Remediation Action Plan (RAP) for the Former Mouren-Laurens Oil Company and Leach Oil Company Sites Project

Responses to Comments and Final Initial Study/Negative Declaration

SCH No. 2025020705

Prepared for

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June 2025

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APPENDICES

Appendix

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Appendix C	Approval of Underground Pipeline Removal Work Plan – May 25, 2006

1.0 INTRODUCTION

The purpose of this document is to present public comments and responses to those comments received on the Draft Initial Study/Negative Declaration (Draft IS/ND) for the Remediation Action Plan (RAP) for the Former Mouren-Laurens Oil Company and Leach Oil Company Sites Project (hereinafter referred to as the Project and further described below in Section 1.1), located in unincorporated Los Angeles County (County), near the City of Compton (City). As no potentially significant impacts are identified, no mitigation measures are required.

Pursuant to Section 15367 of the State CEQA Guidelines, the Los Angeles Regional Water Quality Control Board (hereinafter referred to as the RWQCB or Regional Board) is the lead agency for the Project. The RWQCB, as the Lead Agency, has evaluated all substantive comments and has prepared written responses. In accordance with the California Environmental Quality Act (CEQA) Guidelines (Title 14 California Code of Regulations [CCR] Section 15074[b]), the Lead Agency must consider the IS/ND and comments received before approving the Project. This document, which will be provided to Regional Board, has been prepared in accordance with CEQA and represents the independent judgment of the Lead Agency.

Both the MLOC and LOC Sites are located within the Metro Planning Area, which is one of 11 long-range planning areas established by the General Plan for how the unincorporated communities will grow in the future. Within the Metro Planning Area, the Project Sites are located within the West Rancho Dominguez-Victoria Community, as shown on Exhibit 1, Regional Location, Local Vicinity, of the IS/ND.

The MLOC Site consists of four parcels at 641, 705, 717, and 719 East Compton Boulevard, for a total area of 3.76 acres. The LOC Site consists of three parcels at 625 East Compton Boulevard and 15006 South Avalon Boulevard, for a total area of 1.24 acres. The existing MLOC and LOC Sites are depicted on Exhibits 2, 3a, and 3b.

1.1 PROPOSED PROJECT SUMMARY

The Project is the approval and implementation of the 2021 RAP (Appendix A to this document) submitted to the RWQCB by EKI Environment and Water, Inc., (EKI), as updated by the conditions and modifications in the RWQCB's detailed response letter dated April 22, 2022. The updated RAP addresses the contamination of the MLOC and LOC Sites through a series of actions. The implementation of the updated RAP requires development of various studies and workplans and their implementation under RWQCB oversight after receiving RWQCB approval. The proposed remedial approach will require at least: (1) demolition activities, (2) baseline risk assessment and development of cleanup goals, (3) additional assessment to fill data gaps, (4) on-site structures removal, (5) targeted soil excavation, (6) pilot testing and bench-scale testing, (7) SVE system operation, (8) sparging system operation, (9) in-situ chemical oxidation, (10) monitoring specific to each remedial technology to evaluate efficacy of the remedy (11) monitored natural attenuation, and (12) execution of a deed restriction and environmental covenant. Workplans will be required to collect additional information prior to activating the full-scale remedy.



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Regional Location and Local Vicinity

Exhibit 1

RAP for the Former Mouren-Laurens and Leach Oil Sites Project

N W E S

0 1,000 2,000 Feet

PSOMAS

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Legend

- Approximate Property Line
- FireHydrant
- Conduit_Trench
- Conduit
- Gas_lines
- Electric_line
- Water_Lines
- Fence
- Buildings
- Former/ Existing Aboveground Storage Tanks

Notes

1. All locations are approximate.

Sources

1. Basemap courtesy of Esri, photo from April 2020.

Source: EKI Environment & Water, May 2021

Existing Project Site

Exhibit 2

RAP for the Former Mouren-Laurens and Leach Oil Sites Project

N W E S

Map not to scale

PSOMAS

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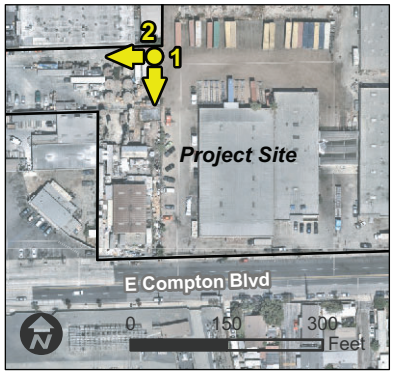

Photo 1. Looking south towards the Mouren-Laurens Oil Company Inc. Site and Compton Blvd.



Photo 2. Looking west towards the Leach Oil Company Inc. Site and Avalon Blvd.

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Site Photographs

Exhibit 3a

RAP for the Former Mouren-Laurens and Leach Oil Sites Project

PSOMAS



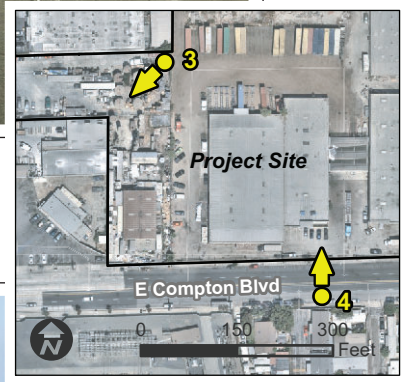

Photo 3. Looking southwest towards the Leach Oil Company Inc. Site.



Photo 4. Looking north towards the Mouren-Laurens Oil Company Inc. Site.

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Site Photographs

Exhibit 3b

RAP for the Former Mouren-Laurens and Leach Oil Sites Project

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1.2 REMEDIAL ACTION OBJECTIVES

Section 13304 of the California Water Code authorizes the RWQCB to order and oversee the cleanup and abatement of waste that is discharged or threatened to be discharged into waters of the State. The updated RAP defines remedial action objectives (RAOs) as being designed to remove, treat in-situ, isolate, and reduce concentrations of COCs present in soil, soil vapor, and groundwater to protect human health, groundwater resources, and the environment. RAOs also should facilitate the evaluation of remedial alternatives that will meet numerical cleanup goals based on the reasonably anticipated land use of the site in question.

The RWQCB requires that the cleanup at both Sites be conducted under the authority of the Porter-Cologne Water Quality Control Act, pursuant to the requirements stated in the Cleanup and Abatement Orders (CAOs) issued for the Sites.

1.3 CLEANUP GOALS

The soil, soil vapor, and the groundwater at the Sites are impacted with COCs and required remediation as proposed in the updated RAP. Therefore, cleanup goals must be developed for the COCs to protect public health, water resources, and the environment. Cleanup goals for soil and groundwater in compliance with the State Water Resources Control Board (SWRCB) Resolution No. 92-49 "Policies and Procedures for Investigation and Cleanup and Abatement of Discharges Under Water Code Section 13304" should protect human health, groundwater and surface water resources, environment, and beneficial uses set forth in the RWQCB's Water Quality Control Plan for the Los Angeles Region (Basin Plan). The groundwater cleanup goals for the site could be based on background levels and/or maximum contamination levels (MCLs). State MCLS are developed pursuant to California Code of Regulations (22 CCR) by the Division of Drinking Water.

Tier 1 screening levels such as the U.S. EPA-established Regional Screening Levels (RSLs) and the San Francisco Regional Water Quality Control Board (SFRWQCB) established Environmental Screening Levels (ESLs) are numerical thresholds for chemicals if present in soil, soil vapor, or groundwater at a site at those concentrations, the Site may be considered safe. The Tier 1 level is used to screen if a COC-containing site poses a significant threat to human health, groundwater resources, and the environment. A site-specific risk assessment may be necessary to evaluate the potential threat to individuals based on the site use. The risk assessment and modeling with using site-specific data may be used to develop site-specific cleanup goals for the remedies implemented at the MLOC and LOC Sites. The risk assessment and Cleanup Goals will be submitted to the RWQCB.

1.4 REMEDIAL ACTION IMPLEMENTATION APPROACH

The updated RAP provides a reasonable approach to address contamination at the Project Sites. It is emphasized that the specifics of each task in the updated RAP are dependent upon the additional information collected during data gap investigations and results of pilot testing and bench-scale testing. The conceptual approach proposed in the updated RAP is

sequential, consisting of several steps that may overlap during implementation. Remedial actions will be implemented consistent with the updated RAP, as described in further detail below.

1.4.1 PRE-REMEDIATION DEMOLITION

Existing aboveground storage tanks and process equipment remaining on the LOC Site will be demolished to prepare the property for remediation. Underground sumps, trenches, and pipelines associated with former operations at the MLOC and LOC Sites also will be removed. Debris generated from these activities will be segregated into recyclable and non-recyclable materials and transported to and disposed of at appropriate off-site, permitted facilities.

An underground pipeline removal and assessment workplan will be submitted to the RWQCB. The workplan will address potential for encountering free product inside or in soil below the pipelines.

1.4.2 DATA GAP INVESTIGATION AND IMPACTED SOIL EXCAVATION

There are data gaps remaining in the delineation of COCs distribution at the Sites. Limited soil vapor data from the early 2000s exist from LOC Site. In addition, soil borings are needed to determine the extent of excavation, particularly around skim pond located at LOC Site. Therefore, a data gap investigation work plan will be submitted to the RWQCB. Subsequently a soil excavation workplan will be developed and submitted to RWQCB.

1.4.3 VOCS REMOVAL

Soil Vapor Extraction (SVE) is recognized as a proven technology. This technology applies a vacuum to create a negative pressure that causes movement of vapors toward extraction wells. The vapors are collected from the subsurface then treated to remove COCs. The SVE wells will be installed within the vadose zone and will be nested with two screen intervals between 5 feet bgs to 65 feet bgs. It is estimated that 15-30 SVE wells will be required but the final number will be based on the result of pilot testing. Air sparging is an in-situ remedial technology that involves injecting air into groundwater, which transfers volatile constituents dissolved in the groundwater into vapor. The vapors are then vented through the unsaturated zone where they are collected by SVE wells for aboveground treatment. The air sparging wells will be screened into the Basal Aquifer, likely at 100 to 105 feet bgs. It is expected that 5-10 air sparging wells will be install at the Site. A pilot study will be conducted to determine the radius of influence, establish COC removal rates, and operating parameters for design and construction of full-scale SVE/air sparging systems at the MLOC and LOC Sites. The purpose of SVE and air sparging is to remove VOCs and sufficient contaminant mass so that biodegradation is no longer impeded by oxygen depletion in the subsurface.

An SVE/air sparging pilot test work plan for the Sites will be developed and submitted to the RWQCB. Based on the pilot test results, a full-scale SVE system and air sparging system design will be developed and submitted to the RWQCB.

1.4.4 IN-SITU CHEMICAL OXIDATION (ISCO)

ISCO is a technique that uses chemicals to clean up soil and groundwater contaminated with hazardous chemicals. ISCO is a type of advanced oxidation process that involves injecting chemicals called oxidants underground through temporary injection points. The oxidants will primarily be injected into Basal Aquifer, which is located 73-110 feet bgs. Additional injections may be done in highly impacted areas within the vadose or within perched water zone between the depths of 50-65 feet bgs. The total number of injection points at the Project Site is expected to be between 10-20 locations. Once the oxidant is pumped down the wells, it spreads into the surrounding soil and groundwater where it mixes and reacts with contaminants. Common oxidants include hydrogen peroxide, potassium permanganate, sodium persulfate, ozone, and permanganate. 1,4-dioxane may not be amenable to volatilization via sparging. Bench-scale testing will be performed to select the suitable oxidant for ISCO.

1.4.5 PERFORMANCE EVALUATIONS

SWRCB Resolution No. 92-49 requires a discharger to address the effects of its waste discharge in a manner that promotes attainment of either background water quality (i.e., water quality that existed before the discharge) or the best water quality that is reasonable if background water quality cannot be restored.

During the implementation of each remedy at the Sites, data will be collected at regular intervals from predetermined monitoring locations on a schedule included in the remedy-specific implementation plan. Groundwater data compiled from existing monitoring wells will also be used to compare the actual performance of remedial technologies to expected performance.

1.4.6 MONITORED NATURAL ATTENUATION

Monitored natural attenuation (MNA) will follow active remediation by SVE, air sparging, and ISCO. MNA refers to the reliance on natural processes to finish site cleanup. Natural processes (e.g., biodegradation, dispersion, dilution, sorption, and volatilization), under favorable conditions, act without human intervention to reduce the mass, toxicity, mobility, volume, and/or concentration of contaminants in soil or groundwater.

RWQCB considers MNA acceptable in certain circumstances and under specific conditions. For example, MNA might be appropriate where a source area is being actively remediated, and MNA is proposed primarily at the fringes of the plume.

1.4.7 CONSTRUCTION

Certain construction activities are anticipated during implementation of the updated RAP. Construction activities would occur in phases, including demolition of the remaining ASTs and process equipment; excavation and demolition associated with the underground sumps, trenches and pipelines; excavation associated with the removal of contaminated soil; SVE

and air sparging well construction; and surface restoration, occurring after excavation and after the full scale remedial system has been installed.

Construction activities would require drilling to install SVE and air sparging wells, as well as installing multi-depth soil vapor probes. Pilot tests will be conducted prior to installation of full scale SVE and air sparging systems. The actual number of SVE, air sparging, and soil vapor probes will be determined based on the results of the pilot tests. Drilling activities would be five days per week, Monday through Friday between 8 AM till 5 PM.

1.4.8 SOIL IMPORT/EXPORT

Implementation of the Project will involve soil removal. It is expected that the maximum volume of soil removal will not exceed 5,000 cy.

Haul trucks with a capacity of 17 cy per load would be utilized to transport the contaminated soil. Inert (non-contaminated) soil would be exported to Azuza Land Reclamation Landfill (owned and operated by Waste Management) in Azuza; Chiquita Canyon Landfill (owned and operated by Waste Connections) located in Santa Clarita; and/or Simi Valley Landfill (owned and operated by Waste Management) located in Simi Valley. Contaminated soil would be directed towards Soil Safe in Adelanto (owned and operated by Soil Safe), or the US Ecology Facility (owned by the State of Nevada and operated by US Ecology) located in Beatty, Nevada. The soil generated at the Project Site will be sampled for waste classification and then disposed offsite to an appropriate TSDF facility under waste manifest.

1.4.9 IMPLEMENTATION TIMEFRAME

The Implementation of the updated RAP is expected to begin within 90 days after RAP approval. Based on the multiple tasks to be carried out from demolition, excavation, active remediation, monitoring, it is expected that it will take approximately 14 years for the updated RAP to be implemented and the Sites to become eligible for no further action determination from the RWQCB.

1.5 PUBLIC REVIEW PROCESS

Upon completion of the IS/ND, the public review was conducted in accordance with Sections 15072 and 15073 of the State CEQA Guidelines. In February 24, 2025, a Notice of Availability (NOA) for Public Comment and Notice of Intent to Adopt a Proposed Initial Study/Negative Declaration (IS/ND) for Remedial Action Plan for the Former Mouren-Laurens Company, Inc. and Loach Oil Company, Inc. Sites(NOI) was prepared and distributed to the responsible and trustee agencies; organizations and interested persons; all persons who requested notice in accordance with CEQA; and the owners and occupants of properties within 500 feet of the Project Site. The NOI and the IS/ND and associated appendices were submitted to the State Clearinghouse (SCH) via CEQAnet.

The NOI was issued for a 30-day public review period on February 24, 2025, through March 25, 2025. The NOI was subsequently filed with the Los Angeles County Clerk-Recorder. The NOI and IS/ND (including technical appendices) were also made

available for review online at the GeoTracker website (https://documents.geotracker.waterboards.ca.gov/regulators/deliverable_documents/7639280021/RAP%20ISND_02032 5-Final_grc.pdf) and in hard copy during regular business hours at the following locations:

Los Angeles Regional Water Quality Control Board
320 W. 4th Street, Suite 200
Los Angeles, CA 90013
Hours: Monday – Friday 9:00 am – 4:00 pm

Compton Library
240 W Compton Boulevard,
Compton, CA 90220
310.637.0202

Hours: **Monday** Closed
Tuesday 12 pm - 8 pm
Wednesday 12 pm - 8 pm
Thursday 10 am - 6 pm
Friday 10 am - 6 pm
Saturday 10 am - 6 pm
Sunday Closed

A total of seven comment letters, two from State Agencies, two from Native American Tribes, and three from individuals, were received prior to and during the public review period. The RWQCB's responses to comments on the IS/ND are provided in Section 3.0 Responses to Comments, of this document.

1.6 CONCLUSION OF THE CEQA PROCESS

The Regional Board has reviewed all comments received to determine whether any substantial new environmental issues have been raised. Based on the evaluation in the IS/ND together with the comments received, the Regional Board has determined that no substantial new environmental issues have been raised, all comments have been adequately addressed in the IS/ND and/or in these Responses to Comments, and a Mitigation Monitoring and Reporting Program (MMRP) document is not required. All potential impacts associated with the Project were found to be less than significant or of no impacts. Therefore, the Project would not result in any significant impacts, and an IS/ND is the appropriate environmental document for the Project in accordance with CEQA and the State CEQA Guidelines.

The Regional Board has considered the IS/ND together with the comments received during the public review process. The Regional Board, as the Lead Agency, is adopting the proposed IS/ND and approve the Project, on the basis of the whole record before it, that there is no substantial evidence that the Project would have a significant effect on the environment, and that the IS/ND reflects the Lead Agency's independent judgment and analysis.

2.0 LIST OF COMMENTERS

The following is a list of commenters that submitted written comments on the Draft IS/ND. The comments are listed chronologically and numbered. The responses have been prepared to match the bracketing on the comment letters. Each comment letter is followed by responses to address the comments. The comment letters and responses are included in Section 3.0 of this document.

No.	Commenter	Date of Correspondence	Page Number
State Agencies			
1	South Coast Air Quality Management District (SCAQMD)	March 14, 2025	11
2	California Department of Conservation, Geologic Energy Management Division (CDC)	March 25, 2025	21
Native American Tribes			
3	Santa Rosa Band of Cahuilla Indians (SRBCI)	February 24, 2025	25
4	Ft. Yuma Quechan Indian Tribe (FYQIT)	March 10, 2025	27
Individuals			
5	Beth Dorris (Dorris-A)	March 14, 2025	30
6	Beth Dorris (Dorris-B)	March 21, 2025	33
7	Law Offices of Beth S. Dorris (Dorris-C)	March 25, 2025	35
Source: Psomas 2025.			

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3.0 RESPONSES TO COMMENTS

The Regional Board's responses to comments received on the Draft IS/ND are provided below. The responses are numbered to match the bracketing on the comment letter. Comment letters received are categorized by State Agencies, Native American Tribes, and Individuals. Within each category, the responses are provided chronologically.

3.1 STATE AGENCIES

Two comment letters were received from State Agencies. The comment letters are listed below:

- South Coast Air Quality Management District (SCAQMD)—March 14, 2024
- California Department of Conservation, Geologic Energy Management Division (CDC)—March 25, 2025

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Letter 1: South Coast Air Quality Management District (SCAQMD)

Comment Letter Dated March 14, 2025

South Coast
Air Quality Management District
21865 Copley Drive, Diamond Bar, CA 91765-4178
(909) 396-2000 • www.aqmd.gov

SENT VIA E-MAIL: March 14, 2025
Adnan.Siddiqui@waterboards.ca.gov
Adnan Siddiqui, Project Manager
Los Angeles Regional Water Quality Control Board
320 4th Street, Suite 200
Los Angeles, CA 90013

Initial Study/Negative Declaration (IS/ND) for the Proposed Remedial Action Plan for the Former Mouren-Laurens and Leach Oil Sites Project (Proposed Project)

South Coast Air Quality Management District (South Coast AQMD) staff appreciate the opportunity to review the above-mentioned document. The Los Angeles Regional Water Quality Control Board is the California Environmental Quality Act (CEQA) Lead Agency for the Proposed Project. To provide context, South Coast AQMD Staff (Staff) has provided a brief summary of the project information and prepared the following comments. SCAQMD-1

Summary of Proposed Project Information in the IS/ND

Based on the IS/ND, the Proposed Project consists of a series of cleanup to address contamination at the Proposed Project site, which includes petroleum hydrocarbons, chlorinated solvents, and other chemicals of concern. The Proposed Project site is comprised of four parcels at 641, 705, 717, and 719 East Compton Boulevard totaling 3.76 acres (referred to as the former Mouren-Laurens Oil Company Site), and three parcels totaling 2.24 acres at 625 East Compton Boulevard and 15006 South Avalon Boulevard (referred to as the Leach Oil Company Inc Site). Both sites are situated next to each other in an unincorporated portion of Los Angeles County near the City of Compton. The Proposed Project is located within the designated AB617 South Los Angeles community. It is expected that cleanup will take approximately 14 years to be implemented and for the Proposed Project sites to become eligible for a no further action determination from the Lead Agency.

South Coast AQMD Comments

South Coast AQMD Air Permits and Role as a Responsible Agency

If implementation of the Proposed Project would require the use of new stationary and portable sources, including but not limited to Soil Vapor Extraction and air sparging systems, emergency generators, fire water pumps, boilers, etc., air permits from South Coast AQMD will be required. As such, the revised CEQA document should include a discussion about the South Coast AQMD rules that may potentially apply to the Proposed Project. Those rules may include, for example, SCAQMD-2

Rule 201 – Permit to Construct,[1] Rule 203 – Permit to Operate,[2] Rule 401 – Visible Emissions,[3] Rule 402 – Nuisance,[4] Rule 403 – Fugitive Dust,[5] Rule 1166 – VOC Contaminated Soil Excavation,[6] Rule 1466 – Control of Particulate Emissions from Soils with Toxic Air Contaminants,[7] Rule 1470 – Requirements for Stationary Diesel Fueled Internal Combustion and Other Compression Ignition Engines,[8] etc. It is important to note that when air permits from South Coast AQMD are required, the role of South Coast AQMD changes from a Commenting Agency to a Responsible Agency under CEQA. In addition, if South Coast AQMD is identified as a Responsible Agency, per CEQA Guidelines Sections 15086, the Lead Agency is required to consult with South Coast AQMD. **SCAQMD-2 cont.**

CEQA Guidelines Section 15096 sets forth specific procedures for a Responsible Agency, including making a decision on the adequacy of the CEQA document for use as part of the process for conducting a review of the Proposed Project and issuing discretionary approvals. Moreover, it is important to note that if a Responsible Agency determines that a CEQA document is not adequate to rely upon for its discretionary approvals, the Responsible Agency must take further actions listed in CEQA Guideline Section 15096(e), which could have the effect of delaying the implementation of the Proposed Project. In its role as CEQA Responsible Agency, the South Coast AQMD is obligated to ensure that the CEQA document prepared for this Proposed Project contains a sufficient project description and analysis to be relied upon in order to issue any discretionary approvals that may be needed for air permits. **SCAQMD-3**

For these reasons, the Final ND should include a discussion about any and all new stationary and portable equipment requiring South Coast AQMD air permits, provide the evaluation of their air quality and greenhouse gas impacts, and identify South Coast AQMD as a Responsible Agency for the Proposed Project as this information will be relied upon as the basis for air permit conditions and emission limits. Please contact South Coast AQMD's Engineering and Permitting staff at (909) 396-3385 for questions regarding what types of equipment would require air permits. For more general information on permits, please visit South Coast AQMD's webpage at https://www.aqmd.gov/home/permits.

Conclusion

The Lead Agency is recommended to revise the CEQA analysis to address the aforementioned comments and provide the necessary evidence to sufficiently support the conclusions reached. If the requested information and analysis are not included in the final CEQA document, either the Final ND or other type of CEQA document, the Lead Agency should provide reasons for not doing so. Pursuant to California Public Resources Code Section 21092.5(b) and CEQA Guidelines Section 15074, prior to approving the Proposed Project, the Lead Agency shall consider the ND for adoption together with any comments received during the public review process and notify each public agency when any public hearings are scheduled. As such, please provide South Coast **SCAQMD-4**

[1] South Coast AQMD. Rule 201 available at https://www.aqmd.gov/docs/default-source/rule-book/reg-ii/rule-201.pdf
[2] South Coast AQMD. Rule 203 available at https://www.aqmd.gov/docs/default-source/rule-book/reg-ii/rule-203.pdf
[3] South Coast AQMD. Rule 401 available at https://www.aqmd.gov/docs/default-source/rule-book/rule-iv/rule-401.pdf
[4] South Coast AQMD. Rule 402 available at https://www.aqmd.gov/docs/default-source/rule-book/rule-iv/rule-402.pdf
[5] South Coast AQMD. Rule 403 available at https://www.aqmd.gov/docs/default-source/rule-book/rule-iv/rule-403
[6] South Coast AQMD. Rule 1166 available at https://www.aqmd.gov/docs/default-source/rule-book/reg-xi/rule-1166.pdf
[7] South Coast AQMD. Rule 1466 available https://www.aqmd.gov/docs/default-source/rule-book/reg-xiv/rule-1466.pdf
[8] South Coast AQMD. Rule 1470 available at https://www.aqmd.gov/docs/default-source/rule-book/reg-xiv/rule-1470.pdf

AQMD with written responses to all comments contained herein prior to the adoption of the Final ND. When responding to issues raised in the comments, detailed reasons supported by substantial evidence in the record to explain why specific comments and suggestions are not accepted must be provided. In addition, if the Lead Agency decides to adopt the Final ND, please provide South Coast AQMD with a notice of any scheduled public hearing(s).

SCAQMD-4 cont.

Thank you for the opportunity to provide comments. South Coast AQMD staff is available to work with the Lead Agency to address any air quality questions that may arise from this comment letter. Please contact Sam Wang, Program Supervisor, at swang1@aqmd.gov should you have any questions.

Sincerely,

Sam Wang

Program Supervisor, CEQA IGR
Planning, Rule Development & Implementation

SW:EA
LAC250221-01
Control Number

Letter 1: South Coast Air Quality Management District (SCAQMD)

Responses to Comments

SCAQMD-1 The commenter, South Coast Air Quality Management District (South Coast AQMD), states that their staff appreciate the opportunity to review the IS/ND. The commenter provides a summary of the Project information in the IS/ND. The comment is noted, and no further response is required.

SCAQMD-2 The commenter notes that if implementation of the Project requires the use of new stationary and portable sources, SCAQMD permits would be required. The commenter adds that the Project's environmental document should include a discussion of potentially applicable rules that the Project needs to comply with; the commenter is referred to the discussion that was included in Section 4.3, Air Quality, of the Draft IS/ND, which states that "the Project would comply with applicable SCAQMD rules and regulations" and "[a]ll necessary SCAQMD permits would be obtained prior to pilot testing and full-scale operation of the SVE and air sparging systems". Additionally, Section 4.3, Air Quality, of the Draft IS/ND details the applicability of SCAQMD Rule 403, Fugitive Dust, and SCAQMD Rule 1166, VOC Emissions From Decontamination of Soil. In response to this comment, edits have been made to incorporate the specific rules identified by the commenter into the IS/ND's discussion. The revisions reflect minor updates or clarifications to the content of the Draft IS/ND, and do not represent material changes or revisions that modify the findings and require recirculation of the IS/ND under CEQA Guidelines Section 15073.5(c)(4). The following revisions are hereby made to the text of the IS/ND on pages 4-20 and 4-21 under Operational Activities in Section 4.3, Air Quality, of the IS/ND (new text is shown in *red italics*):

> The Project would be required to comply with *all applicable SCAQMD rules, including, but not limited to,* SCAQMD Rule 1166, VOC Emissions From Decontamination of Soil (AQ-RR-2). *Other rules which may apply to the proposed Project include, but are not limited to, Rule 201: Permit to Construct; Rule 203: Permit to Operate; Rule 401: Visible Emissions; Rule 402: Nuisance; Rule 403: Fugitive Dust Control; Rule 1466: Control of Particulate Emissions from Soils with Toxic Air Contaminants; Rule 1470: Requirements for Stationary Diesel Fueled Internal Combustion and Other Compression Ignition Engines.* Rule 1166 requires an approved mitigation plan be obtained from SCAQMD prior to commencing the excavation or grading of soil containing VOCs. *The most conservative estimate for remedial excavation is 5,000 cubic yards.*

SCAQMD-3 The commenter states that CEQA Guidelines Section 15096 sets forth specific procedures for a Responsible Agency, and that in its role as CEQA Responsible Agency, the SCAQMD is obligated to ensure that the CEQA document prepared for this Project contains adequate project description and analysis to be relied

upon in order to issue any discretionary approvals that may be needed for air permits. The commenter adds that for these reasons, the Final ND should include a discussion about any and all new stationary and portable equipment requiring SCAQMD air permits, provide the evaluation of their air quality and GHG impacts, and identify SCAQMD as a Responsible Agency for the proposed Project as this information will be relied upon as the basis for air permit conditions and emission limits.

The commenter is referred to Section 4.3, Air Quality of the IS/ND which states that "All necessary SCAQMD permits would be obtained prior to pilot testing and full-scale operation of the SVE and air sparging systems. Implementation of regulatory requirements prior to and during Project construction and operations would minimize the potential for air quality impacts." Moreover, as shown in Section 4.3, Air Quality, and Section 4.8, Greenhouse Gas Emissions, the Project's construction and operational emissions would be less than the SCAQMD CEQA air quality and greenhouse has significance thresholds. Nonetheless, changes have been made to the Draft IS/ND to identify SCAQMD as a Responsible Agency. The revisions reflect minor updates or clarifications to the content of the Draft IS/ND, and do not represent material changes or revisions that modify the findings and require recirculation of the IS/ND under CEQA Guidelines Section 15073.5(c)(4). The following revisions are hereby made to the text of the IS/ND on page 4-8 under Existing Setting in Section 4.3, Air Quality, of the IS/ND (new text is shown in *red italics*):

> The Project Site is located in the Los Angeles County portion of the South Coast Air Basin (SoCAB), and, for air quality regulation and permitting, is under the jurisdiction of the SCAQMD. *As SCAQMD permit(s) would be required during Project implementation, SCAQMD is considered a Responsible Agency under CEQA.* The SoCAB is a 6,600-square-mile area bound by the Pacific Ocean to the west; the San Gabriel, San Bernardino, and San Jacinto Mountains to the north and east; and the San Diego County line to the south. The SoCAB includes all of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino counties, in addition to the San Gorgonio Pass area of Riverside County. SoCAB's terrain and geographical location (i.e., a coastal plain with connecting broad valleys and low hills) determine its distinctive semi-arid climate, which is characterized by moderate temperatures, oceanic influence, and precipitation.

In its role as CEQA Responsible Agency, SCAQMD reviews the adequacy of the CEQA document and the proposed Project for issuing discretionary approval. SCAQMD must ensure that the proposed Project contains sufficient project description and analyses to be relied upon to issue any discretionary approvals that may be needed for air permits.

The Regional Board has used conservative assumptions for full-scale SVE system design in the IS/ND so that the analyses within are sufficient when the system design is submitted to SCAQMD for review and permitting. Furthermore, the SVE system will run on direct power from the grid utilizing Carbon treatment eliminating NOX emissions during its operation.

The commenter is referred to Section 4.3, Air Quality of the IS/ND which states that "All necessary SCAQMD permits would be obtained prior to pilot testing and full-scale operation of the SVE and air sparging systems. Implementation of regulatory requirements prior to and during Project construction and operations would minimize the potential for air quality impacts. Moreover, as shown in Section 4.3, Air Quality, and Section 4.8, Greenhouse Gas Emissions, the Project's construction and operational emissions would be less than the SCAQMD CEQA air quality and greenhouse has significance thresholds. Additionally, the Project's air quality and GHG emissions inventories have been updated using CalEEMod based on refined Project information provided by the Applicant. Refinements were made to 1) Construction scheduling; 2) Off-Road Equipment; and 3) Import/Export Quantities. As shown in Section 4.3, Air Quality of the IS/ND, impacts would remain less than significant, and no mitigation would be required.

In light of the above, edits have been made to the following tables. The revisions reflect minor updates or clarifications to the content of the Draft IS/ND, and do not represent material changes or revisions that modify the findings and require recirculation of the IS/ND under CEQA Guidelines Section 15073.5(c)(4). The following revisions are hereby made to construction schedule and equipment of the IS/ND on page 4-19 under Construction Activities in Section 4.3, Air Quality, of the IS/ND (deleted text is shown in ~~red strikeouts~~ and new text is shown in *red italics*):

Construction Phase	Duration	Equipment Used	Import/Export of Material
Demolition of remaining ASTs and process equipment	*10 Work Days* ~~1/1/2025-1/31/2025~~	*1 Excavator* *1 Skid Steer Loader* *1 Water Truck* *Hydraulic Breaker* ~~1 Concrete/Industrial Saw~~ ~~3 Excavators~~ ~~2 Rubber Tired Dozers~~	None
Excavation/Demolition - Underground sumps, trenches, and pipelines	*12 Work Days* ~~2/1/2025-3/31/2025~~	*1* ~~3~~ Tractors/Loaders/ Backhoes 1 Excavator ~~1 Rubber Tired Dozer~~ ~~1 Grader~~	*Export ~ 4426 Contaminated Soil* ~~200 CY Inert Soil~~ ~~2.3 tons of pipe~~
Excavation - Removal of contaminated soil *and Backfill*	*10 Work Days* ~~32/1/2025-3/31/2025~~	*1 Drill Rig* *1 Tractors/Loaders/Backhoes* *2* ~~1~~ Excavators	*Import ~ 4426 cy inert soil Import* ~~80 CY Contaminated soil~~

Construction Phase	Duration	Equipment Used	Import/Export of Material
SVE Well Construction	*2 Months* ~~2/1/2025-~~ ~~3/31/2025~~	1 Bore/Drill Rig *1* ~~2~~ Forklifts ~~2 Welders~~	None
Re-paving	*1 Month* ~~4/1/2026-~~ ~~4/28/2026~~	1 Cement and Mortar Mixers 1 Paver 2 Paving Equipment 2 Rollers 1 Tractor/ Loader/ Backhoe	None

The following revisions are hereby made to Table 5, Estimated Maximum Daily Regional Construction Emissions of the IS/ND on page 4-20 under Construction Activities in Section 4.3, Air Quality, of the IS/ND (deleted text is shown in ~~red strikeouts~~ and new text is shown in *red italics*):

TABLE 5
ESTIMATED MAXIMUM DAILY REGIONAL CONSTRUCTION EMISSIONS

Year	Emissions (lbs/day)					
	VOC	NOx	CO	SO_2	PM10	PM2.5
2025	~~2~~ 1	~~23~~ *78*	~~27~~ 30	<1	~~4~~ *19*	~~2~~ 6
~~2026~~	~~1~~	~~7~~	~~10~~	~~<1~~	~~1~~	~~<1~~
Maximum Daily Emissions	**~~2~~ 1**	**~~23~~ 78**	**~~27~~ 30**	**<1**	**~~4~~ *19***	**~~2~~ 6**
SCAQMD Thresholds	***75***	***100***	***550***	***150***	***150***	***55***
Exceeds SCAQMD Thresholds?	**No**	**No**	**No**	**No**	**No**	**No**

lbs/day: pounds per day; VOC: volatile organic compound; NOx: nitrogen oxides; CO: carbon monoxide; SO_2: sulfur dioxide; PM10: respirable particulate matter 10 microns or less in diameter; PM2.5: fine particulate matter 2.5 microns or less in diameter; SCAQMD: South Coast Air Quality Management District.

Source: SCAQMD 2023 (thresholds); see Appendix C for CalEEMod model outputs.

The following revisions are hereby made to Table 8, Construction Equipment and Maximum Site Disturbance by Construction Phase of the IS/ND on page 4-22 under Construction Phase Localized Significance Thresholds in Section 4.3, Air Quality, of the IS/ND (deleted text is shown in ~~red strikeouts~~ and new text is shown in *red italics*):

TABLE 8
CONSTRUCTION EQUIPMENT AND MAXIMUM SITE DISTURBANCE BY CONSTRUCTION PHASE

Construction Phase	Equipment Used	Acres of Site Disturbance/8-hr Day *
Demolition of remaining ASTs and process equipment	*1* ~~3~~ Excavator *1 Skid Steer Loader* *1 Water Truck* *Hydraulic Breaker* ~~1 Concrete/Industrial Saw~~ ~~2 Rubber Tired Dozers~~	0
Excavation/Demolition - Underground sumps, trenches, and pipelines	*1* ~~3~~ Tractors/Loaders/Backhoes 1 Excavator ~~1 Rubber Tired Dozer~~ ~~1 Grader~~	0
Excavation - Removal of contaminated soil *and Backfill*	*1 Drill Rig* *1Tractors/Loaders/Backhoes* *2* ~~1~~ Excavators	0
SVE Well Construction	1 Bore/Drill Rig *1* ~~2~~ Forklifts ~~2 Welders~~	0
Re-paving	1 Cement and Mortar Mixers 1 Paver 2 Paving Equipment 2 Rollers 1 Tractor/ Loader/ Backhoe	0
*Calculated based on SCAQMD LST Methodology (SCAQMD 2008)		

The following revisions are hereby made to Table 9, Construction Phase Localized Significance Threshold Emissions of the IS/ND on page 4-23 under Construction Phase Localized Significance Thresholds in Section 4.3, Air Quality, of the IS/ND (deleted text is shown in ~~red strikeouts~~ and new text is shown in *red italics*):

TABLE 9
CONSTRUCTION-PHASE
LOCALIZED SIGNIFICANCE THRESHOLD EMISSIONS

Emissions and Thresholds	Emissions (lbs/day)			
	NOx	CO	PM10	PM2.5
Project maximum daily on-site emissions	~~22~~ *6*	~~20~~ *9*	~~3~~ *0*	~~2~~ *0*
Localized Significance Threshold	46	231	4	3
Exceed threshold?	**No**	**No**	**No**	**No**
lbs/day: pounds per day; NOx: nitrogen oxides; CO: carbon monoxide; PM10: respirable particulate matter 10 microns or less in diameter; PM2.5: fine particulate matter 2.5 microns or less in diameter. Note: Data is for SCAQMD Source Receptor Area 12, South Central Los Angeles County Source: SCAQMD 2009 (thresholds); see Appendix C for CalEEMod model outputs.				

Additionally, the following revisions are hereby made to Table 11, Energy Use During Construction, of the IS/ND on page 4-35 under Energy Consumption During Construction in Section 4.6, Energy, of the IS/ND (deleted text is shown in ~~red strikeouts~~ and new text is shown in *red italics*):

TABLE 11
ENERGY USE DURING CONSTRUCTION

Source	Gasoline – gallons	Diesel Fuel – gallons
Construction Equipment	~~4,306~~ *30*	~~7,635~~ *1,287*
Worker Trips	~~3,417~~ *815*	~~8~~ *2*
Vendor Trips	~~1,301~~ *296*	~~13~~ *3*
Haul Trucks	~~0~~ *34*	~~337~~ *34,674*
Total	***~~9,024~~ 1,174***	***~~7,994~~ 35,967***
Sources: based on data from CalEEMod, OffRoad, and EMFAC2021. Energy data can be found in Appendix E to this IS/ND.		

Additionally, the following revisions are hereby made to Table 12, Energy Use During Operations, of the IS/ND on page 4-36 under Operations in Section 4.6, Energy, of the IS/ND (deleted text is shown in ~~red strikeouts~~ and new text is shown in *red italics*):

TABLE 12
DURING OPERATIONS

Land Use	Gasoline	Diesel	Natural Gas (kBTU/yr)	Electricity (kWh/yr)
Project Land Uses	~~504~~ *163*	~~0~~ *22*	0	~~0~~ *77,600*
kBTU/yr: one thousand British Thermal Units; kWh/yr: kilowatt hours per year. Sources: Energy data can be found in Appendix E of this IS/ND.				

Furthermore, the following revisions are hereby made to Table 13, Estimated Greenhouse Gas Emissions from Construction, of the IS/ND on page 4-50 under Threshold (a) in Section 4.8, Greenhouse Gas Emissions, of the IS/ND (deleted text is shown in ~~red strikeouts~~ and new text is shown in *red italics*):

The estimated construction GHG emissions for the proposed Project would be ~~327.4~~ *420* $MTCO_2e$, as shown in Table 13, Estimated Greenhouse Gas Emissions from Construction.

TABLE 13
ESTIMATED GREENHOUSE GAS
EMISSIONS FROM CONSTRUCTION

Year	Emissions ($MTCO_2e$)
2025	~~253~~ *420*
~~2026~~	~~53~~
Total	**~~306~~ *420***

$MTCO_2e$: metric tons of carbon dioxide equivalent

Notes:

- Totals may not add due to rounding variances.
- Detailed calculations in Appendix C.

Furthermore, the following revisions are hereby made to Table 15, Estimated Total Project Annual Greenhouse Gas Emissions, of the IS/ND on page 4-51 under Threshold (a) in Section 4.8, Greenhouse Gas Emissions, of the IS/ND (deleted text is shown in ~~red strikeouts~~ and new text is shown in *red italics*):

TABLE 15
ESTIMATED TOTAL PROJECT ANNUAL
GREENHOUSE GAS EMISSIONS

Source	Emissions ($MTCO_2e$/yr[a])
Construction (Amortized)	~~10~~ *14*
Operations	21
Total[b]	**~~32~~ *35***
SCAQMD Threshold	**10,000**
Exceeds Threshold?	**No**

$MTCO_2e$/yr: metric tons of carbon dioxide equivalent per year; SCAQMD: South Coast Air Quality Management District.

[a] Total derived by dividing construction emissions (see Table 11) by 30.
[b] Total annual emissions are the sum of mortised construction emissions and operational emissions.

SCAQMD-4 The commenter provides a conclusion to their letter and requests that SCAQMD receive written responses to comments prior to the adoption of the Final ND.

The comment is noted and SCAQMD will receive written responses to comment prior to adoption of the Final ND.

Letter 2: California Department of Conservation, Geologic Energy Management Division (CDC)

Comment Letter Dated March 25, 2025

California
Department of Conservation
Geologic Energy Management Division

Gavin Newsom, Governor
Jennifer Lucchesi, Director

March 25, 2025

VIA EMAIL

Los Angeles Regional Water Quality Control Board
Attn: Adnan Siddiqui, Project Manager
320 W. 4th St., Suite 200
Los Angeles, CA 90013
Email: Adnan.Siddiqui@waterboards.ca.gov

Dear Mr. Siddiqui:

NEGATIVE DECLARATION (NEG)
REMEDIAL ACTION PLAN FOR THE FORMER MOUREN-LAURENS AND LEACH OIL SITES PROJECT
SCH: NO. 2025020705

The Department of Conservation's Geologic Energy Management Division (Division) has reviewed the above-referenced project for impacts with Division jurisdictional authority. The Division supervises the drilling, maintenance, and plugging and abandonmei oil, gas, and geothermal wells in California. The Division offers the following comments for your consideration. CDC-1

The project area is in Los Angeles County and lies within the Rosecrans, East oil field. Division records indicate the presence of one plugged oil and gas well, the "Compton" 1 (API 0403715041), near the middle of the project area. Division information can be found at: www.conservation.ca.gov. Individual well records are also available on the Division's web site, or by emailing CalGEMSouthern@conservation.ca.gov.

The scope and content of information that is germane to the Division's responsibility are contained in Section 3000 et seq. of the Public Resources Code, and administrative regulations under Title 14, Division 2, Chapters 2, 3 and 4 of the California Code of Regulations. CDC-2

If any wells, including any plugged, abandoned or unrecorded wells, are damaged or uncovered during excavation or grading, remedial plugging operations may be required. If such damage or discovery occurs, the Division's district office must be contacted to obtain information on the requirements and approval to perform remedial operations. CDC-3

State of California Natural Resources Agency | Department of Conservation
Southern District, 3780 Kilroy Airport Way, Suite 400, Long Beach, CA 90806
conservation.ca.gov | T: (562) 637-4400 | F: (562) 424-0166

The possibility for future problems from oil and gas wells that have been plugged and abandoned, or reabandoned, to the Division's current specifications are remote. However, the Division recommends that a diligent effort be made to avoid building over any plugged and abandoned well. **CDC-4**

Questions regarding the Division's Construction Site Well Review Program can be addressed to the local Division's office in Long Beach by emailing CalGEMSouthern@conservation.ca.gov or by calling (562) 637-4400. **CDC-5**

Sincerely,



Curtis M. Welty, PG
Associate Oil and Gas Engineer

cc: Governor's Office of Planning and Research, State Clearinghouse Unit
Email: state.clearinghouse@opr.ca.gov

Office of Legislative and Regulatory Affairs
Email: OLRA@conservation.ca.gov

Jan Perez, CalGEM CEQA Unit
Email: Jan.Perez@conservation.ca.gov

Environmental CEQA File

Letter 2: California Department of Conservation, Geologic Energy Management Division (CDC)

Responses to Comments

CDC-1 The commenter acknowledges receipt of the environmental documentation and identifies CDC's responsibilities. The comment briefly identifies the existing setting of the Site and a plugged oil and gas well near the middle of the Project area. The comment also includes links to the CDC information and individual well records. Comment is noted. EKI will review CalGEM records (for the Compton 1 former oil well) and will survey that location and will mark a 10-foot buffer safety area to avoid damaging this well.

EKI will also use surface geophysical methods to verify the location of the Compton 1 former oil well. No subsurface work will be performed within that 10 foot safety buffer zone.

CDC-2 The commenter identifies the section of Public Resources Code and administrative regulations of the California Code of Regulations that contain scope and content of information that is important to CDC's responsibilities. Comment is noted, and no further response is required.

CDC-3 The comment indicates that if plugged, abandoned, or unrecorded wells are damaged or uncovered during excavation or grading, remedial plugging operations would be needed. Additionally, CDC's district office should be contacted to obtain information on the requirements and approval to perform remedial operations. The comment is noted. No further response is required.

CDC-4 Although any future problems from plugged and abandoned or re-abandoned oil and gas to CDC's current specifications are unlikely, a diligent effort must be made to avoid building over any plugged and abandoned well. Comment is noted, and no further response is required.

CDC-5 The commenter provides a link and a telephone number for questions pertaining to CDC's Construction Site Well Review Program. Comment is noted, and no further response is required.

3.2 NATIVE AMERICAN TRIBES

Two comment letters were received from Native American Tribes. The comment letters are listed below:

- Santa Rosa Band of Cahuilla Indians, February 24, 2025
- Ft. Yuma Quechan Indian Tribe, March 10, 2025

Letter 3: Santa Rosa Band of Cahuilla Indians (SRBCI)

Comment Letter Dated February 24, 2025

From: Vanessa Minott
To: Siddiqui, Adnan@Waterboards
Subject: Public Comment: Sites 641, 705, 717 and 719
Date: Monday, February 24, 2025 4:44:16 PM
Attachments: Outlook-2jmqmjac.png

Caution: External Email. Use caution when clicking links or opening attachments. When in doubt, contact DIT or use the Phish Alert Button.

Acha'i Tamit,
Please note that the Santa Rosa Band of Cahuilla Indians is in receipt of the notice of availability for public comment and notice of intent to adopt for sites mentioned in subject line. We don't have any comments. Have a great day.

SRBCI-1

Respectfully,
Vanessa Minott,
Tribal Administrator

Santa Rosa Band of Cahuilla Indians
P.O. Box 391820
Anza, CA 92539
951-659-2700 ext. 102
760-668-0460 work cell

Letter 3: Santa Rosa Band of Cahuilla Indians (SRBCI)

Responses to Comments

SRBCI-1 The commenter, Santa Rosa Band of Cahuilla Indians (SRBCI), acknowledges that they are in receipt of the NOA and that they do not have any comments. The comment is noted.

Letter 4: Ft. Yuma Quechan Indian Tribe (FYQIT)

Comment Letter Dated March 10, 2025

From: Jill Mccormick
To: Siddiqui, Adnan@Waterboards
Subject: Proposed Negative Declaration for Remedial Action Plan for the Former Mouren-Laurens Company, INC and Leach Oil Company Inc.
Date: Monday, March 10, 2025 3:05:50 PM
Attachments: Outlook-t3ydln2u.png

Caution: External Email. Use caution when clicking links or opening attachments. When in doubt, contact DIT or use the Phish Alert Button.

Good afternoon,
This email is to inform you that the Historic Preservation Office does not wish to comment on this project. We defer to the local Tribes and support their determinations on this matter. Email correspondence is the preferred method of communication with this office. Hard copies of project letters are not required if an email containing the project documents has been sent to the Historic Preservation Office. Also, please update your contact information for the Quechan Tribe.

FYQIT-1

All project-based correspondence should be sent to this email address (historicpreservation@quechantribe.com) and President Jordan Joaquin (executivesecretary@quechantribe.com). Per the Tribe's NAHC contact list, please remove Manfred Scott (culturalcommittee@quechantribe.com and scottmanfred@yahoo.com) from the distribution list for the Quechan Tribe.

Jill

H. Jill McCormick, M.A.
Historic Preservation Office
Ft. Yuma Quechan Indian Tribe
P.O. Box 1899
Yuma, AZ 85366-1899
Office: 760-919-3631
Cell: 928-920-6521

Letter 4: Ft. Yuma Quechan Indian Tribe (FYQIT)

Responses to Comments

FYQIT-1 The commenter, H. Jill McCormick, M.A. of the Ft. Yuma Quechan Indian Tribe Historic Preservation Office, acknowledges that they are in receipt of the NOA and that they do not have any comments. The commenter adds that they defer to the local Tribes and support their determinations on this matter. The comment is noted.

3.3 INDIVIDUALS

Three comment letters were received from Beth S. Dorris. The comment letters are listed below:

- Beth Dorris, March 14, 2025
- Beth Dorris, March 21, 2025
- Law Office of Beth Dorris, March 25, 2025

Letter 5: Beth Dorris (Dorris-A)

Comment Letter Dated March 14, 2025

From: Beth Dorris
To: Noah Golden-Krasner
Cc: Siddiqui, Adnan@Waterboards
Subject: Missing MLOC workplaces and imminent default
Date: Friday, March 14, 2025 10:03:09 AM

Caution: External Email. Use caution when clicking links or opening attachments. When in doubt, contact DIT or use the Phish Alert Button.

Greetings. Please provide Jerry and me with the proposed workplans required and due under Ex. A to the MLOC/LOC-Board Settlement. The missing work plans should have been attached to the circulated proposed IS/ND, as mandatory to explain the IS impact findings and to meet *Laurel Heights* Supreme Court CEQA standards against project segmenting. They also should have been circulated to meet the first milestone completion deadlines in Ex at the MLOC/LOC-Board Agreement. The missing workplans include, without limitation:

- LOC Site TSDF units closure workplan, including all mitigations required for hazardous waste handling, transport and removal (there's forms for this) - work must be completed
- LOC Site TSDF soils investigations immediately under each removed TSDF unit with a reported or threatened spill or discharge reported in DTSC's files or otherwise to OES, or based on prior soils/vapor investigations showing higher concentrations and thus source areas - except to the extent already investigated (there's mounds of data already in the files).
- Monitoring plan
- SVE pilot study
- SVE engineering plan
- Groundwater sparging plan

Dorris-A-1

The first several are all due now anyway, if not already late, for MLOC to be in compliance with Ex. A to the MLOC/LOC-Board Agreement, which contains imminent deadlines. We are deeply concerned that MLOC, a sentenced hazardous waste felon, is deliberately dragging its feet to hide critical information from impacted owners, tenants, hazardous waste generators, transporters and arrangers, residents and school attendees, including but not limited to Rev. It is important to remember that mitigations for such a large scale demolition project of a hazardous waste TSDF might be incorporated into a future work plan but if not specified in the IS project description needed to be included with an MND. It also is important to remember that the Water Code contain special statutory protections, above and beyond any standard 30 day public notice and circulation, to ensure full coordination with property owners impacted or potentially impacted by the workplan. Rev is only one of such impacted property owners. The LOC Site already has substantial data showing high soils and groundwater contamination levels from leaking hazardous waste treatment and storage units at and near the western boundary of the LOC Site. The DTSC and OES files also contain reports of leaks, spills and other discharges from individual LOC TSDF units for decades prior to 2006, as does the partial drainage report to the Board required of LOC to the Board under federal court order in about 2010, circulated in draft form to MLOC in 2011 and provided to the Board in served copy in prior litigation.

Dorris-A-2

Letter 5: Beth Dorris (Dorris-A)

Responses to Comments

Dorris-A-1 The commenter requests the proposed workplans "required and due under Ex. A to the MLOC/LOC Board Settlement". Additionally, the comment indicates that circulation of these workplans would have met the first milestone completion deadlines in Exhibit A of the MLOC/LOC-Board Agreement. The commenter identifies the following workplans:

- LOC Site TSDF units closure workplan, including all mitigations required for hazardous waste handling, transport and removal
- LOC Site TSDF soils investigations immediately under each removed TSDF unit with a reported or threatened spill or discharge reported in DTSC's files or otherwise to OES, or based on prior soils/vapor investigations showing higher concentrations and thus source areas except to the extent already investigated
- Monitoring plan
- SVE pilot study
- SVE engineering plan
- Groundwater sparging plan.

The commenter adds that the work plans should have been attached to the IS/ND "as mandatory to explain the IS impact findings and to meet the *Laurel Heights* Supreme Court CEQA standards against project segmenting".

Response to Dorris-A-1. The IS/ND evaluates the environmental impacts of approving and implementing the RAP submitted by EKI, as modified by the Regional Board letter dated April 11, 2022. The approach is summarized in section 1.4 of this document and evaluated in the IS/ND. The workplans will be submitted during RAP implementation and will detail how the remedial work will be conducted, for example, the number and locations of where SVE wells will be placed. Sufficient information exists in the updated RAP regarding the remedial activities to prepare the IS/ND. As stated in the IS/ND, the worst case scenario is used to estimate potential impacts on the environment.

TSDF closure documents or workplans will not be required because, as explained in Response to Dorris-C-5, DTSC transferred the oversight of the assessment and cleanup for LOC Site to the Regional Board in 2009 (Appendix B to this document). As such, the Regional Board's process governs the site cleanup and closure of the LOC Site.

Dorris-A-2 The commenter states that several of the aforementioned work plans are due for MLOC to be in compliance with Ex. A to the MLOC/LOC-Board Agreement,

which contains imminent deadlines. The CEQA process must be satisfied before workplans can be submitted to the RWQCB.

The commenter adds that mitigation for a large scale demolition project of a hazardous waste TSDF might be incorporated into a future work plan but if not specified in the IS project description needed to be included with an MND.

The commenter also notes that the Water Code contains special statutory protections, above and beyond the standard 30 day public notice and circulation, to ensure full coordination with property owner impacted or potentially impacted by the workplan.

The commenter notes that the LOC Site has data showing high soils and groundwater contamination levels from leaking hazardous waste treatment and storage units at and near the western boundary of the LOC Site. The commenter adds that DTSC and OES files also contain reports of leaks, spills, and other discharges from individual LOC TSDF units for decades prior to 2006, as does the partial drainage report to the Board required of LOC under federal court order in 2010, circulated in draft form to MLOC in 2011 and provided to the Board in served copy in prior litigation.

Response to Dorris-A-2. Please refer to Responses to Dorris-A-1, Dorris-C-3, Dorris-C-4, Dorris-C-5, Dorris-C-10 on the following pages. The comments are otherwise noted.

Letter 6: Beth Dorris (Dorris-B)

Comment Letter Dated March 21, 2025

From: beth.dorris@aol.com
To: Siddiqui, Adnan@Waterboards
Subject: Re: Initial Study/ Negative Declaration
Date: Friday, March 21, 2025 9:11:21 PM

Caution: External Email. Use caution when clicking links or opening attachments. When in doubt, contact DIT or use the Phish Alert Button.

The IS/ND Notice claims in the last page that there is some sort of "Removal Action Work Plan" supporting the IS/ND or further describing the RAP project. We could not locate a plan with this title on the geotracker site for the ML Site. Please email to Jerrold Fine and me a copy of the proposed Removal Action Work Plan by 1 pm Monday March 24, 2025. As an impacted property owner, Rev is entitled to receive notice and 30 days comment before any such Removal Action Work Plan is approved. **Dorris-B-1**

If the reference in the Board's IS/ND to "Removal Action Work Plan" is in error, and it was meant to refer to the Final Remedial Action Plan, there is no need to provide another copy. **Dorris-B-2**

From: Siddiqui, Adnan@Waterboards
Sent: Friday, March 7, 2025 1:08 PM
To: 'Joshua Fine'; beth.dorris@aol.com; 'rtraylor@partneresi.com'; jerry
Cc: Heath, Arthur@Waterboards; Yu, Stephanie@Waterboards
Subject: Initial Study/ Negative Declaration

Hello everyone,
I am informing you that an Initial Study/ Negative Declaration (IS/ND) has been completed for the Remediation Action Plan for the Former Mouren-Laurens Oil Company and Leach Oil Company Sites Project. The IS/ND was circulated for public comment and uploaded to Geotracker on February 24, 2025, and is also available on the State Clearinghouse's CEQANet database.

Here is the Geotracker link to the IS/ND document:
https://documents.geotracker.waterboards.ca.gov/regulators/deliverable_documents/7639280021/RAP%20ISND_020325-Final_grc.pdf

On February 20, 2025, I notified Beth Dorris via email that the IS/ND was available for review and comment and provided her the Geotracker link to the document. Because I have not heard back from her, and to make sure that Rev 973 is aware of the availability of the IS/ND, I am sending this information to all of you. The Notice of Availability and Notice of Intent to Adopt is attached. Thank you.
Adnan

Adnan Siddiqui, PG, CHG
Senior Engineering Geologist
Site Cleanup Program
California Regional Water Quality Control Board, Los Angeles Region
320 West 4th Street, Suite 200
Los Angeles, CA 90013
Tel: (213) 576-6812 Direct

Currently, the best way to reach me is via email

Letter 6: Beth Dorris (Dorris-B)

Responses to Comments

Dorris-B-1 The commenter notes that the IS/ND Notice claims in the last page that there is a "Removal Action Work Plan" supporting the IS/ND or further describing the RAP project. The commenter indicates that they could not locate a plan with this title on the GeoTracker site for the ML Site and requests a copy of the plan, because as an impacted owner, the comment alleges, they are entitled to receive notice and 30 days comment before a Removal Action Work Plan is approved.

Response to Dorris-B-1. The comment is noted. The reference to "Removal Action Work Plan" is a typographical error.

Dorris-B-2 The commenter states that if the reference to a "Removal Action Work Plan" is an error, and it was meant to refer to the final Remedial Action Plan, there is no need to provide another copy.

Response to Dorris-B-2. See Response to Dorris-B-1, above.

Letter 7: Law Office of Beth Dorris (Dorris-C)

Comment Letter Dated March 25, 2025

From: beth.dorris@aol.com
To: Siddiqui, Adnan@Waterboards
Subject: Re: Initial Study/ Negative Declaration
Date: Tuesday, March 25, 2025 2:11:53 PM

Caution: External Email. Use caution when clicking links or opening attachments. When in doubt, contact DIT or use the Phish Alert Button.

Rev 973, LLC, a California limited liability corporation, submits these comments to the Regional Water Quality Control Board - Los Angeles Region ("RWQCB")[1] on or before March 25, 2025. These comments concern the proposed final remedial action plan ("RAP" or "Project") for the RCRA[2] hazardous waste treatment facility ("TSDF") at the LOC Site and nearby impacted properties, including the former MLOC Site (also referred to herein as the "Warehouse Site"), as supported by the initial study/negative declaration thereon publicly noticed on or about February 24, 2025 ("IS/ND"). Rev is the current owner of the impacted Warehouse Site.

Dorris-C-1

Rev appreciates that the RWQCB is now undertaking final agency study and review of the proposed RAP. Unfortunately, the long-delayed circulated study was not in the anticipated form of an initial study with a mitigated negative declaration and mitigation monitoring and reporting plan ("MMRP"). Lead agencies generally use a mitigated negative declaration for TSDF closure plans or other remedial action plans of this proposed Project's scale or even smaller. If an IS/ND receives comments similar to those below, the study is revised and recirculated with a mitigated negative declaration, as DTSC did for the Whittaker-Bermite RAP. https://dtsc.ca.gov/wp-content/uploads/sites/31/2017/11/Whittaker-Bermite_FS_Final-dRAP.pdf

Dorris-C-2

1. Corrections and Additions Needed for the Noticed IS/ND as to Project Description, Project Site, Historic Use, and Project Sponsor/Work Party.

a. RAP Project as Set Forth in the IS/ND Needs to Incorporate Modifications and Gap Filling for the RAP in the RAP Agreement entered April 2, 2024.

Dorris-C-3

A mandatory part of any proposed RAP is the completion schedule therefor. *See* State Water Resources Control Board policy resolution 92-49 ("Water Board Policy 92-49"). If, as here, the schedule modifies the proposed RAP with specific Project Tasks defined therein that together comprise the RAP, that modification is a material part of the RAP that needs to be disclosed in the IS/ND.

The IS/ND defines the "RAP" as limited to the initial proposal in July 2021 by EKI (as MLOC[3]'s consultant) and modifications thereto by the RWQCB thereto dated April 11, 2022. This disclosure of the RAP is materially incomplete. The RWQCB provided initial modifications to the RAP in August 19, 2021, which earlier modification is part of the "RAP" as defined in the RWQCB's RAP Agreement. In addition, the RWQCB and Project proponent (MLOC) provided the mandatory schedule element of the RAP as Exhibit A to the agreement between the LA-RWQCB, LOC, MLOC and related parties, and entered April 2, 2024 ("RAP Agreement"). The RAP Agreement provides the mandatory schedule element for a complete RAP. The RAP Agreement provides a project initiation date and sets milestone completion dates for each separate Project task that collectively comprise the proposed RAP as so modified. It also modifies the RAP with specified Project tasks that, as defined therein, comprise the RAP, and are required to be performed and completed by the work party designated therein, MLOC. All this forms critical modifications to and fills in mandatory portions of a final remedial action plan otherwise omitted from the documents listed in the IS/ND as comprising the RAP. The omissions thus are material and need to be corrected. The RAP Agreement is posted on the same online site as the other partial portions of the RAP cited in the IS/ND, so this corrective can be easily made.

The RAP Agreement sets the project initiation date as the "effective date" of the RWQCB RAP Agreement, and vice-versa. Rev filed an administrative appeal on April 12, 2025, raising the RWQCB's failure to timely comply with CEQA and other RAP/TSDF closure plan study and content requirements. The RWQCB then informed Rev that it was proceeding with post-April 12, 2025 CEQA study and review prior to final approval of the proposed RAP, rather than thereafter.

On March 17 and 20, 2025, the RWQCB and EKI confirmed to Rev that the effective date for the RAP Agreement, and thus the project initiation date, is the date the proposed RAP is approved by the RWQCB after CEQA study and compliance. The RAP Schedule Element also sets milestone completion dates for each Project Task.

The RAP Agreement also designates MLOC as the "Work Party" for completion of the RAP, and grants Work Party's designated contractor the $9.8 Million trust therefor (plus interest). That MLOC is the designated Work Party for the RAP is a material disclosure. In 1998, MLOC was ordered by the Los Angeles County Superior Court not to handle hazardous material or waste and received a no-contest felony sentence for hazardous waste discharge violations. Further, MLOC has been under a cleanup order since 1987 but never performed, let alone completed, most of the work thereunder.

2. Project Site Needs to Include All Properties on which RAP Work will be Performed, including to the West of the LOC

Dorris-C-4

Site TSDF.

The IS/ND arbitrarily limits the "Project site" and study of impacts thereon to the LOC Site (where the TSDF is located) and the impacted Warehouse Site to the immediate east. Property to the immediate west of the LOC Site and TSDF thereon also are impacted and thus require inclusion in the Project site on which the RAP is to be performed. Prior (phase II) investigations establish high concentrations of soil and soil vapor levels at and near the LOC Site's western (and northwestern) border. Such high levels of soil contamination from massive TSDF discharges do not just magically disappear based on property line. Groundwater waters near the northwest corner, on site and immediately cross gradient from the historic TSDF carbon filtration unit, show exceptionally high levels of solvent contamination. It is already well established with substantial evidence, then, that the RAP Project tasks include the properties to the immediate west of the LOC Site. Because excluded from the Project site where the RAP is disclosed to be performed, impacted property owners, business, tenants and possibly residents have not received the necessary disclosures. Property to the west also is reported in historic use reports as having had a gas station. Any commingled discharges of petroleum or used oil and associated contaminants may significantly increase the time and scope of the RAP and even modify the type of remediation or duration. There is substantial evidence of a fair argument that the proposed RAP Project will have potential significant impacts[4], based on omitted impacts to the west. CEQA prohibits such deferral, segmenting, or phasing of a proposed project.

Dorris-C-4 cont.

a. The IS/ND and NOA/NOI Do Not Adequately and Consistently Disclose RAP Hazardous Waste Treatment Facility Requirements

Dorris-C-5

The surrounding community has a particular interest in hearing about cleanup of a RCRA hazardous waste treatment and storage facility, or TSDF, that received for "treatment" hazardous waste deposits from hundreds of offsite generators, transporters and arrangers throughout California for decades.

This critical disclosure should be on the front of every notice and study. Yet the NOA/NOI's Project Description does not mention it at all, in the project description or elsewhere.

Similarly, the IS/ND largely avoids calling attention to the LOC RCRA TSDF that lies at the heart of the RAP Project. The IS describes use of the LOC Site as limited to refining of waste oil in section 1.3, for example. Waste oil is only one of the wastes and hazardous wastes accepted in manifests and bills of lading, which include oily water, sludge, crude oil refining wastes, solvents, PCBs and a host of other hazardous wastes. Reference to "refining" as the sole treatment/storage at the LOC Site is also incorrect and deceptively minimizing. The TSDF includes a variety of other hazardous waste treatment units, such as a carbon filtration system, separation and clarification in a sump system; storage in various hazardous waste docks, containment areas and tank systems; and leaching from an unlined hazardous waste pond. DTSC ultimately determined that the leach pond was unlawful application of hazardous waste to the land and not treatment (like refining) at all.

The IS/ND hides the fact that the hazardous waste being cleaned up was generated in the first place by offsite PRPs (strictly liable as a matter of law not agency discretion from "cradle to grave"). The IS does briefly mention "TSDF" status. The first mention is in the Project Background section, in a purported (and misleading) effort to explain why the RWQCB is the lead agency for a RCRA-governed hazardous waste treatment plant, where only DTSC has been delegated authority to do so by the federal EPA. The second is at the tail end of the IS/ND Project Description. There the IS/ND claims that the RAP is required to meet "closure" requirements of California Code of Regulations, Title 22, Division 4.5, Chapter 15 ('State RCRA Implementation Regs."). Rev appreciates the admission in the IS/ND as a step forward, but too little too late. The RAP itself sets TSDF closure standards in knowing direct conflict with State RCRA Implementation Regs., and with RCRA TSDF closure plan standards generally. As further illustrated in prior comments and documents in the record:

The IS/ND (and Proposed RAP) fails to disclose that the very waste oil/petroleum refining waste discharges being cleaned up were generated originally by big oil companies and defense contractors, among others, throughout the region. This is an essential disclosure to the community and reviewing agencies. The disclosure also is no doubt important as a head's up to PRPs like Exxon and Raytheon to review the proposed RAP and IS/ND. Without this disclosure, the IS/ND and proposed RAP fail to provide genuine notice compliant with CEQA, State RCRA Implementation Regs., other applicable RCRA public participation/notice requirements, and Water Board Policy 92-49.

It is not just the State RCRA Implementation Regs. that apply to the RAP Project for a RCRA TSDF, but all related statutes, regulations, policies and guidance referenced in the RCRA definition footnote above.

We were unable to find a commitment in the proposed RAP to comply with any RCRA TSDF regulations and policies, state or federal. The IS/ND does not explain how it will enforce State RCRA Implementation Regs. compliance, where not an express part of the proposed RAP or any mitigation monitoring and reporting plan and associated mitigated negative declaration.

IS/ND analysis of impacts statewide as to which Project tasks or phases what RCRA TSDF regulations or EPA guidance standards apply.

The RWQCB cannot claim in an IS/ND that RCRA and associated State RCRA Implementation Regs. apply to prevent and mitigate significant impacts, even as the RWQCB has refused to apply said Regs. and associated DTSC and EPA policy to its review and approval of the proposed RAP. The RWQCB has disregarded almost every prerequisite for RAP approval in said State RCRA Implementation Regs. and associated guidance – and ignored Water Board Policy 92-49 where overlapping. The ignored prerequisites to RAP review and approval include, among other matters discussed in prior comments and the record:

- a TSDF closure plan for each unit with a different treatment or storage area for hazardous waste and waste, throughout the LOC Site, consistent with sections 264 and 265.112(b) of the State RCRA Implementation Regs. (and more generally RCRA);
- a remedial investigation of discharges into soils immediately below each demolished and removed part of the TSDF and to the west of the LOC Site, whether or not underground or piping, and
- CMS and site-specific cleanup goals meeting all applicable RCRA and State RCRA Implementing Regs. standards.

Dorris-C-5 cont.

3. The IS/ND Does Not Acknowledge Potential Significant Impacts From The Project's TSDF Removal Phase.

Dorris-C-6

The RAP Project includes demolition, removal, transport and disposal of the entire RCRA hazardous waste treatment facility on the LOC Site ("TSDF Removal"). The IS/ND does not say what waste classification standards will be applied; it needs to commit to applying the EPA standards applicable to all TSDFs and state implemented TSDF closures.

The concrete hazardous waste pond, in place since at least the 1970s, was full until ordered drained in 2010. Even then, it was not fully drained. About 5 inches of pond/tank bottoms were left. Some of this hazardous waste may have seeped out in cracks or with stormwater seeping in. Yet the waste and hazardous waste contents of the pond likely has significantly grown anyway, due to stormwater leakage into the exposed pond over the last 15 years. The IS/ND needs to acknowledge potential significant impacts to wastewater/wastewater treatment, given the volume of wastewater and hazardous wastewater now expected to be removed from the massive hazardous waste leach pond. As for the concrete pond's sides and bottom, that concrete may have absorbed hazardous waste into its pores, likely requiring testing throughout to mitigate and protect against hazards/hazardous waste and materials impacts that are potentially significant.

The IS/ND and/or proposed RAP mentions it will provide some sort of unspecified waste classification protocol. The Project Proponent has not really committed to anything with such a vague, empty statement. The IS/ND and proposed RAP need to commit the Project Proponent to the waste classification protocols required for all RCRA regulated TSDF closure projects under all state implementation programs. The TSDF Removal phase as set forth in the RAP does not commit to compliance with waste handling/classification protocols of EPA for TSDFs (for state implementation).

Petroleum refinery tanks and their bottoms (even open concrete ones such as the hazardous waste leach pond and its bottoms) and various refinery catalysts are listed hazardous waste. Listed hazardous waste cannot be commingled with other waste without making that other waste subject to special listed hazardous waste rules as well.

The TSDF includes a refinery. The IS/ND does not evaluate the potential significant impacts as to hazards/hazardous materials or waste within the TSDF Removal, or discuss the mitigations or project features needed to redress not waste or even standard characteristic waste, but rather to address *listed* hazardous waste under RCRA. The IS/ND and Project described therein do not even mention listed hazardous waste anywhere.

There thus is a fair argument that the Project and IS/ND fails to consider and address potential significant impacts from the TSDF closure phase of the Project to health, safety, air quality, geology/soils, hydrology/groundwater, hazards and hazardous materials/waste, among others.

4. The RAP's Site Investigations and Soil Removal Project Tasks (after TSDF Removal) Ignore Substantial Evidence in the Record of Potential Significant Impacts and Conflict with TSDF Closure Plan Requirements and Mitigations.

Dorris-C-7

The Project Description acknowledges that the State RCRA Implementation Regs. apply to the RAP. Section 264/265.112(b) of the State Implementation Regs. and standard TSDF closure protocols require closure testing of soils immediately below each above ground and below ground treatment or storage unit in the TSDF, once removed. Each and every part of the TSDF on the LOC Site handled, treated and stored hazardous waste and waste, and was reported to be leaking and in bad repair throughout. Whether above or below ground, in piping or storage or treatment units, the soils underneath each and every removed part of the LOC Site TSDF need to be examined for the lateral and vertical extent of discharges from each part of the TSDF. Each of the carbon filtration

unit, refinery, hazardous waste docks and containment areas, and above ground storage tanks being removed from the LOC Sites thus require further investigation of soils under them after they are removed, because little to no borings have been taken directly under them, because covered by the TSDF until now.

As for the soil removal after TSDF unit removal and investigations thereunder, the IS/ND bases its no significant impact analysis on the unsupported assumption that only 5,000 cubic yards of soils need to be removed, cumulatively. This is inconsistent with provisions in the RAP requiring that all free product level saturated soils be removed to depth, including without limitation under and by the hazardous waste pond and elsewhere. The first ten feet also need to be removed based on metals and other COC concentrations. An ample record shows, with substantial evidence, that at least 35,000 cy of soil need to be removed because contaminated with COCs in the top ten feet and/or with free product levels of COCs under and by the hazardous waste pond and high heat refinery (that baked such high concentrations of COCs down to groundwater). This calculation can only increase after TSDF Removal investigation of each unit's discharges to soil and groundwater, per the State RCRA Implementation Regs. This substantial evidence supports a fair argument that the IS/ND failed to account for potential significant impacts from a 34,000 cubic yards of soil plus soil removal action (*see, e.g.*, BEC June 9, 2022 comment letter)

Dorris-C-7 cont.

The record provides a fair argument for a major expansion of the remedial program beyond the arbitrary 5,000 cy presumption in the IS, leaving potential significant impacts air quality, human health and safety, soils, hazards/hazardous waste management and groundwater if not properly planned for and properly implemented. The unconsidered potential impacts from the 34,000 plus cy removal action also could result in localized potential significant impacts on traffic/ingress and egress from Rev's property next door, and noise.

The proposed RAP does not include a soil management plan or a hazardous waste management plan. The IS/ND assumes these features will be mysteriously added, but as the proposed RAP stands they are not there, and thus cannot be relied on to mitigate potential significant effects from the TSDF Removal and soil removal project task, including to air quality, human health and safety, soils, hazards/hazardous waste management and groundwater.

The IS/ND and proposed RAP bizarrely focus further investigation and soil removal not on the then-removed TSDF, but on phantom piping segments purportedly at the Warehouse Site. Any theorized piping segments may never have been underground, or were removed decades ago (for example, as part of above-ground tank system decommissioning in the late 1990s). Moreover, unlike the LOC TSDF, which remains barely investigated, the Warehouse Site has been turned into Swiss cheese especially in theorized piping segment areas. Existing data already shows that any theorized piping segments are in areas that do not require soil removal because below free product saturation levels, and except as impacted by TSDF discharges onto the Warehouse Site, do not require separate remediation or removal.

5. A Mitigated Negative Declaration is Required to Mitigate the Potential for Indoor Air Intrusion During Proposed Air Sparging Project Task

The RAP and IS propose the installation of six air sparge wells along the southern property boundary of the LOC Site and Warehouse Site. Many of these wells are located within 50 feet of existing residences and numerous other sensitive receptors (such as schools) are located in the vicinity. There is no vapor control mechanisms proposed in the RAP or IS to protect against the migration of vapors during the sparging operation. The nearest proposed vapor extraction well (that the RAP assumes to have a 50-foot radius of influence) is between 75 and 225 feet away from the air sparge wells.

Dorris-C-8

The RWQCB has determined, as part of the April 11, 2022 conditions/modifications to the proposed RAP, that:

> "The three deep SVE wells are located above this fine-grained layer, screened from 55-65 feet bgs. This means that VOCs that are volatilized due to air sparging would not be captured by the SVE system and instead may travel laterally below the fine grained layer and probably cause expansion of the VOC plume in groundwater.
> Also, 1,4-dioxane may not be amenable to volatilization via sparging."

The IS/ND does not address the concerns associated with the proposed air sparging program in the RAP. This represents the potential for uncontrolled releases to potentially significantly impact air quality, human health, and groundwater if not properly mitigated.

6. The Remedial Investigation Phase in the RAP Needed to be Done before the CEQA Study and Final Remedial Action Plan Approval; Impact Evaluation is Premature.

Dorris-C-9

The RAP Project is atypical, in that it commits to remedial measures before site investigation is done under the to-be-removed TSDF. The record contains comments from the RWQCB on prior proposed remedial action plans and this proposed RAP – that is, substantial evidence - that further investigations need to be done before any final remedial action plan can be reviewed and

approved by the RWQCB with attendant CEQA study. The Warehouse Site was further investigated per the direction of the RWQCB, in advance of the RAP, but the LOC Site and TSDF thereon were not.

A full remedial investigation report is required prior to any RAP approval compliant with State RCRA Implementation Regs. Per the Project Description of the IS/ND, these regulations apply to the TSDF closure embodied in the proposed RAP. The RWQCB may not approve the RAP unless and until the remedial investigation is complete. Deferring investigation to after RAP approval also is not allowed under CEQA, because it hides potential significant impacts from an expanded remedial project after investigation.

Beyond this, as noted in initial comments from the RWQCB on the proposed RAP, until pilot studies are done, there is no verification that the RAP's chosen method will work as assumed. There thus remains a large range of remedial and removal methods open for the RAP once pilot information is in, but no evaluation of the changes' potential significant impacts in the IS/ND, or even disclosure of the potential changes after pilot study in the project description of the IS/ND.

Dorris-C-9 cont.

7. The IS/ND and Proposed RAP were not Circulated with Prerequisite Feasibility Study/CMS and Site Specific Cleanup Goals.

As shown in the 2020 Bowyer Environmental reports submitted to the LA-RWQCB, and in the March 2024 comments of Bowyer Environmental on the proposed RAP, there are important, scientific and technically supported alternatives to the proposed RAP promising far more effective and prompt results - in about 3 or so years, compared to the proposed RAP's 15 years and desperate reliance on natural attenuation for part of the remediation. These alternatives also are not currently estimated to cost more than the remediation and soil removal required under the proposed RAP project, including prior conditions for approval by the RWQCB.

Dorris-C-10

The RWQCB has made no attempt to provide a countervailing corrective measures study to support the proposed RAP. Yet a corrective measures study to select the most prompt, effective remedial action plan looking at alternatives ("CMS") is an absolutely pivotal prerequisite for any final RAP approval for a TSDF. CMS is required to be circulated with the proposed RAP and associated CEQA study for at least 30 days public comment and agency response or incorporation of advice therefrom, prior to final approval. *See* State RCRA Implementation Regs. and associated EPA and DTSC guidance incorporating NCP feasibility study as part of any proposed RAP and review thereof; *cf.* Water Board Policy 92-49 (similar but superseded by NCP). The CMS/ feasibility study requirements are for the protection of impacted property owners and potentially responsible parties who did not sign the RAP Agreement and agree to perform the RAP without CMS/feasibility study. Because the benefits are to others, the agency cannot waive upfront CMS/feasibility study without providing a full defense to RAP liability by those who did not sign the RAP Agreement.

Further, the proposed RAP cannot be treated as static, unchangeable over time, by the RWQCB. The proposed RAP itself, especially in the RWQCB's modifications and conditions for approval thereof, recognizes that even radical changes of remedial approach may be required over time. The RAP Agreement imposes a 15 year schedule for the RAP (19 years after the initial proposed RAP in 2021). Moreover:

Pilot studies have not been done yet;

Soil vapor wells may go asymptotic or fail to timely address solvents contamination in soils where mixed with near free-product level TPH;

Funding for improvements to the RAP may be later secured, e.g., from SCAP, Exxon Mobil or Raytheon, or DTSC, or other taxpayer sponsored cleanup fund, or SCAP;

Later provided investigations, remedial progress or failures, and related studies and goals may confirm the usefulness of such RAP changes or supplements to materially more effectively and promptly achieve TSDF closure and no further action.

The IS/ND expressly acknowledges that the site-specific cleanup goals are missing. This step cannot be deferred into the RAP. Under State Water Resources Control Board Policy 92-49 and the State RCRA Implementation Regs. (together with EPA and DTSC guidance therefor), site-specific cleanup goals must be publicly circulated with the proposed RAP (and CEQA study), before final approval of the RAP. Again, CEQA review of potential impacts cannot be meaningfully evaluated until the scope of the remediation project is known, and site-specific cleanup goals are a critical component of this.

8. Public Participation Efforts for the Proposed RAP Do Not Meet the Standard Set under CEQA, State RCRA Implementing Regs. (and associated DTSC and EPA Guidance), and State Water Policy Resolution 92-49.

Dorris-C-11

Proposed TSDF closure plans like this proposed RAP – including all parts required therein (including the still-missing CMS/feasibility study, site-specific cleanup goals and implementation schedule) – are required to undergo intensive public

participation, under CEQA, State RCRA Implementing Regs. (and associated DTSC and EPA Guidance and NCP requirements incorporated therein), and State Water Policy Resolution 92-49. Notice, public meetings, outreach, 30 day comment period, response to comments or incorporation of the advice therein, are all required. Further, public outreach, notices and circulation cannot be limited to squeaky wheels like Rev. It must include *all* owner/operators, historic and current, at the property to the immediate west of the LOC Site TSDF, because the property held a historic gas station and has substantial evidence in the record of contamination from the TSDF going directly to that property. Notice of this TSDF cleanup also should include PRPs. DTSC has provided PRP notices in the past as to the LOC Site (including the TSDF's changed status to not accepting further waste/hazardous waste from PRPs in the late 1990s). The RWQCB, as lead agency, thus should obtain DTSC's assistance in filling PRP notice requirements. In addition, Rev previously served on the RWQCB, through its counsel, its Eighth Amended Complaint listing PRPs with the DTSC RCRA notice letters attached thereto, and DTSC (as required for all such RCRA notices) received its own served copy. Said served Complaint and RCRA notices are part of intended submissions for the proposed RAP record. Because the federal EPA has overfiling authority as to all TSDF cleanups, it too should be noticed.

