/92	41	ND (<0.50)	ND (<0.50)	0.50	2.7	0.50	17	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F65A1U		12/4/92	42	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	23	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F65A1U		3/9/93	42	ND (<0.50)	ND (<0.50)	ND (<0.50)	2.3	ND (<0.50)	39	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F65A1U		6/10/93	24	ND (<0.50)	ND (<0.50)	ND (<0.50)	5.7	ND (<0.50)	39	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F65A1U		9/9/93	34	ND (<0.50)	ND (<0.50)	ND (<0.50)	10	ND (<0.50)	23	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F65A1U		12/2/93	37	ND (<5.0)	ND (<5.0)	ND (<5.0)	11	ND (<5.0)	38	ND (<5.0)	-	ND (<5.0)	ND (<10)	2,3-Dimethylbutane = 17; 2,3-Dimethylpentane = 20; 2,4-Dimethylpentane = 14; 3-Methylpentane = 17; Cyclopentane, 1, = 6.2; DMCYCPENT = 5.5; MEK = 13;
F65A1U		3/3/94	55	ND (<0.50)	ND (<0.50)	ND (<0.50)	12	ND (<0.50)	65	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F65A1U		6/8/94	43	ND (<0.50)	ND (<0.50)	ND (<0.50)	15	ND (<0.50)	87	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F65A1U		9/6/94	48	ND (<0.50)	ND (<0.50)	ND (<0.50)	15	ND (<0.50)	78	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F65A1U		12/5/94	47	ND (<5.0)	ND (<5.0)	ND (<5.0)	14	ND (<5.0)	94	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F65A1U		3/2/95	43	ND (<0.50)	ND (<0.50)	ND (<0.50)	8.5	ND (<0.50)	130	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F65A1U		6/8/95	18	ND (<0.50)	ND (<0.50)	ND (<0.50)	7.7	ND (<0.50)	71	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F65A1U		9/7/95	36	ND (<2.5)	ND (<2.5)	ND (<2.5)	27	ND (<2.5)	88	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	CHLFM = 2.6;
F65A1U		12/6/95	35	ND (<5.0)	ND (<5.0)	ND (<5.0)	30	ND (<5.0)	110	ND (<5.0)	ND (<0.50)	ND (<0.50)	ND (<10)	
F65A1U		3/6/96	42	ND (<0.50)	ND (<0.50)	ND (<0.50)	19	ND (<0.50)	120	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F65A1U		6/10/96	35	ND (<2.5)	ND (<2.5)	ND (<2.5)	26	ND (<2.5)	140	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	CBMA = 118; MC = 1.8;
F65A1U		9/12/96	30	ND (<2.5)	ND (<2.5)	ND (<2.5)	22	ND (<2.5)	140	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	CBMA = 100;
F65A1U	Dup	9/12/96	34	ND (<2.5)	ND (<2.5)	ND (<2.5)	23	ND (<2.5)	110	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	CBMA = 100; MC = 2.9;
F65A1U		12/12/96	32	ND (<5.0)	ND (<5.0)	ND (<5.0)	17	ND (<5.0)	190	ND (<5.0)	-	ND (<5.0)	ND (<10)	MC = 6.6;
F65A1U		6/5/97	30	ND (<2.5)	ND (<2.5)	ND (<2.5)	14	ND (<2.5)	140	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	CBMA = 97;
F65A1U		12/5/97	28	ND (<2.5)	ND (<2.5)	ND (<2.5)	10	ND (<2.5)	140	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	CBMA = 87;
F65A1U	Dup	12/5/97	27	ND (<2.5)	ND (<2.5)	ND (<2.5)	9.9	ND (<2.5)	130	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	CBMA = 90;
F65A1U		6/4/98	10	ND (<5.0)	ND (<5.0)	ND (<5.0)	7.1	ND (<5.0)	100	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	CBMA = 103;
F65A1U		12/10/98	20	ND (<5.0)	ND (<5.0)	ND (<5.0)	9.7	ND (<5.0)	89	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	CBMA = 117;
F65A1U		6/8/99	17	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	114	ND (<10)	ND (<10)	ND (<10)	ND (<10)	
F65A1U		12/8/99	20	ND (<1.67)	ND (<1.67)	ND (<1.67)	10	ND (<1.67)	95	ND (<3.33)	ND (<1.67)	ND (<1.67)	ND (<1.67)	
F65A1U		6/8/00	19	ND (<2.5)	ND (<2.5)	ND (<2.5)	3.6	ND (<2.5)	110	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
F65A1U		12/8/00	13	ND (<2.5)	ND (<2.5)	ND (<2.5)	4.5	ND (<2.5)	71	ND (<10)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
F65A1U		12/14/10	3.7	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.94	ND (<0.50)	50	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F65A1U		6/15/11	3.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	60	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F66A		12/10/90	0.50	0.30	0.40	0.3	-	-	0.20	1.0	0.50	0.30	0.30	1,1,2,2-TCA = 0.30; 1,1,2-TCA = 0.20; 1,2-DCPA = 0.20; 1,3-DCB = 0.50; 1,4-DCB = 0.50; 2-CVE = 0.40; Acetone = 30; BDCMe = 0.40; Benzene = 0.50; BRFM = 0.50; BRMA = 0.50; CHLBZ = 0.40; CHLEA (EC) = 0.50; CHLFM = 0.20; CHLMA = 0.50; cis-1,3-DCP = 0.30; CT = 0.30; DBCMe = 0.40; EDB = 1.0; Ethylbenzene = 0.50; MC = 5.0; m-Xylene = 0.50; o-Xylene = 0.50; TCFMe (Freon 11) = 0.50; Toluene = 0.50; trans-1,3-DCP = 0.30; Xylenes = 0.50;
F66A		4/9/91	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	1.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F66A		7/31/91	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F66A		10/31/91	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F66A		12/11/91	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F66A		3/6/92	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.60;
F66A		6/3/92	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F66A	Dup	6/3/92	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F66A		9/14/92	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F66A		12/4/92	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F66A		6/10/93	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F66A		12/2/93	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	Acetone = 24; MEK = 36;
F66A		6/8/94	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F66A	Dup	6/8/94	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F66A		12/5/94	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F66A		12/5/95	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F66A		12/10/96	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F66A		6/6/19	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	

Appendix B
Selected Compounds from Historical Records
COE Study Area and Perimeter Area, Palo Alto, California

Location	Type	Date	TCE	1,1,1-TCA	1,1-DCA	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	PCE	Freon 113	1,2-DCB	1,2-DCA	VC	Other Constituents
F73A1		12/10/90	0.50	0.30	0.40	0.30	-	-	0.20	1.0	0.50	0.30	0.30	1,1,2,2-TCA = 0.30; 1,1,2-TCA = 0.20; 1,2-DCPA = 0.20; 1,3-DCB = 0.50; 1,4-DCB = 0.50; 2-CVE = 0.40; Acetone = 75; BDCMe = 0.40; Benzene = 0.50; BRFM = 0.50; BRMA = 0.50; CHLBZ = 0.40; CHLEA (EC) = 0.50; CHLFM = 0.20; CHLMA = 0.50; cis-1,3-DCP = 0.30; CT = 0.30; DBCMe = 0.40; EDB = 1.0; Ethylbenzene = 0.50; MC = 5.0; m-Xylene = 0.50; o-Xylene = 0.50; TCFMe (Freon 11) = 0.50; Toluene = 0.50; trans-1,3-DCP = 0.30; Xylenes = 0.50;
F73A1		4/19/91	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F73A1		7/31/91	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F73A1		10/9/91	ND (<0.50)	ND (<0.50)	0.80	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F73A1		12/10/91	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F73A1		3/4/92	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F73A1		6/15/92	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.60	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F73A1		9/10/92	ND (<0.50)	ND (<0.50)	3.5	ND (<0.50)	4.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F73A1	Dup	9/10/92	ND (<0.50)	ND (<0.50)	8.3	ND (<0.50)	11	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.50	ND (<0.50)	
F73A1		12/10/92	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F73A1		3/10/93	ND (<0.50)	0.70	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	BDCMe = 0.90; CHLFM = 4.4;
F73A1		6/9/93	ND (<0.50)	ND (<0.50)	4.3	ND (<0.50)	11	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.70;
F73A1		9/9/93	ND (<0.50)	ND (<0.50)	26	-	89	5.8	ND (<0.50)	ND (<0.50)	ND (<0.50)	1.8	ND (<0.50)	
F73A1	Dup	9/9/93	ND (<0.50)	ND (<0.50)	6.8	-	12	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.54	ND (<0.50)	
F73A1		12/3/93	ND (<5.0)	ND (<5.0)	14	ND (<5.0)	37	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F73A1		3/2/94	ND (<0.50)	ND (<0.50)	15	-	49	2.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	1.4	ND (<0.50)	
F73A1		6/2/94	ND (<0.50)	ND (<0.50)	0.94	-	3.0	0.65	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F73A1		9/7/94	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	1.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F73A1		12/12/94	ND (<5.0)	ND (<5.0)	12	-	53	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F73A1		3/2/95	ND (<0.50)	ND (<0.50)	19	-	100	3.6	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.54	ND (<0.50)	
F73A1		6/5/95	ND (<0.50)	ND (<0.50)	7.0	-	36	1.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F73A1		9/6/95	ND (<0.50)	ND (<0.50)	35	-	140	9.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	2.2	ND (<0.50)	
F73A1		12/7/95	ND (<5.0)	ND (<5.0)	37	-	170	6.4	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F73A1		3/6/96	ND (<0.50)	ND (<0.50)	64	27	310	14	0.86	ND (<0.50)	ND (<0.50)	4.1	ND (<0.50)	
F73A1		6/5/96	ND (<5.0)	ND (<5.0)	120	67	460	29	ND (<5.0)	ND (<5.0)	ND (<5.0)	5.4	ND (<5.0)	CBMA = 113; MC = 6.4;
F73A1	Dup	6/5/96	ND (<5.0)	ND (<5.0)	120	66	450	28	ND (<5.0)	ND (<5.0)	ND (<5.0)	5.6	ND (<5.0)	CBMA = 111; MC = 6.4;
F73A1		9/11/96	ND (<5.0)	ND (<5.0)	79	32	320	15	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	CBMA = 110;
F73A1		12/12/96	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	MC = 5.2;
F73A1		3/5/97	ND (<10)	ND (<10)	110	40	440	20	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	CBMA = 118;
F73A1		6/4/97	ND (<2.5)	ND (<2.5)	45	23	160	12	ND (<2.5)	ND (<2.5)	ND (<2.5)	4.1	ND (<2.5)	CBMA = 109; MC = 2.7;
F73A1		9/11/97	ND (<2.5)	ND (<2.5)	69	35	250	17	ND (<2.5)	ND (<2.5)	ND (<2.5)	5.8	ND (<2.5)	CBMA = 112;
F73A1		12/22/97	ND (<2.5)	ND (<2.5)	100	55	370	22	ND (<2.5)	ND (<2.5)	ND (<2.5)	2.8	ND (<2.5)	CBMA = 111;
F73A1		6/2/98	ND (<25)	ND (<25)	160	75	660	28	ND (<25)	ND (<25)	ND (<25)	ND (<25)	ND (<25)	CBMA = 123;
F73A1	Dup	6/2/98	ND (<25)	ND (<25)	160	72	630	28	ND (<25)	ND (<25)	ND (<25)	ND (<25)	ND (<25)	CBMA = 116;
F73A1		12/11/98	ND (<25)	ND (<25)	150	53	544	ND (<25)	ND (<25)	ND (<25)	ND (<25)	ND (<25)	ND (<25)	CBMA = 111;
F73A1		6/10/99	ND (<50)	ND (<50)	175	83	660	ND (<50)	ND (<50)	ND (<50)	ND (<50)	ND (<50)	ND (<50)	
F73A1		12/14/99	ND (<25)	ND (<25)	196	99	720	42	ND (<25)	ND (<25)	ND (<25)	ND (<25)	ND (<25)	
F73A1		6/8/00	ND (<10)	ND (<10)	170	70	660	33	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	
F73A1		12/6/00	ND (<10)	ND (<10)	200	ND (<10)	630	34	ND (<10)	ND (<40)	ND (<10)	ND (<10)	ND (<10)	
F73A1		6/20/01	ND (<10)	ND (<10)	160	60	520	29	ND (<10)	ND (<40)	ND (<10)	ND (<10)	ND (<10)	
F73A1		6/25/03	ND (<0.50)	ND (<0.50)	18	8.0	65	3.9	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F73A1		6/22/05	ND (<2.5)	ND (<2.5)	16	13	66	4.0	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
F73A1		6/18/07	ND (<0.50)	ND (<0.50)	2.9	2.5	16	1.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F73A1		6/12/08	ND (<0.50)	ND (<0.50)	2.7	2.1	14	1.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F73A1		12/10/08	ND (<0.50)	ND (<0.50)	2.4	1.8	13	0.96	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F73A1		6/11/09	ND (<0.50)	ND (<0.50)	2.8	2.0	13	1.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	1.0	
F73A1		6/16/11	ND (<0.50)	ND (<0.50)	1.7	ND (<0.50)	ND (<0.50)	0.83	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	2.3	
F73A1		6/20/13	ND (<0.50)	ND (<0.50)	2.1	ND (<0.50)	1.6	0.95	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	6.1	
F73A1		6/11/14	ND (<0.50)	ND (<0.50)	1.2	ND (<0.50)	3.7	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	1.5	
F73A1		6/8/15	ND (<0.50)	ND (<0.50)	1.3	ND (<0.50)	ND (<0.50)	0.67	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	3.6	
F73A1		6/8/17	ND (<0.50)	ND (<0.50)	5.6	ND (<0.50)	ND (<0.50)	1.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	4.7	
F73A1		6/5/18	ND (<0.50)	ND (<0.50)	2.6	ND (<0.50)	ND (<0.50)	0.62	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	4.6	
F73A1		6/4/19	ND (<0.50)	ND (<0.50)	13	1.9	10	1.5	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	7.1	
F73A1		6/2/20	0.58	ND (<0.50)	12	2.6	21	1.6	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	6.8	
F74A		12/12/90	3.4	0.30	1.7	0.30	-	-	0.20	1.0	1.0	0.30	0.30	1,1,2,2-TCA = 0.30; 1,1,2-TCA = 0.2; 1,2-DCPA = 0.20; 1,3-DCB = 1.0; 1,4-DCB = 1.0; 2-CVE = 0.40; Acetone = 30; BDCMe = 0.40; Benzene = 0.50; BRFM = 0.50; BRMA = 0.50; CHLBZ = 0.40; CHLEA (EC) = 0.50; CHLFM = 0.20; CHLMA = 0.50; cis-1,3-DCP = 0.30; CT = 0.30; DBCMe = 0.40; EDB = 1.0; Ethylbenzene = 0.50; MC = 5.0; m-Xylene = 0.50; o-Xylene = 0.50; TCFMe (Freon 11) = 0.50; Toluene = 0.50; trans-1,3-DCP = 0.30; Xylenes = 0.50;
F74A		4/18/91	10	ND (<0.50)	3.0	ND (<0.50)	2.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F74A	Dup	4/18/91	9.7	ND (<0.50)	2.3	ND (<0.50)	1.6	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F74A		7/23/91	17	ND (<0.50)	1.7	ND (<0.50)	1.4	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F74A		10/10/91	15	ND (<0.50)	2.2	ND (<0.50)	1.5	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F74A		12/12/91	7.6	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F74A		3/11/92	2.6	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.60;
F74A		6/12/92	1.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F74A		9/15/92	13	ND (<0.50)	2.5	ND (<0.50)	1.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F74A		12/4/92	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F74A		2/3/93	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F74A		3/10/93	0.50	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F74A		6/15/93	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F74A		9/10/93	1.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F74A		12/7/93	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F74A		3/4/94	0.58	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F74A		6/10/94	1.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F74A		9/8/94	2.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F74A	Dup	9/8/94	1.9	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F74A		12/9/94	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F74A		3/2/95	4.5	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F74A	Dup	3/2/95	4.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F74A		6/5/95	9.5	ND (<0.50)	1.7	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F74A		9/6/95	15	ND (<0.50)	3.2	-	1.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F74A		12/7/95	16	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F74A		3/5/96	17	ND (<0.50)	3.3	0.62	1.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F74A		6/7/96	12	ND (<0.50)	2.8	0.73	1.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 114;
F74A		9/10/96	15	ND (<0.50)	3.2	1.2	1.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 101;
F74A		12/11/96	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F74A		3/4/97	3.3	ND (<0.50)	0.68	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 101;
F74A	Dup	3/4/97	3.4	ND (<0.50)	0.69	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 103;
F74A		6/6/97	4.4	ND (<0.50)	0.69	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 110;
F74A		9/10/97	2.8	ND (<0.50)	0.59	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 101; MC = 1.8;
F74A		12/5/97	2.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 102;
F74A		6/4/98	2.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 100;
F74A		12/10/98	3.3	ND (<0.50)	0.58	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 110;
F74A		6/9/99	12	ND (<0.50)	3.2	1.7	1.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F74A		12/7/99	4.7	ND (<0.50)	0.80	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F74A		1/28/00	5.4	ND (<0.50)	0.95	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F74A		6/7/00	1.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F74A	Dup	6/7/00	1.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F74A		12/8/00	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F74A		6/21/01	0.80	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F74A		6/26/02	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F74A	Dup	6/26/02	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F74A		6/26/03	3.9	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F74A		6/22/04	15	ND (<0.50)	1.8	1.1	0.76	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F74A		6/21/05	22	ND (<0.50)	2.5	3.0	1.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F74A		9/10/07	2.7	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F74A		6/26/08	23	ND (<0.50)	1.6	3.0	1.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F74A		6/15/09	34	ND (<0.50)	1.8	2.8	1.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F74A		6/9/10	30	ND (<0.50)	1.2	2.5	0.78	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F74A		6/15/11	35	ND (<0.50)	1.3	2.8	0.83	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F74A		6/14/12	33	ND (<0.50)	1.4	2.6	0.91	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F74A		6/19/13	40	0.50	1.7	3.5	1.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F74A		11/13/13	35	ND (<0.50)	1.4	2.6	1.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F74A		2/25/14	42	ND (<0.50)	1.5	3.4	1.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F74A		5/13/14	33	ND (<0.50)	1.3	3.1	0.93	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F74A		6/10/14	33	ND (<0.50)	1.4	2.8	0.90	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F74A		8/13/14	36	ND (<0.50)	1.4	3.3	1.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F74A		11/12/14	36	ND (<0.50)	1.4	2.8	1.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F74A		6/10/15	34	ND (<0.50)	1.2	2.9	0.90	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F74A		1/12/16	33	ND (<0.50)	1.3	2.7	0.94	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F74A		6/7/16	37	ND (<0.50)	1.2	3.2	1.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F74A		6/8/17	32	ND (<0.50)	1.2	3.2	1.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F74A		6/7/18	38	ND (<0.50)	1.2	2.4	1.4	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F74A		6/7/19	31	0.51	1.2	2.2	1.4	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F74A		6/4/20	34	ND (<0.50)	1.2	2.1	1.7	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F75A1U		12/12/90	0.50	0.30	1.2	0.30	-	-	0.20	1.0	1.0	0.30	0.30	1,1,2,2-TCA = 0.30; 1,1,2-TCA = 0.20; 1,2-DCPA = 0.20; 1,3-DCB = 1.0; 1,4-DCB = 1.0; 2-CVE = 0.40; Acetone = 30; BDCMe = 0.40; Benzene = 0.50; BRFM = 0.50; BRMA = 0.50; CHLBZ = 0.40; CHLEA (EC) = 0.50; CHLFM = 0.50; CHLMA = 0.90; cis-1,3-DCP = 0.30; CT = 0.30; DBCMe = 0.40; EDB = 1.0; Ethylbenzene = 0.50; MC = 5.0; m-Xylene = 0.50; o-Xylene = 0.50; TCFMe (Freon 11) = 0.50; Toluene = 0.50; trans-1,3-DCP = 0.30; Xylenes = 0.50;
F75A1U		4/22/91	1.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F75A1U		7/23/91	ND (<0.50)	ND (<0.50)	ND (<0.50)	-	ND (<0.50)	0.70	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F75A1U		10/11/91	ND (<0.50)	ND (<0.50)	0.90	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F75A1U		12/12/91	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F75A1U		3/11/92	0.80	ND (<0.50)	1.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F75A1U		6/12/92	ND (<0.50)	ND (<0.50)	0.50	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F75A1U		9/16/92	0.60	ND (<0.50)	1.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F75A1U		12/4/92	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	Acetone = 22;
F75A1U		3/11/93	0.80	ND (<0.50)	2.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F75A1U		6/15/93	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F75A1U		9/10/93	1.3	ND (<0.50)	1.4	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F75A1U		12/7/93	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F75A1U		3/4/94	0.86	ND (<0.50)	2.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F75A1U		6/10/94	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F75A1U	Dup	6/10/94	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F75A1U		9/8/94	0.72	ND (<0.50)	1.8	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F75A1U		12/9/94	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F75A1U		3/2/95	ND (<0.50)	ND (<0.50)	0.94	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F75A1U		6/5/95	ND (<0.50)	ND (<0.50)	0.80	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	

Appendix B
Selected Compounds from Historical Records
COE Study Area and Perimeter Area, Palo Alto, California

Location	Type	Date	TCE	1,1,1-TCA	1,1-DCA	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	PCE	Freon 113	1,2-DCB	1,2-DCA	VC	Other Constituents
F75A1U		9/5/95	0.61	ND (<0.50)	1.5	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F75A1U		12/5/95	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F75A1U		3/4/96	ND (<0.50)	ND (<0.50)	1.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F75A1U		6/5/96	ND (<0.50)	ND (<0.50)	1.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 107;
F75A1U		9/10/96	1.3	ND (<0.50)	1.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 98;
F75A1U		12/10/96	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F75A1U		3/4/97	1.2	ND (<0.50)	1.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 104;
F75A1U		6/3/97	1.2	ND (<0.50)	1.6	0.50	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 104;
F75A1U		9/9/97	1.1	ND (<0.50)	1.8	0.51	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 109;
F75A1U		12/5/97	0.76	ND (<0.50)	1.5	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 95;
F75A1U		6/4/98	0.55	ND (<0.50)	1.3	0.57	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 110;
F75A1U		12/10/98	1.2	ND (<0.50)	1.8	0.72	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 112;
F75A1U		6/9/99	1.1	ND (<0.50)	1.5	0.81	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F75A1U		12/7/99	1.3	ND (<0.50)	1.6	0.76	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F75A1U		1/28/00	ND (<0.50)	ND (<0.50)	0.61	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F75A1U	Dup	1/28/00	ND (<0.50)	ND (<0.50)	0.57	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F75A1U		6/7/00	1.0	ND (<0.50)	1.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F75A1U		12/8/00	1.1	ND (<0.50)	1.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F75A1U	Dup	12/8/00	1.1	ND (<0.50)	1.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F75A1U		6/21/01	0.84	ND (<0.50)	0.76	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F75A1U		6/26/03	0.85	ND (<0.50)	0.68	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F75A1U		6/21/05	1.1	ND (<0.50)	0.85	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F75A1U	Dup	6/21/05	1.1	ND (<0.50)	0.69	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F75A1U		9/10/07	0.68	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F75A1U		6/15/09	0.91	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F75A1U		6/15/11	0.77	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F75A1U		6/19/13	0.76	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F75A1U		6/10/15	0.76	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F75A1U		6/8/17	0.77	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F75A1U		6/7/18	0.66	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F75A1U		6/7/19	0.65	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F75A1U		6/4/20	0.61	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F76A2		12/12/90	0.50	0.30	1.3	0.4	-	-	0.20	1.0	1.0	0.30	0.30	1,1,2,2-TCA = 0.30; 1,1,2-TCA = 0.2; 1,2-DCPA = 0.2; 1,3-DCB = 1; 1,4-DCB = 1; 2-CVE = 0.40; Acetone = 30; BDCMe = 0.40; Benzene = 0.5; BRFM = 0.5; BRMA = 0.5; CHLBZ = 0.40; CHLEA (EC) = 0.5; CHLFM = 0.2; CHLMA = 0.5; cis-1,3-DCP = 0.30; CT = 0.30; DBCMe = 0.40; EDB = 1; Ethylbenzene = 0.5; MC = 5; m-Xylene = 0.5; o-Xylene = 0.5; TCFMe (Freon 11) = 0.5; Toluene = 0.5; trans-1,3-DCP = 0.30; Xylenes = 0.5;
F76A2		4/11/91	ND (<0.50)	ND (<0.50)	1.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F76A2		7/30/91	ND (<0.50)	ND (<0.50)	1.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F76A2		10/7/91	ND (<0.50)	ND (<0.50)	0.80	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F76A2		12/10/91	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F76A2		3/9/92	0.50	ND (<0.50)	0.80	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F76A2		6/9/92	ND (<0.50)	ND (<0.50)	0.70	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F76A2		12/18/92	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F76A2		3/6/96	ND (<0.50)	ND (<0.50)	3.1	1.6	0.54	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F76A2		6/4/96	ND (<0.50)	ND (<0.50)	2.2	0.60	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 107;
F76A2		9/10/96	ND (<0.50)	ND (<0.50)	3.0	0.72	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 106;
F76A2		12/9/96	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F76A2	Dup	12/9/96	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F76A2		3/4/97	ND (<0.50)	ND (<0.50)	4.5	2.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 102;
F76A2		6/3/97	ND (<0.50)	ND (<0.50)	7.3	4.4	0.88	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 112;
F76A2		9/10/97	ND (<0.50)	ND (<0.50)	5.4	3.2	0.60	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 102;
F76A2		12/5/97	ND (<0.50)	ND (<0.50)	5.2	2.9	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 121;
F76A2		12/9/98	ND (<0.50)	ND (<0.50)	5.1	3.0	0.54	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 102;
F76A2		12/14/99	ND (<0.50)	ND (<0.50)	7.0	4.0	0.98	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F76A2	Dup	12/14/99	ND (<0.50)	ND (<0.50)	7.9	4.6	1.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F76A2		12/8/00	ND (<0.50)	ND (<0.50)	7.0	4.8	0.91	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F77A1U		12/12/90	150	25	5.6	23	-	-	2.0	10	0.50	3.0	3.0	1,1,2,2-TCA = 3; 1,1,2-TCA = 2; 1,2-DCPA = 2; 1,3-DCB = 0.5; 1,4-DCB = 0.5; 2-CVE = 4; Acetone = 30; BDCMe = 4; Benzene = 0.5; BRFM = 5; BRMA = 5; CHLBZ = 0.5; CHLEA (EC) = 5; CHLFM = 2; CHLMA = 5; cis-1,3-DCP = 3; CT = 3; DBCMe = 4; EDB = 10; Ethylbenzene = 0.5; MC = 50; m-Xylene = 0.5; o-Xylene = 0.5; TCFMe (Freon 11) = 5; Toluene = 0.5; trans-1,3-DCP = 3; Xylenes = 0.5;
F77A1U		4/11/91	250	28	7.0	-	3.0	ND (<3.0)	ND (<3.0)	ND (<3.0)	ND (<3.0)	ND (<3.0)	ND (<3.0)	
F77A1U		7/30/91	230	24	6.3	-	2.6	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.7;
F77A1U		10/7/91	210	26	7.0	ND (<2.5)	2.8	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.8;
F77A1U		12/10/91	200	17	6.9	-	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F77A1U		3/9/92	150	21	6.2	ND (<2.5)	2.8	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.7;
F77A1U		6/9/92	190	23	6.2	ND (<2.5)	14	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.6;
F77A1U		12/17/92	190	17	ND (<5.0)	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F77A1U		3/6/96	120	10	2.8	9.7	1.8	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.86;
F77A1U		6/5/96	140	18	3.7	12	3.0	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	CBMA = 105;
F77A1U		9/12/96	140	19	4.0	14	3.4	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	CBMA = 109; MC = 3;
F77A1U	Dup	9/12/96	140	20	4.2	15	3.6	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	CBMA = 111; MC = 2.9;
F77A1U		12/13/96	150	15	ND (<5.0)	13	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F77A1U		3/6/97	39	3	1.1	1.5	1.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 106;
F77A1U		6/6/97	150	21	4.3	13	3.9	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	CBMA = 101;
F77A1U		9/12/97	170	22	3.4	12	3.1	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	CBMA = 103;
F77A1U		12/5/97	99	8.3	ND (<2.5)	3.8	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	CBMA = 109;
F77A1U		6/3/98	110	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	CBMA = 104;
F77A1U		12/9/98	120	11	ND (<2.5)	5.4	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	CBMA = 106;
F77A1U		6/9/99	114	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	
F77A1U		12/14/99	118	7.3	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
F77A1U		6/7/00	100	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<10)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
F77A1U	Dup	6/7/00	100	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<10)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
F77A1U		12/8/00	100	3.6	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<10)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
F77A1U		6/21/01	88	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<10)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
F77A1U		6/26/03	58	1.5	ND (<0.50)	0.94	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F77A1U		6/20/05	47	1.1	ND (<0.50)	1.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F77A1U		6/14/07	44	0.89	ND (<0.50)	1.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F77A1U		6/10/09	32	0.55	ND (<0.50)	0.55	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F77A1U		6/15/11	31	0.56	ND (<0.50)	0.76	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F77A1U		6/18/13	25	ND (<0.50)	ND (<0.50)	0.62	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F77A1U	Dup	6/18/13	25	ND (<0.50)	ND (<0.50)	0.66	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F77A1U		6/9/15	26	ND (<0.50)	ND (<0.50)	0.77	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F77A1U		6/7/17	22	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F77A1U		6/6/18	19	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F77A1U		6/4/19	19	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F77A1U		6/2/20	21	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F78A1		12/18/90	5.0	4.2	5.2	14	-	-	2.0	10	10	4.9	3.0	1,1,2,2-TCA = 3; 1,1,2-TCA = 2; 1,2-DCPA = 2; 1,3-DCB = 10; 1,4-DCB = 10; 2-CVE = 4; Acetone = 30; BDCMe = 4; Benzene = 0.30; BRFM = 5; BRMA = 5; CHLBZ = 4; CHLEA (EC) = 5; CHLFM = 3.6; CHLMA = 5; cis-1,3-DCP = 3; CT = 3; DBCMe = 4; EDB = 10; Ethylbenzene = 0.30; MC = 50; m-Xylene = 0.30; o-Xylene = 0.30; TCFMe (Freon 11) = 5; Toluene = 0.30; trans-1,3-DCP = 3; Xylenes = 0.9;
F78A1		4/16/91	11	7.0	8.0	-	1.0	ND (<0.50)	1.0	ND (<0.50)	ND (<0.50)	4.0	ND (<0.50)	CHLFM = 5; TCFMe (Freon 11) = 6;
F78A1		7/24/91	32	6.2	4.4	-	0.60	ND (<0.50)	2.0	ND (<0.50)	ND (<0.50)	3.4	ND (<0.50)	CHLFM = 13; TCFMe (Freon 11) = 7.6;
F78A1		11/1/91	43	5.6	4.2	-	0.70	ND (<0.50)	2.9	2.1	ND (<0.50)	5.9	ND (<0.50)	CHLFM = 19; TCFMe (Freon 11) = 5.7;
F78A1		12/5/91	48	7.5	ND (<5.0)	-	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	5.1	ND (<10)	Acetone = 11; Benzene = 12; CHLFM = 22; Ethylbenzene = 9; Toluene = 13; Xylenes = 100;
F78A1		3/6/92	50	5.3	3.4	-	0.60	ND (<0.50)	4.0	2.1	ND (<0.50)	5.3	ND (<0.50)	CHLFM = 23; TCFMe (Freon 11) = 4.5;
F78A1		6/11/92	98	5.0	2.2	ND (<1.0)	0.50	ND (<0.50)	8.4	3	ND (<0.50)	2.8	ND (<0.50)	CHLFM = 25; TCFMe (Freon 11) = 3.5;
F78A1		9/11/92	98	3.1	1.9	ND (<2.5)	ND (<0.50)	ND (<0.50)	13	3.5	ND (<0.50)	1.2	ND (<0.50)	CHLFM = 21; TCFMe (Freon 11) = 2.6;
F78A1		12/15/92	89	ND (<5.0)	ND (<5.0)	-	-	ND (<5.0)	14	ND (<5.0)	-	ND (<5.0)	ND (<10)	CHLFM = 14;
F78A1		3/5/93	120	4.1	3.0	ND (<2.5)	0.60	ND (<0.50)	22	3	ND (<0.50)	1.8	ND (<0.50)	CHLFM = 18; TCFMe (Freon 11) = 7.9;
F78A1		6/10/93	110	3.2	1.6	ND (<2.5)	ND (<0.50)	ND (<0.50)	24	2.2	ND (<0.50)	0.70	ND (<0.50)	CHLFM = 19; TCFMe (Freon 11) = 7.5;
F78A1		9/13/93	130	1.8	1.1	ND (<2.5)	ND (<0.50)	ND (<0.50)	21	ND (<0.50)	ND (<0.50)	2.3	ND (<0.50)	CHLFM = 20; TCFMe (Freon 11) = 3.1;
F78A1		12/3/93	120	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<5.0)	23	ND (<5.0)	-	6.6	ND (<10)	CHLFM = 18;
F78A1		3/2/94	190	2.0	1.6	-	ND (<0.50)	ND (<0.50)	32	2.8	ND (<0.50)	1.2	ND (<0.50)	CHLFM = 20; TCFMe (Freon 11) = 4.6;
F78A1		6/10/94	150	1.5	0.66	-	ND (<0.50)	ND (<0.50)	47	2.4	ND (<0.50)	0.89	ND (<0.50)	CHLFM = 24; TCFMe (Freon 11) = 2.1;
F78A1		9/6/94	120	1.1	0.57	-	ND (<0.50)	ND (<0.50)	44	1.6	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLEA (EC) = 1; CHLFM = 3.1;
F78A1		12/7/94	99	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<5.0)	32	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F78A1		3/2/95	27	ND (<0.50)	ND (<0.50)	-	ND (<0.50)	ND (<0.50)	8.5	ND (<0.50)	ND (<0.50)	0.71	ND (<0.50)	CHLFM = 2;
F78A1		6/8/95	90	0.76	1.5	-	ND (<0.50)	ND (<0.50)	22	0.99	ND (<0.50)	6.7	ND (<0.50)	CHLEA (EC) = 1.3; CHLFM = 4.7; TCFMe (Freon 11) = 0.91;
F78A1		9/7/95	63	ND (<0.50)	1.7	-	ND (<0.50)	ND (<0.50)	16	ND (<0.50)	ND (<0.50)	9.9	ND (<0.50)	CHLFM = 3.6;
F78A1		12/8/95	66	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<5.0)	16	ND (<5.0)	-	6.1	ND (<10)	
F78A1	Dup	12/8/95	58	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<5.0)	14	ND (<5.0)	-	5.9	ND (<10)	
F78A1		3/6/96	48	ND (<0.50)	1.2	6.3	ND (<0.50)	ND (<0.50)	14	ND (<0.50)	ND (<0.50)	6.0	ND (<0.50)	CHLFM = 1.3; TCFMe (Freon 11) = 0.94;
F78A1		6/7/96	80	1.1	2.5	8.2	ND (<1.0)	ND (<1.0)	21	ND (<1.0)	ND (<1.0)	5.9	ND (<1.0)	CBMA = 115; CHLFM = 1.6; TCFMe (Freon 11) = 1.1;
F78A1		9/12/96	94	2.0	2.6	9.5	ND (<1.0)	ND (<1.0)	33	ND (<1.0)	ND (<1.0)	7.3	ND (<1.0)	CBMA = 109; CHLFM = 1.3; MC = 1.1; TCFMe (Freon 11) = 1.4;
F78A1		12/13/96	74	ND (<5.0)	ND (<5.0)	6.0	ND (<5.0)	ND (<5.0)	20	ND (<5.0)	-	5.3	ND (<10)	
F78A1		3/6/97	46	ND (<0.50)	1.7	2.4	ND (<0.50)	ND (<0.50)	18	ND (<0.50)	ND (<0.50)	6.2	ND (<0.50)	CBMA = 103; CHLFM = 0.67;
F78A1		6/5/97	41	ND (<0.50)	2.0	2.4	ND (<0.50)	ND (<0.50)	18	ND (<0.50)	ND (<0.50)	7.1	ND (<0.50)	CBMA = 98; CHLFM = 0.76;
F78A1		9/11/97	41	ND (<0.50)	0.81	2.5	ND (<0.50)	ND (<0.50)	25	ND (<0.50)	ND (<0.50)	2.7	ND (<0.50)	CBMA = 97;
F78A1		12/3/97	18	ND (<0.50)	0.53	0.99	ND (<0.50)	ND (<0.50)	6.2	ND (<0.50)	ND (<0.50)	7.7	ND (<0.50)	CBMA = 88;
F78A1		6/4/98	20	ND (<0.50)	ND (<0.50)	0.75	ND (<0.50)	ND (<0.50)	12	ND (<0.50)	ND (<0.50)	1.2	ND (<0.50)	CBMA = 98;
F78A1		12/10/98	15	ND (<0.50)	ND (<0.50)	0.79	ND (<0.50)	ND (<0.50)	9.9	ND (<0.50)	ND (<0.50)	0.70	ND (<0.50)	CBMA = 97.3;
F78A1		6/10/99	10	ND (<0.50)	ND (<0.50)	0.61	ND (<0.50)	ND (<0.50)	6.3	ND (<0.50)	ND (<0.50)	0.70	ND (<0.50)	
F78A1	Dup	6/10/99	8.9	ND (<0.50)	ND (<0.50)	0.57	ND (<0.50)	ND (<0.50)	6.1	ND (<0.50)	ND (<0.50)	0.73	ND (<0.50)	
F78A1		12/9/99	6.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	2.9	ND (<1.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F78A1		6/7/00	ND (<0.50)	ND (<0.50)	5.6	6.2	0.71	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F78A1		12/5/00	6.9	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	3.0	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F78A1	Dup	12/5/00	7.7	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	4.0	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F78A1		6/19/01	5.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	2.5	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F78A1		6/25/03	5.9	ND (<0.50)	0.64	0.55	ND (<0.50)	ND (<0.50)	2.6	ND (<0.50)	ND (<0.50)	1.4	ND (<0.50)	
F78A1		6/22/05	3.7	ND (<0.50)	0.55	0.94	ND (<0.50)	ND (<0.50)	1.2	ND (<0.50)	ND (<0.50)	0.55	ND (<0.50)	
F78A1		6/13/07	1.9	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.63	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F78A1		6/11/09	1.7	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.60	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F78A1		6/15/11	1.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F78A1		6/19/13	0.89	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F78A1		6/9/15	1.6	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.56	ND (<0.50)	
F78A1		6/6/17	5.5	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	1.0	ND (<0.50)	ND (<0.50)	0.53	ND (<0.50)	
F78A1		6/6/19	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	

Appendix B
Selected Compounds from Historical Records
COE Study Area and Perimeter Area, Palo Alto, California

Location	Type	Date	TCE	1,1,1-TCA	1,1-DCA	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	PCE	Freon 113	1,2-DCB	1,2-DCA	VC	Other Constituents
F79A2D		12/10/90	1.8	0.90	0.80	0.30	-	-	0.20	1.0	0.50	0.30	0.30	1,1,2,2-TCA = 0.30; 1,1,2-TCA = 0.2; 1,2,4-TCB = 10; 1,2-DCPA = 0.2; 1,3-DCB = 0.5; 1,4-DCB = 0.5; 2-CVE = 0.40; Acetone = 30; BDCMe = 0.40; Benzene = 0.5; BRFM = 0.5; BRMA = 0.5; CHLBZ = 0.40; CHLEA (EC) = 0.5; CHLFM = 0.2; CHLMA = 0.5; cis-1,3-DCP = 0.30; CT = 0.30; DBCMe = 0.40; EDB = 1; Ethylbenzene = 0.5; MC = 5; m-Xylene = 0.5; Naphthalene = 10; o-Xylene = 0.5; TCFMe (Freon 11) = 0.5; Toluene = 0.5; trans-1,3-DCP = 0.30; Xylenes = 0.5;
F79A2D		4/9/91	2.0	ND (<0.50)	1.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F79A2D		7/25/91	2.9	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F79A2D		11/5/91	1.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F79A2D		12/10/91	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F79A2D		3/12/92	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F79A2D		6/10/92	1.6	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F79A2D		9/14/92	0.90	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F79A2D		12/11/92	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F79A2D		3/9/93	1.7	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F79A2D		6/8/93	0.70	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F79A2D		9/14/93	2.9	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F79A2D		12/9/93	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F79A2D		3/7/94	0.95	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F79A2D		6/6/94	0.75	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F79A2D		12/9/94	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F79A2D		6/5/95	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F79A2D		12/4/95	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F79A2D		6/4/96	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 109;
F79A2D		12/9/96	51	12	ND (<5.0)	ND (<5.0)	6.1	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F79A2D		6/4/97	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 110;
F79A2D		12/9/97	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 100;
F79A2D		12/10/98	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 112;
F79A2D		12/9/99	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F79A2D		12/5/00	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F79A2D		3/9/07	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F79A2D		6/5/19	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F80A2		12/10/90	0.50	0.70	0.40	0.30	-	-	0.20	1	0.50	0.30	0.30	1,1,2,2-TCA = 0.30; 1,1,2-TCA = 0.2; 1,2-DCPA = 0.2; 1,3-DCB = 0.5; 1,4-DCB = 0.5; 2-CVE = 0.40; Acetone = 30; BDCMe = 0.40; Benzene = 0.5; BRFM = 0.5; BRMA = 0.5; CHLBZ = 0.40; CHLEA (EC) = 0.5; CHLFM = 1.2; CHLMA = 0.5; cis-1,3-DCP = 0.30; CT = 0.30; DBCMe = 0.40; EDB = 1; Ethylbenzene = 0.5; MC = 5; m-Xylene = 0.5; o-Xylene = 0.5; TCFMe (Freon 11) = 0.5; Toluene = 0.5; trans-1,3-DCP = 0.30; Xylenes = 0.5;
F80A2		4/19/91	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 1;
F80A2		7/31/91	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F80A2		10/9/91	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F80A2		12/10/91	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F80A2		3/4/92	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F80A2		6/15/92	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F80A2		9/10/92	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F80A2		12/10/92	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F80A2		6/9/93	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F80A2		12/3/93	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F80A2		6/2/94	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F83A1U		12/11/90	93	28	4.0	5.0	-	-	2.0	10	10	3.0	3.0	1,1,2,2-TCA = 3; 1,1,2-TCA = 2; 1,2-DCPA = 2; 1,3-DCB = 0.5; 1,4-DCB = 0.5; 2-CVE = 4; Acetone = 30; BDCMe = 4; Benzene = 0.5; BRFM = 5; BRMA = 5; CHLBZ = 0.5; CHLEA (EC) = 5; CHLFM = 2.9; CHLMA = 5; cis-1,3-DCP = 3; CT = 3; DBCMe = 4; EDB = 10; Ethylbenzene = 0.5; MC = 50; m-Xylene = 0.5; o-Xylene = 0.5; TCFMe (Freon 11) = 5; Toluene = 0.5; trans-1,3-DCP = 3; Xylenes = 0.5;
F83A1U		4/22/91	120	28	3.0	ND (<3.0)	2.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 1;
F83A1U		7/30/91	110	25	2.6	-	1.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.50	ND (<0.50)	CHLFM = 0.8;
F83A1U		10/9/91	110	25	2.6	-	1.2	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	
F83A1U		12/10/91	110	19	ND (<5.0)	-	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F83A1U	Dup	12/10/91	100	17	ND (<5.0)	-	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F83A1U		3/5/92	94	18	2.2	ND (<1.0)	1.4	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.50	ND (<0.50)	CHLFM = 0.8;
F83A1U		6/5/92	95	17	1.6	ND (<1.0)	1.7	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.7;
F83A1U		9/22/92	94	18	2.3	ND (<1.0)	1.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.60	ND (<0.50)	CHLFM = 0.7;
F83A1U		12/11/92	100	18	ND (<5.0)	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F83A1U		3/9/93	94	27	3.8	ND (<2.5)	2.7	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.50	ND (<0.50)	
F83A1U		6/11/93	87	24	1.8	ND (<2.5)	3.5	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.6;
F83A1U		9/10/93	61	18	1.8	ND (<1.0)	1.5	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 6.2;
F83A1U		12/3/93	81	17	ND (<5.0)	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F83A1U		3/2/94	100	30	5.8	-	13	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 2.8;
F83A1U		6/10/94	18	5.4	ND (<0.50)	-	2.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.64;
F83A1U		9/7/94	81	27	2.8	-	6.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 2.8; TCFMe (Freon 11) = 0.5;
F83A1U		12/12/94	65	24	ND (<5.0)	-	11	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F83A1U		3/2/95	72	24	2.9	-	7.9	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 2;
F83A1U		6/5/95	78	29	2.7	-	7.5	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 1.8; TCFMe (Freon 11) = 0.51;
F83A1U	Dup	6/5/95	88	33	2.8	-	8.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 1.6; TCFMe (Freon 11) = 0.51;
F83A1U		9/7/95	89	34	ND (<2.5)	-	6.6	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	CHLFM = 2.6; MC = 4.8;
F83A1U		12/8/95	71	28	ND (<5.0)	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F83A1U	Dup	12/8/95	76	30	ND (<5.0)	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F83A1U		3/6/96	100	33	3.3	15	8.6	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 1.7;
F83A1U		6/5/96	100	38	3.6	15	12	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	CBMA = 104; MC = 3;
F83A1U		9/12/96	87	27	3.6	14	9.8	ND (<1.2)	ND (<1.2)	ND (<1.2)	ND (<1.2)	ND (<1.2)	ND (<1.2)	CBMA = 111; CHLFM = 1.6; MC = 1.3;
F83A1U		12/13/96	51	12	ND (<5.0)	ND (<5.0)	6.1	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F83A1U		6/15/11	68	2.8	0.76	2.5	4.4	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F83A1U		6/11/14	66	1.7	0.83	2.4	8.4	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F83A1U		6/10/15	53	1.8	0.67	2.1	4.5	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F83A1U		6/5/18	70	1.9	0.76	2.7	3.8	ND (<0.50)	0.61	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F83A1U		6/5/19	48	1.4	0.53	1.9	2.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F83A1U	Dup	6/5/19	50	1.5	0.55	2.1	2.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F83A1U		6/3/20	50	1.0	0.61	1.5	3.0	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F84A1		12/11/90	0.50	0.30	0.40	0.30	-	-	0.20	1.0	0.50	0.30	0.30	1,1,2,2-TCA = 0.30; 1,1,2-TCA = 0.2; 1,2-DCPA = 0.2; 1,3-DCB = 0.5; 1,4-DCB = 0.5; 2-CVE = 0.40; Acetone = 30; BDCMe = 0.40; Benzene = 0.5; BRFM = 0.5; BRMA = 0.5; CHLBZ = 0.40; CHLEA (EC) = 0.5; CHLFM = 0.2; CHLMA = 0.5; cis-1,3-DCP = 0.30; CT = 0.30; DBCMe = 0.40; EDB = 1; Ethylbenzene = 0.5; MC = 5; m-Xylene = 0.5; o-Xylene = 0.5; TCFMe (Freon 11) = 0.5; Toluene = 0.5; trans-1,3-DCP = 0.30; Xylenes = 0.5;
F84A1		4/22/91	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F84A1		7/30/91	0.70	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F84A1	Dup	7/30/91	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F84A1		10/9/91	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F84A1		12/10/91	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F84A1		3/5/92	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F84A1	Dup	3/5/92	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F84A1		6/5/92	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F84A1		9/21/92	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F84A1		12/10/92	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F84A1		6/11/93	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F84A1		12/3/93	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F84A1		6/10/94	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F84A1		12/12/94	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F84A1		6/2/95	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F84A1		12/4/95	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F84A1		6/4/96	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 106;
F84A1		12/9/96	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F84A1		6/3/97	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 111;
F84A1		12/10/97	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 103; MC = 1.3;
F84A1	Dup	12/10/97	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 101; MC = 1.4;
F84A1		12/8/98	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 101;
F84A1		12/14/99	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F84A1		12/5/00	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F85A1		12/11/90	0.50	5.7	2.6	7.9	-	-	0.20	1.0	0.50	0.80	0.30	1,1,2,2-TCA = 0.30; 1,1,2-TCA = 0.2; 1,2-DCPA = 0.2; 1,3-DCB = 0.5; 1,4-DCB = 0.5; 2-CVE = 0.40; Acetone = 30; BDCMe = 0.40; Benzene = 0.5; BRFM = 0.5; BRMA = 0.5; CHLBZ = 0.40; CHLEA (EC) = 0.5; CHLFM = 8.6; CHLMA = 0.5; cis-1,3-DCP = 0.30; CT = 0.30; DBCMe = 0.40; EDB = 1; Ethylbenzene = 0.5; MC = 5; m-Xylene = 0.5; o-Xylene = 0.5; TCFMe (Freon 11) = 1.1; Toluene = 0.5; trans-1,3-DCP = 0.30; Xylenes = 0.5;
F85A1		4/15/91	1.0	4.0	2.0	-	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	1.0	ND (<0.50)	CHLFM = 6;
F85A1		7/24/91	0.80	3.9	2.8	-	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.90	ND (<0.50)	CHLFM = 5.8;
F85A1		10/8/91	ND (<0.50)	4.6	3.3	-	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	1.1	ND (<0.50)	CHLFM = 4;
F85A1		12/10/91	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F85A1		3/5/92	ND (<0.50)	2.2	1.7	-	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.80	ND (<0.50)	CHLFM = 1.6;
F85A1		6/8/92	0.60	2.3	1.4	-	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 1.1;
F85A1		9/15/92	0.80	1.9	1.4	-	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.70	ND (<0.50)	CHLFM = 1.2;
F85A1	Dup	9/15/92	0.50	1.5	1.1	-	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.50	ND (<0.50)	CHLFM = 1;
F85A1		12/11/92	ND (<5.0)	6.9	ND (<5.0)	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F85A1		3/10/93	0.70	2.3	1.1	-	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.9;
F85A1		6/8/93	0.50	2.1	0.50	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F85A1	Dup	6/8/93	ND (<0.50)	1.9	0.60	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.5;
F85A1		9/14/93	4.6	1.4	0.54	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.64;
F85A1		12/9/93	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F85A1		3/8/94	ND (<0.50)	0.83	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.57;
F85A1		6/6/94	4.6	0.76	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F85A1		9/6/94	1.3	3.1	0.54	-	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 1.2;
F85A1		12/9/94	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F85A1	Dup	12/9/94	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F85A1		3/3/95	ND (<0.50)	0.79	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F85A1		6/6/95	ND (<0.50)	0.55	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F85A1		9/6/95	1.0	2.4	ND (<0.50)	-	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.58;
F85A1		12/5/95	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F85A1		3/5/96	ND (<0.50)	1.6	ND (<0.50)	0.58	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F85A1	Dup	3/5/96	ND (<0.50)	1.8	ND (<0.50)	0.65	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F85A1		6/5/96	1.3	3.2	ND (<0.50)	1.8	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 101; CHLFM = 0.58;
F85A1		9/10/96	1.2	1.4	ND (<0.50)	1.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 104;
F85A1		12/10/96	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F85A1		3/4/97	1.9	2.4	ND (<0.50)	1.7	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 97; CHLFM = 0.57;
F85A1	Dup	3/4/97	1.9	2.1	ND (<0.50)	1.6	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 101; CHLFM = 0.57;
F85A1		6/3/97	2.0	2.7	ND (<0.50)	2.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 109; CHLFM = 0.78;

Appendix B
Selected Compounds from Historical Records
COE Study Area and Perimeter Area, Palo Alto, California

Location	Type	Date	TCE	1,1,1-TCA	1,1-DCA	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	PCE	Freon 113	1,2-DCB	1,2-DCA	VC	Other Constituents
F85A1		9/10/97	0.99	0.94	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 91; MC = 2;
F85A1		12/3/97	0.97	0.74	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 88;
F85A1		12/10/98	1.3	0.86	ND (<0.50)	1.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 107;
F85A1		12/9/99	1.1	ND (<0.50)	ND (<0.50)	0.81	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F85A1		12/5/00	1.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F85A1		6/19/01	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F85A1		6/25/03	0.63	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.53	
F85A1		6/22/05	4.1	1.0	0.62	3.7	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 1.4;
F85A1		6/13/07	8.6	0.75	1.1	3.4	ND (<0.50)	ND (<0.50)	1.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F85A1		6/12/08	8.3	0.57	0.55	2.1	ND (<0.50)	ND (<0.50)	1.4	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F85A1		12/10/08	5.7	ND (<0.50)	ND (<0.50)	1.2	ND (<0.50)	ND (<0.50)	1.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F85A1		6/11/09	1.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F85A1		6/15/11	2.8	ND (<0.50)	ND (<0.50)	0.84	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F85A1		6/20/13	5.8	ND (<0.50)	ND (<0.50)	0.82	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F85A1		6/10/15	6.1	ND (<0.50)	ND (<0.50)	0.80	ND (<0.50)	ND (<0.50)	0.64	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F85A1		6/5/17	6.7	ND (<0.50)	ND (<0.50)	0.69	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F85A1		6/6/18	6.7	ND (<0.50)	ND (<0.50)	0.65	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F85A1		6/6/19	7.7	ND (<0.50)	ND (<0.50)	0.73	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F85A1		6/4/20	5.6	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F85A1	Dup	6/4/20	5.9	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F86A2		12/11/90	0.50	0.30	0.40	0.30	-	-	0.20	1.0	0.50	0.30	0.30	1,1,2,2-TCA = 0.30; 1,1,2-TCA = 0.2; 1,2-DCPA = 0.2; 1,3-DCB = 0.5; 1,4-DCB = 0.5; 2-CVE = 0.40; Acetone = 30; BDCMe = 0.40; Benzene = 0.5; BRFM = 0.5; BRMA = 0.5; CHLBZ = 0.40; CHLEA (EC) = 0.5; CHLFM = 0.2; CHLMA = 0.5; cis-1,3-DCP = 0.30; CT = 0.30; DBCMe = 0.40; EDB = 1; Ethylbenzene = 0.5; MC = 5; m-Xylene = 0.5; o-Xylene = 0.5; TCFMe (Freon 11) = 0.5; Toluene = 0.5; trans-1,3-DCP = 0.30; Xylenes = 0.5;
F86A2		4/15/91	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F86A2		7/24/91	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F86A2		11/5/91	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F86A2		12/10/91	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F86A2		3/5/92	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F86A2		6/8/92	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F86A2		9/15/92	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F86A2		12/11/92	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F86A2		6/8/93	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F86A2		12/9/93	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F86A2		6/6/94	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F86A2	Dup	6/6/94	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F86A2		12/9/94	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F86A2		12/5/95	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F86A2		12/9/96	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F86A2		12/2/97	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 86; MC = 0.61;
F86A2		12/10/98	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 116;
F86A2		12/9/99	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F86A2		12/5/00	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F86A2		3/9/07	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F86A2		6/27/08	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F86A2		12/12/08	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F86A2		6/11/09	2.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F87A2		12/11/90	0.50	0.30	0.40	0.30	-	-	0.20	1.0	0.50	0.30	0.30	1,1,2,2-TCA = 0.30; 1,1,2-TCA = 0.2; 1,2-DCPA = 0.2; 1,3-DCB = 0.5; 1,4-DCB = 0.5; 2-CVE = 0.40; Acetone = 30; BDCMe = 0.40; Benzene = 0.5; BRFM = 0.5; BRMA = 0.5; CHLBZ = 0.40; CHLEA (EC) = 0.5; CHLFM = 0.30; CHLMA = 0.5; cis-1,3-DCP = 0.30; CT = 0.30; DBCMe = 0.40; EDB = 1; Ethylbenzene = 0.5; MC = 5; m-Xylene = 0.5; o-Xylene = 0.5; TCFMe (Freon 11) = 0.5; Toluene = 0.5; trans-1,3-DCP = 0.30; Xylenes = 0.5;
F87A2	Dup	12/11/90	5.0	3.0	4.0	3.0	-	-	2.0	10	0.50	3.0	3.0	1,1,2,2-TCA = 3; 1,1,2-TCA = 2; 1,2-DCPA = 2; 1,3-DCB = 0.5; 1,4-DCB = 0.5; 2-CVE = 4; Acetone = 30; BDCMe = 4; Benzene = 0.5; BRFM = 5; BRMA = 5; CHLBZ = 0.5; CHLEA (EC) = 5; CHLFM = 5.6; CHLMA = 5; cis-1,3-DCP = 3; CT = 3; DBCMe = 4; EDB = 10; Ethylbenzene = 0.5; MC = 50; m-Xylene = 0.5; o-Xylene = 0.5; TCFMe (Freon 11) = 5; Toluene = 0.5; trans-1,3-DCP = 3; Xylenes = 0.5;
F87A2		4/19/91	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F87A2		7/31/91	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F87A2		11/6/91	11	ND (<0.50)	ND (<0.50)	-	ND (<0.50)	ND (<0.50)	13	ND (<0.50)	ND (<0.50)	13	7.2	1,4-DCB = 11; CHLBZ = 13; CHLFM = 11; CT = 12;
F87A2		12/5/91	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F87A2		3/12/92	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F87A2		6/3/92	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F87A2		9/18/92	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F87A2		12/11/92	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F87A2		3/9/93	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F87A2		6/11/93	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F87A2		9/10/93	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F87A2		12/3/93	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F87A2		3/7/94	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F87A2		6/6/94	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F87A2	Dup	6/6/94	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F87A2		12/5/94	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F87A2		6/5/95	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F87A2		12/4/95	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F87A2		6/6/96	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 102;
F87A2		12/9/96	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F87A2		6/5/97	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 91;
F87A2		12/9/97	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 96;
F87A2		6/3/98	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 109;
F87A2		12/8/98	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 111;
F87A2		6/9/99	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F87A2		12/8/99	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<1.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F87A2		6/6/00	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F87A2		12/6/00	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F87A2		6/29/11	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F87A2		9/30/11	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F87A2		12/21/11	ND (<0.50)	ND (<0.50)	2.5	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F87A2		2/1/12	ND (<0.50)	ND (<0.50)	2.8	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F87A2R		2/1/12	2.4	0.68	1.5	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.86	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F87A2R	Dup	2/1/12	2.4	0.69	1.5	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.81	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F87A2R		6/14/12	ND (<0.50)	ND (<0.50)	1.8	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F87A2R		6/18/13	ND (<0.50)	ND (<0.50)	2.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F87A2R		6/11/14	ND (<0.50)	ND (<0.50)	2.4	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F87A2R		6/6/19	1.9	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F88A1U		12/11/90	3.4	0.30	0.40	0.30	-	-	0.20	1.0	0.50	0.30	0.30	1,1,2,2-TCA = 0.30; 1,1,2-TCA = 0.2; 1,2-DCPA = 0.2; 1,3-DCB = 0.5; 1,4-DCB = 0.5; 2-CVE = 0.40; Acetone = 30; BDCMe = 0.40; Benzene = 0.5; BRFM = 0.5; BRMA = 0.5; CHLBZ = 0.40; CHLEA (EC) = 0.5; CHLFM = 0.2; CHLMA = 0.5; cis-1,3-DCP = 0.30; CT = 0.30; DBCMe = 0.40; EDB = 1; Ethylbenzene = 0.5; MC = 5; m-Xylene = 0.5; o-Xylene = 0.5; TCFMe (Freon 11) = 0.5; Toluene = 0.5; trans-1,3-DCP = 0.30; Xylenes = 0.5;
F88A1U		4/11/91	120	43	ND (<5.0)	-	43	8.0	250	ND (<5.0)	ND (<0.50)	ND (<5.0)	ND (<5.0)	
F88A1U		5/3/91	110	25	4.5	-	57	17	210	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F88A1U		7/31/91	100	4.6	1.4	-	22	16	88	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F88A1U		11/12/91	92	5.3	ND (<0.50)	-	23	12	81	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F88A1U		12/12/91	86	ND (<5.0)	ND (<5.0)	-	-	-	89	ND (<5.0)	-	ND (<5.0)	ND (<10)	MC = 14;
F88A1U		3/9/92	99	1.1	ND (<0.50)	ND (<1.0)	13	9.6	38	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.5;
F88A1U	Dup	3/9/92	110	1.3	ND (<1.0)	ND (<1.0)	15	11	41	ND (<1.0)	ND (<1.0)	ND (<0.50)	ND (<1.0)	CHLFM = 0.6;
F88A1U		6/15/92	93	0.50	ND (<0.50)	ND (<1.0)	5.4	3.5	26	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.7;
F88A1U		9/22/92	86	0.70	0.50	ND (<1.0)	3.5	2.1	20	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.6;
F88A1U	Dup	9/22/92	80	ND (<0.50)	ND (<0.50)	ND (<1.0)	3.6	2.4	21	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.7;
F88A1U		12/16/92	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F88A1U		3/8/93	44	0.90	ND (<0.50)	-	1.8	1.3	20	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F88A1U		6/9/93	14	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.50	ND (<0.50)	3.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F88A1U	Dup	6/9/93	12	2.7	ND (<0.50)	ND (<0.50)	2.8	ND (<0.50)	2.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F88A1U		9/13/93	24	ND (<0.50)	ND (<0.50)	-	0.91	0.55	5.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F88A1U		12/9/93	28	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	16	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F88A1U		3/10/94	38	ND (<0.50)	ND (<0.50)	-	3.0	2.6	9.7	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F88A1U		6/2/94	34	ND (<0.50)	0.66	-	3.2	2.4	8.8	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F88A1U	Dup	6/2/94	33	ND (<0.50)	0.63	-	3.0	2.4	8.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F88A1U		9/9/94	35	ND (<0.50)	ND (<0.50)	-	5.5	4.7	5.8	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F88A1U		12/13/94	87	ND (<5.0)	ND (<5.0)	-	41	12	12	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F88A1U		3/7/95	49	ND (<0.50)	ND (<0.50)	-	7.6	5.0	17	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F88A1U		6/7/95	42	ND (<0.50)	ND (<0.50)	-	1.9	1.1	5.5	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F88A1U	Dup	6/7/95	39	ND (<0.50)	ND (<0.50)	-	1.8	1.0	5.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F88A1U		9/6/95	28	ND (<0.50)	ND (<0.50)	-	3.0	2.2	4.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F88A1U		12/7/95	46	ND (<5.0)	ND (<5.0)	ND (<5.0)	5.0	ND (<5.0)	7.5	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F88A1U		3/6/96	39	0.86	0.80	ND (<0.50)	1.7	0.95	6.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 2;
F88A1U		6/10/96	29	ND (<1.0)	ND (<1.0)	ND (<1.0)	3.0	2.0	5.1	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	CBMA = 117; MC = 0.54;
F88A1U		9/11/96	42	8.1	2.4	12	15	3.6	21	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 104; CHLFM = 0.92; MC = 0.52;
F88A1U		12/11/96	39	6.9	ND (<5.0)	7.3	15	ND (<5.0)	54	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F88A1U		3/5/97	35	2.7	1.3	1.9	3.5	1.2	43	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	CBMA = 89;
F88A1U		6/4/97	24	2.5	1.6	1.0	3.6	1.2	23	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	CBMA = 105;
F88A1U		9/11/97	31	4.7	1.8	4.7	8.1	1.6	34	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	CBMA = 109;
F88A1U		12/4/97	36	8.7	2.9	8.5	8.1	1.6	150	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 90;
F88A1U		6/5/98	8.7	1.1	2.8	4.1	0.86	ND (<0.50)	13	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 110;
F88A1U	Dup	6/5/98	8.3	1.1	2.6	3.8	0.83	ND (<0.50)	13	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 105;
F88A1U		12/11/98	14	1.6	2.6	5.6	3.6	0.82	25	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 109;
F88A1U		6/9/99	11	1.5	2.0	3.7	1.5	ND (<0.50)	20	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F88A1U		12/14/99	36	8.2	ND (<5.0)	9.3	7.0	ND (<5.0)	106	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
F88A1U		6/8/00	17	1.9	2.1	3.5	1.7	ND (<0.50)	40	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F88A1U		12/8/00	25	3.4	1.7	6.4	4.2	ND (<1.0)	58	ND (<4.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	
F88A1U		6/27/03	23	1.3	1.9	2.8	6.4	ND (<1.0)	160	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	
F88A1U		6/20/05	18	0.77	1.4	2.0	6.7	ND (<0.50)	49	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F88A1U		6/20/07	17	1.3	0.68	2.2	1.8	ND (<0.50)	87	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F88A1U		6/10/09	36	2.9	ND (<2.5)	6.6	9.4	ND (<2.5)	390	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
F88A1U		7/11/11	18	ND (<2.5)	ND (<2.5)	ND (<2.5)	2.9	ND (<2.5)	140	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
F88A1U		9/11/13	38	6.1	1.2	6.0	11	0.79	290	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F88A1U		11/13/13	38	2.7	ND (<2.5)	3.5	13	ND (<2.5)	200	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
F88A1U		2/25/14	50	6.7	1.6	8.9	15	0.95	270	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F88A1U		6/10/14	18	1.0	0.51	1.5	7.4	0.73	70	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F88A1U		8/13/14	21	1.1	0.66	1.9	11	0.93	72	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	

Appendix B
Selected Compounds from Historical Records
COE Study Area and Perimeter Area, Palo Alto, California

Location	Type	Date	TCE	1,1,1-TCA	1,1-DCA	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	PCE	Freon 113	1,2-DCB	1,2-DCA	VC	Other Constituents
F88A1U		11/12/14	36	1.9	1.0	4.7	35	1.4	100	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F88A1U		6/8/15	11	ND (<0.50)	ND (<0.50)	0.60	3.2	ND (<0.50)	68	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F88A1U		1/12/16	1.5	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	34	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F88A1U		6/6/16	3.7	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.50	ND (<0.50)	21	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F88A1U	Dup	6/6/16	3.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	20	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F88A1U		6/5/17	1.6	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	14	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F88A1U		6/4/18	9.7	ND (<0.50)	ND (<0.50)	ND (<0.50)	5.5	ND (<0.50)	9.6	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F88A1U		6/4/19	1.9	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	18	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F89A		12/11/90	42	7.1	2.5	9.0	-	-	26	1.0	0.50	0.30	0.30	1,1,2,2-TCA = 0.30; 1,1,2-TCA = 0.2; 1,2-DCPA = 0.2; 1,3-DCB = 0.5; 1,4-DCB = 0.5; 2-CVE = 0.40; Acetone = 30; BDCMe = 0.40; Benzene = 0.5; BRFM = 0.5; BRMA = 0.5; CHLBZ = 0.40; CHLEA (EC) = 0.5; CHLFM = 2; CHLMA = 0.5; cis-1,3-DCP = 0.30; CT = 0.30; DBCMe = 0.40; EDB = 1; Ethylbenzene = 0.5; MC = 5; m-Xylene = 0.5; o-Xylene = 0.5; TCFMe (Freon 11) = 0.5; Toluene = 0.5; trans-1,3-DCP = 0.30; Xylenes = 0.5;
F89A		4/15/91	20	1.0	1.0	-	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F89A		7/31/91	5.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F89A		10/10/91	3.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F89A		12/12/91	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	-	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	MC = 14;
F89A	Dup	12/12/91	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	-	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F89A		3/9/92	4.6	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F89A		6/15/92	3.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F89A		9/22/92	29	1.8	1.4	-	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F89A		12/16/92	27	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F89A		3/12/93	0.70	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F89A		6/9/93	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F89A		9/13/93	24	0.90	0.90	-	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F89A		12/9/93	6.6	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F89A		3/10/94	4.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F89A		6/2/94	6.1	0.72	0.92	-	0.83	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F89A		9/9/94	12	0.66	0.87	-	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F89A		12/13/94	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F89A	Dup	12/13/94	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F89A		3/7/95	2.8	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F89A		6/6/95	2.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F89A		9/5/95	2.8	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F89A		12/7/95	7.0	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F89A		3/5/96	2.9	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F89A		6/6/96	2.6	1.0	ND (<0.50)	0.67	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 102;
F89A		9/10/96	4.7	1.1	ND (<0.50)	1.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 106;
F89A		12/10/96	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F89A		3/6/97	1.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 91;
F89A		6/6/97	0.68	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 106;
F89A	Dup	6/6/97	0.68	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 104;
F89A		9/9/97	6.0	1.8	0.68	1.6	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 110;
F89A	Dup	9/9/97	5.8	1.7	0.64	1.4	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 110;
F89A		12/4/97	0.85	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 91;
F89A		6/3/98	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 118;
F89A		12/11/98	0.92	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 120;
F89A		6/9/99	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F89A		12/14/99	2.4	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F89A		6/7/00	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F89A		12/8/00	1.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F89A		11/13/13	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F89A		2/25/14	0.56	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F89A		6/10/14	14	0.91	0.57	2.1	4.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F89A		8/13/14	12	0.71	ND (<0.50)	1.9	3.4	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F89A		11/12/14	14	0.95	0.57	1.7	4.6	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F89A		6/8/15	11	0.72	ND (<0.50)	0.94	3.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F89A		1/12/16	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F89A		6/6/16	0.77	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F89A		6/5/17	7.3	ND (<0.50)	ND (<0.50)	0.64	1.4	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F89A		6/4/18	13	0.65	ND (<0.50)	0.73	2.4	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F89A		6/4/19	11	ND (<0.50)	ND (<0.50)	0.55	1.6	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F90A1U		12/12/90	2.0	3.0	3.0	2.0	5.0	2.0	2.0	1.0	1.0	2.0	3.0	1,1,2,2-TCA = 3; 1,1,2-TCA = 2; 1,2-DCPA = 3; 1,3-DCB = 1; 1,4-DCB = 1; 2-CVE = 5; Acetone = 5; BDCMe = 3; Benzene = 2; BRFM = 2; BRMA = 2; CARBD = 3; CHLBZ = 2; CHLEA (EC) = 2; CHLFM = 2; CHLMA = 3; cis-1,3-DCP = 3; CT = 3; DBCMe = 0.40; EDB = 1; Ethylbenzene = 2; MBK = 5; MC = 2; MEK = 5; MIBK = 5; m-Xylene = 0.5; o-Xylene = 0.5; Styrene = 2; TCFMe (Freon 11) = 0.5; Toluene = 2; trans-1,3-DCP = 2; Vinyl Acetate = 5; Xylenes = 2;
F90A1U	Dup	12/12/90	0.50	0.50	1.3	0.30	-	-	0.20	1.0	1.0	0.30	0.30	1,1,2,2-TCA = 0.30; 1,1,2-TCA = 0.2; 1,2-DCPA = 0.2; 1,3-DCB = 1; 1,4-DCB = 1; 2-CVE = 0.40; Acetone = 30; BDCMe = 0.40; Benzene = 0.5; BRFM = 0.5; BRMA = 0.5; CHLBZ = 0.40; CHLEA (EC) = 0.5; CHLFM = 0.2; CHLMA = 0.5; cis-1,3-DCP = 0.30; CT = 0.30; DBCMe = 0.40; EDB = 1; Ethylbenzene = 0.5; MC = 5; m-Xylene = 0.5; o-Xylene = 0.5; TCFMe (Freon 11) = 0.5; Toluene = 0.5; trans-1,3-DCP = 0.30; Xylenes = 0.5;
F90A1U		4/16/91	ND (<0.50)	ND (<0.50)	1.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F90A1U	Dup	4/16/91	0.50	0.30	1.1	0.30	-	-	0.20	1.0	1.0	0.30	0.30	1,1,2,2-TCA = 0.30; 1,1,2-TCA = 0.2; 1,2-DCPA = 0.2; 1,3-DCB = 1; 1,4-DCB = 1; 2-CVE = 0.40; Acetone = 30; BDCMe = 0.40; Benzene = 0.5; BRFM = 0.5; BRMA = 0.5; CHLBZ = 0.40; CHLEA (EC) = 0.5; CHLFM = 0.2; CHLMA = 0.5; cis-1,3-DCP = 0.30; CT = 0.30; DBCMe = 0.40; EDB = 1; Ethylbenzene = 0.5; MC = 5; m-Xylene = 0.5; o-Xylene = 0.5; TCFMe (Freon 11) = 0.5; Toluene = 0.5; trans-1,3-DCP = 0.30; Xylenes = 0.5;
F90A1U		7/23/91	ND (<0.50)	ND (<0.50)	1.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F90A1U	Dup	7/23/91	ND (<0.50)	ND (<0.50)	1.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F90A1U		10/10/91	ND (<0.50)	ND (<0.50)	1.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F90A1U		12/12/91	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	-	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F90A1U		3/11/92	ND (<0.50)	ND (<0.50)	1.5	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F90A1U		6/11/92	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F90A1U	Dup	6/11/92	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F90A1U		9/16/92	ND (<0.50)	ND (<0.50)	1.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F90A1U		12/7/92	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F90A1U		3/9/93	ND (<0.50)	ND (<0.50)	1.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F90A1U		6/14/93	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F90A1U		9/13/93	ND (<0.50)	ND (<0.50)	1.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F90A1U	Dup	9/13/93	ND (<0.50)	ND (<0.50)	0.76	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F90A1U		12/3/93	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F90A1U		3/4/94	ND (<0.50)	ND (<0.50)	1.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F90A1U		6/9/94	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F90A1U		9/8/94	ND (<0.50)	ND (<0.50)	0.83	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F90A1U		12/9/94	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F90A1U		3/2/95	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F90A1U		6/2/95	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F90A1U		9/5/95	ND (<0.50)	ND (<0.50)	0.89	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F90A1U		12/4/95	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F90A1U		3/4/96	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F90A1U		6/4/96	ND (<0.50)	ND (<0.50)	0.66	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 105;
F90A1U		9/10/96	ND (<0.50)	ND (<0.50)	0.96	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 105;
F90A1U	Dup	9/10/96	ND (<0.50)	ND (<0.50)	0.90	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 103;
F90A1U		12/9/96	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F90A1U		3/4/97	ND (<0.50)	ND (<0.50)	0.69	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 103; CHLFM = 0.81;
F90A1U		6/3/97	ND (<0.50)	ND (<0.50)	0.76	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 103; CHLFM = 0.99;
F90A1U		9/9/97	ND (<0.50)	ND (<0.50)	0.93	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 110; CHLFM = 1.5;
F90A1U		12/2/97	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 90; MC = 0.61;
F90A1U		6/5/98	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 98; CHLFM = 0.87;
F90A1U		12/10/98	ND (<0.50)	ND (<0.50)	1.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 99;
F90A1U		6/9/99	0.60	ND (<0.50)	1.7	0.66	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F90A1U		12/7/99	ND (<0.50)	ND (<0.50)	0.66	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F90A1U	Dup	12/7/99	ND (<0.50)	ND (<0.50)	0.65	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F90A1U		6/7/00	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F90A1U		12/8/00	0.52	ND (<0.50)	1.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F90A1U		6/27/03	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F90A1U		6/22/04	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F90A1U		6/15/11	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F90A1U		6/6/19	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F91A1		12/12/90	0.50	0.30	0.40	0.30	-	-	0.20	1.0	1.0	0.30	0.30	1,1,2,2-TCA = 0.30; 1,1,2-TCA = 0.2; 1,2-DCPA = 0.2; 1,3-DCB = 1; 1,4-DCB = 1; 2-CVE = 0.40; Acetone = 30; BDCMe = 0.40; Benzene = 0.5; BRFM = 0.5; BRMA = 0.5; CHLBZ = 0.40; CHLEA (EC) = 0.5; CHLFM = 0.2; CHLMA = 0.5; cis-1,3-DCP = 0.30; CT = 0.30; DBCMe = 0.40; EDB = 1; Ethylbenzene = 0.5; MC = 5; m-Xylene = 0.5; o-Xylene = 0.5; TCFMe (Freon 11) = 0.5; Toluene = 0.5; trans-1,3-DCP = 0.30; Xylenes = 0.5;
F91A1		4/18/91	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F91A1		7/23/91	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F91A1		10/10/91	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F91A1		12/12/91	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F91A1		3/11/92	0.50	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F91A1		6/11/92	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F91A1		9/17/92	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F91A1		12/8/92	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F91A1		3/12/93	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F91A1		6/14/93	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F91A1		9/13/93	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F91A1		12/8/93	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F91A1		6/10/94	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F91A1		12/9/94	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F91A1		6/2/95	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F91A1		12/4/95	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F91A1		6/4/96	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 107;
F91A1		12/20/96	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F91A1		6/4/97	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 109;
F91A1		12/5/97	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 104;
F91A1		12/10/98	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 112;
F91A1	Dup	12/10/98	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 110;
F91A1		12/7/99	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F91A1		12/8/00	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F91A1		6/7/19	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	

Appendix B
Selected Compounds from Historical Records
COE Study Area and Perimeter Area, Palo Alto, California

Location	Type	Date	TCE	1,1,1-TCA	1,1-DCA	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	PCE	Freon 113	1,2-DCB	1,2-DCA	VC	Other Constituents
F92A2		12/13/90	5.8	0.30	0.40	0.30	-	-	0.20	1.0	0.50	0.30	0.30	1,1,2,2-TCA = 0.30; 1,1,2-TCA = 0.2; 1,2-DCPA = 0.2; 1,3-DCB = 0.5; 1,4-DCB = 0.5; 2-CVE = 0.40; Acetone = 30; BDCMe = 0.40; Benzene = 0.5; BRFM = 0.5; BRMA = 0.5; CHLBZ = 0.40; CHLEA (EC) = 0.5; CHLFM = 0.2; CHLMA = 0.5; cis-1,3-DCP = 0.30; CT = 0.30; DBCMe = 0.40; EDB = 1; Ethylbenzene = 0.5; MC = 5; m-Xylene = 0.5; o-Xylene = 0.5; TCFMe (Freon 11) = 0.5; Toluene = 0.5; trans-1,3-DCP = 0.30; Xylenes = 0.5;
F92A2		4/22/91	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F92A2		7/24/91	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F92A2		10/31/91	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F92A2		12/11/91	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F92A2		3/6/92	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F92A2		6/5/92	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F92A2		9/11/92	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F92A2		12/17/92	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F92A2		3/8/93	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F92A2		6/14/93	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F92A2		9/13/93	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F92A2	Dup	9/13/93	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F92A2		12/9/93	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F92A2		6/10/94	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F92A2		12/13/94	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F92A2		6/2/95	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F92A2	Dup	6/2/95	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F92A2		12/4/95	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F92A2		6/4/96	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 111;
F92A2		12/9/96	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F92A2		6/3/97	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 94;
F92A2	Dup	6/3/97	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 94;
F92A2		12/5/97	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 98;
F92A2		6/3/98	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 109;
F92A2		12/9/98	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 104;
F92A2		6/9/99	0.98	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.56	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F92A2		12/8/99	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<1.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F92A2		6/8/00	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F92A2	Dup	6/8/00	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F92A2		12/7/00	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F92A2		6/21/01	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F92A2		6/26/02	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F92A2		6/26/03	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F92A2		6/22/04	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F92A2		6/20/05	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F92A2		6/27/06	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F92A2		6/14/07	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F92A2		6/10/08	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F92A2		6/16/09	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F92A2		6/9/10	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F92A2		7/11/11	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F92A2		6/11/12	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F92A2		6/17/13	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F92A2		6/10/14	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F92A2		6/8/15	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F92A2		6/6/16	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F92A2		6/5/17	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F92A2		6/4/18	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F92A2		6/4/19	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F93A1U		12/20/90	0.50	0.30	0.40	0.30	-	-	0.20	1.0	0.50	0.30	0.30	1,1,2,2-TCA = 0.30; 1,1,2-TCA = 0.2; 1,2-DCPA = 0.2; 1,3-DCB = 0.5; 1,4-DCB = 0.5; 2-CVE = 0.40; Acetone = 30; BDCMe = 0.40; Benzene = 0.5; BRFM = 0.5; BRMA = 0.5; CHLBZ = 0.40; CHLEA (EC) = 0.5; CHLFM = 0.2; CHLMA = 0.5; cis-1,3-DCP = 0.30; CT = 0.30; DBCMe = 0.40; EDB = 1; Ethylbenzene = 0.5; MC = 5; m-Xylene = 0.5; o-Xylene = 0.5; TCFMe (Freon 11) = 0.5; Toluene = 0.5; trans-1,3-DCP = 0.30; Xylenes = 0.5;
F93A1U		4/16/91	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F93A1U	Dup	4/16/91	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F93A1U		7/30/91	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F93A1U		3/10/92	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F93A1U		6/11/93	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F93A1U		12/3/93	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F93A1U		6/9/94	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.8;
F93A1U		12/6/94	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F93A1U		6/2/95	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F93A1U		12/4/95	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F93A1U		6/4/96	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.56	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 103;
F93A1U		12/9/96	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F93A1U		12/2/97	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 84;
F94A2		12/20/90	0.50	0.30	0.40	0.30	-	-	0.20	1.0	0.50	0.30	0.30	1,1,2,2-TCA = 0.30; 1,1,2-TCA = 0.2; 1,2-DCPA = 0.2; 1,3-DCB = 0.5; 1,4-DCB = 0.5; 2-CVE = 0.40; Acetone = 30; BDCMe = 0.40; Benzene = 0.5; BRFM = 0.5; BRMA = 0.5; CHLBZ = 0.40; CHLEA (EC) = 0.5; CHLFM = 0.2; CHLMA = 0.5; cis-1,3-DCP = 0.30; CT = 0.30; DBCMe = 0.40; EDB = 1; Ethylbenzene = 0.5; MC = 5; m-Xylene = 0.5; o-Xylene = 0.5; TCFMe (Freon 11) = 0.5; Toluene = 0.5; trans-1,3-DCP = 0.30; Xylenes = 0.5;
F94A2		4/16/91	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F94A2		7/30/91	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F95A		2/6/91	0.80	0.30	0.40	0.30	-	-	0.20	1.0	0.50	0.30	0.30	1,1,2,2-TCA = 0.30; 1,1,2-TCA = 0.2; 1,2-DCPA = 0.2; 1,3-DCB = 0.5; 1,4-DCB = 0.5; 2-CVE = 0.40; Acetone = 30; BDCMe = 0.40; Benzene = 0.5; BRFM = 0.5; BRMA = 0.5; CHLBZ = 0.40; CHLEA (EC) = 0.5; CHLFM = 0.2; CHLMA = 0.5; cis-1,3-DCP = 0.30; CT = 0.30; DBCMe = 0.40; EDB = 1; Ethylbenzene = 0.5; MC = 5; m-Xylene = 0.5; o-Xylene = 0.5; TCFMe (Freon 11) = 0.5; Toluene = 0.5; trans-1,3-DCP = 0.30; Xylenes = 0.5;
F95A		4/12/91	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F95A		7/31/91	1.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F95A		10/14/91	1.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F95A		12/11/91	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F95A		3/6/92	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F95A		6/12/92	1.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F95A		10/12/92	1.7	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F95A		12/15/92	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F95A		6/14/93	0.6	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F95A		12/2/93	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F95A		6/9/94	1.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F95A		12/7/94	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F95A		6/5/95	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F95A		12/4/95	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F95A	Dup	12/4/95	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F95A		6/4/96	1.4	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 107;
F95A		12/9/96	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F95A		12/2/97	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 96;
F95A		12/8/99	1.9	0.53	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<1.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F95A		6/20/01	0.51	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F95A		6/24/03	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.85;
F95A		6/21/05	0.69	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F95A		6/20/07	0.53	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F95A		6/11/09	0.54	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F95A		6/16/11	0.63	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F95A		6/20/13	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F95A		6/9/15	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F95A		6/8/17	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F95A		6/6/19	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F96A2D		2/6/91	0.50	0.30	0.40	0.30	-	-	0.20	1.0	0.50	0.30	0.30	1,1,2,2-TCA = 0.30; 1,1,2-TCA = 0.2; 1,2-DCPA = 0.2; 1,3-DCB = 0.5; 1,4-DCB = 0.5; 2-CVE = 0.40; Acetone = 30; BDCMe = 0.40; Benzene = 0.5; BRFM = 0.5; BRMA = 0.5; CHLBZ = 0.40; CHLEA (EC) = 0.5; CHLFM = 0.2; CHLMA = 0.5; cis-1,3-DCP = 0.30; CT = 0.30; DBCMe = 0.40; EDB = 1; Ethylbenzene = 0.5; MC = 5; m-Xylene = 0.5; o-Xylene = 0.5; TCFMe (Freon 11) = 0.5; Toluene = 0.5; trans-1,3-DCP = 0.30; Xylenes = 0.5;
F96A2D		2/6/91	0.50	0.30	0.40	0.30	-	-	0.20	1.0	0.50	0.30	0.30	1,1,2,2-TCA = 0.30; 1,1,2-TCA = 0.2; 1,2-DCPA = 0.2; 1,3-DCB = 0.5; 1,4-DCB = 0.5; 2-CVE = 0.40; Acetone = 30; BDCMe = 0.40; Benzene = 0.5; BRFM = 0.5; BRMA = 0.5; CHLBZ = 0.40; CHLEA (EC) = 0.5; CHLFM = 0.2; CHLMA = 0.5; cis-1,3-DCP = 0.30; CT = 0.30; DBCMe = 0.40; EDB = 1; Ethylbenzene = 0.5; MC = 5; m-Xylene = 0.5; o-Xylene = 0.5; TCFMe (Freon 11) = 0.5; Toluene = 0.5; trans-1,3-DCP = 0.30; Xylenes = 0.5;
F96A2D		4/12/91	1.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	MC = 1;
F96A2D		7/30/91	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F96A2D		12/11/91	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F97A		12/18/90	5.0	9.7	22	12	-	-	3.7	10	10	3.0	3.0	1,1,2,2-TCA = 3; 1,1,2-TCA = 2; 1,2-DCPA = 2; 1,3-DCB = 10; 1,4-DCB = 10; 2-CVE = 4; Acetone = 30; BDCMe = 4; Benzene = 0.30; BRFM = 5; BRMA = 5; CHLBZ = 4; CHLEA (EC) = 5; CHLFM = 2.7; CHLMA = 5; cis-1,3-DCP = 3; CT = 3; DBCMe = 4; EDB = 10; Ethylbenzene = 0.30; MC = 50; m-Xylene = 0.30; o-Xylene = 0.30; TCFMe (Freon 11) = 5; Toluene = 0.30; trans-1,3-DCP = 3; Xylenes = 0.9;
F97A		12/18/90	0.50	19	40	19	-	-	0.20	1.0	1.0	0.30	0.30	1,1,2,2-TCA = 0.30; 1,1,2-TCA = 0.2; 1,2-DCPA = 0.2; 1,3-DCB = 1; 1,4-DCB = 1; 2-CVE = 0.40; BDCMe = 0.40; Benzene = 0.5; BRFM = 0.5; BRMA = 0.5; CHLBZ = 0.40; CHLEA (EC) = 0.5; CHLFM = 0.7; CHLMA = 0.5; cis-1,3-DCP = 0.30; CT = 0.30; DBCMe = 0.40; EDB = 1; Ethylbenzene = 0.5; MC = 5; m-Xylene = 0.5; o-Xylene = 0.5; TCFMe (Freon 11) = 0.5; Toluene = 0.5; trans-1,3-DCP = 0.30; Xylenes = 0.5;
F97A		4/22/91	ND (<0.50)	18	41	-	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 1;
F97A	Dup	4/22/91	ND (<0.50)	18	38	-	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 1;
F97A		7/26/91	ND (<0.50)	17	39	-	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.9;
F97A	Dup	7/26/91	ND (<0.50)	18	38	-	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.9;
F97A		10/3/91	ND (<0.50)	16	38	-	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.9;
F97A		12/16/91	ND (<5.0)	19	45	-	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F97A		3/12/92	ND (<0.50)	14	44	-	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.8;
F97A		6/15/92	ND (<0.50)	9.9	36	-	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.6;
F97A		10/12/92	ND (<0.50)	10	34	-	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F97A		12/7/92	ND (<5.0)	6.4	33	ND (<5.0)	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	

Appendix B
Selected Compounds from Historical Records
COE Study Area and Perimeter Area, Palo Alto, California

Location	Type	Date	TCE	1,1,1-TCA	1,1-DCA	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	PCE	Freon 113	1,2-DCB	1,2-DCA	VC	Other Constituents
F97A		3/8/93	1.5	6.1	38	-	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.5;
F97A		6/15/93	ND (<0.50)	4.8	28	-	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F97A		9/13/93	ND (<0.50)	5.7	34	-	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F97A		12/8/93	ND (<5.0)	ND (<5.0)	32	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F97A		3/7/94	ND (<0.50)	3.1	25	-	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F97A		6/13/94	ND (<0.50)	4.1	38	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F97A		9/2/94	ND (<0.50)	3.3	32	-	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F97A		12/13/94	ND (<5.0)	ND (<5.0)	21	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F97A		3/6/95	ND (<0.50)	2.2	26	-	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F97A		6/6/95	ND (<0.50)	1.7	22	-	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F97A		9/5/95	ND (<0.50)	3.0	26	-	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F97A		12/7/95	ND (<5.0)	ND (<5.0)	16	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F97A		3/5/96	ND (<0.50)	1.9	21	1.8	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F97A		6/7/96	ND (<0.50)	2.5	27	4.5	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 108;
F97A		9/11/96	ND (<0.50)	3.2	24	4.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 106;
F97A		12/11/96	ND (<5.0)	ND (<5.0)	24	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F97A		3/5/97	ND (<0.50)	2.8	27	4.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 119;
F97A		6/4/97	ND (<0.50)	3.3	26	4.7	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 101; CHLFM = 0.55;
F97A		9/10/97	ND (<0.50)	2.0	22	2.6	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 107;
F97A		12/9/97	ND (<0.50)	0.70	10	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 95;
F97A		6/4/98	ND (<0.50)	0.88	8.3	1.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 106;
F97A		12/10/98	ND (<0.50)	3.1	23	4.0	4.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 108;
F97A		6/10/99	ND (<1.00)	8.5	29	9.0	19	ND (<1.00)	ND (<1.00)	ND (<1.00)	ND (<1.00)	ND (<1.00)	ND (<1.00)	
F97A		12/13/99	ND (<2.5)	41	56	35	84	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
F97A		6/6/00	ND (<2.5)	46	50	31	100	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
F97A		12/7/00	ND (<1.0)	68	52	40	120	ND (<1.0)	ND (<1.0)	ND (<4.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	CHLFM = 2.8;
F97A	Dup	12/7/00	ND (<1.0)	67	52	39	120	ND (<1.0)	ND (<1.0)	ND (<4.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	
F97A		6/20/01	1.2	46	35	22	90	1.7	ND (<1.0)	ND (<4.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	
F97A		6/26/02	2.2	48	22	34	110	-	ND (<1.0)	1.0	ND (<1.0)	-	-	
F97A		6/25/03	1.9	80	29	39	96	2.1	ND (<1.0)	2.1	ND (<1.0)	ND (<1.0)	ND (<1.0)	
F97A		6/21/05	15	120	21	35	120	2.1	ND (<1.0)	40	ND (<1.0)	ND (<1.0)	ND (<1.0)	CHLFM = 1.1;
F97A		7/5/07	17	62	13	34	82	1.4	ND (<1.0)	45	ND (<1.0)	ND (<1.0)	ND (<1.0)	
F97A		6/11/09	35	52	11	28	65	0.96	ND (<0.50)	72	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F97A		6/9/10	40	44	10	23	57	0.75	ND (<0.50)	66	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F97A		6/15/11	97	37	13	26	59	0.90	ND (<0.50)	88	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F97A		6/13/12	200	35	16	21	62	0.65	ND (<0.50)	79	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F97A		6/19/13	360	23	16	18	53	0.63	ND (<0.50)	60	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F97A		6/11/14	310	25	18	22	56	0.72	ND (<0.50)	64	ND (<0.50)	ND (<0.50)	1.8	
F97A		6/9/15	170	20	14	21	48	ND (<2.5)	ND (<2.5)	44	ND (<2.5)	ND (<2.5)	ND (<2.5)	
F97A		6/7/16	170	15	17	19	50	ND (<2.5)	ND (<2.5)	38	ND (<2.5)	ND (<2.5)	ND (<2.5)	
F97A		6/7/17	480	13	15	20	77	ND (<2.5)	ND (<2.5)	62	ND (<2.5)	ND (<2.5)	7.1	
F97A	Dup	6/7/17	460	12	15	18	74	ND (<2.5)	ND (<2.5)	55	ND (<2.5)	ND (<2.5)	6.4	
F97A		6/6/18	440	13	18	22	120	0.89	ND (<0.50)	58	ND (<0.50)	ND (<0.50)	4.0	
F97A		6/6/19	420	9.7	18	21	110	ND (<5.0)	ND (<5.0)	45	ND (<5.0)	ND (<5.0)	6.3	
F97A		6/3/20	130	10	16	21	130	1.0	ND (<0.50)	35	ND (<0.50)	ND (<0.50)	4.2	
F98A		11/26/90	43	73	27	49	-	-	2.0	10	0.50	3.0	3.0	1,1,2,2-TCA = 3; 1,1,2-TCA = 2; 1,2-DCPA = 2; 1,3-DCB = 0.5; 1,4-DCB = 0.5; 2-CVE = 4; Acetone = 30; BDCMe = 4; Benzene = 0.5; BRFM = 5; BRMA = 5; CHLBZ = 0.5; CHLEA (EC) = 5; CHLFM = 3.4; CHLMA = 5; cis-1,3-DCP = 3; CT = 3; DBCMe = 4; EDB = 10; Ethylbenzene = 0.5; MC = 50; m-Xylene = 0.5; o-Xylene = 0.5; TCFMe (Freon 11) = 5; Toluene = 0.5; trans-1,3-DCP = 3; Xylenes = 0.5;
F98A		12/7/90	28	61	22	30	-	-	2.0	10	0.50	3.0	3.0	1,1,2,2-TCA = 3; 1,1,2-TCA = 2; 1,2-DCPA = 2; 1,3-DCB = 0.5; 1,4-DCB = 0.5; 2-CVE = 4; Acetone = 30; BDCMe = 4; Benzene = 0.5; BRFM = 5; BRMA = 5; CHLBZ = 0.5; CHLEA (EC) = 5; CHLFM = 3.1; CHLMA = 5; cis-1,3-DCP = 3; CT = 3; DBCMe = 4; EDB = 10; Ethylbenzene = 0.5; MC = 50; m-Xylene = 0.5; o-Xylene = 0.5; TCFMe (Freon 11) = 5; Toluene = 0.5; trans-1,3-DCP = 3; Xylenes = 0.5;
F98A		4/17/91	50	57	33	ND (<1.0)	1.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.50	ND (<0.50)	CHLFM = 2.2;
F98A		7/25/91	51	60	28	-	1.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 1.2;
F98A		10/3/91	58	59	30	-	1.5	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 1.5;
F98A		12/5/91	54	78	34	-	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F98A		3/9/92	40	44	32	-	1.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 1.1;
F98A		6/15/92	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F98A		10/13/92	55	66	33	ND (<2.5)	1.7	ND (<0.50)	ND (<0.50)	1.9	ND (<0.50)	0.60	ND (<0.50)	CHLFM = 1.8;
F98A		12/14/92	56	66	32	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F98A		3/12/93	33	39	27	-	0.70	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 1;
F98A		6/10/93	35	42	29	-	0.70	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.9;
F98A		9/14/93	28	53	31	-	0.80	ND (<0.50)	ND (<0.50)	0.98	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 1.3;
F98A		12/7/93	11	8.4	11	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F98A		3/10/94	26	38	26	-	0.81	ND (<0.50)	ND (<0.50)	0.66	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 1.2;
F98A		6/13/94	28	57	34	-	0.86	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 1.1;
F98A		9/2/94	27	40	35	-	1.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.71	ND (<0.50)	CHLFM = 1.3;
F98A	Dup	9/2/94	27	40	33	-	0.92	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 1.3;
F98A		12/13/94	28	34	28	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F98A		3/6/95	28	49	31	-	1.0	ND (<0.50)	ND (<0.50)	0.84	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 1.2;
F98A		6/8/95	13	7.6	12	-	0.54	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.65;
F98A		9/6/95	42	49	37	-	1.7	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.96	ND (<0.50)	1,1,2,2-TCA = 0.78; CHLFM = 1.6;
F98A		12/7/95	40	46	35	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F98A		3/5/96	52	50	37	36	2.0	ND (<0.50)	ND (<0.50)	1.4	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 1.8;
F98A		6/10/96	76	57	44	40	2.7	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	CBMA = 114;
F98A		9/11/96	86	56	73	50	48	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	2.9	ND (<2.5)	CBMA = 107; CHLFM = 3.8; MC = 3.5;
F98A		12/11/96	83	56	97	45	160	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F98A		3/5/97	80	80	86	66	220	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	2.9	ND (<2.5)	CBMA = 109; CHLFM = 5.5;
F98A		6/4/97	28	37	27	17	110	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	2.6	ND (<1.0)	CBMA = 114; CHLFM = 3.3;
F98A		9/11/97	24	40	20	8.3	170	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	4.7	ND (<2.5)	CBMA = 108; CHLFM = 6.6;
F98A		12/5/97	25	27	16	15	150	ND (<1.2)	ND (<1.2)	ND (<1.2)	ND (<1.2)	1.5	ND (<1.2)	CBMA = 99; CHLFM = 2.6;
F98A		6/5/98	18	51	24	26	150	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	CBMA = 115;
F98A		12/11/98	42	194	28	52	289	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	CBMA = 100;
F98A		6/10/99	65	448	ND (<50)	70	271	ND (<50)	ND (<50)	80	ND (<50)	ND (<50)	ND (<50)	
F98A	Dup	6/10/99	67	459	20	79	275	ND (<12.5)	ND (<12.5)	87	ND (<12.5)	ND (<12.5)	ND (<12.5)	
F98A		12/13/99	84	487	21	89	315	ND (<10)	ND (<10)	115	ND (<10)	ND (<10)	ND (<10)	
F98A		6/8/00	140	330	10	60	200	ND (<5.0)	ND (<5.0)	180	ND (<5.0)	ND (<5.0)	ND (<5.0)	
F98A		12/7/00	70	270	10	45	170	ND (<10)	ND (<10)	160	ND (<10)	ND (<10)	ND (<10)	
F98A		6/20/01	55	170	ND (<10)	29	110	ND (<10)	ND (<10)	260	ND (<10)	ND (<10)	ND (<10)	
F98A		6/25/03	58	88	11	19	53	ND (<1.0)	ND (<1.0)	94	ND (<1.0)	ND (<1.0)	ND (<1.0)	
F98A		6/21/05	75	44	9.9	20	53	0.66	ND (<0.50)	73	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F98A		7/5/07	330	22	5.4	13	38	ND (<2.5)	ND (<2.5)	71	ND (<2.5)	ND (<2.5)	ND (<2.5)	
F98A		6/11/09	870	14	ND (<10)	13	38	ND (<10)	ND (<10)	41	ND (<10)	ND (<10)	ND (<10)	
F98A		6/9/10	1,000	14	12	12	39	ND (<10)	ND (<10)	33	ND (<10)	ND (<10)	ND (<10)	
F98A		6/15/11	1,200	12	15	13	39	ND (<5.0)	ND (<5.0)	33	ND (<5.0)	ND (<5.0)	ND (<5.0)	
F98A		6/13/12	1,200	8.3	16	10	38	ND (<5.0)	ND (<5.0)	20	ND (<5.0)	ND (<5.0)	ND (<5.0)	
F98A		6/18/13	990	6.2	15	9.3	36	ND (<5.0)	ND (<5.0)	12	ND (<5.0)	ND (<5.0)	ND (<5.0)	
F98A		6/11/14	800	5.5	14	8.6	250	ND (<5.0)	ND (<5.0)	13	ND (<5.0)	ND (<5.0)	21	
F98A		6/9/15	910	5.2	12	9.1	180	ND (<5.0)	ND (<5.0)	10	ND (<5.0)	ND (<5.0)	16	
F98A		6/7/16	970	5.6	14	9.3	150	ND (<5.0)	ND (<5.0)	12	ND (<5.0)	ND (<5.0)	10	
F98A		6/7/17	790	ND (<5.0)	11	8.1	83	ND (<5.0)	ND (<5.0)	9.4	ND (<5.0)	ND (<5.0)	6.1	
F98A		6/5/18	680	ND (<5.0)	14	7.7	94	ND (<5.0)	ND (<5.0)	7.3	ND (<5.0)	ND (<5.0)	13	
F98A		6/6/19	410	ND (<10)	13	ND (<10)	110	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	16	
F98A		6/3/20	440	3.3	12	8.6	120	0.99	ND (<0.50)	6.1	ND (<0.50)	ND (<0.50)	12	
F101B		11/21/90	-	-	-	-	-	-	-	-	0.50	-	-	1,3-DCB = 0.5; 1,4-DCB = 0.5; Benzene = 0.5; CHLBZ = 0.5; Ethylbenzene = 0.5; m-Xylene = 0.5; o-Xylene = 0.5; Toluene = 0.5; Xylenes = 0.5;
F101B		12/17/90	0.50	0.40	0.40	0.30	-	-	0.20	1.0	1.0	0.30	0.30	1,1,2,2-TCA = 0.30; 1,1,2-TCA = 0.2; 1,2-DCPA = 0.2; 1,3-DCB = 1; 1,4-DCB = 1; 2-CVE = 0.40; Acetone = 30; BDCMe = 0.40; Benzene = 0.5; BRFM = 0.5; BRMA = 0.5; CHLBZ = 0.40; CHLEA (EC) = 0.5; CHLFM = 0.9; CHLMA = 0.5; cis-1,3-DCP = 0.30; CT = 0.30; DBCMe = 0.40; EDB = 1; Ethylbenzene = 0.5; MC = 5; m-Xylene = 0.30; o-Xylene = 0.30; TCFMe (Freon 11) = 0.5; Toluene = 0.5; trans-1,3-DCP = 0.30; Xylenes = 0.9;
F101B		2/6/91	0.50	0.30	0.40	0.30	-	-	0.20	1.0	1.0	0.30	0.30	1,1,2,2-TCA = 0.30; 1,1,2-TCA = 0.2; 1,2-DCPA = 0.2; 1,3-DCB = 1; 1,4-DCB = 1; 2-CVE = 0.40; BDCMe = 0.40; BRFM = 0.5; BRMA = 0.5; CHLBZ = 0.40; CHLEA (EC) = 0.5; CHLFM = 0.9; CHLMA = 0.5; cis-1,3-DCP = 0.30; CT = 0.30; DBCMe = 0.40; EDB = 1; MC = 5; TCFMe (Freon 11) = 0.5; trans-1,3-DCP = 0.30;
F101B		2/6/91	0.80	ND (<0.30)	ND (<0.40)	ND (<0.30)	-	-	ND (<0.30)	ND (<1.0)	ND (<1.0)	ND (<0.30)	ND (<0.30)	CHLFM = 1.3;
F101B		4/22/91	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F101B	Dup	4/22/91	0.50	0.30	0.40	0.30	-	-	0.20	1.0	1.0	0.30	0.30	1,1,2,2-TCA = 0.30; 1,1,2-TCA = 0.2; 1,2-DCPA = 0.2; 1,3-DCB = 1; 1,4-DCB = 1; 2-CVE = 0.40; Acetone = 30; BDCMe = 0.40; Benzene = 0.5; BRFM = 0.5; BRMA = 0.5; CHLBZ = 0.40; CHLEA (EC) = 0.5; CHLFM = 0.2; CHLMA = 0.5; cis-1,3-DCP = 0.30; CT = 0.30; DBCMe = 0.40; EDB = 1; Ethylbenzene = 0.5; MC = 5; m-Xylene = 0.5; o-Xylene = 0.5; TCFMe (Freon 11) = 0.5; Toluene = 0.5; trans-1,3-DCP = 0.30; Xylenes = 0.5;
F101B		7/23/91	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F101B		10/8/91	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F101B		12/5/91	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F101B		3/12/92	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F101B		6/12/92	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F101B		9/22/92	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F101B		12/9/92	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F101B		6/14/93	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F101B		12/3/93	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F101B		6/6/94	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F101B		12/7/94	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F101B		12/5/95	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F101B		12/10/96	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F101B		12/2/97	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 99;
F101B		12/8/99	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<1.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F102B		11/27/90	0.50	0.30	0.40	0.30	-	-	0.20	1.0	1.0	0.30	0.30	1,1,2,2-TCA = 0.30; 1,1,2-TCA = 0.2; 1,2-DCPA = 0.2; 1,3-DCB = 1; 1,4-DCB = 1; 2-CVE = 0.40; BDCMe = 0.40; Benzene = 0.5; BRFM = 0.5; BRMA = 0.5; CHLBZ = 0.40; CHLEA (EC) = 0.5; CHLFM = 0.2; CHLMA = 0.5; cis-1,3-DCP = 0.30; CT = 0.30; DBCMe = 0.40; EDB = 1; Ethylbenzene = 0.5; MC = 5; m-Xylene = 0.5; o-Xylene = 0.5; TCFMe (Freon 11) = 0.5; Toluene = 0.5; trans-1,3-DCP = 0.30; Xylenes = 0.5;
F102B		12/12/90	-	-	-	-	-	-	-	-	0.50	-	-	1,3-DCB = 0.5; 1,4-DCB = 0.5; Acetone = 30; Benzene = 0.5; CHLBZ = 0.5; Ethylbenzene = 0.5; m-Xylene = 0.5; o-Xylene = 0.5; Toluene = 0.5; Xylenes = 0.5;

Appendix B
Selected Compounds from Historical Records
COE Study Area and Perimeter Area, Palo Alto, California

Location	Type	Date	TCE	1,1,1-TCA	1,1-DCA	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	PCE	Freon 113	1,2-DCB	1,2-DCA	VC	Other Constituents
F102B		2/8/91	0.50	0.30	0.40	0.30	-	-	0.20	1.0	1.0	0.30	0.30	1,1,2,2-TCA = 0.30; 1,1,2-TCA = 0.2; 1,2-DCPA = 0.2; 1,3-DCB = 1; 1,4-DCB = 1; 2-CVE = 0.40; BDCMe = 0.40; BRFM = 0.5; BRMA = 0.5; CHLBZ = 0.40; CHLEA (EC) = 0.5; CHLFM = 0.2; CHLMA = 0.5; cis-1,3-DCP = 0.30; CT = 0.30; DBCMe = 0.40; EDB = 1; MC = 5; TCFMe (Freon 11) = 0.5; trans-1,3-DCP = 0.30;
F102B		4/10/91	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F102B	Dup	4/10/91	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F102B		7/29/91	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F102B		10/10/91	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F102B		12/12/91	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	-	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F102B		3/10/92	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F102B		6/12/92	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F102B		9/17/92	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F102B		12/9/92	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F102B		6/10/93	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F102B		12/3/93	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F102B	Dup	12/3/93	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F102B		6/9/94	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F102B		12/7/94	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F102B		6/2/95	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F102B		12/4/95	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F102B		6/5/96	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 109;
F102B		12/9/96	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F103B		11/27/90	0.50	0.30	0.40	0.30	-	-	0.20	1.0	0.50	0.30	0.30	1,1,2,2-TCA = 0.30; 1,1,2-TCA = 0.2; 1,2-DCPA = 0.2; 1,3-DCB = 0.5; 1,4-DCB = 0.5; 2-CVE = 0.40; BDCMe = 0.40; Benzene = 0.5; BRFM = 0.5; BRMA = 0.5; CHLBZ = 0.40; CHLEA (EC) = 0.5; CHLFM = 0.40; CHLMA = 0.5; cis-1,3-DCP = 0.30; CT = 0.30; DBCMe = 0.40; EDB = 1; Ethylbenzene = 0.5; MC = 5; m-Xylene = 0.5; o-Xylene = 0.5; TCFMe (Freon 11) = 0.5; Toluene = 0.5; trans-1,3-DCP = 0.30; Xylenes = 0.5;
F103B		12/20/90	93	2.4	1.2	1.8	-	-	0.20	1.0	1.0	0.30	0.30	1,1,2,2-TCA = 0.30; 1,1,2-TCA = 0.2; 1,2-DCPA = 0.2; 1,3-DCB = 1; 1,4-DCB = 1; 2-CVE = 0.40; Acetone = 30; BDCMe = 0.40; Benzene = 0.5; BRFM = 0.5; BRMA = 0.5; CHLBZ = 0.40; CHLEA (EC) = 0.5; CHLFM = 0.5; CHLMA = 0.5; cis-1,3-DCP = 0.30; CT = 0.30; DBCMe = 0.40; EDB = 1; Ethylbenzene = 0.5; MC = 5; m-Xylene = 0.5; o-Xylene = 0.5; TCFMe (Freon 11) = 0.5; Toluene = 0.5; trans-1,3-DCP = 0.30; Xylenes = 0.5;
F103B		1/14/91	0.50	0.30	0.40	0.30	-	-	0.20	1.0	1.0	0.30	0.30	1,1,2,2-TCA = 0.30; 1,1,2-TCA = 0.2; 1,2-DCPA = 0.2; 1,3-DCB = 1; 1,4-DCB = 1; 2-CVE = 0.40; BDCMe = 0.40; Benzene = 0.5; BRFM = 0.5; BRMA = 0.5; CHLBZ = 0.40; CHLEA (EC) = 0.5; CHLFM = 0.40; CHLMA = 0.5; cis-1,3-DCP = 0.30; CT = 0.30; DBCMe = 0.40; EDB = 1; Ethylbenzene = 0.5; MC = 5; m-Xylene = 0.5; o-Xylene = 0.5; TCFMe (Freon 11) = 0.5; Toluene = 0.5; trans-1,3-DCP = 0.30; Xylenes = 0.5;
F103B		2/15/91	0.50	0.30	0.40	0.30	-	-	0.20	1.0	1.0	0.30	0.30	1,1,2,2-TCA = 0.30; 1,1,2-TCA = 0.2; 1,2-DCPA = 0.2; 1,3-DCB = 1; 1,4-DCB = 1; 2-CVE = 0.40; BDCMe = 0.40; BRFM = 0.5; BRMA = 0.5; CHLBZ = 0.40; CHLEA (EC) = 0.5; CHLFM = 0.5; CHLMA = 0.5; cis-1,3-DCP = 0.30; CT = 0.30; DBCMe = 0.40; EDB = 1; MC = 5; TCFMe (Freon 11) = 0.5; trans-1,3-DCP = 0.30;
F103B		4/10/91	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F103B		7/29/91	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F103B		10/9/91	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F103B		12/11/91	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F103B		3/4/92	-	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F103B		9/22/92	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F103B		12/10/92	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F103B		3/11/93	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F103B		6/10/93	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F103B		9/10/93	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F103B		12/9/93	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F103B		3/9/94	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F103B		6/7/94	0.51	1.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F103B		12/12/94	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F103B		6/5/95	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F103B		12/4/95	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F103B	Dup	12/4/95	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F103B		6/5/96	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 101;
F103B		12/9/96	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F103B		12/8/97	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 98;
F103B		12/10/98	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 108;
F103B		12/15/99	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<1.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F103B		12/5/00	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F106A1		9/22/92	150	4,600	260	ND (<100)	2,900	ND (<100)	ND (<100)	570	ND (<100)	ND (<100)	ND (<100)	
F106A1		10/13/92	360	9,200	620	ND (<120)	6,600	ND (<120)	ND (<120)	1,800	ND (<120)	ND (<120)	ND (<120)	Acetone = 10,000; MC = 55;
F106A1		12/16/92	770	11,000	1,100	80	-	80	ND (<5.0)	1,500	-	ND (<5.0)	ND (<10)	1,1,2-TCA = 5.1; MC = 110;
F106A1		6/8/93	450	1,500	210	ND (<50)	1,700	ND (<50)	ND (<50)	330	ND (<50)	ND (<50)	ND (<50)	TCFMe (Freon 11) = 14;
F106A1		12/13/93	730	4,400	230	-	2,800	ND (<25)	ND (<25)	860	-	ND (<25)	ND (<50)	
F106A1		6/3/94	930	3,100	54	ND (<10)	1,100	ND (<10)	ND (<10)	1,500	ND (<10)	ND (<10)	ND (<10)	
F106A1		12/12/94	300	510	22	-	280	ND (<5.0)	ND (<5.0)	420	-	ND (<5.0)	ND (<10)	
F106A1		6/9/95	53	56	11	-	57	ND (<0.50)	1.0	11	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 1.8; TCFMe (Freon 11) = 0.75;
F106A1		12/8/95	53	70	15	-	51	ND (<5.0)	ND (<5.0)	48	-	ND (<5.0)	ND (<10)	
F106A1		6/7/96	36	50	14	34	31	ND (<1.0)	2.1	28	ND (<1.0)	ND (<1.0)	ND (<1.0)	CBMA = 109; CHLFM = 4.5; MC = 1.4; TCFMe (Freon 11) = 7; TFT = 109;
F106A1		12/13/96	18	27	6.6	13	21	ND (<5.0)	ND (<5.0)	15	-	ND (<5.0)	ND (<10)	
F106A1	Dup	12/13/96	18	29	7.1	14	23	ND (<5.0)	ND (<5.0)	16	-	ND (<5.0)	ND (<10)	
F106A1		6/5/97	14	22	6.1	11	11	ND (<1.0)	1.4	10	ND (<1.0)	ND (<1.0)	ND (<1.0)	CBMA = 93; CHLFM = 1.4; TCFMe (Freon 11) = 2.5;
F106A1		12/10/97	3.2	4.5	2.2	1.9	4.9	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	CBMA = 103; MC = 2.8;
F106A1		6/5/98	5.5	11	4.0	13	6.6	ND (<0.50)	ND (<0.50)	3.7	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 105; CHLFM = 1.4; TCFMe (Freon 11) = 0.53;
F106A1		12/8/98	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 112;
F106A1		6/8/99	6.7	7.7	3.0	13	6.1	ND (<0.50)	ND (<0.50)	1.4	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F106A1		12/14/99	7.5	6.5	3.8	13	8.8	ND (<0.50)	ND (<0.50)	1.7	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F106A1		6/6/00	6.2	6.6	3.7	15	5.4	ND (<0.50)	ND (<0.50)	1.7	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F106A1		12/6/00	10	6.1	3.3	24	7.0	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F106A1		6/20/01	14	6.4	2.8	30	7.0	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F106A1		6/24/03	11	4.0	3.0	35	8.2	ND (<0.50)	2.3	1.3	ND (<0.50)	ND (<0.50)	0.73	
F106A1		6/22/05	15	3.0	10	16	3.4	ND (<0.50)	14	2.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F106A1		6/20/07	11	2.0	11	10	2.7	ND (<0.50)	11	1.6	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F106A1		6/10/09	17	2.9	3.6	16	5.0	ND (<0.50)	15	0.83	ND (<0.50)	ND (<0.50)	1.3	
F106A1		6/14/11	23	1.6	3.2	21	5.9	ND (<0.50)	18	1.4	ND (<0.50)	ND (<0.50)	0.85	
F106A1		6/19/13	23	1.3	4.0	31	10	ND (<0.50)	20	0.82	ND (<0.50)	ND (<0.50)	1.0	
F106A1		6/8/15	33	1.4	5.3	48	10	ND (<0.50)	26	1.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F106A1		6/7/17	68	1.3	4.9	65	7.8	ND (<0.50)	57	1.8	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F106A1		6/4/19	37	1.4	1.6	12	3.1	ND (<0.50)	77	0.99	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F107A2		9/23/92	ND (<50)	2,500	180	ND (<50)	2,200	ND (<50)	ND (<50)	56	ND (<50)	ND (<50)	ND (<50)	Benzene = 92; MC = 10;
F107A2		10/13/92	28	2,600	380	ND (<25)	2,400	ND (<5.0)	ND (<5.0)	210	ND (<5.0)	6.0	ND (<5.0)	Acetone = 2,900; MC = 38; TCFMe (Freon 11) = 26;
F107A2		12/16/92	29	3,000	470	11	-	11	ND (<5.0)	140	-	10	ND (<10)	MC = 22;
F107A2		6/8/93	11	750	170	ND (<25)	1,400	ND (<5.0)	ND (<5.0)	76	ND (<5.0)	ND (<5.0)	ND (<5.0)	MC = 30;
F107A2		12/13/93	19	630	160	-	1,300	ND (<10)	ND (<10)	97	-	ND (<10)	ND (<20)	MC = 28;
F107A2	Dup	12/13/93	19	540	150	-	1,200	ND (<10)	ND (<10)	100	-	ND (<10)	ND (<20)	MC = 26;
F107A2		6/3/94	24	580	120	-	920	ND (<5.0)	ND (<5.0)	100	ND (<5.0)	ND (<5.0)	ND (<5.0)	MC = 12;
F107A2		12/12/94	230	1,000	ND (<50)	-	490	ND (<50)	ND (<50)	490	-	ND (<50)	ND (<100)	
F107A2		6/9/95	64	300	33	-	250	ND (<2.5)	ND (<2.5)	67	ND (<2.5)	ND (<2.5)	ND (<2.5)	CHLFM = 3.7; TCFMe (Freon 11) = 6.3;
F107A2		12/8/95	32	170	28	-	170	ND (<5.0)	ND (<5.0)	32	-	ND (<5.0)	ND (<10)	
F107A2		6/7/96	22	88	27	28	120	ND (<1.0)	ND (<1.0)	13	ND (<1.0)	2.0	ND (<1.0)	1,2-DCPA = 1.0; CBMA = 108; CHLFM = 9.6; MC = 1.6; TCFMe (Freon 11) = 4.8; TFT = 117;
F107A2		12/13/96	14	59	21	16	110	ND (<5.0)	ND (<5.0)	5.0	-	ND (<5.0)	ND (<10)	
F107A2		6/9/97	2.5	4.7	2.7	ND (<1.2)	13	ND (<1.2)	ND (<1.2)	ND (<1.2)	ND (<1.2)	ND (<1.2)	ND (<1.2)	CBMA = 108; MC = 6.7;
F107A2	Dup	6/9/97	1.3	4.4	2.2	ND (<1.2)	12	ND (<1.2)	ND (<1.2)	ND (<1.2)	ND (<1.2)	ND (<1.2)	ND (<1.2)	CBMA = 104;
F107A2		12/10/97	3.4	16	8.5	7.7	18	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 108; CHLFM = 0.65; TCFMe (Freon 11) = 1.9;
F107A2		6/5/98	0.68	0.82	ND (<0.50)	0.77	7.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 114;
F107A2		12/8/98	1.4	11	ND (<0.50)	4.9	9.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	4.6	ND (<0.50)	CBMA = 108; TCFMe (Freon 11) = 0.918;
F107A2		6/8/99	2.5	8.2	4.3	3.5	7.6	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F107A2		12/14/99	1.6	24	10	14	4.7	ND (<0.50)	ND (<0.50)	0.82	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.786; TCFMe (Freon 11) = 2.54;
F107A2		6/7/00	1.0	17	7.3	5.6	6.1	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.92; TCFMe (Freon 11) = 0.64;
F107A2		12/6/00	ND (<0.50)	ND (<0.50)	8.6	9.8	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	TCFMe (Freon 11) = 2.0;
F107A2		6/20/01	1.1	13	5.9	4.7	6.7	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	TCFMe (Freon 11) = 0.55;
F107A2		6/25/03	0.92	3.1	3.3	3.2	12	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F107A2		6/22/05	0.64	14	6.6	23	3.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.53; TCFMe (Freon 11) = 1.3;
F107A2		6/20/07	ND (<0.50)	8.4	8.7	11	2.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F107A2		6/10/09	0.53	10	8.9	11	2.6	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F107A2		6/14/11	1.1	6.3	7.6	11	2.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F107A2		6/19/13	ND (<0.50)	4.0	6.6	7.8	2.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F107A2	Dup	6/19/13	0.59	5.5	7.5	9.8	2.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F107A2		6/8/15	ND (<0.50)	4.1	5.8	8.5	1.9	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F107A2		6/7/17	0.75	4.1	5.9	17	2.6	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F107A2		6/4/19	2.3	2.6	4.2	24	2.8	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F123A1		1/9/91	31	57	6.7	11	-	-	2.0	20	0.50	3.0	3.0	1,1,2,2-TCA = 3; 1,1,2-TCA = 2; 1,2-DCPA = 2; 1,3-DCB = 0.5; 1,4-DCB = 0.5; 2-CVE = 4; BDCMe = 4; Benzene = 0.5; BRFM = 5; BRMA = 5; CHLBZ = 0.5; CHLEA (EC) = 5; CHLFM = 5; CHLMA = 5; cis-1,3-DCP = 3; CT = 3; DBCMe = 4; EDB = 10; Ethylbenzene = 0.5; MC = 50; m-Xylene = 0.5; o-Xylene = 0.5; TCFMe (Freon 11) = 5; Toluene = 0.5; trans-1,3-DCP = 3; Xylenes = 0.5;
F123A1		2/6/91	24	52	6.0	15	-	-	0.50	31	1.0	0.50	0.30	1,1,2,2-TCA = 0.30; 1,1,2-TCA = 0.2; 1,2-DCPA = 0.2; 1,3-DCB = 1; 1,4-DCB = 1; 2-CVE = 0.40; Acetone = 30; BDCMe = 0.40; Benzene = 0.5; BRFM = 0.5; BRMA = 0.5; CHLBZ = 0.40; CHLEA (EC) = 0.5; CHLFM = 6.9; CHLMA = 0.5; cis-1,3-DCP = 0.30; CT = 0.30; DBCMe = 4; EDB = 1; Ethylbenzene = 0.5; MC = 5; m-Xylene = 0.5; o-Xylene = 0.5; TCFMe (Freon 11) = 0.5; Toluene = 0.5; trans-1,3-DCP = 0.30; Xylenes = 0.5;
F123A1		7/26/91	34	20	6.5	-	15	ND (<0.50)	1.5	18	ND (<0.50)	0.90	ND (<0.50)	CHLFM = 14; TCFMe (Freon 11) = 2.3;
F123A1		10/7/91	31	21	5.6	-	16	ND (<0.50)	1.3	9.8	ND (<0.50)	0.70	ND (<0.50)	CHLFM = 11; TCFMe (Freon 11) = 2.1;
F123A1		12/9/91	49	18	7.8	-	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F123A1		9/10/92	23	14	4.9	-	13	ND (<0.50)	0.90	5.8	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 2.5; TCFMe (Freon 11) = 1.5;
F123A1		12/16/92	36	26	ND (<5.0)	-	-	ND (<5.0)	ND (<5.0)	12	-	ND (<5.0)	ND (<10)	
F123A1		3/12/93	19	15	4.4	-	10	ND (<0.50)	0.70	5.7	ND (<0.50)	0.60	ND (<0.50)	CHLEA (EC) = 1.3; CHLFM = 4.4;
F123A1		6/8/93	13	11	2.2	-	6.9	ND (<0.50)	ND (<0.50)	3.7	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 14; TCFMe (Freon 11) = 1.3;
F123A1		9/14/93	12	7.7	2.5	-	5.4	ND (<0.50)	0.52	3.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLEA (EC) = 2.4; CHLFM = 17; TCFMe (Freon 11) = 1.6;
F123A1		12/9/93	13	6.1	ND (<5.0)	-	6.2	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	CHLFM = 14;
F123A1		3/7/94	16	6.5	2.3	-	6.9	ND (<0.50)	ND (<0.50)	2.5	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLEA (EC) = 2; CHLFM = 21; TCFMe (Freon 11) = 1.3;
F123A1	Dup	3/7/94	17	7.0	2.3	-	7.0	ND (<0.50)	ND (<0.50)	2.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLEA (EC) = 2; CHLFM = 22; TCFMe (Freon 11) = 1.2;
F123A1		6/6/94	17	8.7	2.1	-	6.6	ND (<0.50)	0.59	3.8	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLEA (EC) = 1.5; CHLFM = 31; TCFMe (Freon 11) = 2.4;

Appendix B
Selected Compounds from Historical Records
COE Study Area and Perimeter Area, Palo Alto, California

Location	Type	Date	TCE	1,1,1-TCA	1,1-DCA	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	PCE	Freon 113	1,2-DCB	1,2-DCA	VC	Other Constituents
F123A1		9/6/94	15	8.3	1.2	-	7.6	ND (<0.50)	ND (<0.50)	4.4	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 24; TCFMe (Freon 11) = 1.3;
F123A1		12/9/94	11	ND (<5.0)	ND (<5.0)	-	5.0	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	CHLFM = 18;
F123A1		3/3/95	15	5.5	0.91	-	5.3	ND (<0.50)	ND (<0.50)	3.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 30; TCFMe (Freon 11) = 1.1;
F123A1		6/8/95	12	4.0	1.2	-	4.4	ND (<0.50)	ND (<0.50)	0.84	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLEA (EC) = 0.56; CHLFM = 20; TCFMe (Freon 11) = 0.51;
F123A1		9/6/95	17	6.2	1.4	-	6.6	ND (<0.50)	ND (<0.50)	2.6	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 22; TCFMe (Freon 11) = 0.53;
F123A1		12/7/95	22	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	CHLFM = 25;
F123A1		3/6/96	17	4.5	1.1	5.3	4.3	ND (<0.50)	0.58	0.61	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 22;
F123A1	Dup	3/6/96	17	4.4	1.1	5.1	4.2	ND (<0.50)	1.0	0.58	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 22;
F123A1		6/10/96	22	4.4	1.3	5.6	5.0	ND (<0.50)	0.54	1.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 120; CHLFM = 13;
F123A1		9/11/96	21	4.7	1.7	6.8	5.7	ND (<0.50)	0.61	1.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 107; CHLFM = 13; TCFMe (Freon 11) = 0.81;
F123A1		12/12/96	15	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	CHLFM = 13;
F123A1		3/5/97	14	2.7	0.92	3.2	3.5	ND (<0.50)	ND (<0.50)	1.4	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 96; CHLFM = 7.8; TCFMe (Freon 11) = 0.61;
F123A1		6/4/97	19	3.7	1.6	4.4	4.2	ND (<0.50)	ND (<0.50)	1.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 104; CHLFM = 5.7;
F123A1		9/10/97	18	3.2	1.6	4.2	4.0	ND (<0.50)	ND (<0.50)	1.6	ND (<0.50)	0.56	ND (<0.50)	CBMA = 104; CHLFM = 4.7;
F123A1		12/8/97	22	2.4	1.8	3.0	4.5	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	1.4	ND (<0.50)	CBMA = 94; CHLFM = 0.62;
F123A1	Dup	12/8/97	21	2.3	1.7	3.0	4.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	1.5	ND (<0.50)	CBMA = 94; CHLFM = 0.55;
F123A1		6/4/98	37	3.5	2.1	4.9	5.5	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	1.6	ND (<1.0)	CBMA = 101; CHLFM = 1.1;
F123A1		12/10/98	29	2.9	1.3	2.9	5.5	ND (<0.50)	0.64	0.69	ND (<0.50)	0.90	ND (<0.50)	CBMA = 98.7; CHLFM = 1.78;
F123A1		6/10/99	36	3.6	ND (<2.5)	3.5	6.5	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
F123A1		12/9/99	40	3.3	1.9	5.3	5.8	ND (<0.835)	1.2	ND (<1.67)	ND (<0.835)	ND (<0.835)	ND (<0.835)	CHLFM = 1.13;
F123A1		6/6/00	43	6.3	3.3	9.9	14	ND (<0.50)	1.0	2.5	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.72;
F123A1		12/7/00	36	6.0	3.4	10	14	ND (<0.50)	1.1	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 1.2; TCFMe (Freon 11) = 1.7;
F123A1		6/19/01	35	10	3.0	11	15	ND (<0.50)	1.8	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.93; TCFMe (Freon 11) = 1.2;
F123A1		6/26/03	25	4.6	0.97	5.6	5.7	ND (<0.50)	2.2	5.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.78;
F123A1		6/22/05	74	1,300	ND (<25)	80	58	ND (<25)	ND (<25)	64	ND (<25)	60	ND (<25)	
F123A1		6/13/07	4,600	4,800	96	250	1,700	ND (<50)	ND (<50)	3,700	ND (<50)	ND (<50)	ND (<50)	
F123A1		12/27/07	5,600	7,100	58	370	800	ND (<50)	ND (<50)	6,500	ND (<50)	ND (<50)	ND (<50)	
F123A1		2/1/08	5,400	5,600	ND (<50)	240	540	ND (<50)	ND (<50)	4,600	ND (<50)	ND (<50)	ND (<50)	
F123A1		2/29/08	4,500	4,000	ND (<50)	160	310	ND (<50)	ND (<50)	3,400	ND (<50)	ND (<50)	ND (<50)	
F123A1		6/12/08	2,600	1,900	ND (<25)	78	140	ND (<25)	ND (<25)	2,000	ND (<25)	ND (<25)	ND (<25)	
F123A1		12/10/08	1,600	920	ND (<10)	34	55	ND (<10)	13	1,200	ND (<10)	ND (<10)	ND (<10)	
F123A1		6/11/09	710	210	ND (<5.0)	17	20	ND (<5.0)	7.5	400	ND (<5.0)	ND (<5.0)	ND (<5.0)	
F123A1		6/15/11	180	31	ND (<5.0)	7.2	7.5	ND (<5.0)	5.6	100	ND (<5.0)	ND (<5.0)	ND (<5.0)	
F123A1		8/26/11	170	27	ND (<1.0)	4.3	6.3	ND (<1.0)	4.4	85	ND (<1.0)	ND (<1.0)	ND (<1.0)	
F123A1	Dup	8/26/11	170	28	1.1	4.5	7.1	ND (<0.50)	4.9	86	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F123A1		9/29/11	120	20	1.1	4.0	5.8	ND (<0.50)	3.6	57	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F123A1		10/17/11	130	22	1.2	4.3	6.4	ND (<0.50)	2.7	49	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F123A1		3/5/12	76	12	1.4	5.0	6.0	ND (<0.50)	3.2	37	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F123A1		6/20/13	95	94	3.8	9.7	29	ND (<0.50)	3.4	50	ND (<0.50)	ND (<0.50)	ND (<0.50)	TCFMe (Freon 11) = 1.0;
F123A1		6/10/14	67	26	1.2	5.1	8.5	ND (<0.50)	3.6	39	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F123A1		6/9/15	55	7.7	0.77	2.0	3.4	ND (<0.50)	3.4	19	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F123A1		6/6/16	48	5.2	0.54	1.9	2.9	ND (<0.50)	3.4	12	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F123A1		6/6/17	45	5.1	0.55	2.4	3.1	ND (<0.50)	3.1	13	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F123A1		6/5/18	37	2.6	0.59	1.7	2.1	ND (<0.50)	3.3	5.8	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F123A1		6/6/19	41	2.7	ND (<0.50)	2.1	2.0	ND (<0.50)	4.3	8.4	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F123A1		6/4/20	42	3.0	0.59	1.8	2.4	ND (<0.50)	3.9	6.5	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F124A2		1/9/91	0.50	0.30	0.40	0.30	-	-	0.20	1.0	1.0	0.30	0.30	1,1,2,2-TCA = 0.30; 1,1,2-TCA = 0.2; 1,2-DCPA = 0.2; 1,3-DCB = 1; 1,4-DCB = 1; 2-CVE = 0.40; BDCMe = 0.40; Benzene = 0.5; BRFM = 0.5; BRMA = 0.5; CHLBZ = 0.40; CHLEA (EC) = 0.5; CHLFM = 0.8; CHLMA = 0.5; cis-1,3-DCP = 0.30; CT = 0.30; DBCMe = 0.40; EDB = 1; Ethylbenzene = 0.5; MC = 5; m-Xylene = 0.5; o-Xylene = 0.5; TCFMe (Freon 11) = 0.5; Toluene = 0.5; trans-1,3-DCP = 0.30; Xylenes = 0.5;
F124A2		2/6/91	0.50	0.70	0.40	0.30	-	-	0.20	1.0	0.50	0.30	0.30	1,1,2,2-TCA = 0.30; 1,1,2-TCA = 0.2; 1,2-DCPA = 0.2; 1,3-DCB = 0.5; 1,4-DCB = 0.5; 2-CVE = 0.40; Acetone = 30; BDCMe = 0.40; Benzene = 0.5; BRFM = 0.5; BRMA = 0.5; CHLBZ = 0.40; CHLEA (EC) = 0.5; CHLFM = 0.6; CHLMA = 0.5; cis-1,3-DCP = 0.30; CT = 0.30; DBCMe = 0.40; EDB = 1; Ethylbenzene = 0.5; MC = 5; m-Xylene = 0.5; o-Xylene = 0.5; TCFMe (Freon 11) = 0.5; Toluene = 0.5; trans-1,3-DCP = 0.30; Xylenes = 0.5;
F124A2		2/6/91	0.50	0.80	0.40	0.50	-	-	0.20	1.0	1.0	0.30	0.30	1,1,2,2-TCA = 0.30; 1,1,2-TCA = 0.2; 1,2-DCPA = 0.2; 1,3-DCB = 0.5; 1,4-DCB = 0.5; 2-CVE = 0.40; Acetone = 30; BDCMe = 0.40; Benzene = 0.5; BRFM = 0.5; BRMA = 0.5; CHLBZ = 0.40; CHLEA (EC) = 0.5; CHLFM = 0.6; CHLMA = 0.5; cis-1,3-DCP = 0.30; CT = 0.30; DBCMe = 0.40; EDB = 1; Ethylbenzene = 0.5; MC = 5; m-Xylene = 0.5; o-Xylene = 0.5; TCFMe (Freon 11) = 0.5; Toluene = 0.5; trans-1,3-DCP = 0.30; Xylenes = 0.5;
F124A2		7/26/91	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F124A2		10/7/91	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F124A2		12/9/91	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F124A2		3/5/92	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F124A2		6/10/92	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F124A2		9/10/92	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F124A2		9/23/92	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F124A2		12/16/92	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F124A2		3/11/93	ND (<0.50)	0.60	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F124A2		6/8/93	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F124A2		9/14/93	ND (<0.50)	1.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F124A2		12/9/93	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F124A2		3/7/94	ND (<0.50)	0.52	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F124A2		6/6/94	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F124A2		9/6/94	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F124A2		12/9/94	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F124A2		3/3/95	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F124A2	Dup	3/3/95	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F124A2		6/5/95	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F124A2		9/5/95	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F124A2		12/4/95	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F124A2		3/5/96	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F124A2		6/4/96	ND (<0.50)	0.88	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 107;
F124A2	Dup	6/4/96	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 108;
F124A2		9/10/96	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 103;
F124A2		12/9/96	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F124A2		6/4/97	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 101;
F124A2		12/2/97	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 92;
F124A2		12/10/98	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 104;
F124A2	Dup	12/10/98	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 107;
F124A2		12/15/99	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<1.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F124A2	Dup	12/15/99	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F124A2		12/7/00	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F124A2		6/19/01	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F124A2		6/25/03	ND (<0.50)	ND (<0.50)	0.81	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F124A2		6/22/05	ND (<0.50)	0.72	17	5.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.93	
F124A2		3/9/07	1.1	2.2	23	3.8	0.91	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F124A2		6/13/07	61	22	130	19	7.0	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	
F124A2		12/27/07	61	15	120	14	5.6	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	1.4	
F124A2		2/1/08	55	15	110	13	6.2	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	
F124A2		2/29/08	57	15	110	14	6.1	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	
F124A2		6/12/08	42	9.7	94	7.9	5.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F124A2		12/10/08	54	13	120	14	7.6	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	
F124A2		6/11/09	61	13	150	13	8.4	0.75	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	1.2	1,1,2-TCA = 0.51;
F124A2		6/15/11	200	16	190	26	25	1.6	ND (<0.50)	1.5	ND (<0.50)	ND (<0.50)	0.62	1,1,2-TCA = 0.53;
F124A2		8/26/11	330	21	270	41	34	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
F124A2		9/29/11	330	25	270	46	36	ND (<5.0)	ND (<5.0)	6.9	ND (<5.0)	ND (<5.0)	ND (<5.0)	
F124A2	Dup	9/29/11	340	20	270	35	32	2.1	ND (<0.50)	2.2	ND (<0.50)	ND (<0.50)	0.73	1,1,2-TCA = 0.52;
F124A2		10/17/11	390	27	330	49	44	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
F124A2		6/19/13	360	24	300	47	62	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
F124A2		6/10/14	470	85	67	72	89	ND (<5.0)	ND (<5.0)	25	ND (<5.0)	ND (<5.0)	ND (<5.0)	
F124A2	Dup	6/10/14	430	78	56	55	79	1.8	ND (<0.50)	20	ND (<0.50)	ND (<0.50)	ND (<0.50)	1,1,2-TCA = 0.59;
F124A2		6/9/15	410	48	50	39	56	ND (<5.0)	ND (<5.0)	36	ND (<5.0)	ND (<5.0)	ND (<5.0)	
F124A2		6/6/16	320	53	29	42	63	ND (<5.0)	ND (<5.0)	34	ND (<5.0)	ND (<5.0)	ND (<5.0)	
F124A2		6/5/17	520	62	16	48	60	ND (<5.0)	ND (<5.0)	67	ND (<5.0)	ND (<5.0)	ND (<5.0)	
F124A2		6/5/18	320	44	11	35	43	ND (<5.0)	ND (<5.0)	43	ND (<5.0)	ND (<5.0)	ND (<5.0)	
F124A2	Dup	6/5/18	510	68	19	49	68	ND (<5.0)	ND (<5.0)	64	ND (<5.0)	ND (<5.0)	ND (<5.0)	
F124A2		6/6/19	360	54	14	42	50	ND (<5.0)	ND (<5.0)	53	ND (<5.0)	ND (<5.0)	ND (<5.0)	
F124A2		6/4/20	270	40	9.4	22	40	0.79	ND (<0.50)	39	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.52; Freon 11 = 0.54
F125A1		9/21/92	1.4	3.2	1.7	-	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	BDCMe = 0.9; CHLFM = 30; TCFMe (Freon 11) = 0.6;
F125A1		12/16/92	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	CHLFM = 30;
F125A1		3/8/93	8.9	4.7	1.9	-	1.0	ND (<0.50)	0.90	0.70	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 46; TCFMe (Freon 11) = 2.1;
F125A1		6/7/93	10	3.7	1.0	-	0.80	ND (<0.50)	0.60	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 24; TCFMe (Freon 11) = 2;
F125A1		9/13/93	8.1	2.4	0.81	-	0.60	ND (<0.50)	ND (<0.50)	0.67	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 24; TCFMe (Freon 11) = 0.74;
F125A1		12/3/93	14	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	Acetone = 12; CHLFM = 34;
F125A1		3/4/94	21	2.8	0.94	-	1.0	ND (<0.50)	1.4	1.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 42; TCFMe (Freon 11) = 1.5;
F125A1		6/3/94	8.0	0.94	0.55	-	1.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 31;
F125A1		9/2/94	16	2.3	ND (<0.50)	-	0.59	ND (<0.50)	0.66	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 40; TCFMe (Freon 11) = 0.64;
F125A1		12/9/94	14	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	CHLFM = 33;
F125A1		3/2/95	20	1.8	ND (<0.50)	-	0.53	ND (<0.50)	0.99	0.77	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 36; TCFMe (Freon 11) = 0.68;
F125A1		6/7/95	21	1.9	ND (<0.50)	-	ND (<0.50)	ND (<0.50)	0.99	0.65	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 30; TCFMe (Freon 11) = 0.73;
F125A1		9/6/95	23	2.1	0.73	-	0.60	ND (<0.50)	1.5	0.90	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 27; TCFMe (Freon 11) = 0.63;
F125A1		12/7/95	18	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	CHLFM = 23;
F125A1		3/6/96	12	1.6	0.68	2.5	ND (<0.50)	ND (<0.50)	1.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 14;
F125A1		6/5/96	26	2.0	0.91	6.8	0.62	ND (<0.50)	1.5	0.90	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 105; CHLFM = 23; TCFMe (Freon 11) = 0.85;
F125A1		9/11/96	23	2.8	1.1	7.8	0.81	ND (<0.50)	1.6	0.97	ND (<0.50)	0.50	ND (<0.50)	CBMA = 109; CHLFM = 21; TCFMe (Freon 11) = 1.1;
F125A1		12/12/96	22	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	CHLFM = 17; MC = 5.3;
F125A1		3/5/97	14	0.82	0.52	1.1	ND (<0.50)	ND (<0.50)	0.63	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 101; CHLFM = 6.7;
F125A1		6/4/97	20	ND (<0.50)	0.86	2.2	ND (<0.50)	ND (<0.50)	1.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 108; CHLFM = 7.6;
F125A1		9/10/97	4.8	ND (<0.50)	ND (<0.50)	0.53	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 107; CHLFM = 1.2;
F125A1		12/10/97	9.3	ND (<0.50)	0.74	1.1	ND (<0.50)	ND (<0.50)	0.53	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 99;
F125A1	Dup	12/10/97	8.9	ND (<0.50)	0.69	0.95	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 100; MC = 1.6;
F125A1		6/4/98	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.64	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 98;
F125A1		12/10/98	29	0.67	2.9	8.71	ND (<0.50)	ND (<0.50)	2.1	0.54	ND (<0.50)	1.37	ND (<0.50)	CBMA = 104; CHLFM = 3.43; TCFMe (Freon 11) = 0.84;
F125A1		6/10/99	37	ND (<1.00)	2.7	8.5	ND (<1.00)	ND (<1.00)	2.5	ND (<1.00)	ND (<1.00)	ND (<1.00)	ND (<1.00)	CHLFM = 3.19;
F125A1		12/9/99	61	ND (<1.25)	3.9	9.4	ND (<1.25)	ND (<1.25)	3.3	ND (<1.25)	ND (<1.25)	ND (<1.25)	ND (<1.25)	CHLFM = 2.71;
F125A1		6/6/00	52	ND (<0.50)	1.5	5.1	ND (<0.50)	ND (<0.50)	3.8	ND (<0.50)	ND (<0.50)	1.6	ND (<0.50)	CHLFM = 1.6;
F125A1		12/7/00	51	ND (<1.0)	ND (<1.0)	3.2	ND (<1.0)	ND (<1.0)	3.2	ND (<4.0)	ND (<1.0)	1.3	ND (<1.0)	CHLFM = 1.2;
F125A1		6/19/01	43	ND (<1.0)	ND (<1.0)	1.9	ND (<1.0)	ND (<1.0)	4.4	ND (<4.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	CHLFM = 1.3;
F125A1		6/25/03	55	ND (<1.0)	1.5	5.2	ND (<1.0)	ND (<1.0)	6.7	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	CHLFM = 2.5; TCFMe (Freon 11) = 3.3;
F125A1		6/22/05	40	ND (<0.50)	0.93	2.8	ND (<0.50)	ND (<0.50)	8.8	ND (<0.50)	ND (<0.50)	0.61	ND (<0.50)	CHLFM = 1.1;
F125A1		6/13/07	30	1,200	33	62	74	ND (<10)	14	83	ND (<10)	ND (<10)	ND (<10)	
F125A1		6/12/08	32	280	10	18	23	ND (<2.5)	11	32	ND (<2.5)	ND (<2.5)	ND (<2.5)	
F125A1		12/10/08	24	130	2.8	8.8	8.8	ND (<2.0)	8.9	19	ND (<2.0)	ND (<2.0)	ND (<2.0)	

Appendix B
Selected Compounds from Historical Records
COE Study Area and Perimeter Area, Palo Alto, California

Location	Type	Date	TCE	1,1,1-TCA	1,1-DCA	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	PCE	Freon 113	1,2-DCB	1,2-DCA	VC	Other Constituents
F125A1		6/11/09	26	100	1.7	9.2	6.0	ND (<1.0)	8.6	7.7	ND (<1.0)	ND (<1.0)	ND (<1.0)	
F125A1	Dup	6/11/09	27	120	2.5	7.1	6.0	ND (<0.50)	8.5	7.8	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F125A1		6/15/11	20	12	0.55	1.6	1.0	ND (<0.50)	7.6	2.5	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F125A1		8/26/11	20	8.6	0.58	1.6	0.73	ND (<0.50)	7.9	2.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F125A1		9/29/11	20	9.7	0.65	1.4	0.84	ND (<0.50)	7.0	2.5	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F125A1		10/17/11	19	9.4	0.55	1.5	0.76	ND (<0.50)	5.6	2.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F125A1	Dup	10/17/11	17	8.1	ND (<0.50)	1.3	0.70	ND (<0.50)	5.0	1.9	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F125A1		6/19/13	10	2.6	ND (<0.50)	0.73	ND (<0.50)	ND (<0.50)	5.0	0.86	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F125A1		6/9/15	23	ND (<0.50)	ND (<0.50)	1.2	ND (<0.50)	ND (<0.50)	11	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F125A1	Dup	6/9/15	21	ND (<0.50)	ND (<0.50)	1.0	ND (<0.50)	ND (<0.50)	10	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F125A1		6/6/17	13	0.75	ND (<0.50)	0.79	ND (<0.50)	ND (<0.50)	6.7	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F125A1		6/6/19	15	ND (<0.50)	ND (<0.50)	1.0	ND (<0.50)	ND (<0.50)	7.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F126A2		3/6/92	27	19	5.8	-	19	ND (<0.50)	0.70	7.3	ND (<0.50)	0.60	ND (<0.50)	CHLEA (EC) = 1.2; CHLFM = 5.5; TCFMe (Freon 11) = 1.3;
F126A2		6/10/92	44	31	5.8	-	22	ND (<0.50)	1.8	30	ND (<0.50)	0.60	ND (<0.50)	CHLEA (EC) = 1.4; CHLFM = 5.1; TCFMe (Freon 11) = 1.3;
F126A2		9/14/92	ND (<0.50)	2.4	1.3	-	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 11;
F126A2		12/16/92	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F126A2	Dup	12/16/92	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	CHLFM = 5.6;
F126A2		3/12/93	1.0	4.9	1.9	-	0.60	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 34; TCFMe (Freon 11) = 1.4;
F126A2		6/7/93	0.60	5.7	1.6	-	0.80	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 23; TCFMe (Freon 11) = 1.9;
F126A2		9/13/93	2.1	4.1	0.97	-	1.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 23; TCFMe (Freon 11) = 1.1;
F126A2		12/3/93	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	CHLFM = 28;
F126A2		3/3/94	2.2	4.2	1.2	-	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.63	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 27; TCFMe (Freon 11) = 1.8;
F126A2		6/3/94	3.1	5.2	1.9	-	1.9	ND (<0.50)	ND (<0.50)	1.7	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 37; TCFMe (Freon 11) = 2.9;
F126A2		9/2/94	2.4	3.9	1.2	-	1.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 33; TCFMe (Freon 11) = 1.2;
F126A2		12/12/94	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	CHLFM = 21;
F126A2		3/2/95	1.1	1.3	0.56	-	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 17;
F126A2		6/7/95	0.78	ND (<0.50)	ND (<0.50)	-	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 3.1;
F126A2		9/5/95	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F126A2		12/6/95	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F126A2		3/5/96	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F126A2		6/6/96	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 103;
F126A2		9/10/96	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 103;
F126A2		12/11/96	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F126A2		6/6/97	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.69	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 105;
F126A2		12/10/97	ND (<0.50)	0.63	ND (<0.50)	0.67	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 97;
F126A2		12/10/98	ND (<0.50)	ND (<0.50)	0.60	0.71	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 117;
F126A2		12/9/99	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<1.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F126A2		12/5/00	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F126A2		3/8/07	ND (<0.50)	ND (<0.50)	12	0.98	1.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F126A2		6/26/08	ND (<0.50)	ND (<0.50)	6.7	0.66	1.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F126A2		12/12/08	ND (<0.50)	ND (<0.50)	5.5	0.67	0.88	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F126A2		6/11/09	ND (<0.50)	1.1	5.9	ND (<0.50)	0.75	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F126A2		6/15/11	0.71	ND (<0.50)	7.2	1.0	1.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F126A2		6/13/12	ND (<0.50)	ND (<0.50)	11	2.4	4.6	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F126A2		6/20/13	ND (<0.50)	0.52	10	5.1	9.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F126A2		6/11/14	ND (<0.50)	ND (<0.50)	3.1	1.3	2.5	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F126A2		6/9/15	ND (<0.50)	ND (<0.50)	1.1	0.50	0.69	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F126A2		6/7/16	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F126A2		6/7/17	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F126A2		6/5/18	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F126A2		6/5/19	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F126A2		6/3/20	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F126A2	Dup	6/3/20	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F127A1		9/14/92	780	46	8.5	ND (<10)	14	ND (<10)	ND (<10)	3.5	ND (<10)	ND (<10)	ND (<10)	CHLFM = 2.5;
F127A1		12/16/92	780	55	ND (<5.0)	-	-	ND (<5.0)	ND (<5.0)	11	-	ND (<5.0)	ND (<10)	
F127A1		3/9/93	940	70	9.0	ND (<12)	12	ND (<12)	ND (<12)	16	ND (<12)	ND (<12)	ND (<12)	
F127A1		6/11/93	640	42	4.5	ND (<12)	10	ND (<12)	ND (<12)	5.5	ND (<12)	ND (<12)	ND (<12)	
F127A1	Dup	6/11/93	540	39	4.0	ND (<12)	9.5	ND (<12)	ND (<12)	5.5	ND (<12)	ND (<12)	ND (<12)	
F127A1		9/10/93	890	72	16	ND (<12)	44	ND (<12)	9.6	ND (<12)	ND (<12)	ND (<12)	ND (<12)	
F127A1		12/3/93	71	ND (<5.0)	ND (<5.0)	ND (<5.0)	5.6	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F127A1		3/7/94	180	6.0	2.3	-	6.3	ND (<0.50)	ND (<0.50)	1.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F127A1		6/6/94	250	18	3.6	-	12	ND (<1.0)	ND (<1.0)	3.0	ND (<1.0)	ND (<1.0)	ND (<1.0)	
F127A1		9/6/94	310	22	4.0	-	13	ND (<1.7)	ND (<1.7)	3.3	ND (<1.7)	ND (<1.7)	ND (<1.7)	
F127A1		12/5/94	900	44	11	-	18	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F127A1	Dup	12/5/94	780	42	9.9	-	17	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F127A1		3/2/95	630	45	7.6	-	16	ND (<2.5)	ND (<2.5)	12	ND (<2.5)	ND (<2.5)	ND (<2.5)	CHLFM = 2.7;
F127A1		6/5/95	600	45	11	-	20	ND (<2.5)	ND (<2.5)	7.8	ND (<2.5)	ND (<2.5)	ND (<2.5)	
F127A1		9/7/95	1,200	110	17	-	42	ND (<12)	ND (<12)	27	ND (<12)	ND (<12)	ND (<12)	MC = 29;
F127A1		12/11/95	960	70	15	-	34	ND (<5.0)	ND (<5.0)	10	-	ND (<5.0)	ND (<10)	
F127A1		3/7/96	920	88	ND (<12)	ND (<12)	28	ND (<12)	ND (<12)	ND (<12)	ND (<12)	ND (<12)	ND (<12)	
F127A1		6/6/96	670	57	15	13	37	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	CBMA = 107; MC = 13;
F127A1		9/13/96	480	26	11	10	24	ND (<1.0)	ND (<1.0)	1.7	ND (<1.0)	ND (<1.0)	ND (<1.0)	CBMA = 98; CHLFM = 2.4;
F127A1		12/16/96	370	19	ND (<12)	ND (<12)	28	ND (<12)	ND (<12)	ND (<12)	-	ND (<12)	ND (<25)	
F127A1		3/6/97	290	24	8.5	5.6	25	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	CBMA = 108; MC = 8.7;
F127A1		6/9/97	270	24	8.5	5.7	26	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	CBMA = 102;
F127A1		9/12/97	320	33	5.8	6.5	26	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	CBMA = 100;
F127A1		12/9/97	150	12	ND (<5.0)	ND (<5.0)	18	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	CBMA = 97;
F127A1		6/2/98	180	ND (<10)	ND (<10)	ND (<10)	20	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	CBMA = 113;
F127A1		12/11/98	265	28	5.4	8.3	30	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	CBMA = 95;
F127A1		6/9/99	581	73	ND (<25)	27	61	ND (<25)	ND (<25)	ND (<25)	ND (<25)	ND (<25)	ND (<25)	
F127A1		12/8/99	643	50	ND (<16.7)	25	56	ND (<16.7)	ND (<16.7)	41	ND (<16.7)	ND (<16.7)	ND (<16.7)	
F127A1		6/6/00	460	41	ND (<5.0)	19	35	ND (<5.0)	ND (<5.0)	28	ND (<5.0)	ND (<5.0)	ND (<5.0)	
F127A1		12/6/00	340	25	ND (<10)	ND (<10)	28	ND (<10)	ND (<10)	ND (<40)	ND (<10)	ND (<10)	ND (<10)	
F127A1		6/20/01	380	26	ND (<10)	11	34	ND (<10)	ND (<10)	ND (<40)	ND (<10)	ND (<10)	ND (<10)	
F127A1	Dup	6/20/01	360	24	ND (<10)	ND (<10)	28	ND (<10)	ND (<10)	ND (<40)	ND (<10)	ND (<10)	ND (<10)	
F127A1		6/27/02	390	29	ND (<5.0)	11	30	ND (<5.0)	ND (<5.0)	23	ND (<5.0)	ND (<5.0)	ND (<5.0)	
F127A1		6/25/03	320	17	ND (<10)	ND (<10)	27	ND (<10)	ND (<10)	18	ND (<10)	ND (<10)	ND (<10)	
F127A1	Dup	6/25/03	330	18	5.3	8.5	27	ND (<5.0)	ND (<5.0)	10	ND (<5.0)	ND (<5.0)	ND (<5.0)	
F127A1		8/31/04	180	8.2	ND (<5.0)	5.5	19	ND (<5.0)	ND (<5.0)	6.3	ND (<5.0)	ND (<5.0)	ND (<5.0)	
F127A1		8/31/04	370	23	ND (<5.0)	14	28	ND (<5.0)	ND (<5.0)	32	ND (<5.0)	ND (<5.0)	ND (<5.0)	
F127A1		6/22/05	470	270	49	150	130	ND (<5.0)	ND (<5.0)	86	ND (<5.0)	12	ND (<5.0)	CT = 43;
F127A1		6/27/06	410	280	10	48	58	ND (<5.0)	ND (<5.0)	110	ND (<5.0)	ND (<5.0)	ND (<5.0)	
F127A1		6/14/07	970	820	60	160	290	ND (<10)	ND (<10)	370	ND (<10)	ND (<10)	ND (<10)	
F127A1		6/12/08	1,900	820	37	140	200	ND (<10)	ND (<10)	710	ND (<10)	ND (<10)	ND (<10)	
F127A1		12/10/08	2,300	1,400	56	220	320	ND (<50)	ND (<50)	1,000	ND (<50)	ND (<50)	ND (<50)	
F127A1		6/11/09	2,300	1,500	56	290	270	ND (<10)	ND (<10)	820	ND (<10)	ND (<10)	ND (<10)	
F127A1		6/8/10	2,300	950	ND (<25)	190	160	ND (<25)	ND (<25)	770	ND (<25)	ND (<25)	ND (<25)	
F127A1		6/15/11	1,800	710	16	100	120	ND (<5.0)	ND (<5.0)	660	ND (<5.0)	ND (<5.0)	ND (<5.0)	
F127A1		8/26/11	1,800	720	10	80	100	ND (<5.0)	ND (<5.0)	750	ND (<5.0)	ND (<5.0)	ND (<5.0)	
F127A1		9/29/11	1,700	610	9.9	79	88	ND (<5.0)	ND (<5.0)	620	ND (<5.0)	ND (<5.0)	ND (<5.0)	
F127A1		10/17/11	1,600	620	8.3	75	88	0.67	ND (<0.50)	550	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F127A1		3/5/12	1,300	380	ND (<10)	81	61	ND (<10)	ND (<10)	550	ND (<10)	ND (<10)	ND (<10)	
F127A1	Dup	3/5/12	1,500	430	5.7	60	57	0.57	ND (<0.50)	590	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F127A1		6/14/12	1,400	390	ND (<10)	47	58	ND (<10)	ND (<10)	510	ND (<10)	ND (<10)	ND (<10)	
F127A1R		3/5/12	360	110	30	81	130	1.2	ND (<0.50)	46	ND (<0.50)	0.50	ND (<0.50)	
F127A1R	Dup	3/5/12	350	110	27	71	110	1.3	ND (<0.50)	48	ND (<0.50)	0.50	ND (<0.50)	
F127A1R		6/14/12	340	140	32	82	140	ND (<5.0)	ND (<5.0)	56	ND (<5.0)	ND (<5.0)	ND (<5.0)	
F127A1R	Dup	6/14/12	360	130	32	75	140	1.1	0.54	47	ND (<0.50)	0.71	ND (<0.50)	CHLFM = 1.1;
F127A1R		6/20/13	670	160	31	86	150	1.2	3.2	61	ND (<0.50)	0.64	0.50	CHLFM = 1.1;
F127A1R		6/11/14	350	100	26	71	120	ND (<5.0)	ND (<5.0)	66	ND (<5.0)	ND (<5.0)	ND (<5.0)	
F127A1R	Dup	6/11/14	330	100	25	66	120	1.2	2.5	64	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 1.0;
F127A1R		6/10/15	450	110	26	88	130	ND (<5.0)	ND (<5.0)	87	ND (<5.0)	ND (<5.0)	ND (<5.0)	
F127A1R		6/6/16	320	66	24	67	100	ND (<5.0)	ND (<5.0)	71	ND (<5.0)	ND (<5.0)	ND (<5.0)	
F127A1R		6/8/17	380	75	24	72	110	ND (<5.0)	ND (<5.0)	91	ND (<5.0)	ND (<5.0)	ND (<5.0)	
F127A1R		6/5/18	410	61	25	80	110	ND (<5.0)	ND (<5.0)	100	ND (<5.0)	ND (<5.0)	ND (<5.0)	
F127A1R		6/6/19	420	51	25	83	98	ND (<5.0)	ND (<5.0)	120	ND (<5.0)	ND (<5.0)	ND (<5.0)	
F127A1R	Dup	6/6/19	430	53	24	83	99	ND (<5.0)	ND (<5.0)	120	ND (<5.0)	ND (<5.0)	ND (<5.0)	
F127A1R		6/3/20	410	54	21	65	98	1.3	ND (<0.50)	110	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 1.1; Freon 11 = 0.84
F128A		12/16/92	880	46	ND (<5.0)	-	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F128A		3/4/93	190	27	3.0	ND (<5.0)	26	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	CHLFM = 1.4;
F128A		6/14/93	260	22	2.0	ND (<5.0)	30	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
F128A		9/10/93	440	25	6.1	ND (<5.0)	44	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	CHLFM = 2.3;
F128A		12/3/93	39	ND (<5.0)	ND (<5.0)	-	17	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F128A		3/10/94	880	96	ND (<5.0)	-	120	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
F128A		6/9/94	840	50	ND (<5.0)	ND (<5.0)	120	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	BDCMe = 39;
F128A		12/6/94	870	46	ND (<25)	ND (<25)	88	ND (<25)	ND (<25)	ND (<25)	-	ND (<25)	ND (<50)	
F128A		6/7/95	810	46	9.2	-	90	ND (<5.0)	ND (<5.0)	6.8	ND (<5.0)	ND (<5.0)	ND (<5.0)	
F128A		12/11/95	450	32	6.6	-	64	ND (<5.0)	5.6	5.5	-	ND (<5.0)	ND (<10)	
F128A		6/7/96	280	24	5.4	15	50	ND (<2.5)	ND (<2.5)	4.1	ND (<2.5)	ND (<2.5)	ND (<2.5)	CBMA = 115;
F128A		12/16/96	140	7.7	ND (<5.0)	ND (<5.0)	19	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F128A	Dup	12/16/96	140	7.8	ND (<5.0)	5.0	19	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F128A		6/9/97	240	27	ND (<5.0)	10	32	ND (<5.0)	ND (<5.0)	5.8	ND (<5.0)	ND (<5.0)	ND (<5.0)	CBMA = 103;
F128A		12/3/97	97	8.7	ND (<5.0)	ND (<5.0)	10	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	CBMA = 92;
F128A		6/5/98	86	ND (<5.0)	ND (<5.0)	ND (<5.0)	9.4	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	CBMA = 101; CHLFM = 9.3;
F128A		12/11/98	5.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.73	ND (<0.50)	0.53	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 99;
F128A		6/8/99	212	ND (<10)	ND (<10)	ND (<10)	14	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	CHLFM = 13.3;
F128A		12/8/99	1.7	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<1.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F128A		6/8/00	22	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.51	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 1.3;
F128A		12/8/00	3.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F128A		9/28/11	67	2.5	0.91	1.5	5.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 1.4;
F128A		6/6/19	10	ND (<0.50)	ND (<0.50)	ND (<0.50)	1.4	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F128A	Dup	6/6/19	10	ND (<0.50)	ND (<0.50)	ND (<0.50)	1.4	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F129A1		12/11/92	ND (<0.50)	ND (<0.50)	1.5	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.7;
F129A1		12/17/92	ND (<5.0)	ND (<5.0)	7.3	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F129A1		3/5/93	ND (<0.50)	0.9	3.4	ND (<0.50)	0.90	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	BDCMe = 0.5; CHLFM = 1.6;
F129A1		6/9/93	ND (<0.50)	ND (<0.50)	3.4	ND (<0.50)	0.80	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F129A1		9/13/93	ND (<0.50)	ND (<0.50)	5.6	ND (<0.50)	0.80	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLEA (EC) = 0.62;
F129A1		12/3/93	ND (<5.0)	ND (<5.0)	7.3	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F129A1		6/10/94	ND (<0.50)	ND (<0.50)	18	ND (<0.50)	3.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLEA (EC) = 1.7; CT = 1.3;
F129A1		12/5/94	ND (<5.0)	ND (<5.0)	19	ND (<5.0)	11	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F129A1		6/6/95	ND (<0.50)	ND (<0.50)	21	-	9.6	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.90	ND (<0.50)	CHLEA (EC) = 1.2;
F129A1		9/6/95	ND (<0.50)	ND (<0.50)	12	-	14	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	1.8	ND (<0.50)	
F129A1	Dup	9/6/95	ND (<0.50)	ND (<0.50)	13	-	16	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	1.3	ND (<0.50)	
F129A1		12/7/95	ND (<5.0)	ND (<5.0)	23	ND (<5.0)	20	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F129A1		6/10/96	ND (<0.50)	ND (<0.50)	31	1.4	21	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	2.0	ND (<0.50)	CBMA = 114;

Appendix B
Selected Compounds from Historical Records
COE Study Area and Perimeter Area, Palo Alto, California

Location	Type	Date	TCE	1,1,1-TCA	1,1-DCA	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	PCE	Freon 113	1,2-DCB	1,2-DCA	VC	Other Constituents
F129A1		12/12/96	ND (<5.0)	ND (<5.0)	30	ND (<5.0)	29	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	MC = 5.2;
F129A1	Dup	12/12/96	ND (<5.0)	ND (<5.0)	31	ND (<5.0)	30	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	MC = 5.5;
F129A1		6/4/97	ND (<0.50)	ND (<0.50)	28	2.7	39	0.71	ND (<0.50)	ND (<0.50)	ND (<0.50)	2.9	ND (<0.50)	CBMA = 114;
F129A1		12/3/97	ND (<0.50)	ND (<0.50)	17	1.7	25	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	1.7	ND (<0.50)	CBMA = 99;
F129A1		6/4/98	ND (<0.50)	ND (<0.50)	11	0.97	14	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.90	ND (<0.50)	CBMA = 96;
F129A1		12/10/98	ND (<0.50)	ND (<0.50)	11	1.5	17	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	1.0	ND (<0.50)	CBMA = 126;
F129A1		6/9/99	0.75	0.62	15	3.1	26	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.99	ND (<0.50)	
F129A1		12/8/99	ND (<4.17)	ND (<4.17)	47	25	137	ND (<4.17)	ND (<4.17)	ND (<8.33)	ND (<4.17)	ND (<4.17)	ND (<4.17)	
F129A1		6/6/00	ND (<1.0)	2.1	38	13	99	1.4	ND (<1.0)	ND (<1.0)	ND (<1.0)	1.2	ND (<1.0)	
F129A1		12/6/00	ND (<2.5)	3.2	38	17	110	ND (<2.5)	ND (<2.5)	ND (<10)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
F129A1		6/20/01	ND (<2.5)	4.1	43	20	130	ND (<2.5)	ND (<2.5)	ND (<10)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
F129A1		6/24/03	ND (<0.50)	ND (<0.50)	4.0	2.4	14	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F129A1		6/22/05	ND (<2.5)	ND (<2.5)	33	27	100	2.9	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	2.9	
F129A1		6/14/07	ND (<1.0)	23	32	34	120	3.9	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	
F129A1		6/12/08	ND (<1.0)	31	33	45	130	4.8	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	1.7	
F129A1		12/10/08	ND (<1.0)	33	32	46	140	5.0	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	
F129A1		6/11/09	ND (<1.0)	25	38	43	120	4.9	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	1.7	
F129A1		6/15/11	1.1	16	28	36	110	3.6	ND (<0.50)	0.53	ND (<0.50)	0.68	1.2	
F129A1		8/26/11	ND (<0.50)	16	30	40	110	5.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.63	3.8	
F129A1		9/29/11	0.82	19	26	37	100	4.7	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.62	3.5	
F129A1		10/17/11	ND (<0.50)	20	26	34	110	4.9	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.67	3.0	
F129A1		3/5/12	ND (<0.50)	22	26	40	110	4.8	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.50	0.96	
F129A1		6/20/13	ND (<1.0)	28	28	36	97	4.4	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	1.3	
F129A1		6/11/14	ND (<0.50)	37	29	32	91	3.9	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.50	2.1	
F129A1		6/10/15	ND (<0.50)	27	35	36	96	4.6	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	2.7	
F129A1	Dup	6/10/15	ND (<0.50)	29	34	35	94	4.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	2.5	
F129A1		6/8/17	ND (<0.50)	23	23	26	72	2.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.79	
F129A1		6/5/18	ND (<0.50)	21	24	25	73	2.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F129A1		6/6/19	0.61	22	21	25	62	2.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F129A1		6/3/20	1.8	39	28	41	110	4.4	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 1.1; Freon 11 = 1.3
F130A1U		9/21/92	320	190	22	ND (<5.0)	180	ND (<5.0)	ND (<5.0)	7.0	ND (<5.0)	ND (<5.0)	ND (<5.0)	CHLFM = 7.6; TCFMe (Freon 11) = 2.2;
F130A1U		12/17/92	220	93	13	ND (<6.2)	110	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F130A1U	Dup	12/17/92	210	94	15	ND (<6.2)	110	ND (<6.2)	ND (<6.2)	ND (<6.2)	-	ND (<6.2)	ND (<12)	Acetone = 18;
F130A1U		3/11/93	410	250	29	ND (<5.0)	240	ND (<5.0)	ND (<5.0)	5.2	ND (<5.0)	1.4	ND (<5.0)	CHLFM = 16;
F130A1U	Dup	3/11/93	430	260	30	ND (<5.0)	240	ND (<5.0)	ND (<5.0)	5.2	ND (<5.0)	1.2	ND (<5.0)	CHLFM = 16;
F130A1U		6/14/93	280	160	14	ND (<5.0)	160	ND (<5.0)	ND (<5.0)	5.4	ND (<5.0)	ND (<5.0)	ND (<5.0)	CHLFM = 3.4;
F130A1U		9/10/93	250	190	14	ND (<5.0)	180	ND (<5.0)	ND (<5.0)	8.9	ND (<5.0)	ND (<5.0)	ND (<5.0)	CHLFM = 15;
F130A1U	Dup	9/10/93	240	180	15	ND (<5.0)	170	ND (<5.0)	ND (<5.0)	8.5	ND (<5.0)	ND (<5.0)	ND (<5.0)	CHLFM = 15; MC = 1.7;
F130A1U		12/10/93	300	200	24	-	230	ND (<5.0)	ND (<5.0)	21	-	ND (<5.0)	ND (<10)	CHLFM = 17;
F130A1U	Dup	12/10/93	320	220	24	-	250	ND (<5.0)	ND (<5.0)	23	-	ND (<5.0)	ND (<10)	CHLFM = 17;
F130A1U		3/2/94	490	260	29	-	280	ND (<2.5)	ND (<2.5)	34	ND (<2.5)	ND (<2.5)	ND (<2.5)	CHLFM = 25;
F130A1U		6/2/94	280	150	18	-	170	ND (<1.0)	ND (<1.0)	21	ND (<1.0)	ND (<1.0)	ND (<1.0)	CHLFM = 20;
F130A1U		9/2/94	260	150	12	-	170	ND (<1.0)	ND (<1.0)	16	ND (<1.0)	ND (<1.0)	ND (<1.0)	CHLFM = 25;
F130A1U		12/5/94	420	170	17	-	180	ND (<10)	ND (<10)	35	-	ND (<10)	ND (<20)	CHLFM = 27;
F130A1U		3/2/95	260	120	11	-	140	ND (<1.0)	ND (<1.0)	21	ND (<1.0)	ND (<1.0)	ND (<1.0)	CHLFM = 21;
F130A1U		6/5/95	120	51	8.9	-	58	ND (<1.0)	ND (<1.0)	7.9	ND (<1.0)	ND (<1.0)	ND (<1.0)	CHLFM = 8.4;
F130A1U		9/6/95	96	51	12	-	59	ND (<2.5)	ND (<2.5)	4.3	ND (<2.5)	ND (<2.5)	ND (<2.5)	CHLFM = 12;
F130A1U		12/5/95	71	35	7.9	-	50	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	CHLFM = 18;
F130A1U		3/7/96	67	36	9.7	12	47	ND (<1.0)	ND (<1.0)	2.2	ND (<1.0)	ND (<1.0)	ND (<1.0)	CHLFM = 4.3;
F130A1U		6/5/96	59	32	6.4	16	45	ND (<1.0)	ND (<1.0)	2.9	ND (<1.0)	ND (<1.0)	ND (<1.0)	CBMA = 105; CHLFM = 2.5;
F130A1U		9/13/96	43	23	4.3	12	28	ND (<0.50)	ND (<0.50)	2.6	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 107; CHLFM = 2.6; TCFMe (Freon 11) = 0.66;
F130A1U		12/13/96	35	18	ND (<5.0)	7.0	23	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F130A1U		3/6/97	30	14	2.3	5.0	15	ND (<1.0)	ND (<1.0)	2.0	ND (<1.0)	ND (<1.0)	ND (<1.0)	CBMA = 100; CHLFM = 2.2;
F130A1U	Dup	3/6/97	29	13	2.3	4.4	15	ND (<1.0)	ND (<1.0)	1.9	ND (<1.0)	ND (<1.0)	ND (<1.0)	CBMA = 102; CHLFM = 2.2;
F130A1U		6/6/97	36	13	2.9	8.5	17	ND (<1.0)	ND (<1.0)	2.3	ND (<1.0)	ND (<1.0)	ND (<1.0)	CBMA = 106; CHLFM = 2.3;
F130A1U		9/11/97	38	13	2.0	8.1	13	ND (<1.0)	ND (<1.0)	2.1	ND (<1.0)	ND (<1.0)	ND (<1.0)	CBMA = 97; CHLFM = 2.1;
F130A1U		12/8/97	13	4.4	ND (<0.50)	1.2	3.3	ND (<0.50)	ND (<0.50)	0.51	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 99; MC = 0.81;
F130A1U	Dup	12/8/97	13	4.2	ND (<0.50)	1.1	2.8	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 96; MC = 0.54;
F130A1U		6/4/98	22	5.3	1.7	4.7	8.6	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	CBMA = 99;
F130A1U	Dup	6/4/98	23	5.3	1.7	4.8	8.8	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	CBMA = 100;
F130A1U		12/9/98	19	5.0	ND (<0.50)	1.8	3.5	ND (<0.50)	ND (<0.50)	0.87	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 98.7;
F130A1U	Dup	12/9/98	20	5.3	0.56	2.4	4.3	ND (<0.50)	ND (<0.50)	1.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 101;
F130A1U		6/9/99	19	3.7	1.2	3.4	6.4	ND (<0.50)	ND (<0.50)	1.5	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F130A1U		12/14/99	35	4.5	ND (<1.25)	4.3	8.1	ND (<1.25)	ND (<1.25)	2.8	ND (<1.25)	ND (<1.25)	ND (<1.25)	
F130A1U		6/6/00	31	420	110	140	750	12	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	
F130A1U		12/6/00	31	2.1	0.67	2.6	5.6	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F130A1U		6/20/01	33	1.9	ND (<0.50)	2.5	5.6	ND (<0.50)	ND (<0.50)	2.8	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F130A1U		6/24/03	29	1.4	0.70	1.9	4.4	ND (<0.50)	ND (<0.50)	1.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F130A1U		6/22/05	39	2.3	1.1	6.1	8.3	ND (<0.50)	ND (<0.50)	4.4	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F130A1U		6/14/07	21	8.8	2.2	2.2	9.8	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F130A1U		6/11/09	18	3.6	0.57	1.4	2.4	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F130A1U		6/15/11	30	1.7	0.89	3.0	5.0	ND (<0.50)	ND (<0.50)	3.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F130A1U		6/20/13	13	0.86	ND (<0.50)	ND (<0.50)	0.93	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F130A1U		6/11/14	15	0.83	ND (<0.50)	ND (<0.50)	0.56	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F130A1U		6/8/15	13	0.59	ND (<0.50)	ND (<0.50)	0.71	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F130A1U		6/5/17	21	0.67	0.62	1.6	4.0	0.86	ND (<0.50)	1.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F130A1U		6/20/18	24	ND (<0.50)	ND (<0.50)	1.4	3.2	ND (<0.50)	ND (<0.50)	0.63	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F130A1U		6/4/19	19	ND (<0.50)	ND (<0.50)	1.3	3.1	0.75	ND (<0.50)	0.87	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F130A1U		6/2/20	23	ND (<0.50)	ND (<0.50)	0.93	4.1	0.89	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F131A1		9/21/92	1,100	1,300	49	ND (<25)	780	ND (<5.0)	ND (<5.0)	360	ND (<5.0)	ND (<5.0)	ND (<5.0)	CHLFM = 24;
F131A1	Dup	9/21/92	1,100	1,300	56	ND (<25)	760	ND (<5.0)	ND (<5.0)	460	ND (<5.0)	ND (<5.0)	ND (<5.0)	CHLFM = 28;
F131A1		12/17/92	1,800	1,500	42	ND (<50)	1,200	ND (<5.0)	ND (<5.0)	800	-	ND (<5.0)	ND (<10)	CHLFM = 11;
F131A1		3/11/93	430	1,200	29	ND (<25)	350	ND (<5.0)	ND (<5.0)	230	ND (<5.0)	ND (<5.0)	ND (<5.0)	CHLFM = 30;
F131A1		6/10/93	1,000	890	32	ND (<25)	490	ND (<5.0)	ND (<5.0)	340	ND (<5.0)	ND (<5.0)	ND (<5.0)	CHLFM = 9;
F131A1		9/10/93	180	400	22	ND (<5.0)	250	ND (<5.0)	ND (<5.0)	82	ND (<5.0)	ND (<5.0)	ND (<5.0)	CHLFM = 9.5; TCFMe (Freon 11) = 1.5;
F131A1		12/10/93	690	370	29	-	300	ND (<5.0)	ND (<5.0)	220	-	ND (<5.0)	ND (<10)	CHLFM = 11;
F131A1		3/2/94	630	110	9.8	-	100	ND (<1.0)	ND (<1.0)	44	ND (<1.0)	ND (<1.0)	ND (<1.0)	CHLFM = 5.8;
F131A1		6/2/94	180	200	24	-	200	ND (<1.0)	ND (<1.0)	44	ND (<1.0)	1.0	ND (<1.0)	CHLFM = 11;
F131A1	Dup	6/2/94	180	210	25	-	200	ND (<1.0)	ND (<1.0)	49	ND (<1.0)	ND (<1.0)	ND (<1.0)	CHLFM = 11;
F131A1		9/7/94	58	300	22	-	240	ND (<1.0)	ND (<1.0)	72	ND (<1.0)	ND (<1.0)	ND (<1.0)	CHLFM = 7.1;
F131A1		12/5/94	8.2	8.3	ND (<5.0)	ND (<5.0)	5.6	ND (<5.0)	ND (<5.0)	12	-	ND (<5.0)	ND (<10)	
F131A1		3/2/95	3.8	0.89	ND (<0.50)	ND (<0.50)	2.5	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 2.1;
F131A1	Dup	3/2/95	4.2	0.97	ND (<0.50)	-	2.7	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 2.4;
F131A1		6/8/95	64	55	3.7	-	53	ND (<0.50)	ND (<0.50)	3.6	ND (<0.50)	0.73	ND (<0.50)	CHLFM = 2.3;
F131A1		9/7/95	48	68	7.4	-	71	0.61	ND (<0.50)	5.5	ND (<0.50)	1.8	ND (<0.50)	CHLFM = 3.8;
F131A1		12/8/95	18	22	ND (<5.0)	-	12	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	CHLFM = 9.4;
F131A1		3/7/96	2.7	1.1	ND (<0.50)	ND (<0.50)	0.65	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 1.4;
F131A1		6/5/96	7.4	8.1	0.80	3.4	10	ND (<0.50)	ND (<0.50)	2.4	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 105; CHLFM = 1.4;
F131A1		9/12/96	11	7.7	0.88	3.7	9.9	ND (<0.50)	ND (<0.50)	2.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 107; CHLFM = 1.5; MC = 1;
F131A1		12/13/96	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F131A1	Dup	12/13/96	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F131A1		3/6/97	9.4	7.5	1.3	2.7	9.1	ND (<0.50)	ND (<0.50)	0.73	ND (<0.50)	0.97	ND (<0.50)	CBMA = 104; CHLFM = 1.2;
F131A1		6/6/97	14	15	2	5.6	13	ND (<0.50)	ND (<0.50)	3.7	ND (<0.50)	0.80	ND (<0.50)	CBMA = 104; CHLFM = 1.7;
F131A1		9/11/97	15	13	1.1	7.4	7.0	ND (<0.50)	ND (<0.50)	6.6	ND (<0.50)	0.69	ND (<0.50)	CBMA = 106; CHLFM = 1.4; TCFMe (Freon 11) = 0.77;
F131A1	Dup	9/11/97	16	13	1.4	7.5	7.1	ND (<0.50)	ND (<0.50)	6.6	ND (<0.50)	0.64	ND (<0.50)	CBMA = 108; CHLFM = 1.5; TCFMe (Freon 11) = 0.79;
F131A1		12/3/97	6.6	6.1	0.64	3	3.8	ND (<0.50)	ND (<0.50)	1.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 95;
F131A1	Dup	12/3/97	8.4	7.4	0.73	3.4	4.7	ND (<0.50)	ND (<0.50)	1.4	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 122;
F131A1		6/4/98	1.4	0.79	ND (<0.50)	ND (<0.50)	0.85	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 114;
F131A1		12/9/98	0.96	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 97.3;
F131A1		6/9/99	3.5	1.5	ND (<0.50)	ND (<0.50)	1.0	ND (<0.50)	ND (<0.50)	0.59	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F131A1		12/14/99	7.4	1.8	ND (<0.50)	1.1	2.0	ND (<0.50)	ND (<0.50)	1.4	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F131A1		6/6/00	2.4	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F131A1		12/5/00	3.6	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F131A1		6/19/01	13	0.78	ND (<0.50)	0.60	0.61	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F131A1		6/25/03	2.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F131A1		6/22/05	40	2.4	0.78	4.0	2.6	ND (<0.50)	ND (<0.50)	5.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F131A1		7/5/07	16	10	5.5	6.6	7.3	ND (<0.50)	ND (<0.50)	4.5	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F131A1		12/12/08	8.8	5.6	4.2	4.5	4.8	ND (<0.50)	ND (<0.50)	2.5	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F131A1		6/11/09	11	9.1	4.8	5.4	4.9	ND (<0.50)	ND (<0.50)	2.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F131A1		6/15/11	13	1.6	0.97	3.0	2.1	ND (<0.50)	ND (<0.50)	1.8	ND (<0.50)	ND (<0.50)	0.55	
F131A1		6/20/13	10	0.88	ND (<0.50)	1.5	0.78	ND (<0.50)	ND (<0.50)	1.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F131A1		6/8/15	13	0.63	ND (<0.50)	1.1	1.0	ND (<0.50)	ND (<0.50)	0.99	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F131A1		6/8/17	21	0.70	ND (<0.50)	0.97	0.60	ND (<0.50)	ND (<0.50)	2.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F131A1	Dup	6/8/17	21	0.68	ND (<0.50)	0.87	0.61	ND (<0.50)	ND (<0.50)	1.9	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F131A1		6/4/19	22	0.51	ND (<0.50)	0.66	0.60	ND (<0.50)	ND (<0.50)	1.8	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F132A2		12/10/92	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F132A2		12/18/92	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F132A2		3/11/93	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F132A2		6/14/93	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F132A2		9/17/93	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F132A2		12/13/93	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F132A2		3/10/94	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F132A2		6/13/94	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F132A2		12/9/94	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F132A2		6/2/95	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F132A2		12/4/95	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F132A2		6/4/96	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 108;
F132A2		12/9/96	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F132A2		6/5/97	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 101;
F132A2		12/2/97	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 102;
F132A2		6/3/98	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 111; MC = 0.76;
F132A2		12/8/98	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 105;
F132A2	Dup	12/8/98	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 97.3;
F132A2		6/10/99	17	2.1	ND (<0.50)	ND (<0.50)	0.82	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F132A2		7/29/99	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F132A2		12/7/99	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F132A2		6/7/00	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F132A2	Dup	6/7/00	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F132A2		12/7/00	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F132A2		6/6/19	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F133B		12/17/92	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	Acetone = 12; CHLFM = 8.8;
F133B		3/10/93	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	BDCMe = 7.6; BRFM = 1.3; CHLFM = 18; DBCMe = 6.9;
F133B		6/15/93	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	BDCMe = 3.8; CHLFM = 10; DBCMe = 2.8;
F133B		9/14/93	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	BDCMe = 6; CHLFM = 13; DBCMe = 5;
F133B		12/9/93	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	CHLFM = 9.9;
F133B		3/4/94	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	BDCMe = 3.4; CHLFM = 10; DBCMe = 3.2;

Appendix B
Selected Compounds from Historical Records
COE Study Area and Perimeter Area, Palo Alto, California

Location	Type	Date	TCE	1,1,1-TCA	1,1-DCA	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	PCE	Freon 113	1,2-DCB	1,2-DCA	VC	Other Constituents
F133B		6/9/94	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	BDCMe = 4.8; CHLFM = 11; DBCMe = 3.6;
F133B		12/9/94	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	CHLFM = 7.7;
F133B		6/6/95	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	BDCMe = 2.7; CHLFM = 6.4; DBCMe = 2.2;
F133B		12/7/95	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F133B		6/7/96	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	BDCMe = 2.1; CBMA = 117; CHLFM = 3.6; DBCMe = 1.7;
F133B		12/12/96	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F133B		12/9/97	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	BDCMe = 0.97; CBMA = 101; CHLFM = 0.54; DBCMe = 0.85;
F133B		12/7/99	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F133B		6/21/01	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F133B		6/26/03	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F133B		6/21/05	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F133B		6/18/07	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F133B		9/17/07	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F133B		6/16/09	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F133B		6/15/11	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F133B		6/19/13	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F133B		6/10/15	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F133B		6/7/17	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F133B		6/7/19	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F134A1		12/17/92	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F134A1		3/9/93	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 2.8;
F134A1		6/15/93	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 1.2;
F134A1		9/14/93	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 1.4;
F134A1		12/7/93	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F134A1	Dup	12/7/93	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F134A1		3/4/94	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 1.8;
F134A1		6/10/94	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.84;
F134A1		9/7/94	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
F134A1		12/8/94	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F134A1		3/2/95	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F134A1		6/5/95	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F134A1	Dup	6/5/95	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F134A1		9/5/95	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F134A1		12/4/95	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F134A1		3/4/96	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F134A1	Dup	3/4/96	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F134A1		6/4/96	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 107;
F134A1		9/10/96	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 109;
F134A1		12/9/96	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F134A1		3/5/97	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 94;
F134A1		6/3/97	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 98;
F134A1		9/9/97	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 116;
F134A1		12/9/97	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 100;
F134A1		6/4/98	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 111;
F134A1		12/10/98	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 116;
F134A1		6/9/99	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F134A1	Dup	6/9/99	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F134A1		12/7/99	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F134A1		6/7/00	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F134A1		12/8/00	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F134A1	Dup	12/8/00	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F134A1		6/6/19	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F135A1		12/15/92	84	5.2	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F135A1		3/11/93	96	12	1.5	ND (<2.5)	0.90	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 2.6;
F135A1	Dup	3/11/93	93	11	1.3	ND (<2.5)	0.80	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 2.4;
F135A1		6/15/93	300	37	2.9	ND (<5.0)	3.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.6;
F135A1		9/14/93	310	42	4.3	ND (<5.0)	3.5	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 1.3;
F135A1	Dup	9/14/93	330	42	4.0	ND (<5.0)	3.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 1.2;
F135A1		12/13/93	330	38	ND (<5.0)	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F135A1		3/10/94	330	40	5.2	-	3.3	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	CHLFM = 1.2;
F135A1		6/10/94	430	71	5.8	-	5.4	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	CHLFM = 1.7;
F135A1		9/7/94	410	47	3.8	-	4.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 1.1;
F135A1		12/12/94	420	29	ND (<5.0)	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F135A1		3/7/95	110	8.0	1.2	-	1.9	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.59	ND (<0.50)	1,1,2-TCA = 0.52; CHLFM = 0.57;
F135A1		6/6/95	390	47	4.1	-	3.8	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
F135A1		9/7/95	59	6.8	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
F135A1		12/8/95	180	19	ND (<5.0)	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F135A1		3/7/96	150	19	ND (<2.5)	5.9	2.5	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
F135A1		6/10/96	250	34	ND (<5.0)	19	6.5	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	CBMA = 115;
F135A1		9/12/96	89	11	2.4	6.3	3.6	ND (<1.2)	ND (<1.2)	ND (<1.2)	ND (<1.2)	ND (<1.2)	ND (<1.2)	CBMA = 105; MC = 1.4;
F135A1		12/13/96	19	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F135A1		3/6/97	99	10	2.9	8.5	5.2	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	CBMA = 100;
F135A1		6/6/97	89	11	2.4	NA	3.6	ND (<1.2)	ND (<1.2)	ND (<1.2)	ND (<1.2)	ND (<1.2)	ND (<1.2)	CBMA = 105; MC = 1.4;
F135A1	Dup	6/6/97	91	12	3.2	5.0	5.1	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	CBMA = 97;
F135A1		9/12/97	94	12	ND (<2.5)	ND (<2.5)	2.9	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	CBMA = 98;
F135A1		12/3/97	87	8.2	ND (<2.5)	4.0	2.8	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	CBMA = 92;
F135A1		6/2/98	130	8.3	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	CBMA = 112;
F135A1		12/9/98	128	14	2.9	8.5	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	CBMA = 104;
F135A1		6/9/99	115	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	
F135A1		12/7/99	81	4.6	ND (<2.5)	4.5	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
F135A1		1/28/00	69	3.2	ND (<1.67)	4.3	ND (<1.67)	ND (<1.67)	ND (<1.67)	ND (<1.67)	ND (<1.67)	ND (<1.67)	ND (<1.67)	
F135A1		6/6/00	100	3.3	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
F135A1		12/6/00	69	2.1	ND (<1.0)	2.8	1.3	ND (<1.0)	ND (<1.0)	ND (<4.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	
F135A1		6/20/01	79	2.4	1.1	2.7	1.6	ND (<1.0)	ND (<1.0)	ND (<4.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	
F135A1		6/24/03	35	0.73	ND (<0.50)	1.3	0.67	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F135A1		6/21/05	68	1.9	0.97	2.7	1.8	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F135A1		6/14/07	95	2.6	1.2	3.6	4.9	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F135A1		6/15/09	76	1.6	0.74	2.3	2.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F135A1		6/15/11	70	1.6	0.98	2.8	2.8	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F135A1		6/20/13	69	1.6	0.76	2.2	3.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F135A1		6/10/15	67	1.4	0.84	2.5	3.5	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F135A1		6/8/17	65	0.82	0.85	2.4	4.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F135A1		6/6/19	60	0.74	0.77	2.2	4.9	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F136A1		12/15/92	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F136A1		3/11/93	0.50	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F136A1		6/10/93	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F136A1		9/14/93	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F136A1		12/13/93	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F136A1		6/10/94	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F136A1		12/12/94	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F136A1	Dup	12/12/94	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F136A1		6/2/95	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F136A1		12/4/95	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F136A1		6/5/96	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 104;
F136A1		12/10/96	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F136A1		6/3/97	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 98;
F136A1		12/2/97	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 99;
F136A1		12/8/98	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 110;
F136A1		12/7/99	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F136A1	Dup	12/7/99	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F136A1		12/6/00	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F136A1		6/20/01	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F136A1	Dup	6/20/01	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F136A1		6/24/03	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F136A1	Dup	6/24/03	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F136A1		6/22/05	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F136A1		6/14/07	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F136A1		6/15/09	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F136A1		6/15/11	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F136A1		6/20/13	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F136A1		6/10/15	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F136A1		6/8/17	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.54	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F136A1		6/6/19	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.68	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F137A1		1/7/91	1.5	22	7.0	12	-	-	0.20	9.4	0.50	1.1	0.30	1,1,2,2-TCA = 0.30; 1,1,2-TCA = 0.2; 1,2-DCPA = 0.2; 1,3-DCB = 0.5; 1,4-DCB = 0.5; 2-CVE = 0.40; BDCMe = 0.40; Benzene = 0.5; BRFM = 0.5; BRMA = 0.5; CHLBZ = 0.40; CHLEA (EC) = 0.5; CHLFM = 11; CHLMA = 5; cis-1,3-DCP = 0.30; CT = 0.30; DBCMe = 0.40; EDB = 1; Ethylbenzene = 0.5; MC = 5; m-Xylene = 0.5; o-Xylene = 0.5; TCFMe (Freon 11) = 2.9; Toluene = 0.5; trans-1,3-DCP = 0.30; Xylenes = 0.5;
F137A1		2/5/91	0.50	7.7	3.0	11	-	-	0.20	1.0	1.0	0.60	0.30	1,1,2,2-TCA = 0.30; 1,1,2-TCA = 0.2; 1,2-DCPA = 0.2; 1,3-DCB = 1; 1,4-DCB = 1; 2-CVE = 0.40; Acetone = 30; BDCMe = 0.40; Benzene = 0.5; BRFM = 0.5; BRMA = 0.5; CHLBZ = 0.40; CHLEA (EC) = 0.5; CHLFM = 8.3; CHLMA = 0.5; cis-1,3-DCP = 0.30; CT = 0.30; DBCMe = 0.40; EDB = 1; Ethylbenzene = 0.5; MC = 5; m-Xylene = 0.5; o-Xylene = 0.5; TCFMe (Freon 11) = 2.5; Toluene = 0.5; trans-1,3-DCP = 0.30; Xylenes = 0.5;
F137A1		7/26/91	1.3	8.6	3.8	-	3.5	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.70	ND (<0.50)	CHLFM = 15; TCFMe (Freon 11) = 1.8;
F137A1		10/14/91	1.4	9.2	4.3	-	4.8	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.80	ND (<0.50)	CHLFM = 16; TCFMe (Freon 11) = 1.6;
F137A1		12/9/91	ND (<5.0)	ND (<5.0)	6.6	-	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	CHLFM = 20;
F137A1		3/12/92	1.4	8.4	4.3	-	4.3	ND (<0.50)	ND (<0.50)	1.0	ND (<0.50)	0.80	ND (<0.50)	CHLFM = 28; TCFMe (Freon 11) = 2.6;
F137A1		6/15/92	1.1	6.8	4.0	-	4.4	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.60	ND (<0.50)	CHLEA (EC) = 1.1; CHLFM = 12;
F137A1		9/23/92	1.1	8.4	3.9	-	6.3	ND (<0.50)	ND (<0.50)	0.50	ND (<0.50)	0.70	ND (<0.50)	CHLEA (EC) = 1; CHLFM = 5.2;
F137A1		12/17/92	ND (<5.0)	6.2	ND (<5.0)	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F137A1		3/10/93	1.2	7.0	4.3	-	5.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.70	ND (<0.50)	CHLEA (EC) = 1.3; CHLFM = 4.9;
F137A1	Dup	3/10/93	1.0	6.8	4.0	-	4.8	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.70	ND (<0.50)	CHLEA (EC) = 1.3; CHLFM = 4.6;
F137A1		6/8/93	ND (<0.50)	6.6	2.1	-	3.1	ND (<0.50)	ND (<0.50)	0.80	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 8;
F137A1		9/14/93	3.8	11	2.0	-	2.4	ND (<0.50)	ND (<0.50)	12	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLEA (EC) = 0.66; CHLFM = 17; TCFMe (Freon 11) = 1.3;
F137A1		12/13/93	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	CHLFM = 23;
F137A1		3/9/94	1.8	5.4	3.2	-	4.0	ND (<0.50)	ND (<0.50)	2.7	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 24; TCFMe (Freon 11) = 1.6;
F137A1	Dup	3/9/94	2.5	5.2	3.2	-	3.9	ND (<0.50)	ND (<0.50)	2.6	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 24; TCFMe (Freon 11) = 1.6;
F137A1		6/6/94	2.1	5.7	2.3	-	4.0	ND (<0.50)	ND (<0.50)	1.4	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLEA (EC) = 0.55; CHLFM = 22; TCFMe (Freon 11) = 1.2;
F137A1		12/9/94	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	CHLFM = 9.9;
F137A1		6/7/95	4.8	4.9	2.3	-	4.0	ND (<0.50)	ND (<0.50)	1.8	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 23; TCFMe (Freon 11) = 1.3;
F137A1		12/7/95	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	CHLFM = 21;
F137A1		6/10/96	12	4.2	20	9.2	4.0	ND (<0.50)	ND (<0.50)	2.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 122; CHLFM = 22; TCFMe (Freon 11) = 1;
F137A1		12/12/96	8.5	ND (<5.0)	ND (<5.0)	5.7	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	CHLFM = 21; MC = 5.2;
F137A1		6/26/08	200	930	18	57	85	ND (<10)	ND (<10)	400	ND (<10)	ND (<10)	ND (<10)	

Appendix B
Selected Compounds from Historical Records
COE Study Area and Perimeter Area, Palo Alto, California

Location	Type	Date	TCE	1,1,1-TCA	1,1-DCA	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	PCE	Freon 113	1,2-DCB	1,2-DCA	VC	Other Constituents
F137A1		6/11/09	93	220	3.1	20	23	ND (<2.5)	5.4	85	ND (<2.5)	ND (<2.5)	ND (<2.5)	
F137A1		6/15/11	43	36	5.2	7.2	8.9	ND (<0.50)	6.3	29	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F137A1		3/5/12	36	21	1.4	5.3	5.6	ND (<0.50)	4.9	19	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F137A1		6/13/12	42	26	1.4	4.1	6.5	ND (<0.50)	5.4	19	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F137A1		6/20/13	22	11	5.8	7.0	13	ND (<0.50)	3.1	7.6	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F137A1		6/11/14	23	9.6	1.3	2.6	3.9	ND (<0.50)	4.5	6.5	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F137A1		6/9/15	24	5.8	0.88	1.7	5.6	ND (<0.50)	3.3	1.7	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F137A1		6/7/16	20	3.4	1.3	2.0	2.6	ND (<0.50)	5.7	2.6	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F137A1		6/5/18	13	1.8	0.69	1.6	1.5	ND (<0.50)	4.2	1.4	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F137A1		6/5/19	15	1.3	0.62	1.4	2.9	ND (<0.50)	3.4	0.59	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F137A1	Dup	6/5/19	15	1.3	0.60	1.4	3.0	ND (<0.50)	3.0	0.50	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F137A1		6/3/20	14	0.88	ND (<0.50)	0.90	1.1	ND (<0.50)	5.2	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F138A1U		3/7/96	4.7	4.2	8.7	3.6	0.75	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	BDCMe = 1.6; CHLFM = 36;
F138A1U		6/10/96	3.3	ND (<0.50)	8.4	3.4	4.6	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.75	CBMA = 117; CHLEA (EC) = 2.3; CHLFM = 20; MC = 7.6;
F138A1U		9/11/96	0.81	ND (<0.50)	0.69	1.4	3.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 105; CHLEA (EC) = 3.3; CHLMA = 2; MC = 17;
F138A1U		12/13/96	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F138A1U		3/5/97	1.1	ND (<0.50)	2.9	2.2	3.5	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.57	CBMA = 90; CHLEA (EC) = 1.3; MC = 0.65;
F138A1U		6/4/97	3.0	ND (<0.50)	7.0	4.1	4.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.75	CBMA = 109; CHLEA (EC) = 1.5; MC = 0.73;
F138A1U		9/10/97	1.3	ND (<0.50)	4.1	0.65	2.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 111; MC = 1.4;
F138A1U		12/3/97	1.7	ND (<0.50)	4.3	2.3	2.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 92;
F138A1U		6/2/98	1.4	ND (<0.50)	6.4	3.4	3.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 119; MC = 0.56;
F138A1U		12/8/98	ND (<0.50)	ND (<0.50)	1.6	0.86	1.7	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 117;
F138A1U		6/9/99	1.3	0.80	4.1	5.2	3.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F138A1U		12/14/99	2.7	0.85	2.5	2.2	1.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F138A1U		6/8/00	5.7	5.6	7.4	11	3.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F138A1U		12/6/00	2.4	ND (<0.50)	7.3	8.1	3.4	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F138A1U		6/20/01	1.6	ND (<0.50)	7.4	7.1	3.2	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F138A1U		6/27/02	6.8	ND (<0.50)	7.9	9.7	3.9	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.57	
F138A1U		6/25/03	8.2	3.9	5.8	8.6	3.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.83	
F138A1U		6/25/04	6.2	2.1	4.8	7.1	4.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	1.6	
F138A1U		6/20/05	ND (<0.50)	ND (<0.50)	0.73	1.1	1.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F138A1U		6/27/06	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.51	0.50	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F138A1U		6/14/07	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.81	0.80	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F138A1U		6/12/08	ND (<0.50)	ND (<0.50)	0.68	1.2	1.4	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F138A1U		6/15/09	ND (<0.50)	ND (<0.50)	0.65	0.79	1.4	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.64	
F138A1U	Dup	6/15/09	ND (<0.50)	ND (<0.50)	0.65	0.56	1.4	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.64	
F138A1U		6/8/10	ND (<0.50)	ND (<0.50)	0.65	1.2	2.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F138A1U		6/15/11	ND (<0.50)	ND (<0.50)	1.9	1.4	2.9	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	2.3	
F138A1U		6/14/12	ND (<0.50)	ND (<0.50)	1.6	2.5	5.5	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	1.7	
F138A1U		6/20/13	ND (<0.50)	ND (<0.50)	1.9	1.6	4.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	4.0	
F138A1U		6/10/14	ND (<0.50)	ND (<0.50)	1.9	1.9	6.4	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	2.8	
F138A1U		6/10/15	ND (<0.50)	ND (<0.50)	1.9	2.1	6.5	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	3.3	
F138A1U		6/6/16	ND (<0.50)	ND (<0.50)	1.8	1.9	6.4	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	3.3	
F138A1U		6/8/17	ND (<0.50)	ND (<0.50)	1.8	2.6	6.9	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	3.0	
F138A1U		6/4/18	ND (<0.50)	ND (<0.50)	1.6	2.9	9.4	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	2.0	
F138A1U		6/4/19	ND (<0.50)	ND (<0.50)	0.93	1.7	4.5	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	2.7	
F138A1U		6/2/20	ND (<0.50)	ND (<0.50)	1.2	1.5	4.9	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	3.9	
F139A1		3/4/96	2.4	1.5	2.5	0.98	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 31;
F139A1		6/7/96	ND (<0.50)	ND (<0.50)	1.7	ND (<0.50)	0.63	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 113; MC = 0.68;
F139A1		9/11/96	ND (<0.50)	ND (<0.50)	0.89	0.91	1.8	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 109;
F139A1	Dup	9/11/96	ND (<0.50)	ND (<0.50)	0.83	0.86	1.6	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 107;
F139A1		12/12/96	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	Toluene = 6.7;
F139A1		3/5/97	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 98;
F139A1		6/4/97	ND (<0.50)	ND (<0.50)	0.95	0.77	2.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 112;
F139A1		9/9/97	ND (<0.50)	ND (<0.50)	1.2	1.1	2.8	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 118;
F139A1		12/3/97	0.65	ND (<0.50)	1.2	0.91	2.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 91;
F139A1		6/2/98	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 111;
F139A1		12/8/98	0.76	ND (<0.50)	3.1	2.2	4.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 112; CHLEA (EC) = 1.85;
F139A1		6/9/99	0.51	ND (<0.50)	2.1	1.2	2.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F139A1		12/14/99	1.2	ND (<0.50)	3.4	2.4	2.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F139A1		6/8/00	0.64	ND (<0.50)	1.6	ND (<0.50)	1.3	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F139A1		12/6/00	1.1	ND (<0.50)	2.9	2.2	2.0	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F139A1		6/20/01	ND (<0.50)	ND (<0.50)	0.63	0.84	0.93	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F139A1		6/27/02	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F139A1		6/25/03	1.2	ND (<0.50)	1.7	1.5	1.7	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F139A1		6/25/04	2.0	0.78	0.78	1.9	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.64;
F139A1		6/20/05	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 8.1;
F139A1		6/27/06	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F139A1		6/14/07	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F139A1		6/12/08	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F139A1	Dup	6/12/08	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F139A1		6/15/09	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F139A1		6/8/10	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F139A1		6/15/11	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F139A1	Dup	6/15/11	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F139A1		6/14/12	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 4.9;
F139A1		6/20/13	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F139A1		6/10/14	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F139A1		6/10/15	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F139A1		6/7/16	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F139A1		6/8/17	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F139A1		6/4/18	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F139A1		6/4/19	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F139A1		6/2/20	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F140A1		3/7/96	ND (<0.50)	2.1	0.90	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F140A1		6/5/96	ND (<0.50)	1.7	1.4	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 104;
F140A1		9/10/96	ND (<0.50)	1.7	1.4	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 108;
F140A1		12/11/96	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F140A1		3/6/97	0.80	4.4	2.6	2.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 92;
F140A1		6/3/97	ND (<0.50)	1.4	1.5	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 89;
F140A1		9/9/97	0.68	4.0	3.3	0.99	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 111;
F140A1		12/3/97	0.93	3.1	2.3	0.92	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 92;
F140A1		6/2/98	ND (<0.50)	ND (<0.50)	0.54	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 119;
F140A1		12/8/98	0.97	3.9	2.7	1.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 113;
F140A1		6/9/99	0.93	3.4	2.7	0.88	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F140A1		12/14/99	0.81	2.2	1.8	0.51	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F140A1		6/7/00	ND (<0.50)	1.3	1.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F140A1		12/8/00	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F140A1		6/20/01	1.3	2.8	1.7	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F140A1		6/24/03	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F140A1		6/20/05	1.7	2.0	3.1	0.82	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F140A1		6/14/07	2.8	3.0	3.3	1.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F140A1		6/15/09	2.6	3.0	2.4	0.64	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F140A1		6/15/11	3.4	1.0	3.5	0.89	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F140A1		6/20/13	2.3	ND (<0.50)	3.6	0.66	0.94	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F140A1		6/10/15	1.6	ND (<0.50)	3.7	0.74	1.8	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F140A1		6/8/17	2.0	1.0	2.9	0.82	1.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F140A1		6/4/19	2.9	0.81	3.0	0.75	1.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F141A1U		12/4/92	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F141A1U	Dup	12/4/92	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F141A1U		3/11/93	0.80	0.60	0.90	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F141A1U		6/15/93	0.60	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F141A1U		9/13/93	ND (<0.50)	ND (<0.50)	0.78	ND (<0.50)	ND (<0.50)	ND (<0.50)	1.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F141A1U		12/13/93	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	Acetone = 40;
F141A1U		3/4/94	1.7	ND (<0.50)	1.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F141A1U	Dup	3/4/94	2.1	ND (<0.50)	1.5	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	MC = 0.51;
F141A1U		6/9/94	1.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F141A1U		9/8/94	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F141A1U		12/9/94	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F141A1U		3/6/95	2.3	ND (<0.50)	0.52	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F141A1U		6/5/95	1.4	ND (<0.50)	0.75	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F141A1U		9/5/95	2.0	ND (<0.50)	0.98	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F141A1U		12/6/95	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<0.50)	ND (<5.0)	ND (<10)	
F141A1U		2/22/96	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F141A1U	Dup	2/22/96	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F141A1U		3/5/96	2.2	ND (<0.50)	0.84	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F141A1U		6/6/96	1.5	ND (<0.50)	1.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 117;
F141A1U		9/10/96	1.4	ND (<0.50)	1.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 108;
F141A1U		12/11/96	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F141A1U	Dup	12/11/96	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F141A1U		3/4/97	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 103;
F141A1U		6/3/97	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 99;
F141A1U		9/9/97	0.68	ND (<0.50)	0.78	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 115;
F141A1U		12/8/97	0.65	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 95; MC = 0.51;
F141A1U	Dup	12/8/97	0.73	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 93; MC = 0.57;
F141A1U		6/5/98	1.1	ND (<0.50)	0.95	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 113;
F141A1U		12/11/98	2.6	ND (<0.50)	1.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 95.7;
F141A1U		6/9/99	2.2	ND (<0.50)	1.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.85	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F141A1U		12/7/99	1.5	ND (<0.50)	1.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F141A1U		1/28/00	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F141A1U		6/7/00	1.1	ND (<0.50)	0.72	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F141A1U		12/8/00	1.7	ND (<0.50)	0.98	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F141A1U		6/21/01	1.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F141A1U		6/26/02	1.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F141A1U		6/26/03	1.1	ND (<0.50)	0.76	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F141A1U		8/31/04	0.92	ND (<0.50)	0.64	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F141A1U		8/31/04	0.90	ND (<0.50)	0.64	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F141A1U		6/21/05	0.97	ND (<0.50)	0.71	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F141A1U		6/27/06	0.80	ND (<0.50)	0.55	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F141A1U		6/14/07	0.91	ND (<0.50)	0.70	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F141A1U		6/10/08	1.0	ND (<0.50)	0.73	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F141A1U		6/15/09	0.91	ND (<0.50)	0.57	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F141A1U		6/9/10	0.69	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F141A1U		6/15/11	0.77	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F141A1U		6/14/12	0.75	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F141A1U		6/19/13	0.72	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	

Appendix B
Selected Compounds from Historical Records
COE Study Area and Perimeter Area, Palo Alto, California

Location	Type	Date	TCE	1,1,1-TCA	1,1-DCA	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	PCE	Freon 113	1,2-DCB	1,2-DCA	VC	Other Constituents
F141A1U		11/13/13	1.1	ND (<0.50)	0.55	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F141A1U		2/25/14	1.2	ND (<0.50)	0.57	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F141A1U	Dup	2/25/14	1.2	ND (<0.50)	0.59	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F141A1U		5/13/14	1.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F141A1U		6/10/14	0.82	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F141A1U		8/13/14	0.98	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F141A1U		11/12/14	1.1	ND (<0.50)	0.56	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F141A1U	Dup	11/12/14	1.0	ND (<0.50)	0.57	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F141A1U		6/10/15	0.85	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F141A1U		1/12/16	0.73	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F141A1U		6/7/16	0.86	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F141A1U		6/8/17	0.82	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F141A1U		6/7/18	0.76	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F141A1U		6/7/19	0.84	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F141A1U	Dup	6/7/19	0.80	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F141A1U		6/4/20	0.88	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F142A1		12/4/92	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	Acetone = 11;
F142A1		3/11/93	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F142A1		6/15/93	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F142A1		9/13/93	5.9	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F142A1		12/9/93	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F142A1		3/4/94	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F142A1		6/9/94	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F142A1		9/8/94	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F142A1		12/9/94	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F142A1		3/6/95	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F142A1		6/2/95	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F142A1		9/5/95	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F142A1		12/4/95	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F142A1		3/4/96	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F142A1		6/6/96	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 122;
F142A1		9/10/96	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 106;
F142A1		12/9/96	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F142A1		3/4/97	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 103;
F142A1		6/3/97	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 90;
F142A1		9/9/97	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 120;
F142A1		12/8/97	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 99; MC = 0.53;
F142A1		6/4/98	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 114;
F142A1		12/10/98	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 111;
F142A1		6/9/99	0.96	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.65	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F142A1		12/7/99	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F142A1		1/28/00	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F142A1		6/7/00	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F142A1		12/8/00	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F142A1		6/21/01	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F142A1		6/26/02	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F142A1		6/26/03	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F142A1		6/22/04	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F142A1		6/21/05	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F142A1		6/27/06	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F142A1		6/18/07	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F142A1		6/10/08	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F142A1		6/15/09	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F142A1		6/9/10	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F142A1	Dup	6/9/10	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F142A1		6/15/11	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F142A1		6/14/12	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F142A1		6/19/13	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F142A1	Dup	6/19/13	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F142A1		11/13/13	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F142A1		2/25/14	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F142A1		5/13/14	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F142A1		6/10/14	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F142A1		8/13/14	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F142A1		11/12/14	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F142A1		6/10/15	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F142A1		1/12/16	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F142A1		6/7/16	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F142A1		6/8/17	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F142A1		6/7/18	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F142A1		6/7/19	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F142A1		6/4/20	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F143A1U		12/16/92	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F143A1U		3/8/93	ND (<0.50)	2.5	1.2	-	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F143A1U	Dup	3/8/93	ND (<0.50)	2.4	1.1	-	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F143A1U		6/11/93	ND (<0.50)	2.5	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F143A1U		9/9/93	ND (<0.50)	3.1	0.95	-	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F143A1U		12/8/93	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F143A1U		3/3/94	ND (<0.50)	1.8	ND (<0.50)	-	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F143A1U		6/10/94	ND (<0.50)	1.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F143A1U	Dup	6/10/94	ND (<0.50)	1.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F143A1U		9/7/94	1.5	1.4	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F143A1U		12/7/94	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F143A1U		3/2/95	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F143A1U		6/5/95	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F143A1U		9/5/95	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F143A1U		12/5/95	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F143A1U		3/5/96	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F143A1U		6/4/96	ND (<0.50)	1.9	ND (<0.50)	0.50	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 107;
F143A1U		9/10/96	ND (<0.50)	1.6	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 107;
F143A1U		12/9/96	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F143A1U		3/4/97	ND (<0.50)	2.1	ND (<0.50)	0.61	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 103;
F143A1U		6/3/97	ND (<0.50)	1.7	ND (<0.50)	0.65	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 92;
F143A1U		9/9/97	ND (<0.50)	4.5	ND (<0.50)	0.81	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 87;
F143A1U		12/3/97	ND (<0.50)	1.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 95;
F143A1U		12/9/98	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 98.7;
F143A1U		12/7/99	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F143A1U		1/28/00	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F143A1U		12/8/00	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F143A1U		6/20/01	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F143A1U		6/24/03	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F143A1U		6/21/05	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F143A1U		6/14/07	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F143A1U		6/15/09	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F143A1U		6/15/11	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F143A1U		6/20/13	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F143A1U	Dup	6/20/13	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F143A1U		6/10/15	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F143A1U		6/6/17	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F143A1U		6/7/19	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F144A2		12/16/92	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	CHLFM = 39;
F144A2		3/12/93	0.70	1.4	ND (<0.50)	ND (<0.50)	0.50	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 29;
F144A2		6/14/93	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 14;
F144A2	Dup	6/14/93	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 14;
F144A2		9/10/93	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 3;
F144A2		12/10/93	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F144A2		3/2/94	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 2.6;
F144A2		6/2/94	0.52	0.73	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 1.6;
F144A2		9/2/94	ND (<0.50)	0.51	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 1.2;
F144A2		12/5/94	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F144A2		3/2/95	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.78;
F144A2		6/5/95	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.6;
F144A2		9/6/95	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F144A2		12/5/95	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F144A2		3/5/96	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F144A2		6/5/96	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 115;
F144A2		9/10/96	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 110;
F144A2		12/10/96	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F144A2		3/4/97	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 99;
F144A2		6/3/97	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 98;
F144A2		9/9/97	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 101;
F144A2		12/8/97	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 88;
F144A2	Dup	12/8/97	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 105; MC = 0.53;
F144A2		6/3/98	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 107;
F144A2		12/9/98	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 94.7;
F144A2		6/9/99	1.5	1.4	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F144A2		12/14/99	0.59	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F144A2		6/6/00	270	320	45	68	370	5.4	ND (<5.0)	27	ND (<5.0)	ND (<5.0)	ND (<5.0)	
F144A2		9/7/00	200	210	28	49	240	ND (<10)	ND (<10)	45	ND (<10)	ND (<10)	ND (<10)	
F144A2		12/6/00	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F145A1		12/21/92	230	15	ND (<5.0)	ND (<6.2)	9.4	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<0.50)	ND (<5.0)	ND (<10)	BDCMe = 12; BRFM = 2.4; CHLFM = 13; DBCMe = 9.9;
F145A1	Dup	12/21/92	280	12	2.0	ND (<2.5)	6.2	ND (<0.50)	7.4	3.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	BDCMe = 14; BRFM = 2.0; CHLFM = 14; DBCMe = 10;
F145A1		12/28/92	230	15	ND (<5.0)	ND (<6.2)	9.4	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<0.50)	ND (<5.0)	ND (<10)	BDCMe = 12; BRFM = 2.4; CHLFM = 13; DBCMe = 9.9;
F145A1		3/8/93	320	24	4.6	ND (<5.0)	8.0	ND (<5.0)	7.0	2.6	ND (<5.0)	ND (<5.0)	ND (<5.0)	BDCMe = 1.8; CHLFM = 2.0;
F145A1		6/14/93	330	26	3.8	ND (<5.0)	8.8	ND (<5.0)	1.2	4.4	ND (<5.0)	ND (<5.0)	ND (<5.0)	
F145A1		9/13/93	250	55	5.2	ND (<5.0)	73	ND (<5.0)	ND (<5.0)	ND (<1.0)	ND (<1.0)	ND (<5.0)	ND (<1.0)	CHLFM = 1.5;
F145A1		12/3/93	150	8.4	ND (<5.0)	-	8.3	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F145A1		3/10/94	200	14	4.6	-	6.0	ND (<1.0)	ND (<1.0)	4.7	ND (<1.0)	ND (<1.0)	ND (<1.0)	
F145A1		6/13/94	440	25	5.3	-	9.8	ND (<1.0)	1.3	4.7	ND (<1.0)	ND (<1.0)	ND (<1.0)	
F145A1		9/9/94	380	22	6.1	-	9.8	ND (<1.0)	1.2	5.0	ND (<1.0)	1.4	ND (<1.0)	1,1,2-TCA = 1; MC = 1.1;
F145A1		12/13/94	270	20	5.1	-	7.8	ND (<5.0)	ND (<5.0)	7.4	-	ND (<5.0)	ND (<10)	
F145A1		3/7/95	260	16	4.9	-	9.7	ND (<1.0)	1.9	2.6	ND (<1.0)	ND (<1.0)	ND (<1.0)	
F145A1		6/6/95	360	24	5.0	-	11	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
F145A1		9/7/95	370	29	7.5	-	17	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	MC = 11;
F145A1		12/8/95	350	21	7.0	ND (<25)	16	ND (<5.0)	ND (<5.0)	5.6	-	ND (<5.0)	ND (<10)	
F145A1	Dup	12/8/95	350	23	7.5	ND (<5.0)	17	ND (<5.0)	ND (<5.0)	6.1	-	ND (<5.0)	ND (<10)	

Appendix B
Selected Compounds from Historical Records
COE Study Area and Perimeter Area, Palo Alto, California

Location	Type	Date	TCE	1,1,1-TCA	1,1-DCA	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	PCE	Freon 113	1,2-DCB	1,2-DCA	VC	Other Constituents
F145A1		3/7/96	330	27	8.4	18	16	ND (<5.0)	14	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
F145A1		6/6/96	340	22	7.9	30	18	0.80	2.3	6.2	ND (<0.50)	1.2	ND (<0.50)	CBMA = 103; CHLFM = 2.0; MC = 0.69;
F145A1		9/12/96	220	18	6.6	14	21	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	CBMA = 106; MC = 14;
F145A1		12/13/96	240	11	ND (<10)	12	18	ND (<10)	ND (<10)	ND (<10)	-	ND (<10)	ND (<20)	
F145A1		3/6/97	14	1.4	0.67	0.51	3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 100;
F145A1		6/6/97	260	25	ND (<10)	21	33	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	CBMA = 104;
F145A1		9/12/97	330	28	7.9	25	52	ND (<5.0)	ND (<5.0)	6.0	ND (<5.0)	ND (<5.0)	ND (<5.0)	CBMA = 103;
F145A1		12/5/97	83	6.6	ND (<5.0)	ND (<5.0)	25	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	CBMA = 92;
F145A1		6/3/98	83	ND (<5.0)	ND (<5.0)	ND (<5.0)	19	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	CBMA = 100;
F145A1	Dup	6/3/98	91	ND (<5.0)	ND (<5.0)	ND (<5.0)	20	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	CBMA = 107;
F145A1		12/10/98	220	18	ND (<5.0)	16	46	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	CBMA = 113;
F145A1	Dup	12/10/98	234	18	5.5	16	48	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	CBMA = 119;
F145A1		6/8/99	288	ND (<10)	ND (<10)	17	39	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	
F145A1		1/28/00	228	31	ND (<5.0)	15	36	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
F145A1		6/8/00	130	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<40)	ND (<10)	ND (<10)	ND (<10)	
F145A1		12/8/00	250	31	13	ND (<5.0)	42	ND (<5.0)	ND (<5.0)	ND (<20)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
F145A1		6/27/03	150	21	2.5	7.1	14	ND (<2.0)	ND (<2.0)	2.5	ND (<2.0)	ND (<2.0)	ND (<2.0)	
F145A1		6/20/05	34	2.1	0.63	1.2	4.7	4.2	3.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F145A1		6/20/07	160	18	2.9	8.9	21	ND (<2.0)	4.3	3.3	ND (<2.0)	ND (<2.0)	ND (<2.0)	
F145A1		6/10/09	25	0.91	0.76	0.77	9.6	3.0	4.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F145A1		7/11/11	25	1.0	1.0	0.95	4.4	2.8	5.7	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F145A1		6/17/13	27	0.92	1.1	0.99	5.6	2.6	5.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F145A1		6/10/14	68	7.0	2.3	5.2	16	0.63	3.1	0.90	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F145A1		6/6/16	130	23	2.9	10	19	ND (<0.50)	4.2	2.7	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F145A1		6/5/17	120	23	2.7	8.2	17	ND (<0.50)	3.8	2.7	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F145A1		6/5/19	120	22	1.9	8.2	14	ND (<0.50)	4.5	3.8	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F145A1		6/3/20	110	14	1.7	6.3	14	ND (<0.50)	3.9	2.8	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F145A1	Dup	6/3/20	96	18	1.8	6.4	14	ND (<0.50)	3.6	3.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.51
F146A1U		12/18/92	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<0.50)	ND (<5.0)	ND (<10)	BDCMe = 5.2; CHLFM = 6.8; DBCMe = 4.4;
F146A1U		12/28/92	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<0.50)	ND (<5.0)	ND (<10)	BDCMe = 5.2; CHLFM = 6.8; DBCMe = 4.4;
F146A1U	Dup	12/28/92	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F146A1U		3/11/93	0.80	0.50	0.50	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	BDCMe = 1.1; CHLFM = 6.4;
F146A1U		6/9/93	1.4	ND (<0.50)	0.60	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F146A1U		9/9/93	2.3	ND (<0.50)	0.89	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.58;
F146A1U		12/13/93	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F146A1U	Dup	12/13/93	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F146A1U		3/8/94	1.9	ND (<0.50)	0.65	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F146A1U		6/10/94	1.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F146A1U		9/7/94	2.5	ND (<0.50)	0.73	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F146A1U		12/7/94	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F146A1U	Dup	12/7/94	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F146A1U		3/6/95	2.6	ND (<0.50)	0.60	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F146A1U		6/2/95	2.3	ND (<0.50)	0.61	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F146A1U		9/5/95	1.4	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F146A1U		12/6/95	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F146A1U		3/5/96	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.9;
F146A1U		6/6/96	1.8	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 109;
F146A1U		9/10/96	0.82	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 105;
F146A1U		12/11/96	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F146A1U		3/4/97	1.4	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 106;
F146A1U		6/4/97	2.7	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	1.3	ND (<0.50)	CBMA = 106;
F146A1U		9/9/97	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 101;
F146A1U		12/4/97	0.88	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.69	ND (<0.50)	CBMA = 95;
F146A1U		6/3/98	0.60	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 107;
F146A1U		12/9/98	0.97	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 101;
F146A1U		6/9/99	0.68	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F146A1U		12/7/99	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F146A1U		6/7/00	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F146A1U		12/7/00	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F147A1		12/21/92	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<0.50)	ND (<5.0)	ND (<10)	BDCMe = 9.5; BRFM = 4.9; CHLFM = 12; DBCMe = 18;
F147A1		12/28/92	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<0.50)	ND (<5.0)	ND (<10)	BDCMe = 9.5; BRFM = 4.9; CHLFM = 12; DBCMe = 9.8;
F147A1		3/12/93	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	BDCMe = 7.8; BRFM = 2.4; CHLFM = 10; DBCMe = 8.1;
F147A1		6/9/93	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	BDCMe = 5.4; CHLFM = 7.3; DBCMe = 5.3;
F147A1		9/9/93	0.65	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	BDCMe = 6; BRFM = 1.4; CHLFM = 7.1; DBCMe = 6.4;
F147A1		12/9/93	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	CHLFM = 5.9;
F147A1		3/3/94	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	BDCMe = 3.1; CHLFM = 4.2; DBCMe = 2.5;
F147A1	Dup	3/3/94	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	BDCMe = 2.9; CHLFM = 4.3; DBCMe = 2.1;
F147A1		6/10/94	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	BDCMe = 2.1; CHLFM = 2.6; DBCMe = 0.88;
F147A1		9/7/94	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	BDCMe = 0.8; CHLFM = 0.77;
F147A1		12/7/94	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F147A1		3/6/95	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F147A1		6/6/95	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F147A1		9/5/95	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	-	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F147A1		12/4/95	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F147A1		3/5/96	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F147A1	Dup	3/5/96	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F147A1		6/4/96	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 107;
F147A1	Dup	6/4/96	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 107;
F147A1		9/10/96	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 107;
F147A1		12/9/96	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F147A1		3/4/97	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 102;
F147A1		6/6/97	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 97;
F147A1	Dup	6/6/97	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 95;
F147A1		9/9/97	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 103;
F147A1	Dup	9/9/97	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 112; MC = 0.51;
F147A1		12/4/97	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 86;
F147A1		6/3/98	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 113;
F147A1		12/8/98	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 116;
F147A1		6/9/99	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F147A1		12/7/99	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F147A1		1/28/00	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F147A1		6/7/00	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F147A1		12/7/00	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F148A1U		11/9/95	12	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
F148A1U		12/6/95	8.5	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F148A1U		3/6/96	10	1.5	ND (<0.50)	ND (<0.50)	0.79	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F148A1U		6/7/96	7.6	1.6	ND (<0.50)	ND (<0.50)	0.69	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 112;
F148A1U		9/11/96	7.8	1.1	0.56	ND (<0.50)	1.6	ND (<0.50)	0.66	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 112; CHLFM = 0.55;
F148A1U	Dup	9/11/96	7.0	1.0	ND (<0.50)	ND (<0.50)	0.86	ND (<0.50)	0.70	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 105;
F148A1U		12/11/96	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F148A1U		3/5/97	4.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 93;
F148A1U		6/4/97	8.9	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.92	ND (<0.50)	0.68	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 105; CHLFM = 0.57;
F148A1U		9/10/97	1.8	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 108; MC = 0.74;
F148A1U		12/9/97	1.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 99;
F148A1U		6/4/98	4.4	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 110;
F148A1U		12/10/98	2.5	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 114;
F148A1U		6/9/99	5.5	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.53	ND (<0.50)	1.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F148A1U		12/7/99	7.7	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.87	ND (<0.50)	0.58	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F148A1U		1/28/00	8.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.72	ND (<0.50)	0.55	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F148A1U		6/7/00	6.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F148A1U		12/8/00	6.5	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F149A1U		11/9/95	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.82;
F149A1U		12/5/95	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F149A1U		3/5/96	2.9	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F149A1U		4/4/96	3.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F149A1U		6/6/96	1.9	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 111;
F149A1U	Dup	6/6/96	1.7	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 112;
F149A1U		9/10/96	1.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 104;
F149A1U		12/10/96	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F149A1U	Dup	12/10/96	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F149A1U		3/4/97	0.85	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 105;
F149A1U	Dup	3/4/97	0.84	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 100;
F149A1U		6/3/97	0.54	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 98;
F149A1U		9/9/97	0.56	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 103;
F149A1U		12/2/97	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 108;
F149A1U		6/3/98	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 106;
F149A1U		12/8/98	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 109;
F149A1U	Dup	12/8/98	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 122;
F149A1U		6/9/99	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F149A1U		12/7/99	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F149A1U		6/7/00	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F149A1U		12/6/00	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F150A1		11/9/95	6.3	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
F150A1		12/5/95	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	CARBD = 7.9;
F150A1		3/5/96	3.0	ND (<0.50)	0.85	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	MC = 1.3;
F150A1		6/6/96	1.2	ND (<0.50)	0.94	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 121;
F150A1		9/11/96	1.6	ND (<0.50)	1.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 111;
F150A1		12/11/96	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F150A1		3/4/97	1.3	ND (<0.50)	1.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 98;
F150A1		6/4/97	1.1	ND (<0.50)	1.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 104; MC = 1.5;
F150A1		9/9/97	1.2	ND (<0.50)	0.75	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 104;
F150A1		12/2/97	0.77	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 94;
F150A1		6/3/98	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 115;
F150A1		12/9/98	1.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 103;
F150A1		6/9/99	1.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F150A1		12/7/99	0.95	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F150A1	Dup	12/7/99	1.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F150A1		6/7/00	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F150A1		12/6/00	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F151B		10/16/95	0.81	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	BDCMe = 2.2; CHLFM = 27;
F151B	Dup	10/16/95	0.64	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	BDCMe = 2.5; CHLFM = 23;
F151B		12/5/95	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	CHLFM = 24;
F151B		3/5/96	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F151B		6/6/96	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 113;

Appendix B
Selected Compounds from Historical Records
COE Study Area and Perimeter Area, Palo Alto, California

Location	Type	Date	TCE	1,1,1-TCA	1,1-DCA	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	PCE	Freon 113	1,2-DCB	1,2-DCA	VC	Other Constituents
F151B		9/11/96	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 112;
F151B		12/10/96	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
F151B		3/4/97	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 102;
F151B		12/3/97	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 91;
F151B		12/9/99	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F151B		6/19/01	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F151B		6/25/03	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F151B		6/22/05	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F151B		6/13/07	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F151B		6/15/09	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F151B		6/15/11	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F151B		6/20/13	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F151B		6/10/15	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F151B		6/5/17	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F151B		6/6/19	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F155A1U		8/16/11	54	11	3.1	2.8	12	ND (<0.50)	4.3	2.7	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F155A1U	Dup	8/16/11	53	11	2.8	2.7	12	ND (<0.50)	4.8	2.9	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F155A1U		9/30/11	48	11	2.5	2.5	11	ND (<0.50)	4.9	2.6	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F155A1U		6/14/12	41	7.2	1.8	1.4	8.7	ND (<0.50)	3.4	2.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F155A1U		6/21/13	51	5.5	2.0	2.0	9.3	ND (<0.50)	5.1	2.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F155A1U		6/11/14	38	3.8	0.62	0.74	4.8	ND (<0.50)	3.4	1.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F155A1U		6/10/15	38	2.8	ND (<0.50)	ND (<0.50)	3.3	ND (<0.50)	3.2	0.75	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 1.6;
F155A1U		6/5/17	39	2.2	ND (<0.50)	ND (<0.50)	2.6	ND (<0.50)	3.6	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F155A1U		6/4/18	52	2.3	ND (<0.50)	0.81	3.8	ND (<0.50)	4.8	0.82	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 1.1
F155A1U		6/4/19	43	1.7	ND (<0.50)	0.55	2.3	ND (<0.50)	3.6	0.92	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 2.5
F155A1U		6/2/20	47	1.8	ND (<0.50)	0.59	3.6	ND (<0.50)	4.0	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50) *	CHLFM = 2.3
F156A1U		8/26/11	130	ND (<0.50)	ND (<0.50)	ND (<0.50)	13	0.70	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F156A1U		9/29/11	93	ND (<0.50)	ND (<0.50)	ND (<0.50)	10	0.53	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F156A1U	Dup	9/29/11	110	ND (<0.50)	ND (<0.50)	ND (<0.50)	11	0.65	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F156A1U		6/13/12	91	ND (<0.50)	ND (<0.50)	ND (<0.50)	8.5	0.50	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F156A1U		6/18/13	79	ND (<0.50)	ND (<0.50)	ND (<0.50)	7.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F156A1U		6/11/14	59	0.53	1.7	ND (<0.50)	8.6	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F156A1U		6/8/15	59	ND (<0.50)	0.58	ND (<0.50)	5.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F156A1U		6/6/17	86	ND (<0.50)	0.66	ND (<0.50)	6.7	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F156A1U		6/4/18	60	ND (<0.50)	ND (<0.50)	ND (<0.50)	4.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F156A1U	Dup	6/4/18	55	ND (<0.50)	ND (<0.50)	ND (<0.50)	4.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F156A1U		6/4/19	68	0.80	0.68	0.56	3.8	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F156A1U		6/2/20	75	0.56	0.52	ND (<0.50)	4.5	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.54
F159A1U		8/16/11	11	ND (<0.50)	0.66	0.71	39	2.5	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F159A1U	Dup	8/16/11	11	ND (<0.50)	0.63	0.69	35	2.4	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F159A1U		9/30/11	15	ND (<0.50)	0.55	0.62	33	2.4	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F159A1U		6/12/12	8.8	ND (<0.50)	ND (<0.50)	ND (<0.50)	21	1.8	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F159A1U	Dup	6/12/12	7.9	ND (<0.50)	ND (<0.50)	ND (<0.50)	21	1.7	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F159A1U		6/20/13	9.2	ND (<0.50)	0.55	ND (<0.50)	31	2.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F159A1U		6/11/14	7.6	ND (<0.50)	0.61	0.57	33	2.6	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F159A1U		6/8/15	3.7	ND (<0.50)	0.59	ND (<0.50)	25	1.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F159A1U		6/5/19	2.9	ND (<0.50)	ND (<0.50)	ND (<0.50)	14	1.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F160A1U		8/17/11	17	1.0	0.73	2.1	2.9	ND (<0.50)	28	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F160A1U		9/30/11	24	1.5	0.81	2.7	3.9	ND (<0.50)	37	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F160A1U		6/14/12	20	1.1	0.72	2.1	3.2	ND (<0.50)	37	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F160A1U		6/18/13	20	1.1	0.71	2.2	2.6	ND (<0.50)	36	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F160A1U		6/11/14	21	1.5	0.84	2.8	2.8	0.51	60	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F160A1U		6/8/15	14	0.65	0.51	1.2	1.4	ND (<0.50)	29	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F160A1U		6/6/18	22	0.54	ND (<0.50)	1.2	3.1	ND (<0.50)	61	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F160A1U		6/7/19	15	ND (<0.50)	ND (<0.50)	0.69	1.2	ND (<0.50)	46	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F160A1U		6/4/20	17	ND (<0.50)	ND (<0.50)	0.87	3.2	ND (<0.50)	55	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F161A1U		8/17/11	12	0.79	0.62	1.3	0.61	ND (<0.50)	0.62	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F161A1U		9/30/11	9.3	ND (<0.50)	ND (<0.50)	0.80	ND (<0.50)	ND (<0.50)	0.99	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F161A1U		6/14/12	10	ND (<0.50)	0.64	1.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F161A1U		6/18/13	12	ND (<0.50)	0.67	1.2	0.67	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F161A1U		11/13/13	14	0.50	0.91	1.8	0.95	ND (<0.50)	0.88	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F161A1U		2/25/14	21	0.71	1.2	2.6	1.4	ND (<0.50)	0.74	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F161A1U		5/13/14	14	0.50	0.85	2.0	1.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F161A1U	Dup	5/13/14	17	0.68	1.1	2.0	1.3	ND (<0.50)	0.59	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F161A1U		6/11/14	20	0.68	1.1	2.3	1.3	ND (<0.50)	0.86	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F161A1U		8/13/14	15	ND (<0.50)	0.87	2.2	1.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F161A1U	Dup	8/13/14	16	ND (<0.50)	0.88	2.2	1.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F161A1U		11/12/14	19	0.53	0.86	1.7	1.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F161A1U		6/8/15	17	ND (<0.50)	0.59	1.0	0.90	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F161A1U		1/12/16	16	ND (<0.50)	0.73	1.1	0.94	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F161A1U	Dup	1/12/16	16	ND (<0.50)	0.70	1.1	0.95	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F161A1U		6/7/16	18	ND (<0.50)	0.57	1.4	1.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F161A1U		6/22/17	12	ND (<0.50)	ND (<0.50)	0.79	0.60	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F161A1U		6/7/18	12	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.76	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F161A1U		6/7/19	10	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.80	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F161A1U		6/4/20	7.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.96	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F163A1		8/17/11	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F163A1		9/30/11	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F163A1		6/14/12	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F163A1		6/18/13	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F163A1		6/11/14	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F163A1		6/10/15	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F163A1		6/7/19	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F164A1		8/17/11	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F164A1		9/30/11	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F164A1		6/14/12	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F164A1		6/18/13	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F164A1		6/11/14	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F164A1		6/10/15	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F164A1		6/7/19	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F165A1		8/26/11	12	ND (<0.50)	0.55	ND (<0.50)	1.7	ND (<0.50)	1.3	4.1	2.6	ND (<0.50)	ND (<0.50)	1,2,4-TCB = 25;
F165A1		9/29/11	6.9	ND (<0.50)	ND (<0.50)	ND (<0.50)	1.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F165A1	Dup	9/29/11	6.9	ND (<0.50)	0.51	ND (<0.50)	1.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F165A1		3/5/12	0.80	ND (<0.50)	0.94	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F165A1		6/13/12	ND (<0.50)	ND (<0.50)	1.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F165A1		6/18/13	ND (<0.50)	ND (<0.50)	1.6	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F165A1		6/11/14	ND (<0.50)	ND (<0.50)	2.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F165A1	Dup	6/11/14	ND (<0.50)	ND (<0.50)	1.5	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F165A1		6/8/15	ND (<0.50)	ND (<0.50)	0.99	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F165A1		6/6/17	ND (<0.50)	ND (<0.50)	2.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F165A1		6/4/19	ND (<0.50)	ND (<0.50)	3.8	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F166A1		2/1/12	100	9.5	5.4	8.1	12	ND (<0.50)	ND (<0.50)	15	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F166A1		3/5/12	120	9.1	5.2	8.2	10	ND (<0.50)	ND (<0.50)	16	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F166A1		6/13/12	80	7.0	5.3	3.5	8.9	ND (<0.50)	ND (<0.50)	6.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F166A1		6/18/13	140	11	5.4	7.0	11	ND (<0.50)	ND (<0.50)	13	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F166A1		6/11/14	120	11	5.8	8.0	11	ND (<0.50)	ND (<0.50)	16	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F166A1		6/9/15	110	7.4	5.0	6.9	9.9	ND (<0.50)	ND (<0.50)	7.6	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F166A1		6/5/17	150	8.0	6.2	7.4	11	ND (<0.50)	ND (<0.50)	13	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F166A1		6/5/18	180	8.7	7.2	7.6	11	ND (<0.50)	ND (<0.50)	19	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F166A1		6/6/19	150	8.1	7.6	8.2	13	ND (<0.50)	ND (<0.50)	18	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F166A1		6/4/20	120	28	9.3	21	61	ND (<0.50)	ND (<0.50)	21	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F167A1U		8/16/11	190	93	8.2	27	49	0.54	ND (<0.50)	50	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 1.1;
F167A1U		9/30/11	230	94	9.8	27	46	ND (<2.5)	ND (<2.5)	56	ND (<2.5)	ND (<2.5)	ND (<2.5)	
F167A1U		6/14/12	180	59	7.7	19	36	ND (<2.5)	ND (<2.5)	33	ND (<2.5)	ND (<2.5)	ND (<2.5)	
F167A1U		6/18/13	170	52	8.6	20	40	ND (<2.5)	ND (<2.5)	26	ND (<2.5)	ND (<2.5)	ND (<2.5)	
F167A1U		6/11/14	240	55	9.4	26	38	ND (<1.0)	ND (<1.0)	44	ND (<1.0)	ND (<1.0)	ND (<1.0)	
F167A1U		6/10/15	200	44	7.5	22	40	ND (<2.5)	ND (<2.5)	22	ND (<2.5)	ND (<2.5)	ND (<2.5)	
F167A1U	Dup	6/10/15	270	62	9.1	25	55	ND (<5.0)	ND (<5.0)	29	ND (<5.0)	ND (<5.0)	ND (<5.0)	
F167A1U		6/8/17	190	34	4.0	17	28	ND (<2.5)	ND (<2.5)	23	ND (<2.5)	ND (<2.5)	ND (<2.5)	
F167A1U	Dup	6/8/17	210	39	4.3	19	31	ND (<2.5)	ND (<2.5)	25	ND (<2.5)	ND (<2.5)	ND (<2.5)	
F167A1U		6/5/18	160	20	ND (<5.0)	13	26	ND (<5.0)	ND (<5.0)	24	ND (<5.0)	ND (<5.0)	ND (<5.0)	
F167A1U		6/11/19	160	21	2.8	12	22	ND (<2.5)	ND (<2.5)	19	ND (<2.5)	ND (<2.5)	ND (<2.5)	
F167A1U		6/3/20	130	15	2.5	12	21	ND (<0.50)	ND (<0.50)	18	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.57
F169A2		3/29/12	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F169A2	Dup	3/29/12	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F169A2		6/13/12	0.66	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F169A2		6/18/13	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F169A2		6/11/14	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
F169A2		6/5/19	34	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
H1		6/15/11	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	
H1	Dup	6/15/11	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	
IW-15		10/26/14	71,000	ND (<500)	ND (<500)	ND (<500)	ND (<500)	ND (<500)	ND (<500)	ND (<2,000)	ND (<500)	ND (<500)	ND (<500)	
IW-16		10/26/14	130,000	ND (<1,000)	ND (<1,000)	ND (<1,000)	ND (<1,000)	ND (<1,000)	ND (<1,000)	ND (<4,000)	ND (<1,000)	ND (<1,000)	ND (<1,000)	
IW-17		10/25/14	110,000	ND (<830)	ND (<830)	ND (<830)	ND (<830)	ND (<830)	ND (<830)	ND (<3,300)	ND (<830)	ND (<830)	ND (<830)	
IW-18		10/26/14	450,000	ND (<5,000)	ND (<5,000)	ND (<5,000)	ND (<5,000)	ND (<5,000)	ND (<5,000)	ND (<20,000)	ND (<5,000)	ND (<5,000)	ND (<5,000)	
IW-19		10/25/14	180,000	ND (<1,300)	ND (<1,300)	ND (<1,300)	1,500	ND (<1,300)	ND (<1,300)	ND (<5,000)	ND (<1,300)	ND (<1,300)	ND (<1,300)	
IW-20		10/25/14	140,000	ND (<1,300)	ND (<1,300)	ND (<1,300)	6,600	ND (<1,300)	ND (<1,300)	ND (<5,000)	ND (<1,300)	ND (<1,300)	ND (<1,300)	
IW-21		10/25/14	64,000	ND (<500)	ND (<500)	ND (<500)	ND (<500)	ND (<500)	ND (<500)	ND (<2,000)	ND (<500)	ND (<500)	ND (<500)	
IW-22		10/26/14	41,000	ND (<500)	ND (<500)	ND (<500)	ND (<500)	ND (<500)	ND (<500)	ND (<2,000)	ND (<500)	ND (<500)	ND (<500)	

Appendix B
Selected Compounds from Historical Records
COE Study Area and Perimeter Area, Palo Alto, California

Location	Type	Date	TCE	1,1,1-TCA	1,1-DCA	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	PCE	Freon 113	1,2-DCB	1,2-DCA	VC	Other Constituents
IW-23		10/26/14	90,000	ND (<500)	ND (<500)	ND (<500)	ND (<500)	ND (<500)	ND (<500)	ND (<2,000)	ND (<500)	ND (<500)	ND (<500)	
IW-24		10/26/14	88,000	ND (<1,000)	ND (<1,000)	ND (<1,000)	ND (<1,000)	ND (<1,000)	ND (<1,000)	ND (<4,000)	ND (<1,000)	ND (<1,000)	ND (<1,000)	
M-1		12/14/90	56	110	8.6	12	-	-	4.3	76	10	3.0	3.0	1,1,2,2-TCA = 3; 1,1,2-TCA = 2; 1,2-DCPA = 2; 1,3-DCB = 10; 1,4-DCB = 10; 2-CVE = 4; Acetone = 30; BDCMe = 4; Benzene = 0.5; BRFM = 5; BRMA = 5; CHLBZ = 4; CHLEA (EC) = 5; CHLFM = 4.8; CHLMA = 5; cis-1,3-DCP = 3; CT = 3; DBCMe = 4; EDB = 10; Ethylbenzene = 0.5; MC = 50; m-Xylene = 0.30; o-Xylene = 0.30; TCFMe (Freon 11) = 5; Toluene = 0.5; trans-1,3-DCP = 3; Xylenes = 0.9;
M-1		4/17/91	110	210	14	0.50	60	0.50	9.0	200	ND (<0.50)	1.3	ND (<0.50)	CHLFM = 8.9; TCFMe (Freon 11) = 2;
M-1		5/3/91	-	-	-	-	-	-	-	-	ND (<10)	-	-	
M-1		7/24/91	150	170	10	ND (<0.50)	72	ND (<0.50)	8.1	ND (<0.50)	ND (<0.50)	1.1	ND (<0.50)	CHLFM = 10; TCFMe (Freon 11) = 1.8;
M-1		11/6/91	130	120	12	ND (<0.50)	75	ND (<0.50)	9.2	84	ND (<0.50)	1.0	ND (<0.50)	CHLFM = 14; TCFMe (Freon 11) = 3.5;
M-1		12/6/91	120	89	12	-	-	ND (<5.0)	ND (<5.0)	95	-	ND (<5.0)	ND (<10)	CHLFM = 11;
M-1		3/10/92	86	74	9.7	ND (<5.0)	62	ND (<0.50)	5.2	47	ND (<0.50)	1.0	ND (<0.50)	CHLEA (EC) = 1.1; CHLFM = 5.5; TCFMe (Freon 11) = 1.7;
M-1		6/10/92	70	46	7.8	ND (<1.0)	46	ND (<0.50)	4.3	38	ND (<0.50)	0.60	ND (<0.50)	CHLEA (EC) = 1.3; CHLFM = 2.7; TCFMe (Freon 11) = 1.4;
M-1		9/11/92	100	120	6.8	ND (<2.5)	49	ND (<0.50)	4.9	100	ND (<0.50)	1.0	ND (<0.50)	CHLFM = 3.8; TCFMe (Freon 11) = 1.7;
M-2		2/5/91	1.1	1.2	0.40	2.6	-	-	0.20	1.0	1.0	0.30	0.30	1,1,2,2-TCA = 0.30; 1,1,2-TCA = 0.2; 1,2-DCPA = 0.2; 1,3-DCB = 1; 1,4-DCB = 1; 2-CVE = 0.40; BDCMe = 0.40; BRFM = 0.5; BRMA = 0.5; CHLBZ = 0.40; CHLEA (EC) = 0.5; CHLFM = 0.30; CHLMA = 0.5; cis-1,3-DCP = 0.30; CT = 0.30; DBCMe = 0.40; EDB = 1; MC = 5; TCFMe (Freon 11) = 0.5; trans-1,3-DCP = 0.30;
M-2		4/15/91	3.0	2.0	ND (<0.50)	-	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
M-2		7/26/91	7.9	3.4	ND (<0.50)	-	ND (<0.50)	ND (<0.50)	ND (<0.50)	2.8	ND (<0.50)	ND (<0.50)	ND (<0.50)	
M-3		12/19/90	9.6	3.2	2.5	20	-	-	1.5	3.6	2.0	0.60	0.60	1,1,2,2-TCA = 0.6; 1,1,2-TCA = 0.40; 1,2-DCPA = 0.40; 1,3-DCB = 2; 1,4-DCB = 2; 2-CVE = 0.8; Acetone = 30; BDCMe = 0.8; Benzene = 0.30; BRFM = 1; BRMA = 1; CHLBZ = 0.8; CHLEA (EC) = 1; CHLFM = 25; CHLMA = 1; cis-1,3-DCP = 0.6; CT = 0.6; DBCMe = 0.8; EDB = 2; Ethylbenzene = 0.30; MC = 10; m-Xylene = 0.30; o-Xylene = 0.30; TCFMe (Freon 11) = 2.4; Toluene = 0.30; trans-1,3-DCP = 0.6; Xylenes = 0.9;
M-3		4/15/91	25	5.0	3.0	-	1.0	ND (<0.50)	4.0	2.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 29; TCFMe (Freon 11) = 8;
M-3		7/24/91	25	4.9	2.3	-	0.50	ND (<0.50)	4.9	2.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 21; TCFMe (Freon 11) = 7.1;
MB-2		9/17/92	1.7	ND (<0.50)	6.0	-	1.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
MB-2		12/16/92	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
MB-2		3/9/93	1.6	ND (<0.50)	5.0	-	0.70	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
MB-2		6/4/93	0.90	ND (<0.50)	3.0	-	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
MB-2		9/10/93	0.92	ND (<0.50)	3.7	-	0.51	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
MB-2		12/8/93	ND (<5.0)	ND (<5.0)	5.2	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
MB-2		3/9/94	2.0	ND (<0.50)	5.9	-	0.97	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
MB-2		6/9/94	1.4	ND (<0.50)	5.7	-	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
MB-2		9/7/94	1.9	0.69	6.2	-	0.89	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
MB-2		12/7/94	ND (<5.0)	ND (<5.0)	5.2	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
MB-2		3/3/95	1.6	ND (<0.50)	5.0	-	0.58	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
MB-2		6/7/95	1.7	0.68	3.8	-	20	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
MB-2		9/6/95	1.5	1.6	3.6	-	0.50	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLEA (EC) = 1.5;
MB-2		12/7/95	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
MB-2		3/6/96	2.4	1.1	3.0	4.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
MB-2		6/7/96	0.51	0.53	1.9	3.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 119;
MB-2		9/11/96	0.87	0.58	2.2	3.4	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 109;
MB-2		12/12/96	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
MB-2		3/5/97	0.89	ND (<0.50)	1.6	1.6	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 117;
MB-2	Dup	3/5/97	0.93	ND (<0.50)	1.6	1.7	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 120;
MB-2		6/4/97	0.81	ND (<0.50)	1.6	1.7	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 102;
MB-2		9/9/97	0.93	ND (<0.50)	1.6	1.6	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 107;
MB-2		12/8/97	0.99	ND (<0.50)	1.4	1.4	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 96;
O3A2		12/6/90	5.0	25	12	24	-	-	2.0	10	0.50	3.0	3.0	1,1,2,2-TCA = 3; 1,1,2-TCA = 2; 1,2-DCPA = 2; 1,3-DCB = 0.5; 1,4-DCB = 0.5; 2-CVE = 4; Acetone = 30; BDCMe = 4; Benzene = 0.5; BRFM = 5; BRMA = 5; CHLBZ = 0.5; CHLEA (EC) = 5; CHLFM = 4.1; CHLMA = 5; cis-1,3-DCP = 3; CT = 3; DBCMe = 4; EDB = 10; Ethylbenzene = 0.5; MC = 50; m-Xylene = 0.5; o-Xylene = 0.5; TCFMe (Freon 11) = 11; Toluene = 0.5; trans-1,3-DCP = 3; Xylenes = 0.5;
O3A2		5/1/91	ND (<0.50)	1.0	ND (<0.50)	-	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O3A2		7/22/91	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O3A2		12/4/91	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
O4A2		12/7/90	0.50	0.30	0.40	0.30	-	-	0.20	1.0	0.50	0.30	0.30	1,1,2,2-TCA = 0.30; 1,1,2-TCA = 0.2; 1,2-DCPA = 0.2; 1,3-DCB = 0.5; 1,4-DCB = 0.5; 2-CVE = 0.40; Acetone = 30; BDCMe = 0.40; Benzene = 0.5; BRFM = 0.5; BRMA = 0.5; CHLBZ = 0.40; CHLEA (EC) = 0.5; CHLFM = 0.2; CHLMA = 0.5; cis-1,3-DCP = 0.30; CT = 0.30; DBCMe = 0.40; EDB = 1; Ethylbenzene = 0.5; MC = 5; m-Xylene = 0.5; o-Xylene = 0.5; TCFMe (Freon 11) = 0.5; Toluene = 0.5; trans-1,3-DCP = 0.30; Xylenes = 0.5;
O4A2		4/12/91	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O4A2		7/22/91	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O4A2		12/4/91	ND (<5.0)	15	ND (<5.0)	-	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
O5A		2/5/91	0.50	11	3.0	8.4	-	-	0.20	1.0	1.0	0.70	0.30	1,1,2,2-TCA = 0.30; 1,1,2-TCA = 0.2; 1,2-DCPA = 0.2; 1,3-DCB = 1; 1,4-DCB = 1; 2-CVE = 0.40; BDCMe = 0.40; BRFM = 0.5; BRMA = 0.5; CHLBZ = 0.40; CHLEA (EC) = 0.5; CHLFM = 0.6; CHLMA = 0.5; cis-1,3-DCP = 0.30; CT = 0.30; DBCMe = 0.40; EDB = 1; MC = 5; TCFMe (Freon 11) = 0.5; trans-1,3-DCP = 0.30;
O5A		8/1/91	ND (<0.50)	8.7	3.5	-	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.5;
O5A		12/4/91	ND (<5.0)	14	ND (<5.0)	-	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
O6A		12/5/90	15	13	8.0	7.8	-	-	0.20	3.3	10	0.30	0.30	1,1,2,2-TCA = 0.30; 1,1,2-TCA = 0.2; 1,2,4-TCB = 10; 1,2-DCPA = 0.2; 1,3-DCB = 10; 1,4-DCB = 10; 2-CVE = 0.40; Acetone = 88; BDCMe = 0.40; Benzene = 0.5; BRFM = 0.5; BRMA = 0.5; CHLBZ = 0.40; CHLEA (EC) = 0.5; CHLFM = 1.3; CHLMA = 0.5; cis-1,3-DCP = 0.30; CT = 0.30; DBCMe = 0.40; EDB = 1; Ethylbenzene = 0.5; MC = 5; m-Xylene = 0.5; Naphthalene = 10; o-Xylene = 0.5; TCFMe (Freon 11) = 0.5; Toluene = 0.5; trans-1,3-DCP = 0.30; Xylenes = 0.5;
O6A		4/8/91	-	-	-	-	-	-	-	-	ND (<10)	-	-	
O6A		5/1/91	36	21	13	-	1.0	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	CHLFM = 3;
O6A		7/22/91	42	25	13	-	1.1	ND (<0.50)	ND (<0.50)	3.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 1.6;
O6A		10/4/91	23	15	8.2	-	2.9	ND (<0.50)	ND (<0.50)	1.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 1;
O6A		12/10/91	34	16	11	-	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
O10A		12/14/90	5.0	13	7.4	7.3	-	-	2.0	7.7	10	3.0	30	1,1,2,2-TCA = 3; 1,1,2-TCA = 2; 1,2-DCPA = 2; 1,3-DCB = 10; 1,4-DCB = 10; 2-CVE = 4; Acetone = 30; BDCMe = 4; Benzene = 0.5; BRFM = 5; BRMA = 5; CHLBZ = 4; CHLEA (EC) = 5; CHLFM = 2; CHLMA = 5; cis-1,3-DCP = 3; CT = 3; DBCMe = 4; EDB = 10; Ethylbenzene = 0.5; MC = 50; m-Xylene = 0.30; o-Xylene = 0.30; TCFMe (Freon 11) = 5; Toluene = 0.5; trans-1,3-DCP = 3; Xylenes = 0.9;
O10A		7/22/91	74	3,000	250	-	2,200	14	ND (<10)	660	ND (<10)	ND (<10)	ND (<10)	
O10A		12/4/91	12	810	69	ND (<50)	-	ND (<5.0)	ND (<5.0)	120	-	ND (<5.0)	ND (<10)	
O10A	Dup	12/4/91	ND (<5.0)	530	80	ND (<25)	-	ND (<5.0)	ND (<5.0)	120	-	ND (<5.0)	ND (<10)	
O11A		12/20/90	-	-	-	-	-	-	-	-	10	-	-	
O11A		4/8/91	-	-	-	-	-	-	-	-	ND (<10)	-	-	
O13A		12/14/90	68	640	120	140	-	-	2.0	320	10	3.0	3.0	1,1,2,2-TCA = 3; 1,1,2-TCA = 2; 1,2-DCPA = 2; 1,3-DCB = 10; 1,4-DCB = 10; 2-CVE = 4; Acetone = 270; BDCMe = 4; Benzene = 0.5; BRFM = 5; BRMA = 5; CHLBZ = 4; CHLEA (EC) = 5; CHLFM = 9.5; CHLMA = 5; cis-1,3-DCP = 3; CT = 3; DBCMe = 4; EDB = 10; Ethylbenzene = 0.5; MC = 50; m-Xylene = 0.30; o-Xylene = 0.30; TCFMe (Freon 11) = 5; Toluene = 4.9; trans-1,3-DCP = 3; Xylenes = 0.9;
O13A	Dup	12/14/90	63	940	100	140	1,720	40	20	220	10	3.0	3.0	1,1,2,2-TCA = 3; 1,1,2-TCA = 2; 1,2-DCPA = 2; 1,3-DCB = 10; 1,4-DCB = 10; 2-CVE = 4; Acetone = 260; BDCMe = 4; Benzene = 0.5; BRFM = 5; BRMA = 5; CARBD = 60; CHLBZ = 4; CHLEA (EC) = 5; CHLFM = 9.6; CHLMA = 5; cis-1,3-DCP = 3; CT = 3; DBCMe = 40; EDB = 10; Ethylbenzene = 0.5; MBK = 100; MC = 50; MEK = 100; MIBK = 100; m-Xylene = 0.30; o-Xylene = 0.30; Styrene = 40; TCFMe (Freon 11) = 5; Toluene = 5.4; trans-1,3-DCP = 3; Vinyl Acetate = 100; Xylenes = 0.9;
O13A		2/5/91	55	6,700	300	870	-	-	20	1,200	100	30	30	1,1,2,2-TCA = 30; 1,1,2-TCA = 20; 1,2-DCPA = 20; 1,3-DCB = 100; 1,4-DCB = 100; 2-CVE = 40; BDCMe = 40; BRFM = 50; BRMA = 50; CHLBZ = 40; CHLEA (EC) = 50; CHLFM = 20; CHLMA = 50; cis-1,3-DCP = 30; CT = 30; DBCMe = 40; EDB = 100; MC = 500; TCFMe (Freon 11) = 50; trans-1,3-DCP = 30;
O13A		4/8/91	-	-	-	-	-	-	-	-	ND (<10)	-	-	
O13A		5/1/91	120	2,100	120	-	1,700	ND (<25)	ND (<25)	1,200	ND (<25)	ND (<25)	ND (<25)	
O13A		7/22/91	340	800	44	ND (<25)	620	ND (<2.5)	6.5	610	ND (<10)	ND (<2.5)	ND (<2.5)	
O13A		10/4/91	200	1,000	94	ND (<50)	1,300	ND (<5.0)	5.0	590	ND (<10)	ND (<5.0)	ND (<5.0)	TCFMe (Freon 11) = 32;
O13A		12/9/91	250	700	120	20	-	20	11	660	ND (<10)	ND (<5.0)	ND (<10)	Ethylbenzene = 7.7; Toluene = 9.9; Xylenes = 81;
O15A		12/20/90	130	130	5.9	5.7	-	-	0.20	12	0.50	1.5	0.30	1,1,2,2-TCA = 0.30; 1,1,2-TCA = 0.2; 1,2-DCPA = 0.2; 1,3-DCB = 0.5; 1,4-DCB = 0.5; 2-CVE = 0.40; Acetone = 30; BDCMe = 0.40; Benzene = 2.5; BRFM = 0.5; BRMA = 0.5; CHLBZ = 0.5; CHLEA (EC) = 0.5; CHLFM = 3.9; CHLMA = 0.5; cis-1,3-DCP = 0.30; CT = 0.30; DBCMe = 0.40; EDB = 1; Ethylbenzene = 0.5; MC = 5; m-Xylene = 0.5; o-Xylene = 0.5; TCFMe (Freon 11) = 0.5; Toluene = 0.5; trans-1,3-DCP = 0.30; Xylenes = 0.5;
O15A		2/8/91	230	170	4.0	3.0	-	-	2.0	98	10	3.0	3.0	1,1,2,2-TCA = 3; 1,1,2-TCA = 2; 1,2-DCPA = 2; 1,3-DCB = 10; 1,4-DCB = 10; 2-CVE = 4; BDCMe = 4; BRFM = 5; BRMA = 5; CHLBZ = 4; CHLEA (EC) = 5; CHLFM = 4.8; CHLMA = 5; cis-1,3-DCP = 3; CT = 3; DBCMe = 4; EDB = 10; MC = 50; TCFMe (Freon 11) = 5; trans-1,3-DCP = 3;
O15A		4/8/91	-	-	-	-	-	-	-	-	ND (<10)	-	-	
O15A	Dup	4/8/91	-	-	-	-	-	-	-	-	ND (<10)	-	-	
O15A		5/1/91	350	150	ND (<5.0)	ND (<5.0)	44	ND (<5.0)	ND (<5.0)	110	ND (<5.0)	ND (<5.0)	ND (<5.0)	CHLFM = 7;
O15A	Dup	5/1/91	320	150	6.0	ND (<5.0)	42	ND (<5.0)	ND (<5.0)	120	ND (<5.0)	ND (<5.0)	ND (<5.0)	CHLFM = 7;
O15A		7/22/91	-	-	-	-	-	-	-	-	ND (<10)	-	-	
O15A		10/4/91	410	170	10	ND (<5.0)	55	ND (<5.0)	ND (<5.0)	100	ND (<10)	ND (<5.0)	ND (<5.0)	CHLFM = 3.4; TCFMe (Freon 11) = 1.8;
O15A		12/9/91	200	81	9.8	-	-	ND (<5.0)	ND (<5.0)	51	ND (<10)	ND (<5.0)	ND (<10)	
O17B		12/5/90	0.60	0.30	0.40	0.30	-	-	0.20	1.0	1.0	0.30	0.30	1,1,2,2-TCA = 0.30; 1,1,2-TCA = 0.2; 1,2-DCPA = 0.2; 1,3-DCB = 1; 1,4-DCB = 1; 2-CVE = 0.40; Acetone = 30; BDCMe = 0.40; Benzene = 0.5; BRFM = 0.5; BRMA = 0.5; CHLBZ = 0.40; CHLEA (EC) = 0.5; CHLFM = 0.2; CHLMA = 0.5; cis-1,3-DCP = 0.30; CT = 0.30; DBCMe = 0.40; EDB = 1; Ethylbenzene = 0.5; MC = 5; m-Xylene = 0.5; o-Xylene = 0.5; TCFMe (Freon 11) = 0.5; Toluene = 0.6; trans-1,3-DCP = 0.30; Xylenes = 0.5;

