APPENDIX K.2 **OPERATING UNIT 2 (OU-2) REMEDIAL ACTION PLAN (2 OF 5)**

Prepared for

Universal Paragon Corporation

150 Executive Park Boulevard, Suite 4000
San Francisco, California 94134

DATA GAP INVESTIGATION REPORT

BRISBANE BAYLANDS OPERABLE UNIT 2
BRISBANE, CALIFORNIA

Prepared by

Geosyntec consultants

engineers | scientists | innovators

2700 Ygnacio Valley Road, Suite 130
Walnut Creek, California 94598

Project Number: WG2619-07

3 September 2019
Revised 14 February 2020

Data Gap Investigation Report
Brisbane Baylands Operable Unit 2
Brisbane, California

Prepared by

Geosyntec Consultants, Inc.
1340 Treat Boulevard, Suite 208
Walnut Creek, California 94597



Anthony Smith, Ph.D., P.E. (CA)
Senior Engineer

Krzysztof S. Jesionek, P.E. (CA)
Principal Engineer

Gordon Thrupp, Ph.D., P.G., C.HG. (CA)
Hydrogeologist

Project Number: WG2619-07

3 September 2019
Revised 14 February 2020

TABLE OF CONTENTS

1 INTRODUCTION 1

2 SITE BACKGROUND 3
2.1 Site Description 3
2.2 Site Characteristics 3
2.2.1 Topography 3
2.2.2 Surface Water Hydrology 4
2.2.3 Local Geology 4
2.2.4 Groundwater Occurrence 5
2.2.5 Groundwater Use 6
2.3 Site Use History 7
2.3.1 OU-2 Site History 7
2.3.2 Industrial Way Properties History 8
2.4 Data Gap Analysis 9

3 INVESTIGATION ACTIVITIES 10
3.1 Planning and Site Preparation 10
3.1.1 Health and Safety Plan 10
3.1.2 Permitting 10
3.1.3 Site Preparation 10
3.2 Sample Collection 11
3.2.1 Soil Sample Collection 11
3.2.2 Grab Groundwater Sample Collection 12
3.2.3 Groundwater Well Gauging and Sampling 13
3.3 Analytical Program 14
3.4 Deviations from Work Plan 14
3.5 Investigation-derived Waste Management 15

4 INVESTIGATION RESULTS 16
4.1 Soil Lithology 16
4.2 Residual Petroleum Products 16
4.2.1 Residual Bunker C Oil 16

4.2.2 Residual Fluid Petroleum 17
4.3 Soil Analytical Results 18
4.3.1 Metals 18
4.3.2 Polynuclear Aromatic Hydrocarbons 18
4.3.3 Total Petroleum Hydrocarbons 19
4.3.4 Organochlorine Pesticides 20
4.3.5 Polychlorinated Biphenyls 20
4.3.6 Volatile Organic Compounds 20
4.3.7 Asbestos 21
4.4 Groundwater Hydrology 21
4.5 Groundwater Analytical Results 21
4.5.1 Dissolved Metals 21
4.5.2 Semi-Volatile Organic Compounds 22
4.5.3 Total Petroleum Hydrocarbons 22
4.5.4 Volatile Organic Compounds 23

5 DATA REVIEW AND VALIDATION 25

6 PRELIMINARY RISK EVALUATION 26

7 SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS 29

8 REFERENCES 30

LIST OF TABLES

Table 1a: Soil and Grab Groundwater Sampling Matrix

Table 1b: Groundwater Well Sampling Matrix

Table 2: Metals Concentrations in Soil

Table 3: Polynuclear Aromatic Hydrocarbon and Total Petroleum Hydrocarbons as Diesel and Motor Oil Concentrations in Soil

Table 4: Organochlorine Pesticides and Polychlorinated Biphenyls Concentrations in Soil

Table 5: Volatile Organic Compounds and Total Petroleum Hydrocarbons as Gasoline Concentrations in Soil

Table 6: Groundwater Elevations in Fill Water-Bearing Zone, December 2018

Table 7: Dissolved Metals Concentrations in Fill Groundwater

Table 8: Polynuclear Aromatic Hydrocarbons and Total Petroleum Hydrocarbons as Diesel and Motor Oil Concentrations in Fill Groundwater

Table 9: Volatile Organic Compounds and Total Petroleum Hydrocarbon Concentrations as Gasoline in Fill Groundwater

LIST OF FIGURES

Figure 1: Site Location Map
Figure 2: Site Plan and Well Locations
Figure 3: Soil Sample Locations
Figure 4: Groundwater Sample Locations
Figure 5a: Geologic Cross-Sections A-A' and B-B'
Figure 5b: Geologic Cross-Sections C-C' and D-D'
Figure 6: Residual Petroleum Products
Figure 7: Arsenic Concentrations in Soil
Figure 8: Lead Concentrations in Soil
Figure 9: Benzo(a)pyrene Equivalent Total PAHs Concentrations in Soil
Figure 10: Naphthalene Concentrations in Soil
Figure 11: Petroleum Hydrocarbon Concentrations in Soil (TPH-d)
Figure 12: PCB Concentrations in Soil
Figure 13: Maximum Chlorinated VOC Concentrations in Soil
Figure 14: Potentiometric Surface Contours in Fill Groundwater (December 2018)
Figure 15: Dissolved Arsenic, Lead, Copper, and Nickel Concentrations in Fill Groundwater
Figure 16: Petroleum Hydrocarbon Concentrations in Fill Groundwater
Figure 17: Benzene, Ethylbenzene, Naphthalene, and Total Xylenes Concentrations in Fill Groundwater
Figure 18: Chlorinated VOC Concentrations in Fill Groundwater

LIST OF APPENDICES

Appendix A: Cross-Sections of Schlage OU [Mactec, 2010]

Appendix B: Historical Concentrations of Constituents in Soil and Groundwater

Appendix C: Drilling Permits

Appendix D: Waste Disposal Manifests

Appendix E: Boring Logs

Appendix F: Photograph Log

Appendix G: Analytical Laboratory Reports for Soil and Grab Groundwater Samples

Appendix H: Groundwater Well Monitoring Field Sheets

Appendix I: Analytical Laboratory Reports for Monitoring Well Groundwater Samples

Appendix J: Data Validation Summaries

LIST OF ACRONYMS AND ABBREVIATIONS

B&M	Burns and McDonnell
Basin Plan	San Francisco Bay Basin (Region 2) Water Quality Control Plan
Belshire	Belshire Environmental Services, Inc. of Foothill Ranch, California
bgs	below ground surface
Brisbane OU-2	the Brisbane Operable Unit
Caltrain	Peninsula Corridor Joint Power Board
CAM	California Assessment Manual
CARB	California Air Resources Board
CrVI	hexavalent chromium
DTSC	Department of Toxic Substances Control
ELAP	Environmental Laboratory Accreditation Program
ESLs	Environmental Screening Levels
Fill	A heterogeneous mixture of clay, silt, sand, gravel, and building debris from the 1906 San Francisco earthquake (as known as A-Fill or shallow water-bearing zone [SWBZ])
Geosyntec	Geosyntec Consultants, Inc.
GPS	geographic positioning system
GRO	gasoline-range organics
HASP	health and safety plan
IDW	investigation-derived waste
µg/kg	micrograms per kilogram
µg/L	micrograms per liter
µS/cm	microSiemens per centimeter
mg/kg	milligrams per kilogram
mg/L	milligrams per liter
msl	mean sea level
mV	millivolts

Mactec	Mactec Engineering and Consulting, Inc.
NGVD29	National Geodetic Vertical Datum of 1929
NTUs	Nephelometric Turbidity Units
OCP	organochlorine pesticide
OU	Operable Unit
OU-2	the Brisbane Baylands Operable Unit 2
PAH	polynuclear aromatic hydrocarbon
PaleoWest	PaleoWest Archaeology, Inc.
PCB	polychlorinated biphenyl
Penecore	Penecore Drilling of Woodland, California
Report	Data Gap Investigation Report
SAP/QAPP	Sampling and Analysis Plan and Quality Assurance Project Plan
Schlage	Schlage Lock Company
SF	San Francisco
SFRWQCB	San Francisco Bay Regional Water Quality Control Board
SIM	selective ion monitoring
SPTC	Southern Pacific Transportation Company
SVOC	semi-volatile organic compound
T&R	Treadwell and Rollo
TestAmerica	TestAmerica Laboratory, Inc.
the Site	the Brisbane Baylands Operable Unit (Brisbane OU-2 or OU-2)
TPH	total petroleum hydrocarbon
TPH-d	total petroleum hydrocarbons as diesel
TPH-g	total petroleum hydrocarbons as gasoline
TPH-mo	total petroleum hydrocarbons as motor oil
UPC OU-SM	San Mateo Portion of UPC OU
UPC	Universal Paragon Corporation
USA	Underground Service Alert

USCS	Unified Soil Classification System
USEPA	United States Environmental Protection Agency
UST	underground storage tank
UTL	upper tolerance limit
VOCs	volatile organic compounds
Work Plan	Data Gap Investigation Work Plan for OU-2
YBM	Young Bay Mud

1 INTRODUCTION

Geosyntec Consultants, Inc. (Geosyntec) has prepared this Data Gap Investigation Report (Report) for the Brisbane Baylands Operable Unit 2 (OU-2) and Industrial Way properties (the Site). The Site location is shown in **Figure 1**. This Report has been prepared on behalf of Universal Paragon Corporation, Inc. (UPC), the owner of the Site.[1]

The work documented in this Report was completed in accordance with the Data Gap Investigation Work Plan for OU-2 (Work Plan), which was submitted to the San Francisco Bay Regional Water Quality Control Board (SFBRWQCB) on 27 November 2018 [Geosyntec, 2018]. The field work described in this Report was conducted from 15 November 2018 to 5 February 2019.

The purpose of the data gap investigation described herein is to further characterize the distribution of constituents in the shallow soil and groundwater at the Site to support remedy evaluation and selection.

The work plan included a component of investigation that was designed to assess the presence of archaeological artifacts beneath the Site. The archaeological investigation was conducted by PaleoWest Archaeology, Inc., of Orinda, California (PaleoWest). The methodology, findings, and conclusions of the archaeological investigation are documented in a separate report and not addressed herein.

This Report is organized as follows:

- Section 2, *Site Background*, provides a description of the Site, the geologic setting, and the Site use history;
- Section 3, *Investigation Activities*, summarizes the pre-field, field, and post-field activities conducted;
- Section 4, *Investigation Results*, presents the field observations and measurements as well as analytical results for soil and groundwater samples;

[1] Sunquest Properties, Inc., is a wholly-owned subsidiary of UPC and holds title to the former Southern Pacific Transportation Company (SPTC) parcels in San Mateo County.

- Section 5, *Data Review and Validation*, discusses the assessment of analytical data quality;
- Section 6, *Preliminary Risk Evaluation,* presents a screening-level risk analysis using investigation results;
- Section 7, *Summary, Conclusions and Recommendations*, summarizes the conclusions from the investigation and provides recommendations for future work; and
- Section 8, *References*, provides a list of the references cited in this Report.

Report sections are followed by tables, figures, and appendices.

2 SITE BACKGROUND

This section provides descriptions of the Site, the Site geologic and hydrogeologic setting, and the Site use history. For a record of historical Site investigations and remediation, refer to the Work Plan [Geosyntec, 2018].

2.1 Site Description

The Site comprises approximately 130 acres in the southern portion of the former SPTC Brisbane Railyard. The Site is located south of Geneva Avenue, east of Bayshore Boulevard, west of the Peninsula Corridor Joint Powers Board (Caltrain) railroad tracks, and north of the Ice House Hill (**Figures 1** and **2**). The second amendment to the California Department of Toxic Substances Control's (DTSC) Imminent and Substantial Endangerment Order I/SE-89/90-004A defined OU-2 as "the area of the Bayshore Railyard identified by Tax Assessor Parcel Numbers (APN) 005-340-080 and 005-350-070" [DTSC, 1994]. The fourth amendment to I/SE-89/90-004A transferred OU-2 oversight from DTSC to the SFBRWQCB [DTSC, 1995]. OU-2, as defined herein, includes the parcels in the original DTSC Order plus portions of other parcels that comprised the former STPC Brisbane Railyard. In addition to OU-2, the Site includes properties fronted on Industrial Way which are currently owned by Brisbane Bayshore Properties, an affiliate of UPC. The San Mateo County portion of the UPC OU (UPC OU-SM), which is under DTSC oversight, is located to the north. The Brisbane Landfill is east of the Caltrain tracks (**Figure 1**).

2.2 Site Characteristics

2.2.1 Topography

The Site lies at the base of the Visitacion Valley between Candlestick Point to the north and Visitacion Point to the south. The Site is situated on a low-lying flatland that was formed by historical filling of a former embayment located along the western margin of San Francisco Bay. The current land surface has been largely formed by filling of the area in the early 1900s. The Site is relatively flat, excluding drainage ditches and delineated wetlands, and ground surface elevations range from approximately 7 to 10 feet above mean sea level (msl) relative to the National Geodetic Vertical Datum of 1929 (NGVD29). A steep incline known as Ice House Hill is in the southwest corner of the Site adjacent to Bayshore Boulevard.

2.2.2 Surface Water Hydrology

Surface water at the Site and vicinity primarily moves as overland flow that drains into catch basins and drop inlets to the local storm sewer system that drains to San Francisco Bay. A drainage ditch, which is also referred to as Visitacion Creek, is located east of the Site within the Brisbane Landfill, and the Brisbane Lagoon is south of the Site. The eastern edge of the Site is located approximately 2,000 feet west of the San Francisco Bay shoreline. Jurisdictional freshwater marsh wetlands occupying approximately 1.4 acres are located in the central portion of the Site (**Figure 2**) [Burns & McDonnell (B&M), 2004]. The area is characterized by depressions and man-made drainages which conveyed stormwater out of the railyard. The drainages are lined by polyethylene and the adjacent area is dominated by non-native, emergent wetland flora [B&M, 2004; 2018].

2.2.3 Local Geology

The Site is underlain by Quaternary-age alluvial deposits, dune sediments, estuarine sediments, and fill [Mactec Engineering and Consulting, Inc. (Mactec), 2009; Burns & McDonnell and Treadwell & Rollo, 2005]. Site stratigraphy has been extensively investigated and characterized as part of the Schlage OU site investigation. The Site is underlain by five distinct geological units that are summarized in the updated Hydrogeologic Framework prepared by MACTEC for the Schlage OU [Mactec, 2010] as follows:

- **Fill**: a heterogeneous mixture of clay, silt, sand, gravel, and building debris that is exposed at ground surface and extends for a thickness of 10 to 15 feet below ground surface ("Fill" zone). At the time SPTC acquired the property in 1896, the northern half of the railyard consisted of fill from undocumented sources that had been placed into the tidal flats of San Francisco Bay. Between 1896 and 1935, fill was placed on most of the remaining area between Bayshore Boulevard and Tunnel Avenue. Sources of the fill reportedly include pulverized Franciscan bedrock derived from the surrounding hills, rubble from the 1906 San Francisco earthquake, and soil, debris, and rubble from other possible undocumented sources [DTSC, 1993].
- **Young Bay Margin Deposits (YBMD)**: high-plasticity, low-permeability clay known as Young Bay Mud (YBM), and some interbedded silty sand and organic material that underlies the Fill and extends for a thickness of 5 to 20 feet below the Fill.

- **Colma Formation**: The upper portion of the formation consists of yellow to brown, fine- to medium-grained sand with some silt and clay which underlies the YBMD and extends for a thickness of approximately 30 feet. The lower portion of the formation consists of an approximately 10 to 20 feet thick layer of Old Bay Margin Deposits (OBMD), including yellow to brown, stiff, low-plasticity clay known as Old Bay Mud (OBM) that is considered to be an aquitard that separates the Colma Formation from the underlying Merced Formation. The Old Bay Margin Deposit Sand Unit (OBMD-SU) is a sand layer located within the OBM aquitard and has been documented as a laterally discontinuous layer beneath the Schlage OU. It is uncertain whether the OBMD-SU extends beneath the Site;
- **Merced Formation**: weakly consolidated sandstone with secondary siltstone and claystone. The thickness of the Merced Formation is unknown beneath the Site but reportedly extends to the Franciscan Bedrock [Mactec, 2010].
- **Franciscan Assemblage[2] bedrock**: occurs at a depth of 50 to 60 feet below ground surface (bgs) beneath the Schlage OU site [Mactec, 2010]. The Franciscan bedrock consists of metamorphosed, weathered, and sheared greenstone, interbedded chert and shale, and interbedded sandstone and shale.
- A geologic cross-section prepared for the Schlage OU is provided in **Appendix A** [Mactec, 2010].

2.2.4 Groundwater Occurrence

The water-bearing zones at the Site, as described in the updated Site Conceptual Model (SCM) for the Schlage OU [Mactec, 2010], include the Fill, Colma Formation, and Merced Formation. The YBMD, where present to the south, constitute an aquitard that separates the Fill from the Colma Formation and confines groundwater in the underlying Colma Formation. The OBMD constitute an aquitard that separates the Colma Formation from the Merced Formation and confines groundwater in the underlying Merced Formation. The first encountered groundwater at the Site exists in the Fill typically between 3 and 10 feet bgs.

[2] Also known as Franciscan Complex, it is a geologic term for a late Mesozoic terrane of heterogeneous rocks found throughout the California Coast Ranges, and particularly on the San Francisco Peninsula.

Groundwater monitoring wells, shown in Figure 2, were installed during previous investigations. Additionally, a groundwater monitoring well network has been installed north of the Site at the Schlage OU, UPC OU-SF, and UPC OU-SM to monitor chlorinated solvents impacts at the Schlage OU. Monitoring wells at the Site are screened within the Fill, Colma Formation, and Merced Formation water-bearing zones.

Many monitoring wells that are completed in the Merced Formation exhibit artesian conditions. Groundwater potentiometric elevations increase with depth, and differences in hydraulic head between water-bearing zones range from approximately 5 feet between the Fill and Colma Formation to over 13 feet between the Colma and Merced Formations. Upward vertical pressure gradients, on the order of 0.5 ft/ft, are commonly observed between co-located wells screened in the Merced and Colma Formations [e.g., Geosyntec, 2018c]. The differences in hydraulic pressure (head) result in upward vertical pressure gradients between each water-bearing zone.

The direction and magnitude of lateral hydraulic gradients beneath the Site vary by location and water-bearing zone. In the Fill, the general direction of the lateral hydraulic gradient is to the south and southeast with a historical magnitude of approximately 0.001 foot per foot (ft/ft) [B&M, 2019]. Monitoring wells completed in the Colma and Merced Formations at the Site are not monitored routinely, but at the adjacent UPC OU-SM, hydraulic gradients in the Colma Formation are approximately 0.01 ft/ft toward the northwest and appear to be strongly influenced by the Sunnydale Avenue sewer line. The direction of the lateral hydraulic gradient in the Merced Formation is predominantly to the southeast with historical magnitudes that range from 0.007 ft/ft to 0.025 ft/ft.

2.2.5 Groundwater Use

Groundwater at the Site is not used for domestic or industrial purposes, and the City of Brisbane provides the Site and surrounding residences and businesses with public water that originates from the Hetch Hetchy Reservoir in the Sierra Nevada Mountains [T&R, 2005]. According to the San Francisco Bay Basin (Region 2) Water Quality Control Plan (Basin Plan) [RWQCB, 2017] groundwater in the Fill, Colma, and Merced are located in an area considered beneficial as a potential municipal water supply. However, in its letter to UPC, dated May 6, 2019, the RWQCB has made the following determination regarding the shallow (Fill) water-bearing zone:

"Based on the information provided by Geosyntec [Geosyntec 2019], including lithology, well location, screen interval, and electrical conductivity (EC) data, staff concur that groundwater in the shallow water-bearing zone (SWBZ) to a depth of approximately 15 feet below ground surface (bgs) within those areas meets exceptions (a) and (b) of State Water Resources Control Board (State Water Board) Resolution No. 88-63 and is not likely to be used as a source of drinking water. "

2.3 Site Use History

2.3.1 OU-2 Site History

OU-2 is comprised of the southern portion of the former Brisbane railyard, extending southward from Geneva Avenue (**Figure 2**). SPTC acquired the Brisbane Railyard property in 1896 [Levine-Fricke, 1990] and conducted operations on OU-2 from 1914 until 1960, during which time railroad facilities, oil storage tanks, and an area designated as a "disposal site" were constructed. During operations, the primary waste streams reportedly generated within the railyard were alkaline cleaners and associated oil and grease [HCI, 1989]. It is believed that herbicides containing lead and arsenic were sprayed at the railyard for weed control during that period [MACTEC, 2009]. There was no evidence from the historical record that radionuclides were either used or disposed at the site. The major OU-2 facilities consisted of the following (**Figure 2**):

- Machine and Erecting Shop – constructed in 1920, this facility was a machine shop and mechanical construction shop;[3]
- Turntable – constructed in 1908 and retired in 1942, the turntable was used to transfer locomotives to the individual servicing stalls within the roundhouse;
- Roundhouse – constructed in 1908 and still standing, this was a service area for the locomotives;
- Oil Tank – constructed in 1920, this 3-million-gallon aboveground tank stored fuel oil, commonly called Bunker C, for boilers used in the steam locomotive operation. The tank was dismantled in 1988 and 550,000 gallons of residual oil were recovered and removed for disposal;

[3] Also identified as the "Machine and Electric Shop" in historical figures.

- Tank and Boiler Shop – constructed in 1922 and retired in 1963, this shop repaired water tanks and boilers for steam locomotives. The building is still standing and is currently used by Lazzari Fuel Company, a manufacturer of charcoal briquettes; and
- Switching Yard – constructed in the early 1900s, the yard consisted of a series of tracks used for organizing and building freight trains. It was the largest part of the yard. Two active tracks remain on the eastern edge of the property.

Chemicals that may have been used or generated as waste at these facilities include metals, volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), polychlorinated biphenyls (PCBs), and petroleum hydrocarbons. Organochlorine pesticides (OCPs) may have also been used. Additionally, asbestos may be present in the building debris comprising the Fill, and naturally-occurring asbestos and metals may be present as a component of the fill that was sourced from the nearby Franciscan Bedrock outcrops.

After SPTC's major railyard operation ceased in 1960, OU-2 was abandoned and most of the original structures have been demolished [B&M, 2002]. Various foundations and building slab outlines are still present.

2.3.2 Industrial Way Properties History

The Industrial Way Properties were thought to have once been part of the former railyard and were historically occupied by buildings related to railyard activities [Weiss Associates, Inc., 2008]. Documentation of the specific uses that occurred in these buildings is limited. One of the known uses was the production of glue and fertilizer from bones and hides from 1951 to 1963 by Stauffer Chemical Company at 200 Industrial Way. Following termination of operations in 1963, approximately 10 to 20 feet of fill was used to cover the site for a road project [Ecology and Environment, Inc., 1987].

The former rail yard buildings have since been replaced by more modern buildings. Land uses at these properties currently include automobile garages, storage warehouses, and a boxing ring. The locations of two former underground storage tanks (USTs) at 250 and 350 Industrial Way are shown in **Figure 2**.

2.4 Data Gap Analysis

The Data Gap Investigation Work Plan presented a detailed analysis of historical data (**Appendix B**) and Site conditions. Upon reviewing the Site history and historical investigation data for the Site, four data gaps were identified:

1. Additional sampling was needed of the Fill to assess potential impacts to soil and groundwater resulting from historical activities at the Site. As shown in **Figure 3**, historical sample locations were concentrated in the Turntable/Oil Tank Area and in the South Disposal Area. However, the former Switching Yard and former industrial facilities located north of the Turntable had not been adequately characterized.
2. Soil and groundwater samples across the Site were not analyzed for chemicals that could reasonably be present in the subsurface Fill based on the Site history, including SVOCs, PCBs, and OCPs. Additionally, the presence of asbestos in Fill material placed at the Site had not been investigated previously.
3. The resolution of the spatial distribution of metals in Fill soil, particularly arsenic and lead in the Switching Yard, where lead arsenate pesticide was likely applied, was not sufficient for developing remedial alternatives.
4. The distribution of Site groundwater constituents in the Fill water-bearing zone was outdated. Grab groundwater samples had not been collected since 2006, and although select groundwater monitoring wells in OU-2 are monitored semi-annually, additional sampling was needed for site-specific COPC distribution across the entire Site.

To address the data gaps, the following sampling strategy was proposed and implemented:

- Characterize shallow Fill soil by collecting soil samples from the vadose zone (i.e., generally, between ground surface and 5 feet bgs) plus saturated soil samples at select locations; and
- Characterize shallow groundwater (i.e., groundwater in the Fill) by collecting grab groundwater samples and sampling existing monitoring wells screened in the Fill.

Soil vapor conditions will be investigated at a later date; soil vapor sampling was not included in this data gap investigation.

3 INVESTIGATION ACTIVITIES

Investigation-related activities included planning, permitting, and Site preparation; sample collection and analysis; report preparation; and investigation-derived waste management.

3.1 Planning and Site Preparation

3.1.1 Health and Safety Plan

Field work associated with this investigation was conducted in accordance with the Site-specific health and safety plan (HASP) that was prepared and was provided in the Work Plan [Geosyntec, 2018].

3.1.2 Permitting

Boring permits #18 1876, 1877, 1878, 1879, 1880, and 1881 were acquired on 6 December 2018 from the San Mateo County Department of Environmental Health for parcels 005-340-060, 005-340-090, 005-340-100, 005-350-070, 005-340-080, and 005-320-020, respectively. Boring permits #19 0131, 0132, 0133, 0134, and 0135 were issued by San Mateo County on 24 January 2019 for parcels 005-312-120, 005-312-110, 005-312-070, 005-311-010, and 005-311-100, respectively. Boring permits # 19 0256, 0257, and 0258 were issued on 1 February 2019 for parcels 005-311-070, 005-311-020, and 005-162-320, respectively. Boring permits are provided in **Appendix C**.

3.1.3 Site Preparation

The north and south limits of the investigation area were marked on Bayshore Boulevard and Underground Service Alert (USA) was notified of the planned work prior to drilling (ticket #W822700471-00W). The proposed sampling grid was laid out in the field using a field-scale geographic positioning system (GPS) and each sampling location was marked on the ground (**Figure 3**). To the extent practical, surface debris and vegetation obstructing proposed boring locations were removed by Penecore Drilling of Woodland, California (Penecore) and by UPC. Cruz Brothers Locators of Isleton, California, and California Utility Locators of Scotts Valley, California scanned each sampling location for underground utilities in advance of drilling. In addition, an attempt was made to locate each existing groundwater monitoring well that was scheduled to be sampled.

3.2 Sample Collection

Approximately 1,100 soil samples were collected from 559 soil borings (**Figure 3**) and grab groundwater samples were collected from 138 soil borings (**Figure 4**), as summarized in the sample matrix provided in **Table 1a.** Groundwater samples were also collected from 16 existing groundwater monitoring wells, as indicated in **Table 1b**. Soil borings, soil sampling, and groundwater sampling was conducted in accordance with the procedures outlined in the Data Gap Investigation Work Plan (Geosyntec, 2018).

3.2.1 Soil Sample Collection

Soil borings were advanced by Penecore (a C-57 licensed contractor) using direct-push drilling technology between 21 November 2018 and 5 February 2019. All drilling activities were conducted under the oversight of Geosyntec field staff who were supervised by a California-licensed Professional Geologist. Borings were advanced to a minimum depth of 5 feet bgs, except in the case of shallower refusals, and to a maximum depth of 20 feet bgs. The field engineer/geologist documented drilling progress, including the percent recovery within each core barrel length to confirm depth of soil samples. All borings were logged according to the Unified Soil Classification System (USCS) and reviewed by a California-licensed Professional Geologist. Soil samples from multiple depths along the cores were placed in sealable bags for measurement of total VOCs with a photoionization detector (PID).

Soil samples were collected for laboratory analysis using continuous coring techniques with direct-push technology. The core barrel was lined with 5-foot-long acetate sleeves and advanced to collect the desired soil depth interval. The target soil sample intervals at all borings were 0.5 to 1.0 foot bgs and 3.5 to 4.0 feet bgs.[4] In addition, soil samples were collected from the bottom 6 inches of the core at borings where temporary wells were installed for grab groundwater samples, provided the sample interval was above the contact between the A-Fill and the YBM (generally from 9.5 to 10 feet bgs). Finally, samples of A-Fill material were collected immediately above the contact with the YBM, provided the contact was deeper than 8 feet bgs, at the deeper borings selected by PaleoWest.

[4] Samples were collected from 1.0 to 1.5 feet bgs at borings AL15 and AI16, and from 4.0 to 4.5 feet bgs at boring S9 because the originally proposed sample intervals were comprised of gravel.

Soil samples collected on the 100-foot grid (**Figure 3**) were analyzed for California Assessment Manual (CAM)-17 metals by United States Environmental Protection Agency (USEPA) Methods 6010B and 7471A. Soil samples collected on the 200-foot grid, plus soil samples collected from the saturated zone, were also analyzed for the following:

- Volatile organic compounds (VOCs) and total petroleum hydrocarbons (TPH) as gasoline (TPH-g or gasoline-range organics [GRO]), including 1,2,3-trichloropropane and dibromochloropropane, by USEPA Method 8260B/5035;
- Semi-volatile organic compounds (SVOCs) (i.e., polynuclear aromatic hydrocarbons [PAHs]) by USEPA Method 8270C-selective ion monitoring (SIM);
- TPH as diesel (TPH-d) and as motor oil (TPH-mo) by USEPA Method 8015B;
- Organochlorine pesticides (OCPs) by USEPA Method 8081A;
- Polychlorinated biphenyls (PCBs) by USEPA Method 8082; and
- Asbestos by California Air Resources Board (CARB) Method 435.

Soil samples analyzed for VOCs and TPH-g were collected from soil cores using TerraCore™ samplers; soil samples for analysis by other methods were provided in laboratory-provided jars. Samples were labeled with sample ID (location and depth), date and time of sample collection, name of sampler, and required analytical method. Samples were stored in a cooler with ice and transmitted to the laboratory daily under standard chain-of-custody protocol.

Completed borings were tremie-backfilled from the bottom up with neat cement grout (94 pounds of cement in 6 gallons of water) in accordance with San Mateo County permit requirements.

3.2.2 Grab Groundwater Sample Collection

Grab groundwater samples were collected by Geosyntec from the target locations (**Figure 4)** by installing temporary PVC casing and well screen into the open borehole following direct push coring. The temporary wells were first purged for 5-10 minutes until the purge water ran clear. Grab groundwater samples were subsequently collected with a peristaltic pump using low-flow sampling techniques. At locations where the required groundwater

sample volume could not be collected at one time, the well was allowed to recharge, and sampling was attempted later. The temporary well casings were then removed for disposal and borings were backfilled with neat cement grout as described in the previous section. Purge water was drummed for offsite disposal.

Grab groundwater samples were collected for the following analyses:

- VOCs and TPH-g, including 1,2,3-trichloropropane and dibromochloropropane, by USEPA Method 8260B;
- SVOCs (PAHs) by USEPA Method 8270C-SIM;
- Dissolved CAM-17 metals by USEPA Method 6010B and 7470A;
- Dissolved hexavalent chromium (CrVI) by USEPA Method 7196; and
- TPH-d and TPH-mo by USEPA Method 8015B.

All grab groundwater samples were collected in laboratory-provided glassware containing preservative, as appropriate for the method of analysis. Groundwater samples for dissolved metals analysis were filtered through 0.45-micron filters in the field. Sample containers were labeled with sample ID (location and depth), date and time of sample collection, name of sampler, and analytical method. Groundwater samples were packaged in coolers containing water ice, sealed with chain of custody forms, and transported to the laboratory daily by courier. A summary of the sample analysis program is provided in **Tables 1a** and **1b**.

3.2.3 Groundwater Well Gauging and Sampling

Existing groundwater monitoring wells screened in the Fill were gauged and sampled by Blaine Tech Services on 18 and 19 December 2019. Groundwater samples were collected from 16 of the 17 wells located within the OU-2 Site that are screened in the Fill, shown in **Figure 4**.[5] In each well, the depth to groundwater was measured prior to purging by inserting a groundwater level sensor into the well and recording the depth relative to the top of the well casing. Wells were then purged and sampled in accordance with the Site-specific Sampling and Analysis Plan and Quality Assurance Project Plan (SAP/QAPP) [Geosyntec, 2018]. Samples were packaged in coolers containing water ice, sealed with

[5] Well MK-1A was located behind a locked gate and could not be accessed.

chain of custody forms, and transported to the laboratory daily by courier. Samples were analyzed for the same constituents listed in Section 3.2.2 above.

3.3 Analytical Program

Analytical testing was conducted by TestAmerica Laboratory, Inc. (TestAmerica) in Pleasanton, California, an Environmental Laboratory Accreditation Program (ELAP)-certified analytical laboratory. Sample analysis was conducted in accordance with the UPC OU-2 SAP/QAPP provided in the Work Plan [Geosyntec, 2018].

3.4 Deviations from Work Plan

The following soil samples were proposed in the Work Plan but could not be collected due to field conditions:

- AE15 & AF15 could not be accessed because proposed locations were beneath partially demolished vehicles behind a locked gate. The nearest accessible areas coincided with adjacent proposed sample locations.
- AY10 was behind a locked gate containing livestock. The nearest accessible areas coincided with adjacent proposed sample locations.
- AN15, AO15, AQ14, AT13, AU12, AW12, AY11, AZ11 were located on a steep face of Ice House Hill and could not be accessed safely.
- X14 and X15 were located within the remaining structure of the Roundhouse, which is a historical landmark. The locations could not be accessed safely.
- AO13 was in the city right-of-way and drilling would have obstructed access to buildings to the south. The nearest accessible area coincided with adjacent proposed sample locations.

The following grab groundwater samples were proposed in the Work Plan but could not be collected due to field conditions:

- AO15, AT13, and AY11 were located on a steep hillside in the southwest corner of the Site and could not be accessed safely.
- AB-9, AH-9, and AJ-9 were submerged beneath approximately 2 feet of standing water during the field investigation. Soil samples were collected but groundwater

samples collected from temporary wells would have been impacted by the overlying stormwater.

- AF13, AW7, and P1 were in close proximately to existing "permanent" groundwater monitoring wells screened in the Fill that were sampled as a part of this investigation.
- AI11, AM11, AO11, AP13, AR13, AT12, AU11, AX9, and T17 could not be sampled due to low groundwater yield.

The large number of data gap investigation samples and their distribution across the Site, along with historical date, comprise a thorough characterization of shallow soil and groundwater in the Fill zone beneath the Site. Furthermore, the various historical site activities are represented by the samples collected during this investigation; therefore, the locations listed above that could not be sampled due to field conditions are not considered data gaps.

3.5 Investigation-derived Waste Management

Investigation-derived waste (IDW), consisting of soil cuttings, purged groundwater, and decontamination water, was contained in 55-gallon drums. Soil with visible residual petroleum product was segregated from the rest of the soil. Containers were labeled with generator ID, generation date, and contact name and telephone number. Drums were sampled for profiling; all soil (i.e., with and without visible residual petroleum) was determined to be non-RCRA hazardous and water was determined to be non-hazardous. All drums were removed from the Site on 21 May 2019 by Belshire Environmental Services, Inc. of Foothill Ranch, California (Belshire). Soil drums were transported to U.S. Ecology in Beatty, Nevada. Water drums were transported to DeMenno Kerdoon in Compton, California. Waste manifests are provided as **Appendix D**.

4 INVESTIGATION RESULTS

4.1 Soil Lithology

Observed soil lithologies were described on a boring log prepared for each boring. Boring logs from this investigation are provided in **Appendix E,** geologic cross-sections are provided in **Figures 5a** and **5b,** and a photograph log is provided as **Appendix F**. The observed soil lithology was consistent with previous investigations. Generally, the Fill consists of loose coarse-grained material, primarily silty sand and gravel, for the upper 5 feet to 14.6 feet bgs. In the Fill, industrial materials (e.g., bricks, pieces of timbers, metal, and glass) were noted in some areas. In most of the borings advanced below 5 feet bgs, fat clay, consistent with YBM, was encountered beneath the Fill. The contact between imported Fill and native YBM generally became shallower toward the south of the Site.

4.2 Residual Petroleum Products

The distribution of residual petroleum hydrocarbons at the Site was characterized through field observation (i.e., visual evidence of staining and petroleum odors) and results of chemical testing for TPH. Two types of residual petroleum products were observed during the investigation: (1) a tar-like material largely bound to the soil matrix which is interpreted to be residual weathered Bunker C Oil; and (2) a fluid separate-phase product which appears to be a mix of residual weathered Bunker C Oil and other petroleum hydrocarbons. The distributions of these two different types of product are discussed below and presented in **Figure 6**. TPH concentrations are discussed in Section 4.3.3.

4.2.1 Residual Bunker C Oil

The residual tar-like material bound to the soil matrix was described in boring logs as “sticky”, “tar-like”, or as a “viscous liquid” and is assumed to be residual weathered Bunker C oil. Bunker C Oil was historically used at the railyard to fuel the boilers of the steam locomotives. Many of these locations had corresponding elevated concentrations of TPH-d, TPH-mo, and PAHs. Examples of this material can be seen in photographs 3 through 6 of **Appendix F**. Bunker C residual was observed in the Turntable and Oil Tank Areas (R8, S9, AB14, AC11, AC13, AC15, AD13, AD14, AE13, AF13, AH13, AI12, AI14, AJ14, AK13, AL13, and AQ11) and in the former railyard (R15, U11, AD11, AD12, and AH4). In addition to observations of oil, sheens apparently attributable to TPH-d and/or TPH-mo were observed within the soil matrix in the former railyard, the

former Turntable Area, and the former Oil Tank Area, as shown in Photograph 8 of **Appendix F**.

Bunker C oil, which has the highest viscosity of the fuel oils, does not appear to have penetrated the YBM as indicated by borings in the former Oil Tank Area (refer to boring logs in **Appendix E**):

- At AF13, free product was visible in the interval from 4 to 5 feet bgs and PID readings were 1,547 ppm at 4 feet bgs and 243 ppm at 7.5 feet bgs. At both depths, the soil type was a silty sand. YBM was encountered at 8 feet bgs, and the PID reading at 9 feet bgs was 1.0 ppm;
- At AG15, the maximum PID reading of 9 ppm was recorded at the contact of the Fill and the YBM at 9 feet bgs. At 9.5 feet bgs, the PID reading was 0.5 ppm; and
- At AD17, the maximum PID reading of 20 ppm was observed at 4 feet bgs near the top of a lean clay with sand. PID readings in the YBM at 8 and 9 feet bgs had PID readings of 0.0.

The bottom of occurrence of Bunker C oil appears to be bounded by the fine-grained YBM in the former Oil Tank Area. At borings within the former railyard and former Turntable Area where residual product or sheen was observed (i.e., at locations N4, O4, P4, AH4, S9, and U13) PID readings and visual observations indicated that impacts were delineated vertically within the Fill and that impacts did not extend into the YBM.

4.2.2 Residual Fluid Petroleum

Separate-phase residual fluid petroleum was observed in several locations near the Oil Tank Area (AB13, AE11, AG11, AI11) and in isolated areas of the railyard (P4, P7, S9, W8, X13, AO3, and AS3). The separate-phase residual fluid petroleum, shown in Photograph 7 of **Appendix F**, generally corresponded with elevated TPH-g concentrations. The presence of THP-g was not reported in the samples interpreted as residual weathered Bunker C Oil. A sheen was also observed at the groundwater level in the railyard, beneath the former machine and erecting shops, and in the former Turntable Area (Q7, S15, T16, V17, W13, X12, Y15, Z11, Z12, Z13, Z17, AA15, AB14, AC7, AC11, AE5, AJ13, AN12, AO8, and AQ11). The sheen in the groundwater is shown in Photographs 13 and 14 of **Appendix F**. Samples of soil beneath residual free petroleum were collected and analyzed to confirm the depth of impacts.

4.3 Soil Analytical Results

The analytical laboratory reports for soil samples are presented in **Appendix G**. Analytical results are presented in **Tables 2 through 5**. Constituent concentrations in soil are discussed in the following sections.

4.3.1 Metals

Soil metals results are presented in **Table 2**. Most metals were detected at low concentrations across the site. Lead and arsenic were the metals most commonly detected at elevated concentrations throughout the Site (**Figures 7** and **8**) and in many cases at concentrations exceeding their respective screening level (See Section 6.0). Arsenic was detected at a maximum concentration of 1,400 milligrams per kilogram (mg/kg) at borings AE5 and AV5 (3.5 to 4 feet bgs). The maximum lead concentration detected was 28,000 mg/kg at location AM7 (7.5 to 8 feet bgs).

Maximum concentrations of other metals detected at elevated concentrations were as follows:

- Sample AN5 from 0.5-1 foot bgs: 23,000 mg/kg barium, 120 mg/kg beryllium, 4,400 mg/kg cobalt, and 45,000 mg/kg vanadium;
- Sample O10 from 0.5-1 foot bgs: 4,300 antimony;
- Sample S15 from 0.5-1 foot bgs: 120,000 mg/kg copper;
- Sample N15 from 0.5-1 foot bgs: 22 mg/kg mercury;
- Sample AV10 from 14.5-15 feet bgs: 3,400 mg/kg nickel; and
- Sample W10 from 0.5-1: 110 mg/kg thallium.

4.3.2 Polynuclear Aromatic Hydrocarbons

PAH concentrations are summarized in **Table 3**. All 17 PAHs in the analytical method were detected. Maximum concentrations of these constituents were as follows:

- Sample AB13 from 3.5-4 foot bgs: 4.4 micrograms per kilogram (µg/kg) benzo(a)pyrene, 8,400 µg/kg benzo(b)fluoranthene, 4,700 µg/kg benzo(k)fluoranthene, 76,000 µg/kg 2-methylnaphthalene, 25,000 µg/kg

acenaphthene, 32,000 µg/kg anthracene, 19,000 µg/kg benzo(a)anthracene, 31,000 µg/kg chrysene, 33,000 µg/kg fluorene, and 13,000 µg/kg naphthalene;

- Sample AS7 from 0.5 to 1 foot bgs: 7,900 µg/kg benz(a)pyrene, 13,000 µg/kg benzo(b)fluoranthene, 5,000 µg/kg benzo(k)fluoranthene, 12,000 µg/kg benzo(a)anthracene, 14,000 µg/kg chrysene, 980 µg/kg dibenzo(a,h)anthracene, 29,000 µg/kg fluoranthene, 2,200 µg/kg indeno(1,2,3-cd)pyrene, and 26,000 µg/kg pyrene; and
- Sample X1 from 0.5 to 1 foot bgs:5,200 µg/kg benzo(a)pyrene, 6,800 µg/kg benzo(b)fluoranthene, 2,300 µg/kg benzo(k)fluoranthene, 4,400 µg/kg benzo(a)anthracene, 6,100 µg/kg chrysene, 1,100 µg/kg dibenzo(a,h)anthracene, 2,600 µg/kg fluoranthene, 3,100 µg/kg indeno(1,2,3-cd)pyrene, 350µg/kg naphthalene, and 6,600 µg/kg pyrene.

Benzo(a)pyrene equivalents were calculated for each sample and are presented in **Figure 9**. Concentrations were screened against the 95th percentile benzo(a)pyrene equivalent for ambient concentrations in northern California of 0.9 mg/kg [DTSC, 2009]. Ambient level exceedances occur in deep samples within the former Oil Tank Area, in several shallow and mid-depth samples in the former Turntable Area, and sparsely throughout the railyard predominantly in shallow samples with a few exceedances in mid-depth and deep samples.

The concentrations of naphthalene detected in soil samples is presented in **Figure 10**. Similar to the distribution of Benzo(a)pyrene equivalents, screening level exceedances were observed in deep samples within the former Oil Tank Area and at a few locations north of the former Turntable Area. The exceedances of benzo(a)pyrene equivalents and naphthalene in the former Oil Tank Area and former Turntable Area fall within the previously delineated area of Bunker C impacts in soil [B&M, 2002].

4.3.3 Total Petroleum Hydrocarbons

TPH concentrations are summarized in **Table 3** and the distribution of TPH-d is shown in **Figure 11**. Based on historical site characterization [e.g., B&M, 2002], TPH-d (reported by TestAmerica as carbon chain lengths between C10-C28) and TPH-mo (reported as carbon chain lengths C24-C36) are generally indicative of Bunker C oil (chain lengths C9-C36) rather than diesel or motor oil products.

Maximum concentrations of Bunker C reported as TPH-d and as TPH-mo were 94,000 and 86,000 mg/kg, respectively, at boring AB13 (in the former Oil Tank Area) from 13.5-14 feet bgs. This boring location also contained the maximum concentrations of TPH-g (2,400 mg/kg) and of eight of the 17 PAHs quantified. The elevated concentrations in this sample are consistent with the presence of separate-phase hydrocarbons.

Elevated concentrations were predominantly located within the former Oil Tank Area, the former Turntable Area, and the former machine and erecting shop area, though exceedances were also observed at lower frequency in the former railyard.

4.3.4 Organochlorine Pesticides

OCP concentrations are summarized in **Table 4**. OCPs were detected in approximately 21% of the samples collected. ESLs for groundwater protection were exceeded for dieldrin (6 samples) and endrin (4 samples). All exceedances except one for dieldrin were in the shallowest sample, and all exceedances had deeper samples that were below screening levels indicating that downward migration and potential impacts to groundwater are not significant.

4.3.5 Polychlorinated Biphenyls

PCB results are summarized in **Table 4** and **Figure 12**. Of the six Aroclors reported, only Aroclor 1254 and Aroclor 1260 were detected above method detection limits. Three samples (DG-AI7 and AU11 at 0.5 to 1 foot bgs and S7 at 3.5 to 4 feet bgs) exceeded a concentration of 1,000 ug/kg which triggers the authority of the Toxic Substances Control Act (TSCA). These generally appear to be isolated detections, except for a grouping south of the drainage swale in the former railyard, that are statistically insignificant findings for the Site as a whole.

4.3.6 Volatile Organic Compounds

VOC results are summarized in **Figure 13** and **Table 5**.

Elevated concentrations of chlorinated VOCs in soil and groundwater were previously observed in a limited area between the former Turntable and the former Oil Tank [B&M, 2007]. Historical maximum concentrations of tetrachloroethene (PCE), TCE, and cis-1,2-dichloroethene (cis-1,2-DCE) were 9,400 mg/kg, 860 mg/kg, and 960 mg/kg,

respectively. Chlorinated VOCs were not detected at elevated concentrations in soil samples outside of this previously delineated area.

4.3.7 Asbestos

Asbestos was not detected in any soil samples; there is no evidence of the presence of asbestos in soils at the Site.

4.4 Groundwater Hydrology

Groundwater sampling field forms are presented in **Appendix H**. Consistent with historical reports, shallow groundwater was encountered in the Fill water-bearing zone between 3 and 10 feet bgs. Groundwater elevations from the December 2018 groundwater monitoring well gauging and sampling event are summarized in **Table 6**. Groundwater elevation contours in the Fill within OU-2 based on measurements made in December 2018 are provided in **Figure 14**. Horizontal gradients are nearly flat across much of the Site with groundwater flow generally toward the middle of the Site, controlled by higher topography and groundwater elevations to the north, south, east, and west. The Fill water-bearing zone is likely recharged by surface water infiltration and upward flow from below, and discharge is likely through evapotranspiration.

4.5 Groundwater Analytical Results

The analytical laboratory reports for grab groundwater and monitoring well samples are presented in **Appendix G** and **Appendix I,** respectively. Analytical results are presented in **Tables 7, 8, and 9**, along with updated screening levels to reflect SFBRWQCB's 2019 ESLs.

4.5.1 Dissolved Metals

Dissolved metals concentrations in grab groundwater and monitoring well samples are summarized in **Table 7** and **Figure 15**. Concentrations were screened against saltwater ecotoxicity ESLs with an attenuation factor of 100 (i.e., 100 x ESL) to account for sorption and dilution between the Site and San Francisco Bay.[6] No COCs exceeded

[6] The Site is approximately 0.5 miles from San Francisco Bay; an attenuation factor of 100 has been used at other bayfront sites including Mission Bay, San Francisco International Airport, and East Bay Regional Shoreline Park.

screening criteria. In general, concentrations were low. Arsenic, lead, copper, and nickel had the highest concentrations relative to their screening criteria. The maximum concentration of dissolved arsenic was 4,300 micrograms per liter (µg/L) at AV5, and the maximum concentrations of lead, copper, and nickel were 320 µg/L, 450 µg/L, and 420 µg/L, all at AJ5. Consistent with the distribution of arsenic in soil, elevated concentrations of dissolved arsenic in Fill groundwater were observed primarily in the former railyard adjacent to the tracks.

Elevated concentrations of dissolved metals, arsenic being the most prevalent, are generally localized in the eastern side of the Site and decrease over relatively short distances. For example, the highest dissolved arsenic concentration within approximately 200 feet of AV5 is 100 µg/L at AX5, a 43-fold concentration reduction.

4.5.2 Semi-Volatile Organic Compounds

PAH results are summarized in **Table 8**. PAHs were generally detected below laboratory reporting limits and all concentrations were below saltwater ecotoxicity ESLs with an attenuation factor of 100 (i.e., 100 x ESL). Naphthalene and phenanthrene were detected at the highest concentrations relative to their respective screening criteria. The maximum concentration of naphthalene was 41 µg/L at location AK15 and the maximum concentration of phenanthrene was 10 µg/L at locations AE11 and AG11. Groundwater samples from the 16 Fill groundwater monitoring wells were non-detect for all SVOCs. The low concentrations and lack of screening criteria exceedances are consistent with the relatively low water solubility of SVOCs.

4.5.3 Total Petroleum Hydrocarbons

Concentrations of TPH-d and TPH-mo in groundwater are summarized in **Table 8,** TPH-g concentrations are summarized in **Table 9,** and all TPH fractions are summarized in **Figure 16**. As discussed above, the TPH-d and TPH-mo detections are likely representative of Bunker C oil rather than diesel or motor oil. The maximum concentration of TPH-g was 2,300 µg/L at location AA11, and maximum concentrations for TPH-d, and TPH-mo were 21,000 µg/L and 9,900 µg/L at location AD13. Both AA11 and AD13, as well as most TPH-d exceedances, are located within the former Oil Tank Area and the former Turntable Area. TPH-d exceedances were also observed in the former railyard adjacent to the tracks and along Industrial Way.

4.5.4 Volatile Organic Compounds

VOC results are presented in **Table 9,** and the distributions of benzene, ethylbenzene, and naphthalene in groundwater are shown in **Figure 17**. VOC concentrations were screened against saltwater ecotoxicity ESLs with an attenuation factor of 100 (i.e., 100 x ESL), ESLs for vapor intrusion from groundwater, and ESLs for odor nuisance for non-drinking water.

Samples exceeding ESLs for petroleum hydrocarbons are located in the western half of the Site, just east of the Industrial Way Properties. The locations yielding samples with the highest petroleum VOC detections form a roughly linear north-south pattern stretching from the historical tank and boiler shop to about 1,560 feet due south of the historical oil tank area along row 15 (**Figure 17**). Petroleum VOC concentrations in Fill groundwater at the Site are generally consistent with the previously delineated Bunker C impacted area. The elevated petroleum VOC concentrations are limited to this area and contaminant migration appears to be minimal.

Chlorinated VOCs were detected in the current investigation at relatively low concentrations. PCE, TCE, cis-1,2-DCE, and vinyl chloride were detected at maximum concentrations of 0.98 µg/L, 6.1 µg/L, 45 µg/L, and 9.7 µg/L, respectively (**Figure 18)**. Locations AC15 and AD13 were near the area of previously identified chlorinated VOC impacts to groundwater, where maximum PCE, TCE, cis-1,2-DCE, and vinyl chloride concentrations were 26,000 µg/L, 15,000 µg/L, 150,000 µg/L, and 80,000 µg/L, respectively [B&M, 2007]. Concentrations for these compounds at AC15 and AD13 were significantly lower in this data gap investigation and were below laboratory detection limits in most cases.

4.5.5 General Groundwater Quality

Groundwater field parameters were collected from the December 2018 groundwater monitoring well gauging and sampling event. Field parameters including pH, oxidation/reduction potential (ORP), dissolved oxygen (DO), specific conductance, temperature, and turbidity were monitored in the field during purging. The range of field parameters, once stabilized, were as follows:

- pH was near-neutral, ranging between 5.64 and 7.13;

- Specific conductance was moderate to high, ranging between 1,597 microSiemens per centimeter (µS/cm) and 12,948 µS/cm;
- Turbidity was generally low, ranging between 1 Nephelometric Turbidity Unit (NTUs) and 58 NTUs;
- DO was low to moderate, ranging between 0.24 milligrams per liter (mg/L) and 5.27 mg/L; and
- ORP indicated generally anoxic conditions, ranging between -190.6 millivolts (mV) and 49.7 mV.

The near-neutral pH suggests that groundwater was not impacted by the alleged use of alkaline cleaners, and the specific conductance measurements are consistent with the elevated salinity in Fill groundwater reported previously that meets exceptions to Resolution No. 88-63.

5 DATA REVIEW AND VALIDATION

The data validation process consisted of data generation, reduction, and two levels of review. The analytical laboratory generated and reduced the data and conducted the first level of review. Geosyntec staff, under the direction of the Project Quality Assurance Manager, independently conducted a second level of review. Consistent with the OU-2 SAP/QAPP, all data were validated at Stage 2a and 10% of data were validated at Stage 4. The data validation reports are provided in **Appendix J**.

The data validation reports concluded that the analytical results are robust and of sufficient quality to support project goals and decisions.

6 PRELIMINARY RISK EVALUATION

Geosyntec conducted a preliminary risk evaluation using the data collected in soil and groundwater from this investigation and comparing the results with the current Environmental Screening Levels (ESLs) and/or background concentrations that have been established in other studies. The ESLs presented in the Work Plan were updated to reflect the SFRWQCB's 2019 Environmental Screening Levels (ESLs) [SFBRWQCB, 2019a]. Potential exposure pathways and corresponding screening criteria were established as follows:

Soil: Potential exposure pathways for human health risk to COCs in soil are through direct exposure, inhalation of dust, leaching into groundwater, and volatilization into soil vapor. As discussed in the approved work plan, the soil vapor conditions will be evaluated at a later date prior to Site development. Considering that railyard operations ceased in the 1960s and Fill-zone groundwater is shallow at depths ranging from approximately 5 to 10 feet bgs, groundwater impacts resulting from contaminants leaching from soil would be reflected in groundwater samples. And as discussed in Section 2.2.5, the SFBRWQCB exempted the Fill groundwater from potential use as a drinking water source. For this reason, the leaching to groundwater pathway was not carried forward for further risk evaluation. A summary of the screening level comparisons is as follows;

- Approximately 35% of samples that were tested for arsenic exceeded the 95% upper tolerance limit (UTL) of the mean regional arsenic background concentration of 19 mg/kg [Lawrence Berkeley National Laboratory, 2009].
- Lead was detected above the residential ESL of 80 mg/kg in approximately 56% of samples.
- The residential screening level for antimony was exceeded in 16% of the soil samples.
- Concentrations of benzo(a)pyrene equivalent were screened against the 95th percentile benzo(a)pyrene equivalent for ambient concentrations in northern California of 0.9 mg/kg [DTSC, 2009]. Ambient level exceedances occur in deep samples within the former Oil Tank Area, in several shallow and mid-depth samples in the former Turntable Area, and sparsely throughout the railyard predominantly in shallow samples with a few exceedances in mid-depth and deep samples.

- ESL exceedances for petroleum hydrocarbons were predominantly located within the former Oil Tank Area, the former Turntable Area, and the former machine and erecting shop area, though exceedances were also observed at lower frequency in the former railyard.
- Total detected Aroclor concentrations equaled or exceeded the residential screening level of 230 µg/kg at the following shallow (0.5-1 foot bgs) samples: AA7 (710 µg/kg), AF5 (600 µg/kg), AI7 (1,500 µg/kg), AJ5 (320 µg/kg), AJ9 (820 µg/kg) AK7 (940 µg/kg), AM7 (430 µg/kg), AO7 (440 µg/kg), AV5 (740 µg/kg), and S7 (380 µg/kg). Exceedances at the 3.5-4 foot bgs depth interval were observed at AU11 (1,320 µg/kg), Q7 (520 µg/kg), and S7 (5,300 µg/kg).
- VOCs exceeded ESLs as follows:
    - Benzene: AH13 from 7.5 to 8 feet bgs (82 µg/kg), R13 from 0.5 to 1-foot bgs (2,300 µg/kg), and T17 from 0.5 to 1-foot bgs (450 µg/kg);
    - Ethylbenzene: AB13 from 13.5 to 14 feet bgs (730 µg/kg) and AD13 from 7.5 to 8 feet bgs (590 µg/kg);
    - Naphthalene: AB13 from 13.5 to 14 feet bgs (7,400 µg/kg), AC15 from 7.5 to 8 feet bgs (1,400 µg/kg), AD13 from 7.5 to 8 feet bgs (4,100 µg/kg), and R15 from 3.5 to 4 feet bgs (2,900 µg/kg); and
    - Trichloroethene (TCE): Y15 from 7.5 to 8 feet bgs (100 µg/kg).

Groundwater: The potential exposure pathways involving groundwater include vapor intrusion for VOCs and potential exposure to aquatic biota if the future groundwater hydrology at the Site results in discharge to either the San Francisco Bay or the Brisbane Lagoon. For the reasons stated above, the ingestion of potable water pathway is not a complete pathway and is not carried forward for further risk evaluation. The potential vapor intrusion pathway will be evaluated at a later date prior to Site development. Site COCs that could migrate to nearby surface water bodies would be diluted and/or adsorbed to soil in transit to either water body, thus the concentration at the point of discharge would be reduced relative to the concentration in groundwater at the Site. Screening Site concentrations against leaching-to-groundwater ESLs is therefore, conservative. A summary of the screening level comparisons is as follows:

- ESL exceedances of dissolved arsenic in Fill groundwater were observed primarily in the former railyard adjacent to the tracks.

- Naphthalene and phenanthrene were the only SVOCs exceeding their screening levels in two and five groundwater samples, respectively.
- VOCs that exceeded ESLs in groundwater included benzene, ethylbenzene, naphthalene, xylenes, and vinyl chloride.

The Baseline Health Risk Assessment report will provide a more robust evaluation of the risk associated with Site constituents.

7 SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

The results of the UPC OU-2 data gap investigation indicate the presence of metals and petroleum hydrocarbons in shallow soil at elevated concentrations across certain areas of the Site. Specifically, arsenic and lead were detected in most sampling locations across the Site at relatively elevated concentrations in shallow soil, likely associated with concentrations in the imported fill and from the historical application of lead arsenate pesticide to the ground surface. The concentrations of dissolved metals in groundwater were generally low across the Site with elevated concentrations occurring in very localized areas.

Petroleum hydrocarbons are present primarily in the form of weathered Bunker C Oil. Consistent with historical data, the highest concentrations in soil and groundwater were in the former Oil Tank Area and the former Turntable Area. However, petroleum hydrocarbons were also detected at other locations at the Site.

VOCs, OCPs, and PCBs exceeded screening criteria at only a few locations, indicating that impacts to soil are localized at the Site. VOC exceedances in groundwater were similarly limited. Benzene, ethylbenzene, naphthalene and xylene exceedances were observed primarily in the former Oil Tank Area, and chlorinated solvents were detected near the previously identified chlorinated VOC impacts.

The results of this investigation support the following conclusions and recommendations:

1. The distribution of constituents in Fill soil and groundwater potentially derived from historical Site activities has been adequately assessed across the Site;
2. Due to elevated concentrations of some constituents in soil and groundwater, a baseline health risk assessment for the Site is recommended;
3. The data are sufficient for identifying potential risks to human health and the environment and developing appropriate remediation strategies in a Feasibility Study and Remedial Action Plan; and
4. Additional site characterization, including delineation of the VOC-impacted area and soil vapor sampling, will be conducted to support remedy design and/or development planning.

8 REFERENCES

Burns and McDonnell (B&M) and Treadwell and Rollo (T&R), 2005. Remedial Action Plan, Joint Groundwater Operable Unit for Sunquest Properties, Inc. and Schlage Lock Company, San Francisco, California. January.

B&M, 2002. Revised Remedial Action Plan, Southern Portion of the Former Bayshore Railyard (OU-2), Brisbane, California. February.

B&M, 2004. Brisbane Baylands Wetland Mitigation Plan, prepared for Sunquest Properties, Inc., San Francisco, California. May.

B&M, 2007. OU-2 Additional Investigation in the Area of HVOC Plume, San Francisco and Brisbane, California. 19 February.

B&M, 2019. Semi-Annual Groundwater Monitoring Report: August 2018. Former Brisbane Railyard: Operable Unit 2 (OU-2). 28 January.

DTSC, 1993. Final Remedial Action Plan, Bayshore Railyard North Area, San Francisco, California. December.

DTSC, 2009. Use of the Northern and Southern California Polynuclear Aromatic Hydrocarbon (PAH) Studies in the Manufactured Gas Plant Site Cleanup Process. July 1.

Ecology and Environment, Inc., 1987. Recommendation for Further Action, Stauffer Chemical Company, 200 Industrial Way, Brisbane, California. January 19.

Geosyntec Consultants, Inc. (Geosyntec), 2018. Data Gap Investigation Work Plan, Operable Unit 2 (OU-2), Brisbane, California. 27 November.

Geosyntec, 2019. Memorandum to Vic Pal, San Francisco Bay Regional Water Quality Control Board. Technical Evaluation of Groundwater Quality at Brisbane Baylands, Brisbane, California. 21 February.

Hydrologic Consultants, Inc. (HCI), 1989. Remedial Investigation Data Study Report for Southern Pacific Transportation Company, Bayshore Facility, Brisbane, California. 16 May.

Lawrence Berkeley National Laboratory, 2009. Analysis of Background Distributions of Metals in the Soil at Lawrence Berkeley National Laboratory. June 2002, Revised April 2009.

Levine-Fricke, 1990. Draft Supplemental Remedial Investigation, Data Study Report, The Bayshore Railyard, Brisbane, California. 18 July.

MACTEC, 2009. Sampling and Analysis Plan for Lead and Arsenic in Soil, Schlage Operable Unit and San Francisco County Portion of Universal Paragon Corporation Operable Unit, San Francisco, California. 8 December.

Mactec, 2010. Groundwater Monitoring Report, First Quarter 2010. Schlage OU, San Francisco and Brisbane, California. 21 May.

PaleoWest Archaeology, Inc. (PaleoWest), 2018. Archaeological Monitoring Report, Universal Paragon Corporation, Brisbane UPC OU-SM.

San Francisco Bay Regional Water Quality Control Board (SFBRWQCB), 2017. San Francisco Bay Basin (Region 2) Water Quality Control Plan (Basin Plan). 4 May.

SFBRWQCB, 2019a. Environmental Screening Levels. (ESLs). 24 January.

SFBRWQCB, 2019b. Concurrence with the Technical Evaluation of Groundwater Quality Report, Brisbane Baylands, San Mateo County. May 6.

Weiss Associates, Inc., 2008. Draft Site Characterization Report, Former UST Sites, 250 and 350 Industrial Way, Brisbane, California. 31 March.

TABLES

Table 1a: Soil and Grab Groundwater Sampling Matrix
Brisbane OU-2
Brisbane, California

Boring ID	Grid Node (Figure 5a)		Soil Sample Depth (feet bgs)	Soil Analyses							Grab Groundwater Analyses				
	Ordinate	Abscissa		VOCs & GRO (8260B)	SVOCs - PAHs (8270-SIM)	TPH - Diesel/Motor Oil (8015B)	CAM-17 Metals (6010 B, 7471)	OCPs (8081A)	PCBs (8082)	Asbestos (CARB 435)	VOCs + GRO (8260B)	SVOCs (EPA 8270C)	CAM-17 Metals (6010B, 7471)	CrVI (7196)	TPH Diesel/Motor Oil (8015B)
Zone 1 - Former Switching Yard (North)															
DG-N1	N	1	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	X	X	X	X	X
DG-O1	O	1	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-P1	P	1	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	--	--	--	--	--
DG-Q1	Q	1	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-R1	R	1	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	X	X	X	X	X
DG-S1	S	1	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-T1	T	1	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	X	X	X	X	X
DG-U1	U	1	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-V1	V	1	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	X	X	X	X	X
DG-W1	W	1	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-X1	X	1	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	X	X	X	X	X
DG-Y1	Y	1	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-N2	N	2	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-O2	O	2	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-P2	P	2	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-Q2	Q	2	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-R2	R	2	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-S2	S	2	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-T2	T	2	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-U2	U	2	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-V2	V	2	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-W2	W	2	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-X2	X	2	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-Y2	Y	2	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-Z2	Z	2	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--

Table 1a: Soil and Grab Groundwater Sampling Matrix
Brisbane OU-2
Brisbane, California

Boring ID	Grid Node (Figure 5a)		Soil Sample Depth (feet bgs)	Soil Analyses							Grab Groundwater Analyses				
	Ordinate	Abscissa		VOCs & GRO (8260B)	SVOCs - PAHs (8270-SIM)	TPH - Diesel/Motor Oil (8015B)	CAM-17 Metals (6010 B, 7471)	OCPs (8081A)	PCBs (8082)	Asbestos (CARB 435)	VOCs + GRO (8260B)	SVOCs (EPA 8270C)	CAM-17 Metals (6010B, 7471)	CrVI (7196)	TPH Diesel/Motor Oil (8015B)
Zone 1 - Former Switching Yard (North)															
DG-AA2	AA	2	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AB2	AB	2	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AC2	AC	2	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AD2	AD	2	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AE2	AE	2	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AF2	AF	2	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AG2	AG	2	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-N3	N	3	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-O3	O	3	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	X	X	X	X	X
DG-P3	P	3	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-Q3	Q	3	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	X	X	X	X	X
DG-R3	R	3	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-S3	S	3	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	X	X	X	X	X
DG-T3	T	3	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-U3	U	3	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	X	X	X	X	X
DG-V3	V	3	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-W3	W	3	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	X	X	X	X	X
DG-X3	X	3	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-Y3	Y	3	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	X	X	X	X	X
DG-Z3	Z	3	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AA3	AA	3	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	X	X	X	X	X

Table 1a: Soil and Grab Groundwater Sampling Matrix
Brisbane OU-2
Brisbane, California

Boring ID	Grid Node (Figure 5a)		Soil Sample Depth (feet bgs)	Soil Analyses							Grab Groundwater Analyses				
	Ordinate	Abscissa		VOCs & GRO (8260B)	SVOCs - PAHs (8270-SIM)	TPH - Diesel/Motor Oil (8015B)	CAM-17 Metals (6010 B, 7471)	OCPs (8081A)	PCBs (8082)	Asbestos (CARB 435)	VOCs + GRO (8260B)	SVOCs (EPA 8270C)	CAM-17 Metals (6010B, 7471)	CrVI (7196)	TPH Diesel/Motor Oil (8015B)
Zone 1 - Former Switching Yard (North)															
DG-AB3	AB	3	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AC3	AC	3	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	X	X	X	X	X
DG-AD3	AD	3	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AE3	AE	3	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	X	X	X	X	X
DG-AF3	AF	3	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AG3	AG	3	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	X	X	X	X	X
DG-N4	N	4	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-O4	O	4	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-P4	P	4	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-Q4	Q	4	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-R4	R	4	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-S4	S	4	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-T4	T	4	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-U4	U	4	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-V4	V	4	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-W4	W	4	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-X4	X	4	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-Y4	Y	4	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-Z4	Z	4	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AA4	AA	4	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AB4	AB	4	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AC4	AC	4	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AD4	AD	4	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--

Table 1a: Soil and Grab Groundwater Sampling Matrix
Brisbane OU-2
Brisbane, California

Boring ID	Grid Node (Figure 5a)		Soil Sample Depth (feet bgs)	Soil Analyses							Grab Groundwater Analyses				
	Ordinate	Abscissa		VOCs & GRO (8260B)	SVOCs - PAHs (8270-SIM)	TPH - Diesel/Motor Oil (8015B)	CAM-17 Metals (6010 B, 7471)	OCPs (8081A)	PCBs (8082)	Asbestos (CARB 435)	VOCs + GRO (8260B)	SVOCs (EPA 8270C)	CAM-17 Metals (6010B, 7471)	CrVI (7196)	TPH Diesel/Motor Oil (8015B)
Zone 1 - Former Switching Yard (North)															
DG-AE4	AE	4	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AF4	AF	4	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AG4	AG	4	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-N5	N	5	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	X	X	X	X	X
DG-O5	O	5	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-P5	P	5	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	X	X	X	X	X
DG-Q5	Q	5	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-R5	R	5	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	X	X	X	X	X
DG-S5	S	5	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-T5	T	5	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	X	X	X	X	X
DG-U5	U	5	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-V5	V	5	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	X	X	X	X	X
DG-W5	W	5	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-X5	X	5	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	X	X	X	X	X
DG-Y5	Y	5	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-Z5	Z	5	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	X	X	X	X	X
DG-AA5	AA	5	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AB5	AB	5	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	X	X	X	X	X
DG-AC5	AC	5	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AD5	AD	5	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	X	X	X	X	X
DG-AE5	AE	5	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--

Table 1a: Soil and Grab Groundwater Sampling Matrix
Brisbane OU-2
Brisbane, California

Boring ID	Grid Node (Figure 5a)		Soil Sample Depth (feet bgs)	Soil Analyses							Grab Groundwater Analyses				
	Ordinate	Abscissa		VOCs & GRO (8260B)	SVOCs - PAHs (8270-SIM)	TPH - Diesel/Motor Oil (8015B)	CAM-17 Metals (6010 B, 7471)	OCPs (8081A)	PCBs (8082)	Asbestos (CARB 435)	VOCs + GRO (8260B)	SVOCs (EPA 8270C)	CAM-17 Metals (6010B, 7471)	CrVI (7196)	TPH Diesel/Motor Oil (8015B)
Zone 1 - Former Switching Yard (North)															
DG-AF5	AF	5	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	X	X	X	X	X
DG-AG5	AG	5	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-O6	O	6	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-P6	P	6	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-Q6	Q	6	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-R6	R	6	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-S6	S	6	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-T6	T	6	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-U6	U	6	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-V6	V	6	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-W6	W	6	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-X6	X	6	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-Y6	Y	6	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-Z6	Z	6	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AA6	AA	6	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AB6	AB	6	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AC6	AC	6	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AD6	AD	6	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AE6	AE	6	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AF6	AF	6	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AG6	AG	6	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-Q7	Q	7	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	X	X	X	X	X
DG-R7	R	7	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-S7	S	7	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	X	X	X	X	X

Table 1a: Soil and Grab Groundwater Sampling Matrix
Brisbane OU-2
Brisbane, California

Boring ID	Grid Node (Figure 5a)		Soil Sample Depth (feet bgs)	Soil Analyses							Grab Groundwater Analyses				
	Ordinate	Abscissa		VOCs & GRO (8260B)	SVOCs - PAHs (8270-SIM)	TPH - Diesel/Motor Oil (8015B)	CAM-17 Metals (6010 B, 7471)	OCPs (8081A)	PCBs (8082)	Asbestos (CARB 435)	VOCs + GRO (8260B)	SVOCs (EPA 8270C)	CAM-17 Metals (6010B, 7471)	CrVI (7196)	TPH Diesel/Motor Oil (8015B)
Zone 1 - Former Switching Yard (North)															
DG-T7	T	7	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-U7	U	7	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	X	X	X	X	X
DG-V7	V	7	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-W7	W	7	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	X	X	X	X	X
DG-X7	X	7	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-Y7	Y	7	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	X	X	X	X	X
DG-Z7	Z	7	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AA7	AA	7	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	X	X	X	X	X
DG-AB7	AB	7	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AC7	AC	7	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	X	X	X	X	X
DG-AD7	AD	7	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AE7	AE	7	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	X	X	X	X	X
DG-AF7	AF	7	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AG7	AG	7	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	X	X	X	X	X
DG-S8	S	8	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-T8	T	8	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-U8	U	8	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-V8	V	8	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-W8	W	8	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-X8	X	8	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-Y8	Y	8	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--

Table 1a: Soil and Grab Groundwater Sampling Matrix
Brisbane OU-2
Brisbane, California

Boring ID	Grid Node (Figure 5a)		Soil Sample Depth (feet bgs)	Soil Analyses							Grab Groundwater Analyses				
	Ordinate	Abscissa		VOCs & GRO (8260B)	SVOCs - PAHs (8270-SIM)	TPH - Diesel/Motor Oil (8015B)	CAM-17 Metals (6010 B, 7471)	OCPs (8081A)	PCBs (8082)	Asbestos (CARB 435)	VOCs + GRO (8260B)	SVOCs (EPA 8270C)	CAM-17 Metals (6010B, 7471)	CrVI (7196)	TPH Diesel/Motor Oil (8015B)
Zone 1 - Former Switching Yard (North)															
DG-Z8	Z	8	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AA8	AA	8	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AB8	AB	8	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AC8	AC	8	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AD8	AD	8	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AE8	AE	8	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AF8	AF	8	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AG8	AG	8	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-U9	U	9	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-V9	V	9	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	X	X	X	X	X
DG-W9	W	9	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-X9	X	9	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	X	X	X	X	X
DG-Y9	Y	9	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-Z9	Z	9	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	X	X	X	X	X
DG-AA9	AA	9	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AB9	AB	9	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	X	X	X	X	X
DG-AC9	AC	9	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AD9	AD	9	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	X	X	X	X	X
DG-AF10	AF	10	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AG10	AG	10	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
Field Sample Total				**120**	**120**	**120**	**350**	**120**	**120**	**120**	**39**	**39**	**39**	**39**	**39**
Field Duplicates/Splits (10%)				12	12	12	35	12	12	12	4	4	4	4	4
Matrix Spikes (5%)				6	6	6	18	6	6	6	2	2	2	2	2
Grand Total				**138**	**138**	**138**	**403**	**138**	**138**	**138**	**45**	**45**	**45**	**45**	**45**

Table 1a: Soil and Grab Groundwater Sampling Matrix
Brisbane OU-2
Brisbane, California

Boring ID	Grid Node (Figure 5b)		Soil Sample Depth (feet bgs)	Soil Analyses							Grab Groundwater Analyses				
	Ordinate	Abscissa		VOCs & GRO (8260B)	SVOCs - PAHs (8270-SIM)	TPH - Diesel/Motor Oil (8015B)	CAM-17 Metals (6010 B, 7471)	OCPs (8081A)	PCBs (8082)	Asbestos (CARB 435)	VOCs + GRO (8260B)	SVOCs (EPA 8270C)	CAM-17 Metals (6010B, 7471)	CrVI (7196)	TPH Diesel/Motor Oil (8015B)
Zone 2 - Former Switching Yard (South)															
DG-AH2	AH	2	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AI2	AI	2	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AJ2	AJ	2	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AK2	AK	2	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AL2	AL	2	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AM2	AM	2	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AN2	AN	2	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AO2	AO	2	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AP2	AP	2	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AQ2	AQ	2	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AR2	AR	2	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AS2	AS	2	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AT2	AT	2	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AU2	AU	2	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AV2	AV	2	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AW2	AW	2	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AX2	AX	2	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AY2	AY	2	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AZ2	AZ	2	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AH3	AH	3	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AI3	AI	3	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	X	X	X	X	X
DG-AJ3	AJ	3	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AK3	AK	3	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	X	X	X	X	X
DG-AL3	AL	3	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AM3	AM	3	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	X	X	X	X	X
DG-AN3	AN	3	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--

Table 1a: Soil and Grab Groundwater Sampling Matrix
Brisbane OU-2
Brisbane, California

Boring ID	Grid Node (Figure 5b)		Soil Sample Depth (feet bgs)	Soil Analyses							Grab Groundwater Analyses				
	Ordinate	Abscissa		VOCs & GRO (8260B)	SVOCs - PAHs (8270-SIM)	TPH - Diesel/Motor Oil (8015B)	CAM-17 Metals (6010 B, 7471)	OCPs (8081A)	PCBs (8082)	Asbestos (CARB 435)	VOCs + GRO (8260B)	SVOCs (EPA 8270C)	CAM-17 Metals (6010B, 7471)	CrVI (7196)	TPH Diesel/Motor Oil (8015B)
Zone 2 - Former Switching Yard (South)															
DG-AO3	AO	3	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	X	X	X	X	X
DG-AP3	AP	3	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AQ3	AQ	3	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	X	X	X	X	X
DG-AR3	AR	3	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AS3	AS	3	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	X	X	X	X	X
DG-AT3	AT	3	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AU3	AU	3	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	X	X	X	X	X
DG-AV3	AV	3	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AW3	AW	3	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	X	X	X	X	X
DG-AX3	AX	3	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AY3	AY	3	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	X	X	X	X	X
DG-AZ3	AZ	3	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AH4	AH	4	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AI4	AI	4	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AJ4	AJ	4	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AK4	AK	4	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AL4	AL	4	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AM4	AM	4	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AN4	AN	4	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AO4	AO	4	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AP4	AP	4	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AQ4	AQ	4	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--

Table 1a: Soil and Grab Groundwater Sampling Matrix
Brisbane OU-2
Brisbane, California

Boring ID	Grid Node (Figure 5b)		Soil Sample Depth (feet bgs)	Soil Analyses							Grab Groundwater Analyses				
	Ordinate	Abscissa		VOCs & GRO (8260B)	SVOCs - PAHs (8270-SIM)	TPH - Diesel/Motor Oil (8015B)	CAM-17 Metals (6010 B, 7471)	OCPs (8081A)	PCBs (8082)	Asbestos (CARB 435)	VOCs + GRO (8260B)	SVOCs (EPA 8270C)	CAM-17 Metals (6010B, 7471)	CrVI (7196)	TPH Diesel/Motor Oil (8015B)
Zone 2 - Former Switching Yard (South)															
DG-AR4	AR	4	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AS4	AS	4	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AT4	AT	4	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AU4	AU	4	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AV4	AV	4	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AW4	AW	4	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AX4	AX	4	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AY4	AY	4	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AH5	AH	5	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	X	X	X	X	X
DG-AI5	AI	5	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AJ5	AJ	5	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	X	X	X	X	X
DG-AK5	AK	5	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AL5	AL	5	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	X	X	X	X	X
DG-AM5	AM	5	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AN5	AN	5	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	X	X	X	X	X
DG-AO5	AO	5	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AP5	AP	5	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	X	X	X	X	X
DG-AQ5	AQ	5	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AR5	AR	5	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	X	X	X	X	X
DG-AS5	AS	5	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AT5	AT	5	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	X	X	X	X	X

Table 1a: Soil and Grab Groundwater Sampling Matrix
Brisbane OU-2
Brisbane, California

Boring ID	Grid Node (Figure 5b)		Soil Sample Depth (feet bgs)	Soil Analyses							Grab Groundwater Analyses				
	Ordinate	Abscissa		VOCs & GRO (8260B)	SVOCs - PAHs (8270-SIM)	TPH - Diesel/Motor Oil (8015B)	CAM-17 Metals (6010 B, 7471)	OCPs (8081A)	PCBs (8082)	Asbestos (CARB 435)	VOCs + GRO (8260B)	SVOCs (EPA 8270C)	CAM-17 Metals (6010B, 7471)	CrVI (7196)	TPH Diesel/Motor Oil (8015B)
Zone 2 - Former Switching Yard (South)															
DG-AU5	AU	5	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AV5	AV	5	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	X	X	X	X	X
DG-AW5	AW	5	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AH6	AH	6	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AI6	AI	6	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AJ6	AJ	6	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AK6	AK	6	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AL6	AL	6	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AM6	AM	6	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AN6	AN	6	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AO6	AO	6	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AP6	AP	6	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AQ6	AQ	6	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AR6	AR	6	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AS6	AS	6	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AT6	AT	6	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AU6	AU	6	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AV6	AV	6	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AH7	AH	7	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AI7	AI	7	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	X	X	X	X	X
DG-AJ7	AJ	7	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AK7	AK	7	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	X	X	X	X	X
DG-AL7	AL	7	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AM7	AM	7	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	X	X	X	X	X