Dorris-C-11 cont.

9. The Proposed RAP Must be Fully Considered and Reviewed by the RWQCB's Governing Board, without Prejudgment or Predetermination based on Prior Review without CEQA Study.

Dorris-C-12

CEQA does not allow conditional approval of a RAP or other project contingent on later CEQA study and review. Such predetermination or prejudgment is not allowed under CEQA. Similarly, CEQA review must be accompanied with the CMS and Required Goals, again to not foreclose significant impact findings, mitigation measures and/or more effective, prompt remedial alternatives. According to the California Supreme Court, "before conducting CEQA review, agencies must not 'take any action' that significantly furthers a project 'in a manner that forecloses alternatives or mitigation measures that would ordinarily be part of CEQA review of that public project.' (Cal. Code Regs., tit. 14, § 15004, subd. (b)(2)(B); *Save Tara v. City of W. Hollywood,* 45 Cal. 4th 116, 138-139 (2008). Agencies also must not "take any action" that significantly furthers a project "in a manner that forecloses alternatives or mitigation measures that would ordinarily be part of CEQA review of that public project." *Id.;* Cal. Code Regs., tit. 14, § 15004, subd. (b)(2)(B). Accordingly the pending proposed RAP Project is open for full review on all approval and prerequisite study issues, not just CEQA matters.

As a related matter, the current proposed RAP review and approval must be done by the executive director and governing board, not a "designee" or other agency staff. CEQA requires that the lead agency's governing board approve the proposed RAP Project based on its CEQA review thereof. The CAOs allow final determination on a proposed RAP after CEQA study only by said governing board or the executive director.

LOC first provided a TSDF cleanup/closure plan in the 1980s. The RWQCB began oversight of MLOC's cleanup completion efforts back in the late 1960s. The proposed RAP targets completion more than seventy years later. A relatively short time period may be needed to make the corrections and complete the additional study requested herein and then notice and recirculate for comment as discussed above. This would be an investment well made. Rev's comments are designed to better assure timely and effective cleanup completion, while preventing further harm on impacted properties and businesses from the remediation process.

We appreciate your consideration and incorporation of Rev's comments.

Regards,

Law Offices of Beth S. Dorris

By: */s/* Beth S. Dorris

Beth S. Dorris

Counsel for Rev 973, LLC

cc. Noah Golden-Krasner, Esq.

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[1] All capitalized terms have the meaning set forth in the draft IS/ND unless otherwise specified herein.

[2] "RCRA" means the Resource Conservation and Recovery Act, 42 U.S.C. section 6901 et seq] and 40 CFR Parts 239 through 282, and all regulations promulgated thereunder by the federal Environmental Protection Agency ("EPA") and or the state California Department of Transportation ("DTSC") under EPA-delegated authority to implement RCRA at the state level, under the State RCRA Implementing Regs. defined below, and all DTSC and EPA guidance and policy documents associated therewith.

RCRA also includes 42 U.S.C. section 9601 et seq., and National Contingency Plan regulations thereunder, to the extent authorized by EPA and/or DTSC to be applied to RCRA TSDF closure, including without limitation feasibility study and other RAP prerequisites before lead agency approval thereof.

[3] "MLOC" means Mouren-Laurens Oil Company. MLOC is also referred to as the Project Proponent and Work Party for the proposed RAP.

[4] Unless a comment herein expressly states that impacts are in other impact categories, reference to potential significant impacts are to soils/geology, air quality, groundwater quality/hydrology, hazards/hazardous waste management or hazardous materials, and human health and safety.

From: beth.dorris@aol.com
Sent: Friday, March 21, 2025 9:11 PM
To: Siddiqui, Adnan@Waterboards
Subject: Re: Initial Study/ Negative Declaration

The IS/ND Notice claims in the last page that there is some sort of "Removal Action Work Plan" supporting the IS/ND or further describing the RAP project. We could not locate a plan with this title on the geotracker site for the ML Site. Please email to Jerrold Fine and me a copy of the proposed Removal Action Work Plan by 1 pm Monday March 24, 2025. As an impacted property owner, Rev is entitled to receive notice and 30 days comment before any such Removal Action Work Plan is approved.

If the reference in the Board's IS/ND to "Removal Action Work Plan" is in error, and it was meant to refer to the Final Remedial Action Plan, there is no need to provide another copy.

From: Siddiqui, Adnan@Waterboards
Sent: Friday, March 7, 2025 1:08 PM
To: 'Joshua Fine'; beth.dorris@aol.com; 'rtraylor@partneresi.com'; jerry
Cc: Heath, Arthur@Waterboards; Yu, Stephanie@Waterboards
Subject: Initial Study/ Negative Declaration

> Hello everyone,
> I am informing you that an Initial Study/ Negative Declaration (IS/ND) has been completed for the Remediation Action Plan for the Former Mouren-Laurens Oil Company and Leach Oil Company Sites Project. The IS/ND was circulated for public comment and uploaded to Geotracker on February 24, 2025, and is also available on the State Clearinghouse's CEQANet database.
>
> Here is the Geotracker link to the IS/ND document:
> https://documents.geotracker.waterboards.ca.gov/regulators/deliverable_documents/7639280021/RAP%20ISND_020325-Final_grc.pdf

On February 20, 2025, I notified Beth Dorris via email that the IS/ND was available for review and comment and provided her the Geotracker link to the document. Because I have not heard back from her, and to make sure that Rev 973 is aware of the availability of the IS/ND, I am sending this information to all of you. The Notice of Availability and Notice of Intent to Adopt is attached. Thank you.
Adnan

Adnan Siddiqui, PG, CHG
Senior Engineering Geologist
Site Cleanup Program
California Regional Water Quality Control Board, Los Angeles Region
320 West 4th Street, Suite 200
Los Angeles, CA 90013
Tel: (213) 576-6812 Direct

Currently, the best way to reach me is via email

Letter 7: Law Office of Beth Dorris (Dorris-C)

Responses to Comments

Dorris-C-1 The commenter states that they are submitting these comments on behalf of "Rev 973, LLC, a California limited liability corporation", regarding the proposed final remedial action plan ("RAP" or "Project") for the RCRA hazardous waste treatment facility ("TSDF") at the LOC Site and nearby impacted properties, including the former MLOC Site (also referred to herein as the "Warehouse Site"), as supported by IS/ND. The commenter notes that Rev is the current owner of the impacted Warehouse Site.

Response to Dorris-C-1. The IS/ND describes the Project site as the MLOC Site and the LOC Site and does not use the term "Warehouse Site." The comment is otherwise noted.

Dorris-C-2 The commenter indicates that the delayed circulation of the CEQA document for the proposed Project and the type of document (i.e., IS/ND versus an IS/MND) is not appropriate for a Project like this. The commenter emphasizes the lead agencies typically prepare IS/MNDs for the TSDF closure plans or other remedial action plans for projects of this scale or smaller. The commenter references Whittaker-Bermite RAP, which was revised and recirculated as an MND.

Response to Dorris-C-2. Refer to Response to Dorris-C-5 regarding TSDF closure plans. The comment is noted.

Dorris-C-3 The commenter states that corrections and additions are needed for the noticed IS/ND as to the project description, Project Site, historic use, and project sponsor/work party. The commenter states that the Project needs to incorporate modifications and gap filling for the RAP in the RAP Agreement entered April 2, 2024.

The commenter states that a mandatory part of any proposed RAP is the completion schedule therefor, refers to State Water Resources Control Board Resolution 92-49, and asserts that if, as here, the schedule modifies the proposed RAP with specific Project Tasks defined therein that together comprise the RAP, that modification is a material part of the RAP that needs to be disclosed in the IS/ND.

The commenter states that the IS/ND defines the "RAP" as limited to the initial proposal in July 2021 by EKI (as MLOC's consultant) and modifications thereto by the RWQCB thereto dated April 11, 2022. This disclosure of the RAP is materially incomplete. The RWQCB provided initial modifications to the RAP in August 19, 2021, which earlier modification is part of the "RAP" as defined in the RWQCB's RAP Agreement. In addition, the RWQCB and Project proponent (MLOC) provided the mandatory schedule element of the RAP as

Exhibit A to the agreement between the LA-RWQCB, LOC, MLOC and related parties, and entered April 2, 2024 ("RAP Agreement"). The RAP Agreement provides the mandatory schedule element for a complete RAP. The RAP Agreement provides a project initiation date and sets milestone completion dates for each separate Project task that collectively comprise the proposed RAP as so modified. It also modifies the RAP with specified Project tasks that, as defined therein, comprise the RAP, and are required to be performed and completed by the work party designated therein, MLOC. All this forms critical modifications to and fills in mandatory portions of a final remedial action plan otherwise omitted from the documents listed in the IS/ND as comprising the RAP. The omissions thus are material and need to be corrected. The RAP Agreement is posted on the same online site as the other partial portions of the RAP cited in the IS/ND, so this corrective can be easily made.

The commenter questions the Project initiation date.

Finally, the commenter states that MLOC is under a 1987 cleanup order; recites provisions from the settlement agreement entered into between the Regional Board, MLOC, and LOC; and states that in 1998, MLOC was ordered by the Los Angeles County Superior Court not to handle hazardous material or waste and received a no-contest felony sentence for hazardous waste discharge violations.

Response to Dorris-C-3. The Regional Board's August 19, 2021 letter did not modify the RAP submitted by EKI. Rather, the August 19, 2021 letter concurs with the proposed conceptual approach in the RAP and states that the Regional Board planned to issue a detailed approval letter addressing any comments received from the public on the RAP and that the letter would also include comments from the Regional Board. On October 6, 2021, the Regional Board circulated a Fact Sheet and Notice of Opportunity for Public Comment on the proposed RAP to interested parties and 259 owners and occupants of properties located within a 500-foot radius of the Sites. The Regional Board received comments regarding the proposed RAP from attorney Beth Dorris, Esq., on behalf of Rev 973, dated October 8, 2021, which attached comments dated August 31, 2021 from Rev 973's consultant Bowyer Environmental Consulting, Inc. The RWQCB evaluated the comments received and issued the updated RAP modifications contained in the RWQCB conditional approval letter dated April 11, 2022. The Regional Board's conditional approval letter dated April 11, 2022, is the only modification to the RAP that had been submitted by EKI. The April 11, 2022 letter and the RAP submitted by EKI comprise the Project considered in the Initial Study. The Project will not be approved until the CEQA document is adopted.

The commenter refers to a "RAP Agreement entered April 2, 2024." This document does not exist. A settlement agreement was entered into approximately that date, between the Regional Board; Mouren-Laurens Oil Company, Inc., Mireille Mouren-Laurens, The Estate of Joseph Mouren-

Laurens, and The Estate of Emma Mouren-Laurens (collectively "MLOC Parties"); and Leach Oil Company, Inc., Patricia Leach, also known as Patricia Benetatos, and Leach Property Management (collectively "LOC Parties"). Exhibit A of the settlement agreement includes deadlines by which the MLOC Parties and LOC Parties are required to complete remediation-related tasks at the Site so that MLOC Parties and LOC Parties may obtain releases from "Total Alleged Civil Penalties" as they are defined in the settlement agreement. The deadlines in the settlement agreement, which are based off the "project initiation date," are not a part of the RAP.

The updated RAP approval will follow the adoption of the CEQA document. The CEQA Project is the implementation of the RAP submitted by EKI, as modified by the Regional Board's April 11, 2022, letter. The tasks to be performed under the Project include development of various studies and workplans and their implementation under the Regional Board's oversight.

The project initiation date in the settlement agreement is the date the RAP is approved by the Regional Board, after adoption of the CEQA document. Once the updated RAP is approved, the Regional Board will issue a letter directing the MLOC Parties and the LOC Parties to begin submitting work plans and reports by specific due dates for the Regional Board's review and approval. It is expected that as the designated "work party" under the settlement agreement, the MLOC Parties, through their consultant EKI, will be implementing the updated RAP and the tasks in Exhibit A of the settlement agreement. The approach in the updated RAP is sequential, consisting of several steps that may overlap during implementation, but each task will require review and approval separately from the Regional Board as described in the Regional Board's April 11, 2022 letter. Exhibit A of the settlement agreement is not a modification of the RAP. Under the settlement agreement, the purpose of Exhibit A is to release MLOC and LOC Parties from a portion of the Total Alleged Civil Penalties upon satisfactory completion of tasks within the time frame in Exhibit A. Thus, Exhibit A is a guide as to when RAP tasks are likely to be completed.

Dorris-C-4 The commenter states that the Project Site needs to include all properties on which RAP work will be performed, including to the west of the LOC Site TSDF and that the IS/ND arbitrarily limits the "Project Site" and study of impacts thereon to the LOC Site (where the TSDF is located) and the impacted Warehouse Site to the immediate east. Property to the immediate west of the LOC Site and TSDF thereon also are impacted and thus require inclusion in the Project Site on which the RAP is to be performed. Prior (phase II) investigations establish high concentrations of soil and soil vapor levels at and near the LOC Site's western (and northwestern) border. Such high levels of soil contamination from massive TSDF discharges do not just magically disappear based on property line. Groundwater waters near the northwest corner, on site and immediately cross gradient from the historic TSDF carbon filtration unit, show exceptionally high levels of solvent contamination. It is already well

established with substantial evidence, then, that the RAP Project tasks include the properties to the immediate west of the LOC Site. Because excluded from the Project Site where the RAP is disclosed to be performed, impacted property owners, business, tenants and possibly residents have not received the necessary disclosures. Property to the west also is reported in historic use reports as having had a gas station. Any commingled discharges of petroleum or used oil and associated contaminants may significantly increase the time and scope of the RAP and even modify the type of remediation or duration. There is substantial evidence of a fair argument that the proposed RAP Project will have potential significant impacts, based on omitted impacts to the west.

The commenter also states that the IS/ND and NOA/NOI do not adequately and consistently disclose RAP hazardous waste treatment facility requirements and that the surrounding community has a particular interest in hearing about cleanup of a RCRA hazardous waste treatment and storage facility, or TSDF, that received for "treatment" hazardous waste deposits from hundreds of offsite generators, transporters and arrangers throughout California for decades. This critical disclosure should be on the front of every notice and study. Yet the NOA/NOI's Project Description does not mention it at all, in the project description or elsewhere.

Similarly, the IS/ND largely avoids calling attention to the LOC RCRA TSDF that lies at the heart of the RAP Project. The IS describes use of the LOC Site as limited to refining of waste oil in section 1.3, for example. Waste oil is only one of the wastes and hazardous wastes accepted in manifests and bills of lading, which include oily water, sludge, crude oil refining wastes, solvents, PCBs and a host of other hazardous wastes. Reference to "refining" as the sole treatment/storage at the LOC Site is also incorrect and deceptively minimizing. The TSDF includes a variety of other hazardous waste treatment units, such as a carbon filtration system, separation and clarification in a sump system; storage in various hazardous waste docks, containment areas and tank systems; and leaching from an unlined hazardous waste pond. DTSC ultimately determined that the leach pond was unlawful application of hazardous waste to the land and not treatment (like refining) at all.

The IS/ND hides the fact that the hazardous waste being cleaned up was generated in the first place by offsite PRPs (strictly liable as a matter of law not agency discretion from "cradle to grave"). The IS does briefly mention "TSDF" status. The first mention is in the Project Background section, in a purported (and misleading) effort to explain why the RWQCB is the lead agency for a RCRA-governed hazardous waste treatment plant, where only DTSC has been delegated authority to do so by the federal EPA. The second is at the tail end of the IS/ND Project Description. The IS/ND claims that the RAP is required to meet "closure" requirements of California Code of Regulations, Title 22, Division 4.5, Chapter 15 ('State RCRA Implementation Regs."). Rev appreciates the admission in the IS/ND as a step forward, but too little too late. The RAP itself sets TSDF closure standards in knowing direct conflict with

State RCRA Implementation Regs., and with RCRA TSDF closure plan standards generally. As further illustrated in prior comments and documents in the record:

The commenter further states that the IS/ND (and Proposed RAP) fails to disclose that the very waste oil/petroleum refining waste discharges being cleaned up were generated originally by big oil companies and defense contractors, among others, throughout the region. This is an essential disclosure to the community and reviewing agencies. The disclosure also is no doubt important as a head's up to PRPs like Exxon and Raytheon to review the proposed RAP and IS/ND. Without this disclosure, the IS/ND and proposed RAP fail to provide genuine notice compliant with CEQA, State RCRA Implementation Regs., other applicable RCRA public participation/notice requirements, and Water Board Policy 92-49.

It is not just the State RCRA Implementation Regs. that apply to the RAP Project for a RCRA TSDF, but all related statutes, regulations, policies and guidance referenced in the RCRA definition footnote above.

The commenter states that they were unable to find a commitment in the proposed RAP to comply with any RCRA TSDF regulations and policies, state or federal. The IS/ND does not explain how it will enforce State RCRA Implementation Regs. compliance, where not an express part of the proposed RAP or any mitigation monitoring and reporting plan and associated mitigated negative declaration.

IS/ND analysis of impacts statewide as to which Project tasks or phases what RCRA TSDF regulations or EPA guidance standards apply.

The RWQCB cannot claim in an IS/ND that RCRA and associated State RCRA Implementation Regs. apply to prevent and mitigate significant impacts, even as the RWQCB has refused to apply said Regs. and associated DTSC and EPA policy to its review and approval of the proposed RAP. The RWQCB has disregarded almost every prerequisite for RAP approval in said State RCRA Implementation Regs. and associated guidance – and ignored Water Board Policy 92-49 where overlapping. The ignored prerequisites to RAP review and approval include, among other matters discussed in prior comments and the record:

- a TSDF closure plan for each unit with a different treatment or storage area for hazardous waste and waste, throughout the LOC Site, consistent with sections 264 and 265.112(b) of the State RCRA Implementation Regs. (and more generally RCRA);

- a remedial investigation of discharges into soils immediately below each demolished and removed part of the TSDF and to the west of the LOC Site, whether or not underground or piping, and

- CMS and site-specific cleanup goals meeting all applicable RCRA and State RCRA Implementing Regs. standards.

Response to Dorris-C-4. The comment is noted. The Leach property is included as part of the Site. The Project location includes the MLOC and LOC Sites, which are the sources of contamination and subject to requirements in Cleanup and Abatement Orders R4-2014-0117 and R4-2014-0118. It is standard practice in the assessment and cleanup of hazardous waste sites to begin at onsite source areas. Afterwards, the assessment may proceed offsite to delineate the contamination plumes, if needed. The data gap assessment task is included in the EKI updated RAP implementation.

The Regional Board sought comments from the public regarding cleanup at both the MLOC and LOC Sites. In October 2021, a Fact Sheet and Notice of Opportunity for Public Comment on the RAP submitted by EKI was mailed to 259 homes, businesses, and property owners within a 500-foot radius of the MLOC and LOC Sites. The Regional Board did not receive any comments from the community. Additionally, the RWQCB circulated the NOA for Public Comment and NOI to other relevant public agencies including City of Compton, all homes, businesses, and property owners located within 500-foot radius of the Project Site. The only written comments received on the IS/ND are those listed in Section 2.0 of this Responses to Comments document.

The IS/ND recognizes the LOC Site as the former TSDF. Due to the comingled nature of the contamination, DTSC officially transferred the oversight of the assessment and cleanup for LOC Site to the Regional Board in 2009. The Regional Board's process governs the site cleanup and closure of the LOC Site and is parallel to, if not more comprehensive than, RCRA TSDF closure requirements. See also Response to Comment Dorris-C-5.

Dorris-C-5 The commenter states that the IS/ND does not acknowledge potential significant impacts from the Project's TSDF removal phase and that the RAP Project includes demolition, removal, transport and disposal of the entire RCRA hazardous waste treatment facility on the LOC Site ("TSDF Removal"). The IS/ND does not say what waste classification standards; it needs to commit to applying the EPA standards applicable to all TSDFs and state implemented TSDF closures.

The commenter states that the concrete hazardous waste pond, in place since at least the 1970s, was full until ordered drained in 2010. Even then, it was not fully drained. About 5 inches of pond/tank bottoms were left. Some of this hazardous waste may have seeped out in cracks or with stormwater seeping in. Yet the waste and hazardous waste contents of the pond likely has significantly grown anyway, due to stormwater leakage into the exposed pond over the last 15 years. The IS/ND needs to acknowledge potential significant impacts to wastewater/wastewater treatment, given the volume of wastewater and hazardous wastewater now expected to be removed from the

massive hazardous waste leach pond. As for the concrete pond's sides and bottom, that concrete may have absorbed hazardous waste into its pores, likely requiring testing throughout to mitigate and protect against hazards/hazardous waste and materials impacts that are potentially significant.

The IS/ND and/or proposed RAP mentions it will provide some sort of unspecified waste classification protocol. The Project Proponent has not really committed to anything with such a vague, empty statement. The IS/ND and proposed RAP need to commit the Project Proponent to the waste classification protocols required for all RCRA regulated TSDF closure projects under all state implementation programs. The TSDF Removal phase as set forth in the RAP does not commit to compliance with waste handling/classification protocols of EPA for TSDFs (for state implementation).

Petroleum refinery tanks and their bottoms (even open concrete ones such as the hazardous waste leach pond and its bottoms) and various refinery catalysts are listed hazardous waste. Listed hazardous waste cannot be commingled with other waste without making that other waste subject to special listed hazardous waste rules as well.

The TSDF includes a refinery. The IS/ND does not evaluate the potential significant impacts as to hazards/hazardous materials or waste within the TSDF Removal or discuss the mitigations or project features needed to redress not waste or even standard characteristic waste, but rather to address listed hazardous waste under RCRA. The IS/ND and Project described therein do not even mention listed hazardous waste anywhere.

There thus is a fair argument that the Project and IS/ND fails to consider and address potential significant impacts from the TSDF closure phase of the Project to health, safety, air quality, geology/soils, hydrology/groundwater, hazards and hazardous materials/waste, among others.

Response to Dorris-C-5. The Initial Study identifies the LOC Site as a TSDF facility that had operated under a RCRA permit. However, as stated in Response to Comment Dorris-C-4, in 2009, DTSC transferred the oversight of the LOC Site for assessment and cleanup to the Regional Board, and the Regional Board's site cleanup process governs. The Regional Board's process under the Site Cleanup Program for issuing site closure to contaminated sites is parallel to, if not more comprehensive than, RCRA TSDF closure requirements. The Regional Board also requires land use covenants to protect current and future site occupants.

At the LOC Site, assessment activities consisting of identifying all potential sources of contamination (tanks, sumps, clarifiers, pipping, etc.) and inventorying the chemicals used and stored at the LOC Site have already been

completed. Additionally, tanks have been triple-rinsed and certified clean with disposal of rinsate under universal hazardous waste manifest.

A demolition work plan that includes an AQMD P5 work plan will be first implemented at the LOC Site to remove all remnants of former operations. After that, data gap assessment to complete characterization of waste discharged at the site still needs to be conducted, which includes sampling of soil, soil vapor, groundwater and delineation of contamination in each media.

A combination of soil excavation, soil vapor extraction, in-situ technologies, and monitored natural attenuation (MNA) is expected for LOC Site. The specific selected remedy(ies) will be implemented through design, construction, operation, and performance monitoring.

The demolition work, data gap investigation, and the implementation of selected remedies are expected to have no significant environmental impact.

Dorris-C-6 The commenter states that the RAP's Site investigations and soil removal project tasks (after TSDF removal) ignore substantial evidence in the record of potential significant impacts and conflict with TSDF closure plan requirements and mitigations.

The Project Description acknowledges that the State RCRA Implementation Regs. apply to the RAP. Section 264/265.112(b) of the State Implementation Regs. and standard TSDF closure protocols require closure testing of soils immediately below each above ground and below ground treatment or storage unit in the TSDF, once removed. Each and every part of the TSDF on the LOC Site handled, treated and stored hazardous waste and waste, and was reported to be leaking and in bad repair throughout. Whether above or below ground, in piping or storage or treatment units, the soils underneath each and every removed part of the LOC Site TSDF need to be examined for the lateral and vertical extent of discharges from each part of the TSDF. Each of the carbon filtration unit, refinery, hazardous waste docks and containment areas, and above ground storage tanks being removed from the LOC Sites thus require further investigation of soils under them after they are removed, because little to no borings have been taken directly under them, because covered by the TSDF until now.

The commenter states that as for the soil removal after TSDF unit removal and investigations thereunder, the IS/ND bases its no significant impact analysis on the unsupported assumption that only 5,000 cubic yards of soils need to be removed, cumulatively. This is inconsistent with provisions in the RAP requiring that all free product level saturated soils be removed to depth, including without limitation under and by the hazardous waste pond and elsewhere. The first ten feet also need to be removed based on metals and other COC concentrations. An ample record shows, with substantial evidence,

that at least 35,000 cy of soil need to be removed because contaminated with COCs in the top ten feet and/or with free product levels of COCs under and by the hazardous waste pond and high heat refinery (that baked such high concentrations of COCs down to groundwater). This calculation can only increase after TSDF Removal investigation of each unit's discharges to soil and groundwater, per the State RCRA Implementation Regs. This substantial evidence supports a fair argument that the IS/ND failed to account for potential significant impacts from 34,000 cubic yards of soil plus soil removal action (see, e.g., BEC June 9, 2022, comment letter)

The record provides a fair argument for a major expansion of the remedial program beyond the arbitrary 5,000 cy presumption in the IS, leaving potential significant impacts air quality, human health and safety, soils, hazards/hazardous waste management and groundwater if not properly planned for and properly implemented. The unconsidered potential impacts from the 34,000 plus cy removal action also could result in localized potential significant impacts on traffic/ingress and egress from Rev's property next door, and noise.

The proposed RAP does not include a soil management plan or a hazardous waste management plan. The IS/ND assumes these features will be mysteriously added, but as the proposed RAP stands they are not there and thus cannot be relied on to mitigate potential significant effects from the TSDF Removal and soil removal project task, including to air quality, human health and safety, soils, hazards/hazardous waste management and groundwater.

The IS/ND and proposed RAP bizarrely focus further investigation and soil removal not on the then-removed TSDF, but on phantom piping segments purportedly at the Warehouse Site. Any theorized piping segments may never have been underground, or were removed decades ago (for example, as part of above-ground tank system decommissioning in the late 1990s). Moreover, unlike the LOC TSDF, which remains barely investigated, the Warehouse Site has been turned into Swiss cheese especially in theorized piping segment areas. Existing data already shows that any theorized piping segments are in areas that do not require soil removal because below free product saturation levels, and except as impacted by TSDF discharges onto the Warehouse Site, do not require separate remediation or removal.

Response Dorris C-6. All workplans for removal of tanks from the Leach Site will be reviewed and approved by the RWQCB. The comment that there will be at least 34,000 cubic yards of soil removed at the MLOC and LOC Sites likely envisions soil excavation to 40 to 60 feet depth in a very large area, which creates a multitude of health and safety concerns and is considered impractical and cost prohibitive when compared to the planned in-situ remedial techniques. The removal of impacted soil will not be done in huge excavations that are tens of feet deep and hundreds of feet long and wide.

Instead, a combination of localized excavation and drilling methods may be employed for soil removal.

Soil excavation is one of the selected remedies for the LOC and MLOC Sites in the updated RAP. First, the results from the data gap investigation will be used to fine tune and determine the limits of large excavation in the Skim-Pond area. Second, limited soil excavation will be performed along the pipelines, and third, large diameter bucket auger drilling may be used to remove impacted soil from depths as deep as 60 feet below ground surface. A soil removal action plan will be developed considering the contaminants of concern, their concentration, and location. Sufficient information exists to consider the environmental impacts of soil excavation. The following is a calculation of a conservative estimate of the volume of soil that might be excavated.

It is expected that at the MLOC and LOC Sites, soil removal may occur using 36-inch bucket auger drilling to a depth of up to 60 feet bgs to remove high concentrations of COCs in soil. Accordingly, this is 16 cubic yards (cy) of soil per hole, based on a 3-foot diameter by 60-foot depth. A maximum of 30 bucket auger holes are estimated, resulting in 480 cy of soil removed.

Regarding the volume of soil expected to be removed along the pipelines:

- Pipeline 1: 170’ L x 5’ w x10’ d =315 cy
- Pipeline 2: 160’ L x 5’ w x 10’ d =296 cy
- Pipeline 3: 140’ L x 5’ w x 10’ d =260 cy

The total volume of soil expected to be removed along the pipelines is estimated to be 871 cy.

For impacted soil in the skim pond area, open excavation (i.e. excavator) in the soil removal area is estimated to be up to 40’ wide x 60’ long x 40’ deep, resulting in a volume of approximately 3,555 cy of soil excavated. However, it is likely that the depth of the excavation area will not exceed 20 feet, but excavation may be expanded laterally.

Accordingly, the total volume of soil expected to be excavated is the sum of 871 cy, 436 cy, and 3,555 cy, which is 4,906 cy.

Therefore, it is estimated that approximately 5,000 cubic yards of highly impacted soil may be removed. In addition, after soil vapor extraction (SVE) is employed, a contingency to use hot air injection within the most contaminated deeper area is planned to be tested for inclusion in the remedy. The SVE wells and soil vapor probes in this specific area will be constructed of steel and not PVC. The comment that light non-aqueous phase liquid (LNAPL) is present is not supported by multiple lines of evidence.

The comment regarding significant impacts on traffic, and noise caused by the removal of impacted soil is based on a soil removal estimate of 34,000 cubic yards, which is not based on evidence and practicality. The soil removal work plan that will be submitted to the Regional Board will provide all the details of the amount of soil to be excavated and its location. Furthermore, any required permits (e.g., grading, waste discharge requirements permit, SCAQMD) will be obtained from the appropriate regulating agencies prior to the implementation of soil removal at LOC and MLOC Sites. The MLOC Site is also a source of soil contamination, and during updated RAP implementation, coordination with the MLOC Site property owner will be critical for a successful outcome. As described earlier, due to the incorporation of bucket auger method and application of hot air, the potential amount of impacted soil that will be excavated is expected to be less than 5,000 cy.

There is evidence of existing underground pipelines at the MLOC, or Warehouse Site. In fact, AEI Consultants submitted to the Regional Board an Underground Pipeline Removal Work-Plan dated October 28, 2005, prepared on behalf of Rev 973, LLC. In a letter dated May 25, 2006 (Appendix C to this document), the Regional Board conditionally approved the pipeline's removal. There is no record that the work plan was implemented. Based on the existing data and results of data gap investigation, soil excavation may need to be performed at the MLOC Site to remove these pipelines.

Dorris-C-7 The commenter states that a mitigated negative declaration is required to mitigate the potential for indoor air intrusion during proposed air sparging project task. The RAP and IS propose the installation of six air sparge wells along the southern property boundary of the LOC Site and Warehouse Site. Many of these wells are located within 50 feet of existing residences and numerous other sensitive receptors (such as schools) are located in the vicinity. There is no vapor control mechanisms proposed in the RAP or IS to protect against the migration of vapors during the sparging operation. The nearest proposed vapor extraction well (that the RAP assumes to have a 50-foot radius of influence) is between 75 and 225 feet away from the air sparge wells.

The RWQCB has determined, as part of the April 11, 2022, conditions/modifications to the proposed RAP, that:

> "The three deep SVE wells are located above this fine-grained layer, screened from 55-65 feet bgs. This means that VOCs that are volatilized due to air sparging would not be captured by the SVE system and instead may travel laterally below the fine grained layer and probably cause expansion of the VOC plume in groundwater. Also, 1,4-dioxane may not be amenable to volatilization via sparging."

The IS/ND does not address the concerns associated with the proposed air sparging program in the RAP. This represents the potential for uncontrolled

releases to potentially significantly impact air quality, human health, and groundwater if not properly mitigated.

Response Dorris C-7. The comment suggests the potential for indoor air intrusion during the proposed air sparging project task will require mitigation measures that will have a significant environmental impact, that can be mitigated to less than significant.

In the event that air sparging is utilized to partition VOCs dissolved in groundwater into vapors, SVE wells will also be installed to appropriate depths and locations to capture fugitive vapors for aboveground treatment. It is likely that air sparging will not be employed as a remedy and that instead biosparging, an in-situ technology, will be employed to enhance natural degradation of the organic compounds. Also, bench-scale testing for the use of ozone injection will be evaluated.

As far as intrusion of VOCs into onsite buildings is concerned, the most recent soil vapor data collected at the MLOC, or Warehouse Site in 2020 show that the potential for intrusion of vapors in concentrations that could exceed the indoor air action level exists at the MLOC Site. The Regional Board required sub-slab and indoor air sampling to evaluate the potential vapor intrusion risk at the MLOC Site, but Rev 973 never performed it. Therefore, a vapor intrusion evaluation plan for the MLOC Site will need to be prepared and implemented once the Project is initiated. The scant data collected at the LOC Site is not reliable. Therefore, soil vapor sampling will be performed and evaluated for potential vapor intrusion during data gap investigation. Based on the results of the vapor intrusion evaluation, appropriate measures to protect occupants will be employed, if necessary.

These measures serve to increase ventilation within the building and use of air filters do not cause an adverse environmental impact.

Dorris-C-8 The commenter states that the remedial investigation phase in the RAP needed to be done before the CEQA study and final remedial action plan approval; impact evaluation is premature. The RAP Project is atypical, in that it commits to remedial measures before site investigation is done under the to-be-removed TSDF. The record contains comments from the RWQCB on prior proposed remedial action plans and this proposed RAP – that is, substantial evidence - that further investigations need to be done before any final remedial action plan can be reviewed and approved by the RWQCB with attendant CEQA study. The Warehouse Site was further investigated per the direction of the RWQCB, in advance of the RAP, but the LOC Site and TSDF thereon were not.

A full remedial investigation report is required prior to any RAP approval compliant with State RCRA Implementation Regs. Per the Project Description of the IS/ND, these regulations apply to the TSDF closure embodied in the

proposed RAP. The RWQCB may not approve the RAP unless and until the remedial investigation is complete. Deferring investigation to after RAP approval also is not allowed under CEQA, because it hides potential significant impacts from an expanded remedial project after investigation.

Finally, the commenter states that beyond this, as noted in initial comments from the RWQCB on the proposed RAP, until pilot studies are done, there is no verification that the RAP's chosen method will work as assumed. There thus remains a large range of remedial and removal methods open for the RAP once pilot information is in, but no evaluation of the changes' potential significant impacts in the IS/ND, or even disclosure of the potential changes after pilot study in the project description of the IS/ND.

Response Dorris C-8. The updated RAP has Soil Vapor Extraction Systems planned as part of the Remedial Action to capture volatiles resulting from air sparging. During the assessment and cleanup of a contaminated site, it is common to develop an effective remedy once the contaminants and their occurrence are understood. Any remaining data gaps are completed during the implementation of the remedy. The primary remedies selected and proposed in the updated RAP are excavation, SVE, and in-situ technology, along with monitored natural attenuation. All these remedies are proven technologies and were evaluated before they were proposed in the RAP. However, during the implementation phase, the data gap investigation will determine the limits of soil excavation, the pilot test will determine the number of SVE wells required, and bench-scale testing will determine the type of amendments required. A waste discharge requirements permit will be secured before application of in-site technology at the site.

In the Initial Study, conservative scenarios are used to determine potential effects on the environment. For example, the largest possible SVE system capable of operating at 500 cubic feet per minute airflow and 13 inches mercury vacuum was used to estimate potential impacts. The actual design based on the pilot testing will not exceed this conservatively-estimated design. Similarly, a high estimated volume of soil to be excavated is used to determine the effects on the environment. The actual and final soil removal estimate will be based on the results of data gap investigation and logistics of soil excavation. However, it is not projected to exceed the estimated amount of 5,000 cy. The evaluation of any adverse environmental impacts and applicable mitigation measures are based on the most conservative approach and included in the final CEQA document.

Dorris-C-9 The commenter states that the IS/ND and Proposed RAP were not circulated with prerequisite feasibility study/CMS and site specific cleanup goals and that reports and comments on the proposed RAP submitted by Bowyer Environmental in 2020 and 2024, respectively, show that there are important, scientific and technically supported alternatives to the proposed RAP promising far more effective and prompt results - in about 3 or so years,

compared to the proposed RAP's 15 years and desperate reliance on natural attenuation for part of the remediation. These alternatives also are not currently estimated to cost more than the remediation and soil removal required under the proposed RAP project, including prior conditions for approval by the RWQCB.

The RWQCB has made no attempt to provide a countervailing corrective measures study to support the proposed RAP. Yet a corrective measures study to select the most prompt, effective remedial action plan looking at alternatives ("CMS") is an absolutely pivotal prerequisite for any final RAP approval for a TSDF. CMS is required to be circulated with the proposed RAP and associated CEQA study for at least 30 days public comment and agency response or incorporation of advice therefrom, prior to final approval. See State RCRA Implementation Regs. and associated EPA and DTSC guidance incorporating NCP feasibility study as part of any proposed RAP and review thereof; cf. Water Board Policy 92-49 (similar but superseded by NCP). The CMS/feasibility study requirements are for the protection of impacted property owners and potentially responsible parties who did not sign the RAP Agreement and agree to perform the RAP without CMS/feasibility study. Because the benefits are to others, the agency cannot waive upfront CMS/feasibility study without providing a full defense to RAP liability by those who did not sign the RAP Agreement.

Further, the proposed RAP cannot be treated as static, unchangeable over time, by the RWQCB. The proposed RAP itself, especially in the RWQCB's modifications and conditions for approval thereof, recognizes that even radical changes of remedial approach may be required over time. The RAP Agreement imposes a 15 year schedule for the RAP (19 years after the initial proposed RAP in 2021). Moreover:

- Pilot studies have not been done yet;
- Soil vapor wells may go asymptotic or fail to timely address solvents contamination in soils where mixed with near free-product level TPH;
- Funding for improvements to the RAP may be later secured, e.g., from SCAP, Exxon Mobil or Raytheon, or DTSC, or other taxpayer sponsored cleanup fund, or SCAP;
- Later provided investigations, remedial progress or failures, and related studies and goals may confirm the usefulness of such RAP changes or supplements to materially more effectively and promptly achieve TSDF closure and no further action.

The IS/ND expressly acknowledges that the site-specific cleanup goals are missing. This step cannot be deferred into the RAP. Under State Water Resources Control Board Policy 92-49 and the State RCRA Implementation Regs. (together with EPA and DTSC guidance therefor), site-specific cleanup

goals must be publicly circulated with the proposed RAP (and CEQA study), before final approval of the RAP. Again, CEQA review of potential impacts cannot be meaningfully evaluated until the scope of the remediation project is known, and site-specific cleanup goals are a critical component of this.

Response Dorris-C-9. As explained in Response Dorris-C-4 and Dorris C-5, the Regional Board is the sole oversight agency for the assessment, cleanup, and closure of the LOC and MLOC Sites. The EKI RAP considered a thermal remediation option. Thermal heating of subsurface is expensive and cost prohibitive. All the selected remedies are proven technologies. The Regional Board concurs with the EKI updated RAP and will oversee its implementation with the modifications provided in the Regional Board letter dated April 11, 2022, and any additional modifications addressed in the final approval letter.

Dorric-C-10 The commenter states that the public participation efforts for the proposed RAP do not meet the standard set under CEQA, State RCRA implementing regulations (and associated DTSC and EPA Guidance), and State Water Policy Resolution 92-49. The commenter further states that public participation must include all owner/operators, historic and current, at the property to the immediate west of the LOC Site TSDF, because the property held a historic gas station and has substantial evidence in the record of contamination from the TSDF going directly to that property. Notice of this TSDF cleanup also should include PRPs. The commenter states that DTSC has provided PRP notices in the past as to the LOC Site (including the TSDF's changed status to not accepting further waste/hazardous waste from PRPs in the late 1990s) and that the RWQCB, as lead agency, thus should obtain DTSC's assistance in filling PRP notice requirements. Finally, the commenter states that it previously served on the RWQCB, through its counsel, its Eighth Amended Complaint listing PRPs with the DTSC RCRA notice letters attached thereto, and DTSC (as required for all such RCRA notices) received its own served copy. Said served Complaint and RCRA notices are part of intended submissions for the proposed RAP record. Because the federal EPA has over filing authority as to all TSDF cleanups, it too should be noticed.

Response Dorris-C-10. The IS/ND is governed by the public participation requirements in CEQA and its guidelines. The RWQCB provided the required notice and opportunity to comment on the Draft IS/ND. Consistent with CEQA and its guidelines, the February 24, 2025 NOA for Public Comment and NOI were directly mailed to owners and occupants of property within 500 feet of the Project Site, provided to individuals and organizations that previously submitted written requests for notice, public agencies through the State Clearinghouse, and filed with the Los Angeles County Clerk. The notices and IS/ND have also been available on the GeoTracker entry for the Site.

Dorric-C-11 The commenter states that the Proposed RAP must be fully considered and reviewed by the RWQCB's governing board, without prejudgment or predetermination based on prior review without CEQA study. CEQA does not

allow conditional approval of a RAP or other project contingent on later CEQA study and review. Such predetermination or prejudgment is not allowed under CEQA. Similarly, CEQA review must be accompanied with the CMS and Required Goals, again to not foreclose significant impact findings, mitigation measures and/or more effective, prompt remedial alternatives. According to the California Supreme Court, "before conducting CEQA review, agencies must not 'take any action' that significantly furthers a project 'in a manner that forecloses alternatives or mitigation measures that would ordinarily be part of CEQA review of that public project.' (Cal. Code Regs., tit. 14, Section 15004, subd. (b)(2)(B); Save Tara v. City of W. Hollywood, 45 Cal. 4th 116, 138-139 (2008). Agencies also must not "take any action" that significantly furthers a project "in a manner that forecloses alternatives or mitigation measures that would ordinarily be part of CEQA review of that public project." Id.; Cal. Code Regs., tit. 14, Section 15004, subd. (b)(2)(B). Accordingly, the pending proposed RAP Project is open for full review on all approval and prerequisite study issues, not just CEQA matters.

As a related matter, the current proposed RAP review and approval must be done by the executive director and governing board, not a "designee" or other agency staff. CEQA requires that the lead agency's governing board approve the proposed RAP Project based on its CEQA review thereof. The CAOs allow final determination on a proposed RAP after CEQA study only by said governing board or the executive director.

Response Dorris-C-11. Comment noted. CEQA guidelines have been followed. Final approval of the Project by the RWQCB or its authorized delegee will occur in compliance with the governing laws, regulations and policies, and after adoption of the CEQA document.

Dorris-C-12 LOC first provided a TSDF cleanup/closure plan in the 1980s. The RWQCB began oversight of MLOC's cleanup completion efforts back in the late 1960s. The proposed RAP targets completion more than seventy years later. A relatively short time period may be needed to make the corrections and complete the additional study requested herein and then notice and recirculate for comment as discussed above. This would be an investment well made. Rev's comments are designed to better assure timely and effective cleanup completion, while preventing further harm on impacted properties and businesses from the remediation process.

Response to Dorris-C-12. The comment is noted.

4.0 REVISIONS AS PART OF THE FINAL IS/ND

Revisions have been made to the Draft IS/ND based on input received during the public review period and while preparing responses to comments on the Draft IS/ND. Some additional revisions associated with the SCAQMD comments are incorporated for internal consistency. The revisions requested by the commenters do not change the conclusions of the analysis, do not reflect a substantial change to the Project description, nor would any of the changes result in a new impact or intensification of an impact already identified in the Draft IS/ND. Therefore, recirculation of the IS/ND is not required. Additions to the Draft IS/ND are shown in *red italicized* text and deletions are shown in ~~red strikethrough~~ text.

4.1 REVISIONS TO THE TEXT OF THE IS/ND

4.1.1 IS/ND SECTION 4.3, AIR QUALITY

Operational Activities

The following addition is made on pages 4-20 and 4-21:

> The Project would be required to comply with *all applicable SCAQMD rules, including, but not limited to,* SCAQMD Rule 1166, VOC Emissions From Decontamination of Soil (AQ-RR-2). *Other rules which may apply to the proposed Project include, but are not limited to, Rule 201: Permit to Construct; Rule 203: Permit to Operate; Rule 401: Visible Emissions; Rule 402: Nuisance; Rule 403: Fugitive Dust Control; Rule 1466: Control of Particulate Emissions from Soils with Toxic Air Contaminants; Rule 1470: Requirements for Stationary Diesel Fueled Internal Combustion and Other Compression Ignition Engines.* Rule 1166 requires an approved mitigation plan be obtained from SCAQMD prior to commencing the excavation or grading of soil containing VOCs. *The most conservative estimate for remedial excavation is 5,000 cubic yards.*

Existing Setting

The following addition is made on page 4-8:

> The Project Site is located in the Los Angeles County portion of the South Coast Air Basin (SoCAB), and, for air quality regulation and permitting, is under the jurisdiction of the SCAQMD. *As SCAQMD permit(s) would be required during Project implementation, SCAQMD is considered a Responsible Agency under CEQA.* The SCAQMD The SoCAB is a 6,600-square-mile area bound by the Pacific Ocean to the west; the San Gabriel, San Bernardino, and San Jacinto Mountains to the north and east; and the San Diego County line to the south. The SoCAB includes all of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino counties, in addition to the San Gorgonio Pass area of Riverside County. SoCAB's terrain and geographical location (i.e., a coastal plain with connecting broad valleys and low hills)

determine its distinctive semi-arid climate, which is characterized by moderate temperatures, oceanic influence, and precipitation.

Construction Activities

The following revisions are made on page 4-19:

Construction Phase	Duration	Equipment Used	Import/Export of Material
Demolition of remaining ASTs and process equipment	*10 Work Days* ~~1/1/2025-~~ ~~1/31/2025~~	*1 Excavator* *1 Skid Steer Loader* *1 Water Truck* *Hydraulic Breaker* ~~1 Concrete/Industrial Saw~~ ~~3 Excavators~~ ~~2 Rubber Tired Dozers~~	None
Excavation/Demolition - Underground sumps, trenches, and pipelines	*12 Work Days* ~~2/1/2025-~~ ~~3/31/2025~~	*1* ~~3~~ Tractors/Loaders/ Backhoes 1 Excavator ~~1 Rubber Tired Dozer~~ ~~1 Grader~~	*Export ~ 4426 Contaminated Soil* ~~200 CY Inert Soil~~ ~~2.3 tons of pipe~~
Excavation - Removal of contaminated soil *and Backfill*	*10 Work Days* ~~32/1/2025-~~ ~~3/31/2025~~	*1 Drill Rig* *1Tractors/Loaders/Backhoes* *2* ~~1~~ Excavators	*Import ~ 4426 cy inert soil* *Import* ~~80 CY~~ ~~Contaminated soil~~
SVE Well Construction	*2 Months* ~~2/1/2025-~~ ~~3/31/2025~~	1 Bore/Drill Rig *1* ~~2~~ Forklifts ~~2 Welders~~	None
Re-paving	*1 Month* ~~4/1/2026-~~ ~~4/28/2026~~	1 Cement and Mortar Mixers 1 Paver 2 Paving Equipment 2 Rollers 1 Tractor/ Loader/ Backhoe	None

The following revisions are made on page 4-20:

TABLE 5
ESTIMATED MAXIMUM DAILY REGIONAL CONSTRUCTION EMISSIONS

Year	Emissions (lbs/day)					
	VOC	NOx	CO	SO_2	PM10	PM2.5
2025	~~2~~ 1	~~23~~ *78*	~~27~~ 30	<1	~~4~~ *19*	~~2~~ 6
~~2026~~	~~1~~	~~7~~	~~10~~	~~<1~~	~~1~~	~~<1~~
Maximum Daily Emissions	~~**2**~~ **1**	~~**23**~~ **78**	~~**27**~~ **30**	**<1**	~~**4**~~ ***19***	~~**2**~~ **6**
SCAQMD Thresholds	***75***	***100***	***550***	***150***	***150***	***55***
Exceeds SCAQMD Thresholds?	**No**	**No**	**No**	**No**	**No**	**No**

lbs/day: pounds per day; VOC: volatile organic compound; NOx: nitrogen oxides; CO: carbon monoxide; SO_2: sulfur dioxide; PM10: respirable particulate matter 10 microns or less in diameter; PM2.5: fine particulate matter 2.5 microns or less in diameter; SCAQMD: South Coast Air Quality Management District.

Source: SCAQMD 2023 (thresholds); see Appendix C for CalEEMod model outputs.

The following revisions are made on page 4-22:

TABLE 8
CONSTRUCTION EQUIPMENT AND MAXIMUM SITE DISTURBANCE BY CONSTRUCTION PHASE

Construction Phase	Equipment Used	Acres of Site Disturbance/8-hr Day *
Demolition of remaining ASTs and process equipment	*1* ~~3~~ Excavator *1 Skid Steer Loader* *1 Water Truck* *Hydraulic Breaker* ~~1 Concrete/Industrial Saw~~ ~~2 Rubber Tired Dozers~~	0
Excavation/Demolition - Underground sumps, trenches, and pipelines	*1* ~~3~~ Tractors/Loaders/Backhoes 1 Excavator ~~1 Rubber Tired Dozer~~ ~~1 Grader~~	0
Excavation - Removal of contaminated soil *and Backfill*	*1 Drill Rig* *1Tractors/Loaders/Backhoes* *2* ~~1~~ Excavators	0
SVE Well Construction	1 Bore/Drill Rig *1* ~~2~~ Forklifts ~~2 Welders~~	0
Re-paving	1 Cement and Mortar Mixers 1 Paver 2 Paving Equipment 2 Rollers 1 Tractor/ Loader/ Backhoe	0

*Calculated based on SCAQMD LST Methodology (SCAQMD 2008)

The following revisions are made on page 4-23:

TABLE 9
CONSTRUCTION-PHASE
LOCALIZED SIGNIFICANCE THRESHOLD EMISSIONS

Emissions and Thresholds	Emissions (lbs/day)			
	NOx	CO	PM10	PM2.5
Project maximum daily on-site emissions	~~22~~ *6*	~~20~~ *9*	~~3~~ *0*	~~2~~ *0*
Localized Significance Threshold	46	231	4	3
Exceed threshold?	**No**	**No**	**No**	**No**
lbs/day: pounds per day; NOx: nitrogen oxides; CO: carbon monoxide; PM10: respirable particulate matter 10 microns or less in diameter; PM2.5: fine particulate matter 2.5 microns or less in diameter. Note: Data is for SCAQMD Source Receptor Area 12, South Central Los Angeles County Source: SCAQMD 2009 (thresholds); see Appendix C for CalEEMod model outputs.				

The following revisions are made on page 4-35:

TABLE 11
ENERGY USE DURING CONSTRUCTION

Source	Gasoline – gallons	Diesel Fuel – gallons
Construction Equipment	~~4,306~~ *30*	~~7,635~~ *1,287*
Worker Trips	~~3,417~~ *815*	~~8~~ *2*
Vendor Trips	~~1,301~~ *296*	~~13~~ *3*
Haul Trucks	~~0~~ *34*	~~337~~ *34,674*
Total	***~~9,024~~ 1,174***	***~~7,994~~ 35,967***
Sources: based on data from CalEEMod, OffRoad, and EMFAC2021. Energy data can be found in Appendix E to this IS/ND.		

The following revisions are made on page 4-36:

TABLE 12
DURING OPERATIONS

Land Use	Gasoline	Diesel	Natural Gas (kBTU/yr)	Electricity (kWh/yr)
Project Land Uses	~~504~~ *163*	~~0~~ *22*	0	~~0~~ *77,600*
kBTU/yr: one thousand British Thermal Units; kWh/yr: kilowatt hours per year. Sources: Energy data can be found in Appendix E of this IS/ND.				

The following revisions are made on page 4-50:

TABLE 13
ESTIMATED GREENHOUSE GAS
EMISSIONS FROM CONSTRUCTION

Year	Emissions ($MTCO_2e$)
2025	~~253~~ *420*
~~2026~~	~~53~~
Total	~~**306**~~ ***420***

$MTCO_2e$: metric tons of carbon dioxide equivalent

Notes:

- Totals may not add due to rounding variances.
- Detailed calculations in Appendix C.

The following revisions are made on page 4-51:

TABLE 15
ESTIMATED TOTAL PROJECT ANNUAL
GREENHOUSE GAS EMISSIONS

Source	Emissions ($MTCO_2e/yr$[a])
Construction (Amortized)	~~10~~ *14*
Operations	21
Total[b]	~~**32**~~ ***35***
SCAQMD Threshold	**10,000**
Exceeds Threshold?	**No**

$MTCO_2e/yr$: metric tons of carbon dioxide equivalent per year; SCAQMD: South Coast Air Quality Management District.

[a] Total derived by dividing construction emissions (see Table 11) by 30.
[b] Total annual emissions are the sum of mortised construction emissions and operational emissions.

Appendix A

Remedial Action Plan, Mouren-Laurens Oil Company, Inc. and Leach Oil Company, Inc. Sites – July 26, 2021

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26 July 2021

Mr. Timothy Cronin, Esq.
The Cronin Law Group
390 Bridge Parkway, Suite 220
Redwood City, CA 94065

Subject: Remedial Action Plan for the Former Mouren Laurens and Leach Oil Sites
641, 705, 717, and 719 East Compton Boulevard, 625 East Compton Boulevard, and 15006 South Avalon Boulevard, Compton, California.
(EKI C00008.02)

Dear Mr. Cronin:

At your request, EKI Environment & Water, Inc. (EKI) is pleased to provide The Cronin Law Group with this Remedial Action Plan (RAP) for the Former Mouren Laurens and Leach Oil Properties sites located at 641, 705, 717, and 719 East Compton Boulevard in Compton, California and 625 East Compton Boulevard and 15006 South Avalon Boulevard in Compton, California. EKI has prepared this workplan in accordance with the Cleanup and Abatement Order (CAO) issued by the Los Angeles Regional Water Quality Control Board (RWQCB) and dated September 19, 2014 (see Page 9 Paragraph 3.a.). EKI is formally submitting this RAP to the RWQCB.

We are pleased to have the opportunity to work with you on this project. We have provided a copy of this RAP to the RWQCB to the attention of Mr. Adnan Siddiqui, Mr. Arthur Heath, Ms. Sophie Froelich, and Mr. Erin Garner. If you have any questions or wish to discuss these matters in greater detail, please call.

Very truly yours,

EKI ENVIRONMENT & WATER, INC.



Earl James, PG No. 4544
Vice President



Andrew Safford. PE
Vice President

Steve Figgins
Principal

cc: Mr. Arthur Heath, RWQCB
Mr. Adnan Siddiqui, RWQCB
Mr. Erin Garner, RWQCB
Ms. Sophie Froelich, RWQCB

REMEDIAL ACTION PLAN

Mouren-Laurens Oil Company, Inc. and Leach Oil Company, Inc. Sites

Compton, California

(EKI C00008.02)

26 July 2021

EKI Environment & Water, Inc.
2355 Main Street, Suite 210
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REMEDIAL ACTION PLAN

Mouren-Laurens Oil Company, Inc. and Leach Oil Company, Inc. Sites
Compton, California

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Appendix A Historical Data Summary Tables

1. INTRODUCTION

The former Mouren-Laurens Oil Company, Inc. site ("MLOC Site") and Leach Oil Company, Inc. site ("LOC Site;" "MLOC and LOC Sites" collectively "Site" or "Sites") are situated next to each other in an unincorporated portion of Los Angeles County near the City of Compton, California. Petroleum hydrocarbons, chlorinated solvents, and other chemicals of concern ("COCs") have been released to soil and groundwater beneath each Site. In 2014, the Los Angeles Regional Water Quality Control Board ("Regional Board") issued Cleanup and Abatement Orders ("CAOs" or "Orders") to MLOC[1] and LOC.[2]

On behalf of Rev 973, LLC, the current owner of the MLOC Site, Partner Engineering and Science, Inc. ("Partner") submitted a remedial action plan ("RAP")[3] to the Regional Board in 2020. The RAP was not approved.[4] The Regional Board concluded additional data were needed to design effective remedial actions and that the MLOC and LOC Sites should be remediated concurrently because responsibilities for contamination resulting at both Sites cannot be separated. Additional data needs identified by the Regional Board consisted of anthropogenic background concentrations of volatile organic compounds ("VOCs") in groundwater, and current VOC concentrations in soil gas and groundwater beneath the MLOC and LOC Sites.[5]

EKI Environment and Water, Inc. ("EKI") has prepared this RAP at the request of the Mouren-Laurens Parties to address Regional Board's concerns. The Mouren-Laurens Parties refer to Nicole Mouren-Laurens as Administrator of the Estate of Emma Mouren-Laurens, Claudine Mouren-Laurens as Administrator of the Estate of Joseph Mouren-Laurens, Mouren-Laurens Oil Company, Inc., John Mouren-Laurens and Mireille Mouren-Laurens. Additional VOC data for off-Site groundwater and on-Site soil gas and groundwater have been obtained and were considered in development of the remedial actions proposed herein. Furthermore, the remedial actions are intended to address both separate and commingled contamination that has resulted from releases at the MLOC and LOC Sites. This RAP supersedes the one submitted by Partner on behalf of Rev 973, LLC.

---

[1] Regional Board. 19 September 2014. Cleanup and Abatement Order No. R4-2014-0117. Requiring REV 973, LLC, Mouren-Laurens Oil Company, Estate of Joseph Mouren-Laurens, Estate of Emma Mouren-Laurens, John Mouren-Laurens and Mireille Mouren-Laurens to Assess, Clean-up and Abate Waste Discharged to Waters of the State (Pursuant to California Water Code Sections 13304 and 13267) at Mouren-Laurens Oil Company for Properties located at 641, 705, 717, and 719 East Compton Boulevard in Compton, California.

[2] Regional Board. 17 September 2014. Cleanup and Abatement Order No. R4-2014-0118. Requiring Leach Oil Company, Leach Property Management, and Patricia Leach to Assess, Clean-up and Abate Waste Discharged to Waters of the State (Pursuant to California Water Code Sections 13304 and 13267) at Leach Oil Company, 625 East Compton Boulevard and 15006 South Avalon Boulevard in Compton, California.

[3] Partner. 16 January 2020. *Remedial Action Plan, Mouren-Laurens Site, Los Angeles County, California*. ("Partner RAP")

[4] Regional Board. 28 April 2020. Letter to Rev 973, LLC *Re Review of Technical Report Pursuant to Cleanup and Abatement Order No. R4-2014-0117*. ("Regional Board Review of MLOC RAP")

[5] *Id*. p. 4.

2. BACKGROUND INFORMATION

Descriptions of the MLOC and LOC Sites and documented chemical releases at these properties are presented in Sections 2.1 and 2.2, respectively. Investigative activities and removal actions performed at the properties are described in Sections 2.3 and 2.4.

2.1 Site Descriptions

The MLOC Site is adjacent to the LOC Site as shown on Figures 1 and 2.

2.1.1 MLOC Site

The MLOC Site consists of four parcels at 641, 705, 717, and 719 East Compton Boulevard. Each parcel is zoned commercial/industrial. The parcel numbers assigned by the Los Angeles County Assessor Office are 6137-004-030, 6137-004-031, 6137-004-032, and 6137-004-033. The combined total area of the parcels is 3.76 acres.

MLOC blended and packaged new and re-refined oil between the mid-1950s and 1998, when Rev 973, LLC acquired the properties.[6] Mouren-Laurens trademarked petroleum products under its "RayLube" brand label, which was marketed and sold to the public for more than 40 years. MLOC also produced and packaged products under private labels for other companies.

Four buildings exist at the MLOC Site as shown on Figure 2. Oil blending and packaging operations were performed in Building One. The remaining three buildings were used for other purposes or leased to entities, some of whom handled and used chemicals, including acetone, urethane, oil, and isopropyl alcohol.[7]

According to records of interviews with John Mouren-Laurens, past owner of the MLOC Site, bulk oil was held in underground storage tanks at the property from the 1950s to the 1960s, when the underground storage tanks were replaced with aboveground storage tanks.[8] Aboveground storage tanks were concentrated in a tank farm situated along the northern boundary of the MLOC Site and installed next to and inside of buildings as depicted on Figure 2. Re-refined oil from the LOC Site was conveyed through an underground pipeline to the MLOC Site. Operation of the pipeline was discontinued in the 1960s.[9]

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[6] Clayton Group Services. 11 February 2000. *Draft Report for the 1st Phase of the Limited Subsurface Investigation for the Mouren-Laurens Oil Company Facility, 641-719 East Compton Boulevard, Compton, California*. Volume I of Ill. ("Clayton Limited Subsurface Investigation Report"), p. 1-2; and MRM Group. 22 March 1996. *Expanded Phase II Environmental Site Assessment Report, Mouren-Laurens Oil Company Site, 641 East Compton Boulevard, Compton, California*. ("MRM Group Expanded Phase II Environmental Site Assessment Report"), p. 3.

[7] AEI Consultants. 19 January 2001. *Site Characterization Investigation for Mouren-Laurens Oil Company Site, 641-719 East Compton Boulevard, Compton, California*. ("AEI Consultants Investigation Report"), pp. 4-5.

[8] MRM Group Expanded Phase II Environmental Site Assessment Report. *supra* n. 6, p. 4.

[9] AEI Consultants Investigation Report. *supra* n. 7, pp. 3-4.

In the late 1980s or early 1990s, Mouren-Laurens created a new business called Premier Chemicals, which purchased bulk quantities of various household cleaners, soaps, shampoos, hair, and cosmetic products. The products were repackaged into small containers at the MLOC Site and sold to various retailers throughout the United States and the world.[10]

2.1.2 LOC Site

The LOC Site consists of three parcels at 625 East Compton Boulevard and 15006 South Avalon Boulevard. The parcel numbers assigned by the Los Angeles County Assessor Office are 6137-004-028, 6137-004-029, and 6137-004-006. Each parcel is zoned commercial/light industrial. The combined total area of the parcels is 1.24 acres.

An oil recycling business operated on the LOC Site from the 1940s to the 1990s. This business involved re-refining used oils.[11] Paralim Oil Company and Telovis Oil Company occupied the LOC Site beginning in 1948.[12] John Asbury sold Telovis Oil Company to Mouren-Laurens in 1960.[13] George Leach acquired the company from Mouren-Laurens in 1960 and renamed it Leach Oil Company.[14]

Various processes were employed by Leach Oil to recycle used oil at the LOC Site. Used oil was re-refined or otherwise recovered by an acid-clay process,[15] a thermal process, and by gravity separation.[16] The Department of Toxic Substances Control ("DTSC") terminated Leach Oil's hazardous waste facility permit because of "Leach Oil's long history of repeated and recurring violations of the State hazardous waste laws and regulations."[17] Leach Oil has not been authorized to operate its oil recycling business since 1 January 1998.[18]

A laboratory and building used for offices and warehousing exists on the southern portion of the LOC Site. A hazardous waste storage area, aboveground storage tanks that held oil feedstocks, and process equipment consisting of heaters, oil-water separators, and clay mixing tanks, occupy the central part of the LOC Site. The northwestern portion of the LOC Site was a truck loading area and is presently utilized for vehicle parking.

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[10] Murphy & Maconachy, Inc. February 1999. *Preliminary Environmental Report*. (MMI Preliminary Environmental Report") p. 2.

[11] Clayton Limited Subsurface Investigation Report. *supra* n. 6, p. 1-3.

[12] MMI Preliminary Environmental Report. *supra* n. 12, p. 10.

[13] Clayton Limited Subsurface Investigation Report. *supra* n. 6, p. 1-3.

[14] *Id*.

[15] MRM Group. December 1994. *Phase I Environmental Site Assessment, 641 East Compton Boulevard, Compton, California*. ("MRM Group Phase I Environmental Site Assessment"), p. 4.

[16] Department of Health Services. 6 October 1989. *Inspection Report, Leach Oil Company, Inc., 625 E. Compton Boulevard, Compton, California*. Toxic Substances Control Division. pp. 3-4.

[17] DTSC. 18 November 2008. Notice of Final Decision to Deny a Standardized Permit for Leach Oil Company, Inc.; EPA ID No. CAD 050 099 696. p. 1.

[18] *Id*.

2.2 Documented Chemical Releases

Petroleum hydrocarbons containing other COCs have been released at both the MLOC and LOC Sites.

2.2.1 MLOC Site

Contaminants in soil and groundwater are distributed across the MLOC Site where petroleum products were kept in aboveground storage tanks and drums outside buildings. Oil was released from these aboveground storage tanks and drums in addition to underground pipelines that conveyed oil from the LOC Site and between the various aboveground storage tanks and Building One where oil blending and packaging operations were performed.

Mr. Steve Mulligan of MRM Group observed oil releases when he conducted an inspection of the MLOC Site in 1995. Oil-stained soil was present throughout much of the MLOC Site and the floors of concrete containment structures in which aboveground storage tanks were installed were covered with water, water-oil mixture, or oil.[19] Mr. Mulligan stated "[s]ome of the containment area flooring appeared to have cracks that potentially could allow escaping of liquid materials to the underlying soils."[20] He also noted:

> Hundreds of 55-gallon drums were stacked in the open area at the back of the Property. These drums were stored on wooden pallets and were in stacks up to four drums high. Mr. Mulligan was not able to ascertain whether some of the drums contained hazardous materials or if leakage had occurred beneath the area in which the drums were stored.[21]

Chemical releases have occurred at the MLOC Site since at least the 1960s.[22] In 1987, oil-saturated soil and oil residue was discovered on the facility and in the gutter and catch basin along East Compton Boulevard. In response, the Regional Board issued Cleanup and Abatement Order No. 87-147 that required Mouren-Laurens to clean up the deposits and to "assess the site and characterize the extent of soil and groundwater contamination from past disposal practices."[23] Mouren-Laurens was forced to restrict its business due to inspections, violations, and other spills and releases that happened in 1989, 1992, 1993, 1994, and 1995.[24]

2.2.2 LOC Site

Numerous chemical releases have taken place at the LOC Site. In 1951, Mr. Ashbury, the owner of Telovis Oil Company, disclosed that 4,000 to 5,000 gallons of oil had leaked from an underground storage tank at

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[19] MRM Group Expanded Phase II Environmental Site Assessment Report. *supra* n. 6, p. 6.

[20] MRM Group Phase I Environmental Site Assessment. *supra* n. 15, p. 17.

[21] *Id*.

[22] MMI Preliminary Environmental Report. *supra* n. 12, p. 4.

[23] Regional Board. 20 November 1987. Cleanup and Abatement Order No. 87-147. p. 3.

[24] MMI Preliminary Environmental Report. *supra* n. 12, p. 4.

the property.[25] Richard Riley, a former Leach Oil employee, reported seeing cracks in an underground structure at the LOC Site referred to as the "Skim Pond."[26] Mr. Riley believed leakage from the cracks resulted in soil and groundwater contamination on the MLOC Site.[27] An investigation in 2009 revealed that the sides of the Skim Pond consist of concrete[28] and is more aptly described as a sump than a pond. According to Mr. Riley, the Skim Pond collected used oil and acidic wastewater generated during re-refining operations.[29] However, chemical releases are not restricted to the Skim Pond. Available soil and groundwater data indicate releases of VOCs and/or petroleum hydrocarbons also occurred at process equipment and aboveground storage tank locations on the LOC Site.[30]

2.3 Remedial Investigations

Independent and joint remedial investigations of the MLOC and LOC Sites have been conducted.

2.3.1 Independent Investigations

Characterization of environmental conditions at the MLOC Site commenced when the Regional Board issued Cleanup and Abatement Order No. 87-147. Mouren-Laurens completed four investigations between approximately 1988 and 2000 that are described in reports prepared by: (1) Ralph Stone and Company, Inc., (2) MRM Group, (3) Clayton Group Services, and (4) AEI Consultants. In 2020, MK Environmental Consulting, Inc. ("MKECI") and Partner installed nineteen[31] and eight[32] nested soil gas probes, respectively, at the MLOC Site, and Partner sampled on-Site and off-Site monitoring wells on a quarterly basis.

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[25] Los Angeles County Engineer. 18 January 1951. *Telovis Oil Co. (I-452) 625 E. Compton Blvd*. Industrial Waste Division.

[26] Ralph Stone and Company, Inc. 31 August 1989. *Interview of Richard Riley, Ex-Employee of Leach Oil*. p. 1.

[27] *Id*.

[28] Waterstone Environmental, Inc. ("Waterstone"). 6 July 2009. *Additional Phase II Site Characterization, Mouren-Laurens Oil Company (641-719E. Compton Blvd.) and Leach Oil Company (625 E. Compton Blvd.), Los Angeles, California*. ("Waterstone Additional Phase II Site Characterization Report"), p. 25.

[29] *Id*.

[30] Waterstone. 1 December 2006. *Phase II Site Characterization, Mouren-Laurens Oil Company (641-719 E. Compton Blvd.) and Leach Oil Company (625 E. Compton Blvd.), Los Angeles, California*. Tables 3, 11, 12.

[31] Soil gas probes MSV-7 through MSV-25 are screened at 5, 15, 25, 35, and 45 feet bgs except for MSV-7. No 45-feet deep probe exists at MSV-7 because the borehole collapsed during numerous attempts to place a probe at this depth. *See* MKECI. 27 November 2020. *Soil Vapor Investigation Report, Mouren-Laurens Oil Company (641-719 E. Compton Boulevard), Los Angeles, California*.

[32] Soil gas probes M-B28 through M-B33, and M-B36 are screened at 5, 15, and 30 feet below ground surface ("bgs"). Soil gas probe M-B35 is screened at 4.5, 17, and 30 feet bgs. The depths of the two shallowest probes were adjusted to avoid placing the screens in clay sediments. Additional soil gas probes were constructed and screened at 40 feet bgs at M-B33; 45 feet bgs at M-B31; and 48 feet bgs at M-B32, M-B35, and M-B36. *See* Partner. 15 October 2020. *Soil Gas Investigation Report, Former Mouren-Laurens Oil Company Site, 641-719 East Compton Boulevard, Compton, California 90220*.

In 1989, the Los Angeles County Department of Health Services issued a notice of violation instructing Leach Oil to cleanup soil containing petroleum hydrocarbons.[33] To comply with this directive, Leach Oil retained Conservtech, an environmental consulting company, to prepare and implement a site assessment and contamination mitigation plan.[34] Sampling conducted by Conservtech was limited to collection of soil samples for analysis of petroleum hydrocarbons by U.S. EPA Method 418.1.[35] In 2019, Quinn Environmental Strategies, Inc. ("QES") sampled on-Site and off-Site monitoring wells on a quarterly basis.

2.3.2 Joint Investigations

With regards to the *Rev 973, LLC v. John Mouren-Laurens et al*. litigation, the United States District Court appointed a Special Master to supervise environmental investigations of the MLOC and LOC Sites. The Court has designated Waterstone and MKECI to be independent, third-party consultants for performing the investigations. Recommendations for each phase of investigation are made to the Special Master by a technical committee consisting of consultants to each party involved in the litigation. The following joint investigations have been completed:

2005 Phase II Site Characterization – Waterstone sampled soil, soil gas, and groundwater at the MLOC and LOC Sites.

2009 Additional Phase II Site Characterization – Waterstone constructed on-Site and off-Site groundwater monitoring pairs and reviewed environmental records for facilities that may be contributing COCs to groundwater beneath the MLOC and LOC Sites.

2011 Additional Phase II Site Characterization - 3rd Phase – Waterstone constructed an additional on-Site monitoring well and expanded soil, soil gas, and groundwater sampling at the MLOC and LOC Sites.

2012 and 2013 Additional Phase II Site Characterization – 3rd Phase Change Order No. 4 – Waterstone collected grab groundwater samples to delineate the lateral and vertical extent of contamination within the saturated zone off-Site.

2020 Up-Gradient Monitoring Wells – MKECI constructed two monitoring wells on property at 15000 South Avalon Boulevard, which is in the upgradient direction of groundwater flow from the MLOC and LOC Sites.

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[33] MRM Group Phase I Environmental Site Assessment. *supra* n. 15, p. 4.

[34] Conservtech. 13 November 1989. *Site Assessment and Contamination Mitigation Plan, Leach Oil Company, Compton, California 90220*.

[35] Leach Oil Company, Inc. 9 January 1990. *Contamination Mitigation Program, Progress Report #1*. ("Leach Oil Progress Report No. 1").

Investigation details are described in reports prepared by Waterstone and MKECI. Section 4 summarizes the nature and extent of chemical impacts to soil, soil gas, and groundwater on and off the MLOC and LOC Sites. Section 5 addresses potential human and environmental threats associated with these impacts.

2.4 Removal Actions

Removal actions are measures required to prevent, minimize, or mitigate damage that might otherwise result from the release or threatened release of a hazardous substance.[36] Removal actions include stabilization or elimination of hazardous substances in drums, barrels, tanks, or other bulk storage containers that may pose a threat of release.[37] Such measures were performed at the MLOC and LOC Sites.

2.4.1 MLOC Site

Mouren-Laurens scraped and removed all oil-soaked dirt from the facility[38] in accordance with the requirements of Cleanup and Abatement Order No. 87-147. In addition, aboveground storage tanks and associated piping have been decontaminated, demolished, and removed.

2.4.2 LOC Site

Aboveground storage tanks at the LOC Site were originally installed on gravel layers placed over soil. In 1990, Leach Oil removed approximately 400 cubic feet[39] of oil-containing gravel and soil beneath the tanks to a depth of roughly 4 feet bgs.[40] In 2010, QES supervised removal of liquid and sludge from the Skim Pond. Regarding the condition of the Skim Pond at the time of waste removal, QES stated "crossbeams appeared to hold in place concrete composite side-walls (i.e., concrete with pebble to cobble-size aggregate) of the north and south sides of the pond structure. Those walls were obviously bowed inward in some areas."[41] QES was unable to observe the Skim Pond floor because a sludge layer on the bottom of the Skim Pond could not be dislodged.[42]

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[36] Health & Safety Code § 25354.5.

[37] U.S. EPA. August 1993. *Guidance on Conducting Non-Time-Critical Removal Actions Under CERCLA*. Office of Solid Waste and Emergency Response. EPA 540-R-93-057. p. 4.

[38] MRM Group Phase I Environmental Site Assessment. *supra* n. 15, p. 14.

[39] Leach Oil Progress Report No. 1. *supra* n. 39, pp. 1-2.

[40] Conservtech. 1 March 1990. *Leach Oil Company, Inc. Progress Report #2, Supplemental Drilling Report (Tanks 19 through 24)*. p. 1.

[41] QESI. 30 December 2010. *Draft Summary Report of Interim Remediation at the Leach Oil Company Property, 625 East Compton Boulevard, Los Angeles, California*. p. 3.

[42] *Id*. pp. 2-3.

3. GEOLOGY AND HYDROGEOLOGY

This section summarizes the geology and hydrogeology of the MLOC and LOC Sites. This summary is based upon findings from published reports and lithologic and hydraulic data obtained from investigations and removal actions performed at the Sites and nearby properties.

3.1 Geology

The MLOC and LOC Sites are situated within the Coastal Plain of Los Angeles, which extends inland from the Pacific Ocean to the Santa Monica Mountains.[43] Review of available lithologic data[44] indicates that the stratigraphy beneath the MLOC and LOC Sites consists generally of the following:

- 0 to 15 feet bgs — Clayey silt/silty clay unit with minor thin sand interbeds
- 15 to 40 feet bgs — Fine sand unit with minor thin silt interbeds
- 40 to 45 feet bgs — Silt unit with minor sand interbeds
- 45 to 60 feet bgs — Fine sand unit with moderate thin silt and clay interbeds
- 60 to 65 feet bgs — Silt unit with clay and sand interbeds
- 65 to 95 feet bgs — Fine sand unit

Cross-sections have been prepared that illustrate the stratigraphy beneath the MLOC and LOC Sites. Figure 3 depicts the locations of the cross-section lines. Cross-section A-A' on Figure 3 runs parallel along the shared property boundary. Cross-section B-B' on Figure 3 runs parallel across the former aboveground tank farm situated along the northern boundary of the MLOC Site. Cross-sections A-A' and B-B' with selected chemical concentrations in soil, soil vapor and groundwater are shown on Figures 4a to 6b.

3.2 Hydrogeology

The MLOC and LOC Sites are situated in the Central Basin Pressure Area of the Coastal Plain.[45] In the vicinity of the Sites, the Lakewood formation, which includes the Bellflower Aquitard, and the Exposition and Gardena Aquifers, extends from ground surface to a depth of approximately 160 feet bgs.[46] The base of the Lakewood formation sits uncomfortably on top of the San Pedro formation. The San Pedro formation includes the Lynwood, Silverado, and Sunnyside Aquifers, and extends to depths greater than approximately 550 feet bgs beneath the Sites.[47]

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[43] California Department of Water Resources ("DWR"). June 1961. *Planned Utilization of the Ground Water Basins of the Coastal Plain of Los Angeles County, Appendix A, Groundwater Geology*. Bulletin No. 104. ("DWR Bulletin No. 104"), p. 2.

[44] Clayton Limited Subsurface Investigation Report. *supra* n. 6, pp. 3-4, 3-5.

[45] DWR Bulletin No. 104. *supra* n. 43, App. A, Plate 2.

[46] *Id*. App. A, Plate 6B.

[47] *Id*.

Table 1 summarizes construction details of monitoring wells at the MLOC and LOC Sites. Figures 3 and 7 show monitoring well locations.

3.2.1 Perched Zone

Perched groundwater was encountered in the fine sand unit at 60 feet bgs between 1999 and 2013.[48] This zone correlates with the depth of the Exposition Aquifer, which appears to pinch out and is generally absent in the vicinity of the MLOC and LOC Sites. When present throughout the perched zone, groundwater was determined to be flowing south-southeast at a calculated hydraulic gradient of 0.01 feet per feet.[49]. The perched zone is presently depleted of groundwater. Most monitoring wells with screen intervals above 65 feet bgs were found to be dry in 2019 and 2020.[50]

3.2.2 Water Table Aquifer

Regional groundwater is encountered at a depth of approximately 80 feet bgs[51] within a fine sand unit between 65 and 95 feet bgs. Reports summarizing investigations of the MLOC and LOC Sites designate this unit as the water table aquifer or basal aquifer, suggesting it is the bottom layer or base aquifer. However, groundwater-bearing units underlie the water table aquifer.

Groundwater flow direction in the water table aquifer is towards the south-southeast. Figure 7 depicts the groundwater elevation contours in the water table aquifer plotted by QES for December 2019. The calculated hydraulic gradient within the water table aquifer ranged from 0.0049 to 0.0169 feet per feet during December 2019.[52]

3.2.3 Gardena Aquifer

Monitoring well M-MW-9 is the only well that has been completed deeper than 95 feet bgs in connection with investigation of the MLOC and LOC Sites. Monitoring well M-MW-9 has a screen interval between 125 and 135 feet bgs and is completed in the Gardena Aquifer, which is distinct from the water table aquifer.

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[48] Clayton Limited Subsurface Investigation Report. *supra* n. 6, pp. 3-7, 3-8; and Waterstone Additional Phase II Site Characterization Report. *supra* n. 28, p. 27.

[49] Waterstone Additional Phase II Site Characterization Report. *supra* n. 28, p. 31.

[50] *See* Blaine Tech Services, Inc. Well Monitoring Data Sheets for sampling events conducted at the MLOC and LOC Sites in March, April, June, September, and December 2019 in QES Groundwater Monitoring and Status reports and Well Gauging Data Sheets for sampling events conducted at the MLOC and LOC Sites in March, June, September, and December 2019, and March, June, and December 2020 in Partner Groundwater Monitoring Reports.

[51] Waterstone. 19 January 2011. *Additional Phase II Site Characterization – 3rd Phase, Mouren-Laurens Oil Company (641-719 E. Compton Blvd.) and Leach Oil Company (625 E. Compton Blvd. and 15006 S. Avalon Blvd.), Los Angeles, California*. ("Waterstone Additional Phase II Site Characterization – 3rd Phase Report"), p. 21.

[52] QES. 24 July 2020. *Fourth Quarter 2019 Groundwater Monitoring and Status Report, Leach Oil Company, 625 East Compton Boulevard, Rancho Dominguez, California, Leach Oil Company Site Cleanup No. 0023B and Mouren-Laurens Oil Company Site Cleanup No. 0023A*. p. 4.

4. NATURE AND EXTENT OF CHEMICAL IMPACTS

Contamination of soil and groundwater has resulted from releases of petroleum hydrocarbons that contained other COCs at the MLOC and LOC Sites. As discussed in Section 5.1, comparison of chemical concentrations in soil, soil gas, and groundwater against human health screening levels for commercial and industrial land use indicates that petroleum hydrocarbons; petroleum hydrocarbon related constituents, such as benzene and ethylbenzene; chlorinated solvents; 1,4-dioxane; N-nitrosodimethylamine ("NDMA"); and metals, such as lead, are primary COCs in Site media.