Appendix B
Selected Compounds from Historical Records
COE Study Area and Perimeter Area, Palo Alto, California

Location	Type	Date	TCE	1,1,1-TCA	1,1-DCA	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	PCE	Freon 113	1,2-DCB	1,2-DCA	VC	Other Constituents
O17B		2/5/91	0.50	0.30	0.40	0.30	-	-	0.20	1.0	1.0	0.30	0.30	1,1,2,2-TCA = 0.30; 1,1,2-TCA = 0.2; 1,2-DCPA = 0.2; 1,3-DCB = 1; 1,4-DCB = 1; 2-CVE = 0.40; Acetone = 30; BDCMe = 0.40; Benzene = 0.5; BRFM = 0.5; BRMA = 0.5; CHLBZ = 0.40; CHLEA (EC) = 0.5; CHLFM = 0.2; CHLMA = 0.5; cis-1,3-DCP = 0.30; CT = 0.30; DBCMe = 0.40; EDB = 1; Ethylbenzene = 0.5; MC = 5; m-Xylene = 0.5; o-Xylene = 0.5; TCFMe (Freon 11) = 0.5; Toluene = 0.5; trans-1,3-DCP = 0.30; Xylenes = 0.5;
O17B		8/27/91	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O17B		10/4/91	-	-	-	-	-	-	-	-	ND (<0.50)	-	-	
O17B		12/16/91	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
O17B		3/9/92	-	-	-	-	-	-	-	-	ND (<0.50)	-	-	
O17B		6/4/92	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O17B		9/14/92	-	-	-	-	-	-	-	-	ND (<0.50)	-	-	
O17B		12/2/92	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
O17B		6/9/93	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O17B		12/3/93	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
O17B		6/8/94	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.97; MC = 1.1;
O17B		12/12/94	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
O17B		6/2/95	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 5.3;
O17B		12/6/95	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	CARBD = 7.6;
O17B	Dup	12/6/95	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	CARBD = 7.8;
O17B		6/6/96	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 109;
O17B		12/10/96	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
O17B		12/8/97	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 98;
O17B		12/11/98	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 95.3;
O17B		12/15/99	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<1.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O17B		12/6/00	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O17B		6/20/01	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O17B	Dup	6/20/01	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O17B		6/24/03	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O17B	Dup	6/24/03	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O17B		6/21/05	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O17B		6/13/07	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O17B		6/9/09	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O17B		6/14/11	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O17B		6/19/13	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O17B		6/9/15	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O17B		6/7/17	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O17B		6/5/19	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O27A1		7/22/91	-	-	-	-	-	-	-	-	ND (<0.50)	-	-	
O27A1		12/4/91	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
O27A1		6/4/92	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O27A1		12/3/92	ND (<5.0)	32	12	-	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
O27A1		6/3/93	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O27A1		12/7/93	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
O27A1		6/7/94	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O27A1		12/12/94	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
O27A1		6/2/95	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O27A1		12/5/95	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
O27A1		6/4/96	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 99;
O27A1		12/9/96	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
O27A1		12/3/97	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 97;
O27A1		12/9/99	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<1.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O27A1		6/11/14	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O27A1		6/6/19	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O28A1		12/6/90	28	15	4.7	6.3	-	-	2.0	10	0.50	3.0	3.0	1,1,2,2-TCA = 3; 1,1,2-TCA = 2; 1,2,4-TCB = 20; 1,2-DCPA = 2; 1,3-DCB = 0.5; 1,4-DCB = 0.5; 2-CVE = 4; Acetone = 30; BDCMe = 4; Benzene = 0.5; BRFM = 5; BRMA = 5; CHLBZ = 0.5; CHLEA (EC) = 5; CHLFM = 11; CHLMA = 5; cis-1,3-DCP = 3; CT = 3; DBCMe = 4; EDB = 10; Ethylbenzene = 0.5; MC = 50; m-Xylene = 0.5; Naphthalene = 20; o-Xylene = 0.5; TCFMe (Freon 11) = 5; Toluene = 0.5; trans-1,3-DCP = 3; Xylenes = 0.5;
O28A1		4/19/91	47	12	6.0	-	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 6;
O28A1		7/22/91	72	16	8.8	-	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 2.5;
O28A1		10/4/91	66	15	8.5	-	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 2.7;
O28A1	Dup	10/4/91	62	14	8.1	-	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 2.6;
O28A1		12/9/91	52	ND (<5.0)	8.2	-	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<10)	ND (<5.0)	ND (<10)	
O28A1	Dup	12/9/91	52	ND (<5.0)	8.5	-	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<10)	ND (<5.0)	ND (<10)	
O28A1		3/10/92	27	5.8	3.5	-	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 1.1;
O28A1		6/4/92	39	6.9	5.0	-	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.7;
O28A1		9/15/92	49	9.2	7.5	-	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.6;
O28A1		12/2/92	70	ND (<5.0)	9.2	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<10)	ND (<5.0)	ND (<10)	
O28A1	Dup	12/2/92	52	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<10)	ND (<5.0)	ND (<10)	
O28A1		12/29/92	70	ND (<5.0)	9.2	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<10)	ND (<5.0)	ND (<10)	
O28A1	Dup	12/29/92	52	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<10)	ND (<5.0)	ND (<10)	
O28A1		3/2/93	9.0	1.6	0.90	-	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O28A1		6/8/93	48	12	7.0	-	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O28A1		9/7/93	28	6.5	4.3	-	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	MC = 1.7;
O28A1		12/7/93	47	8.5	6.6	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<10)	ND (<5.0)	ND (<10)	
O28A1		3/9/94	58	11	8.5	-	0.86	ND (<0.50)	ND (<0.50)	0.67	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.95;
O28A1		6/7/94	43	7.4	5.0	-	0.80	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O28A1		9/2/94	60	14	9.3	-	0.63	ND (<0.50)	ND (<0.50)	0.85	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.73;
O28A1		12/8/94	74	12	10	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<10)	ND (<5.0)	ND (<10)	
O28A1		3/3/95	38	7.2	5.7	-	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O28A1		6/7/95	22	4.4	4.5	-	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O28A1		9/6/95	24	5.0	4.3	-	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.62;
O28A1		12/7/95	12	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<10)	ND (<5.0)	ND (<10)	
O28A1	Dup	12/7/95	-	-	-	-	-	-	-	-	ND (<10)	-	-	
O28A1		3/6/96	29	5.7	3.2	3.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 1.8;
O28A1		6/10/96	20	3.7	2.7	2.4	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 103; CHLFM = 1.9; TFT = 100;
O28A1		9/11/96	16	3.0	2.4	2.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 104; CHLFM = 1.5;
O28A1		12/11/96	16	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<10)	ND (<5.0)	ND (<10)	
O28A1		3/5/97	13	2.3	1.7	0.91	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 98; CHLFM = 1.6;
O28A1		6/4/97	13	1.8	1.4	1.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 92; CHLFM = 0.76;
O28A1		9/10/97	12	1.7	1.3	1.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 104; CHLFM = 0.94; MC = 1.7;
O28A1		12/5/97	16	1.5	1.3	1.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 93; CHLFM = 1.5;
O28A1		6/4/98	12	0.69	0.86	0.79	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 104; CHLFM = 1.5; MC = 0.61;
O28A1		12/10/98	9.4	0.57	0.91	0.73	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 94.3;
O28A1		6/10/99	18	1.3	1.4	1.2	ND (<1.00)	ND (<1.00)	ND (<1.00)	ND (<1.00)	ND (<1.00)	ND (<1.00)	ND (<1.00)	CHLFM = 2.99;
O28A1		12/15/99	13	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<1.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.648;
O28A1		6/8/00	19	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O28A1		12/6/00	11	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O28A1		6/20/01	16	0.50	0.82	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O28A1		6/24/03	18	0.53	1.1	0.98	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O28A1		6/22/05	24	0.63	1.1	1.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O28A1	Dup	6/22/05	25	0.66	1.2	1.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O28A1		9/10/07	19	0.67	0.92	0.97	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.65	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O28A1		12/27/07	19	ND (<0.50)	0.87	0.75	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O28A1		2/1/08	17	ND (<0.50)	0.69	0.63	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O28A1		2/29/08	20	ND (<0.50)	0.69	0.74	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O28A1		6/11/08	12	ND (<0.50)	0.59	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O28A1		12/11/08	16	ND (<0.50)	0.68	0.59	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O28A1	Dup	12/11/08	16	ND (<0.50)	0.70	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O28A1		6/10/09	12	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O28A1		6/14/11	27	1.2	2.2	2.2	2.4	ND (<0.50)	ND (<0.50)	1.4	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O28A1		6/20/13	67	1.9	3.0	3.1	4.9	ND (<0.50)	ND (<0.50)	3.6	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O28A1		6/8/15	64	1.7	2.9	2.9	4.4	ND (<0.50)	ND (<0.50)	3.4	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O28A1		6/7/17	55	1.1	2.2	1.8	3.6	ND (<0.50)	ND (<0.50)	2.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O28A1		6/6/18	93	1.1	2.9	3.2	4.2	ND (<0.50)	ND (<0.50)	3.6	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O28A1	Dup	6/6/18	93	1.2	2.9	3.3	4.2	ND (<0.50)	ND (<0.50)	3.8	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O28A1		6/5/19	110	2.0	3.7	6.1	6.3	ND (<0.50)	ND (<0.50)	5.4	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O28A1		6/4/20	140	1.1	3.5	5.0	5.5	ND (<0.50)	ND (<0.50)	5.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O28A1	Dup	6/4/20	140	1.3	3.9	5.4	5.7	ND (<0.50)	ND (<0.50)	5.5	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O48A		12/7/90	730	900	8.3	65	-	-	26	360	18	4.9	3.0	1,1,2,2-TCA = 3; 1,1,2-TCA = 2; 1,2,4-TCB = 180; 1,2-DCPA = 2; 1,3-DCB = 0.5; 1,4-DCB = 0.5; 2-CVE = 4; Acetone = 53; BDCMe = 4; Benzene = 0.5; BRFM = 5; BRMA = 5; CHLBZ = 0.5; CHLEA (EC) = 5; CHLFM = 2; CHLMA = 50; cis-1,3-DCP = 3; CT = 3; DBCMe = 4; EDB = 10; Ethylbenzene = 6.6; MC = 50; m-Xylene = 12; Naphthalene = 10; o-Xylene = 6.2; TCFMe (Freon 11) = 5; Toluene = 4.4; trans-1,3-DCP = 3; Xylenes = 29;
O48A	Dup	12/7/90	760	980	9.1	69	-	-	35	390	19	3.0	3.0	1,1,2,2-TCA = 30; 1,1,2-TCA = 2; 1,2,4-TCB = 230; 1,2-DCPA = 2; 1,3-DCB = 0.5; 1,4-DCB = 0.5; 2-CVE = 4; BDCMe = 4; Benzene = 0.5; BRFM = 5; BRMA = 5; CHLBZ = 0.5; CHLEA (EC) = 5; CHLFM = 2.5; CHLMA = 5; cis-1,3-DCP = 3; CT = 3; DBCMe = 4; EDB = 10; Ethylbenzene = 6.8; MC = 50; m-Xylene = 12; Naphthalene = 11; o-Xylene = 6.4; TCFMe (Freon 11) = 5; Toluene = 4.6; trans-1,3-DCP = 3; Xylenes = 31;
O48A		2/15/91	1,200	1,200	5.0	-	-	-	51	-	-	13	10	1,1,2,2-TCA = 5; 1,1,2-TCA = 5; 1,2-DCPA = 5; 2-CVE = 100; Acetone = 22; BDCMe = 5; Benzene = 5; BRFM = 5; BRMA = 10; CARBD = 5; CHLBZ = 5; CHLEA (EC) = 10; CHLFM = 5; CHLMA = 10; cis-1,3-DCP = 5; CT = 5; DBCMe = 5; Ethylbenzene = 5; MBK = 10; MC = 25; MEK = 25; MIBK = 10; Styrene = 5; Toluene = 5; trans-1,3-DCP = 5; Vinyl Acetate = 10; Xylenes = 25;
O48A		4/8/91	-	-	-	-	-	-	-	-	210	-	-	
O48A		5/1/91	9,300	9,300	57	ND (<5.0)	500	ND (<5.0)	210	3,000	470	6.0	ND (<5.0)	1,1,2-TCA = 5; 1,4-DCB = 7; Acetone = 150; CHLBZ = 9; Ethylbenzene = 180; MC = 370; Toluene = 160; Xylenes = 830;
O48A		7/22/91	13,000	12,000	ND (<50)	ND (<250)	350	ND (<50)	270	2,700	320	ND (<50)	ND (<50)	Ethylbenzene = 220; MC = 300; Toluene = 180; Xylenes = 990;
O48A		10/4/91	7,000	7,700	ND (<120)	ND (<120)	260	ND (<120)	140	1,300	190	ND (<120)	ND (<120)	MC = 100;
O48A		12/9/91	970	1,100	47	ND (<50)	-	ND (<5.0)	38	260	170	ND (<5.0)	ND (<10)	Acetone = 1,500; Ethylbenzene = 17; MC = 14; Toluene = 14; Xylenes = 91;
O52A2		12/6/90	0.50	0.90	16	1.1	-	-	0.20	1.0	0.50	0.30	0.30	1,1,2,2-TCA = 0.30; 1,1,2-TCA = 0.2; 1,2,4-TCB = 20; 1,2-DCPA = 0.2; 1,3-DCB = 0.5; 1,4-DCB = 0.5; 2-CVE = 0.40; Acetone = 30; BDCMe = 0.40; Benzene = 0.5; BRFM = 0.5; BRMA = 0.5; CHLBZ = 0.5; CHLEA (EC) = 0.5; CHLFM = 0.30; CHLMA = 0.5; cis-1,3-DCP = 0.30; CT = 0.30; DBCMe = 0.40; EDB = 1; Ethylbenzene = 0.5; MC = 5; m-Xylene = 0.5; Naphthalene = 20; o-Xylene = 0.5; TCFMe (Freon 11) = 0.5; Toluene = 0.5; trans-1,3-DCP = 0.30; Xylenes = 0.5;
O52A2	Dup	12/6/90	0.50	0.90	16	1.1	-	-	0.20	1.0	1.0	0.30	0.30	1,1,2,2-TCA = 0.30; 1,1,2-TCA = 0.2; 1,2,4-TCB = 20; 1,2-DCPA = 0.2; 1,3-DCB = 1; 1,4-DCB = 1; 2-CVE = 0.40; Acetone = 30; BDCMe = 0.40; Benzene = 0.5; BRFM = 0.5; BRMA = 0.5; CHLBZ = 0.40; CHLEA (EC) = 0.5; CHLFM = 0.40; CHLMA = 0.5; cis-1,3-DCP = 0.30; CT = 0.30; DBCMe = 0.40; EDB = 1; Ethylbenzene = 0.5; MC = 5; m-Xylene = 0.5; Naphthalene = 20; o-Xylene = 0.5; TCFMe (Freon 11) = 0.5; Toluene = 0.5; trans-1,3-DCP = 0.30; Xylenes = 0.5;

Appendix B
Selected Compounds from Historical Records
COE Study Area and Perimeter Area, Palo Alto, California

Location	Type	Date	TCE	1,1,1-TCA	1,1-DCA	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	PCE	Freon 113	1,2-DCB	1,2-DCA	VC	Other Constituents
O52A2		4/19/91	2.0	ND (<0.50)	16	-	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O52A2		7/22/91	13	2.9	18	-	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O52A2		10/4/91	0.50	2.6	24	-	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O52A2		12/9/91	6.0	ND (<5.0)	11	ND (<5.0)	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<10)	ND (<5.0)	ND (<10)	
O52A2		3/10/92	16	3.3	16	-	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O52A2		6/4/92	24	2.9	12	-	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O52A2		9/14/92	22	2.3	11	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O52A2		12/2/92	ND (<5.0)	ND (<5.0)	12	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
O52A2		3/3/93	0.70	0.70	9.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O52A2		6/3/93	22	2.1	8.1	-	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O52A2		9/8/93	23	3.2	10	-	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O52A2		12/7/93	ND (<5.0)	ND (<5.0)	6.3	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
O52A2		3/10/94	12	1.3	5.8	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O52A2		6/7/94	8.2	0.97	12	-	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O52A2		9/2/94	20	3.1	8.4	-	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O52A2		12/8/94	21	ND (<5.0)	7.2	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
O52A2		3/3/95	13	1.1	5.6	-	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O52A2		6/7/95	3.8	ND (<0.50)	2.4	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O52A2		9/5/95	5.7	0.62	4.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O52A2	Dup	9/5/95	4.6	0.86	3.5	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O52A2		12/6/95	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
O52A2		3/6/96	2.4	ND (<0.50)	2.4	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O52A2		6/6/96	1.2	0.83	3.5	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 110; TFT = 118;
O52A2		9/11/96	0.90	0.66	2.4	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 105;
O52A2		12/10/96	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
O52A2		3/7/97	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 118;
O52A2		6/4/97	ND (<0.50)	ND (<0.50)	1.6	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 103;
O52A2		9/9/97	ND (<0.50)	ND (<0.50)	1.5	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 111;
O52A2		12/9/97	0.96	1.4	3.3	-	1.5	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 109;
O52A2		6/3/98	ND (<0.50)	ND (<0.50)	1.4	ND (<0.50)	0.54	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 111;
O52A2		12/9/98	0.75	ND (<0.50)	1.8	ND (<0.50)	0.83	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 95;
O52A2		6/10/99	0.53	1.8	2.3	1.2	2.7	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O52A2		12/15/99	13	50	28	38	63	ND (<1.3)	ND (<1.3)	1.6	ND (<1.3)	ND (<1.3)	ND (<1.3)	TCFMe (Freon 11) = 1.4;
O52A2		6/8/00	89	100	26	48	94	ND (<2.5)	ND (<2.5)	6.4	ND (<2.5)	ND (<2.5)	ND (<2.5)	
O52A2		12/6/00	210	130	22	61	110	ND (<10)	ND (<10)	ND (<40)	ND (<10)	ND (<10)	ND (<10)	
O52A2	Dup	12/6/00	9.0	1.3	0.93	1.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O52A2	Dup	12/6/00	230	130	ND (<25)	55	110	ND (<25)	ND (<25)	ND (<100)	ND (<25)	ND (<25)	ND (<25)	
O52A2		6/22/01	480	170	25	70	130	ND (<10)	ND (<10)	ND (<40)	ND (<10)	ND (<10)	ND (<10)	
O52A2		6/27/02	520	130	22	57	110	ND (<5.0)	ND (<5.0)	39	ND (<5.0)	ND (<5.0)	ND (<5.0)	
O52A2		6/27/03	730	110	17	52	89	ND (<5.0)	ND (<5.0)	130	ND (<5.0)	ND (<5.0)	ND (<5.0)	
O52A2		9/1/04	660	100	14	53	110	ND (<5.0)	ND (<5.0)	42	ND (<5.0)	ND (<5.0)	ND (<5.0)	
O52A2		9/1/04	870	130	16	14	120	ND (<5.0)	ND (<5.0)	65	ND (<5.0)	ND (<5.0)	ND (<5.0)	
O52A2		6/22/05	520	92	19	76	84	ND (<10)	ND (<10)	49	ND (<10)	ND (<10)	ND (<10)	
O52A2		6/27/06	690	130	21	69	110	ND (<5.0)	ND (<5.0)	53	ND (<5.0)	ND (<5.0)	ND (<5.0)	
O52A2		6/13/07	930	130	19	72	110	ND (<5.0)	ND (<5.0)	100	ND (<5.0)	ND (<5.0)	ND (<5.0)	
O52A2		12/27/07	690	94	17	57	84	ND (<10)	ND (<10)	92	ND (<10)	ND (<10)	ND (<10)	
O52A2		2/1/08	650	110	17	61	97	ND (<5.0)	ND (<5.0)	85	ND (<5.0)	ND (<5.0)	ND (<5.0)	
O52A2		2/29/08	840	150	21	84	120	ND (<5.0)	ND (<5.0)	100	ND (<5.0)	ND (<5.0)	ND (<5.0)	
O52A2		6/11/08	470	110	17	64	91	ND (<10)	ND (<10)	61	ND (<10)	ND (<10)	ND (<10)	
O52A2		12/10/08	470	140	19	76	110	ND (<5.0)	ND (<5.0)	91	ND (<5.0)	ND (<5.0)	ND (<5.0)	
O52A2		6/9/09	430	100	15	58	84	ND (<10)	ND (<10)	55	ND (<10)	ND (<10)	ND (<10)	
O52A2		6/9/10	500	100	13	55	66	ND (<10)	ND (<10)	71	ND (<10)	ND (<10)	ND (<10)	
O52A2	Dup	6/9/10	500	100	14	54	66	ND (<10)	ND (<10)	72	ND (<10)	ND (<10)	ND (<10)	
O52A2		6/14/11	550	90	17	47	70	ND (<10)	ND (<10)	89	ND (<10)	ND (<10)	ND (<10)	
O52A2		8/26/11	440	76	14	39	62	1.0	ND (<0.50)	74	0.69	ND (<0.50)	ND (<0.50)	
O52A2		9/29/11	510	93	15	38	63	ND (<10)	ND (<10)	84	ND (<10)	ND (<10)	ND (<10)	
O52A2		10/17/11	460	76	13	36	54	ND (<10)	ND (<10)	67	ND (<10)	ND (<10)	ND (<10)	
O52A2		6/13/12	490	64	14	31	54	ND (<10)	ND (<10)	82	ND (<10)	ND (<10)	ND (<10)	
O52A2		6/20/13	410	45	12	24	44	ND (<5.0)	ND (<5.0)	66	ND (<5.0)	ND (<5.0)	ND (<5.0)	
O52A2		6/11/14	340	51	12	24	44	ND (<5.0)	ND (<5.0)	80	ND (<5.0)	ND (<5.0)	ND (<5.0)	
O52A2		6/8/15	290	50	14	26	49	ND (<5.0)	ND (<5.0)	79	ND (<5.0)	ND (<5.0)	ND (<5.0)	
O52A2		6/7/16	250	45	12	31	44	ND (<5.0)	ND (<5.0)	75	ND (<5.0)	ND (<5.0)	ND (<5.0)	
O52A2		6/8/17	240	29	11	22	31	ND (<5.0)	ND (<5.0)	83	ND (<5.0)	ND (<5.0)	ND (<5.0)	
O52A2		6/5/18	210	22	11	19	30	ND (<5.0)	ND (<5.0)	72	ND (<5.0)	ND (<5.0)	ND (<5.0)	
O52A2		6/5/19	180	25	10	21	30	ND (<5.0)	ND (<5.0)	73	ND (<5.0)	ND (<5.0)	ND (<5.0)	
O52A2		6/3/20	170	18	9.7	16	27	ND (<1.0)	ND (<1.0)	65	ND (<1.0)	ND (<1.0)	ND (<1.0)	
O67A2		12/6/90	0.50	0.30	0.40	0.50	-	-	0.20	1.0	1.0	0.30	0.30	1,1,2,2-TCA = 0.30; 1,1,2-TCA = 0.2; 1,2,4-TCB = 20; 1,2-DCPA = 0.2; 1,3-DCB = 0.5; 1,4-DCB = 0.5; 2-CVE = 0.40; Acetone = 30; BDCMe = 0.40; Benzene = 0.5; BRFM = 0.5; BRMA = 0.5; CHLBZ = 0.5; CHLEA (EC) = 0.5; CHLFM = 0.2; CHLMA = 0.5; cis-1,3-DCP = 0.30; CT = 0.30; DBCMe = 0.40; EDB = 1; Ethylbenzene = 0.5; MC = 5; m-Xylene = 0.5; Naphthalene = 20; o-Xylene = 0.5; TCFMe (Freon 11) = 0.5; Toluene = 0.5; trans-1,3-DCP = 0.30; Xylenes = 0.5;
O67A2		4/8/91	-	-	-	-	-	-	-	-	ND (<10)	-	-	
O67A2		5/1/91	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O67A2		8/1/91	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O67A2		10/4/91	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<10)	ND (<0.50)	ND (<0.50)	
O67A2		12/9/91	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<14)	ND (<5.0)	ND (<10)	
O67A2		3/12/92	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O67A2		6/4/92	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O67A2		6/18/92	-	-	-	-	-	-	-	-	ND (<10)	-	-	
O67A2		9/17/92	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O67A2	Dup	9/17/92	-	-	-	-	-	-	-	-	ND (<10)	-	-	
O67A2		12/2/92	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
O67A2		3/2/93	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O67A2		6/4/93	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O67A2		9/8/93	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O67A2		12/6/93	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
O67A2	Dup	12/6/93	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
O67A2		6/11/94	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O67A2		12/3/94	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
O67A2	Dup	12/3/94	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
O67A2		6/6/95	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O67A2		12/6/95	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
O67A2		6/6/96	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 111;
O67A2	Dup	6/6/96	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 111;
O67A2		12/10/96	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
O67A2		6/4/97	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 101;
O67A2		12/4/97	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 91;
O67A2		6/4/98	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 96;
O67A2		12/10/98	11	ND (<0.50)	2.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 114;
O67A2		6/10/99	55	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
O67A2		12/15/99	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	260	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
O67A2		6/8/00	3,400	ND (<50)	57	ND (<50)	ND (<50)	ND (<50)	ND (<50)	ND (<200)	ND (<50)	ND (<50)	ND (<50)	
O67A2		12/5/00	890	ND (<10)	11	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<40)	ND (<10)	ND (<10)	ND (<10)	
O67A2		6/22/01	19,000	ND (<250)	ND (<250)	ND (<250)	ND (<250)	ND (<250)	ND (<250)	1,000	270	ND (<250)	ND (<250)	
O67A2		6/27/03	5,300	ND (<200)	ND (<200)	ND (<200)	ND (<200)	ND (<200)	1,400	1,800	690	ND (<200)	ND (<200)	
O67A2		6/22/05	15,000	410	ND (<100)	170	110	ND (<100)	1,100	6,600	1,800	ND (<100)	ND (<100)	1,2,4-TCB = 430;
O67A2		6/27/06	85,000	5,200	ND (<1,000)	ND (<1,000)	ND (<1,000)	ND (<1,000)	1,500	8,900	2,500	ND (<1,000)	ND (<1,000)	
O67A2		3/6/07	62,000	4,100	ND (<500)	ND (<500)	ND (<500)	ND (<500)	2,100	13,000	3,100	ND (<500)	ND (<500)	1,2,4-TCB = 2,700;
O67A2		6/12/07	47,000	2,700	ND (<500)	ND (<500)	ND (<500)	ND (<500)	1,700	8,900	2,200	ND (<500)	ND (<500)	1,2,4-TCB = 1,200;
O67A2		6/11/08	18,000	860	ND (<200)	ND (<200)	680	ND (<200)	1,200	6,000	2,000	ND (<200)	ND (<200)	1,2,4-TCB = 2,000;
O67A2		12/10/08	26,000	ND (<500)	ND (<500)	ND (<500)	1,800	ND (<500)	1,100	6,400	2,200	ND (<500)	ND (<500)	1,2,4-TCB = 2,600; Ethylbenzene = 1,700; Xylenes = 4,800;
O67A2		6/10/09	28,000	ND (<500)	ND (<500)	ND (<500)	2,200	ND (<500)	790	3,400	1,300	ND (<500)	ND (<500)	1,2,4-TCB = 1,300;
O67A2		6/9/10	23,000	ND (<500)	ND (<500)	ND (<500)	2,100	ND (<500)	620	3,200	1,000	ND (<500)	ND (<500)	
O67A2		6/14/11	5,800	240	ND (<100)	ND (<100)	1,200	ND (<100)	410	1,800	1,100	ND (<100)	ND (<100)	1,2,4-TCB = 1,300;
O67A2		8/16/11	540	130	8.3	14	6.7	ND (<0.50)	12	68	36	ND (<0.50)	ND (<0.50)	1,2,4-TCB = 31; 1,4-DCB = 0.69; CHLFM = 1.1; TCFMe (Freon 11) = 8.6;
O67A2		9/14/11	4,100	290	ND (<100)	ND (<100)	2,000	ND (<100)	500	1,900	930	ND (<100)	ND (<100)	1,2,4-TCB = 1,300;
O67A2		9/29/11	3,100	260	ND (<25)	ND (<25)	1,700	ND (<25)	240	1,200	520	ND (<25)	ND (<25)	1,2,4-TCB = 250;
O67A2		10/17/11	2,400	220	ND (<25)	ND (<25)	1,500	ND (<25)	220	1,200	600	ND (<25)	ND (<25)	1,2,4-TCB = 410;
O67A2		6/13/12	1,200	370	ND (<25)	25	5,100	34	55	1,200	950	ND (<25)	ND (<25)	1,2,4-TCB = 2,000;
O67A2		6/20/13	7,300	410	25	ND (<25)	2,000	ND (<25)	380	1,700	1,500	ND (<25)	ND (<25)	1,2,4-TCB = 4,500; 1,4-DCB = 33;
O67A2		6/11/14	400	ND (<50)	ND (<50)	ND (<50)	2,400	ND (<50)	78	440	300	ND (<50)	ND (<50)	1,2,4-TCB = 1,500;
O67A2	Dup	6/11/14	410	ND (<5.0)	10	ND (<5.0)	2,300	16	74	430	310	ND (<5.0)	ND (<5.0)	1,2,4-TCB = 1,500; 1,3-DCB = 5.3; 1,4-DCB = 7.3;
O67A2		6/8/15	170	ND (<25)	ND (<25)	ND (<25)	3,500	ND (<25)	270	2,000	790	ND (<25)	ND (<25)	1,2,4-TCB = 5,900;
O67A2		6/7/16	ND (<25)	ND (<25)	ND (<25)	ND (<25)	1,300	ND (<25)	ND (<25)	170	220	ND (<25)	ND (<25)	1,2,4-TCB = 440;
O67A2		6/7/17	110	33	ND (<25)	ND (<25)	4,200	ND (<25)	25	520	650	ND (<25)	ND (<25)	1,2,4-TCB = 790
O67A2		6/5/18	ND (<50)	ND (<50)	ND (<50)	ND (<50)	2,700	ND (<50)	ND (<50)	890	720	ND (<50)	ND (<50)	1,2,4-TCB = 990
O67A2		6/5/19	ND (<50)	ND (<50)	ND (<50)	ND (<50)	3,000	ND (<50)	ND (<50)	1,200	940	ND (<50)	ND (<50)	1,2,4-TCB = 900
O67A2		6/3/20	16	14	ND (<10)	ND (<10)	2,300	ND (<10)	11	810	1,200	ND (<10)	ND (<10)	1,2,4-TCB = 1,500; 1,3-DCB = 15; 1,4-DCB = 82
O68A1		12/6/90	17	73	8.6	21	-	-	2.0	71	6.7	3.0	3.0	1,1,2,2-TCA = 3; 1,1,2-TCA = 2; 1,2-DCPA = 2; 1,3-DCB = 0.5; 1,4-DCB = 0.5; 2-CVE = 4; Acetone = 30; BDCMe = 4; Benzene = 0.5; BRFM = 5; BRMA = 5; CHLBZ = 0.5; CHLEA (EC) = 5; CHLFM = 2; CHLMA = 5; cis-1,3-DCP = 3; CT = 3; DBCMe = 4; EDB = 10; Ethylbenzene = 0.5; MC = 50; m-Xylene = 0.5; o-Xylene = 0.5; TCFMe (Freon 11) = 5; Toluene = 0.5; trans-1,3-DCP = 3; Xylenes = 0.5;
O68A1		2/15/91	-	-	-	-	-	-	-	-	10	-	-	
O68A1		3/1/91	-	-	-	-	-	-	-	-	10	-	-	
O68A1		4/8/91	-	-	-	-	-	-	-	-	ND (<10)	-	-	
O68A1		5/1/91	210	290	19	ND (<5.0)	100	ND (<5.0)	17	310	-	ND (<5.0)	ND (<5.0)	Xylenes = 12;
O68A1		7/22/91	74	150	18	-	130	1.0	7.1	130	ND (<10)	3.8	ND (<0.50)	
O68A1	Dup	7/22/91	73	140	17	-	120	0.90	6.3	120	ND (<10)	3.7	ND (<0.50)	
O68A1		10/4/91	54	60	11	-	57	ND (<0.50)	5.0	42	ND (<10)	2.8	ND (<0.50)	CHLFM = 0.6;
O68A1		12/9/91	33	41	9.5	-	-	ND (<5.0)	ND (<5.0)	38	ND (<10)	ND (<5.0)	ND (<10)	
O68A1		3/12/92	44	59	11	-	54	ND (<0.50)	4.1	46	ND (<10)	2.7	ND (<0.50)	CHLFM = 7.7; TCFMe (Freon 11) = 2.3;
O68A1		6/4/92	44	59	8.9	-	59	ND (<0.50)	4.3	57	-	1.6	ND (<0.50)	CHLFM = 12; TCFMe (Freon 11) = 1.3;
O68A1		6/18/92	-	-	-	-	-	-	-	-	ND (<10)	-	-	
O68A1		9/18/92	34	37	7.2	ND (<0.50)	37	ND (<0.50)	4.1	ND (<0.50)	ND (<10)	1.3	ND (<0.50)	CHLEA (EC) = 1.8; CHLFM = 2.9; TCFMe (Freon 11) = 1.4;
O68A1		12/2/92	34	33	7.4	-	38	ND (<5.0)	ND (<5.0)	36	-	ND (<5.0)	ND (<10)	
O68A1		3/3/93	41	76	10	-	56	0.50	4.5	52	-	1.0	ND (<0.50)	CHLFM = 2.4; TCFMe (Freon 11) = 1.5;
O68A1		6/4/93	24	23	4.2	-	21	ND (<0.50)	2.0	18	-	0.70	ND (<0.50)	
O68A1		9/8/93	22	20	4.7	-	18	ND (<0.50)	2.0	19	-	1.0	ND (<0.50)	CHLEA (EC) = 3.5; CHLFM = 0.7;
O68A1		12/6/93	24	19	ND (<5.0)	-	19	ND (<5.0)	ND (<5.0)	20	-	ND (<5.0)	ND (<10)	
O68A1		3/8/94	28	19	3.4	-	20	ND (<0.50)	1.8	16	-	0.85	ND (<0.50)	CHLEA (EC) = 2.4; CHLFM = 0.64;
O68A1		6/11/94	30	21	3.3	-	22	ND (<0.50)	1.7	19	-	0.52	ND (<0.50)	CHLEA (EC) = 1.9; CHLFM = 0.52;
O68A1	Dup	6/11/94	35	22	3.4	-	23	ND (<0.50)	1.9	20	-	ND (<0.50)	ND (<0.50)	CHLEA (EC) = 1.9; CHLFM = 0.58;
O68A1		9/7/94	34	17	2.3	-	17	ND (<0.50)	1.7	19	-	ND (<0.50)	ND (<0.50)	CHLEA (EC) = 4.2;
O68A1	Dup	9/7/94	32	15	2.2	-	16	ND (<0.50)	1.5	18	-	ND (<0.50)	ND (<0.50)	CHLEA (EC) = 3.6;
O68A1		12/3/94	34	10	ND (<5.0)	-	15	ND (<5.0)	ND (<5.0)	12	-	ND (<5.0)	ND (<10)	

Appendix B
Selected Compounds from Historical Records
COE Study Area and Perimeter Area, Palo Alto, California

Location	Type	Date	TCE	1,1,1-TCA	1,1-DCA	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	PCE	Freon 113	1,2-DCB	1,2-DCA	VC	Other Constituents
O68A1		3/6/95	25	12	1.3	-	15	ND (<0.50)	1.0	13	-	ND (<0.50)	ND (<0.50)	CHLEA (EC) = 0.7; TCFMe (Freon 11) = 0.54;
O68A1	Dup	3/6/95	26	13	1.3	-	15	ND (<0.50)	1.1	14	-	ND (<0.50)	ND (<0.50)	CHLEA (EC) = 0.7; TCFMe (Freon 11) = 0.55;
O68A1		6/6/95	30	16	1.2	-	15	ND (<0.50)	1.7	26	-	ND (<0.50)	ND (<0.50)	CHLEA (EC) = 0.67; CHLFM = 0.74; TCFMe (Freon 11) = 0.84;
O68A1		9/7/95	27	14	1.5	-	14	ND (<0.50)	1.5	18	2.5	1.5	ND (<0.50)	CHLFM = 0.74;
O68A1	Dup	9/7/95	26	14	1.4	-	13	ND (<0.50)	1.4	17	2.4	1.3	ND (<0.50)	CHLFM = 0.7;
O68A1		12/6/95	26	20	ND (<5.0)	-	25	ND (<5.0)	ND (<5.0)	31	-	ND (<5.0)	ND (<10)	
O68A1		3/7/96	14	10	1.0	ND (<1.0)	10	ND (<1.0)	1.7	15	ND (<1.0)	0.61	ND (<1.8)	
O68A1		6/7/96	8.4	6.0	ND (<0.50)	2.2	4.7	ND (<0.50)	0.85	11	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 103; TCFMe (Freon 11) = 0.66; TFT = 110;
O68A1		9/12/96	11	5.8	ND (<0.50)	2.2	4.9	ND (<0.50)	1.2	8.9	1.1	ND (<0.50)	ND (<0.50)	CBMA = 98; MC = 0.65; TCFMe (Freon 11) = 0.81; TFT = 101;
O68A1	Dup	9/12/96	10	5.5	ND (<0.50)	2.0	4.8	ND (<0.50)	1.2	7.5	1.2	ND (<0.50)	ND (<0.50)	1,1,2,2-TCA = 1; CBMA = 104; MC = 0.55; TCFMe (Freon 11) = 0.8; TFT = 103;
O68A1		12/12/96	12	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	9.0	-	ND (<5.0)	ND (<10)	MC = 6.3;
O68A1		3/6/97	6.1	2.2	ND (<0.50)	0.67	2.8	ND (<0.50)	0.96	4.6	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 110;
O68A1	Dup	3/6/97	5.6	2.3	ND (<0.50)	0.74	2.8	ND (<0.50)	0.64	4.9	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 113; MC = 0.61;
O68A1		6/5/97	5.5	2.5	ND (<0.50)	0.53	2.9	ND (<0.50)	0.62	1.2	0.94	ND (<0.50)	ND (<0.50)	CBMA = 94;
O68A1		9/10/97	2.2	1.6	ND (<0.50)	ND (<0.50)	1.0	ND (<0.50)	ND (<0.50)	4.9	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 101; MC = 1.5;
O68A1		12/4/97	3.2	1.7	ND (<0.50)	0.54	1.4	ND (<0.50)	0.50	6.2	0.50	ND (<0.50)	ND (<0.50)	CBMA = 96;
O68A1		12/11/98	2.5	2.2	ND (<0.50)	0.58	1.1	ND (<0.50)	0.61	4.5	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 91.7;
O68A1		12/15/99	5.5	1.8	ND (<0.50)	ND (<0.50)	0.92	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O68A1		12/5/00	11	8.6	1.5	2.9	5.3	ND (<0.50)	1.6	9.7	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O68A1		6/22/01	44	85	26	16	39	ND (<0.50)	7.2	45	3.7	ND (<0.50)	ND (<0.50)	
O68A1		6/27/03	3.6	15	ND (<0.50)	1.2	1.5	ND (<0.50)	0.63	4.7	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O68A1		6/22/05	24	60	1.2	8.8	4.1	ND (<0.50)	ND (<0.50)	16	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O68A1	Dup	6/22/05	26	52	1.1	3.6	3.7	ND (<0.50)	0.63	15	1.1	ND (<0.50)	ND (<0.50)	
O68A1		6/27/06	2,100	2,300	110	140	240	ND (<100)	ND (<100)	1,000	ND (<100)	ND (<100)	ND (<100)	
O68A1		3/6/07	1,500	610	ND (<20)	29	85	ND (<20)	35	790	ND (<20)	ND (<20)	ND (<20)	
O68A1		6/12/07	1,600	760	25	46	220	ND (<20)	32	960	ND (<20)	ND (<20)	ND (<20)	
O68A1		6/11/08	1,800	1,600	ND (<20)	73	160	ND (<20)	23	1,300	ND (<20)	ND (<20)	ND (<20)	
O68A1		12/10/08	2,400	1,200	26	67	230	ND (<25)	36	1,700	ND (<25)	ND (<25)	ND (<25)	
O68A1		6/10/09	1,800	1,700	36	130	220	ND (<25)	52	1,300	ND (<25)	ND (<25)	ND (<25)	
O68A1		6/9/10	470	760	28	73	180	ND (<5.0)	24	470	ND (<5.0)	ND (<5.0)	ND (<5.0)	
O68A1		6/14/11	230	210	8.6	12	60	ND (<5.0)	11	210	ND (<5.0)	ND (<5.0)	ND (<5.0)	
O68A1		6/13/12	420	380	15	17	200	ND (<5.0)	25	320	30	ND (<5.0)	ND (<5.0)	
O68A1		6/20/13	2,600	1,800	210	120	1,300	ND (<5.0)	200	2,000	23	ND (<5.0)	ND (<5.0)	1,2,4-TCB = 23;
O68A1		6/11/14	470	1,100	83	120	760	ND (<25)	92	2,600	140	ND (<25)	ND (<25)	1,2,4-TCB = 52;
O68A1		6/8/15	450	330	ND (<25)	35	180	ND (<25)	130	1,700	140	ND (<25)	ND (<25)	
O68A1	Dup	6/8/15	420	310	ND (<250)	ND (<250)	ND (<250)	ND (<250)	ND (<250)	1,600	ND (<250)	ND (<250)	ND (<250)	
O68A1		6/7/16	170	47	ND (<5.0)	9.5	41	ND (<5.0)	63	450	22	ND (<5.0)	ND (<5.0)	
O68A1		6/7/17	140	35	ND (<25)	ND (<25)	41	ND (<25)	49	320	ND (<25)	ND (<25)	ND (<25)	
O68A1		6/5/18	120	25	ND (<5.0)	6.5	30	ND (<5.0)	41	270	ND (<5.0)	ND (<5.0)	ND (<5.0)	
O68A1		6/5/19	70	8.7	ND (<5.0)	ND (<5.0)	12	ND (<5.0)	42	110	ND (<5.0)	ND (<5.0)	ND (<5.0)	
O68A1		6/3/20	44	6.2	1.9	3.6	11	ND (<0.50)	14	38	28	ND (<0.50)	ND (<0.50)	1,2,4-TCB = 12; 1,4-DCB = 0.69; CHLFM = 0.53; Freon 11 = 1.1
O69A2D		12/6/90	0.50	0.30	0.40	0.30	-	-	0.20	1.0	0.50	0.30	0.30	1,1,2,2-TCA = 0.30; 1,1,2-TCA = 0.2; 1,2-DCPA = 0.2; 1,3-DCB = 0.5; 1,4-DCB = 0.5; 2-CVE = 0.40; Acetone = 30; BDCMe = 0.40; Benzene = 0.5; BRFM = 0.5; BRMA = 0.5; CHLBZ = 0.5; CHLEA (EC) = 0.5; CHLFM = 0.2; CHLMA = 0.5; cis-1,3-DCP = 0.30; CT = 0.30; DBCMe = 0.40; EDB = 1; Ethylbenzene = 0.5; MC = 5; m-Xylene = 0.5; o-Xylene = 0.5; TCFMe (Freon 11) = 0.5; Toluene = 0.5; trans-1,3-DCP = 0.30; Xylenes = 0.5;
O69A2D		4/12/91	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O69A2D		7/29/91	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O69A2D	Dup	7/29/91	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O69A2D		10/3/91	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O69A2D		12/16/91	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
O69A2D	Dup	12/16/91	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
O69A2D		3/12/92	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O69A2D		6/5/92	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O69A2D		9/14/92	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O69A2D		12/2/92	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
O69A2D		3/2/93	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O69A2D	Dup	3/2/93	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O69A2D		6/8/93	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O69A2D		9/7/93	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	MC = 1.2;
O69A2D		12/6/93	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
O69A2D		6/9/94	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O69A2D		12/13/94	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
O69A2D		12/5/95	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
O69A2D		12/10/96	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
O69A2D		12/2/97	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 97; MC = 0.73;
O69A2D		12/11/98	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 100;
O69A2D	Dup	12/11/98	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 107;
O69A2D		12/13/99	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O69A2D		12/6/00	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O69A2D		6/20/01	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O69A2D		6/24/03	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O69A2D		6/23/05	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O69A2D		6/13/07	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O69A2D		6/9/10	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O69A2D		6/14/11	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O69A2D	Dup	6/14/11	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O69A2D		6/13/12	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O69A2D		6/19/13	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O69A2D		6/11/14	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O69A2D		6/9/15	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O69A2D		6/7/16	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O69A2D		6/7/17	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O69A2D		6/5/19	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O70A1		12/6/90	2.4	13	15	9.9	-	-	0.20	1.0	0.50	0.30	0.30	1,1,2,2-TCA = 0.30; 1,1,2-TCA = 0.2; 1,2-DCPA = 0.2; 1,3-DCB = 0.5; 1,4-DCB = 0.5; 2-CVE = 0.40; Acetone = 30; BDCMe = 0.40; Benzene = 0.5; BRFM = 0.5; BRMA = 0.5; CHLBZ = 0.5; CHLEA (EC) = 0.5; CHLFM = 0.7; CHLMA = 0.5; cis-1,3-DCP = 0.30; CT = 0.30; DBCMe = 0.40; EDB = 1; Ethylbenzene = 0.5; MC = 5; m-Xylene = 0.5; o-Xylene = 0.5; TCFMe (Freon 11) = 0.5; Toluene = 0.5; trans-1,3-DCP = 0.30; Xylenes = 0.5;
O70A1		4/12/91	7.0	16	15	-	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O70A1	Dup	4/12/91	11	19	17	-	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O70A1		7/31/91	5.0	14	14	-	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O70A1		10/3/91	7.1	17	16	-	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.5;
O70A1		12/13/91	ND (<5.0)	ND (<5.0)	12	-	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
O70A1		3/11/92	1.7	4.3	8.8	-	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O70A1		6/5/92	3.5	11	12	-	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLMA = 3.6;
O70A1		9/14/92	2.1	7.2	11	-	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O70A1		12/2/92	ND (<5.0)	ND (<5.0)	12	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
O70A1		3/2/93	1.7	5.9	10	-	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O70A1		6/8/93	0.60	2.6	5.6	0.50	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O70A1		9/7/93	3.4	9.3	10	-	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	MC = 1.5;
O70A1		12/6/93	5.9	ND (<5.0)	8.7	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
O70A1		3/2/94	2.2	2.8	7.8	-	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O70A1		6/9/94	1.2	2.4	6.6	-	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O70A1		9/2/94	1.2	2.3	6.2	-	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O70A1		12/13/94	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
O70A1		3/3/95	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O70A1		6/6/95	ND (<0.50)	ND (<0.50)	1.8	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O70A1		9/5/95	0.92	1.1	5.4	-	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O70A1		12/6/95	ND (<5.0)	ND (<5.0)	5.4	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
O70A1		3/5/96	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O70A1		6/4/96	0.51	1.2	2.5	0.77	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 97;
O70A1		9/10/96	ND (<0.50)	0.52	2.7	0.57	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 102;
O70A1		12/10/96	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
O70A1		3/4/97	ND (<0.50)	ND (<0.50)	0.72	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 100;
O70A1		6/3/97	0.64	1.7	4.7	1.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 111;
O70A1		9/10/97	ND (<0.50)	0.74	2.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 98; MC = 1.6;
O70A1	Dup	9/10/97	ND (<0.50)	0.70	1.9	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 109; MC = 1.5;
O70A1		12/9/97	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 101;
O70A1		12/11/98	ND (<0.50)	ND (<0.50)	2.56	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 117;
O70A1		12/13/99	1.1	2.2	6.4	1.6	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O70A1		12/6/00	1.2	2.1	5.9	1.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O70A1		6/20/01	ND (<0.50)	ND (<0.50)	2.4	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O70A1		6/24/03	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O70A1		6/23/05	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<5.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O70A1		6/13/07	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O70A1		6/11/09	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O70A1		6/14/11	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O70A1		6/19/13	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O70A1		6/9/15	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O70A1		6/7/17	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O70A1		6/5/19	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O81A2		12/7/90	360	220	210	58	-	-	16	160	0.50	3.0	3.0	1,1,2,2-TCA = 3; 1,1,2-TCA = 2; 1,2-DCPA = 2; 1,3-DCB = 0.5; 1,4-DCB = 0.5; 2-CVE = 4; Acetone = 30; BDCMe = 4; Benzene = 0.5; BRFM = 5; BRMA = 5; CHLBZ = 0.5; CHLEA (EC) = 5; CHLFM = 4; CHLMA = 5; cis-1,3-DCP = 3; CT = 3; DBCMe = 4; EDB = 10; Ethylbenzene = 0.9; MC = 50; m-Xylene = 2; o-Xylene = 4.1; TCFMe (Freon 11) = 16; Toluene = 0.8; trans-1,3-DCP = 3; Xylenes = 8.1;
O81A2		2/8/91	120	71	76	48	-	-	2.5	47	10	3.0	3.0	1,1,2,2-TCA = 3; 1,1,2-TCA = 2; 1,2-DCPA = 2; 1,3-DCB = 10; 1,4-DCB = 10; 2-CVE = 4; BDCMe = 4; BRFM = 5; BRMA = 5; CHLBZ = 4; CHLEA (EC) = 5; CHLFM = 4; CHLMA = 5; cis-1,3-DCP = 3; CT = 3; DBCMe = 4; EDB = 10; MC = 50; TCFMe (Freon 11) = 29; trans-1,3-DCP = 3;
O81A2		5/1/91	190	92	100	-	42	ND (<3.0)	10	64	7.0	ND (<3.0)	ND (<3.0)	1,4-DCB = 1; TCFMe (Freon 11) = 27; Xylenes = 2;
O81A2		8/1/91	220	74	97	-	52	ND (<5.0)	11	62	ND (<10)	ND (<5.0)	ND (<5.0)	TCFMe (Freon 11) = 18;
O81A2		10/4/91	170	62	78	ND (<2.5)	38	ND (<1.0)	10	39	ND (<10)	ND (<1.0)	ND (<1.0)	CHLEA (EC) = 3.2; CHLFM = 4.4; MC = 1; TCFMe (Freon 11) = 28; Xylenes = 1.8;
O81A2		12/9/91	130	44	69	-	-	ND (<5.0)	8.9	34	ND (<10)	ND (<5.0)	ND (<10)	
O99B		11/29/90	0.50	0.40	0.40	0.30	-	-	0.20	1.0	1.0	0.30	0.30	1,1,2,2-TCA = 0.30; 1,1,2-TCA = 0.2; 1,2-DCPA = 0.2; 1,3-DCB = 1; 1,4-DCB = 1; 2-CVE = 0.40; Acetone = 30; BDCMe = 0.40; Benzene = 0.5; BRFM = 0.5; BRMA = 0.5; CHLBZ = 0.40; CHLEA (EC) = 0.5; CHLFM = 0.6; CHLMA = 0.5; cis-1,3-DCP = 0.30; CT = 0.30; DBCMe = 0.40; EDB = 1; Ethylbenzene = 0.5; MC = 5; m-Xylene = 0.5; o-Xylene = 0.5; TCFMe (Freon 11) = 0.5; Toluene = 0.5; trans-1,3-DCP = 0.30; Xylenes = 0.5;

Appendix B
Selected Compounds from Historical Records
COE Study Area and Perimeter Area, Palo Alto, California

Location	Type	Date	TCE	1,1,1-TCA	1,1-DCA	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	PCE	Freon 113	1,2-DCB	1,2-DCA	VC	Other Constituents
O99B		12/7/90	4.9	3.1	1.6	0.40	-	-	1.3	1.0	0.50	0.30	0.30	1,1,2,2-TCA = 0.30; 1,1,2-TCA = 0.2; 1,2-DCPA = 0.2; 1,3-DCB = 0.5; 1,4-DCB = 0.5; 2-CVE = 0.40; Acetone = 30; BDCMe = 0.40; Benzene = 0.5; BRFM = 0.5; BRMA = 0.5; CHLBZ = 0.40; CHLEA (EC) = 0.5; CHLFM = 0.2; CHLMA = 0.5; cis-1,3-DCP = 0.30; CT = 0.30; DBCMe = 0.40; EDB = 1; Ethylbenzene = 0.5; MC = 5; m-Xylene = 0.5; o-Xylene = 0.5; TCFMe (Freon 11) = 0.5; Toluene = 0.5; trans-1,3-DCP = 0.30; Xylenes = 0.5;
O99B		2/8/91	1.0	0.30	ND (<0.40)	ND (<0.30)	-	-	ND (<0.20)	ND (<1.0)	ND (<1.0)	ND (<0.30)	ND (<0.30)	CHLFM = 0.6;
O99B		2/8/91	0.50	0.60	0.40	0.30	-	-	0.20	1.0	1.0	0.30	0.30	1,1,2,2-TCA = 0.30; 1,1,2-TCA = 0.2; 1,2-DCPA = 0.2; 1,3-DCB = 1; 1,4-DCB = 1; 2-CVE = 0.40; BDCMe = 0.40; BRFM = 0.5; BRMA = 0.5; CHLBZ = 0.40; CHLEA (EC) = 0.5; CHLFM = 0.5; CHLMA = 0.5; cis-1,3-DCP = 0.30; CT = 0.30; DBCMe = 0.40; EDB = 1; MC = 5; TCFMe (Freon 11) = 0.5; trans-1,3-DCP = 0.30;
O99B		4/8/91	-	-	-	-	-	-	-	-	ND (<10)	-	-	
O99B		5/1/91	1.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O99B		8/1/91	1.0	0.50	ND (<0.50)	ND (<0.50)	0.80	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O99B		10/4/91	0.80	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.60	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O99B		12/9/91	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<10)	ND (<5.0)	ND (<10)	
O100B		11/28/90	0.60	0.40	0.40	0.40	-	-	0.20	1.0	1.0	0.30	0.30	1,1,2,2-TCA = 0.30; 1,1,2-TCA = 0.2; 1,2-DCPA = 0.2; 1,3-DCB = 1; 1,4-DCB = 1; 2-CVE = 0.40; Acetone = 30; BDCMe = 0.40; Benzene = 0.5; BRFM = 0.5; BRMA = 0.5; CHLBZ = 0.40; CHLEA (EC) = 0.5; CHLFM = 0.5; CHLMA = 0.5; cis-1,3-DCP = 0.30; CT = 0.30; DBCMe = 0.40; EDB = 1; Ethylbenzene = 0.5; MC = 5; m-Xylene = 0.5; o-Xylene = 0.5; TCFMe (Freon 11) = 0.5; Toluene = 0.5; trans-1,3-DCP = 0.30; Xylenes = 0.5;
O100B		12/19/90	0.50	0.30	0.40	0.30	-	-	0.20	1.0	1.0	0.30	0.30	1,1,2,2-TCA = 0.30; 1,1,2-TCA = 0.2; 1,2-DCPA = 0.2; 1,3-DCB = 1; 1,4-DCB = 1; 2-CVE = 0.40; Acetone = 30; BDCMe = 0.40; Benzene = 0.30; BRFM = 0.5; BRMA = 0.5; CHLBZ = 0.40; CHLEA (EC) = 0.5; CHLFM = 0.2; CHLMA = 0.5; cis-1,3-DCP = 0.30; CT = 0.30; DBCMe = 0.40; EDB = 1; Ethylbenzene = 0.30; MC = 5; m-Xylene = 0.30; o-Xylene = 0.30; TCFMe (Freon 11) = 0.5; Toluene = 0.30; trans-1,3-DCP = 0.30; Xylenes = 0.9;
O100B		2/5/91	0.80	ND (<0.30)	ND (<0.40)	ND (<0.30)	-	-	ND (<0.30)	ND (<1.0)	ND (<1.0)	ND (<0.30)	ND (<0.30)	CHLFM = 1.3;
O100B		2/5/91	0.50	0.30	0.40	0.30	-	-	0.20	1.0	1.0	0.30	0.30	1,1,2,2-TCA = 0.30; 1,1,2-TCA = 0.2; 1,2-DCPA = 0.2; 1,3-DCB = 1; 1,4-DCB = 1; 2-CVE = 0.40; BDCMe = 0.40; BRFM = 0.5; BRMA = 0.5; CHLBZ = 0.40; CHLEA (EC) = 0.5; CHLFM = 0.7; CHLMA = 0.5; cis-1,3-DCP = 0.30; CT = 0.30; DBCMe = 0.40; EDB = 1; MC = 5; TCFMe (Freon 11) = 0.5; trans-1,3-DCP = 0.30;
O100B		4/12/91	2.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O100B		8/1/91	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O100B		10/11/91	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O100B		12/4/91	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
O100B		3/12/92	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O100B		6/15/92	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O100B		9/22/92	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O100B		12/3/92	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
O100B		6/3/93	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O100B		12/6/93	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
O100B		6/7/94	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O100B		12/8/94	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
O100B		12/5/95	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
O100B		12/9/96	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
O100B	Dup	12/9/96	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
O100B		12/2/97	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 82;
O100B		12/11/98	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 110;
O100B		12/9/99	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<1.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O100B		12/6/00	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O100B		6/20/01	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O100B		6/24/03	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O100B		6/21/05	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O100B		6/21/07	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O100B		6/9/09	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O100B		6/14/11	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O100B		6/19/13	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O100B		6/8/15	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O100B		6/5/17	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O100B		6/5/19	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O104A1		9/4/92	ND (<0.50)	3.2	5.2	-	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 1.4;
O104A1		12/3/92	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
O104A1	Dup	12/3/92	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
O104A1		6/3/93	ND (<0.50)	3.9	7.7	-	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.5; TCFMe (Freon 11) = 1.3;
O104A1		1/25/94	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
O104A1	Dup	1/25/94	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
O104A1		6/3/94	ND (<0.50)	4.2	3.5	-	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O104A1		12/7/94	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
O104A1		12/5/95	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
O104A1	Dup	12/5/95	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
O104A1		12/11/96	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
O104A1	Dup	12/11/96	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
O104A1		12/2/97	ND (<0.50)	4.0	2.0	3.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 96; TCFMe (Freon 11) = 0.69;
O104A1		12/15/99	ND (<0.50)	5.4	2.1	5.8	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.539; TCFMe (Freon 11) = 0.541;
O104A1	Dup	12/15/99	ND (<0.50)	5.0	2.2	6.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.547; TCFMe (Freon 11) = 0.597;
O104A1		6/20/01	ND (<0.50)	7.1	1.3	5.9	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O104A1		6/24/03	ND (<0.50)	5.0	1.5	4.4	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O104A1		6/22/05	ND (<0.50)	5.6	2.3	9.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O104A1	Dup	6/22/05	ND (<0.50)	5.4	2.2	8.5	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O104A1		6/21/07	3.6	1.7	4.6	19	2.9	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.93	
O104A1		6/10/09	1.3	2.5	1.4	5.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O104A1		6/14/11	1.3	4.1	1.6	6.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	TCFMe (Freon 11) = 1.1;
O104A1		6/17/13	0.56	2.7	0.92	3.4	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O104A1		6/9/15	0.58	2.3	0.89	2.9	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 1.5;
O104A1		6/5/17	ND (<0.50)	1.2	0.65	1.8	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O104A1		6/5/19	ND (<0.50)	ND (<0.50)	ND (<0.50)	2.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O105A2		9/8/92	ND (<0.50)	23	17	-	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 2.2; TCFMe (Freon 11) = 4.2;
O105A2		12/3/92	ND (<5.0)	26	17	-	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
O105A2		6/3/93	ND (<0.50)	33	20	-	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 2.2; TCFMe (Freon 11) = 10;
O105A2		12/7/93	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
O105A2		6/3/94	ND (<0.50)	26	12	-	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 2.4; TCFMe (Freon 11) = 5.6;
O105A2		12/7/94	ND (<5.0)	5.8	ND (<5.0)	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	CARBD = 22;
O105A2		6/7/95	ND (<0.50)	3.5	2.2	-	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	TCFMe (Freon 11) = 0.6;
O105A2	Dup	6/7/95	ND (<0.50)	3.4	2.2	-	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	TCFMe (Freon 11) = 0.55;
O105A2		12/5/95	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
O105A2		6/7/96	ND (<0.50)	2.4	1.5	1.6	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 99; TFT = 109;
O105A2	Dup	6/7/96	ND (<0.50)	2.6	1.6	1.7	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 104; TFT = 110;
O105A2		12/11/96	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
O105A2		12/3/97	ND (<0.50)	0.89	ND (<0.50)	0.70	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 92;
O105A2		12/11/98	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 92.3;
O105A2		12/9/99	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<1.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O105A2		12/6/00	0.93	0.71	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O105A2		6/20/01	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O105A2		6/24/03	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O105A2		6/22/05	ND (<0.50)	9.3	3.2	12	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 1.1; TCFMe (Freon 11) = 6.2;
O105A2		6/21/07	ND (<0.50)	7.9	2.2	7.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	TCFMe (Freon 11) = 1.0;
O105A2		6/10/09	ND (<0.50)	5.2	1.6	4.6	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	TCFMe (Freon 11) = 1.7;
O105A2		6/14/11	ND (<0.50)	4.8	1.3	4.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	TCFMe (Freon 11) = 1.3;
O105A2		6/17/13	ND (<0.50)	2.7	0.89	2.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O105A2		6/9/15	ND (<0.50)	2.0	1.0	1.7	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O105A2		6/5/17	ND (<0.50)	0.90	0.76	1.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O105A2		6/5/19	ND (<0.50)	1.0	1.2	2.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O105A2	Dup	6/5/19	ND (<0.50)	1.0	1.2	1.9	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O108A1		9/8/92	110	100	11	ND (<2.5)	54	ND (<0.50)	ND (<0.50)	33	ND (<0.50)	ND (<0.50)	ND (<0.50)	BDCMe = 1.1; CHLFM = 5.1;
O108A1		12/3/92	340	290	20	-	-	ND (<5.0)	ND (<5.0)	48	-	ND (<5.0)	ND (<10)	
O108A1		6/7/93	200	160	16	ND (<2.5)	80	ND (<0.50)	ND (<0.50)	37	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 1.5; TCFMe (Freon 11) = 2.1;
O108A1	Dup	6/7/93	220	170	17	ND (<2.5)	90	ND (<0.50)	ND (<0.50)	41	ND (<0.50)	ND (<0.50)	ND (<0.50)	TCFMe (Freon 11) = 2.1;
O108A1		12/6/93	290	150	14	-	70	ND (<5.0)	ND (<5.0)	80	-	ND (<5.0)	ND (<10)	
O108A1		6/7/94	290	160	15	-	76	ND (<2.5)	ND (<2.5)	70	ND (<2.5)	ND (<2.5)	ND (<2.5)	
O108A1		12/8/94	250	110	13	-	67	ND (<8.4)	ND (<8.4)	67	-	ND (<8.4)	ND (<17)	
O108A1		6/6/95	150	120	12	-	77	ND (<1.0)	ND (<1.0)	46	ND (<1.0)	ND (<1.0)	ND (<1.0)	CHLFM = 2.1; TCFMe (Freon 11) = 1.5;
O108A1		12/6/95	120	80	11	-	54	ND (<5.0)	ND (<5.0)	32	ND (<0.50)	ND (<5.0)	ND (<10)	CHLFM = 1.4;
O108A1		6/10/96	130	100	14	40	58	ND (<2.5)	ND (<2.5)	48	ND (<2.5)	ND (<2.5)	ND (<2.5)	CBMA = 103; CHLFM = 6.3; MC = 2.9; TCFMe (Freon 11) = 2.7; TFT = 97;
O108A1		2/18/97	76	64	9.4	23	42	ND (<5.0)	ND (<5.0)	45	-	ND (<5.0)	ND (<10)	
O108A1		12/8/97	65	42	6.0	15	25	ND (<2.5)	ND (<2.5)	27	ND (<2.5)	ND (<2.5)	ND (<2.5)	CBMA = 97; MC = 4.2;
O108A1		6/3/98	30	20	4.4	8.1	19	ND (<1.0)	ND (<1.0)	8.4	ND (<1.0)	ND (<1.0)	ND (<1.0)	CBMA = 109; CHLFM = 2.9;
O108A1		12/9/98	23	15	2.7	6.6	12	ND (<0.50)	ND (<0.50)	12	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 100; CHLFM = 1.54;
O108A1		6/8/99	42	23	3.1	9.0	16	ND (<1.00)	ND (<1.00)	17	ND (<1.00)	ND (<1.00)	ND (<1.00)	
O108A1	Dup	6/8/99	39	20	2.9	7.6	14	ND (<1.00)	ND (<1.00)	14	ND (<1.00)	ND (<1.00)	ND (<1.00)	
O108A1		12/9/99	35	13	2.5	9.4	16	ND (<0.834)	ND (<0.834)	8.9	ND (<0.834)	ND (<0.834)	ND (<0.834)	
O108A1		6/6/00	42	25	2.1	8.5	15	ND (<0.50)	ND (<0.50)	15	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.63;
O108A1		12/6/00	31	15	1.5	5.8	10	ND (<0.50)	ND (<0.50)	13	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 1.3;
O108A1		6/21/01	39	17	1.8	6.8	14	ND (<0.50)	ND (<0.50)	25	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.99;
O108A1		6/27/03	38	14	2.9	5.0	13	0.66	ND (<0.50)	33	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 1.1;
O108A1		6/21/05	15	3.9	2.2	3.4	5.0	ND (<0.50)	ND (<0.50)	6.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O108A1		7/19/07	7.5	1.4	0.73	1.3	1.8	ND (<0.50)	ND (<0.50)	4.7	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O108A1		6/9/09	15	1.6	2.1	2.2	3.1	ND (<0.50)	ND (<0.50)	3.5	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O108A1		6/14/11	12	1.4	1.7	2.2	2.6	ND (<0.50)	ND (<0.50)	3.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O108A1	Dup	6/14/11	11	1.3	1.6	2.2	2.4	ND (<0.50)	ND (<0.50)	2.6	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O108A1		6/19/13	4.6	ND (<0.50)	ND (<0.50)	0.72	0.91	ND (<0.50)	ND (<0.50)	1.8	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O108A1		6/8/15	13	1.5	2.0	3.0	3.6	ND (<0.50)	ND (<0.50)	3.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O108A1		6/5/17	17	1.6	2.9	4.5	4.7	ND (<0.50)	ND (<0.50)	2.8	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O108A1		6/4/18	19	1.7	3.3	8.1	5.3	ND (<0.50)	ND (<0.50)	3.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O108A1		6/5/19	17	1.5	3.4	18	6.2	ND (<0.50)	ND (<0.50)	2.9	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O108A1		6/4/20	15	1.5	3.1	17	6.6	ND (<0.50)	ND (<0.50)	2.7	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O109A2		9/11/92	62	280	39	ND (<0.50)	130	ND (<0.50)	ND (<0.50)	3.8	ND (<0.50)	2.7	ND (<0.50)	CHLFM = 6.3; TCFMe (Freon 11) = 1;
O109A2		12/3/92	42	210	32	-	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
O109A2		6/3/93	110	440	30	ND (<5.0)	160	ND (<5.0)	ND (<5.0)	17	ND (<5.0)	ND (<5.0)	ND (<5.0)	CHLFM = 1.6; TCFMe (Freon 11) = 3;
O109A2		12/6/93	75	220	18	-	99	ND (<5.0)	ND (<5.0)	20	-	ND (<5.0)	ND (<10)	
O109A2	Dup	12/6/93	73	210	18	-	98	ND (<5.0)	ND (<5.0)	19	-	ND (<5.0)	ND (<10)	
O109A2		6/7/94	190	460	24	-	130	ND (<1.0)	ND (<1.0)	38	ND (<1.0)	1.2	ND (<1.0)	CHLFM = 1.6; MC = 1.5; TCFMe (Freon 11) = 1.2;

Appendix B
Selected Compounds from Historical Records
COE Study Area and Perimeter Area, Palo Alto, California

Location	Type	Date	TCE	1,1,1-TCA	1,1-DCA	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	PCE	Freon 113	1,2-DCB	1,2-DCA	VC	Other Constituents
O109A2		12/12/94	160	180	15	-	100	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
O109A2		6/6/95	250	250	14	-	100	ND (<1.0)	ND (<1.0)	26	ND (<1.0)	ND (<1.0)	ND (<1.0)	
O109A2		12/8/95	300	240	15	ND (<50)	100	ND (<5.0)	ND (<5.0)	42	-	ND (<5.0)	ND (<10)	
O109A2	Dup	12/8/95	310	240	16	ND (<50)	100	ND (<5.0)	ND (<5.0)	46	-	ND (<5.0)	ND (<10)	CARBD = 7.8;
O109A2		6/11/96	360	250	20	68	120	ND (<5.0)	ND (<5.0)	48	ND (<5.0)	ND (<5.0)	ND (<5.0)	CBMA = 109; MC = 5; TFT = 101;
O109A2		12/13/96	53	48	11	ND (<5.0)	140	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
O109A2		12/13/96	60	46	11	ND (<5.0)	130	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
O109A2		12/9/97	73	73	11	15	93	ND (<2.5)	ND (<2.5)	31	ND (<2.5)	ND (<2.5)	ND (<2.5)	CBMA = 103;
O109A2		6/3/98	73	52	6.9	ND (<5.0)	93	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	CBMA = 116;
O109A2		12/9/98	63	33	7.2	5.6	59	ND (<1.0)	ND (<1.0)	3.8	ND (<1.0)	ND (<1.0)	ND (<1.0)	CBMA = 102;
O109A2	Dup	12/9/98	73	42	7.2	5.6	69	ND (<2.5)	ND (<2.5)	4.0	ND (<2.5)	ND (<2.5)	ND (<2.5)	CBMA = 101;
O109A2		6/8/99	149	123	16	25	92	ND (<10)	ND (<10)	95	ND (<10)	ND (<10)	ND (<10)	
O109A2		12/9/99	63	72	11	15	59	ND (<1.67)	ND (<1.67)	37	ND (<1.67)	ND (<1.67)	ND (<1.67)	
O109A2		6/6/00	60	59	7.3	14	53	ND (<1.0)	ND (<1.0)	50	ND (<1.0)	ND (<1.0)	ND (<1.0)	
O109A2		12/6/00	66	55	9.7	16	52	ND (<1.0)	ND (<1.0)	48	ND (<1.0)	ND (<1.0)	ND (<1.0)	
O109A2		6/21/01	67	35	6.6	14	36	ND (<1.0)	ND (<1.0)	66	ND (<1.0)	ND (<1.0)	ND (<1.0)	
O109A2	Dup	6/21/01	54	32	6.6	8.6	39	ND (<1.0)	ND (<1.0)	26	ND (<1.0)	ND (<1.0)	ND (<1.0)	
O109A2		6/27/03	27	15	7.2	7.9	25	ND (<1.0)	ND (<1.0)	16	ND (<1.0)	ND (<1.0)	ND (<1.0)	
O109A2	Dup	6/27/03	27	14	6.8	7.5	22	ND (<0.50)	ND (<0.50)	9.9	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O109A2		6/21/05	16	29	7.3	9.7	48	0.67	ND (<0.50)	14	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O109A2		6/20/07	28	52	10	20	72	1.2	ND (<0.50)	44	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O109A2		6/9/09	18	18	6.1	8.3	27	ND (<0.50)	ND (<0.50)	22	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O109A2		6/14/11	28	42	13	18	55	1.4	ND (<0.50)	51	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O109A2		6/19/13	29	32	13	17	49	1.2	ND (<0.50)	44	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O109A2		6/8/15	24	4.5	4.5	7.5	11	ND (<0.50)	ND (<0.50)	7.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O109A2		6/5/17	4.5	0.63	0.83	1.2	2.3	ND (<0.50)	ND (<0.50)	1.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O109A2		6/4/18	19	4.7	5.9	14	12	ND (<0.50)	ND (<0.50)	7.5	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O109A2		6/5/19	4.6	0.58	1.3	4.0	2.9	ND (<0.50)	ND (<0.50)	0.77	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O109A2		6/4/20	3.2	0.62	1.1	2.8	3.2	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O110A1		9/17/92	190	190	ND (<5.0)	ND (<5.0)	78	ND (<5.0)	ND (<5.0)	24	ND (<10)	ND (<5.0)	ND (<5.0)	BDCMe = 1; CHLFM = 11;
O110A1		12/3/92	140	130	16	-	-	ND (<5.0)	ND (<5.0)	21	-	ND (<5.0)	ND (<10)	
O110A1		3/3/93	230	180	18	ND (<5.0)	57	ND (<5.0)	ND (<5.0)	27	ND (<5.0)	ND (<5.0)	ND (<5.0)	CHLFM = 5;
O110A1		6/7/93	120	46	6.4	ND (<2.5)	32	ND (<0.50)	ND (<0.50)	8.0	ND (<0.50)	ND (<2.5)	ND (<0.50)	Xylenes = 0.6;
O110A1		9/7/93	110	58	8.9	ND (<2.5)	32	ND (<0.50)	ND (<0.50)	20	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 1.7;
O110A1		12/7/93	120	78	15	-	60	ND (<5.0)	ND (<5.0)	30	-	ND (<5.0)	ND (<10)	
O110A1		3/10/94	120	79	11	-	49	ND (<1.0)	ND (<1.0)	21	ND (<1.0)	ND (<1.0)	ND (<1.0)	CHLFM = 2.1;
O110A1		6/7/94	150	93	16	-	51	ND (<0.50)	ND (<0.50)	23	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 3.3;
O110A1		9/2/94	180	140	16	-	53	ND (<0.50)	ND (<0.50)	20	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 3.5; TCFMe (Freon 11) = 1.1;
O110A1		12/12/94	120	96	14	-	51	ND (<5.0)	ND (<5.0)	26	-	ND (<5.0)	ND (<10)	
O110A1		3/3/95	26	18	3.3	-	13	ND (<0.50)	ND (<0.50)	3.1	ND (<0.50)	0.50	ND (<0.50)	1,1,2-TCA = 0.56; CHLFM = 1.1;
O110A1		6/9/95	32	20	4.8	-	12	ND (<0.50)	ND (<0.50)	3.5	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 1.3;
O110A1		9/6/95	56	34	8.0	-	16	ND (<0.50)	ND (<0.50)	11	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 1.9;
O110A1		12/8/95	25	9.2	ND (<5.0)	ND (<5.0)	9.2	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
O110A1		3/6/96	13	5.3	1.1	1.9	2.7	ND (<0.50)	ND (<0.50)	2.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.86;
O110A1		6/10/96	15	5.9	1.3	2.6	2.8	ND (<0.50)	ND (<0.50)	1.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	1,1,2,2-TCA = 1.2; CBMA = 99; CHLFM = 0.76; TFT = 111;
O110A1		9/11/96	7.9	2.8	0.56	1.2	1.4	ND (<0.50)	ND (<0.50)	1.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 95;
O110A1		12/12/96	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	MC = 5.1;
O110A1		3/5/97	2.2	0.70	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	1.6	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 91;
O110A1		6/5/97	5.9	1.5	ND (<0.50)	ND (<0.50)	1.1	ND (<0.50)	ND (<0.50)	1.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 96; MC = 1.3;
O110A1		9/10/97	17	3.4	1.9	1.6	1.7	ND (<0.50)	ND (<0.50)	2.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 99; CHLFM = 1;
O110A1		12/8/97	5.4	1.5	ND (<0.50)	0.67	0.75	ND (<0.50)	ND (<0.50)	7.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 96; MC = 0.87; TFT = 133;
O110A1		6/5/98	1.9	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 111;
O110A1		12/10/98	5.2	1.3	ND (<0.50)	0.65	ND (<0.50)	ND (<0.50)	ND (<0.50)	1.7	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 98.3; TFT = 101;
O110A1		6/8/99	15	1.9	1.0	1.4	0.84	ND (<0.50)	ND (<0.50)	2.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O110A1		12/9/99	28	2.0	2.5	3.4	1.6	ND (<1.25)	ND (<1.25)	3.4	ND (<1.25)	ND (<1.25)	ND (<1.25)	CHLFM = 1.61;
O110A1	Dup	12/9/99	44	3.4	3.9	6.1	2.5	ND (<0.834)	ND (<0.834)	6.5	ND (<0.834)	ND (<0.834)	ND (<0.834)	CHLFM = 2.39;
O110A1		6/6/00	49	5.0	3.3	5.5	3.9	ND (<1.0)	ND (<1.0)	3.2	ND (<1.0)	ND (<1.0)	ND (<1.0)	CHLFM = 2.9;
O110A1		12/5/00	42	4.4	3.3	5.1	3.8	ND (<0.50)	ND (<0.50)	4.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 2.2;
O110A1		6/22/01	21	2.1	1.3	1.7	1.8	ND (<0.50)	ND (<0.50)	2.7	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.96;
O110A1		6/27/03	8.0	0.78	0.63	1.0	0.75	ND (<0.50)	ND (<0.50)	5.6	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O110A1		6/21/05	66	16	4.8	12	19	ND (<0.50)	ND (<0.50)	17	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.80;
O110A1		6/12/07	620	11	6.4	11	26	ND (<5.0)	ND (<5.0)	36	ND (<5.0)	ND (<5.0)	ND (<5.0)	
O110A1		6/10/09	680	5.7	6.4	8.9	17	ND (<5.0)	ND (<5.0)	17	ND (<5.0)	ND (<5.0)	ND (<5.0)	
O110A1		6/14/11	390	ND (<5.0)	6.6	7.8	10	ND (<5.0)	ND (<5.0)	9.5	ND (<5.0)	ND (<5.0)	ND (<5.0)	
O110A1		6/19/13	170	2.8	5.1	6.0	7.3	ND (<0.50)	ND (<0.50)	5.9	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O110A1		6/10/14	150	2.4	4.5	5.2	7.1	ND (<0.50)	ND (<0.50)	4.5	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O110A1		6/9/15	140	ND (<2.5)	4.5	5.2	7.1	ND (<2.5)	ND (<2.5)	4.4	ND (<2.5)	ND (<2.5)	ND (<2.5)	
O110A1		6/7/17	91	ND (<2.5)	3.2	5.1	5.9	ND (<2.5)	ND (<2.5)	3.8	ND (<2.5)	ND (<2.5)	ND (<2.5)	
O110A1		6/4/18	99	ND (<2.5)	3.8	6.9	6.7	ND (<2.5)	ND (<2.5)	3.9	ND (<2.5)	ND (<2.5)	ND (<2.5)	
O110A1		6/5/19	62	ND (<2.5)	4.1	16	6.6	ND (<2.5)	ND (<2.5)	3.8	ND (<2.5)	ND (<2.5)	ND (<2.5)	
O110A1		6/4/20	63	1.9	4.7	12	7.8	ND (<0.50)	ND (<0.50)	3.7	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O111A2		9/15/92	330	570	33	ND (<5.0)	230	ND (<1.0)	ND (<1.0)	2.8	ND (<5.0)	2.0	ND (<5.0)	CHLFM = 9.8;
O111A2		12/3/92	76	91	9.2	-	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
O111A2		3/3/93	110	150	12	ND (<5.0)	66	ND (<5.0)	ND (<5.0)	2.4	ND (<5.0)	ND (<5.0)	ND (<5.0)	CHLFM = 2.8;
O111A2		6/7/93	110	140	9.0	ND (<2.5)	65	ND (<0.50)	ND (<0.50)	7.8	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O111A2		9/8/93	380	410	19	ND (<5.0)	110	ND (<5.0)	ND (<5.0)	20	ND (<5.0)	ND (<5.0)	ND (<5.0)	CHLFM = 2.4; TCFMe (Freon 11) = 3.7;
O111A2		12/7/93	410	340	20	-	130	ND (<5.0)	ND (<5.0)	32	-	ND (<5.0)	ND (<10)	
O111A2		3/10/94	380	280	15	-	100	ND (<1.0)	ND (<1.0)	24	ND (<1.0)	1.4	ND (<1.0)	
O111A2	Dup	3/10/94	370	280	14	-	110	ND (<1.0)	ND (<1.0)	39	ND (<1.0)	ND (<1.0)	ND (<1.0)	
O111A2		6/7/94	1,400	770	25	-	190	ND (<2.5)	ND (<2.5)	110	ND (<2.5)	ND (<2.5)	ND (<2.5)	CHLFM = 2.8;
O111A2		9/2/94	710	220	12	-	120	ND (<2.5)	ND (<2.5)	4.9	ND (<2.5)	ND (<2.5)	ND (<2.5)	
O111A2		12/12/94	36	8.6	ND (<5.0)	ND (<5.0)	14	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
O111A2	Dup	12/12/94	39	9.0	ND (<5.0)	ND (<5.0)	15	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
O111A2		3/3/95	420	130	6.7	-	70	ND (<2.5)	ND (<2.5)	2.8	ND (<2.5)	ND (<2.5)	ND (<2.5)	
O111A2		6/9/95	620	230	11	-	96	ND (<2.5)	ND (<2.5)	51	ND (<2.5)	ND (<2.5)	ND (<2.5)	
O111A2		9/8/95	1,100	510	22	-	160	ND (<12)	ND (<12)	160	ND (<12)	ND (<12)	ND (<12)	CHLFM = 12;
O111A2		12/11/95	910	310	17	ND (<50)	110	ND (<5.0)	ND (<5.0)	15	-	ND (<5.0)	ND (<10)	
O111A2	Dup	12/11/95	900	300	17	-	120	ND (<5.0)	ND (<5.0)	15	-	ND (<5.0)	ND (<10)	
O111A2		3/7/96	260	100	ND (<5.0)	17	29	ND (<5.0)	ND (<5.0)	21	ND (<5.0)	ND (<5.0)	ND (<5.0)	
O111A2		6/7/96	910	320	22	63	140	ND (<12)	ND (<12)	70	ND (<12)	ND (<12)	ND (<12)	CBMA = 100; MC = 16; TFT = 90;
O111A2		9/13/96	970	320	21	32	150	ND (<12)	14	ND (<12)	ND (<12)	ND (<12)	ND (<12)	CBMA = 95;
O111A2		12/16/96	690	200	ND (<50)	ND (<50)	120	ND (<50)	ND (<50)	ND (<50)	-	ND (<50)	ND (<100)	
O111A2		3/7/97	150	41	6.1	ND (<5.0)	51	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	CBMA = 114;
O111A2		6/9/97	140	30	5.5	5.5	44	ND (<2.5)	ND (<2.5)	2.7	ND (<2.5)	ND (<2.5)	ND (<2.5)	CBMA = 103;
O111A2		9/11/97	340	110	14	19	93	ND (<2.5)	ND (<2.5)	7.9	ND (<2.5)	ND (<2.5)	ND (<2.5)	CBMA = 109; CHLFM = 4.4;
O111A2		12/4/97	290	110	13	20	86	ND (<5.0)	ND (<5.0)	15	ND (<5.0)	ND (<5.0)	ND (<5.0)	CBMA = 99;
O111A2		6/3/98	99	26	ND (<5.0)	ND (<5.0)	43	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	CBMA = 119;
O111A2		12/9/98	115	25	4.0	5.0	40	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	CBMA = 98.7;
O111A2		6/8/99	391	117	ND (<12.5)	27	66	ND (<12.5)	ND (<12.5)	77	ND (<12.5)	ND (<12.5)	ND (<12.5)	
O111A2		12/9/99	724	291	ND (<25)	72	108	ND (<25)	ND (<25)	178	ND (<25)	ND (<25)	ND (<25)	
O111A2		6/6/00	380	120	10	35	58	ND (<5.0)	ND (<5.0)	140	ND (<5.0)	ND (<5.0)	ND (<5.0)	
O111A2	Dup	6/6/00	400	130	8.9	31	59	ND (<5.0)	ND (<5.0)	140	ND (<5.0)	ND (<5.0)	ND (<5.0)	
O111A2		12/5/00	520	160	ND (<10)	33	69	ND (<10)	ND (<10)	160	ND (<10)	ND (<10)	ND (<10)	
O111A2		6/22/01	440	130	7.5	27	62	ND (<5.0)	ND (<5.0)	180	ND (<5.0)	ND (<5.0)	ND (<5.0)	
O111A2		6/27/03	370	83	10	30	45	ND (<5.0)	ND (<5.0)	210	ND (<5.0)	ND (<5.0)	ND (<5.0)	
O111A2		6/21/05	510	190	25	80	140	ND (<5.0)	ND (<5.0)	66	ND (<5.0)	ND (<5.0)	ND (<5.0)	
O111A2		6/12/07	460	240	23	96	190	ND (<5.0)	ND (<5.0)	140	ND (<5.0)	ND (<5.0)	ND (<5.0)	
O111A2		6/10/09	430	180	17	65	120	ND (<5.0)	ND (<5.0)	140	ND (<5.0)	ND (<5.0)	ND (<5.0)	
O111A2		6/14/11	330	150	15	54	100	ND (<5.0)	ND (<5.0)	120	ND (<5.0)	ND (<5.0)	ND (<5.0)	
O111A2		6/19/13	230	95	19	44	92	ND (<5.0)	ND (<5.0)	85	ND (<5.0)	ND (<5.0)	ND (<5.0)	
O111A2		6/10/14	160	71	11	25	55	ND (<2.5)	ND (<2.5)	59	ND (<2.5)	ND (<2.5)	ND (<2.5)	
O111A2		6/9/15	160	62	11	21	50	ND (<2.5)	ND (<2.5)	60	ND (<2.5)	ND (<2.5)	ND (<2.5)	
O111A2		6/7/17	130	46	9.7	22	39	ND (<2.5)	ND (<2.5)	56	ND (<2.5)	ND (<2.5)	ND (<2.5)	
O111A2		6/4/18	140	33	11	22	36	ND (<2.5)	ND (<2.5)	53	ND (<2.5)	ND (<2.5)	ND (<2.5)	
O111A2		6/5/19	94	20	8.2	26	27	ND (<2.5)	ND (<2.5)	40	ND (<2.5)	ND (<2.5)	ND (<2.5)	
O111A2		6/4/20	96	27	8.6	27	32	0.90	ND (<0.50)	43	ND (<0.50)	ND (<0.50)	ND (<0.50)	Freon 11 = 0.52
O112A1		9/17/92	54	25	10	-	ND (<0.50)	ND (<0.50)	1.0	2.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	BDCMe = 0.7; CHLFM = 2.3;
O112A1		12/3/92	32	13	6.7	ND (<5.0)	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<10)	ND (<5.0)	ND (<10)	
O112A1		3/9/93	42	16	7.5	-	ND (<0.50)	ND (<0.50)	1.2	2.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 1.6;
O112A1		6/7/93	30	9.9	3.1	-	ND (<0.50)	ND (<0.50)	0.90	2.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.5;
O112A1		9/9/93	25	8.4	5.0	-	ND (<0.50)	ND (<0.50)	0.78	2.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.59;
O112A1		12/8/93	25	6.1	ND (<5.0)	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
O112A1		3/7/94	36	9.3	4.2	-	ND (<0.50)	ND (<0.50)	1.2	4.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 1.4;
O112A1		6/3/94	34	10	5.8	-	ND (<0.50)	ND (<0.50)	1.5	2.7	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.94;
O112A1		9/2/94	26	7.7	3.9	-	ND (<0.50)	ND (<0.50)	1.1	1.9	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.87;
O112A1		12/12/94	21	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
O112A1		3/3/95	13	2.8	1.0	-	0.66	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.51;
O112A1		6/7/95	4.4	0.59	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	Benzene = 1.3; Toluene = 1.9; Xylenes = 0.8;
O112A1		9/5/95	15	3.5	0.94	-	ND (<0.50)	ND (<0.50)	1.4	1.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.97;
O112A1		12/6/95	13	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
O112A1		3/5/96	10	2.1	0.62	0.87	ND (<0.50)	ND (<0.50)	0.69	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.89;
O112A1		6/5/96	8.2	1.4	0.60	0.80	ND (<0.50)	ND (<0.50)	0.68	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 102; CHLFM = 0.56; TFT = 109;
O112A1		9/10/96	5.9	1.1	0.58	0.75	ND (<0.50)	ND (<0.50)	0.59	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 104;
O112A1		12/10/96	13	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
O112A1	Dup	12/10/96	13	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
O112A1		3/4/97	7.5	1.9	0.90	1.0	ND (<0.50)	ND (<0.50)	0.86	0.84	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 106;
O112A1		6/4/97	12	2.9	1.0	1.4	ND (<0.50)	ND (<0.50)	1.6	1.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 107; CHLFM = 0.65;
O112A1	Dup	6/4/97	12	2.9	1.0	1.3	ND (<0.50)	ND (<0.50)	1.5	1.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 107; CHLFM = 0.63;
O112A1		9/10/97	5.9	1.1	0.77	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.62	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 98;
O112A1		12/5/97	6.4	1.2	0.90	0.71	ND (<0.50)	ND (<0.50)	0.67	0.68	0.63	ND (<0.50)	ND (<0.50)	CBMA = 88; TFT = 138;
O112A1		6/5/98	4.6	0.55	0.57	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 102;
O112A1		12/11/98	8.3	1.1	0.65	1.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.711	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 95.7; TFT = 104;
O112A1		6/8/99	8.3	1.3	ND (<0.50)	0.91	ND (<0.50)	ND (<0.50)	0.51	0.53	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O112A1		12/15/99	1.7	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O112A1		6/6/00	7.7	0.72	ND (<0.50)	0.82	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.64	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O112A1		12/5/00	7.1	0.94	0.76	0.92	ND (<0.50)	ND (<0.50)	ND (<0.50)	1.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O112A1	Dup	12/5/00	9.0	1.2	0.82	1.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O112A1		12/6/00	9.4	1.3	0.99	1.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O112A1		6/22/01	4,000	620	ND (<250)	410	ND (<250)	ND (<250)	ND (<250)	1,100	ND (<250)	ND (<250)	ND (<250)	
O112A1		6/27/03	10	1.3	1.2	1.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	3.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O112A1		6/21/05	15	2.9	3.2	4.5	1.3	ND (<0.50)	ND (<0.50)	3.9	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 1.3;
O112A1		6/12/07	29	4.9	3.2	5.4	7.2	ND (<0.50)	ND (<0.50)	5.9	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 1.0;
O112A1		6/9/09	450	6.4	4.3	8.5	17	ND (<0.50)	ND (<0.50)	17	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 1.2;
O112A1		6/14/11	880	6.2	6.0	8.9	14	ND (<5.0)	ND (<5.0)	17	ND (<5.0)	ND (<5.0)	ND (<5.0)	
O112A1		6/19/13	650	ND (<5.0)	8.0	9.9	13	ND (<5.0)	ND (<5.0)	9.0	ND (<5.0)	ND (<5.0)	ND (<5.0)	
O112A1		6/10/14	390	ND (<5.0)	ND (<5.0)	5.2	7.7	ND (<5.0)	ND (<5.0)	7.2	ND (<5.0)	ND (<5.0)	ND (<5.0)	
O112A1		6/9/15	590	ND (<5.0)	ND (<5.0)	ND (<5.0)	8.7	ND (<5.0)	ND (<5.0)	8.8	ND (<5.0)	ND (<5.0)	ND (<5.0)	

Appendix B
Selected Compounds from Historical Records
COE Study Area and Perimeter Area, Palo Alto, California

Location	Type	Date	TCE	1,1,1-TCA	1,1-DCA	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	PCE	Freon 113	1,2-DCB	1,2-DCA	VC	Other Constituents
O112A1		6/7/17	350	ND (<5.0)	ND (<5.0)	5.1	6.8	ND (<5.0)	ND (<5.0)	6.3	ND (<5.0)	ND (<5.0)	ND (<5.0)	
O112A1		6/4/18	350	ND (<5.0)	ND (<5.0)	6.2	ND (<5.0)	ND (<5.0)	ND (<5.0)	6.5	ND (<5.0)	ND (<5.0)	ND (<5.0)	
O112A1		6/5/19	200	ND (<5.0)	ND (<5.0)	6.1	6.2	ND (<5.0)	ND (<5.0)	5.3	ND (<5.0)	ND (<5.0)	ND (<5.0)	
O112A1		6/4/20	160	ND (<5.0)	ND (<5.0)	6.0	6.8	ND (<5.0)	ND (<5.0)	ND (<20)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
O113A2		9/16/92	1,300	600	22	ND (<12)	170	ND (<12)	ND (<12)	120	ND (<10)	ND (<12)	ND (<12)	CHLFM = 4.5;
O113A2		12/4/92	1,200	380	28	ND (<50)	180	ND (<5.0)	ND (<5.0)	200	-	ND (<5.0)	ND (<10)	
O113A2		3/9/93	2,000	760	28	ND (<50)	170	ND (<50)	ND (<50)	120	ND (<50)	ND (<50)	ND (<50)	
O113A2		6/3/93	1,400	590	18	ND (<25)	200	ND (<5.0)	ND (<5.0)	220	ND (<5.0)	ND (<5.0)	ND (<5.0)	
O113A2		9/9/93	1,800	550	29	ND (<25)	160	ND (<5.0)	ND (<5.0)	260	ND (<5.0)	ND (<5.0)	ND (<5.0)	
O113A2		12/8/93	1,700	390	20	-	140	ND (<10)	ND (<10)	240	-	ND (<10)	ND (<20)	
O113A2	Dup	12/8/93	1,600	390	21	-	140	ND (<10)	ND (<10)	240	-	ND (<10)	ND (<20)	
O113A2		3/7/94	1,700	340	19	-	140	ND (<5.0)	ND (<5.0)	24	ND (<5.0)	ND (<5.0)	ND (<5.0)	
O113A2		6/3/94	2,100	550	21	ND (<10)	180	ND (<10)	ND (<10)	320	ND (<10)	ND (<10)	ND (<10)	MC = 11;
O113A2		9/2/94	1,300	190	11	-	160	ND (<5.0)	ND (<5.0)	13	ND (<5.0)	ND (<5.0)	ND (<5.0)	
O113A2		12/12/94	1,000	96	10	-	110	ND (<5.0)	ND (<5.0)	14	-	ND (<5.0)	ND (<10)	
O113A2		3/3/95	75	8.2	0.54	-	11	ND (<0.50)	ND (<0.50)	0.97	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O113A2		6/9/95	1,200	200	10	ND (<0.50)	89	ND (<0.50)	ND (<0.50)	27	ND (<0.50)	0.53	ND (<0.50)	CHLFM = 1.7;
O113A2		9/8/95	2,400	290	21	-	130	ND (<2.5)	ND (<2.5)	270	ND (<2.5)	ND (<2.5)	ND (<2.5)	CHLFM = 5.8; MC = 5.6;
O113A2		12/11/95	1,900	310	20	-	150	ND (<5.0)	ND (<5.0)	42	-	ND (<5.0)	ND (<10)	
O113A2	Dup	12/11/95	1,900	330	20	-	150	ND (<5.0)	ND (<5.0)	44	-	ND (<5.0)	ND (<10)	
O113A2		3/7/96	96	12	ND (<2.5)	ND (<2.5)	24	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
O113A2		6/10/96	1,000	170	ND (<25)	ND (<25)	96	ND (<25)	ND (<25)	ND (<25)	ND (<25)	ND (<25)	ND (<25)	CBMA = 101; TFT = 92;
O113A2		9/13/96	830	130	ND (<25)	26	90	ND (<25)	ND (<25)	ND (<25)	ND (<25)	ND (<25)	ND (<25)	CBMA = 101;
O113A2		12/16/96	740	89	ND (<25)	ND (<25)	69	ND (<25)	ND (<25)	75	-	ND (<25)	ND (<50)	
O113A2		3/7/97	500	43	6.5	2.5	54	ND (<1.0)	ND (<1.0)	20	ND (<1.0)	1.4	ND (<1.0)	1,1,2-TCA = 1; CBMA = 108; CHLFM = 2.1;
O113A2		6/9/97	330	46	5.6	7.0	52	ND (<5.0)	ND (<5.0)	9.9	ND (<5.0)	ND (<5.0)	ND (<5.0)	CBMA = 100;
O113A2		9/11/97	340	40	ND (<5.0)	6.5	49	ND (<5.0)	ND (<5.0)	12	ND (<5.0)	ND (<5.0)	ND (<5.0)	CBMA = 97;
O113A2		12/4/97	240	29	ND (<5.0)	6.6	35	ND (<5.0)	ND (<5.0)	17	ND (<5.0)	ND (<5.0)	ND (<5.0)	CBMA = 94;
O113A2		6/5/98	470	60	ND (<25)	ND (<25)	58	ND (<25)	ND (<25)	45	ND (<25)	ND (<25)	ND (<25)	CBMA = 121; MC = 28;
O113A2		12/9/98	452	90	ND (<25)	ND (<25)	60	ND (<25)	ND (<25)	ND (<25)	ND (<25)	ND (<25)	ND (<25)	CBMA = 101;
O113A2		6/8/99	398	59	ND (<25)	ND (<25)	54	ND (<25)	ND (<25)	ND (<25)	ND (<25)	ND (<25)	ND (<25)	
O113A2		12/15/99	539	60	ND (<17.9)	22	65	ND (<17.9)	ND (<17.9)	70	ND (<17.9)	ND (<17.9)	ND (<17.9)	
O113A2		6/6/00	950	150	ND (<13)	46	110	ND (<13)	ND (<13)	110	ND (<13)	ND (<13)	ND (<13)	
O113A2		12/5/00	750	110	10	34	91	ND (<10)	ND (<10)	92	ND (<10)	ND (<10)	ND (<10)	
O113A2		6/22/01	7.5	0.92	0.67	0.64	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O113A2		6/27/03	840	120	14	50	69	ND (<10)	ND (<10)	490	ND (<10)	ND (<10)	ND (<10)	
O113A2		6/21/05	770	120	13	41	82	ND (<5.0)	ND (<5.0)	100	ND (<5.0)	ND (<5.0)	ND (<5.0)	
O113A2		6/12/07	340	45	8.1	18	45	ND (<2.0)	ND (<2.0)	78	ND (<2.0)	ND (<2.0)	ND (<2.0)	
O113A2		6/11/08	310	45	7.8	18	41	ND (<2.0)	ND (<2.0)	100	ND (<2.0)	ND (<2.0)	ND (<2.0)	
O113A2		12/10/08	440	82	14	35	68	ND (<5.0)	ND (<5.0)	210	ND (<5.0)	ND (<5.0)	ND (<5.0)	
O113A2		6/9/09	450	77	12	36	59	ND (<2.5)	ND (<2.5)	150	ND (<2.5)	ND (<2.5)	ND (<2.5)	
O113A2		6/14/11	270	55	10	22	39	ND (<2.5)	ND (<2.5)	95	ND (<2.5)	ND (<2.5)	ND (<2.5)	
O113A2		6/19/13	350	62	14	27	48	ND (<2.5)	ND (<2.5)	120	ND (<2.5)	ND (<2.5)	ND (<2.5)	
O113A2		6/9/15	210	31	7.8	16	29	ND (<2.5)	ND (<2.5)	68	ND (<2.5)	ND (<2.5)	ND (<2.5)	
O113A2		6/7/17	110	14	5.6	13	17	ND (<2.5)	ND (<2.5)	35	ND (<2.5)	ND (<2.5)	ND (<2.5)	
O113A2	Dup	6/7/17	110	13	5.7	13	17	ND (<2.5)	ND (<2.5)	35	ND (<2.5)	ND (<2.5)	ND (<2.5)	
O113A2		6/5/19	170	18	5.4	26	17	ND (<2.5)	ND (<2.5)	55	ND (<2.5)	ND (<2.5)	ND (<2.5)	
O114A2		9/18/92	1,600	620	60	ND (<25)	260	ND (<5.0)	ND (<5.0)	40	ND (<10)	ND (<5.0)	ND (<5.0)	CHLFM = 8;
O114A2		12/2/92	2,900	620	79	ND (<120)	310	ND (<5.0)	ND (<5.0)	120	-	ND (<5.0)	ND (<10)	
O114A2		3/12/93	1,100	220	26	ND (<25)	80	ND (<5.0)	ND (<5.0)	20	ND (<5.0)	ND (<5.0)	ND (<5.0)	
O114A2		6/4/93	1,300	300	29	ND (<25)	140	ND (<5.0)	ND (<5.0)	37	ND (<5.0)	ND (<5.0)	ND (<5.0)	MC = 5;
O114A2		9/9/93	4,500	700	74	ND (<50)	ND (<50)	ND (<50)	ND (<50)	160	ND (<50)	ND (<50)	ND (<50)	
O114A2		12/13/93	1,300	210	35	-	130	ND (<10)	ND (<10)	41	-	ND (<10)	ND (<20)	
O114A2		3/7/94	1,400	200	27	-	120	ND (<5.0)	ND (<5.0)	38	ND (<5.0)	ND (<5.0)	ND (<5.0)	1,1,2-TCA = 8.6; MC = 10;
O114A2		6/6/94	770	150	30	ND (<5.0)	120	ND (<5.0)	ND (<5.0)	20	ND (<5.0)	ND (<5.0)	ND (<5.0)	
O114A2		9/2/94	770	54	17	ND (<5.0)	130	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
O114A2		12/6/94	750	58	ND (<25)	ND (<25)	110	ND (<25)	ND (<25)	ND (<25)	-	ND (<25)	ND (<50)	
O114A2		3/3/95	540	55	10	-	80	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
O114A2		6/7/95	760	110	18	-	110	ND (<5.0)	ND (<5.0)	19	ND (<5.0)	ND (<5.0)	ND (<5.0)	
O114A2		9/8/95	540	86	17	-	100	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	
O114A2		12/11/95	490	50	13	-	70	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	CARBD = 23;
O114A2		3/7/96	560	92	11	14	79	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	
O114A2		6/7/96	620	110	20	28	98	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	CBMA = 103; MC = 13; TFT = 98;
O114A2		9/13/96	640	100	22	32	100	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	CBMA = 106;
O114A2		12/16/96	450	57	13	20	65	ND (<10)	ND (<10)	ND (<10)	-	ND (<10)	ND (<20)	
O114A2		3/7/97	110	11	3.5	ND (<2.5)	28	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	CBMA = 109;
O114A2		6/9/97	410	48	10	17	46	ND (<1.2)	ND (<1.2)	18	ND (<1.2)	ND (<1.2)	ND (<1.2)	CBMA = 98;
O114A2		9/12/97	2,700	570	ND (<50)	130	240	ND (<50)	ND (<50)	150	ND (<50)	ND (<50)	ND (<50)	CBMA = 98;
O114A2		12/8/97	1,100	150	ND (<50)	ND (<50)	140	ND (<50)	ND (<50)	ND (<50)	ND (<50)	ND (<50)	ND (<50)	CBMA = 97;
O114A2		6/5/98	72	6.1	ND (<2.5)	ND (<2.5)	14	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	CBMA = 110;
O114A2		12/11/98	264	34	ND (<5.0)	11	30	ND (<5.0)	ND (<5.0)	8.8	ND (<5.0)	ND (<5.0)	ND (<5.0)	CBMA = 98.3;
O114A2		6/8/99	1,000	110	ND (<25)	36	74	ND (<25)	ND (<25)	ND (<25)	ND (<25)	ND (<25)	ND (<25)	
O114A2		12/15/99	2,950	407	ND (<62.5)	147	131	ND (<62.5)	ND (<62.5)	245	ND (<62.5)	ND (<62.5)	ND (<62.5)	
O114A2		6/8/00	2,700	330	ND (<25)	47	180	ND (<25)	ND (<25)	150	ND (<25)	ND (<25)	ND (<25)	
O114A2		12/5/00	2,800	270	ND (<50)	74	160	ND (<50)	ND (<50)	290	ND (<50)	ND (<50)	ND (<50)	
O114A2		6/21/01	1,500	130	ND (<25)	ND (<25)	82	ND (<25)	ND (<25)	100	ND (<25)	ND (<25)	ND (<25)	
O114A2		6/27/02	920	55	ND (<25)	27	60	ND (<25)	ND (<25)	69	ND (<25)	ND (<25)	ND (<25)	
O114A2		6/27/03	2,300	230	21	88	140	ND (<20)	ND (<20)	430	ND (<20)	ND (<20)	ND (<20)	
O114A2		9/2/04	550	47	ND (<5.0)	19	42	ND (<5.0)	ND (<5.0)	67	ND (<5.0)	ND (<5.0)	ND (<5.0)	
O114A2		9/2/04	470	37	ND (<5.0)	18	28	ND (<5.0)	ND (<5.0)	40	ND (<5.0)	ND (<5.0)	ND (<5.0)	CT = 19;
O114A2		6/21/05	840	97	12	48	81	ND (<10)	ND (<10)	60	ND (<10)	ND (<10)	ND (<10)	
O114A2		7/2/06	1,400	150	12	50	90	ND (<5.0)	ND (<5.0)	190	ND (<5.0)	ND (<5.0)	ND (<5.0)	
O114A2		6/13/07	980	120	11	43	71	ND (<10)	ND (<10)	210	ND (<10)	ND (<10)	ND (<10)	
O114A2		6/11/08	720	84	ND (<10)	31	52	ND (<10)	ND (<10)	110	ND (<10)	ND (<10)	ND (<10)	
O114A2		12/10/08	600	81	9.9	33	51	ND (<5.0)	ND (<5.0)	160	ND (<5.0)	ND (<5.0)	ND (<5.0)	
O114A2		6/10/09	460	46	ND (<10)	25	39	ND (<10)	ND (<10)	63	ND (<10)	ND (<10)	ND (<10)	
O114A2		6/9/10	570	53	ND (<10)	28	34	ND (<10)	ND (<10)	110	ND (<10)	ND (<10)	ND (<10)	
O114A2		6/14/11	560	47	12	27	41	ND (<2.5)	ND (<2.5)	88	ND (<2.5)	ND (<2.5)	ND (<2.5)	
O114A2		6/12/12	280	17	6.3	11	22	ND (<2.5)	ND (<2.5)	47	ND (<2.5)	ND (<2.5)	ND (<2.5)	
O114A2		6/20/13	340	24	8.7	15	24	ND (<2.5)	ND (<2.5)	93	ND (<2.5)	ND (<2.5)	ND (<2.5)	
O114A2		6/11/14	230	15	6.1	11	19	ND (<2.5)	ND (<2.5)	49	ND (<2.5)	ND (<2.5)	ND (<2.5)	
O114A2		6/9/15	300	17	6.5	13	22	ND (<5.0)	ND (<5.0)	74	ND (<5.0)	ND (<5.0)	ND (<5.0)	
O114A2		6/7/16	250	14	6.0	14	19	ND (<5.0)	ND (<5.0)	70	ND (<5.0)	ND (<5.0)	ND (<5.0)	
O114A2		6/8/17	240	13	5.8	15	17	ND (<5.0)	ND (<5.0)	70	ND (<5.0)	ND (<5.0)	ND (<5.0)	
O114A2		6/4/18	240	14	8.5	13	23	ND (<5.0)	ND (<5.0)	58	ND (<5.0)	ND (<5.0)	ND (<5.0)	
O114A2		6/5/19	170	10	6.2	13	17	ND (<5.0)	ND (<5.0)	49	ND (<5.0)	ND (<5.0)	ND (<5.0)	
O114A2		6/3/20	160	10	7.1	13	18	ND (<0.50)	ND (<0.50)	37	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O115A1		9/21/92	3.9	0.50	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	BDCMe = 0.6; CHLFM = 4.9;
O115A1		9/22/92	3.9	0.50	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	BDCMe = 0.6; CHLFM = 4.9;
O115A1		12/4/92	5.7	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	CHLFM = 5.4;
O115A1		3/10/93	5.7	1.2	0.90	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 3.3;
O115A1		6/4/93	3.6	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 1.2;
O115A1		9/7/93	5.3	0.61	0.93	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 2.1; MC = 1.9;
O115A1		12/8/93	5.1	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
O115A1		3/8/94	6.2	ND (<0.50)	1.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 2.7;
O115A1		6/3/94	7.8	ND (<0.50)	1.6	-	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 3.7;
O115A1		9/2/94	12	0.66	1.8	-	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 4.9;
O115A1		12/6/94	13	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
O115A1		3/3/95	20	0.80	0.64	-	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 2.8;
O115A1		6/6/95	15	0.70	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 1.8;
O115A1		9/6/95	14	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 2;
O115A1		12/7/95	12	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
O115A1		3/6/96	18	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 1.8;
O115A1	Dup	3/6/96	18	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 1.8;
O115A1		6/7/96	16	1.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 99; CHLFM = 2; TFT = 103;
O115A1		9/11/96	16	1.1	0.66	0.63	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 104; CHLFM = 2.3; MC = 0.6;
O115A1		12/11/96	13	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
O115A1		3/5/97	13	0.93	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 88; CHLFM = 1.5;
O115A1		6/4/97	14	1.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 102; CHLFM = 1.8;
O115A1		9/10/97	12	0.85	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 101; CHLFM = 1.7;
O115A1		12/5/97	9.1	0.69	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 93; CHLFM = 1.2;
O115A1		6/3/98	6.8	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 101; CHLFM = 1.3;
O115A1		12/9/98	9.5	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 106; CHLFM = 0.598;
O115A1		6/10/99	6.5	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O115A1	Dup	6/10/99	6.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O115A1		12/15/99	7.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<1.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O115A1		6/6/00	5.9	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O115A1		12/6/00	8.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O115A1		6/20/01	6.9	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O115A1		6/25/03	8.6	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O115A1		6/23/05	3.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<5.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	MC = 5.1;
O115A1	Dup	6/23/05	3.5	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<5.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	MC = 5.5;
O115A1	Dup	6/23/05	3.5	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<5.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	MC = 5.5;
O115A1		6/13/07	3.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O115A1		6/9/09	3.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O115A1		6/14/11	4.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O115A1		6/19/13	1.6	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O115A1		6/9/15	3.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O115A1		6/5/17	2.6	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O115A1		6/4/18	3.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O115A1		6/5/19	2.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O115A1		6/4/20	1.6	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O116A1		3/22/93	6,600	26,000	280	ND (<500)	2,000	ND (<500)	1,000	8,200	730	ND (<500)	ND (<500)	
O116A1		8/16/93	2,400	11,000	ND (<100)	-	1,900	ND (<100)	340	7,400	1,100	ND (<100)	ND (<100)	Acetone = 13,000; Ethylbenzene = 800; Toluene = 300; Xylenes = 3,800;
O116A1		9/14/93	5,200	24,000	500	ND (<500)	2,600	ND (<500)	1,100	9,100	1,800	ND (<500)	ND (<500)	CHLFM = 150; MC = 250;
O116A1		11/3/93	5,200	24,000	500	ND (<500)	2,600	ND (<500)	1,100	9,100	1,800	ND (<500)	ND (<500)	CHLFM = 150; MC = 250;
O116A1		12/10/93	13,000	45,000	400	-	1,700	ND (<250)	1,900	20,000	3,700	ND (<250)	ND (<500)	Acetone = 24,000; Ethylbenzene = 3,400; MC = 340; Toluene = 1,800; Xylenes = 15,000;
O116A1		3/7/94	24,000	59,000	ND (<500)	ND (<500)	ND (<500)	ND (<500)	2,500	31,000	5,800	ND (<500)	ND (<500)	
O116A1	Dup	3/7/94	24,000	70,000	ND (<500)	ND (<500)	ND (<500)	ND (<500)	2,600	30,000	ND (<500)	ND (<500)	ND (<500)	
O116A1		6/7/94	17,000	79,000	880	-	4,800	ND (<250)	3,300	36,000	3,900	280	270	Acetone = 36,000; CHLFM = 340; CT = 420; Ethylbenzene = 4,500; MC = 1,000; Toluene = 2,100; Xylenes = 21,000;
O116A1	Dup	6/7/94	17,000	81,000	890	-	4,900	ND (<250)	6,200	35,000	3,500	ND (<250)	ND (<250)	Acetone = 43,000; Ethylbenzene = 5,000; MC = 1,000; Toluene = 2,200; Xylenes = 22,000;
O116A1		9/7/94	ND (<1,000)	65,000	ND (<1,000)	ND (<1,000)	ND (<1,000)	ND (<1,000)	ND (<1,000)	47,000	ND (<1,000)	ND (<1,000)	ND (<1,000)	MC = 470;
O116A1		12/9/94	4,900	18,000	ND (<120)	ND (<120)	530	ND (<120)	1,500	16,000	4,900	ND (<120)	ND (<250)	Acetone = 6,900; Ethylbenzene = 2,500; Toluene = 660; Xylenes = 9,700;

Appendix B
Selected Compounds from Historical Records
COE Study Area and Perimeter Area, Palo Alto, California

Location	Type	Date	TCE	1,1,1-TCA	1,1-DCA	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	PCE	Freon 113	1,2-DCB	1,2-DCA	VC	Other Constituents
O116A1		3/6/95	6,800	18,000	ND (<250)	ND (<250)	540	ND (<250)	1,600	13,000	3,500	ND (<250)	ND (<250)	
O116A1	Dup	3/6/95	7,300	21,000	ND (<250)	ND (<250)	590	ND (<250)	1,700	15,000	3,700	ND (<250)	ND (<250)	
O116A1		6/9/95	82,000	210,000	ND (<250)	-	660	ND (<250)	3,500	38,000	6,300	ND (<250)	ND (<250)	Ethylbenzene = 5,800; MC = 1,100; Toluene = 5,000; Xylenes = 25,000;
O116A1		9/8/95	-	-	-	-	-	-	-	-	2,600	-	-	
O116A1	Dup	9/8/95	23,000	71,000	810	-	3,100	ND (<500)	2,300	13,000	2,400	ND (<500)	ND (<500)	MC = 950;
O116A1		12/11/95	33,000	82,000	ND (<500)	-	1,400	ND (<500)	1,500	9,100	4,400	ND (<500)	ND (<1,000)	Acetone = 14,000; Ethylbenzene = 3,200; MC = 790; Toluene = 2,800;
O116A1		3/7/96	25,000	43,000	ND (<500)	1,400	550	ND (<500)	2,200	12,000	4,200	ND (<500)	ND (<500)	
O116A1	Dup	3/7/96	26,000	43,000	ND (<500)	1,400	550	ND (<500)	2,400	13,000	4,400	ND (<500)	ND (<500)	
O116A1		6/11/96	19,000	52,000	610	2,000	1,400	ND (<500)	1,600	10,000	2,800	ND (<500)	ND (<500)	CBMA = 102; MC = 730; TFT = 103;
O116A1		9/13/96	21,000	68,000	830	3,000	2,400	ND (<500)	1,700	11,000	3,100	ND (<500)	ND (<500)	CBMA = 103; MC = 610;
O116A1		12/16/96	13,000	60,000	ND (<2500)	ND (<2500)	ND (<2500)	ND (<2500)	ND (<2500)	10,000	NA	ND (<2500)	ND (<5000)	Xylenes = 5,500;
O116A1		3/7/97	2,500	4,800	150	180	480	ND (<100)	130	820	600	ND (<100)	ND (<100)	1,2,4-TCB = 750; CBMA = 113; MC = 110; Naphthalene = 28;
O116A1	Dup	3/7/97	2,200	4,100	170	210	500	ND (<100)	150	930	720	ND (<100)	ND (<100)	1,2,4-TCB = 1,100; CBMA = 91; MC = 120; Naphthalene = 41;
O116A1		6/9/97	3,900	10,000	770	1,000	1,700	ND (<100)	450	3,300	1,200	ND (<100)	ND (<100)	Acetone = 9,100; CBMA = 100; Ethylbenzene = 500; MC = 260; TFT = 108; Toluene = 330; Xylenes = 2,300;
O116A1	Dup	6/9/97	4,100	7,700	520	750	1,200	ND (<100)	510	3,000	1,000	ND (<100)	ND (<100)	Acetone = 6,000; CBMA = 97; Ethylbenzene = 370; MC = 200; TFT = 101; Toluene = 250; Xylenes = 1,700;
O116A1		9/12/97	3,200	5,900	590	640	1,800	ND (<120)	310	1,700	1,000	ND (<120)	ND (<120)	CBMA = 104; MC = 200;
O116A1		12/8/97	770	1,200	72	79	270	ND (<50)	66	350	240	ND (<50)	ND (<50)	Acetone = 1,100; CBMA = 100; Ethylbenzene = 58; TFT = 103; Xylenes = 400;
O116A1	Dup	12/8/97	850	1,200	74	85	270	ND (<50)	60	390	240	ND (<50)	ND (<50)	CBMA = 96; Ethylbenzene = 57; TFT = 98; Xylenes = 300;
O116A1		6/5/98	760	730	41	100	230	ND (<25)	39	540	130	ND (<25)	ND (<25)	CBMA = 113; TFT = 93;
O116A1	Dup	6/5/98	730	710	38	92	220	ND (<25)	34	560	110	ND (<25)	ND (<25)	CBMA = 111; MC = 25; TFT = 92;
O116A1		12/11/98	1,960	615	ND (<25)	72	144	ND (<25)	74	371	35	ND (<25)	ND (<25)	CBMA = 95; TFT = 110;
O116A1		6/9/99	3,660	1,890	ND (<125)	164	257	ND (<125)	145	874	295	ND (<125)	ND (<125)	
O116A1	Dup	6/9/99	5,030	1,970	ND (<250)	ND (<250)	266	ND (<250)	ND (<250)	954	265	ND (<250)	ND (<250)	
O116A1		12/9/99	2,240	831	74	158	410	ND (<50)	73	648	89	ND (<50)	ND (<50)	
O116A1		6/8/00	1,800	350	ND (<100)	ND (<100)	ND (<100)	ND (<100)	ND (<100)	310	ND (<100)	ND (<100)	ND (<100)	
O116A1		12/5/00	1,300	880	67	130	380	ND (<25)	51	790	81	ND (<25)	ND (<25)	Xylenes = 84;
O116A1		6/22/01	4,800	1,000	ND (<250)	ND (<250)	ND (<250)	ND (<250)	ND (<250)	ND (<1,000)	330	ND (<250)	ND (<250)	
O116A1		6/27/03	1,100	510	27	44	200	ND (<25)	69	490	89	ND (<25)	ND (<25)	
O116A1		6/20/05	440	220	6.2	11	250	ND (<5.0)	23	260	60	ND (<5.0)	ND (<5.0)	
O116A1		6/28/06	87	27	2.8	6.1	64	ND (<0.50)	12	61	30	ND (<0.50)	ND (<0.50)	1,2,4-TCB = 28; TCFMe (Freon 11) = 1.4;
O116A1		6/12/07	290	160	12	23	350	ND (<2.0)	37	330	28	ND (<2.0)	ND (<2.0)	1,2,4-TCB = 21;
O116A1		6/11/08	32	12	ND (<2.0)	4.3	23	ND (<2.0)	9.5	31	27	ND (<2.0)	ND (<2.0)	1,2,4-TCB = 70;
O116A1		6/9/09	19	6.0	1.7	3.1	3.6	ND (<0.50)	2.3	8.8	8.8	ND (<0.50)	ND (<0.50)	1,2,4-TCB = 24;
O116A1		6/14/11	13	3.7	1.7	4.6	1.6	ND (<0.50)	1.7	5.1	5.6	ND (<0.50)	ND (<0.50)	1,2,4-TCB = 15; TCFMe (Freon 11) = 1.2;
O116A1		6/18/13	8.0	2.2	1.2	3.0	0.71	ND (<0.50)	0.70	1.6	2.0	ND (<0.50)	ND (<0.50)	1,2,4-TCB = 5.4;
O116A1		6/8/15	19	5.7	1.7	5.1	9.1	ND (<0.50)	1.0	5.7	2.9	ND (<0.50)	ND (<0.50)	1,2,4-TCB = 11;
O116A1		6/5/17	9.8	4.2	1.3	2.7	3.5	ND (<0.50)	1.2	3.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O116A1		6/4/19	13	2.2	2.4	3.6	4.0	ND (<0.50)	2.1	17	6.0	ND (<0.50)	ND (<0.50)	1,2,4-TCB = 22; Freon 11 = 1.0
O117A2		3/22/93	12,000	30,000	ND (<500)	ND (<500)	ND (<100)	ND (<100)	1,300	4,900	230	ND (<100)	ND (<100)	
O117A2	Dup	3/22/93	12,000	31,000	ND (<500)	ND (<500)	ND (<500)	ND (<500)	1,100	4,400	6,400	ND (<500)	ND (<500)	
O117A2		8/16/93	180	330	15	-	ND (<5.0)	ND (<5.0)	19	85	53	ND (<5.0)	ND (<5.0)	Xylenes = 30;
O117A2	Dup	8/16/93	160	300	10	-	ND (<5.0)	ND (<5.0)	17	110	52	ND (<5.0)	ND (<5.0)	Xylenes = 28;
O117A2		9/14/93	90	170	17	ND (<2.5)	0.72	ND (<0.50)	20	59	62	ND (<0.50)	ND (<0.50)	CHLFM = 2.1; TCFMe (Freon 11) = 19;
O117A2		12/7/93	200	250	24	-	ND (<5.0)	ND (<5.0)	26	130	57	ND (<5.0)	ND (<10)	EMCYCHEX = 7.8; TCFMe (Freon 11) = 19; Xylenes = 30;
O117A2	Dup	12/7/93	200	250	26	-	ND (<5.0)	ND (<5.0)	27	120	120	ND (<5.0)	ND (<10)	Cyclohexane, Subs = 7.9; TCFMe (Freon 11) = 19; Xylenes = 31;
O117A2		3/7/94	340	500	23	-	ND (<2.5)	ND (<2.5)	44	200	79	ND (<2.5)	ND (<2.5)	TCFMe (Freon 11) = 7;
O117A2		6/7/94	30	74	22	-	ND (<0.50)	ND (<0.50)	7.7	15	ND (<10)	ND (<0.50)	ND (<0.50)	CHLEA (EC) = 2.5; CHLFM = 3.7; TCFMe (Freon 11) = 24;
O117A2		9/7/94	37	62	23	-	0.51	ND (<0.50)	4.7	15	11	ND (<0.50)	ND (<0.50)	CHLEA (EC) = 2.5; CHLFM = 4; TCFMe (Freon 11) = 20;
O117A2		12/8/94	19	28	14	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<10)	ND (<5.0)	ND (<10)	
O117A2	Dup	12/8/94	21	27	14	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<10)	ND (<5.0)	ND (<10)	
O117A2		3/6/95	87	110	19	-	0.51	ND (<0.50)	10	74	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLEA (EC) = 1.8; CHLFM = 2.2; MC = 0.52; TCFMe (Freon 11) = 10;
O117A2		6/9/95	110	140	19	-	0.70	ND (<0.50)	13	110	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLEA (EC) = 1.7; CHLFM = 1.7; MC = 1.1; TCFMe (Freon 11) = 9.7;
O117A2		9/8/95	130	150	25	-	ND (<2.5)	ND (<2.5)	21	120	ND (<2.5)	ND (<2.5)	ND (<2.5)	CHLFM = 2.8; MC = 8;
O117A2		12/11/95	100	110	17	-	ND (<5.0)	ND (<5.0)	16	95	ND (<10)	ND (<5.0)	ND (<10)	
O117A2		4/4/96	120	110	27	27	ND (<2.5)	ND (<2.5)	20	77	ND (<2.5)	ND (<2.5)	ND (<2.5)	CHLFM = 2.6; MC = 8.8; TCFMe (Freon 11) = 12;
O117A2		6/11/96	90	81	19	19	ND (<2.5)	ND (<2.5)	14	39	ND (<2.5)	ND (<2.5)	ND (<2.5)	CBMA = 101; MC = 3.3; TCFMe (Freon 11) = 5.4; TFT = 103;
O117A2		9/12/96	80	70	19	20	1.2	ND (<1.2)	14	28	ND (<1.2)	ND (<1.2)	ND (<1.2)	CBMA = 100; CHLFM = 1.7; MC = 5.4; TCFMe (Freon 11) = 7.8;
O117A2		12/13/96	7.5	7.4	8.8	6.2	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<10)	ND (<5.0)	ND (<10)	
O117A2		3/7/97	26	17	11	8.1	1.2	ND (<0.50)	5.5	7.6	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 101; CHLFM = 1.7; MC = 1; TCFMe (Freon 11) = 2.3;
O117A2		6/9/97	32	26	20	9.8	1.7	ND (<0.50)	6.6	15	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 92; CHLEA (EC) = 0.66; CHLFM = 1.9; MC = 2; TCFMe (Freon 11) = 5.8;
O117A2		9/11/97	38	34	20	12	1.8	ND (<0.50)	8.3	16	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 98; CHLEA (EC) = 0.56; CHLFM = 1.9; MC = 2.2; TCFMe (Freon 11) = 6.4;
O117A2		12/8/97	12	7.4	11	3.9	1.5	ND (<0.50)	0.59	ND (<0.50)	3.3	ND (<0.50)	ND (<0.50)	CBMA = 100; CHLFM = 1.2; TCFMe (Freon 11) = 1; TFT = 105; Xylenes = 1.5;
O117A2		6/3/98	3.0	3.6	9.5	3.4	0.56	ND (<0.50)	ND (<0.50)	ND (<0.50)	1.2	ND (<0.50)	ND (<0.50)	CBMA = 105; CHLFM = 1.6;
O117A2	Dup	6/3/98	2.9	3.6	9.0	3.3	0.57	ND (<0.50)	ND (<0.50)	ND (<0.50)	1.1	ND (<0.50)	ND (<0.50)	CBMA = 109; CHLFM = 1.7;
O117A2		12/9/98	13	18	16	8.8	0.91	ND (<0.50)	1.6	1.8	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 95.7; CHLFM = 1.11; TCFMe (Freon 11) = 3.67; TFT = 101;
O117A2		6/9/99	13	23	14	10	0.83	ND (<0.50)	1.6	2.9	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 1.26; MC = 1.21; TCFMe (Freon 11) = 1.75;
O117A2		12/15/99	28	42	48	34	2.0	ND (<1.25)	1.6	16	ND (<1.25)	ND (<1.25)	ND (<1.25)	CHLFM = 2.11; TCFMe (Freon 11) = 8.43;
O117A2		6/8/00	27	39	39	29	1.4	ND (<0.50)	1.8	22	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 1.7; TCFMe (Freon 11) = 8.7;
O117A2		12/5/00	21	25	23	17	1.1	ND (<0.50)	1.1	12	0.55	ND (<0.50)	ND (<0.50)	CHLFM = 1.3; TCFMe (Freon 11) = 6.0;
O117A2		6/22/01	71	37	26	18	ND (<2.5)	ND (<2.5)	ND (<2.5)	16	ND (<2.5)	ND (<2.5)	ND (<2.5)	
O117A2		6/27/03	49	55	27	26	1.7	ND (<0.50)	1.5	19	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 1.3; DCDFMe (Freon 12) = 1.2; TCFMe (Freon 11) = 5.1;
O117A2		6/20/05	37	13	6.4	18	0.55	ND (<0.50)	0.78	12	1.4	ND (<0.50)	ND (<0.50)	CHLFM = 1.1; TCFMe (Freon 11) = 13;
O117A2		6/28/06	49	11	5.1	13	ND (<0.50)	ND (<0.50)	1.2	13	2.4	ND (<0.50)	ND (<0.50)	1,2,4-TCB = 2.1; CHLFM = 1.3; TCFMe (Freon 11) = 11;
O117A2		6/12/07	50	11	5.5	15	ND (<0.50)	ND (<0.50)	1.7	18	2.8	ND (<0.50)	ND (<0.50)	1,2,4-TCB = 4.9; CHLFM = 1.3; TCFMe (Freon 11) = 15;
O117A2		6/12/08	25	11	8.9	18	1.7	ND (<0.50)	ND (<0.50)	10	ND (<0.50)	ND (<0.50)	ND (<0.50)	1,2,4-TCB = 1.6; CHLFM = 1.2; TCFMe (Freon 11) = 11;
O117A2		6/9/09	19	8.6	8.0	16	1.4	ND (<0.50)	ND (<0.50)	5.9	ND (<0.50)	ND (<0.50)	ND (<0.50)	1,2,4-TCB = 1.0; CHLFM = 1.2; TCFMe (Freon 11) = 9.3;
O117A2		6/14/11	29	8.1	10	15	3.1	ND (<0.50)	0.51	7.6	0.75	ND (<0.50)	ND (<0.50)	1,2,4-TCB = 2.2; CHLFM = 1.2; TCFMe (Freon 11) = 7.9;
O117A2		6/18/13	39	5.8	2.6	6.6	ND (<0.50)	ND (<0.50)	0.57	3.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	1,2,4-TCB = 2.1; CHLFM = 1.0; TCFMe (Freon 11) = 6.1;
O117A2		6/8/15	41	6.4	14	19	11	ND (<0.50)	0.76	5.7	ND (<0.50)	ND (<0.50)	ND (<0.50)	1,2,4-TCB = 1.2; TCFMe (Freon 11) = 5.7;
O117A2		6/5/17	50	6.0	20	25	20	ND (<0.50)	0.95	6.6	1.0	ND (<0.50)	0.58	1,2,4-TCB = 2.5; Freon 11 = 5.1
O117A2		6/4/19	43	5.3	13	20	14	ND (<0.50)	1.1	5.6	0.72	ND (<0.50)	0.55	1,2,4-TCB = 2.2; Freon 11 = 4.7
O118B		3/23/93	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O118B		8/16/93	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O118B		9/14/93	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O118B		11/3/93	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O118B		12/7/93	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<0.50)	ND (<5.0)	ND (<10)	
O118B		3/7/94	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O118B		6/9/94	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O118B		9/6/94	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O118B		12/8/94	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<0.50)	ND (<5.0)	ND (<10)	
O118B		3/3/95	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O118B		6/5/95	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O118B		9/5/95	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O118B		12/5/95	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<0.50)	ND (<5.0)	ND (<10)	
O118B		3/7/96	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O118B		6/10/96	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 106; TFT = 112;
O118B		9/10/96	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 99;
O118B		12/10/96	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<10)	ND (<5.0)	ND (<10)	
O118B	Dup	12/10/96	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<10)	ND (<5.0)	ND (<10)	
O118B		3/4/97	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 100;
O118B		6/5/97	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 103;
O118B		9/9/97	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 114;
O118B		12/8/97	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 79;
O118B		6/3/98	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 104; MC = 1;
O118B		12/9/98	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 106;
O118B		6/9/99	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O118B		1/28/00	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O118B		6/8/00	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O118B		12/5/00	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O118B		6/22/01	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O118B		6/26/02	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O118B		6/27/03	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O118B		6/23/04	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O118B		6/20/05	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O118B		6/12/07	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O118B		6/11/08	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O118B		6/9/09	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O118B	Dup	6/9/09	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O118B		6/8/10	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O118B	Dup	6/8/10	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O118B		6/14/11	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O118B	Dup	6/14/11	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O118B		6/12/12	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O118B		6/18/13	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O118B		6/10/14	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O118B		6/8/15	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O118B		6/6/16	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O118B		6/5/17	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O118B		6/4/18	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O118B		6/4/19	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O118B		6/2/20	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O119A1		3/23/93	34	28	8.4	-	28	ND (<0.50)	7.7	51	42	1.9	ND (<0.50)	CHLFM = 19; TCFMe (Freon 11) = 1.7;
O119A1		6/4/93	35	22	6.3	-	39	ND (<0.50)	5.0	-	-	1.4	ND (<0.50)	CHLFM = 6; TCFMe (Freon 11) = 3.6;
O119A1		9/9/93	39	18	5.9	-	16	ND (<0.50)	10	34	47	1.8	ND (<0.50)	CHLEA (EC) = 4.5; CHLFM = 6.9; TCFMe (Freon 11) = 4.4;
O119A1		12/7/93	30	12	6.5	-	20	ND (<5.0)	7.2	46	48	ND (<5.0)	ND (<10)	
O119A1		3/8/94	37	15	5.4	-	20	ND (<0.50)	6.5	47	12	2.1	ND (<0.50)	CHLEA (EC) = 5.3; CHLFM = 3; TCFMe (Freon 11) = 1;
O119A1		6/7/94	7.7	2.3	0.77	-	3.6	ND (<0.50)	1.0	3.9	ND (<10)	0.88	ND (<0.50)	Benzene = 2.4; CHLFM = 0.6; Toluene = 2.9; Xylenes = 1.9;
O119A1		9/7/94	44	12	3.5	-	13	ND (<0.50)	7.0	29	30	1.4	ND (<0.50)	CHLEA (EC) = 4.5; CHLFM = 1.9; TCFMe (Freon 11) = 3.1;
O119A1	Dup	9/7/94	46	13	3.6	-	14	ND (<0.50)	6.6	30	32	1.4	ND (<0.50)	CHLEA (EC) = 4.9; CHLFM = 2; TCFMe (Freon 11) = 3.3;
O119A1		12/8/94	56	7.8	ND (<5.0)	-	10	ND (<5.0)	6.5	25	-	ND (<5.0)	ND (<10)	
O119A1		3/7/95	38	7.4	3.0	-	14	ND (<0.50)	4.1	26	ND (<0.50)	1.4	ND (<0.50)	CHLEA (EC) = 2.9; CHLFM = 1.5; TCFMe (Freon 11) = 1.7;
O119A1		6/5/95	16	3.0	2.3	-	17	ND (<0.50)	1.1	2.9	-	1.0	ND (<0.50)	CHLEA (EC) = 0.67; CHLFM = 1.8;
O119A1		9/6/95	21	9.6	4.8	-	26	0.52	1.7	25	2.2	1.9	ND (<0.50)	CHLFM = 3.2; TCFMe (Freon 11) = 1.4;
O119A1	Dup	9/6/95	18	8.2	4.1	-	22	ND (<0.50)	1.4	21	2.1	1.9	ND (<0.50)	CHLFM = 2.8; TCFMe (Freon 11) = 1;
O119A1		12/5/95	50	11	5.4	-	22	ND (<5.0)	ND (<5.0)	48	-	ND (<5.0)	ND (<10)	
O119A1		3/6/96	33	16	7.5	15	36	0.87	2.6	71	1.2	ND (<0.50)	ND (<0.50)	CHLFM = 4.7; TCFMe (Freon 11) = 3.5;
O119A1		6/11/96	23	8.7	5.9	5.9	30	0.58	1.4	11	1.9	1.9	ND (<0.50)	CBMA = 109; CHLFM = 4.9; TCFMe (Freon 11) = 0.89; TFT = 93;
O119A1		9/11/96	34	20	11	17	44	1.4	3.0	59	ND (<0.50)	2.5	ND (<0.50)	CBMA = 112; CHLFM = 5.3; MC = 0.84; TCFMe (Freon 11) = 4.9;
O119A1		12/11/96	31	20	9.8	12	53	ND (<5.0)	ND (<5.0)	170	NA	ND (<5.0)	ND (<10)	
O119A1		3/5/97	32	21	9.4	16	46	ND (<1.2)	1.9	130	ND (<1.2)	1.9	ND (<1.2)	CBMA = 100; CHLFM = 4.5; TCFMe (Freon 11) = 5.4;
O119A1		6/5/97	30	19	12	11	50	ND (<2.5)	ND (<2.5)	69	ND (<2.5)	ND (<2.5)	ND (<2.5)	CBMA = 94; CHLFM = 4.7; TCFMe (Freon 11) = 5;
O119A1		9/11/97	15	6.4	4.5	6.1	16	ND (<0.50)	1.4	12	14	0.77	ND (<0.50)	CBMA = 112; CHLFM = 1.7; TCFMe (Freon 11) = 1.2;
O119A1		12/5/97	10	4.0	3.4	6.0	14	ND (<0.50)	0.90	1.5	14	ND (<0.50)	ND (<0.50)	CBMA = 100; CHLFM = 0.79; TCFMe (Freon 11) = 0.84; TFT = 104;

Appendix B
Selected Compounds from Historical Records
COE Study Area and Perimeter Area, Palo Alto, California

Location	Type	Date	TCE	1,1,1-TCA	1,1-DCA	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	PCE	Freon 113	1,2-DCB	1,2-DCA	VC	Other Constituents
O119A1		6/4/98	71	250	31	31	130	ND (<12)	ND (<12)	140	ND (<12)	ND (<12)	ND (<12)	CBMA = 108;
O119A1	Dup	6/4/98	80	220	40	45	120	ND (<12)	ND (<12)	80	ND (<12)	ND (<12)	ND (<12)	CBMA = 101;
O119A1		12/10/98	498	955	85	55	158	ND (<25)	ND (<25)	278	ND (<25)	ND (<25)	ND (<25)	CBMA = 101; TFT = 110;
O119A1		6/9/99	5,190	12,100	279	357	683	ND (<250)	ND (<250)	2,210	ND (<250)	ND (<250)	ND (<250)	
O119A1		12/14/99	999	1,040	105	59	138	ND (<6.25)	10	562	ND (<6.25)	ND (<6.25)	8.4	
O119A1		6/6/00	21,000	25,000	460	780	1,500	ND (<100)	130	6,900	ND (<100)	ND (<100)	ND (<100)	
O119A1		12/5/00	6,000	10,000	550	580	690	ND (<100)	ND (<100)	3,300	ND (<100)	ND (<100)	ND (<100)	
O119A1		6/22/01	8,800	12,000	ND (<500)	ND (<500)	ND (<500)	ND (<500)	ND (<500)	4,000	ND (<500)	ND (<500)	ND (<500)	
O119A1		6/27/02	1,700	2,000	200	89	230	ND (<20)	87	990	ND (<20)	ND (<20)	ND (<20)	
O119A1		6/27/03	460	320	74	41	91	ND (<10)	41	930	11	ND (<10)	ND (<10)	
O119A1		9/2/04	33,000	33,000	280	2,600	2,700	ND (<200)	770	15,000	1,100	ND (<200)	ND (<200)	
O119A1		9/2/04	30,000	29,000	250	2,200	2,700	ND (<200)	690	12,000	1,000	ND (<200)	ND (<200)	
O119A1		6/22/05	16,000	22,000	650	2,500	2,500	ND (<250)	640	15,000	760	ND (<250)	ND (<250)	
O119A1		6/27/06	16,000	13,000	250	ND (<200)	2,200	ND (<200)	800	10,000	1,400	ND (<200)	ND (<200)	
O119A1		3/6/07	400	1,800	64	67	3,000	ND (<50)	260	2,700	1,000	ND (<50)	ND (<50)	1,2,4-TCB = 270;
O119A1		6/12/07	9,900	13,000	320	330	2,500	ND (<100)	360	6,900	1,200	ND (<100)	ND (<100)	1,2,4-TCB = 230;
O119A1		6/11/08	27,000	30,000	570	680	2,000	ND (<200)	560	19,000	2,000	ND (<200)	ND (<200)	1,2,4-TCB = 500;
O119A1		12/10/08	27,000	27,000	ND (<500)	670	3,000	ND (<500)	1,100	24,000	2,400	ND (<500)	ND (<500)	1,2,4-TCB = 1,300; Ethylbenzene = 2,100; Toluene = 720; Xylenes = 7,700;
O119A1		6/10/09	28,000	24,000	330	1,500	3,200	ND (<250)	960	15,000	2,400	ND (<250)	ND (<250)	1,2,4-TCB = 670;
O119A1		6/9/10	10,000	9,600	ND (<250)	810	2,800	ND (<250)	520	6,700	1,500	ND (<250)	ND (<250)	1,2,4-TCB = 750;
O119A1		6/14/11	6,300	7,500	92	300	3,100	ND (<50)	380	5,800	1,300	ND (<50)	ND (<50)	1,2,4-TCB = 1,000;
O119A1		8/26/11	4,800	6,300	81	ND (<250)	3,000	3.8	330	5,700	1,100	ND (<0.50)	7.9	1,1,2-TCA = 1.0; 1,2,4-TCB = 720; 1,3-DCB = 2.1; 1,4-DCB = 16; CHLBZ = 2.9; TCFMe (Freon 11) = 1.1;
O119A1		9/29/11	1,400	3,000	54	91	2,400	ND (<50)	180	2,700	780	ND (<50)	ND (<50)	1,2,4-TCB = 360;
O119A1		10/17/11	1,000	2,700	ND (<50)	140	2,300	ND (<50)	120	2,300	610	ND (<50)	ND (<50)	1,2,4-TCB = 200;
O119A1		6/12/12	3,500	6,300	100	270	4,500	ND (<50)	150	4,400	940	ND (<50)	ND (<50)	1,2,4-TCB = 910;
O119A1		6/20/13	12,000	10,000	150	420	3,200	ND (<50)	670	9,400	1,400	ND (<50)	ND (<50)	1,2,4-TCB = 1,700;
O119A1		6/11/14	20	170	19	17	390	ND (<5.0)	63	1,000	830	ND (<5.0)	ND (<5.0)	1,2,4-TCB = 870; 1,4-DCB = 13;
O119A1		6/9/15	33	37	6.4	7.9	120	ND (<5.0)	38	450	530	ND (<5.0)	ND (<5.0)	1,2,4-TCB = 490; 1,4-DCB = 7.4;
O119A1		6/7/16	44	28	ND (<5.0)	12	81	ND (<5.0)	32	370	370	ND (<5.0)	ND (<5.0)	1,2,4-TCB = 280;
O119A1		6/7/17	680	1,700	93	280	1,100	ND (<5.0)	55	2,700	110	ND (<5.0)	ND (<5.0)	1,2,4-TCB = 320; MC = 93
O119A1		6/5/18	120	640	58	ND (<50)	560	ND (<5.0)	84	2,700	200	ND (<5.0)	ND (<5.0)	1,2,4-TCB = 460; 1,4-DCB = 6.1
O119A1		6/5/19	43	47	6.3	11	57	ND (<5.0)	20	350	29	ND (<5.0)	ND (<5.0)	1,2,4-TCB = 80
O119A1		6/23/20	1,300	2,100	130	85	1,400	ND (<20)	100	3,500	130	ND (<20)	ND (<20)	1,2,4-TCB = 77
O120A2		3/23/93	6,200	1,800	ND (<120)	ND (<120)	45	ND (<120)	70	360	35	ND (<120)	ND (<120)	
O120A2		6/4/93	1,500	300	14	ND (<12)	65	ND (<12)	13	100	14	ND (<12)	ND (<12)	Ethylbenzene = 12; Toluene = 8; Xylenes = 55;
O120A2		9/9/93	5,500	710	32	ND (<50)	35	ND (<10)	58	280	ND (<10)	ND (<10)	ND (<10)	
O120A2		12/7/93	9,000	690	75	ND (<50)	ND (<50)	ND (<50)	ND (<50)	340	-	ND (<50)	ND (<100)	Xylenes = 53;
O120A2		3/8/94	3,200	430	ND (<12)	-	30	ND (<12)	38	210	ND (<12)	ND (<12)	ND (<12)	
O120A2		6/7/94	720	600	19	-	150	ND (<2.5)	10	140	ND (<10)	ND (<2.5)	ND (<2.5)	CHLFM = 2.8; MC = 4.9; Xylenes = 5.6;
O120A2		9/7/94	680	460	19	-	150	ND (<2.5)	5.3	130	ND (<10)	ND (<2.5)	ND (<2.5)	
O120A2		12/8/94	630	400	19	-	130	ND (<17)	ND (<17)	160	ND (<10)	ND (<17)	ND (<33)	
O120A2		3/7/95	390	310	14	-	120	ND (<2.5)	6.4	77	ND (<2.5)	ND (<2.5)	ND (<2.5)	CHLFM = 2.7; TCFMe (Freon 11) = 3.2;
O120A2		6/9/95	460	240	12	-	94	ND (<2.5)	3.8	46	ND (<10)	ND (<2.5)	ND (<2.5)	CHLFM = 3;
O120A2	Dup	6/9/95	430	250	12	-	100	ND (<2.5)	3.2	45	ND (<10)	ND (<2.5)	ND (<2.5)	CHLFM = 3.1;
O120A2		9/8/95	260	44	ND (<12)	ND (<12)	ND (<12)	ND (<12)	ND (<12)	ND (<12)	14	ND (<12)	ND (<12)	MC = 36;
O120A2		11/17/95	480	64	4.2	-	14	ND (<2.5)	7.6	4.3	2.7	3.0	ND (<2.5)	CHLFM = 3.4;
O120A2		12/11/95	680	140	6.3	-	24	ND (<5.0)	10	54	ND (<10)	ND (<5.0)	ND (<10)	
O120A2		3/7/96	120	20	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	10	ND (<2.5)	ND (<2.5)	
O120A2		6/11/96	710	140	ND (<10)	ND (<10)	ND (<10)	ND (<10)	15	39	ND (<10)	ND (<10)	ND (<10)	CBMA = 104; TFT = 98;
O120A2	Dup	6/11/96	710	150	ND (<10)	ND (<10)	ND (<10)	ND (<10)	12	38	ND (<10)	ND (<10)	ND (<10)	CBMA = 106; TFT = 98;
O120A2		9/13/96	1,300	340	15	19	22	ND (<10)	35	27	39	ND (<10)	ND (<10)	CBMA = 100;
O120A2		12/16/96	2,000	610	ND (<50)	ND (<50)	ND (<50)	ND (<50)	ND (<50)	100	30	ND (<50)	ND (<100)	
O120A2		3/5/97	2,100	550	ND (<50)	ND (<50)	ND (<50)	ND (<50)	ND (<50)	100	ND (<50)	ND (<50)	ND (<50)	CBMA = 90;
O120A2		6/9/97	1,800	530	ND (<50)	ND (<50)	ND (<50)	ND (<50)	ND (<50)	79	ND (<50)	ND (<50)	ND (<50)	CBMA = 102;
O120A2		9/12/97	2,500	760	ND (<50)	ND (<50)	ND (<50)	ND (<50)	ND (<50)	160	ND (<50)	ND (<50)	ND (<50)	CBMA = 102;
O120A2		12/8/97	5,400	1,900	ND (<120)	ND (<120)	ND (<120)	ND (<120)	150	1,200	230	ND (<120)	ND (<120)	CBMA = 93;
O120A2		6/5/98	1,800	450	ND (<100)	ND (<100)	ND (<100)	ND (<100)	ND (<100)	170	ND (<100)	ND (<100)	ND (<100)	CBMA = 109;
O120A2		12/11/98	2,270	676	ND (<50)	ND (<50)	ND (<50)	ND (<50)	53	142	ND (<50)	ND (<50)	ND (<50)	CBMA = 94.7;
O120A2		6/9/99	1,660	441	ND (<50)	ND (<50)	ND (<50)	ND (<50)	ND (<50)	145	ND (<50)	ND (<50)	ND (<50)	
O120A2		12/14/99	3,280	559	ND (<125)	ND (<125)	ND (<125)	ND (<125)	ND (<125)	305	21	ND (<125)	ND (<125)	1,2,4-TCB = 37.5;
O120A2		6/8/00	2,700	720	ND (<25)	ND (<25)	ND (<25)	ND (<25)	56	100	ND (<25)	ND (<25)	ND (<25)	
O120A2	Dup	6/8/00	2,400	520	ND (<25)	ND (<25)	ND (<25)	ND (<25)	58	150	ND (<25)	ND (<25)	ND (<25)	
O120A2		12/5/00	2,800	630	ND (<50)	ND (<50)	ND (<50)	ND (<50)	ND (<50)	ND (<200)	ND (<50)	ND (<50)	ND (<50)	
O120A2		6/22/01	9,300	2,100	ND (<250)	ND (<250)	ND (<250)	ND (<250)	ND (<250)	1,500	1,400	ND (<250)	ND (<250)	
O120A2		6/27/03	2,900	740	39	41	ND (<25)	ND (<25)	52	340	ND (<25)	ND (<25)	ND (<25)	
O120A2		6/22/05	2,100	560	ND (<50)	170	ND (<50)	ND (<50)	ND (<50)	440	ND (<50)	ND (<50)	ND (<50)	
O120A2		6/27/06	1,000	230	14	25	11	ND (<10)	43	240	27	ND (<10)	ND (<10)	1,2,4-TCB = 20;
O120A2		3/6/07	650	160	13	25	10	ND (<10)	38	200	87	ND (<10)	ND (<10)	1,2,4-TCB = 110;
O120A2		6/12/07	1,400	300	24	31	22	ND (<10)	56	340	100	ND (<10)	ND (<10)	1,2,4-TCB = 61;
O120A2		6/11/08	1,000	240	14	20	ND (<10)	ND (<10)	49	180	100	ND (<10)	ND (<10)	1,2,4-TCB = 120;
O120A2		12/10/08	790	210	12	22	ND (<10)	ND (<10)	28	160	67	ND (<10)	ND (<10)	1,2,3-TCB = 32; 1,2,4-TCB = 86;
O120A2		6/10/09	670	140	10	22	ND (<10)	ND (<10)	16	75	51	ND (<10)	ND (<10)	1,2,4-TCB = 41;
O120A2		6/9/10	640	130	8.4	24	ND (<5.0)	ND (<5.0)	16	71	45	ND (<5.0)	ND (<5.0)	1,2,4-TCB = 50; TCFMe (Freon 11) = 13;
O120A2		6/14/11	520	120	9.8	18	6.3	ND (<5.0)	13	62	39	ND (<5.0)	ND (<5.0)	1,2,4-TCB = 57;
O120A2		6/12/12	460	97	7.8	12	ND (<5.0)	ND (<5.0)	9.7	50	32	ND (<5.0)	ND (<5.0)	1,2,4-TCB = 50;
O120A2		6/20/13	500	94	6.7	13	7.4	ND (<5.0)	11	51	8.3	ND (<5.0)	ND (<5.0)	1,2,4-TCB = 21;
O120A2		6/11/14	130	100	21	16	110	ND (<5.0)	13	110	16	ND (<5.0)	ND (<5.0)	1,2,4-TCB = 41;
O120A2		6/9/15	2,800	870	52	45	450	ND (<10)	58	1,100	59	ND (<10)	ND (<10)	1,2,4-TCB = 46;
O120A2		6/7/16	1,800	410	24	68	190	ND (<10)	60	1,000	60	ND (<10)	ND (<10)	1,2,4-TCB = 49;
O120A2		6/7/17	880	170	ND (<10)	37	90	ND (<10)	46	370	82	ND (<10)	ND (<10)	1,2,4-TCB = 52
O120A2		6/5/18	500	93	7.5	15	100	ND (<5.0)	35	260	59	ND (<5.0)	ND (<5.0)	1,2,4-TCB = 47
O120A2		6/5/19	510	220	33	19	140	ND (<5.0)	31	460	50	ND (<5.0)	ND (<5.0)	1,2,4-TCB = 35
O120A2		6/23/20	470	120	10	11	140	ND (<0.50)	16	280	32	ND (<0.50)	ND (<0.50)	1,2,4-TCB = 7.1; 1,4-DCB = 0.54; CHLFM = 1.1; Freon 11 = 7.0
O120A2	Dup	6/23/20	400	120	10	11	150	ND (<0.50)	17	220	35	ND (<0.50)	ND (<0.50)	1,2,4-TCB = 7.9; 1,4-DCB = 0.59; CHLFM = 1.1; Freon 11 = 7.3
O121A2		9/21/92	2.3	61	23	ND (<1.0)	0.80	ND (<0.50)	ND (<0.50)	0.60	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLEA (EC) = 0.5; CHLFM = 4.2; TCFMe (Freon 11) = 11;
O121A2		12/3/92	ND (<5.0)	45	18	-	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
O121A2		6/3/93	1.6	27	13	-	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 1.7; TCFMe (Freon 11) = 8.1;
O121A2		12/7/93	ND (<5.0)	47	23	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	TCFMe (Freon 11) = 13;
O121A2		6/7/94	6.3	56	26	ND (<0.50)	1.1	ND (<0.50)	ND (<0.50)	1.5	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLEA (EC) = 1.6; CHLFM = 4.1; TCFMe (Freon 11) = 15;
O121A2		12/12/94	8.1	46	19	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
O121A2		6/9/95	9.2	48	21	ND (<0.50)	0.85	ND (<0.50)	ND (<0.50)	1.9	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 3.2; TCFMe (Freon 11) = 13;
O121A2		12/6/95	12	46	22	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
O121A2		6/6/96	12	33	16	39	0.94	ND (<0.50)	ND (<0.50)	2.4	ND (<0.50)	0.57	ND (<0.50)	CBMA = 105; CHLFM = 2.8; TCFMe (Freon 11) = 12; TFT = 104;
O121A2		12/12/96	ND (<5.0)	6.9	6.0	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	MC = 5.2;
O121A2		12/3/97	4.0	7.2	3.4	5.7	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 91; TCFMe (Freon 11) = 3.2;
O121A2		12/9/99	14	47	15	36	0.87	ND (<0.625)	ND (<0.625)	2.3	ND (<0.625)	ND (<0.625)	ND (<0.625)	CHLFM = 3.32; TCFMe (Freon 11) = 15.6;
O121A2	Dup	12/9/99	14	43	13	33	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<2.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	CHLFM = 2.12; TCFMe (Freon 11) = 9.49;
O121A2		6/21/01	7.7	21	5.3	14	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	TCFMe (Freon 11) = 3.8;
O121A2		6/26/03	6.0	12	3.1	7.6	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	TCFMe (Freon 11) = 3.3;
O121A2		6/22/05	14	28	7.5	32	0.62	ND (<0.50)	ND (<0.50)	3.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 2.1; TCFMe (Freon 11) = 13;
O121A2		6/13/07	9.7	16	3.5	13	ND (<0.50)	ND (<0.50)	ND (<0.50)	2.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 1.9; TCFMe (Freon 11) = 5.1;
O121A2		6/10/09	22	19	6.1	17	ND (<0.50)	ND (<0.50)	ND (<0.50)	2.8	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 2.0; TCFMe (Freon 11) = 7.7;
O121A2		6/14/11	23	16	5.5	17	0.53	ND (<0.50)	ND (<0.50)	3.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 1.8; TCFMe (Freon 11) = 7.7;
O121A2		6/18/13	21	13	4.2	12	ND (<0.50)	ND (<0.50)	ND (<0.50)	2.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 1.4; TCFMe (Freon 11) = 6.6;
O121A2	Dup	6/18/13	21	13	4.2	13	ND (<0.50)	ND (<0.50)	ND (<0.50)	2.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 1.4; TCFMe (Freon 11) = 6.7;
O121A2		6/10/14	25	12	3.5	11	ND (<0.50)	ND (<0.50)	ND (<0.50)	2.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 1.2; TCFMe (Freon 11) = 5.9;
O121A2		6/9/15	31	12	3.6	9.8	ND (<0.50)	ND (<0.50)	0.58	2.4	ND (<0.50)	ND (<0.50)	ND (<0.50)	TCFMe (Freon 11) = 5.8;
O121A2		6/7/17	32	8.1	2.5	7.2	ND (<0.50)	ND (<0.50)	1.6	2.4	ND (<0.50)	ND (<0.50)	ND (<0.50)	Freon 11 = 3.8
O121A2		6/5/18	27	5.3	1.9	6.1	ND (<0.50)	ND (<0.50)	1.4	2.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	Freon 11 = 2.8
O121A2		6/5/19	35	5.0	1.8	5.5	ND (<0.50)	ND (<0.50)	2.9	2.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	Freon 11 = 2.2
O121A2		6/4/20	37	3.7	1.7	4.7	ND (<0.50)	ND (<0.50)	4.4	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.88; Freon 11 = 1.8
O122A2		9/21/92	15	13	5.9	-	ND (<0.50)	ND (<0.50)	1.8	0.70	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 2.8; TCFMe (Freon 11) = 0.7;
O122A2		12/3/92	9.9	8.0	ND (<5.0)	-	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
O122A2		6/7/93	16	12	5.3	-	ND (<0.50)	ND (<0.50)	2.6	1.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.7; TCFMe (Freon 11) = 1.1;
O122A2	Dup	6/7/93	17	12	5.2	-	ND (<0.50)	ND (<0.50)	2.6	1.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.7; TCFMe (Freon 11) = 1.1;
O122A2		12/13/93	14	8.6	5.5	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
O122A2		6/3/94	19	14	8.0	-	ND (<0.50)	ND (<0.50)	5.5	2.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 1.4; TCFMe (Freon 11) = 1.8;
O122A2		12/7/94	20	9.1	6.4	-	ND (<5.0)	ND (<5.0)	5.4	ND (<5.0)	-	ND (<5.0)	ND (<10)	
O122A2		6/7/95	22	10	5.4	-	ND (<0.50)	ND (<0.50)	6.2	1.8	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.99; TCFMe (Freon 11) = 1.2;
O122A2		12/7/95	17	7.7	ND (<5.0)	-	ND (<5.0)	ND (<5.0)	6.6	ND (<5.0)	-	ND (<5.0)	ND (<10)	
O122A2		6/6/96	15	9.0	4.3	8.1	ND (<0.50)	ND (<0.50)	5.9	1.4	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 108; CHLFM = 0.94; TCFMe (Freon 11) = 0.99; TFT = 125;
O122A2		12/12/96	12	6.5	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	MC = 5.5;
O122A2		12/2/97	11	16	9.4	8.5	ND (<0.50)	ND (<0.50)	4.6	1.6	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 100; CHLFM = 0.91; TCFMe (Freon 11) = 27;
O122A2		12/9/99	7.7	16	4.5	8.4	ND (<0.50)	ND (<0.50)	2.5	ND (<1.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.817; TCFMe (Freon 11) = 11.4;
O122A2		6/21/01	17	19	5.5	9.5	ND (<0.50)	ND (<0.50)	4.2	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.61; TCFMe (Freon 11) = 11;
O122A2		6/26/03	3.2	0.90	ND (<0.50)	0.76	ND (<0.50)	ND (<0.50)	0.60	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 15;
O122A2		6/22/05	40	11	2.7	8.7	ND (<0.50)	ND (<0.50)	4.6	2.5	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 1.2; TCFMe (Freon 11) = 4.1;
O122A2		6/13/07	27	4.7	1.7	3.6	ND (<0.50)	ND (<0.50)	7.3	1.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 1.2; TCFMe (Freon 11) = 1.6;
O122A2		6/10/09	20	4.6	1.0	2.2	ND (<0.50)	ND (<0.50)	7.1	0.69	ND (<0.50)	ND (<0.50)	ND (<0.50)	TCFMe (Freon 11) = 1.6;
O122A2		6/14/11	21	4.5	2.4	3.3	ND (<0.50)	ND (<0.50)	8.4	0.83	ND (<0.50)	ND (<0.50)	ND (<0.50)	TCFMe (Freon 11) = 2.7;
O122A2		6/18/13	17	4.4	2.8	3.1	ND (<0.50)	ND (<0.50)	8.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	TCFMe (Freon 11) = 2.2;
O122A2		6/9/15	8.1	1.5	ND (<0.50)	0.95	ND (<0.50)	ND (<0.50)	9.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O122A2		6/5/17	5.1	1.0	0.82	1.1	ND (<0.50)	ND (<0.50)	6.9	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O122A2		6/5/19	3.6	0.72	ND (<0.50)	0.73	ND (<0.50)	ND (<0.50)	7.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O152B		6/9/09	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O152B		6/8/10	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O152B		6/14/11	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O152B	Dup	6/14/11	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O152B		6/12/12	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O152B		6/20/13	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O152B	Dup	6/20/13	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O152B		6/11/14	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O152B		6/6/19	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O162A2		8/16/11	39	2.1	1.3	3.4	ND (<0.50)	ND (<0.50)	33	1.4	ND (<0.50)	ND (<0.50)	ND (<0.50)	TCFMe (Freon 11) = 3.0;
O162A2		9/30/11	36	2.4	1.1	2.8	ND (<0.50)	ND (<0.50)	28	1.5	ND (<0.50)	ND (<0.50)	ND (<0.50)	TCFMe (Freon 11) = 2.6;
O162A2		6/13/12	46	2.2	1.4	3.4	ND (<0.50)	ND (<0.50)	49	1.8	ND (<0.50)	ND (<0.50)	ND (<0.50)	TCFMe (Freon 11) = 2.6;
O162A2	Dup	6/13/12	45	2.3	1.3	3.3	ND (<0.50)	ND (<0.50)	46	1.6	ND (<0.50)	ND (<0.50)	ND (<0.50)	TCFMe (Freon 11) = 2.8;
O162A2		6/18/13	42	2.0	1.2	2.9	ND (<0.50)	ND (<0.50)	45	1.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	TCFMe (Freon 11) = 2.2;
O162A2		6/11/14	39	1.9	0.71	2.5	ND (<0.50)	ND (<0.50)	42	1.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	TCFMe (Freon 11) = 1.8;
O162A2		6/5/18	23	0.67	0.73	2.3	ND (<0.50)	ND (<0.50)	19	0.66	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O162A2		6/6/19	16	ND (<0.50)	0.67	0.75	ND (<0.50)	ND (<0.50)	7.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O162A2	Dup	6/6/19	16	ND (<0.50)	0.64	0.75	ND (<0.50)	ND (<0.50)	7.7	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
O162A2		6/3/20	22	ND (<0.50)	0.56	1.7	ND (<0.50)	ND (<0.50)	19	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	Freon 11 = 0.56

Appendix B
Selected Compounds from Historical Records
COE Study Area and Perimeter Area, Palo Alto, California

Location	Type	Date	TCE	1,1,1-TCA	1,1-DCA	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	PCE	Freon 113	1,2-DCB	1,2-DCA	VC	Other Constituents
OB4-1		12/28/92	430	1,300	76	ND (<50)	940	ND (<50)	ND (<50)	890	ND (<50)	ND (<50)	ND (<50)	
OB4-2		12/28/92	150	4,400	400	ND (<120)	3,400	ND (<120)	ND (<120)	1,100	ND (<120)	ND (<120)	ND (<120)	TCFMe (Freon 11) = 55;
OB4-2	Dup	12/28/92	150	5,300	400	ND (<120)	4,200	ND (<120)	ND (<120)	1,100	ND (<120)	ND (<120)	ND (<120)	TCFMe (Freon 11) = 55;
OB5-1		3/23/93	1,100	71	ND (<5.0)	ND (<25)	110	ND (<5.0)	10	120	ND (<5.0)	ND (<5.0)	ND (<5.0)	
OB5-2		6/27/07	19	3.9	4.6	14	6.5	ND (<0.50)	1.8	4.8	3.0	ND (<0.50)	ND (<0.50)	
OB5-2		6/11/08	19	4.5	4.3	23	7.2	ND (<0.50)	2.2	4.6	3.0	ND (<0.50)	0.53	
OB5-2		6/9/09	15	3.7	4.6	25	6.2	ND (<0.50)	1.4	2.9	2.8	ND (<0.50)	0.52	
OB5-3		3/23/93	61	180	130	ND (<25)	1,200	ND (<5.0)	ND (<5.0)	21	ND (<5.0)	ND (<5.0)	ND (<5.0)	Acetone = 4,100; Ethylbenzene = 10; Toluene = 20; Xylenes = 38;
OB5-3		6/27/07	11	1.7	3.1	6.1	69	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
OB5-3		6/11/08	2.6	2.2	2.1	4.1	14	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
OB5-3		6/9/09	0.99	ND (<0.50)	1.0	1.2	9.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
OB5-4		3/23/93	3.6	24	14	-	0.50	ND (<0.50)	ND (<0.50)	ND (<0.50)	-	ND (<0.50)	ND (<0.50)	CHLFM = 5.5; TCFMe (Freon 11) = 12; Toluene = 0.7; Xylenes = 0.9;
OB5-4		6/27/07	6.7	2.5	2.7	6.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	TCFMe (Freon 11) = 3.1;
OB5-4		6/11/08	23	9.5	4.8	15	ND (<0.50)	ND (<0.50)	ND (<0.50)	2.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 1.4; TCFMe (Freon 11) = 10;
OB5-4		6/9/09	10	4.5	4.4	10	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 1.2; TCFMe (Freon 11) = 4.8;
OB5-5		6/27/07	980	68	20	38	45	ND (<5.0)	ND (<5.0)	130	ND (<5.0)	ND (<5.0)	ND (<5.0)	
OB5-5		6/11/08	1,300	88	31	46	59	ND (<10)	ND (<10)	210	ND (<10)	ND (<10)	ND (<10)	
OB5-5		6/10/09	1,000	78	30	37	45	ND (<10)	ND (<10)	170	ND (<10)	ND (<10)	ND (<10)	
OB6-1		12/28/92	17,000	ND (<50)	ND (<50)	ND (<250)	240	110	ND (<50)	ND (<50)	ND (<50)	ND (<50)	ND (<50)	
OB6-2		2/3/93	15,000	ND (<250)	ND (<250)	ND (<250)	70	ND (<50)	ND (<50)	ND (<250)	ND (<250)	ND (<50)	ND (<250)	
OB7-1		12/28/92	1,000	240	18	ND (<10)	170	ND (<10)	8.0	170	ND (<10)	ND (<10)	ND (<10)	
OB7-2		12/28/92	1,200	440	17	ND (<25)	190	ND (<5.0)	ND (<5.0)	380	ND (<5.0)	ND (<5.0)	ND (<5.0)	
OB7-3		1/8/91	240	120	15	10	-	-	2.0	110	0.50	3.0	3.0	1,1,2,2-TCA = 3; 1,1,2-TCA = 2; 1,2-DCPA = 2; 1,3-DCB = 0.5; 1,4-DCB = 0.5; 2-CVE = 4; BDCMe = 4; Benzene = 0.5; BRFM = 5; BRMA = 5; CHLBZ = 0.5; CHLEA (EC) = 5; CHLFM = 2; CHLMA = 5; cis-1,3-DCP = 3; CT = 3; DBCMe = 4; EDB = 10; Ethylbenzene = 0.5; MC = 50; m-Xylene = 0.5; o-Xylene = 0.5; TCFMe (Freon 11) = 5; Toluene = 0.5; trans-1,3-DCP = 3; Xylenes = 0.5;
OB7-3		2/5/91	230	96	13	20	-	-	0.20	100	1.0	0.30	0.30	1,1,2,2-TCA = 0.30; 1,1,2-TCA = 0.2; 1,2-DCPA = 0.2; 1,3-DCB = 1; 1,4-DCB = 1; 2-CVE = 0.40; Acetone = 30; BDCMe = 0.40; Benzene = 0.5; BRFM = 0.5; BRMA = 0.5; CHLBZ = 0.40; CHLEA (EC) = 0.5; CHLFM = 0.2; CHLMA = 0.5; cis-1,3-DCP = 0.30; CT = 0.30; DBCMe = 0.40; EDB = 1; Ethylbenzene = 0.5; MC = 5; m-Xylene = 0.5; o-Xylene = 0.5; TCFMe (Freon 11) = 0.5; Toluene = 0.5; trans-1,3-DCP = 0.30; Xylenes = 0.5;
OB8-1		12/28/92	650	78	18	ND (<12)	34	ND (<12)	ND (<12)	18	ND (<12)	ND (<12)	ND (<12)	
OB8-2		12/28/92	2,100	1,000	78	ND (<25)	620	ND (<5.0)	ND (<5.0)	440	ND (<5.0)	ND (<5.0)	ND (<5.0)	
OB9-2		12/29/92	170	1,800	150	-	1,600	9.0	ND (<5.0)	76	ND (<5.0)	ND (<5.0)	ND (<5.0)	
OB10-1		12/28/92	1,600	910	74	ND (<50)	700	ND (<50)	ND (<50)	140	ND (<50)	ND (<50)	ND (<50)	
OB10-2		12/28/92	2,000	790	56	ND (<25)	530	ND (<5.0)	ND (<5.0)	380	ND (<5.0)	ND (<5.0)	ND (<5.0)	
OB11-1		12/29/92	220	18	5.4	ND (<2.5)	3.3	ND (<0.50)	150	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
OB11-1		9/27/93	140	16	4.9	ND (<2.5)	3.5	ND (<0.50)	60	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.79;
OB11-1		12/9/97	55	6.9	1.5	4.3	7.2	ND (<1.0)	6.3	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	CBMA = 100;
OB11-1		6/2/98	130	9.8	ND (<5.0)	5.5	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	CBMA = 114;
OB11-1		12/8/98	105	7.1	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	CBMA = 107;
OB11-1		6/8/99	147	12	ND (<5.0)	6.0	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
OB11-1		12/14/99	32	6.2	1.5	2.5	11	ND (<0.835)	3.8	ND (<0.835)	ND (<0.835)	ND (<0.835)	ND (<0.835)	
OB11-1		6/8/00	1.4	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	BDCMe = 0.64; CHLFM = 16;
OB11-1		6/5/19	27	0.50	ND (<0.50)	1.4	1.3	ND (<0.50)	5.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
OB11-2		12/29/92	ND (<12,000)	-	ND (<12,000)	ND (<12,000)	ND (<12,000)	ND (<12,000)	530,000	ND (<12,000)	ND (<12,000)	ND (<12,000)	ND (<12,000)	
OB11-2		12/29/92	ND (<500)	22,000	ND (<500)	ND (<2500)	ND (<500)	ND (<500)	56,000	ND (<500)	ND (<500)	ND (<500)	ND (<500)	
OB11-2	Dup	12/29/92	ND (<2,500)	170,000	ND (<2,500)	-	ND (<2,500)	ND (<2,500)	-	ND (<2,500)	ND (<2,500)	ND (<2,500)	ND (<2,500)	
OB11-2		2/2/93	200	12,000	ND (<50)	ND (<1,000)	ND (<50)	ND (<50)	36,000	ND (<50)	-	ND (<50)	ND (<100)	Acetone = 2,400;
OB11-2		2/2/93	190	13,000	ND (<120)	ND (<1,200)	ND (<1,200)	ND (<120)	39,000	ND (<1,200)	-	ND (<120)	ND (<250)	
OB11-2		2/2/93	ND (<500)	22,000	ND (<500)	ND (<2,500)	ND (<500)	ND (<500)	56,000	ND (<500)	ND (<500)	ND (<500)	ND (<500)	
OB11-2	Dup	2/2/93	-	-	14	5.9	0.70	5.9	-	ND (<5.0)	-	ND (<5.0)	ND (<10)	1,1,2-TCA = 14;
OB11-2		12/4/97	350	1,400	ND (<250)	ND (<250)	ND (<250)	ND (<250)	11,000	ND (<250)	ND (<250)	ND (<250)	ND (<250)	CBMA = 91;
OB11-2		12/9/98	275	1,670	ND (<250)	ND (<250)	ND (<250)	ND (<250)	7,000	ND (<250)	ND (<250)	ND (<250)	ND (<250)	CBMA = 99.7;
OB11-2		10/22/07	ND (<1,000)	8,100	ND (<1,000)	ND (<1,000)	ND (<1,000)	ND (<1,000)	120,000	ND (<1,000)	ND (<1,000)	ND (<1,000)	ND (<1,000)	
OB11-2		5/1/08	ND (<50)	7,500	ND (<50)	84	ND (<50)	ND (<50)	ND (<50)	ND (<50)	ND (<50)	ND (<50)	ND (<50)	CT = 320;
OB11-2		11/5/08	ND (<20)	640	ND (<20)	ND (<20)	ND (<20)	ND (<20)	1,400	ND (<20)	ND (<20)	ND (<20)	ND (<20)	CT = 26;
OB11-2		4/30/09	7.6	87	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	46	ND (<1.0)	ND (<1.0)	7.1	ND (<1.0)	CT = 5.0;
OB11-2		10/22/09	41	57	ND (<1.0)	4.5	ND (<1.0)	ND (<1.0)	190	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	CT = 1.0;
OB11-2		6/8/10	61	60	ND (<5.0)	5.6	ND (<5.0)	ND (<5.0)	360	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
OB11-2		11/4/10	66	34	ND (<5.0)	ND (<5.0)	7.9	ND (<5.0)	180	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
OB11-2		6/14/11	69	39	ND (<5.0)	ND (<5.0)	26	ND (<5.0)	270	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
OB11-2		6/12/12	74	110	ND (<5.0)	6.7	38	ND (<5.0)	630	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
OB11-2		4/4/13	68	100	1.1	8.9	23	ND (<0.50)	670	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	1,1,1,2-TCA = 2.6; CHLFM = 1.6; CT = 0.75;
OB11-2		6/17/13	6.0	110	5.1	7.5	590	ND (<5.0)	390	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	Carbon = 120
OB11-2		8/23/13	ND (<5.0)	68	13	ND (<5.0)	54	7.8	320	ND (<5.0)	ND (<5.0)	ND (<5.0)	95	
OB11-2		11/22/13	2.3	28	12	1.9	7.3	4.9	150	ND (<1.0)	ND (<1.0)	ND (<1.0)	12	
OB11-2		5/22/14	3.5	99	8.6	7.0	69	2.0	1,100	ND (<1.0)	ND (<1.0)	ND (<1.0)	52	1,1,1,2-TCA = 1.8;
OB11-2		6/11/14	6.0	18	4.5	0.75	52	1.2	53	ND (<0.50)	ND (<0.50)	ND (<0.50)	20	
OB11-2		2/23/15	ND (<5.0)	9.6	ND (<5.0)	ND (<5.0)	6.4	ND (<5.0)	130	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
OB11-2		6/9/15	19	140	3.1	2.8	720	ND (<2.5)	18	ND (<2.5)	ND (<2.5)	ND (<2.5)	6.2	
OB11-2		8/10/15	5.2	120	4.2	1.2	200	1.1	780	ND (<1.0)	ND (<1.0)	ND (<1.0)	13	1,1,1,2-TCA = 1.9;
OB11-2		6/6/16	1.4	23	28	1.4	160	1.5	15	ND (<1.0)	ND (<1.0)	ND (<1.0)	73	CHLEA (EC) = 9.2;
OB11-2		6/6/17	ND (<5.0)	15	ND (<5.0)	ND (<5.0)	53	ND (<5.0)	59	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	TOC (mg/L) = 6.8
OB11-2	Dup	6/6/17	ND (<5.0)	16	ND (<5.0)	ND (<5.0)	60	ND (<5.0)	60	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	TOC (mg/L) = 7.4
OB11-2		6/4/18	6.9	160	2.9	ND (<0.50)	13	ND (<0.50)	4,200	ND (<0.50)	ND (<0.50)	ND (<0.50)	2.9	CHLEA (EC) = 1.1; CT = 1.3
OB11-2		6/4/19	ND (<50)	360	ND (<50)	ND (<50)	51	ND (<50)	6,900	ND (<50)	ND (<50)	ND (<50)	ND (<50)	
OB11-2		6/2/20	ND (<500)	12,000	ND (<500)	ND (<500)	3,800	ND (<500)	89,000	ND (<2,000)	ND (<500)	ND (<500)	ND (<500)	
OB11-3		12/29/92	300	120	ND (<100)	ND (<100)	ND (<100)	ND (<100)	13,000	ND (<500)	ND (<500)	ND (<100)	ND (<100)	
OB11-3		9/28/93	170	47	ND (<50)	ND (<50)	22	ND (<50)	4,600	ND (<50)	ND (<50)	ND (<50)	ND (<50)	
OB11-3		12/4/97	51	4.3	1.4	-	2.3	ND (<1.0)	68	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	CBMA = 97;
OB11-3		12/8/98	126	ND (<25)	ND (<25)	-	ND (<25)	ND (<25)	648	ND (<25)	ND (<25)	ND (<25)	ND (<25)	CBMA = 106;
OB11-3		10/16/12	29	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.77	ND (<0.50)	57	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
OB11-3	Dup	10/16/12	30	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.85	ND (<0.50)	89	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
OB11-3		6/5/19	0.65	ND (<0.50)	ND (<0.50)	ND (<0.50)	11	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	4.7	
OB11-4		12/29/92	380	47	4.2	ND (<5.0)	6	ND (<5.0)	140	3.0	ND (<5.0)	ND (<5.0)	ND (<5.0)	
OB11-4		9/28/93	300	78	5.1	ND (<5.0)	6.8	ND (<5.0)	280	ND (<1.0)	ND (<1.0)	ND (<5.0)	ND (<1.0)	CHLBZ = 10;
OB11-4		12/3/97	3.1	0.81	ND (<0.50)	ND (<0.50)	0.72	ND (<0.50)	0.86	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 93;
OB11-4		12/9/98	5.56	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.63	ND (<0.50)	3.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 96;
OB11-4	Dup	12/9/98	5.81	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.63	ND (<0.50)	3.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 98;
OB11-4		10/16/12	120	16	5.8	11	31	ND (<0.50)	32	2.6	ND (<0.50)	ND (<0.50)	ND (<0.50)	
OB11-4		6/5/19	80	16	ND (<2.5)	9.6	16	ND (<2.5)	110	2.5	ND (<2.5)	ND (<2.5)	ND (<2.5)	
OB11-4	Dup	6/5/19	98	19	ND (<2.5)	10	16	ND (<2.5)	150	3.0	ND (<2.5)	ND (<2.5)	ND (<2.5)	
OB11-5		2/1/93	320	49	ND (<5.0)	ND (<25)	5.0	ND (<5.0)	1,300	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
OB11-5		9/28/93	200	34	5.1	ND (<25)	6.6	ND (<5.0)	1,100	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
OB11-5		12/9/97	74	15	4.8	-	73	ND (<2.5)	53	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	CBMA = 101;
OB11-5		12/8/98	179	28	5.1	-	196	ND (<5.0)	67	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	CBMA = 113;
OB11-5		10/16/12	94	10	4.8	9.3	17	ND (<0.50)	290	1.4	ND (<0.50)	ND (<0.50)	ND (<0.50)	
OB11-5		6/5/19	ND (<0.50)	ND (<0.50)	0.53	ND (<0.50)	21	0.85	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	14	
OB11-6		2/3/93	3.9	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	Toluene = 0.5;
OB11-6		9/27/93	1.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	2.4	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
OB11-6	Dup	9/27/93	1.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	2.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
OB11-6		3/3/94	1.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	6.6	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
OB11-6		6/8/94	1.4	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	6.9	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
OB11-6		9/8/94	1.6	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	7.9	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
OB11-6		12/6/94	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	6.2	ND (<5.0)	-	ND (<5.0)	ND (<10)	
OB11-6	Dup	12/6/94	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	6.5	ND (<5.0)	-	ND (<5.0)	ND (<10)	
OB11-6		3/7/95	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.73	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
OB11-6		6/5/95	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.95	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
OB11-6		9/5/95	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	3.9	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
OB11-6		12/5/95	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
OB11-6		3/5/96	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
OB11-6	Dup	3/5/96	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
OB11-6		6/5/96	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	1.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 116;
OB11-6		9/11/96	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 108;
OB11-6		12/10/96	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
OB11-6		3/4/97	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.53	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 103;
OB11-6		6/3/97	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	1.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 93;
OB11-6	Dup	6/3/97	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.96	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 93; MC = 1.2;
OB11-6		9/9/97	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.61	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 107;
OB11-6		12/5/97	0.87	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.58	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 90;
OB11-6		6/2/98	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 118;
OB11-6		12/11/98	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 105;
OB11-6		6/8/99	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
OB11-6		12/10/99	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<1.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
OB11-6		6/8/00	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
OB12-1		4/30/96	5.9	2.0	ND (<0.50)	-	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 6.6;
OB12-1		9/12/96	9.0	2.3	0.70	-	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 106; CHLFM = 0.65;
OB12-1		6/4/97	8.2	2.1	ND (<0.50)	-	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 104;
OB12-2		4/30/96	2.8	1.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	BDCMe = 1.1; CHLFM = 22;
OB12-2		9/12/96	4.4	1.6	ND (<0.50)	-	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 107; CHLFM = 6.8;
OB12-2		6/4/97	7.4	ND (<0.50)	0.58	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 104;
OB13-1		9/12/96	230	45	2.6	-	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	BDCMe = 4.9; CBMA = 107; CHLFM = 31; MC = 2.5;

Appendix B
Selected Compounds from Historical Records
COE Study Area and Perimeter Area, Palo Alto, California

Location	Type	Date	TCE	1,1,1-TCA	1,1-DCA	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	PCE	Freon 113	1,2-DCB	1,2-DCA	VC	Other Constituents
OB13-1		6/5/97	64	17	1.7	-	1.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	BDCMe = 2.1; CBMA = 95; CHLFM = 14;
OB14-1		9/12/96	62	11	8.2	-	3.8	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	BDCMe = 2.1; CBMA = 105; CHLFM = 8.4;
OB14-1		6/6/97	9.0	1.2	0.84	-	1.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 98; CHLFM = 0.75;
OB15-1		10/16/95	26	3.8	ND (<2.5)	2.9	49	2.9	140	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	CHLFM = 12;
OB15-1		12/6/95	23	ND (<5.0)	ND (<5.0)	ND (<5.0)	49	ND (<5.0)	150	ND (<5.0)	-	ND (<5.0)	ND (<10)	CARBD = 6.5; CHLFM = 6;
OB15-1		6/6/97	11	12	1.0	-	6.3	0.63	300	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 85;
OB16-1		10/16/95	130	3.8	2.6	ND (<2.5)	7.4	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	BDCMe = 7; CHLFM = 20;
OB16-1		12/6/95	100	ND (<5.0)	ND (<5.0)	ND (<5.0)	5.4	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	CHLFM = 14;
OB16-1		6/6/97	9.6	ND (<0.50)	0.57	ND (<0.50)	1.7	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 103; CHLFM = 1.3;
OBS		11/22/14	11,000	ND (<100)	ND (<100)	ND (<100)	ND (<100)	ND (<100)	ND (<100)	ND (<400)	ND (<100)	ND (<100)	ND (<100)	
OBS		12/20/14	19,000	ND (<130)	ND (<130)	ND (<130)	ND (<130)	ND (<130)	ND (<130)	ND (<500)	ND (<130)	ND (<130)	ND (<130)	
OBS		3/22/15	5,800	ND (<63)	ND (<63)	ND (<63)	5,200	ND (<63)	ND (<63)	ND (<250)	ND (<63)	ND (<63)	ND (<63)	
OBS		5/31/15	7,000	ND (<63)	ND (<63)	ND (<63)	17,000	ND (<63)	ND (<63)	ND (<250)	ND (<63)	ND (<63)	160	
OBS		12/20/15	7,000	ND (<50)	ND (<50)	ND (<50)	4,700	ND (<50)	ND (<50)	ND (<200)	ND (<50)	ND (<50)	150	
OBS		4/3/16	4,600	ND (<50)	ND (<50)	ND (<50)	3,100	ND (<50)	ND (<50)	ND (<200)	ND (<50)	ND (<50)	150	
OEU manhole		11/21/90	0.80	1.1	0.40	0.30	-	-	0.20	1.0	1.0	0.30	0.30	1,1,2,2-TCA = 0.30; 1,1,2-TCA = 0.2; 1,2-DCPA = 0.2; 1,3-DCB = 1; 1,4-DCB = 1; 2-CVE = 0.40; BDCMe = 0.40; Benzene = 0.5; BRFM = 0.5; BRMA = 0.5; CHLBZ = 0.40; CHLEA (EC) = 0.5; CHLFM = 9.2; CHLMA = 0.5; cis-1,3-DCP = 0.30; CT = 0.30; DBCMe = 0.40; EDB = 1; Ethylbenzene = 0.5; MC = 5; m-Xylene = 0.5; o-Xylene = 0.5; TCFMe (Freon 11) = 0.5; Toluene = 0.6; trans-1,3-DCP = 0.30; Xylenes = 0.5;
OEU manhole		11/13/91	720	78	13	ND (<10)	91	ND (<10)	230	ND (<10)	ND (<10)	ND (<10)	ND (<10)	
OEU manhole		1/29/92	640	70	12	ND (<25)	-	ND (<5.0)	190	ND (<5.0)	-	ND (<5.0)	ND (<10)	
OEU manhole		10/14/92	170	19	3.2	ND (<5.0)	24	ND (<5.0)	43	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	CHLFM = 1.2;
OEU manhole		12/28/92	73	8.4	ND (<5.0)	ND (<5.0)	12	ND (<5.0)	23	ND (<5.0)	-	ND (<5.0)	ND (<10)	
OEU manhole		1/25/94	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
OEU manhole		9/8/94	530	31	ND (<25)	ND (<25)	33	ND (<25)	160	-	-	ND (<25)	ND (<50)	
OEU manhole		9/14/95	180	38	6.8	-	-	ND (<5.0)	55	-	-	ND (<5.0)	ND (<10)	
OEU manhole		9/12/96	400	30	5.7	12	-	ND (<5.0)	220	ND (<5.0)	-	ND (<5.0)	ND (<10)	
OEU manhole		9/12/97	190	20	ND (<5.0)	33	33	ND (<5.0)	110	ND (<5.0)	-	ND (<5.0)	ND (<10)	
OEU manhole		6/3/98	180	ND (<25)	ND (<25)	ND (<25)	26	ND (<25)	98	ND (<25)	-	ND (<25)	ND (<50)	
OEU manhole		6/9/99	181	11	ND (<5.0)	ND (<5.0)	22	ND (<5.0)	102	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
OEU manhole		6/20/00	120	8.8	2.3	3.4	17	0.92	92	1.9	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.93;
OEU manhole		9/24/01	170	9.7	ND (<5.0)	ND (<5.0)	21	ND (<5.0)	130	ND (<20)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
OEU manhole		6/30/03	68	4.2	1.1	1.8	8.2	0.62	34	1.7	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.68;
OEU manhole		9/13/05	89	4.6	1.2	2.4	12	0.74	52	1.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.55;
OEU manhole		9/13/07	79	3.3	1.0	1.6	9.1	0.55	36	0.97	ND (<0.50)	ND (<0.50)	ND (<0.50)	
OEU manhole		6/15/09	69	3.0	1.2	1.7	8.0	ND (<0.50)	23	0.65	ND (<0.50)	ND (<0.50)	ND (<0.50)	
OEU manhole	Dup	6/15/09	68	3.2	1.2	1.6	7.6	ND (<0.50)	17	0.65	ND (<0.50)	ND (<0.50)	ND (<0.50)	
OEU manhole		7/11/11	61	2.2	1.6	1.8	7.8	0.52	23	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
OEU manhole		6/19/13	100	5.9	2.8	3.3	14	0.78	40	0.72	ND (<0.50)	ND (<0.50)	ND (<0.50)	
OEU manhole		6/10/15	69	4.1	1.8	2.4	9.5	0.51	19	0.61	ND (<0.50)	ND (<0.50)	ND (<0.50)	
OEU manhole		6/6/17	24	1.6	0.59	0.98	3.9	ND (<0.50)	6.8	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
P1-1		6/10/94	870	14	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
P1-1		9/6/94	880	18	2.3	-	16	ND (<0.50)	ND (<0.50)	2.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 1.5;
P1-1		12/5/94	920	13	ND (<5.0)	ND (<5.0)	13	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
P1-1		3/2/95	720	14	ND (<5.0)	ND (<5.0)	7.2	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
P1-3		6/11/09	5,100	13	0.51	1.1	1.9	ND (<0.50)	6.7	ND (<0.50)	ND (<0.50)	0.99	ND (<0.50)	1,1,2-TCA = 2.4; CHLFM = 2.9; CT = 0.60;
P1-7		6/11/09	13,000	4.4	11	8.7	49	0.68	0.67	0.85	ND (<0.50)	0.54	ND (<0.50)	1,1,2-TCA = 1.0; CHLFM = 1.2;
P1-A1		1/27/07	5.4	ND (<0.50)	1.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
P1-A1		6/28/07	5.3	ND (<0.50)	1.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
P1-A1		6/10/08	5.4	ND (<0.50)	1.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
P1-A1		12/11/08	3.7	ND (<0.50)	1.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
P1-A1		6/9/09	4.0	0.54	1.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
P1-A1		6/8/10	7.7	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
P1-A1		6/14/11	6.5	ND (<0.50)	0.85	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
P1-A1	Dup	6/14/11	6.2	ND (<0.50)	0.91	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
P1-A1		6/12/12	5.7	ND (<0.50)	0.87	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
P1-A1		6/19/13	4.2	ND (<0.50)	1.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
P1-A1		6/11/14	3.9	ND (<0.50)	0.86	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
P1-A1		6/8/15	1.8	ND (<0.50)	1.4	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
P1-A1		6/6/16	1.9	ND (<0.50)	1.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
P1-A1	Dup	6/6/16	1.9	ND (<0.50)	1.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
P1-A2		1/27/07	17	95	17	59	86	0.76	ND (<0.50)	8.6	ND (<0.50)	ND (<0.50)	ND (<0.50)	TCFMe (Freon 11) = 1.4;
P1-A2		6/28/07	19	110	17	62	90	1.0	ND (<1.0)	12	ND (<1.0)	ND (<1.0)	ND (<1.0)	
P1-A2		6/10/08	39	110	18	59	94	1.1	ND (<1.0)	15	ND (<1.0)	ND (<1.0)	ND (<1.0)	
P1-A2	Dup	6/10/08	37	99	17	53	84	ND (<1.0)	ND (<1.0)	13	ND (<1.0)	ND (<1.0)	ND (<1.0)	
P1-A2		12/11/08	47	130	19	62	92	1.1	ND (<1.0)	20	ND (<1.0)	ND (<1.0)	ND (<1.0)	
P1-A2		6/9/09	23	46	6.3	19	31	ND (<0.50)	ND (<0.50)	3.5	ND (<0.50)	ND (<0.50)	ND (<0.50)	
P1-A2		6/8/10	41	53	9.9	26	41	ND (<0.50)	ND (<0.50)	6.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	
P1-A2		6/14/11	72	84	16	37	65	1.1	ND (<0.50)	13	ND (<0.50)	ND (<0.50)	ND (<0.50)	
P1-A2		6/12/12	7.0	1.7	ND (<0.50)	1.4	3.6	ND (<0.50)	ND (<0.50)	1.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	
P1-A2		6/19/13	12	2.3	0.54	1.8	3.9	ND (<0.50)	ND (<0.50)	1.7	ND (<0.50)	ND (<0.50)	ND (<0.50)	
P1-A2		6/11/14	17	4.2	1.6	2.3	5.9	ND (<0.50)	ND (<0.50)	2.7	ND (<0.50)	ND (<0.50)	ND (<0.50)	
P1-A2		6/8/15	150	41	13	23	43	0.64	ND (<0.50)	50	ND (<0.50)	ND (<0.50)	ND (<0.50)	
P1-A2		6/6/16	150	44	14	24	43	0.69	ND (<0.50)	63	ND (<0.50)	ND (<0.50)	ND (<0.50)	
P2-A2		1/27/07	8.0	65	14	38	56	ND (<0.50)	ND (<0.50)	4.4	ND (<0.50)	ND (<0.50)	ND (<0.50)	
P2-A2		6/28/07	6.3	83	14	42	66	0.63	ND (<0.50)	5.6	ND (<0.50)	ND (<0.50)	ND (<0.50)	
P2-A2		6/27/08	110	110	15	48	76	ND (<2.0)	ND (<2.0)	47	ND (<2.0)	ND (<2.0)	ND (<2.0)	
P2-A2		12/11/08	20	85	15	47	70	0.92	ND (<0.50)	15	ND (<0.50)	ND (<0.50)	ND (<0.50)	TCFMe (Freon 11) = 1.0;
P2-A2	Dup	12/11/08	20	81	14	40	62	ND (<1.0)	ND (<1.0)	13	ND (<1.0)	ND (<1.0)	ND (<1.0)	
P2-A2		6/9/09	9.1	46	9.8	17	29	ND (<0.50)	ND (<0.50)	1.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	
P2-A2		6/8/10	6.2	14	5.8	7.1	16	ND (<0.50)	ND (<0.50)	0.53	ND (<0.50)	ND (<0.50)	ND (<0.50)	
P2-A2		6/14/11	5.7	6.8	4.6	3.4	11	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
P2-A2		6/12/12	3.8	3.1	4.3	1.8	7.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
P2-A2		6/19/13	3.0	1.3	3.4	1.1	3.7	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
P2-A2		6/11/14	4.1	2.2	5.4	2.1	4.8	ND (<0.50)	ND (<0.50)	0.77	ND (<0.50)	ND (<0.50)	ND (<0.50)	
P2-A2		6/8/15	130	41	14	23	42	0.66	ND (<0.50)	48	ND (<0.50)	ND (<0.50)	ND (<0.50)	
P2-A2		6/6/16	130	41	14	23	41	0.61	ND (<0.50)	58	ND (<0.50)	ND (<0.50)	ND (<0.50)	
P3		3/5/12	55	ND (<0.50)	3.0	3.6	35	2.7	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
P3-1		6/15/11	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
P3-A2		2/24/07	99	130	18	55	91	ND (<1.0)	ND (<1.0)	30	ND (<1.0)	ND (<1.0)	ND (<1.0)	
P3-A2		6/28/07	110	120	14	50	86	1.0	ND (<1.0)	36	ND (<1.0)	ND (<1.0)	ND (<1.0)	
P3-A2	Dup	6/28/07	110	130	13	47	78	1.0	ND (<1.0)	35	ND (<1.0)	ND (<1.0)	ND (<1.0)	
P3-A2		6/27/08	220	92	12	35	66	ND (<2.0)	ND (<2.0)	94	ND (<2.0)	ND (<2.0)	ND (<2.0)	
P3-A2		12/11/08	130	110	16	50	82	1.1	ND (<1.0)	54	ND (<1.0)	ND (<1.0)	ND (<1.0)	
P3-A2		6/9/09	100	87	14	37	57	ND (<1.0)	ND (<1.0)	18	ND (<1.0)	ND (<1.0)	ND (<1.0)	
P3-A2		6/8/10	150	88	14	42	59	ND (<1.0)	ND (<1.0)	19	ND (<1.0)	ND (<1.0)	ND (<1.0)	
P3-A2		6/14/11	120	75	14	29	54	1.0	ND (<1.0)	15	ND (<1.0)	ND (<1.0)	ND (<1.0)	
P3-A2		6/12/12	200	55	14	26	50	ND (<1.0)	ND (<1.0)	72	ND (<1.0)	ND (<1.0)	ND (<1.0)	
P3-A2		6/19/13	160	35	11	18	33	ND (<1.0)	ND (<1.0)	50	ND (<1.0)	ND (<1.0)	ND (<1.0)	
P3-A2		6/11/14	150	29	11	16	32	ND (<1.0)	ND (<1.0)	62	ND (<1.0)	ND (<1.0)	ND (<1.0)	
P3-A2		6/8/15	160	29	13	19	38	0.55	ND (<0.50)	63	ND (<0.50)	ND (<0.50)	ND (<0.50)	
P3-A2		6/6/16	160	28	13	18	35	ND (<0.50)	ND (<0.50)	75	ND (<0.50)	ND (<0.50)	ND (<0.50)	
P3-A2		6/5/17	150	22	14	18	34	0.57	ND (<0.50)	72	ND (<0.50)	ND (<0.50)	ND (<0.50)	
P3-A2		6/4/18	150	23	13	21	35	0.56	ND (<0.50)	98	ND (<0.50)	ND (<0.50)	ND (<0.50)	BDCMe = 1.6
P3-A2		6/5/19	160	18	10	19	25	ND (<5.0)	ND (<5.0)	89	ND (<5.0)	ND (<5.0)	ND (<5.0)	
P3-A2		6/3/20	120	17	11	14	27	0.68	ND (<0.50)	67	ND (<0.50)	ND (<0.50)	ND (<0.50)	
P4		3/5/12	160	ND (<0.50)	ND (<0.50)	0.65	16	1.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
P4-A2		2/24/07	310	130	13	37	82	ND (<2.0)	ND (<2.0)	72	ND (<2.0)	ND (<2.0)	ND (<2.0)	
P4-A2		6/28/07	280	110	12	37	69	ND (<2.0)	ND (<2.0)	91	ND (<2.0)	ND (<2.0)	ND (<2.0)	
P4-A2		6/10/08	160	120	16	52	86	ND (<2.0)	ND (<2.0)	49	ND (<2.0)	ND (<2.0)	ND (<2.0)	
P4-A2		12/11/08	240	89	13	39	67	ND (<2.0)	ND (<2.0)	99	ND (<2.0)	ND (<2.0)	ND (<2.0)	
P4-A2		6/9/09	180	21	6.7	7.8	26	ND (<2.5)	ND (<2.5)	6.5	ND (<2.5)	ND (<2.5)	ND (<2.5)	
P4-A2		6/8/10	160	14	5.5	6.3	24	ND (<2.5)	ND (<2.5)	5.6	ND (<2.5)	ND (<2.5)	ND (<2.5)	
P4-A2		6/14/11	48	5.0	2.4	3.0	9.4	ND (<0.50)	ND (<0.50)	5.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	
P4-A2		6/12/12	200	42	15	21	44	0.57	ND (<0.50)	87	ND (<0.50)	ND (<0.50)	ND (<0.50)	
P4-A2		6/19/13	39	4.1	2.4	2.4	7.5	ND (<0.50)	ND (<0.50)	6.7	ND (<0.50)	ND (<0.50)	ND (<0.50)	
P4-A2		6/11/14	29	1.3	1.1	1.0	4.2	ND (<0.50)	ND (<0.50)	1.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	
P4-A2		6/8/15	130	22	12	15	31	ND (<2.5)	ND (<2.5)	59	ND (<2.5)	ND (<2.5)	ND (<2.5)	
P4-A2		6/6/16	140	20	11	15	29	ND (<2.5)	ND (<2.5)	64	ND (<2.5)	ND (<2.5)	ND (<2.5)	
P5-A2		2/24/07	360	130	10	38	69	ND (<5.0)	ND (<5.0)	110	ND (<5.0)	ND (<5.0)	ND (<5.0)	
P5-A2		6/28/07	300	100	10	32	61	ND (<2.0)	ND (<2.0)	91	ND (<2.0)	ND (<2.0)	ND (<2.0)	
P5-A2		6/10/08	270	86	12	31	61	ND (<2.0)	ND (<2.0)	85	ND (<2.0)	ND (<2.0)	ND (<2.0)	
P5-A2		12/12/08	290	82	12	31	55	ND (<2.0)	ND (<2.0)	88	ND (<2.0)	ND (<2.0)	ND (<2.0)	
P5-A2		6/9/09	230	77	13	32	50	ND (<2.5)	ND (<2.5)	80	ND (<2.5)	ND (<2.5)	ND (<2.5)	BDCMe = 2.6;
P5-A2		6/8/10	210	55	12	26	36	ND (<2.5)	ND (<2.5)	32	ND (<2.5)	ND (<2.5)	ND (<2.5)	
P5-A2		6/14/11	150	42	11	17	31	ND (<2.5)	ND (<2.5)	16	ND (<2.5)	ND (<2.5)	ND (<2.5)	
P5-A2		6/12/12	150	26	11	14	32	ND (<2.5)	ND (<2.5)	56	ND (<2.5)	ND (<2.5)	ND (<2.5)	
P5-A2		6/19/13	130	22	10	14	25	ND (<2.5)	ND (<2.5)	53	ND (<2.5)	ND (<2.5)	ND (<2.5)	
P5-A2		6/11/14	110	19	10	12	26	0.56	ND (<0.50)	46	ND (<0.50)	ND (<0.50)	ND (<0.50)	
P5-A2		6/8/15	140	22	12	16	31	ND (<2.5)	ND (<2.5)	64	ND (<2.5)	ND (<2.5)	ND (<2.5)	
P5-A2		6/6/16	120	19	11	14	28	ND (<2.5)	ND (<2.5)	61	ND (<2.5)	ND (<2.5)	ND (<2.5)	
P5-A2		6/5/17	120	16	13	14	28	ND (<0.50)	ND (<0.50)	56	ND (<0.50)	ND (<0.50)	ND (<0.50)	
P5-A2		6/4/18	150	17	12	18	29	ND (<0.50)	ND (<0.50)	73	ND (<0.50)	ND (<0.50)	ND (<0.50)	
P5-A2		6/5/19	110	13	8.8	15	20	ND (<0.50)	ND (<0.50)	62	ND (<0.50)	ND (<0.50)	ND (<0.50)	
P5-A2		6/3/20	96	9.1	9.1	13	22	ND (<0.50)	ND (<0.50)	42	ND (<0.50)	ND (<0.50)	ND (<0.50)	
P17		2/2/14	8600	ND (<63)	ND (<63)	ND (<63)	240	ND (<63)	ND (<63)	ND (<63)	ND (<63)	ND (<63)	ND (<63)	
P17		11/22/14	8,900	ND (<63)	ND (<63)	ND (<63)	410	ND (<63)	ND (<63)	ND (<250)	ND (<63)	ND (<63)	ND (<63)	
P17		12/20/14	19,000	ND (<130)	ND (<130)	ND (<130)	1,100	ND (<130)	ND (<130)	ND (<500)	ND (<130)	ND (<130)	ND (<130)	
P17		3/22/15	10,000	ND (<63)	ND (<63)	ND (<63)	130	ND (<63)	ND (<63)	ND (<250)	ND (<63)	ND (<63)	ND (<63)	
P17		5/31/15	4,100	ND (<63)	ND (<63)	ND (<63)	8,300	ND (<63)	ND (<63)	ND (<250)	ND (<63)	ND (<63)	870	

Appendix B
Selected Compounds from Historical Records
COE Study Area and Perimeter Area, Palo Alto, California

Location	Type	Date	TCE	1,1,1-TCA	1,1-DCA	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	PCE	Freon 113	1,2-DCB	1,2-DCA	VC	Other Constituents
P17		12/20/15	1,600	ND (<63)	ND (<63)	ND (<63)	17,000	ND (<130)	ND (<63)	ND (<250)	ND (<63)	ND (<63)	680	
P17		4/3/16	3,700	ND (<25)	ND (<25)	ND (<25)	1,700	ND (<25)	ND (<25)	ND (<100)	ND (<25)	ND (<25)	160	
P17		6/8/16	3,700	ND (<50)	ND (<50)	ND (<50)	350	ND (<50)	ND (<50)	ND (<50)	ND (<50)	ND (<50)	ND (<50)	
P17		4/9/17	9,400	ND (<63)	ND (<63)	ND (<63)	7,600	ND (<63)	ND (<63)	ND (<63)	ND (<63)	ND (<63)	2200	
P17		2/17/18	17,000	ND (<250)	ND (<250)	ND (<250)	4,500	ND (<250)	ND (<250)	ND (<250)	ND (<250)	ND (<250)	2700	
P17		6/6/18	19,000	2.5	8.0	25	2,200	12	0.57	0.53	ND (<0.50)	1.2	540	EC = 5.0; chloroform = 1.5; 1,1,2-TCA = 1.7;
P17		8/12/18	12,000	ND (<63)	ND (<63)	ND (<63)	840	ND (<63)	ND (<63)	ND (<63)	ND (<63)	ND (<63)	260	
P17		12/2/18	11,000	ND (<100)	ND (<100)	24 J	1,200	ND (<100)	ND (<100)	ND (<100)	ND (<100)	ND (<100)	580	
P17		6/5/19	3,000	ND (<50)	ND (<50)	ND (<50)	110	ND (<50)	ND (<50)	ND (<50)	ND (<50)	ND (<50)	ND (<50)	
P17		5/4/20	16,000	2.1 J	7.1	26	1,900	14	0.90	0.70 J	ND (<5.0)	1.9 J	ND (<5.0)	EC = 39; Benzene = 0.20 J; 1,1,2-TCA = 1.7 J
P21		2/2/14												
P21		11/22/14	130,000	ND (<1,300)	ND (<1,300)	ND (<1,300)	ND (<1,300)	ND (<1,300)	ND (<1,300)	ND (<5,000)	ND (<1,300)	ND (<1,300)	ND (<1,300)	
P21		12/20/14	240,000,000	460,000	ND (<50,000)	ND (<50,000)	270,000	ND (<50,000)	59,000	ND (<200,000)	ND (<50,000)	ND (<50,000)	ND (<50,000)	
P21		3/22/15	410,000	ND (<2,500)	ND (<2,500)	ND (<2,500)	35,000	ND (<2,500)	ND (<2,500)	ND (<10,000)	ND (<2,500)	ND (<2,500)	ND (<2,500)	
P21		5/31/15	470,000	ND (<2,500)	ND (<2,500)	ND (<2,500)	34,000	ND (<2,500)	ND (<2,500)	ND (<10,000)	ND (<2,500)	ND (<2,500)	ND (<2,500)	
P21		11/15/15	660,000	ND (<5,000)	ND (<5,000)	ND (<5,000)	57,000	ND (<5,000)	ND (<5,000)	ND (<20,000)	ND (<5,000)	ND (<5,000)	ND (<5,000)	
P21		12/20/15	580,000	ND (<5,000)	ND (<5,000)	ND (<5,000)	65,000	ND (<5,000)	ND (<5,000)	ND (<20,000)	ND (<5,000)	ND (<5,000)	ND (<5,000)	
P21		4/3/16	540,000	ND (<5,000)	ND (<5,000)	ND (<5,000)	95,000	ND (<5,000)	ND (<5,000)	ND (<20,000)	ND (<5,000)	ND (<5,000)	5,200	
P21		6/8/16	690,000	1200	150	390	130000	140	170	ND	ND	ND	6,800	1,1,2-TCA = 170; 1,2,4-TMB = 68
P21		4/9/17	150,000	ND (<1,000)	ND (<1,000)	ND (<1,000)	74,000	ND (<1,000)	ND (<1,000)	ND (<1,000)	ND (<1,000)	ND (<1,000)	3,600	
P21		2/18/18	550,000	22000	ND (<5,000)	5800	160,000	ND (<5,000)	ND (<5,000)	ND (<5,000)	ND (<5,000)	ND (<5,000)	400,000	
P21		6/5/18	420,000	1100	75	340	190,000	170	94	ND	ND	110	18,000	1,1,2-TCA = 130
P21		8/12/18	610,000	ND (<3,100)	ND (<3,100)	ND (<3,100)	230,000	ND (<3,100)	ND (<3,100)	ND (<3,100)	ND (<3,100)	ND (<3,100)	21,000	
P21		12/2/18	360,000	ND (<25,000)	ND (<25,000)	ND (<25,000)	140,000	ND (<25,000)	ND (<25,000)	ND (<25,000)	ND (<25,000)	ND (<25,000)	10,000 J	
P21		6/5/19	430,000	ND (<5,000)	ND (<5,000)	ND (<5,000)	200,000	ND (<5,000)	ND (<5,000)	ND (<5,000)	ND (<5,000)	ND (<5,000)	23,000	
P21		5/4/20	500,000	1,600	100	610	220,000	3,400	72	ND (<25)	ND (<25)	75	31,000	Acetone = 400J; MC = 39; 2-Butanone = 210J; Benzene = 23J; 1,2-DCP = 2.1J; Toluene = 14J; 1,1,2-TCA = 110; Ethylbenzene = 11J; m,p-Xylene = 140; o-Xylene = 15J; Xylene (tot) = 160; 1,1,2,2-PCA = 29; 1,2,3-TCP = 25J; PB = 1.8J; 1,3,5-TMB = 3.4J; 1,2,4-TMB = 12J
PZ-2		1/7/91	0.80	0.30	0.40	0.30	-	-	0.20	1.0	0.50	0.30	0.30	1,1,2,2-TCA = 0.30; 1,1,2-TCA = 0.2; 1,2-DCPA = 0.2; 1,3-DCB = 0.5; 1,4-DCB = 0.5; 2-CVE = 0.40; Acetone = 30; BDCMe = 0.40; Benzene = 0.5; BRFM = 0.5; BRMA = 0.5; CHLBZ = 0.40; CHLEA (EC) = 0.5; CHLFM = 0.2; CHLMA = 0.5; cis-1,3-DCP = 0.30; CT = 0.30; DBCMe = 0.40; EDB = 1; Ethylbenzene = 0.5; MC = 5; m-Xylene = 0.5; o-Xylene = 0.5; TCFMe (Freon 11) = 0.5; Toluene = 0.5; trans-1,3-DCP = 0.30; Xylenes = 0.5;
PZ-2		2/5/91	0.50	0.30	0.40	0.50	-	-	0.20	1.0	0.50	0.30	0.30	1,1,2,2-TCA = 0.30; 1,1,2-TCA = 0.2; 1,2-DCPA = 0.2; 1,3-DCB = 1; 1,4-DCB = 1; 2-CVE = 0.40; Acetone = 30; BDCMe = 0.40; Benzene = 0.5; BRFM = 0.5; BRMA = 0.5; CHLBZ = 0.40; CHLEA (EC) = 0.5; CHLFM = 0.30; CHLMA = 0.5; cis-1,3-DCP = 0.30; CT = 0.30; DBCMe = 0.40; EDB = 1; Ethylbenzene = 0.5; MC = 5; m-Xylene = 0.5; o-Xylene = 0.5; TCFMe (Freon 11) = 0.5; Toluene = 0.5; trans-1,3-DCP = 0.30; Xylenes = 0.5;
PZ-2		7/25/91	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
RW-1		6/7/95	180	11	4.6	-	23	4.9	4,200	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLBZ = 2.9; CHLFM = 1.3;
RW-1		9/8/95	230	ND (<50)	ND (<50)	ND (<50)	ND (<50)	ND (<50)	3,500	ND (<50)	ND (<50)	ND (<50)	ND (<50)	MC = 130;
RW-1		12/11/95	97	6.0	ND (<5.0)	-	57	ND (<5.0)	1,100	ND (<5.0)	-	ND (<5.0)	ND (<10)	
RW-1		3/7/96	260	26	ND (<10)	15	110	21	1,300	ND (<10)	ND (<10)	ND (<10)	ND (<10)	
RW-1		6/11/96	160	26	ND (<25)	ND (<25)	70	ND (<25)	1,100	ND (<25)	ND (<25)	ND (<25)	ND (<25)	CBMA = 100;
RW-1		9/13/96	210	34	ND (<12)	26	51	ND (<12)	8,800	ND (<12)	ND (<12)	ND (<12)	ND (<12)	CBMA = 89;
RW-1		12/13/96	120	ND (<25)	ND (<25)	ND (<25)	ND (<25)	ND (<25)	680	ND (<25)	-	ND (<25)	ND (<50)	
RW-1		3/7/97	100	16	ND (<5.0)	9.4	12	ND (<5.0)	400	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	CBMA = 100;
RW-1		6/9/97	110	21	ND (<5.0)	13	12	ND (<5.0)	390	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	CBMA = 90;
RW-1		9/12/97	110	29	ND (<5.0)	9.5	ND (<5.0)	ND (<5.0)	530	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	CBMA = 98;
RW-1		12/5/97	73	16	ND (<5.0)	8.0	ND (<5.0)	ND (<5.0)	420	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	CBMA = 77;
RW-1		6/2/98	87	13	ND (<12)	ND (<12)	ND (<12)	ND (<12)	410	ND (<12)	ND (<12)	ND (<12)	ND (<12)	CBMA = 105;
RW-1	Dup	6/2/98	74	ND (<12)	ND (<12)	ND (<12)	ND (<12)	ND (<12)	440	ND (<12)	ND (<12)	ND (<12)	ND (<12)	CBMA = 104;
RW-1		12/9/98	117	30	ND (<10)	ND (<10)	ND (<10)	ND (<10)	293	ND (<10)	ND (<10)	ND (<10)	ND (<10)	CBMA = 89;
RW-1		6/10/99	92	10	ND (<10)	ND (<10)	ND (<10)	ND (<10)	173	ND (<10)	ND (<10)	ND (<10)	ND (<10)	
RW-1		12/15/99	100	9.9	ND (<5.0)	5.6	ND (<5.0)	ND (<5.0)	400	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	MC = 6.9;
RW-1		6/9/00	87	6.7	ND (<2.5)	2.6	ND (<2.5)	ND (<2.5)	220	ND (<10)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
RW-1		12/12/00	80	8.1	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	280	ND (<20)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
RW-1	Dup	12/12/00	70	7.2	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	220	ND (<20)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
RW-1		6/21/01	52	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	120	ND (<20)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
RW-1		6/26/03	96	8.8	1.9	8.9	8.9	ND (<0.50)	75	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.95;
RW-1		6/20/05	73	2.7	ND (<1.0)	2.5	2.8	ND (<1.0)	130	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	
RW-1		6/18/07	47	ND (<1.0)	ND (<1.0)	1.2	4.2	ND (<1.0)	130	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	
RW-1		6/10/09	27	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	150	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	
RW-1		6/15/11	30	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	170	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	
RW-1		10/16/12	58	0.85	ND (<0.50)	0.78	3.3	ND (<0.50)	1,300	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
RW-1		4/4/13	27	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.89	ND (<0.50)	250	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
RW-1		6/19/13	ND (<1.0)	ND (<1.0)	ND (<1.0)	1.3	810	ND (<1.0)	6.1	ND (<1.0)	ND (<1.0)	ND (<1.0)	3.5	
RW-1	Dup	6/19/13	0.95	ND (<0.50)	ND (<0.50)	1.1	820	ND (<0.50)	7.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	2.9	
RW-1		8/23/13	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	12	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	150	
RW-1		11/22/13	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.76	7.9	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	1.2	
RW-1		5/22/14	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	29	2.7	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	28	
RW-1		2/23/15	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	3.1	4.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	4.1	MEK = 69; Toluene = 5.1;
RW-1		6/9/15	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	4.2	8.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	2.5	
RW-1		8/10/15	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	4.4	6.6	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	5.4	Toluene = 7.3;
RW-1		6/7/16	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	2.4	3.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLEA (EC) = 1.8;
RW-1		6/6/17	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	1.1	5.5	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	1.1	CHLEA (EC) = 6.9
RW-1		6/6/18	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	1.3	2.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLEA (EC) = 2.4
RW-1		6/5/19	1.4	ND (<0.50)	ND (<0.50)	ND (<0.50)	13	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	4.7	
RW-1		6/2/20	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	1.1	1.1	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
RW-2		6/7/95	160	6.6	4.5	-	16	7.6	2,800	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLBZ = 4.5; CHLFM = 1.3;
RW-2		9/8/95	250	ND (<50)	ND (<50)	ND (<50)	ND (<50)	ND (<50)	2,900	ND (<50)	ND (<50)	ND (<50)	ND (<50)	MC = 120;
RW-2		12/11/95	150	11	ND (<5.0)	-	48	ND (<5.0)	1,800	ND (<5.0)	-	ND (<5.0)	ND (<10)	
RW-2		4/4/96	250	33	ND (<25)	ND (<25)	110	ND (<25)	1,400	ND (<25)	ND (<25)	ND (<25)	ND (<25)	
RW-2		6/11/96	160	ND (<25)	ND (<25)	ND (<25)	70	ND (<25)	980	ND (<25)	ND (<25)	ND (<25)	ND (<25)	CBMA = 97;
RW-2		9/13/96	180	43	ND (<25)	ND (<25)	32	ND (<25)	1,100	ND (<25)	ND (<25)	ND (<25)	ND (<25)	CBMA = 106; MC = 26;
RW-2		12/13/96	120	ND (<50)	ND (<50)	ND (<50)	ND (<50)	ND (<50)	1,400	ND (<50)	-	ND (<50)	ND (<100)	
RW-2		3/7/97	140	38	ND (<25)	ND (<25)	ND (<25)	ND (<25)	1,600	ND (<25)	ND (<25)	ND (<25)	ND (<25)	CBMA = 104;
RW-2	Dup	3/7/97	130	35	ND (<25)	ND (<25)	ND (<25)	ND (<25)	1,400	ND (<25)	ND (<25)	ND (<25)	ND (<25)	CBMA = 103;
RW-2		6/9/97	130	28	ND (<25)	ND (<25)	ND (<25)	ND (<25)	700	ND (<25)	ND (<25)	ND (<25)	ND (<25)	CBMA = 92;
RW-2		9/12/97	190	40	ND (<12)	ND (<12)	13	ND (<12)	1,100	ND (<12)	ND (<12)	ND (<12)	ND (<12)	CBMA = 102;
RW-2		12/5/97	87	16	ND (<12)	ND (<12)	ND (<12)	ND (<12)	560	ND (<12)	ND (<12)	ND (<12)	ND (<12)	CBMA = 86;
RW-2		6/2/98	54	ND (<25)	ND (<25)	ND (<25)	ND (<25)	ND (<25)	500	ND (<25)	ND (<25)	ND (<25)	ND (<25)	CBMA = 108;
RW-2		12/9/98	122	53	ND (<25)	ND (<25)	ND (<25)	ND (<25)	429	ND (<25)	ND (<25)	ND (<25)	ND (<25)	CBMA = 91;
RW-2		6/10/99	84	21	ND (<12.5)	ND (<12.5)	ND (<12.5)	ND (<12.5)	339	ND (<12.5)	ND (<12.5)	ND (<12.5)	ND (<12.5)	
RW-2		12/15/99	120	27	ND (<5.0)	8.5	ND (<5.0)	ND (<5.0)	450	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	MC = 7.8;
RW-2		6/9/00	78	25	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	320	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
RW-2		12/12/00	92	30	ND (<10)	ND (<10)	ND (<10)	ND (<10)	23	ND (<40)	ND (<10)	ND (<10)	ND (<10)	
RW-2		6/21/01	85	46	ND (<10)	ND (<10)	ND (<10)	ND (<10)	280	ND (<40)	ND (<10)	ND (<10)	ND (<10)	
RW-2		6/26/03	79	6.9	1.5	7.4	7.3	ND (<0.50)	50	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.76;
RW-2		6/20/05	55	2.5	0.55	2.0	3.9	ND (<0.50)	78	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
RW-2		6/18/07	49	ND (<2.0)	ND (<2.0)	ND (<2.0)	5.0	ND (<2.0)	140	ND (<2.0)	ND (<2.0)	ND (<2.0)	ND (<2.0)	
RW-2		6/10/09	23	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	76	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	
RW-2		6/14/11	27	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	130	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	
RW-2		4/4/13	21	ND (<0.50)	ND (<0.50)	ND (<0.50)	1.1	ND (<0.50)	120	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
RW-2		6/18/13	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	280	ND (<1.0)	4.4	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	
RW-2		11/22/13	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	87	3.6	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	82	
RW-2		5/22/14	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	1.7	1.6	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	7.5	Toluene = 0.76;
RW-2		2/23/15	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	5.7	1.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	2.1	MEK = 97; Toluene = 12;
RW-2		6/9/15	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	5.4	2.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	1.4	CHLEA (EC) = 3.0;
RW-2		8/10/15	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	5.3	1.5	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	2.2	CHLEA (EC) = 2.7; Toluene = 1.5;
RW-2		6/7/16	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	1.6	0.94	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	1.3	CHLEA (EC) = 1.2;
RW-2		6/6/17	0.58	ND (<0.50)	ND (<0.50)	ND (<0.50)	28	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	19	
RW-2		6/6/18	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	3.3	0.51	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	5.0	
RW-2		6/5/19	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	56	0.67	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	13	
RW-2		6/4/20	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	1.1	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
RW-3		1/23/96	150	12	ND (<5.0)	ND (<5.0)	96	ND (<5.0)	61	ND (<5.0)	-	ND (<5.0)	ND (<10)	
RW-3	Dup	1/23/96	150	13	ND (<5.0)	ND (<5.0)	98	ND (<5.0)	63	ND (<5.0)	-	ND (<5.0)	ND (<10)	
RW-3		3/7/96	180	19	3.9	14	79	3.0	52	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
RW-3	Dup	3/7/96	170	20	4.3	14	78	3.1	49	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
RW-3		6/11/96	150	ND (<10)	ND (<10)	ND (<10)	37	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	CBMA = 100;
RW-3		9/12/96	170	20	4.7	14	51	ND (<2.5)	6.6	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	CBMA = 101; MC = 4.7;
RW-3		12/13/96	130	10	ND (<5.0)	9.7	14	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
RW-3		3/7/97	43	4.5	1.5	2.6	8	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 100; CHLFM = 0.84;
RW-3		6/6/97	72	8.8	2.8	5.6	14	0.98	1.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 102; CHLFM = 1.5;
RW-3	Dup	6/6/97	66	8.6	2.7	5.4	13	0.83	0.66	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 99; CHLFM = 1.4;
RW-3		9/12/97	100	12	2.7	7.2	7.6	ND (<1.0)	5.9	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	CBMA = 100; CHLFM = 1.5;
RW-3		12/5/97	55	6.2	1.5	4.2	3.6	ND (<1.0)	10	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	CBMA = 88; CHLFM = 1;
RW-4		1/23/96	150	6.1	ND (<5.0)	ND (<50)	28	ND (<5.0)	750	ND (<5.0)	-	ND (<5.0)	ND (<10)	
RW-4		3/7/96	260	18	ND (<10)	ND (<10)	120	ND (<10)	890	ND (<10)	ND (<10)	ND (<10)	ND (<10)	
RW-4		6/7/96	190	ND (<12)	ND (<12)	ND (<12)	92	ND (<12)	600	ND (<12)	ND (<12)	ND (<12)	ND (<12)	CBMA = 115;
RW-4		9/13/96	180	17	ND (<10)	11	96	ND (<10)	480	ND (<10)	ND (<10)	ND (<10)	ND (<10)	CBMA = 108;
RW-4		12/13/96	26	ND (<5.0)	ND (<5.0)	ND (<5.0)	6.2	ND (<5.0)	67	ND (<5.0)	-	ND (<5.0)	ND (<10)	CHLFM = 6.4;
RW-4		3/7/97	30	2.4	1.2	1.9	2.9	ND (<0.50)	27	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 103; CHLFM = 0.93;
RW-4		6/9/97	92	8.4	2.7	7.4	3	ND (<0.50)	44	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 96; CHLFM = 0.95;
RW-4		9/11/97	96	10	ND (<2.5)	5.7	4.4	ND (<2.5)	100	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	CBMA = 102; MC = 5;
RW-4		12/5/97	36	2.7	ND (<1.0)	1.9	1.3	ND (<1.0)	39	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	CBMA = 82; CHLFM = 1.6;
RW-4		6/2/98	67	3.3	ND (<2.5)	3.9	ND (<2.5)	ND (<2.5)	30	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	CBMA = 113;
RW-4		12/9/98	124	9.72	ND (<2.5)	6.7	11	ND (<2.5)	60	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	CBMA = 110;
RW-4		6/8/99	118	8.3	ND (<5.0)	5.2	ND (<5.0)	ND (<5.0)	17	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
RW-4		12/10/99	73	4.1	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	7.9	ND (<5.0)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
RW-4		6/8/00	84	2.8	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	8.1	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
RW-4		12/5/00	54	1.9	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	4.4	ND (<4.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	
RW-4		6/19/01	43	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	6.9	ND (<10)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
RW-4		6/25/03	37	0.90	ND (<0.50)	1.0	0.93	ND (<0.50)	5.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.65;
RW-4		6/20/05	24	0.55	ND (<0.50)	ND (<0.50)	1.4	ND (<0.50)	6.9	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
RW-4		6/18/07	43	0.77	ND (<0.50)	0.98	2.8	ND (<0.50)	15	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
RW-4		6/10/09	38	ND (<0.50)	ND (<0.50)	0.65	0.70	ND (<0.50)	10	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
RW-4		6/15/11	44	0.53	ND (<0.50)	0.90	0.65	ND (<0.50)	12	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
RW-4		6/18/13	38	ND (<0.50)	ND (<0.50)	0.61	ND (<0.50)	ND (<0.50)	10	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
RW-4		6/9/15	42	ND (<0.50)	ND (<0.50)	0.82	0.68	ND (<0.50)	14	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
RW-4		6/7/17	26	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.90	ND (<0.50)	11	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	

Appendix B
Selected Compounds from Historical Records
COE Study Area and Perimeter Area, Palo Alto, California

Location	Type	Date	TCE	1,1,1-TCA	1,1-DCA	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	PCE	Freon 113	1,2-DCB	1,2-DCA	VC	Other Constituents
RW-4		6/6/18	22	ND (<0.50)	ND (<0.50)	0.60	0.84	ND (<0.50)	8.5	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
RW-4	Dup	6/6/18	21	ND (<0.50)	ND (<0.50)	0.56	0.84	ND (<0.50)	8.5	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
RW-4		6/5/19	24	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.62	ND (<0.50)	9.5	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
RW-4		6/4/20	24	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.82	ND (<0.50)	6.6	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
RW-5		1/23/96	150	59	ND (<5.0)	-	8.5	ND (<5.0)	-	ND (<5.0)	-	ND (<5.0)	ND (<10)	
RW-5		1/23/96	-	-	ND (<50)	ND (<50)	ND (<50)	ND (<50)	1,200	ND (<50)	-	ND (<50)	ND (<100)	
RW-5		3/7/96	250	140	ND (<25)	ND (<25)	ND (<25)	ND (<25)	1,900	ND (<25)	ND (<25)	ND (<25)	ND (<25)	
RW-5		6/10/96	210	160	ND (<50)	ND (<50)	ND (<50)	ND (<50)	1,400	ND (<50)	ND (<50)	ND (<50)	ND (<50)	CBMA = 113;
RW-5		9/13/96	250	440	ND (<25)	140	ND (<25)	ND (<25)	2,600	ND (<25)	ND (<25)	ND (<25)	ND (<25)	CBMA = 102;
RW-5	Dup	9/13/96	210	410	ND (<25)	130	ND (<25)	ND (<25)	2,500	ND (<25)	ND (<25)	ND (<25)	ND (<25)	CBMA = 97; MC = 44;
RW-5		12/13/96	130	170	ND (<25)	42	ND (<25)	ND (<25)	1,100	ND (<25)	-	ND (<25)	ND (<50)	
RW-5		3/7/97	270	90	ND (<10)	30	ND (<10)	ND (<10)	610	ND (<10)	ND (<10)	ND (<10)	ND (<10)	CBMA = 97;
RW-5		6/9/97	180	120	ND (<10)	27	ND (<10)	ND (<10)	600	ND (<10)	ND (<10)	ND (<10)	ND (<10)	CBMA = 98;
RW-5		9/12/97	210	360	ND (<25)	36	ND (<25)	ND (<25)	1,700	ND (<25)	ND (<25)	ND (<25)	ND (<25)	CBMA = 98;
RW-5		12/5/97	97	170	ND (<25)	29	ND (<25)	ND (<25)	950	ND (<25)	ND (<25)	ND (<25)	ND (<25)	CBMA = 85;
RW-5		6/2/98	75	160	ND (<50)	ND (<50)	ND (<50)	ND (<50)	1,200	ND (<50)	ND (<50)	ND (<50)	ND (<50)	CBMA = 108;
RW-5		12/9/98	178	152	ND (<50)	ND (<50)	ND (<50)	ND (<50)	1,050	ND (<50)	ND (<50)	ND (<50)	ND (<50)	CBMA = 98.3;
RW-5		6/10/99	ND (<250)	ND (<250)	ND (<250)	ND (<250)	ND (<250)	ND (<250)	3,230	ND (<250)	ND (<250)	ND (<250)	ND (<250)	
RW-5		12/10/99	139	184	ND (<50)	ND (<50)	ND (<50)	ND (<50)	2,310	ND (<100)	ND (<50)	ND (<50)	ND (<50)	
RW-5		6/8/00	120	85	ND (<50)	ND (<50)	ND (<50)	ND (<50)	1,500	ND (<200)	ND (<50)	ND (<50)	ND (<50)	
RW-5		12/8/00	ND (<25)	70	ND (<25)	ND (<25)	ND (<25)	ND (<25)	140	1,400	ND (<25)	ND (<25)	ND (<25)	
RW-5		6/22/01	80	33	ND (<25)	ND (<25)	ND (<25)	ND (<25)	900	ND (<100)	ND (<25)	ND (<25)	ND (<25)	
RW-5		7/2/03	55	28	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	230	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
RW-5		6/23/04	55	36	ND (<2.0)	2.5	ND (<2.0)	ND (<2.0)	230	ND (<2.0)	ND (<2.0)	ND (<2.0)	ND (<2.0)	
RW-5		6/22/05	44	97	ND (<10)	17	ND (<10)	ND (<10)	840	ND (<10)	ND (<10)	ND (<10)	ND (<10)	
RW-5		6/18/07	51	87	ND (<5.0)	8.7	ND (<5.0)	ND (<5.0)	550	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
RW-5		5/1/08	ND (<1.0)	120	ND (<1.0)	2.5	ND (<1.0)	ND (<1.0)	7.3	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	BRFM = 2.3; CT = 3.6;
RW-5		11/5/08	40	42	ND (<0.50)	0.57	ND (<0.50)	ND (<0.50)	16	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CT = 1.4;
RW-5		4/30/09	35	11	ND (<0.50)	0.56	ND (<0.50)	ND (<0.50)	12	ND (<0.50)	ND (<0.50)	0.88	ND (<0.50)	
RW-5		10/22/09	33	6.1	ND (<0.50)	0.96	ND (<0.50)	ND (<0.50)	9.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
RW-5		6/8/10	29	600	ND (<5.0)	57	ND (<5.0)	ND (<5.0)	1,000	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	CT = 18;
RW-5		11/4/10	45	2.2	ND (<0.50)	1.0	ND (<0.50)	ND (<0.50)	9.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
RW-5		11/4/10	51	170	ND (<5.0)	17	ND (<5.0)	ND (<5.0)	580	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	CT = 5.6;
RW-5		3/28/11	33	2.2	ND (<0.50)	0.59	ND (<0.50)	ND (<0.50)	24	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
RW-5		3/28/11	31	3.5	ND (<0.50)	0.83	1.1	ND (<0.50)	21	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
RW-5		3/28/11	33	3.5	ND (<0.50)	0.91	1.1	ND (<0.50)	24	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
RW-5		3/28/11	33	95	0.57	5.0	1.6	ND (<0.50)	660	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 1.2; CT = 4.8;
RW-5		6/15/11	42	290	1.6	22	10	ND (<0.50)	560	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 4.2; CT = 7.4;
RW-5		6/12/12	54	190	ND (<2.5)	27	16	ND (<2.5)	3,900	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	CT = 3.5;
RW-5		4/4/13	31	1.7	ND (<0.50)	0.95	1.4	ND (<0.50)	31	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
RW-5		6/17/13	84	8.7	12	8.7	6,400	13	370	ND (<2.5)	ND (<2.5)	ND (<2.5)	5.6	
RW-5		8/23/13	ND (<0.50)	ND (<0.50)	4.1	ND (<0.50)	2.8	7.8	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	41	CHLEA (EC) = 3.8;
RW-5		11/22/13	ND (<0.50)	ND (<0.50)	4.2	ND (<0.50)	3.2	4.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	6.0	CHLEA (EC) = 1.7;
RW-5		5/22/14	ND (<0.50)	ND (<0.50)	2.3	ND (<0.50)	5.4	0.60	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	18	
RW-5		2/23/15	0.72	ND (<0.50)	0.52	ND (<0.50)	4.0	0.90	0.70	ND (<0.50)	ND (<0.50)	ND (<0.50)	2.6	CHLEA (EC) = 5.9; MEK = 77; Toluene = 2.0;
RW-5		6/9/15	0.74	ND (<0.50)	1.8	ND (<0.50)	2.2	1.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	3.1	CHLEA (EC) = 3.6;
RW-5		8/10/15	0.98	ND (<0.50)	1.7	ND (<0.50)	1.5	1.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	2.6	CHLEA (EC) = 3.0;
RW-5		6/6/16	1.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	1.2	ND (<0.50)	8.9	ND (<0.50)	ND (<0.50)	ND (<0.50)	3.2	CHLEA (EC) = 3.8;
RW-5		6/6/17	ND (<0.50)	ND (<0.50)	0.70	ND (<0.50)	0.98	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	3.0	CHLEA (EC) = 1.2
RW-5		6/4/18	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLEA (EC) = 1.4
RW-5		6/4/19	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	3.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	4.0	
RW-5		6/2/20	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	EC = 1.0;
RW-6		1/23/96	150	38	ND (<5.0)	-	8.4	ND (<5.0)	-	ND (<5.0)	-	ND (<5.0)	ND (<10)	
RW-6		1/23/96	-	-	ND (<50)	ND (<50)	ND (<50)	ND (<50)	1,200	ND (<50)	-	ND (<50)	ND (<100)	
RW-6		3/7/96	170	48	4.1	26	11	3.0	940	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
RW-6		6/10/96	240	130	ND (<50)	ND (<50)	ND (<50)	ND (<50)	1,600	ND (<50)	ND (<50)	ND (<50)	ND (<50)	CBMA = 114;
RW-6		9/13/96	220	130	ND (<25)	52	ND (<25)	ND (<25)	1,200	ND (<25)	ND (<25)	ND (<25)	ND (<25)	CBMA = 101;
RW-6		12/13/96	120	33	ND (<25)	ND (<25)	ND (<25)	ND (<25)	690	ND (<25)	-	ND (<25)	ND (<50)	
RW-6		3/7/97	150	25	ND (<5.0)	12	8.3	ND (<5.0)	360	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	CBMA = 96;
RW-6		6/9/97	110	25	ND (<5.0)	11	10	ND (<5.0)	210	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	CBMA = 94; MC = 13;
RW-6		9/12/97	170	34	ND (<5.0)	11	18	ND (<5.0)	190	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	CBMA = 100;
RW-6	Dup	9/12/97	190	40	ND (<5.0)	13	22	ND (<5.0)	240	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	CBMA = 105;
RW-6		12/5/97	83	15	ND (<2.5)	7.0	12	ND (<2.5)	92	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	CBMA = 90;
RW-6		6/2/98	110	13	ND (<5.0)	6.4	9.5	ND (<5.0)	78	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	CBMA = 106;
RW-6		12/9/98	133	23	ND (<5.0)	6.6	12	ND (<5.0)	97	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	CBMA = 92.3;
RW-6		6/10/99	90	12	ND (<5.0)	ND (<5.0)	12	ND (<5.0)	76	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
RW-6		12/15/99	130	14	ND (<2.5)	5.0	6.5	ND (<2.5)	110	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	MC = 8.2;
RW-6	Dup	12/15/99	130	15	ND (<2.5)	4.9	6.5	ND (<2.5)	110	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	MC = 27;
RW-6		6/9/00	20	3.1	ND (<0.50)	0.58	0.62	ND (<0.50)	22	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
RW-6		12/12/00	110	13	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	120	ND (<20)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
RW-6		6/21/01	64	14	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	190	ND (<20)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
RW-6		6/26/03	61	20	ND (<5.0)	5.6	ND (<5.0)	ND (<5.0)	330	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
RW-6		6/23/04	46	1.6	0.54	1.7	4.3	ND (<0.50)	8.9	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.81;
RW-6		6/20/05	39	9.9	ND (<2.0)	3.7	ND (<2.0)	ND (<2.0)	140	ND (<2.0)	ND (<2.0)	ND (<2.0)	ND (<2.0)	
RW-6		6/18/07	51	13	ND (<2.0)	5.6	ND (<2.0)	ND (<2.0)	220	ND (<2.0)	ND (<2.0)	ND (<2.0)	ND (<2.0)	
RW-6		6/10/09	41	21	ND (<2.5)	3.8	10	ND (<2.5)	140	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
RW-6		6/15/11	33	9.5	ND (<0.50)	2.3	2.2	ND (<0.50)	110	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
RW-6		4/4/13	31	5.3	ND (<0.50)	2.2	2.1	ND (<0.50)	98	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
RW-6		6/18/13	1.3	3.7	9.7	2.0	890	7.8	5.9	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	1,1,2-TCA = 0.59;
RW-6		11/22/13	1.4	3.4	18	0.71	49	22	0.82	ND (<0.50)	ND (<0.50)	ND (<0.50)	160	CHLEA (EC) = 1.4;
RW-6		5/22/14	4.5	2.9	14	1.7	85	4.8	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	160	CHLEA (EC) = 1.3;
RW-6		2/23/15	1.0	0.65	6.7	ND (<0.50)	4.7	3.8	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	9.8	CHLEA (EC) = 5.3;
RW-6		6/9/15	3.8	1.6	6.1	1.4	82	4.8	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	44	CHLEA (EC) = 7.9;
RW-6		8/10/15	2.3	1.4	5.6	1.4	110	3.6	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	37	CHLEA (EC) = 6.2;
RW-6		6/7/16	4.9	2.8	12	8.0	730	8.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	120	CHLEA (EC) = 4.3;
RW-6		6/6/17	2.7	ND (<0.50)	0.94	ND (<0.50)	36	0.82	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	7.9	CHLEA (EC) = 1.9
RW-6		6/6/18	ND (<0.50)	ND (<0.50)	0.63	ND (<0.50)	25	0.61	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	6.3	CHLEA (EC) = 3.2
RW-6		6/5/19	2.7	ND (<0.50)	ND (<0.50)	ND (<0.50)	25	0.50	0.76	ND (<0.50)	ND (<0.50)	ND (<0.50)	4.4	
RW-6		6/4/20	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	5.9	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	2.9	
SC-1		12/11/90	-	-	-	-	-	-	-	-	0.50	-	-	1,3-DCB = 0.5; 1,4-DCB = 0.5; Acetone = 30; Benzene = 0.5; CHLBZ = 0.5; Ethylbenzene = 0.5; m-Xylene = 0.5; o-Xylene = 0.5; Toluene = 0.5; Xylenes = 0.5;
SC-1		2/6/91	1,500	290	200	150	-	-	100	500	500	150	150	1,1,2,2-TCA = 150; 1,1,2-TCA = 100; 1,2-DCPA = 100; 1,3-DCB = 500; 1,4-DCB = 500; 2-CVE = 200; BDCMe = 200; BRFM = 250; BRMA = 250; CHLBZ = 200; CHLEA (EC) = 250; CHLFM = 100; CHLMA = 250; cis-1,3-DCP = 150; CT = 150; DBCMe = 200; EDB = 500; MC = 2,500; TCFMe (Freon 11) = 250; trans-1,3-DCP = 150;
SC-1		4/19/91	1,800	210	8.0	6.0	-	-	4.0	20	0.50	6.0	6.0	1,1,2,2-TCA = 6; 1,1,2-TCA = 4; 1,2-DCPA = 4; 1,3-DCB = 0.5; 1,4-DCB = 0.5; 2-CVE = 8; Acetone = 30; BDCMe = 8; Benzene = 0.5; BRFM = 10; BRMA = 10; CHLBZ = 0.5; CHLEA (EC) = 10; CHLFM = 4; CHLMA = 50; cis-1,3-DCP = 6; CT = 6; DBCMe = 8; EDB = 100; Ethylbenzene = 0.5; MC = 100; m-Xylene = 0.5; o-Xylene = 0.5; TCFMe (Freon 11) = 10; Toluene = 0.5; trans-1,3-DCP = 6; Xylenes = 0.5;
SC-1		4/19/91	1,700	260	60	ND (<25)	150	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	
SC-1		7/31/91	1,700	200	30	ND (<25)	70	ND (<25)	ND (<25)	ND (<25)	ND (<25)	ND (<25)	ND (<25)	
SC-1		11/6/91	1,600	210	97	ND (<25)	210	ND (<5.0)	ND (<5.0)	23	ND (<5.0)	ND (<5.0)	ND (<5.0)	
SC-1		12/5/91	1,400	150	33	ND (<50)	-	ND (<5.0)	ND (<5.0)	49	-	ND (<5.0)	ND (<10)	
SC-1		11/4/10	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
SH1		10/14/91	110	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	18	ND (<10)	ND (<10)	ND (<10)	
SH1		11/12/91	86	2.3	ND (<0.50)	ND (<0.50)	1.2	ND (<0.50)	2.8	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
SH1		12/13/91	110	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
SH1		3/6/92	77	1.9	ND (<0.50)	ND (<0.50)	0.90	ND (<0.50)	3.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
SH1		6/12/92	81	1.2	ND (<0.50)	ND (<0.50)	0.70	ND (<0.50)	2.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
SH1		9/16/92	90	2.2	ND (<0.50)	ND (<0.50)	0.70	ND (<0.50)	1.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
SH1		12/15/92	94	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
SH1		3/10/93	92	2.8	ND (<0.50)	ND (<0.50)	0.90	ND (<0.50)	1.8	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
SH1		6/9/93	90	1.8	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
SH1		9/13/93	130	1.5	ND (<0.50)	ND (<0.50)	0.50	ND (<0.50)	0.55	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
SH1		12/2/93	80	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
SH1		3/3/94	130	1.8	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.60	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
SH1		6/9/94	19	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
SH1		9/6/94	100	1.8	ND (<0.50)	ND (<0.50)	0.69	ND (<0.50)	0.51	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
SH1		12/5/94	110	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
SH1		3/3/95	95	1.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.71	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
SH1		6/6/95	90	1.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
SH1		11/9/95	69	1.6	ND (<0.50)	ND (<0.50)	0.77	ND (<0.50)	4.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
SH1		12/8/95	44	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
SH1		3/7/96	100	4.1	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
SH1		6/11/96	56	1.8	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	2.4	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	CBMA = 104;
SH1		9/12/96	55	1.7	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	5.3	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	CBMA = 101; MC = 1.5;
SH1		12/12/96	43	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	5.3	ND (<5.0)	-	ND (<5.0)	ND (<10)	
SH1		3/6/97	19	0.57	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	1.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 109;
SH1		6/5/97	33	1.1	0.54	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 103;
SH1		12/4/97	34	0.76	0.69	ND (<0.50)	ND (<0.50)	ND (<0.50)	1.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 88;
SH1		6/4/98	8.5	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 117;
SH1		12/10/98	29	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 111;
SH1		6/8/99	32	ND (<1.00)	ND (<1.00)	ND (<1.00)	ND (<1.00)	ND (<1.00)	2.1	ND (<1.00)	ND (<1.00)	ND (<1.00)	ND (<1.00)	
SH1		12/8/99	28	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	4.2	ND (<1.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
SH1		6/8/00	29	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	1.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
SH1		12/7/00	33	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
SH1		6/21/01	29	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.82	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
SH1		6/27/03	9.8	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	5.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
SH1		6/20/05	16	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
SH1		6/14/07	16	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
SH1		6/15/09	17	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
SH1		6/15/11	17	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
SH1		6/20/13	15	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
SH1		6/10/15	19	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
SH1		6/8/17	12	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	3.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
SH1		6/6/18	32	ND (<0.50)	2.9	1.9	2.4	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
SH1		6/7/19	31	ND (<0.50)	0.75	0.70	0.56	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
SH1		6/4/20	26	ND (<0.50)	0.84	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
SH2		6/15/11	2.6	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	24	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
T1A		3/23/05	78	ND (<0.50)	4.3	0.80	1.6	-	ND (<0.50)	ND (<1.0)	ND (<0.50)	-	-	

Appendix B
Selected Compounds from Historical Records
COE Study Area and Perimeter Area, Palo Alto, California