Table 1a: Soil and Grab Groundwater Sampling Matrix
Brisbane OU-2
Brisbane, California

Boring ID	Grid Node (Figure 5b)		Soil Sample Depth (feet bgs)	Soil Analyses							Grab Groundwater Analyses				
	Ordinate	Abscissa		VOCs & GRO (8260B)	SVOCs - PAHs (8270-SIM)	TPH - Diesel/Motor Oil (8015B)	CAM-17 Metals (6010 B, 7471)	OCPs (8081A)	PCBs (8082)	Asbestos (CARB 435)	VOCs + GRO (8260B)	SVOCs (EPA 8270C)	CAM-17 Metals (6010B, 7471)	CrVI (7196)	TPH Diesel/Motor Oil (8015B)
Zone 2 - Former Switching Yard (South)															
DG-AN7	AN	7	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AO7	AO	7	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	X	X	X	X	X
DG-AP7	AP	7	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AQ7	AQ	7	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	X	X	X	X	X
DG-AR7	AR	7	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AS7	AS	7	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	X	X	X	X	X
DG-AT7	AT	7	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AU7	AU	7	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	X	X	X	X	X
DG-AH8	AH	8	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AI8	AI	8	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AJ8	AJ	8	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AK8	AK	8	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AL8	AL	8	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AM8	AM	8	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AN8	AN	8	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AO8	AO	8	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AP8	AP	8	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AQ8	AQ	8	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AR8	AR	8	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AS8	AS	8	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AH9	AH	9	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	X	X	X	X	X
DG-AI9	AI	9	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--

Table 1a: Soil and Grab Groundwater Sampling Matrix
Brisbane OU-2
Brisbane, California

Boring ID	Grid Node (Figure 5b)		Soil Sample Depth (feet bgs)	Soil Analyses							Grab Groundwater Analyses				
	Ordinate	Abscissa		VOCs & GRO (8260B)	SVOCs - PAHs (8270-SIM)	TPH - Diesel/Motor Oil (8015B)	CAM-17 Metals (6010 B, 7471)	OCPs (8081A)	PCBs (8082)	Asbestos (CARB 435)	VOCs + GRO (8260B)	SVOCs (EPA 8270C)	CAM-17 Metals (6010B, 7471)	CrVI (7196)	TPH Diesel/Motor Oil (8015B)
Zone 2 - Former Switching Yard (South)															
DG-AJ9	AJ	9	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	X	X	X	X	X
DG-AK9	AK	9	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AL9	AL	9	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	X	X	X	X	X
DG-AM9	AM	9	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AN9	AN	9	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	X	X	X	X	X
DG-AO9	AO	9	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AP9	AP	9	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	X	X	X	X	X
DG-AQ9	AQ	9	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AR9	AR	9	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	X	X	X	X	X
DG-AH10	AH	10	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AI10	AI	10	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AJ10	AJ	10	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AK10	AK	10	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AL10	AL	10	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AM10	AM	10	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AN10	AN	10	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AO10	AO	10	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
Field Sample Total				**90**	**90**	**90**	**294**	**90**	**90**	**90**	**30**	**30**	**30**	**30**	**30**
Field Duplicates/Splits (10%)				9	9	9	30	9	9	9	3	3	3	3	3
Matrix Spikes (5%)				5	5	5	15	5	5	5	2	2	2	2	2
Grand Total				**104**	**104**	**104**	**339**	**104**	**104**	**104**	**35**	**35**	**35**	**35**	**35**

Table 1a: Soil and Grab Groundwater Sampling Matrix
Brisbane OU-2
Brisbane, California

Boring ID	Grid Node (Figure 5c)		Soil Sample Depth (feet bgs)	Soil Analyses							Grab Groundwater Analyses				
	Ordinate	Abscissa		VOCs & GRO (8260B)	SVOCs - PAHs (8270-SIM)	TPH - Diesel/Motor Oil (8015B)	CAM-17 Metals (6010 B, 7471)	OCPs (8081A)	PCBs (8082)	Asbestos (CARB 435)	VOCs + GRO (8260B)	SVOCs (EPA 8270C)	CAM-17 Metals (6010B, 7471)	CrVI (7196)	TPH Diesel/Motor Oil (8015B)
Zone 3 - Machine Shop Area															
DG-N6	N	6	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-N7	N	7	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-O7	O	7	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	X	X	X	X	X
DG-P7	P	7	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-N8	N	8	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-O8	O	8	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-P8	P	8	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-Q8	Q	8	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-R8	R	8	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-N9	N	9	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	X	X	X	X	X
DG-O9	O	9	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-P9	P	9	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	--	--	--	--	--
DG-Q9	Q	9	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-R9	R	9	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	X	X	X	X	X
DG-S9	S	9	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-T9	T	9	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	X	X	X	X	X
DG-N10	N	10	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-O10	O	10	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-P10	P	10	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-Q10	Q	10	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-R10	R	10	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-S10	S	10	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-T10	T	10	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-U10	U	10	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-V10	V	10	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--

Table 1a: Soil and Grab Groundwater Sampling Matrix
Brisbane OU-2
Brisbane, California

Boring ID	Grid Node (Figure 5c)		Soil Sample Depth (feet bgs)	Soil Analyses							Grab Groundwater Analyses				
	Ordinate	Abscissa		VOCs & GRO (8260B)	SVOCs - PAHs (8270-SIM)	TPH - Diesel/Motor Oil (8015B)	CAM-17 Metals (6010 B, 7471)	OCPs (8081A)	PCBs (8082)	Asbestos (CARB 435)	VOCs + GRO (8260B)	SVOCs (EPA 8270C)	CAM-17 Metals (6010B, 7471)	CrVI (7196)	TPH Diesel/Motor Oil (8015B)
Zone 3 - Machine Shop Area															
DG-N11	N	11	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-O11	O	11	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	X	X	X	X	X
DG-P11	P	11	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-Q11	Q	11	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	X	X	X	X	X
DG-R11	R	11	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-S11	S	11	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	X	X	X	X	X
DG-T11	T	11	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-U11	U	11	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	X	X	X	X	X
DG-V11	V	11	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-N12	N	12	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-O12	O	12	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-P12	P	12	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-Q12	Q	12	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-R12	R	12	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-S12	S	12	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-T12	T	12	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-U12	U	12	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-V12	V	12	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-N13	N	13	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	X	X	X	X	X
DG-O13	O	13	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-P13	P	13	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	X	X	X	X	X
DG-Q13	Q	13	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--

Table 1a: Soil and Grab Groundwater Sampling Matrix
Brisbane OU-2
Brisbane, California

Boring ID	Grid Node (Figure 5c)		Soil Sample Depth (feet bgs)	Soil Analyses							Grab Groundwater Analyses				
	Ordinate	Abscissa		VOCs & GRO (8260B)	SVOCs - PAHs (8270-SIM)	TPH - Diesel/Motor Oil (8015B)	CAM-17 Metals (6010 B, 7471)	OCPs (8081A)	PCBs (8082)	Asbestos (CARB 435)	VOCs + GRO (8260B)	SVOCs (EPA 8270C)	CAM-17 Metals (6010B, 7471)	CrVI (7196)	TPH Diesel/Motor Oil (8015B)
Zone 3 - Machine Shop Area															
DG-R13	R	13	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	X	X	X	X	X
DG-S13	S	13	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-T13	T	13	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	X	X	X	X	X
DG-U13	U	13	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-V13	V	13	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	X	X	X	X	X
DG-N14	N	14	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-O14	O	14	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-P14	P	14	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-Q14	Q	14	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-R14	R	14	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-S14	S	14	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-T14	T	14	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-U14	U	14	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-V14	V	14	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-N15	N	15	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-O15	O	15	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	X	X	X	X	X
DG-P15	P	15	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-Q15	Q	15	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	X	X	X	X	X
DG-R15	R	15	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-S15	S	15	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	X	X	X	X	X
DG-T15	T	15	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-U15	U	15	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	X	X	X	X	X

Table 1a: Soil and Grab Groundwater Sampling Matrix
Brisbane OU-2
Brisbane, California

Boring ID	Grid Node (Figure 5c)		Soil Sample Depth (feet bgs)	Soil Analyses							Grab Groundwater Analyses				
	Ordinate	Abscissa		VOCs & GRO (8260B)	SVOCs - PAHs (8270-SIM)	TPH - Diesel/Motor Oil (8015B)	CAM-17 Metals (6010 B, 7471)	OCPs (8081A)	PCBs (8082)	Asbestos (CARB 435)	VOCs + GRO (8260B)	SVOCs (EPA 8270C)	CAM-17 Metals (6010B, 7471)	CrVI (7196)	TPH Diesel/Motor Oil (8015B)
Zone 3 - Machine Shop Area															
DG-V15	V	15	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-Q16	Q	16	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-R16	R	16	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-S16	S	16	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-T16	T	16	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-U16	U	16	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-V16	V	16	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-S17	S	17	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-T17	T	17	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	X	X	X	X	X
DG-U17	U	17	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-V17	V	17	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	X	X	X	X	X
DG-U18	U	18	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-V18	V	18	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
Field Sample Total				**60**	**60**	**60**	**182**	**60**	**60**	**60**	**19**	**19**	**19**	**19**	**19**
Field Duplicates/Splits (10%)				6	6	6	19	6	6	6	2	2	2	2	2
Matrix Spikes (5%)				3	3	3	10	3	3	3	1	1	1	1	1
Grand Total				**69**	**69**	**69**	**211**	**69**	**69**	**69**	**22**	**22**	**22**	**22**	**22**

Table 1a: Soil and Grab Groundwater Sampling Matrix
Brisbane OU-2
Brisbane, California

Boring ID	Grid Node (Figure 5d)		Soil Sample Depth (feet bgs)	Soil Analyses							Grab Groundwater Analyses				
	Ordinate	Abscissa		VOCs & GRO (8260B)	SVOCs - PAHs (8270-SIM)	TPH - Diesel/Motor Oil (8015B)	CAM-17 Metals (6010 B, 7471)	OCPs (8081A)	PCBs (8082)	Asbestos (CARB 435)	VOCs + GRO (8260B)	SVOCs (EPA 8270C)	CAM-17 Metals (6010B, 7471)	CrVI (7196)	TPH Diesel/Motor Oil (8015B)
Zone 4 - Turntable/Oil Tank Area															
DG-W10	W	10	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-X10	X	10	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-Y10	Y	10	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-Z10	Z	10	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AA10	AA	10	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AB10	AB	10	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AC10	AC	10	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AD10	AD	10	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AE10	AE	10	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-W11	W	11	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	X	X	X	X	X
DG-X11	X	11	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-Y11	Y	11	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	X	X	X	X	X
DG-Z11	Z	11	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AA11	AA	11	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	X	X	X	X	X
DG-AB11	AB	11	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AC11	AC	11	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	--	--	--	--	--
DG-AD11	AD	11	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AE11	AE	11	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	X	X	X	X	X
DG-AF11	AF	11	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AG11	AG	11	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	X	X	X	X	X
DG-AH11	AH	11	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--

Table 1a: Soil and Grab Groundwater Sampling Matrix
Brisbane OU-2
Brisbane, California

Boring ID	Grid Node (Figure 5d)		Soil Sample Depth (feet bgs)	Soil Analyses							Grab Groundwater Analyses				
	Ordinate	Abscissa		VOCs & GRO (8260B)	SVOCs - PAHs (8270-SIM)	TPH - Diesel/Motor Oil (8015B)	CAM-17 Metals (6010 B, 7471)	OCPs (8081A)	PCBs (8082)	Asbestos (CARB 435)	VOCs + GRO (8260B)	SVOCs (EPA 8270C)	CAM-17 Metals (6010B, 7471)	CrVI (7196)	TPH Diesel/Motor Oil (8015B)
Zone 4 - Turntable/Oil Tank Area															
DG-AI11	AI	11	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	X	X	X	X	X
DG-AJ11	AJ	11	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AK11	AK	11	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	X	X	X	X	X
DG-AL11	AL	11	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AM11	AM	11	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	X	X	X	X	X
DG-AN11	AN	11	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-W12	W	12	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-X12	X	12	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-Y12	Y	12	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-Z12	Z	12	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AA12	AA	12	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AB12	AB	12	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AC12	AC	12	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AD12	AD	12	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AE12	AE	12	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AF12	AF	12	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AG12	AG	12	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AH12	AH	12	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AI12	AI	12	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AJ12	AJ	12	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AK12	AK	12	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AL12	AL	12	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AM12	AM	12	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--

Table 1a: Soil and Grab Groundwater Sampling Matrix
Brisbane OU-2
Brisbane, California

Boring ID	Grid Node (Figure 5d)		Soil Sample Depth (feet bgs)	Soil Analyses							Grab Groundwater Analyses				
	Ordinate	Abscissa		VOCs & GRO (8260B)	SVOCs - PAHs (8270-SIM)	TPH - Diesel/Motor Oil (8015B)	CAM-17 Metals (6010 B, 7471)	OCPs (8081A)	PCBs (8082)	Asbestos (CARB 435)	VOCs + GRO (8260B)	SVOCs (EPA 8270C)	CAM-17 Metals (6010B, 7471)	CrVI (7196)	TPH Diesel/Motor Oil (8015B)
Zone 4 - Turntable/Oil Tank Area															
DG-AN12	AN	12	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-W13	W	13	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-X13	X	13	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	X	X	X	X	X
DG-Y13	Y	13	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-Z13	Z	13	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	--	--	--	--	--
DG-AA13	AA	13	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AB13	AB	13	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	X	X	X	X	X
DG-AC13	AC	13	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AD13	AD	13	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	X	X	X	X	X
DG-AE13	AE	13	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AF13	AF	13	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	X	X	X	X	X
DG-AG13	AG	13	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AH13	AH	13	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	X	X	X	X	X
DG-AI13	AI	13	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AJ13	AJ	13	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	X	X	X	X	X
DG-AK13	AK	13	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AL13	AL	13	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	X	X	X	X	X
DG-AM13	AM	13	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-W14	W	14	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-X14	X	14	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-Y14	Y	14	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--

Table 1a: Soil and Grab Groundwater Sampling Matrix
Brisbane OU-2
Brisbane, California

Boring ID	Grid Node (Figure 5d)		Soil Sample Depth (feet bgs)	Soil Analyses							Grab Groundwater Analyses				
	Ordinate	Abscissa		VOCs & GRO (8260B)	SVOCs - PAHs (8270-SIM)	TPH - Diesel/Motor Oil (8015B)	CAM-17 Metals (6010 B, 7471)	OCPs (8081A)	PCBs (8082)	Asbestos (CARB 435)	VOCs + GRO (8260B)	SVOCs (EPA 8270C)	CAM-17 Metals (6010B, 7471)	CrVI (7196)	TPH Diesel/Motor Oil (8015B)
Zone 4 - Turntable/Oil Tank Area															
DG-Z14	Z	14	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AA14	AA	14	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AB14	AB	14	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AC14	AC	14	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AD14	AD	14	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AE14	AE	14	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AF14	AF	14	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AG14	AG	14	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AH14	AH	14	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AI14	AI	14	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AJ14	AJ	14	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AK14	AK	14	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-W15	W	15	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	X	X	X	X	X
DG-X15	X	15	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-Y15	Y	15	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	X	X	X	X	X
DG-Z15	Z	15	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AA15	AA	15	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	X	X	X	X	X
DG-AB15	AB	15	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AC15	AC	15	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	X	X	X	X	X
DG-AD15	AD	15	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AE15	AE	15	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	X	X	X	X	X
DG-AF15	AF	15	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AG15	AG	15	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	X	X	X	X	X

Table 1a: Soil and Grab Groundwater Sampling Matrix
Brisbane OU-2
Brisbane, California

Boring ID	Grid Node (Figure 5d)		Soil Sample Depth (feet bgs)	Soil Analyses							Grab Groundwater Analyses				
	Ordinate	Abscissa		VOCs & GRO (8260B)	SVOCs - PAHs (8270-SIM)	TPH - Diesel/Motor Oil (8015B)	CAM-17 Metals (6010 B, 7471)	OCPs (8081A)	PCBs (8082)	Asbestos (CARB 435)	VOCs + GRO (8260B)	SVOCs (EPA 8270C)	CAM-17 Metals (6010B, 7471)	CrVI (7196)	TPH Diesel/Motor Oil (8015B)
Zone 4 - Turntable/Oil Tank Area															
DG-AH15	AH	15	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-W16	W	16	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-X16	X	16	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-Y16	Y	16	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-Z16	Z	16	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AA16	AA	16	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AB16	AB	16	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AC16	AC	16	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AD16	AD	16	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AE16	AE	16	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-W17	W	17	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-X17	X	17	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	X	X	X	X	X
DG-Y17	Y	17	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-Z17	Z	17	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	X	X	X	X	X
DG-AA17	AA	17	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AB17	AB	17	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	X	X	X	X	X
DG-W18	W	18	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-X18	X	18	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-Y18	Y	18	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-Z18	Z	18	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-X19	X	19	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-Y19	Y	19	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	X	X	X	X	X
DG-Z19	Z	19	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
Field Sample Total				**81**	**81**	**81**	**249**	**81**	**81**	**81**	**25**	**25**	**25**	**25**	**25**
Field Duplicates/Splits (10%)				9	9	9	25	9	9	9	3	3	3	3	3
Matrix Spikes (5%)				5	5	5	13	5	5	5	2	2	2	2	2
Grand Total				**95**	**95**	**95**	**287**	**95**	**95**	**95**	**30**	**30**	**30**	**30**	**30**

Table 1a: Soil and Grab Groundwater Sampling Matrix
Brisbane OU-2
Brisbane, California

Boring ID	Grid Node (Figure 5e)		Soil Sample Depth (feet bgs)	Soil Analyses							Grab Groundwater Analyses				
	Ordinate	Abscissa		VOCs & GRO (8260B)	SVOCs - PAHs (8270-SIM)	TPH - Diesel/Motor Oil (8015B)	CAM-17 Metals (6010 B, 7471)	OCPs (8081A)	PCBs (8082)	Asbestos (CARB 435)	VOCs + GRO (8260B)	SVOCs (EPA 8270C)	CAM-17 Metals (6010B, 7471)	CrVI (7196)	TPH Diesel/Motor Oil (8015B)
Zone 5 - South Disposal Area															
DG-AX5	AX	5	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	X	X	X	X	X
DG-AW6	AW	6	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AX6	AX	6	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AV7	AV	7	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AW7	AW	7	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	X	X	X	X	X
DG-AX7	AX	7	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AT8	AT	8	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AU8	AU	8	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AV8	AV	8	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AW8	AW	8	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AX8	AX	8	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AY8	AY	8	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AS9	AS	9	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AT9	AT	9	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	X	X	X	X	X
DG-AU9	AU	9	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AV9	AV	9	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	X	X	X	X	X
DG-AW9	AW	9	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--

Table 1a: Soil and Grab Groundwater Sampling Matrix
Brisbane OU-2
Brisbane, California

Boring ID	Grid Node (Figure 5e)		Soil Sample Depth (feet bgs)	Soil Analyses							Grab Groundwater Analyses				
	Ordinate	Abscissa		VOCs & GRO (8260B)	SVOCs - PAHs (8270-SIM)	TPH - Diesel/Motor Oil (8015B)	CAM-17 Metals (6010 B, 7471)	OCPs (8081A)	PCBs (8082)	Asbestos (CARB 435)	VOCs + GRO (8260B)	SVOCs (EPA 8270C)	CAM-17 Metals (6010B, 7471)	CrVI (7196)	TPH Diesel/Motor Oil (8015B)
Zone 5 - South Disposal Area															
DG-AP10	AP	10	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AQ10	AQ	10	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AR10	AR	10	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AS10	AS	10	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AT10	AT	10	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AU10	AU	10	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AO11	AO	11	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	X	X	X	X	X
DG-AP11	AP	11	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AQ11	AQ	11	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	X	X	X	X	X
DG-AR11	AR	11	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AO12	AO	12	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
Field Sample Total				**18**	**18**	**18**	**62**	**18**	**18**	**18**	**6**	**6**	**6**	**6**	**6**
Field Duplicates/Splits (10%)				2	2	2	7	2	2	2	1	1	1	1	1
Matrix Spikes (5%)				1	1	1	4	1	1	1	1	1	1	1	1
Grand Total				**21**	**21**	**21**	**73**	**21**	**21**	**21**	**8**	**8**	**8**	**8**	**8**

Table 1a: Soil and Grab Groundwater Sampling Matrix
Brisbane OU-2
Brisbane, California

Boring ID	Grid Node (Figure 5f)		Soil Sample Depth (feet bgs)	Soil Analyses							Grab Groundwater Analyses				
	Ordinate	Abscissa		VOCs & GRO (8260B)	SVOCs - PAHs (8270-SIM)	TPH - Diesel/Motor Oil (8015B)	CAM-17 Metals (6010 B, 7471)	OCPs (8081A)	PCBs (8082)	Asbestos (CARB 435)	VOCs + GRO (8260B)	SVOCs (EPA 8270C)	CAM-17 Metals (6010B, 7471)	CrVI (7196)	TPH Diesel/Motor Oil (8015B)
Zone 6 - Industrial Way Area															
DG-AX9	AX	9	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	X	X	X	X	X
DG-AY9	AY	9	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AV10	AV	10	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AW10	AW	10	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AX10	AX	10	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AY10	AY	10	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AZ10	AZ	10	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AS11	AS	11	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	X	X	X	X	X
DG-AT11	AT	11	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AU11	AU	11	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	X	X	X	X	X
DG-AW11	AW	11	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	X	X	X	X	X
DG-AX11	AX	11	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AY11	AY	11	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	X	X	X	X	X
DG-AZ11	AZ	11	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AP12	AP	12	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AQ12	AQ	12	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AR12	AR	12	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AS12	AS	12	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AT12	AT	12	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AU12	AU	12	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AV12	AV	12	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AW12	AW	12	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AN13	AN	13	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	X	X	X	X	X

Table 1a: Soil and Grab Groundwater Sampling Matrix
Brisbane OU-2
Brisbane, California

Boring ID	Grid Node (Figure 5f)		Soil Sample Depth (feet bgs)	Soil Analyses							Grab Groundwater Analyses				
	Ordinate	Abscissa		VOCs & GRO (8260B)	SVOCs - PAHs (8270-SIM)	TPH - Diesel/Motor Oil (8015B)	CAM-17 Metals (6010 B, 7471)	OCPs (8081A)	PCBs (8082)	Asbestos (CARB 435)	VOCs + GRO (8260B)	SVOCs (EPA 8270C)	CAM-17 Metals (6010B, 7471)	CrVI (7196)	TPH Diesel/Motor Oil (8015B)
Zone 6 - Industrial Way Area															
DG-AO13	AO	13	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AP13	AP	13	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	X	X	X	X	X
DG-AQ13	AQ	13	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AR13	AR	13	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	X	X	X	X	X
DG-AS13	AS	13	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AT13	AT	13	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	X	X	X	X	X
DG-AL14	AL	14	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AM14	AM	14	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AN14	AN	14	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AO14	AO	14	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AP14	AP	14	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AQ14	AQ	14	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AR14	AR	14	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AI15	AI	15	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	X	X	X	X	X
DG-AJ15	AJ	15	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AK15	AK	15	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	X	X	X	X	X
DG-AL15	AL	15	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AM15	AM	15	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	X	X	X	X	X
DG-AN15	AN	15	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AO15	AO	15	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	X	X	X	X	X
DG-AF16	AF	16	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AG16	AG	16	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AH16	AH	16	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--

Table 1a: Soil and Grab Groundwater Sampling Matrix
Brisbane OU-2
Brisbane, California

Boring ID	Grid Node (Figure 5f)		Soil Sample Depth (feet bgs)	Soil Analyses							Grab Groundwater Analyses				
	Ordinate	Abscissa		VOCs & GRO (8260B)	SVOCs - PAHs (8270-SIM)	TPH - Diesel/Motor Oil (8015B)	CAM-17 Metals (6010 B, 7471)	OCPs (8081A)	PCBs (8082)	Asbestos (CARB 435)	VOCs + GRO (8260B)	SVOCs (EPA 8270C)	CAM-17 Metals (6010B, 7471)	CrVI (7196)	TPH Diesel/Motor Oil (8015B)
Zone 6 - Industrial Way Area															
DG-AI16	AI	16	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AK16	AK	16	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AL16	AL	16	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AC17	AC	17	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AD17	AD	17	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	X	X	X	X	X
DG-AE17	AE	17	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AH17	AH	17	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	X	X	X	X	X
DG-AI17	AI	17	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AJ17	AJ	17	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	X	X	X	X	X
DG-AA18	AA	18	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AB18	AB	18	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AC18	AC	18	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AD18	AD	18	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AE18	AE	18	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AF18	AF	18	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AG18	AG	18	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AA19	AA	19	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	X	X	X	X	X
DG-AB19	AB	19	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--
DG-AC19	AC	19	0.5 - 1	X	X	X	X	X	X	X	--	--	--	--	--
			3.5 - 5	X	X	X	X	X	X	X	--	--	--	--	--
			9.5-10*	X	X	X	X	X	X	X	X	X	X	X	X
DG-AD19	AD	19	0.5 - 1	--	--	--	X	--	--	--	--	--	--	--	--
			3.5 - 4	--	--	--	X	--	--	--	--	--	--	--	--

Table 1a: Soil and Grab Groundwater Sampling Matrix
Brisbane OU-2
Brisbane, California

Boring ID	Grid Node (Figure 5f)		Soil Sample Depth (feet bgs)	Soil Analyses							Grab Groundwater Analyses				
	Ordinate	Abscissa		VOCs & GRO (8260B)	SVOCs - PAHs (8270-SIM)	TPH - Diesel/Motor Oil (8015B)	CAM-17 Metals (6010 B, 7471)	OCPs (8081A)	PCBs (8082)	Asbestos (CARB 435)	VOCs + GRO (8260B)	SVOCs (EPA 8270C)	CAM-17 Metals (6010B, 7471)	CrVI (7196)	TPH Diesel/Motor Oil (8015B)
Zone 6 - Industrial Way Area															
Field Sample Total				**55**	**55**	**55**	**150**	**55**	**55**	**55**	**18**	**18**	**18**	**18**	**18**
Field Duplicates/Splits (10%)				6	6	6	15	6	6	6	2	2	2	2	2
Matrix Spikes (5%)				3	3	3	8	3	3	3	1	1	1	1	1
Grand Total				**64**	**64**	**64**	**173**	**64**	**64**	**64**	**21**	**21**	**21**	**21**	**21**

Notes

X = plan to sample

-- = no analysis

* = Approximate depth of saturated sample. If groundwater and/or native soil is encountered shallower than 5 feet bgs, then the 3.5-4' sample will be considered the saturated sample and a third depth will not be collected.

A field blank will be collected each day of groundwater sampling.

An equipment blank will be collected each day of soil or groundwater sampling and a trip blank will accompany all VOC samples.

bgs = below ground surface

CAM = California Assessment Manual

CARB = California Air Resources Board

CrVI = hexavalent chromium

GRO = gasoline range organics

OCP = organochlorine pesticide

PAHs = polycyclic aromatic hydrocarbons

PCB = polychlorinated biphenyl

SVOC = semi-volatile organic compound

TPH = total petroleum hydrocarbons

VOC = volatile organic compound

Table 1b: Groundwater Well Sampling Matrix
Brisbane OU-2
Brisbane, California

Well ID	Well Groundwater Analyses				
	CAM-17 Metals (EPA 6010B, 7471)	Chromium VI (EPA 7196)	TPH Diesel / Motor Oil (EPA 8015B)	VOCs + GRO (EPA 8260B)	SVOCs (EPA 8270C)
KMW-4A	X	X	X	X	X
KMW-7A	X	X	X	X	X
LF-3A	X	X	X	X	X
LF-4A	X	X	X	X	X
LF-5A	X	X	X	X	X
LF-7A	X	X	X	X	X
LF-8A	X	X	X	X	X
MK-1A	X	X	X	X	X
MK-2A	X	X	X	X	X
MK-7A	X	X	X	X	X
MK-8A	X	X	X	X	X
MW-9A	X	X	X	X	X
MW-10A	X	X	X	X	X
MW-11AR	X	X	X	X	X
MW-13A	X	X	X	X	X
MW-15A	X	X	X	X	X
MW-17A	X	X	X	X	X
Subtotal	17	17	17	17	17
Duplicate	2	2	2	2	2
Field Blank	0	0	0	1	0
Trip Blank	0	0	0	2	0
Total	**19**	**19**	**19**	**22**	**19**

X = plan to sample
CAM = California Assessment Manual
EPA = United States Environmental Protection Agency
GRO = gasoline range organics
SVOCs = semi-volatile organic compounds
TPH = total petroleum hydrocarbons
VOCs = volatile organic compounds

Table 2: Metals Concentrations in Soil
Brisbane Baylands OU-2
Brisbane, California

Sample Location	Investigation Zone	Depth Range (ft bgs)	Sample Name	Collection Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
Direct Exposure Human Health Risk Level Residential Soil Exposure ESL [1]					1.1E+01	6.7E-02	1.5E+04	1.6E+01	7.8E+01	1.2E+05	2.3E+01	3.1E+03	8.0E+01	1.3E+01	3.9E+02	8.2E+02	3.9E+02	3.9E+02	7.8E-01	3.9E+02	2.3E+04
Regional Background [2]					5.5E+00	1.9E+01	3.2E+02	1.0E+00	2.7E+00	1.0E+02	2.5E+01	6.9E+01	1.6E+01	4.0E-01	7.4E+00	1.2E+02	5.6E+00	1.8E+00	7.6E+00	7.4E+01	1.1E+02
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
DG-AA2	1	0.5-1	DG-AA2S-0.5-1	12/14/2018	**2.9**	**130**	**70**	<0.11	**0.36 J**	**16**	**11**	**220**	**230**	**0.13**	<0.21	**14**	<0.50	**0.83 U**	<0.48	**96**	**150**
DG-AA2	1	3.5-4	DG-AA2S-3.5-4	12/14/2018	**2.1**	**37**	**81**	**0.19 J**	<0.034	**81**	**13**	**30**	**4.3**	**0.46**	<0.18	**120**	<0.41	**0.69 U**	<0.40	**63**	**46**
DG-AA3	1	0.5-1	DG-AA3S-0.5-1	12/18/2018	**3.9**	**87**	**150**	<0.11	**1.9 J**	**27 J**	**11**	**210**	**310 J**	**0.34 J**	**1.8**	**30 J**	**1.1 J**	**0.84 U**	<0.49	**66**	**360**
DG-AA3	1	3.5-4	DG-AA3S-3.5-4	12/18/2018	<0.32	**4.8**	**110**	<0.13	**0.21 J**	**140**	**20**	**36**	**11**	**0.85**	**0.63 J**	**190**	<0.58	<0.20	<0.56	**83**	**56**
DG-AA3	1	7-7.5	DG-AA3S-7-7.5	12/18/2018	**1.1 J**	**40**	**36**	**0.49**	**0.10 J**	**33**	**13**	**19**	**10**	**0.075**	**0.67 J**	**28**	<0.52	<0.17	<0.50	**43**	**53**
DG-AA3 (D)	1	0.5-1	DG-AA3 (D)S-0.5-1	12/18/2018	**4.7**	**93**	**120**	<0.11	**4.2 J**	**59 J**	**10**	**240**	**520 J**	**0.95 J**	**2.2**	**52 J**	**1.3 J**	**0.40 J**	<0.51	**47**	**510**
DG-AA4	1	0.5-1	DG-AA4S-0.5-1	12/18/2018	**0.97 J**	**77**	**83**	**0.13 J**	**0.54**	**17**	**11**	**160**	**100**	**0.062**	**0.64 J**	**8.3**	**1.1 J**	<0.14	<0.39	**110**	**160**
DG-AA4	1	3.5-4	DG-AA4S-3.5-4	12/18/2018	**0.79 J**	**65**	**31**	**0.22 J**	**0.040 J**	**54**	**5.5**	**11**	**5.2**	**0.041**	<0.21	**44**	<0.48	<0.16	<0.47	**29**	**22**
DG-AA5	1	0.5-1	DG-AA5S-0.5-1	12/18/2018	**2.5**	**51**	**95**	<0.11	**1.3**	**23**	**9.3**	**190**	**280**	**0.49**	**2.5**	**29**	**3.4 U**	**0.35 J**	<0.50	**60**	**520**
DG-AA5	1	3.5-4	DG-AA5S-3.5-4	12/18/2018	**2.0**	**170**	**72**	<0.12	**0.11 J**	**12**	**11**	**130**	**87**	**0.1**	<0.24	**14**	**3.7 U**	<0.19	<0.54	**78**	**100**
DG-AA6	1	0.5-1	DG-AA6S-0.5-1	12/20/2018	**1.4**	**2.8 U**	**53**	<0.092	**0.35 U**	**10**	**16**	**110**	**31 J+**	**0.061**	**0.29 J**	**7.2**	<0.42	<0.14	**1.6**	**120**	**78**
DG-AA6	1	3.5-4	DG-AA6S-3.5-4	12/20/2018	**5.5**	**4.8**	**410**	**0.14 J**	**2.4**	**17**	**1.5**	**310**	**1,100**	**0.25**	<0.17	**8.2**	<0.41	**3.2**	<0.39	**6.6**	**1,800**
DG-AA7	1	0.5-1	DG-AA7S-0.5-1	1/9/2019	**2.6**	**6.0**	**100**	**0.16**	**1.0**	**38**	**14**	**220**	**150**	**0.25**	**3.3**	**32**	**2.4**	<0.14	<0.39	**84**	**270**
DG-AA7	1	3.5-4	DG-AA7S-3.5-4	1/9/2019	**2.9**	**4.6**	**140**	**0.19**	**0.43**	**19**	**6.5**	**50**	**180**	**0.079**	**0.51**	**28**	<0.58	**0.27**	<0.56	**32**	**170**
DG-AA8	1	0.5-1	DG-AA8S-0.5-1	1/29/2019	**13**	**26**	**740**	**0.24 J**	**2.8**	**43**	**11**	**860**	**2,000**	**0.60 J**	**1.0 J**	**38**	**2.0 J**	**4.7 J**	<0.40 R	**32**	**1,400**
DG-AA8	1	3.5-4	DG-AA8S-3.5-4	1/29/2019	**37 J**	**33**	**2,600**	<0.59 UJ	**28 J**	**310**	**14 J**	**1,500**	**12,000**	**0.022**	<1.2 UJ	**57 J+**	**3.6 J**	**16 J+**	<2.6 R	**31 J**	**10,000**
DG-AA8 (D)	1	0.5-1	DG-AA8 (D)S-0.5-1	1/29/2019	**20**	**17**	**1,000**	**0.30 J**	**3.5**	**28**	**7.2**	**560**	**2,600**	**1.1 J**	**1.0 J**	**29**	<1.3 UJ	**2.5 J**	<1.2 R	**24**	**1,500**
DG-AA9	1	0.5-1	DG-AA9S-0.5-1	12/20/2018	**29**	**41**	**1,200**	**0.56 J**	**2.4**	**49**	**10**	**840**	**3,900**	**0.79**	**0.95 J**	**53**	<1.7	**5.4**	<1.6	**35**	**2,400**
DG-AB2	1	0.5-1	DG-AB2S-0.5-1	12/14/2018	**0.50 J**	**2.1 J**	**58**	<0.084	**0.082 J**	**10**	**9.8**	**140**	**49**	**0.094**	<0.17	**9.3**	<0.39	**0.65 U**	<0.37	**91**	**80**
DG-AB2	1	3.5-4	DG-AB2S-3.5-4	12/14/2018	**2.7**	**95**	**98**	**0.15 J**	<0.027	**120**	**17**	**32**	**5.8**	**1.5**	<0.14	**150**	<0.32	**0.54 U**	<0.31	**64**	**52**
DG-AB2	1	7-7.5	DG-AB2S-7-7.5	12/14/2018	**1.8**	**48**	**57**	**0.6**	**0.18 J**	**49**	**16**	**46**	**15**	**0.24**	**0.70 J**	**62**	<0.32	<0.11	<0.31	**39**	**110**
DG-AB3	1	0.5-1	DG-AB3S-0.5-1	12/14/2018	**5.9**	**36**	**71**	<0.10	**3.5**	**15**	**10**	**200**	**200**	**0.49**	**1.1 J**	**37**	**1.1 J**	<0.16	<0.45	**66**	**180**
DG-AB3	1	3.5-4	DG-AB3S-3.5-4	12/14/2018	**5.5**	**20**	**180**	<0.13	**0.36 J**	**140**	**23**	**200**	**250**	**2.6**	**1.3 J**	**200**	**0.78 J**	<0.20	<0.56	**85**	**180**
DG-AB3	1	6.5-7	DG-AB3S-6.5-7	12/14/2018	**1.7**	**29**	**50**	**0.66**	<0.035	**34**	**10**	**41**	**8.8**	**0.041**	**0.95 J**	**32**	**1.6 J**	<0.14	<0.41	**41**	**67**
DG-AB4	1	0.5-1	DG-AB4S-0.5-1	12/18/2018	**2.4**	**110**	**51**	<0.11	**1.7**	**11**	**12**	**130**	**140**	**0.11**	**0.71 J**	**10**	<0.49	<0.17	<0.48	**81**	**300**
DG-AB4	1	3.5-4	DG-AB4S-3.5-4	12/18/2018	**0.64 J**	**31**	**58**	**0.15 J**	**0.066 J**	**55**	**6.6**	**8.8**	**5.5**	**0.021**	**0.76 J**	**44**	**0.64 J**	<0.10	<0.30	**36**	**25**
DG-AB4	1	9-9.5	DG-AB4S-9-9.5	12/18/2018	**1.1**	**13**	**47**	**0.47**	**0.076 J**	**37**	**12**	**37**	**13**	**0.035**	**0.98 J**	**30**	**0.44 J**	**0.37 J**	<0.33	**51**	**69**
DG-AB5	1	0.5-1	DG-AB5S-0.5-1	1/29/2019	**1.1 J**	**200**	**62**	**0.079 J**	**0.51**	**8.3 J**	**8.4**	**94**	**140**	**0.16**	<0.14 UJ	**9.7**	**0.68 J**	**0.15 J**	<0.32 R	**58**	**150**
DG-AB5	1	3.5-4	DG-AB5S-3.5-4	1/29/2019	**1.1 J**	**54**	**31**	<0.11	**0.24 J**	**21**	**3.6**	**13**	**11**	**0.035**	**0.22 J**	**17**	**0.98 J**	<0.17	<0.49	**17**	**27**
DG-AB5 (D)	1	0.5-1	DG-AB5 (D)S-0.5-1	1/29/2019	**2.1 J**	**180**	**58**	<0.10	**0.6**	**15 J**	**9.8**	**100**	**93**	**0.14**	**0.32 J**	**14**	**1.8 J**	<0.16	<0.45	**68**	**100**
DG-AB6	1	0.5-1	DG-AB6S-0.5-1	12/20/2018	**0.51 J**	**2.3 U**	**28**	<0.074	<0.028	**16**	**14**	**130**	**5.2**	**0.038**	<0.15	**11**	<0.34	<0.11	**0.86 J**	**96**	**55**
DG-AB6	1	3.5-4	DG-AB6S-3.5-4	12/20/2018	**6.7**	**8.2**	**360**	**0.17 J**	**0.8**	**14**	**2.8**	**590**	**1,100**	**0.34**	**0.73 J**	**12**	**0.44 J**	**1.7**	<0.29	**8.6**	**670**
DG-AB7	1	0.5-1	DG-AB7S-0.5-1	12/19/2018	**2.5**	**5.7**	**110**	<0.10	**1.6**	**48**	**14**	**150**	**150**	**0.19**	**1.7**	**67**	<0.47	<0.16	<0.45	**63**	**270**
DG-AB7	1	3.5-4	DG-AB7S-3.5-4	12/19/2018	**2.4**	**6.9**	**180**	<0.12	**0.40 J**	**21**	**5.7**	**60**	**280**	**0.055**	**0.50 J**	**82**	<0.56	**0.20 J**	<0.54	**33**	**220**
DG-AB8	1	0.5-1	DG-AB8S-0.5-1	1/31/2019	**0.72 J**	**4.7**	**62**	<0.077 U	**0.22 J**	**17**	**5.2**	**28**	**47**	**0.053**	**0.18 J**	**16**	**0.44 J**	<0.12 U	<0.34 U	**31**	**110**
DG-AB8	1	3.5-4	DG-AB8S-3.5-4	1/31/2019	**18**	**16**	**690**	**0.28 J**	**0.97**	**34**	**7.7**	**510**	**3,100**	**1.1**	**0.68 J**	**28**	**3.5**	**3.7**	<0.51 U	**27**	**1,200**
DG-AB9	1	0.5-1	DG-AB9S-0.5-1	1/30/2019	<0.24	**11**	**85**	**0.29**	**0.36**	**22**	**7**	**96**	**95**	**0.13**	<0.19	**20**	<0.43	<0.15	<0.42	**50**	**140**
DG-AB9	1	3.5-4	DG-AB9S-3.5-4	1/30/2019	**40**	**26**	**1,400**	**0.50 J**	**5.4**	**75**	**11**	**1,000**	**5,700**	**0.71**	**0.65 J**	**49**	<1.1	**8.7**	<1.1	**24**	**3,300**
DG-AC2	1	0.5-1	DG-AC2S-0.5-1	12/14/2018	<0.32	**3.8 U**	**31**	<0.13	**0.27 J**	**8.3**	**9.1**	**120**	**20**	**0.12**	**0.30 J**	**3.6**	<0.58	<0.19	<0.56	**85**	**54**
DG-AC2	1	3.5-4	DG-AC2S-3.5-4	12/14/2018	**0.60 J**	**62**	**97**	**0.30 J**	**0.15 J**	**160**	**18**	**24**	**5.0**	**1.6**	**1.4 J**	**210**	<0.54	<0.18	<0.52	**57**	**49**
DG-AC3	1	0.5-1	DG-AC3S-0.5-1	12/19/2018	**3.3 J-**	**20 J**	**61 J**	<0.12	**1.5**	**17 J**	**10 J**	**210 J**	**260 J**	**0.19**	**1.2 J**	**18 J**	<0.57	<0.19	<0.55	**77 J**	**230 J**
DG-AC3	1	3.5-4	DG-AC3S-3.5-4	12/19/2018	**1.0 J**	**11**	**150**	**0.5**	**0.092 J**	**160**	**25**	**47**	**26**	**7.2**	**0.90 J**	**210**	<0.43	<0.15	<0.42	**86**	**67**
DG-AC4	1	0.5-1	DG-AC4S-0.5-1	12/18/2018	**4.8**	**46 J**	**91**	<0.13	**0.95**	**20**	**9.9**	**210**	**270**	**0.1**	**2.1 J**	**16**	**1.6 J**	**0.43 J**	<0.58	**76**	**220**
DG-AC4	1	3.5-4	DG-AC4S-3.5-4	12/18/2018	**2.4**	**84**	**650**	**0.71**	**1.8**	**35**	**7.5**	**240**	**800**	**0.32**	**1.2 J**	**28**	<0.43	**1.1**	<0.41	**50**	**1,200**
DG-AC4 (D)	1	0.5-1	DG-AC4 (D)S-0.5-1	12/18/2018	**3.5**	**130 J**	**79**	<0.11	**0.69**	**19**	**9.1**	**160**	**240**	**0.066**	**1.0 J**	**18**	**0.53 J**	**0.32 J**	<0.50	**78**	**270**
DG-AC5	1	0.5-1	DG-AC5S-0.5-1	12/18/2018	**21**	**280**	**80**	<0.081	**1.7**	**22**	**8.3**	**600**	**1,300**	**0.52**	**0.39 J**	**32**	**2.5 U**	**0.63**	<0.36	**57**	**1,200**
DG-AC5	1	3.5-4	DG-AC5S-3.5-4	12/18/2018	**4.9**	**150**	**120**	<0.10	**1.5**	**26**	**9.9**	**300**	**540**	**0.38**	**1.1 J**	**36**	**3.2 U**	**0.43 J**	<0.46	**56**	**460**
DG-AC6	1	0.5-1	DG-AC6S-0.5-1	12/20/2018	**0.97 J**	**7.1**	**91**	<0.076	**0.56**	**23**	**9.4**	**120**	**88**	**0.084**	**0.64 J**	**23**	<0.35	<0.12	**0.41 J**	**69**	**180**
DG-AC6	1	3.5-4	DG-AC6S-3.5-4	12/20/2018	**2.2**	**4.4**	**190**	**0.22 J**	**0.33**	**25**	**6.8**	**100**	**370**	**0.093**	<0.16	**26**	<0.38	**0.41 J**	<0.37	**29**	**280**
DG-AC7	1	0.5-1	DG-AC7S-0.5-1	1/9/2019	**2.7**	**8.3**	**160**	**0.16**	**0.96**	**28**	**12**	**160**	**120**	**0.16**	**2.7**	**30**	**1.8**	<0.14	<0.41	**77**	**200**
DG-AC7	1	3.5-4	DG-AC7S-3.5-4	1/9/2019	**38**	**26**	**1,300**	**0.93**	**5.1**	**55**	**9.4**	**610**	**3,400**	**0.36**	**3.6**	**47**	**4.1**	**5.6**	**1.4**	**26**	**2,300**
DG-AC7	1	7.5-8	DG-AC7S-7.5-8	1/9/2019	**4.6**	**13**	**180**	**0.91**	**0.36**	**39**	**13**	**96**	**360**	**0.13**	**1.1**	**52**	**3.5**	**0.42**	**4.3**	**49**	**390**
DG-AC7 (D)	1	0.5-1	DG-AC7 (D)S-0.5-1	1/9/2019	**1.8**	**7.8**	**60**	**0.091**	**0.62**	**16**	**6.4**	**77**	**79**	**0.14**	**1.1**	**22**	**1.2**	**0.13**	<0.39	**38**	**130**

Table 2: Metals Concentrations in Soil
Brisbane Baylands OU-2
Brisbane, California

Sample Location	Investigation Zone	Depth Range (ft bgs)	Sample Name	Collection Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
Direct Exposure Human Health Risk Level Residential Soil Exposure ESL [1]					1.1E+01	6.7E-02	1.5E+04	1.6E+01	7.8E+01	1.2E+05	2.3E+01	3.1E+03	8.0E+01	1.3E+01	3.9E+02	8.2E+02	3.9E+02	3.9E+02	7.8E-01	3.9E+02	2.3E+04
Regional Background [2]					5.5E+00	1.9E+01	3.2E+02	1.0E+00	2.7E+00	1.0E+02	2.5E+01	6.9E+01	1.6E+01	4.0E-01	7.4E+00	1.2E+02	5.6E+00	1.8E+00	7.6E+00	7.4E+01	1.1E+02
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
DG-AC8	1	0.5-1	DG-AC8S-0.5-1	1/31/2019	**14**	**28**	**260**	<0.096 U	**0.60 J**	**110**	**11**	**240**	**390**	**0.12**	**54**	**76**	**15 U**	<0.75 U	<0.43 U	**28**	**650**
DG-AC8	1	3.5-4	DG-AC8S-3.5-4	1/31/2019	**30**	**37**	**1,300**	**0.59 J**	**0.97 J**	**37**	**12**	**2,400**	**7,200**	**0.7**	**2.5 J**	**51**	**5.2 J**	**10**	<1.4 U	**19**	**2,000**
DG-AC9	1	0.5-1	DG-AC9S-0.5-1	12/20/2018	**2.2**	**3.8**	**75**	**0.24 J**	**0.87**	**22**	**10**	**120**	**190**	**0.12**	**0.94 J**	**18**	<0.45	<0.15	<0.44	**83**	**180**
DG-AC9	1	3.5-4	DG-AC9S-3.5-4	12/20/2018	**43**	**35**	**1,700**	**0.95**	**3.7**	**52**	**9.9**	**1,700**	**11,000**	**0.62**	**4.1 J**	**46**	<1.3	**8.9**	**2.1 J**	**37**	**2,800**
DG-AD2	1	0.5-1	DG-AD2S-0.5-1	12/14/2018	**0.97 J**	**21 J-**	**46 J**	**0.22 J**	**0.61**	**36 J**	**9.2**	**240**	**110 J**	**0.16**	**1.1 J**	**9.2**	<0.57	**0.22 J**	<0.55	**69 J+**	**160 J**
DG-AD2	1	3.5-4	DG-AD2S-3.5-4	12/14/2018	<0.20 UJ	**15**	**72**	<0.077 UJ	**0.11 J**	**100**	**14**	**22**	**3.6**	**0.45 J**	**0.43 J**	**120**	<0.36	<0.12	<0.34	**47**	**37**
DG-AD2 (D)	1	3.5-4	DG-AD2 (D)S-3.5-4	12/14/2018	**0.45 J**	**17**	**95**	**0.22 J**	**0.12 J**	**92**	**14**	**24**	**4.8**	**0.77 J**	**0.55 J**	**120**	<0.37	<0.13	<0.36	**51**	**45**
DG-AD3	1	0.5-1	DG-AD3S-0.5-1	12/14/2018	**33**	**470**	**200**	<0.13	**1.9**	**27**	**13**	**420**	**1,400**	**0.41**	**1.0 J**	**20**	**2.1 J**	**1.2**	<0.56	**94**	**480**
DG-AD3	1	3.5-4	DG-AD3S-3.5-4	12/14/2018	**2.3**	**25**	**110**	**0.23 U**	**0.16 J**	**170**	**20**	**49**	**48**	**3.7**	**0.77 J**	**170**	**1.2 J**	<0.12	<0.33	**68**	**73**
DG-AD4	1	0.5-1	DG-AD4S-0.5-1	12/18/2018	**1.3 J**	**24**	**55**	**0.31 J**	**0.53**	**12**	**11**	**120**	**89**	**0.059**	**0.73 J**	**9.1**	<0.50	<0.17	<0.48	**120**	**89**
DG-AD4	1	3.5-4	DG-AD4S-3.5-4	12/18/2018	**0.63 J**	**34**	**45**	**0.35 J**	**0.15 J**	**26**	**3.9**	**75**	**31**	**0.043**	<0.24	**21**	<0.56	<0.19	<0.54	**18**	**99**
DG-AD5	1	0.5-1	DG-AD5S-0.5-1	1/8/2019	**3.2**	**88**	**85**	<0.078	**0.3**	**16**	**13**	**150**	**180**	**0.14**	**0.93**	**13**	**2.1**	**0.29**	<0.35	**98**	**140**
DG-AD5	1	3.5-4	DG-AD5S-3.5-4	1/8/2019	**0.49**	**12**	**47**	**0.2**	**0.063**	**35**	**5.2**	**10**	**11**	**0.02**	**0.38**	**27**	**0.65**	<0.11	<0.33	**25**	**28**
DG-AD6	1	0.5-1	DG-AD6S-0.5-1	12/20/2018	**1.4 J**	**3.5 U**	**75**	<0.11	**0.92**	**24**	**14**	**280**	**140**	**0.12**	**1.2 J**	**17**	<0.53	<0.18	**1.2 J**	**82**	**190**
DG-AD6	1	3.5-4	DG-AD6S-3.5-4	12/20/2018	**4.3 J-**	**10 J**	**210 J**	**0.19 J**	**0.86**	**19 J**	**4.7 J**	**63 J**	**250 J**	**0.098**	**0.39 J**	**21 J**	**0.83 J**	**0.63 J**	<0.47	**26 J**	**240**
DG-AD7	1	0.5-1	DG-AD7S-0.5-1	12/19/2018	**5.7**	**10**	**120**	<0.11	**4.2**	**64**	**15**	**470**	**480**	**0.72**	**7.3**	**77**	**1.4 J**	**0.19 J**	<0.49	**64**	**970**
DG-AD7	1	3.5-4	DG-AD7S-3.5-4	12/19/2018	**0.76 J**	**5.2**	**76**	<0.085	**0.14 J**	**21**	**6.2**	**24**	**55**	**0.048**	**0.43 J**	**24**	<0.39	<0.13	<0.38	**34**	**74**
DG-AD8	1	0.5-1	DG-AD8S-0.5-1	1/31/2019	**30**	**14**	**1,200**	**0.73**	**2.6**	**29 J**	**5.7**	**510**	**4,500**	**0.73**	**1.1 J**	**26**	**1.2 J**	**3.8**	**11**	**28**	**2,100**
DG-AD8	1	3.5-4	DG-AD8S-3.5-4	1/31/2019	**4.0**	**7.9**	**84**	<0.13 U	**2.1**	**79**	**11**	**200**	**270**	**0.11**	**1.9 J**	**55**	**2.0 J**	**0.45 J**	<0.57 U	**62**	**370**
DG-AD9	1	0.5-1	DG-AD9S-0.5-1	1/9/2019	**40**	**14**	**140**	**0.27**	**3.3**	**52**	**11**	**400**	**460**	**0.8**	**7.9**	**41**	**2.9**	**0.55**	<1.2	**38**	**820**
DG-AD9	1	3.5-4	DG-AD9S-3.5-4	1/9/2019	**59**	**16**	**910**	**0.48**	**2.0**	**25**	**6.7**	**950**	**3,200**	**0.88**	**1.8**	**32**	**2.4**	**3.7**	<0.44	**32**	**1,500**
DG-AE2	1	0.5-1	DG-AE2S-0.5-1	12/14/2018	**4.7**	**18**	**130**	<0.13	**1.1**	**20**	**9.2**	**260**	**330**	**0.27**	**1.5 J**	**48**	<0.58	**0.20 J**	<0.56	**64**	**250**
DG-AE2	1	3.5-4	DG-AE2S-3.5-4	12/14/2018	**1.9**	**7.4**	**70**	**0.14 J**	<0.026	**92**	**12**	**30**	**3.2**	**2.2**	<0.13	**110**	**0.37 J**	<0.10	<0.30	**45**	**39**
DG-AE3	1	0.5-1	DG-AE3S-0.5-1	12/19/2018	<0.26	**1.2 J**	**31**	**0.11 J**	**0.053 J**	**9.3**	**11**	**120**	**2.3**	**0.027**	**0.46 J**	**4.1**	**0.61 J**	<0.16	<0.46	**110**	**39**
DG-AE3	1	3.5-4	DG-AE3S-3.5-4	12/19/2018	**1.6 J**	**71**	**130**	<0.12	**0.38 J**	**92**	**16**	**57**	**91**	**1.2**	**0.67 J**	**110**	<0.55	<0.19	<0.53	**62**	**120**
DG-AE4	1	0.5-1	DG-AE4S-0.5-1	12/18/2018	**8.4**	**190**	**190**	<0.094	**2.1**	**38**	**8.6**	**260**	**780**	**0.46**	**2.3**	**33**	**0.86 J**	**0.89**	<0.42	**54**	**900**
DG-AE4	1	3.5-4	DG-AE4S-3.5-4	12/18/2018	**1.6**	**81**	**66**	**0.26**	**0.18 J**	**46**	**6.6**	**8.9**	**5.7**	**0.016**	**0.53 J**	**36**	**0.38 J**	**0.12 J**	<0.31	**30**	**30**
DG-AE5	1	0.5-1	DG-AE5S-0.5-1	12/17/2018	**14**	**23**	**130**	<0.11	**3.6**	**890**	**16**	**420**	**640**	**1.0**	**40**	**460**	<0.50	**1.3**	<0.48	**54**	**1,300**
DG-AE5	1	3.5-4	DG-AE5S-3.5-4	12/17/2018	**17**	**1,400**	**150**	**0.11 J**	**0.79**	**24**	**10**	**230**	**520**	**0.21**	**0.50 J**	**31**	<0.35	**1.0**	**1.5**	**50**	**540**
DG-AE6	1	0.5-1	DG-AE6S-0.5-1	12/20/2018	**4.6**	**4.3**	**92**	<0.10	**1.4**	**33**	**11**	**220**	**180**	**0.24**	**3.3**	**32**	<0.47	<0.16	**0.70 J**	**56**	**290**
DG-AE6	1	3.5-4	DG-AE6S-3.5-4	12/20/2018	**2.2 J**	**6.2 J**	**170**	**0.23 J**	**1.1 J**	**20**	**6.9**	**53**	**270 J**	**0.84 J**	**0.26 J**	**22**	<0.47	**0.39 J**	<0.46	**29**	**430**
DG-AE6 (D)	1	3.5-4	DG-AE6 (D)S-3.5-4	12/20/2018	**4.8 J**	**12 J**	**210**	**0.24 J**	**0.51 J**	**19**	**6.5**	**80**	**6,300 J**	**0.18 J**	**1.0 J**	**23**	<0.39	**0.79 J**	<0.38	**29**	**390**
DG-AE7	1	0.5-1	DG-AE7S-0.5-1	1/9/2019	**2.0**	**7.7**	**83**	**0.14**	**0.58**	**19**	**14**	**98**	**100**	**0.061**	**0.91**	**32**	**1.8**	<0.14	<0.40	**76**	**300**
DG-AE7	1	3.5-4	DG-AE7S-3.5-4	1/9/2019	**3.2**	**8.8**	**130**	**0.16**	**0.2**	**15**	**5.7**	**47**	**220**	**0.033**	**0.79**	**15**	**1.1**	<0.14	<0.40	**35**	**120**
DG-AE7	1	8-8.5	DG-AE7S-8-8.5	1/9/2019	**2.2**	**12**	**60**	**0.94**	**0.12**	**38**	**22**	**55**	**29**	**0.1**	**0.73**	**65**	**1.8**	<0.19	<0.54	**49**	**120**
DG-AE8	1	0.5-1	DG-AE8S-0.5-1	1/31/2019	**4.3**	**9.3**	**85**	<0.085 U	**2.6**	**53**	**11**	**230**	**320**	**0.25**	**4.1**	**64**	**1.9 J**	**0.42 J**	**0.85 J**	**48**	**490**
DG-AE8	1	3.5-4	DG-AE8S-3.5-4	1/31/2019	**0.57 J**	**3.6 J**	**57**	<0.13 U	**0.071 J**	**23**	**6.7**	**28**	**45**	**0.021**	<0.25 U	**22**	<0.58 U	<0.20 U	<0.56 U	**41**	**51**
DG-AF10	1	0.5-1	DG-AF10S-0.5-1	1/15/2019	**0.64 J**	**2.3 J**	**69**	<0.13	**0.46 J**	**13**	**9.4**	**130**	**130**	**0.1**	**0.67 J**	**5.9**	<0.59	<0.20	<0.57	**89**	**170**
DG-AF10	1	3.5-4	DG-AF10S-3.5-4	1/15/2019	**0.76 J**	**3.8**	**220**	**0.16 J**	**2.1**	**75**	**12**	**34**	**120**	**0.082**	**0.90 J**	**38**	<0.49	<0.17	<0.48	**62**	**940**
DG-AF2	1	0.5-1	DG-AF2S-0.5-1	12/14/2018	**3.8 J**	**16**	**190 J**	<0.087	**1.0 J**	**23**	**8.4**	**170**	**520 J**	**0.27**	**2.6 J**	**29**	**0.83 J**	**0.28 J**	<0.39	**46**	**290 J**
DG-AF2	1	3.5-4	DG-AF2S-3.5-4	12/14/2018	**1.1 J**	**8.3**	**79**	**0.35**	<0.039	**24**	**12**	**41**	**16**	**1.2**	<0.20	**41**	**0.57 J**	**0.20 J**	<0.46	**26**	**85**
DG-AF2 (D)	1	0.5-1	DG-AF2 (D)S-0.5-1	12/14/2018	**1.7 J**	**12**	**110 J**	<0.098	**0.45 J**	**17**	**9.1**	**140**	**220 J**	**0.19**	**1.4 J**	**20**	<0.45 UJ	<0.15 UJ	<0.44	**66**	**160 J**
DG-AF3	1	0.5-1	DG-AF3S-0.5-1	12/14/2018	**1.8 U**	**8.5**	**27**	<0.12	<0.044	**8.5**	**14**	**120**	**18**	**0.052**	**0.52 J**	**6.0**	<0.53	<0.18	<0.51	**120**	**60**
DG-AF3	1	3.5-4	DG-AF3S-3.5-4	12/14/2018	**1.1**	**13**	**140**	**0.38**	**0.15 J**	**34**	**16**	**60**	**32**	**0.13**	**0.91 J**	**51**	**0.83 J**	<0.11	<0.31	**37**	**120**
DG-AF4	1	0.5-1	DG-AF4S-0.5-1	12/18/2018	**3.5**	**25**	**73**	**0.25**	**1.4**	**22**	**6.0**	**170**	**260**	**0.19**	**5.8**	**17**	**0.37 J**	**0.6**	<0.31	**43**	**330**
DG-AF4	1	3.5-4	DG-AF4S-3.5-4	12/18/2018	**1.1 J**	**31**	**98**	<0.12	**0.27 J**	**35**	**5.3**	**26**	**81**	**0.033**	**0.33 J**	**28**	<0.55	**0.37 J**	<0.53	**27**	**100**
DG-AF5	1	0.5-1	DG-AF5S-0.5-1	1/8/2019	**13**	**20**	**160**	<0.076	**5.5**	**78**	**13**	**550**	**700**	**0.68**	**9.7**	**83**	**4.7**	**1.7**	<0.34	**47**	**1,200**
DG-AF5	1	3.5-4	DG-AF5S-3.5-4	1/8/2019	**1.7**	**120**	**40**	**0.14**	**0.07**	**28**	**4.9**	**16**	**19**	**0.044**	<0.16	**28**	**0.56**	<0.13	<0.36	**18**	**40**
DG-AF6	1	0.5-1	DG-AF6S-0.5-1	12/20/2018	**1.4 J**	**3.8 U**	**17 J+**	<0.12	**0.47 U**	**20**	**20**	**120**	**28**	**0.11**	**0.25 J**	**11**	<0.57	<0.19	**0.68 J**	**150**	**110**
DG-AF6	1	3.5-4	DG-AF6S-3.5-4	12/20/2018	**25**	**18**	**160**	<0.098	**0.83**	**22**	**5.9**	**420**	**810**	**0.19**	**0.51 J**	**62**	<0.45	<0.15	<0.44	**55**	**340**
DG-AF7	1	0.5-1	DG-AF7S-0.5-1	12/19/2018	**22**	**19**	**360**	**0.15 J**	**8.3**	**780**	**16**	**650**	**1,800**	**0.93**	**13**	**78**	<0.94	**7.1**	<0.91	**59**	**1,700**
DG-AF7	1	3.5-4	DG-AF7S-3.5-4	12/19/2018	**0.82 J**	**3.9**	**93**	**0.48**	**0.54**	**21**	**7.4**	**44**	**35**	**0.028**	**0.70 J**	**17**	<0.37	<0.13	<0.36	**52**	**58**
DG-AF8	1	0.5-1	DG-AF8S-0.5-1	1/31/2019	**4.4**	**11**	**81**	**0.31 U**	**1.5**	**31**	**6.2**	**140**	**290**	**0.15**	**1.5**	**41**	**3.1 U**	**0.77 U**	<0.45 U	**23**	**270**

Table 2: Metals Concentrations in Soil
Brisbane Baylands OU-2
Brisbane, California

Sample Location	Investigation Zone	Depth Range (ft bgs)	Sample Name	Collection Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
Direct Exposure Human Health Risk Level Residential Soil Exposure ESL [1]					1.1E+01	6.7E-02	1.5E+04	1.6E+01	7.8E+01	1.2E+05	2.3E+01	3.1E+03	8.0E+01	1.3E+01	3.9E+02	8.2E+02	3.9E+02	3.9E+02	7.8E-01	3.9E+02	2.3E+04
Regional Background [2]					5.5E+00	1.9E+01	3.2E+02	1.0E+00	2.7E+00	1.0E+02	2.5E+01	6.9E+01	1.6E+01	4.0E-01	7.4E+00	1.2E+02	5.6E+00	1.8E+00	7.6E+00	7.4E+01	1.1E+02
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
DG-AF8	1	3.5-4	DG-AF8S-3.5-4	1/31/2019	**8.3**	**6.2**	**540**	**0.43**	**1.7**	**21**	**4.9**	**1,900**	**970**	**0.12**	<0.18 U	**23**	**2.7 U**	**2.2**	<0.40 U	**28**	**1,500**
DG-AG10	1	0.5-1	DG-AG10S-0.5-1	1/15/2019	**2.8**	**6.6**	**99**	<0.12	**1.6**	**17**	**5.8**	**160**	**470**	**0.27**	**1.1 J**	**14**	<0.54	<0.18	<0.52	**52**	**1,200**
DG-AG10	1	3.5-4	DG-AG10S-3.5-4	1/15/2019	**2.5 J**	**10 J**	**180 J**	**0.21 J**	**2.1**	**68**	**11**	**100**	**1000**	**0.11 J**	**0.66 J**	**48**	**1.1 J**	**0.13 J**	<0.35	**58**	**650 J**
DG-AG10 (D)	1	3.5-4	DG-AG10 (D)S-3.5-4	1/15/2019	**9.6 J**	**20 J**	**340 J**	**0.17 J**	**3.3**	**58**	**10**	**160**	**1500**	**0.23 J**	**0.72 J**	**39**	**1.6 J**	**0.15 J**	<0.37	**49**	**1,500 J**
DG-AG2	1	0.5-1	DG-AG2S-0.5-1	12/14/2018	**9.8**	**11**	**160**	<0.088	**2.4**	**31**	**8.9**	**270**	**350**	**0.52**	**1.9**	**33**	**0.99 J**	**0.86**	<0.39	**41**	**490**
DG-AG2	1	3.5-4	DG-AG2S-3.5-4	12/14/2018	**0.52 J**	**38**	**78**	**0.17 J**	**0.26 J**	**21**	**4.8**	**18**	**130**	**0.36**	**2.0**	**47**	<0.54	<0.18	<0.52	**49**	**53**
DG-AG2	1	4.5-5	DG-AG2S-4.5-5	12/14/2018	**1.1 J**	**14**	**25**	**0.4**	**0.21 J**	**29**	**14**	**21**	**17**	**0.037**	**0.64 J**	**25**	<0.50	<0.17	<0.48	**37**	**79**
DG-AG3	1	0.5-1	DG-AG3S-0.5-1	12/19/2018	**0.31 J**	**6.7**	**39**	<0.082	**0.14 J**	**8.5**	**11**	**95**	**20**	**0.085**	**0.53 J**	**6.1**	<0.38	<0.13	<0.36	**92**	**65**
DG-AG3	1	3.5-4	DG-AG3S-3.5-4	12/19/2018	**0.98 J**	**30**	**150**	**0.51**	**0.29 J**	**120**	**20**	**41**	**25**	**1.0**	**0.96 J**	**160**	**0.65 J**	<0.16	<0.45	**81**	**70**
DG-AG4	1	0.5-1	DG-AG4S-0.5-1	12/18/2018	**0.45 J**	**1.1 J**	**36 J**	**0.17 J**	**0.22 J**	**7.1 J**	**7.3 J**	**130 J**	**10 J**	**0.1**	**0.38 J**	**2.4 J**	<0.47 U	<0.16 U	<0.45 U	**79 J**	**44 J**
DG-AG4	1	11-11.5	DG-AG4S-11-11.5	12/18/2018	**1.4**	**11**	**53**	**0.46**	**0.20 J**	**49**	**19**	**25**	**11**	**0.031**	**2.2**	**43**	<0.33	<0.11	<0.32	**56**	**67**
DG-AG4	1	3.5-4	DG-AG4S-3.5-4	12/18/2018	**1.5 J**	**16**	**100 J**	**0.18 J**	**0.28 J**	**60 J**	**7.5 J**	**13**	**15**	**0.063**	**0.43 J**	**46 J**	<0.58	<0.19	<0.56	**40 J**	**47 J**
DG-AG4 (D)	1	3.5-4	DG-AG4 (D)S-3.5-4	12/18/2018	**0.58 J**	**11**	**40 J**	**0.13 J**	**0.14 J**	**27 J**	**3.7 J**	**9.7**	**14**	**0.047**	**0.19 J**	**19 J**	<0.33	<0.11	<0.32	**19 J**	**24 J**
DG-AG5	1	0.5-1	DG-AG5S-0.5-1	12/17/2018	**5.1**	**84**	**100**	<0.092	**0.87**	**20**	**10**	**160**	**230**	**0.31**	**0.91 J**	**20**	<0.43	**0.60 J**	<0.41	**74**	**250**
DG-AG5	1	3.5-4	DG-AG5S-3.5-4	12/17/2018	**3.0**	**220 J**	**64 J**	<0.069	**0.085 J**	**17**	**12**	**110 J**	**120 J**	**0.12**	**0.41 J**	**21**	<0.32	**0.35 J**	<0.31	**81**	**91 J**
DG-AG5 (D)	1	3.5-4	DG-AG5 (D)S-3.5-4	12/17/2018	**2.9**	**69 J**	**110 J**	<0.086	**0.80 J**	**24**	**11**	**220 J**	**310 J**	**0.2**	**0.66 J**	**24**	<0.40	**0.66 J**	<0.38	**79**	**280 J**
DG-AG6	1	0.5-1	DG-AG6S-0.5-1	12/20/2018	**1.2 J**	**2.8 U**	**17 J**	**0.095 J**	**0.56**	**20 J**	**16 J**	**130 J**	**48 J**	**0.083**	**0.58 J**	**13 J**	<0.43	<0.14	<0.41 UJ	**100 J**	**150 J**
DG-AG6	1	3.5-4	DG-AG6S-3.5-4	12/20/2018	**1.7**	**5.2**	**98**	**0.11 J**	**0.32 U**	**21**	**6.5**	**38**	**120**	**0.087**	**0.19 J**	**23**	<0.39	<0.13	<0.38	**35**	**100**
DG-AG7	1	0.5-1	DG-AG7S-0.5-1	1/30/2019	**0.47 J**	**2.4 J**	**67**	**0.38**	**0.78**	**20**	**12**	**160**	**100**	**0.31**	**0.72 J**	**14**	<0.41	<0.14	<0.40	**92**	**500**
DG-AG7	1	3.5-4	DG-AG7S-3.5-4	1/30/2019	<0.18	**10**	**85**	**0.17 J**	**0.41**	**20**	**4.9**	**45**	**85**	**0.043**	<0.14	**16**	**2.2 U**	**0.12 J**	<0.31	**32**	**110**
DG-AG8	1	0.5-1	DG-AG8S-0.5-1	1/31/2019	**1.2 U**	**2.4 U**	**51**	**0.26**	**0.12 J**	**16**	**8.2**	**53**	**6.2**	**0.085**	<0.15 U	**20**	**2.4 U**	<0.12 U	<0.35 U	**50**	**39**
DG-AG8	1	3.5-4	DG-AG8S-3.5-4	1/31/2019	**1.3 U**	**2.7**	**67**	**0.32**	**0.15 J**	**9.5**	**5.6**	**13**	**8.4**	**0.016**	<0.17 U	**9.3**	**2.6 U**	<0.13 U	<0.38 U	**53**	**35**
DG-AH2	1	0.5-1	DG-AH2S-0.5-1	12/14/2018	**3.9**	**8**	**84**	<0.12	**2.2**	**30**	**12**	**230**	**190**	**0.21**	**2.3**	**23**	<0.55	<0.19	<0.53	**110**	**420**
DG-AH2	1	3.5-4	DG-AH2S-3.5-4	12/14/2018	**0.41 J**	**21**	**86**	**0.24 J**	**0.13 J**	**30 J**	**8.6 J**	**13 J**	**14**	**0.11 J**	**0.32 J**	**40 J**	<0.46	<0.15	<0.44	**22 J**	**48**
DG-AH2 (D)	1	3.5-4	DG-AH2 (D)S-3.5-4	12/14/2018	<0.32 UJ	**30**	**96**	<0.13 UJ	**0.16 J**	**81 J**	**15 J**	**22 J**	**16**	**0.56 J**	**0.40 J**	**91 J**	<0.58	<0.20	<0.56	**53 J**	**62**
DG-AH3	1	0.5-1	DG-AH3S-0.5-1	12/14/2018	**1.2 U**	**6.7**	**68**	<0.080	**0.10 J**	**16**	**11**	**150**	**52**	**0.1**	**0.75 J**	**8.0**	**1.3 J**	<0.12	<0.36	**120**	**84**
DG-AH3	1	3.5-4	DG-AH3S-3.5-4	12/14/2018	**2.1**	**170**	**62**	**0.26 U**	**0.42**	**11**	**11**	**260**	**160**	**0.17**	**0.69 J**	**23**	**0.84 J**	<0.13	<0.37	**77**	**140**
DG-AH4	1	0.5-1	DG-AH4S-0.5-1	12/18/2018	**0.82 J**	**7.7**	**83**	<0.12	**1.1**	**17**	**9.8**	**110**	**93**	**0.085**	**1.1 J**	**21**	<0.54	<0.18	<0.52	**76**	**220**
DG-AH4	1	3.5-4	DG-AH4S-3.5-4	12/18/2018	<0.33	**29**	**36**	<0.13	**0.11 J**	**14**	**9.4**	**170**	**2.3**	**0.058**	**0.34 J**	**7.2**	<0.59	<0.20	<0.57	**100**	**50**
DG-AH4	1	6-6.5	DG-AH4S-6-6.5	12/18/2018	**0.54 J**	**12**	**27**	**0.18 J**	**0.11 J**	**35**	**10**	**22**	**11**	**0.044**	**0.88 J**	**24**	<0.48	<0.16	<0.47	**53**	**55**
DG-AH5	1	0.5-1	DG-AH5S-0.5-1	1/8/2019	**2.0**	**56**	**59**	<0.087	**0.37**	**16**	**9.8**	**120**	**180**	**0.081**	**0.27**	**19**	**1.8**	**0.24**	**1.0**	**78**	**130**
DG-AH5	1	3.5-4	DG-AH5S-3.5-4	1/8/2019	**6.4**	**310**	**71**	**0.14**	**0.76**	**21**	**11**	**200**	**280**	**0.21**	**0.74**	**27**	**3.1**	**0.68**	<0.37	**64**	**260**
DG-AH5	1	8-8.5	DG-AH5S-8-8.5	1/8/2019	**2.1**	**6.0**	**75**	**0.12**	<0.046	**45**	**11**	**24**	**12**	**0.035**	<0.24	**72**	**1.4**	<0.19	<0.54	**27**	**52**
DG-AH6	1	0.5-1	DG-AH6S-0.5-1	12/20/2018	**6.7**	**14**	**140**	<0.072	**6.0**	**67**	**13**	**370**	**450**	**0.49**	**5.2**	**68**	**0.49 J**	**0.66**	**0.44 J**	**59**	**1,300**
DG-AH6	1	3.5-4	DG-AH6S-3.5-4	12/20/2018	**1.2**	**4.1**	**25**	<0.029	**0.26**	**9.0**	**2.6**	**44**	**77**	**0.49**	**0.45**	**8.8**	<0.13	<0.045	<0.13	**15**	**86**
DG-AH7	1	0.5-1	DG-AH7S-0.5-1	12/19/2018	**21**	**53**	**580**	**0.54**	**22**	**120**	**17**	**650**	**1,800**	**2.8**	**24**	**130**	**2.3 J**	**2.8 J**	<1.8	**39**	**2,500**
DG-AH7	1	3.5-4	DG-AH7S-3.5-4	12/19/2018	**0.60 J**	**3.7**	**74**	<0.12	**0.14 J**	**13**	**8.1**	**19**	**44**	**0.027**	**0.91 J**	**28**	<0.54	<0.18	<0.52	**35**	**45**
DG-N1	1	0.5-1	DG-N1S-0.5-1	12/18/2018	**2.5**	**28**	**56**	<0.095	**0.89**	**21**	**9.6**	**120**	**180**	**0.37**	**1.4 J**	**26**	**0.89 J**	**0.73 U**	<0.42	**65**	**300**
DG-N1	1	3.5-4	DG-N1S-3.5-4	12/18/2018	**8.2**	**39**	**110**	**0.25 J**	**0.30 J**	**320**	**24**	**21**	**5.8**	**9.4**	**0.43 J**	**330**	**1.0 J**	<0.15	<0.43	**67**	**54**
DG-N2	1	0.5-1	DG-N2S-0.5-1	12/13/2018	**1.5 U**	**180**	**130**	**0.16 J**	**0.062 J**	**130**	**23**	**42**	**12**	**0.38**	**0.98 J**	**160**	**1.5 J**	<0.16	<0.45	**87**	**96**
DG-N2	1	3.5-4	DG-N2S-3.5-4	12/13/2018	**3.7**	**180**	**68**	**0.13 J**	**0.67**	**23**	**12**	**130**	**170**	**0.25**	**1.3 J**	**25**	**1.5 J**	<0.17	<0.48	**86**	**140**
DG-N3	1	0.5-1	DG-N3S-0.5-1	12/13/2018	**1.8**	**28**	**51**	<0.086	**0.63**	**13**	**7.4**	**120**	**160**	**0.14**	**0.25 J**	**10**	<0.40	**0.24 J**	<0.38	**69**	**150**
DG-N3	1	3.5-4	DG-N3S-3.5-4	12/13/2018	**4.5**	**17**	**480**	**0.49**	**1.5**	**82**	**11**	**220**	**940**	**12**	**0.23 J**	**110**	<0.32	**1.7**	<0.31	**38**	**660**
DG-N4	1	0.5-1	DG-N4S-0.5-1	12/19/2018	**4.6**	**250**	**82**	<0.11	**1.0**	**24**	**12**	**380**	**370**	**0.25**	**1.1 J**	**26**	**2.6 J**	<0.17	<0.49	**79**	**310**
DG-N4	1	3.5-4	DG-N4S-3.5-4	12/19/2018	<0.26	**84**	**18**	<0.10	**0.078 J**	**28**	**4.5**	**6.9**	**3.7**	**0.021**	**0.27 J**	**23**	**1.2 J**	<0.16	<0.45	**20**	**17**
DG-N5	1	0.5-1	DG-N5S-0.5-1	1/8/2019	**2.2**	**9.1**	**99**	**0.11**	**0.85**	**36**	**11**	**110**	**150**	**0.19**	**1.2**	**37**	**2.3**	<0.13	**0.83**	**68**	**210**
DG-N5	1	3.5-4	DG-N5S-3.5-4	1/8/2019	**16**	**180**	**700**	<0.23	**1.1**	**41**	**8.9**	**760**	**1,700**	**0.72**	**1.0**	**39**	**7.0**	**2.3**	**1.3**	**24**	**1,600**
DG-N5 (D)	1	0.5-1	DG-N5 (D)S-0.5-1	1/8/2019	**1.3**	**62**	**56**	<0.073	**0.24**	**12**	**13**	**130**	**66**	**0.13**	**0.55**	**9.9**	**1.4**	**0.13**	**0.76**	**96**	**130**
DG-N5 (D)	1	0.5-1	DG-N5 (D)S-0.5-1	1/24/2019	**2.4**	**15**	**120**	**0.35 J**	**0.63**	**44**	**9.4**	**91**	**15 J**	**0.49 J**	<0.16 UJ	**49**	**3.0 J**	**0.59 J**	**2.9**	**36 J**	**160**
DG-O1	1	0.5-1	DG-O1S-0.5-1	12/13/2018	**1.2 J**	**28**	**48**	<0.10	**0.20 J**	**8.2**	**11**	**130**	**150**	**0.11**	<0.20	**8.9**	<0.47	**0.25 J**	<0.45	**91**	**100**
DG-O1	1	3.5-4	DG-O1S-3.5-4	12/13/2018	**2.2**	**3.7**	**140**	**0.25**	**0.086 J**	**120**	**18**	**30**	**4.7**	**0.66**	**1.6**	**160**	<0.30	**0.15 J**	<0.29	**57**	**49**
DG-O2	1	0.5-1	DG-O2S-0.5-1	12/13/2018	**1.6**	**28**	**51**	<0.094	**0.44**	**19**	**13**	**160**	**72**	**0.077**	**1.4**	**12**	**2.0 J**	<0.15	<0.42	**140**	**130**
DG-O2	1	3.5-4	DG-O2S-3.5-4	12/13/2018	**1.0 U**	**100**	**110**	**0.080 J**	<0.025	**130**	**17**	**27**	**5.9**	**1.4**	**0.52 J**	**130**	**0.72 J**	<0.10	<0.29	**66**	**50**