Chlorinated solvents, 1,4-dioxane, NDMA, and metals likely originated from used oil re-refined at the LOC Site and the resulting re-refined product that was conveyed through the underground pipeline to the MLOC Site. With respect to the presence of chlorinated VOCs in used oil, such as tetrachloroethene ("PCE") and trichloroethene ("TCE") that are chlorinated solvents used for degreasing, U.S. EPA states:

> They are not a normal component of crankcase oil, but are indirectly introduced through careless or ignorant management practices by generators and collectors. For example, automobile mechanics often pour small amounts of degreasing solvents into tanks used primarily for storing used automotive oils.[53]

The stabilizer, 1,4-dioxane is added to chlorinated solvents to prevent solvent degradation and adverse reactions with light, heat, air, and water that may result in corrosion of treated materials and cleaning equipment.[54] Thus, 1,4-dioxane was likely contained in chlorinated solvents mixed with used oil. NDMA was an additive in lubricants[55] and is formed through interaction of nitrogen-containing oil additives, nitrogen oxides, and elevated temperatures in vehicle crankcases.[56] Metals in used oil released at the MLOC and LOC Sites are probably associated with motor oil additives (i.e., barium and zinc), leaded gasoline (i.e., lead), and particles (i.e., cadmium and chromium) from engine wear.[57]

COCs can be grouped into the two broad categories of non-VOCs and VOCs. The prevailing definition of VOCs is associated with analytical methods designed to measure these compounds in soil and water samples. VOCs are compounds that are relatively insoluble in water and have boiling points below 150 to 200 degrees Celsius ("°C"),[58] which corresponds to temperatures of approximately 300 to 400 degrees Fahrenheit ("°F"). As shown by the below diagram from the State Water Resources Control Board

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[53] U.S. EPA. 1984. *Composition and Management of Used Oil Generated in the United States*. Office of Solid Waste and Emergency Response, EPA/530-SW-013. p. 1-14.

[54] Air Force Center for Engineering and the Environment. August 2008. *1,4-Dioxane – A Primer for Air Force Remedial Program Managers and Risk Assessors*. p. 4.

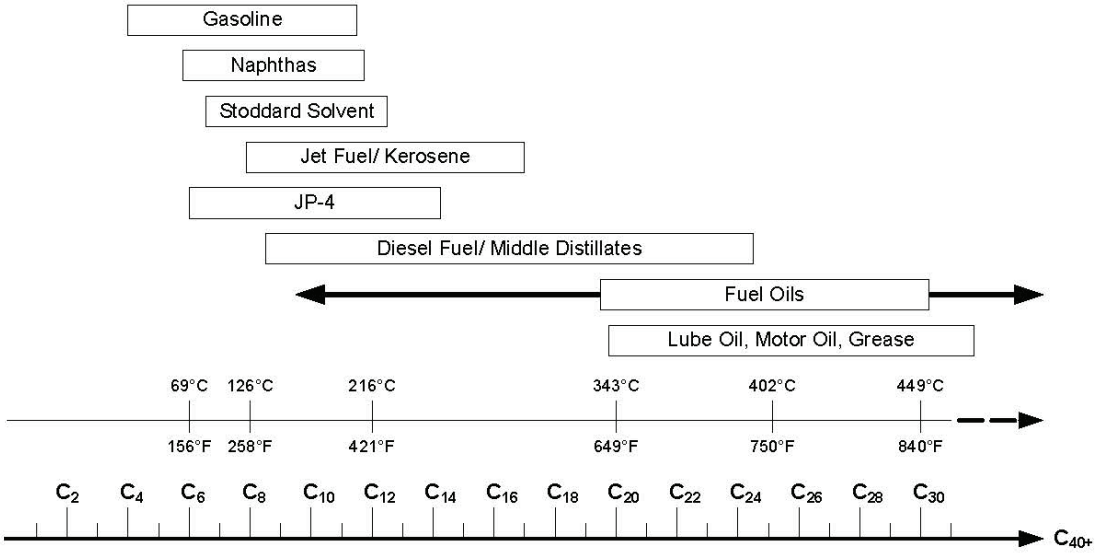
[55] U.S. EPA. January 2014. *Technical Fact Sheet – N-Nitroso-dimethylamine (NDMA)*. Office of Solid Waste and Emergency Response. EPA 505-F-14-005. p. 1.

[56] U.S. EPA. June 1981. *Technical Report, Nitrosamines and Other Hazardous Emissions from Engine Crankcases*. Office of Mobile Source Air Pollution Control and Office of Air, Noise and Radiation. EPA/AA/CTAB/PA/81-15. pp. 3-4.

[57] *Id*. pp. 1-13 and 1-14.

[58] U.S. EPA. May 1993. *Behavior and Determination of Volatile Organic Compounds in Soil: A Literature Review*. Office of Research and Development. EPA/600/R-93/140. p. 2.

("SWRCB") Leaking Underground Fuel Tank Guidance Manual, petroleum hydrocarbons quantitated as gasoline, diesel, and motor oil contains petroleum hydrocarbons with hydrocarbon chain lengths ranging from C_4 to greater than C_{30}.[59] Most petroleum hydrocarbons comprising diesel fuel and motor oil have boiling points higher than 300°F and are not considered VOCs.



Approximate boiling point ranges and hydrocarbon chain lengths for petroleum mixtures (SWRCB, 2015). Most petroleum hydrocarbons comprising diesel fuel and motor oil have boiling points higher than 300°F and are not considered VOCs.

Metals, polychlorinated biphenyls ("PCBs"), and the majority of semi-volatile organic compounds ("SVOCs") detected in soil at the MLOC and LOC Sites also are not VOCs. Benzene, ethylbenzene, chlorinated solvents, 1,4-dioxane, and NDMA have boiling points less than 300°F and meet the definition of VOCs.

4.1 Fate of Non-VOCs

Metals, PCBs, and SVOCs are generally recalcitrant to bioremediation or other processes that would cause appreciable loss of these chemicals in soil. Metals, PCBs, and SVOCs in soil are generally covered or removed by excavated where necessary.

Petroleum hydrocarbons are biodegraded aerobically (i.e., presence of oxygen), which relies on the presence of air to oxidize contaminants.[60] The rate of degradation depends upon the characteristics of

[59] SWRCB. December 2015. *Leaking Underground Fuel Tank Guidance Manual*. ("SWRCB LUFT Manual") p. 13-3.

[60] Naval Facilities Engineering Command ("NAVFAC"). February 2018. *Advances in the State of the Practice for Enhanced In Situ Bioremediation*. Technical Report. TR-NAVFAC EXWC-EV-1806. p. 1.

the petroleum hydrocarbons, the concentrations at which petroleum hydrocarbons are present in soil, and the availability of oxygen, water, and essential nutrients.

4.2 Transport of Non-VOCs

Investigative findings do not indicate that petroleum hydrocarbons, metals, PCBs, and SVOCs remaining in the subsurface at the MLOC and LOC Sites are mobile. Regarding the general lack of mobility of metals in the environment, U.S. EPA states the following:

> Immobilization of metals, by mechanisms of adsorption and precipitation, will prevent movement of the metals to ground water. Metal-soil interaction is such that when metals are introduced at the soil surface, downward transportation does not occur to any great extent unless the metal retention capacity of the soil is overloaded, or metal interaction with the associated waste matrix enhances mobility.[61]

Petroleum hydrocarbons as oils, and PCBs and SVOCs found at the MLOC and LOC Sites display similar characteristics as metals. These chemicals bind tightly to soil and are not prone to leach to groundwater or otherwise migrate in the subsurface. Figures 8a through 8e are plan maps that present concentrations of total extractable petroleum hydrocarbons ("TEPH") in soil at various depths. Figures 6a and 6b display TEPH concentrations in soil, soil gas, and groundwater on Cross-Sections A-A' and B-B'. TEPH data on these figures indicate that silt units underlying the Sites impede downward movement of TEPH. AEI Consultants concluded "[t]he silty clay contact at about 37 feet bgs is the most significant geological control on the vertical migration of hydrocarbons beneath the site."[62]

4.3 Fate of VOCs

Sections 4.3.1, 4.3.2, and 4.3.3 discuss physical, biological, and chemical processes affecting the fate of VOCs in the unsaturated and saturated zones at the MLOC and LOC Sites.[63]

4.3.1 Physical Processes

Petroleum hydrocarbons or oil released to the soil as a distinct organic liquid will often reach a point where the solvent no longer holds together as a continuous liquid, but rather is present in the unsaturated

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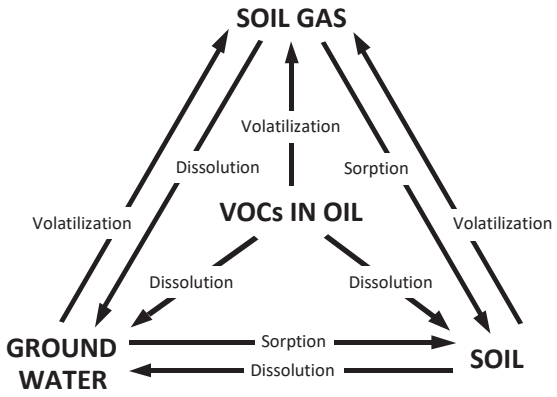
[61] U.S. EPA. October 1992. *Ground Water Issue: Behavior of Metals in Soil*. Office of Solid Waste and Emergency Response. EPA/540/S-92/018. p. 2.

[62] AEI Consultants Investigation Report. *supra* n. 7, p. 12.

[63] The zone between ground surface and the water table is termed the unsaturated zone or vadose zone. The vadose zone occurs immediately below ground surface in most areas and contains both water and air within the soil matrix. The lowest part of the unsaturated zone is occupied by the capillary fringe, the subzone between the unsaturated and saturated zones. The capillary fringe results from the attraction between water and soil particles. As a result of this attraction, water clings as a film on the particle surfaces and rises in small-diameter pores against the pull of gravity. The saturated zone is the zone below the water table in which the pores of sediments are filled completely with water. U.S. Geological Survey. 1987. *Basic Ground-Water Hydrology*. Water Supply Paper 2220. 4th Printing. p. 4.

zone as small, disconnected blobs or globules. These blobs or globules held in soil are termed residual saturation.[64] VOCs in residual oil within the unsaturated zone will seek equilibrium between four physical states or phases. VOCs associated with the oil can: (1) remain in petroleum hydrocarbons within soil, (2) volatilize into soil gas, (3) sorb to soil, or (4) dissolve in water. The distribution of VOCs among these phases can be represented by empirical relationships called equilibrium partition coefficients. The partition coefficients are site-specific and defined by the physical and chemical properties of the VOCs and subsurface environment. The diagram below adapted from U.S. EPA[65] illustrates the physical processes by which VOCs transfer phases to reach equilibrium.

Physical Processes Affecting Phase Equilibrium of VOCs in Residual Oil



As represented by the four-phase diagram, VOCs in residual petroleum hydrocarbons can migrate farther only in soil gas or dissolved in water that infiltrates through the subsurface. Sorption, volatilization, and dissolution of VOCs detected at the Sites are discussed in Sections 4.3.1.1, 4.3.1.2, and 4.3.1.3.

4.3.1.1 Sorption

The term "sorption" denotes the uptake of a vapor or solute without reference to the specific uptake mechanism.[66] VOC sorption is a complex physical process that depends upon the capillary pressure. Capillary pressure is a measure of the pores in soil to retain water moisture. Capillary pressure depends upon the soil type, geometry of the pores, nature of the VOCs, and subsurface moisture content. The hydrophobic nature of VOCs leads them to sorb into petroleum hydrocarbons. U.S. EPA states that the

[64] U.S. EPA. 1995. *Ground Water Issue: Light Nonaqueous Phase Liquids*. Office of Research and Development and Office of Solid Waste and Emergency Response. EPA/540/S-95/500. pp. 1, 4.

[65] *Id*. p. 3.

[66] Chiou, C.T. 1989. *Theoretical Considerations of the Partition Uptake of Nonionic Organic Compounds by Soil Organic Matter*. Reactions and Movement of Organic Chemicals in Soil. Soil Science Society of America. Special Publication No. 22. pp. 1-29.

"presence of anthropogenic, nonpolar organic liquid wastes," such as petroleum hydrocarbons, will increase the sorption of "nonionic organic compounds," such as VOCs.[67]

4.3.1.2 Volatilization

Volatilization of VOCs from residual petroleum hydrocarbons has occurred as evidenced by soil gas TCE concentrations plotted on plan maps for various depths (Figures 9a through 9f), and soil gas TCE and benzene concentrations plotted on Cross-Sections A-A' and B-B' (Figures 4a and 4b).

4.3.1.3 Dissolution

VOCs will dissolve when in physical contact with water. The equilibrium concentration of the VOC in water is referred to as its solubility. Schwille reports the solubility of TCE and PCE in water to be 1,100,000 micrograms per liter ("µg/L") and 200,000 µg/L, respectively.[68]

One way that dissolution of VOCs takes place is by surface water infiltrating into the subsurface and contacting contamination in the unsaturated zone. VOCs, which dissolve in the water, can leach further downward through soil until the top of the saturated zone is encountered. Upon reaching the saturated zone, the dissolved VOCs will migrate in the direction of groundwater flow. Dissolving and leaching of VOCs appears to have happened at the MLOC and LOC Sites but may no longer be a dominant physical process because the quantity of surface water that infiltrates into soil is likely to be small. The Skim Pond has been closed and the Sites are covered by buildings or have been paved with asphalt or concrete, which restrict surface water infiltration.

4.3.2 Biological Processes

Biological transformation of VOCs by indigenous microorganisms, such as bacteria and fungi, can occur under aerobic and anaerobic (i.e., lack of oxygen) conditions. Aerobic degradation can entail direct or cometabolic oxidation of chlorinated VOCs to carbon dioxide, water, and chloride. Direct oxidation refers to the microbial breakdown of a compound in which the compound serves as an electron donor and as a primary growth substrate for the microorganism mediating the reaction. Cometabolic oxidation is the microbial breakdown of a compound in which the compound is oxidized incidentally by an enzyme or cofactor produced by the microorganism during metabolism of another substrate. Unlike direct oxidation, cometabolic oxidation does not yield energy or growth benefit for the microorganism engaged in the reaction.

In general, only chlorinated solvents with one or two chlorine atoms, such as cis-1,2-dichloroethene ("cis-1,2-DCE"), trans-1,2-dichloroethene ("trans-1,2-DCE"), vinyl chloride, 1,1-dichloroethane ("1,1-DCA"), and 1,1-dichloroethene ("1,1-DCE") can be directly oxidized by microorganisms under aerobic conditions. These less chlorinated VOCs also can be oxidized cometabolically in the presence of oxygen. TCE has been observed to be oxidized cometabolically under aerobic conditions, but PCE is harder

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[67] U.S. EPA (1993). *supra* n. 58, p. 12.

[68] Schwille, F. 1988. *Dense Chlorinated Solvents in Porous and Fractured Media: Model Experiments*. Translated by James F. Pankow. Lewis Publishers, Chelsea, Michigan. App. I, Table 1.

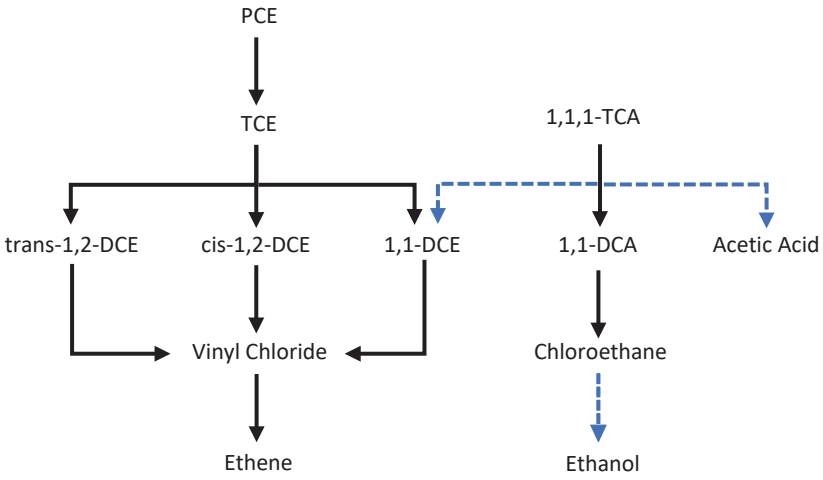
to degrade under aerobic conditions. PCE is biologically transformed under anaerobic conditions through reductive dechlorination.[69]

Reductive dechlorination is a process in which a chlorinated solvent acts as an electron acceptor and a chlorine atom on the chemical is replaced with a hydrogen atom. This process results in the reduction of the chlorinated solvent. When this process is biologically mediated, the microorganism is using the chlorinated solvent for energy and growth. Hydrogen is used as the electron donor during reductive dechlorination and is typically supplied indirectly through fermentation of other organic substrates.

4.3.3 Chemical Processes

Chemical processes that are significant to VOCs found at the MLOC and LOC Sites likely involve the abiotic reactions of 1,1,1-trichloroethane ("1,1,1-TCA") with groundwater. As reported by Vogel and McCarty,[70] abiotic transformation of 1,1,1-TCA results in two possible products, 1,1-DCE and acetic acid. Biotic and abiotic degradation reactions for PCE, TCE and 1,1,1-TCA are illustrated below. Biotic reactions are denoted below by solid black lines. Abiotic reactions are represented by dashed blue lines.

Biotic and Abiotic Degradation Reactions of PCE, TCE, and 1,1,1-TCA



Both biotic and abiotic degradation of chlorinated VOCs is taking place in groundwater beneath the MLOC and LOC Sites. Review of groundwater sample analytical results shows the breakdown products cis-1,2-DCE, trans-1,2-DCE, vinyl chloride, 1,1-DCA, and 1,1-DCE to be present in monitoring wells at the Sites. Acetic acid also is probably being formed but groundwater samples are not routinely analyzed for acetic acid because it represents little human health or environmental hazard.

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[69] U.S. EPA. July 2000. *Engineered Approaches to In Situ Bioremediation of Chlorinated Solvents: Fundamentals and Field Applications*. Office of Solid Waste and Emergency Response. EPA 542-R-00-008. p. 2-15.

[70] Vogel, T. and P. McCarty. 1987. *Abiotic and Biotic Transformations of 1,1,1-Trichloroethane under Methanogenic Conditions*. Environmental Science & Technology. Vol. 21. pp. 1208-1213.

4.4 Transport of VOCs

VOCs have volatilized and leached to groundwater. Figures 10a through 13b indicate that benzene, TCE, 1,4-dioxane, and NDMA have migrated in groundwater south of the MLOC and LOC Sites. Releases from other properties are contributing COCs detected in groundwater downgradient of the Sites.

Commercial development, involving manufacturing, vehicle storage and maintenance, and other industrial activities, surrounds the MLOC and LOC Sites.[71] Waterstone summarizes chemical use and release information for nearby properties obtained from searches of environmental databases by Environmental Data Resources, Inc. and review of Regional Board, DTSC, Los Angeles County Public Works Department, and City of Los Angeles Fire Department records.[72] MRM Group also conducted a review of regulatory agency files in 1994.[73]

VOCs, including PCE, TCE, 1,1-DCA, 1,2-dichloroethane ("1,2-DCA"), 1,1-DCE, cis-1,2-DCE, trans-1,2-DCE, and benzene, that are found in groundwater at the MLOC and LOC Sites also are detected in groundwater at V&M Plating Company at 14024 at South Avalon Boulevard;[74] former Ace Medical Company at 14131 South Avalon Boulevard;[75] and former Roto-Property located at 540 East Rosecrans Avenue, 14435 South Avalon Boulevard, and 14439 South Avalon Boulevard.[76] These properties are situated no farther than 3,000 feet or roughly one-half mile from the MLOC and LOC Sites.

The proximity of the former Ace Medical Company and former Roto-Property facilities to the MLOC and LOC Sites is depicted on Figure 14. Also shown on the figure are PCE and TCE concentrations migrating in groundwater within the water table aquifer toward the Sites.

In 2013, Waterstone collected a grab groundwater sample from boring CPT-N-1 that was approximately 150 feet north of the LOC Site in the upgradient direction of groundwater flow from the Site. This boring was completed to evaluate anthropogenic contaminant background concentrations in regional groundwater.[77] Among other contaminants, benzene was detected at 7.8 µg/L, TCE at 1,200 µg/L and 1,4-dioxane at 6.8 µg/L in a grab groundwater sample collected from the water table aquifer at a depth of 74 to 84 feet bgs.[78] This contamination was confirmed by construction and sampling of water table

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[71] AEI Consultants Investigation Report. *supra* n. 7, p. 3.

[72] Waterstone Additional Phase II Site Characterization Report. *supra* n. 28, pp. 11-23.

[73] MRM Group Phase I Environmental Site Assessment. *supra* n. 6, pp. 7-17.

[74] Salem Engineering Group, Inc. 15 September 2017. *Additional Site Investigation Report, V&M Plating Company, 14024 South Avalon Boulevard, Los Angeles, California*.

[75] Geosyntec Consultants. 17 May 2019. *Site Investigation Work Plan, Former Ace Medical Company, 14131 South Avalon Boulevard, Los Angeles, California*.

[76] Brown and Caldwell. 12 July 2018. *Groundwater Remedial Action Plan, Former Roto-Property Site*.

[77] Waterstone. 7 June 2013. *Additional Phase II Site Characterization – 3rd Phase Change Order No. 4 Report, Mouren-Laurens Oil Company (641-719 E. Compton Blvd.) and Leach Oil Company (625 E. Compton Blvd. and 15006 S. Avalon Blvd.), Los Angeles, California*. ("Additional Phase II Site Characterization – 3rd Phase Change Order No. 4 Report"), p. 7.

[78] *Id*. p. 7 and Tables 1 and 2.

aquifer monitoring wells N-MW-1 and N-MW-2 at 15000 South Avalon Boulevard.[79] In December 2020, monitoring well N-MW-1 contained 3.8 µg/L benzene, 1,000 µg/L TCE, and 12 µg/L 1,4-dioxane; and monitoring well N-MW-2 contained 5.9 µg/L benzene, 230 µg/L TCE, and 3.6 µg/L 1,4-dioxane.[80]

TCE in groundwater samples from boring CPT-N-1 and monitoring well N-MW-1 is higher than TCE concentrations measured in monitoring well L-MW-4, which is constructed along the northern boundary of the LOC Site in the upgradient direction of groundwater flow from contaminant source areas on the LOC Site. As shown on Figure 15a, TCE concentrations in this water table aquifer monitoring well have increased from an initial concentration of 31 µg/L in 2006 to 100 µg/L or more in 2019. The upward trend in TCE concentration for well L-MW-4 likely reflects contaminant transport in groundwater from releases at properties upgradient of the MLOC and LOC Sites.

Figure 15b depicts 1,4-dioxane concentrations versus time for L-MW-4 and other water table aquifer monitoring wells next to the Skim Pond (i.e., L-MW-5B and MW-4) and in the downgradient direction of groundwater flow from the MLOC and LOC Sites (i.e., S-MW-2B and S-MW-4B). Concentrations of 1,4-dioxane in water table aquifer monitoring wells L-MW-4, L-MW-5B, and MW-4 at the Site are less than 10 µg/L, which are similar to the 1,4-dioxane concentrations of 6.8 µg/L, 12 µg/L, and 3.6 µg/L measured in groundwater samples from boring CPT-N-1, and monitoring wells N-MW-1 and N-MW-2. Accordingly, regional groundwater contamination may be the cause of 1,4-dioxane measured at low concentrations in monitoring wells at the MLOC and LOC Sites.

Yet, 1,4-dioxane concentrations are not low in all water table aquifer monitoring wells. Groundwater samples obtained from on-Site wells L-MW-3 and MW-3 routinely had 1,4-dioxane concentrations greater than 100 µg/L in 2019 and 2020.[81] Groundwater samples collected from off-Site wells S-MW-1B, S-MW-2B, and S-MW-4B also contained greater than 100 µg/L of 1,4-dioxane in 2019. These wells were not sampled in 2020. Off-Site wells S-MW-1B, S-MW-2B, and S-MW-4B are in the downgradient direction of groundwater flow, which suggests 1,4-dioxane released at the MLOC and LOC Sites is leaving in groundwater.

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[79] MKECI. 30 October 2020. *Up-Gradient Groundwater Monitoring Wells Report, Mouren-Laurens Oil Company (641-719 E. Compton Boulevard) and Leach Oil Company (625 E. Compton Boulevard and 15006 S. Avalon Boulevard), Los Angeles, California.*

[80] Partner. 15 January 2021. *Groundwater Monitoring Report – December 2020, Former Mouren-Laurens Oil Company Site, 641-719 East Compton Boulevard, Compton, California 90220*. Tables 2, 4.

[81] *See* quarterly groundwater monitoring reports prepared by Partner and QES and data compiled in Appendix A.

5. RISK SUMMARY

This section identifies COCs, summarizes associated potential human health risks, and describes remedial action objectives to address potential risks.

5.1 Examination of Data to Identify COCs

COCs are chemicals that are determined to possibly pose a threat to human health and the environment at a given site. Tables 2a, 2b, and 2c list the chemicals that have been detected in soil, soil gas, and groundwater, respectively, at the MLOC and LOC Sites. Detected chemicals were retained as COCs if they pose a potential human health risk. This determination was made by comparing the maximum detected concentration of each chemical with the below human health screening levels:

- DTSC-modified Screening Levels[82]
- U.S. EPA Regional Screening Levels ("RSLs")[83]
- San Francisco Bay Regional Water Quality Control Board ("SFRWQCB") Environmental Screening Levels ("ESLs")[84]
- State of California Maximum Contaminant Levels ("MCLs") and Notification Levels for drinking water[85]

Chemicals are identified as COCs for a given medium if the maximum detected concentration is greater than a relevant screening level. A chemical is considered to be a primary COC if the maximum detected concentration is more than two orders of magnitude higher than a relevant screening level and the chemical frequency of detection in the medium is equal to or greater than 20 percent.

5.2 Current and Potential Future Site Risks

Information on the COC sources, pathways, and receptors at a site is used to develop a conceptual understanding of the site to evaluate potential risks to human health and the environment. U.S. EPA states the conceptual site model ("CSM") should include "known and suspected sources of contamination, types of contaminants and affected media, known and potential routes of migration, and known or potential

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[82] DTSC. June 2020. *Human Health Risk Assessment (HHRA) Note Number 3, DTSC-modified Screening Levels (DTSC-SLs)*. Human Health and Ecological Risk Office. ("DTSC Human Health Risk Assessment Note No: 3")

[83] U.S. EPA. May 2020. *Regional Screening Level (RSL) Summary Table (TR=1E-06, HQ=1)*.

[84] SFRWQCB. July 2019. *Environmental Screening Levels*. Revision 2.

[85] Office of Environmental Health Hazard Assessment. 21 August 2020. *MCLs, DLRs, PHGs, for Regulated Drinking Water Contaminants*; and State Water Resources Control Board. 6 February 2020. *Drinking Water Notification Levels and Response Levels: An Overview*. Division of Drinking Water.

human and environmental receptors."[86] Partner presents a CSM for the MLOC and LOC Sites on Figure 3.1-1 of its RAP. The main potentially complete exposure pathways are:

- Ingestion and dermal contact with COCs in shallow soil by current and future on-Site construction workers.

- Volatilization of VOCs from contaminated soil and groundwater that results in vapor intrusion and inhalation by current and future on-Site and off-Site commercial occupants.[87]

"Vapor intrusion" refers to the process by which VOCs move from a subsurface source, such as contaminated soil or groundwater, into the indoor air of overlying or adjacent buildings through any opening or conduit. VOC vapor enters buildings through cracks, seams, interstices, and gaps in basement floors, walls, or foundations, through intentional openings (e.g., perforations due to utility conduits, sumps), and/or within conduits (e.g., drain and sewer lines).[88]

Partner states the closest municipal supply well is approximately 4,800 feet to the west-southwest of the MLOC and LOC Sites.[89] This well is likely not in use because potable water is not provided by groundwater in the vicinity of the Sites according to Partner.[90] Further, COCs have not migrated deeper than 95 feet bgs. No COCs have been measured above analytical method reporting limits in groundwater samples obtained from Monitoring well M-MW-9,[91] which is screened between 125 and 135 feet bgs within the Gardena Aquifer. Consequently, ingestion and dermal contact of COCs migrating in groundwater from the MLOC and LOC Sites are not potential exposure pathways as indicated by Partner's CSM.[92]

5.3 Remedial Action Objectives

Section 13304 of the California Water Code governs the Regional Board's oversight of investigation and remediation of chemical releases to soil and groundwater to preserve the water quality of the State. Chapter 6.8 of the California Health and Safety Code ("HSC") describes requirements for preparing a RAP under Regional Board or DTSC supervision, including the recommendation of remedial actions that are based upon evaluation of selection criteria contained in the National Oil and Hazardous Substances Pollution Contingency Plan ("NCP"), set forth in Part 300, Title 40 of the Code of Federal Regulations

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[86] U.S. EPA. October 1988. *Guidance for Conducting Remedial Investigations and Feasibility Under CERCLA, Interim Final.* Office of Solid Waste and Emergency Response. EPA 540/G-89/004. ("U.S. EPA RI/FS Guidance"), p. 2-7.

[87] Figure 3.1-1 illustrating the CSM indicates contact with contaminated shallow soil is a potentially complete exposure pathway for on-Site commercial occupants and VOC inhalation is a potentially complete exposure pathway for on-Site construction workers. Partner transposed these exposure pathways on the figure.

[88] U.S. EPA. June 2015. *OSWER Technical Guide for Assessing and Mitigating the Vapor Intrusion Pathway from Subsurface Vapor Sources to Indoor Air*. Office of Solid Waste and Emergency Response. OSWER Publication 9200.2-154. p. 2.

[89] Partner RAP. *supra* n. 3, p. 7.

[90] *Id*.

[91] *See* groundwater data compiled in Appendix A.

[92] Partner RAP. *supra* n. 3, Figure 3.1-1.

("CFR"). In particular, the NCP, at 40 CFR §300.430(a)(1)(i), explains that the goals of the remedy selection process are to develop and implement remedial actions that protect human health and the environment, maintain protection over time, and minimize untreated waste.

To help meet the requirements of Section 13304 of the California Water Code and Chapter 6.8 of the HSC, remedies for chemical releases to soil and groundwater at a site that will achieve remedial action objectives ("RAOs") are selected. In other words, RAOs provide the foundation upon which remedial alternatives are assembled.

RAOs for the MLOC and LOC Sites consist of the following:

- Remove, treat in-situ, or isolate COC sources in soil that pose possibly significant human health risks due to ingestion or dermal contact.
- Remove or treat in-situ VOC sources in soil that have the potential to leach to groundwater or pose possibly significant human health risks due to vapor intrusion.
- Implement remedial actions to reduce COCs in groundwater to concentrations that are less than MCLs or other appropriate water quality criteria if no MCLs have been promulgated.

RAOs should consider potentially complete exposure pathways as well as numerical remediation goals (i.e., cleanup goals) because protectiveness may be achieved by either preventing exposure (such as capping an area or limiting access) or by reducing contaminant concentrations.[93] RAOs also should allow evaluation of remedial alternatives that will achieve numerical cleanup goals associated with the reasonably anticipated land use of the site in question.[94]

5.3.1 Cleanup Goals

The dischargers named in the Orders for MLOC and LOC Sites are required to propose cleanup goals for soil and groundwater in compliance with SWRCB Resolution No. 92-49*: Policies and Procedures for Investigation and Cleanup and Abatement of Discharges Under Water Code Section 13304*.[95] The cleanup goals also must be protective of human health, groundwater and surface water resources, environment, and beneficial uses set forth in the Water Quality Control Plan.[96]

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[93] U.S. EPA RI/FS Guidance. *supra* n. 86, p. 4-7.

[94] U.S. EPA. 25 May 1995. *Land Use in the CERCLA Remedy Selection Process*. Memorandum from Elliot P. Laws, Assistant Administrator. Office of Solid Waste and Emergency Response. OSWER Directive No. 9355.7-04. p. 6.

[95] *See* Required Action 3.a.i on page 9 of CAO No. R4-2014-0117 for MLOC Site; and Required Action 3.a.i on page 8 of CAO No. R4-2014-0118 for LOC Site.

[96] Regional Board. 11 September 2014. *Water Quality Control Plan, Los Angeles Region, Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties*.

U.S. EPA emphasizes that screening levels are not cleanup goals.[97] Similarly, the SFRWQCB states ESLs are intended to quickly distinguish which sites pose a significant threat.[98] A site does not necessarily pose a threat if contaminant concentrations are above ESLs, which are based on a 1×10^{-6} risk level.[99] This condition simply means that further investigation or evaluation must be performed to assess the threat.[100]

Both U.S. EPA[101] and DTSC[102] consider a 1×10^{-6} risk level to be a point of departure for establishing cleanup goals based upon potential cancer effects. In other words, U.S. EPA and DTSC consider risks less than 1×10^{-6} to be insignificant and no further action is required. A cancer risk range of 1×10^{-6} to 1×10^{-4} is typically used as a "target range" within which to manage human health risk as part of site cleanup.[103]

If a site fails the screening level risk assessment (e.g., cancer risks are greater than 1×10^{-6}), then a site-specific risk assessment may be necessary to evaluate the potential threat to individuals.[104] Cleanup goals are usually predicated on the results of a site-specific risk assessment instead of generic screening levels.[105] In fact, upon assessment and/or implementation of the remedial actions, the Orders require that a human health risk assessment be conducted based upon chemical concentrations remaining in soil, soil gas, and groundwater at each Site.[106] The risk assessment, not screening levels, shall establish cleanup goals for the remedies implemented at the MLOC and LOC Sites.

5.3.2 Anthropogenic Contaminant Background Concentrations

The Regional Board notes the importance of contamination measured in the grab groundwater sample from boring CPT-N-1. The RAP must consider the contribution of releases from properties in the upgradient direction of groundwater flow from the MLOC and LOC Sites.[107]

Off-Site releases will continue to contaminate regional groundwater and make attainment of cleanup goals at the MLOC and LOC Sites impossible. U.S. EPA acknowledges that other sites contributing to

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[97] U.S. EPA. 24 March 2020. *Regional Screening Levels (RSLs) - User's Guide*. https://www.epa.gov/risk/regional-screening-levels-rsls-users-guide. Accessed 30 April 2020. ("U.S. EPA RSL User's Guide")

[98] SFRWQCB. 2019. *User's Guide: Derivation and Application of Environmental Screening Levels (ESLs)*. Interim Final. ("SFRWQCB "ESL User's Guide"), p. 1-5.

[99] *Id*. p. 3-4.

[100] *Id*.

[101] U.S. EPA RSL User's Guide. *supra* n. 97.

[102] DTSC Human Health Risk Assessment Note No: 3. *supra* n. 82, p. 9.

[103] U.S. EPA. 22 April 1991. *Baseline Risk Assessment in Superfund Remedy Selection Decisions*. Office of Solid Waste and Emergency Response. OSWER Directive 9355.0-30. p. 4.

[104] DTSC. 6 October 2015. *Human and Ecological Risk Office Human Health Risk Assessment Note No: 4, Screening Level Human Health Risk Assessments*. p. 5.

[105] U.S. EPA RSL User's Guide. *supra* n. 97.

[106] *See* Required Action 4 on page 10 of CAO No. R4-2014-0117 for MLOC Site; and Required Action 4 on page 9 of CAO No. R4-2014-0118 for LOC Site.

[107] Regional Board Review of MLOC RAP. *supra* n. 4, p. 4.

regional groundwater contamination must be addressed to enable effective remediation of a downgradient site.[108] When groundwater contamination is caused by multiple sites, the amount of resources that is committed to the groundwater remedy will be derived in large part from the extent to which contamination at the site in question contributes to the total groundwater problem.[109]

U.S. EPA normally does not set cleanup goals below anthropogenic contaminant background concentrations.[110] The reasons for this protocol include cost-effectiveness, technical practicability, and the potential for recontamination of remediated areas by surrounding areas with elevated background concentrations.[111]

[108] U.S. EPA. December 1988. *Guidance on Remedial Actions for Contaminated Ground Water at Superfund Sites*. Office of Emergency and Remedial Response. EPA/540/G-88/003. p. B-1.

[109] *Id*. p. B-4.

[110] U.S. EPA. 1 May 2002. *Role of Background in the CERCLA Cleanup Program*. Office of Solid Waste and Emergency Response. OSWER 9285.6-07P. p. 7.

[111] *Id*.

6. EVALUATION OF REMEDIAL ALTERNATIVES

This section augments the identification and screening of technologies, and subsequent development of and analysis of remedial alternatives that Partner accomplished in preparation of its RAP.[112]

6.1 Principal Threat and Low-level Threat Wastes

U.S. EPA has developed guidelines to communicate the types of remedies it generally anticipates to find appropriate for different source materials. U.S. EPA defines source material as:

> . . . material that includes or contains hazardous substances, pollutants, or contaminants that act as a reservoir for migration of contamination to groundwater, to surface water, to air, or acts as a source for direct exposure.[113]

Source material is divided into principal threat waste and low-level threat waste. The definitions of these wastes are as follows:

- **Principal Threat Waste:** Source material that is considered to be highly toxic or extremely mobile that generally cannot be reliably contained or would present a significant risk to human health or the environment should exposure occur. Principal threat waste includes non-aqueous phase liquid, extremely mobile liquids (e.g., solvents), or materials having high concentrations of toxic compounds. Although no "threshold level" of toxicity has been established for definition of a principal threat waste, U.S. EPA indicates for conditions where toxicity and mobility of source material combine to pose a potential risk of 10^{-3} or greater, treatment alternatives generally should be evaluated.[114]

- **Low-level Threat Waste:** Source material that can be reliably contained and that would pose only a low risk in the event of exposure. Low-level threat waste is source material that exhibits low toxicity, limited mobility in the environment, or has contaminant concentrations near health-based levels.

U.S. EPA expects to use treatment to address the principal threats posed by a site, wherever practicable. Principal threats for which treatment is most likely to be appropriate include "liquids, areas contaminated with high concentrations of toxic compounds and highly mobile materials."[115] On the basis of this

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[112] Partner RAP. *supra* n. 3, pp. 13-15.

[113] U.S. EPA. August 1997. *Rules of Thumb for Superfund Remedy Selection*. Office of Solid Waste and Emergency Response. EPA 540-R-97-013. p. 11.

[114] U.S. EPA. November 1991. *A Guide to Principal Threat and Low Level Threat Wastes*. Office of Solid Waste and Emergency Response. Superfund Publication: 9380.3-06FS. ("U.S. EPA A Guide to Principal Threat and Low Level Threat Wastes"), p. 2.

[115] NCP at 40 CFR §300.430(a)(1)(iii)(A).

expectation, treatment appears to be an appropriate remedy for VOCs, petroleum hydrocarbons, and 1,4-dioxane in soil and groundwater at the MLOC and LOC Sites.

Metals and other immobile constituents (e.g., PCBs and most SVOCs) in soil at the MLOC and LOC Sites can be considered low-level threat wastes. U.S. EPA expects to use engineering controls, such as containment, for "wastes that pose a relatively low long-term threat."[116]

6.2 Partner Recommended Remedial Alternative

Partner's recommended remedial alternative consists of electrical resistance heating ("ERH") and heat enhanced plume attenuation ("HEPA").[117] Neither of these technologies are capable of fully remediating the MLOC and LOC Sites and should not be implemented for the reasons explained below.

6.2.1 ERH is Unable to Remove Petroleum Hydrocarbons and Related Constituents

ERH involves passing electrical current between a network of electrodes inserted into the soil. The resistance of the soil allows in situ heating to occur.[118] ERH directly volatilizes contaminants or strips them from the subsurface by converting soil moisture into steam. Steam acts a carrier gas[119] that drives chemicals from clay and silt lenses to more permeable sand and gravel sediments, where they can be captured and removed from the subsurface by a soil vapor extraction ("SVE") system. The primary factors that can limit the performance of ERH are the cooling effect of groundwater flow and soil moisture loss. As moisture decreases, the electrical resistance of soil increases (electrical conductivity decreases), thereby resulting in reduced energy delivery to drier portions of the treatment area within the vadose zone. ERH systems often incorporate wetting systems around the electrodes and in the treatment area to maintain a specified amount of soil moisture.[120]

Given that soil must be moist, ERH is limited to raising the temperature of the subsurface to the boiling point of water, which is 212°F at 1 atmosphere ("atm") of pressure.[121] Otherwise, water in the subsurface would completely evaporate and the technology would no longer be effective. The Partner RAP states ERH/HEPA will treat VOCs, petroleum hydrocarbons and associated gasoline components, and 1,4-dioxane.[122] This is not the case. The temperature limitation imposed by ERH means the technology is

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[116] NCP at 40 CFR §300.430(a)(1)(iii)(B).

[117] Partner RAP. *supra* n. 3, p. 14.

[118] U.S. EPA. March 2004. *In Situ Thermal Treatment of Chlorinated Solvents: Fundamentals and Field Applications*. Office of Solid Waste and Emergency Response. EPA 542-R-04-010. p. 21.

[119] Wolf, J., T. Barton, T. Gomes, and D. Damasi. 2009. *Electrical Resistance Heating: Rapid Treatment for Soil and Groundwater Remediation*. p. 5.

[120] Triplett Kingston, J.L., P.C. Johnson, B.H. Kueper, and K.G. Mumford. 2014. In Situ Thermal Treatment of Chlorinated Solvent Source Zones. p. 529. In U.S. Department of Defense Strategic Environmental Research & Development Program ("SERDP") and U.S. Department of Defense Environmental Security Technology Certification Program ("ESTCP"). *Chlorinated Solvent Source Zone Remediation*.

[121] *Id*.

[122] Partner RAP. *supra* n. 3, p. 14.

unable to remove the majority of petroleum hydrocarbons and related constituents in the subsurface, which are the predominant contaminants at the MLOC and LOC Sites. Most petroleum hydrocarbons and related constituents, such as naphthalene, 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, isopropylbenzene, n-butylbenzene, sec-butylbenzene, and xylenes, have boiling points higher than 258°F and are not prone to removal by ERH that can only raise the temperature of the subsurface to 212°F.

Thermal technologies designed to remove petroleum hydrocarbons from soil operate above the ERH temperature limitation of 212°F. U.S. EPA indicates that most thermal desorbers operate at temperatures between 300°F and 1,000°F.[123] A review of studies by Vidonish et al. also finds that thermal technologies must achieve temperature conditions higher than 212°F to effectively remove petroleum hydrocarbons from soil.[124]

Although ERH is incapable of removing most petroleum hydrocarbons and related constituents, the technology can increase the mobility of these compounds, which might lead to larger impacts to groundwater beneath the MLOC and LOC Sites and subsequent migration of greater concentrations of these compounds in the downgradient direction of groundwater flow from the Site. Heating soil and groundwater makes high molecular weight (i.e., longer hydrocarbon-chain length) petroleum hydrocarbons less viscous and more mobile.[125] U.S. EPA states "[h]igh levels of contamination in the subsurface will result in significant volumes of mobilized mass."[126] Consequently, ERH increases the potential for contaminants to migrate to previously nonimpacted areas.[127] Groundwater extraction is not included as part of Partner's recommended remedial alternative, but would be needed to prevent petroleum hydrocarbons from spreading in groundwater beneath and off the MLOC and LOC Sites if ERH is implemented.

6.2.2 HEPA is Unable to Simultaneously Remove All COCs from Groundwater

HEPA, which is a variation of ERH, is an emerging technology that has not been applied widely to address site contamination. HEPA entails heating groundwater to 30 to 40°C (86 to 104°F), to stimulate the activity of indigenous microorganisms to enhance biological degradation of contaminants in groundwater.[128]

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[123] U.S. EPA. October 2017. Chapter VI, Low-Temperature Thermal Desorption. In *How to Evaluate Alternative Cleanup Technologies for Underground Storage Tank Sites: A Guide for Corrective Action Plan Reviewers*. Land and Emergency Management. EPA 510-B-17-003. p. VI-15.

[124] Vidonish, J.E., K. Zygourakis, C.A. Masiello, G. Sabadell, and P.J. Alvarez. 2016. *Thermal Treatment of Hydrocarbon-Impacted Soils: A Review of Technology Innovation for Sustainable Remediation*. Engineering. Vol. 2. pp. 426-437.

[125] Beyke, G. and D. Fleming. 2005. *In Situ Thermal Remediation of DNAPL and LNAPL Using Electrical Resistance Heating*. Remediation. pp. 5-22.

[126] U.S. EPA. 2014. *Engineering Paper, In Situ Thermal Treatment Technologies: Lessons Learned*. p. 5.

[127] Kingston, J. et al. January 2010. *Critical Evaluation of State-of-the-Art In Situ Thermal Treatment Technologies for DNAPL Source Zone Treatment*. ESTCP Project ER-0314. p. 4.

[128] *See* TRS Group, Inc. 2020. *Innovations in Heat-Enhanced Processes*. https://www.thermalrs.com/erh-heat-enhanced-processes.php. Accessed 1 May 2020; and Cascade. *Combining In Situ Thermal Remediation Technologies*

However, as discussed in Section 4, chlorinated VOCs, and petroleum hydrocarbons and related constituents biodegrade under different conditions. As shown below, chlorinated VOCs, such as TCE and PCE, which are prevalent in soil and groundwater at the MLOC and LOC Sites, are biodegraded anaerobically. Petroleum hydrocarbon contaminants are biodegraded aerobically, which relies on the presence of air to oxidize contaminants.

Biodegradation Processes of Common Contaminants[129]

Class	Common Contaminant	Aerobic Oxidation	Anaerobic		Cometabolic Processes
			Oxidation	Reduction	
Petroleum Hydrocarbons and Related COCs	Non-halogenated alkenes/alkanes	X			
	BTEX	X	X		X
	Simple PAHs (e.g., naphthalene)	X	X		X
	Cyclic PAHs		X		X
	Methyl tert butyl ether (MTBE)	X			X
Chlorinated Ethenes	PCE and TCE			X	X
	Dichloroethene (DCE) and vinyl chloride (VC)	X		X	X
Chlorinated Ethanes	1,1,1-trichloroethane (1,1,1-TCA), 1,2- dichloroethane (1,2-DCA), and 1,1-dichloroethane (1,1-DCA)			X	X
Chlorinated Methanes	Carbon tetrachloride				X
	Chloroform and methylene chloride			X	X
Pesticides	Select pesticides	X		X	X
Ethers	1,4-dioxane	X			X
Energetics	TNT	X			X

Biodegradation of chlorinated VOCs and petroleum hydrocarbons and related constituents take place under different subsurface conditions (NAVFAC, 2018). Thus, HEPA is unable to simultaneously remove chlorinated VOCs and petroleum hydrocarbon contaminants in groundwater at the MLOC and LOC Sites.

Petroleum hydrocarbon contaminants are generally biodegradable, regardless of their molecular weight, as long as indigenous microorganisms have an adequate supply of oxygen and nutrients.[130] At the MLOC

to Tackle Complex Sites. https://www.cascade-env.com/resources/blogs/archive/combining-in-situ-thermal-remediation-technologies-to-tackle-complex-sites/. Accessed 1 May 2020.

[129] Naval Facilities Engineering Command ("NAVFAC"). February 2018. *Advances in the State of the Practice for Enhanced In Situ Bioremediation*. Technical Report. TR-NAVFAC EXWC-EV-1806. p. 1.

[130] U.S. EPA. October 2017. Chapter VIII, Biosparging. In *How to Evaluate Alternative Cleanup Technologies for Underground Storage Tank Sites: A Guide for Corrective Action Plan Reviewers*. Land and Emergency Management. EPA 510-B-17-003. p. VIII-8.

and LOC Sites, the dissolved oxygen concentration is typically greater than 0.5 milligrams per liter ("mg/L") in groundwater, but varies considerably from less than 0.3 mg/L to over 3 mg/L.[131] Anaerobic bacteria generally cannot function at dissolved oxygen concentrations greater than about 0.5 mg/L and, hence, reductive dechlorination will not occur.[132] Dissolved oxygen must be below 0.25 mg/L before anaerobic microbial reactions can take place for more highly chlorinated compounds, such as PCE.[133] HEPA is unable to simultaneously remove chlorinated VOCs and petroleum hydrocarbon contaminants because different subsurface conditions must be established to allow anaerobic and aerobic biodegradation processes to take place.

HEPA seeks to increase the biodegradation rate of contaminants by raising the groundwater temperature, but temperature is not the principal factor slowing the biodegradation rate of contaminants in groundwater at the MLOC and LOC Sites. The groundwater dissolved oxygen concentration is too high for anaerobic biodegradation to happen so raising the temperature will not have an effect on these microorganisms. To the extent that petroleum hydrocarbons exist in groundwater, the biodegradation rate can be increased by adding more oxygen to the subsurface. U.S. EPA states enhanced aerobic bioremediation technologies, such as bioventing and biosparging, are used to accelerate in situ bioremediation of petroleum hydrocarbon contaminants by indigenous microorganisms in the subsurface.[134] HEPA is not necessary, will not achieve RAOs specified for the Sites in Section 5.3, and should not be performed.

6.3 EKI Proposed Remedial Alternative

Instead of Partner's recommended remedial alternative, EKI proposes to conduct work according to the remedial action approach summarized in Section 6.3.1. Technologies comprising EKI's proposed remedial alternative will be implemented as described in Sections 6.3.2 through 6.3.5.

6.3.1 Remedial Action Approach

Remedial actions will be implemented consistent with the Orders. A Phase I Environmental Site Assessment for the MLOC and LOC Sites will be completed in accordance with the latest applicable standards, including the "all appropriate inquiries" rule promulgated in 40 CFR §312.[135] A site

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[131] *See*, for example, Blaine Tech Services, Inc. Well Monitoring Data Sheets for the MLOC and LOC Sites, dated 17 to 19 December 2019, in QES Groundwater Monitoring and Status reports.

[132] U.S. EPA. September 1998. *Technical Protocol for Evaluating Natural Attenuation of Chlorinated Solvents in Ground Water*. Office of Research and Development. EPA/600/R-98/128. p. 38.

[133] U.S. EPA. September 1999. *Ground Water Issue: Microbial Processes Affecting Monitored Natural Attenuation of Contaminants in the Subsurface*. Office of Research and Development and Office of Solid Waste and Emergency Response. EPA/540/S-99/001. p. 7.

[134] U.S. EPA. October 2017. Chapter XII, Enhanced Aerobic Bioremediation. In *How to Evaluate Alternative Cleanup Technologies for Underground Storage Tank Sites: A Guide for Corrective Action Plan Reviewers*. Land and Emergency Management. EPA 510-B-17-003. ("U.S. EPA Enhanced Aerobic Bioremediation"), p. XII-1.

[135] *See* Required Action 1 on page 8 of CAO No. R4-2014-0117 for MLOC Site; and Required Action 1 on page 8 of CAO No. R4-2014-0118 for LOC Site.

assessment[136] also will be performed to delineate the lateral and vertical extent of contaminants released at the MLOC and LOC Sites in soil, soil gas, and groundwater both on-Site and off-Site.

Aboveground storage tanks and process equipment remaining on the LOC Site will be demolished to prepare the property for remediation. Underground sumps, trenches, and pipelines associated with former operations at the MLOC and LOC Sites also will be removed. Debris generated from these activities will be segregated into recyclable and non-recyclable materials and transported to and disposed of at appropriate off-Site, permitted facilities.

Used oil may be discovered as a separate, immiscible phase, also known as free product, beneath infrastructure that is removed. SWRCB Resolution No. 92-49 requires that free product be either removed, isolated, or managed.[137] The SWRCB Low-Threat Underground Storage Tank Case Closure Policy ("Low-Threat Closure Policy") also requires that free product be removed to the maximum extent practicable.[138] Accordingly, soil containing free product discovered during demolition activities will be excavated and disposed of at an appropriate off-Site, permitted facility.

Figure 16_depicts likely soil excavation areas, which include the Skim Pond on the LOC Site and underground pipelines on the MLOC Site. In 2005, Rev 973, LLC. submitted a work plan by AEI Consultants to remove pipelines and contaminated soil surrounding the pipelines. AEI Consultants described the pipelines as follows:[139]

- The first underground pipeline extended from an aboveground point on the LOC Site just west of the LOC Site/MLOC Site property line to an underground manifold box near the northern aboveground storage tank farm on the MLOC Site ("Pipeline No. 1"). LOC used this underground pipeline to transport used oil from the LOC Site to the MLOC Site. LOC ceased using this underground pipeline and removed the aboveground portion on the LOC Site in the 1960s, but the underground pipeline on the MLOC Site remains in place. Pipeline No. 1 is reported to be approximately 170 feet long. AEI Consultants believed the pipe is 6 inches in diameter.

- The second underground pipeline actually consists of four underground pipes that extend from the former northern aboveground storage tank farm to Building One ("Pipeline No. 2") where MLOC, or related persons, processed and packaged used oil and other hazardous materials.

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[136] *See* Required Action 2 on page 8 of CAO No. R4-2014-0117 for MLOC Site; and Required Action 2 on page 8 of CAO No. R4-2014-0118 for LOC Site.

[137] SWRCB Resolution No. 92-49. §III.H.2.b.

[138] SWRCB states "While this policy does not specifically address other petroleum release scenarios such as pipelines or above ground storage tanks, if a particular site with a different petroleum release scenario exhibits attributes similar to those which this policy addresses, the criteria for closure evaluation of these non-UST [underground storage tank] sites should be similar to those in this policy." SWRCB. 1 May 2012. *Resolution No. 2012-0016: Adopt a Substitute Environmental Document and Adopt a Proposed Water Quality Control Policy for Low-Threat Underground Storage Tank Closure*. p. 3.

[139] AEI Consultants. 28 October 2005. *Underground Pipeline Removal Work-Plan, Mouren-Laurens Oil Company Site, 641-719 East Compton Boulevard, Los Angeles, California*. p. 2.

Pipeline No. 2 is reported to be approximately 130 feet long. AEI Consultants believed the four pipes are located in the same trench and each pipe is 4 inches in diameter.

Excavation at the areas shown on Figure 16 is intended to remove free product in soil consistent with SWRCB Resolution No. 92-49 and the Low-Threat Closure Policy. At a minimum, soil containing liquid oil or COCs at concentrations greater than SFRWQCB soil gross contamination screening levels[140] will be excavated. Gross contamination screening levels for soil are designed to help identify the potential presence of free product.[141] Soil gross contamination screening levels are 120,000 milligrams per kilogram ("mg/kg") for 1,4-dioxane and 700 mg/kg for TCE. Soil may be excavated to lower COC concentrations depending upon the volume and depth to which impacted soil resides at each area, and whether COC concentrations less than soil gross contamination screening levels can be efficiently removed by SVE. COC removal rates by SVE will be established through performance of an SVE/air sparging pilot study at the MLOC and LOC Sites.

Excavation of near surface, heavily contaminated soil constitutes an efficient remedial action that reduces leaching of COCs thereby enhancing cleanup of deeper soil by SVE. Contaminated soil will be properly manifested, and transported to and disposed of at appropriate off-Site, permitted facilities.

Concrete and asphalt pavement covering most of the Sites serves as a cover system that prevents contact with soil containing metals and other non-VOCs. Existing cracks and voids, or those created by demolishing and removing tanks, process equipment, underground pipelines, and appurtenances will be sealed or otherwise repaired to restore the integrity of the cover system. A site management plan will be prepared to instruct current and future owners and tenants about the requirements to inspect and maintain the concrete and asphalt, and to follow site-specific environmental procedures if the pavement is breached to install or fix buried utilities or other infrastructure.

The site management plan is considered an institutional control, which U.S. EPA defines as non-engineered instruments that are designed to work by limiting land and/or resource use or by providing information that serves to modify or guide human behavior at a site.[142] Proprietary controls (e.g., negative easement and restrictive covenant) and informational devices (e.g., notices filed in local land records, state registries, tracking systems, and advisories) may accompany the site management plan. U.S. EPA states institutional controls are often more effective if they are layered or implemented in series. Layering can involve using different types of institutional controls at the same time to help ensure the protectiveness of the remedial action.[143]

A pilot study will be conducted to establish COC removal rates, and operating parameters for design and construction of full-scale SVE/air sparging systems at the MLOC and LOC Sites. The purpose of SVE and air

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[140] SFRWQCB. July 2019. ESL Workbook. Revision 2. Table S-4.

[141] SFRWQCB "ESL User's Guide. *supra* n. 98, p. 10-1.

[142] U.S. EPA. December 2012. *Institutional Controls: A Guide to Planning, Implementing, Maintaining, and Enforcing Institutional Controls at Contaminated Sites*. Office of Solid Waste and Emergency Response and Office of Enforcement and Compliance Assurance. EPA-540-R-09-001. p. 2.

[143] *Id*. p. 9.

sparging is to remove VOCs and enough contaminant mass that biodegradation is no longer hindered by oxygen depletion in the subsurface. SVE and air sparging can be discontinued once oxygen in soil and groundwater has stabilized at levels sufficient to maintain microbial activity. As described in Section 7, EKI also will conduct bench-scale and pilot-scale treatability studies to evaluate the feasibility of augmenting air sparging with ozone to accelerate removal of 1,4-dioxane, TCE, and other VOCs in groundwater compared with air sparging by itself.

The remediation timeframe is anticipated to be controlled by how fast 1,4-dioxane will decrease in the water table aquifer at source areas on the Site. MNA will be initiated after SVE/air sparging with ozone (if this supplemental technology proves viable) to corroborate the rate at which 1,4-dioxane concentrations in groundwater are declining at source areas. Site closure from the Regional Board can be sought upon demonstrating aerobic biodegradation will proceed uninterrupted until groundwater concentrations of 1,4-dioxane and other contaminants reach water quality objectives or anthropogenic background concentrations, to the extent applicable.

6.3.2 Cover Systems

U.S. EPA recognizes cover systems as a presumptive remedy for metals in soil that constitute a low-level threat waste.[144] Presumptive remedies are preferred technologies or response actions for sites with similar characteristics. Identification of presumptive remedies is based on patterns of historical remedy selection practices, U.S. EPA scientific and engineering evaluation of performance data on remedy implementation, and U.S. EPA policies. DTSC also recognizes cover systems as a proven technology for addressing metal-containing soil.[145]

Cover systems provide containment of soil impacted by metals and/or other nonvolatile and insoluble contaminants. Cover systems are stable barriers that restrict direct contact, reduce surface water infiltration, and improve aesthetics. Institutional controls generally are used in conjunction with cover systems to further limit the potential for unintended access to underlying contaminated soil.[146]

Asphalt or concrete pavement is an appropriate cover system for many sites. Both asphalt and concrete are especially well suited for areas where containment must be provided with continued or new commercial or industrial use (e.g., parking lot, building foundation) of the property.[147]

6.3.3 Soil Vapor Extraction

SVE is an in-situ remedial technology that directly removes VOCs from soil in the vadose zone. This technology applies a vacuum to the soil matrix to create a negative pressure gradient that causes

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[144] U.S. EPA. September 1999. *Presumptive Remedy for Metals-in-Soil Sites*. Office of Solid Waste and Emergency Response. EPA 540-F-98-054. ("U.S. EPA Presumptive Remedy for Metals in Soil"), p. 2.

[145] DTSC. 29 August 2008. *Proven Technologies and Remedies Guidance, Remediation of Metals in Soil.* ("DTSC Proven Technologies and Remedies Guidance for Metals in Soil")

[146] U.S. EPA Presumptive Remedy for Metals in Soil. *supra* n. 144, p. 2.

[147] DTSC Proven Technologies and Remedies Guidance for Metals in Soil. *supra* n. 147, p. 47.

movement of vapors toward extraction wells.[148] The vapors are collected from the subsurface then treated, as needed, and discharged to the atmosphere. DTSC recognizes SVE as a proven technology to treat VOC-containing soil.[149]

SVE also promotes aerobic biodegradation of less volatile constituents.[150] Prior to SVE, oxygen is typically depleted in soil containing high concentrations of organic compounds which biodegrade under aerobic conditions. U.S. EPA states:

> Oxygen serves as a primary electron acceptor for soil microorganisms employed in the degradation of both refined and natural hydrocarbons. Following a hydrocarbon spill, if active microbial populations are present, soil gas oxygen concentrations are usually low (typically less than 5 percent) and soil gas carbon dioxide (a metabolite of hydrocarbon degradation) may be high (typically greater than 10 percent). Oxygen concentrations generally are lower in the vicinity of the contaminated soils than in clean soils, indicating that aerobic biodegradation is depleting oxygen.[151]

SVE provides air to the vadose zone, which carries oxygen that can be used by soil microorganisms to biodegrade or transform organic compounds aerobically to innocuous byproducts (e.g., carbon dioxide and water).[152] An oxygen content of 2 to 5 percent is the minimum level needed to sustain aerobic biodegradation.[153]

The process of enhancing biodegradation by replenishing oxygen levels in soil is known as bioventing. SVE and bioventing are terms commonly used to describe in-situ remedial technologies in which air flow is induced in soil for the purpose of volatilizing or biodegrading organic compounds.[154]

The volatility versus biodegradability of a contaminant governs whether it will be volatilized or biodegraded. If the rate of volatilization greatly exceeds the rate of biodegradation, then removal of contaminants, such as chlorinated VOCs in soil at the MLOC and LOC Sites, occurs primarily though volatilization. Contaminants with low vapor pressures cannot be successfully removed by volatilization

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[148] U.S. EPA. October 1994. Chapter II, Soil Vapor Extraction. In *How to Evaluate Alternative Cleanup Technologies for Underground Storage Tank Sites: A Guide for Corrective Action Plan Reviewers*. Solid Waste and Emergency Response. EPA 510-R-04-002. p. II-1.

[149] DTSC. April 2010. *Proven Technologies and Remedies Guidance, Remediation of Chlorinated Volatile Organic Compounds in Vadose Zone Soil*.

[150] U.S. Army Corps of Engineers. 3 June 2002. *Engineering and Design: Soil Vapor Extraction and Bioventing*. EM 1110-1-4001. p. 3-3.

[151] U.S. EPA. September 1995. *Manual - Bioventing Principles and Practice, Volume II: Bioventing Design. Office of Research and Development*. EPA/625/XXX/001. ("U.S. EPA Bioventing Principles and Practice"), p. 3.

[152] U.S. EPA. September 2001. *Development of Recommendations and Methods to Support Assessment of Soil Venting Performance and Closure*. Office of Research and Development. EPA/600/R-01/070. p. 212.

[153] Hickey, W. 1995. *Soil Ventilation: Effects on Microbial Populations in Gasoline-Contaminated Subsurface Soils*. Journal of Environmental Quality. Vol. 24. pp. 571-582.

[154] *Id*. p. 1.

but can be biodegraded by SVE/bioventing if they are aerobically biodegradable.[155] Petroleum hydrocarbons, including high molecular weight hydrocarbons comprising lubricating motor oils, such as those in Site soil are amenable to biodegradation.[156] Studies also demonstrate that 1,4-dioxane[157] and NDMA[158] can be biodegraded aerobically.

A centralized remediation system will be constructed to treat VOCs to treat SVE air flows from all source areas on the MLOC and LOC Sites. A thermal oxidizer will combust VOCs in combined air flows from SVE wells before discharge to the atmosphere. The preliminary design and operating parameters of the device are based on a recuperative thermal oxidizer (i.e., control device with a preheater and combustion chamber) that were derived using U.S. EPA guidance documents and U.S. EPA Air Pollution Control Cost Estimation Spreadsheet for Thermal and Catalytic Oxidizers.[159]

SVE operating parameters will be confirmed through performance of a pilot study. For planning purposes, spacing of SVE wells is based on a radius of influence ("ROI") of 25 feet in the silty clay unit between ground surface and 15 feet bgs, ROI of 50 feet in the fine sand unit between 15 and 40 feet bgs, and a ROI of 30 feet in the silt unit between 60 to 65. This SVE well spacing is derived from arrangements of SVE wells installed within sediment types similar to those below the MLOC and LOC Sites.[160] Figure 17 depicts the assumed locations of SVE wells.

SVE wells at each depth interval will be constructed with 10-feet long screens. SVE well screens will be installed between 5 and 15 feet bgs in the silty clay unit, 30 and 40 feet bgs in the fine sand unit, and 55 to 65 feet bgs in the silt unit. SVE well screen lengths and installation depths may vary based upon the lithology encountered at each SVE well locations and pilot study results. EKI will coordinate design and construction of SVE wells with Regional Board staff.

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[155] U.S. EPA Bioventing Principles and Practice. *supra* n 151, p. 22.

[156] *See* U.S. EPA Enhanced Aerobic Bioremediation. supra n. 134, pp. XII-17 and XII-18; and Agarry, S.E., M.O. Aremu, and O.A. Aworanti. 2013. *Kinetic Modelling and Half-Life Study on Bioremediation of Soil Co-Contaminated with Lubricating Motor Oil and Lead Using Different Bioremediation Strategies*. Soil and Sediment Contamination. Vol. 22. pp. 800-816.

[157] U.S. EPA. September 2013. *Ground Water Issue Paper: Synthesis Report on State of Understanding of Chlorinated Solvent Transformation*. EPA/600/R-13/237. p. 25.

[158] Bradley, P., S. Carr, R. Baird, and F. Chapelle. 2005. *Biodegradation of N-nitrosodimethylamine in Soil from a Water Reclamation Facility*. Bioremediation Journal. Vol. 9. No. 2. pp. 115-120.

[159] *See* U.S. EPA. November 2017. Chapter 2, Incinerators and Oxidizers. In *Air Pollution Control Cost Manual*. 7th Edition. Office of Air and Radiation, Office of Air Quality Planning and Standards and U.S. EPA Air Pollution Control Cost Estimation Spreadsheet for Thermal and Catalytic Oxidizers. https://www.epa.gov/economic-and-cost-analysis-air-pollution-regulations/cost-reports-and-guidance-air-pollution.

[160] AECOM. 31 October 2018. *Revised Expanded Interim Remedial Action Plan, Former BP/ARCO Pipelines, Golden Avenue Site, Long Beach, California*. ("AECOM Revised Expanded Interim Remedial Action Plan"), p. 3-2; and GSA Engineering, Inc. 27 February 2006. *Additional Site Assessment and Field Testing Report, Thrifty Service Station 130, 600 East Rosecrans Avenue, Los Angeles, California*. ("GSA Engineering, Inc. Additional Site Assessment and Field Testing Report"), pp. 9.

Air flow rates from proposed SVE wells have been estimated from performance data for the SVE system relied upon to estimate SVE well spacing.[161] Air flow rates for 15-feet deep and 65-feet deep SVE wells completed in the silty clay and silt units, respectively, are estimated to be 10 standard cubic feet per minute ("scfm") per well.[162] Air flow rates for 40-feet deep SVE wells completed in the fine sand unit are estimated to be 30 scfm per well. The total air flow rate conveyed to the centralized remediation system will be 530 scfm at 10 inches Hg of applied vacuum.

6.3.4 Air Sparging

Air sparging is an in-situ remedial technology that reduces concentrations of volatile constituents that are present in groundwater.[163] This technology, which also is known as "in situ air stripping" and "in situ volatilization," involves injecting air into groundwater (i.e., saturated zone), which transfers volatile constituents to the air in a vapor phase. The air is then vented through the unsaturated or vadose zone where it is often collected by SVE wells for aboveground treatment before discharge to the atmosphere.

Air sparging also stimulates aerobic biodegradation of contaminants in groundwater or within the saturated zone.[164] Generally, volatilization dominates when air sparging systems are first activated and, for aerobically degradable compounds, biodegradation can dominate in later phases of air sparging.[165] Air sparging is capable of treating petroleum hydrocarbons and VOCs, including 1,4-dioxane and NDMA, in groundwater.

Spacing of air sparge wells is routinely based on the zone of influence ("ZOI"), which is a key parameter used to judge effectiveness of individual air sparge wells.[166] ZOI refers to the volume of saturated zone with closely-spaced air-filled channels. The term "zone" is preferred over analogous terms such as "radius" due to the tendency for the volume to be non-uniform, varying with depth above the injection point and distance from the injection well.[167] A pilot study will provide data on the ZOI at the MLOC and LOC Sites. In the interim, an air sparge well spacing of 30 feet is assumed based on the study by Bass, Hastings, and

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[161] AECOM Revised Expanded Interim Remedial Action Plan. *supra* n. 160, Figure 8; and GSA Engineering, Inc. Additional Site Assessment and Field Testing Report. *supra* n. 160, pp. 6-9.

[162] Measured at 70°F and 29.92 inches of mercury ("Hg") or 1 atmosphere ("atm").

[163] U.S. EPA. October 1994. Chapter VII, Air Sparging. In *How to Evaluate Alternative Cleanup Technologies for Underground Storage Tank Sites: A Guide for Corrective Action Plan Reviewers*. Solid Waste and Emergency Response. EPA 510-R-04-002. p. VII-1.

[164] Johnson, P. 1998. *Assessment of the Contributions of Volatilization and Biodegradation to in Situ Air Sparging Performance*. Environmental Science & Technology. Vol. 32. pp. 276-281.

[165] Leeson, A. et al. 12 August 2002. *Air Sparging Design Paradigm*. Prepared for U.S. Air Force Research Laboratory, Airbase and Environmental Technology Division, Tyndall Air Force Base, Florida. p. 12.

[166] U.S. Army Corps of Engineers. 31 December 2013. *Environmental Quality: In-Situ Air Sparging*. Engineer Manual. EM 200-1-19. ("U.S. Army Corps of Engineers Air Sparging Manual"), p. 2-19.

[167] Ahlfeld, D., A. Dahmani, and W. Ji. 1994. *A Conceptual Model of Field Behavior of Air Sparging and Its Implications for Application*. Groundwater Monitoring & Remediation. Vol. 132. pp. 132-139.

Brown, which shows most successful air sparging systems consist of injection wells spaced 30 feet or less from one another.[168] Figure depicts the assumed locations of air sparge wells.

NAVFAC states air sparging systems can be designed to operate at injection flow rates of 6 to 20 scfm to effectively partition contaminants from groundwater into the vapor phase.[169] Consistent with this range, an injection air flow rate of 15 scfm is assumed for each sparge well.

Air must be injected at a pressure that displaces water from within the air sparge well screen and adjacent sediments in the saturated zone. Using the equations[170] presented in U.S. Army Corps of Engineers Air Sparging Manual, a maximum injection pressure of roughly 40 pounds per square inch gauge ("psig") is calculated for each air sparge well.

6.3.5 Monitoring

Pursuant to authority granted by California Water Code § 13304, SWRCB Resolution No. 92-49 requires a discharger to abate the effects of its waste discharge in a manner that promotes attainment of either background water quality (i.e., water quality that existed before the discharge), or the best water quality that is reasonable if background water quality cannot be restored.[171] SWRCB Resolution No. 92-49 specifies that groundwater cleanup goals shall be water quality objectives, which include MCLs, if restoration of background water quality cannot be achieved.[172]

Groundwater data compiled from monitoring wells will be used to compare the actual performance of remedial technologies to expected performance. These performance evaluations are likely to indicate that MCLs cannot be met due to anthropogenic contaminant background concentrations in water table aquifer groundwater, as discussed in Section 5.3.2. Based on this likelihood, the duration, or project life span, over which SVE and air sparging must be implemented at the MLOC and LOC Sites is governed by the timeframe to reduce 1,4-dioxane concentrations of roughly 100 µg/L in on-Site monitoring wells L-MW-3 and MW-3 to concentrations less than the anthropogenic background concentration of approximately 10 µg/L. The project life span is controlled by 1,4-dioxane because the largest disparity between on-Site and background groundwater concentrations exist for this contaminant.

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[168] Bass, D., N. Hastings, and R. Brown. 2000. *Performance of Air Sparging Systems: A Review of Case Studies*. Journal of Hazardous Materials. Vol. 72. pp. 101-119.

[169] NAVFAC. 31 August 2001. *Final Air Sparging Guidance Document. Technical Report*. TR-2193-ENV. Prepared by Battelle. p. 18.

[170] *See* U.S. Army Corps of Engineers Air Sparging Manual. *supra* n. 166, p. 5-7. Required air sparging injection pressure is calculated assuming a soil porosity of 40 percent and soil specific gravity of 2.7. Depth to top of each air sparge well screen is 90 feet bgs and depth to top of groundwater surface is 80 feet bgs.

[171] SWRCB Resolution No. 92-49. §4.

[172] *Id*. §III.G.

6.3.5.1 Monitored Natural Attenuation

Monitored natural attenuation ("MNA") will follow active remediation by SVE and air sparging. MNA refers to the reliance on natural processes to finish site cleanup.[173] Natural processes (e.g., biodegradation, dispersion, dilution, sorption, and volatilization), under favorable conditions, act without human intervention to reduce the mass, toxicity, mobility, volume, or concentration of contaminants in soil or groundwater.

To be considered an acceptable remedial technology, MNA is expected to achieve RAOs and site cleanup goals within a timeframe that is reasonable compared to that offered by more active technologies. According to U.S. EPA, MNA is used together with treatment of principal threat waste; that is, removal of the source of contamination as far as practicable.[174]

MNA will be relied upon to address contaminants within the water table aquifer in the downgradient direction of groundwater flow from the MLOC and LOC Sites. Vapor intrusion is the primary pathway that individuals living or working near the Site may be potentially exposed to contaminants emanating from the Site.

However, exposure to VOCs in groundwater through vapor intrusion does not appear to be occurring as evidenced by the lack of VOCs in perched groundwater samples collected in the downgradient direction of groundwater flow from the MLOC and LOC Sites.[175] VOCs would be present in overlying perched groundwater if VOCs were diffusing from the water table aquifer into the vadose zone off-Site. Diffusion of VOCs is restricted by low permeability silt units and the high moisture content of sediments on top of these silt units that leads to perched groundwater on occasion. U.S. EPA states "[h]igh moisture levels in the vadose zone can significantly reduce the effective rate of diffusive transport, owing to the substantially smaller diffusion coefficient of vapor-forming chemicals in water compared to air."[176]

MNA is a suitable remedial technology for contaminants in groundwater that have migrated off the MLOC and LOC Sites because these contaminants do not pose a significant human health threat. Further,

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[173] U.S. EPA. May 1999 *Remedial Technology Fact Sheet: Monitored Natural Attenuation of Petroleum Hydrocarbons*. Office of Research and Development and National Risk Management Research Laboratory. EPA/600/F-98/021. p. 1.

[174] *Id*.

[175] *See* VOC analytical results of perched groundwater samples collected from borings CPT-S-4A and CPT-S-6A and monitoring well S-MW-4A in Waterstone Additional Phase II Site Characterization – 3rd Phase Change Order No. 4 Report. *supra* n. 77, Table 1; and Waterstone. 7 November 2012. *Additional Phase II Site Characterization – 3rd Phase Addendum Report, Additional Phase II Site Characterization – 3rd Phase, Mouren-Laurens Oil Company (641-719 E. Compton Blvd.) and Leach Oil Company (625 E. Compton Blvd. and 15006 S. Avalon Blvd.), Los Angeles, California*. Table 5.

[176] U.S. EPA. June 2015. *OSWER Technical Guide for Assessing and Mitigating the Vapor Intrusion Pathway from Subsurface Vapor Sources to Indoor Air*. Office of Solid Waste and Emergency Response. OSWER Publication 9200.2-154. p. 25.

contaminated groundwater generally is not considered to be a source[177] so treatment of contaminants in off-Site groundwater is not warranted.

6.3.5.2 Site Remediation Timeframe

SWRCB Resolution No. 92-49 requires that the Regional Board accept any RAP that has a "substantial likelihood to achieve compliance, within a reasonable time frame, with cleanup goals and objectives that implement the applicable Water Quality Control Plans and Policies adopted by the State Water Board and Regional Water Boards."[178] A reasonable timeframe is not defined by a specific time period, but by effectiveness. U.S. EPA states if "contaminant concentrations are decreasing in a timely manner and other progress performance metrics are being achieved, then it is likely that the remedial approach is functioning as intended and the remedy is likely to achieve RAOs and cleanup levels in a reasonable timeframe."[179] The remediation timeframe will likely be controlled by 1,4-dioxane in the water table aquifer at source areas on the MLOC and LOC Sites.

Adamson et al. utilized the GeoTracker database, which is the SWRCB's data management system for sites that impact, or have the potential to impact, water quality in California, to evaluate the attenuation of 1,4-dioxane from 2000 to 2013 at thirty-four sites in California.[180] This study characterized source attenuation rates, which reflect the combined effects of processes that exponentially decrease groundwater 1,4-dioxane concentrations during the time period covered by the monitoring record. Attenuation processes include biodegradation, advection, dispersion, and physical removal by remedial technologies. The median source attenuation rate for 1,4-dioxane is 0.27/year.

Jackson and Lemke evaluated groundwater 1,4-dioxane data to determine attenuation metrics in individual monitoring wells at a site in the City of Ann Arbor, Michigan.[181] The average attenuation rate for 1,4-dioxane was determined to be 0.12/year.

The source attenuation rate is used to estimate how quickly contaminant concentrations in groundwater will decline at a site.[182] The source attenuation rate for 1,4-dioxane is inserted into the exponential decay law to estimate the groundwater 1,4-dioxane concentration versus time at the source area:

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[177] U.S. EPA A Guide to Principal Threat and Low Level Threat Wastes. *supra* n. 114, p. 2.

[178] SWRCB Resolution No. 92-49. §III.A.

[179] U.S. EPA. May 2014. *Groundwater Remedy Completion Strategy: Moving Forward with the End in Mind*. Office of Solid Waste and Emergency Response. OSWER Directive 9200.2-144. p. 11.

[180] Adamson, D.T., R.H. Anderson, S. Mahendra, and C.J. Newell. 2015. *Evidence of 1,4-Dioxane Attenuation at Groundwater Sites Contaminated with Chlorinated Solvents and 1,4-Dioxane*. Environmental Science & Technology. Vol. 49. pp. 6510-6518.

[181] Jackson, L.E. and L.D. Lemke. 2019. *Evidence for Natural Attenuation of 1,4-Dioxane in a Glacial Aquifer System*. Hydrogeology Journal. Vol. 27. pp. 3009-3024.

[182] U.S. EPA. November 2002. *Ground Water Issue: Calculation and Use of First-Order Rate Constants for Monitored Natural Attenuation Studies*. National Risk Management Research Laboratory. EPA/540/S-02/500. p. 1.

$$C = C_o e^{-kt}$$

where:

C = Groundwater 1,4-Dioxane Concentration (µg/L) at Source Area at t

C_o = Initial Groundwater 1,4-Dioxane Concentration (µg/L) at Source Area at t = 0

k = 1,4-Dioxane Source Attenuation Rate (1/year)

t = Time (year)

The amount of time that SVE/air sparging is used as opposed to MNA at source areas is an economic decision if steady progress towards reaching RAOs and cleanup goals is being made. SWRCB Resolution No. 92-49 does not require that the requisite level of water quality be met at the time of site or case closure.[183] In its Low-Threat Closure Policy,[184] SWRCB states:

> Program experience has demonstrated the ability of remedial technologies to mitigate a substantial fraction of a petroleum contaminant mass with the investment of a reasonable level of effort. Experience has also shown that residual contaminant mass usually remains after the investment of reasonable effort, and that this mass is difficult to completely remove regardless of the level of additional effort and resources invested.[185]

This policy and SWRCB Resolution No. 92-49 are considered in development of the completion schedule for the MLOC and LOC Sites presented in Section 7.

[183] SWRCB LUFT Manual. *supra* n. 59, p. 7-3.

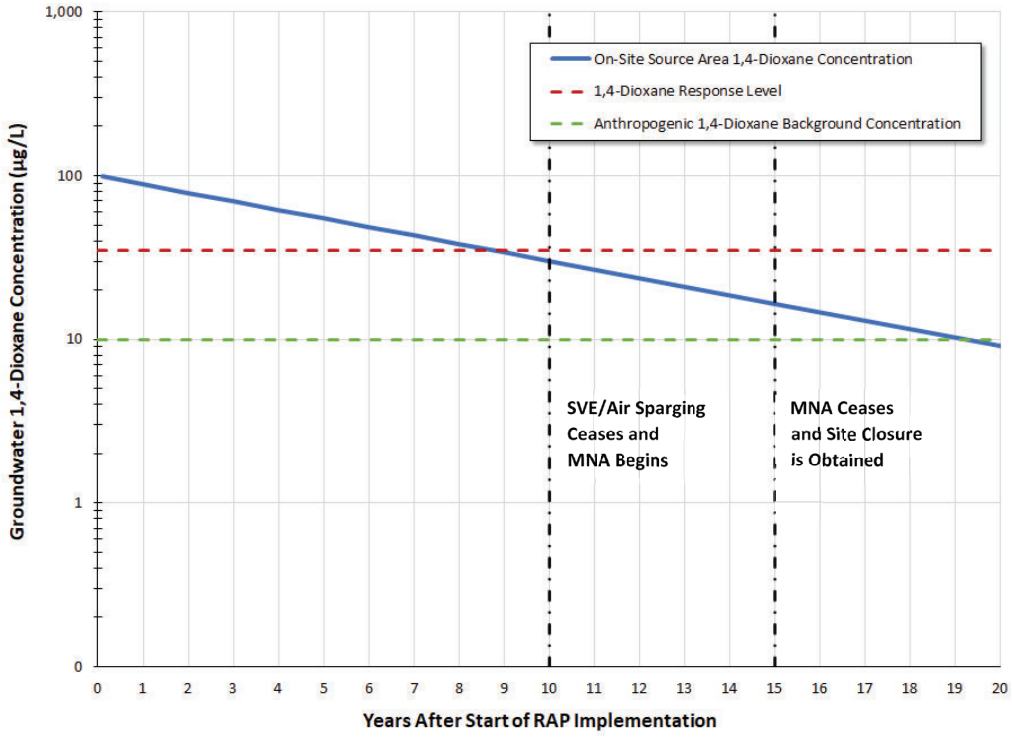
[184] SWRCB. 1 May 2012. *Resolution No. 2012-0016: Adopt a Substitute Environmental Document and Adopt a Proposed Water Quality Control Policy for Low-Threat Underground Storage Tank Closure*. p. 2.