Location	Type	Date	TCE	1,1,1-TCA	1,1-DCA	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	PCE	Freon 113	1,2-DCB	1,2-DCA	VC	Other Constituents
T1A		4/29/05	68	ND (<0.50)	17	4.4	6.3	ND (<0.50)	3.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
T1A		6/28/05	8.2	0.58	17	4.9	6.6	ND (<0.50)	2.4	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
T1A		9/12/05	7.3	ND (<0.50)	17	4.6	6.7	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
T1A		1/11/06	440	ND (<5.0)	12	ND (<5.0)	13	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
T1A		6/28/06	29	ND (<0.50)	23	8.7	12	0.61	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
T1A		6/27/07	12	0.68	22	12	16	0.82	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
T1A		6/11/09	240	ND (<2.5)	23	14	29	3.3	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
T1A		6/9/10	260	ND (<2.5)	19	11	24	3.0	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
T1A		6/14/11	62	1.5	21	17	25	1.9	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
T1A		6/13/12	32	4.8	27	25	42	2.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
T1A		6/19/13	21	7.5	23	25	39	2.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
T1A		6/11/14	250	1.5	19	23	160	8.4	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
T1A	Dup	6/11/14	240	ND (<2.5)	17	17	150	6.3	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	1,2,4-TCB = 20;
T1A		6/10/15	1,000	ND (<0.50)	8.1	10	310	15	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
T1A		6/7/16	1,800	ND (<10)	ND (<10)	ND (<10)	370	15	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	
T1A		6/7/17	1,300	ND (<10)	ND (<10)	ND (<10)	320	13	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	
T1A		6/6/18	840	ND (<10)	11	15	280	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	
T1A	Dup	6/6/18	860	ND (<10)	13	18	300	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	
T1A		6/5/19	1,400	ND (<10)	ND (<10)	13	370	18	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	
T1A		6/4/20	1,300	ND (<10)	ND (<10)	ND (<10)	420	17	ND (<10)	ND (<40)	ND (<10)	ND (<10)	ND (<10)	
T2A		3/23/05	67	ND (<0.50)	ND (<0.50)	0.60	1.8	-	ND (<0.50)	ND (<1.0)	ND (<0.50)	-	-	
T2A		4/29/05	ND (<50)	ND (<50)	ND (<50)	ND (<50)	ND (<50)	ND (<50)	ND (<50)	ND (<50)	ND (<50)	ND (<50)	ND (<50)	
T2A		6/28/05	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	
TW-1		8/5/12	640	46	6.5	13	28	ND (<5.0)	110	270	120	ND (<5.0)	ND (<5.0)	1,2,4-TCB = 12;
TW-1		8/5/12	550	45	6.3	13	34	ND (<5.0)	97	260	120	ND (<5.0)	ND (<5.0)	1,2,4-TCB = 13;
TW-1		8/5/12	480	41	5.8	12	37	ND (<5.0)	94	240	110	ND (<5.0)	ND (<5.0)	1,2,4-TCB = 12;
TW-1		1/16/14	74	76	11	12	130	ND (<1.0)	42	95	100	ND (<1.0)	ND (<1.0)	1,2,3-TCB = 2.3; 1,2,4-TCB = 18; 1,4-DCB = 1.4;
TW-1		6/11/14	560	610	24	41	340	ND (<5.0)	65	880	170	ND (<5.0)	ND (<5.0)	1,2,4-TCB = 92;
TW-1		6/9/15	400	340	15	25	200	ND (<5.0)	74	770	130	ND (<5.0)	ND (<5.0)	1,2,4-TCB = 82;
TW-1		6/7/16	300	130	6.9	17	66	ND (<5.0)	50	340	150	ND (<5.0)	ND (<5.0)	1,2,4-TCB = 79;
TW-1	Dup	6/7/16	290	120	6.7	18	64	ND (<5.0)	49	340	140	ND (<5.0)	ND (<5.0)	1,2,4-TCB = 76;
TW-1		10/26/16	290	250	16	28	150	ND (<0.50)	40	410	150	ND (<0.50)	0.76	1,2,3-TCB = 17; 1,2,4-TCB = 90; 1,4-DCB = 2.3; Naphthalene = 1.5; Xylenes = 5.6
TW-1		1/19/17	470	450	17	50	180	ND (<5.0)	36	550	150	ND (<5.0)	ND (<5.0)	1,2,3-TCB = 24; 1,2,4-TCB = 110
TW-1		4/19/17	600	610	24	45	290	ND (<5.0)	33	590	140	ND (<5.0)	ND (<5.0)	1,2,3-TCB = 20; 1,2,4-TCB = 94; Xylenes = 15
TW-1		6/7/17	530	660	22	100	310	ND (<5.0)	43	690	150	ND (<5.0)	ND (<5.0)	1,2,4-TCB = 110
TW-1		10/25/17	540	680	30	40	410	ND (<5.0)	52	760	150	ND (<5.0)	ND (<5.0)	1,2,3-TCB = 21; 1,2,4-TCB = 110; Xylenes = 18
TW-1		1/17/18	520	590	27	26	340	0.56	55	1,000	140	ND (<0.50)	1.5	1,2,3-TCB = 27; 1,2,4-TCB = 150; 1,4-DCB = 2.6; Ethylbenzene = 1.2; Naphthalene = 4.5; TCFMe = 1.0; Toluene = 0.60; Xylenes = 19
TW-1		4/26/18	590	680	30	31	370	ND (<5.0)	62	1,000	140	ND (<5.0)	ND (<5.0)	1,2,3-TCB = 22; 1,2,4-TCB = 120; Xylenes = 17
TW-1		6/4/18	690	680	29	32	330	ND (<5.0)	65	870	120	ND (<5.0)	ND (<5.0)	1,2,4-TCB = 120
TW-1		11/27/2018	170	130	ND (<25)	ND (<25)	99	ND (<25)	31	340	120	ND (<25)	ND (<25)	1,2,4-TCB = 75;
TW-1		1/31/2019	160	89	9.3	10	83	ND (<5.0)	34	320	130	ND (<5.0)	ND (<5.0)	1,2,3-TCB = 14; 1,2,4-TCB = 86;
TW-1		6/4/19	350	280	16	19	180	ND (<10)	44	710	130	ND (<10)	ND (<10)	1,2,4-TCB = 97
TW-1		9/23/2019	150	290	23	25	340	ND (<5.0)	36	550	170	ND (<5.0)	ND (<5.0)	1,2,3-TCB = 22; 1,2,4-TCB = 120;
TW-1		12/11/2019	220	330	16	16	290	ND (<5.0)	28	290	170	ND (<5.0)	ND (<5.0)	1,2,3-TCB = 22; 1,2,4-TCB = 120;
TW-1		6/2/20	530	650	39	120	350	ND (<5.0)	26	860	180	ND (<5.0)	ND (<5.0)	1,2,4-TCB = 140
TW-2		8/5/12	16,000	800	220	110	130	ND (<100)	ND (<100)	2,500	ND (<100)	ND (<100)	ND (<100)	
TW-2		8/5/12	12,000	510	130	ND (<100)	ND (<100)	ND (<100)	ND (<100)	1,400	ND (<100)	ND (<100)	ND (<100)	
TW-2		8/5/12	11,000	450	130	ND (<100)	ND (<100)	ND (<100)	ND (<100)	1,000	ND (<100)	ND (<100)	ND (<100)	
TW-2		1/16/14	3,300	160	ND (<50)	ND (<50)	130	ND (<50)	81	670	ND (<50)	ND (<50)	ND (<50)	
TW-2		6/11/14	1,700	570	40	38	310	ND (<5.0)	70	730	93	ND (<5.0)	ND (<5.0)	
TW-2		6/9/15	1,300	500	41	32	350	ND (<5.0)	72	710	130	ND (<5.0)	ND (<5.0)	1,2,4-TCB = 23;
TW-2		6/7/16	910	410	28	46	320	ND (<5.0)	53	610	150	ND (<5.0)	ND (<5.0)	1,2,4-TCB = 37;
TW-2		10/26/16	910	410	28	39	250	1.1	51	480	160	ND (<0.50)	ND (<0.50)	1,2,3-TCB = 8.0; 1,2,4-TCB = 46; 1,4-DCB = 2.3; Ethylbenzene = 2.4; Freon 11 = 1.2; Xylenes = 3.2
TW-2		1/19/17	810	460	31	47	380	ND (<10)	37	380	130	ND (<10)	ND (<10)	1,2,4-TCB = 39
TW-2		4/19/17	1,000	640	31	57	380	ND (<10)	44	560	130	ND (<10)	ND (<10)	1,2,4-TCB = 40
TW-2		6/7/17	910	610	26	94	360	ND (<5.0)	41	440	150	ND (<5.0)	ND (<5.0)	1,2,4-TCB = 45
TW-2	Dup	6/7/17	1,200	670	26	54	340	ND (<5.0)	56	690	130	ND (<5.0)	ND (<5.0)	1,2,4-TCB = 44
TW-2		10/25/17	900	600	31	39	460	ND (<10)	46	540	140	ND (<10)	ND (<10)	1,2,4-TCB = 47
TW-2		1/17/18	1,100	680	30	32	460	ND (<25)	54	880	130	ND (<25)	ND (<25)	
TW-2		4/26/18	1,000	650	25	23	400	1.0	54	520	130	ND (<0.50)	ND (<0.50)	1,2,3-TCB = 11; 1,2,4-TCB = 59; 1,4-DCB = 2.0; Ethylbenzene = 1.0; Xylenes = 0.81
TW-2		6/4/18	1,200	710	31	31	460	ND (<5.0)	59	570	150	ND (<5.0)	ND (<5.0)	1,2,4-TCB = 61
TW-2		11/27/2018	680	340	ND (<25)	ND (<25)	280	ND (<25)	41	410	120	ND (<25)	ND (<25)	
TW-2		1/31/2019	700	330	22	22	270	ND (<10)	43	420	140	ND (<10)	ND (<10)	1,2,4-TCB = 65;
TW-2		6/4/19	800	370	23	25	260	ND (<10)	51	690	140	ND (<10)	ND (<10)	1,2,4-TCB = 65
TW-2		9/23/2019	690	380	24	29	340	ND (<10)	44	530	130	ND (<10)	ND (<10)	1,2,4-TCB = 69;
TW-2		12/11/2019	750	410	27	23	380	ND (<10)	38	410	140	ND (<10)	ND (<10)	1,2,4-TCB = 65;
TW-2		6/2/20	1,000	770	40	140	410	ND (<5.0)	45	840	150	ND (<5.0)	ND (<5.0)	1,2,4-TCB = 89
V8-1		12/20/90	320	3.7	3.9	5.9	-	-	0.20	1.0	0.50	0.30	5.2	1,1,2,2-TCA = 0.30; 1,1,2-TCA = 0.2; 1,2,4-TCB = 10; 1,2-DCPA = 0.2; 1,3-DCB = 0.5; 1,4-DCB = 0.5; 2-CVE = 100; Acetone = 30; BDCMe = 0.40; Benzene = 0.5; BRFM = 0.5; BRMA = 0.5; CHLBZ = 0.40; CHLEA (EC) = 0.5; CHLFM = 0.2; CHLMA = 125; cis-1,3-DCP = 0.30; CT = 0.30; DBCMe = 100; EDB = 250; Ethylbenzene = 0.5; MC = 5; m-Xylene = 0.5; Naphthalene = 10; o-Xylene = 0.5; TCFMe (Freon 11) = 0.5; Toluene = 0.5; trans-1,3-DCP = 0.30; Xylenes = 0.5;
V8-1		4/11/91	7,300	ND (<50)	ND (<50)	ND (<50)	140	ND (<50)	ND (<50)	ND (<50)	ND (<10)	ND (<50)	ND (<50)	
V8-1	Dup	4/11/91	0.50	1.8	3.6	4.0	-	-	0.40	1.0	1.0	0.70	0.40	1,1,2,2-TCA = 0.30; 1,1,2-TCA = 0.2; 1,2,4-TCB = 10; 1,2-DCPA = 0.2; 1,3-DCB = 1; 1,4-DCB = 1; 2-CVE = 0.40; Acetone = 30; BDCMe = 0.40; Benzene = 0.5; BRFM = 0.5; BRMA = 0.5; CHLBZ = 0.40; CHLEA (EC) = 0.5; CHLFM = 0.40; CHLMA = 125; cis-1,3-DCP = 0.30; CT = 0.30; DBCMe = 0.40; EDB = 100; Ethylbenzene = 0.5; MC = 5; m-Xylene = 0.5; Naphthalene = 10; o-Xylene = 0.5; TCFMe (Freon 11) = 50; Toluene = 0.5; trans-1,3-DCP = 0.30; Xylenes = 0.5;
V8-1		7/24/91	16,000	ND (<50)	ND (<50)	ND (<50)	570	ND (<50)	ND (<50)	ND (<50)	ND (<50)	ND (<50)	ND (<50)	
V8-1		11/7/91	12,000	ND (<25)	ND (<25)	ND (<25)	560	ND (<25)	ND (<25)	ND (<25)	ND (<25)	ND (<25)	ND (<25)	
V8-1		12/5/91	760	ND (<50)	ND (<50)	ND (<50)	-	ND (<50)	ND (<50)	ND (<50)	-	ND (<50)	ND (<100)	
V8-1		3/4/92	13,000	ND (<10)	ND (<10)	ND (<10)	480	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	
V8-1	Dup	3/4/92	9,300	ND (<10)	ND (<10)	ND (<10)	370	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	
V8-1		6/3/92	7,800	ND (<25)	ND (<25)	ND (<25)	200	ND (<25)	ND (<100)	ND (<25)	ND (<25)	ND (<100)	ND (<25)	
V8-1		10/12/92	7,400	ND (<100)	ND (<100)	ND (<100)	280	ND (<100)	ND (<100)	ND (<100)	ND (<100)	ND (<100)	ND (<100)	
V8-1		10/12/92	200	9.5	8.9	ND (<2.5)	7.9	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V8-1		12/4/92	4,500	ND (<25)	ND (<25)	ND (<25)	230	ND (<25)	ND (<25)	ND (<25)	-	ND (<25)	ND (<50)	
V8-1		3/4/93	10,000	ND (<50)	ND (<50)	ND (<50)	250	ND (<50)	ND (<50)	ND (<50)	ND (<50)	ND (<50)	ND (<50)	
V8-1		6/9/93	1,500	ND (<5.0)	ND (<5.0)	ND (<5.0)	76	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
V8-1		9/8/93	2,300	ND (<50)	ND (<50)	ND (<50)	69	ND (<50)	ND (<50)	ND (<50)	ND (<50)	ND (<10)	ND (<50)	
V8-1		12/6/93	6,600	ND (<50)	ND (<50)	ND (<50)	240	ND (<50)	ND (<50)	ND (<50)	-	ND (<50)	ND (<100)	
V8-1		3/9/94	8,900	ND (<50)	ND (<50)	ND (<50)	350	ND (<50)	ND (<50)	ND (<50)	ND (<50)	ND (<50)	ND (<50)	
V8-1		6/3/94	2,900	ND (<25)	ND (<25)	ND (<25)	140	ND (<25)	ND (<25)	ND (<25)	ND (<25)	ND (<25)	ND (<25)	
V8-1		9/6/94	1,000	9.1	7.2	ND (<5.0)	71	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
V8-1	Dup	9/6/94	1,100	9.3	7.4	ND (<5.0)	74	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
V8-1		12/6/94	760	ND (<25)	ND (<25)	ND (<25)	38	ND (<25)	ND (<25)	ND (<25)	-	ND (<25)	ND (<50)	
V8-1		3/6/95	1,300	ND (<5.0)	ND (<5.0)	ND (<5.0)	93	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
V8-1		6/8/95	82	4.8	5.7	-	6.6	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.84;
V8-1		9/7/95	2,600	ND (<25)	ND (<25)	ND (<25)	190	ND (<25)	ND (<25)	ND (<25)	ND (<25)	ND (<25)	ND (<25)	MC = 67;
V8-1		11/17/95	130	7.2	6.5	-	15	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.85	ND (<0.50)	CHLFM = 1.2;
V8-1	Dup	11/17/95	120	7.2	6.1	-	15	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.92	ND (<0.50)	CHLFM = 0.97;
V8-1		12/6/95	310	6.0	6.1	-	20	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
V8-1	Dup	12/6/95	290	6.1	6.2	-	21	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
V8-1		3/6/96	10,000	ND (<120)	ND (<120)	ND (<120)	390	ND (<120)	ND (<120)	ND (<120)	ND (<120)	ND (<120)	ND (<120)	MC = 220;
V8-1		6/7/96	200	8.7	5.8	6.2	14	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	CBMA = 118;
V8-1		9/12/96	1,900	ND (<25)	ND (<25)	ND (<25)	150	ND (<25)	ND (<25)	ND (<25)	ND (<25)	ND (<25)	ND (<25)	CBMA = 105; MC = 37;
V8-1		12/12/96	ND (<10)	ND (<10)	ND (<10)	ND (<10)	330	ND (<10)	ND (<10)	ND (<10)	-	ND (<10)	ND (<20)	MC = 12;
V8-1		3/6/97	1,500	ND (<25)	ND (<25)	ND (<25)	87	ND (<25)	ND (<25)	ND (<25)	ND (<25)	ND (<25)	ND (<25)	CBMA = 101; MC = 25;
V8-1		6/6/97	1,400	ND (<25)	ND (<25)	ND (<25)	120	ND (<25)	ND (<25)	ND (<25)	ND (<25)	ND (<25)	ND (<25)	CBMA = 101;
V8-1		9/12/97	840	ND (<25)	ND (<25)	ND (<25)	56	ND (<25)	ND (<25)	ND (<25)	ND (<25)	ND (<25)	ND (<25)	CBMA = 104;
V8-1		12/3/97	2,600	ND (<25)	ND (<25)	ND (<25)	200	ND (<25)	ND (<25)	ND (<25)	ND (<25)	ND (<25)	ND (<25)	CBMA = 94;
V8-1		6/5/98	600	ND (<25)	ND (<25)	ND (<25)	34	ND (<25)	ND (<25)	ND (<25)	ND (<25)	ND (<25)	ND (<25)	CBMA = 109;
V8-1		12/11/98	508	ND (<10)	14	ND (<10)	36	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	CBMA = 89;
V8-1		6/10/99	566	ND (<25)	ND (<25)	ND (<25)	35	ND (<25)	ND (<25)	ND (<25)	ND (<25)	ND (<25)	ND (<25)	
V8-1		7/29/99	3,120	ND (<100)	ND (<100)	ND (<100)	204	ND (<100)	ND (<100)	ND (<100)	ND (<100)	ND (<100)	ND (<100)	
V8-1		12/10/99	678	ND (<12.5)	ND (<12.5)	ND (<12.5)	44	ND (<12.5)	ND (<12.5)	ND (<25)	ND (<12.5)	ND (<12.5)	ND (<12.5)	
V8-1	Dup	12/10/99	665	ND (<16.7)	ND (<16.7)	ND (<16.7)	40	ND (<16.7)	ND (<16.7)	ND (<33.3)	ND (<16.7)	ND (<16.7)	ND (<16.7)	
V8-1		6/8/00	1,100	ND (<50)	ND (<50)	ND (<50)	54	ND (<50)	ND (<50)	ND (<50)	ND (<50)	ND (<50)	ND (<50)	
V8-1		12/5/00	490	ND (<10)	ND (<10)	ND (<10)	27	ND (<10)	ND (<10)	ND (<40)	ND (<10)	ND (<10)	ND (<10)	
V8-1		6/19/01	360	ND (<13)	ND (<13)	ND (<13)	42	ND (<13)	ND (<13)	ND (<50)	ND (<13)	ND (<13)	ND (<13)	
V8-1		6/26/03	620	ND (<5.0)	5.8	ND (<5.0)	37	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
V8-1	Dup	6/26/03	630	ND (<5.0)	6.9	ND (<5.0)	31	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
V8-1		1/16/04	3,400	ND	ND	ND	110	-	-	-	-	-	-	
V8-1		4/26/04	889	ND	ND	ND	194	-	-	-	-	-	-	
V8-1		12/6/04	530	ND	5.0	ND	35	-	-	-	-	-	-	
V8-1		6/21/05	870	ND (<10)	ND (<10)	ND (<10)	43	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	
V8-1		4/5/06	460	ND (<10)	ND (<10)	ND (<10)	120	ND (<10)	ND (<10)	ND (<10)	ND (<10)	-	-	
V8-1		6/27/06	280	ND (<0.50)	10	3.0	120	-	ND (<0.50)	ND (<0.50)	ND (<1.0)	-	-	
V8-1		6/21/07	610	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	
V8-1		8/14/07	180	ND (<2.0)	8.7	ND (<2.0)	21	ND (<2.0)	ND (<2.0)	2.0	ND (<2.0)	-	-	
V8-1		6/27/08	140	ND (<2.0)	9.1	3.7	15	ND (<2.0)	ND (<2.0)	ND (<2.0)	ND (<2.0)	ND (<2.0)	ND (<2.0)	
V8-1		6/15/09	2,600	ND (<5.0)	7.2	ND (<5.0)	42	5.2	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
V8-1		6/8/10	3,700	ND (<50)	ND (<50)	ND (<50)	ND (<50)	ND (<50)	ND (<50)	ND (<50)	ND (<50)	ND (<50)	ND (<50)	
V8-1	Dup	6/8/10	3,700	ND (<10)	ND (<10)	ND (<10)	49	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	
V8-1		7/11/11	190	ND (<2.5)	4.4	2.6	25	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
V8-1		6/12/12	210	ND (<2.5)	3.1	ND (<2.5)	22	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
V8-1		6/18/13	160	ND (<2.5)	2.8	ND (<2.5)	18	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
V8-1		6/11/14	100	ND (<0.50)	6.4	2.9	16	1.0	0.52	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V8-1		6/9/15	21	ND (<0.50)	15	9.6	1.9	ND (<0.50)	1.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V8-1		6/8/16	5.5	ND (<0.50)	9.8	8.9	0.51	ND (<0.50)	0.82	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V8-1		6/5/17	360	ND (<0.50)	3.7	3.7	46	2.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V8-1		6/4/18	9.5	ND (<0.50)	7.1	10	0.67	ND (<0.50)	0.58	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V8-1		6/6/19	3.0	ND (<0.50)	4.1	8.6	0.98	ND (<0.50)	0.57	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V8-1		6/3/20	170	ND (<0.50)	3.5	8.9	29	1.0	0.55	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V8-2		12/20/90	-	-	-	-	-	-	-	-	0.50	-	-	1,2,4-TCB = 10; 1,3-DCB = 0.5; 1,4-DCB = 0.5; Acetone = 30; Benzene = 0.5; CHLBZ = 0.5; Ethylbenzene = 0.5; m-Xylene = 0.5; Naphthalene = 10; o-Xylene = 0.5; Toluene = 0.5; Xylenes = 0.5;

Appendix B
Selected Compounds from Historical Records
COE Study Area and Perimeter Area, Palo Alto, California

Location	Type	Date	TCE	1,1,1-TCA	1,1-DCA	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	PCE	Freon 113	1,2-DCB	1,2-DCA	VC	Other Constituents
V8-2		2/15/91	620	30	30	28	-	-	2.6	10	10	3.0	3.0	1,1,2,2-TCA = 3; 1,1,2-TCA = 2; 1,2-DCPA = 2; 1,3-DCB = 10; 1,4-DCB = 10; 2-CVE = 4; BDCMe = 4; BRFM = 5; BRMA = 5; CHLBZ = 4; CHLEA (EC) = 5; CHLFM = 3.3; CHLMA = 50; cis-1,3-DCP = 3; CT = 3; DBCMe = 4; EDB = 10; MC = 50; TCFMe (Freon 11) = 5; trans-1,3-DCP = 3;
V8-2		4/19/91	30,000	60	34	ND (<500)	110	2.0	3.0	ND (<0.50)	ND (<0.50)	5.0	ND (<0.50)	1,1,2-TCA = 3; Benzene = 1; CHLFM = 10; MC = 1;
V8-2		7/24/91	17,000	80	ND (<50)	ND (<50)	210	ND (<50)	ND (<50)	ND (<50)	ND (<10)	ND (<50)	ND (<50)	
V8-2		10/7/91	19,000	ND (<120)	ND (<120)	ND (<120)	280	ND (<120)	ND (<120)	ND (<120)	ND (<120)	ND (<120)	ND (<120)	
V8-2		12/9/91	8,600	180	49	ND (<250)	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<10)	ND (<5.0)	ND (<10)	
V8-2		3/5/92	43,000	180	ND (<500)	ND (<500)	420	ND (<500)	ND (<500)	ND (<500)	ND (<500)	ND (<500)	ND (<500)	
V8-2		6/4/92	7,400	350	94	ND (<100)	410	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	
V8-2	Dup	6/4/92	-	-	-	-	-	-	-	-	ND (<10)	-	-	
V8-2		10/12/92	84	250	150	ND (<10)	630	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	TCFMe (Freon 11) = 18;
V8-2		12/8/92	-	-	110	-	-	ND (<5.0)	ND (<5.0)	7.9	-	ND (<5.0)	ND (<10)	
V8-2		12/8/92	5,900	420	130	ND (<250)	900	ND (<25)	ND (<25)	ND (<25)	-	ND (<25)	ND (<50)	
V8-2	Dup	12/8/92	690	500	-	ND (<25)	960	ND (<25)	ND (<25)	-	-	ND (<25)	ND (<50)	
V8-2		3/3/93	34,000	680	ND (<500)	ND (<500)	820	ND (<500)	ND (<500)	ND (<500)	ND (<500)	ND (<500)	ND (<500)	
V8-2		6/11/93	520	1,200	140	ND (<25)	920	ND (<5.0)	ND (<5.0)	41	ND (<5.0)	ND (<5.0)	ND (<5.0)	TCFMe (Freon 11) = 19; Toluene = 18;
V8-2	Dup	6/11/93	430	1,100	130	ND (<25)	880	ND (<5.0)	ND (<5.0)	34	ND (<5.0)	ND (<5.0)	ND (<5.0)	TCFMe (Freon 11) = 16; Toluene = 9;
V8-2		9/8/93	88	1,700	190	ND (<25)	1,500	ND (<5.0)	ND (<5.0)	54	ND (<5.0)	ND (<5.0)	ND (<5.0)	CHLFM = 7.5; TCFMe (Freon 11) = 39;
V8-2		12/6/93	36,000	840	120	-	1,500	ND (<50)	ND (<50)	ND (<50)	-	ND (<50)	ND (<100)	
V8-2		3/8/94	50,000	1,400	140	-	1,900	ND (<100)	ND (<100)	ND (<100)	ND (<100)	ND (<100)	ND (<100)	
V8-2		6/3/94	16,000	2,700	320	-	2,500	ND (<25)	ND (<25)	130	ND (<25)	ND (<25)	ND (<25)	TCFMe (Freon 11) = 32;
V8-2		9/6/94	37,000	2,300	230	-	2,100	7.6	9.3	230	ND (<5.0)	9.1	ND (<5.0)	1,1,2-TCA = 6.7; CHLFM = 18; TCFMe (Freon 11) = 35;
V8-2		12/6/94	36,000	1,800	ND (<250)	ND (<250)	1,200	ND (<250)	ND (<250)	ND (<250)	-	ND (<250)	ND (<500)	
V8-2		2/1/95	47,000	1,300	65	-	1,300	ND (<50)	ND (<50)	160	-	ND (<50)	ND (<100)	
V8-2		3/6/95	2,300	2,700	140	-	2,200	ND (<25)	ND (<25)	240	ND (<25)	ND (<25)	ND (<25)	
V8-2		6/9/95	1,200	1,100	61	-	670	ND (<5.0)	ND (<5.0)	110	ND (<5.0)	ND (<5.0)	ND (<5.0)	
V8-2		9/8/95	1,800	560	ND (<100)	ND (<100)	240	ND (<100)	ND (<100)	ND (<100)	ND (<100)	ND (<100)	ND (<100)	
V8-2		11/17/95	11,000	760	34	-	370	ND (<5.0)	20	140	ND (<5.0)	15	ND (<5.0)	CHLFM = 15;
V8-2		12/8/95	10,000	1,200	38	ND (<500)	770	ND (<5.0)	ND (<5.0)	180	-	ND (<5.0)	ND (<10)	
V8-2		4/4/96	4,000	570	ND (<100)	ND (<100)	380	ND (<100)	ND (<100)	110	ND (<100)	ND (<100)	ND (<100)	
V8-2		6/11/96	170	43	9.4	9.8	24	ND (<2.5)	ND (<2.5)	8.0	ND (<2.5)	ND (<2.5)	ND (<2.5)	CBMA = 106; TFT = 95;
V8-2		9/13/96	600	100	13	24	60	ND (<2.5)	ND (<2.5)	19	ND (<2.5)	ND (<2.5)	ND (<2.5)	CBMA = 103; CHLFM = 2.9;
V8-2		12/16/96	2,700	ND (<120)	ND (<120)	ND (<120)	ND (<120)	ND (<120)	ND (<120)	ND (<120)	-	ND (<120)	ND (<250)	
V8-2		3/7/97	12,000	160	ND (<100)	ND (<100)	140	ND (<100)	ND (<100)	ND (<100)	ND (<100)	ND (<100)	ND (<100)	CBMA = 100;
V8-2		6/9/97	9,400	370	ND (<120)	ND (<120)	300	ND (<120)	ND (<120)	ND (<120)	ND (<120)	ND (<120)	ND (<120)	CBMA = 98; MC = 580;
V8-2		9/12/97	3,600	ND (<120)	ND (<120)	ND (<120)	ND (<120)	ND (<120)	ND (<120)	ND (<120)	ND (<120)	ND (<120)	ND (<120)	CBMA = 101;
V8-2		12/3/97	38,000	ND (<120)	ND (<120)	ND (<120)	310	ND (<120)	ND (<120)	ND (<120)	ND (<120)	ND (<120)	ND (<120)	CBMA = 100;
V8-2		6/5/98	72	5.4	7.5	11	4.9	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	CBMA = 109;
V8-2	Dup	6/5/98	66	5.4	7.6	8.9	4.8	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	CBMA = 106;
V8-2		12/11/98	69	8.9	18	14	5.1	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	CBMA = 94.7;
V8-2		6/10/99	166	ND (<5.0)	14	8.2	5.3	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
V8-2		7/29/99	60	ND (<2.5)	7.3	4.1	2.7	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
V8-2	Dup	7/29/99	47	ND (<2.5)	5.4	3.2	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
V8-2		12/10/99	101	5.2	20	9.3	7.2	ND (<3.13)	ND (<3.13)	ND (<6.25)	ND (<3.13)	ND (<3.13)	ND (<3.13)	
V8-2		6/9/00	77	3.9	15	7.5	6.9	ND (<1.0)	ND (<1.0)	ND (<4.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	
V8-2		12/5/00	160	ND (<2.5)	16	5.9	3.3	ND (<2.5)	ND (<2.5)	ND (<10)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
V8-2		6/19/01	60	1.1	5.1	3.1	1.4	ND (<1.0)	ND (<1.0)	ND (<4.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	
V8-2		6/26/03	110	1.1	12	5.1	5.9	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	
V8-2		1/16/04	970	ND	ND	ND	ND	-	-	-	-	-	-	
V8-2		4/26/04	2,670	ND	ND	ND	53.2	-	-	-	-	-	-	
V8-2		12/6/04	2,600	ND	ND	ND	ND	-	-	-	-	-	-	
V8-2		6/20/05	69	0.55	0.80	1.0	0.60	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V8-2		8/20/05	110	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<5.0)	ND (<2.5)	-	-	
V8-2		4/6/06	85	ND (<0.50)	0.66	0.56	1.5	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	-	-	
V8-2		7/5/07	390	ND (<5.0)	ND (<5.0)	ND (<5.0)	16	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
V8-2		8/14/07	800	ND (<10)	ND (<10)	ND (<10)	41	ND (<10)	ND (<10)	ND (<10)	ND (<10)	-	-	
V8-2		6/11/09	1,400	ND (<5.0)	14	ND (<5.0)	13	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
V8-2		6/14/11	1,400	ND (<5.0)	14	7.4	7.1	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
V8-2		6/18/13	1,300	ND (<5.0)	9.1	5.5	6.3	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
V8-2		6/11/14	8,200	ND (<10)	ND (<10)	ND (<10)	26	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	
V8-2		11/22/14	7,300	ND (<50)	ND (<50)	ND (<50)	ND (<50)	ND (<50)	ND (<50)	ND (<200)	ND (<50)	ND (<50)	ND (<50)	
V8-2		12/20/14	6,000	ND (<36)	ND (<36)	ND (<36)	57	ND (<36)	ND (<36)	ND (<140)	ND (<36)	ND (<36)	ND (<36)	
V8-2		3/22/15	1,400	ND (<25)	ND (<25)	ND (<25)	130	ND (<25)	ND (<25)	ND (<100)	ND (<25)	ND (<25)	ND (<25)	
V8-2		6/9/15	3,500	ND (<50)	ND (<50)	ND (<50)	3,700	ND (<50)	ND (<50)	ND (<50)	ND (<50)	ND (<50)	ND (<50)	
V8-2		12/20/15	1,600	ND (<13)	13	ND (<13)	630	14	ND (<13)	ND (<50)	ND (<13)	ND (<13)	ND (<13)	
V8-2		4/3/16	2,500	ND (<17)	ND (<17)	ND (<17)	1,700	27	ND (<17)	ND (<67)	ND (<17)	ND (<17)	18	
V8-2		6/7/17	ND (<5.0)	ND (<5.0)	6.0	ND (<5.0)	43	45	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	78	
V8-2		6/6/18	ND (<5.0)	ND (<5.0)	6.7	ND (<5.0)	28	15	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	59	
V8-2		6/6/19	ND (<5.0)	ND (<5.0)	12	ND (<5.0)	260	24	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	990	
V8-2		5/3/20	110	ND (<5.0)	7.6	11	370	5.2	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	150	
V8-2X		12/18/90	220	12	6.9	9.5	-	-	2.0	10	10	3.0	3.0	1,1,2,2-TCA = 3; 1,1,2-TCA = 2; 1,2-DCPA = 2; 1,3-DCB = 10; 1,4-DCB = 10; 2-CVE = 4; Acetone = 30; BDCMe = 4; Benzene = 0.30; BRFM = 5; BRMA = 5; CHLBZ = 4; CHLEA (EC) = 5; CHLFM = 2; CHLMA = 5; cis-1,3-DCP = 3; CT = 3; DBCMe = 4; EDB = 10; Ethylbenzene = 0.30; MC = 50; m-Xylene = 0.30; o-Xylene = 0.30; TCFMe (Freon 11) = 5; Toluene = 0.30; trans-1,3-DCP = 3; Xylenes = 0.9;
V8-2X		12/16/99	530	ND (<13)	ND (<13)	ND (<13)	ND (<13)	ND (<13)	ND (<13)	ND (<1.0)	ND (<13)	ND (<13)	ND (<13)	
V8-2X		8/15/00	680	ND (<10)	ND (<10)	ND (<10)	11	ND (<10)	ND (<10)	ND (<40)	ND (<10)	ND (<10)	ND (<10)	
V8-2X		12/5/00	630	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<40)	ND (<10)	ND (<10)	ND (<10)	
V8-2X		6/22/01	500	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<40)	ND (<10)	ND (<10)	ND (<10)	
V8-2X		6/26/03	590	ND (<10)	ND (<10)	ND (<10)	10	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	
V8-2X		6/29/05	170	ND (<2.0)	ND (<2.0)	ND (<2.0)	ND (<2.0)	ND (<2.0)	ND (<2.0)	ND (<2.0)	ND (<2.0)	ND (<2.0)	3.1	
V8-2X	Dup	6/29/05	160	ND (<2.0)	ND (<2.0)	ND (<2.0)	ND (<2.0)	ND (<2.0)	ND (<2.0)	ND (<2.0)	ND (<2.0)	ND (<2.0)	3.8	
V8-2X		7/5/07	200	ND (<2.0)	ND (<2.0)	ND (<2.0)	13	ND (<2.0)	ND (<2.0)	ND (<2.0)	ND (<2.0)	ND (<2.0)	ND (<2.0)	
V8-2X		6/9/09	5,900	3.2	9.5	6.7	16	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
V8-2X	Dup	6/9/09	5,600	ND (<5.0)	9.4	6.8	16	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
V8-2X		6/14/11	420	ND (<5.0)	10	6.5	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
V8-2X		7/25/13	350	ND (<5.0)	12	8.9	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
V8-2X		6/9/15	6,800	4.7	ND (<2.5)	13	8,700	18	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	4.4	
V8-2X		6/6/17	ND (<100)	ND (<100)	ND (<100)	ND (<100)	2,200	ND (<100)	ND (<100)	ND (<100)	ND (<100)	ND (<100)	1,100	
V8-2X	Dup	6/6/17	ND (<100)	ND (<100)	ND (<100)	ND (<100)	2,200	ND (<100)	ND (<100)	ND (<100)	ND (<100)	ND (<100)	1,000	
V8-2X		6/6/19	410	ND (<100)	ND (<100)	ND (<100)	3,700	ND (<100)	ND (<100)	ND (<100)	ND (<100)	ND (<100)	1,000	
V8-3		12/14/90	5.0	51	13	18	-	-	2.0	10	10	3.0	3.0	1,1,2,2-TCA = 3; 1,1,2-TCA = 2; 1,2,4-TCB = 10; 1,2-DCPA = 2; 1,3-DCB = 10; 1,4-DCB = 10; 2-CVE = 4; Acetone = 30; BDCMe = 4; Benzene = 0.5; BRFM = 5; BRMA = 5; CHLBZ = 4; CHLEA (EC) = 5; CHLFM = 2; CHLMA = 5; cis-1,3-DCP = 3; CT = 3; DBCMe = 4; EDB = 10; Ethylbenzene = 0.5; MC = 50; m-Xylene = 0.30; Naphthalene = 10; o-Xylene = 0.30; TCFMe (Freon 11) = 5; Toluene = 0.5; trans-1,3-DCP = 3; Xylenes = 0.9;
V8-3		4/12/91	6.0	56	26	-	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	10	ND (<0.50)	
V8-3	Dup	4/12/91	8.0	61	27	-	ND (<3.0)	ND (<3.0)	ND (<3.0)	ND (<3.0)	ND (<10)	ND (<3.0)	ND (<3.0)	
V8-3		7/25/91	0.50	4.6	3.1	-	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V8-3		10/8/91	5.3	53	25	-	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.8;
V8-3		12/6/91	ND (<5.0)	41	25	-	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
V8-3		3/5/92	3.5	42	23	-	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.7;
V8-3		6/3/92	4.6	54	27	-	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.50	ND (<0.50)	CHLFM = 0.8;
V8-3		10/12/92	7.8	55	34	-	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V8-3		12/9/92	7.6	55	28	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
V8-3		3/3/93	4.0	27	15	-	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	BDCMe = 3.2; CHLFM = 5.1; DBCMe = 2.9;
V8-3	Dup	3/3/93	3.5	25	14	-	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	BDCMe = 3.4; CHLFM = 5; DBCMe = 3;
V8-3		6/9/93	3.5	26	18	-	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 1.5;
V8-3		9/8/93	18	56	43	-	3.0	ND (<0.50)	ND (<0.50)	0.89	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 1.1;
V8-3		12/6/93	6.3	5.4	7.0	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
V8-3		3/8/94	20	37	33	-	12	ND (<0.50)	ND (<0.50)	0.61	ND (<0.50)	0.84	ND (<0.50)	CHLFM = 1.4;
V8-3	Dup	3/8/94	20	38	34	-	13	ND (<0.50)	ND (<0.50)	0.73	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 1.4;
V8-3		6/3/94	22	50	49	-	12	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.76	ND (<0.50)	CHLFM = 1.7;
V8-3		9/6/94	25	45	46	-	16	ND (<0.50)	ND (<0.50)	0.58	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 1.4;
V8-3		12/6/94	22	34	32	-	26	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
V8-3		3/6/95	21	54	38	ND (<0.50)	59	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.78	ND (<0.50)	CHLFM = 1.9; TCFMe (Freon 11) = 1.8;
V8-3		6/7/95	27	160	33	ND (<0.50)	120	ND (<0.50)	ND (<0.50)	2.9	ND (<0.50)	0.83	ND (<0.50)	CHLEA (EC) = 0.86; CHLFM = 3.1; TCFMe (Freon 11) = 5.9;
V8-3		9/7/95	40	320	130	-	700	ND (<10)	ND (<10)	ND (<10)	ND (<10)	11	ND (<10)	CHLFM = 15;
V8-3		11/17/95	37	240	120	-	230	6.4	ND (<0.50)	74	ND (<0.50)	7.1	ND (<0.50)	CHLFM = 10; MC = 1.2; TCFMe (Freon 11) = 21;
V8-3		12/8/95	49	1,000	160	ND (<5.0)	1,300	ND (<5.0)	ND (<5.0)	74	-	ND (<5.0)	ND (<10)	
V8-3		3/7/96	ND (<25)	1,100	170	220	1,300	ND (<25)	ND (<25)	62	ND (<25)	ND (<25)	ND (<25)	
V8-3		6/6/96	63	1,200	150	230	1,300	35	ND (<12)	160	ND (<12)	ND (<12)	ND (<12)	CBMA = 113;
V8-3		9/12/96	83	1,400	97	280	1,200	ND (<25)	ND (<25)	200	ND (<25)	ND (<25)	ND (<25)	CBMA = 108; CHLFM = 34; MC = 43; TCFMe (Freon 11) = 25;
V8-3		12/13/96	ND (<50)	1,700	72	260	1,300	ND (<50)	ND (<50)	430	-	ND (<50)	ND (<100)	
V8-3		3/6/97	65	1,000	64	160	850	ND (<25)	ND (<25)	240	ND (<25)	ND (<25)	ND (<25)	CBMA = 107;
V8-3		6/6/97	29	580	35	91	490	3.5	ND (<2.5)	180	ND (<2.5)	ND (<2.5)	ND (<2.5)	CBMA = 98; TCFMe (Freon 11) = 7.5;
V8-3		9/12/97	110	770	43	140	530	ND (<10)	ND (<10)	340	ND (<10)	21	ND (<10)	CBMA = 109;
V8-3		12/4/97	41	380	21	59	300	ND (<10)	ND (<10)	110	ND (<10)	ND (<10)	ND (<10)	CBMA = 102;
V8-3		6/4/98	24	170	15	29	190	ND (<5.0)	ND (<5.0)	76	ND (<5.0)	ND (<5.0)	ND (<5.0)	CBMA = 108;
V8-3		12/10/98	44	113	11	25	98	ND (<2.5)	ND (<2.5)	124	ND (<2.5)	ND (<2.5)	ND (<2.5)	CBMA = 112;
V8-3		6/10/99	43	75	ND (<12.5)	17	57	ND (<12.5)	ND (<12.5)	72.8	ND (<12.5)	ND (<12.5)	ND (<12.5)	
V8-3		12/10/99	47	79	8.2	21	58	ND (<1.67)	ND (<1.67)	64.9	ND (<1.67)	ND (<1.67)	ND (<1.67)	
V8-3		6/6/00	6.4	4.5	ND (<0.50)	1.9	7.6	ND (<0.50)	ND (<0.50)	10	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V8-3		12/5/00	12	9.3	2.1	4.1	13	ND (<0.50)	ND (<0.50)	12	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V8-3		6/19/01	37	32	11	17	35	ND (<0.50)	ND (<0.50)	39	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V8-3		6/25/03	11	6.7	5.7	4.0	12	ND (<0.50)	ND (<0.50)	5.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V8-3		6/20/05	230	6.5	9.9	5.7	32	ND (<2.0)	ND (<2.0)	4.4	ND (<2.0)	ND (<2.0)	ND (<2.0)	
V8-3		6/20/07	340	6.6	14	8.4	30	ND (<2.0)	ND (<2.0)	6.7	ND (<2.0)	ND (<2.0)	ND (<2.0)	
V8-3		6/15/09	260	6.0	16	6.9	24	ND (<2.5)	ND (<2.5)	5.4	ND (<2.5)	ND (<2.5)	ND (<2.5)	
V8-3	Dup	6/15/09	280	6.5	18	9.8	27	ND (<0.50)	ND (<0.50)	5.8	ND (<0.50)	ND (<0.50)	ND (<0.50)	1,2-DCPA = 1.4; BDCMe = 3.4;
V8-3		6/14/11	130	5.6	17	8.8	20	ND (<2.5)	ND (<2.5)	3.8	ND (<2.5)	ND (<2.5)	ND (<2.5)	
V8-3		6/18/13	210	3.1	12	7.0	13	ND (<2.5)	ND (<2.5)	2.7	ND (<2.5)	ND (<2.5)	ND (<2.5)	
V8-3		6/10/14	200	2.9	12	7.7	15	ND (<2.5)	ND (<2.5)	2.6	ND (<2.5)	ND (<2.5)	ND (<2.5)	
V8-3		6/9/15	220	3.3	13	9.5	17	ND (<2.5)	ND (<2.5)	3.0	ND (<2.5)	ND (<2.5)	ND (<2.5)	
V8-3		6/7/16	190	3.0	11	7.1	17	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
V8-3		6/5/17	160	2.7	10	8.0	14	ND (<2.5)	ND (<2.5)	2.6	ND (<2.5)	ND (<2.5)	2.5	
V8-3		6/4/18	240	3.1	12	9.9	26	ND (<2.5)	ND (<2.5)	2.8	ND (<2.5)	ND (<2.5)	ND (<2.5)	
V8-3		6/6/19	100	2.9	8.7	8.1	12	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
V8-3	Dup	6/6/19	100	3.1	9.4	8.8	13	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
V8-3		6/3/20	320	3.6	5.2	7.7	14	ND (<0.50)	ND (<0.50)	3.3	ND (<0.50)	ND (<0.50)	0.64	

Appendix B
Selected Compounds from Historical Records
COE Study Area and Perimeter Area, Palo Alto, California

Location	Type	Date	TCE	1,1,1-TCA	1,1-DCA	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	PCE	Freon 113	1,2-DCB	1,2-DCA	VC	Other Constituents
V8-4		12/13/90	2.5	11	3.8	2.6	-	-	0.20	4.5	0.50	0.30	0.30	1,1,2,2-TCA = 0.30; 1,1,2-TCA = 0.2; 1,2,4-TCB = 10; 1,2-DCPA = 0.2; 1,3-DCB = 0.5; 1,4-DCB = 0.5; 2-CVE = 0.40; Acetone = 200; BDCMe = 0.40; Benzene = 0.5; BRFM = 0.5; BRMA = 0.5; CHLBZ = 0.40; CHLEA (EC) = 0.5; CHLFM = 0.40; CHLMA = 0.5; cis-1,3-DCP = 0.30; CT = 0.30; DBCMe = 0.40; EDB = 1; Ethylbenzene = 0.5; MC = 5; m-Xylene = 0.5; Naphthalene = 10; o-Xylene = 0.5; TCFMe (Freon 11) = 0.5; Toluene = 0.5; trans-1,3-DCP = 0.30; Xylenes = 0.5;
V8-4		4/19/91	33	38	17	-	1.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 3;
V8-4	Dup	4/19/91	15	20	9.0	-	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 3;
V8-4		7/26/91	34	38	17	-	1.5	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.9;
V8-4		10/8/91	3.9	5.9	2.1	-	ND (<0.50)	ND (<0.50)	ND (<0.50)	2.4	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.7;
V8-4		12/5/91	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
V8-4		3/6/92	1.6	5.6	1.6	-	ND (<0.50)	ND (<0.50)	ND (<0.50)	1.6	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.6;
V8-4		6/10/92	1.1	2.7	0.60	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	1.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.5;
V8-4		10/13/92	49	53	38	-	18	ND (<0.50)	ND (<0.50)	1.2	ND (<0.50)	0.70	ND (<0.50)	CHLFM = 1.9;
V8-4		12/8/92	55	55	41	-	23	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	Acetone = 20;
V8-4		3/4/93	ND (<0.50)	4.1	ND (<0.50)	-	ND (<0.50)	ND (<0.50)	ND (<0.50)	1.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.9;
V8-4	Dup	3/4/93	ND (<0.50)	4.1	ND (<0.50)	-	ND (<0.50)	ND (<0.50)	ND (<0.50)	1.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.9;
V8-4		6/10/93	7.4	9.7	8.2	-	8	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V8-4		9/10/93	53	70	44	ND (<2.5)	52	ND (<0.50)	ND (<0.50)	1.7	ND (<0.50)	0.84	ND (<0.50)	CHLFM = 1.8; TCFMe (Freon 11) = 2.5;
V8-4		12/13/93	ND (<5.0)	7.2	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
V8-4		3/9/94	0.77	4.4	1.9	-	1.6	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V8-4		6/6/94	ND (<0.50)	3.4	ND (<0.50)	-	0.75	ND (<0.50)	ND (<0.50)	2.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.51;
V8-4		9/7/94	ND (<0.50)	3.2	ND (<0.50)	-	0.74	ND (<0.50)	ND (<0.50)	2.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V8-4		12/8/94	5.9	20	ND (<5.0)	-	11	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	MBK = 31; MIBK = 20;
V8-4		3/6/95	3.1	8.5	0.78	-	4.2	ND (<0.50)	ND (<0.50)	1.7	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V8-4		6/6/95	8.0	27	3.3	-	12	ND (<0.50)	ND (<0.50)	1.8	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V8-4		9/7/95	1.7	5.4	ND (<0.50)	-	ND (<0.50)	ND (<0.50)	ND (<0.50)	1.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V8-4		12/6/95	ND (<5.0)	13	ND (<5.0)	ND (<5.0)	9.3	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
V8-4		3/6/96	63	180	22	57	87	ND (<2.5)	ND (<2.5)	11	ND (<2.5)	3.3	ND (<2.5)	CHLFM = 3.1;
V8-4		6/11/96	180	840	90	210	600	ND (<10)	ND (<10)	100	ND (<10)	ND (<10)	ND (<10)	CBMA = 105; CHLFM = 29; MC = 10; TCFMe (Freon 11) = 13;
V8-4		9/11/96	99	480	44	130	360	ND (<10)	ND (<10)	69	ND (<10)	ND (<10)	ND (<10)	CBMA = 107; CHLFM = 11; MC = 18;
V8-4		12/12/96	11	64	ND (<5.0)	12	50	ND (<5.0)	ND (<5.0)	14	-	ND (<5.0)	ND (<10)	
V8-4		3/5/97	36	150	7.4	22	78	ND (<2.5)	ND (<2.5)	49	ND (<2.5)	3.8	ND (<2.5)	CBMA = 110;
V8-4		6/5/97	9.9	26	ND (<2.5)	7.1	18	ND (<2.5)	ND (<2.5)	41	ND (<2.5)	ND (<2.5)	ND (<2.5)	CBMA = 92;
V8-4		9/11/97	110	270	17	52	140	3.2	ND (<2.5)	67	ND (<2.5)	ND (<2.5)	ND (<2.5)	CBMA = 107; TCFMe (Freon 11) = 3.9;
V8-4		12/4/97	45	99	8.1	9.6	85	3.7	ND (<2.5)	21	ND (<2.5)	ND (<2.5)	ND (<2.5)	CBMA = 96;
V8-4		6/4/98	79	130	11	23	90	ND (<2.5)	ND (<2.5)	110	ND (<2.5)	ND (<2.5)	ND (<2.5)	CBMA = 108; CHLFM = 3.2;
V8-4		12/10/98	8.6	15	1.2	3.4	11	ND (<0.50)	0.52	5.9	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 122;
V8-4		6/10/99	12	13	1.1	3.0	10	ND (<0.50)	ND (<0.50)	12	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V8-4		7/29/99	ND (<0.50)	2.5	ND (<0.50)	ND (<0.50)	0.90	ND (<0.50)	ND (<0.50)	1.7	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V8-4		12/10/99	85	151	8.9	30	89	ND (<3.57)	ND (<3.57)	74	ND (<3.57)	ND (<3.57)	ND (<3.57)	
V8-4		6/6/00	7.4	8.8	ND (<0.50)	2.3	6.1	ND (<0.50)	ND (<0.50)	9.4	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V8-4		12/5/00	0.67	0.90	ND (<0.50)	ND (<0.50)	0.56	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V8-4		6/19/01	1.3	1.3	ND (<0.50)	ND (<0.50)	0.95	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V8-4		6/25/03	5.8	4.2	0.78	1.5	3.2	ND (<0.50)	ND (<0.50)	5.5	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V8-4		6/20/05	8.9	6.2	3.8	3.3	7.1	ND (<0.50)	ND (<0.50)	8.5	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V8-4		6/20/07	24	2.8	2.6	2.5	5.4	ND (<0.50)	ND (<0.50)	5.5	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V8-4		6/10/09	3.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.77	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V8-4		6/14/11	79	10	14	9.5	18	ND (<0.50)	ND (<0.50)	11	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V8-4		6/18/13	42	7.1	12	9.5	14	ND (<0.50)	ND (<0.50)	8.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V8-4		6/9/15	2.7	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.64	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V8-4		6/5/17	43	5.7	8.8	9.7	13	ND (<0.50)	ND (<0.50)	8.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V8-4		6/4/18	9.9	0.87	1.2	1.4	1.8	ND (<0.50)	ND (<0.50)	2.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V8-4		6/6/19	60	5.1	7.0	11	13	ND (<0.50)	ND (<0.50)	8.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V8-4		6/3/20	10	ND (<0.50)	10	3.1	460	51	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	61	
V8-4	Dup	6/3/20	10	ND (<0.50)	11	4.0	330	55	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	64	
V8-5		12/13/90	190	4.0	4.0	12	-	-	2.0	10	0.50	3.0	3.0	1,1,2,2-TCA = 3; 1,1,2-TCA = 2; 1,2,4-TCB = 10; 1,2-DCPA = 2; 1,3-DCB = 0.5; 1,4-DCB = 0.5; 2-CVE = 4; Acetone = 200; BDCMe = 4; Benzene = 0.5; BRFM = 5; BRMA = 5; CHLBZ = 4; CHLEA (EC) = 5; CHLFM = 3.3; CHLMA = 5; cis-1,3-DCP = 3; CT = 3; DBCMe = 4; EDB = 10; Ethylbenzene = 0.5; MC = 50; m-Xylene = 0.5; Naphthalene = 10; o-Xylene = 0.5; TCFMe (Freon 11) = 5; Toluene = 0.5; trans-1,3-DCP = 3; Xylenes = 0.5;
V8-5	Dup	12/13/90	240	7.7	4.8	21	25	10	2.2	10	0.50	3.0	3.0	1,1,2,2-TCA = 3; 1,1,2-TCA = 2; 1,2,4-TCB = 10; 1,2-DCPA = 2; 1,3-DCB = 0.5; 1,4-DCB = 0.5; 2-CVE = 25; Acetone = 200; BDCMe = 4; Benzene = 0.5; BRFM = 5; BRMA = 5; CARBD = 15; CHLBZ = 0.5; CHLEA (EC) = 5; CHLFM = 2; CHLMA = 5; cis-1,3-DCP = 3; CT = 3; DBCMe = 4; EDB = 10; Ethylbenzene = 0.5; MBK = 25; MC = 50; MEK = 25; MIBK = 25; m-Xylene = 0.5; Naphthalene = 10; o-Xylene = 0.5; Styrene = 10; TCFMe (Freon 11) = 5.3; Toluene = 0.5; trans-1,3-DCP = 3; Vinyl Acetate = 25; Xylenes = 0.5;
V8-5		4/19/91	470	12	6.0	ND (<5.0)	34	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V8-5	Dup	4/19/91	3.0	9.1	5.7	19	-	-	4.0	5.0	5.0	6.0	1.5	1,1,2,2-TCA = 1.5; 1,1,2-TCA = 1; 1,2,4-TCB = 10; 1,2-DCPA = 1; 1,3-DCB = 5; 1,4-DCB = 5; 2-CVE = 8; Acetone = 30; BDCMe = 2; Benzene = 0.5; BRFM = 2.5; BRMA = 2.5; CHLBZ = 2; CHLEA (EC) = 2.5; CHLFM = 1.6; CHLMA = 10; cis-1,3-DCP = 1.5; CT = 1.5; DBCMe = 8; EDB = 5; Ethylbenzene = 0.5; MC = 25; m-Xylene = 0.5; Naphthalene = 10; o-Xylene = 0.5; TCFMe (Freon 11) = 2.5; Toluene = 0.5; trans-1,3-DCP = 1.5; Xylenes = 0.5;
V8-5		7/24/91	570	8.0	ND (<5.0)	ND (<5.0)	36	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
V8-5		10/7/91	500	7.0	ND (<5.0)	ND (<5.0)	37	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
V8-5		12/5/91	350	ND (<5.0)	ND (<5.0)	ND (<10)	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
V8-5		3/5/92	360	8.2	2.8	ND (<5.0)	41	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	CHLFM = 1;
V8-5		6/3/92	190	5.9	4.3	ND (<2.5)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 1.4;
V8-5		10/12/92	7.5	20	18	-	1.4	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 2.6; TCFMe (Freon 11) = 6.9;
V8-5		12/9/92	510	8.7	ND (<5.0)	ND (<17)	46	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
V8-5		3/4/93	630	8.0	ND (<12)	ND (<12)	35	ND (<12)	ND (<12)	ND (<12)	ND (<12)	ND (<12)	ND (<12)	
V8-5		6/9/93	500	9.0	ND (<12)	ND (<12)	31	ND (<12)	ND (<12)	ND (<12)	ND (<12)	ND (<12)	ND (<12)	
V8-5		9/8/93	12	29	22	-	9.2	ND (<0.50)	ND (<0.50)	0.55	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLEA (EC) = 0.6; CHLFM = 2.5; TCFMe (Freon 11) = 7.8;
V8-5		12/6/93	500	6.1	ND (<5.0)	-	37	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
V8-5		3/9/94	510	18	11	-	37	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
V8-5		6/3/94	630	9.6	ND (<2.5)	-	35	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
V8-5	Dup	6/3/94	670	9.8	ND (<2.5)	-	33	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
V8-5		9/6/94	570	12	3.6	-	32	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	2.5	ND (<2.5)	1,1,2-TCA = 3.6;
V8-5		12/6/94	570	ND (<25)	ND (<25)	ND (<25)	36	ND (<25)	ND (<25)	ND (<25)	-	ND (<25)	ND (<50)	
V8-5		3/6/95	540	7.2	ND (<2.5)	-	41	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
V8-5		6/8/95	470	5.4	ND (<2.5)	-	23	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
V8-5	Dup	6/8/95	480	5.7	ND (<2.5)	-	22	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
V8-5		9/8/95	420	15	ND (<12)	-	26	ND (<12)	ND (<12)	ND (<12)	ND (<12)	ND (<12)	ND (<12)	
V8-5		12/8/95	330	46	8.6	ND (<50)	84	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
V8-5		3/7/96	140	12	5.8	5.6	14	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
V8-5		6/6/96	380	7.0	ND (<5.0)	16	19	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	CBMA = 115;
V8-5		9/13/96	360	9.1	ND (<5.0)	22	25	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	CBMA = 100;
V8-5		12/13/96	220	ND (<10)	ND (<10)	ND (<10)	20	ND (<10)	ND (<10)	ND (<10)	-	ND (<10)	ND (<20)	
V8-5		3/5/97	290	9.3	ND (<2.5)	12	20	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	CBMA = 105;
V8-5		6/9/97	170	6.3	ND (<5.0)	6.3	10	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	CBMA = 93;
V8-5		9/11/97	280	8.5	ND (<2.5)	12	18	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	CBMA = 107;
V8-5		12/4/97	470	12	ND (<5.0)	ND (<5.0)	20	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	CBMA = 96;
V8-5		6/4/98	340	ND (<12)	ND (<12)	ND (<12)	ND (<12)	ND (<12)	ND (<12)	ND (<12)	ND (<12)	ND (<12)	ND (<12)	CBMA = 105;
V8-5		12/10/98	242	ND (<5.0)	ND (<5.0)	ND (<5.0)	10	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	CBMA = 121;
V8-5		6/10/99	197	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	
V8-5		12/14/99	40	2.1	11	6.3	1.5	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	
V8-5	Dup	12/14/99	39	ND (<2.5)	9.4	6.5	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
V8-5		6/6/00	190	ND (<2.5)	ND (<2.5)	4.1	3.4	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
V8-5	Dup	6/6/00	190	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
V8-5		12/5/00	220	ND (<2.5)	ND (<2.5)	6.4	6.4	ND (<2.5)	ND (<2.5)	ND (<10)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
V8-5		6/19/01	180	ND (<2.5)	ND (<2.5)	5.0	4.1	ND (<2.5)	ND (<2.5)	ND (<10)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
V8-5	Dup	6/19/01	170	ND (<2.5)	ND (<2.5)	5.1	3.6	ND (<2.5)	ND (<2.5)	ND (<10)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
V8-5		6/26/03	170	ND (<2.5)	4.5	6.9	3.3	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
V8-5	Dup	6/26/03	100	ND (<1.0)	1.7	2.6	2.1	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	
V8-5		6/20/05	3.8	1.3	12	5.5	0.60	ND (<0.50)	ND (<0.50)	0.72	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V8-5		6/27/06	4.2	ND (<0.50)	16	4.6	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V8-5		6/20/07	3.2	0.62	16	6.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V8-5		6/12/08	5.8	0.51	9.6	5.7	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V8-5		6/11/09	4.5	0.56	14	9.7	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V8-5		6/8/10	4.1	ND (<0.50)	9.5	8.8	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V8-5		6/14/11	3.3	0.77	11	8.8	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V8-5		6/12/12	3.8	ND (<0.50)	11	9.6	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V8-5		6/18/13	3.4	ND (<0.50)	12	9.7	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V8-5		6/11/14	4.1	0.52	18	14	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V8-5		6/9/15	26	0.61	8.3	5.9	0.50	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V8-5		6/7/16	4.8	0.55	8.1	5.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V8-5		6/7/17	4.5	ND (<0.50)	3.4	5.7	ND (<0.50)	ND (<0.50)	1.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V8-5		6/6/19	9.0	ND (<0.50)	2.9	4.6	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V8-6		12/20/90	1.0	1.6	0.40	1.9	-	-	0.20	1.1	1.0	0.30	0.30	1,1,2,2-TCA = 0.30; 1,1,2-TCA = 0.2; 1,2-DCPA = 0.2; 1,3-DCB = 1; 1,4-DCB = 1; 2-CVE = 0.40; Acetone = 30; BDCMe = 0.40; Benzene = 0.5; BRFM = 0.5; BRMA = 0.5; CHLBZ = 0.40; CHLEA (EC) = 0.5; CHLFM = 0.40; CHLMA = 0.5; cis-1,3-DCP = 0.30; CT = 0.30; DBCMe = 0.40; EDB = 1; Ethylbenzene = 0.5; MC = 5; m-Xylene = 0.5; o-Xylene = 0.5; TCFMe (Freon 11) = 0.5; Toluene = 0.5; trans-1,3-DCP = 0.30; Xylenes = 0.5;
V8-6	Dup	12/20/90	5.0	3.0	3.0	2.0	-	2.0	2.0	1.0	0.50	2.0	3.0	1,1,2,2-TCA = 3; 1,1,2-TCA = 2; 1,2-DCPA = 3; 1,3-DCB = 0.5; 1,4-DCB = 1; 2-CVE = 5; Acetone = 5; BDCMe = 3; Benzene = 2; BRFM = 2; BRMA = 2; CARBD = 3; CHLBZ = 2; CHLEA (EC) = 2; CHLFM = 2; CHLMA = 3; cis-1,3-DCP = 3; CT = 3; DBCMe = 2; Ethylbenzene = 2; MBK = 5; MC = 2; MEK = 5; MIBK = 5; m-Xylene = 0.5; o-Xylene = 0.5; Styrene = 2; TCFMe (Freon 11) = 0.5; Toluene = 2; trans-1,3-DCP = 2; Vinyl Acetate = 5; Xylenes = 2;
V8-6		7/24/91	ND (<0.50)	1.1	ND (<0.50)	ND (<0.50)	2.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	Benzene = 1.1; Toluene = 1.5; Xylenes = 1.5;
V8-6		12/4/91	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
V8-6		6/4/92	ND (<0.50)	0.70	ND (<0.50)	0.50	0.50	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V8-6	Dup	6/4/92	ND (<0.50)	0.50	ND (<0.50)	-	0.60	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V8-6		12/9/92	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
V8-6		6/11/93	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V8-6		12/6/93	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
V8-6		6/3/94	1.5	2.4	ND (<0.50)	-	3.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V8-6		12/6/94	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
V8-6		6/6/95	ND (<0.50)	ND (<0.50)	ND (<0.50)	-	0.50	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V8-6		12/5/95	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
V8-6		6/6/96	0.61	0.68	ND (<0.50)	0.84	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 116;
V8-6		12/13/96	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
V8-6		12/4/97	1.6	ND (<0.50)	1.6	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 95;
V8-6		12/10/99	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<1.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	

Appendix B
Selected Compounds from Historical Records
COE Study Area and Perimeter Area, Palo Alto, California

Location	Type	Date	TCE	1,1,1-TCA	1,1-DCA	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	PCE	Freon 113	1,2-DCB	1,2-DCA	VC	Other Constituents
V8-6		6/19/01	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V8-6		6/25/03	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V8-6		6/20/05	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V8-6		6/21/07	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V8-6		6/11/09	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V8-6		6/14/11	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V8-6		6/18/13	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V8-6		6/9/15	ND (<0.50)	ND (<0.50)	3.8	5.5	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V8-6		6/7/17	ND (<0.50)	ND (<0.50)	0.99	1.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V8-6		6/6/19	0.93	ND (<0.50)	5.1	16	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V8-7		12/12/90	190	24	11	11	-	-	2.0	10	0.50	3.0	3.0	1,1,2,2-TCA = 3; 1,1,2-TCA = 2; 1,2,4-TCB = 10; 1,2-DCPA = 2; 1,3-DCB = 0.5; 1,4-DCB = 0.5; 2-CVE = 4; Acetone = 200; BDCMe = 4; Benzene = 0.5; BRFM = 5; BRMA = 5; CHLBZ = 0.5; CHLEA (EC) = 5; CHLFM = 2; CHLMA = 5; cis-1,3-DCP = 3; CT = 3; DBCMe = 4; EDB = 10; Ethylbenzene = 0.5; MC = 50; m-Xylene = 0.5; Naphthalene = 10; o-Xylene = 0.5; TCFMe (Freon 11) = 5; Toluene = 0.5; trans-1,3-DCP = 3; Xylenes = 0.5;
V8-7		4/11/91	470	41	16	ND (<5.0)	12	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<10)	ND (<5.0)	ND (<5.0)	
V8-7		7/26/91	450	48	20	ND (<5.0)	13	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<5.0)	ND (<2.5)	
V8-7		11/12/91	470	46	18	ND (<12)	11	ND (<12)	ND (<12)	ND (<2.5)	ND (<2.5)	ND (<12)	ND (<2.5)	
V8-7		12/6/91	450	42	24	ND (<25)	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
V8-7		3/5/92	160	14	6.5	ND (<2.5)	4.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 1.5;
V8-7		6/5/92	250	17	10	ND (<2.5)	6.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.6;
V8-7		10/12/92	340	33	17	ND (<5.0)	13	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
V8-7		12/8/92	340	35	22	ND (<12)	14	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
V8-7		3/4/93	480	41	24	ND (<5.0)	11	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	CHLFM = 1.2;
V8-7		6/10/93	55	1.6	ND (<0.50)	ND (<0.50)	0.50	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V8-7		9/9/93	290	28	22	ND (<5.0)	8.2	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
V8-7		12/6/93	280	16	18	-	7.2	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
V8-7		3/8/94	54	ND (<0.50)	1.3	ND (<0.50)	0.92	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V8-7		6/3/94	100	1.6	ND (<0.50)	ND (<0.50)	1.4	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 1.4;
V8-7	Dup	6/3/94	100	0.69	ND (<0.50)	ND (<0.50)	1.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 1.1;
V8-7		9/6/94	110	ND (<0.50)	0.83	ND (<0.50)	1.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 2;
V8-7		12/6/94	110	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
V8-7		3/6/95	110	0.50	ND (<0.50)	ND (<0.50)	0.68	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	BDCMe = 0.63; CHLFM = 11;
V8-7		6/7/95	78	24	2.4	-	23	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 7.5;
V8-7	Dup	6/7/95	72	22	2.3	-	22	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 7.4;
V8-7		9/7/95	120	41	3.0	-	29	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	CHLFM = 9;
V8-7		12/6/95	130	ND (<5.0)	ND (<5.0)	ND (<5.0)	6.6	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	CHLFM = 10;
V8-7		3/6/96	120	120	16	120	140	ND (<2.5)	ND (<2.5)	18	ND (<2.5)	2.8	ND (<2.5)	CHLFM = 15;
V8-7		6/7/96	230	1,300	140	330	1,400	ND (<12)	ND (<12)	140	ND (<12)	ND (<12)	ND (<12)	CBMA = 108; MC = 22; TCFMe (Freon 11) = 17; TFT = 115;
V8-7	Dup	6/7/96	230	1,300	150	320	1,400	ND (<12)	ND (<12)	140	ND (<12)	ND (<12)	ND (<12)	CBMA = 108; MC = 21; TCFMe (Freon 11) = 18; TFT = 113;
V8-7		9/12/96	40	68	14	19	100	ND (<1.0)	ND (<1.0)	7.2	ND (<1.0)	ND (<1.0)	ND (<1.0)	CBMA = 106; CHLFM = 6.7; MC = 1.3; TCFMe (Freon 11) = 2;
V8-7		3/6/97	220	66	2.9	9.6	57	ND (<2.5)	ND (<2.5)	14	ND (<2.5)	ND (<2.5)	ND (<2.5)	CBMA = 113; CHLFM = 4;
V8-7		6/5/97	88	48	11	7.5	110	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	CBMA = 92;
V8-7	Dup	6/5/97	110	61	11	8.1	120	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	CBMA = 104; CHLFM = 5.9;
V8-7		9/11/97	310	520	58	130	460	ND (<5.0)	ND (<5.0)	40	ND (<5.0)	ND (<5.0)	ND (<5.0)	CBMA = 105;
V8-7		12/4/97	230	500	41	120	380	ND (<10)	ND (<10)	97	ND (<10)	ND (<10)	ND (<10)	CBMA = 96;
V8-7		6/5/98	120	44	ND (<5.0)	ND (<5.0)	63	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	CBMA = 109;
V8-7		12/11/98	190	290	17	-	204	ND (<5.0)	ND (<5.0)	94	ND (<5.0)	ND (<5.0)	ND (<5.0)	CBMA = 114;
V8-7	Dup	12/11/98	211	301	16	-	209	ND (<10)	ND (<10)	100	ND (<10)	ND (<10)	ND (<10)	CBMA = 109;
V8-7		6/10/99	177	165	ND (<12.5)	32	140	ND (<12.5)	ND (<12.5)	78	ND (<12.5)	ND (<12.5)	ND (<12.5)	
V8-7	Dup	6/10/99	180	157	12	33	132	ND (<10)	ND (<10)	74	ND (<10)	ND (<10)	ND (<10)	
V8-7		12/10/99	205	187	13	43	132	ND (<5.0)	ND (<5.0)	78	ND (<5.0)	ND (<5.0)	ND (<5.0)	
V8-7		6/6/00	240	12	ND (<2.5)	ND (<2.5)	11	ND (<2.5)	ND (<2.5)	5.2	ND (<2.5)	ND (<2.5)	ND (<2.5)	
V8-7		12/5/00	250	120	8.5	33	100	ND (<5.0)	ND (<5.0)	86	ND (<5.0)	ND (<5.0)	ND (<5.0)	
V8-7	Dup	12/5/00	270	120	ND (<10)	33	110	ND (<10)	ND (<10)	79	ND (<10)	ND (<10)	ND (<10)	
V8-7		6/19/01	170	46	ND (<5.0)	6.6	53	ND (<5.0)	ND (<5.0)	46	ND (<5.0)	ND (<5.0)	ND (<5.0)	
V8-7		6/26/02	180	26	4.6	10	45	ND (<1.0)	ND (<1.0)	33	ND (<1.0)	1.8	ND (<1.0)	
V8-7	Dup	6/26/02	190	28	4.8	10	46	ND (<1.0)	ND (<1.0)	31	ND (<1.0)	1.8	ND (<1.0)	
V8-7		6/26/03	190	26	7.4	10	41	ND (<2.5)	ND (<2.5)	19	ND (<2.5)	ND (<2.5)	ND (<2.5)	
V8-7		8/31/04	210	14	2.7	7.0	33	ND (<2.0)	ND (<2.0)	15	ND (<2.0)	ND (<2.0)	ND (<2.0)	
V8-7		8/31/04	210	14	3.4	6.1	27	ND (<2.0)	ND (<2.0)	17	ND (<2.0)	ND (<2.0)	ND (<2.0)	
V8-7		6/20/05	370	30	5.9	10	37	ND (<2.0)	ND (<2.0)	14	ND (<2.0)	ND (<2.0)	ND (<2.0)	
V8-7		6/27/06	310	10	2.4	4.1	16	ND (<2.0)	ND (<2.0)	9.4	ND (<2.0)	ND (<2.0)	ND (<2.0)	
V8-7		6/20/07	260	8.6	2.7	3.9	13	ND (<2.0)	ND (<2.0)	8.2	ND (<2.0)	ND (<2.0)	ND (<2.0)	
V8-7		6/11/08	180	8.3	4.1	4.5	15	ND (<2.0)	ND (<2.0)	7.8	ND (<2.0)	ND (<2.0)	ND (<2.0)	
V8-7		6/11/09	390	7.6	7.6	5.9	18	ND (<0.50)	ND (<0.50)	5.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V8-7		6/8/10	1,100	ND (<10)	13	ND (<10)	21	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	
V8-7		6/14/11	1,300	11	14	ND (<10)	20	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	
V8-7		6/12/12	1,000	ND (<10)	12	ND (<10)	15	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	
V8-7		6/18/13	48	7.0	15	3.7	260	ND (<2.5)	ND (<2.5)	3.1	ND (<2.5)	ND (<2.5)	34	
V8-7		6/11/14	160	ND (<2.5)	8.1	ND (<2.5)	280	ND (<2.5)	ND (<2.5)	7.0	ND (<2.5)	ND (<2.5)	34	
V8-7		6/10/15	230	ND (<2.5)	8.6	ND (<2.5)	320	ND (<2.5)	ND (<2.5)	6.4	ND (<2.5)	ND (<2.5)	24	
V8-7		6/7/16	160	ND (<2.5)	9.0	2.9	430	ND (<2.5)	ND (<2.5)	3.8	ND (<2.5)	ND (<2.5)	17	
V8-7		6/7/17	57	ND (<2.5)	12	2.8	130	2.7	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	13	
V8-7		6/6/18	32	ND (<2.5)	18	4.5	410	4.9	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	76	
V8-7		6/6/19	38	ND (<5.0)	10	ND (<5.0)	210	12	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	42	
V8-7		6/3/20	9.1	ND (<1.3)	11	4.1	440	56	ND (<1.3)	ND (<5.0)	ND (<1.3)	ND (<1.3)	67	
V8-8		12/18/90	650	11	4.0	4.9	-	-	2.0	10	10	3.0	3.0	1,1,2,2-TCA = 3; 1,1,2-TCA = 2; 1,2-DCPA = 2; 1,3-DCB = 10; 1,4-DCB = 10; 2-CVE = 4; BDCMe = 4; BRFM = 5; BRMA = 5; CHLBZ = 4; CHLEA (EC) = 5; CHLFM = 2.6; CHLMA = 5; cis-1,3-DCP = 3; CT = 3; DBCMe = 4; EDB = 10; MC = 50; TCFMe (Freon 11) = 5; trans-1,3-DCP = 3;
V8-8		2/6/91	1,400	30	40	30	-	-	20	100	0.50	30	30	1,1,2,2-TCA = 30; 1,1,2-TCA = 20; 1,2-DCPA = 20; 1,3-DCB = 0.5; 1,4-DCB = 0.5; 2-CVE = 40; Acetone = 30; BDCMe = 40; Benzene = 0.5; BRFM = 50; BRMA = 50; CHLBZ = 0.5; CHLEA (EC) = 50; CHLFM = 20; CHLMA = 50; cis-1,3-DCP = 30; CT = 30; DBCMe = 40; EDB = 100; Ethylbenzene = 0.5; MC = 500; m-Xylene = 0.5; o-Xylene = 0.5; TCFMe (Freon 11) = 50; Toluene = 0.5; trans-1,3-DCP = 30; Xylenes = 0.5;
V8-8		4/12/91	2,600	ND (<50)	ND (<50)	ND (<50)	50	ND (<50)	ND (<50)	ND (<50)	ND (<10)	ND (<50)	ND (<50)	
V8-8		7/25/91	1,600	ND (<12)	ND (<50)	ND (<50)	120	ND (<12)	ND (<12)	ND (<50)	ND (<50)	ND (<12)	ND (<50)	
V8-8	Dup	7/25/91	1,500	ND (<50)	ND (<50)	ND (<50)	120	ND (<50)	ND (<50)	ND (<50)	ND (<50)	ND (<50)	ND (<50)	
V8-8		10/8/91	1,400	ND (<12)	ND (<12)	ND (<12)	120	ND (<12)	ND (<12)	ND (<12)	ND (<12)	ND (<12)	ND (<12)	
V8-8		12/11/91	1,500	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	25	
V8-8		3/4/92	540	ND (<50)	ND (<50)	ND (<50)	86	ND (<50)	ND (<50)	ND (<50)	ND (<50)	ND (<50)	ND (<50)	
V8-8		6/9/92	2,500	ND (<5.0)	ND (<5.0)	ND (<5.0)	35	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
V8-8		10/13/92	320	5.0	2.6	ND (<5.0)	60	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
V8-8		12/7/92	220	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
V8-8		3/5/93	470	3.6	1.2	ND (<5.0)	31	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	CHLFM = 1.6;
V8-8	Dup	3/5/93	440	3.0	1.2	ND (<5.0)	32	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	CHLFM = 1.6;
V8-8		6/10/93	440	2.2	1.0	ND (<5.0)	42	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
V8-8		9/8/93	330	3.7	2.8	ND (<5.0)	52	ND (<5.0)	ND (<5.0)	1.2	ND (<5.0)	ND (<5.0)	ND (<5.0)	
V8-8		12/8/93	1,500	ND (<12)	ND (<12)	ND (<12)	22	ND (<12)	ND (<12)	ND (<12)	-	ND (<12)	ND (<25)	
V8-8		3/8/94	2,400	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	
V8-8		6/2/94	650	3.1	3.0	ND (<2.5)	56	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
V8-8		9/6/94	1,700	ND (<5.0)	ND (<5.0)	ND (<5.0)	27	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
V8-8		12/6/94	1,200	ND (<50)	ND (<50)	ND (<50)	50	ND (<50)	ND (<50)	ND (<50)	-	ND (<50)	ND (<100)	
V8-8	Dup	12/6/94	1,300	ND (<25)	ND (<25)	ND (<25)	68	ND (<25)	ND (<25)	ND (<25)	-	ND (<25)	ND (<50)	
V8-8		3/6/95	27	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.61	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.98;
V8-8		6/8/95	48	0.56	ND (<0.50)	ND (<0.50)	1.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 1.3;
V8-8		9/7/95	44	1.4	ND (<0.50)	ND (<0.50)	1.4	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 1.8;
V8-8		12/6/95	90	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
V8-8		3/6/96	16	1.0	ND (<0.50)	ND (<0.50)	0.50	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.51;
V8-8		6/10/96	61	1.7	ND (<1.0)	ND (<1.0)	3.6	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	CBMA = 114; CHLFM = 1.8;
V8-8		9/11/96	47	2.1	ND (<1.0)	ND (<1.0)	3.5	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	CBMA = 109; CHLFM = 2.6; MC = 1.1;
V8-8		12/11/96	160	ND (<5.0)	ND (<5.0)	ND (<5.0)	13	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
V8-8		3/5/97	57	1.4	ND (<0.50)	ND (<0.50)	4.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 112; CHLFM = 1.7;
V8-8	Dup	3/5/97	59	1.4	ND (<0.50)	ND (<0.50)	4.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 115; CHLFM = 1.8;
V8-8		6/5/97	100	3.2	2.3	1.1	7.4	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	CBMA = 99; CHLFM = 1.8;
V8-8		9/11/97	110	4.1	4.8	3.7	8.7	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	CBMA = 107; CHLFM = 1.5;
V8-8	Dup	9/11/97	110	2.9	4.9	3.7	7.0	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	CBMA = 105; CHLFM = 1.5;
V8-8		12/4/97	92	3.5	4.9	3.8	4.7	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	CBMA = 97;
V8-8		6/5/98	20	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 107;
V8-8		12/11/98	43	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	CBMA = 105;
V8-8		6/10/99	21	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	
V8-8		7/29/99	107	ND (<5.0)	14	8.1	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
V8-8		12/10/99	84	ND (<1.25)	ND (<1.25)	ND (<1.25)	2.0	ND (<1.25)	ND (<1.25)	ND (<2.5)	ND (<1.25)	ND (<1.25)	ND (<1.25)	
V8-8		6/6/00	24	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V8-8		12/5/00	100	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<10)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
V8-8		6/19/01	64	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<10)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
V8-8		6/26/03	240	ND (<2.5)	ND (<2.5)	ND (<2.5)	12	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
V8-8		6/20/05	120	ND (<1.0)	ND (<1.0)	ND (<1.0)	4.0	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	
V8-8		4/7/06	150	ND (<2.0)	ND (<2.0)	ND (<2.0)	ND (<2.0)	ND (<2.0)	ND (<2.0)	ND (<2.0)	ND (<2.0)	-	-	
V8-8		6/27/06	110	ND (<1.0)	ND (<1.0)	ND (<1.0)	1.5	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	
V8-8		6/21/07	160	ND (<1.0)	ND (<1.0)	ND (<1.0)	4.0	2.2	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	
V8-8		8/14/07	220	9.7	3.4	4.8	16	ND (<2.0)	ND (<2.0)	7.9	ND (<2.0)	-	-	
V8-8		6/11/08	170	ND (<1.0)	ND (<1.0)	ND (<1.0)	7.3	6.6	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	
V8-8		6/11/09	150	ND (<2.5)	ND (<2.5)	ND (<2.5)	5.5	5.6	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
V8-8		6/8/10	140	ND (<2.5)	ND (<2.5)	ND (<2.5)	4.7	3.9	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
V8-8		6/14/11	130	ND (<2.5)	3.8	ND (<2.5)	4.8	2.7	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
V8-8		6/12/12	140	ND (<2.5)	3.4	ND (<2.5)	3.4	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
V8-8		6/18/13	130	ND (<2.5)	ND (<2.5)	ND (<2.5)	4.5	3.1	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
V8-8		6/11/14	270	ND (<2.5)	ND (<2.5)	ND (<2.5)	9.3	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
V8-8	Dup	6/11/14	260	ND (<2.5)	ND (<2.5)	ND (<2.5)	9.1	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
V8-8		6/8/15	240	ND (<2.5)	ND (<2.5)	ND (<2.5)	120	6.7	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
V8-8		6/6/16	340	ND (<2.5)	3.0	4.0	430	3.1	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	59	
V8-8	Dup	6/6/16	340	ND (<2.5)	2.9	4.2	440	2.5	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	61	
V8-8		6/5/17	45	ND (<2.5)	ND (<2.5)	ND (<2.5)	47	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
V8-8		6/4/18	31	ND (<0.50)	ND (<0.50)	ND (<0.50)	55	5.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V8-8		6/6/19	47	ND (<0.50)	ND (<0.50)	ND (<0.50)	78	5.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.67	
V8-8		6/3/20	4.7	ND (<0.50)	ND (<0.50)	ND (<0.50)	160	16	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V8-8X		12/16/99	75	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
V8-8X		8/16/00	94	ND (<2.0)	ND (<2.0)	ND (<2.0)	ND (<2.0)	ND (<2.0)	ND (<2.0)	ND (<8.0)	ND (<2.0)	ND (<2.0)	ND (<2.0)	
V8-8X		12/5/00	69	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<4.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	
V8-8X		6/22/01	84	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<10)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
V8-8X	Dup	6/22/01	110	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<20)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
V8-8X		6/27/03	80	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
V8-8X	Dup	6/27/03	97	ND (<0.50)	ND (<0.50)	ND (<0.50)	1.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	

Appendix B
Selected Compounds from Historical Records
COE Study Area and Perimeter Area, Palo Alto, California

Location	Type	Date	TCE	1,1,1-TCA	1,1-DCA	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	PCE	Freon 113	1,2-DCB	1,2-DCA	VC	Other Constituents
V8-8X		6/29/05	180	ND (<2.0)	ND (<2.0)	ND (<2.0)	3.2	ND (<2.0)	ND (<2.0)	ND (<2.0)	ND (<2.0)	ND (<2.0)	ND (<2.0)	
V8-8X		7/6/07	15	ND (<0.50)	ND (<0.50)	ND (<0.50)	6.3	5.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V8-8X	Dup	7/6/07	13	ND (<0.50)	ND (<0.50)	ND (<0.50)	6.3	4.9	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.52	
V8-8X		6/15/09	170	ND (<0.50)	3.3	0.63	4.4	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	1,2-DCPA = 0.81;
V8-8X		6/14/11	85	ND (<0.50)	2.1	1.4	2.3	ND (<0.50)	0.77	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V8-8X	Dup	6/14/11	69	ND (<0.50)	1.9	1.1	1.9	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V8-8X		6/18/13	180	ND (<0.50)	5.1	2.7	3.9	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V8-8X		6/8/15	0.59	ND (<0.50)	ND (<0.50)	ND (<0.50)	1.7	0.71	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V8-8X	Dup	6/8/15	0.54	ND (<0.50)	ND (<0.50)	ND (<0.50)	1.6	0.65	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V8-8X		6/5/17	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	1.2	1.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V8-8X		6/6/19	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.68	0.88	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V8-13B		12/13/90	-	-	-	-	-	-	-	-	0.50	-	-	1,2,4-TCB = 10; 1,3-DCB = 0.5; 1,4-DCB = 0.5; Acetone = 30; Benzene = 0.5; CHLBZ = 0.5; Ethylbenzene = 0.5; m-Xylene = 0.5; Naphthalene = 10; o-Xylene = 0.5; Toluene = 0.5; Xylenes = 0.5;
V8-13B		2/6/91	0.50	0.30	0.40	0.30	-	-	0.20	1.0	1.0	0.30	0.30	1,1,2,2-TCA = 0.30; 1,1,2-TCA = 0.2; 1,2-DCPA = 0.2; 1,3-DCB = 1; 1,4-DCB = 1; 2-CVE = 0.40; BDCMe = 0.40; BRFM = 0.5; BRMA = 0.5; CHLBZ = 0.40; CHLEA (EC) = 0.5; CHLFM = 0.2; CHLMA = 0.5; cis-1,3-DCP = 0.30; CT = 0.30; DBCMe = 0.40; EDB = 1; MC = 5; TCFMe (Freon 11) = 0.5; trans-1,3-DCP = 0.30;
V8-13B		4/11/91	0.60	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V8-13B		7/26/91	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V8-13B		11/1/91	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V8-13B		12/6/91	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
V8-13B		3/5/92	2.9	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V8-13B		6/9/92	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V8-13B	Dup	6/9/92	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V8-13B		10/12/92	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V8-13B		12/7/92	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
V8-13B		3/5/93	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V8-13B		6/11/93	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V8-13B		9/9/93	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V8-13B		12/6/93	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
V8-13B		3/8/94	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V8-13B		6/2/94	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V8-13B		9/6/94	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V8-13B		12/6/94	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
V8-13B		6/2/95	0.97	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V8-13B		12/6/95	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
V8-13B		6/5/96	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 113;
V8-13B		1/10/97	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
V8-13B		12/4/97	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 100;
V8-13B		12/11/98	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 117;
V8-13B		12/10/99	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<1.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V8-13B		12/5/00	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V8-13B		6/19/01	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V8-13B	Dup	6/19/01	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V8-13B		6/22/04	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V8-13B		6/20/05	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V8-13B		6/27/06	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V8-13B		6/20/07	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V8-13B		6/11/08	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V8-13B		6/11/09	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V8-13B		8/30/11	0.90	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V8-13B		6/18/13	1.8	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V8-13B		6/11/14	2.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V8-13B		6/10/15	0.85	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V8-13B		6/7/16	0.55	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V8-13B		6/5/17	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V8-13B		6/6/19	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V8-14X		12/13/90	990	4.0	4.0	3.0	-	-	2.0	10	0.50	3.0	3.0	1,1,2,2-TCA = 3; 1,1,2-TCA = 2; 1,2,4-TCB = 10; 1,2-DCPA = 2; 1,3-DCB = 0.5; 1,4-DCB = 0.5; 2-CVE = 4; Acetone = 30; BDCMe = 4; Benzene = 0.5; BRFM = 5; BRMA = 5; CHLBZ = 0.5; CHLEA (EC) = 5; CHLFM = 3.8; CHLMA = 5; cis-1,3-DCP = 3; CT = 3; DBCMe = 4; EDB = 10; Ethylbenzene = 0.5; MC = 50; m-Xylene = 0.5; Naphthalene = 10; o-Xylene = 0.5; TCFMe (Freon 11) = 5; Toluene = 0.5; trans-1,3-DCP = 3; Xylenes = 0.5;
V8-14X		2/6/91	7.2	180	25	44	-	-	2.0	10	10	3.0	3.0	1,1,2,2-TCA = 3; 1,1,2-TCA = 2; 1,2-DCPA = 2; 1,3-DCB = 10; 1,4-DCB = 10; 2-CVE = 4; BDCMe = 4; BRFM = 5; BRMA = 5; CHLBZ = 4; CHLEA (EC) = 5; CHLFM = 2.3; CHLMA = 5; cis-1,3-DCP = 3; CT = 3; DBCMe = 4; EDB = 10; MC = 50; TCFMe (Freon 11) = 5; trans-1,3-DCP = 3;
V8-14X		4/19/91	1,300	17	ND (<50)	ND (<50)	15	ND (<50)	ND (<50)	ND (<50)	ND (<10)	ND (<50)	ND (<50)	
V8-14X	Dup	4/19/91	1,300	17	ND (<50)	ND (<50)	14	ND (<50)	ND (<50)	ND (<50)	ND (<10)	ND (<50)	ND (<50)	
V8-14X		7/26/91	1,700	72	ND (<5.0)	ND (<25)	42	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
V8-14X		10/7/91	1,800	8.0	ND (<5.0)	ND (<5.0)	7.0	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
V8-14X		12/5/91	2,000	ND (<50)	ND (<50)	ND (<50)	-	ND (<50)	ND (<50)	ND (<50)	-	ND (<50)	ND (<100)	
V8-14X		3/5/92	1,800	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
V8-14X		6/10/92	1,700	37	ND (<5.0)	ND (<5.0)	12	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
V8-14X		2/10/93	ND (<50)	1,200	160	-	1,100	ND (<50)	ND (<50)	-	-	ND (<50)	ND (<100)	
V8-14X		5/25/93	60	1,300	180	ND (<5.0)	1,400	ND (<5.0)	ND (<5.0)	120	ND (<5.0)	ND (<5.0)	ND (<5.0)	TCFMe (Freon 11) = 24;
V8-14X		8/24/93	47	1,400	180	ND (<25)	1,300	ND (<5.0)	ND (<5.0)	170	ND (<5.0)	ND (<5.0)	ND (<5.0)	TCFMe (Freon 11) = 17;
V8-14X		9/14/93	63	2,000	220	ND (<25)	1,700	ND (<5.0)	ND (<5.0)	200	ND (<5.0)	ND (<5.0)	ND (<5.0)	TCFMe (Freon 11) = 16;
V8-14X	Dup	9/14/93	49	2,000	180	ND (<25)	1,700	ND (<5.0)	ND (<5.0)	160	ND (<5.0)	ND (<5.0)	ND (<5.0)	TCFMe (Freon 11) = 9.1;
V8-14X		1/25/94	110	2,200	280	5.5	2,200	5.5	ND (<5.0)	320	-	ND (<5.0)	ND (<10)	
V8-14X		3/8/94	130	3,100	300	-	2,500	ND (<10)	ND (<10)	480	ND (<10)	ND (<10)	ND (<10)	
V8-14X	Dup	3/8/94	150	3,500	290	-	3,000	ND (<10)	ND (<10)	380	ND (<10)	15	ND (<10)	
V8-14X		6/7/94	140	4,600	190	-	2,800	ND (<25)	ND (<25)	560	ND (<25)	ND (<25)	ND (<25)	MC = 64;
V8-14X	Dup	6/7/94	160	3,800	240	-	2,500	ND (<25)	ND (<25)	760	ND (<25)	ND (<25)	ND (<25)	MC = 68;
V8-14X		9/14/94	180	3,600	160	-	2,000	ND (<10)	ND (<10)	980	ND (<10)	15	ND (<10)	1,1,2-TCA = 15; MC = 17;
V8-14X		10/17/94	200	3,100	140	-	1,800	ND (<10)	ND (<10)	910	ND (<10)	ND (<10)	ND (<10)	
V8-14X		11/15/94	200	2,800	100	-	1,400	ND (<12)	ND (<12)	680	ND (<12)	ND (<12)	ND (<12)	
V8-14X		12/16/94	260	2,100	62	-	1,000	ND (<10)	ND (<10)	760	-	ND (<10)	ND (<20)	Acetone = 31;
V8-14X		3/6/95	260	1,800	30	-	760	ND (<25)	ND (<25)	620	ND (<25)	ND (<25)	ND (<25)	
V8-22		4/19/91	ND (<0.50)	4.0	2.0	-	1.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V8-22		7/25/91	ND (<0.50)	15	4.2	-	8.7	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.6; TCFMe (Freon 11) = 0.5;
V8-22		10/7/91	ND (<0.50)	3.5	1.9	-	2.8	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V8-22		12/9/91	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
V8-22		3/5/92	ND (<5.0)	1,100	340	ND (<25)	1,700	ND (<5.0)	ND (<5.0)	9.0	ND (<5.0)	ND (<5.0)	ND (<5.0)	CHLFM = 15; TCFMe (Freon 11) = 30;
V8-22		6/8/92	0.70	110	19	ND (<2.5)	140	ND (<0.50)	ND (<0.50)	1.7	ND (<0.50)	0.5	ND (<0.50)	CHLFM = 3; TCFMe (Freon 11) = 1;
V8-22		10/13/92	ND (<100)	6,200	450	ND (<100)	4,500	ND (<100)	ND (<100)	610	ND (<100)	ND (<100)	ND (<100)	
V8-22		12/3/92	ND (<500)	5,000	ND (<500)	ND (<500)	-	ND (<500)	ND (<500)	ND (<500)	-	ND (<500)	ND (<1,000)	
V8-22		3/5/93	ND (<0.50)	47	3.2	-	21	ND (<0.50)	ND (<0.50)	0.70	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V8-22		6/11/93	0.60	160	9.5	ND (<2.5)	140	ND (<0.50)	ND (<0.50)	27	ND (<0.50)	ND (<0.50)	ND (<0.50)	TCFMe (Freon 11) = 1.3;
V8-22		9/9/93	1.1	98	7.1	ND (<2.5)	73	ND (<0.50)	ND (<0.50)	11	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V8-22		12/13/93	ND (<5.0)	16	ND (<5.0)	ND (<5.0)	15	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
V8-22		3/9/94	28	580	52	-	800	ND (<2.5)	ND (<2.5)	30	ND (<2.5)	ND (<2.5)	ND (<2.5)	
V8-22		6/6/94	6.0	180	20	-	150	ND (<0.50)	ND (<0.50)	30	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V8-22		9/7/94	5.1	58	8.3	-	56	ND (<0.50)	ND (<0.50)	14	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V8-22		12/6/94	ND (<5.0)	8.2	ND (<5.0)	ND (<5.0)	13	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
V8-22		3/6/95	1.6	23	1.9	-	24	ND (<0.50)	ND (<0.50)	5.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V8-22		6/9/95	16	260	13	-	180	ND (<1.0)	ND (<1.0)	65	ND (<1.0)	ND (<1.0)	ND (<1.0)	
V8-22		9/8/95	25	230	13	-	180	1.8	ND (<0.50)	27	ND (<0.50)	2.6	ND (<0.50)	
V8-22		12/8/95	5.8	40	ND (<5.0)	-	32	ND (<5.0)	ND (<5.0)	9.8	-	ND (<5.0)	ND (<10)	
V8-22	Dup	12/8/95	5.9	41	ND (<5.0)	-	32	ND (<5.0)	ND (<5.0)	9.6	-	ND (<5.0)	ND (<10)	
V8-22		3/7/96	49	160	9.8	23	110	ND (<2.5)	ND (<2.5)	34	ND (<2.5)	ND (<2.5)	ND (<2.5)	
V8-22	Dup	3/7/96	53	170	9.8	24	110	ND (<2.5)	ND (<2.5)	35	ND (<2.5)	ND (<2.5)	ND (<2.5)	
V8-22		6/6/96	31	100	7.3	16	77	ND (<1.0)	ND (<1.0)	34	ND (<1.0)	ND (<1.0)	ND (<1.0)	CBMA = 120; CHLFM = 1.4;
V8-22		9/13/96	160	320	21	68	210	ND (<2.5)	ND (<2.5)	80	ND (<2.5)	ND (<2.5)	ND (<2.5)	CBMA = 105; CHLFM = 6; MC = 2.8; TCFMe (Freon 11) = 4.2;
V8-22	Dup	9/13/96	180	360	22	74	220	ND (<2.5)	ND (<2.5)	96	ND (<2.5)	ND (<2.5)	ND (<2.5)	CBMA = 107; CHLFM = 6.2; MC = 2.9; TCFMe (Freon 11) = 4.6;
V8-22		12/13/96	25	46	ND (<5.0)	5.6	36	ND (<5.0)	ND (<5.0)	7.5	-	ND (<5.0)	ND (<10)	
V8-22		3/6/97	16	29	2.5	5.2	16	ND (<0.50)	ND (<0.50)	20	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 116; TCFMe (Freon 11) = 0.56;
V8-22		6/6/97	6.9	7.8	1.3	0.41	10	ND (<0.50)	ND (<0.50)	1.6	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 96; MC = 2.2;
V8-22		9/10/97	39	39	4.9	5.4	45	0.53	ND (<0.50)	6.1	ND (<0.50)	0.76	ND (<0.50)	CBMA = 109; CHLFM = 1.8;
V8-22		12/3/97	9.3	12	2.9	3.3	10	ND (<0.50)	ND (<0.50)	6.8	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 108; TCFMe (Freon 11) = 0.65;
V8-22		12/10/98	4.5	5.3	1.0	-	5.6	ND (<0.50)	ND (<0.50)	3.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 101;
V8-22		12/10/99	3.9	2.5	ND (<0.50)	0.61	3.8	ND (<0.50)	ND (<0.50)	ND (<1.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V8-22		12/5/00	2.8	1.5	0.55	ND (<0.50)	3.3	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V8-22		6/19/01	2.2	1.1	ND (<0.50)	ND (<0.50)	3.2	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V8-22		6/25/03	9.1	5.4	4.9	6.3	8.7	ND (<0.50)	ND (<0.50)	5.8	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V8-22		6/20/05	8.7	7.6	14	10	14	ND (<0.50)	1.2	2.6	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V8-22		6/20/07	24	7.9	16	12	15	ND (<0.50)	ND (<0.50)	4.7	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V8-22		6/11/09	49	5.0	13	8.7	12	ND (<0.50)	ND (<0.50)	4.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V8-22		6/14/11	13	5.9	16	10	12	ND (<0.50)	ND (<0.50)	3.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V8-22		6/18/13	16	3.9	12	9.0	8.1	ND (<0.50)	ND (<0.50)	2.4	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V8-22		6/9/15	23	3.6	11	8.8	9.5	ND (<0.50)	ND (<0.50)	2.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V8-22		6/5/17	9.9	3.0	7.2	8.1	6.9	ND (<0.50)	ND (<0.50)	2.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V8-22		6/6/19	12	3.3	5.6	14	9.1	ND (<0.50)	ND (<0.50)	2.4	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V8-34		10/12/13	13	ND (<0.50)	18	21	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V8-34		1/19/14	20	ND (<0.50)	21	21	0.60	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V8-34		6/11/14	50	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V8-34		7/1/14	22	ND (<0.50)	18	21	0.60	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V8-34		7/1/14	16	ND (<0.50)	19	22	0.60	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V8-34		6/10/15	19	ND (<0.50)	14	17	15	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	8.2	
V8-34		6/7/16	68	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.50	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V8-34		6/7/17	53	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V8-34		6/6/19	47	ND (<0.50)	0.50	0.61	3.9	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V-9		12/14/90	160	60	17	29	-	-	2.0	10	10	3.0	3.0	1,1,2,2-TCA = 3; 1,1,2-TCA = 2; 1,2,4-TCB = 10; 1,2-DCPA = 2; 1,3-DCB = 10; 1,4-DCB = 10; 2-CVE = 4; Acetone = 30; BDCMe = 4; Benzene = 0.5; BRFM = 5; BRMA = 5; CHLBZ = 4; CHLEA (EC) = 5; CHLFM = 2; CHLMA = 5; cis-1,3-DCP = 3; CT = 3; DBCMe = 4; EDB = 10; Ethylbenzene = 0.5; MC = 50; m-Xylene = 0.30; Naphthalene = 10; o-Xylene = 0.30; TCFMe (Freon 11) = 5; Toluene = 0.5; trans-1,3-DCP = 3; Xylenes = 0.9;
V-9		4/15/91	190	25	16	ND (<3.0)	3.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<10)	ND (<0.50)	ND (<0.50)	Toluene = 0.7;

Appendix B
Selected Compounds from Historical Records
COE Study Area and Perimeter Area, Palo Alto, California

Location	Type	Date	TCE	1,1,1-TCA	1,1-DCA	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	PCE	Freon 113	1,2-DCB	1,2-DCA	VC	Other Constituents
V-9	Dup	4/15/91	-	-	22	4.6	-	-	0.20	1.0	10	0.30	0.30	1,1,2,2-TCA = 0.30; 1,1,2-TCA = 0.2; 1,2,4-TCB = 10; 1,2-DCPA = 0.2; 1,3-DCB = 1; 1,4-DCB = 1; 2-CVE = 0.40; Acetone = 30; BDCMe = 0.40; Benzene = 0.5; BRFM = 0.5; BRMA = 0.5; CHLBZ = 0.40; CHLEA (EC) = 0.5; CHLFM = 0.40; CHLMA = 0.5; cis-1,3-DCP = 0.30; CT = 0.30; DBCMe = 0.40; EDB = 1; Ethylbenzene = 0.5; MC = 5; m-Xylene = 0.5; Naphthalene = 10; o-Xylene = 0.5; TCFMe (Freon 11) = 0.5; Toluene = 0.5; trans-1,3-DCP = 0.30; Xylenes = 0.5;
V-9		7/30/91	34	17	14	-	46	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V-9		11/1/91	180	52	24	ND (<2.5)	12	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.8;
V-9	Dup	11/1/91	180	52	24	ND (<2.5)	12	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.9;
V-9		12/12/91	110	24	17	-	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
V-9		3/4/92	190	48	22	-	5.0	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	7.8	ND (<1.0)	
V-9		6/8/92	130	24	17	ND (<2.5)	3.6	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V-9		10/13/92	110	29	12	ND (<2.5)	2.7	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V-9		12/9/92	230	60	26	ND (<10)	7.2	ND (<5.0)	ND (<5.0)	ND (<10)	-	ND (<5.0)	ND (<20)	
V-9		3/5/93	77	20	14	ND (<2.5)	2.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.5;
V-9		6/11/93	28	7.3	33	-	0.50	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V-9		9/9/93	1.5	ND (<0.50)	0.52	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V-9		12/9/93	16	ND (<5.0)	28	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
V-9		3/9/94	31	2.7	25	-	1.6	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V-9		6/2/94	30	23	34	-	3.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.7;
V-9		12/6/94	14	ND (<5.0)	8.2	ND (<5.0)	9.0	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	Acetone = 24; CARBD = 9.9;
V-9		6/7/95	18	11	16	-	1.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	MC = 1.8;
V-9		12/6/95	40	ND (<5.0)	9.6	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
V-9		6/10/96	100	300	84	110	430	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	CBMA = 113; CHLFM = 7.5;
V-9		12/11/96	110	420	130	150	790	ND (<25)	ND (<25)	ND (<25)	-	ND (<25)	ND (<50)	
V-9		6/5/97	64	110	35	33	140	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	CBMA = 102;
V-9		12/9/97	25	17	6.2	4.3	26	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	CBMA = 100;
V-9		6/2/98	9.6	9.8	2.3	2.2	11	ND (<0.50)	ND (<0.50)	0.74	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 119; MC = 2;
V-9		12/8/98	17	1.0	5.2	1.1	20	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 109;
V-9		6/10/99	6.8	4.3	2.2	1.4	6.9	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V-9		12/10/99	11	10	11	5.5	12	ND (<0.50)	ND (<0.50)	ND (<1.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.502;
V-9		6/6/00	4.8	1.5	0.75	ND (<0.50)	2.9	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V-9		12/7/00	11	2.5	2.4	0.95	4.3	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V-9	Dup	12/7/00	11	2.6	2.4	1.0	4.3	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V-9		6/20/01	5.0	3.9	6.0	2.0	3.2	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V-9		6/24/03	6.4	1.5	2.3	1.0	4.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V-9		7/5/07	140	5.0	2.9	3.6	14	ND (<1.0)	ND (<1.0)	3.8	ND (<1.0)	ND (<1.0)	ND (<1.0)	
V-9		6/11/09	830	ND (<10)	ND (<10)	ND (<10)	15	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	
V-9		6/15/11	2,000	ND (<10)	15	11	27	ND (<10)	ND (<10)	12	ND (<10)	ND (<10)	ND (<10)	
V-9		6/18/13	880	ND (<10)	ND (<10)	ND (<10)	31	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	
V-9		6/11/14	2,000	ND (<10)	13	10	470	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	65	
V-9 (37')		12/20/14	1,200	ND (<13)	ND (<13)	ND (<13)	240	ND (<13)	ND (<13)	ND (<50)	ND (<13)	ND (<13)	36	
V-9 (51')		12/20/14	1,800	ND (<13)	13	ND (<13)	400	ND (<13)	ND (<13)	ND (<50)	ND (<13)	ND (<13)	54	
V-9		6/9/15	2,200	ND (<10)	11	10	400	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	55	
V-9		6/7/17	530	ND (<10)	ND (<10)	ND (<10)	61	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	
V-9		6/6/18	860	ND (<10)	13	10	230	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	31	
V-9		6/4/19	310	ND (<10)	ND (<10)	ND (<10)	240	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	
V-9		5/3/20	430	1.0 J	12	8.0	490	2.5 J	ND (<5.0)	1.2 J	ND (<5.0)	ND (<5.0)	28	
V-9A1U		4/15/91	930	9.0	5.0	ND (<50)	7.0	ND (<50)	ND (<50)	ND (<50)	ND (<10)	ND (<50)	ND (<50)	CHLFM = 3;
V-9X		12/16/99	400	55	ND (<13)	21	55	ND (<13)	ND (<13)	70	ND (<13)	ND (<13)	ND (<13)	
V-9X		8/15/00	570	85	11	28	72	ND (<10)	ND (<10)	93	ND (<10)	ND (<10)	ND (<10)	
V-9X		12/11/00	550	58	ND (<25)	ND (<25)	49	ND (<25)	ND (<25)	ND (<100)	ND (<25)	ND (<25)	ND (<25)	
V-9X		6/22/01	520	33	ND (<25)	ND (<25)	32	ND (<25)	ND (<25)	ND (<100)	48	ND (<25)	ND (<25)	1,1,2,2-TCA = 32; 1,3-DCB = 30; 1,4-DCB = 51;
V-9X		6/26/03	430	20	11	11	24	ND (<10)	ND (<10)	17	ND (<10)	ND (<10)	ND (<10)	
V-9X		6/30/05	4.4	ND (<2.5)	16	ND (<2.5)	500	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	CHLEA (EC) = 7.1;
V-9X		7/19/07	54	ND (<2.5)	7.7	3.1	180	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	63	
V-9X		6/15/09	2,500	ND (<25)	ND (<25)	ND (<25)	ND (<25)	ND (<25)	ND (<25)	ND (<25)	ND (<25)	ND (<25)	ND (<25)	
V-9X		6/15/11	2,000	5.5	14	9.0	30	ND (<1.0)	ND (<1.0)	5.5	ND (<1.0)	ND (<1.0)	ND (<1.0)	
V-9X		6/18/13	2,800	ND (<10)	12	ND (<10)	910	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	120	
V-9X		6/11/14	1,700	ND (<10)	12	14	400	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	72	
V-9X		12/20/14	900	ND (<5.0)	8.7	7.9	250	ND (<5.0)	ND (<5.0)	ND (<20)	ND (<5.0)	ND (<5.0)	45	
V-9X		6/9/15	1,800	ND (<10)	11	ND (<10)	310	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	28	
V-9X		6/7/17	710	ND (<10)	11	ND (<10)	140	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	25	
V-9X		6/4/19	200	ND (<10)	14	11	700	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	45	
V-10		12/20/90	-	-	-	-	-	-	-	-	0.50	-	-	1,3-DCB = 0.5; 1,4-DCB = 0.5; Acetone = 30; Benzene = 0.5; CHLBZ = 0.5; Ethylbenzene = 0.5; m-Xylene = 0.5; o-Xylene = 0.5; Toluene = 1.2; Xylenes = 0.5;
V-10		2/6/91	0.70	0.30	0.40	0.30	-	-	0.20	1	0.50	0.30	0.30	1,1,2,2-TCA = 0.30; 1,1,2-TCA = 0.2; 1,2-DCPA = 0.2; 1,3-DCB = 0.5; 1,4-DCB = 0.5; 2-CVE = 0.40; Acetone = 30; BDCMe = 0.40; Benzene = 0.5; BRFM = 0.5; BRMA = 0.5; CHLBZ = 0.40; CHLEA (EC) = 0.5; CHLFM = 0.2; CHLMA = 0.5; cis-1,3-DCP = 0.30; CT = 0.30; DBCMe = 0.40; EDB = 1; Ethylbenzene = 0.5; MC = 5; m-Xylene = 0.5; o-Xylene = 0.5; TCFMe (Freon 11) = 0.5; Toluene = 0.5; trans-1,3-DCP = 0.30; Xylenes = 0.5;
V-10		7/29/91	0.70	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.6;
V-10		12/9/91	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
V-10		6/10/92	0.50	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V-10		12/8/92	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
V-10		6/11/93	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V-10		12/6/93	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
V-10		6/2/94	1.8	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V-10		12/6/94	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
V-10		6/6/95	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V-10	Dup	6/6/95	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V-10		12/5/95	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
V-10		6/4/96	0.95	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 109;
V-10		12/9/96	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
V-10	Dup	12/9/96	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
V-10		12/2/97	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 92;
V-10	Dup	12/2/97	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 96;
V-10		12/10/99	3.1	0.60	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<1.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V-10		6/19/01	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	BDCMe = 1.1; CHLFM = 5.5;
V-10		6/25/03	0.64	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V-10		6/20/05	1.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V-10		6/20/07	1.9	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V-10		6/11/09	0.89	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V-10		6/16/11	1.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V-10		6/18/13	0.81	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V-10		6/9/15	1.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V-10	Dup	6/9/15	0.56	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V-10		6/7/17	0.53	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V-10		6/6/18	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V-10		6/6/19	0.67	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V-10		6/3/20	0.55	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V-16A1U		6/16/11	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V-16A1U		6/19/13	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V-16A1UR		2/15/17	11	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V-16A1UR		6/7/17	11	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V-16A1UR		6/6/18	8.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V-16A1UR	Dup	6/6/18	7.9	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V-16A1UR		6/24/19	5.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V-16A1UR		6/3/20	6.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V-23		4/10/91	150	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<10)	ND (<5.0)	ND (<5.0)	
V-23	Dup	4/10/91	100	1.5	0.90	1.8	-	-	0.20	1.0	1.0	0.30	0.30	1,1,2,2-TCA = 0.30; 1,1,2-TCA = 0.2; 1,2,4-TCB = 10; 1,2-DCPA = 0.2; 1,3-DCB = 1; 1,4-DCB = 1; 2-CVE = 4; BDCMe = 0.40; Benzene = 0.5; BRFM = 0.5; BRMA = 0.5; CHLBZ = 0.40; CHLEA (EC) = 0.5; CHLFM = 0.2; CHLMA = 0.5; cis-1,3-DCP = 0.30; CT = 0.30; DBCMe = 4; EDB = 1; Ethylbenzene = 0.5; MC = 5; m-Xylene = 0.5; Naphthalene = 10; o-Xylene = 0.5; TCFMe (Freon 11) = 0.5; Toluene = 0.5; trans-1,3-DCP = 0.30; Xylenes = 0.5;
V-23		7/29/91	130	0.80	0.60	ND (<0.50)	1.5	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V-23		10/9/91	27	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V-23		12/11/91	62	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
V-23		3/4/92	57	1.2	ND (<0.50)	ND (<0.50)	1.7	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V-23		6/8/92	46	0.70	ND (<0.50)	ND (<0.50)	0.50	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V-23		10/12/92	86	3.9	1.4	ND (<2.5)	5.6	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<0.50)	ND (<2.5)	
V-23		12/8/92	85	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	Acetone = 25;
V-23		3/8/93	52	1.6	0.70	-	1.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V-23		6/10/93	34	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V-23		9/10/93	37	0.65	ND (<0.50)	ND (<0.50)	0.54	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V-23	Dup	9/10/93	38	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V-23		12/9/93	17	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
V-23	Dup	12/9/93	17	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
V-23		3/9/94	12	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V-23		6/2/94	59	1.1	0.84	-	2.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V-23		9/6/94	21	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V-23		12/8/94	14	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
V-23		3/2/95	10	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V-23		6/7/95	100	1.9	1.2	-	3.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.68;
V-23		9/7/95	170	2.9	1.8	-	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V-23		12/6/95	73	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
V-23		3/6/96	150	7.4	ND (<2.5)	4.0	5.2	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
V-23		6/7/96	30	0.68	ND (<0.50)	0.58	0.65	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 118;
V-23		9/12/96	27	0.59	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 107;
V-23		12/12/96	95	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
V-23		3/6/97	22	0.6	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 107;
V-23		6/6/97	18	0.74	ND (<0.50)	ND (<0.50)	0.61	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 92;
V-23		9/10/97	18	0.73	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 107; MC = 1.3;
V-23	Dup	9/10/97	19	0.73	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 105; MC = 1.3;
V-23		12/8/97	48	2.3	3.7	7.4	2.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 93; TCFMe (Freon 11) = 0.82;
V-23		6/4/98	3.9	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 105;
V-23	Dup	6/4/98	4	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 115;
V-23		12/10/98	53	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	CBMA = 119;
V-23		6/10/99	36	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
V-23		12/14/99	47	1.3	ND (<1.25)	ND (<1.25)	ND (<1.25)	ND (<1.25)	ND (<1.25)	ND (<1.25)	ND (<1.25)	ND (<1.25)	ND (<1.25)	
V-23		6/6/00	41	ND (<0.50)	ND (<0.50)	0.60	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	

Appendix B
Selected Compounds from Historical Records
COE Study Area and Perimeter Area, Palo Alto, California

Location	Type	Date	TCE	1,1,1-TCA	1,1-DCA	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	PCE	Freon 113	1,2-DCB	1,2-DCA	VC	Other Constituents
V-23		12/5/00	50	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<4.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	
V-23	Dup	12/5/00	42	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<4.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	
V-23		6/19/01	34	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<4.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	
V-23		6/26/03	48	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	
V-23		6/20/05	2.5	ND (<0.50)	1.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V-23		6/20/07	1.7	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V-23		6/15/09	1.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V-23		6/15/11	0.90	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V-23		6/18/13	0.57	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V-23	Dup	6/18/13	0.58	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V-23R		2/15/17	250	4.6	11	6.1	130	1.2	ND (<0.50)	2.4	ND (<0.50)	ND (<0.50)	27	
V-23R		6/8/17	540	8.8	11	7.6	150	1.4	ND (<0.50)	7.0	ND (<0.50)	ND (<0.50)	40	
V-23R		6/6/18	540	6.1	17	8.4	190	2.1	ND (<0.50)	5.4	ND (<0.50)	ND (<0.50)	83	
V-23R		6/6/19	700	ND (<25)	ND (<25)	ND (<25)	350	ND (<25)	ND (<25)	ND (<25)	ND (<25)	ND (<25)	110	
V-23R	Dup	6/6/19	700	ND (<25)	ND (<25)	ND (<25)	340	ND (<25)	ND (<25)	ND (<25)	ND (<25)	ND (<25)	100	
V-23R		6/3/20	430	5.3	16	9.0	260	ND (<2.5)	ND (<2.5)	ND (<10)	ND (<2.5)	ND (<2.5)	42	
V-33A2D		6/15/92	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V-33A2D		10/13/92	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V-33A2D		2/25/93	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<5.0)	-	-	ND (<5.0)	ND (<10)	
V-33A2D		3/8/93	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V-33A2D		6/11/93	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V-33A2D		9/10/93	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V-33A2D		12/13/93	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
V-33A2D		3/9/94	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V-33A2D	Dup	3/9/94	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V-33A2D		6/2/94	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V-33A2D		12/8/94	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
V-33A2D		6/2/95	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V-33A2D	Dup	6/2/95	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V-33A2D		12/5/95	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
V-33A2D		6/4/96	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 113;
V-33A2D		12/10/96	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
V-33A2D		6/4/97	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 109;
V-33A2D	Dup	6/4/97	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 106;
V-33A2D		12/9/97	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 98;
V-33A2D		6/4/98	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 121;
V-33A2D		12/9/98	0.63	1.68	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 102;
V-33A2D		6/10/99	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V-33A2D		7/29/99	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V-33A2D		12/10/99	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<1.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V-33A2D		6/6/00	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V-33A2D		12/5/00	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V-33A2D		6/19/01	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V-33A2D		6/25/03	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V-33A2D		6/20/05	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V-33A2D		6/20/07	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V-33A2D		6/11/09	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V-33A2D		6/15/11	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
V-33A2D		6/18/13	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
VB-1		12/13/90	66	13	4.0	3.0	-	-	2.4	10	0.50	3.0	3.0	1,1,2,2-TCA = 3; 1,1,2-TCA = 2; 1,2-DCPA = 2; 1,3-DCB = 0.5; 1,4-DCB = 0.5; 2-CVE = 4; Acetone = 200; BDCMe = 4; Benzene = 1.9; BRFM = 5; BRMA = 5; CHLBZ = 0.5; CHLEA (EC) = 5; CHLFM = 2; CHLMA = 5; cis-1,3-DCP = 3; CT = 3; DBCMe = 4; EDB = 10; Ethylbenzene = 1; MC = 50; m-Xylene = 0.9; o-Xylene = 1.5; TCFMe (Freon 11) = 5; Toluene = 0.5; trans-1,3-DCP = 3; Xylenes = 3.2;
VB-1		4/18/91	140	14	6.0	-	6.0	1.0	8.0	ND (<0.50)	ND (<0.50)	2.0	ND (<0.50)	Benzene = 1; Ethylbenzene = 2; Xylenes = 1;
VB-1		7/24/91	120	8.0	4.7	-	7.0	1.8	6.2	0.90	ND (<0.50)	1.3	ND (<0.50)	
VB-1		11/12/91	97	22	6.6	-	6.1	1.4	4.9	ND (<0.50)	ND (<0.50)	ND (<2.5)	ND (<2.5)	CHLFM = 1;
VB-1		12/11/91	110	24	7.1	ND (<5.0)	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
VB-1		3/6/92	110	9.7	5.2	-	11	0.9	6.1	ND (<0.50)	ND (<0.50)	0.90	ND (<0.50)	CHLFM = 0.8;
VB-1		6/5/92	240	9.6	7.3	ND (<2.5)	31	ND (<0.50)	7.9	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 1.3;
VB-1		9/11/92	250	8.6	5.9	-	19	1.9	7.3	ND (<0.50)	ND (<0.50)	0.90	ND (<0.50)	CHLFM = 0.9;
VB-1		12/10/92	160	12	5.3	ND (<5.0)	12	ND (<5.0)	5.9	ND (<5.0)	-	ND (<5.0)	ND (<10)	
VB-1		3/12/93	2,000	18	7.0	ND (<25)	200	ND (<5.0)	34	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
VB-1		6/4/93	2,000	9.0	3.0	ND (<25)	95	ND (<2.5)	26	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
VB-1		9/10/93	1,000	15	6.9	ND (<12)	48	ND (<12)	26	ND (<2.5)	ND (<2.5)	ND (<12)	ND (<12)	
VB-1		12/3/93	410	8.1	5.8	-	18	ND (<5.0)	11	ND (<5.0)	-	ND (<5.0)	ND (<10)	Benzene = 5.9; Butane = 56; Cyclopentane = 20; Methyl Butane, 2- = 61;
VB-1		3/8/94	420	16	8.7	-	40	ND (<1.0)	10	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	
VB-1		6/7/94	29	26	11	-	59	1.1	12	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 1.4;
VB-1		9/9/94	320	26	10	-	52	ND (<2.5)	11	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
VB-1		12/7/94	180	15	6.3	-	28	ND (<5.0)	7.6	ND (<5.0)	-	ND (<5.0)	ND (<10)	
VB-1		3/3/95	550	21	6.0	-	63	ND (<2.5)	12	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
VB-1		6/8/95	830	14	ND (<5.0)	-	71	ND (<5.0)	28	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
VB-1		11/9/95	350	24	8.6	-	43	1.4	16	0.93	ND (<0.50)	ND (<0.50)	0.77	CHLFM = 2.2;
VB-1		12/8/95	350	37	10	ND (<50)	68	ND (<5.0)	18	ND (<5.0)	-	ND (<5.0)	ND (<10)	
VB-1		3/7/96	1,000	34	ND (<12)	ND (<12)	97	ND (<12)	62	ND (<12)	ND (<12)	ND (<12)	ND (<12)	
VB-1		9/13/96	320	39	8.9	19	60	ND (<5.0)	33	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	CBMA = 106; MC = 8.5;
VB-1		12/13/96	270	33	ND (<10)	15	49	ND (<10)	13	ND (<10)	-	ND (<10)	ND (<20)	
VB-1		3/7/97	440	27	7.7	14	66	ND (<5.0)	30	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	CBMA = 104;
VB-1		6/9/97	240	28	6.4	13	47	ND (<5.0)	22	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	CBMA = 93;
VB-1		12/9/97	170	26	5.7	11	34	ND (<5.0)	11	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	CBMA = 97;
VB-1		6/3/98	370	ND (<12)	ND (<12)	ND (<12)	53	ND (<12)	39	ND (<12)	ND (<12)	ND (<12)	ND (<12)	CBMA = 117;
VB-1		12/10/98	250	18	5.8	NA	52	ND (<5.0)	33	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	CBMA = 122;
VB-1		6/8/99	397	ND (<12.5)	ND (<12.5)	ND (<12.5)	46	ND (<12.5)	56	ND (<12.5)	ND (<12.5)	ND (<12.5)	ND (<12.5)	
VB-1		12/8/99	170	15	ND (<5.0)	8.5	32	ND (<5.0)	19	ND (<10)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
VB-1		6/8/00	160	15	2.8	3.3	30	ND (<2.5)	24	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
VB-1		12/7/00	130	19	2.6	5.3	23	ND (<2.5)	15	ND (<10)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
VB-1		6/21/01	130	14	ND (<2.5)	4.9	22	ND (<2.5)	18	ND (<10)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
VB-1		6/27/03	110	4.8	1.8	2.5	18	1.2	18	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	
VB-1		6/20/05	98	7.0	2.0	3.6	18	0.59	10	0.99	ND (<0.50)	ND (<0.50)	0.56	CHLFM = 0.59;
VB-1	Dup	6/20/05	130	9.5	2.6	5.1	24	ND (<1.0)	12	1.6	ND (<1.0)	ND (<1.0)	1.1	CHLFM = 1.2;
VB-1		6/14/07	90	6.5	1.8	3.6	15	ND (<0.50)	9.2	1.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	
VB-1		6/15/09	93	6.1	1.6	3.1	12	ND (<0.50)	6.2	0.63	ND (<0.50)	ND (<0.50)	ND (<0.50)	
VB-1		6/16/11	56	2.1	1.1	1.8	6.4	ND (<0.50)	2.5	0.57	ND (<0.50)	ND (<0.50)	ND (<0.50)	
VB-1	Dup	6/16/11	56	2.1	1.1	1.8	6.3	ND (<0.50)	2.4	0.52	ND (<0.50)	ND (<0.50)	ND (<0.50)	
VB-1		6/20/13	19	0.69	ND (<0.50)	0.68	2.8	ND (<0.50)	1.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
VB-1		6/10/15	66	5.2	1.3	3.0	11	0.59	2.7	0.72	ND (<0.50)	ND (<0.50)	ND (<0.50)	
VB-1		7/20/17	63	2.4	0.96	2.1	9.4	0.77	2.7	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-1A1U		4/18/91	77	32	16	-	3.0	ND (<1.0)	4.0	ND (<1.0)	ND (<0.50)	ND (<1.0)	ND (<1.0)	
W-1A1U		8/27/91	110	41	27	ND (<1.0)	4.2	ND (<0.50)	8.5	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.8;
W-1A1U		10/8/91	74	20	33	-	7.0	ND (<0.50)	5.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 1.2;
W-1A1U		12/10/91	77	17	38	-	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
W-1A1U		3/9/92	120	57	22	ND (<1.0)	5.0	ND (<0.50)	8.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 1;
W-1A1U		6/11/92	86	40	9.7	ND (<1.0)	11	ND (<0.50)	6.5	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 1.1;
W-1A1U		9/11/92	84	22	31	ND (<2.5)	11	ND (<0.50)	2.7	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-1A-A2		12/11/90	0.50	0.30	0.40	0.30	-	-	0.20	1.0	0.50	0.30	0.30	1,1,2,2-TCA = 0.30; 1,1,2-TCA = 0.2; 1,2-DCPA = 0.2; 1,3-DCB = 0.5; 1,4-DCB = 0.5; 2-CVE = 0.40; Acetone = 30; BDCMe = 0.40; Benzene = 0.5; BRFM = 0.5; BRMA = 0.5; CHLBZ = 0.40; CHLEA (EC) = 0.5; CHLFM = 0.2; CHLMA = 0.5; cis-1,3-DCP = 0.30; CT = 0.30; DBCMe = 0.40; EDB = 1; Ethylbenzene = 0.5; MC = 35; m-Xylene = 0.5; o-Xylene = 0.5; TCFMe (Freon 11) = 0.5; Toluene = 0.5; trans-1,3-DCP = 0.30; Xylenes = 0.5;
W-1A-A2		4/18/91	4.2	3.5	1.6	-	ND (<0.50)	ND (<0.50)	1.5	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-1A-A2	Dup	4/18/91	5.3	4.6	2.1	-	ND (<0.50)	ND (<0.50)	1.9	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-1A-A2		7/25/91	21	14	4.0	-	ND (<0.50)	ND (<0.50)	7.5	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-1A-A2		10/7/91	17	11	3.1	-	ND (<0.50)	ND (<0.50)	5.6	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-1A-A2		12/10/91	13	7.7	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	7.4	ND (<5.0)	-	ND (<5.0)	ND (<10)	
W-1A-A2		3/9/92	7.5	7.4	2.1	-	ND (<0.50)	ND (<0.50)	2.6	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-1A-A2		6/11/92	28	22	5.2	-	ND (<0.50)	ND (<0.50)	9.9	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-1A-A2		9/11/92	2.9	0.50	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-2A1U		12/13/90	28	29	4.0	9.8	-	-	2.0	10	0.50	3.0	3.0	1,1,2,2-TCA = 3; 1,1,2-TCA = 2; 1,2-DCPA = 2; 1,3-DCB = 0.5; 1,4-DCB = 0.5; 2-CVE = 4; Acetone = 200; BDCMe = 4; Benzene = 0.5; BRFM = 5; BRMA = 5; CHLBZ = 0.5; CHLEA (EC) = 5; CHLFM = 2; CHLMA = 5; cis-1,3-DCP = 3; CT = 3; DBCMe = 4; EDB = 10; Ethylbenzene = 0.5; MC = 50; m-Xylene = 0.5; o-Xylene = 0.5; TCFMe (Freon 11) = 5; Toluene = 0.5; trans-1,3-DCP = 3; Xylenes = 0.5;
W-2A1U		4/22/91	91	69	4.0	ND (<3.0)	27	ND (<0.50)	1.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-2A1U		7/25/91	87	74	4.2	-	37	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	
W-2A1U		12/6/91	90	46	ND (<5.0)	-	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
W-2A1U		6/8/92	100	53	4.5	ND (<1.0)	44	ND (<0.50)	1.6	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 1.7;
W-3A1U		12/11/90	37	29	3.8	31	-	-	0.20	1.0	1.0	0.30	0.30	1,1,2,2-TCA = 0.30; 1,1,2-TCA = 0.2; 1,2-DCPA = 0.2; 1,3-DCB = 1; 1,4-DCB = 1; 2-CVE = 0.40; Acetone = 30; BDCMe = 0.40; Benzene = 0.5; BRFM = 0.5; BRMA = 0.5; CHLBZ = 0.40; CHLEA (EC) = 0.5; CHLFM = 0.8; CHLMA = 0.5; cis-1,3-DCP = 0.30; CT = 0.30; DBCMe = 0.40; EDB = 1; Ethylbenzene = 0.5; MC = 5; m-Xylene = 0.5; o-Xylene = 0.5; TCFMe (Freon 11) = 50; Toluene = 0.5; trans-1,3-DCP = 0.30; Xylenes = 0.5;
W-3A1U		4/18/91	190	32	3.4	ND (<5.0)	5.0	ND (<0.50)	1.9	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-3A1U	Dup	4/18/91	280	32	3.5	32	-	-	2.1	1.0	1.0	3.0	0.30	1,1,2,2-TCA = 0.30; 1,1,2-TCA = 0.2; 1,2-DCPA = 0.2; 1,3-DCB = 1; 1,4-DCB = 1; 2-CVE = 4; Acetone = 30; BDCMe = 0.40; Benzene = 0.5; BRFM = 0.5; BRMA = 0.5; CHLBZ = 0.40; CHLEA (EC) = 0.5; CHLFM = 1.1; CHLMA = 0.5; cis-1,3-DCP = 0.30; CT = 0.30; DBCMe = 4; EDB = 1; Ethylbenzene = 0.5; MC = 5; m-Xylene = 0.5; o-Xylene = 0.5; TCFMe (Freon 11) = 0.5; Toluene = 0.5; trans-1,3-DCP = 0.30; Xylenes = 0.5;
W-3A1U		7/24/91	240	34	3.8	ND (<5.0)	5.4	ND (<5.0)	5.6	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
W-3A1U		10/8/91	270	30	3.7	ND (<2.5)	6.1	ND (<0.50)	9.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 1.3;
W-3A1U		12/10/91	270	31	ND (<5.0)	ND (<10)	-	ND (<5.0)	5.4	ND (<5.0)	-	ND (<5.0)	ND (<10)	
W-3A1U		3/6/92	200	32	3.4	ND (<2.5)	4.6	ND (<0.50)	5.8	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 2.1;
W-3A1U		6/10/92	210	29	2.8	ND (<2.5)	3.9	ND (<0.50)	2.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 1.4;
W-3A1U		9/16/92	210	31	3.3	ND (<2.5)	4.6	ND (<0.50)	6.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 1.4;
W-3A1U		12/9/92	250	33	ND (<5.0)	ND (<10)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
W-3A1U		3/4/93	270	31	3.2	ND (<5.0)	3.0	ND (<5.0)	9.2	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	CHLFM = 1;
W-3A1U		6/4/93	240	24	9.2	-	15	1.0	2.4	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
W-3A1U		9/7/93	250	34	6.6	-	11	1.4	3.6	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 1.6; MC = 1.7;
W-3A1U		12/6/93	150	11	ND (<5.0)	-	7.8	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
W-3A1U		3/3/94	360	35	5.1	-	12	ND (<1.0)	2.7	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	

Appendix B
Selected Compounds from Historical Records
COE Study Area and Perimeter Area, Palo Alto, California

Location	Type	Date	TCE	1,1,1-TCA	1,1-DCA	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	PCE	Freon 113	1,2-DCB	1,2-DCA	VC	Other Constituents
W-3A1U		6/8/94	270	50	7.7	-	20	1.1	3.1	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	CHLFM = 2.1;
W-3A1U		9/8/94	260	35	5.8	-	14	ND (<1.0)	4.3	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	CHLFM = 1.4;
W-3A1U		12/7/94	250	33	ND (<5.0)	-	13	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
W-3A1U		3/7/95	220	39	4.7	-	17	ND (<1.0)	1.7	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	CHLFM = 1.5;
W-3A1U		6/8/95	190	30	3.6	-	13	ND (<1.0)	1.2	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	CHLFM = 1.2;
W-3A1U		9/7/95	230	63	5.1	-	20	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	CHLFM = 6.7;
W-3A1U		12/7/95	150	28	ND (<5.0)	-	13	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
W-3A1U		3/7/96	200	53	5.3	21	20	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
W-3A1U		6/10/96	180	43	ND (<5.0)	19	22	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	CBMA = 114;
W-3A1U		9/12/96	220	48	5.6	25	24	ND (<2.5)	3.4	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	CBMA = 103; MC = 5.4;
W-3A1U		12/13/96	180	41	ND (<5.0)	19	23	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
W-3A1U		3/6/97	190	40	5.0	19	22	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	CBMA = 115;
W-3A1U		6/6/97	150	38	4.5	15	18	ND (<2.5)	2.7	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	CBMA = 96;
W-3A1U		12/3/97	90	16	2.8	5.2	9.8	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	CBMA = 106;
W-3A1U		6/2/98	70	5.2	ND (<5.0)	ND (<5.0)	6.0	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	CBMA = 114;
W-3A1U		12/8/98	142	16	ND (<5.0)	7.1	8.2	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	CBMA = 103;
W-3A1U	Dup	12/8/98	142	16	ND (<5.0)	6.6	7.5	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	CBMA = 104;
W-3A1U		6/9/99	133	13	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	
W-3A1U		12/10/99	152	15	ND (<5.0)	6.7	5.7	ND (<5.0)	ND (<5.0)	ND (<10)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
W-3A1U		6/7/00	110	4.6	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
W-3A1U		12/5/00	120	7.0	ND (<2.5)	ND (<2.5)	2.8	ND (<2.5)	ND (<2.5)	ND (<10)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
W-3A1U		6/19/01	130	6.6	ND (<2.5)	2.7	2.6	ND (<2.5)	ND (<2.5)	ND (<10)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
W-3A1U		6/27/02	140	4.6	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
W-3A1U	Dup	6/27/02	150	5.4	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
W-3A1U		6/25/03	93	3.6	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
W-3A1U		9/1/04	110	3.2	ND (<1.0)	2.6	2.7	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	
W-3A1U		9/1/04	90	3.6	ND (<1.0)	2.7	2.4	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	
W-3A1U		6/21/05	100	4.1	0.92	2.8	3.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-3A1U		6/28/06	87	3.4	ND (<1.0)	2.6	3.1	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	
W-3A1U		6/14/07	150	6.5	1.5	13	4.2	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	
W-3A1U		6/10/08	140	5.3	1.3	11	3.7	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	
W-3A1U		6/10/09	130	4.0	1.1	10	3.3	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	
W-3A1U		6/8/10	96	2.6	ND (<1.0)	3.6	2.2	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	
W-3A1U		6/14/11	74	2.2	0.65	2.2	2.3	ND (<0.50)	0.96	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-3A1U		6/12/12	79	2.1	0.68	2.3	2.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-3A1U		6/18/13	73	2.1	0.74	2.4	2.7	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-3A1U		6/10/14	66	1.6	0.60	1.8	2.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-3A1U	Dup	6/10/14	62	1.5	0.57	1.7	2.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-3A1U		6/9/15	69	1.1	ND (<0.50)	1.2	1.6	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-3A1U		6/6/16	57	0.83	ND (<0.50)	1.2	1.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-3A1U		6/5/17	65	0.99	ND (<0.50)	1.2	1.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	BDCMe = 0.69
W-3A1U		6/4/18	94	2.0	0.89	8.4	2.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-3A1U		6/6/19	51	0.83	ND (<0.50)	1.1	0.76	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-3A1U	Dup	6/6/19	50	0.82	ND (<0.50)	1.1	0.74	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-3A1U		6/4/20	52	0.68	ND (<0.50)	1.1	0.94	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-3A1U	Dup	6/4/20	46	0.60	ND (<0.50)	0.89	0.68	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-4A1U/A1		12/11/90	45	32	2.3	5.3	-	-	0.70	1.0	0.50	0.30	0.30	1,1,2,2-TCA = 0.30; 1,1,2-TCA = 0.2; 1,2-DCPA = 0.2; 1,3-DCB = 0.5; 1,4-DCB = 0.5; 2-CVE = 0.40; Acetone = 30; BDCMe = 0.40; Benzene = 0.5; BRFM = 0.5; BRMA = 0.5; CHLBZ = 0.5; CHLEA (EC) = 0.5; CHLFM = 1; CHLMA = 0.5; cis-1,3-DCP = 0.30; CT = 0.30; DBCMe = 0.40; EDB = 1; Ethylbenzene = 0.5; MC = 5; m-Xylene = 0.5; o-Xylene = 0.5; TCFMe (Freon 11) = 0.5; Toluene = 0.5; trans-1,3-DCP = 0.30; Xylenes = 0.5;
W-4A1U/A1		4/22/91	270	19	2.0	ND (<5.0)	2.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-4A1U/A1		7/24/91	100	36	3.6	ND (<0.50)	5.1	ND (<0.50)	1.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 2.7;
W-4A1U/A1		10/8/91	-	39	4.3	-	4.4	0.50	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 1.7;
W-4A1U/A1		11/12/91	240	38	3.6	ND (<2.5)	3.6	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	CHLFM = 1;
W-4A1U/A1		12/6/91	270	36	ND (<5.0)	ND (<10)	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
W-4A1U/A1		3/9/92	190	31	3.5	ND (<2.5)	3.9	ND (<0.50)	0.90	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 1.4;
W-4A1U/A1		6/10/92	210	34	2.7	ND (<2.5)	3.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.9;
W-4A1U/A1		9/16/92	220	38	3.2	ND (<2.5)	3.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 1.3;
W-5A1		12/13/90	42	21	6.8	5.6	-	-	2.0	10	0.50	3.0	3.0	1,1,2,2-TCA = 3; 1,1,2-TCA = 2; 1,2-DCPA = 2; 1,3-DCB = 0.5; 1,4-DCB = 0.5; 2-CVE = 4; Acetone = 200; BDCMe = 4; Benzene = 0.5; BRFM = 5; BRMA = 5; CHLBZ = 0.5; CHLEA (EC) = 5; CHLFM = 3.4; CHLMA = 5; cis-1,3-DCP = 3; CT = 3; DBCMe = 4; EDB = 10; Ethylbenzene = 0.5; MC = 50; m-Xylene = 0.5; o-Xylene = 0.5; TCFMe (Freon 11) = 5; Toluene = 0.5; trans-1,3-DCP = 3; Xylenes = 0.5;
W-5A1		2/15/91	140	84	19	17	-	-	2.0	10	10	3.0	3.0	1,1,2,2-TCA = 3; 1,1,2-TCA = 2; 1,2-DCPA = 2; 1,3-DCB = 10; 1,4-DCB = 10; 2-CVE = 4; BDCMe = 4; BRFM = 5; BRMA = 5; CHLBZ = 4; CHLEA (EC) = 5; CHLFM = 2; CHLMA = 5; cis-1,3-DCP = 3; CT = 3; DBCMe = 4; EDB = 10; MC = 50; TCFMe (Freon 11) = 5; trans-1,3-DCP = 3;
W-5A1		4/16/91	-	34	12	-	-	ND (<0.50)	1.0	ND (<0.50)	ND (<0.50)	1.0	ND (<0.50)	
W-5A1	Dup	4/16/91	140	37	16	19	-	-	1.0	1.0	1.0	0.60	0.30	1,1,2,2-TCA = 0.30; 1,1,2-TCA = 0.2; 1,2-DCPA = 0.2; 1,3-DCB = 1; 1,4-DCB = 1; 2-CVE = 0.40; Acetone = 30; BDCMe = 0.40; Benzene = 0.5; BRFM = 0.5; BRMA = 0.5; CHLBZ = 0.40; CHLEA (EC) = 0.5; CHLFM = 0.7; CHLMA = 0.5; cis-1,3-DCP = 0.30; CT = 0.30; DBCMe = 0.40; EDB = 1; Ethylbenzene = 0.5; MC = 5; m-Xylene = 0.5; o-Xylene = 0.5; TCFMe (Freon 11) = 0.5; Toluene = 0.5; trans-1,3-DCP = 0.30; Xylenes = 0.5;
W-5A1		7/23/91	160	60	18	ND (<2.5)	85	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
W-5A1		10/7/91	150	61	21	ND (<5.0)	89	ND (<0.50)	1.8	0.90	ND (<0.50)	0.90	ND (<0.50)	CHLFM = 1;
W-5A1		12/9/91	160	51	25	-	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
W-5A1		3/5/92	49	23	13	ND (<1.0)	66	ND (<0.50)	0.80	ND (<0.50)	ND (<0.50)	0.90	ND (<0.50)	CHLFM = 2;
W-5A1		6/11/92	150	53	19	ND (<2.5)	100	ND (<0.50)	2.0	1.0	ND (<0.50)	1.0	ND (<0.50)	CHLFM = 3.5;
W-5A1		9/21/92	160	53	18	-	120	0.50	1.9	0.90	ND (<0.50)	1.1	ND (<0.50)	CHLFM = 3.8;
W-5A1		12/9/92	150	57	20	-	140	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	Acetone = 24;
W-5A1	Dup	12/9/92	160	63	19	-	130	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
W-5A1		3/10/93	140	60	24	-	90	0.70	2.8	1.4	ND (<0.50)	1.2	ND (<0.50)	CHLFM = 5.4;
W-5A1		6/4/93	200	48	17	ND (<2.5)	130	ND (<0.50)	1.5	ND (<0.50)	ND (<0.50)	0.50	ND (<0.50)	
W-5A1		9/8/93	140	90	13	ND (<2.5)	130	ND (<0.50)	2.3	1.4	ND (<0.50)	0.74	ND (<0.50)	CHLFM = 2;
W-5A1		12/8/93	140	70	15	-	120	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
W-5A1		3/4/94	160	100	17	-	140	2.1	3.6	ND (<0.50)	ND (<0.50)	1.6	ND (<0.50)	CHLFM = 4.4; TCFMe (Freon 11) = 0.97;
W-5A1		6/8/94	150	130	15	-	140	ND (<1.0)	4.2	2.2	ND (<1.0)	ND (<1.0)	ND (<1.0)	CHLFM = 3.8;
W-5A1		9/8/94	160	100	17	-	120	0.95	3.3	2.9	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 2.7;
W-5A1		12/7/94	80	47	8.9	-	78	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
W-5A1		3/7/95	140	100	14	-	100	0.56	3.2	0.98	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 2.6;
W-5A1		6/8/95	130	100	14	-	91	0.53	3.0	2.8	ND (<0.50)	0.72	ND (<0.50)	CHLFM = 2.9; TCFMe (Freon 11) = 0.68;
W-5A1	Dup	6/8/95	130	100	14	-	92	0.52	2.8	2.8	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 2.7; TCFMe (Freon 11) = 0.67;
W-5A1		11/9/95	160	ND (<5.0)	15	ND (<5.0)	100	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	CHLFM = 7.8;
W-5A1		12/7/95	110	80	11	-	74	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
W-5A1		3/7/96	150	100	15	23	97	ND (<2.5)	6.9	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	CHLFM = 5.4;
W-5A1		6/11/96	110	74	12	19	69	ND (<2.5)	5.0	4.8	ND (<2.5)	ND (<2.5)	ND (<2.5)	CBMA = 99; CHLFM = 5.7;
W-5A1		9/12/96	130	80	12	20	74	ND (<1.2)	5.8	3.0	ND (<1.2)	ND (<1.2)	ND (<1.2)	CBMA = 93; CHLFM = 3.8; MC = 2.3;
W-5A1		12/16/96	110	87	12	17	82	ND (<5.0)	ND (<5.0)	5.7	-	ND (<5.0)	ND (<10)	
W-5A1		3/6/97	120	75	11	15	71	ND (<2.5)	3.4	5.9	ND (<2.5)	ND (<2.5)	ND (<2.5)	CBMA = 117; CHLFM = 3.9;
W-5A1		6/9/97	100	67	12	13	68	ND (<2.5)	3.9	3.4	ND (<2.5)	ND (<2.5)	ND (<2.5)	CBMA = 105; CHLFM = 4.6;
W-5A1		12/3/97	77	38	7.6	6.2	48	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	CBMA = 101;
W-6A1U		12/10/90	42	110	11	16	-	-	2.8	13	0.50	3.0	3.0	1,1,2,2-TCA = 3; 1,1,2-TCA = 2; 1,2-DCPA = 2; 1,3-DCB = 0.5; 1,4-DCB = 0.5; 2-CVE = 4; Acetone = 30; BDCMe = 4; Benzene = 0.5; BRFM = 5; BRMA = 5; CHLBZ = 0.5; CHLEA (EC) = 5; CHLFM = 4.7; CHLMA = 5; cis-1,3-DCP = 3; CT = 3; DBCMe = 4; EDB = 10; Ethylbenzene = 0.5; MC = 50; m-Xylene = 0.5; o-Xylene = 0.5; TCFMe (Freon 11) = 5; Toluene = 0.5; trans-1,3-DCP = 3; Xylenes = 0.5;
W-6A1U		4/11/91	59	64	9.0	-	43	ND (<3.0)	ND (<3.0)	ND (<3.0)	ND (<3.0)	ND (<3.0)	ND (<3.0)	
W-6A1U	Dup	4/11/91	44	62	9.2	17	-	-	2.0	8.1	1.0	0.70	0.30	1,1,2,2-TCA = 10; 1,1,2-TCA = 0.2; 1,2-DCPA = 0.2; 1,3-DCB = 1; 1,4-DCB = 1; 2-CVE = 0.40; Acetone = 30; BDCMe = 0.40; Benzene = 0.5; BRFM = 0.5; BRMA = 0.5; CHLBZ = 0.40; CHLEA (EC) = 0.5; CHLFM = 0.7; CHLMA = 0.5; cis-1,3-DCP = 0.30; CT = 0.30; DBCMe = 0.40; EDB = 1; Ethylbenzene = 0.5; MC = 5; m-Xylene = 0.5; o-Xylene = 0.5; TCFMe (Freon 11) = 3; Toluene = 0.5; trans-1,3-DCP = 0.30; Xylenes = 0.5;
W-6A1U		7/26/91	57	72	15	-	59	3.2	4.4	33	ND (<0.50)	0.90	ND (<0.50)	CHLFM = 1.6;
W-6A1U		10/10/91	68	72	17	-	76	ND (<5.0)	6.0	5.0	ND (<5.0)	ND (<5.0)	ND (<5.0)	
W-6A1U		11/7/91	69	57	14	ND (<1.0)	69	ND (<0.50)	5.5	ND (<0.50)	ND (<0.50)	1.0	ND (<0.50)	CHLFM = 1.7; TCFMe (Freon 11) = 0.8;
W-6A1U		12/9/91	76	53	16	-	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
W-6A1U		3/9/92	69	99	13	ND (<1.0)	60	ND (<0.50)	5.4	4.1	ND (<0.50)	1.0	ND (<0.50)	CHLFM = 3.4;
W-6A1U		6/4/92	70	72	17	ND (<1.0)	89	ND (<0.50)	5.7	2.4	ND (<0.50)	0.70	ND (<0.50)	CHLFM = 2.1;
W-6A1U		9/18/92	82	86	18	ND (<2.5)	98	ND (<0.50)	5.7	3.4	ND (<0.50)	0.80	ND (<0.50)	CHLFM = 2.2;
W-6A1U		12/9/92	79	82	18	-	120	ND (<5.0)	5.9	ND (<5.0)	-	ND (<5.0)	ND (<10)	
W-6A1U		3/3/93	97	100	16	ND (<2.5)	94	ND (<0.50)	5.6	3.1	ND (<0.50)	0.90	ND (<0.50)	CHLFM = 4.3; TCFMe (Freon 11) = 0.6;
W-6A1U		6/4/93	90	85	9.9	ND (<2.5)	80	ND (<0.50)	4.5	3.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-6A1U		9/7/93	120	110	19	ND (<2.5)	100	ND (<0.50)	7.4	4.6	ND (<0.50)	0.53	ND (<0.50)	CHLFM = 2.5; MC = 1.7; TCFMe (Freon 11) = 1.2;
W-6A1U		12/6/93	130	86	24	-	120	ND (<5.0)	7.4	7.1	-	ND (<5.0)	ND (<10)	
W-6A1U		3/4/94	160	100	11	-	100	1.2	12	9.1	ND (<0.50)	0.53	ND (<0.50)	CHLFM = 3.2;
W-6A1U		6/8/94	180	89	11	-	80	ND (<0.50)	12	7.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 2.8;
W-6A1U		12/7/94	130	49	ND (<5.0)	-	47	ND (<5.0)	7.9	ND (<5.0)	-	ND (<5.0)	ND (<10)	
W-6A1U		6/8/95	120	41	7.5	-	42	ND (<0.50)	5.8	3.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 2.7; TCFMe (Freon 11) = 0.52;
W-6A1U		12/7/95	140	61	18	-	92	ND (<5.0)	6.0	ND (<5.0)	-	ND (<5.0)	ND (<10)	CHLFM = 6.9;
W-6A1U	Dup	12/7/95	130	56	17	-	86	ND (<5.0)	5.4	ND (<5.0)	-	ND (<5.0)	ND (<10)	CHLFM = 6.5;
W-6A1U		6/7/96	150	76	15	30	92	1.6	7.8	5.5	ND (<1.2)	ND (<1.2)	ND (<1.2)	CBMA = 110; CHLFM = 14; MC = 1.7;
W-6A1U		12/13/96	130	46	6.2	14	54	ND (<5.0)	5.6	7.2	-	ND (<5.0)	ND (<10)	
W-7A1U		12/10/90	59	9.6	4.0	4.1	-	-	1.1	10	10	0.60	3.0	1,1,2,2-TCA = 0.6; 1,1,2-TCA = 0.40; 1,2-DCPA = 0.40; 1,3-DCB = 0.5; 1,4-DCB = 0.5; 2-CVE = 0.8; Acetone = 75; BDCMe = 0.8; Benzene = 0.5; BRFM = 1; BRMA = 1; CHLBZ = 0.5; CHLEA (EC) = 1; CHLFM = 0.8; CHLMA = 1; cis-1,3-DCP = 0.6; CT = 0.6; DBCMe = 0.8; EDB = 2; Ethylbenzene = 0.5; MC = 10; m-Xylene = 0.5; o-Xylene = 0.5; TCFMe (Freon 11) = 1; Toluene = 0.5; trans-1,3-DCP = 3; Xylenes = 0.5;
W-7A1U		4/11/91	93	9.0	3.0	-	4.0	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	
W-7A1U		7/26/91	110	13	7.8	ND (<2.5)	16	ND (<0.50)	1.9	ND (<0.50)	ND (<0.50)	0.70	ND (<0.50)	CHLFM = 1.1;
W-7A1U		8/7/91	110	13	7.8	ND (<2.5)	16	ND (<0.50)	1.9	ND (<0.50)	ND (<0.50)	0.70	ND (<0.50)	CHLFM = 1.1;
W-7A1U		11/7/91	110	14	6.2	ND (<1.0)	10	ND (<0.50)	1.9	ND (<0.50)	ND (<0.50)	0.60	ND (<0.50)	CHLFM = 1.6; TCFMe (Freon 11) = 0.5;
W-7A1U	Dup	11/7/91	120	13	5.6	ND (<1.0)	9.4	ND (<0.50)	1.3	ND (<0.50)	ND (<0.50)	0.60	ND (<0.50)	CHLFM = 1.5; TCFMe (Freon 11) = 0.5;
W-7A1U		12/6/91	130	ND (<5.0)	ND (<5.0)	-	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
W-7A1U		3/4/92	86	16	8.2	ND (<2.5)	18	ND (<0.50)	2.0	ND (<0.50)	ND (<0.50)	0.60	ND (<0.50)	CHLFM = 1.6;
W-7A1U		6/8/92	98	56	17	ND (<2.5)	86	ND (<0.50)	2.2	0.70	ND (<0.50)	1.1	ND (<0.50)	CHLFM = 4.9; TCFMe (Freon 11) = 0.5;
W-7A1U	Dup	6/8/92	100	54	17	ND (<1.0)	89	ND (<0.50)	2.0	0.60	ND (<0.50)	1.0	ND (<0.50)	CHLFM = 4.4; TCFMe (Freon 11) = 0.5;
W-7A1U		9/11/92	98	54	15	ND (<2.5)	82	ND (<0.50)	2.2	1.2	ND (<0.50)	1.2	ND (<0.50)	CHLFM = 4.1;
W-7A1U		12/11/92	94	34	8.9	-	60	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
W-7A1U	Dup	12/11/92	96	34	10	-	63	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	

Appendix B
Selected Compounds from Historical Records
COE Study Area and Perimeter Area, Palo Alto, California

Location	Type	Date	TCE	1,1,1-TCA	1,1-DCA	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	PCE	Freon 113	1,2-DCB	1,2-DCA	VC	Other Constituents
W-7A1U		3/10/93	97	82	24	-	98	0.50	2.8	1.4	ND (<0.50)	1.3	ND (<0.50)	CHLFM = 6.1;
W-7A1U		6/2/93	95	85	14	ND (<2.5)	110	ND (<0.50)	2.6	3.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 1.3;
W-7A1U		9/7/93	120	92	12	ND (<2.5)	100	ND (<0.50)	4.7	4.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 3; MC = 1.8; TCFMe (Freon 11) = 0.75;
W-7A1U		12/8/93	120	83	20	-	100	ND (<5.0)	6.1	7.0	-	ND (<5.0)	ND (<10)	
W-7A1U		3/4/94	150	120	23	-	180	1.1	5.6	7.4	ND (<0.50)	0.74	ND (<0.50)	CHLFM = 4.7;
W-7A1U	Dup	3/4/94	150	86	23	-	130	0.54	5.2	5.4	ND (<0.50)	0.67	ND (<0.50)	CHLFM = 4.2;
W-7A1U		6/2/94	160	130	26	-	180	1.2	6.0	7.7	ND (<0.50)	1.2	ND (<0.50)	CHLFM = 7.2;
W-7A1U		9/7/94	150	130	24	-	180	0.78	8.4	6.7	ND (<0.50)	1.0	ND (<0.50)	1,1,2-TCA = 0.67; CHLFM = 6.7;
W-7A1U		12/5/94	160	110	22	-	150	ND (<5.0)	8.1	5.9	-	ND (<5.0)	ND (<10)	
W-7A1U		3/2/95	150	120	17	-	150	0.53	9.2	5.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 5.9; TCFMe (Freon 11) = 2.2;
W-7A1U		6/6/95	130	100	12	-	110	0.80	7.2	5.6	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 5;
W-7A1U		9/7/95	150	84	7.4	-	79	ND (<2.5)	6.6	4.7	ND (<2.5)	ND (<2.5)	ND (<2.5)	CHLFM = 5;
W-7A1U		12/6/95	100	47	ND (<5.0)	-	50	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
W-7A1U		3/7/96	120	57	4.1	14	42	ND (<2.5)	8.6	3.3	ND (<2.5)	ND (<2.5)	ND (<2.5)	CHLFM = 3.4;
W-7A1U		6/10/96	92	30	ND (<2.5)	7.8	20	ND (<2.5)	4.7	4.0	ND (<2.5)	ND (<2.5)	ND (<2.5)	CBMA = 115;
W-7A1U		9/12/96	95	21	1.6	6.3	14	ND (<1.2)	7.2	2.1	ND (<1.2)	ND (<1.2)	ND (<1.2)	CBMA = 97; CHLFM = 1.9; MC = 2.1;
W-7A1U		12/16/96	81	15	ND (<5.0)	ND (<5.0)	11	ND (<5.0)	6.1	ND (<5.0)	-	ND (<5.0)	ND (<10)	
W-7A1U	Dup	12/16/96	81	15	ND (<5.0)	ND (<5.0)	11	ND (<5.0)	5.9	ND (<5.0)	-	ND (<5.0)	ND (<10)	
W-7A1U		3/6/97	71	12	1.3	3.3	9.0	ND (<1.0)	2.8	1.7	ND (<1.0)	ND (<1.0)	ND (<1.0)	CBMA = 110; CHLFM = 1.4;
W-7A1U		6/6/97	98	24	ND (<5.0)	ND (<5.0)	10	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	CBMA = 103; MC = 26;
W-7A1U		12/3/97	60	10	ND (<2.5)	3.3	5.4	ND (<2.5)	4.1	2.9	ND (<2.5)	ND (<2.5)	ND (<2.5)	CBMA = 102;
W-7A1U		6/2/98	80	15	ND (<5.0)	5.0	9.6	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	CBMA = 109;
W-7A1U		12/9/98	105	24	ND (<2.5)	8.0	10	ND (<2.5)	4.6	5.4	ND (<2.5)	ND (<2.5)	ND (<2.5)	CBMA = 96.3;
W-7A1U		6/9/99	90	17	ND (<5.0)	6.2	11	ND (<5.0)	5.1	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
W-7A1U		12/8/99	105	11	ND (<3.13)	5.3	10	ND (<3.13)	3.5	ND (<6.25)	ND (<3.13)	ND (<3.13)	ND (<3.13)	
W-7A1U		6/7/00	91	12	ND (<1.0)	3.8	8.8	ND (<1.0)	3.3	7.4	ND (<1.0)	ND (<1.0)	ND (<1.0)	
W-7A1U		12/5/00	100	11	ND (<2.5)	3.4	7.5	ND (<2.5)	ND (<2.5)	ND (<10)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
W-7A1U		6/19/01	92	8.6	ND (<2.5)	3.2	6.4	ND (<2.5)	3.2	ND (<10)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
W-7A1U		6/25/03	67	5.0	ND (<2.5)	2.6	5.1	ND (<2.5)	ND (<2.5)	2.8	ND (<2.5)	ND (<2.5)	ND (<2.5)	
W-7A1U		6/22/05	81	6.6	ND (<2.5)	4.3	3.0	ND (<2.5)	2.8	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
W-7A1U		6/15/07	59	7.4	4.4	6.2	16	ND (<0.50)	2.4	2.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-7A1U		6/10/09	45	2.6	0.58	1.8	2.9	ND (<0.50)	0.64	1.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-7A1U		6/14/11	54	3.3	0.71	2.1	2.4	ND (<0.50)	0.58	1.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-7A1U		6/18/13	48	2.2	ND (<0.50)	1.3	2.1	ND (<0.50)	ND (<0.50)	0.72	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-7A1U		6/11/14	40	1.5	ND (<0.50)	1.2	2.5	ND (<0.50)	0.80	0.62	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-7A1U		6/9/15	49	2.3	0.52	1.3	2.3	ND (<0.50)	0.88	1.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-7A1U	Dup	6/9/15	53	2.5	0.67	1.7	2.7	ND (<0.50)	1.1	1.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-7A1U		6/7/17	44	1.9	0.63	1.3	3.1	ND (<0.50)	ND (<0.50)	1.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-7A1U		6/6/18	46	2.5	0.80	2.2	4.9	ND (<0.50)	0.59	2.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-7A1U	Dup	6/6/18	45	2.4	0.78	2.1	4.8	ND (<0.50)	0.57	2.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-7A1U		6/6/19	47	1.9	0.52	1.4	3.2	ND (<0.50)	0.52	1.9	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-7A1U		6/4/20	47	0.98	ND (<0.50)	0.90	2.7	ND (<0.50)	0.58	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-8A1U		4/22/91	73	39	9.0	ND (<3.0)	4.0	ND (<0.50)	4.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-8A1U		7/25/91	150	87	27	ND (<2.5)	8.3	ND (<0.50)	11	ND (<2.5)	ND (<2.5)	ND (<0.50)	ND (<2.5)	CHLFM = 1.3;
W-8A1U		12/9/92	240	180	61	ND (<10)	26	ND (<5.0)	19	ND (<5.0)	-	ND (<5.0)	ND (<10)	
W-8A1U		3/3/93	120	84	17	ND (<2.5)	19	ND (<0.50)	5.3	ND (<0.50)	ND (<0.50)	0.60	ND (<0.50)	CHLFM = 1.6;
W-8A1U		6/3/93	86	72	15	ND (<2.5)	32	ND (<0.50)	5.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.6;
W-8A1U	Dup	6/3/93	93	74	14	ND (<2.5)	31	ND (<0.50)	4.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.7;
W-8A1U		9/7/93	56	96	12	ND (<2.5)	42	ND (<0.50)	2.2	0.73	ND (<0.50)	0.67	ND (<0.50)	CHLFM = 1.2;
W-8A1U		12/8/93	77	88	13	-	41	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
W-8A1U		3/3/94	87	86	8.9	-	54	ND (<0.50)	1.7	1.8	ND (<0.50)	0.75	ND (<0.50)	CHLFM = 2.2;
W-8A1U		6/8/94	100	110	15	-	48	ND (<0.50)	6.2	2.2	ND (<0.50)	0.61	ND (<0.50)	CHLFM = 2.5;
W-8A1U		9/8/94	68	82	10	-	46	ND (<0.50)	2.1	2.8	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 1.9;
W-8A1U		12/7/94	59	69	6.4	-	41	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
W-8A1U		6/8/95	70	68	8.6	-	35	ND (<0.50)	2.9	4.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 1.9; TCFMe (Freon 11) = 0.54;
W-8A1U		12/7/95	38	51	5.2	-	33	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
W-8A1U		6/10/96	50	49	5.9	-	31	ND (<0.50)	1.8	4.6	ND (<0.50)	1.1	ND (<0.50)	CBMA = 114; CHLFM = 2; MC = 0.22; TCFMe (Freon 11) = 0.98;
W-8A1U		12/13/96	44	56	ND (<5.0)	-	34	ND (<5.0)	ND (<5.0)	7.7	-	ND (<5.0)	ND (<10)	
W-9A1U/A1		12/12/90	81	110	19	31	-	-	2.5	10	0.50	3.0	3.0	1,1,2,2-TCA = 3; 1,1,2-TCA = 2; 1,2-DCPA = 2; 1,3-DCB = 0.5; 1,4-DCB = 0.5; 2-CVE = 4; Acetone = 30; BDCMe = 4; Benzene = 0.5; BRFM = 5; BRMA = 5; CHLBZ = 0.5; CHLEA (EC) = 5; CHLFM = 4.8; CHLMA = 15; cis-1,3-DCP = 3; CT = 3; DBCMe = 4; EDB = 10; Ethylbenzene = 0.5; MC = 50; m-Xylene = 0.5; o-Xylene = 0.5; TCFMe (Freon 11) = 5; Toluene = 0.5; trans-1,3-DCP = 3; Xylenes = 0.5;
W-9A1U/A1		4/16/91	97	88	16	-	110	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
W-9A1U/A1	Dup	4/16/91	110	72	19	29	-	-	2.7	1.0	1.0	0.50	0.30	1,1,2,2-TCA = 0.30; 1,1,2-TCA = 0.2; 1,2-DCPA = 0.2; 1,3-DCB = 1; 1,4-DCB = 1; 2-CVE = 0.40; Acetone = 30; BDCMe = 0.40; Benzene = 0.5; BRFM = 0.5; BRMA = 0.5; CHLBZ = 0.40; CHLEA (EC) = 0.5; CHLFM = 0.7; CHLMA = 0.5; cis-1,3-DCP = 0.30; CT = 0.30; DBCMe = 0.40; EDB = 1; Ethylbenzene = 0.5; MC = 5; m-Xylene = 0.5; o-Xylene = 0.5; TCFMe (Freon 11) = 5; Toluene = 0.5; trans-1,3-DCP = 0.30; Xylenes = 0.5;
W-9A1U/A1		7/26/91	130	120	24	-	150	17	3.9	ND (<0.50)	ND (<0.50)	0.80	ND (<0.50)	CHLFM = 1.7;
W-9A1U/A1		11/5/91	140	160	ND (<0.50)	0.70	220	0.70	4.8	ND (<0.50)	ND (<0.50)	1.0	ND (<0.50)	
W-9A1U/A1		12/5/91	130	110	30	ND (<10)	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
W-9A1U/A1		3/5/92	97	110	20	ND (<5.0)	130	ND (<5.0)	3.2	1.4	ND (<5.0)	ND (<5.0)	ND (<5.0)	CHLFM = 5.2;
W-9A1U/A1		6/11/92	130	110	20	-	150	1.2	4.8	2.3	ND (<0.50)	1.2	ND (<0.50)	CHLFM = 6.4;
W-9A1U/A1		9/18/92	120	140	18	ND (<5.0)	150	ND (<5.0)	3.6	2.8	ND (<5.0)	2.0	ND (<5.0)	CHLFM = 8.4;
W-9A1U/A1		12/10/92	120	150	17	-	190	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
W-9A1U/A1		3/10/93	130	190	19	ND (<5.0)	140	ND (<5.0)	4.8	3.2	ND (<5.0)	1.2	ND (<5.0)	CHLFM = 8;
W-9A1U/A1		6/2/93	140	140	16	ND (<2.5)	150	ND (<0.50)	3.8	2.0	ND (<0.50)	0.50	ND (<0.50)	
W-9A1U/A1		9/8/93	130	170	13	ND (<2.5)	120	ND (<0.50)	3.8	3.9	ND (<0.50)	0.63	ND (<0.50)	CHLFM = 3.6; TCFMe (Freon 11) = 0.84;
W-9A1U/A1	Dup	9/8/93	120	150	14	-	110	0.75	3.8	4.7	ND (<0.50)	0.79	ND (<0.50)	CHLFM = 3.9; TCFMe (Freon 11) = 1.1;
W-9A1U/A1		12/8/93	120	120	13	-	110	ND (<5.0)	ND (<5.0)	5.4	-	ND (<5.0)	ND (<10)	Acetone = 23;
W-9A1U/A1		3/4/94	120	110	10	-	86	0.58	4.8	3.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 2.8;
W-9A1U/A1		6/8/94	140	150	12	-	110	0.69	8.3	5.1	ND (<0.50)	1.2	ND (<0.50)	CHLFM = 4.1;
W-9A1U/A1		12/6/94	130	110	13	-	88	ND (<5.0)	ND (<5.0)	7.1	-	ND (<5.0)	ND (<10)	
W-9A1U/A1		6/8/95	92	81	9.5	-	64	0.64	3.6	5.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 5.2; TCFMe (Freon 11) = 0.54;
W-9A1U/A1		12/7/95	100	75	9.2	16	65	-	ND (<5.0)	5.5	-	ND (<5.0)	ND (<10)	
W-9A1U/A1		6/10/96	81	50	8.0	9.4	50	ND (<2.5)	3.8	4.5	ND (<2.5)	ND (<2.5)	ND (<2.5)	CBMA = 113; CHLFM = 2.6;
W-9A1U/A1		12/16/96	100	73	12	14	72	ND (<5.0)	ND (<5.0)	7.8	-	ND (<5.0)	ND (<10)	
W-9A1U/A1		12/10/97	83	34	6.6	8.5	37	ND (<1.0)	4.5	5.5	ND (<1.0)	ND (<1.0)	ND (<1.0)	CBMA = 97; CHLFM = 3.4;
W-10A1U		12/14/90	67	3.5	4.0	3.0	-	-	2.0	10	10	3.0	3.0	1,1,2,2-TCA = 3; 1,1,2-TCA = 2; 1,2-DCPA = 2; 1,3-DCB = 10; 1,4-DCB = 10; 2-CVE = 4; Acetone = 30; BDCMe = 4; Benzene = 0.5; BRFM = 5; BRMA = 5; CHLBZ = 4; CHLEA (EC) = 5; CHLFM = 2; CHLMA = 5; cis-1,3-DCP = 3; CT = 3; DBCMe = 4; EDB = 10; Ethylbenzene = 0.5; MC = 50; m-Xylene = 0.30; o-Xylene = 0.30; TCFMe (Freon 11) = 5; Toluene = 0.5; trans-1,3-DCP = 3; Xylenes = 0.9;
W-10A1U		4/17/91	ND (<1.0)	8.0	4.0	-	1.0	ND (<1.0)	3.0	ND (<1.0)	ND (<1.0)	110	ND (<1.0)	Acetone = 100;
W-10A1U		7/23/91	120	7.6	3.2	ND (<1.0)	1.0	ND (<0.50)	3.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.5;
W-10A1U	Dup	7/23/91	120	7.0	3.1	ND (<1.0)	ND (<0.50)	ND (<0.50)	3.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-10A1U		11/5/91	110	7.0	3.9	ND (<2.5)	1.3	ND (<0.50)	3.7	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.6;
W-10A1U	Dup	11/5/91	140	8.8	4.8	ND (<2.5)	1.5	ND (<0.50)	4.5	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.7;
W-10A1U		12/5/91	140	6.4	ND (<5.0)	-	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
W-10A1U		3/10/92	120	6.7	3.3	ND (<1.0)	1.2	ND (<0.50)	3.5	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.6;
W-10A1U		6/8/92	83	5.2	2.4	ND (<1.0)	0.80	ND (<0.50)	2.7	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-10A1U		9/16/92	110	6.1	3.2	ND (<2.5)	1.1	ND (<0.50)	3.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-10A1U		12/11/92	110	5.8	ND (<5.0)	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
W-10A1U		3/4/93	110	5.1	2.8	ND (<2.5)	0.70	ND (<0.50)	3.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-10A1U		6/4/93	90	4.2	1.6	ND (<2.5)	ND (<0.50)	ND (<0.50)	2.7	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-10A1U		9/9/93	59	2.8	2.8	-	0.70	ND (<0.50)	2.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-10A1U		12/8/93	84	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
W-10A1U		3/4/94	88	1.9	2.1	-	0.94	ND (<0.50)	2.0	ND (<0.50)	ND (<0.50)	0.83	ND (<0.50)	1,1,2-TCA = 0.83; CHLFM = 0.52; MC = 0.5;
W-10A1U		6/8/94	92	3.8	2.5	-	ND (<0.50)	ND (<0.50)	6.4	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-10A1U		9/8/94	90	3.7	3.8	-	1.1	ND (<0.50)	3.4	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-10A1U		12/7/94	66	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
W-10A1U		3/7/95	92	2.7	3.8	-	1.9	ND (<0.50)	3.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-10A1U		6/8/95	82	3.0	4.2	-	2.0	ND (<0.50)	2.4	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-10A1U		9/7/95	96	6.8	6.2	-	3.2	ND (<2.5)	3.6	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
W-10A1U		12/8/95	120	ND (<5.0)	7.0	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
W-10A1U		3/7/96	110	7.0	7.0	9.4	3.8	ND (<2.5)	3.7	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	MC = 2.5;
W-10A1U		6/11/96	110	8.0	7.6	11	5.9	ND (<2.5)	4.1	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	CBMA = 95;
W-10A1U		9/12/96	120	8.0	8.5	13	6.8	ND (<1.2)	4.3	ND (<1.2)	ND (<1.2)	ND (<1.2)	ND (<1.2)	CBMA = 98; MC = 2.4;
W-10A1U		12/13/96	120	ND (<5.0)	8.7	10	6.0	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
W-10A1U		3/6/97	110	7.6	7.6	9.4	5.9	ND (<2.5)	3.7	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	CBMA = 117;
W-10A1U		6/5/97	100	9.0	8.6	10	6.8	ND (<2.5)	4.3	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	CBMA = 100;
W-10A1U		12/3/97	77	8.1	4.6	7.2	5.3	ND (<2.5)	4.0	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	CBMA = 102;
W-10A1U		6/2/98	67	4.0	ND (<2.5)	3.0	3.3	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	CBMA = 111;
W-10A1U	Dup	6/2/98	72	4.3	2.6	ND (<2.5)	3.3	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	CBMA = 116;
W-10A1U		12/8/98	60	5.7	2.6	5.5	4.5	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	CBMA = 88;
W-10A1U		6/8/99	99	13	ND (<5.0)	9.5	8.4	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
W-10A1U	Dup	6/8/99	98	11	4.7	8.8	7.6	ND (<2.5)	3.7	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
W-10A1U		12/10/99	67	12	3.0	5.3	5.2	ND (<2.5)	2.8	ND (<5.0)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
W-10A1U		6/8/00	69	7.8	1.8	ND (<1.0)	3.8	ND (<1.0)	2.5	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	
W-10A1U		12/5/00	77	12	2.4	6.6	6.2	ND (<1.0)	2.9	ND (<4.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	
W-10A1U		6/19/01	56	6.9	1.4	3.4	3.5	ND (<1.0)	2.5	ND (<4.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	
W-10A1U		6/25/03	48	4.1	1.1	3.1	2.1	ND (<1.0)	2.2	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	
W-10A1U		6/20/05	25	1.9	ND (<0.50)	1.5	1.2	ND (<0.50)	0.84	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-10A1U		6/14/07	50	2.5	0.60	2.0	1.9	ND (<0.50)	1.4	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-10A1U		6/10/09	34	0.91	ND (<0.50)	1.0	1.5	ND (<0.50)	0.88	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-10A1U		6/14/11	50	1.4	ND (<0.50)	1.6	2.3	ND (<0.50)	1.4	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-10A1U		6/18/13	34	0.75	ND (<0.50)	0.80	1.6	ND (<0.50)	1.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-10A1U		6/9/15	35	0.63	ND (<0.50)	0.74	1.7	ND (<0.50)	0.97	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-10A1U		6/7/17	33	0.53	ND (<0.50)	0.64	1.9	ND (<0.50)	1.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-10A1U		6/6/19	26	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.74	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-11A1U		12/12/90	100	16	4.0	14	-	-	2.0	10	0.50	3.0	3.0	1,1,2,2-TCA = 3; 1,1,2-TCA = 2; 1,2-DCPA = 2; 1,3-DCB = 0.5; 1,4-DCB = 0.5; 2-CVE = 4; Acetone = 30; BDCMe = 4; Benzene = 0.5; BRFM = 5; BRMA = 5; CHLBZ = 0.5; CHLEA (EC) = 5; CHLFM = 2; CHLMA = 5; cis-1,3-DCP = 3; CT = 3; DBCMe = 4; EDB = 10; Ethylbenzene = 0.5; MC = 50; m-Xylene = 0.5; o-Xylene = 0.5; TCFMe (Freon 11) = 5; Toluene = 0.5; trans-1,3-DCP = 3; Xylenes = 0.5;
W-11A1U		4/15/91	170	22	6.0	ND (<10)	4.0	ND (<0.50)	1.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 1;
W-11A1U		7/24/91	44	4.5	1.5	ND (<0.50)	0.90	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-11A1U		10/7/91	200	21	7.9	ND (<5.0)	4.5	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-11A1U		12/10/91	200	13	7.7	-	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
W-11A1U		3/10/92	170	13	5.7	ND (<2.5)	3.5	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.7;
W-11A1U		6/8/92	270	16	7.7	ND (<2.5)	4.4	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 1;
W-11A1U		9/18/92	200	20	7.7	ND (<2.5)	4.6	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 1.2;

Appendix B
Selected Compounds from Historical Records
COE Study Area and Perimeter Area, Palo Alto, California

Location	Type	Date	TCE	1,1,1-TCA	1,1-DCA	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	PCE	Freon 113	1,2-DCB	1,2-DCA	VC	Other Constituents
W-11A1U	Dup	9/18/92	190	18	7.3	ND (<2.5)	4.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 1;
W-11A1U		12/11/92	180	14	7.3	-	5.4	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
W-11A1U		3/4/93	160	16	9.0	ND (<2.5)	3.6	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 1.3;
W-11A1U		6/8/93	140	11	11	ND (<2.5)	4.5	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-11A1U		9/8/93	120	8.9	14	ND (<2.5)	5.6	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.83;
W-11A1U		12/8/93	120	6.3	14	-	5.1	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
W-11A1U		3/4/94	140	7.5	15	-	5.4	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.89;
W-11A1U		6/8/94	190	18	32	-	9.5	ND (<1.0)	1.2	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	CHLFM = 1.8; MC = 2.4;
W-11A1U		12/7/94	150	16	25	-	7.1	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
W-11A1U		6/8/95	170	23	18	-	9.0	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
W-11A1U		12/7/95	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	9.3	ND (<5.0)	-	ND (<5.0)	ND (<10)	
W-11A1U		6/7/96	190	30	7.6	16	5.7	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	CBMA = 101; MC = 6.2;
W-11A1U		12/13/96	140	14	5.3	12	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
W-11A1U		12/3/97	130	15	3.3	8.3	3.7	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	CBMA = 92;
W-11A1U		12/9/98	146	13.2	ND (<2.5)	6.42	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	CBMA = 96.3;
W-11A1U		12/10/99	113	6.53	ND (<4.17)	ND (<4.17)	ND (<4.17)	ND (<4.17)	ND (<4.17)	ND (<8.33)	ND (<4.17)	ND (<4.17)	ND (<4.17)	
W-11A1U		12/5/00	120	4.4	ND (<2.5)	2.5	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<10)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
W-11A1U		6/19/01	110	3.8	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<10)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
W-11A1U		6/25/03	63	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
W-11A1U		6/21/05	52	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
W-11A1U		6/15/07	45	1.1	ND (<0.50)	1.2	0.86	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-11A1U		6/10/09	45	0.75	ND (<0.50)	0.99	0.85	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-11A1U	Dup	6/10/09	48	1.0	0.55	0.84	0.79	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-11A1U		6/14/11	48	0.85	ND (<0.50)	1.1	0.94	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-11A1U		6/18/13	45	0.76	ND (<0.50)	0.88	0.95	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-11A1U		6/9/15	55	0.81	0.51	1.5	1.4	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-11A1U		6/7/17	18	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.53	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-11A1U		6/6/18	15	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-11A1U		6/6/19	11	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-11A1U		6/4/20	12	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-12A1U		12/18/90	130	10	4.6	26	-	-	750	10	10	3.0	3.0	1,1,2,2-TCA = 3; 1,1,2-TCA = 2; 1,2-DCPA = 2; 1,3-DCB = 10; 1,4-DCB = 10; 2-CVE = 4; Acetone = 30; BDCMe = 4; Benzene = 0.30; BRFM = 5; BRMA = 5; CHLBZ = 4; CHLEA (EC) = 5; CHLFM = 2; CHLMA = 5; cis-1,3-DCP = 3; CT = 3; DBCMe = 4; EDB = 10; Ethylbenzene = 0.30; MC = 50; m-Xylene = 0.30; o-Xylene = 0.30; TCFMe (Freon 11) = 5; Toluene = 0.30; trans-1,3-DCP = 3; Xylenes = 0.9;
W-12A1U		2/7/91	110	30	40	57	-	-	3,900	100	100	30	30	1,1,2,2-TCA = 30; 1,1,2-TCA = 20; 1,2-DCPA = 20; 1,3-DCB = 100; 1,4-DCB = 100; 2-CVE = 40; BDCMe = 40; BRFM = 50; BRMA = 50; CHLBZ = 40; CHLEA (EC) = 50; CHLFM = 20; CHLMA = 50; cis-1,3-DCP = 30; CT = 30; DBCMe = 40; EDB = 100; MC = 500; TCFMe (Freon 11) = 50; trans-1,3-DCP = 30;
W-12A1U		4/10/91	280	ND (<100)	ND (<100)	ND (<100)	ND (<100)	ND (<100)	6,100	ND (<100)	ND (<5.0)	ND (<100)	ND (<100)	
W-12A1U		7/24/91	300	18	ND (<50)	ND (<50)	32	ND (<50)	3,700	ND (<50)	ND (<50)	ND (<50)	ND (<50)	
W-12A1U		10/8/91	270	12	ND (<12)	ND (<25)	25	ND (<12)	2,500	ND (<12)	ND (<12)	ND (<12)	ND (<12)	
W-12A1U		12/9/91	320	ND (<10)	ND (<10)	ND (<120)	-	ND (<10)	3,400	ND (<10)	-	ND (<10)	ND (<20)	
W-12A1U		3/10/92	310	ND (<100)	ND (<100)	ND (<100)	30	ND (<100)	9,200	ND (<100)	ND (<100)	ND (<100)	ND (<100)	
W-12A1U		6/15/92	280	ND (<100)	ND (<100)	ND (<100)	65	ND (<100)	6,600	ND (<100)	ND (<100)	ND (<100)	ND (<100)	
W-12A1U		9/11/92	260	8.0	5.0	ND (<50)	47	ND (<5.0)	3,800	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
W-12A1U	Dup	9/11/92	250	ND (<50)	ND (<50)	ND (<50)	38	ND (<50)	3,600	ND (<50)	ND (<50)	ND (<50)	ND (<50)	
W-12A1U		12/10/92	100	ND (<5.0)	ND (<5.0)	ND (<50)	24	ND (<5.0)	1,600	ND (<5.0)	-	ND (<5.0)	ND (<10)	
W-12A1U		3/2/93	330	ND (<120)	ND (<120)	ND (<120)	75	ND (<120)	6,900	ND (<120)	ND (<120)	ND (<120)	ND (<120)	
W-12A1U		6/7/93	460	12	ND (<50)	ND (<50)	220	ND (<50)	3,200	ND (<50)	ND (<50)	ND (<50)	ND (<50)	
W-12A1U		9/8/93	210	6.5	ND (<5.0)	ND (<25)	42	ND (<5.0)	2,300	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
W-12A1U		12/6/93	200	ND (<10)	ND (<10)	-	22	ND (<10)	1,400	ND (<10)	-	ND (<10)	ND (<20)	
W-12A1U		3/2/94	300	9.8	7.4	-	35	ND (<5.0)	2,000	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
W-12A1U		6/8/94	130	7.2	ND (<5.0)	ND (<5.0)	17	ND (<5.0)	1,200	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
W-12A1U	Dup	6/8/94	120	9.1	ND (<5.0)	ND (<5.0)	17	ND (<5.0)	1,300	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
W-12A1U		9/8/94	200	8.9	ND (<5.0)	-	8.5	ND (<5.0)	1,200	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
W-12A1U		12/6/94	100	ND (<12)	ND (<12)	ND (<12)	ND (<12)	ND (<12)	430	ND (<12)	-	ND (<12)	ND (<25)	
W-12A1U		3/7/95	240	ND (<25)	ND (<25)	ND (<25)	ND (<25)	ND (<25)	2,400	ND (<25)	ND (<25)	ND (<25)	ND (<25)	
W-12A1U		6/7/95	140	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	1,200	ND (<10)	ND (<10)	ND (<10)	ND (<10)	MC = 26;
W-12A1U		9/7/95	250	ND (<50)	ND (<50)	ND (<50)	ND (<50)	ND (<50)	880	ND (<50)	ND (<50)	ND (<50)	ND (<50)	
W-12A1U		11/17/95	150	18	ND (<5.0)	-	6.0	ND (<5.0)	240	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	CHLFM = 5.1;
W-12A1U		12/11/95	130	11	ND (<5.0)	-	5.2	ND (<5.0)	190	ND (<5.0)	-	ND (<5.0)	ND (<10)	
W-12A1U		3/7/96	250	28	ND (<12)	ND (<12)	39	ND (<12)	670	ND (<12)	ND (<12)	ND (<12)	ND (<12)	
W-12A1U-R		6/10/96	180	11	6.2	13	27	ND (<5.0)	380	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	CBMA = 109;
W-12A1U-R		9/13/96	140	19	5.7	11	45	ND (<5.0)	190	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	CBMA = 104;
W-12A1U-R		12/16/96	110	6.4	ND (<5.0)	7.8	ND (<5.0)	ND (<5.0)	66	ND (<5.0)	-	ND (<5.0)	ND (<10)	
W-12A1U-R		3/7/97	100	11	2.6	6.8	ND (<2.5)	ND (<2.5)	47	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	CBMA = 104;
W-12A1U-R		6/9/97	71	7.0	2.9	6.1	3.0	ND (<0.50)	32	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 107; CHLFM = 0.89;
W-12A1U-R		9/11/97	100	9.8	2.6	6.8	3.0	ND (<1.0)	50	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	CBMA = 95;
W-12A1U-R		12/3/97	61	6.0	1.8	4.3	1.5	ND (<1.0)	10	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	CBMA = 97;
W-12A1U-R		6/2/98	120	7.7	ND (<5.0)	6.4	ND (<5.0)	ND (<5.0)	11	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	CBMA = 113;
W-12A1U-R		12/8/98	80	5.4	ND (<2.5)	4.7	ND (<2.5)	ND (<2.5)	16	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	CBMA = 87.3;
W-12A1U-R		6/8/99	94	7.2	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
W-12A1U-R		12/14/99	82	ND (<3.13)	ND (<3.13)	3.6	ND (<3.13)	ND (<3.13)	5.5	ND (<3.13)	ND (<3.13)	ND (<3.13)	ND (<3.13)	
W-12A1U-R		6/7/00	48	1.8	ND (<0.50)	1.6	ND (<0.50)	ND (<0.50)	6.2	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 2.4;
W-12A1U-R		12/5/00	80	3.4	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	10	ND (<4.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	CHLFM = 3.3;
W-12A1U-R		6/19/01	40	1.5	ND (<0.50)	ND (<0.50)	2.1	ND (<0.50)	3.4	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 1.8;
W-12A1U-R		6/25/03	58	3.6	0.68	2.2	2.7	ND (<0.50)	4.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.61;
W-12A1U-R		6/20/05	51	1.6	ND (<0.50)	1.6	2.2	ND (<0.50)	14	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-12A1U-R		6/14/07	57	1.2	ND (<0.50)	1.4	1.7	ND (<0.50)	11	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-12A1U-R		6/10/09	45	0.70	ND (<0.50)	0.79	ND (<0.50)	ND (<0.50)	7.9	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-12A1U-R		6/14/11	46	0.65	ND (<0.50)	0.92	0.55	ND (<0.50)	6.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-12A1U-R		6/18/13	37	ND (<0.50)	ND (<0.50)	0.61	ND (<0.50)	ND (<0.50)	4.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-12A1U-R		6/9/15	41	ND (<0.50)	ND (<0.50)	0.81	ND (<0.50)	ND (<0.50)	6.5	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-12A1U-R		6/7/17	25	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	6.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-12A1U-R		6/4/18	22	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	4.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-12A1U-R		6/6/19	22	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	5.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-12A1U-R		6/4/20	24	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	3.3	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-13A2		12/17/90	0.50	0.30	0.40	0.30	-	-	0.20	1.0	1.0	0.30	0.30	1,1,2,2-TCA = 0.30; 1,1,2-TCA = 0.2; 1,2-DCPA = 0.2; 1,3-DCB = 1; 1,4-DCB = 1; 2-CVE = 0.40; Acetone = 30; BDCMe = 0.40; Benzene = 0.5; BRFM = 0.5; BRMA = 0.5; CHLBZ = 0.40; CHLEA (EC) = 0.5; CHLFM = 0.2; CHLMA = 0.5; cis-1,3-DCP = 0.30; CT = 0.30; DBCMe = 0.40; EDB = 1; Ethylbenzene = 0.5; MC = 5; m-Xylene = 0.30; o-Xylene = 0.30; TCFMe (Freon 11) = 0.5; Toluene = 0.5; trans-1,3-DCP = 0.30; Xylenes = 0.9;
W-13A2		4/17/91	1.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-13A2		7/23/91	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-13A2		11/5/91	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-13A2		12/5/91	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
W-13A2		3/12/92	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-13A2		6/11/92	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-13A2		9/17/92	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-13A2		12/10/92	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
W-13A2		3/5/93	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-13A2		6/7/93	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-13A2		9/9/93	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-13A2		12/8/93	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
W-13A2		3/4/94	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-13A2		6/8/94	1.4	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-13A2		9/8/94	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-13A2	Dup	9/8/94	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-13A2		12/7/94	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
W-13A2		3/7/95	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-13A2		6/5/95	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-13A2		9/5/95	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<5.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-13A2		12/5/95	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
W-13A2		3/5/96	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-13A2		6/5/96	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 118;
W-13A2	Dup	6/5/96	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 109;
W-13A2		9/11/96	ND (<0.50)	ND (<0.50)	0.66	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 103;
W-13A2		12/10/96	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
W-13A2		6/5/97	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 94;
W-13A2		12/3/97	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 87;
W-13A2		6/2/98	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 113;
W-13A2		12/8/98	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 105;
W-13A2	Dup	12/8/98	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 79;
W-13A2		6/8/99	97	ND (<5.0)	ND (<5.0)	8.9	7.4	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
W-13A2		12/10/99	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<1.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-13A2		6/8/00	0.94	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-13A2	Dup	6/8/00	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-13A2		12/5/00	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-13A2		6/19/01	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-13A2		6/27/02	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-13A2		6/25/03	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-13A2		6/22/04	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-13A2		6/20/05	ND (<0.50)	ND (<0.50)	1.4	ND (<0.50)	0.73	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-13A2		6/27/06	ND (<0.50)	ND (<0.50)	1.1	ND (<0.50)	0.67	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-13A2		6/14/07	ND (<0.50)	ND (<0.50)	1.6	ND (<0.50)	1.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-13A2		6/10/08	ND (<0.50)	ND (<0.50)	0.70	ND (<0.50)	0.68	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-13A2		6/10/09	ND (<0.50)	ND (<0.50)	1.6	ND (<0.50)	1.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-13A2		6/8/10	ND (<0.50)	ND (<0.50)	1.0	ND (<0.50)	0.85	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-13A2		6/14/11	ND (<0.50)	ND (<0.50)	1.1	ND (<0.50)	0.76	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-13A2		6/12/12	ND (<0.50)	ND (<0.50)	1.3	ND (<0.50)	0.86	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-13A2		6/18/13	ND (<0.50)	ND (<0.50)	2.0	ND (<0.50)	1.8	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-13A2		6/10/14	ND (<0.50)	ND (<0.50)	1.7	ND (<0.50)	1.5	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-13A2		6/9/15	0.65	ND (<0.50)	1.6	ND (<0.50)	2.4	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-13A2		6/7/16	5.2	ND (<0.50)	1.6	0.74	5.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-13A2		6/7/17	1.9	ND (<0.50)	1.6	0.59	3.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-13A2	Dup	6/7/17	2.0	ND (<0.50)	1.6	0.59	3.4	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-13A2		6/4/18	4.4	ND (<0.50)	1.6	0.68	3.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-13A2		6/5/19	2.6	ND (<0.50)	1.9	0.67	2.8	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-13A2		6/4/20	1.4	ND (<0.50)	1.3	ND (<0.50)	1.6	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	

Appendix B
Selected Compounds from Historical Records
COE Study Area and Perimeter Area, Palo Alto, California

Location	Type	Date	TCE	1,1,1-TCA	1,1-DCA	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	PCE	Freon 113	1,2-DCB	1,2-DCA	VC	Other Constituents
W-14A1U/A1		12/18/90	140	14	4.0	16	-	-	66	10	10	3.0	3.0	1,1,2,2-TCA = 3; 1,1,2-TCA = 2; 1,2-DCPA = 2; 1,3-DCB = 10; 1,4-DCB = 10; 2-CVE = 4; Acetone = 30; BDCMe = 4; Benzene = 0.30; BRFM = 5; BRMA = 5; CHLBZ = 4; CHLEA (EC) = 5; CHLFM = 2.2; CHLMA = 5; cis-1,3-DCP = 3; CT = 3; DBCMe = 4; EDB = 10; Ethylbenzene = 0.30; MC = 50; m-Xylene = 0.30; o-Xylene = 0.30; TCFMe (Freon 11) = 5; Toluene = 0.30; trans-1,3-DCP = 3; Xylenes = 0.9;
W-14A1U/A1		4/15/91	210	18	3.0	-	19	1.0	88	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 1;
W-14A1U/A1	Dup	4/15/91	220	18	3.0	ND (<10)	19	ND (<0.50)	92	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 1; MC = 1;
W-14A1U/A1		7/23/91	230	18	3.0	ND (<2.5)	18	ND (<1.0)	130	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	
W-14A1U/A1		10/8/91	290	18	ND (<0.50)	ND (<5.0)	26	ND (<0.50)	120	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-14A1U/A1		12/5/91	250	17	ND (<5.0)	ND (<10)	-	ND (<5.0)	130	ND (<5.0)	-	ND (<5.0)	ND (<10)	
W-14A1U/A1		3/10/92	150	9.1	2.6	ND (<2.5)	12	ND (<0.50)	51	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.8;
W-14A1U/A1		6/4/92	200	10	2.5	ND (<2.5)	12	ND (<0.50)	64	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.8;
W-14A1U/A1		9/16/92	280	17	2.6	ND (<5.0)	19	ND (<5.0)	110	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	CHLFM = 1.6;
W-14A1U/A1		12/14/92	250	13	ND (<8.4)	ND (<8.4)	24	ND (<8.4)	99	ND (<8.4)	-	ND (<8.4)	ND (<17)	
W-14A1U/A1		3/3/93	220	15	3.2	ND (<5.0)	6.0	ND (<1.0)	68	ND (<5.0)	ND (<5.0)	ND (<1.0)	ND (<5.0)	
W-14A1U/A1		6/3/93	260	14	1.8	ND (<5.0)	7.6	ND (<5.0)	56	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
W-14A1U/A1		9/7/93	290	16	2.6	-	55	2.1	170	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	CHLFM = 1.9;
W-14A1U/A1		12/6/93	260	11	ND (<5.0)	-	38	ND (<5.0)	210	ND (<5.0)	-	ND (<5.0)	ND (<10)	
W-14A1U/A1		3/3/94	340	18	3.9	-	21	ND (<1.0)	280	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	CHLFM = 1.7;
W-14A1U/A1		6/8/94	360	22	7.0	-	21	1.2	280	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	CHLFM = 2.7;
W-14A1U/A1		9/8/94	180	10	5.0	-	15	ND (<1.0)	110	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	
W-14A1U/A1		12/7/94	110	ND (<5.0)	ND (<5.0)	-	7.9	ND (<5.0)	65	ND (<5.0)	-	ND (<5.0)	ND (<10)	
W-14A1U/A1		3/7/95	200	13	4.8	-	5.6	ND (<1.0)	60	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	CHLFM = 1.1;
W-14A1U/A1		6/7/95	180	19	2.2	-	2.5	ND (<1.0)	22	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	
W-14A1U/A1		11/9/95	130	ND (<5.0)	ND (<5.0)	5.0	ND (<5.0)	ND (<5.0)	34	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
W-14A1U/A1	Dup	11/9/95	150	12	ND (<5.0)	-	5.2	ND (<5.0)	33	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
W-14A1U/A1		12/7/95	140	18	6.3	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
W-14A1U/A1		3/7/96	160	26	3.8	12	4.6	ND (<2.5)	16	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
W-14A1U/A1		6/10/96	190	24	ND (<5.0)	13	5.9	ND (<5.0)	12	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	CBMA = 114;
W-14A1U/A1		9/12/96	190	26	4.4	15	28	ND (<2.5)	15	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	CBMA = 97; MC = 4.8;
W-14A1U/A1		12/13/96	120	12	ND (<5.0)	8.2	39	ND (<5.0)	15	ND (<5.0)	-	ND (<5.0)	ND (<10)	
W-14A1U/A1		3/6/97	160	23	3.5	13	17	ND (<2.5)	15	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	CBMA = 113;
W-14A1U/A1		6/6/97	150	30	4.6	16	18	ND (<2.5)	32	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	CBMA = 103; MC = 12;
W-14A1U/A1		9/11/97	130	22	3.4	11	16	ND (<2.5)	26	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	CBMA = 115;
W-14A1U/A1		12/9/97	51	7.2	ND (<2.5)	4.0	6.0	ND (<2.5)	10	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	CBMA = 94;
W-16A1		9/18/92	380	100	ND (<50)	ND (<250)	ND (<50)	ND (<50)	14,000	ND (<50)	ND (<50)	ND (<50)	ND (<50)	
W-16A1		12/15/92	320	75	8.7	-	-	ND (<5.0)	10,000	ND (<5.0)	-	ND (<5.0)	ND (<10)	
W-16A1		3/5/93	110	36	ND (<50)	ND (<50)	10	ND (<50)	5,200	ND (<50)	ND (<50)	ND (<50)	ND (<50)	CHLBZ = 12;
W-16A1		6/4/93	180	39	ND (<5.0)	ND (<50)	17	ND (<5.0)	3,700	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	CHLBZ = 10;
W-16A1		9/8/93	110	18	ND (<50)	ND (<50)	ND (<50)	ND (<50)	3,800	ND (<50)	ND (<50)	ND (<50)	ND (<50)	
W-16A1		12/6/93	150	32	ND (<25)	-	ND (<25)	ND (<25)	5,100	ND (<25)	-	ND (<25)	ND (<50)	
W-16A1		3/2/94	210	39	ND (<10)	-	22	ND (<10)	4,100	ND (<10)	ND (<10)	ND (<10)	ND (<10)	CHLBZ = 12;
W-16A1		6/8/94	140	50	ND (<25)	ND (<25)	ND (<25)	ND (<25)	4,500	ND (<25)	ND (<25)	ND (<25)	ND (<25)	MC = 48;
W-16A1		9/8/94	190	33	ND (<10)	-	12	ND (<10)	3,900	ND (<10)	ND (<10)	ND (<10)	ND (<10)	
W-16A1		12/6/94	210	ND (<50)	ND (<50)	ND (<50)	ND (<50)	ND (<50)	3,300	ND (<50)	-	ND (<50)	ND (<100)	
W-16A1		3/7/95	150	15	ND (<10)	-	13	ND (<10)	2,900	ND (<10)	ND (<10)	ND (<10)	ND (<10)	
W-16A1	Dup	3/7/95	160	13	ND (<10)	-	12	ND (<10)	2,900	ND (<10)	ND (<10)	ND (<10)	ND (<10)	
W-16A1		6/8/95	180	35	ND (<10)	-	ND (<10)	ND (<10)	1,900	ND (<10)	ND (<10)	ND (<10)	ND (<10)	
W-16A1		9/8/95	310	77	ND (<50)	ND (<50)	ND (<50)	ND (<50)	2,900	ND (<50)	ND (<50)	ND (<50)	ND (<50)	MC = 150;
W-16A1		11/17/95	160	49	ND (<10)	-	16	ND (<10)	1,900	ND (<10)	ND (<10)	ND (<10)	ND (<10)	
W-16A1		12/11/95	160	35	ND (<5.0)	ND (<5.0)	18	ND (<5.0)	3,000	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<10)	
W-16A1		4/4/96	310	81	ND (<50)	ND (<50)	54	ND (<50)	2,400	ND (<50)	ND (<50)	ND (<50)	ND (<50)	
W-16A1		6/11/96	150	44	ND (<25)	ND (<25)	40	ND (<25)	1,300	ND (<25)	ND (<25)	ND (<25)	ND (<25)	CBMA = 95;
W-16A1	Dup	6/11/96	150	44	ND (<25)	ND (<25)	40	ND (<25)	1,300	ND (<25)	ND (<25)	ND (<25)	ND (<25)	CBMA = 96;
W-16A1		9/13/96	320	72	ND (<12)	38	14	ND (<12)	860	ND (<12)	ND (<12)	ND (<12)	ND (<12)	CBMA = 101; MC = 13;
W-16A1		12/16/96	230	41	ND (<25)	ND (<25)	ND (<25)	ND (<25)	560	ND (<25)	-	ND (<25)	ND (<50)	
W-16A1		3/7/97	310	39	ND (<10)	17	12	ND (<10)	460	ND (<10)	ND (<10)	ND (<10)	ND (<10)	CBMA = 106;
W-16A1		6/9/97	82	11	ND (<5.0)	ND (<5.0)	6.8	ND (<5.0)	41	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	CBMA = 103;
W-16A1		9/11/97	220	24	5.8	11	9.1	ND (<2.5)	110	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	CBMA = 103;
W-16A1	Dup	9/11/97	230	25	5.9	12	9.1	ND (<2.5)	110	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	CBMA = 103;
W-16A1		12/4/97	140	19	4.5	12	6.6	ND (<1.2)	68	1.3	ND (<1.2)	ND (<1.2)	ND (<1.2)	CBMA = 96;
W-16A1		6/2/98	130	9.3	ND (<5.0)	5.3	ND (<5.0)	ND (<5.0)	35	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	CBMA = 103;
W-16A1		12/11/98	130	15	4.0	11	6.2	ND (<2.5)	41	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	CBMA = 96;
W-16A1		6/8/99	223	21	ND (<5.0)	13	7.4	ND (<5.0)	48	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
W-16A1	Dup	6/8/99	224	22	ND (<10)	14	ND (<10)	ND (<10)	50	ND (<10)	ND (<10)	ND (<10)	ND (<10)	
W-16A1		12/10/99	135	16	ND (<5.0)	9.2	6.0	ND (<5.0)	35	ND (<10)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
W-16A1	Dup	12/10/99	133	15	ND (<5.0)	8.9	5.8	ND (<5.0)	33	ND (<10)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
W-16A1		6/8/00	150	6.0	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	45	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	
W-16A1		12/5/00	190	14	3.6	9.6	9.6	ND (<2.5)	35	ND (<10)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
W-16A1		6/19/01	150	11	2.8	7.5	7.8	ND (<2.5)	140	ND (<10)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
W-16A1		6/26/03	110	10	ND (<2.5)	6.8	6.7	ND (<2.5)	310	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
W-16A1		6/20/05	85	12	ND (<10)	ND (<10)	ND (<10)	ND (<10)	620	ND (<10)	ND (<10)	ND (<10)	ND (<10)	
W-16A1		6/14/07	67	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	840	ND (<10)	ND (<10)	ND (<10)	ND (<10)	
W-16A1		6/10/09	51	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	630	ND (<10)	ND (<10)	ND (<10)	ND (<10)	
W-16A1		6/14/11	47	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	730	ND (<10)	ND (<10)	ND (<10)	ND (<10)	
W-16A1		4/4/13	33	0.62	ND (<0.50)	0.67	1.0	ND (<0.50)	510	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-16A1		6/18/13	ND (<10)	ND (<10)	ND (<10)	ND (<10)	1,700	ND (<10)	25	ND (<10)	ND (<10)	ND (<10)	ND (<10)	
W-16A1		8/23/13	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	2,600	15	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	180	
W-16A1		11/22/13	ND (<10)	ND (<10)	ND (<10)	ND (<10)	590	13	ND (<10)	ND (<10)	ND (<10)	ND (<10)	270	
W-16A1		5/22/14	0.87	ND (<0.50)	ND (<0.50)	ND (<0.50)	93	3.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	67	
W-16A1		2/23/15	1.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	40	5.8	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	79	CHLEA (EC) = 1.8;
W-16A1		6/9/15	2.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	67	3.7	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	71	CHLEA (EC) = 1.1;
W-16A1		8/10/15	1.9	ND (<0.50)	ND (<0.50)	ND (<0.50)	41	1.8	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	41	
W-16A1		6/7/16	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	260	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	78	
W-16A1		6/6/17	0.75	ND (<0.50)	ND (<0.50)	ND (<0.50)	44	1.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	26	
W-16A1		6/6/18	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	48	0.99	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	24	
W-16A1		6/5/19	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	40	0.81	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	13	
W-16A1		6/2/20	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	200	4.9	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	110	
W-17A2		9/17/92	3.0	0.70	0.90	-	ND (<0.50)	ND (<0.50)	48	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-17A2		12/15/92	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	14	ND (<5.0)	-	ND (<5.0)	ND (<10)	
W-17A2		3/5/93	3.4	ND (<0.50)	2.5	-	0.6	ND (<0.50)	18	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-17A2		6/7/93	3.8	ND (<0.50)	1.4	-	0.6	ND (<0.50)	16	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-17A2		9/8/93	3.7	ND (<0.50)	1.4	-	0.68	ND (<0.50)	14	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-17A2		12/6/93	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	12	ND (<5.0)	-	ND (<5.0)	ND (<10)	
W-17A2		3/2/94	5.3	ND (<0.50)	1.7	-	1.0	ND (<0.50)	17	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-17A2		6/8/94	3.1	ND (<0.50)	1.7	-	0.68	ND (<0.50)	18	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-17A2		9/8/94	4.2	ND (<0.50)	1.3	-	ND (<0.50)	ND (<0.50)	15	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-17A2		12/6/94	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	12	ND (<5.0)	-	ND (<5.0)	ND (<10)	
W-17A2		3/7/95	3.2	ND (<0.50)	1.0	-	0.56	ND (<0.50)	13	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-17A2		6/5/95	3.1	ND (<0.50)	1.2	-	0.66	ND (<0.50)	12	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	MC = 0.81;
W-17A2		9/6/95	0.86	0.93	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	3.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLEA (EC) = 1.2;
W-17A2		12/7/95	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
W-17A2		3/5/96	3.5	ND (<0.50)	1.6	0.69	0.89	ND (<0.50)	13	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-17A2		6/7/96	2.8	ND (<0.50)	1.5	0.73	0.88	ND (<0.50)	9.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 103;
W-17A2	Dup	6/7/96	2.5	ND (<0.50)	1.3	0.60	0.77	ND (<0.50)	8.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 115;
W-17A2		9/11/96	3.5	ND (<0.50)	2.0	1.4	1.4	ND (<0.50)	12	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 110;
W-17A2		12/12/96	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	7.5	ND (<5.0)	-	ND (<5.0)	ND (<10)	
W-17A2		3/5/97	3.2	ND (<0.50)	0.82	0.62	1.1	ND (<0.50)	7.9	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 116;
W-17A2		6/9/97	3.8	ND (<0.50)	0.97	0.85	1.5	ND (<0.50)	9.9	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 93;
W-17A2		9/10/97	2.8	ND (<0.50)	ND (<0.50)	ND (<0.50)	1.6	ND (<0.50)	5.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 112; MC = 0.96;
W-17A2		12/9/97	2.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	1.2	ND (<0.50)	2.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 101; MC = 0.51;
W-17A2		6/2/98	1.8	ND (<0.50)	ND (<0.50)	ND (<0.50)	2.1	ND (<0.50)	5.4	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 112; MC = 0.7;
W-17A2		12/9/98	0.79	ND (<0.50)	ND (<0.50)	ND (<0.50)	1.5	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 100;
W-17A2		6/8/99	1.5	ND (<0.50)	ND (<0.50)	ND (<0.50)	1.8	ND (<0.50)	2.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-17A2		12/10/99	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.51	ND (<0.50)	ND (<0.50)	ND (<1.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-17A2		6/8/00	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-17A2		12/5/00	2.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	2.6	ND (<0.50)	2.5	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-17A2	Dup	12/5/00	2.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	2.5	ND (<0.50)	2.6	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-17A2		6/19/01	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-17A2		6/25/03	1.7	ND (<0.50)	ND (<0.50)	ND (<0.50)	2.7	ND (<0.50)	1.4	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-17A2		6/20/05	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-17A2		6/14/07	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	1.8	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-17A2		6/10/09	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	1.5	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-17A2		6/15/11	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.52	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-17A2	Dup	6/15/11	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-17A2		6/18/13	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-17A2		6/9/15	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-17A2		6/7/17	ND (<0.50)	ND (<0.50)	0.66	ND (<0.50)	1.5	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-17A2		6/5/19	ND (<0.50)	ND (<0.50)	1.1	ND (<0.50)	2.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-18A1U		12/14/92	120	65	5.6	-	54	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
W-18A1U	Dup	12/14/92	100	57	5.6	-	49	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
W-18A1U		3/3/93	120	68	6.6	ND (<2.5)	37	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 2;
W-18A1U		6/3/93	100	66	5.6	ND (<2.5)	49	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.7;
W-18A1U		9/8/93	96	60	5.8	ND (<2.5)	47	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 1.4;
W-18A1U		12/6/93	93	54	7.2	-	54	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
W-18A1U		6/8/94	120	93	9.2	-	86	ND (<0.50)	0.83	1.3	ND (<0.50)	0.56	ND (<0.50)	CHLFM = 3.9;
W-19A2		12/15/92	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
W-19A2	Dup	12/15/92	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	CHLFM = 12;
W-19A2		3/4/93	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-19A2		6/3/93	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	1.6	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.7;
W-19A2		9/8/93	0.85	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	14	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 1;
W-19A2		12/6/93	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	10	ND (<5.0)	-	ND (<5.0)	ND (<10)	
W-19A2		3/3/94	0.81	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	9.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.79;
W-19A2		6/8/94	1.9	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	15	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-19A2		12/7/94	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	12	ND (<5.0)	-	ND (<5.0)	ND (<10)	
W-19A2		6/5/95	2.7	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.53	ND (<0.50)	16	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-19A2	Dup	6/5/95	2.7	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.52	ND (<0.50)	16	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.55;
W-19A2		12/7/95	180	16	7.0	-	7.1	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
W-19A2		1/2/96	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	16	ND (<5.0)	-	ND (<5.0)	ND (<10)	
W-19A2		6/7/96	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 120;
W-19A2		1/10/97	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
W-19A2		12/5/97	1.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	8.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 89;
W-19A2		12/9/98	0.74	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	3.8	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 100;
W-19A2		12/10/99	70	ND (<2.5)	ND (<2.5)	ND (<2.5)	7.8	ND (<2.5)	7.7	ND (<5.0)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
W-19A2		12/5/00	47	ND (<1.0)	ND (<1.0)	ND (<1.0)	4.0	ND (<1.0)	3.2	ND (<4.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	

Appendix B
Selected Compounds from Historical Records
COE Study Area and Perimeter Area, Palo Alto, California

Location	Type	Date	TCE	1,1,1-TCA	1,1-DCA	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	PCE	Freon 113	1,2-DCB	1,2-DCA	VC	Other Constituents
W-19A2		6/20/01	34	ND (<1.0)	ND (<1.0)	ND (<1.0)	3.5	ND (<1.0)	4.6	ND (<4.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	
W-19A2	Dup	6/20/01	32	ND (<1.0)	ND (<1.0)	ND (<1.0)	2.9	ND (<1.0)	4.5	ND (<4.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	
W-19A2		6/27/02	8.4	ND (<0.50)	ND (<0.50)	ND (<0.50)	1.1	ND (<0.50)	7.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 7.6;
W-19A2		6/24/03	8.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	1.4	ND (<0.50)	3.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-19A2	Dup	6/24/03	7.5	ND (<0.50)	ND (<0.50)	ND (<0.50)	1.3	ND (<0.50)	2.7	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CHLFM = 0.52;
W-19A2		9/1/04	3.7	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.76	ND (<0.50)	2.7	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-19A2		9/1/04	8.5	ND (<0.50)	ND (<0.50)	ND (<0.50)	2.5	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-19A2	Dup	9/2/04	6.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	1.2	ND (<0.50)	4.5	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-19A2		6/21/05	7.5	ND (<0.50)	ND (<0.50)	ND (<0.50)	2.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-19A2		6/28/06	6.6	ND (<0.50)	ND (<0.50)	ND (<0.50)	3.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-19A2		6/14/07	5.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	2.7	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-19A2		6/10/08	3.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	1.7	ND (<0.50)	2.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-19A2		6/10/09	2.4	ND (<0.50)	ND (<0.50)	ND (<0.50)	1.7	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	0.58	
W-19A2		6/8/10	2.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	1.9	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-19A2	Dup	6/8/10	2.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	1.8	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-19A2		6/14/11	2.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	2.7	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-19A2		6/12/12	1.7	ND (<0.50)	ND (<0.50)	ND (<0.50)	2.4	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-19A2		6/17/13	1.8	ND (<0.50)	ND (<0.50)	ND (<0.50)	2.9	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-19A2		6/10/14	1.7	ND (<0.50)	ND (<0.50)	ND (<0.50)	3.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-19A2		6/9/15	1.7	ND (<0.50)	ND (<0.50)	ND (<0.50)	3.9	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-19A2		6/6/16	2.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	4.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-19A2	Dup	6/6/16	1.9	ND (<0.50)	ND (<0.50)	ND (<0.50)	3.9	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-19A2		6/5/17	1.3	ND (<0.50)	ND (<0.50)	ND (<0.50)	3.5	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-19A2		6/4/18	0.87	ND (<0.50)	ND (<0.50)	ND (<0.50)	4.0	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-19A2		6/6/19	0.66	ND (<0.50)	ND (<0.50)	ND (<0.50)	3.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-19A2		6/4/20	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	3.6	ND (<0.50)	ND (<0.50)	ND (<2.0)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-20B		12/14/92	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
W-20B		3/2/93	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-20B		6/2/93	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-20B		9/9/93	0.53	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-20B		12/6/93	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
W-20B		3/2/94	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-20B		6/8/94	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-20B		9/8/94	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-20B		12/7/94	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
W-20B		3/7/95	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-20B		6/2/95	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-20B		9/5/95	0.54	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	MC = 1.6;
W-20B		12/6/95	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<0.50)	ND (<5.0)	ND (<10)	
W-20B		3/4/96	2.4	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W-20B		6/5/96	0.77	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 120;
W-20B		9/10/96	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	CBMA = 111;
W-20B		12/10/96	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	-	ND (<5.0)	ND (<10)	
W157A1U		8/16/11	36	3.1	0.85	1.5	4.6	ND (<0.50)	3.2	1.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W157A1U		9/30/11	47	5.3	0.87	1.6	5.6	ND (<0.50)	5.4	1.8	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W157A1U		6/19/13	37	2.5	0.87	1.1	4.9	ND (<0.50)	3.8	0.95	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W157A1U		6/5/19	40	1.5	ND (<0.50)	0.72	2.2	ND (<0.50)	5.2	0.52	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W158A1U		8/16/11	38	0.65	0.59	1.2	2.3	0.71	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W158A1U		9/30/11	44	5.2	0.87	1.8	5.0	ND (<0.50)	4.7	1.9	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W158A1U		6/12/12	36	0.67	0.52	1.1	1.2	0.73	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W158A1U		6/19/13	38	0.75	0.55	1.3	1.7	0.51	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W158A1U		6/11/14	26	0.53	ND (<0.50)	0.77	1.2	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W158A1U		6/10/15	33	0.54	ND (<0.50)	1.1	1.1	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	
W158A1U		6/5/19	22	ND (<0.50)	ND (<0.50)	0.91	1.2	0.75	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	

Notes:
All data reported in µg/L unless otherwise noted.
Dup = Field Duplicate

* = LCS or LCSD is outside acceptance limits.
F1 = MS and/or MSD recovery exceeds control limits.

Abbreviations:
TCE = Trichloroethene
1,1,1-TCA = 1,1,1-Trichloroethane
1,1-DCA = 1,1-Dichloroethane
cis-1,2-DCE = cis-1,2-Dichloroethene
trans-1,2-DCE = trans-1,2-Dichloroethene
PCE = Perchloroethene (Tetrachloroethene)
Freon 113 = 1,1,2-Trichloro-1,2,2-Trifluoroethane
1,2-DCB = 1,2-Dichlorobenzene
1,2-DCA = 1,2-Dichloroethane
VC = Vinyl Chloride

Other Abbreviated Constituents:
1,3-DCB = 1,3-Dichlorobenzene
1,4-DCB = 1,4-Dichlorobenzene
2-CVE =2-Chloroethyl Vinyl Ether
CBMA = Chlorobromomethane
CHLBZ = Chlorobenzene
CHLEA (EC) = Chloroethane (Ethyl Chloride)
CHLMA = Chloromethane
CT = Carbon Tetrachloride
EDB = Ethylene Dibromide (1,2-Dibromoethane)
MC = Methylene Chloride (Dichloromethane)
1,1,2,2-TCA = 1,1,2,2-Trichloroethane
1,1,2-TCA = 1,1,2-Trichloroethane
1,2,3-TCB = 1,2,3-Trichlorobenzene
1,2,4-TCB = 1,2,4-Trichlorobenzene
1,2-DCPA = 1,2-Dichloropropane
BDCHLMA = Bromodichloromethane
BRFM = Bromoform
BRMA = Bromomethane
CHLFM = Chloroform
cis-1,3-DCP = cis-1,3-Dichloropropene
DBCM = Dibromochloromethane
DCDFM = Dichlorodifluoromethane
Freon 11 = Trichlorofluoromethane
trans-1,3-DCP = trans-1,3-Dichloropropene
CARBD = Carbon Disulfide

APPENDIX C

EISB Performance Monitoring at 395 Page Mill Road

2020 Annual Groundwater Self-Monitoring Report
California-Olive-Emerson (COE) Study Area
and Perimeter Area, Palo Alto, California
September 30, 2020



Table C-1
EISB Injection Summary
Area X EISB Treatment
395 Page Mill Road, Palo Alto, California

Treatment Zone	Injection Well	LactOil™ Solution (1) (gallons)	Accelerite (gallons)	Anoxic Water (2) (gallons)	Fresh Whey Solution(3) (gallons)	Total Volume Injected (gallons)	LactOil™ (lbs)	Fresh Whey (lbs)	KB-1 (4) (liters)
1st EISB INJECTION - MAY 2013									
A1 Upper Zone									
	IW-4A1U	275	1.25	50	500	826	225	900	1
	IW-5A1U	275	1.25	50	500	826	225	900	1
	IW-6A1U	275	1.25	50	500	826	225	900	1
	IW-7A1U	275	1.25	50	500	826	225	900	1
	OB11-3	550	5	50	1,000	1,605	450	1,800	1
Total A1 Upper Zone		**1,650**	**10**	**250**	**3,000**	**4,910**	**1,350**	**5,400**	**5**
A1 Zone									
	IW-1A1	550	1.67	50	667	1,269	450	1,200	1
	IW-2A1	550	1.66	50	667	1,269	450	1,200	1
	IW-3A1	550	1.67	50	667	1,269	450	1,200	1
Total A1 Zone		**1,650**	**5**	**150**	**2,001**	**3,806**	**1,350**	**3,600**	**3**
2nd EISB INJECTION - AUGUST 2014									
A1 Upper Zone									
	IW-4A1U	275	1.25	0	500	776	225	900	0
	IW-5A1U	275	1.25	0	500	776	225	900	0
	IW-6A1U	275	1.25	0	500	776	225	900	0
	IW-7A1U	275	1.25	0	500	776	225	900	0
	OB11-3	550	5	0	1,000	1,555	450	1,800	0
Total A1 Upper Zone		**1,650**	**10**	**0**	**3,000**	**4,660**	**1,350**	**5,400**	**0**
A1 Zone									
	IW-1A1	550	1.67	0	667	1,219	450	1,200	0
	IW-2A1	550	1.66	0	667	1,219	450	1,200	0
	IW-3A1	550	1.67	0	667	1,219	450	1,200	0
Total A1 Zone		**1,650**	**5**	**0**	**2,001**	**3,656**	**1,350**	**3,600**	**0**
3rd EISB INJECTION - DECEMBER 2015									
A1 Upper Zone									
	IW-4A1U	275	1.25	0	500	776	225	900	0
	IW-5A1U	275	1.25	0	500	776	225	900	0
	IW-6A1U	275	1.25	0	500	776	225	900	0
	IW-7A1U	275	1.25	0	500	776	225	900	0
Total A1 Upper Zone		**1,100**	**5**	**0**	**2,000**	**3,105**	**900**	**3,600**	**0**
A1 Zone									
	IW-1A1	550	1.67	0	667	1,219	450	1,200	0
	IW-2A1	550	1.66	0	667	1,219	450	1,200	0
	IW-3A1	550	1.67	0	667	1,219	450	1,200	0
Total A1 Zone		**1,650**	**5**	**0**	**2,001**	**3,656**	**1,350**	**3,600**	**0**
4th EISB INJECTION - SEPTEMBER 2017									
A1 Upper Zone									
	IW-4A1U	275	1.25	50	550	876	225	900	3
	IW-5A1U	275	1.25	50	550	876	225	900	3
	IW-6A1U	275	1.25	50	550	876	225	900	3
	IW-7A1U	275	1.25	50	550	876	225	900	3
Total A1 Upper Zone		**1,100**	**5**	**200**	**2,200**	**3,505**	**900**	**3,600**	**12**
A1 Zone									
	IW-1A1	550	1.67	50	667	1,269	450	1,200	3
	IW-2A1	550	1.66	50	667	1,269	450	1,200	3
	IW-3A1	550	1.67	50	667	1,269	450	1,200	3
Total A1 Zone		**1,650**	**5**	**150**	**2,001**	**3,806**	**1,350**	**3,600**	**9**

Table C-1
EISB Injection Summary
Area X EISB Treatment
395 Page Mill Road, Palo Alto, California

Treatment Zone	Injection Well	LactOil™ Solution (1) (gallons)	Accelerite (gallons)	Anoxic Water (2) (gallons)	Fresh Whey Solution(3) (gallons)	Total Volume Injected (gallons)	LactOil™ (lbs)	Fresh Whey (lbs)	KB-1 (4) (liters)
5th EISB INJECTION - NOVEMBER 2019									
A1 Upper Zone									
	IW-4A1U	600	1.25	50	0	651	225	0	3
	IW-5A1U	600	1.25	50	0	651	225	0	3
	IW-6A1U	600	1.25	50	0	651	225	0	3
	IW-7A1U	600	1.25	50	0	651	225	0	3
Total A1 Upper Zone		**2,400**	**5**	**200**	**0**	**2,605**	**900**	**0**	**12**
A1 Zone									
	IW-1A1	800	1.67	50	0	852	450	0	3
	IW-2A1	800	1.66	50	0	852	450	0	3
	IW-3A1	800	1.67	50	0	852	450	0	3
Total A1 Zone		**2,400**	**5**	**150**	**0**	**2,555**	**1,350**	**0**	**9**

Notes and Abbreviations:

(1) LactOil™ solution was prepared by mixing LactOil with potable water at ratio of 1:10 or 1:15

(2) Anoxic water was prepared by adding calcium polysulfide or Newman Zone OS to potable water.

(3) Fresh whey solution was prepared by mixing fresh whey with potable water

(4) Bioaugmentation was performed by injecting KB-1® Plus with nitrogen gas into the anoxic water as it was injected into the well

lbs - pounds

Table C-2
EISB Performance Monitoring Plan
Area X EISB Treatment
395 Page Mill Road, Palo Alto, California

Treatment Zone	Well	VOCs	Total Organic Carbon (TOC)	Dissolved Volatile Gases	DO, ORP, pH, EC, temp, Fe^{+2}	Dhc and Vcr
A1 Upper Zone	OB11-2	x	x	x	x	
A1 Upper Zone	RW-1	x	x	x	x	x
A1 Upper Zone	RW-2	x	x	x	x	
A1 Upper Zone	RW-5	x	x	x	x	x
A1 Upper Zone	RW-6	x	x	x	x	
A1 Zone	EW-11R	x	x	x	x	
A1 Zone	W-16A1	x	x	x	x	x

Notes and Abbreviations:

VOCs: halogenated volatile organic compounds by EPA method 8260B

Dissolved Volatile Gases: methane, ethane, and ethene by EPA Method RSK 175

TOC: Total organic carbon by EPA Method SM 5310C

Dhc and Vcr: Dehalococcoides and vinyl chloride reductase

ORP: oxidation-reduction potential (field measured)

DO: dissolved oxygen (field measured)

EC: electrical conductivity (field measured)

temp: temperature (field measured)

pH: field measured

Fe^{+2}: ferrous iron (field measured)

Table C-3
Groundwater Field Parameters Results
Area X EISB Treatment
395 Page Mill Road, Palo Alto, California

Treatment Zone	Well	Sample Event	Sample Date	Field Parameters					
				DO	ORP	pH	EC	Temperature	Fe^{+2}
A1 Upper Zone	OB11-2	Baseline	4/4/2013	1.69	208	7.42	1420	17.5	0.4
		1st EISB Injection - May 2013							
		1-Month	6/17/2013	0.43	32	6.35	2102	18.7	2.0
		3-Month	8/23/2013	1.90	-80	6.78	1353	18.9	3.6
		6-Month	11/22/2013	0.79	-55	6.88	1428	18.6	ND
		12-Month	5/22/2014	0.82	-64	6.61	1569	17.9	ND
		2nd EISB Injection - August 2014							
		6-Month	2/23/2015	0.34	31	6.48	1960	17.1	0.9
		12-Month	8/10/2015	0.44	1.0	6.78	1475	18.9	2.4
		3rd EISB Injection - December 2015							
		2016 Annual	6/7/2016	0.10	-101	6.82	1941	20.2	ND
		12-Month	12/19/2016	1.64	-74	6.83	1510	17.9	4.4
		2017 Annual	6/6/2017	1.17	24	7.30	1229	18.5	4.6
		4th EISB Injection - September 2017							
		2018 Annual	6/4/2018	0.85	129	6.79	1658	18.7	1.6
		2019 Annual	6/4/2019	1.91	-13	6.92	1492	17.9	1.5
		5th EISB Injection - November 2019							
		2020 Annual	6/2/2020	0.75	-97	6.99	1987	18.3	3.8
A1 Upper Zone	RW-1	Baseline	4/4/2013	1.43	226	7.50	1217	17.2	0.2
		1st EISB Injection - May 2013							
		1-Month	6/19/2013	0.41	-110	7.11	1481	19.5	1.8
		3-Month	8/23/2013	1.39	-88	6.57	1471	17.9	2.2
		6-Month	11/22/2013	0.89	-52	7.10	1178	17.7	1.6
		12-Month	5/22/2014	0.24	-99	6.82	1458	17.9	0.8
		2nd EISB Injection - August 2014							
		6-Month	2/23/2015	0.53	-51	6.62	1881	16.9	ND
		12-Month	8/10/2015	0.18	-38	7.12	1953	20.5	1.8
		3rd EISB Injection - December 2015							
		2016 Annual	6/7/2016	0.40	-80	6.62	1513	20.1	2.2
		12-Month	12/19/2016	0.67	2.0	7.14	1077	16.2	0.8
		2017 Annual	6/6/2017	0.75	19	7.17	1266	18.1	2.4
		4th EISB Injection - September 2017							
		2018 Annual	6/6/2018	2.14	-57	7.26	1376	19.3	3.4
		2019 Annual	6/5/2019	1.18	-106	7.00	1422	18.6	2.3
		5th EISB Injection - November 2019							
		2020 Annual	6/2/2020	0.31	-83	6.34	2403	18.9	1.0
A1 Upper Zone	RW-2	Baseline	4/4/2013	1.49	217	7.15	1214	12.5	0.2
		1st EISB Injection - May 2013							
		1-Month	6/18/2013	--	--	--	--	--	--
		3-Month	8/23/2013	--	--	--	--	--	--
		6-Month	11/22/2013	1.20	-58	6.52	1675	17.6	1.0
		12-Month	5/22/2014	0.80	-119	6.60	1426	20.7	1.2
		2nd EISB Injection - August 2014							
		6-Month	2/23/2015	0.28	-40	6.57	2243	16.0	0.6
		12-Month	8/10/2015	0.07	-86	7.24	1673	20.6	1.2
		3rd EISB Injection - December 2015							
		2016 Annual	6/7/2016	0.21	-42	6.81	923	19.6	ND
		12-Month	12/19/2016	0.61	-22	6.77	1478	17.0	3.8

Table C-3
Groundwater Field Parameters Results
Area X EISB Treatment
395 Page Mill Road, Palo Alto, California

Treatment Zone	Well	Sample Event	Sample Date	Field Parameters					
				DO	ORP	pH	EC	Temperature	Fe^{+2}
A1 Upper Zone	RW-2	2017 Annual	6/6/2017	0.16	-10	7.08	1244	19.2	1.8
	(cont.)	*4th EISB Injection - September 2017*							
		2018 Annual	6/6/2018	1.95	-101	7.08	1435	16.9	3.0
		2019 Annual	6/5/2019	1.84	-57	6.95	1312	18.8	2.8
		5th EISB Injection - November 2019							
		2020 Annual	6/4/2020	0.81	-146	7.15	2453	24.5	2.0
A1 Upper Zone	RW-5	Baseline	4/4/2013	1.56	265	7.01	1335	16.5	0.2
		1st EISB Injection - May 2013							
		1-Month	6/17/2013	0.46	10	6.21	2642	19.0	2.2
		3-Month	8/23/2013	1.44	-98	6.53	1667	19.6	3.0
		6-Month	11/22/2013	0.89	-48	6.76	1348	16.7	0.2
		12-Month	5/22/2014	0.92	108	6.47	4915	18.1	0.4
		2nd EISB Injection - August 2014							
		6-Month	2/23/2015	0.41	88	6.91	2000	15.8	1.2
		12-Month	8/10/2015	0.67	-53	7.08	1482	19.0	1.2
		3rd EISB Injection - December 2015							
		2016 Annual	6/7/2016	0.22	-116	6.98	2137	20.6	2.2
		12-Month	12/19/2016	0.45	-60	6.93	1613	12.4	3.6
		2017 Annual	6/6/2017	0.33	-54	7.14	1229	18.6	2.6
		4th EISB Injection - September 2017							
		2018 Annual	6/4/2018	1.26	154	6.63	1660	18.9	1.8
		2019 Annual	6/4/2019	1.52	-86	6.71	1430	17.7	6.5
		5th EISB Injection - November 2019							
		2020 Annual	6/2/2020	1.88	-115	6.98	2570	19	1.6
A1 Upper Zone	RW-6	Baseline	4/4/2013	1.56	233	7.50	1367	16.4	0.2
		1st EISB Injection - May 2013							
		1-Month	6/18/2013	--	--	--	--	--	--
		3-Month	8/23/2013	--	--	--	--	--	--
		6-Month	11/22/2013	1.05	-49	6.61	1613	17.5	1.4
		12-Month	5/22/2014	0.51	-41	6.62	1553	21.4	0.8
		2nd EISB Injection - August 2014							
		6-Month	2/23/2015	0.48	44	6.62	1641	16.1	0.8
		12-Month	8/10/2015	0.70	59	7.45	1719	21.3	2.8
		3rd EISB Injection - December 2015							
		2016 Annual	6/7/2016	0.30	-21	7.77	648	20.5	ND
		12-Month	12/19/2016	0.05	-19	6.68	1810	15.6	2.2
		2017 Annual	6/6/2017	0.46	-27	6.96	1190	18.6	ND
		4th EISB Injection - September 2017							
		2018 Annual	6/6/2018	1.88	-32	6.45	1845	18.3	2.4
		2019 Annual	6/5/2019	1.30	-31	6.87	1588	20.0	2.0
		5th EISB Injection - November 2019							
		2020 Annual	6/4/2020	1.36	-80	7.07	1721	19.8	1.8
A1 Zone	EW-11R	Baseline	4/4/2013	1.49	209	6.84	1431	17.8	0.4
		1st EISB Injection - May 2013							
		1-Month	6/18/2013	1.69	-83	6.82	1492	19.2	2.0
		3-Month	8/23/2013	2.31	-64	6.92	1629	18.5	3.0
		6-Month	11/22/2013	1.59	-76	6.97	1498	18.1	ND
		12-Month	5/22/2014	2.25	-53	6.98	1478	17.8	1.2

Table C-3
Groundwater Field Parameters Results
Area X EISB Treatment
395 Page Mill Road, Palo Alto, California

Treatment Zone	Well	Sample Event	Sample Date	Field Parameters					
				DO	ORP	pH	EC	Temperature	Fe^{+2}
A1 Zone	EW-11R (cont.)	*2nd EISB Injection - August 2014*							
		6-Month	2/23/2015	0.83	-30	6.80	1385	17.9	3.0
		12-Month	8/10/2015	1.03	-28	7.02	1346	19.5	1.0
		3rd EISB Injection - December 2015							
		2016 Annual	6/7/2016	0.8	-89	7.00	1250	19.6	ND
		12-Month	12/19/2016	1.5	-46	6.84	1360	15.8	5.2
		2017 Annual	6/6/2017	0.70	-87	8.13	1243	19.2	1.6
		4th EISB Injection - September 2017							
		2018 Annual	6/4/2018	1.34	153	7.00	1359	19.0	2.8
		2019 Annual	6/5/2019	0.87	-78	7.09	1413	20.2	2.0
		5th EISB Injection - November 2019							
		2020 Annual	6/4/2020	0.72	-112	7.27	1441	19.6	2.0
A1 Zone	W-16A1	Baseline	4/4/2013	1.28	235	7.43	716	17.0	0.2
		1st EISB Injection - May 2013							
		1-Month	6/18/2013	0.64	-181	6.95	1672	19.5	1.4
		3-Month	8/23/2013	0.91	-140	6.61	1702	17.9	1.4
		6-Month	11/22/2013	1.20	-89	6.93	1611	16.3	1.2
		12-Month	5/22/2014	0.92	-98	6.52	1627	20.7	1.0
		2nd EISB Injection - August 2014							
		6-Month	2/23/2015	0.43	-31	6.54	1754	17.2	ND
		12-Month	8/10/2015	0.17	112	7.30	1612	19.7	1.8
		3rd EISB Injection - December 2015							
		2016 Annual	6/7/2016	0.32	-36	6.88	1000	19.3	ND
		12-Month	12/19/2016	0.84	-19	6.94	338	16.2	4.0
		2017 Annual	6/6/2017	0.53	194	8.37	393	18.5	ND
		4th EISB Injection - September 2017							
		2018 Annual	6/6/2018	1.83	315	6.76	1255	22.3	2.4
		2019 Annual	6/5/2019	1.45	-74	6.88	1049	18.4	3.5
		5th EISB Injection - November 2019							
		2020 Annual	6/2/2020	0.89	-33	6.61	1198	19.3	2.5

Notes and Abbreviations:

DO: Dissolved Oxygen in milligrams per liter (mg/l)

ORP: Oxygen Reduction Potential in millivolts (mV)

pH: hydrogen ion concentration (unitless)

ND: Not detected

EC: Electrical Conductivity in micromhos per centimeter (µmohs/cm)

Temperature in degrees Centigrade (°C)

Fe^{+2}: Ferrous Iron in mg/L

--: Not Analyzed

Table C-4
Groundwater Volatile Organic Compound (VOC) Results
Area X EISB Treatment
395 Page Mill Road, Palo Alto, California

Treatment Zone	Well	Sample Event	Sample Date	Volatile Organic Compounds - US EPA Method 8260B											
				PCE (µg/L)	TCE (µg/L)	*cis* 1,2-DCE (µg/L)	*trans* 1,2-DCE (µg/L)	Vinyl Chloride (µg/L)	CT (µg/L)	Chloroform (µg/L)	1,1-DCA (µg/L)	1,1-DCE (µg/L)	1,1,1-TCA (µg/L)	Freon 113 (µg/L)	Other (µg/L)
A1 Upper Zone	OB11-2	Baseline [(1)]	4/4/2013	**670**	**68**	**23**	ND (<0.5)	ND (<0.5)	**0.75**	**1.6**	**1.1**	**8.9**	**100**	ND (<0.5)	
		1st EISB Injection - May 2013													
		1-Month	6/17/2013	**390**	**6.0**	**590**	ND (<5)	ND (<5)	ND (<5)	ND (<10)	**5.1**	**7.5**	**110**	ND (<5)	
		3-Month	8/23/2013	**320**	ND (<5)	**54**	**7.8**	**95**	ND (<5)	ND (<10)	**13**	ND (<5)	**68**	ND (<5)	
		6-Month	11/22/2013	**150**	**2.3**	**7.3**	**4.9**	**12**	ND (<1)	ND (<2)	**12**	**1.9**	**28**	ND (<1)	
		12-Month	5/22/2014	**1,100**	**3.5**	**69**	**2.0**	**52**	ND (<1)	ND (<2)	**8.6**	**7.0**	**99**	ND (<1)	1,1,1,2-PCA=1.8
		2014 Annual	6/11/2014	**53**	**6.0**	**52**	**1.2**	**20**	ND (<5)	ND (<10)	**4.5**	**0.75**	**18**	ND (<1)	
		2nd EISB Injection - August 2014													
		6-Month	2/23/2015	**130**	ND (<5)	**6.4**	ND (<5)	ND (<5)	ND (<5)	ND (<10)	ND (<5)	ND (<5)	**9.6**	ND (<5)	
		2015 Annual	6/9/2015	**18**	**19**	**720**	ND (<2.5)	**6.2**	ND (<2.5)	ND (<2.5)	**3.1**	**2.8**	**140**	ND (<2.5)	
		12-Month	8/10/2015	**780**	**5.2**	**200**	**1.1**	**13**	ND (<1)	ND (<2)	**4.2**	**1.2**	**120**	ND (<1)	1,1,1,2-PCA=1.9
		3rd EISB Injection - December 2015													
		2016 Annual	6/7/2016	**15**	**1.4**	**160**	**1.5**	**73**	ND (<1)	ND (<2)	**28**	**1.4**	**23**	ND (<1)	Chloroethane=9.2
		12-Month	12/19/2016	**380**	**3.9**	**48**	**0.51**	**2.4**	ND (<0.5)	ND (<1)	**0.50**	**1.5**	**35**	ND (<0.5)	Chloroethane=2.2
		2017 Annual	6/6/2017	**59**	ND (<5)	**53**	ND (<5)	ND (<5)	ND (<5)	ND (<10)	ND (<5)	ND (<5)	**15**	ND (<5)	
		Duplicate	6/6/2017	**60**	ND (<5)	**60**	ND (<5)	ND (<5)	ND (<5)	ND (<10)	ND (<5)	ND (<5)	**16**	ND (<5)	
		4th EISB Injection - September 2017													
		2018 Annual	6/4/2018	**4,200**	**6.9**	**13**	ND (<0.5)	**2.9**	**1.3**	ND (<1)	**2.9**	ND (<0.5)	**160**	ND (<0.5)	Chloroethane=1.1
		2019 Annual	6/4/2019	**6,900**	ND (<50)	**51**	ND (<50)	ND (<50)	ND (<50)	ND (<100)	ND (<50)	ND (<50)	**360**	ND (<50)	
		5th EISB Injection - November 2019													
		2020 Annual	6/2/2020	**89,000**	ND (<500)	**3,800**	ND (<500)	ND (<500)	ND (<500)	ND (<500)	ND (<500)	ND (<500)	**12,000**	ND (<500)	
A1 Upper Zone	RW-1	Baseline	4/4/2013	**250**	**27**	**0.89**	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<1)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	
		1st EISB Injection - May 2013													
		1-Month	6/19/2013	**6.1**	ND (<1)	**810**	ND (<1)	**3.5**	ND (<1)	ND (<2)	ND (<1)	**1.3**	ND (<1)	ND (<1)	
		3-Month	8/23/2013	ND (<2.5)	ND (<2.5)	**12**	ND (<2.5)	**150**	ND (<2.5)	ND (<5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
		6-Month	11/22/2013	ND (<0.5)	ND (<0.5)	**0.76**	**7.9**	**1.2**	ND (<0.5)	ND (<1)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	
		12-Month	5/22/2014	ND (<0.5)	ND (<0.5)	**29**	**2.7**	**28**	ND (<0.5)	ND (<1)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	
		2nd EISB Injection - August 2014													
		6-Month	2/23/2015	ND (<0.5)	ND (<0.5)	**3.1**	**4.1**	**4.1**	ND (<0.5)	ND (<1)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	2-butanone = 69; toluene =5.1
		2015 Annual	6/9/2015	ND (<0.5)	ND (<0.5)	**4.2**	**8.3**	**2.5**	ND (<0.5)	ND (<1)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	
		12-Month	8/10/2015	ND (<0.5)	ND (<0.5)	**4.4**	**6.6**	**5.4**	ND (<0.5)	ND (<1)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	Toluene =7.3
		3rd EISB Injection - December 2015													
		2016 Annual	6/7/2016	ND (<0.5)	ND (<0.5)	**2.4**	**3.1**	ND (<0.5)	ND (<0.5)	ND (<1)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	Chloroethane=1.8
		12-Month	12/19/2016	ND (<0.5)	ND (<0.5)	**1.7**	**5.1**	**1.5**	ND (<0.5)	ND (<1)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	Chloroethane=5.0
		2017 Annual	6/6/2017	ND (<0.5)	ND (<0.5)	**1.1**	**5.5**	**1.1**	ND (<0.5)	ND (<1)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	Chloroethane=6.9
		4th EISB Injection - September 2017													
		2018 Annual	6/6/2018	ND (<0.5)	ND (<0.5)	**1.3**	**2.3**	ND (<0.5)	ND (<0.5)	ND (<1)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	Chloroethane=2.4
		2019 Annual	6/5/2019	ND (<0.5)	**1.4**	**13**	ND (<0.5)	**4.7**	ND (<0.5)	ND (<1)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	
		5th EISB Injection - November 2019													
		2020 Annual	6/2/2020	ND (<0.5)	ND (<0.5)	**1.1**	**1.1**	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	
A1 Upper Zone	RW-2	Baseline	4/4/2013	**120**	**21**	**1.1**	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<1)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	
		1st EISB Injection - May 2013													
		1-Month	6/18/2013	**4.4**	ND (<1)	**280**	ND (<1)	ND (<1)	ND (<1)	ND (<2)	ND (<1)	ND (<1)	ND (<1)	ND (<1)	
		3-Month	8/23/2013	---	---	---	---	---	---	---	---	---	---	---	
		6-Month	11/22/2013	ND (<0.5)	ND (<0.5)	**87**	**3.6**	**82**	ND (<0.5)	ND (<1)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	

Table C-4
Groundwater Volatile Organic Compound (VOC) Results
Area X EISB Treatment
395 Page Mill Road, Palo Alto, California

Treatment Zone	Well	Sample Event	Sample Date	Volatile Organic Compounds - US EPA Method 8260B											
				PCE (µg/L)	TCE (µg/L)	*cis* 1,2-DCE (µg/L)	*trans* 1,2-DCE (µg/L)	Vinyl Chloride (µg/L)	CT (µg/L)	Chloroform (µg/L)	1,1-DCA (µg/L)	1,1-DCE (µg/L)	1,1,1-TCA (µg/L)	Freon 113 (µg/L)	Other (µg/L)
A1 Upper Zone	RW-2 (cont.)	12-Month	5/22/2014	ND (<0.5)	ND (<0.5)	**1.7**	**1.6**	**7.5**	ND (<0.5)	ND (<1)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	Toluene = 0.76
		2nd EISB Injection - August 2014													
		6-Month	2/23/2015	ND (<0.5)	ND (<0.5)	**5.7**	**1.0**	**2.1**	ND (<0.5)	ND (<1)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	2-butanone = 97; toluene =12
		2015 Annual	6/9/2015	ND (<0.5)	ND (<0.5)	**5.4**	**2.2**	**1.4**	ND (<0.5)	ND (<1)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	Chloroethane=3.0
		12-Month	8/10/2015	ND (<0.5)	ND (<0.5)	**5.3**	**1.5**	**2.2**	ND (<0.5)	ND (<1)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	Chloroethane=2.7; toluene=1.5
		3rd EISB Injection - December 2015													
		2016 Annual	6/7/2016	ND (<0.5)	ND (<0.5)	**1.6**	**0.94**	**1.3**	ND (<0.5)	ND (<1)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	Chloroethane=1.2
		12-Month	12/19/2016	ND (<0.5)	ND (<0.5)	**10**	**1.5**	**13**	ND (<0.5)	ND (<1)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	Chloroethane=1.7
		2017 Annual	6/6/2017	ND (<0.5)	**0.58**	**28**	ND (<0.5)	**19**	ND (<0.5)	ND (<1)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	
		4th EISB Injection - September 2017													
		2018 Annual	6/6/2018	ND (<0.5)	ND (<0.5)	**3.3**	**0.51**	**5**	ND (<0.5)	ND (<1)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	
		2019 Annual	6/5/2019	ND (<0.5)	ND (<0.5)	**56**	**0.67**	**13**	ND (<0.5)	ND (<1)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	
		5th EISB Injection - November 2019													
		2020 Annual	6/4/2020	ND (<0.5)	ND (<0.5)	**1.1**	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	
A1 Upper Zone	RW-5	Baseline	4/4/2013	**31**	**31**	**1.4**	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<1)	ND (<0.5)	**0.95**	**1.7**	ND (<0.5)	
		1st EISB Injection - May 2013													
		1-Month	6/17/2013	**370**	**84**	**6,400**	**13**	**5.6**	ND (<2.5)	ND (<5)	**12**	**8.7**	**8.7**	ND (<2.5)	
		3-Month	8/23/2013	ND (<0.5)	ND (<0.5)	**2.8**	**7.8**	**41**	ND (<0.5)	ND (<1)	**4.1**	ND (<0.5)	ND (<0.5)	ND (<0.5)	Chloroethane=3.8
		6-Month	11/22/2013	ND (<0.5)	ND (<0.5)	**3.2**	**4.1**	**6.0**	ND (<0.5)	ND (<1)	**4.2**	ND (<0.5)	ND (<0.5)	ND (<0.5)	Chloroethane=1.7
		12-Month	5/22/2014	ND (<0.5)	ND (<0.5)	**5.4**	**0.60**	**18**	ND (<0.5)	ND (<1)	**2.3**	ND (<0.5)	ND (<0.5)	ND (<0.5)	
		2nd EISB Injection - August 2014													
		6-Month	2/23/2015	**0.70**	**0.72**	**4.0**	**0.90**	**2.6**	ND (<0.5)	ND (<1)	**0.52**	ND (<0.5)	ND (<0.5)	ND (<0.5)	2-butanone = 77; toluene =2.0; chloroethane=5.9
		2015 Annual	6/9/2015	ND (<0.5)	**0.74**	**2.2**	**1.3**	**3.1**	ND (<0.5)	ND (<1)	**1.8**	ND (<0.5)	ND (<0.5)	ND (<0.5)	Chloroethane=3.6
		12-Month	8/10/2015	ND (<0.5)	**0.98**	ND (<1)	**1.3**	**2.6**	ND (<0.5)	ND (<1)	**1.7**	ND (<0.5)	ND (<0.5)	ND (<0.5)	Chloroethane=3.0
		3rd EISB Injection - December 2015													
		2016 Annual	6/7/2016	**8.9**	**1.2**	**1.2**	ND (<0.5)	**3.2**	ND (<0.5)	ND (<1)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	Chloroethane=3.8
		12-Month	12/19/2016	ND (<0.5)	ND (<0.5)	ND (<0.5)	**3.1**	ND (<0.5)	ND (<0.5)	ND (<1)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	Chloroethane=12
		2017 Annual	6/6/2017	ND (<0.5)	ND (<0.5)	**0.98**	ND (<0.5)	**3.0**	ND (<0.5)	ND (<1)	**0.70**	ND (<0.5)	ND (<0.5)	ND (<0.5)	Chloroethane=1.2
		4th EISB Injection - September 2017													
		2018 Annual	6/4/2018	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<1)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	Chloroethane=1.4
		2019 Annual	6/4/2019	ND (<0.5)	ND (<0.5)	**3.2**	ND (<0.5)	**4.0**	ND (<0.5)	ND (<1)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	
		5th EISB Injection - November 2019													
		2020 Annual	6/2/2020	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<1)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	Chloroethane=1.0
A1 Upper Zone	RW-6	Baseline	4/4/2013	**98**	**31**	**2.1**	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<1)	ND (<0.5)	**2.2**	**5.3**	ND (<0.5)	
		1st EISB Injection - May 2013													
		1-Month	6/18/2013	**5.9**	**1.3**	**890**	**7.8**	ND (<0.5)	ND (<0.5)	ND (<1)	**9.7**	**2.0**	**3.7**	ND (<0.5)	1,1,2-TCA=0.59
		3-Month	8/23/2013	---	---	---	---	---	---	---	---	---	---	---	
		6-Month	11/22/2013	**0.82**	**1.4**	**49**	**22**	**160**	ND (<0.5)	ND (<1)	**18**	**0.71**	**3.4**	ND (<0.5)	Chloroethane=1.4
		12-Month	5/22/2014	ND (<0.5)	**4.5**	**85**	**4.8**	**160**	ND (<0.5)	ND (<1)	**14**	**1.7**	**2.9**	ND (<0.5)	Chloroethane=1.3
		2nd EISB Injection - August 2014													
		6-Month	2/23/2015	ND (<0.5)	**1.0**	**4.7**	**3.8**	**9.8**	ND (<0.5)	ND (<1)	**6.7**	ND (<0.5)	**0.65**	ND (<0.5)	Chloroethane=5.3
		2015 Annual	6/9/2015	ND (<0.5)	**3.8**	**82**	**4.8**	**44**	ND (<0.5)	ND (<1)	**6.1**	**1.4**	**1.6**	ND (<0.5)	Chloroethane=7.9
		12-Month	8/10/2015	ND (<0.5)	**2.3**	**110**	**3.6**	**37**	ND (<0.5)	ND (<1)	**5.6**	**1.4**	**1.4**	ND (<0.5)	Chloroethane=6.2
		3rd EISB Injection - December 2015													
		2016 Annual	6/7/2016	ND (<0.5)	**4.9**	**730**	**8.3**	**120**	ND (<0.5)	ND (<1)	**12**	**8.0**	**2.8**	ND (<0.5)	Chloroethane=4.3
		12-Month	12/19/2016	ND (<10)	ND (<10)	**560**	ND (<10)	**140**	ND (<10)	ND (<20)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	

Table C-4
Groundwater Volatile Organic Compound (VOC) Results
Area X EISB Treatment
395 Page Mill Road, Palo Alto, California

Treatment Zone	Well	Sample Event	Sample Date	Volatile Organic Compounds - US EPA Method 8260B											
				PCE (µg/L)	TCE (µg/L)	*cis* 1,2-DCE (µg/L)	*trans* 1,2-DCE (µg/L)	Vinyl Chloride (µg/L)	CT (µg/L)	Chloroform (µg/L)	1,1-DCA (µg/L)	1,1-DCE (µg/L)	1,1,1-TCA (µg/L)	Freon 113 (µg/L)	Other (µg/L)
A1 Upper Zone	RW-6 (cont.)	2017 Annual	6/6/2017	ND (<0.5)	**2.7**	**36**	**0.82**	**7.9**	ND (<0.5)	ND (<1)	**0.94**	ND (<0.5)	ND (<0.5)	ND (<0.5)	Chloroethane=1.9
		4th EISB Injection - September 2017													
		2018 Annual	6/6/2018	ND (<0.5)	ND (<0.5)	**25**	**0.61**	**6.3**	ND (<0.5)	ND (<1)	**0.63**	ND (<0.5)	ND (<0.5)	ND (<0.5)	Chloroethane=3.2
		2019 Annual	6/5/2019	**0.76**	**2.7**	**25**	**0.50**	**4.4**	ND (<0.5)	ND (<1)	ND (<0.5)	ND (<0.5)		ND (<0.5)	
		5th EISB Injection - November 2019													
		2020 Annual	6/4/2020	ND (<0.5)	ND (<0.5)	**5.9**	ND (<0.5)	**2.9**	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	
A1 Zone	EW-11R	Baseline	4/4/2013	**450**	**120**	**12**	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<1)	**2.5**	**11**	**8.4**	**1.2**	
		1st EISB Injection - May 2013													
		1-Month	6/18/2013	**250**	**80**	**840**	ND (<5)	ND (<5)	ND (<5)	ND (<10)	**8.0**	**14**	**5.6**	ND (<5)	
		3-Month	8/23/2013	**55**	**19**	**1,700**	**7.2**	**170**	ND (<2.5)	ND (<5)	**5.8**	**11**	**3.5**	ND (<2.5)	
		Duplicate	8/23/2013	**27**	**12**	**1,600**	**5.5**	**140**	ND (<2.5)	ND (<5)	**5.1**	**7.9**	**2.7**	ND (<2.5)	
		6-Month	11/22/2013	**42**	**13**	**280**	**5.3**	**200**	ND (<2.5)	ND (<5)	**3.9**	**3.1**	ND (<2.5)	ND (<2.5)	
		12-Month	5/22/2014	**46**	**22**	**110**	ND (<2.5)	**130**	ND (<2.5)	ND (<5)	**3.0**	ND (<2.5)	**2.6**	ND (<2.5)	
		Duplicate	5/22/2014	**48**	**23**	**110**	ND (<2.5)	**140**	ND (<2.5)	ND (<5)	**3.1**	**2.6**	**2.6**	ND (<2.5)	
		2014 Annual	6/11/2014	**51**	**28**	**170**	ND (<5)	**200**	ND (<5)	ND (<10)	ND (<5)	ND (<5)	ND (<5)	ND (<5)	
		2nd EISB Injection - August 2014													
		6-Month	2/23/2015	**3.2**	**2.8**	**40**	**4.8**	**66**	ND (<5)	ND (<10)	ND (<5)	ND (<5)	ND (<5)	ND (<5)	
		Duplicate	2/23/2015	**3.3**	**2.8**	**41**	**4.6**	**63**	ND (<5)	ND (<10)	ND (<5)	ND (<5)	ND (<5)	ND (<5)	
		2015 Annual	6/9/2015	ND (<2.5)	ND (<2.5)	**86**	**3.0**	**87**	ND (<2.5)	ND (<5)	**3.3**	ND (<2.5)	ND (<2.5)	ND (<2.5)	
		12-Month	8/10/2015	**0.81**	**1.2**	**63**	**2.0**	**60**	ND (<0.5)	ND (<1)	**3.6**	ND (<0.5)	ND (<0.5)	ND (<0.5)	
		Duplicate	8/10/2015	**0.73**	**1.1**	**58**	**1.9**	**57**	ND (<0.5)	ND (<1)	**3.3**	ND (<0.5)	ND (<0.5)	ND (<0.5)	
		3rd EISB Injection - December 2015													
		2016 Annual	6/7/2016	**0.71**	**0.98**	**80**	**2.1**	**70**	ND (<0.5)	ND (<1)	**3.2**	ND (<0.5)	ND (<0.5)	ND (<0.5)	
		12-Month	12/19/2016	**1.0**	**1.2**	**73**	**1.7**	**31**	ND (<0.5)	ND (<1)	**2.8**	ND (<0.5)	ND (<0.5)	ND (<0.5)	Chloroethane=1.4
		Duplicate	12/19/2016	**1.0**	**1.2**	**82**	**1.6**	**25**	ND (<0.5)	ND (<1)	**3.1**	ND (<0.5)	ND (<0.5)	ND (<0.5)	Chloroethane=1.2
		2017 Annual	6/6/2017	ND (<2.5)	ND (<2.5)	**280**	ND (<2.5)	**42**	ND (<2.5)	ND (<5)	**6.1**	**6.4**	ND (<2.5)	ND (<2.5)	
		4th EISB Injection - September 2017													
		2018 Annual	6/4/2018	ND (<2.5)	ND (<2.5)	**74**	ND (<2.5)	**38**	ND (<2.5)	ND (<5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	
		2019 Annual	6/5/2019	ND (<0.5)	ND (<0.5)	**400**	**3.6**	**35**	ND (<0.5)	ND (<1)	**6.1**	**15**	ND (<0.5)	ND (<0.5)	
		5th EISB Injection - November 2019													
		2020 Annual	6/4/2020	ND (<2.5)	ND (<2.5)	**440**	**4.6**	**110**	ND (<2.5)	ND (<2.5)	**6.3**	**11**	ND (<2.5)	ND (<2.5)	
A1 Zone	W-16A1	Baseline	4/4/2013	**510**	**33**	**1.0**	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<1)	ND (<0.5)	**0.67**	**0.62**	ND (<0.5)	
		1st EISB Injection - May 2013													
		1-Month	6/18/2013	**25**	ND (<10)	**1,700**	ND (<10)	ND (<10)	ND (<10)	ND (<20)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	
		3-Month	8/23/2013	ND (<5)	ND (<5)	**2,600**	**15**	**180**	ND (<5)	ND (<10)	ND (<5)	ND (<5)	ND (<5)	ND (<5)	
		6-Month	11/22/2013	ND (<10)	ND (<10)	**590**	**13**	**270**	ND (<10)	ND (<20)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	
		12-Month	5/22/2014	ND (<0.5)	**0.87**	**93**	**3.3**	**67**	ND (<0.5)	ND (<1)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	
		2nd EISB Injection - August 2014													
		6-Month	2/23/2015	ND (<0.5)	**1.1**	**40**	**5.8**	**79**	ND (<0.5)	ND (<1)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	Chloroethane=1.8
		2015 Annual	6/9/2015	ND (<0.5)	**2.2**	**67**	**3.7**	**71**	ND (<0.5)	ND (<1)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	Chloroethane=1.1
		12-Month	8/10/2015	ND (<0.5)	**1.9**	**41**	**1.8**	**41**	ND (<0.5)	ND (<1)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	
		3rd EISB Injection - December 2015													
		2016 Annual	6/7/2016	ND (<5)	ND (<5)	**260**	ND (<5)	**78**	ND (<5)	ND (<10)	ND (<5)	ND (<5)	ND (<5)	ND (<5)	
		12-Month	12/19/2016	ND (<0.5)	**1.1**	**46**	**1.1**	**22**	ND (<0.5)	ND (<1)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	
		2017 Annual	6/6/2017	ND (<0.5)	**0.75**	**44**	**1.0**	**26**	ND (<0.5)	ND (<1)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	

Table C-4
Groundwater Volatile Organic Compound (VOC) Results
Area X EISB Treatment
395 Page Mill Road, Palo Alto, California

Treatment Zone	Well	Sample Event	Sample Date	Volatile Organic Compounds - US EPA Method 8260B											
				PCE (µg/L)	TCE (µg/L)	*cis* 1,2-DCE (µg/L)	*trans* 1,2-DCE (µg/L)	Vinyl Chloride (µg/L)	CT (µg/L)	Chloroform (µg/L)	1,1-DCA (µg/L)	1,1-DCE (µg/L)	1,1,1-TCA (µg/L)	Freon 113 (µg/L)	Other (µg/L)
A1 Zone	W-16A1 (cont.)	*4th EISB Injection - September 2017*													
		2018 Annual	6/6/2018	ND (<0.5)	ND (<0.5)	**48**	**0.99**	**24**	ND (<0.5)	ND (<1)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	
		2019 Annual	6/5/2019	ND (<0.5)	ND (<0.5)	**40**	**0.81**	**13**	ND (<0.5)	ND (<1)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	
		5th EISB Injection - November 2019													
		2020 Annual	6/2/2020	ND (<0.5)	ND (<0.5)	**200**	**4.9**	**110**	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	

Notes and Abbreviations:

Only compounds detected in one or more baseline samples are presented. See the laboratory reports for a complete list of analytes and reporting limits.

(1): Baseline event conducted prior to carbon substrate injections.