Table 2: Metals Concentrations in Soil
Brisbane Baylands OU-2
Brisbane, California

Sample Location	Investigation Zone	Depth Range (ft bgs)	Sample Name	Collection Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
Direct Exposure Human Health Risk Level Residential Soil Exposure ESL [1]					1.1E+01	6.7E-02	1.5E+04	1.6E+01	7.8E+01	1.2E+05	2.3E+01	3.1E+03	8.0E+01	1.3E+01	3.9E+02	8.2E+02	3.9E+02	3.9E+02	7.8E-01	3.9E+02	2.3E+04
Regional Background [2]					5.5E+00	1.9E+01	3.2E+02	1.0E+00	2.7E+00	1.0E+02	2.5E+01	6.9E+01	1.6E+01	4.0E-01	7.4E+00	1.2E+02	5.6E+00	1.8E+00	7.6E+00	7.4E+01	1.1E+02
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
DG-O3	1	0.5-1	DG-O3S-0.5-1	12/18/2018	**0.58 J**	**37**	**23**	<0.089	**0.35**	**8.1**	**11**	**89**	**14**	**0.061**	**0.41 J**	**5.6**	**0.72 J**	<0.14	<0.40	**79**	**72**
DG-O3	1	3.5-4	DG-O3S-3.5-4	12/18/2018	**4.5**	**39**	**55**	**0.15 J**	**0.23 J**	**190**	**14**	**20**	**6.0**	**4.0**	**0.40 J**	**170**	**1.6 J**	**0.90 U**	<0.52	**43**	**50**
DG-O4	1	0.5-1	DG-O4S-0.5-1	12/19/2018	**0.42 J**	**3.3 J**	**47**	<0.12	**0.29 J**	**7.3**	**7.5**	**110**	**29**	**0.09**	**0.32 J**	**2.9**	**1.2 J**	<0.19	<0.55	**100**	**86**
DG-O4	1	3.5-4	DG-O4S-3.5-4	12/19/2018	**0.74 J**	**48**	**32**	<0.12	**0.11 J**	**31**	**4.9**	**15**	**34**	**0.024**	**0.45 J**	**21**	<0.55	<0.18	<0.53	**23**	**43**
DG-O5	1	0.5-1	DG-O5S-0.5-1	12/18/2018	**0.72 J**	**94**	**110**	<0.11	**0.18 J**	**15**	**12**	**190**	**86**	**0.11**	**0.25 J**	**7.5**	<0.52	**0.19 J**	<0.50	**130**	**160**
DG-O5	1	3.5-4	DG-O5S-3.5-4	12/18/2018	**2.0**	**410**	**110**	**0.26 J**	<0.049	**51**	**6.8**	**26**	**29**	**0.034**	**0.26 J**	**39**	<0.59	<0.20	<0.57	**32**	**65**
DG-O6	1	0.5-1	DG-O6S-0.5-1	12/19/2018	**1.3 J**	**2.8 J**	**54**	**0.17 J**	**0.67**	**18**	**11**	**130 J**	**55**	**0.098**	**1.6**	**12**	**1.7 J**	<0.15	<0.43	**84**	**160 J**
DG-O6	1	3.5-4	DG-O6S-3.5-4	12/19/2018	**12 J**	**11 J**	**250 J**	**0.25 J**	**1.1**	**14 J**	**4.1 J**	**190**	**780 J**	**0.93**	**0.35 J**	**14 J**	**1.4 J**	**1.1 J**	**1.2 J**	**19 J**	**740 J**
DG-O6 (D)	1	0.5-1	DG-O6 (D)S-0.5-1	12/19/2018	**1.8 J**	**3.6 J**	**56**	<0.12 UJ	**0.92**	**19**	**14**	**250 J**	**71**	**0.11**	**1.9**	**12**	**2.0 J**	<0.18	<0.51	**110**	**750 J**
DG-P1	1	0.5-1	DG-P1S-0.5-1	11/21/2018	**0.69 J**	**42**	**53**	<0.11	**0.10 J**	**23**	**10**	**81**	**59**	**0.07**	<0.21	**14**	<0.50	**0.83 U**	<0.48	**92**	**66**
DG-P1	1	3.5-4	DG-P1S-3.5-4	11/21/2018	**2.6**	**55**	**92**	**0.16 J**	**0.085 J**	**120**	**17**	**31**	**4.5**	**12**	<0.26	**140**	<0.60	**1.0 U**	<0.58	**70**	**49**
DG-P1 (D)	1	3.5-4	DG-P1 (D)S-3.5-4	11/21/2018	**2.9**	**56**	**100**	**0.12 J**	**0.069 J**	**130**	**17**	**27**	**7.0**	**19**	<0.22	**140**	<0.52	**0.86 U**	<0.50	**79**	**52**
DG-P2	1	0.5-1	DG-P2S-0.5-1	12/13/2018	**2.0**	**170**	**37**	<0.093	**0.13 J**	**8.3**	**13**	**130**	**46 J**	**0.088**	**0.65 J**	**6.7 J**	**0.56 J**	<0.14	<0.41	**140**	**90 J**
DG-P2	1	3.5-4	DG-P2S-3.5-4	12/13/2018	**2.0 U**	**78**	**350**	**0.91**	**0.098 J**	**42**	**18**	**50**	**24**	**0.074**	**0.83 J**	**56**	**0.98 J**	<0.20	<0.57	**37**	**110**
DG-P2 (D)	1	0.5-1	DG-P2 (D)S-0.5-1	12/13/2018	**2.8**	**260**	**45**	<0.12	**0.26 J**	**10**	**12**	**130**	**120 J**	**0.074**	**0.60 J**	**12 J**	**1.1 J**	<0.19	<0.53	**120**	**180 J**
DG-P3	1	0.5-1	DG-P3S-0.5-1	12/13/2018	**4.0**	**250**	**160**	<0.10	**2.3**	**25**	**7.1**	**120**	**380**	**0.51**	**0.35 J**	**31**	**0.66 J**	**0.46 J**	**0.60 J**	**27**	**320**
DG-P3	1	3.5-4	DG-P3S-3.5-4	12/13/2018	**1.9**	**140**	**64**	**0.32**	**0.072 J**	**47**	**14**	**36**	**20**	**0.77**	<0.18	**66**	<0.43	<0.15	<0.42	**52**	**61**
DG-P4	1	0.5-1	DG-P4S-0.5-1	12/19/2018	**6.8**	**630**	**220**	<0.13	**2.5**	**37**	**9.1**	**190**	**610**	**0.31**	**1.0 J**	**41**	**2.1 J**	**0.58 J**	**1.7 J**	**41**	**500**
DG-P4	1	3.5-4	DG-P4S-3.5-4	12/19/2018	**0.98 J**	**68**	**46**	**0.25 J**	**0.32 J**	**42**	**6.1**	**20**	**21**	**0.033**	**0.40 J**	**34**	**1.3 J**	<0.15	<0.42	**30**	**52**
DG-P5	1	0.5-1	DG-P5S-0.5-1	1/8/2019	**2.1**	**42**	**68**	<0.092	**1.1**	**24**	**14**	**180**	**190**	**0.12**	**1.3**	**20**	**2.9**	**0.26**	<0.41	**100**	**220**
DG-P5	1	3.5-4	DG-P5S-3.5-4	1/8/2019	**1.4**	**150**	**100**	**0.41**	**0.24**	**26**	**7.2**	**35**	**170**	**0.21**	**0.19**	**34**	**1.1**	**0.18**	**0.67**	**26**	**120**
DG-P6	1	0.5-1	DG-P6S-0.5-1	12/19/2018	**7.1**	**21**	**450**	**0.17 J**	**1.3**	**20**	**7.7**	**300**	**750**	**0.25**	**0.53 J**	**21**	**0.85 J**	**2.0**	<0.45	**55**	**630**
DG-P6	1	3.5-4	DG-P6S-3.5-4	12/19/2018	**28**	**19**	**940**	**0.55**	**3.1**	**30**	**7.7**	**540**	**2,400**	**0.25**	**0.53 J**	**43**	**3.7 J**	**3.7**	**2.1 J**	**27**	**1,700**
DG-Q1	1	0.5-1	DG-Q1S-0.5-1	12/13/2018	**1.7 J**	**79**	**87**	<0.12	**0.61**	**25**	**9.9**	**100**	**120**	**0.37**	**1.2 J**	**28**	**0.58 J**	<0.19	<0.55	**79**	**210**
DG-Q1	1	3.5-4	DG-Q1S-3.5-4	12/13/2018	**2.4**	**8.7**	**130**	**0.24**	**0.11 J**	**130**	**18**	**29**	**4.1**	**0.54**	<0.15	**160**	<0.36	**0.21 J**	<0.35	**67**	**52**
DG-Q2	1	0.5-1	DG-Q2S-0.5-1	12/13/2018	**5.3**	**46**	**79**	**0.15 J**	**0.56**	**18**	**9.4**	**150**	**2,200**	**0.21**	**0.90 J**	**33**	**1.5 J**	<0.19	<0.55	**43**	**140**
DG-Q2	1	3.5-4	DG-Q2S-3.5-4	12/13/2018	**3.5**	**140**	**59**	<0.12	<0.047	**68**	**9.5**	**16**	**22**	**0.33**	**0.26 J**	**53**	**0.70 J**	<0.19	<0.55	**58**	**34**
DG-Q3	1	0.5-1	DG-Q3S-0.5-1	12/18/2018	**0.68 J**	**86**	**42**	<0.080	**0.23 J**	**7.6**	**11**	**85**	**30**	**0.046**	**0.39 J**	**4.6**	**0.53 J**	<0.12	<0.36	**81**	**50**
DG-Q3	1	3.5-4	DG-Q3S-3.5-4	12/18/2018	**1.6**	**2.5**	**23**	**0.17 J**	**0.18 J**	**45**	**7.9**	**6.2**	**2.6**	**0.015 U**	**0.34 J**	**32**	**0.72 J**	<0.10	<0.29	**39**	**23**
DG-Q4	1	0.5-1	DG-Q4S-0.5-1	12/19/2018	**0.99 J**	**16 J**	**61**	<0.11	**0.61**	**14 J+**	**8.7 J**	**77 J+**	**150 J**	**0.06**	**0.69 J**	**13**	**1.1 J**	<0.18	<0.50	**53 J+**	**170 J**
DG-Q4	1	3.5-4	DG-Q4S-3.5-4	12/19/2018	**0.57 J**	**13 J**	**81**	**0.14 J**	**0.41 J**	**38**	**5.5**	**86 J**	**140**	**1.4 J**	**0.51 J**	**29**	**1.1 J**	<0.18	<0.51	**27**	**210**
DG-Q4 (D)	1	3.5-4	DG-Q4 (D)S-3.5-4	12/19/2018	**0.60 J**	**22 J**	**93**	**0.18 J**	**0.55 J**	**39**	**5.1**	**31 J**	**120**	**0.055 J**	**0.38 J**	**30**	**0.50 J**	<0.15	<0.43	**25**	**310**
DG-Q5	1	0.5-1	DG-Q5S-0.5-1	12/18/2018	**2.7**	**48**	**130**	**0.15 J**	**1.8**	**25**	**12**	**240**	**340**	**0.26**	**1.1 J**	**23**	<0.50	**0.67 J**	<0.48	**98**	**580**
DG-Q5	1	3.5-4	DG-Q5S-3.5-4	12/18/2018	**2.7**	**140**	**160**	**0.15 J**	**0.30 J**	**56**	**12**	**77**	**150**	**0.24**	<0.23	**74**	<0.53	**0.38 J**	<0.51	**37**	**170**
DG-Q6	1	0.5-1	DG-Q6S-0.5-1	12/19/2018	**1.0 J**	**2.7**	**67**	<0.080	**0.13 J**	**24**	**7.3**	**100**	**110**	**0.11**	**0.36 J**	**22**	**0.55 J**	**0.12 J**	<0.36	**64**	**89**
DG-Q6	1	3.5-4	DG-Q6S-3.5-4	12/19/2018	**26**	**47**	**1,200**	**0.49 J**	**3.6**	**52**	**13**	**1,400**	**4,200**	**0.61**	**2.7 J**	**47**	**2.8 J**	**7.3**	**1.8 J**	**37**	**2,500**
DG-Q7	1	0.5-1	DG-Q7S-0.5-1	1/8/2019	**6.7**	**15**	**150**	**0.11**	**3.8**	**42**	**9.3**	**270**	**760**	**0.35**	**3.8**	**42**	**1.8**	**0.57**	**0.59**	**40**	**570**
DG-Q7	1	3.5-4	DG-Q7S-3.5-4	1/8/2019	**18**	**12**	**51**	<0.12	**1.7**	**17**	**4.5**	**210**	**940**	**0.27**	**0.39**	**13**	**2.0**	**0.42**	<0.53	**27**	**900**
DG-Q7 (D)	1	3.5-4	DG-Q7 (D)S-3.5-4	1/8/2019	**8.6**	**11**	**130**	**0.092**	**2.4**	**49**	**8.6**	**210**	**390**	**0.26**	**3.2**	**66**	**1.6**	**0.39**	<0.36	**35**	**410**
DG-R1	1	0.5-1	DG-R1S-0.5-1	12/17/2018	**3.5**	**320**	**90**	**0.11 J**	**1.6**	**42**	**14**	**150**	**200**	**0.49**	**1.8**	**49**	**1.4 J**	**0.72 U**	<0.42	**73**	**270**
DG-R1	1	3.5-4	DG-R1S-3.5-4	12/17/2018	**1.5 J**	**49**	**59**	**0.69**	**0.32 J**	**46**	**15**	**35**	**16**	**0.19**	**0.37 J**	**46**	**0.63 J**	<0.20	<0.57	**44**	**72**
DG-R2	1	0.5-1	DG-R2S-0.5-1	12/13/2018	**5.7**	**210**	**110**	<0.10	**0.43**	**86**	**16**	**130**	**150**	**0.98**	**0.85 J**	**98**	**1.4 J**	<0.16	<0.45	**80**	**160**
DG-R2	1	3.5-4	DG-R2S-3.5-4	2/5/2019	**1.0 J**	**1.8 J**	**20**	**0.076 J**	<0.028	**23**	**3.1**	**4**	**1.1**	**0.016**	<0.15 UJ	**21**	**0.35 J**	<0.11	**0.4**	**19**	**11**
DG-R2 (D)	1	3.5-4	DG-R2 (D)S-3.5-4	2/5/2019	**0.93 J**	**1.8 J**	**23**	**0.081 J**	<0.028	**30**	**3.8**	**4.6**	**1.2**	**0.022**	**0.15 J**	**24**	**0.77 J**	<0.11	<0.33	**24**	**12**
DG-R3	1	0.5-1	DG-R3S-0.5-1	12/13/2018	**0.87 J**	**82**	**40**	<0.076	**0.26 J**	**10**	**11**	**630**	**52**	**0.069**	<0.15	**7.5**	<0.35	**0.44 J**	<0.34	**89**	**140**
DG-R3	1	3.5-4	DG-R3S-3.5-4	12/13/2018	**1.2**	**3.9**	**38**	**0.082 J**	<0.028	**58**	**6.1**	**9.3**	**1.4**	**0.023**	<0.14	**36**	**0.34 J**	**0.16 J**	<0.32	**44**	**22**
DG-R4	1	0.5-1	DG-R4S-0.5-1	12/19/2018	**1.7 J**	**22**	**57**	<0.12	**0.5**	**20**	**11**	**110**	**150**	**0.12**	**1.6 J**	**20**	**2.6 J**	<0.19	<0.54	**66**	**550**
DG-R4	1	3.5-4	DG-R4S-3.5-4	12/19/2018	**19**	**120**	**1,000**	**0.67 J**	**1.4**	**37**	**11**	**1,100**	**2,300**	**0.31**	**4.9**	**50**	<1.4	**4.2**	**1.9 J**	**38**	**1,600**
DG-R4	1	9.5-10	DG-R4S-9.5-10	12/19/2018	**1.6 J**	**30**	**53**	**0.5**	**0.31 J**	**52**	**13**	**84**	**18**	**0.033**	**1.1 J**	**64**	**0.62 J**	<0.19	<0.56	**56**	**180**
DG-R5	1	0.5-1	DG-R5S-0.5-1	1/29/2019	**1.2**	**53**	**99**	<0.080	**1**	**16**	**11**	**110**	**230**	**0.2**	**0.47 J**	**14**	**0.93 J**	**0.15 J**	<0.36 R	**78**	**310**
DG-R5	1	3.5-4	DG-R5S-3.5-4	1/29/2019	**2.0 J**	**170 J**	**75 J**	**0.095 J**	**0.63 J**	**28 J**	**8.1**	**65**	**370 J**	**0.077**	**0.18 J**	**43 J**	**0.54 J**	**0.32 J**	<0.31 R	**37 J**	**190 J**
DG-R5 (D)	1	3.5-4	DG-R5 (D)S-3.5-4	1/29/2019	**0.69 J**	**22 J**	**30 J**	<0.097	**0.21 J**	**7.3 J**	**7.9**	**96**	**53 J**	**0.089**	<0.19	**4.2 J**	<0.45 UJ	**0.15 J**	<0.43	**69 J**	**69 J**
DG-R6	1	0.5-1	DG-R6S-0.5-1	12/19/2018	**9.7**	**12**	**200**	**0.44**	**4**	**66**	**23**	**5,400**	**790**	**0.66**	**5.4**	**65**	**0.79 J**	**1.9**	<0.49	**58**	**980**

Table 2: Metals Concentrations in Soil
Brisbane Baylands OU-2
Brisbane, California

Sample Location	Investigation Zone	Depth Range (ft bgs)	Sample Name	Collection Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
Direct Exposure Human Health Risk Level Residential Soil Exposure ESL [1]					1.1E+01	6.7E-02	1.5E+04	1.6E+01	7.8E+01	1.2E+05	2.3E+01	3.1E+03	8.0E+01	1.3E+01	3.9E+02	8.2E+02	3.9E+02	3.9E+02	7.8E-01	3.9E+02	2.3E+04
Regional Background [2]					5.5E+00	1.9E+01	3.2E+02	1.0E+00	2.7E+00	1.0E+02	2.5E+01	6.9E+01	1.6E+01	4.0E-01	7.4E+00	1.2E+02	5.6E+00	1.8E+00	7.6E+00	7.4E+01	1.1E+02
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
DG-R6	1	3.5-4	DG-R6S-3.5-4	12/19/2018	**4.3**	**9.6**	**260**	<0.13	**0.71**	**32**	**7.7**	**240**	**630**	**0.14**	<0.26	**18**	**1.0 J**	**1.1**	<0.58	**47**	**600**
DG-R7	1	0.5-1	DG-R7S-0.5-1	12/19/2018	**1.8**	**6.0**	**120**	**0.32**	**0.86**	**27**	**7.2**	**97**	**140**	**0.11**	**1.1 J**	**28**	**1.2 J**	<0.15	<0.43	**39**	**150**
DG-R7	1	3.5-4	DG-R7S-3.5-4	12/19/2018	**21**	**38**	**400**	**0.5**	**2.7**	**39**	**10**	**790**	**4,000**	**0.054**	**3.1**	**67**	**1.8 J**	**9.9**	<0.39	**23**	**1,300**
DG-R7	1	8-8.5	DG-R7S-8-8.5	12/19/2018	**38**	**24**	**670**	**0.31**	**2.6**	**34**	**8.4**	**630**	**3,800**	**0.15**	**3.6**	**33**	**2.0 J**	**3.8**	**0.98 J**	**25**	**1,900**
DG-S1	1	0.5-1	DG-S1S-0.5-1	12/13/2018	**0.59 J**	**18**	**41**	<0.10	<0.040	**11**	**9.5**	**93**	**53**	**0.24**	<0.21	**15**	<0.48	<0.16	<0.47	**72**	**84**
DG-S1	1	3.5-4	DG-S1S-3.5-4	12/13/2018	**2.4**	**35**	**91**	**0.65**	**0.075 J**	**76**	**16**	**55**	**17**	**0.22**	**0.27 J**	**64**	<0.51	<0.17	<0.49	**47**	**82**
DG-S2	1	0.5-1	DG-S2S-0.5-1	12/13/2018	**9.5**	**290**	**74**	<0.10	**0.5**	**18**	**9.2**	**260**	**390**	**0.16**	**1.1 J**	**20**	**1.4 J**	**0.51 J**	<0.45	**53**	**150**
DG-S2	1	3.5-4	DG-S2S-3.5-4	12/13/2018	<0.20	**2.7**	**66**	**0.45**	<0.030	**65**	**8.9**	**10**	**4.2**	**0.037**	**0.37 J**	**44**	**1.1 J**	<0.12	<0.35	**49**	**24**
DG-S3	1	0.5-1	DG-S3S-0.5-1	12/18/2018	**10**	**210**	**58**	<0.12	**0.98**	**12**	**12**	**170**	**290**	**0.11**	**0.63 J**	**24**	**0.99 J**	**0.91 U**	<0.53	**78**	**170**
DG-S3	1	3.5-4	DG-S3S-3.5-4	12/18/2018	**3.2**	**48**	**73**	**0.44**	**0.37 J**	**86**	**20**	**36**	**82**	**3.3**	**0.43 J**	**130**	**1.2 J**	<0.16	<0.46	**64**	**76**
DG-S4	1	0.5-1	DG-S4S-0.5-1	12/19/2018	**1.9**	**8.2**	**58**	<0.10	**0.73**	**29**	**8.5**	**100**	**130**	**0.048**	**1.6**	**28**	**1.7 J**	<0.16	<0.45	**44**	**130**
DG-S4	1	3.5-4	DG-S4S-3.5-4	12/19/2018	**17**	**320**	**620**	**1.0**	**1.4**	**35**	**11**	**460**	**2,000**	**0.31**	**8.4**	**39**	<1.2	**3.6**	**1.2 J**	**41**	**1,100**
DG-S5	1	0.5-1	DG-S5S-0.5-1	12/18/2018	**7.3**	**140**	**170**	<0.13	**4.0**	**33**	**15**	**230**	**4,200**	**0.15**	**2.0**	**29**	**1.3 J**	**9.2**	<0.56	**100**	**1,100**
DG-S5	1	3.5-4	DG-S5S-3.5-4	12/18/2018	**1.1**	**140**	**54**	**0.17 J**	**0.20 J**	**26**	**3.9**	**19**	**81**	**0.043**	**0.14 J**	**21**	<0.32	<0.11	<0.31	**19**	**140**
DG-S6	1	0.5-1	DG-S6S-0.5-1	12/19/2018	**8.9**	**23**	**300**	<0.27	**15**	**88**	**22**	**580**	**660**	**0.25**	**7.8**	**93**	**1.7 J**	**1.5 J**	<1.2	**120**	**780**
DG-S6	1	3.5-4	DG-S6S-3.5-4	12/19/2018	**9.4**	**11**	**360**	**0.14 J**	**0.39 J**	**14**	**4.1**	**260**	**1,500**	**0.19**	**0.33 J**	**15**	**0.99 J**	**2.3**	**0.80 J**	**11**	**620**
DG-S7	1	0.5-1	DG-S7S-0.5-1	1/8/2019	**3.3**	**8.8**	**150**	<0.075	**0.98**	**31**	**10**	**160**	**200**	**0.26**	**1.6**	**27**	**2.8**	**0.22**	**0.33**	**57**	**280**
DG-S7	1	3.5-4	DG-S7S-3.5-4	1/8/2019	**22**	**26**	**1,200**	<0.20	**2.2**	**75**	**9.1**	**2,200**	**3,600**	**0.23**	**0.7**	**40**	**5.9**	**4.6**	<0.91	**23**	**3,600**
DG-S8	1	0.5-1	DG-S8S-0.5-1	1/29/2019	<0.27	**0.51 J**	**32**	**0.23 J**	<0.040	**13**	**8.3**	**110**	**12**	**0.17**	**0.33 J**	**4.1**	<0.48	<0.16	<0.46 R	**75**	**36**
DG-S8	1	3.5-4	DG-S8S-3.5-4	1/29/2019	**0.76 J**	**3.7**	**30**	**0.19 J**	<0.034	**7.2**	**13**	**91**	**33**	**0.059**	**0.18 J**	**4.9**	**0.65 J**	**0.20 J**	<0.40 R	**81**	**54**
DG-S8 (D)	1	0.5-1	DG-S8 (D)S-0.5-1	1/29/2019	<0.31	**0.64 J**	**33**	**0.17 J**	<0.046	**12**	**8.2**	**120**	**15**	**0.11**	<0.24 UJ	**3.9**	<0.56	<0.19	<0.54 R	**70**	**38**
DG-T1	1	0.5-1	DG-T1S-0.5-1	12/17/2018	**2.0 J**	**100 J**	**73 J**	**0.13 J**	**0.84**	**29 J**	**12 J**	**84 J+**	**140 J**	**0.54 J**	**0.85 J**	**43 J**	**0.73 J**	**0.74 U**	<0.43	**73 J**	**190 J**
DG-T1	1	3.5-4	DG-T1S-3.5-4	12/17/2018	**1.4 J**	**24**	**70**	**0.18 J**	<0.030 UJ	**76**	**12**	**24**	**2.8 J**	**0.45**	<0.16 UJ	**89**	<0.37 UJ	<0.12	<0.36	**48**	**42**
DG-T1 (D)	1	3.5-4	DG-T1 (D)S-3.5-4	12/17/2018	**3.5 J**	**27**	**110**	**0.28 J**	**0.33 J**	**100**	**18**	**28**	**6.3 J**	**0.59**	**0.45 J**	**130**	**0.43 J**	<0.14	<0.41	**70**	**57**
DG-T2	1	0.5-1	DG-T2S-0.5-1	2/5/2019	**0.47 J**	**0.72 J**	**36**	**0.14 J**	<0.042	**45**	**5.3**	**5.6**	**3**	**0.16**	<0.22	**33**	**0.89 J**	<0.17	**0.74**	**28**	**17**
DG-T2	1	3.5-4	DG-T2S-3.5-4	12/13/2018	**1.0 U**	**3.5**	**130**	**0.12 J**	**0.030 J**	**100**	**35**	**11**	**4.4**	**0.031**	**0.60 J**	**83**	**1.2 J**	<0.10	<0.30	**70**	**28**
DG-T3	1	0.5-1	DG-T3S-0.5-1	12/14/2018	**3.6 J**	**120 J**	**71 J**	<0.096 U	**0.85**	**30 J**	**9.9 J**	**110 J**	**190 J**	**0.14**	**1.6 J**	**29 J**	**0.47 J**	<0.15 U	<0.43	**54 J**	**210 J**
DG-T3	1	3.5-4	DG-T3S-3.5-4	12/14/2018	**1.5**	**120**	**150**	**0.26**	<0.032	**86**	**22**	**99**	**44**	**1.8**	**1.2 J**	**130**	**1.2 J**	<0.13	<0.37	**71**	**73**
DG-T4	1	0.5-1	DG-T4S-0.5-1	12/19/2018	**5.5**	**15**	**64**	**0.37**	**1.6**	**30**	**11**	**1,300**	**280**	**0.25**	**2.0**	**30**	**1.8 J**	**3.4**	<0.53	**76**	**370**
DG-T4	1	3.5-4	DG-T4S-3.5-4	12/19/2018	**2.6**	**16**	**120**	**0.68**	**0.18 J**	**56**	**54**	**46**	**280**	**0.09**	**1.4 J**	**45**	**1.5 J**	<0.20	<0.57	**60**	**170**
DG-T5	1	0.5-1	DG-T5S-0.5-1	1/8/2019	**0.68**	**20**	**41**	<0.071	**0.057**	**6.7**	**8.7**	**89**	**150**	**0.13**	<0.14	**3.8**	**0.77**	**0.45**	<0.32	**77**	**72**
DG-T5	1	3.5-4	DG-T5S-3.5-4	1/8/2019	**1.2**	**24**	**46**	**0.22**	**0.12**	**29**	**4.6**	**15**	**14**	**0.037**	**0.15**	**21**	**1.0**	<0.11	<0.32	**21**	**40**
DG-T6	1	0.5-1	DG-T6S-0.5-1	12/19/2018	**0.85 J**	**5.4**	**71**	<0.10	**0.15 J**	**22**	**9.1**	**110**	**77**	**0.1**	**0.48 J**	**22**	<0.47	<0.16	<0.45	**72**	**82**
DG-T6	1	3.5-4	DG-T6S-3.5-4	12/19/2018	**32**	**33**	**1,600**	**0.61 J**	**5.7**	**46**	**7.7**	**900**	**4,200**	**0.38**	**1.6 J**	**42**	<1.2	**8.4**	<1.2	**36**	**3,700**
DG-T7	1	3.5-4	DG-T7S-3.5-4	12/19/2018	**2.7**	**6.5**	**220**	**0.17 J**	**0.57**	**21**	**6.3**	**86 J**	**420 J**	**0.14 J**	**0.72 J**	**21**	<0.45	**0.78 J**	<0.44	**34**	**390**
DG-T7 (D)	1	3.5-4	DG-T7 (D)S-3.5-4	12/19/2018	**2.7**	**7**	**250**	<0.12 UJ	**0.49**	**21**	**6.1**	**220 J**	**750 J**	**0.076 J**	**0.68 J**	**21**	<0.55	**0.29 J**	<0.53	**34**	**440**
DG-T8	1	0.5-1	DG-T8S-0.5-1	1/15/2019	**0.47 J**	**2.7**	**98**	**0.79**	**5.3**	**21**	**10**	**500**	**78**	**0.13**	**1.0 J**	**26**	**1.1 J**	<0.11	**0.39 J**	**85**	**1,400**
DG-T8	1	3.5-4	DG-T8S-3.5-4	1/15/2019	**13**	**28**	**200**	**0.82**	**0.53 J**	**31**	**17**	**470**	**990**	**0.23**	**2.3**	**69**	**4.1 J**	**0.42 J**	**0.93 J**	**94**	**670**
DG-U1	1	0.5-1	DG-U1S-0.5-1	12/13/2018	**2.0**	**97**	**98**	**0.12 J**	**0.041 J**	**76**	**12**	**48**	**28**	**1.2**	<0.21	**83**	<0.49	**0.22 J**	<0.47	**41**	**71**
DG-U1	1	3.5-4	DG-U1S-3.5-4	12/13/2018	**2.5**	**34**	**130**	**0.51**	**0.037 J**	**110**	**21**	**38**	**6.4**	**0.46**	<0.18	**130**	<0.43	<0.15	<0.42	**66**	**71**
DG-U2	1	0.5-1	DG-U2S-0.5-1	12/13/2018	**28**	**17**	**110**	<0.13	**1.2**	**35**	**11**	**190**	**2,200**	**0.56**	**3.7**	**51**	**1.3 J**	<0.20	<0.57	**58**	**240**
DG-U2	1	3.5-4	DG-U2S-3.5-4	2/5/2019	**3.2**	**4.4**	**120**	**0.45**	<0.031	**120**	**18**	**28**	**4.8**	**10**	<0.16	**180**	**1.5 J**	<0.13	**0.62**	**60**	**49**
DG-U3	1	0.5-1	DG-U3S-0.5-1	12/18/2018	**3.0**	**200**	**99**	**0.17 J**	**2**	**25**	**11**	**200**	**1,600**	**0.3**	**1.4 J**	**31**	**1.2 J**	**0.92 U**	<0.53	**60**	**420**
DG-U3	1	3.5-4	DG-U3S-3.5-4	12/18/2018	**1.2 J**	**65**	**36 J**	**0.92 J**	**0.3**	**32 J**	**15**	**49**	**12 J**	**0.11 J**	**0.61 J**	**40 J**	**0.60 J**	<0.12	<0.33	**35**	**90**
DG-U3 (D)	1	3.5-4	DG-U3 (D)S-3.5-4	12/18/2018	**3.3 J**	**84**	**64 J**	**0.46 J**	**0.35 J**	**79 J**	**19**	**34**	**25 J**	**0.47 J**	**0.59 J**	**100 J**	<0.50 UJ	<0.17	<0.48	**53**	**69**
DG-U4	1	0.5-1	DG-U4S-0.5-1	12/18/2018	**5.2**	**37 J**	**180**	<0.098	**2.7**	**37**	**11**	**170**	**320**	**0.4**	**4.0**	**130 J**	**3.0 U**	**0.45 J**	<0.44	**75**	**510**
DG-U4	1	3.5-4	DG-U4S-3.5-4	12/18/2018	<0.33 UJ	**35 J**	**36**	**0.14 J**	**0.066 J**	**12 J**	**9.2 J**	**47 J**	**5**	**0.034**	**0.39 J**	**11**	**3.9 U**	<0.20	<0.57	**54**	**38 J-**
DG-U4 (D)	1	0.5-1	DG-U4 (D)S-0.5-1	12/18/2018	**4.0**	**120 J**	**160**	<0.13	**2.8**	**43**	**12**	**280**	**470**	**0.51**	**3.1**	**42 J**	**3.9 U**	**0.37 J**	<0.56	**83**	**730**
DG-U5	1	0.5-1	DG-U5S-0.5-1	12/18/2018	**3.5**	**40**	**120**	<0.092	**2.5**	**39**	**12**	**230**	**430**	**0.16**	**4.1**	**25**	**2.8 U**	**0.37 J**	<0.41	**91**	**500**
DG-U5	1	3.5-4	DG-U5S-3.5-4	12/18/2018	**3.0**	**87**	**110**	**0.16 J**	**0.36 J**	**31**	**5.1**	**34**	**210**	**0.055**	**0.21 J**	**23**	<0.46	**0.17 J**	<0.45	**27**	**330**
DG-U6	1	0.5-1	DG-U6S-0.5-1	12/19/2018	**1.1 J**	**2.6 J**	**53**	<0.094	**0.22 J**	**17**	**8.7**	**140**	**400**	**0.049**	**0.31 J**	**8.3**	**0.55 J**	**0.19 J**	<0.42	**66**	**93**
DG-U6	1	3.5-4	DG-U6S-3.5-4	12/19/2018	**40**	**60**	**2,000**	**0.30 J**	**5.1**	**49**	**18**	**780**	**6,700**	**0.66**	**3.0 J**	**87**	<2.2	**3.4 J**	**2.2 J**	**23**	**2,200**
DG-U7	1	0.5-1	DG-U7S-0.5-1	1/8/2019	**0.75**	**5.1**	**72**	<0.096	**0.94**	**19**	**8.8**	**110**	**69**	**0.073**	<0.19	**27**	**1.0**	<0.15	**0.66**	**69**	**490**

Table 2: Metals Concentrations in Soil
Brisbane Baylands OU-2
Brisbane, California

Sample Location	Investigation Zone	Depth Range (ft bgs)	Sample Name	Collection Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
Direct Exposure Human Health Risk Level Residential Soil Exposure ESL [1]					1.1E+01	6.7E-02	1.5E+04	1.6E+01	7.8E+01	1.2E+05	2.3E+01	3.1E+03	8.0E+01	1.3E+01	3.9E+02	8.2E+02	3.9E+02	3.9E+02	7.8E-01	3.9E+02	2.3E+04
Regional Background [2]					5.5E+00	1.9E+01	3.2E+02	1.0E+00	2.7E+00	1.0E+02	2.5E+01	6.9E+01	1.6E+01	4.0E-01	7.4E+00	1.2E+02	5.6E+00	1.8E+00	7.6E+00	7.4E+01	1.1E+02
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
DG-U7	1	3.5-4	DG-U7S-3.5-4	1/8/2019	**12**	**18**	**930**	<0.20	**2.8**	**33**	**8.9**	**810**	**2,600**	**0.42**	**0.55**	**40**	**4.8**	**6.7**	**1.0**	**40**	**1,800**
DG-U8	1	0.5-1	DG-U8S-0.5-1	1/15/2019	**1.4**	**2.3 U**	**53**	**0.79**	**0.29**	**12**	**12**	**120**	**58**	**0.12**	**0.76 J**	**7.9**	**1.5 J**	<0.12	**0.86 J**	**99**	**110**
DG-U8	1	3.5-4	DG-U8S-3.5-4	1/15/2019	**20**	**27**	**1,500**	**0.76**	**5.3**	**78**	**7.7**	**1,600**	**5,300**	**0.49**	**2.5**	**86**	**4.7 J**	**8.6**	<0.80	**32**	**4,200**
DG-U9	1	0.5-1	DG-U9S-0.5-1	12/20/2018	**5.4 J**	**9.3 J+**	**110 J+**	**0.26 J**	**1.9**	**57 J**	**11 J**	**350 J**	**510 J**	**0.24**	**2.3**	**27 J**	<0.53	<0.18	<0.51	**72 J**	**740 J**
DG-U9	1	3.5-4	DG-U9S-3.5-4	12/20/2018	**13**	**8.9**	**440**	**0.38 J**	**2.5**	**23**	**10**	**460**	**1,400**	**0.38**	**1.7 J**	**21 J**	<0.95	**0.34 J**	<0.92	**67**	**720**
DG-U9 (D)	1	3.5-4	DG-U9 (D)S-3.5-4	12/20/2018	**10**	**10**	**430**	<0.10 UJ	**1.7**	**22**	**11**	**450**	**1,300**	**0.27**	**0.30 J**	**43 J**	**0.72 J**	**0.75 J**	<0.45	**69**	**930**
DG-V1	1	0.5-1	DG-V1S-0.5-1	12/17/2018	**2.1**	**200**	**67**	<0.084	**0.39**	**74**	**15**	**61**	**51**	**1.9**	**0.17 J**	**80**	<0.39	<0.13	<0.37	**67**	**99**
DG-V1	1	3.5-4	DG-V1S-3.5-4	12/17/2018	**1.7**	**18**	**75**	**0.27 J**	<0.038	**120**	**18**	**26**	**3.5**	**0.31**	<0.20	**140**	<0.46	<0.16	<0.45	**52**	**51**
DG-V2	1	3.5-4	DG-V2S-3.5-4	12/13/2018	**1.9 J-**	**58 J**	**41 J+**	**0.67**	**0.16 J**	**32 J+**	**19**	**39 J+**	**17**	**0.21 J-**	**0.77 J**	**40 J+**	**1.2 J**	<0.19	<0.56	**39 J+**	**87 J**
DG-V2	1	3.5-4	DG-V2S-3.5-4	2/5/2019	**3.8**	**16**	**70**	**0.29 J**	**0.12 J**	**190**	**16**	**27**	**8.2**	**5.1**	<0.20	**170**	**0.94 J**	<0.16	**24 R**	**63**	**120**
DG-V2 (D)	1	0.5-1	DG-V2 (D)S-0.5-1	12/13/2018	**3**	**16**	**70**	**0.15 J**	**0.61**	**23**	**11**	**120**	**180**	**0.17**	**1.5 J**	**33**	**1.3 J**	<0.19	<0.55	**72**	**150**
DG-V3	1	0.5-1	DG-V3S-0.5-1	12/14/2018	**3.8**	**330**	**79**	**0.35 U**	**0.7**	**29**	**13**	**210**	**280**	**0.11**	**0.97 J**	**25**	**1.9 J**	<0.18	<0.51	**91**	**240**
DG-V3	1	3.5-4	DG-V3S-3.5-4	12/14/2018	**2.3**	**140**	**49**	**0.88**	**0.14 J**	**34**	**22**	**47**	**18**	**0.091**	**1.1 J**	**41**	**1.3 J**	<0.13	<0.36	**42**	**92**
DG-V4	1	0.5-1	DG-V4S-0.5-1	12/18/2018	**1.1 J**	**69**	**53**	<0.099	<0.038	**14**	**8.6**	**87**	**40**	**0.14**	**0.23 J**	**23**	**3.1 U**	<0.15	<0.44	**55**	**54**
DG-V4	1	3.5-4	DG-V4S-3.5-4	12/18/2018	**1.6 J**	**130**	**150**	**0.24 J**	<0.047	**43**	**10**	**28**	**22**	**0.085**	**0.26 J**	**96**	<0.57	<0.19	<0.55	**31**	**64**
DG-V5	1	0.5-1	DG-V5S-0.5-1	1/8/2019	**3.4**	**98**	**100**	**0.15**	**1.2**	**22**	**13**	**140**	**580**	**0.16**	**0.91**	**35**	**2.5**	**1.3**	**0.4**	**62**	**320**
DG-V5	1	3.5-4	DG-V5S-3.5-4	1/8/2019	**4.2**	**120**	**88**	**0.18**	**0.058**	**56**	**7.1**	**28**	**86**	**0.029**	<0.14	**37**	**1.1**	**0.12**	<0.32	**42**	**110**
DG-V5	1	7.5-8	DG-V5S-7.5-8	1/8/2019	**2.1**	**12**	**97**	**0.6**	<0.047	**42**	**10**	**41**	**5.9**	**0.023**	<0.24	**36**	**2.0**	<0.19	<0.55	**53**	**56**
DG-V6	1	0.5-1	DG-V6S-0.5-1	12/19/2018	**3.5**	**8.3**	**110**	<0.098	**1.1**	**28**	**8.9**	**140**	**350**	**0.27**	**1.1 J**	**43**	**0.82 J**	**0.21 J**	<0.44	**37**	**250**
DG-V6	1	3.5-4	DG-V6S-3.5-4	12/19/2018	**2.5**	**9.3**	**200**	**0.74**	**0.47 J**	**35**	**10**	**140**	**270**	**1.6**	<0.19	**37**	**0.76 J**	**0.92 J**	<0.43	**37**	**460**
DG-V6 (D)	1	3.5-4	DG-V6 (D)S-3.5-4	12/19/2018	**2.2**	**9.5**	**210**	**0.79**	**0.81 J**	**34**	**13**	**130**	**320**	**1.1**	<0.26	**38**	**0.97 J**	**0.34 J**	<0.58	**38**	**430**
DG-V7	1	0.5-1	DG-V7S-0.5-1	12/19/2018	**9.4**	**11**	**77**	**0.42**	<0.090	**42**	**13**	**130**	**810**	**0.12**	**3.3**	**37**	<1.1	**0.50 J**	<1.1	**52**	**220**
DG-V7	1	3.5-4	DG-V7S-3.5-4	12/19/2018	**5.3**	**6.6**	**240**	**0.087 J**	**0.67**	**23**	**6**	**220**	**680**	**0.075**	**1.1 J**	**26**	<0.38	**0.55 J**	<0.36	**31**	**480**
DG-V8	1	0.5-1	DG-V8S-0.5-1	1/15/2019	**46**	**31**	**1,600**	**0.97**	**2.9**	**42**	**14**	**510**	**5,500**	**0.77**	**4.1**	**42**	**6.0**	**12**	**2.1 J**	**29**	**1,600**
DG-V8	1	3.5-4	DG-V8S-3.5-4	1/15/2019	**4.7**	**12**	**310**	**0.99**	**1.2**	**59**	**9.9**	**120**	**770**	**0.31**	**1.5 J**	**40**	**2.4 J**	**0.80 J**	<0.48	**53**	**640**
DG-V9	1	0.5-1	DG-V9S-0.5-1	1/10/2019	<0.21	<0.21	**43**	<0.082	**0.091 J**	**7.2**	**9.4**	**91**	**14**	**0.075**	**0.28 J**	**3.3**	**0.54 J**	<0.13	**1.3**	**70**	**41**
DG-V9	1	3.5-4	DG-V9S-3.5-4	1/10/2019	**6.7 J**	**5.5 J**	**420 J**	**0.10 J**	**1.7 J**	**12 J**	**3.2 J**	**430 J**	**2,400 J**	**0.53**	**0.20 J**	**54**	**1.7 J**	**1.8 J**	**0.63 J**	**8.6 J+**	**1,600 J**
DG-V9	1	7.5-8	DG-V9S-7.5-8	1/10/2019	**0.79 J**	**7.5**	**120**	**0.52**	<0.025	**41**	**13**	**34**	**14**	**0.063**	**0.14 J**	**29**	**1.3 J**	<0.10	**0.34 J**	**48**	**53**
DG-W1	1	0.5-1	DG-W1S-0.5-1	12/13/2018	**3.4**	**330**	**140**	**0.15 J**	**0.45**	**85**	**16**	**94**	**110**	**3.1**	<0.23	**120**	<0.55	**0.29 J**	<0.53	**78**	**120**
DG-W1	1	3.5-4	DG-W1S-3.5-4	12/13/2018	**2.7**	**15**	**120**	**0.20 J**	<0.043	**95**	**14**	**27**	**3.4**	**0.51**	<0.22	**110**	<0.52	<0.17	<0.50	**62**	**49**
DG-W1	1	9-10	DG-W1S-9-10	12/13/2018	**1.5**	**49**	**46**	**0.78**	<0.033	**37**	**16**	**42**	**9.4**	**0.057**	**0.17 J**	**40**	<0.40	<0.13	<0.39	**45**	**92**
DG-W2	1	0.5-1	DG-W2S-0.5-1	12/14/2018	**6.6**	**33**	**96**	<0.12	**2.7**	**48**	**12**	**310**	**360**	**0.49**	**4.6**	**57**	**1.2 J**	**0.94 U**	<0.55	**38**	**400**
DG-W2	1	3.5-4	DG-W2S-3.5-4	12/14/2018	**2.3**	**29**	**120**	**0.34**	<0.038	**97**	**20**	**48**	**17**	**0.49**	<0.20	**140**	<0.46	**0.76 U**	<0.44	**51**	**65**
DG-W2	1	8.5-9	DG-W2S-8.5-9	12/14/2018	**3.1**	**41**	**51**	**0.71**	**0.12 J**	**31**	**19**	**44**	**8.9**	**0.049**	**0.47 J**	**41**	**0.55 J**	**0.87 U**	<0.50	**35**	**74**
DG-W3	1	0.5-1	DG-W3S-0.5-1	12/18/2018	**3.7**	**140**	**34**	<0.090	**0.46**	**12**	**12**	**99**	**120**	**0.078**	**0.50 J**	**12**	**0.77 J**	**0.69 U**	<0.40	**66**	**92**
DG-W3	1	3.5-4	DG-W3S-3.5-4	12/18/2018	**1.6 J**	**140**	**86**	**0.99**	**0.44 J**	**30**	**32**	**55**	**21**	**0.12**	**0.89 J**	**48**	**0.73 J**	<0.18	**0.79 J**	**37**	**97**
DG-W4	1	0.5-1	DG-W4S-0.5-1	12/18/2018	**0.30 J**	**34**	**32**	<0.071	<0.027	**7.1**	**7.1**	**65**	**3.9**	**0.059**	<0.14	**6.7**	<0.33	<0.11	<0.32	**49**	**28**
DG-W4	1	3.5-4	DG-W4S-3.5-4	12/18/2018	**1.3 J**	**37**	**23**	**0.13 J**	**0.21 J**	**33**	**3.7**	**33**	**14**	**0.16**	<0.22	**22**	**3.4 U**	<0.17	<0.50	**26**	**77**
DG-W5	1	0.5-1	DG-W5S-0.5-1	12/18/2018	**1.0 J**	**16**	**45**	<0.075	**0.56**	**15**	**14**	**160**	**140**	**0.34 J**	**0.61 J**	**11**	**2.3 U**	**0.28 J**	<0.34	**110**	**280**
DG-W5	1	3.5-4	DG-W5S-3.5-4	12/18/2018	**3.5 J**	**400 J**	**240 J**	**0.26 J**	**2.4 J**	**56 J**	**7.7 J**	**45 J+**	**7,200 J**	**0.66**	<0.23	**24 J**	<0.55	**0.46 J**	<0.53	**36 J**	**780 J**
DG-W5	1	8.5-9	DG-W5S-8.5-9	12/18/2018	**1.2 J**	**18**	**68**	**0.54**	<0.047	**39**	**18**	**31**	**9.9**	**0.054**	**0.43 J**	**39**	<0.57	<0.19	<0.55	**44**	**69**
DG-W5 (D)	1	0.5-1	DG-W5 (D)S-0.5-1	12/18/2018	**1.4 J**	**20**	**66**	<0.093	**0.69**	**16**	**14**	**190**	**140**	**0.091 J**	**0.83 J**	**15**	**2.9 U**	**0.40 J**	<0.41	**110**	**200**
DG-W6	1	0.5-1	DG-W6S-0.5-1	12/20/2018	**2.0**	**9.2**	**59**	<0.066	**0.53**	**16**	**4.8**	**74**	**83**	**0.21**	**0.47 J**	**13**	**0.66 J**	<0.10	<0.30	**34**	**110**
DG-W6	1	3.5-4	DG-W6S-3.5-4	12/20/2018	**32**	**18**	**910**	**0.43 J**	**1.5**	**27**	**6.7**	**770**	**4,000**	**1.4**	**0.52 J**	**24**	**1.4 J**	**4.1**	<1.1	**19**	**1,300**
DG-W7	1	0.5-1	DG-W7S-0.5-1	1/29/2019	**0.48 J**	**2.7**	**62**	**0.086 J**	**0.44**	**14**	**6.9**	**68**	**56**	**0.096**	**0.47 J**	**22**	**0.37 J**	<0.12	<0.34 R	**42**	**98**
DG-W7	1	3.5-4	DG-W7S-3.5-4	1/29/2019	**65**	**30**	**1,300**	<0.21	**3.5**	**70**	**15**	**1,100**	**4,900**	**0.52**	**1.5 J**	**72**	**2.1 J**	**7**	**0.96 R**	**35**	**2,200**
DG-W8	1	0.5-1	DG-W8S-0.5-1	1/29/2019	**17 J**	**7.6**	**690**	**0.16 J**	**0.99**	**22 J**	**5.9 J**	**150 J**	**740 J**	**0.24**	**0.28 J**	**23 J**	<0.58	**1.6**	<0.56 R	**28**	**700 J**
DG-W8	1	3.5-4	DG-W8S-3.5-4	1/29/2019	**19**	**11**	**1,200**	**0.67 J**	**1.5 J**	**28**	**4.7**	**500**	**2,800 J**	**0.39**	<0.50 UJ	**42**	<1.2	**6.3**	<1.1 R	**26**	**1,500**
DG-W8 (D)	1	3.5-4	DG-W8 (D)S-3.5-4	1/29/2019	**26**	**14**	**1,500**	**1.0 J**	**2.6 J**	**36**	**5.4**	**620**	**6,600 J**	**0.46**	**0.84 J**	**38**	<0.44	**6.6**	<0.43 R	**31**	**2,200**
DG-W9	1	0.5-1	DG-W9S-0.5-1	12/20/2018	**0.89 J**	**2.1 J**	**55**	**0.19 J**	**0.27**	**26**	**7.0**	**92**	**77**	**0.075**	**0.42 J**	**15**	<0.32	<0.11	<0.31	**66**	**96**
DG-W9	1	3.5-4	DG-W9S-3.5-4	12/20/2018	**27**	**38**	**960**	**0.51 J**	**2.8**	**33**	**11**	**950**	**7,500**	**0.93**	**1.5 J**	**40**	<1.6	**3.2**	<1.5	**25**	**2,700**
DG-W9	1	8.5-9	DG-W9S-8.5-9	12/20/2018	**22**	**29**	**600**	**0.89**	**3.2**	**46**	**9.2**	**530**	**2,200**	**0.1**	**5.4**	**48**	<1.1	**4.4**	<1.1	**29**	**1,300**
DG-X1	1	0.5-1	DG-X1S-0.5-1	12/17/2018	**3.3 J**	**110**	**140 J**	**0.25 J**	<0.047	**170 J**	**26**	**44**	**25**	**11 J**	<0.24	**240 J**	<0.57 UJ	<0.19	<0.55	**78**	**85**

Table 2: Metals Concentrations in Soil
Brisbane Baylands OU-2
Brisbane, California

Sample Location	Investigation Zone	Depth Range (ft bgs)	Sample Name	Collection Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
Direct Exposure Human Health Risk Level Residential Soil Exposure ESL [1]					1.1E+01	6.7E-02	1.5E+04	1.6E+01	7.8E+01	1.2E+05	2.3E+01	3.1E+03	8.0E+01	1.3E+01	3.9E+02	8.2E+02	3.9E+02	3.9E+02	7.8E-01	3.9E+02	2.3E+04
Regional Background [2]					5.5E+00	1.9E+01	3.2E+02	1.0E+00	2.7E+00	1.0E+02	2.5E+01	6.9E+01	1.6E+01	4.0E-01	7.4E+00	1.2E+02	5.6E+00	1.8E+00	7.6E+00	7.4E+01	1.1E+02
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
DG-X1	1	3.5-4	DG-X1S-3.5-4	12/17/2018	**2.1 J**	**16 J**	**98 J**	**0.29 J**	<0.048	**110 J**	**17 J**	**29 J+**	**5.1 J**	**0.16 J+**	<0.25	**120 J**	<0.58	<0.20	<0.56	**52 J+**	**50 J**
DG-X1 (D)	1	0.5-1	DG-X1 (D)S-0.5-1	12/17/2018	**1.7 UJ**	**67**	**70 J**	<0.11 UJ	<0.042	**67 J**	**17**	**59**	**20**	**3.1 J**	<0.22	**92 J**	**0.56 J**	<0.17	<0.50	**76**	**65**
DG-X2	1	0.5-1	DG-X2S-0.5-1	12/14/2018	**5**	**560**	**100**	<0.089	**0.31 J**	**27**	**9.4**	**160**	**220**	**3.1**	**0.20 J**	**31**	**0.42 J**	**1.0**	<0.40	**69**	**220**
DG-X2	1	3.5-4	DG-X2S-3.5-4	12/14/2018	**1.7**	**8.8**	**35**	**0.63**	**0.4**	**30**	**16**	**44**	**25**	**0.036**	**0.29 J**	**32**	**0.88 J**	**0.81 U**	<0.47	**39**	**110**
DG-X3	1	0.5-1	DG-X3S-0.5-1	12/14/2018	**9.8**	**180**	**75**	**0.36 U**	**1.5**	**30**	**9.8**	**180**	**420**	**0.28**	**2.8**	**37**	**1.3 J**	<0.18	<0.53	**50**	**1,200**
DG-X3	1	3.5-4	DG-X3S-3.5-4	12/14/2018	**1.1 U**	**9.3**	**52**	**0.61**	**0.078 J**	**26**	**28**	**38**	**14**	**0.034**	**0.69 J**	**33**	**0.58 J**	<0.11	<0.31	**33**	**66**
DG-X4	1	0.5-1	DG-X4S-0.5-1	12/18/2018	**1.4 J**	**54**	**36**	<0.10	<0.040	**5.9**	**7.8**	**74**	**40**	**0.17**	<0.20	**4.6**	**3.2 U**	<0.16	<0.46	**58**	**54**
DG-X4	1	3.5-4	DG-X4S-3.5-4	12/18/2018	**0.61 J**	**29**	**37**	**0.16 J**	<0.041	**50**	**5.2**	**7.3**	**1.5 J**	**0.015 U**	<0.21	**38**	<0.50	<0.17	<0.48	**35**	**17**
DG-X5	1	0.5-1	DG-X5S-0.5-1	1/8/2019	**2**	**120**	**60**	<0.073	**0.44**	**15**	**15**	**140**	**130**	**0.17**	**3.8**	**16**	**2.8**	**0.5**	<0.32	**97**	**140**
DG-X5	1	3.5-4	DG-X5S-3.5-4	1/8/2019	**1.8**	**36**	**56**	**0.14**	<0.033	**59**	**7.0**	**8.5**	**5.7**	**0.034**	<0.17	**40**	**1.1**	<0.13	<0.38	**43**	**31**
DG-X6	1	0.5-1	DG-X6S-0.5-1	12/20/2018	**2.9**	**6.3**	**81**	<0.11	**0.96**	**26**	**7.2**	**150**	**130**	**0.19**	**0.86 J**	**32**	<0.50	<0.17	<0.49	**38**	**230**
DG-X6	1	3.5-4	DG-X6S-3.5-4	12/20/2018	**13**	**19**	**890**	**0.37**	**9.0**	**69**	**9.4**	**360**	**1,800**	**0.68**	**0.67 J**	**160**	**0.98 J**	**3.6**	<0.76	**19**	**2,400**
DG-X7	1	0.5-1	DG-X7S-0.5-1	12/19/2018	**6.9 J**	**5.3**	**75**	<0.099 UJ	**0.96**	**24**	**7.6**	**1,200 J**	**230**	**0.25**	**2.1**	**31**	<0.46	<0.15	<0.44	**44**	**210**
DG-X7	1	3.5-4	DG-X7S-3.5-4	12/19/2018	**1.7 J**	**3.5 J**	**100**	<0.12	**0.27 J**	**15**	**4.6**	**82**	**210**	**0.029**	**0.39 J**	**13**	<0.55	**0.43 J**	<0.53	**27**	**130**
DG-X7 (D)	1	0.5-1	DG-X7 (D)S-0.5-1	12/19/2018	**2.5 J**	**8.2**	**98**	**0.22 J**	**1.2**	**37**	**10**	**150 J**	**220**	**0.16**	**2.3**	**27**	<0.48	<0.16	<0.47	**67**	**280**
DG-X8	1	0.5-1	DG-X8S-0.5-1	1/29/2019	**1.8**	**4.7**	**150**	<0.11	**0.45**	**17**	**5.1**	**48**	**240**	**0.08**	<0.21	**20**	<0.49	**1.3**	<0.48 R	**26**	**190**
DG-X8	1	3.5-4	DG-X8S-3.5-4	1/29/2019	**28**	**34**	**970**	<0.25	**5.9**	**38**	**12**	**790**	**9,600**	**0.19**	<0.49	**42**	**4.0 J**	**4.8**	<1.1 R	**32**	**4,000**
DG-X9	1	0.5-1	DG-X9S-0.5-1	1/10/2019	<0.43	<0.44	**65**	<0.17	<0.064	**41**	**29**	**250**	**46**	**0.062**	<0.33	**5.2**	**1.9 J**	<0.26	**3.6**	**260**	**120**
DG-X9	1	3.5-4	DG-X9S-3.5-4	1/10/2019	**16**	**8.3**	**520**	**0.11 J**	**1.2**	**14**	**3.3**	**310**	**1,300**	**2.1**	**0.76 J**	**33**	**2.7 J**	**1.7**	<0.41	**12**	**1,400**
DG-Y1	1	0.5-1	DG-Y1S-0.5-1	12/13/2018	<0.21 R	**1.9 J**	**39 J**	<0.084	**0.092 J**	**9.8 J**	**6.2 J**	**96 J**	**17 J**	**0.1**	<0.17	**10 J**	<0.39	**0.13 J**	<0.37	**56 J**	**44 J**
DG-Y1	1	3.5-4	DG-Y1S-3.5-4	12/13/2018	**2.8**	**32**	**110**	**0.32**	**0.092 J**	**180**	**22**	**38**	**6.8**	**2.3**	**0.16 J**	**210**	<0.30	**0.27 J**	<0.29	**66**	**56**
DG-Y2	1	0.5-1	DG-Y2S-0.5-1	12/14/2018	**2.2**	**92**	**69**	<0.12	**0.32 J**	**24**	**7.5**	**110**	**110**	**0.46**	**0.48 J**	**24**	<0.54	**0.89 U**	<0.52	**36**	**110**
DG-Y2	1	3.5-4	DG-Y2S-3.5-4	12/14/2018	**2.4**	**130**	**72**	**0.35**	**0.036 J**	**65**	**17**	**43**	**25**	**0.31**	<0.15	**86**	<0.35	**0.58 U**	<0.34	**52**	**73**
DG-Y3	1	0.5-1	DG-Y3S-0.5-1	12/18/2018	**12**	**110**	**200**	**0.12 J**	**12**	**82**	**17**	**440**	**940**	**1.2**	**9.4**	**140**	**3.1 J**	**1.1**	<0.55	**66**	**1,500**
DG-Y3	1	3.5-4	DG-Y3S-3.5-4	12/18/2018	**1.5 J**	**34**	**61**	**0.6**	**0.30 J**	**33**	**19**	**32**	**12**	**0.082**	**0.44 J**	**37**	**0.68 J**	<0.18	<0.51	**39**	**73**
DG-Y4	1	0.5-1	DG-Y4S-0.5-1	12/18/2018	**4.1**	**94**	**200**	<0.11	**1.0**	**49**	**10**	**1,300**	**360**	**0.26**	**1.3 J**	**63**	**1.4 J**	**0.41 J**	<0.48	**41**	**370**
DG-Y4	1	3.5-4	DG-Y4S-3.5-4	12/18/2018	**0.80 J**	**36 J**	**90 J**	**0.28 J**	**0.077 J**	**47**	**9.5**	**24**	**20 J**	**0.029**	**0.45 J**	**60**	**0.72 J**	**0.21 J**	<0.34	**26 J**	**42**
DG-Y4 (D)	1	3.5-4	DG-Y4 (D)S-3.5-4	12/18/2018	**0.80 J**	**130 J**	**190 J**	**0.78 J**	<0.046 UJ	**74**	**13**	**28**	**58 J**	**0.047**	**0.70 J**	**67**	**0.71 J**	<0.19 UJ	<0.54	**56 J**	**61**
DG-Y5	1	0.5-1	DG-Y5S-0.5-1	12/18/2018	**2.9**	**9.7**	**82**	<0.071	**1.9**	**76**	**9.6**	**160**	**270**	**0.41**	**2.6**	**30**	<0.33	**0.24 J**	<0.32	**64**	**340**
DG-Y5	1	3.5-4	DG-Y5S-3.5-4	12/18/2018	**0.69 J**	**2.7**	**26**	<0.084	**0.051 J**	**19**	**3.0**	**5.0**	**7.9**	**0.0086 J**	<0.17	**14**	**2.6 U**	<0.13	<0.38	**15**	**16**
DG-Y6	1	0.5-1	DG-Y6S-0.5-1	12/20/2018	**1.6 J**	**8.3**	**150**	<0.11	**0.58**	**18**	**11**	**81**	**500**	**0.2**	**1.8**	**38**	**0.69 J**	**0.64 J**	<0.50	**44**	**150**
DG-Y6	1	3.5-4	DG-Y6S-3.5-4	12/20/2018	**19**	**31**	**2,500**	**1.2**	**3.7**	**140**	**9.5**	**660**	**6,400**	**0.26**	**1.7**	**83**	**1.0 J**	**5.0**	<0.50	**32**	**2,500**
DG-Y7	1	0.5-1	DG-Y7S-0.5-1	1/9/2019	**1.8**	**3.9**	**71**	**0.14**	**0.28**	**18**	**5.3**	**56**	**110**	**0.042**	**0.42**	**23**	<0.39	**0.13**	<0.38	**20**	**170**
DG-Y7	1	3.5-4	DG-Y7S-3.5-4	1/9/2019	**26**	**13**	**1,700**	**0.82**	**2.6**	**38**	**4.6**	**3,400**	**6,700**	**0.43**	**2.1**	**39**	**1.7**	**9.9**	<0.52	**29**	**2,400**
DG-Y8	1	0.5-1	DG-Y8S-0.5-1	1/29/2019	**95**	**22**	**2,300**	**0.52 J**	**3.9**	**47**	**7.2**	**1,100**	**7,600**	**0.61**	**0.64 J**	**45**	<1.3	**6.9**	<1.3 R	**27**	**2,900**
DG-Y8	1	3.5-4	DG-Y8S-3.5-4	1/29/2019	**79**	**68**	**1,100**	<0.20	**5.2**	**44**	**12**	**15,000**	**5,000**	**0.7**	**2.8 J**	**82**	**2.1 J**	**9.1**	**1.0 R**	**15**	**2,800**
DG-Y9	1	0.5-1	DG-Y9S-0.5-1	12/20/2018	<0.27	**5.0**	**39**	**0.34**	**0.21 J**	**11**	**12**	**150**	**12**	**0.1**	**0.64 J**	**4.1**	**0.96 J**	<0.17	<0.48	**120**	**58**
DG-Y9	1	3.5-4	DG-Y9S-3.5-4	12/20/2018	**100**	**47**	**1,100**	<0.54	**2.1**	**51**	**16**	**1,100**	**4,900**	**0.74**	**1.2 J**	**92**	<2.5	**18**	<2.4	**56**	**2,100**
DG-Z2	1	0.5-1	DG-Z2S-0.5-1	12/14/2018	**2.1**	**74**	**95**	<0.12	**0.47**	**27**	**10**	**120**	**190**	**0.28**	**0.79 J**	**27**	**0.68 J**	**0.90 U**	<0.52	**67**	**180**
DG-Z2	1	3.5-4	DG-Z2S-3.5-4	12/14/2018	**2.9**	**99**	**90**	**0.13 J**	<0.043	**92**	**17**	**29**	**7.1**	**7.6**	<0.22	**170**	<0.52	**0.86 U**	<0.50	**64**	**46**
DG-Z3	1	0.5-1	DG-Z3S-0.5-1	12/14/2018	**5**	**290**	**100**	<0.098	**0.31 J**	**22**	**11**	**210**	**370**	**0.28**	**0.83 J**	**29**	**1.6 J**	<0.15	<0.44	**76**	**130**
DG-Z3	1	3.5-4	DG-Z3S-3.5-4	12/14/2018	**1.4**	**43**	**120**	<0.068	**0.092 J**	**120**	**20**	**39**	**20**	**3**	**0.70 J**	**160**	**0.80 J**	<0.11	<0.30	**75**	**79**
DG-Z4	1	0.5-1	DG-Z4S-0.5-1	12/18/2018	**34**	**840**	**100**	**0.12 J**	**1.8**	**18**	**10**	**200**	**2,100**	**1.1**	**0.86 J**	**16**	**1.3 J**	**0.62 J**	<0.37	**64**	**260**
DG-Z4	1	3.5-4	DG-Z4S-3.5-4	12/18/2018	**0.87 J**	**72**	**80**	**0.4**	**0.081 J**	**44**	**9.0**	**21**	**13**	**0.088**	**0.42 J**	**75**	**0.44 J**	<0.15	<0.42	**25**	**38**
DG-Z5	1	0.5-1	DG-Z5S-0.5-1	1/8/2019	**1.6**	**31**	**62**	<0.091	**0.36**	**14**	**11**	**140**	**160**	**0.12**	**0.33**	**9.7**	**1.5**	**0.25**	**0.57**	**88**	**160**
DG-Z5	1	3.5-4	DG-Z5S-3.5-4	1/8/2019	**1.3**	**11**	**36**	**0.13**	<0.034	**30**	**4.3**	**5.9**	**3.2**	**0.021**	**0.26**	**23**	<0.42	<0.14	<0.40	**22**	**19**
DG-Z6	1	0.5-1	DG-Z6S-0.5-1	12/20/2018	**2.3**	**9.5**	**82**	<0.092	**0.63**	**26**	**11**	**110**	**190**	**0.11**	**1.1 J**	**29**	<0.43	<0.14	**0.82 J**	**67**	**160**
DG-Z6	1	3.5-4	DG-Z6S-3.5-4	12/20/2018	**33**	**16**	**1,300**	**0.72**	**4.3**	**39**	**6.7**	**640**	**5,800**	**0.37**	**0.66 J**	**100**	<0.54	**4.2**	<0.52	**27**	**3,900**
DG-Z6 (D)	1	0.5-1	DG-Z6 (D)S-0.5-1	12/20/2018	**2.6**	**11**	**94**	<0.10	**0.73**	**25**	**12**	**120**	**130**	**0.095**	**0.69 J**	**32**	<0.47	<0.16	<0.46 UJ	**71**	**170**
DG-Z7	1	0.5-1	DG-Z7S-0.5-1	11/21/2018	**26**	**18**	**1,300**	**0.8**	**2.3**	**46**	**6.1**	**570**	**3,200**	**0.51**	**0.76 J**	**67**	<0.56	**4.7**	<0.54	**35**	**1,500**
DG-Z7	1	0.5-1	DG-Z7S-0.5-1	2/4/2019	**3.7 J-**	**7.3**	**63 J**	<0.12	**1.2**	**28 J**	**10 J**	**120 J-**	**220 J**	**0.21**	**1.6 J**	**39 J**	**2.6 J**	<0.19	**1.4**	**54 J**	**230 J**
DG-Z7	1	3.5-4	DG-Z7S-3.5-4	11/21/2018	**2.4**	**5.2**	**130**	<0.11	**0.63**	**23**	**9.5**	**84**	**130**	**0.12**	**0.83 J**	**34**	<0.50	**0.83 U**	<0.48	**47**	**170**
DG-Z7	1	3.5-4	DG-Z7S-3.5-4	2/4/2019	**22 J-**	**11**	**1,400**	**0.8**	**2.1**	**34**	**4.6**	**570**	**4,300**	**0.56 J+**	**0.44 J**	**69 J**	**0.96 J**	**5.5**	<0.55	**26**	**1,900**

Table 2: Metals Concentrations in Soil
Brisbane Baylands OU-2
Brisbane, California

Sample Location	Investigation Zone	Depth Range (ft bgs)	Sample Name	Collection Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
Direct Exposure Human Health Risk Level Residential Soil Exposure ESL [1]					1.1E+01	6.7E-02	1.5E+04	1.6E+01	7.8E+01	1.2E+05	2.3E+01	3.1E+03	8.0E+01	1.3E+01	3.9E+02	8.2E+02	3.9E+02	3.9E+02	7.8E-01	3.9E+02	2.3E+04
Regional Background [2]					5.5E+00	1.9E+01	3.2E+02	1.0E+00	2.7E+00	1.0E+02	2.5E+01	6.9E+01	1.6E+01	4.0E-01	7.4E+00	1.2E+02	5.6E+00	1.8E+00	7.6E+00	7.4E+01	1.1E+02
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
DG-Z8	1	0.5-1	DG-Z8S-0.5-1	1/29/2019	**19**	**13**	**550**	**0.25 J**	**1.4**	**32**	**7.5**	**370**	**1,900**	**0.6**	**0.33 J**	**38**	<0.40	**2.2**	<0.39 R	**30**	**1,200**
DG-Z8	1	3.5-4	DG-Z8S-3.5-4	1/29/2019	**44**	**29**	**1,400**	**0.36**	**8.8**	**42**	**8.7**	**760**	**4,900**	**1.5**	**0.64 J**	**44**	**1.5 J**	**5.7**	<1.2	**26**	**2,700**
DG-Z9	1	0.5-1	DG-Z9S-0.5-1	1/9/2019	**1.6**	**4.2**	**73**	**0.15**	**0.53**	**15**	**9.9**	**160**	**120**	**0.15**	**0.57**	**11**	**0.8**	<0.12	<0.35	**71**	**210**
DG-Z9	1	3.5-4	DG-Z9S-3.5-4	1/9/2019	**66**	**28**	**1,600**	**0.71**	**5.1**	**48**	**7**	**1,200**	**15,000**	**0.65**	**2.3**	**37**	**4.4**	**11**	<1.2	**30**	**2,900**
DG-Z9 (D)	1	0.5-1	DG-Z9 (D)S-0.5-1	1/9/2019	**1.6**	**4.6**	**50**	**0.094**	**0.28**	**12**	**9.5**	**130**	**76**	**0.1**	**0.57**	**10**	**0.76**	**0.32**	<0.41	**72**	**110**
DG-AH10	2	0.5-1	DG-AH10S-0.5-1	1/15/2019	**2.0**	**7.8**	**130**	<0.096	**1.9**	**25**	**9.8**	**240**	**270**	**0.28**	**1.8**	**24**	**0.46 J**	**0.57 J**	<0.43	**86**	**620**
DG-AH10	2	3.5-4	DG-AH10S-3.5-4	1/15/2019	**2.4**	**5.5**	**83**	<0.067	**0.69**	**19**	**8.8**	**140**	**540**	**0.064**	**1.2**	**9.0**	**0.79 J**	<0.10	<0.30	**76**	**490**
DG-AH8	2	0.5-1	DG-AH8S-0.5-1	1/30/2019	**0.56 J**	**1.6 J**	**49**	**0.4**	**0.15 J**	**11**	**13**	**150**	**27**	**0.082**	<0.15 U	**11**	<0.36 U	<0.12 U	<0.35 U	**100**	**86**
DG-AH8	2	3.5-4	DG-AH8S-3.5-4	1/30/2019	<0.17 U	**3.7**	**52**	**0.17 J**	**0.15 J**	**14**	**5.1**	**12**	**8.9**	**0.019**	**0.26 J**	**15**	**2.1 U**	<0.10 U	<0.30 U	**28**	**27**
DG-AH9	2	0.5-1	DG-AH9S-0.5-1	1/30/2019	**1.8 J**	**4.3**	**90**	**0.31 J**	**0.59**	**20**	**7.6**	**130**	**110**	**0.15**	**0.45 J**	**15**	<0.59	**0.25 J**	<0.57	**71**	**200**
DG-AH9	2	3.5-4	DG-AH9S-3.5-4	1/30/2019	<0.31	**4.0**	**85**	**0.17 J**	**0.15 J**	**15**	**5.2**	**32**	**210**	**0.041**	<0.24	**15**	**3.8 U**	<0.19	<0.55	**29**	**93**
DG-AI10	2	0.5-1	DG-AI10S-0.5-1	1/29/2019	**2.2**	**2.0 J**	**61**	<0.10	**0.72**	**55**	**9.6**	**110**	**650**	**0.11**	**0.92 J**	**9.9**	**0.72 J**	<0.16	<0.46	**85**	**250**
DG-AI10	2	3.5-4	DG-AI10S-3.5-4	1/29/2019	**1.1 J**	**3.5 J**	**45**	<0.12	**0.13 J**	**11**	**3.8**	**19**	**18**	**0.0084 J**	<0.24	**11**	**0.57 J**	<0.19	<0.55	**24**	**28**
DG-AI2	2	0.5-1	DG-AI2S-0.5-1	12/14/2018	**1.3 J**	**55**	**92**	<0.11	**0.74**	**41**	**11**	**110**	**150**	**2.0**	**1.3 J**	**43**	<0.51	<0.17	<0.50	**70**	**170**
DG-AI2	2	3.5-4	DG-AI2S-3.5-4	12/14/2018	**0.49 J**	**69**	**33**	<0.094	**0.30 J**	**9.6**	**12**	**110**	**370**	**0.064**	**0.35 J**	**5.4**	<0.43	**0.22 J**	<0.42	**81**	**83**
DG-AI3	2	0.5-1	DG-AI3S-0.5-1	12/19/2018	<0.27 R	**0.62 J**	**38 J**	<0.11 U	**0.11 J**	**5.9 J+**	**8.2**	**98 J+**	**6.6**	**0.066**	**0.35 J**	**2.7**	<0.49	<0.16	<0.47	**75 J+**	**35**
DG-AI3	2	3.5-4	DG-AI3S-3.5-4	12/19/2018	**0.76 J**	**59 J**	**220**	**0.41**	**0.12 J**	**33**	**18**	**48 J**	**29 J**	**0.21**	**0.82 J**	**47**	<0.41	<0.14	<0.39	**37 J**	**110**
DG-AI3 (D)	2	3.5-4	DG-AI3 (D)S-3.5-4	12/19/2018	**1.3 J**	**110 J**	**160**	**0.25**	**0.33 J**	**27**	**15**	**85 J**	**57 J**	**0.21**	**0.83 J**	**34**	<0.37	<0.12	<0.36	**62 J**	**170**
DG-AI4	2	0.5-1	DG-AI4S-0.5-1	12/18/2018	**1.2 J**	**6**	**62**	**0.14 J**	**0.56**	**12**	**8.9**	**150**	**50**	**0.07**	**0.85 J**	**15**	<0.54	<0.18	<0.52	**79**	**290**
DG-AI4	2	3.5-4	DG-AI4S-3.5-4	12/18/2018	**2.0**	**110**	**88**	<0.098	**0.44**	**25**	**9.7**	**130**	**190**	**0.11**	**0.97 J**	**19**	<0.45	<0.15	<0.44	**86**	**230**
DG-AI5	2	0.5-1	DG-AI5S-0.5-1	12/17/2018	**2.3**	**12**	**200**	**0.22 J**	**0.85**	**20**	**11**	**480**	**240**	**0.13**	**1.9**	**20**	<0.55	**0.58 J**	<0.53	**82**	**270**
DG-AI5	2	3.5-4	DG-AI5S-3.5-4	12/17/2018	**6.8**	**420**	**100**	<0.084	**1.7**	**21**	**13**	**250**	**240**	**0.13**	**0.81 J**	**29**	<0.39	**0.50 J**	<0.37	**73**	**320**
DG-AI6	2	0.5-1	DG-AI6S-0.5-1	12/20/2018	**0.86 J**	<0.26	**13**	**1.5**	**0.23 J**	**8.9**	**15**	**73**	**11**	**0.051**	**0.57 J**	**6.0**	<0.47	<0.16	<0.45	**120**	**58**
DG-AI6	2	3.5-4	DG-AI6S-3.5-4	12/20/2018	**6.8**	**13**	**340**	**1.0**	**3.1**	**31**	**12**	**140**	**630**	**0.42**	**3.0**	**28**	**0.92 J**	<0.17	<0.49	**84**	**430**
DG-AI7	2	0.5-1	DG-AI7S-0.5-1	1/9/2019	**40**	**16**	**360**	**0.36**	**10**	**960**	**26**	**1,000**	**1,400**	**8.1**	**44**	**550**	**6.0**	**2.2**	**0.79**	**60**	**2,700**
DG-AI7	2	3.5-4	DG-AI7S-3.5-4	1/9/2019	**1.1**	**4.4**	**68**	**0.15**	**0.38**	**25**	**6.1**	**26**	**32**	**0.054**	**0.55**	**30**	**0.89**	<0.11	<0.31	**30**	**60**
DG-AI7	2	8-8.5	DG-AI7S-8-8.5	1/9/2019	**30**	**31**	**870**	**0.74**	**2.2**	**39**	**17**	**1700**	**4,400**	**1.3**	**4.3**	**41**	**5.9**	**4.2**	**1.3**	**27**	**1,600**
DG-AI8	2	0.5-1	DG-AI8S-0.5-1	1/30/2019	<0.19 U	**4.3**	**76**	**0.22 J**	**0.10 J**	**20**	**5.3**	**21**	**46**	**0.022**	<0.15 U	**19**	**2.3 U**	<0.12 U	<0.33 U	**32**	**62**
DG-AI8	2	3.5-4	DG-AI8S-3.5-4	1/30/2019	<0.19 U	**4.9**	**160**	**0.35**	**0.098 J**	**14**	**7.4**	**34**	**94**	**0.36**	**0.35 J**	**15**	<0.34 U	<0.11 U	<0.32 U	**68**	**86**
DG-AI9	2	0.5-1	DG-AI9S-0.5-1	1/30/2019	**5.3**	**8.8**	**110**	<0.11 U	**1.1**	**46**	**9.4**	**210**	**430**	**0.28**	**2.1**	**66**	**3.3 U**	<0.17 U	<0.48 U	**44**	**420**
DG-AI9	2	3.5-4	DG-AI9S-3.5-4	1/30/2019	**0.71 J**	**4.6**	**71**	<0.080 U	**0.12 J**	**16**	**5.1**	**22**	**54**	**0.032**	**0.49 J**	**18**	**2.5 U**	<0.12 U	<0.36 U	**30**	**87**
DG-AJ10	2	0.5-1	DG-AJ10S-0.5-1	1/15/2019	<0.19	**0.38 J**	**26**	<0.076	**0.21 J**	**26**	**11**	**86**	**41**	**0.041**	**0.61 J**	**340**	**0.71 J**	<0.12	<0.34	**84**	**53**
DG-AJ10	2	3.5-4	DG-AJ10S-3.5-4	1/15/2019	<0.19	**3.9**	**78**	**0.11 J**	**0.31**	**43**	**11**	**74**	**40**	**0.055**	**0.48 J**	**53**	**0.37 J**	<0.12	<0.34	**60**	**88**
DG-AJ2	2	0.5-1	DG-AJ2S-0.5-1	12/14/2018	<0.31	**13**	**44**	<0.12	**0.33 J**	**9.1**	**8.1**	**93**	**41**	**0.89**	**0.46 J**	**5.9**	<0.56	<0.19	<0.54	**66**	**110**
DG-AJ2	2	3.5-4	DG-AJ2S-3.5-4	12/14/2018	**7.2**	**180**	**120**	**0.34 J**	**0.20 J**	**32**	**10**	**110**	**960**	**1.3**	**0.47 J**	**40**	<0.54	<0.18	<0.52	**49**	**110**
DG-AJ3	2	0.5-1	DG-AJ3S-0.5-1	12/14/2018	**1.7 U**	**16**	**56**	<0.11	**0.18 J**	**12**	**9.2**	**140**	**26**	**0.072**	**0.38 J**	**4.9**	**1.7 J**	<0.17	<0.48	**110**	**68**
DG-AJ3	2	3.5-4	DG-AJ3S-3.5-4	12/14/2018	**1.5 U**	**66**	**73**	<0.096	<0.037	**14**	**14**	**110**	**11**	**0.06**	**0.74 J**	**7.5**	**0.84 J**	<0.15	<0.43	**90**	**60**
DG-AJ4	2	0.5-1	DG-AJ4S-0.5-1	12/18/2018	**0.92 J**	**6.9**	**81**	<0.11	**0.61**	**18**	**12**	**110**	**250**	**0.072**	**1.1 J**	**17**	<0.52	**0.43 J**	<0.50	**100**	**160**
DG-AJ4	2	3.5-4	DG-AJ4S-3.5-4	12/18/2018	<0.19	**27**	**29**	<0.073	**0.11 J**	**15**	**11**	**150**	**20**	**0.088**	**0.41 J**	**4.9**	<0.34	<0.11	<0.33	**100**	**69**
DG-AJ5	2	0.5-1	DG-AJ5S-0.5-1	1/8/2019	**1.0**	**2.6**	**45**	**0.086**	**0.51**	**14**	**9.4**	**130**	**41**	**0.11**	**0.53**	**7.7**	**1.6**	<0.13	<0.36	**87**	**120**
DG-AJ5	2	3.5-4	DG-AJ5S-3.5-4	1/8/2019	**11**	**620**	**80**	<0.23	**2.1**	**29**	**10**	**150**	**270**	**0.91**	**0.89**	**37**	**3.3**	<0.36	<1.0	**36**	**670**
DG-AJ6	2	0.5-1	DG-AJ6S-0.5-1	12/20/2018	**1.1 J**	**0.54 J**	**17**	**1.7**	**0.14 J**	**12**	**17**	**800 J**	**3.0 J**	**0.063**	**0.77 J**	**5.7 J**	**1.7 J**	<0.14	<0.39	**140**	**55 J**
DG-AJ6	2	3.5-4	DG-AJ6S-3.5-4	12/20/2018	**12**	**21**	**220**	**0.72**	**18**	**52**	**9.3**	**190**	**620**	**0.46**	**2.7**	**41**	**1.1 J**	**1.7**	<0.46	**49**	**750**
DG-AJ6 (D)	2	0.5-1	DG-AJ6 (D)S-0.5-1	12/20/2018	**2.2 J**	**1.2 J**	**25**	**1.5**	**0.68 J**	**16**	**17**	**180 J**	**70 J**	**0.1**	**1.3 J**	**11 J**	**0.94 J**	<0.19	<0.55	**130**	**140 J**
DG-AJ7	2	0.5-1	DG-AJ7S-0.5-1	12/19/2018	**38**	**25**	**290**	<0.12	**9.8**	**230**	**20**	**1,200**	**3,000**	**2.0**	**40**	**180**	<1.4	**2.5**	<1.3	**41**	**2,000**
DG-AJ7	2	3.5-4	DG-AJ7S-3.5-4	12/19/2018	**1.4 J**	**3.2 J**	**93**	<0.13	**0.33 J**	**19**	**5.6**	**29**	**81**	**0.093**	**0.77 J**	**18**	<0.58	<0.19	<0.56	**31**	**100**
DG-AJ8	2	0.5-1	DG-AJ8S-0.5-1	1/30/2019	**4.1**	**13**	**140**	<0.18 U	**6.3**	**45**	**18**	**330**	**460**	**0.3**	**3.9**	**46**	**5.6 U**	**0.41 J**	<0.81 U	**91**	**650**
DG-AJ8	2	3.5-4	DG-AJ8S-3.5-4	1/30/2019	**0.60 J**	**4.0**	**61**	<0.11 U	**0.053 J**	**23**	**6.2**	**21**	**25**	**0.029**	**0.37 J**	**24**	<0.52 U	<0.17 U	<0.50 U	**33**	**40**
DG-AJ9	2	0.5-1	DG-AJ9S-0.5-1	1/30/2019	**9.5**	**20**	**250**	**0.24 J**	**3.7**	**62**	**9.8**	**500**	**710**	**0.34**	**3.9**	**61**	<0.41	**1.2**	<0.40	**35**	**830**
DG-AJ9	2	3.5-4	DG-AJ9S-3.5-4	1/30/2019	<0.28	**4**	**72**	**0.25 J**	**0.064 J**	**20**	**5.2**	**17**	**22**	**0.025**	<0.21	**18**	**3.3 U**	<0.17	<0.48	**35**	**43**
DG-AK10	2	0.5-1	DG-AK10S-0.5-1	1/15/2019	**2.6**	**4.7**	**58**	<0.12	**1.1**	**39**	**9.4**	**130**	**300**	**0.88**	**1.5 J**	**13**	**1.1 J**	<0.19	<0.54	**81**	**490**
DG-AK10	2	3.5-4	DG-AK10S-3.5-4	1/15/2019	**0.74 J**	**7.0**	**55**	<0.095	**0.30 J**	**18**	**5.1**	**25**	**120**	**0.029**	**1.0 J**	**17**	<0.44	<0.15	<0.42	**30**	**78**
DG-AK2	2	0.5-1	DG-AK2S-0.5-1	12/14/2018	**1.2 J**	**7.7**	**86**	<0.088	**0.8**	**14**	**10**	**130**	**130**	**0.13**	**0.91 J**	**11**	**0.54 J**	<0.14	<0.39	**89**	**190**