[185] *Id*. p. 1.

7. COMPLETION SCHEDULE

The below plot depicts the anticipated rate of decline in groundwater 1,4-dioxane concentrations in the source areas on the MLOC and LOC Sites after initiating implementation of EKI's proposed remedial alternative described in Section 6.3. This rate of decline in 1,4-dioxane concentrations at Site source areas is based on the attenuation rate of 0.12/year determined by Jackson and Lemke (*see* Section 6.3.5.2). This attenuation rate is assumed rather than the rate reported by Adamson et al. because the rate determined by Jackson and Lemke is more conservative and therefore better reflects uncertainty regarding the actual rate that biodegradation and other attenuation processes will occur at source areas on the MLOC and LOC Sites.

Anticipated Rate of Decline in On-Site Groundwater 1,4-Dioxane Concentration



Remediation timeframe is controlled by 1,4-dioxane because the largest disparity between on-Site and anthropogenic background groundwater concentrations exist for this contaminant.

The rates of decline indicate that 7 to 10 years of SVE/air sparging followed by 5 years of MNA for a project life span (i.e., life cycle) of 12 to 15 years is a reasonable estimate for design, construction, operation and maintenance, and closeout tasks associated with remedial actions for the Sites. Although groundwater 1,4-dioxane concentrations at the Site source areas may not be less than the anthropogenic background concentration of approximately 10 µg/L at the end of 15 years, Site specific data compiled by that time will demonstrate that 1,4-dioxane concentrations of 10 µg/L will be attained in a reasonable time frame.

SWRCB Resolution No. 92-49 and Low-Threat Closure Policy indicate that such a demonstration is sufficient for the Regional Board to grant site closure.

Nevertheless, combining in situ chemical oxidation ("ISCO") with air sparging offers the possibility of substantially reducing the time to attain RAOs. For instance, ozone generates hydroxyl radicals (•OH) that can destroy most organic pollutants at rapid rates due to their high reactivity and oxidation potential.[186] Air sparging with ozone was utilized to treat TCE-containing groundwater at the Rochester Property site in Travelers Rest, South Carolina, which was included on U.S. EPA's Comprehensive Environmental Response, Compensation, and Liability Act (i.e., Superfund) National Priorities List ("NPL").[187] The air/ozone sparging system operated for two years between 2002 and 2004. U.S. EPA removed the Rochester Property site from the NPL after monitoring from 2004 through 2006 demonstrated TCE and other VOC concentrations in groundwater remained less than their respective MCLs.[188]

ISCO entails introducing oxidant into the subsurface to obtain contact with target compounds. Pac et al. state "[c]ontact may be facilitated by a variety of induced and natural groundwater mechanisms — displacement, advection, dispersion, and diffusion -— both during and following injection. ISCO is completed by direct contact aqueous reaction -— for the reaction to proceed, both the target compound and the ISCO agent must be dissolved in water and in contact with one another."[189] Effective delivery of the oxidant is key because the inability to provide and maintain contact of the oxidant with target compounds will inhibit ISCO effectiveness.[190] Research has shown oxidants can travel farther into a 1,4-dioxane contaminated aquifer by increasing the longevity and transportability of oxidants through (1) co-injecting oxidants, (2) using complexing agents to facilitate reagent transport, and (3) exploiting aquifer materials to delay activation of oxidants.[191]

Bench-scale and pilot-scale treatability studies are needed to design and plan full-scale SVE/air sparging systems at the MLOC and LOC Sites, particularly regarding the use of ISCO in combination with air sparging. For example, Andaluri and Suri found ozone by itself was not very effective at removing 1,4-dioxane from water under acidic conditions.[192] Enhanced destruction of 1,4-dioxane was achieved at a solution pH greater than 8 or by adding hydrogen peroxide at neutral pH. Destruction of 1,4-dioxane destruction was

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[186] Glaze, W.H. and Kang, J.W. 1988. *Advanced Oxidation Processes for Treating Groundwater Contaminated with TCE and PCE - Laboratory Studies*. Journal American Water Works Association. Vol. 80, No. 5. pp. 57-63.

[187] U.S. EPA. May 2018. *Examples of Groundwater Remediation at NPL Sites*. Office of Superfund Remediation and Technology Innovation. EPA 542-R-18-002. pp. B-33, B-34.

[188] *Id*.

[189] Pac, T. et al. 2019. *In Situ Chemical Oxidation: Lessons Learned at Multiple Sites*. Remediation. Vol. 29. pp. 75-91.

[190] Suthersan, S., J. McDonough, M. Schnobrich, and C. Divine. 2017. *In Situ Chemical Treatment: A Love-Hate Relationship*. Groundwater Monitoring & Remediation. Vol. 37, No. 1. pp. 17-26.

[191] Carroll, K., M. Brusseau, T. Boving, and R. Ball. August 2018. *Facilitated Transport Enabled In-Situ Chemical Oxidation of 1,4-Dioxane-Contaminated Groundwater*. SERDP Project ER-2302. p. 2.

[192] Andaluri, G. and R. Suri. 2017. *Removal of 1,4-Dioxane and Volatile Organic Compounds from Groundwater Using Ozone-Based Advanced Oxidation Process*. Ozone Science & Engineering. Vol. 39, No. 6. pp. 423-434.

approximately 20 percent at pH 5 but increased to 70 percent at pH 8 and 98 percent at pH 10.[193] The pH of groundwater at the MLOC and LOC Sites is about pH 7 or neutral.[194] At neutral pH, Andaluri and Suri reported only 40 percent of 1,4-dioxane was removed by ozone alone. Thus, the effectiveness of various oxidants will be evaluated through implementation of bench and pilot studies. U.S. EPA states other objectives of an ISCO pilot study include the following:

> . . . determine the injection rate vs. injection pressure; assess various injection strategies; assess the travel times, distribution (vertical/horizontal), and persistence of the oxidant and reagents (Fe, acid, stabilizers, chelators); determine whether ground-water contaminants are mobilized or are volatilized; assess the mobilization of metals; assess contaminant rebound; determine reaction byproducts; conduct a preliminary performance evaluation of contaminant oxidation; assess the adequacy of the monitoring program; anticipate well fouling problems; and assess the potential difficulties in scaling up a treatment system. Multiple injections of oxidant and/or reagents under different conditions can be used to accomplish different treatment and testing objectives.[195]

Implementation of the bench and pilot studies to establish the efficacy and operating parameters for design and construction of the full-scale SVE/air sparging systems at the MLOC and LOC Sites will be conducted within six months of Regional Board approval of EKI's proposed remedial alternatives. The timeframe for installing the full-scale SVE/air sparging systems is contingent upon the bench and pilot test results and effect that COC mass removal rates may have on permitting requirements. A schedule for designing and constructing the full-scale SVE/air sparging systems will be submitted to the Regional Board for approval upon completing the bench and pilot studies.

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[193] *Id*.

[194] Partner (2021). *supra* n. 80, Table 2.

[195] U.S. EPA. August 2006. *Engineering Issue: In-Situ Chemical Oxidation*. Office of Research and Development National Risk Management Research Laboratory. EPA/600/R-06/072. p. 24.

TABLES

TABLE 1
WELL CONSTRUCTION DETAILS
Mouren-Laurens Oil Company, Inc. and Leach Oil Company, Inc. Sites
Compton, California

Well ID	Installation Date	Location	Casing Diameter (inches)	Well Depth (feet bgs)	Screen Length (feet)	Screened Interval (feet bgs)	TOC Elevation (feet amsl)
MW-2	11/06-07/00	On-Site	2	95	20	75-95	91.38
MW-3	11/6/00	On-Site	2	95	20	75-95	90.73
MW-4A	10/05-06/00	On-Site	2	50	30	20-50	NA
MW-4B	10/05-06/00	On-Site	2	95	20	75-95	91.47
MW-5A	10/06-09/00	On-Site	2	50	30	20-50	NA
MW-5B	10/06-09/00	On-Site	2	95	20	75-95	92.6
MW-6A	10/9/00	On-Site	2	50	30	20-50	NA
MW-6B	10/9/00	On-Site	2	95	20	75-95	93.02
M-MW-7A	4/22/09	On-Site	2	63	10	53-63	93.23
M-MW-7B	4/27/09	On-Site	2	95	20	75-95	93.4
M-MW-8A	4/23/09	On-Site	2	65	10	55-65	92.81
M-MW-8B	04/23-24/09	On-Site	2	95	20	75-95	92.86
M-MW-9	10/13-14/10	On-Site	4	135	10	125-135	91.04
L-MW-1	11/21/05	Off-Site	2	105	30	75-105	91.4
L-MW-2	11/22/05	Off-Site	2	105	30	75-105	91.56
L-MW-3	11/23/05	Off-Site	2	105	30	75-105	91.11
L-MW-4	11/23/05	Off-Site	2	105	30	75-105	94.74
L-MW-5A	9/27/10	Off-Site	2	64.5	10	54.5-64.5	93.03
L-MW-5B	9/28-29/10	Off-Site	2	95	20	75-95	93.42
N-MW-1	10/20	Off-Site	2	100	20	80-100	94.14
N-MW-2	10/20	Off-Site	2	100	20	80-100	94.8
S-MW-1A	5/12/09	Right-of-Way	2	63.5	10	53.5-63.5	90.84
S-MW-1B	05/12-13/09	Right-of-Way	2	95	20	75-95	90.88
S-MW-2A	5/5/09	Right-of-Way	2	65	10	55-65	90.9
S-MW-2B	05/05-06/09	Right-of-Way	2	95	21	75-95	90.98
S-MW-3A	5/7/09	Right-of-Way	2	65	10	55-65	91.44
S-MW-3B	05/07-08/09	Right-of-Way	2	95	20	75-95	91.46
S-MW-4A	7/18/11	Right-of-Way	2	62.5	10	52.5-62.5	84.65
S-MW-4B	07/18-19/11	Right-of-Way	2	97	20	77-97	84.45

Abbreviations:
amsl = above mean sea level
bgs = below ground surface
TOC = top of casing

References:
(1) Partner Engineering and Science, Inc., 2021. *Groundwater Monitoring Report - December 2020, Former Mouren-Laurens Oil Company Site, 641-719 East Compton Boulevard, Compton, California* , 15 January 2021.

TABLE 2a
STATISTICAL SUMMARY OF SITE-WIDE SOIL DATASET
Mouren-Laurens Oil Company, Inc. and Leach Oil Company, Inc. Sites
Compton, California

Chemicals Analyzed for in Soil (a)	Site-Wide Soil Dataset						
	Number of Samples Analyzed	Number of Samples Detected	Frequency of Detection	Minimum Detected Concentration (mg/kg)	Maximum Detected Concentration (mg/kg)	Selected Commercial/ Industrial Screening Level for Direct Exposure (mg/kg) (b)	Retain as COC? (c)
Acenaphthene [PAH]	71	11	15%	0.43	3.3	10,000	No
Acetone	260	41	16%	0.058	18	270,000	No
Aldrin	222	10	5%	0.0021	0.033	0.15	No
Antimony	254	3	1%	2.1	14	50	No
Arsenic	258	113	44%	0.53	36	0.31	Yes
Barium	258	258	100%	4.2	515	3,000	No
Benzene	660	171	26%	0.0015	28	1.4	Yes
Beryllium	258	37	14%	0.20	0.82	27	No
Bis(2-chloro-1-methylethyl) ether	71	3	4%	0.54	1.5	23	No
Bis(2-ethylhexyl) phthalate	335	20	6%	0.11	28	160	No
Boron	229	26	11%	0.25	16	45,000	No
Bromoform (Tribromomethane)	409	10	2%	0.0068	0.057	80	No
Cadmium (soil)	254	202	80%	0.54	42	51	No
Chlordane	209	0	0%	NA	NA	2.2	No
Chlorobenzene	603	23	4%	0.0019	4.9	1,200	No
Chloroform	216	6	3%	0.0019	0.013	1.4	No
Chromium (total)	231	149	65%	0.54	43	--	No
Chromium VI	3	1	33%	0.47	0.47	2.8	No
Cobalt	258	252	98%	1.6	32	28	Yes
Copper	258	255	99%	2.8	907	14,000	No
1,2-Dichlorobenzene	599	49	8%	0.0027	17	7,800	No
1,3-Dichlorobenzene	136	1	1%	0.13	0.13	--	No
1,4-Dichlorobenzene	NA	NA	NA	NA	NA	12	No
DDD	222	3	1%	0.018	0.042	12	No
DDE	222	8	4%	0.0061	0.096	8.3	No
DDT	222	15	7%	0.011	0.33	8.5	No
1,1-Dichloroethane	660	78	12%	0.0017	3.1	16	No
1,2-Dichloroethane	458	11	2%	0.0020	0.027	2.1	No
1,1-Dichloroethene	387	2	1%	0.0082	0.027	350	No
cis-1,2-Dichloroethene	652	171	26%	0.0012	0.82	78	No
trans-1,2-Dichloroethene	216	1	0%	0.0032	0.0032	570	No
1,2-Dichloropropane	136	5	4%	0.0054	0.011	4.4	No
Diethyl phthalate	71	3	4%	4.9	8.0	150,000	No
2,4-Dimethylphenol	335	52	16%	0.12	20	7,100	No
1,4-Dioxane	225	40	18%	0.026	19	22	No
Endrin	222	9	4%	0.012	0.19	74	No
Ethylbenzene	660	106	16%	0.0029	64	26	Yes
Fluoranthene [PAH]	71	6	8%	0.66	2.4	6,700	No
Fluorene [PAH]	71	12	17%	0.46	3.4	6,700	No
Heptachlor	222	9	4%	0.0033	0.12	0.53	No
Heptachlor epoxide	222	6	3%	0.0056	0.042	0.28	No
Hexachlorobutadiene	136	2	1%	0.0085	0.28	5.3	No
g-Hexachlorocyclohexane (Lindane)	222	0	0%	NA	NA	2.5	No
Lead	258	235	91%	0.33	1,460	160	Yes
Mercury (elemental)	258	38	15%	0.024	1.0	44	No
Methoxychlor	222	1	0%	0.018	0.018	1,200	No
Methylene chloride	467	8	2%	0.0050	1.19	25	No
Methyl ethyl ketone	211	8	4%	0.7	7.8	120,000	No
Methyl isobutyl ketone	260	16	6%	0.050	0.44	140,000	No
2-Methylnaphthalene	335	57	17%	0.83	72	670	No
Methyl tertiary butyl ether (MTBE)	136	1	1%	0.018	0.018	210	No
Molybdenum	233	14	6%	0.60	18	1,800	No
Naphthalene [PAH]	555	132	24%	0.0031	86	17	Yes
Nickel	258	251	97%	1.8	33	86	No
Petroleum - Gasoline	503	137	27%	0.26	8,900	1,800	Yes
Petroleum - Diesel	494	128	26%	0.25	21,000	1,100	Yes
Petroleum - Motor Oil	494	153	31%	0.12	74,700	54,000	Yes
Phenanthrene [PAH]	173	36	21%	0.19	9.0	--	No
Phenol	335	59	18%	0.31	120	98,000	No
Pyrene [PAH]	173	14	8%	0.12	3.9	5,000	No
Selenium	189	47	25%	0.50	2.0	1,700	No
Styrene	216	1	0%	0.043	0.043	25,000	No
Tetrachloroethene	603	86	14%	0.0020	53	2.7	Yes
Thallium	189	14	7%	2.3	83	3.5	Yes
Toluene	660	152	23%	0.0025	160	4,700	No
Toxaphene	222	1	0%	0.14	0.14	2.2	No
1,2,4-Trichlorobenzene	136	5	4%	0.0028	12	110	No
1,1,1-Trichloroethane	554	21	4%	0.0050	14.6	7,200	No
1,1,2-Trichloroethane	216	2	1%	0.0020	0.0031	5.1	No
Trichloroethene	660	226	34%	0.0016	17	6.1	Yes
1,2,3-Trichloropropane	136	1	1%	0.0046	0.0046	0.11	No
Vanadium	258	250	97%	0.67	67	470	No
Vinyl chloride	409	23	6%	0.0031	0.23	0.15	Yes
Xylene (total)	656	130	20%	0.0036	420	2,400	No
Zinc	258	257	100%	9.7	2,100	110,000	No

TABLE 2a
STATISTICAL SUMMARY OF SITE-WIDE SOIL DATASET
Mouren-Laurens Oil Company, Inc. and Leach Oil Company, Inc. Sites
Compton, California

Chemicals Analyzed for in Soil (a)	Site-Wide Soil Dataset						
	Number of Samples Analyzed	Number of Samples Detected	Frequency of Detection	Minimum Detected Concentration (mg/kg)	Maximum Detected Concentration (mg/kg)	Selected Commercial/ Industrial Screening Level for Direct Exposure (mg/kg) (b)	Retain as COC? (c)
1,2,3-Trichlorobenzene	136	2	1%	0.13	0.26	300	No
4-Chlorotoluene	136	1	1%	0.10	0.10	2,300	No
Ethylene glycol	24	13	54%	3.0	1,200	1,100,000	No
Petroleum - Total Recoverable	336	160	48%	11	230,000	1,800	Yes
1,2,4-Trimethylbenzene	612	109	18%	0.0026	245	1,800	No
1,3,5-Trimethylbenzene	612	94	15%	0.0035	73	1,500	No
n-Butylbenzene	612	33	5%	0.006	39	18,000	No
n-Propylbenzene	612	87	14%	0.0026	53	24,000	No
Isopropylbenzene	555	46	8%	0.0029	10.4	9,900	No
4-Isopropyltoluene	555	52	9%	0.0030	19.0	--	No
sec-Butyl benzene	555	42	8%	0.016	11.0	74,000	No
tert-Butyl benzene	203	2	1%	0.018	157	12,000	No
tert-Butyl alcohol	352	96	27%	0.052	98	--	No
1,2-Dichlorobenzene (SVOC)	379	38	10%	0.013	17	7,800	No
1,3-Dichlorobenzene (SVOC)	71	2	3%	0.510	0.67	--	No
1,4-Dichlorobenzene (SVOC)	277	14	5%	0.430	3.6	12	No
Di-n-butylphthalate	233	2	1%	0.460	10.5	53,000	No
Cresol, o-	335	48	14%	0.220	120	26,000	No
Cresol, p-	335	46	14%	0.567	42	53,000	No
Naphthalene (SVOC)	392	59	15%	0.026	93	17	Yes
alpha-BHC	222	2	1%	0.016	0.031	0.24	No
alpha-Chlordane	13	0	0%	NA	NA	2.2	No
beta-BHC	222	5	2%	0.006	0.041	0.82	No
delta-BHC	222	1	0%	0.018	0.018	--	No
Alvit	222	6	3%	0.003	0.016	--	No
Endosulfan I	222	4	2%	0.010	0.027	--	No
Endosulfan II	222	1	0%	0.013	0.013	--	No
Endosulfan Sulfate	222	0	0%	NA	NA	3,200	No
Endrin aldehyde	222	5	2%	0.022	0.10	--	No
Endrin ketone	13	0	0%	NA	NA	--	No
gamma-Chlordane	13	0	0%	NA	NA	2.2	No
Aroclor 1016	245	5	2%	0.044	2.6	0.94	Yes
Aroclor 1221	245	0	0%	NA	NA	0.94	No
Aroclor 1232	245	0	0%	NA	NA	0.94	No
Aroclor 1242	245	0	0%	NA	NA	0.94	No
Aroclor 1248	245	0	0%	NA	NA	0.94	No
Aroclor 1254	245	8	3%	0.035	0.20	0.94	No
Aroclor 1260	245	16	7%	0.130	4.2	0.94	Yes
Aroclor 1262	154	0	0%	NA	NA	0.94	No
Aroclor 1268	154	0	0%	NA	NA	0.94	No

Abbreviations:
"--" = not applicable
COCs = chemicals of concern
DTSC-SL = Department of Toxic Substances Control modified screening level
mg/kg = milligrams per kilogram
NA = not applicable
PAH = polycyclic aromatic hydrocarbons
RSL = regional screening level
SFRWQCB = San Francisco Bay Regional Water Quality Control Board
SVOCs = semivolatile organic compounds
U.S. EPA = United States Environmental Protection Agency

Notes:
(a) List of chemicals analyzed for in soil based on chemicals listed on historical data tables (see Appendix A).
(b) Screening levels selected based on the following hierarchy.
1) Commercial ESLs for Soil for Direct Exposure (SFRWQCB, 2019);
2) Commercial/Industrial DTSC-SLs for Soil (DTSC, 2020); and
3) Commercial/Industrial RSLs for Soil (U.S. EPA, 2020).
(c) Chemical identified as a COC in soil vapor if the maximum detected concentration exceeded the selected commercial/industrial screening level.

References:
(1) DTSC, 2020. *HERO HHRA Note Number: 3, DTSC-modified Screening Levels (DTSC-SLs)*. California Department of Toxic Substances Control. June 2020.
(2) SFRWQCB, 2019. *Environmental Screening Levels*, Tier 1 Soil, July 2019.
(3) U.S. EPA, 2020. *Regional Screening Level (RSL) Summary Table (TR=1E-6, HQ=1)*. United States Environmental Protection Agency. May 2020.

TABLE 2b
STATISTICAL SUMMARY OF SITE-WIDE SOIL GAS DATASET
Mouren-Laurens Oil Company, Inc. and Leach Oil Company, Inc. Sites
Compton, California

Chemicals Analyzed for in Soil Gas (a)	Site-Wide Soil Gas Dataset							
	Number of Samples Analyzed	Number of Samples Detected	Frequency of Detection	Minimum Detected Concentration ($\mu g/m^3$)	Maximum Detected Concentration ($\mu g/m^3$)	Selected Commercial/ Industrial Screening Level ($\mu g/m^3$) (c)	Retain as COC? (d)	Identified Primary COC? (e)
Benzene	386	241	62%	5	1,184,000	14	Yes	Yes
Bromomethane	25	8	32%	372	1,350	730	Yes	No
Chlorobenzene	32	15	47%	4.6	13,000	7,300	Yes	No
Chloroethane	32	8	25%	50	1,350	1,500,000	No	No
Chloroform	386	125	32%	5	56,000	18	Yes	Yes
Chloromethane	129	6	5%	1.8	6,000	13,000	No	No
1,2-Dichlorobenzene	14	1	7%	5.1	5.1	29,000	No	No
1,1-Dichloroethane	386	193	50%	79	215,000	260	Yes	Yes
1,2-Dichloroethane	145	5	3%	600	2,820	16	Yes	No
1,1-Dichloroethene	386	125	32%	119	129,000	10,000	Yes	No
cis-1,2-Dichloroethene	217	172	79%	32	1,574,000	1,200	Yes	Yes
trans-1,2-Dichloroethene	115	23	20%	169	7,640	12,000	No	No
Ethylbenzene	386	98	25%	13	967,496	160	Yes	Yes
Methylene chloride	298	17	6%	90	30,300	410	Yes	No
Methyl tertiary butyl ether (MTBE)	284	5	2%	679	13,000	1,600	Yes	No
Tetrachloroethene	387	283	73%	12	705,238	67	Yes	Yes
Toluene	386	148	38%	29	1,887,799	44,000	Yes	No
1,1,1-Trichloroethane	298	48	16%	600	203,000	150,000	Yes	No
1,1,2-Trichloroethane	124	1	1%	145	145	26	Yes	No
Trichloroethene	386	349	90%	12	1,270,000	100	Yes	Yes
Vinyl chloride	385	228	59%	28	2,170,000	5	Yes	Yes
Xylene (total)	287	105	37%	619	412,000	15,000	Yes	No
1,2,4-Trimethylbenzene	3	1	33%	2,400	2,400	8,700	No	No
1,3,5-Trimethylbenzene	3	1	33%	1,800	1,800	8,700	No	No
Trimethylbenzene (b)	198	21	11%	53	56,000	8,700	Yes	No
Aliphatic Hydrocarbons	169	146	86%	2,400	111,620,000	15,000	Yes	Yes
1,2-Dichloroethene (b)	284	79	28%	500	1,381,000	1,200	Yes	Yes
Dichlorodifluoromethane (Freon 12)	129	38	29%	79	3,700	15,000	No	No
Trichlorotrifluoroethane (Freon 113)	298	164	55%	37	99,000	730,000	No	No
Trichlorofluoromethane (Freon 11)	298	53	18%	128	80,000	--	No	No
m,p-Xylene	191	8	4%	52,615	1,374,039	15,000	Yes	No
o-Xylene	88	8	9%	20,977	1,034,093	15,000	Yes	No
n-Butylbenzene	131	3	2%	1,000	6,000	--	No	No
n-Propylbenzene	121	1	1%	39	39	--	No	No
Other Poly-alkyl benzenes	16	3	19%	1,000	13,000	--	No	No
Isopropylbenzene	116	14	12%	198	64,300	60,000	Yes	No
4-Isopropyltoluene	116	3	3%	189	1,940	--	No	No
sec-Butyl benzene	131	4	3%	1,000	19,000	--	No	No
tert-Butyl benzene	131	5	4%	1,000	15,100	--	No	No
tert-amylmethylether	121	2	2%	2,880	7,590	--	No	No
tert-Butyl alcohol	121	2	2%	5,510	5,950	--	No	No

Abbreviations:
"--" = not applicable
COCs = chemicals of concern
DTSC-SL = Department of Toxic Substances Control modified screening level
RSL = regional screening level
SFRWQCB = San Francisco Bay Regional Water Quality Control Board
$\mu g/m^3$ = micrograms per cubic meter
U.S. EPA = United States Environmental Protection Agency

Notes:
(a) List of chemicals analyzed for in soil gas based on chemicals listed on historical data tables (see Appendix A).
(b) Trimethylbenzene was reported on historical data tables as the sum of 1,2,4-trimethylbenzene and 1,3,5-trimethylbenzene. 1,2-Dichloroethene was reported on historical data tables as the sum of cis-1,2,dichloroethene and trans-1,2,dichloroethene.
(c) Screening levels selected based on the following hierarchy.
1) Commercial ESLs for Soil Vapor (SFRWQCB, 2019);
2) Commercial/Industrial DTSC-SLs for Indoor Air divided by an attenuation factor of 0.03.ESLs (DTSC, 2020; U.S. EPA, 2015); and
3) Commercial/Industrial RSLs for Indoor Air (divided by an attenuation factor of 0.03.ESLs (U.S. EPA, 2020; U.S. EPA, 2015).
Calculated levels rounded to two significant figures.
(d) Chemical identified as a COC in soil gas if the maximum detected concentration exceeded the selected commercial/industrial screening level.
(e) Chemical identified as a primary COC if the maximum detected concentration exceeded the selected screening level by more than 2 orders of magnitude and if the frequency of detection was equal to or greater than 20%.

References:
(1) DTSC, 2020. *HERO HHRA Note Number: 3, DTSC-modified Screening Levels (DTSC-SLs)*. California Department of Toxic Substances Control. June 2020.
(2) SFRWQCB, 2019. *Environmental Screening Levels*, Tier 1 Vapor, July 2019.
(3) U.S. EPA, 2015. *OWSER Technical Guide for Assessing and Mitigating the Vapor Intrusion Pathway from Subsurface Vapor Sources to Indoor Air*. United States Environmental Protection Agency, Office of Solid Waste and Emergency Response, 9200.2-154, June 2015.
(4) U.S. EPA, 2020. *Regional Screening Level (RSL) Summary Table (TR=1E-6, HQ=1)*. United States Environmental Protection Agency. May 2020.

TABLE 2c
STATISTICAL SUMMARY OF SITE-WIDE GROUNDWATER DATASET
Mouren-Laurens Oil Company, Inc. and Leach Oil Company, Inc. Sites
Compton, California

Chemicals Analyzed for in Groundwater (a)	Site-Wide Historical Groundwater Dataset					Site-Wide Groundwater Dataset Using the Most Recent Data at Each Location					MCL or Notification Level (µg/L)	Retain as COC? (d)	Identifid Primary COC? (e)
	Number of Samples Analyzed	Number of Samples Detected	Frequency of Detection	Minimum Detected Concentration (µg/L) (c)	Maximum Detected Concentration (µg/L) (c)	Number of Samples Analyzed	Number of Samples Detected	Frequency of Detection	Minimum Detected Concentration (µg/L) (c)	Maximum Detected Concentration (µg/L) (c)			
Acetone	81	2	2%	10	17,000	28	2	7%	10	17,000	--	No	No
Antimony	64	2	3%	4.2	5.6	16	0	0%	NA	NA	6	No	No
Arsenic	172	22	13%	4.9	2,440	30	2	7%	18	1,200	10	Yes	No
Barium	172	170	99%	24	5,400	30	30	100%	24	490	1,000	Yes	No
Benzene	249	107	43%	0.5	900	80	36	45%	0.53	900	1	Yes	No
Beryllium	53	3	6%	2.2	3.4	15	0	0%	NA	NA	4	No	No
Bis(2-ethylhexyl) phthalate	203	3	1%	6.8	21	50	2	4%	8.3	21	4	Yes	No
Cadmium (water)	53	6	11%	2.8	36	15	0	0%	NA	NA	5	Yes	No
Chlordane	30	0	0%	NA	NA	2	0	0%	NA	NA	0.1	No	No
Chlorobenzene	247	121	49%	0.47	310	80	33	41%	1.0	310	70	Yes	No
Chloroform	247	21	9%	0.27	28	80	6	8%	1.1	28	80	No	No
Chromium (total)	105	16	15%	2.2	1,800	21	2	10%	16	17	50	Yes	No
Chromium VI	159	55	35%	0.66	54	30	10	33%	1.0	15	--	No	No
Cobalt	53	12	23%	3.8	300	15	0	0%	NA	NA	--	No	No
Copper	53	12	23%	8.2	1,400	15	0	0%	NA	NA	1,300	Yes	No
1,2-Dichlorobenzene	245	14	6%	0.55	18	78	9	12%	1.9	18	600	No	No
1,4-Dichlorobenzene	155	10	6%	1.1	4.2	47	6	13%	1.1	4.2	5	No	No
DDD	30	0	0%	NA	NA	2	0	0%	NA	NA	--	No	No
DDE	30	0	0%	NA	NA	2	0	0%	NA	NA	--	No	No
DDT	30	0	0%	NA	NA	2	0	0%	NA	NA	--	No	No
1,1-Dichloroethane	248	159	64%	0.34	68	80	42	53%	1.0	68	5	Yes	No
1,2-Dichloroethane	249	169	68%	0.35	84	80	32	40%	0.6	84	0.5	Yes	No
1,1-Dichloroethene	249	166	67%	0.78	110	80	40	50%	1.0	110	6	Yes	No
cis-1,2-Dichloroethene	247	213	86%	0.33	1,100	78	61	78%	1.0	1,100	6	Yes	Yes
trans-1,2-Dichloroethene	249	106	43%	0.5	110	80	21	26%	0.9	90	10	Yes	No
1,2-Dichloropropane	157	6	4%	1.0	4.4	49	4	8%	1.0	4	5	No	No
Dieldrin	30	0	0%	NA	NA	2	0	0%	NA	NA	--	No	No
Diethyl phthalate	123	8	7%	0.81	180	37	8	22%	0.81	180	--	No	No
2,4-Dimethylphenol	203	15	7%	5.9	860	50	7	14%	14	860	--	No	No
1,4-Dioxane	207	168	81%	1.1	4,500	57	38	67%	1.1	4,500	1	Yes	Yes
Endrin	30	0	0%	NA	NA	2	0	0%	NA	NA	2	No	No
Ethylbenzene	247	12	5%	0.94	247	80	10	13%	0.94	247	300	No	No
Heptachlor	30	0	0%	NA	NA	2	0	0%	NA	NA	0.01	No	No
Heptachlor epoxide	30	0	0%	NA	NA	2	0	0%	NA	NA	0.01	No	No
g-Hexachlorocyclohexane (Lindane)	30	0	0%	NA	NA	2	0	0%	NA	NA	0.2	No	No
Lead	53	10	19%	8.5	230	15	0	0%	NA	NA	15	Yes	No
Mercury (elemental)	172	25	15%	0.070	25	30	1	3%	1.0	1.0	--	No	No
Methoxychlor	30	0	0%	NA	NA	2	0	0%	NA	NA	30	No	No
Methyl isobutyl ketone	82	1	1%	2,600	2,600	20	1	5%	2,600	2,600	120	Yes	No
2-Methylnaphthalene	123	5	4%	7.9	1,790	29	5	17%	7.9	1,790	--	No	No
Methyl tertiary butyl ether (MTBE)	238	26	11%	1.0	8.0	76	5	7%	1.0	5.3	13	No	No
Molybdenum	172	13	8%	5.5	116	30	2	7%	44	93	--	No	No
Naphthalene [PAH]	157	8	5%	0.83	90	47	6	13%	1.0	90	17	Yes	No
Nickel	53	21	40%	8.7	600	15	0	0%	NA	NA	--	No	No
Perchlorate	30	6	20%	5.3	22	15	4	27%	7.0	22	--	No	No

TABLE 2c
STATISTICAL SUMMARY OF SITE-WIDE GROUNDWATER DATASET
Mouren-Laurens Oil Company, Inc. and Leach Oil Company, Inc. Sites
Compton, California

Chemicals Analyzed for in Groundwater (a)	Site-Wide Historical Groundwater Dataset					Site-Wide Groundwater Dataset Using the Most Recent Data at Each Location					MCL or Notification Level (µg/L)	Retain as COC? (d)	Identifid Primary COC? (e)
	Number of Samples Analyzed	Number of Samples Detected	Frequency of Detection	Minimum Detected Concentration (µg/L) (c)	Maximum Detected Concentration (µg/L) (c)	Number of Samples Analyzed	Number of Samples Detected	Frequency of Detection	Minimum Detected Concentration (µg/L) (c)	Maximum Detected Concentration (µg/L) (c)			
Petroleum - Gasoline	84	55	65%	55	9,000	25	16	64%	60	9,000	--	No	No
Petroleum - Diesel	66	12	18%	59	15,270	19	4	21%	530	15,270	--	No	No
Petroleum - Motor Oil	72	10	14%	51	1,300	19	3	16%	51	550	--	No	No
Phenanthrene [PAH]	43	0	0%	NA	NA	16	0	0%	NA	NA	--	No	No
Phenol	123	13	11%	11	12,600	29	5	17%	49	12,600	--	No	No
Pyrene [PAH]	74	1	1%	13	13	27	1	4%	13	13	--	No	No
Selenium	148	9	6%	11	30	24	0	0%	NA	NA	--	No	No
Silver	53	5	9%	5.4	73	15	0	0%	NA	NA	--	No	No
tert-Butyl alcohol	215	18	8%	12	1,700	67	8	12%	12	1,700	12	Yes	No
Tetrachloroethene	249	119	48%	0	83	80	38	48%	0.71	72	5	Yes	No
Thallium	53	18	34%	4.0	510	15	0	0%	NA	NA	--	No	No
Toluene	247	28	11%	0.53	1,400	80	16	20%	0.56	1,400	150	Yes	No
Toxaphene	30	0	0%	NA	NA	2	0	0%	NA	NA	3	No	No
1,1,1-Trichloroethane	114	4	4%	1.7	105	33	3	9%	8.5	105	200	No	No
Trichloroethene	249	222	89%	0.26	3,300	80	68	85%	0.8	3,300	5	Yes	Yes
Vanadium	53	12	23%	12	860	15	0	0%	NA	NA	50	Yes	No
Vinyl chloride	246	31	13%	0.50	49	77	10	13%	0.79	49	0.5	Yes	No
Xylene (total)	215	13	6%	1.1	880	67	6	9%	7.1	880	1,750	No	No
Zinc	172	29	17%	10	2,200	30	4	13%	11	37	--	No	No
Carbon disulfide	104	1	1%	0.53	0.53	33	1	3%	0.53	0.53	160	No	No
Di-isopropyl ether	125	2	2%	1.9	2.5	36	1	3%	2.5	2.5	--	No	No
Benzoic Acid	43	1	2%	19	19	16	0	0%	NA	NA	--	No	No
Benzyl Alchohol	43	1	2%	25	25	16	0	0%	NA	NA	--	No	No
1,2-Dichlorobenzene (SVOC)	74	1	1%	4.0	4.0	27	0	0%	NA	NA	--	No	No
2-Methylphenol	172	10	6%	16	1,800	39	2	5%	250	1,800	--	No	No
4-Methylphenol	203	16	8%	11	2,800	50	7	14%	13	2,800	--	No	No
Di-n-butylphthalate	74	2	3%	2.7	5.9	27	0	0%	NA	NA	--	No	No
N-Nitrosodimethylamine	194	43	22%	0.012	0.73	45	7	16%	0.055	0.66	0.01	Yes	No
Petroleum - Total Recoverable	16	2	13%	4,600	5,800	13	2	15%	4,600	5,800	--	No	No
Trimethylbenzene (b)	245	20	8%	0.50	369	78	11	14%	1.4	360	--	No	No
n-Butylbenzene	112	4	4%	0.75	8	31	1	3%	1.0	1.0	--	No	No
n-Propylbenzene	245	12	5%	1.1	37	78	6	8%	4.4	19	260	No	No
Isopropylbenzene	245	16	7%	0.75	38	78	10	13%	2.5	38	770	No	No
4-Isopropyltoluene	82	1	1%	2.0	2	20	0	0%	NA	NA	--	No	No
sec-Butyl benzene	245	8	3%	1.6	6	78	6	8%	1.6	5.7	260	No	No
Manganese	77	63	82%	54	2,160	9	9	100%	191	2,080	500	Yes	No
alpha-BHC	30	0	0%	NA	NA	2	0	0%	NA	NA	--	No	No
beta-BHC	30	0	0%	NA	NA	2	0	0%	NA	NA	--	No	No
delta-BHC	30	0	0%	NA	NA	2	0	0%	NA	NA	--	No	No
Endosulfan I	30	0	0%	NA	NA	2	0	0%	NA	NA	--	No	No
Endosulfan II	30	0	0%	NA	NA	2	0	0%	NA	NA	--	No	No
Endosulfan Sulfate	30	0	0%	NA	NA	2	0	0%	NA	NA	--	No	No
Endrin aldehyde	30	0	0%	NA	NA	2	0	0%	NA	NA	--	No	No

TABLE 2c
STATISTICAL SUMMARY OF SITE-WIDE GROUNDWATER DATASET
Mouren-Laurens Oil Company, Inc. and Leach Oil Company, Inc. Sites
Compton, California

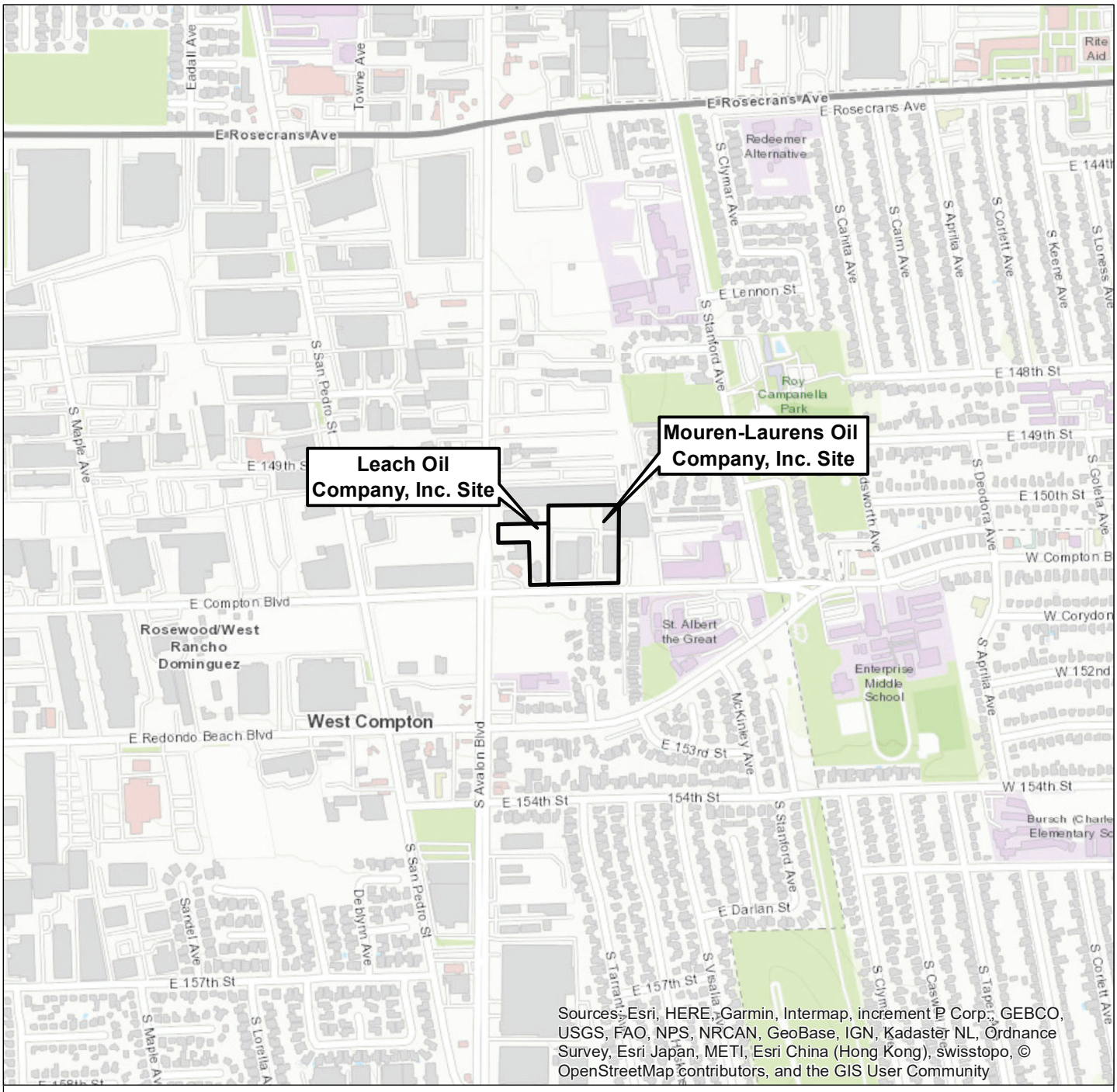
Chemicals Analyzed for in Groundwater (a)	Site-Wide Historical Groundwater Dataset					Site-Wide Groundwater Dataset Using the Most Recent Data at Each Location					MCL or Notification Level (µg/L)	Retain as COC? (d)	Identifid Primary COC? (e)
	Number of Samples Analyzed	Number of Samples Detected	Frequency of Detection	Minimum Detected Concentration (µg/L) (c)	Maximum Detected Concentration (µg/L) (c)	Number of Samples Analyzed	Number of Samples Detected	Frequency of Detection	Minimum Detected Concentration (µg/L) (c)	Maximum Detected Concentration (µg/L) (c)			
Aroclor 1016	31	0	0%	NA	NA	2	0	0%	NA	NA	--	No	No
Aroclor 1221	31	0	0%	NA	NA	2	0	0%	NA	NA	--	No	No
Aroclor 1232	31	0	0%	NA	NA	2	0	0%	NA	NA	--	No	No
Aroclor 1242	31	0	0%	NA	NA	2	0	0%	NA	NA	--	No	No
Aroclor 1248	31	0	0%	NA	NA	2	0	0%	NA	NA	--	No	No
Aroclor 1254	31	0	0%	NA	NA	2	0	0%	NA	NA	--	No	No
Aroclor 1260	31	0	0%	NA	NA	2	0	0%	NA	NA	--	No	No
Aroclor 1262	12	0	0%	NA	NA	0	0	NA	NA	NA	--	No	No
Aroclor 1268	12	0	0%	NA	NA	0	0	NA	NA	NA	--	No	No

Abbreviations:
"--" = not available
COCs = chemicals of concern
MCL = Maximum Contaminant Level
NA = not applicable
SWRCB = State Water Resources Control Board
µg/L = micrograms per liter

Notes:
(a) List of chemicals analyzed for in groundwater based on chemicals listed on historical data tables (see Appendix A).
(b) Trimethylbenzene was reported on historical data tables as the sum of 1,2,4-trimethylbenzene and 1,3,5-trimethylbenzene.
(c) Chemical identified as a COC in groundwater if the maxmium detected concentration exceeded the MCL or notification level.
(d) Chemical identified as a COC in groundwater if the maxmium detected concentration exceeded the MCL or notification level.
(e) Chemical identified as a primary COC if the maxmium detected concentration exceeded the MCL or notification level by more than 2 orders of magnitude and if the frequency of detection was equal to greater than 20%.

References:
(1) SWRCB, 2019. *MCLs, DLRs, and PHGs for Regulated Drinking Water Contaminants.* State of California Water Quality Control Board. 13 March 2019.
(2) SWRCB, 2020. *Drinking Water Notification Levels and Response Levels: An Overview.* State of California Water Quality Control Board. 6 February 2020.

FIGURES



Notes

1. All locations are approximate.

Sources

Basemap is ESRI's ArcGIS Online world topographic map, obtained 10 May 2021.

N

0 800 1,600

Feet

Site Location Map

Mouren-Laurens Oil Company, Inc.
and Leach Oil Company, Inc. Sites
Compton, CA
May 2021
EKI C00008.02

Figure 1

eki environment & water

Path: X:\C00008\Maps\...02\2021\05\Fig1_SiteLocation.mxd



Legend

- Approximate Property Line
- FireHydrant
- Conduit_Trench
- Conduit
- Gas_lines
- Electric_line
- Water_Lines
- Fence
- Buildings
- Former/ Existing Aboveground Storage Tanks

Notes

1. All locations are approximate.

Sources

1. Basemap courtesy of Esri, photo from April 2020.

N

0 80 160

Feet

Current Site Aerial Photograph

Mouren-Laurens Oil Company, Inc.
and Leach Oil Company, Inc. Sites

Compton, CA
May 2021
EKI C00008.02

Figure 2

eki environment & water

Path: X:\C00008\Maps\...02\20210105\Fig2_SiteAerial.mxd



Legend

- Soil Boring Location (AEI, 2001)
- Soil Boring Location (Ralph Stone, 1989)
- Soil Boring Location (Clayton, 2000)
- Soil Boring Location (MRM, 1996)
- Cone Penetrometer Test Boring and Groundwater Boring Location (Waterstone, 2011)
- Hydropunch Ground Water Location (Waterstone, 2006)
- Abandoned Piazometer Location (Clayton, 2000 abandoned by Waterstone, 2009)
- Soil Boring and Soil Gas Sampling Location (MKECI, 2020)
- Soil Gas Survey Probe Location (Waterstone, 2006 and Waterstone, 2011)
- Shallow Soil Boring Location (40' to 55' bgs) (Waterstone, 2006 and Waterstone, 2011)
- Deep Soil Boring Location (90' bgs) (Watersone, 2006)
- Perched Zone Monitoring Well
- Water Table Aquifer Monitoring Well Location - On-Site or Downgradient (Waterstone, 2006, 2009, & 2011; AE, 2001)
- Water Table Aquifer Monitoring Well - Upgradient (MKECI, Oct 2020)
- Gardena Aquifer Monitoring Well (Waterstone, 2009)
- FireHydrant
- Conduit_Trench
- Buildings
- Former/ Existing Aboveground Storage Tanks
- Conduit
- Gas Line
- Electric Line
- Water Line
- Fence
- Approximate Property Line
- Cross-Section Line

Notes

1. All locations approximate.

Sources

1. Basemap courtesy of Esri, photo from April 2020.

N

0 50 100

Feet

Well and Sampling Locations and Cross-Section Locations

Mouren-Laurens Oil Company, Inc.
and Leach Oil Company, Inc. Sites
Compton, CA

May 2021

EKI C00008.02

Figure 3

eki environment & water

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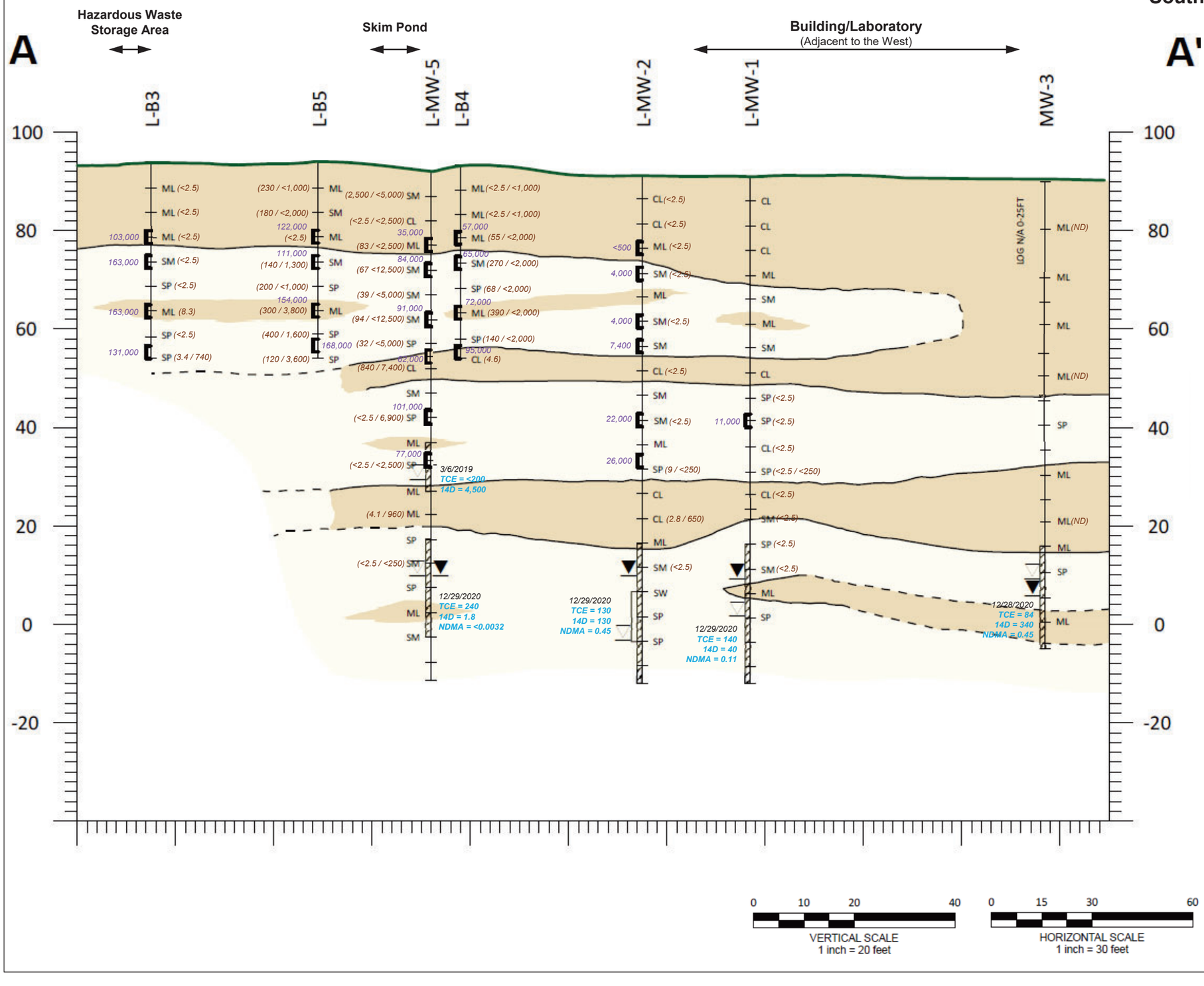
Leach Oil Company, Inc. Site

(Along Eastern Property Boundary)



Legend

- Grab groundwater sample interval
- Well Screen Interval
- Vapor Screen Interval
- Depth of Observed Soil Saturation During Drilling
- Water Level Measured December 2019
- Finer Grained Materials
- Coarser Grained Materials

LITHOLOGY

CL = Lean Clay, Sandy Clay, Silty Clay

ML = Clayey Silt, Sandy Silt to Silt

SP = Poorly Sorted Sand

SW = Well Sorted Sand

SM = Silty Sand

(<2.5) TCE Soil Concentrations in µg/kg

(<2.5 / <20) TCE / 14D Soil Concentrations in µg/kg

4,000 TCE Soil Vapor Concentration in µg/m³

320 Groundwater Concentrations in µg/L

Abbreviations:

14D = 1,4-dioxane
J = estimated value between the method detection limit and the laboratory reporting limit
NDMA = N-Nitrosodimethylamine
TCE = trichloroethene
µg/kg = micrograms per kilogram
µg/L= micrograms per liter
µg/m³ = micrograms per cubic meter

Notes:

1. Most recent groundwater data shown at each well location.

Sources:

Quinn Environmental Strategies, Inc. 8 May 2020.
Regional Environmental Setting.

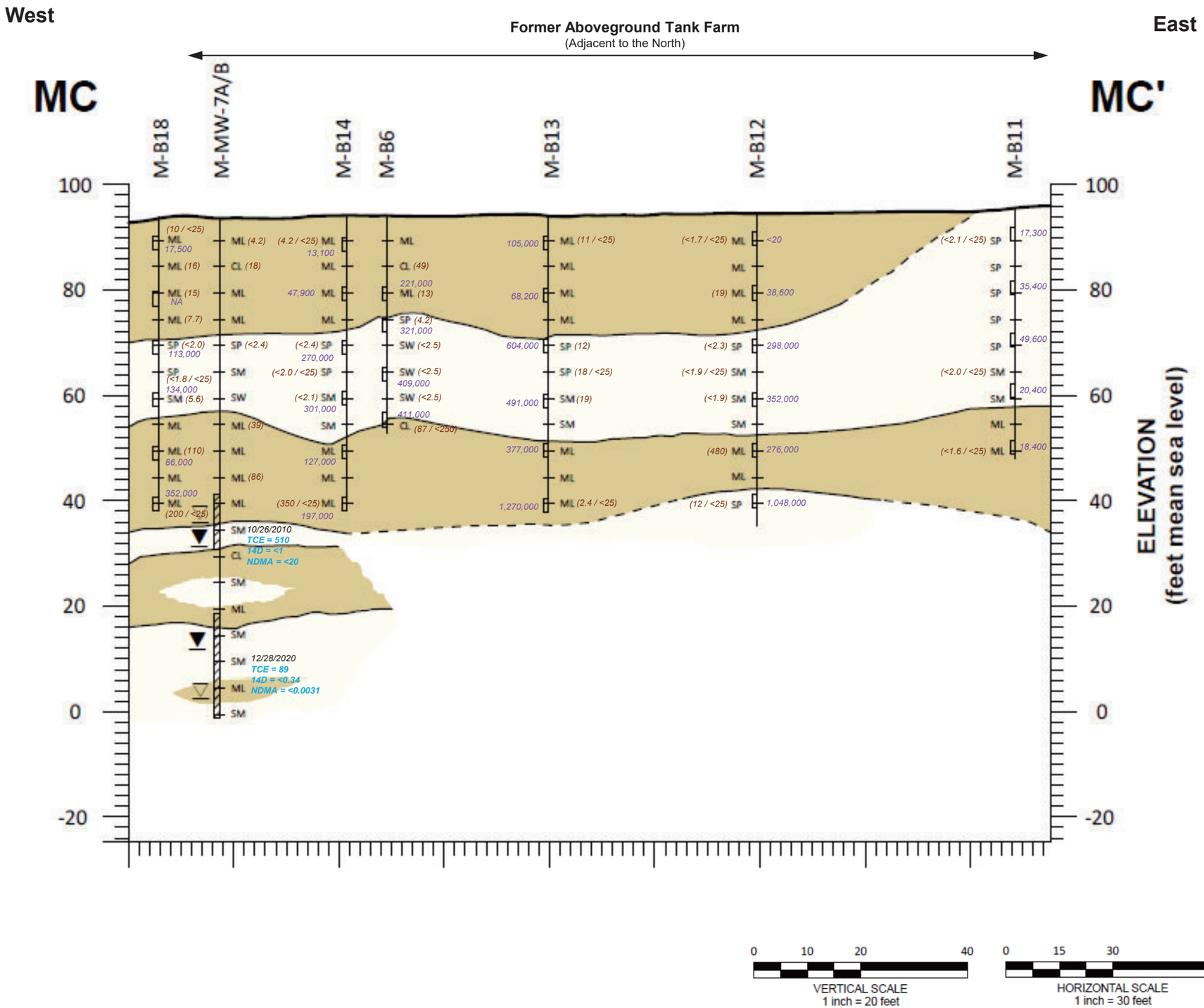
Cross-Section A-A'
TCE, 1,4-Dioxane, and NDMA in Soil, Soil Vapor, and Groundwater

Mouren-Laurens Oil Company, Inc. and
Leach Oil Company, Inc. Sites
Compton, CA
May 2021
EKI C00008.02
Figure 4a

eki environment & water

Mouren-Laurens Oil Company, Inc. Site

(Northern Portion of Site)



Legend

- Grab groundwater sample interval
- Well Screen Interval
- Vapor Screen Interval
- Depth of Observed Soil Saturation During Drilling
- Water Level Measured December 2019
- Finer Grained Materials
- Coarser Grained Materials

LITHOLOGY

CL = Lean Clay, Sandy Clay, Silty Clay

ML = Clayey Silt, Sandy Silt to Silt

SP = Poorly Sorted Sand

SW = Well Sorted Sand

SM = Silty Sand

(<2.5) TCE Soil Concentrations in µg/kg

(<2.5 / <20) TCE / 14D Soil Concentrations in µg/kg

4,000 TCE Soil Vapor Concentration in µg/m³

320 Groundwater Concentrations in µg/L

Abbreviations:

14D = 1,4-dioxane
J = estimated value between the method detection limit and the laboratory reporting limit
NDMA = N-Nitrosodimethylamine
TCE = trichloroethene
µg/kg = micrograms per kilogram
µg/L= micrograms per liter
µg/m³ = micrograms per cubic meter

Notes:

1. Most recent groundwater data shown at each well location.

Sources:

Quinn Environmental Strategies, Inc. 8 May 2020.
Regional Environmental Setting.

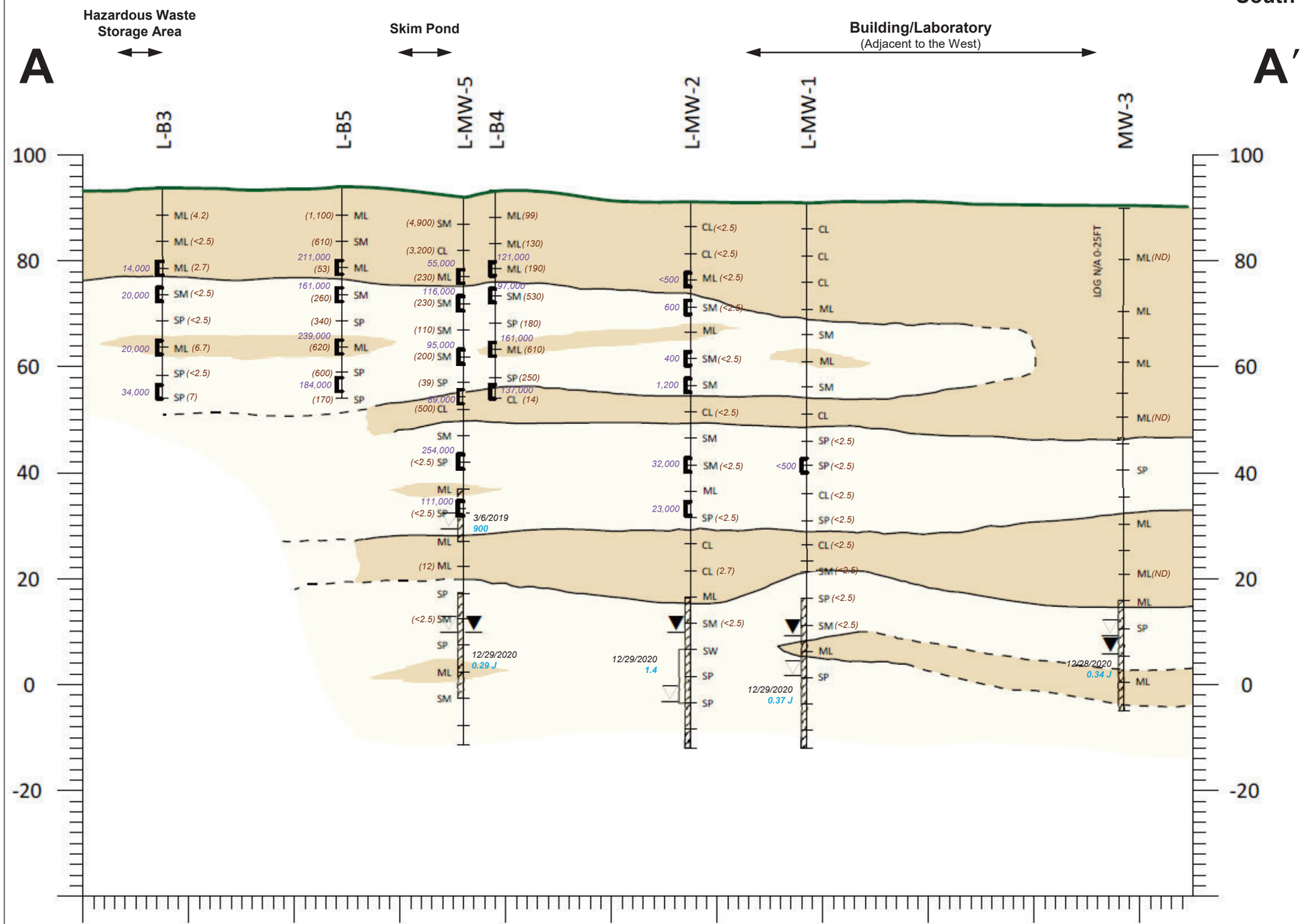
Cross-Section B-B'
TCE, 1,4-Dioxane, and NDMA in Soil, Soil Vapor, and Groundwater

Mouren-Laurens Oil Company, Inc. and
Leach Oil Company, Inc. Sites
Compton, CA
May 2021
EKI C00008.02
Figure 4b

eki environment & water

Leach Oil Company, Inc. Site

(Along Eastern Property Boundary)



Legend

- Grab groundwater sample interval
- Well Screen Interval
- Vapor Screen Interval
- Depth of Observed Soil Saturation During Drilling
- Water Level Measured December 2019
- Finer Grained Materials
- Coarser Grained Materials

LITHOLOGY

CL = Lean Clay, Sandy Clay, Silty Clay

ML = Clayey Silt, Sandy Silt to Silt

SP = Poorly Sorted Sand

SW = Well Sorted Sand

SM = Silty Sand

(<2.5) Benzene Soil Concentrations in µg/kg

4,000 Benzene Soil Vapor Concentration in µg/m³

320 Benzene Groundwater Concentrations in µg/L

Abbreviations:

J = estimated value between the method detection limit and the laboratory reporting limit
µg/kg = micrograms per kilogram
µg/L= micrograms per liter
µg/m³ = micrograms per cubic meter

Notes:

1. Most recent groundwater data shown at each well location.

Sources:

Quinn Environmental Strategies, Inc. 8 May 2020.
Regional Environmental Setting.

0 10 20 40
VERTICAL SCALE
1 inch = 20 feet

0 15 30 60
HORIZONTAL SCALE
1 inch = 30 feet

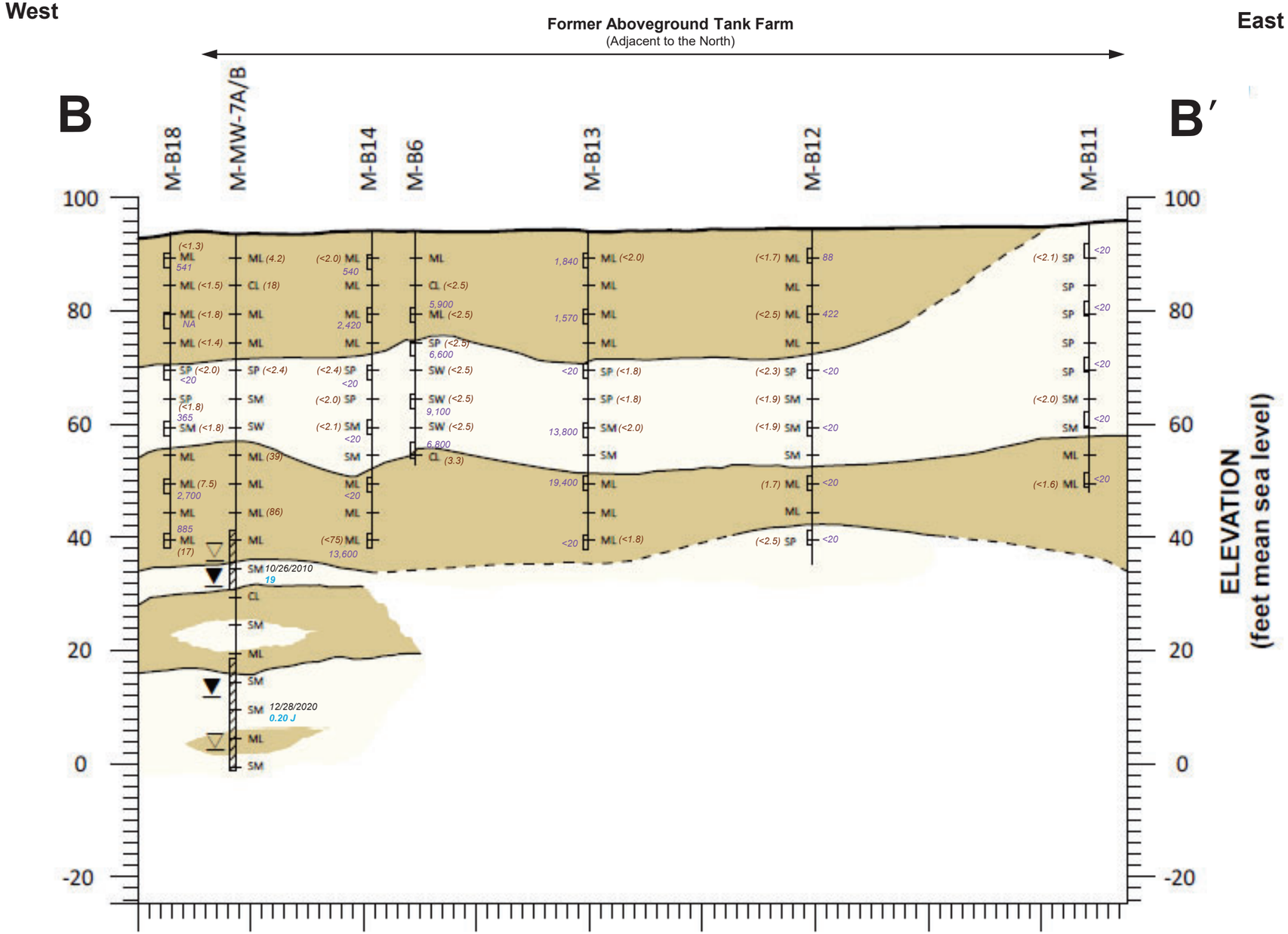
Cross-Section A-A'
Benzene in Soil, Soil Vapor, and Groundwater

Mouren-Laurens Oil Company, Inc. and
Leach Oil Company, Inc. Sites
Compton, CA
May 2021
EKI C00008.02
Figure 5a

eki environment & water

Mouren-Laurens Oil Company, Inc. Site

(Northern Portion of Site)



Legend

- Grab groundwater sample interval
- Well Screen Interval
- Vapor Screen Interval
- Depth of Observed Soil Saturation During Drilling
- Water Level Measured December 2019
- Finer Grained Materials
- Coarser Grained Materials

LITHOLOGY

CL = Lean Clay, Sandy Clay, Silty Clay

ML = Clayey Silt, Sandy Silt to Silt

SP = Poorly Sorted Sand

SW = Well Sorted Sand

SM = Silty Sand

(<2.5) Benzene Soil Concentrations in µg/kg

4,000 Benzene Soil Vapor Concentration in µg/m³

320 Benzene Groundwater Concentrations in µg/L

Abbreviations:

J = estimated value between the method detection limit and the laboratory reporting limit
µg/kg = micrograms per kilogram
µg/L= micrograms per liter
µg/m³ = micrograms per cubic meter

Notes:

1. Most recent groundwater data shown at each well location.

Sources:

Quinn Environmental Strategies, Inc. 8 May 2020.
Regional Environmental Setting.

VERTICAL SCALE
0 10 20 40
1 inch = 20 feet

HORIZONTAL SCALE
0 15 30 60
1 inch = 30 feet

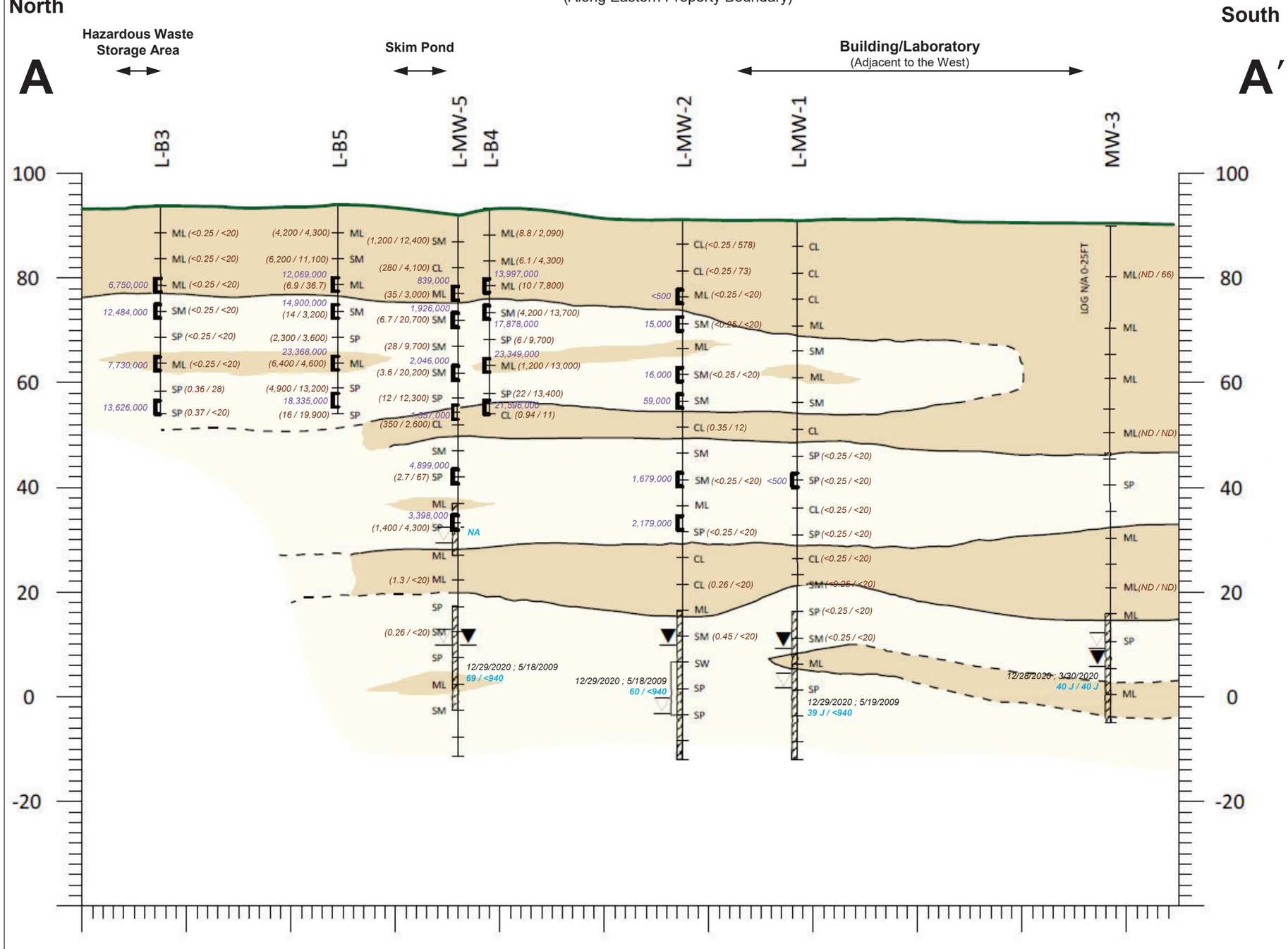
Cross-Section B-B'
Benzene in Soil, Soil Vapor, and Groundwater

Mouren-Laurens Oil Company, Inc. and
Leach Oil Company, Inc. Sites
Compton, CA
May 2021
EKI C00008.02
Figure 5b

eki environment & water

Leach Oil Company, Inc. Site

(Along Eastern Property Boundary)



Legend

- Grab groundwater sample interval
- Well Screen Interval
- Vapor Screen Interval
- Depth of Observed Soil Saturation During Drilling
- Water Level Measured December 2019
- Finer Grained Materials
- Coarser Grained Materials

LITHOLOGY

CL = Lean Clay, Sandy Clay, Silty Clay

ML = Clayey Silt, Sandy Silt to Silt

SP = Poorly Sorted Sand

SW = Well Sorted Sand

SM = Silty Sand

(<2.5 / <20) TPHg / TEPH Soil Concentrations in mg/kg

4,000 Aliphatic Hydrocarbon Soil Vapor Concentration in μg/m³

<50 / 320 TPHg / TEPH Groundwater Concentrations in μg/L

Abbreviations:

J = estimated value between the method detection limit and the laboratory reporting limit
NA = not analyzed or not applicable
ND = not detected above laboratory reporting limit
TEPH = total extractable petroleum hydrocarbons (TPHd + TPHm)
TPH = total petroleum hydrocarbons
TPHd = TPH, diesel range
TPHg = TPH, gasoline range
TPHm = TPH, motor oil range
mg/kg = micrograms per kilogram
μg/L= micrograms per liter
μg/m³ = micrograms per cubic meter

Notes:

1. Most recent groundwater data shown at each well location.

Sources:

Quinn Environmental Strategies, Inc. 8 May 2020.
Regional Environmental Setting.

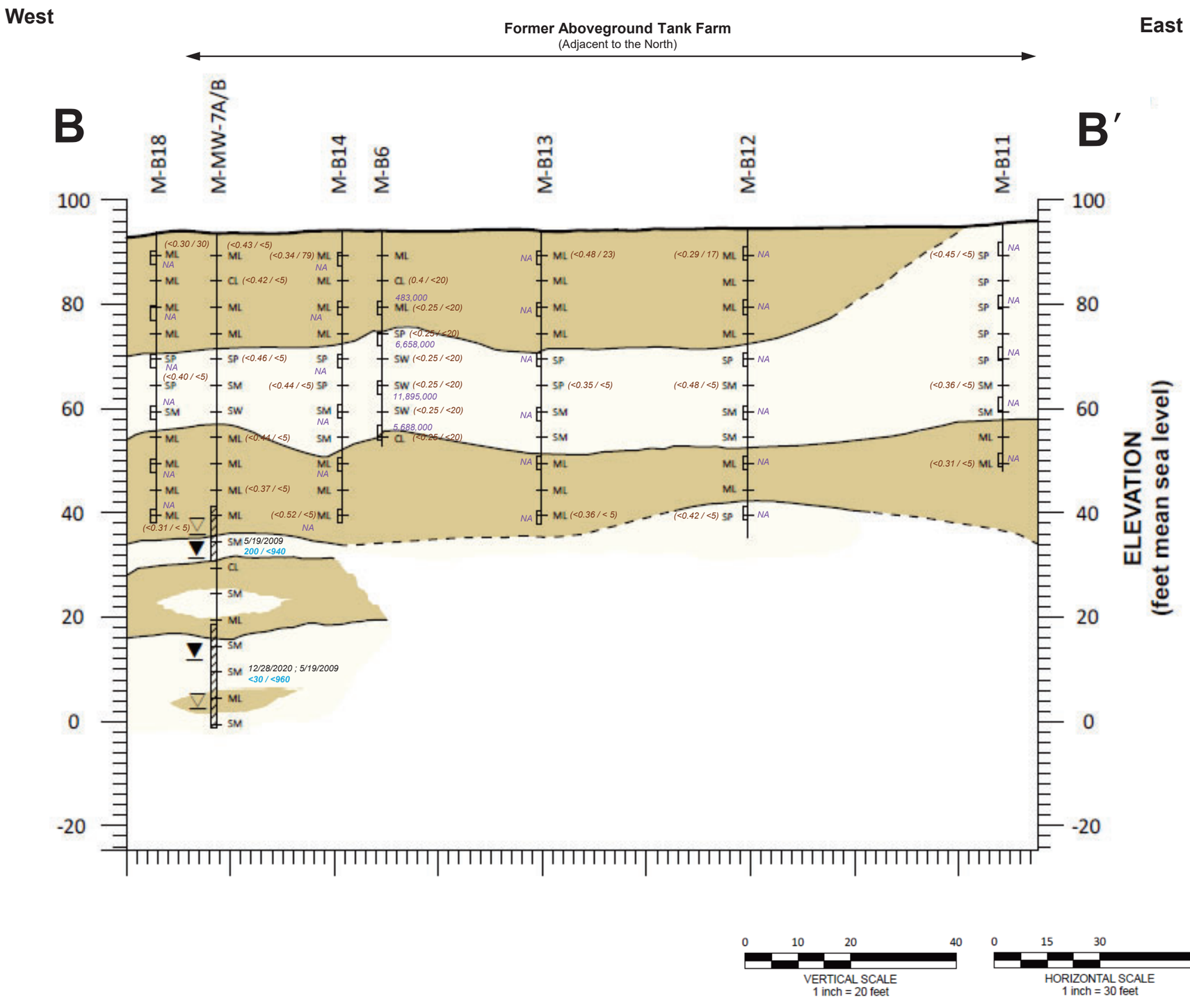
Cross-Section A-A'
TEPH in Soil, Soil Vapor, and Groundwater

Mouren-Laurens Oil Company, Inc. and
Leach Oil Company, Inc. Sites
Compton, CA
May 2021
EKI C00008.02
Figure 6a

eki environment & water

Mouren-Laurens Oil Company, Inc. Site

(Northern Portion of Site)



Legend

- Grab groundwater sample interval
- Well Screen Interval
- Vapor Screen Interval
- Depth of Observed Soil Saturation During Drilling
- Water Level Measured December 2019
- Finer Grained Materials
- Coarser Grained Materials

LITHOLOGY

CL = Lean Clay, Sandy Clay, Silty Clay

ML = Clayey Silt, Sandy Silt to Silt

SP = Poorly Sorted Sand

SW = Well Sorted Sand

SM = Silty Sand

(<2.5 / <20) TPHg / TEPH Soil Concentrations in mg/kg

4,000 Aliphatic Hydrocarbon Soil Vapor Concentration in µg/m³

<50 / 320 TPHg / TEPH Groundwater Concentrations in µg/L

Abbreviations:

J = estimated value between the method detection limit and the laboratory reporting limit
NA = not analyzed or not applicable
ND = not detected above laboratory reporting limit
TEPH = total extractable petroleum hydrocarbons (TPHd + TPHm)
TPH = total petroleum hydrocarbons
TPHd = TPH, diesel range
TPHg = TPH, gasoline range
TPHm = TPH, motor oil range
mg/kg = micrograms per kilogram
µg/L= micrograms per liter
µg/m³ = micrograms per cubic meter

Notes:

1. Most recent groundwater data shown at each well location.

Sources:

Quinn Environmental Strategies, Inc. 8 May 2020.
Regional Environmental Setting.

Cross-Section B-B'
TPH in Soil, Soil Vapor, and Groundwater

Mouren-Laurens Oil Company, Inc. and
Leach Oil Company, Inc. Sites
Compton, CA
May 2021
EKI C00008.02
Figure 6b

eki environment & water



Legend

- Perched Zone Monitoring Well
- Water Table Aquifer Monitoring Well Location - On-Site or Downgradient (Waterstone, 2006, 2009, & 2011; AE, 2001)
- Water Table Aquifer Monitoring Well - Upgradient (MKECI, Oct 2020)
- Gardena Aquifer Monitoring Well (Waterstone, 2009)
- FireHydrant
- Conduit_Trench
- Buildings
- Former/ Existing Aboveground Storage Tanks
- Conduit
- Gas Line
- Electric Line
- Water Line
- Fence
- Approximate Property Line
- Groundwater elevation contour (feet above mean sea level)
- Approximate Hydraulic Gradient Direction

Notes

1. All locations approximate.
2. Water levels measured on 17 December 2019.

Sources

1. Basemap courtesy of Esri, photo from April 2020.
2. Quinn Environmental Strategies, Inc., 2020. Expert Report, REV973 LLC VS. JOHN MOUREN-LAURENS ET AL CASE NUMBER CV98-10690 DSF (Ex), May 2020.