US EPA = U.S. Environmental Protection Agency
µg/L = Micrograms per liter
VOCs = volatile organic compounds by EPA method 8260B
ND (<0.01) = Analyte was not detected above the reporting limit in parentheses

cis-1,2-DCE = *cis*-1,2-Dichloroethene
trans-1,2-DCE = *trans*-1,2-Dichloroethene
PCE = Tetrachloroethane

CT = Carbon Tetrachloride
1,1-DCA = 1,1-Dichloroethane
1,1-DCE = 1,1-Dichloroethene

1,1,1,-TCA = 1,1,1-Trichloroethane
TCE = Trichloroethene
Freon 113 = 1,1,2-Trichloro-1,2,2-trifluoroethane

Table C-5
Groundwater Total Organic Carbon, Volatile Gases, and Dehalococcoides Results
Area X EISB Treatment
395 Page Mill Road, Palo Alto, California

Treatment	Well	Sample Event	Sample Date	Total Organic Carbon (TOC) (mg/L)	Dissolved Volatile Gases			Dhc (copies/L)	vcrA (copies/L)
					Methane (µg/L)	Ethane (µg/L)	Ethene (µg/L)		
A1 Upper Zone	OB11-2	Baseline	4/4/2013	2.0	0.25	ND (<0.2)	0.015 J	--	--
		1st EISB Injection - May 2013							
		1-Month	6/17/2013	120	--	--	--	--	--
		3-Month	8/23/2013	24	7,700	0.079 J	88	--	--
		6-Month	11/22/2013	4.7	6,200	0.057 J	88	--	--
		12-Month	5/22/2014	4.5	12,000	0.024 J	24	--	--
		2nd EISB Injection - August 2014							
		6-Month	2/23/2015	12	14,000	18	0.71	--	--
		12-Month	8/10/2015	7.9	8,300	4.6	5.7	--	--
		3rd EISB Injection - December 2015							
		2016 Annual	6/7/2016	16	16,000	67	32	--	--
		12-Month	12/19/2016	11	12,000	22	2.2	--	--
		2017 Annual	6/6/2017	6.8	2,700	2.6	2.0	--	--
		duplicate	6/6/2017	7.4	2,700	2.8	2.1	--	--
		4th EISB Injection - September 2017							
		2018 Annual	6/4/2018	6.5	9,400	6.9	7.6	--	--
		2019 Annual	6/4/2019	5.9	2,400	3.3	3.8	--	--
		5th EISB Injection - November 2019							
		2020 Annual	6/2/2020	17	3,200	6.5	39	--	--
A1 Upper Zone	RW-1	Baseline	4/4/2013	2.2	0.068 J	ND (<0.2)	0.014 J	NP	--
		1st EISB Injection - May 2013							
		1-Month	6/19/2013	16	--	--	--	--	--
		3-Month	8/23/2013	39	1,800	ND (<0.2)	1.8	--	--
		6-Month	11/22/2013	4.4	18,000	4.5	81	9×10^7	1×10^8
		12-Month	5/22/2014	3.0	7,800	32	18	8×10^7	5×10^8
		2nd EISB Injection - August 2014							
		6-Month	2/23/2015	10	13,000	41	0.27	1×10^6	3×10^6
		12-Month	8/10/2015	11	15,000	88	12	9×10^5	2×10^6
		3rd EISB Injection - December 2015							
		2016 Annual	6/7/2016	7.9	18,000	11	ND (<0.1)	7×10^6	8×10^6
		12-Month	12/19/2016	4.2	19,000	39	3.6	3×10^5	2×10^5
		2017 Annual	6/6/2017	3.6	21,000	56	1.6	3×10^5	9×10^4
		4th EISB Injection - September 2017							
		2018 Annual	6/6/2018	2.6	2,200	1.6	4.3	NP	--
		2019 Annual	6/5/2019	2.6	380	0.38	0.99	4×10^5	6×10^5
		5th EISB Injection - November 2019							
		2020 Annual	6/2/2020	30	3,300	0.097 J	ND (<1.0)	1×10^6	2×10^6
A1 Upper Zone	RW-2	Baseline	4/4/2013	2.1	0.048 J	ND (<0.2)	ND (<0.2)	--	--
		1st EISB Injection - May 2013							
		1-Month	6/18/2013	--	--	--	--	--	--
		3-Month	8/23/2013	--	--	--	--	--	--
		6-Month	11/22/2013	5.4	11,000	ND (<0.2)	56	--	--
		12-Month	5/22/2014	3.0	7,500	1.9	30	--	--
		2nd EISB Injection - August 2014							
		6-Month	2/23/2015	11	16,000	4.9	0.38	--	--
		12-Month	8/10/2015	6.7	15,000	12	0.25	--	--
		3rd EISB Injection - December 2015							
		2016 Annual	6/7/2016	9.4	18,000	1.0	0.6	--	--
		12-Month	12/19/2016	7.5	19,000	14	5.0	--	--
		2017 Annual	6/6/2017	5.8	570	0.65	2.0	--	--
		4th EISB Injection - September 2017							
		2018 Annual	6/6/2018	4.7	3,300	2.7	5.2	--	--
		2019 Annual	6/5/2019	4.1	200	0.20 J	1.6	--	--
		5th EISB Injection - November 2019							
		2020 Annual	6/4/2020	53	16,000	ND (<2.0)	ND (<2.0)	--	--

Table C-5
Groundwater Total Organic Carbon, Volatile Gases, and Dehalococcoides Results
Area X EISB Treatment
395 Page Mill Road, Palo Alto, California

Treatment	Well	Sample Event	Sample Date	Total Organic Carbon (TOC) (mg/L)	Dissolved Volatile Gases			Dhc (copies/L)	vcrA (copies/L)
					Methane (µg/L)	Ethane (µg/L)	Ethene (µg/L)		
A1 Upper Zone	RW-5	Baseline	4/4/2013	1.8	0.068 J	ND (<0.2)	0.015 J	NP	--
		1st EISB Injection - May 2013							
		1-Month	6/17/2013	650	--	--	--	--	--
		3-Month	8/23/2013	45	19,000	ND (<0.2)	96	--	--
		6-Month	11/22/2013	3.9	4,500	21	71	1×10^7	8×10^6
		12-Month	5/22/2014	3.5	3,100	0.78	12	1×10^6	6×10^5
		2nd EISB Injection - August 2014							
		6-Month	2/23/2015	26	18,000	24	0.19 J	4×10^7	3×10^7
		12-Month	8/10/2015	9.5	10,000	79	19	2×10^6	2×10^6
		3rd EISB Injection - December 2015							
		2016 Annual	6/7/2016	28	19,000	26	0.47	1×10^8	4×10^7
		12-Month	12/19/2016	20	22,000	470	0.11 J	5×10^6	9×10^5
		2017 Annual	6/6/2017	7.1	2,100	17	7.2	6×10^5	2×10^5
		4th EISB Injection - September 2017							
		2018 Annual	6/4/2018	5.6	9,800	27	2.0	3×10^5	3×10^5
		2019 Annual	2019 Annual	6.3	1,100	8.7	12	9×10^4	1×10^5
		5th EISB Injection - November 2019							
		2020 Annual	6/2/2020	29	19,000	14	ND (<6.0)	5×10^5	1×10^6
A1 Upper Zone	RW-6	Baseline	4/4/2013	2.2	0.067 J	ND (<0.2)	0.014 J	--	--
		1st EISB Injection - May 2013							
		1-Month	6/18/2013	--	--	--	--	--	--
		3-Month	8/23/2013	--	--	--	--	--	--
		6-Month	11/22/2013	4.0	8,000	0.22	230	--	--
		12-Month	5/22/2014	2.2	9,000	0.024 J	24	--	--
		2nd EISB Injection - August 2014							
		6-Month	2/23/2015	ND (<1.0)	11,000	27	17	--	--
		12-Month	8/10/2015	4.2	13000	53	12	--	--
		3rd EISB Injection - December 2015							
		2016 Annual	6/7/2016	8.8	8,400	33	12	--	--
		12-Month	12/19/2016	4.1	13,000	50	13	--	--
		2017 Annual	6/6/2017	4.0	4,400	14	0.49	--	--
		4th EISB Injection - September 2017							
		2018 Annual	6/6/2018	3.5	13,000	41	0.57	--	--
		2019 Annual	6/5/2019	4.1	580	8.8	0.70	--	--
		5th EISB Injection - November 2019							
		2020 Annual	6/4/2020	6.4	6,200	3.2	1.6	--	--
A1 Zone	EW-11R	Baseline	4/4/2013	1.2	3.1	0.016 J	ND (<0.2)	--	--
		1st EISB Injection - May 2013							
		1-Month	6/18/2013	88	--	--	--	--	--
		3-Month	8/23/2013	63	9,000	0.14 J	1.7	--	--
		duplicate	8/23/2013	60	7,000	0.055 J	0.88	--	--
		6-Month	11/22/2013	4.1	8,800	0.61	130	--	--
		12-Month	5/22/2014	1.7	540	0.024 J	18	--	--
		duplicate	5/22/2014	1.5	610	0.025 J	20	--	--
		2nd EISB Injection - August 2014							
		6-Month	2/23/2015	3.9	15,000	13	87	--	--
		duplicate	2/23/2015	3.8	14,000	14	72	--	--
		12-Month	8/10/2015	5.3	3,300	9.7	57	--	--
		duplicate	8/10/2015	5.3	2,600	9.6	57	--	--
		3rd EISB Injection - December 2015							
		2016 Annual	6/7/2016	5.3	5,000	7.9	44	--	--
		12-Month	12/19/2016	15	6,500	9.8	27	--	--
		duplicate	12/19/2016	15	6,900	9.8	26	--	--
		2017 Annual	6/6/2017	5.5	680	1.2	4.4	--	--
		4th EISB Injection - September 2017							
		2018 Annual	6/4/2018	7.8	4,800	13	14	--	--
		2019 Annual	6/5/2019	1.9	730	1.4	4	--	--

Table C-5
Groundwater Total Organic Carbon, Volatile Gases, and Dehalococcoides Results
Area X EISB Treatment
395 Page Mill Road, Palo Alto, California

Treatment	Well	Sample Event	Sample Date	Total Organic Carbon (TOC) (mg/L)	Dissolved Volatile Gases			Dhc (copies/L)	vcrA (copies/L)
					Methane (µg/L)	Ethane (µg/L)	Ethene (µg/L)		
A1 Zone	EW-11R	*5th EISB Injection - November 2019*							
	(cont.)	2020 Annual	6/4/2020	3.0	5,400	2.8	1.5	--	--
A1 Zone	W-16A1	Baseline	4/4/2013	2.5	0.053 J	ND (<0.2)	ND (<0.2)	NP	--
		1st EISB Injection - May 2013							
		1-Month	6/18/2013	160	--	--	--	--	--
		3-Month	8/23/2013	120	6,400	0.084 J	0.27	--	--
		6-Month	11/22/2013	3.8	9,600	0.019 J	99	3×10^8	2×10^7
		12-Month	5/22/2014	2.8	10,000	2.9	70	3×10^8	1×10^8
		2nd EISB Injection - August 2014							
		6-Month	2/23/2015	2.0	16,000	96	13	1×10^8	1×10^8
		12-Month	8/10/2015	5.8	10,000	27	25	8×10^6	3×10^7
		3rd EISB Injection - December 2015							
		2016 Annual	6/7/2016	7.5	17,000	26	16	2×10^6	1×10^6
		12-Month	12/19/2016	9.8	8,700	11	11	8×10^5	2×10^5
		2017 Annual	6/6/2017	4.7	1,300	4.9	11	3×10^5	4×10^4
		4th EISB Injection - September 2017							
		2018 Annual	6/6/2018	3.5	5,500	6.3	9.1	1×10^6	1×10^6
		2019 Annual	6/5/2019	4.4	420	1.6	5.2	4×10^5	6×10^5
		5th EISB Injection - November 2019							
		2020 Annual	6/2/2020	5.9	2,400	3.5	4.8	1×10^6	1×10^6

Notes and Abbreviations:

mg/L: milligrams per liter

µg/L: micrograms per liter

Dhc: Dehalococcoides microbe

vcrA: vinyl chloride reductase

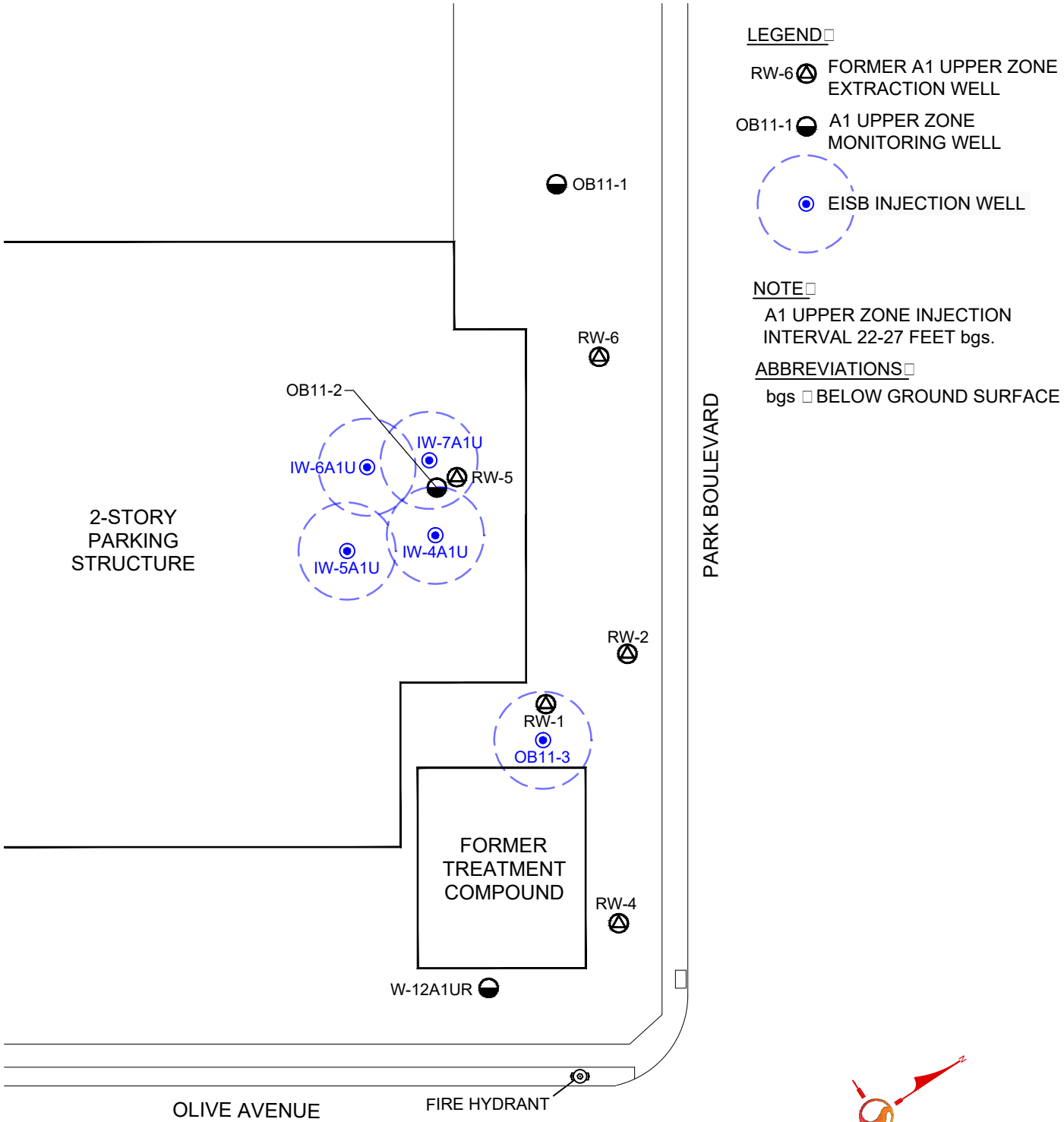
J: Estimated concentration greater than the set method detection limit (MDL) and less than the practical quantitation limit (PQL).

ND(<0.20): Analyte not detected above the practical quantitation limit (PQL) in parentheses

NP: Not Present

--: Not Analyzed

copies/L: gene copies per liter



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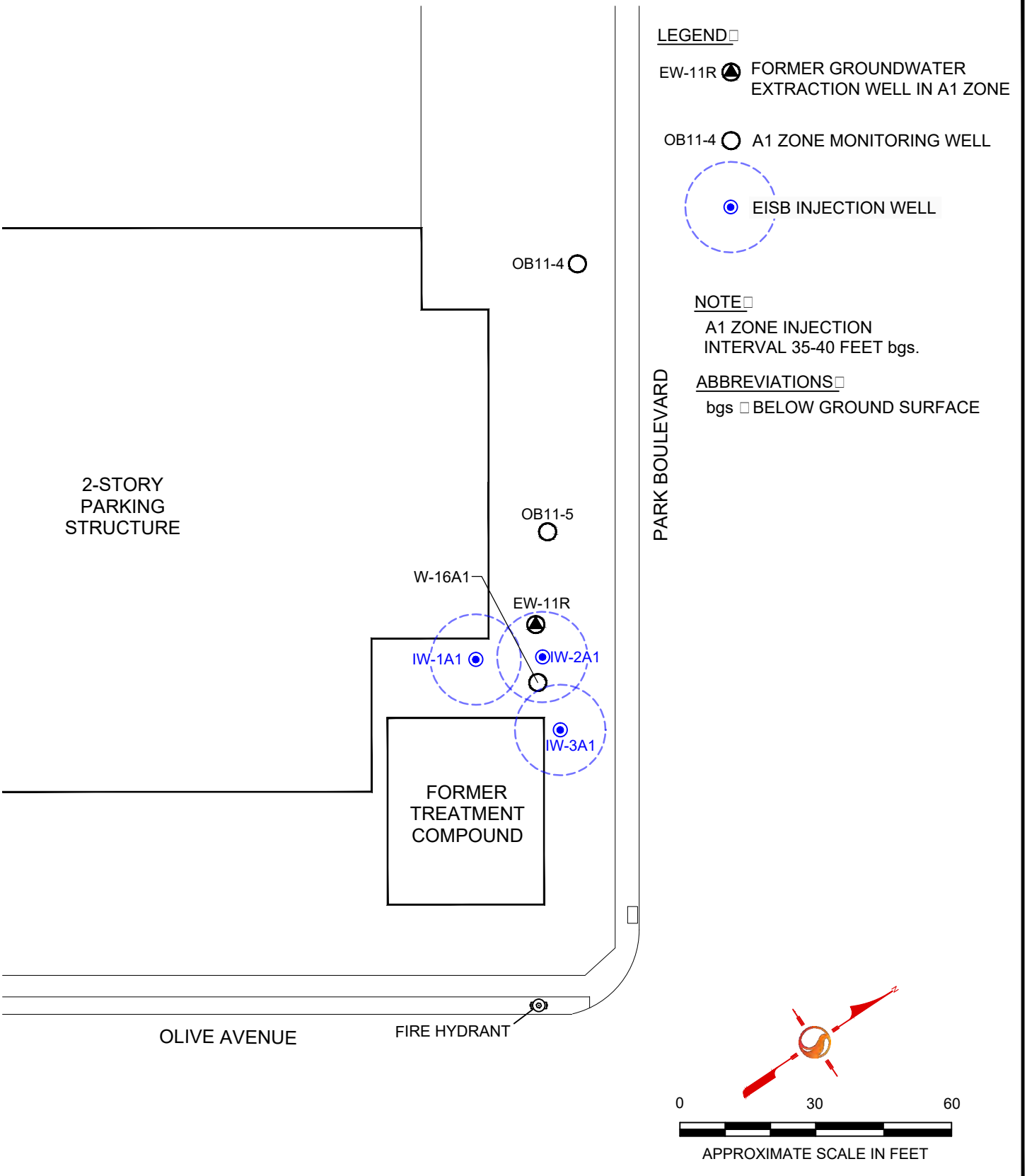
FOR
HEWLETT-PACKARD COMPANY
395 PAGE MILL ROAD
PALO ALTO, CALIFORNIA

AREA X
EISB TREATMENT AREA
A1 UPPER ZONE

FIGURE
C-1

JOB NUMBER	DRAWN BY	CHECKED BY	APPROVED BY	DATE
185702834.200.0002	RRR/STA	EH/BES	BES	07/02/14

FILEPATH M HP PALO ALTO 2014 JULY 2014 HP395-PMR-185702834.200.0002_2014_EISB-F2.dwg saguinaldo Jul 11, 2014 at 18:30 Layout F2



Stantec
15575 LOS GATOS BOULEVARD BUILDING C
LOS GATOS, CALIFORNIA 95032
PHONE (408) 356-6124 FAX (408) 356-6138

FOR		FIGURE
HEWLETT-PACKARD COMPANY 395 PAGE MILL ROAD PALO ALTO, CALIFORNIA	AREA X EISB TREATMENT AREA A1 ZONE	C-2

JOB NUMBER	DRAWN BY	CHECKED BY	APPROVED BY	DATE
185702834.200.0002	RRR/STA	EH/BES	BES	07/02/14

FILEPATH M HP PALO ALTO 2014 JULY 2014 HP395-PMR-185702834.200.0002_2014_EISB-F3.dwg saguinaldo Jul 11, 2014 at 18:29 Layout F3

Figure C-3

Concentration Trends in A1 Upper Zone Wells in EISB Treatment Area
395 Page Mill Road Site, Palo Alto, CA

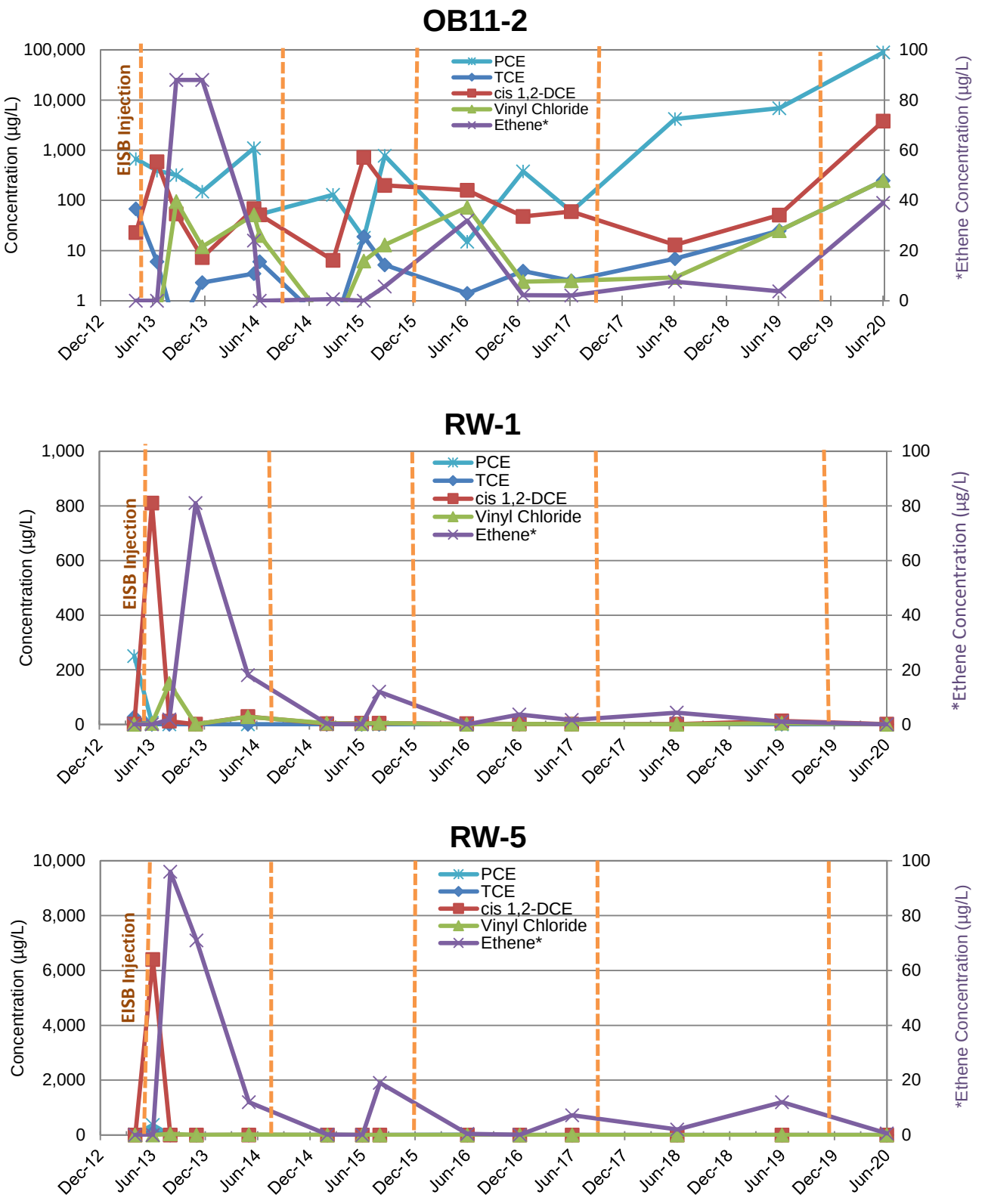


Figure C-4

Molarity Trends in A1 Upper Zone Wells in EISB Treatment Area
395 Page Mill Road Site, Palo Alto, CA

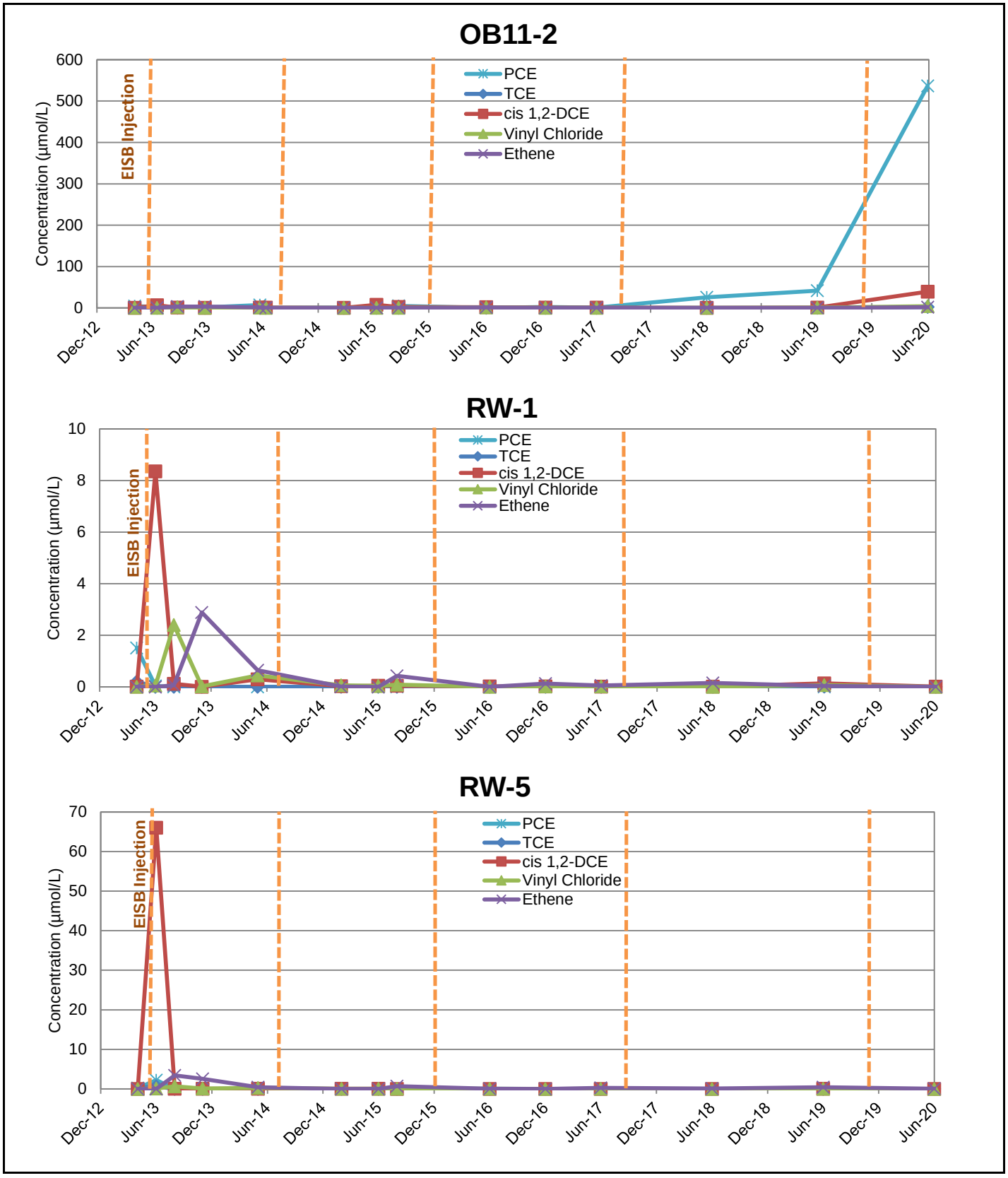


Figure C-5

Concentration Trends in A1 Upper Zone Wells Down Gradient from EISB Treatment Area
395 Page Mill Road Site, Palo Alto, CA

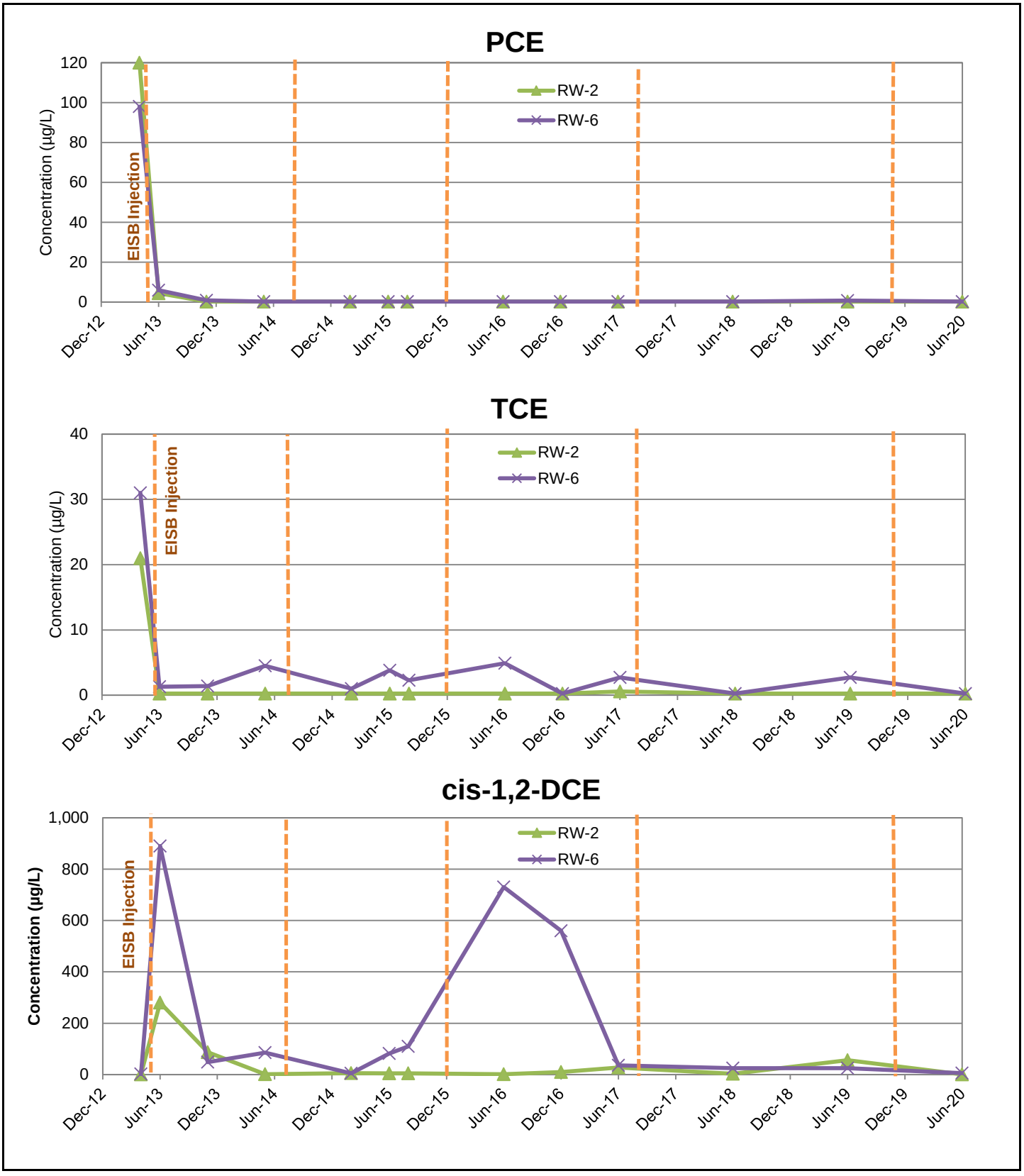


Figure C-6

Concentration Trends in A1 Zone EISB Treatment Area Wells
395 Page Mill Road Site

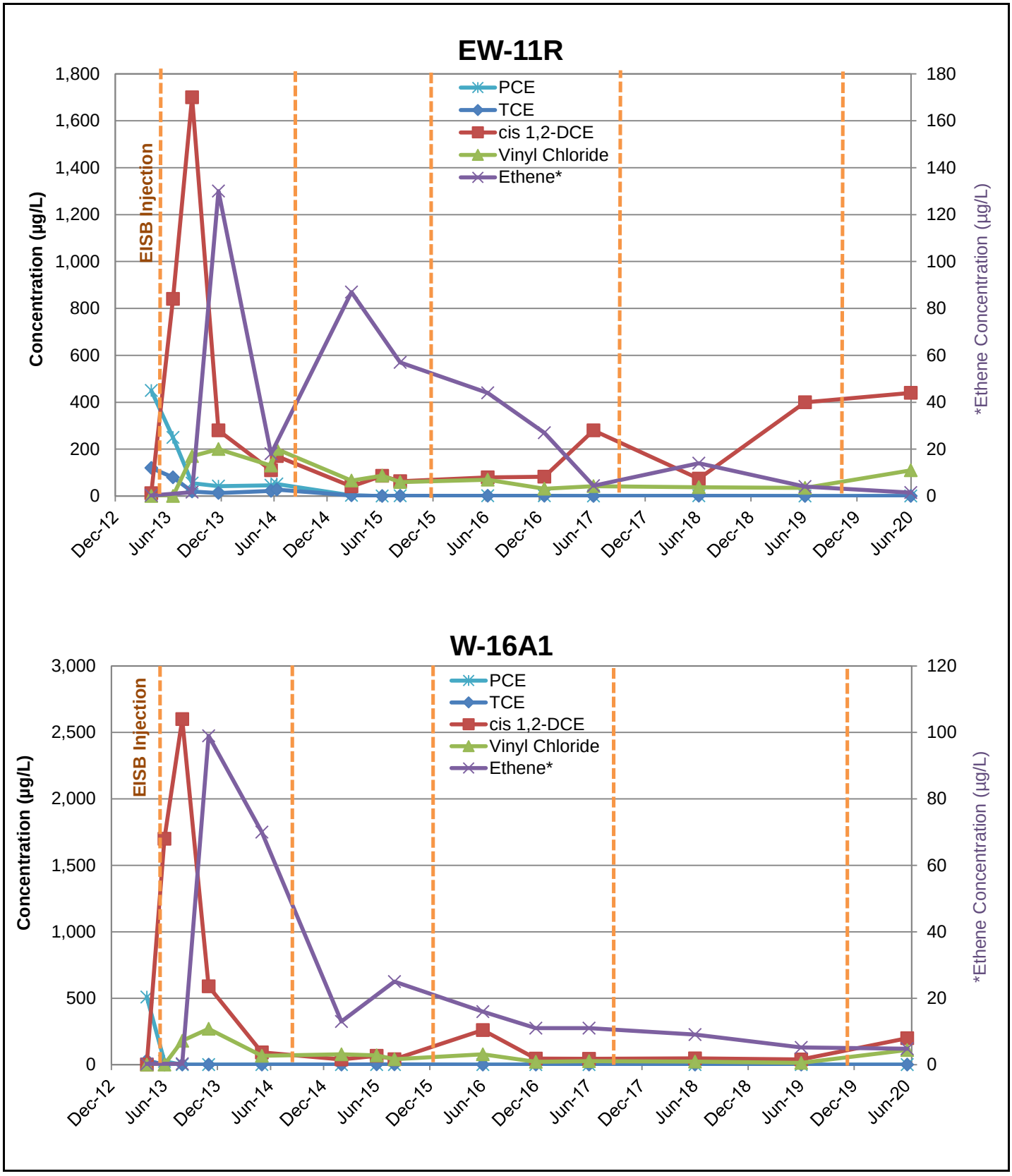
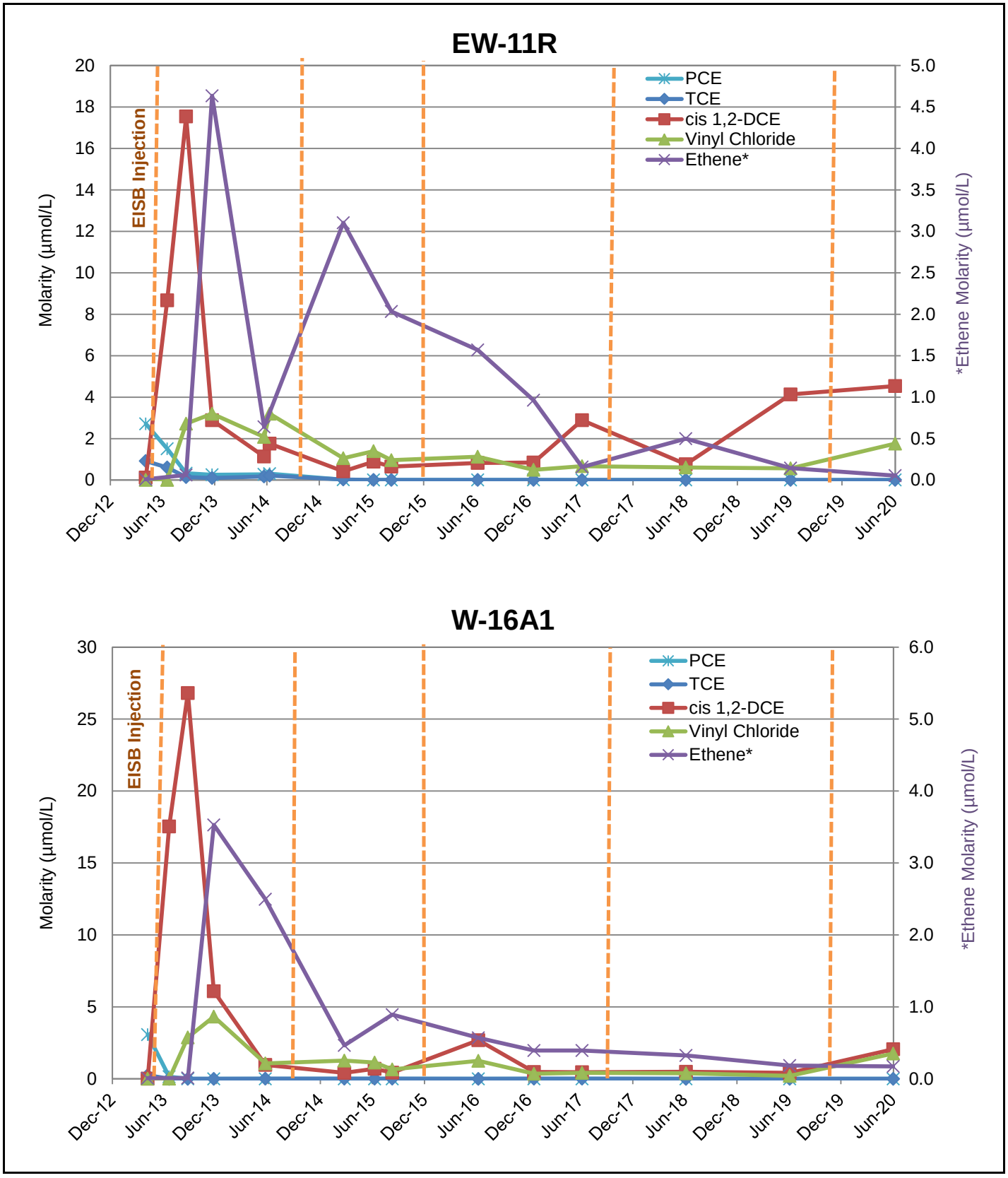


Figure C-7

Molarity Trends in A1 Zone EISB Treatment Area Wells
395 Page Mill Road Site



APPENDIX D

EISB Performance Monitoring at 601 California Ave.

2020 Annual Groundwater Self-Monitoring Report
California-Olive-Emerson (COE) Study Area
and Perimeter Area, Palo Alto, California
September 30, 2020



Table D-1
Phase 2 Courtyard EISB Groundwater Monitoring Field Parameters
Varian Medical Systems, Inc.
601 California Avenue, Palo Alto, California

Well ID	Injection Event	Sampling Method	Date	Field Meter					Test Kit
				pH (S.U.)	Temperature (ºC)	Conductivity (µmhos/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Fe^{+2} (mg/L)
Phase 2 Courtyard EISB Monitoring Wells									
P16		low flow	02/01/14	6.8	18.3	2,011	0.22	304	--
		bailer	10/26/14	7.1	18.0	1,073	--	--	--
		low flow	04/09/17	--	--	--	--	--	--
			02/18/18	--	--	--	--	--	--
			06/05/18	Sample attempted but not collected due to thick oily substance.					
		low flow	06/05/19	5.3	20.2	3,080	0.27	2	--
P17		QED (backpack)	06/20/13	6.8	18.4	1,070	0.57	164	0.2
		low flow	02/02/14	6.8	18.6	1,025	0.09	174	0.0
1st Injection	November 2014	bailer	12/20/14	7.9	19.5	1,136	0.20	-147	0.0
		low flow	03/22/15	6.9	19.0	1,132	2.65	-21	0.0
2nd Injection	April 2015	low flow	05/31/15	6.8	19.3	1,058	0.12	23	0.5
		low flow	12/20/15	7.0	17.9	1,046	1.7	-252	0.8
3rd Injection	September 2015	low flow	04/03/16	7.0	19.5	999	0.09	-101	0.0
4th Injection	September 2016	low flow	06/08/16	7.2	27.9	1,304	0.82	-176	--
		low flow	04/09/17	6.7	19.3	1,560	0.06	-55	0.7
		low flow	02/17/18	6.6	19.5	1,698	0.31	-29	0.3
		low flow	06/06/18	6.6	18.8	1,474	0.79	366	--
		low flow	08/12/18	6.8	19.8	1,314	0.50	51	0.0
		bailer	12/02/18	7.8	19.7	1,176	1.97	-48	0.0
		low flow	06/05/19	6.7	20.0	1,383	0.31	53	--
P18		low flow	02/01/14	6.7	18.6	1,262	0.25	230	0.0
		low flow	02/18/18	4.9	19.0	6,762	0.22	-273	4.8
P21		QED (backpack)	06/20/13	6.8	18.8	1,077	0.60	164	0.6
		low flow	02/02/14	6.7	17.9	1,038	0.11	90	0.0
1st Injection	November 2014	bailer	12/20/14	7.1	18.9	1,367	0.16	-225	0.0
		low flow	03/22/15	6.4	19.4	1,663	6.97	-104	5.6
2nd Injection	April 2015	low flow	05/31/15	--	19.7	1,476	0.09	84	2.0
		low flow	11/15/16	6.0	19.4	1,321	2.17	-68	1.8
3rd Injection	September 2015	low flow	12/20/15	6.1	18.2	1,397	0.14	59	2.6
		low flow	04/03/16	6.4	19.6	1,451	0.06	-83	1.4
4th Injection	September 2016	low flow	06/08/16	6.2	28.9	1,990	0.22	-60	--
		low flow	04/09/17	5.7	19.3	1,623	0.01	-84	2.8
5th Injection	December 2017	low flow	02/18/18	5.8	18.9	1,907	0.51	-105	6.2
		low flow	06/05/18	5.8	22.8	2,650	0.85	348	--
		low flow	08/12/18	5.9	19.7	1,901	0.40	-77	3.4
		bailer	12/02/18	7.1	19.3	1,732	1.56	-70	1.8
		low flow	06/05/19	5.6	22.2	2,607	0.48	-28	--
P23		low flow	02/02/14	6.9	18.0	995	0.15	178	0.0
1st Injection	November 2014	bailer	12/20/14	6.2	18.9	1,984	0.18	-133	0.0
		low flow	03/22/15	6.4	19.3	1,804	6.03	-133	5.0
2nd Injection	April 2015	low flow	05/31/15	5.4	19.7	2,531	0.07	11	2.8
		low flow	11/15/15	5.3	19.4	2,219	2.03	-40	2.0
3rd Injection	September 2015	low flow	12/20/15	5.6	17.2	1,789	2.90	-17	2.8
		low flow	04/03/16	6.6	18.9	2,095	0.10	-161	2.4
4th Injection	September 2016	low flow	06/08/16	6.6	27.7	2,932	0.59	-169	--
		low flow	04/09/17	5.8	19.5	1,816	0.01	-59	0.2
5th Injection	December 2017	low flow	02/18/18	5.3	19.2	3,740	0.56	-54	4.4
		low flow	06/06/18	6.1	19.0	2,811	0.37	253	--
		low flow	08/12/18	6.4	19.8	2,526	0.44	-125	4.4

Table D-1
Phase 2 Courtyard EISB Groundwater Monitoring Field Parameters
Varian Medical Systems, Inc.
601 California Avenue, Palo Alto, California

Well ID	Injection Event	Sampling Method	Date	Field Meter					Test Kit
				pH (S.U.)	Temperature (ºC)	Conductivity (µmhos/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Fe^{+2} (mg/L)
P23 (cont.)		bailer	12/02/18	7.3	19.3	2,242	1.88	-135	3.9
		low flow	06/05/19	6.5	19.1	2,508	0.07	10	--
P26		QED (backpack)	06/20/13	6.9	18.8	1,059	0.86	166	0.60
		low flow	02/02/14	6.6	18.7	1,011	0.18	178	0.0
1st Injection	November 2014	bailer	12/20/14	7.6	19.0	1,043	0.15	-99	0.0
		low flow	03/22/15	6.8	19.2	1,136	3.05	134	0.0
2nd Injection	April 2015	low flow	05/31/15	6.7	19.5	1,053	0.17	141	0.0
		low flow	12/20/15	6.9	19.5	1,088	2.26	18	0.0
3rd Injection	September 2015	low flow	04/03/16	7.1	19.0	1,035	0.08	-164	0.0
		low flow	06/08/16	6.7	30.4	1,382	0.74	-169	--
4th Injection	September 2016	low flow	04/09/17	6.7	19.4	1,353	0.07	47	0.0
5th Injection	December 2017	low flow	02/17/18	6.6	19.6	1,403	0.36	29	0.0
		low flow	06/05/18	6.7	20.5	1,431	0.36	418	--
		low flow	08/12/18	6.7	20.1	1,333	0.54	15	0.0
		bailer	12/01/18	8.9	19.8	1,262	1.23	119	0.0
		low flow	06/05/19	6.7	20.4	1,391	0.35	85	--
OBS		low flow	02/01/14	6.5	18.5	1,065	0.03	172	0.0
1st Injection	November 2014	bailer	12/20/14	7.4	19.2	1,039	0.29	-124	0.0
		low flow	03/22/15	--	--	1,183	2.64	28	0.0
2nd Injection	April 2015	low flow	05/30/15	6.6	19.4	1,163	0.07	25	0.8
3rd Injection	September 2015	low flow	12/20/15	6.8	18.5	1,104	3.00	-108	3.0
		low flow	04/03/16	6.9	18.8	1,095	0.08	-197	2.6
4th Injection	September 2016	low flow	04/09/17	6.7	19.3	1,400	0.05	-104	1.3
5th Injection	December 2017	low flow	08/12/18	6.3	20.4	2,341	0.48	-107	4.6
V8-2		low flow	02/01/14	6.7	18.9	1,248	0.25	227	0.0
1st Injection	November 2014	bailer	12/20/14	7.6	19.4	1,152	0.21	-183	0.5
2nd Injection	April 2015	low flow	03/22/15	6.9	19.0	1,146	2.62	221	0.0
3rd Injection	September 2015	low flow	12/20/15	6.9	18.4	1,014	7.40	102	0.0
		low flow	04/03/16	7.0	19.5	994	0.54	22	0.0
4th Injection	September 2016	low flow	04/09/17	6.2	19.6	1,376	0.01	-149	3.3
5th Injection	November 2017	low flow	06/06/18	PDB Sampled - No additional measurements taken.					
		low flow	08/12/18	6.7	19.8	1,511	0.5	-207	1.0
P13		low flow	02/02/14	6.9	17.5	1,375	0.15	189	0.0
1st Injection	November 2014	bailer	04/12/14	--	--	--	--	--	--
2nd Injection	April 2015	bailer	10/26/14	7.2	18.7	1,044	--	--	--
3rd Injection	September 2015	low flow	06/08/16	5.4	27.4	48	0.42	-137	--
4th Injection	September 2016	low flow	04/09/17	5.0	19.4	4,830	0.01	42	1.2
5th Injection	December 2017	bailer	02/17/18	5.1	18.4	7,215	0.20	-121	3.3
		low flow	06/05/18	5.0	22.5	8,617	0.39	446	--
P22		low flow	02/01/14	6.7	17.7	1,037	0.15	214	0.0
		bailer	12/02/18	6.6	19.2	1,051	1.50	-62	3.6
Monitoring Wells Down-Gradient of Phase 2 Courtyard EISB Treatment Area									
P24		low flow	07/22/12	6.9	20.4	1,176	0.57	17	0.0
1st Injection	August 2012	low flow	02/24/13	7.2	17.8	1,123	0.40	-7	0.0
2nd Injection	October 2013	portable submersible pump	06/20/13	7.0	26.3	1,225	1.62	99	0.0
3rd Injection	August 2014	portable submersible pump	05/30/15	6.9	20.3	1,087	0.21	202	0.0
4th Injection	December 2015	low flow	06/05/18	5.1	23.5	2,999	0.01	380	--
5th Injection	November 2017	bailer	12/01/18	9.2	19.3	1,330	1.12	56	0.0
		low flow	06/05/19	6.9	21.8	1,485	0.49	69	--

Table D-1
Phase 2 Courtyard EISB Groundwater Monitoring Field Parameters
Varian Medical Systems, Inc.
601 California Avenue, Palo Alto, California

Well ID	Injection Event	Sampling Method	Date	Field Meter					Test Kit
				pH (S.U.)	Temperature (ºC)	Conductivity (µmhos/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Fe^{+2} (mg/L)
P25		low flow	07/22/12	6.7	19.9	1,189	0.40	3	0.0
1st Injection	August 2012	low flow	02/24/13	7.1	19.1	1,184	0.10	3	0.0
2nd Injection	October 2013	portable submersible pump	06/20/13	6.9	21.3	1,261	0.43	-32	--
3rd Injection	August 2014	portable submersible pump	05/30/15	6.7	20.3	1,087	0.16	190	0.0
4th Injection	December 2015	low flow	06/08/16	7.6	20.0	1,197	1.99	-44	--
5th Injection	November 2017	low flow	08/11/18	6.7	20.4	1,615	0.56	50	0.0
		bailer	12/01/18	9.0	19.9	1,448	1.04	67	0.0
P27		low flow	06/08/16	6.6	21.5	1,780	0.60	-146	--
			06/06/17	6.7	21.4	1,752	0.22	-73	--
5th Injection	November 2017		02/17/18	6.2	20.7	1,794	0.27	-94	4.2
			06/05/18	6.3	26.7	1,900	0.26	245	--
		low flow	08/11/18	6.5	22.1	1,095	0.41	-247	3.2
		bailer	12/02/18	7.4	20.0	1,042	1.55	-164	1.2
		low flow	06/05/19	6.5	21.1	1,430	0.20	35	--
P28		low flow	06/08/16	6.6	21.7	1,173	0.50	-89.3	--
			06/06/17	6.4	21.8	1,573	0.22	-78.1	--
5th Injection	November 2017		02/17/18	6.2	20.8	1,573	0.29	-79.1	2.6
		low flow	08/12/18	6.4	20.9	1,641	0.46	-142	4.4
		bailer	12/02/18	7.5	20.7	1,541	1.21	-159	3.8
		low flow	06/05/19	6.6	21.1	1,420	0.13	10	--
P29		low flow	06/08/16	7.1	21.6	1,444	0.55	-102	--
			06/06/17	6.4	22.7	1,617	0.22	-41	--
5th Injection	November 2017	low flow	02/17/18	6.3	20.6	1,859	0.32	-86	5.0
		low flow	08/11/18	6.4	21.9	1,726	0.46	-80	5.2
		bailer	12/02/18	7.6	20.8	1,586	1.25	-106	3.6
		low flow	06/06/19	6.6	22.3	1,427	0.36	58	--
V-9		low flow	06/08/16	7.4	20.9	1,299	0.86	-47	--
Injection Wells - One-Time Sampling as Part of COE 2017 Event									
P10		low flow	06/06/17	4.7	17.5	242	2.42	467	--
P12		low flow	06/06/17	5.1	23.1	4,271	0.40	206	--
P13		low flow	06/06/17	5.3	23.2	4,785	0.38	307	--
			06/05/18	5.0	22.5	8,617	0.39	446	--
P18		low flow	06/06/17	5.0	23.2	4,674	0.29	189	--
P22		low flow	06/06/17	5.2	19.1	5,521	0.63	260	--

Notes and Abbreviations:

S.U. = Standard Units
ºC = degrees Centigrade
mV = millivolts
mg/L = milligrams per liter
µmhos/cm = micromhos per centimeter
-- = Not analyzed

Table D-2
Phase 2 Courtyard EISB Monitoring Well Groundwater VOC Analytical Results
Varian Medical Systems, Inc.
601 California Avenue, Palo Alto, California

Well ID	Injection Events	Sample Date	1,1-DCE (µg/L)	1,1-DCA (µg/L)	Xylenes (µg/L)	*cis*-1,2-DCE (µg/L)	*trans*-1,2-DCE (µg/L)	1,1,1-TCA (µg/L)	TCE (µg/L)	VC (µg/L)	Other Detected VOCs (µg/L)
Phase 2 Courtyard EISB Monitoring Wells											
P16		02/01/14	<710	<710	<710	<710	<710	<710	97,000	<710	
		10/26/14	<500	<500	<500	<500	<500	<500	68,000	<500	
		04/09/17	*Unable to collect sample - well obstructed by oil and biomass*								
		06/06/18	*Unable to collect sample - well obstructed by oil and biomass*								
		06/05/19	<250	<250	<250	7,400	<250	<250	2,000	1600	
P17		02/02/14	<63	<63	<63	240	<63	<63	8,600	<63	
1st Injection	November 2014	11/22/14	<63	<63	<63	410	<63	<63	8,900	<63	
		12/20/14	<130	<130	<130	1,100	<130	<130	19,000	<130	
2nd Injection	April 2015	03/22/15	<63	<63	<63	130	<63	<63	10,000	<63	
		05/31/15	<63	<63	<63	8,300	<63	<63	4,100	870	
3rd Injection	September 2015	12/20/15	<63	<63	<63	17,000	<130	<63	1,600	680	
		04/03/16	<25	<25	<25	1,700	<25	<25	3,700	160	
4th Injection	September 2016	06/08/16	<50	<50	<100	350	<50	<50	3,700	<50	
		04/09/17	<63	<63	<63	7,600	<63	<63	9,400	2,200	
5th Injection	December 2017	02/17/18	<250	<250	<250	4,500	<250	<250	17,000	2,700	
		06/06/18	25	8.0	<0.50	2,200	12	2.5	19,000	540	EC = 5.0; chloroform = 1.5; 1,2-DCA = 1.2; Freon 113 = 0.53; 1,1,2-TCA = 1.7; PCE = 0.57
		08/12/18	<63	<63	<63	840	<63	<63	12,000	260	
		12/02/18	24 J	<100	<200	1,200	<100	<100	11,000	580	
		06/05/19	<50	<50	<50	110	<50	<50	3,000	<50	
P18		02/02/14	<50	<50	56	99	<50	<50	5,200	<50	Toluene = 78
		06/06/17	<50	<50	<100	14,000	130	<50	320	1,900	
5th Injection	December 2017	02/18/18	<5,000	<5,000	<5,000	25,000	<5,000	<5,000	20,000	<5,000	
P21		02/02/14	<1000	<1000	<1000	1,100	<1000	<1000	160,000	<1,000	
1st Injection	November 2014	11/22/14	<1300	<1300	<1300	<1,300	<1300	<1300	130,000	<1,300	
		12/20/14	<50000	<50000	110,000	270,000	<50000	460,000	240,000,000	<50,000	PCE = 59,000
2nd Injection	April 2015	03/22/15	<2500	<2500	<2500	35,000	<2500	<2500	410,000	<2,500	
		05/30/15	<2500	<2500	<2500	34,000	<2500	<2500	470,000	<2,500	
3rd Injection	September 2015	11/15/15	<5000	<5000	<5000	57,000	<5000	<5000	660,000	<5,000	
		12/20/15	<5000	<5000	<5000	65,000	<5000	<5000	580,000	<5,000	
		04/03/16	<5000	<5000	<5000	95,000	<5000	<5000	540,000	5,200	
4th Injection	September 2016	06/08/16	390	150	350	130,000	140	1,200	690,000	6,800	PCE = 170; 1,1,2-TCA = 170; 1,2,4-TMB = 68
		04/09/17	<1,000	<1,000	<1,000	74,000	<1,000	<1,000	150,000	3,600	
5th Injection	December 2017	02/18/18	5800	<5,000	<5,000	160,000	<5,000	22,000	550,000	400,000	
		06/05/18	340	75	160	190,000	170	1,100	420,000	18,000	1,2-DCA = 110; PCE = 94; 1,1,2-TCA = 130
		08/12/18	<3,100	<3,100	<3,100	230,000	<3,100	<3,100	610,000	21,000	
		12/02/18	<25,000	<25,000	<25,000	140,000	<25,000	<25,000	360,000	10,000 J	
		06/05/19	<5,000	<5,000	<5,000	200,000	<5,000	<5,000	430,000	23,000	
P23		02/02/14	<250	<250	<250	270	<250	<250	35,000	<250	
1st Injection	November 2014	11/22/14	<310	<310	<310	<310	<310	<310	46,000	<310	
		12/20/14	<310	<310	<310	370	<310	<310	52,000	<310	
2nd Injection	April 2015	03/22/15	<250	<250	<250	29,000	<250	<250	350	13,000	
		05/31/15	<310	<310	<310	39,000	<310	<310	1,700	7,600	
3rd Injection	September 2015	11/15/15	<250	<250	<250	27,000	<250	<250	1,100	6,800	
		12/20/15	<100	<100	<100	14,000	120	<100	700	3,100	
		04/03/16	<1.0	1.2	<1.0	180	24	<1.0	26	63	EC = 2.4; 1,2-DCA = 1.3
4th Injection	September 2016	06/08/16	<2.5	<2.5	<5.0	76	15	<2.5	140	29	
		04/09/17	<5.0	<5.0	<5.0	860	12	<5.0	390	330	carbon disulfide = 20
5th Injection	December 2017	02/18/18	<50	<50	<50	1,100	<50	<50	260	310	
		06/06/18	1.2	1.4	<0.50	1,000	9	<0.50	<50	450	acetone = 91; EC = 5.6; 1,2-DCA = 0.85; toluene = 1.8
		08/12/18	<2.5	<2.5	<2.5	340	6	<2.5	9	130	EC = 5.0
		12/2/2018 ^	<170	<170	<130	<140	<250	<110	<150	<250	chloroform = 160 J
		06/16/19	<0.50	1.4	0.52	34	4.8	<0.50	69.0	25	EC = 3.8; toluene = 1.4
P26		02/02/14	<25	<25	<25	<25	<25	<25	4,600	<25	
1st Injection	November 2014	11/22/14	<310	<310	<310	<310	<310	<310	37,000	<310	
		12/20/14	<200	<200	<200	<200	<200	<200	33,000	<200	
2nd Injection	April 2015	03/22/15	<100	<100	<100	<100	<100	<100	18,000	<100	
		05/30/15	<200	<200	<200	1,600	<200	<200	80,000	<200	
3rd Injection	September 2015	12/20/15	<100	<100	<100	1,000	<100	<100	70,000	<100	
		04/03/16	<130	<130	<130	350	<130	<130	22,000	<130	
4th Injection	September 2016	06/08/16	<50	<50	<100	350	<50	<50	25,000	<50	
		04/09/17	21	<17	<17	2,700	<17	<17	11,000	730	
5th Injection	December 2017	02/17/18	<250	<250	<250	1,600	<250	<250	19,000	1,300	
	duplicate	02/17/18	<250	<250	<250	1,600	<250	<250	16,000	840	
		06/05/18	<50	<50	<50	980	<50	<50	20,000	120	
		08/12/18	<250	<250	<250	2,300	<250	<250	51,000	<250	
		12/01/18	51 J	<100	<200	3,200	<100	<100	57,000	210	
		06/18/19	<50	<50	<50	120	<50	<50	3,000	<50	
OBS		02/01/14	37	<36	<36	37	<36	<36	5,400	<36	
1st Injection	November 2014	11/22/14	<100	<100	<100	<100	<100	<100	11,000	<100	
		12/20/14	<130	<130	<130	<130	<130	<130	19,000	<130	
2nd Injection	April 2015	03/22/15	<63	<63	<63	5,200	<63	<63	5,800	<64	
		05/31/15	<63	<63	<63	17,000	<63	<63	7,000	160	
3rd Injection	September 2015	12/20/15	< 50	< 50	< 50	4,700	<50	<50	7,000	150	
		04/03/16	< 50	< 50	< 50	3,100	<50	<50	4,600	150	
4th Injection	September 2016	06/09/16	<10	10	<20	170	<10	<10	1,000	17	
5th Injection	December 2017	04/09/17	<8.3	9.8	<8.3	1,100	<8.3	<8.3	350	150	
		08/12/18	<17	<17	<17	2,700	21	<17	36	480	2-Butanone = 530
V8-2/P15		02/01/14	7.9	14	<2.5	3.4	<2.5	<2.5	310	<2.5	
		02/02/14	8.2	12	<2.5	4.9	<2.5	<2.5	570	<2.5	
1st Injection	November 2014	11/22/14	<50	<50	<50	<50	<50	<50	7,300	<50	
		12/20/14	<36	<36	<36	57	<36	<36	6,600	<36	
2nd Injection	April 2015	03/22/15	<25	<25	<25	130	<25	<25	1,400	<25	

Table D-2
Phase 2 Courtyard EISB Monitoring Well Groundwater VOC Analytical Results
Varian Medical Systems, Inc.
601 California Avenue, Palo Alto, California

Well ID	Injection Events	Sample Date	1,1-DCE (µg/L)	1,1-DCA (µg/L)	Xylenes (µg/L)	*cis*-1,2-DCE (µg/L)	*trans*-1,2-DCE (µg/L)	1,1,1-TCA (µg/L)	TCE (µg/L)	VC (µg/L)	Other Detected VOCs (µg/L)
V8-2/P15 (cont.)		12/20/15	< 13	13	< 13	630	14	< 13	1,600	<13	
3rd Injection	September 2015	04/03/16	< 17	< 17	< 17	1,700	27	< 17	2,500	18	
4th Injection	September 2016	04/09/17	<5.0	9.5	<5.0	790	51	<5.0	170	220	
5th Injection	December 2017	06/06/18	<5.0	6.7	NR	28	15	<5.0	<5.0	59	
		08/12/18	<4.2	10	<4.2	930	16	<4.2	13	400	
Up- Down- or Cross-gradient Monitoring Wells Outside the Phase 2 Treatment Area											
P9		02/01/14	<36	<36	<36	<36	<36	<36	4,900	<36	
		06/08/16	5.6	8.4	<1.0	52	0.91	1.2	3,400	3.2	Freon 113 = 0.52; PCE = 2.6
P12		02/01/14	<8.3	<8.3	<8.3	<8.3	<8.3	<8.3	840	<8.3	
		06/08/16	<5.0	<5.0	<10	160	6.3	<5.0	520	50	
		06/06/17	<5.0	<5.0	<10	66	<5.0	<5.0	35	11	2-butanone (MEK) = 620*
P13		02/02/14	<1300	<1300	<1300	<1,300	<1300	<1300	130,000	<1,300	
1st Injection	November 2014	10/26/14	<500	<500	<500	<500	<500	<500	69,000	<500	
2nd Injection	April 2015	06/08/16	<21,000	<21,000	<42,000	130,000	<21,000	78,000	16,000,000	<21,000	
3rd Injection	September 2015	04/09/17	<1,300	<1,300	<1,300	<1,300	<1,300	<1,300	180,000	<1,300	
4th Injection	September 2016	06/06/17	110	<50	<100	870	<50	660	110,000	350	Acetone=20,000
5th Injection	December 2017	02/17/18	<5,000	<5,000	5,500	43,000	<5,000	150,000	70,000	9,600	PCE = 20,000
		06/05/18	<2,500**	<2,500	<2,500	<2,500	<2,500**	<2,500	130,000	<2,500	
	duplicate	06/05/18	<2,500**	<2,500	<2,500	<2,500	<2,500**	<2,500	120,000	<2,500	
		12/01/18	<5,000	<5,000	<5,000	1,500 J	<5,000	570 J	120,000	600 J	2-butanone = 5,200 J
		06/05/19	<2,500	<2,500	<2,500	3,900	<2,500	<2,500	350,000	<2,500	
P14		02/01/14	<4.2	7.9	7.0	17	<4.2	<4.2	560	<4.2	
P19		02/01/14	0.5	<0.5	<0.5	8.0	1.8	<0.5	47	<0.50	
P20		02/01/14	8.5	<6.3	<6.3	120	40	<6.3	930	<6.3	
P22		02/02/14	<36	<36	<36	<36	<36	<36	5,300	<36	
		06/06/17	<50	<50	<100	11,000	<50	<50	790	980	2-Butanone (MEK) = 8,300
		06/06/17	<50	<50	<100	14,000	<50	<50	3,300	1100	2-Butanone (MEK) = 8,000
		12/02/18	<2,500	<2,500	<2,500	7,200	<2,500	<2,500	790 J	680 J	2-Butanone (MEK) = 11,000 J; chloroform = 140 J
Monitoring Wells Downgradient of Phase 2 Courtyard EISB Treatment Area											
P24		07/22/12	15	19	<20	66	<20	10	1,400	<20	
1st Injection	August 2012	08/12/12	--	--	--	--	--	--	--	--	
		02/24/13	12	17	<10	24	<10	<10	1,400	<10	
2nd Injection	October 2013	06/20/13	<8.3	11	<8.3	33	<8.3	9	1,300	<8.3	
3rd Injection	August 2014	11/22/14	<10	11	<10	28	<10	<10	1,300	<10	
4th Injection	December 2015	05/30/15	<8.3	11	<8.3	19	<8.3	<8.3	800	<8.3	
5th Injection	December 2017	06/05/18	<50	<50	<50	24	<50	<50	13	<50	Acetone = 8,700
		12/01/18	16	19	<20	360	<10	3.1 J	1,400	150	
		06/06/19	12	13	<0.50	330	2	2.8	1,400	58	Freon 113 = 3.6
P25		07/22/12	7.8	16	<10	10	<5.0	5.0	930	<10	
1st Injection	August 2012	02/24/13	9.2	17	<5	11	<5.0	<5.0	1,000	<5.0	
2nd Injection	October 2013	06/20/13	8.0	16	<3.6	9.6	<3.6	<3.6	820	<3.6	
3rd Injection	August 2014	11/22/14	<10	12	<10	19	<10	<10	1,200	<10	
4th Injection	December 2015	05/30/15	8.1	13	<6.3	15	<6.3	<6.3	800	<6.3	
		04/03/16	< 17	< 17	< 17	1,700	27	<17	2,500	18	
5th Injection	December 2017	06/09/16	7.7	12	<10	96	<5.0	<5.0	690	<5.0	
		08/11/18	<7.1	13	<7.1	410	<7.1	<7.1	1,200	100	
		12/01/18	12	16	<20	440	<10	3.1 J	1,300	110	
P27		07/22/12	<42	<42	--	59	<42	<42	4,600	<1.0	
Ist Injection	August 2012	09/15/12	<17	<17	--	3,000	<17	<17	920	<17	
		11/10/12	<20	<20	--	1,600	<20	<20	1,100	280	
		02/24/13	<20	<20	--	350	<20	<20	2,300	110	
		06/20/13	26	<17	--	290	<17	<17	2,800	78	
2nd Injection	October 2013	01/19/14	0.5	7.9	--	51	7.5	< 0.50	12	47	
3rd Injection	August 2014	04/13/14	0.9	9.2	--	290	3.4	0.70	19	180	
4th Injection	December 2015	05/30/15	1.0	6.6	--	74	3.3	< 0.50	16	86	
		06/09/16	<0.50	1.8	<1.0	14	2.5	<0.50	9.0	12	EC = 4.3
		06/06/17	<0.5	8.8	<1.0	160	1.9	<0.5	35	26	EC = 2.7
5th Injection	December 2017	02/17/18	<2.5	6.0	<2.5	130	<2.5	<2.5	38	66	
		06/05/18	<0.50	7.0	<0.50	25	1.6	<0.50	11	16	EC = 2.2
		08/11/18	<1.0	3.6	<1.0	150	1.3	<1.0	3	46	
		12/02/18	0.65 J	4.9	<2.0	170	0.58 J	<1.0	9	84	carbon disulfide = 3.6 J
		06/06/19	3.2	8.4	<0.50	750	2.8	<0.50	120.0	63	
P28		07/22/12	9.6	16	--	29	<8.3	<8.3	1,100	<0.50	
1st Injection	August 2012	09/15/12	5.9	12	--	410	<3.1	3.5	580	<3.1	
		11/10/12	8.0	12	--	290	<3.1	3.6	700	15	
		02/24/13	8.5	15	--	280	<5.0	<5.0	800	24	
		06/20/13	8.1	14	--	70	<1.7	3.5	830	10	
2nd Injection	October 2013	06/20/13	6.0	14	--	56	<4.2	<4.2	910	11	
		01/19/14	7.9	16	--	370	8.7	< 5.0	470	70	
3rd Injection	August 2014	04/13/14	< 3.6	9.8	--	440	< 3.6	< 3.6	330	86	
4th Injection	December 2015	05/31/15	< 0.50	4.7	--	53	3.2	< 0.50	39	23	EC =8.6
		06/09/16	<0.50	2.1	<1.0	30	2.1	<0.50	33	15	acetone = 60; EC = 4.1
		06/06/17	<0.5	2.3	<1.0	8.9	1.6	<0.5	3.2	8.5	EC = 5.4
5th Injection	December 2017	02/17/18	<2.5	5.7	<2.5	110.0	<2.5	<2.5	61.0	40	
		08/12/18	0.5	5.2	<0.5	76.0	1.9	<0.5	20.0	31	EC = 2.3
		12/02/18	<1.0	4.2	<2.0	38.0	1.7	<1.0	6.7	15	benzene = 0.17 J; EC = 1.5 J; toluene = 0.16 B,J
		06/06/19	<0.50	5.9	<0.50	37	2.2	<0.50	4	32	EC = 1.9
P29		07/22/12	<20	<20	--	39	<20	<20	2,600	<20	
1st Injection	August 2012	09/15/12	<20	<20	--	3,600	<20	<20	48	<20	
		11/10/12	<3.6	12	--	530	<3.6	<3.6	44	180	
		02/24/13	1.0	13	--	110	3.8	<1.0	150	72	
2nd Injection	October 2013	06/20/13	3.3	16	--	230	3.1	1.5	390	160	
		01/19/14	< 0.50	11	--	18	3.8	< 0.50	19	21	
3rd Injection	August 2014	04/13/14	< 0.50	5.2	--	23	1.7	< 0.50	19	16	
4th Injection	December 2015	05/30/15	0.8	8.8	--	63	3.3	<0.50	72	62	

Table D-2
Phase 2 Courtyard EISB Monitoring Well Groundwater VOC Analytical Results
Varian Medical Systems, Inc.
601 California Avenue, Palo Alto, California

Well ID	Injection Events	Sample Date	1,1-DCE (µg/L)	1,1-DCA (µg/L)	Xylenes (µg/L)	*cis*-1,2-DCE (µg/L)	*trans-1,2*-DCE (µg/L)	*1,1,1*-TCA (µg/L)	TCE (µg/L)	VC (µg/L)	Other Detected VOCs (µg/L)
P29 (cont.)		06/09/16	2.0	9.3	<1.0	120	2.6	<0.50	61	120	Freon 113 = 0.61; EC = 2.3
		06/06/17	<5.0	13	<10	280	<5.0	<5.0	21	120	
5th Injection	December 2017	02/17/18	<1.0	8.2	<1.0	84	2.5	<1.0	25	62	EC = 4.0
		08/11/18	<1.3	11	<1.3	370.0	3.4	<1.3	20.0	270	EC = 3.7
		12/02/18	1.1 J	13	<4.0	320.0	4.9	<2.0	42.0	200	EC = 4.5 J
		06/06/19	1.5	11	<0.50	470	3.6	<0.50	13	150	
V-9		07/05/07	3.6	2.9	<10	14	<10	5.0	140	<1.0	
		06/11/09	<10	<10	<20	15	<10	<10	830	<10	
		06/15/11	11	15	<20	27	<10	<10	2,000	<10	
		06/18/13	<10	<10	<20	31	<10	<10	880	<10	
		06/11/14	10	13	<20	470	<10	<10	2,000	65	
		06/09/15	10	11	<20	400	<10	<10	2,200	55	
		06/09/16	<10	10	<20	170	<10	<10	1,000	17	
		06/04/19	<10	<10	--	240	<10	<10	310	<10	
V-9X		06/17/17	<10	<10	<20	61	<10	<10	530	<10	
5th Injection	December 2017	06/04/19	11	14	--	700	<10	<10	200	45	

Notes and Abbreviations:
Groundwater chemical data reported using USEPA Method 8260B
1,1-DCE = 1,1-Dichloroethene
1,1-DCA = 1,1-Dichloroethane
cis-1,2-DCE = cis-1,2-Dichloroethene
trans-1,2-DCE = trans-1,2-Dichloroethene
1,1,1-TCA = 1,1,1-Trichloroethane
TCE = trichloroethene
1,2-DCA = 1,2-Dichloroethane
PCE = Tetrachloroethene
1,2,4-TMB = 1,2,4-Trimethylbenzene
1,1,2-TCA = 1,1,2-Trichloroethane
EC = chloroethane
µg/L = micrograms per liter
<x.x = Analyte not detected at or above the specified reporting limit
-- = not analyzed

*Relative percent difference of the laboratory control sample and laboratory control sample duplicate exceeds control limits.

**LCS or LCSD is outside acceptance limits.

^Due to matrix interference in the December 2, 2018 sample from P23, laboratory reporting limits were elevated. Laboratory results were compared to both laboratory reporting limit (LRL) and method detection limit (MDL) and J-flagged where they were < LRL and >MDL. Results are reported here as less than the MDL, where concentrations were reported as less than the LRL, and not J-flagged by the laboratory

B = analyte was detected in the associated method blank (December 2018, sample from well P28.

Table D-3
Phase 2 Courtyard Analytical Results for Geochemical and Biodegradation Parameters in Groundwater
Varian Medical Systems, Inc.
601 California Avenue, Palo Alto, California

Well ID	Injection Events	Date	Geochemical Parameters				Dissolved Gasses			Dechlorinating Bacteria Populations					Tracer Dyes		
			USEPA Method 300.0		SM 2320B	SM 5310 C	RSK 175			SiREM Gene-Trac					Ozark Laboratories		
			Nitrate (mg/L)	Sulfate (mg/L)	Alkalinity (as HCO_3^-) (mg/L)	TOC (mg/L)	Methane (µg/L)	Ethane (µg/L)	Ethene (µg/L)	*Dhc* (Number/L)	*vcrA* (Gene Copies/L)	*bvcA* (Gene Copies/L)	*tceA* (Gene Copies/L)	Dhb (Gene Copies/L)	Fluorescein (ppb)	Rhoda-mine WT (ppb)	Eosine (ppb)
Phase 2 Courtyard EISB Monitoring Wells																	
P16		02/01/14	--	--	--	3.0	--	--	--	--	--	--	--	--	--	--	--
		04/09/17	*Unable to collect sample - well obstructed by oil and biomass*														
		06/05/19	--	--	--	1,200.0	--	--	--	--	--	--	--	--	--	--	--
P17		02/02/14	--	--	--	1.1	< 5.0	< 5.0	< 5.0	--	--	--	--	--	--	--	--
1st Injection	November 2014	11/22/14	0.36	65	290	1.9	--	--	--	--	--	--	--	--	--	--	--
		12/20/14	0.24	67	460**	--	6.0	< 5.0	< 5.0	--	--	--	--	--	--	--	--
		03/22/15	1.8	64	420	--	--	--	--	--	--	--	--	--	--	--	--
2nd Injection	April 2015	04/12/15	--	--	--	--	--	--	--	--	--	--	--	--	ND	1.53	ND
		05/31/15	0.24	55	430	3.4	--	--	--	--	--	--	--	--	--	--	--
3rd Injection	September 2015	12/20/15	0.18	31	460	3.9	180	< 5.0	420	--	--	--	--	--	--	--	--
		04/03/16	0.76	59	440	1.4	29	< 5.0	36	--	--	--	--	--	--	--	--
4th Injection	September 2016	04/09/17	<0.05	34	--	--	11,000	18	950	--	--	--	--	--	--	--	--
		02/17/18	--	--	--	1.4	--	--	--	--	--	--	--	--	--	--	--
		06/06/18	--	--	--	1.6	--	--	--	--	--	--	--	--	--	--	--
		08/12/18	1.5	62	480	1.8	3,100	< 5.0	120	--	--	--	--	--	--	--	--
		12/02/18	0.95	55	490	1.6	801	1.1	37	--	--	--	--	--	--	--	--
		06/05/19	--	--	--	1.8	--	--	--	--	--	--	--	--	--	--	--
P18		02/02/14	--	--	--	1.5	--	--	--	--	--	--	--	--	--	--	--
		06/06/17	--	--	--	4,700	--	--	--	--	--	--	--	--	--	--	--
		02/18/18	--	--	--	9,500	--	--	--	--	--	--	--	--	--	--	--
P21		02/02/14	--	--	--	1.6	79	< 5.0	< 5.0	--	--	--	--	--	--	--	--
1st Injection	November 2014	11/22/14	0.11	83	420	3.0	--	--	--	--	--	--	--	--	--	--	--
		12/14/14	--	--	--	--	--	--	--	--	--	--	--	--	ND	5.06	ND
		12/20/14	<0.05	62	550**	271	47	< 5.0	< 5.0	8.0E+04	2.0E+05*	--	--	5.0E+06	--	--	--
		03/22/15	<0.05	9.6	580	270	250	< 5.0	47	1.0E+10	6.0E+09	--	--	1.0E+08	--	--	--
2nd Injection	April 2015	04/12/15	--	--	--	--	--	--	--	--	--	--	--	--	ND	400	ND
		05/31/15	<0.05	7.2	580	290	5,200	< 5.0	1,200	--	--	--	--	--	--	--	--
3rd Injection	September 2015	11/15/15	<0.05	22	450	< 50	12,000	< 5.0	1,900	8.0E+07	4.0+07	--	--	5.0E+07	--	--	--
		12/20/15	<0.05	14	510	< 50	13,000	10	3,000	6.0E+08	1.0E+08	--	--	1.0E+08	--	--	--
		04/03/16	<0.05	12	480	120	18,000	22	3,500	2E+09	4.0E+08	--	--	1.0E+08	--	--	--
4th Injection	September 2016	04/09/17	<0.05	13	--	--	11,000	<250	1,500	1E+09	9E+07	4E+08	2E+06	7E+07	--	--	--
5th Injection	November 2017	02/18/18	--	--	--	230	--	--	--	--	--	--	--	--	--	--	--
		06/05/18	--	--	--	280	--	--	--	--	--	--	--	--	--	--	--
		08/12/18	<0.05^	17	410	140	18,000	57	2,000	--	--	--	--	--	--	--	--
		12/02/18	<0.05	18	--	190	5,240	17	633	--	--	--	--	--	--	--	--
		06/06/19	--	--	--	230	--	--	--	--	--	--	--	--	--	--	--

Table D-3
Phase 2 Courtyard Analytical Results for Geochemical and Biodegradation Parameters in Groundwater
Varian Medical Systems, Inc.
601 California Avenue, Palo Alto, California

Well ID	Injection Events	Date	Geochemical Parameters				Dissolved Gasses			Dechlorinating Bacteria Populations					Tracer Dyes		
			USEPA Method 300.0		SM 2320B	SM 5310 C	RSK 175			SiREM Gene-Trac					Ozark Laboratories		
			Nitrate (mg/L)	Sulfate (mg/L)	Alkalinity (as HCO_3^-) (mg/L)	TOC (mg/L)	Methane (µg/L)	Ethane (µg/L)	Ethene (µg/L)	*Dhc* (Number/L)	*vcrA* (Gene Copies/L)	*bvcA* (Gene Copies/L)	*tceA* (Gene Copies/L)	Dhb (Gene Copies/L)	Fluorescein (ppb)	Rhodamine WT (ppb)	Eosine (ppb)
P23		02/02/14	--	--	--	1.0	--	--	--	--	--	--	--	--	--	--	--
1st Injection	November 2014	11/22/14	1.4	69	430	1.8	--	--	--	--	--	--	--	--	--	--	--
		12/14/13	--	--	--	--	--	--	--	--	--	--	--	--	ND	931	ND
		12/20/14	<0.05	64	880**	1,070	9.0	< 5.0	< 5.0	4.0E+05	2.0E+06	--	--	8.0E+05	--	--	--
		03/22/15	<0.05	0.78	770	210	4,100	< 5.0	3,500	3.0E+07	4.0E+07	--	--	5.0E+08	ND	45.2	ND
2nd Injection	April 2015	04/12/15	--	--	--	--	--	--	--	--	--	--	--	--	ND	188	ND
		05/31/15	<0.05	0.82	900	1,400	10,000	7.0	1,500	--	--	--	--	--	--	--	--
3rd Injection	September 2015	11/15/15	<0.05	1.9	590	< 50	16,000	< 5.0	610	2.0E+07	1.0E+07	--	--	5.0E+06	--	--	--
		12/20/15	<0.05	4.0	960	< 50	11,000	< 5.0	420	1.0E+04 J	9.0E+04 J	--	--	9.0E+03 J	--	--	--
		04/03/16	<0.05	3.2	860	52	18,000	11	140	1E+10	9.0E+08	--	--	2.0E+07	--	--	--
4th Injection	September 2016	04/09/17	<0.05	0.58	--	--	16,000	57	120	3E+09	1E+09	6E+08	2E+08	1E+07	--	--	--
		02/18/18	--	--	--	1,100	--	--	--	--	--	--	--	--	--	--	--
		06/06/18	--	--	--	260	--	--	--	--	--	--	--	--	--	--	--
		08/12/18	<0.05^	6.1	1,000	71	24,000	36	60	--	--	--	--	--	--	--	--
		12/02/18	<0.05	9.5	--	20				--	--	--	--	--	--	--	--
		06/06/19	--	--	--	37	--	--	--	--	--	--	--	--	--	--	--
P26		02/02/14	--	--	--	0.91	< 5.0	< 5.0	< 5.0	--	--	--	--	--	--	--	--
1st Injection	November 2014	11/22/14	2.2	65	420	1.6	--	--	--	--	--	--	--	--	--	--	--
		12/20/14	1.9	65	380**	5.0	< 5.0	< 5.0	< 5.0	--	--	--	--	--	--	--	--
2nd Injection	April 2015	03/22/15	2.1	63	420	1.7	--	--	--	--	--	--	--	--	--	--	--
		04/12/15	--	--	--	--	--	--	--	--	--	--	--	--	ND	ND	ND
3rd Injection	September 2015	05/31/15	1.9	62	410	2.1	--	--	--	--	--	--	--	--	--	--	--
		12/20/15	2.1	58	450	1.4	< 5.0	< 5.0	< 5.0	--	--	--	--	--	--	--	--
4th Injection	September 2016	04/03/16	2.4	60	440	1.1	< 5.0	< 5.0	< 5.0	--	--	--	--	--	--	--	--
		04/09/17	0.64	47	--	--	1,500	< 5.0	110	--	--	--	--	--	--	--	--
5th Injection	November 2017	02/17/18	--	--	--	1.3	--	--	--	--	--	--	--	--	--	--	--
		06/05/18	--	--	--	1.5	--	--	--	--	--	--	--	--	--	--	--
		08/12/18	1.6^	69	520	1.4	--	--	--	--	--	--	--	--	--	--	--
		12/01/18	--	--	500	1.7	--	--	--	--	--	--	--	--	--	--	--
		06/05/19	--	--	--	1.3	--	--	--	--	--	--	--	--	--	--	--
OBS		02/01/14	--	--	--	1.0	--	--	--	--	--	--	--	--	--	--	--
1st Injection	November 2014	11/22/14	--	--	--	1.0	--	--	--	--	--	--	--	--	ND	--	ND
		12/20/14	1.2	66	420**	6.1	12,000	< 5.0	9.0	--	--	--	--	--	ND	3.14	ND
2nd Injection	April 2015	03/22/15	0.07	63	470	3.7	9,100	< 5.0	< 5.0	--	--	--	--	--	ND	0.370	ND
		04/12/15	--	--	--	--	--	--	--	--	--	--	--	--	ND [1]	1,880 [1]	ND [1]
3rd Injection	September 2015	05/31/15	<0.05	63	480	4.6	--	--	--	--	--	--	--	--	--	--	--
		12/20/15	0.20	54	490	1.6	7,600	< 5.0	49	--	--	--	--	--	--	--	--
4th Injection	September 2016	04/03/16	<0.05	58	490	2.1	8,300	< 5.0	67	--	--	--	--	--	--	--	--

Table D-3
Phase 2 Courtyard Analytical Results for Geochemical and Biodegradation Parameters in Groundwater
Varian Medical Systems, Inc.
601 California Avenue, Palo Alto, California

Well ID	Injection Events	Date	Geochemical Parameters				Dissolved Gasses			Dechlorinating Bacteria Populations					Tracer Dyes		
			USEPA Method 300.0		SM 2320B	SM 5310 C	RSK 175			SiREM Gene-Trac					Ozark Laboratories		
			Nitrate (mg/L)	Sulfate (mg/L)	Alkalinity (as HCO_3^-) (mg/L)	TOC (mg/L)	Methane (µg/L)	Ethane (µg/L)	Ethene (µg/L)	*Dhc* (Number/L)	*vcrA* (Gene Copies/L)	*bvcA* (Gene Copies/L)	*tceA* (Gene Copies/L)	Dhb (Gene Copies/L)	Fluorescein (ppb)	Rhoda-mine WT (ppb)	Eosine (ppb)
OBS (cont.)		04/09/17	<0.05	52	--	--	8,300	< 5.0	1,000	--	--	--	--	--	--	--	--
		08/12/18	<0.05^	<0.50	900	260	--	--	--	--	--	--	--	--	--	--	--
V8-2/P15		02/01/14	--	--	--	1.1	--	--	--	--	--	--	--	--	--	--	--
1st Injection	November 2014	11/22/14	--	--	--	1.1	--	--	--	--	--	--	--	--	ND	--	ND
		12/20/14	<0.05	65	600**	16	3,100	< 5.0	< 5.0	--	--	--	--	--	--	--	--
2nd Injection	April 2015	03/22/15	0.64	66	420	2.4	--	--	--	--	--	--	--	--	ND	ND	ND
3rd Injection	September 2015	12/20/15	1.2	57	450	1.8	970	< 5.0	< 5.0	--	--	--	--	--	--	--	--
4th Injection	September 2016	04/09/17	<0.05	17	--	--	10,000	< 5.0	1,000	--	--	--	--	--	--	--	--
		08/12/18	<0.05^	32	630	3.5	--	--	--	--	--	--	--	--	--	--	--
Up- Down- or Cross-gradient Monitoring Wells Outside the Phase 2 Treatment Study Area																	
P10		02/01/14	--	--	--	3.7	--	--	--	--	--	--	--	--	--	--	--
		06/06/17	--	--	--	1,100	--	--	--	--	--	--	--	--	--	--	--
P11		02/01/14	--	--	--	2.6	--	--	--	--	--	--	--	--	--	--	--
P12		02/01/14	--	--	--	4.2	--	--	--	--	--	--	--	--	--	--	--
		06/06/17	--	--	--	10,000	--	--	--	--	--	--	--	--	--	--	--
P13		02/02/14	--	--	--	2.9	--	--	--	--	--	--	--	--	--	--	--
		04/09/17	<0.25	66	--	--	9,100	<50	210	2E+07	8E+06	2E+04 J	5E+05	6E+06	--	--	--
		06/06/17	--	--	--	6,600	--	--	--	--	--	--	--	--	--	--	--
		02/17/18	--	--	--	13,000	--	--	--	--	--	--	--	--	--	--	--
		06/05/18	--	--	--	8,300	--	--	--	--	--	--	--	--	--	--	--
	duplicate	06/05/18	--	--	--	8,000	--	--	--	--	--	--	--	--	--	--	--
P14		02/01/14	--	--	--	1.4	--	--	--	--	--	--	--	--	--	--	--
P19		02/01/14	--	--	--	4.5	--	--	--	--	--	--	--	--	--	--	--
P20		02/01/14	--	--	--	4.3	--	--	--	--	--	--	--	--	--	--	--
P22		02/02/14	--	--	--	1.0	--	--	--	--	--	--	--	--	--	--	--
		06/06/17	--	--	--	2,600	--	--	--	--	--	--	--	--	--	--	--
		06/06/17	--	--	--	2,600	--	--	--	--	--	--	--	--	--	--	--
		12/02/18	<0.50	33	--	6,500	--	--	--	--	--	--	--	--	--	--	--
Monitoring Wells Downgradient of Phase 2 Courtyard EISB Treatment Area																	
P24		07/22/12	0.11	57	--	1.1	--	--	--	--	--	--	--	--	--	--	--
1st Injection	August 2012	08/12/12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2nd Injection	October 2013	06/20/13	0.64	60	--	--	--	--	--	--	--	--	--	--	ND	--	ND
3rd Injection	August 2014	11/22/14	--	--	--	--	--	--	--	--	--	--	--	--	ND	--	ND
4th Injection	December 2015	05/30/15	--	--	--	--	--	--	--	--	--	--	--	--	ND	ND	ND
5th Injection	November 2017	06/05/18	--	--	--	6,300	--	--	--	--	--	--	--	--	--	--	--
		12/01/18	--	--	580	--	--	--	--	--	--	--	--	--	--	--	--
		06/06/19	--	--	--	1.0	--	--	--	--	--	--	--	--	--	--	--

Table D-3
Phase 2 Courtyard Analytical Results for Geochemical and Biodegradation Parameters in Groundwater
Varian Medical Systems, Inc.
601 California Avenue, Palo Alto, California

Well ID	Injection Events	Date	Geochemical Parameters				Dissolved Gasses			Dechlorinating Bacteria Populations					Tracer Dyes		
			USEPA Method 300.0		SM 2320B	SM 5310 C	RSK 175			SiREM Gene-Trac					Ozark Laboratories		
			Nitrate (mg/L)	Sulfate (mg/L)	Alkalinity (as HCO_3^-) (mg/L)	TOC (mg/L)	Methane (µg/L)	Ethane (µg/L)	Ethene (µg/L)	*Dhc* (Number/L)	*vcrA* (Gene Copies/L)	*bvcA* (Gene Copies/L)	*tceA* (Gene Copies/L)	Dhb (Gene Copies/L)	Fluorescein (ppb)	Rhodamine WT (ppb)	Eosine (ppb)
P25		07/22/12	2.1	57	--	0.84	--	--	--	--	--	--	--	--	--	--	--
1st Injection	August 2012	08/12/12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2nd Injection	October 2013	06/20/13	1.9	61	--	--	--	--	--	--	--	--	--	--	ND	--	ND
3rd Injection	August 2014	11/22/14	--	--	--	--	--	--	--	--	--	--	--	--	ND	--	ND
4th Injection	December 2015	05/30/15	--	--	--	--	--	--	--	--	--	--	--	--	1.16 [2]	11.4 [2]	3.55 [2]
		04/03/16	1.1	61	440	1.6	1,300	<130	< 5.0	--	--	--	--	--	--	--	--
		08/11/18	0.13^	41	680	1.5	--	--	--	--	--	--	--	--	--	--	--
		12/01/18	--	--	650	1.5	--	--	--	--	--	--	--	--	--	--	--
P27		06/06/17	--	--	--	34	--	--	--	--	--	--	--	--	--	--	--
		02/17/18	--	--	--	8.4	--	--	--	--	--	--	--	--	--	--	--
		06/05/18	--	--	--	8.6	--	--	--	--	--	--	--	--	--	--	--
		08/11/18	<0.05^	45	480	5.3	20,000	18	55	--	--	--	--	--	--	--	--
		12/02/18	<0.05	47	500	2.0	--	--	--	--	--	--	--	--	--	--	--
		06/06/19	--	--	--	2.4	--	--	--	--	--	--	--	--	--	--	--
P28		06/06/17	--	--	--	30	--	--	--	--	--	--	--	--	--	--	--
		02/17/18	--	--	--	10	--	--	--	--	--	--	--	--	--	--	--
		08/12/18	<0.05^	18	680	6.9	--	--	--	--	--	--	--	--	--	--	--
		12/02/18	0.10	11	710	4.8	--	--	--	--	--	--	--	--	--	--	--
		06/06/19	--	--	--	2.8	--	--	--	--	--	--	--	--	--	--	--
P29		06/06/17	--	--	--	3.4	--	--	--	--	--	--	--	--	--	--	--
		02/17/18	--	--	--	1.9	--	--	--	--	--	--	--	--	--	--	--
		08/11/18	<0.05^	32	750	1.9	--	--	--	--	--	--	--	--	--	--	--
		12/02/18	<0.05	40	680	1.8	--	--	--	--	--	--	--	--	--	--	--
		06/06/19	--	--	--	1.4	--	--	--	--	--	--	--	--	--	--	--

Notes and Abbreviations:

mg/L = Milligrams per liter
TOC = Total organic carbon
-- = Not analyzed
ND = Not detected
ppb = parts per billion
<x.x = Analyte not detected at or above the specified reporting limit
USEPA = United States Environmental Protection Agency
Dhc = Dehalococcoides
vcrA = Vinyl chloride reductase
Dhb = Dehalobacter
mg/L = Micrograms per liter

1 Dye tracer concentrations in April 2015 samples from well OBS was quantified from passive carbon sorption modules and groundwater samples.
2 Dye tracer concentrations in May 2015 samples from well P25 was quantified from passive carbon sorption modules and groundwater samples.
* value is an estimated quantity (correction applied for non-specific PCR products.
** indicates reported as mg/L as CaCO3
^ High recoveries were observed for nitrate and sulfate in the matrix spike duplicate sample, but the laboratory controls ample was wthin limits. Nitrate was analyzed outside of hold time.

Table D-4a
Phase 1 Biobarrier Soil Vapor Analytical Results
Varian Medical Systems, Inc.
601 California Avenue, Palo Alto, California

Well ID	Injection Events	Sample Date	VOCs USEPA Method TO-15														
			Acetone (µg/m3)	Cyclo-hexane (µg/m3)	1,1-DCE (µg/m3)	1,1-DCA (µg/m3)	PCE (µg/m3)	*1,1,1*-TCA (µg/m3)	TCE (µg/m3)	Chloroform (µg/m3)	Carbon Disulfide (µg/m3)	Ethanol (µg/m3)	Freon 113 (µg/m3)	Toluene (µg/m3)	m,p-Xylenes (µg/m3)	Vinyl Chloride (µg/m3)	Other Detected VOCs (µg/m3)
SVP-1		07/23/12	<900	<130	<150	<150	<260	400	34,000	<180	<470	430	570	160	<160	<97	
1st Injection	August 2012	09/15/12	3,200	<82	<94	<96	<160	470	36,000	<120	360	<180	700	<90	<100	<61	
		11/10/12	<550	<80	<92	<94	<160	540	44,000	<110	<290	<180	1,000	<88	<100	<60	
		02/24/13	<340	<50	<58	<59	<99	260	18,000	<71	<180	<110	420	<55	<63	<37	
2nd Injection	October 2013	07/08/13	<910	<130	<150	<160	<260	370	41,000	<190	<480	<290	400	<140	<170	<98	
		01/19/14	<270	<39	<45	<46	<78	190	20,000	<56	<140	<86	290	<43	<50	<29	cis-1,2-DCE = 93
3rd Injection	August 2014	04/13/14	<1,200	<170	<200	<200	<340	570	83,000	<240	<620	<370	660	<190	<210	<130	cis-1,2-DCE = 320
4th Injection	December 2015	11/15/15	<190	<70	<81	<83	150	<110	15,000	<100	<64	--	<160	<77	<89	<52	
		08/11/18	<69	<10	<11	<12	<20	80	4,600	32	<36	<22	40	<11	<12	<7.4	
		12/01/18	<118	<34	<40	<41	<68	49 J	1,330	21.8 J	<31	--	38.2 J	<38	21.7 J	<26	4-ethyltoluene = 14.4 J; ethylbenzene = 14.1 J; methylene chloride = 30.6 J; total xylenes = 21.7 J
SVP-2		07/23/12	<610	<89	<100	<100	<180	310	22,000	<130	<320	280	500	160	<110	<66	
1st Injection	August 2012	09/15/12	<560	<82	<94	<96	<160	370	29,000	<120	<300	<180	700	<90	<100	<61	
		11/10/12	<540	<79	<91	<93	<160	350	28,000	<110	<280	<170	800	<86	<99	<58	
		02/24/13	<270	<39	<45	<46	<78	180	13,000	<56	<140	<86	370	<43	<50	<29	
2nd Injection	October 2013	07/08/13	<560	<82	<94	<96	<160	260	26,000	<120	<300	<180	250	<89	<100	<60	
		01/19/14	<180	<27	<31	<31	<52	180	13,000	<38	<96	<58	320	<29	<34	<20	cis-1,2-DCE = 52
3rd Injection	August 2014	04/13/14	<270	<39	<45	<46	<78	190	21,000	<56	<140	<86	300	<43	<50	<29	cis-1,2-DCE = 83
4th Injection	December 2015	11/15/15	<140	<51	<59	<60	<100	98	14,000	<72	<46	--	<110	<56	<64	<38	
		08/11/18	<49	<7.2	<8.2	<8.4	<34	62	3,500	30	<26	<16	30	<7.8	<9.0	<5.3	
		12/01/18	<118	<34	<40	<41	<68	41.1 J	1,590	19.1 J	<31	--	36.8 J	<38	<43	<10	methylene chloride = 15.8 J

Notes and Abbreviations:

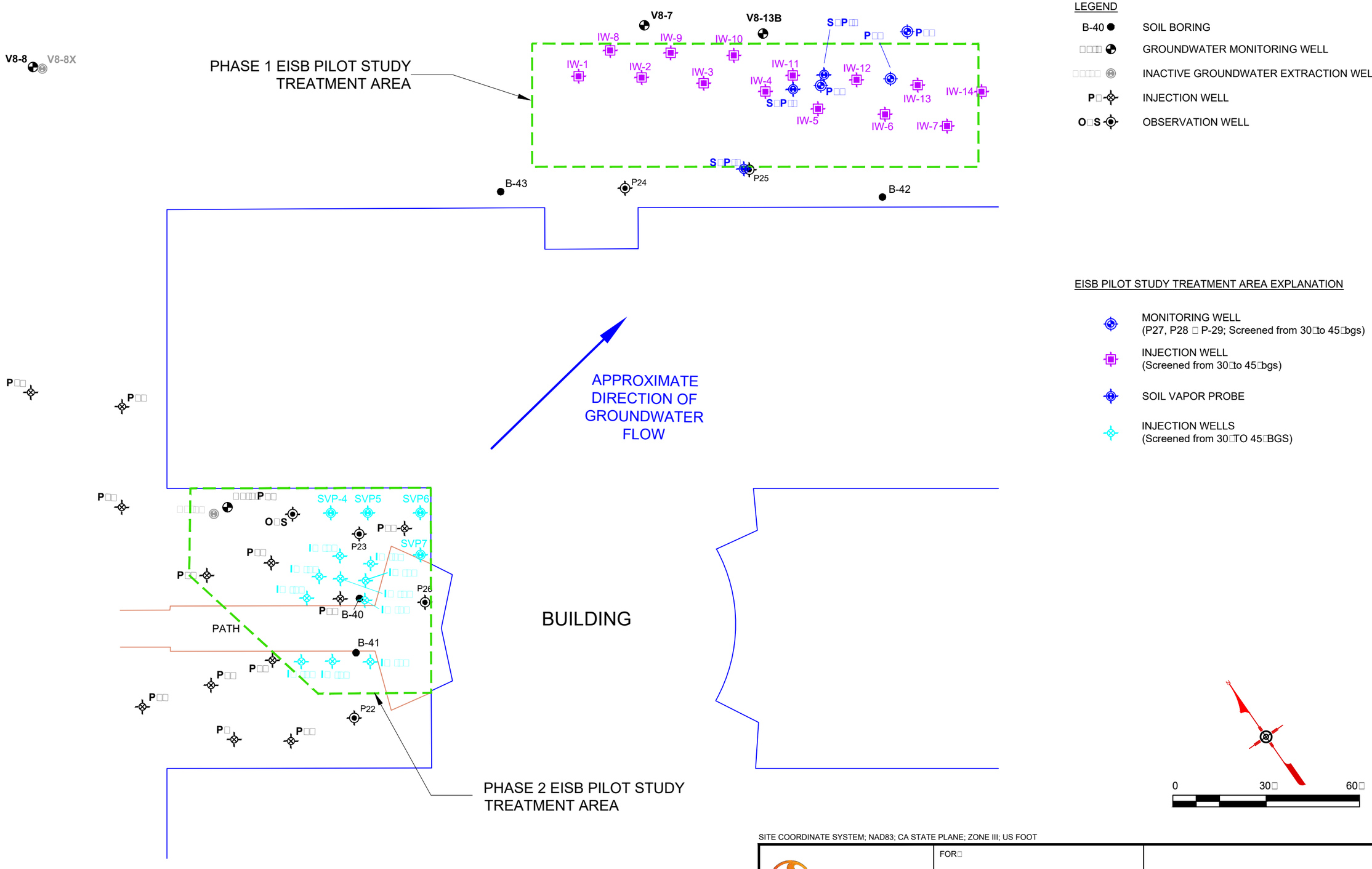
VOCs = Volatile organic compounds
1,1-DCE = 1,1-Dichloroethene
1,1-DCA = 1,1-Dichloroethane
1,1,1-TCA = 1,1,1-Trichloroethane
PCE = Tetrachloroethene
TCE = Trichloroethene
Freon 113 = 1,1,2-Trichloro-1,2,2-trifluoroethane
cis-1,2-DCE - cis-1,2-Dichloroethene
µg/m^3 = Micrograms per cubic meter
-- = not analyzed
J = estimated value

Table D-4b
Phase 2 Biobarrier/Courtyard Soil Vapor Analytical Results
Varian Medical Systems, Inc.
601 California Avenue, Palo Alto, California

Well ID	Injection Events	Sample Date	ASTM D-1946	VOCs USEPA Method TO-15													Other Detected VOCs (µg/m3)
			Methane (%)	Acetone (µg/m^3)	Cyclo-hexane (µg/m^3)	1,1-DCE (µg/m^3)	1,1-DCA (µg/m^3)	PCE (µg/m^3)	*1,1,1-* TCA (µg/m^3)	TCE (µg/m^3)	Chloroform (µg/m^3)	Carbon Disulfide (µg/m^3)	Ethanol (µg/m^3)	Freon 113 (µg/m^3)	Toluene (µg/m^3)	m,p-Xylenes (µg/m^3)	Vinyl Chloride (µg/m^3)	
SVP-3		07/23/12	<0.20	<30	<4.4	5.7	10	150	340	1,300	52	22	<9.5	74	<4.8	<5.5	<3.2	
1st Injection	August 2012	09/15/12	<0.20	<27	7.8	6.5	12	150	660	1,300	50	22	10	340	4.3	2.0	<2.9	
		11/10/12	<0.20	<26	<3.7	6.4	11	140	520	1,800	71	<13	<8.1	130	<4.1	<4.7	<2.8	
		02/24/13	<0.20	<26	<3.8	<4.4	7.7	76	470	710	39	<14	<8.3	270	<4.1	<4.8	<2.8	
2nd Injection	October 2013	07/08/13	<0.20	<28	<4.0	<4.6	<4.7	57	120	600	50	<14	<8.8	26	<4.4	<5.1	<3.0	
		01/19/14	<0.20	<25	<3.6	<4.1	<4.2	270	53	500	13	<13	17	28	<3.9	33	<2.7	ethylbenzene = 14
3rd Injection	August 2014	04/13/14	<0.20	<26	<3.7	<4.3	5.4	46	180	1,300	23	<13	<8.1	74	<4.1	<4.7	<2.8	
4th Injection	December 2015	11/15/15	<0.20	<14	<5.1	<5.8	<5.9	<10	18	120	8.6	<4.6	--	<11	<5.5	<6.4	<3.8	
		04/03/16	<0.20	<9.3	<3.4	<3.9	4.0	26	230	690	14	<3.1	--	90	<3.7	<4.3	9.2	
		06/05/16	<0.21	<9.9	<3.6	<4.1	<4.2	7.4	20	130	12	<3.2	--	< 8.0	<3.9	<4.5	4.8	cis-1,2-DCE = 21
		04/09/17	<0.21	<9.9	<3.6	<4.1	<4.2	17	290	390	7.0	<3.2	--	150	<3.9	<4.5	<2.7	ethyl acetate = 11
		08/11/18	--	<28	<4.1	<4.8	<4.8	<8.1	10	84	14	<15	<9.0	<9.2	<4.5	<5.2	<3.1	
		12/01/18	--	7.9 J	<3.4	1.2 J	1.1 J	6.1 J	23	142	8.2	<3.1	--	5.1 J	1.0 J	<4.3	17	cis-1,2-DCE = 6.2; DCDFMe = 2.9 J; n-Hexane = 1.1 J; MC = 70.2; TCFMe = 1.7 J
SVP-4		10/26/14	0.20	<210	<31	1,300	120	<61	<49	3,300	<44	<110	<67	240	<34	<39	3,600	
1st Injection	November 2014	11/08/14	--	<200	<30	1,300	130	91	<47	3,900	<42	<110	<65	260	<32	<37	4,200	trans-1,2-DCE = 590; cis-1,2-DCE = 9,000; benzene = 82
		12/20/14	<0.18	<170	<60	1,200	110	<120	<95	1,700	<85	<54	--	200	<66	<76	3,200	
2nd Injection	April 2015	03/21/15	--	<190	<41	1,300	110	<82	<65	2,000	<97	<62	--	230	<45	<52	3,700	trans-1,2-DCE = 490; cis-1,2-DCE = 8,600; benzene = 70
		05/30/15	0.20	<180	<64	1,300	120	<130	<100	1,600	<91	<58	--	160	<70	<81	3,300	trans-1,2-DCE = 560 ; cis-1,2-DCE = 10,000 ; benzene = 76
3rd Injection	September 2015	11/15/15	0.32	<110	<40	1,400	130	<79	<64	2,100	<57	<36	--	230	<44	<51	3,500	trans-1,2-DCE = 670 ; cis-1,2-DCE = 9,200 ; benzene = 72
		12/20/15	0.68	<100	<38	1,600	120	<74	<60	1,700	<53	<34	--	190	<41	<47	3,700	trans-1,2-DCE = 630; cis-1,2-DCE = 11,000; benzene = 72
		04/03/16	3.9	<59	27	1,400	110	<42	<34	2,900	<30	<19	--	180	<23	<27	4,100	EC = 36; trans-1,2-DCE = 570; cis-1,2-DCE = 11,000; benzene = 67
4th Injection	September 2016	06/05/16	8.3	<57	37	2,000	170	<41	33	3,100	<29	19	--	200	<23	<26	2,800	EC = 910; trans-1,2-DCE = 840; cis-1,2-DCE = 11,000; benzene = 93
		04/09/17	23	<180	<65	1,200	110	<130	<100	1,300	92	<59	--	160	<71	<82	2,100	EC = 4,600; trans-1,2-DCE = 580; cis-1,2-DCE = 13,000
		08/11/18	--	<260	<38	1,300	130	<75	<60	1,900	<54	<140	<84	<85	<42	<48	7,200	EC = 1,100; trans-1,2-DCE = 530; cis-1,2-DCE = 8,800; benzene = 80
		12/01/18	--	<2,360	<680	1,440	<820	<1,360	<1,100	993 J	<980	<620	--	<1,540	<760	<860	24,800	EC = 859; cis-1,2-DCE = 9,890; MC = 182 J; trans-1,2-DCE = 508 J
SVP-5		10/26/14	0.0086	<210	<31	190	130	<61	<49	2,200	<44	<110	<67	520	<34	<39	1,400	
1st Injection	November 2014	11/08/14	--	<210	<31	180	150	<60	<48	2,600	<43	<110	<67	560	<34	<39	1,300	trans-1,2-DCE = 540; cis-1,2-DCE = 10,000
		12/20/14*	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
2nd Injection	April 2015	3/21/15*	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		11/17/2015*	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
3rd Injection	September 2015	12/20/2015 *	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		4/03/2016*	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
4th Injection	September 2016	06/05/16	<0.20	<110	<41	270	170	<81	<65	2,500	<58	<37	--	400	<45	<52	2,000	trans-1,2-DCE = 720; cis-1,2-DCE = 13,000
SVP-6		10/26/14	0.0019	<26	<3.8	24	19	<7.4	<5.9	1,500	<5.3	95	<8.2	<8.4	<4.1	<4.7	9.2	
1st Injection	November 2014	11/08/14	--	<26	<3.7	16	18	<7.4	<5.9	1,500	<5.3	47	<8.2	31	<4.1	<4.7	8.5	trans-1,2-DCE = 22; cis-1,2-DCE = 110; benzene=4.5
		12/20/14*	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
2nd Injection	April 2015	3/21/15*	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		11/17/2015*	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
3rd Injection	September 2015	12/20/2015 *	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		4/03/2016 *	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
4th Injection	September 2016	06/05/16	<0.20	<9.3	14	46	32	<6.6	<5.3	590	<4.8	<3.1	--	2,300	<3.7	<4.3	100	trans-1,2-DCE = 78; n-Hexane = 6.2; cis-1,2-DCA = 290; benzene = 5.9
SVP-7		10/26/14	0.72	<260	82	720	80	<73	<59	2,500	<53	<130	<81	85	<41	<47	880	
1st Injection	November 2014	11/08/14	--	<260	78	840	96	<75	<60	4,100	<54	<140	<83	100	<42	<48	1,200	trans-1,2-DCE = 1,200; cis-1,2-DCE = 12,000; benzene = 42
		12/20/14*	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
2nd Injection	April 2015	3/21/15*	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		11/17/2015*	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
3rd Injection	September 2015	12/20/2015 *	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		4/03/2016 *	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
4th Injection	September 2016	06/05/16	0.68	<380	140	1100	<160	330	<220	4000	<190	<120	--	<310	<150	<170	1,100	trans-1,2-DCE = 2,100; cis-1,2-DCE = 25,000
		12/01/18	--	<944	<272	588	68 J	<544	<440	1,480	<392	<248	--	<616	<304	<344	1,390	benzene = 62.9J; cis-1,2-DCE = 12,100; n-Hexane = 232J; MC = 113J; trans-1,2-DCE = 1,210

Notes and Abbreviations:

DCDFMe = Dichlorodifluoromethane
1,1-DCA = 1,1-Dichloroethane
1,1-DCE = 1,1-Dichloroethene
cis-1,2-DCE = cis-1,2-Dichloroethene
trans-1,2-DCE = trans-1,2-Dichloroethene
EC = chloroethane
Freon 113 = 1,1,2-Trichloro-1,2,2-trifluoroethane
MC = methylene chloride
PCE = Tetrachloroethene
1,1,1-TCA = 1,1,1-Trichloroethane
TCE = Trichloroethene
TCFMe = 1,1,1-TCA = 1,1,1-Trichloroethane
µg/m^3 = Micrograms per cubic meter
-- = not analyzed
* water encountered during purge; no sample collected.
J = estimated value



LEGEND

B-40 ●	SOIL BORING
□□□	GROUNDWATER MONITORING WELL
□□□□	INACTIVE GROUNDWATER EXTRACTION WELL
P□	INJECTION WELL
O□S	OBSERVATION WELL

EISB PILOT STUDY TREATMENT AREA EXPLANATION

- MONITORING WELL (P27, P28 □ P-29; Screened from 30□to 45□bgs)
- INJECTION WELL (Screened from 30□to 45□bgs)
- SOIL VAPOR PROBE
- INJECTION WELLS (Screened from 30□TO 45□BGS)

SITE COORDINATE SYSTEM; NAD83; CA STATE PLANE; ZONE III; US FOOT

Stantec
1340 Treat Boulevard, Suite 300
Walnut Creek, CA 94597
PHONE□(925) 941-1400 FAX□(925) 941-1401

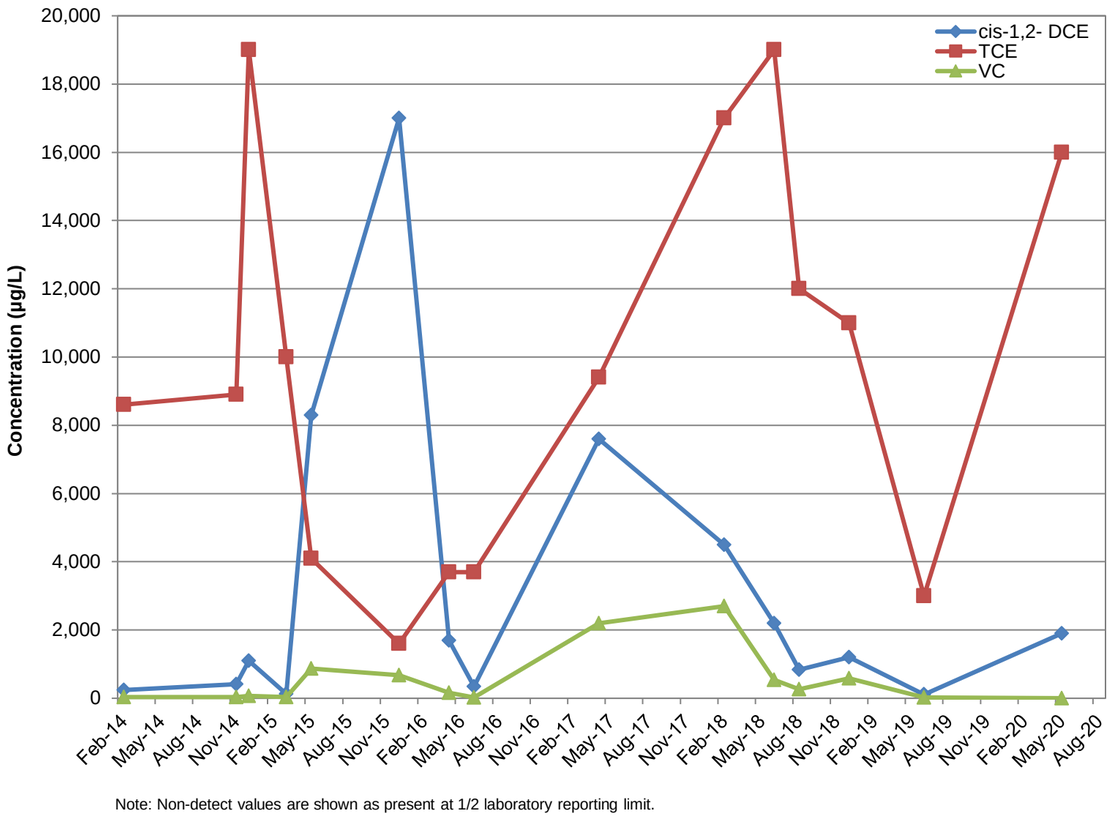
FOR□
VARIAN MEDICAL SYSTEMS, INC.
601 CALIFORNIA AVENUE
PALO ALTO, CALIFORNIA

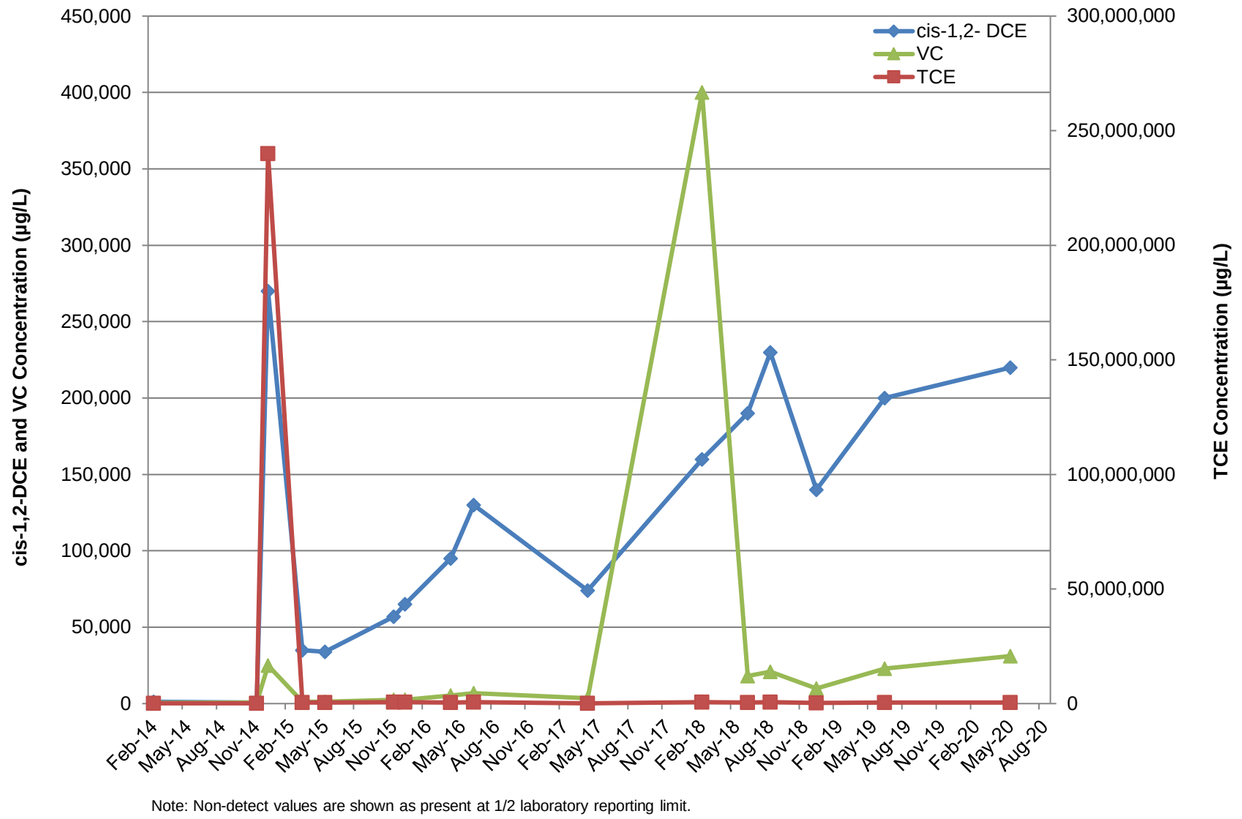
COURTYARD EISB
WELL LOCATION MAP

FIGURE□
D1

JOB NUMBER□	DRAWN BY□	CHECKED BY□	APPROVED BY□	DATE□
185702783.201.0003	RRR/STA	CEA	NHD	05/20/16

M□□ARIA□□M□□DICAL SYST□MS□cad□□arian□□□Cali□rnia□□□□□□□□□□□□□□□□□□□d□□□□odi□led□□y□a□uinaldo at May □□□□□□□□□□□□TA□□TA□□□□□





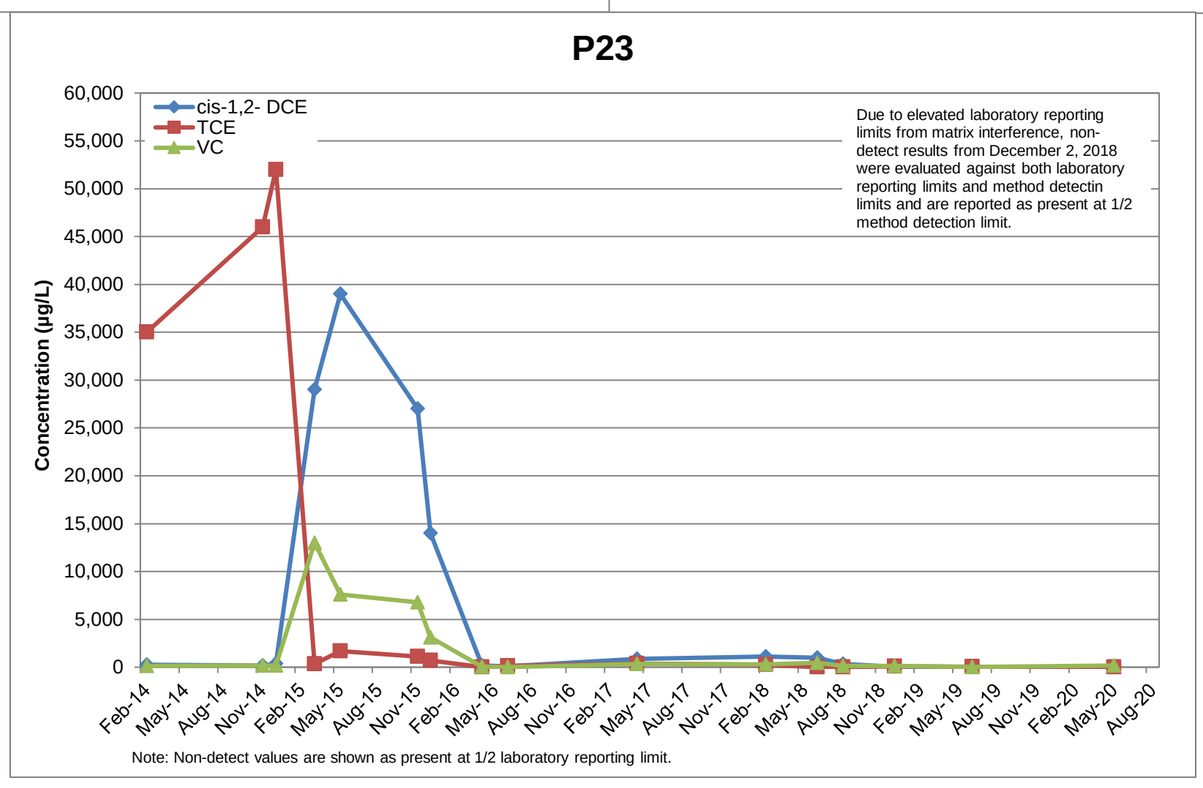
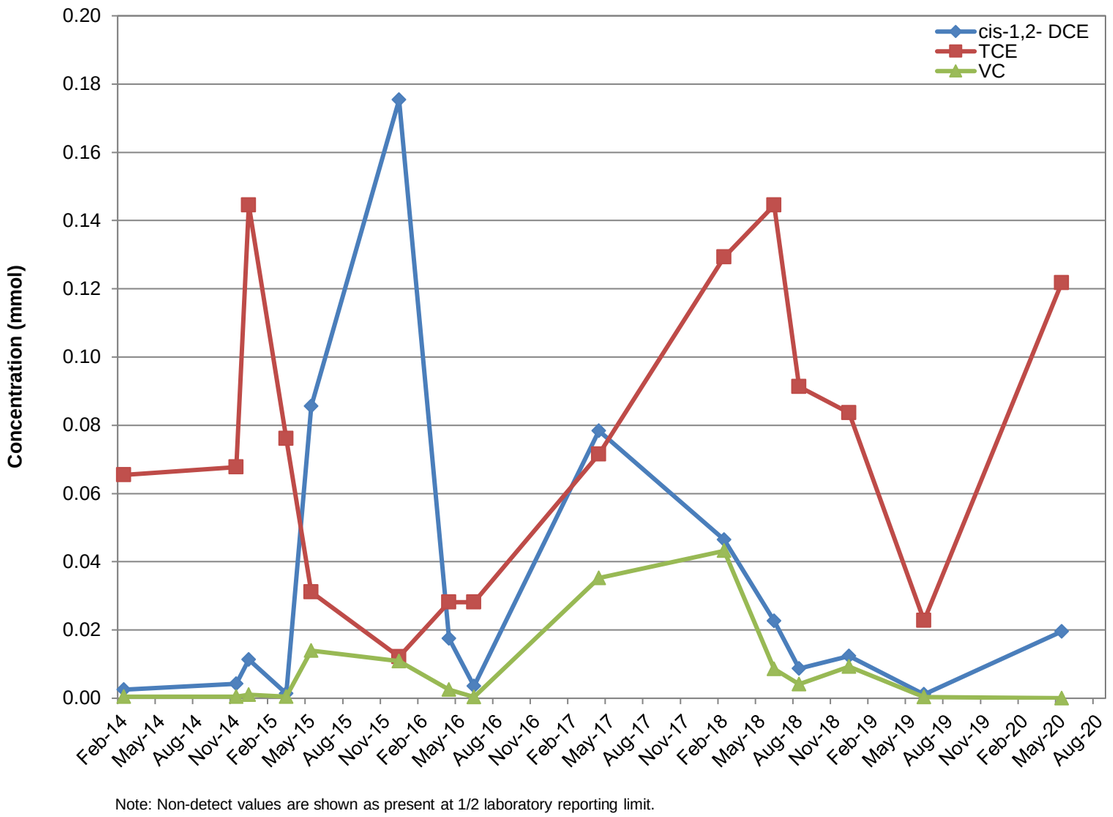
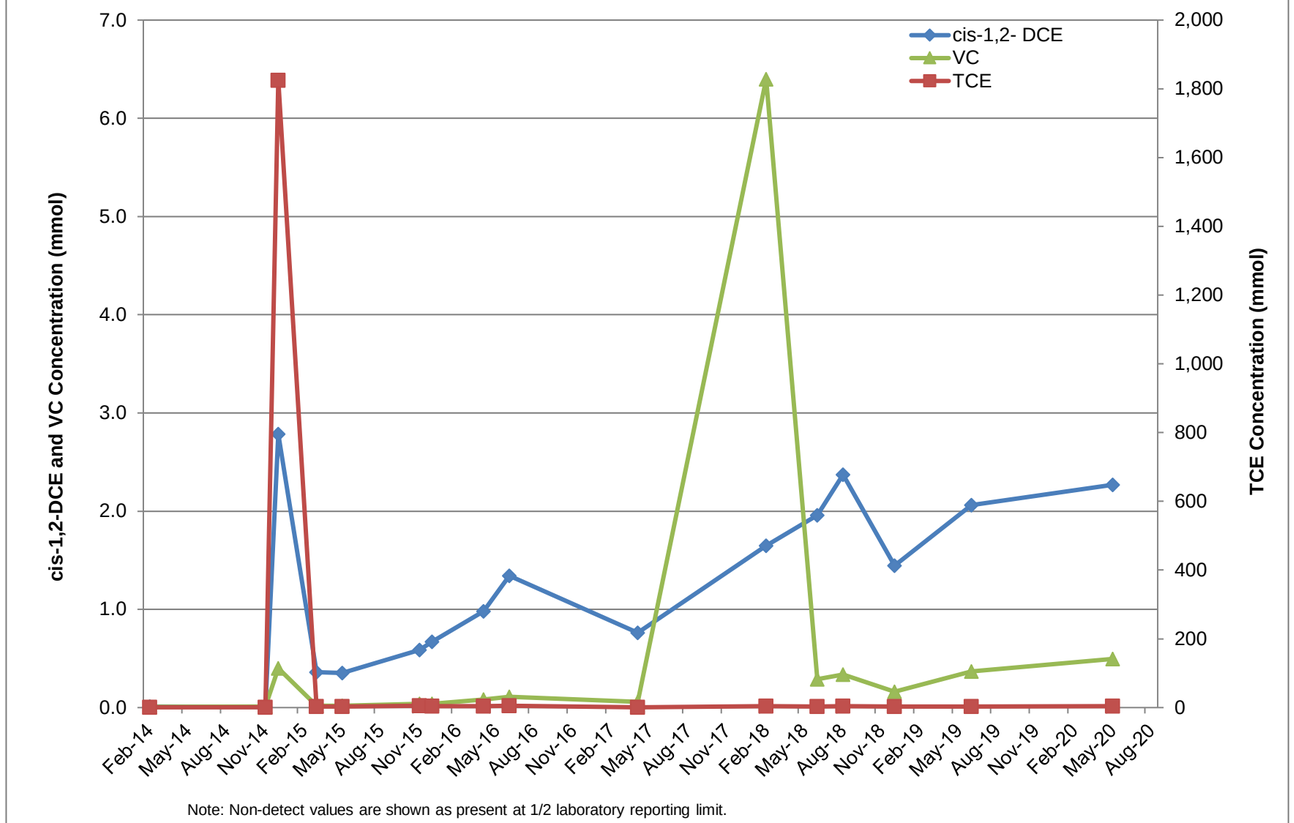


Figure D-2. Concentration Plots for Wells P17, P21, P23





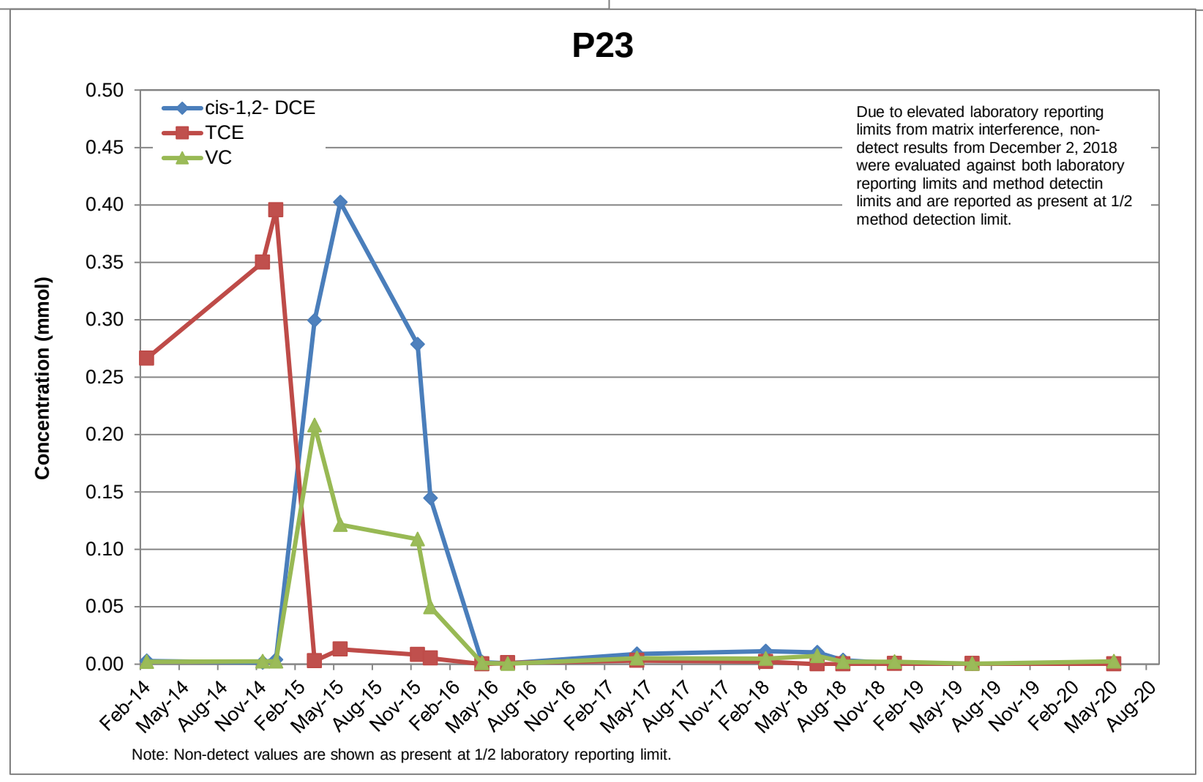


Figure D-3. Molarity Plots for Wells P17, P21, P23

APPENDIX E

Trial Shutdown Monitoring of EW-15 and EW-16

2020 Annual Groundwater Self-Monitoring Report
California-Olive-Emerson (COE) Study Area
and Perimeter Area, Palo Alto, California
September 30, 2020

TABLE E-1
VOC RESULTS FOR MONITORING WELLS
EW-15 and EW-16 Trial Shutdown Evaluation
COE Perimeter Area, Palo Alto, California

Well	Flow Zone	Sample Date	Type	PCE	TCE	c-1,2-DCE	t-1,2-DCE	VC	1,1-DCE	1,1,1-TCA	1,1-DCA
EW-15	A1U	11/13/2013		**230**	**18**	**9.4**	**1.1**	ND (<0.50)	**5.4**	**2.8**	**1.0**
		2/25/2014		**15**	**17**	**75**	**5.3**	**0.62**	**1.2**	ND (<0.50)	**0.81**
		5/13/2014		**12**	**29**	**11**	**4.4**	**0.98**	**1.2**	ND (<0.50)	**1.2**
		8/13/2014		**13**	**31**	**16**	**3.5**	**1.7**	**1.9**	ND (<0.50)	**1.3**
		11/12/2014		**20**	**22**	**29**	**3.5**	**2.8**	**2.0**	ND (<0.50)	**2.0**
		6/9/2015		**3.3**	**39**	**9.0**	**5.6**	**0.66**	**1.8**	ND (<0.50)	**1.3**
		1/12/2016		**0.63**	**11**	**2.8**	**1.6**	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)
		6/6/2016		ND (<0.50)	**2.3**	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)
		6/5/2017		**2.3**	**23**	**4.2**	**3.2**	ND (<0.50)	**0.69**	ND (<0.50)	**0.79**
		6/5/2018		**2.7**	**14**	**2.3**	**1.6**	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)
		6/5/2019		**0.63**	**3.2**	**0.63**	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)
		6/3/2020		ND (<0.50)	**3.5**	**0.88**	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)
F88A1U	A1U	11/13/2013		**200**	**38**	**13**	ND (<2.5)	ND (<2.5)	**3.5**	**2.7**	ND (<2.5)
		2/25/2014		**270**	**50**	**15**	**0.95**	ND (<0.50)	**8.9**	**6.7**	**1.6**
		6/10/2014		**70**	**18**	**7.4**	**0.73**	ND (<0.50)	**1.5**	**1.0**	**0.51**
		8/13/2014		**72**	**21**	**11**	**0.93**	ND (<0.50)	**1.9**	**1.1**	**0.66**
		11/12/2014		**100**	**36**	**35**	**1.4**	ND (<0.50)	**4.7**	**1.9**	**1.0**
		6/8/2015		**68**	**11**	**3.2**	ND (<0.50)	ND (<0.50)	**0.60**	ND (<0.50)	ND (<0.50)
		1/12/2016		**34**	**1.5**	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)
		6/6/2016		**21**	**3.7**	**0.50**	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)
		6/6/2016	dup	**20**	**3.3**	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)
		6/5/2017		**14**	**1.6**	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)
		6/4/2018		**9.6**	**9.7**	**5.5**	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)
		6/4/2019		**18**	**1.9**	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)
F141A1U	A1U	11/13/2013		ND (<0.50)	**1.1**	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	**0.55**
		2/25/2014		ND (<0.50)	**1.2**	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	**0.57**
		2/25/2014	dup	ND (<0.50)	**1.2**	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	**0.59**
		5/13/2014		ND (<0.50)	**1.0**	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)
		6/10/2014		ND (<0.50)	**0.82**	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)
		8/13/2014		ND (<0.50)	**0.98**	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)
		11/12/2014		ND (<0.50)	**1.1**	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	**0.56**
		11/12/2014	dup	ND (<0.50)	**1.0**	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	**0.57**
		6/10/2015		ND (<0.50)	**0.85**	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)
		1/12/2016		ND (<0.50)	**0.73**	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)
		6/7/2016		ND (<0.50)	**0.86**	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)
		6/8/2017		ND (<0.50)	**0.82**	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)
		6/7/2018		ND (<0.50)	**0.76**	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)
		6/7/2019		ND (<0.50)	**0.84**	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)
		6/4/2020		ND (<0.50)	**0.88**	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)
F161A1U	A1U	11/13/2013		**0.88**	**14**	**0.95**	ND (<0.50)	ND (<0.50)	**1.8**	ND (<0.50)	**0.91**
		2/25/2014		**0.74**	**21**	**1.4**	ND (<0.50)	ND (<0.50)	**2.6**	**0.71**	**1.2**
		5/13/2014		ND (<0.50)	**14**	**1.1**	ND (<0.50)	ND (<0.50)	**2.0**	**0.50**	**0.85**
		5/13/2014	dup	**0.59**	**17**	**1.3**	ND (<0.50)	ND (<0.50)	**2.0**	**0.68**	**1.1**
		8/13/2014		ND (<0.50)	**15**	**1.1**	ND (<0.50)	ND (<0.50)	**2.2**	ND (<0.50)	**0.87**
		8/13/2014	dup	ND (<0.50)	**16**	**1.1**	ND (<0.50)	ND (<0.50)	**2.2**	ND (<0.50)	**0.88**
		11/12/2014		ND (<0.50)	**19**	**1.3**	ND (<0.50)	ND (<0.50)	**1.7**	**0.53**	**0.86**
		6/8/2015		ND (<0.50)	**17**	**0.90**	ND (<0.50)	ND (<0.50)	**1.0**	ND (<0.50)	**0.59**
		1/12/2016		ND (<0.50)	**16**	**0.94**	ND (<0.50)	ND (<0.50)	**1.1**	ND (<0.50)	**0.73**
		6/7/2016		ND (<0.50)	**18**	**1.2**	ND (<0.50)	ND (<0.50)	**1.4**	ND (<0.50)	**0.57**
		6/22/2017		ND (<0.50)	**12**	**0.60**	ND (<0.50)	ND (<0.50)	**0.79**	ND (<0.50)	ND (<0.50)
		6/7/2018		ND (<0.50)	**12**	**0.76**	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)
		6/7/2019		ND (<0.50)	**10** (F1)	**0.80**	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)
		6/4/2020		ND (<0.50)	**7.3**	**0.96**	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)

TABLE E-1
VOC RESULTS FOR MONITORING WELLS
EW-15 and EW-16 Trial Shutdown Evaluation
COE Perimeter Area, Palo Alto, California

Well	Flow Zone	Sample Date	Type	PCE	TCE	c-1,2-DCE	t-1,2-DCE	VC	1,1-DCE	1,1,1-TCA	1,1-DCA
EW-16	A1	11/13/2013		**270**	**56**	**10**	**1.2**	ND (<0.50)	**5.5**	**2.2**	**2.2**
		2/25/2014		**130**	**40**	**34**	**2.1**	ND (<0.50)	**3.4**	**1.6**	**1.6**
		5/13/2014		**28**	**9.6**	**190**	**1.9**	ND (<0.50)	**1.9**	**0.5**	**1.1**
		8/13/2014		**22**	**9.0**	**200**	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)
		11/12/2014		**14**	**9.9**	**200**	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)
		6/9/2015		**9.2**	**5.3**	**25**	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)
		1/12/2016		**34**	**18**	**25**	**2.8**	ND (<0.50)	**0.94**	ND (<0.50)	**0.98**
		6/6/2016		**13**	**7.1**	**31**	**1.9**	ND (<0.50)	**0.51**	ND (<0.50)	**0.61**
		6/5/2017		**8.0**	**4.9**	**9.5**	**0.85**	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)
		6/4/2018		**17**	**9.3**	**9.1**	**0.78**	ND (<0.50)	ND (<0.50)	ND (<0.50)	**0.50**
		6/5/2019		**8.9**	**5.4**	**6.7**	**1.0**	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)
		6/3/2020		**7.1**	**4.9**	**14**	**2.7**	ND (<0.50)	ND (<0.50)	ND (<0.50)	**0.62**
F74A	A1	11/13/2013		ND (<0.50)	**35**	**1.0**	ND (<0.50)	ND (<0.50)	**2.6**	ND (<0.50)	**1.4**
		2/25/2014		ND (<0.50)	**42**	**1.1**	ND (<0.50)	ND (<0.50)	**3.4**	ND (<0.50)	**1.5**
		5/13/2014		ND (<0.50)	**33**	**0.93**	ND (<0.50)	ND (<0.50)	**3.1**	ND (<0.50)	**1.3**
		6/10/2014		ND (<0.50)	**33**	**0.90**	ND (<0.50)	ND (<0.50)	**2.8**	ND (<0.50)	**1.4**
		8/13/2014		ND (<0.50)	**36**	**1.0**	ND (<0.50)	ND (<0.50)	**3.3**	ND (<0.50)	**1.4**
		11/12/2014		ND (<0.50)	**36**	**1.1**	ND (<0.50)	ND (<0.50)	**2.8**	ND (<0.50)	**1.4**
		6/10/2015		ND (<0.50)	**34**	**0.90**	ND (<0.50)	ND (<0.50)	**2.9**	ND (<0.50)	**1.2**
		1/12/2016		ND (<0.50)	**33**	**0.94**	ND (<0.50)	ND (<0.50)	**2.7**	ND (<0.50)	**1.3**
		6/7/2016		ND (<0.50)	**37**	**1.0**	ND (<0.50)	ND (<0.50)	**3.2**	ND (<0.50)	**1.2**
		6/8/2017		ND (<0.50)	**32**	**1.1**	ND (<0.50)	ND (<0.50)	**3.2**	ND (<0.50)	**1.2**
		6/7/2018		ND (<0.50)	**38**	**1.4**	ND (<0.50)	ND (<0.50)	**2.4**	ND (<0.50)	**1.2**
		6/7/2019		ND (<0.50)	**31**	**1.4**	ND (<0.50)	ND (<0.50)	**2.2**	**0.51**	**1.2**
		6/4/2020		ND (<0.50)	**34**	**1.7**	ND (<0.50)	ND (<0.50)	**2.1**	ND (<0.50)	**1.2**
F89A	A1	11/13/2013		ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)
		2/25/2014		ND (<0.50)	**0.89**	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)
		6/10/2014		ND (<0.50)	**14**	**4.0**	ND (<0.50)	ND (<0.50)	**2.1**	**0.91**	**0.57**
		8/13/2014		ND (<0.50)	**12**	**3.4**	ND (<0.50)	ND (<0.50)	**1.9**	**0.71**	ND (<0.50)
		11/12/2014		ND (<0.50)	**14**	**4.6**	ND (<0.50)	ND (<0.50)	**1.7**	**0.95**	**0.57**
		6/9/2015		ND (<0.50)	**11**	**3.1**	ND (<0.50)	ND (<0.50)	**0.94**	**0.72**	ND (<0.50)
		1/12/2016		ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)
		6/6/2016		ND (<0.50)	**0.77**	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)
		6/5/2017		ND (<0.50)	**7.3**	**1.4**	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)
		6/4/2018		ND (<0.50)	**13**	**2.4**	ND (<0.50)	ND (<0.50)	**0.73**	**0.65**	ND (<0.50)
		6/4/2019		ND (<0.50)	**11**	**1.6**	ND (<0.50)	ND (<0.50)	**0.55**	ND (<0.50)	ND (<0.50)
F142A1	A1	11/13/2013		ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)
		2/25/2014		ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)
		5/13/2014		ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)
		6/10/2014		ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)
		8/13/2014		ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)
		11/12/2014		ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)
		6/10/2015		ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)
		1/12/2016		ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)
		6/7/2016		ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)
		6/8/2017		ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)
		6/7/2018		ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)
		6/7/2019		ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)
		6/4/2020		ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)	ND (<0.50)

Notes and Abbreviations:

All results are reported in micrograms per liter (ug/L)

Only chemicals detected above the laboratory reporting limit in one or more samples are included on this table

dup: duplicate sample

F1: Associated MS/MSD sample outside control limit

PCE: Tetrachloroethene
TCE: Trichloroethene
c-1,2-DCE: cis-1,2-dichloroethene
t-1,2-DCE: trans-1,2-dichloroethene
1,1-DCA: 1,1-dichloroethane
1,1-DCE: 1,1-dichloroethene
1,1,1-TCA: 1,1,1-trichloroethane
VC: vinyl chloride

Figure E-1
A1 Upper Zone Monitoring Well VOC Concentration Changes
EW-15 and EW-16 Trial Shutdown Evaluation
COE Perimeter Area, Palo Alto, CA

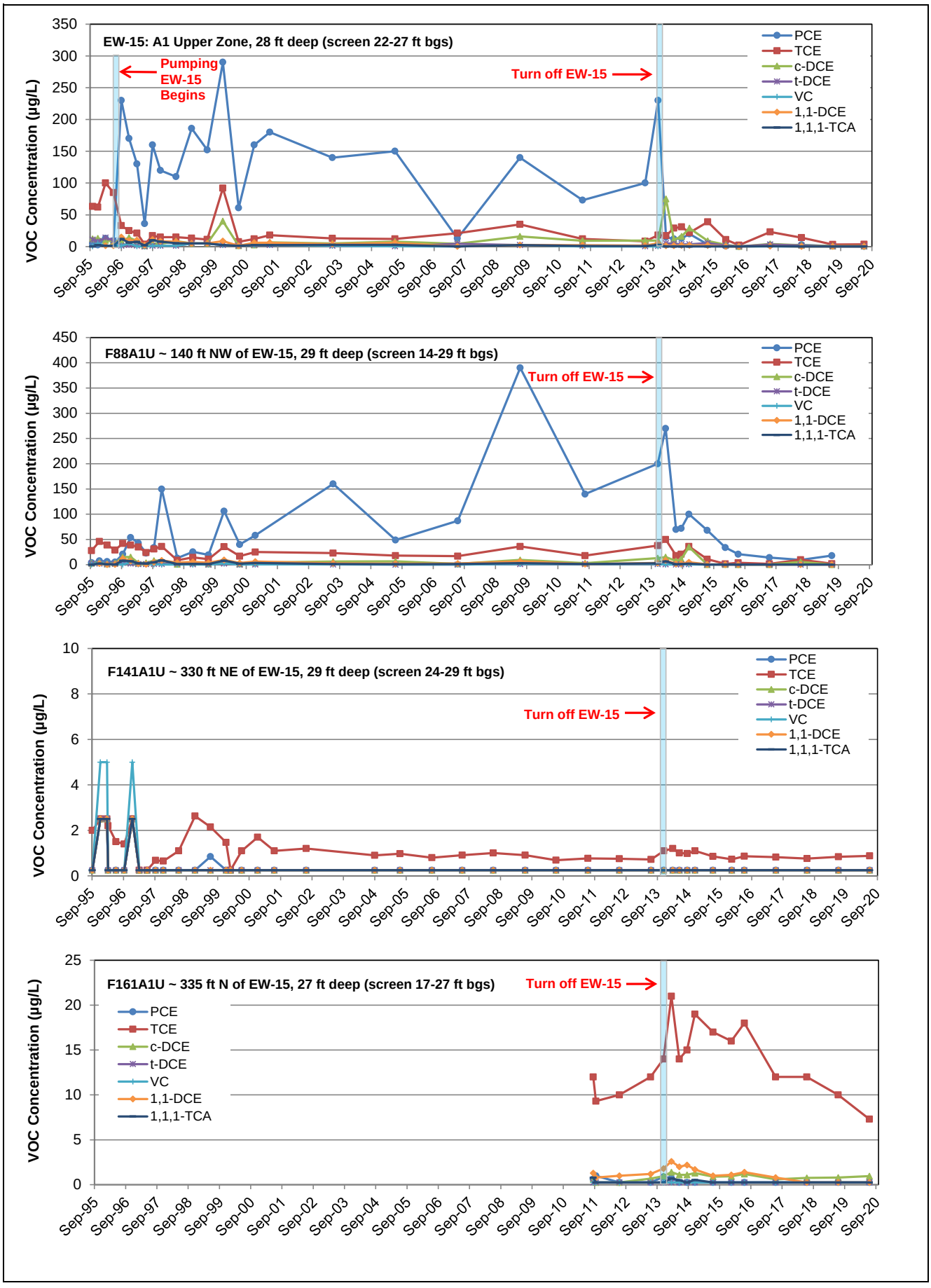
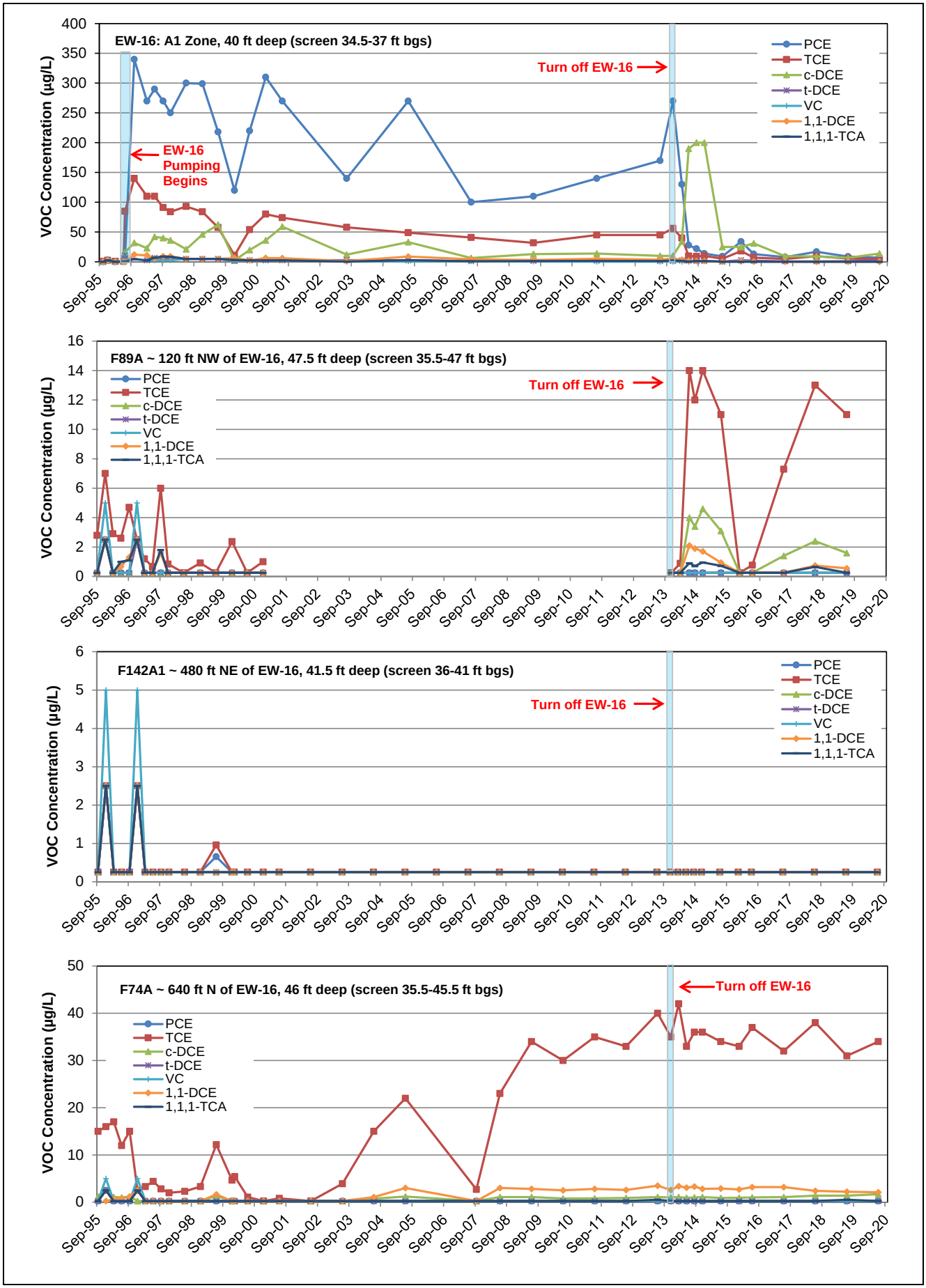


Figure E-2
A1 Zone Monitoring Well VOC Concentration Changes
EW-15 and EW-16 Trial Shutdown Evaluation
COE Perimeter Area, Palo Alto, CA



APPENDIX I

REGULATORY AGENCY DATABASE REPORT

GeoSearch
On time. On target. In touch.™

Radius Report

GeoLens by GeoSearch

Target Property:

El Camino Center
200-340, 3040, 3180, and 3200 Park Avenue
Palo Alto, Santa Clara County, California 94306

Prepared For:

PES Environmental, Inc.

Order #: 154956
Job #: 376059
Project #: 126.076.02
PO #: 126.076.02.001
Date: 10/23/2020

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Unlocatable Report . . . . . See Attachment

Zip Report . . . . . See Attachment

Disclaimer

This report was designed by GeoSearch to meet or exceed the records search requirements of the All Appropriate Inquiries Rule (40 CFR ï¿½312.26) and the current version of the ASTM International E1527, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process or, if applicable, the custom requirements requested by the entity that ordered this report. The records and databases of records used to compile this report were collected from various federal,state and local governmental entities. It is the goal of GeoSearch to meet or exceed the 40 CFR ï¿½312.26 and E1527 requirements for updating records by using the best available technology. GeoSearch contacts the appropriate governmental entities on a recurring basis. Depending on the frequency with which a record source or database of records is updated by the governmental entity, the data used to prepare this report may be updated monthly, quarterly, semi-annually, or annually.

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Target Property Summary

Target Property Information

El Camino Center
200-340, 3040, 3180, and 3200 Park Avenue
Palo Alto, California 94306

Coordinates
Area centroid (-122.13662, 37.4243779)
33 feet above sea level

USGS Quadrangle
Palo Alto, CA

Geographic Coverage Information

County/Parish: Santa Clara (CA)
ZipCode(s):
Stanford CA: 94305
Palo Alto CA: 94301, 94303, 94304, 94306

Database Summary

FEDERAL LISTING

Standard Environmental Records

Database	Acronym	Locatable	Unlocatable	Search Radius (miles)
EMERGENCY RESPONSE NOTIFICATION SYSTEM	ERNSCA	0	0	TP/AP
FEDERAL ENGINEERING INSTITUTIONAL CONTROL SITES	EC	0	0	TP/AP
LAND USE CONTROL INFORMATION SYSTEM	LUCIS	0	0	TP/AP
RCRA SITES WITH CONTROLS	RCRASC	0	0	TP/AP
RESOURCE CONSERVATION & RECOVERY ACT - GENERATOR	RCRAGR09	11	0	0.1250
RESOURCE CONSERVATION & RECOVERY ACT - NON-GENERATOR	RCRANGR09	19	0	0.1250
BROWNFIELDS MANAGEMENT SYSTEM	BF	0	0	0.5000
DELISTED NATIONAL PRIORITIES LIST	DNPL	0	0	0.5000
NO LONGER REGULATED RCRA NON-CORRACTS TSD FACILITIES	NLRRCRAT	0	0	0.5000
RESOURCE CONSERVATION & RECOVERY ACT - NON-CORRACTS TREATMENT, STORAGE & DISPOSAL FACILITIES	RCRAT	2	0	0.5000
SUPERFUND ENTERPRISE MANAGEMENT SYSTEM	SEMS	1	0	0.5000
SUPERFUND ENTERPRISE MANAGEMENT SYSTEM ARCHIVED SITE INVENTORY	SEMSARCH	7	0	0.5000
NATIONAL PRIORITIES LIST	NPL	1	0	1.0000
NO LONGER REGULATED RCRA CORRECTIVE ACTION FACILITIES	NLRRCRAC	0	0	1.0000
PROPOSED NATIONAL PRIORITIES LIST	PNPL	0	0	1.0000
RESOURCE CONSERVATION & RECOVERY ACT - CORRECTIVE ACTION FACILITIES	RCRAC	5	0	1.0000
RESOURCE CONSERVATION & RECOVERY ACT - SUBJECT TO CORRECTIVE ACTION FACILITIES	RCRASUBC	1	0	1.0000

SUB-TOTAL		47	0	

Additional Environmental Records

Database	Acronym	Locatable	Unlocatable	Search Radius (miles)
AEROMETRIC INFORMATION RETRIEVAL SYSTEM / AIR FACILITY SUBSYSTEM	AIRSAFS	0	0	TP/AP
BIENNIAL REPORTING SYSTEM	BRS	0	0	TP/AP
CERCLIS LIENS	SFLIENS	0	0	TP/AP
CLANDESTINE DRUG LABORATORY LOCATIONS	CDL	0	0	TP/AP
EPA DOCKET DATA	DOCKETS	0	0	TP/AP
ENFORCEMENT AND COMPLIANCE HISTORY INFORMATION	ECHOR09	4	0	TP/AP
FACILITY REGISTRY SYSTEM	FRSCA	7	0	TP/AP

Database Summary

Database	Acronym	Locatable	Unlocatable	Search Radius (miles)
HAZARDOUS MATERIALS INCIDENT REPORTING SYSTEM	HMIRSR09	0	0	TP/AP
HAZARDOUS WASTE COMPLIANCE DOCKET FACILITIES	HWCD	0	0	TP/AP
INTEGRATED COMPLIANCE INFORMATION SYSTEM (FORMERLY DOCKETS)	ICIS	0	0	TP/AP
INTEGRATED COMPLIANCE INFORMATION SYSTEM NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM	ICISNPDES	0	0	TP/AP
MATERIAL LICENSING TRACKING SYSTEM	MLTS	0	0	TP/AP
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM	NPDESR09	0	0	TP/AP
PCB ACTIVITY DATABASE SYSTEM	PADS	0	0	TP/AP
PERMIT COMPLIANCE SYSTEM	PCSR09	0	0	TP/AP
SEMS LIEN ON PROPERTY	SEMSLIENS	0	0	TP/AP
SSEHRI PFAS CONTAMINATION SITES	SSEHRIPFAS	0	0	TP/AP
SECTION SEVEN TRACKING SYSTEM	SSTS	0	0	TP/AP
TOXIC SUBSTANCE CONTROL ACT INVENTORY	TSCA	0	0	TP/AP
TOXICS RELEASE INVENTORY	TRI	0	0	TP/AP
ALTERNATIVE FUELING STATIONS	ALTFUELS	2	0	0.2500
FEMA OWNED STORAGE TANKS	FEMAUST	0	0	0.2500
HISTORICAL GAS STATIONS	HISTPST	0	0	0.2500
INTEGRATED COMPLIANCE INFORMATION SYSTEM DRYCLEANERS	ICISCLEANERS	0	0	0.2500
MINE SAFETY AND HEALTH ADMINISTRATION MASTER INDEX FILE	MSHA	0	0	0.2500
MINERAL RESOURCE DATA SYSTEM	MRDS	0	0	0.2500
OPEN DUMP INVENTORY	ODI	0	0	0.5000
SURFACE MINING CONTROL AND RECLAMATION ACT SITES	SMCRA	0	0	0.5000
URANIUM MILL TAILINGS RADIATION CONTROL ACT SITES	USUMTRCA	0	0	0.5000
DEPARTMENT OF DEFENSE SITES	DOD	0	0	1.0000
FORMER MILITARY NIKE MISSILE SITES	NMS	0	0	1.0000
FORMERLY USED DEFENSE SITES	FUDS	0	0	1.0000
FORMERLY UTILIZED SITES REMEDIAL ACTION PROGRAM	FUSRAP	0	0	1.0000
RECORD OF DECISION SYSTEM	RODS	1	0	1.0000

SUB-TOTAL		14	0	

Database Summary

STATE (CA) LISTING

Standard Environmental Records

Database	Acronym	Locatable	Unlocatable	Search Radius (miles)
DTSC DEED RESTRICTIONS	DTSCDR	0	0	TP/AP
ABOVE GROUND STORAGE TANKS	ABST	1	0	0.2500
ABOVEGROUND STORAGE TANKS PRIOR TO JANUARY 2008	AST2007	0	0	0.2500
HISTORICAL UNDERGROUND STORAGE TANKS	HISTUST	10	0	0.2500
STATEWIDE ENVIRONMENTAL EVALUATION AND PLANNING SYSTEM	SWEEPS	11	0	0.2500
UNDERGROUND STORAGE TANKS	USTCUPA	1	0	0.2500
BROWNFIELD SITES	BF	3	0	0.5000
CALSITES DATABASE	CALSITES	4	0	0.5000
GEOTRACKER CLEANUP SITES	CLEANUPSITES	59	0	0.5000
LEAKING UNDERGROUND STORAGE TANKS	LUST	34	0	0.5000
SOLID WASTE INFORMATION SYSTEM SITES	SWIS	0	0	0.5000
VOLUNTARY CLEANUP PROGRAM	VCP	1	0	0.5000
ENVIROSTOR CLEANUP SITES	ENVIROSTOR	18	0	1.0000
ENVIROSTOR PERMITTED AND CORRECTIVE ACTION SITES	ENVIROSTORPCA	6	0	1.0000

SUB-TOTAL		148	0	

Additional Environmental Records

Database	Acronym	Locatable	Unlocatable	Search Radius (miles)
CALIFORNIA HAZARDOUS MATERIAL INCIDENT REPORT SYSTEM	CHMIRS	1	0	TP/AP
CLANDESTINE DRUG LABS	CDL	0	0	TP/AP
EMISSIONS INVENTORY DATA	EMI	0	0	TP/AP
HAZARDOUS WASTE TANNER SUMMARY	HWTS	4	0	TP/AP
LAND DISPOSAL SITES	LDS	0	0	TP/AP
MILITARY CLEANUP SITES	MCS	0	0	TP/AP
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM FACILITIES	NPDES	0	0	TP/AP
PFAS SAMPLING LOCATION SITES	PFAS	0	0	TP/AP
RECORDED ENVIRONMENTAL CLEANUP LIENS	LIENS	0	0	TP/AP
CALIFORNIA MEDICAL WASTE MANAGEMENT PROGRAM FACILITY LIST	MWMP	0	0	0.2500
DTSC REGISTERED HAZARDOUS WASTE TRANSPORTERS	DTSCHWT	0	0	0.2500
DRY CLEANER FACILITIES	CLEANER	1	0	0.2500

Database Summary

Database	Acronym	Locatable	Unlocatable	Search Radius (miles)
MINES LISTING	MINES	0	0	0.2500
SPILLS, LEAKS, INVESTIGATION & CLEANUP RECOVERY LISTING	SLIC	22	0	0.2500
CORTESE LIST	CORTESE	1	0	0.5000
EXPEDITED REMOVAL ACTION PROGRAM SITES	ERAP	0	0	0.5000
HISTORICAL CORTESE LIST	HISTCORTESE	24	0	0.5000
LISTING OF CERTIFIED DROPOFF, COLLECTION, AND COMMUNITY SERVICE PROGRAMS	DROP	0	0	0.5000
LISTING OF CERTIFIED PROCESSORS	PROC	1	0	0.5000
NO FURTHER ACTION DETERMINATION	NFA	2	0	0.5000
RECYCLING CENTERS	SWRCY	5	0	0.5000
REFERRED TO ANOTHER LOCAL OR STATE AGENCY	REF	7	0	0.5000
SITES NEEDING FURTHER EVALUATION	NFE	0	0	0.5000
WASTE MANAGEMENT UNIT DATABASE	WMUDS	0	0	0.5000
TOXIC PITS CLEANUP ACT SITES	TOXPITS	0	0	1.0000

SUB-TOTAL		68	0	

TRIBAL LISTING

Standard Environmental Records

Database	Acronym	Locatable	Unlocatable	Search Radius (miles)
UNDERGROUND STORAGE TANKS ON TRIBAL LANDS	USTR09	0	0	0.2500
ILLEGAL DUMP SITES ON THE TORRES MARTINEZ RESERVATION	TORRESDUMPSITES	0	0	0.5000
LEAKING UNDERGROUND STORAGE TANKS ON TRIBAL LANDS	LUSTR09	0	0	0.5000
OPEN DUMP INVENTORY ON TRIBAL LANDS	ODINDIAN	0	0	0.5000
SUB-TOTAL		0	0	

Additional Environmental Records

Database	Acronym	Locatable	Unlocatable	Search Radius (miles)
INDIAN RESERVATIONS	INDIANRES	0	0	1.0000
SUB-TOTAL		0	0	

TOTAL		277	0	

Database Radius Summary

FEDERAL LISTING

*Standard environmental records are displayed in **bold**.*

Acronym	Search Radius (miles)	TP/AP (0 - 0.02)	1/8 Mile (> TP/AP)	1/4 Mile (> 1/8)	1/2 Mile (> 1/4)	1 Mile (> 1/2)	> 1 Mile	Total
AIRSAFS	0.0200	0	NS	NS	NS	NS	NS	0
BRS	0.0200	0	NS	NS	NS	NS	NS	0
CDL	0.0200	0	NS	NS	NS	NS	NS	0
DOCKETS	0.0200	0	NS	NS	NS	NS	NS	0
EC	**0.0200**	**0**	**NS**	**NS**	**NS**	**NS**	**NS**	**0**
ECHOR09	0.0200	4	NS	NS	NS	NS	NS	4
ERNSCA	**0.0200**	**0**	**NS**	**NS**	**NS**	**NS**	**NS**	**0**
FRSCA	0.0200	7	NS	NS	NS	NS	NS	7
HMIRSR09	0.0200	0	NS	NS	NS	NS	NS	0
HWCD	0.0200	0	NS	NS	NS	NS	NS	0
ICIS	0.0200	0	NS	NS	NS	NS	NS	0
ICISNPDES	0.0200	0	NS	NS	NS	NS	NS	0
LUCIS	**0.0200**	**0**	**NS**	**NS**	**NS**	**NS**	**NS**	**0**
MLTS	0.0200	0	NS	NS	NS	NS	NS	0
NPDESR09	0.0200	0	NS	NS	NS	NS	NS	0
PADS	0.0200	0	NS	NS	NS	NS	NS	0
PCSR09	0.0200	0	NS	NS	NS	NS	NS	0
RCRASC	**0.0200**	**0**	**NS**	**NS**	**NS**	**NS**	**NS**	**0**
SEMSLIENS	0.0200	0	NS	NS	NS	NS	NS	0
SFLIENS	0.0200	0	NS	NS	NS	NS	NS	0
SSEHRIPFAS	0.0200	0	NS	NS	NS	NS	NS	0
SSTS	0.0200	0	NS	NS	NS	NS	NS	0
TRI	0.0200	0	NS	NS	NS	NS	NS	0
TSCA	0.0200	0	NS	NS	NS	NS	NS	0
RCRAGR09	**0.1250**	**2**	**9**	**NS**	**NS**	**NS**	**NS**	**11**
RCRANGR09	**0.1250**	**2**	**17**	**NS**	**NS**	**NS**	**NS**	**19**
ALTFUELS	0.2500	0	2	0	NS	NS	NS	2
FEMAUST	0.2500	0	0	0	NS	NS	NS	0
HISTPST	0.2500	0	0	0	NS	NS	NS	0
ICISCLEANERS	0.2500	0	0	0	NS	NS	NS	0
MRDS	0.2500	0	0	0	NS	NS	NS	0
MSHA	0.2500	0	0	0	NS	NS	NS	0
BF	**0.5000**	**0**	**0**	**0**	**0**	**NS**	**NS**	**0**
DNPL	**0.5000**	**0**	**0**	**0**	**0**	**NS**	**NS**	**0**
NLRRCRAT	**0.5000**	**0**	**0**	**0**	**0**	**NS**	**NS**	**0**

Database Radius Summary

Acronym	Search Radius (miles)	TP/AP (0 - 0.02)	1/8 Mile (> TP/AP)	1/4 Mile (> 1/8)	1/2 Mile (> 1/4)	1 Mile (> 1/2)	> 1 Mile	Total
ODI	0.5000	0	0	0	0	NS	NS	0
RCRAT	**0.5000**	**0**	**1**	**0**	**1**	**NS**	**NS**	**2**
SEMS	**0.5000**	**0**	**0**	**0**	**1**	**NS**	**NS**	**1**
SEMSARCH	**0.5000**	**0**	**2**	**1**	**4**	**NS**	**NS**	**7**
SMCRA	0.5000	0	0	0	0	NS	NS	0
USUMTRCA	0.5000	0	0	0	0	NS	NS	0
DOD	1.0000	0	0	0	0	0	NS	0
FUDS	1.0000	0	0	0	0	0	NS	0
FUSRAP	1.0000	0	0	0	0	0	NS	0
NLRRCRAC	**1.0000**	**0**	**0**	**0**	**0**	**0**	**NS**	**0**
NMS	1.0000	0	0	0	0	0	NS	0
NPL	**1.0000**	**0**	**0**	**0**	**1**	**0**	**NS**	**1**
PNPL	**1.0000**	**0**	**0**	**0**	**0**	**0**	**NS**	**0**
RCRAC	**1.0000**	**0**	**1**	**0**	**2**	**2**	**NS**	**5**
RCRASUBC	**1.0000**	**0**	**0**	**0**	**0**	**1**	**NS**	**1**
RODS	1.0000	0	0	0	1	0	NS	1
SUB-TOTAL		15	32	1	10	3	0	61

Database Radius Summary

STATE (CA) LISTING

*Standard environmental records are displayed in **bold**.*

Acronym	Search Radius (miles)	TP/AP (0 - 0.02)	1/8 Mile (> TP/AP)	1/4 Mile (> 1/8)	1/2 Mile (> 1/4)	1 Mile (> 1/2)	> 1 Mile	Total
CDL	0.0200	0	NS	NS	NS	NS	NS	0
CHMIRS	0.0200	1	NS	NS	NS	NS	NS	1
DTSCDR	**0.0200**	**0**	**NS**	**NS**	**NS**	**NS**	**NS**	**0**
EMI	0.0200	0	NS	NS	NS	NS	NS	0
HWTS	0.0200	4	NS	NS	NS	NS	NS	4
LDS	0.0200	0	NS	NS	NS	NS	NS	0
LIENS	0.0200	0	NS	NS	NS	NS	NS	0
MCS	0.0200	0	NS	NS	NS	NS	NS	0
NPDES	0.0200	0	NS	NS	NS	NS	NS	0
PFAS	0.0200	0	NS	NS	NS	NS	NS	0
ABST	**0.2500**	**0**	**1**	**0**	**NS**	**NS**	**NS**	**1**
AST2007	**0.2500**	**0**	**0**	**0**	**NS**	**NS**	**NS**	**0**
CLEANER	0.2500	0	0	1	NS	NS	NS	1
DTSCHWT	0.2500	0	0	0	NS	NS	NS	0
HISTUST	**0.2500**	**0**	**5**	**5**	**NS**	**NS**	**NS**	**10**
MINES	0.2500	0	0	0	NS	NS	NS	0
MWMP	0.2500	0	0	0	NS	NS	NS	0
SLIC	0.2500	1	11	10	NS	NS	NS	22
SWEEPS	**0.2500**	**0**	**6**	**5**	**NS**	**NS**	**NS**	**11**
USTCUPA	**0.2500**	**0**	**1**	**0**	**NS**	**NS**	**NS**	**1**
BF	**0.5000**	**0**	**1**	**0**	**2**	**NS**	**NS**	**3**
CALSITES	**0.5000**	**0**	**1**	**0**	**3**	**NS**	**NS**	**4**
CLEANUPSITES	**0.5000**	**2**	**16**	**16**	**25**	**NS**	**NS**	**59**
CORTESE	0.5000	0	0	0	1	NS	NS	1
DROP	0.5000	0	0	0	0	NS	NS	0
ERAP	0.5000	0	0	0	0	NS	NS	0
HISTCORTESE	0.5000	0	5	4	15	NS	NS	24
LUST	**0.5000**	**1**	**8**	**10**	**15**	**NS**	**NS**	**34**
NFA	0.5000	0	0	0	2	NS	NS	2
NFE	0.5000	0	0	0	0	NS	NS	0
PROC	0.5000	0	0	0	1	NS	NS	1
REF	0.5000	0	3	0	4	NS	NS	7
SWIS	**0.5000**	**0**	**0**	**0**	**0**	**NS**	**NS**	**0**
SWRCY	0.5000	0	0	0	5	NS	NS	5
VCP	**0.5000**	**0**	**0**	**1**	**0**	**NS**	**NS**	**1**

Database Radius Summary

Acronym	Search Radius (miles)	TP/AP (0 - 0.02)	1/8 Mile (> TP/AP)	1/4 Mile (> 1/8)	1/2 Mile (> 1/4)	1 Mile (> 1/2)	> 1 Mile	Total
WMUDS	0.5000	0	0	0	0	NS	NS	0
ENVIROSTOR	**1.0000**	**0**	**3**	**1**	**7**	**7**	**NS**	**18**
ENVIROSTORPCA	**1.0000**	**0**	**1**	**0**	**2**	**3**	**NS**	**6**
TOXPITS	1.0000	0	0	0	0	0	NS	0
SUB-TOTAL		9	62	53	82	10	0	216

Database Radius Summary

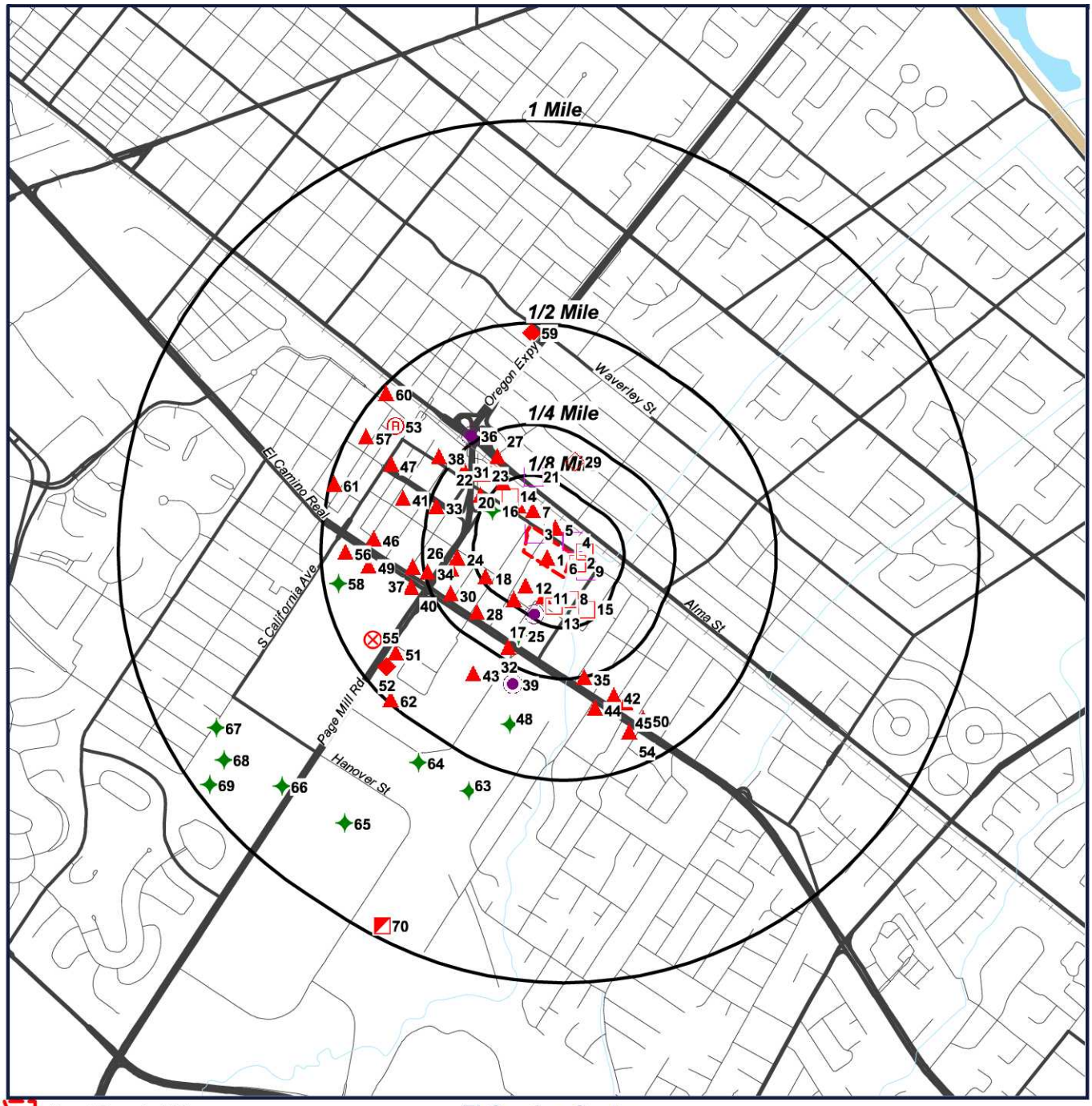
TRIBAL LISTING

*Standard environmental records are displayed in **bold**.*

Acronym	Search Radius (miles)	TP/AP (0 - 0.02)	1/8 Mile (> TP/AP)	1/4 Mile (> 1/8)	1/2 Mile (> 1/4)	1 Mile (> 1/2)	> 1 Mile	Total
USTR09	**0.2500**	**0**	**0**	**0**	**NS**	**NS**	**NS**	**0**
LUSTR09	**0.5000**	**0**	**0**	**0**	**0**	**NS**	**NS**	**0**
ODINDIAN	**0.5000**	**0**	**0**	**0**	**0**	**NS**	**NS**	**0**
TORRESDUMPSITES	**0.5000**	**0**	**0**	**0**	**0**	**NS**	**NS**	**0**
INDIANRES	1.0000	0	0	0	0	0	NS	0
SUB-TOTAL		0	0	0	0	0	0	0
TOTAL		24	94	54	92	13	0	277

NOTES:
NS = NOT SEARCHED
TP/AP = TARGET PROPERTY/ADJACENT PROPERTY

Radius Map 1



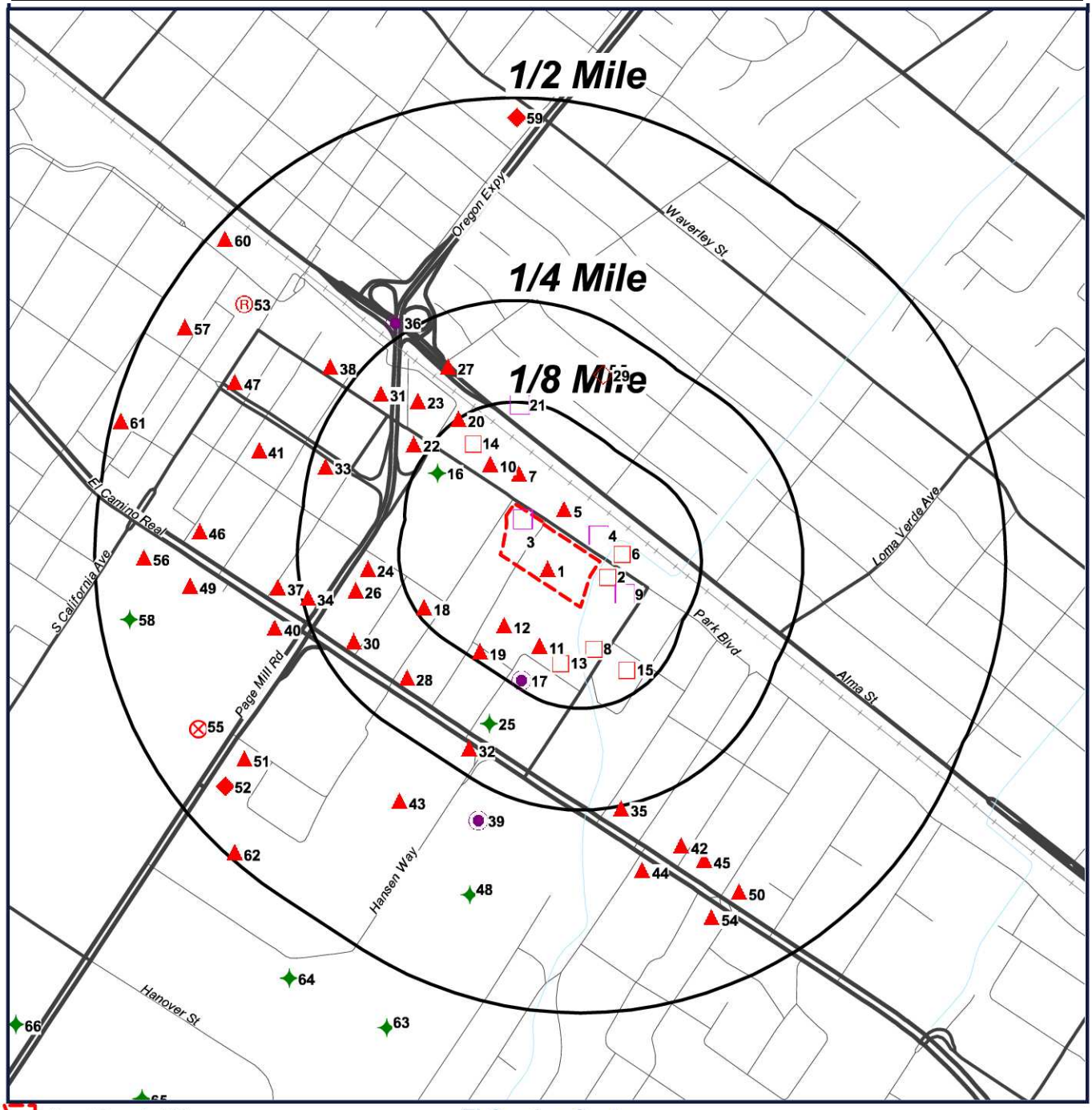
Target Property (TP)
CLEANUPSITES
RCRAGR09
RCRANGR09
ENVIROSTOR
CALSITES
SWEEPS
SLIC
LUST
SWRCY
NPL
RCRAC

El Camino Center
200-340, 3040, 3180, and 3200 Park Avenue
Palo Alto, California
94306

N
W E
S

0' 1000' 2000' 3000'
SCALE: 1" = 2000'

Radius Map 2



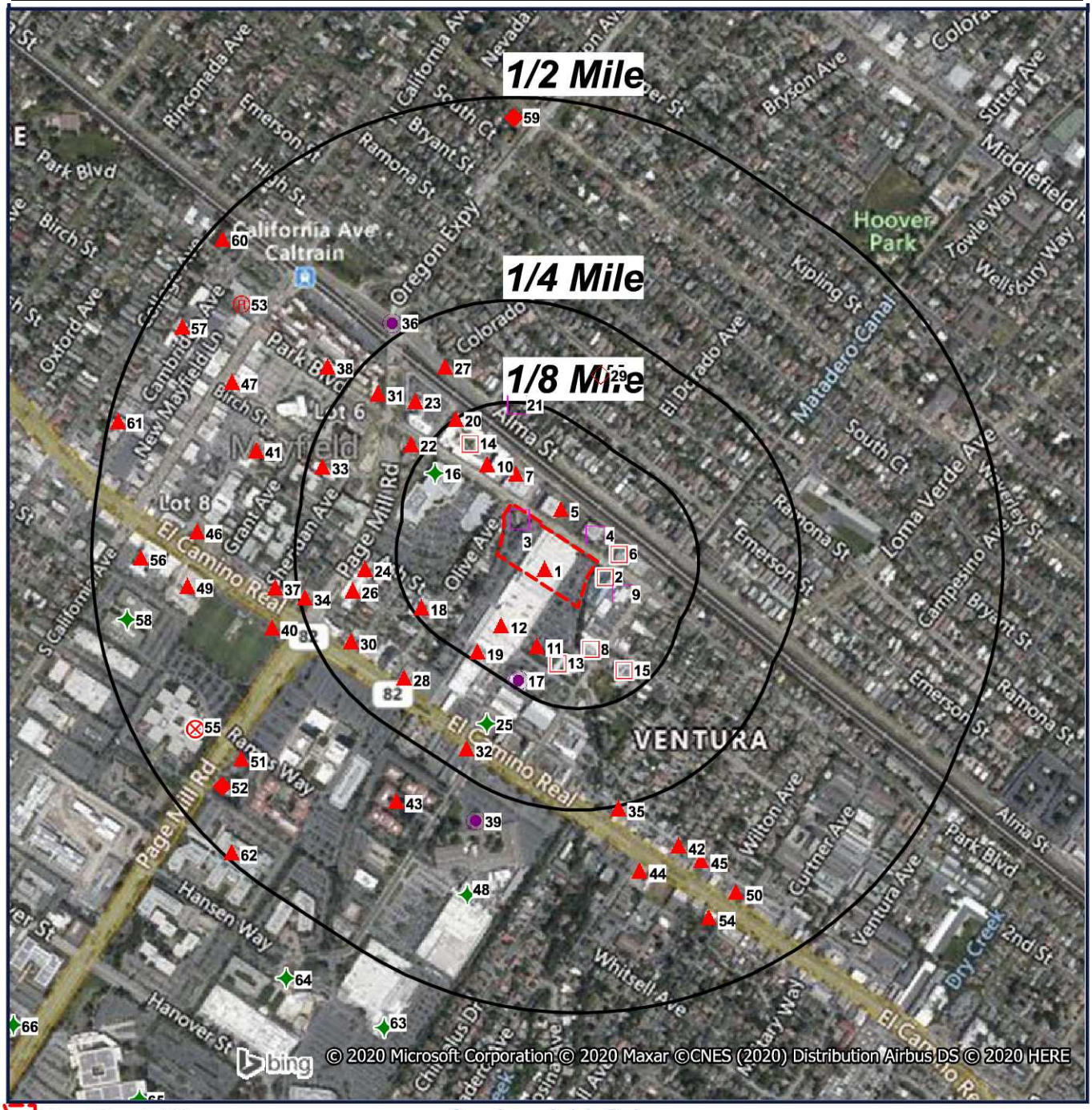
Target Property (TP)
CLEANUPSITES
RCRAGR09
RCRANGR09
ENVIROSTOR
CALSITES
SWEEPS
SLIC
LUST
SWRCY
NPL
RCRAC

El Camino Center
200-340, 3040, 3180, and 3200 Park Avenue
Palo Alto, California 94306

N W E S

0' 500' 1000' 1500'
SCALE: 1" = 1000'

Ortho Map



Target Property (TP)
CLEANUPSITES
RCRAGR09
RCRANGR09
ENVIROSTOR
CALSITES
SWEEPS
SLIC
LUST
SWRCY
NPL
RCRAC

Quadrangle(s): Palo Alto
El Camino Center
200-340, 3040, 3180, and 3200
Park Avenue
Palo Alto, California
94306

N
W E
S

0' 500' 1000' 1500'
SCALE: 1" = 1000'

Topographic Map



Quadrangle(s): Palo Alto
Source: USGS, 05/10/2012
El Camino Center
200-340, 3040, 3180, and 3200
Park Avenue
Palo Alto, California
94306

N
W E
S

0' 1000' 2000' 3000'
SCALE: 1" = 2000'

Located Sites Summary

*NOTE: Standard environmental records are displayed in **bold**.*

Map ID#	Database Name	Site ID#	Relative Elevation	Distance From Site	Site Name	Address	PAGE #
1	CHMIRS	13-3775	Equal (33 ft.)	TP	STORM DRAIN TO MATADERO CREEK TO S.F. BAY.	210 PORTAGE AVENUE, PALO ALTO, CA 94303	54
1	***CLEANUPSITES***	***SL0608568096***	***Equal (33 ft.)***	***TP***	***MERCER PROCESSING***	***230 PORTAGE AVE, PALO ALTO, CA 94306***	***55***
1	***CLEANUPSITES***	***T10000003606***	***Equal (33 ft.)***	***TP***	***EL CAMINO CENTER***	***340 PORTAGE AVENUE, PALO ALTO, CA 94306***	***57***
1	ECHOR09	110002740204	Equal (33 ft.)	TP	SYSTEMS CONTROL INC	220 PORTAGE, PALO ALTO, CA 94306	60
1	FRSCA	110002740204	Equal (33 ft.)	TP	SYSTEMS CONTROL INC	220 PORTAGE, PALO ALTO, CA 94306	61
1	FRSCA	110065985642	Equal (33 ft.)	TP	MERCER PROCESSING	230 PORTAGE AVE, PALO ALTO, CA 94306	62
1	FRSCA	110066240856	Equal (33 ft.)	TP	EL CAMINO CENTER	340 PORTAGE AVENUE, PALO ALTO, CA 94306	63
1	HWTS	CAC002675759	Equal (33 ft.)	TP	EL CAMINO CENTER	340 PORTAGE AVE, PALO ALTO, CA 94306	64
1	***LUST***	***T10000003606***	***Equal (33 ft.)***	***TP***	***EL CAMINO CENTER***	***340 PORTAGE AVENUE, PALO ALTO, CA 94306***	***65***
1	***RCRAGR09***	***CAD981657984***	***Equal (33 ft.)***	***TP***	***SYSTEMS CONTROL INC***	***220 PORTAGE, PALO ALTO, CA 94306***	***67***
1	SLIC	SL0608568096	Equal (33 ft.)	TP	MERCER PROCESSING	230 PORTAGE AVE, PALO ALTO, CA 94306	68
2	ECHOR09	110017217135	Lower (32 ft.)	0.018 mi. ESE (95 ft.)	PARK AVE MOTORS	3250 PARK BLVD, PALO ALTO, CA 94306	69
2	ECHOR09	110070423282	Lower (32 ft.)	0.018 mi. ESE (95 ft.)	KUNI REDWOOD MOTORS LLC DBA AUDI PALO ALTO	3250 PARK BLVD, PALO ALTO, CA 94303	70
2	FRSCA	110017217135	Lower (32 ft.)	0.018 mi. ESE (95 ft.)	PARK AVE MOTORS	3250 PARK BLVD, PALO ALTO, CA 94306	71
2	FRSCA	110070423282	Lower (32 ft.)	0.018 mi. ESE (95 ft.)	KUNI REDWOOD MOTORS LLC DBA AUDI PALO ALTO	3250 PARK BLVD, PALO ALTO, CA 94303	72
2	HWTS	CAC001305584	Lower (32 ft.)	TP	WSJ PROPERTIES	3200 PARK BLVD, PALO ALTO, CA 94306	73
2	HWTS	CAR000151357	Lower (32 ft.)	0.015 mi. ESE (79 ft.)	PARK AVE MOTORS	3250 PARK BLVD, PALO ALTO, CA 94306	74
2	***RCRAGR09***	***CAR000151357***	***Lower (32 ft.)***	***0.018 mi. ESE (95 ft.)***	***PARK AVE MOTORS***	***3250 PARK BLVD, PALO ALTO, CA 94306***	***77***
2	***RCRANGR09***	***CAL000421792***	***Lower (32 ft.)***	***0.018 mi. ESE (95 ft.)***	***KUNI REDWOOD MOTORS LLC DBA AUDI PALO ALTO***	***3250 PARK BLVD, PALO ALTO, CA 94303***	***79***
3	ECHOR09	110070490086	Equal (33 ft.)	TP	PARK AUTOMOTIVE	3040 PARK BLVD, PALO ALTO, CA 94306	81
3	FRSCA	110055737172	Equal (33 ft.)	TP	PARK AUTOMOTIVE SERVICE	3040 PARK BL, PALO ALTO, CA 94306	82
3	FRSCA	110070490086	Equal (33 ft.)	TP	PARK AUTOMOTIVE	3040 PARK BLVD, PALO ALTO, CA 94306	83

Located Sites Summary

*NOTE: Standard environmental records are displayed in **bold**.*

Map ID#	Database Name	Site ID#	Relative Elevation	Distance From Site	Site Name	Address	PAGE #
3	HWTS	CAL930295449	Equal (33 ft.)	TP	PARK AUTOMOTIVE	3040 PARK BLVD, PALO ALTO, CA 94306	84
3	***RCRANGR09***	***CAL930295449***	***Equal (33 ft.)***	***TP***	***PARK AUTOMOTIVE***	***3040 PARK BLVD, PALO ALTO, CA 94306***	***87***
4	***RCRANGR09***	***CAC002999555***	***Lower (32 ft.)***	***0.026 mi. NE (137 ft.)***	***PARK PLACE ASSOCIATES***	***3197 PARK BLVD., PALO ALTO, CA 94306***	***89***
5	***CLEANUPSITES***	***T0608501727***	***Equal (33 ft.)***	***0.027 mi. NE (143 ft.)***	***VANCE BROWN & SONS***	***3101 PARK BLVD, PALO ALTO, CA 94301***	***91***
5	***CLEANUPSITES***	***T10000007084***	***Equal (33 ft.)***	***0.027 mi. NE (143 ft.)***	***LOCKHEED-MARTIN***	***3101 PARK BOULEVARD, PALO ALTO, CA 94503***	***93***
5	HISTCORTESE	43-1799COR	Equal (33 ft.)	0.028 mi. NE (148 ft.)	VANCE BROWN & SONS	3101 PARK, PALO ALTO, CA 94306	95
5	***LUST***	***T0608501727***	***Equal (33 ft.)***	***0.027 mi. NE (143 ft.)***	***VANCE BROWN & SONS***	***3101 PARK BLVD, PALO ALTO, CA 94301***	***96***
5	***RCRANGR09***	***CAD981994593***	***Equal (33 ft.)***	***0.027 mi. NE (143 ft.)***	***LOCKHEED MISSLES & SPACE CO***	***3101 PARK BLVD, PALO ALTO, CA 94306***	***97***
5	SLIC	T10000007084	Equal (33 ft.)	0.027 mi. NE (143 ft.)	LOCKHEED-MARTIN	3101 PARK BOULEVARD, PALO ALTO, CA 94503	98
6	***RCRAGR09***	***CAR000098996***	***Lower (32 ft.)***	***0.029 mi. ENE (153 ft.)***	***PARK AVENUE MOTORS***	***3241 PARK AVE, PALO ALTO, CA 94306***	***99***
6	***RCRANGR09***	***CAL000441349***	***Lower (32 ft.)***	***0.029 mi. ENE (153 ft.)***	***AKINS BODY SHOP INC***	***3241 PARK BLVD, PALO ALTO, CA 94306***	***100***
7	***CLEANUPSITES***	***T10000009221***	***Equal (33 ft.)***	***0.034 mi. NNE (180 ft.)***	***FORMER AKINS AUTO BODY***	***3045 PARK BLVD., PALO ALTO, CA 94306***	***102***
7	***CLEANUPSITES***	***T10000010246***	***Equal (33 ft.)***	***0.034 mi. NNE (180 ft.)***	***3045 PARK BLVD DEVELOPMENT***	***3045 PARK BLVD, PALO ALTO, CA 94036***	***104***
7	***RCRANGR09***	***CAC002972947***	***Equal (33 ft.)***	***0.034 mi. NNE (180 ft.)***	***3045 PARK PROPERTY LLC***	***3045 PARK BOULEVARD, PALO ALTO, CA 94306***	***106***
7	***RCRANGR09***	***CAC002986615***	***Equal (33 ft.)***	***0.034 mi. NNE (180 ft.)***	***3045 PARK PROPERTY LLC***	***3045 PARK BLVD, PALO ALTO, CA 94306***	***108***
7	***RCRANGR09***	***CAC002993272***	***Equal (33 ft.)***	***0.034 mi. NNE (180 ft.)***	***3045 PARK PROPERTY LLC***	***3045 PARK BLVD, PALO ALTO, CA 94306***	***110***
7	***RCRANGR09***	***CAC003008436***	***Equal (33 ft.)***	***0.034 mi. NNE (180 ft.)***	***3045 PARK PROPERTY LLC***	***3045 PARK BLVD, PALO ALTO, CA 94306***	***112***
7	***RCRANGR09***	***CAC003023588***	***Equal (33 ft.)***	***0.034 mi. NNE (180 ft.)***	***3045 PARK PROPERTY LLC***	***3045 PARK BLVD., PALO ALTO, CA 94306***	***114***
7	***RCRANGR09***	***CAD981992639***	***Equal (33 ft.)***	***0.034 mi. NNE (180 ft.)***	***STANFORD BMW***	***3045 PARK BLVD, PALO ALTO, CA 94306***	***116***
7	SLIC	T10000010246	Equal (33 ft.)	0.034 mi. NNE (180 ft.)	3045 PARK BLVD DEVELOPMENT	3045 PARK BLVD, PALO ALTO, CA 94036	118

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Map ID#	Database Name	Site ID#	Relative Elevation	Distance From Site	Site Name	Address	PAGE #
8	***RCRAGR09***	***CAD982496853***	***Equal (33 ft.)***	***0.053 mi. SSE (280 ft.)***	***HELMINGS AUTO REPAIR***	***300 LAMBERT AVE, PALO ALTO, CA 94306***	***119***
8	***RCRANGR09***	***CAD063539217***	***Equal (33 ft.)***	***0.037 mi. SE (195 ft.)***	***ARTS BODYCRAFT INC***	***280 LAMBERT AVE, PALO ALTO, CA 94306***	***121***
8	***RCRANGR09***	***CAL000291378***	***Equal (33 ft.)***	***0.047 mi. SSE (248 ft.)***	***STANFORD ARCO AUTO CARE***	***290 LAMBERT AVE, PALO ALTO, CA 94306***	***123***
8	***RCRANGR09***	***CAL000379235***	***Equal (33 ft.)***	***0.042 mi. SE (222 ft.)***	***COMCAST OF CALIFORNIA IX,INC***	***278 LAMBERT ST, PALO ALTO, CA 94360***	***125***
9	***HISTUST***	***000206DF***	***Lower (32 ft.)***	***0.048 mi. ESE (253 ft.)***	***PARK AVENUE MOTORS***	***3290 PARK BLVD, PALO ALTO, CA 94306***	***127***
9	***RCRANGR09***	***CAD063548655***	***Lower (32 ft.)***	***0.048 mi. ESE (253 ft.)***	***PARK AVENUE MOTORS***	***3290 PARK BLVD, PALO ALTO, CA 94306***	***128***
9	***RCRANGR09***	***CAL000400217***	***Lower (32 ft.)***	***0.048 mi. ESE (253 ft.)***	***AKINS BODY SHOP INC***	***3290 PARK BLVD, PALO ALTO, CA 94306***	***129***
9	SLIC	2-43S0390	Lower (32 ft.)	0.067 mi. ESE (354 ft.)	MATADERO CREEK	BETWEEN LAMBER AVE & PARK BLVD, PALO ALTO, CA 94304	131
9	***SWEEPS***	***A43-006-59666***	***Lower (32 ft.)***	***0.048 mi. ESE (253 ft.)***	***PARK AVENUE MOTORS***	***3290 PARK BLVD, PALO ALTO, CA 94306***	***132***
10	***CLEANUPSITES***	***T10000008090***	***Lower (31 ft.)***	***0.055 mi. NW (290 ft.)***	***SOUTHERN PACIFIC***	***2901 PARK BOULEVARD, PALO ALTO, CA 94036***	***133***
10	***RCRAGR09***	***CAD064719859***	***Lower (31 ft.)***	***0.055 mi. NW (290 ft.)***	***AKINS BODY SHOP INC***	***2901 PARK BLVD, PALO ALTO, CA 94306***	***134***
10	SLIC	2-43S0773	Lower (31 ft.)	0.055 mi. NW (290 ft.)	PALO ALTO SOUTHERN PACIFIC SITE	2901 PARK BLVD, PALO ALTO, CA 94304	136
10	SLIC	T10000008090	Lower (31 ft.)	0.055 mi. NW (290 ft.)	SOUTHERN PACIFIC	2901 PARK BOULEVARD, PALO ALTO, CA 94036	137
11	***CLEANUPSITES***	***T0608501751***	***Equal (33 ft.)***	***0.069 mi. SW (364 ft.)***	***DURA BOND BEARING CO.***	***3201 ASH ST, PALO ALTO, CA 94306***	***138***
11	***CLEANUPSITES***	***T0608591604***	***Equal (33 ft.)***	***0.069 mi. SW (364 ft.)***	***DURA BOND***	***3201 ASH ST, PALO ALTO, CA 94306***	***140***
11	HISTCORTESE	43-1824COR	Equal (33 ft.)	0.069 mi. SW (364 ft.)	DURA BOND BEARING COMPANY	3201 ASH, PALO ALTO, CA 94306	141
11	***LUST***	***T0608501751***	***Equal (33 ft.)***	***0.069 mi. SW (364 ft.)***	***DURA BOND BEARING CO.***	***3201 ASH ST, PALO ALTO, CA 94306***	***142***
11	***LUST***	***T0608591604***	***Equal (33 ft.)***	***0.069 mi. SW (364 ft.)***	***DURA BOND***	***3201 ASH ST, PALO ALTO, CA 94306***	***143***
11	***SEMSARCH***	***CAD014440648***	***Equal (33 ft.)***	***0.069 mi. SW (364 ft.)***	***DURA-BOND***	***3201 ASH ST, PALO ALTO, CA 94306***	***144***
11	SLIC	2-43S0025	Equal (33 ft.)	0.069 mi. SW (364 ft.)	DURA BOND	3201 ASH ST, PALO ALTO, CA 94306	145
12	***CLEANUPSITES***	***SL18361781***	***Higher (34 ft.)***	***0.072 mi. SW (380 ft.)***	***DURA-BOND BEARING***	***370 PORTAGE AVENUE, PALO ALTO, CA***	***146***
12	***RCRANGR09***	***CAD982510208***	***Higher (34 ft.)***	***0.072 mi. SW (380 ft.)***	***VARIAN ASSOCIATES, INC***	***380 PORTAGE AVE, PALO ALTO, CA 94303***	***147***

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Map ID#	Database Name	Site ID#	Relative Elevation	Distance From Site	Site Name	Address	PAGE #
12	***RCRANGR09***	***CAL000423385***	***Higher (34 ft.)***	***0.072 mi. SW (380 ft.)***	***PLAYGROUND GLOBAL LLC***	***380 PORTAGE AVE, PALO ALTO, CA 94306***	***148***
12	SLIC	2-43S0562	Higher (34 ft.)	0.072 mi. SW (380 ft.)	DURA BOND FACILITY FORMER	370 PORTAGE AVE, PALO ALTO, CA	150
12	SLIC	SL18361781	Higher (34 ft.)	0.072 mi. SW (380 ft.)	DURA-BOND BEARING	370 PORTAGE AVENUE, PALO ALTO, CA 94306	151
13	***RCRAGR09***	***CAD983600206***	***Equal (33 ft.)***	***0.072 mi. SSW (380 ft.)***	***SAY RAY***	***3251 ASH ST, PALO ALTO, CA 94306***	***152***
14	***ABST***	***70526***	***Lower (31 ft.)***	***0.117 mi. NW (618 ft.)***	***SPRINT POP***	***101 PAGE MILL RD, PALO ALTO, CA 94306***	***154***
14	***RCRAGR09***	***CAD981394265***	***Lower (31 ft.)***	***0.090 mi. NW (475 ft.)***	***BIX***	***2891 PARK BLVD, PALO ALTO, CA 94306***	***156***
15	***HISTUST***	***000206B5***	***Equal (33 ft.)***	***0.095 mi. SE (502 ft.)***	***PACIFIC BELL (P1-052)***	***3350 BIRCH ST, PALO ALTO, CA 94306***	***157***
15	***RCRAGR09***	***CAT080019896***	***Equal (33 ft.)***	***0.095 mi. SE (502 ft.)***	***PACIFIC BELL***	***3350 BIRCH STREET, PALO ALTO, CA 94306***	***159***
15	***SWEEPS***	***A43-006-36909***	***Equal (33 ft.)***	***0.095 mi. SE (502 ft.)***	***PACIFIC BELL (P1-052)***	***3350 BIRCH ST, PALO ALTO, CA 94303***	***161***
15	***SWEEPS***	***I43-006-36909***	***Equal (33 ft.)***	***0.095 mi. SE (502 ft.)***	***PACIFIC BELL (P1-052)***	***3350 BIRCH ST, PALO ALTO, CA 94306***	***162***
15	***USTCUPA***	***2016512292***	***Equal (33 ft.)***	***0.095 mi. SE (502 ft.)***	***AT&T CALIFORNIA - P1052***	***3350 BIRCH ST, PALO ALTO, CA 94306***	***163***
16	ALTFUELS	41348	Lower (30 ft.)	0.100 mi. WNW (528 ft.)	AOL PARKING GARAGE	395 PAGE MILL RD, PALO ALTO, CA 94306	164
16	***CLEANUPSITES***	***SL18321741***	***Lower (30 ft.)***	***0.099 mi. WNW (523 ft.)***	***HEWLETT PACKARD COMPANY***	***395 PAGE MILL RD, PALO ALTO, CA 94306***	***165***
16	***CLEANUPSITES***	***T0608502399***	***Lower (30 ft.)***	***0.099 mi. WNW (523 ft.)***	***HEWLETT-PACKARD***	***395 PAGE MILL RD, PALO ALTO, CA 94304***	***168***
16	***CLEANUPSITES***	***T10000005459***	***Lower (30 ft.)***	***0.099 mi. WNW (523 ft.)***	***JAY PAUL REDEVELOPMENT***	***395 / 3045 PAGE MILL ROAD / PARK BOULEVARD, PALO ALTO, CA 94303***	***170***
16	***ENVIROSTOR***	***71002260***	***Lower (30 ft.)***	***0.099 mi. WNW (523 ft.)***	***HEWLETT-PACKARD CO. - PALO ALTO FABRICA CTR.***	***395 PAGE MILL ROAD, PALO ALTO, CA 94306***	***172***
16	***ENVIROSTOR***	***80001599***	***Lower (30 ft.)***	***0.099 mi. WNW (523 ft.)***	***HEWLETT-PACKARD COMPANY***	***395 PAGE MILL RD, PALO ALTO, CA 94306***	***173***
16	***ENVIROSTORPCA***	***CAD009122557***	***Lower (30 ft.)***	***0.099 mi. WNW (523 ft.)***	***HEWLETT-PACKARD COMPANY***	***395 PAGE MILL RD, PALO ALTO, CA 94303***	***174***
16	HISTCORTESE	2 438131NO1COR	Lower (30 ft.)	0.100 mi. WNW (528 ft.)	SCR-HEWLETT PACKARD-395 P	395 PAGE MILL, PALO ALTO, CA 94306	176
16	***LUST***	***T0608502399***	***Lower (30 ft.)***	***0.099 mi. WNW (523 ft.)***	***HEWLETT-PACKARD***	***395 PAGE MILL RD, PALO ALTO, CA 94304***	***177***
16	***LUST***	***T0608591782***	***Lower (30 ft.)***	***0.100 mi. WNW (528 ft.)***	***HEWLETT PACKARD***	***395 PAGE MILL RD, PALO ALTO, CA 94306***	***178***

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Map ID#	Database Name	Site ID#	Relative Elevation	Distance From Site	Site Name	Address	PAGE #
16	***RCRAC***	***CAD009122557***	***Lower (30 ft.)***	***0.099 mi. WNW (523 ft.)***	***HEWLETT PACKARD MFG DIV***	***395 PAGE MILL RD, PALO ALTO, CA 94306***	***179***
16	***RCRAGR09***	***CAD009122557***	***Lower (30 ft.)***	***0.099 mi. WNW (523 ft.)***	***HEWLETT PACKARD MFG DIV***	***395 PAGE MILL RD, PALO ALTO, CA 94306***	***187***
16	***RCRAT***	***CAD009122557***	***Lower (30 ft.)***	***0.099 mi. WNW (523 ft.)***	***HEWLETT PACKARD MFG DIV***	***395 PAGE MILL RD, PALO ALTO, CA 94306***	***195***
16	REF	71002260	Lower (30 ft.)	0.099 mi. WNW (523 ft.)	HEWLETT-PACKARD CO. - PALO ALTO FABRICA CTR.	395 PAGE MILL ROAD, PALO ALTO, CA 94306	203
16	REF	80001599	Lower (30 ft.)	0.099 mi. WNW (523 ft.)	HEWLETT-PACKARD COMPANY	395 PAGE MILL RD, PALO ALTO, CA 94306	204
16	***SEMSARCH***	***CAD009122557***	***Lower (30 ft.)***	***0.100 mi. WNW (528 ft.)***	***HEWLETT PACKARD CO MFG DIV***	***395 PAGE MILL RD, PALO ALTO, CA 94306***	***205***
16	SLIC	2-43S0053	Lower (30 ft.)	0.100 mi. WNW (528 ft.)	HEWLETT PACKARD	395 PAGE MILL RD, PALO ALTO, CA 94304	206
16	SLIC	SL18321741	Lower (30 ft.)	0.099 mi. WNW (523 ft.)	HEWLETT PACKARD COMPANY	395 PAGE MILL RD, PALO ALTO, CA 94306	207
17	***CALSITES***	***43370006***	***Higher (34 ft.)***	***0.115 mi. SW (607 ft.)***	***DURA-BOND BEARING***	***395 PORTAGE AVE, PALO ALTO, CA 94306***	***208***
17	***ENVIROSTOR***	***43370006***	***Higher (34 ft.)***	***0.115 mi. SW (607 ft.)***	***DURA-BOND BEARING***	***395 PORTAGE AVE, PALO ALTO, CA 94306***	***209***
17	***HISTUST***	***0002090C***	***Higher (34 ft.)***	***0.115 mi. SW (607 ft.)***	***DURA-BOND BEARING COMPANY***	***395 PORTAGE AVENUE, PALO ALTO, CA 94306***	***210***
17	***HISTUST***	***0002093C***	***Higher (34 ft.)***	***0.100 mi. SW (528 ft.)***	***STAR GRAFIC ARTS CO INC***	***3200 ASH ST, PALO ALTO, CA 94306***	***214***
17	***RCRAGR09***	***CAD063553630***	***Higher (34 ft.)***	***0.115 mi. SW (607 ft.)***	***DURA-BOND BEARING COMPANY***	***395 PORTAGE, PALO ALTO, CA 94306***	***215***
17	REF	43370006	Higher (34 ft.)	0.115 mi. SW (607 ft.)	DURA-BOND BEARING	395 PORTAGE AVE, PALO ALTO, CA 94306	217
17	***SWEEPS***	***A43-006-1428***	***Higher (34 ft.)***	***0.115 mi. SW (607 ft.)***	***DURA-BOND BEARING COMPANY***	***395 PORTAGE AVE, PALO ALTO, CA 94306***	***218***
17	***SWEEPS***	***A43-006-60093***	***Higher (34 ft.)***	***0.100 mi. SW (528 ft.)***	***STAR GRAPHIC ARTS CO. INC.***	***3200 ASH ST, PALO ALTO, CA 94306***	***219***
18	***CLEANUPSITES***	***T0608500788***	***Higher (36 ft.)***	***0.115 mi. WSW (607 ft.)***	***JOST HEATING & SHEET METAL***	***412 OLIVE AVE, PALO ALTO, CA 94306***	***220***
18	HISTCORTESE	43-0765COR	Higher (36 ft.)	0.115 mi. WSW (607 ft.)	JOST HEATING & SHEET META	412 OLIVE, PALO ALTO, CA 94306	222
18	***LUST***	***T0608500788***	***Higher (36 ft.)***	***0.115 mi. WSW (607 ft.)***	***JOST HEATING & SHEET METAL***	***412 OLIVE AVE, PALO ALTO, CA 94306***	***223***
19	***CLEANUPSITES***	***T0608501661***	***Higher (34 ft.)***	***0.115 mi. SW (607 ft.)***	***CARMEAN TRUST***	***411 ACACIA AVE, PALO ALTO, CA 94306***	***224***
19	HISTCORTESE	43-1725COR	Higher (34 ft.)	0.115 mi. SW (607 ft.)	CARMEAN TRUST	411 ACACIA, PALO ALTO, CA 94306	226

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Map ID#	Database Name	Site ID#	Relative Elevation	Distance From Site	Site Name	Address	PAGE #
19	HISTUST	0002C152	Higher (34 ft.)	0.115 mi. SW (607 ft.)	PALO ALTO DATSUN INC	411 ACACIA ST, PALO ALTO, CA 94304	227
19	LUST	T0608501661	Higher (34 ft.)	0.115 mi. SW (607 ft.)	CARMEAN TRUST	411 ACACIA AVE, PALO ALTO, CA 94306	229
19	RCRAGR09	CAD981579691	Higher (34 ft.)	0.115 mi. SW (607 ft.)	PALO ALTO NISSAN INC	411 ACACIA, PALO ALTO, CA 94306	230
19	SWEEPS	I43-006-2752	Higher (34 ft.)	0.115 mi. SW (607 ft.)	VACANT	411 ACACIA ST, PALO ALTO, CA 94304	231
20	ALTFUELS	124548	Lower (30 ft.)	0.123 mi. NW (649 ft.)	PARK PLAZA	195 PAGE MILL RD, PALO ALTO, CA 94306	232
20	BF	SL0608525943	Lower (30 ft.)	0.123 mi. NW (649 ft.)	PARK PLAZA	195 PAGE MILL ROAD, PALO ALTO, CA 94303	233
20	CLEANUPSITES	SL0608525943	Lower (30 ft.)	0.123 mi. NW (649 ft.)	PARK PLAZA	195 PAGE MILL ROAD, PALO ALTO, CA 94303	234
20	CLEANUPSITES	T10000000056	Lower (30 ft.)	0.123 mi. NW (649 ft.)	PARK PLAZA	PALO ALTO, CA 94306	237
20	CLEANUPSITES	T10000010996	Lower (30 ft.)	0.123 mi. NW (649 ft.)	PARK PLAZA - UST	195 PAGE MILL ROAD, PALO ALTO, CA	238
20	LUST	T10000010996	Lower (30 ft.)	0.123 mi. NW (649 ft.)	PARK PLAZA - UST	195 PAGE MILL ROAD, PALO ALTO, CA	240
20	SLIC	SL0608525943	Lower (30 ft.)	0.123 mi. NW (649 ft.)	PARK PLAZA	195 PAGE MILL ROAD, PALO ALTO, CA 94303	241
21	RCRANGR09	CAC003052934	Lower (28 ft.)	0.122 mi. N (644 ft.)	SAM WONG	2609 ALMA STREET, PALO ALTO, CA 94036	242
22	CLEANUPSITES	T0608500732	Lower (30 ft.)	0.142 mi. WNW (750 ft.)	HOHBACH	200 PAGE MILL, PALO ALTO, CA 94306	244
22	HISTCORTESE	43-0703COR	Lower (30 ft.)	0.142 mi. WNW (750 ft.)	HOHBACK	216 PAGE MILL, PALO ALTO, CA	247
22	LUST	T0608500732	Lower (30 ft.)	0.142 mi. WNW (750 ft.)	HOHBACH	200 PAGE MILL, PALO ALTO, CA 94306	248
23	CLEANUPSITES	T0608501823	Lower (30 ft.)	0.172 mi. NW (908 ft.)	VANCE BROWN & SONS	2747 PARK BLVD, PALO ALTO, CA 94306	250
23	CLEANUPSITES	T0608572772	Lower (30 ft.)	0.172 mi. NW (908 ft.)	2747 PARK BOULEVARD	2747-2785 PARK BOULEVARD, PALO ALTO, CA 94306	252
23	CLEANUPSITES	T0608591678	Lower (30 ft.)	0.172 mi. NW (908 ft.)	VANCE BROWN AND SONS	2747 PARK BLVD, PALO ALTO, CA 94306	255
23	CLEANUPSITES	T10000005839	Lower (30 ft.)	0.155 mi. NW (818 ft.)	ESSEX PARK TRUST	2785-2787 PARK BOULEVARD, PALO ALTO, CA 94304	256
23	HISTCORTESE	43-1923COR	Lower (30 ft.)	0.171 mi. NW (903 ft.)	VANCE BROWN & SONS	2747 PARK, PALO ALTO, CA 94306	258
23	HISTUST	000206D6	Lower (30 ft.)	0.155 mi. NW (818 ft.)	PACIFIC READY MIX INC	2785 PARK BLVD, PALO ALTO, CA 94306	259
23	HISTUST	0002CEFD	Lower (30 ft.)	0.171 mi. NW (903 ft.)	OFFICES OF VANCE M BROWN AND SO	2747 PARK BOULEVARD, PALO ALTO, CA 94306	261
23	LUST	T0608501823	Lower (30 ft.)	0.172 mi. NW (908 ft.)	VANCE BROWN & SONS	2747 PARK BLVD, PALO ALTO, CA 94306	263
23	LUST	T0608572772	Lower (30 ft.)	0.172 mi. NW (908 ft.)	PROPOSED PARK PLAZA APARTMENTS	2785 PARK BOULEVARD, PALO ALTO, CA	264

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23	**LUST**	**T0608591678**	**Lower (30 ft.)**	**0.172 mi. NW (908 ft.)**	**VANCE BROWN AND SONS**	**2747 PARK BLVD, PALO ALTO, CA 94306**	**265**
23	SLIC	2-43S0736	Lower (30 ft.)	0.171 mi. NW (903 ft.)	VANCE BROWN AND SONS	2747 PARK BLVD, PALO ALTO, CA 94304	266
23	SLIC	T0608572772	Lower (30 ft.)	0.172 mi. NW (908 ft.)	2785 PARK BOULEVARD	2785 PARK BOULEVARD, PALO ALTO, CA 94306	267
23	**SWEEPS**	**A43-006-10312**	**Lower (30 ft.)**	**0.155 mi. NW (818 ft.)**	**PACIFIC READY MIX INC**	**2785 PARK BLVD, PALO ALTO, CA 94306**	**268**
23	**SWEEPS**	**A43-006-10713**	**Lower (30 ft.)**	**0.171 mi. NW (903 ft.)**	**OFFICES OF VANCE M. BROWN & SO**	**2747 PARK BLVD, PALO ALTO, CA 94306**	**269**
24	**CLEANUPSITES**	**T0608501747**	**Higher (35 ft.)**	**0.164 mi. W (866 ft.)**	**BLEIBLER IRON WORKS**	**411 PAGE MILL RD, PALO ALTO, CA 94306**	**270**
24	HISTCORTESE	43-1820COR	Higher (35 ft.)	0.164 mi. W (866 ft.)	BLEIBLER IRON WORKS	411 PAGE MILL, PALO ALTO, CA 94306	272
24	**HISTUST**	**0002CED8**	**Higher (35 ft.)**	**0.164 mi. W (866 ft.)**	**BLEIBLER IRON WORKS INC**	**411 PAGE MILL ROAD, PALO ALTO, CA 94306**	**273**
24	**LUST**	**T0608501747**	**Higher (35 ft.)**	**0.164 mi. W (866 ft.)**	**BLEIBLER IRON WORKS**	**411 PAGE MILL RD, PALO ALTO, CA 94306**	**274**
24	**SWEEPS**	**A43-006-10796**	**Higher (35 ft.)**	**0.164 mi. W (866 ft.)**	**BLEIBLER IRON WORKS INC.**	**411 PAGE MILL RD, PALO ALTO, CA 94306**	**275**
25	**CLEANUPSITES**	**T10000005468**	**Higher (36 ft.)**	**0.191 mi. SW (1008 ft.)**	**PORTAGE LLC**	**3159 EL CAMINO REAL, PALO ALTO, CA 94303**	**276**
25	**ENVIROSTOR**	**60002787**	**Higher (36 ft.)**	**0.182 mi. SW (961 ft.)**	**FORMER FOOT LOCKER STORE**	**3225 EL CAMINO REAL, PALO ALTO, CA 94306**	**278**
25	SLIC	T10000005468	Higher (36 ft.)	0.191 mi. SW (1008 ft.)	PORTAGE LLC	3159 EL CAMINO REAL, PALO ALTO, CA 94303	279
25	**VCP**	**60002787**	**Higher (36 ft.)**	**0.182 mi. SW (961 ft.)**	**FORMER FOOT LOCKER STORE**	**3225 EL CAMINO REAL, PALO ALTO, CA 94306**	**280**
26	**CLEANUPSITES**	**T10000008756**	**Higher (35 ft.)**	**0.184 mi. WSW (972 ft.)**	**441 PAGE MILL ROAD**	**441 PAGE MILL ROAD, PALO ALTO, CA 94306**	**281**
26	SLIC	T10000008756	Higher (35 ft.)	0.184 mi. WSW (972 ft.)	441 PAGE MILL ROAD	441 PAGE MILL ROAD, PALO ALTO, CA 94306	283
27	**CLEANUPSITES**	**SL0608561372**	**Lower (30 ft.)**	**0.185 mi. NNW (977 ft.)**	**OREGON EXPRESSWAY UNDERPASS**	**ALMA STREET, PALO ALTO, CA 94301**	**284**
28	**CLEANUPSITES**	**T0608548811**	**Higher (39 ft.)**	**0.192 mi. SW (1014 ft.)**	**GAVENMAN PROPERTY**	**3017 EL CAMINO REAL, PALO ALTO, CA 94306**	**286**
28	**CLEANUPSITES**	**T0608555022**	**Higher (39 ft.)**	**0.192 mi. SW (1014 ft.)**	**PALO ALTO NISSAN**	**3001 EL CAMINO REAL, PALO ALTO, CA 94306**	**288**
28	**CLEANUPSITES**	**T10000011631**	**Higher (39 ft.)**	**0.192 mi. SW (1014 ft.)**	**SOBRATO 3001 EL CAMINO**	**3001-3017 EL CAMINO REAL, PALO ALTO, CA 94306**	**290**
28	HISTCORTESE	43-1031COR	Higher (39 ft.)	0.191 mi. SW (1008 ft.)	PALO ALTO NISSAN	3001 EL CAMINO REAL, PALO ALTO, CA	292
28	**LUST**	**T0608501026**	**Higher (39 ft.)**	**0.191 mi. SW (1008 ft.)**	**PALO ALTO NISSAN**	**3001 EL CAMINO REAL, PALO ALTO, CA 94306**	**293**
28	**LUST**	**T0608548811**	**Higher (39 ft.)**	**0.192 mi. SW (1014 ft.)**	**GAVENMAN PROPERTY**	**3017 EL CAMINO REAL, PALO ALTO, CA 94306**	**294**
28	**LUST**	**T0608555022**	**Higher (39 ft.)**	**0.192 mi. SW (1014 ft.)**	**PALO ALTO NISSAN**	**3001 EL CAMINO REAL, PALO ALTO, CA 94306**	**295**

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Map ID#	Database Name	Site ID#	Relative Elevation	Distance From Site	Site Name	Address	PAGE #
28	SLIC	T10000011631	Higher (39 ft.)	0.192 mi. SW (1014 ft.)	SOBRATO 3001 EL CAMINO	3001-3017 EL CAMINO REAL, PALO ALTO, CA 94306	296
29	***HISTUST***	***0002088B***	***Lower (27 ft.)***	***0.192 mi. NE (1014 ft.)***	***ZZONTA***	***2680 RAMONA, PALO ALTO, CA 94306***	***297***
29	***SWEEPS***	***A43-006-46598***	***Lower (27 ft.)***	***0.192 mi. NE (1014 ft.)***	***ZZONTA***	***2680 RAMONA, PALO ALTO, CA 94306***	***298***
30	CLEANER	CAD028879765	Higher (38 ft.)	0.211 mi. WSW (1114 ft.)	STANFORD CLEANERS	2875 EL CAMINO REAL, PALO ALTO, CA 94306	299
30	***CLEANUPSITES***	***T0608591612***	***Higher (38 ft.)***	***0.211 mi. WSW (1114 ft.)***	***STANFORD CLEANERS***	***2875 EL CAMINO REAL, PALO ALTO, CA 94306***	***300***
30	***CLEANUPSITES***	***T0608591756***	***Higher (38 ft.)***	***0.211 mi. WSW (1114 ft.)***	***STANFORD CLEANERS***	***2875 EL CAMINO REAL, PALO ALTO, CA 94306***	***302***
30	***HISTUST***	***00020930***	***Higher (38 ft.)***	***0.211 mi. WSW (1114 ft.)***	***STANFORD CLEANERS***	***2875 EL CAMINO REAL, PALO ALTO, CA 94306***	***303***
30	***LUST***	***T0608591612***	***Higher (38 ft.)***	***0.211 mi. WSW (1114 ft.)***	***STANFORD CLEANERS***	***2875 EL CAMINO REAL, PALO ALTO, CA 94306***	***304***
30	***LUST***	***T0608591756***	***Higher (38 ft.)***	***0.211 mi. WSW (1114 ft.)***	***STANFORD CLEANERS***	***2875 EL CAMINO REAL, PALO ALTO, CA 94306***	***305***
30	***SEMSARCH***	***CAD028879765***	***Higher (38 ft.)***	***0.211 mi. WSW (1114 ft.)***	***STANFORD CLEANERS***	***2875 EL CAMINO, PALO ALTO, CA 94306***	***306***
30	SLIC	2-43S0121	Higher (38 ft.)	0.211 mi. WSW (1114 ft.)	STANFORD CLEANERS	2875 EL CAMINO, PALO ALTO, CA 94304	307
30	SLIC	T0608591612	Higher (38 ft.)	0.211 mi. WSW (1114 ft.)	STANFORD CLEANERS	2875 EL CAMINO REAL, PALO ALTO, CA 94306	308
30	***SWEEPS***	***A43-006-20402***	***Higher (38 ft.)***	***0.211 mi. WSW (1114 ft.)***	***STANFORD CLEANERS***	***2875 EL CAMINO REAL, PALO ALTO, CA 94306***	***309***
31	SLIC	2-43S0287	Lower (30 ft.)	0.212 mi. WNW (1119 ft.)	SUMMERHILL CHEVRON BULK OIL	2655 PARK BLVD, PALO ALTO, CA 94304	310
32	SLIC	2-43S0290	Higher (36 ft.)	0.223 mi. SW (1177 ft.)	CLOCKTOWER PLAZA PREFORMED LINE	600 HANSEN WAY, PALO ALTO, CA 94304	311
33	***CLEANUPSITES***	***T10000002007***	***Equal (33 ft.)***	***0.230 mi. WNW (1214 ft.)***	***BIRCH PLAZA***	***2640 & 2650 BIRCH STREET, PALO ALTO, CA 94304***	***312***
34	***CLEANUPSITES***	***T10000005467***	***Higher (37 ft.)***	***0.244 mi. W (1288 ft.)***	***2755 EL CAMINO REAL***	***2755 EL CAMINO REAL, PALO ALTO, CA 94303***	***314***
34	SLIC	T10000005467	Higher (37 ft.)	0.244 mi. W (1288 ft.)	2755 EL CAMINO REAL	2755 EL CAMINO REAL, PALO ALTO, CA 94303	316
35	***CLEANUPSITES***	***T0608501025***	***Higher (39 ft.)***	***0.255 mi. SSE (1346 ft.)***	***PALO ALTO FIRESTONE***	***3401 EL CAMINO REAL, PALO ALTO, CA 94306***	***317***

Located Sites Summary

*NOTE: Standard environmental records are displayed in **bold**.*

Map ID#	Database Name	Site ID#	Relative Elevation	Distance From Site	Site Name	Address	PAGE #
35	HISTCORTESE	43-1030COR	Higher (39 ft.)	0.255 mi. SSE (1346 ft.)	FIRESTONE	3401 EL CAMINO REAL, PALO ALTO, CA 94306	319
35	***LUST***	***T0608501025***	***Higher (39 ft.)***	***0.255 mi. SSE (1346 ft.)***	***PALO ALTO FIRESTONE***	***3401 EL CAMINO REAL, PALO ALTO, CA 94306***	***320***
36	***CALSITES***	***43170004***	***Lower (11 ft.)***	***0.266 mi. NW (1404 ft.)***	***OREGON EXPRESSWAY UNDERPASS***	***XING OF OREGON EXPRESSWAY & ALMA STREET, PALO ALTO, CA 94304***	***321***
36	***ENVIROSTOR***	***43170004***	***Lower (11 ft.)***	***0.266 mi. NW (1404 ft.)***	***OREGON EXPRESSWAY UNDERPASS***	***XING OF OREGON EXPRESSWAY & ALMA STREET, PALO ALTO, CA 94304***	***322***
36	HISTCORTESE	43170004COR	Lower (11 ft.)	0.266 mi. NW (1404 ft.)	OREGON EXPRESSWAY UNDERPA	XING OF OREGON EXWY & ALM, PALO ALTO, CA 94304	323
36	REF	43170004	Lower (11 ft.)	0.266 mi. NW (1404 ft.)	OREGON EXPRESSWAY UNDERPASS	XING OF OREGON EXPRESSWAY & ALMA STREET, PALO ALTO, CA 94304	324
36	***SEMSARCH***	***CAD982399800***	***Lower (11 ft.)***	***0.264 mi. NW (1394 ft.)***	***OREGON EXPWY UNDERPASS***	***OREGON EXPWY & ALMA ST, PALO ALTO, CA 94304***	***325***
37	***CLEANUPSITES***	***T0608501659***	***Higher (37 ft.)***	***0.277 mi. W (1463 ft.)***	***GREEN WORLD NURSERY***	***2711 EL CAMINO REAL, PALO ALTO, CA 94306***	***326***
37	HISTCORTESE	43-1723COR	Higher (37 ft.)	0.275 mi. W (1452 ft.)	GREEN WORLD NURSERY	2711 EL CAMINO REAL, PALO ALTO, CA 94301	328
37	***LUST***	***T0608501659***	***Higher (37 ft.)***	***0.277 mi. W (1463 ft.)***	***GREEN WORLD NURSERY***	***2711 EL CAMINO REAL, PALO ALTO, CA 94306***	***329***
38	***CLEANUPSITES***	***T10000008033***	***Lower (32 ft.)***	***0.281 mi. WNW (1484 ft.)***	***KJ PARK (FORMER CAMPBELL-T) - 2555 PARK BOULEVARD***	***2555 PARK BOULEVARD, PALO ALTO, CA 94103***	***330***
38	***CLEANUPSITES***	***T10000010397***	***Lower (32 ft.)***	***0.281 mi. WNW (1484 ft.)***	***KJ PARK***	***2555 PARK BOULEVARD, PALO ALTO, CA 94709***	***332***
39	***CALSITES***	***43360086***	***Higher (41 ft.)***	***0.291 mi. SSW (1536 ft.)***	***VARIAN***	***611 HANSEN WAY, PALO ALTO, CA 94304***	***334***
39	***CLEANUPSITES***	***SL0608530107***	***Higher (41 ft.)***	***0.291 mi. SSW (1536 ft.)***	***VARIAN INC. [NPDES]***	***611 HANSEN, MONTAIN VIEW, CA 94304***	***335***
39	CORTESE	43360086	Higher (41 ft.)	0.291 mi. SSW (1536 ft.)	VARIAN	611 HANSEN WAY, PALO ALTO, CA 94304	337
39	***ENVIROSTOR***	***43360086***	***Higher (41 ft.)***	***0.291 mi. SSW (1536 ft.)***	***VARIAN***	***611 HANSEN WAY, PALO ALTO, CA 94304***	***338***
39	HISTCORTESE	43360086COR	Higher (41 ft.)	0.291 mi. SSW (1536 ft.)	VARIAN	611 HANSEN, PALO ALTO, CA 94303	339
39	***SEMSARCH***	***CAD009120817***	***Higher (41 ft.)***	***0.291 mi. SSW (1536 ft.)***	***VARIAN ASSOCIATES CORP HDQTRS***	***611 HANSEN WAY, PALO ALTO, CA 94303***	***340***
40	***CLEANUPSITES***	***T0608500216***	***Higher (37 ft.)***	***0.293 mi. WSW (1547 ft.)***	***MOBIL (BP 11219)***	***2780 EL CAMINO REAL, PALO ALTO, CA 94306***	***341***

Located Sites Summary

*NOTE: Standard environmental records are displayed in **bold**.*

Map ID#	Database Name	Site ID#	Relative Elevation	Distance From Site	Site Name	Address	PAGE #
40	HISTCORTESE	43-0150COR	Higher (37 ft.)	0.292 mi. WSW (1542 ft.)	MOBIL	2780 EL CAMINO REAL, PALO ALTO, CA	343
40	***LUST***	***T0608500216***	***Higher (37 ft.)***	***0.293 mi. WSW (1547 ft.)***	***MOBIL (BP 11219)***	***2780 EL CAMINO REAL, PALO ALTO, CA 94306***	***344***
41	***CLEANUPSITES***	***T10000001638***	***Higher (35 ft.)***	***0.314 mi. WNW (1658 ft.)***	***MINKOFF GROUP (FORMER PREMIER PROPERTIES) - 385-399 SHERMAN***	***385-399 SHERMAN AVENUE, PALO ALTO, CA 94301***	***345***
42	***CLEANUPSITES***	***T0608500445***	***Higher (37 ft.)***	***0.321 mi. SSE (1695 ft.)***	***COMBES AUTO REPAIR***	***3585 EL CAMINO REAL, PALO ALTO, CA 94306***	***347***
42	HISTCORTESE	43-0394COR	Higher (37 ft.)	0.321 mi. SSE (1695 ft.)	COMBES AUTO REPAIR	3585 EL CAMINO REAL, PALO ALTO, CA	351
42	***LUST***	***T0608500445***	***Higher (37 ft.)***	***0.321 mi. SSE (1695 ft.)***	***COMBES AUTO REPAIR***	***3585 EL CAMINO REAL, PALO ALTO, CA 94306***	***352***
43	***CLEANUPSITES***	***T10000012691***	***Higher (41 ft.)***	***0.324 mi. SW (1711 ft.)***	***PREFORMED LINE PRODUCTS, INC. (PREFORMED)***	***600 HANSEN WAY, PALO ALTO, CA 94304***	***353***
43	PROC	PR0448	Higher (41 ft.)	0.324 mi. SW (1711 ft.)	ECULLET INC	600 HANSEN WY STE 246, PALO ALTO, CA 94304	354
43	SWRCY	PR0448	Higher (41 ft.)	0.324 mi. SW (1711 ft.)	ECULLET INC	600 HANSEN WY STE 246, PALO ALTO, CA 94304	355
44	***CLEANUPSITES***	***T0608500266***	***Higher (37 ft.)***	***0.335 mi. SSE (1769 ft.)***	***JOHN'S AUTOMOTIVE***	***3508 EL CAMINO REAL, PALO ALTO, CA 94306***	***356***
44	HISTCORTESE	43-0206COR	Higher (37 ft.)	0.335 mi. SSE (1769 ft.)	JOHNS AUTOMOTIVE	3508 EL CAMINO REAL, PALO ALTO, CA	358
44	***LUST***	***T0608500266***	***Higher (37 ft.)***	***0.335 mi. SSE (1769 ft.)***	***JOHN'S AUTOMOTIVE***	***3508 EL CAMINO REAL, PALO ALTO, CA 94306***	***359***
45	***CLEANUPSITES***	***T0608501292***	***Higher (39 ft.)***	***0.349 mi. SSE (1843 ft.)***	***SHELL - 3601 EL CAMINO***	***3601 EL CAMINO REAL, PALO ALTO, CA 94306***	***360***
45	HISTCORTESE	43-1314COR	Higher (39 ft.)	0.349 mi. SSE (1843 ft.)	SHELL	3601 EL CAMINO REAL, PALO ALTO, CA 94306	365
45	***LUST***	***T0608501292***	***Higher (39 ft.)***	***0.349 mi. SSE (1843 ft.)***	***SHELL - 3601 EL CAMINO***	***3601 EL CAMINO REAL, PALO ALTO, CA 94306***	***366***
46	***BF***	***T10000012297***	***Higher (39 ft.)***	***0.371 mi. W (1959 ft.)***	***2515 & 2585 EL CAMINO REAL***	***2515 & 2585 EL CAMINO REAL, PALO ALTO, CA 94306***	***369***
46	***CLEANUPSITES***	***T10000012297***	***Higher (39 ft.)***	***0.371 mi. W (1959 ft.)***	***2515 & 2585 EL CAMINO REAL***	***2515 & 2585 EL CAMINO REAL, PALO ALTO, CA 94306***	***370***
46	***CLEANUPSITES***	***T10000013681***	***Higher (39 ft.)***	***0.371 mi. W (1959 ft.)***	***2515 EL CAMINO REAL***	***2515 EL CAMINO REAL, PALO ALTO, CA***	***372***
47	***CLEANUPSITES***	***T0608502062***	***Higher (35 ft.)***	***0.372 mi. WNW (1964 ft.)***	***SHELL - 299 S CALIFORNIA***	***299 S. CALIFORNIA AVENUE, PALO ALTO, CA 94301***	***373***

Located Sites Summary

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Map ID#	Database Name	Site ID#	Relative Elevation	Distance From Site	Site Name	Address	PAGE #
47	***LUST***	***T0608502062***	***Higher (35 ft.)***	***0.372 mi. WNW (1964 ft.)***	***SHELL - 299 S CALIFORNIA***	***299 S. CALIFORNIA AVENUE, PALO ALTO, CA 94301***	***378***
48	***ENVIROSTOR***	***60002078***	***Higher (43 ft.)***	***0.374 mi. SSW (1975 ft.)***	***COMMUNICATIONS & POWER IND, INC.***	***607 HANSEN WAY (CONTIGUOUS PR), PALO ALTO, CA 94304***	***381***
48	***ENVIROSTOR***	***71003431***	***Higher (43 ft.)***	***0.374 mi. SSW (1975 ft.)***	***COMMUNICATIONS & POWER IND, INC.***	***607 HANSEN WAY (CONTIGUOUS PR), PALO ALTO, CA 94304***	***382***
48	***ENVIROSTORP CA***	***CAR000003863***	***Higher (43 ft.)***	***0.374 mi. SSW (1975 ft.)***	***COMMUNICATIONS & POWER INDUSTRIES***	***811 HANSEN WAY, PALO ALTO, CA 94304***	***383***
48	NFA	60002078	Higher (43 ft.)	0.374 mi. SSW (1975 ft.)	COMMUNICATIONS & POWER IND, INC.	607 HANSEN WAY (CONTIGUOUS PR), PALO ALTO, CA 94304	384
48	NFA	71003431	Higher (43 ft.)	0.374 mi. SSW (1975 ft.)	COMMUNICATIONS & POWER IND, INC.	607 HANSEN WAY (CONTIGUOUS PR), PALO ALTO, CA 94304	385
48	***RCRAC***	***CAR000003863***	***Higher (43 ft.)***	***0.374 mi. SSW (1975 ft.)***	***COMMUNICATIONS & POWER INDUSTRIES***	***811 HANSEN WAY, PALO ALTO, CA 94304***	***386***
48	***RCRAT***	***CAR000003863***	***Higher (43 ft.)***	***0.374 mi. SSW (1975 ft.)***	***COMMUNICATIONS & POWER INDUSTRIES***	***811 HANSEN WAY, PALO ALTO, CA 94304***	***390***
49	***BF***	***T10000010107***	***Higher (39 ft.)***	***0.384 mi. W (2028 ft.)***	***SAND HILL PROPERTIES***	***2600 EL CAMINO REAL, PALO ALTO, CA 94306***	***394***
49	***CLEANUPSITES***	***T10000010107***	***Higher (39 ft.)***	***0.384 mi. W (2028 ft.)***	***SAND HILL PROPERTIES***	***2600 EL CAMINO REAL, PALO ALTO, CA 94306***	***395***
50	***CLEANUPSITES***	***T10000013863***	***Higher (39 ft.)***	***0.403 mi. SE (2128 ft.)***	***PALO ALTO HOUSING WILTON COURT DEVELOPMENT***	***3703-3709 EL CAMINO REAL, PALO ALTO, CA 94306***	***398***
51	***CLEANUPSITES***	***T0608500394***	***Higher (42 ft.)***	***0.405 mi. WSW (2138 ft.)***	***CHEVRON***	***775 PAGE MILL RD, PALO ALTO, CA 94304***	***400***
52	HISTCORTESE	43-0338COR	Higher (42 ft.)	0.443 mi. SW (2339 ft.)	CHEVRON	775 PAGE MILL, PALO ALTO, CA 94304	402
52	***LUST***	***T0608500394***	***Higher (42 ft.)***	***0.405 mi. WSW (2138 ft.)***	***CHEVRON***	***775 PAGE MILL RD, PALO ALTO, CA 94304***	***403***
53	SWRCY	RC14577	Higher (35 ft.)	0.413 mi. WNW (2181 ft.)	TOMRA PACIFIC INC	164 S CALIFORNIA AVE, PALO ALTO, CA 94306	404
53	SWRCY	RC14696	Higher (35 ft.)	0.413 mi. WNW (2181 ft.)	TOMRA PACIFIC INC	164 S CALIFORNIA AVE, PALO ALTO, CA 94306	405
53	SWRCY	RC164743.001	Higher (35 ft.)	0.413 mi. WNW (2181 ft.)	REPLANET LLC	164 S CALIFORNIA AVE, PALO ALTO, CA 94306	406
53	SWRCY	RC3048	Higher (35 ft.)	0.413 mi. WNW (2181 ft.)	GOODWILL INDUSTRIES	164 S CALIFORNIA AVE, PALO ALTO, CA 94306	407

Located Sites Summary

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Map ID#	Database Name	Site ID#	Relative Elevation	Distance From Site	Site Name	Address	PAGE #
54	***CLEANUPSITES***	***T10000012320***	***Higher (39 ft.)***	***0.417 mi. SSE (2202 ft.)***	***3666 EL CAMINO***	***3666 EL CAMINO REAL, PALO ALTO, CA 94306***	***408***
54	***LUST***	***T10000012320***	***Higher (39 ft.)***	***0.417 mi. SSE (2202 ft.)***	***3666 EL CAMINO***	***3666 EL CAMINO REAL, PALO ALTO, CA 94306***	***410***
55	***CALSITES***	***43350082***	***Higher (44 ft.)***	***0.428 mi. WSW (2260 ft.)***	***HEWLETT-PACKARD (620-640 PAGE MILL ROAD)***	***620-640 PAGE MILL ROAD, PALO ALTO, CA 94304***	***411***
55	***CLEANUPSITES***	***SL720511210***	***Higher (44 ft.)***	***0.428 mi. WSW (2260 ft.)***	***HEWLETT-PACKARD COMPANY***	***640 PAGE MILL RD, PALO ALTO, CA 94304***	***412***
55	***ENVIROSTOR***	***43350082***	***Higher (44 ft.)***	***0.428 mi. WSW (2260 ft.)***	***HEWLETT-PACKARD (620-640 PAGE MILL ROAD)***	***620-640 PAGE MILL ROAD, PALO ALTO, CA 94304***	***416***
55	HISTCORTESE	2 438063NO2COR	Higher (44 ft.)	0.428 mi. WSW (2260 ft.)	SCR-HEWLETT PKRD-640 PAGE	640 PAGE MILL, PALO ALTO, CA 94304	417
55	***NPL***	***CAD980884209***	***Higher (44 ft.)***	***0.428 mi. WSW (2260 ft.)***	***HEWLETT-PACKARD (620-640 PAGE MILL ROAD)***	***620 - 640 PAGE MILL RD., PALO ALTO, CA 94304***	***418***
55	REF	43350082	Higher (44 ft.)	0.428 mi. WSW (2260 ft.)	HEWLETT-PACKARD (620-640 PAGE MILL ROAD)	620-640 PAGE MILL ROAD, PALO ALTO, CA 94304	430
55	RODS	CAD980884209	Higher (44 ft.)	0.428 mi. WSW (2260 ft.)	HEWLETT-PACKARD (620-640 PAGE MILL ROAD)	620 - 640 PAGE MILL RD., PALO ALTO, CA 94304	431
55	***SEMS***	***CAD980884209***	***Higher (44 ft.)***	***0.428 mi. WSW (2260 ft.)***	***HEWLETT-PACKARD (620-640 PAGE MILL ROAD)***	***620 - 640 PAGE MILL RD., PALO ALTO, CA 94304***	***432***
56	***CLEANUPSITES***	***T10000004533***	***Higher (40 ft.)***	***0.439 mi. W (2318 ft.)***	***STANFORD-MAYFIELD REDEVELOPMENT***	***2450 EL CAMINO REAL, PALO ALTO, CA 94304***	***444***
57	***CLEANUPSITES***	***T0608587383***	***Higher (35 ft.)***	***0.458 mi. WNW (2418 ft.)***	***PALO ALTO TIRE & BRAKE***	***306 CAMBRIDGE, PALO ALTO, CA 94306***	***446***
57	HISTCORTESE	43-1032COR	Higher (35 ft.)	0.458 mi. WNW (2418 ft.)	PALO ALTO TIRE & BRAKE	306 CAMBRIDGE, PALO ALTO, CA 94036	449
57	***LUST***	***T0608501027***	***Higher (35 ft.)***	***0.458 mi. WNW (2418 ft.)***	***PALO ALTO TIRE & BRAKE***	***306 CAMBRIDGE AVE, PALO ALTO, CA 94306***	***450***
57	***LUST***	***T0608587383***	***Higher (35 ft.)***	***0.458 mi. WNW (2418 ft.)***	***PALO ALTO TIRE & BRAKE***	***306 CAMBRIDGE, PALO ALTO, CA 94306***	***451***
58	***CLEANUPSITES***	***SL181201123***	***Higher (43 ft.)***	***0.464 mi. W (2450 ft.)***	***VARIAN ASSOCIATES***	***601 S. CALIFORNIA AVE., PALO ALTO, CA 94304***	***452***
58	***ENVIROSTOR***	***71003512***	***Higher (43 ft.)***	***0.464 mi. W (2450 ft.)***	***INTEVAC/EO SENSORS, INC.***	***601 CALIFORNIA AVENUE, PALO ALTO, CA 94304***	***456***
58	***ENVIROSTOR***	***80001826***	***Higher (43 ft.)***	***0.464 mi. W (2450 ft.)***	***INTEVAC***	***601 CALIFORNIA AVE, PALO ALTO, CA 94303***	***457***
58	***ENVIROSTORPCA***	***CAT080010804***	***Higher (43 ft.)***	***0.464 mi. W (2450 ft.)***	***INTEVAC***	***601 CALIFORNIA AVE, PALO ALTO, CA 94303***	***458***

Located Sites Summary

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Map ID#	Database Name	Site ID#	Relative Elevation	Distance From Site	Site Name	Address	PAGE #
58	HISTCORTESE	2 438249NO1COR	Higher (43 ft.)	0.464 mi. W (2450 ft.)	SCR-VARIAN-601 CALIF AVE	601 CALIFORNIA, PALO ALTO, CA 94304	459
58	***RCRAC***	***CAT080010804***	***Higher (43 ft.)***	***0.464 mi. W (2450 ft.)***	***INTEVAC***	***601 CALIFORNIA AVE, PALO ALTO, CA 94304***	***460***
58	REF	71003512	Higher (43 ft.)	0.464 mi. W (2450 ft.)	INTEVAC/EO SENSORS, INC.	601 CALIFORNIA AVENUE, PALO ALTO, CA 94304	468
58	REF	80001826	Higher (43 ft.)	0.464 mi. W (2450 ft.)	INTEVAC	601 CALIFORNIA AVE, PALO ALTO, CA 94303	469
58	***SEMSARCH***	***CAT080010804***	***Higher (43 ft.)***	***0.464 mi. W (2450 ft.)***	***VARIAN ASSOCIATES***	***601 CALIFORNIA AVE, PALO ALTO, CA 94303***	***470***
59	HISTCORTESE	43-0795COR	Lower (26 ft.)	0.475 mi. N (2508 ft.)	SNELL RESIDENCE	2388 WAVERLY, PALO ALTO, CA 94303	471
59	***LUST***	***T0608500813***	***Lower (26 ft.)***	***0.475 mi. N (2508 ft.)***	***SNELL RESIDENCE***	***2388 WAVERLY ST, PALO ALTO, CA 94301***	***472***
60	***CLEANUPSITES***	***T0608501658***	***Higher (34 ft.)***	***0.482 mi. NW (2545 ft.)***	***OLD FIRE STATION***	***2253 PARK BLVD, PALO ALTO, CA 94306***	***473***
60	HISTCORTESE	43-1720COR	Higher (34 ft.)	0.475 mi. NW (2508 ft.)	OLD FIRE STATION	2253 PARK, PALO ALTO, CA	475
60	***LUST***	***T0608501658***	***Higher (34 ft.)***	***0.482 mi. NW (2545 ft.)***	***OLD FIRE STATION***	***2253 PARK BLVD, PALO ALTO, CA 94306***	***476***
61	***CLEANUPSITES***	***T0608501144***	***Higher (40 ft.)***	***0.488 mi. W (2577 ft.)***	***ROYAL GLASS & MIRROR***	***450 CAMBRIDGE AVE, PALO ALTO, CA 94306***	***477***
61	HISTCORTESE	43-1154COR	Higher (40 ft.)	0.488 mi. W (2577 ft.)	ROYAL GLASS & MIRROR	450 CAMBRIDGE, PALO ALTO, CA	479
61	***LUST***	***T0608501144***	***Higher (40 ft.)***	***0.488 mi. W (2577 ft.)***	***ROYAL GLASS & MIRROR***	***450 CAMBRIDGE AVE, PALO ALTO, CA 94306***	***480***
62	***CLEANUPSITES***	***T0608591791***	***Higher (46 ft.)***	***0.493 mi. SW (2603 ft.)***	***EASTMAN KODAK COMPANY***	***925 PAGE MILL RD, PALO ALTO, CA 94304***	***481***
62	***LUST***	***T0608591791***	***Higher (46 ft.)***	***0.493 mi. SW (2603 ft.)***	***EASTMAN KODAK COMPANY***	***925 PAGE MILL RD, PALO ALTO, CA 94304***	***483***
62	***SEMSARCH***	***CAD028874253***	***Higher (46 ft.)***	***0.493 mi. SW (2603 ft.)***	***EASTMAN KODAK CO***	***925 PAGE MILL RD, PALO ALTO, CA 94304***	***484***
63	***ENVIROSTOR***	***71003483***	***Higher (49 ft.)***	***0.565 mi. SSW (2983 ft.)***	***VARIAN MEDICAL SYSTEMS***	***911, 913, 3075, 3030, & 3140 HANSEN WAY, PALO ALTO, CA 94304***	***485***
64	***ENVIROSTOR***	***80001596***	***Higher (47 ft.)***	***0.579 mi. SW (3057 ft.)***	***VARIAN NMR SYSTEMS***	***3120 HANSEN WAY, PALO ALTO, CA 94304***	***486***
64	***ENVIROSTORPCA***	***CAD009120817***	***Higher (47 ft.)***	***0.577 mi. SW (3047 ft.)***	***VARIAN MEDICAL SYSTEMS PALO ALTO***	***3120 HANSEN WAY, PALO ALTO, CA 94304***	***487***
64	***RCRAC***	***CAD009120817***	***Higher (47 ft.)***	***0.577 mi. SW (3047 ft.)***	***VARIAN MEDICAL SYSTEMS PALO ALTO***	***3120 HANSEN WAY, PALO ALTO, CA 94304***	***489***
65	***ENVIROSTOR***	***43360085***	***Higher (77 ft.)***	***0.803 mi. SW (4240 ft.)***	***AYDIN ENERGY***	***3180 HANOVER STREET, PALO ALTO, CA 94304***	***499***
66	***ENVIROSTOR***	***43280115***	***Higher (67 ft.)***	***0.832 mi. SW (4393 ft.)***	***ALZA PHARMACEUTICALS***	***1454 PAGE MILL ROAD, PALO ALTO, CA 94304***	***500***
67	***ENVIROSTOR***	***60001837***	***Higher (59 ft.)***	***0.874 mi. WSW (4615 ft.)***	***CALIFORNIA AVENUE HOUSING SITE***	***1451-1481 CALIFORNIA AVENUE, PALO ALTO, CA 94304***	***501***

Located Sites Summary

*NOTE: Standard environmental records are displayed in **bold**.*

Map ID#	Database Name	Site ID#	Relative Elevation	Distance From Site	Site Name	Address	PAGE #
68	ENVIROSTOR	60001911	Higher (81 ft.)	0.901 mi. WSW (4757 ft.)	CALIFORNIA AVENUE HOUSING PHASE II SITE	1501 CALIFORNIA AVENUE, PALO ALTO, CA 94304	502
69	ENVIROSTOR	71002581	Higher (81 ft.)	0.966 mi. WSW (5100 ft.)	1601 S CALIFORNIA AVENUE	1601 CALIFORNIA AVENUE, PALO ALTO, CA 94304	503
69	ENVIROSTORP CA	CAD076314640	Higher (81 ft.)	0.966 mi. WSW (5100 ft.)	AGILENT TECHNOLOGIES CALIFORNIA AVE SITE	1601 CALIFORNIA AVE, PALO ALTO, CA 94304	504
70	ENVIROSTORP CA	CAD009129354	Higher (110 ft.)	0.966 mi. SSW (5100 ft.)	LOCKHEED MARTIN SPACE SYSTEMS CO	3251 HANOVER ST, PALO ALTO, CA 94304	505
70	RCRAC	CAD009129354	Higher (110 ft.)	0.966 mi. SSW (5100 ft.)	LOCKHEED MARTIN SPACE SYSTEM	3251 HANOVER STREET, PALO ALTO, CA 94304	506
70	RCRASUBC	CAD009129354	Higher (110 ft.)	0.966 mi. SSW (5100 ft.)	LOCKHEED MARTIN SPACE SYSTEM	3251 HANOVER STREET, PALO ALTO, CA 94304	511

Site Summary By Database

*NOTE: Standard environmental records are displayed in **bold**.*

Map ID#	Database Name	Site ID#	Relative Elevation	Distance From Site	Site Name	Address
14	***ABST***	***70526***	***Lower (31 ft.)***	***0.117 mi. NW (618 ft.)***	***SPRINT POP***	***101 PAGE MILL RD, PALO ALTO, CA 94306***
16	ALTFUELS	41348	Lower (30 ft.)	0.100 mi. WNW (528 ft.)	AOL PARKING GARAGE	395 PAGE MILL RD, PALO ALTO, CA 94306
20	ALTFUELS	124548	Lower (30 ft.)	0.123 mi. NW (649 ft.)	PARK PLAZA	195 PAGE MILL RD, PALO ALTO, CA 94306
20	***BF***	***SL0608525943***	***Lower (30 ft.)***	***0.123 mi. NW (649 ft.)***	***PARK PLAZA***	***195 PAGE MILL ROAD, PALO ALTO, CA 94303***
46	***BF***	***T10000012297***	***Higher (39 ft.)***	***0.371 mi. W (1959 ft.)***	***2515 & 2585 EL CAMINO REAL***	***2515 & 2585 EL CAMINO REAL, PALO ALTO, CA 94306***
49	***BF***	***T10000010107***	***Higher (39 ft.)***	***0.384 mi. W (2028 ft.)***	***SAND HILL PROPERTIES***	***2600 EL CAMINO REAL, PALO ALTO, CA 94306***
17	***CALSITES***	***43370006***	***Higher (34 ft.)***	***0.115 mi. SW (607 ft.)***	***DURA-BOND BEARING***	***395 PORTAGE AVE, PALO ALTO, CA 94306***
36	***CALSITES***	***43170004***	***Lower (11 ft.)***	***0.266 mi. NW (1404 ft.)***	***OREGON EXPRESSWAY UNDERPASS***	***XING OF OREGON EXPRESSWAY & ALMA STREET, PALO ALTO, CA 94304***
39	***CALSITES***	***43360086***	***Higher (41 ft.)***	***0.291 mi. SSW (1536 ft.)***	***VARIAN***	***611 HANSEN WAY, PALO ALTO, CA 94304***
55	***CALSITES***	***43350082***	***Higher (44 ft.)***	***0.428 mi. WSW (2260 ft.)***	***HEWLETT-PACKARD (620-640 PAGE MILL ROAD)***	***620-640 PAGE MILL ROAD, PALO ALTO, CA 94304***
1	CHMIRS	13-3775	Equal (33 ft.)	TP	STORM DRAIN TO MATADERO CREEK TO S.F. BAY.	210 PORTAGE AVENUE, PALO ALTO, CA 94303
30	CLEANER	CAD028879765	Higher (38 ft.)	0.211 mi. WSW (1114 ft.)	STANFORD CLEANERS	2875 EL CAMINO REAL, PALO ALTO, CA 94306
1	***CLEANUPSITES***	***SL0608568096***	***Equal (33 ft.)***	***TP***	***MERCER PROCESSING***	***230 PORTAGE AVE, PALO ALTO, CA 94306***
1	***CLEANUPSITES***	***T10000003606***	***Equal (33 ft.)***	***TP***	***EL CAMINO CENTER***	***340 PORTAGE AVENUE, PALO ALTO, CA 94306***
5	***CLEANUPSITES***	***T0608501727***	***Equal (33 ft.)***	***0.027 mi. NE (143 ft.)***	***VANCE BROWN & SONS***	***3101 PARK BLVD, PALO ALTO, CA 94301***
5	***CLEANUPSITES***	***T10000007084***	***Equal (33 ft.)***	***0.027 mi. NE (143 ft.)***	***LOCKHEED-MARTIN***	***3101 PARK BOULEVARD, PALO ALTO, CA 94503***
7	***CLEANUPSITES***	***T10000009221***	***Equal (33 ft.)***	***0.034 mi. NNE (180 ft.)***	***FORMER AKINS AUTO BODY***	***3045 PARK BLVD., PALO ALTO, CA 94306***
7	***CLEANUPSITES***	***T10000010246***	***Equal (33 ft.)***	***0.034 mi. NNE (180 ft.)***	***3045 PARK BLVD DEVELOPMENT***	***3045 PARK BLVD, PALO ALTO, CA 94036***
10	***CLEANUPSITES***	***T10000008090***	***Lower (31 ft.)***	***0.055 mi. NW (290 ft.)***	***SOUTHERN PACIFIC***	***2901 PARK BOULEVARD, PALO ALTO, CA 94036***
11	***CLEANUPSITES***	***T0608501751***	***Equal (33 ft.)***	***0.069 mi. SW (364 ft.)***	***DURA BOND BEARING CO.***	***3201 ASH ST, PALO ALTO, CA 94306***
11	***CLEANUPSITES***	***T0608591604***	***Equal (33 ft.)***	***0.069 mi. SW (364 ft.)***	***DURA BOND***	***3201 ASH ST, PALO ALTO, CA 94306***
12	***CLEANUPSITES***	***SL18361781***	***Higher (34 ft.)***	***0.072 mi. SW (380 ft.)***	***DURA-BOND BEARING***	***370 PORTAGE AVENUE, PALO ALTO, CA***

Site Summary By Database

NOTE: Standard environmental records are displayed in **bold**.

Map ID#	Database Name	Site ID#	Relative Elevation	Distance From Site	Site Name	Address
16	CLEANUPSITES	SL18321741	Lower (30 ft.)	0.099 mi. WNW (523 ft.)	HEWLETT PACKARD COMPANY	395 PAGE MILL RD, PALO ALTO, CA 94306
16	CLEANUPSITES	T0608502399	Lower (30 ft.)	0.099 mi. WNW (523 ft.)	HEWLETT-PACKARD	395 PAGE MILL RD, PALO ALTO, CA 94304
16	CLEANUPSITES	T10000005459	Lower (30 ft.)	0.099 mi. WNW (523 ft.)	JAY PAUL REDEVELOPMENT	395 / 3045 PAGE MILL ROAD / PARK BOULEVARD, PALO ALTO, CA 94303
18	CLEANUPSITES	T0608500788	Higher (36 ft.)	0.115 mi. WSW (607 ft.)	JOST HEATING & SHEET METAL	412 OLIVE AVE, PALO ALTO, CA 94306
19	CLEANUPSITES	T0608501661	Higher (34 ft.)	0.115 mi. SW (607 ft.)	CARMEAN TRUST	411 ACACIA AVE, PALO ALTO, CA 94306
20	CLEANUPSITES	SL0608525943	Lower (30 ft.)	0.123 mi. NW (649 ft.)	PARK PLAZA	195 PAGE MILL ROAD, PALO ALTO, CA 94303
20	CLEANUPSITES	T10000000056	Lower (30 ft.)	0.123 mi. NW (649 ft.)	PARK PLAZA	PALO ALTO, CA 94306
20	CLEANUPSITES	T10000010996	Lower (30 ft.)	0.123 mi. NW (649 ft.)	PARK PLAZA - UST	195 PAGE MILL ROAD, PALO ALTO, CA
22	CLEANUPSITES	T0608500732	Lower (30 ft.)	0.142 mi. WNW (750 ft.)	HOHBACH	200 PAGE MILL, PALO ALTO, CA 94306
23	CLEANUPSITES	T0608501823	Lower (30 ft.)	0.172 mi. NW (908 ft.)	VANCE BROWN & SONS	2747 PARK BLVD, PALO ALTO, CA 94306
23	CLEANUPSITES	T0608572772	Lower (30 ft.)	0.172 mi. NW (908 ft.)	2747 PARK BOULEVARD	2747-2785 PARK BOULEVARD, PALO ALTO, CA 94306
23	CLEANUPSITES	T0608591678	Lower (30 ft.)	0.172 mi. NW (908 ft.)	VANCE BROWN AND SONS	2747 PARK BLVD, PALO ALTO, CA 94306
23	CLEANUPSITES	T10000005839	Lower (30 ft.)	0.155 mi. NW (818 ft.)	ESSEX PARK TRUST	2785-2787 PARK BOULEVARD, PALO ALTO, CA 94304
24	CLEANUPSITES	T0608501747	Higher (35 ft.)	0.164 mi. W (866 ft.)	BLEIBLER IRON WORKS	411 PAGE MILL RD, PALO ALTO, CA 94306
25	CLEANUPSITES	T10000005468	Higher (36 ft.)	0.191 mi. SW (1008 ft.)	PORTAGE LLC	3159 EL CAMINO REAL, PALO ALTO, CA 94303
26	CLEANUPSITES	T10000008756	Higher (35 ft.)	0.184 mi. WSW (972 ft.)	441 PAGE MILL ROAD	441 PAGE MILL ROAD, PALO ALTO, CA 94306
27	CLEANUPSITES	SL0608561372	Lower (30 ft.)	0.185 mi. NNW (977 ft.)	OREGON EXPRESSWAY UNDERPASS	ALMA STREET, PALO ALTO, CA 94301
28	CLEANUPSITES	T0608548811	Higher (39 ft.)	0.192 mi. SW (1014 ft.)	GAVENMAN PROPERTY	3017 EL CAMINO REAL, PALO ALTO, CA 94306
28	CLEANUPSITES	T0608555022	Higher (39 ft.)	0.192 mi. SW (1014 ft.)	PALO ALTO NISSAN	3001 EL CAMINO REAL, PALO ALTO, CA 94306
28	CLEANUPSITES	T10000011631	Higher (39 ft.)	0.192 mi. SW (1014 ft.)	SOBRATO 3001 EL CAMINO	3001-3017 EL CAMINO REAL, PALO ALTO, CA 94306
30	CLEANUPSITES	T0608591612	Higher (38 ft.)	0.211 mi. WSW (1114 ft.)	STANFORD CLEANERS	2875 EL CAMINO REAL, PALO ALTO, CA 94306

Site Summary By Database

NOTE: Standard environmental records are displayed in **bold**.