Table 2: Metals Concentrations in Soil
Brisbane Baylands OU-2
Brisbane, California

Sample Location	Investigation Zone	Depth Range (ft bgs)	Sample Name	Collection Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
Direct Exposure Human Health Risk Level Residential Soil Exposure ESL [1]					1.1E+01	6.7E-02	1.5E+04	1.6E+01	7.8E+01	1.2E+05	2.3E+01	3.1E+03	8.0E+01	1.3E+01	3.9E+02	8.2E+02	3.9E+02	3.9E+02	7.8E-01	3.9E+02	2.3E+04
Regional Background [2]					5.5E+00	1.9E+01	3.2E+02	1.0E+00	2.7E+00	1.0E+02	2.5E+01	6.9E+01	1.6E+01	4.0E-01	7.4E+00	1.2E+02	5.6E+00	1.8E+00	7.6E+00	7.4E+01	1.1E+02
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
DG-AK2	2	3.5-4	DG-AK2S-3.5-4	12/14/2018	**0.70 J**	**45**	**32**	<0.070	**0.20 J**	**7.9**	**11**	**84**	**15**	**0.071**	**0.55 J**	**4.7**	<0.32	<0.11	<0.31	**79**	**73**
DG-AK3	2	0.5-1	DG-AK3S-0.5-1	12/19/2018	**0.81 J**	**1.6 J**	**53**	**0.28**	**0.20 J**	**11**	**10**	**150**	**26**	**0.35**	**0.92 J**	**5.6**	**0.62 J**	<0.11	<0.32	**98**	**69**
DG-AK3	2	3.5-4	DG-AK3S-3.5-4	12/19/2018	**1.3 J**	**85**	**300**	**0.52**	**0.26 J**	**35**	**10**	**63**	**180**	**0.31**	**1.1 J**	**34**	<0.43	**0.23 J**	<0.42	**43**	**210**
DG-AK4	2	0.5-1	DG-AK4S-0.5-1	12/18/2018	<0.28 UJ	**4.1**	**74**	**0.19 J**	**0.13 J**	**7.5**	**13**	**100**	**3.5 J**	**0.046**	**0.49 J**	**4.1 J**	<0.51	<0.17	<0.50	**110**	**49**
DG-AK4	2	3.5-4	DG-AK4S-3.5-4	12/18/2018	**2.1 J**	**160 J**	**60 J**	**0.19 J**	**0.95**	**18 J**	**9.9 J**	**850 J**	**210 J**	**0.091**	**0.60 J**	**14 J**	**1.0 J**	<0.17 U	<0.50	**59 J**	**450 J**
DG-AK4 (D)	2	0.5-1	DG-AK4 (D)S-0.5-1	12/18/2018	**0.60 J**	**2.6**	**68**	**0.18 J**	**0.17 J**	**11**	**15**	**120**	**11 J**	**0.063**	**0.95 J**	**8.0 J**	<0.38	<0.13	<0.37	**120**	**70**
DG-AK5	2	0.5-1	DG-AK5S-0.5-1	12/17/2018	**2.9**	**7.7**	**91**	<0.11	**4.0**	**81**	**10**	**260**	**520**	**0.48**	**2.3**	**19**	<0.50	**0.50 J**	<0.49	**66**	**1,000**
DG-AK5	2	3.5-4	DG-AK5S-3.5-4	12/17/2018	**4.0**	**230**	**85**	<0.26	**0.95 J**	**16**	**7.9**	**300**	**370**	**0.19**	**0.56 J**	**21**	<1.2	<0.40	<1.2	**49**	**320**
DG-AK6	2	0.5-1	DG-AK6S-0.5-1	12/20/2018	**1.4 J**	**0.82 J**	**5.7**	**1.6**	**0.22 J**	**13**	**21**	**140**	**3.1**	**0.055**	**0.79 J**	**7.7**	**0.57 J**	<0.17	<0.48	**130**	**66**
DG-AK6	2	3.5-4	DG-AK6S-3.5-4	12/20/2018	**12**	**14**	**240**	**0.37**	**2.4**	**49**	**10**	**190**	**330**	**0.68**	**4.2**	**50**	**1.4 J**	<0.13	<0.37	**33**	**690**
DG-AK7	2	0.5-1	DG-AK7S-0.5-1	1/9/2019	**23**	**19**	**270**	**0.33**	**8.1**	**140**	**38**	**690**	**960**	**2.3**	**28**	**120**	**1.6**	**1.1**	**1.7**	**38**	**1,400**
DG-AK7	2	3.5-4	DG-AK7S-3.5-4	1/9/2019	**4.4**	**4.8**	**140**	**0.14**	**0.3**	**15**	**5.8**	**77**	**290**	**0.38**	**0.61**	**18**	**0.65**	**0.34**	<0.55	**26**	**230**
DG-AK7 (D)	2	3.5-4	DG-AK7 (D)S-3.5-4	1/9/2019	**0.76**	**3**	**65**	**0.12**	**0.096**	**13**	**4.4**	**20**	**44**	**0.04**	**0.37**	**14**	**0.57**	**0.18**	<0.37	**24**	**58**
DG-AK8	2	0.5-1	DG-AK8S-0.5-1	2/1/2019	**1.2 U**	**0.84 J**	**56**	<0.076	**0.57**	**24**	**9.5**	**120**	**69**	**0.55**	<0.15	**6.3**	**0.37 J**	**0.13 J**	**0.46**	**86**	**140**
DG-AK8	2	3.5-4	DG-AK8S-3.5-4	2/1/2019	<0.19	**5.3**	**62**	<0.073	**0.22 J**	**14**	**4.3**	**12**	**17**	**0.037**	<0.14	**14**	**0.41 J**	<0.11	<0.33	**19**	**32**
DG-AK9	2	0.5-1	DG-AK9S-0.5-1	1/30/2019	**7.4**	**15**	**220**	<0.11 U	**2.4**	**52**	**8.2**	**230**	**390**	**0.64**	**1.9**	**51**	**3.3 U**	**0.27 J**	**0.51 J**	**35**	**620**
DG-AK9	2	3.5-4	DG-AK9S-3.5-4	1/30/2019	**1.0 J**	**6.7**	**79**	<0.10 U	**0.15 J**	**16**	**4.6**	**22**	**170**	**0.03**	**0.73 J**	**19**	<0.48 U	<0.16 U	<0.47 U	**27**	**70**
DG-AL10	2	0.5-1	DG-AL10S-0.5-1	1/15/2019	<0.17	**0.45 J**	**30**	<0.067	**0.14 J**	**11**	**9.6**	**120**	**6.4**	**0.068**	**0.52 J**	**3.9**	**0.69 J**	<0.10	<0.30	**100**	**50**
DG-AL10	2	3.5-4	DG-AL10S-3.5-4	1/15/2019	<0.27	**6.3**	**41**	<0.11	**0.30 J**	**20**	**5.4**	**21**	**30**	**0.025**	**0.40 J**	**15**	<0.49	<0.17	<0.48	**33**	**47**
DG-AL2	2	0.5-1	DG-AL2S-0.5-1	12/17/2018	<0.25	**7.2**	**37**	<0.097	<0.037	**6.3**	**7.1**	**110**	**9.9**	**0.078**	**0.27 J**	**2.6**	<0.45	<0.15	<0.43	**70**	**36**
DG-AL2	2	3.5-4	DG-AL2S-3.5-4	12/17/2018	**3.0**	**280**	**71**	**0.11 J**	**0.62**	**23**	**11**	**250**	**230**	**0.28**	**0.25 J**	**16**	<0.43	**0.23 J**	<0.41	**72**	**200**
DG-AL2	2	7.5-8	DG-AL2S-7.5-8	12/17/2018	**1.9**	**35**	**76**	**0.29**	**0.045 J**	**64**	**16**	**29**	**5.3**	**0.31**	<0.18	**81**	<0.43	<0.14	<0.41	**52**	**56**
DG-AL3	2	0.5-1	DG-AL3S-0.5-1	11/21/2018	**2.4**	**11**	**76**	<0.099	**0.92**	**9.5**	**7.5**	**160**	**420**	**0.35**	**0.52 J**	**9.3**	<0.46	**0.91**	<0.44	**75**	**240**
DG-AL3	2	3.5-4	DG-AL3S-3.5-4	11/21/2018	**4.1 J**	**310 J**	**39**	<0.094	**0.46 J**	**11**	**9.5**	**120**	**200 J**	**0.089**	<0.19 UJ	**15 J**	<0.43	**0.95 J**	<0.42	**79**	**130 J**
DG-AL3 (D)	2	3.5-4	DG-AL3 (D)S-3.5-4	11/21/2018	**1.2 J**	**97 J**	**42**	<0.12	**0.31 J**	**8.6**	**10**	**77**	**40 J**	**0.13**	**0.37 J**	**6.7 J**	<0.55	**0.91 UJ**	<0.53	**91**	**69 J**
DG-AL4	2	0.5-1	DG-AL4S-0.5-1	12/18/2018	**0.44 J**	**72**	**86**	**0.096 J**	**0.15 J**	**12**	**7.7**	**120**	**59**	**0.28**	**0.50 J**	**5.0**	<0.44	<0.15	<0.42	**80**	**200**
DG-AL4	2	3.5-4	DG-AL4S-3.5-4	12/18/2018	**3.2**	**17**	**110**	<0.081	**2.9**	**37**	**9.2**	**120**	**260**	**0.28**	**2.9**	**47**	<0.37	**0.42 J**	<0.36	**35**	**330**
DG-AL4	2	7.5-8	DG-AL4S-7.5-8	12/18/2018	**4.9**	**27**	**290**	**0.56**	**0.18 J**	**25**	**11**	**41**	**260**	**0.16**	**0.28 J**	**32**	<0.57	**0.67 J**	<0.55	**28**	**160**
DG-AL5	2	0.5-1	DG-AL5S-0.5-1	1/30/2019	**2.5 J-**	**9.1**	**96 J**	<0.10	**1.2**	**26**	**8.5**	**140 J+**	**220**	**0.34**	**2.4**	**29**	**1.6 J**	**0.77 U**	<0.45	**52**	**240**
DG-AL5	2	3.5-4	DG-AL5S-3.5-4	1/30/2019	**5.4**	**68**	**66**	**0.23 J**	**1.1**	**22**	**7.5**	**320**	**330**	**0.4**	**1.6**	**30**	<0.47	**0.29 J**	<0.45 UJ	**47**	**350**
DG-AL5 (D)	2	3.5-4	DG-AL5 (D)S-3.5-4	1/30/2019	**4.1**	**75**	**100**	**0.25 J**	**1.4**	**27**	**8.1**	**260**	**370**	**0.55**	**1.5**	**34**	**2.6 U**	**0.17 J**	<0.37	**56**	**420**
DG-AL6	2	0.5-1	DG-AL6S-0.5-1	12/20/2018	**1.7**	**1.8 J**	**27**	**1.6**	**0.85**	**21**	**19**	**170**	**80**	**0.12**	**1.5 J**	**14**	**1.2 J**	<0.16	<0.46	**130**	**170**
DG-AL6	2	3.5-4	DG-AL6S-3.5-4	12/20/2018	**3.2**	**35**	**100**	**1.3**	**1.2**	**30**	**14**	**150**	**200**	**0.18**	**1.5 J**	**23**	**0.62 J**	<0.19	<0.55	**100**	**290**
DG-AL7	2	0.5-1	DG-AL7S-0.5-1	12/19/2018	**20**	**17**	**300**	<0.078	**12**	**300**	**16**	**390**	**1,000**	**0.059**	**67**	**240**	**1.6 J**	**0.62 J**	<0.87	**34**	**1,200**
DG-AL7	2	14.5-15	DG-AL7S-14.5-15	12/19/2018	**7.7**	**17**	**440**	**0.26 J**	**1.7**	**49**	**8.2**	**220**	**1,200**	**0.063**	**0.52 J**	**36**	**1.7 J**	**1.3 J**	<1.1	**34**	**1,100**
DG-AL7	2	3.5-4	DG-AL7S-3.5-4	12/19/2018	**0.93 J**	**6.4**	**85**	<0.12	**0.13 J**	**16**	**6.6**	**22**	**32**	**0.036**	**0.70 J**	**22**	<0.54	<0.18	<0.52	**40**	**140**
DG-AL8	2	0.5-1	DG-AL8S-0.5-1	1/30/2019	**5.7**	**21**	**110**	**0.41**	**3.8**	**39**	**12**	**310**	**230**	**0.63**	**1.9**	**53**	**0.96 J**	**0.66 J**	<0.53 U	**61**	**420**
DG-AL8	2	3.5-4	DG-AL8S-3.5-4	1/30/2019	**0.88 J**	**5.1**	**75**	**0.18 J**	**0.21 J**	**13**	**4.6**	**29**	**55**	**0.038**	**0.28 J**	**14**	**0.99 J**	<0.12 U	<0.33 U	**26**	**120**
DG-AL9	2	0.5-1	DG-AL9S-0.5-1	1/21/2019	**2.9 J-**	**9.9 J**	**83 J**	<0.073	**1.1**	**30 J**	**8.9 J**	**120 J**	**170 J**	**0.19**	**1.1**	**30 J**	<0.34	**0.41 J**	**1.1 U**	**43 J**	**270 J**
DG-AL9	2	3.5-4	DG-AL9S-3.5-4	1/21/2019	**23**	**22**	**1,300**	**0.31**	**2.9**	**47**	**7.6**	**530**	**4,600**	**0.51**	**0.25 J**	**42**	<0.47	**6.2**	<0.45	**29**	**3,800**
DG-AL9	2	7-7.5	DG-AL9S-7-7.5	1/21/2019	**3.4**	**9.9**	**100**	**0.44 J**	**0.57**	**24**	**12 J**	**49**	**18 J**	**0.027 J**	<0.23	**34**	<0.55	<0.18	<0.53	**31**	**130 J**
DG-AL9 (D)	2	7-7.5	DG-AL9 (D)S-7-7.5	1/21/2019	**3.0**	**14**	**110**	**0.88 J**	**0.72**	**36**	**22 J**	**73**	**37 J**	**0.053 J**	<0.20	**48**	<0.47	<0.16	<0.45	**42**	**410 J**
DG-AM10	2	0.5-1	DG-AM10S-0.5-1	1/15/2019	**0.32 J**	**4.0 J**	**67 J**	<0.086	**0.84 J**	**17 J**	**6.9**	**92**	**120 J**	**0.26 J**	**1.1 J**	**11 J**	<0.39	<0.13	<0.38	**48 J**	**270 J**
DG-AM10	2	3.5-4	DG-AM10S-3.5-4	1/15/2019	<0.19	**0.49 J**	**30**	<0.073	**0.080 J**	**16**	**9.6**	**190**	**30**	**0.064**	**0.70 J**	**4.7**	**0.40 J**	<0.11	<0.32	**83**	**140**
DG-AM10 (D)	2	0.5-1	DG-AM10 (D)S-0.5-1	1/15/2019	**1.6 U**	**0.41 J**	**36 J**	<0.10	**0.12 J**	**10 J**	**9.4**	**100**	**3.3 J**	**0.060 J**	<0.20 UJ	**3.6 J**	<0.48	<0.16	<0.46	**100 J**	**31 J**
DG-AM2	2	0.5-1	DG-AM2S-0.5-1	12/17/2018	<0.26	**9.5**	**33**	<0.10	<0.039	**12**	**11**	**130**	**0.82 J**	**0.097**	<0.20	**4.5**	<0.47	<0.16	<0.45	**110**	**32**
DG-AM2	2	3.5-4	DG-AM2S-3.5-4	12/17/2018	**0.38 J**	**11**	**47**	<0.10	**0.30 J**	**7.7**	**7.9**	**90**	**68**	**0.06**	**0.28 J**	**4.3**	<0.48	<0.16	<0.46	**68**	**110**
DG-AM3	2	0.5-1	DG-AM3S-0.5-1	12/19/2018	**1.9**	**13**	**57**	<0.068	**0.59**	**17**	**9.8**	**130**	**140**	**0.098**	**1.1**	**16**	<0.32	<0.11	<0.31	**85**	**190**
DG-AM3	2	3.5-4	DG-AM3S-3.5-4	12/19/2018	**1.3**	**140**	**88**	**0.16 J**	**0.36**	**28**	**12**	**75**	**51**	**0.1**	**0.66 J**	**37**	**0.55 J**	<0.13	<0.37	**58**	**93**
DG-AM4	2	0.5-1	DG-AM4S-0.5-1	12/18/2018	**0.79 J**	**14**	**47**	<0.11	**0.26 J**	**15**	**15**	**120**	**47**	**0.098**	**1.2 J**	**10**	**0.75 J**	<0.17	<0.50	**120**	**110**
DG-AM4	2	3.5-4	DG-AM4S-3.5-4	12/18/2018	**0.67 J**	**160**	**130**	**0.44**	**0.39**	**100**	**23**	**50**	**140**	**0.18**	**0.48 J**	**72**	**0.42 J**	<0.14	<0.40	**67**	**220**
DG-AM5	2	0.5-1	DG-AM5S-0.5-1	12/17/2018	**3.3**	**6.4**	**68**	<0.11	**1.7**	**39**	**13**	**240**	**790**	**0.18**	**2.7**	**23**	**0.58 J**	**0.9**	<0.49	**86**	**1,300**
DG-AM5	2	3.5-4	DG-AM5S-3.5-4	12/17/2018	**1.6 U**	**5.9**	**30**	<0.11	<0.041	**10**	**12**	**150**	**8.9**	**0.033**	<0.21	**4.4**	<0.49	<0.17	<0.48	**140**	**52**

Table 2: Metals Concentrations in Soil
Brisbane Baylands OU-2
Brisbane, California

Sample Location	Investigation Zone	Depth Range (ft bgs)	Sample Name	Collection Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
Direct Exposure Human Health Risk Level Residential Soil Exposure ESL [1]					1.1E+01	6.7E-02	1.5E+04	1.6E+01	7.8E+01	1.2E+05	2.3E+01	3.1E+03	8.0E+01	1.3E+01	3.9E+02	8.2E+02	3.9E+02	3.9E+02	7.8E-01	3.9E+02	2.3E+04
Regional Background [2]					5.5E+00	1.9E+01	3.2E+02	1.0E+00	2.7E+00	1.0E+02	2.5E+01	6.9E+01	1.6E+01	4.0E-01	7.4E+00	1.2E+02	5.6E+00	1.8E+00	7.6E+00	7.4E+01	1.1E+02
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
DG-AM6	2	0.5-1	DG-AM6S-0.5-1	12/20/2018	**1.4**	<0.24	**7.4**	**2.0**	**0.13 J**	**16**	**21**	**110**	**1.5**	**0.084**	**0.73 J**	**8.1**	**0.63 J**	<0.14	<0.41	**160**	**63**
DG-AM6	2	3.5-4	DG-AM6S-3.5-4	12/20/2018	**4.0**	**68**	**83**	**0.59**	**1.2**	**28**	**11**	**170**	**270**	**0.14**	**1.6**	**43**	**0.80 J**	<0.15	<0.44	**59**	**230**
DG-AM7	2	0.5-1	DG-AM7S-0.5-1	1/9/2019	**13**	**15**	**280**	**0.18**	**8**	**58**	**15**	**490**	**930**	**0.9**	**9.3**	**89**	**3.4**	**0.79**	<0.50	**35**	**1,400**
DG-AM7	2	3.5-4	DG-AM7S-3.5-4	1/9/2019	**1.2**	**4.9**	**96**	**0.19**	**0.58**	**15**	**5.4**	**43**	**120**	**0.046**	**0.53**	**14**	**0.69**	**0.18**	<0.45	**32**	**130**
DG-AM7	2	7.5-8	DG-AM7S-7.5-8	1/9/2019	**14**	**43**	**420**	**0.67**	**0.82**	**60**	**13**	**470**	**28,000**	**0.23**	**3.2**	**48**	**3.3**	**3.7**	<1.1	**24**	**990**
DG-AM8	2	0.5-1	DG-AM8S-0.5-1	1/30/2019	**5.7**	**20**	**73**	**0.20 J**	**4.4**	**35**	**7.2**	**270**	**270**	**0.54**	**1.5 J**	**44**	**1.6 J**	**0.60 J**	**0.78 J**	**35**	**550**
DG-AM8	2	3.5-4	DG-AM8S-3.5-4	1/30/2019	**75 J**	**35 J**	**1,100**	**0.37**	**15 J**	**75 J**	**8.4 J**	**1,600 J**	**8,700 J**	**0.039**	**0.57 J**	**55 J**	<1.9 U	**4.5 J**	<1.8 UJ	**29 J**	**17,000 J**
DG-AM8 (D)	2	0.5-1	DG-AM8 (D)S-0.5-1	1/30/2019	**0.82 J**	**3.7 J**	**84**	**0.19 J**	**0.17 J**	**19 J**	**6.0 J**	**35 J**	**47 J**	**0.035 J**	<0.15 UJ	**18 J**	<0.36 UJ	**0.15 J**	<0.35 U	**26 J**	**100 J**
DG-AM9	2	0.5-1	DG-AM9S-0.5-1	1/30/2019	**8.1**	**16**	**220**	<0.083 U	**3.9**	**71**	**14**	**490**	**680**	**0.3**	**6**	**130**	**3.8**	**0.42 J**	**0.82 J**	**38**	**1,300**
DG-AM9	2	3.5-4	DG-AM9S-3.5-4	1/30/2019	**34**	**24 J**	**1,300**	<1.0 U	**3.1 J**	**58**	**14**	**630**	**4,300**	**2.5**	**0.79 J**	**49**	<4.7 U	**5.4 J**	<4.6 U	**37**	**2,400**
DG-AN10	2	0.5-1	DG-AN10S-0.5-1	1/15/2019	**1.8**	**8.6**	**87**	<0.11	**2.3**	**23**	**13**	**200**	**240**	**0.17**	**1.4 J**	**18**	**1.0 J**	**0.18 J**	<0.48	**95**	**600**
DG-AN10	2	3.5-4	DG-AN10S-3.5-4	1/15/2019	**34**	**18**	**1,100**	**0.32 J**	**3.7**	**52**	**6.2**	**570**	**5,100**	**1.9**	**2.7**	**44**	**1.4 J**	**6.3**	**0.55 J**	**24**	**2,400**
DG-AN2	2	0.5-1	DG-AN2S-0.5-1	12/17/2018	**0.34 J**	**0.80 J**	**24**	<0.10	<0.040	**8.8**	**13**	**140**	**6.6**	**0.034**	<0.21	**3.8**	<0.48	**0.18 J**	<0.47	**130**	**48**
DG-AN2	2	3.5-4	DG-AN2S-3.5-4	12/17/2018	**0.65 J**	**30 J**	**35 J**	<0.080	**0.18 J**	**7.0 J**	**9.1 J**	**88 J**	**23 J**	**0.047**	<0.16	**3.7**	<0.37	<0.12	<0.36	**72**	**55**
DG-AN2 (D)	2	0.5-1	DG-AN2 (D)S-0.5-1	12/17/2018	<0.26 UJ	<0.27 UJ	**28**	<0.10	<0.039	**7.5**	**12**	**130**	**6.5**	**0.044**	<0.20	**3.8**	<0.48	<0.16 UJ	<0.46	**110**	**52**
DG-AN3	2	0.5-1	DG-AN3S-0.5-1	12/14/2018	**2.9**	**23**	**45**	<0.097	**0.61**	**16**	**11**	**190**	**240**	**0.14**	**1.2 J**	**12**	**0.93 J**	<0.15	<0.43	**96**	**180**
DG-AN3	2	3.5-4	DG-AN3S-3.5-4	12/14/2018	**2.8 J**	**270 J**	**79 J**	**0.13 J**	**0.4**	**24 J**	**12 J**	**94 J-**	**100 J**	**0.11**	**2.4**	**34 J**	<0.38	**0.63 U**	<0.37	**67 J**	**110 J**
DG-AN4	2	0.5-1	DG-AN4S-0.5-1	12/17/2018	**8.8**	**36**	**150**	**0.10 J**	**5.0**	**66**	**15**	**2400**	**750**	**0.92**	**6.5**	**73**	<0.43	**0.85**	<0.41	**36**	**710**
DG-AN4	2	3.5-4	DG-AN4S-3.5-4	12/17/2018	**11**	**160**	**180**	**0.23 J**	**2.9**	**24**	**8.7**	**220**	**880**	**0.75**	**0.27 J**	**25**	<0.55	**0.67 J**	<0.53	**45**	**830**
DG-AN5	2	0.5-1	DG-AN5S-0.5-1	12/20/2018	<120	**200 J**	**23,000**	**120 J**	**51 J**	**4700**	**4400**	**62,000**	**4,600**	**0.071**	**250 J**	**1800**	<220	<73	<210	**45000**	**18,000**
DG-AN5	2	3.5-4	DG-AN5S-3.5-4	12/20/2018	<2.0	**83**	**810**	<0.39	<0.30	**12 U**	**10**	**96**	**12 U**	**0.031**	<0.78	**3.8 J**	<3.6	<1.2	<3.5	**81**	**36**
DG-AN6	2	0.5-1	DG-AN6S-0.5-1	12/21/2018	**1.2**	**2.3 U**	**18**	**1.7**	**0.38**	**9.9**	**18**	**110**	**15**	**0.063**	**0.89 J**	**6.6**	**0.36 J**	<0.12	<0.33	**140**	**77**
DG-AN6	2	3.5-4	DG-AN6S-3.5-4	12/21/2018	**12 J**	**71 J**	**200 J**	**0.87**	**3.5 J**	**55**	**14**	**270 J**	**740 J**	**0.35 J**	**5.2**	**52**	**2.9 J**	**0.64 J**	<0.44	**66**	**590 J**
DG-AN7	2	0.5-1	DG-AN7S-0.5-1	12/19/2018	**10**	**15**	**230**	<0.10	**7.2**	**86**	**12**	**500**	**870**	**0.97**	**8.4**	**96**	**1.2 J**	**0.98**	<0.47	**28**	**1,300**
DG-AN7	2	3.5-4	DG-AN7S-3.5-4	12/19/2018	**0.64 J**	**3.3**	**66**	<0.11	**0.070 J**	**12**	**4.9**	**17**	**19**	**0.03**	<0.21	**15**	**0.69 J**	<0.17	<0.48	**28**	**55**
DG-AN8	2	3.5-4	DG-AN8S-3.5-4	1/15/2019	**0.46 J**	**4.6**	**61**	**0.33 J**	**0.21 J**	**20**	**6.3**	**18**	**7.9**	**0.016**	**0.60 J**	**13**	**1.1 J**	<0.20	<0.56 UJ	**54**	**40**
DG-AN9	2	0.5-1	DG-AN9S-0.5-1	1/21/2019	**2.3**	**6.4**	**99**	<0.090	**1.3**	**82**	**21**	**94**	**150**	**0.52**	**0.96 J**	**130**	<0.41	<0.14	<0.40	**34**	**210**
DG-AN9	2	3.5-4	DG-AN9S-3.5-4	1/21/2019	**21**	**33**	**1,400**	**0.21 J**	**0.79 J**	**33**	**14**	**380**	**980**	**0.11**	**0.60 J**	**84**	<1.4	<0.48	<1.4	**31**	**200**
DG-AN9	2	7-7.5	DG-AN9S-7-7.5	1/21/2019	**2.3**	**7.6**	**38**	**0.45**	**0.41**	**35**	**22**	**42**	**27**	**0.034**	<0.16	**47**	**2.5 U**	<0.13	<0.37	**45**	**110**
DG-AO10	2	0.5-1	DG-AO10S-0.5-1	1/15/2019	**2.9 J**	**4.7**	**170 J**	<0.090	**1.6**	**28 J**	**11 J**	**180 J**	**320 J**	**0.19**	**1.1 J**	**12 J**	**1.7 J**	**0.24 J**	<0.40	**81 J**	**630 J**
DG-AO10	2	3.5-4	DG-AO10S-3.5-4	1/15/2019	**45**	**40**	**1,200**	<0.30	**4.2**	**59**	**11**	**1,400**	**4,300**	**1.1**	**4.5**	**65**	**12**	**4.2**	**1.5 J**	**23**	**3,300**
DG-AO2	2	0.5-1	DG-AO2S-0.5-1	12/17/2018	**1.0 J**	**4.1**	**71**	<0.11	<0.042	**10**	**13**	**140**	**74**	**0.069**	<0.22	**6.3**	<0.50	<0.17	<0.49	**110**	**88**
DG-AO2	2	3.5-4	DG-AO2S-3.5-4	12/17/2018	**2.9**	**350**	**100**	<0.077	**0.9**	**20**	**10**	**210**	**390**	**0.23**	**0.35 J**	**26**	**0.61 J**	**0.72**	<0.35	**67**	**270**
DG-AO3	2	0.5-1	DG-AO3S-0.5-1	12/19/2018	**0.76 J**	**3.9**	**39**	<0.086	**0.33**	**14**	**7.5**	**140**	**64**	**0.1**	**0.70 J**	**14**	<0.40	<0.13	<0.38	**81**	**110**
DG-AO3	2	3.5-4	DG-AO3S-3.5-4	12/19/2018	**2.7**	**230**	**190**	**0.51**	**0.27 J**	**31**	**16**	**72**	**43**	**0.07**	**1.5**	**48**	**1.8 J**	<0.15	<0.43	**37**	**110**
DG-AO4	2	0.5-1	DG-AO4S-0.5-1	12/17/2018	**0.69 J**	**0.69 J**	**30**	<0.074	**0.059 J**	**8.2**	**14**	**81**	**6.1**	**0.057**	<0.15	**4.1**	<0.34	<0.11	<0.33	**97**	**77**
DG-AO4	2	3.5-4	DG-AO4S-3.5-4	12/17/2018	**1.2 J**	**140**	**100**	**0.19 J**	**1.4**	**35**	**8.4**	**51 J**	**120 J**	**0.25 J**	<0.13 UJ	**24**	<0.31	**0.37 J**	<0.30	**43**	**400 J**
DG-AO4 (D)	2	3.5-4	DG-AO4 (D)S-3.5-4	12/17/2018	**1.0 J**	**230**	**77**	**0.19 J**	**1.1**	**45**	**7.7**	**12 J**	**24 J**	**0.55 J**	**0.17 J**	**23**	<0.35	<0.12 UJ	<0.34	**38**	**72 J**
DG-AO5	2	0.5-1	DG-AO5S-0.5-1	12/17/2018	**2.1**	**2.0 J**	**120**	<0.081	**0.4**	**11**	**11**	**170**	**270**	**0.15**	**0.45 J**	**8.0**	<0.38	**0.45 J**	<0.36	**95**	**1,100**
DG-AO5	2	3.5-4	DG-AO5S-3.5-4	12/17/2018	<0.27	**24**	**67**	<0.10	<0.040	**7.7**	**9.4**	**160**	**5.8**	**0.094**	<0.21	**3.6**	<0.48	<0.16	<0.47	**89**	**39**
DG-AO6	2	0.5-1	DG-AO6S-0.5-1	12/21/2018	**5.7**	**13**	**94**	**1.5**	**4.8**	**56**	**19**	**290**	**560**	**0.64**	**7.2**	**47**	**2.3 J**	<0.19	<0.54	**120**	**530**
DG-AO6	2	3.5-4	DG-AO6S-3.5-4	12/21/2018	**7.7**	**35**	**190**	**0.74**	**2.4**	**35**	**9.9**	**230**	**670**	**0.3**	**2.7**	**38**	**1.4 J**	<0.12	<0.35	**51**	**390**
DG-AO7	2	0.5-1	DG-AO7S-0.5-1	1/9/2019	**39**	**16**	**350**	**0.19**	**3.4**	**40**	**8.9**	**350**	**410**	**0.42**	**3.1**	**67**	**1.5**	**0.49**	<0.46	**36**	**530**
DG-AO7	2	3.5-4	DG-AO7S-3.5-4	1/9/2019	**1.9**	**3.5**	**61**	**0.11**	**0.099**	**13**	**5.6**	**15**	**350**	**0.033**	**0.34**	**17**	**0.4**	<0.13	<0.36	**30**	**39**
DG-AO8	2	0.5-1	DG-AO8S-0.5-1	1/30/2019	**1.3 J**	**14 J**	**100 J**	**0.16 J**	**2.5 J**	**15 J**	**4.7 J**	**1,800 J**	**72 J**	**0.05**	**0.26 J**	**15 J**	<0.48 U	**0.20 J**	<0.47 U	**25 J**	**240 J**
DG-AO8	2	3.5-4	DG-AO8S-3.5-4	1/30/2019	**9.7 J**	**24**	**320 J**	**0.13 J**	**5.4**	**38**	**12**	**1,800 J**	**1,400 J**	**0.71 J**	**0.87 J**	**75**	<0.99 UJ	**1.3 J**	<0.95 U	**20**	**1,500 J**
DG-AO8 (D)	2	3.5-4	DG-AO8 (D)S-3.5-4	1/30/2019	**25 J**	**33**	**780 J**	**0.34 J**	**6.9**	**46**	**8.9**	**820 J**	**7,200 J**	**2.8 J**	**1.3 J**	**66**	**3.7 J**	**2.9 J**	<0.91 U	**24**	**3,300 J**
DG-AO9	2	0.5-1	DG-AO9S-0.5-1	1/30/2019	**5.4**	**6.2**	**120**	<0.098 U	**1.8**	**150**	**13**	**210**	**220**	**0.94**	**1.4 J**	**84**	**3.0 U**	<0.15 U	**0.74 J**	**44**	**460**
DG-AO9	2	3.5-4	DG-AO9S-3.5-4	1/30/2019	**5.0**	**26**	**190**	<0.070 U	**0.8**	**22**	**18**	**280**	**240**	**0.069**	**0.59 J**	**75**	**2.4**	**0.28 J**	**0.57 J**	**39**	**620**
DG-AP2	2	0.5-1	DG-AP2S-0.5-1	12/17/2018	<0.18	**1.2 J**	**33**	<0.071	<0.027	**8.4**	**7.3**	**100**	**8.5**	**0.2**	**0.25 J**	**3.2**	<0.33	**0.13 J**	<0.32	**68**	**31**
DG-AP2	2	3.5-4	DG-AP2S-3.5-4	12/17/2018	**4.9**	**360**	**120**	<0.090	**0.65**	**25**	**18**	**340**	**340**	**0.37**	**0.53 J**	**28**	**0.94 J**	**4.2**	<0.40	**73**	**280**
DG-AP3	2	0.5-1	DG-AP3S-0.5-1	12/14/2018	<0.22	**0.41 J**	**38**	<0.084	<0.032	**5.5**	**9.4**	**95**	**9.6**	**0.054**	<0.17	**3.2**	<0.39	**0.65 U**	<0.38	**82**	**39**
DG-AP3	2	3.5-4	DG-AP3S-3.5-4	12/14/2018	**1.1 U**	**180**	**31**	<0.071	**0.18 J**	**6.5**	**7.6**	**110**	**520**	**0.067**	<0.14	**6.7**	<0.33	**2.7**	<0.32	**67**	**130**

Table 2: Metals Concentrations in Soil
Brisbane Baylands OU-2
Brisbane, California

Sample Location	Investigation Zone	Depth Range (ft bgs)	Sample Name	Collection Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
Direct Exposure Human Health Risk Level Residential Soil Exposure ESL [1]					1.1E+01	6.7E-02	1.5E+04	1.6E+01	7.8E+01	1.2E+05	2.3E+01	3.1E+03	8.0E+01	1.3E+01	3.9E+02	8.2E+02	3.9E+02	3.9E+02	7.8E-01	3.9E+02	2.3E+04
Regional Background [2]					5.5E+00	1.9E+01	3.2E+02	1.0E+00	2.7E+00	1.0E+02	2.5E+01	6.9E+01	1.6E+01	4.0E-01	7.4E+00	1.2E+02	5.6E+00	1.8E+00	7.6E+00	7.4E+01	1.1E+02
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
DG-AP4	2	0.5-1	DG-AP4S-0.5-1	12/17/2018	**0.57 J**	**0.69 J**	**29**	<0.083	**0.055 J**	**6.9**	**12**	**78**	**4.8**	**0.036**	<0.16	**2.8**	<0.38	<0.13	<0.37	**83**	**38**
DG-AP4	2	3.5-4	DG-AP4S-3.5-4	12/17/2018	**2.0**	**190**	**100**	**0.17 J**	**0.89**	**39**	**8.9**	**85**	**320**	**0.37**	<0.16	**23**	<0.38	**0.22 J**	<0.37	**43**	**840**
DG-AP5	2	0.5-1	DG-AP5S-0.5-1	12/20/2018	**13**	**2.7 J**	**68**	**0.25 J**	**0.53**	**13**	**12**	**130**	**62**	**0.14**	**1.3 J**	**10**	<0.48	<0.16	<0.46	**97**	**120**
DG-AP5	2	3.5-4	DG-AP5S-3.5-4	12/20/2018	**0.82 J**	**19**	**59**	**0.23 J**	**0.20 J**	**26**	**4.4**	**23**	**64**	**0.013 J**	<0.17	**21**	<0.39	<0.13	<0.37	**21**	**62**
DG-AP6	2	0.5-1	DG-AP6S-0.5-1	12/21/2018	**8.5**	**22**	**170**	**0.71**	**5.8**	**73**	**12**	**420**	**530**	**0.8**	**8.3**	**68**	**2.0 J**	**0.82**	<0.33	**50**	**920**
DG-AP6	2	3.5-4	DG-AP6S-3.5-4	12/21/2018	**5.1**	**64**	**460**	**0.42**	**2.1**	**36**	**8.6**	**130**	**460**	**0.12**	**1.4 J**	**33**	**0.99 J**	**1.0**	<0.50	**35**	**670**
DG-AP7	2	0.5-1	DG-AP7S-0.5-1	12/19/2018	**14**	**34**	**440**	<0.094	**9.9**	**73**	**21**	**450**	**810**	**1.9**	**15**	**88**	**2.8 J**	**0.46 J**	<1.0	**30**	**1,400**
DG-AP7	2	3.5-4	DG-AP7S-3.5-4	12/19/2018	**1.3 J**	**5.2**	**61**	**0.24 J**	**0.12 J**	**15**	**5.3**	**15**	**7.2 J**	**0.019**	<0.18	**16**	<0.42	<0.14	<0.41	**32**	**35**
DG-AP7 (D)	2	3.5-4	DG-AP7 (D)S-3.5-4	12/19/2018	**1.3**	**5.2**	**60**	**0.19 J**	**0.19 J**	**18**	**4.9**	**19**	**13 J**	**0.022**	<0.17	**16**	<0.40	<0.13	<0.39	**29**	**49**
DG-AP8	2	0.5-1	DG-AP8S-0.5-1	12/21/2018	**1.4 J**	**6.6**	**93**	**0.19 J**	**0.25 J**	**11**	**4.9**	**33**	**60**	**0.07**	<0.23	**10**	<0.54	<0.18	<0.52	**25**	**120**
DG-AP8	2	3.5-4	DG-AP8S-3.5-4	12/21/2018	**19**	**21**	**1,100**	**0.16 J**	**3**	**54**	**11**	**530**	**2,400**	**0.8**	**0.91 J**	**40**	<1.2	**4.0**	**1.6 J**	**20**	**2,200**
DG-AP9	2	0.5-1	DG-AP9S-0.5-1	1/21/2019	**1.6 U**	**1.2 J**	**41**	<0.11	**2.2**	**9.7**	**9.4**	**110**	**33**	**0.048**	<0.21	**5.4**	**3.3 U**	<0.17	<0.48	**88**	**60**
DG-AP9	2	3.5-4	DG-AP9S-3.5-4	1/21/2019	**41**	**41**	**1,100**	**0.20 J**	**4.3**	**80**	**15**	**840**	**6100**	**0.18**	**1.5**	**70**	<2.3	**5.9**	<2.2	**27**	**3,000**
DG-AQ2	2	0.5-1	DG-AQ2S-0.5-1	12/17/2018	**0.44 J**	**7.6**	**25 J**	**0.10 J**	**0.11 J**	**10 J**	**10 J**	**93 J+**	**20 J**	**0.077**	<0.18	**4.8**	<0.42	<0.14	<0.40	**72 J**	**42**
DG-AQ2	2	3.5-4	DG-AQ2S-3.5-4	12/17/2018	**4.2**	**210**	**270**	**0.44 J**	**0.82 J**	**27**	**9.2**	**250 J**	**600**	**0.31**	**0.26 J**	**28**	<0.56	**0.24 J**	<0.54	**32**	**630**
DG-AQ2	2	7.5-8	DG-AQ2S-7.5-8	12/17/2018	**1.8**	**38**	**94**	**0.12 J**	<0.031	**76**	**14**	**27**	**10**	**2.1**	<0.16	**110**	<0.37	<0.13	<0.36	**52**	**49**
DG-AQ2 (D)	2	3.5-4	DG-AQ2 (D)S-3.5-4	12/17/2018	**3.2**	**150**	**220**	**0.25 J**	**0.44 J**	**21**	**5.7**	**120 J**	**400**	**0.33**	<0.21 UJ	**20**	<0.50	<0.17 UJ	<0.48	**22**	**470**
DG-AQ3	2	0.5-1	DG-AQ3S-0.5-1	12/19/2018	<0.22	**0.60 J**	**23**	**0.29**	**0.038 J**	**5.1**	**7**	**150**	**2.7**	**0.045**	**0.33 J**	**3.6**	**1.2 J**	<0.14	<0.39	**62**	**22**
DG-AQ3	2	3.5-4	DG-AQ3S-3.5-4	12/19/2018	**0.88 J**	**52**	**130**	**0.089 J**	**0.25 J**	**23**	**12**	**39**	**45**	**0.062**	**0.58 J**	**37**	**0.68 J**	<0.13	<0.36	**25**	**82**
DG-AQ4	2	0.5-1	DG-AQ4S-0.5-1	12/17/2018	**0.27 J**	**5.1**	**34**	<0.10	<0.039	**11**	**11**	**120**	**6.7**	**0.05**	<0.20	**3.6**	<0.47	<0.16	<0.46	**84**	**40**
DG-AQ4	2	3.5-4	DG-AQ4S-3.5-4	12/17/2018	**3.5**	**190**	**140**	**0.12 J**	**1.4**	**24**	**7.7**	**110**	**420**	**0.24**	<0.16	**15**	<0.37	**0.42 J**	<0.36	**45**	**770**
DG-AQ4	2	9-9.5	DG-AQ4S-9-9.5	12/17/2018	**1.4 J**	**6**	**59**	**0.31 J**	<0.044	**29**	**8.7**	**6.5**	**0.95 J**	**0.014 J**	**0.52 J**	**21**	<0.54	<0.18	<0.52	**39**	**29**
DG-AQ5	2	0.5-1	DG-AQ5S-0.5-1	12/17/2018	**1.6 U**	**0.29 J**	**22**	<0.10	<0.039	**12**	**14**	**110**	**1.2 J**	**0.073**	**0.79 J**	**5.2**	<0.47	**0.19 J**	<0.46	**110**	**45**
DG-AQ5	2	3.5-4	DG-AQ5S-3.5-4	12/17/2018	**1.5 U**	**13**	**49**	<0.10	<0.038	**8.5**	**15**	**120**	**46**	**0.022**	<0.20	**5.6**	<0.46	<0.16	<0.45	**110**	**67**
DG-AQ5 (D)	2	0.5-1	DG-AQ5 (D)S-0.5-1	12/17/2018	**1.5 U**	**0.74 J**	**20**	<0.098	<0.037	**9.8**	**14**	**100**	**1.7 J**	**0.074**	**0.80 J**	**4.4**	<0.45	**0.27 J**	<0.44	**110**	**45**
DG-AQ6	2	0.5-1	DG-AQ6S-0.5-1	12/21/2018	**2.8**	**9.1**	**210**	**0.66**	**1.6**	**37**	**8.6**	**150**	**320**	**0.38**	**1.9**	**39**	<0.54	<0.18	<0.52	**49**	**280**
DG-AQ6	2	11-11.5	DG-AQ6S-11-11.5	12/21/2018	**2.9**	**19**	**63**	**1.0**	**0.65**	**27**	**12**	**32**	**65**	**0.059**	**0.74 J**	**29**	<0.44	<0.15	<0.43	**35**	**170**
DG-AQ6	2	3.5-4	DG-AQ6S-3.5-4	12/21/2018	**1.5**	**14**	**66**	**0.42**	**0.17 J**	**17**	**5.4**	**17**	**25**	**0.042**	**0.33 J**	**20**	<0.45	<0.15	<0.44	**33**	**40**
DG-AQ7	2	0.5-1	DG-AQ7S-0.5-1	1/30/2019	<0.23	**4.5**	**49**	**0.26 J**	**0.057 J**	**13**	**4.6**	**19**	**14**	**0.018**	<0.18	**13**	<0.41	<0.14 U	<0.40	**30**	**30**
DG-AQ7	2	3.5-4	DG-AQ7S-3.5-4	1/30/2019	**9.4**	**21**	**320**	**0.46**	**0.91**	**51**	**10**	**1,300**	**1,400**	**2.0**	**0.47 J**	**85**	<0.50	**1.4**	<0.48	**44**	**660**
DG-AQ8	2	0.5-1	DG-AQ8S-0.5-1	12/21/2018	**11**	**16**	**280**	**0.13 J**	**8.6**	**96**	**15**	**450**	**870**	**0.95**	**11**	**110**	<0.54	**1.0**	<0.52	**40**	**1,300**
DG-AQ8	2	3.5-4	DG-AQ8S-3.5-4	12/21/2018	**44**	**35**	**1,200**	**0.3**	**6.0**	**49**	**13**	**1,000**	**4,500**	**0.9**	**1.5**	**61**	<0.90	**8.4**	**1.8 J**	**29**	**2,400**
DG-AQ8	2	8-8.5	DG-AQ8S-8-8.5	12/21/2018	**2.3**	**16**	**130**	**0.62**	<0.044	**36**	**11**	**75**	**290**	**0.091**	**0.85 J**	**36**	<0.54	**0.31 J**	<0.52	**45**	**200**
DG-AQ9	2	0.5-1	DG-AQ9S-0.5-1	1/30/2019	**3.4**	**7.2**	**72**	<0.13 U	**0.68**	**32**	**10**	**140**	**200**	**0.17**	**1.4 J**	**24**	**3.9 U**	<0.20 U	**1.3 J**	**110**	**410**
DG-AQ9	2	3.5-4	DG-AQ9S-3.5-4	1/30/2019	<0.20 U	<0.20 U	**28**	<0.077 U	**0.14 J**	**9.3**	**11**	**130**	**1.4**	**0.043**	<0.15 U	**5.3**	<0.36 U	<0.12 U	**1.6**	**120**	**36**
DG-AR2	2	0.5-1	DG-AR2S-0.5-1	12/17/2018	<0.33	**5.2**	**80**	<0.13	**0.29 J**	**12**	**12**	**190**	**94**	**0.087**	<0.26	**7.0**	<0.60	**0.33 J**	<0.58	**110**	**120**
DG-AR2	2	3.5-4	DG-AR2S-3.5-4	12/17/2018	**1.2**	**180**	**88**	**0.23**	**0.54**	**17**	**8.1**	**150**	**170**	**0.43**	**0.21 J**	**16**	<0.34	**0.46 J**	<0.33	**50**	**130**
DG-AR3	2	0.5-1	DG-AR3S-0.5-1	12/14/2018	**1.4 U**	**7.4**	**49**	<0.089	<0.034	**13**	**12**	**170**	**23**	**0.077**	<0.18	**6**	<0.41	**0.68 U**	<0.40	**110**	**57**
DG-AR3	2	3.5-4	DG-AR3S-3.5-4	12/14/2018	**1.2**	**41**	**27**	<0.067	**0.13 J**	**12**	**9.6**	**130**	**36**	**0.073**	**0.56 J**	**6.4**	<0.31	**0.52 U**	<0.30	**76**	**53**
DG-AR4	2	0.5-1	DG-AR4S-0.5-1	12/17/2018	<0.17	**0.70 J**	**37**	<0.066	<0.025	**5.4**	**8.9**	**120**	**2.2**	**0.035**	<0.13	**2.3**	<0.30	<0.10	<0.29	**71**	**33**
DG-AR4	2	3.5-4	DG-AR4S-3.5-4	12/17/2018	**1.7**	**120**	**91**	**0.21 J**	**1.0**	**44**	**9.9**	**50**	**140**	**0.57**	<0.16	**32**	<0.38	**0.57 J**	<0.36	**39**	**310**
DG-AR5	2	0.5-1	DG-AR5S-0.5-1	12/20/2018	<0.27	<0.27	**39**	<0.10	<0.040	**9.9**	**11**	**160**	**7.6**	**0.067**	<0.21	**4.4**	<0.48	<0.16	<0.47	**90**	**39**
DG-AR5	2	3.5-4	DG-AR5S-3.5-4	12/20/2018	**0.69 J**	**18**	**180**	**0.48**	**0.33 J**	**89**	**16**	**39**	**70**	**0.088**	**0.49 J**	**140**	<0.43	<0.15	<0.42	**45**	**75**
DG-AR6	2	0.5-1	DG-AR6S-0.5-1	12/21/2018	**4.4**	**11**	**260**	**0.44**	**3.0**	**47**	**8.6**	**220**	**570**	**0.26**	**5.0**	**48**	**0.44 J**	**0.33 J**	<0.40	**31**	**530**
DG-AR6	2	3.5-4	DG-AR6S-3.5-4	12/21/2018	**1.8 U**	**13**	**34**	**0.13 J**	**0.23 J**	**26**	**3.5**	**26**	**75**	**0.015**	**0.29 J**	**29**	<0.55	<0.19	<0.53	**12**	**44**
DG-AR7	2	0.5-1	DG-AR7S-0.5-1	12/19/2018	**5.4**	**16**	**150**	**0.21 J**	**3.4**	**74**	**11**	**260**	**2,700**	**0.7**	**16**	**77**	**1.7 J**	**3.0**	<0.43	**35**	**580**
DG-AR7	2	3.5-4	DG-AR7S-3.5-4	12/19/2018	**0.77 J**	**2.4 J**	**45**	**0.19 J**	**0.056 J**	**12**	**4.5**	**9.8**	**8.9**	**0.022**	<0.20	**17**	<0.47	<0.16	<0.45	**19**	**26**
DG-AR8	2	0.5-1	DG-AR8S-0.5-1	12/21/2018	**3.6**	**9.5**	**220**	**0.12 J**	**3.1**	**49**	**9.9**	**240**	**450**	**0.31**	**3.4**	**56**	**0.82 J**	**0.66**	<0.31	**38**	**1,600**
DG-AR8	2	3.5-4	DG-AR8S-3.5-4	12/21/2018	**23**	**31**	**430**	**0.22 J**	**0.58**	**19**	**7.3**	**180**	**1,600**	**0.078**	**1.6**	**25**	**0.51 J**	**1.3**	**0.34 J**	**34**	**540**
DG-AR9	2	0.5-1	DG-AR9S-0.5-1	1/9/2019	**6.9**	**14**	**200**	**0.22**	**2.8**	**53**	**13**	**270**	**450**	**0.46**	**5.1**	**51**	**2.0**	**0.69**	<0.40	**66**	**670**
DG-AR9	2	3.5-4	DG-AR9S-3.5-4	1/9/2019	**3.5**	**27**	**230**	**0.19**	**0.54**	**30**	**3.7**	**180**	**1,200**	**0.073**	**0.55**	**26**	**1.0**	**1.5**	<0.34	**14**	**390**
DG-AR9 (D)	2	3.5-4	DG-AR9 (D)S-3.5-4	1/9/2019	**5.3**	**49**	**330**	**0.23**	**0.6**	**39**	**4.7**	**180**	**800**	**0.066**	**0.7**	**39**	<0.34	**1.5**	<0.33	**17**	**530**
DG-AS2	2	0.5-1	DG-AS2S-0.5-1	12/17/2018	<0.27	**9.2**	**43**	<0.10	<0.040	**7.0**	**9.9**	**130**	**14**	**0.042**	<0.20	**3.4**	<0.48	<0.16	<0.46	**110**	**42**

Table 2: Metals Concentrations in Soil
Brisbane Baylands OU-2
Brisbane, California

Sample Location	Investigation Zone	Depth Range (ft bgs)	Sample Name	Collection Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
Direct Exposure Human Health Risk Level Residential Soil Exposure ESL [1]					1.1E+01	6.7E-02	1.5E+04	1.6E+01	7.8E+01	1.2E+05	2.3E+01	3.1E+03	8.0E+01	1.3E+01	3.9E+02	8.2E+02	3.9E+02	3.9E+02	7.8E-01	3.9E+02	2.3E+04
Regional Background [2]					5.5E+00	1.9E+01	3.2E+02	1.0E+00	2.7E+00	1.0E+02	2.5E+01	6.9E+01	1.6E+01	4.0E-01	7.4E+00	1.2E+02	5.6E+00	1.8E+00	7.6E+00	7.4E+01	1.1E+02
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
DG-AS2	2	3.5-4	DG-AS2S-3.5-4	12/17/2018	**0.39 J**	**2.2**	**20**	<0.072	<0.028	**6.2**	**9.3**	**84**	**2.2**	**0.068**	**0.17 J**	**3.4**	<0.33	<0.11	<0.32	**66**	**32**
DG-AS3	2	0.5-1	DG-AS3S-0.5-1	12/20/2018	**0.49 J**	**0.91 J**	**57**	**0.14 J**	**0.087 J**	**9.1**	**7.6**	**110**	**36**	**0.081**	<0.19 UJ	**5.2 J**	<0.43 UJ	<0.15	<0.42	**73**	**70**
DG-AS3	2	3.5-4	DG-AS3S-3.5-4	12/20/2018	**5.9**	**190**	**69**	**0.23**	**1.1**	**21**	**8.4**	**130**	**120**	**0.2**	**0.19 J**	**23**	<0.31	**0.27 J**	<0.30	**47**	**130**
DG-AS3	2	4.5-5	DG-AS3S-4.5-5	12/20/2018	**2.2**	**21**	**58**	**0.89**	<0.047	**39**	**11**	**37**	**10**	**0.088**	<0.24	**35**	<0.57	<0.19	<0.55	**47**	**74**
DG-AS3 (D)	2	0.5-1	DG-AS3 (D)S-0.5-1	12/20/2018	**1.2 J**	**2.1 J**	**47**	**0.11 J**	**0.31 J**	**14**	**9.2**	**110**	**59**	**0.11**	**0.19 J**	**11 J**	**0.70 J**	<0.13	<0.37	**72**	**91**
DG-AS4	2	0.5-1	DG-AS4S-0.5-1	12/17/2018	**0.27 J**	**0.64 J**	**36**	<0.074	<0.028	**4.3**	**8.8 J**	**76**	**2.3**	**0.043**	<0.15	**2.1**	<0.34	<0.12	<0.33	**68**	**35**
DG-AS4	2	3.5-4	DG-AS4S-3.5-4	12/17/2018	**2.8**	**230**	**150**	**0.23 J**	**0.87**	**43**	**11**	**110**	**330**	**0.56**	**0.28 J**	**31**	<0.46	**0.45 J**	<0.44	**45**	**460**
DG-AS4 (D)	2	0.5-1	DG-AS4 (D)S-0.5-1	12/17/2018	<0.19 UJ	**0.43 J**	**25**	<0.075	<0.029	**4.0**	**5.0 J**	**72**	**2.5**	**0.051**	<0.15	**2.2**	<0.34	<0.12	<0.33	**46**	**34**
DG-AS5	2	0.5-1	DG-AS5S-0.5-1	12/17/2018	**0.72 J**	**3.7 U**	**29**	<0.12	**0.098 J**	**10**	**8.7**	**86**	**7.2**	**0.067**	**0.36 J**	**7.2**	<0.56	<0.19	<0.54	**76**	**30**
DG-AS5	2	3.5-4	DG-AS5S-3.5-4	12/17/2018	<0.20	**2.4 U**	**120**	<0.077	**0.066 J**	**30**	**3.4**	**10**	**48**	**0.075**	<0.15	**36**	<0.36	**0.17 J**	**0.51 J**	**17**	**41**
DG-AS6	2	0.5-1	DG-AS6S-0.5-1	12/21/2018	**5.3 J**	**17**	**150 J**	**0.45**	**1.9 J**	**47**	**9.6**	**160 J**	**360 J**	**0.45 J**	**3.2**	**56**	**0.87 J**	<0.14 UJ	<0.41	**36**	**330 J**
DG-AS6	2	3.5-4	DG-AS6S-3.5-4	12/21/2018	**1.5 U**	**17**	**89**	**0.12 J**	**0.19 J**	**8.0**	**4.4**	**16**	**35**	**0.023**	**0.23 J**	**7.6**	<0.45	<0.15	<0.44	**23**	**60**
DG-AS7	2	0.5-1	DG-AS7S-0.5-1	1/9/2019	**9.6**	**15**	**170**	**0.19**	**3.8**	**77**	**15**	**310**	**940**	**0.88**	**7.1**	**150**	**3.6**	**0.52**	<0.56	**73**	**970**
DG-AS7	2	3.5-4	DG-AS7S-3.5-4	1/9/2019	**0.75**	**3.5**	**75**	**0.25**	**0.035**	**12**	**6.2**	**15**	**7.6**	**0.036**	**0.36**	**13**	<0.30	<0.10	<0.29	**40**	**31**
DG-AS8	2	0.5-1	DG-AS8S-0.5-1	12/21/2018	**6.8 J**	**130 J**	**190 J**	**0.42 J**	**0.50 J**	**43 J**	**12 J**	**230 J**	**450 J**	**0.97**	**0.89 J**	**71 J**	<0.53 UJ	**0.73 J**	<0.51	**51 J**	**340 J**
DG-AS8	2	3.5-4	DG-AS8S-3.5-4	12/21/2018	**1.1 J**	**110**	**77**	**0.41**	<0.042	**52**	**14**	**13**	**17**	**0.043**	<0.22	**41**	<0.51	<0.17	<0.50	**52**	**40**
DG-AS8 (D)	2	0.5-1	DG-AS8 (D)S-0.5-1	12/21/2018	**10**	**200**	**290**	**0.25 J**	**1.1 J**	**47**	**14**	**300**	**610**	**1.4**	**1.3 J**	**87**	**0.43 J**	**0.70 J**	<0.36	**58**	**510**
DG-AT2	2	0.5-1	DG-AT2S-0.5-1	12/17/2018	**0.59 J**	**1.9 J**	**29**	<0.12	<0.045	**9.0**	**10**	**130**	**15**	**0.16**	<0.23	**3.8**	<0.54	<0.18	<0.52	**110**	**46**
DG-AT2	2	3.5-4	DG-AT2S-3.5-4	12/17/2018	**0.55 J**	**1.2 J**	**26**	<0.094	<0.036	**8.0**	**12**	**100**	**7.7**	**0.12**	**0.29 J**	**3.9**	**0.69 J**	<0.15	<0.42	**89**	**42**
DG-AT2 (D)	2	0.5-1	DG-AT2 (D)S-0.5-1	12/17/2018	<0.30	<0.31 UJ	**25 J**	<0.12	<0.046 UJ	**8.1**	**9.4**	**100**	**6.4**	**0.12 J**	<0.23	**3.2**	<0.55 UJ	<0.19	<0.53	**100**	**36 J**
DG-AT3	2	0.5-1	DG-AT3S-0.5-1	12/14/2018	**1.6 U**	**3.3**	**37**	<0.11	<0.041	**11**	**9.4**	**120**	**18**	**0.12**	**0.48 J**	**5.8**	<0.49	**0.82 U**	<0.48	**94**	**49**
DG-AT3	2	3.5-4	DG-AT3S-3.5-4	12/14/2018	**2.9**	**440**	**63**	<0.11	**0.75**	**18**	**10**	**140**	**130**	**0.14**	<0.22	**14**	**0.52 J**	**0.85 U**	<0.50	**73**	**180**
DG-AT4	2	0.5-1	DG-AT4S-0.5-1	12/17/2018	<0.26	**0.76 J**	**50 J**	<0.10	**0.11 J**	**5.6**	**13**	**110**	**9.0**	**0.042 J**	<0.20	**3.4**	**0.61 J**	<0.16	<0.46	**87**	**350 J**
DG-AT4	2	3.5-4	DG-AT4S-3.5-4	12/17/2018	**1.2 J**	**150**	**180**	**0.18 J**	**0.87**	**30**	**6.7**	**71**	**310**	**0.68**	**0.30 J**	**24**	<0.39	**0.38 J**	<0.38	**34**	**370**
DG-AT5	2	0.5-1	DG-AT5S-0.5-1	12/20/2018	**0.68 J**	**0.21 J**	**28**	<0.078	<0.030	**10**	**12**	**200**	**2.0**	**0.029**	<0.15	**4.5**	<0.36	<0.12	<0.35 UJ	**95**	**36**
DG-AT5	2	3.5-4	DG-AT5S-3.5-4	12/20/2018	**8.3**	**83**	**180**	**0.25**	**0.86**	**20**	**8.8**	**140**	**600**	**0.16**	**0.49 J**	**19**	<0.37	**0.98**	<0.35	**53**	**350**
DG-AT6	2	0.5-1	DG-AT6S-0.5-1	12/21/2018	**8.1**	**12**	**190**	<0.18	**4.6**	**86**	**15**	**530**	**860**	**0.6**	**9.7**	**78**	<0.82	**0.60 J**	<0.79	**50**	**900**
DG-AT6	2	3.5-4	DG-AT6S-3.5-4	12/21/2018	**1.4 U**	**6.0**	**73**	**0.57**	**0.16 J**	**13**	**6.8**	**16**	**12**	**0.017**	**0.49 J**	**16**	<0.41	<0.14	<0.40	**51**	**38**
DG-AT7	2	3.5-4	DG-AT7S-3.5-4	12/19/2018	**1.1 J**	**86**	**70**	**0.17 J**	**0.070 J**	**15**	**9.6**	**66**	**21**	**0.052**	<0.19	**17**	<0.44	<0.15	<0.43	**59**	**54**
DG-AU2	2	0.5-1	DG-AU2S-0.5-1	12/17/2018	**0.51 J**	<0.30	**27**	<0.12	<0.044	**8.2**	**15**	**120**	**3.0**	**0.046**	<0.23	**3.6**	**0.65 J**	<0.18	<0.52	**130**	**47**
DG-AU2	2	3.5-4	DG-AU2S-3.5-4	12/17/2018	**1.2**	**1.0 J**	**46**	<0.074	**0.046 J**	**12**	**14**	**130**	**2.5**	**0.059**	**0.41 J**	**5**	<0.34	**0.22 J**	<0.33	**120**	**48**
DG-AU3	2	0.5-1	DG-AU3S-0.5-1	12/20/2018	**0.99 J**	**9.4**	**64**	**0.11 J**	**0.28 J**	**15**	**10**	**120**	**66**	**0.11**	**0.20 J**	**10**	<0.41	**0.18 J**	<0.40	**92**	**96**
DG-AU3	2	3.5-4	DG-AU3S-3.5-4	12/20/2018	**0.79 J**	**79**	**290**	**0.48**	**0.15 J**	**19**	**6.4**	**43**	**61**	**0.42**	**0.26 J**	**22**	<0.33	**0.11 J**	<0.32	**28**	**180**
DG-AU4	2	0.5-1	DG-AU4S-0.5-1	12/17/2018	**0.92 J**	<0.31	**40**	<0.12	<0.046	**4.4**	**11**	**82**	**0.39 J**	**0.029**	<0.24	**2.5**	<0.56	<0.19	<0.54	**91**	**39**
DG-AU4	2	3.5-4	DG-AU4S-3.5-4	12/17/2018	**0.95 J**	**46**	**150**	**0.2**	**0.13 J**	**49**	**9.3**	**13**	**260**	**0.15**	**0.35 J**	**28**	<0.30	**0.16 J**	<0.29	**39**	**76**
DG-AU5	2	0.5-1	DG-AU5S-0.5-1	12/17/2018	<0.31	<0.32	**250**	**0.29 J**	**7.0**	**4100**	**36**	**830**	**950**	**1.3**	**80**	**2900**	**2.3 J**	**1.1**	**2.7**	**47**	**1,300**
DG-AU5	2	3.5-4	DG-AU5S-3.5-4	12/17/2018	**4.2**	**120**	**31**	<0.068	**0.31**	**9.3**	**3.2**	**52**	**160**	**0.069**	**0.35 J**	**11**	<0.32	<0.11	<0.31	**18**	**57**
DG-AU6	2	0.5-1	DG-AU6S-0.5-1	12/21/2018	**6.8**	**15**	**200**	<0.18	**5.4**	**84**	**13**	**510**	**600**	**0.57**	**9.3**	**80**	<0.85	**0.81 J**	<0.82	**32**	**750**
DG-AU6	2	3.5-4	DG-AU6S-3.5-4	12/21/2018	**9.7**	**110**	**79**	**0.74**	**0.5**	**18**	**8.8**	**140**	**320**	**0.55**	**1.3**	**27**	**1.1 J**	<0.11	<0.32	**57**	**110**
DG-AU7	2	0.5-1	DG-AU7S-0.5-1	1/9/2019	**2.3**	**6.2**	**110**	**0.14**	**1.5**	**24**	**10**	**130**	**220**	**0.14**	**1.6**	**24**	**1.3**	**0.17**	<0.47	**63**	**300**
DG-AU7	2	3.5-4	DG-AU7S-3.5-4	1/9/2019	**91**	**43**	**1,200**	<2.9	**6.2**	**46**	**13**	**1,500**	**6,700**	**0.74**	**6.3**	**110**	**18**	**6.5**	<13	**26**	**3,700**
DG-AU7 (D)	2	0.5-1	DG-AU7 (D)S-0.5-1	1/9/2019	**5.0**	**8.5**	**120**	**0.17**	**1.7**	**28**	**9.9**	**180**	**310**	**0.19**	**2.6**	**44**	**2.3**	<0.19	<0.54	**61**	**340**
DG-AV2	2	0.5-1	DG-AV2S-0.5-1	2/1/2019	**2.4**	**16**	**56**	**0.23 J**	**0.93**	**18**	**11**	**150**	**180**	**0.14**	**0.71 J**	**19**	**1.2 J**	**0.34 J**	<0.46 R	**89**	**230**
DG-AV2	2	3.5-4	DG-AV2S-3.5-4	2/1/2019	**1.9**	**8.2**	**320**	**0.73**	**0.25 J**	**49**	**14**	**58**	**360**	**0.071**	<0.20	**56**	**0.85 J**	<0.15	<0.44 R	**48**	**100**
DG-AV3	2	0.5-1	DG-AV3S-0.5-1	2/1/2019	**4.2**	**690**	**130**	<0.096	**0.69**	**12**	**10**	**300**	**230**	**0.13**	<0.19	**12**	**0.54 J**	**0.45 J**	<0.43 R	**77**	**150**
DG-AV3	2	3.5-4	DG-AV3S-3.5-4	2/1/2019	**0.36 J**	**7.1**	**27**	<0.090	**0.20 J**	**9.6**	**8.9**	**110**	**41**	**0.13**	<0.18	**7.6**	<0.42	**0.17 J**	<0.40 R	**63**	**59**
DG-AV4	2	0.5-1	DG-AV4S-0.5-1	12/17/2018	**0.73 J**	<0.33	**16**	<0.13	<0.048	**16 J**	**16**	**130 J**	**1.5 J**	**0.031**	<0.25	**6.1**	<0.58	<0.20	<0.56	**120**	**48**
DG-AV4	2	3.5-4	DG-AV4S-3.5-4	12/17/2018	**1.2 J**	**9.9**	**160**	**0.5**	**0.061 J**	**31**	**17**	**39**	**23**	**0.077**	**0.28 J**	**46**	<0.54	**0.18 J**	<0.52	**29**	**79**
DG-AV4	2	8-8.5	DG-AV4S-8-8.5	12/17/2018	**1.5 J**	**13**	**39**	**0.44**	**0.081 J**	**26**	**13**	**20**	**7.1**	**0.034**	**0.59 J**	**27**	<0.51	<0.17	<0.50	**35**	**54**
DG-AV4 (D)	2	3.5-4	DG-AV4 (D)S-3.5-4	12/17/2018	**0.94 J**	**16**	**140**	**0.55**	<0.026 UJ	**25**	**12**	**43**	**17**	**0.048**	**0.37 J**	**40**	<0.31	<0.11 UJ	<0.30	**25**	**81**
DG-AV5	2	0.5-1	DG-AV5S-0.5-1	12/20/2018	**5.0**	**12**	**240**	**0.45 J**	**1.6 J**	**51 J**	**9.4**	**300**	**290**	**1.3**	**3.5 J**	**48 J**	**0.70 J**	**7.7 J**	<0.49	**38**	**550**
DG-AV5	2	3.5-4	DG-AV5S-3.5-4	12/20/2018	**13 J**	**1,400 J**	**33 J**	**0.33 J**	**0.77**	**24 J**	**3.3 J**	**8.3 J**	**28 J**	**0.023**	<0.21	**19 J**	**0.52 J**	<0.17 U	**32 J**	**15 J**	**40 J**
DG-AV5	2	7.5-8	DG-AV5S-7.5-8	12/20/2018	**2.3**	**110**	**55**	**1.0**	<0.035	**38**	**19**	**45**	**13**	**0.039**	**0.24 J**	**36**	<0.42	<0.14	<0.41	**48**	**82**

Table 2: Metals Concentrations in Soil
Brisbane Baylands OU-2
Brisbane, California