N

0 60 120
Feet

Groundwater Elevation Contours – Water Table Aquifer (December 2019)

Mouren-Laurens Oil Company, Inc.
and Leach Oil Company, Inc. Sites
Compton, CA
May 2021
EKI C00008.02

Figure 7

eki environment & water

Document Path: X:\C00008\Maps_02\2021\05\Fig7_WLs_WTZone_Dec2019.mxd



Legend

- Soil Boring Location (AEI, 2001)
- Soil Boring Location (Ralph Stone, 1989)
- Soil Boring Location (Clayton, 2000)
- Soil Boring Location (MRM, 1996)
- Cone Penetrometer Test Boring and Groundwater Boring Location (Waterstone, 2011)
- Hydropunch Ground Water Location (Waterstone, 2006)
- Abandoned Piazometer Location (Clayton, 2000 abandoned by Waterstone, 2009)
- Soil Boring and Soil Gas Sampling Location (MKECI, 2020)
- Soil Gas Survey Probe Location (Waterstone, 2006 and Waterstone, 2011)
- Shallow Soil Boring Location (40' to 55' bgs) (Waterstone, 2006 and Waterstone, 2011)
- Deep Soil Boring Location (90' bgs) (Watersone, 2006)
- Perched Zone Monitoring Well
- Water Table Aquifer Monitoring Well Location - On-Site or Downgradient (Waterstone, 2006, 2009, & 2011; AE, 2001)
- Water Table Aquifer Monitoring Well - Upgradient (MKECI, Oct 2020)
- Gardena Aquifer Monitoring Well (Waterstone, 2009)
- FireHydrant
- Conduit_Trench
- Buildings
- Former/ Existing Aboveground Storage Tanks
- Conduit
- Gas Line
- Electric Line
- Water Line
- Fence
- Approximate Property Line

TEPH in Soil (mg/kg)

- >10,000 (Max 74,700)
- 1,001 to 10,000
- 501 to 1,000
- 101 to 500
- Detected up to 100
- ND above the laboratory reporting limit

Abbreviations

bgs = below ground surface
mg/kg = milligrams per kilogram
ND = not detected above the laboratory report limit
TEPH = total extractable petroleum hydrocarbons (TPHd + TPHm)
TPH = total petroleum hydrocarbons
TPHd = TPH, diesel range
TPHm = TPH, motor oil range

Notes

1. All locations approximate.
2. If multi-depth soil samples were collected within the selected depth interval, the highest detected concentration is shown.

Sources

1. Basemap courtesy of Esri, photo from April 2020.

N

0 50 100
Feet

TEPH in Soil (<=10 feet bgs)

Mouren-Laurens Oil Company, Inc. and Leach Oil Company, Inc. Sites
Compton, CA
May 2021
EKI C00008.02

eki environment & water

Figure 8a

Document Path: X:\C00008\Maps_02\2021\05\Fig8a_TEPH_Soil_10ftbgs.mxd



Legend

- Soil Boring Location (AEI, 2001)
- Soil Boring Location (Ralph Stone, 1989)
- Soil Boring Location (Clayton, 2000)
- Soil Boring Location (MRM, 1996)
- Cone Penetrometer Test Boring and Groundwater Boring Location (Waterstone, 2011)
- Hydropunch Ground Water Location (Waterstone, 2006)
- Abandoned Piazometer Location (Clayton, 2000 abandoned by Waterstone, 2009)
- Soil Boring and Soil Gas Sampling Location (MKECI, 2020)
- Soil Gas Survey Probe Location (Waterstone, 2006 and Waterstone, 2011)
- Shallow Soil Boring Location (40' to 55' bgs) (Waterstone, 2006 and Waterstone, 2011)
- Deep Soil Boring Location (90' bgs) (Watersone, 2006)
- Perched Zone Monitoring Well
- Water Table Aquifer Monitoring Well Location - On-Site or Downgradient (Waterstone, 2006, 2009, & 2011; AE, 2001)
- Water Table Aquifer Monitoring Well - Upgradient (MKECI, Oct 2020)
- Gardena Aquifer Monitoring Well (Waterstone, 2009)
- FireHydrant
- Conduit_Trench
- Buildings
- Former/ Existing Aboveground Storage Tanks
- Conduit
- Gas Line
- Electric Line
- Water Line
- Fence
- Approximate Property Line

TEPH in Soil (mg/kg)

- >10,000 (Max 20,700)
- 1,001 to 10,000
- 501 to 1,000
- 101 to 500
- Detected up to 100
- ND above the laboratory reporting limit

Abbreviations

bgs = below ground surface
mg/kg = milligrams per kilogram
ND = not detected above the laboratory report limit
TEPH = total extractable petroleum hydrocarbons (TPHd + TPHm)
TPH = total petroleum hydrocarbons
TPHd = TPH, diesel range
TPHm = TPH, motor oil range

Notes

1. All locations approximate.
2. If multi-depth soil samples were collected within the selected depth interval, the highest detected concentration is shown.

Sources

1. Basemap courtesy of Esri, photo from April 2020.

N

0 50 100
Feet

TEPH in Soil (>10 and <=20 feet bgs)

Mouren-Laurens Oil Company, Inc. and Leach Oil Company, Inc. Sites
Compton, CA
May 2021
EKI C00008.02

eki environment & water

Figure 8b

Document Path: X:\C00008\Maps_02\2021\05\Fig8b_TEPH_Soil_10to20ftbgs.mxd



Legend

- Soil Boring Location (AEI, 2001)
- Soil Boring Location (Ralph Stone, 1989)
- Soil Boring Location (Clayton, 2000)
- Soil Boring Location (MRM, 1996)
- Cone Penetrometer Test Boring and Groundwater Boring Location (Waterstone, 2011)
- Hydropunch Ground Water Location (Waterstone, 2006)
- Abandoned Piazometer Location (Clayton, 2000 abandoned by Waterstone, 2009)
- Soil Boring and Soil Gas Sampling Location (MKECI, 2020)
- Soil Gas Survey Probe Location (Waterstone, 2006 and Waterstone, 2011)
- Shallow Soil Boring Location (40' to 55' bgs) (Waterstone, 2006 and Waterstone, 2011)
- Deep Soil Boring Location (90' bgs) (Watersone, 2006)
- Perched Zone Monitoring Well
- Water Table Aquifer Monitoring Well Location - On-Site or Downgradient (Waterstone, 2006, 2009, & 2011; AE, 2001)
- Water Table Aquifer Monitoring Well - Upgradient (MKECI, Oct 2020)
- Gardena Aquifer Monitoring Well (Waterstone, 2009)
- FireHydrant
- Conduit_Trench
- Buildings
- Former/ Existing Aboveground Storage Tanks
- Conduit
- Gas Line
- Electric Line
- Water Line
- Fence
- Approximate Property Line

TEPH in Soil (mg/kg)

- >10,000 (Max 23,000)
- 1,001 to 10,000
- 501 to 1,000
- 101 to 500
- Detected up to 100
- ND above the laboratory reporting limit

Abbreviations

bgs = below ground surface
mg/kg = milligrams per kilogram
ND = not detected above the laboratory report limit
TEPH = total extractable petroleum hydrocarbons (TPHd + TPHm)
TPH = total petroleum hydrocarbons
TPHd = TPH, diesel range
TPHm = TPH, motor oil range

Notes

1. All locations approximate.
2. If multi-depth soil samples were collected within the selected depth interval, the highest detected concentration is shown.

Sources

1. Basemap courtesy of Esri, photo from April 2020.

N

0 50 100
Feet

TEPH in Soil
(>20 and <=30 feet bgs)

Mouren-Laurens Oil Company, Inc.
and Leach Oil Company, Inc. Sites
Compton, CA
May 2021
EKI C00008.02
Figure 8c

eki environment & water

Document Path: X:\C00008\Maps_02\2021\05\Fig8c_TEPH_Soil_20to30ftbgs.mxd



Legend

- Soil Boring Location (AEI, 2001)
- Soil Boring Location (Ralph Stone, 1989)
- Soil Boring Location (Clayton, 2000)
- Soil Boring Location (MRM, 1996)
- Cone Penetrometer Test Boring and Groundwater Boring Location (Waterstone, 2011)
- Hydropunch Ground Water Location (Waterstone, 2006)
- Abandoned Piazometer Location (Clayton, 2000 abandoned by Waterstone, 2009)
- Soil Boring and Soil Gas Sampling Location (MKECI, 2020)
- Soil Gas Survey Probe Location (Waterstone, 2006 and Waterstone, 2011)
- Shallow Soil Boring Location (40' to 55' bgs) (Waterstone, 2006 and Waterstone, 2011)
- Deep Soil Boring Location (90' bgs) (Watersone, 2006)
- Perched Zone Monitoring Well
- Water Table Aquifer Monitoring Well Location - On-Site or Downgradient (Waterstone, 2006, 2009, & 2011; AE, 2001)
- Water Table Aquifer Monitoring Well - Upgradient (MKECI, Oct 2020)
- Gardena Aquifer Monitoring Well (Waterstone, 2009)
- FireHydrant
- Conduit_Trench
- Buildings
- Former/ Existing Aboveground Storage Tanks
- Conduit
- Gas Line
- Electric Line
- Water Line
- Fence
- Approximate Property Line

TEPH in Soil (mg/kg)

- >10,000 (Max 38,000)
- 1,001 to 10,000
- 501 to 1,000
- 101 to 500
- Detected up to 100
- ND above the laboratory reporting limit

Abbreviations

bgs = below ground surface
mg/kg = milligrams per kilogram
ND = not detected above the laboratory report limit
TEPH = total extractable petroleum hydrocarbons (TPHd + TPHm)
TPH = total petroleum hydrocarbons
TPHd = TPH, diesel range
TPHm = TPH, motor oil range

Notes

1. All locations approximate.
2. If multi-depth soil samples were collected within the selected depth interval, the highest detected concentration is shown.

Sources

1. Basemap courtesy of Esri, photo from April 2020.

N

0 50 100
Feet

TEPH in Soil (>30 and <=40 feet bgs)

Mouren-Laurens Oil Company, Inc. and Leach Oil Company, Inc. Sites
Compton, CA
May 2021
EKI C00008.02

eki environment & water

Figure 8d

Document Path: X:\C00008\Maps_02\2021\05\Fig8d_TEPH_Soil_30to40ftbgs.mxd



Legend

- Soil Boring Location (AEI, 2001)
- Soil Boring Location (Ralph Stone, 1989)
- Soil Boring Location (Clayton, 2000)
- Soil Boring Location (MRM, 1996)
- Cone Penetrometer Test Boring and Groundwater Boring Location (Waterstone, 2011)
- Hydropunch Ground Water Location (Waterstone, 2006)
- Abandoned Piazometer Location (Clayton, 2000 abandoned by Waterstone, 2009)
- Soil Boring and Soil Gas Sampling Location (MKECI, 2020)
- Soil Gas Survey Probe Location (Waterstone, 2006 and Waterstone, 2011)
- Shallow Soil Boring Location (40' to 55' bgs) (Waterstone, 2006 and Waterstone, 2011)
- Deep Soil Boring Location (90' bgs) (Watersone, 2006)
- Perched Zone Monitoring Well
- Water Table Aquifer Monitoring Well Location - On-Site or Downgradient (Waterstone, 2006, 2009, & 2011; AE, 2001)
- Water Table Aquifer Monitoring Well - Upgradient (MKECI, Oct 2020)
- Gardena Aquifer Monitoring Well (Waterstone, 2009)
- FireHydrant
- Conduit_Trench
- Buildings
- Former/ Existing Aboveground Storage Tanks
- Conduit
- Gas Line
- Electric Line
- Water Line
- Fence
- Approximate Property Line

TEPH in Soil (mg/kg)

- >10,000 (Max 27,330)
- 1,001 to 10,000
- 501 to 1,000
- 101 to 500
- Detected up to 100
- ND above the laboratory reporting limit

Abbreviations

bgs = below ground surface
mg/kg = milligrams per kilogram
ND = not detected above the laboratory report limit
TEPH = total extractable petroleum hydrocarbons (TPHd + TPHm)
TPH = total petroleum hydrocarbons
TPHd = TPH, diesel range
TPHm = TPH, motor oil range

Notes

1. All locations approximate.
2. If multi-depth soil samples were collected within the selected depth interval, the highest detected concentration is shown.

Sources

1. Basemap courtesy of Esri, photo from April 2020.

N

0 50 100
Feet

TEPH in Soil (>40 feet bgs)

Mouren-Laurens Oil Company, Inc. and Leach Oil Company, Inc. Sites
Compton, CA
May 2021
EKI C00008.02

eki environment & water

Figure 8e

Document Path: X:\C00008\Maps_02\2021\05\Fig8e_TEPH_Soil_40ftbgsAndDeeper.mxd



Legend

- Soil Boring and Soil Gas Sampling Location (MKECI, 2020)
- Soil Gas Survey Probe Location (Waterstone, 2006 and Waterstone, 2011)
- Shallow Soil Boring Location (40' to 55' bgs) (Waterstone, 2006 and Waterstone, 2011)
- Deep Soil Boring Location (90' bgs) (Watersone, 2006)
- Perched Zone Monitoring Well
- Water Table Aquifer Monitoring Well Location - On-Site or Downgradient (Waterstone, 2006, 2009, & 2011; AE, 2001)
- Water Table Aquifer Monitoring Well - Upgradient (MKECI, Oct 2020)
- Gardena Aquifer Monitoring Well (Waterstone, 2009)
- FireHydrant
- Conduit_Trench
- Buildings
- Former/ Existing Aboveground Storage Tanks
- Conduit
- Gas Line
- Electric Line
- Water Line
- Fence
- Approximate Property Line

TCE in Soil Gas (µg/m^3)

- >500,000
- 100,000 to 500,000
- 10,001 to 100,000
- 1,001 to 10,000
- 101 to 1,000
- Detected up to 100
- ND above the laboratory reporting limit

M-B2 Sample collected prior to 2011

MSV-9 Sample collected in 2020

Abbreviations

bgs = below ground surface
ND = not detected above the laboratory reporting limit
TCE = trichloroethene
µg/m^3 = micrograms per cubic meter

Notes

1. All locations are approximate.
2. If multi-depth soil gas samples were collected within the selected depth interval, the highest detected concentration is shown.

Notes

1. Basemap courtesy of Esri, photo from April 2020.

N

0 50 100
Feet

TCE in Soil Gas (<=10 feet bgs)

Mouren-Laurens Oil Company, Inc. and Leach Oil Company, Inc. Sites
Compton, CA

May 2021

EKI C00008.02

Figure 9a

eki environment & water

Document Path: X:\C00008\Maps_02\2021\05\Fig9a_TCE_SoilGas_10ftbgs.mxd



Legend

- Soil Boring and Soil Gas Sampling Location (MKECI, 2020)
- Soil Gas Survey Probe Location (Waterstone, 2006 and Waterstone, 2011)
- Shallow Soil Boring Location (40' to 55' bgs) (Waterstone, 2006 and Waterstone, 2011)
- Deep Soil Boring Location (90' bgs) (Watersone, 2006)
- Perched Zone Monitoring Well
- Water Table Aquifer Monitoring Well Location - On-Site or Downgradient (Waterstone, 2006, 2009, & 2011; AE, 2001)
- Water Table Aquifer Monitoring Well - Upgradient (MKECI, Oct 2020)
- Gardena Aquifer Monitoring Well (Waterstone, 2009)
- FireHydrant
- Conduit_Trench
- Buildings
- Former/ Existing Aboveground Storage Tanks
- Conduit
- Gas Line
- Electric Line
- Water Line
- Fence
- Approximate Property Line

TCE in Soil Gas (µg/m^3)

- >500,000
- 100,000 to 500,000
- 10,001 to 100,000
- 1,001 to 10,000
- 101 to 1,000
- Detected up to 100
- ND above the laboratory reporting limit

M-B2 Sample collected prior to 2011

MSV-9 Sample collected in 2020

Abbreviations

bgs = below ground surface
ND = not detected above the laboratory reporting limit
TCE = trichloroethene
µg/m^3 = micrograms per cubic meter

Notes

1. All locations are approximate.
2. If multi-depth soil gas samples were collected within the selected depth interval, the highest detected concentration is shown.

Notes

1. Basemap courtesy of Esri, photo from April 2020.

N

0 50 100
Feet

TCE in Soil Gas (>10 and <=20 feet bgs)

Mouren-Laurens Oil Company, Inc. and Leach Oil Company, Inc. Sites
Compton, CA
May 2021
EKI C00008.02

Figure 9b

eki environment & water

Document Path: X:\C00008\Maps_02\2021\05\Fig9b_TCE_SoilGas_10fto20tbgs.mxd



Legend

- Soil Boring and Soil Gas Sampling Location (MKECI, 2020)
- Soil Gas Survey Probe Location (Waterstone, 2006 and Waterstone, 2011)
- Shallow Soil Boring Location (40' to 55' bgs) (Waterstone, 2006 and Waterstone, 2011)
- Deep Soil Boring Location (90' bgs) (Watersone, 2006)
- Perched Zone Monitoring Well
- Water Table Aquifer Monitoring Well Location - On-Site or Downgradient (Waterstone, 2006, 2009, & 2011; AE, 2001)
- Water Table Aquifer Monitoring Well - Upgradient (MKECI, Oct 2020)
- Gardena Aquifer Monitoring Well (Waterstone, 2009)
- FireHydrant
- Conduit_Trench
- Buildings
- Former/ Existing Aboveground Storage Tanks
- Conduit
- Gas Line
- Electric Line
- Water Line
- Fence
- Approximate Property Line

TCE in Soil Gas (µg/m^3)

- >500,000
- 100,000 to 500,000
- 10,001 to 100,000
- 1,001 to 10,000
- 101 to 1,000
- Detected up to 100
- ND above the laboratory reporting limit

M-B2 Sample collected prior to 2011

MSV-9 Sample collected in 2020

Abbreviations

bgs = below ground surface
ND = not detected above the laboratory reporting limit
TCE = trichloroethene
µg/m^3 = micrograms per cubic meter

Notes

1. All locations are approximate.
2. If multi-depth soil gas samples were collected within the selected depth interval, the highest detected concentration is shown.

Notes

1. Basemap courtesy of Esri, photo from April 2020.

N

0 50 100
Feet

TCE in Soil Gas (>20 and <=30 feet bgs)

Mouren-Laurens Oil Company, Inc. and Leach Oil Company, Inc. Sites
Compton, CA

May 2021

EKI C00008.02

Figure 9c

eki environment & water

Document Path: X:\C00008\Maps_02\2021\05\Fig9c_TCE_SoilGas_20fto30tbgs.mxd



Legend

- Soil Boring and Soil Gas Sampling Location (MKECI, 2020)
- Soil Gas Survey Probe Location (Waterstone, 2006 and Waterstone, 2011)
- Shallow Soil Boring Location (40' to 55' bgs) (Waterstone, 2006 and Waterstone, 2011)
- Deep Soil Boring Location (90' bgs) (Watersone, 2006)
- Perched Zone Monitoring Well
- Water Table Aquifer Monitoring Well Location - On-Site or Downgradient (Waterstone, 2006, 2009, & 2011; AE, 2001)
- Water Table Aquifer Monitoring Well - Upgradient (MKECI, Oct 2020)
- Gardena Aquifer Monitoring Well (Waterstone, 2009)
- FireHydrant
- Conduit_Trench
- Buildings
- Former/ Existing Aboveground Storage Tanks
- Conduit
- Gas Line
- Electric Line
- Water Line
- Fence
- Approximate Property Line

TCE in Soil Gas (µg/m^3)

- >500,000
- 100,000 to 500,000
- 10,001 to 100,000
- 1,001 to 10,000
- 101 to 1,000
- Detected up to 100
- ND above the laboratory reporting limit

M-B2 Sample collected prior to 2011

MSV-9 Sample collected in 2020

Abbreviations

bgs = below ground surface
ND = not detected above the laboratory reporting limit
TCE = trichloroethene
µg/m^3 = micrograms per cubic meter

Notes

1. All locations are approximate.
2. If multi-depth soil gas samples were collected within the selected depth interval, the highest detected concentration is shown.

Notes

1. Basemap courtesy of Esri, photo from April 2020.

N

0 50 100
Feet

TCE in Soil Gas (>30 and <=40 feet bgs)

Mouren-Laurens Oil Company, Inc. and Leach Oil Company, Inc. Sites
Compton, CA

May 2021

EKI C00008.02

Figure 9d

eki environment & water

Document Path: X:\C00008\Maps_02\2021\05\Fig9d_TCE_SoilGas_30fto40tbgs.mxd



Legend

- Soil Boring and Soil Gas Sampling Location (MKECI, 2020)
- Soil Gas Survey Probe Location (Waterstone, 2006 and Waterstone, 2011)
- Shallow Soil Boring Location (40' to 55' bgs) (Waterstone, 2006 and Waterstone, 2011)
- Deep Soil Boring Location (90' bgs) (Watersone, 2006)
- Perched Zone Monitoring Well
- Water Table Aquifer Monitoring Well Location - On-Site or Downgradient (Waterstone, 2006, 2009, & 2011; AE, 2001)
- Water Table Aquifer Monitoring Well - Upgradient (MKECI, Oct 2020)
- Gardena Aquifer Monitoring Well (Waterstone, 2009)
- FireHydrant
- Conduit_Trench
- Buildings
- Former/ Existing Aboveground Storage Tanks
- Conduit
- Gas Line
- Electric Line
- Water Line
- Fence
- Approximate Property Line

TCE in Soil Gas (µg/m^3)

- >500,000
- 100,000 to 500,000
- 10,001 to 100,000
- 1,001 to 10,000
- 101 to 1,000
- Detected up to 100
- ND above the laboratory reporting limit

M-B2 Sample collected prior to 2011

MSV-9 Sample collected in 2020

Abbreviations

bgs = below ground surface
ND = not detected above the laboratory reporting limit
TCE = trichloroethene
µg/m^3 = micrograms per cubic meter

Notes

1. All locations are approximate.
2. If multi-depth soil gas samples were collected within the selected depth interval, the highest detected concentration is shown.

Notes

1. Basemap courtesy of Esri, photo from April 2020.

N

0 50 100
Feet

TCE in Soil Gas (>40 and <=50 feet bgs)

Mouren-Laurens Oil Company, Inc. and Leach Oil Company, Inc. Sites
Compton, CA
May 2021
EKI C00008.02

Figure 9e

eki environment & water

Document Path: X:\C00008\Maps_02\2021\05\Fig9e_TCE_SoilGas_40ftto50tbgs.mxd



Legend

- Soil Boring and Soil Gas Sampling Location (MKECI, 2020)
- Soil Gas Survey Probe Location (Waterstone, 2006 and Waterstone, 2011)
- Shallow Soil Boring Location (40' to 55' bgs) (Waterstone, 2006 and Waterstone, 2011)
- Deep Soil Boring Location (90' bgs) (Watersone, 2006)
- Perched Zone Monitoring Well
- Water Table Aquifer Monitoring Well Location - On-Site or Downgradient (Waterstone, 2006, 2009, & 2011; AE, 2001)
- Water Table Aquifer Monitoring Well - Upgradient (MKECI, Oct 2020)
- Gardena Aquifer Monitoring Well (Waterstone, 2009)
- FireHydrant
- Conduit_Trench
- Buildings
- Former/ Existing Aboveground Storage Tanks
- Conduit
- Gas Line
- Electric Line
- Water Line
- Fence
- Approximate Property Line

TCE in Soil Gas (µg/m^3)

- >500,000
- 100,000 to 500,000
- 10,001 to 100,000
- 1,001 to 10,000
- 101 to 1,000
- Detected up to 100
- ND above the laboratory reporting limit

M-B2 Sample collected prior to 2011

MSV-9 Sample collected in 2020

Abbreviations

bgs = below ground surface
ND = not detected above the laboratory reporting limit
TCE = trichloroethene
µg/m^3 = micrograms per cubic meter

Notes

1. All locations are approximate.
2. If multi-depth soil gas samples were collected within the selected depth interval, the highest detected concentration is shown.

Notes

1. Basemap courtesy of Esri, photo from April 2020.

N

0 50 100
Feet

TCE in Soil Gas (>50 feet bgs)

Mouren-Laurens Oil Company, Inc.
and Leach Oil Company, Inc. Sites
Compton, CA

May 2021

EKI C00008.02

Figure 9f

eki environment & water

Document Path: X:\C00008\Maps_02\2021\05\Fig9f_TCE_SoilGas_50ftbgsAndDeeper.mxd



Legend

- Soil Boring Location (AEI, 2001)
- Soil Boring Location (Ralph Stone, 1989)
- Soil Boring Location (Clayton, 2000)
- Soil Boring Location (MRM, 1996)
- Cone Penetrometer Test Boring and Groundwater Boring Location (Waterstone, 2011)
- Hydropunch Ground Water Location (Waterstone, 2006)
- Abandoned Piazometer Location (Clayton, 2000 abandoned by Waterstone, 2009)
- Deep Soil Boring Location (90' bgs) (Watersone, 2006)
- Perched Zone Monitoring Well
- Water Table Aquifer Monitoring Well Location - On-Site or Downgradient (Waterstone, 2006, 2009, & 2011; AE, 2001)
- Water Table Aquifer Monitoring Well - Upgradient (MKECI, Oct 2020)
- Gardena Aquifer Monitoring Well (Waterstone, 2009)
- FireHydrant
- Conduit_Trench
- Buildings
- Former/ Existing Aboveground Storage Tanks
- Conduit
- Gas Line
- Electric Line
- Water Line
- Fence
- Approximate Property Line

Benzene in Groundwater (µg/L)

- >100 (Max 900)
- 10.1 to 100
- 1.9 to 10
- 1.1 to 1.8
- Detected up to 1
- ND (RL from 0.14 to 10)

Most recent data displayed at each location.

1/29/2006 Sample collected prior to 2010

12/17/2019 Sample collected 2010 or later

Abbreviations

ND = not detected above the laboratory reporting limit
RL = laboratory reporting limit
µg/L = micrograms per liter

Notes

1. All locations are approximate.

Sources

1. Basemap courtesy of Esri, photo from April 2020.

N

0 50 100
Feet

Benzene in Groundwater (Perched Zone)

Mouren-Laurens Oil Company, Inc.
and Leach Oil Company, Inc. Sites
Compton, CA

May 2021

EKI C00008.02

Figure 10a

eki environment & water

Document Path: X:\C00008\Maps_02\2021\05\Fig10a_BenzeneGW_PerchedZone.mxd



Legend

- Soil Boring Location (AEI, 2001)
- Soil Boring Location (Ralph Stone, 1989)
- Soil Boring Location (Clayton, 2000)
- Soil Boring Location (MRM, 1996)
- Cone Penetrometer Test Boring and Groundwater Boring Location (Waterstone, 2011)
- Hydropunch Ground Water Location (Waterstone, 2006)
- Abandoned Piazometer Location (Clayton, 2000 abandoned by Waterstone, 2009)
- Deep Soil Boring Location (90' bgs) (Watersone, 2006)
- Perched Zone Monitoring Well
- Water Table Aquifer Monitoring Well Location - On-Site or Downgradient (Waterstone, 2006, 2009, & 2011; AE, 2001)
- Water Table Aquifer Monitoring Well - Upgradient (MKECI, Oct 2020)
- Gardena Aquifer Monitoring Well (Waterstone, 2009)
- FireHydrant
- Conduit_Trench
- Buildings
- Former/ Existing Aboveground Storage Tanks
- Conduit
- Gas Line
- Electric Line
- Water Line
- Fence
- Approximate Property Line

Benzene in Groundwater (µg/L)

- >10 (Max 32)
- 1.9 to 10
- 1.1 to 1.8
- Detected up to 1
- ND (RL from 0.14 to 10)

Most recent data displayed at each location.

1/29/2006 Sample collected prior to 2010

12/17/2019 Sample collected 2010 or later

Abbreviations

ND = not detected above the laboratory reporting limit
RL = laboratory reporting limit
µg/L = micrograms per liter

Notes

1. All locations are approximate.

Sources

1. Basemap courtesy of Esri, photo from April 2020.

N 0 50 100 Feet

Benzene in Groundwater (Water Table Zone)

Mouren-Laurens Oil Company, Inc.
and Leach Oil Company, Inc. Sites
Compton, CA

May 2021

EKI C00008.02

Figure 10b

eki environment & water

Document Path: X:\C00008\Maps_02\2021\05\Fig10b_BenzeneGW_WaterTableAquifer.mxd



Legend

- Soil Boring Location (AEI, 2001)
- Soil Boring Location (Ralph Stone, 1989)
- Soil Boring Location (Clayton, 2000)
- Soil Boring Location (MRM, 1996)
- Cone Penetrometer Test Boring and Groundwater Boring Location (Waterstone, 2011)
- Hydropunch Ground Water Location (Waterstone, 2006)
- Abandoned Piazometer Location (Clayton, 2000 abandoned by Waterstone, 2009)
- Deep Soil Boring Location (90' bgs) (Watersone, 2006)
- Perched Zone Monitoring Well
- Water Table Aquifer Monitoring Well Location - On-Site or Downgradient (Waterstone, 2006, 2009, & 2011; AE, 2001)
- Water Table Aquifer Monitoring Well - Upgradient (MKECI, Oct 2020)
- Gardena Aquifer Monitoring Well (Waterstone, 2009)
- FireHydrant
- Conduit_Trench
- Buildings
- Former/ Existing Aboveground Storage Tanks
- Conduit
- Gas Line
- Electric Line
- Water Line
- Fence
- Approximate Property Line

TCE in Groundwater (µg/L)

- >1,000 (Max 3,300)
- 101 to 1,000
- 7.6 to 100
- 5.1 to 7.5
- Detected up to 5
- ND above the laboratory reporting limit

Most recent data displayed at each location.

1/29/2006 Sample collected prior to 2010

12/17/2019 Sample collected 2010 or later

Abbreviations

ND = not detected above the laboratory reporting limit
RL = laboratory reporting limit
TCE = trichloroethene
µg/L = micrograms per liter

Notes

1. All locations are approximate.

Sources

1. Basemap courtesy of Esri, photo from April 2020.

N

0 50 100
Feet

TCE in Groundwater (Perched Zone)

Mouren-Laurens Oil Company, Inc.
and Leach Oil Company, Inc. Sites
Compton, CA

May 2021

EKI C00008.02

Figure 11a

eki environment & water

Document Path: X:\C00008\Maps_02\2021\05\Fig11a_TCE_GW_Perched.mxd



Legend

- Soil Boring Location (AEI, 2001)
- Soil Boring Location (Ralph Stone, 1989)
- Soil Boring Location (Clayton, 2000)
- Soil Boring Location (MRM, 1996)
- Cone Penetrometer Test Boring and Groundwater Boring Location (Waterstone, 2011)
- Hydropunch Ground Water Location (Waterstone, 2006)
- Abandoned Piazometer Location (Clayton, 2000 abandoned by Waterstone, 2009)
- Deep Soil Boring Location (90' bgs) (Watersone, 2006)
- Perched Zone Monitoring Well
- Water Table Aquifer Monitoring Well Location - On-Site or Downgradient (Waterstone, 2006, 2009, & 2011; AE, 2001)
- Water Table Aquifer Monitoring Well - Upgradient (MKECI, Oct 2020)
- Gardena Aquifer Monitoring Well (Waterstone, 2009)
- FireHydrant
- Conduit_Trench
- Buildings
- Former/ Existing Aboveground Storage Tanks
- Conduit
- Gas Line
- Electric Line
- Water Line
- Fence
- Approximate Property Line

TCE in Groundwater (µg/L)

- >1,000 (Max 1,700)
- 101 to 1,000
- 7.6 to 100
- 5.1 to 7.5
- Detected up to 5
- ND above the laboratory reporting limit

Most recent data displayed at each location.

1/29/2006 Sample collected prior to 2010

12/17/2019 Sample collected 2010 or later

Abbreviations

ND = not detected above the laboratory reporting limit
RL = laboratory reporting limit
TCE = trichloroethene
µg/L = micrograms per liter

Notes

1. All locations are approximate.

Sources

1. Basemap courtesy of Esri, photo from April 2020.

N

0 50 100
Feet

TCE in Groundwater (Water Table Aquifer)

Mouren-Laurens Oil Company, Inc.
and Leach Oil Company, Inc. Sites
Compton, CA

May 2021

EKI C00008.02

Figure 11b

eki environment & water

Document Path: X:\C00008\Maps_02\2021\05\Fig11b_TCE_GW_WaterTableAquifer.mxd



Legend

- Soil Boring Location (AEI, 2001)
- Soil Boring Location (Ralph Stone, 1989)
- Soil Boring Location (Clayton, 2000)
- Soil Boring Location (MRM, 1996)
- Cone Penetrometer Test Boring and Groundwater Boring Location (Waterstone, 2011)
- Hydropunch Ground Water Location (Waterstone, 2006)
- Abandoned Piazometer Location (Clayton, 2000 abandoned by Waterstone, 2009)
- Deep Soil Boring Location (90' bgs) (Watersone, 2006)
- Perched Zone Monitoring Well
- Water Table Aquifer Monitoring Well Location - On-Site or Downgradient (Waterstone, 2006, 2009, & 2011; AE, 2001)
- Water Table Aquifer Monitoring Well - Upgradient (MKECI, Oct 2020)
- Gardena Aquifer Monitoring Well (Waterstone, 2009)
- FireHydrant
- Conduit_Trench
- Buildings
- Former/ Existing Aboveground Storage Tanks
- Conduit
- Gas Line
- Electric Line
- Water Line
- Fence
- Approximate Property Line

1,4-Dioxane in Groundwater (µg/L)

- >1,000 (Max 4,500)
- 101 to 1,000
- 35.1 to 100
- 1.1 to 35
- Detected up to 1
- ND above the reporting limit

Most recent data displayed at each location.

1/29/2006 Sample collected prior to 2010

12/17/2019 Sample collected 2010 or later

Abbreviations

ND = not detected above the laboratory reporting limit
RL = reporting limit
µg/L = micrograms per liter

Notes

1. All locations are approximate.

Sources

1. Basemap courtesy of Esri, photo from April 2020.

N

0 50 100
Feet

1,4-Dioxane in Groundwater (Perched Zone)

Mouren-Laurens Oil Company, Inc.
and Leach Oil Company, Inc. Sites
Compton, CA

May 2021

EKI C00008.02

Figure 12a

eki environment & water

Document Path: X:\C00008\Maps_02\2021\05\Fig12a_14Diox_GW_Perched.mxd



Legend

- Soil Boring Location (AEI, 2001)
- Soil Boring Location (Ralph Stone, 1989)
- Soil Boring Location (Clayton, 2000)
- Soil Boring Location (MRM, 1996)
- Cone Penetrometer Test Boring and Groundwater Boring Location (Waterstone, 2011)
- Hydropunch Ground Water Location (Waterstone, 2006)
- Abandoned Piazometer Location (Clayton, 2000 abandoned by Waterstone, 2009)
- Deep Soil Boring Location (90' bgs) (Watersone, 2006)
- Perched Zone Monitoring Well
- Water Table Aquifer Monitoring Well Location - On-Site or Downgradient (Waterstone, 2006, 2009, & 2011; AE, 2001)
- Water Table Aquifer Monitoring Well - Upgradient (MKECI, Oct 2020)
- Gardena Aquifer Monitoring Well (Waterstone, 2009)
- FireHydrant
- Conduit_Trench
- Buildings
- Former/ Existing Aboveground Storage Tanks
- Conduit
- Gas Line
- Electric Line
- Water Line
- Fence
- Approximate Property Line

1,4-Dioxane in Groundwater (µg/L)

- >100 (Max 350)
- 35.1 to 100
- 1.1 to 35
- Detected up to 1
- ND above the reporting limit

Most recent data displayed at each location.

1/29/2006 Sample collected prior to 2010

12/17/2019 Sample collected 2010 or later

Abbreviations

ND = not detected above the laboratory reporting limit
RL = reporting limit
µg/L = micrograms per liter

Notes

1. All locations are approximate.

Sources

1. Basemap courtesy of Esri, photo from April 2020.

N

0 50 100
Feet

1,4-Dioxane in Groundwater (Water Table Aquifer)

Mouren-Laurens Oil Company, Inc.
and Leach Oil Company, Inc. Sites
Compton, CA

May 2021

EKI C00008.02

Figure 12b

eki environment & water

Document Path: X:\C00008\Maps_02\2021\05\Fig12b_14Diox_GW_WTAquifer.mxd



Legend

- Soil Boring Location (AEI, 2001)
- Soil Boring Location (Ralph Stone, 1989)
- Soil Boring Location (Clayton, 2000)
- Soil Boring Location (MRM, 1996)
- Cone Penetrometer Test Boring and Groundwater Boring Location (Waterstone, 2011)
- Hydropunch Ground Water Location (Waterstone, 2006)
- Abandoned Piazometer Location (Clayton, 2000 abandoned by Waterstone, 2009)
- Deep Soil Boring Location (90' bgs) (Watersone, 2006)
- Perched Zone Monitoring Well
- Water Table Aquifer Monitoring Well Location - On-Site or Downgradient (Waterstone, 2006, 2009, & 2011; AE, 2001)
- Water Table Aquifer Monitoring Well - Upgradient (MKECI, Oct 2020)
- Gardena Aquifer Monitoring Well (Waterstone, 2009)
- FireHydrant
- Conduit_Trench
- Buildings
- Former/ Existing Aboveground Storage Tanks
- Conduit
- Gas Line
- Electric Line
- Water Line
- Fence
- Approximate Property Line

NDMA in Groundwater (µg/L)

- ND (RLs from 5 to 480)

Most recent data displayed at each location.

- 1/29/2006 Sample collected prior to 2010
- 12/17/2019 Sample collected 2010 or later

Abbreviations

ND = not detected above either the RL
NDMA = N-Nitrosodimethylamine
RL = laboratory reporting limit
ug/L = micrograms per liter

Notes

1. All locations are approximate.

Sources

1. Basemap courtesy of Esri, photo from April 2020.

N

0 50 100
Feet

NDMA in Groundwater (Perched Zone)

Mouren-Laurens Oil Company, Inc.
and Leach Oil Company, Inc. Sites
Compton, CA

May 2021

EKI C00008.02

Figure 13a

eki environment & water

Document Path: X:\C00008\Maps_02\2021\05\Fig13a_NDMA_GW_Perched.mxd



Legend

- Soil Boring Location (AEI, 2001)
- Soil Boring Location (Ralph Stone, 1989)
- Soil Boring Location (Clayton, 2000)
- Soil Boring Location (MRM, 1996)
- Cone Penetrometer Test Boring and Groundwater Boring Location (Waterstone, 2011)
- Hydropunch Ground Water Location (Waterstone, 2006)
- Abandoned Piazometer Location (Clayton, 2000 abandoned by Waterstone, 2009)
- Soil Boring and Soil Gas Sampling Location (MKECI, 2020)
- Soil Gas Survey Probe Location (Waterstone, 2006 and Waterstone, 2011)
- Shallow Soil Boring Location (40' bgs) (Waterstone, 2006)
- Deep Soil Boring Location (90' bgs) (Watersone, 2006)
- Perched Zone Monitoring Well
- Water Table Aquifer Monitoring Well Location - On-Site or Downgradient (Waterstone, 2006, 2009, & 2011; AE, 2001)
- Water Table Aquifer Monitoring Well - Upgradient (MKECI, Oct 2020)
- Gardena Aquifer Monitoring Well (Waterstone, 2009)
- FireHydrant
- Conduit_Trench
- Buildings
- Former/ Existing Aboveground Storage Tanks
- Conduit
- Gas Line
- Electric Line
- Water Line
- Fence
- Approximate Property Line

NDMA in Groundwater (µg/L)

- >0.3 (Max 0.66)
- 0.011 to 0.3
- Detected up to 0.01
- ND (MDLs or RLs from 0.0018 to 32)

Most recent data displayed at each location.

1/29/2006 Sample collected prior to 2010

12/17/2019 Sample collected 2010 or later

Abbreviations

MDL = method detection limit
ND = not detected above either the MDL or the RL
NDMA = N-Nitrosodimethylamine
RL = laboratory reporting limit
µg/L = micrograms per liter

Notes

1. All locations are approximate.

Sources

1. Basemap courtesy of Esri, photo from April 2020.

N

0 50 100
Feet

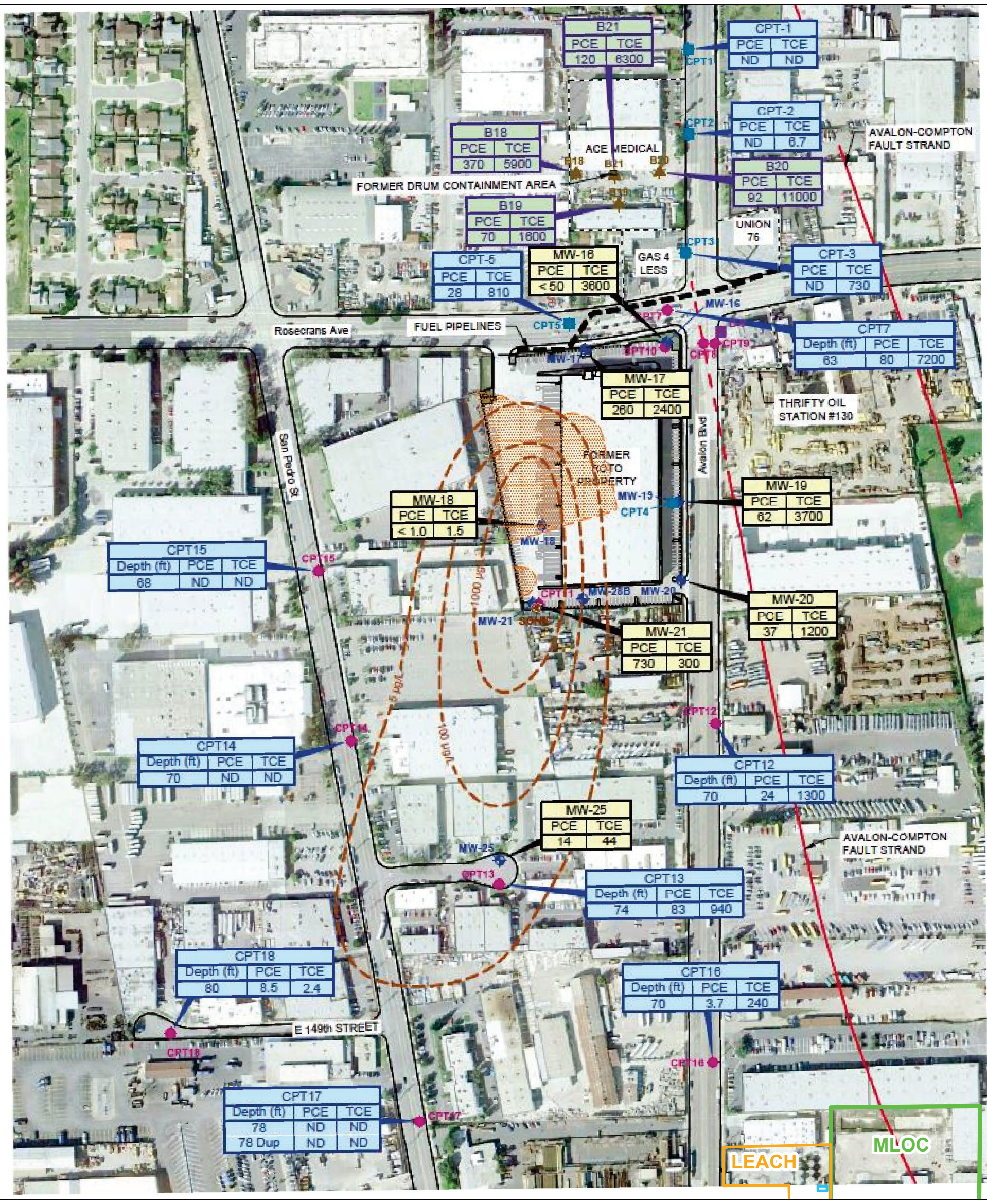
NDMA in Groundwater (Water Table Zone)

Mouren-Laurens Oil Company, Inc. and Leach Oil Company, Inc. Sites
Compton, CA
May 2021
EKI C00008.02

Figure 13b

eki environment & water

Document Path: X:\C00008\Maps_02\2021\05\Fig13b_NDMA_GW_WTAquifer.mxd



Legend

- CPT14 — Roto-Property Cone Penetration Test Location (2011)
- MW-18 — Roto-Property Quarterly Monitoring Location (March 2011)
- CPT1 — Roto-Property Cone Penetration Test Location (2007)
- B21 — Ace Medical Hydropunch Sample Location (1995)
- B-9 — Thrifty Oil Station #130 Soil Boring Location (2009)
- SONIC — Roto-Property Sonic Boring Location (2011)
- Remediated PCE Source Area
- Approximate Lateral Extent of Dissolved-Phase PCE Migrating from Site

Abbreviations

ND = Not Detected
PCE = tetrachloroethylene
TCE = trichloroethene
ug/L = micrograms per liter

Notes

1. All locations are approximate.
2. All PCE/TCE results shown are in ug/L.
3. Quarterly monitoring well results are from March 2018 monitoring event.

Sources

1. Figure adapated from Brown and Caldwell TCE and PCE Groundwater Analytical Results in the 2nd WBZ.

N

0 250 500
Feet

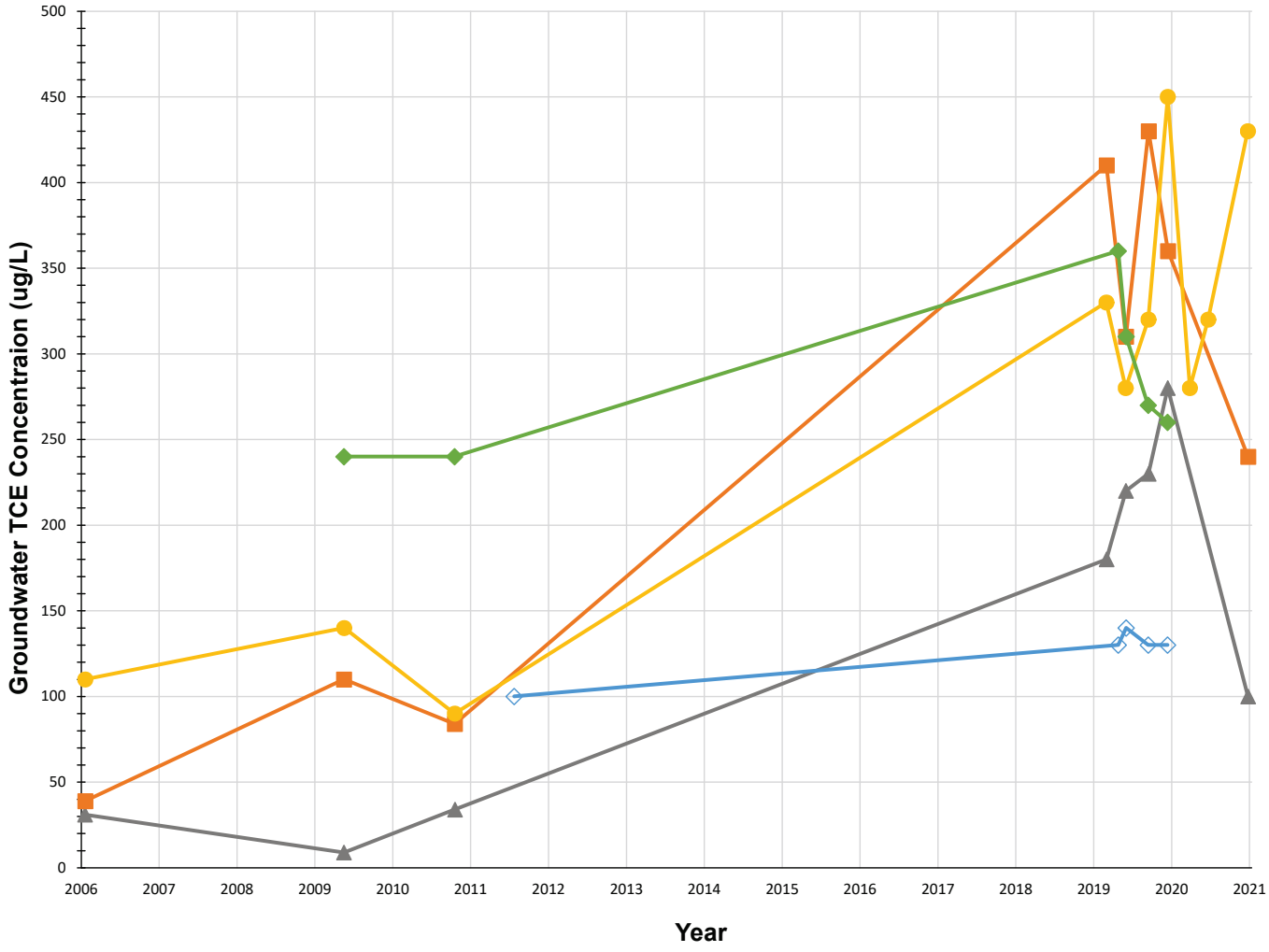
Proximity of former Ace Medical Company and former Roto-Property to MLOC and LOC Sites. Also shown are PCE and TCE concentrations migrating in groundwater within the basal aquifer toward the Sites (Brown and Caldwell, 2018).

TCE and PCE in Upgradient Groundwater (Water Table Aquifer)

Mouren-Laurens Oil Company, Inc.
and Leach Oil Company, Inc.
Compton, CA
May 2021
EKI C00008.02
Figure 14

eki environment & water

Path: X:\C00008\Mapsl_02\2021\05\Fig14_TCE_PCE_Upgradient.mxd



Legend

- L-MW-4 (LOC Upgradient Monitoring Well)
- L-MW-5B (LOC Skim Pond Monitoring Well)
- MW-4 (MLOC Skim Pond Monitoring Well)
- S-MW-2B (Downgradient Monitoring Well Near to Sites)
- S-MW-4B (Downgradient Monitoring Wells Far From Sites)
- TCE Maximum Contaminant Level ("MCL")

Notes

1. Measurements in micrograms per liter.

Abbreviations

TCE = trichloroethylene

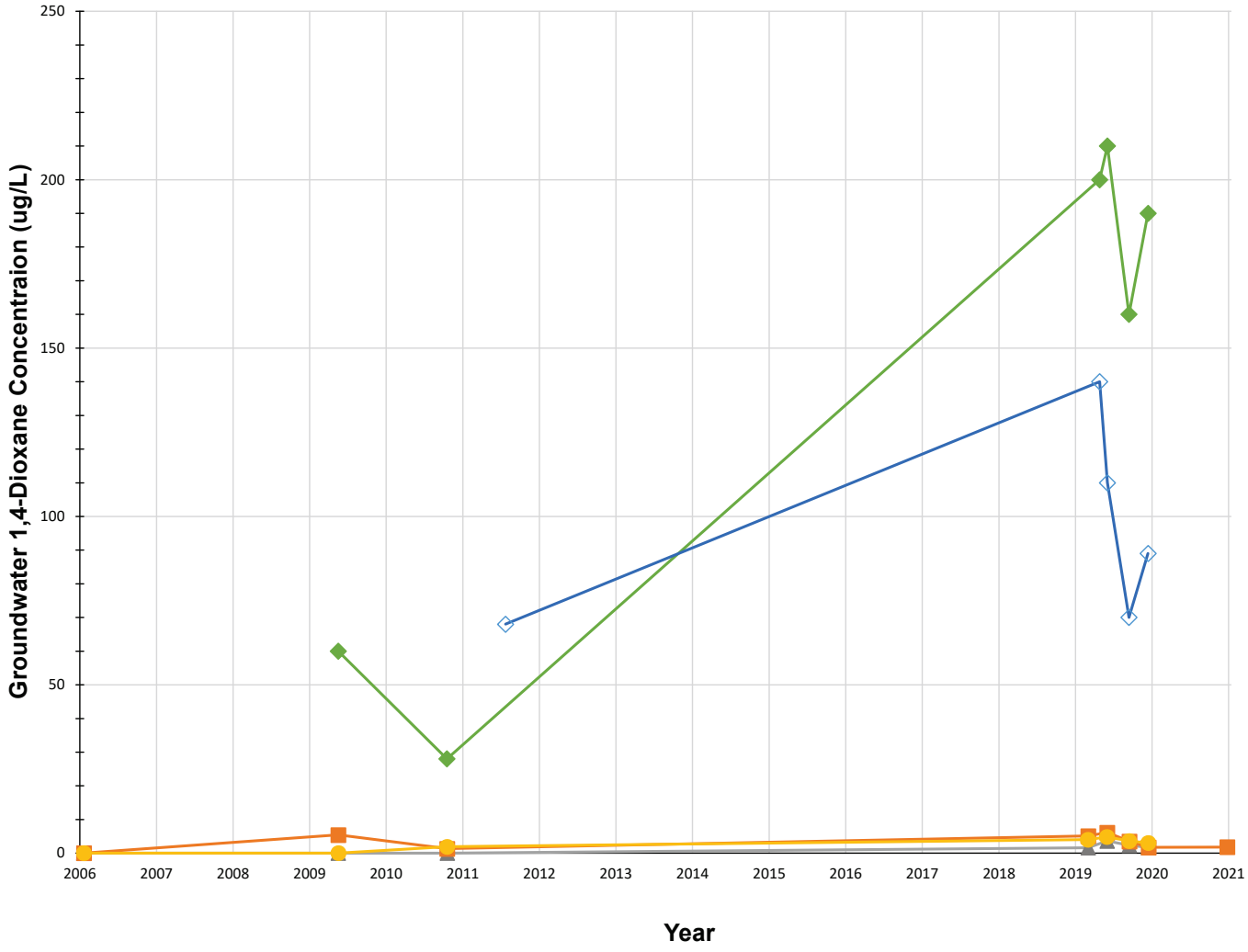
Historic TCE Concentration in Groundwater

Mouren-Laurens Oil Company, Inc.
and Leach Oil Company, Inc.
Compton, CA
May 2021
EKI C00008.02

Figure 15a

eki environment & water

Path: X:\C00008\Maps\...02\2021\05\Fig15a_TCE.mxd



Legend

- L-MW-4 (LOC Upgradient Monitoring Well)
- L-MW-5B (LOC Skim Pond Monitoring Well)
- MW-4 (MLOC Skim Pond Monitoring Well)
- S-MW-2B (Downgradient Monitoring Well Near to Sites)
- S-MW-4B (Downgradient Monitoring Wells Far From Sites)
- 1,4-Dioxane Response Level

Notes

1. Measurements in micrograms per liter.

Historic 1,4-Dioxane Concentration in Groundwater

Mouren-Laurens Oil Company, Inc.
and Leach Oil Company, Inc.
Compton, CA
May 2021
EKI C00008.02

Figure 15b

eki environment & water

Path: X:\C00008\Maps\...02\2021\05\Fig15b_14Dioxane.mxd



Legend

- Soil Boring Location (AEI, 2001)
- Soil Boring Location (Ralph Stone, 1989)
- Soil Boring Location (Clayton, 2000)
- Soil Boring Location (MRM, 1996)
- Cone Penetrometer Test Boring and Groundwater Boring Location (Waterstone, 2011)
- Hydropunch Ground Water Location (Waterstone, 2006)
- Abandoned Piazometer Location (Clayton, 2000 abandoned by Waterstone, 2009)
- Soil Boring and Soil Gas Sampling Location (MKECI, 2020)
- Soil Gas Survey Probe Location (Waterstone, 2006 and Waterstone, 2011)
- Shallow Soil Boring Location (40' to 55' bgs) (Waterstone, 2006 and Waterstone, 2011)
- Deep Soil Boring Location (90' bgs) (Watersone, 2006)
- Perched Zone Monitoring Well
- Water Table Aquifer Monitoring Well Location - On-Site or Downgradient (Waterstone, 2006, 2009, & 2011; AE, 2001)
- Water Table Aquifer Monitoring Well - Upgradient (MKECI, Oct 2020)
- Gardena Aquifer Monitoring Well (Waterstone, 2009)
- FireHydrant
- Conduit_Trench
- Buildings
- Former/ Existing Aboveground Storage Tanks
- Conduit
- Gas Line
- Electric Line
- Water Line
- Fence
- Approximate Property Line
- Likely Soil Excavation Areas

Abbreviations

SVE = soil vapor extraction

Sources

1. Basemap courtesy of Esri, photo from April 2020.
2. Adapted from Mouren Laurens Remediation Figure 2, Waterstone Environmental, Inc. 01/2011.

N

0 50 100

Feet

Likely Soil Excavation Areas

Mouren-Laurens Oil Company, Inc. and Leach Oil Company, Inc. Sites

Compton, CA

May 2021

EKI C00008.02

Figure 16

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Legend

- Soil Boring Location (AEI, 2001)
- Soil Boring Location (Ralph Stone, 1989)
- Soil Boring Location (Clayton, 2000)
- Soil Boring Location (MRM, 1996)
- Cone Penetrometer Test Boring and Groundwater Boring Location (Waterstone, 2011)
- Hydropunch Ground Water Location (Waterstone, 2006)
- Abandoned Piazometer Location (Clayton, 2000 abandoned by Waterstone, 2009)
- Soil Boring and Soil Gas Sampling Location (MKECI, 2020)
- Soil Gas Survey Probe Location (Waterstone, 2006 and Waterstone, 2011)
- Shallow Soil Boring Location (40' to 55' bgs) (Waterstone, 2006 and Waterstone, 2011)
- Deep Soil Boring Location (90' bgs) (Watersone, 2006)
- Perched Zone Monitoring Well
- Water Table Aquifer Monitoring Well Location - On-Site or Downgradient (Waterstone, 2006, 2009, & 2011; AE, 2001)
- Water Table Aquifer Monitoring Well - Upgradient (MKECI, Oct 2020)
- Gardena Aquifer Monitoring Well (Waterstone, 2009)
- FireHydrant
- Conduit_Trench
- Buildings
- Former/ Existing Aboveground Storage Tanks
- Conduit
- Gas Line
- Electric Line
- Water Line
- Fence
- Approximate Property Line
- Likely Soil Excavation Areas
- Proposed 15-feet Deep SVE Well (Assumed 25-feet Radius of Influence)
- Proposed 40-feet Deep SVE Well (Assumed 50-feet Radius of Influence)
- Proposed 65-feet Deep SVE Well (Assumed 30-feet Radius of Influence)
- Proposed 95-feet Deep Air Sparge (Assumed 30-feet Zone of Influence)

Abbreviations

SVE = soil vapor extraction

Sources

1. Basemap courtesy of Esri, photo from April 2020.
2. Adapted from Mouren Laurens Remediation Figure 2, Waterstone Environmental, Inc. 01/2011.

N

0 50 100

Feet

Proposed Soil Vapor Extraction/ Air Sparging Well Locations and Depths

Mouren-Laurens Oil Company, Inc. and Leach Oil Company, Inc. Sites

Compton, CA

May 2021

EKI C00008.02

Figure 17

eki environment & water

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APPENDIX A

Historical Data Summary Tables

APPENDIX A-1

Historical Data Summary Tables
From
Ralph Stone and Company, Inc., 1990. *Proposal for Site Remediation at Mouren-Laurens Oil Company*, 641 East Compton Boulevard, Los Angeles, CA, dated 8 May 1990.

TABLE 1
MOUREN-LAURENS OIL COMPANY
SITE INVESTIGATION DATA EVALUATION
VALUES THAT EXCEED GROUNDWATER STANDARDS

Bore Hole	Depth	Contaminant	Conc	Standard	Description
B2 std.	5	Petroleum HC	2367ppm	100ppm	DHS Clnup
B2	5	Toluene	252ppb	200ppb	Gdwtr A.L.
B2	5	Tetrachloro-ethylene	439ppb	4ppb	Gdwtr A.L.
B2A/B Std.	10′	Petroleum HC	5732ppm	100ppm	DHS Clnup
	65′-w	1,1-Dichloro-ethylene	6.9ppb	6ppb	Gdwtr A.L.
	65′-w	Benzene	24.8ppb	1ppb	Gdwtr A.L.
	65′-w	Tetrachloro-ethylene	21.8ppb	4ppb	Gdwtr A.L.
B11	65′-w	1,1-Dichloro-ethylene	11.3ppb	6ppb	Gdwtr A.L.
	65′-w	Tetrachloro-ethylene	7.2ppb	4ppb	Gdwtr A.L.
	65′-w	Trichloro-ethylene	8ppb	7ppb	Gdwtr A.L.
B4 Std.	3′	Petroleum HC	4058ppm	100ppm	DHS Clnup
		Trichloro-ethylene	18.2ppb	7ppb	Gdwtr A.L.
B9 Std.	5′	Petroleum HC	5000ppm	100ppm	DHS Clnup
B10 Std.	7′	Petroleum HC	5510ppm	100ppm	DHS Clnup
B10 Std.	10′	Petroleum HC	11,201ppm	100ppm	DHS Clnup
B10 Std.	27′	Petroleum HC	1,310ppm	100ppm	DHS Clnup

APPENDIX A-2

Historical Data Summary Tables
From
MRM Group, 1996. *Expanded Phase II Environmental Site Assessment Report*, Mouren-Laurens Oil Company Site, 641 East Compton Boulevard, Compton, California, dated 22 March 1996.

TABLE 2

ANALYTICAL RESULTS FROM RALPH STONE AND COMPANY INVESTIGATION

SAMPLE ESIGNATION/DEPTH (feet below grade)	CONCENTRATION OF ANALYTE IN SAMPLE (µg/kg)											
	TPH	MC	111-TCA	11-DCE	11-DCA	PCE	BEN	TOL	EBZ	XYL	DBCM	METALS
RSB-1/												
5'	ND(10,000)	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
15'	ND(10,000)	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
20'	N.A.	ND(200)	ND(200)	ND(200)	ND(200)	ND(200)	ND(200)	ND(200)	ND(200)	ND(200)	N.A.	N.A.
RSB-2/												
5'	2,367,000	11.8	15.7	ND(5)	ND(5)	439	ND(5)	252	363	N.A.	426	N.A.
55'	ND(10,000)	12.1	5.0	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	N.A.	ND(5)	N.A.
RSB-2A/												
10'	5,732,000	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
RSB-2B/												
60'	ND(10,000)	18.5	9.9	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	N.A.	ND(5)	N.A.
65'	ND(10,000)	17.7	11.1	8.2	6.9	21.8	24.8	54.8	14.4	N.A.	21.8	N.A.
RSB-3/												
5'	N.A.	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(200)	ND(200)	ND(200)	ND(200)	N.A.	N.A.
7'	ND(10,000)	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
RSB-4/												
3'	4,058,000	5.0	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	10.6	ND(5)	ND(5)	ND(5)	N.A.
7'	ND(10,000)	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
RSB-5/												
3'	ND(10,000)	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
7'	ND(10,000)	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.

MR000080

TABLE 2 CONTINUED

ANALYTICAL RESULTS FROM RALPH STONE AND COMPANY INVESTIGATION

SAMPLE ESIGNATION/DEPTH (feet below grade)	CONCENTRATION OF ANALYTE IN SAMPLE (µg/kg)											
	TPH	MC	111-TCA	11-DCE	11-DCA	PCE	BEN	TOL	EBZ	XYL	DBCM	METALS
RSB-6/												
3'	ND(10,000)	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
7'	ND(10,000)	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
15'	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	<87,000
RSB-7/												
3'	ND(10,000)	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
RSB-9/												
5'	5,000,000	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
7'	ND(10,000)	11.2	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	NC(5)	ND(5)	ND(5)	N.A.
RSB-10/												
7'	5,510,000	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
10'	ND(10,000)	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
17'	11,201,000	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
22'	ND(10,000)	5.9	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	N.A.	ND(5)	N.A.
27'	1,310,000	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
RSB-11/												
9'	ND(10,000)	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
14'	ND(10,000)	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
65'	ND(10,000)	5.0	8.5	11.3	ND(5)	7.2	ND(5)	ND(5)	12.3	N.A.	7.1	N.A.
RSB-12/												
15'	ND(10,000)	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
20'	ND(10,000)	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.

MR000081

TABLE 2 CONTINUED

ANALYTICAL RESULTS FROM RALPH STONE AND COMPANY INVESTIGATION

NOTES:

1) TPH means total petroleum hydrocarbons, analyzed using EPA Method 418.1.
MC means methylene chloride (dichloromethane).
111TCA means 1,1,1-trichloroethane.
11DCE means 1,1-dichloroethene.
11DCA means 1,1-dichloroethane.
BEN means benzene.
TOL means toluene.
EBZ means ethylbenzene.
XYL means xylenes.
DBCM means dibromochloromethane.
METALS includes those listed in the California Code of Regulations, Title 22.

2) ND( ) means not detected at the detection limit listed in parentheses.

3) N.A. means analyte was not analyzed for.

4) Approximate sample locations are shown on Figure 2.

MR000082

TABLE 3

TRPH AND VOC ANALYTICAL DATA

SAMPLE DESIGNATION/DEPTH (feet below original grade)	CONCENTRATION OF ANALYTE IN SOIL										
	TRPH (mg/kg)	1,1,1-TCA (µg/kg)	TCE (µg/kg)	PCE (µg/kg)	CBZ (µg/kg)	1,2-DCB (µg/kg)	1,4-DCB (µg/kg)	BNZ (µg/kg)	TOL (µg/kg)	EBZ (µg/kg)	XYL (µg/kg)
B1/											
1'	ND(50)	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
5'	ND(50)	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
10'	ND(50)	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
15'	ND(50)	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
20'	ND(50)	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
B2/											
1'	92	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
5'	92	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
10'	83	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
15'	83	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
20'	92	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
25'	160	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
30'	200	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
35'	100	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
40'	140	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
45'	120	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
50'	120	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
55'	150	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.

MR000083

TABLE 3 CONTINUED

TRPH AND VOC ANALYTICAL DATA

SAMPLE DESIGNATION/DEPTH (feet below original grade)	CONCENTRATION OF ANALYTE IN SOIL										
	TRPH (mg/kg)	1,1,1-TCA (µg/kg)	TCE (µg/kg)	PCE (µg/kg)	CBZ (µg/kg)	1,2-DCB (µg/kg)	1,4-DCB (µg/kg)	BNZ (µg/kg)	TOL (µg/kg)	EBZ (µg/kg)	XYL (µg/kg)
B3/											
1'	180	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
5'	150	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
10'	120	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
15'	170	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
20'	120	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
25'	170	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
30'	190	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
35'	160	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
40'	120	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
45'	170	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
50'	210	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
55'	120	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
B4/											
1'	150,000	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(15)
5'	480	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
10'	220	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
15'	200	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(15)
20'	140	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
25'	210	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(15)
30'	220	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
35'	170	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
40'	170	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.

MR000084

TABLE 3 CONTINUED

TRPH AND VOC ANALYTICAL DATA

SAMPLE DESIGNATION/DEPTH (feet below original grade)	CONCENTRATION OF ANALYTE IN SOIL										
	TRPH (mg/kg)	1,1,1-TCA (µg/kg)	TCE (µg/kg)	PCE (µg/kg)	CBZ (µg/kg)	1,2-DCB (µg/kg)	1,4-DCB (µg/kg)	BNZ (µg/kg)	TOL (µg/kg)	EBZ (µg/kg)	XYL (µg/kg)
B5/											
1'	28,000	11,000	3,900	40,000	1,100	5,800	1,700	9,300	100,000	39,000	230,000
5'	44,000	13,000	5,000	53,000	1,500	8,500	2,000	12,000	130,000	52,000	310,000
10'	9,800	4,400	1,900	20,000	420	3,100	910	3,100	52,000	19,000	110,000
15'	23,000	7,400	5,000	49,000	2,800	11,000	2,600	6,800	110,000	52,000	330,000
20'	18,000	3,200	2,700	22,000	1,700	6,500	1,500	3,900	50,000	26,000	160,000
25'	32,000	4,600	9,000	49,000	4,900	17,000	3,600	9,500	130,000	64,000	420,000
30'	44,000	1,000	5,500	21,000	3,100	9,800	ND(1,000)	7,200	52,000	31,000	200,000
35'	60	ND(5)	ND(5)	27	9	18	ND(5)	130	190	60	72
40'	ND(50)	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
45'	ND(50)	ND(5)	15	19	9	13	ND(5)	100	150	42	260
50'	ND(50)	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
55'	ND(50)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	65	70	ND(5)	40
B6/											
1'	220	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
5'	220	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
10'	230	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
15'	220	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
20'	190	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
25'	200	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
30'	250	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
35'	230	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
40'	200	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
45'	200	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
50'	180	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.

MR000085

TABLE 3 CONTINUED

TRPH AND VOC ANALYTICAL DATA

SAMPLE DESIGNATION/DEPTH (feet below original grade)	CONCENTRATION OF ANALYTE IN SOIL										
	TRPH (mg/kg)	1,1,1-TCA (µg/kg)	TCE (µg/kg)	PCE (µg/kg)	CBZ (µg/kg)	1,2-DCB (µg/kg)	1,4-DCB (µg/kg)	BNZ (µg/kg)	TOL (µg/kg)	EBZ (µg/kg)	XYL (µg/kg)
B7/											
1'	230	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(15)
5'	250	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(15)
10'	220	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	20	ND(5)	ND(5)	ND(15)
15'	230	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(15)
20'	230	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	18	ND(5)	ND(5)	ND(15)
25'	280	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(15)
30'	280	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(15)
35'	3,000	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(15)
40'	300	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
45'	350	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
50'	250	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
55'	320	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
60'	250	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
65'	180	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
B8/											
1'	4,700	ND(1,000)	ND(1,000)	3,600	ND(1,000)	ND(1,000)	ND(1,000)	1,500	3,600	2,800	13,000
5'	130	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(15)
10'	750	ND(5)	27	240	36	140	ND(5)	100	32	310	450
15'	120	ND(5)	ND(5)	ND(5)	ND(5)	14	ND(5)	130	5.3	6.9	23
20'	110	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	18	ND(5)	ND(5)	ND(15)
25'	150	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(15)
30'	150	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	22	ND(5)	ND(5)	ND(15)
35'	150	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
40'	150	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
45'	170	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
50'	180	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
55'	150	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
60'	190	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.

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TABLE 3 CONTINUED

TRPH AND VOC ANALYTICAL DATA

SAMPLE DESIGNATION/DEPTH (feet below original grade)	CONCENTRATION OF ANALYTE IN SOIL										
	TRPH (mg/kg)	1,1,1-TCA (µg/kg)	TCE (µg/kg)	PCE (µg/kg)	CBZ (µg/kg)	1,2-DCB (µg/kg)	1,4-DCB (µg/kg)	BNZ (µg/kg)	TOL (µg/kg)	EBZ (µg/kg)	XYL (µg/kg)
B9/											
1'	230,000	ND(200)	430	1,080	ND(200)	ND(200)	ND(200)	390	330	ND(200)	990
5'	110	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
10'	140	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(15)
15'	92	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
20'	100	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(15)
25'	110	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
30'	100	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
35'	140	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
40'	120	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
45'	150	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
50'	140	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
55'	120	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
B10/											
1'	ND(50)	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
5'	ND(50)	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
10'	ND(50)	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
15'	ND(50)	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
20'	ND(50)	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
B11/											
1'	2,600	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
5'	ND(50)	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
10'	83	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
15'	ND(50)	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
20'	ND(50)	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
25'	ND(50)	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
30'	60	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
35'	53	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
40'	120	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
45'	170	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.

MR000087

TABLE 3 CONTINUED

TRPH AND VOC ANALYTICAL DATA

SAMPLE DESIGNATION/DEPTH (feet below original grade)	CONCENTRATION OF ANALYTE IN SOIL										
	TRPH (mg/kg)	1,1,1-TCA (µg/kg)	TCE (µg/kg)	PCE (µg/kg)	CBZ (µg/kg)	1,2-DCB (µg/kg)	1,4-DCB (µg/kg)	BNZ (µg/kg)	TOL (µg/kg)	EBZ (µg/kg)	XYL (µg/kg)
B12/											
1'	58,000	ND(5)	48	ND(5)	ND(5)	ND(5)	ND(5)	25	8	ND(5)	ND(15)
5'	45,000	ND(5)	40	ND(5)	ND(5)	ND(5)	ND(5)	37	10	ND(5)	ND(15)
10'	ND(50)	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
15'	ND(50)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(15)
20'	94	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
25'	65	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(15)
30'	760	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(15)
35'	ND(50)	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
40'	ND(50)	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
45'	ND(50)	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
50'	71	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
55'	ND(50)	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
B13/											
1'	10,000	ND(5)	2,200	91	ND(5)	ND(5)	ND(5)	340	19	ND(5)	34
5'	ND(50)	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
10'	ND(50)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(15)
15'	ND(50)	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
20'	ND(50)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(15)
25'	ND(50)	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
30'	ND(50)	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
35'	ND(50)	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
40'	ND(50)	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
45'	ND(50)	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
50'	ND(50)	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
55'	ND(50)	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
60'	ND(50)	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.

MR000088

TABLE 3 CONTINUED

TRPH AND VOC ANALYTICAL DATA

SAMPLE DESIGNATION/DEPTH (feet below original grade)	CONCENTRATION OF ANALYTE IN SOIL										
	TRPH (mg/kg)	1,1,1-TCA (µg/kg)	TCE (µg/kg)	PCE (µg/kg)	CBZ (µg/kg)	1,2-DCB (µg/kg)	1,4-DCB (µg/kg)	BNZ (µg/kg)	TOL (µg/kg)	EBZ (µg/kg)	XYL (µg/kg)
B14/											
1'	22,000	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	14,000	ND(2,500)	ND(2,500)	ND(7,500)
5'	ND(50)	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
10'	ND(50)	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
15'	ND(50)	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
20'	ND(50)	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
25'	ND(50)	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
30'	ND(50)	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
35'	ND(50)	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
40'	ND(50)	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
45'	ND(50)	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
50'	ND(50)	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
55'	ND(50)	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.

NOTES:

1) TRPH means total recoverable petroleum hydrocarbons.
1,1,1-TCA means 1,1,1-trichloroethane.
TCE means trichloroethene.
PCE means tetrachloroethene.
CBZ means chlorobenzene.
1,2-DCB means 1,2-dichlorobenzene
1,4-DCB means 1,4-dichlorobenzene.
BNZ means benzene.
TOL means toluene.
EBZ means ethylbenzene.
XYL means total xylenes.

MR000089

TABLE 3 CONTINUED

TRPH AND VOC ANALYTICAL DATA

2) ND( ) means not detected at the detection limit shown in parentheses.

3) N.A. means that analyte was not analyzed for.

4) Soil samples were collected on the following days:

- December 20, 1995 - B1/1', B1/5', B1/10', B1/15', B1/20', B2/1', B2/5', B2/10', B2/15', B2/20', B2/25', B2/30', B2/35', B2/40', B2/45', B2/50', B3/1', B3/5', B3/10', B3/15', B3/20', B3/25', B3/30', B3/35', B3/40', B3/45', B3/50', B4/1', B4/5', B4/10', B4/15', B4/20', B4/25', B4/30', B4/35', B4/40'

- December 21, 1995 - B5/1', B5/5', B5/10', B6/1', B6/5', B6/10', B6/15', B6/20', B6/25', B6/30', B6/35', B6/40', B6/45', B6/50', B7/1', B7/5', B7/10', B7/15', B7/20', B7/25', B7/30', B7/35', B7/40', B7/45', B7/50', B7/55', B7/60'

- December 22, 1995 - B7/65', B2/55', B3/55', B8/1', B8/5', B8/10', B8/15', B8/20', B8/25', B8/30', B8/35', B8/40', B8/45', B8/50', B8/55', B8/60', B9/1', B9/5', B9/10', B9/15', B9/20', B9/25', B9/30', B9/35', B9/40', B9/45', B9/50', B9/55'

- December 27, 1995 - B12/1', B12/5', B12/10', B12/15', B12/20', B12/25', B12/30', B12/35', B12/40', B12/45', B12/50', B12/55', B13/1', B5/5', B13/10', B13/15', B13/20', B13/25', B13/30', B13/35', B13/40', B13/45', B13/50', B13/55', B13/60', B14/1', B14/5', B14/10', B14/15', B14/20', B14/25', B14/30', B14/35', B14/40', B14/45', B14/50', B14/55'

- December 28, 1995 - B5/15', B5/20', B5/25', B5/30', B5/35', B5/40', B5,45', B5/50', B5/55', B10/1', B10/5', B10/10', B10/15', B10/20', B11/1', B11/5', B11/15', B11/20', B11/25', B11/30', B11/35', B11/40', B11/45'

MR000090

TABLE 4

METALS ANALYTICAL DATA

SAMPLE DESIGNATION/DEPTH (feet below original grade)	As (mg/kg)	Ba (mg/kg)	Cd (mg/kg)	Cr (mg/kg)	Co (mg/kg)	Cu (mg/kg)	Pb (mg/kg)	Ni (mg/kg)	Th (mg/kg)	V (mg/kg)	Zn (mg/kg)
B4/											
1'	ND(10)	4.24	ND(1)	ND(1)	ND(1)	ND(1)	33.6	ND(2)	ND(50)	ND(1)	ND(1)
B5/											
15'	ND(10)	81.5	ND(0.5)	12.8	5.94	48	ND(10)	11	58.4	26.4	58.6
20'	ND(10)	165	0.69	16.1	10.5	87.4	ND(10)	15.3	82.7	41.7	87.1
25'	ND(10)	140	ND(0.5)	15.8	9.67	62.3	ND(10)	11.8	77.9	40.9	76.1
30'	10.3	93.6	ND(0.5)	14.2	7.49	74	ND(10)	11.3	60.3	28.6	64.7
B7/											
35'	ND(10)	117	ND(0.5)	12.2	8	25	ND(10)	9.22	63.5	31.5	66.1
B8/											
1'	ND(10)	515	ND(0.5)	ND(1)	ND(1)	46.4	874	ND(2)	ND(50)	ND(1)	12.6
10'	ND(10)	108	ND(0.5)	10.5	9.65	19.6	ND(10)	8.71	55.3	27.8	44.2
B9/											
1'	ND(10)	442	0.78	2.94	ND(1)	14.7	1,460	2.04	ND(50)	7.37	56.1
B12/											
1'	ND(10)	98.3	ND(0.5)	13.2	5.7	35.6	27.7	8.95	ND(50)	26.4	68.4
5'	ND(10)	99.5	ND(0.5)	17.9	7.09	25.3	ND(10)	10.9	53.9	35.3	45.2
30'	ND(10)	59.2	ND(0.5)	8.85	4.54	19.1	ND(10)	6.55	ND(50)	20.6	32.9
B13/											
1'	ND(10)	373	0.64	14.8	6.79	31.1	106	14.2	53.8	27.2	62.7

MR000091

TABLE 4 CONTINUED

METALS ANALYTICAL DATA

SAMPLE DESIGNATION/DEPTH (feet below original grade)	As (mg/kg)	Ba (mg/kg)	Cd (mg/kg)	Cr (mg/kg)	Co (mg/kg)	Cu (mg/kg)	Pb (mg/kg)	Ni (mg/kg)	Th (mg/kg)	V (mg/kg)	Zn (mg/kg)
B14/ 1'	ND(10)	153	0.66	13.3	5.86	24.9	223	9.8	ND(50)	25.3	75.9

NOTES:

1) As means arsenic.
Ba means barium.
Cd means cadmium.
Cr means chromium.
Co means cobalt.
Cu means copper.
Pb means lead.
Ni means nickel.
Th means thallium.
V means vanadium.
Zn means zinc.

2) ND( ) means not detected at the detection limit shown in parentheses.

MR000092

TABLE 5

PCB ANALYTICAL DATA

SAMPLE DESIGNATION/DEPTH (feet below original grade)	PCB COMPOUND - CONCENTRATION (µg/kg)
B5/	
15'	Aroclor 1260 - 170
20'	Aroclor 1260 - 220
25'	Aroclor 1260 - 540
30'	Aroclor 1260 - 540
B7/	
35'	Aroclor 1260 - 230
B8/	
1'	None Detected
10'	None Detected
B9/	
1'	None Detected
B12/	
1'	Aroclor 1260 - 2,200
5'	None Detected
30'	None Detected
B13/	
1'	None Detected
B14/	
1'	Aroclor 1260 - 4,200

NOTE:

1) Detection limits for PCB compounds ranged as follows:

- 33 to 67 µg/kg for Samples B7/35', B8/10', B12/5', B12/30', and B14/1'
- 132 to 268 µg/kg for Samples B5/15', B5/20', B5/25', and B5/30'
- 264 to 536 µg/kg for Sample B13/1'
- 660 to 1,340 µg/kg for Sample B12/1'
- 3,960 to 8,040 µg/kg for Sample B9/1'
- 9,900 to 20,100 µg/kg for Sample B8/1'

APPENDIX A-3

Historical Data Summary Tables
From
Clayton Group Services, 2000. *Draft Report for the 1st Phase of the Limited Subsurface Investigation for the Mouren-Laurens Oil Company Facility*, 641 – 719 East Compton Boulevard, Compton, California, dated 11 February 2000.