Map ID#	Database Name	Site ID#	Relative Elevation	Distance From Site	Site Name	Address
30	CLEANUPSITES	T0608591756	Higher (38 ft.)	0.211 mi. WSW (1114 ft.)	STANFORD CLEANERS	2875 EL CAMINO REAL, PALO ALTO, CA 94306
33	CLEANUPSITES	T10000002007	Equal (33 ft.)	0.230 mi. WNW (1214 ft.)	BIRCH PLAZA	2640 & 2650 BIRCH STREET, PALO ALTO, CA 94304
34	CLEANUPSITES	T10000005467	Higher (37 ft.)	0.244 mi. W (1288 ft.)	2755 EL CAMINO REAL	2755 EL CAMINO REAL, PALO ALTO, CA 94303
35	CLEANUPSITES	T0608501025	Higher (39 ft.)	0.255 mi. SSE (1346 ft.)	PALO ALTO FIRESTONE	3401 EL CAMINO REAL, PALO ALTO, CA 94306
37	CLEANUPSITES	T0608501659	Higher (37 ft.)	0.277 mi. W (1463 ft.)	GREEN WORLD NURSERY	2711 EL CAMINO REAL, PALO ALTO, CA 94306
38	CLEANUPSITES	T10000008033	Lower (32 ft.)	0.281 mi. WNW (1484 ft.)	KJ PARK (FORMER CAMPBELL-T) - 2555 PARK BOULEVARD	2555 PARK BOULEVARD, PALO ALTO, CA 94103
38	CLEANUPSITES	T10000010397	Lower (32 ft.)	0.281 mi. WNW (1484 ft.)	KJ PARK	2555 PARK BOULEVARD, PALO ALTO, CA 94709
39	CLEANUPSITES	SL0608530107	Higher (41 ft.)	0.291 mi. SSW (1536 ft.)	VARIAN INC. [NPDES]	611 HANSEN, MONTAIN VIEW, CA 94304
40	CLEANUPSITES	T0608500216	Higher (37 ft.)	0.293 mi. WSW (1547 ft.)	MOBIL (BP 11219)	2780 EL CAMINO REAL, PALO ALTO, CA 94306
41	CLEANUPSITES	T10000001638	Higher (35 ft.)	0.314 mi. WNW (1658 ft.)	MINKOFF GROUP (FORMER PREMIER PROPERTIES) - 385-399 SHERMAN	385-399 SHERMAN AVENUE, PALO ALTO, CA 94301
42	CLEANUPSITES	T0608500445	Higher (37 ft.)	0.321 mi. SSE (1695 ft.)	COMBES AUTO REPAIR	3585 EL CAMINO REAL, PALO ALTO, CA 94306
43	CLEANUPSITES	T10000012691	Higher (41 ft.)	0.324 mi. SW (1711 ft.)	PREFORMED LINE PRODUCTS, INC. (PREFORMED)	600 HANSEN WAY, PALO ALTO, CA 94304
44	CLEANUPSITES	T0608500266	Higher (37 ft.)	0.335 mi. SSE (1769 ft.)	JOHN'S AUTOMOTIVE	3508 EL CAMINO REAL, PALO ALTO, CA 94306
45	CLEANUPSITES	T0608501292	Higher (39 ft.)	0.349 mi. SSE (1843 ft.)	SHELL - 3601 EL CAMINO	3601 EL CAMINO REAL, PALO ALTO, CA 94306
46	CLEANUPSITES	T10000012297	Higher (39 ft.)	0.371 mi. W (1959 ft.)	2515 & 2585 EL CAMINO REAL	2515 & 2585 EL CAMINO REAL, PALO ALTO, CA 94306
46	CLEANUPSITES	T10000013681	Higher (39 ft.)	0.371 mi. W (1959 ft.)	2515 EL CAMINO REAL	2515 EL CAMINO REAL, PALO ALTO, CA
47	CLEANUPSITES	T0608502062	Higher (35 ft.)	0.372 mi. WNW (1964 ft.)	SHELL - 299 S CALIFORNIA	299 S. CALIFORNIA AVENUE, PALO ALTO, CA 94301
49	CLEANUPSITES	T10000010107	Higher (39 ft.)	0.384 mi. W (2028 ft.)	SAND HILL PROPERTIES	2600 EL CAMINO REAL, PALO ALTO, CA 94306
50	CLEANUPSITES	T10000013863	Higher (39 ft.)	0.403 mi. SE (2128 ft.)	PALO ALTO HOUSING WILTON COURT DEVELOPMENT	3703-3709 EL CAMINO REAL, PALO ALTO, CA 94306

Site Summary By Database

*NOTE: Standard environmental records are displayed in **bold**.*

Map ID#	Database Name	Site ID#	Relative Elevation	Distance From Site	Site Name	Address
51	***CLEANUPSITES***	***T0608500394***	***Higher (42 ft.)***	***0.405 mi. WSW (2138 ft.)***	***CHEVRON***	***775 PAGE MILL RD, PALO ALTO, CA 94304***
54	***CLEANUPSITES***	***T10000012320***	***Higher (39 ft.)***	***0.417 mi. SSE (2202 ft.)***	***3666 EL CAMINO***	***3666 EL CAMINO REAL, PALO ALTO, CA 94306***
55	***CLEANUPSITES***	***SL720511210***	***Higher (44 ft.)***	***0.428 mi. WSW (2260 ft.)***	***HEWLETT-PACKARD COMPANY***	***640 PAGE MILL RD, PALO ALTO, CA 94304***
56	***CLEANUPSITES***	***T10000004533***	***Higher (40 ft.)***	***0.439 mi. W (2318 ft.)***	***STANFORD-MAYFIELD REDEVELOPMENT***	***2450 EL CAMINO REAL, PALO ALTO, CA 94304***
57	***CLEANUPSITES***	***T0608587383***	***Higher (35 ft.)***	***0.458 mi. WNW (2418 ft.)***	***PALO ALTO TIRE & BRAKE***	***306 CAMBRIDGE, PALO ALTO, CA 94306***
58	***CLEANUPSITES***	***SL181201123***	***Higher (43 ft.)***	***0.464 mi. W (2450 ft.)***	***VARIAN ASSOCIATES***	***601 S. CALIFORNIA AVE., PALO ALTO, CA 94304***
60	***CLEANUPSITES***	***T0608501658***	***Higher (34 ft.)***	***0.482 mi. NW (2545 ft.)***	***OLD FIRE STATION***	***2253 PARK BLVD, PALO ALTO, CA 94306***
61	***CLEANUPSITES***	***T0608501144***	***Higher (40 ft.)***	***0.488 mi. W (2577 ft.)***	***ROYAL GLASS & MIRROR***	***450 CAMBRIDGE AVE, PALO ALTO, CA 94306***
62	***CLEANUPSITES***	***T0608591791***	***Higher (46 ft.)***	***0.493 mi. SW (2603 ft.)***	***EASTMAN KODAK COMPANY***	***925 PAGE MILL RD, PALO ALTO, CA 94304***
39	CORTESE	43360086	Higher (41 ft.)	0.291 mi. SSW (1536 ft.)	VARIAN	611 HANSEN WAY, PALO ALTO, CA 94304
1	ECHOR09	110002740204	Equal (33 ft.)	TP	SYSTEMS CONTROL INC	220 PORTAGE, PALO ALTO, CA 94306
2	ECHOR09	110017217135	Lower (32 ft.)	0.018 mi. ESE (95 ft.)	PARK AVE MOTORS	3250 PARK BLVD, PALO ALTO, CA 94306
2	ECHOR09	110070423282	Lower (32 ft.)	0.018 mi. ESE (95 ft.)	KUNI REDWOOD MOTORS LLC DBA AUDI PALO ALTO	3250 PARK BLVD, PALO ALTO, CA 94303
3	ECHOR09	110070490086	Equal (33 ft.)	TP	PARK AUTOMOTIVE	3040 PARK BLVD, PALO ALTO, CA 94306
16	***ENVIROSTOR***	***71002260***	***Lower (30 ft.)***	***0.099 mi. WNW (523 ft.)***	***HEWLETT-PACKARD CO. - PALO ALTO FABRICA CTR.***	***395 PAGE MILL ROAD, PALO ALTO, CA 94306***
16	***ENVIROSTOR***	***80001599***	***Lower (30 ft.)***	***0.099 mi. WNW (523 ft.)***	***HEWLETT-PACKARD COMPANY***	***395 PAGE MILL RD, PALO ALTO, CA 94306***
17	***ENVIROSTOR***	***43370006***	***Higher (34 ft.)***	***0.115 mi. SW (607 ft.)***	***DURA-BOND BEARING***	***395 PORTAGE AVE, PALO ALTO, CA 94306***
25	***ENVIROSTOR***	***60002787***	***Higher (36 ft.)***	***0.182 mi. SW (961 ft.)***	***FORMER FOOT LOCKER STORE***	***3225 EL CAMINO REAL, PALO ALTO, CA 94306***
36	***ENVIROSTOR***	***43170004***	***Lower (11 ft.)***	***0.266 mi. NW (1404 ft.)***	***OREGON EXPRESSWAY UNDERPASS***	***XING OF OREGON EXPRESSWAY & ALMA STREET, PALO ALTO, CA 94304***
39	***ENVIROSTOR***	***43360086***	***Higher (41 ft.)***	***0.291 mi. SSW (1536 ft.)***	***VARIAN***	***611 HANSEN WAY, PALO ALTO, CA 94304***

Site Summary By Database

*NOTE: Standard environmental records are displayed in **bold**.*

Map ID#	Database Name	Site ID#	Relative Elevation	Distance From Site	Site Name	Address
48	ENVIROSTOR	60002078	Higher (43 ft.)	0.374 mi. SSW (1975 ft.)	COMMUNICATIONS & POWER IND, INC.	607 HANSEN WAY (CONTIGUOUS PR), PALO ALTO, CA 94304
48	ENVIROSTOR	71003431	Higher (43 ft.)	0.374 mi. SSW (1975 ft.)	COMMUNICATIONS & POWER IND, INC.	607 HANSEN WAY (CONTIGUOUS PR), PALO ALTO, CA 94304
55	ENVIROSTOR	43350082	Higher (44 ft.)	0.428 mi. WSW (2260 ft.)	HEWLETT-PACKARD (620-640 PAGE MILL ROAD)	620-640 PAGE MILL ROAD, PALO ALTO, CA 94304
58	ENVIROSTOR	71003512	Higher (43 ft.)	0.464 mi. W (2450 ft.)	INTEVAC/EO SENSORS, INC.	601 CALIFORNIA AVENUE, PALO ALTO, CA 94304
58	ENVIROSTOR	80001826	Higher (43 ft.)	0.464 mi. W (2450 ft.)	INTEVAC	601 CALIFORNIA AVE, PALO ALTO, CA 94303
63	ENVIROSTOR	71003483	Higher (49 ft.)	0.565 mi. SSW (2983 ft.)	VARIAN MEDICAL SYSTEMS	911, 913, 3075, 3030, & 3140 HANSEN WAY, PALO ALTO, CA 94304
64	ENVIROSTOR	80001596	Higher (47 ft.)	0.579 mi. SW (3057 ft.)	VARIAN NMR SYSTEMS	3120 HANSEN WAY, PALO ALTO, CA 94304
65	ENVIROSTOR	43360085	Higher (77 ft.)	0.803 mi. SW (4240 ft.)	AYDIN ENERGY	3180 HANOVER STREET, PALO ALTO, CA 94304
66	ENVIROSTOR	43280115	Higher (67 ft.)	0.832 mi. SW (4393 ft.)	ALZA PHARMACEUTICALS	1454 PAGE MILL ROAD, PALO ALTO, CA 94304
67	ENVIROSTOR	60001837	Higher (59 ft.)	0.874 mi. WSW (4615 ft.)	CALIFORNIA AVENUE HOUSING SITE	1451-1481 CALIFORNIA AVENUE, PALO ALTO, CA 94304
68	ENVIROSTOR	60001911	Higher (81 ft.)	0.901 mi. WSW (4757 ft.)	CALIFORNIA AVENUE HOUSING PHASE II SITE	1501 CALIFORNIA AVENUE, PALO ALTO, CA 94304
69	ENVIROSTOR	71002581	Higher (81 ft.)	0.966 mi. WSW (5100 ft.)	1601 S CALIFORNIA AVENUE	1601 CALIFORNIA AVENUE, PALO ALTO, CA 94304
16	ENVIROSTORP CA	CAD009122557	Lower (30 ft.)	0.099 mi. WNW (523 ft.)	HEWLETT-PACKARD COMPANY	395 PAGE MILL RD, PALO ALTO, CA 94303
48	ENVIROSTORP CA	CAR000003863	Higher (43 ft.)	0.374 mi. SSW (1975 ft.)	COMMUNICATIONS & POWER INDUSTRIES	811 HANSEN WAY, PALO ALTO, CA 94304
58	ENVIROSTORP CA	CAT080010804	Higher (43 ft.)	0.464 mi. W (2450 ft.)	INTEVAC	601 CALIFORNIA AVE, PALO ALTO, CA 94303
64	ENVIROSTORP CA	CAD009120817	Higher (47 ft.)	0.577 mi. SW (3047 ft.)	VARIAN MEDICAL SYSTEMS PALO ALTO	3120 HANSEN WAY, PALO ALTO, CA 94304
69	ENVIROSTORP CA	CAD076314640	Higher (81 ft.)	0.966 mi. WSW (5100 ft.)	AGILENT TECHNOLOGIES CALIFORNIA AVE SITE	1601 CALIFORNIA AVE, PALO ALTO, CA 94304
70	ENVIROSTORP CA	CAD009129354	Higher (110 ft.)	0.966 mi. SSW (5100 ft.)	LOCKHEED MARTIN SPACE SYSTEMS CO	3251 HANOVER ST, PALO ALTO, CA 94304
1	FRSCA	110002740204	Equal (33 ft.)	TP	SYSTEMS CONTROL INC	220 PORTAGE, PALO ALTO, CA 94306
1	FRSCA	110065985642	Equal (33 ft.)	TP	MERCER PROCESSING	230 PORTAGE AVE, PALO ALTO, CA 94306

Site Summary By Database

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Map ID#	Database Name	Site ID#	Relative Elevation	Distance From Site	Site Name	Address
1	FRSCA	110066240856	Equal (33 ft.)	TP	EL CAMINO CENTER	340 PORTAGE AVENUE, PALO ALTO, CA 94306
2	FRSCA	110017217135	Lower (32 ft.)	0.018 mi. ESE (95 ft.)	PARK AVE MOTORS	3250 PARK BLVD, PALO ALTO, CA 94306
2	FRSCA	110070423282	Lower (32 ft.)	0.018 mi. ESE (95 ft.)	KUNI REDWOOD MOTORS LLC DBA AUDI PALO ALTO	3250 PARK BLVD, PALO ALTO, CA 94303
3	FRSCA	110055737172	Equal (33 ft.)	TP	PARK AUTOMOTIVE SERVICE	3040 PARK BL, PALO ALTO, CA 94306
3	FRSCA	110070490086	Equal (33 ft.)	TP	PARK AUTOMOTIVE	3040 PARK BLVD, PALO ALTO, CA 94306
5	HISTCORTESE	43-1799COR	Equal (33 ft.)	0.028 mi. NE (148 ft.)	VANCE BROWN & SONS	3101 PARK, PALO ALTO, CA 94306
11	HISTCORTESE	43-1824COR	Equal (33 ft.)	0.069 mi. SW (364 ft.)	DURA BOND BEARING COMPANY	3201 ASH, PALO ALTO, CA 94306
16	HISTCORTESE	2 438131NO1COR	Lower (30 ft.)	0.100 mi. WNW (528 ft.)	SCR-HEWLETT PACKARD-395 P	395 PAGE MILL, PALO ALTO, CA 94306
18	HISTCORTESE	43-0765COR	Higher (36 ft.)	0.115 mi. WSW (607 ft.)	JOST HEATING & SHEET META	412 OLIVE, PALO ALTO, CA 94306
19	HISTCORTESE	43-1725COR	Higher (34 ft.)	0.115 mi. SW (607 ft.)	CARMEAN TRUST	411 ACACIA, PALO ALTO, CA 94306
22	HISTCORTESE	43-0703COR	Lower (30 ft.)	0.142 mi. WNW (750 ft.)	HOHBACK	216 PAGE MILL, PALO ALTO, CA
23	HISTCORTESE	43-1923COR	Lower (30 ft.)	0.171 mi. NW (903 ft.)	VANCE BROWN & SONS	2747 PARK, PALO ALTO, CA 94306
24	HISTCORTESE	43-1820COR	Higher (35 ft.)	0.164 mi. W (866 ft.)	BLEIBLER IRON WORKS	411 PAGE MILL, PALO ALTO, CA 94306
28	HISTCORTESE	43-1031COR	Higher (39 ft.)	0.191 mi. SW (1008 ft.)	PALO ALTO NISSAN	3001 EL CAMINO REAL, PALO ALTO, CA
35	HISTCORTESE	43-1030COR	Higher (39 ft.)	0.255 mi. SSE (1346 ft.)	FIRESTONE	3401 EL CAMINO REAL, PALO ALTO, CA 94306
36	HISTCORTESE	43170004COR	Lower (11 ft.)	0.266 mi. NW (1404 ft.)	OREGON EXPRESSWAY UNDERPA	XING OF OREGON EXWY & ALM, PALO ALTO, CA 94304
37	HISTCORTESE	43-1723COR	Higher (37 ft.)	0.275 mi. W (1452 ft.)	GREEN WORLD NURSERY	2711 EL CAMINO REAL, PALO ALTO, CA 94301
39	HISTCORTESE	43360086COR	Higher (41 ft.)	0.291 mi. SSW (1536 ft.)	VARIAN	611 HANSEN, PALO ALTO, CA 94303
40	HISTCORTESE	43-0150COR	Higher (37 ft.)	0.292 mi. WSW (1542 ft.)	MOBIL	2780 EL CAMINO REAL, PALO ALTO, CA
42	HISTCORTESE	43-0394COR	Higher (37 ft.)	0.321 mi. SSE (1695 ft.)	COMBES AUTO REPAIR	3585 EL CAMINO REAL, PALO ALTO, CA
44	HISTCORTESE	43-0206COR	Higher (37 ft.)	0.335 mi. SSE (1769 ft.)	JOHNS AUTOMOTIVE	3508 EL CAMINO REAL, PALO ALTO, CA

Site Summary By Database

*NOTE: Standard environmental records are displayed in **bold**.*

Map ID#	Database Name	Site ID#	Relative Elevation	Distance From Site	Site Name	Address
45	HISTCORTESE	43-1314COR	Higher (39 ft.)	0.349 mi. SSE (1843 ft.)	SHELL	3601 EL CAMINO REAL, PALO ALTO, CA 94306
52	HISTCORTESE	43-0338COR	Higher (42 ft.)	0.443 mi. SW (2339 ft.)	CHEVRON	775 PAGE MILL, PALO ALTO, CA 94304
55	HISTCORTESE	2 438063NO2COR	Higher (44 ft.)	0.428 mi. WSW (2260 ft.)	SCR-HEWLETT PKRD-640 PAGE	640 PAGE MILL, PALO ALTO, CA 94304
57	HISTCORTESE	43-1032COR	Higher (35 ft.)	0.458 mi. WNW (2418 ft.)	PALO ALTO TIRE & BRAKE	306 CAMBRIDGE, PALO ALTO, CA 94036
58	HISTCORTESE	2 438249NO1COR	Higher (43 ft.)	0.464 mi. W (2450 ft.)	SCR-VARIAN-601 CALIF AVE	601 CALIFORNIA, PALO ALTO, CA 94304
59	HISTCORTESE	43-0795COR	Lower (26 ft.)	0.475 mi. N (2508 ft.)	SNELL RESIDENCE	2388 WAVERLY, PALO ALTO, CA 94303
60	HISTCORTESE	43-1720COR	Higher (34 ft.)	0.475 mi. NW (2508 ft.)	OLD FIRE STATION	2253 PARK, PALO ALTO, CA
61	HISTCORTESE	43-1154COR	Higher (40 ft.)	0.488 mi. W (2577 ft.)	ROYAL GLASS & MIRROR	450 CAMBRIDGE, PALO ALTO, CA
9	***HISTUST***	***000206DF***	***Lower (32 ft.)***	***0.048 mi. ESE (253 ft.)***	***PARK AVENUE MOTORS***	***3290 PARK BLVD, PALO ALTO, CA 94306***
15	***HISTUST***	***000206B5***	***Equal (33 ft.)***	***0.095 mi. SE (502 ft.)***	***PACIFIC BELL (P1-052)***	***3350 BIRCH ST, PALO ALTO, CA 94306***
17	***HISTUST***	***0002090C***	***Higher (34 ft.)***	***0.115 mi. SW (607 ft.)***	***DURA-BOND BEARING COMPANY***	***395 PORTAGE AVENUE, PALO ALTO, CA 94306***
17	***HISTUST***	***0002093C***	***Higher (34 ft.)***	***0.100 mi. SW (528 ft.)***	***STAR GRAFIC ARTS CO INC***	***3200 ASH ST, PALO ALTO, CA 94306***
19	***HISTUST***	***0002C152***	***Higher (34 ft.)***	***0.115 mi. SW (607 ft.)***	***PALO ALTO DATSUN INC***	***411 ACACIA ST, PALO ALTO, CA 94304***
23	***HISTUST***	***000206D6***	***Lower (30 ft.)***	***0.155 mi. NW (818 ft.)***	***PACIFIC READY MIX INC***	***2785 PARK BLVD, PALO ALTO, CA 94306***
23	***HISTUST***	***0002CEFD***	***Lower (30 ft.)***	***0.171 mi. NW (903 ft.)***	***OFFICES OF VANCE M BROWN AND SO***	***2747 PARK BOULEVARD, PALO ALTO, CA 94306***
24	***HISTUST***	***0002CED8***	***Higher (35 ft.)***	***0.164 mi. W (866 ft.)***	***BLEIBLER IRON WORKS INC***	***411 PAGE MILL ROAD, PALO ALTO, CA 94306***
29	***HISTUST***	***0002088B***	***Lower (27 ft.)***	***0.192 mi. NE (1014 ft.)***	***ZZONTA***	***2680 RAMONA, PALO ALTO, CA 94306***
30	***HISTUST***	***00020930***	***Higher (38 ft.)***	***0.211 mi. WSW (1114 ft.)***	***STANFORD CLEANERS***	***2875 EL CAMINO REAL, PALO ALTO, CA 94306***
1	HWTS	CAC002675759	Equal (33 ft.)	TP	EL CAMINO CENTER	340 PORTAGE AVE, PALO ALTO, CA 94306
2	HWTS	CAC001305584	Lower (32 ft.)	TP	WSJ PROPERTIES	3200 PARK BLVD, PALO ALTO, CA 94306
2	HWTS	CAR000151357	Lower (32 ft.)	0.015 mi. ESE (79 ft.)	PARK AVE MOTORS	3250 PARK BLVD, PALO ALTO, CA 94306
3	HWTS	CAL930295449	Equal (33 ft.)	TP	PARK AUTOMOTIVE	3040 PARK BLVD, PALO ALTO, CA 94306

Site Summary By Database

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Map ID#	Database Name	Site ID#	Relative Elevation	Distance From Site	Site Name	Address
1	LUST	T10000003606	Equal (33 ft.)	TP	EL CAMINO CENTER	340 PORTAGE AVENUE, PALO ALTO, CA 94306
5	LUST	T0608501727	Equal (33 ft.)	0.027 mi. NE (143 ft.)	VANCE BROWN & SONS	3101 PARK BLVD, PALO ALTO, CA 94301
11	LUST	T0608501751	Equal (33 ft.)	0.069 mi. SW (364 ft.)	DURA BOND BEARING CO.	3201 ASH ST, PALO ALTO, CA 94306
11	LUST	T0608591604	Equal (33 ft.)	0.069 mi. SW (364 ft.)	DURA BOND	3201 ASH ST, PALO ALTO, CA 94306
16	LUST	T0608502399	Lower (30 ft.)	0.099 mi. WNW (523 ft.)	HEWLETT-PACKARD	395 PAGE MILL RD, PALO ALTO, CA 94304
16	LUST	T0608591782	Lower (30 ft.)	0.100 mi. WNW (528 ft.)	HEWLETT PACKARD	395 PAGE MILL RD, PALO ALTO, CA 94306
18	LUST	T0608500788	Higher (36 ft.)	0.115 mi. WSW (607 ft.)	JOST HEATING & SHEET METAL	412 OLIVE AVE, PALO ALTO, CA 94306
19	LUST	T0608501661	Higher (34 ft.)	0.115 mi. SW (607 ft.)	CARMEAN TRUST	411 ACACIA AVE, PALO ALTO, CA 94306
20	LUST	T10000010996	Lower (30 ft.)	0.123 mi. NW (649 ft.)	PARK PLAZA - UST	195 PAGE MILL ROAD, PALO ALTO, CA
22	LUST	T0608500732	Lower (30 ft.)	0.142 mi. WNW (750 ft.)	HOHBACH	200 PAGE MILL, PALO ALTO, CA 94306
23	LUST	T0608501823	Lower (30 ft.)	0.172 mi. NW (908 ft.)	VANCE BROWN & SONS	2747 PARK BLVD, PALO ALTO, CA 94306
23	LUST	T0608572772	Lower (30 ft.)	0.172 mi. NW (908 ft.)	PROPOSED PARK PLAZA APARTMENTS	2785 PARK BOULEVARD, PALO ALTO, CA
23	LUST	T0608591678	Lower (30 ft.)	0.172 mi. NW (908 ft.)	VANCE BROWN AND SONS	2747 PARK BLVD, PALO ALTO, CA 94306
24	LUST	T0608501747	Higher (35 ft.)	0.164 mi. W (866 ft.)	BLEIBLER IRON WORKS	411 PAGE MILL RD, PALO ALTO, CA 94306
28	LUST	T0608501026	Higher (39 ft.)	0.191 mi. SW (1008 ft.)	PALO ALTO NISSAN	3001 EL CAMINO REAL, PALO ALTO, CA 94306
28	LUST	T0608548811	Higher (39 ft.)	0.192 mi. SW (1014 ft.)	GAVENMAN PROPERTY	3017 EL CAMINO REAL, PALO ALTO, CA 94306
28	LUST	T0608555022	Higher (39 ft.)	0.192 mi. SW (1014 ft.)	PALO ALTO NISSAN	3001 EL CAMINO REAL, PALO ALTO, CA 94306
30	LUST	T0608591612	Higher (38 ft.)	0.211 mi. WSW (1114 ft.)	STANFORD CLEANERS	2875 EL CAMINO REAL, PALO ALTO, CA 94306
30	LUST	T0608591756	Higher (38 ft.)	0.211 mi. WSW (1114 ft.)	STANFORD CLEANERS	2875 EL CAMINO REAL, PALO ALTO, CA 94306
35	LUST	T0608501025	Higher (39 ft.)	0.255 mi. SSE (1346 ft.)	PALO ALTO FIRESTONE	3401 EL CAMINO REAL, PALO ALTO, CA 94306
37	LUST	T0608501659	Higher (37 ft.)	0.277 mi. W (1463 ft.)	GREEN WORLD NURSERY	2711 EL CAMINO REAL, PALO ALTO, CA 94306
40	LUST	T0608500216	Higher (37 ft.)	0.293 mi. WSW (1547 ft.)	MOBIL (BP 11219)	2780 EL CAMINO REAL, PALO ALTO, CA 94306

Site Summary By Database

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Map ID#	Database Name	Site ID#	Relative Elevation	Distance From Site	Site Name	Address
42	***LUST***	***T0608500445***	***Higher (37 ft.)***	***0.321 mi. SSE (1695 ft.)***	***COMBES AUTO REPAIR***	***3585 EL CAMINO REAL, PALO ALTO, CA 94306***
44	***LUST***	***T0608500266***	***Higher (37 ft.)***	***0.335 mi. SSE (1769 ft.)***	***JOHN'S AUTOMOTIVE***	***3508 EL CAMINO REAL, PALO ALTO, CA 94306***
45	***LUST***	***T0608501292***	***Higher (39 ft.)***	***0.349 mi. SSE (1843 ft.)***	***SHELL - 3601 EL CAMINO***	***3601 EL CAMINO REAL, PALO ALTO, CA 94306***
47	***LUST***	***T0608502062***	***Higher (35 ft.)***	***0.372 mi. WNW (1964 ft.)***	***SHELL - 299 S CALIFORNIA***	***299 S. CALIFORNIA AVENUE, PALO ALTO, CA 94301***
52	***LUST***	***T0608500394***	***Higher (42 ft.)***	***0.405 mi. WSW (2138 ft.)***	***CHEVRON***	***775 PAGE MILL RD, PALO ALTO, CA 94304***
54	***LUST***	***T10000012320***	***Higher (39 ft.)***	***0.417 mi. SSE (2202 ft.)***	***3666 EL CAMINO***	***3666 EL CAMINO REAL, PALO ALTO, CA 94306***
57	***LUST***	***T0608501027***	***Higher (35 ft.)***	***0.458 mi. WNW (2418 ft.)***	***PALO ALTO TIRE & BRAKE***	***306 CAMBRIDGE AVE, PALO ALTO, CA 94306***
57	***LUST***	***T0608587383***	***Higher (35 ft.)***	***0.458 mi. WNW (2418 ft.)***	***PALO ALTO TIRE & BRAKE***	***306 CAMBRIDGE, PALO ALTO, CA 94306***
59	***LUST***	***T0608500813***	***Lower (26 ft.)***	***0.475 mi. N (2508 ft.)***	***SNELL RESIDENCE***	***2388 WAVERLY ST, PALO ALTO, CA 94301***
60	***LUST***	***T0608501658***	***Higher (34 ft.)***	***0.482 mi. NW (2545 ft.)***	***OLD FIRE STATION***	***2253 PARK BLVD, PALO ALTO, CA 94306***
61	***LUST***	***T0608501144***	***Higher (40 ft.)***	***0.488 mi. W (2577 ft.)***	***ROYAL GLASS & MIRROR***	***450 CAMBRIDGE AVE, PALO ALTO, CA 94306***
62	***LUST***	***T0608591791***	***Higher (46 ft.)***	***0.493 mi. SW (2603 ft.)***	***EASTMAN KODAK COMPANY***	***925 PAGE MILL RD, PALO ALTO, CA 94304***
48	NFA	60002078	Higher (43 ft.)	0.374 mi. SSW (1975 ft.)	COMMUNICATIONS & POWER IND, INC.	607 HANSEN WAY (CONTIGUOUS PR), PALO ALTO, CA 94304
48	NFA	71003431	Higher (43 ft.)	0.374 mi. SSW (1975 ft.)	COMMUNICATIONS & POWER IND, INC.	607 HANSEN WAY (CONTIGUOUS PR), PALO ALTO, CA 94304
55	***NPL***	***CAD980884209***	***Higher (44 ft.)***	***0.428 mi. WSW (2260 ft.)***	***HEWLETT-PACKARD (620-640 PAGE MILL ROAD)***	***620 - 640 PAGE MILL RD., PALO ALTO, CA 94304***
43	PROC	PR0448	Higher (41 ft.)	0.324 mi. SW (1711 ft.)	ECULLET INC	600 HANSEN WY STE 246, PALO ALTO, CA 94304
16	***RCRAC***	***CAD009122557***	***Lower (30 ft.)***	***0.099 mi. WNW (523 ft.)***	***HEWLETT PACKARD MFG DIV***	***395 PAGE MILL RD, PALO ALTO, CA 94306***
48	***RCRAC***	***CAR000003863***	***Higher (43 ft.)***	***0.374 mi. SSW (1975 ft.)***	***COMMUNICATIONS & POWER INDUSTRIES***	***811 HANSEN WAY, PALO ALTO, CA 94304***
58	***RCRAC***	***CAT080010804***	***Higher (43 ft.)***	***0.464 mi. W (2450 ft.)***	***INTEVAC***	***601 CALIFORNIA AVE, PALO ALTO, CA 94304***

Site Summary By Database

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Map ID#	Database Name	Site ID#	Relative Elevation	Distance From Site	Site Name	Address
64	RCRAC	CAD009120817	Higher (47 ft.)	0.577 mi. SW (3047 ft.)	VARIAN MEDICAL SYSTEMS PALO ALTO	3120 HANSEN WAY, PALO ALTO, CA 94304
70	RCRAC	CAD009129354	Higher (110 ft.)	0.966 mi. SSW (5100 ft.)	LOCKHEED MARTIN SPACE SYSTEM	3251 HANOVER STREET, PALO ALTO, CA 94304
1	RCRAGR09	CAD981657984	Equal (33 ft.)	TP	SYSTEMS CONTROL INC	220 PORTAGE, PALO ALTO, CA 94306
2	RCRAGR09	CAR000151357	Lower (32 ft.)	0.018 mi. ESE (95 ft.)	PARK AVE MOTORS	3250 PARK BLVD, PALO ALTO, CA 94306
6	RCRAGR09	CAR000098996	Lower (32 ft.)	0.029 mi. ENE (153 ft.)	PARK AVENUE MOTORS	3241 PARK AVE, PALO ALTO, CA 94306
8	RCRAGR09	CAD982496853	Equal (33 ft.)	0.053 mi. SSE (280 ft.)	HELMINGS AUTO REPAIR	300 LAMBERT AVE, PALO ALTO, CA 94306
10	RCRAGR09	CAD064719859	Lower (31 ft.)	0.055 mi. NW (290 ft.)	AKINS BODY SHOP INC	2901 PARK BLVD, PALO ALTO, CA 94306
13	RCRAGR09	CAD983600206	Equal (33 ft.)	0.072 mi. SSW (380 ft.)	SAY RAY	3251 ASH ST, PALO ALTO, CA 94306
14	RCRAGR09	CAD981394265	Lower (31 ft.)	0.090 mi. NW (475 ft.)	BIX	2891 PARK BLVD, PALO ALTO, CA 94306
15	RCRAGR09	CAT080019896	Equal (33 ft.)	0.095 mi. SE (502 ft.)	PACIFIC BELL	3350 BIRCH STREET, PALO ALTO, CA 94306
16	RCRAGR09	CAD009122557	Lower (30 ft.)	0.099 mi. WNW (523 ft.)	HEWLETT PACKARD MFG DIV	395 PAGE MILL RD, PALO ALTO, CA 94306
17	RCRAGR09	CAD063553630	Higher (34 ft.)	0.115 mi. SW (607 ft.)	DURA-BOND BEARING COMPANY	395 PORTAGE, PALO ALTO, CA 94306
19	RCRAGR09	CAD981579691	Higher (34 ft.)	0.115 mi. SW (607 ft.)	PALO ALTO NISSAN INC	411 ACACIA, PALO ALTO, CA 94306
2	RCRANGR09	CAL000421792	Lower (32 ft.)	0.018 mi. ESE (95 ft.)	KUNI REDWOOD MOTORS LLC DBA AUDI PALO ALTO	3250 PARK BLVD, PALO ALTO, CA 94303
3	RCRANGR09	CAL930295449	Equal (33 ft.)	TP	PARK AUTOMOTIVE	3040 PARK BLVD, PALO ALTO, CA 94306
4	RCRANGR09	CAC002999555	Lower (32 ft.)	0.026 mi. NE (137 ft.)	PARK PLACE ASSOCIATES	3197 PARK BLVD., PALO ALTO, CA 94306
5	RCRANGR09	CAD981994593	Equal (33 ft.)	0.027 mi. NE (143 ft.)	LOCKHEED MISSLES & SPACE CO	3101 PARK BLVD, PALO ALTO, CA 94306
6	RCRANGR09	CAL000441349	Lower (32 ft.)	0.029 mi. ENE (153 ft.)	AKINS BODY SHOP INC	3241 PARK BLVD, PALO ALTO, CA 94306
7	RCRANGR09	CAC002972947	Equal (33 ft.)	0.034 mi. NNE (180 ft.)	3045 PARK PROPERTY LLC	3045 PARK BOULEVARD, PALO ALTO, CA 94306
7	RCRANGR09	CAC002986615	Equal (33 ft.)	0.034 mi. NNE (180 ft.)	3045 PARK PROPERTY LLC	3045 PARK BLVD, PALO ALTO, CA 94306

Site Summary By Database

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Map ID#	Database Name	Site ID#	Relative Elevation	Distance From Site	Site Name	Address
7	***RCRANGR09***	***CAC002993272***	***Equal (33 ft.)***	***0.034 mi. NNE (180 ft.)***	***3045 PARK PROPERTY LLC***	***3045 PARK BLVD, PALO ALTO, CA 94306***
7	***RCRANGR09***	***CAC003008436***	***Equal (33 ft.)***	***0.034 mi. NNE (180 ft.)***	***3045 PARK PROPERTY LLC***	***3045 PARK BLVD, PALO ALTO, CA 94306***
7	***RCRANGR09***	***CAC003023588***	***Equal (33 ft.)***	***0.034 mi. NNE (180 ft.)***	***3045 PARK PROPERTY LLC***	***3045 PARK BLVD., PALO ALTO, CA 94306***
7	***RCRANGR09***	***CAD981992639***	***Equal (33 ft.)***	***0.034 mi. NNE (180 ft.)***	***STANFORD BMW***	***3045 PARK BLVD, PALO ALTO, CA 94306***
8	***RCRANGR09***	***CAD063539217***	***Equal (33 ft.)***	***0.037 mi. SE (195 ft.)***	***ARTS BODYCRAFT INC***	***280 LAMBERT AVE, PALO ALTO, CA 94306***
8	***RCRANGR09***	***CAL000291378***	***Equal (33 ft.)***	***0.047 mi. SSE (248 ft.)***	***STANFORD ARCO AUTO CARE***	***290 LAMBERT AVE, PALO ALTO, CA 94306***
8	***RCRANGR09***	***CAL000379235***	***Equal (33 ft.)***	***0.042 mi. SE (222 ft.)***	***COMCAST OF CALIFORNIA IX,INC***	***278 LAMBERT ST, PALO ALTO, CA 94360***
9	***RCRANGR09***	***CAD063548655***	***Lower (32 ft.)***	***0.048 mi. ESE (253 ft.)***	***PARK AVENUE MOTORS***	***3290 PARK BLVD, PALO ALTO, CA 94306***
9	***RCRANGR09***	***CAL000400217***	***Lower (32 ft.)***	***0.048 mi. ESE (253 ft.)***	***AKINS BODY SHOP INC***	***3290 PARK BLVD, PALO ALTO, CA 94306***
12	***RCRANGR09***	***CAD982510208***	***Higher (34 ft.)***	***0.072 mi. SW (380 ft.)***	***VARIAN ASSOCIATES, INC***	***380 PORTAGE AVE, PALO ALTO, CA 94303***
12	***RCRANGR09***	***CAL000423385***	***Higher (34 ft.)***	***0.072 mi. SW (380 ft.)***	***PLAYGROUND GLOBAL LLC***	***380 PORTAGE AVE, PALO ALTO, CA 94306***
21	***RCRANGR09***	***CAC003052934***	***Lower (28 ft.)***	***0.122 mi. N (644 ft.)***	***SAM WONG***	***2609 ALMA STREET, PALO ALTO, CA 94036***
70	***RCRASUBC***	***CAD009129354***	***Higher (110 ft.)***	***0.966 mi. SSW (5100 ft.)***	***LOCKHEED MARTIN SPACE SYSTEM***	***3251 HANOVER STREET, PALO ALTO, CA 94304***
16	***RCRAT***	***CAD009122557***	***Lower (30 ft.)***	***0.099 mi. WNW (523 ft.)***	***HEWLETT PACKARD MFG DIV***	***395 PAGE MILL RD, PALO ALTO, CA 94306***
48	***RCRAT***	***CAR000003863***	***Higher (43 ft.)***	***0.374 mi. SSW (1975 ft.)***	***COMMUNICATIONS & POWER INDUSTRIES***	***811 HANSEN WAY, PALO ALTO, CA 94304***
16	REF	71002260	Lower (30 ft.)	0.099 mi. WNW (523 ft.)	HEWLETT-PACKARD CO. - PALO ALTO FABRICA CTR.	395 PAGE MILL ROAD, PALO ALTO, CA 94306
16	REF	80001599	Lower (30 ft.)	0.099 mi. WNW (523 ft.)	HEWLETT-PACKARD COMPANY	395 PAGE MILL RD, PALO ALTO, CA 94306
17	REF	43370006	Higher (34 ft.)	0.115 mi. SW (607 ft.)	DURA-BOND BEARING	395 PORTAGE AVE, PALO ALTO, CA 94306
36	REF	43170004	Lower (11 ft.)	0.266 mi. NW (1404 ft.)	OREGON EXPRESSWAY UNDERPASS	XING OF OREGON EXPRESSWAY & ALMA STREET, PALO ALTO, CA 94304

Site Summary By Database

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Map ID#	Database Name	Site ID#	Relative Elevation	Distance From Site	Site Name	Address
55	REF	43350082	Higher (44 ft.)	0.428 mi. WSW (2260 ft.)	HEWLETT-PACKARD (620-640 PAGE MILL ROAD)	620-640 PAGE MILL ROAD, PALO ALTO, CA 94304
58	REF	71003512	Higher (43 ft.)	0.464 mi. W (2450 ft.)	INTEVAC/EO SENSORS, INC.	601 CALIFORNIA AVENUE, PALO ALTO, CA 94304
58	REF	80001826	Higher (43 ft.)	0.464 mi. W (2450 ft.)	INTEVAC	601 CALIFORNIA AVE, PALO ALTO, CA 94303
55	RODS	CAD980884209	Higher (44 ft.)	0.428 mi. WSW (2260 ft.)	HEWLETT-PACKARD (620-640 PAGE MILL ROAD)	620 - 640 PAGE MILL RD., PALO ALTO, CA 94304
55	***SEMS***	***CAD980884209***	***Higher (44 ft.)***	***0.428 mi. WSW (2260 ft.)***	***HEWLETT-PACKARD (620-640 PAGE MILL ROAD)***	***620 - 640 PAGE MILL RD., PALO ALTO, CA 94304***
11	***SEMSARCH***	***CAD014440648***	***Equal (33 ft.)***	***0.069 mi. SW (364 ft.)***	***DURA-BOND***	***3201 ASH ST, PALO ALTO, CA 94306***
16	***SEMSARCH***	***CAD009122557***	***Lower (30 ft.)***	***0.100 mi. WNW (528 ft.)***	***HEWLETT PACKARD CO MFG DIV***	***395 PAGE MILL RD, PALO ALTO, CA 94306***
30	***SEMSARCH***	***CAD028879765***	***Higher (38 ft.)***	***0.211 mi. WSW (1114 ft.)***	***STANFORD CLEANERS***	***2875 EL CAMINO, PALO ALTO, CA 94306***
36	***SEMSARCH***	***CAD982399800***	***Lower (11 ft.)***	***0.264 mi. NW (1394 ft.)***	***OREGON EXPWY UNDERPASS***	***OREGON EXPWY & ALMA ST, PALO ALTO, CA 94304***
39	***SEMSARCH***	***CAD009120817***	***Higher (41 ft.)***	***0.291 mi. SSW (1536 ft.)***	***VARIAN ASSOCIATES CORP HDQTRS***	***611 HANSEN WAY, PALO ALTO, CA 94303***
58	***SEMSARCH***	***CAT080010804***	***Higher (43 ft.)***	***0.464 mi. W (2450 ft.)***	***VARIAN ASSOCIATES***	***601 CALIFORNIA AVE, PALO ALTO, CA 94303***
62	***SEMSARCH***	***CAD028874253***	***Higher (46 ft.)***	***0.493 mi. SW (2603 ft.)***	***EASTMAN KODAK CO***	***925 PAGE MILL RD, PALO ALTO, CA 94304***
1	SLIC	SL0608568096	Equal (33 ft.)	TP	MERCER PROCESSING	230 PORTAGE AVE, PALO ALTO, CA 94306
5	SLIC	T10000007084	Equal (33 ft.)	0.027 mi. NE (143 ft.)	LOCKHEED-MARTIN	3101 PARK BOULEVARD, PALO ALTO, CA 94503
7	SLIC	T10000010246	Equal (33 ft.)	0.034 mi. NNE (180 ft.)	3045 PARK BLVD DEVELOPMENT	3045 PARK BLVD, PALO ALTO, CA 94036
9	SLIC	2-43S0390	Lower (32 ft.)	0.067 mi. ESE (354 ft.)	MATADERO CREEK	BETWEEN LAMBER AVE & PARK BLVD, PALO ALTO, CA 94304
10	SLIC	2-43S0773	Lower (31 ft.)	0.055 mi. NW (290 ft.)	PALO ALTO SOUTHERN PACIFIC SITE	2901 PARK BLVD, PALO ALTO, CA 94304
10	SLIC	T10000008090	Lower (31 ft.)	0.055 mi. NW (290 ft.)	SOUTHERN PACIFIC	2901 PARK BOULEVARD, PALO ALTO, CA 94036
11	SLIC	2-43S0025	Equal (33 ft.)	0.069 mi. SW (364 ft.)	DURA BOND	3201 ASH ST, PALO ALTO, CA 94306
12	SLIC	2-43S0562	Higher (34 ft.)	0.072 mi. SW (380 ft.)	DURA BOND FACILITY FORMER	370 PORTAGE AVE, PALO ALTO, CA
12	SLIC	SL18361781	Higher (34 ft.)	0.072 mi. SW (380 ft.)	DURA-BOND BEARING	370 PORTAGE AVENUE, PALO ALTO, CA 94306

Site Summary By Database

*NOTE: Standard environmental records are displayed in **bold**.*

Map ID#	Database Name	Site ID#	Relative Elevation	Distance From Site	Site Name	Address
16	SLIC	2-43S0053	Lower (30 ft.)	0.100 mi. WNW (528 ft.)	HEWLETT PACKARD	395 PAGE MILL RD, PALO ALTO, CA 94304
16	SLIC	SL18321741	Lower (30 ft.)	0.099 mi. WNW (523 ft.)	HEWLETT PACKARD COMPANY	395 PAGE MILL RD, PALO ALTO, CA 94306
20	SLIC	SL0608525943	Lower (30 ft.)	0.123 mi. NW (649 ft.)	PARK PLAZA	195 PAGE MILL ROAD, PALO ALTO, CA 94303
23	SLIC	2-43S0736	Lower (30 ft.)	0.171 mi. NW (903 ft.)	VANCE BROWN AND SONS	2747 PARK BLVD, PALO ALTO, CA 94304
23	SLIC	T0608572772	Lower (30 ft.)	0.172 mi. NW (908 ft.)	2785 PARK BOULEVARD	2785 PARK BOULEVARD, PALO ALTO, CA 94306
25	SLIC	T10000005468	Higher (36 ft.)	0.191 mi. SW (1008 ft.)	PORTAGE LLC	3159 EL CAMINO REAL, PALO ALTO, CA 94303
26	SLIC	T10000008756	Higher (35 ft.)	0.184 mi. WSW (972 ft.)	441 PAGE MILL ROAD	441 PAGE MILL ROAD, PALO ALTO, CA 94306
28	SLIC	T10000011631	Higher (39 ft.)	0.192 mi. SW (1014 ft.)	SOBRATO 3001 EL CAMINO	3001-3017 EL CAMINO REAL, PALO ALTO, CA 94306
30	SLIC	2-43S0121	Higher (38 ft.)	0.211 mi. WSW (1114 ft.)	STANFORD CLEANERS	2875 EL CAMINO, PALO ALTO, CA 94304
30	SLIC	T0608591612	Higher (38 ft.)	0.211 mi. WSW (1114 ft.)	STANFORD CLEANERS	2875 EL CAMINO REAL, PALO ALTO, CA 94306
31	SLIC	2-43S0287	Lower (30 ft.)	0.212 mi. WNW (1119 ft.)	SUMMERHILL CHEVRON BULK OIL	2655 PARK BLVD, PALO ALTO, CA 94304
32	SLIC	2-43S0290	Higher (36 ft.)	0.223 mi. SW (1177 ft.)	CLOCKTOWER PLAZA PREFORMED LINE	600 HANSEN WAY, PALO ALTO, CA 94304
34	SLIC	T10000005467	Higher (37 ft.)	0.244 mi. W (1288 ft.)	2755 EL CAMINO REAL	2755 EL CAMINO REAL, PALO ALTO, CA 94303
9	***SWEEPS***	***A43-006-59666***	***Lower (32 ft.)***	***0.048 mi. ESE (253 ft.)***	***PARK AVENUE MOTORS***	***3290 PARK BLVD, PALO ALTO, CA 94306***
15	***SWEEPS***	***A43-006-36909***	***Equal (33 ft.)***	***0.095 mi. SE (502 ft.)***	***PACIFIC BELL (P1-052)***	***3350 BIRCH ST, PALO ALTO, CA 94303***
15	***SWEEPS***	***I43-006-36909***	***Equal (33 ft.)***	***0.095 mi. SE (502 ft.)***	***PACIFIC BELL (P1-052)***	***3350 BIRCH ST, PALO ALTO, CA 94306***
17	***SWEEPS***	***A43-006-1428***	***Higher (34 ft.)***	***0.115 mi. SW (607 ft.)***	***DURA-BOND BEARING COMPANY***	***395 PORTAGE AVE, PALO ALTO, CA 94306***
17	***SWEEPS***	***A43-006-60093***	***Higher (34 ft.)***	***0.100 mi. SW (528 ft.)***	***STAR GRAPHIC ARTS CO. INC.***	***3200 ASH ST, PALO ALTO, CA 94306***
19	***SWEEPS***	***I43-006-2752***	***Higher (34 ft.)***	***0.115 mi. SW (607 ft.)***	***VACANT***	***411 ACACIA ST, PALO ALTO, CA 94304***
23	***SWEEPS***	***A43-006-10312***	***Lower (30 ft.)***	***0.155 mi. NW (818 ft.)***	***PACIFIC READY MIX INC***	***2785 PARK BLVD, PALO ALTO, CA 94306***
23	***SWEEPS***	***A43-006-10713***	***Lower (30 ft.)***	***0.171 mi. NW (903 ft.)***	***OFFICES OF VANCE M. BROWN & SO***	***2747 PARK BLVD, PALO ALTO, CA 94306***
24	***SWEEPS***	***A43-006-10796***	***Higher (35 ft.)***	***0.164 mi. W (866 ft.)***	***BLEIBLER IRON WORKS INC.***	***411 PAGE MILL RD, PALO ALTO, CA 94306***

Site Summary By Database

*NOTE: Standard environmental records are displayed in **bold**.*

Map ID#	Database Name	Site ID#	Relative Elevation	Distance From Site	Site Name	Address
29	***SWEEPS***	***A43-006-46598***	***Lower (27 ft.)***	***0.192 mi. NE (1014 ft.)***	***ZZONTA***	***2680 RAMONA, PALO ALTO, CA 94306***
30	***SWEEPS***	***A43-006-20402***	***Higher (38 ft.)***	***0.211 mi. WSW (1114 ft.)***	***STANFORD CLEANERS***	***2875 EL CAMINO REAL, PALO ALTO, CA 94306***
43	SWRCY	PR0448	Higher (41 ft.)	0.324 mi. SW (1711 ft.)	ECULLET INC	600 HANSEN WY STE 246, PALO ALTO, CA 94304
53	SWRCY	RC14577	Higher (35 ft.)	0.413 mi. WNW (2181 ft.)	TOMRA PACIFIC INC	164 S CALIFORNIA AVE, PALO ALTO, CA 94306
53	SWRCY	RC14696	Higher (35 ft.)	0.413 mi. WNW (2181 ft.)	TOMRA PACIFIC INC	164 S CALIFORNIA AVE, PALO ALTO, CA 94306
53	SWRCY	RC164743.001	Higher (35 ft.)	0.413 mi. WNW (2181 ft.)	REPLANET LLC	164 S CALIFORNIA AVE, PALO ALTO, CA 94306
53	SWRCY	RC3048	Higher (35 ft.)	0.413 mi. WNW (2181 ft.)	GOODWILL INDUSTRIES	164 S CALIFORNIA AVE, PALO ALTO, CA 94306
15	***USTCUPA***	***2016512292***	***Equal (33 ft.)***	***0.095 mi. SE (502 ft.)***	***AT&T CALIFORNIA - P1052***	***3350 BIRCH ST, PALO ALTO, CA 94306***
25	***VCP***	***60002787***	***Higher (36 ft.)***	***0.182 mi. SW (961 ft.)***	***FORMER FOOT LOCKER STORE***	***3225 EL CAMINO REAL, PALO ALTO, CA 94306***

Elevation Summary

Elevations are collected from the USGS 3D Elevation Program 1/3 arc-second (approximately 10 meters) layer hosted at the NGTOC. .

Target Property Elevation: 33 ft.

*NOTE: Standard environmental records are displayed in **bold**.*

EQUAL/HIGHER ELEVATION

Map ID#	Database Name	Elevation	Site Name	Address	Page #
1	CHMIRS	33 ft.	STORM DRAIN TO MATADERO CREEK TO S.F. BAY.	210 PORTAGE AVENUE, PALO ALTO, CA 94303	54
1	***CLEANUPSITES***	***33 ft.***	***MERCER PROCESSING***	***230 PORTAGE AVE, PALO ALTO, CA 94306***	***55***
1	***CLEANUPSITES***	***33 ft.***	***EL CAMINO CENTER***	***340 PORTAGE AVENUE, PALO ALTO, CA 94306***	***57***
1	ECHOR09	33 ft.	SYSTEMS CONTROL INC	220 PORTAGE, PALO ALTO, CA 94306	60
1	FRSCA	33 ft.	SYSTEMS CONTROL INC	220 PORTAGE, PALO ALTO, CA 94306	61
1	FRSCA	33 ft.	MERCER PROCESSING	230 PORTAGE AVE, PALO ALTO, CA 94306	62
1	FRSCA	33 ft.	EL CAMINO CENTER	340 PORTAGE AVENUE, PALO ALTO, CA 94306	63
1	HWTS	33 ft.	EL CAMINO CENTER	340 PORTAGE AVE, PALO ALTO, CA 94306	64
1	***LUST***	***33 ft.***	***EL CAMINO CENTER***	***340 PORTAGE AVENUE, PALO ALTO, CA 94306***	***65***
1	***RCRAGR09***	***33 ft.***	***SYSTEMS CONTROL INC***	***220 PORTAGE, PALO ALTO, CA 94306***	***67***
1	SLIC	33 ft.	MERCER PROCESSING	230 PORTAGE AVE, PALO ALTO, CA 94306	68
3	ECHOR09	33 ft.	PARK AUTOMOTIVE	3040 PARK BLVD, PALO ALTO, CA 94306	81
3	FRSCA	33 ft.	PARK AUTOMOTIVE SERVICE	3040 PARK BL, PALO ALTO, CA 94306	82
3	FRSCA	33 ft.	PARK AUTOMOTIVE	3040 PARK BLVD, PALO ALTO, CA 94306	83
3	HWTS	33 ft.	PARK AUTOMOTIVE	3040 PARK BLVD, PALO ALTO, CA 94306	84
3	***RCRANGR09***	***33 ft.***	***PARK AUTOMOTIVE***	***3040 PARK BLVD, PALO ALTO, CA 94306***	***87***
5	***CLEANUPSITES***	***33 ft.***	***VANCE BROWN & SONS***	***3101 PARK BLVD, PALO ALTO, CA 94301***	***91***
5	***CLEANUPSITES***	***33 ft.***	***LOCKHEED-MARTIN***	***3101 PARK BOULEVARD, PALO ALTO, CA 94503***	***93***
5	HISTCORTESE	33 ft.	VANCE BROWN & SONS	3101 PARK, PALO ALTO, CA 94306	95
5	***LUST***	***33 ft.***	***VANCE BROWN & SONS***	***3101 PARK BLVD, PALO ALTO, CA 94301***	***96***
5	***RCRANGR09***	***33 ft.***	***LOCKHEED MISSLES & SPACE CO***	***3101 PARK BLVD, PALO ALTO, CA 94306***	***97***
5	SLIC	33 ft.	LOCKHEED-MARTIN	3101 PARK BOULEVARD, PALO ALTO, CA 94503	98
7	***CLEANUPSITES***	***33 ft.***	***FORMER AKINS AUTO BODY***	***3045 PARK BLVD., PALO ALTO, CA 94306***	***102***
7	***CLEANUPSITES***	***33 ft.***	***3045 PARK BLVD DEVELOPMENT***	***3045 PARK BLVD, PALO ALTO, CA 94036***	***104***
7	***RCRANGR09***	***33 ft.***	***3045 PARK PROPERTY LLC***	***3045 PARK BOULEVARD, PALO ALTO, CA 94306***	***106***

Elevation Summary

Map ID#	Database Name	Elevation	Site Name	Address	Page #
7	RCRANGR09	33 ft.	3045 PARK PROPERTY LLC	3045 PARK BLVD, PALO ALTO, CA 94306	108
7	RCRANGR09	33 ft.	3045 PARK PROPERTY LLC	3045 PARK BLVD, PALO ALTO, CA 94306	110
7	RCRANGR09	33 ft.	3045 PARK PROPERTY LLC	3045 PARK BLVD, PALO ALTO, CA 94306	112
7	RCRANGR09	33 ft.	3045 PARK PROPERTY LLC	3045 PARK BLVD., PALO ALTO, CA 94306	114
7	RCRANGR09	33 ft.	STANFORD BMW	3045 PARK BLVD, PALO ALTO, CA 94306	116
7	SLIC	33 ft.	3045 PARK BLVD DEVELOPMENT	3045 PARK BLVD, PALO ALTO, CA 94036	118
8	RCRAGR09	33 ft.	HELMINGS AUTO REPAIR	300 LAMBERT AVE, PALO ALTO, CA 94306	119
8	RCRANGR09	33 ft.	ARTS BODYCRAFT INC	280 LAMBERT AVE, PALO ALTO, CA 94306	121
8	RCRANGR09	33 ft.	STANFORD ARCO AUTO CARE	290 LAMBERT AVE, PALO ALTO, CA 94306	123
8	RCRANGR09	33 ft.	COMCAST OF CALIFORNIA IX,INC	278 LAMBERT ST, PALO ALTO, CA 94360	125
11	CLEANUPSITES	33 ft.	DURA BOND BEARING CO.	3201 ASH ST, PALO ALTO, CA 94306	138
11	CLEANUPSITES	33 ft.	DURA BOND	3201 ASH ST, PALO ALTO, CA 94306	140
11	HISTCORTESE	33 ft.	DURA BOND BEARING COMPANY	3201 ASH, PALO ALTO, CA 94306	141
11	LUST	33 ft.	DURA BOND BEARING CO.	3201 ASH ST, PALO ALTO, CA 94306	142
11	LUST	33 ft.	DURA BOND	3201 ASH ST, PALO ALTO, CA 94306	143
11	SEMSARCH	33 ft.	DURA-BOND	3201 ASH ST, PALO ALTO, CA 94306	144
11	SLIC	33 ft.	DURA BOND	3201 ASH ST, PALO ALTO, CA 94306	145
12	CLEANUPSITES	34 ft.	DURA-BOND BEARING	370 PORTAGE AVENUE, PALO ALTO, CA	146
12	RCRANGR09	34 ft.	VARIAN ASSOCIATES, INC	380 PORTAGE AVE, PALO ALTO, CA 94303	147
12	RCRANGR09	34 ft.	PLAYGROUND GLOBAL LLC	380 PORTAGE AVE, PALO ALTO, CA 94306	148
12	SLIC	34 ft.	DURA BOND FACILITY FORMER	370 PORTAGE AVE, PALO ALTO, CA	150
12	SLIC	34 ft.	DURA-BOND BEARING	370 PORTAGE AVENUE, PALO ALTO, CA 94306	151
13	RCRAGR09	33 ft.	SAY RAY	3251 ASH ST, PALO ALTO, CA 94306	152
15	HISTUST	33 ft.	PACIFIC BELL (P1-052)	3350 BIRCH ST, PALO ALTO, CA 94306	157
15	RCRAGR09	33 ft.	PACIFIC BELL	3350 BIRCH STREET, PALO ALTO, CA 94306	159
15	SWEEPS	33 ft.	PACIFIC BELL (P1-052)	3350 BIRCH ST, PALO ALTO, CA 94303	161
15	SWEEPS	33 ft.	PACIFIC BELL (P1-052)	3350 BIRCH ST, PALO ALTO, CA 94306	162
15	USTCUPA	33 ft.	AT&T CALIFORNIA - P1052	3350 BIRCH ST, PALO ALTO, CA 94306	163
17	CALSITES	34 ft.	DURA-BOND BEARING	395 PORTAGE AVE, PALO ALTO, CA 94306	208
17	ENVIROSTOR	34 ft.	DURA-BOND BEARING	395 PORTAGE AVE, PALO ALTO, CA 94306	209
17	HISTUST	34 ft.	DURA-BOND BEARING COMPANY	395 PORTAGE AVENUE, PALO ALTO, CA 94306	210
17	HISTUST	34 ft.	STAR GRAFIC ARTS CO INC	3200 ASH ST, PALO ALTO, CA 94306	214

Elevation Summary

Map ID#	Database Name	Elevation	Site Name	Address	Page #
17	RCRAGR09	34 ft.	DURA-BOND BEARING COMPANY	395 PORTAGE, PALO ALTO, CA 94306	215
17	REF	34 ft.	DURA-BOND BEARING	395 PORTAGE AVE, PALO ALTO, CA 94306	217
17	SWEEPS	34 ft.	DURA-BOND BEARING COMPANY	395 PORTAGE AVE, PALO ALTO, CA 94306	218
17	SWEEPS	34 ft.	STAR GRAPHIC ARTS CO. INC.	3200 ASH ST, PALO ALTO, CA 94306	219
18	CLEANUPSITES	36 ft.	JOST HEATING & SHEET METAL	412 OLIVE AVE, PALO ALTO, CA 94306	220
18	HISTCORTESE	36 ft.	JOST HEATING & SHEET META	412 OLIVE, PALO ALTO, CA 94306	222
18	LUST	36 ft.	JOST HEATING & SHEET METAL	412 OLIVE AVE, PALO ALTO, CA 94306	223
19	CLEANUPSITES	34 ft.	CARMEAN TRUST	411 ACACIA AVE, PALO ALTO, CA 94306	224
19	HISTCORTESE	34 ft.	CARMEAN TRUST	411 ACACIA, PALO ALTO, CA 94306	226
19	HISTUST	34 ft.	PALO ALTO DATSUN INC	411 ACACIA ST, PALO ALTO, CA 94304	227
19	LUST	34 ft.	CARMEAN TRUST	411 ACACIA AVE, PALO ALTO, CA 94306	229
19	RCRAGR09	34 ft.	PALO ALTO NISSAN INC	411 ACACIA, PALO ALTO, CA 94306	230
19	SWEEPS	34 ft.	VACANT	411 ACACIA ST, PALO ALTO, CA 94304	231
24	CLEANUPSITES	35 ft.	BLEIBLER IRON WORKS	411 PAGE MILL RD, PALO ALTO, CA 94306	270
24	HISTCORTESE	35 ft.	BLEIBLER IRON WORKS	411 PAGE MILL, PALO ALTO, CA 94306	272
24	HISTUST	35 ft.	BLEIBLER IRON WORKS INC	411 PAGE MILL ROAD, PALO ALTO, CA 94306	273
24	LUST	35 ft.	BLEIBLER IRON WORKS	411 PAGE MILL RD, PALO ALTO, CA 94306	274
24	SWEEPS	35 ft.	BLEIBLER IRON WORKS INC.	411 PAGE MILL RD, PALO ALTO, CA 94306	275
25	CLEANUPSITES	36 ft.	PORTAGE LLC	3159 EL CAMINO REAL, PALO ALTO, CA 94303	276
25	ENVIROSTOR	36 ft.	FORMER FOOT LOCKER STORE	3225 EL CAMINO REAL, PALO ALTO, CA 94306	278
25	SLIC	36 ft.	PORTAGE LLC	3159 EL CAMINO REAL, PALO ALTO, CA 94303	279
25	VCP	36 ft.	FORMER FOOT LOCKER STORE	3225 EL CAMINO REAL, PALO ALTO, CA 94306	280
26	CLEANUPSITES	35 ft.	441 PAGE MILL ROAD	441 PAGE MILL ROAD, PALO ALTO, CA 94306	281
26	SLIC	35 ft.	441 PAGE MILL ROAD	441 PAGE MILL ROAD, PALO ALTO, CA 94306	283
28	CLEANUPSITES	39 ft.	GAVENMAN PROPERTY	3017 EL CAMINO REAL, PALO ALTO, CA 94306	286
28	CLEANUPSITES	39 ft.	PALO ALTO NISSAN	3001 EL CAMINO REAL, PALO ALTO, CA 94306	288
28	CLEANUPSITES	39 ft.	SOBRATO 3001 EL CAMINO	3001-3017 EL CAMINO REAL, PALO ALTO, CA 94306	290
28	HISTCORTESE	39 ft.	PALO ALTO NISSAN	3001 EL CAMINO REAL, PALO ALTO, CA	292
28	LUST	39 ft.	PALO ALTO NISSAN	3001 EL CAMINO REAL, PALO ALTO, CA 94306	293
28	LUST	39 ft.	GAVENMAN PROPERTY	3017 EL CAMINO REAL, PALO ALTO, CA 94306	294

Elevation Summary

Map ID#	Database Name	Elevation	Site Name	Address	Page #
28	***LUST***	***39 ft.***	***PALO ALTO NISSAN***	***3001 EL CAMINO REAL, PALO ALTO, CA 94306***	***295***
28	SLIC	39 ft.	SOBRATO 3001 EL CAMINO	3001-3017 EL CAMINO REAL, PALO ALTO, CA 94306	296
30	CLEANER	38 ft.	STANFORD CLEANERS	2875 EL CAMINO REAL, PALO ALTO, CA 94306	299
30	***CLEANUPSITES***	***38 ft.***	***STANFORD CLEANERS***	***2875 EL CAMINO REAL, PALO ALTO, CA 94306***	***300***
30	***CLEANUPSITES***	***38 ft.***	***STANFORD CLEANERS***	***2875 EL CAMINO REAL, PALO ALTO, CA 94306***	***302***
30	***HISTUST***	***38 ft.***	***STANFORD CLEANERS***	***2875 EL CAMINO REAL, PALO ALTO, CA 94306***	***303***
30	***LUST***	***38 ft.***	***STANFORD CLEANERS***	***2875 EL CAMINO REAL, PALO ALTO, CA 94306***	***304***
30	***LUST***	***38 ft.***	***STANFORD CLEANERS***	***2875 EL CAMINO REAL, PALO ALTO, CA 94306***	***305***
30	***SEMSARCH***	***38 ft.***	***STANFORD CLEANERS***	***2875 EL CAMINO, PALO ALTO, CA 94306***	***306***
30	SLIC	38 ft.	STANFORD CLEANERS	2875 EL CAMINO, PALO ALTO, CA 94304	307
30	SLIC	38 ft.	STANFORD CLEANERS	2875 EL CAMINO REAL, PALO ALTO, CA 94306	308
30	***SWEEPS***	***38 ft.***	***STANFORD CLEANERS***	***2875 EL CAMINO REAL, PALO ALTO, CA 94306***	***309***
32	SLIC	36 ft.	CLOCKTOWER PLAZA PREFORMED LINE	600 HANSEN WAY, PALO ALTO, CA 94304	311
33	***CLEANUPSITES***	***33 ft.***	***BIRCH PLAZA***	***2640 & 2650 BIRCH STREET, PALO ALTO, CA 94304***	***312***
34	***CLEANUPSITES***	***37 ft.***	***2755 EL CAMINO REAL***	***2755 EL CAMINO REAL, PALO ALTO, CA 94303***	***314***
34	SLIC	37 ft.	2755 EL CAMINO REAL	2755 EL CAMINO REAL, PALO ALTO, CA 94303	316
35	***CLEANUPSITES***	***39 ft.***	***PALO ALTO FIRESTONE***	***3401 EL CAMINO REAL, PALO ALTO, CA 94306***	***317***
35	HISTCORTESE	39 ft.	FIRESTONE	3401 EL CAMINO REAL, PALO ALTO, CA 94306	319
35	***LUST***	***39 ft.***	***PALO ALTO FIRESTONE***	***3401 EL CAMINO REAL, PALO ALTO, CA 94306***	***320***
37	***CLEANUPSITES***	***37 ft.***	***GREEN WORLD NURSERY***	***2711 EL CAMINO REAL, PALO ALTO, CA 94306***	***326***
37	HISTCORTESE	37 ft.	GREEN WORLD NURSERY	2711 EL CAMINO REAL, PALO ALTO, CA 94301	328
37	***LUST***	***37 ft.***	***GREEN WORLD NURSERY***	***2711 EL CAMINO REAL, PALO ALTO, CA 94306***	***329***
39	***CALSITES***	***41 ft.***	***VARIAN***	***611 HANSEN WAY, PALO ALTO, CA 94304***	***334***
39	***CLEANUPSITES***	***41 ft.***	***VARIAN INC. [NPDES]***	***611 HANSEN, MONTAIN VIEW, CA 94304***	***335***
39	CORTESE	41 ft.	VARIAN	611 HANSEN WAY, PALO ALTO, CA 94304	337
39	***ENVIROSTOR***	***41 ft.***	***VARIAN***	***611 HANSEN WAY, PALO ALTO, CA 94304***	***338***
39	HISTCORTESE	41 ft.	VARIAN	611 HANSEN, PALO ALTO, CA 94303	339

Elevation Summary

Map ID#	Database Name	Elevation	Site Name	Address	Page #
39	***SEMSARCH***	***41 ft.***	***VARIAN ASSOCIATES CORP HDQTRS***	***611 HANSEN WAY, PALO ALTO, CA 94303***	***340***
40	***CLEANUPSITES***	***37 ft.***	***MOBIL (BP 11219)***	***2780 EL CAMINO REAL, PALO ALTO, CA 94306***	***341***
40	HISTCORTESE	37 ft.	MOBIL	2780 EL CAMINO REAL, PALO ALTO, CA	343
40	***LUST***	***37 ft.***	***MOBIL (BP 11219)***	***2780 EL CAMINO REAL, PALO ALTO, CA 94306***	***344***
41	***CLEANUPSITES***	***35 ft.***	***MINKOFF GROUP (FORMER PREMIER PROPERTIES) - 385-399 SHERMAN***	***385-399 SHERMAN AVENUE, PALO ALTO, CA 94301***	***345***
42	***CLEANUPSITES***	***37 ft.***	***COMBES AUTO REPAIR***	***3585 EL CAMINO REAL, PALO ALTO, CA 94306***	***347***
42	HISTCORTESE	37 ft.	COMBES AUTO REPAIR	3585 EL CAMINO REAL, PALO ALTO, CA	351
42	***LUST***	***37 ft.***	***COMBES AUTO REPAIR***	***3585 EL CAMINO REAL, PALO ALTO, CA 94306***	***352***
43	***CLEANUPSITES***	***41 ft.***	***PREFORMED LINE PRODUCTS, INC. (PREFORMED)***	***600 HANSEN WAY, PALO ALTO, CA 94304***	***353***
43	PROC	41 ft.	ECULLET INC	600 HANSEN WY STE 246, PALO ALTO, CA 94304	354
43	SWRCY	41 ft.	ECULLET INC	600 HANSEN WY STE 246, PALO ALTO, CA 94304	355
44	***CLEANUPSITES***	***37 ft.***	***JOHN'S AUTOMOTIVE***	***3508 EL CAMINO REAL, PALO ALTO, CA 94306***	***356***
44	HISTCORTESE	37 ft.	JOHNS AUTOMOTIVE	3508 EL CAMINO REAL, PALO ALTO, CA	358
44	***LUST***	***37 ft.***	***JOHN'S AUTOMOTIVE***	***3508 EL CAMINO REAL, PALO ALTO, CA 94306***	***359***
45	***CLEANUPSITES***	***39 ft.***	***SHELL - 3601 EL CAMINO***	***3601 EL CAMINO REAL, PALO ALTO, CA 94306***	***360***
45	HISTCORTESE	39 ft.	SHELL	3601 EL CAMINO REAL, PALO ALTO, CA 94306	365
45	***LUST***	***39 ft.***	***SHELL - 3601 EL CAMINO***	***3601 EL CAMINO REAL, PALO ALTO, CA 94306***	***366***
46	***BF***	***39 ft.***	***2515 & 2585 EL CAMINO REAL***	***2515 & 2585 EL CAMINO REAL, PALO ALTO, CA 94306***	***369***
46	***CLEANUPSITES***	***39 ft.***	***2515 & 2585 EL CAMINO REAL***	***2515 & 2585 EL CAMINO REAL, PALO ALTO, CA 94306***	***370***
46	***CLEANUPSITES***	***39 ft.***	***2515 EL CAMINO REAL***	***2515 EL CAMINO REAL, PALO ALTO, CA***	***372***
47	***CLEANUPSITES***	***35 ft.***	***SHELL - 299 S CALIFORNIA***	***299 S. CALIFORNIA AVENUE, PALO ALTO, CA 94301***	***373***
47	***LUST***	***35 ft.***	***SHELL - 299 S CALIFORNIA***	***299 S. CALIFORNIA AVENUE, PALO ALTO, CA 94301***	***378***
48	***ENVIROSTOR***	***43 ft.***	***COMMUNICATIONS & POWER IND, INC.***	***607 HANSEN WAY (CONTIGUOUS PR), PALO ALTO, CA 94304***	***381***
48	***ENVIROSTOR***	***43 ft.***	***COMMUNICATIONS & POWER IND, INC.***	***607 HANSEN WAY (CONTIGUOUS PR), PALO ALTO, CA 94304***	***382***
48	***ENVIROSTORPCA***	***43 ft.***	***COMMUNICATIONS & POWER INDUSTRIES***	***811 HANSEN WAY, PALO ALTO, CA 94304***	***383***
48	NFA	43 ft.	COMMUNICATIONS & POWER IND, INC.	607 HANSEN WAY (CONTIGUOUS PR), PALO ALTO, CA 94304	384
48	NFA	43 ft.	COMMUNICATIONS & POWER IND, INC.	607 HANSEN WAY (CONTIGUOUS PR), PALO ALTO, CA 94304	385

Elevation Summary

Map ID#	Database Name	Elevation	Site Name	Address	Page #
48	RCRAC	43 ft.	COMMUNICATIONS & POWER INDUSTRIES	811 HANSEN WAY, PALO ALTO, CA 94304	386
48	RCRAT	43 ft.	COMMUNICATIONS & POWER INDUSTRIES	811 HANSEN WAY, PALO ALTO, CA 94304	390
49	BF	39 ft.	SAND HILL PROPERTIES	2600 EL CAMINO REAL, PALO ALTO, CA 94306	394
49	CLEANUPSITES	39 ft.	SAND HILL PROPERTIES	2600 EL CAMINO REAL, PALO ALTO, CA 94306	395
50	CLEANUPSITES	39 ft.	PALO ALTO HOUSING WILTON COURT DEVELOPMENT	3703-3709 EL CAMINO REAL, PALO ALTO, CA 94306	398
51	CLEANUPSITES	42 ft.	CHEVRON	775 PAGE MILL RD, PALO ALTO, CA 94304	400
52	HISTCORTESE	42 ft.	CHEVRON	775 PAGE MILL, PALO ALTO, CA 94304	402
52	LUST	42 ft.	CHEVRON	775 PAGE MILL RD, PALO ALTO, CA 94304	403
53	SWRCY	35 ft.	TOMRA PACIFIC INC	164 S CALIFORNIA AVE, PALO ALTO, CA 94306	404
53	SWRCY	35 ft.	TOMRA PACIFIC INC	164 S CALIFORNIA AVE, PALO ALTO, CA 94306	405
53	SWRCY	35 ft.	REPLANET LLC	164 S CALIFORNIA AVE, PALO ALTO, CA 94306	406
53	SWRCY	35 ft.	GOODWILL INDUSTRIES	164 S CALIFORNIA AVE, PALO ALTO, CA 94306	407
54	CLEANUPSITES	39 ft.	3666 EL CAMINO	3666 EL CAMINO REAL, PALO ALTO, CA 94306	408
54	LUST	39 ft.	3666 EL CAMINO	3666 EL CAMINO REAL, PALO ALTO, CA 94306	410
55	CALSITES	44 ft.	HEWLETT-PACKARD (620-640 PAGE MILL ROAD)	620-640 PAGE MILL ROAD, PALO ALTO, CA 94304	411
55	CLEANUPSITES	44 ft.	HEWLETT-PACKARD COMPANY	640 PAGE MILL RD, PALO ALTO, CA 94304	412
55	ENVIROSTOR	44 ft.	HEWLETT-PACKARD (620-640 PAGE MILL ROAD)	620-640 PAGE MILL ROAD, PALO ALTO, CA 94304	416
55	HISTCORTESE	44 ft.	SCR-HEWLETT PKRD-640 PAGE	640 PAGE MILL, PALO ALTO, CA 94304	417
55	NPL	44 ft.	HEWLETT-PACKARD (620-640 PAGE MILL ROAD)	620 - 640 PAGE MILL RD., PALO ALTO, CA 94304	418
55	REF	44 ft.	HEWLETT-PACKARD (620-640 PAGE MILL ROAD)	620-640 PAGE MILL ROAD, PALO ALTO, CA 94304	430
55	RODS	44 ft.	HEWLETT-PACKARD (620-640 PAGE MILL ROAD)	620 - 640 PAGE MILL RD., PALO ALTO, CA 94304	431
55	SEMS	44 ft.	HEWLETT-PACKARD (620-640 PAGE MILL ROAD)	620 - 640 PAGE MILL RD., PALO ALTO, CA 94304	432
56	CLEANUPSITES	40 ft.	STANFORD-MAYFIELD REDEVELOPMENT	2450 EL CAMINO REAL, PALO ALTO, CA 94304	444
57	CLEANUPSITES	35 ft.	PALO ALTO TIRE & BRAKE	306 CAMBRIDGE, PALO ALTO, CA 94306	446
57	HISTCORTESE	35 ft.	PALO ALTO TIRE & BRAKE	306 CAMBRIDGE, PALO ALTO, CA 94036	449
57	LUST	35 ft.	PALO ALTO TIRE & BRAKE	306 CAMBRIDGE AVE, PALO ALTO, CA 94306	450
57	LUST	35 ft.	PALO ALTO TIRE & BRAKE	306 CAMBRIDGE, PALO ALTO, CA 94306	451

Elevation Summary

Map ID#	Database Name	Elevation	Site Name	Address	Page #
58	CLEANUPSITES	43 ft.	VARIAN ASSOCIATES	601 S. CALIFORNIA AVE., PALO ALTO, CA 94304	452
58	ENVIROSTOR	43 ft.	INTEVAC/EO SENSORS, INC.	601 CALIFORNIA AVENUE, PALO ALTO, CA 94304	456
58	ENVIROSTOR	43 ft.	INTEVAC	601 CALIFORNIA AVE, PALO ALTO, CA 94303	457
58	ENVIROSTORPCA	43 ft.	INTEVAC	601 CALIFORNIA AVE, PALO ALTO, CA 94303	458
58	HISTCORTESE	43 ft.	SCR-VARIAN-601 CALIF AVE	601 CALIFORNIA, PALO ALTO, CA 94304	459
58	RCRAC	43 ft.	INTEVAC	601 CALIFORNIA AVE, PALO ALTO, CA 94304	460
58	REF	43 ft.	INTEVAC/EO SENSORS, INC.	601 CALIFORNIA AVENUE, PALO ALTO, CA 94304	468
58	REF	43 ft.	INTEVAC	601 CALIFORNIA AVE, PALO ALTO, CA 94303	469
58	SEMSARCH	43 ft.	VARIAN ASSOCIATES	601 CALIFORNIA AVE, PALO ALTO, CA 94303	470
60	CLEANUPSITES	34 ft.	OLD FIRE STATION	2253 PARK BLVD, PALO ALTO, CA 94306	473
60	HISTCORTESE	34 ft.	OLD FIRE STATION	2253 PARK, PALO ALTO, CA	475
60	LUST	34 ft.	OLD FIRE STATION	2253 PARK BLVD, PALO ALTO, CA 94306	476
61	CLEANUPSITES	40 ft.	ROYAL GLASS & MIRROR	450 CAMBRIDGE AVE, PALO ALTO, CA 94306	477
61	HISTCORTESE	40 ft.	ROYAL GLASS & MIRROR	450 CAMBRIDGE, PALO ALTO, CA	479
61	LUST	40 ft.	ROYAL GLASS & MIRROR	450 CAMBRIDGE AVE, PALO ALTO, CA 94306	480
62	CLEANUPSITES	46 ft.	EASTMAN KODAK COMPANY	925 PAGE MILL RD, PALO ALTO, CA 94304	481
62	LUST	46 ft.	EASTMAN KODAK COMPANY	925 PAGE MILL RD, PALO ALTO, CA 94304	483
62	SEMSARCH	46 ft.	EASTMAN KODAK CO	925 PAGE MILL RD, PALO ALTO, CA 94304	484
63	ENVIROSTOR	49 ft.	VARIAN MEDICAL SYSTEMS	911, 913, 3075, 3030, & 3140 HANSEN WAY, PALO ALTO, CA 94304	485
64	ENVIROSTOR	47 ft.	VARIAN NMR SYSTEMS	3120 HANSEN WAY, PALO ALTO, CA 94304	486
64	ENVIROSTORPCA	47 ft.	VARIAN MEDICAL SYSTEMS PALO ALTO	3120 HANSEN WAY, PALO ALTO, CA 94304	487
64	RCRAC	47 ft.	VARIAN MEDICAL SYSTEMS PALO ALTO	3120 HANSEN WAY, PALO ALTO, CA 94304	489
65	ENVIROSTOR	77 ft.	AYDIN ENERGY	3180 HANOVER STREET, PALO ALTO, CA 94304	499
66	ENVIROSTOR	67 ft.	ALZA PHARMACEUTICALS	1454 PAGE MILL ROAD, PALO ALTO, CA 94304	500
67	ENVIROSTOR	59 ft.	CALIFORNIA AVENUE HOUSING SITE	1451-1481 CALIFORNIA AVENUE, PALO ALTO, CA 94304	501
68	ENVIROSTOR	81 ft.	CALIFORNIA AVENUE HOUSING PHASE II SITE	1501 CALIFORNIA AVENUE, PALO ALTO, CA 94304	502
69	ENVIROSTOR	81 ft.	1601 S CALIFORNIA AVENUE	1601 CALIFORNIA AVENUE, PALO ALTO, CA 94304	503

Elevation Summary

Map ID#	Database Name	Elevation	Site Name	Address	Page #
69	ENVIROSTORPCA	81 ft.	AGILENT TECHNOLOGIES CALIFORNIA AVE SITE	1601 CALIFORNIA AVE, PALO ALTO, CA 94304	504
70	ENVIROSTORPCA	110 ft.	LOCKHEED MARTIN SPACE SYSTEMS CO	3251 HANOVER ST, PALO ALTO, CA 94304	505
70	RCRAC	110 ft.	LOCKHEED MARTIN SPACE SYSTEM	3251 HANOVER STREET, PALO ALTO, CA 94304	506
70	RCRASUBC	110 ft.	LOCKHEED MARTIN SPACE SYSTEM	3251 HANOVER STREET, PALO ALTO, CA 94304	511

LOWER ELEVATION

Map ID#	Database Name	Elevation	Site Name	Address	Page #
2	ECHOR09	32 ft.	PARK AVE MOTORS	3250 PARK BLVD, PALO ALTO, CA 94306	69
2	ECHOR09	32 ft.	KUNI REDWOOD MOTORS LLC DBA AUDI PALO ALTO	3250 PARK BLVD, PALO ALTO, CA 94303	70
2	FRSCA	32 ft.	PARK AVE MOTORS	3250 PARK BLVD, PALO ALTO, CA 94306	71
2	FRSCA	32 ft.	KUNI REDWOOD MOTORS LLC DBA AUDI PALO ALTO	3250 PARK BLVD, PALO ALTO, CA 94303	72
2	HWTS	32 ft.	WSJ PROPERTIES	3200 PARK BLVD, PALO ALTO, CA 94306	73
2	HWTS	32 ft.	PARK AVE MOTORS	3250 PARK BLVD, PALO ALTO, CA 94306	74
2	RCRAGR09	32 ft.	PARK AVE MOTORS	3250 PARK BLVD, PALO ALTO, CA 94306	77
2	RCRANGR09	32 ft.	KUNI REDWOOD MOTORS LLC DBA AUDI PALO ALTO	3250 PARK BLVD, PALO ALTO, CA 94303	79
4	RCRANGR09	32 ft.	PARK PLACE ASSOCIATES	3197 PARK BLVD., PALO ALTO, CA 94306	89
6	RCRAGR09	32 ft.	PARK AVENUE MOTORS	3241 PARK AVE, PALO ALTO, CA 94306	99
6	RCRANGR09	32 ft.	AKINS BODY SHOP INC	3241 PARK BLVD, PALO ALTO, CA 94306	100
9	HISTUST	32 ft.	PARK AVENUE MOTORS	3290 PARK BLVD, PALO ALTO, CA 94306	127
9	RCRANGR09	32 ft.	PARK AVENUE MOTORS	3290 PARK BLVD, PALO ALTO, CA 94306	128
9	RCRANGR09	32 ft.	AKINS BODY SHOP INC	3290 PARK BLVD, PALO ALTO, CA 94306	129
9	SLIC	32 ft.	MATADERO CREEK	BETWEEN LAMBER AVE & PARK BLVD, PALO ALTO, CA 94304	131
9	SWEEPS	32 ft.	PARK AVENUE MOTORS	3290 PARK BLVD, PALO ALTO, CA 94306	132
10	CLEANUPSITES	31 ft.	SOUTHERN PACIFIC	2901 PARK BOULEVARD, PALO ALTO, CA 94036	133
10	RCRAGR09	31 ft.	AKINS BODY SHOP INC	2901 PARK BLVD, PALO ALTO, CA 94306	134
10	SLIC	31 ft.	PALO ALTO SOUTHERN PACIFIC SITE	2901 PARK BLVD, PALO ALTO, CA 94304	136
10	SLIC	31 ft.	SOUTHERN PACIFIC	2901 PARK BOULEVARD, PALO ALTO, CA 94036	137
14	ABST	31 ft.	SPRINT POP	101 PAGE MILL RD, PALO ALTO, CA 94306	154

Elevation Summary

Map ID#	Database Name	Elevation	Site Name	Address	Page #
14	***RCRAGR09***	***31 ft.***	***BIX***	***2891 PARK BLVD, PALO ALTO, CA 94306***	***156***
16	ALTFUELS	30 ft.	AOL PARKING GARAGE	395 PAGE MILL RD, PALO ALTO, CA 94306	164
16	***CLEANUPSITES***	***30 ft.***	***HEWLETT PACKARD COMPANY***	***395 PAGE MILL RD, PALO ALTO, CA 94306***	***165***
16	***CLEANUPSITES***	***30 ft.***	***HEWLETT-PACKARD***	***395 PAGE MILL RD, PALO ALTO, CA 94304***	***168***
16	***CLEANUPSITES***	***30 ft.***	***JAY PAUL REDEVELOPMENT***	***395 / 3045 PAGE MILL ROAD / PARK BOULEVARD, PALO ALTO, CA 94303***	***170***
16	***ENVIROSTOR***	***30 ft.***	***HEWLETT-PACKARD CO. - PALO ALTO FABRICA CTR.***	***395 PAGE MILL ROAD, PALO ALTO, CA 94306***	***172***
16	***ENVIROSTOR***	***30 ft.***	***HEWLETT-PACKARD COMPANY***	***395 PAGE MILL RD, PALO ALTO, CA 94306***	***173***
16	***ENVIROSTORPCA***	***30 ft.***	***HEWLETT-PACKARD COMPANY***	***395 PAGE MILL RD, PALO ALTO, CA 94303***	***174***
16	HISTCORTESE	30 ft.	SCR-HEWLETT PACKARD-395 P	395 PAGE MILL, PALO ALTO, CA 94306	176
16	***LUST***	***30 ft.***	***HEWLETT-PACKARD***	***395 PAGE MILL RD, PALO ALTO, CA 94304***	***177***
16	***LUST***	***30 ft.***	***HEWLETT PACKARD***	***395 PAGE MILL RD, PALO ALTO, CA 94306***	***178***
16	***RCRAC***	***30 ft.***	***HEWLETT PACKARD MFG DIV***	***395 PAGE MILL RD, PALO ALTO, CA 94306***	***179***
16	***RCRAGR09***	***30 ft.***	***HEWLETT PACKARD MFG DIV***	***395 PAGE MILL RD, PALO ALTO, CA 94306***	***187***
16	***RCRAT***	***30 ft.***	***HEWLETT PACKARD MFG DIV***	***395 PAGE MILL RD, PALO ALTO, CA 94306***	***195***
16	REF	30 ft.	HEWLETT-PACKARD CO. - PALO ALTO FABRICA CTR.	395 PAGE MILL ROAD, PALO ALTO, CA 94306	203
16	REF	30 ft.	HEWLETT-PACKARD COMPANY	395 PAGE MILL RD, PALO ALTO, CA 94306	204
16	***SEMSARCH***	***30 ft.***	***HEWLETT PACKARD CO MFG DIV***	***395 PAGE MILL RD, PALO ALTO, CA 94306***	***205***
16	SLIC	30 ft.	HEWLETT PACKARD	395 PAGE MILL RD, PALO ALTO, CA 94304	206
16	SLIC	30 ft.	HEWLETT PACKARD COMPANY	395 PAGE MILL RD, PALO ALTO, CA 94306	207
20	ALTFUELS	30 ft.	PARK PLAZA	195 PAGE MILL RD, PALO ALTO, CA 94306	232
20	***BF***	***30 ft.***	***PARK PLAZA***	***195 PAGE MILL ROAD, PALO ALTO, CA 94303***	***233***
20	***CLEANUPSITES***	***30 ft.***	***PARK PLAZA***	***195 PAGE MILL ROAD, PALO ALTO, CA 94303***	***234***
20	***CLEANUPSITES***	***30 ft.***	***PARK PLAZA***	***PALO ALTO, CA 94306***	***237***
20	***CLEANUPSITES***	***30 ft.***	***PARK PLAZA - UST***	***195 PAGE MILL ROAD, PALO ALTO, CA***	***238***
20	***LUST***	***30 ft.***	***PARK PLAZA - UST***	***195 PAGE MILL ROAD, PALO ALTO, CA***	***240***
20	SLIC	30 ft.	PARK PLAZA	195 PAGE MILL ROAD, PALO ALTO, CA 94303	241
21	***RCRANGR09***	***28 ft.***	***SAM WONG***	***2609 ALMA STREET, PALO ALTO, CA 94036***	***242***
22	***CLEANUPSITES***	***30 ft.***	***HOHBACH***	***200 PAGE MILL, PALO ALTO, CA 94306***	***244***

Elevation Summary

Map ID#	Database Name	Elevation	Site Name	Address	Page #
22	HISTCORTESE	30 ft.	HOHBACK	216 PAGE MILL, PALO ALTO, CA	247
22	***LUST***	***30 ft.***	***HOHBACH***	***200 PAGE MILL, PALO ALTO, CA 94306***	***248***
23	***CLEANUPSITES***	***30 ft.***	***VANCE BROWN & SONS***	***2747 PARK BLVD, PALO ALTO, CA 94306***	***250***
23	***CLEANUPSITES***	***30 ft.***	***2747 PARK BOULEVARD***	***2747-2785 PARK BOULEVARD, PALO ALTO, CA 94306***	***252***
23	***CLEANUPSITES***	***30 ft.***	***VANCE BROWN AND SONS***	***2747 PARK BLVD, PALO ALTO, CA 94306***	***255***
23	***CLEANUPSITES***	***30 ft.***	***ESSEX PARK TRUST***	***2785-2787 PARK BOULEVARD, PALO ALTO, CA 94304***	***256***
23	HISTCORTESE	30 ft.	VANCE BROWN & SONS	2747 PARK, PALO ALTO, CA 94306	258
23	***HISTUST***	***30 ft.***	***PACIFIC READY MIX INC***	***2785 PARK BLVD, PALO ALTO, CA 94306***	***259***
23	***HISTUST***	***30 ft.***	***OFFICES OF VANCE M BROWN AND SO***	***2747 PARK BOULEVARD, PALO ALTO, CA 94306***	***261***
23	***LUST***	***30 ft.***	***VANCE BROWN & SONS***	***2747 PARK BLVD, PALO ALTO, CA 94306***	***263***
23	***LUST***	***30 ft.***	***PROPOSED PARK PLAZA APARTMENTS***	***2785 PARK BOULEVARD, PALO ALTO, CA***	***264***
23	***LUST***	***30 ft.***	***VANCE BROWN AND SONS***	***2747 PARK BLVD, PALO ALTO, CA 94306***	***265***
23	SLIC	30 ft.	VANCE BROWN AND SONS	2747 PARK BLVD, PALO ALTO, CA 94304	266
23	SLIC	30 ft.	2785 PARK BOULEVARD	2785 PARK BOULEVARD, PALO ALTO, CA 94306	267
23	***SWEEPS***	***30 ft.***	***PACIFIC READY MIX INC***	***2785 PARK BLVD, PALO ALTO, CA 94306***	***268***
23	***SWEEPS***	***30 ft.***	***OFFICES OF VANCE M. BROWN & SO***	***2747 PARK BLVD, PALO ALTO, CA 94306***	***269***
27	***CLEANUPSITES***	***30 ft.***	***OREGON EXPRESSWAY UNDERPASS***	***ALMA STREET, PALO ALTO, CA 94301***	***284***
29	***HISTUST***	***27 ft.***	***ZZONTA***	***2680 RAMONA, PALO ALTO, CA 94306***	***297***
29	***SWEEPS***	***27 ft.***	***ZZONTA***	***2680 RAMONA, PALO ALTO, CA 94306***	***298***
31	SLIC	30 ft.	SUMMERHILL CHEVRON BULK OIL	2655 PARK BLVD, PALO ALTO, CA 94304	310
36	***CALSITES***	***11 ft.***	***OREGON EXPRESSWAY UNDERPASS***	***XING OF OREGON EXPRESSWAY & ALMA STREET, PALO ALTO, CA 94304***	***321***
36	***ENVIROSTOR***	***11 ft.***	***OREGON EXPRESSWAY UNDERPASS***	***XING OF OREGON EXPRESSWAY & ALMA STREET, PALO ALTO, CA 94304***	***322***
36	HISTCORTESE	11 ft.	OREGON EXPRESSWAY UNDERPA	XING OF OREGON EXWY & ALM, PALO ALTO, CA 94304	323
36	REF	11 ft.	OREGON EXPRESSWAY UNDERPASS	XING OF OREGON EXPRESSWAY & ALMA STREET, PALO ALTO, CA 94304	324
36	***SEMSARCH***	***11 ft.***	***OREGON EXPWY UNDERPASS***	***OREGON EXPWY & ALMA ST, PALO ALTO, CA 94304***	***325***
38	***CLEANUPSITES***	***32 ft.***	***KJ PARK (FORMER CAMPBELL-T) - 2555 PARK BOULEVARD***	***2555 PARK BOULEVARD, PALO ALTO, CA 94103***	***330***
38	***CLEANUPSITES***	***32 ft.***	***KJ PARK***	***2555 PARK BOULEVARD, PALO ALTO, CA 94709***	***332***
59	HISTCORTESE	26 ft.	SNELL RESIDENCE	2388 WAVERLY, PALO ALTO, CA 94303	471
59	***LUST***	***26 ft.***	***SNELL RESIDENCE***	***2388 WAVERLY ST, PALO ALTO, CA 94301***	***472***

California Hazardous Material Incident Report System (CHMIRS)

MAP ID# 1

Distance from Property: 0.000 mi. (0 ft.) X
Elevation: 33 ft. (Equal to TP)

INCIDENT INFORMATION

CONTROL #: **13-3775**
NOTIFIED: **06/21/13**
AGENCY: **CITY OF PALO ALTO UTILITIES**
ADMINISTRATION: **SANTA CLARA COUNTY HEALTH DEPARTMENT**
INCIDENT LOCATION: **210 PORTAGE AVENUE**
PALO ALTO, CA 94303
INCIDENT COUNTY: **SANTA CLARA**

SUBSTANCE INFORMATION

SUBSTANCE: **SEWAGE**
QUANTITY: **UNK**
TYPE: **GAL(S)**

INCIDENT DESCRIPTION

AN UNDERGROUND PIPE IS BROKEN. THE DRAIN IS NEARBY A STORM DRAIN WHICH GOES TO MATADERO CREEK. THE CREEK IS ALMOST DRY BUT FLOWING AT THIS TIME. THE CREEK HAS BEEN DAMMED IN TWO DIFFERENT LOCATIONS FOR CONTAINMENT. THE SEWAGE FLOW HAS BEEN STOPPED.

CONTAINED: **YES**
WATER INVOLVED / WATERWAY: **YES / STORM DRAIN TO MATADERO CREEK TO S.F. BAY.**
DATE AND TIME: **6/21/2013**
SITE: **WATERWAYS**
INJURIES: **NOT REPORTED**
FATALITIES: **NOT REPORTED**
EVACUATIONS: **NOT REPORTED**
CLEANUP BY: **REPORTING PARTY**

Back to Report Summary

MAP ID# 1

Distance from Property: 0.000 mi. (0 ft.) X
Elevation: 33 ft. (Equal to TP)

FACILITY INFORMATION

GLOBAL ID: **SL0608568096**

URL LINK: CLICK HERE

BUSINESS NAME: **MERCER PROCESSING**

ADDRESS: **230 PORTAGE AVE**
PALO ALTO, CA 94306-2242

COUNTY: **SANTA CLARA**

FACILITY DETAILS

CASE TYPE: **CLEANUP PROGRAM SITE**

CASE NUMBER: **43S0965**

STATUS: **COMPLETED - CASE CLOSED 4/8/2002**

POTENTIAL CONTAMINATION:

OTHER CHLORINATED HYDROCARBONS, TRICHLOROETHYLENE (TCE)

POTENTIAL MEDIA AFFECTED:

SOIL

DISADVANTAGED COMMUNITY:

NO

SEVERELY DISADVANTAGED COMMUNITY:

NO

SITE HISTORY:

NOT REPORTED

REGULATORY ACTIVITIES

TYPE OF ACTION:	DATE:	ACTION:
OTHER	**01/01/50**	**LEAK DISCOVERY**
OTHER	**01/01/50**	**LEAK REPORTED**
REMEDIATION	**01/01/50**	**EXCAVATION**
ENFORCEMENT	**04/08/2002**	**CLOSURE/NO FURTHER ACTION LETTER**
REMEDIATION	**01/02/2002**	**EXCAVATION**
RESPONSE	**08/18/2001**	**CORRESPONDENCE**
ENFORCEMENT	**05/09/2001**	**STAFF LETTER**
OTHER	**03/23/2001**	**LEAK REPORTED**
OTHER	**01/12/2000**	**LEAK DISCOVERY**

STATUS HISTORY

STATUS:	DATE:
COMPLETED - CASE CLOSED	**04/08/2002**
OPEN - REMEDIATION	**01/02/2002**
OPEN - REOPEN CASE	**10/18/2001**
OPEN - REMEDIATION	**06/27/2001**
OPEN - SITE ASSESSMENT	**03/23/2001**
OPEN - CASE BEGIN DATE	**01/12/2000**

CONTACT DETAILS

ORGANIZATION: **SAN FRANCISCO BAY RWQCB (REGION 2)**

ADDRESS: **1515 CLAY ST SUITE 1400**

CITY: **OAKLAND**
CONTACT NAME: **REGIONAL WATER BOARD**
CONTACT TYPE: **REGIONAL BOARD CASEWORKER**
CONTACT PHONE: **NOT REPORTED**
EMAIL: **NOT REPORTED**

Back to Report Summary

MAP ID# 1

Distance from Property: 0.000 mi. (0 ft.) X
Elevation: 33 ft. (Equal to TP)

FACILITY INFORMATION

GLOBAL ID: **T10000003606**
URL LINK: CLICK HERE
BUSINESS NAME: **EL CAMINO CENTER**
ADDRESS: **340 PORTAGE AVENUE**
PALO ALTO, CA 94306
COUNTY: **SANTA CLARA**

FACILITY DETAILS

CASE TYPE: **LUST CLEANUP SITE**
CASE NUMBER: **14-825**
STATUS: **COMPLETED - CASE CLOSED 7/7/2015**
POTENTIAL CONTAMINATION:
TRICHLOROETHYLENE (TCE), DIESEL, GASOLINE
POTENTIAL MEDIA AFFECTED:
OTHER GROUNDWATER (USES OTHER THAN DRINKING WATER)
DISADVANTAGED COMMUNITY:
NO
SEVERELY DISADVANTAGED COMMUNITY:
NO
SITE HISTORY:
THE SITE IS LOCATED WITHIN THE CALIFORNIA-OLIVE-EMERSON (COE) REGIONAL PLUME OF VOC AFFECTED GROUNDWATER. CHLORINATED VOCS (CVOCS) ASSOCIATED WITH THIS REGIONAL PLUME, (INCLUDING TRICHLOROETHENE [(TCE)], HAVE BEEN FOUND IN SOIL AND/OR GROUNDWATER SAMPLES AT LOW CONCENTRATIONS AT THE SITE AT CONCENTRATIONS GENERALLY LESS THAN 5 ¦G/L. NUMEROUS SHALLOW GROUNDWATER MONITORING WELLS ASSOCIATED WITH MONITORING AND EVALUATION OF THE COE PLUME ARE LOCATED AT ON- AND OFF-SITE LOCATIONS IN THE VICINITY OF THE FORMER UST AREA. TYPICAL GROUNDWATER DEPTHS (RANGING BETWEEN 13 TO 17 FEET BGS) AND FLOW DIRECTIONS IN THE VICINITY IS UNDERSTOOD (BOTH WITHIN THE GREATER COE STUDY AREA AS WELL AS AT THE SITE), AND BASED ON GROUNDWATER ELEVATION CONTOUR MAPS PREPARED BY OTHERS GROUNDWATER FLOW DIRECTION AT THE SUBJECT SITE IS NORTH TO NORTHEAST, TOWARDS SAN FRANCISCO BAY (LOCATED APPROXIMATELY 2 MILES NORTHEAST OF THE SITE). THE FORMER UST AREA IS LOCATED IN THE SOUTHERN PORTION OF THE MAIN PARKING LOT OF THE EL CAMINO CENTER, A COMMERCIAL RETAIL SHOPPING CENTER. PRIOR TO REMOVAL OF THE TWO DIESEL TANKS (INCLUDING ONE 1,000-GALLON UST AND ONE 1,150-GALLON TANK), GROUNDWATER SAMPLES WERE COLLECTED IN 2010 IN THE VICINITY OF THE FORMER USTS. THE GROUNDWATER SAMPLE RESULTS INDICATED LOW-TO-MODERATE CONCENTRATIONS OF TOTAL PETROLEUM HYDROCARBONS QUANTIFIED AS GASOLINE (TPHG) AND DIESEL (TPHD), AND A GENERAL ABSENCE OF BENZENE, TOLUENE, ETHYLBENZENE, AND XYLENES (BTEX) IN GROUNDWATER IN THE NEAR VICINITY OF THE TANKS. TPHG AND TPHD WERE DETECTED IN GRAB GROUNDWATER SAMPLES AT MAXIMUM CONCENTRATIONS OF 2.1 AND 24.3 MILLIGRAMS PER LITER (MG/L), RESPECTIVELY; IN CONTRAST, RELATIVELY LOW MAXIMUM CONCENTRATIONS OF BENZENE AND ETHYLBENZENE WERE DETECTED AT 9.4 AND 11.4 MICROGRAMS PER LITER (¦G/L); RESPECTIVELY. ALL OTHER PETROLEUM HYDROCARBON-RELATED CONSTITUENTS WERE DETECTED BELOW SAN FRANCISCO BAY REGIONAL WATER QUALITY CONTROL BOARD (RWQCB) ENVIRONMENTAL SCREENING LEVELS (ESLS). THE TWO FORMER USTS WERE REMOVED UNDER PERMIT WITH OVERSIGHT BY THE DEH ON OCTOBER 18, 2011. DURING THE TANK EXCAVATION ACTIVITIES, APPROXIMATELY 750 CUBIC YARDS OF HYDROCARBON AFFECTED SOIL WERE REMOVED AND DISPOSED OFF-SITE. PRIOR TO BACKFILLING, APPROXIMATELY 500 POUNDS OF OXYGEN-RELEASING COMPOUND (ORC) WAS DISTRIBUTED

ACROSS THE BOTTOM OF THE EXCAVATION TO ASSIST IN THE DEGRADATION OF RESIDUAL HYDROCARBONS IN THE SUBSURFACE. SURFACE CONDITIONS AT THE SITE CONSISTED OF AN ASPHALT-CEMENT PARKING LOT, WITH LITTLE BASE ROCK MATERIAL BENEATH. DURING PREVIOUS INVESTIGATIONS, SUBSURFACE SOILS ENCOUNTERED BENEATH THE PARKING LOT WERE PREDOMINANTLY CLAYS TO THE MAXIMUM DEPTH EXPLORED (28 FEET BGS). A SAND LENSE, RANGING FROM 1 TO 7 FEET THICK, IS PRESENT AT APPROXIMATELY 15 FEET BGS. SATURATED SOIL WAS ENCOUNTERED IN EACH BORING AT VARYING DEPTHS RANGING FROM APPROXIMATELY 15 FEET TO 25 FEET BGS. STATIC DEPTH TO WATER WAS MEASURED IN MOST BORINGS AT APPROXIMATELY 16 FEET BGS. NUMEROUS SHALLOW GROUNDWATER MONITORING WELLS ASSOCIATED WITH MONITORING AND EVALUATION OF THE COE PLUME ARE LOCATED AT ON- AND OFF-SITE LOCATIONS IN THE VICINITY OF THE FORMER UST AREA. BASED ON CURRENT AND HISTORICAL GROUNDWATER ELEVATION MEASUREMENTS AND CONTOUR MAPS, GROUNDWATER FLOW DIRECTION AT THE SUBJECT SITE IS NORTH-TO-NORTHEAST. BASED ON THE MOST RECENT GROUNDWATER DATA, THE EXTENT OF RESIDUAL PETROLEUM HYDROCARBONS IN GROUNDWATER APPEARS TO BE GENERALLY CONTROLLED BY LATERAL GROUNDWATER FLOW IN THE DOWNGRADIENT NORTH-TO-NORTHEAST GROUNDWATER FLOW DIRECTION. DISSOLVED RESIDUAL PETROLEUM HYDROCARBONS ARE BEING DEPLETED VIA NATURAL ATTENUATION, ADVECTION, AND DIFFUSION. THE HIGHEST CONCENTRATIONS OF PETROLEUM HYDROCARBON RESIDUALS IN GROUNDWATER APPEAR TO BE IN THE NEAR VICINITY OF THE FORMER TANKS, REPRESENTED BY GROUNDWATER SAMPLES GW-4 AND GW-8, AND THE DOWNGRADIENT EXTENT OF THE RESIDUAL HYDROCARBON PLUME (LESS THAN 150 FEET IN LENGTH) IS DELINEATED BY SAMPLES GW-1 AND GW-2. THE MAXIMUM CONCENTRATIONS OF TPHD ARE LESS THAN THE MAXIMUM GROUNDWATER CONCENTRATIONS DETECTED DURING THE 2010 INVESTIGATION (24.3 MG/L); COLLECTED DURING THE SOURCE REMOVAL ACTIONS (TANK REMOVAL AND OVEREXCAVATIONS) IN 2011.

REGULATORY ACTIVITIES

TYPE OF ACTION:	DATE:	ACTION:
OTHER	01/01/50	LEAK DISCOVERY
OTHER	01/01/50	LEAK REPORTED
ENFORCEMENT	07/07/2015	CLOSURE/NO FURTHER ACTION LETTER
ENFORCEMENT	04/27/2015	NOTIFICATION - PUBLIC NOTICE OF CASE CLOSURE
RESPONSE	07/11/2014	OTHER REPORT / DOCUMENT
ENFORCEMENT	05/28/2014	STAFF LETTER
RESPONSE	01/31/2014	SITE ASSESSMENT REPORT
RESPONSE	01/28/2014	SOIL AND WATER INVESTIGATION REPORT
ENFORCEMENT	09/26/2013	STAFF LETTER
RESPONSE	09/20/2013	OTHER WORKPLAN
RESPONSE	09/20/2013	OTHER WORKPLAN - REGULATOR RESPONDED
ENFORCEMENT	07/19/2013	STAFF LETTER
RESPONSE	06/11/2012	OTHER REPORT / DOCUMENT
ENFORCEMENT	04/06/2012	STAFF LETTER
ENFORCEMENT	03/15/2012	OTHER REPORT
RESPONSE	03/15/2012	OTHER REPORT / DOCUMENT
ENFORCEMENT	03/14/2012	NOTICE OF RESPONSIBILITY
RESPONSE	01/01/2012	CORRESPONDENCE
OTHER	10/20/2011	LEAK REPORTED
RESPONSE	10/20/2011	UNAUTHORIZED RELEASE FORM
OTHER	10/18/2011	LEAK DISCOVERY

STATUS HISTORY

STATUS:	DATE:
COMPLETED - CASE CLOSED	07/07/2015

STATUS:	DATE:
OPEN - ELIGIBLE FOR CLOSURE	**04/27/2015**
OPEN - VERIFICATION MONITORING	**05/27/2014**
OPEN - SITE ASSESSMENT	**03/13/2012**
OPEN - CASE BEGIN DATE	**10/18/2011**

CONTACT DETAILS

ORGANIZATION: **SANTA CLARA COUNTY LOP**
ADDRESS: **1555 BERGER DRIVE, SUITE 300**
CITY: **SAN JOSE**
CONTACT NAME: **AARON COSTA**
CONTACT TYPE: **LOCAL AGENCY CASEWORKER**
CONTACT PHONE: **4089181954**
EMAIL: **AARON.COSTA@CEP.SCCGOV.ORG**
ORGANIZATION: **SAN FRANCISCO BAY RWQCB (REGION 2)**
ADDRESS: **1515 CLAY ST SUITE 1400**
CITY: **OAKLAND**
CONTACT NAME: **REGIONAL WATER BOARD**
CONTACT TYPE: **REGIONAL BOARD CASEWORKER**
CONTACT PHONE: **NOT REPORTED**
EMAIL: **NOT REPORTED**

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Enforcement and Compliance History Information (ECHOR09)

MAP ID# 1

Distance from Property: 0.000 mi. (0 ft.) X
Elevation: 33 ft. (Equal to TP)

FACILITY INFORMATION

UNIQUE ID: **110002740204**
REGISTRY ID: **110002740204**
NAME: **SYSTEMS CONTROL INC**
ADDRESS: **220 PORTAGE**
PALO ALTO, CA 94306
COUNTY: **SANTA CLARA**
FACILITY LINK: *Facility Detail Report*

Back to Report Summary

Facility Registry System (FRSCA)

MAP ID# 1

Distance from Property: 0.000 mi. (0 ft.) X
Elevation: 33 ft. (Equal to TP)

FACILITY INFORMATION

REGISTRY ID: **110002740204**

NAME: **SYSTEMS CONTROL INC**

LOCATION ADDRESS: **220 PORTAGE**
PALO ALTO, CA 94306

COUNTY: **SANTA CLARA**

EPA REGION: **09**

FEDERAL FACILITY: **NOT REPORTED**

TRIBAL LAND: **NOT REPORTED**

ALTERNATIVE NAME/S:

SYSTEMS CONTROL INC

PROGRAM/S LISTED FOR THIS FACILITY

RCRAINFO - RESOURCE CONSERVATION AND RECOVERY ACT INFORMATION SYSTEM

STANDARD INDUSTRIAL CLASSIFICATION/S (SIC)

NO SIC DATA REPORTED

NORTH AMERICAN INDUSTRY CLASSIFICATION/S (NAICS)

NO NAICS DATA REPORTED

Back to Report Summary

Facility Registry System (FRSCA)

MAP ID# 1

Distance from Property: 0.000 mi. (0 ft.) X
Elevation: 33 ft. (Equal to TP)

FACILITY INFORMATION

REGISTRY ID: **110065985642**

NAME: **MERCER PROCESSING**

LOCATION ADDRESS: **230 PORTAGE AVE**
PALO ALTO, CA 94306-2242

COUNTY: **SANTA CLARA**

EPA REGION: **09**

FEDERAL FACILITY: **NOT REPORTED**

TRIBAL LAND: **NOT REPORTED**

ALTERNATIVE NAME/S:

MERCER PROCESSING

PROGRAM/S LISTED FOR THIS FACILITY

CA-ENVIROVIEW - CA-ENVIROVIEW

STANDARD INDUSTRIAL CLASSIFICATION/S (SIC)

NO SIC DATA REPORTED

NORTH AMERICAN INDUSTRY CLASSIFICATION/S (NAICS)

NO NAICS DATA REPORTED

Back to Report Summary

Facility Registry System (FRSCA)

MAP ID# 1

Distance from Property: 0.000 mi. (0 ft.) X
Elevation: 33 ft. (Equal to TP)

FACILITY INFORMATION

REGISTRY ID: **110066240856**

NAME: **EL CAMINO CENTER**

LOCATION ADDRESS: **340 PORTAGE AVENUE**
PALO ALTO, CA 94306

COUNTY: **SANTA CLARA**

EPA REGION: **09**

FEDERAL FACILITY: **NOT REPORTED**

TRIBAL LAND: **NOT REPORTED**

ALTERNATIVE NAME/S:

EL CAMINO CENTER

PROGRAM/S LISTED FOR THIS FACILITY

CA-ENVIROVIEW - CA-ENVIROVIEW

STANDARD INDUSTRIAL CLASSIFICATION/S (SIC)

NO SIC DATA REPORTED

NORTH AMERICAN INDUSTRY CLASSIFICATION/S (NAICS)

NO NAICS DATA REPORTED

Back to Report Summary

Hazardous Waste Tanner Summary (HWTS)

MAP ID# 1

Distance from Property: 0.000 mi. (0 ft.) X
Elevation: 33 ft. (Equal to TP)

SITE INFORMATION

EPA ID: **CAC002675759**
NAME: **EL CAMINO CENTER**
COUNTY: **SANTA CLARA**
ADDRESS: **340 PORTAGE AVE**
PALO ALTO, CA 94306-2244
FACILITY LINK: *Department of Toxic Substances Control*

CONTACT INFORMATION

CONTACT: **ROBERT WHEATLEY**
PHONE: **(650) 856-0926**
ADDRESS: **3225 ASH ST**
PALO ALTO CA 94306-2240

MANIFEST SUMMARY INFORMATION

YEAR: **2011**
TSD ID: **CAD980887418**
GENERATOR COUNTY: **SANTA CLARA**
DISPOSAL COUNTY: **SANTA CLARA**
WASTE CATEGORY: **UNSPECIFIED AQUEOUS SOLUTION**
AMOUNT DISPOSED(TONS): **1.6800**
DISPOSAL METHOD: **DISCHARGE TO SEWER/POTW OR NPDES(WITH PRIOR STORAGE--WITH OR WITHOUT TREATMENT)**

Back to Report Summary

Leaking Underground Storage Tanks (LUST)

MAP ID# 1

Distance from Property: 0.000 mi. (0 ft.) X
Elevation: 33 ft. (Equal to TP)

FACILITY INFORMATION

GLOBAL ID: **T10000003606**
URL LINK: CLICK HERE
BUSINESS NAME: **EL CAMINO CENTER**
ADDRESS: **340 PORTAGE AVENUE**
PALO ALTO, CA 94306
COUNTY: **SANTA CLARA**

FACILITY DETAILS

CASE TYPE: **LUST CLEANUP SITE**
CASE NUMBER: **14-825**
STATUS: **COMPLETED - CASE CLOSED 07/07/2015**
POTENTIAL CONTAMINATION:
TRICHLOROETHYLENE (TCE), DIESEL, GASOLINE
POTENTIAL MEDIA AFFECTED:
OTHER GROUNDWATER (USES OTHER THAN DRINKING WATER)
DISADVANTAGED COMMUNITY:
NO
SEVERELY DISADVANTAGED COMMUNITY:
NO
SITE HISTORY:
THE SITE IS LOCATED WITHIN THE CALIFORNIA-OLIVE-EMERSON (COE) REGIONAL PLUME OF VOC AFFECTED GROUNDWATER. CHLORINATED VOCS (CVOCS) ASSOCIATED WITH THIS REGIONAL PLUME, (INCLUDING TRICHLOROETHENE [(TCE)], HAVE BEEN FOUND IN SOIL AND/OR GROUNDWATER SAMPLES AT LOW CONCENTRATIONS AT THE SITE AT CONCENTRATIONS GENERALLY LESS THAN 5 ¦G/L. NUMEROUS SHALLOW GROUNDWATER MONITORING WELLS ASSOCIATED WITH MONITORING AND EVALUATION OF THE COE PLUME ARE LOCATED AT ON- AND OFF-SITE LOCATIONS IN THE VICINITY OF THE FORMER UST AREA. TYPICAL GROUNDWATER DEPTHS (RANGING BETWEEN 13 TO 17 FEET BGS) AND FLOW DIRECTIONS IN THE VICINITY IS UNDERSTOOD (BOTH WITHIN THE GREATER COE STUDY AREA AS WELL AS AT THE SITE), AND BASED ON GROUNDWATER ELEVATION CONTOUR MAPS PREPARED BY OTHERS GROUNDWATER FLOW DIRECTION AT THE SUBJECT SITE IS NORTH TO NORTHEAST, TOWARDS SAN FRANCISCO BAY (LOCATED APPROXIMATELY 2 MILES NORTHEAST OF THE SITE). THE FORMER UST AREA IS LOCATED IN THE SOUTHERN PORTION OF THE MAIN PARKING LOT OF THE EL CAMINO CENTER, A COMMERCIAL RETAIL SHOPPING CENTER. PRIOR TO REMOVAL OF THE TWO DIESEL TANKS (INCLUDING ONE 1,000-GALLON UST AND ONE 1,150-GALLON TANK), GROUNDWATER SAMPLES WERE COLLECTED IN 2010 IN THE VICINITY OF THE FORMER USTS. THE GROUNDWATER SAMPLE RESULTS INDICATED LOW-TO-MODERATE CONCENTRATIONS OF TOTAL PETROLEUM HYDROCARBONS QUANTIFIED AS GASOLINE (TPHG) AND DIESEL (TPHD), AND A GENERAL ABSENCE OF BENZENE, TOLUENE, ETHYLBENZENE, AND XYLENES (BTEX) IN GROUNDWATER IN THE NEAR VICINITY OF THE TANKS. TPHG AND TPHD WERE DETECTED IN GRAB GROUNDWATER SAMPLES AT MAXIMUM CONCENTRATIONS OF 2.1 AND 24.3 MILLIGRAMS PER LITER (MG/L), RESPECTIVELY; IN CONTRAST, RELATIVELY LOW MAXIMUM CONCENTRATIONS OF BENZENE AND ETHYLBENZENE WERE DETECTED AT 9.4 AND 11.4 MICROGRAMS PER LITER (¦G/L); RESPECTIVELY. ALL OTHER PETROLEUM HYDROCARBON-RELATED CONSTITUENTS WERE DETECTED BELOW SAN FRANCISCO BAY REGIONAL WATER QUALITY CONTROL BOARD (RWQCB) ENVIRONMENTAL SCREENING LEVELS (ESLS). THE TWO FORMER USTS WERE REMOVED UNDER PERMIT WITH OVERSIGHT BY THE DEH ON OCTOBER 18, 2011. DURING THE TANK EXCAVATION ACTIVITIES, APPROXIMATELY 750 CUBIC YARDS OF HYDROCARBON AFFECTED SOIL WERE REMOVED AND DISPOSED OFF-SITE. PRIOR TO BACKFILLING, APPROXIMATELY 500 POUNDS OF OXYGEN-RELEASING COMPOUND (ORC) WAS DISTRIBUTED

ACROSS THE BOTTOM OF THE EXCAVATION TO ASSIST IN THE DEGRADATION OF RESIDUAL HYDROCARBONS IN THE SUBSURFACE. SURFACE CONDITIONS AT THE SITE CONSISTED OF AN ASPHALT-CEMENT PARKING LOT, WITH LITTLE BASE ROCK MATERIAL BENEATH. DURING PREVIOUS INVESTIGATIONS, SUBSURFACE SOILS ENCOUNTERED BENEATH THE PARKING LOT WERE PREDOMINANTLY CLAYS TO THE MAXIMUM DEPTH EXPLORED (28 FEET BGS). A SAND LENSE, RANGING FROM 1 TO 7 FEET THICK, IS PRESENT AT APPROXIMATELY 15 FEET BGS. SATURATED SOIL WAS ENCOUNTERED IN EACH BORING AT VARYING DEPTHS RANGING FROM APPROXIMATELY 15 FEET TO 25 FEET BGS. STATIC DEPTH TO WATER WAS MEASURED IN MOST BORINGS AT APPROXIMATELY 16 FEET BGS. NUMEROUS SHALLOW GROUNDWATER MONITORING WELLS ASSOCIATED WITH MONITORING AND EVALUATION OF THE COE PLUME ARE LOCATED AT ON- AND OFF-SITE LOCATIONS IN THE VICINITY OF THE FORMER UST AREA. BASED ON CURRENT AND HISTORICAL GROUNDWATER ELEVATION MEASUREMENTS AND CONTOUR MAPS, GROUNDWATER FLOW DIRECTION AT THE SUBJECT SITE IS NORTH-TO-NORTHEAST. BASED ON THE MOST RECENT GROUNDWATER DATA, THE EXTENT OF RESIDUAL PETROLEUM HYDROCARBONS IN GROUNDWATER APPEARS TO BE GENERALLY CONTROLLED BY LATERAL GROUNDWATER FLOW IN THE DOWNGRADIENT NORTH-TO-NORTHEAST GROUNDWATER FLOW DIRECTION. DISSOLVED RESIDUAL PETROLEUM HYDROCARBONS ARE BEING DEPLETED VIA NATURAL ATTENUATION, ADVECTION, AND DIFFUSION. THE HIGHEST CONCENTRATIONS OF PETROLEUM HYDROCARBON RESIDUALS IN GROUNDWATER APPEAR TO BE IN THE NEAR VICINITY OF THE FORMER TANKS, REPRESENTED BY GROUNDWATER SAMPLES GW-4 AND GW-8, AND THE DOWNGRADIENT EXTENT OF THE RESIDUAL HYDROCARBON PLUME (LESS THAN 150 FEET IN LENGTH) IS DELINEATED BY SAMPLES GW-1 AND GW-2. THE MAXIMUM CONCENTRATIONS OF TPHD ARE LESS THAN THE MAXIMUM GROUNDWATER CONCENTRATIONS DETECTED DURING THE 2010 INVESTIGATION (24.3 MG/L); COLLECTED DURING THE SOURCE REMOVAL ACTIONS (TANK REMOVAL AND OVEREXCAVATIONS) IN 2011.

HISTORICAL FACILITY DETAILS

NO HISTORICAL DETAIL(S) INFORMATION REPORTED FOR THIS FACILITY

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Resource Conservation & Recovery Act - Generator (RCRAGR09)

MAP ID# 1

Distance from Property: 0.000 mi. (0 ft.) X
Elevation: 33 ft. (Equal to TP)

FACILITY INFORMATION

EPA ID#: **CAD981657984**
NAME: **SYSTEMS CONTROL INC**
ADDRESS: **220 PORTAGE**
PALO ALTO, CA 94306
CONTACT NAME: **ENVIRONMENTAL MANAGER**
CONTACT ADDRESS: **220 PORTAGE**
PALO ALTO CA 94306
CONTACT PHONE: **415-494-1165**
NON-NOTIFIER: **NOT A NON-NOTIFIER**
DATE RECEIVED BY AGENCY: **09/30/1986**

OWNER TYPE: **PRIVATE**
OWNER NAME: **WSJ PROPERTIES**
OPERATOR TYPE: **PRIVATE**
OPERATOR NAME: **NOT REQUIRED**

CERTIFICATION **- NO CERTIFICATION REPORTED -**
INDUSTRY CLASSIFICATION (NAICS) **- NO NAICS INFORMATION REPORTED -**

CURRENT ACTIVITY INFORMATION

GENERATOR STATUS: **SMALL QUANTITY GENERATOR** LAST UPDATED DATE: **09/15/2000**
SUBJECT TO CORRECTIVE ACTION UNIVERSE: **NO**
TDSFs POTENTIALLY SUBJECT TO CORRECTIVE ACTION UNDER 3004 (u)/(v) UNIVERSE: **NO**
TDSFs ONLY SUBJECT TO CORRECTIVE ACTION UNDER DISCRETIONARY AUTHORITIES UNIVERSE: **NO**
NON TSDFs WHERE RCRA CORRECTIVE ACTION HAS BEEN IMPOSED UNIVERSE: **NO**
CORRECTIVE ACTION WORKLOAD UNIVERSE: **NO**

IMPORTER: **NO**
MIXED WASTE GENERATOR: **NO**
RECYCLER: **NO**
TRANSPORTER: **NO**
ONSITE BURNER EXEMPTION: **NO**
FURNACE EXEMPTION: **NO**
USED OIL REFINER: **NO**
USED OIL TRANSFER FACILITY: **NO**

UNDERGROUND INJECTION: **NO**
UNIVERSAL WASTE DESTINATION FACILITY: **NO**
TRANSFER FACILITY: **NO**
USED OIL FUEL BURNER: **NO**
USED OIL PROCESSOR: **NO**
USED OIL FUEL MARKETER TO BURNER: **NO**
SPECIFICATION USED OIL MARKETER: **NO**
USED OIL TRANSPORTER: **NO**

COMPLIANCE, MONITORING AND ENFORCEMENT INFORMATION

EVALUATIONS **- NO EVALUATIONS REPORTED -**
VIOLATIONS **- NO VIOLATIONS REPORTED -**
ENFORCEMENTS **- NO ENFORCEMENTS REPORTED -**

HAZARDOUS WASTE

- NO HAZARDOUS WASTE INFORMATION REPORTED -
UNIVERSAL WASTE **- NO UNIVERSAL WASTE REPORTED -**
CORRECTIVE ACTION AREA **- NO CORRECTIVE ACTION AREA INFORMATION REPORTED -**
CORRECTIVE ACTION EVENT
NO CORRECTIVE ACTION EVENT(S) REPORTED

Back to Report Summary

Spills, Leaks, Investigation & Cleanup Recovery Listing (SLIC)

MAP ID# 1

Distance from Property: 0.000 mi. (0 ft.) X
Elevation: 33 ft. (Equal to TP)

INCIDENT INFORMATION

GLOBAL ID#:	**SL0608568096**
CASE NUMBER:	**43S0965**
NAME:	**MERCER PROCESSING**
ADDRESS:	**230 PORTAGE AVE**
	PALO ALTO CA
FACILITY TYPE:	**CLEANUP PROGRAM SITE**
LEAD AGENCY:	**SAN FRANCISCO BAY RWQCB (REGION 2)**
LEAD AGENCY CONTACT:	**DEREK WHITWORTH**
LEAD AGENCY CASE #:	**43S0965**
SUBSTANCE RELEASED:	**34531, 39180**
STATUS:	**COMPLETED - CASE CLOSED**
RESPONSIBLE PARTY:	**BOYD SMITH**

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Enforcement and Compliance History Information (ECHOR09)

MAP ID# 2

Distance from Property: 0.018 mi. (95 ft.) ESE
Elevation: 32 ft. (Lower than TP)

FACILITY INFORMATION

UNIQUE ID: **110017217135**
REGISTRY ID: **110017217135**
NAME: **PARK AVE MOTORS**
ADDRESS: **3250 PARK BLVD**
PALO ALTO, CA 94306
COUNTY: **SANTA CLARA**
FACILITY LINK: *Facility Detail Report*

Back to Report Summary

Enforcement and Compliance History Information (ECHOR09)

MAP ID# 2

Distance from Property: 0.018 mi. (95 ft.) ESE
Elevation: 32 ft. (Lower than TP)

FACILITY INFORMATION

UNIQUE ID: **110070423282**
REGISTRY ID: **110070423282**
NAME: **KUNI REDWOOD MOTORS LLC DBA AUDI PALO ALTO**
ADDRESS: **3250 PARK BLVD**
PALO ALTO, CA 94303
COUNTY: **SANTA CLARA**
FACILITY LINK: *Facility Detail Report*

Back to Report Summary

Facility Registry System (FRSCA)

MAP ID# 2

Distance from Property: 0.018 mi. (95 ft.) ESE
Elevation: 32 ft. (Lower than TP)

FACILITY INFORMATION

REGISTRY ID: **110017217135**

NAME: **PARK AVE MOTORS**

LOCATION ADDRESS: **3250 PARK BLVD**
PALO ALTO, CA 94306

COUNTY: **SANTA CLARA**

EPA REGION: **09**

FEDERAL FACILITY: **NOT REPORTED**

TRIBAL LAND: **NOT REPORTED**

ALTERNATIVE NAME/S:

PARK AVE MOTORS

PARK AVENUE MOTORS

PROGRAM/S LISTED FOR THIS FACILITY

RCRAINFO - RESOURCE CONSERVATION AND RECOVERY ACT INFORMATION SYSTEM

HWTS-DATAMART - HAZARDOUS WASTE TRACKING SYSTEM - DATAMART

CA-ENVIROVIEW - CA-ENVIROVIEW

STANDARD INDUSTRIAL CLASSIFICATION/S (SIC)

5511 - MOTOR VEHICLE DEALERS (NEW AND USED)

NORTH AMERICAN INDUSTRY CLASSIFICATION/S (NAICS)

44111 - NEW CAR DEALERS

44111 - NEW CAR DEALERS

Back to Report Summary

Facility Registry System (FRSCA)

MAP ID# 2

Distance from Property: 0.018 mi. (95 ft.) ESE
Elevation: 32 ft. (Lower than TP)

FACILITY INFORMATION

REGISTRY ID: **110070423282**

NAME: **KUNI REDWOOD MOTORS LLC DBA AUDI PALO ALTO**

LOCATION ADDRESS: **3250 PARK BLVD**
PALO ALTO, CA 94303

COUNTY: **SANTA CLARA**

EPA REGION: **09**

FEDERAL FACILITY: **NOT REPORTED**

TRIBAL LAND: **NOT REPORTED**

ALTERNATIVE NAME/S:
NO ALTERNATIVE NAME(S) LISTED FOR THIS FACILITY

PROGRAM/S LISTED FOR THIS FACILITY
RCRAINFO - RESOURCE CONSERVATION AND RECOVERY ACT INFORMATION SYSTEM

STANDARD INDUSTRIAL CLASSIFICATION/S (SIC)
NO SIC DATA REPORTED

NORTH AMERICAN INDUSTRY CLASSIFICATION/S (NAICS)
811111 - GENERAL AUTOMOTIVE REPAIR.

Back to Report Summary

Hazardous Waste Tanner Summary (HWTS)

MAP ID# 2

Distance from Property: 0.000 mi. (0 ft.) X
Elevation: 32 ft. (Lower than TP)

SITE INFORMATION

EPA ID: **CAC001305584**
NAME: **WSJ PROPERTIES**
COUNTY: **NOT REPORTED**
ADDRESS: **3200 PARK BLVD**
PALO ALTO, CA 94306
FACILITY LINK: *Department of Toxic Substances Control*

CONTACT INFORMATION

CONTACT: **WSJ PROPERTIES**
PHONE: **NOT REPORTED**
ADDRESS: **NOT REPORTED**
NOT REPORTED NOT REPORTED

MANIFEST SUMMARY INFORMATION

YEAR: **1997**
TSD ID: **NVD982358483**
GENERATOR COUNTY: **SANTA CLARA**
DISPOSAL COUNTY: **UNKNOWN**
WASTE CATEGORY: **UNSPECIFIED OIL-CONTAINING WASTE**
AMOUNT DISPOSED(TONS): **34.0897**
DISPOSAL METHOD: **BLANK**

Back to Report Summary

Hazardous Waste Tanner Summary (HWTS)

MAP ID# 2

Distance from Property: 0.015 mi. (79 ft.) ESE
Elevation: 32 ft. (Lower than TP)

SITE INFORMATION

EPA ID: **CAR000151357**
NAME: **PARK AVE MOTORS**
COUNTY: **SANTA CLARA**
ADDRESS: **3250 PARK BLVD**
PALO ALTO, CA 94306
FACILITY LINK: *Department of Toxic Substances Control*

CONTACT INFORMATION

CONTACT: **JOHN BECK-JENSEN**
PHONE: **(650) 494-6653**
ADDRESS: **3241 PARK BLVD**
PALO ALTO CA 943060000

MANIFEST SUMMARY INFORMATION

YEAR: **2014**
TSD ID: **CAD980887418**
GENERATOR COUNTY: **SANTA CLARA**
DISPOSAL COUNTY: **ALAMEDA**
WASTE CATEGORY: **AQUEOUS SOLUTION WITH TOTAL ORGANIC RESIDUES 10 PERCENT OR MORE**
AMOUNT DISPOSED(TONS): **2.2101**
DISPOSAL METHOD: **STORAGE, BULKING, AND/OR TRANSFER OFF SITE--NO TREATMENT/REOVERY (H010-H129) OR (H131-H135)**

YEAR: **2010**
TSD ID: **CAD093459485**
GENERATOR COUNTY: **SANTA CLARA**
DISPOSAL COUNTY: **FRESNO**
WASTE CATEGORY: **UNSPECIFIED SOLVENT MIXTURE**
AMOUNT DISPOSED(TONS): **0.0864**
DISPOSAL METHOD: **STORAGE, BULKING, AND/OR TRANSFER OFF SITE--NO TREATMENT/REOVERY (H010-H129) OR (H131-H135)**

YEAR: **2010**
TSD ID: **TXD077603371**
GENERATOR COUNTY: **SANTA CLARA**
DISPOSAL COUNTY: **UNKNOWN**
WASTE CATEGORY: **UNSPECIFIED SOLVENT MIXTURE**
AMOUNT DISPOSED(TONS): **0.1400**
DISPOSAL METHOD: **FUEL BLENDING PRIOR TO ENERGY RECOVERY AT ANOTHER SITE**

YEAR: **2009**
TSD ID: **CAD093459485**
GENERATOR COUNTY: **SANTA CLARA**
DISPOSAL COUNTY: **FRESNO**
WASTE CATEGORY: **UNSPECIFIED SOLVENT MIXTURE**
AMOUNT DISPOSED(TONS): **0.0864**
DISPOSAL METHOD: **STORAGE, BULKING, AND/OR TRANSFER OFF SITE--NO TREATMENT/REOVERY (H010-H129) OR (H131-H135)**

YEAR: **2009**
TSD ID: **TXD077603371**
GENERATOR COUNTY: **SANTA CLARA**
DISPOSAL COUNTY: **UNKNOWN**

WASTE CATEGORY: **UNSPECIFIED SOLVENT MIXTURE**
AMOUNT DISPOSED(TONS): **0.1400**
DISPOSAL METHOD: **FUEL BLENDING PRIOR TO ENERGY RECOVERY AT ANOTHER SITE**

YEAR: **2008**
TSD ID: **CAD093459485**
GENERATOR COUNTY: **SANTA CLARA**
DISPOSAL COUNTY: **FRESNO**
WASTE CATEGORY: **UNSPECIFIED SOLVENT MIXTURE**
AMOUNT DISPOSED(TONS): **0.0216**
DISPOSAL METHOD: **NOT REPORTED**

YEAR: **2008**
TSD ID: **CAD093459485**
GENERATOR COUNTY: **SANTA CLARA**
DISPOSAL COUNTY: **FRESNO**
WASTE CATEGORY: **UNSPECIFIED SOLVENT MIXTURE**
AMOUNT DISPOSED(TONS): **0.0252**
DISPOSAL METHOD: **STORAGE, BULKING, AND/OR TRANSFER OFF SITE--NO TREATMENT/REOVERY (H010-H129) OR (H131-H135)**

YEAR: **2008**
TSD ID: **TXD077603371**
GENERATOR COUNTY: **SANTA CLARA**
DISPOSAL COUNTY: **UNKNOWN**
WASTE CATEGORY: **OTHER STILL BOTTOM WASTE**
AMOUNT DISPOSED(TONS): **0.0880**
DISPOSAL METHOD: **FUEL BLENDING PRIOR TO ENERGY RECOVERY AT ANOTHER SITE**

YEAR: **2007**
TSD ID: **CAD093459485**
GENERATOR COUNTY: **SANTA CLARA**
DISPOSAL COUNTY: **FRESNO**
WASTE CATEGORY: **BLANK OR UNKNOWN**
AMOUNT DISPOSED(TONS): **0.1500**
DISPOSAL METHOD: **SOLVENTS RECOVERY**

YEAR: **2007**
TSD ID: **CAD980887418**
GENERATOR COUNTY: **SANTA CLARA**
DISPOSAL COUNTY: **ALAMEDA**
WASTE CATEGORY: **OIL/WATER SEPARATION SLUDGE**
AMOUNT DISPOSED(TONS): **0.2000**
DISPOSAL METHOD: **STORAGE, BULKING, AND/OR TRANSFER OFF SITE--NO TREATMENT/REOVERY (H010-H129) OR (H131-H135)**

YEAR: **2007**
TSD ID: **TXD077603371**
GENERATOR COUNTY: **SANTA CLARA**
DISPOSAL COUNTY: **UNKNOWN**
WASTE CATEGORY: **UNSPECIFIED SOLVENT MIXTURE**
AMOUNT DISPOSED(TONS): **0.1000**

DISPOSAL METHOD: **FUEL BLENDING PRIOR TO ENERGY RECOVERY AT ANOTHER SITE**

YEAR: **2006**
TSD ID: **CA0000084517**
GENERATOR COUNTY: **SANTA CLARA**
DISPOSAL COUNTY: **SACRAMENTO**
WASTE CATEGORY: **HYDROCARBON SOLVENTS (BENZENE, HEXANE, STODDARD, ETC.)**
AMOUNT DISPOSED(TONS): **0.0000**
DISPOSAL METHOD: **STORAGE, BULKING, AND/OR TRANSFER OFF SITE--NO TREATMENT/REOVERY (H010-H129) OR (H131-H135)**

YEAR: **2006**
TSD ID: **CAD093459485**
GENERATOR COUNTY: **SANTA CLARA**
DISPOSAL COUNTY: **FRESNO**
WASTE CATEGORY: **BLANK OR UNKNOWN**
AMOUNT DISPOSED(TONS): **0.0700**
DISPOSAL METHOD: **NOT REPORTED**

YEAR: **2006**
TSD ID: **CAD093459485**
GENERATOR COUNTY: **SANTA CLARA**
DISPOSAL COUNTY: **FRESNO**
WASTE CATEGORY: **BLANK OR UNKNOWN**
AMOUNT DISPOSED(TONS): **0.1500**
DISPOSAL METHOD: **RECYCLE**

YEAR: **2006**
TSD ID: **CAD093459485**
GENERATOR COUNTY: **SANTA CLARA**
DISPOSAL COUNTY: **FRESNO**
WASTE CATEGORY: **BLANK OR UNKNOWN**
AMOUNT DISPOSED(TONS): **0.1500**
DISPOSAL METHOD: **RECYCLER**

YEAR: **2006**
TSD ID: **CAD093459485**
GENERATOR COUNTY: **SANTA CLARA**
DISPOSAL COUNTY: **FRESNO**
WASTE CATEGORY: **OXYGENATED SOLVENTS (ACETONE, BUTANOL, ETHYL ACETATE, ETC.)**
AMOUNT DISPOSED(TONS): **0.0500**
DISPOSAL METHOD: **RECYCLE**

YEAR: **2006**
TSD ID: **CAD093459485**
GENERATOR COUNTY: **SANTA CLARA**
DISPOSAL COUNTY: **FRESNO**
WASTE CATEGORY: **OXYGENATED SOLVENTS (ACETONE, BUTANOL, ETHYL ACETATE, ETC.)**
AMOUNT DISPOSED(TONS): **0.0500**
DISPOSAL METHOD: **RECYCLER**

Back to Report Summary

Resource Conservation & Recovery Act - Generator (RCRAGR09)

MAP ID# 2

Distance from Property: 0.018 mi. (95 ft.) ESE
Elevation: 32 ft. (Lower than TP)

FACILITY INFORMATION

EPA ID#: **CAR000151357**
NAME: **PARK AVE MOTORS**
ADDRESS: **3250 PARK BLVD**
PALO ALTO, CA 94306
CONTACT NAME: **STEVE KIRKSEY**
CONTACT ADDRESS: **3250 PARK BLVD**
PALO ALTO CA 94306
CONTACT PHONE: **650-494-0311**
NON-NOTIFIER: **NOT A NON-NOTIFIER**
DATE RECEIVED BY AGENCY: **02/24/2004**

OWNER TYPE: **PRIVATE**
OWNER NAME: **WSJ PROP**
OPERATOR TYPE: **PRIVATE**
OPERATOR NAME: **PARK AVE MOTORS INC**

CERTIFICATION

CERTIFICATION NAME:	CERTIFICATION TITLE:	CERTIFICATION SIGNED DATE:
STEVE KIRKSEY	**DIR OF OPS**	**02/18/2004**

INDUSTRY CLASSIFICATION (NAICS)
44111 - NEW CAR DEALERS

CURRENT ACTIVITY INFORMATION

GENERATOR STATUS: **SMALL QUANTITY GENERATOR** LAST UPDATED DATE: **03/03/2004**
SUBJECT TO CORRECTIVE ACTION UNIVERSE: **NO**
TDSFs POTENTIALLY SUBJECT TO CORRECTIVE ACTION UNDER 3004 (u)/(v) UNIVERSE: **NO**
TDSFs ONLY SUBJECT TO CORRECTIVE ACTION UNDER DISCRETIONARY AUTHORITIES UNIVERSE: **NO**
NON TSDFs WHERE RCRA CORRECTIVE ACTION HAS BEEN IMPOSED UNIVERSE: **NO**
CORRECTIVE ACTION WORKLOAD UNIVERSE: **NO**

IMPORTER: **NO**
MIXED WASTE GENERATOR: **NO**
RECYCLER: **NO**
TRANSPORTER: **NO**
ONSITE BURNER EXEMPTION: **NO**
FURNACE EXEMPTION: **NO**
USED OIL REFINER: **NO**
USED OIL TRANSFER FACILITY: **NO**

UNDERGROUND INJECTION: **NO**
UNIVERSAL WASTE DESTINATION FACILITY: **NO**
TRANSFER FACILITY: **NO**
USED OIL FUEL BURNER: **NO**
USED OIL PROCESSOR: **NO**
USED OIL FUEL MARKETER TO BURNER: **NO**
SPECIFICATION USED OIL MARKETER: **NO**
USED OIL TRANSPORTER: **NO**

COMPLIANCE, MONITORING AND ENFORCEMENT INFORMATION

EVALUATIONS **- NO EVALUATIONS REPORTED -**
VIOLATIONS **- NO VIOLATIONS REPORTED -**
ENFORCEMENTS **- NO ENFORCEMENTS REPORTED -**

HAZARDOUS WASTE

D001 **IGNITABLE WASTE**
D008 **LEAD**

UNIVERSAL WASTE **- NO UNIVERSAL WASTE REPORTED -**
CORRECTIVE ACTION AREA **- NO CORRECTIVE ACTION AREA INFORMATION REPORTED -**

CORRECTIVE ACTION EVENT

NO CORRECTIVE ACTION EVENT(S) REPORTED

Back to Report Summary

Resource Conservation & Recovery Act - Non-Generator (RCRANGR09)

MAP ID# 2

Distance from Property: 0.018 mi. (95 ft.) ESE
Elevation: 32 ft. (Lower than TP)

FACILITY INFORMATION

EPA ID#: **CAL000421792**

NAME: **KUNI REDWOOD MOTORS LLC DBA AUDI PALO ALTO**

ADDRESS: **3250 PARK BLVD**
PALO ALTO, CA 94303

CONTACT NAME: **KATIE GARREN**

CONTACT ADDRESS: **1730 EMBARCADERO RD**
PALO ALTO CA 94303

CONTACT PHONE: **650-852-1593**

NON-NOTIFIER: **NOT A NON-NOTIFIER**

DATE RECEIVED BY AGENCY: **11/10/2016**

OWNER TYPE: **OTHER**

OWNER NAME: **KUNI REDWOOD MOTORS LLC DBA AUDI PA**

OPERATOR TYPE: **OTHER**

OPERATOR NAME: **KATIE GARREN**

CERTIFICATION

CERTIFICATION NAME:	CERTIFICATION TITLE:	CERTIFICATION SIGNED DATE:
DTSC HQ	**CA-DTSC**	**09/07/2018**

INDUSTRY CLASSIFICATION (NAICS)

811111 - GENERAL AUTOMOTIVE REPAIR

CURRENT ACTIVITY INFORMATION

GENERATOR STATUS: **NON-GENERATOR** LAST UPDATED DATE: **09/07/2018**

SUBJECT TO CORRECTIVE ACTION UNIVERSE: **NO**

TDSFs POTENTIALLY SUBJECT TO CORRECTIVE ACTION UNDER 3004 (u)/(v) UNIVERSE: **NO**

TDSFs ONLY SUBJECT TO CORRECTIVE ACTION UNDER DISCRETIONARY AUTHORITIES UNIVERSE: **NO**

NON TSDFs WHERE RCRA CORRECTIVE ACTION HAS BEEN IMPOSED UNIVERSE: **NO**

CORRECTIVE ACTION WORKLOAD UNIVERSE: **NO**

IMPORTER: **NO**
MIXED WASTE GENERATOR: **NO**
RECYCLER: **NO**
TRANSPORTER: **NO**
ONSITE BURNER EXEMPTION: **NO**
FURNACE EXEMPTION: **NO**
USED OIL REFINER: **NO**
USED OIL TRANSFER FACILITY: **NO**

UNDERGROUND INJECTION: **NO**
UNIVERSAL WASTE DESTINATION FACILITY: **YES**
TRANSFER FACILITY: **NO**
USED OIL FUEL BURNER: **NO**
USED OIL PROCESSOR: **NO**
USED OIL FUEL MARKETER TO BURNER: **NO**
SPECIFICATION USED OIL MARKETER: **NO**
USED OIL TRANSPORTER: **NO**

COMPLIANCE, MONITORING AND ENFORCEMENT INFORMATION

EVALUATIONS **- NO EVALUATIONS REPORTED -**

VIOLATIONS **- NO VIOLATIONS REPORTED -**

ENFORCEMENTS **- NO ENFORCEMENTS REPORTED -**

HAZARDOUS WASTE

- NO HAZARDOUS WASTE INFORMATION REPORTED -

UNIVERSAL WASTE **- NO UNIVERSAL WASTE REPORTED -**

CORRECTIVE ACTION AREA **- NO CORRECTIVE ACTION AREA INFORMATION REPORTED -**

CORRECTIVE ACTION EVENT

NO CORRECTIVE ACTION EVENT(S) REPORTED

Back to Report Summary

Enforcement and Compliance History Information (ECHOR09)

MAP ID# 3

Distance from Property: 0.000 mi. (0 ft.) X
Elevation: 33 ft. (Equal to TP)

FACILITY INFORMATION

UNIQUE ID: **110070490086**
REGISTRY ID: **110070490086**
NAME: **PARK AUTOMOTIVE**
ADDRESS: **3040 PARK BLVD**
PALO ALTO, CA 94306
COUNTY: **SANTA CLARA**
FACILITY LINK: *Facility Detail Report*

Back to Report Summary

Facility Registry System (FRSCA)

MAP ID# 3

Distance from Property: 0.000 mi. (0 ft.) X
Elevation: 33 ft. (Equal to TP)

FACILITY INFORMATION

REGISTRY ID: **110055737172**

NAME: **PARK AUTOMOTIVE SERVICE**

LOCATION ADDRESS: **3040 PARK BL**
PALO ALTO, CA 94306

COUNTY: **SANTA CLARA**

EPA REGION: **09**

FEDERAL FACILITY: **NOT REPORTED**

TRIBAL LAND: **NOT REPORTED**

ALTERNATIVE NAME/S:

PARK AUTOMOTIVE SERVICE

PROGRAM/S LISTED FOR THIS FACILITY

CA-ENVIROVIEW - CA-ENVIROVIEW

CA-CERS - CA-CERS

STANDARD INDUSTRIAL CLASSIFICATION/S (SIC)

NO SIC DATA REPORTED

NORTH AMERICAN INDUSTRY CLASSIFICATION/S (NAICS)

NO NAICS DATA REPORTED

Back to Report Summary

Facility Registry System (FRSCA)

MAP ID# 3

Distance from Property: 0.000 mi. (0 ft.) X
Elevation: 33 ft. (Equal to TP)

FACILITY INFORMATION

REGISTRY ID: **110070490086**

NAME: **PARK AUTOMOTIVE**

LOCATION ADDRESS: **3040 PARK BLVD**
PALO ALTO, CA 94306

COUNTY: **SANTA CLARA**

EPA REGION: **09**

FEDERAL FACILITY: **NOT REPORTED**

TRIBAL LAND: **NOT REPORTED**

ALTERNATIVE NAME/S:

NO ALTERNATIVE NAME(S) LISTED FOR THIS FACILITY

PROGRAM/S LISTED FOR THIS FACILITY

RCRAINFO - RESOURCE CONSERVATION AND RECOVERY ACT INFORMATION SYSTEM

STANDARD INDUSTRIAL CLASSIFICATION/S (SIC)

NO SIC DATA REPORTED

NORTH AMERICAN INDUSTRY CLASSIFICATION/S (NAICS)

44111 - NEW CAR DEALERS

Back to Report Summary

Hazardous Waste Tanner Summary (HWTS)

MAP ID# 3

Distance from Property: 0.000 mi. (0 ft.) X
Elevation: 33 ft. (Equal to TP)

SITE INFORMATION

EPA ID: **CAL930295449**
NAME: **PARK AUTOMOTIVE**
COUNTY: **NOT REPORTED**
ADDRESS: **3040 PARK BLVD**
PALO ALTO, CA 94306
FACILITY LINK: *Department of Toxic Substances Control*

CONTACT INFORMATION

CONTACT: **DON ARMSTRONG**
PHONE: **(415) 326-7801**
ADDRESS: **NOT REPORTED**
NOT REPORTED NOT REPORTED

MANIFEST SUMMARY INFORMATION

YEAR: **2004**
TSD ID: **CAD009452657**
GENERATOR COUNTY: **SANTA CLARA**
DISPOSAL COUNTY: **SAN MATEO**
WASTE CATEGORY: **UNSPECIFIED ORGANIC LIQUID MIXTURE**
AMOUNT DISPOSED(TONS): **0.3900**
DISPOSAL METHOD: **RECYCLER**

YEAR: **2003**
TSD ID: **CAD009452657**
GENERATOR COUNTY: **SANTA CLARA**
DISPOSAL COUNTY: **SAN MATEO**
WASTE CATEGORY: **UNSPECIFIED ORGANIC LIQUID MIXTURE**
AMOUNT DISPOSED(TONS): **0.7700**
DISPOSAL METHOD: **RECYCLER**

YEAR: **2002**
TSD ID: **CAD009452657**
GENERATOR COUNTY: **SANTA CLARA**
DISPOSAL COUNTY: **SAN MATEO**
WASTE CATEGORY: **UNSPECIFIED ORGANIC LIQUID MIXTURE**
AMOUNT DISPOSED(TONS): **0.2000**
DISPOSAL METHOD: **RECYCLER**

YEAR: **2002**
TSD ID: **CAD009452657**
GENERATOR COUNTY: **SANTA CLARA**
DISPOSAL COUNTY: **SAN MATEO**
WASTE CATEGORY: **UNSPECIFIED ORGANIC LIQUID MIXTURE**
AMOUNT DISPOSED(TONS): **0.2200**
DISPOSAL METHOD: **RECYCLER**

YEAR: **2001**
TSD ID: **CAD009452657**
GENERATOR COUNTY: **SANTA CLARA**
DISPOSAL COUNTY: **SAN MATEO**
WASTE CATEGORY: **UNSPECIFIED ORGANIC LIQUID MIXTURE**
AMOUNT DISPOSED(TONS): **0.8300**
DISPOSAL METHOD: **RECYCLER**

YEAR: **2000**
TSD ID: **CAD009452657**
GENERATOR COUNTY: **SANTA CLARA**
DISPOSAL COUNTY: **SAN MATEO**
WASTE CATEGORY: **UNSPECIFIED ORGANIC LIQUID MIXTURE**
AMOUNT DISPOSED(TONS): **0.5800**
DISPOSAL METHOD: **RECYCLER**

YEAR: **1999**
TSD ID: **CAD009452657**
GENERATOR COUNTY: **SANTA CLARA**
DISPOSAL COUNTY: **SAN MATEO**
WASTE CATEGORY: **UNSPECIFIED ORGANIC LIQUID MIXTURE**
AMOUNT DISPOSED(TONS): **0.8340**
DISPOSAL METHOD: **RECYCLER**

YEAR: **1998**
TSD ID: **CAD009452657**
GENERATOR COUNTY: **SANTA CLARA**
DISPOSAL COUNTY: **SAN MATEO**
WASTE CATEGORY: **UNSPECIFIED ORGANIC LIQUID MIXTURE**
AMOUNT DISPOSED(TONS): **0.9382**
DISPOSAL METHOD: **RECYCLER**

YEAR: **1997**
TSD ID: **CAD009452657**
GENERATOR COUNTY: **SANTA CLARA**
DISPOSAL COUNTY: **SAN MATEO**
WASTE CATEGORY: **UNSPECIFIED ORGANIC LIQUID MIXTURE**
AMOUNT DISPOSED(TONS): **0.8548**
DISPOSAL METHOD: **RECYCLER**

YEAR: **1996**
TSD ID: **CAD009452657**
GENERATOR COUNTY: **SANTA CLARA**
DISPOSAL COUNTY: **SAN MATEO**
WASTE CATEGORY: **UNSPECIFIED ORGANIC LIQUID MIXTURE**
AMOUNT DISPOSED(TONS): **0.5837**
DISPOSAL METHOD: **RECYCLER**

YEAR: **1995**
TSD ID: **CAD009452657**
GENERATOR COUNTY: **SANTA CLARA**
DISPOSAL COUNTY: **SAN MATEO**
WASTE CATEGORY: **UNSPECIFIED ORGANIC LIQUID MIXTURE**
AMOUNT DISPOSED(TONS): **0.8339**
DISPOSAL METHOD: **RECYCLER**

YEAR: **1994**
TSD ID: **CAD009452657**
GENERATOR COUNTY: **SANTA CLARA**
DISPOSAL COUNTY: **SAN MATEO**

Hazardous Waste Tanner Summary (HWTS)

WASTE CATEGORY: **UNSPECIFIED ORGANIC LIQUID MIXTURE**
AMOUNT DISPOSED(TONS): **0.5838**
DISPOSAL METHOD: **RECYCLER**
YEAR: **1993**
TSD ID: **CAD009452657**
GENERATOR COUNTY: **SANTA CLARA**
DISPOSAL COUNTY: **SAN MATEO**
WASTE CATEGORY: **UNSPECIFIED ORGANIC LIQUID MIXTURE**
AMOUNT DISPOSED(TONS): **0.2293**
DISPOSAL METHOD: **BLANK**

Back to Report Summary

Resource Conservation & Recovery Act - Non-Generator (RCRANGR09)

MAP ID# 3

Distance from Property: 0.000 mi. (0 ft.) X
Elevation: 33 ft. (Equal to TP)

FACILITY INFORMATION

EPA ID#: **CAL930295449**
NAME: **PARK AUTOMOTIVE**
ADDRESS: **3040 PARK BLVD**
PALO ALTO, CA 94306
CONTACT NAME: **DON ARMSTRONG-OWNER**
CONTACT ADDRESS: **3040 PARK BLVD**
PALO ALTO CA 94306-2241
CONTACT PHONE: **415-326-7801**
NON-NOTIFIER: **NOT A NON-NOTIFIER**
DATE RECEIVED BY AGENCY: **01/29/1993**

OWNER TYPE: **OTHER**
OWNER NAME: **DON ARMSTRONG**
OPERATOR TYPE: **OTHER**
OPERATOR NAME: **DON ARMSTRONG-OWNER**

CERTIFICATION

CERTIFICATION NAME:	CERTIFICATION TITLE:	CERTIFICATION SIGNED DATE:
DTSC HQ	**CA-DTSC**	**09/07/2018**

INDUSTRY CLASSIFICATION (NAICS)
44111 - NEW CAR DEALERS

CURRENT ACTIVITY INFORMATION

GENERATOR STATUS: **NON-GENERATOR** LAST UPDATED DATE: **09/07/2018**
SUBJECT TO CORRECTIVE ACTION UNIVERSE: **NO**
TDSFs POTENTIALLY SUBJECT TO CORRECTIVE ACTION UNDER 3004 (u)/(v) UNIVERSE: **NO**
TDSFs ONLY SUBJECT TO CORRECTIVE ACTION UNDER DISCRETIONARY AUTHORITIES UNIVERSE: **NO**
NON TSDFs WHERE RCRA CORRECTIVE ACTION HAS BEEN IMPOSED UNIVERSE: **NO**
CORRECTIVE ACTION WORKLOAD UNIVERSE: **NO**

IMPORTER: **NO**
MIXED WASTE GENERATOR: **NO**
RECYCLER: **NO**
TRANSPORTER: **NO**
ONSITE BURNER EXEMPTION: **NO**
FURNACE EXEMPTION: **NO**
USED OIL REFINER: **NO**
USED OIL TRANSFER FACILITY: **NO**

UNDERGROUND INJECTION: **NO**
UNIVERSAL WASTE DESTINATION FACILITY: **YES**
TRANSFER FACILITY: **NO**
USED OIL FUEL BURNER: **NO**
USED OIL PROCESSOR: **NO**
USED OIL FUEL MARKETER TO BURNER: **NO**
SPECIFICATION USED OIL MARKETER: **NO**
USED OIL TRANSPORTER: **NO**

COMPLIANCE, MONITORING AND ENFORCEMENT INFORMATION

EVALUATIONS **- NO EVALUATIONS REPORTED -**
VIOLATIONS **- NO VIOLATIONS REPORTED -**
ENFORCEMENTS **- NO ENFORCEMENTS REPORTED -**

HAZARDOUS WASTE

- NO HAZARDOUS WASTE INFORMATION REPORTED -
UNIVERSAL WASTE **- NO UNIVERSAL WASTE REPORTED -**
CORRECTIVE ACTION AREA **- NO CORRECTIVE ACTION AREA INFORMATION REPORTED -**
CORRECTIVE ACTION EVENT

NO CORRECTIVE ACTION EVENT(S) REPORTED

Back to Report Summary

Resource Conservation & Recovery Act - Non-Generator (RCRANGR09)

MAP ID# 4

Distance from Property: 0.026 mi. (137 ft.) NE
Elevation: 32 ft. (Lower than TP)

FACILITY INFORMATION

EPA ID#: **CAC002999555**
NAME: **PARK PLACE ASSOCIATES**
ADDRESS: **3197 PARK BLVD.**
PALO ALTO, CA 94306
CONTACT NAME: **SANDY FRESCHI**
CONTACT ADDRESS: **3197 PARK BLVD.**
PALO ALTO CA 94306
CONTACT PHONE: **650-849-9900**
NON-NOTIFIER: **NOT A NON-NOTIFIER**
DATE RECEIVED BY AGENCY: **02/04/2019**

OWNER TYPE: **OTHER**
OWNER NAME: **SANDY FRESCHI**
OPERATOR TYPE: **OTHER**
OPERATOR NAME: **SANDY FRESCHI**

CERTIFICATION

CERTIFICATION NAME:	CERTIFICATION TITLE:	CERTIFICATION SIGNED DATE:
DTSC HQ	**CA-DTSC**	**02/22/2019**

INDUSTRY CLASSIFICATION (NAICS)
56299 - ALL OTHER WASTE MANAGEMENT SERVICES

CURRENT ACTIVITY INFORMATION

GENERATOR STATUS: **NON-GENERATOR** LAST UPDATED DATE: **02/22/2019**
SUBJECT TO CORRECTIVE ACTION UNIVERSE: **NO**
TDSFs POTENTIALLY SUBJECT TO CORRECTIVE ACTION UNDER 3004 (u)/(v) UNIVERSE: **NO**
TDSFs ONLY SUBJECT TO CORRECTIVE ACTION UNDER DISCRETIONARY AUTHORITIES UNIVERSE: **NO**
NON TSDFs WHERE RCRA CORRECTIVE ACTION HAS BEEN IMPOSED UNIVERSE: **NO**
CORRECTIVE ACTION WORKLOAD UNIVERSE: **NO**

IMPORTER: **NO**
MIXED WASTE GENERATOR: **NO**
RECYCLER: **NO**
TRANSPORTER: **NO**
ONSITE BURNER EXEMPTION: **NO**
FURNACE EXEMPTION: **NO**
USED OIL REFINER: **NO**
USED OIL TRANSFER FACILITY: **NO**

UNDERGROUND INJECTION: **NO**
UNIVERSAL WASTE DESTINATION FACILITY: **YES**
TRANSFER FACILITY: **NO**
USED OIL FUEL BURNER: **NO**
USED OIL PROCESSOR: **NO**
USED OIL FUEL MARKETER TO BURNER: **NO**
SPECIFICATION USED OIL MARKETER: **NO**
USED OIL TRANSPORTER: **NO**

COMPLIANCE, MONITORING AND ENFORCEMENT INFORMATION

EVALUATIONS **- NO EVALUATIONS REPORTED -**
VIOLATIONS **- NO VIOLATIONS REPORTED -**
ENFORCEMENTS **- NO ENFORCEMENTS REPORTED -**

HAZARDOUS WASTE

- NO HAZARDOUS WASTE INFORMATION REPORTED -
UNIVERSAL WASTE **- NO UNIVERSAL WASTE REPORTED -**
CORRECTIVE ACTION AREA **- NO CORRECTIVE ACTION AREA INFORMATION REPORTED -**
CORRECTIVE ACTION EVENT

NO CORRECTIVE ACTION EVENT(S) REPORTED

Back to Report Summary

GeoTracker Cleanup Sites (CLEANUPSITES)

MAP ID# 5

Distance from Property: 0.027 mi. (143 ft.) NE
Elevation: 33 ft. (Equal to TP)

FACILITY INFORMATION

GLOBAL ID: **T0608501727**
URL LINK: CLICK HERE
BUSINESS NAME: **VANCE BROWN & SONS**
ADDRESS: **3101 PARK BLVD**
PALO ALTO, CA 94301
COUNTY: **SANTA CLARA**

FACILITY DETAILS

CASE TYPE: **LUST CLEANUP SITE**
CASE NUMBER: **NOT REPORTED**
STATUS: **COMPLETED - CASE CLOSED 4/11/1997**
POTENTIAL CONTAMINATION:
DIESEL
POTENTIAL MEDIA AFFECTED:
OTHER GROUNDWATER (USES OTHER THAN DRINKING WATER)
DISADVANTAGED COMMUNITY:
NO
SEVERELY DISADVANTAGED COMMUNITY:
NO
SITE HISTORY:
NOT REPORTED

REGULATORY ACTIVITIES

TYPE OF ACTION:	DATE:	ACTION:
OTHER	**01/01/50**	**LEAK REPORTED**
ENFORCEMENT	**04/11/1997**	**CLOSURE/NO FURTHER ACTION LETTER**
RESPONSE	**04/11/1997**	**OTHER REPORT / DOCUMENT**
OTHER	**03/12/1997**	**LEAK REPORTED**

STATUS HISTORY

STATUS:	DATE:
COMPLETED - CASE CLOSED	**04/11/1997**
OPEN - CASE BEGIN DATE	**03/12/1997**

CONTACT DETAILS

ORGANIZATION: **SANTA CLARA COUNTY LOP**
ADDRESS: **1555 BERGER DRIVE, SUITE 300**
CITY: **SAN JOSE**
CONTACT NAME: **UST CASE WORKER**
CONTACT TYPE: **LOCAL AGENCY CASEWORKER**
CONTACT PHONE: **4089183400**
EMAIL: **NOT REPORTED**
ORGANIZATION: **SAN FRANCISCO BAY RWQCB (REGION 2)**
ADDRESS: **1515 CLAY ST SUITE 1400**
CITY: **OAKLAND**
CONTACT NAME: **REGIONAL WATER BOARD**

CONTACT TYPE: **REGIONAL BOARD CASEWORKER**
CONTACT PHONE: **NOT REPORTED**
EMAIL: **NOT REPORTED**

Back to Report Summary

MAP ID# 5

Distance from Property: 0.027 mi. (143 ft.) NE
Elevation: 33 ft. (Equal to TP)

FACILITY INFORMATION

GLOBAL ID: **T10000007084**
URL LINK: CLICK HERE
BUSINESS NAME: **LOCKHEED-MARTIN**
ADDRESS: **3101 PARK BOULEVARD**
PALO ALTO, CA 94503
COUNTY: **SANTA CLARA**

FACILITY DETAILS

CASE TYPE: **CLEANUP PROGRAM SITE**
CASE NUMBER: **43S1171**
STATUS: **COMPLETED - CASE CLOSED 2/14/2017**
POTENTIAL CONTAMINATION:
TETRACHLOROETHYLENE (PCE)
POTENTIAL MEDIA AFFECTED:
OTHER GROUNDWATER (USES OTHER THAN DRINKING WATER), SOIL VAPOR
DISADVANTAGED COMMUNITY:
NO
SEVERELY DISADVANTAGED COMMUNITY:
NO
SITE HISTORY:
NOT REPORTED

REGULATORY ACTIVITIES

TYPE OF ACTION:	DATE:	ACTION:
ENFORCEMENT	**06/16/2016**	**TECHNICAL CORRESPONDENCE / ASSISTANCE / OTHER**
RESPONSE	**08/10/2015**	**REQUEST FOR CLOSURE**
ENFORCEMENT	**05/06/2015**	**13267 REQUIREMENT**
ENFORCEMENT	**09/02/2014**	**13267 REQUIREMENT**
ENFORCEMENT	**06/19/2014**	**13267 REQUIREMENT**
ENFORCEMENT	**01/15/2014**	**13267 REQUIREMENT**
OTHER	**01/01/1995**	**LEAK STOPPED**
OTHER	**01/01/1994**	**LEAK DISCOVERY**
OTHER	**01/01/1994**	**LEAK REPORTED**
OTHER	**01/01/1989**	**LEAK BEGAN**

STATUS HISTORY

STATUS:	DATE:
COMPLETED - CASE CLOSED	**02/14/2017**
OPEN - INACTIVE	**02/14/2017**
OPEN - REOPEN CASE	**02/14/2017**
INFORMATIONAL ITEM	**02/06/2017**
COMPLETED - CASE CLOSED	**01/18/2017**
COMPLETED - CASE CLOSED	**01/01/2017**
INFORMATIONAL ITEM	**06/06/2016**
COMPLETED - CASE CLOSED	**01/01/2016**

STATUS:	DATE:
INFORMATIONAL ITEM	**06/29/2015**
INFORMATIONAL ITEM	**01/01/1989**
OPEN - CASE BEGIN DATE	**01/01/1989**

CONTACT DETAILS

ORGANIZATION: **SAN FRANCISCO BAY RWQCB (REGION 2)**
ADDRESS: **1515 CLAY STREET, SUITE 1500**
CITY: **OAKLAND**
CONTACT NAME: **ROGER PAPLER**
CONTACT TYPE: **REGIONAL BOARD CASEWORKER**
CONTACT PHONE: **NOT REPORTED**
EMAIL: **ROGER.PAPLER@WATERBOARDS.CA.GOV**

Back to Report Summary

Historical Cortese List (HISTCORTESE)

MAP ID# 5

Distance from Property: 0.028 mi. (148 ft.) NE
Elevation: 33 ft. (Equal to TP)

FACILITY INFORMATION

GEOSEARCH ID: **43-1799COR**
ID#: **43-1799**
NAME: **VANCE BROWN & SONS**
ADDRESS: **3101 PARK**
PALO ALTO, CA 94306

Back to Report Summary

Leaking Underground Storage Tanks (LUST)

MAP ID# 5

Distance from Property: 0.027 mi. (143 ft.) NE
Elevation: 33 ft. (Equal to TP)

FACILITY INFORMATION

GLOBAL ID: **T0608501727**
URL LINK: CLICK HERE
BUSINESS NAME: **VANCE BROWN & SONS**
ADDRESS: **3101 PARK BLVD**
PALO ALTO, CA 94301
COUNTY: **SANTA CLARA**

FACILITY DETAILS

CASE TYPE: **LUST CLEANUP SITE**
CASE NUMBER: **NOT REPORTED**
STATUS: **COMPLETED - CASE CLOSED 04/11/1997**
POTENTIAL CONTAMINATION:
DIESEL
POTENTIAL MEDIA AFFECTED:
OTHER GROUNDWATER (USES OTHER THAN DRINKING WATER)
DISADVANTAGED COMMUNITY:
NO
SEVERELY DISADVANTAGED COMMUNITY:
NO
SITE HISTORY:
NOT REPORTED

HISTORICAL FACILITY DETAILS

NO HISTORICAL DETAIL(S) INFORMATION REPORTED FOR THIS FACILITY

Back to Report Summary

Resource Conservation & Recovery Act - Non-Generator (RCRANGR09)

MAP ID# 5

Distance from Property: 0.027 mi. (143 ft.) NE
Elevation: 33 ft. (Equal to TP)

FACILITY INFORMATION

EPA ID#: **CAD981994593**
NAME: **LOCKHEED MISSLES & SPACE CO**
ADDRESS: **3101 PARK BLVD**
PALO ALTO, CA 94306
CONTACT NAME: **JAMES SEAVER**
CONTACT ADDRESS: **PO BOX 3504 B142 O2723**
SUNNYVALE CA 94088
CONTACT PHONE: **408-742-7661**
NON-NOTIFIER: **NOT A NON-NOTIFIER**
DATE RECEIVED BY AGENCY: **03/24/1996**

OWNER TYPE: **PRIVATE**
OWNER NAME: **LOCKHEED M&S CO**
OPERATOR TYPE: **PRIVATE**
OPERATOR NAME: **NOT REQUIRED**

CERTIFICATION **- NO CERTIFICATION REPORTED -**
INDUSTRY CLASSIFICATION (NAICS) **- NO NAICS INFORMATION REPORTED -**

CURRENT ACTIVITY INFORMATION

GENERATOR STATUS: **NON-GENERATOR** LAST UPDATED DATE: **09/15/2000**
SUBJECT TO CORRECTIVE ACTION UNIVERSE: **NO**
TDSFs POTENTIALLY SUBJECT TO CORRECTIVE ACTION UNDER 3004 (u)/(v) UNIVERSE: **NO**
TDSFs ONLY SUBJECT TO CORRECTIVE ACTION UNDER DISCRETIONARY AUTHORITIES UNIVERSE: **NO**
NON TSDFs WHERE RCRA CORRECTIVE ACTION HAS BEEN IMPOSED UNIVERSE: **NO**
CORRECTIVE ACTION WORKLOAD UNIVERSE: **NO**

IMPORTER: **NO**
MIXED WASTE GENERATOR: **NO**
RECYCLER: **NO**
TRANSPORTER: **NO**
ONSITE BURNER EXEMPTION: **NO**
FURNACE EXEMPTION: **NO**
USED OIL REFINER: **NO**
USED OIL TRANSFER FACILITY: **NO**

UNDERGROUND INJECTION: **NO**
UNIVERSAL WASTE DESTINATION FACILITY: **NO**
TRANSFER FACILITY: **NO**
USED OIL FUEL BURNER: **NO**
USED OIL PROCESSOR: **NO**
USED OIL FUEL MARKETER TO BURNER: **NO**
SPECIFICATION USED OIL MARKETER: **NO**
USED OIL TRANSPORTER: **NO**

COMPLIANCE, MONITORING AND ENFORCEMENT INFORMATION

EVALUATIONS **- NO EVALUATIONS REPORTED -**
VIOLATIONS **- NO VIOLATIONS REPORTED -**
ENFORCEMENTS **- NO ENFORCEMENTS REPORTED -**

HAZARDOUS WASTE

- NO HAZARDOUS WASTE INFORMATION REPORTED -
UNIVERSAL WASTE **- NO UNIVERSAL WASTE REPORTED -**
CORRECTIVE ACTION AREA **- NO CORRECTIVE ACTION AREA INFORMATION REPORTED -**

CORRECTIVE ACTION EVENT

NO CORRECTIVE ACTION EVENT(S) REPORTED

Back to Report Summary

MAP ID# 5

Distance from Property: 0.027 mi. (143 ft.) NE
Elevation: 33 ft. (Equal to TP)

INCIDENT INFORMATION

GLOBAL ID#:	**T10000007084**
CASE NUMBER:	**NOT REPORTED**
NAME:	**LOCKHEED-MARTIN**
ADDRESS:	**3101 PARK BOULEVARD**
	PALO ALTO CA
FACILITY TYPE:	**CLEANUP PROGRAM SITE**
LEAD AGENCY:	**NOT REPORTED**
LEAD AGENCY CONTACT:	**NOT REPORTED**
LEAD AGENCY CASE #:	**NOT REPORTED**
SUBSTANCE RELEASED:	**NOT REPORTED**
STATUS:	**COMPLETED - CASE CLOSED**
RESPONSIBLE PARTY:	**NOT REPORTED**

Back to Report Summary

Resource Conservation & Recovery Act - Generator (RCRAGR09)

MAP ID# 6

Distance from Property: 0.029 mi. (153 ft.) ENE
Elevation: 32 ft. (Lower than TP)

FACILITY INFORMATION

EPA ID#: **CAR000098996**
NAME: **PARK AVENUE MOTORS**
ADDRESS: **3241 PARK AVE**
PALO ALTO, CA 94306
CONTACT NAME: **STEVE KIRKSEY**
CONTACT ADDRESS: **3290 PARK AVE**
PALO ALTO CA 94306
CONTACT PHONE: **650-494-0311**
NON-NOTIFIER: **NOT A NON-NOTIFIER**
DATE RECEIVED BY AGENCY: **06/25/2001**

OWNER TYPE: **PRIVATE**
OWNER NAME: **SMYTHE EUROPEAN INC**
OPERATOR TYPE: **NOT REPORTED**
OPERATOR NAME: **NOT REPORTED**

CERTIFICATION **- NO CERTIFICATION REPORTED -**
INDUSTRY CLASSIFICATION (NAICS) **- NO NAICS INFORMATION REPORTED -**

CURRENT ACTIVITY INFORMATION

GENERATOR STATUS: **SMALL QUANTITY GENERATOR** LAST UPDATED DATE: **10/07/2002**
SUBJECT TO CORRECTIVE ACTION UNIVERSE: **NO**
TDSFs POTENTIALLY SUBJECT TO CORRECTIVE ACTION UNDER 3004 (u)/(v) UNIVERSE: **NO**
TDSFs ONLY SUBJECT TO CORRECTIVE ACTION UNDER DISCRETIONARY AUTHORITIES UNIVERSE: **NO**
NON TSDFs WHERE RCRA CORRECTIVE ACTION HAS BEEN IMPOSED UNIVERSE: **NO**
CORRECTIVE ACTION WORKLOAD UNIVERSE: **NO**

IMPORTER: **NO**
MIXED WASTE GENERATOR: **NO**
RECYCLER: **NO**
TRANSPORTER: **NO**
ONSITE BURNER EXEMPTION: **NO**
FURNACE EXEMPTION: **NO**
USED OIL REFINER: **NO**
USED OIL TRANSFER FACILITY: **NO**

UNDERGROUND INJECTION: **NO**
UNIVERSAL WASTE DESTINATION FACILITY: **NO**
TRANSFER FACILITY: **NO**
USED OIL FUEL BURNER: **NO**
USED OIL PROCESSOR: **NO**
USED OIL FUEL MARKETER TO BURNER: **NO**
SPECIFICATION USED OIL MARKETER: **NO**
USED OIL TRANSPORTER: **NO**

COMPLIANCE, MONITORING AND ENFORCEMENT INFORMATION

EVALUATIONS **- NO EVALUATIONS REPORTED -**
VIOLATIONS **- NO VIOLATIONS REPORTED -**
ENFORCEMENTS **- NO ENFORCEMENTS REPORTED -**

HAZARDOUS WASTE

D001 **IGNITABLE WASTE**
D002 **CORROSIVE WASTE**

UNIVERSAL WASTE **- NO UNIVERSAL WASTE REPORTED -**
CORRECTIVE ACTION AREA **- NO CORRECTIVE ACTION AREA INFORMATION REPORTED -**

CORRECTIVE ACTION EVENT

NO CORRECTIVE ACTION EVENT(S) REPORTED

Back to Report Summary

Resource Conservation & Recovery Act - Non-Generator (RCRANGR09)

MAP ID# 6

Distance from Property: 0.029 mi. (153 ft.) ENE
Elevation: 32 ft. (Lower than TP)

FACILITY INFORMATION

EPA ID#: **CAL000441349**
NAME: **AKINS BODY SHOP INC**
ADDRESS: **3241 PARK BLVD**
PALO ALTO, CA 94306
CONTACT NAME: **SHARON RUPP**
CONTACT ADDRESS: **3290 PARK BLVD**
PALO ALTO CA 94306
CONTACT PHONE: **650-321-1460**
NON-NOTIFIER: **NOT A NON-NOTIFIER**
DATE RECEIVED BY AGENCY: **11/29/2018**

OWNER TYPE: **OTHER**
OWNER NAME: **SHARON RUPP**
OPERATOR TYPE: **OTHER**
OPERATOR NAME: **SHARON RUPP**

CERTIFICATION

CERTIFICATION NAME:	CERTIFICATION TITLE:	CERTIFICATION SIGNED DATE:
DTSC HQ	**CA-DTSC**	**12/19/2018**

INDUSTRY CLASSIFICATION (NAICS)

811121 - AUTOMOTIVE BODY, PAINT, AND INTERIOR REPAIR AND MAINTENANCE

CURRENT ACTIVITY INFORMATION

GENERATOR STATUS: **NON-GENERATOR** LAST UPDATED DATE: **12/20/2018**
SUBJECT TO CORRECTIVE ACTION UNIVERSE: **NO**
TDSFs POTENTIALLY SUBJECT TO CORRECTIVE ACTION UNDER 3004 (u)/(v) UNIVERSE: **NO**
TDSFs ONLY SUBJECT TO CORRECTIVE ACTION UNDER DISCRETIONARY AUTHORITIES UNIVERSE: **NO**
NON TSDFs WHERE RCRA CORRECTIVE ACTION HAS BEEN IMPOSED UNIVERSE: **NO**
CORRECTIVE ACTION WORKLOAD UNIVERSE: **NO**

IMPORTER: **NO**
MIXED WASTE GENERATOR: **NO**
RECYCLER: **NO**
TRANSPORTER: **NO**
ONSITE BURNER EXEMPTION: **NO**
FURNACE EXEMPTION: **NO**
USED OIL REFINER: **NO**
USED OIL TRANSFER FACILITY: **NO**

UNDERGROUND INJECTION: **NO**
UNIVERSAL WASTE DESTINATION FACILITY: **YES**
TRANSFER FACILITY: **NO**
USED OIL FUEL BURNER: **NO**
USED OIL PROCESSOR: **NO**
USED OIL FUEL MARKETER TO BURNER: **NO**
SPECIFICATION USED OIL MARKETER: **NO**
USED OIL TRANSPORTER: **NO**

COMPLIANCE, MONITORING AND ENFORCEMENT INFORMATION

EVALUATIONS **- NO EVALUATIONS REPORTED -**
VIOLATIONS **- NO VIOLATIONS REPORTED -**
ENFORCEMENTS **- NO ENFORCEMENTS REPORTED -**

HAZARDOUS WASTE

- NO HAZARDOUS WASTE INFORMATION REPORTED -

UNIVERSAL WASTE **- NO UNIVERSAL WASTE REPORTED -**

CORRECTIVE ACTION AREA **- NO CORRECTIVE ACTION AREA INFORMATION REPORTED -**

CORRECTIVE ACTION EVENT

Resource Conservation & Recovery Act - Non-Generator (RCRANGR09)

NO CORRECTIVE ACTION EVENT(S) REPORTED

Back to Report Summary

MAP ID# 7

Distance from Property: 0.034 mi. (180 ft.) NNE
Elevation: 33 ft. (Equal to TP)

FACILITY INFORMATION

GLOBAL ID: **T10000009221**
URL LINK: CLICK HERE
BUSINESS NAME: **FORMER AKINS AUTO BODY**
ADDRESS: **3045 PARK BLVD.**
PALO ALTO, CA 94306
COUNTY: **SANTA CLARA**

FACILITY DETAILS

CASE TYPE: **NON-CASE INFORMATION**
CASE NUMBER: **NOT REPORTED**
STATUS: **INFORMATIONAL ITEM 8/8/2016**
POTENTIAL CONTAMINATION:
TETRACHLOROETHYLENE (PCE), TRICHLOROETHYLENE (TCE), VINYL CHLORIDE
POTENTIAL MEDIA AFFECTED:
AQUIFER USED FOR DRINKING WATER SUPPLY, SOIL VAPOR
DISADVANTAGED COMMUNITY:
NO
SEVERELY DISADVANTAGED COMMUNITY:
NO
SITE HISTORY:
THIS PROPERTY IS WITHIN THE COE STUDY AREA. A FACILITY CLOSURE WAS PERMITTED BY THE CITY OF PALO ALTO FIRE DEPARTMENT. BASED ON THE DATA RECEIVED BY THE DEH, GROUNDWATER AND SOIL VAPOR SAMPLING WAS RECOMMENDED. THE GROUNDWATER AND SOIL VAPOR DATA INDICATE THAT GROUNDWATER BENEATH THE SITE IS CONTAMINATED BY VOCS. THE VOCS IN GROUNDWATER ARE LIKELY OFF-GASSING AND CREATING A SOIL VAPOR PLUME BENEATH THE SITE AS WELL. IT DOES NOT APPEAR THAT THE FORMER AUTO BODY OPERATION HAD A SIGNIFICANT RELEASE. THE CONTAMINATION FOUND BENEATH THE PROPERTY APPEARS TO HAVE MIGRATED FROM AN UPGRADIENT SOURCE WITHIN THE COE STUDY AREA. THE REGIONAL WATER QUALITY CONTROL BOARD SHOULD BE CONSULTED PRIOR TO ANY REDEVELOPMENT OR CHANGE IN LAND USE.

REGULATORY ACTIVITIES

TYPE OF ACTION:	DATE:	ACTION:
ENFORCEMENT	**08/09/2016**	**STAFF LETTER**
RESPONSE	**08/08/2016**	**OTHER REPORT / DOCUMENT**
RESPONSE	**08/05/2016**	**EMAIL CORRESPONDENCE**
RESPONSE	**11/05/2015**	**CORRESPONDENCE**
RESPONSE	**10/19/2015**	**OTHER REPORT / DOCUMENT**

STATUS HISTORY

STATUS:	DATE:
INFORMATIONAL ITEM	**08/08/2016**
OPEN - INACTIVE	**08/08/2016**
OPEN - CASE BEGIN DATE	**10/19/2015**

CONTACT DETAILS

ORGANIZATION: **SANTA CLARA COUNTY LOP**
ADDRESS: **1555 BERGER DRIVE, SUITE 300**

CITY: **SAN JOSE**
CONTACT NAME: **AARON COSTA**
CONTACT TYPE: **LOCAL AGENCY CASEWORKER**
CONTACT PHONE: **4089181954**
EMAIL: **AARON.COSTA@CEP.SCCGOV.ORG**

Back to Report Summary

MAP ID# 7

Distance from Property: 0.034 mi. (180 ft.) NNE
Elevation: 33 ft. (Equal to TP)

FACILITY INFORMATION

GLOBAL ID: **T10000010246**

URL LINK: CLICK HERE

BUSINESS NAME: **3045 PARK BLVD DEVELOPMENT**

ADDRESS: **3045 PARK BLVD**
PALO ALTO, CA 94036

COUNTY: **SANTA CLARA**

FACILITY DETAILS

CASE TYPE: **CLEANUP PROGRAM SITE**

CASE NUMBER: **NOT REPORTED**

STATUS: **OPEN - REMEDIATION 3/6/2019**

POTENTIAL CONTAMINATION:

TETRACHLOROETHYLENE (PCE), BENZENE, ETHYLBENZENE, GASOLINE, NAPHTHALENE, TOLUENE, TOTAL PETROLEUM HYDROCARBONS (TPH), XYLENE

POTENTIAL MEDIA AFFECTED:

SOIL, SOIL VAPOR

DISADVANTAGED COMMUNITY:

NO

SEVERELY DISADVANTAGED COMMUNITY:

NO

SITE HISTORY:

NOT REPORTED

REGULATORY ACTIVITIES

TYPE OF ACTION:	DATE:	ACTION:
RESPONSE	**12/30/2022**	**MONITORING REPORT - ANNUALLY**
RESPONSE	**12/30/2022**	**SOIL VAPOR INTRUSION INVESTIGATION REPORT**
RESPONSE	**12/30/2021**	**MONITORING REPORT - SEMI-ANNUALLY**
RESPONSE	**12/30/2021**	**SOIL VAPOR INTRUSION INVESTIGATION REPORT**
RESPONSE	**06/30/2021**	**MONITORING REPORT - SEMI-ANNUALLY**
RESPONSE	**06/30/2021**	**OTHER REPORT / DOCUMENT**
RESPONSE	**06/30/2021**	**SOIL VAPOR INTRUSION INVESTIGATION REPORT**
RESPONSE	**12/30/2020**	**OTHER REPORT / DOCUMENT**
ENFORCEMENT	**07/01/2020**	**STAFF LETTER**
ENFORCEMENT	**06/24/2020**	**STAFF LETTER**
RESPONSE	**04/30/2020**	**OTHER REPORT / DOCUMENT**
RESPONSE	**04/30/2020**	**OTHER REPORT / DOCUMENT - REGULATOR RESPONDED**
RESPONSE	**04/30/2020**	**SOIL VAPOR INTRUSION INVESTIGATION REPORT**
RESPONSE	**04/30/2020**	**SOIL VAPOR INTRUSION INVESTIGATION REPORT - REGULATOR RESPONDED**
ENFORCEMENT	**01/15/2020**	**STAFF LETTER**
RESPONSE	**12/30/2019**	**OTHER REPORT / DOCUMENT**
ENFORCEMENT	**07/30/2019**	**STAFF LETTER**
RESPONSE	**06/30/2019**	**REMEDY IN PLACE**
ENFORCEMENT	**04/23/2019**	**STAFF LETTER**

TYPE OF ACTION:	DATE:	ACTION:
ENFORCEMENT	**03/06/2019**	**EMAIL CORRESPONDENCE**
RESPONSE	**10/19/2018**	**EMAIL CORRESPONDENCE**
ENFORCEMENT	**07/27/2018**	**STAFF LETTER**
RESPONSE	**07/27/2018**	**OTHER REPORT / DOCUMENT**
RESPONSE	**07/27/2018**	**RISK ASSESSMENT REPORT**
RESPONSE	**10/27/2017**	**CAP/RAP - OTHER REPORT**
ENFORCEMENT	**07/25/2017**	**STAFF LETTER**
ENFORCEMENT	**03/21/2017**	**COST RECOVERY AGREEMENT**
ENFORCEMENT	**03/21/2017**	**COST RECOVERY AGREEMENT / N. OF REIMBURSEMENT**
ENFORCEMENT	**03/01/2017**	**LETTER - NOTICE**
RESPONSE	**03/01/2017**	**OTHER REPORT / DOCUMENT**

STATUS HISTORY

STATUS:	DATE:
OPEN - REMEDIATION	**03/06/2019**
OPEN - ACTIVE	**03/21/2017**
OPEN - CASE BEGIN DATE	**03/01/2017**

CONTACT DETAILS

ORGANIZATION: **SANTA CLARA COUNTY LOP**
ADDRESS: **1555 BERGER DRIVE STE 300**
CITY: **SAN JOSE**
CONTACT NAME: **GERALD O'REGAN**
CONTACT TYPE: **LOCAL AGENCY CASEWORKER**
CONTACT PHONE: **NOT REPORTED**
EMAIL: **GERALD.O'REGAN@DEH.SCCGOV.ORG**

Back to Report Summary

Resource Conservation & Recovery Act - Non-Generator (RCRANGR09)

MAP ID# 7

Distance from Property: 0.034 mi. (180 ft.) NNE
Elevation: 33 ft. (Equal to TP)

FACILITY INFORMATION

EPA ID#: **CAC002972947**
NAME: **3045 PARK PROPERTY LLC**
ADDRESS: **3045 PARK BOULEVARD**
PALO ALTO, CA 94306
CONTACT NAME: **MARIA MCGUIGAN**
CONTACT ADDRESS: **FOUR EMBARCADERO CENTER SUITE 3620**
SAN FRANCISCO CA 94111
CONTACT PHONE: **415-263-7400**
NON-NOTIFIER: **NOT A NON-NOTIFIER**
DATE RECEIVED BY AGENCY: **07/26/2018**

OWNER TYPE: **OTHER**
OWNER NAME: **3045 PARK PROPERTY LLC**
OPERATOR TYPE: **OTHER**
OPERATOR NAME: **MARIA MCGUIGAN**

CERTIFICATION

CERTIFICATION NAME:	CERTIFICATION TITLE:	CERTIFICATION SIGNED DATE:
DTSC HQ	**CA-DTSC**	**08/31/2018**

INDUSTRY CLASSIFICATION (NAICS)
811111 - GENERAL AUTOMOTIVE REPAIR

CURRENT ACTIVITY INFORMATION

GENERATOR STATUS: **NON-GENERATOR** LAST UPDATED DATE: **08/31/2018**
SUBJECT TO CORRECTIVE ACTION UNIVERSE: **NO**
TDSFs POTENTIALLY SUBJECT TO CORRECTIVE ACTION UNDER 3004 (u)/(v) UNIVERSE: **NO**
TDSFs ONLY SUBJECT TO CORRECTIVE ACTION UNDER DISCRETIONARY AUTHORITIES UNIVERSE: **NO**
NON TSDFs WHERE RCRA CORRECTIVE ACTION HAS BEEN IMPOSED UNIVERSE: **NO**
CORRECTIVE ACTION WORKLOAD UNIVERSE: **NO**

IMPORTER: **NO**
MIXED WASTE GENERATOR: **NO**
RECYCLER: **NO**
TRANSPORTER: **NO**
ONSITE BURNER EXEMPTION: **NO**
FURNACE EXEMPTION: **NO**
USED OIL REFINER: **NO**
USED OIL TRANSFER FACILITY: **NO**

UNDERGROUND INJECTION: **NO**
UNIVERSAL WASTE DESTINATION FACILITY: **YES**
TRANSFER FACILITY: **NO**
USED OIL FUEL BURNER: **NO**
USED OIL PROCESSOR: **NO**
USED OIL FUEL MARKETER TO BURNER: **NO**
SPECIFICATION USED OIL MARKETER: **NO**
USED OIL TRANSPORTER: **NO**

COMPLIANCE, MONITORING AND ENFORCEMENT INFORMATION

EVALUATIONS **- NO EVALUATIONS REPORTED -**
VIOLATIONS **- NO VIOLATIONS REPORTED -**
ENFORCEMENTS **- NO ENFORCEMENTS REPORTED -**

HAZARDOUS WASTE

- NO HAZARDOUS WASTE INFORMATION REPORTED -
UNIVERSAL WASTE **- NO UNIVERSAL WASTE REPORTED -**
CORRECTIVE ACTION AREA **- NO CORRECTIVE ACTION AREA INFORMATION REPORTED -**
CORRECTIVE ACTION EVENT

NO CORRECTIVE ACTION EVENT(S) REPORTED

Back to Report Summary

Resource Conservation & Recovery Act - Non-Generator (RCRANGR09)

MAP ID# 7

Distance from Property: 0.034 mi. (180 ft.) NNE
Elevation: 33 ft. (Equal to TP)

FACILITY INFORMATION

EPA ID#: **CAC002986615**
NAME: **3045 PARK PROPERTY LLC**
ADDRESS: **3045 PARK BLVD**
PALO ALTO, CA 94306
CONTACT NAME: **MARIA MCGUIGAN**
CONTACT ADDRESS: **FOUR EMBARCADERO CENTER SUITE 3620**
SAN FRANCISCO CA 94111
CONTACT PHONE: **415-263-7400**
NON-NOTIFIER: **NOT A NON-NOTIFIER**
DATE RECEIVED BY AGENCY: **10/26/2018**

OWNER TYPE: **OTHER**
OWNER NAME: **MARIA MCGUIGAN**
OPERATOR TYPE: **OTHER**
OPERATOR NAME: **MARIA MCGUIGAN**

CERTIFICATION

CERTIFICATION NAME:	CERTIFICATION TITLE:	CERTIFICATION SIGNED DATE:
DTSC HQ	**CA-DTSC**	**11/19/2018**

INDUSTRY CLASSIFICATION (NAICS)
811111 - GENERAL AUTOMOTIVE REPAIR

CURRENT ACTIVITY INFORMATION

GENERATOR STATUS: **NON-GENERATOR** LAST UPDATED DATE: **11/20/2018**
SUBJECT TO CORRECTIVE ACTION UNIVERSE: **NO**
TDSFs POTENTIALLY SUBJECT TO CORRECTIVE ACTION UNDER 3004 (u)/(v) UNIVERSE: **NO**
TDSFs ONLY SUBJECT TO CORRECTIVE ACTION UNDER DISCRETIONARY AUTHORITIES UNIVERSE: **NO**
NON TSDFs WHERE RCRA CORRECTIVE ACTION HAS BEEN IMPOSED UNIVERSE: **NO**
CORRECTIVE ACTION WORKLOAD UNIVERSE: **NO**

IMPORTER: **NO**
MIXED WASTE GENERATOR: **NO**
RECYCLER: **NO**
TRANSPORTER: **NO**
ONSITE BURNER EXEMPTION: **NO**
FURNACE EXEMPTION: **NO**
USED OIL REFINER: **NO**
USED OIL TRANSFER FACILITY: **NO**

UNDERGROUND INJECTION: **NO**
UNIVERSAL WASTE DESTINATION FACILITY: **YES**
TRANSFER FACILITY: **NO**
USED OIL FUEL BURNER: **NO**
USED OIL PROCESSOR: **NO**
USED OIL FUEL MARKETER TO BURNER: **NO**
SPECIFICATION USED OIL MARKETER: **NO**
USED OIL TRANSPORTER: **NO**

COMPLIANCE, MONITORING AND ENFORCEMENT INFORMATION

EVALUATIONS **- NO EVALUATIONS REPORTED -**
VIOLATIONS **- NO VIOLATIONS REPORTED -**
ENFORCEMENTS **- NO ENFORCEMENTS REPORTED -**

HAZARDOUS WASTE

- NO HAZARDOUS WASTE INFORMATION REPORTED -
UNIVERSAL WASTE **- NO UNIVERSAL WASTE REPORTED -**
CORRECTIVE ACTION AREA **- NO CORRECTIVE ACTION AREA INFORMATION REPORTED -**
CORRECTIVE ACTION EVENT

NO CORRECTIVE ACTION EVENT(S) REPORTED

Back to Report Summary

Resource Conservation & Recovery Act - Non-Generator (RCRANGR09)

MAP ID# 7

Distance from Property: 0.034 mi. (180 ft.) NNE
Elevation: 33 ft. (Equal to TP)

FACILITY INFORMATION

EPA ID#: **CAC002993272**
NAME: **3045 PARK PROPERTY LLC**
ADDRESS: **3045 PARK BLVD**
PALO ALTO, CA 94306
CONTACT NAME: **MARIA MCGUIGAN**
CONTACT ADDRESS: **FOUR EMBARCADERO CENTER , SUITE 3620**
SAN FRANCISCO CA 94111
CONTACT PHONE: **415-263-7400**
NON-NOTIFIER: **NOT A NON-NOTIFIER**
DATE RECEIVED BY AGENCY: **12/17/2018**

OWNER TYPE: **OTHER**
OWNER NAME: **3045 PARK PROPERTY LLC**
OPERATOR TYPE: **OTHER**
OPERATOR NAME: **MARIA MCGUIGAN**

CERTIFICATION

CERTIFICATION NAME:	CERTIFICATION TITLE:	CERTIFICATION SIGNED DATE:
DTSC HQ	**CA-DTSC**	**12/19/2018**

INDUSTRY CLASSIFICATION (NAICS)
811111 - GENERAL AUTOMOTIVE REPAIR

CURRENT ACTIVITY INFORMATION

GENERATOR STATUS: **NON-GENERATOR** LAST UPDATED DATE: **12/20/2018**
SUBJECT TO CORRECTIVE ACTION UNIVERSE: **NO**
TDSFs POTENTIALLY SUBJECT TO CORRECTIVE ACTION UNDER 3004 (u)/(v) UNIVERSE: **NO**
TDSFs ONLY SUBJECT TO CORRECTIVE ACTION UNDER DISCRETIONARY AUTHORITIES UNIVERSE: **NO**
NON TSDFs WHERE RCRA CORRECTIVE ACTION HAS BEEN IMPOSED UNIVERSE: **NO**
CORRECTIVE ACTION WORKLOAD UNIVERSE: **NO**

IMPORTER: **NO**
MIXED WASTE GENERATOR: **NO**
RECYCLER: **NO**
TRANSPORTER: **NO**
ONSITE BURNER EXEMPTION: **NO**
FURNACE EXEMPTION: **NO**
USED OIL REFINER: **NO**
USED OIL TRANSFER FACILITY: **NO**

UNDERGROUND INJECTION: **NO**
UNIVERSAL WASTE DESTINATION FACILITY: **YES**
TRANSFER FACILITY: **NO**
USED OIL FUEL BURNER: **NO**
USED OIL PROCESSOR: **NO**
USED OIL FUEL MARKETER TO BURNER: **NO**
SPECIFICATION USED OIL MARKETER: **NO**
USED OIL TRANSPORTER: **NO**

COMPLIANCE, MONITORING AND ENFORCEMENT INFORMATION

EVALUATIONS **- NO EVALUATIONS REPORTED -**
VIOLATIONS **- NO VIOLATIONS REPORTED -**
ENFORCEMENTS **- NO ENFORCEMENTS REPORTED -**

HAZARDOUS WASTE

- NO HAZARDOUS WASTE INFORMATION REPORTED -
UNIVERSAL WASTE **- NO UNIVERSAL WASTE REPORTED -**
CORRECTIVE ACTION AREA **- NO CORRECTIVE ACTION AREA INFORMATION REPORTED -**
CORRECTIVE ACTION EVENT

NO CORRECTIVE ACTION EVENT(S) REPORTED

Back to Report Summary

Resource Conservation & Recovery Act - Non-Generator (RCRANGR09)

MAP ID# 7

Distance from Property: 0.034 mi. (180 ft.) NNE
Elevation: 33 ft. (Equal to TP)

FACILITY INFORMATION

EPA ID#: **CAC003008436**
NAME: **3045 PARK PROPERTY LLC**
ADDRESS: **3045 PARK BLVD**
PALO ALTO, CA 94306
CONTACT NAME: **MARIA MCGUIGAN**
CONTACT ADDRESS: **FOUR EMBARCADERO CENTER SUITE 3620**
SAN FRANCISCO CA 94111
CONTACT PHONE: **415-263-7402**
NON-NOTIFIER: **NOT A NON-NOTIFIER**
DATE RECEIVED BY AGENCY: **04/03/2019**

OWNER TYPE: **OTHER**
OWNER NAME: **MARIA MCGUIGAN**
OPERATOR TYPE: **OTHER**
OPERATOR NAME: **MARIA MCGUIGAN**

CERTIFICATION

CERTIFICATION NAME:	CERTIFICATION TITLE:	CERTIFICATION SIGNED DATE:
DTSC HQ	**CA-DTSC**	**06/20/2019**

INDUSTRY CLASSIFICATION (NAICS)

811121 - AUTOMOTIVE BODY, PAINT, AND INTERIOR REPAIR AND MAINTENANCE

CURRENT ACTIVITY INFORMATION

GENERATOR STATUS: **NON-GENERATOR** LAST UPDATED DATE: **06/26/2019**
SUBJECT TO CORRECTIVE ACTION UNIVERSE: **NO**
TDSFs POTENTIALLY SUBJECT TO CORRECTIVE ACTION UNDER 3004 (u)/(v) UNIVERSE: **NO**
TDSFs ONLY SUBJECT TO CORRECTIVE ACTION UNDER DISCRETIONARY AUTHORITIES UNIVERSE: **NO**
NON TSDFs WHERE RCRA CORRECTIVE ACTION HAS BEEN IMPOSED UNIVERSE: **NO**
CORRECTIVE ACTION WORKLOAD UNIVERSE: **NO**

IMPORTER: **NO**
MIXED WASTE GENERATOR: **NO**
RECYCLER: **NO**
TRANSPORTER: **NO**
ONSITE BURNER EXEMPTION: **NO**
FURNACE EXEMPTION: **NO**
USED OIL REFINER: **NO**
USED OIL TRANSFER FACILITY: **NO**

UNDERGROUND INJECTION: **NO**
UNIVERSAL WASTE DESTINATION FACILITY: **YES**
TRANSFER FACILITY: **NO**
USED OIL FUEL BURNER: **NO**
USED OIL PROCESSOR: **NO**
USED OIL FUEL MARKETER TO BURNER: **NO**
SPECIFICATION USED OIL MARKETER: **NO**
USED OIL TRANSPORTER: **NO**

COMPLIANCE, MONITORING AND ENFORCEMENT INFORMATION

EVALUATIONS **- NO EVALUATIONS REPORTED -**
VIOLATIONS **- NO VIOLATIONS REPORTED -**
ENFORCEMENTS **- NO ENFORCEMENTS REPORTED -**

HAZARDOUS WASTE

- NO HAZARDOUS WASTE INFORMATION REPORTED -

UNIVERSAL WASTE **- NO UNIVERSAL WASTE REPORTED -**

CORRECTIVE ACTION AREA **- NO CORRECTIVE ACTION AREA INFORMATION REPORTED -**

CORRECTIVE ACTION EVENT

NO CORRECTIVE ACTION EVENT(S) REPORTED

Back to Report Summary

Resource Conservation & Recovery Act - Non-Generator (RCRANGR09)

MAP ID# 7

Distance from Property: 0.034 mi. (180 ft.) NNE
Elevation: 33 ft. (Equal to TP)

FACILITY INFORMATION

EPA ID#: **CAC003023588**
NAME: **3045 PARK PROPERTY LLC**
ADDRESS: **3045 PARK BLVD.**
PALO ALTO, CA 94306
CONTACT NAME: **MARIA MCGUIGAN**
CONTACT ADDRESS: **FOUR EMBARCADERO CENTER SUITE 3620**
SAN FRANCISCO CA 94111
CONTACT PHONE: **415-263-7402**
NON-NOTIFIER: **NOT A NON-NOTIFIER**
DATE RECEIVED BY AGENCY: **07/11/2019**

OWNER TYPE: **OTHER**
OWNER NAME: **MARIA MCGUIGAN**
OPERATOR TYPE: **OTHER**
OPERATOR NAME: **MARIA MCGUIGAN**

CERTIFICATION

CERTIFICATION NAME:	CERTIFICATION TITLE:	CERTIFICATION SIGNED DATE:
DTSC HQ	**CA-DTSC**	**07/26/2019**

INDUSTRY CLASSIFICATION (NAICS)

811121 - AUTOMOTIVE BODY, PAINT, AND INTERIOR REPAIR AND MAINTENANCE

CURRENT ACTIVITY INFORMATION

GENERATOR STATUS: **NON-GENERATOR** LAST UPDATED DATE: **07/29/2019**
SUBJECT TO CORRECTIVE ACTION UNIVERSE: **NO**
TDSFs POTENTIALLY SUBJECT TO CORRECTIVE ACTION UNDER 3004 (u)/(v) UNIVERSE: **NO**
TDSFs ONLY SUBJECT TO CORRECTIVE ACTION UNDER DISCRETIONARY AUTHORITIES UNIVERSE: **NO**
NON TSDFs WHERE RCRA CORRECTIVE ACTION HAS BEEN IMPOSED UNIVERSE: **NO**
CORRECTIVE ACTION WORKLOAD UNIVERSE: **NO**

IMPORTER: **NO**
MIXED WASTE GENERATOR: **NO**
RECYCLER: **NO**
TRANSPORTER: **NO**
ONSITE BURNER EXEMPTION: **NO**
FURNACE EXEMPTION: **NO**
USED OIL REFINER: **NO**
USED OIL TRANSFER FACILITY: **NO**

UNDERGROUND INJECTION: **NO**
UNIVERSAL WASTE DESTINATION FACILITY: **YES**
TRANSFER FACILITY: **NO**
USED OIL FUEL BURNER: **NO**
USED OIL PROCESSOR: **NO**
USED OIL FUEL MARKETER TO BURNER: **NO**
SPECIFICATION USED OIL MARKETER: **NO**
USED OIL TRANSPORTER: **NO**

COMPLIANCE, MONITORING AND ENFORCEMENT INFORMATION

EVALUATIONS **- NO EVALUATIONS REPORTED -**
VIOLATIONS **- NO VIOLATIONS REPORTED -**
ENFORCEMENTS **- NO ENFORCEMENTS REPORTED -**

HAZARDOUS WASTE

- NO HAZARDOUS WASTE INFORMATION REPORTED -

UNIVERSAL WASTE **- NO UNIVERSAL WASTE REPORTED -**

CORRECTIVE ACTION AREA **- NO CORRECTIVE ACTION AREA INFORMATION REPORTED -**

CORRECTIVE ACTION EVENT

NO CORRECTIVE ACTION EVENT(S) REPORTED

Back to Report Summary

Resource Conservation & Recovery Act - Non-Generator (RCRANGR09)

MAP ID# 7

Distance from Property: 0.034 mi. (180 ft.) NNE
Elevation: 33 ft. (Equal to TP)

FACILITY INFORMATION

EPA ID#: **CAD981992639**
NAME: **STANFORD BMW**
ADDRESS: **3045 PARK BLVD**
PALO ALTO, CA 94306
CONTACT NAME: **ANTHONY JAEHNICHEN**
CONTACT ADDRESS: **3045 PARK BLVD**
PALO ALTO CA 94306
CONTACT PHONE: **650-324-4488**
NON-NOTIFIER: **NOT A NON-NOTIFIER**
DATE RECEIVED BY AGENCY: **06/23/2006**

OWNER TYPE: **PRIVATE**
OWNER NAME: **H JAEHNICHEN**
OPERATOR TYPE: **PRIVATE**
OPERATOR NAME: **NOT REQUIRED**

CERTIFICATION

CERTIFICATION NAME:	CERTIFICATION TITLE:	CERTIFICATION SIGNED DATE:
HERBERT T JAEHNICHEN	**PRES**	**06/20/2006**

INDUSTRY CLASSIFICATION (NAICS)
44111 - NEW CAR DEALERS

CURRENT ACTIVITY INFORMATION

GENERATOR STATUS: **NON-GENERATOR** LAST UPDATED DATE: **07/30/2007**
SUBJECT TO CORRECTIVE ACTION UNIVERSE: **NO**
TDSFs POTENTIALLY SUBJECT TO CORRECTIVE ACTION UNDER 3004 (u)/(v) UNIVERSE: **NO**
TDSFs ONLY SUBJECT TO CORRECTIVE ACTION UNDER DISCRETIONARY AUTHORITIES UNIVERSE: **NO**
NON TSDFs WHERE RCRA CORRECTIVE ACTION HAS BEEN IMPOSED UNIVERSE: **NO**
CORRECTIVE ACTION WORKLOAD UNIVERSE: **NO**

IMPORTER: **NO**
MIXED WASTE GENERATOR: **NO**
RECYCLER: **NO**
TRANSPORTER: **NO**
ONSITE BURNER EXEMPTION: **NO**
FURNACE EXEMPTION: **NO**
USED OIL REFINER: **NO**
USED OIL TRANSFER FACILITY: **NO**

UNDERGROUND INJECTION: **NO**
UNIVERSAL WASTE DESTINATION FACILITY: **NO**
TRANSFER FACILITY: **NO**
USED OIL FUEL BURNER: **NO**
USED OIL PROCESSOR: **NO**
USED OIL FUEL MARKETER TO BURNER: **NO**
SPECIFICATION USED OIL MARKETER: **NO**
USED OIL TRANSPORTER: **NO**

COMPLIANCE, MONITORING AND ENFORCEMENT INFORMATION

EVALUATIONS **- NO EVALUATIONS REPORTED -**
VIOLATIONS **- NO VIOLATIONS REPORTED -**
ENFORCEMENTS **- NO ENFORCEMENTS REPORTED -**

HAZARDOUS WASTE

- NO HAZARDOUS WASTE INFORMATION REPORTED -
UNIVERSAL WASTE **- NO UNIVERSAL WASTE REPORTED -**
CORRECTIVE ACTION AREA **- NO CORRECTIVE ACTION AREA INFORMATION REPORTED -**
CORRECTIVE ACTION EVENT

NO CORRECTIVE ACTION EVENT(S) REPORTED

Back to Report Summary

Spills, Leaks, Investigation & Cleanup Recovery Listing (SLIC)

MAP ID# 7

Distance from Property: 0.034 mi. (180 ft.) NNE
Elevation: 33 ft. (Equal to TP)

INCIDENT INFORMATION

GLOBAL ID#:	**T10000010246**
CASE NUMBER:	**NOT REPORTED**
NAME:	**3045 PARK BLVD DEVELOPMENT**
ADDRESS:	**3045 PARK BLVD**
	PALO ALTO CA
FACILITY TYPE:	**CLEANUP PROGRAM SITE**
LEAD AGENCY:	**NOT REPORTED**
LEAD AGENCY CONTACT:	**NOT REPORTED**
LEAD AGENCY CASE #:	**NOT REPORTED**
SUBSTANCE RELEASED:	**NOT REPORTED**
STATUS:	**OPEN - REMEDIATION**
RESPONSIBLE PARTY:	**NOT REPORTED**

Back to Report Summary

Resource Conservation & Recovery Act - Generator (RCRAGR09)

MAP ID# 8

Distance from Property: 0.053 mi. (280 ft.) SSE
Elevation: 33 ft. (Equal to TP)

FACILITY INFORMATION

EPA ID#: **CAD982496853**
NAME: **HELMINGS AUTO REPAIR**
ADDRESS: **300 LAMBERT AVE**
PALO ALTO, CA 94306
CONTACT NAME: **ENVIRONMENTAL MANAGER**
CONTACT ADDRESS: **300 LAMBERT AVE**
PALO ALTO CA 94306
CONTACT PHONE: **415-494-0908**
NON-NOTIFIER: **NOT A NON-NOTIFIER**
DATE RECEIVED BY AGENCY: **05/16/1990**

OWNER TYPE: **PRIVATE**
OWNER NAME: **HELMING ROBERT**
OPERATOR TYPE: **PRIVATE**
OPERATOR NAME: **NOT REQUIRED**

CERTIFICATION **- NO CERTIFICATION REPORTED -**

INDUSTRY CLASSIFICATION (NAICS)

811111 - GENERAL AUTOMOTIVE REPAIR

CURRENT ACTIVITY INFORMATION

GENERATOR STATUS: **SMALL QUANTITY GENERATOR** LAST UPDATED DATE: **06/27/2002**
SUBJECT TO CORRECTIVE ACTION UNIVERSE: **NO**
TDSFs POTENTIALLY SUBJECT TO CORRECTIVE ACTION UNDER 3004 (u)/(v) UNIVERSE: **NO**
TDSFs ONLY SUBJECT TO CORRECTIVE ACTION UNDER DISCRETIONARY AUTHORITIES UNIVERSE: **NO**
NON TSDFs WHERE RCRA CORRECTIVE ACTION HAS BEEN IMPOSED UNIVERSE: **NO**
CORRECTIVE ACTION WORKLOAD UNIVERSE: **NO**

IMPORTER: **NO**
MIXED WASTE GENERATOR: **NO**
RECYCLER: **NO**
TRANSPORTER: **NO**
ONSITE BURNER EXEMPTION: **NO**
FURNACE EXEMPTION: **NO**
USED OIL REFINER: **NO**
USED OIL TRANSFER FACILITY: **NO**

UNDERGROUND INJECTION: **NO**
UNIVERSAL WASTE DESTINATION FACILITY: **NO**
TRANSFER FACILITY: **NO**
USED OIL FUEL BURNER: **NO**
USED OIL PROCESSOR: **NO**
USED OIL FUEL MARKETER TO BURNER: **NO**
SPECIFICATION USED OIL MARKETER: **NO**
USED OIL TRANSPORTER: **NO**

COMPLIANCE, MONITORING AND ENFORCEMENT INFORMATION

EVALUATIONS **- NO EVALUATIONS REPORTED -**
VIOLATIONS **- NO VIOLATIONS REPORTED -**
ENFORCEMENTS **- NO ENFORCEMENTS REPORTED -**

HAZARDOUS WASTE

- NO HAZARDOUS WASTE INFORMATION REPORTED -
UNIVERSAL WASTE **- NO UNIVERSAL WASTE REPORTED -**
CORRECTIVE ACTION AREA **- NO CORRECTIVE ACTION AREA INFORMATION REPORTED -**

CORRECTIVE ACTION EVENT

NO CORRECTIVE ACTION EVENT(S) REPORTED

Back to Report Summary

Resource Conservation & Recovery Act - Non-Generator (RCRANGR09)

MAP ID# 8

Distance from Property: 0.037 mi. (195 ft.) SE
Elevation: 33 ft. (Equal to TP)

FACILITY INFORMATION

EPA ID#: **CAD063539217**
NAME: **ARTS BODYCRAFT INC**
ADDRESS: **280 LAMBERT AVE**
PALO ALTO, CA 94306
CONTACT NAME: **REYNALDO JARA**
CONTACT ADDRESS: **280 LAMBERT AVE**
PALO ALTO CA 94306-2216
CONTACT PHONE: **650-493-4459**
NON-NOTIFIER: **NOT A NON-NOTIFIER**
DATE RECEIVED BY AGENCY: **04/10/1987**

OWNER TYPE: **OTHER**
OWNER NAME: **ARTS BODYCRAFT INC**
OPERATOR TYPE: **OTHER**
OPERATOR NAME: **REYNALDO JARA**

CERTIFICATION

CERTIFICATION NAME:	CERTIFICATION TITLE:	CERTIFICATION SIGNED DATE:
DTSC HQ	**CA-DTSC**	**08/31/2018**

INDUSTRY CLASSIFICATION (NAICS)

811121 - AUTOMOTIVE BODY, PAINT, AND INTERIOR REPAIR AND MAINTENANCE

CURRENT ACTIVITY INFORMATION

GENERATOR STATUS: **NON-GENERATOR** LAST UPDATED DATE: **08/31/2018**
SUBJECT TO CORRECTIVE ACTION UNIVERSE: **NO**
TDSFs POTENTIALLY SUBJECT TO CORRECTIVE ACTION UNDER 3004 (u)/(v) UNIVERSE: **NO**
TDSFs ONLY SUBJECT TO CORRECTIVE ACTION UNDER DISCRETIONARY AUTHORITIES UNIVERSE: **NO**
NON TSDFs WHERE RCRA CORRECTIVE ACTION HAS BEEN IMPOSED UNIVERSE: **NO**
CORRECTIVE ACTION WORKLOAD UNIVERSE: **NO**

IMPORTER: **NO**
MIXED WASTE GENERATOR: **NO**
RECYCLER: **NO**
TRANSPORTER: **NO**
ONSITE BURNER EXEMPTION: **NO**
FURNACE EXEMPTION: **NO**
USED OIL REFINER: **NO**
USED OIL TRANSFER FACILITY: **NO**

UNDERGROUND INJECTION: **NO**
UNIVERSAL WASTE DESTINATION FACILITY: **YES**
TRANSFER FACILITY: **NO**
USED OIL FUEL BURNER: **NO**
USED OIL PROCESSOR: **NO**
USED OIL FUEL MARKETER TO BURNER: **NO**
SPECIFICATION USED OIL MARKETER: **NO**
USED OIL TRANSPORTER: **NO**

COMPLIANCE, MONITORING AND ENFORCEMENT INFORMATION

EVALUATIONS **- NO EVALUATIONS REPORTED -**
VIOLATIONS **- NO VIOLATIONS REPORTED -**
ENFORCEMENTS **- NO ENFORCEMENTS REPORTED -**

HAZARDOUS WASTE

- NO HAZARDOUS WASTE INFORMATION REPORTED -
UNIVERSAL WASTE **- NO UNIVERSAL WASTE REPORTED -**
CORRECTIVE ACTION AREA **- NO CORRECTIVE ACTION AREA INFORMATION REPORTED -**
CORRECTIVE ACTION EVENT

NO CORRECTIVE ACTION EVENT(S) REPORTED

Back to Report Summary

Resource Conservation & Recovery Act - Non-Generator (RCRANGR09)

MAP ID# 8

Distance from Property: 0.047 mi. (248 ft.) SSE
Elevation: 33 ft. (Equal to TP)

FACILITY INFORMATION

EPA ID#: **CAL000291378**
NAME: **STANFORD ARCO AUTO CARE**
ADDRESS: **290 LAMBERT AVE**
PALO ALTO, CA 94306
CONTACT NAME: **KWANG KIM**
CONTACT ADDRESS: **290 LAMBERT AVE**
PALO ALTO CA 94306-2216
CONTACT PHONE: **650-856-0904**
NON-NOTIFIER: **NOT A NON-NOTIFIER**
DATE RECEIVED BY AGENCY: **02/22/2005**

OWNER TYPE: **OTHER**
OWNER NAME: **KWANG KIM**
OPERATOR TYPE: **OTHER**
OPERATOR NAME: **KWANG KIM**

CERTIFICATION

CERTIFICATION NAME:	CERTIFICATION TITLE:	CERTIFICATION SIGNED DATE:
DTSC HQ	**CA-DTSC**	**09/05/2018**

INDUSTRY CLASSIFICATION (NAICS)
811111 - GENERAL AUTOMOTIVE REPAIR

CURRENT ACTIVITY INFORMATION

GENERATOR STATUS: **NON-GENERATOR** LAST UPDATED DATE: **09/05/2018**
SUBJECT TO CORRECTIVE ACTION UNIVERSE: **NO**
TDSFs POTENTIALLY SUBJECT TO CORRECTIVE ACTION UNDER 3004 (u)/(v) UNIVERSE: **NO**
TDSFs ONLY SUBJECT TO CORRECTIVE ACTION UNDER DISCRETIONARY AUTHORITIES UNIVERSE: **NO**
NON TSDFs WHERE RCRA CORRECTIVE ACTION HAS BEEN IMPOSED UNIVERSE: **NO**
CORRECTIVE ACTION WORKLOAD UNIVERSE: **NO**

IMPORTER: **NO**
MIXED WASTE GENERATOR: **NO**
RECYCLER: **NO**
TRANSPORTER: **NO**
ONSITE BURNER EXEMPTION: **NO**
FURNACE EXEMPTION: **NO**
USED OIL REFINER: **NO**
USED OIL TRANSFER FACILITY: **NO**

UNDERGROUND INJECTION: **NO**
UNIVERSAL WASTE DESTINATION FACILITY: **YES**
TRANSFER FACILITY: **NO**
USED OIL FUEL BURNER: **NO**
USED OIL PROCESSOR: **NO**
USED OIL FUEL MARKETER TO BURNER: **NO**
SPECIFICATION USED OIL MARKETER: **NO**
USED OIL TRANSPORTER: **NO**

COMPLIANCE, MONITORING AND ENFORCEMENT INFORMATION

EVALUATIONS **- NO EVALUATIONS REPORTED -**
VIOLATIONS **- NO VIOLATIONS REPORTED -**
ENFORCEMENTS **- NO ENFORCEMENTS REPORTED -**

HAZARDOUS WASTE

- NO HAZARDOUS WASTE INFORMATION REPORTED -
UNIVERSAL WASTE **- NO UNIVERSAL WASTE REPORTED -**
CORRECTIVE ACTION AREA **- NO CORRECTIVE ACTION AREA INFORMATION REPORTED -**
CORRECTIVE ACTION EVENT

NO CORRECTIVE ACTION EVENT(S) REPORTED

Back to Report Summary

Resource Conservation & Recovery Act - Non-Generator (RCRANGR09)

MAP ID# 8

Distance from Property: 0.042 mi. (222 ft.) SE
Elevation: 33 ft. (Equal to TP)

FACILITY INFORMATION

EPA ID#: **CAL000379235**

NAME: **COMCAST OF CALIFORNIA IX,INC**

ADDRESS: **278 LAMBERT ST**
PALO ALTO, CA 94360

CONTACT NAME: **DEBRA EMERY**

CONTACT ADDRESS: **3055 COMCAST PL**
LIVERMORE CA 94551-7594

CONTACT PHONE: **925-424-0286**

NON-NOTIFIER: **NOT A NON-NOTIFIER**

DATE RECEIVED BY AGENCY: **10/25/2012**

OWNER TYPE: **OTHER**

OWNER NAME: **COMCAST CABLE COMM. MANAGEMENT, LLC**

OPERATOR TYPE: **OTHER**

OPERATOR NAME: **DEBRA EMERY**

CERTIFICATION

CERTIFICATION NAME:	CERTIFICATION TITLE:	CERTIFICATION SIGNED DATE:
DTSC HQ	**CA-DTSC**	**09/06/2018**

INDUSTRY CLASSIFICATION (NAICS)

51322 - CABLE AND OTHER PROGRAM DISTRIBUTION

CURRENT ACTIVITY INFORMATION

GENERATOR STATUS: **NON-GENERATOR** LAST UPDATED DATE: **09/06/2018**

SUBJECT TO CORRECTIVE ACTION UNIVERSE: **NO**

TDSFs POTENTIALLY SUBJECT TO CORRECTIVE ACTION UNDER 3004 (u)/(v) UNIVERSE: **NO**

TDSFs ONLY SUBJECT TO CORRECTIVE ACTION UNDER DISCRETIONARY AUTHORITIES UNIVERSE: **NO**

NON TSDFs WHERE RCRA CORRECTIVE ACTION HAS BEEN IMPOSED UNIVERSE: **NO**

CORRECTIVE ACTION WORKLOAD UNIVERSE: **NO**

IMPORTER: **NO**
MIXED WASTE GENERATOR: **NO**
RECYCLER: **NO**
TRANSPORTER: **NO**
ONSITE BURNER EXEMPTION: **NO**
FURNACE EXEMPTION: **NO**
USED OIL REFINER: **NO**
USED OIL TRANSFER FACILITY: **NO**

UNDERGROUND INJECTION: **NO**
UNIVERSAL WASTE DESTINATION FACILITY: **YES**
TRANSFER FACILITY: **NO**
USED OIL FUEL BURNER: **NO**
USED OIL PROCESSOR: **NO**
USED OIL FUEL MARKETER TO BURNER: **NO**
SPECIFICATION USED OIL MARKETER: **NO**
USED OIL TRANSPORTER: **NO**

COMPLIANCE, MONITORING AND ENFORCEMENT INFORMATION

EVALUATIONS **- NO EVALUATIONS REPORTED -**

VIOLATIONS **- NO VIOLATIONS REPORTED -**

ENFORCEMENTS **- NO ENFORCEMENTS REPORTED -**

HAZARDOUS WASTE

- NO HAZARDOUS WASTE INFORMATION REPORTED -

UNIVERSAL WASTE **- NO UNIVERSAL WASTE REPORTED -**

CORRECTIVE ACTION AREA **- NO CORRECTIVE ACTION AREA INFORMATION REPORTED -**

CORRECTIVE ACTION EVENT

NO CORRECTIVE ACTION EVENT(S) REPORTED

Back to Report Summary

Historical Underground Storage Tanks (HISTUST)

MAP ID# 9

Distance from Property: 0.048 mi. (253 ft.) ESE
Elevation: 32 ft. (Lower than TP)

PARK AVENUE MOTORS, 3290 PARK BLVD, PALO ALTO, CA 94306
UNIQUE ID: **000206DF**

PAGE 3371 STATE WATER RESOURCES CONTROL BOARD 06/01/88
HAZARDOUS SUBSTANCE STORAGE CONTAINER INFORMATION FOR SANTA CLARA COUNTY
CONTAINER TYPES: 1,2,3,4,5
(1=FARM MOTOR VEHICLE FUEL TANKS, 2=ALL OTHER PRODUCT TANKS, 3=WASTE TANKS, 4=SUMPS, 5=PITS, PONDS, LAGOONS & OTHERS)

I OWNER
PARKE AVENUE MOTORS
3290 PARK BLVD. PALO ALTO CA 94306

II FACILITY

	MAILING ADDRESS	DEALER/FOREMAN/SUPERVISOR	TYPE OF BUSINESS
PARK AVENUE MOTORS	TOWNSHIP/RANGE/SECTION	TELEPHONE	NO. OF CONTAINERS
3290 PARK BLVD.			
PALO ALTO CA 94306	3290 PARK BLVD.	KARL VAN KEMPEN	AUTO DEALER
	PALO ALTO CA 94306		
CROSS STREET :		(415) 494-0311	1
	TPAL/R /S		

III 24-HR. CONTACT PERSON / TELEPHONE
DAY: VAN KEMPEN (415) 494-0311 NIGHT: VAN KEMPEN (415) 948-9695

********** OWNER ASSIGNED CONTAINER NUMBER: 1 ********** STATE BOARD ASSIGNED CONTAINER ID NUMBER: 00000059666001 **********

IV DESCRIPTION
A. CONTAINER TYPE : TANK
B. MANUFACTURER/YR OF MFG: /1973
C. YEAR INSTALLED : 1973
D. CAPACITY (GALLONS) : 500
E. REPAIRS : NONE IF YES WHEN :
F. CURRENTLY USED : YES IF NO, YEAR OF LAST USE:
G. STORES : WASTE
H. MOTOR VEHICLE FUEL/WASTE OIL : YES CONTAINS: WASTE OIL

IS CONTAINER LOCATED ON A FARM : NO

V CONTAINER CONSTRUCTION
A. THICKNESS: B. VAULTING: UNKNOWN C. WALLING: SINGLE
D. MATERIAL : CARBON STEEL
E. LINING : UNKNOWN
F. WRAPPING : UNKNOWN

VI PIPING
A. ABOVEGROUND PIPING : B. UNDERGROUND PIPING : UNKNOWN
C. REPAIRS : UNKN IF YES, YEAR OF MOST RECENT REPAIR:

VII LEAK DETECTION
NONE P

URE TEST COMPOSITION OF SUBSTANCES CURRENTLY STORED IN CONTAINER
12035 WASTE OIL

*** E16 ***

Back to Report Summary

Resource Conservation & Recovery Act - Non-Generator (RCRANGR09)

MAP ID# 9

Distance from Property: 0.048 mi. (253 ft.) ESE
Elevation: 32 ft. (Lower than TP)

FACILITY INFORMATION

EPA ID#: **CAD063548655**
NAME: **PARK AVENUE MOTORS**
ADDRESS: **3290 PARK BLVD**
PALO ALTO, CA 94306
CONTACT NAME: **KEVIN HAGAR**
CONTACT ADDRESS: **3290 PARK BLVD**
PALO ALTO CA 94306
CONTACT PHONE: **408-497-6087**
NON-NOTIFIER: **NOT A NON-NOTIFIER**
DATE RECEIVED BY AGENCY: **04/13/1999**

OWNER TYPE: **PRIVATE**
OWNER NAME: **KARL VAN KEMPER**
OPERATOR TYPE: **NOT REPORTED**
OPERATOR NAME: **NOT REPORTED**

CERTIFICATION **- NO CERTIFICATION REPORTED -**
INDUSTRY CLASSIFICATION (NAICS) **- NO NAICS INFORMATION REPORTED -**

CURRENT ACTIVITY INFORMATION

GENERATOR STATUS: **NON-GENERATOR** LAST UPDATED DATE: **06/27/2002**
SUBJECT TO CORRECTIVE ACTION UNIVERSE: **NO**
TDSFs POTENTIALLY SUBJECT TO CORRECTIVE ACTION UNDER 3004 (u)/(v) UNIVERSE: **NO**
TDSFs ONLY SUBJECT TO CORRECTIVE ACTION UNDER DISCRETIONARY AUTHORITIES UNIVERSE: **NO**
NON TSDFs WHERE RCRA CORRECTIVE ACTION HAS BEEN IMPOSED UNIVERSE: **NO**
CORRECTIVE ACTION WORKLOAD UNIVERSE: **NO**

IMPORTER: **NO**
MIXED WASTE GENERATOR: **NO**
RECYCLER: **NO**
TRANSPORTER: **NO**
ONSITE BURNER EXEMPTION: **NO**
FURNACE EXEMPTION: **NO**
USED OIL REFINER: **NO**
USED OIL TRANSFER FACILITY: **NO**
UNDERGROUND INJECTION: **NO**
UNIVERSAL WASTE DESTINATION FACILITY: **NO**
TRANSFER FACILITY: **NO**
USED OIL FUEL BURNER: **NO**
USED OIL PROCESSOR: **NO**
USED OIL FUEL MARKETER TO BURNER: **NO**
SPECIFICATION USED OIL MARKETER: **NO**
USED OIL TRANSPORTER: **NO**

COMPLIANCE, MONITORING AND ENFORCEMENT INFORMATION

EVALUATIONS **- NO EVALUATIONS REPORTED -**
VIOLATIONS **- NO VIOLATIONS REPORTED -**
ENFORCEMENTS **- NO ENFORCEMENTS REPORTED -**

HAZARDOUS WASTE

- NO HAZARDOUS WASTE INFORMATION REPORTED -
UNIVERSAL WASTE **- NO UNIVERSAL WASTE REPORTED -**
CORRECTIVE ACTION AREA **- NO CORRECTIVE ACTION AREA INFORMATION REPORTED -**

CORRECTIVE ACTION EVENT

NO CORRECTIVE ACTION EVENT(S) REPORTED

Back to Report Summary

Resource Conservation & Recovery Act - Non-Generator (RCRANGR09)

MAP ID# 9

Distance from Property: 0.048 mi. (253 ft.) ESE
Elevation: 32 ft. (Lower than TP)

FACILITY INFORMATION

EPA ID#: **CAL000400217**
NAME: **AKINS BODY SHOP INC**
ADDRESS: **3290 PARK BLVD**
PALO ALTO, CA 94306
CONTACT NAME: **SHARON RUPP**
CONTACT ADDRESS: **3290 PARK BLVD**
PALO ALTO CA 94306-0000
CONTACT PHONE: **650-269-9654**
NON-NOTIFIER: **NOT A NON-NOTIFIER**
DATE RECEIVED BY AGENCY: **09/04/2014**

OWNER TYPE: **OTHER**
OWNER NAME: **SHARON RUPP**
OPERATOR TYPE: **OTHER**
OPERATOR NAME: **SHARON RUPP**

CERTIFICATION

CERTIFICATION NAME:	CERTIFICATION TITLE:	CERTIFICATION SIGNED DATE:
DTSC HQ	**CA-DTSC**	**09/06/2018**

INDUSTRY CLASSIFICATION (NAICS)

811121 - AUTOMOTIVE BODY, PAINT, AND INTERIOR REPAIR AND MAINTENANCE

CURRENT ACTIVITY INFORMATION

GENERATOR STATUS: **NON-GENERATOR** LAST UPDATED DATE: **09/06/2018**
SUBJECT TO CORRECTIVE ACTION UNIVERSE: **NO**
TDSFs POTENTIALLY SUBJECT TO CORRECTIVE ACTION UNDER 3004 (u)/(v) UNIVERSE: **NO**
TDSFs ONLY SUBJECT TO CORRECTIVE ACTION UNDER DISCRETIONARY AUTHORITIES UNIVERSE: **NO**
NON TSDFs WHERE RCRA CORRECTIVE ACTION HAS BEEN IMPOSED UNIVERSE: **NO**
CORRECTIVE ACTION WORKLOAD UNIVERSE: **NO**

IMPORTER: **NO**
MIXED WASTE GENERATOR: **NO**
RECYCLER: **NO**
TRANSPORTER: **NO**
ONSITE BURNER EXEMPTION: **NO**
FURNACE EXEMPTION: **NO**
USED OIL REFINER: **NO**
USED OIL TRANSFER FACILITY: **NO**

UNDERGROUND INJECTION: **NO**
UNIVERSAL WASTE DESTINATION FACILITY: **YES**
TRANSFER FACILITY: **NO**
USED OIL FUEL BURNER: **NO**
USED OIL PROCESSOR: **NO**
USED OIL FUEL MARKETER TO BURNER: **NO**
SPECIFICATION USED OIL MARKETER: **NO**
USED OIL TRANSPORTER: **NO**

COMPLIANCE, MONITORING AND ENFORCEMENT INFORMATION

EVALUATIONS **- NO EVALUATIONS REPORTED -**
VIOLATIONS **- NO VIOLATIONS REPORTED -**
ENFORCEMENTS **- NO ENFORCEMENTS REPORTED -**

HAZARDOUS WASTE

- NO HAZARDOUS WASTE INFORMATION REPORTED -
UNIVERSAL WASTE **- NO UNIVERSAL WASTE REPORTED -**
CORRECTIVE ACTION AREA **- NO CORRECTIVE ACTION AREA INFORMATION REPORTED -**
CORRECTIVE ACTION EVENT

NO CORRECTIVE ACTION EVENT(S) REPORTED

Back to Report Summary

Spills, Leaks, Investigation & Cleanup Recovery Listing (SLIC)

MAP ID# 9

Distance from Property: 0.067 mi. (354 ft.) ESE
Elevation: 32 ft. (Lower than TP)

INCIDENT INFORMATION

GLOBAL ID#:	**2-43S0390**
CASE NUMBER:	**NOT REPORTED**
NAME:	**MATADERO CREEK**
ADDRESS:	**BETWEEN LAMBER AVE & PARK BLVD**
	PALO ALTO CA
FACILITY TYPE:	**NOT REPORTED**
LEAD AGENCY:	**SAN FRANCISCO BAY RWQCB (REGION 2)**
LEAD AGENCY CONTACT:	**NOT REPORTED**
LEAD AGENCY CASE #:	**NOT REPORTED**
SUBSTANCE RELEASED:	**NOT REPORTED**
STATUS:	**NOT REPORTED**
RESPONSIBLE PARTY:	**NOT REPORTED**

Back to Report Summary

MAP ID# 9

Distance from Property: 0.048 mi. (253 ft.) ESE
Elevation: 32 ft. (Lower than TP)

FACILITY INFORMATION

FACILITY #: **59666**
BOE: **44-026129**
NAME: **PARK AVENUE MOTORS**
ADDRESS: **3290 PARK BLVD**
PALO ALTO, CA 94306

STATUS: **ACTIVE**
JURISDICTION: **CITY OF PALO ALTO**
AGENCY: **FIRE DEPARTMENT**

TANK INFORMATION

TANK #: **000001**
INSTALLED: **NOT REPORTED**
TANK USE: **OIL**
CONTENT: **WASTE OIL**

CAPACITY: **500**
REMOVED: **NOT REPORTED**
STORAGE TYPE: **WASTE**
CONTAINMENT: **NOT REPORTED**

Back to Report Summary

MAP ID# 10

Distance from Property: 0.055 mi. (290 ft.) NW
Elevation: 31 ft. (Lower than TP)

FACILITY INFORMATION

GLOBAL ID: **T10000008090**
URL LINK: CLICK HERE
BUSINESS NAME: **SOUTHERN PACIFIC**
ADDRESS: **2901 PARK BOULEVARD**
PALO ALTO, CA 94036
COUNTY: **SANTA CLARA**

FACILITY DETAILS

CASE TYPE: **CLEANUP PROGRAM SITE**
CASE NUMBER: **43S0773**
STATUS: **OPEN - INACTIVE 6/9/2016**
POTENTIAL CONTAMINATION:
COPPER, LEAD, ZINC
POTENTIAL MEDIA AFFECTED:
SOIL
DISADVANTAGED COMMUNITY:
NO
SEVERELY DISADVANTAGED COMMUNITY:
NO
SITE HISTORY:
NOT REPORTED

REGULATORY ACTIVITIES

TYPE OF ACTION:	DATE:	ACTION:
RESPONSE	**02/20/2020**	**OTHER REPORT / DOCUMENT**
RESPONSE	**11/12/1981**	**OTHER REPORT / DOCUMENT**

STATUS HISTORY

STATUS:	DATE:
OPEN - INACTIVE	**06/09/2016**
OPEN - CASE BEGIN DATE	**12/03/2015**
OPEN - INACTIVE	**12/03/2015**

CONTACT DETAILS

ORGANIZATION: **SAN FRANCISCO BAY RWQCB (REGION 2)**
ADDRESS: **1515 CLAY ST, SUITE 1400**
CITY: **OAKLAND**
CONTACT NAME: **RB 2**
CONTACT TYPE: **REGIONAL BOARD CASEWORKER**
CONTACT PHONE: **NOT REPORTED**
EMAIL: **NOT REPORTED**

Back to Report Summary

Resource Conservation & Recovery Act - Generator (RCRAGR09)

MAP ID# 10

Distance from Property: 0.055 mi. (290 ft.) NW
Elevation: 31 ft. (Lower than TP)

FACILITY INFORMATION

EPA ID#: **CAD064719859**
NAME: **AKINS BODY SHOP INC**
ADDRESS: **2901 PARK BLVD**
PALO ALTO, CA 94306
CONTACT NAME: **ENVIRONMENTAL MANAGER**
CONTACT ADDRESS: **2901 PARK BLVD**
PALO ALTO CA 94306
CONTACT PHONE: **405-321-1460**
NON-NOTIFIER: **NOT A NON-NOTIFIER**
DATE RECEIVED BY AGENCY: **02/20/1986**
CERTIFICATION **- NO CERTIFICATION REPORTED -**
INDUSTRY CLASSIFICATION (NAICS)
811121 - AUTOMOTIVE BODY, PAINT, AND INTERIOR REPAIR AND MAINTENANCE

OWNER TYPE: **PRIVATE**
OWNER NAME: **BILL RUPP**
OPERATOR TYPE: **PRIVATE**
OPERATOR NAME: **NOT REQUIRED**

CURRENT ACTIVITY INFORMATION

GENERATOR STATUS: **SMALL QUANTITY GENERATOR** LAST UPDATED DATE: **06/27/2002**
SUBJECT TO CORRECTIVE ACTION UNIVERSE: **NO**
TDSFs POTENTIALLY SUBJECT TO CORRECTIVE ACTION UNDER 3004 (u)/(v) UNIVERSE: **NO**
TDSFs ONLY SUBJECT TO CORRECTIVE ACTION UNDER DISCRETIONARY AUTHORITIES UNIVERSE: **NO**
NON TSDFs WHERE RCRA CORRECTIVE ACTION HAS BEEN IMPOSED UNIVERSE: **NO**
CORRECTIVE ACTION WORKLOAD UNIVERSE: **NO**

IMPORTER: **NO**
MIXED WASTE GENERATOR: **NO**
RECYCLER: **NO**
TRANSPORTER: **NO**
ONSITE BURNER EXEMPTION: **NO**
FURNACE EXEMPTION: **NO**
USED OIL REFINER: **NO**
USED OIL TRANSFER FACILITY: **NO**

UNDERGROUND INJECTION: **NO**
UNIVERSAL WASTE DESTINATION FACILITY: **NO**
TRANSFER FACILITY: **NO**
USED OIL FUEL BURNER: **NO**
USED OIL PROCESSOR: **NO**
USED OIL FUEL MARKETER TO BURNER: **NO**
SPECIFICATION USED OIL MARKETER: **NO**
USED OIL TRANSPORTER: **NO**

COMPLIANCE, MONITORING AND ENFORCEMENT INFORMATION

EVALUATIONS **- NO EVALUATIONS REPORTED -**
VIOLATIONS **- NO VIOLATIONS REPORTED -**
ENFORCEMENTS **- NO ENFORCEMENTS REPORTED -**

HAZARDOUS WASTE

- NO HAZARDOUS WASTE INFORMATION REPORTED -
UNIVERSAL WASTE **- NO UNIVERSAL WASTE REPORTED -**
CORRECTIVE ACTION AREA **- NO CORRECTIVE ACTION AREA INFORMATION REPORTED -**
CORRECTIVE ACTION EVENT
NO CORRECTIVE ACTION EVENT(S) REPORTED

MAP ID# 10

Distance from Property: 0.055 mi. (290 ft.) NW
Elevation: 31 ft. (Lower than TP)

INCIDENT INFORMATION

GLOBAL ID#:	**2-43S0773**
CASE NUMBER:	**NOT REPORTED**
NAME:	**PALO ALTO SOUTHERN PACIFIC SITE**
ADDRESS:	**2901 PARK BLVD**
	PALO ALTO CA
FACILITY TYPE:	**NOT REPORTED**
LEAD AGENCY:	**SAN FRANCISCO BAY RWQCB (REGION 2)**
LEAD AGENCY CONTACT:	**NOT REPORTED**
LEAD AGENCY CASE #:	**NOT REPORTED**
SUBSTANCE RELEASED:	**NOT REPORTED**
STATUS:	**NOT REPORTED**
RESPONSIBLE PARTY:	**NOT REPORTED**

Back to Report Summary

Spills, Leaks, Investigation & Cleanup Recovery Listing (SLIC)

MAP ID# 10

Distance from Property: 0.055 mi. (290 ft.) NW
Elevation: 31 ft. (Lower than TP)

INCIDENT INFORMATION

GLOBAL ID#:	**T10000008090**
CASE NUMBER:	**NOT REPORTED**
NAME:	**SOUTHERN PACIFIC**
ADDRESS:	**2901 PARK BOULEVARD**
	PALO ALTO CA
FACILITY TYPE:	**CLEANUP PROGRAM SITE**
LEAD AGENCY:	**NOT REPORTED**
LEAD AGENCY CONTACT:	**NOT REPORTED**
LEAD AGENCY CASE #:	**NOT REPORTED**
SUBSTANCE RELEASED:	**NOT REPORTED**
STATUS:	**OPEN - INACTIVE**
RESPONSIBLE PARTY:	**NOT REPORTED**

Back to Report Summary

GeoTracker Cleanup Sites (CLEANUPSITES)

MAP ID# 11

Distance from Property: 0.069 mi. (364 ft.) SW
Elevation: 33 ft. (Equal to TP)

FACILITY INFORMATION

GLOBAL ID: **T0608501751**
URL LINK: CLICK HERE
BUSINESS NAME: **DURA BOND BEARING CO.**
ADDRESS: **3201 ASH ST**
PALO ALTO, CA 94306
COUNTY: **SANTA CLARA**

FACILITY DETAILS

CASE TYPE: **LUST CLEANUP SITE**
CASE NUMBER: **NOT REPORTED**
STATUS: **COMPLETED - CASE CLOSED 1/19/1999**
POTENTIAL CONTAMINATION:
GASOLINE
POTENTIAL MEDIA AFFECTED:
OTHER GROUNDWATER (USES OTHER THAN DRINKING WATER)
DISADVANTAGED COMMUNITY:
NO
SEVERELY DISADVANTAGED COMMUNITY:
NO
SITE HISTORY:
NOT REPORTED

REGULATORY ACTIVITIES

TYPE OF ACTION:	DATE:	ACTION:
OTHER	**01/01/50**	**LEAK REPORTED**
ENFORCEMENT	**01/19/1999**	**CLOSURE/NO FURTHER ACTION LETTER**
RESPONSE	**01/19/1999**	**OTHER REPORT / DOCUMENT**
ENFORCEMENT	**02/07/1997**	**NOTICE OF RESPONSIBILITY - #40035**
OTHER	**09/26/1988**	**LEAK REPORTED**

STATUS HISTORY

STATUS:	DATE:
COMPLETED - CASE CLOSED	**01/19/1999**
OPEN - SITE ASSESSMENT	**11/22/1985**
OPEN - CASE BEGIN DATE	**07/27/1984**
OPEN - SITE ASSESSMENT	**07/27/1984**

CONTACT DETAILS

ORGANIZATION: **SANTA CLARA COUNTY LOP**
ADDRESS: **1555 BERGER DRIVE, SUITE 300**
CITY: **SAN JOSE**
CONTACT NAME: **UST CASE WORKER**
CONTACT TYPE: **LOCAL AGENCY CASEWORKER**
CONTACT PHONE: **4089183400**
EMAIL: **NOT REPORTED**
ORGANIZATION: **SAN FRANCISCO BAY RWQCB (REGION 2)**

ADDRESS: **1515 CLAY ST SUITE 1400**
CITY: **OAKLAND**
CONTACT NAME: **REGIONAL WATER BOARD**
CONTACT TYPE: **REGIONAL BOARD CASEWORKER**
CONTACT PHONE: **NOT REPORTED**
EMAIL: **NOT REPORTED**

Back to Report Summary

GeoTracker Cleanup Sites (CLEANUPSITES)

MAP ID# 11

Distance from Property: 0.069 mi. (364 ft.) SW
Elevation: 33 ft. (Equal to TP)

FACILITY INFORMATION

GLOBAL ID: **T0608591604**
URL LINK: CLICK HERE
BUSINESS NAME: **DURA BOND**
ADDRESS: **3201 ASH ST**
PALO ALTO, CA 94306
COUNTY: **SANTA CLARA**

FACILITY DETAILS

CASE TYPE: **NON-CASE INFORMATION**
CASE NUMBER: **NOT REPORTED**
STATUS: **INFORMATIONAL ITEM 4/17/2009**
POTENTIAL CONTAMINATION:
*** SOLVENTS**
POTENTIAL MEDIA AFFECTED:
OTHER GROUNDWATER (USES OTHER THAN DRINKING WATER)
DISADVANTAGED COMMUNITY:
NO
SEVERELY DISADVANTAGED COMMUNITY:
NO
SITE HISTORY:
NOT REPORTED

REGULATORY ACTIVITIES

TYPE OF ACTION:	DATE:	ACTION:
OTHER	**01/01/50**	**LEAK REPORTED**
OTHER	**02/28/1981**	**LEAK REPORTED**

STATUS HISTORY

STATUS:	DATE:
INFORMATIONAL ITEM	**04/17/2009**
OPEN - INACTIVE	**04/17/09**
INFORMATIONAL ITEM	**03/18/1999**
OPEN - SITE ASSESSMENT	**03/18/99**
INFORMATIONAL ITEM	**02/28/1981**
OPEN - CASE BEGIN DATE	**02/28/1981**

CONTACT DETAILS

ORGANIZATION: **SANTA CLARA COUNTY LOP**
ADDRESS: **1555 BERGER DRIVE, SUITE 300**
CITY: **SAN JOSE**
CONTACT NAME: **AARON COSTA**
CONTACT TYPE: **LOCAL AGENCY CASEWORKER**
CONTACT PHONE: **4089181954**
EMAIL: **AARON.COSTA@CEP.SCCGOV.ORG**

Back to Report Summary

Historical Cortese List (HISTCORTESE)

MAP ID# 11

Distance from Property: 0.069 mi. (364 ft.) SW
Elevation: 33 ft. (Equal to TP)

FACILITY INFORMATION

GEOSEARCH ID: **43-1824COR**

ID#: **43-1824**

NAME: **DURA BOND BEARING COMPANY**

ADDRESS: **3201 ASH**
PALO ALTO, CA 94306

Back to Report Summary

Leaking Underground Storage Tanks (LUST)

MAP ID# 11

Distance from Property: 0.069 mi. (364 ft.) SW
Elevation: 33 ft. (Equal to TP)

FACILITY INFORMATION

GLOBAL ID: **T0608501751**
URL LINK: CLICK HERE
BUSINESS NAME: **DURA BOND BEARING CO.**
ADDRESS: **3201 ASH ST**
PALO ALTO, CA 94306
COUNTY: **SANTA CLARA**

FACILITY DETAILS

CASE TYPE: **LUST CLEANUP SITE**
CASE NUMBER: **NOT REPORTED**
STATUS: **COMPLETED - CASE CLOSED 01/19/1999**
POTENTIAL CONTAMINATION:
GASOLINE
POTENTIAL MEDIA AFFECTED:
OTHER GROUNDWATER (USES OTHER THAN DRINKING WATER)
DISADVANTAGED COMMUNITY:
NO
SEVERELY DISADVANTAGED COMMUNITY:
NO
SITE HISTORY:
NOT REPORTED

HISTORICAL FACILITY DETAILS

NO HISTORICAL DETAIL(S) INFORMATION REPORTED FOR THIS FACILITY

Back to Report Summary

Leaking Underground Storage Tanks (LUST)

MAP ID# 11

Distance from Property: 0.069 mi. (364 ft.) SW
Elevation: 33 ft. (Equal to TP)

FACILITY INFORMATION

GLOBAL ID: **T0608591604**
URL LINK: CLICK HERE
BUSINESS NAME: **DURA BOND**
ADDRESS: **3201 ASH ST**
PALO ALTO, CA 94306
COUNTY: **SANTA CLARA**

FACILITY DETAILS

NO DETAIL(S) INFORMATION REPORTED

HISTORICAL FACILITY DETAILS

NO HISTORICAL DETAIL(S) INFORMATION REPORTED FOR THIS FACILITY

Back to Report Summary

Superfund Enterprise Management System Archived Site Inventory (SEMSARCH)

MAP ID# 11

Distance from Property: 0.069 mi. (364 ft.) SW
Elevation: 33 ft. (Equal to TP)

FACILITY INFORMATION

EPA ID#: **CAD014440648**
SITE ID#: **0901248**
NAME: **DURA-BOND**
ADDRESS: **3201 ASH ST**
PALO ALTO, CA 94306
COUNTY: **SANTA CLARA**
FEDERAL FACILITY: **NOT A FEDERAL FACILITY**
SUPERFUND ALTERNATIVE AGREEMENT IN PLACE?: **NO**
NPL: **NOT ON THE NPL**
NON NPL STATUS: **NFRAP-SITE DOES NOT QUALIFY FOR THE NPL BASED ON EXISTING INFORMATION**
SUPERFUND SITE INFORMATION: **CLICK HERE**

Below information was gathered from the prior NFRAP update completed in 10/2013 update:

ACTION	START DATE	COMPLETION DATE	RESPONSIBILITY
PA - PRELIMINARY ASSESSMENT	**9/1/1986**	**9/1/1987**	**STATE (FUND)**
DS - DISCOVERY	**NOT REPORTED**	**4/1/1985**	**STATE (FUND)**
VS - ARCHIVE SITE	**NOT REPORTED**	**9/1/1987**	**EPA IN-HOUSE**

ACTION DESCRIPTIONS

PA - (PRELIMINARY ASSESSMENT) - COLLECTION OF DIVERSE EXISTING INFORMATION ABOUT THE SOURCE AND NATURE OF THE SITE HAZARD. IT IS EPA POLICY TO COMPLETE THE PRELIMINARY ASSESSMENT WITHIN ONE YEAR OF SITE DISCOVERY.

DS - (DISCOVERY) - THE PROCESS BY WHICH A POTENTIAL HAZARDOUS WASTE SITE IS BROUGHT TO THE ATTENTION OF THE EPA. THE PROCESS CAN OCCUR THROUGH THE USE OF SEVERAL MECHANISMS SUCH AS A PHONE CALL OR REFERRAL BY ANOTHER GOVERNMENT AGENCY.

VS - (ARCHIVE SITE) - THE DECISION IS MADE THAT NO FURTHER ACTIVITY IS PLANNED AT THE SITE.