Sample Location	Investigation Zone	Depth Range (ft bgs)	Sample Name	Collection Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
Direct Exposure Human Health Risk Level Residential Soil Exposure ESL [1]					1.1E+01	6.7E-02	1.5E+04	1.6E+01	7.8E+01	1.2E+05	2.3E+01	3.1E+03	8.0E+01	1.3E+01	3.9E+02	8.2E+02	3.9E+02	3.9E+02	7.8E-01	3.9E+02	2.3E+04
Regional Background [2]					5.5E+00	1.9E+01	3.2E+02	1.0E+00	2.7E+00	1.0E+02	2.5E+01	6.9E+01	1.6E+01	4.0E-01	7.4E+00	1.2E+02	5.6E+00	1.8E+00	7.6E+00	7.4E+01	1.1E+02
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
DG-AV5 (D)	2	0.5-1	DG-AV5 (D)S-0.5-1	12/20/2018	**5.8**	**15**	**190**	**0.15 J**	**3.0 J**	**100 J**	**13**	**480**	**420**	**1.0**	**12 J**	**93 J**	**0.84 J**	**1.2 J**	<0.35	**36**	**720**
DG-AV6	2	0.5-1	DG-AV6S-0.5-1	12/21/2018	**5.9 J**	**12 J**	**300 J**	**0.39 J+**	**2.3 J**	**47 J**	**16 J**	**190 J**	**290 J**	**0.36**	**4.3**	**55 J**	**1.1 J**	**0.30 J**	<0.45 U	**40 J**	**360 J**
DG-AV6	2	3.5-4	DG-AV6S-3.5-4	12/21/2018	**51**	**32**	**1,600**	**0.94**	**6.3**	**56**	**13**	**1,200**	**5,400**	**1.0**	**4.2**	**50**	**3.4 J**	**9.1**	<0.86	**27**	**4,200**
DG-AV6	2	7-7.5	DG-AV6S-7-7.5	12/21/2018	**3.2**	**23**	**100**	**1.1**	**0.67**	**38**	**16**	**89**	**120**	**0.046**	**1.2 J**	**44**	**0.58 J**	<0.17	<0.48	**53**	**310**
DG-AV6 (D)	2	3.5-4	DG-AV6 (D)S-3.5-4	12/21/2018	**190 J**	**34 J**	**1,800 J**	**1.0**	**6.0 J**	**71**	**11**	**1,300 J**	**10,000 J**	**1.0 J**	**3.1 J**	**60**	**3.9 J**	**7.6 J**	<1.0	**46**	**3,900 J**
DG-AW2	2	0.5-1	DG-AW2S-0.5-1	1/31/2019	**0.28 J**	**28**	**33**	<0.088 U	**0.30 J**	**13**	**9.7**	**110**	**83**	**0.1**	**0.21 J**	**10**	<0.41 U	**0.31 J**	**0.85 J**	**87**	**86**
DG-AW2	2	3.5-4	DG-AW2S-3.5-4	1/31/2019	**3.1 J**	**370**	**140**	**0.19 J**	**0.36 J**	**44**	**12**	**97 J**	**450 J**	**0.13 J**	**0.39 J**	**38**	**1.2 J**	**0.32 J**	**0.84 J**	**64**	**330 J**
DG-AW2 (D)	2	3.5-4	DG-AW2 (D)S-3.5-4	1/31/2019	**7.2 J**	**440**	**130**	<0.11 UJ	**1.6 J**	**35**	**18**	**450 J**	**820 J**	**0.073 J**	**0.36 J**	**40**	**2.1 J**	**1.0 J**	**1.3 J**	**98**	**630 J**
DG-AW3	2	0.5-1	DG-AW3S-0.5-1	1/31/2019	**3.4**	**55**	**120**	**0.12 J**	**1.2**	**38**	**13**	**160**	**230**	**0.23**	**3.2**	**35**	**1.8 J**	<0.17	<0.49	**74**	**330**
DG-AW3	2	3.5-4	DG-AW3S-3.5-4	1/31/2019	**2.6**	**120**	**130**	**0.15 J**	**0.6**	**21**	**9.6**	**130**	**150**	**0.19**	**0.29 J**	**18**	**1.2 J**	**0.13 J**	<0.38	**77**	**260**
DG-AW4	2	0.5-1	DG-AW4S-0.5-1	2/1/2019	**4.0**	**51**	**96**	<0.12	**2.6**	**35**	**11**	**200**	**370**	**0.42**	**2.9**	**37**	**1.5 J**	**0.97**	**0.86**	**60**	**590**
DG-AW4	2	3.5-4	DG-AW4S-3.5-4	2/1/2019	**1.2 U**	**62**	**53**	<0.079	**0.41**	**13**	**8.5**	**58**	**16**	**0.099**	<0.16	**16**	<0.36	<0.12	**0.36**	**56**	**91**
DG-AW5	2	0.5-1	DG-AW5S-0.5-1	12/14/2018	**27**	**34**	**1,400**	**0.56**	**3.7**	**44**	**10**	**790**	**4,800**	**--**	**0.71 J**	**62**	<1.3	**8.1**	**2.0 J**	**32**	**2,800**
DG-AW5	2	3.5-4	DG-AW5S-3.5-4	12/14/2018	**2.6**	**7.4**	**150**	<0.10	**1.2**	**29**	**7.1**	**140**	**270**	**0.37**	**1.6**	**37**	<0.47	**0.78**	<0.45	**35**	**310**
DG-AX2	2	0.5-1	DG-AX2S-0.5-1	2/1/2019	**4.3**	**67**	**170**	**0.31 J**	**2.7**	**160**	**14**	**190**	**470**	**0.92**	**4.3**	**120**	**1.2 J**	**0.39 J**	<0.51 R	**62**	**440**
DG-AX2	2	3.5-4	DG-AX2S-3.5-4	2/1/2019	**4.2**	**96**	**88**	**0.54**	**1.1**	**110**	**18**	**120**	**160**	**0.41**	**0.85 J**	**150**	<0.57	**0.22 J**	<0.55 R	**65**	**200**
DG-AX3	2	0.5-1	DG-AX3S-0.5-1	2/1/2019	**35**	**350**	**250**	**0.32 J**	**2.8**	**43**	**12**	**640**	**3,100**	**0.18**	<0.22	**59**	**2.1 J**	**6.1**	<0.50 R	**43**	**1,000**
DG-AX3	2	3.5-4	DG-AX3S-3.5-4	2/1/2019	**0.97 J**	**60**	**67**	**0.31 J**	**0.26 J**	**97**	**18**	**33**	**10**	**2.2**	<0.22	**140**	**0.73 J**	<0.18	<0.51 R	**67**	**56**
DG-AX4	2	0.5-1	DG-AX4S-0.5-1	2/1/2019	**4.7**	**240**	**110**	<0.12	**0.75**	**28**	**12**	**110**	**160**	**0.16**	**0.39 J**	**30**	**1.5 J**	<0.19	<0.54	**62**	**200**
DG-AX4	2	3.5-4	DG-AX4S-3.5-4	2/1/2019	**4.6**	**420**	**81**	**0.29**	**0.14 J**	**47**	**14**	**18**	**5.3**	**0.032**	**0.20 J**	**35**	**0.90 J**	<0.15	<0.43	**50**	**35**
DG-AX5	2	0.5-1	DG-AX5S-0.5-1	12/20/2018	**2.4**	**9.6**	**200**	**0.57**	**0.34 J**	**44**	**12**	**69**	**220**	**0.13**	**0.24 J**	**42**	**0.56 J**	<0.17	<0.49	**43**	**230**
DG-AX5	2	3.5-4	DG-AX5S-3.5-4	12/20/2018	**2.3**	**14**	**64**	**0.9**	<0.038	**39**	**17**	**49**	**12**	**0.096**	<0.20	**38**	<0.47	<0.16	<0.45	**45**	**83**
DG-AY2	2	0.5-1	DG-AY2S-0.5-1	2/1/2019	**5.4**	**330**	**58**	**0.17 J**	**1.5**	**26**	**13**	**150**	**340**	**0.26**	**0.25 J**	**48**	**1.7 J**	**0.26 J**	<0.52 R	**48**	**190**
DG-AY2	2	3.5-4	DG-AY2S-3.5-4	2/1/2019	**0.89 J**	**11**	**99**	**0.53**	**0.19 J**	**93**	**17**	**27**	**7.1**	**0.69**	<0.19	**150**	**1.5 J**	<0.15	<0.44 R	**66**	**51**
DG-AY3	2	0.5-1	DG-AY3S-0.5-1	1/31/2019	**0.44 J**	**8.8**	**37**	**0.11 J**	**0.24 J**	**13**	**11**	**120**	**22**	**0.081**	<0.16	**6.5**	<0.38	<0.13	<0.36	**110**	**54**
DG-AY3	2	3.5-4	DG-AY3S-3.5-4	1/31/2019	**2.6**	**150**	**61**	**0.18 J**	**0.49**	**23**	**9.7**	**89**	**62**	**0.27**	<0.17	**22**	**1.3 J**	<0.13	<0.38	**52**	**100**
DG-AY4	2	0.5-1	DG-AY4S-0.5-1	2/1/2019	**11 J**	**13**	**130**	<0.096	**3.1**	**47**	**11**	**170**	**1,100**	**0.091 J**	**3.8**	**82**	**2.5 J**	**0.37 J**	<0.43	**35**	**520**
DG-AY4	2	3.5-4	DG-AY4S-3.5-4	2/1/2019	**4.3 J-**	**7.6**	**96 J-**	**0.34 J**	**0.15 J**	**56 J**	**15 J**	**37 J-**	**22 J**	**0.45**	<0.24	**71 J**	**1.5 J**	<0.19	<0.54	**53 J**	**87 J-**
DG-AY4 (D)	2	0.5-1	DG-AY4 (D)S-0.5-1	2/1/2019	**22 J**	**18**	**190**	<0.080	**3.6**	**56**	**10**	**190**	**1,100**	**0.65 J**	**3.7**	**63**	**2.5 J**	**0.52 J**	**0.52**	**36**	**710**
DG-AZ2	2	0.5-1	DG-AZ2S-0.5-1	2/1/2019	**4.0**	**210**	**77**	<0.63	**0.77**	**12**	**5.7**	**610**	**250**	**0.23**	**0.35 J**	**17**	<0.58	<0.97	<0.56 R	**39**	**110**
DG-AZ2	2	3.5-4	DG-AZ2S-3.5-4	2/1/2019	**2.1**	**130**	**62**	**0.38**	**0.23 J**	**80**	**17**	**55**	**56**	**4.3**	<0.22	**95**	**0.73 J**	<0.18	<0.50 R	**64**	**82**
DG-AZ3	2	0.5-1	DG-AZ3S-0.5-1	2/1/2019	**2.6**	**120**	**34**	<0.10	**0.17 J**	**8.3**	**9.4**	**89**	**64**	**0.071**	<0.20	**9.1**	**0.64 J**	<0.16	<0.46	**59**	**64**
DG-AZ3	2	3.5-4	DG-AZ3S-3.5-4	2/1/2019	**3.5**	**88**	**47**	**0.43**	**1.0**	**43**	**17**	**20**	**29**	**0.016**	<0.24	**34**	**4.9**	<0.19	**1.4**	**68**	**1,100**
DG-N10	3	0.5-1	DG-N10S-0.5-1	1/14/2019	**17**	**18**	**120**	**0.99**	**1.0**	**27**	**11**	**3,600**	**1,700**	**2.0**	**2.4**	**59**	**3.1 J**	**0.37 J**	<0.46	**56**	**390**
DG-N10	3	3.5-4	DG-N10S-3.5-4	1/14/2019	**6.0**	**4.8**	**43**	**0.23**	**0.21 J**	**11**	**3.1**	**66**	**240**	**0.081**	**0.63 J**	**12**	**0.43 J**	<0.11	**0.44 J**	**14**	**64**
DG-N11	3	0.5-1	DG-N11S-0.5-1	12/20/2018	**39**	**30**	**200**	<0.31	**2.1**	**36**	**12**	**1,700**	**2,900**	**0.13**	<0.61	**36**	<1.4	**1.3 J**	<1.4	**25**	**1,200**
DG-N11	3	3.5-4	DG-N11S-3.5-4	12/20/2018	**24**	**31**	**340**	<0.20	**0.79**	**42**	**10**	**230**	**6,600**	**0.18**	**0.90 J**	**24**	**1.4 J**	**0.35 J**	<0.87	**20**	**900**
DG-N12	3	0.5-1	DG-N12S-0.5-1	1/14/2019	**3.4 J-**	**89 J**	**80 J**	**0.25 J+**	**0.43 J+**	**14 J**	**13 J**	**140 J**	**470 J**	**0.11 J+**	**0.48 J**	**12 J**	**1.1 J**	<0.14	**1.1 J**	**79 J**	**250 J**
DG-N12	3	3.5-4	DG-N12S-3.5-4	1/14/2019	**1.3**	**26 J**	**29**	**0.36 J**	<0.030 UJ	**32**	**13**	**92 J**	**16**	**0.1**	**1.6 J**	**24**	<0.36 UJ	<0.12	**0.80 J**	**77**	**64**
DG-N12 (D)	3	3.5-4	DG-N12 (D)S-3.5-4	1/14/2019	**1.8 J**	**13 J**	**25 J**	**0.68 J**	**0.13 J**	**37 J**	**15 J**	**53 J**	**22 J**	**0.087**	**2.7 J**	**28 J**	**0.77 J**	<0.15	<0.43 UJ	**57 J**	**66 J+**
DG-N13	3	0.5-1	DG-N13S-0.5-1	1/10/2019	**1.2 J**	**3.3 J**	**120**	**0.30 J**	**0.18 J**	**15**	**13**	**93**	**58**	**0.079**	**0.53 J**	**15 J**	**1.3 J**	<0.17	<0.49	**97**	**90**
DG-N13	3	3.5-4	DG-N13S-3.5-4	1/10/2019	**0.59 J**	**2.8 J**	**50 J**	**0.23 J**	<0.044	**130 J**	**25 J**	**35 J+**	**7.9**	**0.16**	**0.79 J**	**120 J**	**1.4 J**	<0.18	<0.51	**74 J**	**57 J**
DG-N13	3	7.5-8	DG-N13S-7.5-8	1/10/2019	<0.22	**3.8**	**29**	**0.3**	<0.032	**50**	**8.1**	**5.2**	**2.3**	<0.0024	**0.39 J**	**21**	<0.39	<0.13	<0.38	**36**	**14**
DG-N13 (D)	3	0.5-1	DG-N13 (D)S-0.5-1	1/10/2019	**1.7 J**	**6.7 J**	**150**	**0.55 J**	**0.40 J**	**21**	**14**	**79**	**95**	**0.076**	**0.75 J**	**27 J**	**2.7 J**	<0.19	<0.56	**73**	**140**
DG-N14	3	0.5-1	DG-N14S-0.5-1	1/14/2019	**6.8**	**95**	**120**	**0.22 J**	**1.4**	**37**	**17**	**250**	**510**	**0.26**	**1.7**	**31**	**1.2 J**	<0.16	**1.7**	**110**	**350**
DG-N14	3	3.5-4	DG-N14S-3.5-4	1/14/2019	**1.5**	**15**	**160**	**0.66**	<0.034	**58**	**14**	**31**	**7.9**	**0.12**	<0.18	**73**	<0.42	<0.18	**0.50 J**	**81**	**71**
DG-N15	3	0.5-1	DG-N15S-0.5-1	12/21/2018	**2.9**	**110**	**95**	**0.78**	**0.40 J**	**150**	**21**	**62**	**60**	**22**	**0.79 J**	**180**	<0.50	<0.17	<0.48	**59**	**87**
DG-N15	3	3.5-4	DG-N15S-3.5-4	12/21/2018	**3.5**	**39**	**110**	**0.79**	**0.26 J**	**210**	**28**	**32**	**9.5**	**9.0**	**0.75 J**	**380**	**1.5 J**	<0.11	<0.32	**75**	**56**
DG-N6	3	0.5-1	DG-N6S-0.5-1	12/19/2018	**5.0**	**19**	**79**	**0.13 J**	**6.0**	**55**	**10**	**1,100**	**940**	**0.32**	**8.3**	**47**	**2.2 J**	**1.0**	<0.52	**43**	**750**
DG-N6	3	3.5-4	DG-N6S-3.5-4	12/19/2018	**8.9**	**9.0**	**320**	**0.21 J**	**0.95**	**17**	**3.5**	**300**	**1,600**	**0.55**	**1.6 J**	**13**	**1.8 J**	**2.0**	**1.2 J**	**11**	**770**
DG-N7	3	0.5-1	DG-N7S-0.5-1	12/18/2018	**0.87 J**	**10**	**15**	<0.12	<0.046	**11**	**15**	**96**	**17**	**0.067**	**0.57 J**	**6.1**	<0.56	<0.19	<0.54	**100**	**77**
DG-N7	3	3.5-4	DG-N7S-3.5-4	12/18/2018	**1.1 J**	**100**	**58**	<0.083	**0.58**	**15**	**15**	**120**	**290**	**0.072**	**0.17 J**	**15**	<0.38	**0.17 J**	<0.37	**100**	**200**
DG-N8	3	0.5-1	DG-N8S-0.5-1	1/15/2019	**11**	**140**	**1,400**	**1.4**	**4.3**	**100**	**27**	**610**	**1,300**	**0.42**	**6.0**	**170**	**3.7 J**	**0.77 J**	**0.36 J**	**140**	**1,700**

Table 2: Metals Concentrations in Soil
Brisbane Baylands OU-2
Brisbane, California

Sample Location	Investigation Zone	Depth Range (ft bgs)	Sample Name	Collection Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
Direct Exposure Human Health Risk Level Residential Soil Exposure ESL [1]					1.1E+01	6.7E-02	1.5E+04	1.6E+01	7.8E+01	1.2E+05	2.3E+01	3.1E+03	8.0E+01	1.3E+01	3.9E+02	8.2E+02	3.9E+02	3.9E+02	7.8E-01	3.9E+02	2.3E+04
Regional Background [2]					5.5E+00	1.9E+01	3.2E+02	1.0E+00	2.7E+00	1.0E+02	2.5E+01	6.9E+01	1.6E+01	4.0E-01	7.4E+00	1.2E+02	5.6E+00	1.8E+00	7.6E+00	7.4E+01	1.1E+02
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
DG-N8	3	3.5-4	DG-N8S-3.5-4	1/15/2019	**2.5 J**	**11 J**	**100 J**	**1.7 J**	**0.23 J**	**43 J**	**20**	**110**	**35 J**	**0.047**	**1.0 J**	**36 J**	**1.8 J**	<0.12	**0.44 J**	**95**	**72**
DG-N8 (D)	3	3.5-4	DG-N8 (D)S-3.5-4	1/15/2019	**1.3 J**	**4.1 J**	**34 J**	**0.11 J**	<0.029 UJ	**17 J**	**12**	**75**	**16 J**	**0.035**	<0.15 UJ	**15 J**	**0.54 J**	<0.12	<0.34 UJ	**89**	**51**
DG-N9	3	0.5-1	DG-N9S-0.5-1	1/10/2019	**1.5**	**32**	**49**	<0.080	**0.24 J**	**36**	**12**	**110**	**170**	**0.3**	**0.38 J**	**32**	**1.2 J**	<0.12	**1.4**	**75**	**110**
DG-N9	3	3.5-4	DG-N9S-3.5-4	1/10/2019	**1.9**	**140**	**63**	**0.67**	<0.036	**48**	**16**	**54**	**26**	**0.18**	**0.20 J**	**38**	**2.0 J**	<0.15	**0.61 J**	**50**	**110**
DG-O10	3	0.5-1	DG-O10S-0.5-1	1/14/2019	**2,500 J**	**97 J**	**92 J**	**0.45**	**2.0 J**	**25 J**	**7.6 J**	**1,800**	**17,000**	**0.11 J**	**2.2 J**	**35 J**	**1.8 J**	**6.3**	<1.5	**22 J**	**600 J**
DG-O10	3	3.5-4	DG-O10S-3.5-4	1/14/2019	**4.5 J-**	**13 J**	**100 J**	**0.9**	**0.64**	**44**	**15**	**640**	**180**	**0.19**	**0.47 J**	**48 J-**	**2.4 J**	<0.13	<0.39	**49 J-**	**300**
DG-O10 (D)	3	0.5-1	DG-O10 (D)S-0.5-1	1/14/2019	**4,300 J**	**57 J**	**24 J**	**0.5**	**4.8 J**	**50 J**	**13 J**	**1,300**	**14,000**	**0.053 J**	**5.2 J**	**77 J**	**10 J**	**8.2**	<1.7	**12 J**	**2,800 J**
DG-O11	3	0.5-1	DG-O11S-0.5-1	1/10/2019	**1.3**	**9.4**	**39**	**0.34**	<0.031	**32**	**14**	**53**	**68**	**0.049**	**0.21 J**	**46**	**1.0 J**	<0.13	**1.4**	**84**	**71**
DG-O11	3	3.5-4	DG-O11S-3.5-4	1/10/2019	**12**	**59**	**140**	<0.11	**4.3**	**71**	**11**	**680**	**2,000**	**0.39**	**1.1 J**	**61**	**4.0**	**0.17 J**	**1.3 J**	**68**	**570**
DG-O12	3	0.5-1	DG-O12S-0.5-1	1/14/2019	**8.4**	**25**	**100**	**0.24 J**	**1.1**	**36**	**11**	**150**	**730**	**0.24**	**1.1 J**	**46**	**0.73 J**	<0.20	<0.58	**59**	**320**
DG-O12	3	3.5-4	DG-O12S-3.5-4	1/14/2019	**59**	**24**	**240**	**0.49**	**3.8**	**39**	**15**	**6,800**	**3,700**	**0.17**	**2.5**	**45**	**6.6 J**	**1.8 J**	<2.2	**65**	**1,700**
DG-O13	3	0.5-1	DG-O13S-0.5-1	12/21/2018	**880**	**140**	**510**	**0.42 J**	**2.8**	**78**	**26**	**5,900**	**19,000**	**0.11**	**5.1 J**	**270**	<1.6	**4.2**	<1.5	**49**	**990**
DG-O13	3	3.5-4	DG-O13S-3.5-4	12/21/2018	**12**	**15**	**110**	**0.89**	**1.6**	**42**	**11**	**250**	**910**	**0.28**	**2.0**	**37**	<0.56	<0.19	<0.54	**69**	**350**
DG-O14	3	0.5-1	DG-O14S-0.5-1	1/14/2019	**0.35 J**	**2.4**	**54**	<0.079	**0.079 J**	**14**	**14**	**140**	**130**	**0.17**	**0.49 J**	**12**	<0.36	<0.12	**1.2**	**100**	**88**
DG-O14	3	3.5-4	DG-O14S-3.5-4	1/14/2019	**2.1**	**8.5**	**130**	**0.8**	<0.035	**150**	**23**	**56**	**61**	**0.22**	**0.66 J**	**130**	**1.2 J**	<0.14	<0.41	**63**	**140**
DG-O15	3	0.5-1	DG-O15S-0.5-1	1/10/2019	**2.4**	**75**	**170 J-**	**0.37 J+**	**0.044 J**	**210**	**29**	**34 J+**	**11**	**17**	**0.53 J**	**300**	**1.5 J**	<0.18	<0.51	**81 J+**	**62**
DG-O15	3	3.5-4	DG-O15S-3.5-4	1/10/2019	**0.44 J**	**4.6**	**84**	**0.22 J**	**0.056 J**	**73 J**	**8**	**15 J**	**20**	**0.26 J-**	**0.67 J**	**36 J**	**0.62 J**	<0.12	<0.35	**38**	**77**
DG-O15	3	7.5-8	DG-O15S-7.5-8	1/10/2019	**0.31 J**	**1.5 J**	**49**	**0.21**	**0.038 J**	**45**	**8.1**	**7.1**	**3.5**	**0.032**	**0.21 J**	**25**	**0.40 J**	<0.11	<0.30	**32**	**18**
DG-O15 (D)	3	3.5-4	DG-O15 (D)S-3.5-4	1/10/2019	<0.23 UJ	**4.5**	**69**	**0.20 J**	**0.041 J**	**160 J**	**13**	**27 J**	**20**	**0.33**	**0.57 J**	**92 J**	**1.9 J**	<0.14	<0.40	**48**	**75**
DG-O7	3	0.5-1	DG-O7S-0.5-1	1/8/2019	<0.24	**0.93**	**34**	<0.096	<0.036	**8.1**	**11**	**97**	**1.2**	**0.069**	<0.19	**3.9**	**0.6**	<0.15	**1.5**	**110**	**36**
DG-O7	3	3.5-4	DG-O7S-3.5-4	1/8/2019	**0.42**	**1.5**	**32**	<0.083	<0.032	**19**	**12**	**94**	**5.9**	**0.076**	<0.16	**11**	**0.64**	<0.13	**1.5**	**110**	**38**
DG-O8	3	0.5-1	DG-O8S-0.5-1	1/29/2019	**2.2**	**110**	**62**	**0.20 J**	**0.78**	**17**	**10**	**180**	**330**	**0.23**	<0.25	**19**	**0.64 J**	<0.20	<0.56 R	**74**	**200**
DG-O8	3	3.5-4	DG-O8S-3.5-4	1/29/2019	<0.24	**1.3 J**	**41**	<0.092	<0.035	**44**	**6.2**	**5.7**	**2.8**	**0.011 J**	<0.18	**29**	<0.43	<0.14	<0.41 R	**34**	**17**
DG-O9	3	0.5-1	DG-O9S-0.5-1	12/20/2018	**0.44 J**	**1.1 J**	**34**	<0.089	<0.034	**7.3**	**12**	**100**	**27**	**0.067**	<0.18	**7.0**	<0.41	<0.14	<0.40	**83**	**49**
DG-O9	3	3.5-4	DG-O9S-3.5-4	12/20/2018	**2.8**	**15**	**61**	**0.8**	<0.044	**37**	**12**	**31**	**34**	**0.037**	<0.23	**27**	<0.53	<0.18	<0.51	**46**	**230**
DG-P10	3	0.5-1	DG-P10S-0.5-1	1/14/2019	**1.0 J**	**5.7**	**81**	**0.72**	**0.59**	**40**	**8.0**	**110**	**300**	**0.089**	**0.59 J**	**31**	<0.47	<0.16	<0.46	**72**	**130**
DG-P10	3	3.5-4	DG-P10S-3.5-4	1/14/2019	**1.8**	**3.1 U**	**78**	**0.27 J**	**0.10 J**	**46**	**8.5**	**7.9**	**11**	**0.13**	**0.47 J**	**37**	**1.3 J**	<0.16	<0.45	**47**	**43**
DG-P11	3	0.5-1	DG-P11S-0.5-1	12/20/2018	**1.6**	**1.3 J**	**48**	<0.069	**0.27 U**	**60**	**6.3**	**25**	**76**	**0.15**	<0.14	**63**	<0.32	<0.11	<0.31	**26**	**37**
DG-P12	3	0.5-1	DG-P12S-0.5-1	1/14/2019	**10**	**6.0**	**86**	**0.12 J**	**0.92**	**30**	**3.2**	**260**	**1,600**	**0.16**	**0.54 J**	**17**	**1.0 J**	**0.13 J**	<0.30	**15**	**240**
DG-P12	3	3.5-4	DG-P12S-3.5-4	1/14/2019	**28**	**9.6**	**130**	**0.30 J**	**0.21 J**	**29**	**7.5**	**860**	**1,000**	**0.29**	**1.7**	**67**	**1.5 J**	<0.16	<0.45	**94**	**140**
DG-P13	3	0.5-1	DG-P13S-0.5-1	1/10/2019	**1.0 J**	**1.4 J**	**37**	**0.17 J**	**0.26 J**	**18**	**11**	**110**	**150**	**0.038**	**0.52 J**	**7.4**	**1.6 J**	<0.17	<0.48	**110**	**110**
DG-P13	3	3.5-4	DG-P13S-3.5-4	1/10/2019	**3.6**	**16**	**72**	**0.84**	**2.3 J**	**32**	**18**	**300 J**	**790 J**	**0.053**	**1.2 J**	**47**	**2.0 J**	<0.17	**0.85 J**	**41**	**330**
DG-P13 (D)	3	3.5-4	DG-P13 (D)S-3.5-4	1/10/2019	**3.0**	**15**	**53**	**0.87**	**0.72 J**	**37**	**16**	**150 J**	**200 J**	**0.079**	**1.1 J**	**46**	**2.5 J**	<0.14	<0.40 UJ	**43**	**310**
DG-P14	3	0.5-1	DG-P14S-0.5-1	1/14/2019	**200**	**35**	**94**	**0.13 J**	**0.28 J**	**21**	**14**	**1,200**	**3,200**	**0.19**	**0.48 J**	**24**	<0.53	**0.60 J**	**1.3 J**	**96**	**240**
DG-P14	3	3.5-4	DG-P14S-3.5-4	1/14/2019	**4.7**	**14**	**1,100**	**1.4**	**0.62 J**	**140**	**19**	**220**	**920 J**	**3.4**	**1.7 J**	**130**	<0.83	**1.0 J**	**0.93 J**	**86**	**550**
DG-P14 (D)	3	3.5-4	DG-P14 (D)S-3.5-4	1/14/2019	**4.0**	**19**	**1,500**	**1.9**	**0.63 J**	**110**	**19**	**300**	**2,500 J**	**3.0**	**4.5 J**	**110**	<1.0	**0.48 J**	<0.97 UJ	**120**	**610**
DG-P15	3	0.5-1	DG-P15S-0.5-1	12/21/2018	**2.4**	**12**	**71**	**0.84**	**0.68**	**32**	**15**	**220**	**250**	**0.35**	**0.77 J**	**40**	<0.53	<0.18	<0.51	**88**	**160**
DG-P15	3	3.5-4	DG-P15S-3.5-4	12/21/2018	**1.9 U**	**3.7**	**48**	**1.2**	**0.31 J**	**440**	**39**	**62**	**13**	**0.1**	**1.1 J**	**480**	**0.80 J**	<0.19	<0.54	**95**	**84**
DG-P7	3	0.5-1	DG-P7S-0.5-1	12/18/2018	**2.8**	**20**	**130**	<0.10	**7.3**	**38**	**9.6**	**870**	**1,900**	**0.16**	**4.5**	**45**	**0.62 J**	**3.6**	<0.45	**68**	**760**
DG-P7	3	3.5-4	DG-P7S-3.5-4	12/18/2018	**0.48 J**	**0.98 J**	**32**	<0.12	**0.12 J**	**13**	**12**	**130**	**13**	**0.051**	**0.28 J**	**5.2**	<0.56	<0.19	<0.54	**110**	**58**
DG-P7	3	8.5-9	DG-P7S-8.5-9	12/18/2018	**0.64 J**	**5.5**	**39**	**0.26 J**	**0.070 J**	**56**	**6.8**	**25**	**29**	**0.22**	**0.77 J**	**44**	**0.58 J**	<0.17	<0.50	**47**	**72**
DG-P8	3	0.5-1	DG-P8S-0.5-1	12/18/2018	**0.90 J**	**18**	**68**	<0.13	**0.59**	**18**	**12**	**160**	**490**	**0.068**	**0.35 J**	**10**	<0.59	<0.20	<0.57	**120**	**120**
DG-P8	3	3.5-4	DG-P8S-3.5-4	12/18/2018	**0.65 J**	**2.4**	**41**	<0.079	<0.030	**47**	**4.6**	**6.7**	**1.1 J**	**0.47**	<0.16	**35**	<0.36	<0.12	<0.35	**40**	**19**
DG-P9	3	0.5-1	DG-P9S-0.5-1	11/21/2018	**0.56 J**	**0.79 J**	**26 J**	<0.13	**0.12 J**	**11 J**	**13 J**	**94**	**6.4**	**0.038 J-**	<0.25	**5.5**	**0.69 J**	**0.96 U**	<0.56	**110 J**	**45**
DG-P9	3	3.5-4	DG-P9S-3.5-4	11/21/2018	**5.4**	**19**	**33**	**1.1**	**0.57**	**28**	**13**	**41**	**64**	**0.19**	**0.39 J**	**38**	<0.59	**0.99 U**	<0.57	**45**	**520**
DG-Q10	3	0.5-1	DG-Q10S-0.5-1	1/14/2019	<0.47	**6.6**	**73**	**0.33**	**0.20 J**	**9.1**	**5.9**	**52**	**58**	**0.039**	**0.49 J**	**9.4**	<0.85	<0.11	**1.1 J**	**41**	**49**
DG-Q10	3	3.5-4	DG-Q10S-3.5-4	1/14/2019	**1.3**	**2.3**	**110**	**0.83**	**0.085 J**	**83**	**22**	**9.4**	**4.9**	**0.054**	**0.55 J**	**45**	**0.74 J**	<0.10	<0.29	**50**	**29**
DG-Q11	3	0.5-1	DG-Q11S-0.5-1	1/10/2019	**3.1**	**9.1**	**75**	<0.081	**0.18 J**	**21**	**13**	**170**	**420**	**0.14**	**0.51 J**	**17**	**1.5 J**	<0.13	**1.3 J**	**84**	**140**
DG-Q11	3	3.5-4	DG-Q11S-3.5-4	1/10/2019	**2.5**	**14**	**47**	**0.72**	<0.045	**37**	**18**	**77**	**48**	**0.093**	<0.23	**43**	**2.1 J**	<0.18	<0.52	**47**	**98**
DG-Q11 (D)	3	0.5-1	DG-Q11 (D)S-0.5-1	1/10/2019	**4.2**	**7.5**	**55**	<0.12	**0.13 J**	**16**	**11**	**130**	**430**	**0.16**	<0.23 UJ	**13**	**1.2 J**	<0.18	**1.1 J**	**71**	**110**
DG-Q12	3	0.5-1	DG-Q12S-0.5-1	1/14/2019	**3.4**	**6.2**	**23**	**0.15 J**	**0.35 J**	**17**	**4.7**	**180**	**380**	**0.28**	**0.69 J**	**27**	**0.52 J**	<0.15	<0.43	**21**	**77**
DG-Q12	3	3.5-4	DG-Q12S-3.5-4	1/14/2019	**0.55 J**	**2.7 J**	**25**	**0.28 J**	<0.049	**16**	**14**	**92**	**17**	**0.044**	**0.53 J**	**13**	**1.3 J**	<0.20	<0.57	**91**	**73**
DG-Q13	3	0.5-1	DG-Q13S-0.5-1	12/21/2018	**1.2**	**2.3 U**	**26**	**1.3**	**0.32**	**22**	**14**	**150**	**170**	**0.056**	**1.2**	**10**	**1.1 J**	<0.12	<0.33	**100**	**76**

Table 2: Metals Concentrations in Soil
Brisbane Baylands OU-2
Brisbane, California

Sample Location	Investigation Zone	Depth Range (ft bgs)	Sample Name	Collection Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
Direct Exposure Human Health Risk Level Residential Soil Exposure ESL [1]					1.1E+01	6.7E-02	1.5E+04	1.6E+01	7.8E+01	1.2E+05	2.3E+01	3.1E+03	8.0E+01	1.3E+01	3.9E+02	8.2E+02	3.9E+02	3.9E+02	7.8E-01	3.9E+02	2.3E+04
Regional Background [2]					5.5E+00	1.9E+01	3.2E+02	1.0E+00	2.7E+00	1.0E+02	2.5E+01	6.9E+01	1.6E+01	4.0E-01	7.4E+00	1.2E+02	5.6E+00	1.8E+00	7.6E+00	7.4E+01	1.1E+02
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
DG-Q13	3	3.5-4	DG-Q13S-3.5-4	12/21/2018	**2.3**	**2.7 U**	**330**	**1.8**	**0.32 J**	**67**	**34**	**82**	**19**	**0.2**	**0.91 J**	**48**	**2.3 J**	<0.14	<0.39	**140**	**52**
DG-Q14	3	0.5-1	DG-Q14S-0.5-1	1/14/2019	**6.3**	**6.6**	**110**	**0.21 J**	**1.2**	**44**	**9.9**	**320**	**680**	**0.18**	**1.8 J**	**34**	<0.56	<0.19	<0.54	**66**	**400**
DG-Q14	3	3.5-4	DG-Q14S-3.5-4	1/14/2019	**0.80 J**	**2.0**	**88**	**0.36**	<0.025	**71**	**10**	**15**	**5.0**	**0.026**	<0.13	**36**	<0.31	<0.10	**1.0**	**74**	**36**
DG-Q15	3	0.5-1	DG-Q15S-0.5-1	1/11/2019	**5.8 J**	**3.4**	**51**	**0.19 J**	<0.039	**9.0 J**	**13**	**330 J**	**3,300 J**	**0.054 J**	**0.52 J**	**11 J**	**1.4 J**	<0.16	**1.4 J**	**82**	**84**
DG-Q15	3	3.5-4	DG-Q15S-3.5-4	1/11/2019	**6.8**	**11**	**450**	**0.64**	**0.5**	**57**	**11**	**170**	**270**	**0.12**	**1.1 J**	**41**	**2.7 J**	<0.14	**1.0 J**	**73**	**130**
DG-Q15	3	7.5-8	DG-Q15S-7.5-8	1/11/2019	**0.46 J**	**1.4 J**	**64**	**0.16 J**	<0.030	**39**	**2.7**	**4.5**	**4.4**	**0.0055 J**	**0.21 J**	**7.9**	<0.36	<0.12	**0.51 J**	**26**	**10**
DG-Q15 (D)	3	0.5-1	DG-Q15 (D)S-0.5-1	1/11/2019	**3.2 J**	**4.1**	**79**	**0.15 J**	<0.039	**28 J**	**12**	**160 J**	**330 J**	**0.093 J**	**0.40 J**	**23 J**	**1.8 J**	<0.16	**0.82 J**	**68**	**91**
DG-Q16	3	0.5-1	DG-Q16S-0.5-1	1/14/2019	**2.1**	**120**	**81**	**0.56**	**0.49**	**87**	**20**	**110**	**110**	**1.2**	**0.30 J**	**96**	**1.1 J**	<0.15	**0.93 J**	**75**	**150**
DG-Q16	3	3.5-4	DG-Q16S-3.5-4	1/14/2019	**2.7**	**4.0**	**110**	**0.36**	<0.034	**260**	**28**	**46**	**4.6**	**0.1**	**0.25 J**	**290**	<0.41	<0.14	**1.1 J**	**91**	**57**
DG-Q8	3	0.5-1	DG-Q8S-0.5-1	1/15/2019	**12**	**23**	**160**	**0.62**	**3.3**	**97**	**15**	**1,000**	**780**	**0.23**	**9.5**	**85**	**7.0**	<0.34	**1.7 J**	**71**	**780**
DG-Q8	3	3.5-4	DG-Q8S-3.5-4	1/15/2019	**2.6**	**4.8**	**67**	**0.44**	**0.27 J**	**20**	**9.2**	**97**	**150**	**0.16**	**0.55 J**	**18**	**0.50 J**	<0.12	**0.44 J**	**66**	**140**
DG-Q9	3	0.5-1	DG-Q9S-0.5-1	12/20/2018	**1.9**	**12**	**49**	<0.066	**0.52**	**22**	**7.7**	**97**	**280**	**0.52**	**0.19 J**	**20**	<0.30	<0.10	<0.29	**53**	**130**
DG-Q9	3	3.5-4	DG-Q9S-3.5-4	12/20/2018	**36**	**380**	**86**	**0.35**	**1.1**	**95**	**13**	**620**	**1,500**	**2.7**	**0.56 J**	**100**	<0.38	**0.53 J**	**1.7**	**54**	**230**
DG-R10	3	0.5-1	DG-R10S-0.5-1	1/29/2019	**0.75 J**	**7.2 J**	**130**	**0.38 J**	<0.10	**95**	**15**	**26**	**45**	**0.053**	<0.53	**59**	<1.3	**0.51 J**	<1.2 R	**83**	**100**
DG-R10	3	3.5-4	DG-R10S-3.5-4	1/29/2019	**4.1**	**21**	**51**	**0.86**	<0.039	**28**	**16**	**33**	**36**	**0.052**	**0.34 J**	**29**	<0.47	<0.16	<0.45 R	**33**	**91**
DG-R11	3	0.5-1	DG-R11S-0.5-1	12/20/2018	**1.0 J**	**120**	**50**	<0.12	<0.044	**57**	**8.3**	**12**	**6.4**	**0.036**	<0.23	**29**	**0.63 J**	<0.18	<0.52	**59**	**23**
DG-R11	3	3.5-4	DG-R11S-3.5-4	12/20/2018	**1.8**	**41**	**51**	**0.48**	**0.26 U**	**27**	**15**	**44**	**50**	**0.045**	**0.25 J**	**33**	<0.32	<0.11	<0.31	**32**	**87**
DG-R11	3	7.5-8	DG-R11S-7.5-8	12/20/2018	**0.90 J**	**4.6**	**27**	**0.24 J**	<0.033	**49**	**8.4**	**23**	**6.1**	**0.048**	**0.57 J**	**45**	**0.49 J**	<0.13	<0.38	**37**	**50**
DG-R12	3	0.5-1	DG-R12S-0.5-1	1/28/2019	**7.5**	**6.7**	**78**	**0.11 J**	**1.2**	**37**	**11**	**630**	**1,200**	**0.41**	**0.86 J**	**30**	**3.3 U**	**0.21 J**	<0.47 U	**62**	**450**
DG-R12	3	3.5-4	DG-R12S-3.5-4	1/28/2019	**0.52 J**	**3.3 U**	**200**	**0.26 J**	**0.29 J**	**60**	**21**	**32**	**9.7**	**0.19**	<0.21 U	**36**	**3.3 U**	<0.17 U	<0.48 U	**120**	**70**
DG-R13	3	0.5-1	DG-R13S-0.5-1	1/28/2019	**54**	**7.9**	**110**	**0.47**	**0.20 J**	**28**	**13**	**490**	**1,100**	**0.066**	**1.0 J**	**37**	<0.52	**0.23 J**	<0.50 R	**49**	**130**
DG-R13	3	3.5-4	DG-R13S-3.5-4	1/28/2019	**1.6 U**	**1.1 J**	**170**	**0.33 U**	<0.041	**64**	**17**	**27**	**13**	**0.17**	<0.21	**28**	**0.71 J**	<0.17	**0.85 R**	**130**	**44**
DG-R14	3	0.5-1	DG-R14S-0.5-1	1/28/2019	<0.32 U	**2.0 J**	**80**	**0.19 J**	**0.49 U**	**53**	**10 J**	**89**	**59**	**0.18 J**	<0.25 U	**69**	<0.58 U	<0.20 U	<0.56 U	**30 J**	**50**
DG-R14	3	3.5-4	DG-R14S-3.5-4	1/28/2019	<0.29 UJ	**1.4 J**	**74**	**0.15 J**	**0.43 U**	**50**	**8.3 J**	**38**	**44**	**0.12 J**	<0.22 U	**62**	<0.52 U	<0.18 U	**1.7 U**	**22 J**	**53**
DG-R14 (D)	3	0.5-1	DG-R14 (D)S-0.5-1	1/28/2019	<0.26 U	**3.9 J**	**120**	**0.16 J**	**0.31 J**	**59**	**18 J**	**54**	**56**	**0.077 J**	<0.20 U	**68**	<0.47 U	<0.16 U	<0.46 U	**65 J**	**60**
DG-R15	3	0.5-1	DG-R15S-0.5-1	12/21/2018	**9.9**	**4.1**	**240**	<0.098	**2.9**	**19**	**3.1**	**1,300**	**960**	**0.15**	**0.60 J**	**18**	<0.45	**0.49 J**	<0.44	**10**	**480**
DG-R15	3	3.5-4	DG-R15S-3.5-4	12/21/2018	**2.0 U**	**4.0 U**	**160**	<0.13	**1.2**	**14**	**2.7**	**90**	**610**	**0.18**	**0.40 J**	**9.5**	<0.59	<0.20	<0.57	**8.7**	**310**
DG-R16	3	0.5-1	DG-R16S-0.5-1	1/28/2019	**5.6**	**17**	**73**	**0.19 J**	**0.78**	**26**	**13**	**450**	**520**	**2.1**	**0.31 J**	**38**	<0.57 U	<0.19 U	**1.9 U**	**85**	**190**
DG-R16	3	19.5-20	DG-R16S-19.5-20	1/28/2019	**1.6 U**	**0.98 J**	**74**	**0.15 J**	**0.41 U**	**52**	**8.6**	**9.9**	**3.5**	**0.022**	<0.21 U	**32**	<0.49 U	<0.16 U	**1.6 U**	**46**	**23**
DG-R16	3	3.5-4	DG-R16S-3.5-4	1/28/2019	**1.9 U**	**56**	**86**	**0.47**	**0.46 U**	**140**	**16**	**42**	**40**	**9.3**	<0.24 U	**170**	**0.67 J**	<0.19 U	<0.54 U	**54**	**55**
DG-R8	3	0.5-1	DG-R8S-0.5-1	1/29/2019	<0.29	<0.30	**34**	**0.29 J**	<0.044	**9.4**	**9.9**	**110**	**2.9**	**0.082**	<0.22	**4.6**	<0.53	<0.18	<0.51 R	**84**	**37**
DG-R8	3	3.5-4	DG-R8S-3.5-4	1/29/2019	**0.36 J**	**1.6 J**	**29**	**0.16 J**	<0.027	**6.7**	**5.1**	**73**	**220**	**0.062**	<0.14	**2.7**	<0.33	**0.12 J**	<0.32 R	**51**	**99**
DG-R9	3	0.5-1	DG-R9S-0.5-1	1/22/2019	**2.1**	**41**	**44**	<0.086	**0.29 J**	**17**	**13**	**96**	**120**	**0.15**	**0.21 J**	**63**	**0.56 J**	<0.13	<0.38	**25**	**77**
DG-R9	3	3.5-4	DG-R9S-3.5-4	1/22/2019	**0.87 J**	**240**	**96**	**0.47**	**0.20 J**	**86**	**16**	**38**	**15**	**3.4**	<0.26	**120**	<0.60	<0.20	<0.58	**59**	**70**
DG-S10	3	0.5-1	DG-S10S-0.5-1	1/14/2019	**0.57 J**	**5**	**12**	**0.093 J**	**0.12 J**	**8.9**	**1.6**	**32**	**110**	**0.031**	**1.1 J**	**9.5**	**0.59 J**	<0.13	<0.39	**5.4**	**27**
DG-S10	3	3.5-4	DG-S10S-3.5-4	1/14/2019	**4.2**	**8.5**	**68**	**0.12 J**	**1.3**	**24**	**4.8**	**340**	**820**	**0.21**	**1.0 J**	**30**	<0.57	<0.19	<0.55	**20**	**480**
DG-S11	3	0.5-1	DG-S11S-0.5-1	1/10/2019	**0.37 J**	**1.2 J**	**55**	<0.086	<0.033	**9.7**	**7.4**	**37**	**39**	**0.049**	<0.17	**3.1**	<0.39	<0.13	**1.0 J**	**53**	**48**
DG-S11	3	3.5-4	DG-S11S-3.5-4	1/10/2019	**26**	**31**	**100**	**0.34 J**	**0.34 J**	**22**	**13**	**1,600**	**1,300**	**2.3**	**3.6**	**120**	**5.5 J**	<0.29	<0.82	**75**	**130**
DG-S12	3	0.5-1	DG-S12S-0.5-1	1/14/2019	<0.30	**4.7**	**160**	**0.36**	**0.10 J**	**81**	**20**	**34**	**9.1**	**0.097**	**0.53 J**	**92**	<0.55 UJ	<0.18	<0.53	**87**	**53**
DG-S12	3	3.5-4	DG-S12S-3.5-4	1/14/2019	**1.3**	**9.9**	**58**	**1.3**	**0.15 J**	**40**	**23**	**51**	**54**	**0.09**	**0.81 J**	**43**	**1.4 J**	<0.12	<0.35	**48**	**100**
DG-S12 (D)	3	0.5-1	DG-S12 (D)S-0.5-1	1/14/2019	<0.18	**3.1**	**140**	**0.52**	**0.031 J**	**87**	**19**	**26**	**6.6**	**0.11**	**0.57 J**	**87**	**0.56 J**	<0.11	<0.32	**69**	**42**
DG-S13	3	0.5-1	DG-S13S-0.5-1	12/21/2018	<0.27	**3.6**	**65**	**0.29 J**	**0.29 J**	**66**	**17**	**35**	**58**	**0.066**	**0.62 J**	**62**	<0.49	<0.16	<0.47	**64**	**58**
DG-S13	3	3.5-4	DG-S13S-3.5-4	12/21/2018	**0.57 J**	**2.7 J**	**62**	**0.24 J**	**0.37**	**96**	**23**	**44**	**8.3**	**0.097**	**0.76 J**	**80**	<0.41	<0.14	<0.40	**98**	**83**
DG-S14	3	0.5-1	DG-S14S-0.5-1	1/14/2019	**8.9**	**5.4**	**250**	<0.081	**1.1**	**53**	**10**	**1,100**	**1,200**	**1.1**	**1.9**	**58**	**0.85 J**	<0.13	**0.46 J**	**40**	**300**
DG-S14	3	3.5-4	DG-S14S-3.5-4	1/14/2019	**1.5 J**	**8.9**	**67**	**0.89**	<0.044	**43**	**19**	**37**	**58**	**0.028**	**0.38 J**	**40**	**0.62 J**	<0.18	<0.51	**52**	**190**
DG-S15	3	0.5-1	DG-S15S-0.5-1	1/11/2019	**130**	**21**	**48**	<0.11	**0.18 J**	**23**	**13**	**120,000**	**1,100**	**0.47**	**0.63 J**	**210**	**1.5 J**	**2.4**	**0.57 J**	**74**	**140**
DG-S15	3	3.5-4	DG-S15S-3.5-4	1/11/2019	**1.7**	**8.0**	**74**	**0.5**	<0.039	**74**	**17**	**53**	**37**	**0.15 J**	<0.20 UJ	**81**	**1.1 J**	<0.16	<0.45 UJ	**54**	**93**
DG-S15	3	6-6.5	DG-S15S-6-6.5	1/11/2019	**0.96 J**	**12**	**660**	**0.64**	**0.14 J**	**30**	**7.1**	**6,400**	**190**	**0.68**	**1.4 J**	**27**	**0.72 J**	**3.0**	**0.62 J**	**48**	**110**
DG-S15 (D)	3	3.5-4	DG-S15 (D)S-3.5-4	1/11/2019	**2.4**	**8.6**	**65**	**0.52**	<0.035	**71**	**16**	**59**	**29**	**0.075 J**	**0.54 J**	**77**	**1.0 J**	<0.14	**0.64 J**	**57**	**80**
DG-S16	3	0.5-1	DG-S16S-0.5-1	1/14/2019	**23**	**18**	**120**	**0.43**	**1.2**	**83**	**24**	**2,800**	**4,700**	**14 J**	**1.8**	**110**	**1.6 J**	**0.30 J**	**0.72 J**	**77**	**430**
DG-S16	3	3.5-4	DG-S16S-3.5-4	1/14/2019	**7.3**	**20**	**840**	**1.4**	**0.68 J**	**71**	**16**	**230**	**1,200**	**2.4**	**3.6**	**46**	**1.8 J**	**0.57 J**	**1.1 J**	**91**	**620**
DG-S16 (D)	3	0.5-1	DG-S16 (D)S-0.5-1	1/14/2019	**19**	**19**	**180**	**0.42**	**1.3**	**74**	**21**	**1,800**	**3,400**	**2.5 J**	**2.1**	**110**	**1.2 J**	<0.16 UJ	**0.63 J**	**67**	**450**
DG-S17	3	0.5-1	DG-S17S-0.5-1	2/5/2019	**5.0 J**	**570**	**84**	**0.21 J**	**0.45 J**	**71 J-**	**14**	**87**	**140 J+**	**2.1 J-**	<0.25	**85 J-**	**2.9 J**	<0.19	**0.63**	**59**	**120**

Table 2: Metals Concentrations in Soil
Brisbane Baylands OU-2
Brisbane, California

Sample Location	Investigation Zone	Depth Range (ft bgs)	Sample Name	Collection Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
Direct Exposure Human Health Risk Level Residential Soil Exposure ESL [1]					1.1E+01	6.7E-02	1.5E+04	1.6E+01	7.8E+01	1.2E+05	2.3E+01	3.1E+03	8.0E+01	1.3E+01	3.9E+02	8.2E+02	3.9E+02	3.9E+02	7.8E-01	3.9E+02	2.3E+04
Regional Background [2]					5.5E+00	1.9E+01	3.2E+02	1.0E+00	2.7E+00	1.0E+02	2.5E+01	6.9E+01	1.6E+01	4.0E-01	7.4E+00	1.2E+02	5.6E+00	1.8E+00	7.6E+00	7.4E+01	1.1E+02
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
DG-S17	3	3.5-4	DG-S17S-3.5-4	2/5/2019	**1.7 J**	**52**	**48**	**0.69**	<0.044	**33**	**15**	**30**	**13**	**0.14**	<0.23	**31**	**1.9 J**	<0.18	**0.69**	**44**	**92**
DG-S9	3	0.5-1	DG-S9S-0.5-1	12/20/2018	**1.8**	**3.3**	**67**	<0.10	**0.4**	**15**	**11**	**92**	**98**	**0.064**	**0.28 J**	**13**	<0.48	<0.16	<0.46	**74**	**130**
DG-S9	3	3.5-4	DG-S9S-3.5-4	12/20/2018	<0.26	**1.0 J**	**42**	<0.10	<0.039	**7.4**	**10**	**140**	**4**	**0.043**	<0.20	**9.7**	**0.81 J**	<0.16	<0.46	**88**	**38**
DG-S9	3	4.5-5	DG-S9S-4.5-5	12/20/2018	**6.2**	**110**	**100**	**0.16 J**	**26**	**29**	**9.4**	**210**	**500**	**0.12**	<0.24	**36**	<0.57	<0.19	<0.55	**53**	**4,500**
DG-T10	3	0.5-1	DG-T10S-0.5-1	1/14/2019	**0.52 J**	**32**	**61**	**0.21 J**	<0.039	**14**	**13**	**190**	**44**	**0.039**	**0.45 J**	**11**	**0.99 J**	<0.16	<0.46	**120**	**50**
DG-T10	3	3.5-4	DG-T10S-3.5-4	1/14/2019	**1.2**	**110**	**79**	**0.7**	**0.18 J**	**120**	**20**	**67**	**27**	**0.71**	**0.60 J**	**150**	**1.7 J**	<0.10	<0.29	**56**	**84**
DG-T11	3	0.5-1	DG-T11S-0.5-1	12/21/2018	**2.2**	**4.8**	**49**	**0.33 J**	**0.88**	**25**	**5.1**	**150**	**4,600**	**0.3**	**0.86 J**	**17**	<0.57	<0.19	<0.55	**28**	**270**
DG-T11	3	3.5-4	DG-T11S-3.5-4	12/21/2018	**8.1**	**4.3**	**43**	**0.65**	**0.55**	**36**	**7.7**	**1,000**	**550**	**0.37**	**0.64 J**	**24**	<0.36	<0.12	<0.35	**55**	**130**
DG-T12	3	0.5-1	DG-T12S-0.5-1	1/14/2019	**33**	**9.3**	**220**	**0.24 J**	**1.5**	**52**	**9.6**	**4,600**	**1,100**	**0.3**	**2.7**	**69**	**1.6 J**	**3.1**	<0.56	**53**	**550**
DG-T12	3	3.5-4	DG-T12S-3.5-4	1/14/2019	**1.2 J**	**8.1**	**160**	**0.47**	**0.45 J**	**95**	**15**	**150**	**91**	**2.5**	**0.85 J**	**130**	<0.58	<0.20	<0.56	**64**	**420**
DG-T13	3	0.5-1	DG-T13S-0.5-1	1/10/2019	**4.9 J**	**4.3 J**	**80**	**0.23**	**0.25 J**	**20 J**	**11 J**	**430 J**	**410 J**	**0.21 J**	**1.4 J**	**26 J**	**1.4 J**	<0.11	<0.33	**87**	**110 J**
DG-T13	3	3.5-4	DG-T13S-3.5-4	1/10/2019	**0.70 J**	**2.9**	**71 J+**	**0.12 J**	<0.034	**71 J+**	**7.9**	**12**	**6.3**	**0.2**	**0.18 J**	**50 J**	**1.0 J**	<0.14	**0.65 J**	**46**	**25**
DG-T13 (D)	3	0.5-1	DG-T13 (D)S-0.5-1	1/10/2019	**15 J**	**19 J**	**120**	<0.30	**1.3 J**	**60 J**	**25 J**	**1,300 J**	**2,500 J**	**0.56 J**	**6.8 J**	**130 J**	<1.4 UJ	<0.47	<1.3	**66**	**310 J**
DG-T14	3	0.5-1	DG-T14S-0.5-1	1/14/2019	**2.5**	**3.8**	**110**	**0.22**	**0.67**	**200**	**25**	**64**	**210**	**0.25**	**0.39 J**	**400**	**0.48 J**	<0.11	**0.49 J**	**40**	**360**
DG-T14	3	3.5-4	DG-T14S-3.5-4	1/14/2019	**4.5**	**2.2 J**	**71**	**0.12 J**	**0.99**	**360**	**34**	**85**	**170**	**0.28**	**0.16 J**	**650**	**1.1 J**	<0.12	**0.75 J**	**38**	**160**
DG-T15	3	0.5-1	DG-T15S-0.5-1	12/21/2018	**2.6**	**3.5 U**	**45**	**0.38**	**0.29 J**	**380**	**33**	**25**	**61**	**2.4**	**0.42 J**	**530**	<0.52	<0.18	<0.50	**38**	**48**
DG-T15	3	3.5-4	DG-T15S-3.5-4	12/21/2018	**1.7**	<0.28	**49**	**0.5**	**0.20 J**	**490**	**53**	**30**	**5.6**	**0.054**	**0.53 J**	**880**	**0.75 J**	<0.17	<0.48	**54**	**52**
DG-T16	3	0.5-1	DG-T16S-0.5-1	1/24/2019	**4.7**	**14**	**32**	<0.12	**0.65**	**35**	**8.9**	**140**	**280**	**0.15**	**0.39 J**	**24**	**1.1 J**	<0.19	<0.55 R	**44**	**63**
DG-T16	3	3.5-4	DG-T16S-3.5-4	1/24/2019	**0.34 J**	**0.90 J**	**35**	<0.11	**0.040 J**	**20**	**7.1**	**48**	**18**	**0.058**	<0.21	**11**	<0.49	<0.16	<0.47 R	**51**	**25**
DG-T17	3	0.5-1	DG-T17S-0.5-1	1/28/2019	**1.2 J**	**4.2 J**	**140**	<0.49	**0.57 J**	**27**	**5.9**	**55**	**110**	**0.073**	<0.96	**26**	**2.6 J**	<0.75	**13 R**	**34**	**110**
DG-T17	3	3.5-4	DG-T17S-3.5-4	1/28/2019	**0.81 J**	**23 J**	**68 J**	<0.13	**0.39 J**	**13 J**	**9.0 J**	**120**	**95 J**	**0.091**	**0.37 J**	**11 J**	**1.2 J**	<0.19	**39 R**	**99 J**	**71**
DG-T17	3	7-7.5	DG-T17S-7-7.5	1/28/2019	**2.3 J**	**12**	**400**	**0.90 J**	**2.1**	**34**	**8.2**	**2,300 J**	**3,300 J**	**1.2**	**1.3 J**	**26**	<0.53	**2.4 J**	**20 R**	**52**	**1,000 J**
DG-T17 (D)	3	7-7.5	DG-T17 (D)S-7-7.5	1/28/2019	**1.3 UJ**	**14**	**540**	**1.6 J**	**2.3**	**21**	**8.8**	**89 J**	**1,600 J**	**0.86**	**1.1 J**	**23**	<0.39	**0.51 J**	<0.38 R	**51**	**450 J**
DG-T9	3	0.5-1	DG-T9S-0.5-1	1/10/2019	<0.27	**0.66 J**	**27**	<0.11	**0.12 J**	**8.6**	**12**	**110**	**20**	**0.054**	**0.22 J**	**4.4**	**0.78 J**	<0.16	**1.4 J**	**100**	**76**
DG-T9	3	3.5-4	DG-T9S-3.5-4	1/10/2019	<0.28	<0.29	**20**	<0.11	<0.042	**7.8**	**7.1**	**81**	**2.2**	**0.038**	<0.22	**2.3**	<0.51	<0.17	**1.0 J**	**74**	**20**
DG-U10	3	0.5-1	DG-U10S-0.5-1	1/14/2019	**2.4**	**2.3 J**	**43**	**0.19 J**	**0.25 J**	**17**	**14**	**220**	**170**	**0.075**	**1.1 J**	**13**	**2.2 J**	<0.18	<0.52	**110**	**130**
DG-U10	3	3.5-4	DG-U10S-3.5-4	1/14/2019	**30**	**32**	**150**	**0.31**	**0.76**	**27**	**10**	**1,400**	**1,500**	**0.15**	**1.5**	**62**	**2.1 J**	**0.50 J**	<0.44	**94**	**320**
DG-U11	3	0.5-1	DG-U11S-0.5-1	1/10/2019	**34**	**11**	**68**	<0.10	**0.20 J**	**17**	**8.8**	**150**	**840**	**0.12**	<0.20	**12**	<0.46	<0.16	**1.3 J**	**65**	**120**
DG-U11	3	3.5-4	DG-U11S-3.5-4	1/10/2019	**1.6 J**	**8.7**	**130**	**0.61**	**0.46**	**35**	**11**	**34**	**94**	**0.16**	<0.22	**53**	**0.89 J**	<0.17	**1.1 J**	**39**	**290**
DG-U12	3	0.5-1	DG-U12S-0.5-1	1/28/2019	**1.7**	**3.3**	**31**	<0.10 U	**0.26 J**	**10**	**8.2**	**110**	**110**	**0.093**	<0.20 U	**10**	**3.1 U**	<0.16 U	<0.46 U	**76**	**80**
DG-U12	3	3.5-4	DG-U12S-3.5-4	1/28/2019	**8.4**	**59 J**	**44 J**	**1.3**	**3.4**	**73 J**	**19**	**110**	**1,700 J**	**6.3**	**1.2 J**	**58**	**7.9 U**	<0.40 U	<1.2 UJ	**31**	**790**
DG-U12 (D)	3	3.5-4	DG-U12 (D)S-3.5-4	1/28/2019	**12**	**13 J**	**74 J**	**1.0**	**3.7**	**210 J**	**15**	**68**	**20,000 J**	**8.9**	**1.1 J**	**48**	**2.8 J**	<0.19 U	<0.53 UJ	**39**	**990**
DG-U13	3	0.5-1	DG-U13S-0.5-1	12/21/2018	**0.87 J**	**2.8**	**140**	**0.62**	**0.27 J**	**120**	**35**	**22**	**63**	**0.24**	**0.38 J**	**240**	**0.71 J**	<0.13	<0.37	**41**	**62**
DG-U13	3	3.5-4	DG-U13S-3.5-4	12/21/2018	**1.4**	<0.20	**39**	**0.72**	**0.14 J**	**1200**	**98**	**22**	**3.4**	**0.056**	**0.80 J**	**1700**	**2.2 J**	<0.12	<0.34	**45**	**31**
DG-U14	3	0.5-1	DG-U14S-0.5-1	1/24/2019	**0.57 J**	**2.4 J**	**28**	**0.21 J**	**0.062 J**	**18**	**6.5**	**19**	**21**	**0.045**	<0.21 U	**20**	**0.60 J**	<0.17 U	<0.48 R	**39 J**	**36**
DG-U14	3	3.5-4	DG-U14S-3.5-4	1/24/2019	**0.42 J**	**1.3 J**	**35**	**0.13 J**	**0.063 J**	**54**	**7.8**	**8.2**	**2.3**	**0.032**	<0.23	**22**	<0.53	<0.18	<0.51 R	**61**	**21**
DG-U14 (D)	3	3.5-4	DG-U14 (D)S-3.5-4	1/24/2019	**1.4 J**	**1.5 J**	**36**	<0.079 UJ	**0.29 J**	**51**	**6.5**	**8.4**	**1.6**	**0.021**	<0.16	**17**	<0.36	**0.15 J**	<0.35 R	**55**	**18**
DG-U15	3	3.5-4	DG-U15S-3.5-4	1/28/2019	**1.1 J**	**2.6 J**	**27**	<0.12	**0.17 J**	**14**	**12**	**100**	**24**	**0.058**	<0.23	**8.4**	<0.54	<0.18	**34 R**	**84**	**54**
DG-U15	3	8.5-9	DG-U15S-8.5-9	1/28/2019	**1.6 J**	**7.1**	**55**	**0.43**	**0.18 J**	**28**	**13**	**26**	**8.1**	**0.11**	<0.23	**28**	**2.1 J**	<0.18	**14 R**	**37**	**47**
DG-U16	3	0.5-1	DG-U16S-0.5-1	1/24/2019	**1.4 J**	**2.6 J**	**32**	**0.21 J**	**0.24 J**	**12**	**13**	**150**	**120**	**0.092**	<0.21	**10**	**0.81 J**	<0.17	<0.48 R	**95**	**71**
DG-U16	3	3.5-4	DG-U16S-3.5-4	1/24/2019	**0.41 J**	**0.73 J**	**65**	**0.21 J**	**0.20 J**	**67**	**17**	**17**	**6.3**	**0.05**	<0.15	**27**	<0.36	<0.12	<0.35 R	**120**	**49**
DG-U17	3	0.5-1	DG-U17S-0.5-1	1/24/2019	**4.8**	**11**	**190**	**0.22 J**	**1.2**	**35**	**6.7**	**69**	**4,900**	**0.3**	**1.0 J**	**27**	**2.0 J**	<0.19	<0.54 R	**48**	**200**
DG-U17	3	0.5-1	DG-U17S-0.5-1	1/28/2019	**1.1 J**	**3.5**	**63**	**0.20 J**	**0.42**	**14**	**5.2**	**72**	**160**	**0.24**	**0.83 J**	**16**	<0.45	<0.15	<0.43 R	**35**	**280**
DG-U17	3	3.5-4	DG-U17S-3.5-4	1/24/2019	**4.6**	**4.4**	**150**	**0.5**	**0.45**	**180**	**24**	**41**	**13**	**18**	**0.30 J**	**210**	**1.9 J**	<0.12	<0.35 R	**79**	**65**
DG-U18	3	0.5-1	DG-U18S-0.5-1	1/24/2019	**1.6**	**38**	**78**	**0.44**	**0.73**	**60**	**12**	**52**	**130**	**0.32**	**0.56 J**	**56**	**0.65 J**	<0.15	<0.44 R	**59**	**150**
DG-U18	3	3.5-4	DG-U18S-3.5-4	1/24/2019	**1.9**	**98**	**72**	**0.45**	**0.42**	**68**	**14**	**32**	**35**	**0.43**	<0.20	**53**	**0.98 J**	<0.15	<0.44 R	**54**	**130**
DG-V10	3	0.5-1	DG-V10S-0.5-1	1/14/2019	**1.0 J**	**3.0 J**	**58**	**0.22 J**	**0.52**	**16**	**11**	**170**	**93**	**0.1**	**1.4 J**	**11**	**1.5 J**	<0.17	<0.48	**110**	**190**
DG-V10	3	3.5-4	DG-V10S-3.5-4	1/14/2019	**12**	**22**	**84**	**0.36**	**0.60 J**	**22**	**13**	**590**	**950**	**0.17**	**3.3**	**94**	**3.7 J**	<0.28	<0.81	**74**	**170**
DG-V11	3	0.5-1	DG-V11S-0.5-1	12/21/2018	**1.9**	**29**	**70**	**1.1**	**0.31**	**16**	**8.9**	**120**	**180**	**0.11**	**0.42 J**	**11**	<0.34	<0.11	<0.33	**85**	**94**
DG-V11	3	3.5-4	DG-V11S-3.5-4	12/21/2018	**10**	**15**	**570**	**1.1**	**1.3**	**54**	**8.9**	**210**	**1,800**	**0.056**	**1.2**	**37**	<0.35	**2.2**	<0.34	**48**	**780**
DG-V12	3	0.5-1	DG-V12S-0.5-1	1/28/2019	**1.0 J**	**3.6 U**	**30**	<0.12 U	**0.15 J**	**10**	**11**	**110**	**63**	**0.076**	<0.23 U	**10**	**3.6 U**	<0.18 U	<0.52 U	**72**	**55**
DG-V12	3	3.5-4	DG-V12S-3.5-4	1/28/2019	<0.30 U	**5.2**	**70**	**0.33 J**	**0.12 J**	**54**	**15**	**30**	**7.4**	**0.031**	<0.23 U	**33**	**3.6 U**	<0.18 U	<0.53 U	**52**	**47**
DG-V13	3	0.5-1	DG-V13S-0.5-1	1/10/2019	**4.2**	**7.1**	**66**	**0.25 J**	**0.36 J**	**36**	**8.7**	**120**	**360**	**0.097**	**0.76 J**	**33**	**0.59 J**	<0.16	<0.47	**64**	**230**

Table 2: Metals Concentrations in Soil
Brisbane Baylands OU-2
Brisbane, California

Sample Location	Investigation Zone	Depth Range (ft bgs)	Sample Name	Collection Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
Direct Exposure Human Health Risk Level Residential Soil Exposure ESL [1]					1.1E+01	6.7E-02	1.5E+04	1.6E+01	7.8E+01	1.2E+05	2.3E+01	3.1E+03	8.0E+01	1.3E+01	3.9E+02	8.2E+02	3.9E+02	3.9E+02	7.8E-01	3.9E+02	2.3E+04
Regional Background [2]					5.5E+00	1.9E+01	3.2E+02	1.0E+00	2.7E+00	1.0E+02	2.5E+01	6.9E+01	1.6E+01	4.0E-01	7.4E+00	1.2E+02	5.6E+00	1.8E+00	7.6E+00	7.4E+01	1.1E+02
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
DG-V13	3	3.5-4	DG-V13S-3.5-4	1/10/2019	**2.4**	**5.4**	**63**	**0.24 J**	**0.37**	**43**	**7.7**	**120**	**280**	**0.086**	**0.67 J**	**36**	**0.89 J**	**0.42 J**	<0.40	**64**	**120**
DG-V13	3	7.5-8	DG-V13S-7.5-8	1/10/2019	**1.8**	**6.2**	**100**	**0.66**	<0.041	**59**	**14**	**28**	**9.3**	**0.059**	**0.53 J**	**39**	**1.1 J**	<0.17	<0.48	**59**	**59**
DG-V14	3	0.5-1	DG-V14S-0.5-1	1/23/2019	<5.0	**3.9**	**45**	<0.25	**0.51**	**20**	**9.9**	**120**	**390**	**0.2**	<1.0	**35**	<1.7	<0.89	<5.0	**77**	**190**
DG-V14	3	3.5-4	DG-V14S-3.5-4	1/23/2019	<5.0	**7.2**	**49**	**0.56**	<0.25	**38**	**10**	**42**	**6.4**	**0.027**	<0.99	**31**	<1.7	<0.88	<5.0	**56**	**47**
DG-V15	3	0.5-1	DG-V15S-0.5-1	1/23/2019	**10 U**	**11**	**120**	**0.28 J**	**1.1**	**38**	**11**	**270**	**1,800**	**0.037**	**1.1 J**	**77**	<1.7	<0.89	<5.0	**78**	**540**
DG-V15	3	3.5-4	DG-V15S-3.5-4	1/23/2019	<5.0	**1.6 J**	**65**	**0.63**	**0.32 J**	**87**	**24**	**31**	**2.7**	**0.031**	<0.99	**39**	<1.7	<0.88	<5.0	**170**	**52**
DG-V16	3	0.5-1	DG-V16S-0.5-1	1/24/2019	**1.4 J**	**1.5 J**	**35**	**0.27 J**	**0.29 J**	**12**	**8.9**	**110**	**71**	**0.086**	**0.29 J**	**12**	<0.55	<0.19	<0.53 R	**74**	**56**
DG-V17	3	0.5-1	DG-V17S-0.5-1	1/28/2019	**4.6**	**11**	**89**	<0.11	**2.9**	**24**	**12**	**140**	**640**	**0.1**	**0.23 J**	**26**	**3.2 J**	<0.17	**30 R**	**77**	**2,300**
DG-V17	3	3.5-4	DG-V17S-3.5-4	1/28/2019	**1.9 J**	**3.3 J**	**64**	<0.13 UJ	**0.27 J**	**33**	**18**	**47**	**14 J**	**0.028 J**	<0.26	**21**	**1.2 J**	<0.20	**32 R**	**81**	**62 J**
DG-V17	3	9.5-10	DG-V17S-9.5-10	1/28/2019	**6.7**	**13**	**460**	**0.49**	**2.0**	**37**	**11**	**440**	**4,900**	**1.0**	**1.5 J**	**39**	**2.4 J**	**2.9**	**19 R**	**50**	**2,100**
DG-V17 (D)	3	3.5-4	DG-V17 (D)S-3.5-4	1/28/2019	**1.5 J**	**4.8 J**	**70**	**0.16 J**	**0.29 J**	**37**	**17**	**49**	**34 J**	**0.048 J**	<0.21	**24**	**1.2 J**	<0.17	**27 R**	**69**	**120 J**
DG-V18	3	0.5-1	DG-V18S-0.5-1	1/24/2019	**1.2 U**	**2.4**	**52**	<0.078	**0.16 J**	**9.7**	**5.6**	**29**	**22**	**0.073**	<0.15	**15**	**0.59 J**	<0.12	<0.35 R	**39**	**40**
DG-V18	3	3.5-4	DG-V18S-3.5-4	1/24/2019	**0.55 J**	**34**	**33**	**0.075 J**	**0.087 J**	**8.7**	**9.5**	**97**	**1.2**	**0.049**	<0.14	**2.8**	<0.33	<0.11	<0.32 R	**92**	**32**
DG-AA10	4	0.5-1	DG-AA10S-0.5-1	1/29/2019	**2.2**	**2.9**	**47**	<0.080	**0.47**	**9.3**	**8.1**	**120**	**150**	**0.069**	**0.24 J**	**7.7**	<0.37	<0.12	**0.8**	**71**	**84**
DG-AA10	4	3.5-4	DG-AA10S-3.5-4	1/29/2019	**45**	**20**	**1,400**	**0.35 J**	**4.2**	**51**	**5.8**	**880**	**11,000**	**0.61**	<0.50	**41**	**3.4 J**	**11**	<1.1	**29**	**3,400**
DG-AA11	4	0.5-1	DG-AA11S-0.5-1	1/29/2019	**0.38 J**	**0.35 J**	**7.8**	<0.079	**0.077 J**	**18**	**10**	**51**	**3.7**	**0.076**	<0.16	**7.5**	<0.37	<0.12	<0.35 R	**67**	**36**
DG-AA11	4	3.5-4	DG-AA11S-3.5-4	1/29/2019	<0.21	**0.48 J**	**19**	<0.084	**0.052 J**	**9.0**	**11**	**88**	**22**	**0.066**	**0.35 J**	**4.1**	<0.39	<0.13	<0.37 R	**93**	**55**
DG-AA12	4	0.5-1	DG-AA12S-0.5-1	1/25/2019	**9.8**	**4.9**	**48**	<0.077	**0.62**	**21**	**12**	**390**	**710**	**1.3**	**0.26 J**	**21**	**2.4 U**	<0.12	<0.34	**91**	**120**
DG-AA12	4	3.5-4	DG-AA12S-3.5-4	1/25/2019	**2.4**	**5.2**	**61**	<0.11	**0.68**	**35**	**12**	**170**	**620**	**1.8**	<0.22	**48**	**3.4 U**	<0.17	<0.50	**70**	**160**
DG-AA13	4	0.5-1	DG-AA13S-0.5-1	1/24/2019	**2.9**	**1.6 J**	**27**	<0.083	**0.34**	**11**	**7.7**	**200**	**150**	**0.11**	<0.16	**11**	**0.39 J**	<0.13	**1.0 R**	**75**	**49**
DG-AA13	4	3.5-4	DG-AA13S-3.5-4	1/24/2019	**1.7 U**	**1.8 J**	**14**	<0.11	**0.21 J**	**9.6**	**17**	**89**	**31**	**0.049**	<0.21	**8.2**	<0.50	<0.17	<0.48 R	**100**	**57**
DG-AA14	4	0.5-1	DG-AA14S-0.5-1	1/24/2019	**1.6 J**	**3.1 J**	**54**	<0.12	**0.93**	**17**	**3.7**	**83**	**190**	**0.095**	**1.1 J**	**10**	<0.54	**0.28 J**	<0.52 R	**36**	**110**
DG-AA14	4	3.5-4	DG-AA14S-3.5-4	1/24/2019	**1.3 J**	**4.0**	**57**	<0.11	**0.63**	**21**	**5.4**	**130**	**220**	**0.32**	**0.89 J**	**15**	**0.50 J**	**0.25 J**	<0.49 R	**49**	**150**
DG-AA15	4	0.5-1	DG-AA15S-0.5-1	1/22/2019	**1.7**	**3.6**	**38**	**0.13 J**	**0.26 J**	**27**	**5.5**	**74**	**120**	**0.19**	**0.20 J**	**26**	<0.43	<0.15	<0.42	**36**	**53**
DG-AA16	4	0.5-1	DG-AA16S-0.5-1	1/24/2019	**3.5**	**3.4 J**	**59**	<0.12	**0.67**	**19**	**5.7**	**160**	**180**	**0.058**	**0.50 J**	**69**	<0.57	<0.19	**0.96 R**	**93**	**94**
DG-AA16	4	3.5-4	DG-AA16S-3.5-4	1/24/2019	**92**	**23**	**48**	<0.078	**0.6**	**20**	**3.5**	**490**	**2,500**	**0.065**	**0.43 J**	**42**	<0.36	**0.13 J**	**0.64 R**	**48**	**73**
DG-AA17	4	0.5-1	DG-AA17S-0.5-1	2/5/2019	**0.59 J**	**2.6**	**63**	**0.19 J**	<0.030	**23**	**9.7**	**40**	**28**	**0.059**	**0.63 J**	**30**	**1.1 J**	<0.12	**0.46**	**44**	**42**
DG-AA17	4	3.5-4	DG-AA17S-3.5-4	2/5/2019	**2.9**	**7.4**	**88**	<0.12	**2.8**	**37**	**16**	**250**	**300**	**0.35**	**3.3**	**30**	**2.7 J**	**0.44 J**	**2.1**	**91**	**830**
DG-AA18	4	0.5-1	DG-AA18S-0.5-1	1/23/2019	<5.0	**6.9**	**94**	**0.32 J**	**0.31 J**	**32**	**7.7**	**47**	**100**	**0.08**	<1.0	**31**	<1.7	<0.89	<5.0	**37**	**89**
DG-AA18	4	3.5-4	DG-AA18S-3.5-4	1/23/2019	**10 U**	**6.2**	**100**	<0.25 UJ	**0.59**	**210**	**5.2**	**180**	**330**	**0.18**	<1.0	**55**	<1.7	<0.89	<5.0	**48**	**170**
DG-AA18 (D)	4	3.5-4	DG-AA18 (D)S-3.5-4	1/23/2019	**10 U**	**8.1**	**110**	**0.29 J**	**0.76**	**160**	**6.8**	**170**	**390**	**0.21**	<1.0	**53**	<1.7	<0.89	<5.0	**49**	**190**
DG-AA19	4	0.5-1	DG-AA19S-0.5-1	1/24/2019	**0.76 J**	**2.2 J**	**23**	<0.10	**0.15 J**	**33**	**6.9**	**9.4**	**5.2**	**0.026**	**0.21 J**	**30**	**0.94 J**	<0.16	<0.46	**34**	**30**
DG-AA19	4	3.5-4	DG-AA19S-3.5-4	1/24/2019	**0.60 J**	**3.9**	**92**	<0.12	**0.11 J**	**140**	**17**	**31**	**27**	**0.83**	<0.23	**120**	<0.54	<0.18	<0.52 R	**58**	**70**
DG-AA19	4	8.5-9	DG-AA19S-8.5-9	1/24/2019	**1.6 J**	**9.2**	**71**	**0.62**	**0.089 J**	**64**	**11**	**28**	**10**	**0.029**	<0.25	**25**	<0.58	<0.19	<0.56 R	**61**	**37**
DG-AB10	4	0.5-1	DG-AB10S-0.5-1	1/29/2019	**210 J**	**25 J**	**130 J**	<0.25	**2.4 J**	**34 J**	**11**	**670 J**	**5,200**	**6.9 J**	**1.5 J**	**34 J**	**3.3 J**	**0.83 J**	<1.1	**52**	**840 J**
DG-AB10	4	3.5-4	DG-AB10S-3.5-4	1/29/2019	**9.1**	**12**	**500**	**0.43**	**1.8**	**41**	**8.7**	**3,500**	**1,100**	**0.41**	**0.56 J**	**34**	**2.8 J**	**4.3**	<0.43	**39**	**940**
DG-AB10 (D)	4	0.5-1	DG-AB10 (D)S-0.5-1	1/29/2019	**1.2 J**	**0.52 J**	**33 J**	<0.075	**0.30 J**	**14 J**	**7.9**	**110 J**	**67**	**0.031 J**	**0.18 J**	**3.7 J**	**0.59 J**	<0.12 UJ	<0.33	**62**	**47 J**
DG-AB11	4	0.5-1	DG-AB11S-0.5-1	1/28/2019	**1.5 U**	**3.0 U**	**24**	<0.096 U	**0.37**	**16**	**13**	**89**	**65**	**0.097**	**2.0**	**11**	<0.44 U	<0.15 U	<0.43 U	**87**	**73**
DG-AB11	4	3.5-4	DG-AB11S-3.5-4	1/28/2019	**4.1**	**9.1**	**74**	<0.11 U	**0.83**	**21**	**11**	**160**	**590**	**0.53**	**0.47 J**	**18**	<0.49 U	<0.16 U	<0.47 U	**84**	**200**
DG-AB12	4	0.5-1	DG-AB12S-0.5-1	1/25/2019	**6.4**	**11**	**150**	<0.091	**2.5**	**71**	**13**	**570**	**830**	**0.61**	**5.3**	**72**	<0.42	<0.14	<0.41	**70**	**260**
DG-AB12	4	3.5-4	DG-AB12S-3.5-4	1/25/2019	**250 J**	**38 J**	**170 J**	<0.20	**2.2**	**55 J**	**16 J**	**4,400 J**	**4,200 J**	**0.36**	**1.6 J**	**81 J**	**6.1 U**	**1.6**	<0.88	**67 J**	**930 J**
DG-AB13	4	0.5-1	DG-AB13S-0.5-1	1/22/2019	**540**	**22**	**180**	<0.23	**1.8**	**76**	**19**	**3,000**	**7,400**	**0.35**	**6.2**	**170**	**3.2 J**	<0.36	<1.0	**74**	**1,300**
DG-AB13	4	13.5-14	DG-AB13S-13.5-14	1/22/2019	**2.3**	**8.9**	**35**	**0.42**	**0.20 J**	**25**	**10**	**44**	**62**	**0.0070 J**	**1.1 J**	**40**	<0.52	<0.18	**0.79 J**	**41**	**84**
DG-AB13	4	3.5-4	DG-AB13S-3.5-4	1/22/2019	**37 J**	**12 J**	**30**	<0.10	**0.25 J**	**19**	**3.0**	**120 J**	**480 J**	**0.028**	<0.20	**23 J**	<0.47	<0.16	<0.45	**10**	**100 J**
DG-AB13 (D)	4	3.5-4	DG-AB13 (D)S-3.5-4	1/22/2019	**15 J**	**3.4 J**	**22**	<0.10	**0.12 J**	**14**	**1.9**	**43 J**	**160 J**	**0.02**	<0.20	**13 J**	<0.47	<0.16	<0.45	**8.2**	**35 J**
DG-AB14	4	0.5-1	DG-AB14S-0.5-1	1/31/2019	**4.4**	**3.0 J**	**64**	**0.43**	**0.23 J**	**13**	**6.8**	**130**	**270**	**0.031**	**0.73 J**	**99**	**3.9 U**	<0.20	<0.56 R	**130**	**76**
DG-AB14	4	3.5-4	DG-AB14S-3.5-4	1/31/2019	**8.4**	**6.3**	**35 J**	**0.38 U**	**1.7 J**	**15**	**5.8**	**220**	**950**	**0.034 J**	**0.29 J**	**77**	**3.8 U**	<0.19	<0.55 R	**67**	**72**
DG-AB14 (D)	4	3.5-4	DG-AB14 (D)S-3.5-4	1/31/2019	**8.6**	**5.0**	**120 J**	**0.34 U**	**0.55 J**	**14**	**5.2**	**170**	**640**	**0.015 J**	**0.26 J**	**73**	**3.4 U**	<0.17	<0.49 R	**70**	**68**
DG-AB15	4	0.5-1	DG-AB15S-0.5-1	2/1/2019	**3.5 J-**	**6.7 U**	**90 J**	**0.32 J**	**1.1**	**14**	**5.3**	**110 J**	**280 J**	**0.51 J-**	**0.93 J**	**46 J**	<1.0	<0.34	<0.97 R	**56 J**	**130 J+**
DG-AB15	4	3.5-4	DG-AB15S-3.5-4	2/1/2019	**0.78 J**	**2.5 U**	**100**	**0.37**	**0.067 J**	**61**	**8.4**	**13**	**5.0**	**0.0088 J**	<0.16	**21**	<0.38	<0.13	<0.36 R	**70**	**28**
DG-AC10	4	0.5-1	DG-AC10S-0.5-1	1/29/2019	**2.7**	**3.8**	**150**	<0.079	**1.6**	**16**	**11**	**210**	**180**	**0.1**	**3.5**	**9.7**	**0.49 J**	**0.13 J**	**0.55**	**63**	**440**
DG-AC10	4	3.5-4	DG-AC10S-3.5-4	1/29/2019	**0.40 J**	<0.25	**31**	<0.094	**0.054 J**	**7.5**	**8.5**	**110**	**29**	**0.061**	<0.19	**2.8**	<0.43	<0.15	<0.42	**74**	**26**
DG-AC11	4	0.5-1	DG-AC11S-0.5-1	1/29/2019	<0.17	**1.2 J**	**17**	**0.14 J**	**0.088 J**	**15**	**11**	**62**	**16**	**0.057**	**0.45 J**	**9.1**	<0.31	<0.11	<0.30 R	**79**	**50**