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Table 5-1
Area 1A - Field Screening Soil Results
EPA Method 8015M

SAMPLE ID	DATE	TPH-G (C6-C12)	TPH-D (C13-C22)	TPH-EXT (C23-C36)
Units		mg/kg	mg/kg	mg/kg
PT1-1A-SB-1-1'	9/9/99	16&	<10	<10
PT1-1A-SB-1-5'	9/9/99	3,500&	4,800#	770
PT1-1A-SB-1-10'	9/9/99	1,900&	2,100#	180
PT1-1A-SB-2-1'	9/9/99	<10	140#	200
PT1-1A-SB-2-5'	9/9/99	<10	<10	<10
PT1-1A-SB-2-10'	9/9/99	<10	<10	<10
PT1-1A-SB-3-1'	9/9/99	<10	1,200#	1,600
PT1-1A-SB-3-5'	9/9/99	<10	<10	<10
PT1-1A-SB-3-10'	9/9/99	<10	<10	<10
PT1-1A-SB-4-1'	9/9/99	<10	2,800#	4,200
PT1-1A-SB-4-5'	9/9/99	<10	<10	<10
PT1-1A-SB-4-10'	9/9/99	<10	<10	<10
PT1-1A-SB-5-1'	9/9/99	<10	3,300#	3,400
PT1-1A-SB-5-5'	9/9/99	<10	<10	<10
PT1-1A-SB-5-10'	9/9/99	<10	<10	<10
PT1-1A-SB-6-1'	9/9/99	19&	5,500#	6,000
PT1-1A-SB-6-5'	9/9/99	<10	<10	<10
PT1-1A-SB-6-10'	9/9/99	<10	<10	<10
PT1-1A-SB-7-1'	9/9/99	<10	1,900#	2,000
PT1-1A-SB-7-5'	9/9/99	<10	<10	<10
PT1-1A-SB-7-10'	9/9/99	<10	<10	<10
PT1-1A-SB-8-1'	9/9/99	<10	300#	430
PT1-1A-SB-8-5'	9/9/99	<10	<10	<10
PT1-1A-SB-8-10'	9/9/99	<10	<10	<10

Notes:
& = Gasoline range organics not identified as gasoline.
# = Diesel range organics not identified as diesel.

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Table 5-1
Area 2 - Field Screening Soil Results
EPA Method 8015M

SAMPLE ID	DATE	TPH-G (C6-C12)	TPH-D (C13-C22)	TPH-EXT (C23-C36)
Units		mg/kg	mg/kg	mg/kg
PT1-2-SB-1-1'	9/9/99	<10	<10	<10
PT1-2-SB-1-5'	9/9/99	<10	<10	<10
PT1-2-SB-1-10'	9/9/99	<10	<10	<10
PT1-2-SB-2-1'	9/9/99	<10	4,100#	1,900
PT1-2-SB-2-5'	9/9/99	<10	1,800#	640
PT1-2-SB-2-10'	9/9/99	<10	1,100#	570
PT1-2-SB-3-1'	9/9/99	<10	5,200#	6,000
PT1-2-SB-3-5'	9/9/99	<10	3,700#	2,800
PT1-2-SB-3-10'	9/9/99	<10	<10	<10
PT1-2-SB-4-1'	9/9/99	<10	<10	<10
PT1-2-SB-4-5'	9/9/99	<10	<10	<10
PT1-2-SB-4-10'	9/9/99	<10	<10	<10
PT1-2-SB-5-1'	9/9/99	<10	<10	<10
PT1-2-SB-5-5'	9/9/99	<10	<10	<10
PT1-2-SB-5-10'	9/9/99	<10	<10	<10
PT1-2-SB-6-1'	9/9/99	<10	<10	<10
PT1-2-SB-6-5'	9/9/99	<10	<10	<10
PT1-2-SB-6-10'	9/9/99	<10	<10	<10
PT1-2-SB-7-1'	9/9/99	<10	<10	<10
PT1-2-SB-7-5'	9/9/99	<10	<10	<10
PT1-2-SB-7-10'	9/9/99	<10	<10	<10
PT1-2-SB-8-1'	9/9/99	<10	<10	<10
PT1-2-SB-8-5'	9/9/99	<10	<10	<10
PT1-2-SB-8-10'	9/9/99	<10	<10	<10
PT1-2-SB-9-1'	9/9/99	<10	<10	<10
PT1-2-SB-9-5'	9/9/99	<10	<10	<10
PT1-2-SB-9-10'	9/9/99	<10	<10	<10

Notes:
& = Gasoline range organics not identified as gasoline.
# = Diesel range organics not identified as diesel.

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Table 5-1
Area 13 - Field Screening Soil Results
EPA Method 8015M

SAMPLE ID	DATE	TPH-G (C6-C12)	TPH-D (C13-C22)	TPH-EXT (C23-C36)
Units		mg/kg	mg/kg	mg/kg
PT1-13-SB-1-1'	9/8/99	<10	240#	360
PT1-13-SB-1-5'	9/8/99	<10	<10	<10
PT1-13-SB-1-10'	9/8/99	<10	<10	<10
PT1-13-SB-2-1'	9/8/99	<10	2,100#	2,400
PT1-13-SB-2-5'	9/8/99	<10	<10	<10
PT1-13-SB-2-10'	9/8/99	<10	<10	<10
PT1-13-SB-3-1'	9/8/99	<10	1,000#	1,000
PT1-13-SB-3-5'	9/8/99	<10	<10	<10
PT1-13-SB-3-10'	9/8/99	<10	400#	880
PT1-13-SB-4-1'	9/8/99	<10	4,000#	5,300
PT1-13-SB-4-5'	9/8/99	2,600&	5,000#	1,100
PT1-13-SB-4-10'	9/8/99	1,700&	2,600#	340

Notes:
& = Gasoline range organics not identified as gasoline.
# = Diesel range organics not identified as diesel.

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ATTORNEY-CLIENT AND WORK PRODUCT
PRIVILEGES ASSERTED

Table 5-1
Area 16 - Field Screening Soil Results
EPA Method 8015M

SAMPLE ID	DATE	TPH-G (C6-C12)	TPH-D (C13-C22)	TPH-EXT (C23-C36)
Units		mg/kg	mg/kg	mg/kg
PT1-16-SB-1-1'	9/8/99	<10	110#	170
PT1-16-SB-1-5'	9/8/99	35&	650#	600
PT1-16-SB-1-10"	9/8/99	<10	<10	<10
PT1-16-SB-2-1'	9/8/99	<10	330#	540
PT1-16-SB-2-5'	9/8/99	<10	150#	110
PT1-16-SB-2-10'	9/8/99	<10	<10	<10
PT1-16-SB-3-1'	9/8/99	<10	190#	31
PT1-16-SB-3-5'	9/8/99	<10	<10	<10
PT1-16-SB-3-10'	9/8/99	<10	<10	<10
PT1-16-SB-4-1'	9/9/99	<10	55#	51
PT1-16-SB-4-5'	9/9/99	<10	44#	24
PT1-16-SB-4-10'	9/9/99	<10	<10	<10

Notes:
& = Gasoline range organics not identified as gasoline.
# = Diesel range organics not identified as diesel.

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ATTORNEY-CLIENT AND WORK PRODUCT
PRIVILEGES ASSERTED

Table 5-2A
Area 1A - Summary of Soil Results
EPA Method 8260

SAMPLE ID	DATE	Acetone	Benzene	2-Butanone	n-Butylbenzene	sec-Butylbenzene	tert-Butylbenzene	Chlorobenzene	1,2-Dichlorobenzene	1,1-Dichloroethane	cis-1,2-Dichloroethene	Ethylbenzene	2-Hexanone	Isopropylbenzene	p-Isopropyltoluene	4-Methyl-2-pentanone
Units		µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg
Residential PRG[1]		1,400,000	620	NA	130,000	100,000	120,000	54,000	370,000	570,000	42,000	230,000	NA	NA	NA	NA
PT1-1A-SB-1-1'	9/9/99	<500	**1,250**	<500	<100	**315**	<100	**728**	<100	**320**	<100	**6,520**	<500	**829**	**308**	<500
PT1-1A-SB-1-5'	9/9/99	<5000	**4,110**	<5000	<1000	**3,580**	<1000	<1000	<1000	<1000	<1000	**31,200**	<5000	**5,660**	**4,220**	<5000
PT1-1A-SB-1-10'	9/9/99	<5000	**9,130**	<5000	<1000	**9,440**	<1000	<1000	<1000	<1000	<1000	**56,300**	<5000	**10,400**	**11,100**	<5000
PT1-1A-SB-1-20'	9/13/99	**71**	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10	<50
PT1-1A-SB-1-30'	9/13/99	**1,790**	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10	<50
PT1-1A-SB-1-40'	9/13/99	**11,300**	**235**	**5,840**	<10	<10	<10	<10	<10	<10	<10	**42**	**72**	<10	<10	**273**
PT1-1A-SB-1-50'	9/13/99	**218**	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10	**50**
PT1-1A-SB-1-60'	9/13/99	<50	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10	<50
PT1-1A-SB-2-1'	9/9/99	<50	**13**	<50	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10	<50
PT1-1A-SB-2-5'	9/9/99	<50	**28**	<50	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10	<50
PT1-1A-SB-2-10'	9/9/99	<50	**70**	<50	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10	<50
PT1-1A-SB-3-1'	9/9/99	<50	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10	<50
PT1-1A-SB-3-5'	9/9/99	**120**	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10	<50
PT1-1A-SB-3-10'	9/9/99	<50	**97**	<50	<10	<10	<10	<10	<10	<10	**13**	<10	<50	<10	<10	<50
PT1-1A-SB-4-1'	9/9/99	<50	**52**	<50	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10	<50
PT1-1A-SB-4-5'	9/9/99	<50	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10	<50
PT1-1A-SB-4-10'	9/9/99	**100**	**93**	<50	<10	<10	<10	<10	<10	<10	**36**	<10	<50	<10	<10	<50

Table 5-2A
Area 1A - Summary of Soil Results
EPA Method 8260

SAMPLE ID	DATE	Naphthalene	n-Propylbenzene	Tetrachloroethene	Toluene	1,2,4-Trichlorobenzene	1,1,1-Trichloroethane	Trichloroethene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	o-Xylene	m/p-Xylene
Units		µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg
Residential PRG[1]		NA	130,000	4,700	520,000	480,000	680,000	2,700	51,000	21,000	280,000	580,000
PT1-1A-SB-1-1'	9/9/99	**313**	**2,160**	**7,160**	**1,030**	<100	<100	**943**	**11,400**	**3,750**	**7,200**	**12,400**
PT1-1A-SB-1-5'	9/9/99	**27,000**	**16,400**	**34,200**	**72,300**	<1000	**4,050**	**2,960**	**115,000**	**35,600**	**56,200**	**123,000**
PT1-1A-SB-1-10'	9/9/99	**65,800**	**34,000**	**40,900**	**114,000**	<1000	**4,900**	**9,490**	**245,000**	**73,200**	**108,000**	**213,000**
PT1-1A-SB-1-20'	9/13/99	**25**	<10	<10	<10	<10	<10	<10	<10	<30	<10	<20
PT1-1A-SB-1-30'	9/13/99	<10	<10	<10	<10	<10	<10	<10	<10	<30	<10	<20
PT1-1A-SB-1-40'	9/13/99	**114**	**12**	**11**	**180**	<10	<10	<10	**112**	**27**	**71**	**165**
PT1-1A-SB-1-50'	9/13/99	<10	<10	<10	<10	<10	<10	<10	<10	<30	<10	<20
PT1-1A-SB-1-60'	9/13/99	<10	<10	<10	<10	<10	<10	<10	<10	<30	<10	<20
PT1-1A-SB-2-1'	9/9/99	<10	<10	<10	<10	<10	<10	<10	<10	<30	<10	<20
PT1-1A-SB-2-5'	9/9/99	<10	<10	<10	<10	<10	<10	<10	<10	<30	<10	<20
PT1-1A-SB-2-10'	9/9/99	<10	<10	<10	<10	<10	<10	**11**	<10	<30	<10	<20
PT1-1A-SB-3-1'	9/9/99	<10	<10	**18**	<10	<10	<10	<10	<10	<30	<10	<20
PT1-1A-SB-3-5'	9/9/99	<10	<10	<10	<10	<10	<10	<10	<10	<30	<10	<20
PT1-1A-SB-3-10'	9/9/99	<10	<10	<10	<10	<10	<10	**63**	<10	<30	<10	<20
PT1-1A-SB-4-1'	9/9/99	<10	<10	<10	<10	<10	<10	<10	<10	<30	<10	<20
PT1-1A-SB-4-5'	9/9/99	<10	<10	<10	<10	<10	<10	<10	<10	<30	<10	<20
PT1-1A-SB-4-10'	9/9/99	<10	<10	<10	<10	<10	<10	**124**	<10	<30	<10	<20

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ATTORNEY-CLIENT AND WORK PRODUCT
PRIVILEGES ASSERTED

Table 5-2A
Area 1A - Summary of Soil Results
EPA Method 8260

SAMPLE ID	DATE	Acetone	Benzene	2-Butanone	n-Butylbenzene	sec-Butylbenzene	tert-Butylbenzene	Chlorobenzene	1,2-Dichlorobenzene	1,1-Dichloroethane	cis-1,2-Dichloroethene	Ethylbenzene	2-Hexanone	Isopropylbenzene	p-Isopropyltoluene	4-Methyl-2-pentanone
Units		µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg
Residential PRG[1]		1,400,000	620	NA	130,000	100,000	120,000	54,000	370,000	570,000	42,000	230,000	NA	NA	NA	NA
PT1-1A-SB-5-1'	9/9/99	**155**	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10	<50
PT1-1A-SB-5-5'	9/9/99	<50	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10	<50
PT1-1A-SB-5-10'	9/9/99	<50	**31**	<50	<10	<10	<10	<10	<10	<10	**56**	<10	<50	<10	<10	<50
PT1-1A-SB-5-20'	9/13/99	<50	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10	<50
PT1-1A-SB-5-30'	9/13/99	<50	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10	<50
PT1-1A-SB-5-40'	9/13/99	<50	**53**	<50	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10	<50
PT1-1A-SB-5-50'	9/13/99	<50	**21**	<50	<10	<10	<10	<10	<10	<10	**58**	<10	<50	<10	<10	<50
PT1-1A-SB-5-60'	9/13/99	<50	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10	<50
PT1-1A-SB-6-1'	9/9/99	**1,710**	**13**	<50	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10	<50
PT1-1A-SB-6-5'	9/9/99	<50	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10	<50
PT1-1A-SB-6-10'	9/9/99	<50	**11**	<50	<10	<10	<10	<10	<10	<10	**78**	<10	<50	<10	<10	<50
PT1-1A-SB-6-20'	9/14/99	<50	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10	<50
PT1-1A-SB-6-30'	9/14/99	<50	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10	<50
PT1-1A-SB-6-40'	9/14/99	<50	**25**	<50	<10	<10	<10	<10	<10	<10	**34**	<10	<50	<10	<10	<50
PT1-1A-SB-6-50'	9/14/99	<50	**76**	<50	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10	<50
PT1-1A-SB-6-60'	9/14/99	<50	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10	<50
PT1-1A-SB-7-1'	9/9/99	**255**	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10	<50
PT1-1A-SB-7-5'	9/9/99	**82**	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10	<50
PT1-1A-SB-7-10'	9/9/99	<50	<10	<50	<10	<10	<10	<10	<10	<10	**120**	<10	<50	<10	<10	<50
PT1-1A-SB-8-1'	9/9/99	**1,080**	<10	<50	<10	**16**	<10	<10	<10	<10	<10	<10	<50	<10	<10	<50
PT1-1A-SB-8-5'	9/9/99	<50	<10	<50	<10	<10	<10	<10	<10	<10	**26**	<10	<50	<10	<10	<50
PT1-1A-SB-8-10'	9/9/99	<50	<10	<50	<10	<10	<10	<10	<10	<10	**263**	<10	<50	<10	<10	<50

(1) 1998 Preliminary Remediation Goals

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Table 5-2A
Area 1A - Summary of Soil Results
EPA Method 8260

SAMPLE ID	DATE	Naphthalene	n-Propylbenzene	Tetrachloroethene	Toluene	1,2,4-Trichlorobenzene	1,1,1-Trichloroethane	Trichloroethene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	o-Xylene	m/p-Xylene
Units		µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg
Residential PRG[1]		NA	130,000	4,700	520,000	480,000	680,000	2,700	51,000	21,000	280,000	580,000
PT1-1A-SB-5-1'	9/9/99	<10	<10	<10	<10	<10	<10	<10	<10	<30	<10	<20
PT1-1A-SB-5-5'	9/9/99	<10	<10	<10	<10	<10	<10	<10	<10	<30	<10	<20
PT1-1A-SB-5-10'	9/9/99	<10	<10	<10	<10	<10	<10	**109**	<10	<30	<10	<20
PT1-1A-SB-5-20'	9/13/99	<10	<10	<10	<10	<10	<10	<10	<10	<30	<10	<20
PT1-1A-SB-5-30'	9/13/99	<10	<10	<10	<10	<10	<10	<10	<10	<30	<10	<20
PT1-1A-SB-5-40'	9/13/99	<10	<10	<10	<10	<10	<10	**107**	<10	<30	<10	<20
PT1-1A-SB-5-50'	9/13/99	<10	<10	<10	<10	<10	<10	<10	<10	<30	<10	<20
PT1-1A-SB-5-60'	9/13/99	<10	<10	<10	<10	<10	<10	<10	<10	<30	<10	<20
PT1-1A-SB-6-1'	9/9/99	<10	<10	<10	<10	<10	<10	<10	<10	<30	<10	**26**
PT1-1A-SB-6-5'	9/9/99	<10	<10	<10	<10	<10	<10	<10	<10	<30	<10	<20
PT1-1A-SB-6-10'	9/9/99	<10	<10	<10	<10	<10	<10	**81**	<10	<30	<10	<20
PT1-1A-SB-6-20'	9/14/99	<10	<10	<10	<10	<10	<10	<10	<10	<30	<10	<20
PT1-1A-SB-6-30'	9/14/99	<10	<10	<10	<10	<10	<10	<10	<10	<30	<10	<20
PT1-1A-SB-6-40'	9/14/99	<10	<10	<10	<10	<10	<10	**51**	<10	<30	<10	<20
PT1-1A-SB-6-50'	9/14/99	<10	<10	<10	<10	<10	<10	**34**	<10	<30	<10	<20
PT1-1A-SB-6-60'	9/14/99	<10	<10	<10	<10	<10	<10	<10	<10	<30	<10	<20
PT1-1A-SB-7-1'	9/9/99	<10	<10	<10	<10	<10	<10	<10	<10	<30	<10	<20
PT1-1A-SB-7-5'	9/9/99	<10	<10	<10	<10	<10	<10	<10	<10	<30	<10	<20
PT1-1A-SB-7-10'	9/9/99	<10	<10	<10	<10	<10	<10	**55**	<10	<30	<10	<20
PT1-1A-SB-8-1'	9/9/99	**16**	**16**	<10	**15**	<10	<10	<10	**97**	**33**	**17**	<20
PT1-1A-SB-8-5'	9/9/99	<10	<10	<10	<10	<10	<10	**15**	<10	<30	<10	<20
PT1-1A-SB-8-10'	9/9/99	<10	<10	<10	<10	<10	<10	**66**	<10	<30	<10	<20

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ATTORNEY-CLIENT AND WORK PRODUCT
PRIVILEGES ASSERTED

Table 5-2A
Area 2 - Summary of Soil Results
EPA Method 8260

SAMPLE ID	DATE	Acetone	Benzene	2-Butanone	n-Butylbenzene	sec-Butylbenzene	tert-Butylbenzene	Chlorobenzene	1,2-Dichlorobenzene	1,1-Dichloroethane	cis-1,2-Dichloroethene	Ethylbenzene	2-Hexanone	Isopropylbenzene	p-Isopropyltoluene
Units		µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg
Residential PRG[(1)]		1,400,000	620	NA	130,000	100,000	120,000	54,000	370,000	570,000	42,000	230,000	NA	NA	NA
PT1-2-SB-1-1'	9/9/99	<50	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10
PT1-2-SB-1-5'	9/9/99	<50	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10
PT1-2-SB-1-10'	9/9/99	<50	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10
PT1-2-SB-2-1'	9/9/99	**460**	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10
PT1-2-SB-2-5'	9/9/99	**267**	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10
PT1-2-SB-2-10'	9/9/99	<50	<10	<50	<10	<10	<10	<10	<10	<10	**32**	<10	<50	<10	<10
PT1-2-SB-2-20'	9/14/99	<50	<10	<50	<10	<10	<10	<10	<10	<10	**45**	<10	<50	<10	<10
PT1-2-SB-2-30'	9/14/99	<50	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10
PT1-2-SB-2-40'	9/14/99	**163**	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10
PT1-2-SB-2-50'	9/14/99	<50	<10	<50	<10	<10	<10	<10	<10	<10	**33**	<10	<50	<10	<10
PT1-2-SB-2-60'	9/14/99	<50	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10
PT1-2-SB-3-1'	9/9/99	**350**	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10
PT1-2-SB-3-5'	9/9/99	<50	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10
PT1-2-SB-3-10'	9/9/99	<50	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10
PT1-2-SB-3-20'	9/15/99	<50	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10
PT1-2-SB-3-30'	9/15/99	<50	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10
PT1-2-SB-3-40'	9/15/99	<50	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10
PT1-2-SB-3-50'	9/15/99	<50	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10
PT1-2-SB-3-60'	9/15/99	<50	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10
PT1-2-SB-4-1'	9/9/99	<50	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10
PT1-2-SB-4-5'	9/9/99	<50	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10
PT1-2-SB-4-10'	9/9/99	<50	<10	<50	<10	<10	<10	<10	<10	<10	**22**	<10	<50	<10	<10

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ATTORNEY-CLIENT AND WORK PRODUCT
PRIVILEGES ASSERTED

Table 5-2A
Area 2 - Summary of Soil Results
EPA Method 8260

SAMPLE ID	DATE	4-Methyl-2-pentanone	Naphthalene	n-Propylbenzene	Tetrachloroethene	Toluene	1,2,4-Trichlorobenzene	1,1,1-Trichloroethane	Trichloroethene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	o-Xylene	m/p-Xylene
Units		µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg
Residential PRG[1]		NA	NA	130,000	4,700	520,000	480,000	680,000	2,700	51,000	21,000	280,000	580,000
PT1-2-SB-1-1'	9/9/99	<50	<10	<10	<10	<10	<10	<10	<10	<10	<30	<10	<20
PT1-2-SB-1-5'	9/9/99	<50	<10	<10	<10	<10	<10	<10	<10	<10	<30	<10	<20
PT1-2-SB-1-10'	9/9/99	<50	<10	<10	<10	<10	<10	<10	<10	<10	<30	<10	<20
PT1-2-SB-2-1'	9/9/99	<50	<10	<10	<10	<10	<10	<10	<10	<10	<30	<10	<20
PT1-2-SB-2-5'	9/9/99	<50	<10	<10	<10	<10	<10	<10	<10	<10	<30	<10	<20
PT1-2-SB-2-10'	9/9/99	<50	<10	<10	<10	<10	<10	<10	**180**	<10	<30	<10	<20
PT1-2-SB-2-20'	9/14/99	<50	<10	<10	<10	<10	<10	<10	**77**	<10	<30	<10	<20
PT1-2-SB-2-30'	9/14/99	<50	<10	<10	<10	<10	<10	<10	<10	<10	<30	<10	<20
PT1-2-SB-2-40'	9/14/99	<50	<10	<10	<10	<10	<10	<10	<10	<10	<30	<10	<20
PT1-2-SB-2-50'	9/14/99	<50	<10	<10	<10	<10	<10	<10	**98**	<10	<30	<10	<20
PT1-2-SB-2-60'	9/14/99	<50	<10	<10	<10	<10	<10	<10	<10	<10	<30	<10	<20
PT1-2-SB-3-1'	9/9/99	<50	<10	<10	<10	<10	<10	<10	<10	<10	<30	<10	<20
PT1-2-SB-3-5'	9/9/99	<50	<10	<10	<10	<10	<10	<10	**196**	<10	<30	<10	<20
PT1-2-SB-3-10'	9/9/99	<50	<10	<10	<10	<10	<10	<10	**630**	<10	<30	<10	<20
PT1-2-SB-3-20'	9/15/99	<50	<10	<10	<10	<10	<10	<10	<10	<10	<30	<10	<20
PT1-2-SB-3-30'	9/15/99	<50	<10	<10	<10	<10	<10	<10	<10	<10	<30	<10	<20
PT1-2-SB-3-40'	9/15/99	<50	<10	<10	<10	<10	<10	<10	<10	<10	<30	<10	<20
PT1-2-SB-3-50'	9/15/99	<50	<10	<10	<10	<10	<10	<10	<10	<10	<30	<10	<20
PT1-2-SB-3-60'	9/15/99	<50	<10	<10	<10	<10	<10	<10	<10	<10	<30	<10	<20
PT1-2-SB-4-1'	9/9/99	<50	<10	<10	<10	<10	<10	<10	**103**	<10	<30	<10	<20
PT1-2-SB-4-5'	9/9/99	<50	<10	<10	<10	<10	<10	<10	**16**	<10	<30	<10	<20
PT1-2-SB-4-10'	9/9/99	<50	<10	<10	<10	<10	<10	<10	<10	<10	<30	<10	<20
PT1-2-SB-4-10'	9/9/99	<50	<10	<10	<10	<10	<10	<10	**240**	<10	<30	<10	<20

Table 5-2A
Area 2 - Summary of Soil Results
EPA Method 8260

SAMPLE ID	DATE	Acetone	Benzene	2-Butanone	n-Butylbenzene	sec-Butylbenzene	tert-Butylbenzene	Chlorobenzene	1,2-Dichlorobenzene	1,1-Dichloroethane	cis-1,2-Dichloroethene	Ethylbenzene	2-Hexanone	Isopropylbenzene	p-Isopropyltoluene
Units		µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg
Residential PRG[1]		1,400,000	620	NA	130,000	100,000	120,000	54,000	370,000	570,000	42,000	230,000	NA	NA	NA
PT1-2-SB-5-1'	9/9/99	<50	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10
PT1-2-SB-5-5'	9/9/99	<50	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10
PT1-2-SB-5-10'	9/9/99	<50	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10
PT1-2-SB-6-1'	9/9/99	**58**	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10
PT1-2-SB-6-5'	9/9/99	<50	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10
PT1-2-SB-6-10'	9/9/99	<50	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10
PT1-2-SB-7-1'	9/9/99	<50	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10
PT1-2-SB-7-5'	9/9/99	<50	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10
PT1-2-SB-7-10'	9/9/99	<50	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10
PT1-2-SB-7-20'	9/15/99	<50	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10
PT1-2-SB-7-30'	9/15/99	<50	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10
PT1-2-SB-7-40'	9/15/99	<50	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10
PT1-2-SB-7-50'	9/15/99	<50	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10
PT1-2-SB-7-60'	9/15/99	<50	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10
PT1-2-SB-8-1'	9/9/99	<50	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10
PT1-2-SB-8-5'	9/9/99	<50	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10
PT1-2-SB-8-10'	9/9/99	<50	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10
PT1-2-SB-9-1'	9/9/99	<50	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10
PT1-2-SB-9-5'	9/9/99	<50	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10
PT1-2-SB-9-10'	9/9/99	<50	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10

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Table 5-2A
Area 2 - Summary of Soil Results
EPA Method 8260

SAMPLE ID	DATE	4-Methyl-2-pentanone	Naphthalene	n-Propylbenzene	Tetrachloroethene	Toluene	1,2,4-Trichlorobenzene	1,1,1-Trichloroethane	Trichloroethene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	o-Xylene	m/p-Xylene
Units		µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg
Residential PRG(1)		NA	NA	130,000	4,700	520,000	480,000	680,000	2,700	51,000	21,000	280,000	580,000
PT1-2-SB-5-1'	9/9/99	<50	<10	<10	<10	<10	<10	<10	<10	<10	<30	<10	<20
PT1-2-SB-5-5'	9/9/99	<50	<10	<10	<10	<10	<10	<10	**15**	<10	<30	<10	<20
PT1-2-SB-5-10'	9/9/99	<50	<10	<10	<10	<10	<10	<10	<10	<10	<30	<10	<20
PT1-2-SB-6-1'	9/9/99	<50	<10	<10	<10	<10	<10	<10	<10	<10	<30	<10	<20
PT1-2-SB-6-5'	9/9/99	<50	<10	<10	<10	<10	<10	<10	<10	<10	<30	<10	<20
PT1-2-SB-6-10'	9/9/99	<50	<10	<10	<10	<10	<10	<10	<10	<10	<30	<10	<20
PT1-2-SB-7-1'	9/9/99	<50	<10	<10	<10	<10	<10	<10	<10	<10	<30	<10	<20
PT1-2-SB-7-5'	9/9/99	<50	<10	<10	<10	<10	<10	<10	<10	<10	<30	<10	<20
PT1-2-SB-7-10'	9/9/99	<50	<10	<10	<10	<10	<10	<10	<10	<10	<30	<10	<20
PT1-2-SB-7-20'	9/15/99	<50	<10	<10	<10	<10	<10	<10	**22**	<10	<30	<10	<20
PT1-2-SB-7-30'	9/15/99	<50	<10	<10	<10	<10	<10	<10	<10	<10	<30	<10	<20
PT1-2-SB-7-40'	9/15/99	<50	<10	<10	<10	<10	<10	<10	<10	<10	<30	<10	<20
PT1-2-SB-7-50'	9/15/99	<50	<10	<10	<10	<10	<10	<10	<10	<10	<30	<10	<20
PT1-2-SB-7-60'	9/15/99	<50	<10	<10	<10	<10	<10	<10	<10	<10	<30	<10	<20
PT1-2-SB-8-1'	9/9/99	<50	<10	<10	<10	<10	<10	<10	<10	<10	<30	<10	<20
PT1-2-SB-8-5'	9/9/99	<50	<10	<10	<10	<10	<10	<10	<10	<10	<30	<10	<20
PT1-2-SB-8-10'	9/9/99	<50	<10	<10	<10	<10	<10	<10	<10	<10	<30	<10	<20
PT1-2-SB-9-1'	9/9/99	<50	<10	<10	<10	<10	<10	<10	<10	<10	<30	<10	<20
PT1-2-SB-9-5'	9/9/99	<50	<10	<10	<10	<10	<10	<10	<10	<10	<30	<10	<20
PT1-2-SB-9-10'	9/9/99	<50	<10	<10	<10	<10	<10	<10	<10	<10	<30	<10	<20

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ATTORNEY-CLIENT AND WORK PRODUCT
PRIVILEGES ASSERTED

Table 5-2A
Area 3 - Summary of Soil Results
EPA Method 8260

SAMPLE ID	DATE	Acetone	Benzene	2-Butanone	n-Butylbenzene	sec-Butylbenzene	tert-Butylbenzene	Chlorobenzene	1,2-Dichlorobenzene	1,1-Dichloroethane	cis-1,2-Dichloroethene	Ethylbenzene	2-Hexanone	Isopropylbenzene	p-Isopropyltoluene
Units		µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg
Residential PRG[1]		1,400,000	620	NA	130,000	100,000	120,000	54,000	370,000	570,000	42,000	230,000	NA	NA	NA
PT1-3-SB-1-1'	9/16/99	<50	<10	<50	<10	**203**	<10	<10	<10	<10	<10	<10	<50	<10	**322**
PT1-3-SB-1-5'	9/16/99	<50	<10	<50	<10	**112**	<10	<10	<10	<10	<10	<10	<50	<10	**167**
PT1-3-SB-1-10'	9/17/99	<50	<10	<50	**423**	**110**	<10	<10	<10	<10	<10	<10	<50	<10	**159**
PT1-3-SB-2-1'	9/17/99	<50	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10
PT1-3-SB-2-5'	9/17/99	<50	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10
PT1-3-SB-2-10'	9/17/99	<50	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10
PT1-3-SB-3-1'	9/17/99	<50	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10
PT1-3-SB-3-5'	9/17/99	<50	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10
PT1-3-SB-3-10'	9/17/99	<50	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10

(1) 1998 Preliminary Remediation Goals

Table 5-2A
Area 3 - Summary of Soil Results
EPA Method 8260

SAMPLE ID	DATE	4-Methyl-2-pentanone	Naphthalene	n-Propylbenzene	Tetrachloroethene	Toluene	1,2,4-Trichlorobenzene	1,1,1-Trichloroethane	Trichloroethene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	o-Xylene	m/p-Xylene
Units		µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg
Residential PRG[1]		NA	NA	130,000	4,700	520,000	480,000	680,000	2,700	51,000	21,000	280,000	580,000
PT1-3-SB-1-1'	9/16/99	<50	**2,110**	**186**	<10	<10	<10	<10	<10	**1,820**	**657**	**205**	**386**
PT1-3-SB-1-5'	9/16/99	<50	**933**	**105**	<10	<10	<10	<10	<10	**857**	**322**	**120**	**200**
PT1-3-SB-1-10'	9/17/99	<50	**821**	**112**	<10	<10	<10	<10	<10	**753**	**265**	<10	<20
PT1-3-SB-2-1'	9/17/99	<50	<10	<10	<10	<10	<10	<10	<10	<10	<30	<10	<20
PT1-3-SB-2-5'	9/17/99	<50	<10	<10	<10	<10	<10	<10	<10	<10	<30	<10	<20
PT1-3-SB-2-10'	9/17/99	<50	<10	<10	<10	<10	<10	<10	<10	<10	<30	<10	<20
PT1-3-SB-3-1'	9/17/99	<50	<10	<10	<10	<10	<10	<10	<10	<10	<30	<10	<20
PT1-3-SB-3-5'	9/17/99	<50	<10	<10	<10	<10	<10	<10	<10	<10	<30	<10	<20
PT1-3-SB-3-10'	9/17/99	<50	<10	<10	<10	<10	<10	<10	<10	<10	<30	<10	<20

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CONFIDENTIAL AND PRIVILEGED
ATTORNEY-CLIENT AND WORK PRODUCT
PRIVILEGES ASSERTED

Table 5-2A
Area 7 - Summary of Soil Results
EPA Method 8260

SAMPLE ID	DATE	Acetone	Benzene	2-Butanone	n-Butylbenzene	sec-Butylbenzene	tert-Butylbenzene	Chlorobenzene	1,2-Dichlorobenzene	1,1-Dichloroethane	cis-1,2-Dichloroethene	Ethylbenzene	2-Hexanone	Isopropylbenzene	p-Isopropyltoluene
Units		µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg
Residential PRG[(1)]		1,400,000	620	NA	130,000	100,000	120,000	54,000	370,000	570,000	42,000	230,000	NA	NA	NA
PT1-7-SB-1-1'	9/24/99	<50	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10
PT1-7-SB-1-10'	9/24/99	<50	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10
PT1-7-SB-2-1'	9/20/99	<50	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10
PT1-7-SB-2-10'	9/20/99	<50	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10
PT1-7-SB-3-1'	9/20/99	<50	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10
PT1-7-SB-3-10'	9/20/99	<50	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10
PT1-7-SB-4-1'	9/20/99	<50	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10
PT1-7-SB-4-10'	9/20/99	<50	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10

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CONFIDENTIAL AND PRIVILEGED
ATTORNEY-CLIENT AND WORK PRODUCT
PRIVILEGES ASSERTED

Table 5-2A
Area 7 - Summary of Soil Results
EPA Method 8260

SAMPLE ID	DATE	4-Methyl-2-pentanone	Naphthalene	n-Propylbenzene	Tetrachloroethene	Toluene	1,2,4-Trichlorobenzene	1,1,1-Trichloroethane	Trichloroethene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	o-Xylene	m/p-Xylene
Units		µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg
Residential PRG(1)		NA	NA	130,000	4,700	520,000	480,000	680,000	2,700	51,000	21,000	280,000	580,000
PT1-7-SB-1-1'	9/24/99	<50	<10	<10	<10	<10	<10	<10	<10	<10	<30	<10	<20
PT1-7-SB-1-10'	9/24/99	<50	<10	<10	<10	<10	<10	<10	<10	<10	<30	<10	<20
PT1-7-SB-2-1'	9/20/99	<50	<10	<10	<10	<10	<10	<10	<10	<10	<30	<10	<20
PT1-7-SB-2-10'	9/20/99	<50	<10	<10	<10	<10	<10	<10	<10	<10	<30	<10	<20
PT1-7-SB-3-1'	9/20/99	<50	<10	<10	<10	<10	<10	<10	<10	<10	<30	<10	<20
PT1-7-SB-3-10'	9/20/99	<50	<10	<10	<10	<10	<10	<10	<10	<10	<30	<10	<20
PT1-7-SB-4-1'	9/20/99	<50	<10	<10	<10	<10	<10	<10	<10	<10	<30	<10	<20
PT1-7-SB-4-10'	9/20/99	<50	<10	<10	<10	<10	<10	<10	<10	<10	<30	<10	<20

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CONFIDENTIAL AND PRIVILEGED
ATTORNEY-CLIENT AND WORK PRODUCT
PRIVILEGES ASSERTED

Table 5-2A
Area 8 - Summary of Soil Results
EPA Method 8260

SAMPLE ID	DATE	Acetone	Benzene	2-Butanone	n-Butylbenzene	sec-Butylbenzene	tert-Butylbenzene	Chlorobenzene	1,2-Dichlorobenzene	1,1-Dichloroethane	cis-1,2-Dichloroethene	Ethylbenzene	2-Hexanone	Isopropylbenzene	p-Isopropyltoluene	4-Methyl-2-pentanone
Units		µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg
Residential PRG[1]		1,400,000	620	NA	130,000	100,000	120,000	54,000	370,000	570,000	42,000	230,000	NA	NA	NA	NA
PT1-8-SB-1-1'	9/15/99	<50	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10	<50
PT1-8-SB-1-5'	9/15/99	<50	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10	<50
PT1-8-SB-1-10'	9/15/99	<50	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10	<50
PT1-8-SB-2-1'	9/15/99	<50	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10	<50
PT1-8-SB-2-5'	9/15/99	<50	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10	<50
PT1-8-SB-2-10'	9/15/99	<50	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10	<50
PT1-8-SB-3-1'	9/15/99	<50	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10	<50
PT1-8-SB-3-5'	9/15/99	<50	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10	<50
PT1-8-SB-3-10'	9/15/99	<50	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10	<50
PT1-8-SB-4-1'	9/15/99	<50	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10	<50
PT1-8-SB-4-5'	9/15/99	<50	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10	<50
PT1-8-SB-4-10'	9/15/99	<50	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10	<50

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ATTORNEY-CLIENT AND WORK PRODUCT
PRIVILEGES ASSERTED

Table 5-2A
Area 8 - Summary of Soil Results
EPA Method 8260

SAMPLE ID	DATE	Naphthalene	n-Propylbenzene	Tetrachloroethene	Toluene	1,2,4-Trichlorobenzene	1,1,1-Trichloroethane	Trichloroethene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	o-Xylene	m/p-Xylene
Units		µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg
Residential PRG[1]		NA	130,000	4,700	520,000	480,000	680,000	2,700	51,000	21,000	280,000	580,000
PT1-8-SB-1-1'	9/15/99	<10	<10	<10	<10	<10	<10	<10	<10	<30	<10	<20
PT1-8-SB-1-5'	9/15/99	<10	<10	<10	<10	<10	<10	<10	<10	<30	<10	<20
PT1-8-SB-1-10'	9/15/99	<10	<10	<10	<10	<10	<10	<10	<10	<30	<10	<20
PT1-8-SB-2-1'	9/15/99	<10	<10	<10	<10	<10	<10	<10	<10	<30	<10	<20
PT1-8-SB-2-5'	9/15/99	<10	<10	<10	<10	<10	<10	<10	<10	<30	<10	<20
PT1-8-SB-2-10'	9/15/99	<10	<10	<10	<10	<10	<10	<10	<10	<30	<10	<20
PT1-8-SB-3-1'	9/15/99	<10	<10	<10	<10	<10	<10	<10	<10	<30	<10	<20
PT1-8-SB-3-5'	9/15/99	<10	<10	<10	<10	<10	<10	<10	<10	<30	<10	<20
PT1-8-SB-3-10'	9/15/99	<10	<10	<10	<10	<10	<10	<10	<10	<30	<10	<20
PT1-8-SB-4-1'	9/15/99	**35**	**12**	<10	<10	<10	<10	<10	**110**	**70**	**30**	**47**
PT1-8-SB-4-5'	9/15/99	<10	<10	<10	<10	<10	<10	<10	<10	<30	<10	<20
PT1-8-SB-4-10'	9/15/99	<10	<10	<10	<10	<10	<10	<10	<10	<30	<10	<20

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CONFIDENTIAL AND PRIVILEGED
ATTORNEY-CLIENT AND WORK PRODUCT
PRIVILEGES ASSERTED

Table 5-2A
Area 9 - Summary of Soil Results
EPA Method 8260

SAMPLE ID	DATE	Acetone	Benzene	2-Butanone	n-Butylbenzene	sec-Butylbenzene	tert-Butylbenzene	Chlorobenzene	1,2-Dichlorobenzene	1,1-Dichloroethane	cis-1,2-Dichloroethene	Ethylbenzene	2-Hexanone	Isopropylbenzene	p-Isopropyltoluene	4-Methyl-2-pentanone
Units		µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg
Residential PRG[1]		1,400,000	620	NA	130,000	100,000	120,000	54,000	370,000	570,000	42,000	230,000	NA	NA	NA	NA
PT1-9-SB-1-1'	9/20/99	<50	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10	<50
PT1-9-SB-1-10'	9/20/99	<50	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10	<50
PT1-9-SB-2-1'	9/24/99	<50	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10	<50
PT1-9-SB-2-10'	9/24/99	<50	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10	<50
PT1-9-SB-3-1'	9/24/99	<50	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10	<50
PT1-9-SB-3-10'	9/24/99	<50	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10	<50
PT1-9-SB-4-1'	9/24/99	<50	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10	<50
PT1-9-SB-4-10'	9/24/99	<50	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10	<50

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CONFIDENTIAL AND PRIVILEGED
ATTORNEY-CLIENT AND WORK PRODUCT
PRIVILEGES ASSERTED

Table 5-2A
Area 9 - Summary of Soil Results
EPA Method 8260

SAMPLE ID	DATE	Naphthalene	n-Propylbenzene	Tetrachloroethene	Toluene	1,2,4-Trichlorobenzene	1,1,1-Trichloroethane	Trichloroethene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	o-Xylene	m/p-Xylene
Units		µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg
Residential PRG[1]		NA	130,000	4,700	520,000	480,000	680,000	2,700	51,000	21,000	280,000	580,000
PT1-9-SB-1-1'	9/20/99	<10	<10	<10	<10	<10	<10	<10	<10	<30	<10	<20
PT1-9-SB-1-10'	9/20/99	<10	<10	<10	<10	<10	<10	<10	<10	<30	<10	<20
PT1-9-SB-2-1'	9/24/99	<10	<10	<10	<10	<10	<10	<10	<10	<30	<10	<20
PT1-9-SB-2-10'	9/24/99	<10	<10	<10	<10	<10	<10	<10	<10	<30	<10	<20
PT1-9-SB-3-1'	9/24/99	<10	<10	<10	<10	<10	<10	<10	<10	<30	<10	<20
PT1-9-SB-3-10'	9/24/99	<10	<10	<10	<10	<10	<10	<10	<10	<30	<10	<20
PT1-9-SB-4-1'	9/24/99	<10	<10	<10	<10	<10	<10	<10	<10	<30	<10	<20
PT1-9-SB-4-10'	9/24/99	<10	<10	<10	<10	<10	<10	<10	<10	<30	<10	<20

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CONFIDENTIAL AND PRIVILEGED
ATTORNEY-CLIENT AND WORK PRODUCT
PRIVILEGES ASSERTED

Table 5-2A
Area 13 - Summary of Soil Results
EPA Method 8260

SAMPLE ID	DATE	Acetone	Benzene	2-Butanone	n-Butylbenzene	sec-Butylbenzene	tert-Butylbenzene	Chlorobenzene	1,2-Dichlorobenzene	1,1-Dichloroethane	cis-1,2-Dichloroethene	Ethylbenzene	2-Hexanone	Isopropylbenzene	p-Isopropyltoluene
Units		µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg
Residential PRG[1]		1,400,000	620	NA	130,000	100,000	120,000	54,000	370,000	570,000	42,000	230,000	NA	NA	NA
PT1-13-SB-1-1'	9/8/99	<50	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10
PT1-13-SB-1-5'	9/8/99	<50	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10
PT1-13-SB-1-10'	9/8/99	<50	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10
PT1-13-SB-2-1'	9/8/99	**80**	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10
PT1-13-SB-2-5'	9/8/99	<50	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10
PT1-13-SB-2-10'	9/8/99	<50	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10
PT1-13-SB-3-1'	9/8/99	<50	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10
PT1-13-SB-3-5'	9/8/99	<50	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10
PT1-13-SB-3-10'	9/8/99	<50	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10
PT1-13-SB-3-20'	9/10/99	**87**	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10
PT1-13-SB-3-30'	9/10/99	<50	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10
PT1-13-SB-3-40'	9/10/99	**6,600**	<10	**1,770**	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10
PT1-13-SB-3-50'	9/10/99	**8,020**	**10**	**2,930**	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10
PT1-13-SB-3-60'	9/10/99	**6,330**	<10	**1,750**	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10

CONFIDENTIAL AND PRIVILEGED
ATTORNEY-CLIENT AND WORK PRODUCT
PRIVILEGES ASSERTED

Table 5-2A
Area 13 - Summary of Soil Results
EPA Method 8260

SAMPLE ID	DATE	4-Methyl-2-pentanone	Naphthalene	n-Propylbenzene	Tetrachloroethene	Toluene	1,2,4-Trichlorobenzene	1,1,1-Trichloroethane	Trichloroethene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	o-Xylene	m/p-Xylene
Units		µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg
Residential PRG[1]		NA	NA	130,000	4,700	520,000	480,000	680,000	2,700	51,000	21,000	280,000	580,000
PT1-13-SB-1-1'	9/8/99	<50	<10	<10	<10	<10	<10	<10	<10	<10	<30	<10	<20
PT1-13-SB-1-5'	9/8/99	<50	<10	<10	<10	<10	<10	<10	<10	<10	<30	<10	<20
PT1-13-SB-1-10'	9/8/99	<50	<10	<10	<10	<10	<10	<10	<10	<10	<30	<10	<20
PT1-13-SB-2-1'	9/8/99	<50	<10	<10	<10	<10	<10	<10	<10	<10	<30	<10	<20
PT1-13-SB-2-5'	9/8/99	<50	<10	<10	<10	<10	<10	<10	<10	<10	<30	<10	<20
PT1-13-SB-2-10'	9/8/99	<50	<10	<10	<10	<10	<10	<10	<10	<10	<30	<10	<20
PT1-13-SB-3-1'	9/8/99	<50	<10	<10	<10	<10	<10	<10	<10	<10	<30	<10	<20
PT1-13-SB-3-5'	9/8/99	<50	<10	<10	<10	<10	<10	<10	<10	<10	<30	<10	<20
PT1-13-SB-3-10'	9/8/99	<50	<10	<10	<10	<10	<10	<10	<10	<10	<30	<10	<20
PT1-13-SB-3-20'	9/10/99	<50	<10	<10	<10	<10	<10	<10	<10	<10	<30	<10	<20
PT1-13-SB-3-30'	9/10/99	<50	<10	<10	<10	<10	<10	<10	<10	<10	<30	<10	<20
PT1-13-SB-3-40'	9/10/99	**88**	<10	<10	<10	<10	<10	<10	<10	<10	<30	<10	<20
PT1-13-SB-3-50'	9/10/99	**195**	**64**	<10	<10	<10	<10	<10	<10	**39**	<30	<10	<20
PT1-13-SB-3-60'	9/10/99	**120**	**39**	<10	<10	<10	<10	<10	<10	**32**	<30	**11**	<20

Table 5-2A
Area 13 - Summary of Soil Results
EPA Method 8260

SAMPLE ID	DATE	Acetone	Benzene	2-Butanone	n-Butylbenzene	sec-Butylbenzene	tert-Butylbenzene	Chlorobenzene	1,2-Dichlorobenzene	1,1-Dichloroethane	cis-1,2-Dichloroethene	Ethylbenzene	2-Hexanone	Isopropylbenzene	p-Isopropyltoluene
Units		µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg
Residential PRG[(1)]		1,400,000	620	NA	130,000	100,000	120,000	54,000	370,000	570,000	42,000	230,000	NA	NA	NA
PT1-13-SB-4-1'	9/8/99	<5000	**7,910**	<5000	<1000	**3,100**	<1000	<1000	<1000	**3,020**	<1000	**19,400**	<5000	**3,790**	**3,610**
PT1-13-SB-4-5'	9/8/99	<5000	**6,400**	<5000	<1000	**2,000**	<1000	<1000	<1000	<1000	<1000	**21,500**	<5000	**3,800**	**2,320**
PT1-13-SB-4-10'	9/8/99	<5000	**11,400**	<5000	<1000	**3,160**	<1000	<1000	<1000	**1,460**	<1000	**37,700**	<5000	**6,590**	**3,520**
PT1-13-SB-4-20'	9/13/99	<5000	**3,650**	<5000	<1000	**6,580**	**157,000**	**2,190**	<1000	<1000	<1000	**39,600**	<5000	**7,750**	**6,580**
PT1-13-SB-4-30'	9/13/99	<5000	**2,080**	<5000	<1000	**5,000**	<1000	<1000	**5,460**	<1000	<1000	**26,800**	<5000	**5,650**	**6,340**
PT1-13-SB-4-40'	9/13/99	**8,120**	**70**	**7,780**	<10	<10	<10	<10	<10	<10	<10	**23**	**60**	<10	<10
PT1-13-SB-4-50'	9/13/99	**2,140**	<10	**1,440**	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10
PT1-13-SB-4-60'	9/13/99	**1,490**	<10	<50	<10	<10	<10	<10	<10	<10	<10	**246**	<50	<10	<10

(1) 1998 Preliminary Remediation Goals

Table 5-2A
Area 13 - Summary of Soil Results
EPA Method 8260

SAMPLE ID	DATE	4-Methyl-2-pentanone	Naphthalene	n-Propylbenzene	Tetrachloroethene	Toluene	1,2,4-Trichlorobenzene	1,1,1-Trichloroethane	Trichloroethene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	o-Xylene	m/p-Xylene
Units		µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg
Residential PRG(1)		NA	NA	130,000	4,700	520,000	480,000	680,000	2,700	51,000	21,000	280,000	580,000
PT1-13-SB-4-1'	9/8/99	<5000	17,100	9,510	19,300	68,500	<1000	1,000	2,540	77,200	23,200	32,000	78,800
PT1-13-SB-4-5'	9/8/99	<5000	14,900	8,950	23,900	62,500	<1000	14,600	1,660	64,100	19,300	34,600	82,800
PT1-13-SB-4-10'	9/8/99	<5000	23,000	15,200	39,800	110,000	<1000	2,130	3,170	102,000	31,300	60,100	140,000
PT1-13-SB-4-20'	9/13/99	<5000	39,300	23,200	30,100	82,300	<1000	3,010	3,720	5,550	49,500	69,400	154,000
PT1-13-SB-4-30'	9/13/99	<5000	32,400	18,600	16,900	51,700	<1000	<1000	3,610	120,000	37,300	48,400	108,000
PT1-13-SB-4-40'	9/13/99	195	101	<10	<10	124	<10	<10	<10	57	<30	39	80
PT1-13-SB-4-50'	9/13/99	<50	120	<10	<10	<10	<10	<10	<10	43	<30	<10	<20
PT1-13-SB-4-60'	9/13/99	<50	605	238	194	285	<10	<10	<10	1,870	531	471	1,140

(1) 1998 Preliminary Remediation Goals

CONFIDENTIAL AND PRIVILEGED
ATTORNEY-CLIENT AND WORK PRODUCT
PRIVILEGES ASSERTED

Table 5-2A
Area 16 - Summary of Soil Results
EPA Method 8260

SAMPLE ID	DATE	Acetone	Benzene	2-Butanone	n-Butylbenzene	sec-Butylbenzene	tert-Butylbenzene	Chlorobenzene	1,2-Dichlorobenzene	1,1-Dichloroethane	cis-1,2-Dichloroethene	Ethylbenzene	2-Hexanone	Isopropylbenzene	p-Isopropyltoluene
Units		µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg
Residential PRG(1)		1,400,000	620	NA	130,000	100,000	120,000	54,000	370,000	570,000	42,000	230,000	NA	NA	NA
PT1-16-SB-1-1'	9/8/99	<500	<100	<500	<100	**351**	<100	<100	<100	<100	<100	**146**	<500	**124**	**965**
PT1-16-SB-1-5'	9/8/99	<50	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10
PT1-16-SB-1-10"	9/8/99	<50	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10
PT1-16-SB-1-20'	9/16/99	<50	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10
PT1-16-SB-1-30'	9/16/99	<50	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10
PT1-16-SB-1-40'	9/16/99	<50	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10
PT1-16-SB-1-50'	9/16/99	<50	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10
PT1-16-SB-1-60'	9/16/99	<50	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10
PT1-16-SB-2-1'	9/8/99	<50	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10
PT1-16-SB-2-5'	9/8/99	<50	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10
PT1-16-SB-2-10'	9/8/99	<50	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10
PT1-16-SB-2-20'	9/16/99	<50	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10
PT1-16-SB-2-30'	9/16/99	<50	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10
PT1-16-SB-2-40'	9/16/99	**2,990**	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10
PT1-16-SB-2-50'	9/16/99	**825**	**21**	<50	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10
PT1-16-SB-2-60'	9/16/99	<50	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10
PT1-16-SB-3-1'	9/8/99	<50	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10
PT1-16-SB-3-5'	9/8/99	<50	**16**	<50	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10
PT1-16-SB-3-10'	9/8/99	**182**	**34**	<50	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10
PT1-16-SB-4-1'	9/8/99	**54**	**97**	<50	<10	<10	<10	<10	<10	**16**	<10	<10	<50	<10	<10
PT1-16-SB-4-5'	9/8/99	<50	**69**	<50	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10
PT1-16-SB-4-10'	9/8/99	<50	**45**	<50	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10

(1) 1998 Preliminary Remediation Goals

CONFIDENTIAL AND PRIVILEGED
ATTORNEY-CLIENT AND WORK PRODUCT
PRIVILEGES ASSERTED

Table 5-2A
Area 16 - Summary of Soil Results
EPA Method 8260

SAMPLE ID	DATE	4-Methyl-2-pentanone	Naphthalene	n-Propylbenzene	Tetrachloroethene	Toluene	1,2,4-Trichlorobenzene	1,1,1-Trichloroethane	Trichloroethene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	o-Xylene	m/p-Xylene
Units		µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg
Residential PRG[1]		NA	NA	130,000	4,700	520,000	480,000	680,000	2,700	51,000	21,000	280,000	580,000
PT1-16-SB-1-1'	9/8/99	<500	**3,000**	**337**	**187**	**277**	<100	<100	<100	**4,750**	**1,320**	**397**	**718**
PT1-16-SB-1-5'	9/8/99	<50	<10	<10	<10	<10	<10	<10	<10	<10	<30	<10	<20
PT1-16-SB-1-10"	9/8/99	<50	<10	<10	<10	<10	<10	<10	<10	<10	<30	<10	<20
PT1-16-SB-1-20'	9/16/99	<50	<10	<10	<10	<10	<10	<10	<10	<10	<30	<10	<20
PT1-16-SB-1-30'	9/16/99	<50	<10	<10	<10	<10	<10	<10	<10	<10	<30	<10	<20
PT1-16-SB-1-40'	9/16/99	<50	<10	<10	<10	<10	<10	<10	<10	<10	<30	<10	<20
PT1-16-SB-1-50'	9/16/99	<50	<10	<10	<10	<10	<10	<10	<10	<10	<30	<10	<20
PT1-16-SB-1-60'	9/16/99	<50	<10	<10	<10	<10	<10	<10	<10	<10	<30	<10	<20
PT1-16-SB-2-1'	9/8/99	<50	<10	<10	<10	<10	<10	<10	<10	<10	<30	<10	<20
PT1-16-SB-2-5'	9/8/99	<50	<10	<10	<10	<10	<10	<10	<10	<10	<30	<10	<20
PT1-16-SB-2-10'	9/8/99	<50	<10	<10	<10	<10	<10	<10	<10	<10	<30	<10	<20
PT1-16-SB-2-20'	9/16/99	<50	<10	<10	<10	<10	<10	<10	<10	<10	<30	<10	<20
PT1-16-SB-2-30'	9/16/99	<50	<10	<10	<10	<10	<10	<10	<10	<10	<30	<10	<20
PT1-16-SB-2-40'	9/16/99	**197**	<10	<10	<10	<10	<10	<10	<10	<10	<30	<10	<20
PT1-16-SB-2-50'	9/16/99	**111**	<10	<10	<10	<10	<10	<10	<10	<10	<30	<10	<20
PT1-16-SB-2-60'	9/16/99	<50	<10	<10	<10	<10	<10	<10	<10	<10	<30	<10	<20
PT1-16-SB-3-1'	9/8/99	<50	<10	<10	<10	<10	<10	<10	<10	<10	<30	<10	<20
PT1-16-SB-3-5'	9/8/99	<50	<10	<10	<10	<10	<10	<10	<10	<10	<30	<10	<20
PT1-16-SB-3-10'	9/8/99	<50	<10	<10	<10	<10	<10	<10	<10	<10	<30	<10	<20
PT1-16-SB-4-1'	9/8/99	<50	<10	<10	**40**	<10	<10	<10	**19**	<10	<30	<10	<20
PT1-16-SB-4-5'	9/8/99	<50	<10	<10	<10	<10	<10	<10	<10	<10	<30	<10	<20
PT1-16-SB-4-10'	9/8/99	<50	<10	<10	<10	<10	<10	<10	<10	<10	<30	<10	<20

(1) 1998 Preliminary Remediation Goal:

CONFIDENTIAL AND PRIVILEGED
ATTORNEY-CLEINT AND WORK PRODUCT
PRIVILEGES ASSERTED

Table 5-2B
Area 1A - Summary of Soil Results
EPA Method 8270

SAMPLE ID	DATE	Bis(2-ethylhexyl) phthalate	Di-n-butyl phthalate	2,4-Dimethylphenol	2-Methylnaphthalene	2-Methylphenol	4-Methylphenol	3-Methylphenol	Naphthalene	Phenol
Units		µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg
Residential PRG[1]		32,000	NA	1,100,000	NA	2,700,000	2,700,000	2,700,000	NA	33,000,000
PT1-1A-SB-1-1'	9/9/99	<330	<330	**463**	<330	**1650**	**3690**	<330	<330	**5540**
PT1-1A-SB-1-5'	9/9/99	<660	<660	<660	**37,500**	<660	<660	<660	<660	<660
PT1-1A-SB-1-10'	9/9/99	<660	<660	<660	**24,600**	<660	<660	<660	<660	<660
PT1-1A-SB-1-20'	9/13/99	<660	<660	<660	<660	<660	<660	<660	<660	<660
PT1-1A-SB-1-30'	9/13/99	<660	<660	<660	<660	**511**	**1,140**	<660	<660	**1,790**
PT1-1A-SB-1-40'	9/13/99	<660	<660	**450**	<1,320	**3,650**	**9,000**	<660	<660	**29,700**
PT1-1A-SB-1-50'	9/13/99	<660	<660	<660	<1,320	**786**	**2,450**	<660	<660	**6,640**
PT1-1A-SB-1-60'	9/13/99	<660	<660	<660	<1,320	<660	**884**	<660	<660	**2,260**
PT1-1A-SB-2-1'	9/9/99	<1320	<1320	<1320	<1320	<1320	<1320	<1320	<1320	<1320
PT1-1A-SB-2-5'	9/9/99	<13200	<13200	<13200	<13200	<13200	<13200	<13200	<13200	<13200
PT1-1A-SB-2-10'	9/9/99	<330	<330	<330	<330	<330	<330	<330	<330	<330
PT1-1A-SB-3-1'	9/9/99	<6600	<6600	<6600	<6600	<6600	<6600	<6600	<6600	<6600
PT1-1A-SB-3-5'	9/9/99	<330	<330	<330	<330	<330	<330	<330	<330	<330
PT1-1A-SB-3-10'	9/9/99	<330	<330	<330	<330	<330	<330	<330	<330	<330
PT1-1A-SB-4-1'	9/9/99	<6600	<6600	<6600	<6600	<6600	<6600	<6600	<6600	<6600
PT1-1A-SB-4-5'	9/9/99	<330	<330	<330	<330	<330	<330	<330	<330	<330
PT1-1A-SB-4-10'	9/9/99	<330	<330	<330	<330	<330	<330	<330	<330	<330

CONFIDENTIAL AND PRIVILEGED
ATTORNEY-CLEINT AND WORK PRODUCT
PRIVILEGES ASSERTED

Table 5-2B
Area 1A - Summary of Soil Results
EPA Method 8270

SAMPLE ID	DATE	Bis(2-ethylhexyl) phthalate	Di-n-butyl phthalate	2,4-Dimethylphenol	2-Methylnaphthalene	2-Methylphenol	4-Methylphenol	3-Methylphenol	Naphthalene	Phenol
Units		µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg
Residential PRG(1)		32,000	NA	1,100,000	NA	2,700,000	2,700,000	2,700,000	NA	33,000,000
PT1-1A-SB-5-1'	9/9/99	<13200	<13200	<13200	<13200	<13200	<13200	<13200	<13200	<13200
PT1-1A-SB-5-5'	9/9/99	<330	<330	<330	<330	<330	<330	<330	<330	<330
PT1-1A-SB-5-10'	9/9/99	<330	<330	<330	<330	<330	<330	<330	<330	<330
PT1-1A-SB-5-20'	9/13/99	<330	<330	<330	<330	<330	<330	<330	<330	<330
PT1-1A-SB-5-30'	9/13/99	<330	<330	<330	<330	<330	<330	<330	<330	<330
PT1-1A-SB-5-40'	9/13/99	<330	<330	<330	<330	<330	<330	<330	<330	<330
PT1-1A-SB-5-50'	9/13/99	<330	<330	<330	<330	<330	<330	<330	<330	<330
PT1-1A-SB-5-60'	9/13/99	<330	<330	<330	<330	<330	<330	<330	<330	<330
PT1-1A-SB-6-1'	9/9/99	<8250	<8250	<8250	<8250	<8250	<8250	<8250	<8250	<8250
PT1-1A-SB-6-5'	9/9/99	<1650	<1650	<1650	<1650	<1650	<1650	<1650	<330	<330
PT1-1A-SB-6-10'	9/9/99	<330	<330	<330	<330	<330	<330	<330	<330	<330
PT1-1A-SB-6-20'	9/14/99	<330	<330	<330	<330	<330	<330	<330	<330	<330
PT1-1A-SB-6-30'	9/14/99	<330	<330	<330	<330	<330	<330	<330	<330	<330
PT1-1A-SB-6-40'	9/14/99	<330	<330	<330	<330	<330	<330	<330	<330	<330
PT1-1A-SB-6-50'	9/14/99	<330	<330	<330	<330	<330	<330	<330	<330	<330
PT1-1A-SB-6-60'	9/14/99	<330	<330	<330	<330	<330	<330	<330	<330	<330
PT1-1A-SB-7-1'	9/9/99	<1650	<1650	<1650	<1650	<1650	<1650	<1650	<1650	<1650
PT1-1A-SB-7-5'	9/9/99	<330	<330	<330	<330	<330	<330	<330	<330	<330
PT1-1A-SB-7-10'	9/9/99	<330	<330	<330	<330	<330	<330	<330	<330	<330
PT1-1A-SB-8-1'	9/9/99	<1650	<1650	<1650	<1650	<1650	<1650	<1650	<1650	<1650
PT1-1A-SB-8-5'	9/9/99	<330	<330	<330	<330	<330	<330	<330	<330	<330
PT1-1A-SB-8-10'	9/9/99	<330	<330	<330	<330	<330	<330	<330	<330	<330

(1) 1998 Preliminary Remediation Goals

Clayton ENVIRONMENTAL CONSULTANTS

CS 000165

CONFIDENTIAL AND PRIVILEGED
ATTORNEY-CLIENT AND WORK PRODUCT
PRIVILEGES ASSERTED

Table 5-2B
Area 2 - Summary of Soil Results
EPA Method 8270

SAMPLE ID	DATE	Bis(2-ethylhexyl) phthalate	Di-n-butyl phthalate	2,4-Dimethylphenol	2-Methylnaphthalene	2-Methylphenol	4-Methylphenol	3-Methylphenol	Naphthalene	Phenol
Units		µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg
Residential PRG[1]		32,000	NA	1,100,000	NA	2,700,000	2,700,000	2,700,000	NA	33,000,000
PT1-2-SB-1-1'	9/9/99	<1320	<1320	<1320	<1320	<1320	<1320	<1320	<1320	<1320
PT1-2-SB-1-5'	9/9/99	<330	<330	<330	<330	<330	<330	<330	<330	<330
PT1-2-SB-1-10'	9/9/99	<330	<330	<330	<330	<330	<330	<330	<330	<330
PT1-2-SB-2-1'	9/9/99	<660	<660	<660	<660	<660	<660	<660	<660	<660
PT1-2-SB-2-5'	9/9/99	<330	<330	<330	<330	<330	<330	<330	<330	<330
PT1-2-SB-2-10'	9/9/99	<330	<330	<330	<330	<330	<330	<330	<330	<330
PT1-2-SB-2-20'	9/14/99	<330	<330	<330	<330	<330	<330	<330	<330	<330
PT1-2-SB-2-30'	9/14/99	<330	<330	<330	<330	<330	<330	<330	<330	<330
PT1-2-SB-2-40'	9/14/99	<330	<330	<330	<330	<330	<330	<330	<330	<330
PT1-2-SB-2-50'	9/14/99	<330	<330	<330	<330	<330	<330	<330	<330	<330
PT1-2-SB-2-60'	9/14/99	<330	<330	<330	<330	<330	<330	<330	<330	<330
PT1-2-SB-3-1'	9/9/99	<3300	<3300	<3300	<3300	<3300	<3300	<3300	<3300	<3300
PT1-2-SB-3-5'	9/9/99	<330	<330	<330	<330	<330	<330	<330	<330	<330
PT1-2-SB-3-10'	9/9/99	<330	<330	<330	<330	<330	<330	<330	<330	<330
PT1-2-SB-3-20'	9/15/99	<330	<330	<330	<330	<330	<330	<330	<330	<330
PT1-2-SB-3-30'	9/15/99	<330	<330	<330	<330	<330	<330	<330	<330	<330
PT1-2-SB-3-40'	9/15/99	<330	<330	<330	<330	<330	<330	<330	<330	<330
PT1-2-SB-3-50'	9/15/99	<330	<330	<330	<330	<330	<330	<330	<330	<330
PT1-2-SB-3-60'	9/15/99	<330	<330	<330	<330	<330	<330	<330	<330	<330
PT1-2-SB-4-1'	9/9/99	<330	<330	<330	<330	<330	<330	<330	<330	<330
PT1-2-SB-4-5'	9/9/99	<330	<330	<330	<330	<330	<330	<330	<330	<330
PT1-2-SB-4-10'	9/9/99	<330	<330	<330	<330	<330	<330	<330	<330	<330

CONFIDENTIAL AND PRIVILEGED
ATTORNEY-CLIENT AND WORK PRODUCT
PRIVILEGES ASSERTED

Table 5-2B
Area 2 - Summary of Soil Results
EPA Method 8270

SAMPLE ID	DATE	Bis(2-ethylhexyl) phthalate	Di-n-butyl phthalate	2,4-Dimethylphenol	2-Methylnaphthalene	2-Methylphenol	4-Methylphenol	3-Methylphenol	Naphthalene	Phenol
Units		µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg
Residential PRG[1]		32,000	NA	1,100,000	NA	2,700,000	2,700,000	2,700,000	NA	33,000,000
PT1-2-SB-5-1'	9/9/99	<330	<330	<330	<330	<330	<330	<330	<330	<330
PT1-2-SB-5-5'	9/9/99	<330	<330	<330	<330	<330	<330	<330	<330	<330
PT1-2-SB-5-10'	9/9/99	<330	<330	<330	<330	<330	<330	<330	<330	<330
PT1-2-SB-6-1'	9/9/99	<330	<330	<330	<330	<330	<330	<330	<330	<330
PT1-2-SB-6-5'	9/9/99	<330	<330	<330	<330	<330	<330	<330	<330	<330
PT1-2-SB-6-10'	9/9/99	<330	<330	<330	<330	<330	<330	<330	<330	<330
PT1-2-SB-7-1'	9/9/99	<330	<330	<330	<330	<330	<330	<330	<330	<330
PT1-2-SB-7-5'	9/9/99	<330	<330	<330	<330	<330	<330	<330	<330	<330
PT1-2-SB-7-10'	9/9/99	<330	<330	<330	<330	<330	<330	<330	<330	<330
PT1-2-SB-7-20'	9/15/99	<330	<330	<330	<330	<330	<330	<330	<330	<330
PT1-2-SB-7-30'	9/15/99	<330	<330	<330	<330	<330	<330	<330	<330	<330
PT1-2-SB-7-40'	9/15/99	<330	<330	<330	<330	<330	<330	<330	<330	<330
PT1-2-SB-7-50'	9/15/99	<330	<330	<330	<330	<330	<330	<330	<330	<330
PT1-2-SB-7-60'	9/15/99	<330	<330	<330	<330	<330	<330	<330	<330	<330
PT1-2-SB-8-1'	9/9/99	<330	<330	<330	<330	<330	<330	<330	<330	<330
PT1-2-SB-8-5'	9/9/99	<330	<330	<330	<330	<330	<330	<330	<330	<330
PT1-2-SB-8-10'	9/9/99	<330	<330	<330	<330	<330	<330	<330	<330	<330
PT1-2-SB-9-1'	9/9/99	<660	**10,500**	<660	<1,320	<660	<660	<660	<660	<660
PT1-2-SB-9-5'	9/9/99	<330	<330	<330	<330	<330	<330	<330	<330	<330
PT1-2-SB-9-10'	9/9/99	<330	<330	<330	<330	<330	<330	<330	<330	<330

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CONFIDENTIAL AND PRIVILEGED
ATTORNEY-CLIENT AND WORK PRODUCT
PRIVILEGES ASSERTED

Table 5-2B
Area 3 - Summary of Soil Results
EPA Method 8270

SAMPLE ID	DATE	Bis(2-ethylhexyl) phthalate	Di-n-butyl phthalate	2,4-Dimethylphenol	2-Methylnaphthalene	2-Methylphenol	4-Methylphenol	3-Methylphenol	Naphthalene	Phenol
Units		µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg
Residential PRG[1]		32,000	NA	1,100,000	NA	2,700,000	2,700,000	2,700,000	NA	33,000,000
PT1-3-SB-1-1'	9/16/99	<330	<330	<330	<330	<330	<330	<330	<330	<330
PT1-3-SB-1-5'	9/16/99	**28,000**	<330	<330	<330	<330	<330	<330	<330	<330
PT1-3-SB-1-10'	9/17/99	<330	<330	<330	**833**	<330	<330	<330	**523**	<330
PT1-3-SB-2-1'	9/17/99	<330	<330	<330	<330	<330	<330	<330	<330	<330
PT1-3-SB-2-5'	9/17/99	<330	<330	<330	<330	<330	<330	<330	<330	<330
PT1-3-SB-2-10'	9/17/99	<330	<330	<330	<330	<330	<330	<330	<330	<330
PT1-3-SB-3-1'	9/17/99	<330	<330	<330	<330	<330	<330	<330	<330	<330
PT1-3-SB-3-5'	9/17/99	<330	<330	<330	<330	<330	<330	<330	<330	<330
PT1-3-SB-3-10"	9/17/99	<330	<330	<330	<330	<330	<330	<330	<330	<330

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CONFIDENTIAL AND PRIVILEGED
ATTORNEY-CLIENT AND WORK PRODUCT
PRIVILEGES ASSERTED

Table 5-2B
Area 7 - Summary of Soil Results
EPA Method 8270

SAMPLE ID	DATE	Bis(2-ethylhexyl) phthalate	Di-n-butyl phthalate	2,4-Dimethylphenol	2-Methylnaphthalene	2-Methylphenol	4-Methylphenol	3-Methylphenol	Naphthalene	Phenol
Units		µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg
Residential PRG[1]		32,000	NA	1,100,000	NA	2,700,000	2,700,000	2,700,000	NA	33,000,000
PT1-7-SB-1-1'	9/24/99	<330	<330	<330	<330	<330	<330	<330	<330	<330
PT1-7-SB-1-10'	9/24/99	<330	<330	<330	<330	<330	<330	<330	<330	<330
PT1-7-SB-2-1'	9/20/99	<330	<330	<330	<330	<330	<330	<330	<330	<330
PT1-7-SB-2-10'	9/20/99	<330	<330	<330	<330	<330	<330	<330	<330	<330
PT1-7-SB-3-1'	9/20/99	<330	<330	<330	<330	<330	<330	<330	<330	<330
PT1-7-SB-3-10'	9/20/99	<330	<330	<330	<330	<330	<330	<330	<330	<330
PT1-7-SB-4-1'	9/20/99	<330	<330	<330	<330	<330	<330	<330	<330	<330
PT1-7-SB-4-10'	9/20/99	<330	<330	<330	<330	<330	<330	<330	<330	<330

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CONFIDENTIAL AND PRIVILEGED
ATTORNEY-CLIENT AND WORK PRODUCT
PRIVILEGES ASSERTED

Table 5-2B
Area 8 - Summary of Soil Results
EPA Method 8270

SAMPLE ID	DATE	Bis(2-ethylhexyl) phthalate	Di-n-butyl phthalate	2,4-Dimethylphenol	2-Methylnaphthalene	2-Methylphenol	4-Methylphenol	3-Methylphenol	Naphthalene	Phenol
Units		µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg
Residential PRG[1]		32,000	NA	1,100,000	NA	2,700,000	2,700,000	2,700,000	NA	33,000,000
PT1-8-SB-1-1'	9/15/99	<330	<330	<330	<330	<330	<330	<330	<330	<330
PT1-8-SB-1-5'	9/15/99	<330	<330	<330	<330	<330	<330	<330	<330	<330
PT1-8-SB-1-10'	9/15/99	<3300	<3300	<3300	<3300	<3300	<3300	<3300	<3300	<3300
PT1-8-SB-2-1'	9/15/99	<13200	<13200	<13200	<13200	<13200	<13200	<13200	<13200	<13200
PT1-8-SB-2-5'	9/15/99	<330	<330	<330	<330	<330	<330	<330	<330	<330
PT1-8-SB-2-10'	9/15/99	<3300	<3300	<3300	<3300	<3300	<3300	<3300	<3300	<3300
PT1-8-SB-3-1'	9/15/99	<330	<330	<330	<330	<330	<330	<330	<330	<330
PT1-8-SB-3-5'	9/15/99	<330	<330	<330	<330	<330	<330	<330	<330	<330
PT1-8-SB-3-10'	9/15/99	<330	<330	<330	<330	<330	<330	<330	<330	<330
PT1-8-SB-4-1'	9/15/99	<330	<330	<330	<330	<330	<330	<330	<330	<330
PT1-8-SB-4-5'	9/15/99	<330	<330	<330	<330	<330	<330	<330	<330	<330
PT1-8-SB-4-10'	9/15/99	<330	<330	<330	<330	<330	<330	<330	<330	<330

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CONFIDENTIAL AND PRIVILEGED
ATTORNEY-CLIENT AND WORK PRODUCT
PRIVILEGES ASSERTED

Table 5-2B
Area 9 - Summary of Soil Results
EPA Method 8270

SAMPLE ID	DATE	Bis(2-ethylhexyl) phthalate	Di-n-butyl phthalate	2,4-Dimethylphenol	2-Methylnaphthalene	2-Methylphenol	4-Methylphenol	3-Methylphenol	Naphthalene	Phenol
Units		µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg
Residential PRG[1]		32,000	NA	1,100,000	NA	2,700,000	2,700,000	2,700,000	NA	33,000,000
PT1-9-SB-1-1'	9/20/99	<330	<330	<330	<330	<330	<330	<330	<330	<330
PT1-9-SB-1-10'	9/20/99	<330	<330	<330	<330	<330	<330	<330	<330	<330
PT1-9-SB-2-1'	9/24/99	<330	<330	<330	<330	<330	<330	<330	<330	<330
PT1-9-SB-2-10'	9/24/99	**450**	<330	<330	<330	<330	<330	<330	<330	<330
PT1-9-SB-3-1'	9/24/99	<330	<330	<330	<330	<330	<330	<330	<330	<330
PT1-9-SB-3-10'	9/24/99	<330	<330	<330	<330	<330	<330	<330	<330	<330
PT1-9-SB-4-1'	9/24/99	<330	<330	<330	<330	<330	<330	<330	<330	<330
PT1-9-SB-4-10'	9/24/99	<330	<330	<330	<330	<330	<330	<330	<330	<330

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CONFIDENTIAL AND PRIVILEGED
ATTORNEY-CLIENT AND WORK PRODUCT
PRIVILEGES ASSERTED

Table 5-2B
Area 13 - Summary of Soil Results
EPA Method 8270

SAMPLE ID	DATE	Bis(2-ethylhexyl) phthalate	Di-n-butyl phthalate	2,4-Dimethylphenol	2-Methylnaphthalene	2-Methylphenol	4-Methylphenol	3-Methylphenol	Naphthalene	Phenol
Units		µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg
Residential PRG[1]		32,000	NA	1,100,000	NA	2,700,000	2,700,000	2,700,000	NA	33,000,000
PT1-13-SB-1-1'	9/8/99	<330	<330	<330	<330	<330	<330	<330	<330	<330
PT1-13-SB-1-5'	9/8/99	<330	<330	<330	<330	<330	<330	<330	<330	<330
PT1-13-SB-1-10'	9/8/99	<330	<330	<330	<330	<330	<330	<330	<330	<330
PT1-13-SB-2-1'	9/8/99	<330	<330	<330	<330	<330	<330	<330	<330	<330
PT1-13-SB-2-5'	9/8/99	<330	<330	<330	<330	<330	<330	<330	<330	<330
PT1-13-SB-2-10'	9/8/99	<330	<330	<330	<330	<330	<330	<330	<330	<330
PT1-13-SB-3-1'	9/8/99	<330	<330	<330	<330	<330	<330	<330	<330	<330
PT1-13-SB-3-5'	9/8/99	<330	<330	<330	<330	<330	<330	<330	<330	<330
PT1-13-SB-3-10'	9/8/99	<330	<330	<330	<330	<330	<330	<330	<330	<330
PT1-13-SB-3-20'	9/10/99	<330	<330	<330	<330	<330	<330	<330	<330	<330
PT1-13-SB-3-30'	9/10/99	<330	<330	<330	<330	<330	<330	<330	<330	<330
PT1-13-SB-3-40'	9/10/99	<330	<330	<330	**5,690**	<330	**5,270**	<330	<330	**28,800**
PT1-13-SB-3-50'	9/10/99	<330	<330	**1,010**	<330	**4,200**	**11,300**	<330	<330	**32,000**
PT1-13-SB-3-60'	9/10/99	<330	<330	**568**	<330	**1,410**	**4,670**	<330	<330	**11,700**
PT1-13-SB-4-1'	9/8/99	<330	<330	<330	**6,700**	<330	<330	<330	<330	**10,500**
PT1-13-SB-4-5'	9/8/99	<330	<330	<330	<330	<330	<330	<330	<330	<330
PT1-13-SB-4-10'	9/8/99	<330	<330	<330	**8,100**	<330	<330	<330	<330	**15,100**
PT1-13-SB-4-20'	9/13/99	<330	<330	<330	**3,700**	**685**	<330	<330	**2,710**	**1,850**
PT1-13-SB-4-30'	9/13/99	<330	<330	<330	**4,060**	**407**	<330	<330	**2,880**	**1,220**
PT1-13-SB-4-40'	9/13/99	<330	<330	**1,180**	<330	**4,310**	**15,100**	<330	<330	**36,400**
PT1-13-SB-4-50'	9/13/99	<330	<330	**615**	<330	**2,680**	**8,590**	<330	<330	**25,700**
PT1-13-SB-4-60'	9/13/99	<330	<330	<330	<330	**590**	**1,990**	<330	<330	**4,910**

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CONFIDENTIAL AND PRIVILEGED
ATTORNEY-CLIENT AND WORK PRODUCT
PRIVILEGES ASSERTED