Back to Report Summary

Spills, Leaks, Investigation & Cleanup Recovery Listing (SLIC)

MAP ID# 11

Distance from Property: 0.069 mi. (364 ft.) SW
Elevation: 33 ft. (Equal to TP)

INCIDENT INFORMATION

GLOBAL ID#:	**2-43S0025**
CASE NUMBER:	**NOT REPORTED**
NAME:	**DURA BOND**
ADDRESS:	**3201 ASH ST**
	PALO ALTO CA
FACILITY TYPE:	**NOT REPORTED**
LEAD AGENCY:	**SAN FRANCISCO BAY RWQCB (REGION 2)**
LEAD AGENCY CONTACT:	**NOT REPORTED**
LEAD AGENCY CASE #:	**NOT REPORTED**
SUBSTANCE RELEASED:	**SOIL CONTAMINATION PAST WASTE IMPOU**
STATUS:	**NOT REPORTED**
RESPONSIBLE PARTY:	**NOT REPORTED**

Back to Report Summary

MAP ID# 12

Distance from Property: 0.072 mi. (380 ft.) SW
Elevation: 34 ft. (Higher than TP)

FACILITY INFORMATION

GLOBAL ID: **SL18361781**
URL LINK: CLICK HERE
BUSINESS NAME: **DURA-BOND BEARING**
ADDRESS: **370 PORTAGE AVENUE**
PALO ALTO, CA
COUNTY: **SANTA CLARA**

FACILITY DETAILS

CASE TYPE: **NON-CASE INFORMATION**
CASE NUMBER: **NOT REPORTED**
STATUS: **INFORMATIONAL ITEM 8/1/1997**
POTENTIAL CONTAMINATION:
NOT REPORTED
POTENTIAL MEDIA AFFECTED:
NOT REPORTED
DISADVANTAGED COMMUNITY:
NO
SEVERELY DISADVANTAGED COMMUNITY:
NO
SITE HISTORY:
NOT REPORTED

STATUS HISTORY

STATUS:	DATE:
INFORMATIONAL ITEM	**08/01/1997**
OPEN - CASE BEGIN DATE	**08/01/1997**
OPEN - INACTIVE	**08/01/97**

CONTACT DETAILS

ORGANIZATION: **SANTA CLARA COUNTY LOP**
ADDRESS: **1555 BERGER DRIVE, SUITE 300**
CITY: **SAN JOSE**
CONTACT NAME: **AARON COSTA**
CONTACT TYPE: **LOCAL AGENCY CASEWORKER**
CONTACT PHONE: **4089181954**
EMAIL: **AARON.COSTA@CEP.SCCGOV.ORG**

Back to Report Summary

Resource Conservation & Recovery Act - Non-Generator (RCRANGR09)

MAP ID# 12

Distance from Property: 0.072 mi. (380 ft.) SW
Elevation: 34 ft. (Higher than TP)

FACILITY INFORMATION

EPA ID#: **CAD982510208**
NAME: **VARIAN ASSOCIATES, INC**
ADDRESS: **380 PORTAGE AVE**
PALO ALTO, CA 94303
CONTACT NAME: **DENISE KATO**
CONTACT ADDRESS: **611 HANSEN WAY, MS-A129**
PALO ALTO CA 94303
CONTACT PHONE: **650-424-5812**
NON-NOTIFIER: **NOT A NON-NOTIFIER**
DATE RECEIVED BY AGENCY: **11/22/1999**

OWNER TYPE: **PRIVATE**
OWNER NAME: **WSJ PROPERTIES**
OPERATOR TYPE: **NOT REPORTED**
OPERATOR NAME: **NOT REPORTED**

CERTIFICATION **- NO CERTIFICATION REPORTED -**
INDUSTRY CLASSIFICATION (NAICS) **- NO NAICS INFORMATION REPORTED -**

CURRENT ACTIVITY INFORMATION

GENERATOR STATUS: **NON-GENERATOR** LAST UPDATED DATE: **06/27/2002**
SUBJECT TO CORRECTIVE ACTION UNIVERSE: **NO**
TDSFs POTENTIALLY SUBJECT TO CORRECTIVE ACTION UNDER 3004 (u)/(v) UNIVERSE: **NO**
TDSFs ONLY SUBJECT TO CORRECTIVE ACTION UNDER DISCRETIONARY AUTHORITIES UNIVERSE: **NO**
NON TSDFs WHERE RCRA CORRECTIVE ACTION HAS BEEN IMPOSED UNIVERSE: **NO**
CORRECTIVE ACTION WORKLOAD UNIVERSE: **NO**

IMPORTER: **NO**
MIXED WASTE GENERATOR: **NO**
RECYCLER: **NO**
TRANSPORTER: **NO**
ONSITE BURNER EXEMPTION: **NO**
FURNACE EXEMPTION: **NO**
USED OIL REFINER: **NO**
USED OIL TRANSFER FACILITY: **NO**

UNDERGROUND INJECTION: **NO**
UNIVERSAL WASTE DESTINATION FACILITY: **NO**
TRANSFER FACILITY: **NO**
USED OIL FUEL BURNER: **NO**
USED OIL PROCESSOR: **NO**
USED OIL FUEL MARKETER TO BURNER: **NO**
SPECIFICATION USED OIL MARKETER: **NO**
USED OIL TRANSPORTER: **NO**

COMPLIANCE, MONITORING AND ENFORCEMENT INFORMATION

EVALUATIONS **- NO EVALUATIONS REPORTED -**
VIOLATIONS **- NO VIOLATIONS REPORTED -**
ENFORCEMENTS **- NO ENFORCEMENTS REPORTED -**

HAZARDOUS WASTE

- NO HAZARDOUS WASTE INFORMATION REPORTED -
UNIVERSAL WASTE **- NO UNIVERSAL WASTE REPORTED -**
CORRECTIVE ACTION AREA **- NO CORRECTIVE ACTION AREA INFORMATION REPORTED -**

CORRECTIVE ACTION EVENT

NO CORRECTIVE ACTION EVENT(S) REPORTED

Back to Report Summary

Resource Conservation & Recovery Act - Non-Generator (RCRANGR09)

MAP ID# 12

Distance from Property: 0.072 mi. (380 ft.) SW
Elevation: 34 ft. (Higher than TP)

FACILITY INFORMATION

EPA ID#: **CAL000423385**
NAME: **PLAYGROUND GLOBAL LLC**
ADDRESS: **380 PORTAGE AVE**
PALO ALTO, CA 94306
CONTACT NAME: **RICHARD BECKER**
CONTACT ADDRESS: **380 PORTAGE AVE**
PALO ALTO CA 94306
CONTACT PHONE: **408-636-3275**
NON-NOTIFIER: **NOT A NON-NOTIFIER**
DATE RECEIVED BY AGENCY: **12/27/2016**

OWNER TYPE: **OTHER**
OWNER NAME: **PLAYGROUND GLOBAL LLC**
OPERATOR TYPE: **OTHER**
OPERATOR NAME: **RICHARD BECKER**

CERTIFICATION

CERTIFICATION NAME:	CERTIFICATION TITLE:	CERTIFICATION SIGNED DATE:
DTSC HQ	**CA-DTSC**	**11/19/2018**

INDUSTRY CLASSIFICATION (NAICS)

56299 - ALL OTHER WASTE MANAGEMENT SERVICES

CURRENT ACTIVITY INFORMATION

GENERATOR STATUS: **NON-GENERATOR** LAST UPDATED DATE: **11/20/2018**
SUBJECT TO CORRECTIVE ACTION UNIVERSE: **NO**
TDSFs POTENTIALLY SUBJECT TO CORRECTIVE ACTION UNDER 3004 (u)/(v) UNIVERSE: **NO**
TDSFs ONLY SUBJECT TO CORRECTIVE ACTION UNDER DISCRETIONARY AUTHORITIES UNIVERSE: **NO**
NON TSDFs WHERE RCRA CORRECTIVE ACTION HAS BEEN IMPOSED UNIVERSE: **NO**
CORRECTIVE ACTION WORKLOAD UNIVERSE: **NO**

IMPORTER: **NO**
MIXED WASTE GENERATOR: **NO**
RECYCLER: **NO**
TRANSPORTER: **NO**
ONSITE BURNER EXEMPTION: **NO**
FURNACE EXEMPTION: **NO**
USED OIL REFINER: **NO**
USED OIL TRANSFER FACILITY: **NO**
UNDERGROUND INJECTION: **NO**
UNIVERSAL WASTE DESTINATION FACILITY: **YES**
TRANSFER FACILITY: **NO**
USED OIL FUEL BURNER: **NO**
USED OIL PROCESSOR: **NO**
USED OIL FUEL MARKETER TO BURNER: **NO**
SPECIFICATION USED OIL MARKETER: **NO**
USED OIL TRANSPORTER: **NO**

COMPLIANCE, MONITORING AND ENFORCEMENT INFORMATION

EVALUATIONS **- NO EVALUATIONS REPORTED -**
VIOLATIONS **- NO VIOLATIONS REPORTED -**
ENFORCEMENTS **- NO ENFORCEMENTS REPORTED -**

HAZARDOUS WASTE

- NO HAZARDOUS WASTE INFORMATION REPORTED -

UNIVERSAL WASTE **- NO UNIVERSAL WASTE REPORTED -**

CORRECTIVE ACTION AREA **- NO CORRECTIVE ACTION AREA INFORMATION REPORTED -**

CORRECTIVE ACTION EVENT

Resource Conservation & Recovery Act - Non-Generator (RCRANGR09)

NO CORRECTIVE ACTION EVENT(S) REPORTED

Back to Report Summary

Spills, Leaks, Investigation & Cleanup Recovery Listing (SLIC)

MAP ID# 12

Distance from Property: 0.072 mi. (380 ft.) SW
Elevation: 34 ft. (Higher than TP)

INCIDENT INFORMATION

GLOBAL ID#:	**2-43S0562**
CASE NUMBER:	**NOT REPORTED**
NAME:	**DURA BOND FACILITY FORMER**
ADDRESS:	**370 PORTAGE AVE**
	PALO ALTO CA
FACILITY TYPE:	**NOT REPORTED**
LEAD AGENCY:	**SAN FRANCISCO BAY RWQCB (REGION 2)**
LEAD AGENCY CONTACT:	**NOT REPORTED**
LEAD AGENCY CASE #:	**NOT REPORTED**
SUBSTANCE RELEASED:	**NOT REPORTED**
STATUS:	**NOT REPORTED**
RESPONSIBLE PARTY:	**NOT REPORTED**

Back to Report Summary

Spills, Leaks, Investigation & Cleanup Recovery Listing (SLIC)

MAP ID# 12

Distance from Property: 0.072 mi. (380 ft.) SW
Elevation: 34 ft. (Higher than TP)

INCIDENT INFORMATION

GLOBAL ID#:	**SL18361781**
CASE NUMBER:	**NOT REPORTED**
NAME:	**DURA-BOND BEARING**
ADDRESS:	**370 PORTAGE AVENUE**
	PALO ALTO CA
FACILITY TYPE:	**NOT REPORTED**
LEAD AGENCY:	**NOT REPORTED**
LEAD AGENCY CONTACT:	**NOT REPORTED**
LEAD AGENCY CASE #:	**NOT REPORTED**
SUBSTANCE RELEASED:	**NOT REPORTED**
STATUS:	**NOT REPORTED**
RESPONSIBLE PARTY:	**DURA-BOND BEARING CO**

Back to Report Summary

Resource Conservation & Recovery Act - Generator (RCRAGR09)

MAP ID# 13

Distance from Property: 0.072 mi. (380 ft.) SSW
Elevation: 33 ft. (Equal to TP)

FACILITY INFORMATION

EPA ID#: **CAD983600206**
NAME: **SAY RAY**
ADDRESS: **3251 ASH ST**
PALO ALTO, CA 94306
CONTACT NAME: **PETER D LONGANECKER**
CONTACT ADDRESS: **3251 ASH ST**
PALO ALTO CA 94306
CONTACT PHONE: **415-493-8480**
NON-NOTIFIER: **NOT A NON-NOTIFIER**
DATE RECEIVED BY AGENCY: **03/01/2018**

OWNER TYPE: **PRIVATE**
OWNER NAME: **SARAH LONGANECKER**
OPERATOR TYPE: **PRIVATE**
OPERATOR NAME: **PETER LONGANECKER**

CERTIFICATION

CERTIFICATION NAME:	CERTIFICATION TITLE:	CERTIFICATION SIGNED DATE:
SARAH H LONGANECKER	**PROPERTY OWNER**	**02/09/2018**
PETER LONGANECKER	**PRESIDENT**	**03/01/2018**

INDUSTRY CLASSIFICATION (NAICS)
811111 - GENERAL AUTOMOTIVE REPAIR

CURRENT ACTIVITY INFORMATION

GENERATOR STATUS: **SMALL QUANTITY GENERATOR** LAST UPDATED DATE: **03/05/2018**
SUBJECT TO CORRECTIVE ACTION UNIVERSE: **NO**
TDSFs POTENTIALLY SUBJECT TO CORRECTIVE ACTION UNDER 3004 (u)/(v) UNIVERSE: **NO**
TDSFs ONLY SUBJECT TO CORRECTIVE ACTION UNDER DISCRETIONARY AUTHORITIES UNIVERSE: **NO**
NON TSDFs WHERE RCRA CORRECTIVE ACTION HAS BEEN IMPOSED UNIVERSE: **NO**
CORRECTIVE ACTION WORKLOAD UNIVERSE: **NO**

IMPORTER: **NO**
MIXED WASTE GENERATOR: **NO**
RECYCLER: **NO**
TRANSPORTER: **NO**
ONSITE BURNER EXEMPTION: **NO**
FURNACE EXEMPTION: **NO**
USED OIL REFINER: **NO**
USED OIL TRANSFER FACILITY: **NO**

UNDERGROUND INJECTION: **NO**
UNIVERSAL WASTE DESTINATION FACILITY: **NO**
TRANSFER FACILITY: **NO**
USED OIL FUEL BURNER: **NO**
USED OIL PROCESSOR: **NO**
USED OIL FUEL MARKETER TO BURNER: **NO**
SPECIFICATION USED OIL MARKETER: **NO**
USED OIL TRANSPORTER: **NO**

COMPLIANCE, MONITORING AND ENFORCEMENT INFORMATION

EVALUATIONS **- NO EVALUATIONS REPORTED -**
VIOLATIONS **- NO VIOLATIONS REPORTED -**
ENFORCEMENTS **- NO ENFORCEMENTS REPORTED -**

HAZARDOUS WASTE

133
223
D001 **IGNITABLE WASTE**
D002 **CORROSIVE WASTE**

D003 **REACTIVE WASTE**

D008 **LEAD**

UNIVERSAL WASTE **- NO UNIVERSAL WASTE REPORTED -**

CORRECTIVE ACTION AREA **- NO CORRECTIVE ACTION AREA INFORMATION REPORTED -**

CORRECTIVE ACTION EVENT

NO CORRECTIVE ACTION EVENT(S) REPORTED

Back to Report Summary

Above Ground Storage Tanks (ABST)

MAP ID# 14

Distance from Property: 0.117 mi. (618 ft.) NW
Elevation: 31 ft. (Lower than TP)

FACILITY INFORMATION

GEOSEARCH ID: **70526**
SITE ID: **70526**
FACILITY NAME: **SPRINT POP**
ADDRESS: **101 PAGE MILL RD**
PALO ALTO, CA 94306
COUNTY: **NOT REPORTED**
FACILITY LINK: *Click Here*

FACILITY DETAILS

EI ID: **10079263**
EI DESCRIPTION: **ABOVEGROUND PETROLEUM STORAGE**

CHEMICAL DETAILS

NONE REPORTED

ENFORCEMENT DETAILS

NONE REPORTED

EVALUATION DETAILS

EVALUATION DATE: **2/18/2014**
VIOLATIONS FOUND?: **NO**
GENERAL TYPE: **COMPLIANCE EVALUATION INSPECTION**
EVALUATION TYPE:
EVALUATION DIVISION: **PALO ALTO CITY FIRE DEPARTMENT**
EVALUATION PROGRAM: **HMRRP**
EVALUATION SOURCE: **CERS**

EVALUATION DATE: **2/18/2014**
VIOLATIONS FOUND?: **NO**
GENERAL TYPE: **COMPLIANCE EVALUATION INSPECTION**
EVALUATION TYPE:
EVALUATION DIVISION: **PALO ALTO CITY FIRE DEPARTMENT**
EVALUATION PROGRAM: **HMRRP**
EVALUATION SOURCE: **CERS**

VIOLATION DETAILS

NONE REPORTED

AFFILIATION DETAILS

ENTITY NAME: **SANTA CLARA COUNTY ENVIRONMENTAL HEALTH**
ENTITY TITLE: **NOT REPORTED**
AFFILIATION ADDRESS: **1555 BERGER DRIVE, SUITE 300**
SAN JOSE, CA 95112-2716
AFFILIATION DESCRIPTION: **CUPA DISTRICT**
ENTITY PHONE NUMBER: **(408) 918-3400**

ENTITY NAME: **NORA GALINDO**
ENTITY TITLE: **NOT REPORTED**
AFFILIATION ADDRESS: **330 S.VALLEY VIEW**
LAS VEGAS, NV 89107
AFFILIATION DESCRIPTION: **ENVIRONMENTAL CONTACT**
ENTITY PHONE NUMBER: **NOT REPORTED**

ENTITY NAME: **SPRINT COMMUNICATIONS CO. LLP**
ENTITY TITLE: **NOT REPORTED**
AFFILIATION ADDRESS: **NOT REPORTED**
OVERLAND PARK, KS 66251
AFFILIATION DESCRIPTION: **LEGAL OWNER**
ENTITY PHONE NUMBER: **(913) 315-8625**

ENTITY NAME: **SPRINT COMMUNICATION**
ENTITY TITLE: **NOT REPORTED**
AFFILIATION ADDRESS: **NOT REPORTED**
NOT REPORTED, NOT REPORTED NOT REPORTED
AFFILIATION DESCRIPTION: **OPERATOR**
ENTITY PHONE NUMBER: **(800) 230-2127**

ENTITY NAME: **SPRINT UNITED MANAGEMENT CO.**
ENTITY TITLE: **NOT REPORTED**
AFFILIATION ADDRESS: **NOT REPORTED**
NOT REPORTED, NOT REPORTED NOT REPORTED
AFFILIATION DESCRIPTION: **PARENT CORPORATION**
ENTITY PHONE NUMBER: **NOT REPORTED**

Back to Report Summary

Resource Conservation & Recovery Act - Generator (RCRAGR09)

MAP ID# 14

Distance from Property: 0.090 mi. (475 ft.) NW
Elevation: 31 ft. (Lower than TP)

FACILITY INFORMATION

EPA ID#: **CAD981394265**
NAME: **BIX**
ADDRESS: **2891 PARK BLVD**
PALO ALTO, CA 94306
CONTACT NAME: **NOT REPORTED**
CONTACT ADDRESS: **2891 PARK BLVD**
PALO ALTO CA 94306
CONTACT PHONE: **NOT REPORTED**
NON-NOTIFIER: **NOT A NON-NOTIFIER**
DATE RECEIVED BY AGENCY: **09/01/1996**

OWNER TYPE: **PRIVATE**
OWNER NAME: **RICHARD DENNISON**
OPERATOR TYPE: **PRIVATE**
OPERATOR NAME: **NOT REQUIRED**

CERTIFICATION **- NO CERTIFICATION REPORTED -**
INDUSTRY CLASSIFICATION (NAICS) **- NO NAICS INFORMATION REPORTED -**

CURRENT ACTIVITY INFORMATION

GENERATOR STATUS: **SMALL QUANTITY GENERATOR** LAST UPDATED DATE: **09/15/2000**
SUBJECT TO CORRECTIVE ACTION UNIVERSE: **NO**
TDSFs POTENTIALLY SUBJECT TO CORRECTIVE ACTION UNDER 3004 (u)/(v) UNIVERSE: **NO**
TDSFs ONLY SUBJECT TO CORRECTIVE ACTION UNDER DISCRETIONARY AUTHORITIES UNIVERSE: **NO**
NON TSDFs WHERE RCRA CORRECTIVE ACTION HAS BEEN IMPOSED UNIVERSE: **NO**
CORRECTIVE ACTION WORKLOAD UNIVERSE: **NO**

IMPORTER: **NO**
MIXED WASTE GENERATOR: **NO**
RECYCLER: **NO**
TRANSPORTER: **NO**
ONSITE BURNER EXEMPTION: **NO**
FURNACE EXEMPTION: **NO**
USED OIL REFINER: **NO**
USED OIL TRANSFER FACILITY: **NO**

UNDERGROUND INJECTION: **NO**
UNIVERSAL WASTE DESTINATION FACILITY: **NO**
TRANSFER FACILITY: **NO**
USED OIL FUEL BURNER: **NO**
USED OIL PROCESSOR: **NO**
USED OIL FUEL MARKETER TO BURNER: **NO**
SPECIFICATION USED OIL MARKETER: **NO**
USED OIL TRANSPORTER: **NO**

COMPLIANCE, MONITORING AND ENFORCEMENT INFORMATION

EVALUATIONS **- NO EVALUATIONS REPORTED -**
VIOLATIONS **- NO VIOLATIONS REPORTED -**
ENFORCEMENTS **- NO ENFORCEMENTS REPORTED -**

HAZARDOUS WASTE

- NO HAZARDOUS WASTE INFORMATION REPORTED -
UNIVERSAL WASTE **- NO UNIVERSAL WASTE REPORTED -**
CORRECTIVE ACTION AREA **- NO CORRECTIVE ACTION AREA INFORMATION REPORTED -**

CORRECTIVE ACTION EVENT

NO CORRECTIVE ACTION EVENT(S) REPORTED

Back to Report Summary

MAP ID# 15

Distance from Property: 0.095 mi. (502 ft.) SE
Elevation: 33 ft. (Equal to TP)

PACIFIC BELL (P1-052), 3350 BIRCH ST, PALO ALTO, CA 94306
UNIQUE ID: **000206B5**

*** D11 ***

PAGE 3296 STATE WATER RESOURCES CONTROL BOARD 06/01/88
HAZARDOUS SUBSTANCE STORAGE CONTAINER INFORMATION FOR SANTA CLARA COUNTY
CONTAINER TYPES: 1,2,3,4,5
(1=FARM MOTOR VEHICLE FUEL TANKS, 2=ALL OTHER PRODUCT TANKS, 3=WASTE TANKS, 4=SUMPS, 5=PITS, PONDS, LAGOONS & OTHERS)

I OWNER
PACIFIC BELL
370 THIRD STREET SAN FRANCISCO CA 94107

II FACILITY

	MAILING ADDRESS	DEALER/FOREMAN/SUPERVISOR	TYPE OF BUSINESS
PACIFIC BELL (P1-052)	TOWNSHIP/RANGE/SECTION	TELEPHONE	NO. OF CONTAINERS
3350 BIRCH ST.			
PALO ALTO CA 94306	370 THIRD STREET, ROOM 600G	E.J. KOEHLER	SIC 4800
	SAN FRANCISCO CA 94107		
CROSS STREET :		(415) 542-6758	1
EL CAMINO			

III 24-HR. CONTACT PERSON / TELEPHONE
DAY. EMERGENCY CONTROL CENTER (415) 542-4601 NIGHT: SAME ( ) -

********** OWNER ASSIGNED CONTAINER NUMBER: P-69-10K ********** STATE BOARD ASSIGNED CONTAINER ID NUMBER: 00000036909001 **********

IV DESCRIPTION
A. CONTAINER TYPE : TANK
B. MANUFACTURER/YR OF MFG: /1969
C. YEAR INSTALLED : 1969
D. CAPACITY (GALLONS) : 10,000
E. REPAIRS : UNKN IF YES WHEN :
F. CURRENTLY USED : YES IF NO, YEAR OF LAST USE:
G. STORES : PRODUCT
H. MOTOR VEHICLE FUEL/WASTE OIL : YES CONTAINS: DIESEL

IS CONTAINER LOCATED ON A FARM : NO

V CONTAINER CONSTRUCTION
A. THICKNESS:
B. VAULTING: NON-VAULTED C. WALLING: WRAPPED
D. MATERIAL : CARBON STEEL
E. LINING : UNKNOWN
F. WRAPPING : UNKNOWN

VI PIPING
A. ABOVEGROUND PIPING :
B. UNDERGROUND PIPING : SUCTION
C. REPAIRS : UNKN IF YES, YEAR OF MOST RECENT REPAIR:

VII LEAK DETECTION
VISUAL

URE TEST COMPOSITION OF SUBSTANCES CURRENTLY STORED IN CONTAINER
12034 DIESEL MOTOR VEHICLE FUEL

*** E11 ***

PACIFIC BELL (P1-052), 3350 BIRCH ST, PALO ALTO, CA 94306
UNIQUE ID: **000206B5**

--- F11 ---

PAGE 3297 STATE WATER RESOURCES CONTROL BOARD 06/01/88
HAZARDOUS SUBSTANCE STORAGE CONTAINER INFORMATION FOR SANTA CLARA COUNTY
CONTAINER TYPES: 1,2,3,4,5
(1=FARM MOTOR VEHICLE FUEL TANKS, 2=ALL OTHER PRODUCT TANKS, 3=WASTE TANKS, 4=SUMPS, 5=PITS, PONDS, LAGOONS & OTHERS)

********** OWNER ASSIGNED CONTAINER NUMBER: 1 ********** STATE BOARD ASSIGNED CONTAINER ID NUMBER: 00000036909002 **********

IV DESCRIPTION
A. CONTAINER TYPE : TANK
B. MANUFACTURER/YR OF MFG:
C. YEAR INSTALLED : 1969
D. CAPACITY (GALLONS) : 10,000
E. REPAIRS : UNKN IF YES WHEN :
F. CURRENTLY USED : YES IF NO, YEAR OF LAST USE:
G. STORES : PRODUCT
H. MOTOR VEHICLE FUEL/WASTE OIL : YES CONTAINS: DIESEL

IS CONTAINER LOCATED ON A FARM : NO

V CONTAINER CONSTRUCTION
A. THICKNESS:
B. VAULTING: NON-VAULTED
C. WALLING: WRAPPED
D. MATERIAL : CARBON STEEL
E. LINING : UNKNOWN
F. WRAPPING : UNKNOWN

VI PIPING
A. ABOVEGROUND PIPING :
B. UNDERGROUND PIPING :
C. REPAIRS : UNKN IF YES, YEAR OF MOST RECENT REPAIR:

VII LEAK DETECTION
NONE P

URE TEST COMPOSITION OF SUBSTANCES CURRENTLY STORED IN CONTAINER
12034 DIESEL, MOTOR VEHICLE FUEL

*** F11 ***

Back to Report Summary

Resource Conservation & Recovery Act - Generator (RCRAGR09)

MAP ID# 15

Distance from Property: 0.095 mi. (502 ft.) SE
Elevation: 33 ft. (Equal to TP)

FACILITY INFORMATION

EPA ID#: **CAT080019896**

NAME: **PACIFIC BELL**

ADDRESS: **3350 BIRCH STREET**
PALO ALTO, CA 94306

CONTACT NAME: **ENVIRONMENTAL MANAGER**

CONTACT ADDRESS: **2 NORTH SECOND ST ROOM 1125**
SAN JOSE CA 95113

CONTACT PHONE: **408-491-6029**

NON-NOTIFIER: **NOT A NON-NOTIFIER**

DATE RECEIVED BY AGENCY: **01/19/1981**

OWNER TYPE: **PRIVATE**

OWNER NAME: **THE PACIFIC TELEPHONE AND TELEGRAPH CO**

OPERATOR TYPE: **NOT REPORTED**

OPERATOR NAME: **NOT REPORTED**

CERTIFICATION

CERTIFICATION NAME:	CERTIFICATION TITLE:	CERTIFICATION SIGNED DATE:
DTSC HQ	**CA-DTSC**	**06/20/2019**

INDUSTRY CLASSIFICATION (NAICS)

51331 - WIRED TELECOMMUNICATIONS CARRIERS

51334 - SATELLITE TELECOMMUNICATIONS

CURRENT ACTIVITY INFORMATION

GENERATOR STATUS: **LARGE QUANTITY GENERATOR** LAST UPDATED DATE: **06/27/2002**

SUBJECT TO CORRECTIVE ACTION UNIVERSE: **NO**

TDSFs POTENTIALLY SUBJECT TO CORRECTIVE ACTION UNDER 3004 (u)/(v) UNIVERSE: **NO**

TDSFs ONLY SUBJECT TO CORRECTIVE ACTION UNDER DISCRETIONARY AUTHORITIES UNIVERSE: **NO**

NON TSDFs WHERE RCRA CORRECTIVE ACTION HAS BEEN IMPOSED UNIVERSE: **NO**

CORRECTIVE ACTION WORKLOAD UNIVERSE: **NO**

IMPORTER: **NO**

MIXED WASTE GENERATOR: **NO**

RECYCLER: **NO**

TRANSPORTER: **YES**

ONSITE BURNER EXEMPTION: **NO**

FURNACE EXEMPTION: **NO**

USED OIL REFINER: **NO**

USED OIL TRANSFER FACILITY: **NO**

UNDERGROUND INJECTION: **NO**

UNIVERSAL WASTE DESTINATION FACILITY: **NO**

TRANSFER FACILITY: **NO**

USED OIL FUEL BURNER: **NO**

USED OIL PROCESSOR: **NO**

USED OIL FUEL MARKETER TO BURNER: **NO**

SPECIFICATION USED OIL MARKETER: **NO**

USED OIL TRANSPORTER: **NO**

COMPLIANCE, MONITORING AND ENFORCEMENT INFORMATION

EVALUATIONS **- NO EVALUATIONS REPORTED -**

VIOLATIONS **- NO VIOLATIONS REPORTED -**

ENFORCEMENTS **- NO ENFORCEMENTS REPORTED -**

HAZARDOUS WASTE

- NO HAZARDOUS WASTE INFORMATION REPORTED -

UNIVERSAL WASTE **- NO UNIVERSAL WASTE REPORTED -**

CORRECTIVE ACTION AREA **- NO CORRECTIVE ACTION AREA INFORMATION REPORTED -**

CORRECTIVE ACTION EVENT

NO CORRECTIVE ACTION EVENT(S) REPORTED

Back to Report Summary

MAP ID# 15

Distance from Property: 0.095 mi. (502 ft.) SE
Elevation: 33 ft. (Equal to TP)

FACILITY INFORMATION

FACILITY #: **36909**
BOE: **44-031914**
NAME: **PACIFIC BELL (P1-052)**
ADDRESS: **3350 BIRCH ST**
PALO ALTO, CA 94303

STATUS: **ACTIVE**
JURISDICTION: **CITY OF PALO ALTO**
AGENCY: **FIRE DEPARTMENT**

TANK INFORMATION

TANK #: **000002**
INSTALLED: **NOT REPORTED**
TANK USE: **M.V. FUEL**
CONTENT: **DIESEL**

CAPACITY: **10000**
REMOVED: **NOT REPORTED**
STORAGE TYPE: **PRODUCT**
CONTAINMENT: **NOT REPORTED**

TANK #: **000003**
INSTALLED: **NOT REPORTED**
TANK USE: **M.V. FUEL**
CONTENT: **DIESEL**

CAPACITY: **10000**
REMOVED: **NOT REPORTED**
STORAGE TYPE: **PRODUCT**
CONTAINMENT: **NOT REPORTED**

Back to Report Summary

MAP ID# 15

Distance from Property: 0.095 mi. (502 ft.) SE
Elevation: 33 ft. (Equal to TP)

FACILITY INFORMATION

FACILITY #: **36909**
BOE: **44-031914**
NAME: **PACIFIC BELL (P1-052)**
ADDRESS: **3350 BIRCH ST**
PALO ALTO, CA 94306

STATUS: **INACTIVE**
JURISDICTION: **CITY OF PALO ALTO**
AGENCY: **FIRE DEPARTMENT**

TANK INFORMATION

TANK #: **000001**
INSTALLED: **01-01-69**
TANK USE: **M.V. FUEL**
CONTENT: **DIESEL**

CAPACITY: **10000**
REMOVED: **10-10-93**
STORAGE TYPE: **PRODUCT**
CONTAINMENT: **BARE STEEL**

Back to Report Summary

Underground Storage Tanks (USTCUPA)

MAP ID# 15

Distance from Property: 0.095 mi. (502 ft.) SE
Elevation: 33 ft. (Equal to TP)

FACILITY INFORMATION

GEOSEARCH ID: **2016512292** FACILITY ID: **43-006-001349**

NAME: **AT&T CALIFORNIA - P1052**

ADDRESS: **3350 BIRCH ST**
PALO ALTO, CA 94306

COUNTY: **SANTA CLARA**

FACILITY DETAILS

OTHER FACILITY NAME(S) LISTED FOR THIS SITE: **AT&T CALIFORNIA - P1052**

PERMIT AGENCY: **SANTA CLARA COUNTY ENVIRONMENTAL HEALTH**

FACILITY DETAILS LINK: *Click Here*

Back to Report Summary

MAP ID# 16

Distance from Property: 0.100 mi. (528 ft.) WNW
Elevation: 30 ft. (Lower than TP)

FACILITY INFORMATION

GEOSEARCH ID: **41348**
UNIQUE IDENTIFIER FOR THIS SPECIFIC STATION: **41348**
STATION NAME: **AOL PARKING GARAGE**
ADDRESS: **395 PAGE MILL RD**
PALO ALTO, CA 94306
INTERSECTION DIRECTIONS: **NOT REPORTED**
STATION PHONE: **NOT REPORTED**
STATION CURRENT STATUS: **OPEN: THE STATION IS OPEN.**
TYPE OF ALTERNATIVE FUEL THE STATION PROVIDES: **NOT REPORTED**
OWNER TYPE: **PRIVATELY OWNED**
FEDERAL AGANCY ID: **NOT REPORTED**
FEDERAL AGENCY NAME: **NOT REPORTED**
DATE THAT THE STATION BEGAN OFFERING THE FUEL: **9/1/2011**
DATE THE STATION'S DETAILS WERE LAST CONFIRMED: **10/4/2016**
TIME THE STATION'S DETAILS WERE LAST UPDATED (ISO 8601 FORMAT).: **2017-01-18 02:46:30 UTC**

Back to Report Summary

MAP ID# 16

Distance from Property: 0.099 mi. (523 ft.) WNW
Elevation: 30 ft. (Lower than TP)

FACILITY INFORMATION

GLOBAL ID: **SL18321741**
URL LINK: CLICK HERE
BUSINESS NAME: **HEWLETT PACKARD COMPANY**
ADDRESS: **395 PAGE MILL RD**
PALO ALTO, CA 94306-2024
COUNTY: **SANTA CLARA**

FACILITY DETAILS

CASE TYPE: **CLEANUP PROGRAM SITE**
CASE NUMBER: **43S0053**
STATUS: **OPEN - REMEDIATION 1/1/2015**
POTENTIAL CONTAMINATION:
1,1,1-TRICHLOROETHANE (TCA), OTHER CHLORINATED HYDROCARBONS, TETRACHLOROETHYLENE (PCE), TRICHLOROETHYLENE (TCE)
POTENTIAL MEDIA AFFECTED:
OTHER GROUNDWATER (USES OTHER THAN DRINKING WATER), SOIL
DISADVANTAGED COMMUNITY:
NO
SEVERELY DISADVANTAGED COMMUNITY:
NO
SITE HISTORY:
THIS SITE IS PART OF THE COE STUDY AREA - BOUNDED BY CALIFORNIA, OLIVE, AND EMERSON STREETS - THAT INCLUDES HP 640 PMR (MSCA SITE) AND VARIAN 601 CALIFORNIA. AS PART OF THE DUAL PHASE EXTRACTION (DPE) SYSTEM GWET WAS SHUT DOWN AFTER REACHING ASYMPTOTIC GROUNDWATER-CVOC LEVELS IN 2001. SUBSEQUENT IN-SITU CHEMICAL OXIDATION (ISCO) BEGAN LATE 2007 WHEN GROUNDWATER CVOC LEVELS IN WELL RW-5 WERE STILL PEAKING AT OVER 800 PARTS PER BILLION (PPB). ISCO BASELINE GROUNDWATER SAMPLING INDICATED THAT WELL OB11-2 - THAT HAD NOT BEEN SAMPLED SINCE 1997 - CONTAINED PCE AT 120,000 PPB. SUBSEQUENT ISCO INJECTIONS REDUCED PCE LEVELS BELOW 50 PPB THAT REBOUNDED TO OVER 1,000 PPB BY THE NEXT ISCO MONITORING EVENT. WHEN ELEVATED GROUNDWATER-PCE LEVELS WERE NOTED IN OB11-2, THE WATER BOARD REQUIRED A WORKPLAN TO EVALUATE POTENTIAL VAPOR INTRUSION ASSESSMENT THAT WAS REVIEWED AND APPROVED IN JANUARY 2008. THE COE SITE-WIDE IA VI HAS BEEN COMPLETED AND THERE WERE NO EXCEEDANCES OF THE INDOOR AIR ESL IN THE BREATHING ZONE.

REGULATORY ACTIVITIES

TYPE OF ACTION:	DATE:	ACTION:
OTHER	**01/01/50**	**LEAK DISCOVERY**
OTHER	**01/01/50**	**LEAK REPORTED**
OTHER	**01/01/50**	**LEAK STOPPED**
REMEDIATION	**01/01/50**	**EXCAVATION**
REMEDIATION	**01/01/50**	**PUMP & TREAT (P&T) GROUNDWATER**
REMEDIATION	**01/01/50**	**SOIL VAPOR EXTRACTION (SVE)**
ENFORCEMENT	**05/28/2020**	**ANNUAL ESTIMATION LETTER**
ENFORCEMENT	**06/28/2019**	**ANNUAL ESTIMATION LETTER**
ENFORCEMENT	**06/29/2018**	**ANNUAL ESTIMATION LETTER**
ENFORCEMENT	**07/24/2017**	**ANNUAL ESTIMATION LETTER**

TYPE OF ACTION:	DATE:	ACTION:
ENFORCEMENT	05/10/2017	TECHNICAL CORRESPONDENCE / ASSISTANCE / OTHER
ENFORCEMENT	08/30/2016	ANNUAL ESTIMATION LETTER
ENFORCEMENT	07/08/2015	ANNUAL ESTIMATION LETTER - #43S0053
REMEDIATION	01/01/2015	IN SITU BIOLOGICAL TREATMENT
ENFORCEMENT	08/12/2014	TECHNICAL CORRESPONDENCE / ASSISTANCE / OTHER
ENFORCEMENT	11/07/2013	TECHNICAL CORRESPONDENCE / ASSISTANCE / OTHER
ENFORCEMENT	08/26/2013	MEETING
ENFORCEMENT	06/28/2013	COST RECOVERY AGREEMENT
ENFORCEMENT	06/28/2013	COST RECOVERY AGREEMENT / N. OF REIMBURSEMENT
ENFORCEMENT	03/12/2013	13267 REQUIREMENT
ENFORCEMENT	03/12/2012	STAFF LETTER
ENFORCEMENT	11/01/2011	13267 REQUIREMENT
ENFORCEMENT	04/25/2011	STAFF LETTER
ENFORCEMENT	06/18/2009	TECHNICAL CORRESPONDENCE / ASSISTANCE / OTHER
ENFORCEMENT	03/23/2009	TECHNICAL CORRESPONDENCE / ASSISTANCE / OTHER
ENFORCEMENT	12/16/2008	TECHNICAL CORRESPONDENCE / ASSISTANCE / OTHER
ENFORCEMENT	03/14/2008	DEED RESTRICTION / LAND USE RESTRICTION / COVENANT
ENFORCEMENT	03/14/2006	DEED RESTRICTION / LAND USE RESTRICTION / COVENANT
RESPONSE	09/30/2003	MONITORING REPORT - QUARTERLY
RESPONSE	09/30/2002	MONITORING REPORT - QUARTERLY
RESPONSE	08/09/2002	OTHER REPORT / DOCUMENT
RESPONSE	09/30/2001	MONITORING REPORT - QUARTERLY
RESPONSE	04/13/2001	MONITORING REPORT - QUARTERLY
RESPONSE	12/19/2000	INTERIM REMEDIAL ACTION REPORT
RESPONSE	06/01/2000	UNKNOWN
REMEDIATION	01/01/1996	PUMP & TREAT (P&T) GROUNDWATER
REMEDIATION	07/12/1995	SOIL VAPOR EXTRACTION (SVE)
ENFORCEMENT	09/21/1994	CLEAN-UP AND ABATEMENT ORDER - #94-130
RESPONSE	09/21/1994	OTHER REPORT / DOCUMENT
REMEDIATION	11/01/1992	EXCAVATION
ENFORCEMENT	04/19/1985	CLEAN-UP AND ABATEMENT ORDER - #89-050
OTHER	01/01/1983	LEAK REPORTED
OTHER	01/01/1970	LEAK DISCOVERY
OTHER	01/01/1970	LEAK STOPPED

STATUS HISTORY

STATUS:	DATE:
OPEN - REMEDIATION	01/01/2015
OPEN - REMEDIATION	01/01/1989
OPEN - SITE ASSESSMENT	06/01/1986
OPEN - CASE BEGIN DATE	01/01/1983
OPEN - REMEDIATION	01/01/1983

CONTACT DETAILS

ORGANIZATION: **SANTA CLARA VALLEY WATER DISTRICT**

ADDRESS: **5750 ALMADEN EXPRESSWAY**

CITY: **SAN JOSE**
CONTACT NAME: **GEORGE COOK**
CONTACT TYPE: **LOCAL AGENCY CASEWORKER**
CONTACT PHONE: **4082652607**
EMAIL: **GCOOK@VALLEYWATER.ORG**
ORGANIZATION: **SAN FRANCISCO BAY RWQCB (REGION 2)**
ADDRESS: **1515 CLAY STREET, SUITE 1500**
CITY: **OAKLAND**
CONTACT NAME: **ROGER PAPLER**
CONTACT TYPE: **REGIONAL BOARD CASEWORKER**
CONTACT PHONE: **NOT REPORTED**
EMAIL: **ROGER.PAPLER@WATERBOARDS.CA.GOV**

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GeoTracker Cleanup Sites (CLEANUPSITES)

MAP ID# 16

Distance from Property: 0.099 mi. (523 ft.) WNW
Elevation: 30 ft. (Lower than TP)

FACILITY INFORMATION

GLOBAL ID: **T0608502399**
URL LINK: CLICK HERE
BUSINESS NAME: **HEWLETT-PACKARD**
ADDRESS: **395 PAGE MILL RD**
PALO ALTO, CA 94304
COUNTY: **SANTA CLARA**

FACILITY DETAILS

CASE TYPE: **LUST CLEANUP SITE**
CASE NUMBER: **NOT REPORTED**
STATUS: **COMPLETED - CASE CLOSED 8/2/1999**
POTENTIAL CONTAMINATION:
WASTE OIL / MOTOR / HYDRAULIC / LUBRICATING
POTENTIAL MEDIA AFFECTED:
SOIL
DISADVANTAGED COMMUNITY:
NO
SEVERELY DISADVANTAGED COMMUNITY:
NO
SITE HISTORY:
NOT REPORTED

REGULATORY ACTIVITIES

TYPE OF ACTION:	DATE:	ACTION:
OTHER	**01/01/50**	**LEAK REPORTED**
RESPONSE	**06/03/2005**	**OTHER REPORT / DOCUMENT**
OTHER	**06/23/1999**	**LEAK REPORTED**

STATUS HISTORY

STATUS:	DATE:
COMPLETED - CASE CLOSED	**08/02/1999**
OPEN - SITE ASSESSMENT	**06/03/1999**
OPEN - CASE BEGIN DATE	**05/20/1999**
OPEN - SITE ASSESSMENT	**05/20/1999**

CONTACT DETAILS

ORGANIZATION: **SANTA CLARA COUNTY LOP**
ADDRESS: **1555 BERGER DRIVE, SUITE 300**
CITY: **SAN JOSE**
CONTACT NAME: **UST CASE WORKER**
CONTACT TYPE: **LOCAL AGENCY CASEWORKER**
CONTACT PHONE: **4089183400**
EMAIL: **NOT REPORTED**
ORGANIZATION: **SAN FRANCISCO BAY RWQCB (REGION 2)**
ADDRESS: **1515 CLAY ST SUITE 1400**
CITY: **OAKLAND**

CONTACT NAME: **REGIONAL WATER BOARD**
CONTACT TYPE: **REGIONAL BOARD CASEWORKER**
CONTACT PHONE: **NOT REPORTED**
EMAIL: **NOT REPORTED**

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GeoTracker Cleanup Sites (CLEANUPSITES)

MAP ID# 16

Distance from Property: 0.099 mi. (523 ft.) WNW
Elevation: 30 ft. (Lower than TP)

FACILITY INFORMATION

GLOBAL ID: **T10000005459**
URL LINK: CLICK HERE
BUSINESS NAME: **JAY PAUL REDEVELOPMENT**
ADDRESS: **395 / 3045 PAGE MILL ROAD / PARK BOULEVARD**
PALO ALTO, CA 94303
COUNTY: **SANTA CLARA**

FACILITY DETAILS

CASE TYPE: **CLEANUP PROGRAM SITE**
CASE NUMBER: **43S1169**
STATUS: **OPEN - REMEDIATION 12/17/2013**
POTENTIAL CONTAMINATION:
TETRACHLOROETHYLENE (PCE), TRICHLOROETHYLENE (TCE)
POTENTIAL MEDIA AFFECTED:
OTHER GROUNDWATER (USES OTHER THAN DRINKING WATER)
DISADVANTAGED COMMUNITY:
NO
SEVERELY DISADVANTAGED COMMUNITY:
NO
SITE HISTORY:
NOT REPORTED

REGULATORY ACTIVITIES

TYPE OF ACTION:	DATE:	ACTION:
OTHER	**01/01/50**	**LEAK BEGAN**
OTHER	**01/01/50**	**LEAK DISCOVERY**
OTHER	**01/01/50**	**LEAK REPORTED**
OTHER	**01/01/50**	**LEAK STOPPED**
ENFORCEMENT	**11/07/2013**	**TECHNICAL CORRESPONDENCE / ASSISTANCE / OTHER**
RESPONSE	**10/31/2013**	**OTHER REPORT / DOCUMENT**
OTHER	**01/01/1990**	**LEAK STOPPED**
OTHER	**01/01/1983**	**LEAK DISCOVERY**
OTHER	**01/01/1983**	**LEAK REPORTED**
OTHER	**01/01/1970**	**LEAK BEGAN**

STATUS HISTORY

STATUS:	DATE:
OPEN - REMEDIATION	**12/17/2013**
OPEN - CASE BEGIN DATE	**01/01/1983**

CONTACT DETAILS

ORGANIZATION: **SAN FRANCISCO BAY RWQCB (REGION 2)**
ADDRESS: **1515 CLAY STREET, SUITE 1500**
CITY: **OAKLAND**
CONTACT NAME: **ROGER PAPLER**
CONTACT TYPE: **REGIONAL BOARD CASEWORKER**

CONTACT PHONE: **NOT REPORTED**

EMAIL: **ROGER.PAPLER@WATERBOARDS.CA.GOV**

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MAP ID# 16

Distance from Property: 0.099 mi. (523 ft.) WNW
Elevation: 30 ft. (Lower than TP)

SITE INFORMATION

ID #: **71002260** ASSESSOR'S PARCEL #: **132-32-047, 13232047**
FACILITY LINK: CLICK HERE
NAME: **HEWLETT-PACKARD CO. - PALO ALTO FABRICA CTR.**
ADDRESS: **395 PAGE MILL ROAD**
PALO ALTO, CA 94306
COUNTY: **SANTA CLARA**
SITE SIZE (ACRES): **9.86**
LEAD AGENCY: **NONE SPECIFIED**
DTSC PROJECT MANAGER: **NOT REPORTED**
DTSC SUPERVISOR: **MARK PIROS**
DTSC DIVISION BRANCH: **CLEANUP BERKELEY**
NPL LISTED: **NO** RESTRICTED LAND USE: **NO**
SITE TYPE: **TIERED PERMIT**
SITE TYPE DESCRIPTION
NOT REPORTED
DTSC's CURRENT INVOLVEMENT AT SITE (as of 01/ /8/7/)
REFER: RWQCB -
PAST USE/S THAT CAUSED THE CONTAMINATION
MANUFACTURING - ELECTRONIC
CONFIRMED CONTAMINANTS OF CONCERN
NONESPECIFIED - NONE SPECIFIED

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MAP ID# 16

Distance from Property: 0.099 mi. (523 ft.) WNW
Elevation: 30 ft. (Lower than TP)

SITE INFORMATION

ID #: **80001599** ASSESSOR'S PARCEL #: **132-32-047**
FACILITY LINK: CLICK HERE
NAME: **HEWLETT-PACKARD COMPANY**
ADDRESS: **395 PAGE MILL RD**
PALO ALTO, CA 94306
COUNTY: **SANTA CLARA**
SITE SIZE (ACRES): **1**
LEAD AGENCY: **RWQCB 2 - SAN FRANCISCO BAY**
DTSC PROJECT MANAGER: **NOT REPORTED**
DTSC SUPERVISOR: **REFERRED - NOT ASSIGNED**
DTSC DIVISION BRANCH: **CLEANUP BERKELEY**
NPL LISTED: **NO** RESTRICTED LAND USE: **NO**
SITE TYPE: **CORRECTIVE ACTION**
SITE TYPE DESCRIPTION
INVESTIGATION AND CLEANUP ACTIVITIES AT HAZARDOUS WASTE FACILITIES (EITHER RESOURCE CONSERVATION AND RECOVERY ACT (RCRA) OR STATE-ONLY) THAT EITHER WERE ELIGIBLE FOR A PERMIT OR RECEIVED A PERMIT, ARE CALLED CORRECTIVE ACTION.
DTSC's CURRENT INVOLVEMENT AT SITE (as of 00/ /1/1/)
REFER: RWQCB -
PAST USE/S THAT CAUSED THE CONTAMINATION
NONE SPECIFIED
CONFIRMED CONTAMINANTS OF CONCERN
NONESPECIFIED - NONE SPECIFIED

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MAP ID# 16

Distance from Property: 0.099 mi. (523 ft.) WNW
Elevation: 30 ft. (Lower than TP)

SITE INFORMATION

GEOSEARCH ID: **CAD009122557**
EPA ID: **CAD009122557**
NAME: **HEWLETT-PACKARD COMPANY**
ADDRESS: **395 PAGE MILL RD**
PALO ALTO, CA 94303
COUNTY: **SANTA CLARA**
PROJECT MANAGER: **NOT REPORTED**
DTSC PROJECT TRACKING CODE: **NOT REPORTED**
FACILITY TYPE: **HISTORICAL - NON-OPERATING**
STATUS: **CLOSED**

HAZARDOUS WASTE UNITS UNDERGOING CLOSURE

DATE: **06/10/1994**
UNIT: **SO1**
EVENT DESCRIPTION: **CLOSURE - ISSUE CLOSURE VERIFICATION**
FACILITY TYPE: **HISTORICAL - NON-OPERATING**

DATE: **06/10/1994**
UNIT: **SO1**
EVENT DESCRIPTION: **CLOSURE - CLOSURE PLAN APPROVED**
FACILITY TYPE: **HISTORICAL - NON-OPERATING**

DATE: **02/24/1994**
UNIT: **SO1**
EVENT DESCRIPTION: **CLOSURE - 1ST NOTICE OF DEFICIENCY ISSUED**
FACILITY TYPE: **HISTORICAL - NON-OPERATING**

DATE: **11/24/1993**
UNIT: **SO1**
EVENT DESCRIPTION: **CLOSURE - CLOSURE PLAN RECEIVED**
FACILITY TYPE: **HISTORICAL - NON-OPERATING**

HAZARDOUS WASTE UNITS COMPLETED ACTIVITIES

DATE: **06/10/1994**
UNIT: **NOT REPORTED**
EVENT DESCRIPTION: **NEW OPERATING PERMIT - FINAL PERMIT - WITHDRAWAL REQUEST ACKNOWLEDGED**
FACILITY TYPE: **HISTORICAL - NON-OPERATING**

DATE: **09/29/1992**
UNIT: **SO2, TO1, TO4**
EVENT DESCRIPTION: **PROTECTIVE FILER STATUS - PROTECTIVE FILER (APPROVED)**
FACILITY TYPE: **HISTORICAL - NON-OPERATING**

DATE: **11/08/1988**
UNIT: **NOT REPORTED**
EVENT DESCRIPTION: **NEW OPERATING PERMIT - APPLICATION PART B RECEIVED**
FACILITY TYPE: **HISTORICAL - NON-OPERATING**

DATE: **12/20/1985**
UNIT: **NOT REPORTED**

EVENT DESCRIPTION: **NEW OPERATING PERMIT - APPLICATION PART A RECEIVED**

FACILITY TYPE: **HISTORICAL - NON-OPERATING**

MAINTENANCE **- NO INFORMATION REPORTED -**

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Historical Cortese List (HISTCORTESE)

MAP ID# 16

Distance from Property: 0.100 mi. (528 ft.) WNW
Elevation: 30 ft. (Lower than TP)

FACILITY INFORMATION

GEOSEARCH ID: **2 438131NO1COR**
ID#: **2 438131NO1**
NAME: **SCR-HEWLETT PACKARD-395 P**
ADDRESS: **395 PAGE MILL**
PALO ALTO, CA 94306

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Leaking Underground Storage Tanks (LUST)

MAP ID# 16

Distance from Property: 0.099 mi. (523 ft.) WNW
Elevation: 30 ft. (Lower than TP)

FACILITY INFORMATION

GLOBAL ID: **T0608502399**
URL LINK: CLICK HERE
BUSINESS NAME: **HEWLETT-PACKARD**
ADDRESS: **395 PAGE MILL RD**
PALO ALTO, CA 94304
COUNTY: **SANTA CLARA**

FACILITY DETAILS

CASE TYPE: **LUST CLEANUP SITE**
CASE NUMBER: **NOT REPORTED**
STATUS: **COMPLETED - CASE CLOSED 08/02/1999**
POTENTIAL CONTAMINATION:
WASTE OIL / MOTOR / HYDRAULIC / LUBRICATING
POTENTIAL MEDIA AFFECTED:
SOIL
DISADVANTAGED COMMUNITY:
NO
SEVERELY DISADVANTAGED COMMUNITY:
NO
SITE HISTORY:
NOT REPORTED

HISTORICAL FACILITY DETAILS

NO HISTORICAL DETAIL(S) INFORMATION REPORTED FOR THIS FACILITY

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Leaking Underground Storage Tanks (LUST)

MAP ID# 16

Distance from Property: 0.100 mi. (528 ft.) WNW
Elevation: 30 ft. (Lower than TP)

FACILITY INFORMATION

GLOBAL ID: **T0608591782**
URL LINK: CLICK HERE
BUSINESS NAME: **HEWLETT PACKARD**
ADDRESS: **395 PAGE MILL RD**
PALO ALTO, CA 94306
COUNTY: **SANTA CLARA**

FACILITY DETAILS

NO DETAIL(S) INFORMATION REPORTED

HISTORICAL FACILITY DETAILS

NO HISTORICAL DETAIL(S) INFORMATION REPORTED FOR THIS FACILITY

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Resource Conservation & Recovery Act - Corrective Action Facilities (RCRAC)

MAP ID# 16

Distance from Property: 0.099 mi. (523 ft.) WNW
Elevation: 30 ft. (Lower than TP)

FACILITY INFORMATION

EPA ID#: **CAD009122557**
NAME: **HEWLETT PACKARD MFG DIV**
ADDRESS: **395 PAGE MILL RD**
PALO ALTO, CA 94306

OWNER TYPE: **NOT REPORTED**
OWNER NAME: **NOT REPORTED**
OPERATOR TYPE: **PRIVATE**
OPERATOR NAME: **HEWLETT PACKARD CO PALO ALTO FABRCTN**

CONTACT NAME: **NOT REPORTED**
CONTACT ADDRESS: **395 PAGE MILL RD**
PALO ALTO CA 94306
CONTACT PHONE: **NOT REPORTED**
NON-NOTIFIER: **NOT A NON-NOTIFIER**
DATE RECEIVED BY AGENCY: **09/01/1996**

CERTIFICATION

CERTIFICATION NAME:	CERTIFICATION TITLE:	CERTIFICATION SIGNED DATE:
DTSC HQ	**CA-DTSC**	**06/20/2019**
MEREDITH G DURANT	**ENV. ENG**	**04/11/1990**
LOREN HENNING	**MANAGER, RCRA ENFORCEMENT OFFICE**	**09/05/2006**
KEVIN GRANT	**ENVIRONMENTAL M**	**02/25/1992**
MARTIN D DEVRIES	**FAC DES ENG**	**03/09/1994**
PIERRE DE LA ROCHA	**ENG. MANAGER**	**02/12/1996**

INDUSTRY CLASSIFICATION (NAICS)

325413 - IN-VITRO DIAGNOSTIC SUBSTANCE MANUFACTURING
326199 - ALL OTHER PLASTICS PRODUCT MANUFACTURING
331521 - ALUMINUM DIE-CASTING FOUNDRIES
332322 - SHEET METAL WORK MANUFACTURING
332999 - ALL OTHER MISCELLANEOUS FABRICATED METAL PRODUCT MANUFACTURING
33991 - JEWELRY AND SILVERWARE MANUFACTURING

CURRENT ACTIVITY INFORMATION

GENERATOR STATUS: **SMALL QUANTITY GENERATOR** LAST UPDATED DATE: **09/05/2006**
SUBJECT TO CORRECTIVE ACTION UNIVERSE: **NO**
TDSFs POTENTIALLY SUBJECT TO CORRECTIVE ACTION UNDER 3004 (u)/(v) UNIVERSE: **NO**
TDSFs ONLY SUBJECT TO CORRECTIVE ACTION UNDER DISCRETIONARY AUTHORITIES UNIVERSE: **NO**
NON TSDFs WHERE RCRA CORRECTIVE ACTION HAS BEEN IMPOSED UNIVERSE: **YES**
CORRECTIVE ACTION WORKLOAD UNIVERSE: **YES**

IMPORTER: **NO**
MIXED WASTE GENERATOR: **NO**
RECYCLER: **NO**
TRANSPORTER: **NO**
ONSITE BURNER EXEMPTION: **NO**
FURNACE EXEMPTION: **NO**
USED OIL REFINER: **NO**
USED OIL TRANSFER FACILITY: **NO**
UNDERGROUND INJECTION: **NO**
UNIVERSAL WASTE DESTINATION FACILITY: **NO**
TRANSFER FACILITY: **NO**
USED OIL FUEL BURNER: **NO**
USED OIL PROCESSOR: **NO**
USED OIL FUEL MARKETER TO BURNER: **NO**
SPECIFICATION USED OIL MARKETER: **NO**
USED OIL TRANSPORTER: **NO**

COMPLIANCE, MONITORING AND ENFORCEMENT INFORMATION

EVALUATIONS

07/27/1994	**CEI COMPLIANCE EVALUATION INSPECTION ON-SITE**
02/26/1992	**CEI COMPLIANCE EVALUATION INSPECTION ON-SITE**
02/05/1992	**FRR FINANCIAL RECORD REVIEW**
08/30/1990	**CEI COMPLIANCE EVALUATION INSPECTION ON-SITE**
08/13/1990	**FRR FINANCIAL RECORD REVIEW**
09/28/1988	**CEI COMPLIANCE EVALUATION INSPECTION ON-SITE**
09/28/1988	**FCI FOCUSED COMPLIANCE INSPECTION**
09/06/1988	**FRR FINANCIAL RECORD REVIEW**

VIOLATIONS

04/02/1992	**262.A GENERATORS - GENERAL**
04/02/1992	**264.B TSD - GENERAL FACILITY STANDARDS**
04/02/1992	**264.D TSD - CONTINGENCY PLAN AND EMERGENCY PROCEDURES**
04/02/1992	**264.J TSD - TANK SYSTEM STANDARDS**
04/02/1992	**268.A LDR - GENERAL**
08/30/1990	**264.A TSD - GENERAL**
08/30/1990	**268.A LDR - GENERAL**
09/28/1988	**264.A TSD - GENERAL**
09/28/1988	**264.E TSD - MANIFEST/RECORDS/REPORTING**
09/28/1988	**264.G TSD - CLOSURE/POST-CLOSURE**
09/28/1988	**268.A LDR - GENERAL**

ENFORCEMENTS

04/07/1992	**120 WRITTEN INFORMAL**
01/16/1991	**210 INITIAL 3008(A) COMPLIANCE**
10/04/1990	**120 WRITTEN INFORMAL**
05/30/1989	**620 FINAL CIVIL JUDICIAL ACTION FOR IMMINENT AND SUBSTANTIAL ENDANGERMENT**
12/27/1988	**120 WRITTEN INFORMAL**

HAZARDOUS WASTE

- NO HAZARDOUS WASTE INFORMATION REPORTED -

UNIVERSAL WASTE **- NO UNIVERSAL WASTE REPORTED -**

CORRECTIVE ACTION AREA (RELEASE)

AREA NAME:	AIR:	GROUNDWATER:	SOIL:	SURFACE WASTE:
ENTIRE FACILITY	**-----**	**-----**	**-----**	**-----**

CORRECTIVE ACTION EVENT

CA EVENT CODE: **CA800YE**

EVENT DESCRIPTION: **READY FOR ANTICIPATED USE DETERMINATION - READY FOR ANTICIPATED USE**

EVENT SEQUENCE NUMBER: **1**

EVENT RESPONSIBLE AGENCY: **EPA**

ACTUAL DATE OF EVENT: **09/22/2009**

ORIGINAL SCHEDULE DATE OF EVENT: **NOT REPORTED**

NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA100**
EVENT DESCRIPTION: **INVESTIGATION IMPOSITION**
EVENT SEQUENCE NUMBER: **1**
EVENT RESPONSIBLE AGENCY: **STATE**
ACTUAL DATE OF EVENT: **04/19/1989**
ORIGINAL SCHEDULE DATE OF EVENT: **NOT REPORTED**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA029ST**
EVENT DESCRIPTION: **LEAD AGENCY DETERMINATION**
EVENT SEQUENCE NUMBER: **1**
EVENT RESPONSIBLE AGENCY: **EPA**
ACTUAL DATE OF EVENT: **10/01/1987**
ORIGINAL SCHEDULE DATE OF EVENT: **NOT REPORTED**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA200**
EVENT DESCRIPTION: **INVESTIGATION COMPLETE**
EVENT SEQUENCE NUMBER: **2**
EVENT RESPONSIBLE AGENCY: **STATE**
ACTUAL DATE OF EVENT: **09/21/1994**
ORIGINAL SCHEDULE DATE OF EVENT: **NOT REPORTED**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA048ST**
EVENT DESCRIPTION: **RFA NEED BY ANOTHER AGCY**
EVENT SEQUENCE NUMBER: **2**
EVENT RESPONSIBLE AGENCY: **EPA**
ACTUAL DATE OF EVENT: **NOT REPORTED**
ORIGINAL SCHEDULE DATE OF EVENT: **19900406**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA210**
EVENT DESCRIPTION: **REFERRED TO A NON-RCRA AUTHORITY**
EVENT SEQUENCE NUMBER: **3**
EVENT RESPONSIBLE AGENCY: **STATE**
ACTUAL DATE OF EVENT: **09/19/1997**
ORIGINAL SCHEDULE DATE OF EVENT: **NOT REPORTED**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA049PA**
EVENT DESCRIPTION: **PA OR CERCLA INSPECTION**

EVENT SEQUENCE NUMBER: **3**
EVENT RESPONSIBLE AGENCY: **EPA**
ACTUAL DATE OF EVENT: **10/01/1987**
ORIGINAL SCHEDULE DATE OF EVENT: **NOT REPORTED**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA250**
EVENT DESCRIPTION: **CMS IMPOSITION**
EVENT SEQUENCE NUMBER: **4**
EVENT RESPONSIBLE AGENCY: **STATE**
ACTUAL DATE OF EVENT: **04/19/1989**
ORIGINAL SCHEDULE DATE OF EVENT: **NOT REPORTED**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA050**
EVENT DESCRIPTION: **RFA COMPLETED**
EVENT SEQUENCE NUMBER: **4**
EVENT RESPONSIBLE AGENCY: **EPA**
ACTUAL DATE OF EVENT: **10/01/1987**
ORIGINAL SCHEDULE DATE OF EVENT: **NOT REPORTED**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA350**
EVENT DESCRIPTION: **CMS COMPLETE**
EVENT SEQUENCE NUMBER: **5**
EVENT RESPONSIBLE AGENCY: **STATE**
ACTUAL DATE OF EVENT: **09/21/1994**
ORIGINAL SCHEDULE DATE OF EVENT: **NOT REPORTED**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA074HI**
EVENT DESCRIPTION: **NCAPS RANKING/PRIORITY**
EVENT SEQUENCE NUMBER: **5**
EVENT RESPONSIBLE AGENCY: **EPA**
ACTUAL DATE OF EVENT: **10/01/1987**
ORIGINAL SCHEDULE DATE OF EVENT: **NOT REPORTED**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA400**
EVENT DESCRIPTION: **REMEDY DECISION**
EVENT SEQUENCE NUMBER: **6**
EVENT RESPONSIBLE AGENCY: **STATE**

ACTUAL DATE OF EVENT: **09/21/1994**
ORIGINAL SCHEDULE DATE OF EVENT: **NOT REPORTED**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA075HI**
EVENT DESCRIPTION: **CA PRIORITIZATION-HIGH CA PRIORITY**
EVENT SEQUENCE NUMBER: **6**
EVENT RESPONSIBLE AGENCY: **EPA**
ACTUAL DATE OF EVENT: **10/01/1987**
ORIGINAL SCHEDULE DATE OF EVENT: **NOT REPORTED**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA450**
EVENT DESCRIPTION: **CORRECTIVE MEASURES DESIGN APPROVED**
EVENT SEQUENCE NUMBER: **7**
EVENT RESPONSIBLE AGENCY: **STATE**
ACTUAL DATE OF EVENT: **09/21/1994**
ORIGINAL SCHEDULE DATE OF EVENT: **NOT REPORTED**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA075ME**
EVENT DESCRIPTION: **CA PRIORITIZATION-MEDIUM CA PRIORITY**
EVENT SEQUENCE NUMBER: **7**
EVENT RESPONSIBLE AGENCY: **EPA**
ACTUAL DATE OF EVENT: **07/28/1994**
ORIGINAL SCHEDULE DATE OF EVENT: **NOT REPORTED**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA500**
EVENT DESCRIPTION: **CMI WORKPLAN APPROVED**
EVENT SEQUENCE NUMBER: **8**
EVENT RESPONSIBLE AGENCY: **STATE**
ACTUAL DATE OF EVENT: **09/21/1994**
ORIGINAL SCHEDULE DATE OF EVENT: **NOT REPORTED**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA225NR**
EVENT DESCRIPTION: **STABILIZATION MEASURES EVALUATION-FACILITY NOT AMENABLE TO STABILIZATION**
EVENT SEQUENCE NUMBER: **8**
EVENT RESPONSIBLE AGENCY: **EPA**
ACTUAL DATE OF EVENT: **07/27/1994**
ORIGINAL SCHEDULE DATE OF EVENT: **NOT REPORTED**

NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA225NR**
EVENT DESCRIPTION: **STABILIZATION MEASURES EVALUATION-FACILITY NOT AMENABLE TO STABILIZATION**
EVENT SEQUENCE NUMBER: **8**
EVENT RESPONSIBLE AGENCY: **STATE**
ACTUAL DATE OF EVENT: **07/27/1994**
ORIGINAL SCHEDULE DATE OF EVENT: **19940727**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA725YE**
EVENT DESCRIPTION: **HUMAN EXPOSURES CONTROLLED DETERMINATION-YES, APPLICABLE AS OF THIS DATE**
EVENT SEQUENCE NUMBER: **9**
EVENT RESPONSIBLE AGENCY: **EPA**
ACTUAL DATE OF EVENT: **12/28/2000**
ORIGINAL SCHEDULE DATE OF EVENT: **NOT REPORTED**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA750YE**
EVENT DESCRIPTION: **RELEASE TO GW CONTROLLED DETERMINATION-YES, APPLICABLE AS OF THIS DATE**
EVENT SEQUENCE NUMBER: **10**
EVENT RESPONSIBLE AGENCY: **EPA**
ACTUAL DATE OF EVENT: **12/28/2000**
ORIGINAL SCHEDULE DATE OF EVENT: **NOT REPORTED**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA600GW**
EVENT DESCRIPTION: **STABILIZATION/INTERIM MEASURES DECISION-GROUNDWATER EXTRACTION & TREATMENT**
EVENT SEQUENCE NUMBER: **10**
EVENT RESPONSIBLE AGENCY: **STATE**
ACTUAL DATE OF EVENT: **01/01/1986**
ORIGINAL SCHEDULE DATE OF EVENT: **NOT REPORTED**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA600SR**
EVENT DESCRIPTION: **STABILIZATION/INTERIM MEASURES DECISION-PRIMARY MEAS IS SOURCE REMOVL &/OR TRT**
EVENT SEQUENCE NUMBER: **11**
EVENT RESPONSIBLE AGENCY: **STATE**
ACTUAL DATE OF EVENT: **01/01/1986**
ORIGINAL SCHEDULE DATE OF EVENT: **NOT REPORTED**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA650**
EVENT DESCRIPTION: **STABILIZATION CONSTRUCTION COMPLETED**
EVENT SEQUENCE NUMBER: **12**
EVENT RESPONSIBLE AGENCY: **STATE**
ACTUAL DATE OF EVENT: **12/31/1993**
ORIGINAL SCHEDULE DATE OF EVENT: **NOT REPORTED**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA650**
EVENT DESCRIPTION: **STABILIZATION CONSTRUCTION COMPLETED**
EVENT SEQUENCE NUMBER: **12**
EVENT RESPONSIBLE AGENCY: **STATE**
ACTUAL DATE OF EVENT: **12/31/1992**
ORIGINAL SCHEDULE DATE OF EVENT: **NOT REPORTED**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA725YE**
EVENT DESCRIPTION: **HUMAN EXPOSURES CONTROLLED DETERMINATION-YES, APPLICABLE AS OF THIS DATE**
EVENT SEQUENCE NUMBER: **13**
EVENT RESPONSIBLE AGENCY: **STATE**
ACTUAL DATE OF EVENT: **09/30/1992**
ORIGINAL SCHEDULE DATE OF EVENT: **NOT REPORTED**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA750YE**
EVENT DESCRIPTION: **RELEASE TO GW CONTROLLED DETERMINATION-YES, APPLICABLE AS OF THIS DATE**
EVENT SEQUENCE NUMBER: **14**
EVENT RESPONSIBLE AGENCY: **STATE**
ACTUAL DATE OF EVENT: **12/31/1988**
ORIGINAL SCHEDULE DATE OF EVENT: **NOT REPORTED**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA750YE**
EVENT DESCRIPTION: **RELEASE TO GW CONTROLLED DETERMINATION-YES, APPLICABLE AS OF THIS DATE**
EVENT SEQUENCE NUMBER: **14**
EVENT RESPONSIBLE AGENCY: **STATE**
ACTUAL DATE OF EVENT: **12/31/1987**
ORIGINAL SCHEDULE DATE OF EVENT: **NOT REPORTED**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA725YE**

EVENT DESCRIPTION: **HUMAN EXPOSURES CONTROLLED DETERMINATION-YES, APPLICABLE AS OF THIS DATE**
EVENT SEQUENCE NUMBER: **174**
EVENT RESPONSIBLE AGENCY: **STATE**
ACTUAL DATE OF EVENT: **11/01/2000**
ORIGINAL SCHEDULE DATE OF EVENT: **20001101**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA750YE**
EVENT DESCRIPTION: **RELEASE TO GW CONTROLLED DETERMINATION-YES, APPLICABLE AS OF THIS DATE**
EVENT SEQUENCE NUMBER: **177**
EVENT RESPONSIBLE AGENCY: **STATE**
ACTUAL DATE OF EVENT: **11/01/2000**
ORIGINAL SCHEDULE DATE OF EVENT: **20001101**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA400**
EVENT DESCRIPTION: **REMEDY DECISION**
EVENT SEQUENCE NUMBER: **180**
EVENT RESPONSIBLE AGENCY: **STATE**
ACTUAL DATE OF EVENT: **09/21/1994**
ORIGINAL SCHEDULE DATE OF EVENT: **19940921**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA550RC**
EVENT DESCRIPTION: **REMEDY CONSTRUCTION-REMEDY CONSTRUCTED**
EVENT SEQUENCE NUMBER: **186**
EVENT RESPONSIBLE AGENCY: **STATE**
ACTUAL DATE OF EVENT: **09/09/1996**
ORIGINAL SCHEDULE DATE OF EVENT: **19960909**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

Back to Report Summary

Resource Conservation & Recovery Act - Generator (RCRAGR09)

MAP ID# 16

Distance from Property: 0.099 mi. (523 ft.) WNW
Elevation: 30 ft. (Lower than TP)

FACILITY INFORMATION

EPA ID#: **CAD009122557**
NAME: **HEWLETT PACKARD MFG DIV**
ADDRESS: **395 PAGE MILL RD**
PALO ALTO, CA 94306

OWNER TYPE: **NOT REPORTED**
OWNER NAME: **NOT REPORTED**
OPERATOR TYPE: **PRIVATE**
OPERATOR NAME: **HEWLETT PACKARD CO PALO ALTO FABRCTN**

CONTACT NAME: **NOT REPORTED**
CONTACT ADDRESS: **395 PAGE MILL RD**
PALO ALTO CA 94306
CONTACT PHONE: **NOT REPORTED**
NON-NOTIFIER: **NOT A NON-NOTIFIER**
DATE RECEIVED BY AGENCY: **09/01/1996**

CERTIFICATION

CERTIFICATION NAME:	CERTIFICATION TITLE:	CERTIFICATION SIGNED DATE:
DTSC HQ	**CA-DTSC**	**06/20/2019**
MEREDITH G DURANT	**ENV. ENG**	**04/11/1990**
LOREN HENNING	**MANAGER, RCRA ENFORCEMENT OFFICE**	**09/05/2006**
KEVIN GRANT	**ENVIRONMENTAL M**	**02/25/1992**
MARTIN D DEVRIES	**FAC DES ENG**	**03/09/1994**
PIERRE DE LA ROCHA	**ENG. MANAGER**	**02/12/1996**

INDUSTRY CLASSIFICATION (NAICS)

325413 - IN-VITRO DIAGNOSTIC SUBSTANCE MANUFACTURING
326199 - ALL OTHER PLASTICS PRODUCT MANUFACTURING
331521 - ALUMINUM DIE-CASTING FOUNDRIES
332322 - SHEET METAL WORK MANUFACTURING
332999 - ALL OTHER MISCELLANEOUS FABRICATED METAL PRODUCT MANUFACTURING
33991 - JEWELRY AND SILVERWARE MANUFACTURING

CURRENT ACTIVITY INFORMATION

GENERATOR STATUS: **SMALL QUANTITY GENERATOR** LAST UPDATED DATE: **09/05/2006**
SUBJECT TO CORRECTIVE ACTION UNIVERSE: **NO**
TDSFs POTENTIALLY SUBJECT TO CORRECTIVE ACTION UNDER 3004 (u)/(v) UNIVERSE: **NO**
TDSFs ONLY SUBJECT TO CORRECTIVE ACTION UNDER DISCRETIONARY AUTHORITIES UNIVERSE: **NO**
NON TSDFs WHERE RCRA CORRECTIVE ACTION HAS BEEN IMPOSED UNIVERSE: **YES**
CORRECTIVE ACTION WORKLOAD UNIVERSE: **YES**

IMPORTER: **NO**
MIXED WASTE GENERATOR: **NO**
RECYCLER: **NO**
TRANSPORTER: **NO**
ONSITE BURNER EXEMPTION: **NO**
FURNACE EXEMPTION: **NO**
USED OIL REFINER: **NO**
USED OIL TRANSFER FACILITY: **NO**

UNDERGROUND INJECTION: **NO**
UNIVERSAL WASTE DESTINATION FACILITY: **NO**
TRANSFER FACILITY: **NO**
USED OIL FUEL BURNER: **NO**
USED OIL PROCESSOR: **NO**
USED OIL FUEL MARKETER TO BURNER: **NO**
SPECIFICATION USED OIL MARKETER: **NO**
USED OIL TRANSPORTER: **NO**

COMPLIANCE, MONITORING AND ENFORCEMENT INFORMATION

EVALUATIONS

07/27/1994	**CEI COMPLIANCE EVALUATION INSPECTION ON-SITE**
02/26/1992	**CEI COMPLIANCE EVALUATION INSPECTION ON-SITE**
02/05/1992	**FRR FINANCIAL RECORD REVIEW**
08/30/1990	**CEI COMPLIANCE EVALUATION INSPECTION ON-SITE**
08/13/1990	**FRR FINANCIAL RECORD REVIEW**
09/28/1988	**CEI COMPLIANCE EVALUATION INSPECTION ON-SITE**
09/28/1988	**FCI FOCUSED COMPLIANCE INSPECTION**
09/06/1988	**FRR FINANCIAL RECORD REVIEW**

VIOLATIONS

04/02/1992	**262.A GENERATORS - GENERAL**
04/02/1992	**264.B TSD - GENERAL FACILITY STANDARDS**
04/02/1992	**264.D TSD - CONTINGENCY PLAN AND EMERGENCY PROCEDURES**
04/02/1992	**264.J TSD - TANK SYSTEM STANDARDS**
04/02/1992	**268.A LDR - GENERAL**
08/30/1990	**264.A TSD - GENERAL**
08/30/1990	**268.A LDR - GENERAL**
09/28/1988	**264.A TSD - GENERAL**
09/28/1988	**264.E TSD - MANIFEST/RECORDS/REPORTING**
09/28/1988	**264.G TSD - CLOSURE/POST-CLOSURE**
09/28/1988	**268.A LDR - GENERAL**

ENFORCEMENTS

04/07/1992	**120 WRITTEN INFORMAL**
01/16/1991	**210 INITIAL 3008(A) COMPLIANCE**
10/04/1990	**120 WRITTEN INFORMAL**
05/30/1989	**620 FINAL CIVIL JUDICIAL ACTION FOR IMMINENT AND SUBSTANTIAL ENDANGERMENT**
12/27/1988	**120 WRITTEN INFORMAL**

HAZARDOUS WASTE

- NO HAZARDOUS WASTE INFORMATION REPORTED -

UNIVERSAL WASTE **- NO UNIVERSAL WASTE REPORTED -**

CORRECTIVE ACTION AREA (RELEASE)

AREA NAME:	AIR:	GROUNDWATER:	SOIL:	SURFACE WASTE:
ENTIRE FACILITY	**-----**	**-----**	**-----**	**-----**

CORRECTIVE ACTION EVENT

CA EVENT CODE: **CA800YE**

EVENT DESCRIPTION: **READY FOR ANTICIPATED USE DETERMINATION - READY FOR ANTICIPATED USE**

EVENT SEQUENCE NUMBER: **1**

EVENT RESPONSIBLE AGENCY: **EPA**

ACTUAL DATE OF EVENT: **09/22/2009**

ORIGINAL SCHEDULE DATE OF EVENT: **NOT REPORTED**

NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA100**
EVENT DESCRIPTION: **INVESTIGATION IMPOSITION**
EVENT SEQUENCE NUMBER: **1**
EVENT RESPONSIBLE AGENCY: **STATE**
ACTUAL DATE OF EVENT: **04/19/1989**
ORIGINAL SCHEDULE DATE OF EVENT: **NOT REPORTED**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA029ST**
EVENT DESCRIPTION: **LEAD AGENCY DETERMINATION**
EVENT SEQUENCE NUMBER: **1**
EVENT RESPONSIBLE AGENCY: **EPA**
ACTUAL DATE OF EVENT: **10/01/1987**
ORIGINAL SCHEDULE DATE OF EVENT: **NOT REPORTED**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA200**
EVENT DESCRIPTION: **INVESTIGATION COMPLETE**
EVENT SEQUENCE NUMBER: **2**
EVENT RESPONSIBLE AGENCY: **STATE**
ACTUAL DATE OF EVENT: **09/21/1994**
ORIGINAL SCHEDULE DATE OF EVENT: **NOT REPORTED**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA048ST**
EVENT DESCRIPTION: **RFA NEED BY ANOTHER AGCY**
EVENT SEQUENCE NUMBER: **2**
EVENT RESPONSIBLE AGENCY: **EPA**
ACTUAL DATE OF EVENT: **NOT REPORTED**
ORIGINAL SCHEDULE DATE OF EVENT: **19900406**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA210**
EVENT DESCRIPTION: **REFERRED TO A NON-RCRA AUTHORITY**
EVENT SEQUENCE NUMBER: **3**
EVENT RESPONSIBLE AGENCY: **STATE**
ACTUAL DATE OF EVENT: **09/19/1997**
ORIGINAL SCHEDULE DATE OF EVENT: **NOT REPORTED**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA049PA**
EVENT DESCRIPTION: **PA OR CERCLA INSPECTION**

EVENT SEQUENCE NUMBER: **3**
EVENT RESPONSIBLE AGENCY: **EPA**
ACTUAL DATE OF EVENT: **10/01/1987**
ORIGINAL SCHEDULE DATE OF EVENT: **NOT REPORTED**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA250**
EVENT DESCRIPTION: **CMS IMPOSITION**
EVENT SEQUENCE NUMBER: **4**
EVENT RESPONSIBLE AGENCY: **STATE**
ACTUAL DATE OF EVENT: **04/19/1989**
ORIGINAL SCHEDULE DATE OF EVENT: **NOT REPORTED**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA050**
EVENT DESCRIPTION: **RFA COMPLETED**
EVENT SEQUENCE NUMBER: **4**
EVENT RESPONSIBLE AGENCY: **EPA**
ACTUAL DATE OF EVENT: **10/01/1987**
ORIGINAL SCHEDULE DATE OF EVENT: **NOT REPORTED**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA350**
EVENT DESCRIPTION: **CMS COMPLETE**
EVENT SEQUENCE NUMBER: **5**
EVENT RESPONSIBLE AGENCY: **STATE**
ACTUAL DATE OF EVENT: **09/21/1994**
ORIGINAL SCHEDULE DATE OF EVENT: **NOT REPORTED**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA074HI**
EVENT DESCRIPTION: **NCAPS RANKING/PRIORITY**
EVENT SEQUENCE NUMBER: **5**
EVENT RESPONSIBLE AGENCY: **EPA**
ACTUAL DATE OF EVENT: **10/01/1987**
ORIGINAL SCHEDULE DATE OF EVENT: **NOT REPORTED**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA400**
EVENT DESCRIPTION: **REMEDY DECISION**
EVENT SEQUENCE NUMBER: **6**
EVENT RESPONSIBLE AGENCY: **STATE**

ACTUAL DATE OF EVENT: **09/21/1994**
ORIGINAL SCHEDULE DATE OF EVENT: **NOT REPORTED**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA075HI**
EVENT DESCRIPTION: **CA PRIORITIZATION-HIGH CA PRIORITY**
EVENT SEQUENCE NUMBER: **6**
EVENT RESPONSIBLE AGENCY: **EPA**
ACTUAL DATE OF EVENT: **10/01/1987**
ORIGINAL SCHEDULE DATE OF EVENT: **NOT REPORTED**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA450**
EVENT DESCRIPTION: **CORRECTIVE MEASURES DESIGN APPROVED**
EVENT SEQUENCE NUMBER: **7**
EVENT RESPONSIBLE AGENCY: **STATE**
ACTUAL DATE OF EVENT: **09/21/1994**
ORIGINAL SCHEDULE DATE OF EVENT: **NOT REPORTED**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA075ME**
EVENT DESCRIPTION: **CA PRIORITIZATION-MEDIUM CA PRIORITY**
EVENT SEQUENCE NUMBER: **7**
EVENT RESPONSIBLE AGENCY: **EPA**
ACTUAL DATE OF EVENT: **07/28/1994**
ORIGINAL SCHEDULE DATE OF EVENT: **NOT REPORTED**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA500**
EVENT DESCRIPTION: **CMI WORKPLAN APPROVED**
EVENT SEQUENCE NUMBER: **8**
EVENT RESPONSIBLE AGENCY: **STATE**
ACTUAL DATE OF EVENT: **09/21/1994**
ORIGINAL SCHEDULE DATE OF EVENT: **NOT REPORTED**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA225NR**
EVENT DESCRIPTION: **STABILIZATION MEASURES EVALUATION-FACILITY NOT AMENABLE TO STABILIZATION**
EVENT SEQUENCE NUMBER: **8**
EVENT RESPONSIBLE AGENCY: **EPA**
ACTUAL DATE OF EVENT: **07/27/1994**
ORIGINAL SCHEDULE DATE OF EVENT: **NOT REPORTED**

NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA225NR**
EVENT DESCRIPTION: **STABILIZATION MEASURES EVALUATION-FACILITY NOT AMENABLE TO STABILIZATION**
EVENT SEQUENCE NUMBER: **8**
EVENT RESPONSIBLE AGENCY: **STATE**
ACTUAL DATE OF EVENT: **07/27/1994**
ORIGINAL SCHEDULE DATE OF EVENT: **19940727**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA725YE**
EVENT DESCRIPTION: **HUMAN EXPOSURES CONTROLLED DETERMINATION-YES, APPLICABLE AS OF THIS DATE**
EVENT SEQUENCE NUMBER: **9**
EVENT RESPONSIBLE AGENCY: **EPA**
ACTUAL DATE OF EVENT: **12/28/2000**
ORIGINAL SCHEDULE DATE OF EVENT: **NOT REPORTED**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA750YE**
EVENT DESCRIPTION: **RELEASE TO GW CONTROLLED DETERMINATION-YES, APPLICABLE AS OF THIS DATE**
EVENT SEQUENCE NUMBER: **10**
EVENT RESPONSIBLE AGENCY: **EPA**
ACTUAL DATE OF EVENT: **12/28/2000**
ORIGINAL SCHEDULE DATE OF EVENT: **NOT REPORTED**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA600GW**
EVENT DESCRIPTION: **STABILIZATION/INTERIM MEASURES DECISION-GROUNDWATER EXTRACTION & TREATMENT**
EVENT SEQUENCE NUMBER: **10**
EVENT RESPONSIBLE AGENCY: **STATE**
ACTUAL DATE OF EVENT: **01/01/1986**
ORIGINAL SCHEDULE DATE OF EVENT: **NOT REPORTED**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA600SR**
EVENT DESCRIPTION: **STABILIZATION/INTERIM MEASURES DECISION-PRIMARY MEAS IS SOURCE REMOVL &/OR TRT**
EVENT SEQUENCE NUMBER: **11**
EVENT RESPONSIBLE AGENCY: **STATE**
ACTUAL DATE OF EVENT: **01/01/1986**
ORIGINAL SCHEDULE DATE OF EVENT: **NOT REPORTED**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA650**
EVENT DESCRIPTION: **STABILIZATION CONSTRUCTION COMPLETED**
EVENT SEQUENCE NUMBER: **12**
EVENT RESPONSIBLE AGENCY: **STATE**
ACTUAL DATE OF EVENT: **12/31/1993**
ORIGINAL SCHEDULE DATE OF EVENT: **NOT REPORTED**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA650**
EVENT DESCRIPTION: **STABILIZATION CONSTRUCTION COMPLETED**
EVENT SEQUENCE NUMBER: **12**
EVENT RESPONSIBLE AGENCY: **STATE**
ACTUAL DATE OF EVENT: **12/31/1992**
ORIGINAL SCHEDULE DATE OF EVENT: **NOT REPORTED**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA725YE**
EVENT DESCRIPTION: **HUMAN EXPOSURES CONTROLLED DETERMINATION-YES, APPLICABLE AS OF THIS DATE**
EVENT SEQUENCE NUMBER: **13**
EVENT RESPONSIBLE AGENCY: **STATE**
ACTUAL DATE OF EVENT: **09/30/1992**
ORIGINAL SCHEDULE DATE OF EVENT: **NOT REPORTED**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA750YE**
EVENT DESCRIPTION: **RELEASE TO GW CONTROLLED DETERMINATION-YES, APPLICABLE AS OF THIS DATE**
EVENT SEQUENCE NUMBER: **14**
EVENT RESPONSIBLE AGENCY: **STATE**
ACTUAL DATE OF EVENT: **12/31/1988**
ORIGINAL SCHEDULE DATE OF EVENT: **NOT REPORTED**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA750YE**
EVENT DESCRIPTION: **RELEASE TO GW CONTROLLED DETERMINATION-YES, APPLICABLE AS OF THIS DATE**
EVENT SEQUENCE NUMBER: **14**
EVENT RESPONSIBLE AGENCY: **STATE**
ACTUAL DATE OF EVENT: **12/31/1987**
ORIGINAL SCHEDULE DATE OF EVENT: **NOT REPORTED**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA725YE**

EVENT DESCRIPTION: **HUMAN EXPOSURES CONTROLLED DETERMINATION-YES, APPLICABLE AS OF THIS DATE**
EVENT SEQUENCE NUMBER: **174**
EVENT RESPONSIBLE AGENCY: **STATE**
ACTUAL DATE OF EVENT: **11/01/2000**
ORIGINAL SCHEDULE DATE OF EVENT: **20001101**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA750YE**
EVENT DESCRIPTION: **RELEASE TO GW CONTROLLED DETERMINATION-YES, APPLICABLE AS OF THIS DATE**
EVENT SEQUENCE NUMBER: **177**
EVENT RESPONSIBLE AGENCY: **STATE**
ACTUAL DATE OF EVENT: **11/01/2000**
ORIGINAL SCHEDULE DATE OF EVENT: **20001101**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA400**
EVENT DESCRIPTION: **REMEDY DECISION**
EVENT SEQUENCE NUMBER: **180**
EVENT RESPONSIBLE AGENCY: **STATE**
ACTUAL DATE OF EVENT: **09/21/1994**
ORIGINAL SCHEDULE DATE OF EVENT: **19940921**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA550RC**
EVENT DESCRIPTION: **REMEDY CONSTRUCTION-REMEDY CONSTRUCTED**
EVENT SEQUENCE NUMBER: **186**
EVENT RESPONSIBLE AGENCY: **STATE**
ACTUAL DATE OF EVENT: **09/09/1996**
ORIGINAL SCHEDULE DATE OF EVENT: **19960909**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

Back to Report Summary

Resource Conservation & Recovery Act - Non-CORRACTS Treatment, Storage & Disposal Facilities (RCRAT)

MAP ID# 16

Distance from Property: 0.099 mi. (523 ft.) WNW
Elevation: 30 ft. (Lower than TP)

FACILITY INFORMATION

EPA ID#: **CAD009122557**
NAME: **HEWLETT PACKARD MFG DIV**
ADDRESS: **395 PAGE MILL RD**
PALO ALTO, CA 94306

OWNER TYPE: **NOT REPORTED**
OWNER NAME: **NOT REPORTED**
OPERATOR TYPE: **PRIVATE**
OPERATOR NAME: **HEWLETT PACKARD CO PALO ALTO FABRCTN**

CONTACT NAME: **NOT REPORTED**
CONTACT ADDRESS: **395 PAGE MILL RD**
PALO ALTO CA 94306
CONTACT PHONE: **NOT REPORTED**
NON-NOTIFIER: **NOT A NON-NOTIFIER**
DATE RECEIVED BY AGENCY: **09/01/1996**

CERTIFICATION

CERTIFICATION NAME:	CERTIFICATION TITLE:	CERTIFICATION SIGNED DATE:
DTSC HQ	**CA-DTSC**	**06/20/2019**
MEREDITH G DURANT	**ENV. ENG**	**04/11/1990**
LOREN HENNING	**MANAGER, RCRA ENFORCEMENT OFFICE**	**09/05/2006**
KEVIN GRANT	**ENVIRONMENTAL M**	**02/25/1992**
MARTIN D DEVRIES	**FAC DES ENG**	**03/09/1994**
PIERRE DE LA ROCHA	**ENG. MANAGER**	**02/12/1996**

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CURRENT ACTIVITY INFORMATION

GENERATOR STATUS: **SMALL QUANTITY GENERATOR** LAST UPDATED DATE: **09/05/2006**
SUBJECT TO CORRECTIVE ACTION UNIVERSE: **NO**
TDSFs POTENTIALLY SUBJECT TO CORRECTIVE ACTION UNDER 3004 (u)/(v) UNIVERSE: **NO**
TDSFs ONLY SUBJECT TO CORRECTIVE ACTION UNDER DISCRETIONARY AUTHORITIES UNIVERSE: **NO**
NON TSDFs WHERE RCRA CORRECTIVE ACTION HAS BEEN IMPOSED UNIVERSE: **YES**
CORRECTIVE ACTION WORKLOAD UNIVERSE: **YES**

IMPORTER: **NO**
MIXED WASTE GENERATOR: **NO**
RECYCLER: **NO**
TRANSPORTER: **NO**
ONSITE BURNER EXEMPTION: **NO**
FURNACE EXEMPTION: **NO**
USED OIL REFINER: **NO**
USED OIL TRANSFER FACILITY: **NO**

UNDERGROUND INJECTION: **NO**
UNIVERSAL WASTE DESTINATION FACILITY: **NO**
TRANSFER FACILITY: **NO**
USED OIL FUEL BURNER: **NO**
USED OIL PROCESSOR: **NO**
USED OIL FUEL MARKETER TO BURNER: **NO**
SPECIFICATION USED OIL MARKETER: **NO**
USED OIL TRANSPORTER: **NO**

COMPLIANCE, MONITORING AND ENFORCEMENT INFORMATION

EVALUATIONS

07/27/1994	**CEI COMPLIANCE EVALUATION INSPECTION ON-SITE**
02/26/1992	**CEI COMPLIANCE EVALUATION INSPECTION ON-SITE**
02/05/1992	**FRR FINANCIAL RECORD REVIEW**
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04/02/1992	**264.J TSD - TANK SYSTEM STANDARDS**
04/02/1992	**268.A LDR - GENERAL**
08/30/1990	**264.A TSD - GENERAL**
08/30/1990	**268.A LDR - GENERAL**
09/28/1988	**264.A TSD - GENERAL**
09/28/1988	**264.E TSD - MANIFEST/RECORDS/REPORTING**
09/28/1988	**264.G TSD - CLOSURE/POST-CLOSURE**
09/28/1988	**268.A LDR - GENERAL**

ENFORCEMENTS

04/07/1992	**120 WRITTEN INFORMAL**
01/16/1991	**210 INITIAL 3008(A) COMPLIANCE**
10/04/1990	**120 WRITTEN INFORMAL**
05/30/1989	**620 FINAL CIVIL JUDICIAL ACTION FOR IMMINENT AND SUBSTANTIAL ENDANGERMENT**
12/27/1988	**120 WRITTEN INFORMAL**

HAZARDOUS WASTE

- NO HAZARDOUS WASTE INFORMATION REPORTED -

UNIVERSAL WASTE **- NO UNIVERSAL WASTE REPORTED -**

CORRECTIVE ACTION AREA (RELEASE)

AREA NAME:	AIR:	GROUNDWATER:	SOIL:	SURFACE WASTE:
ENTIRE FACILITY	**-----**	**-----**	**-----**	**-----**

CORRECTIVE ACTION EVENT

CA EVENT CODE: **CA800YE**

EVENT DESCRIPTION: **READY FOR ANTICIPATED USE DETERMINATION - READY FOR ANTICIPATED USE**

EVENT SEQUENCE NUMBER: **1**

EVENT RESPONSIBLE AGENCY: **EPA**

ACTUAL DATE OF EVENT: **09/22/2009**

ORIGINAL SCHEDULE DATE OF EVENT: **NOT REPORTED**

NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA100**
EVENT DESCRIPTION: **INVESTIGATION IMPOSITION**
EVENT SEQUENCE NUMBER: **1**
EVENT RESPONSIBLE AGENCY: **STATE**
ACTUAL DATE OF EVENT: **04/19/1989**
ORIGINAL SCHEDULE DATE OF EVENT: **NOT REPORTED**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA029ST**
EVENT DESCRIPTION: **LEAD AGENCY DETERMINATION**
EVENT SEQUENCE NUMBER: **1**
EVENT RESPONSIBLE AGENCY: **EPA**
ACTUAL DATE OF EVENT: **10/01/1987**
ORIGINAL SCHEDULE DATE OF EVENT: **NOT REPORTED**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA200**
EVENT DESCRIPTION: **INVESTIGATION COMPLETE**
EVENT SEQUENCE NUMBER: **2**
EVENT RESPONSIBLE AGENCY: **STATE**
ACTUAL DATE OF EVENT: **09/21/1994**
ORIGINAL SCHEDULE DATE OF EVENT: **NOT REPORTED**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA048ST**
EVENT DESCRIPTION: **RFA NEED BY ANOTHER AGCY**
EVENT SEQUENCE NUMBER: **2**
EVENT RESPONSIBLE AGENCY: **EPA**
ACTUAL DATE OF EVENT: **NOT REPORTED**
ORIGINAL SCHEDULE DATE OF EVENT: **19900406**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA210**
EVENT DESCRIPTION: **REFERRED TO A NON-RCRA AUTHORITY**
EVENT SEQUENCE NUMBER: **3**
EVENT RESPONSIBLE AGENCY: **STATE**
ACTUAL DATE OF EVENT: **09/19/1997**
ORIGINAL SCHEDULE DATE OF EVENT: **NOT REPORTED**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA049PA**
EVENT DESCRIPTION: **PA OR CERCLA INSPECTION**

EVENT SEQUENCE NUMBER: **3**
EVENT RESPONSIBLE AGENCY: **EPA**
ACTUAL DATE OF EVENT: **10/01/1987**
ORIGINAL SCHEDULE DATE OF EVENT: **NOT REPORTED**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA250**
EVENT DESCRIPTION: **CMS IMPOSITION**
EVENT SEQUENCE NUMBER: **4**
EVENT RESPONSIBLE AGENCY: **STATE**
ACTUAL DATE OF EVENT: **04/19/1989**
ORIGINAL SCHEDULE DATE OF EVENT: **NOT REPORTED**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA050**
EVENT DESCRIPTION: **RFA COMPLETED**
EVENT SEQUENCE NUMBER: **4**
EVENT RESPONSIBLE AGENCY: **EPA**
ACTUAL DATE OF EVENT: **10/01/1987**
ORIGINAL SCHEDULE DATE OF EVENT: **NOT REPORTED**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA350**
EVENT DESCRIPTION: **CMS COMPLETE**
EVENT SEQUENCE NUMBER: **5**
EVENT RESPONSIBLE AGENCY: **STATE**
ACTUAL DATE OF EVENT: **09/21/1994**
ORIGINAL SCHEDULE DATE OF EVENT: **NOT REPORTED**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA074HI**
EVENT DESCRIPTION: **NCAPS RANKING/PRIORITY**
EVENT SEQUENCE NUMBER: **5**
EVENT RESPONSIBLE AGENCY: **EPA**
ACTUAL DATE OF EVENT: **10/01/1987**
ORIGINAL SCHEDULE DATE OF EVENT: **NOT REPORTED**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA400**
EVENT DESCRIPTION: **REMEDY DECISION**
EVENT SEQUENCE NUMBER: **6**
EVENT RESPONSIBLE AGENCY: **STATE**

ACTUAL DATE OF EVENT: **09/21/1994**
ORIGINAL SCHEDULE DATE OF EVENT: **NOT REPORTED**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA075HI**
EVENT DESCRIPTION: **CA PRIORITIZATION-HIGH CA PRIORITY**
EVENT SEQUENCE NUMBER: **6**
EVENT RESPONSIBLE AGENCY: **EPA**
ACTUAL DATE OF EVENT: **10/01/1987**
ORIGINAL SCHEDULE DATE OF EVENT: **NOT REPORTED**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA450**
EVENT DESCRIPTION: **CORRECTIVE MEASURES DESIGN APPROVED**
EVENT SEQUENCE NUMBER: **7**
EVENT RESPONSIBLE AGENCY: **STATE**
ACTUAL DATE OF EVENT: **09/21/1994**
ORIGINAL SCHEDULE DATE OF EVENT: **NOT REPORTED**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA075ME**
EVENT DESCRIPTION: **CA PRIORITIZATION-MEDIUM CA PRIORITY**
EVENT SEQUENCE NUMBER: **7**
EVENT RESPONSIBLE AGENCY: **EPA**
ACTUAL DATE OF EVENT: **07/28/1994**
ORIGINAL SCHEDULE DATE OF EVENT: **NOT REPORTED**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA500**
EVENT DESCRIPTION: **CMI WORKPLAN APPROVED**
EVENT SEQUENCE NUMBER: **8**
EVENT RESPONSIBLE AGENCY: **STATE**
ACTUAL DATE OF EVENT: **09/21/1994**
ORIGINAL SCHEDULE DATE OF EVENT: **NOT REPORTED**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA225NR**
EVENT DESCRIPTION: **STABILIZATION MEASURES EVALUATION-FACILITY NOT AMENABLE TO STABILIZATION**
EVENT SEQUENCE NUMBER: **8**
EVENT RESPONSIBLE AGENCY: **EPA**
ACTUAL DATE OF EVENT: **07/27/1994**
ORIGINAL SCHEDULE DATE OF EVENT: **NOT REPORTED**

NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA225NR**
EVENT DESCRIPTION: **STABILIZATION MEASURES EVALUATION-FACILITY NOT AMENABLE TO STABILIZATION**
EVENT SEQUENCE NUMBER: **8**
EVENT RESPONSIBLE AGENCY: **STATE**
ACTUAL DATE OF EVENT: **07/27/1994**
ORIGINAL SCHEDULE DATE OF EVENT: **19940727**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA725YE**
EVENT DESCRIPTION: **HUMAN EXPOSURES CONTROLLED DETERMINATION-YES, APPLICABLE AS OF THIS DATE**
EVENT SEQUENCE NUMBER: **9**
EVENT RESPONSIBLE AGENCY: **EPA**
ACTUAL DATE OF EVENT: **12/28/2000**
ORIGINAL SCHEDULE DATE OF EVENT: **NOT REPORTED**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA750YE**
EVENT DESCRIPTION: **RELEASE TO GW CONTROLLED DETERMINATION-YES, APPLICABLE AS OF THIS DATE**
EVENT SEQUENCE NUMBER: **10**
EVENT RESPONSIBLE AGENCY: **EPA**
ACTUAL DATE OF EVENT: **12/28/2000**
ORIGINAL SCHEDULE DATE OF EVENT: **NOT REPORTED**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA600GW**
EVENT DESCRIPTION: **STABILIZATION/INTERIM MEASURES DECISION-GROUNDWATER EXTRACTION & TREATMENT**
EVENT SEQUENCE NUMBER: **10**
EVENT RESPONSIBLE AGENCY: **STATE**
ACTUAL DATE OF EVENT: **01/01/1986**
ORIGINAL SCHEDULE DATE OF EVENT: **NOT REPORTED**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA600SR**
EVENT DESCRIPTION: **STABILIZATION/INTERIM MEASURES DECISION-PRIMARY MEAS IS SOURCE REMOVL &/OR TRT**
EVENT SEQUENCE NUMBER: **11**
EVENT RESPONSIBLE AGENCY: **STATE**
ACTUAL DATE OF EVENT: **01/01/1986**
ORIGINAL SCHEDULE DATE OF EVENT: **NOT REPORTED**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA650**
EVENT DESCRIPTION: **STABILIZATION CONSTRUCTION COMPLETED**
EVENT SEQUENCE NUMBER: **12**
EVENT RESPONSIBLE AGENCY: **STATE**
ACTUAL DATE OF EVENT: **12/31/1993**
ORIGINAL SCHEDULE DATE OF EVENT: **NOT REPORTED**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA650**
EVENT DESCRIPTION: **STABILIZATION CONSTRUCTION COMPLETED**
EVENT SEQUENCE NUMBER: **12**
EVENT RESPONSIBLE AGENCY: **STATE**
ACTUAL DATE OF EVENT: **12/31/1992**
ORIGINAL SCHEDULE DATE OF EVENT: **NOT REPORTED**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA725YE**
EVENT DESCRIPTION: **HUMAN EXPOSURES CONTROLLED DETERMINATION-YES, APPLICABLE AS OF THIS DATE**
EVENT SEQUENCE NUMBER: **13**
EVENT RESPONSIBLE AGENCY: **STATE**
ACTUAL DATE OF EVENT: **09/30/1992**
ORIGINAL SCHEDULE DATE OF EVENT: **NOT REPORTED**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA750YE**
EVENT DESCRIPTION: **RELEASE TO GW CONTROLLED DETERMINATION-YES, APPLICABLE AS OF THIS DATE**
EVENT SEQUENCE NUMBER: **14**
EVENT RESPONSIBLE AGENCY: **STATE**
ACTUAL DATE OF EVENT: **12/31/1988**
ORIGINAL SCHEDULE DATE OF EVENT: **NOT REPORTED**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA750YE**
EVENT DESCRIPTION: **RELEASE TO GW CONTROLLED DETERMINATION-YES, APPLICABLE AS OF THIS DATE**
EVENT SEQUENCE NUMBER: **14**
EVENT RESPONSIBLE AGENCY: **STATE**
ACTUAL DATE OF EVENT: **12/31/1987**
ORIGINAL SCHEDULE DATE OF EVENT: **NOT REPORTED**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA725YE**

EVENT DESCRIPTION: **HUMAN EXPOSURES CONTROLLED DETERMINATION-YES, APPLICABLE AS OF THIS DATE**
EVENT SEQUENCE NUMBER: **174**
EVENT RESPONSIBLE AGENCY: **STATE**
ACTUAL DATE OF EVENT: **11/01/2000**
ORIGINAL SCHEDULE DATE OF EVENT: **20001101**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA750YE**
EVENT DESCRIPTION: **RELEASE TO GW CONTROLLED DETERMINATION-YES, APPLICABLE AS OF THIS DATE**
EVENT SEQUENCE NUMBER: **177**
EVENT RESPONSIBLE AGENCY: **STATE**
ACTUAL DATE OF EVENT: **11/01/2000**
ORIGINAL SCHEDULE DATE OF EVENT: **20001101**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA400**
EVENT DESCRIPTION: **REMEDY DECISION**
EVENT SEQUENCE NUMBER: **180**
EVENT RESPONSIBLE AGENCY: **STATE**
ACTUAL DATE OF EVENT: **09/21/1994**
ORIGINAL SCHEDULE DATE OF EVENT: **19940921**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA550RC**
EVENT DESCRIPTION: **REMEDY CONSTRUCTION-REMEDY CONSTRUCTED**
EVENT SEQUENCE NUMBER: **186**
EVENT RESPONSIBLE AGENCY: **STATE**
ACTUAL DATE OF EVENT: **09/09/1996**
ORIGINAL SCHEDULE DATE OF EVENT: **19960909**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

Back to Report Summary

Referred to Another Local or State Agency (REF)

MAP ID# 16

Distance from Property: 0.099 mi. (523 ft.) WNW
Elevation: 30 ft. (Lower than TP)

FACILITY INFORMATION

GEOSEARCH ID: **71002260**
ENVIROSTOR ID: **71002260**
FACILITY NAME: **HEWLETT-PACKARD CO. - PALO ALTO FABRICA CTR.**
ADDRESS: **395 PAGE MILL ROAD**
PALO ALTO, CA 94306
COUNTY: **SANTA CLARA**

FACILITY DETAILS

PROGRAM TYPE: **TIERED PERMIT**
STATUS: **REFER: RWQCB**
STATUS DATE: **8/7/2017**
CALENVIROSCREEN SCORE: **26-30%**
SITE CODE: **NOT REPORTED**

Back to Report Summary

Referred to Another Local or State Agency (REF)

MAP ID# 16

Distance from Property: 0.099 mi. (523 ft.) WNW
Elevation: 30 ft. (Lower than TP)

FACILITY INFORMATION

GEOSEARCH ID: **80001599**
ENVIROSTOR ID: **80001599**
FACILITY NAME: **HEWLETT-PACKARD COMPANY**
ADDRESS: **395 PAGE MILL RD**
PALO ALTO, CA 94306
COUNTY: **SANTA CLARA**

FACILITY DETAILS

PROGRAM TYPE: **CORRECTIVE ACTION**
STATUS: **REFER: RWQCB**
STATUS DATE: **1/1/2008**
CALENVIROSCREEN SCORE: **26-30%**
SITE CODE: **NOT REPORTED**

Back to Report Summary

Superfund Enterprise Management System Archived Site Inventory (SEMSARCH)

MAP ID# 16

Distance from Property: 0.100 mi. (528 ft.) WNW
Elevation: 30 ft. (Lower than TP)

FACILITY INFORMATION

EPA ID#: **CAD009122557**
SITE ID#: **0901148**
NAME: **HEWLETT PACKARD CO MFG DIV**
ADDRESS: **395 PAGE MILL RD**
PALO ALTO, CA 94306
COUNTY: **SANTA CLARA**
FEDERAL FACILITY: **NOT A FEDERAL FACILITY**
SUPERFUND ALTERNATIVE AGREEMENT IN PLACE?: **NO**
NPL: **NOT ON THE NPL**
NON NPL STATUS: **NFRAP-SITE DOES NOT QUALIFY FOR THE NPL BASED ON EXISTING INFORMATION**
SUPERFUND SITE INFORMATION: **CLICK HERE**

Below information was gathered from the prior NFRAP update completed in 10/2013 update:

ACTION	START DATE	COMPLETION DATE	RESPONSIBILITY
DS - DISCOVERY	**NOT REPORTED**	**5/1/1986**	**EPA FUND**
PA - PRELIMINARY ASSESSMENT	**NOT REPORTED**	**10/1/1987**	**EPA FUND**
VS - ARCHIVE SITE	**NOT REPORTED**	**10/1/1987**	**EPA IN-HOUSE**

ACTION DESCRIPTIONS

DS - (DISCOVERY) - THE PROCESS BY WHICH A POTENTIAL HAZARDOUS WASTE SITE IS BROUGHT TO THE ATTENTION OF THE EPA. THE PROCESS CAN OCCUR THROUGH THE USE OF SEVERAL MECHANISMS SUCH AS A PHONE CALL OR REFERRAL BY ANOTHER GOVERNMENT AGENCY.

PA - (PRELIMINARY ASSESSMENT) - COLLECTION OF DIVERSE EXISTING INFORMATION ABOUT THE SOURCE AND NATURE OF THE SITE HAZARD. IT IS EPA POLICY TO COMPLETE THE PRELIMINARY ASSESSMENT WITHIN ONE YEAR OF SITE DISCOVERY.

VS - (ARCHIVE SITE) - THE DECISION IS MADE THAT NO FURTHER ACTIVITY IS PLANNED AT THE SITE.

Back to Report Summary

Spills, Leaks, Investigation & Cleanup Recovery Listing (SLIC)

MAP ID# 16

Distance from Property: 0.100 mi. (528 ft.) WNW
Elevation: 30 ft. (Lower than TP)

INCIDENT INFORMATION

GLOBAL ID#:	**2-43S0053**
CASE NUMBER:	**NOT REPORTED**
NAME:	**HEWLETT PACKARD**
ADDRESS:	**395 PAGE MILL RD**
	PALO ALTO CA
FACILITY TYPE:	**NOT REPORTED**
LEAD AGENCY:	**SAN FRANCISCO BAY RWQCB (REGION 2)**
LEAD AGENCY CONTACT:	**NOT REPORTED**
LEAD AGENCY CASE #:	**NOT REPORTED**
SUBSTANCE RELEASED:	**LEAKING TANK,CHEMICAL STORAGE AREAS**
STATUS:	**NOT REPORTED**
RESPONSIBLE PARTY:	**NOT REPORTED**

Back to Report Summary

Spills, Leaks, Investigation & Cleanup Recovery Listing (SLIC)

MAP ID# 16

Distance from Property: 0.099 mi. (523 ft.) WNW
Elevation: 30 ft. (Lower than TP)

INCIDENT INFORMATION

GLOBAL ID#:	**SL18321741**
CASE NUMBER:	**43S0053**
NAME:	**HEWLETT PACKARD COMPANY**
ADDRESS:	**395 PAGE MILL RD**
	PALO ALTO CA
FACILITY TYPE:	**CLEANUP PROGRAM SITE**
LEAD AGENCY:	**SAN FRANCISCO BAY RWQCB (REGION 2)**
LEAD AGENCY CONTACT:	**ROGER PAPLER**
LEAD AGENCY CASE #:	**43S0053**
SUBSTANCE RELEASED:	**34506, 34501, 34475, 39180**
STATUS:	**OPEN - REMEDIATION**
RESPONSIBLE PARTY:	**ELIZABETH MCDONALD**

Back to Report Summary

MAP ID# 17

Distance from Property: 0.115 mi. (607 ft.) SW
Elevation: 34 ft. (Higher than TP)

FACILITY INFORMATION

ID #: **43370006**

NAME: **DURA-BOND BEARING**

ADDRESS: **395 PORTAGE AVE**
PALO ALTO, CA

STATUS (DATE): **PROPERTY/SITE REFERRED TO RWQCB (11/15/1993)**

STANDARD INDUSTRIAL CLASSIFICATION BELIEVED TO BE CAUSE OF (POTENTIAL) CONTAMINATION:
MANU - TRANSPORTATION EQUIPMENT

ACCESS TO SITE: **CONTROLLED**

GROUNDWATER CONTAMINATION: **NOT REPORTED**

COMMENTS

RECORDS SEARCH: SITE OWNED BY MCQUAY-NORRIS INC (SUBSIDIARY OF SKF INDUSTRIES). MANUFACTURING OF CAMSHAFT BEARINGS. SOIL CONTAMINATION - HEAVY METALS FROM WATER TREATMENT SYS-TEM AND SURFACE IMPOUNDMENT; BOTH ARE REMOVED & CLEANED UP (TELEPHONE CONVERSATION WITH T.K. CO, DURA). GROUNDWATER CONTAMINATION ONSITE BY UNDERGROUND FUEL TANKS; FUEL TANKS REPLACED. GROUNDWATER CONTAMINATION BY SOLVENTS (TCA, TCE, DCE, DCA) FROM OFFSITE (DHS/NCC). PRELIMINARY ASSESSMENT SUBMITTED TO EPA. SELF-MONITORING: FOUR WELLS ARE TESTED SEMI-ANNUALLY FOR RWQCB. SITE SCREENING DONE: DURA BOND BEARING COMPANY CONSISTS OF TWO FACILITIES; 370 PORTAGE AVENUE - MFG, AND 3201 ASH ST -ADMINISTRATIVE. SITE REPORTED FOR PROPOSITION 65. SITE LISTED ON CORTESE. RECORDS SEARCH: REMOVAL OF 36 CUBIC YARDS OF CONTAMINATED SLUDGE IN 1983. SITE CERTIFIED. (MONTH AND DAY INFORMATION NOT AVAILABLE. JANUARY 1 SELECTED BECAUSE IT GIVES THE EARLIEST STATUTE OF LIMITATIONS DATE.) SITE DELETED FROM CORTESE. IN SEPTEMBER 1992; CLOSURE OF SURFACE IMPOUNDMENTS AND 100 CUBIC YARDS OF CONTAMINATED SOIL WARE REMOVED. IN DECEMBER 1983; COMPANY CLOSED A WATER TREATMENT SYSTEM WHICH THE DEPARTMENT OF TOXIC SUBSTANCES CONTROL APPROVED AND 28 CUBIC YARDS OF SOIL WERE REMOVED AND DISPOSED OF DURING THE CLOSURE OF THE WATER TREATMENT SYSTEM. DURA BOND HAS BEEN WORKING WITH RWQCB CONCERNING FUEL SPILLS AND SOME GROUNDWATER CONTAMINATION PROBLEMS FROM AN OFF-SITE SOURCE SINCE 1984. THEREFORE, THE SITE HAS BEEN "DECERTIFIED" AND THE PREVIOUS CERT IS CONSIDERED A REMOVAL ACTION. THE STATUS OF THE SITE SHOWS AS REFERRED TO THE RWQCB.

Back to Report Summary

MAP ID# 17

Distance from Property: 0.115 mi. (607 ft.) SW
Elevation: 34 ft. (Higher than TP)

SITE INFORMATION

ID #: **43370006** ASSESSOR'S PARCEL #: **NONE SPECIFIED**
FACILITY LINK: CLICK HERE
NAME: **DURA-BOND BEARING**
ADDRESS: **395 PORTAGE AVE**
PALO ALTO, CA 94306
COUNTY: **SANTA CLARA**
SITE SIZE (ACRES): **NOT REPORTED**
LEAD AGENCY: **NONE SPECIFIED**
DTSC PROJECT MANAGER: **NOT REPORTED**
DTSC SUPERVISOR: **REFERRED - NOT ASSIGNED**
DTSC DIVISION BRANCH: **CLEANUP BERKELEY**
NPL LISTED: **NO** RESTRICTED LAND USE: **NO**
SITE TYPE: **HISTORICAL**
SITE TYPE DESCRIPTION
HISTORICAL: IDENTIFIES SITES FROM AN OLDER DATABASE WHERE NO SITE TYPE WAS IDENTIFIED. MOST OF THESE SITES HAVE A STATUS OF REFERRED OR NO FURTHER ACTION. DTSC IS WORKING TO CLEAN UP THIS DATA BY IDENTIFYING AN APPROPRIATE SITE TYPE FOR EACH "HISTORIC" SITE.
DTSC's CURRENT INVOLVEMENT AT SITE (as of /1/93/11/1)
REFER: RWQCB -
PAST USE/S THAT CAUSED THE CONTAMINATION
NONE SPECIFIED
CONFIRMED CONTAMINANTS OF CONCERN
NONESPECIFIED - NONE SPECIFIED

Back to Report Summary

MAP ID# 17

Distance from Property: 0.115 mi. (607 ft.) SW
Elevation: 34 ft. (Higher than TP)

DURA-BOND BEARING COMPANY, 395 PORTAGE AVENUE, PALO ALTO, CA 94306
UNIQUE ID: **0002090C**

*** B02 ***

PAGE 4235 STATE WATER RESOURCES CONTROL BOARD 06/01/88
HAZARDOUS SUBSTANCE STORAGE CONTAINER INFORMATION FOR SANTA CLARA COUNTY
CONTAINER TYPES: 1,2,3,4,5
(1=FARM MOTOR VEHICLE FUEL TANKS, 2=ALL OTHER PRODUCT TANKS, 3=WASTE TANKS, 4=SUMPS, 5=PITS, PONDS, LAGOONS & OTHERS)

I OWNER
SKF INDUSTRIES, INC.
1100 FIRST AVENUE KING OF PRUSSIA PA 19406

II FACILITY

	MAILING ADDRESS / TOWNSHIP/RANGE/SECTION	DEALER/FOREMAN/SUPERVISOR / TELEPHONE	TYPE OF BUSINESS / NO. OF CONTAINERS
DURA-BOND BEARING COMPANY 395 PORTAGE AVENUE PALO ALTO CA 94306	P.O. BOX 60220 PALO ALTO CA 94306	JOHN A. MANGAN,JR., MFG. MANAG (415) 493-6546	MANUFACTURING 5

CROSS STREET :
ASH STREET

III 24-HR. CONTACT PERSON / TELEPHONE
DAY: KO, T.L. (415) 493-6546 NIGHT: PAVKOVIC, MIRO (408) 730-5175

********** OWNER ASSIGNED CONTAINER NUMBER: 1 ********** STATE BOARD ASSIGNED CONTAINER ID NUMBER: 00000001428001 *********

IV DESCRIPTION
A. CONTAINER TYPE : TANK
B. MANUFACTURER/YR OF MFG: UNKNOWN /
C. YEAR INSTALLED : 1960
D. CAPACITY (GALLONS) : 1,000
E. REPAIRS : NONE IF YES WHEN :
F. CURRENTLY USED : YES IF NO, YEAR OF LAST USE:
G. STORES : PRODUCT
H. MOTOR VEHICLE FUEL/WASTE OIL : NO CONTAINS:

IS CONTAINER LOCATED ON A FARM : NO

V CONTAINER CONSTRUCTION
A. THICKNESS: B. VAULTING: NON-VAULTED C. WALLING: UNKNOWN
D. MATERIAL : CARBON STEEL
E. LINING : UNKNOWN
F. WRAPPING : UNKNOWN

VI PIPING
A. ABOVEGROUND PIPING : B. UNDERGROUND PIPING : SUCTION
C. REPAIRS : NONE IF YES, YEAR OF MOST RECENT REPAIR:

VII LEAK DETECTION
GW MON. WELLS P

URE TEST COMPOSITION OF SUBSTANCES CURRENTLY STORED IN CONTAINER
SOLVENTS

*** C02 ***

PAGE 4236 STATE WATER RESOURCES CONTROL BOARD 06/01/88
HAZARDOUS SUBSTANCE STORAGE CONTAINER INFORMATION FOR SANTA CLARA COUNTY
CONTAINER TYPES: 1,2,3,4,5
(1=FARM MOTOR VEHICLE FUEL TANKS, 2=ALL OTHER PRODUCT TANKS, 3=WASTE TANKS, 4=SUMPS, 5=PITS, PONDS, LAGOONS & OTHERS)

********** OWNER ASSIGNED CONTAINER NUMBER: 2 ********** STATE BOARD ASSIGNED CONTAINER ID NUMBER: 00000001428002 **********

IV DESCRIPTION
A. CONTAINER TYPE : TANK
B. MANUFACTURER/YR OF MFG: UNKNOWN
C. YEAR INSTALLED : 1960
D. CAPACITY (GALLONS) : 500
E. REPAIRS : NONE IF YES WHEN :
F. CURRENTLY USED : YES IF NO, YEAR OF LAST USE:
G. STORES : PRODUCT
H. MOTOR VEHICLE FUEL/WASTE OIL : YES CONTAINS: UNLEADED

IS CONTAINER LOCATED ON A FARM : NO

V CONTAINER CONSTRUCTION
A. THICKNESS:
B. VAULTING: NON-VAULTED
C. WALLING: UNKNOWN
D. MATERIAL : CARBON STEEL
E. LINING : UNKNOWN
F. WRAPPING : UNKNOWN

VI PIPING
A. ABOVEGROUND PIPING :
B. UNDERGROUND PIPING : SUCTION
C. REPAIRS : NONE IF YES, YEAR OF MOST RECENT REPAIR:

VII LEAK DETECTION
GW MON. WELLS P

URE TEST COMPOSITION OF SUBSTANCES CURRENTLY STORED IN CONTAINER
12031 UNLEADED MOTOR VEHICLE FUEL

********** OWNER ASSIGNED CONTAINER NUMBER: 3 ********** STATE BOARD ASSIGNED CONTAINER ID NUMBER: 00000001428003 **********

IV DESCRIPTION
A. CONTAINER TYPE : TANK
B. MANUFACTURER/YR OF MFG: MODESTO WELDING & TANKS WORKS /1981
C. YEAR INSTALLED : 1981
D. CAPACITY (GALLONS) : 5,000
E. REPAIRS : NONE IF YES WHEN :
F. CURRENTLY USED : YES IF NO, YEAR OF LAST USE:
G. STORES : WASTE
H. MOTOR VEHICLE FUEL/WASTE OIL : NO CONTAINS:

IS CONTAINER LOCATED ON A FARM : NO

V CONTAINER CONSTRUCTION
A. THICKNESS: 1/4 INCHES
B. VAULTING: NON-VAULTED
C. WALLING: WRAPPED
D. MATERIAL : CARBON STEEL
E. LINING : UNKNOWN
F. WRAPPING : UNKNOWN

VI PIPING
A. ABOVEGROUND PIPING :
B. UNDERGROUND PIPING : PRESSURE
C. REPAIRS : NONE IF YES, YEAR OF MOST RECENT REPAIR:

VII LEAK DETECTION
GW MON. WELLS P

URE TEST COMPOSITION OF SUBSTANCES CURRENTLY STORED IN CONTAINER
7440439 CADMIUM
7439921 LEAD
7440666 ZINC
LUBRICATING OIL

*** 002 ***

PAGE 4237 STATE WATER RESOURCES CONTROL BOARD 06/01/88
HAZARDOUS SUBSTANCE STORAGE CONTAINER INFORMATION FOR SANTA CLARA COUNTY
CONTAINER TYPES: 1,2,3,4,5
(1=FARM MOTOR VEHICLE FUEL TANKS, 2=ALL OTHER PRODUCT TANKS, 3=WASTE TANKS, 4=SUMPS, 5=PITS, PONDS, LAGOONS & OTHERS)

********** OWNER ASSIGNED CONTAINER NUMBER: 4 ********** STATE BOARD ASSIGNED CONTAINER ID NUMBER: 00000001428004 *********

IV DESCRIPTION
A. CONTAINER TYPE : SUMP
B. MANUFACTURER/YR OF MFG: CEILCOTE /1982
C. YEAR INSTALLED : 1982
D. CAPACITY (GALLONS) : 374
E. REPAIRS : NONE IF YES WHEN :
F. CURRENTLY USED : YES IF NO, YEAR OF LAST USE:
G. STORES : WASTE
H. MOTOR VEHICLE FUEL/WASTE OIL : NO CONTAINS:

IS CONTAINER LOCATED ON A FARM : NO

V CONTAINER CONSTRUCTION
A. THICKNESS: 1/4 INCHES B. VAULTING: UNKNOWN C. WALLING: NONE
D. MATERIAL : FIBERGLASS
E. LINING : UNLINED
F. WRAPPING : NONE

VI PIPING
A. ABOVEGROUND PIPING : B. UNDERGROUND PIPING :
C. REPAIRS : UNKN IF YES, YEAR OF MOST RECENT REPAIR:

VII LEAK DETECTION
VAULT MONITORING PIP OTHER P

URE TEST	COMPOSITION OF SUBSTANCES CURRENTLY STORED IN CONTAINER
7647010	* HYDROCHLORIC ACID (HYDROGEN CHLORIDE)
7646857	ZINC CHLORIDE
	KOLENE #1
7439921	LEAD

* CHECK STATE BOARD CHEMICAL CODE LISTING FOR POSSIBLE SYNONYMS

*** E02 ***

PAGE 4238 STATE WATER RESOURCES CONTROL BOARD 06/01/88
HAZARDOUS SUBSTANCE STORAGE CONTAINER INFORMATION FOR SANTA CLARA COUNTY
CONTAINER TYPES: 1,2,3,4,5
(1=FARM MOTOR VEHICLE FUEL TANKS, 2=ALL OTHER PRODUCT TANKS, 3=WASTE TANKS, 4=SUMPS, 5=PITS, PONDS, LAGOONS & OTHERS)

********** OWNER ASSIGNED CONTAINER NUMBER: 5 ********** STATE BOARD ASSIGNED CONTAINER ID NUMBER: 0000000142800S *********

IV DESCRIPTION
A. CONTAINER TYPE : SUMP
B. MANUFACTURER/YR OF MFG: CEILCOTE /1983
C. YEAR INSTALLED : 1983
D. CAPACITY (GALLONS) : 224
E. REPAIRS : NONE IF YES WHEN :
F. CURRENTLY USED : YES IF NO, YEAR OF LAST USE:
G. STORES : WASTE
H. MOTOR VEHICLE FUEL/WASTE OIL : NO CONTAINS:

IS CONTAINER LOCATED ON A FARM : NO

V CONTAINER CONSTRUCTION
A. THICKNESS: 1/4 INCHES B. VAULTING: VAULTED C. WALLING: NONE
D. MATERIAL : FIBERGLASS
E. LINING : UNLINED
F. WRAPPING : NONE

VI PIPING
A. ABOVEGROUND PIPING : UNKNOWN B. UNDERGROUND PIPING :
C. REPAIRS : NONE IF YES, YEAR OF MOST RECENT REPAIR:

VII LEAK DETECTION
VAULT MONITORING PIP OTHER P

URE TEST COMPOSITION OF SUBSTANCES CURRENTLY STORED IN CONTAINER
7647010 * HYDROCHLORIC ACID (HYDROGEN CHLORIDE)
7646857 ZINC CHLORIDE
KOLENE #1
7439921 LEAD

* CHECK STATE BOARD CHEMICAL CODE LISTING FOR POSSIBLE SYNONYMS

*** E02 ***

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*** K08 ***

PAGE 4334 — STATE WATER RESOURCES CONTROL BOARD — 06/01/88
HAZARDOUS SUBSTANCE STORAGE CONTAINER INFORMATION FOR SANTA CLARA COUNTY
CONTAINER TYPES: 1,2,3,4,5
(1=FARM MOTOR VEHICLE FUEL TANKS, 2=ALL OTHER PRODUCT TANKS, 3=WASTE TANKS, 4=SUMPS, 5=PITS, PONDS, LAGOONS & OTHERS)

I OWNER
STAR GRAPHIC ARTS CO. INC.
3200 ASH ST. PALO ALTO CA 94306

II FACILITY

	MAILING ADDRESS / TOWNSHIP/RANGE/SECTION	DEALER/FOREMAN/SUPERVISOR / TELEPHONE	TYPE OF BUSINESS / NO. OF CONTAINERS
STAR GRAPHIC ARTS CO. INC. 3200 ASH ST. PALO ALTO CA 94306	3200 ASH ST. PALO ALTO CA 94306	GEO. GANANIAN (415) 494-3351	GRAPHIC ARTS 1

CROSS STREET : PORTAGE

III 24-HR. CONTACT PERSON / TELEPHONE
DAY: GANANIAN, GEO. (494) 335-1 NIGHT: GANANIAN, GEO. (928) 421-1

********** OWNER ASSIGNED CONTAINER NUMBER: 1 ********** STATE BOARD ASSIGNED CONTAINER ID NUMBER: 00000060093001 **********

IV DESCRIPTION
A. CONTAINER TYPE : TANK
B. MANUFACTURER/YR OF MFG: /
C. YEAR INSTALLED : 1979
D. CAPACITY (GALLONS) : 2,000
E. REPAIRS : NONE IF YES WHEN :
F. CURRENTLY USED : YES IF NO, YEAR OF LAST USE:
G. STORES : PRODUCT
H. MOTOR VEHICLE FUEL/WASTE OIL : YES CONTAINS: UNLEADED

IS CONTAINER LOCATED ON A FARM : NO

V CONTAINER CONSTRUCTION
A. THICKNESS:
B. VAULTING: UNKNOWN
C. WALLING: UNKNOWN
D. MATERIAL : FIBERGLASS
E. LINING : UNKNOWN
F. WRAPPING : UNKNOWN

VI PIPING
A. ABOVEGROUND PIPING :
B. UNDERGROUND PIPING :
C. REPAIRS : NONE IF YES, YEAR OF MOST RECENT REPAIR:

VII LEAK DETECTION
NONE P

URE TEST COMPOSITION OF SUBSTANCES CURRENTLY STORED IN CONTAINER
12031 UNLEADED MOTOR VEHICLE FUEL

*** L08 ***

Back to Report Summary

Resource Conservation & Recovery Act - Generator (RCRAGR09)

MAP ID# 17

Distance from Property: 0.115 mi. (607 ft.) SW
Elevation: 34 ft. (Higher than TP)

FACILITY INFORMATION

EPA ID#: **CAD063553630**
NAME: **DURA-BOND BEARING COMPANY**
ADDRESS: **395 PORTAGE**
PALO ALTO, CA 94306
CONTACT NAME: **NOT REPORTED**
CONTACT ADDRESS: **P.O. BOX ELEVEN THOUSAND EIGHT**
PALO ALTO CA 94306
CONTACT PHONE: **NOT REPORTED**
NON-NOTIFIER: **NOT A NON-NOTIFIER**
DATE RECEIVED BY AGENCY: **09/01/1996**
CERTIFICATION **- NO CERTIFICATION REPORTED -**
INDUSTRY CLASSIFICATION (NAICS)
336399 - ALL OTHER MOTOR VEHICLE PARTS MANUFACTURING

OWNER TYPE: **NOT REPORTED**
OWNER NAME: **NOT REPORTED**
OPERATOR TYPE: **PRIVATE**
OPERATOR NAME: **DURA-BOND BEARING COMPANY**

CURRENT ACTIVITY INFORMATION

GENERATOR STATUS: **SMALL QUANTITY GENERATOR** LAST UPDATED DATE: **06/27/2002**
SUBJECT TO CORRECTIVE ACTION UNIVERSE: **NO**
TDSFs POTENTIALLY SUBJECT TO CORRECTIVE ACTION UNDER 3004 (u)/(v) UNIVERSE: **NO**
TDSFs ONLY SUBJECT TO CORRECTIVE ACTION UNDER DISCRETIONARY AUTHORITIES UNIVERSE: **NO**
NON TSDFs WHERE RCRA CORRECTIVE ACTION HAS BEEN IMPOSED UNIVERSE: **NO**
CORRECTIVE ACTION WORKLOAD UNIVERSE: **NO**

IMPORTER: **NO**
MIXED WASTE GENERATOR: **NO**
RECYCLER: **NO**
TRANSPORTER: **NO**
ONSITE BURNER EXEMPTION: **NO**
FURNACE EXEMPTION: **NO**
USED OIL REFINER: **NO**
USED OIL TRANSFER FACILITY: **NO**

UNDERGROUND INJECTION: **NO**
UNIVERSAL WASTE DESTINATION FACILITY: **NO**
TRANSFER FACILITY: **NO**
USED OIL FUEL BURNER: **NO**
USED OIL PROCESSOR: **NO**
USED OIL FUEL MARKETER TO BURNER: **NO**
SPECIFICATION USED OIL MARKETER: **NO**
USED OIL TRANSPORTER: **NO**

COMPLIANCE, MONITORING AND ENFORCEMENT INFORMATION

EVALUATIONS
07/16/1985 **FRR FINANCIAL RECORD REVIEW**
VIOLATIONS **- NO VIOLATIONS REPORTED -**
ENFORCEMENTS **- NO ENFORCEMENTS REPORTED -**

HAZARDOUS WASTE

- NO HAZARDOUS WASTE INFORMATION REPORTED -
UNIVERSAL WASTE **- NO UNIVERSAL WASTE REPORTED -**
CORRECTIVE ACTION AREA **- NO CORRECTIVE ACTION AREA INFORMATION REPORTED -**
CORRECTIVE ACTION EVENT
NO CORRECTIVE ACTION EVENT(S) REPORTED

Back to Report Summary

Referred to Another Local or State Agency (REF)

MAP ID# 17

Distance from Property: 0.115 mi. (607 ft.) SW
Elevation: 34 ft. (Higher than TP)

FACILITY INFORMATION

GEOSEARCH ID: **43370006**
ENVIROSTOR ID: **43370006**
FACILITY NAME: **DURA-BOND BEARING**
ADDRESS: **395 PORTAGE AVE**
PALO ALTO, CA 94306
COUNTY: **SANTA CLARA**

FACILITY DETAILS

PROGRAM TYPE: **HISTORICAL**
STATUS: **REFER: RWQCB**
STATUS DATE: **11/15/1993**
CALENVIROSCREEN SCORE: **26-30%**
SITE CODE: **NOT REPORTED**

Back to Report Summary

MAP ID# 17

Distance from Property: 0.115 mi. (607 ft.) SW
Elevation: 34 ft. (Higher than TP)

FACILITY INFORMATION

FACILITY #: **1428**
BOE: **44-026035**
NAME: **DURA-BOND BEARING COMPANY**
ADDRESS: **395 PORTAGE AVE**
PALO ALTO, CA 94306

STATUS: **ACTIVE**
JURISDICTION: **CITY OF PALO ALTO**
AGENCY: **FIRE DEPARTMENT**

TANK INFORMATION

TANK #: **000001**
INSTALLED: **NOT REPORTED**
TANK USE: **UNKNOWN**
CONTENT: **NOT REPORTED**

CAPACITY: **1000**
REMOVED: **NOT REPORTED**
STORAGE TYPE: **PRODUCT**
CONTAINMENT: **NOT REPORTED**

TANK #: **000002**
INSTALLED: **NOT REPORTED**
TANK USE: **M.V. FUEL**
CONTENT: **REG UNLEADED**

CAPACITY: **500**
REMOVED: **NOT REPORTED**
STORAGE TYPE: **PRODUCT**
CONTAINMENT: **NOT REPORTED**

TANK #: **000003**
INSTALLED: **NOT REPORTED**
TANK USE: **UNKNOWN**
CONTENT: **NOT REPORTED**

CAPACITY: **5000**
REMOVED: **NOT REPORTED**
STORAGE TYPE: **WASTE**
CONTAINMENT: **NOT REPORTED**

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MAP ID# 17

Distance from Property: 0.100 mi. (528 ft.) SW
Elevation: 34 ft. (Higher than TP)

FACILITY INFORMATION

FACILITY #: **60093**
BOE: **44-026070**
NAME: **STAR GRAPHIC ARTS CO. INC.**
ADDRESS: **3200 ASH ST**
PALO ALTO, CA 94306

STATUS: **ACTIVE**
JURISDICTION: **CITY OF PALO ALTO**
AGENCY: **FIRE DEPARTMENT**

TANK INFORMATION

TANK #: **000001**
INSTALLED: **NOT REPORTED**
TANK USE: **M.V. FUEL**
CONTENT: **REG UNLEADED**

CAPACITY: **2000**
REMOVED: **NOT REPORTED**
STORAGE TYPE: **PRODUCT**
CONTAINMENT: **NOT REPORTED**

Back to Report Summary

GeoTracker Cleanup Sites (CLEANUPSITES)

MAP ID# 18

Distance from Property: 0.115 mi. (607 ft.) WSW
Elevation: 36 ft. (Higher than TP)

FACILITY INFORMATION

GLOBAL ID: **T0608500788**
URL LINK: CLICK HERE
BUSINESS NAME: **JOST HEATING & SHEET METAL**
ADDRESS: **412 OLIVE AVE**
PALO ALTO, CA 94306
COUNTY: **SANTA CLARA**

FACILITY DETAILS

CASE TYPE: **LUST CLEANUP SITE**
CASE NUMBER: **NOT REPORTED**
STATUS: **COMPLETED - CASE CLOSED 7/9/1992**
POTENTIAL CONTAMINATION:
GASOLINE
POTENTIAL MEDIA AFFECTED:
SOIL
DISADVANTAGED COMMUNITY:
NO
SEVERELY DISADVANTAGED COMMUNITY:
NO
SITE HISTORY:
NOT REPORTED

REGULATORY ACTIVITIES

TYPE OF ACTION:	DATE:	ACTION:
OTHER	**01/01/50**	**LEAK REPORTED**
REMEDIATION	**01/01/50**	**EXCAVATION**
ENFORCEMENT	**07/09/1992**	**CLOSURE/NO FURTHER ACTION LETTER**
RESPONSE	**01/25/1992**	**OTHER REPORT / DOCUMENT**
ENFORCEMENT	**09/17/1990**	**NOTICE OF RESPONSIBILITY - #40036**
OTHER	**02/07/1986**	**LEAK REPORTED**
REMEDIATION	**02/07/1986**	**EXCAVATION**

STATUS HISTORY

STATUS:	DATE:
COMPLETED - CASE CLOSED	**07/09/1992**
OPEN - SITE ASSESSMENT	**05/28/1991**
OPEN - CASE BEGIN DATE	**02/07/1986**

CONTACT DETAILS

ORGANIZATION: **SANTA CLARA COUNTY LOP**
ADDRESS: **1555 BERGER DRIVE, SUITE 300**
CITY: **SAN JOSE**
CONTACT NAME: **UST CASE WORKER**
CONTACT TYPE: **LOCAL AGENCY CASEWORKER**
CONTACT PHONE: **4089183400**
EMAIL: **NOT REPORTED**

ORGANIZATION: **SAN FRANCISCO BAY RWQCB (REGION 2)**
ADDRESS: **1515 CLAY ST SUITE 1400**
CITY: **OAKLAND**
CONTACT NAME: **REGIONAL WATER BOARD**
CONTACT TYPE: **REGIONAL BOARD CASEWORKER**
CONTACT PHONE: **NOT REPORTED**
EMAIL: **NOT REPORTED**

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Historical Cortese List (HISTCORTESE)

MAP ID# 18

Distance from Property: 0.115 mi. (607 ft.) WSW
Elevation: 36 ft. (Higher than TP)

FACILITY INFORMATION

GEOSEARCH ID: **43-0765COR**
ID#: **43-0765**
NAME: **JOST HEATING & SHEET META**
ADDRESS: **412 OLIVE**
PALO ALTO, CA 94306

Back to Report Summary

Leaking Underground Storage Tanks (LUST)

MAP ID# 18

Distance from Property: 0.115 mi. (607 ft.) WSW
Elevation: 36 ft. (Higher than TP)

FACILITY INFORMATION

GLOBAL ID: **T0608500788**
URL LINK: CLICK HERE
BUSINESS NAME: **JOST HEATING & SHEET METAL**
ADDRESS: **412 OLIVE AVE**
PALO ALTO, CA 94306
COUNTY: **SANTA CLARA**

FACILITY DETAILS

CASE TYPE: **LUST CLEANUP SITE**
CASE NUMBER: **NOT REPORTED**
STATUS: **COMPLETED - CASE CLOSED 07/09/1992**
POTENTIAL CONTAMINATION:
GASOLINE
POTENTIAL MEDIA AFFECTED:
SOIL
DISADVANTAGED COMMUNITY:
NO
SEVERELY DISADVANTAGED COMMUNITY:
NO
SITE HISTORY:
NOT REPORTED

HISTORICAL FACILITY DETAILS

NO HISTORICAL DETAIL(S) INFORMATION REPORTED FOR THIS FACILITY

Back to Report Summary

GeoTracker Cleanup Sites (CLEANUPSITES)

MAP ID# 19

Distance from Property: 0.115 mi. (607 ft.) SW
Elevation: 34 ft. (Higher than TP)

FACILITY INFORMATION

GLOBAL ID: **T0608501661**
URL LINK: CLICK HERE
BUSINESS NAME: **CARMEAN TRUST**
ADDRESS: **411 ACACIA AVE**
PALO ALTO, CA 94306
COUNTY: **SANTA CLARA**

FACILITY DETAILS

CASE TYPE: **LUST CLEANUP SITE**
CASE NUMBER: **NOT REPORTED**
STATUS: **COMPLETED - CASE CLOSED 4/22/1996**
POTENTIAL CONTAMINATION:
DIESEL
POTENTIAL MEDIA AFFECTED:
SOIL
DISADVANTAGED COMMUNITY:
NO
SEVERELY DISADVANTAGED COMMUNITY:
NO
SITE HISTORY:
NOT REPORTED

REGULATORY ACTIVITIES

TYPE OF ACTION:	DATE:	ACTION:
OTHER	**01/01/50**	**LEAK REPORTED**
ENFORCEMENT	**04/22/1996**	**CLOSURE/NO FURTHER ACTION LETTER**
RESPONSE	**04/22/1996**	**OTHER REPORT / DOCUMENT**
OTHER	**01/01/1991**	**LEAK REPORTED**

STATUS HISTORY

STATUS:	DATE:
COMPLETED - CASE CLOSED	**04/22/1996**
OPEN - CASE BEGIN DATE	**01/01/1991**

CONTACT DETAILS

ORGANIZATION: **SANTA CLARA COUNTY LOP**
ADDRESS: **1555 BERGER DRIVE, SUITE 300**
CITY: **SAN JOSE**
CONTACT NAME: **UST CASE WORKER**
CONTACT TYPE: **LOCAL AGENCY CASEWORKER**
CONTACT PHONE: **4089183400**
EMAIL: **NOT REPORTED**
ORGANIZATION: **SAN FRANCISCO BAY RWQCB (REGION 2)**
ADDRESS: **1515 CLAY ST SUITE 1400**
CITY: **OAKLAND**
CONTACT NAME: **REGIONAL WATER BOARD**

CONTACT TYPE: **REGIONAL BOARD CASEWORKER**
CONTACT PHONE: **NOT REPORTED**
EMAIL: **NOT REPORTED**

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Historical Cortese List (HISTCORTESE)

MAP ID# 19

Distance from Property: 0.115 mi. (607 ft.) SW
Elevation: 34 ft. (Higher than TP)

FACILITY INFORMATION

GEOSEARCH ID: **43-1725COR**
ID#: **43-1725**
NAME: **CARMEAN TRUST**
ADDRESS: **411 ACACIA**
PALO ALTO, CA 94306

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PALO ALTO DATSUN INC, 411 ACACIA ST, PALO ALTO, CA 94304
UNIQUE ID: **0002C152**

*** J16 ***

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HAZARDOUS SUBSTANCE STORAGE CONTAINER INFORMATION FOR SAN MATEO COUNTY
CONTAINER TYPES: 1,2,3,4,5
(1=FARM MOTOR VEHICLE FUEL TANKS, 2=ALL OTHER PRODUCT TANKS, 3=WASTE TANKS, 4=SUMPS, 5=PITS, PONDS, LAGOONS & OTHERS)

I OWNER
PALO ALTO DATSUN INC.
3017 EL CAMINO REAL PALO ALTO CA 94304

II FACILITY

	MAILING ADDRESS / TOWNSHIP/RANGE/SECTION	DEALER/FOREMAN/SUPERVISOR / TELEPHONE	TYPE OF BUSINESS / NO. OF CONTAINERS
PALO ALTO DATSUN INC 411 ACACIA ST PALO ALTO CA 94304	PO BOX 60310 PALO ALTO CA 94306	EUGENE ROE (415) 493-5100	AUTO DEALERSHIP 2

CROSS STREET :
PAGE MILL/EL CAMINO REAL

III 24-HR. CONTACT PERSON / TELEPHONE
DAY: RONALD STEPHENS (408) 723-0539 NIGHT: FRED HELLNER (415) 364-0145

********** OWNER ASSIGNED CONTAINER NUMBER: 1 ********** STATE BOARD ASSIGNED CONTAINER ID NUMBER: 000000C2752001 **********

IV DESCRIPTION
A. CONTAINER TYPE : TANK
B. MANUFACTURER/YR OF MFG: UNKNOWN /
C. YEAR INSTALLED : UNK
D. CAPACITY (GALLONS) : 1,000
E. REPAIRS : NONE IF YES WHEN :
F. CURRENTLY USED : YES IF NO, YEAR OF LAST USE:
G. STORES : PRODUCT
H. MOTOR VEHICLE FUEL/WASTE OIL : YES CONTAINS: UNLEADED

IS CONTAINER LOCATED ON A FARM : NO

V CONTAINER CONSTRUCTION
A. THICKNESS: B. VAULTING: UNKNOWN C. WALLING: UNKNOWN
D. MATERIAL : UNKNOWN
E. LINING : UNKNOWN
F. WRAPPING : UNKNOWN

VI PIPING
A. ABOVEGROUND PIPING : B. UNDERGROUND PIPING : UNKNOWN
C. REPAIRS : UNKN IF YES, YEAR OF MOST RECENT REPAIR:

VII LEAK DETECTION
VISUAL P

URE TEST COMPOSITION OF SUBSTANCES CURRENTLY STORED IN CONTAINER
12031 UNLEADED MOTOR VEHICLE FUEL

*** K16 ***

PAGE 1448 STATE WATER RESOURCES CONTROL BOARD 06/01/88
HAZARDOUS SUBSTANCE STORAGE CONTAINER INFORMATION FOR SAN MATEO COUNTY
CONTAINER TYPES: 1,2,3,4,5
(1=FARM MOTOR VEHICLE FUEL TANKS, 2=ALL OTHER PRODUCT TANKS, 3=WASTE TANKS, 4=SUMPS, 5=PITS, PONDS, LAGOONS & OTHERS)

********** OWNER ASSIGNED CONTAINER NUMBER: 2 ********** STATE BOARD ASSIGNED CONTAINER ID NUMBER: 00000002752002 **********

IV DESCRIPTION
A. CONTAINER TYPE : TANK
B. MANUFACTURER/YR OF MFG: UNKNOWN
C. YEAR INSTALLED : UNK
D. CAPACITY (GALLONS) :
E. REPAIRS : UNKN IF YES WHEN :
F. CURRENTLY USED : YES IF NO, YEAR OF LAST USE:
G. STORES : WASTE
H. MOTOR VEHICLE FUEL/WASTE OIL : YES CONTAINS: WASTE OIL

IS CONTAINER LOCATED ON A FARM : NO

V CONTAINER CONSTRUCTION
A. THICKNESS:
B. VAULTING: UNKNOWN
C. WALLING: UNKNOWN
D. MATERIAL : UNKNOWN
E. LINING : UNKNOWN
F. WRAPPING : UNKNOWN

VI PIPING
A. ABOVEGROUND PIPING :
B. UNDERGROUND PIPING : GRAVITY
C. REPAIRS : UNKN IF YES, YEAR OF MOST RECENT REPAIR:

VII LEAK DETECTION
VISUAL P

URE TEST COMPOSITION OF SUBSTANCES CURRENTLY STORED IN CONTAINER
12035 WASTE OIL

*** L16 ***

Back to Report Summary

Leaking Underground Storage Tanks (LUST)

MAP ID# 19

Distance from Property: 0.115 mi. (607 ft.) SW
Elevation: 34 ft. (Higher than TP)

FACILITY INFORMATION

GLOBAL ID: **T0608501661**
URL LINK: CLICK HERE
BUSINESS NAME: **CARMEAN TRUST**
ADDRESS: **411 ACACIA AVE**
PALO ALTO, CA 94306
COUNTY: **SANTA CLARA**

FACILITY DETAILS

CASE TYPE: **LUST CLEANUP SITE**
CASE NUMBER: **NOT REPORTED**
STATUS: **COMPLETED - CASE CLOSED 04/22/1996**
POTENTIAL CONTAMINATION:
DIESEL
POTENTIAL MEDIA AFFECTED:
SOIL
DISADVANTAGED COMMUNITY:
NO
SEVERELY DISADVANTAGED COMMUNITY:
NO
SITE HISTORY:
NOT REPORTED

HISTORICAL FACILITY DETAILS

NO HISTORICAL DETAIL(S) INFORMATION REPORTED FOR THIS FACILITY

Back to Report Summary

Resource Conservation & Recovery Act - Generator (RCRAGR09)

MAP ID# 19

Distance from Property: 0.115 mi. (607 ft.) SW
Elevation: 34 ft. (Higher than TP)

FACILITY INFORMATION

EPA ID#: **CAD981579691**
NAME: **PALO ALTO NISSAN INC**
ADDRESS: **411 ACACIA**
PALO ALTO, CA 94306
CONTACT NAME: **NOT REPORTED**
CONTACT ADDRESS: **PO BOX 60310**
PALO ALTO CA 94306
CONTACT PHONE: **NOT REPORTED**
NON-NOTIFIER: **NOT A NON-NOTIFIER**
DATE RECEIVED BY AGENCY: **09/01/1996**

OWNER TYPE: **NOT REPORTED**
OWNER NAME: **NOT REPORTED**
OPERATOR TYPE: **PRIVATE**
OPERATOR NAME: **NOT REQUIRED**

CERTIFICATION **- NO CERTIFICATION REPORTED -**
INDUSTRY CLASSIFICATION (NAICS) **- NO NAICS INFORMATION REPORTED -**

CURRENT ACTIVITY INFORMATION

GENERATOR STATUS: **SMALL QUANTITY GENERATOR** LAST UPDATED DATE: **06/27/2002**
SUBJECT TO CORRECTIVE ACTION UNIVERSE: **NO**
TDSFs POTENTIALLY SUBJECT TO CORRECTIVE ACTION UNDER 3004 (u)/(v) UNIVERSE: **NO**
TDSFs ONLY SUBJECT TO CORRECTIVE ACTION UNDER DISCRETIONARY AUTHORITIES UNIVERSE: **NO**
NON TSDFs WHERE RCRA CORRECTIVE ACTION HAS BEEN IMPOSED UNIVERSE: **NO**
CORRECTIVE ACTION WORKLOAD UNIVERSE: **NO**

IMPORTER: **NO**
MIXED WASTE GENERATOR: **NO**
RECYCLER: **NO**
TRANSPORTER: **NO**
ONSITE BURNER EXEMPTION: **NO**
FURNACE EXEMPTION: **NO**
USED OIL REFINER: **NO**
USED OIL TRANSFER FACILITY: **NO**

UNDERGROUND INJECTION: **NO**
UNIVERSAL WASTE DESTINATION FACILITY: **NO**
TRANSFER FACILITY: **NO**
USED OIL FUEL BURNER: **NO**
USED OIL PROCESSOR: **NO**
USED OIL FUEL MARKETER TO BURNER: **NO**
SPECIFICATION USED OIL MARKETER: **NO**
USED OIL TRANSPORTER: **NO**

COMPLIANCE, MONITORING AND ENFORCEMENT INFORMATION

EVALUATIONS **- NO EVALUATIONS REPORTED -**
VIOLATIONS **- NO VIOLATIONS REPORTED -**
ENFORCEMENTS **- NO ENFORCEMENTS REPORTED -**

HAZARDOUS WASTE

- NO HAZARDOUS WASTE INFORMATION REPORTED -
UNIVERSAL WASTE **- NO UNIVERSAL WASTE REPORTED -**
CORRECTIVE ACTION AREA **- NO CORRECTIVE ACTION AREA INFORMATION REPORTED -**

CORRECTIVE ACTION EVENT

NO CORRECTIVE ACTION EVENT(S) REPORTED

Back to Report Summary

MAP ID# 19

Distance from Property: 0.115 mi. (607 ft.) SW
Elevation: 34 ft. (Higher than TP)

FACILITY INFORMATION

FACILITY #: **2752**
BOE: **44-034456**
NAME: **VACANT**
ADDRESS: **411 ACACIA ST**
PALO ALTO, CA 94304

STATUS: **INACTIVE**
JURISDICTION: **CITY OF PALO ALTO**
AGENCY: **FIRE DEPARTMENT**

TANK INFORMATION

TANK #: **000001**
INSTALLED: **01-01-74**
TANK USE: **M.V. FUEL**
CONTENT: **REG UNLEADED**

CAPACITY: **1000**
REMOVED: **07-13-92**
STORAGE TYPE: **PRODUCT**
CONTAINMENT: **OTHER**

TANK #: **000002**
INSTALLED: **01-01-74**
TANK USE: **OIL**
CONTENT: **WASTE OIL**

CAPACITY: **500**
REMOVED: **07-13-92**
STORAGE TYPE: **WASTE**
CONTAINMENT: **UNKNOWN**

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Alternative Fueling Stations (ALTFUELS)

MAP ID# 20

Distance from Property: 0.123 mi. (649 ft.) NW
Elevation: 30 ft. (Lower than TP)

FACILITY INFORMATION

GEOSEARCH ID: **124548**
UNIQUE IDENTIFIER FOR THIS SPECIFIC STATION: **124548**
STATION NAME: **PARK PLAZA**
ADDRESS: **195 PAGE MILL RD**
PALO ALTO, CA 94306
INTERSECTION DIRECTIONS: **NOT REPORTED**
STATION PHONE: **NOT REPORTED**
STATION CURRENT STATUS: **OPEN: THE STATION IS OPEN.**
TYPE OF ALTERNATIVE FUEL THE STATION PROVIDES: **ELECTRIC**
OWNER TYPE: **PRIVATELY OWNED**
FEDERAL AGANCY ID: **NOT REPORTED**
FEDERAL AGENCY NAME: **NOT REPORTED**
DATE THAT THE STATION BEGAN OFFERING THE FUEL: **5/1/2019**
DATE THE STATION'S DETAILS WERE LAST CONFIRMED: **7/9/2019**
TIME THE STATION'S DETAILS WERE LAST UPDATED (ISO 8601 FORMAT).: **2020-01-21 18:34:38 UTC**

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MAP ID# 20

Distance from Property: 0.123 mi. (649 ft.) NW
Elevation: 30 ft. (Lower than TP)

FACILITY INFORMATION

GLOBAL ID: **SL0608525943**
SITE NAME: **PARK PLAZA**
ADDRESS: **195 PAGE MILL ROAD**
PALO ALTO, CA 94303
COUNTY: **SANTA CLARA**

FACILITY DETAILS

PROJECT TYPE: **CLEANUP PROGRAM SITE**
STATUS: **OPEN - ELIGIBLE FOR CLOSURE**
STATUS DATE: **7/18/2018**
LEAD AGENCY:
SAN FRANCISCO BAY RWQCB (REGION 2)
LAST CORRESPONDENCE DATE:
7/23/2020
RELEASE TYPE:
OTHER TYPE OF RELEASE
CONTAMINANT(S) OF CONCERN:
*** CHLORINATED HYDROCARBONS, ARSENIC, WASTE OIL / MOTOR / HYDRAULIC / LUBRICATING**
MEDIA OF CONCERN:
SOIL, SOIL VAPOR
PAST USE(S) THAT CAUSED CONTAMINATION:
MANUFACTURING - OTHER, VEHICLE MAINTENANCE
HUMAN HEALTH EXPOSURE CONTROLLED:
INSUFFICIENT DATA
HUMAN HEALTH EXPOSURE CONTROLLED DATE:
6/28/2017
GROUNDWATER MIGRATION CONTROLLED:
YES
GROUNDWATER MIGRATION CONTROLLED DATE:
6/28/2017
PRIMARY CASEWORKER NAME:
ROGER PAPLER
PRIMARY CASEWORKER ORGANIZATION NAME:
SAN FRANCISCO BAY RWQCB (REGION 2)
PRIMARY CASEWORKER PHONE NUMBER:
510-622-2435
PRIMARY CASEWORKER ADDRESS:
1515 CLAY STREET, SUITE 1500, OAKLAND, CA
PRIMARY CASEWORKER EMAIL:
ROGER.PAPLER@WATERBOARDS.CA.GOV

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MAP ID# 20

Distance from Property: 0.123 mi. (649 ft.) NW
Elevation: 30 ft. (Lower than TP)

FACILITY INFORMATION

GLOBAL ID: **SL0608525943**
URL LINK: CLICK HERE
BUSINESS NAME: **PARK PLAZA**
ADDRESS: **195 PAGE MILL ROAD**
PALO ALTO, CA 94303
COUNTY: **SANTA CLARA**

FACILITY DETAILS

CASE TYPE: **CLEANUP PROGRAM SITE**
CASE NUMBER: **43S1107**
STATUS: **OPEN - ELIGIBLE FOR CLOSURE 7/18/2018**
POTENTIAL CONTAMINATION:
*** CHLORINATED HYDROCARBONS, ARSENIC, WASTE OIL / MOTOR / HYDRAULIC / LUBRICATING**
POTENTIAL MEDIA AFFECTED:
SOIL, SOIL VAPOR
DISADVANTAGED COMMUNITY:
NO
SEVERELY DISADVANTAGED COMMUNITY:
NO
SITE HISTORY:
LIMITED SOIL INVESTIGATIONS INDICATES LIMITED CHLORINATED VOLATILE ORGANIC COMPOUNDS (CVOCS) AND PETROLEUM HYDROCARBON (PHC) CONTAMINATION PROBABLY ORIGINATING FROM PRIOR INDUSTRIAL SITE USE. GROUNDWATER CONTAMINATION PROBABLY MAY HAVE ORIGINATED FROM OFF-SITE HP/VARIAN SOURCES WITHIN THE COE PLUME. HOWEVER, ELEVATED CHLORINATED VOLATILE ORGANIC COMPOUNDS (CVOCS) IN SOIL VAPOR UNDER THE NORTHEASTERN HALF OF THE PROPERTY INDICATE POTENTIAL VADOSE ZONE CVOC SOURCES IN THAT AREA. DURING EXCAVATION FOR BUILDING FOOTINGS, PHC CONTAMINATION ASSOCIATED WITH SEVERAL UNDERGROUND STORAGE TANKS (USTS) WAS DISCOVERED IN THE CENTRAL PORTION OF THE PROPERTY. A FOLLOWUP INVESTIGATION DEFINED AND EXCAVATED THE SOIL-PHCS AND GROUNDWATER-PHCS WERE DEFINED TO WITHIN PROPERTY BOUNDARIES. THE PROPOSED REMEDY WAS EXCAVATION AND DISPOSAL THAT WAS COMPLETED TO ACCOMMODATE UNDERGROUND PARKING FOR THE BUILDING. THE BUILDING HAS BEEN CONSTRUCTED WITH POTENTIAL IA VI MITIGATED THROUGH THE VAPOR INTRUSION MITIGATION SYSTEM (VIMS) CONSISTING OF A VAPOR BARRIER PLUS A SUBSLAB VENTILATION SYSTEM. INDOOR AIR TESTING HAS BEEN CONDUCTED TO VERIFY THAT THE VIMS IS OPERATING AS DESIGNED AND THE RESULTS INDICATE A MIX OF INDOOR SOURCES WITH LOW LEVEL VI. THE REGIONAL WATER BOARD REQUIRED A WORKPLAN TO OBTAIN MORE RELIABLE SV-CVOC DATA THAN THE RISER-BASED DATE THAT HAS BEEN SUBMITTED FOR THE PAST SEVERAL YEARS. MORE RELIABLE SV DATA IS NEEDED TO ALLOW US TO BETTER EVALUATE VI. SO THE ORIGINALLY EXPECTED CLOSURE DATE MAY GET EXTENDED PENDING RESULTS OF THE WORKPLAN IMPLEMENTATION.

REGULATORY ACTIVITIES

TYPE OF ACTION:	DATE:	ACTION:
OTHER	**01/01/50**	**LEAK DISCOVERY**
OTHER	**01/01/50**	**LEAK REPORTED**
OTHER	**01/01/50**	**LEAK STOPPED**
ENFORCEMENT	**07/23/2020**	**13267 REQUIREMENT**
ENFORCEMENT	**06/03/2020**	**STAFF LETTER**
ENFORCEMENT	**05/29/2020**	**ANNUAL ESTIMATION LETTER**

TYPE OF ACTION:	DATE:	ACTION:
ENFORCEMENT	04/30/2020	STAFF LETTER
ENFORCEMENT	04/09/2020	TECHNICAL CORRESPONDENCE / ASSISTANCE / OTHER
ENFORCEMENT	11/14/2019	STAFF LETTER
ENFORCEMENT	11/04/2019	STAFF LETTER
ENFORCEMENT	10/22/2019	STAFF LETTER
ENFORCEMENT	10/22/2019	TECHNICAL CORRESPONDENCE / ASSISTANCE / OTHER
ENFORCEMENT	07/22/2019	ANNUAL ESTIMATION LETTER
ENFORCEMENT	05/07/2019	TECHNICAL CORRESPONDENCE / ASSISTANCE / OTHER
ENFORCEMENT	03/04/2019	TECHNICAL CORRESPONDENCE / ASSISTANCE / OTHER
ENFORCEMENT	02/05/2019	STAFF LETTER
ENFORCEMENT	06/29/2018	STAFF LETTER
ENFORCEMENT	03/08/2018	TECHNICAL CORRESPONDENCE / ASSISTANCE / OTHER
ENFORCEMENT	03/05/2018	13267 REQUIREMENT
ENFORCEMENT	09/12/2017	TECHNICAL CORRESPONDENCE / ASSISTANCE / OTHER
ENFORCEMENT	07/24/2017	ANNUAL ESTIMATION LETTER
ENFORCEMENT	06/20/2017	TECHNICAL CORRESPONDENCE / ASSISTANCE / OTHER
ENFORCEMENT	05/17/2017	MEETING
ENFORCEMENT	03/06/2017	TECHNICAL CORRESPONDENCE / ASSISTANCE / OTHER
ENFORCEMENT	02/01/2017	STAFF LETTER
ENFORCEMENT	02/01/2017	TECHNICAL CORRESPONDENCE / ASSISTANCE / OTHER
ENFORCEMENT	01/20/2017	TECHNICAL CORRESPONDENCE / ASSISTANCE / OTHER
ENFORCEMENT	11/03/2016	13267 REQUIREMENT
ENFORCEMENT	09/14/2016	TECHNICAL CORRESPONDENCE / ASSISTANCE / OTHER
ENFORCEMENT	09/01/2016	TECHNICAL CORRESPONDENCE / ASSISTANCE / OTHER
ENFORCEMENT	08/30/2016	ANNUAL ESTIMATION LETTER
ENFORCEMENT	07/08/2015	ANNUAL ESTIMATION LETTER - #43S1107
ENFORCEMENT	03/18/2015	LETTER - NOTICE - #43S1107
ENFORCEMENT	06/18/2014	CLOSURE/NO FURTHER ACTION LETTER
ENFORCEMENT	06/18/2014	STAFF LETTER
ENFORCEMENT	05/08/2014	TECHNICAL CORRESPONDENCE / ASSISTANCE / OTHER
ENFORCEMENT	06/28/2013	COST RECOVERY AGREEMENT
ENFORCEMENT	06/28/2013	COST RECOVERY AGREEMENT / N. OF REIMBURSEMENT
REMEDIATION	04/01/2013	EXCAVATION
ENFORCEMENT	08/05/2009	MEETING
ENFORCEMENT	05/21/2009	TECHNICAL CORRESPONDENCE / ASSISTANCE / OTHER
ENFORCEMENT	04/29/2009	STAFF LETTER
ENFORCEMENT	07/03/2008	STAFF LETTER
RESPONSE	07/02/2008	CAP/RAP - OTHER REPORT
ENFORCEMENT	04/29/2008	STAFF LETTER
ENFORCEMENT	04/02/2008	STAFF LETTER
OTHER	01/01/2008	LEAK STOPPED
OTHER	09/01/2006	LEAK REPORTED
OTHER	08/29/2006	LEAK DISCOVERY

STATUS HISTORY

STATUS:	DATE:
OPEN - ELIGIBLE FOR CLOSURE	**07/18/2018**
OPEN - REMEDIATION	**08/31/2016**
OPEN - SITE ASSESSMENT	**12/04/2007**
OPEN - CASE BEGIN DATE	**08/29/2006**

CONTACT DETAILS

ORGANIZATION: **SAN FRANCISCO BAY RWQCB (REGION 2)**
ADDRESS: **1515 CLAY STREET, SUITE 1500**
CITY: **OAKLAND**
CONTACT NAME: **ROGER PAPLER**
CONTACT TYPE: **REGIONAL BOARD CASEWORKER**
CONTACT PHONE: **NOT REPORTED**
EMAIL: **ROGER.PAPLER@WATERBOARDS.CA.GOV**

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MAP ID# 20

Distance from Property: 0.123 mi. (649 ft.) NW
Elevation: 30 ft. (Lower than TP)

FACILITY INFORMATION

GLOBAL ID: **T10000000056**
URL LINK: CLICK HERE
BUSINESS NAME: **PARK PLAZA**
ADDRESS: **NOT REPORTED**
PALO ALTO, CA 94306
COUNTY: **SANTA CLARA**

FACILITY DETAILS

CASE TYPE: **CLEANUP PROGRAM SITE**
CASE NUMBER: **43S1107**
STATUS: **OPEN - REMEDIATION 07/16/2008**
POTENTIAL CONTAMINATION:
NOT REPORTED
POTENTIAL MEDIA AFFECTED:
NOT REPORTED
DISADVANTAGED COMMUNITY:
NO
SEVERELY DISADVANTAGED COMMUNITY:
NO
SITE HISTORY:
NOT REPORTED

STATUS HISTORY

STATUS:	DATE:
OPEN - REMEDIATION	**07/16/08**

CONTACT DETAILS

ORGANIZATION: **SAN FRANCISCO BAY RWQCB (REGION 2)**
ADDRESS: **1515 CLAY STREET, SUITE 1500**
CITY: **OAKLAND**
CONTACT NAME: **ROGER PAPLER**
CONTACT TYPE: **REGIONAL BOARD CASEWORKER**
CONTACT PHONE: **NOT REPORTED**
EMAIL: **RPAPLER@WATERBOARDS.CA.GOV**

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MAP ID# 20

Distance from Property: 0.123 mi. (649 ft.) NW
Elevation: 30 ft. (Lower than TP)

FACILITY INFORMATION

GLOBAL ID: **T10000010996**

URL LINK: CLICK HERE

BUSINESS NAME: **PARK PLAZA - UST**

ADDRESS: **195 PAGE MILL ROAD**
PALO ALTO, CA

COUNTY: **SANTA CLARA**

FACILITY DETAILS

CASE TYPE: **LUST CLEANUP SITE**

CASE NUMBER: **41-1242**

STATUS: **COMPLETED - CASE CLOSED 1/8/2018**

POTENTIAL CONTAMINATION:

NOT REPORTED

POTENTIAL MEDIA AFFECTED:

OTHER GROUNDWATER (USES OTHER THAN DRINKING WATER), SOIL

DISADVANTAGED COMMUNITY:

NO

SEVERELY DISADVANTAGED COMMUNITY:

NO

SITE HISTORY:

NOT REPORTED

REGULATORY ACTIVITIES

TYPE OF ACTION:	DATE:	ACTION:
ENFORCEMENT	**06/18/2014**	**CLOSURE/NO FURTHER ACTION LETTER**
ENFORCEMENT	**06/18/2014**	**STAFF LETTER**
OTHER	**04/11/2014**	**LEAK STOPPED**
RESPONSE	**04/11/2014**	**REQUEST FOR CLOSURE - REGULATOR RESPONDED**
RESPONSE	**03/24/2014**	**CORRECTIVE ACTION PLAN / REMEDIAL ACTION PLAN - REGULATOR RESPONDED**
RESPONSE	**03/11/2014**	**REQUEST FOR CLOSURE - REGULATOR RESPONDED**
OTHER	**03/01/2014**	**LEAK DISCOVERY**
OTHER	**01/01/2014**	**LEAK REPORTED**
RESPONSE	**05/20/2013**	**UNAUTHORIZED RELEASE FORM**
OTHER	**01/01/1970**	**LEAK BEGAN**

STATUS HISTORY

STATUS:	DATE:
COMPLETED - CASE CLOSED	**01/08/2018**
OPEN - ELIGIBLE FOR CLOSURE	**09/28/2017**
COMPLETED - CASE CLOSED	**06/18/2014**
OPEN - CASE BEGIN DATE	**05/20/2013**

CONTACT DETAILS

ORGANIZATION: **SAN FRANCISCO BAY RWQCB (REGION 2)**

ADDRESS: **1515 CLAY STREET, SUITE 1500**

CITY: **OAKLAND**
CONTACT NAME: **ROGER PAPLER**
CONTACT TYPE: **REGIONAL BOARD CASEWORKER**
CONTACT PHONE: **NOT REPORTED**
EMAIL: **ROGER.PAPLER@WATERBOARDS.CA.GOV**

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Leaking Underground Storage Tanks (LUST)

MAP ID# 20

Distance from Property: 0.123 mi. (649 ft.) NW
Elevation: 30 ft. (Lower than TP)

FACILITY INFORMATION

GLOBAL ID: **T10000010996**
URL LINK: CLICK HERE
BUSINESS NAME: **PARK PLAZA - UST**
ADDRESS: **195 PAGE MILL ROAD**
PALO ALTO, CA
COUNTY: **SANTA CLARA**

FACILITY DETAILS

CASE TYPE: **LUST CLEANUP SITE**
CASE NUMBER: **41-1242**
STATUS: **COMPLETED - CASE CLOSED 01/08/2018**
POTENTIAL CONTAMINATION:
NOT REPORTED
POTENTIAL MEDIA AFFECTED:
OTHER GROUNDWATER (USES OTHER THAN DRINKING WATER), SOIL
DISADVANTAGED COMMUNITY:
NO
SEVERELY DISADVANTAGED COMMUNITY:
NO
SITE HISTORY:
NOT REPORTED

HISTORICAL FACILITY DETAILS

NO HISTORICAL DETAIL(S) INFORMATION REPORTED FOR THIS FACILITY

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Spills, Leaks, Investigation & Cleanup Recovery Listing (SLIC)

MAP ID# 20

Distance from Property: 0.123 mi. (649 ft.) NW
Elevation: 30 ft. (Lower than TP)

INCIDENT INFORMATION

GLOBAL ID#:	**SL0608525943**
CASE NUMBER:	**43S1107**
NAME:	**PARK PLAZA**
ADDRESS:	**195 PAGE MILL ROAD**
	PALO ALTO CA
FACILITY TYPE:	**CLEANUP PROGRAM SITE**
LEAD AGENCY:	**SAN FRANCISCO BAY RWQCB (REGION 2)**
LEAD AGENCY CONTACT:	**ROGER W. PAPLER**
LEAD AGENCY CASE #:	**43S1107**
SUBSTANCE RELEASED:	**12035, 7440382, NNCHS**
STATUS:	**OPEN - ELIGIBLE FOR CLOSURE**
RESPONSIBLE PARTY:	**NOT REPORTED**

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Resource Conservation & Recovery Act - Non-Generator (RCRANGR09)

MAP ID# 21

Distance from Property: 0.122 mi. (644 ft.) N
Elevation: 28 ft. (Lower than TP)

FACILITY INFORMATION

EPA ID#: **CAC003052934**
NAME: **SAM WONG**
ADDRESS: **2609 ALMA STREET**
PALO ALTO, CA 94036
CONTACT NAME: **SAM WONG**
CONTACT ADDRESS: **3000 EL CAMINO REAL SUITE 4-200**
PALO ALTO CA 94306
CONTACT PHONE: **610-745-7780**
NON-NOTIFIER: **NOT A NON-NOTIFIER**
DATE RECEIVED BY AGENCY: **01/27/2020**

OWNER TYPE: **OTHER**
OWNER NAME: **GEMINI DEVELOPMENT ONE PA, LLC**
OPERATOR TYPE: **OTHER**
OPERATOR NAME: **SAM WONG**

CERTIFICATION

CERTIFICATION NAME:	CERTIFICATION TITLE:	CERTIFICATION SIGNED DATE:
DTSC HQ	**CA-DTSC**	**02/10/2020**

INDUSTRY CLASSIFICATION (NAICS)
56299 - ALL OTHER WASTE MANAGEMENT SERVICES

CURRENT ACTIVITY INFORMATION

GENERATOR STATUS: **NON-GENERATOR** LAST UPDATED DATE: **02/10/2020**
SUBJECT TO CORRECTIVE ACTION UNIVERSE: **NO**
TDSFs POTENTIALLY SUBJECT TO CORRECTIVE ACTION UNDER 3004 (u)/(v) UNIVERSE: **NO**
TDSFs ONLY SUBJECT TO CORRECTIVE ACTION UNDER DISCRETIONARY AUTHORITIES UNIVERSE: **NO**
NON TSDFs WHERE RCRA CORRECTIVE ACTION HAS BEEN IMPOSED UNIVERSE: **NO**
CORRECTIVE ACTION WORKLOAD UNIVERSE: **NO**

IMPORTER: **NO**
MIXED WASTE GENERATOR: **NOT REPORTED**
RECYCLER: **NO**
TRANSPORTER: **NO**
ONSITE BURNER EXEMPTION: **NO**
FURNACE EXEMPTION: **NO**
USED OIL REFINER: **NO**
USED OIL TRANSFER FACILITY: **NO**

UNDERGROUND INJECTION: **NO**
UNIVERSAL WASTE DESTINATION FACILITY: **NO**
TRANSFER FACILITY: **NO**
USED OIL FUEL BURNER: **NO**
USED OIL PROCESSOR: **NO**
USED OIL FUEL MARKETER TO BURNER: **NO**
SPECIFICATION USED OIL MARKETER: **NO**
USED OIL TRANSPORTER: **NO**

COMPLIANCE, MONITORING AND ENFORCEMENT INFORMATION

EVALUATIONS **- NO EVALUATIONS REPORTED -**
VIOLATIONS **- NO VIOLATIONS REPORTED -**
ENFORCEMENTS **- NO ENFORCEMENTS REPORTED -**

HAZARDOUS WASTE

- NO HAZARDOUS WASTE INFORMATION REPORTED -
UNIVERSAL WASTE **- NO UNIVERSAL WASTE REPORTED -**
CORRECTIVE ACTION AREA **- NO CORRECTIVE ACTION AREA INFORMATION REPORTED -**
CORRECTIVE ACTION EVENT

NO CORRECTIVE ACTION EVENT(S) REPORTED

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MAP ID# 22

Distance from Property: 0.142 mi. (750 ft.) WNW
Elevation: 30 ft. (Lower than TP)

FACILITY INFORMATION

GLOBAL ID: **T0608500732**
URL LINK: CLICK HERE
BUSINESS NAME: **HOHBACH**
ADDRESS: **200 PAGE MILL**
PALO ALTO, CA 94306
COUNTY: **SANTA CLARA**

FACILITY DETAILS

CASE TYPE: **LUST CLEANUP SITE**
CASE NUMBER: **14-369**
STATUS: **COMPLETED - CASE CLOSED 2/12/2016**
POTENTIAL CONTAMINATION:
BENZENE, TOLUENE, XYLENE, GASOLINE
POTENTIAL MEDIA AFFECTED:
AQUIFER USED FOR DRINKING WATER SUPPLY, SOIL
DISADVANTAGED COMMUNITY:
NO
SEVERELY DISADVANTAGED COMMUNITY:
NO
SITE HISTORY:
JUNE 1984: THE 2 USTS WERE DISCOVERED DURING PROPERTY DEVELOPMENT SOIL TESTING ACTIVITY. SPILL/ RELEASE FILED WITH WATER BOARD. NOVEMBER 1984: THE USTS AND DISPENSERS WERE REMOVED BY WOODWARD-CLYDE SUBCONTRACTOR TO HOWARD WHITE CONSTRUCTION. TWO UST REMOVAL CONFIRMATION SOIL SAMPLES SHOWED 100 AND 2,500 PPM TPH-GASOLINE. JANUARY 30, 1985: WOODWARD-CLYDE CONDUCTED A GASOLINE BORING INVESTIGATION (8 EXPLORATORY BORINGS WITH SOIL AND GRAB GROUNDWATER SAMPLES). FREE PRODUCT WAS NOTED IN SEVERAL BORINGS AND A MONITORING WELL. THE DEH DOES NOT HAVE REPORTS OF FREE PRODUCT REMOVAL OR THE SITE REDEVELOPMENT ACTIVITIES DURING THIS TIME. APRIL 19, 1985: WATER BOARD DIRECTIVE LETTER TO INSTALL MONITORING WELLS AND ASSOCIATED CORRESPONDENCE WITH PAGE MILL - PARK COMPANY. JUNE 1985: TWO SITE MONITORING WELLS INSTALLED BY WOODWARD-CLYDE AND PITCHER DRILLING. JUNE 1985 AND DECEMBER 1985: GROUNDWATER SAMPLING EVENTS OF 2 SITE MONITORING WELLS. BETWEEN DECEMBER 1985 AND DECEMBER 2010, NO SAMPLING OR ASSESSMENT ACTIVITIES WERE CONDUCTED. DECEMBER 3, 2010: DEH LETTER REQUESTING ADDITIONAL SITE ASSESSMENT. MAY 24, 2011: GROUNDWATER MONITORING OF 2 SITE WELLS AND ONE DOWNGRADIENT OFFSITE WELL. AUGUST 23, 2013: AN 8-HOUR INDOOR AIR EVENT WAS CONDUCTED; NO COCS WERE DETECTED (ATTACHMENT 6). AUGUST 23, 2013; STELLAR ENVIRONMENTAL CONDUCTS AN EXPLORATORY BORING SITE INVESTIGATION AND EVALUATION. AUGUST 2014: STELLAR ENVIRONMENTAL SOLUTIONS PREPARES AN IN-SITU REMEDIAL PRODUCT INJECTION WORKPLAN: SUBMITTED AND APPROVED BY DEH SEPTEMBER 2014. OCTOBER 20, 2015: PRE-REMEDIAL INJECTION QUARTERLY GROUNDWATER MONITORING OF 2 SITE WELLS. OCTOBER 27-28, 2014: REMEDIAL IN-SITU PRODUCT INJECTION IMPLEMENTED BY STELLAR ENVIRONMENTAL SOLUTIONS. JANUARY 8, 2015: POST-REMEDIAL INJECTION QUARTERLY GROUNDWATER MONITORING OF 2 SITE WELLS. APRIL 2015: POST-REMEDIATION QUARTERLY GROUNDWATER MONITORING OF 2 SITE WELLS AND ONE DOWNGRADIENT OFFSITE WELL.

REGULATORY ACTIVITIES

TYPE OF ACTION:	DATE:	ACTION:
OTHER	**01/01/50**	**LEAK DISCOVERY**
OTHER	**01/01/50**	**LEAK REPORTED**

TYPE OF ACTION:	DATE:	ACTION:
OTHER	01/01/50	LEAK STOPPED
ENFORCEMENT	02/12/2016	CLOSURE/NO FURTHER ACTION LETTER
ENFORCEMENT	01/22/2016	WARNING LETTER
RESPONSE	01/15/2016	WELL DESTRUCTION REPORT
ENFORCEMENT	11/06/2015	STAFF LETTER
RESPONSE	09/04/2015	CORRESPONDENCE
ENFORCEMENT	08/31/2015	NOTIFICATION - PUBLIC NOTICE OF CASE CLOSURE
ENFORCEMENT	07/15/2015	STAFF LETTER
RESPONSE	04/30/2015	MONITORING REPORT - SEMI-ANNUALLY
RESPONSE	01/30/2015	MONITORING REPORT - SEMI-ANNUALLY
RESPONSE	01/30/2015	REMEDIAL PROGRESS REPORT
RESPONSE	10/03/2014	OTHER WORKPLAN - REGULATOR RESPONDED
ENFORCEMENT	09/09/2014	STAFF LETTER
ENFORCEMENT	08/25/2014	STAFF LETTER
RESPONSE	08/15/2014	OTHER WORKPLAN - REGULATOR RESPONDED
REMEDIATION	06/30/2014	IN SITU PHYSICAL/CHEMICAL TREATMENT (OTHER THAN SVE)
ENFORCEMENT	06/26/2014	STAFF LETTER
RESPONSE	02/20/2014	OTHER REPORT / DOCUMENT
RESPONSE	12/06/2013	CORRESPONDENCE
RESPONSE	11/11/2013	OTHER REPORT / DOCUMENT
ENFORCEMENT	10/30/2013	NOTICE OF VIOLATION
ENFORCEMENT	09/26/2012	WARNING LETTER
RESPONSE	11/04/2011	SOIL AND WATER INVESTIGATION WORKPLAN
ENFORCEMENT	08/28/2011	STAFF LETTER
RESPONSE	08/16/2011	REQUEST FOR CLOSURE
RESPONSE	06/30/2011	SITE ASSESSMENT REPORT
ENFORCEMENT	04/18/2011	STAFF LETTER
RESPONSE	03/21/2011	OTHER WORKPLAN
RESPONSE	03/21/2011	PRELIMINARY SITE ASSESSMENT WORKPLAN - ADDENDUM - REGULATOR RESPONDED
ENFORCEMENT	02/24/2011	STAFF LETTER - #1102422
ENFORCEMENT	12/03/2010	STAFF LETTER - #0102321
ENFORCEMENT	08/12/2009	STAFF LETTER
ENFORCEMENT	06/03/2005	OTHER REPORT
RESPONSE	06/03/2005	OTHER REPORT / DOCUMENT
RESPONSE	11/21/2001	MONITORING REPORT - QUARTERLY
RESPONSE	09/28/2001	SOIL AND WATER INVESTIGATION WORKPLAN
ENFORCEMENT	08/24/2001	STAFF LETTER - #28714
RESPONSE	12/03/1999	MONITORING REPORT - QUARTERLY
ENFORCEMENT	11/05/1999	STAFF LETTER - #28862
RESPONSE	02/25/1999	OTHER REPORT / DOCUMENT
ENFORCEMENT	12/18/1998	STAFF LETTER - #28856
RESPONSE	09/14/1998	SOIL AND WATER INVESTIGATION WORKPLAN
ENFORCEMENT	08/17/1998	STAFF LETTER - #28860

TYPE OF ACTION:	DATE:	ACTION:
ENFORCEMENT	**03/03/1997**	**NOTICE OF RESPONSIBILITY - #40033**
RESPONSE	**09/16/1985**	**OTHER REPORT / DOCUMENT**
RESPONSE	**02/14/1985**	**OTHER REPORT / DOCUMENT**
OTHER	**11/09/1984**	**LEAK REPORTED**
RESPONSE	**11/09/1984**	**SOIL AND WATER INVESTIGATION REPORT**
RESPONSE	**11/09/1984**	**TANK REMOVAL REPORT / UST SAMPLING REPORT**
OTHER	**11/07/1984**	**LEAK DISCOVERY**
OTHER	**11/07/1984**	**LEAK STOPPED**
RESPONSE	**06/22/1984**	**UNAUTHORIZED RELEASE FORM**
RESPONSE	**01/01/1984**	**CORRESPONDENCE**

STATUS HISTORY

STATUS:	DATE:
COMPLETED - CASE CLOSED	**02/12/2016**
OPEN - ELIGIBLE FOR CLOSURE	**08/04/2015**
OPEN - VERIFICATION MONITORING	**05/18/2015**
OPEN - VERIFICATION MONITORING	**02/01/2015**
OPEN - REMEDIATION	**08/22/2014**
OPEN - CASE BEGIN DATE	**11/07/1984**
OPEN - SITE ASSESSMENT	**11/07/1984**

CONTACT DETAILS

ORGANIZATION: **SANTA CLARA COUNTY LOP**
ADDRESS: **1555 BERGER DRIVE, SUITE 300**
CITY: **SAN JOSE**
CONTACT NAME: **AARON COSTA**
CONTACT TYPE: **LOCAL AGENCY CASEWORKER**
CONTACT PHONE: **4089181954**
EMAIL: **AARON.COSTA@CEP.SCCGOV.ORG**
ORGANIZATION: **SAN FRANCISCO BAY RWQCB (REGION 2)**
ADDRESS: **1515 CLAY ST SUITE 1400**
CITY: **OAKLAND**
CONTACT NAME: **REGIONAL WATER BOARD**
CONTACT TYPE: **REGIONAL BOARD CASEWORKER**
CONTACT PHONE: **NOT REPORTED**
EMAIL: **NOT REPORTED**

Back to Report Summary

Historical Cortese List (HISTCORTESE)

MAP ID# 22

Distance from Property: 0.142 mi. (750 ft.) WNW
Elevation: 30 ft. (Lower than TP)

FACILITY INFORMATION

GEOSEARCH ID: **43-0703COR**
ID#: **43-0703**
NAME: **HOHBACK**
ADDRESS: **216 PAGE MILL**
PALO ALTO, CA

Back to Report Summary

Leaking Underground Storage Tanks (LUST)

MAP ID# 22

Distance from Property: 0.142 mi. (750 ft.) WNW
Elevation: 30 ft. (Lower than TP)

FACILITY INFORMATION

GLOBAL ID: **T0608500732**
URL LINK: CLICK HERE
BUSINESS NAME: **HOHBACH**
ADDRESS: **200 PAGE MILL**
PALO ALTO, CA 94306
COUNTY: **SANTA CLARA**

FACILITY DETAILS

CASE TYPE: **LUST CLEANUP SITE**
CASE NUMBER: **14-369**
STATUS: **COMPLETED - CASE CLOSED 02/12/2016**
POTENTIAL CONTAMINATION:
BENZENE, TOLUENE, XYLENE, GASOLINE
POTENTIAL MEDIA AFFECTED:
AQUIFER USED FOR DRINKING WATER SUPPLY, SOIL
DISADVANTAGED COMMUNITY:
NO
SEVERELY DISADVANTAGED COMMUNITY:
NO
SITE HISTORY:
JUNE 1984: THE 2 USTS WERE DISCOVERED DURING PROPERTY DEVELOPMENT SOIL TESTING ACTIVITY. SPILL/ RELEASE FILED WITH WATER BOARD. NOVEMBER 1984: THE USTS AND DISPENSERS WERE REMOVED BY WOODWARD-CLYDE SUBCONTRACTOR TO HOWARD WHITE CONSTRUCTION. TWO UST REMOVAL CONFIRMATION SOIL SAMPLES SHOWED 100 AND 2,500 PPM TPH-GASOLINE. JANUARY 30, 1985: WOODWARD-CLYDE CONDUCTED A GASOLINE BORING INVESTIGATION (8 EXPLORATORY BORINGS WITH SOIL AND GRAB GROUNDWATER SAMPLES). FREE PRODUCT WAS NOTED IN SEVERAL BORINGS AND A MONITORING WELL. THE DEH DOES NOT HAVE REPORTS OF FREE PRODUCT REMOVAL OR THE SITE REDEVELOPMENT ACTIVITIES DURING THIS TIME. APRIL 19, 1985: WATER BOARD DIRECTIVE LETTER TO INSTALL MONITORING WELLS AND ASSOCIATED CORRESPONDENCE WITH PAGE MILL - PARK COMPANY. JUNE 1985: TWO SITE MONITORING WELLS INSTALLED BY WOODWARD-CLYDE AND PITCHER DRILLING. JUNE 1985 AND DECEMBER 1985: GROUNDWATER SAMPLING EVENTS OF 2 SITE MONITORING WELLS. BETWEEN DECEMBER 1985 AND DECEMBER 2010, NO SAMPLING OR ASSESSMENT ACTIVITIES WERE CONDUCTED. DECEMBER 3, 2010: DEH LETTER REQUESTING ADDITIONAL SITE ASSESSMENT. MAY 24, 2011: GROUNDWATER MONITORING OF 2 SITE WELLS AND ONE DOWNGRADIENT OFFSITE WELL. AUGUST 23, 2013: AN 8-HOUR INDOOR AIR EVENT WAS CONDUCTED; NO COCS WERE DETECTED (ATTACHMENT 6). AUGUST 23, 2013; STELLAR ENVIRONMENTAL CONDUCTS AN EXPLORATORY BORING SITE INVESTIGATION AND EVALUATION. AUGUST 2014: STELLAR ENVIRONMENTAL SOLUTIONS PREPARES AN IN-SITU REMEDIAL PRODUCT INJECTION WORKPLAN: SUBMITTED AND APPROVED BY DEH SEPTEMBER 2014. OCTOBER 20, 2015: PRE-REMEDIAL INJECTION QUARTERLY GROUNDWATER MONITORING OF 2 SITE WELLS. OCTOBER 27-28, 2014: REMEDIAL IN-SITU PRODUCT INJECTION IMPLEMENTED BY STELLAR ENVIRONMENTAL SOLUTIONS. JANUARY 8, 2015: POST-REMEDIAL INJECTION QUARTERLY GROUNDWATER MONITORING OF 2 SITE WELLS. APRIL 2015: POST-REMEDIATION QUARTERLY GROUNDWATER MONITORING OF 2 SITE WELLS AND ONE DOWNGRADIENT OFFSITE WELL.

HISTORICAL FACILITY DETAILS

NO HISTORICAL DETAIL(S) INFORMATION REPORTED FOR THIS FACILITY

Leaking Underground Storage Tanks (LUST)

Back to Report Summary

MAP ID# 23

Distance from Property: 0.172 mi. (908 ft.) NW
Elevation: 30 ft. (Lower than TP)

FACILITY INFORMATION

GLOBAL ID: **T0608501823**
URL LINK: CLICK HERE
BUSINESS NAME: **VANCE BROWN & SONS**
ADDRESS: **2747 PARK BLVD**
PALO ALTO, CA 94306
COUNTY: **SANTA CLARA**

FACILITY DETAILS

CASE TYPE: **LUST CLEANUP SITE**
CASE NUMBER: **NOT REPORTED**
STATUS: **COMPLETED - CASE CLOSED 2/6/1997**
POTENTIAL CONTAMINATION:
GASOLINE
POTENTIAL MEDIA AFFECTED:
OTHER GROUNDWATER (USES OTHER THAN DRINKING WATER)
DISADVANTAGED COMMUNITY:
NO
SEVERELY DISADVANTAGED COMMUNITY:
NO
SITE HISTORY:
NOT REPORTED

REGULATORY ACTIVITIES

TYPE OF ACTION:	DATE:	ACTION:
OTHER	**01/01/50**	**LEAK REPORTED**
REMEDIATION	**01/01/50**	**EXCAVATION**
ENFORCEMENT	**02/06/1997**	**CLOSURE/NO FURTHER ACTION LETTER**
RESPONSE	**02/06/1997**	**OTHER REPORT / DOCUMENT**
OTHER	**01/07/1997**	**LEAK REPORTED**
ENFORCEMENT	**06/10/1996**	**NOTICE OF RESPONSIBILITY - #40034**
REMEDIATION	**12/21/1988**	**EXCAVATION**

STATUS HISTORY

STATUS:	DATE:
COMPLETED - CASE CLOSED	**02/06/1997**
OPEN - SITE ASSESSMENT	**08/28/1989**
OPEN - CASE BEGIN DATE	**10/22/1984**
OPEN - SITE ASSESSMENT	**10/22/1984**

CONTACT DETAILS

ORGANIZATION: **SANTA CLARA COUNTY LOP**
ADDRESS: **1555 BERGER DRIVE, SUITE 300**
CITY: **SAN JOSE**
CONTACT NAME: **UST CASE WORKER**
CONTACT TYPE: **LOCAL AGENCY CASEWORKER**
CONTACT PHONE: **4089183400**

EMAIL: **NOT REPORTED**
ORGANIZATION: **SAN FRANCISCO BAY RWQCB (REGION 2)**
ADDRESS: **1515 CLAY ST SUITE 1400**
CITY: **OAKLAND**
CONTACT NAME: **REGIONAL WATER BOARD**
CONTACT TYPE: **REGIONAL BOARD CASEWORKER**
CONTACT PHONE: **NOT REPORTED**
EMAIL: **NOT REPORTED**

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MAP ID# 23

Distance from Property: 0.172 mi. (908 ft.) NW
Elevation: 30 ft. (Lower than TP)

FACILITY INFORMATION

GLOBAL ID: **T0608572772**
URL LINK: CLICK HERE
BUSINESS NAME: **2747 PARK BOULEVARD**
ADDRESS: **2747-2785 PARK BOULEVARD**
PALO ALTO, CA 94306
COUNTY: **SANTA CLARA**

FACILITY DETAILS

CASE TYPE: **CLEANUP PROGRAM SITE**
CASE NUMBER: **43S1076**
STATUS: **OPEN - VERIFICATION MONITORING 1/9/2018**
POTENTIAL CONTAMINATION:
ARSENIC, DIESEL, TETRACHLOROETHYLENE (PCE)
POTENTIAL MEDIA AFFECTED:
SOIL
DISADVANTAGED COMMUNITY:
NO
SEVERELY DISADVANTAGED COMMUNITY:
NO
SITE HISTORY:
THIS SITE IS LOCATED AT 2747 AND 2787 PARK BOULEVARD, PALO ALTO, SANTA CLARA COUNTY. A CONCRETE BATCH PLANT OPERATED AT THE SITE FROM APPROXIMATELY THE 1940S TO THE EARLY 1990S. THE SITE IS WITHIN THE CALIFORNIA-OLIVE-EMERSON (COE) STUDY AREA, WHICH IS CHARACTERIZED BY A GROUNDWATER PLUME OF CHLORINATED SOLVENTS FOR SOURCES LOCATED UP-GRADIENT OF THE SITE. ONSITE SOURCED CONTAMINATION IS ASSOCIATED WITH UNDERGROUND STORAGE TANKS FOR VARIOUS PETROLEUM PRODUCTS, INCLUDING DIESEL FUEL AND GASOLINE. REDEVELOPMENT PLANS PROPOSED BY 2747-87 PARK BOULEVARD, LLC, INCLUDE THE DEMOLITION OF AN EXISTING BUILDING AND CONSTRUCTION OF A THREE-STORY RESEARCH AND DEVELOPMENT BUILDING AND ASSOCIATED SUBSURFACE PARKING STRUCTURES, PAVING, AND LANDSCAPING. REDEVELOPMENT OF THE SITE INCLUDED THE DEMOLITION OF AN EXISTING ONE-STORY OFFICE BUILDING AND THE CONSTRUCTION OF A NEW THREE-STORY OFFICE BUILDING WITH A SUBTERRANEAN PARKING STRUCTURE. TO MITIGATE THE POTENTIAL OF VAPOR INTRUSION OF VOLATILE ORGANIC COMPOUNDS ASSOCIATED WITH A REGIONAL COE GROUNDWATER PLUME, THE REDEVELOPMENT INCORPORATED A VAPOR INTRUSION MITIGATION SYSTEM (VIMS) THAT INCLUDED VENTILATED SUBTERRANEAN PARKING USING THE HEATING, VENTILATION, AND AIR CONDITIONING (HVAC) SYSTEM AND CONFIRMATION SOIL VAPOR AND INDOOR AIR MONITORING.

REGULATORY ACTIVITIES

TYPE OF ACTION:	DATE:	ACTION:
OTHER	**01/01/50**	**LEAK DISCOVERY**
OTHER	**01/01/50**	**LEAK REPORTED**
REMEDIATION	**01/01/50**	**NOT REPORTED**
ENFORCEMENT	**06/30/2020**	**ANNUAL ESTIMATION LETTER**
ENFORCEMENT	**07/24/2019**	**ANNUAL ESTIMATION LETTER**
ENFORCEMENT	**06/14/2019**	**13267 REQUIREMENT**
ENFORCEMENT	**11/02/2018**	**TECHNICAL CORRESPONDENCE / ASSISTANCE / OTHER**
RESPONSE	**10/29/2018**	**EMAIL CORRESPONDENCE - REGULATOR RESPONDED**

TYPE OF ACTION:	DATE:	ACTION:
ENFORCEMENT	09/11/2018	TECHNICAL CORRESPONDENCE / ASSISTANCE / OTHER
ENFORCEMENT	07/19/2018	STAFF LETTER
ENFORCEMENT	06/29/2018	ANNUAL ESTIMATION LETTER
ENFORCEMENT	02/28/2018	TECHNICAL CORRESPONDENCE / ASSISTANCE / OTHER
ENFORCEMENT	02/20/2018	TECHNICAL CORRESPONDENCE / ASSISTANCE / OTHER
ENFORCEMENT	08/16/2017	SITE VISIT / INSPECTION / SAMPLING
ENFORCEMENT	08/08/2017	EMAIL CORRESPONDENCE
ENFORCEMENT	06/30/2017	ANNUAL ESTIMATION LETTER
ENFORCEMENT	06/29/2017	STAFF LETTER
ENFORCEMENT	03/16/2017	SITE VISIT / INSPECTION / SAMPLING
ENFORCEMENT	02/14/2017	STAFF LETTER
ENFORCEMENT	02/09/2017	STAFF LETTER
RESPONSE	02/07/2017	OTHER REPORT / DOCUMENT
ENFORCEMENT	10/27/2016	13267 REQUIREMENT
ENFORCEMENT	10/27/2016	STAFF LETTER
RESPONSE	10/13/2016	OTHER REPORT / DOCUMENT
RESPONSE	10/12/2016	CORRESPONDENCE
ENFORCEMENT	09/28/2016	EMAIL CORRESPONDENCE
RESPONSE	09/22/2016	OTHER REPORT / DOCUMENT
RESPONSE	09/22/2016	SOIL VAPOR INTRUSION INVESTIGATION REPORT
RESPONSE	09/20/2016	REMOVAL ACTION WORK PLAN
RESPONSE	09/08/2016	REMOVAL ACTION WORK PLAN
ENFORCEMENT	06/13/2016	MEETING
RESPONSE	06/13/2016	CORRESPONDENCE
ENFORCEMENT	05/13/2016	STAFF LETTER
ENFORCEMENT	05/11/2016	STAFF LETTER
ENFORCEMENT	01/13/2016	STAFF LETTER
ENFORCEMENT	08/05/2015	ANNUAL ESTIMATION LETTER - #2020205
RESPONSE	03/23/2015	CORRESPONDENCE
ENFORCEMENT	03/18/2015	LETTER - NOTICE - #43S1079
ENFORCEMENT	06/28/2013	COST RECOVERY AGREEMENT
ENFORCEMENT	06/28/2013	COST RECOVERY AGREEMENT / N. OF REIMBURSEMENT
ENFORCEMENT	06/28/2013	TECHNICAL CORRESPONDENCE / ASSISTANCE / OTHER
ENFORCEMENT	08/22/2008	STAFF LETTER
RESPONSE	06/03/2008	CAP/RAP - OTHER REPORT - REGULATOR RESPONDED
ENFORCEMENT	07/18/2006	EMAIL CORRESPONDENCE
ENFORCEMENT	05/16/2006	STAFF LETTER
REMEDIATION	05/01/2006	NOT REPORTED
OTHER	04/11/2006	LEAK REPORTED
OTHER	02/01/1993	LEAK DISCOVERY

STATUS HISTORY

STATUS:	DATE:
OPEN - VERIFICATION MONITORING	01/09/2018

STATUS:	DATE:
OPEN - REMEDIATION	**02/14/2017**
OPEN - SITE ASSESSMENT	**02/14/2017**
OPEN - SITE ASSESSMENT	**02/24/1993**
OPEN - CASE BEGIN DATE	**02/01/1993**

CONTACT DETAILS

ORGANIZATION: **SAN FRANCISCO BAY RWQCB (REGION 2)**
ADDRESS: **1515 CLAY STREET, SUITE 1400**
CITY: **OAKLAND**
CONTACT NAME: **MICHAEL ROCHETTE**
CONTACT TYPE: **REGIONAL BOARD CASEWORKER**
CONTACT PHONE: **NOT REPORTED**
EMAIL: **MICHAEL.ROCHETTE@WATERBOARDS.CA.GOV**

Back to Report Summary

MAP ID# 23

Distance from Property: 0.172 mi. (908 ft.) NW
Elevation: 30 ft. (Lower than TP)

FACILITY INFORMATION

GLOBAL ID: **T0608591678**
URL LINK: CLICK HERE
BUSINESS NAME: **VANCE BROWN AND SONS**
ADDRESS: **2747 PARK BLVD**
PALO ALTO, CA 94306
COUNTY: **SANTA CLARA**

FACILITY DETAILS

CASE TYPE: **CLEANUP PROGRAM SITE**
CASE NUMBER: **43S0736**
STATUS: **OPEN - INACTIVE 04/17/2009**
POTENTIAL CONTAMINATION:
GASOLINE
POTENTIAL MEDIA AFFECTED:
UNDER INVESTIGATION
DISADVANTAGED COMMUNITY:
NO
SEVERELY DISADVANTAGED COMMUNITY:
NO
SITE HISTORY:
NOT REPORTED

REGULATORY ACTIVITIES

TYPE OF ACTION:	DATE:	ACTION:
OTHER	**01/01/50**	**LEAK REPORTED**

STATUS HISTORY

STATUS:	DATE:
OPEN - INACTIVE	**04/17/09**
OPEN - SITE ASSESSMENT	**01/01/91**
OPEN - CASE BEGIN DATE	**01/01/84**

CONTACT DETAILS

ORGANIZATION: **SAN FRANCISCO BAY RWQCB (REGION 2)**
ADDRESS: **1515 CLAY ST SUITE 1400**
CITY: **OAKLAND**
CONTACT NAME: **REGIONAL BOARD (RB2)**
CONTACT TYPE: **REGIONAL BOARD CASEWORKER**
CONTACT PHONE: **NOT REPORTED**
EMAIL: **NOT REPORTED**

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GeoTracker Cleanup Sites (CLEANUPSITES)

MAP ID# 23

Distance from Property: 0.155 mi. (818 ft.) NW
Elevation: 30 ft. (Lower than TP)

FACILITY INFORMATION

GLOBAL ID: **T10000005839**

URL LINK: CLICK HERE

BUSINESS NAME: **ESSEX PARK TRUST**

ADDRESS: **2785-2787 PARK BOULEVARD**
PALO ALTO, CA 94304

COUNTY: **SANTA CLARA**

FACILITY DETAILS

CASE TYPE: **CLEANUP PROGRAM SITE**

CASE NUMBER: **43S1079**

STATUS: **OPEN - ASSESSMENT & INTERIM REMEDIAL ACTION 04/14/2014**

POTENTIAL CONTAMINATION:

TETRACHLOROETHYLENE (PCE), TRICHLOROETHYLENE (TCE), LEAD, DIESEL

POTENTIAL MEDIA AFFECTED:

NOT REPORTED

DISADVANTAGED COMMUNITY:

NO

SEVERELY DISADVANTAGED COMMUNITY:

NO

SITE HISTORY:

NOT REPORTED

REGULATORY ACTIVITIES

TYPE OF ACTION:	DATE:	ACTION:
OTHER	**01/01/50**	**LEAK BEGAN**
OTHER	**01/01/50**	**LEAK DISCOVERY**
OTHER	**01/01/50**	**LEAK REPORTED**
OTHER	**01/01/50**	**LEAK STOPPED**
OTHER	**06/03/2008**	**LEAK REPORTED**
RESPONSE	**06/03/2008**	**REMEDIAL PROGRESS REPORT**
OTHER	**03/14/2005**	**LEAK DISCOVERY**
OTHER	**01/01/1990**	**LEAK STOPPED**
OTHER	**01/01/1951**	**LEAK BEGAN**

STATUS HISTORY

STATUS:	DATE:
OPEN - ASSESSMENT & INTERIM REMEDIAL ACTION	**04/14/2014**
OPEN - CASE BEGIN DATE	**01/01/1990**

CONTACT DETAILS

ORGANIZATION: **SAN FRANCISCO BAY RWQCB (REGION 2)**

ADDRESS: **1515 CLAY STREET, SUITE 1500**

CITY: **OAKLAND**

CONTACT NAME: **ROGER PAPLER**

CONTACT TYPE: **REGIONAL BOARD CASEWORKER**

CONTACT PHONE: **NOT REPORTED**

EMAIL: **ROGER.PAPLER@WATERBOARDS.CA.GOV**

Back to Report Summary

Historical Cortese List (HISTCORTESE)

MAP ID# 23

Distance from Property: 0.171 mi. (903 ft.) NW
Elevation: 30 ft. (Lower than TP)

FACILITY INFORMATION

GEOSEARCH ID: **43-1923COR**

ID#: **43-1923**

NAME: **VANCE BROWN & SONS**

ADDRESS: **2747 PARK**
PALO ALTO, CA 94306

Back to Report Summary

MAP ID# 23

Distance from Property: 0.155 mi. (818 ft.) NW
Elevation: 30 ft. (Lower than TP)

PACIFIC READY MIX INC, 2785 PARK BLVD, PALO ALTO, CA 94306
UNIQUE ID: **000206D6**

*** 815 ***

PAGE 3353 — STATE WATER RESOURCES CONTROL BOARD — 06/01/88
HAZARDOUS SUBSTANCE STORAGE CONTAINER INFORMATION FOR SANTA CLARA COUNTY
CONTAINER TYPES: 1,2,3,4,5
(1=FARM MOTOR VEHICLE FUEL TANKS, 2=ALL OTHER PRODUCT TANKS, 3=WASTE TANKS, 4=SUMPS, 5=PITS, PONDS, LAGOONS & OTHERS)

I OWNER
PACIFIC READY MIX INC
850 SAN MATEO DR — SAN MATEO — CA 94401

II FACILITY

	MAILING ADDRESS / TOWNSHIP/RANGE/SECTION	DEALER/FOREMAN/SUPERVISOR / TELEPHONE	TYPE OF BUSINESS / NO. OF CONTAINERS
PACIFIC READY MIX INC 2785 PARK BLVD PALO ALTO CA 94306	2785 PARK BLVD PALO ALTO CA 94306	KEN GARINO (415) 323-0224	READY MIX CONCRETE 2

CROSS STREET :

III 24-HR. CONTACT PERSON / TELEPHONE
DAY: GARINO, KEN (415) 593-1349 NIGHT: SAME (408) 377-2987

********* OWNER ASSIGNED CONTAINER NUMBER: 1 ********** STATE BOARD ASSIGNED CONTAINER ID NUMBER: 00000010312001 *********

IV DESCRIPTION
A. CONTAINER TYPE : TANK
B. MANUFACTURER/YR OF MFG:
C. YEAR INSTALLED : UNK
D. CAPACITY (GALLONS) : 8,000
E. REPAIRS : UNKN IF YES WHEN :
F. CURRENTLY USED : YES IF NO, YEAR OF LAST USE:
G. STORES : PRODUCT
H. MOTOR VEHICLE FUEL/WASTE OIL : YES CONTAINS: DIESEL

IS CONTAINER LOCATED ON A FARM : NO

V CONTAINER CONSTRUCTION
A. THICKNESS:
B. VAULTING: UNKNOWN
C. WALLING: UNKNOWN
D. MATERIAL : UNKNOWN
E. LINING : UNKNOWN
F. WRAPPING : UNKNOWN

VI PIPING
A. ABOVEGROUND PIPING :
B. UNDERGROUND PIPING : SUCTION
C. REPAIRS : UNKN IF YES, YEAR OF MOST RECENT REPAIR:

VII LEAK DETECTION
VISUAL STOCK INVENTORY INTERNAL INSPECTION P

URE TEST	COMPOSITION OF SUBSTANCES CURRENTLY STORED IN CONTAINER
12034	DIESEL MOTOR VEHICLE FUEL

PACIFIC READY MIX INC, 2785 PARK BLVD, PALO ALTO, CA 94306
UNIQUE ID: **000206D6**

*** B15 ***

PAGE 3354 STATE WATER RESOURCES CONTROL BOARD 05/01/88
HAZARDOUS SUBSTANCE STORAGE CONTAINER INFORMATION FOR SANTA CLARA COUNTY
CONTAINER TYPES: 1,2,3,4,5
(1=FARM MOTOR VEHICLE FUEL TANKS, 2=ALL OTHER PRODUCT TANKS, 3=WASTE TANKS, 4=SUMPS, 5=PITS, PONDS, LAGOONS & OTHERS)

********** OWNER ASSIGNED CONTAINER NUMBER: 2 ********** STATE BOARD ASSIGNED CONTAINER ID NUMBER: C0000010312002 *********

IV DESCRIPTION
A. CONTAINER TYPE : TANK
B. MANUFACTURER/YR OF MFG:
C. YEAR INSTALLED : UNK
D. CAPACITY (GALLONS) : 1,000
E. REPAIRS : UNKN IF YES WHEN :
F. CURRENTLY USED : YES IF NO, YEAR OF LAST USE:
G. STORES : PRODUCT
H. MOTOR VEHICLE FUEL/WASTE OIL : YES CONTAINS: REGULAR

IS CONTAINER LOCATED ON A FARM : NO

V CONTAINER CONSTRUCTION
A. THICKNESS: B. VAULTING: UNKNOWN C. WALLING: UNKNOWN
D. MATERIAL : UNKNOWN
E. LINING : UNKNOWN
F. WRAPPING : UNKNOWN

VI PIPING
A. ABOVEGROUND PIPING : B. UNDERGROUND PIPING : SUCTION
C. REPAIRS : UNKN IF YES, YEAR OF MOST RELENT REPAIR:

VII LEAK DETECTION
VISUAL STOCK INVENTORY INTERNAL INSPECTION P

URE TEST COMPOSITION OF SUBSTANCES CURRENTLY STORED IN CONTAINER
12032 REGULAR MOTOR VEHICLE FUEL

*** C15 ***

Back to Report Summary

Historical Underground Storage Tanks (HISTUST)

MAP ID# 23

Distance from Property: 0.171 mi. (903 ft.) NW
Elevation: 30 ft. (Lower than TP)

OFFICES OF VANCE M BROWN AND SO, 2747 PARK BOULEVARD, PALO ALTO, CA 94306
UNIQUE ID: **0002CEFD**

*** C04 ***

PAGE 500 STATE WATER RESOURCES CONTROL BOARD 06/01/88
HAZARDOUS SUBSTANCE STORAGE CONTAINER INFORMATION FOR SANTA CLARA COUNTY
CONTAINER TYPES: 1,2,3,4,5
(1=FARM MOTOR VEHICLE FUEL TANKS, 2=ALL OTHER PRODUCT TANKS, 3=WASTE TANKS, 4=SUMPS, 5=PITS, PONDS, LAGOONS & OTHERS)

I OWNER
BROWN INVESTMENT COMPANY
2747 PARK BOULEVARD PALO ALTO CA 94306

II FACILITY

	MAILING ADDRESS	DEALER/FOREMAN/SUPERVISOR	TYPE OF BUSINESS
OFFICES OF VANCE M. BROWN & SO	TOWNSHIP/RANGE/SECTION	TELEPHONE	NO. OF CONTAINERS
2747 PARK BOULEVARD			
PALO ALTO CA 94306	2747 PARK BOULEVARD	ALLAN F. BROWN	GENERAL CONTRACTORS
	PALO ALTO CA 94306		
CROSS STREET :		(415) 321-8432	2
OREGON EXPRESSWAY			

III 24-HR. CONTACT PERSON / TELEPHONE
DAY: BROWN, ALLAN F. (415) 321-8432 NIGHT: BROWN, ALLAN F. (415) 854-0452

********** OWNER ASSIGNED CONTAINER NUMBER: 1 ********** STATE BOARD ASSIGNED CONTAINER ID NUMBER: 00000010713001 **********

IV DESCRIPTION
A. CONTAINER TYPE : TANK
B. MANUFACTURER/YR OF MFG: /
C. YEAR INSTALLED : 1964
D. CAPACITY (GALLONS) : 550
E. REPAIRS : UNKN IF YES WHEN :
F. CURRENTLY USED : YES IF NO, YEAR OF LAST USE:
G. STORES : PRODUCT
H. MOTOR VEHICLE FUEL/WASTE OIL : YES CONTAINS: REGULAR

IS CONTAINER LOCATED ON A FARM : NO

V CONTAINER CONSTRUCTION
A. THICKNESS: 100R12 GAUGE B. VAULTING: NON-VAULTED C. WALLING: WRAPPED
D. MATERIAL : STEEL OTHER
E. LINING : UNLINED
F. WRAPPING : TAR TAR OR ASPHT

VI PIPING
A. ABOVEGROUND PIPING : B. UNDERGROUND PIPING : SUCTION
C. REPAIRS : NONE IF YES, YEAR OF MOST RECENT REPAIR:

VII LEAK DETECTION
STOCK INVENTORY P

URE TEST COMPOSITION OF SUBSTANCES CURRENTLY STORED IN CONTAINER
12032 REGULAR MOTOR VEHICLE FUEL

*** D04 ***

*** U04 ***

PAGE 501 STATE WATER RESOURCES CONTROL BOARD 06/01/88
HAZARDOUS SUBSTANCE STORAGE CONTAINER INFORMATION FOR SANTA CLARA COUNTY
CONTAINER TYPES: 1,2,3,4,5
(1=FARM MOTOR VEHICLE FUEL TANKS, 2=ALL OTHER PRODUCT TANKS, 3=WASTE TANKS, 4=SUMPS, 5=PITS, PONDS, LAGOONS & OTHERS)

********** OWNER ASSIGNED CONTAINER NUMBER: 2 ********** STATE BOARD ASSIGNED CONTAINER ID NUMBER: 00000010713002 *********

IV DESCRIPTION
A. CONTAINER TYPE : TANK
B. MANUFACTURER/YR OF MFG:
C. YEAR INSTALLED : 1977
D. CAPACITY (GALLONS) : 1,000
E. REPAIRS : UNKN IF YES WHEN :
F. CURRENTLY USED : YES IF NO, YEAR OF LAST USE:
G. STORES : PRODUCT
H. MOTOR VEHICLE FUEL/WASTE OIL : YES CONTAINS: UNLEADED

IS CONTAINER LOCATED ON A FARM : NO

V CONTAINER CONSTRUCTION
A. THICKNESS: 10GR12 GAUGE B. VAULTING: NON-VAULTED C. WALLING: WRAPPED
D. MATERIAL : STEEL OTHER
E. LINING : UNLINED
F. WRAPPING : TAR TAR OR ASPHT

VI PIPING
A. ABOVEGROUND PIPING : B. UNDERGROUND PIPING : SUCTION
C. REPAIRS : NONE IF YES, YEAR OF MOST RECENT REPAIR:

VII LEAK DETECTION
STOCK INVENTORY P

URE TEST COMPOSITION OF SUBSTANCES CURRENTLY STORED IN CONTAINER
12031 UNLEADED MOTOR VEHICLE FUEL

*** E04 ***

Back to Report Summary

Leaking Underground Storage Tanks (LUST)

MAP ID# 23

Distance from Property: 0.172 mi. (908 ft.) NW
Elevation: 30 ft. (Lower than TP)

FACILITY INFORMATION

GLOBAL ID: **T0608501823**
URL LINK: CLICK HERE
BUSINESS NAME: **VANCE BROWN & SONS**
ADDRESS: **2747 PARK BLVD**
PALO ALTO, CA 94306
COUNTY: **SANTA CLARA**

FACILITY DETAILS

CASE TYPE: **LUST CLEANUP SITE**
CASE NUMBER: **NOT REPORTED**
STATUS: **COMPLETED - CASE CLOSED 02/06/1997**
POTENTIAL CONTAMINATION:
GASOLINE
POTENTIAL MEDIA AFFECTED:
OTHER GROUNDWATER (USES OTHER THAN DRINKING WATER)
DISADVANTAGED COMMUNITY:
NO
SEVERELY DISADVANTAGED COMMUNITY:
NO
SITE HISTORY:
NOT REPORTED

HISTORICAL FACILITY DETAILS

NO HISTORICAL DETAIL(S) INFORMATION REPORTED FOR THIS FACILITY

Back to Report Summary

Leaking Underground Storage Tanks (LUST)

MAP ID# 23

Distance from Property: 0.172 mi. (908 ft.) NW
Elevation: 30 ft. (Lower than TP)

FACILITY INFORMATION

GLOBAL ID: **T0608572772**

URL LINK: CLICK HERE

BUSINESS NAME: **PROPOSED PARK PLAZA APARTMENTS**

ADDRESS: **2785 PARK BOULEVARD**
PALO ALTO, CA

COUNTY: **SANTA CLARA**

FACILITY DETAILS

NO DETAIL(S) INFORMATION REPORTED

HISTORICAL FACILITY DETAILS

NO HISTORICAL DETAIL(S) INFORMATION REPORTED FOR THIS FACILITY

Back to Report Summary

Leaking Underground Storage Tanks (LUST)

MAP ID# 23

Distance from Property: 0.172 mi. (908 ft.) NW
Elevation: 30 ft. (Lower than TP)

FACILITY INFORMATION

GLOBAL ID: **T0608591678**

URL LINK: CLICK HERE

BUSINESS NAME: **VANCE BROWN AND SONS**

ADDRESS: **2747 PARK BLVD**
PALO ALTO, CA 94306

COUNTY: **SANTA CLARA**

FACILITY DETAILS

NO DETAIL(S) INFORMATION REPORTED

HISTORICAL FACILITY DETAILS

NO HISTORICAL DETAIL(S) INFORMATION REPORTED FOR THIS FACILITY

Back to Report Summary

MAP ID# 23

Distance from Property: 0.171 mi. (903 ft.) NW
Elevation: 30 ft. (Lower than TP)

INCIDENT INFORMATION

GLOBAL ID#:	**2-43S0736**
CASE NUMBER:	**NOT REPORTED**
NAME:	**VANCE BROWN AND SONS**
ADDRESS:	**2747 PARK BLVD**
	PALO ALTO CA
FACILITY TYPE:	**NOT REPORTED**
LEAD AGENCY:	**SAN FRANCISCO BAY RWQCB (REGION 2)**
LEAD AGENCY CONTACT:	**NOT REPORTED**
LEAD AGENCY CASE #:	**NOT REPORTED**
SUBSTANCE RELEASED:	**GASOLINE STORAGE TANK**
STATUS:	**NOT REPORTED**
RESPONSIBLE PARTY:	**NOT REPORTED**

Back to Report Summary

Spills, Leaks, Investigation & Cleanup Recovery Listing (SLIC)

MAP ID# 23

Distance from Property: 0.172 mi. (908 ft.) NW
Elevation: 30 ft. (Lower than TP)

INCIDENT INFORMATION

GLOBAL ID#:	**T0608572772**
CASE NUMBER:	**NOT REPORTED**
NAME:	**2785 PARK BOULEVARD**
ADDRESS:	**2785 PARK BOULEVARD**
	PALO ALTO CA
FACILITY TYPE:	**CLEANUP PROGRAM SITE**
LEAD AGENCY:	**NOT REPORTED**
LEAD AGENCY CONTACT:	**NOT REPORTED**
LEAD AGENCY CASE #:	**NOT REPORTED**
SUBSTANCE RELEASED:	**NOT REPORTED**
STATUS:	**OPEN - VERIFICATION MONITORING**
RESPONSIBLE PARTY:	**NOT REPORTED**

Back to Report Summary

MAP ID# 23

Distance from Property: 0.155 mi. (818 ft.) NW
Elevation: 30 ft. (Lower than TP)

FACILITY INFORMATION

FACILITY #: **10312**
BOE: **44-018864**
NAME: **PACIFIC READY MIX INC**
ADDRESS: **2785 PARK BLVD**
PALO ALTO, CA 94306

STATUS: **ACTIVE**
JURISDICTION: **CITY OF PALO ALTO**
AGENCY: **FIRE DEPARTMENT**

TANK INFORMATION

TANK #: **000001**
INSTALLED: **NOT REPORTED**
TANK USE: **M.V. FUEL**
CONTENT: **DIESEL**

CAPACITY: **8000**
REMOVED: **NOT REPORTED**
STORAGE TYPE: **PRODUCT**
CONTAINMENT: **NOT REPORTED**

TANK #: **000002**
INSTALLED: **NOT REPORTED**
TANK USE: **M.V. FUEL**
CONTENT: **LEADED**

CAPACITY: **1000**
REMOVED: **NOT REPORTED**
STORAGE TYPE: **PRODUCT**
CONTAINMENT: **NOT REPORTED**

Back to Report Summary

MAP ID# 23

Distance from Property: 0.171 mi. (903 ft.) NW
Elevation: 30 ft. (Lower than TP)

FACILITY INFORMATION

FACILITY #: **10713**
STATUS: **ACTIVE**
BOE: **NOT REPORTED**
JURISDICTION: **CITY OF PALO ALTO**
NAME: **OFFICES OF VANCE M. BROWN & SO**
AGENCY: **FIRE DEPARTMENT**
ADDRESS: **2747 PARK BLVD**
PALO ALTO, CA 94306

TANK INFORMATION

TANK #: **000001**
CAPACITY: **550**
INSTALLED: **NOT REPORTED**
REMOVED: **NOT REPORTED**
TANK USE: **M.V. FUEL**
STORAGE TYPE: **PRODUCT**
CONTENT: **LEADED**
CONTAINMENT: **NOT REPORTED**

TANK #: **000002**
CAPACITY: **1000**
INSTALLED: **NOT REPORTED**
REMOVED: **NOT REPORTED**
TANK USE: **M.V. FUEL**
STORAGE TYPE: **PRODUCT**
CONTENT: **REG UNLEADED**
CONTAINMENT: **NOT REPORTED**

Back to Report Summary

MAP ID# 24

Distance from Property: 0.164 mi. (866 ft.) W
Elevation: 35 ft. (Higher than TP)

FACILITY INFORMATION

GLOBAL ID: **T0608501747**
URL LINK: CLICK HERE
BUSINESS NAME: **BLEIBLER IRON WORKS**
ADDRESS: **411 PAGE MILL RD**
PALO ALTO, CA 94306
COUNTY: **SANTA CLARA**

FACILITY DETAILS

CASE TYPE: **LUST CLEANUP SITE**
CASE NUMBER: **43-1820**
STATUS: **COMPLETED - CASE CLOSED 5/8/1995**
POTENTIAL CONTAMINATION:
GASOLINE
POTENTIAL MEDIA AFFECTED:
OTHER GROUNDWATER (USES OTHER THAN DRINKING WATER)
DISADVANTAGED COMMUNITY:
NO
SEVERELY DISADVANTAGED COMMUNITY:
NO
SITE HISTORY:
NOT REPORTED

REGULATORY ACTIVITIES

TYPE OF ACTION:	DATE:	ACTION:
OTHER	**01/01/50**	**LEAK DISCOVERY**
OTHER	**01/01/50**	**LEAK REPORTED**
OTHER	**01/01/50**	**LEAK STOPPED**
RESPONSE	**05/28/2002**	**WELL DESTRUCTION REPORT**
ENFORCEMENT	**01/16/2002**	**CLOSURE/NO FURTHER ACTION LETTER**
ENFORCEMENT	**01/10/2002**	**STAFF LETTER**
RESPONSE	**12/10/2001**	**OTHER REPORT / DOCUMENT**
RESPONSE	**10/01/2001**	**UNAUTHORIZED RELEASE FORM**
ENFORCEMENT	**07/08/1995**	**CLOSURE/NO FURTHER ACTION LETTER**
ENFORCEMENT	**05/08/1995**	**CLOSURE/NO FURTHER ACTION LETTER**
RESPONSE	**08/24/1993**	**OTHER REPORT / DOCUMENT**
OTHER	**02/13/1984**	**LEAK DISCOVERY**
OTHER	**02/13/1984**	**LEAK REPORTED**
OTHER	**02/13/1984**	**LEAK STOPPED**

STATUS HISTORY

STATUS:	DATE:
COMPLETED - CASE CLOSED	**05/08/1995**
OPEN - SITE ASSESSMENT	**10/31/1990**
OPEN - SITE ASSESSMENT	**09/11/1990**
OPEN - CASE BEGIN DATE	**02/13/1984**

CONTACT DETAILS

ORGANIZATION: **SANTA CLARA COUNTY LOP**
ADDRESS: **1555 BERGER DRIVE, SUITE 300**
CITY: **SAN JOSE**
CONTACT NAME: **UST CASE WORKER**
CONTACT TYPE: **LOCAL AGENCY CASEWORKER**
CONTACT PHONE: **4089183400**
EMAIL: **NOT REPORTED**
ORGANIZATION: **SAN FRANCISCO BAY RWQCB (REGION 2)**
ADDRESS: **1515 CLAY ST SUITE 1400**
CITY: **OAKLAND**
CONTACT NAME: **REGIONAL WATER BOARD**
CONTACT TYPE: **REGIONAL BOARD CASEWORKER**
CONTACT PHONE: **NOT REPORTED**
EMAIL: **NOT REPORTED**

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Historical Cortese List (HISTCORTESE)

MAP ID# 24

Distance from Property: 0.164 mi. (866 ft.) W
Elevation: 35 ft. (Higher than TP)

FACILITY INFORMATION

GEOSEARCH ID: **43-1820COR**

ID#: **43-1820**

NAME: **BLEIBLER IRON WORKS**

ADDRESS: **411 PAGE MILL**
PALO ALTO, CA 94306

Back to Report Summary

MAP ID# 24

Distance from Property: 0.164 mi. (866 ft.) W
Elevation: 35 ft. (Higher than TP)

BLEIBLER IRON WORKS INC, 411 PAGE MILL ROAD, PALO ALTO, CA 94306
UNIQUE ID: **0002CED8**

*** H01 ***

PAGE 460 STATE WATER RESOURCES CONTROL BOARD 06/01/88
HAZARDOUS SUBSTANCE STORAGE CONTAINER INFORMATION FOR SANTA CLARA COUNTY
CONTAINER TYPES: 1,2,3,4,5
(1=FARM MOTOR VEHICLE FUEL TANKS, 2=ALL OTHER PRODUCT TANKS, 3=WASTE TANKS, 4=SUMPS, 5=PITS, PONDS, LAGOONS & OTHERS)

I OWNER
BLEIBLER IRON WORKS INC.
411-PAGE MILL ROAD PALO ALTO CA 94306

II FACILITY

	MAILING ADDRESS	DEALER/FOREMAN/SUPERVISOR	TYPE OF BUSINESS
BLEIBLER IRON WORKS INC.	TOWNSHIP/RANGE/SECTION	TELEPHONE	NO. OF CONTAINERS
411-PAGE MILL ROAD			
PALO ALTO CA 94306	SAME AS ABOVE	ROBERT A. BLEIBLER	IRON FABRICATION
	PALO ALTO CA 94306		
CROSS STREET :		(415) 322-3941	1
ASH ST			

III 24-HR. CONTACT PERSON / TELEPHONE
DAY: BLEIBLER ROBERT A (415) 322-3941 NIGHT: BLEIBLER ROBERT A. (408) 739-5913

********** OWNER ASSIGNED CONTAINER NUMBER: 0001 ********** STATE BOARD ASSIGNED CONTAINER ID NUMBER: 00000010796001 **********

IV DESCRIPTION
A. CONTAINER TYPE : TANK
B. MANUFACTURER/YR OF MFG: UNKNOWN
C. YEAR INSTALLED : 1958
D. CAPACITY (GALLONS) : 550
E. REPAIRS : NONE IF YES WHEN :
F. CURRENTLY USED : YES IF NO, YEAR OF LAST USE:
G. STORES : PRODUCT
H. MOTOR VEHICLE FUEL/WASTE OIL : YES CONTAINS: REGULAR

IS CONTAINER LOCATED ON A FARM : NO

V CONTAINER CONSTRUCTION
A. THICKNESS: B. VAULTING: NON-VAULTED C. WALLING: UNKNOWN
D. MATERIAL : CARBON STEEL
E. LINING : UNKNOWN
F. WRAPPING : UNKNOWN

VI PIPING
A. ABOVEGROUND PIPING : B. UNDERGROUND PIPING : SUCTION
C. REPAIRS : NONE IF YES, YEAR OF MOST RECENT REPAIR:

VII LEAK DETECTION
NONE P

URE TEST COMPOSITION OF SUBSTANCES CURRENTLY STORED IN CONTAINER
12032 REGULAR MOTOR VEHICLE FUEL

*** I01 ***

Back to Report Summary

Leaking Underground Storage Tanks (LUST)

MAP ID# 24

Distance from Property: 0.164 mi. (866 ft.) W
Elevation: 35 ft. (Higher than TP)

FACILITY INFORMATION

GLOBAL ID: **T0608501747**
URL LINK: CLICK HERE
BUSINESS NAME: **BLEIBLER IRON WORKS**
ADDRESS: **411 PAGE MILL RD**
PALO ALTO, CA 94306
COUNTY: **SANTA CLARA**

FACILITY DETAILS

CASE TYPE: **LUST CLEANUP SITE**
CASE NUMBER: **43-1820**
STATUS: **COMPLETED - CASE CLOSED 05/08/1995**
POTENTIAL CONTAMINATION:
GASOLINE
POTENTIAL MEDIA AFFECTED:
OTHER GROUNDWATER (USES OTHER THAN DRINKING WATER)
DISADVANTAGED COMMUNITY:
NO
SEVERELY DISADVANTAGED COMMUNITY:
NO
SITE HISTORY:
NOT REPORTED

HISTORICAL FACILITY DETAILS

NO HISTORICAL DETAIL(S) INFORMATION REPORTED FOR THIS FACILITY

Back to Report Summary

MAP ID# 24

Distance from Property: 0.164 mi. (866 ft.) W
Elevation: 35 ft. (Higher than TP)

FACILITY INFORMATION

FACILITY #: **10796**
STATUS: **ACTIVE**
BOE: **NOT REPORTED**
JURISDICTION: **CITY OF PALO ALTO**
NAME: **BLEIBLER IRON WORKS INC.**
AGENCY: **FIRE DEPARTMENT**
ADDRESS: **411 PAGE MILL RD**
PALO ALTO, CA 94306

TANK INFORMATION

TANK #: **000001**
CAPACITY: **550**
INSTALLED: **NOT REPORTED**
REMOVED: **NOT REPORTED**
TANK USE: **M.V. FUEL**
STORAGE TYPE: **PRODUCT**
CONTENT: **LEADED**
CONTAINMENT: **NOT REPORTED**

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GeoTracker Cleanup Sites (CLEANUPSITES)

MAP ID# 25

Distance from Property: 0.191 mi. (1,008 ft.) SW
Elevation: 36 ft. (Higher than TP)

FACILITY INFORMATION

GLOBAL ID: **T10000005468**
URL LINK: CLICK HERE
BUSINESS NAME: **PORTAGE LLC**
ADDRESS: **3159 EL CAMINO REAL**
PALO ALTO, CA 94303
COUNTY: **SANTA CLARA**

FACILITY DETAILS

CASE TYPE: **CLEANUP PROGRAM SITE**
CASE NUMBER: **43S1157**
STATUS: **OPEN - INACTIVE 8/25/2016**
POTENTIAL CONTAMINATION:
TRICHLOROETHYLENE (TCE)
POTENTIAL MEDIA AFFECTED:
INDOOR AIR
DISADVANTAGED COMMUNITY:
NO
SEVERELY DISADVANTAGED COMMUNITY:
NO
SITE HISTORY:
THE PROJECT IS A REDEVELOPMENT PROPERTY WITHIN THE COE PLUME WITH UNDERLYING GROUNDWATER PROBABLY IMPACTED BY THE UPGRADIENT HP/VARIAN SOURCE PROPERTIES. THE REGIOINAL WATER BOARD AND USEPA ARE CURRENTLY ENGAGING THE DEVELOPER TO SUBMIT A STE/RISK MANAGEMENT PLAN AND INDOOR AIR TESTING WORKPLAN TO VERIFY THAT INDOOR AIR VAPOR INTRUSION.

REGULATORY ACTIVITIES

TYPE OF ACTION:	DATE:	ACTION:
OTHER	**01/01/50**	**LEAK BEGAN**
OTHER	**01/01/50**	**LEAK DISCOVERY**
OTHER	**01/01/50**	**LEAK REPORTED**
OTHER	**01/01/50**	**LEAK STOPPED**
ENFORCEMENT	**06/29/2018**	**ANNUAL ESTIMATION LETTER**
ENFORCEMENT	**09/16/2015**	**TECHNICAL CORRESPONDENCE / ASSISTANCE / OTHER**
ENFORCEMENT	**07/29/2015**	**TECHNICAL CORRESPONDENCE / ASSISTANCE / OTHER**
RESPONSE	**04/07/2013**	**REMEDIAL INVESTIGATION REPORT - REGULATOR RESPONDED**
OTHER	**01/01/1983**	**LEAK DISCOVERY**
OTHER	**01/01/1983**	**LEAK REPORTED**
OTHER	**01/01/1983**	**LEAK STOPPED**
OTHER	**01/01/1970**	**LEAK BEGAN**

STATUS HISTORY

STATUS:	DATE:
OPEN - INACTIVE	**08/25/2016**
INFORMATIONAL ITEM	**12/18/2013**
INFORMATIONAL ITEM	**01/01/1983**

STATUS: DATE:

OPEN - CASE BEGIN DATE **01/01/1983**

CONTACT DETAILS

ORGANIZATION: **SAN FRANCISCO BAY RWQCB (REGION 2)**
ADDRESS: **1515 CLAY STREET, SUITE 1500**
CITY: **OAKLAND**
CONTACT NAME: **ROGER PAPLER**
CONTACT TYPE: **REGIONAL BOARD CASEWORKER**
CONTACT PHONE: **NOT REPORTED**
EMAIL: **ROGER.PAPLER@WATERBOARDS.CA.GOV**

Back to Report Summary

MAP ID# 25

Distance from Property: 0.182 mi. (961 ft.) SW
Elevation: 36 ft. (Higher than TP)

SITE INFORMATION

ID #: **60002787** ASSESSOR'S PARCEL #: **NONE SPECIFIED**
FACILITY LINK: CLICK HERE
NAME: **FORMER FOOT LOCKER STORE**
ADDRESS: **3225 EL CAMINO REAL**
PALO ALTO, CA 94306
COUNTY: **SANTA CLARA**
SITE SIZE (ACRES): **0.69**
LEAD AGENCY: **SMBRP**
DTSC PROJECT MANAGER: **JOVANNE VILLAMATER**
DTSC SUPERVISOR: **CHERYL PROWELL**
DTSC DIVISION BRANCH: **CLEANUP BERKELEY**
NPL LISTED: **NO** RESTRICTED LAND USE: **NO**
SITE TYPE: **VOLUNTARY CLEANUP**
SITE TYPE DESCRIPTION
VOLUNTARY CLEANUP: IDENTIFIES SITES WITH EITHER CONFIRMED OR UNCONFIRMED RELEASES, AND THE PROJECT PROPONENTS HAVE REQUESTED THAT DTSC OVERSEE EVALUATION, INVESTIGATION, AND/OR CLEANUP ACTIVITIES AND HAVE AGREED TO PROVIDE COVERAGE FOR DTSC'S COSTS.
DTSC's CURRENT INVOLVEMENT AT SITE (as of /2/18/12/3)
ACTIVE - IDENTIFIES THAT AN INVESTIGATION AND/OR REMEDIATION IS CURRENTLY IN PROGRESS AND THAT DTSC IS ACTIVELY INVOLVED, EITHER IN A LEAD OR SUPPORT CAPACITY
PAST USE/S THAT CAUSED THE CONTAMINATION
NONE SPECIFIED
CONFIRMED CONTAMINANTS OF CONCERN
NONESPECIFIED - NONE SPECIFIED

Back to Report Summary

Spills, Leaks, Investigation & Cleanup Recovery Listing (SLIC)

MAP ID# 25

Distance from Property: 0.191 mi. (1,008 ft.) SW
Elevation: 36 ft. (Higher than TP)

INCIDENT INFORMATION

GLOBAL ID#:	**T10000005468**
CASE NUMBER:	**NOT REPORTED**
NAME:	**PORTAGE LLC**
ADDRESS:	**3159 EL CAMINO REAL**
	PALO ALTO CA
FACILITY TYPE:	**CLEANUP PROGRAM SITE**
LEAD AGENCY:	**NOT REPORTED**
LEAD AGENCY CONTACT:	**NOT REPORTED**
LEAD AGENCY CASE #:	**NOT REPORTED**
SUBSTANCE RELEASED:	**NOT REPORTED**
STATUS:	**OPEN - INACTIVE**
RESPONSIBLE PARTY:	**NOT REPORTED**

Back to Report Summary

Voluntary Cleanup Program (VCP)

MAP ID# 25

Distance from Property: 0.182 mi. (961 ft.) SW
Elevation: 36 ft. (Higher than TP)

SITE INFORMATION

ID #: **60002787** ASSESSOR'S PARCEL #: **NONE SPECIFIED**
URL LINK: CLICK HERE
NAME: **FORMER FOOT LOCKER STORE**
ADDRESS: **3225 EL CAMINO REAL**
PALO ALTO, CA 94306
COUNTY: **SANTA CLARA**
SITE SIZE (ACRES): **0.69**
LEAD AGENCY: **SMBRP**
DTSC PROJECT MANAGER: **JOVANNE VILLAMATER**
DTSC SUPERVISOR: **CHERYL PROWELL**
DTSC DIVISION BRANCH: **CLEANUP BERKELEY**
NPL LISTED: **NO** RESTRICTED LAND USE: **NO**
SITE TYPE: **VOLUNTARY CLEANUP**
SITE TYPE DESCRIPTION
VOLUNTARY CLEANUP: IDENTIFIES SITES WITH EITHER CONFIRMED OR UNCONFIRMED RELEASES, AND THE PROJECT PROPONENTS HAVE REQUESTED THAT DTSC OVERSEE EVALUATION, INVESTIGATION, AND/OR CLEANUP ACTIVITIES AND HAVE AGREED TO PROVIDE COVERAGE FOR DTSC'S COSTS.
DTSC's CURRENT INVOLVEMENT AT SITE (as of /2/18/12/3)
ACTIVE - IDENTIFIES THAT AN INVESTIGATION AND/OR REMEDIATION IS CURRENTLY IN PROGRESS AND THAT DTSC IS ACTIVELY INVOLVED, EITHER IN A LEAD OR SUPPORT CAPACITY
PAST USE/S THAT CAUSED THE CONTAMINATION
NONE SPECIFIED
CONFIRMED CONTAMINANTS OF CONCERN
NONESPECIFIED - NONE SPECIFIED

Back to Report Summary

MAP ID# 26

Distance from Property: 0.184 mi. (972 ft.) WSW
Elevation: 35 ft. (Higher than TP)

FACILITY INFORMATION

GLOBAL ID: **T10000008756**
URL LINK: CLICK HERE
BUSINESS NAME: **441 PAGE MILL ROAD**
ADDRESS: **441 PAGE MILL ROAD**
PALO ALTO, CA 94306
COUNTY: **SANTA CLARA**

FACILITY DETAILS

CASE TYPE: **CLEANUP PROGRAM SITE**
CASE NUMBER: **43S1198**
STATUS: **OPEN - VERIFICATION MONITORING 1/9/2018**
POTENTIAL CONTAMINATION:
TRICHLOROETHYLENE (TCE)
POTENTIAL MEDIA AFFECTED:
CONTAMINATED SURFACE / STRUCTURE, INDOOR AIR, OTHER GROUNDWATER (USES OTHER THAN DRINKING WATER), SOIL, SOIL VAPOR
DISADVANTAGED COMMUNITY:
NO
SEVERELY DISADVANTAGED COMMUNITY:
NO
SITE HISTORY:
BASED ON INFORMATION PRESENTED IN THE MAY 17, 2012, PHASE 1 ENVIRONMENTAL SITE ASSESSMENT, GREEN MOUNTAIN REALITY IS PLANNING TO REDEVELOP THE SITE WITH A MIXED-USE (RETAIL, COMMERCIAL, AND RESIDENTIAL) STRUCTURE. THE PROPOSED STRUCTURE WILL BE THREE STORIES ABOVE GROUND WITH ONE LEVEL BELOW GROUND FOR PARKING. THE SITE IS LOCATED WITHIN THE CALIFORNIA OLIVE EMERSON (COE) STUDY AREA, WITH IS CHARACTERIZED WITH CONTAMINATED GROUNDWATER OF VARIOUS VOLATILE ORGANIC COMPOUNDS (VOCS) FROM SEVERAL UPGRADIENT SITES INCLUDING FORMER HEWLETT PACKARD 640 PAGE MILL ROAD, FORMER VARIAN 601 CALIFORNIA AVENUE, AND FORMER HEWLETT PACKARD, 395 PAGE MILL ROAD. ANALYSIS OF GROUNDWATER IN THE SITE VICINITY SHOW TRICHLOROETHENE (TCE) CONCENTRATIONS RANGING, GENERALLY, FROM 50 TO 130 MICROGRAMS PER LITER (UG/L).

REGULATORY ACTIVITIES

TYPE OF ACTION:	DATE:	ACTION:
ENFORCEMENT	**08/20/2020**	**STAFF LETTER**
ENFORCEMENT	**08/06/2020**	**STAFF LETTER**
ENFORCEMENT	**06/30/2020**	**ANNUAL ESTIMATION LETTER**
ENFORCEMENT	**07/25/2019**	**ANNUAL ESTIMATION LETTER**
ENFORCEMENT	**06/29/2018**	**ANNUAL ESTIMATION LETTER**
ENFORCEMENT	**07/05/2017**	**VERBAL COMMUNICATION**
ENFORCEMENT	**06/30/2017**	**ANNUAL ESTIMATION LETTER**
ENFORCEMENT	**03/16/2017**	**SITE VISIT / INSPECTION / SAMPLING**
ENFORCEMENT	**11/17/2016**	**13267 REQUIREMENT**
ENFORCEMENT	**06/30/2016**	**ANNUAL ESTIMATION LETTER - #2020656**
ENFORCEMENT	**03/25/2016**	**STAFF LETTER**
ENFORCEMENT	**03/11/2016**	**STAFF LETTER**

TYPE OF ACTION:	DATE:	ACTION:
RESPONSE	**03/11/2016**	**OTHER REPORT / DOCUMENT**
ENFORCEMENT	**01/01/2016**	**NOTIFICATION - PUBLIC PARTICIPATION DOCUMENT**

STATUS HISTORY

STATUS:	DATE:
OPEN - VERIFICATION MONITORING	**01/09/2018**
OPEN - REMEDIATION	**11/17/2016**
OPEN - CASE BEGIN DATE	**04/06/2016**
OPEN - SITE ASSESSMENT	**04/06/2016**

CONTACT DETAILS

ORGANIZATION: **SAN FRANCISCO BAY RWQCB (REGION 2)**
ADDRESS: **1515 CLAY STREET, SUITE 1400**
CITY: **OAKLAND**
CONTACT NAME: **MICHAEL ROCHETTE**
CONTACT TYPE: **REGIONAL BOARD CASEWORKER**
CONTACT PHONE: **NOT REPORTED**
EMAIL: **MICHAEL.ROCHETTE@WATERBOARDS.CA.GOV**

Back to Report Summary

Spills, Leaks, Investigation & Cleanup Recovery Listing (SLIC)

MAP ID# 26

Distance from Property: 0.184 mi. (972 ft.) WSW
Elevation: 35 ft. (Higher than TP)

INCIDENT INFORMATION

GLOBAL ID#:	**T10000008756**
CASE NUMBER:	**NOT REPORTED**
NAME:	**441 PAGE MILL ROAD**
ADDRESS:	**441 PAGE MILL ROAD**
	PALO ALTO CA
FACILITY TYPE:	**CLEANUP PROGRAM SITE**
LEAD AGENCY:	**NOT REPORTED**
LEAD AGENCY CONTACT:	**NOT REPORTED**
LEAD AGENCY CASE #:	**NOT REPORTED**
SUBSTANCE RELEASED:	**NOT REPORTED**
STATUS:	**OPEN - VERIFICATION MONITORING**
RESPONSIBLE PARTY:	**NOT REPORTED**

Back to Report Summary

MAP ID# 27

Distance from Property: 0.185 mi. (977 ft.) NNW
Elevation: 30 ft. (Lower than TP)

FACILITY INFORMATION

GLOBAL ID: **SL0608561372**
URL LINK: CLICK HERE
BUSINESS NAME: **OREGON EXPRESSWAY UNDERPASS**
ADDRESS: **ALMA STREET**
PALO ALTO, CA 94301
COUNTY: **SANTA CLARA**

FACILITY DETAILS

CASE TYPE: **CLEANUP PROGRAM SITE**
CASE NUMBER: **43S0230**
STATUS: **OPEN - INACTIVE 1/9/2020**
POTENTIAL CONTAMINATION:
TRICHLOROETHYLENE (TCE)
POTENTIAL MEDIA AFFECTED:
OTHER GROUNDWATER (USES OTHER THAN DRINKING WATER)
DISADVANTAGED COMMUNITY:
NO
SEVERELY DISADVANTAGED COMMUNITY:
NO
SITE HISTORY:
SINCE THE CONSTRUCTION OF THE OREGON EXPRESSWAY UNDERPASS (OEU), THE OEU KEPT DRY AND PASSABLE BY A 24/7 ACTIVELY PUMPING GALLERY OF EXTRACTION WELLS KNOWN AS THE OEU SUBDRAIN. THE CONE OF DEPRESSION EFFECTIVELY CAPTURED THE ENTIRE COE PLUME AND THE PUMPED/EXTRACTED WATER HAS BEEN DIRECTED TO THE NEAREST CREEK WITHOUT PRE-TREATMENT UNTIL 1995. A GROUNDWATER TREATMENT SYSTEM WAS THEN INSTALLED TO TREAT THE GROUNDWATER BEFORE DISCHARGING TO THE CREEK.

REGULATORY ACTIVITIES

TYPE OF ACTION:	DATE:	ACTION:
OTHER	**01/01/50**	**LEAK REPORTED**
REMEDIATION	**01/01/50**	**PUMP & TREAT (P&T) GROUNDWATER**
RESPONSE	**01/30/2004**	**NPDES / WDR REPORTS**
RESPONSE	**10/30/2003**	**NPDES / WDR REPORTS**
RESPONSE	**07/30/2003**	**NPDES / WDR REPORTS**
RESPONSE	**04/30/2003**	**NPDES / WDR REPORTS**
RESPONSE	**01/30/2003**	**NPDES / WDR REPORTS**
RESPONSE	**01/30/2002**	**NPDES / WDR REPORTS**
RESPONSE	**06/12/2001**	**NPDES / WDR REPORTS**
RESPONSE	**01/30/2001**	**NPDES / WDR REPORTS**
ENFORCEMENT	**08/16/2000**	**WASTE DISCHARGE REQUIREMENTS - #00-085**
ENFORCEMENT	**09/21/1994**	**CLEAN-UP AND ABATEMENT ORDER - #94-130**
REMEDIATION	**09/16/1987**	**PUMP & TREAT (P&T) GROUNDWATER**
OTHER	**01/02/1965**	**LEAK REPORTED**

STATUS HISTORY

STATUS:	DATE:
OPEN - INACTIVE	**01/09/2020**
OPEN - CASE BEGIN DATE	**09/16/1987**
OPEN - REMEDIATION	**09/16/1987**

CONTACT DETAILS

ORGANIZATION: **SANTA CLARA VALLEY WATER DISTRICT**
ADDRESS: **5750 ALMADEN EXPRESSWAY**
CITY: **SAN JOSE**
CONTACT NAME: **GEORGE COOK**
CONTACT TYPE: **LOCAL AGENCY CASEWORKER**
CONTACT PHONE: **4082652607**
EMAIL: **GCOOK@VALLEYWATER.ORG**
ORGANIZATION: **SAN FRANCISCO BAY RWQCB (REGION 2)**
ADDRESS: **1515 CLAY STREET, SUITE 1500**
CITY: **OAKLAND**
CONTACT NAME: **ROGER PAPLER**
CONTACT TYPE: **REGIONAL BOARD CASEWORKER**
CONTACT PHONE: **NOT REPORTED**
EMAIL: **ROGER.PAPLER@WATERBOARDS.CA.GOV**

Back to Report Summary

MAP ID# 28

Distance from Property: 0.192 mi. (1,014 ft.) SW
Elevation: 39 ft. (Higher than TP)

FACILITY INFORMATION

GLOBAL ID: **T0608548811**
URL LINK: CLICK HERE
BUSINESS NAME: **GAVENMAN PROPERTY**
ADDRESS: **3017 EL CAMINO REAL**
PALO ALTO, CA 94306
COUNTY: **SANTA CLARA**

FACILITY DETAILS

CASE TYPE: **LUST CLEANUP SITE**
CASE NUMBER: **NOT REPORTED**
STATUS: **COMPLETED - CASE CLOSED 8/30/2004**
POTENTIAL CONTAMINATION:
WASTE OIL / MOTOR / HYDRAULIC / LUBRICATING
POTENTIAL MEDIA AFFECTED:
SOIL
DISADVANTAGED COMMUNITY:
NO
SEVERELY DISADVANTAGED COMMUNITY:
NO
SITE HISTORY:
NOT REPORTED

REGULATORY ACTIVITIES

TYPE OF ACTION:	DATE:	ACTION:
OTHER	**01/01/50**	**LEAK REPORTED**
ENFORCEMENT	**08/30/2004**	**CLOSURE/NO FURTHER ACTION LETTER**
RESPONSE	**08/05/2004**	**OTHER REPORT / DOCUMENT**
RESPONSE	**07/14/2004**	**TANK REMOVAL REPORT / UST SAMPLING REPORT**
OTHER	**06/15/2004**	**LEAK REPORTED**
RESPONSE	**06/15/2004**	**UNAUTHORIZED RELEASE FORM**
RESPONSE	**06/14/2004**	**UNAUTHORIZED RELEASE FORM**
RESPONSE	**12/22/1993**	**OTHER REPORT / DOCUMENT**

STATUS HISTORY

STATUS:	DATE:
COMPLETED - CASE CLOSED	**08/30/2004**
OPEN - CASE BEGIN DATE	**06/15/2004**

CONTACT DETAILS

ORGANIZATION: **SANTA CLARA COUNTY LOP**
ADDRESS: **1555 BERGER DRIVE, SUITE 300**
CITY: **SAN JOSE**
CONTACT NAME: **UST CASE WORKER**
CONTACT TYPE: **LOCAL AGENCY CASEWORKER**
CONTACT PHONE: **4089183400**
EMAIL: **NOT REPORTED**

ORGANIZATION: **SAN FRANCISCO BAY RWQCB (REGION 2)**
ADDRESS: **1515 CLAY ST SUITE 1400**
CITY: **OAKLAND**
CONTACT NAME: **REGIONAL WATER BOARD**
CONTACT TYPE: **REGIONAL BOARD CASEWORKER**
CONTACT PHONE: **NOT REPORTED**
EMAIL: **NOT REPORTED**

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GeoTracker Cleanup Sites (CLEANUPSITES)

MAP ID# 28

Distance from Property: 0.192 mi. (1,014 ft.) SW
Elevation: 39 ft. (Higher than TP)

FACILITY INFORMATION

GLOBAL ID: **T0608555022**
URL LINK: CLICK HERE
BUSINESS NAME: **PALO ALTO NISSAN**
ADDRESS: **3001 EL CAMINO REAL**
PALO ALTO, CA 94306
COUNTY: **SANTA CLARA**

FACILITY DETAILS

CASE TYPE: **LUST CLEANUP SITE**
CASE NUMBER: **NOT REPORTED**
STATUS: **COMPLETED - CASE CLOSED 1/22/1992**
POTENTIAL CONTAMINATION:
NOT REPORTED
POTENTIAL MEDIA AFFECTED:
SOIL
DISADVANTAGED COMMUNITY:
NO
SEVERELY DISADVANTAGED COMMUNITY:
NO
SITE HISTORY:
NOT REPORTED

REGULATORY ACTIVITIES

TYPE OF ACTION:	DATE:	ACTION:
OTHER	**01/01/50**	**LEAK REPORTED**
ENFORCEMENT	**01/22/1992**	**CLOSURE/NO FURTHER ACTION LETTER**
OTHER	**01/01/1990**	**LEAK REPORTED**
RESPONSE	**07/02/1984**	**OTHER REPORT / DOCUMENT**

STATUS HISTORY

STATUS:	DATE:
COMPLETED - CASE CLOSED	**01/22/1992**
OPEN - CASE BEGIN DATE	**01/01/1990**

CONTACT DETAILS

ORGANIZATION: **SANTA CLARA COUNTY LOP**
ADDRESS: **1555 BERGER DRIVE, SUITE 300**
CITY: **SAN JOSE**
CONTACT NAME: **UST CASE WORKER**
CONTACT TYPE: **LOCAL AGENCY CASEWORKER**
CONTACT PHONE: **4089183400**
EMAIL: **NOT REPORTED**
ORGANIZATION: **SAN FRANCISCO BAY RWQCB (REGION 2)**
ADDRESS: **1515 CLAY ST SUITE 1400**
CITY: **OAKLAND**
CONTACT NAME: **REGIONAL WATER BOARD**

CONTACT TYPE: **REGIONAL BOARD CASEWORKER**
CONTACT PHONE: **NOT REPORTED**
EMAIL: **NOT REPORTED**

Back to Report Summary

MAP ID# 28

Distance from Property: 0.192 mi. (1,014 ft.) SW
Elevation: 39 ft. (Higher than TP)

FACILITY INFORMATION

GLOBAL ID: **T10000011631**
URL LINK: CLICK HERE
BUSINESS NAME: **SOBRATO 3001 EL CAMINO**
ADDRESS: **3001-3017 EL CAMINO REAL**
PALO ALTO, CA 94306
COUNTY: **SANTA CLARA**

FACILITY DETAILS

CASE TYPE: **CLEANUP PROGRAM SITE**
CASE NUMBER: **NOT REPORTED**
STATUS: **OPEN - INACTIVE 8/17/2020**
POTENTIAL CONTAMINATION:
TRICHLOROETHYLENE (TCE)
POTENTIAL MEDIA AFFECTED:
SOIL, SOIL VAPOR
DISADVANTAGED COMMUNITY:
NO
SEVERELY DISADVANTAGED COMMUNITY:
NO
SITE HISTORY:
THIS CASE IS CURRENTLY INACTIVE UNTIL PROPERTY DEVELOPMENT OR BUILDING OCCUPATION. PREVIOUS SITE ASSESSMENT ACTIVITIES DETECTED CONTAMINATION, WITHIN THE PROPERTY BOUNDARIES, AT LEVELS THAT REPRESENT A POTENTIAL RISK TO HUMAN HEALTH. SOIL VAPOR SAMPLES COLLECTED IN APRIL OF 2018 CONTAINED UP TO 1,740 MICROGRAMS PER CUBIC METER (UG/M3) OF TRICHLOROETHENE (TCE). THE ENVIRONMENTAL SCREENING LEVEL (ESL) FOR POTENTIAL VAPOR INTRUSION INTO A RESIDENTIAL AND COMMERCIAL SPACE FROM TCE IN SOIL VAPOR IS 16 AND 100 UG/M3, RESPECTIVELY. THE DEH HAS BEEN INFORMED BY THE PROPERTY OWNER THAT THE EXISTING BUILDINGS ON THE PROPERTY ARE NOT OCCUPIED. TO PROTECT HUMAN HEALTH, THE DEH RECOMMENDS THAT THE BUILDINGS REMAIN UNOCCUPIED, UNTIL ALL POTENTIAL ENVIRONMENTAL ISSUES, INCLUDING TCE IN SOIL VAPOR, ARE APPROPRIATELY ADDRESSED.