Table 2: Metals Concentrations in Soil
Brisbane Baylands OU-2
Brisbane, California

Sample Location	Investigation Zone	Depth Range (ft bgs)	Sample Name	Collection Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
Direct Exposure Human Health Risk Level Residential Soil Exposure ESL [1]					1.1E+01	6.7E-02	1.5E+04	1.6E+01	7.8E+01	1.2E+05	2.3E+01	3.1E+03	8.0E+01	1.3E+01	3.9E+02	8.2E+02	3.9E+02	3.9E+02	7.8E-01	3.9E+02	2.3E+04
Regional Background [2]					5.5E+00	1.9E+01	3.2E+02	1.0E+00	2.7E+00	1.0E+02	2.5E+01	6.9E+01	1.6E+01	4.0E-01	7.4E+00	1.2E+02	5.6E+00	1.8E+00	7.6E+00	7.4E+01	1.1E+02
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
DG-AC11	4	3.5-4	DG-AC11S-3.5-4	1/29/2019	**1.6 J**	**17**	**55**	**0.44**	**0.19 J**	**26**	**13**	**86**	**67**	**4.5**	<0.24	**37**	**1.3 J**	<0.19	<0.55 R	**54**	**80**
DG-AC11	4	8.5-9	DG-AC11S-8.5-9	1/29/2019	**0.26 J**	**6.2**	**130**	**0.22 J**	**0.17 J**	**39**	**8.1**	**15**	**24**	**0.029**	<0.15	**32**	<0.34	<0.11	<0.33 R	**33**	**61**
DG-AC12	4	0.5-1	DG-AC12S-0.5-1	1/31/2019	**3.2**	**13**	**13**	<0.090 U	**0.94**	**23**	**2.5**	**130**	**590**	**0.074**	**0.86 J**	**8.6**	**0.70 J**	**0.41 J**	<0.40 U	**4.4**	**440**
DG-AC12	4	3.5-4	DG-AC12S-3.5-4	1/31/2019	**0.71 J**	**3.5**	**30**	<0.11 U	**0.071 J**	**8.9**	**7.2**	**190**	**97**	**0.091**	<0.22 U	**20**	<0.51 U	<0.17 U	<0.50 U	**79**	**69**
DG-AC13	4	0.5-1	DG-AC13S-0.5-1	1/24/2019	**1.2 U**	**2.8**	**42**	<0.078	**0.31**	**20**	**5.5**	**87**	**150**	**0.094**	**4.4**	**150**	**0.64 J**	<0.12	<0.35 R	**180**	**81**
DG-AC13	4	3.5-4	DG-AC13S-3.5-4	1/24/2019	**1.5 U**	**1.4 J**	**44**	<0.10	**0.082 J**	**5.5**	**6**	**39**	**61**	**0.0089 J**	**0.63 J**	**150**	<0.46	<0.16	<0.45 R	**180**	**18**
DG-AC14	4	0.5-1	DG-AC14S-0.5-1	1/24/2019	**2.5**	**5.4**	**49**	<0.11	**1.3**	**27**	**3.9**	**130**	**310**	**0.21**	**3.7**	**21**	**1.1 J**	**0.83 U**	<0.48 R	**22**	**140**
DG-AC14	4	3.5-4	DG-AC14S-3.5-4	1/24/2019	**2.3**	**8.1**	**51**	<0.081	**0.57**	**27**	**9.0**	**160**	**370**	**0.19**	**1.2 J**	**110**	<0.38	<0.13	<0.36 R	**99**	**76**
DG-AD10	4	0.5-1	DG-AD10S-0.5-1	1/15/2019	**1.4 U**	**0.74 J**	**41**	**0.16 J**	**0.15 J**	**15**	**14**	**91**	**12**	**0.058**	**0.18 J**	**7.9**	<0.42	<0.14	<0.41	**99**	**77**
DG-AD10	4	3.5-4	DG-AD10S-3.5-4	1/15/2019	**1.9 U**	**1.6 J**	**44**	<0.12	**0.20 J**	**17**	**13**	**130**	**28**	**0.12**	<0.24	**8.9**	<0.57	<0.19	<0.55	**85**	**130**
DG-AD11	4	0.5-1	DG-AD11S-0.5-1	1/31/2019	<0.33 U	**0.73 J**	**18**	<0.13 U	<0.050 U	**12**	**13**	**79**	**2.0 U**	**0.076**	<0.26 U	**8.2**	**0.85 J**	**0.20 J**	**1.1 J**	**100**	**46**
DG-AD11	4	3.5-4	DG-AD11S-3.5-4	1/31/2019	**1.5**	**3.1**	**30**	<0.096 U	**0.37**	**9.0**	**2.0**	**41**	**170**	**0.049**	**0.44 J**	**8.0**	**0.75 J**	<0.15 U	<0.43 U	**9.4**	**94**
DG-AD12	4	0.5-1	DG-AD12S-0.5-1	1/31/2019	**2.0**	**6.0 J**	**41 J**	<0.11 U	**0.14 J**	**42**	**8.4**	**150**	**290**	**0.13**	**1.1 J**	**100**	**0.91 J**	**0.16 J**	<0.47 U	**100 J**	**84**
DG-AD12	4	3.5-4	DG-AD12S-3.5-4	1/31/2019	**5.3**	**10**	**32**	**0.12 J**	**0.15 J**	**23**	**5.2**	**150**	**1,000**	**0.097**	**0.27 J**	**12**	**0.52 J**	<0.15 U	<0.43 U	**28**	**120**
DG-AD12 (D)	4	0.5-1	DG-AD12 (D)S-0.5-1	1/31/2019	**2.6**	**13 J**	**71 J**	<0.11 U	**0.19 J**	**33**	**8.9**	**240**	**290**	**0.21**	**2.3 J**	**150**	**3.3 U**	**0.82 U**	<0.48 U	**170 J**	**91**
DG-AD13	4	0.5-1	DG-AD13S-0.5-1	2/1/2019	**1.2 J**	**2.6 J**	**59**	<0.092	**0.17 J**	**19**	**5.4**	**110**	**160**	**0.16**	**1.2 J**	**130**	**2.8 U**	**0.71 U**	<0.41	**120**	**74**
DG-AD13	4	3.5-4	DG-AD13S-3.5-4	2/1/2019	**1.5**	**9.7**	**86**	<0.091	**0.077 J**	**16**	**9**	**130**	**190**	**0.5**	**2.5**	**260**	**2.8 U**	**0.72**	<0.41	**290**	**81**
DG-AD13	4	7.5-8	DG-AD13S-7.5-8	2/1/2019	**14**	**13 J**	**190 J**	<0.11 UJ	**0.84 J**	**21 J**	**6.3 J**	**200**	**1,000**	**0.084**	**1.1 J**	**140**	**3.3 UJ**	**0.81 UJ**	<0.47	**140 J**	**510 J**
DG-AD13 (D)	4	7.5-8	DG-AD13 (D)S-7.5-8	2/1/2019	**13**	**43 J**	**350 J**	**0.18 J**	**1.5 J**	**37 J**	**11 J**	**220**	**1,200**	**0.21**	**0.74 J**	**84**	**4.1 J**	**1.2 J**	<0.46	**35 J**	**1,000 J**
DG-AE10	4	0.5-1	DG-AE10S-0.5-1	1/15/2019	<0.28	**0.65 J**	**11**	<0.11	**0.093 J**	**14**	**21**	**99**	**1.7**	**0.072**	**0.68 J**	**6.5**	**0.67 J**	<0.17	<0.49	**110**	**59**
DG-AE10	4	3.5-4	DG-AE10S-3.5-4	1/15/2019	<0.28 UJ	**0.89 J**	**19 J**	<0.11	<0.042	**8.3**	**6.3 J**	**76 J**	**1.7 U**	**0.1**	<0.22	**3.9**	<0.51	<0.17	**0.52 J**	**54 J**	**95 J+**
DG-AE11	4	0.5-1	DG-AE11S-0.5-1	1/21/2019	**0.50 J**	**2.6**	**24**	<0.068	**0.13 J**	**27**	**4.2**	**10**	**17**	**0.04**	**0.16 J**	**20**	<0.31	<0.11	<0.30	**26**	**32**
DG-AE11	4	3.5-4	DG-AE11S-3.5-4	1/21/2019	**1.6 U**	**2.8 J**	**31**	<0.10	**0.16 J**	**10**	**9.2**	**120**	**28**	**0.12**	<0.20	**9.1**	**3.1 U**	<0.16	<0.45	**95**	**41**
DG-AE12	4	0.5-1	DG-AE12S-0.5-1	1/25/2019	**0.37 J**	**4.3**	**280**	**0.41**	**0.61**	**60**	**12**	**38**	**36**	**0.2**	**1.3 J**	**60**	<0.57	<0.19	<0.55	**70**	**66**
DG-AE12	4	3.5-4	DG-AE12S-3.5-4	1/25/2019	<0.31	**23**	**66**	**0.43**	**0.36 J**	**40**	**5.0**	**20**	**48**	**0.029**	<0.24	**33**	<0.56	<0.19	<0.54	**32**	**290**
DG-AE13	4	0.5-1	DG-AE13S-0.5-1	1/25/2019	**1.5 J**	**5.8**	**52**	**0.20 J**	**0.47 J**	**50**	**10**	**120**	**220**	**0.085**	**1.2 J**	**82**	**0.75 J**	<0.19	<0.55	**84**	**89**
DG-AE13	4	3.5-4	DG-AE13S-3.5-4	1/25/2019	**0.82 J**	**3.8**	**110**	**0.27 J**	**0.48**	**30**	**4.4**	**16**	**110**	**0.029**	<0.25	**24**	<0.58	<0.19	<0.56	**22**	**120**
DG-AF11	4	0.5-1	DG-AF11S-0.5-1	1/28/2019	**1.7 U**	**5.1**	**31**	<0.11 U	**0.15 J**	**31**	**5.7**	**15**	**26**	**0.065**	<0.22 U	**25**	<0.52 U	<0.17 U	<0.50 U	**31**	**36**
DG-AF11	4	3.5-4	DG-AF11S-3.5-4	1/28/2019	**3.4**	**8.2**	**42**	<0.11 U	**0.39 J**	**17**	**8.7**	**130**	**190**	**0.51**	**0.62 J**	**23**	**1.3 J**	<0.17 U	<0.49 U	**57**	**77**
DG-AF12	4	0.5-1	DG-AF12S-0.5-1	1/25/2019	**1.2**	**25**	**100**	**0.10 J**	**0.27 J**	**33**	**7.7**	**52**	**150**	**0.11**	**0.15 J**	**41**	<0.36	<0.12	<0.35	**41**	**110**
DG-AF12	4	3.5-4	DG-AF12S-3.5-4	1/25/2019	**1.7**	**36**	**83**	**0.096 J**	**0.28 J**	**14**	**2.5**	**94**	**280**	**0.061**	<0.16	**12**	<0.38	<0.13	<0.37	**14**	**150**
DG-AF13	4	0.5-1	DG-AF13S-0.5-1	11/21/2018	**0.79 J**	**19**	**80**	**0.14 J**	**0.073 J**	**48**	**8.2**	**16**	**31**	**0.097**	**0.25 J**	**24**	<0.52	**0.86 U**	<0.50	**43**	**36**
DG-AF13	4	0.5-1	DG-AF13S-0.5-1	1/28/2019	**2.0 U**	**5.6**	**120**	**0.39 U**	**0.26 J**	**40**	**7.9**	**40**	**120**	**0.058**	**0.28 J**	**40**	**0.60 J**	<0.20	**0.86 R**	**39**	**110**
DG-AF13	4	3.5-4	DG-AF13S-3.5-4	11/21/2018	**5.9**	**11**	**440**	**0.21 J**	**1.1**	**30**	**7.7**	**190**	**1,500**	**0.47**	**0.40 J**	**26**	<0.53	**1.9**	<0.51	**60**	**550**
DG-AF13	4	3.5-4	DG-AF13S-3.5-4	1/28/2019	**3.3**	**46**	**85**	<0.11	**0.54**	**29**	**4.8**	**110**	**360**	**0.19**	<0.22	**22**	<0.52	**0.57 J**	**0.53 R**	**21**	**370**
DG-AF13	4	7-7.5	DG-AF13S-7-7.5	11/21/2018	**4.5**	**10**	**400**	**0.56**	**0.69**	**28**	**9.7**	**120**	**890**	**0.15**	**0.45 J**	**29**	<0.56	**2.2**	<0.54	**30**	**460**
DG-AG11	4	0.5-1	DG-AG11S-0.5-1	1/21/2019	**1.0 J**	**26**	**68**	**0.089 J**	**0.51**	**25**	**5.8**	**70**	**190**	**0.1**	**0.42 J**	**21**	<0.38	**0.25 J**	<0.37	**39**	**130**
DG-AG11	4	3.5-4	DG-AG11S-3.5-4	1/21/2019	**3.1**	**87**	**79**	<0.12	**0.44 J**	**22**	**6.4**	**80**	**240**	**0.064**	<0.24	**25**	**0.96 J**	**0.52 J**	<0.54	**31**	**170**
DG-AG11	4	9.5-10	DG-AG11S-9.5-10	1/21/2019	**3.4**	**13**	**460**	**0.27 J**	**0.85**	**47**	**4.6**	**140**	**920**	**0.2**	<0.20	**37**	**0.76 J**	**1.7**	<0.45	**40**	**650**
DG-AG12	4	0.5-1	DG-AG12S-0.5-1	1/25/2019	**0.92 J**	**3.7 J+**	**34 J**	**0.34 J**	**0.37 J**	**16 J+**	**2.0 J**	**47 J+**	**320**	**0.063**	**0.83 J**	**6.5 J**	**0.94 J**	<0.18 U	<0.52	**29 J+**	**29 J+**
DG-AG12	4	3.5-4	DG-AG12S-3.5-4	1/25/2019	**19**	**16**	**1,100**	**0.6**	**2.7**	**45**	**7.9 J**	**3,600 J**	**2,600 J**	**0.67**	**0.98 J**	**410 J**	**1.8 J**	**4.0**	<0.57	**30**	**2,900 J**
DG-AG12 (D)	4	3.5-4	DG-AG12 (D)S-3.5-4	1/25/2019	**23**	**19**	**1,100**	**0.54**	**4.0**	**40**	**14 J**	**150 J**	**34 J**	**0.93**	<0.22 UJ	**2,100 J**	**1.3 J**	**6.6**	<0.49	**29**	**82 J**
DG-AG13	4	0.5-1	DG-AG13S-0.5-1	1/25/2019	<0.27	**5.0**	**34**	**0.22 J**	**0.34 J**	**9.3**	**2.6**	**43**	**150**	**0.04**	**0.46 J**	**23**	<0.49	<0.17	<0.48	**28**	**51**
DG-AG13	4	3.5-4	DG-AG13S-3.5-4	1/25/2019	**22**	**24**	**1,000**	**0.65**	**3.3**	**44**	**11**	**710**	**4,000**	**0.17**	**1.1 J**	**40**	**1.9 J**	**4.9**	<0.56	**49**	**2,200**
DG-AH11	4	0.5-1	DG-AH11S-0.5-1	1/28/2019	**1.7 U**	**6.9**	**46**	<0.11 U	**0.40 J**	**27**	**5.8**	**48**	**130**	**0.081**	**0.36 J**	**20**	<0.50 U	**0.36 J**	<0.49 U	**34**	**81**
DG-AH11	4	3.5-4	DG-AH11S-3.5-4	1/28/2019	**1.7 U**	**8.2**	**30**	<0.11 U	**0.44**	**16**	**6.6**	**100**	**140**	**0.16**	**0.49 J**	**14**	<0.52 U	<0.18 U	<0.50 U	**44**	**86**
DG-AH12	4	0.5-1	DG-AH12S-0.5-1	1/25/2019	**0.87 J**	**5.1**	**64**	**0.23 J**	**0.43 J**	**24**	**5.0**	**140**	**150**	**0.031**	<0.25	**28**	<0.59	<0.20	<0.57	**37**	**180**
DG-AH12	4	3.5-4	DG-AH12S-3.5-4	1/25/2019	**100**	**19**	**980**	**0.61**	**1.8**	**31**	**6.5**	**110**	**410**	**0.74**	**1.2 J**	**42**	**0.61 J**	**5.3**	<0.50	**36**	**1,600**
DG-AH13	4	0.5-1	DG-AH13S-0.5-1	1/29/2019	<0.26	**1.0 J**	**40**	<0.10	<0.039	**10**	**7.1**	**110**	**20**	**0.089**	<0.20	**6.5**	<0.48	<0.16	<0.46 R	**67**	**57**
DG-AH13	4	3.5-4	DG-AH13S-3.5-4	1/29/2019	**1.2 J**	**8.3**	**110**	**0.14 J**	**0.12 J**	**52**	**9.4**	**27**	**120**	**0.085**	**0.25 J**	**36**	**0.90 J**	<0.16	<0.46 R	**49**	**63**
DG-AH13	4	7.5-8	DG-AH13S-7.5-8	1/29/2019	**15**	**37**	**51**	**0.63 J**	**2.8**	**170**	**44**	**1,200**	**1,600**	**0.36**	**1.0 J**	**240**	<1.2	**1.7 J**	<1.1 R	**110**	**3,200**
DG-AI11	4	0.5-1	DG-AI11S-0.5-1	1/21/2019	<0.26	<0.27	**21**	<0.10	<0.039	**7.9**	**11**	**81**	**1.6 U**	**0.046**	<0.20	**6.9**	<0.48	<0.16	<0.46	**87**	**41**
DG-AI11	4	3.5-4	DG-AI11S-3.5-4	1/21/2019	**3.2 J**	**15 J+**	**250**	**0.19 J**	**0.8**	**18**	**7.1 J**	**160 J+**	**540**	**0.31**	**0.64 J**	**20**	**1.1 J**	**1.1**	<0.52	**60 J+**	**400**

Table 2: Metals Concentrations in Soil
Brisbane Baylands OU-2
Brisbane, California

Sample Location	Investigation Zone	Depth Range (ft bgs)	Sample Name	Collection Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
Direct Exposure Human Health Risk Level Residential Soil Exposure ESL [1]					1.1E+01	6.7E-02	1.5E+04	1.6E+01	7.8E+01	1.2E+05	2.3E+01	3.1E+03	8.0E+01	1.3E+01	3.9E+02	8.2E+02	3.9E+02	3.9E+02	7.8E-01	3.9E+02	2.3E+04
Regional Background [2]					5.5E+00	1.9E+01	3.2E+02	1.0E+00	2.7E+00	1.0E+02	2.5E+01	6.9E+01	1.6E+01	4.0E-01	7.4E+00	1.2E+02	5.6E+00	1.8E+00	7.6E+00	7.4E+01	1.1E+02
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
DG-AI11	4	9.5-10	DG-AI11S-9.5-10	1/21/2019	**1.8 U**	**6.4**	**100**	**0.18 J**	**0.27 J**	**60**	**10**	**33**	**46**	**0.053**	**0.32 J**	**84**	<0.54	<0.18	<0.52	**41**	**67**
DG-AI11 (D)	4	0.5-1	DG-AI11 (D)S-0.5-1	1/21/2019	**1.6 U**	**0.99 J**	**29**	<0.10	**0.23 J**	**9.5**	**14**	**92**	**13 J**	**0.067**	<0.21	**7.5**	<0.48	<0.16	<0.47	**98**	**55**
DG-AI12	4	0.5-1	DG-AI12S-0.5-1	1/25/2019	**0.37 J**	**8.2**	**36**	**0.21 J**	**0.46 J**	**11**	**4.7**	**51**	**82**	**0.032**	<0.26	**11**	**0.87 J**	<0.20	<0.58	**38**	**75**
DG-AI12	4	3.5-4	DG-AI12S-3.5-4	1/25/2019	**0.35 J**	**4.1**	**18**	**0.20 J**	**0.074 J**	**10**	**2.5**	**13**	**9.1**	**0.013 J**	<0.25	**15**	<0.58	<0.19	<0.56	**18**	**25**
DG-AI13	4	0.5-1	DG-AI13S-0.5-1	2/1/2019	<0.29 R	**3.3 J**	**16**	<0.11	**0.28 J**	**6.8**	**12**	**83 J+**	**29**	**0.031**	<0.22	**7.5**	**1.4 J**	<0.17	**0.99**	**100 J+**	**74 J+**
DG-AI13	4	3.5-4	DG-AI13S-3.5-4	2/1/2019	<0.29	**33 J**	**31**	<0.11	**0.23 J**	**4.4 J**	**9.3**	**62 J**	**34**	**0.066 J**	<0.22	**10 J**	**0.73 J**	<0.18	<0.50	**62**	**83**
DG-AI13 (D)	4	3.5-4	DG-AI13 (D)S-3.5-4	2/1/2019	**1.8 U**	**73 J**	**31**	<0.11	**0.23 J**	**16 J**	**12**	**130 J**	**50**	**0.21 J**	<0.22	**20 J**	<0.53 UJ	<0.18	<0.51	**86**	**98**
DG-AJ11	4	0.5-1	DG-AJ11S-0.5-1	1/28/2019	**1.8 U**	**4.3**	**36**	<0.12 U	**0.21 J**	**31**	**6.2**	**14**	**27**	**0.043**	<0.23 U	**27**	**0.94 J**	<0.18 U	<0.51 U	**33**	**52**
DG-AJ11	4	3.5-4	DG-AJ11S-3.5-4	1/28/2019	**19**	**140**	**390**	<0.12 U	**1.9**	**76**	**12**	**350**	**1,700**	**0.57**	<0.23 U	**34**	**1.0 J**	**1.4**	<0.53 U	**54**	**810**
DG-AJ12	4	0.5-1	DG-AJ12S-0.5-1	1/25/2019	**37 J**	**16**	**65**	**0.73**	**0.35 J**	**36 J**	**13**	**190**	**1,200 J**	**0.35**	**0.63 J**	**44**	**0.89 J**	<0.19	<0.56	**48**	**150**
DG-AJ12	4	3.5-4	DG-AJ12S-3.5-4	1/25/2019	**2.3**	**14**	**360**	**0.94**	**0.59**	**47**	**17**	**150**	**280**	**0.13**	**0.42 J**	**66**	**0.94 J**	**0.35 J**	<0.57	**49**	**690**
DG-AJ12 (D)	4	0.5-1	DG-AJ12 (D)S-0.5-1	1/25/2019	**14 J**	**17**	**51**	**0.56**	**0.60 J**	**66 J**	**16**	**250**	**2,600 J**	**0.31**	**4.7 J**	**65**	**0.53 J**	<0.14	<0.41 UJ	**40**	**140**
DG-AJ13	4	0.5-1	DG-AJ13S-0.5-1	1/29/2019	**0.50 J**	**190**	**44 J**	<0.12	**0.21 J**	**10 J**	**11 J**	**81 J+**	**83 J-**	**0.046**	<0.24	**15**	**0.70 J**	**0.63 J**	<0.54	**68 J**	**70 J+**
DG-AJ13	4	3.5-4	DG-AJ13S-3.5-4	1/29/2019	**0.38 J**	**33**	**150**	**0.14 J**	**0.36 J**	**8.4**	**10**	**220**	**52**	**0.047**	<0.22	**10**	<0.53	**0.35 J**	<0.51 R	**77**	**380**
DG-AK11	4	0.5-1	DG-AK11S-0.5-1	1/22/2019	**0.22 J**	<0.22	**15**	<0.083	**0.13 J**	**84**	**12**	**74**	**2.3**	**0.049**	<0.16	**7.6**	<0.38	<0.13	<0.37	**84**	**47**
DG-AK11	4	3.5-4	DG-AK11S-3.5-4	1/22/2019	**15**	**31**	**490**	<0.28	**7.3**	**47**	**10**	**580**	**1,800**	**0.25**	**1.3 J**	**53**	<1.3	**0.99 J**	<1.3	**44**	**1,300**
DG-AK12	4	0.5-1	DG-AK12S-0.5-1	1/25/2019	**0.62 J**	**11**	**48**	**0.12 J**	**0.41**	**21**	**4.9**	**39**	**100**	**0.061**	<0.20	**19**	<0.46	<0.15	<0.44	**36**	**88**
DG-AK12	4	3.5-4	DG-AK12S-3.5-4	1/25/2019	**14**	**10**	**440**	**0.69**	**0.89**	**61**	**13**	**140**	**960**	**0.72**	<0.25	**61**	<0.58	**0.59 J**	<0.56	**51**	**520**
DG-AK13	4	0.5-1	DG-AK13S-0.5-1	1/25/2019	**2.8**	**40**	**100**	**0.28 J**	**0.8**	**27**	**11**	**200**	**300**	**0.17**	<0.21	**23**	**0.92 J**	**2.3**	<0.47	**87**	**300**
DG-AK13	4	3.5-4	DG-AK13S-3.5-4	1/25/2019	**4.3**	**290**	**420**	**0.4**	**0.76 J**	**14**	**12**	**140**	**200**	**1.7**	**1.1 J**	**14**	<1.1	**0.66 J**	<1.1	**87**	**210**
DG-AL11	4	0.5-1	DG-AL11S-0.5-1	1/28/2019	**1.8 U**	**4.4**	**49**	<0.12 U	**0.23 J**	**33**	**6.1**	**17**	**36**	**0.046**	<0.23 U	**27**	<0.54 U	<0.18 U	<0.52 U	**31**	**61**
DG-AL11	4	3.5-4	DG-AL11S-3.5-4	1/28/2019	**2.0 U**	**4.0 U**	**18**	<0.13 U	**0.18 J**	**7.8**	**14**	**83**	**3.1**	**0.059**	<0.25 U	**5.0**	**0.85 J**	<0.20 U	<0.57 U	**93**	**54**
DG-AL12	4	0.5-1	DG-AL12S-0.5-1	1/25/2019	**0.60 J**	**8.8**	**57**	<0.12	**0.48**	**20**	**3.5**	**31**	**150**	**0.04**	<0.23	**22**	<0.54	<0.18	<0.52	**23**	**110**
DG-AL12	4	3.5-4	DG-AL12S-3.5-4	1/25/2019	**10**	**13**	**730**	**0.51**	**1.4**	**31**	**6.4**	**580**	**2,000**	**1.1**	**0.82 J**	**37**	<0.36	**1.6**	<0.35	**60**	**990**
DG-AL13	4	0.5-1	DG-AL13S-0.5-1	1/29/2019	**0.93 J**	**7.5**	**38**	**0.12 J**	**0.29**	**14**	**15**	**120**	**52**	**0.046**	**0.28 J**	**18**	**0.98 J**	<0.12	<0.34 R	**91**	**110**
DG-AL13	4	3.5-4	DG-AL13S-3.5-4	1/29/2019	<0.23	**0.86 J**	**26**	**0.15 J**	<0.034	**7.9**	**8.8**	**89**	**4.8**	**0.043**	<0.18	**3.8**	<0.41	<0.14	<0.40 R	**78**	**35**
DG-AM11	4	0.5-1	DG-AM11S-0.5-1	1/22/2019	<0.29	<0.30	**15**	**0.20 J**	**0.082 J**	**8.4**	**13**	**76**	**1.9**	**0.044**	**0.36 J**	**5.5**	**1.5 J**	<0.18	**1.7 J**	**96**	**46**
DG-AM11	4	3.5-4	DG-AM11S-3.5-4	1/22/2019	**12**	**12**	**300**	**0.45 J**	**1.4**	**47**	**9.0**	**1500**	**700**	**0.13**	<0.33	**32**	**1.7 J**	**3.5**	<0.75	**37**	**1,300**
DG-AM12	4	0.5-1	DG-AM12S-0.5-1	1/25/2019	**1.3 J**	**5.3**	**32**	**0.12 J**	**0.23 J**	**13**	**2.8**	**22**	**64**	**0.033**	<0.18	**12**	<0.43	<0.14	<0.41	**15**	**57**
DG-AM12	4	3.5-4	DG-AM12S-3.5-4	1/25/2019	**2.2**	**12**	**170**	**0.55**	**0.42**	**53**	**12**	**81 J**	**110 J**	**0.11**	**0.16 J**	**39**	**0.54 J**	<0.12 UJ	<0.35	**50**	**400**
DG-AM12 (D)	4	3.5-4	DG-AM12 (D)S-3.5-4	1/25/2019	**2.8**	**12**	**250**	**0.47**	**0.6**	**58**	**13**	**160 J**	**320 J**	**0.08**	<0.23	**41**	**3.6 U**	**0.79 J**	<0.52	**47**	**590**
DG-AM13	4	0.5-1	DG-AM13S-0.5-1	1/31/2019	**10**	**35**	**130**	<0.090 U	**1.1**	**21**	**7.8**	**81 J**	**220**	**0.20 J**	**0.52 J**	**21**	<1.0 U	<0.35 U	<1.0 U	**33**	**250**
DG-AM13	4	3.5-4	DG-AM13S-3.5-4	1/31/2019	**6.2**	**17 J**	**370**	<0.29 U	**0.79 J**	**19 J**	**3.7 J**	**220**	**960**	**0.19**	<0.57 U	**18 J**	<1.3 U	**2.2 U**	<1.3 U	**20 J+**	**660**
DG-AM13 (D)	4	0.5-1	DG-AM13 (D)S-0.5-1	1/31/2019	**8.8**	**21**	**150**	<0.092 U	**0.69**	**17**	**5.9**	**160 J**	**290**	**0.11 J**	**0.20 J**	**19**	<0.43 U	**0.71 U**	<0.41 U	**35**	**270**
DG-AN11	4	0.5-1	DG-AN11S-0.5-1	1/28/2019	**2.0 U**	<0.34 U	**8.9**	<0.13 U	**0.15 J**	**8.7**	**15**	**99**	**2.5**	**0.06**	**0.32 J**	**5.2**	<0.59 U	<0.20 U	<0.57 U	**97**	**49**
DG-AN11	4	3.5-4	DG-AN11S-3.5-4	1/28/2019	**2.0 U**	**3.9 U**	**42**	<0.13 U	**0.069 J**	**8.1**	**11**	**93**	**7.9**	**0.11**	<0.25 U	**4.0**	<0.59 U	<0.20 U	<0.57 U	**97**	**43**
DG-AN12	4	0.5-1	DG-AN12S-0.5-1	1/25/2019	**0.64 J**	**9.5**	**22**	**0.10 J**	**0.24 J**	**11**	**2.4**	**18**	**59**	**0.036**	<0.15	**10**	<0.34	<0.12	<0.33	**13**	**50**
DG-AN12	4	3.5-4	DG-AN12S-3.5-4	1/25/2019	**2.5**	**140**	**120**	<0.099	**0.54**	**64**	**14**	**110**	**34**	**0.1**	<0.20	**13**	**2.2 J**	<0.15	**1.7**	**100**	**360**
DG-AN13	4	0.5-1	DG-AN13S-0.5-1	1/31/2019	**1.9 U**	**6**	**47**	**0.6**	**0.19 J**	**37**	**11**	**38**	**11**	**0.016 U**	<0.24	**54**	**3.8 U**	<0.19	<0.55 R	**59**	**45**
DG-AN13	4	3.5-4	DG-AN13S-3.5-4	1/31/2019	**1.6 U**	**0.39 J**	**250**	**0.77**	**0.28 J**	**41**	**21**	**81**	**5.4**	**0.14**	<0.21	**35**	**3.2 U**	**0.29 J**	<0.47 R	**120**	**69**
DG-AN13	4	9.5-10	DG-AN13S-9.5-10	1/31/2019	**18**	**28**	**500**	<0.63	**3.7**	**58**	**6.0**	**1,200**	**9,200**	**12**	**3.7 J**	**34**	<2.9	**4.7 J**	<2.8 R	**19**	**2,900**
DG-W10	4	0.5-1	DG-W10S-0.5-1	1/29/2019	**12 J**	**5.5 J**	**760 J**	<0.46	**4.4 J**	**54 J**	**35 J**	**700 J**	**1,300 J**	**0.26**	**1.2 J**	**30 J**	<2.1	**2.0 J**	<0.41	**280 J**	**980 J**
DG-W10	4	3.5-4	DG-W10S-3.5-4	1/29/2019	**77 J**	**25**	**1,000**	<0.26 UJ	**5.5**	**41 J**	**8.6**	**880 J**	**5,600 J**	**2.3**	**0.85 J**	**54**	**2.2 J**	**12**	<1.2 R	**22**	**2,800**
DG-W10 (D)	4	3.5-4	DG-W10 (D)S-3.5-4	1/29/2019	**30 J**	**17**	**1,300**	**0.38 J**	**7.2**	**77 J**	**8.8**	**510 J**	**3,100 J**	**1.9**	**1.1 J**	**51**	**6.1 J**	**13**	<1.3	**28**	**2,100**
DG-W11	4	0.5-1	DG-W11S-0.5-1	1/29/2019	**10**	**50**	**29**	<0.10	**0.21 J**	**11**	**5.0**	**91**	**360**	**0.091**	**0.60 J**	**20**	**0.55 J**	<0.16	<0.46 R	**29**	**60**
DG-W11	4	3.5-4	DG-W11S-3.5-4	1/29/2019	**0.32 J**	**100**	**42**	**0.11 J**	<0.033 UJ	**46**	**7.2**	**5.4**	**1.7 J**	<0.0023 UJ	<0.17	**37**	**0.53 J**	<0.13	<0.38 R	**35**	**19**
DG-W11 (D)	4	3.5-4	DG-W11 (D)S-3.5-4	1/29/2019	**2.6 J**	**89**	**38**	<0.11 UJ	**0.11 J**	**50**	**5.9**	**7.2**	**5.3 J**	**0.0049 J**	<0.21	**37**	**0.57 J**	<0.17	<0.48	**29**	**21**
DG-W12	4	0.5-1	DG-W12S-0.5-1	1/28/2019	**1.9 J**	**4.0 U**	**33**	<0.13 U	**0.12 J**	**23**	**6.3**	**94**	**87**	**0.044**	<0.26 U	**12**	<0.60 U	<0.20 U	<0.58 U	**58**	**38**
DG-W12	4	3.5-4	DG-W12S-3.5-4	1/28/2019	<0.29 U	**7.5**	**600**	**0.71**	**0.14 J**	**17**	**19**	**20**	**19**	**0.062**	<0.22 U	**38**	**3.5 U**	<0.18 U	<0.50 U	**27**	**63**
DG-W13	4	0.5-1	DG-W13S-0.5-1	11/21/2018	**1.4 J**	**1.4 J**	**30**	<0.12	**0.17 J**	**16**	**13**	**130**	**66**	**0.07**	<0.24	**12**	<0.57	**0.94 U**	<0.55	**120**	**75**
DG-W13	4	0.5-1	DG-W13S-0.5-1	1/31/2019	**2**	**8.6**	**74**	**0.37 U**	**0.34 J**	**19**	**9.4**	**110**	**140**	**0.11**	<0.24	**22**	<0.56	<0.19	<0.54 R	**73**	**96**
DG-W13	4	3.5-4	DG-W13S-3.5-4	11/21/2018	**2.1**	**7.6**	**63**	**0.36**	**0.13 J**	**36**	**16**	**67**	**17**	**0.066**	**0.32 J**	**31**	<0.55	**0.91 U**	<0.53	**41**	**66**
DG-W13	4	3.5-4	DG-W13S-3.5-4	1/31/2019	**1.4 U**	**2.1 J**	**110**	**0.59**	**0.21 J**	**99**	**16**	**27**	**5.5**	**0.83**	<0.18	**130**	<0.43	<0.15	<0.42 R	**64**	**52**

Table 2: Metals Concentrations in Soil
Brisbane Baylands OU-2
Brisbane, California

Sample Location	Investigation Zone	Depth Range (ft bgs)	Sample Name	Collection Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
Direct Exposure Human Health Risk Level Residential Soil Exposure ESL [1]					1.1E+01	6.7E-02	1.5E+04	1.6E+01	7.8E+01	1.2E+05	2.3E+01	3.1E+03	8.0E+01	1.3E+01	3.9E+02	8.2E+02	3.9E+02	3.9E+02	7.8E-01	3.9E+02	2.3E+04
Regional Background [2]					5.5E+00	1.9E+01	3.2E+02	1.0E+00	2.7E+00	1.0E+02	2.5E+01	6.9E+01	1.6E+01	4.0E-01	7.4E+00	1.2E+02	5.6E+00	1.8E+00	7.6E+00	7.4E+01	1.1E+02
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
DG-W13	4	7.5-8	DG-W13S-7.5-8	1/31/2019	**1.9**	**8.7**	**63**	**0.8**	**0.27 J**	**51**	**15**	**45**	**21**	**0.63**	<0.20	**52**	**3.1 U**	<0.16	<0.45 R	**44**	**96**
DG-W14	4	0.5-1	DG-W14S-0.5-1	1/23/2019	<5.0	**7.6**	**95**	<0.25	**2.7**	**36**	**7.3**	**170**	**420**	**0.56**	**2.4**	**30**	<1.7	<0.88	<5.0	**34**	**490**
DG-W14	4	3.5-4	DG-W14S-3.5-4	1/23/2019	<5.0	**6.2**	**56**	**0.40 J**	<0.25	**31**	**11**	**99**	**58**	**0.022**	<1.0	**74**	<1.7	<0.89	<5.0	**75**	**50**
DG-W14	4	9.5-10	DG-W14S-9.5-10	1/23/2019	<5.0	**14**	**29**	**0.35 J**	**0.44 J**	**40**	**11**	**37**	**18**	**0.079**	**1.1 J**	**51**	<1.7	<0.89	<5.0	**41**	**69**
DG-W15	4	0.5-1	DG-W15S-0.5-1	1/28/2019	**1.7 J**	**1.9 J**	**83**	<0.12	**0.21 J**	**26**	**10**	**37**	**23 J**	**0.25 J**	<0.24	**28**	<0.57	<0.19	**22 R**	**57**	**58**
DG-W15	4	3.5-4	DG-W15S-3.5-4	1/28/2019	**1.9 UJ**	**3.9 J**	**57 J+**	**0.38 U**	**0.13 J**	**13 J**	**4.3 J**	**80 J**	**110 J+**	**0.047**	<0.24 U	**19 J**	<0.57 U	**0.20 J**	**0.93 R**	**30 J+**	**45 J**
DG-W15 (D)	4	0.5-1	DG-W15 (D)S-0.5-1	1/28/2019	**1.8 U**	**5.6 J**	**85**	**0.35 U**	**0.061 J**	**30**	**11**	**36**	**13 J**	**0.0083 J**	<0.22	**40**	<0.53	<0.18	<0.51 R	**58**	**53**
DG-W17	4	0.5-1	DG-W17S-0.5-1	1/24/2019	**2.9 J**	**9.9**	**280 J**	**0.38 J**	**1.1**	**33 J**	**10 J**	**130 J**	**190 J**	**1.8 J+**	**0.76 J**	**32 J**	**1.1 J**	**0.54 J**	<0.57 R	**40 J**	**230**
DG-W17	4	3.5-4	DG-W17S-3.5-4	1/24/2019	<0.26 UJ	**0.71 J**	**16**	**0.15 J**	**0.11 J**	**11**	**10 J**	**59 J**	**8.4 J**	**0.092 J**	<0.20	**14**	**0.48 J**	<0.16	<0.45 R	**68**	**41**
DG-W17 (D)	4	3.5-4	DG-W17 (D)S-3.5-4	1/24/2019	**1.1 J**	**0.52 J**	**17**	<0.096 UJ	**0.50 J**	**10**	**17 J**	**110 J**	**2.3 J**	**0.19 J**	<0.19	**12**	**0.47 J**	**0.15 J**	**1.4 R**	**96**	**52**
DG-W18	4	0.5-1	DG-W18S-0.5-1	1/24/2019	**1.0 J**	**4.8 J**	**65**	<0.11	**0.52**	**21**	**10**	**79 J**	**140 J**	**0.087 J**	**0.74 J**	**26**	<0.49	**0.21 J**	**1.0 R**	**64**	**88**
DG-W18	4	3.5-4	DG-W18S-3.5-4	1/24/2019	**0.85 J-**	**0.54 J**	**11**	<0.13	**0.43 J**	**14**	**17**	**120**	**4.4**	**0.025**	<0.25	**7**	<0.59	**0.23 J**	**1.6 R**	**110**	**55**
DG-W18 (D)	4	0.5-1	DG-W18 (D)S-0.5-1	1/24/2019	**0.73 J**	**2.9 J**	**64**	<0.11	**0.57**	**32**	**6.6**	**44 J**	**63 J**	**0.33 J**	**0.79 J**	**39**	<0.50	<0.17 UJ	**0.89 R**	**48**	**91**
DG-X10	4	0.5-1	DG-X10S-0.5-1	1/29/2019	**1.1 J**	<0.29	**24**	<0.11	**0.12 J**	**6.8**	**9.8**	**110**	**53**	**0.041**	<0.22	**2.9**	<0.51	<0.17	<0.50	**87**	**42**
DG-X10	4	3.5-4	DG-X10S-3.5-4	1/29/2019	**21**	**9.8**	**490**	**0.12 J**	**0.87**	**18**	**3.4**	**330**	**1,800**	**0.62**	**0.33 J**	**16**	<0.53	**1.9**	<0.51 R	**12**	**700**
DG-X11	4	0.5-1	DG-X11S-0.5-1	1/28/2019	**7.0 J**	**11**	**26 J**	<0.10 U	**0.11 J**	**12**	**7.7**	**130 J**	**130 J**	**0.051**	<0.20 U	**20**	<0.48 U	<0.16 U	<0.46 U	**52 J**	**37 J**
DG-X11	4	3.5-4	DG-X11S-3.5-4	1/28/2019	**1.8 U**	**11**	**39**	**0.36 U**	**0.12 J**	**53**	**6.4**	**6.7**	**2.6**	**0.011 J**	<0.23 U	**39**	<0.54 U	<0.18 U	<0.52 U	**42**	**21**
DG-X12	4	0.5-1	DG-X12S-0.5-1	1/28/2019	**0.99 J**	**6.6**	**80**	<0.13 U	**0.67**	**55**	**9.0**	**160**	**270**	**0.24**	**2.6**	**32**	**4.0 U**	<0.20 U	<0.57 U	**67**	**170**
DG-X12	4	3.5-4	DG-X12S-3.5-4	1/28/2019	**15**	**15**	**1,900**	**0.49**	**3.4**	**65**	**6.8**	**800**	**4,700**	**0.79**	**0.52 J**	**44**	<0.58 U	**6.6**	<0.56 U	**36**	**2,600**
DG-X13	4	0.5-1	DG-X13S-0.5-1	1/22/2019	**7.0 J-**	**6.6**	**230 J**	<0.19	**2.3**	**35 J**	**10 J**	**240 J**	**950 J**	**0.33**	**1.2 J**	**34 J**	**1.8 J**	**1.4 J**	<0.85	**65 J**	**530 J**
DG-X13	4	3.5-4	DG-X13S-3.5-4	1/22/2019	**1.2 J**	**3.7 J**	**55**	**0.40 J**	**0.14 J**	**24 J**	**13**	**60 J**	**7.8 J**	**0.038 J**	**0.30 J**	**22**	<0.44 UJ	<0.15	**0.77 J**	**65 J**	**37 J**
DG-X13 (D)	4	3.5-4	DG-X13 (D)S-3.5-4	1/22/2019	**4.6 J**	**9.8 J**	**88**	<0.11 UJ	**0.32 J**	**12 J**	**14**	**150 J**	**970 J**	**0.077 J**	<0.22 UJ	**33**	**0.94 J**	<0.18	**0.52 J**	**110 J**	**200 J**
DG-X16	4	0.5-1	DG-X16S-0.5-1	1/23/2019	<5.0	**4.3**	**39**	<0.25	**0.36 J**	**35**	**9.1**	**140**	**110**	**0.12**	**1.2 J**	**26**	<1.7	<0.89	<5.0	**75**	**76**
DG-X16	4	3.5-4	DG-X16S-3.5-4	1/23/2019	<4.9	**5.6**	**64**	**0.42 J**	<0.25	**52**	**9.5**	**71**	**100**	**2.2**	<0.99	**71**	<1.7	<0.88	<4.9	**60**	**49**
DG-X17	4	0.5-1	DG-X17S-0.5-1	1/28/2019	**1.3 U**	**4.3**	**95**	**0.26 U**	**0.16 J**	**26**	**6.1**	**62**	**55**	**0.061**	**0.36 J**	**32**	**0.90 J**	<0.13	<0.38 R	**35**	**56**
DG-X17	4	3.5-4	DG-X17S-3.5-4	1/28/2019	**33**	**40**	**63**	<0.12	**13**	**53**	**12**	**730**	**17,000**	**0.073**	**1.7 J**	**59**	**4.0 J**	**5.3**	<1.4 R	**36**	**5,700**
DG-X18	4	0.5-1	DG-X18S-0.5-1	1/24/2019	**1.1 J**	**5.5**	**85**	<0.11	**0.47**	**86**	**14**	**29**	**51**	**0.075**	**0.38 J**	**120**	<0.51	**0.24 J**	**1.1 R**	**62**	**45**
DG-X18	4	3.5-4	DG-X18S-3.5-4	1/24/2019	**7.2**	**16**	**130**	<0.13	**2.2**	**74**	**16**	**320**	**2,000**	**0.26**	**6.5**	**79**	**5.6 J**	<0.49	<1.4 R	**53**	**360**
DG-X19	4	0.5-1	DG-X19S-0.5-1	2/5/2019	**0.68 J**	**11**	**310**	**0.83**	<0.038	**20**	**12**	**34**	**38**	**0.11**	**2.6**	**39**	**1.4 J**	<0.16	**1.0**	**21**	**64**
DG-X19	4	3.5-4	DG-X19S-3.5-4	2/5/2019	**12**	**70**	**520**	**0.12 J**	**0.21 J**	**41**	**13**	**260**	**2,900**	**0.14**	**1.2 J**	**50**	**5.6 J**	<0.37	**1.5**	**55**	**650**
DG-Y10	4	0.5-1	DG-Y10S-0.5-1	1/29/2019	**5.8**	**7.4**	**70**	<0.084	**2.5**	**20**	**9.8**	**140**	**250**	**0.18**	**1.1 J**	**12**	**1.3 J**	**0.28 J**	**0.45**	**63**	**310**
DG-Y10	4	3.5-4	DG-Y10S-3.5-4	1/29/2019	**1.3**	<0.20	**18**	<0.075	**0.21 J**	**7.6**	**7.9**	**83**	**20**	**0.037**	<0.15	**3.1**	**0.60 J**	<0.12	**0.46**	**68**	**57**
DG-Y11	4	0.5-1	DG-Y11S-0.5-1	1/21/2019	**5.3**	**14**	**94**	<0.11	**0.72**	**21**	**8.4**	**200**	**500**	**0.4**	**0.36 J**	**24**	<0.50	<0.17	<0.48	**58**	**210**
DG-Y11	4	3.5-4	DG-Y11S-3.5-4	1/21/2019	**2.4**	**11**	**360**	**0.79**	**0.29 J**	**26**	**15**	**220**	**610**	**0.097**	<0.16	**34**	<0.38	<0.13	<0.37	**33**	**140**
DG-Y12	4	0.5-1	DG-Y12S-0.5-1	1/25/2019	<0.26	**3.2 U**	**27**	<0.10	**0.20 J**	**5.1**	**0.60 J**	**9.3**	**120**	**0.0064 J**	<0.20	**3.9**	<0.48	<0.16	<0.46	**4.6**	**37**
DG-Y12	4	3.5-4	DG-Y12S-3.5-4	1/25/2019	**9.5**	**6.0**	**120**	<0.13	**0.67**	**23**	**12**	**270**	**340**	**0.21**	**0.28 J**	**19**	<0.60	**0.28 J**	<0.58	**80**	**340**
DG-Y13	4	0.5-1	DG-Y13S-0.5-1	1/31/2019	**1.8 J**	**4.1 J**	**69**	**0.45 J**	**0.41 J**	**42**	**5.6**	**34**	**120**	**0.047**	**0.25 J**	**25**	**2.8 U**	<0.14 UJ	<0.41 R	**35**	**140**
DG-Y13	4	3.5-4	DG-Y13S-3.5-4	1/31/2019	**8.5**	**15**	**800**	**0.42**	**2.2**	**29**	**7.4**	**510**	**2,700**	**8.3**	**0.42 J**	**23**	**7.1 U**	**2.3**	**1.6**	**31**	**1,900**
DG-Y13 (D)	4	0.5-1	DG-Y13 (D)S-0.5-1	1/31/2019	**1.8 UJ**	**3.3 J**	**58**	**0.36 UJ**	**0.36 J**	**37**	**5.9**	**27**	**91**	**0.063**	<0.23 UJ	**24**	<0.54	**0.21 J**	<0.52 R	**33**	**110**
DG-Y14	4	0.5-1	DG-Y14S-0.5-1	1/31/2019	**2.1**	**3.5 J**	**74**	**0.37 J**	**0.37 J**	**23**	**11**	**110**	**160**	**0.11**	**0.28 J**	**19 J**	<0.53	<0.18	<0.51 R	**72**	**120**
DG-Y14	4	3.5-4	DG-Y14S-3.5-4	1/31/2019	**1.9 UJ**	**3.3 J**	**89 J+**	**0.72**	**0.27 J**	**120 J**	**19 J**	**31**	**10**	**0.37 J**	<0.25	**130 J**	**3.8 U**	**0.27 J**	<0.56 R	**63 J**	**61**
DG-Y14 (D)	4	0.5-1	DG-Y14 (D)S-0.5-1	1/31/2019	**1.5**	**2.1 J**	**48**	**0.29 UJ**	**0.33 J**	**17**	**11**	**130**	**110**	**0.16**	<0.18 UJ	**11 J**	**2.9 U**	<0.14	<0.41 R	**90**	**88**
DG-Y15	4	0.5-1	DG-Y15S-0.5-1	1/31/2019	**2.5**	**6.8**	**60**	**0.11 J**	**0.96**	**56**	**6.9**	**73**	**200**	**0.12**	**0.79 J**	**19**	<0.44	<0.15	<0.43	**45**	**520**
DG-Y15	4	3.5-4	DG-Y15S-3.5-4	1/31/2019	**4.2**	**4.2**	**75**	**0.38**	**0.4**	**130**	**18**	**65**	**15**	**1.2**	**0.28 J**	**120**	**1.9 J**	<0.13	<0.38	**90**	**82**
DG-Y15	4	7.5-8	DG-Y15S-7.5-8	1/31/2019	**1.7**	**7.6**	**42**	**0.84**	**0.37**	**31**	**14**	**50**	**20**	**0.081**	**0.20 J**	**31**	**1.4 J**	<0.12	**0.37**	**36**	**87**
DG-Y15 (D)	4	3.5-4	DG-Y15 (D)S-3.5-4	1/31/2019	**5.2**	**4.2**	**51**	**0.47**	**0.51**	**150**	**19**	**75**	**23**	**0.73**	<0.21 UJ	**150**	**1.5 J**	<0.17	<0.48	**96**	**120**
DG-Y16	4	0.5-1	DG-Y16S-0.5-1	1/24/2019	**3.7 J**	**5.4**	**60**	**0.17 J**	**0.65**	**31**	**6.7**	**220 J**	**230**	**0.085**	**0.60 J**	**52**	**0.84 J**	<0.16	<0.47 R	**65**	**170**
DG-Y16	4	3.5-4	DG-Y16S-3.5-4	1/24/2019	**16**	**61**	**110**	**0.13 J**	**0.94**	**21**	**12**	**430**	**2,100**	**0.15**	**0.39 J**	**56**	<0.47	**0.79 U**	<0.46 R	**70**	**220**
DG-Y16 (D)	4	0.5-1	DG-Y16 (D)S-0.5-1	1/24/2019	**2.1 J**	**4.9**	**66**	<0.11 UJ	**0.61**	**26**	**7.6**	**110 J**	**200**	**0.096**	**0.91 J**	**48**	**0.64 J**	<0.18	<0.51 R	**64**	**160**
DG-Y17	4	0.5-1	DG-Y17S-0.5-1	1/23/2019	<5.0	**3.6**	**65**	<0.25	**2.1**	**14**	**8.4**	**180**	**170**	**0.065**	<1.0	**34**	<1.7	<0.89	<5.0	**80**	**510**
DG-Y17	4	3.5-4	DG-Y17S-3.5-4	1/23/2019	**9.9 U**	**11**	**88**	<0.25	**0.64**	**24**	**6.2**	**240**	**440**	**0.42**	**1.2 J**	**55**	<1.7	<0.88	<4.9	**57**	**100**
DG-Y18	4	0.5-1	DG-Y18S-0.5-1	1/23/2019	<5.0	**3.9**	**51**	<0.25	<0.25	**15**	**3.5**	**17**	**4.4**	<0.012	<1.0	**11**	<1.7	<0.89	<5.0	**32**	**29**
DG-Y18	4	3.5-4	DG-Y18S-3.5-4	1/23/2019	<5.0	**12**	**52**	<0.25	**1.9**	**21**	**11**	**140**	**310**	**0.099**	<1.0	**27**	<1.7	<0.89	<5.0	**83**	**290**

Table 2: Metals Concentrations in Soil
Brisbane Baylands OU-2
Brisbane, California

Sample Location	Investigation Zone	Depth Range (ft bgs)	Sample Name	Collection Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
Direct Exposure Human Health Risk Level Residential Soil Exposure ESL [1]					1.1E+01	6.7E-02	1.5E+04	1.6E+01	7.8E+01	1.2E+05	2.3E+01	3.1E+03	8.0E+01	1.3E+01	3.9E+02	8.2E+02	3.9E+02	3.9E+02	7.8E-01	3.9E+02	2.3E+04
Regional Background [2]					5.5E+00	1.9E+01	3.2E+02	1.0E+00	2.7E+00	1.0E+02	2.5E+01	6.9E+01	1.6E+01	4.0E-01	7.4E+00	1.2E+02	5.6E+00	1.8E+00	7.6E+00	7.4E+01	1.1E+02
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
DG-Y19	4	0.5-1	DG-Y19S-0.5-1	1/28/2019	**1.0 J**	**3.3 J**	**65**	**0.22 J**	**0.22 J**	**48**	**8.8**	**23**	**18**	**0.031**	**0.27 J**	**73**	**0.91 J**	<0.19	**19 R**	**48**	**50**
DG-Y19	4	3.5-4	DG-Y19S-3.5-4	1/28/2019	**2.7**	**32**	**99**	**0.31 J**	**0.42 J**	**92**	**15**	**77**	**140**	**2.4**	<0.24	**91**	**1.0 J**	<0.19	**25 R**	**63**	**120**
DG-Y19	4	7.5-8	DG-Y19S-7.5-8	1/28/2019	**2.0**	**2.0 J**	**90**	<0.13	**0.12 J**	**57**	**10**	**10**	**2.7**	**0.042**	<0.26	**59**	<0.60	<0.20	**17 R**	**43**	**32**
DG-Z10	4	0.5-1	DG-Z10S-0.5-1	1/29/2019	**7.6**	**110**	**80**	<0.074	**2.3**	**410**	**8.5**	**160**	**250**	**0.16**	**1.1**	**12**	**1.1 J**	**0.17 J**	**0.57**	**61**	**430**
DG-Z10	4	3.5-4	DG-Z10S-3.5-4	1/29/2019	**60**	**24**	**1,400**	<0.29	**3.8**	**220**	**10**	**1,600**	**16,000**	**1.0**	**0.63 J**	**42**	**9.0**	**11**	<1.3	**29**	**2,700**
DG-Z11	4	0.5-1	DG-Z11S-0.5-1	1/28/2019	**2.3**	**18**	**41**	<0.11 U	**0.56**	**23**	**6.2**	**100**	**170**	**0.11**	**1.9**	**16**	<0.52 U	<0.18 U	<0.50 U	**44**	**88**
DG-Z11	4	3.5-4	DG-Z11S-3.5-4	1/28/2019	**9.5**	**76**	**120**	<0.12 U	**0.36 J**	**18**	**9**	**140**	**360**	**0.07**	<0.23 U	**28**	<0.54 U	<0.18 U	<0.52 U	**65**	**210**
DG-Z12	4	0.5-1	DG-Z12S-0.5-1	1/25/2019	**1.1 J**	**3.7 U**	**51**	<0.12	**0.49 J**	**14**	**13**	**100**	**140 J**	**0.078 J**	<0.24	**9.3**	**3.7 U**	<0.19	<0.54	**110**	**120**
DG-Z12	4	3.5-4	DG-Z12S-3.5-4	1/25/2019	**17**	**23**	**290**	<0.24	**2.0**	**40**	**14**	**330**	**960**	**0.52**	<0.47	**41**	**7.3 U**	**1.5 J**	<1.1	**31**	**640**
DG-Z12 (D)	4	0.5-1	DG-Z12 (D)S-0.5-1	1/25/2019	**0.68 J**	**3.2 U**	**42**	<0.10	**0.29 J**	**8.7**	**15**	**96**	**53 J**	**0.038 J**	<0.20	**5.7**	**3.2 U**	<0.16	<0.46	**120**	**73**
DG-Z13	4	0.5-1	DG-Z13S-0.5-1	1/28/2019	<0.30	**7.0**	**330**	**0.37 U**	**0.13 J**	**28**	**4.2**	**39**	**32**	**0.022 J**	**0.66 J**	**18**	<0.55	<0.19	<0.53 R	**67**	**65**
DG-Z13	4	3.5-4	DG-Z13S-3.5-4	1/28/2019	**5.9**	**14**	**350**	**0.88**	**0.33 J**	**55**	**16**	**160**	**550**	**0.22**	<0.25	**55**	<0.58	**0.41 J**	<0.56 R	**54**	**630**
DG-Z14	4	0.5-1	DG-Z14S-0.5-1	1/24/2019	**2.2**	**7.7**	**54**	<0.13	**1.1**	**29**	**6.0**	**120**	**670**	**0.95**	**5.8**	**25**	<0.59	**0.36 J**	<0.57 R	**56**	**99**
DG-Z14	4	3.5-4	DG-Z14S-3.5-4	1/24/2019	<0.24	**1.3 J**	**53**	<0.093	**0.37**	**12**	**8.6**	**98**	**1.8**	**0.023**	<0.18	**9.7**	<0.43	<0.14	**0.83 R**	**77**	**36**
DG-Z15	4	0.5-1	DG-Z15S-0.5-1	1/24/2019	**2.9**	**2.7 J**	**39**	<0.10	**0.45**	**36**	**10**	**110**	**180**	**0.044**	**0.36 J**	**16**	<0.47	<0.16	<0.45 R	**76**	**55**
DG-Z15	4	3.5-4	DG-Z15S-3.5-4	1/24/2019	**3.4**	**1.0 J**	**330**	<0.092	**0.6**	**49**	**21**	**43**	**5.4**	**0.11**	<0.18	**25**	**0.43 J**	<0.14	<0.41 R	**160**	**58**
DG-Z16	4	0.5-1	DG-Z16S-0.5-1	1/24/2019	**4.9 J**	**3.6**	**39 J**	**0.23 J**	**0.79**	**49 J+**	**6.1 J**	**160**	**800 J**	**0.27**	**0.88 J**	**43 J**	**1.5 J**	<0.15	<0.43 R	**67 J+**	**120 J+**
DG-Z16	4	3.5-4	DG-Z16S-3.5-4	1/24/2019	**2.0**	**2.0 J**	**30**	<0.073	**0.42**	**35**	**7.0**	**76**	**86**	**0.07**	**0.27 J**	**23**	**0.45 J**	<0.11	**0.39 R**	**60**	**74**
DG-Z16 (D)	4	3.5-4	DG-Z16 (D)S-3.5-4	1/24/2019	**1.8**	**1.7 J**	**21**	<0.080	**0.38**	**28**	**7.1**	**79**	**67**	**0.073**	**0.27 J**	**20**	**1.2 J**	<0.12	<0.36 R	**64**	**68**
DG-Z17	4	0.5-1	DG-Z17S-0.5-1	1/28/2019	**2.6**	**6.7**	**84**	<0.093	**0.59**	**20**	**7.1**	**130 J**	**260**	**0.13**	**0.62 J**	**40**	**0.83 J**	<0.14	**17 R**	**43**	**140**
DG-Z17	4	3.5-4	DG-Z17S-3.5-4	1/28/2019	**6.1**	**12**	**93**	<0.12	**0.46**	**11**	**3.5**	**250**	**630**	**0.019**	**0.85 J**	**34**	**1.6 J**	<0.18	**15 R**	**38**	**73**
DG-Z17	4	7.5-8	DG-Z17S-7.5-8	1/28/2019	**1.8**	**5.1**	**45**	**0.35**	**0.24 J**	**33**	**12**	**35**	**15**	**0.041**	<0.18	**28**	**1.7 J**	<0.15	**16 R**	**42**	**62**
DG-Z17 (D)	4	0.5-1	DG-Z17 (D)S-0.5-1	1/28/2019	**3.6**	**10**	**66**	<0.11	**0.63**	**25**	**9.9**	**230 J**	**270**	**0.14**	**2.1 J**	**37**	**1.8 J**	**0.86 U**	**26 R**	**67**	**160**
DG-Z18	4	0.5-1	DG-Z18S-0.5-1	1/23/2019	<5.0	**4.6**	**130**	**0.48 J**	<0.25	**46**	**11**	**42**	**9.3**	**0.07**	<1.0	**62**	<1.7	<0.89	<5.0	**50**	**49**
DG-Z18	4	3.5-4	DG-Z18S-3.5-4	1/23/2019	**10 U**	**11**	**55**	**0.32 J**	**0.56**	**19**	**8.4**	**210**	**570**	**0.054**	<1.0	**46**	<1.7	<0.89	<5.0	**68**	**290**
DG-Z19	4	0.5-1	DG-Z19S-0.5-1	2/5/2019	<0.26	**2.9 J**	**77**	**0.16 J**	**0.12 J**	**29**	**7.3**	**30**	**14**	**0.062**	**0.27 J**	**25**	<0.46	<0.16	<0.45	**56**	**42**
DG-Z19	4	3.5-4	DG-Z19S-3.5-4	2/5/2019	**3.7**	**130**	**120**	**0.33**	<0.037	**110**	**17**	**30**	**12**	**10**	**0.25 J**	**150**	**2.0 J**	<0.15	<0.43	**60**	**89**
DG-AO11	5	0.5-1	DG-AO11S-0.5-1	1/22/2019	**0.64 J**	**18**	**62**	**0.19 J**	**0.33**	**36**	**10**	**60**	**71**	**0.12**	**0.32 J**	**63**	<0.35	<0.12	**0.60 J**	**51**	**97**
DG-AO11	5	3.5-4	DG-AO11S-3.5-4	1/22/2019	**24**	**150**	**350**	**0.52**	**0.35 J**	**28**	**18**	**310**	**1,700**	**0.12**	**0.98 J**	**49**	<1.1	**0.86 J**	<1.1	**30**	**430**
DG-AO12	5	0.5-1	DG-AO12S-0.5-1	1/31/2019	**45**	**36**	**1,400**	**0.49**	**5.7**	**88**	**11**	**1,400**	**4,800**	**0.65**	**1.6 J**	**73**	**5.8**	**8.0**	<0.56 U	**42**	**3,500**
DG-AO12	5	3.5-4	DG-AO12S-3.5-4	1/31/2019	**57**	**54**	**1,900**	**0.36 U**	**6.0**	**59**	**13**	**640**	**6,000**	**0.02**	**1.7 J**	**47**	<2.7 U	**5.1**	<2.6 U	**41**	**2,700**
DG-AP10	5	0.5-1	DG-AP10S-0.5-1	1/28/2019	**0.81 J**	**0.26 J**	**22**	<0.093 U	**0.20 J**	**10**	**13**	**78**	**13**	**0.067**	**1.1 J**	**4.8**	**1.1 J**	<0.14 U	**0.81 J**	**90**	**71**
DG-AP10	5	3.5-4	DG-AP10S-3.5-4	1/28/2019	**8.1**	**17**	**410**	**0.17 J**	**1.5**	**52**	**9**	**580**	**1,200**	**0.13**	<0.19 U	**95**	**3.1**	**2.0**	<0.44 U	**34**	**720**
DG-AP11	5	0.5-1	DG-AP11S-0.5-1	1/31/2019	**1.2 J**	**3.4**	**87 J**	<0.095 U	**0.27 J**	**45 J**	**10**	**100**	**120 J**	**0.069 J**	**0.80 J**	**66 J**	**0.82 J**	**0.30 J**	**0.63 J**	**60**	**110 J**
DG-AP11	5	3.5-4	DG-AP11S-3.5-4	1/31/2019	**60**	**33**	**1,600**	**1.0**	**7.3**	**43**	**10**	**920**	**7,700**	**0.36**	**2.5 J**	**32**	**7.5**	**7.2**	<1.0 U	**32**	**2,500**
DG-AP11 (D)	5	0.5-1	DG-AP11 (D)S-0.5-1	1/31/2019	**1.7 J**	**4**	**150 J**	<0.088 U	**0.80 J**	**26 J**	**8.9**	**150**	**240 J**	**0.15 J**	**1.2 J**	**18 J**	**2.7 U**	**0.68 U**	<0.39 U	**76**	**260 J**
DG-AQ10	5	0.5-1	DG-AQ10S-0.5-1	2/1/2019	**1.7 U**	**2.3 J**	**55**	<0.11	**1.2**	**33**	**16**	**140**	**140**	**0.13**	**0.58 J**	**13**	<0.52	**0.28 J**	**0.63**	**110**	**260**
DG-AQ10	5	3.5-4	DG-AQ10S-3.5-4	2/1/2019	**22**	**14**	**760**	**0.13 J**	**4.1**	**40**	**11**	**7,700**	**2,700**	**1.1**	**0.75 J**	**46**	**5.8**	**6.2**	<0.78 R	**40**	**2,700**
DG-AQ11	5	0.5-1	DG-AQ11S-0.5-1	1/30/2019	**1.5**	**2.2 J**	**92**	**0.37**	**0.13 J**	**16**	**9.6**	**150**	**230**	**0.17**	<0.17	**7.8**	<0.40	<0.13	<0.38	**82**	**190**
DG-AQ11	5	3.5-4	DG-AQ11S-3.5-4	1/30/2019	**41**	**21**	**1,400**	**0.65**	**2.4**	**88**	**25**	**740**	**3,900**	**0.49**	**2.2**	**150**	**9.9 U**	**8**	<1.4	**25**	**2,700**
DG-AR10	5	0.5-1	DG-AR10S-0.5-1	1/31/2019	**66**	**43**	**1,900**	**0.56 J**	**7.8**	**88**	**15**	**1,900**	**9,800**	**3**	**2.1 J**	**78**	**9.4 U**	**8.5**	**3.0 J**	**33**	**4,700**
DG-AR10	5	3.5-4	DG-AR10S-3.5-4	1/31/2019	**65**	**24**	**2,100**	**0.89**	**6.3**	**53**	**10**	**1,800**	**6,900**	**1.6**	**1.2 J**	**67**	**8.5 U**	**7.4**	**2.0 J**	**34**	**4,900**
DG-AR11	5	0.5-1	DG-AR11S-0.5-1	1/30/2019	**19**	**24**	**1,000**	**0.33**	**2.8**	**160**	**13**	**770**	**1,600**	**1.2**	**0.94 J**	**58**	**3.3 U**	**2.7**	**0.73 J**	**47**	**1,700**
DG-AR11	5	3.5-4	DG-AR11S-3.5-4	1/30/2019	**200**	**15**	**1,500**	<0.30 U	**7.7**	**2600**	**15**	**1500**	**4,000**	**2.8**	**1.5 J**	**88**	**9.3 U**	**5.8**	<1.3 U	**41**	**4,400**
DG-AS10	5	0.5-1	DG-AS10S-0.5-1	1/31/2019	**76**	**35**	**1,500**	**0.93 U**	**4.3**	**99**	**14**	**19,000**	**6,900**	**1.2**	**2.1 J**	**74**	**10**	**8.0**	<1.4 U	**46**	**3,400**
DG-AS10	5	3.5-4	DG-AS10S-3.5-4	1/31/2019	**23**	**22**	**920**	**0.36 U**	**3.8**	**89**	**12**	**680**	**2,700**	**0.98**	**1.3 J**	**77**	**4.8**	**3.4**	<0.52 U	**39**	**3,000**
DG-AS9	5	0.5-1	DG-AS9S-0.5-1	12/20/2018	<0.27	**4.5**	**22**	**0.13 J**	**0.071 J**	**83**	**5.2**	**17**	**14**	**0.0022 J**	**0.34 J**	**80**	<0.49	<0.17	<0.48	**7.6**	**12**
DG-AS9	5	3.5-4	DG-AS9S-3.5-4	12/20/2018	**1.2 J**	**6.3**	**110**	**0.26 J**	**0.99**	**26**	**11**	**180**	**130**	**0.18**	**1.3 J**	**21**	**0.46 J**	**0.19 J**	<0.44	**82**	**290**
DG-AT10	5	0.5-1	DG-AT10S-0.5-1	1/30/2019	**15**	**140**	**380**	**0.29 U**	**2.2**	**55**	**19**	**400**	**1,400**	**0.83**	**1.3 J**	**64**	<1.1 U	**1.0 J**	**1.2 J**	**55**	**720**
DG-AT10	5	3.5-4	DG-AT10S-3.5-4	1/30/2019	**82**	**31**	**2,100 J**	<0.30 U	**7.9**	**230**	**15 J**	**3,000**	**12,000**	**2.9 J**	**1.0 J**	**100 J**	**9.1 U**	**9.0**	**3.9 J**	**46**	**4,900**
DG-AT8	5	0.5-1	DG-AT8S-0.5-1	12/21/2018	**1.0 J**	**4.3**	**83**	**0.37 J**	<0.047	**18**	**10**	**130**	**39**	**0.12**	**0.89 J**	**24**	<0.57	<0.19	<0.55	**100**	**120**
DG-AT8	5	3.5-4	DG-AT8S-3.5-4	12/21/2018	**18**	**38**	**1,200**	**0.43**	**3.6**	**56**	**8.5**	**720**	**4,400**	**0.66**	**0.61 J**	**47**	<0.58	**5.9**	**0.64 J**	**25**	**2,500**
DG-AT9	5	0.5-1	DG-AT9S-0.5-1	1/30/2019	**29**	**9**	**380**	**0.12 J**	**1.7**	**26**	**9.5**	**380**	**1,100**	**0.49**	**0.44 J**	**22**	<0.38	**1.8**	<0.36	**49**	**800**

Table 2: Metals Concentrations in Soil
Brisbane Baylands OU-2
Brisbane, California