Table 5-2B
Area 16 - Summary of Soil Results
EPA Method 8270

SAMPLE ID	DATE	Bis(2-ethylhexyl) phthalate	Di-n-butyl phthalate	2,4-Dimethylphenol	2-Methylnaphthalene	2-Methylphenol	4-Methylphenol	3-Methylphenol	Naphthalene	Phenol
Units		µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg
Residential PRG[1]		32,000	NA	1,100,000	NA	2,700,000	2,700,000	2,700,000	NA	33,000,000
PT1-16-SB-1-1'	9/8/99	<330	<330	<330	<330	<330	<330	<330	<330	<330
PT1-16-SB-1-5'	9/8/99	<330	<330	<330	<330	<330	<330	<330	<330	<330
PT1-16-SB-1-10'	9/8/99	<330	<330	<330	<330	<330	<330	<330	<330	<330
PT1-16-SB-1-20'	9/16/99	<330	<330	<330	<330	<330	<330	<330	<330	<330
PT1-16-SB-1-30'	9/16/99	<330	<330	<330	<330	<330	<330	<330	<330	<330
PT1-16-SB-1-40'	9/16/99	<330	<330	<330	<330	<330	<330	<330	<330	<330
PT1-16-SB-1-50'	9/16/99	**1,430**	<330	<330	<330	<330	<330	<330	<330	<330
PT1-16-SB-1-60'	9/16/99	<330	<330	<330	<330	<330	<330	<330	<330	<330
PT1-16-SB-2-1'	9/8/99	<330	<330	<330	<330	<330	<330	<330	<330	<330
PT1-16-SB-2-5'	9/8/99	<330	<330	<330	<330	<330	<330	<330	<330	<330
PT1-16-SB-2-10'	9/8/99	<330	<330	<330	<330	<330	<330	<330	<330	<330
PT1-16-SB-2-20'	9/16/99	<330	<330	<330	<330	<330	<330	<330	<330	<330
PT1-16-SB-2-30'	9/16/99	<330	<330	<330	<330	<330	<330	<330	<330	<330
PT1-16-SB-2-40'	9/16/99	<330	<330	<330	<330	<330	**567**	<330	<330	**2,600**
PT1-16-SB-2-50'	9/16/99	<330	<330	<330	<330	<330	<330	<330	<330	<330
PT1-16-SB-2-60'	9/16/99	<330	<330	<330	<330	<330	<330	<330	<330	<330
PT1-16-SB-3-1'	9/8/99	<330	<330	<330	<330	<330	<330	<330	<330	<330
PT1-16-SB-3-5'	9/8/99	<330	<330	<330	<330	<330	<330	<330	<330	<330
PT1-16-SB-3-10'	9/8/99	<330	<330	<330	<330	<330	<330	<330	<330	<330
PT1-16-SB-4-1'	9/8/99	<330	<330	<330	<330	<330	<330	<330	<330	<330
PT1-16-SB-4-5'	9/8/99	<330	<330	<330	<330	<330	<330	<330	<330	<330
PT1-16-SB-4-10'	9/8/99	<330	<330	<330	<330	<330	<330	<330	<330	<330

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CONFIDENTIAL AND PRIVILEGED
ATTORNEY-CLIENT AND WORK PRODUCT
PRIVILEGES ASSERTED

Table 5-2C
Area 1A - Summary of Soil Results
EPA Method 8080

SAMPLE ID	DATE	4,4'-DDD	4,4'-DDE	4,4'-DDT	Aroclor-1254
Units		µg/kg	µg/kg	µg/kg	µg/kg
Residential PRG[1]		2,400	1,700	1,700	970
PT1-1A-SB-1-1'	9/9/99	<4	<4	<4	<33
PT1-1A-SB-1-5'	9/9/99	<4	<4	<4	<33
PT1-1A-SB-1-10'	9/9/99	<4	<4	<4	<33
PT1-1A-SB-1-20'	9/13/99	<4	<4	<4	<33
PT1-1A-SB-1-30'	9/13/99	<4	<4	<4	<33
PT1-1A-SB-1-40'	9/13/99	<4	<4	<4	<33
PT1-1A-SB-1-50'	9/13/99	<4	<4	<4	<33
PT1-1A-SB-1-60'	9/13/99	<4	<4	<4	<33
PT1-1A-SB-2-1'	9/9/99	<4	<4	<4	**35**
PT1-1A-SB-2-5'	9/9/99	<4	<4	<4	<33
PT1-1A-SB-2-10'	9/9/99	<4	<4	<4	<33
PT1-1A-SB-3-1'	9/9/99	<4	<4	<4	**82**
PT1-1A-SB-3-5'	9/9/99	<4	<4	<4	<33
PT1-1A-SB-3-10'	9/9/99	<4	<4	<4	<33
PT1-1A-SB-4-1'	9/9/99	<4	<4	<4	**51**
PT1-1A-SB-4-5'	9/9/99	<4	<4	<4	<33
PT1-1A-SB-4-10'	9/9/99	<4	<4	<4	<33

CONFIDENTIAL AND PRIVILEGED
ATTORNEY-CLIENT AND WORK PRODUCT
PRIVILEGES ASSERTED

Table 5-2C
Area 1A - Summary of Soil Results
EPA Method 8080

SAMPLE ID	DATE	4,4'-DDD	4,4'-DDE	4,4'-DDT	Aroclor-1254
Units		µg/kg	µg/kg	µg/kg	µg/kg
Residential PRG(1)		2,400	1,700	1,700	970
PT1-1A-SB-5-1'	9/9/99	<4	<4	<4	<33
PT1-1A-SB-5-5'	9/9/99	<4	<4	<4	<33
PT1-1A-SB-5-10'	9/9/99	<4	<4	<4	<33
PT1-1A-SB-5-20'	9/13/99	<4	<4	<4	<33
PT1-1A-SB-5-30'	9/13/99	<4	<4	<4	<33
PT1-1A-SB-5-40'	9/13/99	<4	<4	<4	<33
PT1-1A-SB-5-50'	9/13/99	<4	<4	<4	<33
PT1-1A-SB-5-60'	9/13/99	<4	<4	<4	<33
PT1-1A-SB-6-1'	9/9/99	<4	<4	<4	**82**
PT1-1A-SB-6-5'	9/9/99	<4	<4	<4	<33
PT1-1A-SB-6-10'	9/9/99	<4	<4	<4	<33
PT1-1A-SB-6-20'	9/14/99	<4	<4	<4	<33
PT1-1A-SB-6-30'	9/14/99	<4	<4	<4	<33
PT1-1A-SB-6-40'	9/14/99	<4	<4	<4	<33
PT1-1A-SB-6-50'	9/14/99	<4	<4	<4	<33
PT1-1A-SB-6-60'	9/14/99	<4	<4	<4	<33
PT1-1A-SB-7-1'	9/9/99	<4	<4	<4	**111**
PT1-1A-SB-7-5'	9/9/99	<4	<4	<4	<33
PT1-1A-SB-7-10'	9/9/99	<4	<4	<4	<33
PT1-1A-SB-8-1'	9/9/99	<4	<4	<4	<33
PT1-1A-SB-8-5'	9/9/99	<4	<4	<4	<33
PT1-1A-SB-8-10'	9/9/99	<4	<4	<4	<33

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CONFIDENTIAL AND PRIVILEGED
ATTORNEY-CLIENT AND WORK PRODUCT
PRIVILEGES ASSERTED

Table 5-2C
Area 2 - Summary of Soil Results
EPA Method 8080

SAMPLE ID	DATE	4,4'-DDD	4,4'-DDE	4,4'-DDT	Aroclor-1254
Units		µg/kg	µg/kg	µg/kg	µg/kg
Residential PRG[1]		2,400	1,700	1,700	970
PT1-2-SB-1-1'	9/9/99	<4	<4	<4	<33
PT1-2-SB-1-5'	9/9/99	<4	<4	<4	<33
PT1-2-SB-1-10'	9/9/99	<4	<4	<4	<33
PT1-2-SB-2-1'	9/9/99	<4	<4	<4	<33
PT1-2-SB-2-5'	9/9/99	<4	<4	<4	<33
PT1-2-SB-2-10'	9/9/99	<4	<4	<4	<33
PT1-2-SB-2-20'	9/14/99	<4	<4	<4	<33
PT1-2-SB-2-30'	9/14/99	<4	<4	<4	<33
PT1-2-SB-2-40'	9/14/99	<4	<4	<4	<33
PT1-2-SB-2-50'	9/14/99	<4	<4	<4	<33
PT1-2-SB-2-60'	9/14/99	<4	<4	<4	<33
PT1-2-SB-3-1'	9/9/99	<4	<4	<4	<33
PT1-2-SB-3-5'	9/9/99	<4	<4	<4	<33
PT1-2-SB-3-10'	9/9/99	<4	<4	<4	<33
PT1-2-SB-3-20'	9/15/99	<4	<4	<4	<33
PT1-2-SB-3-30'	9/15/99	<4	<4	<4	<33
PT1-2-SB-3-40'	9/15/99	<4	<4	<4	<33
PT1-2-SB-3-50'	9/15/99	<4	<4	<4	<33
PT1-2-SB-3-60'	9/15/99	<4	<4	<4	<33
PT1-2-SB-4-1'	9/9/99	<4	<4	<4	<33
PT1-2-SB-4-5'	9/9/99	<4	<4	<4	<33
PT1-2-SB-4-10'	9/9/99	<4	<4	<4	<33

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PRIVILEGES ASSERTED

Table 5-2C
Area 2 - Summary of Soil Results
EPA Method 8080

SAMPLE ID	DATE	4,4'-DDD	4,4'-DDE	4,4'-DDT	Aroclor-1254
Units		µg/kg	µg/kg	µg/kg	µg/kg
Residential PRG[1]		2,400	1,700	1,700	970
PT1-2-SB-5-1'	9/9/99	<4	<4	<4	<33
PT1-2-SB-5-5'	9/9/99	<4	<4	<4	<33
PT1-2-SB-5-10'	9/9/99	<4	<4	<4	<33
PT1-2-SB-6-1'	9/9/99	<4	<4	<4	<33
PT1-2-SB-6-5'	9/9/99	<4	<4	<4	<33
PT1-2-SB-6-10'	9/9/99	<4	<4	<4	<33
PT1-2-SB-7-1'	9/9/99	<4	<4	<4	<33
PT1-2-SB-7-5'	9/9/99	<4	<4	<4	<33
PT1-2-SB-7-10'	9/9/99	<4	<4	<4	<33
PT1-2-SB-7-20'	9/15/99	<4	<4	<4	<33
PT1-2-SB-7-30'	9/15/99	<4	<4	<4	<33
PT1-2-SB-7-40'	9/15/99	<4	<4	<4	<33
PT1-2-SB-7-50'	9/15/99	<4	<4	<4	<33
PT1-2-SB-7-60'	9/15/99	<4	<4	<4	<33
PT1-2-SB-8-1'	9/9/99	<4	<4	<4	<33
PT1-2-SB-8-5'	9/9/99	<4	<4	<4	<33
PT1-2-SB-8-10'	9/9/99	<4	<4	<4	<33
PT1-2-SB-9-1'	9/9/99	<4	<4	<4	<33
PT1-2-SB-9-5'	9/9/99	<4	<4	<4	<33
PT1-2-SB-9-10'	9/9/99	<4	<4	<4	<33

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CONFIDENTIAL AND PRIVILEGED
ATTORNEY-CLIENT AND WORK PRODUCT
PRIVILEGES ASSERTED

Table 5-2C
Area 3 - Summary of Soil Results
EPA Method 8080

SAMPLE ID	DATE	4,4'-DDD	4,4'-DDE	4,4'-DDT	Aroclor-1254
Units		µg/kg	µg/kg	µg/kg	µg/kg
Residential PRG(1)		2,400	1,700	1,700	970
PT1-3-SB-1-1'	9/16/99	<4	<4	<4	<33
PT1-3-SB-1-5'	9/16/99	<4	<4	<4	<33
PT1-3-SB-1-10'	9/17/99	<4	<4	<4	<33
PT1-3-SB-2-1'	9/17/99	<4	<4	<4	<33
PT1-3-SB-2-5'	9/17/99	<4	<4	<4	<33
PT1-3-SB-2-10'	9/17/99	<4	<4	<4	<33
PT1-3-SB-3-1'	9/17/99	<4	<4	<4	<33
PT1-3-SB-3-5'	9/17/99	<4	<4	<4	<33
PT1-3-SB-3-10'	9/17/99	<4	<4	<4	<33

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ATTORNEY-CLIENT AND WORK PRODUCT
PRIVILEGES ASSERTED

Table 5-2C
Area 7 - Summary of Soil Results
EPA Method 8080

SAMPLE ID	DATE	4,4'-DDD	4,4'-DDE	4,4'-DDT	Aroclor-1254
Units		µg/kg	µg/kg	µg/kg	µg/kg
Residential PRG(1)		2,400	1,700	1,700	970
PT1-7-SB-1-1	9/24/99	<4	<4	<4	<33
PT1-7-SB-1-10'	9/24/99	<4	<4	<4	<33
PT1-7-SB-2-1	9/20/99	<4	<4	<4	<33
PT1-7-SB-2-10'	9/20/99	<4	<4	<4	<33
PT1-7-SB-3-1	9/20/99	<4	<4	<4	<33
PT1-7-SB-3-10'	9/20/99	<4	<4	<4	<33
PT1-7-SB-4-1	9/20/99	<4	<4	<4	<33
PT1-7-SB-4-10'	9/20/99	<4	<4	<4	<33

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ATTORNEY-CLIENT AND WORK PRODUCT
PRIVILEGES ASSERTED

Table 5-2C
Area 8 - Summary of Soil Results
EPA Method 8080

SAMPLE ID	DATE	4,4'-DDD	4,4'-DDE	4,4'-DDT	Aroclor-1254
Units		µg/kg	µg/kg	µg/kg	µg/kg
Residential PRG(1)		2,400	1,700	1,700	970
PT1-8-SB-1-1'	9/15/99	<4	<4	<4	<33
PT1-8-SB-1-5'	9/15/99	<4	<4	<4	<33
PT1-8-SB-1-10'	9/15/99	<4	<4	<4	<33
PT1-8-SB-2-1'	9/15/99	<4	<4	<4	<33
PT1-8-SB-2-5'	9/15/99	<4	<4	<4	<33
PT1-8-SB-2-10'	9/15/99	<4	<4	<4	<33
PT1-8-SB-3-1'	9/15/99	**42.2**	**96.2**	**293**	<33
PT1-8-SB-3-5'	9/15/99	<4	<4	<4	<33
PT1-8-SB-3-10'	9/15/99	<4	<4	<4	<33
PT1-8-SB-4-1'	9/15/99	<4	<4	<4	<33
PT1-8-SB-4-5'	9/15/99	<4	<4	<4	<33
PT1-8-SB-4-10'	9/15/99	<4	<4	<4	<33

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CONFIDENTIAL AND PRIVILEGED
ATTORNEY-CLIENT AND WORK PRODUCT
PRIVILEGES ASSERTED

Table 5-2C
Area 13 - Summary of Soil Results
EPA Method 8080

SAMPLE ID	DATE	4,4'-DDD	4,4'-DDE	4,4'-DDT	Aroclor-1254
Units		µg/kg	µg/kg	µg/kg	µg/kg
Residential PRG(1)		2,400	1,700	1,700	970
PT1-13-SB-1-1'	9/8/99	<4	<4	<4	<33
PT1-13-SB-1-5'	9/8/99	<4	<4	<4	<33
PT1-13-SB-1-10'	9/8/99	<4	<4	<4	<33
PT1-13-SB-2-1'	9/8/99	<4	<4	<4	<33
PT1-13-SB-2-5'	9/8/99	<4	<4	<4	<33
PT1-13-SB-2-10'	9/8/99	<4	<4	<4	<33
PT1-13-SB-3-1'	9/8/99	<4	<4	<4	<33
PT1-13-SB-3-5'	9/8/99	<4	<4	<4	<33
PT1-13-SB-3-10'	9/8/99	<4	<4	<4	<33
PT1-13-SB-3-20'	9/10/99	<4	<4	<4	<33
PT1-13-SB-3-30'	9/10/99	<4	<4	<4	<33
PT1-13-SB-3-40'	9/10/99	<4	<4	<4	**198**
PT1-13-SB-3-50'	9/10/99	<4	<4	<4	<33
PT1-13-SB-3-60'	9/10/99	<4	<4	<4	<33
PT1-13-SB-4-1'	9/8/99	<4	<4	<4	<33
PT1-13-SB-4-5'	9/8/99	<4	<4	<4	<33
PT1-13-SB-4-10'	9/8/99	<4	<4	<4	<33
PT1-13-SB-4-20'	9/13/99	<4	<4	<4	**92**
PT1-13-SB-4-30'	9/13/99	<4	<4	<4	**157**
PT1-13-SB-4-40'	9/13/99	<4	<4	<4	<33
PT1-13-SB-4-50'	9/13/99	<4	<4	<4	<33
PT1-13-SB-4-60'	9/13/99	<4	<4	<4	<33

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ATTORNEY-CLIENT AND WORK PRODUCT
PRIVILEGES ASSERTED

Table 5-2C
Area 16 - Summary of Soil Results
EPA Method 8080

SAMPLE ID	DATE	4,4'-DDD	4,4'-DDE	4,4'-DDT	Aroclor-1254
Units		µg/kg	µg/kg	µg/kg	µg/kg
Residential PRG(1)		2,400	1,700	1,700	970
PT1-16-SB-1-1'	9/8/99	<4	<4	<4	<33
PT1-16-SB-1-5'	9/8/99	<4	<4	<4	<33
PT1-16-SB-1-10"	9/8/99	<4	<4	<4	<33
PT1-16-SB-1-20'	9/16/99	<4	<4	<4	<33
PT1-16-SB-1-30'	9/16/99	<4	<4	<4	<33
PT1-16-SB-1-40'	9/16/99	<4	<4	<4	<33
PT1-16-SB-1-50'	9/16/99	<4	<4	<4	<33
PT1-16-SB-1-60'	9/16/99	<4	<4	<4	<33
PT1-16-SB-2-1'	9/8/99	<4	<4	<4	<33
PT1-16-SB-2-5'	9/8/99	<4	<4	<4	<33
PT1-16-SB-2-10'	9/8/99	<4	<4	<4	<33
PT1-16-SB-2-20'	9/16/99	<4	<4	<4	<33
PT1-16-SB-2-30'	9/16/99	<4	<4	<4	<33
PT1-16-SB-2-40'	9/16/99	<4	<4	<4	<33
PT1-16-SB-2-50'	9/16/99	<4	<4	<4	<33
PT1-16-SB-2-60'	9/16/99	<4	<4	<4	<33
PT1-16-SB-3-1'	9/8/99	<4	<4	<4	<33
PT1-16-SB-3-5'	9/8/99	<4	<4	<4	<33
PT1-16-SB-3-10'	9/8/99	<4	<4	<4	<33
PT1-16-SB-4-1'	9/8/99	<4	<4	<4	<33
PT1-16-SB-4-5'	9/8/99	<4	<4	<4	<33
PT1-16-SB-4-10'	9/8/99	<4	<4	<4	<33

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ATTORNEY-CLIENT AND WORK PRODUCT
PRIVILEGES ASSERTED

Table 5-2D
Area 1A - Summary of Soil Results
EPA Methods 6010/7196A

SAMPLE ID	DATE	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc	Hexavalent Chromium
Units		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Residential PRG[1]		30	21	5,200	150	37	210	3,300	2,800	130[2]	220	370	150[2]	370	370	16	520	22,000	30
PT1-1A-SB-1-1'	9/9/99	<0.3	.53	108	<0.2	<0.25	9.83	4	9.07	16.2	<0.2	<0.5	6.35	<0.5	<0.5	<0.1	14.3	28.2	4.7
PT1-1A-SB-1-5'	9/9/99	<0.3	<0.5	141	<0.2	<0.25	19.1	12.9	19.4	2.92	.33	<0.5	12.8	.64	<0.5	<0.1	45.7	52.6	5.2
PT1-1A-SB-1-10'	9/9/99	<0.3	<0.5	150	.38	<0.25	20.8	11.6	28.4	3.74	<0.2	<0.5	18	.58	<0.5	<0.1	40.8	66.1	<2.5
PT1-1A-SB-1-20'	9/13/99	<0.3	<0.5	111	<0.2	<0.25	12	7.51	14.3	2.33	<0.2	<0.5	12	<0.5	<0.5	<0.1	24.3	39	<2.5
PT1-1A-SB-1-30'	9/13/99	<0.3	2.44	101	<0.2	<0.25	13	7.23	12.9	1.51	<0.2	<0.5	10.3	<0.5	<0.5	<0.1	27.8	45.6	<2.5
PT1-1A-SB-1-40'	9/13/99	<0.3	14.2	122	<0.2	<0.25	31.6	9.05	22.8	2.34	<0.2	1.46	15.7	<0.5	<0.5	<0.1	43.2	59.6	<2.5
PT1-1A-SB-1-50'	9/13/99	<0.3	5.76	86.8	<0.2	<0.25	6.26	4.02	6.48	.65	<0.2	<0.5	5.95	<0.5	<0.5	<0.1	13.9	18.6	<2.5
PT1-1A-SB-1-60'	9/13/99	<0.3	6.61	74.7	<0.2	<0.25	9.84	5.51	10.7	.79	<0.2	<0.5	10	<0.5	<0.5	<0.1	20.1	29.8	<2.5
PT1-1A-SB-2-1'	9/9/99	<0.3	<0.5	96	<0.2	<0.25	9.16	3.87	13.8	183	<0.2	<0.5	6.19	<0.5	<0.5	<0.1	17.3	46.3	<2.5
PT1-1A-SB-2-5'	9/9/99	<0.3	.64	86.7	<0.2	<0.25	4.6	2.49	7.43	47.3	.29	<0.5	7.11	<0.5	<0.5	<0.1	12.5	20.7	<2.5
PT1-1A-SB-2-10'	9/9/99	<0.3	<0.5	151	.37	<0.25	22.4	11.8	29.6	4.03	<0.2	<0.5	19.6	<0.5	<0.5	<0.1	50.7	70.7	<2.5
PT1-1A-SB-3-1'	9/9/99	<0.3	1.2	160	<0.2	<0.25	12.5	5.91	20.7	250	<0.2	<0.5	12	<0.5	<0.5	<0.1	24.9	86.8	3.2
PT1-1A-SB-3-5'	9/9/99	<0.3	<0.5	94.1	<0.2	<0.25	14.9	8.78	11.7	2.54	<0.2	<0.5	10.3	<0.5	<0.5	<0.1	38.2	58.3	<2.5
PT1-1A-SB-3-10'	9/9/99	<0.3	<0.5	162	.44	<0.25	20.3	12.1	25.6	4.24	.21	<0.5	17.9	<0.5	<0.5	<0.1	45.1	65.2	<2.5
PT1-1A-SB-4-1'	9/9/99	2.07	.57	158	<0.2	<0.25	8.18	3.07	20.3	612	<0.2	<0.5	6.1	<0.5	<0.5	<0.1	18.6	65.8	<2.5
PT1-1A-SB-4-5'	9/9/99	<0.3	<0.5	82	<0.2	<0.25	17.6	4.83	11.3	5.87	<0.2	<0.5	8.02	<0.5	<0.5	<0.1	27.5	37.5	5.1
PT1-1A-SB-4-10'	9/9/99	<0.3	<0.5	97.8	<0.2	<0.25	16.4	8.25	14	3.59	<0.2	<0.5	9.82	<0.5	<0.5	<0.1	31.1	45.7	3.2
PT1-1A-SB-5-1'	9/9/99	<0.3	<0.5	157	.42	<0.25	17.2	9.72	20.3	17	<0.2	<0.5	13.6	<0.5	<0.5	<0.1	36.6	82.8	2.7
PT1-1A-SB-5-5'	9/9/99	<0.3	<0.5	84.8	<0.2	<0.25	13.4	7.75	9.32	2.34	<0.2	<0.5	9.47	<0.5	<0.5	<0.1	30.6	44	3.4
PT1-1A-SB-5-10'	9/9/99	<0.3	<0.5	248	.49	<0.25	25.8	15.6	33.5	4.99	<0.2	<0.5	23.2	.67	<0.5	<0.1	59.4	84.6	<2.5
PT1-1A-SB-5-20'	9/13/99	<0.3	<0.5	114	<0.2	<0.25	12.7	7.15	14.2	1.47	<0.2	<0.5	12.2	<0.5	<0.5	<0.1	24	40.1	<2.5
PT1-1A-SB-5-30'	9/13/99	<0.3	1.64	32.5	<0.2	<0.25	3.84	2.36	3.79	.33	<0.2	<0.5	3.46	<0.5	<0.5	<0.1	9.14	11.6	2.7
PT1-1A-SB-5-40'	9/13/99	<0.3	13.3	137	<0.2	<0.25	17.4	10.1	19.5	2.55	<0.2	<0.5	14.6	<0.5	<0.5	<0.1	38.5	59.2	<2.5
PT1-1A-SB-5-50'	9/13/99	<0.3	11.2	108	<0.2	<0.25	15.4	10.3	17.4	1.31	<0.2	<0.5	14.9	<0.5	<0.5	<0.1	29.7	55.4	<2.5
PT1-1A-SB-5-60'	9/13/99	<0.3	12.9	78.4	<0.2	<0.25	10.1	6.35	10.6	.75	<0.2	<0.5	10.9	<0.5	<0.5	<0.1	19.7	31.1	<2.5

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PRIVILEGES ASSERTED

Table 5-2D
Area 1A - Summary of Soil Results
EPA Methods 6010/7196A

SAMPLE ID	DATE	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc	Hexavalent Chromium
Units		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Residential PRG[1]		30	21	5,200	150	37	210	3,300	2,800	130[2]	220	370	150[2]	370	370	16	520	22,000	30
PT1-1A-SB-6-1'	9/9/99	<0.3	.9	426	<0.2	<0.25	9.26	3.7	17.7	1250	<0.2	<0.5	6.51	.51	<0.5	<0.1	21.4	35.3	9
PT1-1A-SB-6-5'	9/9/99	<0.3	<0.5	79.4	<0.2	<0.25	15.3	8.8	10.1	3.07	<0.2	<0.5	10	<0.5	<0.5	<0.1	29.9	37.4	3.6
PT1-1A-SB-6-10'	9/9/99	<0.3	<0.5	96.4	.26	<0.25	13.7	8.63	14.1	3.46	<0.2	<0.5	10.8	.51	<0.5	<0.1	30.9	41	4.7
PT1-1A-SB-6-20'	9/14/99	<0.3	<0.5	69.2	<0.2	<0.25	14.3	6.49	12.6	2.04	<0.2	<0.5	13.8	.54	<0.5	<0.1	24.4	57.4	2.7
PT1-1A-SB-6-30'	9/14/99	<0.3	1.8	119	<0.2	<0.25	11.5	6.45	11.3	1.69	<0.2	<0.5	9.47	.57	<0.5	<0.1	27.5	49.7	5.8
PT1-1A-SB-6-40'	9/14/99	<0.3	22.5	99.9	.3	.37	23	12.1	27.5	3.84	.38	<0.5	19.1	<0.5	<0.5	<0.1	48	81.8	2.7
PT1-1A-SB-6-50'	9/14/99	<0.3	12.3	106	<0.2	<0.5	15	9.26	16.4	1.61	<0.2	<0.5	15.5	<0.5	<0.5	<0.1	29.6	58.1	<2.5
PT1-1A-SB-6-60'	9/14/99	<0.3	15	80.3	<0.2	<0.25	15.5	7.37	11.7	1.01	<0.2	<0.5	13.9	.53	<0.5	<0.1	26.7	48.9	<2.5
PT1-1A-SB-7-1'	9/9/99	<0.3	1.64	136	<0.2	<0.25	7.23	3.11	8.01	261	<0.2	<0.5	4.71	<0.5	<0.5	<0.1	17.2	21	4.7
PT1-1A-SB-7-5'	9/9/99	<0.3	<0.5	83.5	<0.2	<0.25	14	7.07	8.86	2.51	.3	<0.5	9.18	<0.5	<0.5	<0.1	30.4	41.6	11.2
PT1-1A-SB-7-10'	9/9/99	<0.3	<0.5	129	.4	<0.25	20.4	10.3	24.2	3.92	<0.2	<0.5	16.5	<0.5	<0.5	<0.1	44.6	65.4	6.5
PT1-1A-SB-8-1'	9/9/99	<0.3	<0.5	103	<0.2	<0.25	8.04	2.64	9.95	13.6	<0.2	<0.5	4.46	.55	<0.5	<0.1	12.5	19.2	5.1
PT1-1A-SB-8-5'	9/9/99	<0.3	<0.5	81	<0.2	<0.25	13	7.87	9.19	2.42	<0.2	<0.5	9.06	<0.5	<0.5	<0.1	27.4	42.6	<2.5
PT1-1A-SB-8-10'	9/9/99	<0.3	1.27	89.9	<0.2	<0.25	21.9	5.23	28.4	21.3	<0.2	<0.5	18.4	.58	<0.5	<0.1	30.6	62.7	<2.5

(1) 1998 Preliminary Remediation Goals
(2) California Modified PRG (1994)

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PRIVILEGES ASSERTED

Table 5-2D
Area 2 - Summary of Soil Results
EPA Methods 6010/7196A

SAMPLE ID	DATE	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc	Hexavalent Chromium
Units		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Residential PRG[1]		30	21	5,200	150	37	210	3,300	2,800	130[2]	220	370	150[2]	370	370	16	520	22,000	30
PT1-2-SB-1-1'	9/9/99	<0.3	1.95	270	.24	<0.25	6.28	1.66	12.9	1170	<0.2	<0.5	5.4	.51	<0.5	<0.1	27.1	31.5	6
PT1-2-SB-1-5'	9/9/99	<0.3	<0.5	150	<0.2	<0.25	19.6	16.6	13.9	4.26	.23	<0.5	12.7	<0.5	<0.5	<0.1	48.7	53.2	<2.5
PT1-2-SB-1-10'	9/9/99	<0.3	<0.5	145	.2	<0.25	17.7	12	22.8	3.69	<0.2	<0.5	17.3	.63	<0.5	<0.1	43.2	61.9	<2.5
PT1-2-SB-2-1'	9/9/99	<0.3	<0.5	89.3	<0.2	<0.25	12.2	6.21	12.6	2.66	<0.2	<0.5	7.94	.52	<0.5	<0.1	24.6	35.8	12
PT1-2-SB-2-5'	9/9/99	<0.3	<0.5	86.3	<0.2	<0.25	11.9	9.59	11	2.51	<0.2	<0.5	8.36	.61	<0.5	<0.1	30	34.3	<2.5
PT1-2-SB-2-10'	9/9/99	<0.3	<0.5	125	.23	<0.25	16.1	7.78	17.8	3.69	.29	<0.5	11.5	.54	<0.5	<0.1	34.2	45.7	<2.5
PT1-2-SB-2-20'	9/14/99	<0.3	<0.5	92.1	<0.2	<0.25	15.1	8.81	15.1	2.33	<0.2	<0.5	13.8	.52	<0.5	<0.1	28.1	68.2	2.7
PT1-2-SB-2-30'	9/14/99	<0.3	<0.5	122	<0.2	<0.25	9.9	10.4	10.3	.8	<0.2	<0.5	11.3	<0.5	<0.5	<0.1	28.4	53.6	3.1
PT1-2-SB-2-40'	9/14/99	<0.3	<0.5	76.3	<0.2	<0.25	4.77	3.4	4.43	<0.25	<0.2	<0.5	4.96	<0.5	<0.5	<0.1	14.4	25.4	4.5
PT1-2-SB-2-50'	9/14/99	<0.3	7.64	129	<0.2	<0.25	17.5	10.4	19	1.88	<0.2	.6	18.5	.63	<0.5	<0.1	37.4	100	6.3
PT1-2-SB-2-60'	9/14/99	<0.3	9.44	37.3	<0.2	<0.25	5.75	3.95	5.33	1.6	<0.2	<0.5	5.57	<0.5	<0.5	<0.1	12.4	24.8	5.5
PT1-2-SB-3-1'	9/9/99	<0.3	<0.5	65.9	<0.2	<0.25	10.1	5.01	10.2	14.6	<0.2	<0.5	6.62	<0.5	<0.5	<0.1	19	45.4	10
PT1-2-SB-3-5'	9/9/99	<0.3	<0.5	96.8	<0.2	<0.25	14.6	9.26	11.2	2.39	.31	<0.5	9.33	<0.5	<0.5	<0.1	33.4	37.7	<2.5
PT1-2-SB-3-10'	9/9/99	<0.3	<0.5	101	<0.2	<0.25	13.3	7.06	13.5	1.76	.21	<0.5	9.88	<0.5	<0.5	<0.1	35	39.3	2.5
PT1-2-SB-3-20'	9/15/99	<0.3	1.42	70.1	<0.2	<0.25	11.4	16.6	10.4	9.3	<0.2	<0.5	21.4	.61	<0.5	<0.1	20.5	58.6	11
PT1-2-SB-3-30'	9/15/99	<0.3	1.2	77.6	<0.2	<0.25	7.35	4.9	7.13	1.17	<0.2	<0.5	8	.52	<0.5	<0.1	16.2	34.3	7
PT1-2-SB-3-40'	9/15/99	<0.3	1.25	56.8	<0.2	<0.25	4.68	3.92	4.44	<0.25	<0.2	<0.5	5.18	<0.5	<0.5	<0.1	12.8	25.7	<2.5
PT1-2-SB-3-50'	9/15/99	<0.3	4	59.7	<0.2	<0.25	4.43	2.76	3.39	.56	<0.2	<0.5	3.99	<0.5	<0.5	<0.1	10.4	19.4	4.4
PT1-2-SB-3-60'	9/15/99	<0.3	5.72	29	<0.2	<0.25	4.45	2.31	3.66	<0.25	<0.2	<0.5	4.06	<0.5	<0.5	<0.1	8.16	14.4	2.7
PT1-2-SB-4-1'	9/9/99	<0.3	<0.5	94.8	<0.2	<0.25	12.3	6.74	9.86	2.06	<0.2	<0.5	8.44	<0.5	<0.5	<0.1	25.4	38.3	11.4
PT1-2-SB-4-5'	9/9/99	<0.3	<0.5	87.5	<0.2	<0.25	13.3	9.11	10.5	1.9	<0.2	<0.5	<0.5	<0.5	<0.5	<0.1	32	36.5	<2.5
PT1-2-SB-4-10'	9/9/99	<0.3	<0.5	128	<0.2	<0.25	18	10.5	20.5	2.89	<0.2	<0.5	13.4	<0.5	<0.5	<0.1	40.4	57.3	<2.5
PT1-2-SB-5-1'	9/9/99	<0.3	<0.5	80.3	<0.2	<0.25	9.96	4.91	9.63	1.66	<0.2	<0.5	6.33	<0.5	<0.5	<0.1	19.4	31.5	4.7
PT1-2-SB-5-5'	9/9/99	<0.3	<0.5	68.8	<0.2	<0.25	10.3	6.45	7.74	1.63	<0.2	<0.5	6.42	<0.5	<0.5	<0.1	25.4	27.7	<2.5
PT1-2-SB-5-10'	9/9/99	<0.3	<0.5	99.9	<0.2	<0.25	13.8	10.1	14.9	2.11	<0.2	<0.5	11.3	<0.5	<0.5	<0.1	35.2	44.2	<2.5
PT1-2-SB-6-1'	9/9/99	<0.3	<0.5	108	.26	<0.25	19	9.29	20	3.9	.23	<0.5	14.1	<0.5	<0.5	<0.1	43.5	55.8	2.5
PT1-2-SB-6-5'	9/9/99	<0.3	<0.5	53.3	<0.2	<0.25	11.7	6.14	12.4	1.63	<0.2	<0.5	8.44	<0.5	<0.5	<0.1	29.8	32.2	<2.5
PT1-2-SB-6-10'	9/9/99	<0.3	<0.5	61.7	<0.2	<0.25	8.11	5.46	8.73	.81	<0.2	<0.5	6.84	<0.5	<0.5	<0.1	20.9	28.6	<2.5

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Table 5-2D
Area 2 - Summary of Soil Results
EPA Methods 6010/7196A

SAMPLE ID	DATE	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc	Hexavalent Chromium
Units		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Residential PRG[1]		30	21	5,200	150	37	210	3,300	2,800	130[2]	220	370	150[2]	370	370	16	520	22,000	30
PT1-2-SB-7-1'	9/9/99	<0.3	<0.5	67	<0.2	<0.25	7.01	4.13	9.04	38.4	<0.2	<0.5	5.87	<0.5	<0.5	<0.1	15.4	62.3	7
PT1-2-SB-7-5'	9/9/99	<0.3	<0.5	51.2	<0.2	<0.25	9.15	6.71	9.68	.94	<0.2	<0.5	6.75	<0.5	<0.5	<0.1	24.1	31.3	<2.5
PT1-2-SB-7-10'	9/9/99	<0.3	<0.5	48.2	<0.2	<0.25	8.19	4.55	8.39	.82	<0.2	<0.5	7.26	<0.5	<0.5	<0.1	16.8	29.8	<2.5
PT1-2-SB-7-20'	9/15/99	<0.3	2.81	143	<0.2	.97	18.9	11.4	20.5	2.86	<0.2	<0.5	24	.53	<0.5	<0.1	38.3	73.6	6.3
PT1-2-SB-7-30'	9/15/99	<0.3	4.41	125	<0.2	<0.25	14.3	8.35	14.1	1.67	<0.2	<0.5	14.2	<0.5	<0.5	<0.1	30.8	57.7	1.6
PT1-2-SB-7-40'	9/15/99	<0.3	35.5	239	.39	.33	22.4	10.9	25.7	4.14	<0.2	.94	26.2	.69	<0.5	<0.1	37.9	80.4	3.1
PT1-2-SB-7-50'	9/15/99	<0.3	<0.5	113	<0.2	1.26	19	8.74	20.7	4.68	<0.2	<0.5	19.2	.71	<0.5	<0.1	29.2	58.1	1.4
PT1-2-SB-7-60'	9/15/99	<0.3	14.8	40	<0.2	<0.25	10.9	5.31	11	<0.25	.32	<0.5	10.5	<0.5	<0.5	<0.1	18.6	28.2	1.8
PT1-2-SB-8-1'	9/9/99	<0.3	<0.5	55.4	<0.2	<0.25	6.14	3.68	6	1.23	<0.2	<0.5	4.55	<0.5	<0.5	<0.1	12.4	20.1	<2.5
PT1-2-SB-8-5'	9/9/99	<0.3	<0.5	78.9	<0.2	<0.25	7.38	8.68	9.14	1.07	<0.2	<0.5	6.58	<0.5	<0.5	<0.1	19.5	35.2	<2.5
PT1-2-SB-8-10'	9/9/99	<0.3	<0.5	79.5	<0.2	<0.25	8.27	5.49	10.9	1.48	<0.2	<0.5	6.56	<0.5	<0.5	<0.1	24.7	35.6	<2.5
PT1-2-SB-9-1'	9/9/99	<0.3	<0.5	37.3	<0.2	<0.25	6.5	2.04	4.02	.54	<0.2	<0.5	4.38	<0.5	<0.5	<0.1	7.7	9.85	<2.5
PT1-2-SB-9-5'	9/9/99	<0.3	<0.5	36.2	<0.2	<0.25	6.82	2.03	5.65	.52	<0.2	<0.5	3.22	<0.5	<0.5	<0.1	7.46	9.72	<2.5
PT1-2-SB-9-10'	9/9/99	<0.3	<0.5	50.7	<0.2	<0.25	6.7	5.67	7.82	1.32	<0.2	<0.5	5.14	<0.5	<0.5	<0.1	14.2	17.6	<2.5

(1) 1998 Preliminary Remediation Goals
(2) California Modified PRG (1994)

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Table 5-2D
Area 3 - Summary of Soil Results
EPA Methods 6010/7196A

SAMPLE ID	DATE	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc	Hexavalent Chromium
Units		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Residential PRG[1]		30	21	5,200	150	37	210	3,300	2,800	130[2]	220	370	150[2]	370	370	16	520	22,000	30
PT1-3-SB-1-1'	9/16/99	<0.3	<0.5	48.7	<0.2	<0.25	7.92	4.46	7.17	1.99	<0.2	<0.5	5.79	<0.5	<0.5	<0.1	17.7	21.1	<2.5
PT1-3-SB-1-5'	9/16/99	<0.3	<0.5	40.2	<0.2	<0.25	7.68	4.25	6.78	1.01	<0.2	<0.5	11.0	<0.5	<0.5	<0.1	13.8	17.5	<2.5
PT1-3-SB-1-10'	9/16/99	<0.3	<0.5	58.4	<0.2	<0.25	8.84	5.87	8.15	2.44	<0.2	<0.5	<0.5	<0.5	<0.5	<0.1	20.3	31.1	<2.5
PT1-3-SB-2-1'	9/17/99	<0.3	<0.5	54.8	<0.2	<0.25	8.74	4.87	9.44	1.29	<0.2	<0.5	6.29	<0.5	<0.5	<0.1	20.2	24.4	<2.5
PT1-3-SB-2-5'	9/17/99	<0.3	<0.5	46.5	<0.2	<0.25	9.58	5.18	8.78	1.12	<0.2	<0.5	7.51	<0.5	<0.5	<0.1	16.9	26.4	<2.5
PT1-3-SB-2-10'	9/17/99	<0.3	<0.5	63.3	<0.2	<0.25	10.5	6.26	8.68	0.81	<0.2	<0.5	7.91	<0.5	<0.5	<0.1	25.3	31.4	<2.5
PT1-3-SB-3-1'	9/17/99	<0.3	<0.5	57.5	<0.2	<0.25	11.4	6.91	9.38	2.37	<0.2	<0.5	7.93	<0.5	<0.5	<0.1	24.3	26.6	<2.5
PT1-3-SB-3-5'	9/17/99	<0.3	<0.5	57	<0.2	<0.25	12.2	5.42	10.5	1.77	<0.2	<0.5	7.6	<0.5	<0.5	<0.1	24.9	29.6	<2.5
PT1-3-SB-3-10"	9/17/99	<0.3	<0.5	45.6	<0.2	<0.25	11.5	3.94	12.9	1.87	<0.2	<0.5	7.6	<0.5	<0.5	<0.1	19.2	19.2	<2.5

(1) 1998 Preliminary Remediation Goals
(2) California Modified PRG (1994)

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Table 5-2D
Area 7 - Summary of Soil Results
EPA Methods 6010/7196A

SAMPLE ID	DATE	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc	Hexavalent Chromium
Units		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Residential PRG[1]		30	21	5,200	150	37	210	3,300	2,800	130[2]	220	370	150[2]	370	370	16	520	22,000	30
PT1-7-SB-1-1'	9/24/99	<0.3	<0.5	58.2	<0.2	<50	10.7	5.02	15.6	7.22	<0.2	<0.5	7.41	<0.5	<0.5	<0.1	16.7	38.5	<2.5
PT1-7-SB-1-10'	9/24/99	<0.3	<0.5	36.7	<0.2	<50	7.33	4.25	6.55	1.06	<0.2	<0.5	5.53	<0.5	<0.5	<0.1	14.6	15.1	7
PT1-7-SB-2-1'	9/20/99	<0.3	<0.5	56.3	<0.2	<0.25	7.75	4.02	14.6	2.02	<0.2	<0.5	5.13	0.55	<0.5	<0.1	15.8	27.5	<2.5
PT1-7-SB-2-10'	9/20/99	<0.3	<0.5	28.1	<0.2	<0.25	3.54	3.04	59.6	0.53	<0.2	<0.5	2.93	<0.5	<0.5	<0.1	12.6	40.9	<2.5
PT1-7-SB-3-1'	9/20/99	<0.3	<0.5	87.2	<0.2	<0.25	10.1	4.8	71.9	9.02	<0.2	<0.5	8.58	0.65	<0.5	<0.1	16.5	87	<2.5
PT1-7-SB-3-10'	9/20/99	<0.3	<0.5	25.4	<0.2	<0.25	1.44	1.6	47.2	0.49	<0.2	<0.5	1.76	<0.5	<0.5	<0.1	4.03	45.2	<2.5
PT1-7-SB-4-1'	9/20/99	<0.3	<0.5	40	<0.2	<0.25	5.39	3.56	121	36.4	<0.2	<0.5	3.74	<0.5	<0.5	<0.1	12.9	89.8	<2.5
PT1-7-SB-4-10'	9/20/99	<0.3	<0.5	54.6	<0.2	<0.25	6.67	4.33	115	1.42	<0.2	<0.5	4.72	<0.5	<0.5	<0.1	14.1	212	<2.5

(1) 1998 Preliminary Remediation Goals
(2) California Modified PRG (1994)

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Table 5-2D
Area 8 - Summary of Soil Results
EPA Methods 6010/7196A

SAMPLE ID	DATE	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc	Hexavalent Chromium
Units		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Residential PRG[1]		30	21	5,200	150	37	210	3,300	2,800	130[2]	220	370	150[2]	370	370	16	520	22,000	30
PT1-8-SB-1-1'	9/15/99	<0.3	<0.5	70	<0.2	<0.25	10.9	5.62	7.56	2.17	<0.2	<0.5	8.42	<0.5	<0.5	<0.1	20.2	38.2	1.6
PT1-8-SB-1-5'	9/15/99	<0.3	<0.5	69.3	<0.2	<0.25	12.4	10.3	<0.5	2.19	<0.2	<0.5	8.79	.58	<0.5	<0.1	29.4	48.5	<2.5
PT1-8-SB-1-10'	9/15/99	<0.3	<0.5	23.9	<0.2	<0.25	4.11	2.12	3.8	.6	<0.2	<0.5	4.07	<0.5	<0.5	<0.1	9.08	18.6	4.1
PT1-8-SB-2-1'	9/15/99	<0.3	<0.5	91	<0.2	<0.25	12	6.24	9.92	2.45	<0.2	<0.5	9.55	0.52	<0.5	<0.1	20.8	38.9	<2.5
PT1-8-SB-2-5'	9/15/99	<0.3	<0.5	81.7	<0.2	<0.25	12.8	7.15	9.09	2.98	<0.2	<0.5	9.75	0.53	<0.5	<0.1	24.3	39.8	11.6
PT1-8-SB-2-10'	9/15/99	<0.3	<0.5	85.5	<0.2	<0.25	15	7.7	10.1	2.75	<0.2	<0.5	9.58	<0.5	<0.5	<0.1	31	46.4	<2.5
PT1-8-SB-3-1'	9/15/99	<0.3	<0.5	101	<0.2	<0.25	13.2	6.68	10.6	2.84	<0.2	<0.5	10.1	<0.5	<0.5	<0.1	22.7	81.9	2.9
PT1-8-SB-3-5'	9/15/99	<0.3	<0.5	74.8	<0.2	<0.25	12.7	7.18	8.12	2.52	<0.2	<0.5	9.87	<0.5	<0.5	<0.1	25.5	48.3	12
PT1-8-SB-3-10'	9/15/99	<0.3	<0.5	90.8	<0.2	<0.25	17.5	11.2	18.9	3.51	<0.2	<0.5	16.7	<0.5	<0.5	<0.1	38.7	106	17
PT1-8-SB-4-1'	9/15/99	<0.3	0.6	88	<0.2	<0.25	11.8	5.52	10.8	30.1	<0.2	<0.5	9.91	0.6	<0.5	<0.1	20.9	89.3	11
PT1-8-SB-4-5'	9/15/99	<0.3	<0.5	104	<0.2	<0.25	20.6	9.21	<0.5	3.36	<0.2	<0.5	12.4	<0.5	<0.5	<0.1	44.1	55	16
PT1-8-SB-4-10'	9/15/99	<0.3	<0.5	93.1	<0.2	<0.25	22.3	12.4	23.6	4.63	<0.2	<0.5	17.4	<0.5	<0.5	<0.1	43.1	76.3	16.5

(1) 1998 Preliminary Remediation Goals
(2) California Modified PRG (1994)

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Table 5-2D
Area 9 - Summary of Soil Results
EPA Methods 6010/7196A

SAMPLE ID	DATE	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc	Hexavalent Chromium
Units		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Residential PRG[1]		30	21	5,200	150	37	210	3,300	2,800	130[2]	220	370	150[2]	370	370	16	520	22,000	30
PT1-9-SB-1-1'	9/20/99	<0.3	<0.5	70.4	<0.2	<0.25	9.34	4.64	119	13.6	<0.2	<0.5	6.79	0.56	<0.5	<0.1	14.7	109	<2.5
PT1-9-SB-1-10'	9/20/99	<0.3	<0.5	97.5	<0.2	<0.25	15.7	8.5	31.3	2.36	0.26	<0.5	10.3	<0.5	<0.5	<0.1	35.7	71.3	<2.5
PT1-9-SB-2-1'	9/24/99	<0.3	<0.5	79.9	<0.2	<50	14.8	6.88	9.38	2.11	<0.2	<0.5	9.41	<0.5	<0.5	<0.1	23.8	33	<2.5
PT1-9-SB-2-10'	9/24/99	<0.3	<0.5	89.4	<0.2	<50	16.1	12.9	11.1	2.36	<0.2	<0.5	10.8	<0.5	<0.5	<0.1	32.3	40.3	<2.5
PT1-9-SB-3-1'	9/24/99	<0.3	<0.5	71	<0.2	<50	12	5.28	9.35	9.53	<0.2	<0.5	8.33	0.53	<0.5	<0.1	18.6	37.8	<2.5
PT1-9-SB-3-10'	9/24/99	<0.3	<0.5	126	<0.2	<50	25.8	15.9	16.7	4.03	<0.2	<0.5	19.1	<0.5	<0.5	<0.1	49	52.7	<2.5
PT1-9-SB-4-1'	9/24/99	<0.3	<0.5	86	<0.2	<50	15.9	6.85	11	3.86	<0.2	<0.5	9.42	0.5	<0.5	<0.1	22	41.6	<2.5
PT1-9-SB-4-10'	9/24/99	<0.3	<0.5	91.1	<0.2	<50	25.3	11.2	18.1	3.92	<0.2	<0.5	15.9	0.51	<0.5	<0.1	50.2	59.5	<2.5

(1) 1998 Preliminary Remediation Goals
(2) California Modified PRG (1994)

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Table 5-2D
Area 13 - Summary of Soil Results
EPA Methods 6010/7196A

SAMPLE ID	DATE	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc	Hexavalent Chromium
Units		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Residential PRG[1]		30	21	5,200	150	37	210	3,300	2,800	130[2]	220	370	150[2]	370	370	16	520	22,000	30
PT1-13-SB-1-1'	9/8/99	<0.3	<0.5	128	<0.2	<0.25	20.9	7.98	18.3	52.6	0.44	1.12	20	.79	<0.5	<0.1	30.8	63.8	20.9
PT1-13-SB-1-5'	9/8/99	<0.3	.81	225	<0.2	1.05	17.1	6.19	27.1	506	.35	1.57	12.8	.57	<0.5	<0.1	26.7	65.4	17.1
PT1-13-SB-1-10'	9/8/99	<0.3	<0.5	128	<0.2	<0.25	16.2	8.81	17.3	2.26	.23	<0.5	12.9	<0.5	<0.5	<0.1	37	50.2	4.82
PT1-13-SB-2-1'	9/8/99	<0.3	<0.5	101	<0.2	<0.25	18.2	6.72	11.8	2.83	<0.2	<0.5	10.4	<0.5	<0.5	<0.1	40.3	43.2	4.09
PT1-13-SB-2-5'	9/8/99	<0.3	<0.5	155	.24	<0.25	20.5	12.3	12.1	3.30	.31	<0.5	11.8	.66	<0.5	<0.1	48.4	41	3
PT1-13-SB-2-10'	9/8/99	<0.3	<0.5	109	<0.2	<0.25	18.7	9.13	18.6	3.04	<0.2	<0.5	13.4	<0.5	<0.5	<0.1	37.2	56.1	<2.5
PT1-13-SB-3-1'	9/8/99	<0.3	<0.5	102	<0.2	<0.25	17.4	6.21	17.2	6.72	<0.2	<0.5	9.87	.53	<0.5	<0.1	42.9	51.2	4.09
PT1-13-SB-3-5'	9/8/99	<0.3	<0.5	115	<0.2	<0.25	22.6	10.1	15.5	3.69	<0.2	<0.5	13.9	<0.5	<0.5	<0.1	52.5	53.8	<2.5
PT1-13-SB-3-10'	9/8/99	<0.3	<0.5	112	<0.2	<0.25	17	10.8	17	2.84	<0.2	<0.5	14.6	0.5	<0.5	<0.1	36.5	48.5	3.55
PT1-13-SB-3-20'	9/10/99	<0.3	<0.5	77.9	<0.2	<0.25	8.94	6.59	11.1	1.16	<0.2	<0.5	8.28	<0.5	<0.5	<0.1	22.9	34.2	<2.5
PT1-13-SB-3-30'	9/10/99	<0.3	<0.5	116	<0.2	<0.25	15.4	9.18	19	3.41	<0.2	<0.5	13	<0.5	<0.5	<0.1	42.4	62	2.8
PT1-13-SB-3-40'	9/10/99	<0.3	5.58	68.6	<0.2	<0.25	11.1	6.37	12	1.33	<0.2	<0.5	10.4	<0.5	<0.5	<0.1	28.6	39	<2.5
PT1-13-SB-3-50'	9/10/99	<0.3	14.1	102	<0.2	<0.25	16.6	9.37	19.9	2	<0.2	<0.5	15.5	<0.5	<0.5	<0.1	36.6	55.7	<2.5
PT1-13-SB-3-60'	9/10/99	<0.3	15.2	114	.2	<0.25	17.2	8.6	19.2	2.86	<0.2	<0.5	14.6	<0.5	<0.5	<0.1	25.9	55.3	<2.5
PT1-13-SB-4-1'	9/8/99	<0.3	<0.5	73	<0.2	<0.25	10.6	5.65	12.3	30.6	1.01	<0.5	9.97	<0.5	<0.5	<0.1	23.1	44.4	7.36
PT1-13-SB-4-5'	9/8/99	<0.3	<0.5	78.5	<0.2	<0.25	15.4	7.71	9.98	3.82	<0.2	<0.5	10	<0.5	<0.5	<0.1	37.6	35.9	3.36
PT1-13-SB-4-10'	9/8/99	<0.3	<0.5	127	<0.2	<0.25	18.2	9.04	18.7	2.12	<0.2	<0.5	13	<0.5	<0.5	<0.1	38.4	51.4	2.82
PT1-13-SB-4-20'	9/13/99	<0.3	<0.5	102	<0.2	<0.25	11.8	7.32	13.1	1.19	<0.2	<0.5	10.2	<0.5	<0.5	<0.1	22	41.1	11.1
PT1-13-SB-4-30'	9/13/99	<0.3	3.11	126	<0.2	<0.25	14.1	9.56	12	1.96	<0.2	<0.5	13.2	<0.5	<0.5	<0.1	36.3	52.7	2.7
PT1-13-SB-4-40'	9/13/99	<0.3	12.9	128	<0.2	<0.25	22.1	9.65	24.1	1.99	<0.2	<0.5	17.3	<0.5	<0.5	<0.1	47.5	67.9	4.5
PT1-13-SB-4-50'	9/13/99	<0.3	8.93	108	<0.2	<0.25	14	7.66	15	.87	<0.2	<0.5	11.6	<0.5	<0.5	<0.1	28.3	49.7	6.3
PT1-13-SB-4-60'	9/13/99	<0.3	7.46	94.1	<0.2	.25	12.7	6.97	13.2	1.6	<0.2	<0.5	12.8	<0.5	<0.5	<0.1	22.8	38.4	2.7

(1) 1998 Preliminary Remediation Goals
(2) California Modified PRG (1994)

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Table 5-2D
Area 16 - Summary of Soil Results
EPA Methods 6010/7196A

SAMPLE ID	DATE	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc	Hexavalent Chromium
Units		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Residential PRG[1]		30	21	5,200	150	37	210	3,300	2,800	130[2]	220	370	150[2]	370	370	16	520	22,000	30
PT1-16-SB-1-1'	9/8/99	<0.3	<0.5	108	<0.2	<0.25	25.2	6.16	13	3.09	<0.2	<0.5	10.9	<0.5	<0.5	<0.1	53.3	63.2	4.64
PT1-16-SB-1-5'	9/8/99	<0.3	<0.5	132	<0.2	<0.25	21.8	9.18	13	2.92	<0.2	<0.5	12.7	.51	<0.5	<0.1	49.3	74	4.45
PT1-16-SB-1-10"	9/8/99	<0.3	<0.5	108	<0.2	<0.25	13.8	10.2	14.7	3.35	<0.2	<0.5	12.1	<0.5	<0.5	<0.1	31.7	41.3	3.18
PT1-16-SB-1-20"	9/16/99	<0.3	<0.5	105	<0.2	<0.25	15.9	8.07	16.5	1.61	<0.2	<0.5	12.2	<0.5	<0.5	<0.1	29	49.3	<2.5
PT1-16-SB-1-30'	9/16/99	<0.3	<0.5	63.7	<0.2	<0.25	13.3	8.36	13.6	2.01	<0.2	<0.5	10.1	<0.5	<0.5	<0.1	23.7	38.9	<2.5
PT1-16-SB-1-40'	9/16/99	<0.3	11.5	264	.26	.25	41.6	20.8	35.8	6.77	<0.2	.97	27	<0.5	<0.5	<0.1	57.6	84.3	<2.5
PT1-16-SB-1-50'	9/16/99	<0.3	7.45	102	<0.2	<0.25	16.7	8.97	15.5	1.04	<0.2	<0.5	13.8	<0.5	<0.5	<0.1	32.9	45.5	<2.5
PT1-16-SB-1-60'	9/16/99	<0.3	18	55.8	<0.2	.31	11.8	6.59	10.3	1.91	<0.2	<0.5	10	<0.5	<0.5	<0.1	29.6	26.1	<2.5
PT1-16-SB-2-1'	9/8/99	<0.3	<0.5	78.6	<0.2	<0.25	17.2	6.58	9.75	3.04	<0.2	<0.5	10.4	<0.5	<0.5	<0.1	35.1	34.8	3
PT1-16-SB-2-5'	9/8/99	<0.3	<0.5	120	.26	<0.25	20.7	8.12	12.7	2.81	<0.2	<0.5	11.8	<0.5	<0.5	<0.1	50.1	47.5	<2.5
PT1-16-SB-2-10'	9/8/99	<0.3	<0.5	105	<0.2	<0.25	19.2	8.7	18	5.37	<0.2	<0.5	12.9	<0.5	<0.5	<0.1	41.6	50.3	<2.5
PT1-16-SB-2-20'	9/16/99	<0.3	<0.5	114	<0.2	<0.25	16.2	8.64	18.8	1.74	<0.2	<0.5	13.8	0.54	<0.5	<0.1	28.2	46.1	<2.5
PT1-16-SB-2-30'	9/16/99	<0.3	<0.5	134	<0.2	<0.25	19.2	11.2	22.2	2.06	<0.2	<0.5	16.2	<0.5	<0.5	<0.1	41.2	67.9	<2.5
PT1-16-SB-2-40'	9/16/99	<0.3	3.67	119	<0.2	<0.25	19.4	10.5	19.9	2.8	0.24	<0.5	15.8	<0.5	<0.5	<0.1	38.2	58.9	<2.5
PT1-16-SB-2-50'	9/16/99	<0.3	9.17	95.6	<0.2	<0.25	17.8	9.49	16.8	0.82	<0.2	<0.5	15.2	<0.5	<0.5	<0.1	32.3	52.4	<2.5
PT1-16-SB-2-60'	9/16/99	<0.3	9.15	86.8	<0.2	<0.25	15	7.9	12.2	0.39	<0.2	<0.5	12.8	<0.5	<0.5	<0.1	26.2	36.1	15
PT1-16-SB-3-1'	9/8/99	<0.3	<0.5	82.4	<0.2	<0.25	14.8	7.71	9.10	2.47	<0.2	<0.5	9.96	<0.5	<0.5	<0.1	33.2	33.8	4.45
PT1-16-SB-3-5'	9/8/99	<0.3	<0.5	96.9	<0.2	<0.25	17.3	10.9	10	2.36	<0.2	<0.5	9.56	<0.5	<0.5	<0.1	44	37.9	4.27
PT1-16-SB-3-10'	9/8/99	<0.3	<0.5	102	<0.2	<0.25	16.5	10.8	17	2.20	.2	<0.5	14	<0.5	<0.5	<0.1	38.5	49.6	3
PT1-16-SB-4-1'	9/8/99	<0.3	<0.5	102	<0.2	<0.25	15	9.76	11.3	2.34	<0.2	<0.5	10.2	.64	<0.5	<0.1	35.7	39.2	3.55
PT1-16-SB-4-5'	9/8/99	<0.3	<0.5	100	<0.2	<0.25	15.2	7.87	11.5	23.4	.2	<0.5	9.67	<0.5	<0.5	<0.1	29.3	39.2	<2.5
PT1-16-SB-4-10'	9/8/99	<0.3	<0.5	147	<0.2	<0.25	19	10	20.1	3.15	<0.2	<0.5	14.8	<0.5	<0.5	<0.1	41.8	56.8	4.27

(1) 1998 Preliminary Remediation Goals
(2) California Modified PRG (1994)

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Table 5-2E
Area 1A - Summary of Soil Results
EPA Methods 418.1, 8015M, and 150.1

SAMPLE ID	DATE	TRPH	TPH-G (C4-C12)	TPH-D (C13-C22)	TPH-EXT (C23-C40)	pH
Units		mg/kg	mg/kg	mg/kg	mg/kg	NA
PT1-1A-SB-1-1'	9/9/99	8,240	142	<40	3,640	4.6
PT1-1A-SB-1-5'	9/9/99	7,630	1,470	580	1,820	5.64
PT1-1A-SB-1-10'	9/9/99	29,500	2,430	1,880	10,550	7.23
PT1-1A-SB-1-20'	9/13/99	<10	<1	<10	<50	7.98
PT1-1A-SB-1-30'	9/13/99	<10	<1	<10	<50	8.12
PT1-1A-SB-1-40'	9/13/99	122	2	<10	<50	9.82
PT1-1A-SB-1-50'	9/13/99	<10	<1	<10	<50	8.61
PT1-1A-SB-1-60'	9/13/99	<10	<1	<10	<50	9.22
PT1-1A-SB-2-1'	9/9/99	58	<1	<10	<50	7.33
PT1-1A-SB-2-5'	9/9/99	<10	<1	<10	<50	8.52
PT1-1A-SB-2-10'	9/9/99	<10	<1	<10	<50	7.86
PT1-1A-SB-3-1'	9/9/99	105,000	<1	<10	<50	8.71
PT1-1A-SB-3-5'	9/9/99	14	<1	<10	<50	4.05
PT1-1A-SB-3-10'	9/9/99	<10	<1	<10	<50	7.53
PT1-1A-SB-4-1'	9/9/99	43,500	<1	<10	<50	4.73
PT1-1A-SB-4-5'	9/9/99	<10	<1	<10	<50	4.21
PT1-1A-SB-4-10'	9/9/99	<10	<1	<10	<50	4.77
PT1-1A-SB-5-1'	9/9/99	14,400	<1	<40	10,200	8.04
PT1-1A-SB-5-5'	9/9/99	<10	<1	<10	<50	4.39
PT1-1A-SB-5-10'	9/9/99	<10	<1	<10	<50	7.39
PT1-1A-SB-5-20'	9/13/99	<10	<1	<10	<50	8.57
PT1-1A-SB-5-30'	9/13/99	<10	<1	<10	<50	8.93
PT1-1A-SB-5-40'	9/13/99	<10	<1	<10	<50	8.3
PT1-1A-SB-5-50'	9/13/99	<10	<1	<10	<50	8.27
PT1-1A-SB-5-60'	9/13/99	<10	<1	<10	<50	8.7
PT1-1A-SB-6-1'	9/9/99	8160	<1	<10	4,970	6.63
PT1-1A-SB-6-5'	9/9/99	<10	<1	<10	<50	6.81
PT1-1A-SB-6-10'	9/9/99	<10	<1	<10	<50	8.02
PT1-1A-SB-6-20'	9/14/99	<10	<1	<10	<50	9.14
PT1-1A-SB-6-30'	9/14/99	<10	<1	<10	<50	8.82
PT1-1A-SB-6-40'	9/14/99	<10	<1	<10	<50	8.62
PT1-1A-SB-6-50'	9/14/99	<10	<1	<10	<50	8.9
PT1-1A-SB-6-60'	9/14/99	<10	<1	<10	<50	8.93
PT1-1A-SB-7-1'	9/9/99	4380	<1	<10	4,080	5.35
PT1-1A-SB-7-5'	9/9/99	<10	<1	<10	<50	4.34
PT1-1A-SB-7-10'	9/9/99	<10	<1	<10	<50	7.59
PT1-1A-SB-8-1'	9/9/99	113,000	<1	<10	11,400	5.34
PT1-1A-SB-8-5'	9/9/99	<10	<1	<10	<50	6.03
PT1-1A-SB-8-10'	9/9/99	<10	<1	<10	<50	7.8

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Table 5-2E
Area 3 - Summary of Soil Results
EPA Methods 418.1, 8015M, and 150.1

SAMPLE ID	DATE	TRPH	TPH-G (C4-C12)	TPH-D (C13-C22)	TPH-EXT (C23-C40)	pH
Units		mg/kg	mg/kg	mg/kg	mg/kg	NA
PT1-3-SB-1-1'	9/16/99	**14,800**	**34**	**3,920**	**2,990**	NT
PT1-3-SB-1-5'	9/16/99	**17,400**	**23**	**2,580**	**3,320**	NT
PT1-3-SB-1-10'	9/17/99	**6,840**	**18**	**1,850**	**1,520**	NT
PT1-3-SB-2-1'	9/17/99	<10	<1	<10	<50	NT
PT1-3-SB-2-5'	9/17/99	<10	<1	<10	<50	NT
PT1-3-SB-2-10'	9/17/99	<10	<1	<10	<50	NT
PT1-3-SB-3-1'	9/16/99	<10	<1	<10	<50	NT
PT1-3-SB-3-5'	9/16/99	<10	<1	<10	<50	NT
PT1-3-SB-3-10"	9/17/99	<10	<1	<10	<50	NT

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PRIVILEGES ASSERTED

Table 5-2E
Area 8 - Summary of Soil Results
EPA Methods 418.1, 8015M, and 150.1

SAMPLE ID	DATE	TRPH	TPH-G (C4-C12)	TPH-D (C13-C22)	TPH-EXT (C23-C40)	pH
Units		mg/kg	mg/kg	mg/kg	mg/kg	NA
PT1-8-SB-1-1'	9/15/99	<10	<1	<10	<50	NT
PT1-8-SB-1-5'	9/15/99	<10	<1	<10	<50	NT
PT1-8-SB-1-10'	9/15/99	<10	<1	<10	<50	NT
PT1-8-SB-2-1'	9/15/99	<10	<1	<10	<50	NT
PT1-8-SB-2-5'	9/15/99	<10	<1	<10	<50	NT
PT1-8-SB-2-10'	9/15/99	<10	<1	<10	<50	NT
PT1-8-SB-3-1'	9/15/99	<10	<1	<10	<50	NT
PT1-8-SB-3-5'	9/15/99	<10	<1	<10	<50	NT
PT1-8-SB-3-10'	9/15/99	<10	<1	<10	<50	NT
PT1-8-SB-4-1'	9/15/99	**299**	**1**	<10	**50**	NT
PT1-8-SB-4-5'	9/15/99	<10	<1	<10	<50	NT
PT1-8-SB-4-10'	9/15/99	<10	<1	<10	<50	NT

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ATTORNEY-CLIENT AND WORK PRODUCT
PRIVILEGES ASSERTED

Table 5-2E
Area 7 - Summary of Soil Results
EPA Methods 418.1, 8015M, and 150.1

SAMPLE ID	DATE	TRPH	TPH-G (C4-C12)	TPH-D (C13-C22)	TPH-EXT (C23-C40)	pH
Units		mg/kg	mg/kg	mg/kg	mg/kg	NA
PT1-7-SB-1-1'	9/24/99	<10	<1	<10	<50	**9.17**
PT1-7-SB-1-10'	9/24/99	<10	<1	<10	<50	**8.21**
PT1-7-SB-2-1'	9/20/99	<10	<1	<10	<50	**9.61**
PT1-7-SB-2-10'	9/20/99	<10	<1	<10	<50	**7.74**
PT1-7-SB-3-1'	9/20/99	<10	<1	<10	<50	**8.26**
PT1-7-SB-3-10'	9/20/99	<10	<1	<10	<50	**8.79**
PT1-7-SB-4-1'	9/20/99	**138**	<1	<10	**112**	**8.65**
PT1-7-SB-4-10'	9/20/99	<10	<1	<10	<50	**9.09**

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ATTORNEY-CLIENT AND WORK PRODUCT
PRIVILEGES ASSERTED

Table 5-2E
Area 9 - Summary of Soil Results
EPA Methods 418.1, 8015M, and 150.1

SAMPLE ID	DATE	TRPH	TPH-G (C4-C12)	TPH-D (C13-C22)	TPH-EXT (C23-C40)	pH
Units		mg/kg	mg/kg	mg/kg	mg/kg	NA
PT1-9-SB-1-1'	9/20/99	400	NT	NT	NT	8.81
PT1-9-SB-1-10'	9/20/99	<10	NT	NT	NT	8.87
PT1-9-SB-2-1'	9/24/99	<10	<1	<10	<50	8.63
PT1-9-SB-2-10'	9/24/99	<10	<1	<10	<50	7.82
PT1-9-SB-3-1'	9/24/99	<10	<1	<10	<50	8.38
PT1-9-SB-3-10'	9/24/99	<10	<1	<10	<50	8.53
PT1-9-SB-4-1'	9/24/99	<10	<1	<10	<50	6.61
PT1-9-SB-4-10'	9/24/99	<10	<1	<10	<50	8.77

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ATTORNEY-CLIENT AND WORK PRODUCT
PRIVILEGES ASSERTED

Table 5-2E
Area 13 - Summary of Soil Results
EPA Methods 418.1, 8015M, and 150.1

SAMPLE ID	DATE	TRPH	TPH-G (C4-C12)	TPH-D (C13-C22)	TPH-EXT (C23-C40)	pH
Units		mg/kg	mg/kg	mg/kg	mg/kg	NA
PT1-13-SB-1-1'	9/8/99	1740	<1	<10	1800	6.45
PT1-13-SB-1-5'	9/8/99	208	<1	<10	<50	7.63
PT1-13-SB-1-10'	9/8/99	<10	<1	<10	<50	7.77
PT1-13-SB-2-1'	9/8/99	1590	<1	<10	221	4.83
PT1-13-SB-2-5'	9/8/99	<10	<1	<10	<50	6.78
PT1-13-SB-2-10'	9/8/99	<10	<1	<10	<50	7.82
PT1-13-SB-3-1'	9/8/99	<10	<1	<10	<50	4.22
PT1-13-SB-3-5'	9/8/99	356	<1	<10	50	8.01
PT1-13-SB-3-10'	9/8/99	<10	<1	<10	<50	8.03
PT1-13-SB-3-20'	9/10/99	<10	<1	<10	<50	9.16
PT1-13-SB-3-30'	9/10/99	<10	<1	<10	<50	8.38
PT1-13-SB-3-40'	9/10/99	20	<1	<10	<50	8.35
PT1-13-SB-3-50'	9/10/99	65	1.3	<10	<50	8.21
PT1-13-SB-3-60'	9/10/99	116	1.3	<10	<50	8.87
PT1-13-SB-4-1'	9/8/99	19,900	1520	3,140	5,750	8.85
PT1-13-SB-4-5'	9/8/99	18,700	1230	965	3,200	8.57
PT1-13-SB-4-10'	9/8/99	11,200	1690	1,090	4,070	8.8
PT1-13-SB-4-20'	9/13/99	28,000	2150	<10	<50	7.87
PT1-13-SB-4-30'	9/13/99	28,300	2070	<10	<50	9.22
PT1-13-SB-4-40'	9/13/99	45	14	<10	<50	9.47
PT1-13-SB-4-50'	9/13/99	17	1.1	<10	<50	9.31
PT1-13-SB-4-60'	9/13/99	24	27	<10	<50	9.48

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PRIVILEGES ASSERTED

Table 5-2E
Area 16 - Summary of Soil Results
EPA Methods 418.1, 8015M, and 150.1

SAMPLE ID	DATE	TRPH	TPH-G (C4-C12)	TPH-D (C13-C22)	TPH-EXT (C23-C40)	pH
Units		mg/kg	mg/kg	mg/kg	mg/kg	NA
PT1-16-SB-1-1'	9/8/99	3,320	3.6	322	1,310	4.84
PT1-16-SB-1-5'	9/8/99	<10	<1	<10	<50	4.23
PT1-16-SB-1-10"	9/8/99	<10	<1	<10	<50	7.29
PT1-16-SB-1-20'	9/16/99	<10	<1	<10	<50	9.06
PT1-16-SB-1-30	9/16/99	<10	<1	<10	<50	9.42
PT1-16-SB-1-40'	9/16/99	<10	<1	<10	<50	9.47
PT1-16-SB-1-50'	9/16/99	<10	<1	<10	<50	8.8
PT1-16-SB-1-60'	9/16/99	<10	<1	<10	<50	9.09
PT1-16-SB-2-1'	9/8/99	<10	<1	<10	<50	7.76
PT1-16-SB-2-5'	9/8/99	<10	<1	<10	<50	7.92
PT1-16-SB-2-10'	9/8/99	<10	<1	<10	<50	8.66
PT1-16-SB-2-20'	9/16/99	173	<1	<10	<50	9.14
PT1-16-SB-2-30'	9/16/99	<10	<1	<10	<50	8.78
PT1-16-SB-2-40'	9/16/99	<10	<1	<10	54	8.52
PT1-16-SB-2-50'	9/16/99	<10	<1	<10	<50	8.07
PT1-16-SB-2-60'	9/16/99	<10	<1	<10	<50	9.02
PT1-16-SB-3-1'	9/8/99	45	<1	<10	<50	7.69
PT1-16-SB-3-5'	9/8/99	<10	<1	<10	<50	7.85
PT1-16-SB-3-10'	9/8/99	<10	<1	<10	<50	8.78
PT1-16-SB-4-1'	9/8/99	<10	<1	<10	<50	7.58
PT1-16-SB-4-5'	9/8/99	<10	<1	<10	<50	7.64
PT1-16-SB-4-10'	9/8/99	<10	<1	<10	<50	8.13

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ATTORNEY-CLIENT AND WORK PRODUCT
PRIVILEGES ASSERTED

Table 5-3A
Summary of Groundwater Results
EPA Method 8260

SAMPLE ID		DATE	Acetone	Benzene	2-Butanone	n-Butylbenzene	sec-Butylbenzene	Chlorobenzene	Chloroform	1,2-Dichlorobenzene	1,4-Dichlorobenzene	1,1-Dichloroethane	1,1-Dichloroethene	cis-1,2-Dichloroethene	1,2-Dichloropropane	Ethylbenzene
Units			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MCL[1]			610[2]	1	1,900[2]	NA	NA	70	100	600	5	5	6	6	NA	700
DP Locations	PT1-1A-GW-1-65'	9/13/99	594	46.5	72.9	<1.0	1.6	14.5	<1.0	10.1	2.2	8.5	1.7	2.8	1.1	17.9
	PT1-1A-GW-5-65'	9/14/99	<5.0	17.3	<5.0	1	3.1	27.6	<1.0	10.4	3.1	31.3	4.3	11	<1.0	<1.0
	PT1-1A-GW-6-65'	9/14/99	<5.0	34.6	<5.0	<1.0	3	22.8	<1.0	9.6	3.9	29	5.1	22.7	<1.0	<1.0
	PT1-2-GW-2-65'	9/15/99	<5.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	17.9	<1.0	<1.0
	PT1-2-GW-3-65'	9/15/99	<5.0	1.2	<5.0	<1.0	<1.0	<1.0	3.4	<1.0	<1.0	<1.0	<1.0	48.2	<1.0	<1.0
	PT1-2-GW-7-64'	9/15/99	<5.0	1	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1	<1.0	<1.0	<1.0
	PT1-10-GW-1-70'	9/14/99	<5.0	8.3	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.5	1.9	<1.0	<1.0
	PT1-13-GW-3-62'	9/10/99	1,280	102	367	<1.0	3.4	20.1	<1.0	13.8	3.1	9.6	<1.0	3.2	<1.0	69
	PT1-13-GW-4-63'	9/13/99	15,700	333	2,110	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	247
	PT1-16-GW-1-66	9/16/99	<5.0	3	<5.0	<1.0	<1.0	3.2	<1.0	1.9	<1.0	3.3	<1.0	<1.0	<1.0	<1.0
	PT1-16-GW-2-68	9/16/99	222	37.5	<5.0	<1.0	<1.0	4.4	<1.0	1.9	<1.0	4.5	<1.0	<1.0	<1.0	6.2
TP Locations	PT-1-2-TP-2-66'	9/24/99	<5.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	PT-1-6-TP-3-79'	9/24/99	<5.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	PT-1-7-TP-4-75'	9/24/99	<5.0	<1.0	<5.0	<1.0	<1.0	<1.0	1.3	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0

DP = Direct Push
TP = Temporary piezometer
(1) MCL = Maximum Contaminant Level
(2) Preliminary Remediation Goal
(3) California Modified MCL

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Table 5-3A
Summary of Groundwater Results
EPA Method 8260

SAMPLE ID		DATE	Isopropylbenzene	p-Isopropyltoluene	4-Methyl-2-pentanone	Naphthalene	n-Propylbenzene	Tetrachloroethene	Toluene	1,1,1-Trichloroethane	Trichloroethene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	o-Xylene	m/p-Xylene
Units			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MCL[1]			19[2]	NA	160[2]	240[2]	NA	5	150	5	5	NA	NA	1,750	1,750
DP Locations	PT1-1A-GW-1-65'	9/13/99	2.5	<1.0	336	16.8	4.4	13.2	41.6	<1.0	53	26.3	6.5	16.9	36.6
	PT1-1A-GW-5-65'	9/14/99	4.6	1.1	<5.0	1	<1.0	26.8	<1.0	<1.0	144	<1.0	<3.0	<1.0	<2.0
	PT1-1A-GW-6-65'	9/14/99	7.9	<1.0	<5.0	3.3	<1.0	25.8	<1.0	<1.0	142	<1.0	<3.0	<1.0	<2.0
	PT1-2-GW-2-65'	9/15/99	<1.0	<1.0	<5.0	<1.0	<1.0	2.8	<1.0	<1.0	177	<1.0	<3.0	<1.0	<2.0
	PT1-2-GW-3-65'	9/15/99	<1.0	<1.0	<5.0	<1.0	<1.0	2.3	<1.0	<1.0	551	<1.0	<3.0	<1.0	<2.0
	PT1-2-GW-7-64'	9/15/99	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	12.6	<1.0	<3.0	<1.0	<2.0
	PT1-10-GW-1-70'	9/14/99	<1.0	<1.0	<5.0	<1.0	<1.0	2.9	<1.0	<1.0	144	1.4	<3.0	<1.0	2
	PT1-13-GW-3-62'	9/10/99	7.5	4.1	687	90	19.2	14.6	233	<1.0	69	169	47.3	132	234
	PT1-13-GW-4-63'	9/13/99	<100	<100	1,060	<100	<100	<100	1,400	105	<100	360	<300	415	1,160
	PT1-16-GW-1-66	9/16/99	<1.0	<1.0	<5.0	<1.0	<1.0	1.8	<1.0	<1.0	18.4	<1.0	<3.0	<1.0	<2.0
	PT1-16-GW-2-68	9/16/99	<1.0	<1.0	158	1.6	<1.0	4.2	33.3	<1.0	20.6	7.5	1.9	8.6	13
TP Locations	PT-1-2-TP-2-66'	9/24/99	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	2.8	<1.0	<3.0	<1.0	<2.0
	PT-1-6-TP-3-79'	9/24/99	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0
	PT-1-7-TP-4-75'	9/24/99	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0

DP = Direct Push
TP = Temporary piezometer
(1) MCL = Maximum Contaminant Level
(2) Preliminary Remediation Goal
(3) California Modified MCL

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Table 5-3B
Summary of Groundwater Results
EPA Method 8270

SAMPLE ID		DATE	2,4-Dimethylphenol	2-Methylphenol	4-Methylphenol	Pentachlorophenol	Phenol	Pyrene
Units			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MCL[1]			730[2]	NA	NA	1	NA	NA
DP Location	PT1-1A-GW-1-65'	9/13/99	**196**	**334**	**893**	<10	**944**	<10
	PT1-1A-GW-5-65'	9/14/99	<10	<10	<10	<10	<10	<10
	PT1-1A-GW-6-65'	9/14/99	<10	<10	<10	<10	<10	<10
	PT1-2-GW-2-65'	9/15/99	<10	<10	<10	<10	<10	<10
	PT1-2-GW-3-65'	9/15/99	<10	<10	<10	<10	<10	<10
	PT1-2-GW-7-64	9/15/99	<10	<10	<10	<10	<10	<10
	PT1-10-GW-1-70'	9/14/99	<10	<10	<10	<10	<10	<10
	PT1-13-GW-3-62'	9/10/99	**693**	**1,790**	**1,810**	**21.3**	**1,190**	**12.8**
	PT1-13-GW-4-63'	9/13/99	**450**	**599**	**605**	<10	**12,600**	<10
	PT1-16-GW-1-66'	9/16/99	<10	<10	<10	<10	<10	<10
	PT1-16-GW-2-68'	9/16/99	**14**	**41**	**17**	<10	**49**	<10
TP Location	PT-1-2-TP-2-66'	9/24/99	<10	<10	<10	<10	<10	<10
	PT-1-6-TP-3-79'	9/24/99	<10	<10	<10	<10	<10	<10
	PT-1-7-TP-4-75'	9/24/99	<10	<10	<10	<10	<10	<10

DP = Direct Push
TP = Temporary piezometer
(1) MCL = Maximum Contaminant Level
(2) Preliminary Remediation Goal
(3) California Modified MCL

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Table 5-3C
Summary of Groundwater Results
EPA Method 8080

	SAMPLE ID	DATE	Aldrin	alpha-BHC	beta-BHC	Chlordane	4,4'-DDD	4,4'-DDE	4,4'-DDT	delta-BHC	Dieldrin	Endosulfan I	Endosulfan II	Endosulfan sulfate	Endrin	Endrin aldehyde	gamma-BHC (Lindane)	Heptachlor	Heptachlor epoxide	Methoxychlor	Toxaphene	Aroclor-1016	Aroclor-1221	Aroclor-1232	Aroclor-1242	Aroclor-1248	Aroclor-1254	Aroclor-1260	Aroclor-1262	Aroclor-1268
Units			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
DP Location	PT1-1A-GW-1-65	9/13/99	<0.10	<0.12	<0.11	<5	<0.10	<0.10	<0.10	<0.11	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<10	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1
	PT1-1A-GW-5-65	9/14/99	<0.10	<0.12	<0.11	<5	<0.10	<0.10	<0.10	<0.11	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<10	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1
	PT1-1A-GW-6-65	9/14/99	<0.10	<0.12	<0.11	<5	<0.10	<0.10	<0.10	<0.11	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<10	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1
	PT1-2-GW-2-65'	9/15/99	<0.10	<0.12	<0.11	<5	<0.10	<0.10	<0.10	<0.11	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<10	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1
	PT1-2-GW-3-65'	9/15/99	<0.10	<0.12	<0.11	<5	<0.10	<0.10	<0.10	<0.11	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<10	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1
	PT1-2-GW-7-64'	9/15/99	<0.10	<0.12	<0.11	<5	<0.10	<0.10	<0.10	<0.11	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<10	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1
	PT1-10-GW-1-70'	9/14/99	<0.10	<0.12	<0.11	<5	<0.10	<0.10	<0.10	<0.11	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<10	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1
	PT1-13-GW-3-62'	9/10/99	<0.10	<0.12	<0.11	<5	<0.10	<0.10	<0.10	<0.11	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<10	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1
	PT1-13-GW-4-63	9/13/99	<0.10	<0.12	<0.11	<5	<0.10	<0.10	<0.10	<0.11	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<10	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1
	PT1-16-GW-1-66	9/16/99	<0.10	<0.12	<0.11	<5	<0.10	<0.10	<0.10	<0.11	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<10	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1
	PT1-16-GW-2-68	9/16/99	<0.10	<0.12	<0.11	<5	<0.10	<0.10	<0.10	<0.11	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<10	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1
TP Location	PT-1-2-TP-2-66'	9/24/99	<0.10	<0.12	<0.11	<5	<0.10	<0.10	<0.10	<0.11	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<10	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1
	PT-1-6-TP-6-79'	9/24/99	<0.10	<0.12	<0.11	<5	<0.10	<0.10	<0.10	<0.11	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<10	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1
	PT-1-7-TP-4-75'	9/24/99	<0.10	<0.12	<0.11	<5	<0.10	<0.10	<0.10	<0.11	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<10	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1

DP = Direct Push
TP = Temporary piezometer

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Table 5-3D
Summary of Groundwater Results
EPA Methods 6010/7196A

SAMPLE ID		DATE	Arsenic	Barium	Cadmium	Chromium	Cobalt	Copper	Molybdenum	Nickel	Selenium	Thallium	Vanadium	Zinc
Units			mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
MCL[1]			0.05	1	0.005	0.05	2.2[3]	1.3	0.18	0.1	0.05	0.002	0.26[3]	5[2]
DP Location	PT1-1A-GW-1-65'	9/13/99	.729	.058	.011	<0.010	<0.010	.014	.027	.022	<0.010	<0.010	<0.010	<0.010
	PT1-1A-GW-5-65'	9/14/99	<0.010	.098	<0.005	<0.010	.014	<0.010	<0.010	.032	<0.010	<0.002	<0.010	.033
	PT1-1A-GW-6-65'	9/14/99	<0.010	.096	<0.005	.012	<0.010	<0.010	<0.010	.035	<0.010	<0.002	<0.010	.026
	PT1-2-GW-2-65'	9/15/99	<0.010	.114	<0.005	<0.010	<0.010	<0.010	<0.010	.057	<0.010	.054	<0.010	<0.010
	PT1-2-GW-3-65'	9/15/99	<0.010	.096	<0.005	<0.010	<0.010	<0.010	<0.010	.042	.015	.075	<0.010	.024
	PT1-2-GW-7-64'	9/15/99	<0.010	.147	<0.005	<0.010	<0.010	<0.010	<0.010	.02	<0.010	.015	<0.010	<0.010
	PT1-10-GW-1-70'	9/14/99	<0.010	.124	<0.005	<0.010	<0.010	<0.010	<0.010	.024	<0.010	<0.002	<0.010	.081
	PT1-13-GW-3-62'	9/10/99	1.74	.37	<0.005	<0.010	<0.010	<0.010	.116	.032	.022	.004	<0.010	<0.010
	PT1-13-GW-4-63'	9/13/99	2.44	<0.010	.036	<0.010	<0.010	<0.010	.06	.051	.03	.016	.092	<0.010
	PT1-16-GW-1-66'	9/16/99	0.48	.057	<0.005	<0.010	<0.010	<0.010	<0.010	.02	<0.010	.018	<0.010	<0.010
	PT1-16-GW-2-68'	9/16/99	0.80	.063	<0.005	<0.010	<0.010	<0.010	<0.010	.025	<0.010	.017	<0.010	.23
TP Location	PT1-2-TP-2-66'	9/24/99	<0.010	.294	<0.005	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	.014	<0.010	<0.010
	PT1-6-TP-3-79'	9/24/99	.016	.191	<0.005	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	.012	<0.010	<0.010
	PT1-7-TP-4-75'	9/24/99	<0.010	.074	<0.005	<0.010	<0.010	<0.010	<0.010	.016	<0.010	.01	<0.010	<0.010

DP = Direct Push
TP = Temporary piezometer
(1) MCL = Maximum Contaminant Level
(2) Preliminary Remediation Goal
(3) California Modified MCL

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Table 5-3E
Summary of Groundwater Results
EPA Methods 418.1, 8015M, and 150.1

SAMPLE ID		DATE	TRPH	TPH-G (C4-C12)	TPH-D (C13-C22)	TPH-EXT (C23-C40)	pH
Units			mg/L	mg/L	mg/L	mg/L	NA
DP Location	PT1-1A-GW-1-65'	9/13/99	<1.0	**0.899**	<0.0005	<0.0005	**7.28**
	PT1-1A-GW-5-65'	9/14/99	<1.0	**0.218**	<0.0005	<0.0005	**7.24**
	PT1-1A-GW-6-65'	9/14/99	<1.0	**0.33**	<0.0005	<0.0005	**7.13**
	PT1-2-GW-2-65'	9/15/99	<1.0	<0.05	<0.0005	<0.0005	**6.89**
	PT1-2-GW-3-65'	9/15/99	<1.0	<0.05	<0.0005	<0.0005	**7.16**
	PT1-2-GW-7-64'	9/15/99	<1.0	<0.05	<0.0005	<0.0005	**7.04**
	PT1-10-GW-1-70'	9/14/99	<1.0	**0.072**	<0.0005	<0.0005	**7.13**
	PT1-13-GW-3-62'	9/10/99	**4.6**	**3.65**	<0.0005	<0.0005	**7.25**
	PT1-13-GW-4-63'	9/13/99	**5.8**	**6.39**	<0.01	<0.05	**6.7**
	PT1-16-GW-1-66'	9/16//9	<1.0	<0.05	<0.0005	<0.0005	**7.21**
	PT1-16-GW-2-68'	9/16/99	<1.0	**0.237**	<0.0005	<0.0005	**7.59**
TP Location	PT1-2-TP-2-66'	9/24/99	<1.0	<0.05	<0.0005	<0.0005	**7.26**
	PT1-6-TP-3-79'	9/24/99	<1.0	<0.05	<0.0005	<0.0005	**7.5**
	PT1-7-TP-4-75'	9/24/99	<1.0	<0.05	<0.0005	<0.0005	**6.99**

DP = Direct Push
TP = Temporary piezometer

APPENDIX A-4

Historical Data Summary Tables
From
AEI Consultants, 2001. *Site Characterization for Mouren-Laurens Oil Company Site*, 641 East Compton Boulevard, Compton, California, dated 19 January 2001.