REGULATORY ACTIVITIES

TYPE OF ACTION:	DATE:	ACTION:
RESPONSE	**12/30/2020**	**MONITORING REPORT - ANNUALLY**
RESPONSE	**12/30/2020**	**OTHER REPORT / DOCUMENT**
ENFORCEMENT	**08/18/2020**	**STAFF LETTER**
ENFORCEMENT	**08/10/2020**	**STAFF LETTER**
RESPONSE	**07/22/2020**	**OTHER REPORT / DOCUMENT**
RESPONSE	**06/30/2020**	**OTHER REPORT / DOCUMENT**
RESPONSE	**09/30/2019**	**OPERATION AND MAINTENANCE PLAN/MONITORING REPORT**
RESPONSE	**06/30/2019**	**OTHER REPORT / DOCUMENT**
ENFORCEMENT	**11/27/2018**	**STAFF LETTER**
ENFORCEMENT	**05/14/2018**	**COST RECOVERY AGREEMENT / N. OF REIMBURSEMENT**
ENFORCEMENT	**04/11/2018**	**LETTER - NOTICE**
RESPONSE	**04/10/2018**	**OTHER REPORT / DOCUMENT**

STATUS HISTORY

STATUS:	DATE:
OPEN - INACTIVE	**08/17/2020**
OPEN - ASSESSMENT & INTERIM REMEDIAL ACTION	**05/14/2018**
OPEN - CASE BEGIN DATE	**04/10/2018**

CONTACT DETAILS

ORGANIZATION: **SANTA CLARA COUNTY LOP**

ADDRESS: **1555 BERGER DRIVE STE 300**

CITY: **SAN JOSE**

CONTACT NAME: **GERALD O'REGAN**

CONTACT TYPE: **LOCAL AGENCY CASEWORKER**

CONTACT PHONE: **NOT REPORTED**

EMAIL: **GERALD.O'REGAN@DEH.SCCGOV.ORG**

Back to Report Summary

Historical Cortese List (HISTCORTESE)

MAP ID# 28

Distance from Property: 0.191 mi. (1,008 ft.) SW
Elevation: 39 ft. (Higher than TP)

FACILITY INFORMATION

GEOSEARCH ID: **43-1031COR**
ID#: **43-1031**
NAME: **PALO ALTO NISSAN**
ADDRESS: **3001 EL CAMINO REAL**
PALO ALTO, CA

Back to Report Summary

Leaking Underground Storage Tanks (LUST)

MAP ID# 28

Distance from Property: 0.191 mi. (1,008 ft.) SW
Elevation: 39 ft. (Higher than TP)

FACILITY INFORMATION

GLOBAL ID: **T0608501026**

URL LINK: CLICK HERE

BUSINESS NAME: **PALO ALTO NISSAN**

ADDRESS: **3001 EL CAMINO REAL**
PALO ALTO, CA 94306

COUNTY: **SANTA CLARA**

FACILITY DETAILS

NO DETAIL(S) INFORMATION REPORTED

HISTORICAL FACILITY DETAILS

NO HISTORICAL DETAIL(S) INFORMATION REPORTED FOR THIS FACILITY

Back to Report Summary

Leaking Underground Storage Tanks (LUST)

MAP ID# 28

Distance from Property: 0.192 mi. (1,014 ft.) SW
Elevation: 39 ft. (Higher than TP)

FACILITY INFORMATION

GLOBAL ID: **T0608548811**
URL LINK: CLICK HERE
BUSINESS NAME: **GAVENMAN PROPERTY**
ADDRESS: **3017 EL CAMINO REAL**
PALO ALTO, CA 94306
COUNTY: **SANTA CLARA**

FACILITY DETAILS

CASE TYPE: **LUST CLEANUP SITE**
CASE NUMBER: **NOT REPORTED**
STATUS: **COMPLETED - CASE CLOSED 08/30/2004**
POTENTIAL CONTAMINATION:
WASTE OIL / MOTOR / HYDRAULIC / LUBRICATING
POTENTIAL MEDIA AFFECTED:
SOIL
DISADVANTAGED COMMUNITY:
NO
SEVERELY DISADVANTAGED COMMUNITY:
NO
SITE HISTORY:
NOT REPORTED

HISTORICAL FACILITY DETAILS

NO HISTORICAL DETAIL(S) INFORMATION REPORTED FOR THIS FACILITY

Back to Report Summary

Leaking Underground Storage Tanks (LUST)

MAP ID# 28

Distance from Property: 0.192 mi. (1,014 ft.) SW
Elevation: 39 ft. (Higher than TP)

FACILITY INFORMATION

GLOBAL ID: **T0608555022**
URL LINK: CLICK HERE
BUSINESS NAME: **PALO ALTO NISSAN**
ADDRESS: **3001 EL CAMINO REAL**
PALO ALTO, CA 94306
COUNTY: **SANTA CLARA**

FACILITY DETAILS

CASE TYPE: **LUST CLEANUP SITE**
CASE NUMBER: **NOT REPORTED**
STATUS: **COMPLETED - CASE CLOSED 01/22/1992**
POTENTIAL CONTAMINATION:
NOT REPORTED
POTENTIAL MEDIA AFFECTED:
SOIL
DISADVANTAGED COMMUNITY:
NO
SEVERELY DISADVANTAGED COMMUNITY:
NO
SITE HISTORY:
NOT REPORTED

HISTORICAL FACILITY DETAILS

NO HISTORICAL DETAIL(S) INFORMATION REPORTED FOR THIS FACILITY

Back to Report Summary

Spills, Leaks, Investigation & Cleanup Recovery Listing (SLIC)

MAP ID# 28

Distance from Property: 0.192 mi. (1,014 ft.) SW
Elevation: 39 ft. (Higher than TP)

INCIDENT INFORMATION

GLOBAL ID#:	**T10000011631**
CASE NUMBER:	**NOT REPORTED**
NAME:	**SOBRATO 3001 EL CAMINO**
ADDRESS:	**3001-3017 EL CAMINO REAL**
	PALO ALTO CA
FACILITY TYPE:	**CLEANUP PROGRAM SITE**
LEAD AGENCY:	**NOT REPORTED**
LEAD AGENCY CONTACT:	**NOT REPORTED**
LEAD AGENCY CASE #:	**NOT REPORTED**
SUBSTANCE RELEASED:	**NOT REPORTED**
STATUS:	**OPEN - ASSESSMENT & INTERIM REMEDIAL ACT**
RESPONSIBLE PARTY:	**NOT REPORTED**

Back to Report Summary

Historical Underground Storage Tanks (HISTUST)

MAP ID# 29

Distance from Property: 0.192 mi. (1,014 ft.) NE
Elevation: 27 ft. (Lower than TP)

ZZONTA, 2680 RAMONA, PALO ALTO, CA 94306
UNIQUE ID: **0002088B**

PAGE 3874 STATE WATER RESOURCES CONTROL BOARD 06/01/88
HAZARDOUS SUBSTANCE STORAGE CONTAINER INFORMATION FOR SANTA CLARA COUNTY
CONTAINER TYPES: 1,2,3,4,5
(1=FARM MOTOR VEHICLE FUEL TANKS, 2=ALL OTHER PRODUCT TANKS, 3=WASTE TANKS, 4=SUMPS, 5=PITS, PONDS, LAGOONS & OTHERS)

I OWNER
SCOTTIE HUNTER OR GERRY HUNTER
2680 RAMONA PALO ALTO CA 94306

II FACILITY

	MAILING ADDRESS / TOWNSHIP/RANGE/SECTION	DEALER/FOREMAN/SUPERVISOR / TELEPHONE	TYPE OF BUSINESS / NO. OF CONTAINERS
ZZONTA 2680 RAMONA PALO ALTO CA 94306	2680 RAMONA PALO ALTO CA 94306	(415) 324-1446	HOME 1

CROSS STREET :
COLORADO & EL DORADO

III 24-HR. CONTACT PERSON / TELEPHONE
DAY: HUNTER, SCOTTIE (415) 324-1446 NIGHT: HUNTER, SCOTTIE (415) 324-1446

********** OWNER ASSIGNED CONTAINER NUMBER: #1 ********** STATE BOARD ASSIGNED CONTAINER ID NUMBER: 000000459800I ******

IV DESCRIPTION
A. CONTAINER TYPE : TANK
B. MANUFACTURER/YR OF MFG: UNKNOWN /
C. YEAR INSTALLED : 1976
D. CAPACITY (GALLONS) : 500
E. REPAIRS : NONE IF YES WHEN :
F. CURRENTLY USED : NO IF NO, YEAR OF LAST USE: 1983
G. STORES : PRODUCT
H. MOTOR VEHICLE FUEL/WASTE OIL : YES CONTAINS: DIESEL

IS CONTAINER LOCATED ON A FARM : NO

V CONTAINER CONSTRUCTION
A. THICKNESS: B. VAULTING: NON-VAULTED C. WALLING: UNKNOWN
D. MATERIAL : UNKNOWN
E. LINING : UNKNOWN
F. WRAPPING : UNKNOWN

VI PIPING
A. ABOVEGROUND PIPING : B. UNDERGROUND PIPING :
C. REPAIRS : UNKN IF YES, YEAR OF MOST RECENT REPAIR:

VII LEAK DETECTION
VISUAL P

URE TEST COMPOSITION OF SUBSTANCES CURRENTLY STORED IN CONTAINER
12034 DIESEL MOTOR VEHICLE FUEL

*** 013 ***

Back to Report Summary

MAP ID# 29

Distance from Property: 0.192 mi. (1,014 ft.) NE
Elevation: 27 ft. (Lower than TP)

FACILITY INFORMATION

FACILITY #: **46598**
BOE: **44-026112**
NAME: **ZZONTA**
ADDRESS: **2680 RAMONA**
PALO ALTO, CA 94306

STATUS: **ACTIVE**
JURISDICTION: **CITY OF PALO ALTO**
AGENCY: **FIRE DEPARTMENT**

TANK INFORMATION

TANK #: **000001**
INSTALLED: **NOT REPORTED**
TANK USE: **M.V. FUEL**
CONTENT: **DIESEL**

CAPACITY: **500**
REMOVED: **NOT REPORTED**
STORAGE TYPE: **PRODUCT**
CONTAINMENT: **NOT REPORTED**

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Dry Cleaner Facilities (CLEANER)

MAP ID# 30

Distance from Property: 0.211 mi. (1,114 ft.) WSW
Elevation: 38 ft. (Higher than TP)

FACILITY INFORMATION

GEOSEARCH ID: **CAD028879765**
PERMIT ID: **CAD028879765**
FACILITY NAME: **STANFORD CLEANERS**
ADDRESS: **2875 EL CAMINO REAL**
PALO ALTO, CA 94306
COUNTY: **NOT REPORTED**
STATUS: **INACTIVE**
FACILITY LINK: CLICK HERE

FACILITY DETAILS

SIC CODE: **7211**
SIC DESCRIPTION: **POWER LAUNDRIES, FAMILY AND COMMERCIAL**
NAICS CODE: **81232**
SIC DESCRIPTION: **DRYCLEANING AND LAUNDRY SERVICES**

SIC CODE: **7212**
SIC DESCRIPTION: **GARMENT PRESSING, AND AGENTS FOR LAUNDRIES AND DRYCLEANERS**
NAICS CODE: **81232**
SIC DESCRIPTION: **DRYCLEANING AND LAUNDRY SERVICES**

SIC CODE: **7216**
SIC DESCRIPTION: **DRYCLEANING PLANTS, EXCEPT RUG CLEANING**
NAICS CODE: **81232**
SIC DESCRIPTION: **DRYCLEANING AND LAUNDRY SERVICES**

SIC CODE: **7219**
SIC DESCRIPTION: **LAUNDRY AND GARMENT SERVICES, NOT ELSEWHERE CLASSIFIED**
NAICS CODE: **81232**
SIC DESCRIPTION: **DRYCLEANING AND LAUNDRY SERVICES**

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MAP ID# 30

Distance from Property: 0.211 mi. (1,114 ft.) WSW
Elevation: 38 ft. (Higher than TP)

FACILITY INFORMATION

GLOBAL ID: **T0608591612**
URL LINK: CLICK HERE
BUSINESS NAME: **STANFORD CLEANERS**
ADDRESS: **2875 EL CAMINO REAL**
PALO ALTO, CA 94306
COUNTY: **SANTA CLARA**

FACILITY DETAILS

CASE TYPE: **CLEANUP PROGRAM SITE**
CASE NUMBER: **43S0121**
STATUS: **COMPLETED - CASE CLOSED 4/15/2014**
POTENTIAL CONTAMINATION:
TETRACHLOROETHYLENE (PCE)
POTENTIAL MEDIA AFFECTED:
OTHER GROUNDWATER (USES OTHER THAN DRINKING WATER), SOIL
DISADVANTAGED COMMUNITY:
NO
SEVERELY DISADVANTAGED COMMUNITY:
NO
SITE HISTORY:
NOT REPORTED

REGULATORY ACTIVITIES

TYPE OF ACTION:	DATE:	ACTION:
OTHER	**01/01/50**	**LEAK BEGAN**
OTHER	**01/01/50**	**LEAK DISCOVERY**
OTHER	**01/01/50**	**LEAK REPORTED**
OTHER	**01/01/50**	**LEAK STOPPED**
ENFORCEMENT	**04/15/2014**	**CLOSURE/NO FURTHER ACTION LETTER**
ENFORCEMENT	**04/10/2014**	**STAFF LETTER**
ENFORCEMENT	**12/19/2013**	**DEED RESTRICTION / LAND USE RESTRICTION / COVENANT**
ENFORCEMENT	**06/28/2013**	**COST RECOVERY AGREEMENT**
ENFORCEMENT	**06/28/2013**	**COST RECOVERY AGREEMENT / N. OF REIMBURSEMENT**
ENFORCEMENT	**01/23/2013**	**13267 REQUIREMENT**
ENFORCEMENT	**11/29/2012**	**NOTIFICATION - PUBLIC PARTICIPATION DOCUMENT**
ENFORCEMENT	**10/23/2012**	**TECHNICAL CORRESPONDENCE / ASSISTANCE / OTHER**
ENFORCEMENT	**07/25/2012**	**13267 REQUIREMENT**
ENFORCEMENT	**06/07/2012**	**NOTIFICATION - PUBLIC PARTICIPATION DOCUMENT**
ENFORCEMENT	**05/24/2012**	**TECHNICAL CORRESPONDENCE / ASSISTANCE / OTHER**
ENFORCEMENT	**11/08/2011**	**13267 REQUIREMENT**
ENFORCEMENT	**11/17/2010**	**STAFF LETTER**
ENFORCEMENT	**08/11/2010**	**TECHNICAL CORRESPONDENCE / ASSISTANCE / OTHER**
ENFORCEMENT	**02/04/2009**	**13267 REQUIREMENT**
ENFORCEMENT	**11/20/2007**	**13267 REQUIREMENT**
OTHER	**01/01/1988**	**LEAK STOPPED**

TYPE OF ACTION:	DATE:	ACTION:
ENFORCEMENT	**07/29/1985**	**STAFF LETTER**
OTHER	**01/01/1982**	**LEAK BEGAN**
OTHER	**01/01/1982**	**LEAK DISCOVERY**
OTHER	**01/01/1982**	**LEAK REPORTED**

STATUS HISTORY

STATUS:	DATE:
COMPLETED - CASE CLOSED	**04/15/2014**
OPEN - REMEDIATION	**06/03/2009**
OPEN - SITE ASSESSMENT	**06/03/2009**
OPEN - SITE ASSESSMENT	**07/18/1990**
OPEN - CASE BEGIN DATE	**01/01/1982**

CONTACT DETAILS

ORGANIZATION: **SAN FRANCISCO BAY RWQCB (REGION 2)**
ADDRESS: **1515 CLAY STREET, SUITE 1500**
CITY: **OAKLAND**
CONTACT NAME: **ROGER PAPLER**
CONTACT TYPE: **REGIONAL BOARD CASEWORKER**
CONTACT PHONE: **NOT REPORTED**
EMAIL: **ROGER.PAPLER@WATERBOARDS.CA.GOV**

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GeoTracker Cleanup Sites (CLEANUPSITES)

MAP ID# 30

Distance from Property: 0.211 mi. (1,114 ft.) WSW
Elevation: 38 ft. (Higher than TP)

FACILITY INFORMATION

GLOBAL ID: **T0608591756**
URL LINK: CLICK HERE
BUSINESS NAME: **STANFORD CLEANERS**
ADDRESS: **2875 EL CAMINO REAL**
PALO ALTO, CA 94306
COUNTY: **SANTA CLARA**

FACILITY DETAILS

CASE TYPE: **CLEANUP PROGRAM SITE**
CASE NUMBER: **43-1928**
STATUS: **OPEN - INACTIVE 06/02/2009**
POTENTIAL CONTAMINATION:
*** SOLVENTS**
POTENTIAL MEDIA AFFECTED:
UNDER INVESTIGATION
DISADVANTAGED COMMUNITY:
NO
SEVERELY DISADVANTAGED COMMUNITY:
NO
SITE HISTORY:
NOT REPORTED

REGULATORY ACTIVITIES

TYPE OF ACTION:	DATE:	ACTION:
OTHER	**01/01/50**	**LEAK DISCOVERY**
OTHER	**01/01/50**	**LEAK REPORTED**
OTHER	**01/01/50**	**LEAK STOPPED**

STATUS HISTORY

STATUS:	DATE:
OPEN - INACTIVE	**06/02/09**
OPEN - CASE BEGIN DATE	**05/11/88**
OPEN - VERIFICATION MONITORING	**05/11/88**

CONTACT DETAILS

ORGANIZATION: **SAN FRANCISCO BAY RWQCB (REGION 2)**
ADDRESS: **1515 CLAY ST SUITE 1400**
CITY: **OAKLAND**
CONTACT NAME: **REGIONAL BOARD (RB2)**
CONTACT TYPE: **REGIONAL BOARD CASEWORKER**
CONTACT PHONE: **NOT REPORTED**
EMAIL: **NOT REPORTED**

Back to Report Summary

MAP ID# 30

Distance from Property: 0.211 mi. (1,114 ft.) WSW
Elevation: 38 ft. (Higher than TP)

STANFORD CLEANERS, 2875 EL CAMINO REAL, PALO ALTO, CA 94306
UNIQUE ID: **00020930**

*** B07 ***

PAGE 4310 STATE WATER RESOURCES CONTROL BOARD 06/01/88
HAZARDOUS SUBSTANCE STORAGE CONTAINER INFORMATION FOR SANTA CLARA COUNTY
CONTAINER TYPES: 1,2,3,4,5
(1=FARM MOTOR VEHICLE FUEL TANKS, 2=ALL OTHER PRODUCT TANKS, 3=WASTE TANKS, 4=SUMPS, 5=PITS, PONDS, LAGOONS & OTHERS)

I OWNER
STANFORD CLEANERS FRED FUJIKAW
2875 EL CAMINO REAL PALO ALTO CA 94306

II FACILITY

	MAILING ADDRESS	DEALER/FOREMAN/SUPERVISOR	TYPE OF BUSINESS
STANFORD CLEANERS	TOWNSHIP/RANGE/SECTION	TELEPHONE	NO. OF CONTAINERS
2875 EL CAMINO REAL			
PALO ALTO CA 94306	2875 EL CAMINO REAL	FRED FUJIKAWA OWNER	DRY CLEANER
	PALO ALTO CA 94306		
CROSS STREET :		(415) 322-2540	1
PEPPER AVENUE			

III 24-HR. CONTACT PERSON / TELEPHONE
DAY: FUJIKAWA, FRED (415) 322-2540 NIGHT: FUJIKAWA, FRED (415) 493-9204

********** OWNER ASSIGNED CONTAINER NUMBER: 0001 ********** STATE BOARD ASSIGNED CONTAINER ID NUMBER: 00000020402001 **********

IV DESCRIPTION
A. CONTAINER TYPE : TANK
B. MANUFACTURER/YR OF MFG: /
C. YEAR INSTALLED : 1959
D. CAPACITY (GALLONS) : 550
E. REPAIRS : NONE IF YES WHEN :
F. CURRENTLY USED : YES IF NO, YEAR OF LAST USE:
G. STORES : PRODUCT
H. MOTOR VEHICLE FUEL/WASTE OIL : NO CONTAINS:

IS CONTAINER LOCATED ON A FARM : NO

V CONTAINER CONSTRUCTION
A. THICKNESS: B. VAULTING: NON-VAULTED C. WALLING: UNKNOWN
D. MATERIAL : CARBON STEEL
E. LINING : UNKNOWN
F. WRAPPING : NONE

VI PIPING
A. ABOVEGROUND PIPING : B. UNDERGROUND PIPING : SUCTION
C. REPAIRS : NONE IF YES, YEAR OF MOST RECENT REPAIR:

VII LEAK DETECTION
GW MON. WELLS P

URE TEST COMPOSITION OF SUBSTANCES CURRENTLY STORED IN CONTAINER
SOLVENTS

Back to Report Summary

Leaking Underground Storage Tanks (LUST)

MAP ID# 30

Distance from Property: 0.211 mi. (1,114 ft.) WSW
Elevation: 38 ft. (Higher than TP)

FACILITY INFORMATION

GLOBAL ID: **T0608591612**

URL LINK: CLICK HERE

BUSINESS NAME: **STANFORD CLEANERS**

ADDRESS: **2875 EL CAMINO REAL**
PALO ALTO, CA 94306

COUNTY: **SANTA CLARA**

FACILITY DETAILS

NO DETAIL(S) INFORMATION REPORTED

HISTORICAL FACILITY DETAILS

NO HISTORICAL DETAIL(S) INFORMATION REPORTED FOR THIS FACILITY

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Leaking Underground Storage Tanks (LUST)

MAP ID# 30

Distance from Property: 0.211 mi. (1,114 ft.) WSW
Elevation: 38 ft. (Higher than TP)

FACILITY INFORMATION

GLOBAL ID: **T0608591756**
URL LINK: CLICK HERE
BUSINESS NAME: **STANFORD CLEANERS**
ADDRESS: **2875 EL CAMINO REAL**
PALO ALTO, CA 94306
COUNTY: **SANTA CLARA**

FACILITY DETAILS

NO DETAIL(S) INFORMATION REPORTED

HISTORICAL FACILITY DETAILS

NO HISTORICAL DETAIL(S) INFORMATION REPORTED FOR THIS FACILITY

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Superfund Enterprise Management System Archived Site Inventory (SEMSARCH)

MAP ID# 30

Distance from Property: 0.211 mi. (1,114 ft.) WSW
Elevation: 38 ft. (Higher than TP)

FACILITY INFORMATION

EPA ID#: **CAD028879765**
SITE ID#: **0901281**
NAME: **STANFORD CLEANERS**
ADDRESS: **2875 EL CAMINO**
PALO ALTO, CA 94306
COUNTY: **SANTA CLARA**
FEDERAL FACILITY: **NOT A FEDERAL FACILITY**
SUPERFUND ALTERNATIVE AGREEMENT IN PLACE?: **NO**
NPL: **NOT ON THE NPL**
NON NPL STATUS: **NFRAP-SITE DOES NOT QUALIFY FOR THE NPL BASED ON EXISTING INFORMATION**
SUPERFUND SITE INFORMATION: **CLICK HERE**

Below information was gathered from the prior NFRAP update completed in 10/2013 update:

ACTION	START DATE	COMPLETION DATE	RESPONSIBILITY
DS - DISCOVERY	**NOT REPORTED**	**5/1/1986**	**EPA FUND**
PA - PRELIMINARY ASSESSMENT	**NOT REPORTED**	**11/1/1987**	**EPA FUND**
VS - ARCHIVE SITE	**NOT REPORTED**	**11/1/1987**	**EPA IN-HOUSE**

ACTION DESCRIPTIONS

DS - (DISCOVERY) - THE PROCESS BY WHICH A POTENTIAL HAZARDOUS WASTE SITE IS BROUGHT TO THE ATTENTION OF THE EPA. THE PROCESS CAN OCCUR THROUGH THE USE OF SEVERAL MECHANISMS SUCH AS A PHONE CALL OR REFERRAL BY ANOTHER GOVERNMENT AGENCY.

PA - (PRELIMINARY ASSESSMENT) - COLLECTION OF DIVERSE EXISTING INFORMATION ABOUT THE SOURCE AND NATURE OF THE SITE HAZARD. IT IS EPA POLICY TO COMPLETE THE PRELIMINARY ASSESSMENT WITHIN ONE YEAR OF SITE DISCOVERY.

VS - (ARCHIVE SITE) - THE DECISION IS MADE THAT NO FURTHER ACTIVITY IS PLANNED AT THE SITE.

Back to Report Summary

Spills, Leaks, Investigation & Cleanup Recovery Listing (SLIC)

MAP ID# 30

Distance from Property: 0.211 mi. (1,114 ft.) WSW
Elevation: 38 ft. (Higher than TP)

INCIDENT INFORMATION

GLOBAL ID#:	**2-43S0121**
CASE NUMBER:	**NOT REPORTED**
NAME:	**STANFORD CLEANERS**
ADDRESS:	**2875 EL CAMINO**
	PALO ALTO CA
FACILITY TYPE:	**NOT REPORTED**
LEAD AGENCY:	**SAN FRANCISCO BAY RWQCB (REGION 2)**
LEAD AGENCY CONTACT:	**NOT REPORTED**
LEAD AGENCY CASE #:	**NOT REPORTED**
SUBSTANCE RELEASED:	**LEAKING WASTE SOLVENT TANK**
STATUS:	**NOT REPORTED**
RESPONSIBLE PARTY:	**NOT REPORTED**

Back to Report Summary

Spills, Leaks, Investigation & Cleanup Recovery Listing (SLIC)

MAP ID# 30

Distance from Property: 0.211 mi. (1,114 ft.) WSW
Elevation: 38 ft. (Higher than TP)

INCIDENT INFORMATION

GLOBAL ID#:	**T0608591612**
CASE NUMBER:	**NOT REPORTED**
NAME:	**STANFORD CLEANERS**
ADDRESS:	**2875 EL CAMINO REAL**
	PALO ALTO CA
FACILITY TYPE:	**CLEANUP PROGRAM SITE**
LEAD AGENCY:	**NOT REPORTED**
LEAD AGENCY CONTACT:	**NOT REPORTED**
LEAD AGENCY CASE #:	**NOT REPORTED**
SUBSTANCE RELEASED:	**NOT REPORTED**
STATUS:	**COMPLETED - CASE CLOSED**
RESPONSIBLE PARTY:	**NOT REPORTED**

Back to Report Summary

MAP ID# 30

Distance from Property: 0.211 mi. (1,114 ft.) WSW
Elevation: 38 ft. (Higher than TP)

FACILITY INFORMATION

FACILITY #: **20402**
BOE: **NOT REPORTED**
NAME: **STANFORD CLEANERS**
ADDRESS: **2875 EL CAMINO REAL**
PALO ALTO, CA 94306

STATUS: **ACTIVE**
JURISDICTION: **CITY OF PALO ALTO**
AGENCY: **FIRE DEPARTMENT**

TANK INFORMATION

TANK #: **000001**
INSTALLED: **NOT REPORTED**
TANK USE: **UNKNOWN**
CONTENT: **NOT REPORTED**

CAPACITY: **550**
REMOVED: **NOT REPORTED**
STORAGE TYPE: **PRODUCT**
CONTAINMENT: **NOT REPORTED**

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Spills, Leaks, Investigation & Cleanup Recovery Listing (SLIC)

MAP ID# 31

Distance from Property: 0.212 mi. (1,119 ft.) WNW
Elevation: 30 ft. (Lower than TP)

INCIDENT INFORMATION

GLOBAL ID#:	**2-43S0287**
CASE NUMBER:	**NOT REPORTED**
NAME:	**SUMMERHILL CHEVRON BULK OIL**
ADDRESS:	**2655 PARK BLVD**
	PALO ALTO CA
FACILITY TYPE:	**NOT REPORTED**
LEAD AGENCY:	**SAN FRANCISCO BAY RWQCB (REGION 2)**
LEAD AGENCY CONTACT:	**NOT REPORTED**
LEAD AGENCY CASE #:	**NOT REPORTED**
SUBSTANCE RELEASED:	**NOT REPORTED**
STATUS:	**NOT REPORTED**
RESPONSIBLE PARTY:	**NOT REPORTED**

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Spills, Leaks, Investigation & Cleanup Recovery Listing (SLIC)

MAP ID# 32

Distance from Property: 0.223 mi. (1,177 ft.) SW
Elevation: 36 ft. (Higher than TP)

INCIDENT INFORMATION

GLOBAL ID#:	**2-43S0290**
CASE NUMBER:	**NOT REPORTED**
NAME:	**CLOCKTOWER PLAZA PREFORMED LINE**
ADDRESS:	**600 HANSEN WAY**
	PALO ALTO CA
FACILITY TYPE:	**NOT REPORTED**
LEAD AGENCY:	**SAN FRANCISCO BAY RWQCB (REGION 2)**
LEAD AGENCY CONTACT:	**NOT REPORTED**
LEAD AGENCY CASE #:	**NOT REPORTED**
SUBSTANCE RELEASED:	**NOT REPORTED**
STATUS:	**NOT REPORTED**
RESPONSIBLE PARTY:	**NOT REPORTED**

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MAP ID# 33

Distance from Property: 0.230 mi. (1,214 ft.) WNW
Elevation: 33 ft. (Equal to TP)

FACILITY INFORMATION

GLOBAL ID: **T10000002007**
URL LINK: CLICK HERE
BUSINESS NAME: **BIRCH PLAZA**
ADDRESS: **2640 & 2650 BIRCH STREET**
PALO ALTO, CA 94304
COUNTY: **SANTA CLARA**

FACILITY DETAILS

CASE TYPE: **CLEANUP PROGRAM SITE**
CASE NUMBER: **43S1132**
STATUS: **COMPLETED - CASE CLOSED 5/6/2010**
POTENTIAL CONTAMINATION:
TRICHLOROETHYLENE (TCE)
POTENTIAL MEDIA AFFECTED:
OTHER GROUNDWATER (USES OTHER THAN DRINKING WATER)
DISADVANTAGED COMMUNITY:
NO
SEVERELY DISADVANTAGED COMMUNITY:
NO
SITE HISTORY:
RISK ASSESSMENT SUBMITTED BY CONSULTANT INDICATED IA VI IMPACT LESS THAN USEPA ESTABLISHED POINT OF DEPARTURE APPROVED BY RB2

REGULATORY ACTIVITIES

TYPE OF ACTION:	DATE:	ACTION:
OTHER	**01/01/50**	**LEAK BEGAN**
OTHER	**01/01/50**	**LEAK DISCOVERY**
OTHER	**01/01/50**	**LEAK REPORTED**
OTHER	**01/01/50**	**LEAK STOPPED**
OTHER	**01/01/1982**	**LEAK DISCOVERY**
OTHER	**01/01/1982**	**LEAK REPORTED**
OTHER	**01/01/1982**	**LEAK STOPPED**
OTHER	**01/01/1970**	**LEAK BEGAN**

STATUS HISTORY

STATUS:	DATE:
COMPLETED - CASE CLOSED	**05/06/2010**
OPEN - SITE ASSESSMENT	**05/06/2010**
OPEN - CASE BEGIN DATE	**01/01/1982**

CONTACT DETAILS

ORGANIZATION: **SAN FRANCISCO BAY RWQCB (REGION 2)**
ADDRESS: **1515 CLAY STREET, SUITE 1500**
CITY: **OAKLAND**
CONTACT NAME: **ROGER PAPLER**
CONTACT TYPE: **REGIONAL BOARD CASEWORKER**

CONTACT PHONE: **NOT REPORTED**

EMAIL: **ROGER.PAPLER@WATERBOARDS.CA.GOV**

Back to Report Summary

MAP ID# 34

Distance from Property: 0.244 mi. (1,288 ft.) W
Elevation: 37 ft. (Higher than TP)

FACILITY INFORMATION

GLOBAL ID: **T10000005467**
URL LINK: CLICK HERE
BUSINESS NAME: **2755 EL CAMINO REAL**
ADDRESS: **2755 EL CAMINO REAL**
PALO ALTO, CA 94303
COUNTY: **SANTA CLARA**

FACILITY DETAILS

CASE TYPE: **CLEANUP PROGRAM SITE**
CASE NUMBER: **43S1170**
STATUS: **OPEN - SITE ASSESSMENT 4/4/2019**
POTENTIAL CONTAMINATION:
TRICHLOROETHYLENE (TCE)
POTENTIAL MEDIA AFFECTED:
OTHER GROUNDWATER (USES OTHER THAN DRINKING WATER)
DISADVANTAGED COMMUNITY:
NO
SEVERELY DISADVANTAGED COMMUNITY:
NO
SITE HISTORY:
THE PROJECT IS A REDEVELOPMENT PROPERTY WITHIN THE COE PLUME WITH UNDERLYING GROUNDWATER PROBABLY IMPACTED BY THE UPGRADIENT HP/VARIAN SOURCE PROPERTIES. THE DEVELOPER PLANS TO CONSTRUCT THE BUILDING WIHT A VAPOR INTRUSION MITIGATION SYSTEM (VIMS) AND WATER BARRIER. INDOOR AIR TESTING WILL BE CONDUCTED TO VERIFY THAT THE VIMS IS WORKING AS DESIGNED.

REGULATORY ACTIVITIES

TYPE OF ACTION:	DATE:	ACTION:
OTHER	**01/01/50**	**LEAK BEGAN**
OTHER	**01/01/50**	**LEAK DISCOVERY**
OTHER	**01/01/50**	**LEAK REPORTED**
OTHER	**01/01/50**	**LEAK STOPPED**
ENFORCEMENT	**06/30/2020**	**ANNUAL ESTIMATION LETTER**
ENFORCEMENT	**06/13/2019**	**13267 REQUIREMENT**
ENFORCEMENT	**06/06/2019**	**EMAIL CORRESPONDENCE**
ENFORCEMENT	**04/04/2019**	**COST RECOVERY AGREEMENT / N. OF REIMBURSEMENT**
ENFORCEMENT	**03/27/2019**	**EMAIL CORRESPONDENCE**
ENFORCEMENT	**06/29/2018**	**STAFF LETTER**
ENFORCEMENT	**07/24/2017**	**ANNUAL ESTIMATION LETTER**
ENFORCEMENT	**04/29/2015**	**STAFF LETTER**
RESPONSE	**10/10/2014**	**TECHNICAL MEMOS**
ENFORCEMENT	**09/30/2014**	**TECHNICAL CORRESPONDENCE / ASSISTANCE / OTHER**
ENFORCEMENT	**05/21/2014**	**13267 REQUIREMENT**
OTHER	**01/01/1983**	**LEAK DISCOVERY**
OTHER	**01/01/1983**	**LEAK REPORTED**
OTHER	**01/01/1983**	**LEAK STOPPED**

TYPE OF ACTION:	DATE:	ACTION:
OTHER	**01/01/1970**	**LEAK BEGAN**

STATUS HISTORY

STATUS:	DATE:
OPEN - SITE ASSESSMENT	**04/04/2019**
OPEN - VERIFICATION MONITORING	**01/08/2018**
OPEN - ASSESSMENT & INTERIM REMEDIAL ACTION	**01/01/2014**
OPEN - REMEDIATION	**12/18/2013**
OPEN - CASE BEGIN DATE	**01/01/1983**

CONTACT DETAILS

ORGANIZATION: **SAN FRANCISCO BAY RWQCB (REGION 2)**

ADDRESS: **1515 CLAY STREET, SUITE 1400**

CITY: **OAKLAND**

CONTACT NAME: **MICHAEL ROCHETTE**

CONTACT TYPE: **REGIONAL BOARD CASEWORKER**

CONTACT PHONE: **NOT REPORTED**

EMAIL: **MICHAEL.ROCHETTE@WATERBOARDS.CA.GOV**

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Spills, Leaks, Investigation & Cleanup Recovery Listing (SLIC)

MAP ID# 34

Distance from Property: 0.244 mi. (1,288 ft.) W
Elevation: 37 ft. (Higher than TP)

INCIDENT INFORMATION

GLOBAL ID#:	**T10000005467**
CASE NUMBER:	**NOT REPORTED**
NAME:	**2755 EL CAMINO REAL**
ADDRESS:	**2755 EL CAMINO REAL**
	PALO ALTO CA
FACILITY TYPE:	**CLEANUP PROGRAM SITE**
LEAD AGENCY:	**NOT REPORTED**
LEAD AGENCY CONTACT:	**NOT REPORTED**
LEAD AGENCY CASE #:	**NOT REPORTED**
SUBSTANCE RELEASED:	**NOT REPORTED**
STATUS:	**OPEN - SITE ASSESSMENT**
RESPONSIBLE PARTY:	**NOT REPORTED**

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MAP ID# 35

Distance from Property: 0.255 mi. (1,346 ft.) SSE
Elevation: 39 ft. (Higher than TP)

FACILITY INFORMATION

GLOBAL ID: **T0608501025**
URL LINK: CLICK HERE
BUSINESS NAME: **PALO ALTO FIRESTONE**
ADDRESS: **3401 EL CAMINO REAL**
PALO ALTO, CA 94306
COUNTY: **SANTA CLARA**

FACILITY DETAILS

CASE TYPE: **LUST CLEANUP SITE**
CASE NUMBER: **NOT REPORTED**
STATUS: **COMPLETED - CASE CLOSED 5/28/1996**
POTENTIAL CONTAMINATION:
GASOLINE
POTENTIAL MEDIA AFFECTED:
SOIL
DISADVANTAGED COMMUNITY:
NO
SEVERELY DISADVANTAGED COMMUNITY:
NO
SITE HISTORY:
NOT REPORTED

REGULATORY ACTIVITIES

TYPE OF ACTION:	DATE:	ACTION:
OTHER	**01/01/50**	**LEAK REPORTED**
ENFORCEMENT	**05/28/1996**	**CLOSURE/NO FURTHER ACTION LETTER**
RESPONSE	**05/28/1996**	**OTHER REPORT / DOCUMENT**
ENFORCEMENT	**04/15/1996**	**NOTICE OF RESPONSIBILITY - #40041**
OTHER	**01/01/1986**	**LEAK REPORTED**

STATUS HISTORY

STATUS:	DATE:
COMPLETED - CASE CLOSED	**05/28/1996**
OPEN - SITE ASSESSMENT	**09/16/1986**
OPEN - CASE BEGIN DATE	**01/01/1986**

CONTACT DETAILS

ORGANIZATION: **SANTA CLARA COUNTY LOP**
ADDRESS: **1555 BERGER DRIVE, SUITE 300**
CITY: **SAN JOSE**
CONTACT NAME: **UST CASE WORKER**
CONTACT TYPE: **LOCAL AGENCY CASEWORKER**
CONTACT PHONE: **4089183400**
EMAIL: **NOT REPORTED**
ORGANIZATION: **SAN FRANCISCO BAY RWQCB (REGION 2)**
ADDRESS: **1515 CLAY ST SUITE 1400**

CITY: **OAKLAND**
CONTACT NAME: **REGIONAL WATER BOARD**
CONTACT TYPE: **REGIONAL BOARD CASEWORKER**
CONTACT PHONE: **NOT REPORTED**
EMAIL: **NOT REPORTED**

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Historical Cortese List (HISTCORTESE)

MAP ID# 35

Distance from Property: 0.255 mi. (1,346 ft.) SSE
Elevation: 39 ft. (Higher than TP)

FACILITY INFORMATION

GEOSEARCH ID: **43-1030COR**
ID#: **43-1030**
NAME: **FIRESTONE**
ADDRESS: **3401 EL CAMINO REAL**
PALO ALTO, CA 94306

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Leaking Underground Storage Tanks (LUST)

MAP ID# 35

Distance from Property: 0.255 mi. (1,346 ft.) SSE
Elevation: 39 ft. (Higher than TP)

FACILITY INFORMATION

GLOBAL ID: **T0608501025**
URL LINK: CLICK HERE
BUSINESS NAME: **PALO ALTO FIRESTONE**
ADDRESS: **3401 EL CAMINO REAL**
PALO ALTO, CA 94306
COUNTY: **SANTA CLARA**

FACILITY DETAILS

CASE TYPE: **LUST CLEANUP SITE**
CASE NUMBER: **NOT REPORTED**
STATUS: **COMPLETED - CASE CLOSED 05/28/1996**
POTENTIAL CONTAMINATION:
GASOLINE
POTENTIAL MEDIA AFFECTED:
SOIL
DISADVANTAGED COMMUNITY:
NO
SEVERELY DISADVANTAGED COMMUNITY:
NO
SITE HISTORY:
NOT REPORTED

HISTORICAL FACILITY DETAILS

NO HISTORICAL DETAIL(S) INFORMATION REPORTED FOR THIS FACILITY

Back to Report Summary

MAP ID# 36

Distance from Property: 0.266 mi. (1,404 ft.) NW
Elevation: 11 ft. (Lower than TP)

FACILITY INFORMATION

ID #: **43170004**

NAME: **OREGON EXPRESSWAY UNDERPASS**

ADDRESS: **XING OF OREGON EXPRESSWAY & ALMA STREET**
PALO ALTO, CA

STATUS (DATE): **PROPERTY/SITE REFERRED TO RWQCB (02/03/1993)**

STANDARD INDUSTRIAL CLASSIFICATION BELIEVED TO BE CAUSE OF (POTENTIAL) CONTAMINATION:
SPECIAL TRADE CONTRACTORS

ACCESS TO SITE: **CONTROLLED**

GROUNDWATER CONTAMINATION: **C**

COMMENTS

FACILITY IDENTIFIED EPA FIT PRELIMINARY ASSESSMENT EPA COMPLETED PRELIMINARY ASSESSMENT AND RECOMMEND NO FURTHER ACTION; STATE RECOMMENDATION IS SITE SCREENING. THE OREGON EXPRESSWAY UNDERPASS SITE IS THE LOCATION OF A DEWATERING SYSTEM THAT COLLECTS LOCAL GROUNDWATER FOR DISCHARGE INTO A CULVERT. THIS HELPS IN MAINTAINING A DRY ROADWAY AND HAS BEEN IN OPERATION SINCE 1959. THE SITE IS ADJACENT TO THE HEWLETT-PACKARD (HP) FACILITY LOCATED AT 640 PAGE MILL ROAD WHERE GROUNDWATER CON-TAMINATION HAS BEEN DISCOVERED. CONTAMINANTS HAVE MIGRATED FROM HP FAR ENOUGH TO BE INTERCEPTED BY THE OREGON EXPRESSWAY UNDERPASS DEWATERING SYSTEM. IN ADDITION TO HP, OTHER FACILITEIES LIKE ALZA CORP, AYDIN ENERGY, COMMODOZE, ETC. ARE BELIEVED TO HAVE CONTRIBUTED TO THE PLUME. THE RWQCB IS THE LEAD AGENCY FOR THE SITE AND HAS ISSUED ORDER 87-129 TO ADDRESS THE PROBLEM. CONTAMINANTS DETECTED AT THIS SITE INCLUDE THE FOLLOWING: TRICHLOROETHYLENE 190 PPB; PERCHLOROETHYLENE 110 PPB; TRICHLOROETGABE 25 PPB; 1,-1-DICHLOROETHYLENE 3.1 PPB; AND TRANS -1,2-DICHLOROETHYLENE 24 PPB; U.S. EPA FIT HAS RECOMMENDED NFA UNDER CERCLIS.

Back to Report Summary

MAP ID# 36

Distance from Property: 0.266 mi. (1,404 ft.) NW
Elevation: 11 ft. (Lower than TP)

SITE INFORMATION

ID #: **43170004** ASSESSOR'S PARCEL #: **NONE SPECIFIED**
FACILITY LINK: CLICK HERE
NAME: **OREGON EXPRESSWAY UNDERPASS**
ADDRESS: **XING OF OREGON EXPRESSWAY & ALMA STREET**
PALO ALTO, CA 94304
COUNTY: **SANTA CLARA**
SITE SIZE (ACRES): **NOT REPORTED**
LEAD AGENCY: **RWQCB 2 - SAN FRANCISCO BAY**
DTSC PROJECT MANAGER: **NOT REPORTED**
DTSC SUPERVISOR: **REFERRED - NOT ASSIGNED**
DTSC DIVISION BRANCH: **CLEANUP BERKELEY**
NPL LISTED: **NO** RESTRICTED LAND USE: **NO**
SITE TYPE: **HISTORICAL**
SITE TYPE DESCRIPTION
HISTORICAL: IDENTIFIES SITES FROM AN OLDER DATABASE WHERE NO SITE TYPE WAS IDENTIFIED. MOST OF THESE SITES HAVE A STATUS OF REFERRED OR NO FURTHER ACTION. DTSC IS WORKING TO CLEAN UP THIS DATA BY IDENTIFYING AN APPROPRIATE SITE TYPE FOR EACH "HISTORIC" SITE.
DTSC's CURRENT INVOLVEMENT AT SITE (as of 99/ /2/3/)
REFER: RWQCB -
PAST USE/S THAT CAUSED THE CONTAMINATION
NONE SPECIFIED
CONFIRMED CONTAMINANTS OF CONCERN
NONESPECIFIED - NONE SPECIFIED

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Historical Cortese List (HISTCORTESE)

MAP ID# 36

Distance from Property: 0.266 mi. (1,404 ft.) NW
Elevation: 11 ft. (Lower than TP)

FACILITY INFORMATION

GEOSEARCH ID: **43170004COR**
ID#: **43170004**
NAME: **OREGON EXPRESSWAY UNDERPA**
ADDRESS: **XING OF OREGON EXWY & ALM**
PALO ALTO, CA 94304

Back to Report Summary

Referred to Another Local or State Agency (REF)

MAP ID# 36

Distance from Property: 0.266 mi. (1,404 ft.) NW
Elevation: 11 ft. (Lower than TP)

FACILITY INFORMATION

GEOSEARCH ID: **43170004**
ENVIROSTOR ID: **43170004**
FACILITY NAME: **OREGON EXPRESSWAY UNDERPASS**
ADDRESS: **XING OF OREGON EXPRESSWAY & ALMA STREET**
PALO ALTO, CA 94304
COUNTY: **SANTA CLARA**

FACILITY DETAILS

PROGRAM TYPE: **HISTORICAL**
STATUS: **REFER: RWQCB**
STATUS DATE: **2/3/1993**
CALENVIROSCREEN SCORE: **1-5%**
SITE CODE: **NOT REPORTED**

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Superfund Enterprise Management System Archived Site Inventory (SEMSARCH)

MAP ID# 36

Distance from Property: 0.264 mi. (1,394 ft.) NW
Elevation: 11 ft. (Lower than TP)

FACILITY INFORMATION

EPA ID#: **CAD982399800**
SITE ID#: **0900100**
NAME: **OREGON EXPWY UNDERPASS**
ADDRESS: **OREGON EXPWY & ALMA ST**
PALO ALTO, CA 94304
COUNTY: **SANTA CLARA**
FEDERAL FACILITY: **NOT A FEDERAL FACILITY**
SUPERFUND ALTERNATIVE AGREEMENT IN PLACE?: **NO**
NPL: **NOT ON THE NPL**
NON NPL STATUS: **NFRAP-SITE DOES NOT QUALIFY FOR THE NPL BASED ON EXISTING INFORMATION**
SUPERFUND SITE INFORMATION: **CLICK HERE**

Below information was gathered from the prior NFRAP update completed in 10/2013 update:

ACTION	START DATE	COMPLETION DATE	RESPONSIBILITY
DS - DISCOVERY	**NOT REPORTED**	**4/1/1988**	**STATE (FUND)**
PA - PRELIMINARY ASSESSMENT	**NOT REPORTED**	**4/28/1989**	**STATE (FUND)**
VS - ARCHIVE SITE	**NOT REPORTED**	**4/28/1989**	**EPA IN-HOUSE**

ACTION DESCRIPTIONS

DS - (DISCOVERY) - THE PROCESS BY WHICH A POTENTIAL HAZARDOUS WASTE SITE IS BROUGHT TO THE ATTENTION OF THE EPA. THE PROCESS CAN OCCUR THROUGH THE USE OF SEVERAL MECHANISMS SUCH AS A PHONE CALL OR REFERRAL BY ANOTHER GOVERNMENT AGENCY.

PA - (PRELIMINARY ASSESSMENT) - COLLECTION OF DIVERSE EXISTING INFORMATION ABOUT THE SOURCE AND NATURE OF THE SITE HAZARD. IT IS EPA POLICY TO COMPLETE THE PRELIMINARY ASSESSMENT WITHIN ONE YEAR OF SITE DISCOVERY.

VS - (ARCHIVE SITE) - THE DECISION IS MADE THAT NO FURTHER ACTIVITY IS PLANNED AT THE SITE.

Back to Report Summary

MAP ID# 37

Distance from Property: 0.277 mi. (1,463 ft.) W
Elevation: 37 ft. (Higher than TP)

FACILITY INFORMATION

GLOBAL ID: **T0608501659**
URL LINK: CLICK HERE
BUSINESS NAME: **GREEN WORLD NURSERY**
ADDRESS: **2711 EL CAMINO REAL**
PALO ALTO, CA 94306
COUNTY: **SANTA CLARA**

FACILITY DETAILS

CASE TYPE: **LUST CLEANUP SITE**
CASE NUMBER: **NOT REPORTED**
STATUS: **COMPLETED - CASE CLOSED 10/30/2000**
POTENTIAL CONTAMINATION:
GASOLINE
POTENTIAL MEDIA AFFECTED:
OTHER GROUNDWATER (USES OTHER THAN DRINKING WATER)
DISADVANTAGED COMMUNITY:
NO
SEVERELY DISADVANTAGED COMMUNITY:
NO
SITE HISTORY:
NOT REPORTED

REGULATORY ACTIVITIES

TYPE OF ACTION:	DATE:	ACTION:
OTHER	**01/01/50**	**LEAK REPORTED**
ENFORCEMENT	**10/30/2000**	**CLOSURE/NO FURTHER ACTION LETTER**
RESPONSE	**01/15/2000**	**MONITORING REPORT - QUARTERLY**
ENFORCEMENT	**09/23/1999**	**STAFF LETTER - #28745**
RESPONSE	**08/18/1999**	**OTHER REPORT / DOCUMENT**
ENFORCEMENT	**07/07/1999**	**STAFF LETTER - #28743**
RESPONSE	**06/09/1999**	**SOIL AND WATER INVESTIGATION REPORT**
ENFORCEMENT	**04/29/1999**	**STAFF LETTER - #28741**
RESPONSE	**04/29/1999**	**SOIL AND WATER INVESTIGATION REPORT**
ENFORCEMENT	**03/16/1999**	**STAFF LETTER - #28738**
RESPONSE	**02/08/1999**	**SOIL AND WATER INVESTIGATION WORKPLAN**
ENFORCEMENT	**01/05/1999**	**STAFF LETTER - #28736**
RESPONSE	**01/05/1999**	**OTHER REPORT / DOCUMENT**
RESPONSE	**11/18/1998**	**SOIL AND WATER INVESTIGATION REPORT**
ENFORCEMENT	**09/21/1998**	**STAFF LETTER - #28733**
RESPONSE	**08/16/1998**	**SOIL AND WATER INVESTIGATION WORKPLAN**
ENFORCEMENT	**06/05/1998**	**STAFF LETTER - #28730**
ENFORCEMENT	**07/09/1996**	**NOTICE OF RESPONSIBILITY - #40038**
OTHER	**03/14/1991**	**LEAK REPORTED**

STATUS HISTORY

STATUS:	DATE:
COMPLETED - CASE CLOSED	**10/30/2000**
OPEN - SITE ASSESSMENT	**01/05/1999**
OPEN - CASE BEGIN DATE	**07/19/1990**
OPEN - SITE ASSESSMENT	**07/19/1990**

CONTACT DETAILS

ORGANIZATION: **SANTA CLARA COUNTY LOP**
ADDRESS: **1555 BERGER DRIVE, SUITE 300**
CITY: **SAN JOSE**
CONTACT NAME: **UST CASE WORKER**
CONTACT TYPE: **LOCAL AGENCY CASEWORKER**
CONTACT PHONE: **4089183400**
EMAIL: **NOT REPORTED**
ORGANIZATION: **SAN FRANCISCO BAY RWQCB (REGION 2)**
ADDRESS: **1515 CLAY ST SUITE 1400**
CITY: **OAKLAND**
CONTACT NAME: **REGIONAL WATER BOARD**
CONTACT TYPE: **REGIONAL BOARD CASEWORKER**
CONTACT PHONE: **NOT REPORTED**
EMAIL: **NOT REPORTED**

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Historical Cortese List (HISTCORTESE)

MAP ID# 37

Distance from Property: 0.275 mi. (1,452 ft.) W
Elevation: 37 ft. (Higher than TP)

FACILITY INFORMATION

GEOSEARCH ID: **43-1723COR**
ID#: **43-1723**
NAME: **GREEN WORLD NURSERY**
ADDRESS: **2711 EL CAMINO REAL**
PALO ALTO, CA 94301

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Leaking Underground Storage Tanks (LUST)

MAP ID# 37

Distance from Property: 0.277 mi. (1,463 ft.) W
Elevation: 37 ft. (Higher than TP)

FACILITY INFORMATION

GLOBAL ID: **T0608501659**
URL LINK: CLICK HERE
BUSINESS NAME: **GREEN WORLD NURSERY**
ADDRESS: **2711 EL CAMINO REAL**
PALO ALTO, CA 94306
COUNTY: **SANTA CLARA**

FACILITY DETAILS

CASE TYPE: **LUST CLEANUP SITE**
CASE NUMBER: **NOT REPORTED**
STATUS: **COMPLETED - CASE CLOSED 10/30/2000**
POTENTIAL CONTAMINATION:
GASOLINE
POTENTIAL MEDIA AFFECTED:
OTHER GROUNDWATER (USES OTHER THAN DRINKING WATER)
DISADVANTAGED COMMUNITY:
NO
SEVERELY DISADVANTAGED COMMUNITY:
NO
SITE HISTORY:
NOT REPORTED

HISTORICAL FACILITY DETAILS

NO HISTORICAL DETAIL(S) INFORMATION REPORTED FOR THIS FACILITY

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MAP ID# 38

Distance from Property: 0.281 mi. (1,484 ft.) WNW
Elevation: 32 ft. (Lower than TP)

FACILITY INFORMATION

GLOBAL ID: **T10000008033**
URL LINK: CLICK HERE
BUSINESS NAME: **KJ PARK (FORMER CAMPBELL-T) - 2555 PARK BOULEVARD**
ADDRESS: **2555 PARK BOULEVARD**
PALO ALTO, CA 94103
COUNTY: **SANTA CLARA**

FACILITY DETAILS

CASE TYPE: **CLEANUP PROGRAM SITE**
CASE NUMBER: **43S1189**
STATUS: **OPEN - ASSESSMENT & INTERIM REMEDIAL ACTION 11/24/2015**
POTENTIAL CONTAMINATION:
TETRACHLOROETHYLENE (PCE), HEATING OIL / FUEL OIL, STODDARD SOLVENT / MINERAL SPRIITS / DISTILLATES
POTENTIAL MEDIA AFFECTED:
OTHER GROUNDWATER (USES OTHER THAN DRINKING WATER), SOIL
DISADVANTAGED COMMUNITY:
NO
SEVERELY DISADVANTAGED COMMUNITY:
NO
SITE HISTORY:
THE SUBJECT PROPERTY IS A REDEVELOPMENT PROJECT JUST OUTSIDE THE COE SUPERFUND SITE PLUME IN PALO ALTO.

REGULATORY ACTIVITIES

TYPE OF ACTION:	DATE:	ACTION:
ENFORCEMENT	**08/20/2020**	**TECHNICAL CORRESPONDENCE / ASSISTANCE / OTHER**
ENFORCEMENT	**05/28/2020**	**ANNUAL ESTIMATION LETTER**
ENFORCEMENT	**04/14/2020**	**STAFF LETTER**
ENFORCEMENT	**01/27/2020**	**STAFF LETTER**
ENFORCEMENT	**10/31/2019**	**STAFF LETTER**
ENFORCEMENT	**10/29/2019**	**STAFF LETTER**
ENFORCEMENT	**08/28/2019**	**TECHNICAL CORRESPONDENCE / ASSISTANCE / OTHER**
ENFORCEMENT	**06/28/2019**	**ANNUAL ESTIMATION LETTER**
ENFORCEMENT	**03/28/2019**	**STAFF LETTER**
ENFORCEMENT	**02/06/2019**	**STAFF LETTER**
ENFORCEMENT	**12/20/2018**	**STAFF LETTER**
ENFORCEMENT	**12/04/2018**	**STAFF LETTER**
ENFORCEMENT	**12/04/2018**	**TECHNICAL CORRESPONDENCE / ASSISTANCE / OTHER**
ENFORCEMENT	**06/29/2018**	**ANNUAL ESTIMATION LETTER**
ENFORCEMENT	**03/07/2018**	**STAFF LETTER**
ENFORCEMENT	**03/07/2018**	**TECHNICAL CORRESPONDENCE / ASSISTANCE / OTHER**
ENFORCEMENT	**02/27/2018**	**TECHNICAL CORRESPONDENCE / ASSISTANCE / OTHER**
ENFORCEMENT	**02/06/2018**	**STAFF LETTER**
ENFORCEMENT	**02/06/2018**	**TECHNICAL CORRESPONDENCE / ASSISTANCE / OTHER**
ENFORCEMENT	**01/16/2018**	**TECHNICAL CORRESPONDENCE / ASSISTANCE / OTHER**

TYPE OF ACTION:	DATE:	ACTION:
ENFORCEMENT	11/07/2017	TECHNICAL CORRESPONDENCE / ASSISTANCE / OTHER
ENFORCEMENT	11/01/2017	TECHNICAL CORRESPONDENCE / ASSISTANCE / OTHER
ENFORCEMENT	07/24/2017	ANNUAL ESTIMATION LETTER
RESPONSE	06/02/2017	TANK REMOVAL REPORT / UST SAMPLING REPORT
ENFORCEMENT	05/31/2017	13267 REQUIREMENT
RESPONSE	05/05/2017	CAP/RAP - OTHER REPORT
ENFORCEMENT	04/26/2017	TECHNICAL CORRESPONDENCE / ASSISTANCE / OTHER
ENFORCEMENT	04/04/2017	TECHNICAL CORRESPONDENCE / ASSISTANCE / OTHER
ENFORCEMENT	03/24/2017	TECHNICAL CORRESPONDENCE / ASSISTANCE / OTHER
ENFORCEMENT	02/12/2016	13267 MONITORING PROGRAM
RESPONSE	01/19/2016	CAP/RAP - OTHER REPORT
ENFORCEMENT	01/05/2016	TECHNICAL CORRESPONDENCE / ASSISTANCE / OTHER
ENFORCEMENT	12/08/2015	TECHNICAL CORRESPONDENCE / ASSISTANCE / OTHER
ENFORCEMENT	11/23/2015	TECHNICAL CORRESPONDENCE / ASSISTANCE / OTHER
ENFORCEMENT	11/16/2015	TECHNICAL CORRESPONDENCE / ASSISTANCE / OTHER
ENFORCEMENT	11/08/2015	TECHNICAL CORRESPONDENCE / ASSISTANCE / OTHER
RESPONSE	11/08/2015	TECHNICAL MEMOS
RESPONSE	10/13/2015	SITE INVESTIGATION
OTHER	01/01/2013	LEAK DISCOVERY
OTHER	01/01/2013	LEAK REPORTED
OTHER	01/01/1964	LEAK STOPPED
OTHER	01/01/1951	LEAK BEGAN

STATUS HISTORY

STATUS:	DATE:
OPEN - ASSESSMENT & INTERIM REMEDIAL ACTION	11/24/2015
OPEN - CASE BEGIN DATE	01/01/2013

CONTACT DETAILS

ORGANIZATION: **SAN FRANCISCO BAY RWQCB (REGION 2)**
ADDRESS: **1515 CLAY STREET, SUITE 1500**
CITY: **OAKLAND**
CONTACT NAME: **ROGER PAPLER**
CONTACT TYPE: **REGIONAL BOARD CASEWORKER**
CONTACT PHONE: **NOT REPORTED**
EMAIL: **ROGER.PAPLER@WATERBOARDS.CA.GOV**

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MAP ID# 38

Distance from Property: 0.281 mi. (1,484 ft.) WNW
Elevation: 32 ft. (Lower than TP)

FACILITY INFORMATION

GLOBAL ID: **T10000010397**
URL LINK: CLICK HERE
BUSINESS NAME: **KJ PARK**
ADDRESS: **2555 PARK BOULEVARD**
PALO ALTO, CA 94709
COUNTY: **SANTA CLARA**

FACILITY DETAILS

CASE TYPE: **NON-CASE INFORMATION**
CASE NUMBER: **NOT REPORTED**
STATUS: **INFORMATIONAL ITEM 5/16/2017**
POTENTIAL CONTAMINATION:
NOT REPORTED
POTENTIAL MEDIA AFFECTED:
NOT REPORTED
DISADVANTAGED COMMUNITY:
NO
SEVERELY DISADVANTAGED COMMUNITY:
NO
SITE HISTORY:
TWO UNDERGROUND STORAGE TANKS (USTS) WERE REMOVED FROM THE SITE IN MAY 2017. RELATIVELY LOW LEVELS OF PETROLEUM HYDROCARBON CONTAMINATION WERE REPORTED IN SOIL BENEATH THE FORMER USTS. DEH DETERMINED THAT NO ADDITIONAL ACTION RELATED TO THE REPORTED PETROLEUM HYDROCARBON CONTAMINATION IS REQUIRED. THE SITE IS PART OF THE ÔKJ PARK (FORMER CAMPBELL-T),Ö CASE #: 43S1189 CLEANUP CASE BEING OVERSEEN BY THE SAN FRANCISCO REGIONAL WATER QUALITY CONTROL BOARD (SFRWQCB).

REGULATORY ACTIVITIES

TYPE OF ACTION:	DATE:	ACTION:
ENFORCEMENT	**05/18/2017**	**STAFF LETTER**
RESPONSE	**05/11/2017**	**TANK REMOVAL REPORT / UST SAMPLING REPORT**
OTHER	**05/05/2017**	**LEAK REPORTED**
RESPONSE	**05/05/2017**	**OTHER REPORT / DOCUMENT**
RESPONSE	**05/05/2017**	**UNAUTHORIZED RELEASE FORM**
OTHER	**05/04/2017**	**LEAK DISCOVERY**

STATUS HISTORY

STATUS:	DATE:
INFORMATIONAL ITEM	**05/16/2017**
OPEN - CASE BEGIN DATE	**05/16/2017**

CONTACT DETAILS

ORGANIZATION: **SANTA CLARA COUNTY LOP**
ADDRESS: **1555 BERGER DRIVE, SUITE 300**
CITY: **SAN JOSE**
CONTACT NAME: **AARON COSTA**
CONTACT TYPE: **LOCAL AGENCY CASEWORKER**

CONTACT PHONE: **4089181954**
EMAIL: **AARON.COSTA@CEP.SCCGOV.ORG**

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MAP ID# 39

Distance from Property: 0.291 mi. (1,536 ft.) SSW
Elevation: 41 ft. (Higher than TP)

FACILITY INFORMATION

ID #: **43360086**

NAME: **VARIAN**

ADDRESS: **611 HANSEN WAY**
PALO ALTO, CA

STATUS (DATE): **CERTIFIED / OPERATION & MAINTENANCE (08/21/1997)**

STANDARD INDUSTRIAL CLASSIFICATION BELIEVED TO BE CAUSE OF (POTENTIAL) CONTAMINATION:
MANU - ELECTRONIC & OTHER ELECTRIC EQUIP

ACCESS TO SITE: **CONTROLLED**

GROUNDWATER CONTAMINATION: **C**

COMMENTS

APPROVED RAP. IMPLEMENTATION EXPECTED TO BE COMPLETED BY APRIL 1996. SVE AND TREATMENT SYSTEM WITH ACTIVATED CARBON ADSORPTION WAS SELECTED FOR SOIL. FOR GROUNDWATER TREATMENT, USING AN AIR-STRIPPER WAS SELECTED AND TREATED WATER WILL BE USED ON-SITE FOR IRRIGATION TO THE EXTENT POSSIBLE. REMAINDER WILL BE DISCHARGED TO STORM DRAIN. CEQA NEGATIVE DECLARATION COMPLETED. COMPLETED PUBLIC PARTICIPATION PLAN. COMPLETED RA. A SOIL VAPOR EXTRACTION SYSTEM (SVE) WAS IMPLEMENTED AS AN IRM TO REMEDIATE GASOLINE CONTAMINATED SOIL NEAR BUILDING 3 AREA. IRM WAS COMPLETED IN DECEMBER 1993. A VERIFICATION SAMPLING PROGRAM WAS UNDERTAKEN; SAMPLES INDICATED THAT REMOVAL ACTION WAS SUCCESSFUL. SAMPLES ALL NON-DETECT. COMPLETED RIFS FOR GROUNDWATER OPERABLE UNIT. COMPLETED RA. SOIL VAPOR EXTRACTION (SVE) SYSTEM TREATED SOILS IMPACTED WITH BENZENE, TOLUENE, ETHYLBENZENE, XYLENES (BTEX) AND TOTAL EXTRACTABLE PETROLEUM HYDROCARBONS (TPH-G) WHICH WERE DETECTED NEAR BUILDING 3 ONSITE. CHEMICAL CONCENTRATIONS HAVE BEEN REDUCED BELOW REMEDIAL ACTION OBJECTIVES FOR THE SITE. VERIFICATION SAMPLING INDICATED THAT THE SVE WAS SUCCESSFUL IN REMEDIATING AFFECTED SOILS. SVE SYSTEM WAS SHUT DOWN AND IS BEING REMOVED FROM THE SITE. THE SYSTEM EXTRACTED A CUMULATIVE MASS OF ABOUT 15,352 POUNDS OF TPH-G FROM FEBRUARY 1992 THROUGH DECEMBER 1993. COMPLETED FIVE-YEAR REVIEW. BASED ON THIS REVIEW, VARIAN PLANS TO CONDUCT AN IN-SITU PILOT TEST IN 2003 TO EVALUATE TECHNIQUES TO REDUCE THE HIGH CONCENTRATIONS OF PCE WHICH REMAIN IN THE GROUNDWATER. COMPLETED PA. CONSENT ORDER SIGNED. COMPLETED FRIFS. COMPLETED FRA FOR THE SITE WHICH INCLUDES GROUNDWATER EXTRACTION AND TREATMENT. COMPLETED RIFS FOR SOIL OPERABLE UNIT. APPROVED DESIGN DOCUMENTS FOR GROUNDWATER TREATMENT SYSTEM. COMPLETED CEQA NEGATIVE DECLARATION. CERTIFIED SITE. AMENDED ORDER TO INCLUDE OPERATION AND MAINTENANCE OF THE REMEDIAL SYSTEM. GROUNDWATER EXTRACTION AND TREATMENT WILL CONTINUE IN ACCORDANCE WITH THE APPROVED OPERATION AND MAINTENANCE PLAN. COMPLETED FRIFS. THIS WAS AN UNPLANNED F-RI/FS. A PILOT STUDY WAS COMPLETED WITH OXIDATION TREATMENT SYSTEM WHICH UTILIZES HIGH INTENSITY ULTRAVIOLET LIGHT AND HYDROGEN PEROXIDE TO OXIDIZE VOCS. COMPLETED RA. EXCAVATED 100 CUBIC YARDS OF VOC CONTAMINATED SOIL. GROUNDWATER EXTRACTION AND TREATMENT SYSTEM STARTED. EFFLUENT IS REUSED FOR ON-SITE IRRIGATION. APPROVED O&M PLAN FOR GROUNDWATER SYSTEM. TREATMENT SYSTEM INCORPORATES INSTRUMENTATION FOR AUTOMATIC OPERATION WHICH REQUIRES ONLY PERIODIC OBSERVATION AND MAINTENANCE. COMPLETED RA. REMOVAL OF TEN CUBIC YARDS OF SOIL CONTAMINATED WITH 25% ETHYLENE GLYCOL.

BACKGROUND

VARIAN IS A DIVERSIFIED ELECTRONICS COMPANY OCCUPYING 70 ACRES IN THE STANFORD RESEARCH PARK SINCE 1952. DUE TO HISTORICAL PRACTICES, GASOLINE, TRICHLOROETHYLENE (TCE) AND PERCLOROETHYLENE (PCE) CONTAMINATED THE SOIL AND UNDERLYING GROUNDWATER.

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MAP ID# 39

Distance from Property: 0.291 mi. (1,536 ft.) SSW
Elevation: 41 ft. (Higher than TP)

FACILITY INFORMATION

GLOBAL ID: **SL0608530107**
URL LINK: CLICK HERE
BUSINESS NAME: **VARIAN INC. [NPDES]**
ADDRESS: **611 HANSEN**
MONTAIN VIEW, CA 94304
COUNTY: **SANTA CLARA**

FACILITY DETAILS

CASE TYPE: **CLEANUP PROGRAM SITE**
CASE NUMBER: **43S1044**
STATUS: **COMPLETED - CASE CLOSED 7/21/2009**
POTENTIAL CONTAMINATION:
*** SOLVENTS**
POTENTIAL MEDIA AFFECTED:
OTHER GROUNDWATER (USES OTHER THAN DRINKING WATER)
DISADVANTAGED COMMUNITY:
NO
SEVERELY DISADVANTAGED COMMUNITY:
NO
SITE HISTORY:
NO WATER BOARD OVERSIGHT OF CLEANUP AT THIS SITE. THIS CASE IS INCLUDED IN GEOTRACKER BECAUSE THE SITE IS COVERED BY THE WATER BOARDÆS NPDES GENERAL PERMITS FOR DISCHARGES FROM ÔPUMP AND TREATÖ SYSTEMS TO SURFACE WATERS (ONE EACH FOR FUELS- AND VOC-IMPACTED SITES). THIS CAN HAPPEN FOR TWO REASONS: (I) THE SITE IS OVERSEEN BY ANOTHER AGENCY (E.G., USEPA OR DTSC) AND NEEDS COVERAGE UNDER ONE OF THE NPDES GENERAL PERMITS OR (II) CONSTRUCTION DEWATERING IN AN AREA OF GROUNDWATER CONTAMINATION NECESSITATES NPDES GENERAL PERMIT COVERAGE. INCLUDING THIS CASE IN GEOTRACKER HELPS STAFF TO RECEIVE AND REVIEW REQUIRED NPDES REPORTS. PER CIWQS, THE WATER BOARDS TERMINATED THE FACILITY'S PERMIT OF JULY, 2009.

REGULATORY ACTIVITIES

TYPE OF ACTION:	DATE:	ACTION:
OTHER	**01/01/50**	**LEAK REPORTED**
REMEDIATION	**01/01/50**	**PUMP & TREAT (P&T) GROUNDWATER**
REMEDIATION	**01/01/1990**	**PUMP & TREAT (P&T) GROUNDWATER**
OTHER	**01/02/1965**	**LEAK REPORTED**

STATUS HISTORY

STATUS:	DATE:
COMPLETED - CASE CLOSED	**07/21/2009**
OPEN - CASE BEGIN DATE	**01/01/1990**
OPEN - INACTIVE	**01/01/1990**
OPEN - REMEDIATION	**01/01/1990**

CONTACT DETAILS

ORGANIZATION: **SAN FRANCISCO BAY RWQCB (REGION 2)**
ADDRESS: **1515 CLAY ST SUITE 1400**

CITY: **OAKLAND**
CONTACT NAME: **LOU GONZALES**
CONTACT TYPE: **REGIONAL BOARD CASEWORKER**
CONTACT PHONE: **NOT REPORTED**
EMAIL: **LGONZALES@WATERBOARDS.CA.GOV**

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Cortese List (CORTESE)

MAP ID# 39

Distance from Property: 0.291 mi. (1,536 ft.) SSW
Elevation: 41 ft. (Higher than TP)

FACILITY INFORMATION

GEOSEARCH ID: **43360086**
ENVIROSTOR ID: **43360086**
FACILITY NAME: **VARIAN**
ADDRESS: **611 HANSEN WAY**
PALO ALTO, CA 94304
COUNTY: **SANTA CLARA**

FACILITY DETAILS

PROGRAM TYPE: **STATE RESPONSE**
STATUS: **CERTIFIED / OPERATION & MAINTENANCE**
STATUS DATE: **8/21/1997**
CALENVIROSCREEN SCORE: **1-5%**
SITE CODE: **200122**

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MAP ID# 39

Distance from Property: 0.291 mi. (1,536 ft.) SSW
Elevation: 41 ft. (Higher than TP)

SITE INFORMATION

ID #: **43360086** ASSESSOR'S PARCEL #: **142-20-046, 142-20-42, 142-20-44, 142-20-45, 142-20-46, 142-20-67, 142-20-68, 14220040, 14220067, 14220073, 14220092, 14220093, 14220095, 14220096, 14220097, 14220098**

FACILITY LINK: CLICK HERE

NAME: **VARIAN**

ADDRESS: **611 HANSEN WAY**
PALO ALTO, CA 94304

COUNTY: **SANTA CLARA**

SITE SIZE (ACRES): **70**

LEAD AGENCY: **SMBRP**

DTSC PROJECT MANAGER: **JOVANNE VILLAMATER**

DTSC SUPERVISOR: **CHERYL PROWELL**

DTSC DIVISION BRANCH: **CLEANUP BERKELEY**

NPL LISTED: **NO** RESTRICTED LAND USE: **NO**

SITE TYPE: **STATE RESPONSE**

SITE TYPE DESCRIPTION

STATE RESPONSE: IDENTIFIES CONFIRMED RELEASE SITES WHERE DTSC IS INVOLVED IN REMEDIATION, EITHER IN A LEAD OR OVERSIGHT CAPACITY. THESE CONFIRMED RELEASE SITES ARE GENERALLY HIGH-PRIORITY AND HIGH POTENTIAL RISK.

DTSC's CURRENT INVOLVEMENT AT SITE (as of 19/7 /8/21)

CERTIFIED / OPERATION & MAINTENANCE -

PAST USE/S THAT CAUSED THE CONTAMINATION

MANUFACTURING - ELECTRONIC

CONFIRMED CONTAMINANTS OF CONCERN

NONE SPECIFIED

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Historical Cortese List (HISTCORTESE)

MAP ID# 39

Distance from Property: 0.291 mi. (1,536 ft.) SSW
Elevation: 41 ft. (Higher than TP)

FACILITY INFORMATION

GEOSEARCH ID: **43360086COR**
ID#: **43360086**
NAME: **VARIAN**
ADDRESS: **611 HANSEN**
PALO ALTO, CA 94303

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Superfund Enterprise Management System Archived Site Inventory (SEMSARCH)

MAP ID# 39

Distance from Property: 0.291 mi. (1,536 ft.) SSW
Elevation: 41 ft. (Higher than TP)

FACILITY INFORMATION

EPA ID#: **CAD009120817**
SITE ID#: **0900225**
NAME: **VARIAN ASSOCIATES CORP HDQTRS**
ADDRESS: **611 HANSEN WAY**
PALO ALTO, CA 94303
COUNTY: **SAN MATEO**
FEDERAL FACILITY: **NOT A FEDERAL FACILITY**
SUPERFUND ALTERNATIVE AGREEMENT IN PLACE?: **NO**
NPL: **NOT ON THE NPL**
NON NPL STATUS: **NFRAP-SITE DOES NOT QUALIFY FOR THE NPL BASED ON EXISTING INFORMATION**
SUPERFUND SITE INFORMATION: **CLICK HERE**

Below information was gathered from the prior NFRAP update completed in 10/2013 update:

ACTION	START DATE	COMPLETION DATE	RESPONSIBILITY
DS - DISCOVERY	**NOT REPORTED**	**4/1/1988**	**STATE (FUND)**
PA - PRELIMINARY ASSESSMENT	**NOT REPORTED**	**6/13/1989**	**STATE (FUND)**
PA - PRELIMINARY ASSESSMENT	**NOT REPORTED**	**6/28/1990**	**EPA FUND**
VS - ARCHIVE SITE	**NOT REPORTED**	**6/28/1990**	**EPA IN-HOUSE**

ACTION DESCRIPTIONS

DS - (DISCOVERY) - THE PROCESS BY WHICH A POTENTIAL HAZARDOUS WASTE SITE IS BROUGHT TO THE ATTENTION OF THE EPA. THE PROCESS CAN OCCUR THROUGH THE USE OF SEVERAL MECHANISMS SUCH AS A PHONE CALL OR REFERRAL BY ANOTHER GOVERNMENT AGENCY.

PA - (PRELIMINARY ASSESSMENT) - COLLECTION OF DIVERSE EXISTING INFORMATION ABOUT THE SOURCE AND NATURE OF THE SITE HAZARD. IT IS EPA POLICY TO COMPLETE THE PRELIMINARY ASSESSMENT WITHIN ONE YEAR OF SITE DISCOVERY.

PA - (PRELIMINARY ASSESSMENT) - COLLECTION OF DIVERSE EXISTING INFORMATION ABOUT THE SOURCE AND NATURE OF THE SITE HAZARD. IT IS EPA POLICY TO COMPLETE THE PRELIMINARY ASSESSMENT WITHIN ONE YEAR OF SITE DISCOVERY.

VS - (ARCHIVE SITE) - THE DECISION IS MADE THAT NO FURTHER ACTIVITY IS PLANNED AT THE SITE.

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GeoTracker Cleanup Sites (CLEANUPSITES)

MAP ID# 40

Distance from Property: 0.293 mi. (1,547 ft.) WSW
Elevation: 37 ft. (Higher than TP)

FACILITY INFORMATION

GLOBAL ID: **T0608500216**
URL LINK: CLICK HERE
BUSINESS NAME: **MOBIL (BP 11219)**
ADDRESS: **2780 EL CAMINO REAL**
PALO ALTO, CA 94306
COUNTY: **SANTA CLARA**

FACILITY DETAILS

CASE TYPE: **LUST CLEANUP SITE**
CASE NUMBER: **2189.8377**
STATUS: **COMPLETED - CASE CLOSED 6/19/2006**
POTENTIAL CONTAMINATION:
GASOLINE
POTENTIAL MEDIA AFFECTED:
OTHER GROUNDWATER (USES OTHER THAN DRINKING WATER)
DISADVANTAGED COMMUNITY:
NO
SEVERELY DISADVANTAGED COMMUNITY:
NO
SITE HISTORY:
NOT REPORTED

REGULATORY ACTIVITIES

TYPE OF ACTION:	DATE:	ACTION:
OTHER	**01/01/50**	**LEAK REPORTED**
REMEDIATION	**01/01/50**	**EXCAVATION**
REMEDIATION	**01/01/50**	**PUMP & TREAT (P&T) GROUNDWATER**
REMEDIATION	**01/01/50**	**SOIL VAPOR EXTRACTION (SVE)**
ENFORCEMENT	**06/20/2006**	**CLOSURE/NO FURTHER ACTION LETTER**
RESPONSE	**06/20/2006**	**OTHER REPORT / DOCUMENT**
RESPONSE	**06/19/2006**	**CORRESPONDENCE**
ENFORCEMENT	**09/01/2005**	*** NO ACTION - #5019**
RESPONSE	**05/30/2001**	**MONITORING REPORT - QUARTERLY**
ENFORCEMENT	**04/05/2001**	**STAFF LETTER - #28728**
ENFORCEMENT	**02/28/1997**	**NOTICE OF RESPONSIBILITY - #40037**
REMEDIATION	**10/01/1996**	**EXCAVATION**
REMEDIATION	**10/01/1996**	**PUMP & TREAT (P&T) GROUNDWATER**
REMEDIATION	**10/01/1996**	**SOIL VAPOR EXTRACTION (SVE)**
ENFORCEMENT	**07/09/1993**	**STAFF LETTER**
OTHER	**12/03/1984**	**LEAK REPORTED**

STATUS HISTORY

STATUS:	DATE:
COMPLETED - CASE CLOSED	**06/19/2006**

STATUS:	DATE:
OPEN - VERIFICATION MONITORING	**02/28/1997**
OPEN - SITE ASSESSMENT	**04/08/1992**
OPEN - SITE ASSESSMENT	**01/08/1986**
OPEN - CASE BEGIN DATE	**12/03/1984**

CONTACT DETAILS

ORGANIZATION: **SAN FRANCISCO BAY RWQCB (REGION 2)**

ADDRESS: **1515 CLAY ST SUITE 1400**

CITY: **OAKLAND**

CONTACT NAME: **REGIONAL WATER BOARD**

CONTACT TYPE: **REGIONAL BOARD CASEWORKER**

CONTACT PHONE: **NOT REPORTED**

EMAIL: **NOT REPORTED**

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Historical Cortese List (HISTCORTESE)

MAP ID# 40

Distance from Property: 0.292 mi. (1,542 ft.) WSW
Elevation: 37 ft. (Higher than TP)

FACILITY INFORMATION

GEOSEARCH ID: **43-0150COR**
ID#: **43-0150**
NAME: **MOBIL**
ADDRESS: **2780 EL CAMINO REAL**
PALO ALTO, CA

Back to Report Summary

Leaking Underground Storage Tanks (LUST)

MAP ID# 40

Distance from Property: 0.293 mi. (1,547 ft.) WSW
Elevation: 37 ft. (Higher than TP)

FACILITY INFORMATION

GLOBAL ID: **T0608500216**
URL LINK: CLICK HERE
BUSINESS NAME: **MOBIL (BP 11219)**
ADDRESS: **2780 EL CAMINO REAL**
PALO ALTO, CA 94306
COUNTY: **SANTA CLARA**

FACILITY DETAILS

CASE TYPE: **LUST CLEANUP SITE**
CASE NUMBER: **2189.8377**
STATUS: **COMPLETED - CASE CLOSED 06/19/2006**
POTENTIAL CONTAMINATION:
GASOLINE
POTENTIAL MEDIA AFFECTED:
OTHER GROUNDWATER (USES OTHER THAN DRINKING WATER)
DISADVANTAGED COMMUNITY:
NO
SEVERELY DISADVANTAGED COMMUNITY:
NO
SITE HISTORY:
NOT REPORTED

HISTORICAL FACILITY DETAILS

NO HISTORICAL DETAIL(S) INFORMATION REPORTED FOR THIS FACILITY

Back to Report Summary

MAP ID# 41

Distance from Property: 0.314 mi. (1,658 ft.) WNW
Elevation: 35 ft. (Higher than TP)

FACILITY INFORMATION

GLOBAL ID: **T10000001638**
URL LINK: CLICK HERE
BUSINESS NAME: **MINKOFF GROUP (FORMER PREMIER PROPERTIES) - 385-399 SHERMAN AVENUE**
ADDRESS: **385-399 SHERMAN AVENUE**
PALO ALTO, CA 94301
COUNTY: **SANTA CLARA**

FACILITY DETAILS

CASE TYPE: **CLEANUP PROGRAM SITE**
CASE NUMBER: **43S1133**
STATUS: **COMPLETED - CASE CLOSED 7/30/2018**
POTENTIAL CONTAMINATION:
TRICHLOROETHYLENE (TCE)
POTENTIAL MEDIA AFFECTED:
OTHER GROUNDWATER (USES OTHER THAN DRINKING WATER)
DISADVANTAGED COMMUNITY:
NO
SEVERELY DISADVANTAGED COMMUNITY:
NO
SITE HISTORY:
THE UNDERLYING HP/VARIAN PLUME HAS BEEN UNDER HYDRAULIC CONTROL SICNE THE LATE 1980S WITH OFF-PROPERTY EXTRACTION WELLS AND THE OREGON EXPRESSWAY UNDERPASS SUBDRAIN SYSTEM OPERATING ON A 24/7 BASIS. DEVELOPER WILL CONDUCT IA TESTING AFTER BUILDING CONSTRUCTED THE BUILDING WITH A VIMS EVEN THOUGH GROUNEWATER-CVOC LEVELS ARE VERY LOW.

REGULATORY ACTIVITIES

TYPE OF ACTION:	DATE:	ACTION:
ENFORCEMENT	**07/30/2018**	**13267 REQUIREMENT**
ENFORCEMENT	**07/30/2018**	**CLOSURE/NO FURTHER ACTION LETTER**
ENFORCEMENT	**06/29/2018**	**STAFF LETTER**
ENFORCEMENT	**12/18/2017**	**TECHNICAL CORRESPONDENCE / ASSISTANCE / OTHER**
ENFORCEMENT	**03/07/2017**	**13267 REQUIREMENT**
ENFORCEMENT	**12/02/2016**	**TECHNICAL CORRESPONDENCE / ASSISTANCE / OTHER**
ENFORCEMENT	**08/30/2016**	**ANNUAL ESTIMATION LETTER**
ENFORCEMENT	**11/10/2015**	**ANNUAL ESTIMATION LETTER**
ENFORCEMENT	**04/20/2015**	**TECHNICAL CORRESPONDENCE / ASSISTANCE / OTHER**
ENFORCEMENT	**04/15/2015**	**MEETING**
RESPONSE	**04/06/2015**	**CAP/RAP - OTHER REPORT**
ENFORCEMENT	**03/18/2015**	**LETTER - NOTICE - #43S1133**
ENFORCEMENT	**09/02/2014**	**TECHNICAL CORRESPONDENCE / ASSISTANCE / OTHER**
ENFORCEMENT	**08/21/2014**	**TECHNICAL CORRESPONDENCE / ASSISTANCE / OTHER**
ENFORCEMENT	**08/11/2014**	**MEETING**
ENFORCEMENT	**07/25/14**	**COST RECOVERY AGREEMENT - #43S1153**
ENFORCEMENT	**05/07/2014**	**13267 REQUIREMENT**
ENFORCEMENT	**05/07/2014**	**STAFF LETTER**

TYPE OF ACTION:	DATE:	ACTION:
ENFORCEMENT	**04/14/2014**	**TECHNICAL CORRESPONDENCE / ASSISTANCE / OTHER**
RESPONSE	**01/14/2014**	**CAP/RAP - OTHER REPORT**
ENFORCEMENT	**06/28/2013**	**COST RECOVERY AGREEMENT**
ENFORCEMENT	**06/28/2013**	**COST RECOVERY AGREEMENT / N. OF REIMBURSEMENT**
ENFORCEMENT	**06/08/2010**	**TECHNICAL CORRESPONDENCE / ASSISTANCE / OTHER**
ENFORCEMENT	**05/20/2010**	**TECHNICAL CORRESPONDENCE / ASSISTANCE / OTHER**
ENFORCEMENT	**10/28/2009**	**TECHNICAL CORRESPONDENCE / ASSISTANCE / OTHER**
OTHER	**01/01/2009**	**LEAK REPORTED**

STATUS HISTORY

STATUS:	DATE:
COMPLETED - CASE CLOSED	**07/30/2018**
OPEN - REMEDIATION	**12/31/2016**
OPEN - ASSESSMENT & INTERIM REMEDIAL ACTION	**11/03/2009**
OPEN - CASE BEGIN DATE	**11/03/2009**

CONTACT DETAILS

ORGANIZATION: **SAN FRANCISCO BAY RWQCB (REGION 2)**
ADDRESS: **1515 CLAY STREET, SUITE 1500**
CITY: **OAKLAND**
CONTACT NAME: **ROGER PAPLER**
CONTACT TYPE: **REGIONAL BOARD CASEWORKER**
CONTACT PHONE: **NOT REPORTED**
EMAIL: **ROGER.PAPLER@WATERBOARDS.CA.GOV**

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MAP ID# 42

Distance from Property: 0.321 mi. (1,695 ft.) SSE
Elevation: 37 ft. (Higher than TP)

FACILITY INFORMATION

GLOBAL ID: **T0608500445**
URL LINK: CLICK HERE
BUSINESS NAME: **COMBES AUTO REPAIR**
ADDRESS: **3585 EL CAMINO REAL**
PALO ALTO, CA 94306
COUNTY: **SANTA CLARA**

FACILITY DETAILS

CASE TYPE: **LUST CLEANUP SITE**
CASE NUMBER: **12-034**
STATUS: **COMPLETED - CASE CLOSED 8/31/2016**
POTENTIAL CONTAMINATION:
BENZENE, TOLUENE, XYLENE, MTBE / TBA / OTHER FUEL OXYGENATES, GASOLINE
POTENTIAL MEDIA AFFECTED:
AQUIFER USED FOR DRINKING WATER SUPPLY, OTHER GROUNDWATER (USES OTHER THAN DRINKING WATER), SOIL
DISADVANTAGED COMMUNITY:
NO
SEVERELY DISADVANTAGED COMMUNITY:
NO
SITE HISTORY:
THE SITE IS CURRENTLY AN UNOCCUPIED FORMER AUTO REPAIR AND COMMERCIAL GASOLINE SERVICE STATION. AN UNAUTHORIZED RELEASE WAS REPORTED IN NOVEMBER 1986 FOLLOWING THE REMOVAL OF TWO GASOLINE UNDERGROUND STORAGE TANKS (USTS) IN JULY OF 1986. AN UNKNOWN VOLUME OF SOIL WAS EXCAVATED TO A DEPTH OF 12 FEET BELOW GRADE AND DISPOSED OF OFF-SITE. SEVERAL ROUNDS OF INVESTIGATION AND SAMPLING, INCLUDING THE INSTALLATION OF 12 MONITORING WELLS, HAVE ADEQUATELY DEFINED THE NATURE AND EXTENT OF THE CONTAMINANT PLUME. REMEDIATION INCLUDED SOIL EXCAVATION, COMPLETED IN 1986, AND SOIL VAPOR EXTRACTION WITH AIR SPARGING CONDUCTED BETWEEN JANUARY 2013 AND SEPTEMBER 2014. THE MOST RECENT GROUNDWATER SAMPLING DATA REPORT CONCENTRATIONS THAT SATISFY THE GROUNDWATER CRITERIA OF THE LOW-THREAT CASE CLOSURE POLICY.

REGULATORY ACTIVITIES

TYPE OF ACTION:	DATE:	ACTION:
OTHER	**01/01/50**	**LEAK DISCOVERY**
OTHER	**01/01/50**	**LEAK REPORTED**
REMEDIATION	**01/01/50**	**EXCAVATION**
REMEDIATION	**01/01/50**	**SOIL VAPOR EXTRACTION (SVE)**
RESPONSE	**09/09/2016**	**WELL DESTRUCTION REPORT**
ENFORCEMENT	**08/31/2016**	**CLOSURE/NO FURTHER ACTION LETTER**
RESPONSE	**06/08/2016**	**CORRESPONDENCE**
ENFORCEMENT	**06/02/2016**	**STAFF LETTER**
ENFORCEMENT	**03/25/2016**	**NOTIFICATION - PUBLIC NOTICE OF CASE CLOSURE**
RESPONSE	**02/05/2016**	**REQUEST FOR CLOSURE - REGULATOR RESPONDED**
RESPONSE	**10/30/2015**	**MONITORING REPORT - QUARTERLY**
RESPONSE	**07/30/2015**	**MONITORING REPORT - QUARTERLY**
RESPONSE	**07/03/2015**	**SITE ASSESSMENT REPORT**

TYPE OF ACTION:	DATE:	ACTION:
RESPONSE	05/29/2015	OTHER REPORT / DOCUMENT
RESPONSE	04/30/2015	MONITORING REPORT - QUARTERLY
ENFORCEMENT	04/03/2015	STAFF LETTER
RESPONSE	03/26/2015	CLEAN UP FUND - 5-YEAR REVIEW SUMMARY
RESPONSE	02/27/2015	MONITORING REPORT - QUARTERLY
ENFORCEMENT	02/18/2015	STAFF LETTER
RESPONSE	02/16/2015	OTHER WORKPLAN - REGULATOR RESPONDED
RESPONSE	02/05/2015	OTHER WORKPLAN - REGULATOR RESPONDED
RESPONSE	01/30/15	REMEDIAL PROGRESS REPORT
RESPONSE	01/30/2015	MONITORING REPORT - QUARTERLY
RESPONSE	01/29/2015	EMAIL CORRESPONDENCE
ENFORCEMENT	01/22/2015	STAFF LETTER
RESPONSE	01/16/2015	OTHER WORKPLAN
ENFORCEMENT	01/13/2015	CLEAN UP FUND - CASE CLOSURE REVIEW SUMMARY REPORT (RSR)
ENFORCEMENT	11/21/2014	STAFF LETTER
RESPONSE	10/30/2014	REMEDIAL PROGRESS REPORT
RESPONSE	07/30/2014	REMEDIAL PROGRESS REPORT
RESPONSE	04/30/2014	REMEDIAL PROGRESS REPORT
ENFORCEMENT	04/17/2014	STAFF LETTER
RESPONSE	08/01/2013	REMEDIAL PROGRESS REPORT
RESPONSE	01/04/2013	REMEDIAL PROGRESS REPORT
ENFORCEMENT	10/12/2012	STAFF LETTER
ENFORCEMENT	08/15/2012	NOTIFICATION - PUBLIC NOTICE OF ROD/RAP/CAP
RESPONSE	12/23/2011	OTHER REPORT / DOCUMENT
ENFORCEMENT	09/16/2011	STAFF LETTER
RESPONSE	07/01/2011	MONITORING REPORT - QUARTERLY
RESPONSE	07/31/2010	MONITORING REPORT - QUARTERLY
ENFORCEMENT	05/17/2010	STAFF LETTER
RESPONSE	04/30/2010	MONITORING REPORT - QUARTERLY
RESPONSE	01/31/2010	MONITORING REPORT - QUARTERLY
RESPONSE	10/31/2009	MONITORING REPORT - QUARTERLY
RESPONSE	10/15/2009	SITE ASSESSMENT REPORT
RESPONSE	09/15/2009	OTHER REPORT / DOCUMENT
ENFORCEMENT	06/26/2009	STAFF LETTER - #9002626
ENFORCEMENT	05/28/2009	STAFF LETTER
RESPONSE	04/22/2009	PRELIMINARY SITE ASSESSMENT WORKPLAN - ADDENDUM
ENFORCEMENT	02/25/2009	STAFF LETTER - #90025220
RESPONSE	01/15/2009	OTHER REPORT / DOCUMENT
RESPONSE	01/09/2009	SOIL AND WATER INVESTIGATION REPORT
ENFORCEMENT	10/22/2008	STAFF LETTER - #80022201
RESPONSE	10/20/2008	PRELIMINARY SITE ASSESSMENT WORKPLAN
ENFORCEMENT	08/20/2008	STAFF LETTER - #80020280
RESPONSE	11/21/2007	OTHER REPORT / DOCUMENT
RESPONSE	11/16/2007	WELL INSTALLATION REPORT

TYPE OF ACTION:	DATE:	ACTION:
RESPONSE	03/31/2006	RISK ASSESSMENT REPORT
ENFORCEMENT	12/15/2005	STAFF LETTER - #51215
ENFORCEMENT	08/04/2005	STAFF LETTER - #50804
ENFORCEMENT	06/03/2005	OTHER REPORT
RESPONSE	06/03/2005	OTHER REPORT / DOCUMENT
ENFORCEMENT	05/23/2005	STAFF LETTER - #50523
RESPONSE	04/25/2005	OTHER REPORT / DOCUMENT
RESPONSE	02/27/2003	INTERIM REMEDIAL ACTION REPORT
REMEDIATION	12/08/2002	SOIL VAPOR EXTRACTION (SVE)
RESPONSE	05/09/2002	CAP/RAP - FEASIBILITY STUDY REPORT
RESPONSE	03/07/2001	OTHER REPORT / DOCUMENT
RESPONSE	01/30/2001	CAP/RAP - OTHER REPORT
RESPONSE	01/26/2001	MONITORING REPORT - QUARTERLY
RESPONSE	05/31/2000	SOIL AND WATER INVESTIGATION REPORT
RESPONSE	10/15/1995	MONITORING REPORT - QUARTERLY
ENFORCEMENT	08/27/1995	STAFF LETTER - #28762
RESPONSE	09/22/1994	MONITORING REPORT - QUARTERLY
RESPONSE	09/07/1994	OTHER REPORT / DOCUMENT
RESPONSE	08/15/1994	MONITORING REPORT - QUARTERLY
ENFORCEMENT	07/10/1994	STAFF LETTER - #28756
RESPONSE	11/25/1993	OTHER WORKPLAN
REMEDIATION	12/01/1992	SOIL VAPOR EXTRACTION (SVE)
ENFORCEMENT	09/16/1991	NOTICE OF RESPONSIBILITY - #40039
RESPONSE	01/01/1987	CORRESPONDENCE
OTHER	11/14/1986	LEAK REPORTED
RESPONSE	08/14/1986	OTHER REPORT / DOCUMENT
OTHER	08/01/1986	LEAK DISCOVERY
RESPONSE	07/11/1986	OTHER REPORT / DOCUMENT
REMEDIATION	07/10/1986	EXCAVATION

STATUS HISTORY

STATUS:	DATE:
COMPLETED - CASE CLOSED	08/31/2016
OPEN - ELIGIBLE FOR CLOSURE	06/02/2016
OPEN - VERIFICATION MONITORING	11/21/2014
OPEN - REMEDIATION	07/30/1993
OPEN - SITE ASSESSMENT	07/30/1993
OPEN - SITE ASSESSMENT	01/28/1993
OPEN - CASE BEGIN DATE	07/11/1986

CONTACT DETAILS

ORGANIZATION: **SANTA CLARA COUNTY LOP**

ADDRESS: **1555 BERGER DRIVE, SUITE 300**

CITY: **SAN JOSE**

CONTACT NAME: **AARON COSTA**
CONTACT TYPE: **LOCAL AGENCY CASEWORKER**
CONTACT PHONE: **4089181954**
EMAIL: **AARON.COSTA@CEP.SCCGOV.ORG**

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Historical Cortese List (HISTCORTESE)

MAP ID# 42

Distance from Property: 0.321 mi. (1,695 ft.) SSE
Elevation: 37 ft. (Higher than TP)

FACILITY INFORMATION

GEOSEARCH ID: **43-0394COR**
ID#: **43-0394**
NAME: **COMBES AUTO REPAIR**
ADDRESS: **3585 EL CAMINO REAL**
PALO ALTO, CA

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Leaking Underground Storage Tanks (LUST)

MAP ID# 42

Distance from Property: 0.321 mi. (1,695 ft.) SSE
Elevation: 37 ft. (Higher than TP)

FACILITY INFORMATION

GLOBAL ID: **T0608500445**
URL LINK: CLICK HERE
BUSINESS NAME: **COMBES AUTO REPAIR**
ADDRESS: **3585 EL CAMINO REAL**
PALO ALTO, CA 94306
COUNTY: **SANTA CLARA**

FACILITY DETAILS

CASE TYPE: **LUST CLEANUP SITE**
CASE NUMBER: **12-034**
STATUS: **COMPLETED - CASE CLOSED 08/31/2016**
POTENTIAL CONTAMINATION:
BENZENE, TOLUENE, XYLENE, MTBE / TBA / OTHER FUEL OXYGENATES, GASOLINE
POTENTIAL MEDIA AFFECTED:
AQUIFER USED FOR DRINKING WATER SUPPLY, OTHER GROUNDWATER (USES OTHER THAN DRINKING WATER), SOIL
DISADVANTAGED COMMUNITY:
NO
SEVERELY DISADVANTAGED COMMUNITY:
NO
SITE HISTORY:
THE SITE IS CURRENTLY AN UNOCCUPIED FORMER AUTO REPAIR AND COMMERCIAL GASOLINE SERVICE STATION. AN UNAUTHORIZED RELEASE WAS REPORTED IN NOVEMBER 1986 FOLLOWING THE REMOVAL OF TWO GASOLINE UNDERGROUND STORAGE TANKS (USTS) IN JULY OF 1986. AN UNKNOWN VOLUME OF SOIL WAS EXCAVATED TO A DEPTH OF 12 FEET BELOW GRADE AND DISPOSED OF OFF-SITE. SEVERAL ROUNDS OF INVESTIGATION AND SAMPLING, INCLUDING THE INSTALLATION OF 12 MONITORING WELLS, HAVE ADEQUATELY DEFINED THE NATURE AND EXTENT OF THE CONTAMINANT PLUME. REMEDIATION INCLUDED SOIL EXCAVATION, COMPLETED IN 1986, AND SOIL VAPOR EXTRACTION WITH AIR SPARGING CONDUCTED BETWEEN JANUARY 2013 AND SEPTEMBER 2014. THE MOST RECENT GROUNDWATER SAMPLING DATA REPORT CONCENTRATIONS THAT SATISFY THE GROUNDWATER CRITERIA OF THE LOW-THREAT CASE CLOSURE POLICY.

HISTORICAL FACILITY DETAILS

NO HISTORICAL DETAIL(S) INFORMATION REPORTED FOR THIS FACILITY

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GeoTracker Cleanup Sites (CLEANUPSITES)

MAP ID# 43

Distance from Property: 0.324 mi. (1,711 ft.) SW
Elevation: 41 ft. (Higher than TP)

FACILITY INFORMATION

GLOBAL ID: **T10000012691**

URL LINK: CLICK HERE

BUSINESS NAME: **PREFORMED LINE PRODUCTS, INC. (PREFORMED)**

ADDRESS: **600 HANSEN WAY**
PALO ALTO, CA 94304

COUNTY: **SANTA CLARA**

FACILITY DETAILS

CASE TYPE: **CLEANUP PROGRAM SITE**

CASE NUMBER: **43S0290**

STATUS: **OPEN - INACTIVE 01/31/2019**

POTENTIAL CONTAMINATION:
NOT REPORTED

POTENTIAL MEDIA AFFECTED:
NOT REPORTED

DISADVANTAGED COMMUNITY:
NO

SEVERELY DISADVANTAGED COMMUNITY:
NO

SITE HISTORY:
NOT REPORTED

REGULATORY ACTIVITIES

TYPE OF ACTION:	DATE:	ACTION:
ENFORCEMENT	**05/29/1998**	**RESCISSION OF ENFORCEMENT ACTION**

STATUS HISTORY

STATUS:	DATE:
OPEN - INACTIVE	**01/31/2019**
OPEN - CASE BEGIN DATE	**05/29/1998**

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Listing of Certified Processors (PROC)

MAP ID# 43

Distance from Property: 0.324 mi. (1,711 ft.) SW
Elevation: 41 ft. (Higher than TP)

SITE INFORMATION

ID #: **PR0448**
NAME: **ECULLET INC**
ADDRESS: **600 HANSEN WY STE 246**
CITY: **PALO ALTO**
STATE: **CA**
ZIP: **94304**
COUNTY: **SANTA CLARA**

SITE DETAILS

OPERATION BEGIN DATE: **03/12/2007**
OPERATION END DATE: **NOT REPORTED**
PROGRAM PHONE: **(650) 493-7300X4458**
ORGANIZATION NAME: **ECULLET INC**
ADDRESS: **420 S HILLVIEW DR**
MILPITAS CA 95035
GLASS: **ACCEPTED**
ALUMINIUM: **NOT ACCEPTED**
PLASTIC: **NOT ACCEPTED**
BIMETAL: **NOT ACCEPTED**

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Recycling Centers (SWRCY)

MAP ID# 43

Distance from Property: 0.324 mi. (1,711 ft.) SW
Elevation: 41 ft. (Higher than TP)

SITE INFORMATION

ID #: **PR0448**
NAME: **ECULLET INC**
ADDRESS: **600 HANSEN WY STE 246**
CITY: **PALO ALTO**
STATE: **CA**
ZIP: **94304**
COUNTY: **SANTA CLARA**

SITE DETAILS

OPERATION BEGIN DATE: **03/12/07**
OPERATION END DATE: **NOT REPORTED**
PROGRAM PHONE: **(650) 493-7300X4458**
ORGANIZATION NAME: **ECULLET INC**
ADDRESS: **420 S HILLVIEW DR**
MILPITAS CA 95035
GLASS: **ACCEPTED**
ALUMINIUM: **NOT ACCEPTED**
PLASTIC: **NOT ACCEPTED**
BIMETAL: **NOT ACCEPTED**

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GeoTracker Cleanup Sites (CLEANUPSITES)

MAP ID# 44

Distance from Property: 0.335 mi. (1,769 ft.) SSE
Elevation: 37 ft. (Higher than TP)

FACILITY INFORMATION

GLOBAL ID: **T0608500266**
URL LINK: CLICK HERE
BUSINESS NAME: **JOHN'S AUTOMOTIVE**
ADDRESS: **3508 EL CAMINO REAL**
PALO ALTO, CA 94306
COUNTY: **SANTA CLARA**

FACILITY DETAILS

CASE TYPE: **LUST CLEANUP SITE**
CASE NUMBER: **NOT REPORTED**
STATUS: **COMPLETED - CASE CLOSED 7/23/1997**
POTENTIAL CONTAMINATION:
NOT REPORTED
POTENTIAL MEDIA AFFECTED:
OTHER GROUNDWATER (USES OTHER THAN DRINKING WATER)
DISADVANTAGED COMMUNITY:
NO
SEVERELY DISADVANTAGED COMMUNITY:
NO
SITE HISTORY:
NOT REPORTED

REGULATORY ACTIVITIES

TYPE OF ACTION:	DATE:	ACTION:
OTHER	**01/01/50**	**LEAK REPORTED**
REMEDIATION	**01/01/50**	**EXCAVATION**
ENFORCEMENT	**07/23/1997**	**CLOSURE/NO FURTHER ACTION LETTER**
ENFORCEMENT	**11/19/1996**	**NOTICE OF RESPONSIBILITY - #40042**
OTHER	**01/01/1989**	**LEAK REPORTED**
REMEDIATION	**05/17/1987**	**EXCAVATION**

STATUS HISTORY

STATUS:	DATE:
COMPLETED - CASE CLOSED	**07/23/1997**
OPEN - SITE ASSESSMENT	**01/24/1992**
OPEN - CASE BEGIN DATE	**05/17/1987**
OPEN - SITE ASSESSMENT	**05/17/1987**

CONTACT DETAILS

ORGANIZATION: **SANTA CLARA COUNTY LOP**
ADDRESS: **1555 BERGER DRIVE, SUITE 300**
CITY: **SAN JOSE**
CONTACT NAME: **UST CASE WORKER**
CONTACT TYPE: **LOCAL AGENCY CASEWORKER**
CONTACT PHONE: **4089183400**
EMAIL: **NOT REPORTED**

ORGANIZATION: **SAN FRANCISCO BAY RWQCB (REGION 2)**
ADDRESS: **1515 CLAY ST SUITE 1400**
CITY: **OAKLAND**
CONTACT NAME: **REGIONAL WATER BOARD**
CONTACT TYPE: **REGIONAL BOARD CASEWORKER**
CONTACT PHONE: **NOT REPORTED**
EMAIL: **NOT REPORTED**

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Historical Cortese List (HISTCORTESE)

MAP ID# 44

Distance from Property: 0.335 mi. (1,769 ft.) SSE
Elevation: 37 ft. (Higher than TP)

FACILITY INFORMATION

GEOSEARCH ID: **43-0206COR**
ID#: **43-0206**
NAME: **JOHNS AUTOMOTIVE**
ADDRESS: **3508 EL CAMINO REAL**
PALO ALTO, CA

Back to Report Summary

Leaking Underground Storage Tanks (LUST)

MAP ID# 44

Distance from Property: 0.335 mi. (1,769 ft.) SSE
Elevation: 37 ft. (Higher than TP)

FACILITY INFORMATION

GLOBAL ID: **T0608500266**
URL LINK: CLICK HERE
BUSINESS NAME: **JOHN'S AUTOMOTIVE**
ADDRESS: **3508 EL CAMINO REAL**
PALO ALTO, CA 94306
COUNTY: **SANTA CLARA**

FACILITY DETAILS

CASE TYPE: **LUST CLEANUP SITE**
CASE NUMBER: **NOT REPORTED**
STATUS: **COMPLETED - CASE CLOSED 07/23/1997**
POTENTIAL CONTAMINATION:
NOT REPORTED
POTENTIAL MEDIA AFFECTED:
OTHER GROUNDWATER (USES OTHER THAN DRINKING WATER)
DISADVANTAGED COMMUNITY:
NO
SEVERELY DISADVANTAGED COMMUNITY:
NO
SITE HISTORY:
NOT REPORTED

HISTORICAL FACILITY DETAILS

NO HISTORICAL DETAIL(S) INFORMATION REPORTED FOR THIS FACILITY

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MAP ID# 45

Distance from Property: 0.349 mi. (1,843 ft.) SSE
Elevation: 39 ft. (Higher than TP)

FACILITY INFORMATION

GLOBAL ID: **T0608501292**
URL LINK: CLICK HERE
BUSINESS NAME: **SHELL - 3601 EL CAMINO**
ADDRESS: **3601 EL CAMINO REAL**
PALO ALTO, CA 94306
COUNTY: **SANTA CLARA**

FACILITY DETAILS

CASE TYPE: **LUST CLEANUP SITE**
CASE NUMBER: **19-047**
STATUS: **COMPLETED - CASE CLOSED 7/29/2016**
POTENTIAL CONTAMINATION:
BENZENE, TOLUENE, XYLENE, MTBE / TBA / OTHER FUEL OXYGENATES, GASOLINE
POTENTIAL MEDIA AFFECTED:
OTHER GROUNDWATER (USES OTHER THAN DRINKING WATER), SOIL
DISADVANTAGED COMMUNITY:
NO
SEVERELY DISADVANTAGED COMMUNITY:
NO
SITE HISTORY:
1985 UNDERGROUND STORAGE TANK (UST) REMOVAL AND REPLACEMENT: DURING 1985, FOUR STEEL USTS (TWO 5,000 GALLON AND TWO 8,000 GALLON) WERE REPLACED WITH THREE DOUBLE-WALLED FIBERGLASS USTS. THESE ACTIVITIES ARE DOCUMENTED IN GEOSTRATEGIES INC.ÆS DECEMBER 8, 1995 SITE REMEDIAL INVESTIGATION SUMMARY. NO OTHER REPORTS WERE FOUND DOCUMENTING THESE ACTIVITIES. 1985 SUBSURFACE INVESTIGATION: DURING SEPTEMBER 1985, EMCON ASSOCIATES, INC. (EMCON) ADVANCED THREE EXPLORATORY BORINGS (S-A, S-B, S-1) AT THE SITE. UP TO 3,400 MILLIGRAMS PER KILOGRAM (MG/KG) OF TOTAL PETROLEUM HYDROCARBONS AS GASOLINE (TPHG) WERE DETECTED IN SOIL SAMPLES COLLECTED FROM BORING SB-5. BORING S-1 WAS CONVERTED TO A GROUNDWATER MONITORING WELL. DURING DECEMBER 1985, GETTLER-RYAN INC. INSTALLED THREE MONITORING WELLS (S-2 THROUGH S-4) AT THE SITE. THESE INVESTIGATIONS ARE SUMMARIZED IN EMCONÆS NOVEMBER 5, 1985 LETTER AND EMCONÆS MAY 19, 1986 LETTER. 1986 SUBSURFACE INVESTIGATION: DURING APRIL 1986, EMCON INSTALLED FOUR GROUNDWATER MONITORING WELLS (S-5 THROUGH S-8) AT THE SITE. SOIL SAMPLES WERE ONLY OBTAINED FOR SOIL CLASSIFICATION. THIS INVESTIGATION IS SUMMARIZED IN EMCONÆS MAY 19, 1986 LETTER. 1986 WELL SURVEY: DURING APRIL 1986, EMCON CONDUCTED A WATER WELL SURVEY AND FOUND 20 WELLS LOCATED WITHIN A ONE-HALF MILE RADIUS OF THE SITE. SIX OF THE WELLS WERE LISTED AS WATER SUPPLY WELLS. DETAILS OF THE WELL SURVEY ARE DISCUSSED IN EMCONÆS MAY 19, 1986 LETTER. 1987 SUBSURFACE INVESTIGATION: DURING DECEMBER 1987, PACIFIC ENVIRONMENTAL GROUP, INC. (PACIFIC) INSTALLED THREE GROUNDWATER MONITORING WELLS (S-9 THROUGH S-11) TO ASSESS GASOLINE CONSTITUENT CONCENTRATIONS IN SOIL AND GROUNDWATER OFF SITE. SOIL SAMPLES WERE ONLY OBTAINED FOR SOIL CLASSIFICATION. THE SITE INVESTIGATION IS SUMMARIZED IN PACIFICÆS JANUARY 29, 1988 LETTER. 1988 SUBSURFACE INVESTIGATION: DURING MAY 1988, PACIFIC INSTALLED ONE GROUNDWATER MONITORING WELL (S-12), ONE VADOSE WELL (SP-1), AND ONE RECOVERY WELL PILOT HOLE BORING (RW-1) TO ASSESS GASOLINE CONSTITUENT CONCENTRATIONS IN SOIL AND GROUNDWATER OFF SITE. SOIL SAMPLES WERE OBTAINED FOR SOIL CLASSIFICATION, AND ONE SIEVE ANALYSIS (RW-1) WAS CONDUCTED TO DETERMINE FUTURE RECOVERY WELL DESIGN PARAMETERS. THE SITE INVESTIGATION IS SUMMARIZED IN PACIFICÆS OCTOBER 27, 1988 LETTER. 1988 WELL INSTALLATION: DURING DECEMBER 1988, WOODWARD-CLYDE CONSULTANTS (WCC) INSTALLED ONE GROUNDWATER

RECOVERY WELL (SR-1) WELL AT THE LOCATION OF PILOT BORING RW-1. THE FIELD ACTIVITIES ARE SUMMARIZED IN WCCÆS APRIL 14, 1989 LETTER. 1989-1996 GROUNDWATER REMEDIAL ACTIVITIES: A GROUNDWATER EXTRACTION AND TREATMENT (GWET) SYSTEM OPERATED AT THE SITE FROM 1989 TO 1996. DURING THIS OPERATION OF THE GWET SYSTEM, 69,228,250 GALLONS OF GROUNDWATER WERE EXTRACTED, REMOVING APPROXIMATELY 13.9 GALLONS OF TPHG AND 2.21 GALLONS OF BENZENE. THE REMEDIATION ACTIVITIES ARE SUMMARIZED IN PACIFICÆS APRIL 29, 1996 QUARTERLY REPORT - SECOND QUARTER 1996. 1989 SUBSURFACE INVESTIGATION: DURING DECEMBER 1989, GEOSTRATEGIES, INC. (GSI) INSTALLED THREE OFF-SITE GROUNDWATER MONITORING WELLS (S-14, S-15, AND S-17) AND ONE ON SITE MONITORING WELL (S-16). UP TO 290 MG/KG OF TPHG AND 1.6 MG/KG OF BENZENE WERE DETECTED IN SOIL SAMPLES COLLECTED FROM BORING S-14. THE SITE INVESTIGATION IS SUMMARIZED IN GSIÆS FEBRUARY 26, 1990 WELL INSTALLATION/INTERIM RECOVERY SYSTEM REPORT. 1991 SUBSURFACE INVESTIGATION: DURING JANUARY 1991, GSI INSTALLED THREE GROUNDWATER MONITORING WELLS (S-18 THROUGH S-20) ON-SITE. UP TO 100 MG/KG OF TPHG AND 1.2 MG/KG OF BENZENE WERE DETECTED IN SOIL SAMPLES COLLECTED FROM BORINGS S-19 AND S-18, RESPECTIVELY. THE SITE INVESTIGATION IS SUMMARIZED IN GSIÆS APRIL 5, 1991 WELL INSTALLATION REPORT. 1991 WELL INSTALLATIONS: DURING OCTOBER 1991, GSI INSTALLED FOUR GROUNDWATER MONITORING WELLS (S-21 THROUGH S-24), THREE RECOVERY WELLS (SR-2 THROUGH SR-4), AND ONE VAPOR EXTRACTION WELL (SV-1) ON SITE. UP TO 1,400 MG/KG OF TPHG AND 4.5 MG/KG OF BENZENE WERE DETECTED IN SOIL SAMPLES COLLECTED FROM BORING SR-3. THE SITE INVESTIGATION IS SUMMARIZED IN GSIÆS FEBRUARY 19, 1992 WELL INSTALLATION REPORT. 1992-1996 SOIL VAPOR REMEDIAL ACTIVITIES: A SOIL VAPOR EXTRACTION (SVE) SYSTEM OPERATED AT THE SITE FROM DECEMBER 1992 TO APRIL 1996. DURING THE OPERATION OF THE SVE SYSTEM, 12,386.02 POUNDS (LBS) OF TPHG AND 33.34 LBS OF BENZENE WERE EXTRACTED. THESE ACTIVITIES ARE DOCUMENTED IN TOXICHEM MANAGEMENT SYSTEMS, INC.ÆS (TOXICHEMÆS) APRIL 30, 1997 QUARTERLY REPORT - SECOND QUARTER 1996. 1994 WELL INSTALLATIONS: DURING MARCH AND APRIL 1994, PACIFIC INSTALLED TWO ON-SITE AIR SPARGING WELLS (SP-2 AND SP-3) AND TWO OFF-SITE GROUNDWATER MONITORING WELLS (S-25 AND S-26). UP TO 12 MG/KG OF TPHG AND 0.7 MG/KG OF BENZENE WERE DETECTED IN SOIL SAMPLES COLLECTED FROM BORING SP-3. THE SITE INVESTIGATION IS SUMMARIZED IN PACIFICÆS APRIL 29, 1994 GROUNDWATER MONITORING WELL INSTALLATION REPORT. 1994 AIR SPARGE TEST: DURING AUGUST 1994, PACIFIC PERFORMED A ONE-DAY AIR SPARGE TEST, AND IT WAS DETERMINED THAT AIR SPARGING WAS A VIABLE TECHNOLOGY FOR REMEDIATION. THESE ACTIVITIES ARE DOCUMENTED IN PACIFICÆS JANUARY 20, 1995 QUARTERLY REPORT - FOURTH QUARTER 1994. 1997 BIOREMEDIATION TEST: DURING APRIL 1997, PACIFIC PERFORMED AN INTRINSIC BIOREMEDIATION EVALUATION TEST ON SELECTED WELLS (S-1, S-2, S-24, S-25), AND IT WAS DETERMINED THAT OXYGEN ENHANCEMENT IS BENEFICIAL TO INTRINSIC BIODEGRADATION. THESE ACTIVITIES ARE DOCUMENTED IN PACIFICÆS JULY 31, 1997 QUARTERLY REPORT - SECOND QUARTER 1997. 1998 UST UPGRADES: DURING 1998, THE UST TANK TOPS AND DISPENSERS WERE UPGRADED AND THE PRODUCT PIPING WAS REPLACED. THESE ACTIVITIES ARE DOCUMENTED IN TOXICHEMÆS JANUARY 30, 2001 CORRECTIVE ACTION PLAN. NO OTHER REPORTS WERE FOUND DOCUMENTING THESE ACTIVITIES. 2000 SUBSURFACE INVESTIGATION: DURING SEPTEMBER 2000, TOXICHEM ADVANCED FOUR DIRECT PUSH BORINGS (GP-1 THROUGH GP-4) ON SITE AND THREE DIRECT-PUSH BORINGS (GP-5 THROUGH GP-7) OFF SITE. UP TO 270 MG/KG OF TPHG AND 5.9 MG/KG OF METHYL TERTIARY BUTYL ETHER (MTBE) WERE DETECTED IN SOIL SAMPLES COLLECTED FROM ON-SITE BORING GP-4. UP TO 0.257 MG/KG OF BENZENE WERE DETECTED IN SOIL SAMPLES FROM BORING GP-3. UP TO 0.1 MG/KG OF TPHG WERE DETECTED IN SOIL SAMPLES FROM OFF-SITE BORING GP-5. BENZENE WAS NOT DETECTED IN OFF-SITE BORINGS. THE SITE INVESTIGATION IS SUMMARIZED IN TOXICHEMÆS OCTOBER 13, 2000 SOIL AND GROUNDWATER INVESTIGATION REPORT. 2000 SOIL VAPOR RISK EVALUATION: DURING FEBRUARY 2000, TOXICHEM PERFORMED A SOIL VAPOR RISK EVALUATION AND DETERMINED THAT THE CONCENTRATION OF EXISTING SOIL VAPOR DOES NOT POSE A SIGNIFICANT RISK TO EITHER COMMERCIAL DEVELOPMENT OF THE FORMER COMBES AUTO SITE OR CONTINUED COMMERCIAL USE AT THE SHELL-BRANDED SERVICE STATION, AND IT WAS DETERMINED THERE IS NOT A SIGNIFICANT RISK TO THE RESIDENTS LIVING IMMEDIATELY DOWN GRADIENT OF THE SITES. THESE ACTIVITIES ARE SUMMARIZED IN TOXICHEMÆS MAY 31, 2000 SOIL VAPOR RISK EVALUATION. 2000 CONDUIT STUDY AND WELL SURVEY: DURING FEBRUARY 2000, TOXICHEM CONDUCTED A CONDUIT SURVEY REVIEW OF PREFERENTIAL PATHWAYS FOR CONTAMINANT MIGRATION. TOXICHEM REVIEWED THE WELL SURVEY PERFORMED BY EMCON IN 1986

AND DETERMINED THAT TWO WELLS WERE THE ONLY POTENTIALLY DOWN-GRADIENT WATER-SUPPLY WELLS WITHIN A HALF-MILE RADIUS. THE FERNANDO WELL IS COMPLETED TO A DEPTH OF 1,020 FEET BELOW GRADE (FBG) AND HAS A SANITARY SEAL AT 91 FBG. THE WELL IS CURRENTLY INACTIVE, BUT MAY BE INCLUDED IN AN EMERGENCY WATER SUPPLY WELL REHABILITATION PROJECT. WELL 29 IS AN INACTIVE DOMESTIC WELL LOCATED APPROXIMATELY ONE HALF-MILE NORTHEAST OF THE SITE. TOXICHEM PERFORMED UTILITY SURVEYS AND DETERMINED THAT IT IS UNLIKELY THAT ANY PRIVATE OR CITY OF PALO ALTO UTILITIES ARE ACTING AS PREFERENTIAL MIGRATION PATHWAYS. 2000-2004 GROUNDWATER REMEDIAL ACTIVITIES: PERIODIC GROUNDWATER EXTRACTION OPERATED FROM JANUARY 2000 THROUGH OCTOBER 2002, AND A TOTAL OF 29,243 GALLONS OF GROUNDWATER WAS EXTRACTED FROM WELL S-2 BY VACUUM TRUCK, RESULTING IN THE REMOVAL OF APPROXIMATELY 1.25 POUNDS OF TPHG, 0.03 POUNDS OF BENZENE, AND 5.2 POUNDS OF MTBE. IN MARCH 2003, THE GWET SYSTEM WAS RE-INSTALLED. THIS GWET SYSTEM CONSISTED OF ELECTRIC SUBMERSIBLE PUMPS IN WELLS SR-1 AND SR-2. FROM MARCH 2003 THROUGH NOVEMBER 2004, A TOTAL OF 18,433,100 GALLONS OF GROUNDWATER WAS EXTRACTED RESULTING IN THE REMOVAL OF APPROXIMATELY 1.1 POUNDS OF TPHG, 0.6 POUNDS OF BENZENE, AND 0.4 POUNDS OF MTBE. THESE REMEDIAL ACTIVITIES ARE DOCUMENTED IN TOXICHEMÆS JULY 31, 2002 QUARTERLY MONITORING REPORT - SECOND QUARTER 2002 AND TOXICHEMÆS OCTOBER 26, 2005 QUARTERLY MONITORING REPORT - THIRD QUARTER 2005. 2001 SUBSURFACE INVESTIGATION: DURING DECEMBER 2001, TOXICHEM ADVANCED SEVEN DIRECT PUSH BORINGS (GP-8 THROUGH GP-14) OFF SITE. UP TO 0.64 MICROGRAMS PER LITER (¦G/L) OF BENZENE AND 110 ¦G/L OF MTBE WERE DETECTED IN GRAB GROUNDWATER SAMPLES COLLECTED FROM OFF-SITE BORINGS GP-8 AND GP-12, RESPECTIVELY. THE SITE INVESTIGATION IS SUMMARIZED IN TOXICHEMÆS JANUARY 25, 2002 ADDITIONAL SITE ASSESSMENT AND FEASIBILITY TESTING REPORT. 2001 CORRECTIVE ACTION PLAN (CAP): TOXICHEM SUBMITTED A CAP SUMMARIZING SITE CONDITIONS, REMEDIAL ACTION OBJECTIVES, AND REMEDIAL ACTION PLANS. THIS SUMMARY IS PRESENTED IN TOXICHEMÆS JANUARY 30, 2001 CORRECTIVE ACTION PLAN. 2002 SUBSURFACE INVESTIGATION: DURING APRIL 2002, TOXICHEM ADVANCED ONE PILOT BORING (FB-1) TO APPROXIMATELY 80 FBG AND INSTALLED TWO MONITORING WELLS (S-27 AND S 28). SOIL SAMPLES WERE OBTAINED FOR SOIL CLASSIFICATION. TPHG AND BENZENE WERE NOT DETECTED FROM ANY OF THE GRAB GROUNDWATER SAMPLES. THE SITE INVESTIGATION IS SUMMARIZED IN TOXICHEMÆS JULY 15, 2002 SOIL AND GROUNDWATER INVESTIGATION REPORT. 2006 UST REMOVAL, REPLACEMENT: DURING JUNE 2006, CAMBRIA ENVIRONMENTAL TECHNOLOGY, INC. (CAMBRIA) OVERSAW THE REMOVAL OF ONE 550-GALLON, DUAL WALLED FIBERGLASS WASTE OIL UST AND COLLECTED ONE SOIL SAMPLE (WO-1-8). THESE ACTIVITIES ARE DOCUMENTED IN CAMBRIAÆS AUGUST 15, 2006 UNDERGROUND STORAGE TANK REMOVAL REPORT. 2013 SITE CONCEPTUAL MODEL (SCM): DURING APRIL 2013, CONESTOGA ROVERS & ASSOCIATES (CRA) SUBMITTED A SCM TO OBTAIN AND REVIEW THE HISTORICAL SITE DATA AND IDENTIFY ANY POTENTIAL DATA GAPS. THIS IS DOCUMENTED IN CRAÆS APRIL 12, 2013 SITE CONCEPTUAL MODEL. GROUNDWATER MONITORING: GROUNDWATER MONITORING WAS CONDUCTED AT THE SITE FROM MAY 1988 TO DECEMBER 2014.

REGULATORY ACTIVITIES

TYPE OF ACTION:	DATE:	ACTION:
OTHER	01/01/50	LEAK DISCOVERY
OTHER	01/01/50	LEAK REPORTED
REMEDIATION	01/01/50	PUMP & TREAT (P&T) GROUNDWATER
REMEDIATION	01/01/50	SOIL VAPOR EXTRACTION (SVE)
ENFORCEMENT	07/29/2016	CLOSURE/NO FURTHER ACTION LETTER
RESPONSE	07/29/2016	WELL DESTRUCTION REPORT
RESPONSE	04/29/2016	WELL DESTRUCTION REPORT
ENFORCEMENT	04/19/2016	EMAIL CORRESPONDENCE
RESPONSE	01/29/2016	WELL DESTRUCTION REPORT
ENFORCEMENT	01/15/2016	EMAIL CORRESPONDENCE
RESPONSE	10/30/2015	WELL DESTRUCTION REPORT
ENFORCEMENT	10/20/2015	STAFF LETTER
ENFORCEMENT	06/01/2015	STAFF LETTER

TYPE OF ACTION:	DATE:	ACTION:
ENFORCEMENT	03/27/2015	NOTIFICATION - PUBLIC NOTICE OF CASE CLOSURE
ENFORCEMENT	01/12/2015	STAFF LETTER
RESPONSE	12/05/2014	RISK ASSESSMENT REPORT
ENFORCEMENT	08/12/2014	STAFF LETTER
RESPONSE	08/01/2014	OTHER REPORT / DOCUMENT
ENFORCEMENT	06/11/2014	STAFF LETTER
RESPONSE	04/12/2013	CONCEPTUAL SITE MODEL
RESPONSE	12/05/2012	OTHER REPORT / DOCUMENT
ENFORCEMENT	12/04/2012	STAFF LETTER
ENFORCEMENT	12/03/2012	NOTICE OF RESPONSIBILITY
RESPONSE	11/30/2012	SOIL VAPOR INTRUSION INVESTIGATION WORKPLAN
ENFORCEMENT	09/24/2012	STAFF LETTER
ENFORCEMENT	07/27/2012	STAFF LETTER
RESPONSE	01/31/2010	MONITORING REPORT - SEMI-ANNUALLY
RESPONSE	01/14/2010	MONITORING REPORT - QUARTERLY
RESPONSE	07/31/2009	MONITORING REPORT - SEMI-ANNUALLY
ENFORCEMENT	06/26/2009	STAFF LETTER - #9002626
RESPONSE	03/11/2009	CORRESPONDENCE
ENFORCEMENT	02/25/2009	STAFF LETTER - #90025220
RESPONSE	08/15/2006	TANK REMOVAL REPORT / UST SAMPLING REPORT
RESPONSE	11/09/2005	MONITORING REPORT - QUARTERLY
ENFORCEMENT	08/31/2005	STAFF LETTER - #28779
ENFORCEMENT	06/03/2005	OTHER REPORT
RESPONSE	06/03/2005	OTHER REPORT / DOCUMENT
RESPONSE	06/03/2005	UNAUTHORIZED RELEASE FORM
RESPONSE	05/02/2005	MONITORING REPORT - QUARTERLY
RESPONSE	03/07/2001	OTHER REPORT / DOCUMENT
RESPONSE	01/30/2001	CAP/RAP - OTHER REPORT
RESPONSE	06/08/1998	MONITORING REPORT - QUARTERLY
RESPONSE	05/01/1997	MONITORING REPORT - QUARTERLY
ENFORCEMENT	03/30/1997	STAFF LETTER - #28779
RESPONSE	12/08/1995	RISK ASSESSMENT REPORT
RESPONSE	01/08/1993	OTHER REPORT / DOCUMENT
REMEDIATION	12/01/1992	SOIL VAPOR EXTRACTION (SVE)
RESPONSE	01/24/1992	NPDES / WDR REPORTS
RESPONSE	10/31/1991	OTHER WORKPLAN
RESPONSE	07/18/1991	CAP/RAP - FEASIBILITY STUDY REPORT
RESPONSE	04/23/1991	OTHER REPORT / DOCUMENT
ENFORCEMENT	03/25/1991	NOTICE OF RESPONSIBILITY - #40040
RESPONSE	11/21/1990	REMEDIAL PROGRESS REPORT
REMEDIATION	09/01/1989	PUMP & TREAT (P&T) GROUNDWATER
RESPONSE	09/14/1988	MONITORING REPORT - QUARTERLY
RESPONSE	09/14/1988	OTHER REPORT / DOCUMENT
RESPONSE	05/19/1986	WELL INSTALLATION REPORT

TYPE OF ACTION:	DATE:	ACTION:
OTHER	**11/05/1985**	**LEAK DISCOVERY**
OTHER	**11/05/1985**	**LEAK REPORTED**
RESPONSE	**11/05/1985**	**SOIL AND WATER INVESTIGATION REPORT**
RESPONSE	**01/01/1985**	**CORRESPONDENCE**

STATUS HISTORY

STATUS:	DATE:
COMPLETED - CASE CLOSED	**07/29/2016**
OPEN - ELIGIBLE FOR CLOSURE	**01/09/2015**
OPEN - VERIFICATION MONITORING	**11/22/2004**
OPEN - SITE ASSESSMENT	**12/23/1985**
OPEN - CASE BEGIN DATE	**11/05/1985**
OPEN - SITE ASSESSMENT	**11/05/1985**

CONTACT DETAILS

ORGANIZATION: **SANTA CLARA COUNTY LOP**
ADDRESS: **1555 BERGER DRIVE, SUITE 300**
CITY: **SAN JOSE**
CONTACT NAME: **AARON COSTA**
CONTACT TYPE: **LOCAL AGENCY CASEWORKER**
CONTACT PHONE: **4089181954**
EMAIL: **AARON.COSTA@CEP.SCCGOV.ORG**
ORGANIZATION: **SAN FRANCISCO BAY RWQCB (REGION 2)**
ADDRESS: **1515 CLAY ST SUITE 1400**
CITY: **OAKLAND**
CONTACT NAME: **REGIONAL WATER BOARD**
CONTACT TYPE: **REGIONAL BOARD CASEWORKER**
CONTACT PHONE: **NOT REPORTED**
EMAIL: **NOT REPORTED**

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Historical Cortese List (HISTCORTESE)

MAP ID# 45

Distance from Property: 0.349 mi. (1,843 ft.) SSE
Elevation: 39 ft. (Higher than TP)

FACILITY INFORMATION

GEOSEARCH ID: **43-1314COR**
ID#: **43-1314**
NAME: **SHELL**
ADDRESS: **3601 EL CAMINO REAL**
PALO ALTO, CA 94306

Back to Report Summary

Leaking Underground Storage Tanks (LUST)

MAP ID# 45

Distance from Property: 0.349 mi. (1,843 ft.) SSE
Elevation: 39 ft. (Higher than TP)

FACILITY INFORMATION

GLOBAL ID: **T0608501292**
URL LINK: CLICK HERE
BUSINESS NAME: **SHELL - 3601 EL CAMINO**
ADDRESS: **3601 EL CAMINO REAL**
PALO ALTO, CA 94306
COUNTY: **SANTA CLARA**

FACILITY DETAILS

CASE TYPE: **LUST CLEANUP SITE**
CASE NUMBER: **19-047**
STATUS: **COMPLETED - CASE CLOSED 07/29/2016**
POTENTIAL CONTAMINATION:
BENZENE, TOLUENE, XYLENE, MTBE / TBA / OTHER FUEL OXYGENATES, GASOLINE
POTENTIAL MEDIA AFFECTED:
OTHER GROUNDWATER (USES OTHER THAN DRINKING WATER), SOIL
DISADVANTAGED COMMUNITY:
NO
SEVERELY DISADVANTAGED COMMUNITY:
NO
SITE HISTORY:
1985 UNDERGROUND STORAGE TANK (UST) REMOVAL AND REPLACEMENT: DURING 1985, FOUR STEEL USTS (TWO 5,000 GALLON AND TWO 8,000 GALLON) WERE REPLACED WITH THREE DOUBLE-WALLED FIBERGLASS USTS. THESE ACTIVITIES ARE DOCUMENTED IN GEOSTRATEGIES INC.ÆS DECEMBER 8, 1995 SITE REMEDIAL INVESTIGATION SUMMARY. NO OTHER REPORTS WERE FOUND DOCUMENTING THESE ACTIVITIES. 1985 SUBSURFACE INVESTIGATION: DURING SEPTEMBER 1985, EMCON ASSOCIATES, INC. (EMCON) ADVANCED THREE EXPLORATORY BORINGS (S-A, S-B, S-1) AT THE SITE. UP TO 3,400 MILLIGRAMS PER KILOGRAM (MG/KG) OF TOTAL PETROLEUM HYDROCARBONS AS GASOLINE (TPHG) WERE DETECTED IN SOIL SAMPLES COLLECTED FROM BORING SB-5. BORING S-1 WAS CONVERTED TO A GROUNDWATER MONITORING WELL. DURING DECEMBER 1985, GETTLER-RYAN INC. INSTALLED THREE MONITORING WELLS (S-2 THROUGH S-4) AT THE SITE. THESE INVESTIGATIONS ARE SUMMARIZED IN EMCONÆS NOVEMBER 5, 1985 LETTER AND EMCONÆS MAY 19, 1986 LETTER. 1986 SUBSURFACE INVESTIGATION: DURING APRIL 1986, EMCON INSTALLED FOUR GROUNDWATER MONITORING WELLS (S-5 THROUGH S-8) AT THE SITE. SOIL SAMPLES WERE ONLY OBTAINED FOR SOIL CLASSIFICATION. THIS INVESTIGATION IS SUMMARIZED IN EMCONÆS MAY 19, 1986 LETTER. 1986 WELL SURVEY: DURING APRIL 1986, EMCON CONDUCTED A WATER WELL SURVEY AND FOUND 20 WELLS LOCATED WITHIN A ONE-HALF MILE RADIUS OF THE SITE. SIX OF THE WELLS WERE LISTED AS WATER SUPPLY WELLS. DETAILS OF THE WELL SURVEY ARE DISCUSSED IN EMCONÆS MAY 19, 1986 LETTER. 1987 SUBSURFACE INVESTIGATION: DURING DECEMBER 1987, PACIFIC ENVIRONMENTAL GROUP, INC. (PACIFIC) INSTALLED THREE GROUNDWATER MONITORING WELLS (S-9 THROUGH S-11) TO ASSESS GASOLINE CONSTITUENT CONCENTRATIONS IN SOIL AND GROUNDWATER OFF SITE. SOIL SAMPLES WERE ONLY OBTAINED FOR SOIL CLASSIFICATION. THE SITE INVESTIGATION IS SUMMARIZED IN PACIFICÆS JANUARY 29, 1988 LETTER. 1988 SUBSURFACE INVESTIGATION: DURING MAY 1988, PACIFIC INSTALLED ONE GROUNDWATER MONITORING WELL (S-12), ONE VADOSE WELL (SP-1), AND ONE RECOVERY WELL PILOT HOLE BORING (RW-1) TO ASSESS GASOLINE CONSTITUENT CONCENTRATIONS IN SOIL AND GROUNDWATER OFF SITE. SOIL SAMPLES WERE OBTAINED FOR SOIL CLASSIFICATION, AND ONE SIEVE ANALYSIS (RW-1) WAS CONDUCTED TO DETERMINE FUTURE RECOVERY WELL DESIGN PARAMETERS. THE SITE INVESTIGATION IS SUMMARIZED IN PACIFICÆS OCTOBER 27, 1988 LETTER. 1988 WELL INSTALLATION: DURING DECEMBER 1988, WOODWARD-CLYDE CONSULTANTS (WCC) INSTALLED ONE GROUNDWATER

RECOVERY WELL (SR-1) WELL AT THE LOCATION OF PILOT BORING RW-1. THE FIELD ACTIVITIES ARE SUMMARIZED IN WCCÆS APRIL 14, 1989 LETTER. 1989-1996 GROUNDWATER REMEDIAL ACTIVITIES: A GROUNDWATER EXTRACTION AND TREATMENT (GWET) SYSTEM OPERATED AT THE SITE FROM 1989 TO 1996. DURING THIS OPERATION OF THE GWET SYSTEM, 69,228,250 GALLONS OF GROUNDWATER WERE EXTRACTED, REMOVING APPROXIMATELY 13.9 GALLONS OF TPHG AND 2.21 GALLONS OF BENZENE. THE REMEDIATION ACTIVITIES ARE SUMMARIZED IN PACIFICÆS APRIL 29, 1996 QUARTERLY REPORT - SECOND QUARTER 1996. 1989 SUBSURFACE INVESTIGATION: DURING DECEMBER 1989, GEOSTRATEGIES, INC. (GSI) INSTALLED THREE OFF-SITE GROUNDWATER MONITORING WELLS (S-14, S-15, AND S-17) AND ONE ON SITE MONITORING WELL (S-16). UP TO 290 MG/KG OF TPHG AND 1.6 MG/KG OF BENZENE WERE DETECTED IN SOIL SAMPLES COLLECTED FROM BORING S-14. THE SITE INVESTIGATION IS SUMMARIZED IN GSIÆS FEBRUARY 26, 1990 WELL INSTALLATION/INTERIM RECOVERY SYSTEM REPORT. 1991 SUBSURFACE INVESTIGATION: DURING JANUARY 1991, GSI INSTALLED THREE GROUNDWATER MONITORING WELLS (S-18 THROUGH S-20) ON-SITE. UP TO 100 MG/KG OF TPHG AND 1.2 MG/KG OF BENZENE WERE DETECTED IN SOIL SAMPLES COLLECTED FROM BORINGS S-19 AND S-18, RESPECTIVELY. THE SITE INVESTIGATION IS SUMMARIZED IN GSIÆS APRIL 5, 1991 WELL INSTALLATION REPORT. 1991 WELL INSTALLATIONS: DURING OCTOBER 1991, GSI INSTALLED FOUR GROUNDWATER MONITORING WELLS (S-21 THROUGH S-24), THREE RECOVERY WELLS (SR-2 THROUGH SR-4), AND ONE VAPOR EXTRACTION WELL (SV-1) ON SITE. UP TO 1,400 MG/KG OF TPHG AND 4.5 MG/KG OF BENZENE WERE DETECTED IN SOIL SAMPLES COLLECTED FROM BORING SR-3. THE SITE INVESTIGATION IS SUMMARIZED IN GSIÆS FEBRUARY 19, 1992 WELL INSTALLATION REPORT. 1992-1996 SOIL VAPOR REMEDIAL ACTIVITIES: A SOIL VAPOR EXTRACTION (SVE) SYSTEM OPERATED AT THE SITE FROM DECEMBER 1992 TO APRIL 1996. DURING THE OPERATION OF THE SVE SYSTEM, 12,386.02 POUNDS (LBS) OF TPHG AND 33.34 LBS OF BENZENE WERE EXTRACTED. THESE ACTIVITIES ARE DOCUMENTED IN TOXICHEM MANAGEMENT SYSTEMS, INC.ÆS (TOXICHEMÆS) APRIL 30, 1997 QUARTERLY REPORT - SECOND QUARTER 1996. 1994 WELL INSTALLATIONS: DURING MARCH AND APRIL 1994, PACIFIC INSTALLED TWO ON-SITE AIR SPARGING WELLS (SP-2 AND SP-3) AND TWO OFF-SITE GROUNDWATER MONITORING WELLS (S-25 AND S-26). UP TO 12 MG/KG OF TPHG AND 0.7 MG/KG OF BENZENE WERE DETECTED IN SOIL SAMPLES COLLECTED FROM BORING SP-3. THE SITE INVESTIGATION IS SUMMARIZED IN PACIFICÆS APRIL 29, 1994 GROUNDWATER MONITORING WELL INSTALLATION REPORT. 1994 AIR SPARGE TEST: DURING AUGUST 1994, PACIFIC PERFORMED A ONE-DAY AIR SPARGE TEST, AND IT WAS DETERMINED THAT AIR SPARGING WAS A VIABLE TECHNOLOGY FOR REMEDIATION. THESE ACTIVITIES ARE DOCUMENTED IN PACIFICÆS JANUARY 20, 1995 QUARTERLY REPORT - FOURTH QUARTER 1994. 1997 BIOREMEDIATION TEST: DURING APRIL 1997, PACIFIC PERFORMED AN INTRINSIC BIOREMEDIATION EVALUATION TEST ON SELECTED WELLS (S-1, S-2, S-24, S-25), AND IT WAS DETERMINED THAT OXYGEN ENHANCEMENT IS BENEFICIAL TO INTRINSIC BIODEGRADATION. THESE ACTIVITIES ARE DOCUMENTED IN PACIFICÆS JULY 31, 1997 QUARTERLY REPORT - SECOND QUARTER 1997. 1998 UST UPGRADES: DURING 1998, THE UST TANK TOPS AND DISPENSERS WERE UPGRADED AND THE PRODUCT PIPING WAS REPLACED. THESE ACTIVITIES ARE DOCUMENTED IN TOXICHEMÆS JANUARY 30, 2001 CORRECTIVE ACTION PLAN. NO OTHER REPORTS WERE FOUND DOCUMENTING THESE ACTIVITIES. 2000 SUBSURFACE INVESTIGATION: DURING SEPTEMBER 2000, TOXICHEM ADVANCED FOUR DIRECT PUSH BORINGS (GP-1 THROUGH GP-4) ON SITE AND THREE DIRECT-PUSH BORINGS (GP-5 THROUGH GP-7) OFF SITE. UP TO 270 MG/KG OF TPHG AND 5.9 MG/KG OF METHYL TERTIARY BUTYL ETHER (MTBE) WERE DETECTED IN SOIL SAMPLES COLLECTED FROM ON-SITE BORING GP-4. UP TO 0.257 MG/KG OF BENZENE WERE DETECTED IN SOIL SAMPLES FROM BORING GP-3. UP TO 0.1 MG/KG OF TPHG WERE DETECTED IN SOIL SAMPLES FROM OFF-SITE BORING GP-5. BENZENE WAS NOT DETECTED IN OFF-SITE BORINGS. THE SITE INVESTIGATION IS SUMMARIZED IN TOXICHEMÆS OCTOBER 13, 2000 SOIL AND GROUNDWATER INVESTIGATION REPORT. 2000 SOIL VAPOR RISK EVALUATION: DURING FEBRUARY 2000, TOXICHEM PERFORMED A SOIL VAPOR RISK EVALUATION AND DETERMINED THAT THE CONCENTRATION OF EXISTING SOIL VAPOR DOES NOT POSE A SIGNIFICANT RISK TO EITHER COMMERCIAL DEVELOPMENT OF THE FORMER COMBES AUTO SITE OR CONTINUED COMMERCIAL USE AT THE SHELL-BRANDED SERVICE STATION, AND IT WAS DETERMINED THERE IS NOT A SIGNIFICANT RISK TO THE RESIDENTS LIVING IMMEDIATELY DOWN GRADIENT OF THE SITES. THESE ACTIVITIES ARE SUMMARIZED IN TOXICHEMÆS MAY 31, 2000 SOIL VAPOR RISK EVALUATION. 2000 CONDUIT STUDY AND WELL SURVEY: DURING FEBRUARY 2000, TOXICHEM CONDUCTED A CONDUIT SURVEY REVIEW OF PREFERENTIAL PATHWAYS FOR CONTAMINANT MIGRATION. TOXICHEM REVIEWED THE WELL SURVEY PERFORMED BY EMCON IN 1986

AND DETERMINED THAT TWO WELLS WERE THE ONLY POTENTIALLY DOWN-GRADIENT WATER-SUPPLY WELLS WITHIN A HALF-MILE RADIUS. THE FERNANDO WELL IS COMPLETED TO A DEPTH OF 1,020 FEET BELOW GRADE (FBG) AND HAS A SANITARY SEAL AT 91 FBG. THE WELL IS CURRENTLY INACTIVE, BUT MAY BE INCLUDED IN AN EMERGENCY WATER SUPPLY WELL REHABILITATION PROJECT. WELL 29 IS AN INACTIVE DOMESTIC WELL LOCATED APPROXIMATELY ONE HALF-MILE NORTHEAST OF THE SITE. TOXICHEM PERFORMED UTILITY SURVEYS AND DETERMINED THAT IT IS UNLIKELY THAT ANY PRIVATE OR CITY OF PALO ALTO UTILITIES ARE ACTING AS PREFERENTIAL MIGRATION PATHWAYS. 2000-2004 GROUNDWATER REMEDIAL ACTIVITIES: PERIODIC GROUNDWATER EXTRACTION OPERATED FROM JANUARY 2000 THROUGH OCTOBER 2002, AND A TOTAL OF 29,243 GALLONS OF GROUNDWATER WAS EXTRACTED FROM WELL S-2 BY VACUUM TRUCK, RESULTING IN THE REMOVAL OF APPROXIMATELY 1.25 POUNDS OF TPHG, 0.03 POUNDS OF BENZENE, AND 5.2 POUNDS OF MTBE. IN MARCH 2003, THE GWET SYSTEM WAS RE-INSTALLED. THIS GWET SYSTEM CONSISTED OF ELECTRIC SUBMERSIBLE PUMPS IN WELLS SR-1 AND SR-2. FROM MARCH 2003 THROUGH NOVEMBER 2004, A TOTAL OF 18,433,100 GALLONS OF GROUNDWATER WAS EXTRACTED RESULTING IN THE REMOVAL OF APPROXIMATELY 1.1 POUNDS OF TPHG, 0.6 POUNDS OF BENZENE, AND 0.4 POUNDS OF MTBE. THESE REMEDIAL ACTIVITIES ARE DOCUMENTED IN TOXICHEMÆS JULY 31, 2002 QUARTERLY MONITORING REPORT - SECOND QUARTER 2002 AND TOXICHEMÆS OCTOBER 26, 2005 QUARTERLY MONITORING REPORT - THIRD QUARTER 2005. 2001 SUBSURFACE INVESTIGATION: DURING DECEMBER 2001, TOXICHEM ADVANCED SEVEN DIRECT PUSH BORINGS (GP-8 THROUGH GP-14) OFF SITE. UP TO 0.64 MICROGRAMS PER LITER (¦G/L) OF BENZENE AND 110 ¦G/L OF MTBE WERE DETECTED IN GRAB GROUNDWATER SAMPLES COLLECTED FROM OFF-SITE BORINGS GP-8 AND GP-12, RESPECTIVELY. THE SITE INVESTIGATION IS SUMMARIZED IN TOXICHEMÆS JANUARY 25, 2002 ADDITIONAL SITE ASSESSMENT AND FEASIBILITY TESTING REPORT. 2001 CORRECTIVE ACTION PLAN (CAP): TOXICHEM SUBMITTED A CAP SUMMARIZING SITE CONDITIONS, REMEDIAL ACTION OBJECTIVES, AND REMEDIAL ACTION PLANS. THIS SUMMARY IS PRESENTED IN TOXICHEMÆS JANUARY 30, 2001 CORRECTIVE ACTION PLAN. 2002 SUBSURFACE INVESTIGATION: DURING APRIL 2002, TOXICHEM ADVANCED ONE PILOT BORING (FB-1) TO APPROXIMATELY 80 FBG AND INSTALLED TWO MONITORING WELLS (S-27 AND S 28). SOIL SAMPLES WERE OBTAINED FOR SOIL CLASSIFICATION. TPHG AND BENZENE WERE NOT DETECTED FROM ANY OF THE GRAB GROUNDWATER SAMPLES. THE SITE INVESTIGATION IS SUMMARIZED IN TOXICHEMÆS JULY 15, 2002 SOIL AND GROUNDWATER INVESTIGATION REPORT. 2006 UST REMOVAL, REPLACEMENT: DURING JUNE 2006, CAMBRIA ENVIRONMENTAL TECHNOLOGY, INC. (CAMBRIA) OVERSAW THE REMOVAL OF ONE 550-GALLON, DUAL WALLED FIBERGLASS WASTE OIL UST AND COLLECTED ONE SOIL SAMPLE (WO-1-8). THESE ACTIVITIES ARE DOCUMENTED IN CAMBRIAÆS AUGUST 15, 2006 UNDERGROUND STORAGE TANK REMOVAL REPORT. 2013 SITE CONCEPTUAL MODEL (SCM): DURING APRIL 2013, CONESTOGA ROVERS & ASSOCIATES (CRA) SUBMITTED A SCM TO OBTAIN AND REVIEW THE HISTORICAL SITE DATA AND IDENTIFY ANY POTENTIAL DATA GAPS. THIS IS DOCUMENTED IN CRAÆS APRIL 12, 2013 SITE CONCEPTUAL MODEL. GROUNDWATER MONITORING: GROUNDWATER MONITORING WAS CONDUCTED AT THE SITE FROM MAY 1988 TO DECEMBER 2014.

HISTORICAL FACILITY DETAILS

NO HISTORICAL DETAIL(S) INFORMATION REPORTED FOR THIS FACILITY

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MAP ID# 46

Distance from Property: 0.371 mi. (1,959 ft.) W
Elevation: 39 ft. (Higher than TP)

FACILITY INFORMATION

GLOBAL ID: **T10000012297**
SITE NAME: **2515 & 2585 EL CAMINO REAL**
ADDRESS: **2515 & 2585 EL CAMINO REAL**
PALO ALTO, CA 94306
COUNTY: **SANTA CLARA**

FACILITY DETAILS

PROJECT TYPE: **CLEANUP PROGRAM SITE**
STATUS: **OPEN - SITE ASSESSMENT**
STATUS DATE: **1/8/2020**
LEAD AGENCY:
SAN FRANCISCO BAY RWQCB (REGION 2)
LAST CORRESPONDENCE DATE:
6/30/2020
RELEASE TYPE:
SURFACE DISCHARGE
CONTAMINANT(S) OF CONCERN:
TRICHLOROETHYLENE (TCE), LEAD, DIESEL, GASOLINE
MEDIA OF CONCERN:
NOT REPORTED
PAST USE(S) THAT CAUSED CONTAMINATION:
FUEL - VEHICLE STORAGE/ REFUELING, MACHINE SHOP, RETAIL - SERVICE STATION
HUMAN HEALTH EXPOSURE CONTROLLED:
INSUFFICIENT DATA
HUMAN HEALTH EXPOSURE CONTROLLED DATE:
11/6/2018
GROUNDWATER MIGRATION CONTROLLED:
UNDETERMINED
GROUNDWATER MIGRATION CONTROLLED DATE:
11/6/2018
PRIMARY CASEWORKER NAME:
MICHAEL ROCHETTE
PRIMARY CASEWORKER ORGANIZATION NAME:
SAN FRANCISCO BAY RWQCB (REGION 2)
PRIMARY CASEWORKER PHONE NUMBER:
510-622-2411
PRIMARY CASEWORKER ADDRESS:
1515 CLAY STREET, SUITE 1400, OAKLAND, CA
PRIMARY CASEWORKER EMAIL:
MICHAEL.ROCHETTE@WATERBOARDS.CA.GOV

Back to Report Summary

MAP ID# 46

Distance from Property: 0.371 mi. (1,959 ft.) W
Elevation: 39 ft. (Higher than TP)

FACILITY INFORMATION

GLOBAL ID: **T10000012297**
URL LINK: CLICK HERE
BUSINESS NAME: **2515 & 2585 EL CAMINO REAL**
ADDRESS: **2515 & 2585 EL CAMINO REAL**
PALO ALTO, CA 94306
COUNTY: **SANTA CLARA**

FACILITY DETAILS

CASE TYPE: **CLEANUP PROGRAM SITE**
CASE NUMBER: **43S1226**
STATUS: **OPEN - SITE ASSESSMENT 1/8/2020**
POTENTIAL CONTAMINATION:
TRICHLOROETHYLENE (TCE), LEAD, DIESEL, GASOLINE
POTENTIAL MEDIA AFFECTED:
NOT REPORTED
DISADVANTAGED COMMUNITY:
NO
SEVERELY DISADVANTAGED COMMUNITY:
NO
SITE HISTORY:
JUNE 11, 2019 - BACKGROUND SITE INVESTIGATIONS HAVE FOUND VARIOUS ENVIRONMENTAL CONCERNS ASSOCIATED WITH ONSITE AND OFFSITE SOURCES. MOST SIGNIFICANTLY ARE THE VOLATILE ORGANIC COMPOUNDS (VOCS) ASSOCIATED WITH A REGIONAL GROUNDWATER AND SOIL GAS PLUME OF VOCS, KNOWN AS THE CALIFORNIA-OLIVE-EMERSON PLUME. OF THE VOCS, TRICHLOROETHENE (TCE) CONCENTRATIONS ARE THE HIGHEST. THE MAXIMUM DETECTED CONCENTRATION OF TCE IN GROUNDWATER WAS 71 MICROGRAMS PER LITER (¦G/L), WHICH EXCEEDS OUR COMMERCIAL ENVIRONMENTAL SCREENING LEVEL (ESL) OF 7.5 ¦G/L BY APPROXIMATELY 10 TIMES. THE MAXIMUM TCE CONCENTRATION IN SOIL GAS WAS 19,000 MICROGRAMS PER CUBIC METER (¦G/M3), WHICH EXCEEDS OUR COMMERCIAL ESL OF 100 ¦G/M3 BY 190 TIMES.THE PROPOSED REDEVELOPMENT INCLUDES A SUBTERRANEAN PARKING GARAGE, COMMERCIAL SPACE ON THE GROUND LEVEL FLOOR, MIXED COMMERCIAL AND RESIDENTIAL SPACE ON THE SECOND FLOOR, AND RESIDENTIAL SPACE ON THE THIRD FLOOR. THE SUBTERRANEAN PARKING STRUCTURE WILL EXTEND APPROXIMATELY 14.5 FEET BELOW GROUND SURFACE (BGS). THE PROPOSED REDEVELOPMENT INCLUDES A SUBTERRANEAN PARKING GARAGE, COMMERCIAL SPACE ON THE GROUND LEVEL FLOOR, MIXED COMMERCIAL AND RESIDENTIAL SPACE ON THE SECOND FLOOR, AND RESIDENTIAL SPACE ON THE THIRD FLOOR. THE SUBTERRANEAN PARKING STRUCTURE WILL EXTEND APPROXIMATELY 14.5 FEET BELOW GROUND SURFACE (BGS). GROUNDWATER DATA COLLECTED FROM WELL F41A1 AT 2577 EL CAMINO REAL, APPROXIMATELY 650 FEET TO THE SOUTHWEST, SHOW GROUNDWATER SEASONALLY VARYING FROM APPROXIMATELY 17 TO 20 FEET BGS.

REGULATORY ACTIVITIES

TYPE OF ACTION:	DATE:	ACTION:
ENFORCEMENT	**06/30/2020**	**ANNUAL ESTIMATION LETTER**
ENFORCEMENT	**06/25/2020**	**STAFF LETTER**
ENFORCEMENT	**11/26/2019**	**MEETING**
ENFORCEMENT	**10/30/2019**	**EMAIL CORRESPONDENCE**
ENFORCEMENT	**07/25/2019**	**ANNUAL ESTIMATION LETTER**
ENFORCEMENT	**06/17/2019**	**13267 REQUIREMENT**

TYPE OF ACTION:	DATE:	ACTION:
ENFORCEMENT	**03/28/2019**	**STAFF LETTER**
ENFORCEMENT	**02/26/2019**	**STAFF LETTER**
ENFORCEMENT	**11/07/2018**	**COST RECOVERY AGREEMENT / N. OF REIMBURSEMENT**
RESPONSE	**10/09/2018**	**OTHER REPORT / DOCUMENT**
RESPONSE	**10/04/2018**	**OTHER REPORT / DOCUMENT**
ENFORCEMENT	**10/03/2018**	**TECHNICAL CORRESPONDENCE / ASSISTANCE / OTHER**
RESPONSE	**09/28/2018**	**SITE ASSESSMENT REPORT**
RESPONSE	**09/25/2018**	**OTHER REPORT / DOCUMENT**
RESPONSE	**09/25/2018**	**PHASE I ASSESSMENT REPORT**
RESPONSE	**09/17/2018**	**OTHER REPORT / DOCUMENT**
RESPONSE	**09/04/2018**	**CEQA REPORTS**
RESPONSE	**09/04/2018**	**OTHER REPORT / DOCUMENT**

STATUS HISTORY

STATUS:	DATE:
OPEN - SITE ASSESSMENT	**01/08/2020**
OPEN - ACTIVE	**11/06/2018**
OPEN - CASE BEGIN DATE	**09/04/2018**

CONTACT DETAILS

ORGANIZATION: **SAN FRANCISCO BAY RWQCB (REGION 2)**
ADDRESS: **1515 CLAY STREET, SUITE 1400**
CITY: **OAKLAND**
CONTACT NAME: **MICHAEL ROCHETTE**
CONTACT TYPE: **REGIONAL BOARD CASEWORKER**
CONTACT PHONE: **NOT REPORTED**
EMAIL: **MICHAEL.ROCHETTE@WATERBOARDS.CA.GOV**

Back to Report Summary

MAP ID# 46

Distance from Property: 0.371 mi. (1,959 ft.) W
Elevation: 39 ft. (Higher than TP)

FACILITY INFORMATION

GLOBAL ID: **T10000013681**
URL LINK: CLICK HERE
BUSINESS NAME: **2515 EL CAMINO REAL**
ADDRESS: **2515 EL CAMINO REAL**
PALO ALTO, CA
COUNTY: **SANTA CLARA**

FACILITY DETAILS

CASE TYPE: **NON-CASE INFORMATION**
CASE NUMBER: **NOT REPORTED**
STATUS: **INFORMATIONAL ITEM 10/4/2019**
POTENTIAL CONTAMINATION:
TOTAL PETROLEUM HYDROCARBONS (TPH)
POTENTIAL MEDIA AFFECTED:
NOT REPORTED
DISADVANTAGED COMMUNITY:
NO
SEVERELY DISADVANTAGED COMMUNITY:
NO
SITE HISTORY:
NOT REPORTED

REGULATORY ACTIVITIES

TYPE OF ACTION:	DATE:	ACTION:
ENFORCEMENT	**10/04/2019**	**STAFF LETTER**
RESPONSE	**08/30/2019**	**TANK REMOVAL REPORT / UST SAMPLING REPORT**
ENFORCEMENT	**07/25/2019**	**UNAUTHORIZED RELEASE FORM**
OTHER	**07/25/2019**	**LEAK REPORTED**
OTHER	**07/24/2019**	**LEAK DISCOVERY**

STATUS HISTORY

STATUS:	DATE:
INFORMATIONAL ITEM	**10/04/2019**
OPEN - CASE BEGIN DATE	**07/24/2019**

CONTACT DETAILS

ORGANIZATION: **SANTA CLARA COUNTY LOP**
ADDRESS: **1555 BERGER DRIVE, SUITE 300**
CITY: **SAN JOSE**
CONTACT NAME: **UST CASE WORKER**
CONTACT TYPE: **LOCAL AGENCY CASEWORKER**
CONTACT PHONE: **4089183400**
EMAIL: **NOT REPORTED**

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MAP ID# 47

Distance from Property: 0.372 mi. (1,964 ft.) WNW
Elevation: 35 ft. (Higher than TP)

FACILITY INFORMATION

GLOBAL ID: **T0608502062**
URL LINK: CLICK HERE
BUSINESS NAME: **SHELL - 299 S CALIFORNIA**
ADDRESS: **299 S. CALIFORNIA AVENUE**
PALO ALTO, CA 94301
COUNTY: **SANTA CLARA**

FACILITY DETAILS

CASE TYPE: **LUST CLEANUP SITE**
CASE NUMBER: **19-097**
STATUS: **COMPLETED - CASE CLOSED 9/13/2016**
POTENTIAL CONTAMINATION:
GASOLINE
POTENTIAL MEDIA AFFECTED:
OTHER GROUNDWATER (USES OTHER THAN DRINKING WATER)
DISADVANTAGED COMMUNITY:
NO
SEVERELY DISADVANTAGED COMMUNITY:
NO
SITE HISTORY:
1998 PHASE I ENVIRONMENTAL SITE ASSESSMENT (ESA): ACCORDING TO KRAZAN & ASSOCIATES' (KRAZAN'S) FEBRUARY 11, 1998 PHASE I ENVIRONMENTAL SITE ASSESSMENT REPORT, THE SITE WAS OCCUPIED BY A BREWERY FROM AT LEAST 1884 TO 1935 AND BY A SHELL-BRANDED SERVICE STATION FROM APPROXIMATELY 1939 TO THE EARLY 1970S. THE BREWERY FACILITIES REPORTEDLY INCLUDED A 1,200-GALLON OIL UNDERGROUND STORAGE TANK (UST). THE SHELL-BRANDED SERVICE STATION HAD THREE 1,000-GALLON GASOLINE USTS AND A HYDRAULIC LIFT. NO INFORMATION IS AVAILABLE REGARDING THE FORMER LOCATIONS OR THE REMOVAL OF THESE USTS. CONSTRUCTION OF THE CURRENT ON-SITE OFFICE BUILDING, WHICH INCLUDES A BASEMENT OCCUPYING AT LEAST THREE-QUARTERS OF THE SITE, WOULD LIKELY HAVE DISCOVERED ANY USTS EXISTING ON SITE AT THAT TIME. KRAZAN'S REPORT INCLUDES A COPY OF THE JANUARY 3, 1973 BUILDING PERMIT FOR CONSTRUCTION OF THE BUILDING. THE ENVIRONMENTAL SITE ASSESSMENT ALSO IDENTIFIED THE PROPERTY IMMEDIATELY ACROSS SOUTH CALIFORNIA AVENUE AS THE SITE OF ANOTHER GASOLINE SERVICE STATION FROM AT LEAST 1946 TO 1970. 1998 SUBSURFACE INVESTIGATION: IN MARCH 1998, LOWNEY & ASSOCIATES (LOWNEY) DRILLED FIVE EXPLORATORY BORINGS (EB-1, EB-2, EB-3, EB-4, AND EB-5). THE BORINGS WERE COMPLETED IN THE ON-SITE BUILDING BASEMENT (APPROXIMATELY 9 TO 10 FEET BELOW THE ADJACENT STREET SURFACE) TO A DEPTH OF APPROXIMATELY 24 FEET BELOW GRADE (FBG). GROUNDWATER WAS ENCOUNTERED IN EACH BORING AT APPROXIMATELY 22 TO 24 FBG. GRAB GROUNDWATER SAMPLES CONTAINED UP TO 950,000 MICROGRAMS PER LITER (¦G/L) TOTAL PETROLEUM HYDROCARBONS AS DIESEL (TPHD) AND 120,000 ¦G/L TOTAL PETROLEUM HYDROCARBONS AS GASOLINE (TPHG). UP TO 900 ¦G/ L METHYL TERTIARY-BUTYL ETHER (MTBE) WAS INITIALLY REPORTED IN FOUR OF THE FIVE GROUNDWATER SAMPLES ANALYZED BY EPA METHOD 8020. CONFIRMATION ANALYSES ON THE HIGHEST REPORTED MTBE CONCENTRATION (SAMPLE EB-3) BY EPA METHOD 8260 DID NOT DETECT MTBE. LOWNEY DID NOT COLLECT SOIL SAMPLES FROM THE EXPLORATORY BORINGS FOR CHEMICAL ANALYSES OR PROVIDE BORING LOGS IN THEIR REPORT. THE INVESTIGATION IS DETAILED IN LOWNEY'S APRIL 3, 1998 GROUND WATER QUALITY EVALUATION REPORT. 1999 SUBSURFACE INVESTIGATION: IN NOVEMBER 1999, CAMBRIA ENVIRONMENTAL TECHNOLOGY, INC. (CAMBRIA) INSTALLED THREE GROUNDWATER MONITORING WELLS (MW-1, MW-2, AND MW-3). SOIL SAMPLES COLLECTED FROM THE WELL BORINGS CONTAINED UP TO 310 MILLIGRAMS PER KILOGRAM (MG/ KG) TPHD,

1,300 MG/ KG TPHG, AND 2.1 MG/KG BENZENE. NO TPHD, TPHG, OR BENZENE WAS DETECTED IN SOIL SAMPLES FROM WELL BORING MW-3. UP TO 0.76 MG/ KG MTBE WAS REPORTED IN SOIL SAMPLES ANALYZED BY EPA METHOD 8020, BUT NO MTBE WAS DETECTED WHEN THE SAMPLES WERE ANALYZED BY EPA METHOD 8260. DETAILS OF THIS INVESTIGATION ARE SUMMARIZED IN CAMBRIA'S DECEMBER 10, 1999 SUBSURFACE INVESTIGATION REPORT AND DECEMBER 20, 1999 SUBSURFACE INVESTIGATION REPORT ADDENDUM. 2000 SUBSURFACE INVESTIGATION: IN APRIL 2000, CAMBRIA INSTALLED ONE GROUNDWATER MONITORING WELL (MW-4) AND DRILLED TWO SOIL BORINGS (SB-5 AND SB-6). THE SOIL BORINGS WERE DRILLED UP GRADIENT AND DOWN GRADIENT FROM THE FORMER SOURCE AREA ON SITE (BASED ON THE GROUNDWATER GRADIENTS OBTAINED FROM WELLS MW-1THROUGH MW-3). WELL MW-4 WAS INSTALLED IN THE LIKELY SOURCE AREA IN THE BASEMENT OF THE OFFICE BUILDING. SOIL SAMPLES COLLECTED FROM SB-6 AND MW-4 SOIL CONTAINED UP TO 140 MG/ KG TPHD, 710 MG/KG TPHG, AND 0.92 MG/KG BENZENE. TI1E ONLY MTBE REPORTED IN SOIL SAMPLES WAS 0.29 MG/ KG (SB-6 AT 30.5 FBG) BY EPA METHOD 8020; HOWEVER, MTBE WAS NOT DETECTED IN THE SAME SAMPLE WHEN ANALYZED BY EPA METHOD 8260. NO ANALYTES WERE DETECTED IN THE SOIL SAMPLES COLLECTED FROM BORING SB-5, LOCATED DOWN GRADIENT FROM THE SITE, WITH EXCEPTION OF 12 MG/ KG TPHD AT 10 FBG. GRAB GROUNDWATER SAMPLES WERE COLLECTED FROM SB-5 AND SB-6, AND TWO GRAB GROUNDWATER SAMPLES WERE COLLECTED FROM THE MW-4 WELL BORING. GRAB GROUNDWATER SAMPLES CONTAINED UP TO 310,000 ¦G/L TPHD, 130,000 ¦G/L TPHG, AND 11,000 ¦G/L BENZENE. MTBE WAS NOT DETECTED BY EPA METHOD 8260, WITH THE EXCEPTION OF 5 ¦G/L IN SB-5. CAMBRIA'S JUNE 8, 2000 ADDITIONAL SUBSURFACE INVESTIGATION REPORT DETAILS INVESTIGATION RESULTS. 2001 CONDUIT STUDY: IN JANUARY 2001, CAMBRIA PERFORMED A SUBSURFACE CONDUIT STUDY OF THE AREA ADJACENT TO THE SITE TO DETERMINE THE POTENTIAL FOR UNDERGROUND UTILITY TRENCHES TO AFFECT GROUNDWATER FLOW NEAR THE SITE. GAS AND WATER LINES ARE GENERALLY LOCATED AT DEPTHS OF 3 TO 8 FBG. STORM AND SANITARY SEWER CONDUITS OFTEN EXIST AT GREATER DEPTHS THAN GAS AND WATER LINES. CAMBRIA MEASURED THE DEPTHS OF THE STORM AND SANITARY SEWER SYSTEMS VIA ACCESS MANHOLES ADJACENT TO THE SITE. THE DEPTHS TO FLOW LINES IN +THE CONDUITS WERE ALL LESS THAN 5 FBG. GIVEN THAT PREVAILING GROUNDWATER ON SITE RANGES FROM 17.5 TO 20 FBG, IT IS UNLIKELY THAT THE GAS, WATER, STORM, OR SANITARY SEWER LINES ON OR NEAR THE SITE ARE ACTING AS PREFERENTIAL PATHWAYS FOR MIGRATION OF GROUNDWATER CONTAMINANTS. THE RESULTS WERE REPORTED IN CAMBRIA'S JANUARY 18, 2001 CONDUIT STUDY. 2001 CORRECTIVE ACTION PLAN (CAP): CAMBRIA'S MAY 29, 2001 CAP REVIEWED SITE CONDITIONS AND POTENTIAL SENSITIVE RECEPTORS, IDENTIFIED BENZENE, TOLUENE, ETHYLBENZENE, AND TOTAL XYLENES (BTEX) AS THE CHEMICALS OF CONCERN (COCS), AND EVALUATED SOIL VAPOR EXTRACTION AND MONITORED NATURAL ATTENUATION AS REMEDIAL ALTERNATIVES. CAMBRIA RECOMMENDED THAT A TIER 2 RISK-BASED CORRECTIVE ACTION (RBCA) ANALYSIS BE PERFORMED TO EVALUATE THE POTENTIAL HEALTH RISK POSED BY SITE HYDROCARBONS. 2001 CAP ADDENDUM, INDOOR AIR SAMPLING, AND RBCA ANALYSIS: CAMBRIA' S AUGUST 27,2001 CORRECTIVE ACTION PLAN ADDENDUM: RISK-BASED CORRECTIVE ACTION ANALYSIS REPORT PRESENTED THE RESULTS OF TWO INDOOR AIR SAMPLES COLLECTED ON JULY 27, 2001. THE SAMPLES WERE COLLECTED FROM NEAR THE FLOOR LEVEL IN THE BUILDING BASEMENT USING PASSIVE INTEGRATED AIR SAMPLING DEVICES (SUMMA CANISTERS) OVER AN APPROXIMATE 4-HOUR PERIOD. NO OUTDOOR AIR "BACKGROUND" SAMPLES WERE COLLECTED, AND A SURVEY OF THE BUILDING BASEMENT FOR POSSIBLE "BACKGROUND" SOURCES OF COCS WAS NOT CONDUCTED. THE BASEMENT IS NOT NORMALLY OCCUPIED, AND AIR SAMPLING WAS NOT CONDUCTED IN ANY OTHER OCCUPIED AREAS OF THE BUILDING. THE MAXIMUM BENZENE AIR CONCENTRATION OBTAINED WAS 0.97 MICROGRAMS PER CUBIC METER (¦G/M3). CAMBRIA PRESENTED A TIER 2 RBCA ANALYSIS, BASED ON THE AMERICAN SOCIETY OF TESTING AND MATERIALS' RBCA APPROACH. A CONCEPTUAL SITE MODEL IDENTIFIED INDOOR AIR INHALATION OF VAPORS ORIGINATING FROM SOIL AND GROUNDWATER AS COMPLETE EXPOSURE PATHWAYS TO BE EVALUATED. REPRESENTATIVE CONCENTRATIONS OF SOIL, GROUNDWATER, AND INDOOR AIR WERE PRESENTED BASED ON MAXIMUM-DETECTED CONCENTRATIONS IN EACH MEDIA. DUE TO THE EXISTENCE OF THE COMMERCIAL OFFICE BUILDING, A TARGET CARCINOGENIC RISK LEVEL OF 1X 10-S WAS PRESENTED FOR THE COMMERCIAL RECEPTOR SCENARIO. IN LIEU OF MODELING INDOOR AIR CONCENTRATIONS FROM SOIL OR GROUNDWATER, THE RESULTS OF INDOOR AIR SAMPLING WERE USED AS THE EXPOSURE POINT CONCENTRATIONS FOR EVALUATION OF THE INDOOR AIR INHALATION EXPOSURE PATHWAY. CAMBRIA CALCULATED A

RISK OF 0.678 X 10.S AS THE RISK DUE TO THE HIGHEST MEASURED BENZENE CONCENTRATIONS.IN BASEMENT AIR, AND IDENTIFIED AN AIR CONCENTRATION OF 1.43 ¦G/M3BENZENE AS THE RISK BASED SCREENING LEVEL FOR A 1X 10-S RISK LEVEL. 2001 CAP ADDENDUM: CAMBRIA'S OCTOBER 23, 2001 CORRECTIVE ACTION PLAN ADDENDUM PRESENTED PROPOSED FINAL CLEANUP LEVELS FOR GROUNDWATER AND RECOMMENDED CONTINUED ANNUAL GROUNDWATER MONITORING UNTIL THE RESULTS CAN DEMONSTRATE A CLEAR ATTENUATING TREND OF COC CONCENTRATIONS AND A TIME ESTIMATE TO REACH CLEANUP GOALS CAN BE MADE. THE SANTA CLARA VALLEY WATER DISTRICT APPROVED THE CAP IN A JANUARY 25, 2002 LETTER. 2004 REMEDIAL METHOD AND SITE RISK ASSESSMENT RE-EVALUATION: CAMBRIA'S JANUARY 29, 2004 SITE REVIEW-REMEDIAL METHOD AND SITE RISK ASSESSMENT RE-EVALUATION LETTER RE-EVALUATED THE SITE AND RECOMMENDED CONTINU.CD ANNUAL GROUNDWATER MONITORING UNTIL THE RESULTS CAN DEMONSTRATE A CLEAR ATTENUATING TREND OF COC CONCENTRATIONS AND A TIME ESTIMATE TO REACH CLEANUP GOALS CAN BE MADE. THE LETTER ALSO STATED THAT PREVIOUS INVESTIGATIONS AND GROUNDWATER MONITORING HAVE SHOWN THAT HYDROCARBONS ARE NOT SIGNIFICANTLY MIGRATING FROM THE SITE, AND THE DECREASES IN HYDROCARBON CONCENTRATIONS IN OFF-SITE WELLS INDICATE THAT NATURAL ATTENUATION PROCESSES ARE WORKING TO REMEDIATE SOIL AND GROUNDWATER. 2011 SUBSURFACE INVESTIGATION: IN APRIL AND MAY 2011, CONESTOGA-ROVERS & ASSOCIATES (CRA) INSTALLED ONE GROUNDWATER MONITORING WELL (MW-5) AND TWO SUB-SLAB SOIL VAPOR PROBES (SVP-1 AND SVP-2). SOIL SAMPLES FROM THE WELL BORING CONTAINED UP TO 9.8 MG/KG TPHD AND 65 MG/KG TPHG. NO BENZENE OR MTBE WAS DETECTED IN THE SOIL SAMPLES. NO BTEX WAS DETECTED IN SOIL VAPOR SAMPLES COLLECTED FROM THE SUB-SLAB PROBES. CRA'S JULY 22, 2011SUBSURFACE INVESTIGATION REPORT DETAILS THESE RESULTS. 2013 SUBSURFACE INVESTIGATION: IN AUGUST 2013, CRA ADVANCED TWO SOIL BORINGS (SB-7 AND SB-8). GRAB GROUNDWATER SAMPLES FROM THE WELL BORINGS CONTAINED UP TO 40,000 ¦G/L TPHD AND 110,000 ¦G/L TPHG. BENZENE WAS ONLY DETECTED IN ONE BORING, SB-7 AT 30 FBG, AT A CONCENTRATION OF 1.2 ¦G/L. CRA'S DECEMBER 9, 2013 SUBSURFACE INVESTIGATION REPORT DETAILS THESE RESULTS. 2013 SOIL VAPOR SAMPLING: CRA CONDUCTED QUARTERLY SOIL VAPOR SAMPLING DURING 2013 FROM SUB-SLAB SOIL VAPOR PROBES SVP-1AND SVP-2. NO BTEX DETECTIONS EXCEEDED SAN FRANCISCO BAY REGIONAL WATER QUALITY CONTROL BOARD'S ENVIRONMENTAL SCREENING LEVELS,1 AND NO NAPHTHALENE WAS DETECTED IN ANY SOIL VAPOR SAMPLES. CRA'S FEBRUARY 20, 2014 SOIL VAPOR MONITORING REPORT CONTAINS THE HISTORICAL SOIL VAPOR DATA. GROUNDWATER MONITORING: QUARTERLY GROUNDWATER MONITORING WAS CONDUCTED FROM FOURTH QUARTER 1999 THROUGH THE END OF 2000. SINCE 2001, SEMIANNUAL GROUNDWATER MONITORING HAS BEEN CONDUCTED DURING THE FIRST AND THIRD QUARTERS.

REGULATORY ACTIVITIES

TYPE OF ACTION:	DATE:	ACTION:
OTHER	01/01/50	LEAK DISCOVERY
OTHER	01/01/50	LEAK REPORTED
REMEDIATION	01/01/50	MONITORED NATURAL ATTENUATION
ENFORCEMENT	07/12/2016	CLOSURE/NO FURTHER ACTION LETTER - #07/12/2016
RESPONSE	07/01/2016	WELL DESTRUCTION REPORT
ENFORCEMENT	03/09/2016	STAFF LETTER
ENFORCEMENT	02/26/2016	STATE WATER BOARD – CLOSURE ORDER
ENFORCEMENT	07/17/2015	NOTIFICATION - PUBLIC NOTICE OF CASE CLOSURE
ENFORCEMENT	07/17/2015	STATE WATER BOARD – CLOSURE ORDER
ENFORCEMENT	07/06/2015	CLEAN UP FUND - CASE CLOSURE REVIEW SUMMARY REPORT (RSR)
RESPONSE	02/20/2015	CAP/RAP - FINAL REMEDIATION / DESIGN PLAN
ENFORCEMENT	02/18/2015	STAFF LETTER
ENFORCEMENT	02/03/2015	CLEAN UP FUND - CASE CLOSURE REVIEW SUMMARY REPORT (RSR)
RESPONSE	02/03/2015	CLEAN UP FUND - 5-YEAR REVIEW SUMMARY
RESPONSE	01/30/2015	EMAIL CORRESPONDENCE
ENFORCEMENT	11/10/2014	STAFF LETTER

TYPE OF ACTION:	DATE:	ACTION:
RESPONSE	08/01/2014	SOIL AND WATER INVESTIGATION WORKPLAN
ENFORCEMENT	05/29/2014	STAFF LETTER
ENFORCEMENT	04/16/2014	STAFF LETTER
RESPONSE	04/07/2014	OTHER REPORT / DOCUMENT - REGULATOR RESPONDED
ENFORCEMENT	03/04/2014	EMAIL CORRESPONDENCE
ENFORCEMENT	03/04/2014	STAFF LETTER
ENFORCEMENT	01/09/2014	STAFF LETTER
RESPONSE	12/13/2013	SITE ASSESSMENT REPORT - REGULATOR RESPONDED
RESPONSE	11/15/2013	SITE ASSESSMENT REPORT
RESPONSE	10/30/2013	MONITORING REPORT - SEMI-ANNUALLY
RESPONSE	09/12/2013	SOIL VAPOR INTRUSION INVESTIGATION REPORT
ENFORCEMENT	08/09/2013	STAFF LETTER
RESPONSE	08/02/2013	SOIL AND WATER INVESTIGATION WORKPLAN - ADDENDUM - REGULATOR RESPONDED
RESPONSE	04/30/2013	MONITORING REPORT - SEMI-ANNUALLY
ENFORCEMENT	01/25/2013	STAFF LETTER
RESPONSE	01/18/2013	CONCEPTUAL SITE MODEL
RESPONSE	01/18/2013	CORRECTIVE ACTION PLAN / REMEDIAL ACTION PLAN - ADDENDUM - REGULATOR RESPONDED
ENFORCEMENT	12/12/2012	STAFF LETTER
ENFORCEMENT	08/27/2012	STAFF LETTER
RESPONSE	04/30/2012	MONITORING REPORT - SEMI-ANNUALLY - REGULATOR RESPONDED
RESPONSE	01/13/2012	OTHER REPORT / DOCUMENT
ENFORCEMENT	01/11/2012	NOTICE OF RESPONSIBILITY
RESPONSE	10/30/2011	MONITORING REPORT - SEMI-ANNUALLY
ENFORCEMENT	09/21/2011	STAFF LETTER
RESPONSE	07/22/2011	SOIL AND WATER INVESTIGATION REPORT
RESPONSE	04/30/2011	MONITORING REPORT - SEMI-ANNUALLY
ENFORCEMENT	02/15/2011	STAFF LETTER
RESPONSE	01/17/2011	SOIL AND WATER INVESTIGATION WORKPLAN
ENFORCEMENT	11/02/2010	STAFF LETTER
RESPONSE	10/31/2010	MONITORING REPORT - SEMI-ANNUALLY
RESPONSE	04/30/2010	MONITORING REPORT - SEMI-ANNUALLY
RESPONSE	10/30/2009	MONITORING REPORT - SEMI-ANNUALLY
RESPONSE	04/30/2009	MONITORING REPORT - SEMI-ANNUALLY
ENFORCEMENT	04/08/2009	STAFF LETTER
ENFORCEMENT	06/03/2005	OTHER REPORT
RESPONSE	06/03/2005	OTHER REPORT / DOCUMENT
RESPONSE	01/30/2004	OTHER REPORT / DOCUMENT
RESPONSE	01/29/2004	RISK ASSESSMENT REPORT
ENFORCEMENT	11/25/2003	STAFF LETTER - #42618
REMEDIATION	01/25/2002	MONITORED NATURAL ATTENUATION
RESPONSE	10/15/2001	MONITORING REPORT - QUARTERLY
ENFORCEMENT	08/31/2001	STAFF LETTER - #28854
RESPONSE	07/13/2001	OTHER REPORT / DOCUMENT

TYPE OF ACTION:	DATE:	ACTION:
RESPONSE	**05/29/2001**	**CAP/RAP - OTHER REPORT**
RESPONSE	**01/18/2001**	**OTHER REPORT / DOCUMENT**
RESPONSE	**06/08/2000**	**OTHER REPORT / DOCUMENT**
RESPONSE	**12/20/1999**	**OTHER REPORT / DOCUMENT**
RESPONSE	**12/10/1999**	**SOIL AND WATER INVESTIGATION REPORT**
RESPONSE	**07/21/1999**	**OTHER WORKPLAN**
RESPONSE	**01/01/1999**	**CORRESPONDENCE**
OTHER	**04/15/1998**	**LEAK REPORTED**
RESPONSE	**04/10/1998**	**MONITORING REPORT - QUARTERLY**
OTHER	**03/26/1998**	**LEAK DISCOVERY**
RESPONSE	**02/11/1998**	**PRELIMINARY SITE ASSESSMENT REPORT**

STATUS HISTORY

STATUS:	DATE:
COMPLETED - CASE CLOSED	**09/13/2016**
OPEN - ELIGIBLE FOR CLOSURE	**06/07/2016**
OPEN - SITE ASSESSMENT	**01/25/2002**
OPEN - CASE BEGIN DATE	**03/26/1998**
OPEN - SITE ASSESSMENT	**03/26/1998**

CONTACT DETAILS

ORGANIZATION: **SANTA CLARA COUNTY LOP**
ADDRESS: **1555 BERGER DRIVE, SUITE 300**
CITY: **SAN JOSE**
CONTACT NAME: **AARON COSTA**
CONTACT TYPE: **LOCAL AGENCY CASEWORKER**
CONTACT PHONE: **4089181954**
EMAIL: **AARON.COSTA@CEP.SCCGOV.ORG**
ORGANIZATION: **SAN FRANCISCO BAY RWQCB (REGION 2)**
ADDRESS: **1515 CLAY ST SUITE 1400**
CITY: **OAKLAND**
CONTACT NAME: **REGIONAL WATER BOARD**
CONTACT TYPE: **REGIONAL BOARD CASEWORKER**
CONTACT PHONE: **NOT REPORTED**
EMAIL: **NOT REPORTED**

Back to Report Summary

Leaking Underground Storage Tanks (LUST)

MAP ID# 47

Distance from Property: 0.372 mi. (1,964 ft.) WNW
Elevation: 35 ft. (Higher than TP)

FACILITY INFORMATION

GLOBAL ID: **T0608502062**
URL LINK: CLICK HERE
BUSINESS NAME: **SHELL - 299 S CALIFORNIA**
ADDRESS: **299 S. CALIFORNIA AVENUE**
PALO ALTO, CA 94301
COUNTY: **SANTA CLARA**

FACILITY DETAILS

CASE TYPE: **LUST CLEANUP SITE**
CASE NUMBER: **19-097**
STATUS: **COMPLETED - CASE CLOSED 09/13/2016**
POTENTIAL CONTAMINATION:
GASOLINE
POTENTIAL MEDIA AFFECTED:
OTHER GROUNDWATER (USES OTHER THAN DRINKING WATER)
DISADVANTAGED COMMUNITY:
NO
SEVERELY DISADVANTAGED COMMUNITY:
NO
SITE HISTORY:
1998 PHASE I ENVIRONMENTAL SITE ASSESSMENT (ESA): ACCORDING TO KRAZAN & ASSOCIATES' (KRAZAN'S) FEBRUARY 11, 1998 PHASE I ENVIRONMENTAL SITE ASSESSMENT REPORT, THE SITE WAS OCCUPIED BY A BREWERY FROM AT LEAST 1884 TO 1935 AND BY A SHELL-BRANDED SERVICE STATION FROM APPROXIMATELY 1939 TO THE EARLY 1970S. THE BREWERY FACILITIES REPORTEDLY INCLUDED A 1,200-GALLON OIL UNDERGROUND STORAGE TANK (UST). THE SHELL-BRANDED SERVICE STATION HAD THREE 1,000-GALLON GASOLINE USTS AND A HYDRAULIC LIFT. NO INFORMATION IS AVAILABLE REGARDING THE FORMER LOCATIONS OR THE REMOVAL OF THESE USTS. CONSTRUCTION OF THE CURRENT ON-SITE OFFICE BUILDING, WHICH INCLUDES A BASEMENT OCCUPYING AT LEAST THREE-QUARTERS OF THE SITE, WOULD LIKELY HAVE DISCOVERED ANY USTS EXISTING ON SITE AT THAT TIME. KRAZAN'S REPORT INCLUDES A COPY OF THE JANUARY 3, 1973 BUILDING PERMIT FOR CONSTRUCTION OF THE BUILDING. THE ENVIRONMENTAL SITE ASSESSMENT ALSO IDENTIFIED THE PROPERTY IMMEDIATELY ACROSS SOUTH CALIFORNIA AVENUE AS THE SITE OF ANOTHER GASOLINE SERVICE STATION FROM AT LEAST 1946 TO 1970. 1998 SUBSURFACE INVESTIGATION: IN MARCH 1998, LOWNEY & ASSOCIATES (LOWNEY) DRILLED FIVE EXPLORATORY BORINGS (EB-1, EB-2, EB-3, EB-4, AND EB-5). THE BORINGS WERE COMPLETED IN THE ON-SITE BUILDING BASEMENT (APPROXIMATELY 9 TO 10 FEET BELOW THE ADJACENT STREET SURFACE) TO A DEPTH OF APPROXIMATELY 24 FEET BELOW GRADE (FBG). GROUNDWATER WAS ENCOUNTERED IN EACH BORING AT APPROXIMATELY 22 TO 24 FBG. GRAB GROUNDWATER SAMPLES CONTAINED UP TO 950,000 MICROGRAMS PER LITER (¦G/L) TOTAL PETROLEUM HYDROCARBONS AS DIESEL (TPHD) AND 120,000 ¦G/L TOTAL PETROLEUM HYDROCARBONS AS GASOLINE (TPHG). UP TO 900 ¦G/ L METHYL TERTIARY-BUTYL ETHER (MTBE) WAS INITIALLY REPORTED IN FOUR OF THE FIVE GROUNDWATER SAMPLES ANALYZED BY EPA METHOD 8020. CONFIRMATION ANALYSES ON THE HIGHEST REPORTED MTBE CONCENTRATION (SAMPLE EB-3) BY EPA METHOD 8260 DID NOT DETECT MTBE. LOWNEY DID NOT COLLECT SOIL SAMPLES FROM THE EXPLORATORY BORINGS FOR CHEMICAL ANALYSES OR PROVIDE BORING LOGS IN THEIR REPORT. THE INVESTIGATION IS DETAILED IN LOWNEY'S APRIL 3, 1998 GROUND WATER QUALITY EVALUATION REPORT. 1999 SUBSURFACE INVESTIGATION: IN NOVEMBER 1999, CAMBRIA ENVIRONMENTAL TECHNOLOGY, INC. (CAMBRIA) INSTALLED THREE GROUNDWATER MONITORING WELLS (MW-1, MW-2, AND MW-3). SOIL SAMPLES COLLECTED FROM THE WELL BORINGS CONTAINED UP TO 310 MILLIGRAMS PER KILOGRAM (MG/ KG) TPHD,

1,300 MG/ KG TPHG, AND 2.1 MG/KG BENZENE. NO TPHD, TPHG, OR BENZENE WAS DETECTED IN SOIL SAMPLES FROM WELL BORING MW-3. UP TO 0.76 MG/ KG MTBE WAS REPORTED IN SOIL SAMPLES ANALYZED BY EPA METHOD 8020, BUT NO MTBE WAS DETECTED WHEN THE SAMPLES WERE ANALYZED BY EPA METHOD 8260. DETAILS OF THIS INVESTIGATION ARE SUMMARIZED IN CAMBRIA'S DECEMBER 10, 1999 SUBSURFACE INVESTIGATION REPORT AND DECEMBER 20, 1999 SUBSURFACE INVESTIGATION REPORT ADDENDUM. 2000 SUBSURFACE INVESTIGATION: IN APRIL 2000, CAMBRIA INSTALLED ONE GROUNDWATER MONITORING WELL (MW-4) AND DRILLED TWO SOIL BORINGS (SB-5 AND SB-6). THE SOIL BORINGS WERE DRILLED UP GRADIENT AND DOWN GRADIENT FROM THE FORMER SOURCE AREA ON SITE (BASED ON THE GROUNDWATER GRADIENTS OBTAINED FROM WELLS MW-1THROUGH MW-3). WELL MW-4 WAS INSTALLED IN THE LIKELY SOURCE AREA IN THE BASEMENT OF THE OFFICE BUILDING. SOIL SAMPLES COLLECTED FROM SB-6 AND MW-4 SOIL CONTAINED UP TO 140 MG/ KG TPHD, 710 MG/KG TPHG, AND 0.92 MG/KG BENZENE. TI1E ONLY MTBE REPORTED IN SOIL SAMPLES WAS 0.29 MG/ KG (SB-6 AT 30.5 FBG) BY EPA METHOD 8020; HOWEVER, MTBE WAS NOT DETECTED IN THE SAME SAMPLE WHEN ANALYZED BY EPA METHOD 8260. NO ANALYTES WERE DETECTED IN THE SOIL SAMPLES COLLECTED FROM BORING SB-5, LOCATED DOWN GRADIENT FROM THE SITE, WITH EXCEPTION OF 12 MG/ KG TPHD AT 10 FBG. GRAB GROUNDWATER SAMPLES WERE COLLECTED FROM SB-5 AND SB-6, AND TWO GRAB GROUNDWATER SAMPLES WERE COLLECTED FROM THE MW-4 WELL BORING. GRAB GROUNDWATER SAMPLES CONTAINED UP TO 310,000 ¦G/L TPHD, 130,000 ¦G/L TPHG, AND 11,000 ¦G/L BENZENE. MTBE WAS NOT DETECTED BY EPA METHOD 8260, WITH THE EXCEPTION OF 5 ¦G/L IN SB-5. CAMBRIA'S JUNE 8, 2000 ADDITIONAL SUBSURFACE INVESTIGATION REPORT DETAILS INVESTIGATION RESULTS. 2001 CONDUIT STUDY: IN JANUARY 2001, CAMBRIA PERFORMED A SUBSURFACE CONDUIT STUDY OF THE AREA ADJACENT TO THE SITE TO DETERMINE THE POTENTIAL FOR UNDERGROUND UTILITY TRENCHES TO AFFECT GROUNDWATER FLOW NEAR THE SITE. GAS AND WATER LINES ARE GENERALLY LOCATED AT DEPTHS OF 3 TO 8 FBG. STORM AND SANITARY SEWER CONDUITS OFTEN EXIST AT GREATER DEPTHS THAN GAS AND WATER LINES. CAMBRIA MEASURED THE DEPTHS OF THE STORM AND SANITARY SEWER SYSTEMS VIA ACCESS MANHOLES ADJACENT TO THE SITE. THE DEPTHS TO FLOW LINES IN +THE CONDUITS WERE ALL LESS THAN 5 FBG. GIVEN THAT PREVAILING GROUNDWATER ON SITE RANGES FROM 17.5 TO 20 FBG, IT IS UNLIKELY THAT THE GAS, WATER, STORM, OR SANITARY SEWER LINES ON OR NEAR THE SITE ARE ACTING AS PREFERENTIAL PATHWAYS FOR MIGRATION OF GROUNDWATER CONTAMINANTS. THE RESULTS WERE REPORTED IN CAMBRIA'S JANUARY 18, 2001 CONDUIT STUDY. 2001 CORRECTIVE ACTION PLAN (CAP): CAMBRIA'S MAY 29, 2001 CAP REVIEWED SITE CONDITIONS AND POTENTIAL SENSITIVE RECEPTORS, IDENTIFIED BENZENE, TOLUENE, ETHYLBENZENE, AND TOTAL XYLENES (BTEX) AS THE CHEMICALS OF CONCERN (COCS), AND EVALUATED SOIL VAPOR EXTRACTION AND MONITORED NATURAL ATTENUATION AS REMEDIAL ALTERNATIVES. CAMBRIA RECOMMENDED THAT A TIER 2 RISK-BASED CORRECTIVE ACTION (RBCA) ANALYSIS BE PERFORMED TO EVALUATE THE POTENTIAL HEALTH RISK POSED BY SITE HYDROCARBONS. 2001 CAP ADDENDUM, INDOOR AIR SAMPLING, AND RBCA ANALYSIS: CAMBRIA' S AUGUST 27,2001 CORRECTIVE ACTION PLAN ADDENDUM: RISK-BASED CORRECTIVE ACTION ANALYSIS REPORT PRESENTED THE RESULTS OF TWO INDOOR AIR SAMPLES COLLECTED ON JULY 27, 2001. THE SAMPLES WERE COLLECTED FROM NEAR THE FLOOR LEVEL IN THE BUILDING BASEMENT USING PASSIVE INTEGRATED AIR SAMPLING DEVICES (SUMMA CANISTERS) OVER AN APPROXIMATE 4-HOUR PERIOD. NO OUTDOOR AIR "BACKGROUND" SAMPLES WERE COLLECTED, AND A SURVEY OF THE BUILDING BASEMENT FOR POSSIBLE "BACKGROUND" SOURCES OF COCS WAS NOT CONDUCTED. THE BASEMENT IS NOT NORMALLY OCCUPIED, AND AIR SAMPLING WAS NOT CONDUCTED IN ANY OTHER OCCUPIED AREAS OF THE BUILDING. THE MAXIMUM BENZENE AIR CONCENTRATION OBTAINED WAS 0.97 MICROGRAMS PER CUBIC METER (¦G/M3). CAMBRIA PRESENTED A TIER 2 RBCA ANALYSIS, BASED ON THE AMERICAN SOCIETY OF TESTING AND MATERIALS' RBCA APPROACH. A CONCEPTUAL SITE MODEL IDENTIFIED INDOOR AIR INHALATION OF VAPORS ORIGINATING FROM SOIL AND GROUNDWATER AS COMPLETE EXPOSURE PATHWAYS TO BE EVALUATED. REPRESENTATIVE CONCENTRATIONS OF SOIL, GROUNDWATER, AND INDOOR AIR WERE PRESENTED BASED ON MAXIMUM-DETECTED CONCENTRATIONS IN EACH MEDIA. DUE TO THE EXISTENCE OF THE COMMERCIAL OFFICE BUILDING, A TARGET CARCINOGENIC RISK LEVEL OF 1X 10-S WAS PRESENTED FOR THE COMMERCIAL RECEPTOR SCENARIO. IN LIEU OF MODELING INDOOR AIR CONCENTRATIONS FROM SOIL OR GROUNDWATER, THE RESULTS OF INDOOR AIR SAMPLING WERE USED AS THE EXPOSURE POINT CONCENTRATIONS FOR EVALUATION OF THE INDOOR AIR INHALATION EXPOSURE PATHWAY. CAMBRIA CALCULATED A

RISK OF 0.678 X 10.S AS THE RISK DUE TO THE HIGHEST MEASURED BENZENE CONCENTRATIONS.IN BASEMENT AIR, AND IDENTIFIED AN AIR CONCENTRATION OF 1.43 ¦G/M3BENZENE AS THE RISK BASED SCREENING LEVEL FOR A 1X 10-S RISK LEVEL. 2001 CAP ADDENDUM: CAMBRIA'S OCTOBER 23, 2001 CORRECTIVE ACTION PLAN ADDENDUM PRESENTED PROPOSED FINAL CLEANUP LEVELS FOR GROUNDWATER AND RECOMMENDED CONTINUED ANNUAL GROUNDWATER MONITORING UNTIL THE RESULTS CAN DEMONSTRATE A CLEAR ATTENUATING TREND OF COC CONCENTRATIONS AND A TIME ESTIMATE TO REACH CLEANUP GOALS CAN BE MADE. THE SANTA CLARA VALLEY WATER DISTRICT APPROVED THE CAP IN A JANUARY 25, 2002 LETTER. 2004 REMEDIAL METHOD AND SITE RISK ASSESSMENT RE-EVALUATION: CAMBRIA'S JANUARY 29, 2004 SITE REVIEW-REMEDIAL METHOD AND SITE RISK ASSESSMENT RE-EVALUATION LETTER RE-EVALUATED THE SITE AND RECOMMENDED CONTINU.CD ANNUAL GROUNDWATER MONITORING UNTIL THE RESULTS CAN DEMONSTRATE A CLEAR ATTENUATING TREND OF COC CONCENTRATIONS AND A TIME ESTIMATE TO REACH CLEANUP GOALS CAN BE MADE. THE LETTER ALSO STATED THAT PREVIOUS INVESTIGATIONS AND GROUNDWATER MONITORING HAVE SHOWN THAT HYDROCARBONS ARE NOT SIGNIFICANTLY MIGRATING FROM THE SITE, AND THE DECREASES IN HYDROCARBON CONCENTRATIONS IN OFF-SITE WELLS INDICATE THAT NATURAL ATTENUATION PROCESSES ARE WORKING TO REMEDIATE SOIL AND GROUNDWATER. 2011 SUBSURFACE INVESTIGATION: IN APRIL AND MAY 2011, CONESTOGA-ROVERS & ASSOCIATES (CRA) INSTALLED ONE GROUNDWATER MONITORING WELL (MW-5) AND TWO SUB-SLAB SOIL VAPOR PROBES (SVP-1 AND SVP-2). SOIL SAMPLES FROM THE WELL BORING CONTAINED UP TO 9.8 MG/KG TPHD AND 65 MG/KG TPHG. NO BENZENE OR MTBE WAS DETECTED IN THE SOIL SAMPLES. NO BTEX WAS DETECTED IN SOIL VAPOR SAMPLES COLLECTED FROM THE SUB-SLAB PROBES. CRA'S JULY 22, 2011SUBSURFACE INVESTIGATION REPORT DETAILS THESE RESULTS. 2013 SUBSURFACE INVESTIGATION: IN AUGUST 2013, CRA ADVANCED TWO SOIL BORINGS (SB-7 AND SB-8). GRAB GROUNDWATER SAMPLES FROM THE WELL BORINGS CONTAINED UP TO 40,000 ¦G/L TPHD AND 110,000 ¦G/L TPHG. BENZENE WAS ONLY DETECTED IN ONE BORING, SB-7 AT 30 FBG, AT A CONCENTRATION OF 1.2 ¦G/L. CRA'S DECEMBER 9, 2013 SUBSURFACE INVESTIGATION REPORT DETAILS THESE RESULTS. 2013 SOIL VAPOR SAMPLING: CRA CONDUCTED QUARTERLY SOIL VAPOR SAMPLING DURING 2013 FROM SUB-SLAB SOIL VAPOR PROBES SVP-1AND SVP-2. NO BTEX DETECTIONS EXCEEDED SAN FRANCISCO BAY REGIONAL WATER QUALITY CONTROL BOARD'S ENVIRONMENTAL SCREENING LEVELS,1 AND NO NAPHTHALENE WAS DETECTED IN ANY SOIL VAPOR SAMPLES. CRA'S FEBRUARY 20, 2014 SOIL VAPOR MONITORING REPORT CONTAINS THE HISTORICAL SOIL VAPOR DATA. GROUNDWATER MONITORING: QUARTERLY GROUNDWATER MONITORING WAS CONDUCTED FROM FOURTH QUARTER 1999 THROUGH THE END OF 2000. SINCE 2001, SEMIANNUAL GROUNDWATER MONITORING HAS BEEN CONDUCTED DURING THE FIRST AND THIRD QUARTERS.

HISTORICAL FACILITY DETAILS

NO HISTORICAL DETAIL(S) INFORMATION REPORTED FOR THIS FACILITY

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MAP ID# 48

Distance from Property: 0.374 mi. (1,975 ft.) SSW
Elevation: 43 ft. (Higher than TP)

SITE INFORMATION

ID #: **60002078** ASSESSOR'S PARCEL #: **14220098**
FACILITY LINK: CLICK HERE
NAME: **COMMUNICATIONS & POWER IND, INC.**
ADDRESS: **607 HANSEN WAY (CONTIGUOUS PR)**
PALO ALTO, CA 94304
COUNTY: **SANTA CLARA**
SITE SIZE (ACRES): **70**
LEAD AGENCY: **SMBRP**
DTSC PROJECT MANAGER: **JOVANNE VILLAMATER**
DTSC SUPERVISOR: **MARK PIROS**
DTSC DIVISION BRANCH: **CLEANUP BERKELEY**
NPL LISTED: **NO** RESTRICTED LAND USE: **NO**
SITE TYPE: **TIERED PERMIT**
SITE TYPE DESCRIPTION
NOT REPORTED
DTSC's CURRENT INVOLVEMENT AT SITE (as of 20/4 /6/30)
NO FURTHER ACTION - IDENTIFIES COMPLETED SITES WHERE DTSC DETERMINED AFTER INVESTIGATION, GENERALLY A PEA (AN INITIAL ASSESSMENT), THAT THE PROPERTY DOES NOT POSE A PROBLEM TO PUBLIC HEALTH OR THE ENVIRONMENT
PAST USE/S THAT CAUSED THE CONTAMINATION
MANUFACTURING - ELECTRONIC
CONFIRMED CONTAMINANTS OF CONCERN
30022 - TETRACHLOROETHYLENE (PCE)
30027 - TRICHLOROETHYLENE (TCE)

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MAP ID# 48

Distance from Property: 0.374 mi. (1,975 ft.) SSW
Elevation: 43 ft. (Higher than TP)

SITE INFORMATION

ID #: **71003431** ASSESSOR'S PARCEL #: **14220098**
FACILITY LINK: CLICK HERE
NAME: **COMMUNICATIONS & POWER IND, INC.**
ADDRESS: **607 HANSEN WAY (CONTIGUOUS PR)**
PALO ALTO, CA 94304
COUNTY: **SANTA CLARA**
SITE SIZE (ACRES): **70**
LEAD AGENCY: **SMBRP**
DTSC PROJECT MANAGER: **JOVANNE VILLAMATER**
DTSC SUPERVISOR: **MARK PIROS**
DTSC DIVISION BRANCH: **CLEANUP BERKELEY**
NPL LISTED: **NO** RESTRICTED LAND USE: **NO**
SITE TYPE: **CORRECTIVE ACTION**
SITE TYPE DESCRIPTION
INVESTIGATION AND CLEANUP ACTIVITIES AT HAZARDOUS WASTE FACILITIES (EITHER RESOURCE CONSERVATION AND RECOVERY ACT (RCRA) OR STATE-ONLY) THAT EITHER WERE ELIGIBLE FOR A PERMIT OR RECEIVED A PERMIT, ARE CALLED CORRECTIVE ACTION.
DTSC's CURRENT INVOLVEMENT AT SITE (as of 20/4 /6/30)
NO FURTHER ACTION - IDENTIFIES COMPLETED SITES WHERE DTSC DETERMINED AFTER INVESTIGATION, GENERALLY A PEA (AN INITIAL ASSESSMENT), THAT THE PROPERTY DOES NOT POSE A PROBLEM TO PUBLIC HEALTH OR THE ENVIRONMENT
PAST USE/S THAT CAUSED THE CONTAMINATION
MANUFACTURING - ELECTRONIC
CONFIRMED CONTAMINANTS OF CONCERN
30022 - TETRACHLOROETHYLENE (PCE)
30027 - TRICHLOROETHYLENE (TCE)

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MAP ID# 48

Distance from Property: 0.374 mi. (1,975 ft.) SSW
Elevation: 43 ft. (Higher than TP)

SITE INFORMATION

GEOSEARCH ID: **CAR000003863**
EPA ID: **CAR000003863**
NAME: **COMMUNICATIONS & POWER INDUSTRIES**
ADDRESS: **811 HANSEN WAY**
PALO ALTO, CA 94304
COUNTY: **SANTA CLARA**
PROJECT MANAGER: **NOT REPORTED**
DTSC PROJECT TRACKING CODE: **NOT REPORTED**
FACILITY TYPE: **HISTORICAL - NON-OPERATING**
STATUS: **CLOSED**

HAZARDOUS WASTE UNITS UNDERGOING CLOSURE

DATE: **10/28/1998**
UNIT: **TANKSTR1 (GPRA UNIT), TANKTRT1 (GPRA UNIT)**
EVENT DESCRIPTION: **CLOSURE FINAL - ISSUE CLOSURE VERIFICATION**
FACILITY TYPE: **HISTORICAL - NON-OPERATING**

DATE: **07/01/1998**
UNIT: **TANKSTR1 (GPRA UNIT), TANKTRT1 (GPRA UNIT)**
EVENT DESCRIPTION: **CLOSURE FINAL - RECEIVE CLOSURE CERTIFICATION**
FACILITY TYPE: **HISTORICAL - NON-OPERATING**

HAZARDOUS WASTE UNITS COMPLETED ACTIVITIES

DATE: **07/07/1995**
UNIT: **NOT REPORTED**
EVENT DESCRIPTION: **RENEWAL - HISTORICAL - APPLICATION PART B RECEIVED**
FACILITY TYPE: **HISTORICAL - NON-OPERATING**

MAINTENANCE **- NO INFORMATION REPORTED -**

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No Further Action Determination (NFA)

MAP ID# 48

Distance from Property: 0.374 mi. (1,975 ft.) SSW
Elevation: 43 ft. (Higher than TP)

FACILITY INFORMATION

GEOSEARCH ID: **60002078**
ENVIROSTOR ID: **60002078**
FACILITY NAME: **COMMUNICATIONS & POWER IND, INC.**
ADDRESS: **607 HANSEN WAY (CONTIGUOUS PR)**
PALO ALTO, CA 94304
COUNTY: **SANTA CLARA**

FACILITY DETAILS

PROGRAM TYPE: **TIERED PERMIT**
STATUS: **NO FURTHER ACTION**
STATUS DATE: **6/30/2014**
CALENVIROSCREEN SCORE: **1-5%**
SITE CODE: **NOT REPORTED**

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No Further Action Determination (NFA)

MAP ID# 48

Distance from Property: 0.374 mi. (1,975 ft.) SSW
Elevation: 43 ft. (Higher than TP)

FACILITY INFORMATION

GEOSEARCH ID: **71003431**
ENVIROSTOR ID: **71003431**
FACILITY NAME: **COMMUNICATIONS & POWER IND, INC.**
ADDRESS: **607 HANSEN WAY (CONTIGUOUS PR)**
PALO ALTO, CA 94304
COUNTY: **SANTA CLARA**

FACILITY DETAILS

PROGRAM TYPE: **CORRECTIVE ACTION**
STATUS: **NO FURTHER ACTION**
STATUS DATE: **6/30/2014**
CALENVIROSCREEN SCORE: **1-5%**
SITE CODE: **NOT REPORTED**

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Resource Conservation & Recovery Act - Corrective Action Facilities (RCRAC)

MAP ID# 48

Distance from Property: 0.374 mi. (1,975 ft.) SSW
Elevation: 43 ft. (Higher than TP)

FACILITY INFORMATION

EPA ID#: **CAR000003863**

NAME: **COMMUNICATIONS & POWER INDUSTRIES**

ADDRESS: **811 HANSEN WAY**
PALO ALTO, CA 94304

OWNER TYPE: **PRIVATE**

OWNER NAME: **COMMUNICATIONS & POWER INDUSTRIES LLC**

OPERATOR TYPE: **PRIVATE**

OPERATOR NAME: **COMMUNICATIONS & POWER INDUSTRIES LLC**

CONTACT NAME: **JOHN M DALE**

CONTACT ADDRESS: **811 HANSEN WAY**
PALO ALTO CA 94304-0000

CONTACT PHONE: **650-846-3141**

NON-NOTIFIER: **NOT A NON-NOTIFIER**

DATE RECEIVED BY AGENCY: **04/30/2019**

CERTIFICATION

CERTIFICATION NAME:	CERTIFICATION TITLE:	CERTIFICATION SIGNED DATE:
JOHN WNOROWSKI	**FACILITIES DIRE**	**02/26/2004**
TOR DALE	**DIR.FACILITIES**	**04/01/1996**
PAUL DINAPOLI	**FACILITIES DIR.**	**02/24/2010**
JOHN WNOROWSKI	**FAC DIR**	**03/04/2004**
TOR DALE	**FACILITIES MANA**	**03/16/1999**
PAUL DINAPOLI	**FACILITIES DIRECTOR**	**02/27/2012**
PAUL DINAPOLI	**FACILITIES DIR.**	**02/11/2011**
MICHAEL KRAUS	**FACILITIES MANA**	**10/12/2000**
PAUL DINAPOLI	**FACILITIES DIRECTOR**	**02/24/2014**
JOHN M DALE	**ENVIRONMENTAL ENGINEER**	**04/30/2019**
PAUL DINAPOLI	**FACILITIES DIR.**	**02/28/2006**
PAUL DINAPOLI	**FACILITIES DIRECTOR**	**02/26/2016**
PAUL DINAPOLI	**FACILITIES DIR.**	**02/28/2008**
PAUL DINAPOLI	**FACILITIES DIRECTOR**	**04/10/2018**

INDUSTRY CLASSIFICATION (NAICS)

334411 - ELECTRON TUBE MANUFACTURING
334418 - PRINTED CIRCUIT ASSEMBLY (ELECTRONIC ASSEMBLY) MANUFACTURING
334419 - OTHER ELECTRONIC COMPONENT MANUFACTURING

CURRENT ACTIVITY INFORMATION

GENERATOR STATUS: **LARGE QUANTITY GENERATOR** LAST UPDATED DATE: **05/02/2019**

SUBJECT TO CORRECTIVE ACTION UNIVERSE: **YES**

TDSFs POTENTIALLY SUBJECT TO CORRECTIVE ACTION UNDER 3004 (u)/(v) UNIVERSE: **NO**

TDSFs ONLY SUBJECT TO CORRECTIVE ACTION UNDER DISCRETIONARY AUTHORITIES UNIVERSE: **YES**

NON TSDFs WHERE RCRA CORRECTIVE ACTION HAS BEEN IMPOSED UNIVERSE: **NO**

CORRECTIVE ACTION WORKLOAD UNIVERSE: **YES**

IMPORTER: **NO**

MIXED WASTE GENERATOR: **NO**

RECYCLER: **NO**

UNDERGROUND INJECTION: **NO**

UNIVERSAL WASTE DESTINATION FACILITY: **NO**

TRANSFER FACILITY: **NO**

TRANSPORTER: **NO**
ONSITE BURNER EXEMPTION: **NO**
FURNACE EXEMPTION: **NO**
USED OIL REFINER: **NO**
USED OIL TRANSFER FACILITY: **NO**
USED OIL FUEL BURNER: **NO**
USED OIL PROCESSOR: **NO**
USED OIL FUEL MARKETER TO BURNER: **NO**
SPECIFICATION USED OIL MARKETER: **NO**
USED OIL TRANSPORTER: **NO**

COMPLIANCE, MONITORING AND ENFORCEMENT INFORMATION

EVALUATIONS

07/22/2009	**CEI**	**COMPLIANCE EVALUATION INSPECTION ON-SITE**
05/22/2007	**CEI**	**COMPLIANCE EVALUATION INSPECTION ON-SITE**
04/06/2004	**CEI**	**COMPLIANCE EVALUATION INSPECTION ON-SITE**

VIOLATIONS

07/22/2009	**262.A**	**GENERATORS - GENERAL**
05/22/2007	**262.A**	**GENERATORS - GENERAL**
04/06/2004	**262.A**	**GENERATORS - GENERAL**

ENFORCEMENTS

07/22/2009	**120**	**WRITTEN INFORMAL**
05/22/2007	**120**	**WRITTEN INFORMAL**
04/06/2004	**120**	**WRITTEN INFORMAL**

HAZARDOUS WASTE

122
131
132
135
172
181
212
214
261
331
343
352
491
551
591
711
726
731
741
751
791
792

D001	**IGNITABLE WASTE**
D002	**CORROSIVE WASTE**

D003	**REACTIVE WASTE**
D005	**BARIUM**
D006	**CADMIUM**
D007	**CHROMIUM**
D008	**LEAD**
D009	**MERCURY**
D010	**SELENIUM**
D011	**SILVER**
D018	**BENZENE**
D035	**METHYL ETHYL KETONE**
F002	**THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE,TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE,CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2, TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001,F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.**
F003	**THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NONHALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS, AND A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.**
F005	**THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE,CARBON DISULFIDE, ISOBUTANOL, PYRIDINE,BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001,F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.**
F006	**WASTEWATER TREATMENT SLUDGES FROM ELECTROPLATING OPERATIONS EXCEPT FROM THE FOLLOWING PROCESSES: (1) SULFURIC ACID ANODIZING OF ALUMINUM; (2) TIN PLATING ON CARBON STEEL; (3) ZINC PLATING (SEGREGATED BASIS) ON CARBON STEEL; (4) ALUMINUM OR ZINC-ALUMINUM PLATING ON CARBON STEEL; (5) CLEANING/STRIPPING ASSOCIATED WITH TIN, ZINC, AND ALUMINUM PLATING ON CARBON STEEL; AND (6) CHEMICAL ETCHING AND MILLING OF ALUMINUM.**
F007	**SPENT CYANIDE PLATING BATH SOLUTIONS FROM ELECTROPLATING OPERATIONS.**
F008	**PLATING BATH RESIDUES FROM THE BOTTOM OF PLATING BATHS FROM ELECTROPLATING OPERATIONS IN WHICH CYANIDES ARE USED IN THE PROCESS.**
F009	**SPENT STRIPPING AND CLEANING BATH SOLUTIONS FROM ELECTROPLATING OPERATIONS IN WHICH CYANIDES ARE USED IN THE PROCESS.**
LABP	
P030	**CYANIDES (SOLUBLE CYANIDE SALTS), NOT OTHERWISE SPECIFIED**
P098	**POTASSIUM CYANIDE**
P098	**POTASSIUM CYANIDE K(CN)**

UNIVERSAL WASTE

WASTE TYPE:	ACCUMULATED WASTE ON-SITE:	GENERATED WASTE ON-SITE:	SOURCE TYPE:
BATTERIES	**NO**	**NO**	**ANNUAL/BIENNIAL REPORT UPDATED WITH NOTIFICATION**
LAMPS	**NO**	**NO**	**ANNUAL/BIENNIAL REPORT UPDATED WITH NOTIFICATION**
PESTICIDES	**NO**	**NO**	**ANNUAL/BIENNIAL REPORT UPDATED WITH NOTIFICATION**
MERCURY CONTAINING EQUIPMENT	**NO**	**NO**	**ANNUAL/BIENNIAL REPORT UPDATED WITH NOTIFICATION**

CORRECTIVE ACTION AREA (RELEASE)

AREA NAME:	AIR:	GROUNDWATER:	SOIL:	SURFACE WASTE:
ENTIRE FACILITY	**-----**	**-----**	**-----**	**-----**

CORRECTIVE ACTION EVENT

CA EVENT CODE: **CA725YE**
EVENT DESCRIPTION: **HUMAN EXPOSURES CONTROLLED DETERMINATION-YES, APPLICABLE AS OF THIS DATE**
EVENT SEQUENCE NUMBER: **172**
EVENT RESPONSIBLE AGENCY: **STATE**
ACTUAL DATE OF EVENT: **09/27/2012**
ORIGINAL SCHEDULE DATE OF EVENT: **20121027**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA750YE**
EVENT DESCRIPTION: **RELEASE TO GW CONTROLLED DETERMINATION-YES, APPLICABLE AS OF THIS DATE**
EVENT SEQUENCE NUMBER: **178**
EVENT RESPONSIBLE AGENCY: **STATE**
ACTUAL DATE OF EVENT: **06/30/2014**
ORIGINAL SCHEDULE DATE OF EVENT: **20140729**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA550RC**
EVENT DESCRIPTION: **REMEDY CONSTRUCTION-REMEDY CONSTRUCTED**
EVENT SEQUENCE NUMBER: **181**
EVENT RESPONSIBLE AGENCY: **STATE**
ACTUAL DATE OF EVENT: **06/30/2014**
ORIGINAL SCHEDULE DATE OF EVENT: **20140729**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

Back to Report Summary

Resource Conservation & Recovery Act - Non-CORRACTS Treatment, Storage & Disposal Facilities (RCRAT)

MAP ID# 48

Distance from Property: 0.374 mi. (1,975 ft.) SSW
Elevation: 43 ft. (Higher than TP)

FACILITY INFORMATION

EPA ID#: **CAR000003863**

NAME: **COMMUNICATIONS & POWER INDUSTRIES**

ADDRESS: **811 HANSEN WAY**
PALO ALTO, CA 94304

OWNER TYPE: **PRIVATE**

OWNER NAME: **COMMUNICATIONS & POWER INDUSTRIES LLC**

OPERATOR TYPE: **PRIVATE**

OPERATOR NAME: **COMMUNICATIONS & POWER INDUSTRIES LLC**

CONTACT NAME: **JOHN M DALE**

CONTACT ADDRESS: **811 HANSEN WAY**
PALO ALTO CA 94304-0000

CONTACT PHONE: **650-846-3141**

NON-NOTIFIER: **NOT A NON-NOTIFIER**

DATE RECEIVED BY AGENCY: **04/30/2019**

CERTIFICATION

CERTIFICATION NAME:	CERTIFICATION TITLE:	CERTIFICATION SIGNED DATE:
JOHN WNOROWSKI	**FACILITIES DIRE**	**02/26/2004**
TOR DALE	**DIR.FACILITIES**	**04/01/1996**
PAUL DINAPOLI	**FACILITIES DIR.**	**02/24/2010**
JOHN WNOROWSKI	**FAC DIR**	**03/04/2004**
TOR DALE	**FACILITIES MANA**	**03/16/1999**
PAUL DINAPOLI	**FACILITIES DIRECTOR**	**02/27/2012**
PAUL DINAPOLI	**FACILITIES DIR.**	**02/11/2011**
MICHAEL KRAUS	**FACILITIES MANA**	**10/12/2000**
PAUL DINAPOLI	**FACILITIES DIRECTOR**	**02/24/2014**
JOHN M DALE	**ENVIRONMENTAL ENGINEER**	**04/30/2019**
PAUL DINAPOLI	**FACILITIES DIR.**	**02/28/2006**
PAUL DINAPOLI	**FACILITIES DIRECTOR**	**02/26/2016**
PAUL DINAPOLI	**FACILITIES DIR.**	**02/28/2008**
PAUL DINAPOLI	**FACILITIES DIRECTOR**	**04/10/2018**

INDUSTRY CLASSIFICATION (NAICS)

334411 - ELECTRON TUBE MANUFACTURING
334418 - PRINTED CIRCUIT ASSEMBLY (ELECTRONIC ASSEMBLY) MANUFACTURING
334419 - OTHER ELECTRONIC COMPONENT MANUFACTURING

CURRENT ACTIVITY INFORMATION

GENERATOR STATUS: **LARGE QUANTITY GENERATOR** LAST UPDATED DATE: **05/02/2019**

SUBJECT TO CORRECTIVE ACTION UNIVERSE: **YES**

TDSFs POTENTIALLY SUBJECT TO CORRECTIVE ACTION UNDER 3004 (u)/(v) UNIVERSE: **NO**

TDSFs ONLY SUBJECT TO CORRECTIVE ACTION UNDER DISCRETIONARY AUTHORITIES UNIVERSE: **YES**

NON TSDFs WHERE RCRA CORRECTIVE ACTION HAS BEEN IMPOSED UNIVERSE: **NO**

CORRECTIVE ACTION WORKLOAD UNIVERSE: **YES**

IMPORTER: **NO**

UNDERGROUND INJECTION: **NO**

MIXED WASTE GENERATOR: **NO**

UNIVERSAL WASTE DESTINATION FACILITY: **NO**

RECYCLER: **NO**

TRANSFER FACILITY: **NO**

TRANSPORTER: **NO**
ONSITE BURNER EXEMPTION: **NO**
FURNACE EXEMPTION: **NO**
USED OIL REFINER: **NO**
USED OIL TRANSFER FACILITY: **NO**
USED OIL FUEL BURNER: **NO**
USED OIL PROCESSOR: **NO**
USED OIL FUEL MARKETER TO BURNER: **NO**
SPECIFICATION USED OIL MARKETER: **NO**
USED OIL TRANSPORTER: **NO**

COMPLIANCE, MONITORING AND ENFORCEMENT INFORMATION

EVALUATIONS

07/22/2009	**CEI**	**COMPLIANCE EVALUATION INSPECTION ON-SITE**
05/22/2007	**CEI**	**COMPLIANCE EVALUATION INSPECTION ON-SITE**
04/06/2004	**CEI**	**COMPLIANCE EVALUATION INSPECTION ON-SITE**

VIOLATIONS

07/22/2009	**262.A**	**GENERATORS - GENERAL**
05/22/2007	**262.A**	**GENERATORS - GENERAL**
04/06/2004	**262.A**	**GENERATORS - GENERAL**

ENFORCEMENTS

07/22/2009	**120**	**WRITTEN INFORMAL**
05/22/2007	**120**	**WRITTEN INFORMAL**
04/06/2004	**120**	**WRITTEN INFORMAL**

HAZARDOUS WASTE

122
131
132
135
172
181
212
214
261
331
343
352
491
551
591
711
726
731
741
751
791
792

D001	**IGNITABLE WASTE**
D002	**CORROSIVE WASTE**

D003	**REACTIVE WASTE**
D005	**BARIUM**
D006	**CADMIUM**
D007	**CHROMIUM**
D008	**LEAD**
D009	**MERCURY**
D010	**SELENIUM**
D011	**SILVER**
D018	**BENZENE**
D035	**METHYL ETHYL KETONE**
F002	**THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE,TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE,CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2, TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001,F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.**
F003	**THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NONHALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS, AND A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.**
F005	**THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE,CARBON DISULFIDE, ISOBUTANOL, PYRIDINE,BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001,F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.**
F006	**WASTEWATER TREATMENT SLUDGES FROM ELECTROPLATING OPERATIONS EXCEPT FROM THE FOLLOWING PROCESSES: (1) SULFURIC ACID ANODIZING OF ALUMINUM; (2) TIN PLATING ON CARBON STEEL; (3) ZINC PLATING (SEGREGATED BASIS) ON CARBON STEEL; (4) ALUMINUM OR ZINC-ALUMINUM PLATING ON CARBON STEEL; (5) CLEANING/STRIPPING ASSOCIATED WITH TIN, ZINC, AND ALUMINUM PLATING ON CARBON STEEL; AND (6) CHEMICAL ETCHING AND MILLING OF ALUMINUM.**
F007	**SPENT CYANIDE PLATING BATH SOLUTIONS FROM ELECTROPLATING OPERATIONS.**
F008	**PLATING BATH RESIDUES FROM THE BOTTOM OF PLATING BATHS FROM ELECTROPLATING OPERATIONS IN WHICH CYANIDES ARE USED IN THE PROCESS.**
F009	**SPENT STRIPPING AND CLEANING BATH SOLUTIONS FROM ELECTROPLATING OPERATIONS IN WHICH CYANIDES ARE USED IN THE PROCESS.**
LABP	
P030	**CYANIDES (SOLUBLE CYANIDE SALTS), NOT OTHERWISE SPECIFIED**
P098	**POTASSIUM CYANIDE**
P098	**POTASSIUM CYANIDE K(CN)**

UNIVERSAL WASTE

WASTE TYPE:	ACCUMULATED WASTE ON-SITE:	GENERATED WASTE ON-SITE:	SOURCE TYPE:
BATTERIES	**NO**	**NO**	**ANNUAL/BIENNIAL REPORT UPDATED WITH NOTIFICATION**
LAMPS	**NO**	**NO**	**ANNUAL/BIENNIAL REPORT UPDATED WITH NOTIFICATION**
PESTICIDES	**NO**	**NO**	**ANNUAL/BIENNIAL REPORT UPDATED WITH NOTIFICATION**
MERCURY CONTAINING EQUIPMENT	**NO**	**NO**	**ANNUAL/BIENNIAL REPORT UPDATED WITH NOTIFICATION**

CORRECTIVE ACTION AREA (RELEASE)

AREA NAME:	AIR:	GROUNDWATER:	SOIL:	SURFACE WASTE:
ENTIRE FACILITY	**-----**	**-----**	**-----**	**-----**

CORRECTIVE ACTION EVENT

CA EVENT CODE: **CA725YE**
EVENT DESCRIPTION: **HUMAN EXPOSURES CONTROLLED DETERMINATION-YES, APPLICABLE AS OF THIS DATE**
EVENT SEQUENCE NUMBER: **172**
EVENT RESPONSIBLE AGENCY: **STATE**
ACTUAL DATE OF EVENT: **09/27/2012**
ORIGINAL SCHEDULE DATE OF EVENT: **20121027**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA750YE**
EVENT DESCRIPTION: **RELEASE TO GW CONTROLLED DETERMINATION-YES, APPLICABLE AS OF THIS DATE**
EVENT SEQUENCE NUMBER: **178**
EVENT RESPONSIBLE AGENCY: **STATE**
ACTUAL DATE OF EVENT: **06/30/2014**
ORIGINAL SCHEDULE DATE OF EVENT: **20140729**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA550RC**
EVENT DESCRIPTION: **REMEDY CONSTRUCTION-REMEDY CONSTRUCTED**
EVENT SEQUENCE NUMBER: **181**
EVENT RESPONSIBLE AGENCY: **STATE**
ACTUAL DATE OF EVENT: **06/30/2014**
ORIGINAL SCHEDULE DATE OF EVENT: **20140729**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

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MAP ID# 49

Distance from Property: 0.384 mi. (2,028 ft.) W
Elevation: 39 ft. (Higher than TP)

FACILITY INFORMATION

GLOBAL ID: **T10000010107**
SITE NAME: **SAND HILL PROPERTIES**
ADDRESS: **2600 EL CAMINO REAL**
PALO ALTO, CA 94306
COUNTY: **SANTA CLARA**

FACILITY DETAILS

PROJECT TYPE: **CLEANUP PROGRAM SITE**
STATUS: **OPEN - SITE ASSESSMENT**
STATUS DATE: **6/14/2018**
LEAD AGENCY:
SAN FRANCISCO BAY RWQCB (REGION 2)
LAST CORRESPONDENCE DATE:
6/4/2019
RELEASE TYPE:
NON-POINT SOURCE
CONTAMINANT(S) OF CONCERN:
TRICHLOROETHYLENE (TCE)
MEDIA OF CONCERN:
OTHER GROUNDWATER (USES OTHER THAN DRINKING WATER), SOIL VAPOR
PAST USE(S) THAT CAUSED CONTAMINATION:
NOT REPORTED
HUMAN HEALTH EXPOSURE CONTROLLED:
NOT REPORTED
HUMAN HEALTH EXPOSURE CONTROLLED DATE:
6/4/2019
GROUNDWATER MIGRATION CONTROLLED:
NOT APPLICABLE
GROUNDWATER MIGRATION CONTROLLED DATE:
6/4/2019
PRIMARY CASEWORKER NAME:
CELINA HERNANDEZ
PRIMARY CASEWORKER ORGANIZATION NAME:
SAN FRANCISCO BAY RWQCB (REGION 2)
PRIMARY CASEWORKER PHONE NUMBER:
510-622-2447
PRIMARY CASEWORKER ADDRESS:
1515 CLAY STREET, SUITE 1400, OAKLAND, CA
PRIMARY CASEWORKER EMAIL:
CELINA.HERNANDEZ@WATERBOARDS.CA.GOV

Back to Report Summary

MAP ID# 49

Distance from Property: 0.384 mi. (2,028 ft.) W
Elevation: 39 ft. (Higher than TP)

FACILITY INFORMATION

GLOBAL ID: **T10000010107**
URL LINK: CLICK HERE
BUSINESS NAME: **SAND HILL PROPERTIES**
ADDRESS: **2600 EL CAMINO REAL**
PALO ALTO, CA 94306
COUNTY: **SANTA CLARA**

FACILITY DETAILS

CASE TYPE: **CLEANUP PROGRAM SITE**
CASE NUMBER: **43S1212**
STATUS: **OPEN - SITE ASSESSMENT 6/14/2018**
POTENTIAL CONTAMINATION:
TRICHLOROETHYLENE (TCE)
POTENTIAL MEDIA AFFECTED:
OTHER GROUNDWATER (USES OTHER THAN DRINKING WATER), SOIL VAPOR
DISADVANTAGED COMMUNITY:
NO
SEVERELY DISADVANTAGED COMMUNITY:
NO
SITE HISTORY:
THE SITE IS OWNED BY LELAND STANFORD JUNIOR UNIVERSITY BOARD OF TRUSTEES. THE SITE HAS BEEN REDEVELOPED WITH A SUBTERRANEAN GARAGE AND OFFICE SPACE ABOVE BY THE GROUND LESSEE, SAND HILL PROPERTY COMPANY OF PALO ALTO (SHPDM, LLC). THE BOTTOM OF THE GARAGE FLOOR SLAB IS ANTICIPATED TO BE 8 FEET BELOW GRADE (FBG). THE SITE IS LOCATED WITHIN THE A REGIONAL GROUNDWATER PLUME FROM VARIAN MEDICAL SYSTEMS (VARIAN) AND HEWLETT PACKARD SUPERFUND SITE (HP). THE PLUME IS REFERRED TO AS THE CALIFORNIA-OLIVE-EMERSON (NAMED FOR THE STREETS) OR ÔCOEÖ PLUME. MULTIPLE LINES OF EVIDENCE, INCLUDING SOIL GAS, GROUNDWATER, AND INDOOR AIR SAMPLE DATA COLLECTED ON THIS PROPERTY FOR THE VARIAN OR HP SITES, DEMONSTRATE THAT ENGINEERING CONTROLS WILL BE NECESSARY TO MITIGATE INDOOR AIR ISSUES AT THIS FACILITY. GROUNDWATER FLOW IS PRESUMED TO BE TOWARDS THE NORTHEAST AND DEPTH TO FIRST ENCOUNTERED GROUNDWATER IN THE AREA IS BETWEEN 15 AND 30 FBG. THERE ARE TWO GROUNDWATER MONITORING WELLS ON THE SUBJECT PROPERTY (V-9 AND V-9X) THAT ARE PART OF ONGOING MONITORING PLAN FOR HP AND VARIAN SITES. THE MAIN CHEMICALS OBSERVED IN THE WELLS ARE TCE, DCE, TCA AND OTHER VOLATILE ORGANIC COMPOUNDS. INDOOR AIR MONITORING WAS CONDUCTED WITHIN THE FIRST FLOOR AND GARAGE AREAS SOMETIME BEFORE JUNE 3, 2014 AND AGAIN ON JULY 11, 2014. LEVELS OF TCE WERE NOT DETECTED WITHIN OCCUPIED OFFICES ON THE FIRST FLOOR, BUT WERE DETECTED ABOVE ACCEPTABLE HEALTH SCREENING LEVELS WITHIN THE GARAGE, THE ELEVATOR SHAFT, AND THE ELECTRICAL EQUIPMENT ROOM WITHIN THE GARAGE. BASED ON THE INITIAL RESULTS, A MEMORANDUM FROM MELANIE MORASH OF US EPA REGION 9 TO MR. DEATON AND MS. OLIVIER DATED JUNE 3, 2014 RECOMMENDED OPERATION OF VENTILATION FANS IN THE GARAGE DURING WEEKDAY WORKING HOURS AND ON WEEKENDS AS NECESSARY. THE REPORTED LEVELS OF TCE FROM THE JULY 11 SAMPLING WERE 9.4 8G/M¦ IN THE GARAGE AND 130 8G/M¦ IN THE ELECTRICAL STORAGE ROOM. IT WAS DETERMINED THE VENTILATION FANS WITHIN THE GARAGE AREA SHOULD BE OPERATED DURING WEEKDAY WORKING HOURS AND ON WEEKENDS AS NECESSARY. ADDITIONALLY, THE VAPOR INTRUSION RISK SHOULD BE EVALUATED AS PART OF ANY RENOVATIONS OR NEW BUILDING CONSTRUCTION AND PASSIVE AND ACTIVE MITIGATION MEASURES SHOULD BE CONSIDERED. CURRENT STATUS: SHPDM LLC HAS SUBMITTED A VAPOR INTRUSION MITIGATION SYSTEM DESIGN PLAN (VIMS) AND IT WAS APPROVED BY THE REGIONAL

WATER BOARD ON JULY 20, 2017. THE VIMS WILL CONSIST OF A SUB-SLAB VAPOR VENTING SYSTEM AND A VAPOR BARRIER. A CONSTRUCTION COMPLETION REPORT WILL BE SUBMITTED AFTER INSTALLATION AND TESTING OF THE VIMS IS COMPLETE AND WILL INCLUDE A VIMS OPERATION AND MAINTENANCE PLAN. AS OF MARCH 2020, CONSTRUCTION IS ALMOST COMPLETE PENDING FINAL INSPECTIONS.

REGULATORY ACTIVITIES

TYPE OF ACTION:	DATE:	ACTION:
RESPONSE	**03/31/2020**	**EMAIL CORRESPONDENCE**
RESPONSE	**03/09/2020**	**CORRESPONDENCE**
RESPONSE	**07/01/2019**	**OPERATION AND MAINTENANCE PLAN/MONITORING REPORT**
ENFORCEMENT	**06/04/2019**	**ANNUAL ESTIMATION LETTER**
RESPONSE	**06/01/2019**	**OTHER REPORT / DOCUMENT**
ENFORCEMENT	**05/03/2019**	**TECHNICAL CORRESPONDENCE / ASSISTANCE / OTHER**
ENFORCEMENT	**04/26/2019**	**VERBAL COMMUNICATION**
RESPONSE	**08/18/2018**	**CORRESPONDENCE**
ENFORCEMENT	**07/06/2018**	**ANNUAL ESTIMATION LETTER**
ENFORCEMENT	**10/25/2017**	**TECHNICAL CORRESPONDENCE / ASSISTANCE / OTHER**
RESPONSE	**09/25/2017**	**OPERATION AND MAINTENANCE PLAN/MONITORING REPORT**
ENFORCEMENT	**07/20/2017**	**13267 REQUIREMENT**
ENFORCEMENT	**06/30/2017**	**ANNUAL ESTIMATION LETTER**
ENFORCEMENT	**06/09/2017**	**TECHNICAL CORRESPONDENCE / ASSISTANCE / OTHER**
RESPONSE	**06/02/2017**	**CAP/RAP - OTHER REPORT**
ENFORCEMENT	**05/24/2017**	**TECHNICAL CORRESPONDENCE / ASSISTANCE / OTHER**
RESPONSE	**04/28/2017**	**CAP/RAP - OTHER REPORT**
ENFORCEMENT	**04/13/2017**	**TECHNICAL CORRESPONDENCE / ASSISTANCE / OTHER**
RESPONSE	**04/10/2017**	**OTHER REPORT / DOCUMENT**
RESPONSE	**02/15/2017**	**OTHER REPORT / DOCUMENT**
ENFORCEMENT	**02/10/2017**	**COST RECOVERY AGREEMENT**
ENFORCEMENT	**02/10/2017**	**COST RECOVERY AGREEMENT / N. OF REIMBURSEMENT**
ENFORCEMENT	**02/02/2017**	**REFERRAL TO REGIONAL BOARD**
RESPONSE	**02/01/2017**	**TECHNICAL MEMOS**
RESPONSE	**01/31/2017**	**OPERATION AND MAINTENANCE PLAN/MONITORING REPORT**
RESPONSE	**01/10/2017**	**EMAIL CORRESPONDENCE**
ENFORCEMENT	**09/15/2016**	**TECHNICAL CORRESPONDENCE / ASSISTANCE / OTHER**
RESPONSE	**09/07/2016**	**EMAIL CORRESPONDENCE**

STATUS HISTORY

STATUS:	DATE:
OPEN - SITE ASSESSMENT	**06/14/2018**
OPEN - SITE ASSESSMENT	**07/14/2017**
OPEN - REMEDIATION	**06/09/2017**
OPEN - ACTIVE	**02/07/2017**
OPEN - CASE BEGIN DATE	**09/07/2016**

CONTACT DETAILS

ORGANIZATION: **SAN FRANCISCO BAY RWQCB (REGION 2)**

ADDRESS: **1515 CLAY STREET, SUITE 1400**

CITY: **OAKLAND**

CONTACT NAME: **MICHAEL ROCHETTE**

CONTACT TYPE: **REGIONAL BOARD CASEWORKER**
CONTACT PHONE: **NOT REPORTED**
EMAIL: **MICHAEL.ROCHETTE@WATERBOARDS.CA.GOV**

Back to Report Summary

GeoTracker Cleanup Sites (CLEANUPSITES)

MAP ID# 50

Distance from Property: 0.403 mi. (2,128 ft.) SE
Elevation: 39 ft. (Higher than TP)

FACILITY INFORMATION

GLOBAL ID: **T10000013863**

URL LINK: CLICK HERE

BUSINESS NAME: **PALO ALTO HOUSING WILTON COURT DEVELOPMENT**

ADDRESS: **3703-3709 EL CAMINO REAL**
PALO ALTO, CA 94306

COUNTY: **SANTA CLARA**

FACILITY DETAILS

CASE TYPE: **CLEANUP PROGRAM SITE**

CASE NUMBER: **NOT REPORTED**

STATUS: **OPEN - SITE ASSESSMENT 12/17/2019**

POTENTIAL CONTAMINATION:
NOT REPORTED

POTENTIAL MEDIA AFFECTED:
NOT REPORTED

DISADVANTAGED COMMUNITY:
NO

SEVERELY DISADVANTAGED COMMUNITY:
NO

SITE HISTORY:
NOT REPORTED

REGULATORY ACTIVITIES

TYPE OF ACTION:	DATE:	ACTION:
RESPONSE	**11/30/2022**	**MONITORING REPORT - OTHER**
RESPONSE	**11/30/2022**	**REMEDIAL ACTION COMPLETE**
RESPONSE	**09/30/2022**	**OTHER REPORT / DOCUMENT**
RESPONSE	**06/30/2021**	**OTHER REPORT / DOCUMENT**
RESPONSE	**10/30/2020**	**OPERATION AND MAINTENANCE PLAN/MONITORING REPORT**
RESPONSE	**10/20/2020**	**OTHER REPORT / DOCUMENT**
ENFORCEMENT	**10/06/2020**	**STAFF LETTER**
ENFORCEMENT	**09/21/2020**	**STAFF LETTER**
ENFORCEMENT	**09/11/2020**	**STAFF LETTER**
RESPONSE	**08/20/2020**	**SITE ASSESSMENT REPORT**
ENFORCEMENT	**07/17/2020**	**STAFF LETTER**
ENFORCEMENT	**04/21/2020**	**STAFF LETTER**
RESPONSE	**12/30/2019**	**PHASE I ASSESSMENT REPORT**
RESPONSE	**12/30/2019**	**SITE INVESTIGATION**
ENFORCEMENT	**12/18/2019**	**STAFF LETTER**
ENFORCEMENT	**12/17/2019**	**VOLUNTARY REMEDIAL ACTION AGREEMENT**
ENFORCEMENT	**12/03/2019**	**LETTER - NOTICE**
RESPONSE	**12/03/2019**	**OTHER REPORT / DOCUMENT**
RESPONSE	**04/17/2010**	**OTHER REPORT / DOCUMENT**

STATUS HISTORY

STATUS:	DATE:
OPEN - ACTIVE	**12/17/2019**
OPEN - SITE ASSESSMENT	**12/17/2019**
OPEN - CASE BEGIN DATE	**12/03/2019**

CONTACT DETAILS

ORGANIZATION: **SANTA CLARA COUNTY LOP**
ADDRESS: **1555 BERGER DRIVE STE 300**
CITY: **SAN JOSE**
CONTACT NAME: **GERALD O'REGAN**
CONTACT TYPE: **LOCAL AGENCY CASEWORKER**
CONTACT PHONE: **NOT REPORTED**
EMAIL: **GERALD.O'REGAN@DEH.SCCGOV.ORG**

Back to Report Summary

MAP ID# 51

Distance from Property: 0.405 mi. (2,138 ft.) WSW
Elevation: 42 ft. (Higher than TP)

FACILITY INFORMATION

GLOBAL ID: **T0608500394**
URL LINK: CLICK HERE
BUSINESS NAME: **CHEVRON**
ADDRESS: **775 PAGE MILL RD**
PALO ALTO, CA 94304
COUNTY: **SANTA CLARA**

FACILITY DETAILS

CASE TYPE: **LUST CLEANUP SITE**
CASE NUMBER: **43-0338**
STATUS: **COMPLETED - CASE CLOSED 10/4/1996**
POTENTIAL CONTAMINATION:
GASOLINE
POTENTIAL MEDIA AFFECTED:
OTHER GROUNDWATER (USES OTHER THAN DRINKING WATER)
DISADVANTAGED COMMUNITY:
NO
SEVERELY DISADVANTAGED COMMUNITY:
NO
SITE HISTORY:
NOT REPORTED

REGULATORY ACTIVITIES

TYPE OF ACTION:	DATE:	ACTION:
OTHER	**01/01/50**	**LEAK DISCOVERY**
OTHER	**01/01/50**	**LEAK REPORTED**
OTHER	**01/01/50**	**LEAK STOPPED**
ENFORCEMENT	**10/04/1996**	**CLOSURE/NO FURTHER ACTION LETTER**
RESPONSE	**10/04/1996**	**OTHER REPORT / DOCUMENT**
OTHER	**07/13/1989**	**LEAK DISCOVERY**
OTHER	**07/13/1989**	**LEAK REPORTED**
OTHER	**07/13/1989**	**LEAK STOPPED**

STATUS HISTORY

STATUS:	DATE:
COMPLETED - CASE CLOSED	**10/04/1996**
OPEN - SITE ASSESSMENT	**01/04/1990**
OPEN - CASE BEGIN DATE	**07/13/1989**

CONTACT DETAILS

ORGANIZATION: **SANTA CLARA COUNTY LOP**
ADDRESS: **1555 BERGER DRIVE, SUITE 300**
CITY: **SAN JOSE**
CONTACT NAME: **UST CASE WORKER**
CONTACT TYPE: **LOCAL AGENCY CASEWORKER**
CONTACT PHONE: **4089183400**

EMAIL: **NOT REPORTED**
ORGANIZATION: **SAN FRANCISCO BAY RWQCB (REGION 2)**
ADDRESS: **1515 CLAY ST SUITE 1400**
CITY: **OAKLAND**
CONTACT NAME: **REGIONAL WATER BOARD**
CONTACT TYPE: **REGIONAL BOARD CASEWORKER**
CONTACT PHONE: **NOT REPORTED**
EMAIL: **NOT REPORTED**

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Historical Cortese List (HISTCORTESE)

MAP ID# 52

Distance from Property: 0.443 mi. (2,339 ft.) SW
Elevation: 42 ft. (Higher than TP)

FACILITY INFORMATION

GEOSEARCH ID: **43-0338COR**
ID#: **43-0338**
NAME: **CHEVRON**
ADDRESS: **775 PAGE MILL**
PALO ALTO, CA 94304

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Leaking Underground Storage Tanks (LUST)

MAP ID# 52

Distance from Property: 0.405 mi. (2,138 ft.) WSW
Elevation: 42 ft. (Higher than TP)

FACILITY INFORMATION

GLOBAL ID: **T0608500394**
URL LINK: CLICK HERE
BUSINESS NAME: **CHEVRON**
ADDRESS: **775 PAGE MILL RD**
PALO ALTO, CA 94304
COUNTY: **SANTA CLARA**

FACILITY DETAILS

CASE TYPE: **LUST CLEANUP SITE**
CASE NUMBER: **43-0338**
STATUS: **COMPLETED - CASE CLOSED 10/04/1996**
POTENTIAL CONTAMINATION:
GASOLINE
POTENTIAL MEDIA AFFECTED:
OTHER GROUNDWATER (USES OTHER THAN DRINKING WATER)
DISADVANTAGED COMMUNITY:
NO
SEVERELY DISADVANTAGED COMMUNITY:
NO
SITE HISTORY:
NOT REPORTED

HISTORICAL FACILITY DETAILS

NO HISTORICAL DETAIL(S) INFORMATION REPORTED FOR THIS FACILITY

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Recycling Centers (SWRCY)

MAP ID# 53

Distance from Property: 0.413 mi. (2,181 ft.) WNW
Elevation: 35 ft. (Higher than TP)

SITE INFORMATION

ID #: **RC14577**
NAME: **TOMRA PACIFIC INC**
ADDRESS: **164 S CALIFORNIA AVE**
CITY: **PALO ALTO**
STATE: **CA**
ZIP: **94306**
COUNTY: **SANTA CLARA**

SITE DETAILS

OPERATION BEGIN DATE: **09/25/09**
OPERATION END DATE: **12/09/09**
PROGRAM PHONE: **NOT REPORTED**
ORGANIZATION NAME: **NOT REPORTED**
ADDRESS: **STREET NOT REPORTED**
CITY NOT REPORTED
GLASS: **NOT ACCEPTED**
ALUMINIUM: **NOT ACCEPTED**
PLASTIC: **NOT ACCEPTED**
BIMETAL: **NOT ACCEPTED**

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Recycling Centers (SWRCY)

MAP ID# 53

Distance from Property: 0.413 mi. (2,181 ft.) WNW
Elevation: 35 ft. (Higher than TP)

SITE INFORMATION

ID #: **RC14696**
NAME: **TOMRA PACIFIC INC**
ADDRESS: **164 S CALIFORNIA AVE**
CITY: **PALO ALTO**
STATE: **CA**
ZIP: **94306**
COUNTY: **SANTA CLARA**

SITE DETAILS

OPERATION BEGIN DATE: **02/20/10**
OPERATION END DATE: **NOT REPORTED**
PROGRAM PHONE: **(951) 520-1700**
ORGANIZATION NAME: **NOT REPORTED**
ADDRESS: **STREET NOT REPORTED**
CITY NOT REPORTED
GLASS: **NOT ACCEPTED**
ALUMINIUM: **NOT ACCEPTED**
PLASTIC: **NOT ACCEPTED**
BIMETAL: **NOT ACCEPTED**

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Recycling Centers (SWRCY)

MAP ID# 53

Distance from Property: 0.413 mi. (2,181 ft.) WNW
Elevation: 35 ft. (Higher than TP)

SITE INFORMATION

ID #: **RC164743.001**
NAME: **REPLANET LLC**
ADDRESS: **164 S CALIFORNIA AVE**
CITY: **PALO ALTO**
STATE: **CA**
ZIP: **94306**
COUNTY: **SANTA CLARA**

SITE DETAILS

OPERATION BEGIN DATE: **7/1/2012**
OPERATION END DATE: **NOT REPORTED**
PROGRAM PHONE: **(877) 737-5263**
ORGANIZATION NAME: **REPLANET LLC**
ADDRESS: **800 N HAVEN AVE SUITE 120**
ONTARIO CA 91764
GLASS: **ACCEPTED**
ALUMINIUM: **ACCEPTED**
PLASTIC: **ACCEPTED**
BIMETAL: **ACCEPTED**

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Recycling Centers (SWRCY)

MAP ID# 53

Distance from Property: 0.413 mi. (2,181 ft.) WNW
Elevation: 35 ft. (Higher than TP)

SITE INFORMATION

ID #: **RC3048**
NAME: **GOODWILL INDUSTRIES**
ADDRESS: **164 S CALIFORNIA AVE**
CITY: **PALO ALTO**
STATE: **CA**
ZIP: **94306**
COUNTY: **SANTA CLARA**

SITE DETAILS

OPERATION BEGIN DATE: **03/02/89**
OPERATION END DATE: **10/26/09**
PROGRAM PHONE: **(408) 998-5774**
ORGANIZATION NAME: **NOT REPORTED**
ADDRESS: **STREET NOT REPORTED**
CITY NOT REPORTED
GLASS: **NOT ACCEPTED**
ALUMINIUM: **NOT ACCEPTED**
PLASTIC: **NOT ACCEPTED**
BIMETAL: **NOT ACCEPTED**

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MAP ID# 54

Distance from Property: 0.417 mi. (2,202 ft.) SSE
Elevation: 39 ft. (Higher than TP)

FACILITY INFORMATION

GLOBAL ID: **T10000012320**
URL LINK: CLICK HERE
BUSINESS NAME: **3666 EL CAMINO**
ADDRESS: **3666 EL CAMINO REAL**
PALO ALTO, CA 94306
COUNTY: **SANTA CLARA**

FACILITY DETAILS

CASE TYPE: **LUST CLEANUP SITE**
CASE NUMBER: **NOT REPORTED**
STATUS: **OPEN - SITE ASSESSMENT 11/14/2018**
POTENTIAL CONTAMINATION:
NOT REPORTED
POTENTIAL MEDIA AFFECTED:
NOT REPORTED
DISADVANTAGED COMMUNITY:
NO
SEVERELY DISADVANTAGED COMMUNITY:
NO
SITE HISTORY:
NOT REPORTED

REGULATORY ACTIVITIES

TYPE OF ACTION:	DATE:	ACTION:
RESPONSE	**04/30/2020**	**SITE ASSESSMENT REPORT**
ENFORCEMENT	**12/16/2019**	**STAFF LETTER**
RESPONSE	**11/08/2019**	**OTHER WORKPLAN**
RESPONSE	**11/08/2019**	**OTHER WORKPLAN - REGULATOR RESPONDED**
ENFORCEMENT	**09/19/2019**	**STAFF LETTER**
RESPONSE	**09/10/2019**	**SITE ASSESSMENT REPORT**
RESPONSE	**08/30/2019**	**SITE ASSESSMENT REPORT**
ENFORCEMENT	**08/27/2019**	**STAFF LETTER**
ENFORCEMENT	**04/24/2019**	**STAFF LETTER**
RESPONSE	**01/15/2019**	**PRELIMINARY SITE ASSESSMENT WORKPLAN**
RESPONSE	**01/15/2019**	**PRELIMINARY SITE ASSESSMENT WORKPLAN - REGULATOR RESPONDED**
ENFORCEMENT	**11/15/2018**	**STAFF LETTER**
ENFORCEMENT	**11/14/2018**	**NOTICE OF RESPONSIBILITY**
OTHER	**08/21/2018**	**LEAK DISCOVERY**
OTHER	**08/21/2018**	**LEAK REPORTED**

STATUS HISTORY

STATUS:	DATE:
OPEN - SITE ASSESSMENT	**11/14/2018**
OPEN - CASE BEGIN DATE	**08/21/2018**

CONTACT DETAILS

ORGANIZATION: **SANTA CLARA COUNTY LOP**
ADDRESS: **1555 BERGER DRIVE STE 300**
CITY: **SAN JOSE**
CONTACT NAME: **GERALD O'REGAN**
CONTACT TYPE: **LOCAL AGENCY CASEWORKER**
CONTACT PHONE: **NOT REPORTED**
EMAIL: **GERALD.O'REGAN@DEH.SCCGOV.ORG**

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Leaking Underground Storage Tanks (LUST)

MAP ID# 54

Distance from Property: 0.417 mi. (2,202 ft.) SSE
Elevation: 39 ft. (Higher than TP)

FACILITY INFORMATION

GLOBAL ID: **T10000012320**
URL LINK: CLICK HERE
BUSINESS NAME: **3666 EL CAMINO**
ADDRESS: **3666 EL CAMINO REAL**
PALO ALTO, CA 94306
COUNTY: **SANTA CLARA**

FACILITY DETAILS

CASE TYPE: **LUST CLEANUP SITE**
CASE NUMBER: **NOT REPORTED**
STATUS: **OPEN - SITE ASSESSMENT 11/14/2018**
POTENTIAL CONTAMINATION:
NOT REPORTED
POTENTIAL MEDIA AFFECTED:
NOT REPORTED
DISADVANTAGED COMMUNITY:
NO
SEVERELY DISADVANTAGED COMMUNITY:
NO
SITE HISTORY:
NOT REPORTED

HISTORICAL FACILITY DETAILS

NO HISTORICAL DETAIL(S) INFORMATION REPORTED FOR THIS FACILITY

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MAP ID# 55

Distance from Property: 0.428 mi. (2,260 ft.) WSW
Elevation: 44 ft. (Higher than TP)

FACILITY INFORMATION

ID #: **43350082**

NAME: **HEWLETT-PACKARD (620-640 PAGE MILL ROAD)**

ADDRESS: **620-640 PAGE MILL ROAD**
PALO ALTO, CA

STATUS (DATE): **PROPERTY/SITE REFERRED TO RWQCB (06/27/1994)**

STANDARD INDUSTRIAL CLASSIFICATION BELIEVED TO BE CAUSE OF (POTENTIAL) CONTAMINATION:
MANU - INDUSTRIAL MACHINERY & EQUIPMENT

ACCESS TO SITE: **NOT REPORTED**

GROUNDWATER CONTAMINATION: **C**

COMMENTS

THIS IS THE DATE THE SITE WAS FIRST LISTED AWP PURSUANT TO SECTION 25356. SITE HAS BEEN REFERRED TO RWQCB. VOLATILE ORGANIC COMPOUNDS (VOCS) DETECTED IN GROUNDWATER UNDER TANK AREA AND IN SOILS FROM FORMER TANK LOCATION. POTENTIAL HEALTH RISKS INCLUDE TOUCHING OR INGESTING CONTAMINATED GROUNDWATER OR SOIL. CHEMICALS IN SHALLOW AQUIFER HAVE MIGRATED OFF-SITE IN A NORTHERNLY DIRECTION. UNTREATED GROUNDWATER IS DISCHARGED TO MATADERO CANAL, WHICH EMPTIES INTO SAN FRANCISCO BAY APPROXIMATELY FOUR MILES AWAY.