Sample Location	Investigation Zone	Depth Range (ft bgs)	Sample Name	Collection Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
Direct Exposure Human Health Risk Level Residential Soil Exposure ESL [1]					1.1E+01	6.7E-02	1.5E+04	1.6E+01	7.8E+01	1.2E+05	2.3E+01	3.1E+03	8.0E+01	1.3E+01	3.9E+02	8.2E+02	3.9E+02	3.9E+02	7.8E-01	3.9E+02	2.3E+04
Regional Background [2]					5.5E+00	1.9E+01	3.2E+02	1.0E+00	2.7E+00	1.0E+02	2.5E+01	6.9E+01	1.6E+01	4.0E-01	7.4E+00	1.2E+02	5.6E+00	1.8E+00	7.6E+00	7.4E+01	1.1E+02
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
DG-AT9	5	3.5-4	DG-AT9S-3.5-4	1/30/2019	**210**	**41**	**1,600**	**0.42 J**	**8.0**	**69**	**24**	**1,200**	**5,300**	**0.34**	**1.0 J**	**89**	**9.2 J**	**8.3**	<1.8	**40**	**4,900**
DG-AU10	5	0.5-1	DG-AU10S-0.5-1	1/30/2019	**46 J**	**29 J**	**970 J**	**0.46**	**4.8 J**	**69 J**	**14 J**	**1,000 J**	**4,800 J**	**0.9**	**1.1 J**	**110 J**	**7.2 U**	**5.7 J**	**1.1 J**	**39 J**	**3,000 J**
DG-AU10	5	3.5-4	DG-AU10S-3.5-4	1/30/2019	**61**	**100**	**1,700**	**0.36 J**	**4.3**	**130**	**40**	**2,300**	**6,900**	**0.54**	**2.4 J**	**290**	**8.0 J**	**5.5**	**2.6 J**	**23**	**5,100**
DG-AU10 (D)	5	3.5-4	DG-AU10 (D)S-3.5-4	1/30/2019	**67**	**47**	**1,200 J**	<1.3 U	**4.8**	**160**	**41 J**	**2,700**	**8,500**	**0.34 J**	**1.2 J**	**310 J**	**39 U**	**7.2 J**	**9.5 J**	**31**	**4,700**
DG-AU8	5	0.5-1	DG-AU8S-0.5-1	12/21/2018	**79**	**48**	**2,000**	**1.2**	**10**	**100**	**16**	**1,700**	**7,900**	**1.9**	**5.9**	**99**	**7.3 J**	**17**	<1.4	**53**	**5,200**
DG-AU8	5	3.5-4	DG-AU8S-3.5-4	12/21/2018	**35**	**24**	**1,700**	**0.95**	**5.8**	**58**	**13**	**3,000**	**4,900**	**1**	**4.0 J**	**63**	**2.6 J**	**6.6**	<1.3	**32**	**3,400**
DG-AU9	5	0.5-1	DG-AU9S-0.5-1	1/30/2019	**20**	**19**	**190**	**0.17 J**	**20**	**43**	**6.6**	**3,700**	**3,500**	**2**	**1.6 J**	**57**	**1.9 J**	**3.8**	**0.74 J**	**22**	**4,200**
DG-AU9	5	3.5-4	DG-AU9S-3.5-4	1/30/2019	**140**	**37**	**360**	**0.51 J**	**7.8**	**110**	**14**	**2,100**	**9,200**	**2.6**	**1.9 J**	**130**	**7.9 J**	**34**	<2.2 U	**40**	**7,000**
DG-AV7	5	0.5-1	DG-AV7S-0.5-1	12/20/2018	<0.28	**140**	**81**	**0.34**	**0.12 J**	**11**	**15**	**160**	**10**	**0.16**	**0.51 J**	**5.2**	**1.1 J**	<0.17	<0.48	**130**	**58**
DG-AV7	5	3.5-4	DG-AV7S-3.5-4	12/20/2018	**72**	**73**	**1,900**	**0.69 J**	**19**	**85**	**12**	**9,900**	**6,000**	**2.1**	**4.7**	**150**	**10**	**11**	**18**	**42**	**10,000**
DG-AV7	5	7.5-8	DG-AV7S-7.5-8	12/20/2018	**94**	**36**	**1,300**	**0.64 J**	**5.6**	**52**	**12**	**12,000**	**4,300**	**0.72**	**5.1**	**120**	<1.3	**9.7**	**2.8 J**	**28**	**6,100**
DG-AV8	5	0.5-1	DG-AV8S-0.5-1	12/21/2018	**38**	**29**	**1,500**	**1.3**	**17**	**71**	**15**	**1,400**	**3,400**	**1.0**	**3.8**	**71**	**4.2 J**	**5.6**	<1.1	**45**	**6,500**
DG-AV8	5	3.5-4	DG-AV8S-3.5-4	12/21/2018	**50 J**	**19**	**990 J**	**0.87 J**	**5.7**	**47 J**	**7.4**	**1,600 J**	**5,800 J**	**1.3**	**3.3 J**	**40 J**	**3.9 J**	**6.8**	<1.4	**28 J+**	**5,500 J**
DG-AV8 (D)	5	0.5-1	DG-AV8 (D)S-0.5-1	12/21/2018	**25 J**	**26**	**1,400 J**	**0.65 J**	**5.4 J**	**64**	**11**	**1,100 J**	**3,400 J**	**0.94 J**	**4.3**	**60**	<1.3	**5.6 J**	<1.2	**39**	**2,900 J**
DG-AV9	5	0.5-1	DG-AV9S-0.5-1	2/1/2019	**35**	**61**	**1,200**	**0.32 J**	**8.8**	**85**	**19**	**900**	**3,000**	**1**	**7.6**	**83**	**8.8 U**	**3.6**	<1.3 R	**28**	**3,400**
DG-AV9	5	3.5-4	DG-AV9S-3.5-4	2/1/2019	**68**	**26**	**190**	**0.46 J**	**3.6**	**50**	**15**	**1,300**	**4,700**	**1.4**	**2.5 J**	**48**	**7.2 U**	**6.0**	<1.1	**29**	**2,800**
DG-AV9	5	8.5-9	DG-AV9S-8.5-9	2/1/2019	**26**	**21**	**970**	**0.45 J**	**5.8**	**37**	**8.4**	**1,500**	**4,100**	**1.2**	**0.96 J**	**46**	**5.7 U**	**5.2**	**1.4 R**	**20**	**3,100**
DG-AW6	5	0.5-1	DG-AW6S-0.5-1	12/21/2018	**2.0 J-**	**4.7 J+**	**98 J**	**0.57**	**0.73**	**27 J**	**7.7 J**	**77 J+**	**140 J**	**0.098**	**1.2 J**	**30 J**	**0.47 J**	<0.14	<0.41	**34 J**	**220 J**
DG-AW6	5	3.5-4	DG-AW6S-3.5-4	12/21/2018	**39**	**23**	**1,700**	<0.57 UJ	**5.0**	**61**	**10**	**4,300 J**	**5,700**	**0.54**	**2.6 J**	**54**	<2.6	**11**	<2.5	**31**	**3,100**
DG-AW6 (D)	5	3.5-4	DG-AW6 (D)S-3.5-4	12/21/2018	**33**	**22**	**1,200**	**0.92 J**	**4.5**	**50**	**9.4**	**7,500 J**	**4,300**	**0.55**	**2.8 J**	**56**	<1.3	**10**	<1.3	**37**	**3,000**
DG-AW7	5	0.5-1	DG-AW7S-0.5-1	11/21/2018	**35**	**35**	**1,500**	**0.53 J**	**5.0**	**150**	**15**	**4,700**	**4,900**	**1.4**	**0.59 J**	**130**	<1.2	**7.4**	**1.6 J**	**33**	**3,600**
DG-AW7	5	3.5-4	DG-AW7S-3.5-4	11/21/2018	**37 J-**	**22**	**2,300 J**	**1.1**	**8.3 J**	**75 J**	**10 J**	**2,000**	**7,900**	**0.62**	**1.4 J**	**66 J**	<1.5 UJ	**13**	<1.5	**42 J**	**5,400**
DG-AW8	5	0.5-1	DG-AW8S-0.5-1	1/30/2019	**17 J**	**24 J**	**69**	<0.44 U	**3.3 J**	**60 J**	**11 J**	**670 J**	**14,000 J**	**0.31 J**	**5.7 J**	**65 J**	**3.8 J**	**3.4 J**	<2.0 U	**30 J**	**2,200 J**
DG-AW8	5	3.5-4	DG-AW8S-3.5-4	1/30/2019	**15**	**14**	**330**	<0.36 U	**1.1 J**	**21**	**4.4**	**350**	**1,800**	**0.68**	<0.70 U	**18**	**3.5 J**	**3.2**	<1.6 U	**12**	**920**
DG-AW8 (D)	5	3.5-4	DG-AW8 (D)S-3.5-4	1/30/2019	**13 J**	**6.5 J**	**690**	**0.61 U**	**2.2 J**	**19 J**	**3.8 J**	**420 J**	**1,600 J**	**0.033**	**1.1 J**	**24 J**	**12 U**	**2.4 J**	**2.3 J**	**8.2 J**	**1,300 J**
DG-AW9	5	0.5-1	DG-AW9S-0.5-1	1/30/2019	**19**	**24 J**	**1,100 J**	**0.54 J**	**3.4 J**	**89 J**	**13**	**780 J**	**1,900 J**	**1.7 J**	<0.47 UJ	**64 J**	**1.9 J**	**6.3 J**	<1.1 U	**55**	**2,100 J**
DG-AW9	5	3.5-4	DG-AW9S-3.5-4	1/30/2019	**11 J**	**11 J**	**130 J+**	**1.1 J+**	**3.5**	**45 J**	**6.3**	**890**	**3,400 J**	<0.024 U	**1.2 J**	**36 J**	**8.4 U**	**4.0**	<1.2 U	**31 J**	**2,400**
DG-AW9 (D)	5	0.5-1	DG-AW9 (D)S-0.5-1	1/30/2019	**13**	**10 J**	**340 J**	**0.27 U**	**1.5 J**	**52 J**	**12**	**270 J**	**1,100 J**	**0.47 J**	**0.89 J**	**36 J**	**2.7 U**	**1.8 J**	<0.40 U	**60**	**920 J**
DG-AX6	5	0.5-1	DG-AX6S-0.5-1	2/1/2019	**1.3**	**1.6**	**1,000**	**0.47**	**0.045 J**	**1.7**	**0.58**	**48**	**130**	**0.2**	**0.81 J**	**1.7**	**0.55 J**	**0.34**	<1.9	**1.6**	**76**
DG-AX6	5	3.5-4	DG-AX6S-3.5-4	2/1/2019	**1.6 U**	**7.3**	**79**	**0.99**	**0.21 J**	**34**	**25**	**37**	**49**	**0.14**	<0.21	**45**	**1.3 J**	<0.17	<0.48	**52**	**89**
DG-AX7	5	0.5-1	DG-AX7S-0.5-1	1/30/2019	**26**	**24**	**890**	**1.2**	**3.2**	**81**	**16**	**790**	**1,900**	**0.83**	**1.5 J**	**73**	**3.8 J**	**4.9**	<1.4 U	**62**	**2,200**
DG-AX7	5	3.5-4	DG-AX7S-3.5-4	1/30/2019	**31**	**32**	**310**	<0.53 U	**8.0**	**55**	**12**	**1,400**	**4,100**	**1.3**	**1.0 J**	**52**	**8.1 J**	**3.8 J**	**2.9 J**	**31**	**3,700**
DG-AX8	5	0.5-1	DG-AX8S-0.5-1	1/30/2019	**10**	**40**	**880**	**0.49 J**	**3.8**	**66**	**9.6**	**430**	**2,100**	**0.31**	**2.6 J**	**44**	<1.9 U	**1.2 J**	<1.8 U	**36**	**2,100**
DG-AX8	5	3.5-4	DG-AX8S-3.5-4	1/30/2019	**21**	**19**	**3,800**	**0.3**	**2.8**	**36**	**4.5**	**250**	**18,000**	**3.9**	**0.56 J**	**21**	**0.71 J**	**2.7 J**	<0.39 U	**16**	**7,600**
DG-AX9	5	0.5-1	DG-AX9S-0.5-1	1/23/2019	<5.0	**7.3**	**120**	**0.61**	<0.25	**71**	**14**	**36**	**28**	**0.42**	<1.0	**80**	<1.7	<0.89	<5.0	**45**	**60**
DG-AX9	5	3.5-4	DG-AX9S-3.5-4	1/23/2019	<5.0	**3.5**	**76**	<0.25	<0.25	**29**	**7.0**	**21**	**50**	**0.071**	<1.0	**50**	<1.7	<0.89	<5.0	**36**	**55**
DG-AX9	5	9.5-10	DG-AX9S-9.5-10	1/23/2019	**16**	**24**	**320**	**0.85**	**2.6**	**87**	**8.1**	**440**	**2,200**	**2.6**	**1.0 J**	**47**	**2.2 J**	**1.7**	<5.0	**46**	**1,400**
DG-AY8	5	0.5-1	DG-AY8S-0.5-1	1/30/2019	**0.53 J**	**4.8**	**100**	**0.51**	**0.11 J**	**91**	**9.0**	**23 J**	**30**	**0.035 J**	**0.19 J**	**25**	**0.97 J**	<0.11 U	<0.32 U	**34**	**85**
DG-AY8	5	3.5-4	DG-AY8S-3.5-4	1/30/2019	**1.8**	**8.4**	**110**	**0.88**	<0.027 U	**34**	**14**	**38**	**17**	**0.042**	<0.14 U	**32**	<0.33 U	<0.11 U	<0.32 U	**40**	**78**
DG-AY8 (D)	5	0.5-1	DG-AY8 (D)S-0.5-1	1/30/2019	**0.59 J**	**6.7**	**120**	**0.73**	**0.099 J**	**61**	**9.6**	**47 J**	**39**	**0.062 J**	<0.13 UJ	**30**	<0.31 UJ	<0.10 U	<0.30 U	**53**	**110**
DG-AB16	6	0.5-1	DG-AB16S-0.5-1	2/1/2019	**3.2 J**	**7.7 U**	**63**	**0.28 J**	**0.41 J**	**13**	**4.7**	**100**	**260**	**0.11**	<0.49	**67**	<1.2	<0.39	<1.1 R	**69**	**85**
DG-AB16	6	3.5-4	DG-AB16S-3.5-4	2/1/2019	**9.6**	**11**	**54**	<0.22	**0.27 J**	**14**	**4.2**	**210**	**570**	**0.013 J**	<0.43	**57**	**1.0 J**	<0.34	<0.97 R	**63**	**110**
DG-AB17	6	0.5-1	DG-AB17S-0.5-1	1/24/2019	**5.5**	**4.0**	**150**	<0.11	**1.5**	**220**	**18**	**69**	**620**	**0.23**	**5.2**	**51**	**2.4 J**	**0.29 J**	<0.48	**81**	**780**
DG-AB17	6	3.5-4	DG-AB17S-3.5-4	1/24/2019	**2.4**	**6.9**	**180**	**0.22 J**	**0.79**	**21**	**7.7**	**150**	**330**	**0.38**	<0.20	**41**	**1.4 J**	**0.19 J**	<0.46	**40**	**370**
DG-AC15	6	0.5-1	DG-AC15S-0.5-1	1/31/2019	**1.8 J**	**6.9**	**77**	**0.9**	**0.33 J**	**47**	**11**	**32**	**19**	**0.053**	**0.41 J**	**37**	**1.4 J**	<0.19	<0.53	**61**	**83**
DG-AC15	6	3.5-4	DG-AC15S-3.5-4	1/31/2019	**2.5**	**85**	**59**	**0.29**	**1.2**	**57**	**8.9**	**39**	**150**	**0.13**	**0.25 J**	**27**	**1.0 J**	<0.12	<0.35	**43**	**260**
DG-AC15	6	7.5-8	DG-AC15S-7.5-8	1/31/2019	**120**	**50**	**720**	**0.44**	**17**	**65**	**8.9**	**1,900**	**6,400**	**2.6**	<0.17	**58**	<2.0	**17**	<1.9	**40**	**15,000**
DG-AC15 (D)	6	0.5-1	DG-AC15 (D)S-0.5-1	1/31/2019	**1.7 UJ**	**4.9**	**120**	**0.77**	**0.21 J**	**55**	**12**	**23**	**13**	**0.036**	<0.22 UJ	**41**	**3.4 U**	<0.17	<0.49 R	**58**	**55**
DG-AC17	6	0.5-1	DG-AC17S-0.5-1	1/23/2019	<5.0	**6.7**	**48**	**0.5**	<0.25	**27**	**9.2**	**18**	**6.5**	**0.041**	<1.0	**31**	<1.7	<0.89	<5.0	**41**	**39**
DG-AC17	6	3.5-4	DG-AC17S-3.5-4	1/23/2019	<5.0	**37**	**150**	**0.33 J**	<0.25	**39**	**11**	**37**	**46**	**0.079**	<1.0	**44**	<1.7	<0.89	<5.0	**36**	**78**
DG-AD14	6	0.5-1	DG-AD14S-0.5-1	2/1/2019	**1.3 J**	**6.6 U**	**61**	**0.40 J**	**0.65 J**	**23**	**6.7**	**320**	**360**	**0.29**	**2.2 J**	**160**	<0.99	**0.91 J**	<0.95 R	**220**	**130**
DG-AD14	6	3.5-4	DG-AD14S-3.5-4	2/1/2019	**2.8**	**8.9**	**29**	**0.45**	**0.32 J**	**29**	**13**	**260**	**240**	**0.22**	**5.2**	**190**	**2.4 J**	**0.75**	<0.41 R	**310**	**51**
DG-AD15	6	0.5-1	DG-AD15S-0.5-1	1/23/2019	<5.0	**12**	**53**	**0.5**	**0.30 J**	**36**	**13**	**50**	**28**	**0.022**	<1.0	**31**	<1.7	<0.89	<5.0	**45**	**93**

Table 2: Metals Concentrations in Soil
Brisbane Baylands OU-2
Brisbane, California

Sample Location	Investigation Zone	Depth Range (ft bgs)	Sample Name	Collection Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
Direct Exposure Human Health Risk Level Residential Soil Exposure ESL [1]					1.1E+01	6.7E-02	1.5E+04	1.6E+01	7.8E+01	1.2E+05	2.3E+01	3.1E+03	8.0E+01	1.3E+01	3.9E+02	8.2E+02	3.9E+02	3.9E+02	7.8E-01	3.9E+02	2.3E+04
Regional Background [2]					5.5E+00	1.9E+01	3.2E+02	1.0E+00	2.7E+00	1.0E+02	2.5E+01	6.9E+01	1.6E+01	4.0E-01	7.4E+00	1.2E+02	5.6E+00	1.8E+00	7.6E+00	7.4E+01	1.1E+02
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
DG-AD15	6	3.5-4	DG-AD15S-3.5-4	1/23/2019	<5.0	**1.7 J**	**26**	<0.25	<0.25	**45**	**3.2**	**7.6**	**3.0**	**0.032**	<0.99	**17**	<1.7	<0.88	<5.0	**37**	**16**
DG-AD16	6	0.5-1	DG-AD16S-0.5-1	1/23/2019	<5.0 UJ	**210 J**	**130 J**	**0.36 J**	**0.44 J**	**25**	**8.0**	**150 J**	**39 J**	**0.064**	<1.0	**23**	<1.7	<0.89	<5.0	**28**	**210 J**
DG-AD16	6	3.5-4	DG-AD16S-3.5-4	1/23/2019	<5.0	**19**	**49**	<0.25	**0.37 J**	**11**	**8.1**	**92**	**120**	**0.13**	<1.0	**7.6**	<1.7	<0.89	<5.0	**59**	**180**
DG-AD16 (D)	6	0.5-1	DG-AD16 (D)S-0.5-1	1/23/2019	<5.0 UJ	**6.3 J**	**76 J**	**0.35 J**	**0.33 J**	**36**	**7.2**	**33 J**	**72 J**	**0.064**	<0.99	**30**	<1.7	<0.88	<5.0	**44**	**74 J**
DG-AD17	6	0.5-1	DG-AD17S-0.5-1	1/24/2019	**1.3**	**2.4**	**230**	**0.25**	**0.35**	**31**	**12**	**56**	**13**	**0.043**	<0.16	**27**	**1.4 J**	**0.33 J**	<0.35	**58**	**50**
DG-AD17	6	3.5-4	DG-AD17S-3.5-4	1/24/2019	**1.7 J**	**9.2**	**98 J**	**0.59**	**0.17 J**	**37 J**	**11 J**	**45 J+**	**16**	**0.15**	<0.20	**32 J**	**0.62 J**	<0.16	<0.45 R	**40 J**	**110 J**
DG-AD17	6	7-7.5	DG-AD17S-7-7.5	1/24/2019	**1.4**	**8.6**	**57**	**0.61**	**0.25 J**	**57**	**8.2**	**29**	**15**	**0.035**	**0.33 J**	**32**	**1.7 J**	<0.11	<0.33	**50**	**80**
DG-AE14	6	0.5-1	DG-AE14S-0.5-1	1/23/2019	<5.0	**4.4**	**110**	<0.25 UJ	**0.81 J**	**37**	**5.6 J**	**25 J**	**26 J**	**0.061 J**	<1.0	**42**	<1.7	<0.89	<5.0	**66**	**63**
DG-AE14	6	3.5-4	DG-AE14S-3.5-4	1/23/2019	<5.0	**35**	**130**	<0.25	**0.44 J**	**110**	**9.7**	**110**	**92**	**0.25**	<1.0	**31**	<1.7	<0.89	<5.0	**47**	**180**
DG-AE16	6	0.5-1	DG-AE16S-0.5-1	1/23/2019	<5.0 UJ	**5.3**	**100 J**	**0.33 J**	**0.44 J**	**29**	**5.8**	**38 J**	**120 J**	**0.28**	<1.0	**43**	<1.7	<0.89 UJ	<5.0	**23**	**170 J**
DG-AE16	6	3.5-4	DG-AE16S-3.5-4	1/23/2019	<5.0	**5.8**	**98**	**0.35 J**	**0.48 J**	**30**	**5.6**	**45**	**140**	**0.72**	<1.0	**35**	<1.7	<0.89	<5.0	**22**	**200**
DG-AE17	6	0.5-1	DG-AE17S-0.5-1	1/23/2019	<5.0 UJ	**7.6**	**39 J**	<0.25	**0.49 J**	**23**	**8.7**	**36**	**220 J**	**0.043**	<1.0	**26**	<1.7	<0.89	<5.0	**25**	**81 J+**
DG-AE17	6	3.5-4	DG-AE17S-3.5-4	1/23/2019	<5.0	<1.5	**32**	<0.25	<0.25	**8.8**	**7.7**	**79**	<1.0	**0.052**	<1.0	**4.0**	<1.7	<0.89	<5.0	**80**	**62**
DG-AE18	6	0.5-1	DG-AE18S-0.5-1	1/23/2019	<5.0	**7.4**	**81**	**0.45 J**	<0.25	**44**	**14**	**17**	**10**	**0.051**	<1.0	**32**	<1.7	<0.89	<5.0	**45**	**59**
DG-AE18	6	3.5-4	DG-AE18S-3.5-4	1/23/2019	<5.0	**15**	**190**	**0.56**	<0.25	**26**	**27**	**20**	**15**	**0.048**	<0.99	**24**	<1.7	<0.88	<5.0	**39**	**140**
DG-AF14	6	0.5-1	DG-AF14S-0.5-1	2/5/2019	<0.30	**1.2 J**	**58**	<0.12	<0.045	**21**	**7.0**	**40**	**83**	**0.057**	**0.30 J**	**23**	**0.97 J**	<0.18	<0.53	**46**	**54**
DG-AF14	6	3.5-4	DG-AF14S-3.5-4	2/5/2019	<0.30	**0.47 J**	**88**	<0.12	<0.044	**13**	**7.2**	**38**	**18**	**0.042**	**0.24 J**	**21**	<0.54	<0.18	**0.77**	**47**	**36**
DG-AF16	6	0.5-1	DG-AF16S-0.5-1	1/23/2019	<5.0 UJ	**2.8 J**	**300**	**0.39 J**	**0.25 J**	**20**	**8.8**	**54 J-**	**13**	**0.11 J-**	**3.4**	**33**	<1.7	<0.89	<5.0	**36**	**58 J-**
DG-AF16	6	3.5-4	DG-AF16S-3.5-4	1/23/2019	<5.0	**5.9**	**91**	**0.36 J**	<0.25	**52**	**12**	**17**	**7.6**	**0.025**	<1.0	**29**	<1.7	<0.89	<5.0	**44**	**42**
DG-AF16 (D)	6	3.5-4	DG-AF16 (D)S-3.5-4	1/23/2019	<5.0	**6.3**	**100**	**0.46 J**	<0.25	**46**	**14**	**20**	**9.4**	**0.02**	<1.0	**30**	<1.7	<0.89	<5.0	**46**	**48**
DG-AF18	6	0.5-1	DG-AF18S-0.5-1	1/23/2019	<5.0	**31**	**110**	**0.38 J**	**0.29 J**	**39**	**9.1**	**27**	**74**	**0.12**	<1.0	**28**	<1.7	<0.89	<5.0	**37**	**110**
DG-AF18	6	3.5-4	DG-AF18S-3.5-4	1/23/2019	<5.0 UJ	**18 J-**	**520**	**0.54**	**0.33 J**	**38**	**14**	**160 J-**	**12**	**0.51**	<1.0	**43**	<1.7	<0.89	<5.0	**40**	**65**
DG-AF18 (D)	6	0.5-1	DG-AF18 (D)S-0.5-1	1/23/2019	<5.0	**6.8**	**79**	**0.36 J**	<0.25 UJ	**55**	**9.9 J**	**14 J**	**7.4 J**	**0.016 J**	<1.0	**30**	<1.7	<0.89	<5.0	**49**	**57**
DG-AG14	6	0.5-1	DG-AG14S-0.5-1	2/5/2019	<0.22	**2.8**	**110**	**0.10 J**	**0.69**	**15**	**4.0**	**19**	**19**	**0.15**	**0.88 J**	**26**	<0.39	<0.13	**0.9**	**50**	**33**
DG-AG14	6	3.5-4	DG-AG14S-3.5-4	2/5/2019	**2.4 J**	**8.6 J**	**600 J**	**0.29 J**	<0.043	**32**	**21 J**	**50 J**	**22 J**	**0.073 J**	<0.22	**29**	**2.0 J**	<0.17	**1.6**	**130**	**91**
DG-AG14 (D)	6	3.5-4	DG-AG14 (D)S-3.5-4	2/5/2019	**1.3 J**	**26 J**	**120 J**	**0.24 J**	<0.045	**26**	**12 J**	**110 J**	**57 J**	**0.23 J**	<0.23	**21**	**1.2 J**	<0.18	**1.1**	**82**	**120**
DG-AG15	6	0.5-1	DG-AG15S-0.5-1	1/24/2019	**0.30 J**	**3.1**	**23**	**0.090 J**	**0.13 J**	**24**	**3.8**	**8.1**	**28**	**0.065**	<0.16	**20**	<0.38	<0.13	<0.36	**22**	**30**
DG-AG15	6	3.5-4	DG-AG15S-3.5-4	1/24/2019	**1.3 J**	**7**	**110**	**0.41**	**0.55**	**30**	**8.2**	**32**	**88**	**0.17**	**0.29 J**	**28**	<0.51	<0.17	<0.49	**40**	**150**
DG-AG15	6	8.5-9	DG-AG15S-8.5-9	1/24/2019	**1.4 J**	**5.1**	**73**	**0.24 J**	**1.2**	**31**	**8.8**	**28**	**70**	**0.024**	<0.25	**44**	**1.2 J**	**0.41 J**	<0.57	**28**	**250**
DG-AG16	6	0.5-1	DG-AG16S-0.5-1	1/22/2019	**2.1**	**6.5**	**110**	**0.89**	**0.35**	**37**	**15**	**32**	**18**	**0.065**	**0.20 J**	**35**	**2.2 J**	**0.17 J**	**1.2 J**	**54**	**58**
DG-AG16	6	3.5-4	DG-AG16S-3.5-4	1/22/2019	**1.1 J**	**6.6**	**56**	**0.29 U**	**0.22 J**	**38**	**8.2**	**16**	**20**	**0.18**	<0.18 U	**32**	**0.82 J**	<0.15 U	<0.42 U	**35**	**33**
DG-AG18	6	0.5-1	DG-AG18S-0.5-1	1/23/2019	<5.0	**7.1**	**120**	**0.47 J**	<0.25	**76**	**15**	**16**	**12**	**0.36**	<0.99	**49**	<1.7	<0.88	<5.0	**62**	**41**
DG-AG18	6	3.5-4	DG-AG18S-3.5-4	1/23/2019	<5.0	**4.7**	**93**	**0.35 J**	<0.25	**62**	**11**	**13**	**6.4**	**0.034**	<1.0	**44**	<1.7	<0.89	<5.0	**54**	**33**
DG-AH14	6	0.5-1	DG-AH14S-0.5-1	2/5/2019	**0.55 J**	**8.2**	**180**	**0.53**	<0.037	**25**	**12**	**39**	**23**	**0.16**	<0.19	**50**	**1.0 J**	<0.15	**0.96**	**26**	**92**
DG-AH14	6	3.5-4	DG-AH14S-3.5-4	2/5/2019	**0.95 J**	**2.3 J**	**36**	**0.19 J**	<0.030	**50**	**7.7**	**5.7**	**6.3**	**0.036**	<0.15	**36**	**1.1 J**	<0.12	**0.45**	**42**	**24**
DG-AH15	6	0.5-1	DG-AH15S-0.5-1	1/22/2019	**1.8**	**8.6**	**170**	**0.78**	**0.44**	**37**	**13**	**38**	**62**	**0.28**	<0.20 U	**35**	**1.6 J**	<0.15 U	<0.44 U	**59**	**73**
DG-AH16	6	0.5-1	DG-AH16S-0.5-1	1/22/2019	**2.6**	**9.5**	**190**	**0.64**	**0.53**	**47**	**13**	**78**	**110**	**0.19**	<0.23 U	**43**	**2.3 J**	<0.18 U	<0.53 U	**56**	**130**
DG-AH16	6	3.5-4	DG-AH16S-3.5-4	1/22/2019	**1.8**	**5.8**	**70**	**0.66**	**0.20 J**	**37**	**7.5**	**26**	**32**	**0.075**	<0.14 U	**21**	**1.4 J**	<0.11 U	<0.32 U	**50**	**95**
DG-AH17	6	0.5-1	DG-AH17S-0.5-1	1/24/2019	**1.5 J**	**5.1**	**35**	**0.65**	**0.22 J**	**26**	**12**	**15**	**10**	**0.019**	<0.22	**25**	**1.1 J**	<0.18	<0.50	**34**	**75**
DG-AI14	6	0.5-1	DG-AI14S-0.5-1	2/1/2019	**0.77 J**	**3.7 U**	**56**	**0.22 J**	**0.36 J**	**26**	**8.1**	**160**	**67**	**0.083**	<0.24	**39**	<0.56	**0.26 J**	<0.54 R	**75**	**220**
DG-AI14	6	3.5-4	DG-AI14S-3.5-4	2/1/2019	<0.22	**5.1**	**14**	**0.11 J**	**0.065 J**	**8.9**	**2.7**	**13**	**19**	**0.0087 J**	<0.17	**18**	<0.40	**0.14 J**	<0.39 R	**20**	**20**
DG-AI15	6	0.5-1	DG-AI15S-0.5-1	1/24/2019	**1.2 J**	**9.2**	**69 J-**	**0.88**	**0.37 J**	**34**	**14**	**30 J**	**5.8**	**0.03**	**0.34 J**	**32**	**2.3 J**	**0.26 J**	<0.49	**50**	**50**
DG-AI15	6	3.5-4	DG-AI15S-3.5-4	1/24/2019	**1.6 J**	**8.3**	**93**	**0.28 J**	**0.33 J**	**34**	**5.0 J**	**20**	**8.1 J**	**0.042**	**0.40 J**	**26**	**1.8 J**	**0.21 J**	<0.57	**45**	**47**
DG-AI15 (D)	6	3.5-4	DG-AI15 (D)S-3.5-4	1/24/2019	**1.4 J**	**5.3**	**74**	**0.40 J**	**0.18 J**	**36**	**9.4 J**	**20**	**16 J**	**0.045**	**0.25 J**	**24**	**1.1 J**	<0.18 UJ	<0.50	**42**	**45**
DG-AI16	6	1-1.5	DG-AI16S-1-1.5	1/22/2019	**2.4**	**2.6 U**	**370**	**0.49**	**0.43**	**37**	**16**	**75**	**5.4**	**0.16**	<0.17 U	**31**	**1.8 J**	<0.13 U	<0.37 U	**82**	**57**
DG-AI17	6	0.5-1	DG-AI17S-0.5-1	1/22/2019	**3.1**	**15**	**92**	**1.0**	**0.72**	**48**	**18**	**49**	**25**	**0.029**	**0.26 J**	**47**	**2.3 J**	<0.17 U	<0.49 U	**59**	**180**
DG-AI17	6	3.5-4	DG-AI17S-3.5-4	1/22/2019	**2.4**	**9.1**	**26**	**0.94**	**0.94**	**36**	**19**	**59**	**230**	**0.19**	<0.22 U	**37**	**2.0 J**	<0.17 U	<0.50 U	**37**	**1,500**
DG-AJ14	6	0.5-1	DG-AJ14S-0.5-1	1/22/2019	**2.5**	**5.4**	**92**	**0.41**	**0.4**	**90**	**15**	**27**	**27**	**0.052**	<0.18 U	**100**	**0.82 J**	<0.15 U	**0.63 J**	**69**	**56**
DG-AJ14	6	3.5-4	DG-AJ14S-3.5-4	1/22/2019	**1.7**	**2**	**80**	**0.20 U**	**0.18 J**	**56**	**6.1**	**7.6**	**5.6**	**0.016 U**	<0.13 U	**20**	**0.98 J**	<0.10 U	<0.29 U	**54**	**25**
DG-AJ15	6	0.5-1	DG-AJ15S-0.5-1	1/22/2019	**3.3**	**3.4 U**	**160**	**0.4**	**0.46**	**41**	**22**	**48**	**6.3**	**0.057**	<0.22 U	**32**	**2.1 J**	<0.17 U	<0.50 U	**120**	**71**
DG-AJ15	6	3.5-4	DG-AJ15S-3.5-4	1/22/2019	**2.6**	**3.1 U**	**66**	**0.31 U**	**0.41**	**88**	**6.3**	**13**	**2.6**	**0.068**	<0.20 U	**31**	**1.1 J**	<0.16 U	<0.45 U	**64**	**50**
DG-AJ17	6	0.5-1	DG-AJ17S-0.5-1	1/24/2019	**1.7 J**	**8.3**	**30**	**0.52**	**0.20 J**	**38**	**7.5**	**19**	**12**	**0.016**	<0.25	**30**	**0.86 J**	<0.19	<0.56	**45**	**71**
DG-AJ17	6	3.5-4	DG-AJ17S-3.5-4	1/24/2019	**2.0**	**7.6**	**54**	**0.43**	**0.26 J**	**49**	**9.2**	**18**	**6.9**	**0.018**	**0.22 J**	**30**	**1.5 J**	<0.15	<0.44	**52**	**60**

Table 2: Metals Concentrations in Soil
Brisbane Baylands OU-2
Brisbane, California

Sample Location	Investigation Zone	Depth Range (ft bgs)	Sample Name	Collection Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
Direct Exposure Human Health Risk Level Residential Soil Exposure ESL [1]					1.1E+01	6.7E-02	1.5E+04	1.6E+01	7.8E+01	1.2E+05	2.3E+01	3.1E+03	8.0E+01	1.3E+01	3.9E+02	8.2E+02	3.9E+02	3.9E+02	7.8E-01	3.9E+02	2.3E+04
Regional Background [2]					5.5E+00	1.9E+01	3.2E+02	1.0E+00	2.7E+00	1.0E+02	2.5E+01	6.9E+01	1.6E+01	4.0E-01	7.4E+00	1.2E+02	5.6E+00	1.8E+00	7.6E+00	7.4E+01	1.1E+02
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
DG-AJ17	6	9.5-10	DG-AJ17S-9.5-10	1/24/2019	**1.3 J**	**5.1**	**90**	**0.41**	**0.22 J**	**67**	**9.0**	**16**	**5.5**	**0.013 J**	<0.18	**32**	**1.1 J**	<0.14	<0.41	**48**	**52**
DG-AK14	6	0.5-1	DG-AK14S-0.5-1	1/22/2019	**3.7**	**19**	**130**	<0.090 U	**1.0**	**390**	**8.8**	**130**	**230**	**0.29**	<0.18 U	**27**	<0.41 U	**0.69 U**	<0.40 U	**59**	**330**
DG-AK14	6	3.5-4	DG-AK14S-3.5-4	1/22/2019	**0.91 J**	**1.7 J**	**110**	<0.12 U	**0.24 J**	**42**	**22**	**42**	**11**	**0.051**	<0.24 U	**35**	**3.7 U**	**0.93 U**	<0.54 U	**120**	**65**
DG-AK14 (D)	6	3.5-4	DG-AK14 (D)S-3.5-4	1/22/2019	**4.1**	**17**	**99**	**0.85**	**0.86**	**180**	**14**	**94**	**76**	**0.47**	**0.40 J**	**33**	**2.4 J**	<0.16 U	**0.75 J**	**63**	**210**
DG-AK15	6	0.5-1	DG-AK15S-0.5-1	1/23/2019	<5.0	**5.3**	**140**	**0.29 J**	<0.25	**52**	**8.6**	**120**	**46**	**0.11**	<1.0	**85**	**1.7 J**	<0.89	<5.0	**32**	**140**
DG-AK15	6	3.5-4	DG-AK15S-3.5-4	1/23/2019	<5.0	**7.8**	**100**	**0.63**	**1.8**	**34**	**8.7**	**43**	**45**	**0.21**	<1.0	**25**	**1.7 J**	<0.89	<5.0	**37**	**660**
DG-AK16	6	0.5-1	DG-AK16S-0.5-1	1/22/2019	<0.29 U	**4.5**	**63**	<0.12 U	**0.25 J**	**63**	**7.0**	**21**	**50**	**0.18**	<0.23 U	**33**	<0.53 U	**0.88 U**	<0.51 U	**46**	**91**
DG-AK16	6	3.5-4	DG-AK16S-3.5-4	1/22/2019	**1.2 J**	**11**	**130**	**0.35**	**0.46**	**48 J**	**13 J**	**25**	**49 J**	**0.19**	**0.23 J**	**30**	**0.84 J**	<0.12 U	**1.2 U**	**49**	**76 J**
DG-AK16 (D)	6	0.5-1	DG-AK16 (D)S-0.5-1	1/22/2019	**3.3**	**9.8**	**130**	**0.5**	**0.53**	**52**	**16**	**45**	**66**	**0.16**	**0.16 J**	**32**	**1.6 J**	<0.12 U	**0.62 J**	**53**	**110**
DG-AL14	6	0.5-1	DG-AL14S-0.5-1	1/22/2019	**1.2 J**	**13**	**61**	**0.86**	**0.19 J**	**53**	**17**	**30**	**5.1**	**0.032**	**4.3**	**38**	**3.2 U**	**0.80 U**	<0.46 U	**57**	**63**
DG-AL14	6	3.5-4	DG-AL14S-3.5-4	1/22/2019	**1.2 J**	**3.7**	**80**	**0.29 U**	**0.14 J**	**67**	**8.8**	**21**	**11**	**0.11**	<0.18 U	**36**	**2.9 U**	<0.14 U	<0.41 U	**62**	**35**
DG-AL14 (D)	6	0.5-1	DG-AL14 (D)S-0.5-1	1/22/2019	**1.9**	**7.7**	**51**	**0.92**	**0.35**	**39**	**14**	**38**	**4.7**	**0.025**	<0.16 U	**29**	**2.0 J**	**0.18 J**	**0.69 J**	**55**	**55**
DG-AL15	6	1-1.5	DG-AL15S-1-1.5	1/22/2019	**3.6**	**5**	**170**	**0.32**	**0.63**	**230**	**9.2**	**57**	**87**	**0.28**	**0.18 J**	**36**	**0.64 J**	<0.11 U	<0.32 U	**45**	**250**
DG-AL16	6	0.5-1	DG-AL16S-0.5-1	1/22/2019	**4.4**	**5.9**	**150**	**0.32 U**	**1.5**	**160**	**9.8**	**49**	**390**	**0.14**	**4.9**	**44**	**1.2 J**	**3.4**	<0.46 U	**44**	**320**
DG-AM14	6	1-1.5	DG-AM14S-1-1.5	1/22/2019	**0.50 J**	**5.4**	**47**	<0.098 U	**0.12 J**	**77**	**9.3**	**32**	**12**	**0.021**	<0.19 U	**41**	<0.45 U	<0.15 U	<0.44 U	**60**	**34**
DG-AM15	6	0.5-1	DG-AM15S-0.5-1	1/23/2019	<5.0	**7.4**	**30**	**0.74**	<0.25	**30**	**12**	**16**	**4.3**	**0.042**	<0.99	**28**	<1.7	<0.88	<5.0	**43**	**42**
DG-AM15	6	3.5-4	DG-AM15S-3.5-4	1/23/2019	<5.0	**5.3**	**110 J-**	**0.30 J**	**0.37 J**	**66 J-**	**5.2**	**31**	**180 J**	**0.086**	<1.0	**31**	<1.7	<0.89	<5.0	**28**	**130 J-**
DG-AM15	6	9.5-10	DG-AM15S-9.5-10	1/23/2019	<5.0	**6.3**	**87**	**0.43 J**	**0.27 J**	**49**	**9.4**	**33**	**29**	**0.033**	<0.99	**33**	<1.7	<0.88	<5.0	**48**	**63**
DG-AM15 (D)	6	9.5-10	DG-AM15 (D)S-9.5-10	1/23/2019	<4.9	**7.8**	**88**	**0.62 J**	<0.25 UJ	**48**	**8.1**	**37**	**21**	**0.039**	<0.99	**32**	<1.7	<0.88	<4.9	**53**	**64**
DG-AN14	6	0.5-1	DG-AN14S-0.5-1	1/21/2019	**0.94 J**	**1.7 J**	**140**	<0.12	**0.14 J**	**29**	**5.3**	**24**	**49**	**0.034**	**0.41 J**	**24**	<0.55	<0.18	<0.53	**29**	**86**
DG-AO14	6	0.5-1	DG-AO14S-0.5-1	1/21/2019	**1.2 J**	**7.2**	**87**	**0.69**	**0.19 J**	**29**	**11**	**34**	**40**	**0.035**	**0.21 J**	**27**	<0.49	<0.17	<0.48	**38**	**62**
DG-AP12	6	0.5-1	DG-AP12S-0.5-1	1/31/2019	**45**	**44**	**1,100**	**0.54 J**	**6.7**	**110**	**13**	**1,900**	**10,000**	**1.0**	**1.7 J**	**99**	**8.2 J**	**11**	<1.3 U	**37**	**4,700**
DG-AP12	6	3.5-4	DG-AP12S-3.5-4	1/31/2019	**36**	**23**	**1,200**	**0.51 J**	**2.4**	**48**	**9.6**	**1,000**	**5,100**	**1.3**	**1.1 J**	**49**	**7.2 J**	**5.6**	<1.1 U	**27**	**2,500**
DG-AP13	6	0.5-1	DG-AP13S-0.5-1	1/23/2019	<5.0	**6.3**	**98**	**0.49 J**	<0.25	**95**	**9.6**	**27**	**24 J**	**0.12**	<1.0	**23**	<1.7	<0.89	<5.0	**44**	**56 J**
DG-AP13	6	3.5-4	DG-AP13S-3.5-4	1/23/2019	<5.0	**3.7**	**120**	**0.40 J**	<0.25	**80**	**12**	**27**	**7.1**	**0.12**	<1.0	**41**	<1.7	<0.89	<5.0	**75**	**40**
DG-AP13	6	9.5-10	DG-AP13S-9.5-10	1/23/2019	**15 J**	**27**	**170**	<0.50	**1.9**	**25**	**20**	**1,100**	**4,100**	**0.086**	**2.1 J**	**57**	**3.7 J**	<1.8	<10	**27**	**1,300**
DG-AP13 (D)	6	0.5-1	DG-AP13 (D)S-0.5-1	1/23/2019	<5.0	**8.7**	**120**	**0.47 J**	<0.25	**150**	**11**	**43**	**51 J**	**0.19**	<0.99	**28**	<1.7	<0.88	<5.0	**51**	**170 J**
DG-AP14	6	0.5-1	DG-AP14S-0.5-1	1/22/2019	**1.2**	**11**	**96**	**0.49**	**0.16 J**	**50**	**9.8**	**27**	**42**	**0.061**	**0.20 J**	**33**	**2.4 U**	**0.59 U**	<0.34 U	**51**	**62**
DG-AP14	6	3.5-4	DG-AP14S-3.5-4	1/22/2019	**2.2**	**16**	**73**	**0.36 U**	**0.13 J**	**42**	**5.5**	**69**	**12**	**0.098**	**0.27 J**	**24**	**3.6 U**	<0.18 U	<0.52 U	**59**	**34**
DG-AQ12	6	0.5-1	DG-AQ12S-0.5-1	1/21/2019	**1.3**	**2.3**	**350**	**0.63**	**0.28**	**44**	**19**	**75**	**6.7**	**0.54**	**0.99 J**	**46**	**0.89 J**	**0.26 J**	<0.32	**100**	**75**
DG-AQ12	6	3.5-4	DG-AQ12S-3.5-4	1/21/2019	**1.7**	**8.3**	**130**	**0.48**	**0.13 J**	**56**	**19**	**45**	**21**	**0.052**	**0.23 J**	**34**	<0.43	<0.15	<0.42	**56**	**47**
DG-AQ13	6	0.5-1	DG-AQ13S-0.5-1	1/21/2019	**1.3 J**	**4.1**	**520**	**0.75**	**0.37**	**43**	**29**	**91**	**9.6**	**0.49**	**1.8**	**63**	**1.6 J**	**0.64 J**	<0.42	**110**	**89**
DG-AQ13	6	11.5-12	DG-AQ13S-11.5-12	1/21/2019	**59**	**24**	**1,500**	**0.56 J**	**6.1**	**81**	**24**	**1,400**	**9,200**	**1.8**	**0.27 J**	**82**	**3.1 J**	**7.0**	<1.9	**36**	**4,900**
DG-AQ13	6	3.5-4	DG-AQ13S-3.5-4	1/21/2019	**0.99 J**	**4.2**	**96**	**0.34 J**	**0.10 J**	**42**	**9.8**	**20**	**12**	**0.85**	<0.22	**29**	<0.52	<0.18	<0.50	**45**	**43**
DG-AR12	6	0.5-1	DG-AR12S-0.5-1	1/21/2019	**0.89 J**	**6.1**	**110**	**0.6**	**0.14 J**	**63**	**11**	**26**	**23**	**0.088**	**0.19 J**	**26**	**0.65 J**	**0.19 J**	<0.31	**51**	**50**
DG-AR12	6	3.5-4	DG-AR12S-3.5-4	1/21/2019	**40**	**20**	**920**	**0.20 J**	**26**	**2000**	**11**	**1,600**	**5,200**	**22**	**0.94 J**	**58**	**8.1**	**9.8**	<1.2	**36**	**3,800**
DG-AR13	6	0.5-1	DG-AR13S-0.5-1	1/23/2019	<5.0	**6.1**	**120**	**1.4**	**0.37 J**	**170**	**11**	**62**	**64**	**0.36 J-**	<1.0	**33**	<1.7	<0.89	<5.0	**54**	**180**
DG-AR13	6	3.5-4	DG-AR13S-3.5-4	1/23/2019	**36**	**27**	**710**	**1.2**	**2.9**	**100**	**10**	**1,600**	**1,900**	**2.7**	**3.7**	**53**	<1.7	**3.8**	<5.0	**50**	**1,800**
DG-AR13	6	9.5-10	DG-AR13S-9.5-10	1/23/2019	**17**	**20**	**930**	**0.52**	**7.1**	**42**	**11**	**790**	**3,000**	**1.6**	**2.2**	**39**	**1.8 J**	**4.0**	<5.0	**22**	**2,000**
DG-AS11	6	0.5-1	DG-AS11S-0.5-1	1/31/2019	**19**	**20**	**550**	**0.32**	**3.3**	**59**	**7.2**	**430**	**3,200**	**1.5**	**0.68 J**	**34**	**3.9**	**4.0**	<0.34	**22**	**1,400**
DG-AS11	6	3.5-4	DG-AS11S-3.5-4	1/31/2019	**39**	**30**	**1,700**	**0.49**	**11**	**360**	**13**	**2,400**	**7,100**	**1.4**	**1.0 J**	**73**	<1.2	**8.6**	<1.2	**43**	**4,100**
DG-AS11	6	7.5-8	DG-AS11S-7.5-8	1/31/2019	**63**	**34**	**1,300**	**0.97**	**8.8**	**43**	**13**	**1,300**	**7,300**	**0.26**	**1.6**	**55**	**2.8 J**	**6.3**	<1.1	**35**	**3,100**
DG-AS12	6	0.5-1	DG-AS12S-0.5-1	1/21/2019	**5.3**	**6.6**	**210**	**0.49**	**0.87**	**200**	**10**	**170**	**470**	**0.69**	**0.24 J**	**36**	**1.2 J**	**1.1**	<0.43	**46**	**590**
DG-AS12	6	3.5-4	DG-AS12S-3.5-4	1/21/2019	**5.3**	**8.0**	**140**	**0.46**	**0.65**	**240**	**12**	**100**	**360**	**1.8**	<0.22	**35**	**0.69 J**	**0.54 J**	<0.50	**38**	**410**
DG-AT11	6	3.5-4	DG-AT11S-3.5-4	1/21/2019	**7.0**	**8.7 J**	**230**	**0.16 J**	**1.6 J**	**33 J**	**5.8 J**	**240 J**	**210**	**0.24 J**	**0.79 J**	**58**	<1.1	**0.40 J**	<1.1	**3.9**	**970**
DG-AT11 (D)	6	3.5-4	DG-AT11 (D)S-3.5-4	1/21/2019	**8.7**	**2.8 J**	**190**	<0.11 UJ	**0.74 J**	**12 J**	**3.4 J**	**980 J**	**160**	**0.057 J**	**0.86 J**	**49**	<1.2	<0.16 UJ	<0.47	**3.9**	**1,200**
DG-AT12	6	0.5-1	DG-AT12S-0.5-1	1/23/2019	**51**	**25**	**530**	<0.50	**6.1**	**1400**	**4.5**	**630**	**11,000**	**0.26**	<2.0	**52**	<3.4	<1.8	<10	**12**	**3,800**
DG-AT12	6	3.5-4	DG-AT12S-3.5-4	1/23/2019	<5.0	**10**	**150**	**0.43 J**	**0.29 J**	**110**	**7.5**	**79**	**120**	**0.014 J**	<1.0	**34**	<1.7	<0.89	<5.0	**56**	**190**
DG-AT12	6	9.5-10	DG-AT12S-9.5-10	1/23/2019	**51**	**29**	**1,600**	<1.2	**4.8**	**53**	<2.5	**1,100**	**6,600**	<0.012	<5.0	**74**	<8.4	**5.6 J**	<25	**25**	**2,900**
DG-AU11	6	0.5-1	DG-AU11S-0.5-1	1/23/2019	<5.0	**5.5**	**84**	**0.5**	<0.25	**54**	**9.6**	**22**	**12**	**0.16**	<1.0	**32**	<1.7	<0.89	<5.0	**50**	**49**
DG-AU11	6	3.5-4	DG-AU11S-3.5-4	1/23/2019	<5.0	**4.7**	**97**	**0.43 J**	<0.25	**49**	**9.7**	**24**	**11**	**0.15**	<1.0	**29**	<1.7	<0.89	<5.0	**49**	**46**
DG-AU11	6	9.5-10	DG-AU11S-9.5-10	1/23/2019	**58**	**40**	**990**	<0.50	**4.1**	**1200**	**6.4**	**2,900**	**8,400**	**11**	**3.8 J**	**56**	**4.7 J**	**31**	<10	**15**	**2,900**
DG-AV10	6	0.5-1	DG-AV10S-0.5-1	1/21/2019	**2.6**	**9**	**150**	**0.46**	**0.98**	**250**	**11**	**110**	**140**	**0.38**	**0.32 J**	**52**	**1.4 J**	<0.12	<0.35 U	**47**	**400**

Table 2: Metals Concentrations in Soil
Brisbane Baylands OU-2
Brisbane, California

Sample Location	Investigation Zone	Depth Range (ft bgs)	Sample Name	Collection Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
Direct Exposure Human Health Risk Level Residential Soil Exposure ESL [1]					1.1E+01	6.7E-02	1.5E+04	1.6E+01	7.8E+01	1.2E+05	2.3E+01	3.1E+03	8.0E+01	1.3E+01	3.9E+02	8.2E+02	3.9E+02	3.9E+02	7.8E-01	3.9E+02	2.3E+04
Regional Background [2]					5.5E+00	1.9E+01	3.2E+02	1.0E+00	2.7E+00	1.0E+02	2.5E+01	6.9E+01	1.6E+01	4.0E-01	7.4E+00	1.2E+02	5.6E+00	1.8E+00	7.6E+00	7.4E+01	1.1E+02
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
DG-AV10	6	14.5-15	DG-AV10S-14.5-15	1/21/2019	**48**	**20**	**1,600**	**0.81**	**66**	**970**	**13**	**5,100**	**7,200**	**13**	**1.9 J**	**3,400**	**2.4 J**	**11**	<0.85	**31**	**7,300**
DG-AV10	6	3.5-4	DG-AV10S-3.5-4	1/21/2019	**1.2 U**	**6.1**	**55**	**0.48**	**0.47**	**37**	**12**	**52**	**41**	**0.23**	<0.15	**33**	**0.71 J**	<0.12	<0.34 U	**34**	**190**
DG-AV12	6	0.5-1	DG-AV12S-0.5-1	1/22/2019	**5.2**	**21**	**310**	**0.81**	**1.1**	**730**	**19**	**180**	**230**	**0.6**	**3.5**	**55**	**7.2 U**	<0.37 U	<1.1 U	**55**	**750**
DG-AV12	6	19.5-20	DG-AV12S-19.5-20	1/22/2019	**1.2**	**9.3**	**150**	**0.46**	**0.21 J**	**51**	**22**	**35**	**6.7**	**0.035**	**0.19 J**	**48**	**2.4 U**	**0.60 U**	<0.35 U	**67**	**87**
DG-AV12	6	3.5-4	DG-AV12S-3.5-4	1/22/2019	**0.81 J**	**9.9**	**100**	**0.4**	**0.095 J**	**70**	**8.7**	**48**	**6.3**	**0.082**	<0.18 U	**48**	**2.8 U**	**0.70 U**	<0.41 U	**74**	**48**
DG-AW10	6	0.5-1	DG-AW10S-0.5-1	1/21/2019	**1.7 U**	**6.8**	**59**	**0.8**	**0.46**	**67**	**15**	**27**	**18**	**0.068**	<0.22	**61**	**1.1 J**	<0.17	<0.49 U	**61**	**77**
DG-AW10	6	3.5-4	DG-AW10S-3.5-4	1/21/2019	<0.26	**2.4 J**	**27**	<0.10	**0.13 J**	**38**	**3.7**	**17**	**9.6**	**0.023**	<0.20	**19**	**0.77 J**	<0.16	<0.46 U	**22**	**33**
DG-AW11	6	0.5-1	DG-AW11S-0.5-1	1/23/2019	<5.0	**8.3**	**73**	**0.69**	<0.25	**170**	**12**	**44**	**41**	**0.16**	<1.0	**30**	<1.7	<0.89	<5.0	**46**	**120**
DG-AW11	6	3.5-4	DG-AW11S-3.5-4	1/23/2019	<5.0	**4.9**	**150**	**0.38 J**	<0.25	**780**	**6.1**	**49**	**59**	**0.22**	<1.0	**24**	<1.7	<0.89	<5.0	**35**	**200**
DG-AW11	6	7.5-8	DG-AW11S-7.5-8	1/23/2019	<50	<15	**130**	<2.5	<2.5	**8700**	<5.0	**85**	**69**	**2.6 J-**	<10	**13 J**	<17	<8.9	<50	**22**	**1,200**
DG-AX10	6	0.5-1	DG-AX10S-0.5-1	1/21/2019	**1.1 U**	**5.2**	**110**	**0.49**	**0.4**	**53**	**12**	**32**	**11**	**0.16**	**0.32 J**	**47**	<0.32	<0.11	<0.31 U	**59**	**60**
DG-AX10	6	3.5-4	DG-AX10S-3.5-4	1/21/2019	**1.7 U**	**10**	**72**	**0.75**	**0.35 J**	**48**	**7.2**	**58**	**17**	**0.057**	<0.22	**35**	<0.52	<0.17	<0.50 U	**56**	**64**
DG-AX11	6	0.5-1	DG-AX11S-0.5-1	1/21/2019	**5.9 J-**	**5.1**	**100 J+**	**0.54**	**0.49**	**440**	**13**	**54**	**88 J**	**0.41**	<0.19	**35**	**0.93 J**	<0.15	<0.42 U	**49**	**230**
DG-AX11	6	3.5-4	DG-AX11S-3.5-4	1/21/2019	**1.5 J**	**6.7**	**78**	**0.92**	**0.27 J**	**30**	**11**	**20**	**13**	**0.042**	**0.31 J**	**24**	**2.3 J**	<0.18	<0.52	**41**	**46**
DG-AY9	6	0.5-1	DG-AY9S-0.5-1	1/21/2019	**1.6 U**	**8.9**	**120**	**0.51**	**0.81**	**55**	**15**	**48**	**63**	**0.1**	<0.21	**34**	**1.6 J**	<0.16	<0.47 U	**53**	**140**
DG-AY9	6	3.5-4	DG-AY9S-3.5-4	1/21/2019	**1.1 U**	**6.5**	**110**	**0.62**	**0.26 J**	**58**	**12**	**19**	**10**	**0.04**	<0.14	**30**	**0.73 J**	<0.11	<0.31 U	**53**	**42**
DG-AZ10	6	0.5-1	DG-AZ10S-0.5-1	1/21/2019	**1.5 U**	**5.8**	**140**	**0.6**	**0.27 J**	**38**	**12**	**16**	**6.4**	**0.019**	<0.19	**29**	**0.48 J**	<0.15	<0.43 U	**46**	**35**
DG-AZ10	6	3.5-4	DG-AZ10S-3.5-4	1/21/2019	**1.8 U**	**7.8**	**99**	**0.51**	**0.28 J**	**44**	**7.3**	**21**	**8.1**	**0.025**	<0.23	**27**	**1.6 J**	<0.18	<0.52 U	**51**	**42**

Notes:

1. San Francisco Bay RWQCB, 2019. Summary of Soil ESLs, Jan. 2019 (Rev. 1) - Direct Exposure Human Health Risk Levels (Table S-1) Res: Shallow Soil Exposure. The chromium ESL is for chromium(III).
2. All except cobalt: Table 3, 95th Percentiles in Diamond, D. et al., 2009. Analysis of Background Distributions of Metals in the Soil at Lawrence Berkeley National Laboratory. April.
   Cobalt: RWQCB, 2017. Letter from Vic Pal to Howard Pearce Re Concurrence with Proposed Revisions to the Baylands Soil Processing Acceptance Criteria, Brisbane Landfill, San Mateo County. 14 September.

- The RWQCB ESL is used as comparison criteria when available unless the regional background is higher, in which case regional background is used as the comparison criteria.
- Metals were analyzed by USEPA Methods 6010B and 7471A.
- Non-detect results are presented with "<" followed by the MDL.
- Results in bold font indicate a detection above the MDL.
- Gray shading indicates a detection above the screening level.

Abbreviations and Symbols:

"J" - Analyte was detected but the associated numerical value is the approximate concentration.
"J+" - Analyte was detected but the associated numerical value is likely to be higher than the concentration of the analyte in the sample due to positive bias of associated QC or calibration data or attributable to matrix interference.
"J-" - Analyte was detected but the associated numerical value is likely to be lower than the concentration of the analyte in the sample due to negative bias of associated QC or calibration data or attributable to matrix interference.
"R" - The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.
"U" - Not detected at or above the reported result.
"UJ" - The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
"--" - Not Available
"<" - Non-detect result
(D) - Duplicate sample
ESL - Environmental Screening Level
ft bgs - Feet below ground surface
MDL - Method Detection Limit
mg/kg - milligram per kilogram
QC - quality control
RWQCB - Regional Water Quality Control Board
USEPA - United States Environmental Protection Agency

Table 3: Polynuclear Aromatic Hydrocarbons and TPH as Diesel and Motor Oil Concentrations in Soil
Brisbane Baylands OU-2
Brisbane, California

Sample Location	Investigation Zone	Depth Range (ft bgs)	Sample Name	Collection Date	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Chrysene	Dibenzo(a,h)anthracene	Indeno(1,2,3-cd)pyrene	Benzo(a)pyrene Equivalent Total PAHs[4]	2-Methylnaphthalene	Acenaphthene	Acenaphthylene	Anthracene	Benzo(g,h,i)perylene	Fluoranthene	Fluorene	Naphthalene	Phenanthrene	Pyrene	TPH-Diesel (C10-C28)	TPH-Motor Oil (C24-C36)
Direct Exposure Human Health Risk Level Residential Soil Exposure ESL [1]					1.1E+03	1.1E+02	1.1E+03	1.1E+04	1.1E+05	1.1E+02	1.1E+03	--	2.4E+05	3.6E+06	--	1.8E+07	--	2.4E+06	2.4E+06	3.8E+03	--	1.8E+06	2.6E+02	1.2E+04
Leaching to Groundwater Levels Non-drinking Water ESL [2]					1.0E+04	5.7E+03	7.5E+04	3.9E+04	1.0E+04	3.9E+05	3.2E+04	--	8.8E+02	1.2E+04	6.4E+03	1.9E+03	2.7E+04	8.6E+04	6.0E+03	1.2E+03	1.1E+04	4.5E+04	7.3E+03	--
Regional Background [3]					--	--	--	--	--	--	--	9.0E+02	--	--	--	--	--	--	--	--	--	--	--	--
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	µg/kg	µg/kg	µg/kg	mg/kg	mg/kg
DG-N1	1	0.5-1	DG-N1S-0.5-1	12/18/2018	**50**	**70**	**130**	**47**	**81**	**19 J**	**44**	**112**	**31 J**	<11	**23**	**58**	**50**	**91**	<8.7	**33**	**53**	**100**	**82**	**210**
DG-N1	1	3.5-4	DG-N1S-3.5-4	12/18/2018	**2.7 J**	**4.2 J**	**9.2**	**2.9 J**	**7**	<3.5	<4.2	**7**	<4.9	<2.8	<2.4	<2.0	**5.6**	**3.6 J**	<2.2	**3.6 J**	**11**	**5.8**	**3.2**	<10
DG-N4	1	4.5-5	DG-N4S-4.5-5	12/19/2018	**10**	**7.4**	**57**	**5.7**	**55**	**6.2**	**7.5**	**21**	**740**	**250**	**73**	**200**	**10**	**44**	**330**	**280**	**720**	**69**	**2,800**	<200
DG-N4	1	8.5-9	DG-N4S-8.5-9	12/19/2018	**2.8 J**	**4.3 J**	**18**	**3.1 J**	**11**	<3.5	<4.2	**8**	<5.0	<2.8	<2.4	**3.4 J**	**4.8 J**	**9.1**	**3.6 J**	**4.3 J**	**15**	**11**	**29**	**40 J**
DG-N5	1	0.5-1	DG-N5S-0.5-1	1/8/2019	**88**	**100**	**170**	**67**	**120**	**14**	**48**	**145**	**27**	<5.4	**24**	**48**	**58**	**130**	<4.3	**23**	**60**	**140**	**68**	**190**
DG-N5 (D)	1	0.5-1	DG-N5 (D)S-0.5-1	1/8/2019	**40**	**72**	**87**	**27**	**68**	**8.1**	**47**	**98**	**12**	**3.3**	**28**	**36**	**68**	**160**	**4.2**	**16**	**140**	**230**	**35**	**86**
DG-N5 (D)	1	0.5-1	DG-N5 (D)S-0.5-1	1/24/2019	**71 J**	**43 J**	**59 J**	<39 UJ	**48 J**	<39	<39 UJ	**78**	<39	**200 J**	<39	**75 J**	<39 UJ	**400 J**	**47 J**	<39	**280 J**	**220 J**	**100**	**110 J**
DG-N5	1	3.5-4	DG-N5S-3.5-4	1/8/2019	**5.6**	**4.4**	**9.7**	**3**	**13**	<3.4	**4.8**	**8**	<4.9	<2.7	<2.3	**2.1**	**7.5**	**11**	<2.1	**5**	**13**	**12**	**38**	**74**
DG-O3	1	0.5-1	DG-O3S-0.5-1	12/18/2018	**4.3 J**	**5.2**	**7.2**	**3.4 J**	**3.3 J**	<3.5	<4.2	**8**	<5.0	<2.8	<2.4	<2.0	**5.8**	**5.4**	<2.2	<3.5	**3.1 J**	**6.2**	**4.2**	**13 J**
DG-O3	1	3.5-4	DG-O3S-3.5-4	12/18/2018	**3.3 J**	**5.1**	**8.1**	**3.3 J**	**4.5 J**	<3.5	<4.2	**8**	**6.8 J**	<2.8	<2.4	<2.0	**5.6**	**8.2**	<2.2	**4.7 J**	**10**	**8.9**	**2.0 U**	<10
DG-O4	1	4.5-5	DG-O4S-4.5-5	12/19/2018	**8.8 J**	**14 J**	**25 U**	**10 J**	**13 J**	<17	<21	**27**	**130**	**220**	**52**	**110**	<21	**31**	**250**	**97**	**210**	**63**	**2,000**	<99
DG-O4	1	9.5-10	DG-O4S-9.5-10	12/19/2018	**2.8 J**	**5.1**	**21**	**2.8 J**	**9.1**	<3.5	<4.2	**9**	**7.7 J**	**14**	**3.8 J**	**8.1**	**5.6**	**7.9**	**16**	**11**	**21**	**12**	**130**	**21 J**
DG-P1	1	0.5-1	DG-P1S-0.5-1	11/21/2018	**120 J**	**180 J**	**170**	**64**	**130 J**	**34**	**86**	**252**	**16**	**15**	**43**	**45**	**110**	**180 J**	**16**	**25**	**120 J**	**220**	**15**	**43 J**
DG-P1	1	3.5-4	DG-P1S-3.5-4	11/21/2018	**6.9 J**	**12**	**14**	**5.3 J**	**12 J**	**4.0 J**	**9**	**19**	**7.3 J**	**5.4 J**	**3.8 J**	**4.0 J**	**13**	**15 J**	**4.0 J**	**9.6**	**22 J**	**18 J**	**3.5**	**10 J**
DG-P1 (D)	1	3.5-4	DG-P1 (D)S-3.5-4	11/21/2018	**18 J**	**20**	**21**	**9.1 J**	**22 J**	**4.5 J**	**11**	**30**	**6.0 J**	**4.9 UJ**	**5.4 J**	**14 J**	**15**	**39 J**	**6.8 J**	**7.7**	**53 J**	**44 J**	**4.7**	**16 J**
DG-P4	1	4.5-5	DG-P4S-4.5-5	12/19/2018	**27 J**	**36 J**	**80**	**25 J**	**72**	<35	<42	**67**	**730**	**240**	**110**	**230**	<43	**84**	**360**	**520**	**270**	**140**	**3,600**	<200
DG-P4	1	7.5-8	DG-P4S-7.5-8	12/19/2018	**2.5 J**	**4.3 J**	**31**	**3.2 J**	**36**	**4.7 J**	<4.2	**13**	**11**	**5**	**2.8 J**	**6**	**6.1**	**12**	**6.7**	**23**	**83**	**12**	**54**	**15 J**
DG-P5	1	0.5-1	DG-P5S-0.5-1	1/8/2019	**31**	**46**	**80**	**25**	**54**	**6.7**	**22**	**66**	**34**	**3.3**	**14**	**27**	**25**	**58**	**2.4**	**38**	**47**	**72**	**35**	**110**
DG-P5	1	3.5-4	DG-P5S-3.5-4	1/8/2019	**29**	**34**	**62**	**23**	**41**	<17	<20	**53**	<24	<13	<11	**9.9**	**27**	**37**	<10	**25**	**30**	**54**	**100**	**940**
DG-Q3	1	0.5-1	DG-Q3S-0.5-1	12/18/2018	**6**	**8.7**	**11**	**4.9 J**	**6.9**	<3.5	**5.9**	**13**	**5.2 J**	<2.8	**2.5 J**	**3.0 J**	**8.6**	**12**	<2.2	<3.5	**7.5**	**15**	**11**	**31 J**
DG-Q3	1	3.5-4	DG-Q3S-3.5-4	12/18/2018	<1.5	**2.5 J**	**5.0 U**	<2.1	<1.4	<3.5	<4.2	**5**	<5.0	<2.8	<2.4	<2.0	<4.3	**1.6 J**	<2.2	<3.5	<1.8	<1.7	**2.5**	<10
DG-Q7	1	0.5-1	DG-Q7S-0.5-1	1/8/2019	**85**	**120**	**200**	**66**	**160**	**26**	**93**	**185**	**68**	<13	**64**	**180**	**170**	**190**	**12**	**49**	**180**	**230**	**270**	**530**
DG-Q7	1	3.5-4	DG-Q7S-3.5-4	1/8/2019	**11**	**11**	**32**	**9.4**	**27**	**4.4**	**10**	**21**	**27**	<2.8	**7.5**	**20**	**13**	**28**	<2.2	**40**	**44**	**27**	**61**	**150**
DG-Q7 (D)	1	3.5-4	DG-Q7 (D)S-3.5-4	1/8/2019	**67**	**89**	**160**	**52**	**120**	<17	**57**	**127**	**57**	<13	**45**	**140**	**80**	**120**	<11	**40**	**90**	**150**	**280**	**520**
DG-R1	1	0.5-1	DG-R1S-0.5-1	12/17/2018	**190**	**310**	**470**	**130**	**390**	**68**	**170**	**463**	**120**	<14	**130**	**180**	**240**	**300**	**12 J**	**110**	**200**	**620**	**190**	**440**
DG-R1	1	3.5-4	DG-R1S-3.5-4	12/17/2018	**5**	**4.3 J**	**26**	**3.3 J**	**22**	**4.0 J**	**4.6 J**	**12**	**72**	**4.0 J**	**2.6 J**	**120**	**6.9**	**11**	**13**	**21**	**52**	**12**	**92**	**61**
DG-R5	1	0.5-1	DG-R5S-0.5-1	1/29/2019	**230**	**280**	**440**	**140**	**240**	**46**	**120**	**407**	**73**	<14	**32**	**48**	**130**	**330**	<11	**70**	**140**	**300**	**62**	**150**
DG-R5	1	3.5-4	DG-R5S-3.5-4	1/29/2019	**82**	**110**	**140**	**33**	**110**	**18**	**49**	**156**	**10 J**	<5.5	**19**	**12 J**	**56**	**110**	<4.3	**12**	**45**	**140**	**11**	**32 J**
DG-R5 (D)	1	3.5-4	DG-R5 (D)S-3.5-4	1/29/2019	**73**	**97**	**150**	**47**	**100**	**16**	**40**	**140**	**14 J**	<5.5	**21**	**21 J**	**48**	**110**	<4.3	**14**	**53**	**130**	**10**	**35 J**
DG-S3	1	0.5-1	DG-S3S-0.5-1	12/18/2018	**21**	**28**	**42**	**13**	**30**	**5.1**	**15**	**41**	**22**	<2.8	**8.9**	**12**	**18**	**42**	<2.2	**17**	**31**	**57**	**90**	**230**
DG-S3	1	3.5-4	DG-S3S-3.5-4	12/18/2018	**31 J**	**84 J**	**130**	**43 J**	**70 J**	<70	<84	**140**	<99	<56	<48	<40	<86	**75 J**	<44	<70 UJ	**97 J**	**81 J**	**740**	**4,700**
DG-S7	1	0.5-1	DG-S7S-0.5-1	1/8/2019	**85**	**120**	**180**	**67**	**140**	**19**	**61**	**172**	**33**	<14	**49**	**89**	**90**	**160**	<11	**32**	**100**	**200**	**260**	**710**
DG-S7	1	3.5-4	DG-S7S-3.5-4	1/8/2019	**18**	**13**	**26**	**8.2**	**33**	<3.4	**8.6**	**20**	**15**	<2.7	**6.6**	**12**	**11**	**52**	**3.8**	**34**	**53**	**55**	**97**	**140**
DG-T1	1	0.5-1	DG-T1S-0.5-1	12/17/2018	**140**	**250**	**360**	**100**	**240**	**50 J**	**130 J**	**364**	**83**	<14	**100**	**110**	**170 J**	**200 J**	**12 J**	**78**	**130**	**400 J**	**180**	**540**
DG-T1	1	3.5-4	DG-T1S-3.5-4	12/17/2018	**3.7 J**	**5.9 J**	**14**	**3.6 J**	**12 J**	<3.5	<4.2	**10**	<5.0	<2.8	<2.4	**2.0 J**	**6.3 J**	**6.5 J**	<2.2	**6.4 J**	**25 J**	**10**	**2.0 UJ**	<10
DG-T1 (D)	1	3.5-4	DG-T1 (D)S-3.5-4	12/17/2018	**2.8 J**	**4.7 J**	**9.5**	**2.7 J**	**5.8 J**	<3.5	<4.2	**8**	<5.0	<2.8	<2.4	**2.2 J**	**4.6 J**	**3.8 J**	<2.2	<3.5 UJ	**12 J**	**7**	**5.8 J**	**19 J**
DG-T5	1	0.5-1	DG-T5S-0.5-1	1/8/2019	**33**	**55**	**54**	**19**	**47**	**9.3**	**29**	**76**	**17**	**3.1**	**4.9**	**10**	**42**	**51**	<2.2	**25**	**33**	**67**	**22**	**47**
DG-T5	1	3.5-4	DG-T5S-3.5-4	1/8/2019	<1.5	**2.6**	**4.3**	<2.1	**2.3**	<3.5	<4.1	**5**	<4.9	<2.8	<2.4	<2.0	<4.2	**2**	<2.2	<3.5	<1.8	**2.3**	**3.4**	<9.9
DG-U3	1	0.5-1	DG-U3S-0.5-1	12/18/2018	**55**	**61**	**130**	**47**	**81**	**11**	**32**	**94**	**70**	<5.6	**26**	**65**	**32**	**130**	**5.2 J**	**72**	**110**	**130**	**98**	**220**
DG-U3	1	3.5-4	DG-U3S-3.5-4	12/18/2018	**16 J**	**10 J**	**110 J**	**13 J**	**130**	**14 J**	**13**	**38**	**130 J**	**20**	**11**	**27 J**	**17 J**	**140**	**12**	**280 J**	**650 J**	**70 J**	**12 J**	**36 J**
DG-U3 (D)	1	3.5-4	DG-U3 (D)S-3.5-4	12/18/2018	**79 J**	**140 J**	**210 J**	**75 J**	**120**	**70 J**	<84	**244**	<100 UJ	<56	<48	**110 J**	**110 J**	**140**	<44	**92 J**	**230 J**	**140 J**	**330 J**	**2,200 J**
DG-U7	1	0.5-1	DG-U7S-0.5-1	1/8/2019	**10**	**20**	**30**	**13**	**25**	**6.4**	**22**	**33**	**5.8**	<2.6	**5.8**	**11**	**33**	**19**	<2.1	**5.8**	**11**	**23**	**15**	**52**
DG-U7	1	3.5-4	DG-U7S-3.5-4	1/8/2019	**23**	**20**	**38**	**15**	**44**	**4.4**	**14**	**32**	**91**	<2.7	**11**	**11**	**20**	**40**	**6.5**	**79**	**59**	**51**	**28**	**62**
DG-V1	1	0.5-1	DG-V1S-0.5-1	12/17/2018	**150**	**260**	**300**	**85**	**230**	**49**	**150**	**370**	**34**	<5.6	**83**	**45**	**200**	**190**	**11**	**48**	**96**	**440**	**41**	**76**
DG-V1	1	3.5-4	DG-V1S-3.5-4	12/17/2018	**4.4 J**	**7.8**	**66**	**5.1**	**84**	**9.5**	**8.4**	**25**	**8.9 J**	<2.8	<2.4	**4.6 J**	**12**	**30**	**4.9 J**	**9.5**	**220**	**22**	**2.8**	<10

Table 3: Polynuclear Aromatic Hydrocarbons and TPH as Diesel and Motor Oil Concentrations in Soil
Brisbane Baylands OU-2
Brisbane, California