Table 1

Soil Sample Analysis Shallow
EPA Method 8260
Volatile Organic Carbons

SAMPLE ID	DATE	Total Xylenes	n-Propylbenzene	1,3,5-Trimethylbenzene	1,2,4-Trimethylbenzene	Sec-Butylbenzene	p-Isopropyltoluene	1,2-Dichlorobenzene	n-Butylbenzene	Naphthalene	Acetone	4-Methyl-2-pentanone	Methylene Chloride	cis-1,2-Dichloroethene	1,2-Dichloroethane	Trichloroethylene	Benzene	Isopropylbenzene	Toluene	Tetrachloroethylene	Ethylbenzene	tert-Butylbenzene	1,1-Dichloroethene	1,1-Dichloroethane	Chlorobenzene	M&P Xylenes	O Xylenes
AEI-1-1A-5'	08/09/00	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
AEI-1-2-5'	08/09/00	ND	ND	ND	ND	ND	ND	ND	ND	**26**	**128**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
AEI-1-3-5'	08/09/00	ND	ND	ND	ND	ND	ND	ND	ND	**24**	**460**	**65**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
AEI-1-4-5'	08/09/00	**174**	**100**	**376**	**1,530**	**60**	**143**	**68**	**342**	**2,570**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
AEI-1-5-10'	08/09/00	ND	**30**	**19**	**38**	**30**	**476**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
AEI-1-6-5'	08/09/00	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
AEI-1-7-5'	08/09/00	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
AEI-1-8-5'	08/09/00	ND	ND	ND	ND	ND	ND	ND	ND	ND	**193**	**144**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
AEI-1-9-5'	08/09/00	ND	ND	ND	ND	ND	ND	ND	ND	ND	**116**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
AEI-3-10A-10'	08/09/00	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
AEI-3-11A-10'	08/09/00	ND	ND	ND	ND	ND	ND	ND	ND	ND	**177**	ND	ND	**625**	ND	**71**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
AEI-3-12A-10'	08/09/00	ND	ND	ND	ND	ND	ND	ND	ND	ND	**17,800**	**167**	**1,190**	**63**	**27**	**47**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
AEI-3-13-5'	08/09/00	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
AEI-3-14-5'	08/09/00	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
AEI-4-15-5'	08/09/00	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
AEI-4-16-5'	08/09/00	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
AEI-5-17-5'	08/09/00	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
AEI-5-18-5'	08/09/00	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
AEI-5-19-5'	08/09/00	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
AEI-5-20-5'	08/09/00	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
AEI-5-21-5'	08/09/00	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
AEI-6-22-5'	08/09/00	ND	ND	ND	ND	ND	ND	ND	ND	ND	**98**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
AEI-10-23-5'	08/09/00	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
AEI-10-24-5'	08/09/00	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
AEI-10-25-5'	08/09/00	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
AEI-15-26-5'	08/09/00	ND	**45**	**39**	**44**	ND	**24**	ND	**36**	**80**	ND	ND	ND	ND	ND	ND	**27**	**13**	ND	ND	**99**	**18**	ND	ND	ND	ND	ND
AEI-15-27-5'	08/09/00	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
AEI-15-28-5'	08/09/00	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
AEI-16-29-5'	08/09/00	**174**	**220**	**240**	**570**	ND	**26**	ND	**61**	**330**	**290**	**431**	ND	ND	ND	ND	ND	**20**	**20**	ND	ND	ND	ND	ND	ND	ND	ND
AEI-16-30-5'	08/09/00	**670**	**410**	**950**	**2,330**	ND	ND	**35**	**550**	**1,040**	**1,430**	**435**	ND	ND	ND	ND	ND	**84**	**49**	**148**	**73**	ND	ND	ND	ND	ND	ND
AEI-16-31-5'	08/09/00	**530**	**170**	**870**	**2,300**	**143**	**370**	ND	**490**	**1,270**	**665**	**427**	ND	ND	ND	**10**	ND	**75**	**32**	**102**	**60**	ND	ND	ND	ND	ND	ND
AEI-16-32-5'	08/09/00	ND	ND	ND	ND	ND	ND	ND	ND	**25**	ND	**144**	ND	ND	ND	ND	ND	ND	ND	**6**	ND	ND	ND	ND	ND	ND	ND
AEI-16-33-5'	08/09/00	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
AEI-16-34-5'	08/09/00	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
AEI-16-35-5'	08/09/00	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**100**	ND	ND	ND	ND	ND	ND

Notes:
All concentrations in micrograms per kilogram
ND = None Detected

Table 2

Soil Sample Analysis Deep
EPA Method 8260
Volatile Organic Carbons

SAMPLE ID	DATE	Total Xylenes	n-Propylbenzene	1,3,5-Trimethylbenzene	1,2,4-Trimethylbenzene	Sec-Butylbenzene	p-Isopropyltoluene	1,2-Dichlorobenzene	n-Butylbenzene	Naphthalene	Acetone	4-Methyl-2-pentanone	Methylene Chloride	cis-1,2-Dichloroethene	1,2-Dichloroethane	Trichloroethylene	Benzene	Isopropylbenzene	Toluene	Tetrachloroethylene	Ethylbenzene	tert-Butylbenzene	1,1-Dichloroethene	1,1-Dichloroethane	Chlorobenzene	M&P Xylenes	O Xylenes
AEI-MW-2-10'	11/06/00	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
AEI-MW-2-40'	11/06/00	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
AEI-MW-2-70'	11/07/00	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
AEI-MW-3-10'	11/06/00	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
AEI-MW-3-40'	11/06/00	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
AEI-MW-3-70'	11/06/00	ND	ND	ND	ND	ND	ND	ND	ND	ND	**378**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
AEI-MW-4-10'	10/05/00	**61,200**	**52,700**	**17,800**	**62,900**	**2,610**	**3,700**	**3,890**	**8,980**	**19,300**	ND	ND	ND	ND	ND	**1,100**	**1,750**	**2,370**	**11,800**	**7,600**	**10,000**	ND	ND	ND	ND	ND	ND
AEI-MW-4-20'	10/05/00	**78,400**	**10,600**	**25,100**	**79,500**	**3,680**	**3,750**	**5,140**	**11,800**	**24,900**	ND	ND	ND	ND	ND	**2,300**	**2,940**	**2,730**	**20,200**	**8,680**	**11,700**	ND	ND	ND	ND	ND	ND
AEI-MW-4-30'	10/05/00	ND	ND	ND	ND	ND	ND	ND	ND	ND	**815**	ND	ND	ND	ND	ND	ND	ND	**83**	ND	ND	ND	ND	ND	ND	ND	ND
AEI-MW-4-40'	10/05/00	**60,600**	**8,800**	**22,300**	**66,500**	**3,050**	**4,050**	**2,300**	**11,200**	**28,300**	**9,200**	ND	ND	ND	ND	**2,650**	**1,400**	**2,320**	**18,300**	**3,190**	**9,900**	ND	ND	ND	ND	ND	ND
AEI-MW-4-50'	10/05/00	**241,000**	**32,600**	**68,300**	**225,000**	**11,000**	**14,000**	**10,200**	**36,700**	**86,000**	ND	ND	ND	ND	ND	**7,400**	**27,600**	**9,040**	**115,000**	**13,000**	**44,300**	ND	ND	ND	ND	ND	ND
AEI-MW-4-60'	10/05/00	**170**	**60**	ND	**60**	ND	ND	ND	ND	93	**3,280**	ND	ND	ND	ND	ND	**32.5**	ND	**151**	ND	**30**	ND	ND	ND	ND	ND	ND
AEI-MW-5-30'	10/06/00	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**7.4**	ND	**5.2**	**5.7**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
AEI-MW-6-30'	10/09/00	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Notes:
All concentrations in micrograms per kilogram
ND = None Detected

Table 3

Groundwater Sample Analysis
EPA Method 8260
Volatile Organic Carbons

SAMPLE ID	DATE	Total Xylenes	n-Propylbenzene	1,3,5-Trimethylbenzene	1,2,4-Trimethylbenzene	Sec-Butylbenzene	p-Isopropyltoluene	1,2-Dichlorobenzene	n-Butylbenzene	Naphthalene	Acetone	4-Methyl-2-pentanone	Methylene Chloride	cis-1,2-Dichloroethene	1,2-Dichloroethane	Trichloroethylene	Benzene	Isopropylbenzene	Toluene	Tetrachloroethylene	Ethylbenzene	tert-Butylbenzene	1,1-Dichloroethene	1,1-Dichloroethane	Chlorobenzene	M&P Xylenes	O Xylenes
AEI-MW-2-GW	11/14/00	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	22.4	15.2	14.3	58.1	ND	ND	ND	ND	ND	8	13.5	71.5	ND	ND
AEI-MW-3-GW	11/14/00	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	12.1	18.7	74	2.1	ND	ND	ND	ND	ND	9.9	9.5	26.3	ND	ND
AEI-MW-4-GW	11/14/00	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.8	10.7	49.3	ND	ND	ND	ND	ND	ND	6.5	5.9	14.2	ND	ND
AEI-MW-5-GW	11/14/00	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	21.7	22.4	51.4	2	ND	ND	ND	ND	ND	8.4	15	53	ND	ND
AEI-MW-6-GW	11/14/00	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.9	ND	147	50.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TP-1-GW	11/14/00	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	94.6	ND	1,610	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TP-2-GW	11/15/00	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TP-3-GW	11/15/00	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TP-4-GW	11/15/00	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TP-5-GW	11/13/00	ND	ND	ND	5.9	ND	ND	6.3	ND	ND	ND	ND	ND	5.3	ND	51.6	56.4	ND	2.5	10.4	4.8	ND	3.1	16.7	12.3	10.5	1.5
TP-6-GW	11/15/00	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	148	ND	721	56	ND	ND	ND	ND	ND	ND	15	ND	ND	ND

Notes:

All concentrations in micrograms per liter

ND = None Detected

Table 4

Soil Sample Analysis Shallow
EPA Method 8015M
Total Petroleum Hydrocarbons

SAMPLE ID	DATE	C4-C12 (gasoline)	C12-C23 (diesel)	C23-C40 (oil)
AEI-1-1A-5'	08/09/00	ND	ND	ND
AEI-1-2-5'	08/09/00	**1**	**160**	ND
AEI-1-2-11'	09/07/00	ND	ND	ND
AEI-1-3-5'	08/09/00	ND	**452**	**841**
AEI-1-3-11'	09/07/00	ND	ND	ND
AEI-1-4-5'	08/09/00	**76**	**8,000**	**8,480**
AEI-1-4-10'	09/07/00	ND	ND	ND
AEI-1-5-10'	08/09/00	**369**	**300**	**71**
AEI-1-5-15'	09/07/00	ND	ND	ND
AEI-1-6-5'	08/09/00	ND	ND	ND
AEI-1-7-5'	08/09/00	ND	ND	ND
AEI-1-8-5'	08/09/00	ND	ND	ND
AEI-1-8-10'	09/07/00	ND	ND	ND
AEI-1-9-5'	08/09/00	**2**	ND	ND
AEI-3-10A-10'	08/09/00	**66**	**1,130**	**4,140**
AEI-3-10-12'	09/07/00	ND	ND	ND
AEI-3-11A-10'	08/09/00	**1**	**843**	**6,270**
AEI-3-11-5'	09/07/00	ND	ND	ND
AEI-3-12A-10'	08/09/00	ND	ND	**70**
AEI-3-12-5'	09/07/00	ND	ND	ND
AEI-3-12A-34'	09/07/00	ND	ND	ND
AEI-3-13-5'	08/09/00	ND	ND	ND
AEI-3-14-5'	08/09/00	ND	ND	ND
AEI-4-15-5'	08/09/00	ND	ND	ND
AEI-4-16-5'	08/09/00	ND	ND	ND
AEI-5-17-5'	08/09/00	ND	ND	ND
AEI-5-18-5'	08/09/00	ND	ND	ND
AEI-5-19-5'	08/09/00	ND	ND	ND
AEI-5-20-5'	08/09/00	ND	ND	ND
AEI-5-21-5'	08/09/00	ND	ND	ND
AEI-6-22-5'	08/09/00	ND	ND	ND
AEI-6-22-10'	09/07/00	ND	ND	ND
AEI-10-23-5'	08/09/00	ND	ND	ND
AEI-10-24-5'	08/09/00	ND	ND	ND
AEI-10-25-5'	08/09/00	ND	ND	ND
AEI-15-26-5'	08/09/00	ND	ND	ND
AEI-15-26-20'	09/07/00	ND	ND	ND
AEI-15-27-5'	08/09/00	ND	ND	ND
AEI-15-28-5'	08/09/00	ND	ND	ND
AEI-16-29-5'	08/09/00	**6**	**5,180**	**11,600**
AEI-16-29-21.5'	09/07/00	ND	ND	ND
AEI-16-30-5'	08/09/00	**257**	**4,000**	**4,060**
AEI-16-30-15'	09/07/00	ND	ND	ND
AEI-16-31-5'	08/09/00	ND	ND	ND
AEI-16-31-18'	09/07/00	ND	ND	ND
AEI-16-32-5'	08/09/00	ND	ND	ND
AEI-16-32-10'	09/07/00	ND	ND	ND
AEI-16-33-5'	08/09/00	ND	ND	ND
AEI-16-34-5'	08/09/00	ND	ND	ND
AEI-16-35-5'	08/09/00	ND	ND	ND

Notes:
All concentrations in milligrams per kilogram
ND = None Detected

Table 5

Soil Sample Analysis Deep
EPA Method 8015M
Total Petroleum Hydrocarbons

SAMPLE ID	DATE	C4-C12 (gasoline)	C12-C23 (diesel)	C23-C40 (oil)
AEI-MW-2-10'	11/06/00	ND	ND	ND
AEI-MW-2-40'	11/06/00	ND	ND	ND
AEI-MW-2-70'	11/07/00	ND	ND	ND
AEI-MW-3-10'	11/06/00	ND	ND	**66**
AEI-MW-3-40'	11/06/00	ND	ND	ND
AEI-MW-3-70'	11/06/00	ND	ND	ND
AEI-MW-4-10'	10/05/00	**1,530**	**5,960**	**3,850**
AEI-MW-4-20'	10/05/00	**3,500**	**7,460**	**4,230**
AEI-MW-4-30'	10/05/00	**5**	ND	ND
AEI-MW-4-40'	10/05/00	**2,350**	**4,700**	**2,560**
AEI-MW-4-50'	10/05/00	**6,000**	**18,700**	**8,630**
AEI-MW-4-60'	10/05/00	**3**	ND	ND
AEI-MW-5-30'	10/06/00	ND	ND	ND
AEI-MW-6-30'	10/09/00	ND	ND	ND

Notes:

All concentrations in milligrams per kilogram

ND = None Detected

Table 6

Groundwater Sample Analysis
EPA Method 8015M
Total Petroleum Hydrocarbons

SAMPLE ID	DATE	C4-C12 (gasoline)	C12-C23 (diesel)	C23-C40 (oil)
AEI-MW-2-GW	11/14/00	**121**	ND	ND
AEI-MW-3-GW	11/14/00	**69**	ND	ND
AEI-MW-4-GW	11/14/00	ND	ND	ND
AEI-MW-5-GW	11/14/00	**61**	ND	ND
AEI-MW-6-GW	11/14/00	**89**	ND	ND
TP-1-GW	11/14/00	**561**	ND	ND
TP-2-GW	11/15/00	ND	ND	ND
TP-3-GW	11/15/00	ND	ND	ND
TP-4-GW	11/15/00	ND	ND	ND
TP-5-GW	11/13/00	**371**	ND	ND
TP-6-GW	11/15/00	**476**	ND	ND

Notes:
All samples in micrograms per liter
ND = None Detected

Table 7

Soil Sample Analysis
EPA Method 7000
CAM-17 Metals

SAMPLE ID	DATE	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
AEI-1-1A-5'	08/09/00	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
AEI-1-2-5'	08/09/00	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
AEI-1-3-5'	08/09/00	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
AEI-1-4-5'	08/09/00	**13.9**	ND	**218.7**	ND	ND	**11.9**	**2.6**	**32.1**	**10.5**	ND	**6.8**	**11.3**	**1.2**	ND	**3.4**	**14.6**	**133**
AEI-1-5-10'	08/09/00	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
AEI-1-6-5'	08/09/00	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
AEI-1-7-5'	08/09/00	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
AEI-1-8-5'	08/09/00	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
AEI-1-9-5'	08/09/00	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
AEI-3-10A-10'	08/09/00	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
AEI-3-11A-10'	08/09/00	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
AEI-3-12A-10'	08/09/00	**11.1**	ND	**142.6**	ND	ND	**12.1**	**6.9**	**12.2**	**5.4**	ND	**7.7**	**10.2**	**1.6**	ND	**3.7**	ND	**84**
AEI-3-13-5'	08/09/00	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
AEI-3-14-5'	08/09/00	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
AEI-4-15-5'	08/09/00	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
AEI-4-16-5'	08/09/00	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
AEI-5-17-5'	08/09/00	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
AEI-5-18-5'	08/09/00	ND	ND	**41.6**	ND	ND	**6.7**	ND	**29.5**	ND	ND	**8.5**	**3.4**	**0.65**	ND	ND	ND	**52**
AEI-5-19-5'	08/09/00	ND	ND	**57.4**	ND	ND	**6.7**	**3**	**22.2**	ND	ND	ND	**6**	**1.05**	ND	ND	ND	**49**
AEI-5-20-5'	08/09/00	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
AEI-5-21-5'	08/09/00	ND	ND	**78.6**	ND	ND	**7.2**	**3.5**	**25.2**	ND	ND	**6.3**	**6.7**	**1.35**	ND	ND	ND	**61**
AEI-6-22-5'	08/09/00	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
AEI-10-23-5'	08/09/00	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
AEI-10-24-5'	08/09/00	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
AEI-10-25-5'	08/09/00	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
AEI-10-26-5'	08/09/00	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
AEI-15-27-5'	08/09/00	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
AEI-15-28-5'	08/09/00	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
AEI-16-29-5'	08/09/00	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
AEI-16-30-5'	08/09/00	ND	ND	**133**	ND	ND	**18.9**	**7.9**	**907**	**3.9**	ND	**17.5**	**9**	**1.74**	ND	**4.7**	ND	**2,100**
AEI-16-31-5'	08/09/00	ND	ND	**151**	ND	ND	**11.2**	**7.2**	**660**	**3.5**	ND	**5.9**	**8.5**	**2.03**	ND	**2.3**	**42.1**	**1,600**
AEI-16-32-5'	08/09/00	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
AEI-16-33-5'	08/09/00	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
AEI-16-34-5'	08/09/00	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
AEI-16-35-5'	08/09/00	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Notes:
All concentrations in milligrams per kilogram
ND = None Detected
NS = Not Sampled

Table 8

Groundwater Sample Analysis
EPA Method 7000
CAM-17 Metals

SAMPLE ID	DATE	Antimony	Arsenic	Barium	Berylium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
AEI-MW-2-GW	11/14/00	ND	ND	**5.4**	ND	ND	ND	ND	**0.13**	ND	ND	ND	ND	ND	ND	ND	ND	**0.64**
AEI-MW-3-GW	11/14/00	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
AEI-MW-4-GW	11/14/00	ND	ND	**1.4**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**0.08**
AEI-MW-5-GW	11/14/00	ND	**0.026**	ND	ND	ND	ND	ND	**0.24**	ND	ND	ND	ND	ND	ND	**0.51**	0.6	**1.1**
AEI-MW-6-GW	11/14/00	ND	ND	**3.2**	ND	ND	ND	ND	**0.38**	ND	ND	ND	ND	ND	ND	**0.3**	0.57	**0.46**
TP-1-GW	11/14/00	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TP-2-GW	11/15/00	ND	ND	**2.4**	ND	ND	**1.6**	ND	**0.36**	ND	ND	ND	ND	ND	ND	**0.37**	ND	**0.34**
TP-3-GW	11/15/00	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TP-4-GW	11/15/00	ND	**0.022**	ND	ND	ND	ND	ND	**0.22**	ND	ND	ND	ND	ND	ND	**0.39**	ND	**0.22**
TP-5-GW	11/13/00	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**0.12**
TP-6-GW	11/15/00	ND	**0.014**	**2.1**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**0.08**

Notes:
All concentrations in milligrams per liter
ND = None Detected

Table 9

Groundwater Sample Analysis
EPA Method 8270B
Semi-Volatile Organic Carbons

SAMPLE ID	DATE	2,4 Dimethylphenol	All other SVOCs
AEI-MW-2-GW	11/14/00	ND	ND
AEI-MW-3-GW	11/14/00	ND	ND
AEI-MW-4-GW	11/14/00	ND	ND
AEI-MW-5-GW	11/14/00	ND	ND
AEI-MW-6-GW	11/14/00	ND	ND
TP-1-GW	11/14/00	ND	ND
TP-2-GW	11/15/00	ND	ND
TP-3-GW	11/15/00	ND	ND
TP-4-GW	11/15/00	ND	ND
TP-5-GW	11/13/00	**26**	ND
TP-6-GW	11/15/00	ND	ND

Notes:
All samples in micrograms per liter
ND = None Detected

Table 10

Soil Sample Analysis
EPA Method 9045
pH Levels

SAMPLE ID	DATE	pH
AEI-1-1A-5'	08/09/00	**5.53**
AEI-1-2-5'	08/09/00	**3.73**
AEI-1-2-11'	09/07/00	6.93
AEI-1-3-5'	08/09/00	6.62
AEI-1-3-11'	09/07/00	7.05
AEI-1-4-5'	08/09/00	**9.75**
AEI-1-4-10'	09/07/00	7.35
AEI-1-5-10'	08/09/00	7.6
AEI-1-5-15'	09/07/00	7.50
AEI-1-6-5'	08/09/00	7.5
AEI-1-7-5'	08/09/00	**4.33**
AEI-1-8-5'	08/09/00	6.22
AEI-1-8-10'	09/07/00	7.72
AEI-1-9-5'	08/09/00	7.47
AEI-3-10-12'	09/07/00	8.03
AEI-3-11-5'	09/07/00	8.34
AEI-3-10A-10'	08/09/00	6.93
AEI-3-11A-10'	08/09/00	7.95
AEI-3-12-5'	09/07/00	7.91
AEI-3-12A-10'	08/09/00	7.12
AEI-3-12A-34'	09/07/00	8.28
AEI-3-13-5'	08/09/00	8.2
AEI-3-14-5'	08/09/00	8.13
AEI-5-20-10'	08/09/00	7.60
AEI-4-15-5'	08/09/00	8.22
AEI-4-16-5'	08/09/00	7.15
AEI-5-17-5'	08/09/00	7.37
AEI-5-18-5'	08/09/00	**11.5**
AEI-5-19-5'	08/09/00	**11.48**
AEI-5-20-5'	08/09/00	7.9
AEI-5-21-5'	08/09/00	**9.16**
AEI-6-22-5'	08/09/00	7.35
AEI-10-23-5'	08/09/00	6.7
AEI-10-24-5'	08/09/00	6.63
AEI-10-25-5'	08/09/00	7.36
AEI-15-26-5'	08/09/00	7.41
AEI-15-26-20'	09/07/00	7.59
AEI-15-27-5'	08/09/00	7.07
AEI-15-28-5'	08/09/00	7.8
AEI-16-29-5'	08/09/00	**3.39**
AEI-16-29-21.5'	08/09/00	7.35
AEI-16-30-15'	08/09/00	7.15
AEI-16-31-5'	08/09/00	**3.26**
AEI-16-31-18'	08/09/00	7.50
AEI-16-32-5'	08/09/00	**3.58**
AEI-15-28-5'	08/09/00	7.8
AEI-16-29-5'	08/09/00	**3.39**
AEI-16-30-5'	08/09/00	**3.12**
AEI-16-31-5'	08/09/00	**3.26**
AEI-16-32-5'	08/09/00	**3.58**
AEI-16-32-10'	08/09/00	7.73
AEI-16-33-5'	08/09/00	6.5
AEI-16-34-5'	08/09/00	6.63
AEI-16-35-5'	08/09/00	**5.6**
AEI-MW-2-10'	11/06/00	7.14
AEI-MW-2-40'	11/06/00	7.53
AEI-MW-2-70'	11/07/00	7.3
AEI-MW-3-10'	11/06/00	6.94
AEI-MW-3-40'	11/06/00	7.09
AEI-MW-3-70'	11/06/00	7.35
AEI-MW-4-10'	10/05/00	8.34
AEI-MW-4-20'	10/05/00	8.17
AEI-MW-4-30'	10/05/00	8.3
AEI-MW-4-40'	10/05/00	8.84
AEI-MW-4-50'	10/05/00	9.03
AEI-MW-4-60'	10/05/00	7.43
AEI-MW-5-30'	10/06/00	7.88
AEI-MW-6-30'	10/09/00	7.73

APPENDIX A-5

Historical Data Summary Tables
From
Waterstone Environmental, Inc., 2006. *Phase II Site Characterization*, Mouren-Laurens Oil Company (641 – 719 E. Compton Blvd.) and Leach Oil Company (625 E. Compton Blvd.), Los Angeles, California, dated 1 December 2006.

Table 1
Mouren-Laurens/Leach Oil Company
Laboratory Results for Soil Vapor Analysis
EPA Method 8260C

Sample ID	Sample Depth (feet bgs)	Sample Date	Analyte (µg/L)																								
			Aliphatic Hydrocarbons	1,1-Dichloro-ethane	1,1-Dichloro-ethene	1,2-Dichloro-ethane	1,2-Dichloro-ethene	1,1,1-Trichloro-ethane	Benzene	Chloro-form	Methylene Chloride	Ethyl-benzene	Freon 11	Freon 113	MTBE	n-Butyl benzene	other Poly-alkyl benzenes	sec-Butyl benzene	tert-Butyl benzene	Tetra-chloro-ethene	Toluene	trans-1,3-Dichloro propene	Tri-chloro-ethene	Trimethyl-benzene	Vinyl Chloride	Xylenes (total)
LB1-15	15	1/25/2006	**120**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**3**	<0.5	<0.5	<0.5	<0.5	<0.5	**4.9**	<0.5	<0.5	**1.6**	<0.5	<0.5	<0.5
LB1-15 water	15	11/15/2005	**120**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**8.6**	<0.5	<0.5	**2.6**	<0.5	<0.5	<0.5
LB1-20	20	11/15/2005	**42**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**11**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
LB1-20	20	1/25/2006	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**3.7**	<0.5	<0.5	<0.5	<0.5	<0.5	**11**	<0.5	<0.5	**2.2**	<0.5	<0.5	<0.5
LB1-30	30	11/15/2005	**1,639**	**6.5**	**3.2**	<0.5	<0.5	**5.9**	**6.7**	<0.5	<0.5	**9.5**	<0.5	**4.4**	<0.5	<0.5	<0.5	<0.5	<0.5	**13**	**20**	<0.5	**24**	<0.5	<0.5	**32**
LB1-30	30	1/25/2006	**2,229**	**9.8**	**2.8**	<0.5	<0.5	**7**	**9.6**	<0.5	<0.5	**177**	<0.5	**5.8**	<0.5	<0.5	<0.5	<0.5	<0.5	**14**	**5.1**	<0.5	**29**	<0.5	<0.5	**133**
LB1-37	37	11/15/2005	**2,039**	**7.8**	**2.9**	<0.5	<0.5	<0.5	**10**	<0.5	<0.5	**14**	<0.5	**4.5**	<0.5	<0.5	<0.5	<0.5	<0.5	**13**	**17**	<0.5	**30**	<0.5	<0.5	**55**
LB1-37	37	1/25/2006	**3,033**	**12**	**3.4**	<0.5	<0.5	**6.6**	**13**	<0.5	**1.8**	**9.2**	<0.5	**6.6**	<0.5	<0.5	<0.5	<0.5	<0.5	**11**	**18**	<0.5	**30**	<0.5	<0.5	**35**
LB2-15	15	11/15/2005	**68**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**2.2**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
LB2-15	15	1/25/2006	<0.5	<0.5	**1.0**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**2.7**	<0.5	<0.5	<0.5	<0.5	<0.5	**0.9**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
LB2-20	20	11/15/2005	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**1.3**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
LB2-20	20	1/25/2006	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**2.7**	<0.5	<0.5	<0.5	<0.5	<0.5	**1.3**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
LB2-30	30	11/15/2005	**58**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**2.2**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
LB2-30	30	1/25/2006	**3.9**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**4.2**	<0.5	<0.5	<0.5	<0.5	<0.5	**4**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
LB2-37	37	11/15/2005	**35**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**2.8**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
LB2-37	37	1/25/2006	**4.5**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**2.5**	<0.5	<0.5	<0.5	<0.5	<0.5	**1.9**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
LB3-15	15	11/16/2005	**6,750**	**13**	**7.3**	<0.5	**24**	<0.5	**14**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**24**	**0.6**	<0.5	**97**	<0.5	**80**	<0.5
LB3-15	15	1/30/2006	**1,521**	**0.4**	**5**	<0.5	**27**	<0.5	**9.8**	<0.5	<0.5	<0.5	**5.3**	**7.7**	<0.5	<0.5	<0.5	<0.5	<0.5	**16**	<0.5	<0.5	**103**	<0.5	**93**	<0.5
LB3-20	20	11/16/2005	**12,484**	**17**	**17**	<0.5	**84**	<0.5	**20**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**31**	**0.6**	<0.5	**140**	<0.5	**219**	<0.5
LB3-20	20	1/30/2006	**2,277**	**0.6**	**8.7**	<0.5	**43**	<0.5	**17**	<0.5	<0.5	<0.5	**9.1**	**11**	<0.5	<0.5	<0.5	<0.5	<0.5	**29**	**0.6**	<0.5	**163**	<0.5	**128**	<0.5
LB3-30 loflo	30	11/16/2005	**7,730**	**13**	**12**	<0.5	**71**	<0.5	**19**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**25**	**1.7**	<0.5	**108**	<0.5	**130**	<0.5
LB3-30	30	1/30/2006	**2,540**	**0.7**	**10**	<0.5	**43**	<0.5	**20**	<0.5	<0.5	<0.5	**7.0**	**13**	<0.5	<0.5	<0.5	<0.5	<0.5	**31**	**2.4**	<0.5	**163**	<0.5	**115**	<0.5
LB3-37	37	11/16/2005	**13,626**	**20**	**18**	<0.5	**67**	<0.5	<0.5	<0.5	<0.5	**0.7**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**30**	**15**	<0.5	**141**	<0.5	**165**	**1.2**
LB3-37	37	1/30/2006	**2,409**	**0.7**	**12**	<0.5	**35**	<0.5	**34**	<0.5	<0.5	0.6	**8.0**	**15**	<0.5	<0.5	<0.5	<0.5	<0.5	**14**	**2.8**	<0.5	**131**	<0.5	**112**	**1.3**
LB4-15	15	11/15/2005	**1,706**	<0.5	<0.5	<0.5	<0.5	<0.5	**67**	**2.0**	<0.5	**53**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**131**	**373**	<0.5	**57**	<0.5	**218**	**219**
LB4-15	15	1/25/2006	**13,997**	**145**	**29**	<0.5	**2.6**	<0.5	**121**	<0.5	<0.5	**64**	**0.6**	**22**	<0.5	<0.5	<0.5	<0.5	<0.5	**174**	**500**	<0.5	**54**	<0.5	**692**	**130**
LB4-20	20	11/15/2005	**1,983**	<0.5	<0.5	<0.5	<0.5	<0.5	**83**	**2.4**	<0.5	**47**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**125**	**364**	<0.5	**65**	<0.5	**41**	**201**
LB4-20	20	1/25/2006	**17,878**	**122**	**51**	<0.5	**49**	**6.0**	**97**	<0.5	<0.5	**7.1**	**2.2**	**49**	<0.5	<0.5	<0.5	<0.5	<0.5	**80**	**185**	<0.5	**38**	<0.5	**182**	**46**
LB4-30	30	11/15/2005	**2,077**	<0.5	**16**	<0.5	<0.5	<0.5	**92**	**3.2**	<0.5	**47**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**110**	**325**	<0.5	**69**	<0.5	**22**	**222**
LB4-30	30	1/25/2006	**23,349**	**126**	**75**	<0.5	**49**	**9.3**	**161**	<0.5	<0.5	**57**	**4.7**	**71**	<0.5	<0.5	<0.5	<0.5	<0.5	**151**	**518**	<0.5	**72**	<0.5	**71**	**212**
LB4-37	37	11/15/2005	**2,092**	**3.2**	**20**	<0.5	<0.5	<0.5	**86**	**2.8**	<0.5	**60**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**109**	**379**	<0.5	**95**	<0.5	**5.5**	**305**
LB4-37 LF	37	1/25/2006	**21,596**	**98**	**56**	<0.5	**14**	**2.7**	**137**	<0.5	<0.5	**66**	**4.1**	**58**	<0.5	<0.5	<0.5	<0.5	<0.5	**131**	**555**	<0.5	**88**	<0.5	**20**	**258**
LB5-15	15	11/15/2005	**12,069**	**215**	**56**	<0.5	<0.5	<0.5	**211**	<0.5	<0.5	**71**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**142**	**807**	<0.5	**106**	<0.5	**54**	**123**
LB5-15	15	1/25/2006	**2,543**	<0.5	**30**	<0.5	<0.5	**16**	**161**	<0.5	<0.5	**77**	**50**	**40**	<0.5	<0.5	<0.5	<0.5	<0.5	**126**	**573**	<0.5	**122**	<0.5	**31**	**412**
LB5-20	20	11/15/2005	**14,900**	**55**	**61**	<0.5	<0.5	**18**	**161**	**4.7**	<0.5	**38**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**76**	**470**	<0.5	**81**	<0.5	**33**	**46**
LB5-20	20	1/25/2006	**2,164**	**4.2**	**44**	<0.5	**1.3**	**18**	**158**	<0.5	<0.5	**19**	**60**	**44**	<0.5	<0.5	<0.5	<0.5	<0.5	**61**	**420**	<0.5	**111**	<0.5	**33**	**83**
LB5-30	30	11/15/2005	**23,368**	**92**	**99**	<0.5	<0.5	<0.5	**239**	**7.9**	<0.5	**81**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**155**	**800**	<0.5	**140**	<0.5	**75**	**406**
LB5-30	30	1/25/2006	**3,376**	**6.4**	**53**	<0.5	**1.6**	**26**	**176**	<0.5	<0.5	**79**	**80**	**52**	<0.5	<0.5	<0.5	<0.5	<0.5	**126**	**574**	<0.5	**154**	<0.5	**35**	**404**
LB5-37 loflo	37	11/15/2005	**18,335**	**48**	**44**	<0.5	<0.5	<0.5	**184**	**5.9**	<0.5	**84**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**127**	**726**	<0.5	**135**	<0.5	**28**	**369**
LB5-37	37	1/25/2006	**2,871**	**4.9**	**29**	<0.5	**1.1**	**21**	**159**	<0.5	<0.5	**73**	**27**	**42**	<0.5	<0.5	<0.5	<0.5	<0.5	**108**	**544**	<0.5	**168**	<0.5	**20**	**376**
LB6-10	10	11/15/2005	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
LB6-10'	10	1/25/2006	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**7.1**	<0.5
LB6-20	20	11/15/2005	**34**	<0.5	<0.5	<0.5	<0.5	<0.5	**2.2**	<0.5	<0.5	**1.3**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**2.8**	**11**	<0.5	**2.6**	<0.5	**1.4**	**5.5**
LB6-20	20	1/25/2006	**6,627**	**145**	**117**	<0.5	3.8	**9.9**	**234**	<0.5	<0.5	**93**	**4.2**	**78**	<0.5	<0.5	<0.5	<0.5	<0.5	**145**	**735**	<0.5	**121**	<0.5	**107**	**316**
LB6-30	30	11/15/2005	**1,976**	**3.9**	**30**	<0.5	<0.5	<0.5	**107**	**3.4**	<0.5	**51**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**81**	**383**	<0.5	**100**	<0.5	**24**	**217**
LB6-30	30	1/25/2006	**32,339**	**141**	**129**	<0.5	3.6	**31**	**251**	<0.5	<0.5	**80**	**6.5**	**97**	<0.5	<0.5	<0.5	<0.5	<0.5	**141**	**746**	<0.5	**133**	<0.5	**111**	**283**
LB6-37	37	1/25/2006	**29,205**	**105**	**99**	<0.5	<0.5	**64**	**222**	<0.5	<0.5	**75**	**8.2**	**84**	<0.5	<0.5	<0.5	<0.5	<0.5	**141**	**800**	<0.5	**128**	<0.5	**54**	**267**
LB7-10	10	11/15/2005	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
LB7-10	10	1/30/2006	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
LB7-20	20	11/15/2005	**810**	**1.1**	**3.9**	<0.5	<0.5	<0.5	**4.5**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**8.7**	<0.5	<0.5	**47**	<0.5	**41**	<0.5
LB7-20	20	1/30/2006	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
LB7-30	30	11/15/2005	**1,932**	**3.2**	**6.9**	<0.5	<0.5	<0.5	**15**	**3.3**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**26**	**1.4**	<0.5	**128**	<0.5	**93**	<0.5
LB7-30 dup	30	11/15/2005	**1,938**	**3.2**	**6.2**	<0.5	<0.5	<0.5	**15**	**3.8**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**28**	**1.4**	<0.5	**132**	<0.5	**94**	<0.5
LB7-30	30	1/30/2006	**25,188**	**34**	**28**	<0.5	**85**	<0.5	**28**	<0.5	<0.5	<0.5	**1.6**	**33**	<0.5	<0.5	<0.5	<0.5	<0.5	**38**	**0.4**	<0.5	**140**	<0.5	**307**	<0.5
LB7-37	37	11/15/2005	**925**	**1.9**	**4.4**	<0.5	<0.5	<0.5	**16**	**1.6**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**8.7**	**7.7**	<0.5	**57**	<0.5	**37**	<0.5
LB7-37 dup	37	11/15/2005	**1,253**	**0.8**	**6.3**	<0.5	<0.5	<0.5	**17**	**1.8**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**13**	**11**	<0.5	**64**	<0.5	**47**	<0.5
LB7-37	37	1/30/2006	**28,279**	**44**	**37**	<0.5	**55**	<0.5	**84**	<0.5	<0.5	**31**	**1.8**	**44**	<0.5	<0.5	<0.5	<0.5	<0.5	**61**	**121**	<0.5	**169**	<0.5	**253**	**97**
LB8-15	15	11/15/2005	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
LB8-15 dup	15	11/15/2005	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
LB8-15	15	1/30/2006	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
LB8-20	20	11/15/2005	**1,671**	**15**	**8.1**	**3.1**	**3.1**	<0.5	**13**	<0.5	<0.5	**2.2**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**4.2**	**18**	<0.5	**14**	<0.5	**4.4**	**5.3**
LB8-20	20	1/30/2006	**1,763**	**11**	**7.9**	<0.5	**2.5**	<0.5	**8.9**	<0.5	<0.5	**3.2**	<0.5	**4.6**	<0.5	<0.5	<0.5	<0.5	<0.5	**5.8**	**25**	<0.5	**8.3**	<0.5	**24**	**9.6**
LB8-20 dup	20	1/30/2006	**1,922**	**18**	**12**	<0.5	**2.1**	<0.5	**12**	<0.5	<0.5	**3.1**	<0.5	**5.4**	<0.5	<0.5	<0.5	<0.5	<0.5	**6.4**	**26**	<0.5	**13**	<0.5	**27**	**14**

Table 1
Mouren-Laurens/Leach Oil Company
Laboratory Results for Soil Vapor Analysis
EPA Method 8260C

Sample ID	Sample Depth (feet bgs)	Sample Date	Analyte (µg/L)																								
			Aliphatic Hydrocarbons	1,1-Dichloro-ethane	1,1-Dichloro-ethene	1,2-Dichloro-ethane	1,2-Dichloro-ethene	1,1,1-Trichloro-ethane	Benzene	Chloro-form	Methylene Chloride	Ethyl-benzene	Freon 11	Freon 113	MTBE	n-Butyl benzene	other Poly-alkyl benzenes	sec-Butyl benzene	tert-Butyl benzene	Tetra-chloro-ethene	Toluene	trans-1,3-Dichloro propene	Tri-chloro-ethene	Trimethyl-benzene	Vinyl Chloride	Xylenes (total)
LB8-30	30	11/15/2005	**2,680**	<0.5	**12**	<0.5	<0.5	<0.5	**11**	<0.5	<0.5	**6.2**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**5.9**	**29**	<0.5	**15**	<0.5	**13**	**19**
LB8-30	30	1/30/2006	**4,169**	**31**	**23**	<0.5	**4.5**	<0.5	**19**	<0.5	<0.5	**7.8**	<0.5	**12**	<0.5	<0.5	<0.5	<0.5	<0.5	**8.4**	**46**	<0.5	**21**	<0.5	**26**	**30**
LB8-37	37	11/15/2005	**1,975**	<0.5	**8.4**	<0.5	<0.5	<0.5	**8.4**	<0.5	<0.5	**4.3**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**7.8**	**24**	<0.5	**12**	<0.5	**7.4**	**14**
LB8-37	37	1/30/2006	**2,122**	**18**	**16**	<0.5	**1.7**	<0.5	**11**	<0.5	<0.5	**2.7**	<0.5	**13**	<0.5	<0.5	<0.5	<0.5	<0.5	**9.6**	**36**	<0.5	**14**	<0.5	**17**	**8.4**
LB9-13	13	11/15/2005	**353**	**1.7**	**1**	<0.5	<0.5	<0.5	**2.5**	<0.5	<0.5	**1.3**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**3.6**	<0.5	<0.5	**4.9**	<0.5	**3.1**	**1.8**
LB9-13	13	1/25/2006	**6,919**	**41**	**31**	<0.5	**14**	<0.5	**45**	<0.5	<0.5	<0.5	<0.5	**14**	<0.5	<0.5	<0.5	<0.5	<0.5	**14**	**6.4**	<0.5	**52**	<0.5	**273**	<0.5
LB9-20	20	11/15/2005	**956**	**14**	**2.4**	<0.5	<0.5	<0.5	**24**	<0.5	<0.5	**4.3**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**9.0**	**7.5**	<0.5	**28**	<0.5	**4.7**	**2.6**
LB9-20	20	1/25/2006	**13,718**	**63**	**53**	<0.5	**9.9**	<0.5	**84**	<0.5	<0.5	**15**	<0.5	**26**	<0.5	<0.5	<0.5	<0.5	<0.5	**33**	**15**	<0.5	**97**	<0.5	**120**	**69**
LB9-30	30	11/15/2005	**4,438**	**23**	**23**	**2.5**	**2.5**	<0.5	**30**	<0.5	<0.5	**4.5**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**8.4**	**7.7**	<0.5	**36**	<0.5	**38**	**3.5**
LB9-30	30	1/25/2006	**15,066**	**67**	**59**	<0.5	**2.8**	<0.5	**80**	<0.5	<0.5	**12**	<0.5	**30**	<0.5	<0.5	<0.5	<0.5	<0.5	**28**	**22**	<0.5	**90**	<0.5	**106**	**38**
LB9-30 dup	30	1/25/2006	**14,032**	**63**	**59**	<0.5	**4.7**	<0.5	**77**	<0.5	<0.5	**19**	<0.5	**30**	<0.5	<0.5	<0.5	<0.5	<0.5	**27**	**21**	<0.5	**87**	<0.5	**106**	**69**
LB9-37	37	11/15/2005	**4,427**	**25**	**23**	<0.5	<0.5	<0.5	**37**	<0.5	<0.5	**17**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**24**	**55**	<0.5	**50**	<0.5	**16**	**23**
LB9-37	37	1/25/2006	**11,030**	**51**	**49**	<0.5	**2.6**	**0.8**	**47**	<0.5	<0.5	**18**	**0.8**	**33**	<0.5	<0.5	<0.5	<0.5	<0.5	**28**	**77**	<0.5	**58**	<0.5	**65**	**72**
LB9-37 dup	37	1/25/2006	**10,583**	**48**	**49**	<0.5	**2.2**	**4.8**	**47**	<0.5	<0.5	**19**	**0.8**	**32**	<0.5	<0.5	<0.5	<0.5	<0.5	**26**	**73**	<0.5	**56**	<0.5	**63**	**71**
LB10-12	12	1/25/2006	**823**	**0.5**	**10**	<0.5	**4.4**	<0.5	**11**	<0.5	<0.5	0.5	**1.9**	**8.7**	<0.5	<0.5	<0.5	<0.5	<0.5	**7.1**	**1.2**	<0.5	**38**	<0.5	**77**	**1.6**
LB10-20	20	1/25/2006	**1,019**	**1.8**	**14**	<0.5	**5**	<0.5	**20**	<0.5	<0.5	<0.5	<0.5	**9.3**	<0.5	<0.5	<0.5	<0.5	<0.5	**19**	**1.3**	<0.5	**68**	<0.5	**59**	<0.5
LB10-30	30	1/25/2006	**994**	**2.1**	**16**	<0.5	**2.1**	<0.5	**20**	<0.5	<0.5	<0.5	<0.5	**10**	<0.5	<0.5	<0.5	<0.5	<0.5	**12**	**1.7**	<0.5	**64**	<0.5	**60**	<0.5
LB10-30 dup	30	1/25/2006	**1,003**	**0.5**	**15**	<0.5	**4.3**	<0.5	**20**	<0.5	<0.5	<0.5	<0.5	**10**	<0.5	<0.5	<0.5	<0.5	<0.5	**13**	**1.9**	<0.5	**67**	<0.5	**63**	<0.5
LB10-37	37	1/25/2006	**965**	**0.5**	**14**	<0.5	**2.1**	<0.5	**18**	<0.5	<0.5	**5.3**	**1.4**	**11**	<0.5	<0.5	<0.5	<0.5	<0.5	**13**	**6.4**	<0.5	**56**	<0.5	**43**	**11**
LB10-50	50	1/25/2006	**2,390**	**1.4**	**4.1**	<0.5	**1.1**	**1.6**	**48**	<0.5	<0.5	**7.5**	<0.5	**9.6**	<0.5	<0.5	<0.5	<0.5	<0.5	**16**	**28**	<0.5	**69**	<0.5	**7.7**	**13**
LB10-56	56	1/25/2006	**1,909**	**1.4**	**5.6**	<0.5	**1.9**	**0.9**	**23**	<0.5	<0.5	<0.5	<0.5	**7.9**	<0.5	<0.5	<0.5	<0.5	<0.5	**6.2**	**3.1**	<0.5	**50**	<0.5	**9.5**	<0.5
LB10-56 dup	56	1/25/2006	**1,868**	**1.4**	**5.2**	<0.5	**1.9**	**0.8**	**22**	<0.5	<0.5	<0.5	<0.5	**7.8**	<0.5	<0.5	<0.5	<0.5	<0.5	**6.3**	**3.2**	<0.5	**50**	<0.5	**8.8**	<0.5
L-MW1-50	50	1/25/2006	**907**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**2.3**	<0.5	<0.5	<0.5	<0.5	<0.5	**6.6**	**<0.5**	<0.5	**11**	<0.5	<0.5	<0.5
L-MW2-15	15	1/25/2006	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
L-MW2-20	20	1/25/2006	**15**	<0.5	<0.5	<0.5	<0.5	<0.5	**0.6**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**1.6**	<0.5	<0.5	**4**	<0.5	<0.5	<0.5
L-MW2-30	30	1/25/2006	**16**	<0.5	<0.5	<0.5	<0.5	<0.5	**0.4**	<0.5	<0.5	<0.5	<0.5	**0.7**	<0.5	<0.5	<0.5	<0.5	<0.5	**2.4**	<0.5	<0.5	**4**	<0.5	<0.5	<0.5
L-MW2-37	37	1/25/2006	**59**	<0.5	<0.5	<0.5	<0.5	<0.5	**1.2**	<0.5	<0.5	0.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**4**	<0.5	<0.5	**7.4**	<0.5	<0.5	<0.5
L-MW2-50	50	1/25/2006	**1,679**	<0.5	<0.5	<0.5	<0.5	<0.5	**32**	<0.5	<0.5	<0.5	<0.5	**4.7**	<0.5	<0.5	<0.5	<0.5	<0.5	**7.1**	**4.7**	<0.5	**22**	<0.5	<0.5	**5**
L-MW2-58	58	1/25/2006	**2,179**	<0.5	<0.5	<0.5	<0.5	<0.5	**16**	<0.5	<0.5	<0.5	<0.5	**1.3**	<0.5	<0.5	<0.5	<0.5	<0.5	**5.5**	**1.4**	<0.5	**25**	<0.5	<0.5	**2.4**
L-MW5-15	15	1/25/2006	**839**	<0.5	**13**	<0.5	<0.5	**1.6**	**55**	<0.5	<0.5	**9.9**	<0.5	**14**	<0.5	<0.5	<0.5	<0.5	<0.5	**27**	**125**	<0.5	**35**	<0.5	**21**	**46**
L-MW5-20	20	1/25/2006	**1,926**	**3.6**	**30**	<0.5	<0.5	**4.4**	**116**	<0.5	<0.5	**39**	**13**	**29**	<0.5	<0.5	<0.5	<0.5	<0.5	**81**	**319**	<0.5	**84**	<0.5	**23**	**192**
L-MW5-30	30	1/25/2006	**2,046**	**4**	**36**	<0.5	**7.5**	**4.9**	**95**	<0.5	<0.5	**31**	**27**	**2.1**	<0.5	<0.5	<0.5	<0.5	<0.5	**75**	**243**	<0.5	**91**	<0.5	**20**	**186**
L-MW5-37	37	1/25/2006	**1,557**	**3.8**	**29**	<0.5	**5.4**	**4**	**89**	<0.5	<0.5	**9.9**	**25**	**31**	<0.5	<0.5	<0.5	<0.5	<0.5	**33**	**179**	<0.5	**62**	<0.5	**12**	**37**
L-MW5-50 water	50	1/25/2006	**4,899**	**2.4**	**3.1**	<0.5	**1.9**	**5.2**	**254**	<0.5	<0.5	**65**	**17**	**20**	<0.5	<0.5	<0.5	<0.5	<0.5	**87**	**486**	<0.5	**101**	<0.5	**2.2**	**322**
L-MW5-58	58	1/25/2006	**3,398**	**4.9**	**3.0**	<0.5	**1.6**	**1.0**	**111**	<0.5	<0.5	**44**	**4.2**	**10**	<0.5	<0.5	<0.5	<0.5	<0.5	**63**	**319**	<0.5	**77**	<0.5	**1.9**	**203**
LSV2-10	10	6/16/2005	<0.5	**1.8**	**<0.5**	**<0.5**	**2.4**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**4.8**	<0.5	<0.5	**18**	**1**	**13**	<0.5
LSV5-5	5	6/16/2005	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**<0.5**	<0.5
LSV5-5D	5	6/16/2005	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**<0.5**	<0.5
LSV15-5	5	6/16/2005	**534**	**2.2**	<0.5	<0.5	**18**	<0.5	**13**	<0.5	<0.5	**7.3**	<0.5	<0.5	**0.9**	<0.5	<0.5	**1.0**	<0.5	<0.5	**12**	<0.5	<0.5	**4**	**41**	**10**
LSV15-5D	5	6/16/2005	**492**	**2.2**	<0.5	<0.5	**19**	<0.5	**14**	<0.5	<0.5	**6.3**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**11**	<0.5	<0.5	**2**	**44**	**9.7**
LSV16-5	5	6/16/2005	**11**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**0.6**	<0.5	**7.9**	<0.5	**22**	<0.5
LSV17-5	5	6/16/2005	**13**	**1.9**	**2.0**	**<0.5**	**8.5**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**0.7**	<0.5	<0.5	**13**	<0.5	**431**	<0.5
LSV18-5	5	6/16/2005	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**0.9**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**0.9**	<0.5	**1.9**	<0.5	**40**	<0.5
LSV19-5	5	6/16/2005	**599**	<0.5	<0.5	<0.5	<0.5	<0.5	**12**	<0.5	<0.5	**16**	<0.5	<0.5	<0.5	**1.0**	**1.0**	**2.0**	**1.0**	<0.5	**2.4**	<0.5	<0.5	**5**	**97**	**2.8**
LSV20-5	5	6/16/2005	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
MB1-10	10	11/16/2005	**8.7**	<0.5	<0.5	<0.5	<0.5	<0.5	**0.7**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**0.9**	**0.7**	<0.5	**25**	<0.5	**20**	<0.5
MB1-10 dup	10	11/16/2005	**6.1**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**0.7**	**0.5**	<0.5	**23**	<0.5	**18**	<0.5
MB1-10	10	1/30/2006	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
MB1-20	20	11/16/2005	**6.4**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**1**	<0.5	<0.5	**27**	<0.5	**14**	<0.5
MB1-20	20	1/30/2006	**2.4**	**0.6**	<0.5	<0.5	**124**	<0.5	0.5	<0.5	<0.5	<0.5	<0.5	**2.4**	<0.5	<0.5	<0.5	<0.5	<0.5	**1.1**	<0.5	<0.5	**38**	<0.5	**26**	<0.5
MB1-30	30	11/16/2005	**44**	<0.5	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**1.6**	<0.5	<0.5	**56**	<0.5	**49**	<0.5
MB1-30	30	1/30/2006	**9.7**	**0.7**	<0.5	<0.5	**91**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**1.7**	<0.5	<0.5	<0.5	<0.5	<0.5	**1.5**	<0.5	<0.5	**57**	<0.5	**31**	<0.5
MB1-40	40	11/16/2005	**38**	<0.5	<0.5	<0.5	<0.5	<0.5	**1.5**	<0.5	<0.5	**2**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**4.4**	**11**	<0.5	**71**	<0.5	**17**	**6.1**
MB1-40 dup	40	11/16/2005	**41**	<0.5	<0.5	<0.5	<0.5	<0.5	**1.6**	<0.5	<0.5	**2.2**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**4.4**	**12**	<0.5	**73**	<0.5	**17**	**6.9**
MB1-40	40	1/30/2006	**2.8**	**0.6**	<0.5	<0.5	**67**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**1.4**	<0.5	<0.5	**64**	<0.5	**12**	<0.5
MB2-6	6	11/16/2005	**9.0**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**7.4**	<0.5	<0.5	**1.7**	<0.5	<0.5	<0.5
MB2-6	6	1/30/2006	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**2.5**	**2.2**	<0.5	<0.5	<0.5	<0.5	<0.5	**7.8**	<0.5	<0.5	**0.5**	<0.5	<0.5	<0.5
MB2-20	20	11/16/2005	**180**	<0.5	<0.5	<0.5	<0.5	**1.6**	**8.6**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**11**	**1.1**	<0.5	**8.1**	<0.5	0.4	<0.5
MB2-20	20	1/30/2006	**4,596**	<0.5	**12**	<0.5	**2.2**	**9.2**	**79**	<0.5	<0.5	<0.5	**23**	**18**	<0.5	<0.5	<0.5	<0.5	<0.5	**34**	**1**	<0.5	**63**	<0.5	**21**	**<0.5**
MB2-30	30	11/16/2005	**1,829**	**0.7**	**4.1**	<0.5	<0.5	**4.5**	**56**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**27**	**2.5**	<0.5	**40**	<0.5	**8.3**	**7.3**
MB2-30	30	1/30/2006	**3,974**	<0.5	**10**	<0.5	**1.0**	<0.5	**66**	<0.5	<0.5	<0.5	**20**	**16**	<0.5	<0.5	<0.5	<0.5	<0.5	**28**	**1.6**	<0.5	**51**	<0.5	**15**	**1.5**
MB2-39	39	11/16/2005	**5,707**	**2.8**	**6.0**	<0.5	<0.5	**2.5**	**370**	**22**	<0.5	**68**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**36**	**297**	<0.5	**61**	<0.5	**7**	**151**
MB2-39	39	1/30/2006	**5,005**	**2.2**	**8.0**	<0.5	**1.2**	**2.2**	**273**	<0.5	<0.5	**2.6**	**15**	**13**	<0.5	<0.5	<0.5	<0.5	<0.5	**20**	**54**	<0.5	**48**	<0.5	**7.9**	**4.3**

Table 1
Mouren-Laurens/Leach Oil Company
Laboratory Results for Soil Vapor Analysis
EPA Method 8260C

Sample ID	Sample Depth (feet bgs)	Sample Date	Analyte (µg/L) Aliphatic Hydrocarbons	1,1-Dichloro-ethane	1,1-Dichloro-ethene	1,2-Dichloro-ethane	1,2-Dichloro-ethene	1,1,1-Trichloro-ethane	Benzene	Chloro-form	Methylene Chloride	Ethyl-benzene	Freon 11	Freon 113	MTBE	n-Butyl benzene	other Poly-alkyl benzenes	sec-Butyl benzene	tert-Butyl benzene	Tetra-chloro-ethene	Toluene	trans-1,3-Dichloro propene	Tri-chloro-ethene	Trimethyl-benzene	Vinyl Chloride	Xylenes (total)
MB3-6	6	11/16/2005	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**3.3**	<0.5	<0.5	**1.1**	<0.5	<0.5	<0.5
MB3-6	6	1/30/2006	**21**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**1.6**	<0.5	<0.5	<0.5	<0.5	<0.5	**2.8**	<0.5	<0.5	**1.4**	<0.5	<0.5	<0.5
MB3-20	20	11/16/2005	**416**	<0.5	**1.4**	<0.5	<0.5	<0.5	**2.6**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**6.9**	<0.5	<0.5	**8.5**	<0.5	0.5	<0.5
MB3-20	20	1/30/2006	**393**	<0.5	**2.0**	<0.5	<0.5	<0.5	**2.2**	<0.5	<0.5	<0.5	**2.3**	**4.3**	<0.5	<0.5	<0.5	<0.5	<0.5	**5.2**	<0.5	<0.5	**7.3**	<0.5	**0.5**	<0.5
MB3-30	30	11/16/2005	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
MB3-40	40	11/16/2005	**843**	**0.6**	**1.4**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**5.7**	<0.5	<0.5	**11**	<0.5	<0.5	<0.5
MB3-40	40	1/30/2006	**1,047**	<0.5	**2.7**	<0.5	<0.5	<0.5	**7.8**	<0.5	<0.5	<0.5	<0.5	**4.6**	<0.5	<0.5	<0.5	<0.5	<0.5	**6.8**	<0.5	<0.5	**13**	<0.5	**0.6**	<0.5
MB3-40	40	1/30/2006	**1,091**	<0.5	**3.0**	<0.5	<0.5	<0.5	**8.1**	<0.5	<0.5	<0.5	<0.5	**4.5**	<0.5	<0.5	<0.5	<0.5	<0.5	**8.2**	<0.5	<0.5	**14**	<0.5	**0.6**	<0.5
MB4-15	15	11/16/2005	**16,656**	**86**	**64**	<0.5	**1.6**	**124**	**323**	<0.5	**14**	**83**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**159**	**854**	<0.5	**141**	<0.5	**22**	**303**
MB4-15	15	1/30/2006	**22,039**	**137**	**76**	<0.5	**5.8**	**171**	**275**	<0.5	<0.5	**38**	**27**	**99**	<0.5	<0.5	<0.5	<0.5	<0.5	**69**	**468**	<0.5	**77**	<0.5	**65**	**107**
MB4-20	20	11/16/2005	**26,773**	**91**	**105**	<0.5	**6.6**	**203**	**381**	<0.5	**18**	**74**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**148**	**772**	<0.5	**146**	<0.5	**75**	**271**
MB4-20	20	1/30/2006	**19,826**	**47**	**48**	<0.5	**2.6**	**120**	**201**	<0.5	<0.5	**39**	**13**	**57**	<0.5	<0.5	<0.5	<0.5	<0.5	**74**	**426**	<0.5	**66**	<0.5	**35**	**154**
MB4-30	30	11/16/2005	**650**	<0.5	<0.5	<0.5	<0.5	<0.5	**6.0**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**9.2**	**8.9**	<0.5	**8.1**	<0.5	<0.5	<0.5
MB4-30	30	1/30/2006	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
MB4-40	40	11/16/2005	**18,344**	**35**	**22**	<0.5	**3.8**	**44**	**279**	<0.5	**2.1**	**55**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**107**	**525**	<0.5	**101**	<0.5	**15**	**198**
MB4-40	40	1/30/2006	**29,410**	**60**	**68**	<0.5	**9.9**	**133**	**299**	<0.5	<0.5	**52**	22	**93**	<0.5	<0.5	<0.5	<0.5	<0.5	**88**	**550**	<0.5	**103**	<0.5	**52**	**201**
MB5-15	15	11/16/2005	**4**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
MB5-15	15	1/30/2006	**930**	**15**	**11**	<0.5	**12**	<0.5	**108**	<0.5	<0.5	**3.3**	**9.4**	**5.7**	<0.5	<0.5	<0.5	<0.5	<0.5	**18**	**18**	<0.5	**73**	<0.5	**55**	**9.8**
MB5-20	20	11/16/2005	**465**	**0.6**	**4.4**	<0.5	<0.5	**3.7**	**15**	**0.7**	<0.5	**3.0**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**13**	**4.7**	<0.5	**50**	<0.5	**31**	**14**
MB5-20	20	1/30/2006	**644**	<0.5	**7.9**	<0.5	**9**	**4.1**	**85**	**54**	<0.5	**3**	**12**	**4.2**	<0.5	<0.5	<0.5	<0.5	<0.5	**15**	**14**	<0.5	**58**	<0.5	**42**	**13**
MB5-20 dup	20	1/30/2006	**698**	<0.5	**8.5**	<0.5	**9**	**4.1**	**86**	**56**	<0.5	**3**	**11**	**4.1**	<0.5	<0.5	<0.5	<0.5	<0.5	**15**	**15**	<0.5	**56**	<0.5	**46**	**13**
MB5-30 EQ	30	1/30/2006	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
MB5-37	37	11/16/2005	**4,380**	**2.0**	**22**	<0.5	<0.5	**9.4**	**244**	**4.7**	<0.5	**29**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**59**	**188**	<0.5	**162**	<0.5	**41**	**93**
MB5-37	37	1/30/2006	**3,305**	**1.1**	**22**	<0.5	**1.4**	<0.5	**202**	<0.5	<0.5	**21**	**44**	**29**	<0.5	<0.5	<0.5	<0.5	<0.5	**52**	**151**	<0.5	**138**	<0.5	**30**	**69**
MB5-37 dup	37	1/30/2006	**3,408**	**1.3**	**26**	<0.5	**1.4**	<0.5	**208**	<0.5	<0.5	**22**	**44**	**33**	<0.5	<0.5	<0.5	<0.5	<0.5	**55**	**157**	<0.5	**148**	<0.5	**31**	**72**
MB6-15	15	11/16/2005	**483**	<0.5	**0.8**	<0.5	**1,097**	<0.5	**5.1**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**1.4**	**6.1**	<0.5	**168**	<0.5	**834**	<0.5
MB6-15	15	1/30/2006	**295**	<0.5	0.9	<0.5	**1,381**	<0.5	**5.9**	<0.5	<0.5	<0.5	<0.5	**1**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**221**	<0.5	**2,148**	<0.5
MB6-20	20	11/16/2005	**2,610**	<0.5	<0.5	<0.5	**418**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**1**	**0.6**	<0.5	**317**	<0.5	**544**	<0.5
MB6-20	20	1/30/2006	**6,658**	<0.5	<0.5	<0.5	**1,195**	<0.5	**6.6**	<0.5	<0.5	<0.5	<0.5	**3.3**	<0.5	<0.5	<0.5	<0.5	<0.5	**0.9**	<0.5	<0.5	**321**	<0.5	**1,217**	<0.5
MB6-30	30	11/16/2005	**4,394**	<0.5	<0.5	<0.5	**1,146**	<0.5	**6.1**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**1.44**	<0.5	<0.5	**399**	<0.5	**1022**	<0.5
MB6-30 dup	30	11/16/2005	**5,292**	<0.5	<0.5	<0.5	**1,160**	<0.5	**6.8**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**1.5**	<0.5	<0.5	**404**	<0.5	**1020**	<0.5
MB6-30	30	1/30/2006	**11,895**	<0.5	<0.5	<0.5	**662**	<0.5	**9.1**	<0.5	<0.5	<0.5	<0.5	**5.8**	<0.5	<0.5	<0.5	<0.5	<0.5	**1.6**	<0.5	<0.5	**409**	<0.5	**1,120**	<0.5
MB6-37	37	11/16/2005	**5,688**	<0.5	**3.2**	<0.5	**946**	<0.5	**6.8**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**1.5**	<0.5	<0.5	**411**	<0.5	**947**	<0.5
MB6-37	37	1/30/2006	**165**	<0.5	<0.5	<0.5	**164**	<0.5	**1.2**	<0.5	<0.5	<0.5	<0.5	**0.6**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**26**	<0.5	**1,080**	<0.5
MB7-50	50	1/30/2006	**111,620**	**21**	**7.7**	<0.5	**3.6**	**18**	**1,184**	<0.5	<0.5	**44**	**7.1**	**57**	**3.2**	<0.5	<0.5	<0.5	<0.5	**55**	**845**	<0.5	**60**	<0.5	**16**	**162**
MB7-57	57	1/30/2006	**111,547**	**5.5**	**3.8**	<0.5	**2.9**	**5.6**	**914**	<0.5	<0.5	**57**	**5.4**	**49**	<0.5	<0.5	<0.5	<0.5	<0.5	**47**	**741**	<0.5	**47**	<0.5	**11**	**199**
MB7-72	72	1/30/2006	**62,814**	**27**	**16**	<0.5	**8**	**36**	**408**	<0.5	<0.5	**1.8**	**6.6**	**47**	<0.5	<0.5	<0.5	<0.5	<0.5	**31**	**14**	<0.5	**66**	<0.5	**24**	**13**
MSV1-5	5	6/16/2005	**41**	**9.7**	<0.5	<0.5	<0.5	<0.5	**1.0**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**0.9**	<0.5	<0.5	<0.5	**523**	<0.5
MSV2-5	5	6/16/2005	**2,299**	**12**	<0.5	<0.5	**0.6**	<0.5	**7.5**	<0.5	<0.5	<0.5	<0.5	<0.5	**5.2**	**2**	**6**	**6**	**4**	<0.5	**0.6**	<0.5	**25**	**22**	**8.9**	<0.5
MSV3-5	5	6/16/2005	**5,395**	**3.4**	**1.3**	**0.8**	<0.5	<0.5	**28**	<0.5	<0.5	**0.9**	<0.5	<0.5	**13**	**6**	**13**	**19**	**6**	<0.5	<0.5	<0.5	**8.1**	**37**	**49**	**4**
MSV4-5	5	6/16/2005	**80**	<0.5	<0.5	<0.5	<0.5	<0.5	**0.8**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**6.4**	<0.5	<0.5	**4.2**	<0.5	<0.5	<0.5
MSV5-5	5	6/16/2005	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
MSV6-5	5	6/16/2005	**75**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ambient	0	1/25/2006	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Notes:

<0.5	not detected above noted reporting limit
ug/l	micrograms per liter
water	sample contained moisture
loflo	low flow conditions were encountered during sampling

Table 2
Mouren-Laurens/Leach Oil Company
Laboratory Results for Soil Vapor
EPA Method TO-14

Sample ID	Sample Depth (feet)	Sample Date	Analyte (ppbv)																								
			Benzene	Bromo-methane	Chloro-benzene	Chloro-ethane	Chloro-form	Chloro-methane	Dichloro difluoro methane	1,1-Di-chloro-ethane	1,1-Dichloro-ethene	1,2-Dichloro-benzene	1,2-Dichloro-ethane	cis1,2-Dichloro-ethene	Ethyl-benzene	Methylene chloride	Xylenes (o)	Xylenes (p/m)	Tetra-chloro-ethene	Toluene	Tri-chloro-ethene	Trichloro fluoro methane	1,1,2-Trichloro-1,2,2-Trifluoro-ethane	1,1,1-Trichloro-ethane	1,3,5-Trimethyl-benzene	1,2,4-Trimethyl-benzene	Vinyl Chloride
LSV5-5	5	16-Jun-05	<0.67	<0.67	**1.0**	<0.67	<0.67	**0.89**	<0.67	<0.67	<0.67	**0.85**	<0.67	<0.67	**3.1**	< 2.7	**5.2**	**2.7**	**51**	<0.67	**11**	<1.3	<1.3	<0.67	**5**	**6.8**	<0.67
LSV15-5	5	16-Jun-05	**1300**	<16	**90**	**19**	<16	<16	<16	**880**	<16	<16	<16	**160**	**1,400**	**86**	**1,400**	**1,700**	<16	**1,500**	**50**	<32	<32	<16	**280**	**700**	**1,200**
LSV15-5 dup	5	16-Jun-05	**710**	<11	**57**	<11	<11	<11	<11	**490**	<11	<11	<11	**85**	**1,100**	**84**	**950**	**1,200**	< 11	**1,000**	**41**	<22	<22	< 11	**250**	**680**	**700**
QC Ambient	NA	16-Jun-05	<0.70	<0.70	<0.70	<0.70	<0.70	**1.4**	**0.76**	<0.70	<0.70	<0.70	<0.70	<0.70	<0.70	<2.8	<0.70	<1.4	<0.70	<0.70	<0.70	<1.4	<1.4	<0.70	<0.70	<1.4	<0.70
LB2-15	15	15-Nov-05	<14	<14	<14	<14	<14	<14	<14	<14	<14	<14	<14	<14	**52**	< 58	**56**	**70**	**240**	<14	<14	<29	**260**	<14	**580**	**1,400**	<14
LB7-20	20	15-Nov-05	**6,700**	<540	**980**	<540	<540	<540	<540	**7,100**	**4,700**	<540	<540	**14,000**	<540	**2,300**	<540	<1,100	**5,800**	**540**	**34,000**	<1,100	**3,400**	<540	<540	<1,100	**29,000**
LB8-37	37	15-Nov-05	**2,600**	<130	<130	<130	<130	<130	<130	**2,400**	**2,100**	<130	<130	<130	**1,000**	< 520	**1,100**	**2,500**	**1,000**	**5,600**	**2,900**	<260	**670**	**1,800**	**180**	**460**	<130
MB1-20	20	16-Nov-05	**1,500**	<150	<150	<150	<150	<150	<150	<150	<150	<150	<150	**150,000**	<150	< 580	<150	< 290	<150	**280**	**49,000**	<290	**320**	<150	<150	<290	**100,000**
MB3-40	40	16-Nov-05	**1,300**	<250	<250	<250	<250	**2,900**	<250	**1,600**	**1,000**	<250	**450**	<250	<250	**2,500**	<250	<490	**850**	**400**	**2,300**	<490	**1,200**	<250	<250	<490	<250
MB5-15	15	16-Nov-05	**9,000**	<170	<170	<170	<170	**180**	<170	**5,100**	**2,200**	<170	<170	**2,400**	**730**	<700	**1,200**	**1,400**	**2,500**	**1,000**	**9,700**	<350	**610**	**790**	**360**	**490**	<170
LB4-37 LF	37	25-Jan-06	**9,600**	<110	**340**	<110	<110	<110	**160**	**4,500**	**2,700**	<110	<110	**960**	**4,500**	**550**	**5,800**	**11,000**	**5,600**	**18,000**	**4,100**	<220	**1,600**	<110	**940**	**1,300**	**880**
LB6-37	37	25-Jan-06	**57,000**	<360	**2,400**	<360	**820**	<360	**740**	**15,000**	**15,000**	<360	<360	<360	**23,000**	**1,600**	**22,000**	**52,000**	**20,000**	**170,000**	**23,000**	**790**	**8,100**	**8,400**	**3,100**	**7,000**	**3,900**
LB6-37 dup	37	25-Jan-06	**68,000**	<360	**2,800**	<360	**970**	<360	**710**	**18,000**	**17,000**	<360	<360	**370**	**27,000**	**2,000**	**24,000**	**57,000**	**24,000**	**220,000**	**25,000**	**860**	**9,100**	**9,600**	**3,600**	**7,800**	**3,800**
LB10-56	56	25-Jan-06	**5,400**	<100	**210**	<100	<100	<100	**190**	**1,300**	**740**	<100	<100	**280**	**420**	**1,300**	**250**	**570**	**1,300**	**2,200**	**5,300**	<210	**980**	**110**	<100	<210	**690**
L-MW2-58	58	25-Jan-06	**7,300**	<380	<380	<380	<380	<380	**400**	**1,400**	**1,100**	<380	<380	<380	**630**	<1,500	<380	<760	**1,100**	**800**	**4,900**	<760	**1,700**	<380	<380	< 760	<380
Ambient	NA	25-Jan-06	<0.73	<0.73	<0.73	<0.73	<0.73	<0.73	**0.99**	<0.73	<0.73	<0.73	<0.73	<0.73	<0.73	<2.9	<0.73	<1.5	<0.73	**1.6**	<0.73	<1.5	<1.5	<0.73	<0.73	<1.5	<0.73

Notes:

<0.67 not detected above noted reporting limit

ppbv parts per billion per volume