BACKGROUND

TWO DIVISIONS OF THIS CORPORATION SHARE THE FACILITY'S FIFTY-ACRE SITE: STANFORD PARK DIVISION, PRIMARILY A PLATING AND CHEMICAL MILLINGS SHOP, AND THE HEWLETT-PACKARD LABORATORIES, A RESEARCH AND DEVELOPMENT BRANCH FOR MICRO- ELECTRONIC COMPONENTS. THE SURROUNDING LAND USE IS BOTH INDUSTRIAL AND COMMERCIAL. SEVERAL UNDERGROUND STORAGE TANKS EXISTED AT THE SITE FROM 1965 TO 1983. THESE TANKS STORED CHEMICAL PRODUCTS AND WASTES. IN 1981, CHLORINATED AND AROMATIC SOLVENTS WERE DISCOVERED IN SOIL AND GROUNDWATER. THE FOLLOWING CHEMICALS HAVE BEEN DETECTED IN SOIL AND GROUNDWATER: FREON, BENZENE, TOLUENE, DICHLOROETHANE (DCA), TRICHLOROETHYLENE (TCE), ETHYLBENZENE, METHYLCYCLOHEXANE, AND METHYLENE CHLORIDE. ABOUT 56,000 PEOPLE LIVE WITHIN A THREE-MILE RADIUS OF THE FACILITY AND DEPEND ON GROUNDWATER AS A STAND-BY SOURCE OF DRINKING WATER. THE CLOSEST WELL TO THE SITE IS THE MATADERO WELL LOCATED NEAR THE SOUTHEAST CORNER OF MATADERO CREEK AND WHITSELL STREET, A DISTANCE OF 4530 FEET FROM CONTAMINATED MONITORING WELLS.

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MAP ID# 55

Distance from Property: 0.428 mi. (2,260 ft.) WSW
Elevation: 44 ft. (Higher than TP)

FACILITY INFORMATION

GLOBAL ID: **SL720511210**
URL LINK: CLICK HERE
BUSINESS NAME: **HEWLETT-PACKARD COMPANY**
ADDRESS: **640 PAGE MILL RD**
PALO ALTO, CA 94304-1001
COUNTY: **SANTA CLARA**

FACILITY DETAILS

CASE TYPE: **CLEANUP PROGRAM SITE**
CASE NUMBER: **43S0051**
STATUS: **OPEN - REMEDIATION 1/1/1987**
POTENTIAL CONTAMINATION:
TRICHLOROETHYLENE (TCE), 1,1,1-TRICHLOROETHANE (TCA), ARSENIC, TETRACHLOROETHYLENE (PCE)
POTENTIAL MEDIA AFFECTED:
OTHER GROUNDWATER (USES OTHER THAN DRINKING WATER), SOIL VAPOR
DISADVANTAGED COMMUNITY:
NO
SEVERELY DISADVANTAGED COMMUNITY:
NO
SITE HISTORY:
THE RESPONSIBLE PARTIES CONDUCTED THE FOLLOWING REMEDIAL MEASURES: - SOIL EXCAVATION OF THE ON-SITE DRY WELL SOURCE IN 1990S - ON-SITE SOIL VAPOR EXTRACTION FOR A FEW YEARS - ON- AND OFF-SITE GROUNDWATER EXTRACTION THAT CONTINUES TODAY - ON-SITE IN-SITU CHEMICAL OXIDATION (ISCO) GROUNDWATER MIGRATION IS UNDER LATERAL CONTROL IN THE A1 AND A2 ZONES WITH INCREASED OFF-PROPERTY EXTRACTION IN EW-8 AND EW-10. HOWEVER, CVOC LEVELS IN THE A2 ZONE ROSE FROM NON-DETECTABLE LEVELS IN 2000 TO ELEVATED LEVELS SINCE 2001. THE INSTALLATION AND MONITORING OF A B-ZONE WELL DOWNGRADIENT FROM THE AREA OF ELEVATED A2-ZONE CVOCS INDICATES THE B ZONE HAS NOT BEEN SIGNIFICANTLY IMPACTED. FOLLLOWING UP ON THE LAST 5YR, THE RESPONSIBLE PARTIES ARE PILOT TESTING ON-PROPERTY DIRECT REMEDIATION OF THE A1 AND A2 ZONES THROUGH FOCUSED GROUNDWATER EXTRACTION THAT HAS SUCCESSFULLY LOWERED CVOC LEVELS FROM OVER DNAPL THRESHOLD TO THE HIGH-HUNDREDS TO LOW THOUSANDS OF PARTS PER BILLION. ON-PROPERTY INDOOR AIR VAPOR INTRUSION IS EFFECTIVELY CONTROLLED BY THE PODIUM-PARKING DESIGN OF THE BUILDING THAT HAS A VAPOR BARRIER. OFF-PROPERTY VI EVALUATION IS CURRENTLY BEING CONDUCTED WITH THE RESIDENTIAL PHASE RECENTLY COMPLETED. THE OFF-PROPERTY VI EVALUATION CONCLUDED THAT VI IS NOT OCCURRING IN SINGLE FAMILY HOMES AND IN THE BREATHING ZONE OF RESIDENTIAL AND COMMERCIAL BUILDINGS WITH REGIONAL WATER BOARD AND USEPA CONCURRENCE.

REGULATORY ACTIVITIES

TYPE OF ACTION:	DATE:	ACTION:
OTHER	**01/01/50**	**LEAK DISCOVERY**
OTHER	**01/01/50**	**LEAK REPORTED**
OTHER	**01/01/50**	**LEAK STOPPED**
REMEDIATION	**01/01/50**	**IN SITU PHYSICAL/CHEMICAL TREATMENT (OTHER THAN SVE)**
REMEDIATION	**01/01/50**	**PUMP & TREAT (P&T) GROUNDWATER**
ENFORCEMENT	**05/28/2020**	**ANNUAL ESTIMATION LETTER**
ENFORCEMENT	**05/14/2020**	**STAFF LETTER**

TYPE OF ACTION:	DATE:	ACTION:
ENFORCEMENT	04/15/2020	STAFF LETTER
ENFORCEMENT	01/27/2020	STAFF LETTER
ENFORCEMENT	07/17/2019	ANNUAL ESTIMATION LETTER
ENFORCEMENT	05/16/2019	STAFF LETTER
ENFORCEMENT	06/29/2018	STAFF LETTER
ENFORCEMENT	05/10/2018	TECHNICAL CORRESPONDENCE / ASSISTANCE / OTHER
ENFORCEMENT	01/17/2018	TECHNICAL CORRESPONDENCE / ASSISTANCE / OTHER
ENFORCEMENT	09/11/2017	TECHNICAL CORRESPONDENCE / ASSISTANCE / OTHER
ENFORCEMENT	08/09/2017	TECHNICAL CORRESPONDENCE / ASSISTANCE / OTHER
ENFORCEMENT	07/24/2017	ANNUAL ESTIMATION LETTER
ENFORCEMENT	10/06/2016	13267 REQUIREMENT
RESPONSE	03/21/2016	OTHER REPORT / DOCUMENT
ENFORCEMENT	01/11/2016	NOTIFICATION - PUBLIC PARTICIPATION DOCUMENT
RESPONSE	09/30/2015	FIVE YEAR REVIEW COMPLETE
ENFORCEMENT	07/08/2015	ANNUAL ESTIMATION LETTER - #43S0051
ENFORCEMENT	05/06/2015	13267 REQUIREMENT
ENFORCEMENT	03/12/2015	TECHNICAL CORRESPONDENCE / ASSISTANCE / OTHER
ENFORCEMENT	02/25/2015	MEETING
ENFORCEMENT	02/24/2015	13267 REQUIREMENT
ENFORCEMENT	01/08/2015	13267 REQUIREMENT
ENFORCEMENT	12/10/2014	MEETING
ENFORCEMENT	01/23/2014	13267 REQUIREMENT
ENFORCEMENT	12/05/2013	MEETING
ENFORCEMENT	12/05/2013	TECHNICAL CORRESPONDENCE / ASSISTANCE / OTHER
ENFORCEMENT	10/09/2013	13267 REQUIREMENT
ENFORCEMENT	10/08/2013	STAFF LETTER
ENFORCEMENT	06/06/2013	13267 REQUIREMENT
ENFORCEMENT	05/18/2013	13267 REQUIREMENT
RESPONSE	04/16/2013	CAP/RAP - OTHER REPORT
ENFORCEMENT	12/04/2012	13267 REQUIREMENT
ENFORCEMENT	11/08/2012	13267 REQUIREMENT
ENFORCEMENT	10/18/2012	13267 REQUIREMENT
ENFORCEMENT	09/25/2012	13267 REQUIREMENT
ENFORCEMENT	05/15/2012	13267 REQUIREMENT
ENFORCEMENT	04/28/2012	MEETING
ENFORCEMENT	04/19/2012	TECHNICAL CORRESPONDENCE / ASSISTANCE / OTHER
ENFORCEMENT	03/12/2012	13267 REQUIREMENT
ENFORCEMENT	02/23/2012	13267 REQUIREMENT
ENFORCEMENT	02/02/2012	MEETING
REMEDIATION	01/01/2012	PUMP & TREAT (P&T) GROUNDWATER
ENFORCEMENT	12/01/2011	13267 REQUIREMENT
ENFORCEMENT	11/01/2011	MEETING
ENFORCEMENT	08/08/2011	MEETING
ENFORCEMENT	08/05/2011	NOTIFICATION - PUBLIC PARTICIPATION DOCUMENT

TYPE OF ACTION:	DATE:	ACTION:
ENFORCEMENT	07/13/2011	13267 REQUIREMENT
ENFORCEMENT	06/01/2011	13267 REQUIREMENT
ENFORCEMENT	11/18/2010	13267 REQUIREMENT
ENFORCEMENT	10/20/2010	STAFF LETTER
RESPONSE	09/30/2010	FIVE YEAR REVIEW COMPLETE
ENFORCEMENT	07/13/2010	13267 REQUIREMENT
ENFORCEMENT	06/24/2010	LETTER - NOTICE
ENFORCEMENT	11/12/2009	TECHNICAL CORRESPONDENCE / ASSISTANCE / OTHER
ENFORCEMENT	04/30/2009	TECHNICAL CORRESPONDENCE / ASSISTANCE / OTHER
ENFORCEMENT	11/18/2008	TECHNICAL CORRESPONDENCE / ASSISTANCE / OTHER
ENFORCEMENT	09/03/2008	TECHNICAL CORRESPONDENCE / ASSISTANCE / OTHER
ENFORCEMENT	06/02/2008	TECHNICAL CORRESPONDENCE / ASSISTANCE / OTHER
RESPONSE	09/24/2007	REMEDIAL PROGRESS REPORT
ENFORCEMENT	09/30/2005	TECHNICAL CORRESPONDENCE / ASSISTANCE / OTHER
REMEDIATION	03/01/2005	IN SITU PHYSICAL/CHEMICAL TREATMENT (OTHER THAN SVE)
RESPONSE	01/30/2004	NPDES / WDR REPORTS
RESPONSE	10/30/2003	NPDES / WDR REPORTS
RESPONSE	09/30/2003	MONITORING REPORT - QUARTERLY
RESPONSE	07/30/2003	NPDES / WDR REPORTS
ENFORCEMENT	06/25/2003	DEED RESTRICTION / LAND USE RESTRICTION / COVENANT
RESPONSE	04/30/2003	NPDES / WDR REPORTS
RESPONSE	01/30/2003	NPDES / WDR REPORTS
RESPONSE	01/29/2003	NPDES / WDR REPORTS
RESPONSE	09/30/2002	MONITORING REPORT - QUARTERLY
RESPONSE	09/30/2001	MONITORING REPORT - QUARTERLY
RESPONSE	04/13/2001	MONITORING REPORT - QUARTERLY
OTHER	12/31/2000	LEAK STOPPED
RESPONSE	12/19/2000	INTERIM REMEDIAL ACTION REPORT
RESPONSE	06/01/2000	UNKNOWN
ENFORCEMENT	11/24/1999	WASTE DISCHARGE REQUIREMENTS - #99-051
ENFORCEMENT	09/21/1994	CLEAN-UP AND ABATEMENT ORDER - #94-130
RESPONSE	09/24/1993	REMEDIAL INVESTIGATION REPORT
RESPONSE	06/24/1993	REMEDIAL INVESTIGATION REPORT
RESPONSE	07/16/1992	OTHER REPORT / DOCUMENT
REMEDIATION	01/01/1991	PUMP & TREAT (P&T) GROUNDWATER
OTHER	01/01/1982	LEAK REPORTED
REMEDIATION	01/01/1982	PUMP & TREAT (P&T) GROUNDWATER
OTHER	01/01/1981	LEAK DISCOVERY

STATUS HISTORY

STATUS:	DATE:
OPEN - REMEDIATION	01/01/1987
OPEN - CASE BEGIN DATE	01/01/1981

CONTACT DETAILS

ORGANIZATION: **SANTA CLARA VALLEY WATER DISTRICT**

ADDRESS: **5750 ALMADEN EXPRESSWAY**
CITY: **SAN JOSE**
CONTACT NAME: **GEORGE COOK**
CONTACT TYPE: **LOCAL AGENCY CASEWORKER**
CONTACT PHONE: **4082652607**
EMAIL: **GCOOK@VALLEYWATER.ORG**
ORGANIZATION: **SAN FRANCISCO BAY RWQCB (REGION 2)**
ADDRESS: **1515 CLAY STREET, SUITE 1500**
CITY: **OAKLAND**
CONTACT NAME: **ROGER PAPLER**
CONTACT TYPE: **REGIONAL BOARD CASEWORKER**
CONTACT PHONE: **NOT REPORTED**
EMAIL: **ROGER.PAPLER@WATERBOARDS.CA.GOV**

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MAP ID# 55

Distance from Property: 0.428 mi. (2,260 ft.) WSW
Elevation: 44 ft. (Higher than TP)

SITE INFORMATION

ID #: **43350082** ASSESSOR'S PARCEL #: **NONE SPECIFIED**
FACILITY LINK: CLICK HERE
NAME: **HEWLETT-PACKARD (620-640 PAGE MILL ROAD)**
ADDRESS: **620-640 PAGE MILL ROAD**
PALO ALTO, CA 94304
COUNTY: **SANTA CLARA**
SITE SIZE (ACRES): **NOT REPORTED**
LEAD AGENCY: **US EPA**
DTSC PROJECT MANAGER: **NOT REPORTED**
DTSC SUPERVISOR: **REFERRED - NOT ASSIGNED**
DTSC DIVISION BRANCH: **CLEANUP BERKELEY**
NPL LISTED: **YES** RESTRICTED LAND USE: **NO**
SITE TYPE: **FEDERAL SUPERFUND**
SITE TYPE DESCRIPTION
FEDERAL SUPERFUND (NPL): IDENTIFIES SITES WHERE THE U.S. EPA PROPOSED, LISTED, OR DELISTED A SITE ON THE NATIONAL PRIORITIES LIST (NPL). THE LIST OF SITES IS DEVELOPED AND MAINTAINED BY THE U.S. EPA, WHICH TYPICALLY HAS PRIMARY REGULATORY OVERSIGHT FOR THE SITES LISTED ON THE NPL. FOR MORE INFORMATION, PLEASE REFER TO THE U.S. EPA'S WEB SITE AT HTTP://WWW.EPA.GOV/SUPERFUND/SITES/NPL/NPL_HRS.HTM.
DTSC's CURRENT INVOLVEMENT AT SITE (as of 19/4 /6/27)
REFER: RWQCB -
PAST USE/S THAT CAUSED THE CONTAMINATION
NONE SPECIFIED
CONFIRMED CONTAMINANTS OF CONCERN
NONESPECIFIED - NONE SPECIFIED

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Historical Cortese List (HISTCORTESE)

MAP ID# 55

Distance from Property: 0.428 mi. (2,260 ft.) WSW
Elevation: 44 ft. (Higher than TP)

FACILITY INFORMATION

GEOSEARCH ID: **2 438063NO2COR**

ID#: **2 438063NO2**

NAME: **SCR-HEWLETT PKRD-640 PAGE**

ADDRESS: **640 PAGE MILL**
PALO ALTO, CA 94304

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MAP ID# 55

Distance from Property: 0.428 mi. (2,260 ft.) WSW
Elevation: 44 ft. (Higher than TP)

FACILITY INFORMATION

FACILITY LINK: *EPA*

EPA ID#: **CAD980884209**

SITE ID#: **0902134**

NAME: **HEWLETT-PACKARD (620-640 PAGE MILL ROAD)**

ADDRESS: **620 - 640 PAGE MILL RD.**
PALO ALTO, CA 94304

COUNTY: **SANTA CLARA**

NATIONAL PRIORITY LISTING: **F - CURRENTLY ON THE FINAL NPL**

FEDERAL FACILITY CLASSIFICATION: **NO - NOT A FEDERAL FACILITY**

NON-NPL STATUS: **NOT REPORTED -**

NON-NPL STATUS DATE: **NOT REPORTED**

PHYSICAL CLASSIFICATION OF SITE / INCIDENT: **MANUFACTURING PLANT**

FEDERAL REGISTER INFORMATION

DATE	VOLUME	PAGE #	ACTION	HRS SCORE
06/24/1988	**53**	**23988**	**PROPOSED TO THE FINAL NPL**	**29.76000**
02/21/1990	**55**	**6154**	**PROMULGATED TO THE FINAL NPL**	**29.76000**

SITE DESCRIPTION

THE HEWLETT-PACKARD 620-640 PAGE MILL ROAD (HP-640 PMR) SUPERFUND SITE IS LOCATED IN PALO ALTO, CALIFORNIA WITHIN THE STANFORD RESEARCH PARK, A LIGHT-INDUSTRIAL AND RESEARCH AREA OWNED BY STANFORD UNIVERSITY. LEAKS FROM AN UNDERGROUND WASTE SOLVENT STORAGE TANK HAVE RESULTED IN SOIL AND GROUND WATER CONTAMINATION AT THE SITE.

LAND USE IN THE VICINITY OF THE SITE IS PREDOMINANTLY COMMERCIAL AND INDUSTRIAL, WITH SMALLER AREAS OF RESIDENTIAL DEVELOPMENT. THE NEAREST RESIDENTIAL AREAS ARE LOCATED APPROXIMATELY 1/8 MILE NORTHEAST OF THE FACILITY. FIVE MUNICIPAL BACKUP SUPPLY WELLS DRAWING FROM A DEEP AQUIFER ARE WITHIN THREE MILES OF THE SITE BUT ARE NOT CURRENTLY USED. ALL OF THE CITY OF PALO ALTO DRINKING WATER IS SUPPLIED BY THE SAN FRANCISCO WATER DEPARTMENT'S HETCH HETCHY SYSTEM.

THE HP-640 PMR SITE IS LOCATED NEAR THE WESTERN MARGIN OF THE SANTA CLARA VALLEY. THE VALLEY SURFACE IN THIS AREA IS A GENTLY SLOPING ALLUVIAL PLAIN THAT EXTENDS NORTHEAST FROM THE FOOTHILLS TO SAN FRANCISCO BAY, LOCATED APPROXIMATELY THREE MILES TO THE NORTHEAST. THE AREA IS UNDERLAIN BY INTERBEDDED ALLUVIAL FAN DEPOSITS AND FINE-GRAINED FLOODPLAIN DEPOSITS.

THE ONLY SURFACE WATER IN THE VICINITY OF HP-640 PMR IS MATADERO CREEK, LOCATED TO THE EAST OF THE SITE. MATADERO CREEK IS AN INTERMITTENT STREAM THAT ORIGINATES NEAR THE LOS ALTOS HILLS AND FLOWS IN A NORTHERLY DIRECTION THROUGH THE RESIDENTIAL, COMMERCIAL AND INDUSTRIAL AREAS OF PALO ALTO.

TWO AREAS HAVE BEEN DESIGNATED AS GROUND WATER STUDY AREAS: THE CALIFORNIA OLIVE EMERSON (COE) STUDY AREA (NAMED BY THE BORDERING STREETS) AND THE PERIMETER AREA WHICH REPRESENTS THE LIMITS OF THE KNOWN GROUND WATER CONTAMINATION PLUME. THE COE AND PERIMETER AREAS, ARE UNDERLAIN BY TWO PRIMARY AQUIFERS, THE UPPER A AQUIFER AND THE LOWER B AQUIFER. EACH OF THESE TWO AQUIFERS CONTAIN DISTINCT SAND ZONES. THE A AQUIFER EXTENDS UP TO 55 FEET BELOW GROUND SURFACE, AND GROUNDWATER IS FIRST ENCOUNTERED AT DEPTHS BETWEEN 15 A ND 30 FEET. WITHIN THE A AQUIFER, THE A1 UPPER (A1U) ZONE IS GENERALLY FOUND BETWEEN THE DEPTHS OF 15 AND 30 FEET, THE A1 ZONE BETWEEN 30 AND 40 FEET, AND THE A2 ZONE BETWEEN 40 AND 55 FEET. THE GENERAL GROUNDWATER GRADIENT IN THE A AQUIFER IS TO THE NORTH-

NORTHEAST. WITHIN THE B AQUIFER, THE B1 ZONE OCCURS BELOW AN APPROXIMATE DEPTH OF 60 FEET BELOW GROUND SURFACE. THIS ZONE IS TYPICALLY ABOUT 10 FEET THICK. WHERE ENCOUNTERED, THE B2 ZONE BEGINS AT APPROXIMATELY 85 FEET BELOW THE SURFACE AND IS BETWEEN SIX AND 33 FEET THICK.

THE OREGON EXPRESSWAY UNDERPASS (OEU) SERVES AS A SUBSURFACE ROADWAY BENEATH THE SOUTHERN PACIFIC RAILROAD TRACKS, ALMA STREET AND PARK BOULEVARD. THE UNDERPASS, BUILT IN 1958, EXTENDS 24 FEET BELOW GROUND SURFACE INTO THE AQUIFER A1U ZONE. A DEWATERING SYSTEM INSTALLED BENEATH THE UNDERPASS CONTROLS NATURAL GROUNDWATER INFLOW AND SURFACE RUNOFF. THIS DEWATERING APPEARS TO AFFECT GROUNDWATER FLOW IN THE A1U, A1 AND A2 ZONES, AND DOES NOT ALLOW CONTAMINANTS TO BYPASS THE SUBDRAIN TO THE NORTH.

DURING LOW FLOW PERIODS, THE AVERAGE RATE OF GROUNDWATER DISCHARGE IS TYPICALLY 140 GALLONS PER MINUTE (GPM), WITH TOTAL VOLATILE ORGANIC COMPOUNDS (VOCS) CONCENTRATIONS RANGING BETWEEN 200 AND 300 PARTS PER BILLION (PPB). THIS WATER IS DISCHARGED TO THE CITY OF PALO ALTO SANITARY SEWER. THE DISCHARGE DURING HIGH FLOW PERIODS CONSISTS OF BOTH SURFACE WATER AND GROUNDWATER; EXCESS IS PUMPED VIA AUXILIARY PUMPS AND DISCHARGED TO THE CITY OF PALO ALTO STORM DRAIN SYSTEM.

SITE HISTORY

HEWLETT PACKARD COMPANY (HP) MANUFACTURED GALLIUM ARSENIDE- AND SILICON-BASED SEMICONDUCTORS AT THE PROPERTY FROM 1962 UNTIL OPERATIONS CEASED IN 1986. THE FACILITY CONSISTED OF TWO MAIN BUILDINGS (#10 AND #11) AND A STORAGE BUILDING. BOTH BUILDINGS HAVE SINCE BEEN DEMOLISHED AND THE SITE REDEVELOPED FOR AN OFFICE BUILDING WITH AN UNDERGROUND GARAGE.

SITE INVESTIGATION BEGAN IN 1981 AFTER A LEAKING 1000-GALLON UNDERGROUND SOLVENT STORAGE TANK WAS DISCOVERED BETWEEN BUILDING 11 AND THE STORAGE BUILDING. SOURCES OF METALS WERE FOUND IN BUILDING 10, ASSOCIATED WITH ACID NEUTRALIZATION PUMPS, PIPING AND OPERATIONS AREAS IN THE BUILDING. THE PRIMARY CONTAMINANTS DETECTED AT THE SITE WERE TRICHLOROETHENE (TCE); 1,1,1-TRICHLOROETHANE (1,1,1-TCA); TETRACHLOROETHENE (PCE); GALLIUM; AND ARSENIC.

INTERIM REMEDIAL MEASURES (IRMS) HAVE BEEN CONDUCTED SINCE 1982. SOIL EXCAVATIONS AT THE HP-640 PM) SITE BETWEEN 1987 AND 1992 REMOVED APPROXIMATELY 7,700 CUBIC YARDS OF CONTAMINATED SOIL TO CLASS I LANDFILLS AND APPROXIMATELY 3,000 CUBIC YARDS TO CLASS III LANDFILLS. ADDITIONAL AREAS OF THE SITE WERE ALSO EXCAVATED TO REMOVE ABOVE-BACKGROUND CONCENTRATIONS OF ARSENIC, GALLIUM AND SEVERAL OTHER METALS. GROUNDWATER REMEDIATION AT HP-640 PMR WAS INITIATED IN 1982 FOR SEVEN MONTHS; EXTRACTION WAS RESTARTED IN 1987 AND HAS CONTINUED TO THE PRESENT.

ON JUNE 24, 1988, THE U.S. EPA PROPOSED ADDING THE HP-640 PMR SITE TO THE NATIONAL PRIORITIES LIST (NPL), SUBJECT TO THE REQUIREMENTS OF THE COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION, AND LIABILITY ACT (CERCLA). ON FEBRUARY 1, 1990, THE HP-640 PMR FACILITY WAS ADDED TO THE NPL. SINCE THE LISTING, THE GROUNDWATER CONTAMINATION PLUME EMANATING FROM THE HP-640 PMR SITE WAS FOUND TO BE COMMINGLED IN PART WITH GROUNDWATER CONTAMINATION PLUMES ASSOCIATED WITH OTHER POTENTIAL SOURCES BEYOND THE HP-640 PMR FACILITY BOUNDARIES.

PURSUANT TO THE SOUTH BAY MULTI-SITE COOPERATIVE AGREEMENT AND THE SOUTH BAY GROUNDWAT ER CONTAMINATION ENFORCEMENT AGREEMENT ENTERED INTO BY THE CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD (RWQCB), EPA AND THE CALIFORNIA DEPARTMENT OF TOXIC SUBSTANCES CONTROL (DTSC) (FORMERLY THE CALIFORNIA DEPARTMENT OF HEALTH SERVICES (DHS)), THE RWQCB HAS BEEN ACTING AS LEAD REGULATORY AGENCY FOR THE SITE.

IN JULY 1994, THE RWQCB RELEASED A PROPOSED PLAN FACT SHEET FOR THE SITE THAT DESCRIBED THE PROPOSED REMEDY FOR THE SITE. A PUBLIC NOTICE WAS PUBLISHED ALLOWING 30 DAYS FOR PUBLIC COMMENT ON THE RI/FS AND PROPOSED PLAN. A PUBLIC MEETING WAS HELD ON JULY 26, 1994.

ACTIONS

TYPE: **SI - SITE INSPECTION**
START DATE: **NR**
COMPLETION DATE: **06/01/1987**
ACTION TYPE DEFINITION:
THE PROCESS OF COLLECTING SITE DATA AND SAMPLES TO CHARACTERIZE THE SEVERITY OF THE HAZARD FOR THE HAZARD RANKING SCORE AND/OR ENFORCEMENT SUPPORT.

TYPE: **HR - HAZARD RANKING SYSTEM PACKAGE**
START DATE: **NR**
COMPLETION DATE: **06/01/1987**
ACTION TYPE DEFINITION:
A NUMERIC ESTIMATE OF THE RELATIVE SEVERITY OF A HAZARDOUS SUBSTANCE RELEASE OR POTENTIAL RELEASE BASED ON: (1) THE RELATIVE POTENTIAL OF SUBSTANCES TO CAUSE HAZARDOUS SITUATIONS; (2) THE LIKELIHOOD AND RATE AT WHICH THE SUBSTANCES MAY AFFECT HUMAN AND ENVIRONMENTAL RECEPTORS; AND (3) THE SEVERITY AND MAGNITUDE OF POTENTIAL EFFECTS. THE SCORE IS COMPUTED USING THE HAZARD RANKING SYSTEM (HRS).

TYPE: **IP - INITIAL REMEDIAL MEASURE**
START DATE: **04/01/1983**
COMPLETION DATE: **NR**
ACTION TYPE DEFINITION:
THE IMMEDIATE STEPS TAKEN TO MITIGATE A HAZARDOUS SITUATION AT A NATIONAL PRIORITY LIST (NPL) SITE. INCLUDES SUCH ACTIONS AS ERECTING RESTRAINING FENCES, REMOVING CONTAMINANTS, AND IMPLEMENTING TEMPORARY WATER SUPPLY ALTERNATIVES.

TYPE: **NF - FINAL LISTING ON NATIONAL PRIORITIES LIST**
START DATE: **NR**
COMPLETION DATE: **02/21/1990**
ACTION TYPE DEFINITION:
SITE MOVED FROM PROPOSED LIST TO FINAL NATIONAL PRIORITY LIST.

TYPE: **NP - PROPOSAL TO NATIONAL PRIORITIES LIST**
START DATE: **NR**
COMPLETION DATE: **06/24/1988**
ACTION TYPE DEFINITION:
SITE PROPOSED FOR INCLUSION ON THE NATIONAL PRIORITY LIST BASED ON THE HAZARD RANKING SYSTEM (HRS) SCORE FOR THE SITE.

TYPE: **NS - NATIONAL PRIORITIES LIST RESPONSIBLE PARTY SEARCH**
START DATE: **08/04/1989**
COMPLETION DATE: **03/30/1990**
ACTION TYPE DEFINITION:
THE NATIONAL PRIORITY LIST (NPL) POTENTIALLY RESPONSIBLE PARTY (PRP) SEARCH IS USED TO IDENTIFY PRPS AT A FINAL NPL OR PROPOSED NPL SITE. ACTIONS TYPICALLY INCLUDE TITLE SEARCH, FINANCIAL ASSESSMENTS, AND REVIEW OF APPLICABLE RECORDS. THE NPL PRP SEARCH SHOULD BEGIN UPON COMPLETION OF THE SCREENING SITE INVESTIGATION AND SHOULD BE CONDUCTED CONCURRENT WITH THE NATIONAL PRIORITIES LISTING PROCESS.

TYPE: **PA - PRELIMINARY ASSESSMENT**
START DATE: **NR**
COMPLETION DATE: **07/01/1984**
ACTION TYPE DEFINITION:
COLLECTION OF DIVERSE EXISTING INFORMATION ABOUT THE SOURCE AND NATURE OF THE SITE HAZARD. IT IS EPA POLICY TO COMPLETE THE PRELIMINARY ASSESSMENT WITHIN ONE YEAR OF SITE DISCOVERY.

TYPE: **RO - RECORD OF DECISION**
START DATE: **NR**
COMPLETION DATE: **03/24/1995**
ACTION TYPE DEFINITION:
THE FINAL RECORD OF DECISION (ROD) IS SIGNED BY THE APPROPRIATE AGENCY INDICATING THAT THE AGENCY HAS CHOSEN THE REMEDY FOR SITE REMEDIATION. ROD SIGNATURE IS SIGNIFIED BY THE COMPLETE DATE.

TYPE: **RS - REMOVAL ASSESSMENT**
START DATE: **NR**
COMPLETION DATE: **12/29/1992**
ACTION TYPE DEFINITION:
COLLECTING SITE CHARACTERISTICS TO DETERMINE WHETHER OR NOT A REMOVAL MUST BE PERFORMED.

TYPE: **FE - FIVE-YEAR REVIEW**
START DATE: **NR**
COMPLETION DATE: **09/30/2010**
ACTION TYPE DEFINITION:
A REVIEW THAT IS CONDUCTED AT A MINIMUM OF EVERY FIVE YEARS TO DETERMINE IF THE IMPLEMENTATION AND PERFORMANCE OF A REMEDY IS PROTECTIVE OR WILL BE PROTECTIVE OF HUMAN HEALTH AND THE ENVIRONMENT.

TYPE: **RS - REMOVAL ASSESSMENT**
START DATE: **08/14/1990**
COMPLETION DATE: **08/14/1990**
ACTION TYPE DEFINITION:
COLLECTING SITE CHARACTERISTICS TO DETERMINE WHETHER OR NOT A REMOVAL MUST BE PERFORMED.

TYPE: **DS - DISCOVERY**
START DATE: **NR**
COMPLETION DATE: **07/01/1984**
ACTION TYPE DEFINITION:
THE PROCESS BY WHICH A POTENTIAL HAZARDOUS WASTE SITE IS BROUGHT TO THE ATTENTION OF THE EPA. THE PROCESS CAN OCCUR THROUGH THE USE OF SEVERAL MECHANISMS SUCH AS A PHONE CALL OR REFERRAL BY ANOTHER GOVERNMENT AGENCY.

TYPE: **SO - STATE ORDER**
START DATE: **NR**
COMPLETION DATE: **03/15/1991**
ACTION TYPE DEFINITION:

ADMINISTRATIVE ORDER SIGNED BY THE STATE AND THE POTENTIALLY RESPONSIBLE PARTIES (PRPS). THE ORDER MAY BE FOR RESPONSE WORK, COST RECOVERY OR BOTH.

TYPE: **RS - REMOVAL ASSESSMENT**
START DATE: **08/03/1989**
COMPLETION DATE: **08/03/1989**
ACTION TYPE DEFINITION:
COLLECTING SITE CHARACTERISTICS TO DETERMINE WHETHER OR NOT A REMOVAL MUST BE PERFORMED.

TYPE: **BD - POTENTIALLY RESPONSIBLE PARTY REMEDIAL INVESTIGATION/FEASIBILITY STUDY**
START DATE: **03/16/1989**
COMPLETION DATE: **03/24/1995**
ACTION TYPE DEFINITION:
PROVIDES FOR OVERSIGHT OF POTENTIALLY RESPONSIBLE PARTY (PRP) RESPONSE ACTION FOR REMEDIAL INVESTIGATION/FEASIBILITY STUDY (RI/FS), INCLUDING ALL ACTIVITIES FOR MONITORING AND SUPERVISING THE PERFORMANCE OF THE RESPONSIBLE PARTIES TO DETERMINE WHETHER SUCH PERFORMANCE IS CONSISTENT WITH THE REQUIREMENTS OF THE ADMINISTRATIVE ORDERS ON CONSENT, UNILATERAL ADMINISTRATIVE ORDERS, CONSENT DECREES, JUDICIAL DECREES, INFORMATION AGREEMENTS, AND COMPLIANCE SCHEDULES.

TYPE: **AR - ADMINISTRATIVE RECORDS**
START DATE: **04/02/1991**
COMPLETION DATE: **03/24/1995**
ACTION TYPE DEFINITION:
SARA SPECIFIES THAT ADMINISTRATIVE RECORDS BE COMPILED AT SUPERFUND SITES WHERE REMEDIAL OR REMOVAL RESPONSES ARE PLANNED, OR ARE OCCURRING, OR WHERE EPA IS ISSUING A UNILATERAL ORDER OR INITIATING LITIGATION TO TRACK ENFORCEMENT CASE BUDGET FUNDS USED FOR ANY RP LEAD ACTIVITY.

TYPE: **AV - ADMINISTATIVE/VOLUNTARY COST RECOVERY**
START DATE: **NR**
COMPLETION DATE: **06/18/1992**
ACTION TYPE DEFINITION:
REIMBURSEMENT OF TRUST FUND EXPENDITURES IN DIRECT RESPONSE TO DEMAND LETTERS. NO FORMAL SETTLEMENT DOCUMENT EXISTS. IF AN ADMINISTRATIVE ORDER ON CONSENT (AOC) RESOLVES A COST RECOVERY ACTION, IT SHOULD BE CODED AS AC (ACTION CODE FOR AOC) WITH COST RECOVERY REMEDIES.

TYPE: **AV - ADMINISTATIVE/VOLUNTARY COST RECOVERY**
START DATE: **NR**
COMPLETION DATE: **01/18/1996**
ACTION TYPE DEFINITION:
REIMBURSEMENT OF TRUST FUND EXPENDITURES IN DIRECT RESPONSE TO DEMAND LETTERS. NO FORMAL SETTLEMENT DOCUMENT EXISTS. IF AN ADMINISTRATIVE ORDER ON CONSENT (AOC) RESOLVES A COST RECOVERY ACTION, IT SHOULD BE CODED AS AC (ACTION CODE FOR AOC) WITH COST RECOVERY REMEDIES.

TYPE: **AV - ADMINISTATIVE/VOLUNTARY COST RECOVERY**
START DATE: **NR**
COMPLETION DATE: **04/02/1998**

ACTION TYPE DEFINITION:
REIMBURSEMENT OF TRUST FUND EXPENDITURES IN DIRECT RESPONSE TO DEMAND LETTERS. NO FORMAL SETTLEMENT DOCUMENT EXISTS. IF AN ADMINISTRATIVE ORDER ON CONSENT (AOC) RESOLVES A COST RECOVERY ACTION, IT SHOULD BE CODED AS AC (ACTION CODE FOR AOC) WITH COST RECOVERY REMEDIES.

TYPE: **FE - FIVE-YEAR REVIEW**
START DATE: **08/01/2000**
COMPLETION DATE: **09/14/2000**
ACTION TYPE DEFINITION:
A REVIEW THAT IS CONDUCTED AT A MINIMUM OF EVERY FIVE YEARS TO DETERMINE IF THE IMPLEMENTATION AND PERFORMANCE OF A REMEDY IS PROTECTIVE OR WILL BE PROTECTIVE OF HUMAN HEALTH AND THE ENVIRONMENT.

TYPE: **AV - ADMINISTATIVE/VOLUNTARY COST RECOVERY**
START DATE: **NR**
COMPLETION DATE: **03/18/1999**
ACTION TYPE DEFINITION:
REIMBURSEMENT OF TRUST FUND EXPENDITURES IN DIRECT RESPONSE TO DEMAND LETTERS. NO FORMAL SETTLEMENT DOCUMENT EXISTS. IF AN ADMINISTRATIVE ORDER ON CONSENT (AOC) RESOLVES A COST RECOVERY ACTION, IT SHOULD BE CODED AS AC (ACTION CODE FOR AOC) WITH COST RECOVERY REMEDIES.

TYPE: **FE - FIVE-YEAR REVIEW**
START DATE: **NR**
COMPLETION DATE: **09/30/2005**
ACTION TYPE DEFINITION:
A REVIEW THAT IS CONDUCTED AT A MINIMUM OF EVERY FIVE YEARS TO DETERMINE IF THE IMPLEMENTATION AND PERFORMANCE OF A REMEDY IS PROTECTIVE OR WILL BE PROTECTIVE OF HUMAN HEALTH AND THE ENVIRONMENT.

TYPE: **BE - POTENTIALLY RESPONSIBLE PARTY REMEDIAL DESIGN**
START DATE: **09/21/1994**
COMPLETION DATE: **01/23/1995**
ACTION TYPE DEFINITION:
PROVIDES FOR OVERSIGHT OF POTENTIALLY RESPONSIBLE PARTY (PRP) RESPONSE ACTION FOR REMEDIAL DESIGN (RD), INCLUDING ALL ACTIVITIES FOR MONITORING AND SUPERVISING THE PERFORMANCE OF THE RESPONSIBLE PARTIES TO DETERMINE WHETHER SUCH PERFORMANCE IS CONSISTENT WITH THE REQUIREMENTS OF THE ADMINISTRATIVE ORDERS ON CONSENT, UNILATERAL ADMINISTRATIVE ORDERS, CONSENT DECREES, JUDICIAL DECREES, INFORMATION AGREEMENTS, AND COMPLIANCE SCHEDULES.

TYPE: **BF - POTENTIALLY RESPONSIBLE PARTY REMEDIAL ACTION - LONG TERM ACTION**
START DATE: **01/23/1995**
COMPLETION DATE: **12/11/1996**
ACTION TYPE DEFINITION:
PROVIDES FOR OVERSIGHT OF POTENTIALLY RESPONSIBLE PARTY (PRP) RESPONSE ACTION FOR REMEDIAL ACTION (RA), INCLUDING ALL ACTIVITIES FOR MONITORING AND SUPERVISING THE PERFORMANCE OF THE RESPONSIBLE PARTIES TO DETERMINE WHETHER SUCH PERFORMANCE IS CONSISTENT WITH THE REQUIREMENTS OF THE ADMINISTRATIVE ORDERS ON CONSENT, UNILATERAL ADMINISTRATIVE ORDERS, CONSENT DECREES, JUDICIAL DECREES, INFORMATION AGREEMENTS, AND COMPLIANCE SCHEDULES.

TYPE: **CM - PRELIMINARY CLOSE-OUT REPORT PREPARED**
START DATE: **NR**
COMPLETION DATE: **09/16/1997**
ACTION TYPE DEFINITION:
A REPORT PREPARED BY THE REMEDIAL PROGRAM MANAGER (RPM) VERIFYING THAT PHYSICAL CONSTRUCTION OF THE REMEDY IS COMPLETE, INDICATING MINOR PUNCH LIST ITEMS THAT REMAIN AND OUTLINING A SCHEDULE OF THE OUTSTANDING ACTIVITIES.

TYPE: **TG - TECHNICAL ASSISTANCE GRANT**
START DATE: **06/05/1990**
COMPLETION DATE: **07/31/1998**
ACTION TYPE DEFINITION:
A GRANT OF UP TO $50,000 PROVIDED UNDER SARA TO A COMMUNITY FOR TECHNICAL ASSISTANCE IN DEALING WITH SUPERFUND ISSUES AT A NATIONAL PRIORITY LIST (NPL) SITE.

TYPE: **ED - RISK/HEALTH ASSESSMENT**
START DATE: **NR**
COMPLETION DATE: **09/30/1992**
ACTION TYPE DEFINITION:
ASSESSMENT OF THE BASELINE RISKS POSED BY THE SITE TO HUMAN HEALTH.

TYPE: **AV - ADMINISTATIVE/VOLUNTARY COST RECOVERY**
START DATE: **NR**
COMPLETION DATE: **04/27/1998**
ACTION TYPE DEFINITION:
REIMBURSEMENT OF TRUST FUND EXPENDITURES IN DIRECT RESPONSE TO DEMAND LETTERS. NO FORMAL SETTLEMENT DOCUMENT EXISTS. IF AN ADMINISTRATIVE ORDER ON CONSENT (AOC) RESOLVES A COST RECOVERY ACTION, IT SHOULD BE CODED AS AC (ACTION CODE FOR AOC) WITH COST RECOVERY REMEDIES.

CONTAMINANTS
WASTE SOURCE MEDIA CONTAMINATED NAME: **GROUNDWATER 01 MATRL**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **NOT REPORTED**
HAZARDOUS SUBSTANCE NAME: **VOC**
CONTAMINANT GROUP NAME: **VOC**

WASTE SOURCE MEDIA CONTAMINATED NAME: **GW1**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **1,2,4-TRICHLOROBENZENE**
CONTAMINANT GROUP NAME: **BASE NEUTRAL ACIDS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **GW1**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **30000 PPB**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**

HAZARDOUS SUBSTANCE NAME: **1,1,1-TRICHLOROETHANE**
CONTAMINANT GROUP NAME: **VOC**

WASTE SOURCE MEDIA CONTAMINATED NAME: **GW1**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **1,1,2-TRICHLOROETHANE**
CONTAMINANT GROUP NAME: **VOC**

WASTE SOURCE MEDIA CONTAMINATED NAME: **GW1**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **1,1-DICHLOROETHANE**
CONTAMINANT GROUP NAME: **VOC**

WASTE SOURCE MEDIA CONTAMINATED NAME: **GW1**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **1,1-DICHLOROETHYLENE**
CONTAMINANT GROUP NAME: **VOC**

WASTE SOURCE MEDIA CONTAMINATED NAME: **GW1**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **1,2-DICHLOROBENZENE**
CONTAMINANT GROUP NAME: **VOC**

WASTE SOURCE MEDIA CONTAMINATED NAME: **GW1**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **1,2-DICHLOROETHANE**
CONTAMINANT GROUP NAME: **VOC**

WASTE SOURCE MEDIA CONTAMINATED NAME: **GW1**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **ACETONE**
CONTAMINANT GROUP NAME: **VOC**

WASTE SOURCE MEDIA CONTAMINATED NAME: **GW1**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **BENZENE**
CONTAMINANT GROUP NAME: **VOC**

WASTE SOURCE MEDIA CONTAMINATED NAME: **GW1**

CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **FREON-113**
CONTAMINANT GROUP NAME: **VOC**

WASTE SOURCE MEDIA CONTAMINATED NAME: **GW1**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **METHYLENE CHLORIDE**
CONTAMINANT GROUP NAME: **VOC**

WASTE SOURCE MEDIA CONTAMINATED NAME: **GW1**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **39000 PPB**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **TETRACHLOROETHYLENE**
CONTAMINANT GROUP NAME: **VOC**

WASTE SOURCE MEDIA CONTAMINATED NAME: **GW1**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **TRANS-1,2-DICHLOROETHYLENE**
CONTAMINANT GROUP NAME: **VOC**

WASTE SOURCE MEDIA CONTAMINATED NAME: **GW1**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **17000 PPB**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **TRICHLOROETHYLENE**
CONTAMINANT GROUP NAME: **VOC**

WASTE SOURCE MEDIA CONTAMINATED NAME: **GW1**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **CIS-1,2-DICHLOROETHYLENE**
CONTAMINANT GROUP NAME: **VOC**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SO1**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **1,2,4-TRICHLOROBENZENE**
CONTAMINANT GROUP NAME: **BASE NEUTRAL ACIDS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SO1**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **ARSENIC**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SO1**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **1,1,1-TRICHLOROETHANE**
CONTAMINANT GROUP NAME: **VOC**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SO1**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **1,1,2-TRICHLOROETHANE**
CONTAMINANT GROUP NAME: **VOC**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SO1**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **1,1-DICHLOROETHANE**
CONTAMINANT GROUP NAME: **VOC**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SO1**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **1,2-DICHLOROBENZENE**
CONTAMINANT GROUP NAME: **VOC**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SO1**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **1,2-DICHLOROETHANE**
CONTAMINANT GROUP NAME: **VOC**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SO1**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **ACETONE**
CONTAMINANT GROUP NAME: **VOC**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SO1**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **BENZENE**
CONTAMINANT GROUP NAME: **VOC**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SO1**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**

HAZARDOUS SUBSTANCE NAME: **FREON-113**
CONTAMINANT GROUP NAME: **VOC**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SO1**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **METHYLENE CHLORIDE**
CONTAMINANT GROUP NAME: **VOC**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SO1**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **TETRACHLOROETHANE**
CONTAMINANT GROUP NAME: **VOC**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SO1**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **TOLUENE**
CONTAMINANT GROUP NAME: **VOC**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SO1**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **TRICHLOROETHANE**
CONTAMINANT GROUP NAME: **VOC**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SO1**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **VOC**
CONTAMINANT GROUP NAME: **VOC**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SO1**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **XYLENES**
CONTAMINANT GROUP NAME: **VOC**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SO1**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **CIS-1,2-DICHLOROETHYLENE**
CONTAMINANT GROUP NAME: **VOC**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SOIL 01 MATRL**

CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **NOT REPORTED**
HAZARDOUS SUBSTANCE NAME: **VOC**
CONTAMINANT GROUP NAME: **VOC**

LISTING OF PUBLISHED INSTITUTIONAL CONTROL SITE REPORT
REPORT TYPE: **ICS REQUIRED**

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Referred to Another Local or State Agency (REF)

MAP ID# 55

Distance from Property: 0.428 mi. (2,260 ft.) WSW
Elevation: 44 ft. (Higher than TP)

FACILITY INFORMATION

GEOSEARCH ID: **43350082**
ENVIROSTOR ID: **43350082**
FACILITY NAME: **HEWLETT-PACKARD (620-640 PAGE MILL ROAD)**
ADDRESS: **620-640 PAGE MILL ROAD**
PALO ALTO, CA 94304
COUNTY: **SANTA CLARA**

FACILITY DETAILS

PROGRAM TYPE: **FEDERAL SUPERFUND - LISTED**
STATUS: **REFER: RWQCB**
STATUS DATE: **6/27/1994**
CALENVIROSCREEN SCORE: **1-5%**
SITE CODE: **200124**

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MAP ID# 55

Distance from Property: 0.428 mi. (2,260 ft.) WSW
Elevation: 44 ft. (Higher than TP)

FACILITY LINK: *EPA*
EPA ID: **CAD980884209**
SITE ID: **0902134**
NAME: **HEWLETT-PACKARD (620-640 PAGE MILL ROAD)**
ADDRESS: **620 - 640 PAGE MILL RD., PALO ALTO, CA 94304**
COUNTY: **SANTA CLARA**
REGION: **09**

FACILITY DETAIL(S)

SEQ ID: **1**
OPERABLE UNIT NAME: **OVERALL SITE**
ACTION NAME: **GOVT ROD FOR PRP REMEDY**
ACTUAL COMPLETION DATE: **3/24/1995**
NPL STATUS: **FINAL**
NON NPL STATUS: **NOT REPORTED**

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MAP ID# 55

Distance from Property: 0.428 mi. (2,260 ft.) WSW
Elevation: 44 ft. (Higher than TP)

FACILITY INFORMATION

EPA ID#: **CAD980884209**
SITE ID#: **0902134**
NAME: **HEWLETT-PACKARD (620-640 PAGE MILL ROAD)**
ADDRESS: **620 - 640 PAGE MILL RD.**
PALO ALTO, CA 94304
COUNTY: **SANTA CLARA**
FEDERAL FACILITY: **NO - NOT A FEDERAL FACILITY**
SUPERFUND ALTERNATIVE AGREEMENT IN PLACE?: **NO**
NPL: **CURRENTLY ON THE FINAL NPL**
NON NPL STATUS: **NOT REPORTED**
Below information was gathered from the prior CERCLIS update completed in 10/2013 update:
NON-NPL STATUS DATE: **NOT REPORTED**
PHYSICAL CLASSIFICATION OF SITE / INCIDENT: **MANUFACTURING PLANT**

SUPERFUND SITE INFORMATION: CLICK HERE

FEDERAL REGISTER INFORMATION

DATE	VOLUME	PAGE #	ACTION	HRS SCORE
06/24/1988	**53**	**23988**	**PROPOSED TO THE FINAL NPL**	**29.76000**
02/21/1990	**55**	**6154**	**PROMULGATED TO THE FINAL NPL**	**29.76000**

SITE DESCRIPTION

THE HEWLETT-PACKARD 620-640 PAGE MILL ROAD (HP-640 PMR) SUPERFUND SITE IS LOCATED IN PALO ALTO, CALIFORNIA WITHIN THE STANFORD RESEARCH PARK, A LIGHT-INDUSTRIAL AND RESEARCH AREA OWNED BY STANFORD UNIVERSITY. LEAKS FROM AN UNDERGROUND WASTE SOLVENT STORAGE TANK HAVE RESULTED IN SOIL AND GROUND WATER CONTAMINATION AT THE SITE.

LAND USE IN THE VICINITY OF THE SITE IS PREDOMINANTLY COMMERCIAL AND INDUSTRIAL, WITH SMALLER AREAS OF RESIDENTIAL DEVELOPMENT. THE NEAREST RESIDENTIAL AREAS ARE LOCATED APPROXIMATELY 1/8 MILE NORTHEAST OF THE FACILITY. FIVE MUNICIPAL BACKUP SUPPLY WELLS DRAWING FROM A DEEP AQUIFER ARE WITHIN THREE MILES OF THE SITE BUT ARE NOT CURRENTLY USED. ALL OF THE CITY OF PALO ALTO DRINKING WATER IS SUPPLIED BY THE SAN FRANCISCO WATER DEPARTMENT'S HETCH HETCHY SYSTEM.

THE HP-640 PMR SITE IS LOCATED NEAR THE WESTERN MARGIN OF THE SANTA CLARA VALLEY. THE VALLEY SURFACE IN THIS AREA IS A GENTLY SLOPING ALLUVIAL PLAIN THAT EXTENDS NORTHEAST FROM THE FOOTHILLS TO SAN FRANCISCO BAY, LOCATED APPROXIMATELY THREE MILES TO THE NORTHEAST. THE AREA IS UNDERLAIN BY INTERBEDDED ALLUVIAL FAN DEPOSITS AND FINE-GRAINED FLOODPLAIN DEPOSITS.

THE ONLY SURFACE WATER IN THE VICINITY OF HP-640 PMR IS MATADERO CREEK, LOCATED TO THE EAST OF THE SITE. MATADERO CREEK IS AN INTERMITTENT STREAM THAT ORIGINATES NEAR THE LOS ALTOS HILLS AND FLOWS IN A NORTHERLY DIRECTION THROUGH THE RESIDENTIAL, COMMERCIAL AND INDUSTRIAL AREAS OF PALO ALTO.

TWO AREAS HAVE BEEN DESIGNATED AS GROUND WATER STUDY AREAS: THE CALIFORNIA OLIVE EMERSON (COE) STUDY AREA (NAMED BY THE BORDERING STREETS) AND THE PERIMETER AREA WHICH REPRESENTS THE LIMITS OF THE KNOWN GROUND WATER CONTAMINATION PLUME. THE COE AND PERIMETER AREAS, ARE UNDERLAIN BY TWO PRIMARY AQUIFERS, THE UPPER A AQUIFER AND THE LOWER B AQUIFER. EACH OF THESE TWO AQUIFERS CONTAIN DISTINCT SAND ZONES. THE A AQUIFER EXTENDS UP TO 55 FEET BELOW GROUND SURFACE, AND GROUNDWATER IS FIRST

ENCOUNTERED AT DEPTHS BETWEEN 15 A ND 30 FEET. WITHIN THE A AQUIFER, THE A1 UPPER (A1U) ZONE IS GENERALLY FOUND BETWEEN THE DEPTHS OF 15 AND 30 FEET, THE A1 ZONE BETWEEN 30 AND 40 FEET, AND THE A2 ZONE BETWEEN 40 AND 55 FEET. THE GENERAL GROUNDWATER GRADIENT IN THE A AQUIFER IS TO THE NORTH-NORTHEAST. WITHIN THE B AQUIFER, THE B1 ZONE OCCURS BELOW AN APPROXIMATE DEPTH OF 60 FEET BELOW GROUND SURFACE. THIS ZONE IS TYPICALLY ABOUT 10 FEET THICK. WHERE ENCOUNTERED, THE B2 ZONE BEGINS AT APPROXIMATELY 85 FEET BELOW THE SURFACE AND IS BETWEEN SIX AND 33 FEET THICK.

THE OREGON EXPRESSWAY UNDERPASS (OEU) SERVES AS A SUBSURFACE ROADWAY BENEATH THE SOUTHERN PACIFIC RAILROAD TRACKS, ALMA STREET AND PARK BOULEVARD. THE UNDERPASS, BUILT IN 1958, EXTENDS 24 FEET BELOW GROUND SURFACE INTO THE AQUIFER A1U ZONE. A DEWATERING SYSTEM INSTALLED BENEATH THE UNDERPASS CONTROLS NATURAL GROUNDWATER INFLOW AND SURFACE RUNOFF. THIS DEWATERING APPEARS TO AFFECT GROUNDWATER FLOW IN THE A1U, A1 AND A2 ZONES, AND DOES NOT ALLOW CONTAMINANTS TO BYPASS THE SUBDRAIN TO THE NORTH.

DURING LOW FLOW PERIODS, THE AVERAGE RATE OF GROUNDWATER DISCHARGE IS TYPICALLY 140 GALLONS PER MINUTE (GPM), WITH TOTAL VOLATILE ORGANIC COMPOUNDS (VOCS) CONCENTRATIONS RANGING BETWEEN 200 AND 300 PARTS PER BILLION (PPB). THIS WATER IS DISCHARGED TO THE CITY OF PALO ALTO SANITARY SEWER. THE DISCHARGE DURING HIGH FLOW PERIODS CONSISTS OF BOTH SURFACE WATER AND GROUNDWATER; EXCESS IS PUMPED VIA AUXILIARY PUMPS AND DISCHARGED TO THE CITY OF PALO ALTO STORM DRAIN SYSTEM.

SITE HISTORY

HEWLETT PACKARD COMPANY (HP) MANUFACTURED GALLIUM ARSENIDE- AND SILICON-BASED SEMICONDUCTORS AT THE PROPERTY FROM 1962 UNTIL OPERATIONS CEASED IN 1986. THE FACILITY CONSISTED OF TWO MAIN BUILDINGS (#10 AND #11) AND A STORAGE BUILDING. BOTH BUILDINGS HAVE SINCE BEEN DEMOLISHED AND THE SITE REDEVELOPED FOR AN OFFICE BUILDING WITH AN UNDERGROUND GARAGE.

SITE INVESTIGATION BEGAN IN 1981 AFTER A LEAKING 1000-GALLON UNDERGROUND SOLVENT STORAGE TANK WAS DISCOVERED BETWEEN BUILDING 11 AND THE STORAGE BUILDING. SOURCES OF METALS WERE FOUND IN BUILDING 10, ASSOCIATED WITH ACID NEUTRALIZATION PUMPS, PIPING AND OPERATIONS AREAS IN THE BUILDING. THE PRIMARY CONTAMINANTS DETECTED AT THE SITE WERE TRICHLOROETHENE (TCE); 1,1,1-TRICHLOROETHANE (1,1,1-TCA); TETRACHLOROETHENE (PCE); GALLIUM; AND ARSENIC.

INTERIM REMEDIAL MEASURES (IRMS) HAVE BEEN CONDUCTED SINCE 1982. SOIL EXCAVATIONS AT THE HP-640 PM) SITE BETWEEN 1987 AND 1992 REMOVED APPROXIMATELY 7,700 CUBIC YARDS OF CONTAMINATED SOIL TO CLASS I LANDFILLS AND APPROXIMATELY 3,000 CUBIC YARDS TO CLASS III LANDFILLS. ADDITIONAL AREAS OF THE SITE WERE ALSO EXCAVATED TO REMOVE ABOVE-BACKGROUND CONCENTRATIONS OF ARSENIC, GALLIUM AND SEVERAL OTHER METALS. GROUNDWATER REMEDIATION AT HP-640 PMR WAS INITIATED IN 1982 FOR SEVEN MONTHS; EXTRACTION WAS RESTARTED IN 1987 AND HAS CONTINUED TO THE PRESENT.

ON JUNE 24, 1988, THE U.S. EPA PROPOSED ADDING THE HP-640 PMR SITE TO THE NATIONAL PRIORITIES LIST (NPL), SUBJECT TO THE REQUIREMENTS OF THE COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION, AND LIABILITY ACT (CERCLA). ON FEBRUARY 1, 1990, THE HP-640 PMR FACILITY WAS ADDED TO THE NPL. SINCE THE LISTING, THE GROUNDWATER CONTAMINATION PLUME EMANATING FROM THE HP-640 PMR SITE WAS FOUND TO BE COMMINGLED IN PART WITH GROUNDWATER CONTAMINATION PLUMES ASSOCIATED WITH OTHER POTENTIAL SOURCES BEYOND THE HP-640 PMR FACILITY BOUNDARIES.

PURSUANT TO THE SOUTH BAY MULTI-SITE COOPERATIVE AGREEMENT AND THE SOUTH BAY GROUNDWAT ER CONTAMINATION ENFORCEMENT AGREEMENT ENTERED INTO BY THE CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD (RWQCB), EPA AND THE CALIFORNIA DEPARTMENT OF TOXIC SUBSTANCES CONTROL (DTSC) (FORMERLY THE CALIFORNIA DEPARTMENT OF HEALTH SERVICES (DHS)), THE RWQCB HAS BEEN ACTING AS LEAD REGULATORY AGENCY FOR THE SITE.

IN JULY 1994, THE RWQCB RELEASED A PROPOSED PLAN FACT SHEET FOR THE SITE THAT DESCRIBED THE PROPOSED REMEDY FOR THE SITE. A PUBLIC NOTICE WAS PUBLISHED ALLOWING 30 DAYS FOR PUBLIC COMMENT ON THE RI/FS AND PROPOSED PLAN. A PUBLIC MEETING WAS HELD ON JULY 26, 1994.

ACTIONS

TYPE: **SI - SITE INSPECTION**
START DATE: **NOT REPORTED**
COMPLETION DATE: **06/01/1987**
ACTION TYPE DEFINITION:
THE PROCESS OF COLLECTING SITE DATA AND SAMPLES TO CHARACTERIZE THE SEVERITY OF THE HAZARD FOR THE HAZARD RANKING SCORE AND/OR ENFORCEMENT SUPPORT.

TYPE: **HR - HAZARD RANKING SYSTEM PACKAGE**
START DATE: **NOT REPORTED**
COMPLETION DATE: **06/01/1987**
ACTION TYPE DEFINITION:
A NUMERIC ESTIMATE OF THE RELATIVE SEVERITY OF A HAZARDOUS SUBSTANCE RELEASE OR POTENTIAL RELEASE BASED ON: (1) THE RELATIVE POTENTIAL OF SUBSTANCES TO CAUSE HAZARDOUS SITUATIONS; (2) THE LIKELIHOOD AND RATE AT WHICH THE SUBSTANCES MAY AFFECT HUMAN AND ENVIRONMENTAL RECEPTORS; AND (3) THE SEVERITY AND MAGNITUDE OF POTENTIAL EFFECTS. THE SCORE IS COMPUTED USING THE HAZARD RANKING SYSTEM (HRS).

TYPE: **IP - INITIAL REMEDIAL MEASURE**
START DATE: **04/01/1983**
COMPLETION DATE: **NOT REPORTED**
ACTION TYPE DEFINITION:
THE IMMEDIATE STEPS TAKEN TO MITIGATE A HAZARDOUS SITUATION AT A NATIONAL PRIORITY LIST (NPL) SITE. INCLUDES SUCH ACTIONS AS ERECTING RESTRAINING FENCES, REMOVING CONTAMINANTS, AND IMPLEMENTING TEMPORARY WATER SUPPLY ALTERNATIVES.

TYPE: **NF - FINAL LISTING ON NATIONAL PRIORITIES LIST**
START DATE: **NOT REPORTED**
COMPLETION DATE: **02/21/1990**
ACTION TYPE DEFINITION:
SITE MOVED FROM PROPOSED LIST TO FINAL NATIONAL PRIORITY LIST.

TYPE: **NP - PROPOSAL TO NATIONAL PRIORITIES LIST**
START DATE: **NOT REPORTED**
COMPLETION DATE: **06/24/1988**
ACTION TYPE DEFINITION:
SITE PROPOSED FOR INCLUSION ON THE NATIONAL PRIORITY LIST BASED ON THE HAZARD RANKING SYSTEM (HRS) SCORE FOR THE SITE.

TYPE: **NS - NATIONAL PRIORITIES LIST RESPONSIBLE PARTY SEARCH**
START DATE: **08/04/1989**
COMPLETION DATE: **03/30/1990**
ACTION TYPE DEFINITION:
THE NATIONAL PRIORITY LIST (NPL) POTENTIALLY RESPONSIBLE PARTY (PRP) SEARCH IS USED TO IDENTIFY PRPS AT A

FINAL NPL OR PROPOSED NPL SITE. ACTIONS TYPICALLY INCLUDE TITLE SEARCH, FINANCIAL ASSESSMENTS, AND REVIEW OF APPLICABLE RECORDS. THE NPL PRP SEARCH SHOULD BEGIN UPON COMPLETION OF THE SCREENING SITE INVESTIGATION AND SHOULD BE CONDUCTED CONCURRENT WITH THE NATIONAL PRIORITIES LISTING PROCESS.

TYPE: **PA - PRELIMINARY ASSESSMENT**
START DATE: **NOT REPORTED**
COMPLETION DATE: **07/01/1984**
ACTION TYPE DEFINITION:
COLLECTION OF DIVERSE EXISTING INFORMATION ABOUT THE SOURCE AND NATURE OF THE SITE HAZARD. IT IS EPA POLICY TO COMPLETE THE PRELIMINARY ASSESSMENT WITHIN ONE YEAR OF SITE DISCOVERY.

TYPE: **RO - RECORD OF DECISION**
START DATE: **NOT REPORTED**
COMPLETION DATE: **03/24/1995**
ACTION TYPE DEFINITION:
THE FINAL RECORD OF DECISION (ROD) IS SIGNED BY THE APPROPRIATE AGENCY INDICATING THAT THE AGENCY HAS CHOSEN THE REMEDY FOR SITE REMEDIATION. ROD SIGNATURE IS SIGNIFIED BY THE COMPLETE DATE.

TYPE: **RS - REMOVAL ASSESSMENT**
START DATE: **NOT REPORTED**
COMPLETION DATE: **12/29/1992**
ACTION TYPE DEFINITION:
COLLECTING SITE CHARACTERISTICS TO DETERMINE WHETHER OR NOT A REMOVAL MUST BE PERFORMED.

TYPE: **FE - FIVE-YEAR REVIEW**
START DATE: **NOT REPORTED**
COMPLETION DATE: **09/30/2010**
ACTION TYPE DEFINITION:
A REVIEW THAT IS CONDUCTED AT A MINIMUM OF EVERY FIVE YEARS TO DETERMINE IF THE IMPLEMENTATION AND PERFORMANCE OF A REMEDY IS PROTECTIVE OR WILL BE PROTECTIVE OF HUMAN HEALTH AND THE ENVIRONMENT.

TYPE: **RS - REMOVAL ASSESSMENT**
START DATE: **08/14/1990**
COMPLETION DATE: **08/14/1990**
ACTION TYPE DEFINITION:
COLLECTING SITE CHARACTERISTICS TO DETERMINE WHETHER OR NOT A REMOVAL MUST BE PERFORMED.

TYPE: **DS - DISCOVERY**
START DATE: **NOT REPORTED**
COMPLETION DATE: **07/01/1984**
ACTION TYPE DEFINITION:
THE PROCESS BY WHICH A POTENTIAL HAZARDOUS WASTE SITE IS BROUGHT TO THE ATTENTION OF THE EPA. THE PROCESS CAN OCCUR THROUGH THE USE OF SEVERAL MECHANISMS SUCH AS A PHONE CALL OR REFERRAL BY ANOTHER GOVERNMENT AGENCY.

TYPE: **SO - STATE ORDER**

START DATE: **NOT REPORTED**
COMPLETION DATE: **03/15/1991**
ACTION TYPE DEFINITION:
ADMINISTRATIVE ORDER SIGNED BY THE STATE AND THE POTENTIALLY RESPONSIBLE PARTIES (PRPS). THE ORDER MAY BE FOR RESPONSE WORK, COST RECOVERY OR BOTH.

TYPE: **RS - REMOVAL ASSESSMENT**
START DATE: **08/03/1989**
COMPLETION DATE: **08/03/1989**
ACTION TYPE DEFINITION:
COLLECTING SITE CHARACTERISTICS TO DETERMINE WHETHER OR NOT A REMOVAL MUST BE PERFORMED.

TYPE: **BD - POTENTIALLY RESPONSIBLE PARTY REMEDIAL INVESTIGATION/FEASIBILITY STUDY**
START DATE: **03/16/1989**
COMPLETION DATE: **03/24/1995**
ACTION TYPE DEFINITION:
PROVIDES FOR OVERSIGHT OF POTENTIALLY RESPONSIBLE PARTY (PRP) RESPONSE ACTION FOR REMEDIAL INVESTIGATION/FEASIBILITY STUDY (RI/FS), INCLUDING ALL ACTIVITIES FOR MONITORING AND SUPERVISING THE PERFORMANCE OF THE RESPONSIBLE PARTIES TO DETERMINE WHETHER SUCH PERFORMANCE IS CONSISTENT WITH THE REQUIREMENTS OF THE ADMINISTRATIVE ORDERS ON CONSENT, UNILATERAL ADMINISTRATIVE ORDERS, CONSENT DECREES, JUDICIAL DECREES, INFORMATION AGREEMENTS, AND COMPLIANCE SCHEDULES.

TYPE: **AR - ADMINISTRATIVE RECORDS**
START DATE: **04/02/1991**
COMPLETION DATE: **03/24/1995**
ACTION TYPE DEFINITION:
SARA SPECIFIES THAT ADMINISTRATIVE RECORDS BE COMPILED AT SUPERFUND SITES WHERE REMEDIAL OR REMOVAL RESPONSES ARE PLANNED, OR ARE OCCURRING, OR WHERE EPA IS ISSUING A UNILATERAL ORDER OR INITIATING LITIGATION TO TRACK ENFORCEMENT CASE BUDGET FUNDS USED FOR ANY RP LEAD ACTIVITY.

TYPE: **AV - ADMINISTATIVE/VOLUNTARY COST RECOVERY**
START DATE: **NOT REPORTED**
COMPLETION DATE: **06/18/1992**
ACTION TYPE DEFINITION:
REIMBURSEMENT OF TRUST FUND EXPENDITURES IN DIRECT RESPONSE TO DEMAND LETTERS. NO FORMAL SETTLEMENT DOCUMENT EXISTS. IF AN ADMINISTRATIVE ORDER ON CONSENT (AOC) RESOLVES A COST RECOVERY ACTION, IT SHOULD BE CODED AS AC (ACTION CODE FOR AOC) WITH COST RECOVERY REMEDIES.

TYPE: **AV - ADMINISTATIVE/VOLUNTARY COST RECOVERY**
START DATE: **NOT REPORTED**
COMPLETION DATE: **01/18/1996**
ACTION TYPE DEFINITION:
REIMBURSEMENT OF TRUST FUND EXPENDITURES IN DIRECT RESPONSE TO DEMAND LETTERS. NO FORMAL SETTLEMENT DOCUMENT EXISTS. IF AN ADMINISTRATIVE ORDER ON CONSENT (AOC) RESOLVES A COST RECOVERY ACTION, IT SHOULD BE CODED AS AC (ACTION CODE FOR AOC) WITH COST RECOVERY REMEDIES.

TYPE: **AV - ADMINISTATIVE/VOLUNTARY COST RECOVERY**
START DATE: **NOT REPORTED**
COMPLETION DATE: **04/02/1998**
ACTION TYPE DEFINITION:
REIMBURSEMENT OF TRUST FUND EXPENDITURES IN DIRECT RESPONSE TO DEMAND LETTERS. NO FORMAL SETTLEMENT DOCUMENT EXISTS. IF AN ADMINISTRATIVE ORDER ON CONSENT (AOC) RESOLVES A COST RECOVERY ACTION, IT SHOULD BE CODED AS AC (ACTION CODE FOR AOC) WITH COST RECOVERY REMEDIES.

TYPE: **FE - FIVE-YEAR REVIEW**
START DATE: **08/01/2000**
COMPLETION DATE: **09/14/2000**
ACTION TYPE DEFINITION:
A REVIEW THAT IS CONDUCTED AT A MINIMUM OF EVERY FIVE YEARS TO DETERMINE IF THE IMPLEMENTATION AND PERFORMANCE OF A REMEDY IS PROTECTIVE OR WILL BE PROTECTIVE OF HUMAN HEALTH AND THE ENVIRONMENT.

TYPE: **AV - ADMINISTATIVE/VOLUNTARY COST RECOVERY**
START DATE: **NOT REPORTED**
COMPLETION DATE: **03/18/1999**
ACTION TYPE DEFINITION:
REIMBURSEMENT OF TRUST FUND EXPENDITURES IN DIRECT RESPONSE TO DEMAND LETTERS. NO FORMAL SETTLEMENT DOCUMENT EXISTS. IF AN ADMINISTRATIVE ORDER ON CONSENT (AOC) RESOLVES A COST RECOVERY ACTION, IT SHOULD BE CODED AS AC (ACTION CODE FOR AOC) WITH COST RECOVERY REMEDIES.

TYPE: **FE - FIVE-YEAR REVIEW**
START DATE: **NOT REPORTED**
COMPLETION DATE: **09/30/2005**
ACTION TYPE DEFINITION:
A REVIEW THAT IS CONDUCTED AT A MINIMUM OF EVERY FIVE YEARS TO DETERMINE IF THE IMPLEMENTATION AND PERFORMANCE OF A REMEDY IS PROTECTIVE OR WILL BE PROTECTIVE OF HUMAN HEALTH AND THE ENVIRONMENT.

TYPE: **BE - POTENTIALLY RESPONSIBLE PARTY REMEDIAL DESIGN**
START DATE: **09/21/1994**
COMPLETION DATE: **01/23/1995**
ACTION TYPE DEFINITION:
PROVIDES FOR OVERSIGHT OF POTENTIALLY RESPONSIBLE PARTY (PRP) RESPONSE ACTION FOR REMEDIAL DESIGN (RD), INCLUDING ALL ACTIVITIES FOR MONITORING AND SUPERVISING THE PERFORMANCE OF THE RESPONSIBLE PARTIES TO DETERMINE WHETHER SUCH PERFORMANCE IS CONSISTENT WITH THE REQUIREMENTS OF THE ADMINISTRATIVE ORDERS ON CONSENT, UNILATERAL ADMINISTRATIVE ORDERS, CONSENT DECREES, JUDICIAL DECREES, INFORMATION AGREEMENTS, AND COMPLIANCE SCHEDULES.

TYPE: **BF - POTENTIALLY RESPONSIBLE PARTY REMEDIAL ACTION - LONG TERM ACTION**
START DATE: **01/23/1995**
COMPLETION DATE: **12/11/1996**
ACTION TYPE DEFINITION:
PROVIDES FOR OVERSIGHT OF POTENTIALLY RESPONSIBLE PARTY (PRP) RESPONSE ACTION FOR REMEDIAL ACTION (RA), INCLUDING ALL ACTIVITIES FOR MONITORING AND SUPERVISING THE PERFORMANCE OF THE RESPONSIBLE

PARTIES TO DETERMINE WHETHER SUCH PERFORMANCE IS CONSISTENT WITH THE REQUIREMENTS OF THE ADMINISTRATIVE ORDERS ON CONSENT, UNILATERAL ADMINISTRATIVE ORDERS, CONSENT DECREES, JUDICIAL DECREES, INFORMATION AGREEMENTS, AND COMPLIANCE SCHEDULES.

TYPE: **CM - PRELIMINARY CLOSE-OUT REPORT PREPARED**
START DATE: **NOT REPORTED**
COMPLETION DATE: **09/16/1997**
ACTION TYPE DEFINITION:
A REPORT PREPARED BY THE REMEDIAL PROGRAM MANAGER (RPM) VERIFYING THAT PHYSICAL CONSTRUCTION OF THE REMEDY IS COMPLETE, INDICATING MINOR PUNCH LIST ITEMS THAT REMAIN AND OUTLINING A SCHEDULE OF THE OUTSTANDING ACTIVITIES.

TYPE: **TG - TECHNICAL ASSISTANCE GRANT**
START DATE: **06/05/1990**
COMPLETION DATE: **07/31/1998**
ACTION TYPE DEFINITION:
A GRANT OF UP TO $50,000 PROVIDED UNDER SARA TO A COMMUNITY FOR TECHNICAL ASSISTANCE IN DEALING WITH SUPERFUND ISSUES AT A NATIONAL PRIORITY LIST (NPL) SITE.

TYPE: **ED - RISK/HEALTH ASSESSMENT**
START DATE: **NOT REPORTED**
COMPLETION DATE: **09/30/1992**
ACTION TYPE DEFINITION:
ASSESSMENT OF THE BASELINE RISKS POSED BY THE SITE TO HUMAN HEALTH.

TYPE: **AV - ADMINISTATIVE/VOLUNTARY COST RECOVERY**
START DATE: **NOT REPORTED**
COMPLETION DATE: **04/27/1998**
ACTION TYPE DEFINITION:
REIMBURSEMENT OF TRUST FUND EXPENDITURES IN DIRECT RESPONSE TO DEMAND LETTERS. NO FORMAL SETTLEMENT DOCUMENT EXISTS. IF AN ADMINISTRATIVE ORDER ON CONSENT (AOC) RESOLVES A COST RECOVERY ACTION, IT SHOULD BE CODED AS AC (ACTION CODE FOR AOC) WITH COST RECOVERY REMEDIES.

CONTAMINANTS
WASTE SOURCE MEDIA CONTAMINATED NAME: **GROUNDWATER 01 MATRL**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **NOT REPORTED**
HAZARDOUS SUBSTANCE NAME: **VOC**
CONTAMINANT GROUP NAME: **VOC**

WASTE SOURCE MEDIA CONTAMINATED NAME: **GW1**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **1,2,4-TRICHLOROBENZENE**
CONTAMINANT GROUP NAME: **BASE NEUTRAL ACIDS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **GW1**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **30000 PPB**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **1,1,1-TRICHLOROETHANE**
CONTAMINANT GROUP NAME: **VOC**

WASTE SOURCE MEDIA CONTAMINATED NAME: **GW1**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **1,1,2-TRICHLOROETHANE**
CONTAMINANT GROUP NAME: **VOC**

WASTE SOURCE MEDIA CONTAMINATED NAME: **GW1**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **1,1-DICHLOROETHANE**
CONTAMINANT GROUP NAME: **VOC**

WASTE SOURCE MEDIA CONTAMINATED NAME: **GW1**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **1,1-DICHLOROETHYLENE**
CONTAMINANT GROUP NAME: **VOC**

WASTE SOURCE MEDIA CONTAMINATED NAME: **GW1**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **1,2-DICHLOROBENZENE**
CONTAMINANT GROUP NAME: **VOC**

WASTE SOURCE MEDIA CONTAMINATED NAME: **GW1**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **1,2-DICHLOROETHANE**
CONTAMINANT GROUP NAME: **VOC**

WASTE SOURCE MEDIA CONTAMINATED NAME: **GW1**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **ACETONE**
CONTAMINANT GROUP NAME: **VOC**

WASTE SOURCE MEDIA CONTAMINATED NAME: **GW1**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **BENZENE**

CONTAMINANT GROUP NAME: **VOC**

WASTE SOURCE MEDIA CONTAMINATED NAME: **GW1**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **FREON-113**
CONTAMINANT GROUP NAME: **VOC**

WASTE SOURCE MEDIA CONTAMINATED NAME: **GW1**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **METHYLENE CHLORIDE**
CONTAMINANT GROUP NAME: **VOC**

WASTE SOURCE MEDIA CONTAMINATED NAME: **GW1**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **39000 PPB**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **TETRACHLOROETHYLENE**
CONTAMINANT GROUP NAME: **VOC**

WASTE SOURCE MEDIA CONTAMINATED NAME: **GW1**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **TRANS-1,2-DICHLOROETHYLENE**
CONTAMINANT GROUP NAME: **VOC**

WASTE SOURCE MEDIA CONTAMINATED NAME: **GW1**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **17000 PPB**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **TRICHLOROETHYLENE**
CONTAMINANT GROUP NAME: **VOC**

WASTE SOURCE MEDIA CONTAMINATED NAME: **GW1**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **CIS-1,2-DICHLOROETHYLENE**
CONTAMINANT GROUP NAME: **VOC**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SO1**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **1,2,4-TRICHLOROBENZENE**
CONTAMINANT GROUP NAME: **BASE NEUTRAL ACIDS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SO1**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**

CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **ARSENIC**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SO1**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **1,1,1-TRICHLOROETHANE**
CONTAMINANT GROUP NAME: **VOC**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SO1**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **1,1,2-TRICHLOROETHANE**
CONTAMINANT GROUP NAME: **VOC**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SO1**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **1,1-DICHLOROETHANE**
CONTAMINANT GROUP NAME: **VOC**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SO1**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **1,2-DICHLOROBENZENE**
CONTAMINANT GROUP NAME: **VOC**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SO1**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **1,2-DICHLOROETHANE**
CONTAMINANT GROUP NAME: **VOC**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SO1**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **ACETONE**
CONTAMINANT GROUP NAME: **VOC**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SO1**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **BENZENE**
CONTAMINANT GROUP NAME: **VOC**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SO1**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **FREON-113**
CONTAMINANT GROUP NAME: **VOC**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SO1**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **METHYLENE CHLORIDE**
CONTAMINANT GROUP NAME: **VOC**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SO1**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **TETRACHLOROETHANE**
CONTAMINANT GROUP NAME: **VOC**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SO1**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **TOLUENE**
CONTAMINANT GROUP NAME: **VOC**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SO1**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **TRICHLOROETHANE**
CONTAMINANT GROUP NAME: **VOC**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SO1**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **VOC**
CONTAMINANT GROUP NAME: **VOC**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SO1**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **XYLENES**
CONTAMINANT GROUP NAME: **VOC**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SO1**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **CIS-1,2-DICHLOROETHYLENE**

CONTAMINANT GROUP NAME: **VOC**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SOIL 01 MATRL**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **NOT REPORTED**
HAZARDOUS SUBSTANCE NAME: **VOC**
CONTAMINANT GROUP NAME: **VOC**

LISTING OF PUBLISHED INSTITUTIONAL CONTROL SITE REPORT
REPORT TYPE: **ICS REQUIRED**
URL LINK: **http://www.epa.gov/ictssw07/public/export/09/CAD980884209/CAD980884209_report.HTM**

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MAP ID# 56

Distance from Property: 0.439 mi. (2,318 ft.) W
Elevation: 40 ft. (Higher than TP)

FACILITY INFORMATION

GLOBAL ID: **T10000004533**
URL LINK: CLICK HERE
BUSINESS NAME: **STANFORD-MAYFIELD REDEVELOPMENT**
ADDRESS: **2450 EL CAMINO REAL**
PALO ALTO, CA 94304
COUNTY: **SANTA CLARA**

FACILITY DETAILS

CASE TYPE: **CLEANUP PROGRAM SITE**
CASE NUMBER: **43S1150**
STATUS: **COMPLETED - CASE CLOSED 8/23/2018**
POTENTIAL CONTAMINATION:
TRICHLOROETHYLENE (TCE)
POTENTIAL MEDIA AFFECTED:
SOIL, SOIL VAPOR
DISADVANTAGED COMMUNITY:
NO
SEVERELY DISADVANTAGED COMMUNITY:
NO
SITE HISTORY:
THE PROJECT IS A REDEVELOPMENT PROPERTY WITHIN THE COE PLUME WITH UNDERLYING GROUNDWATER PROBABLY IMPACTED BY THE UPGRADIENT HP/VARIAN SOURCE PROPERTIES. ELEVATED SV-TCE LEVELS IN THE CORNER OF THE PROPERTY OVERLYING THE COE PLUME PROMPTED THE DEVELOPER TO CONSTRUCT THE BUILDING WIHT A VAPOR INTRUSION MITIGATION SYSTEM (VIMS) AND WATER BARRIER. POST-MITIGATION IA TESTING VERIFIED THAT THE VIMS IS WORKING AS DESIGNED.

REGULATORY ACTIVITIES

TYPE OF ACTION:	DATE:	ACTION:
OTHER	**01/01/50**	**LEAK BEGAN**
OTHER	**01/01/50**	**LEAK DISCOVERY**
OTHER	**01/01/50**	**LEAK REPORTED**
OTHER	**01/01/50**	**LEAK STOPPED**
ENFORCEMENT	**08/23/2018**	**CLOSURE/NO FURTHER ACTION LETTER**
ENFORCEMENT	**06/29/2018**	**STAFF LETTER**
ENFORCEMENT	**05/04/2017**	**13267 REQUIREMENT**
ENFORCEMENT	**09/15/2016**	**ANNUAL ESTIMATION LETTER**
ENFORCEMENT	**05/12/2016**	**MEETING**
ENFORCEMENT	**10/05/2015**	**ANNUAL ESTIMATION LETTER - #2020438**
ENFORCEMENT	**04/21/2015**	**EMAIL CORRESPONDENCE**
ENFORCEMENT	**03/18/2015**	**LETTER - NOTICE - #43S1150**
RESPONSE	**01/31/2015**	**SOIL VAPOR INTRUSION INVESTIGATION WORKPLAN**
ENFORCEMENT	**01/15/2015**	**TECHNICAL CORRESPONDENCE / ASSISTANCE / OTHER**
ENFORCEMENT	**01/12/2015**	**TECHNICAL CORRESPONDENCE / ASSISTANCE / OTHER**
ENFORCEMENT	**09/22/2014**	**MEETING**
ENFORCEMENT	**01/21/2014**	**MEETING**

TYPE OF ACTION:	DATE:	ACTION:
ENFORCEMENT	**06/28/2013**	**COST RECOVERY AGREEMENT**
ENFORCEMENT	**06/28/2013**	**COST RECOVERY AGREEMENT / N. OF REIMBURSEMENT**
ENFORCEMENT	**01/08/2013**	**STAFF LETTER**
RESPONSE	**12/18/2012**	**TECHNICAL MEMOS**
RESPONSE	**10/11/2012**	**OTHER WORKPLAN**
RESPONSE	**05/11/2012**	**SOIL VAPOR INTRUSION INVESTIGATION REPORT**
OTHER	**01/01/2012**	**LEAK REPORTED**
OTHER	**01/01/1990**	**LEAK DISCOVERY**
OTHER	**01/01/1990**	**LEAK STOPPED**
OTHER	**01/01/1961**	**LEAK BEGAN**
OTHER	**01/01/1960**	**LEAK STOPPED**
OTHER	**01/01/1955**	**LEAK BEGAN**

STATUS HISTORY

STATUS:	DATE:
COMPLETED - CASE CLOSED	**08/23/2018**
OPEN - ELIGIBLE FOR CLOSURE	**01/01/2018**
OPEN - REMEDIATION	**01/08/2013**
OPEN - CASE BEGIN DATE	**01/01/2012**

CONTACT DETAILS

ORGANIZATION: **SAN FRANCISCO BAY RWQCB (REGION 2)**
ADDRESS: **1515 CLAY STREET, SUITE 1500**
CITY: **OAKLAND**
CONTACT NAME: **ROGER PAPLER**
CONTACT TYPE: **REGIONAL BOARD CASEWORKER**
CONTACT PHONE: **NOT REPORTED**
EMAIL: **ROGER.PAPLER@WATERBOARDS.CA.GOV**

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GeoTracker Cleanup Sites (CLEANUPSITES)

MAP ID# 57

Distance from Property: 0.458 mi. (2,418 ft.) WNW
Elevation: 35 ft. (Higher than TP)

FACILITY INFORMATION

GLOBAL ID: **T0608587383**
URL LINK: CLICK HERE
BUSINESS NAME: **PALO ALTO TIRE & BRAKE**
ADDRESS: **306 CAMBRIDGE**
PALO ALTO, CA 94306
COUNTY: **SANTA CLARA**

FACILITY DETAILS

CASE TYPE: **LUST CLEANUP SITE**
CASE NUMBER: **NOT REPORTED**
STATUS: **COMPLETED - CASE CLOSED 12/14/2006**
POTENTIAL CONTAMINATION:
GASOLINE
POTENTIAL MEDIA AFFECTED:
OTHER GROUNDWATER (USES OTHER THAN DRINKING WATER)
DISADVANTAGED COMMUNITY:
NO
SEVERELY DISADVANTAGED COMMUNITY:
NO
SITE HISTORY:
NOT REPORTED

REGULATORY ACTIVITIES

TYPE OF ACTION:	DATE:	ACTION:
OTHER	01/01/50	LEAK REPORTED
ENFORCEMENT	12/14/2006	CLOSURE/NO FURTHER ACTION LETTER - #624121
RESPONSE	12/06/2006	WELL DESTRUCTION REPORT
RESPONSE	08/17/2006	CORRESPONDENCE
RESPONSE	01/05/2006	MONITORING REPORT - QUARTERLY
RESPONSE	10/06/2005	MONITORING REPORT - QUARTERLY
RESPONSE	09/21/2005	CAP/RAP - OTHER REPORT
RESPONSE	07/06/2005	MONITORING REPORT - QUARTERLY
RESPONSE	05/25/2005	OTHER REPORT / DOCUMENT
RESPONSE	03/24/2005	MONITORING REPORT - QUARTERLY
RESPONSE	12/15/2004	MONITORING REPORT - QUARTERLY
RESPONSE	09/29/2004	MONITORING REPORT - QUARTERLY
RESPONSE	08/30/2004	INTERIM REMEDIAL ACTION REPORT
RESPONSE	07/05/2004	CORRECTIVE ACTION PLAN / REMEDIAL ACTION PLAN
RESPONSE	06/21/2004	MONITORING REPORT - QUARTERLY
RESPONSE	06/14/2004	INTERIM REMEDIAL ACTION PLAN
ENFORCEMENT	04/20/2004	STAFF LETTER - #43636
RESPONSE	03/29/2004	MONITORING REPORT - QUARTERLY
RESPONSE	03/19/2004	INTERIM REMEDIAL ACTION REPORT
RESPONSE	01/20/2004	MONITORING REPORT - QUARTERLY
RESPONSE	01/13/2004	VERBAL COMMUNICATION

TYPE OF ACTION:	DATE:	ACTION:
RESPONSE	01/12/2004	SOIL AND WATER INVESTIGATION WORKPLAN
RESPONSE	11/21/2003	MONITORING REPORT - QUARTERLY
ENFORCEMENT	11/07/2003	STAFF LETTER - #42550
RESPONSE	08/15/2003	CORRESPONDENCE
RESPONSE	07/28/2003	MONITORING REPORT - QUARTERLY
RESPONSE	03/24/2003	MONITORING REPORT - QUARTERLY
RESPONSE	01/17/2003	MONITORING REPORT - QUARTERLY
RESPONSE	12/16/2002	MONITORING REPORT - QUARTERLY
ENFORCEMENT	08/26/2002	STAFF LETTER - #38540
RESPONSE	08/09/2002	WELL INSTALLATION REPORT
RESPONSE	06/10/2002	SOIL AND WATER INVESTIGATION REPORT
RESPONSE	12/17/2001	SOIL AND WATER INVESTIGATION WORKPLAN
ENFORCEMENT	12/14/2001	STAFF LETTER - #28829
RESPONSE	12/14/2001	WELL INSTALLATION WORKPLAN
RESPONSE	08/16/2001	SOIL AND WATER INVESTIGATION REPORT
RESPONSE	07/13/2000	SOIL AND WATER INVESTIGATION REPORT
ENFORCEMENT	04/11/2000	STAFF LETTER - #28827
RESPONSE	03/20/2000	OTHER WORKPLAN
RESPONSE	01/23/1998	WELL INSTALLATION WORKPLAN
ENFORCEMENT	01/13/1998	STAFF LETTER - #28824
RESPONSE	12/03/1997	SOIL AND WATER INVESTIGATION REPORT
RESPONSE	05/20/1997	SOIL AND WATER INVESTIGATION WORKPLAN
RESPONSE	04/28/1997	SOIL AND WATER INVESTIGATION WORKPLAN
RESPONSE	04/15/1997	OTHER REPORT / DOCUMENT
ENFORCEMENT	02/07/1997	NOTICE OF RESPONSIBILITY - #40032
RESPONSE	06/10/1993	OTHER REPORT / DOCUMENT
RESPONSE	05/12/1993	OTHER REPORT / DOCUMENT
RESPONSE	08/15/1992	OTHER REPORT / DOCUMENT
RESPONSE	12/19/1991	OTHER REPORT / DOCUMENT
OTHER	03/01/1987	LEAK REPORTED
RESPONSE	03/01/1987	UNAUTHORIZED RELEASE FORM
RESPONSE	03/26/1986	TANK REMOVAL REPORT / UST SAMPLING REPORT

STATUS HISTORY

STATUS:	DATE:
COMPLETED - CASE CLOSED	12/14/2006
OPEN - REMEDIATION	09/22/2005
OPEN - SITE ASSESSMENT	04/15/1997
OPEN - CASE BEGIN DATE	03/01/1986
OPEN - SITE ASSESSMENT	03/01/1986

CONTACT DETAILS

ORGANIZATION: **SAN FRANCISCO BAY RWQCB (REGION 2)**

ADDRESS: **1515 CLAY ST SUITE 1400**

CITY: **OAKLAND**

CONTACT NAME: **REGIONAL WATER BOARD**

CONTACT TYPE: **REGIONAL BOARD CASEWORKER**
CONTACT PHONE: **NOT REPORTED**
EMAIL: **NOT REPORTED**

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Historical Cortese List (HISTCORTESE)

MAP ID# 57

Distance from Property: 0.458 mi. (2,418 ft.) WNW
Elevation: 35 ft. (Higher than TP)

FACILITY INFORMATION

GEOSEARCH ID: **43-1032COR**
ID#: **43-1032**
NAME: **PALO ALTO TIRE & BRAKE**
ADDRESS: **306 CAMBRIDGE**
PALO ALTO, CA 94036

Back to Report Summary

Leaking Underground Storage Tanks (LUST)

MAP ID# 57

Distance from Property: 0.458 mi. (2,418 ft.) WNW
Elevation: 35 ft. (Higher than TP)

FACILITY INFORMATION

GLOBAL ID: **T0608501027**

URL LINK: CLICK HERE

BUSINESS NAME: **PALO ALTO TIRE & BRAKE**

ADDRESS: **306 CAMBRIDGE AVE**
PALO ALTO, CA 94306

COUNTY: **SANTA CLARA**

FACILITY DETAILS

NO DETAIL(S) INFORMATION REPORTED

HISTORICAL FACILITY DETAILS

NO HISTORICAL DETAIL(S) INFORMATION REPORTED FOR THIS FACILITY

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Leaking Underground Storage Tanks (LUST)

MAP ID# 57

Distance from Property: 0.458 mi. (2,418 ft.) WNW
Elevation: 35 ft. (Higher than TP)

FACILITY INFORMATION

GLOBAL ID: **T0608587383**
URL LINK: CLICK HERE
BUSINESS NAME: **PALO ALTO TIRE & BRAKE**
ADDRESS: **306 CAMBRIDGE**
PALO ALTO, CA 94306
COUNTY: **SANTA CLARA**

FACILITY DETAILS

CASE TYPE: **LUST CLEANUP SITE**
CASE NUMBER: **NOT REPORTED**
STATUS: **COMPLETED - CASE CLOSED 12/14/2006**
POTENTIAL CONTAMINATION:
GASOLINE
POTENTIAL MEDIA AFFECTED:
OTHER GROUNDWATER (USES OTHER THAN DRINKING WATER)
DISADVANTAGED COMMUNITY:
NO
SEVERELY DISADVANTAGED COMMUNITY:
NO
SITE HISTORY:
NOT REPORTED

HISTORICAL FACILITY DETAILS

NO HISTORICAL DETAIL(S) INFORMATION REPORTED FOR THIS FACILITY

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MAP ID# 58

Distance from Property: 0.464 mi. (2,450 ft.) W
Elevation: 43 ft. (Higher than TP)

FACILITY INFORMATION

GLOBAL ID: **SL181201123**
URL LINK: CLICK HERE
BUSINESS NAME: **VARIAN ASSOCIATES**
ADDRESS: **601 S. CALIFORNIA AVE.**
PALO ALTO, CA 94304-1101
COUNTY: **SANTA CLARA**

FACILITY DETAILS

CASE TYPE: **CLEANUP PROGRAM SITE**
CASE NUMBER: **43S0188**
STATUS: **OPEN - REMEDIATION 1/1/2014**
POTENTIAL CONTAMINATION:
1,1,1-TRICHLOROETHANE (TCA), OTHER CHLORINATED HYDROCARBONS, TRICHLOROETHYLENE (TCE)
POTENTIAL MEDIA AFFECTED:
OTHER GROUNDWATER (USES OTHER THAN DRINKING WATER), SOIL
DISADVANTAGED COMMUNITY:
NO
SEVERELY DISADVANTAGED COMMUNITY:
NO
SITE HISTORY:
THE VARIAN SITE IS A NON-SUPERFUND SCP SITE LOCATED UPGRADIENT FROM AND CONTRIBUTING TO THE COE PLUME - THAT INCLUDES THE HEWLETT PACKARD 395 AND 640 PAGE MILL ROAD (PMR) SITES. THE VARIAN SITE IS LOCATED NORTHWEST OF AND ADJACENT TO THE 640 PMR SITE. PERIODIC IA SAMPLING BY THE PRESENT OCCUPANTS INDICATES THAT INDOOR AIR CONTAMINANTS ARE BELOW LEVELS OF CONCERN. A DEED RESTRICTION PROHIBITS THE USE OF GROUNDWATER FOR DRINKING WATER AND EXCAVATION WITHOUT NOTIFYING THE WATER BOARD. VARIAN CONDUCTED REMEDIAL ACTIONS AT THE SITE INCLUDING: - SOIL EXCAVATION OF THE ON-SITE DRY WELL SOURCE IN 1990 - ON-SITE SOIL VAPOR EXTRACTION FOR A FEW YEARS - ON- AND OFF-SITE GROUNDWATER EXTRACTION FROM 1987 UNTIL 2003. - ON-SITE IN-SITU CHEMICAL OXIDATION (ISCO) FOR THE LAST SEVERAL YEARS AFTER SEVERAL YEARS OF IN-SITU CHEMICAL OXIDATION (ISCO), TCE DNAPL CONDITIONS PERSIST IN THE COURTYARD AREA THROUGH THE PRESENT TIME. VARIAN CONDUCTED ADDITONAL RI IN PREPARATION FOR CHANGING THE REMEDY FROM ISCO TO ENHANCED REDUCTIVE DECHLORINATION (ERD). THE WATER BOARD REVIEWED AND APPROVED A PILOT STUDY WORKPLAN FOR ERD AND ISSUED AN APPROVAL LETTER. THE PILOT STUDY AND FOLLOWUP RESULTS INDICATED THAT ERD MAY BE SELECTED AS THE FINAL REMEDY

REGULATORY ACTIVITIES

TYPE OF ACTION:	DATE:	ACTION:
OTHER	**01/01/50**	**LEAK DISCOVERY**
OTHER	**01/01/50**	**LEAK REPORTED**
OTHER	**01/01/50**	**LEAK STOPPED**
REMEDIATION	**01/01/50**	**IN SITU PHYSICAL/CHEMICAL TREATMENT (OTHER THAN SVE)**
REMEDIATION	**01/01/50**	**PUMP & TREAT (P&T) GROUNDWATER**
REMEDIATION	**01/01/50**	**SOIL VAPOR EXTRACTION (SVE)**
ENFORCEMENT	**05/29/2020**	**ANNUAL ESTIMATION LETTER**
ENFORCEMENT	**08/26/2019**	**STAFF LETTER**
ENFORCEMENT	**07/15/2019**	**ANNUAL ESTIMATION LETTER**

TYPE OF ACTION:	DATE:	ACTION:
ENFORCEMENT	06/29/2018	STAFF LETTER
ENFORCEMENT	02/07/2017	TECHNICAL CORRESPONDENCE / ASSISTANCE / OTHER
ENFORCEMENT	10/06/2016	13267 REQUIREMENT
RESPONSE	09/09/2015	REMEDIAL PROGRESS REPORT
ENFORCEMENT	07/08/2015	ANNUAL ESTIMATION LETTER - #43S0188
ENFORCEMENT	01/08/2015	13267 REQUIREMENT
ENFORCEMENT	08/28/2014	COST RECOVERY AGREEMENT
ENFORCEMENT	08/28/2014	COST RECOVERY AGREEMENT / N. OF REIMBURSEMENT
ENFORCEMENT	06/26/2014	13267 REQUIREMENT
ENFORCEMENT	01/23/2014	13267 REQUIREMENT
ENFORCEMENT	12/05/2013	TECHNICAL CORRESPONDENCE / ASSISTANCE / OTHER
ENFORCEMENT	09/19/2013	13267 REQUIREMENT
ENFORCEMENT	08/07/2013	13267 REQUIREMENT
ENFORCEMENT	06/28/2013	COST RECOVERY AGREEMENT
ENFORCEMENT	06/28/2013	COST RECOVERY AGREEMENT / N. OF REIMBURSEMENT
ENFORCEMENT	06/28/2013	TECHNICAL CORRESPONDENCE / ASSISTANCE / OTHER
ENFORCEMENT	06/06/2013	13267 REQUIREMENT
ENFORCEMENT	12/14/2012	13267 REQUIREMENT
ENFORCEMENT	12/04/2012	13267 REQUIREMENT
ENFORCEMENT	04/30/2012	MEETING
ENFORCEMENT	03/12/2012	13267 REQUIREMENT
ENFORCEMENT	02/08/2012	13267 REQUIREMENT
ENFORCEMENT	02/02/2012	MEETING
ENFORCEMENT	08/08/2011	MEETING
ENFORCEMENT	02/16/2011	13267 REQUIREMENT
RESPONSE	12/20/2010	CORRESPONDENCE
ENFORCEMENT	06/25/2009	TECHNICAL CORRESPONDENCE / ASSISTANCE / OTHER
ENFORCEMENT	11/18/2008	TECHNICAL CORRESPONDENCE / ASSISTANCE / OTHER
RESPONSE	09/24/2007	REMEDIAL PROGRESS REPORT
ENFORCEMENT	08/25/2005	* NO ACTION
RESPONSE	01/21/2005	REMEDIAL PROGRESS REPORT
REMEDIATION	01/01/2005	IN SITU PHYSICAL/CHEMICAL TREATMENT (OTHER THAN SVE)
RESPONSE	01/30/2004	NPDES / WDR REPORTS
RESPONSE	10/30/2003	NPDES / WDR REPORTS
RESPONSE	09/30/2003	MONITORING REPORT - QUARTERLY
RESPONSE	07/30/2003	NPDES / WDR REPORTS
ENFORCEMENT	06/25/2003	DEED RESTRICTION / LAND USE RESTRICTION / COVENANT
RESPONSE	05/22/2003	CORRECTIVE ACTION PLAN / REMEDIAL ACTION PLAN
RESPONSE	04/30/2003	NPDES / WDR REPORTS
RESPONSE	01/30/2003	NPDES / WDR REPORTS
RESPONSE	09/30/2002	MONITORING REPORT - QUARTERLY
RESPONSE	01/30/2002	NPDES / WDR REPORTS
RESPONSE	10/29/2001	CAP/RAP - OTHER REPORT
RESPONSE	09/30/2001	MONITORING REPORT - QUARTERLY

TYPE OF ACTION:	DATE:	ACTION:
RESPONSE	**04/13/2001**	**MONITORING REPORT - QUARTERLY**
RESPONSE	**01/30/2001**	**NPDES / WDR REPORTS**
RESPONSE	**12/19/2000**	**INTERIM REMEDIAL ACTION REPORT**
RESPONSE	**11/28/2000**	**CORRECTIVE ACTION PLAN / REMEDIAL ACTION PLAN**
RESPONSE	**06/01/2000**	**UNKNOWN**
ENFORCEMENT	**09/07/1999**	**WASTE DISCHARGE REQUIREMENTS - #99-051**
ENFORCEMENT	**09/21/1994**	**CLEAN-UP AND ABATEMENT ORDER - #94-130**
RESPONSE	**05/01/1994**	**FEASIBILITY STUDY REPORT**
RESPONSE	**06/23/1993**	**REMEDIAL INVESTIGATION REPORT**
RESPONSE	**06/13/1991**	**SITE INVESTIGATION**
RESPONSE	**04/01/1991**	**REMEDIAL INVESTIGATION REPORT**
REMEDIATION	**01/01/1991**	**SOIL VAPOR EXTRACTION (SVE)**
ENFORCEMENT	**05/16/1990**	**CLEAN-UP AND ABATEMENT ORDER - #90-066**
OTHER	**01/01/1990**	**LEAK DISCOVERY**
ENFORCEMENT	**04/19/1989**	**CLEAN-UP AND ABATEMENT ORDER - #89-059**
OTHER	**01/01/1988**	**LEAK REPORTED**
ENFORCEMENT	**04/15/1987**	**CLEAN-UP AND ABATEMENT ORDER - #87-039**
OTHER	**01/01/1987**	**LEAK STOPPED**
REMEDIATION	**01/01/1987**	**PUMP & TREAT (P&T) GROUNDWATER**

STATUS HISTORY

STATUS:	DATE:
OPEN - REMEDIATION	**01/01/2014**
OPEN - VERIFICATION MONITORING	**06/21/2005**
OPEN - REMEDIATION	**05/22/2003**
OPEN - REMEDIATION	**10/29/2001**
OPEN - REMEDIATION	**01/01/2001**
OPEN - REMEDIATION	**11/28/2000**
OPEN - REMEDIATION	**01/01/1995**
OPEN - REMEDIATION	**01/01/1991**
OPEN - CASE BEGIN DATE	**01/01/1987**

CONTACT DETAILS

ORGANIZATION: **SANTA CLARA VALLEY WATER DISTRICT**
ADDRESS: **5750 ALMADEN EXPRESSWAY**
CITY: **SAN JOSE**
CONTACT NAME: **GEORGE COOK**
CONTACT TYPE: **LOCAL AGENCY CASEWORKER**
CONTACT PHONE: **4082652607**
EMAIL: **GCOOK@VALLEYWATER.ORG**
ORGANIZATION: **SAN FRANCISCO BAY RWQCB (REGION 2)**
ADDRESS: **1515 CLAY STREET, SUITE 1500**
CITY: **OAKLAND**
CONTACT NAME: **ROGER PAPLER**
CONTACT TYPE: **REGIONAL BOARD CASEWORKER**

CONTACT PHONE: **NOT REPORTED**

EMAIL: **ROGER.PAPLER@WATERBOARDS.CA.GOV**

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MAP ID# 58

Distance from Property: 0.464 mi. (2,450 ft.) W
Elevation: 43 ft. (Higher than TP)

SITE INFORMATION

ID #: **71003512** ASSESSOR'S PARCEL #: **14220011**
FACILITY LINK: CLICK HERE
NAME: **INTEVAC/EO SENSORS, INC.**
ADDRESS: **601 CALIFORNIA AVENUE**
PALO ALTO, CA 94304
COUNTY: **SANTA CLARA**
SITE SIZE (ACRES): **6.28**
LEAD AGENCY: **NONE SPECIFIED**
DTSC PROJECT MANAGER: **NOT REPORTED**
DTSC SUPERVISOR: **MARK PIROS**
DTSC DIVISION BRANCH: **CLEANUP BERKELEY**
NPL LISTED: **NO** RESTRICTED LAND USE: **NO**
SITE TYPE: **TIERED PERMIT**
SITE TYPE DESCRIPTION
NOT REPORTED
DTSC's CURRENT INVOLVEMENT AT SITE (as of 20/7 /6/23)
REFER: RWQCB -
PAST USE/S THAT CAUSED THE CONTAMINATION
NONE SPECIFIED
CONFIRMED CONTAMINANTS OF CONCERN
NONESPECIFIED - NONE SPECIFIED

Back to Report Summary

MAP ID# 58

Distance from Property: 0.464 mi. (2,450 ft.) W
Elevation: 43 ft. (Higher than TP)

SITE INFORMATION

ID #: **80001826** ASSESSOR'S PARCEL #: **142-20-011**
FACILITY LINK: CLICK HERE
NAME: **INTEVAC**
ADDRESS: **601 CALIFORNIA AVE**
PALO ALTO, CA 94303
COUNTY: **SANTA CLARA**
SITE SIZE (ACRES): **0**
LEAD AGENCY: **RWQCB 2 - SAN FRANCISCO BAY**
DTSC PROJECT MANAGER: **NOT REPORTED**
DTSC SUPERVISOR: *** UNKNOWN**
DTSC DIVISION BRANCH: **CLEANUP BERKELEY**
NPL LISTED: **NO** RESTRICTED LAND USE: **NO**
SITE TYPE: **CORRECTIVE ACTION**
SITE TYPE DESCRIPTION
INVESTIGATION AND CLEANUP ACTIVITIES AT HAZARDOUS WASTE FACILITIES (EITHER RESOURCE CONSERVATION AND RECOVERY ACT (RCRA) OR STATE-ONLY) THAT EITHER WERE ELIGIBLE FOR A PERMIT OR RECEIVED A PERMIT, ARE CALLED CORRECTIVE ACTION.
DTSC's CURRENT INVOLVEMENT AT SITE (as of 00/ /1/1/)
REFER: RWQCB -
PAST USE/S THAT CAUSED THE CONTAMINATION
NONE SPECIFIED
CONFIRMED CONTAMINANTS OF CONCERN
NONESPECIFIED - NONE SPECIFIED

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MAP ID# 58

Distance from Property: 0.464 mi. (2,450 ft.) W
Elevation: 43 ft. (Higher than TP)

SITE INFORMATION

GEOSEARCH ID: **CAT080010804**
EPA ID: **CAT080010804**
NAME: **INTEVAC**
ADDRESS: **601 CALIFORNIA AVE**
PALO ALTO, CA 94303
COUNTY: **SANTA CLARA**
PROJECT MANAGER: **NOT REPORTED**
DTSC PROJECT TRACKING CODE: **NOT REPORTED**
FACILITY TYPE: **HISTORICAL - NON-OPERATING**
STATUS: **CLOSED**
HAZARDOUS WASTE UNITS UNDERGOING CLOSURE
DATE: **06/30/1994**
UNIT: **CONTAINER**
EVENT DESCRIPTION: **CLOSURE FINAL - ISSUE CLOSURE VERIFICATION**
FACILITY TYPE: **HISTORICAL - NON-OPERATING**
HAZARDOUS WASTE UNITS COMPLETED ACTIVITIES **- NO INFORMATION REPORTED -**
MAINTENANCE **- NO INFORMATION REPORTED -**

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Historical Cortese List (HISTCORTESE)

MAP ID# 58

Distance from Property: 0.464 mi. (2,450 ft.) W
Elevation: 43 ft. (Higher than TP)

FACILITY INFORMATION

GEOSEARCH ID: **2 438249NO1COR**
ID#: **2 438249NO1**
NAME: **SCR-VARIAN-601 CALIF AVE**
ADDRESS: **601 CALIFORNIA**
PALO ALTO, CA 94304

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Resource Conservation & Recovery Act - Corrective Action Facilities (RCRAC)

MAP ID# 58

Distance from Property: 0.464 mi. (2,450 ft.) W
Elevation: 43 ft. (Higher than TP)

FACILITY INFORMATION

EPA ID#: **CAT080010804**
NAME: **INTEVAC**
ADDRESS: **601 CALIFORNIA AVE**
PALO ALTO, CA 94304-0883
CONTACT NAME: **NOT REPORTED**
CONTACT ADDRESS: **601 CALIFORNIA AVE**
PALO ALTO CA 94304-0883
CONTACT PHONE: **NOT REPORTED**
NON-NOTIFIER: **NOT A NON-NOTIFIER**
DATE RECEIVED BY AGENCY: **09/01/1996**

OWNER TYPE: **NOT REPORTED**
OWNER NAME: **NOT REPORTED**
OPERATOR TYPE: **PRIVATE**
OPERATOR NAME: **VARIAN ASSOCIATES INC**

CERTIFICATION

CERTIFICATION NAME:	CERTIFICATION TITLE:	CERTIFICATION SIGNED DATE:
BONITA L STEERS	**ENV. H & S TECH**	**04/12/1990**
LOREN HENNING	**MANAGER, RCRA ENFORCEMENT OFFICE**	**09/05/2006**
JAMES D BENHAM	**PRES.& GEN.MGR.**	**03/01/1994**
DENNIS BATEMAN	**ENV. ENGINEER**	**NOT REPORTED**

INDUSTRY CLASSIFICATION (NAICS)

334419 - OTHER ELECTRONIC COMPONENT MANUFACTURING

CURRENT ACTIVITY INFORMATION

GENERATOR STATUS: **SMALL QUANTITY GENERATOR** LAST UPDATED DATE: **09/05/2006**
SUBJECT TO CORRECTIVE ACTION UNIVERSE: **NO**
TDSFs POTENTIALLY SUBJECT TO CORRECTIVE ACTION UNDER 3004 (u)/(v) UNIVERSE: **NO**
TDSFs ONLY SUBJECT TO CORRECTIVE ACTION UNDER DISCRETIONARY AUTHORITIES UNIVERSE: **NO**
NON TSDFs WHERE RCRA CORRECTIVE ACTION HAS BEEN IMPOSED UNIVERSE: **YES**
CORRECTIVE ACTION WORKLOAD UNIVERSE: **YES**

IMPORTER: **NO**
MIXED WASTE GENERATOR: **NO**
RECYCLER: **NO**
TRANSPORTER: **NO**
ONSITE BURNER EXEMPTION: **NO**
FURNACE EXEMPTION: **NO**
USED OIL REFINER: **NO**
USED OIL TRANSFER FACILITY: **NO**
UNDERGROUND INJECTION: **NO**
UNIVERSAL WASTE DESTINATION FACILITY: **NO**
TRANSFER FACILITY: **NO**
USED OIL FUEL BURNER: **NO**
USED OIL PROCESSOR: **NO**
USED OIL FUEL MARKETER TO BURNER: **NO**
SPECIFICATION USED OIL MARKETER: **NO**
USED OIL TRANSPORTER: **NO**

COMPLIANCE, MONITORING AND ENFORCEMENT INFORMATION

EVALUATIONS

01/30/1987	**FRR**	**FINANCIAL RECORD REVIEW**
10/23/1985	**CEI**	**COMPLIANCE EVALUATION INSPECTION ON-SITE**

VIOLATIONS **- NO VIOLATIONS REPORTED -**

ENFORCEMENTS **- NO ENFORCEMENTS REPORTED -**

HAZARDOUS WASTE

- NO HAZARDOUS WASTE INFORMATION REPORTED -

UNIVERSAL WASTE **- NO UNIVERSAL WASTE REPORTED -**

CORRECTIVE ACTION AREA (RELEASE)

AREA NAME:	AIR:	GROUNDWATER:	SOIL:	SURFACE WASTE:
ENTIRE FACILITY	**-----**	**-----**	**-----**	**-----**

CORRECTIVE ACTION EVENT

CA EVENT CODE: **CA800YE**
EVENT DESCRIPTION: **READY FOR ANTICIPATED USE DETERMINATION - READY FOR ANTICIPATED USE**
EVENT SEQUENCE NUMBER: **1**
EVENT RESPONSIBLE AGENCY: **EPA**
ACTUAL DATE OF EVENT: **09/22/2009**
ORIGINAL SCHEDULE DATE OF EVENT: **NOT REPORTED**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA050**
EVENT DESCRIPTION: **RFA COMPLETED**
EVENT SEQUENCE NUMBER: **1**
EVENT RESPONSIBLE AGENCY: **STATE**
ACTUAL DATE OF EVENT: **05/02/1994**
ORIGINAL SCHEDULE DATE OF EVENT: **19940502**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA029WQ**
EVENT DESCRIPTION: **LEAD AGENCY DETERMINATION**
EVENT SEQUENCE NUMBER: **1**
EVENT RESPONSIBLE AGENCY: **EPA**
ACTUAL DATE OF EVENT: **12/01/1986**
ORIGINAL SCHEDULE DATE OF EVENT: **NOT REPORTED**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA036WQ**
EVENT DESCRIPTION: **DEFERRAL TO ANOTHER AGENCY**
EVENT SEQUENCE NUMBER: **2**
EVENT RESPONSIBLE AGENCY: **EPA**
ACTUAL DATE OF EVENT: **09/29/1988**
ORIGINAL SCHEDULE DATE OF EVENT: **NOT REPORTED**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA100**
EVENT DESCRIPTION: **INVESTIGATION IMPOSITION**
EVENT SEQUENCE NUMBER: **2**
EVENT RESPONSIBLE AGENCY: **STATE**

ACTUAL DATE OF EVENT: **04/15/1987**
ORIGINAL SCHEDULE DATE OF EVENT: **NOT REPORTED**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA200**
EVENT DESCRIPTION: **INVESTIGATION COMPLETE**
EVENT SEQUENCE NUMBER: **3**
EVENT RESPONSIBLE AGENCY: **STATE**
ACTUAL DATE OF EVENT: **09/21/1994**
ORIGINAL SCHEDULE DATE OF EVENT: **NOT REPORTED**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA049PA**
EVENT DESCRIPTION: **PA OR CERCLA INSPECTION**
EVENT SEQUENCE NUMBER: **3**
EVENT RESPONSIBLE AGENCY: **EPA**
ACTUAL DATE OF EVENT: **12/01/1986**
ORIGINAL SCHEDULE DATE OF EVENT: **NOT REPORTED**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA210**
EVENT DESCRIPTION: **REFERRED TO A NON-RCRA AUTHORITY**
EVENT SEQUENCE NUMBER: **4**
EVENT RESPONSIBLE AGENCY: **STATE**
ACTUAL DATE OF EVENT: **09/17/1997**
ORIGINAL SCHEDULE DATE OF EVENT: **NOT REPORTED**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA049SI**
EVENT DESCRIPTION: **PA OR CERCLA INSPECTION**
EVENT SEQUENCE NUMBER: **4**
EVENT RESPONSIBLE AGENCY: **EPA**
ACTUAL DATE OF EVENT: **06/01/1987**
ORIGINAL SCHEDULE DATE OF EVENT: **NOT REPORTED**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA250**
EVENT DESCRIPTION: **CMS IMPOSITION**
EVENT SEQUENCE NUMBER: **5**
EVENT RESPONSIBLE AGENCY: **STATE**
ACTUAL DATE OF EVENT: **04/15/1987**
ORIGINAL SCHEDULE DATE OF EVENT: **NOT REPORTED**

NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA074HI**
EVENT DESCRIPTION: **NCAPS RANKING/PRIORITY**
EVENT SEQUENCE NUMBER: **5**
EVENT RESPONSIBLE AGENCY: **EPA**
ACTUAL DATE OF EVENT: **12/01/1986**
ORIGINAL SCHEDULE DATE OF EVENT: **NOT REPORTED**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA350**
EVENT DESCRIPTION: **CMS COMPLETE**
EVENT SEQUENCE NUMBER: **6**
EVENT RESPONSIBLE AGENCY: **STATE**
ACTUAL DATE OF EVENT: **09/21/1994**
ORIGINAL SCHEDULE DATE OF EVENT: **NOT REPORTED**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA075HI**
EVENT DESCRIPTION: **CA PRIORITIZATION-HIGH CA PRIORITY**
EVENT SEQUENCE NUMBER: **6**
EVENT RESPONSIBLE AGENCY: **EPA**
ACTUAL DATE OF EVENT: **08/12/1994**
ORIGINAL SCHEDULE DATE OF EVENT: **NOT REPORTED**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA400**
EVENT DESCRIPTION: **REMEDY DECISION**
EVENT SEQUENCE NUMBER: **7**
EVENT RESPONSIBLE AGENCY: **STATE**
ACTUAL DATE OF EVENT: **09/21/1994**
ORIGINAL SCHEDULE DATE OF EVENT: **NOT REPORTED**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA075HI**
EVENT DESCRIPTION: **CA PRIORITIZATION-HIGH CA PRIORITY**
EVENT SEQUENCE NUMBER: **7**
EVENT RESPONSIBLE AGENCY: **EPA**
ACTUAL DATE OF EVENT: **12/01/1986**
ORIGINAL SCHEDULE DATE OF EVENT: **NOT REPORTED**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA450**
EVENT DESCRIPTION: **CORRECTIVE MEASURES DESIGN APPROVED**
EVENT SEQUENCE NUMBER: **8**
EVENT RESPONSIBLE AGENCY: **STATE**
ACTUAL DATE OF EVENT: **09/21/1994**
ORIGINAL SCHEDULE DATE OF EVENT: **NOT REPORTED**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA225NR**
EVENT DESCRIPTION: **STABILIZATION MEASURES EVALUATION-FACILITY NOT AMENABLE TO STABILIZATION**
EVENT SEQUENCE NUMBER: **8**
EVENT RESPONSIBLE AGENCY: **EPA**
ACTUAL DATE OF EVENT: **08/12/1994**
ORIGINAL SCHEDULE DATE OF EVENT: **NOT REPORTED**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA225NR**
EVENT DESCRIPTION: **STABILIZATION MEASURES EVALUATION-FACILITY NOT AMENABLE TO STABILIZATION**
EVENT SEQUENCE NUMBER: **8**
EVENT RESPONSIBLE AGENCY: **STATE**
ACTUAL DATE OF EVENT: **08/12/1994**
ORIGINAL SCHEDULE DATE OF EVENT: **19940812**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA725YE**
EVENT DESCRIPTION: **HUMAN EXPOSURES CONTROLLED DETERMINATION-YES, APPLICABLE AS OF THIS DATE**
EVENT SEQUENCE NUMBER: **9**
EVENT RESPONSIBLE AGENCY: **EPA**
ACTUAL DATE OF EVENT: **12/28/2000**
ORIGINAL SCHEDULE DATE OF EVENT: **NOT REPORTED**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA500**
EVENT DESCRIPTION: **CMI WORKPLAN APPROVED**
EVENT SEQUENCE NUMBER: **9**
EVENT RESPONSIBLE AGENCY: **STATE**
ACTUAL DATE OF EVENT: **09/21/1994**
ORIGINAL SCHEDULE DATE OF EVENT: **NOT REPORTED**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA750YE**

EVENT DESCRIPTION: **RELEASE TO GW CONTROLLED DETERMINATION-YES, APPLICABLE AS OF THIS DATE**
EVENT SEQUENCE NUMBER: **10**
EVENT RESPONSIBLE AGENCY: **EPA**
ACTUAL DATE OF EVENT: **12/28/2000**
ORIGINAL SCHEDULE DATE OF EVENT: **NOT REPORTED**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA600GW**
EVENT DESCRIPTION: **STABILIZATION/INTERIM MEASURES DECISION-GROUNDWATER EXTRACTION & TREATMENT**
EVENT SEQUENCE NUMBER: **11**
EVENT RESPONSIBLE AGENCY: **STATE**
ACTUAL DATE OF EVENT: **01/01/1990**
ORIGINAL SCHEDULE DATE OF EVENT: **NOT REPORTED**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA600SR**
EVENT DESCRIPTION: **STABILIZATION/INTERIM MEASURES DECISION-PRIMARY MEAS IS SOURCE REMOVL &/OR TRT**
EVENT SEQUENCE NUMBER: **12**
EVENT RESPONSIBLE AGENCY: **STATE**
ACTUAL DATE OF EVENT: **01/01/1990**
ORIGINAL SCHEDULE DATE OF EVENT: **NOT REPORTED**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA650**
EVENT DESCRIPTION: **STABILIZATION CONSTRUCTION COMPLETED**
EVENT SEQUENCE NUMBER: **13**
EVENT RESPONSIBLE AGENCY: **STATE**
ACTUAL DATE OF EVENT: **12/01/1993**
ORIGINAL SCHEDULE DATE OF EVENT: **NOT REPORTED**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA650**
EVENT DESCRIPTION: **STABILIZATION CONSTRUCTION COMPLETED**
EVENT SEQUENCE NUMBER: **14**
EVENT RESPONSIBLE AGENCY: **STATE**
ACTUAL DATE OF EVENT: **12/01/1993**
ORIGINAL SCHEDULE DATE OF EVENT: **NOT REPORTED**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA725YE**
EVENT DESCRIPTION: **HUMAN EXPOSURES CONTROLLED DETERMINATION-YES, APPLICABLE AS OF THIS DATE**
EVENT SEQUENCE NUMBER: **15**

EVENT RESPONSIBLE AGENCY: **STATE**
ACTUAL DATE OF EVENT: **10/30/1996**
ORIGINAL SCHEDULE DATE OF EVENT: **NOT REPORTED**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA750YE**
EVENT DESCRIPTION: **RELEASE TO GW CONTROLLED DETERMINATION-YES, APPLICABLE AS OF THIS DATE**
EVENT SEQUENCE NUMBER: **16**
EVENT RESPONSIBLE AGENCY: **STATE**
ACTUAL DATE OF EVENT: **12/01/1993**
ORIGINAL SCHEDULE DATE OF EVENT: **NOT REPORTED**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA725YE**
EVENT DESCRIPTION: **HUMAN EXPOSURES CONTROLLED DETERMINATION-YES, APPLICABLE AS OF THIS DATE**
EVENT SEQUENCE NUMBER: **183**
EVENT RESPONSIBLE AGENCY: **STATE**
ACTUAL DATE OF EVENT: **12/28/2000**
ORIGINAL SCHEDULE DATE OF EVENT: **20001228**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA750YE**
EVENT DESCRIPTION: **RELEASE TO GW CONTROLLED DETERMINATION-YES, APPLICABLE AS OF THIS DATE**
EVENT SEQUENCE NUMBER: **186**
EVENT RESPONSIBLE AGENCY: **STATE**
ACTUAL DATE OF EVENT: **12/28/2000**
ORIGINAL SCHEDULE DATE OF EVENT: **20001228**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA400**
EVENT DESCRIPTION: **REMEDY DECISION**
EVENT SEQUENCE NUMBER: **189**
EVENT RESPONSIBLE AGENCY: **STATE**
ACTUAL DATE OF EVENT: **09/21/1994**
ORIGINAL SCHEDULE DATE OF EVENT: **19940921**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA550RC**
EVENT DESCRIPTION: **REMEDY CONSTRUCTION-REMEDY CONSTRUCTED**
EVENT SEQUENCE NUMBER: **195**
EVENT RESPONSIBLE AGENCY: **STATE**
ACTUAL DATE OF EVENT: **10/15/1996**

ORIGINAL SCHEDULE DATE OF EVENT: **19961015**

NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

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Referred to Another Local or State Agency (REF)

MAP ID# 58

Distance from Property: 0.464 mi. (2,450 ft.) W
Elevation: 43 ft. (Higher than TP)

FACILITY INFORMATION

GEOSEARCH ID: **71003512**
ENVIROSTOR ID: **71003512**
FACILITY NAME: **INTEVAC/EO SENSORS, INC.**
ADDRESS: **601 CALIFORNIA AVENUE**
PALO ALTO, CA 94304
COUNTY: **SANTA CLARA**

FACILITY DETAILS

PROGRAM TYPE: **TIERED PERMIT**
STATUS: **REFER: RWQCB**
STATUS DATE: **6/23/2017**
CALENVIROSCREEN SCORE: **1-5%**
SITE CODE: **NOT REPORTED**

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Referred to Another Local or State Agency (REF)

MAP ID# 58

Distance from Property: 0.464 mi. (2,450 ft.) W
Elevation: 43 ft. (Higher than TP)

FACILITY INFORMATION

GEOSEARCH ID: **80001826**
ENVIROSTOR ID: **80001826**
FACILITY NAME: **INTEVAC**
ADDRESS: **601 CALIFORNIA AVE**
PALO ALTO, CA 94303
COUNTY: **SANTA CLARA**

FACILITY DETAILS

PROGRAM TYPE: **CORRECTIVE ACTION**
STATUS: **REFER: RWQCB**
STATUS DATE: **1/1/2008**
CALENVIROSCREEN SCORE: **1-5%**
SITE CODE: **NOT REPORTED**

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Superfund Enterprise Management System Archived Site Inventory (SEMSARCH)

MAP ID# 58

Distance from Property: 0.464 mi. (2,450 ft.) W
Elevation: 43 ft. (Higher than TP)

FACILITY INFORMATION

EPA ID#: **CAT080010804**
SITE ID#: **0902669**
NAME: **VARIAN ASSOCIATES**
ADDRESS: **601 CALIFORNIA AVE**
PALO ALTO, CA 94303
COUNTY: **SAN MATEO**
FEDERAL FACILITY: **NOT A FEDERAL FACILITY**
SUPERFUND ALTERNATIVE AGREEMENT IN PLACE?: **NO**
NPL: **NOT ON THE NPL**
NON NPL STATUS: **NFRAP-SITE DOES NOT QUALIFY FOR THE NPL BASED ON EXISTING INFORMATION**
SUPERFUND SITE INFORMATION: **CLICK HERE**

Below information was gathered from the prior NFRAP update completed in 10/2013 update:

ACTION	START DATE	COMPLETION DATE	RESPONSIBILITY
DS - DISCOVERY	**NOT REPORTED**	**10/1/1986**	**EPA FUND**
PA - PRELIMINARY ASSESSMENT	**NOT REPORTED**	**12/1/1986**	**EPA FUND**
SI - SITE INSPECTION	**NOT REPORTED**	**6/1/1987**	**EPA FUND**
HR - HAZARD RANKING SYSTEM PACKAGE	**NOT REPORTED**	**6/1/1987**	**EPA FUND**
VS - ARCHIVE SITE	**NOT REPORTED**	**11/2/1992**	**EPA IN-HOUSE**

ACTION DESCRIPTIONS

DS - (DISCOVERY) - THE PROCESS BY WHICH A POTENTIAL HAZARDOUS WASTE SITE IS BROUGHT TO THE ATTENTION OF THE EPA. THE PROCESS CAN OCCUR THROUGH THE USE OF SEVERAL MECHANISMS SUCH AS A PHONE CALL OR REFERRAL BY ANOTHER GOVERNMENT AGENCY.

PA - (PRELIMINARY ASSESSMENT) - COLLECTION OF DIVERSE EXISTING INFORMATION ABOUT THE SOURCE AND NATURE OF THE SITE HAZARD. IT IS EPA POLICY TO COMPLETE THE PRELIMINARY ASSESSMENT WITHIN ONE YEAR OF SITE DISCOVERY.

SI - (SITE INSPECTION) - THE PROCESS OF COLLECTING SITE DATA AND SAMPLES TO CHARACTERIZE THE SEVERITY OF THE HAZARD FOR THE HAZARD RANKING SCORE AND/OR ENFORCEMENT SUPPORT.

HR - (HAZARD RANKING SYSTEM PACKAGE) - A NUMERIC ESTIMATE OF THE RELATIVE SEVERITY OF A HAZARDOUS SUBSTANCE RELEASE OR POTENTIAL RELEASE BASED ON: (1) THE RELATIVE POTENTIAL OF SUBSTANCES TO CAUSE HAZARDOUS SITUATIONS; (2) THE LIKELIHOOD AND RATE AT WHICH THE SUBSTANCES MAY AFFECT HUMAN AND ENVIRONMENTAL RECEPTORS; AND (3) THE SEVERITY AND MAGNITUDE OF POTENTIAL EFFECTS. THE SCORE IS COMPUTED USING THE HAZARD RANKING SYSTEM (HRS).

VS - (ARCHIVE SITE) - THE DECISION IS MADE THAT NO FURTHER ACTIVITY IS PLANNED AT THE SITE.

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Historical Cortese List (HISTCORTESE)

MAP ID# 59

Distance from Property: 0.475 mi. (2,508 ft.) N
Elevation: 26 ft. (Lower than TP)

FACILITY INFORMATION

GEOSEARCH ID: **43-0795COR**
ID#: **43-0795**
NAME: **SNELL RESIDENCE**
ADDRESS: **2388 WAVERLY**
PALO ALTO, CA 94303

Back to Report Summary

Leaking Underground Storage Tanks (LUST)

MAP ID# 59

Distance from Property: 0.475 mi. (2,508 ft.) N
Elevation: 26 ft. (Lower than TP)

FACILITY INFORMATION

GLOBAL ID: **T0608500813**
URL LINK: CLICK HERE
BUSINESS NAME: **SNELL RESIDENCE**
ADDRESS: **2388 WAVERLY ST**
PALO ALTO, CA 94301
COUNTY: **SANTA CLARA**

FACILITY DETAILS

NO DETAIL(S) INFORMATION REPORTED

HISTORICAL FACILITY DETAILS

NO HISTORICAL DETAIL(S) INFORMATION REPORTED FOR THIS FACILITY

Back to Report Summary

GeoTracker Cleanup Sites (CLEANUPSITES)

MAP ID# 60

Distance from Property: 0.482 mi. (2,545 ft.) NW
Elevation: 34 ft. (Higher than TP)

FACILITY INFORMATION

GLOBAL ID: **T0608501658**
URL LINK: CLICK HERE
BUSINESS NAME: **OLD FIRE STATION**
ADDRESS: **2253 PARK BLVD**
PALO ALTO, CA 94306
COUNTY: **SANTA CLARA**

FACILITY DETAILS

CASE TYPE: **LUST CLEANUP SITE**
CASE NUMBER: **NOT REPORTED**
STATUS: **COMPLETED - CASE CLOSED 12/29/1995**
POTENTIAL CONTAMINATION:
GASOLINE
POTENTIAL MEDIA AFFECTED:
SOIL
DISADVANTAGED COMMUNITY:
NO
SEVERELY DISADVANTAGED COMMUNITY:
NO
SITE HISTORY:
NOT REPORTED

REGULATORY ACTIVITIES

TYPE OF ACTION:	DATE:	ACTION:
OTHER	**01/01/50**	**LEAK REPORTED**
ENFORCEMENT	**12/29/1995**	**CLOSURE/NO FURTHER ACTION LETTER**
RESPONSE	**12/29/1995**	**OTHER REPORT / DOCUMENT**
OTHER	**01/01/1991**	**LEAK REPORTED**

STATUS HISTORY

STATUS:	DATE:
COMPLETED - CASE CLOSED	**12/29/1995**
OPEN - CASE BEGIN DATE	**01/01/1991**

CONTACT DETAILS

ORGANIZATION: **SANTA CLARA COUNTY LOP**
ADDRESS: **1555 BERGER DRIVE, SUITE 300**
CITY: **SAN JOSE**
CONTACT NAME: **UST CASE WORKER**
CONTACT TYPE: **LOCAL AGENCY CASEWORKER**
CONTACT PHONE: **4089183400**
EMAIL: **NOT REPORTED**
ORGANIZATION: **SAN FRANCISCO BAY RWQCB (REGION 2)**
ADDRESS: **1515 CLAY ST SUITE 1400**
CITY: **OAKLAND**
CONTACT NAME: **REGIONAL WATER BOARD**

CONTACT TYPE: **REGIONAL BOARD CASEWORKER**
CONTACT PHONE: **NOT REPORTED**
EMAIL: **NOT REPORTED**

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Historical Cortese List (HISTCORTESE)

MAP ID# 60

Distance from Property: 0.475 mi. (2,508 ft.) NW
Elevation: 34 ft. (Higher than TP)

FACILITY INFORMATION

GEOSEARCH ID: **43-1720COR**
ID#: **43-1720**
NAME: **OLD FIRE STATION**
ADDRESS: **2253 PARK**
PALO ALTO, CA

Back to Report Summary

Leaking Underground Storage Tanks (LUST)

MAP ID# 60

Distance from Property: 0.482 mi. (2,545 ft.) NW
Elevation: 34 ft. (Higher than TP)

FACILITY INFORMATION

GLOBAL ID: **T0608501658**
URL LINK: CLICK HERE
BUSINESS NAME: **OLD FIRE STATION**
ADDRESS: **2253 PARK BLVD**
PALO ALTO, CA 94306
COUNTY: **SANTA CLARA**

FACILITY DETAILS

CASE TYPE: **LUST CLEANUP SITE**
CASE NUMBER: **NOT REPORTED**
STATUS: **COMPLETED - CASE CLOSED 12/29/1995**
POTENTIAL CONTAMINATION:
GASOLINE
POTENTIAL MEDIA AFFECTED:
SOIL
DISADVANTAGED COMMUNITY:
NO
SEVERELY DISADVANTAGED COMMUNITY:
NO
SITE HISTORY:
NOT REPORTED

HISTORICAL FACILITY DETAILS

NO HISTORICAL DETAIL(S) INFORMATION REPORTED FOR THIS FACILITY

Back to Report Summary

MAP ID# 61

Distance from Property: 0.488 mi. (2,577 ft.) W
Elevation: 40 ft. (Higher than TP)

FACILITY INFORMATION

GLOBAL ID: **T0608501144**
URL LINK: CLICK HERE
BUSINESS NAME: **ROYAL GLASS & MIRROR**
ADDRESS: **450 CAMBRIDGE AVE**
PALO ALTO, CA 94306
COUNTY: **SANTA CLARA**

FACILITY DETAILS

CASE TYPE: **LUST CLEANUP SITE**
CASE NUMBER: **NOT REPORTED**
STATUS: **COMPLETED - CASE CLOSED 12/21/1995**
POTENTIAL CONTAMINATION:
NOT REPORTED
POTENTIAL MEDIA AFFECTED:
SOIL
DISADVANTAGED COMMUNITY:
NO
SEVERELY DISADVANTAGED COMMUNITY:
NO
SITE HISTORY:
NOT REPORTED

REGULATORY ACTIVITIES

TYPE OF ACTION:	DATE:	ACTION:
OTHER	**01/01/50**	**LEAK REPORTED**
ENFORCEMENT	**12/21/1995**	**CLOSURE/NO FURTHER ACTION LETTER**
RESPONSE	**11/08/1991**	**OTHER REPORT / DOCUMENT**
OTHER	**01/01/1990**	**LEAK REPORTED**

STATUS HISTORY

STATUS:	DATE:
COMPLETED - CASE CLOSED	**12/21/1995**
OPEN - CASE BEGIN DATE	**01/01/1990**

CONTACT DETAILS

ORGANIZATION: **SANTA CLARA COUNTY LOP**
ADDRESS: **1555 BERGER DRIVE, SUITE 300**
CITY: **SAN JOSE**
CONTACT NAME: **UST CASE WORKER**
CONTACT TYPE: **LOCAL AGENCY CASEWORKER**
CONTACT PHONE: **4089183400**
EMAIL: **NOT REPORTED**
ORGANIZATION: **SAN FRANCISCO BAY RWQCB (REGION 2)**
ADDRESS: **1515 CLAY ST SUITE 1400**
CITY: **OAKLAND**
CONTACT NAME: **REGIONAL WATER BOARD**

CONTACT TYPE: **REGIONAL BOARD CASEWORKER**
CONTACT PHONE: **NOT REPORTED**
EMAIL: **NOT REPORTED**

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Historical Cortese List (HISTCORTESE)

MAP ID# 61

Distance from Property: 0.488 mi. (2,577 ft.) W
Elevation: 40 ft. (Higher than TP)

FACILITY INFORMATION

GEOSEARCH ID: **43-1154COR**
ID#: **43-1154**
NAME: **ROYAL GLASS & MIRROR**
ADDRESS: **450 CAMBRIDGE**
PALO ALTO, CA

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Leaking Underground Storage Tanks (LUST)

MAP ID# 61

Distance from Property: 0.488 mi. (2,577 ft.) W
Elevation: 40 ft. (Higher than TP)

FACILITY INFORMATION

GLOBAL ID: **T0608501144**
URL LINK: CLICK HERE
BUSINESS NAME: **ROYAL GLASS & MIRROR**
ADDRESS: **450 CAMBRIDGE AVE**
PALO ALTO, CA 94306
COUNTY: **SANTA CLARA**

FACILITY DETAILS

CASE TYPE: **LUST CLEANUP SITE**
CASE NUMBER: **NOT REPORTED**
STATUS: **COMPLETED - CASE CLOSED 12/21/1995**
POTENTIAL CONTAMINATION:
NOT REPORTED
POTENTIAL MEDIA AFFECTED:
SOIL
DISADVANTAGED COMMUNITY:
NO
SEVERELY DISADVANTAGED COMMUNITY:
NO
SITE HISTORY:
NOT REPORTED

HISTORICAL FACILITY DETAILS

NO HISTORICAL DETAIL(S) INFORMATION REPORTED FOR THIS FACILITY

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GeoTracker Cleanup Sites (CLEANUPSITES)

MAP ID# 62

Distance from Property: 0.493 mi. (2,603 ft.) SW
Elevation: 46 ft. (Higher than TP)

FACILITY INFORMATION

GLOBAL ID: **T0608591791**
URL LINK: CLICK HERE
BUSINESS NAME: **EASTMAN KODAK COMPANY**
ADDRESS: **925 PAGE MILL RD**
PALO ALTO, CA 94304
COUNTY: **SANTA CLARA**

FACILITY DETAILS

CASE TYPE: **CLEANUP PROGRAM SITE**
CASE NUMBER: **43-1969**
STATUS: **COMPLETED - CASE CLOSED 11/20/2015**
POTENTIAL CONTAMINATION:
*** SOLVENTS**
POTENTIAL MEDIA AFFECTED:
UNDER INVESTIGATION
DISADVANTAGED COMMUNITY:
NO
SEVERELY DISADVANTAGED COMMUNITY:
NO
SITE HISTORY:
NFA LETTER ISSUED 2AUG1995 BASED ON LOW SOIL-CVOC LEVELS

REGULATORY ACTIVITIES

TYPE OF ACTION:	DATE:	ACTION:
OTHER	**01/01/50**	**LEAK DISCOVERY**
OTHER	**01/01/50**	**LEAK REPORTED**
OTHER	**01/01/50**	**LEAK STOPPED**
ENFORCEMENT	**08/02/1995**	**STAFF LETTER**
OTHER	**04/17/1995**	**LEAK DISCOVERY**
OTHER	**04/17/1995**	**LEAK REPORTED**
OTHER	**04/17/1995**	**LEAK STOPPED**
RESPONSE	**07/13/1990**	**OTHER REPORT / DOCUMENT**
RESPONSE	**01/29/1990**	**PRELIMINARY SITE ASSESSMENT REPORT**

STATUS HISTORY

STATUS:	DATE:
COMPLETED - CASE CLOSED	**11/20/2015**
OPEN - INACTIVE	**06/02/2009**
OPEN - SITE ASSESSMENT	**04/20/1995**
OPEN - CASE BEGIN DATE	**04/17/1995**

CONTACT DETAILS

ORGANIZATION: **SAN FRANCISCO BAY RWQCB (REGION 2)**
ADDRESS: **1515 CLAY ST SUITE 1400**
CITY: **OAKLAND**
CONTACT NAME: **REGIONAL WATER BOARD**

CONTACT TYPE: **REGIONAL BOARD CASEWORKER**
CONTACT PHONE: **NOT REPORTED**
EMAIL: **NOT REPORTED**

Back to Report Summary

Leaking Underground Storage Tanks (LUST)

MAP ID# 62

Distance from Property: 0.493 mi. (2,603 ft.) SW
Elevation: 46 ft. (Higher than TP)

FACILITY INFORMATION

GLOBAL ID: **T0608591791**

URL LINK: CLICK HERE

BUSINESS NAME: **EASTMAN KODAK COMPANY**

ADDRESS: **925 PAGE MILL RD**
PALO ALTO, CA 94304

COUNTY: **SANTA CLARA**

FACILITY DETAILS

NO DETAIL(S) INFORMATION REPORTED

HISTORICAL FACILITY DETAILS

NO HISTORICAL DETAIL(S) INFORMATION REPORTED FOR THIS FACILITY

Back to Report Summary

Superfund Enterprise Management System Archived Site Inventory (SEMSARCH)

MAP ID# 62

Distance from Property: 0.493 mi. (2,603 ft.) SW
Elevation: 46 ft. (Higher than TP)

FACILITY INFORMATION

EPA ID#: **CAD028874253**
SITE ID#: **0901280**
NAME: **EASTMAN KODAK CO**
ADDRESS: **925 PAGE MILL RD**
PALO ALTO, CA 94304
COUNTY: **SANTA CLARA**
FEDERAL FACILITY: **NOT A FEDERAL FACILITY**
SUPERFUND ALTERNATIVE AGREEMENT IN PLACE?: **NO**
NPL: **NOT ON THE NPL**
NON NPL STATUS: **NFRAP-SITE DOES NOT QUALIFY FOR THE NPL BASED ON EXISTING INFORMATION**
SUPERFUND SITE INFORMATION: **CLICK HERE**

Below information was gathered from the prior NFRAP update completed in 10/2013 update:

ACTION	START DATE	COMPLETION DATE	RESPONSIBILITY
PA - PRELIMINARY ASSESSMENT	**2/1/1987**	**4/1/1987**	**EPA FUND**
DS - DISCOVERY	**NOT REPORTED**	**1/1/1987**	**OTHER**
VS - ARCHIVE SITE	**NOT REPORTED**	**4/1/1987**	**EPA IN-HOUSE**

ACTION DESCRIPTIONS

PA - (PRELIMINARY ASSESSMENT) - COLLECTION OF DIVERSE EXISTING INFORMATION ABOUT THE SOURCE AND NATURE OF THE SITE HAZARD. IT IS EPA POLICY TO COMPLETE THE PRELIMINARY ASSESSMENT WITHIN ONE YEAR OF SITE DISCOVERY.

DS - (DISCOVERY) - THE PROCESS BY WHICH A POTENTIAL HAZARDOUS WASTE SITE IS BROUGHT TO THE ATTENTION OF THE EPA. THE PROCESS CAN OCCUR THROUGH THE USE OF SEVERAL MECHANISMS SUCH AS A PHONE CALL OR REFERRAL BY ANOTHER GOVERNMENT AGENCY.

VS - (ARCHIVE SITE) - THE DECISION IS MADE THAT NO FURTHER ACTIVITY IS PLANNED AT THE SITE.

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MAP ID# 63

Distance from Property: 0.565 mi. (2,983 ft.) SSW
Elevation: 49 ft. (Higher than TP)

SITE INFORMATION

ID #: **71003483** ASSESSOR'S PARCEL #: **NONE SPECIFIED**
FACILITY LINK: CLICK HERE
NAME: **VARIAN MEDICAL SYSTEMS**
ADDRESS: **911, 913, 3075, 3030, & 3140 HANSEN WAY**
PALO ALTO, CA 94304
COUNTY: **SANTA CLARA**
SITE SIZE (ACRES): **NOT REPORTED**
LEAD AGENCY: **NONE SPECIFIED**
DTSC PROJECT MANAGER: **NOT REPORTED**
DTSC SUPERVISOR: **NOT REPORTED**
DTSC DIVISION BRANCH: **CLEANUP BERKELEY**
NPL LISTED: **NO** RESTRICTED LAND USE: **NO**
SITE TYPE: **TIERED PERMIT**
SITE TYPE DESCRIPTION
NOT REPORTED
DTSC's CURRENT INVOLVEMENT AT SITE (as of)
INACTIVE - NEEDS EVALUATION - IDENTIFIES NON-ACTIVE SITES WHERE DTSC HAS DETERMINED A PEA OR OTHER EVALUATION IS REQUIRED
PAST USE/S THAT CAUSED THE CONTAMINATION
NONE SPECIFIED
CONFIRMED CONTAMINANTS OF CONCERN
NONESPECIFIED - NONE SPECIFIED

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MAP ID# 64

Distance from Property: 0.579 mi. (3,057 ft.) SW
Elevation: 47 ft. (Higher than TP)

SITE INFORMATION

ID #: **80001596** ASSESSOR'S PARCEL #: **NONE SPECIFIED**
FACILITY LINK: CLICK HERE
NAME: **VARIAN NMR SYSTEMS**
ADDRESS: **3120 HANSEN WAY**
PALO ALTO, CA 94304-1030
COUNTY: **SANTA CLARA**
SITE SIZE (ACRES): **70**
LEAD AGENCY: **MBR**
DTSC PROJECT MANAGER: **JOVANNE VILLAMATER**
DTSC SUPERVISOR: **MARK PIROS**
DTSC DIVISION BRANCH: **CLEANUP BERKELEY**
NPL LISTED: **NO** RESTRICTED LAND USE: **NO**
SITE TYPE: **CORRECTIVE ACTION**
SITE TYPE DESCRIPTION
INVESTIGATION AND CLEANUP ACTIVITIES AT HAZARDOUS WASTE FACILITIES (EITHER RESOURCE CONSERVATION AND RECOVERY ACT (RCRA) OR STATE-ONLY) THAT EITHER WERE ELIGIBLE FOR A PERMIT OR RECEIVED A PERMIT, ARE CALLED CORRECTIVE ACTION.
DTSC's CURRENT INVOLVEMENT AT SITE (as of 20/4 /5/19)
REFER: SMBRP -
PAST USE/S THAT CAUSED THE CONTAMINATION
MANUFACTURING - ELECTRONIC
CONFIRMED CONTAMINANTS OF CONCERN
NONE SPECIFIED

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MAP ID# 64

Distance from Property: 0.577 mi. (3,047 ft.) SW
Elevation: 47 ft. (Higher than TP)

SITE INFORMATION

GEOSEARCH ID: **CAD009120817**
EPA ID: **CAD009120817**
NAME: **VARIAN MEDICAL SYSTEMS PALO ALTO**
ADDRESS: **3120 HANSEN WAY**
PALO ALTO, CA 94304-1030
COUNTY: **SANTA CLARA**
PROJECT MANAGER: **NOT REPORTED**
DTSC PROJECT TRACKING CODE: **NOT REPORTED**
FACILITY TYPE: **HISTORICAL - NON-OPERATING**
STATUS: **CLOSED**

HAZARDOUS WASTE UNITS UNDERGOING CLOSURE

DATE: **10/28/1998**
UNIT: **CONTAIN1, TANKSTR1, TANKTRT1**
EVENT DESCRIPTION: **CLOSURE FINAL - ISSUE CLOSURE VERIFICATION**
FACILITY TYPE: **HISTORICAL - NON-OPERATING**

DATE: **03/29/1995**
UNIT: **CONTAIN1, TANKSTR1, TANKTRT1**
EVENT DESCRIPTION: **CLOSURE FINAL - RECEIVE CLOSURE CERTIFICATION**
FACILITY TYPE: **HISTORICAL - NON-OPERATING**

HAZARDOUS WASTE UNITS COMPLETED ACTIVITIES

DATE: **08/24/1995**
UNIT: **CONTAIN1, TANKSTR1, TANKTRT1**
EVENT DESCRIPTION: **NEW OPERATING PERMIT - PERMIT TERMINATED - TERMINATION RECEIVED**
FACILITY TYPE: **HISTORICAL - NON-OPERATING**

DATE: **08/24/1995**
UNIT: **CONTAIN1, TANKSTR1, TANKTRT1**
EVENT DESCRIPTION: **NEW OPERATING PERMIT - PERMIT TERMINATED - TERMINATION APPROVED**
FACILITY TYPE: **HISTORICAL - NON-OPERATING**

DATE: **02/09/1984**
UNIT: **CONTAIN1, TANKSTR1, TANKTRT1**
EVENT DESCRIPTION: **NEW OPERATING PERMIT - FINAL PERMIT**
FACILITY TYPE: **HISTORICAL - NON-OPERATING**

DATE: **10/25/1983**
UNIT: **CONTAIN1, TANKSTR1, TANKTRT1**
EVENT DESCRIPTION: **NEW OPERATING PERMIT - TECHNICAL COMPLETE LETTER**
FACILITY TYPE: **HISTORICAL - NON-OPERATING**

DATE: **06/13/1983**
UNIT: **CONTAIN1, TANKSTR1, TANKTRT1**
EVENT DESCRIPTION: **NEW OPERATING PERMIT - PUBLIC COMMENT (BEGIN)**
FACILITY TYPE: **HISTORICAL - NON-OPERATING**

DATE: **03/25/1983**
UNIT: **CONTAIN1, TANKSTR1, TANKTRT1**

EVENT DESCRIPTION: **NEW OPERATING PERMIT - APPLICATION PART B RECEIVED**
FACILITY TYPE: **HISTORICAL - NON-OPERATING**
DATE: **02/02/1983**
UNIT: **CONTAIN1, TANKSTR1, TANKTRT1**
EVENT DESCRIPTION: **NEW OPERATING PERMIT - CALL-IN LETTER ISSUED**
FACILITY TYPE: **HISTORICAL - NON-OPERATING**
DATE: **11/19/1980**
UNIT: **CONTAIN1, TANKSTR1, TANKTRT1**
EVENT DESCRIPTION: **NEW OPERATING PERMIT - APPLICATION PART A RECEIVED**
FACILITY TYPE: **HISTORICAL - NON-OPERATING**
MAINTENANCE **- NO INFORMATION REPORTED -**

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Resource Conservation & Recovery Act - Corrective Action Facilities (RCRAC)

MAP ID# 64

Distance from Property: 0.577 mi. (3,047 ft.) SW
Elevation: 47 ft. (Higher than TP)

FACILITY INFORMATION

EPA ID#: **CAD009120817**
NAME: **VARIAN MEDICAL SYSTEMS PALO ALTO**
ADDRESS: **3120 HANSEN WAY**
PALO ALTO, CA 94304
CONTACT NAME: **JIM WEBER**
CONTACT ADDRESS: **3130 HANSEN WAY F007**
PALO ALTO CA 94304
CONTACT PHONE: **650-424-6272**
NON-NOTIFIER: **NOT A NON-NOTIFIER**
DATE RECEIVED BY AGENCY: **12/01/2010**

OWNER TYPE: **PRIVATE**
OWNER NAME: **VARIAN MEDICAL SYSTEMS**
OPERATOR TYPE: **PRIVATE**
OPERATOR NAME: **VARIAN MEDICAL SYSTEMS**

CERTIFICATION

CERTIFICATION NAME:	CERTIFICATION TITLE:	CERTIFICATION SIGNED DATE:
DTSC HQ	**CA-DTSC**	**06/20/2019**
CARL C CLEMM	**DIR. CORP FACIL**	**04/12/1990**
JIM WEBER	**CORP HEALTH AND SAFETY MGR**	**10/18/2010**
DANI TSUDA	**MNGR., CORP. EN**	**02/27/1992**
KATHY T HORTON	**MGR, ENV OPER**	**03/23/1994**
KATHY HORTON	**MGR P.A.V.E.O.**	**02/20/1996**
KATHY PANDREA	**MANAGER, ENVIRO**	**03/04/1999**
JIM WEBER	**ENVIRONMENTAL H**	**10/12/2000**

INDUSTRY CLASSIFICATION (NAICS)

33429 - OTHER COMMUNICATIONS EQUIPMENT MANUFACTURING
334411 - ELECTRON TUBE MANUFACTURING
334413 - SEMICONDUCTOR AND RELATED DEVICE MANUFACTURING
33451 - NAVIGATIONAL, MEASURING, ELECTROMEDICAL, AND CONTROL INSTRUMENTS MANUFACTURING
334516 - ANALYTICAL LABORATORY INSTRUMENT MANUFACTURING
334517 - IRRADIATION APPARATUS MANUFACTURING
54171 - RESEARCH AND DEVELOPMENT IN THE PHYSICAL, ENGINEERING, AND LIFE SCIENCES
541712 - RESEARCH AND DEVELOPMENT IN THE PHYSICAL, ENGINEERING, AND LIFE SCIENCES (EXCEPT BIOTECHNOLOGY)
56121 - FACILITIES SUPPORT SERVICES

CURRENT ACTIVITY INFORMATION

GENERATOR STATUS: **SMALL QUANTITY GENERATOR** LAST UPDATED DATE: **12/21/2010**
SUBJECT TO CORRECTIVE ACTION UNIVERSE: **YES**
TDSFs POTENTIALLY SUBJECT TO CORRECTIVE ACTION UNDER 3004 (u)/(v) UNIVERSE: **NO**
TDSFs ONLY SUBJECT TO CORRECTIVE ACTION UNDER DISCRETIONARY AUTHORITIES UNIVERSE: **YES**
NON TSDFs WHERE RCRA CORRECTIVE ACTION HAS BEEN IMPOSED UNIVERSE: **NO**
CORRECTIVE ACTION WORKLOAD UNIVERSE: **YES**

IMPORTER: **NO**
MIXED WASTE GENERATOR: **NO**
RECYCLER: **NO**
TRANSPORTER: **NO**
ONSITE BURNER EXEMPTION: **NO**
UNDERGROUND INJECTION: **NO**
UNIVERSAL WASTE DESTINATION FACILITY: **NO**
TRANSFER FACILITY: **NO**
USED OIL FUEL BURNER: **NO**
USED OIL PROCESSOR: **NO**

FURNACE EXEMPTION: **NO**
USED OIL FUEL MARKETER TO BURNER: **NO**
USED OIL REFINER: **NO**
SPECIFICATION USED OIL MARKETER: **NO**
USED OIL TRANSFER FACILITY: **NO**
USED OIL TRANSPORTER: **NO**

COMPLIANCE, MONITORING AND ENFORCEMENT INFORMATION

EVALUATIONS

03/09/2017	**FRR**	**FINANCIAL RECORD REVIEW**
12/19/2013	**FRR**	**FINANCIAL RECORD REVIEW**
09/15/2011	**FRR**	**FINANCIAL RECORD REVIEW**
11/20/1997	**CEI**	**COMPLIANCE EVALUATION INSPECTION ON-SITE**
07/12/1996	**CEI**	**COMPLIANCE EVALUATION INSPECTION ON-SITE**
12/21/1994	**CEI**	**COMPLIANCE EVALUATION INSPECTION ON-SITE**
02/02/1994	**CEI**	**COMPLIANCE EVALUATION INSPECTION ON-SITE**
06/18/1991	**FRR**	**FINANCIAL RECORD REVIEW**
01/30/1991	**CEI**	**COMPLIANCE EVALUATION INSPECTION ON-SITE**
01/14/1991	**FRR**	**FINANCIAL RECORD REVIEW**
01/24/1990	**CEI**	**COMPLIANCE EVALUATION INSPECTION ON-SITE**
01/17/1990	**FRR**	**FINANCIAL RECORD REVIEW**
02/16/1988	**CEI**	**COMPLIANCE EVALUATION INSPECTION ON-SITE**
02/05/1988	**FRR**	**FINANCIAL RECORD REVIEW**
08/10/1987	**CEI**	**COMPLIANCE EVALUATION INSPECTION ON-SITE**

VIOLATIONS

03/10/1994	**262.A**	**GENERATORS - GENERAL**
03/10/1994	**264.A**	**TSD - GENERAL**
03/10/1994	**264.H**	**TSD - FINANCIAL REQUIREMENTS**
06/18/1991	**264.H**	**TSD - FINANCIAL REQUIREMENTS**
01/30/1991	**264.A**	**TSD - GENERAL**
01/24/1990	**264.A**	**TSD - GENERAL**
01/17/1990	**264.H**	**TSD - FINANCIAL REQUIREMENTS**
08/10/1987	**264.A**	**TSD - GENERAL**

ENFORCEMENTS

06/13/1994	**210**	**INITIAL 3008(A) COMPLIANCE**
03/16/1994	**120**	**WRITTEN INFORMAL**
03/11/1991	**120**	**WRITTEN INFORMAL**
03/11/1991	**210**	**INITIAL 3008(A) COMPLIANCE**
02/21/1990	**120**	**WRITTEN INFORMAL**
01/17/1990	**120**	**WRITTEN INFORMAL**
09/04/1987	**120**	**WRITTEN INFORMAL**

HAZARDOUS WASTE

122
132
135
141
151

172	
181	
214	
221	
231	
331	
343	
352	
513	
551	
731	
741	
791	
D001	IGNITABLE WASTE
D002	CORROSIVE WASTE
D003	REACTIVE WASTE
D004	ARSENIC
D008	LEAD
D009	MERCURY
D011	SILVER
D018	BENZENE
D019	CARBON TETRACHLORIDE
D022	CHLOROFORM
D035	METHYL ETHYL KETONE
D040	TRICHLORETHYLENE
F001	THE FOLLOWING SPENT HALOGENATED SOLVENTS USED IN DEGREASING: TETRACHLOROETHYLENE,TRICHLORETHYLENE, METHYLENE CHLORIDE, 1,1,1-TRICHLOROETHANE, CARBON TETRACHLORIDE ANDCHLORINATED FLUOROCARBONS; ALL SPENT SOLVENT MIXTURES/BLENDS USED IN DEGREASING CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
F003	THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NONHALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS, AND A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
F004	THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: CRESOLS, CRESYLIC ACID, AND NITROBENZENE; AND THE STILL BOTTOMS FROM THE RECOVERY OF THESE SOLVENTS; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001,F002, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
F005	THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE,CARBON DISULFIDE, ISOBUTANOL, PYRIDINE,BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001,F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
P030	CYANIDES (SOLUBLE CYANIDE SALTS), NOT OTHERWISE SPECIFIED
U154	METHANOL (I)
U154	METHYL ALCOHOL (I)

UNIVERSAL WASTE **- NO UNIVERSAL WASTE REPORTED -**

CORRECTIVE ACTION AREA (RELEASE)

AREA NAME:	AIR:	GROUNDWATER:	SOIL:	SURFACE WASTE:
ENTIRE FACILITY	**-----**	**-----**	**-----**	**-----**

CORRECTIVE ACTION EVENT

CA EVENT CODE: **CA800YE**
EVENT DESCRIPTION: **READY FOR ANTICIPATED USE DETERMINATION - READY FOR ANTICIPATED USE**
EVENT SEQUENCE NUMBER: **1**
EVENT RESPONSIBLE AGENCY: **EPA**
ACTUAL DATE OF EVENT: **09/22/2009**
ORIGINAL SCHEDULE DATE OF EVENT: **NOT REPORTED**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA050**
EVENT DESCRIPTION: **RFA COMPLETED**
EVENT SEQUENCE NUMBER: **1**
EVENT RESPONSIBLE AGENCY: **STATE**
ACTUAL DATE OF EVENT: **06/20/1994**
ORIGINAL SCHEDULE DATE OF EVENT: **19940620**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA050RF**
EVENT DESCRIPTION: **RFA COMPLETED-ASSESSMENT WAS A RFA**
EVENT SEQUENCE NUMBER: **1**
EVENT RESPONSIBLE AGENCY: **STATE**
ACTUAL DATE OF EVENT: **06/20/1994**
ORIGINAL SCHEDULE DATE OF EVENT: **NOT REPORTED**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA070YE**
EVENT DESCRIPTION: **DETERMINATION OF NEED FOR AN INVESTIGATION-INVESTIGATION IS NECESSARY**
EVENT SEQUENCE NUMBER: **1**
EVENT RESPONSIBLE AGENCY: **STATE**
ACTUAL DATE OF EVENT: **06/20/1994**
ORIGINAL SCHEDULE DATE OF EVENT: **19940620**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA021OP**
EVENT DESCRIPTION: **3004(U) C/A UNDER PERMIT**
EVENT SEQUENCE NUMBER: **1**
EVENT RESPONSIBLE AGENCY: **EPA**
ACTUAL DATE OF EVENT: **NOT REPORTED**
ORIGINAL SCHEDULE DATE OF EVENT: **19900712**

NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA029ST**
EVENT DESCRIPTION: **LEAD AGENCY DETERMINATION**
EVENT SEQUENCE NUMBER: **2**
EVENT RESPONSIBLE AGENCY: **EPA**
ACTUAL DATE OF EVENT: **06/28/1990**
ORIGINAL SCHEDULE DATE OF EVENT: **NOT REPORTED**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA100**
EVENT DESCRIPTION: **INVESTIGATION IMPOSITION**
EVENT SEQUENCE NUMBER: **2**
EVENT RESPONSIBLE AGENCY: **STATE**
ACTUAL DATE OF EVENT: **06/29/1989**
ORIGINAL SCHEDULE DATE OF EVENT: **NOT REPORTED**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA150**
EVENT DESCRIPTION: **INVESTIGATION WORKPLAN APPROVED**
EVENT SEQUENCE NUMBER: **3**
EVENT RESPONSIBLE AGENCY: **STATE**
ACTUAL DATE OF EVENT: **06/20/1994**
ORIGINAL SCHEDULE DATE OF EVENT: **NOT REPORTED**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA036ST**
EVENT DESCRIPTION: **DEFERRAL TO ANOTHER AGENCY**
EVENT SEQUENCE NUMBER: **3**
EVENT RESPONSIBLE AGENCY: **EPA**
ACTUAL DATE OF EVENT: **NOT REPORTED**
ORIGINAL SCHEDULE DATE OF EVENT: **19900705**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA200**
EVENT DESCRIPTION: **INVESTIGATION COMPLETE**
EVENT SEQUENCE NUMBER: **4**
EVENT RESPONSIBLE AGENCY: **STATE**
ACTUAL DATE OF EVENT: **06/20/1994**
ORIGINAL SCHEDULE DATE OF EVENT: **NOT REPORTED**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA048ST**
EVENT DESCRIPTION: **RFA NEED BY ANOTHER AGCY**
EVENT SEQUENCE NUMBER: **4**
EVENT RESPONSIBLE AGENCY: **EPA**
ACTUAL DATE OF EVENT: **NOT REPORTED**
ORIGINAL SCHEDULE DATE OF EVENT: **19900628**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA210**
EVENT DESCRIPTION: **REFERRED TO A NON-RCRA AUTHORITY**
EVENT SEQUENCE NUMBER: **5**
EVENT RESPONSIBLE AGENCY: **STATE**
ACTUAL DATE OF EVENT: **04/21/1998**
ORIGINAL SCHEDULE DATE OF EVENT: **NOT REPORTED**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA049PA**
EVENT DESCRIPTION: **PA OR CERCLA INSPECTION**
EVENT SEQUENCE NUMBER: **5**
EVENT RESPONSIBLE AGENCY: **EPA**
ACTUAL DATE OF EVENT: **06/13/1989**
ORIGINAL SCHEDULE DATE OF EVENT: **NOT REPORTED**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA049RE**
EVENT DESCRIPTION: **PA OR CERCLA INSPECTION**
EVENT SEQUENCE NUMBER: **6**
EVENT RESPONSIBLE AGENCY: **EPA**
ACTUAL DATE OF EVENT: **06/28/1990**
ORIGINAL SCHEDULE DATE OF EVENT: **NOT REPORTED**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA250**
EVENT DESCRIPTION: **CMS IMPOSITION**
EVENT SEQUENCE NUMBER: **6**
EVENT RESPONSIBLE AGENCY: **STATE**
ACTUAL DATE OF EVENT: **06/29/1989**
ORIGINAL SCHEDULE DATE OF EVENT: **NOT REPORTED**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA300**

EVENT DESCRIPTION: **CMS WORKPLAN APPROVED**
EVENT SEQUENCE NUMBER: **7**
EVENT RESPONSIBLE AGENCY: **STATE**
ACTUAL DATE OF EVENT: **06/20/1994**
ORIGINAL SCHEDULE DATE OF EVENT: **NOT REPORTED**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA074HI**
EVENT DESCRIPTION: **NCAPS RANKING/PRIORITY**
EVENT SEQUENCE NUMBER: **7**
EVENT RESPONSIBLE AGENCY: **EPA**
ACTUAL DATE OF EVENT: **06/28/1990**
ORIGINAL SCHEDULE DATE OF EVENT: **NOT REPORTED**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA350**
EVENT DESCRIPTION: **CMS COMPLETE**
EVENT SEQUENCE NUMBER: **8**
EVENT RESPONSIBLE AGENCY: **STATE**
ACTUAL DATE OF EVENT: **06/20/1994**
ORIGINAL SCHEDULE DATE OF EVENT: **NOT REPORTED**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA075HI**
EVENT DESCRIPTION: **CA PRIORITIZATION-HIGH CA PRIORITY**
EVENT SEQUENCE NUMBER: **8**
EVENT RESPONSIBLE AGENCY: **EPA**
ACTUAL DATE OF EVENT: **06/28/1990**
ORIGINAL SCHEDULE DATE OF EVENT: **NOT REPORTED**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA400**
EVENT DESCRIPTION: **REMEDY DECISION**
EVENT SEQUENCE NUMBER: **9**
EVENT RESPONSIBLE AGENCY: **STATE**
ACTUAL DATE OF EVENT: **01/05/1995**
ORIGINAL SCHEDULE DATE OF EVENT: **NOT REPORTED**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA075ME**
EVENT DESCRIPTION: **CA PRIORITIZATION-MEDIUM CA PRIORITY**
EVENT SEQUENCE NUMBER: **9**

EVENT RESPONSIBLE AGENCY: **EPA**
ACTUAL DATE OF EVENT: **10/12/1994**
ORIGINAL SCHEDULE DATE OF EVENT: **NOT REPORTED**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA450**
EVENT DESCRIPTION: **CORRECTIVE MEASURES DESIGN APPROVED**
EVENT SEQUENCE NUMBER: **10**
EVENT RESPONSIBLE AGENCY: **STATE**
ACTUAL DATE OF EVENT: **07/02/1995**
ORIGINAL SCHEDULE DATE OF EVENT: **NOT REPORTED**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA225NR**
EVENT DESCRIPTION: **STABILIZATION MEASURES EVALUATION-FACILITY NOT AMENABLE TO STABILIZATION**
EVENT SEQUENCE NUMBER: **10**
EVENT RESPONSIBLE AGENCY: **EPA**
ACTUAL DATE OF EVENT: **10/12/1994**
ORIGINAL SCHEDULE DATE OF EVENT: **NOT REPORTED**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA500**
EVENT DESCRIPTION: **CMI WORKPLAN APPROVED**
EVENT SEQUENCE NUMBER: **11**
EVENT RESPONSIBLE AGENCY: **STATE**
ACTUAL DATE OF EVENT: **09/06/1996**
ORIGINAL SCHEDULE DATE OF EVENT: **NOT REPORTED**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA600GW**
EVENT DESCRIPTION: **STABILIZATION/INTERIM MEASURES DECISION-GROUNDWATER EXTRACTION & TREATMENT**
EVENT SEQUENCE NUMBER: **13**
EVENT RESPONSIBLE AGENCY: **STATE**
ACTUAL DATE OF EVENT: **06/29/1989**
ORIGINAL SCHEDULE DATE OF EVENT: **NOT REPORTED**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA600SR**
EVENT DESCRIPTION: **STABILIZATION/INTERIM MEASURES DECISION-PRIMARY MEAS IS SOURCE REMOVL &/OR TRT**
EVENT SEQUENCE NUMBER: **14**
EVENT RESPONSIBLE AGENCY: **STATE**
ACTUAL DATE OF EVENT: **06/29/1989**

ORIGINAL SCHEDULE DATE OF EVENT: **NOT REPORTED**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA650**
EVENT DESCRIPTION: **STABILIZATION CONSTRUCTION COMPLETED**
EVENT SEQUENCE NUMBER: **15**
EVENT RESPONSIBLE AGENCY: **STATE**
ACTUAL DATE OF EVENT: **06/12/1992**
ORIGINAL SCHEDULE DATE OF EVENT: **NOT REPORTED**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA725YE**
EVENT DESCRIPTION: **HUMAN EXPOSURES CONTROLLED DETERMINATION-YES, APPLICABLE AS OF THIS DATE**
EVENT SEQUENCE NUMBER: **16**
EVENT RESPONSIBLE AGENCY: **STATE**
ACTUAL DATE OF EVENT: **08/11/2000**
ORIGINAL SCHEDULE DATE OF EVENT: **NOT REPORTED**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA725YE**
EVENT DESCRIPTION: **HUMAN EXPOSURES CONTROLLED DETERMINATION-YES, APPLICABLE AS OF THIS DATE**
EVENT SEQUENCE NUMBER: **17**
EVENT RESPONSIBLE AGENCY: **STATE**
ACTUAL DATE OF EVENT: **04/21/1998**
ORIGINAL SCHEDULE DATE OF EVENT: **NOT REPORTED**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA750YE**
EVENT DESCRIPTION: **RELEASE TO GW CONTROLLED DETERMINATION-YES, APPLICABLE AS OF THIS DATE**
EVENT SEQUENCE NUMBER: **18**
EVENT RESPONSIBLE AGENCY: **STATE**
ACTUAL DATE OF EVENT: **08/11/2000**
ORIGINAL SCHEDULE DATE OF EVENT: **NOT REPORTED**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA750YE**
EVENT DESCRIPTION: **RELEASE TO GW CONTROLLED DETERMINATION-YES, APPLICABLE AS OF THIS DATE**
EVENT SEQUENCE NUMBER: **19**
EVENT RESPONSIBLE AGENCY: **STATE**
ACTUAL DATE OF EVENT: **04/21/1998**
ORIGINAL SCHEDULE DATE OF EVENT: **NOT REPORTED**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA725YE**
EVENT DESCRIPTION: **HUMAN EXPOSURES CONTROLLED DETERMINATION-YES, APPLICABLE AS OF THIS DATE**
EVENT SEQUENCE NUMBER: **189**
EVENT RESPONSIBLE AGENCY: **STATE**
ACTUAL DATE OF EVENT: **11/01/2000**
ORIGINAL SCHEDULE DATE OF EVENT: **20001101**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA750YE**
EVENT DESCRIPTION: **RELEASE TO GW CONTROLLED DETERMINATION-YES, APPLICABLE AS OF THIS DATE**
EVENT SEQUENCE NUMBER: **192**
EVENT RESPONSIBLE AGENCY: **STATE**
ACTUAL DATE OF EVENT: **11/01/2000**
ORIGINAL SCHEDULE DATE OF EVENT: **20001101**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA400**
EVENT DESCRIPTION: **REMEDY DECISION**
EVENT SEQUENCE NUMBER: **195**
EVENT RESPONSIBLE AGENCY: **STATE**
ACTUAL DATE OF EVENT: **01/05/1995**
ORIGINAL SCHEDULE DATE OF EVENT: **19950105**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

CA EVENT CODE: **CA550RC**
EVENT DESCRIPTION: **REMEDY CONSTRUCTION-REMEDY CONSTRUCTED**
EVENT SEQUENCE NUMBER: **201**
EVENT RESPONSIBLE AGENCY: **STATE**
ACTUAL DATE OF EVENT: **08/21/1997**
ORIGINAL SCHEDULE DATE OF EVENT: **19970920**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

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MAP ID# 65

Distance from Property: 0.803 mi. (4,240 ft.) SW
Elevation: 77 ft. (Higher than TP)

SITE INFORMATION

ID #: **43360085** ASSESSOR'S PARCEL #: **142-18-048, 142-18-48, 142-18-48**
FACILITY LINK: CLICK HERE
NAME: **AYDIN ENERGY**
ADDRESS: **3180 HANOVER STREET**
PALO ALTO, CA 94304
COUNTY: **SANTA CLARA**
SITE SIZE (ACRES): **4**
LEAD AGENCY: **SMBRP**
DTSC PROJECT MANAGER: **JOVANNE VILLAMATER**
DTSC SUPERVISOR: **CHERYL PROWELL**
DTSC DIVISION BRANCH: **CLEANUP BERKELEY**
NPL LISTED: **NO** RESTRICTED LAND USE: **YES**
SITE TYPE: **STATE RESPONSE**
SITE TYPE DESCRIPTION
STATE RESPONSE: IDENTIFIES CONFIRMED RELEASE SITES WHERE DTSC IS INVOLVED IN REMEDIATION, EITHER IN A LEAD OR OVERSIGHT CAPACITY. THESE CONFIRMED RELEASE SITES ARE GENERALLY HIGH-PRIORITY AND HIGH POTENTIAL RISK.
DTSC's CURRENT INVOLVEMENT AT SITE (as of 19/7 /9/30)
CERTIFIED / OPERATION & MAINTENANCE -
PAST USE/S THAT CAUSED THE CONTAMINATION
TRANSFORMER REPAIR
CONFIRMED CONTAMINANTS OF CONCERN
NONE SPECIFIED

Back to Report Summary

MAP ID# 66

Distance from Property: 0.832 mi. (4,393 ft.) SW
Elevation: 67 ft. (Higher than TP)

SITE INFORMATION

ID #: **43280115** ASSESSOR'S PARCEL #: **142-19-019**
FACILITY LINK: CLICK HERE
NAME: **ALZA PHARMACEUTICALS**
ADDRESS: **1454 PAGE MILL ROAD**
PALO ALTO, CA 94304
COUNTY: **SANTA CLARA**
SITE SIZE (ACRES): **NOT REPORTED**
LEAD AGENCY: **NONE SPECIFIED**
DTSC PROJECT MANAGER: **NOT REPORTED**
DTSC SUPERVISOR: **REFERRED - NOT ASSIGNED**
DTSC DIVISION BRANCH: **CLEANUP BERKELEY**
NPL LISTED: **NO** RESTRICTED LAND USE: **NO**
SITE TYPE: **HISTORICAL**
SITE TYPE DESCRIPTION
HISTORICAL: IDENTIFIES SITES FROM AN OLDER DATABASE WHERE NO SITE TYPE WAS IDENTIFIED. MOST OF THESE SITES HAVE A STATUS OF REFERRED OR NO FURTHER ACTION. DTSC IS WORKING TO CLEAN UP THIS DATA BY IDENTIFYING AN APPROPRIATE SITE TYPE FOR EACH "HISTORIC" SITE.
DTSC's CURRENT INVOLVEMENT AT SITE (as of 99/ /6/8/)
REFER: RWQCB -
PAST USE/S THAT CAUSED THE CONTAMINATION
NONE SPECIFIED
CONFIRMED CONTAMINANTS OF CONCERN
NONESPECIFIED - NONE SPECIFIED

Back to Report Summary

MAP ID# 67

Distance from Property: 0.874 mi. (4,615 ft.) WSW
Elevation: 59 ft. (Higher than TP)

SITE INFORMATION

ID #: **60001837** ASSESSOR'S PARCEL #: **142-19-007**
FACILITY LINK: CLICK HERE
NAME: **CALIFORNIA AVENUE HOUSING SITE**
ADDRESS: **1451-1481 CALIFORNIA AVENUE**
PALO ALTO, CA 94304
COUNTY: **SANTA CLARA**
SITE SIZE (ACRES): **4.5**
LEAD AGENCY: **SMBRP**
DTSC PROJECT MANAGER: **NOT REPORTED**
DTSC SUPERVISOR: **MARK PIROS**
DTSC DIVISION BRANCH: **CLEANUP BERKELEY**
NPL LISTED: **NO** RESTRICTED LAND USE: **NO**
SITE TYPE: **VOLUNTARY CLEANUP**
SITE TYPE DESCRIPTION
VOLUNTARY CLEANUP: IDENTIFIES SITES WITH EITHER CONFIRMED OR UNCONFIRMED RELEASES, AND THE PROJECT PROPONENTS HAVE REQUESTED THAT DTSC OVERSEE EVALUATION, INVESTIGATION, AND/OR CLEANUP ACTIVITIES AND HAVE AGREED TO PROVIDE COVERAGE FOR DTSC'S COSTS.
DTSC's CURRENT INVOLVEMENT AT SITE (as of 20/3 /7/30)
NO FURTHER ACTION - IDENTIFIES COMPLETED SITES WHERE DTSC DETERMINED AFTER INVESTIGATION, GENERALLY A PEA (AN INITIAL ASSESSMENT), THAT THE PROPERTY DOES NOT POSE A PROBLEM TO PUBLIC HEALTH OR THE ENVIRONMENT
PAST USE/S THAT CAUSED THE CONTAMINATION
AGRICULTURAL - ORCHARD, ELECTRIC GENERATION/SUBSTATION, LABORATORIES- UNSPECIFIED, MANUFACTURING - ELECTRONIC, MANUFACTURING - METAL, MANUFACTURING - OTHER, RESEARCH - AEROSPACE
CONFIRMED CONTAMINANTS OF CONCERN
30006 - DDD
30007 - DDE
30008 - DDT
30013 - LEAD
30018 - POLYCHLORINATED BIPHENYLS (PCBS)

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MAP ID# 68

Distance from Property: 0.901 mi. (4,757 ft.) WSW
Elevation: 81 ft. (Higher than TP)

SITE INFORMATION

ID #: **60001911** ASSESSOR'S PARCEL #: **142-19-006**
FACILITY LINK: CLICK HERE
NAME: **CALIFORNIA AVENUE HOUSING PHASE II SITE**
ADDRESS: **1501 CALIFORNIA AVENUE**
PALO ALTO, CA 94304
COUNTY: **SANTA CLARA**
SITE SIZE (ACRES): **4**
LEAD AGENCY: **SMBRP**
DTSC PROJECT MANAGER: **NOT REPORTED**
DTSC SUPERVISOR: **MARK PIROS**
DTSC DIVISION BRANCH: **CLEANUP BERKELEY**
NPL LISTED: **NO** RESTRICTED LAND USE: **NO**
SITE TYPE: **VOLUNTARY CLEANUP**
SITE TYPE DESCRIPTION
VOLUNTARY CLEANUP: IDENTIFIES SITES WITH EITHER CONFIRMED OR UNCONFIRMED RELEASES, AND THE PROJECT PROPONENTS HAVE REQUESTED THAT DTSC OVERSEE EVALUATION, INVESTIGATION, AND/OR CLEANUP ACTIVITIES AND HAVE AGREED TO PROVIDE COVERAGE FOR DTSC'S COSTS.
DTSC's CURRENT INVOLVEMENT AT SITE (as of /2/13/12/1)
NO FURTHER ACTION - IDENTIFIES COMPLETED SITES WHERE DTSC DETERMINED AFTER INVESTIGATION, GENERALLY A PEA (AN INITIAL ASSESSMENT), THAT THE PROPERTY DOES NOT POSE A PROBLEM TO PUBLIC HEALTH OR THE ENVIRONMENT
PAST USE/S THAT CAUSED THE CONTAMINATION
LABORATORIES- UNSPECIFIED, MANUFACTURING - ELECTRONIC
CONFIRMED CONTAMINANTS OF CONCERN
NONE SPECIFIED

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MAP ID# 69

Distance from Property: 0.966 mi. (5,100 ft.) WSW
Elevation: 81 ft. (Higher than TP)

SITE INFORMATION

ID #: **71002581** ASSESSOR'S PARCEL #: **14219017**
FACILITY LINK: CLICK HERE
NAME: **1601 S CALIFORNIA AVENUE**
ADDRESS: **1601 CALIFORNIA AVENUE**
PALO ALTO, CA 94304
COUNTY: **SANTA CLARA**
SITE SIZE (ACRES): **8.5**
LEAD AGENCY: **SMBRP**
DTSC PROJECT MANAGER: **JOVANNE VILLAMATER**
DTSC SUPERVISOR: **CHERYL PROWELL**
DTSC DIVISION BRANCH: **CLEANUP BERKELEY**
NPL LISTED: **NO** RESTRICTED LAND USE: **NO**
SITE TYPE: **VOLUNTARY CLEANUP**
SITE TYPE DESCRIPTION
VOLUNTARY CLEANUP: IDENTIFIES SITES WITH EITHER CONFIRMED OR UNCONFIRMED RELEASES, AND THE PROJECT PROPONENTS HAVE REQUESTED THAT DTSC OVERSEE EVALUATION, INVESTIGATION, AND/OR CLEANUP ACTIVITIES AND HAVE AGREED TO PROVIDE COVERAGE FOR DTSC'S COSTS.
DTSC's CURRENT INVOLVEMENT AT SITE (as of 20/5 /8/10)
ACTIVE - IDENTIFIES THAT AN INVESTIGATION AND/OR REMEDIATION IS CURRENTLY IN PROGRESS AND THAT DTSC IS ACTIVELY INVOLVED, EITHER IN A LEAD OR SUPPORT CAPACITY
PAST USE/S THAT CAUSED THE CONTAMINATION
MANUFACTURING - ELECTRONIC, MANUFACTURING - OTHER, METAL PLATING - CHROME, METAL PLATING - OTHER, RESEARCH - BIOMEDICAL, RESEARCH - OTHER
CONFIRMED CONTAMINANTS OF CONCERN
NONE SPECIFIED

Back to Report Summary

MAP ID# 69

Distance from Property: 0.966 mi. (5,100 ft.) WSW
Elevation: 81 ft. (Higher than TP)

SITE INFORMATION

GEOSEARCH ID: **CAD076314640**
EPA ID: **CAD076314640**
NAME: **AGILENT TECHNOLOGIES CALIFORNIA AVE SITE**
ADDRESS: **1601 CALIFORNIA AVE**
PALO ALTO, CA 94304
COUNTY: **SANTA CLARA**
PROJECT MANAGER: **NOT REPORTED**
DTSC PROJECT TRACKING CODE: **NOT REPORTED**
FACILITY TYPE: **HISTORICAL - NON-OPERATING**
STATUS: **CLOSED**
HAZARDOUS WASTE UNITS UNDERGOING CLOSURE
DATE: **02/21/2020**
UNIT: **UNIT1**
EVENT DESCRIPTION: **CLOSURE ADMINISTRATIVE - ISSUE CLOSURE VERIFICATION**
FACILITY TYPE: **HISTORICAL - NON-OPERATING**
HAZARDOUS WASTE UNITS COMPLETED ACTIVITIES **- NO INFORMATION REPORTED -**
MAINTENANCE **- NO INFORMATION REPORTED -**

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MAP ID# 70

Distance from Property: 0.966 mi. (5,100 ft.) SSW
Elevation: 110 ft. (Higher than TP)

SITE INFORMATION

GEOSEARCH ID: **CAD009129354**
EPA ID: **CAD009129354**
NAME: **LOCKHEED MARTIN SPACE SYSTEMS CO**
ADDRESS: **3251 HANOVER ST**
PALO ALTO, CA 94304-1121
COUNTY: **SANTA CLARA**
PROJECT MANAGER: **NOT REPORTED**
DTSC PROJECT TRACKING CODE: **200558**
FACILITY TYPE: **HISTORICAL - NON-OPERATING**
STATUS: **CLOSED**
HAZARDOUS WASTE UNITS UNDERGOING CLOSURE
DATE: **01/10/1995**
UNIT: **CONTAIN1**
EVENT DESCRIPTION: **CLOSURE FINAL - ISSUE CLOSURE VERIFICATION**
FACILITY TYPE: **HISTORICAL - NON-OPERATING**
HAZARDOUS WASTE UNITS COMPLETED ACTIVITIES **- NO INFORMATION REPORTED -**
MAINTENANCE **- NO INFORMATION REPORTED -**

Back to Report Summary

Resource Conservation & Recovery Act - Corrective Action Facilities (RCRAC)

MAP ID# 70

Distance from Property: 0.966 mi. (5,100 ft.) SSW
Elevation: 110 ft. (Higher than TP)

FACILITY INFORMATION

EPA ID#: **CAD009129354**
NAME: **LOCKHEED MARTIN SPACE SYSTEM**
ADDRESS: **3251 HANOVER STREET**
PALO ALTO, CA 94304

OWNER TYPE: **PRIVATE**
OWNER NAME: **STANFORD MANAGEMENT COMPANY**
OPERATOR TYPE: **PRIVATE**
OPERATOR NAME: **LOCKHEED MARTIN SPACE SYSTEM**

CONTACT NAME: **JAMES C SEAVER**
CONTACT ADDRESS: **1111 LOCKHEED MARTIN WAY B-157 0/2251S JAMES SEAVER**
SUNNYVALE CA 94088
CONTACT PHONE: **408-742-0243**
NON-NOTIFIER: **NOT A NON-NOTIFIER**
DATE RECEIVED BY AGENCY: **02/26/2016**

CERTIFICATION

CERTIFICATION NAME:	CERTIFICATION TITLE:	CERTIFICATION SIGNED DATE:
JAMES SEAVER	**ENV. ENGINEER**	**02/24/2010**
JOEL C SUTY	**V.P OPERATIONS**	**05/22/1990**
JAMES C SEAVER	**ENVIRONMENTAL ENGINEER STAFF**	**02/26/2014**
JOEL C SUTY	**VICE PRESIDENT-**	**03/25/1992**
JAMES C SEAVER	**ENV. ENG. STAFF**	**02/25/2016**
JOEL C SUTY	**VP-OPERATION**	**03/31/1994**
JAMES SEAVER	**ENV. ENGINNER**	**02/26/1996**
JOEL C. SUTY	**VICE PRESIDENT,**	**03/04/1999**
JAMES C. SEAVER	**ENV. ENGINEER**	**10/12/2000**
JAMES C SEAVER	**ENV. ENG. SR.**	**02/25/2004**
JAMES C SEAVER	**ENV. ENG. SR.**	**02/28/2006**
JAMES C SEAVER	**ENV. ENG. SR**	**02/21/2008**

INDUSTRY CLASSIFICATION (NAICS)

336414 - GUIDED MISSILE AND SPACE VEHICLE MANUFACTURING
336415 - GUIDED MISSILE AND SPACE VEHICLE PROPULSION UNIT AND PROPULSION UNIT PARTS MANUFACTURING
54138 - TESTING LABORATORIES
54171 - RESEARCH AND DEVELOPMENT IN THE PHYSICAL, ENGINEERING, AND LIFE SCIENCES
541711 - RESEARCH AND DEVELOPMENT IN BIOTECHNOLOGY
541712 - RESEARCH AND DEVELOPMENT IN THE PHYSICAL, ENGINEERING, AND LIFE SCIENCES (EXCEPT BIOTECHNOLOGY)

CURRENT ACTIVITY INFORMATION

GENERATOR STATUS: **LARGE QUANTITY GENERATOR** LAST UPDATED DATE: **11/04/2016**
SUBJECT TO CORRECTIVE ACTION UNIVERSE: **YES**
TDSFs POTENTIALLY SUBJECT TO CORRECTIVE ACTION UNDER 3004 (u)/(v) UNIVERSE: **NO**
TDSFs ONLY SUBJECT TO CORRECTIVE ACTION UNDER DISCRETIONARY AUTHORITIES UNIVERSE: **YES**
NON TSDFs WHERE RCRA CORRECTIVE ACTION HAS BEEN IMPOSED UNIVERSE: **NO**
CORRECTIVE ACTION WORKLOAD UNIVERSE: **NO**

IMPORTER: **NO**
MIXED WASTE GENERATOR: **NO**
RECYCLER: **NO**
UNDERGROUND INJECTION: **NO**
UNIVERSAL WASTE DESTINATION FACILITY: **NO**
TRANSFER FACILITY: **NO**

TRANSPORTER: **NO**
ONSITE BURNER EXEMPTION: **NO**
FURNACE EXEMPTION: **NO**
USED OIL REFINER: **NO**
USED OIL TRANSFER FACILITY: **NO**
USED OIL FUEL BURNER: **NO**
USED OIL PROCESSOR: **NO**
USED OIL FUEL MARKETER TO BURNER: **NO**
SPECIFICATION USED OIL MARKETER: **NO**
USED OIL TRANSPORTER: **NO**

COMPLIANCE, MONITORING AND ENFORCEMENT INFORMATION

EVALUATIONS

12/09/2015	**CEI**	**COMPLIANCE EVALUATION INSPECTION ON-SITE**
06/18/2008	**CEI**	**COMPLIANCE EVALUATION INSPECTION ON-SITE**
04/15/1993	**CEI**	**COMPLIANCE EVALUATION INSPECTION ON-SITE**
03/07/1987	**FRR**	**FINANCIAL RECORD REVIEW**
06/26/1986	**FRR**	**FINANCIAL RECORD REVIEW**
07/16/1985	**CSE**	**COMPLIANCE SCHEDULE EVALUATION**
01/18/1985	**CEI**	**COMPLIANCE EVALUATION INSPECTION ON-SITE**
02/05/1982	**CEI**	**COMPLIANCE EVALUATION INSPECTION ON-SITE**

VIOLATIONS

06/18/2008	**262.A**	**GENERATORS - GENERAL**
04/15/1993	**262.A**	**GENERATORS - GENERAL**
06/26/1986	**262.A**	**GENERATORS - GENERAL**
01/18/1985	**262.A**	**GENERATORS - GENERAL**

ENFORCEMENTS

08/06/2008	**120**	**WRITTEN INFORMAL**
06/18/2008	**120**	**WRITTEN INFORMAL**
11/13/1986	**120**	**WRITTEN INFORMAL**
04/05/1985	**120**	**WRITTEN INFORMAL**

HAZARDOUS WASTE

121
181
214
331
343
352
551
791
792
801

D001	**IGNITABLE WASTE**
D002	**CORROSIVE WASTE**
D003	**REACTIVE WASTE**
D004	**ARSENIC**
D005	**BARIUM**
D006	**CADMIUM**
D007	**CHROMIUM**

D008	LEAD
D009	MERCURY
D010	SELENIUM
D011	SILVER
D018	BENZENE
D019	CARBON TETRACHLORIDE
D022	CHLOROFORM
D024	M-CRESOL
D026	CRESOL
D035	METHYL ETHYL KETONE
D036	NITROBENZENE
D039	TETRACHLOROETHYLENE
D040	TRICHLORETHYLENE
F001	THE FOLLOWING SPENT HALOGENATED SOLVENTS USED IN DEGREASING: TETRACHLOROETHYLENE,TRICHLORETHYLENE, METHYLENE CHLORIDE, 1,1,1-TRICHLOROETHANE, CARBON TETRACHLORIDE ANDCHLORINATED FLUOROCARBONS; ALL SPENT SOLVENT MIXTURES/BLENDS USED IN DEGREASING CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
F002	THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE,TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE,CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2, TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001,F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
F003	THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NONHALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS, AND A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
F005	THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE,CARBON DISULFIDE, ISOBUTANOL, PYRIDINE,BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001,F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
LABP	
P015	BERYLLIUM
P022	CARBON DISULFIDE
P029	COPPER CYANIDE
P029	COPPER CYANIDE CU(CN)
P068	HYDRAZINE, METHYL-
P068	METHYL HYDRAZINE
P087	OSMIUM OXIDE OSO4, (T-4)-
P087	OSMIUM TETROXIDE
P106	SODIUM CYANIDE
P106	SODIUM CYANIDE NA(CN)
U001	ACETALDEHYDE (I)
U001	ETHANAL (I)
U002	2-PROPANONE (I)

U002	**ACETONE (I)**
U003	**ACETONITRILE (I,T)**
U012	**ANILINE (I,T)**
U012	**BENZENAMINE (I,T)**
U044	**CHLOROFORM**
U044	**METHANE, TRICHLORO-**
U045	**METHANE, CHLORO- (I,T)**
U045	**METHYL CHLORIDE (I,T)**
U057	**CYCLOHEXANONE (I)**
U080	**METHANE, DICHLORO-**
U080	**METHYLENE CHLORIDE**
U108	**1,4-DIETHYLENEOXIDE**
U108	**1,4-DIOXANE**
U133	**HYDRAZINE (R,T)**
U134	**HYDROFLUORIC ACID (C,T)**
U134	**HYDROGEN FLUORIDE (C,T)**
U138	**METHANE, IODO-**
U138	**METHYL IODIDE**
U154	**METHANOL (I)**
U154	**METHYL ALCOHOL (I)**
U159	**2-BUTANONE (I,T)**
U159	**METHYL ETHYL KETONE (MEK) (I,T)**
U201	**1,3-BENZENEDIOL**
U201	**RESORCINOL**
U211	**CARBON TETRACHLORIDE**
U211	**METHANE, TETRACHLORO-**
U213	**FURAN, TETRAHYDRO-(I)**
U213	**TETRAHYDROFURAN (I)**
U220	**BENZENE, METHYL-**
U220	**TOLUENE**
U239	**BENZENE, DIMETHYL- (I,T)**
U239	**XYLENE (I)**

UNIVERSAL WASTE

WASTE TYPE:	ACCUMULATED WASTE ON-SITE:	GENERATED WASTE ON-SITE:	SOURCE TYPE:
BATTERIES	**NO**	**NO**	**ANNUAL/BIENNIAL REPORT**
LAMPS	**NO**	**NO**	**ANNUAL/BIENNIAL REPORT**
PESTICIDES	**NO**	**NO**	**ANNUAL/BIENNIAL REPORT**
MERCURY CONTAINING EQUIPMENT	**NO**	**NO**	**ANNUAL/BIENNIAL REPORT**

CORRECTIVE ACTION AREA (RELEASE)

AREA NAME:	AIR:	GROUNDWATER:	SOIL:	SURFACE WASTE:
ENTIER FACILITY	**-----**	**Y**	**Y**	**-----**

CORRECTIVE ACTION EVENT

CA EVENT CODE: **CA029**

EVENT DESCRIPTION: **NOT REPORTED**
EVENT SEQUENCE NUMBER: **1**
EVENT RESPONSIBLE AGENCY: **STATE**
ACTUAL DATE OF EVENT: **12/20/2007**
ORIGINAL SCHEDULE DATE OF EVENT: **NOT REPORTED**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

Back to Report Summary

Resource Conservation & Recovery Act - Subject to Corrective Action Facilities (RCRASUBC)

MAP ID# 70

Distance from Property: 0.966 mi. (5,100 ft.) SSW
Elevation: 110 ft. (Higher than TP)

FACILITY INFORMATION

EPA ID#: **CAD009129354**
NAME: **LOCKHEED MARTIN SPACE SYSTEM**
ADDRESS: **3251 HANOVER STREET**
PALO ALTO, CA 94304

OWNER TYPE: **PRIVATE**
OWNER NAME: **STANFORD MANAGEMENT COMPANY**
OPERATOR TYPE: **PRIVATE**
OPERATOR NAME: **LOCKHEED MARTIN SPACE SYSTEM**

CONTACT NAME: **JAMES C SEAVER**
CONTACT ADDRESS: **1111 LOCKHEED MARTIN WAY B-157 0/2251S JAMES SEAVER**
SUNNYVALE CA 94088
CONTACT PHONE: **408-742-0243**
NON-NOTIFIER: **NOT A NON-NOTIFIER**
DATE RECEIVED BY AGENCY: **02/26/2016**

CERTIFICATION

CERTIFICATION NAME:	CERTIFICATION TITLE:	CERTIFICATION SIGNED DATE:
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JOEL C SUTY	**V.P OPERATIONS**	**05/22/1990**
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NON TSDFs WHERE RCRA CORRECTIVE ACTION HAS BEEN IMPOSED UNIVERSE: **NO**
CORRECTIVE ACTION WORKLOAD UNIVERSE: **NO**

IMPORTER: **NO**
MIXED WASTE GENERATOR: **NO**
RECYCLER: **NO**
UNDERGROUND INJECTION: **NO**
UNIVERSAL WASTE DESTINATION FACILITY: **NO**
TRANSFER FACILITY: **NO**

TRANSPORTER: **NO**
ONSITE BURNER EXEMPTION: **NO**
FURNACE EXEMPTION: **NO**
USED OIL REFINER: **NO**
USED OIL TRANSFER FACILITY: **NO**
USED OIL FUEL BURNER: **NO**
USED OIL PROCESSOR: **NO**
USED OIL FUEL MARKETER TO BURNER: **NO**
SPECIFICATION USED OIL MARKETER: **NO**
USED OIL TRANSPORTER: **NO**

COMPLIANCE, MONITORING AND ENFORCEMENT INFORMATION

EVALUATIONS

12/09/2015	**CEI**	**COMPLIANCE EVALUATION INSPECTION ON-SITE**
06/18/2008	**CEI**	**COMPLIANCE EVALUATION INSPECTION ON-SITE**
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01/18/1985	**CEI**	**COMPLIANCE EVALUATION INSPECTION ON-SITE**
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VIOLATIONS

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06/26/1986	**262.A**	**GENERATORS - GENERAL**
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ENFORCEMENTS

08/06/2008	**120**	**WRITTEN INFORMAL**
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HAZARDOUS WASTE

121
181
214
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D001	**IGNITABLE WASTE**
D002	**CORROSIVE WASTE**
D003	**REACTIVE WASTE**
D004	**ARSENIC**
D005	**BARIUM**
D006	**CADMIUM**
D007	**CHROMIUM**

D008	LEAD
D009	MERCURY
D010	SELENIUM
D011	SILVER
D018	BENZENE
D019	CARBON TETRACHLORIDE
D022	CHLOROFORM
D024	M-CRESOL
D026	CRESOL
D035	METHYL ETHYL KETONE
D036	NITROBENZENE
D039	TETRACHLOROETHYLENE
D040	TRICHLORETHYLENE
F001	THE FOLLOWING SPENT HALOGENATED SOLVENTS USED IN DEGREASING: TETRACHLOROETHYLENE,TRICHLORETHYLENE, METHYLENE CHLORIDE, 1,1,1-TRICHLOROETHANE, CARBON TETRACHLORIDE ANDCHLORINATED FLUOROCARBONS; ALL SPENT SOLVENT MIXTURES/BLENDS USED IN DEGREASING CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
F002	THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE,TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE,CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2, TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001,F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
F003	THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NONHALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS, AND A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
F005	THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE,CARBON DISULFIDE, ISOBUTANOL, PYRIDINE,BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001,F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
LABP	
P015	BERYLLIUM
P022	CARBON DISULFIDE
P029	COPPER CYANIDE
P029	COPPER CYANIDE CU(CN)
P068	HYDRAZINE, METHYL-
P068	METHYL HYDRAZINE
P087	OSMIUM OXIDE OSO4, (T-4)-
P087	OSMIUM TETROXIDE
P106	SODIUM CYANIDE
P106	SODIUM CYANIDE NA(CN)
U001	ACETALDEHYDE (I)
U001	ETHANAL (I)
U002	2-PROPANONE (I)

U002	**ACETONE (I)**
U003	**ACETONITRILE (I,T)**
U012	**ANILINE (I,T)**
U012	**BENZENAMINE (I,T)**
U044	**CHLOROFORM**
U044	**METHANE, TRICHLORO-**
U045	**METHANE, CHLORO- (I,T)**
U045	**METHYL CHLORIDE (I,T)**
U057	**CYCLOHEXANONE (I)**
U080	**METHANE, DICHLORO-**
U080	**METHYLENE CHLORIDE**
U108	**1,4-DIETHYLENEOXIDE**
U108	**1,4-DIOXANE**
U133	**HYDRAZINE (R,T)**
U134	**HYDROFLUORIC ACID (C,T)**
U134	**HYDROGEN FLUORIDE (C,T)**
U138	**METHANE, IODO-**
U138	**METHYL IODIDE**
U154	**METHANOL (I)**
U154	**METHYL ALCOHOL (I)**
U159	**2-BUTANONE (I,T)**
U159	**METHYL ETHYL KETONE (MEK) (I,T)**
U201	**1,3-BENZENEDIOL**
U201	**RESORCINOL**
U211	**CARBON TETRACHLORIDE**
U211	**METHANE, TETRACHLORO-**
U213	**FURAN, TETRAHYDRO-(I)**
U213	**TETRAHYDROFURAN (I)**
U220	**BENZENE, METHYL-**
U220	**TOLUENE**
U239	**BENZENE, DIMETHYL- (I,T)**
U239	**XYLENE (I)**

UNIVERSAL WASTE

WASTE TYPE:	ACCUMULATED WASTE ON-SITE:	GENERATED WASTE ON-SITE:	SOURCE TYPE:
BATTERIES	**NO**	**NO**	**ANNUAL/BIENNIAL REPORT**
LAMPS	**NO**	**NO**	**ANNUAL/BIENNIAL REPORT**
PESTICIDES	**NO**	**NO**	**ANNUAL/BIENNIAL REPORT**
MERCURY CONTAINING EQUIPMENT	**NO**	**NO**	**ANNUAL/BIENNIAL REPORT**

CORRECTIVE ACTION AREA (RELEASE)

AREA NAME:	AIR:	GROUNDWATER:	SOIL:	SURFACE WASTE:
ENTIER FACILITY	**-----**	**Y**	**Y**	**-----**

CORRECTIVE ACTION EVENT

CA EVENT CODE: **CA029**

EVENT DESCRIPTION: **NOT REPORTED**
EVENT SEQUENCE NUMBER: **1**
EVENT RESPONSIBLE AGENCY: **STATE**
ACTUAL DATE OF EVENT: **12/20/2007**
ORIGINAL SCHEDULE DATE OF EVENT: **NOT REPORTED**
NEW SCHEDULE DATE OF EVENT: **NOT REPORTED**

Back to Report Summary

Unlocated Sites Summary

This list contains sites that could not be mapped due to limited or incomplete address information.

No Records Found

Environmental Records Definitions - FEDERAL

AIRSAFS Aerometric Information Retrieval System / Air Facility Subsystem

VERSION DATE: 10/20/14

The United States Environmental Protection Agency (EPA) modified the Aerometric Information Retrieval System (AIRS) to a database that exclusively tracks the compliance of stationary sources of air pollution with EPA regulations: the Air Facility Subsystem (AFS). Since this change in 2001, the management of the AIRS/AFS database was assigned to EPA's Office of Enforcement and Compliance Assurance. Enforcement and Compliance History Online (ECHO) Clean Air Act data from AFS are frozen and reflect data as of October 17, 2014, the EPA retired this system for Clean Air Act stationary sources.

ALTFUELS Alternative Fueling Stations

VERSION DATE: 04/30/20

Nationwide list of alternative fueling stations made available by the U.S. Department of Energy's Office of Energy Efficiency & Renewable Energy. Includes Bio-diesel stations, Ethanol (E85) stations, Liquefied Petroleum Gas (Propane) stations, Ethanol (E85) stations, Natural Gas stations, Hydrogen stations, and Electric Vehicle Supply Equipment (EVSE).

BF Brownfields Management System

VERSION DATE: 10/08/20

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. The United States Environmental Protection Agency maintains this database to track activities in the various brown field grant programs including grantee assessment, site cleanup and site redevelopment. This database included tribal brownfield sites.

BRS Biennial Reporting System

VERSION DATE: 12/31/15

The United States Environmental Protection Agency (EPA), in cooperation with the States, biennially collects information regarding the generation, management, and final disposition of hazardous wastes regulated under the Resource Conservation and Recovery Act of 1976 (RCRA), as amended. The Biennial Report captures detailed data on the generation of hazardous waste from large quantity generators and data on waste management practices from treatment, storage and disposal facilities. Currently, the EPA states that data collected between 1991 and 1997 was originally a part of the defunct Biennial Reporting System and is now incorporated into the RCRAInfo data system.

CDL Clandestine Drug Laboratory Locations

VERSION DATE: 06/17/20

The U.S. Department of Justice ("the Department") provides this information as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments. The Department does not establish, implement, enforce, or certify compliance with clean-up or remediation standards for contaminated sites; the public should contact a state or local health department or environmental protection agency for that information.

DNPL Delisted National Priorities List

VERSION DATE: 09/21/20

This database includes sites from the United States Environmental Protection Agency's Final National Priorities List (NPL) where remedies have proven to be satisfactory or sites where the original analyses were inaccurate, and the site is no longer appropriate for inclusion on the NPL, and final publication in the Federal Register has occurred.

DOCKETS EPA Docket Data

VERSION DATE: 12/22/05

The United States Environmental Protection Agency Docket data lists Civil Case Defendants, filing dates as far back as 1971, laws broken including section, violations that occurred, pollutants involved, penalties assessed and superfund awards by facility and location. Please refer to ICIS database as source of current data.

DOD Department of Defense Sites

VERSION DATE: 12/01/14

This information originates from the National Atlas of the United States Federal Lands data, which includes lands owned or administered by the Federal government. Army DOD, Army Corps of Engineers DOD, Air Force DOD, Navy DOD and Marine DOD areas of 640 acres or more are included.

EC Federal Engineering Institutional Control Sites

VERSION DATE: 08/26/20

This database includes site locations where Engineering and/or Institutional Controls have been identified as part of a selected remedy for the site as defined by United States Environmental Protection Agency official remedy decision documents. The data displays remedy component information for Superfund decision documents issued in fiscal years 1982-2017, and it includes final and deleted NPL sites as well as sites with a Superfund Alternative Approach (SAA) agreement in place. The only sites included that are not on the NPL, proposed for NPL, or removed from proposed NPL, are those with an SAA Agreement in place. A site listing does not indicate that the institutional and engineering controls are currently in place nor will be in place once the remedy is complete; it only indicates that the decision to include either of them in the remedy is documented as of the completed date of the document. Institutional controls are actions, such as legal controls, that help minimize the

potential for human exposure to contamination by ensuring appropriate land or resource use. Engineering controls include caps, barriers, or other device engineering to prevent access, exposure, or continued migration of contamination.

ECHOR09 Enforcement and Compliance History Information

VERSION DATE: 05/30/20

The U.S. Environmental Protection Agency's Enforcement and Compliance History Online (ECHO) database, provides compliance and enforcement information for facilities nationwide. This database includes facilities regulated as Clean Air Act stationary sources, Clean Water Act direct dischargers, Resource Conservation and Recovery Act hazardous waste handlers, Safe Drinking Water Act public water systems along with other data, such as Toxics Release Inventory releases.

ERNSCA Emergency Response Notification System

VERSION DATE: 09/27/20

This National Response Center database contains data on reported releases of oil, chemical, radiological, biological, and/or etiological discharges into the environment anywhere in the United States and its territories. The data comes from spill reports made to the U.S. Environmental Protection Agency, U.S. Coast Guard, the National Response Center and/or the U.S. Department of Transportation.

FEMAUST FEMA Owned Storage Tanks

VERSION DATE: 12/01/16

This is a listing of FEMA owned underground and aboveground storage tank sites. For security reasons, address information is not released to the public according to the U.S. Department of Homeland Security.

FRSCA Facility Registry System

VERSION DATE: 04/05/20

The United States Environmental Protection Agency's Office of Environmental Information (OEI) developed the Facility Registry System (FRS) as the centrally managed database that identifies facilities, sites or places subject to environmental regulations or of environmental interest. The Facility Registry System replaced the Facility Index System or FINDS database.

FUDS Formerly Used Defense Sites

VERSION DATE: 12/31/18

The Formerly Used Defense Sites (FUDS) inventory includes properties previously owned by or leased to the United States and under Secretary of Defense Jurisdiction, as well as Munitions Response Areas (MRAs). The remediation of these properties is the responsibility of the Department of Defense. This data is provided by the U.S. Army Corps of Engineers (USACE), the boundaries/polygon data are based on preliminary findings and not

all properties currently have polygon data available. DISCLAIMER: This data represents the results of data collection/processing for a specific USACE activity and is in no way to be considered comprehensive or to be used in any legal or official capacity as presented on this site. While the USACE has made a reasonable effort to insure the accuracy of the maps and associated data, it should be explicitly noted that USACE makes no warranty, representation or guaranty, either expressed or implied, as to the content, sequence, accuracy, timeliness or completeness of any of the data provided herein. For additional information on Formerly Used Defense Sites please contact the USACE Public Affairs Office at (202) 528-4285.

FUSRAP Formerly Utilized Sites Remedial Action Program

VERSION DATE: 03/04/17

The U.S. Department of Energy (DOE) established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from the Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations. The DOE Office of Legacy Management (LM) established long-term surveillance and maintenance (LTS&M) requirements for remediated FUSRAP sites. DOE evaluates the final site conditions of a remediated site on the basis of risk for different future uses. DOE then confirms that LTS&M requirements will maintain protectiveness.

HISTPST Historical Gas Stations

VERSION DATE: NR

This historic directory of service stations is provided by the Cities Service Company. The directory includes Cities Service filling stations that were located throughout the United States in 1930.

HMIRSR09 Hazardous Materials Incident Reporting System

VERSION DATE: 05/20/20

The HMIRS database contains unintentional hazardous materials release information reported to the U.S. Department of Transportation located in EPA Region 9. This region includes the following states: Arizona, California, Hawaii, Nevada, and the territories of Guam and American Samoa.

HWCD Hazardous Waste Compliance Docket Facilities

VERSION DATE: 04/29/20

This list of the Federal Agency Hazardous Waste Compliance Docket Facilities is maintained by the United States Environmental Protection Agency (EPA). According to the EPA, Section 120(c) of CERCLA requires EPA to establish a listing, known as the Federal Facility Hazardous Waste Compliance Docket (Docket), of Federal facilities which are managing or have managed hazardous waste; or have had a release of hazardous waste. Thus, the Docket identifies all Federal facilities that must be evaluated to determine whether they pose a risk to human health and the environment and it makes this information available to the public. In order for the Docket to remain current and accurate it requires periodic updating.

ICIS Integrated Compliance Information System (formerly DOCKETS)

VERSION DATE: 09/19/20

ICIS is a case activity tracking and management system for civil, judicial, and administrative federal Environmental Protection Agency enforcement cases. ICIS contains information on federal administrative and federal judicial cases under the following environmental statutes: the Clean Air Act, the Clean Water Act, the Resource Conservation and Recovery Act, the Emergency Planning and Community Right-to-Know Act - Section 313, the Toxic Substances Control Act, the Federal Insecticide, Fungicide, and Rodenticide Act, the Comprehensive Environmental Response, Compensation, and Liability Act, the Safe Drinking Water Act, and the Marine Protection, Research, and Sanctuaries Act.

ICISCLEANERS Integrated Compliance Information System Drycleaners

VERSION DATE: 09/19/20

This is a listing of drycleaner facilities from the Integrated Compliance Information System (ICIS). The U.S. Environmental Protection Agency (EPA) tracks facilities that possess NAIC and SIC codes that classify businesses as drycleaner establishments. The following Primary SIC Codes are included in this data: 7211, 7212, 7213, 7215, 7216, 7217, 7218, and/or 7219; the following Primary NAICS Codes are included in this data: 812320, 812331, and/or 812332.

ICISNPDES Integrated Compliance Information System National Pollutant Discharge Elimination System

VERSION DATE: 04/26/20

Authorized by the Clean Water Act, the National Pollutant Discharge Elimination System (NPDES) permit program controls water pollution by regulating point sources that discharge pollutants into waters of the United States. This database is provided by the U.S. Environmental Protection Agency.

LUCIS Land Use Control Information System

VERSION DATE: 09/01/06

The LUCIS database is maintained by the U.S. Department of the Navy and contains information for former Base Realignment and Closure (BRAC) properties across the United States.

MLTS Material Licensing Tracking System

VERSION DATE: 06/29/17

MLTS is a list of approximately 8,100 sites which have or use radioactive materials subject to the United States Nuclear Regulatory Commission (NRC) licensing requirements. Disclaimer: Due to agency regulations and policies, this database contains applicant/licensee location information which may or may not be related to the physical location per MLTS site.

MRDS Mineral Resource Data System

VERSION DATE: 03/15/16

MRDS (Mineral Resource Data System) is a collection of reports describing metallic and nonmetallic mineral resources throughout the world. Included are deposit name, location, commodity, deposit description, geologic characteristics, production, reserves, resources, and references. This database contains the records previously provided in the Mineral Resource Data System (MRDS) of USGS and the Mineral Availability System/Mineral Industry Locator System (MAS/MILS) originated in the U.S. Bureau of Mines, which is now part of USGS. The USGS has ceased systematic updates of the MRDS database with their focus more recently on deposits of critical minerals while providing a well-documented baseline of historical mine locations from USGS topographic maps. A few updates last occurred 2015 and early 2016 for select mine site area/s.

MSHA Mine Safety and Health Administration Master Index File

VERSION DATE: 08/07/20

The Mine dataset lists all Coal and Metal/Non-Metal mines under MSHA's jurisdiction since 1/1/1970. It includes such information as the current status of each mine (Active, Abandoned, NonProducing, etc.), the current owner and operating company, commodity codes and physical attributes of the mine. Mine ID is the unique key for this data. This information is provided by the United States Department of Labor - Mine Safety and Health Administration (MSHA).

NLRRCRAC No Longer Regulated RCRA Corrective Action Facilities

VERSION DATE: 09/14/20

This database includes RCRA Corrective Action facilities that are no longer regulated by the United States Environmental Protection Agency or do not meet other RCRA reporting requirements.

NLRRCRAT No Longer Regulated RCRA Non-CORRACTS TSD Facilities

VERSION DATE: 09/14/20

This database includes RCRA Non-Corrective Action TSD facilities that are no longer regulated by the United States Environmental Protection Agency or do not meet other RCRA reporting requirements. This listing includes facilities that formerly treated, stored or disposed of hazardous waste.

NMS Former Military Nike Missile Sites

VERSION DATE: 12/01/84

This information was taken from report DRXTH-AS-IA-83A016 (Historical Overview of the Nike Missile System, 12/1984) which was performed by Environmental Science and Engineering, Inc. for the U.S. Army Toxic and Hazardous Materials Agency Assessment Division. The Nike system was deployed between 1954 and the mid-1970's. Among the substances used or stored on Nike sites were liquid missile fuel (JP-4); starter fluids (UDKH, aniline, and furfuryl alcohol); oxidizer (IRFNA); hydrocarbons (motor oil, hydraulic fluid, diesel fuel, gasoline,

heating oil); solvents (carbon tetrachloride, trichloroethylene, trichloroethane, stoddard solvent); and battery electrolyte. The quantities of material a disposed of and procedures for disposal are not documented in published reports. Virtually all information concerning the potential for contamination at Nike sites is confined to personnel who were assigned to Nike sites. During deactivation most hardware was shipped to depot-level supply points. There were reportedly instances where excess materials were disposed of on or near the site itself at closure. There was reportedly no routine site decontamination.

NPDESR09 National Pollutant Discharge Elimination System

VERSION DATE: 04/01/07

Authorized by the Clean Water Act, the National Pollutant Discharge Elimination System (NPDES) permit program controls water pollution by regulating point sources that discharge pollutants into waters of the United States. The NPDES database was collected from the U.S. Environmental Protection Agency (EPA) from December 2002 through April 2007. Refer to the ICIS and/or ICIS-NPDES database as source of current data. This database includes permitted facilities located in EPA Region 9. This region includes the following states: Arizona, California, Hawaii, Nevada, and the territories of Guam and American Samoa.

NPL National Priorities List

VERSION DATE: 09/21/20

This database includes United States Environmental Protection Agency (EPA) National Priorities List sites that fall under the EPA's Superfund program, established to fund the cleanup of the most serious uncontrolled or abandoned hazardous waste sites identified for possible long-term remedial action.

ODI Open Dump Inventory

VERSION DATE: 06/01/85

The open dump inventory was published by the United States Environmental Protection Agency. An “open dump” is defined as a facility or site where solid waste is disposed of which is not a sanitary landfill which meets the criteria promulgated under section 4004 of the Solid Waste Disposal Act (42 U.S.C. 6944) and which is not a facility for disposal of hazardous waste. This inventory has not been updated since June 1985.

PADS PCB Activity Database System

VERSION DATE: 10/09/19

PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of Polychlorinated Biphenyls (PCB) who are required to notify the U.S. Environmental Protection Agency of such activities.

PCSR09 Permit Compliance System

VERSION DATE: 08/01/12

The historic Permit Compliance System tracked enforcement status and permit compliance of facilities controlled

by the National Pollutant Discharge Elimination System (NPDES) under the Clean Water Act. This database includes permitted facilities located in EPA Region 9 states: Arizona, California, Hawaii, Nevada, and the territories of Guam and American Samoa. This system has since been modernized by United States Environmental Protection Agency and is now integrated into the Integrated Compliance Information System (ICIS). Please refer to the ICIS database as the current source for this data.

PNPL Proposed National Priorities List

VERSION DATE: 09/21/20

This database contains sites proposed to be included on the National Priorities List (NPL) in the Federal Register. The United States Environmental Protection Agency investigates these sites to determine if they may present long-term threats to public health or the environment.

RCRAC Resource Conservation & Recovery Act - Corrective Action Facilities

VERSION DATE: 09/14/20

The Resource Conservation and Recovery Act (RCRA) gives the U.S. Environmental Protection Agency (EPA) the authority to control hazardous waste from the "cradle-to-grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also set forth a framework for the management of non-hazardous solid wastes. The 1986 amendments to RCRA enabled EPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances. This listing refers to facilities with corrective action activity.

RCRAGR09 Resource Conservation & Recovery Act - Generator

VERSION DATE: 09/14/20

The Resource Conservation and Recovery Act (RCRA) gives the U.S. Environmental Protection Agency (EPA) the authority to control hazardous waste from the "cradle-to-grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also set forth a framework for the management of non-hazardous solid wastes. The 1986 amendments to RCRA enabled EPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances. This listing refers to facilities currently generating hazardous waste. EPA Region 9 includes the following states: Arizona, California, Hawaii, Nevada, and the territories of Guam and American Samoa.

RCRANGR09 Resource Conservation & Recovery Act - Non-Generator

VERSION DATE: 09/14/20

The Resource Conservation and Recovery Act (RCRA) gives the U.S. Environmental Protection Agency (EPA) the authority to control hazardous waste from the "cradle-to-grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also set forth a framework for the management of non-hazardous solid wastes. The 1986 amendments to RCRA enabled EPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances. This listing refers to facilities classified as non-generators. Non-Generators do not presently generate hazardous waste. EPA

Region 9 includes the following states: Arizona, California, Hawaii, Nevada, and the territories of Guam and American Samoa.

RCRASC RCRA Sites with Controls

VERSION DATE: 08/04/20

The Resource Conservation and Recovery Act (RCRA) gives the U.S. Environmental Protection Agency (EPA) the authority to control hazardous waste from the "cradle-to-grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also set forth a framework for the management of non-hazardous solid wastes. The 1986 amendments to RCRA enabled EPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances. This listing refers to facilities with institutional controls in place.

RCRASUBC Resource Conservation & Recovery Act - Subject to Corrective Action Facilities

VERSION DATE: 09/14/20

The Resource Conservation and Recovery Act (RCRA) gives the U.S. Environmental Protection Agency (EPA) the authority to control hazardous waste from the "cradle-to-grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also set forth a framework for the management of non-hazardous solid wastes. The 1986 amendments to RCRA enabled EPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances. This listing refers to facilities subject to corrective actions.

RCRAT Resource Conservation & Recovery Act - Non-CORRACTS Treatment, Storage & Disposal Facilities

VERSION DATE: 09/14/20

The Resource Conservation and Recovery Act (RCRA) gives the U.S. Environmental Protection Agency (EPA) the authority to control hazardous waste from the "cradle-to-grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also set forth a framework for the management of non-hazardous solid wastes. The 1986 amendments to RCRA enabled EPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances. This listing refers to facilities recognized as hazardous waste treatment, storage, and disposal sites (TSD).

RODS Record of Decision System

VERSION DATE: 09/21/20

These decision documents maintained by the United States Environmental Protection Agency describe the chosen remedy for NPL (Superfund) site remediation. They also include site history, site description, site characteristics, community participation, enforcement activities, past and present activities, contaminated media, the contaminants present, and scope and role of response action.

SEMS Superfund Enterprise Management System

VERSION DATE: 09/21/20

The U.S. Environmental Protection Agency's (EPA) Office of Solid Waste and Emergency Response, Office of Superfund Remediation and Technology Innovation (OSRTI), has implemented The Superfund Enterprise Management System (SEMS), formerly known as CERCLIS (Comprehensive Environmental Response, Compensation and Liability Information System) to track and report on clean-up and enforcement activities taking place at Superfund sites. SEMS represents a joint development and ongoing collaboration between Superfund's Remedial, Removal, Federal Facilities, Enforcement and Emergency Response programs.

SEMSARCH Superfund Enterprise Management System Archived Site Inventory

VERSION DATE: 09/21/20

The U.S. Environmental Protection Agency's (EPA) Superfund Enterprise Management System Archived Site Inventory (List 8R Archived) replaced the CERCLIS NFRAP reporting system in 2015. This listing reflects sites at which the EPA has determined that assessment has been completed and no further remedial action is planned under the Superfund program.

SEMSLIENS SEMS Lien on Property

VERSION DATE: 06/22/20

The U.S. Environmental Protection Agency's (EPA) Office of Solid Waste and Emergency Response, Office of Superfund Remediation and Technology Innovation (OSRTI), has implemented The Superfund Enterprise Management System (SEMS), formerly known as CERCLIS (Comprehensive Environmental Response, Compensation and Liability Information System) to track and report on clean-up and enforcement activities taking place at Superfund sites. SEMS represents a joint development and ongoing collaboration between Superfund's Remedial, Removal, Federal Facilities, Enforcement and Emergency Response programs. This is a listing of SEMS sites with a lien on the property.

SFLIENS CERCLIS Liens

VERSION DATE: 06/08/12

A Federal CERCLA ("Superfund") lien can exist by operation of law at any site or property at which United States Environmental Protection Agency has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties. This database contains those CERCLIS sites where the Lien on Property action is complete. Please refer to the SEMSLIENS database as source of current data.

SMCRA Surface Mining Control and Reclamation Act Sites

VERSION DATE: 06/24/20

An inventory of land and water impacted by past mining (primarily coal mining) is maintained by the Office of

Surface Mining Reclamation and Enforcement (OSMRE) to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of AML impacts, as well as, information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.

SSEHRIPFAS SSEHRI PFAS Contamination Sites

VERSION DATE: 12/12/19

This PFAS Contamination Site Tracker database is compiled by the Social Science Environmental Health Research Institute (SSEHRI) at Northeastern University. According to the SSEHRI, the database records qualitative and quantitative data from each known site of PFAS contamination, including timeline of discovery, sources, levels, health impacts, community response, and government response. The goal of this database is to compile information and support public understanding of the rapidly unfolding issue of PFAS contamination. All data presented was extracted from government websites, news articles, or publicly available documents, and this is cited in the tracker. Disclaimer: The source conveys this database undergoes regular updates as new information becomes available, some sites may be missing and/or contain information that is incorrect or outdated, as well as their information represents all contamination sites SSEHRI is aware of, not all possible contamination sites. This data is not intended to be used for legal purposes. Limited location details are available with this data. Please access the following source link for the most current information: https://pfasproject.com/pfas-contamination-site-tracker/

SSTS Section Seven Tracking System

VERSION DATE: 08/04/20

The United States Environmental Protection Agency tracks information on pesticide establishments through the Section Seven Tracking System (SSTS). SSTS records the registration of new establishments and records pesticide production at each establishment. The Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) requires that production of pesticides or devices be conducted in a registered pesticide-producing or device-producing establishment. "Production" includes formulation, packaging, repackaging, and relabeling. For this database, the Product Information is only available for establishments up through 2014 or prior years, product details are no longer released by the EPA within the current SSTS non-Confidential Business Information data.

TRI Toxics Release Inventory

VERSION DATE: 12/31/18

The Toxics Release Inventory, provided by the United States Environmental Protection Agency, includes data on toxic chemical releases and waste management activities from certain industries as well as federal and tribal facilities. This inventory contains information about the types and amounts of toxic chemicals that are released each year to the air, water, and land as well as information on the quantities of toxic chemicals sent to other facilities for further waste management.

TSCA Toxic Substance Control Act Inventory

VERSION DATE: 12/31/16

The Toxic Substances Control Act (TSCA) was enacted in 1976 to ensure that chemicals manufactured, imported, processed, or distributed in commerce, or used or disposed of in the United States do not pose any unreasonable risks to human health or the environment. TSCA section 8(b) provides the United States Environmental Protection Agency (EPA) authority to "compile, keep current, and publish a list of each chemical substance that is manufactured or processed in the United States." This TSCA Chemical Substance Inventory contains non-confidential information on the production amount of toxic chemicals from each manufacturer and importer site. The EPA has collected Chemical Data Reporting (CDR) data since in 1986 (as Inventory Update Reporting). Collections occur approximately every four years and reporting requirements changed from collection to collection.

USUMTRCA Uranium Mill Tailings Radiation Control Act Sites

VERSION DATE: 03/04/17

The Legacy Management Office of the Department of Energy (DOE) manages radioactive and chemical waste, environmental contamination, and hazardous material at over 100 sites across the U.S. The L.M. Office manages this database of sites registered under the Uranium Mill Tailings Control Act (UMTRCA).

Environmental Records Definitions - STATE (CA)

ABST Above Ground Storage Tanks

VERSION DATE: 08/30/20

This database, provided by the California Environmental Protection Agency's (CalEPA) Regulated Site Portal, contains aboveground petroleum storage tank facilities originating from the California Environmental Reporting System (CERS). These facilities store petroleum in aboveground storage tanks with oversight by local agencies. As of January 1, 2008, Assembly Bill No. 1130 of the Aboveground Petroleum Storage Act (APSA) authorized the Certified Unified Program Agencies to implement and administer the requirements of the APSA. CalEPA Data Disclaimer: Information displayed in the portal is collected from separate agency databases and displayed unaltered. Information that is considered confidential, trade secret, or is otherwise protected by the agency that manages the database is not loaded into the portal. For more detail about information displayed in the portal, please visit the data source sites. Please refer to AST2007 database for aboveground storage tank information obtained from the California State Water Resources Control Board prior to 2008 APSA requirements.

AST2007 Aboveground Storage Tanks Prior to January 2008

VERSION DATE: 12/01/07

This database contains aboveground storage tank facilities registered with the California State Water Resources Control Board (SWRCB) between 2007 and 2003. Since 2006, tanks were required to contain a minimum (even as cumulative) of 1320 gallons to be in the program. As of January 1, 2008, the SWRCB no longer maintains a list of registered aboveground storage tanks, due to effective Assembly Bill No. 1130 (Laird) of the Aboveground Petroleum Storage Act (APSA). This Bill authorized the Certified Unified Program Agencies to implement and administer the requirements of the APSA. Please refer to ABST database as a current source for aboveground petroleum storage tank data.

BF Brownfield Sites

VERSION DATE: 08/16/20

This database of Brownfield Memorandum of Agreement (MOA) sites is maintained by the California Environmental Protection Agency. The California Department of Toxic Substances Control (CTSC), the State Water Resources Control Board, and the Regional Water Quality Control Boards (RWQCBs) agreed to a Brownfield Memorandum of Agreement (MOA). The MOA limits the oversight of a brownfields site to one agency, establishes procedures and guidelines for identifying the lead agency, calls for a single uniform site assessment procedure, requires all cleanups to address the requirements of the agencies, defines roles and responsibilities, provides for ample opportunity for public involvement, commits agencies to review time frames, and commits agencies to coordinate and communicate on brownfields issues. The Brownfield MOA site list is obtained from the State Water Resources Control Board GeoTracker online database. This list contains both open and completed sites.

CALSITES CALSITES Database

VERSION DATE: 05/01/04

This historical database was maintained by the Department of Toxic Substance Control for more than a decade.

CALSITES contains information on Brownfield properties with confirmed or potential hazardous contamination. In 2006, DTSC introduced EnviroStor as the latest Brownfields site database.

CDL Clandestine Drug Labs

VERSION DATE: 06/30/19

The California Department of Toxic Substance Control (DTSC) maintains this listing of illegal drug laboratories. DTSC maintains a limited cost-tracking database to manage and pay appropriate contractor invoices for removal costs. The data source is an expenditure report with the contractors' invoice information and the reported removal action locations. The reported location information may or may not include the actual location of the illegal drug lab for several reasons. First, DTSC receives the location information verbally from law enforcement or local environmental health officials in the initial request for emergency support. Second, DTSC does not verify the information received and does not perform "data cleaning" or other measures to ensure data quality. Third, the location information may not be the actual location of an illegal drug lab or any hazardous substance release to the environment. The initial report may have provided the location of the nearest identifiable address to an illegal drug lab or mobile lab or abandonment of illegal drug lab wastes, or a nearby meeting location for the contractor. Please note the DTSC does not guarantee the accuracy of the address or location information or the condition of the location listed. The listing of an address or location in this database does not indicate that any illegal drug lab materials were or were not present there, and does not constitute a determination that the address or location either requires or does not require additional cleanup work or mitigation action.

CHMIRS California Hazardous Material Incident Report System

VERSION DATE: 05/31/20

The California Hazardous Material Incident Report System list is maintained by the California Governor's Office of Emergency Services (OES). This list contains all spills called in to the California OES Warning Center for a specific year since 1993.

CLEANER Dry Cleaner Facilities

VERSION DATE: 05/29/20

This list of dry cleaners is maintained by the California Department of Toxic Substances Control (DTSC). Data is extracted from the DTSC Hazardous Waste Tracking System. This list includes dry cleaner facilities that have registered EPA identification numbers. These facilities are categorized by SIC codes (7211, 7212, 7213, 7215, 7216, 7217, 7218, 7219). This database may also include facilities other than dry cleaners who also register with these same NAICS Codes. Not all companies report their NAICS/SIC Codes to the DTSC, therefore this database may exclude registered dry cleaner facilities with incomplete classification information.

CLEANUPSITES GeoTracker Cleanup Sites

VERSION DATE: 10/07/20

This list of GeoTracker Cleanup Sites is maintained by the California State Water Resources Control Board. The database contains contaminated sites that impact groundwater or have the potential to impact ground water,

including sites that require cleanup, such as Leaking Underground Storage Tank Sites, Department of Defense Sites, and Cleanup Program Sites. GeoTracker also contains records for various unregulated projects as well as permitted facilities including: Irrigated Lands, Oil and Gas production, operating Permitted USTs, and Land Disposal Sites. GeoTracker portals retrieve records and view integrated data sets from multiple State Water Board programs and other agencies.

CORTESE Cortese List

VERSION DATE: 10/08/20

This list of hazardous waste and substances sites (Cortese List) is maintained by the California Department of Toxic Substances Control (DTSC). DTSC's Brownfields and Environmental Restoration Program (Cleanup Program) EnviroStor database provides DTSC's component of Cortese List data by identifying Annual Workplan (now referred to State Response and/or Federal Superfund), and Backlog sites listed under Health and Safety Code section 25356. In addition, DTSC's Cortese List includes Certified with Operation and Maintenance sites. The list, or a site's presence on the list, has bearing on the local permitting process as well as on compliance with the California Environmental Quality Act (CEQA). Because this statute was enacted over twenty years ago, some of the provisions refer to agency activities that were conducted many years ago and are no longer being implemented and, in some cases, the information to be included in the Cortese List does not exist.

DROP Listing of Certified Dropoff, Collection, and Community Service Programs

VERSION DATE: 09/20/20

This list of Certified Dropoff, Collection, and Community Service Programs (non-buyback) operating under the state of California's Beverage Container Recycling Program is maintained by the California Department of Resources Recycling and Recovery.

DTSCDR DTSC Deed Restrictions

VERSION DATE: 09/15/20

The California Department of Toxic Substances Control (DTSC) maintains this listi of sites with deed restrictions. According to the DTSC, restricted land use indicates whether the site or area within the site has an environmental restriction recorded and/or other institutional control preventing certain types of land use or activities. The land use restrictions listed under the site management requirements are only an abbreviated summary of the land use restrictions, and may not encompass all restrictions and notification requirements placed on a property. For complete land use restriction information please contact the DTSC to review associated Land Use Restriction documents.

DTSCHWT DTSC Registered Hazardous Waste Transporters

VERSION DATE: 07/21/20

The California Department of Toxic Substances Control maintains this list of Registered Hazardous Waste Transporters.

EMI Emissions Inventory Data

VERSION DATE: 12/31/18

This list of Emissions Inventory Data is maintained by the California Environmental Protection Agency California Environmental Agency Air Resources Board. This list includes criteria pollutant data and toxic data. Please note gas stations, print shops, autobody shops, and dry cleaners are not included in this list.

ENVIROSTOR EnviroStor Cleanup Sites

VERSION DATE: 10/09/20

This list of Envirostor Cleanup Sites is maintained by the California Department of Toxic Substances Control (DTSC). DTSC has developed the EnviroStor database system to evaluate and track sites with confirmed or potential contamination and sites where further investigation may be necessary. This EnviroStor database of cleanup sites contains the following: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites.

ENVIROSTORPCA EnviroStor Permitted and Corrective Action Sites

VERSION DATE: 10/15/20

The California Department of Toxic Substance Control maintains this list of Hazardous Waste sites in their Envirostor online database. This list contains: 1) data pertaining to the Hazardous Waste Sites tracked in Envirostor; 2) the completed activities for Hazardous Waste Units; 3) the completed activities for Hazardous Waste Units undergoing closure; 4) completed maintenance activities; 5) the various "aliases" for a project (Some examples are: alt project name, alt address, EPA ID, etc.).

ERAP Expedited Removal Action Program Sites

VERSION DATE: 10/09/20

This list of Expedited Removal Action Program Sites is a subset of the EnviroStor database, maintained by the California Department of the Toxic Substance Control. Sites are queried from Envirostor by site type = State Response ERAP.

HISTCORTESE Historical Cortese List

VERSION DATE: 11/02/02

This historical listing includes hazardous waste and substances sites designated by the State Water Resources Control Board, the Integrated Waste Board, and the Department of Toxic Substance Control. The Cortese List was utilized by the State, local agencies and developers to comply with the California Environmental Quality Act requirements in providing information about the location of hazardous materials release sites. See CACORTESE for an updated version of this database.

HISTUST Historical Underground Storage Tanks

VERSION DATE: 12/31/87

The Hazardous Substance Storage Container Database is a historical list of Underground Storage Tank sites, compiled from tank survey and registration information collected at one time between 1984 and 1987 by the State Water Resources Control Board. The hazardous substances stored within these tanks includes, but not restricted to, petroleum products, industrial solvents, and other materials.

HWTS Hazardous Waste Tanner Summary

VERSION DATE: 12/31/19

The Hazardous Waste Tanner Summary is maintained by the California Department of Toxic Substances Control (DTSC). This list includes data extracted from the copies of hazardous waste manifests received each year by the DTSC.

LDS Land Disposal Sites

VERSION DATE: 10/07/20

This list of Land Disposal sites (Landfills) is a subset of the GeoTracker Cleanup Sites database, maintained by the California State Water Resources Control Board. Sites are queried from GeoTracker by case type = Land Disposal Site.

LIENS Recorded Environmental Cleanup Liens

VERSION DATE: 05/20/20

The California Department of Toxic Substance Control (DTSC) maintains this list of liens placed upon real properties. A lien is utilized by the DTSC to obtain reimbursement from responsible parties for costs associated with the remediation of contaminated properties.

LUST Leaking Underground Storage Tanks

VERSION DATE: 10/07/20

This list of leaking underground storage tanks is a subset of the GeoTracker Cleanup Sites database maintained by the California State Water Resources Control Board. Sites are queried from GeoTracker by case type = LUST Cleanup Site.

MCS Military Cleanup Sites

VERSION DATE: 10/07/20

This list of Military sites is a subset of the GeoTracker Cleanup Sites database maintained by the California State Water Resources Control Board. Sites are queried from GeoTracker by case type = Military Cleanup Sites. This

list includes : Military UST sites; Military Privatized sites; and Military Cleanup sites (formerly known as DoD non UST).

MINES Mines Listing

VERSION DATE: 10/14/20

This list includes mine site locations extracted from the Mines Online database, maintained by the California Department of Conservation. Mines Online (MOL) is an interactive web map designed with GIS features that provide information such as the mine name, mine status, commodity sold, location, and other mine specific data. Please note: Mine location information is provided to assist experts in determining the location of mine operators in accordance with California Civil Code section 1103.4 and reflects information reported by mine operators in annual reports provided under Public Resources Code section 2207. While the Division of Mine Reclamation (DMR) attempts to populate MOL with accurate location information, the DMR cannot guarantee the accuracy of operator reported location information.

MWMP California Medical Waste Management Program Facility List

VERSION DATE: 07/08/20

This list of Medical Waste Management Program Facilities is maintained by the California Department of Public Health. The Medical Waste Management Program (MWMP) regulates the generation, handling, storage, treatment, and disposal of medical waste by providing oversight for the implementation of the Medical Waste Management Act (MWMA). The MWMP permits and inspects all medical waste off-site treatment facilities, medical waste transporters, and medical waste transfer stations. This list contains transporters, treatment, and transfer facilities.

NFA No Further Action Determination

VERSION DATE: 09/09/19

This list of No Further Action (NFA) sites is maintained by the California Department of Toxic Substances Control. NFA identifies sites where a Phase I Environmental Assessment was completed and resulted in a no action required determination. Please refer to ENVIROSTOR for current No Further Action sites.

NFE Sites Needing Further Evaluation

VERSION DATE: 08/31/20

This list of Inactive - Needs Evaluation sites is maintained by the California Department of Toxic Substances Control. These are unconfirmed contaminated properties that need further assessment. This data is queried from the Department of Toxic Substances Control Evirostor online database.

NPDES National Pollutant Discharge Elimination System Facilities

VERSION DATE: 08/19/20

This list of active, historical, and terminated National Pollutant Discharge Elimination System Facilities permits is maintained by the California Environmental Protection Agency State Water Resources Control Board. This data includes storm water general permit enrollees that are active or have been active within the past three years. Please note there can be multiple listings for a single permit due to multiple dischargers, multiple facilities, and/or multiple address listings. Please use the Regulatory Measure ID to identify duplicates, as this is a unique identifier for each permit.

PFAS PFAS Sampling Location Sites

VERSION DATE: 09/15/20

This list of PFAS Sampling Locations is maintained by the California State Water Resources Control Board (SWRCB). This list contains site locations with Per- and Polyfluoroalkyl Substances (PFAS) analytical data. The data can represent individual sampling points (i.e. soil boring, groundwater monitoring well, drinking water well, etc.) or a site location with multiple sampling points. Sites currently under investigation are not included in this database until analytical results are finalized and submitted electronically by the Responsible Parties via GeoTracker's Electronic Submittal of Information Portal, and after acceptance by a Regional Water Quality Control Board. According to the SWRCB, the addresses in this data may or may not be accurate.

PROC Listing of Certified Processors

VERSION DATE: 07/29/20

This list of Certified Processors that are operating under the state of California's Beverage Container Recycling Program is maintained by the California Department of Resources Recycling and Recovery.

REF Referred to Another Local or State Agency

VERSION DATE: 09/02/20

This Referred to Another Local or State Agency list, maintained by the California Department of Toxic Substances Control (DTSC), contains properties where contamination has not been confirmed and which were determined as not requiring direct Department of Toxic Substance Control Site Mitigation Program action or oversight. Accordingly, these sites have been referred to another state or local regulatory agency. This data is extracted from the DTSC Envirostor online database and is queried by Status = "Refer state and local agencies".

SLIC Spills, Leaks, Investigation & Cleanup Recovery Listing

VERSION DATE: 08/10/20

This list of Spills, Leaks, Investigation & Cleanup Recovery sites is maintained by the California Regional Water Quality Control Board (RWQCB). This list all "non-federally owned" sites that are regulated under the State Water Resources Control Board's Site Cleanup Program and/or similar programs conducted by each of the nine Regional Water Quality Control Boards. Cleanup Program Sites are also commonly referred to as "Site Cleanup Program sites". Cleanup Program Sites are varied and include but are not limited to pesticide and fertilizer facilities, rail yards, ports, equipment supply facilities, metals facilities, industrial manufacturing and maintenance sites, dry cleaners, bulk transfer facilities, refineries, mine sites, landfills, RCRA/CERCLA cleanups, and some

brownfields. Unauthorized releases detected at Cleanup Program Sites are highly variable and include but are not limited to hydrocarbon solvents, pesticides, perchlorate, nitrate, heavy metals, and petroleum constituents, to name a few.

SWEEPS Statewide Environmental Evaluation and Planning System

VERSION DATE: 10/01/94

The Statewide Environmental Evaluation and Planning System (SWEEPS) contains a historical listing of active and inactive underground storage tank locations from the State Water Resources Control Board. The hazardous substances stored within these tanks includes, but not restricted to, petroleum products, industrial solvents, and other materials. Refer to CUPA listing for source of current data.

SWIS Solid Waste Information System Sites

VERSION DATE: 07/22/20

This list of Solid Waste Information System Sites is extracted from the Solid Waste Information System (SWIS) database, maintained by the California Department of Resources Recycling and Recovery. The SWIS database includes information on solid waste facilities, operations, and disposal sites located in California. The types of facilities found in this database include landfills, transfer stations, material recovery facilities, composting sites, transformation facilities, waste tire sites, and closed disposal sites.

SWRCY Recycling Centers

VERSION DATE: 08/03/20

This list of Certified Recycling Centers that are operating under the state of California's Beverage Container Recycling Program is maintained by the California Department of Resources Recycling and Recovery.

TOXPITS Toxic Pits Cleanup Act Sites

VERSION DATE: 07/01/95

Toxic Pits are sites with possible contamination of hazardous substances where cleanup is necessary. This listing is no longer updated by the State Water Resources Control Board.

USTCUPA Underground Storage Tanks

VERSION DATE: 10/14/20

The California State Water Resources Control Board maintains this list of permitted underground storage tanks. Permitted Underground Storage Tank (UST) Facilities includes facilities at which the owner or operator has been issued a permit to operate one or more USTs by the local permitting agency. Permitted UST Facilities are imported weekly from the California Environmental Reporting System (CERS).

VCP Voluntary Cleanup Program

VERSION DATE: 10/09/20

This list of Voluntary Cleanup Sites is a subset of the Envirostor database maintained by the California Department of Toxic Substance Control. Sites are queried from Envirostor by site type = Voluntary Cleanup.

WMUDS Waste Management Unit Database

VERSION DATE: 01/01/00

The Waste Management Unit Database System tracks and inventories waste management units. CCR Title 27 contains criteria stating that Waste Management Units are classified according to their ability to contain wastes. Containment shall be determined by geology, hydrology, topography, climatology, and other factors relating to the ability of the Unit to protect water quality. Water Code Section 13273.1 requires that operators submit a water quality solid waste assessment test (SWAT) report to address leak status. The WMUDS was last updated by the State Water Resources control board in 2000.

Environmental Records Definitions - TRIBAL

INDIANRES Indian Reservations

VERSION DATE: 09/27/17

This database is extracted from select geographic and cartographic information from the U.S. Census Bureau. The Bureau of Indian Affairs (BIA) within the U.S. Department of the Interior (DOI) provides the list of federally recognized tribes. The American Indian/Alaska Native/Native Hawaiian (AIANNH) Areas includes the following legal entities: federally recognized American Indian reservations and off-reservation trust land areas, state-recognized American Indian reservations, and Hawaiian home lands (HHLs). The boundaries for federally recognized American Indian reservations and off-reservation trust lands are as of January 2017. The boundaries for state-recognized American Indian reservations and for state designated tribal statistical areas were delineated by state governor-appointed liaisons for the 2010 Census through the State American Indian Reservation Program and Tribal Statistical Areas Program respectively.

LUSTR09 Leaking Underground Storage Tanks On Tribal Lands

VERSION DATE: 04/08/20

This database, provided by the United States Environmental Protection Agency (EPA), contains leaking underground storage tanks on Tribal lands located in EPA Region 9. This region includes the following states: Arizona, California, Hawaii, Nevada, and the territories of Guam and American Samoa.

ODINDIAN Open Dump Inventory on Tribal Lands

VERSION DATE: 11/08/06

This Indian Health Service database contains information about facilities and sites on tribal lands where solid waste is disposed of, which are not sanitary landfills or hazardous waste disposal facilities, and which meet the criteria promulgated under section 4004 of the Solid Waste Disposal Act (42 U.S.C. 6944).

TORRESDUMPSITES Illegal Dump Sites on the Torres Martinez Reservation

VERSION DATE: 12/31/18

This listing of illegal dump site locations on the Torres Martinez Reservation is maintained by the United States Environmental Protection Agency, Region IX. These dump sites contain unlawfully discarded household waste such as landscaping and wood wastes with no known soil or groundwater contamination. A majority of the sites have already been cleaned up through the collaborative efforts of the EPA, The California Integrated Waste Management Board and the Torres Martinez Tribe. This data contains the 2007 List of Illegal Dump Site Locations from the Torres Martinez Reservation and the 2017-2018 List of Illegal Dump Site Locations from the Torres Martinez Reservation.

USTR09 Underground Storage Tanks On Tribal Lands

VERSION DATE: 04/08/20

This database, provided by the United States Environmental Protection Agency (EPA), contains underground

storage tanks on Tribal lands located in EPA Region 9. This region includes the following states: Arizona, California, Hawaii, Nevada, and the territories of Guam and American Samoa.

APPENDIX J

RESUMES OF ENVIRONMENTAL PROFESSIONALS

Lucia E. Tropeano

Staff Geologist

Ms. Tropeano is a staff geologist who has participated in a variety of site assessments and investigations, as well as remediation projects. Her experience has included: soil, groundwater, and soil gas sampling. She has provided on-site field support to project managers, geologists, and engineers on a variety of construction projects. Ms. Tropeano is proficient in Microsoft Word, Excel, and PowerPoint with working knowledge of ArcGIS and gINT software.

EDUCATION

B.S., Geology, Sonoma State University, Rohnert Park, California, 2018

EXPERIENCE

2019 – Present: PES Environmental, Inc., Novato, California

HEALTH AND SAFETY TRAINING

Health and Safety training courses following EPA and OSHA requirements
40-hour HAZWOPER training

JAMES P. DUNN, P.G.

Principal Geologist

Mr. Dunn has over 30 years of professional experience in the hazardous waste management and geotechnical field. Mr. Dunn has served as a project manager and geologist on numerous multi-faceted projects including site investigations, corrective action, environmental compliance, and real estate assessment projects. He has experience in conducting investigations, planning, and coordinating analytical laboratory work, interpreting data, evaluating, and selecting remedial alternatives, and conducting corrective action for numerous projects, including several RCRA sites. Mr. Dunn has also served as project manager and provided technical expertise in performing facility environmental compliance assessments, tenant environmental audits on behalf of property ownership as well as facility closures where a variety of chemical use and/or storage was conducted.

Mr. Dunn is experienced in stormwater pollution prevention management including development and preparation of stormwater pollution prevention plans; compliance with State General Permits for construction and industrial activities; development and implementation of stormwater inspection and discharge monitoring; and preparation of annual reports.

EDUCATION

B.S., Geology, Sonoma State University, Rohnert Park, California, 1985
Single Subject Credential, Earth Sciences, State of California, 2003

Postgraduate education includes seminars in groundwater hydrology, hazardous waste management and underground storage tank issues.

SAFETY TRAINING

Health and Safety training courses following EPA and OSHA requirements. Courses included training in physical, chemical, and toxicological properties of hazardous materials; hazard evaluation and control; selection and use of personal protective equipment; sampling and monitoring techniques and equipment; site entrance and decontamination procedures; and safety plan development.

EXPERIENCE

1989 - Present:	PES Environmental, Inc., Novato, California
1987 - 1989:	Harding Lawson Associates, Novato, California
1986 - 1987:	Barrett Consulting Group, Costa Mesa, California
1984 - 1986:	Applied Earth Sciences, Rohnert Park, California

REGISTRATION

Registered Professional Geologist – California
Certified Qualified Stormwater Pollution Prevention Plan Developer/Practitioner - California

REPRESENTATIVE PROJECTS

Environmental Projects

Comprehensive Environmental Management and Remediation Program, Napa Pipe Facility, Napa, California – Project Manager for a comprehensive environmental management program including investigation and remediation of this 150-acre industrial facility on the Napa River. Project site is a former shipyard and industrial manufacturing complex that is undergoing redevelopment for residential and commercial uses. Mr. Dunn's responsibilities include implementation of overall environmental strategy, oversight of investigations and remedial planning functions, preparing remedial planning documents, ongoing remedial actions, regulatory agency negotiations, environmental compliance manager and stormwater pollution prevention program management. Client: Napa Redevelopment Partners

Richmond Marsh Restoration, Richmond, California - Large amounts of red lead paint residue were uncovered during construction of new channels to restore marshlands on the edge of San Francisco Bay. As project manager, participated in technical aspects to develop and implement site characterization; developed, tested, and analyzed potential remedial actions; selected preferred remedial actions; prepared draft and final Remedial Action Plans; developed Community Relations Plan and participated in public hearings; developed construction plans and specifications; conducted contract negotiations with clean-up contractor; and supervised remedial construction activities. Participated in negotiations with state regulatory agencies. Obtained hazardous waste declassification of residual soils. Client: City of Richmond Redevelopment Agency

Miraflores Housing Development Project, Former Nursery Facilities, Richmond, California – Mr. Dunn is Project Manager for stormwater compliance during site demolition and remedial construction. Clients: City of Richmond, Eden Housing, Inc. and Community Housing Development Corporation of North Richmond

Groundwater Investigation and Mitigation Program, Florin Mall Redevelopment, Sacramento, California – Project manager and geologist for investigation of chlorinated solvents in groundwater that have migrated onto this regional shopping mall property from a former off-site dry-cleaning facility. Designed mitigations include installation of a flexible vapor barrier beneath new commercial development. Activities performed under a voluntary agreement with the Central Valley RWQCB. Clients: Highland Development Corp. and Stonehenge Property Group

The Caloyeras Trust, Forestville, California – Project manager and geologist for investigation of chlorinated solvents in groundwater that have migrated onto an adjacent school property. Designed investigations to evaluate the extent of release and develop corrective action. Main liaison with State regional water board staff.

Crown Cork & Seal Company, Inc. - Richmond Facility, Richmond, California - Mr. Dunn is the project manager for site investigation and remediation at a former beverage can manufacturing facility. Project included assessment of the presence and extent of onsite and off-site soil and groundwater contamination, performance of an asbestos assessment, coordination of asbestos and PCB remediation, and formulation of remedial alternatives for mitigation of hydrocarbon and VOC-affected soil and groundwater.

Koll Company, Hayward, California - Mr. Dunn acted as the project manager for site investigation of a former 22-acre building fabrication facility. Project included assessments for the presence and extent of various contaminants in soil and groundwater, including petroleum products and lead; evaluation of remedial alternatives for each type of contaminant; and preparation of a draft Remedial Action Plan.

City of Richmond Redevelopment Agency, Richmond, California - Mr. Dunn managed a site investigation for soil and groundwater contamination at a former shipyard facility. Characterized degree and extent of hydrocarbon and heavy metal contamination. Also designed and implemented remedial measures to remove and biodegrade hydrocarbon-bearing soils.

Transit Mixed Concrete Company, Several Southern California Counties, California - As project manager, Mr. Dunn was responsible for acquiring permits for underground tanks containing hazardous materials for a major Southern California ready-mix concrete producer. Conducted hydrogeologic investigations, developed and coordinated testing program for over 50 underground tanks at 15 sites, designed tank monitoring programs, coordinated the

installation of monitoring and spill protection equipment, supervised field activities, and conducted regulatory agency negotiations.

Facility Closure, various sites - Mr. Dunn was the project manager for facility closures where pasts chemical use and/or storage was conducted. Activities included developing closure plans; permitting; oversight of decontamination contractor activities, clearance sampling and chemical analyses; and documentation of closure activities.

Hazardous Waste Investigation, State Superfund Site, Richmond, California - Project geologist for site investigation and evaluation of remedial alternatives for submerged and adjacent lands at a bulk transfer shipping facility where soil contaminated with high levels of chlorinated pesticides were identified. Client: Levin Richmond Terminal Corporation

Litigation Support, various sites - Mr. Dunn has provided technical analysis and site characterization/risk-based assessment services for numerous environmental-based lawsuits. Client: Confidential

Site Redevelopment and Cost Allocation, City of Pleasant Hill, California - Mr. Dunn is the project manager for an environmental assessment and remedial cost allocation project for a major redevelopment program. This project included completion of a multi-property assessment and investigation as well as an evaluation of site conditions to determine environmental offsets. Client: Confidential

Annual Environmental Compliance Audits and Risk Evaluation, Lennar Mare Island, City of Vallejo, California – Mr. Dunn, as lead geologist and project manager, conducted annual environmental audits for the tenant holding of tenant operations on the Mare Island property. Project included evaluate general environmental conditions of tenant operations, assessment of tenant operations and evaluate hazardous materials and/or hazardous waste usage, assessment of tenant compliance with Federal, State and local hazardous materials and hazardous waste regulations, a applicable, and providing recommendations for minimizing potential adverse environmental affects to the Lennar Mare Island LLC property resulting from tenant operations. Client: Lennar Mare Island LLC

Real Estate Assessment Projects, various sites - Mr. Dunn was the project manager responsible for all phases of numerous real estate transfers and refinancing projects. Projects involved evaluating properties for potential liability due to hazardous waste contamination, site history evaluations, site inspections, regulatory review, and preparation of assessment reports. Several projects included completion of preliminary soil and groundwater screening for hazardous waste contamination.

DISTRIBUTION

PHASE I
ENVIRONMENTAL SITE ASSESSMENT
A PORTION OF EL CAMINO CENTER
200-336 PORTAGE AVENUE,
PALO ALTO, CALIFORNIA

NOVEMBER 17, 2020

The Sobrato Organization — Electronic Copy
Attention: Mr. Tim Steele
599 Castro Street, Suite 400
Mountain View, CA 94041

PES Electronic File