Sample Location	Investigation Zone	Depth Range (ft bgs)	Sample Name	Collection Date	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Chrysene	Dibenzo(a,h)anthracene	Indeno(1,2,3-cd)pyrene	Benzo(a)pyrene Equivalent Total PAHs [4]	2-Methylnaphthalene	Acenaphthene	Acenaphthylene	Anthracene	Benzo(g,h,i)perylene	Fluoranthene	Fluorene	Naphthalene	Phenanthrene	Pyrene	TPH-Diesel (C10-C28)	TPH-Motor Oil (C24-C36)
Direct Exposure Human Health Risk Level Residential Soil Exposure ESL [1]					1.1E+03	1.1E+02	1.1E+03	1.1E+04	1.1E+05	1.1E+02	1.1E+03	--	2.4E+05	3.6E+06	--	1.8E+07	--	2.4E+06	2.4E+06	3.8E+03	--	1.8E+06	2.6E+02	1.2E+04
Leaching to Groundwater Levels Non-drinking Water ESL [2]					1.0E+04	5.7E+03	7.5E+04	3.9E+04	1.0E+04	3.9E+05	3.2E+04	--	8.8E+02	1.2E+04	6.4E+03	1.9E+03	2.7E+04	8.6E+04	6.0E+03	1.2E+03	1.1E+04	4.5E+04	7.3E+03	--
Regional Background [3]					--	--	--	--	--	--	--	9.0E+02	--	--	--	--	--	--	--	--	--	--	--	--
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	µg/kg	µg/kg	µg/kg	mg/kg	mg/kg
DG-V5	1	0.5-1	DG-V5S-0.5-1	1/8/2019	**46**	**62**	**97**	**31**	**77**	**11**	**31**	**91**	**79**	**4.9**	**15**	**30**	**39**	**110**	**3.4**	**61**	**91**	**110**	**48**	**110**
DG-V5	1	3.5-4	DG-V5S-3.5-4	1/8/2019	<1.5	**2**	**3.5**	<2.1	**1.8**	<3.5	<4.2	**4**	<4.9	<2.8	<2.4	<2.0	<4.2	**2.6**	<2.2	<3.5	**2.2**	**3.1**	**1.7**	<9.9
DG-V5	1	7.5-8	DG-V5S-7.5-8	1/8/2019	<1.5	<1.9	<2.1	<2.1	<1.4	<3.4	<4.1	**3**	<4.9	<2.8	<2.4	<2.0	<4.2	<1.4	<2.2	<3.4	<1.8	<1.7	**0.98**	<9.9
DG-V9	1	0.5-1	DG-V9S-0.5-1	1/10/2019	<1.5	<1.9	**2.2 J**	<2.1	**1.8 J**	<3.4	<4.1	**3**	<4.9	<2.7	<2.3	<2.0	<4.2	**2.7 J**	<2.1	<3.4	**2.7 J**	**3.1 J**	**5**	**16 J**
DG-V9	1	3.5-4	DG-V9S-3.5-4	1/10/2019	**2.1 J**	<1.8 R	**11 J**	**2.8 J**	**17 J**	<3.4 UJ	<4.0 UJ	**4**	**20**	<2.7	**4.5 J**	**2.4 J**	<4.1 UJ	**29 J**	**3.0 J**	**130**	**59 J**	**16 J**	**15**	**27 J**
DG-V9	1	7.5-8	DG-V9S-7.5-8	1/10/2019	<1.4	<1.8	<2.0	<2.0	<1.3	<3.4	<4.0	**3**	<4.8	<2.7	<2.3	<1.9	<4.1	<1.3	<2.1	<3.4	<1.7	<1.6	**2.8**	**18 J**
DG-W3	1	0.5-1	DG-W3S-0.5-1	12/18/2018	**27**	**36**	**45**	**21 J**	**25**	<17	<21	**53**	<25	<14	**15 J**	**32**	**25**	**44**	<11	**17 J**	**26**	**55**	**62**	**160**
DG-W3	1	3.5-4	DG-W3S-3.5-4	12/18/2018	**4.8 J**	**7**	**60**	**5.2**	**60**	**6.8**	**7**	**21**	<5.0	<2.8	<2.4	**2.6 J**	**9**	**27**	<2.2	**8.6**	**78**	**19**	**9.4**	**12 J**
DG-W7	1	0.5-1	DG-W7S-0.5-1	1/29/2019	**39**	**57**	**100**	**33**	**36**	**21 J**	**48**	**97**	**42 J**	<14	**29**	**52**	**67**	**66**	<11	**42**	**50**	**63**	**32**	**74**
DG-W7	1	3.5-4	DG-W7S-3.5-4	1/29/2019	**13**	**14**	**43**	**14**	**37**	**7.0 J**	**11**	**28**	**22**	<5.5	**7.4 J**	**7.2 J**	**12**	**59**	<4.3	**69**	**81**	**43**	**35**	**68**
DG-X1	1	0.5-1	DG-X1S-0.5-1	12/17/2018	**810 J**	**1,300 J**	**1,600 J**	**530 J**	**1,400 J**	**270 J**	**770 J**	**1,895**	**190**	<14	**470 J**	**260 J**	**1,100 J**	**1,100 J**	**67 J**	**310**	**600**	**2,600 J**	**95**	**130**
DG-X1 (D)	1	0.5-1	DG-X1 (D)S-0.5-1	12/17/2018	**4,400 J**	**5,200 J**	**6,800 J**	**2,300 J**	**6,100 J**	**1,100 J**	**3,100 J**	**7,759**	**220**	<28	**1,400 J**	**730 J**	**3,900 J**	**2,600 J**	**160 J**	**350**	**1,000**	**6,600 J**	**69**	**120**
DG-X1	1	3.5-4	DG-X1S-3.5-4	12/17/2018	**20**	**3.1 J**	**62**	<2.1	**30**	**3.9 J**	<4.2	**15**	<5.0	<2.8	<2.4	<2.0	<4.3	**11**	<2.2	**5.3**	**30**	**5.1**	**2.9**	<10
DG-X5	1	0.5-1	DG-X5S-0.5-1	1/8/2019	**46**	**61**	**94**	**34**	**73**	**11**	**37**	**90**	**71**	**3.7**	**27**	**70**	**68**	**94**	<2.2	**68**	**140**	**110**	**78**	**190**
DG-X5	1	3.5-4	DG-X5S-3.5-4	1/8/2019	<1.5	<1.9	**2.6**	<2.1	<1.4	<3.4	<4.1	**3**	<4.9	<2.8	<2.4	<2.0	<4.2	**1.6**	<2.2	<3.4	<1.8	**1.8**	**1.3**	<9.9
DG-X9	1	0.5-1	DG-X9S-0.5-1	1/10/2019	**8.4**	**7.9**	**13**	**4.1 J**	**4.3 J**	**3.8 J**	**20**	**16**	**5.3 J**	<2.8	**22**	**47**	**65**	**6.9**	<2.2	**8.9**	**6.5**	**8**	**31**	**74**
DG-X9	1	3.5-4	DG-X9S-3.5-4	1/10/2019	**18**	**10**	**27**	**7.7**	**44**	<3.4	**6.4**	**17**	**120**	<2.7	<2.4	**15**	**8.2**	**69**	**7.8**	**390**	**160**	**52**	**68**	**90**
DG-Y3	1	0.5-1	DG-Y3S-0.5-1	12/18/2018	**210 J**	**300**	**470**	**200 J**	**200 J**	<170	<210	**466**	<250	<140	<120	**140 J**	**230 J**	**410**	<110	<170	**210 J**	**470**	**930**	**1,900**
DG-Y3	1	3.5-4	DG-Y3S-3.5-4	12/18/2018	**2.4 J**	**4.3 J**	**25**	**2.9 J**	**22**	<3.5	<4.2	**9**	<5.0	<2.8	<2.4	<2.0	**5.3**	**11**	<2.2	**7.3**	**35**	**9**	**2.1**	<10
DG-Y7	1	0.5-1	DG-Y7S-0.5-1	1/9/2019	**31**	**32**	**53**	**18**	**47**	**4.6**	**15**	**47**	**11**	**3.7**	**4.4**	**14**	**17**	**70**	**3**	**12**	**49**	**68**	**25**	**43**
DG-Y7	1	3.5-4	DG-Y7S-3.5-4	1/9/2019	**11**	**7.5**	**18**	**6.2**	**29**	<3.4	<4.1	**12**	**22**	<2.7	**4.4**	**6.8**	<4.2	**35**	**3.9**	**73**	**68**	**34**	**59**	**110**
DG-Z5	1	0.5-1	DG-Z5S-0.5-1	1/8/2019	**140**	**190**	**230**	**93**	**180**	**24**	**67**	**259**	**55**	<11	**48**	**61**	**79**	**180**	<8.7	**85**	**93**	**330**	**70**	**190**
DG-Z5	1	3.5-4	DG-Z5S-3.5-4	1/8/2019	<1.5	<1.9	**3.4**	<2.1	**1.8**	<3.5	<4.2	**3**	<5.0	<2.8	<2.4	<2.0	<4.3	**2.2**	<2.2	<3.5	**2.5**	**2.4**	**5.6**	**12**
DG-Z9	1	0.5-1	DG-Z9S-0.5-1	1/9/2019	**39**	**50**	**93**	**29**	**45**	<17	**23**	**74**	<24	<13	**24**	**41**	**33**	**56**	<10	**21**	**30**	**65**	**100**	**190**
DG-Z9 (D)	1	0.5-1	DG-Z9 (D)S-0.5-1	1/9/2019	**19**	**21**	**38**	**12**	**27**	<6.8	**14**	**32**	<9.8	<5.5	**12**	**22**	**27**	**59**	<4.3	**11**	**31**	**52**	**62**	**130**
DG-Z9	1	3.5-4	DG-Z9S-3.5-4	1/9/2019	**4**	<1.8	**19**	**4**	**29**	<3.4	<4.1	**5**	**15**	<2.7	<2.3	**2.6**	<4.2	**29**	**2.1**	**41**	**56**	**17**	**31**	**58**
DG-AA3	1	0.5-1	DG-AA3S-0.5-1	12/18/2018	**80**	**100**	**150**	**62**	**99**	**15**	**42**	**143**	**31 J**	<5.6	**17**	**31**	**57 J**	**130**	<4.4	**24 J**	**67 J**	**160**	**76**	**150**
DG-AA3 (D)	1	0.5-1	DG-AA3 (D)S-0.5-1	12/18/2018	**74**	**98**	**130**	**53**	**100**	**18 J**	**65**	**144**	**53 J**	<14	**23 J**	**47**	**270 J**	**150**	<11	**47 J**	**130 J**	**220**	**97**	**180**
DG-AA3	1	3.5-4	DG-AA3S-3.5-4	12/18/2018	**2.2 J**	**4.1 J**	**7.6**	**2.9 J**	**4.1 J**	<3.5	<4.2	**7**	<5.0	<2.8	<2.4	<2.0	**4.3 J**	**3.6 J**	<2.2	<3.5	**8.5**	**5**	**2.0 U**	**14 J**
DG-AA3	1	7-7.5	DG-AA3S-7-7.5	12/18/2018	**7**	**2.4 J**	**20**	**2.2 J**	**8.8**	<3.5	<4.2	**7**	**11**	<2.8	<2.4	<2.0	**4.8 J**	**6.4**	**16**	**6.9**	**24**	**19**	**2**	<10
DG-AA7	1	0.5-1	DG-AA7S-0.5-1	1/9/2019	**44**	**58**	**130**	**41**	**63**	<17	**42**	**89**	<25	<14	**51**	**240**	**64**	**74**	<11	**21**	**50**	**85**	**45**	**130**
DG-AA7	1	3.5-4	DG-AA7S-3.5-4	1/9/2019	**4.2**	**3.6**	**7.4**	**2.8**	**6.2**	<3.3	<4.0	**7**	<4.7	<2.7	<2.3	**3.4**	<4.1	**8.1**	<2.1	<3.3	**7.6**	**9.6**	**14**	**38**
DG-AB5	1	0.5-1	DG-AB5S-0.5-1	1/29/2019	**550 J**	**770 J**	**740 J**	**290 J**	**600 J**	**81 J**	**250 J**	**1,009**	**79 J**	<14	**130 J**	**56 J**	**290 J**	**480 J**	<11	**100 J**	**140 J**	**1,000 J**	**51**	**150**
DG-AB5 (D)	1	0.5-1	DG-AB5 (D)S-0.5-1	1/29/2019	**53 J**	**84 J**	**99 J**	**36 J**	**56 J**	**18 J**	**40 J**	**122**	**26 J**	<14	**23 J**	**21 J**	**49 J**	**91 J**	<11	**22 J**	**42 J**	**120 J**	**38**	**91**
DG-AB5	1	3.5-4	DG-AB5S-3.5-4	1/29/2019	**5.6**	**12**	**16**	**6.6**	**8**	**3.9 J**	**8.7**	**19**	<4.9	<2.7	<2.3	**2.2 J**	**11**	**12**	<2.1	<3.4	**6.3**	**13**	**6.8**	**24 J**
DG-AB9	1	0.5-1	DG-AB9S-0.5-1	1/30/2019	**5.4 J**	**4.3 J**	**10 J**	<4.0	**14 J**	<4.0	**4.0 J**	**8**	**15 J**	<4.0	<4.0	<4.0	**4.1 J**	**15 J**	<4.0	**18 J**	**26 J**	**10 J**	**21**	**22**
DG-AB9	1	3.5-4	DG-AB9S-3.5-4	1/30/2019	**16 J**	**22 J**	**32**	**10 J**	**23 J**	**5.7 J**	**32**	**36**	**26 J**	<3.9	**13 J**	**28 J**	**39**	**19 J**	<3.9	**22 J**	**21 J**	**21 J**	**8.9**	**11**
DG-AC3	1	0.5-1	DG-AC3S-0.5-1	12/19/2018	**50**	**68**	**110**	**44**	**74**	**11 J**	**28 J**	**98**	**33**	**3.0 J**	**16**	**27**	**33 J**	**78**	**2.9 J**	**22**	**58**	**100**	**72**	**170**
DG-AC3	1	3.5-4	DG-AC3S-3.5-4	12/19/2018	<1.5	**3.0 J**	**7.1**	**2.2 J**	**3.6 J**	<3.5	<4.2	**6**	**10 U**	<2.8	<2.4	<2.0	<4.3	**2.9 J**	<2.2	**5.2**	**12**	**3.7 J**	**4**	**15 J**
DG-AC7	1	0.5-1	DG-AC7S-0.5-1	1/9/2019	**330**	**500**	**1,100**	**330**	**480**	**72**	**240**	**743**	<24	**16**	**170**	**360**	**280**	**620**	**17**	**28**	**110**	**830**	**85**	**210**
DG-AC7 (D)	1	0.5-1	DG-AC7 (D)S-0.5-1	1/9/2019	**96**	**200**	**430**	**130**	**170**	**27**	**92**	**290**	**45**	<14	**82**	**190**	**100**	**160**	<11	**43**	**62**	**220**	**75**	**180**
DG-AC7	1	3.5-4	DG-AC7S-3.5-4	1/9/2019	**5.3**	**2.5**	**11**	**2.8**	**19**	<3.4	<4.1	**6**	**11**	<2.8	**2.9**	**5.3**	<4.2	**27**	<2.2	**41**	**51**	**17**	**28**	**37**
DG-AC7	1	7.5-8	DG-AC7S-7.5-8	1/9/2019	**9.3**	**17**	**54**	**9.3**	**30**	<3.4	**14**	**27**	**16**	<2.7	**5.9**	**3.2**	**20**	**43**	**5.8**	**42**	**49**	**41**	**9.2**	**25**
DG-AD5	1	0.5-1	DG-AD5S-0.5-1	1/8/2019	**51**	**64**	**80**	**37**	**92**	<14	**34**	**88**	**92**	<11	**53**	**77**	**54**	**100**	**20**	**340**	**130**	**140**	**310**	**550**
DG-AD5	1	3.5-4	DG-AD5S-3.5-4	1/8/2019	<1.5	**2.5**	**4.8**	<2.1	**3.3**	<3.4	<4.1	**5**	<4.9	<2.8	<2.4	<2.0	**4.4**	**4.6**	<2.2	**3.6**	**3.6**	**6.3**	**15**	**35**

Table 3: Polynuclear Aromatic Hydrocarbons and TPH as Diesel and Motor Oil Concentrations in Soil
Brisbane Baylands OU-2
Brisbane, California

Sample Location	Investigation Zone	Depth Range (ft bgs)	Sample Name	Collection Date	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Chrysene	Dibenzo(a,h)anthracene	Indeno(1,2,3-cd)pyrene	Benzo(a)pyrene Equivalent Total PAHs [4]	2-Methylnaphthalene	Acenaphthene	Acenaphthylene	Anthracene	Benzo(g,h,i)perylene	Fluoranthene	Fluorene	Naphthalene	Phenanthrene	Pyrene	TPH-Diesel (C10-C28)	TPH-Motor Oil (C24-C36)
Direct Exposure Human Health Risk Level Residential Soil Exposure ESL [1]					1.1E+03	1.1E+02	1.1E+03	1.1E+04	1.1E+05	1.1E+02	1.1E+03	--	2.4E+05	3.6E+06	--	1.8E+07	--	2.4E+06	2.4E+06	3.8E+03	--	1.8E+06	2.6E+02	1.2E+04
Leaching to Groundwater Levels Non-drinking Water ESL [2]					1.0E+04	5.7E+03	7.5E+04	3.9E+04	1.0E+04	3.9E+05	3.2E+04	--	8.8E+02	1.2E+04	6.4E+03	1.9E+03	2.7E+04	8.6E+04	6.0E+03	1.2E+03	1.1E+04	4.5E+04	7.3E+03	--
Regional Background [3]					--	--	--	--	--	--	--	9.0E+02	--	--	--	--	--	--	--	--	--	--	--	--
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	µg/kg	µg/kg	µg/kg	mg/kg	mg/kg
DG-AD9	1	0.5-1	DG-AD9S-0.5-1	1/9/2019	**120**	**180**	**260**	**91**	**190**	**24**	**84**	**252**	**120**	**21**	**56**	**110**	**110**	**220**	**12**	**130**	**150**	**250**	**510**	**1,200**
DG-AD9	1	3.5-4	DG-AD9S-3.5-4	1/9/2019	**18**	**11**	**36**	**10**	**41**	<3.3	**6.2**	**19**	**58**	**3.1**	<2.3	**27**	**8.5**	**81**	**9.4**	**170**	**190**	**60**	**110**	**150**
DG-AE3	1	0.5-1	DG-AE3S-0.5-1	12/19/2018	<1.5	**2.8 J**	**5.0 U**	<2.1	<1.4	<3.5	<4.2	**5**	<5.0	<2.8	<2.4	<2.0	<4.3	**2.0 J**	<2.2	<3.5	<1.8	**2.3 J**	**3**	**13 J**
DG-AE3	1	3.5-4	DG-AE3S-3.5-4	12/19/2018	**34**	**47**	**60**	**21**	**45**	**10**	**35**	**70**	**23**	<2.8	**8.4**	**10**	**44**	**72**	**3.2 J**	**20**	**49**	**83**	**24**	**69**
DG-AE7	1	0.5-1	DG-AE7S-0.5-1	1/9/2019	**25**	**36**	**53**	**22**	**42**	**4.4**	**15**	**50**	**5.4**	<2.6	**2.4**	**4.2**	**18**	**40**	<2.1	**4.9**	**18**	**42**	**21**	**47**
DG-AE7	1	3.5-4	DG-AE7S-3.5-4	1/9/2019	**18**	**18**	**27**	**9.6**	**28**	<3.4	**6.6**	**25**	**13**	<2.7	**3.4**	**4.9**	**8.1**	**20**	**2.9**	**14**	**23**	**30**	**27**	**140**
DG-AE7	1	8-8.5	DG-AE7S-8-8.5	1/9/2019	**14**	**28**	**58**	**17**	**39**	**4.2**	**19**	**42**	**5.1**	<2.6	**2.3**	**3**	**26**	**42**	**2.3**	**15**	**47**	**52**	**6.2**	<9.7
DG-AF5	1	0.5-1	DG-AF5S-0.5-1	1/8/2019	**130**	**160**	**260**	**91**	**210**	**32**	**96**	**242**	**64**	**22**	**60**	**150**	**130**	**240**	**14**	**77**	**190**	**270**	**300**	**640**
DG-AF5	1	3.5-4	DG-AF5S-3.5-4	1/8/2019	<1.5	**2.9**	**4.7**	<2.1	**3.1**	<3.4	<4.1	**5**	<4.9	<2.7	<2.4	<2.0	**4.7**	**3.9**	<2.2	<3.4	**2.8**	**5**	**11**	**35**
DG-AG3	1	0.5-1	DG-AG3S-0.5-1	12/19/2018	**8.5**	**12**	**17**	**6.8**	**13**	**3.8 J**	**9.7**	**19**	<5.0	<2.8	**2.5 J**	**6.3**	**18**	**18**	<2.2	**4.3 J**	**9.3**	**19**	**11**	**45 J**
DG-AG3	1	3.5-4	DG-AG3S-3.5-4	12/19/2018	**3.8 J**	**7.7**	**11**	**3.6 J**	**7.1**	<3.5	**4.4 J**	**11**	<5.0	<2.8	<2.4	<2.0	**7.4**	**7.3**	<2.2	<3.5	**8.8**	**20**	**210**	**690**
DG-AG7	1	0.5-1	DG-AG7S-0.5-1	1/30/2019	**15 J**	**24 J**	**35**	**11 J**	**24 J**	**4.4 J**	**20 J**	**36**	**5.7 J**	<3.9	**3.9 J**	**8.4 J**	**27 J**	**24 J**	<3.9	**6.1 J**	**16 J**	**26 J**	**20**	**18**
DG-AG7	1	3.5-4	DG-AG7S-3.5-4	1/30/2019	**4.2 J**	**4.9 J**	**9.6 J**	<4.0	**7.5 J**	<4.0	<4.0	**9**	<4.0	<4.0	<4.0	<4.0	**4.1 J**	**8.1 J**	<4.0	<4.0	**5.4 J**	**8.1 J**	**5.4**	**4.9**
DG-AH4	1	4-4.5	DG-AH4S-4-4.5	12/18/2018	**2,700**	**1,600**	**940**	**350 J**	**4,200**	<350	<420	**2,168**	**20,000**	**3100**	**460 J**	**4,600**	**510**	**1,900**	**3,400**	**1,100**	**14,000**	**9,200**	**3,700**	**3,600**
DG-AH4	1	6-6.5	DG-AH4S-6-6.5	12/18/2018	**3.6 J**	**7.2**	**21**	**3.9 J**	**20**	**4.2 J**	**6.5**	**15**	**11**	<2.8	<2.4	**3.1 J**	**12**	**13**	<2.2	**19**	**46**	**15**	**13**	**34 J**
DG-AH5	1	0.5-1	DG-AH5S-0.5-1	1/8/2019	**55**	**79**	**90**	**40**	**81**	**9.3**	**35**	**107**	**24**	**3**	**12**	**30**	**46**	**130**	**3.4**	**27**	**77**	**150**	**58**	**160**
DG-AH5	1	3.5-4	DG-AH5S-3.5-4	1/8/2019	**430**	**880**	**820**	**360**	**670**	**54**	**350**	**1,098**	**130**	<14	**140**	**170**	**370**	**1,900**	**55**	**660**	**1,500**	**2,300**	**130**	**340**
DG-AH5	1	8-8.5	DG-AH5S-8-8.5	1/8/2019	<1.5	**2.8**	**4.7**	<2.1	**3.1**	<3.4	<4.1	**5**	<4.9	<2.8	<2.4	<2.0	**5.8**	**3.8**	<2.2	<3.4	**3.3**	**4.7**	**18**	**28**
DG-AH9	2	0.5-1	DG-AH9S-0.5-1	1/30/2019	**22 J**	**30**	**41**	**15 J**	**28 J**	**5.4 J**	**25 J**	**44**	**7.4 J**	<3.9	**6.1 J**	**22 J**	**39**	**35**	<3.9	**6.3 J**	**21 J**	**34**	**9.3**	**11**
DG-AH9	2	3.5-4	DG-AH9S-3.5-4	1/30/2019	**25 J**	**24 J**	**42**	**13 J**	**37**	**5.2 J**	**18 J**	**38**	**29**	<3.9	**4.7 J**	**16 J**	**18 J**	**48**	**6.8 J**	**36**	**50**	**36**	**13**	**13**
DG-AI3	2	0.5-1	DG-AI3S-0.5-1	12/19/2018	**1.7 J**	**3.5 J**	**5.9**	**2.5 J**	**1.5 J**	<3.5	<4.2	**6**	<5.0	<2.8	<2.4	**2.3 J**	<4.3	**3.0 J**	<2.2	<3.5	<1.8	**3.3 J**	**5.1**	**13 J**
DG-AI3	2	3.5-4	DG-AI3S-3.5-4	12/19/2018	**3.4 J**	**5.5 J**	**35**	**4.8 UJ**	**32**	**5.1**	**5.8 J**	**15**	**55**	<2.7 UJ	<2.3 UJ	**7.4**	**14**	**9.0 J**	**19**	**7.6 J**	**55**	**22**	**20 J**	**47 J**
DG-AI3 (D)	2	3.5-4	DG-AI3 (D)S-3.5-4	12/19/2018	**7.7 J**	**9.4 J**	**36**	**6.2 J**	**32**	**5.4**	**10 J**	**20**	**54**	**3.1 J**	**2.4 J**	**10**	**20**	**17 J**	**20**	**14 J**	**56**	**28**	**38 J**	**74 J**
DG-AI7	2	0.5-1	DG-AI7S-0.5-1	1/9/2019	**350**	**440**	**690**	**210**	**600**	**51**	**150**	**613**	**85**	**32**	**41**	**120**	**180**	**640**	**28**	**80**	**420**	**770**	**440**	**980**
DG-AI7	2	3.5-4	DG-AI7S-3.5-4	1/9/2019	**20**	**9.2**	**21**	**7.8**	**35**	<3.3	**7**	**16**	**15**	<2.7	<2.3	**5.8**	**10**	**24**	**2.5**	**14**	**16**	**27**	**25**	**75**
DG-AI7	2	8-8.5	DG-AI7S-8-8.5	1/9/2019	**660**	**800**	**990**	**400**	**800**	**76**	**230**	**1,069**	**250**	**41**	**70**	**260**	**220**	**980**	**110**	**510**	**1,000**	**1,200**	**220**	**330**
DG-AJ5	2	0.5-1	DG-AJ5S-0.5-1	1/8/2019	**44**	**64**	**100**	**42**	**77**	**11**	**29**	**93**	**17**	**6.6**	**18**	**38**	**37**	**76**	<4.3	**18**	**44**	**79**	**51**	**160**
DG-AJ5	2	3.5-4	DG-AJ5S-3.5-4	1/8/2019	**380**	**430**	**610**	**250**	**610**	**36**	**120**	**580**	**670**	**81**	**100**	**260**	**130**	**960**	**100**	**630**	**1,000**	**1,100**	**600**	**1,600**
DG-AJ9	2	0.5-1	DG-AJ9S-0.5-1	1/30/2019	**40**	**44**	**67**	**20 J**	**60**	**7.8 J**	**37**	**66**	**18 J**	**4.1 J**	**12 J**	**28 J**	**57**	**86**	**4.8 J**	**20 J**	**66**	**88**	**71**	**73**
DG-AJ9	2	3.5-4	DG-AJ9S-3.5-4	1/30/2019	**13 J**	**8.3 J**	**22 J**	**5.9 J**	**24 J**	<3.9	**7.0 J**	**15**	**34**	<3.9	<3.9	**12 J**	**8.3 J**	**23 J**	**5.6 J**	**26 J**	**36**	**18 J**	**7.1**	**8.4**
DG-AK3	2	0.5-1	DG-AK3S-0.5-1	12/19/2018	**2.6 J**	**3.7 J**	**5.6**	**2.5 J**	**2.6 J**	<3.5	<4.2	**7**	**6.0 J**	<2.8	<2.4	<2.0	<4.3	**3.6 J**	<2.2	**3.5 J**	**5.2**	**3.4 J**	**14**	**32 J**
DG-AK3	2	3.5-4	DG-AK3S-3.5-4	12/19/2018	**260**	**290**	**350**	**110**	**280**	**42**	**110**	**405**	**150**	**18**	**83**	**110**	**120**	**410**	**43**	**120**	**400**	**490**	**27**	**45 J**
DG-AK7	2	0.5-1	DG-AK7S-0.5-1	1/9/2019	**200**	**280**	**430**	**180**	**310**	**35**	**100**	**390**	**45**	**15**	**29**	**53**	**120**	**310**	**12**	**45**	**210**	**370**	**200**	**360**
DG-AK7	2	3.5-4	DG-AK7S-3.5-4	1/9/2019	**7.1**	**4.8**	**11**	**3.4**	**12**	<3.4	<4.1	**9**	**22**	<2.7	**3.2**	**5.9**	<4.2	**19**	**2.9**	**26**	**33**	**18**	**36**	**72**
DG-AK7 (D)	2	3.5-4	DG-AK7 (D)S-3.5-4	1/9/2019	**8**	**5.7**	**12**	**3.5**	**13**	<3.4	<4.0	**10**	**46**	<2.7	**2.5**	**5.1**	<4.1	**12**	**2.1**	**35**	**21**	**14**	**17**	**56**
DG-AL5	2	0.5-1	DG-AL5S-0.5-1	1/30/2019	**26 J**	**28 J**	**45**	**14 J**	**34**	**5.3 J**	**25 J**	**43**	**32**	<3.9	**16 J**	**46**	**35**	**47**	**3.9 J**	**63**	**49**	**42**	**15**	**21**
DG-AL5	2	3.5-4	DG-AL5S-3.5-4	1/30/2019	**60 J**	**74 J**	**140 J**	**42 J**	**130 J**	**17 J**	**59 J**	**117**	**28 J**	<16	**22 J**	**68 J**	**93 J**	**110 J**	<16	**38 J**	**76 J**	**130 J**	**110 J**	**200 J**
DG-AL5 (D)	2	3.5-4	DG-AL5 (D)S-3.5-4	1/30/2019	**23 J**	**26 J**	**44 J**	**14 J**	**41 J**	<8.0 UJ	**20 J**	**39**	**19 J**	<8.0	**11 J**	**31 J**	**35 J**	**51 J**	<8.0	**21 J**	**44 J**	**51 J**	**38 J**	**64 J**
DG-AL9	2	0.5-1	DG-AL9S-0.5-1	1/21/2019	**40**	**54**	**78**	**25**	**62**	**9.9**	**34**	**79**	**9.7**	**3.0 J**	**4.6 J**	**12**	**60**	**65**	<2.1	**10**	**28**	**69**	**36**	**91**
DG-AL9	2	3.5-4	DG-AL9S-3.5-4	1/21/2019	**18**	**13**	**34**	**8.2**	**36**	**6**	**10**	**25**	**59**	**2.7 J**	**6.6**	**12**	**14**	**38**	**4.3 J**	**82**	**64**	**47**	**53**	**98**
DG-AL9	2	7-7.5	DG-AL9S-7-7.5	1/21/2019	**3.4 J**	**6.5**	**59**	**4.7 J**	**36**	**5.3**	**6.3**	**19**	<4.8	<2.7	<2.3	**3.8 J**	**7.1**	**20**	**3.1 J**	**6.7 J**	**60 J**	**29**	**1.4 J**	<9.5
DG-AL9 (D)	2	7-7.5	DG-AL9 (D)S-7-7.5	1/21/2019	**3.5 J**	**8.5**	**71**	**5.3 J**	**35**	**5**	**6.6**	**22**	<4.8	<2.7	<2.3	**3.0 J**	**7.5**	**22**	<2.1 UJ	**4.4 J**	**35 J**	**30**	**2.7 J**	<9.7
DG-AM3	2	0.5-1	DG-AM3S-0.5-1	12/19/2018	**160**	**350**	**390**	**160**	**240**	**210**	**1,100**	**727**	<99	<56	**550**	**550**	**3,100**	**150**	<44	<70	**98 J**	**210**	**310**	**780**
DG-AM3	2	3.5-4	DG-AM3S-3.5-4	12/19/2018	**12**	**15**	**33**	**8.6**	**27**	**5.4**	**12**	**26**	**31**	<2.8	**3.3 J**	**6.5**	**17**	**22**	<2.2	**23**	**29**	**31**	**65**	**130**
DG-AM7	2	0.5-1	DG-AM7S-0.5-1	1/9/2019	**210**	**260**	**360**	**160**	**240**	**25**	**85**	**352**	**54**	**16**	**93**	**120**	**120**	**300**	**13**	**66**	**190**	**570**	**170**	**440**

Table 3: Polynuclear Aromatic Hydrocarbons and TPH as Diesel and Motor Oil Concentrations in Soil
Brisbane Baylands OU-2
Brisbane, California

Sample Location	Investigation Zone	Depth Range (ft bgs)	Sample Name	Collection Date	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Chrysene	Dibenzo(a,h)anthracene	Indeno(1,2,3-cd)pyrene	Benzo(a)pyrene Equivalent Total PAHs [4]	2-Methylnaphthalene	Acenaphthene	Acenaphthylene	Anthracene	Benzo(g,h,i)perylene	Fluoranthene	Fluorene	Naphthalene	Phenanthrene	Pyrene	TPH-Diesel (C10-C28)	TPH-Motor Oil (C24-C36)
Direct Exposure Human Health Risk Level Residential Soil Exposure ESL [1]					1.1E+03	1.1E+02	1.1E+03	1.1E+04	1.1E+05	1.1E+02	1.1E+03	--	2.4E+05	3.6E+06	--	1.8E+07	--	2.4E+06	2.4E+06	3.8E+03	--	1.8E+06	2.6E+02	1.2E+04
Leaching to Groundwater Levels Non-drinking Water ESL [2]					1.0E+04	5.7E+03	7.5E+04	3.9E+04	1.0E+04	3.9E+05	3.2E+04	--	8.8E+02	1.2E+04	6.4E+03	1.9E+03	2.7E+04	8.6E+04	6.0E+03	1.2E+03	1.1E+04	4.5E+04	7.3E+03	--
Regional Background [3]					--	--	--	--	--	--	--	9.0E+02	--	--	--	--	--	--	--	--	--	--	--	--
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	µg/kg	µg/kg	µg/kg	mg/kg	mg/kg
DG-AM7	2	3.5-4	DG-AM7S-3.5-4	1/9/2019	**6.6**	**5.2**	**14**	**5**	**13**	<3.4	**7.1**	**10**	**27**	<2.7	**2.4**	**7.9**	**11**	**14**	**3.8**	**25**	**26**	**12**	**16**	**66**
DG-AM7	2	7.5-8	DG-AM7S-7.5-8	1/9/2019	**13**	**40**	**66**	**18**	**30**	**16**	**55**	**70**	**55**	<2.8	**5.5**	**9.2**	**80**	**34**	**11**	**90**	**88**	**39**	**42**	**67**
DG-AN5	2	0.5-1	DG-AN5S-0.5-1	12/20/2018	**11**	**13**	**20**	**6.7**	**11**	<3.5	**6.1**	**19**	<5.0	<2.8	<2.4	**4.2 J**	**7.3**	**23**	<2.2	**4.4 J**	**15**	**20**	**13**	**41 J**
DG-AN5	2	3.5-4	DG-AN5S-3.5-4	12/20/2018	**2.0 J**	**3.6 J**	**5.0 U**	**2.5 J**	**2.0 J**	<3.5	<4.2	**6**	<5.0	<2.8	<2.4	<2.0	<4.3	**4.1 J**	<2.2	<3.5	**2.9 J**	**4.4 J**	**15**	**36 J**
DG-AN9	2	0.5-1	DG-AN9S-0.5-1	1/21/2019	**44**	**75**	**91**	**29**	**46**	**14**	**39**	**107**	**15**	**4.0 J**	**5.7**	**13**	**60**	**48**	<2.1	**13**	**26**	**59**	**43**	**91**
DG-AN9	2	3.5-4	DG-AN9S-3.5-4	1/21/2019	<1.5	**2.8 J**	**3.5 J**	**2.5 J**	<1.4	<3.5	<4.2	**5**	<4.9	<2.8	<2.4	<2.0	<4.3	**2.5 J**	<2.2	<3.5	<1.8	**2.9 J**	**0.92 J**	<9.7
DG-AN9	2	7-7.5	DG-AN9S-7-7.5	1/21/2019	<1.4	**3.0 J**	**31**	**3.5 J**	**20**	**4.2 J**	<4.0	**11**	<4.8	<2.7	<2.3	**3.3 J**	**4.1 J**	**11**	**2.3 J**	**5.1**	**46**	**9.5**	**2**	<9.5
DG-AO3	2	0.5-1	DG-AO3S-0.5-1	12/19/2018	**23**	**28**	**60**	**22**	**37**	**7**	**15**	**45**	**40**	<2.8	**11**	**19**	**17**	**52**	<2.2	**40**	**39**	**53**	**42**	**89**
DG-AO3	2	3.5-4	DG-AO3S-3.5-4	12/19/2018	**7.9**	**8.6**	**29**	**4.9 J**	**23**	**5.5**	**8**	**19**	**16**	<2.8	**2.5 J**	**6.8**	**12**	**18**	**2.5 J**	**12**	**30**	**27**	**23**	**47 J**
DG-AO7	2	0.5-1	DG-AO7S-0.5-1	1/9/2019	**93**	**140**	**160**	**72**	**140**	**25**	**87**	**200**	**20**	**29**	**23**	**35**	**120**	**170**	**7.1**	**20**	**97**	**200**	**38**	**110**
DG-AO7	2	3.5-4	DG-AO7S-3.5-4	1/9/2019	**7.7**	**9.6**	**15**	**5.8**	**12**	<3.4	**6.2**	**14**	**13**	<2.7	<2.3	**2.6**	**8.2**	**13**	<2.1	**9.4**	**8.8**	**12**	**44**	**150**
DG-AP5	2	0.5-1	DG-AP5S-0.5-1	12/20/2018	**16**	**19**	**33**	**11**	**21**	**4.2 J**	**8.9**	**29**	**340**	**3.4 J**	**7.4**	**13**	**12**	**33**	<2.2	**240**	**66 J**	**35**	**70**	**220**
DG-AP5	2	3.5-4	DG-AP5S-3.5-4	12/20/2018	**5.6**	**6.7**	**8.8**	**3.9 J**	**4.6 J**	<3.5	**4.4 J**	**10**	<5.0	<2.8	<2.4	<2.0	**6**	**7.6**	<2.2	<3.5	**4.4 J**	**8.2**	**5.3**	**11 J**
DG-AP9	2	0.5-1	DG-AP9S-0.5-1	1/21/2019	**6.9**	**7.5**	**12**	**4.7 J**	**6.2**	**3.8 J**	**5.6**	**14**	<4.8	<2.7	<2.3	**3.2 J**	**6.2**	**11**	<2.1	<3.4	**5.7**	**10**	**11**	**27 J**
DG-AP9	2	3.5-4	DG-AP9S-3.5-4	1/21/2019	<1.5	**2.8 J**	**4.4 J**	**2.6 J**	**1.7 J**	<3.4	<4.1	**5**	<4.9	<2.7	<2.4	<2.0	<4.2	**3.2 J**	<2.2	<3.4	**2.9 J**	**4.0 J**	**2.6**	<9.9
DG-AQ3	2	0.5-1	DG-AQ3S-0.5-1	12/19/2018	<1.5	**3.5 J**	**5.0 U**	**2.1 J**	**1.5 J**	<3.5	<4.2	**6**	<5.0	<2.8	<2.4	<2.0	<4.3	**2.4 J**	<2.2	<3.5	<1.8	**4.5 J**	**3**	**11 J**
DG-AQ3	2	3.5-4	DG-AQ3S-3.5-4	12/19/2018	**30**	**24**	**54**	**11**	**54**	**10**	**14**	**44**	**5.6 J**	**6.3**	<2.4	**16**	**18**	**58**	**5.8**	**5.2**	**79**	**80**	**5.5**	**15 J**
DG-AQ7	2	0.5-1	DG-AQ7S-0.5-1	1/30/2019	**7.1 J**	**6.6 J**	**11 J**	<3.9	**11 J**	<3.9	<3.9	**11**	**65**	<3.9	<3.9	<3.9	**4.9 J**	**11 J**	<3.9	**49**	**20 J**	**14 J**	**6.2**	**6.5**
DG-AQ7	2	3.5-4	DG-AQ7S-3.5-4	1/30/2019	**7.1 J**	**5.2 J**	**12 J**	<3.9	**14 J**	<3.9	**4.3 J**	**10**	**27 J**	<3.9	<3.9	<3.9	**4.8 J**	**16 J**	<3.9	**25 J**	**24 J**	**14 J**	**7.4**	**9.3**
DG-AR5	2	0.5-1	DG-AR5S-0.5-1	12/20/2018	<1.5	**2.2 J**	**5.0 U**	<2.1	<1.4	<3.5	<4.2	**5**	<5.0	<2.8	<2.4	<2.0	<4.3	**2.5 J**	<2.2	<3.5	**2.7 J**	**2.7 J**	**1.5 J**	<10
DG-AR5	2	3.5-4	DG-AR5S-3.5-4	12/20/2018	**23**	**31**	**39**	**16**	**26**	**6.3**	**14**	**45**	**5.2 J**	<2.8	**6.5**	**7.5**	**15**	**35**	**2.6 J**	**5.1**	**21**	**42**	**16**	**43 J**
DG-AR9	2	0.5-1	DG-AR9S-0.5-1	1/9/2019	**71**	**84**	**150**	**45**	**110**	<17	**57**	**121**	**39**	<13	**58**	**120**	**99**	**110**	<11	**58**	**70**	**130**	**180**	**440**
DG-AR9	2	3.5-4	DG-AR9S-3.5-4	1/9/2019	**4.3**	**4.3**	**10**	**3.3**	**11**	<3.4	<4.1	**8**	<4.8	<2.7	<2.3	**3.2**	**4.8**	**8.6**	<2.1	**5.8**	**9.9**	**8.4**	**15**	**52**
DG-AR9 (D)	2	3.5-4	DG-AR9 (D)S-3.5-4	1/9/2019	**4.8**	**6.8**	**12**	**4.6**	**8.9**	<3.3	<4.0	**10**	<4.8	<2.7	<2.3	**2.4**	**6**	**8.4**	<2.1	**3.9**	**8.4**	**9.5**	**47**	**240**
DG-AS3	2	0.5-1	DG-AS3S-0.5-1	12/20/2018	**9.3**	**12**	**19**	**7.4**	**12**	**4.0 J**	**9.4**	**20**	**6.8 J**	<2.8	**2.5 J**	**5.6**	**11**	**16 J**	<2.2	**5.6 J**	**9.9 J**	**15**	**24**	**60**
DG-AS3 (D)	2	0.5-1	DG-AS3 (D)S-0.5-1	12/20/2018	**15**	**16**	**26**	**11**	**19**	**4.1 J**	**9.9**	**25**	**11 J**	<2.8	**2.9 J**	**7.5**	**11**	**27 J**	<2.2	**12 J**	**18 J**	**25**	**25**	**65**
DG-AS3	2	3.5-4	DG-AS3S-3.5-4	12/20/2018	**270**	**400**	**360**	**180**	**260**	**110**	**230**	**598**	**98**	**26**	**30**	**180**	**240**	**430**	**40**	**74**	**370**	**530**	**110**	**240**
DG-AS3	2	4.5-5	DG-AS3S-4.5-5	12/20/2018	**6.5 J**	**16**	**25**	**8.5 J**	**13**	<6.9	<8.2	**23**	<9.8	<5.5	**5.0 J**	**4.4 J**	**9.1 J**	**8.5 J**	<4.3	**15**	**18 J**	**52**	**160**	**230**
DG-AS7	2	0.5-1	DG-AS7S-0.5-1	1/9/2019	**12,000**	**7,900**	**13,000**	**5,000**	**14,000**	**980**	**2,200**	**11,664**	<190	**1,000**	**130**	**3,800**	**2,000**	**29,000**	**1,000**	<140	**25,000**	**26,000**	**120**	**310**
DG-AS7	2	3.5-4	DG-AS7S-3.5-4	1/9/2019	**1.6**	**1.9**	**2.9**	<2.0	**3.6**	<3.4	<4.1	**4**	**6.7**	<2.7	<2.3	<1.9	<4.2	**4.7**	<2.1	**5**	**8.8**	**4.4**	**8.4**	**23**
DG-AT5	2	0.5-1	DG-AT5S-0.5-1	12/20/2018	<1.5	**2.3 J**	**5.0 U**	<2.1	<1.4	<3.5	<4.2	**5**	<5.0	<2.8	<2.4	<2.0	<4.3	<1.4	<2.2	<3.5	<1.8	<1.7	**3**	**11 J**
DG-AT5	2	3.5-4	DG-AT5S-3.5-4	12/20/2018	**220**	**240**	**280**	**97**	**260**	**45**	**120**	**348**	**13**	**11**	**43**	**37**	**110**	**350**	**14**	**21**	**230**	**470**	**16**	**42 J**
DG-AU3	2	0.5-1	DG-AU3S-0.5-1	12/20/2018	**90**	**160**	**240**	**89**	**120**	**23**	**59**	**223**	**15 J**	<5.6	**24**	**41**	**62**	**49**	<4.4	**21**	**29**	**58**	**41**	**110**
DG-AU3	2	3.5-4	DG-AU3S-3.5-4	12/20/2018	**68**	**98**	**110**	**48**	**87**	**19**	**58**	**141**	**45**	**5.1**	**13**	**17**	**69**	**83**	**13**	**23**	**91**	**110**	**140**	**160**
DG-AU7	2	0.5-1	DG-AU7S-0.5-1	1/9/2019	**17**	**27**	**44**	**16**	**25**	**4.7**	**16**	**40**	**15**	**2.8**	**18**	**54**	**26**	**33**	**2.4**	**22**	**28**	**38**	**94**	**360**
DG-AU7 (D)	2	0.5-1	DG-AU7 (D)S-0.5-1	1/9/2019	**43**	**50**	**83**	**34**	**56**	<16	**34**	**74**	**34**	<13	**31**	**88**	**49**	**74**	<10	**59**	**58**	**71**	**110**	**280**
DG-AU7	2	3.5-4	DG-AU7S-3.5-4	1/9/2019	**5.7**	**3.6**	**18**	**4.1**	**20**	<3.4	<4.1	**8**	**13**	<2.8	<2.4	**7.3**	<4.2	**29**	<2.2	**42**	**63**	**18**	**31**	**52**
DG-AV5	2	0.5-1	DG-AV5S-0.5-1	12/20/2018	**120 J**	**130 J**	**210 J**	**89 J**	**150 J**	**20 J**	**59 J**	**190**	**110**	**8.7 J**	**34 J**	**92 J**	**120 J**	**210 J**	**6.8 J**	**87 J**	**160 J**	**220 J**	**120 J**	**280 J**
DG-AV5 (D)	2	0.5-1	DG-AV5 (D)S-0.5-1	12/20/2018	**1,000 J**	**970 J**	**1,200 J**	**520 J**	**1,100 J**	**120 J**	**450 J**	**1,361**	**140**	**430 J**	**84 J**	**640 J**	**470 J**	**2,000 J**	**370 J**	**150 J**	**2,100 J**	**2,200 J**	**330 J**	**580 J**
DG-AV5	2	3.5-4	DG-AV5S-3.5-4	12/20/2018	**6.6**	**5.7**	**10**	**4.1 J**	**7**	<3.5	<4.2	**9**	<5.0	<2.8	**2.8 J**	**6.5**	**7.4**	**13**	<2.2	**8.5**	**4.3 J**	**11**	**5.8**	**22 J**
DG-AV5	2	7.5-8	DG-AV5S-7.5-8	12/20/2018	**2.0 J**	**4.6 J**	**43**	**4.0 J**	**25**	**3.9 J**	<4.1	**13**	<4.9	<2.8	<2.4	<2.0	**5.5**	**9.5**	<2.2	**5**	**31 J**	**8.1**	**3.9**	<10
DG-AW3	2	0.5-1	DG-AW3S-0.5-1	1/31/2019	**180**	**340**	**440**	**180**	**220**	**76**	**200**	**500**	**65 J**	<27	**55**	**76**	**230**	**230**	<22	**75**	**110**	**260**	**42**	**52**
DG-AW3	2	3.5-4	DG-AW3S-3.5-4	1/31/2019	**140 J**	**290**	**380**	**130**	**200**	**44**	**150**	**403**	**45 J**	<14	**69**	**43**	**200**	**250**	<11	**72**	**90**	**380**	**54**	**80**
DG-AX5	2	0.5-1	DG-AX5S-0.5-1	12/20/2018	**2,300**	**4,400**	**5,200**	**1,800**	**2,500**	**350**	**2,100**	**5,731**	<49	**160**	**410**	**450**	**2,300**	**6,300**	**120**	**130**	**2,700 J**	**8,900**	**47**	**130**
DG-AX5	2	3.5-4	DG-AX5S-3.5-4	12/20/2018	**150**	**230**	**260**	**79**	**190**	**33**	**190**	**324**	**5.7 J**	**14**	**29**	**50**	**250**	**440**	**25**	**11**	**350**	**570**	**5.2**	<10

Table 3: Polynuclear Aromatic Hydrocarbons and TPH as Diesel and Motor Oil Concentrations in Soil
Brisbane Baylands OU-2
Brisbane, California

Sample Location	Investigation Zone	Depth Range (ft bgs)	Sample Name	Collection Date	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Chrysene	Dibenzo(a,h)anthracene	Indeno(1,2,3-cd)pyrene	Benzo(a)pyrene Equivalent Total PAHs [4]	2-Methylnaphthalene	Acenaphthene	Acenaphthylene	Anthracene	Benzo(g,h,i)perylene	Fluoranthene	Fluorene	Naphthalene	Phenanthrene	Pyrene	TPH-Diesel (C10-C28)	TPH-Motor Oil (C24-C36)
Direct Exposure Human Health Risk Level Residential Soil Exposure ESL [1]					1.1E+03	1.1E+02	1.1E+03	1.1E+04	1.1E+05	1.1E+02	1.1E+03	--	2.4E+05	3.6E+06	--	1.8E+07	--	2.4E+06	2.4E+06	3.8E+03	--	1.8E+06	2.6E+02	1.2E+04
Leaching to Groundwater Levels Non-drinking Water ESL [2]					1.0E+04	5.7E+03	7.5E+04	3.9E+04	1.0E+04	3.9E+05	3.2E+04	--	8.8E+02	1.2E+04	6.4E+03	1.9E+03	2.7E+04	8.6E+04	6.0E+03	1.2E+03	1.1E+04	4.5E+04	7.3E+03	--
Regional Background [3]					--	--	--	--	--	--	--	9.0E+02	--	--	--	--	--	--	--	--	--	--	--	--
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	µg/kg	µg/kg	µg/kg	mg/kg	mg/kg
DG-AY3	2	0.5-1	DG-AY3S-0.5-1	1/31/2019	**3.8 J**	**11**	**15**	**6.9 J**	**6.0 J**	<6.8	**10**	**17**	<9.8	<5.5	**7.8 J**	**12**	**14**	**8.0 J**	<4.3	<6.8	**4.4 J**	**9.6 J**	**17**	**14**
DG-AY3	2	3.5-4	DG-AY3S-3.5-4	1/31/2019	<150	**440 J**	**470 J**	**280 J**	**170 J**	<350	<420	**693**	<500	<280	**240 J**	<200	**560**	**270 J**	<220	<350	**250 J**	**420 J**	**130**	**170**
DG-N9	3	0.5-1	DG-N9S-0.5-1	1/10/2019	**2,800**	**5,400**	**6,200**	**2,400**	**4,500**	**490**	**1,800**	**6,999**	**330**	**97**	**2,100**	**710**	**2,200**	**5,700**	**310**	**1,100**	**6,000**	**11,000**	**380**	**960**
DG-N9	3	3.5-4	DG-N9S-3.5-4	1/10/2019	**36**	**63**	**94**	**26**	**65**	**11**	**36**	**91**	**16**	<2.8	**32**	**10**	**47**	**72**	**4.4 J**	**36**	**86**	**110**	**15**	**37 J**
DG-N13	3	0.5-1	DG-N13S-0.5-1	1/10/2019	**62 J**	**140 J**	**180 J**	**61 J**	**87**	**11 J**	**64**	**182**	**10 J**	<5.5	**22**	**49**	**83**	**170 J**	<4.3	**22**	**59**	**230 J**	**59**	**170**
DG-N13 (D)	3	0.5-1	DG-N13 (D)S-0.5-1	1/10/2019	**37 J**	**80 J**	**100 J**	**35 J**	**63**	**9.5 J**	**50**	**109**	**23 J**	<5.5	**18**	**48**	**72**	**100 J**	<4.3	**27**	**50**	**120 J**	**57**	**160**
DG-N13	3	3.5-4	DG-N13S-3.5-4	1/10/2019	**8.7**	**8.1**	**14**	**2.1 J**	**30**	**3.6 J**	<4.2	**14**	**190**	**8.7**	**2.9 J**	**12**	**8.5**	**15**	**54**	**79**	**160**	**27**	**13**	**15 J**
DG-N13	3	7.5-8	DG-N13S-7.5-8	1/10/2019	<1.5	<1.9	<2.1	<2.1	<1.4	<3.4	<4.1	**3**	<4.9	<2.7	<2.4	<2.0	<4.2	<1.4	<2.2	<3.4	<1.8	<1.7	**1.3 J**	<9.8
DG-O7	3	0.5-1	DG-O7S-0.5-1	1/8/2019	<7.4	**49**	<10	<10	**24**	<17	<21	**59**	<25	<14	<12	<9.8	**62**	<6.9	<11	<17	**22**	**38**	**170**	**550**
DG-O7	3	3.5-4	DG-O7S-3.5-4	1/8/2019	**4**	**4.4**	**6.5**	**2.4**	**6.4**	<3.4	<4.1	**7**	<4.8	<2.7	<2.3	<1.9	**5.9**	**7**	<2.1	<3.4	**5.6**	**11**	**63**	**170**
DG-O11	3	0.5-1	DG-O11S-0.5-1	1/10/2019	**40**	**39**	**85**	**26**	**77**	**7**	**18**	**61**	**5.1 J**	<2.8	**7.1**	**7.2**	**22**	**37**	<2.2	**31**	**58**	**57**	**31**	**88**
DG-O11	3	3.5-4	DG-O11S-3.5-4	1/10/2019	**150**	**140**	**230**	**88**	**230**	**18 J**	**53**	**202**	**66**	<14	**34**	**38**	**69**	**180**	<11	**78**	**100**	**320**	**99**	**330**
DG-O15	3	0.5-1	DG-O15S-0.5-1	1/10/2019	**7.4**	**9.9**	**16**	**5.6**	**15**	<3.4	**7.1**	**15**	**9.3 J**	**2.8 J**	**5**	**3.1 J**	**9**	**16**	**3.0 J**	**11**	**21**	**22**	**65**	**120**
DG-O15	3	3.5-4	DG-O15S-3.5-4	1/10/2019	**3.0 J**	**5.1 J**	**8.3**	**3.1 J**	**5.5 J**	<3.4	<4.1	**8**	**9.1 J**	<2.7	<2.3	<1.9	<4.2	**6.8**	<2.1	**6.0 J**	**6.4**	**7.9**	**8.3**	**30 J**
DG-O15 (D)	3	3.5-4	DG-O15 (D)S-3.5-4	1/10/2019	**2.3 J**	**3.9 J**	**6.6**	**2.3 J**	**4.5 J**	<3.4	<4.1	**7**	**7.8 J**	<2.8	<2.4	<2.0	<4.2	**5.4**	<2.2	**4.5 J**	**5.7**	**6.1**	**7.3**	**30 J**
DG-O15	3	7.5-8	DG-O15S-7.5-8	1/10/2019	<1.5	<1.9	<2.1	<2.1	<1.4	<3.5	<4.1	**3**	<4.9	<2.8	<2.4	<2.0	<4.2	<1.4	<2.2	<3.5	<1.8	<1.7	**1.2 J**	<9.9
DG-P9	3	0.5-1	DG-P9S-0.5-1	11/21/2018	**8.7 J**	**16**	**18**	<4.2	**10**	<6.9	**16**	**24**	**10 J**	<5.6	**24**	**13**	**50**	**9.8 J**	<4.4	**10**	**17**	**17**	**96**	**380**
DG-P9	3	3.5-4	DG-P9S-3.5-4	11/21/2018	**11**	**17**	**67**	**10**	**67**	**11**	**14**	**37**	<4.7	<2.6	**3.5 J**	**3.7 J**	**16**	**54**	<2.1	<3.3	**240**	**42**	**14**	**45 J**
DG-P13	3	0.5-1	DG-P13S-0.5-1	1/10/2019	<1.5	**2.3 J**	**4.0 J**	<2.1	**2.7 J**	<3.5	<4.2	**5**	<4.9	<2.8	<2.4	<2.0	<4.3	**4.0 J**	<2.2	<3.5	**3.9 J**	**3.9 J**	**25**	**89**
DG-P13	3	3.5-4	DG-P13S-3.5-4	1/10/2019	**5.8**	**11**	**36**	**6**	**29**	<3.4	**6.1**	**18**	**7.8 J**	<2.7	**4.0 J**	**2.7 J**	**9.4**	**18**	<2.1	**45**	**50**	**21**	**90 J**	**330 J**
DG-P13 (D)	3	3.5-4	DG-P13 (D)S-3.5-4	1/10/2019	**5.3**	**11**	**36**	**6.8**	**26**	<3.4	**5.8**	**18**	**6.2 J**	<2.7	**3.8 J**	**2.6 J**	**8.3**	**18**	<2.2	**37**	**42**	**21**	**22 J**	**70 J**
DG-Q11	3	0.5-1	DG-Q11S-0.5-1	1/10/2019	**150 J**	**150 J**	**220 J**	**75 J**	**280 J**	<69	<83	**227**	**220 J**	<55	<47	**74 J**	**120**	**170 J**	<43	**150 J**	**380**	**300 J**	**950**	**2,800**
DG-Q11 (D)	3	0.5-1	DG-Q11 (D)S-0.5-1	1/10/2019	**58 J**	**91 J**	**150 J**	<80	**170 J**	<130	<160	**185**	<190 UJ	<110	<91	<76	<160	**110 J**	<84	**130 J**	**230**	**180 J**	**920**	**2,600**
DG-Q11	3	3.5-4	DG-Q11S-3.5-4	1/10/2019	<140	<180	<200	<200	<130	<340	<400	**298**	**520 J**	<270	<230	<190	<410	<130	<210	<340	**260 J**	<160	**2,300**	**5,700**
DG-Q15	3	0.5-1	DG-Q15S-0.5-1	1/11/2019	**230**	**180**	**360**	**42 J**	**480**	**83 J**	**96 J**	**333**	**1,500**	<55	<47	**44 J**	**180 J**	**83 J**	**55 J**	**590**	**620**	**160 J**	**460 J**	**1,100 J**
DG-Q15 (D)	3	0.5-1	DG-Q15 (D)S-0.5-1	1/11/2019	**180 J**	**260**	**390**	<100	**530**	<170	<210	**414**	**1,600**	<140	<120	<99	**220 J**	**100 J**	<110	**580**	**690**	**280 J**	**1,200 J**	**2,900 J**
DG-Q15	3	3.5-4	DG-Q15S-3.5-4	1/11/2019	**24**	**33**	**46 J**	**17 J**	**40**	**5.2 J**	**24 J**	**48**	**89 J**	**2.8 J**	**12**	**8.8**	**35 J**	**56**	**2.8 J**	**74 J**	**44**	**68 J**	**32**	**150**
DG-Q15	3	7.5-8	DG-Q15S-7.5-8	1/11/2019	<1.5	<1.9	<2.0	<2.0	**1.4 J**	<3.4	<4.1	**3**	<4.9	<2.7	<2.3	<1.9	<4.2	**2.3 J**	<2.1	<3.4	<1.8	<1.7	**2.8**	**20 J**
DG-R9	3	0.5-1	DG-R9S-0.5-1	1/22/2019	**98 J**	**220**	**300**	**120 U**	**100 J**	<86	**120**	**316**	<120	<69	**120**	**190**	**140**	**220**	<54	**130**	**140**	**260**	**320**	**390**
DG-R9	3	3.5-4	DG-R9S-3.5-4	1/22/2019	**11**	**15**	**28**	**7.3**	**16**	**4.5 J**	**8.6**	**24**	<4.7	<2.7	**4.7**	**4.9**	**10**	**14**	<2.1	**5.1**	**19**	**20**	**39**	**44 J**
DG-R13	3	0.5-1	DG-R13S-0.5-1	1/28/2019	**300**	**200**	**470**	**110**	**620**	**140**	**120**	**431**	**3,300**	<55	**49 J**	**150**	**160**	**240**	**130**	**1,500**	**1,400**	**330**	**350**	**870**
DG-R13	3	3.5-4	DG-R13S-3.5-4	1/28/2019	**6.8**	**7.9**	**16**	**4.9 U**	**13**	**4.0 J**	<4.1	**14**	**72**	<2.7	<2.3	**3.3 J**	**4.8 J**	**7.1**	**3.1 J**	**32**	**32**	**9.5**	**24**	**59**
DG-R15	3	3.5-4	DG-R15S-3.5-4	12/21/2018	**320 J**	**490 U**	**700**	<210	**1,100**	<340	<410	**785**	<490	<280	<240	**710**	<420	**190 J**	<220	**1,000**	**1,000**	**940**	**10,000**	**29,000**
DG-S9	3	4.5-5	DG-S9S-4.5-5	12/20/2018	**98 J**	**220**	**420**	<42	**330**	<70	**100**	**317**	**110 J**	<56	**58 J**	**210**	**140**	**310**	<44	**120**	**140**	**700**	**3,000**	**7,300**
DG-S9	3	7.5-8	DG-S9S-7.5-8	12/20/2018	**20 J**	**21 J**	**55**	<10	**45**	<17	<21	**38**	<25	**35**	<12	**99**	<21	**50**	**17 J**	**24 J**	**120**	**92**	**1,900**	**2,700**
DG-S11	3	0.5-1	DG-S11S-0.5-1	1/10/2019	<74	<94	<100	<100	<69	<170	<210	**152**	<250	<140	<120	<99	<210	<69	<110	<170	<89	<84	**680**	**1,900**
DG-S11	3	3.5-4	DG-S11S-3.5-4	1/10/2019	**97 J**	**97 J**	**240**	<83	**230**	<140	<170	**210**	**240 J**	<110	<95	<79	<170	**290**	<87	<140 UJ	**460**	**320**	**1,200**	**2,700**
DG-S15	3	0.5-1	DG-S15S-0.5-1	1/11/2019	<30	**42 J**	**58 J**	<41	<28	<69	<83	**88**	<98	<55	<47	<39	<85	**30 J**	<43	<69	**41 J**	**71 J**	**940**	**2,400**
DG-S15	3	3.5-4	DG-S15S-3.5-4	1/11/2019	**7.8**	**6.3**	**57**	**6.7 J**	**74 J**	**4.5 J**	**7**	**18**	**42 J**	<2.7 UJ	**3.0 J**	**5**	**9.7**	**41 J**	**11 J**	**100**	**280 J**	**28**	**13**	**33 J**
DG-S15 (D)	3	3.5-4	DG-S15 (D)S-3.5-4	1/11/2019	**10**	**8.4**	**36**	**3.7 J**	**37 J**	**3.5 J**	**5.1**	**17**	**140 J**	**3.8 J**	**2.4 J**	**6.3**	**9.7**	**24 J**	**37 J**	**89**	**140 J**	**27**	**16**	**41 J**
DG-S15	3	6-6.5	DG-S15S-6-6.5	1/11/2019	<30	<38	<42	<42	**67 J**	<69	<83	**62**	<99	<55	<47	<40	<85	<28	<44	<69	**240**	**120**	**1,500**	**1,400**
DG-T9	3	0.5-1	DG-T9S-0.5-1	1/10/2019	**7.5**	**8.5**	**15**	**4.8 J**	**12**	<3.4	**4.3 J**	**13**	**7.5 J**	<2.7	**3.0 J**	**7.1**	**6.6**	**15**	<2.1	**6.8**	**12**	**16**	**46**	**86**
DG-T9	3	3.5-4	DG-T9S-3.5-4	1/10/2019	<1.5	<1.9	<2.1	<2.1	<1.4	<3.4	<4.1	**3**	<4.9	<2.7	<2.3	<2.0	<4.2	<1.4	<2.1	<3.4	<1.8	<1.7	**1.9 J**	<9.9
DG-T13	3	0.5-1	DG-T13S-0.5-1	1/10/2019	**8.5 J**	**14 J**	**29 J**	<10	**26 J**	<17	<21	**27**	**78 J**	<14	<12 UJ	**10 J**	<21 UJ	**20 J**	<11	**56 J**	**43 J**	**27 J**	**280 J**	**730 J**
DG-T13 (D)	3	0.5-1	DG-T13 (D)S-0.5-1	1/10/2019	**21 J**	**34 J**	**56 J**	<21	**57 J**	<35	<42	**61**	**220 J**	<28	**25 J**	**21 J**	**74 J**	**38 J**	<22	**120 J**	**94 J**	**55 J**	**530 J**	**1,500 J**

Table 3: Polynuclear Aromatic Hydrocarbons and TPH as Diesel and Motor Oil Concentrations in Soil
Brisbane Baylands OU-2
Brisbane, California

Sample Location	Investigation Zone	Depth Range (ft bgs)	Sample Name	Collection Date	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Chrysene	Dibenzo(a,h)anthracene	Indeno(1,2,3-cd)pyrene	Benzo(a)pyrene Equivalent Total PAHs[4]	2-Methylnaphthalene	Acenaphthene	Acenaphthylene	Anthracene	Benzo(g,h,i)perylene	Fluoranthene	Fluorene	Naphthalene	Phenanthrene	Pyrene	TPH-Diesel (C10-C28)	TPH-Motor Oil (C24-C36)
Direct Exposure Human Health Risk Level Residential Soil Exposure ESL [1]					1.1E+03	1.1E+02	1.1E+03	1.1E+04	1.1E+05	1.1E+02	1.1E+03	--	2.4E+05	3.6E+06	--	1.8E+07	--	2.4E+06	2.4E+06	3.8E+03	--	1.8E+06	2.6E+02	1.2E+04
Leaching to Groundwater Levels Non-drinking Water ESL [2]					1.0E+04	5.7E+03	7.5E+04	3.9E+04	1.0E+04	3.9E+05	3.2E+04	--	8.8E+02	1.2E+04	6.4E+03	1.9E+03	2.7E+04	8.6E+04	6.0E+03	1.2E+03	1.1E+04	4.5E+04	7.3E+03	--
Regional Background [3]					--	--	--	--	--	--	--	9.0E+02	--	--	--	--	--	--	--	--	--	--	--	--
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	µg/kg	µg/kg	µg/kg	mg/kg	mg/kg
DG-T13	3	3.5-4	DG-T13S-3.5-4	1/10/2019	**10**	**11**	**15**	**5.3**	**14**	<3.5	**8.5**	**16**	**5.4 J**	<2.8	<2.4	**3.2 J**	**13**	**27**	<2.2	**5.2**	**25**	**23**	**11**	**27 J**
DG-T17	3	0.5-1	DG-T17S-0.5-1	1/28/2019	**350**	**250 U**	**410**	**250 U**	**340**	<170	<210	**424**	**2,100**	<140	**140 J**	**330**	<210	**740**	<110	**1,300**	**740**	**630**	**1,200**	**3,400**
DG-T17	3	3.5-4	DG-T17S-3.5-4	1/28/2019	**18 J**	**49 UJ**	**78**	**49 UJ**	**28 J**	<34 UJ	<41 UJ	**78**	<49	<27 UJ	<23	**34 J**	<42 UJ	**49 UJ**	<21 UJ	<34	**24 J**	**54**	**59**	**200**
DG-T17	3	7-7.5	DG-T17S-7-7.5	1/28/2019	**140**	**230**	**400**	**98**	**170 J**	**69**	**100**	**364**	**200**	<27	<23	**87**	**130**	**270**	**61**	**480**	**260**	**240**	**940 J**	**900 J**
DG-T17 (D)	3	7-7.5	DG-T17 (D)S-7-7.5	1/28/2019	**220**	**180**	**480**	**120**	**290 J**	**53**	**110**	**315**	**260**	<28	<24	**85**	**110**	**350**	**68**	**470**	**320**	**370**	**420 J**	**450 J**
DG-U11	3	0.5-1	DG-U11S-0.5-1	1/10/2019	**92 J**	**140 J**	**190 J**	<83	**300**	<140	<170	**247**	**1,000**	**130 J**	<94	**170 J**	<170	**230**	**150 J**	**380**	**650**	**660**	**3,600**	**4,900**
DG-U11	3	3.5-4	DG-U11S-3.5-4	1/10/2019	**12**	**17**	**34**	**8.7**	**30**	<3.5	**6.3**	**24**	**46**	**8**	**7.8**	**28**	**8.4**	**32**	**9**	**40**	**76**	**51**	**270**	**450**
DG-U13	3	7.5-8	DG-U13S-7.5-8	12/21/2018	**45 J**	**98 U**	**98 U**	<41	**200**	<69	<83	**151**	<98	<55	<47	**44 J**	<84	**29 J**	<43	<69	**37 J**	**280**	**1,100**	**2,700**
DG-U15	3	3.5-4	DG-U15S-3.5-4	1/28/2019	<2.9	**9.6 U**	**9.9**	**9.6 U**	**3.9 J**	<6.7	<8.0	**15**	**12 J**	<5.4	<4.6	**4.6 J**	**8.6 J**	**9.6 U**	<4.2	**9.0 J**	**5.6 J**	**9.6 U**	**20**	**66**
DG-U15	3	8.5-9	DG-U15S-8.5-9	1/28/2019	<73	**240 U**	**240 U**	<100	<68	<170	<200	**363**	<240	<140	<120	**120 J**	<210	<68	<110	<170	<87	**280**	**2,400**	**3,100**
DG-U17	3	0.5-1	DG-U17S-0.5-1	1/28/2019	<29	**98 U**	**110**	**98 U**	**62 J**	<69	<82	**150**	**320**	<55	<47	**67 J**	**87 J**	**100**	<43	**300**	**170**	**130**	**500**	**1,800**
DG-V13	3	0.5-1	DG-V13S-0.5-1	1/10/2019	<28	**63 J**	**100**	<40	**66 J**	<66	<79	**112**	<94	<53	<45	<38	<81	**64 J**	<42	**70 J**	**78 J**	**83 J**	**710**	**2,300**
DG-V13	3	3.5-4	DG-V13S-3.5-4	1/10/2019	**170**	**170**	**220**	**83 J**	**200**	<68	<82	**248**	<98	<55	<47	<39	**100**	**260**	<43	<68	**250**	**440**	**710**	**2,300**
DG-V13	3	7.5-8	DG-V13S-7.5-8	1/10/2019	**6.2**	**3.0 J**	**5.2**	**2.4 J**	**6.1**	<3.4	<4.0	**6**	<4.8	<2.7	<2.3	**3.5 J**	<4.1	**13**	<2.1	<3.4	**13**	**8.8**	**5.7**	**22 J**
DG-V17	3	0.5-1	DG-V17S-0.5-1	1/28/2019	**33**	**54**	**93**	**29**	**40**	**25 U**	**34**	**95**	<25	<14	<12	**14 J**	**41**	**41**	<11	<17	**25**	**69**	**70**	**210**
DG-V17	3	3.5-4	DG-V17S-3.5-4	1/28/2019	<1.5 UJ	**4.8 UJ**	**5.1 J**	**4.8 U**	**2.1 J**	<3.4	<4.1 UJ	**7**	<4.8	<2.7	<2.3	<1.9	**4.2 J**	**4.8 UJ**	<2.1	<3.4	**1.9 J**	**5.1 J**	**3.1**	**16 J**
DG-V17 (D)	3	3.5-4	DG-V17 (D)S-3.5-4	1/28/2019	**2.2 J**	**7.1 J**	**9.1 J**	**4.7 U**	**3.8 J**	<3.3	**5.7 J**	**11**	<4.7	<2.7	<2.3	<1.9	**6.3 J**	**8.4 J**	<2.1	<3.3	**4.1 J**	**11 J**	**3.4**	**19 J**
DG-V17	3	9.5-10	DG-V17S-9.5-10	1/28/2019	**180**	**240**	**290**	**81**	**190**	**26**	**90**	**323**	**340**	**65**	**34**	**130**	**140**	**540**	**68**	**290**	**380**	**770**	**170**	**210**
DG-W11	4	0.5-1	DG-W11S-0.5-1	1/29/2019	**250**	**460**	**550**	**210**	**290**	**89 J**	**230**	**654**	<98	<55	**140**	**120**	**290**	**380**	<43	**86 J**	**170**	**650**	**240**	**620**
DG-W11	4	3.5-4	DG-W11S-3.5-4	1/29/2019	<1.5	**5.1**	**5.6**	**4.9 U**	**2.3 J**	<3.4	**4.1 J**	**8**	<4.9	<2.7	<2.4	**2.4 J**	**4.6 J**	**4.3 J**	<2.2	<3.4	**3.2 J**	**7.2**	**1.4 J**	<9.5
DG-W11 (D)	4	3.5-4	DG-W11 (D)S-3.5-4	1/29/2019	<1.5	**5.4**	**5.5**	**4.9 U**	**2.0 J**	<3.4	**4.3 J**	**8**	<4.9	<2.8	<2.4	**2.3 J**	**4.8 J**	**4.0 J**	<2.2	<3.4	**3.3 J**	**6.5**	**3.4 J**	**13 J**
DG-W15	4	0.5-1	DG-W15S-0.5-1	1/28/2019	<300	**990 U**	**990 U**	**990 U**	<280	<690	<830	**1501**	<990	<560	<480	<400	<850	**990 U**	<440	<690	<360	**990 U**	**700**	**2,900**
DG-W15 (D)	4	0.5-1	DG-W15 (D)S-0.5-1	1/28/2019	<73	**240 U**	**140 J**	**240 U**	<68	<170	<200	**355**	<240	<140	<120	<98	<210	<68	<110	<170	<88	**100 J**	**510**	**2,600**
DG-W15	4	3.5-4	DG-W15S-3.5-4	1/28/2019	<150 U	**260 J**	**260 J**	**210 J**	<140 U	<350 U	<410	**491**	<490	<280	<240	<200 U	<420 U	<140	<220	<350 UJ	<180	**580**	**2,200**	**4,400**
DG-X13	4	0.5-1	DG-X13S-0.5-1	1/22/2019	**38**	**240**	**590**	**99**	**97**	<69	**92**	**348**	<98	<55	<93	**85**	**96**	**68**	<85	<69	**57**	**210**	**490**	**1,300**
DG-X13	4	3.5-4	DG-X13S-3.5-4	1/22/2019	<15	**30 J**	**43 J**	**49 UJ**	<14 UJ	<34 UJ	<41 UJ	**55**	<49	<27	**32 J**	<20 UJ	<42 UJ	**16 J**	<22	<34	<18	**28 J**	**180 J**	**280 J**
DG-X13 (D)	4	3.5-4	DG-X13 (D)S-3.5-4	1/22/2019	<15	**52 J**	**100 J**	**49 UJ**	**26 J**	<34 UJ	**59 J**	**86**	<49	<27	**53 J**	**28 J**	**110 J**	**31 J**	<21	<34	<17	**86 J**	**860 J**	**1,300 J**
DG-X17	4	0.5-1	DG-X17S-0.5-1	1/28/2019	<150	**500 U**	**500 U**	**500 U**	<140	<350	<420	**759**	<500	<280	<240	<200	<430	<140	<220	<350	<180	**500 U**	**420**	**1,600**
DG-X17	4	3.5-4	DG-X17S-3.5-4	1/28/2019	<290	**980 U**	**550 J**	**980 U**	<270	<690	<820	**1445**	<980	<550	<470	<390	<840	**270 J**	<430	<690	<350	**560 J**	**1,500**	**4,600**
DG-Y11	4	0.5-1	DG-Y11S-0.5-1	1/21/2019	**220 J**	**680**	**690**	**340 J**	**280 J**	**400 J**	**520**	**1227**	<480	<270	<230	**260 J**	**900**	**320 J**	<210	<340	**180 J**	**920**	**2,200**	**6,100**
DG-Y11	4	3.5-4	DG-Y11S-3.5-4	1/21/2019	<2.8	**8.5 J**	**16**	**6.0 J**	**6.9 J**	**6.8 J**	**10**	**18**	<9.4	<5.3	**6.5 J**	**34**	**19**	**5.5 J**	<4.1	<6.6	**12**	**9.8**	**250**	**260**
DG-Y15	4	0.5-1	DG-Y15S-0.5-1	1/31/2019	<59	**100 J**	**140 J**	<83	<55	<140	<170	**196**	<200	<110	<95	**85 J**	<170	**87 J**	<87	<140	**77 J**	**110 J**	**620**	**860**
DG-Y15	4	3.5-4	DG-Y15S-3.5-4	1/31/2019	<7.3	**16 J**	**20 J**	**14 J**	<6.8 UJ	<17	<21	**28**	<24	<14	<12	**13 J**	<21	**12 J**	<11	<17	**13 J**	**18 J**	**180**	**270**
DG-Y15 (D)	4	3.5-4	DG-Y15 (D)S-3.5-4	1/31/2019	<7.5	**20 J**	**29 J**	**16 J**	**9.3 J**	<17	<21	**33**	<25	<14	<12	**13 J**	<21	**18 J**	<11	<17	**16 J**	**26 J**	**120**	**170**
DG-Y15	4	7.5-8	DG-Y15S-7.5-8	1/31/2019	<59	**170 J+**	**250 J+**	<83	**280 J+**	<140	<170	**277**	**2,600 J+**	**1,000 J+**	**400 J+**	**260 J+**	<170	**290 J+**	**820 J+**	**1,300 J+**	**990 J+**	**830 J+**	**3,600**	**1,600**
DG-Y19	4	0.5-1	DG-Y19S-0.5-1	1/28/2019	<150	**500 U**	**500 U**	<210	<140	<350	<420	**755**	<500	<280	<240	<200	<430	<140	<220	<350	<180	**500 U**	**1,000**	**6,400**
DG-Y19	4	3.5-4	DG-Y19S-3.5-4	1/28/2019	**50**	**69**	**140**	**52**	**56**	<33	**49**	**110**	**53 J**	<27	**25 J**	**42 J**	**51**	**74**	<21	**36 J**	**68**	**97**	**82**	**320**
DG-Y19	4	7.5-8	DG-Y19S-7.5-8	1/28/2019	<1.4	**4.8 U**	**4.8 U**	**4.8 U**	<1.3	<3.4	<4.0	**7**	<4.8	<2.7	<2.3	<1.9	<4.1	**4.8 U**	<2.1	<3.4	<1.7	**5**	**5.5**	<9.8
DG-Z13	4	0.5-1	DG-Z13S-0.5-1	1/28/2019	<15	**49 U**	**32 J**	**49 U**	<14	<35	<42	**73**	**110**	<28	<24	**29 J**	<43	**21 J**	<22	**37 J**	**86**	**40 J**	**1,000**	**200 J**
DG-Z13	4	3.5-4	DG-Z13S-3.5-4	1/28/2019	<7.3	**24 U**	**40**	**24 U**	**21 J**	<17	<21	**38**	**150**	<14	**12 J**	**25**	**21 J**	**20 J**	**37**	**35**	**54**	**36**	**290**	**280**
DG-Z17	4	0.5-1	DG-Z17S-0.5-1	1/28/2019	<74	**350 J**	**250 U**	**250 U**	<69	<170	<210	**477**	<250	<140	<120	<99	<210	**250 U**	<110	<170	<89	**250 U**	**400**	**1,200**
DG-Z17 (D)	4	0.5-1	DG-Z17 (D)S-0.5-1	1/28/2019	<30	**99 J**	**110**	**98 U**	**40 J**	<69	<83	**151**	<98	<55	<47	**52 J**	**110**	**98 U**	<43	<69	**43 J**	**110**	**590**	**1,300**
DG-Z17	4	3.5-4	DG-Z17S-3.5-4	1/28/2019	<150	**500 U**	**500 U**	**500 U**	<140	<350	<420	**759**	<500	<280	<240	<200	<430	<140	<220	<350	<180	<170	**1,300**	**4,800**
DG-Z17	4	7.5-8	DG-Z17S-7.5-8	1/28/2019	<71	**240 U**	**240 U**	**240 U**	<67	<170	<200	**365**	**390 J**	**350**	**130 J**	**190 J**	<200	**240 U**	<100	<170	**550**	**290**	**1,800**	**990**
DG-AA11	4	0.5-1	DG-AA11S-0.5-1	1/29/2019	**42**	**74**	**63**	**25**	**35**	<17	**42**	**97**	<24	<14	<12	**33**	**64**	**140**	<11	<17	<8.8	**190**	**310**	**290**

Table 3: Polynuclear Aromatic Hydrocarbons and TPH as Diesel and Motor Oil Concentrations in Soil
Brisbane Baylands OU-2
Brisbane, California

Sample Location	Investigation Zone	Depth Range (ft bgs)	Sample Name	Collection Date	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Chrysene	Dibenzo(a,h)anthracene	Indeno(1,2,3-cd)pyrene	Benzo(a)pyrene Equivalent Total PAHs[4]	2-Methylnaphthalene	Acenaphthene	Acenaphthylene	Anthracene	Benzo(g,h,i)perylene	Fluoranthene	Fluorene	Naphthalene	Phenanthrene	Pyrene	TPH-Diesel (C10-C28)	TPH-Motor Oil (C24-C36)
Direct Exposure Human Health Risk Level Residential Soil Exposure ESL [1]					1.1E+03	1.1E+02	1.1E+03	1.1E+04	1.1E+05	1.1E+02	1.1E+03	--	2.4E+05	3.6E+06	--	1.8E+07	--	2.4E+06	2.4E+06	3.8E+03	--	1.8E+06	2.6E+02	1.2E+04
Leaching to Groundwater Levels Non-drinking Water ESL [2]					1.0E+04	5.7E+03	7.5E+04	3.9E+04	1.0E+04	3.9E+05	3.2E+04	--	8.8E+02	1.2E+04	6.4E+03	1.9E+03	2.7E+04	8.6E+04	6.0E+03	1.2E+03	1.1E+04	4.5E+04	7.3E+03	--
Regional Background [3]					--	--	--	--	--	--	--	9.0E+02	--	--	--	--	--	--	--	--	--	--	--	--
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	µg/kg	µg/kg	µg/kg	mg/kg	mg/kg
DG-AA11	4	3.5-4	DG-AA11S-3.5-4	1/29/2019	<37	**54 J**	**53 J**	**120 U**	<34	<85	<100	**110**	<120	**220**	**73 J**	**110 J**	<100	**51 J**	**230**	**90 J**	**290**	**110 J**	**1,400**	**270**
DG-AA15	4	0.5-1	DG-AA15S-0.5-1	1/22/2019	<59	**130 J**	**160 J**	**200 UJ**	<55 UJ	<140 UJ	<170 UJ	**229**	<200	<110	<95	<79	<170 UJ	**78 J**	<87	<140	<71	**130 J**	**1,400**	**3,100**
DG-AA19	4	0.5-1	DG-AA19S-0.5-1	1/24/2019	<40	<40	<40	<40	**180 J**	<40	<40	**46**	<40	<40	<40	<40	**59 J**	**50 J**	<40	<40	**50 J**	**65 J**	**350**	**520**
DG-AA19	4	3.5-4	DG-AA19S-3.5-4	1/24/2019	**100 J**	**230**	**270**	**77 J**	**170 J**	<31	**330**	**316**	<31	<31	<31	<31	**430**	**270**	<31	<31	**140 J**	**320**	**55**	**110**
DG-AA19	4	8.5-9	DG-AA19S-8.5-9	1/24/2019	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0	**9**	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0	**10 J**	<8.0	**5.9**	**3.5 J**
DG-AB13	4	0.5-1	DG-AB13S-0.5-1	1/22/2019	<35	**120 U**	**140**	**120 U**	**71 J**	<83	<99	**183**	<120	<66	<57	**48 J**	**110 J**	**57 J**	<52	<83	**81 J**	**110 J**	**610**	**1,300**
DG-AB13	4	3.5-4	DG-AB13S-3.5-4	1/22/2019	**1.8 J**	**4.4 J**	**5.3**	**4.8 U**	**3.3 J**	<3.4	<4.0	**7**	<4.8	<2.7	<2.3	**3.0 J**	**5.8 J**	**4.6 J**	<2.1	<3.4	**4.7 J**	**7.5**	**54**	**120**
DG-AB13 (D)	4	3.5-4	DG-AB13 (D)S-3.5-4	1/22/2019	**3.5 J**	**6.2 J**	**6.9**	**4.8 U**	**4.4 J**	<3.3	<4.0	**9**	<4.8	<2.7	<2.3	**2.6 J**	**4.3 J**	**5.6 J**	<2.1	<3.3	**4.5 J**	**8.8**	**35**	**95**
DG-AB13	4	13.5-14	DG-AB13S-13.5-14	1/22/2019	**19,000**	**14,000**	**8,400 J**	**10,000 U**	**31,000**	<7,000	<8,400	**20,791**	**76,000**	**25,000**	**6,200 J**	**32,000**	<8,600	**10,000**	**33,000**	**13,000**	**100,000**	**63,000**	**94,000**	**86,000**
DG-AC11	4	0.5-1	DG-AC11S-0.5-1	1/29/2019	<59 U	**110 J**	**100 J**	**200 UJ**	<55 U	<140 UJ	<160 UJ	**203**	<200 U	**130 J**	<94	**140 J**	<170 UJ	**57 J**	<86	<140 U	**190 J**	**190 J**	**5,000**	**910 J**
DG-AC11	4	3.5-4	DG-AC11S-3.5-4	1/29/2019	**350 J**	**1,200**	**840 J**	**990 U**	**650 J**	<690	<830	**1716**	<990	**730 J**	<480	**610 J**	**900 J**	**380 J**	**610 J**	<690	**420 J**	**3,200**	**5,400**	**9,500**
DG-AC11	4	8.5-9	DG-AC11S-8.5-9	1/29/2019	<30	**95 J**	**100**	**98 U**	**57 J**	<69	<83	**146**	<98	<55	<47	**43 J**	**89 J**	**87 J**	<43	<69	**85 J**	**190**	**770**	**1,100**
DG-AD13	4	0.5-1	DG-AD13S-0.5-1	2/1/2019	**63 J**	**110**	**120**	**96 U**	**160**	<67	<81	**167**	<96	<54	<46	**55 J**	**110**	**77 J**	<42	<67	**140**	**190**	**390**	**540**
DG-AD13	4	3.5-4	DG-AD13S-3.5-4	2/1/2019	<150	**490**	**490 U**	<210	**490**	<340	<410	**739**	<490	<270	<230	**200 J**	**500**	**190 J**	<210	<340	**280 J**	**670**	**2,400**	**5,900**
DG-AD13	4	7.5-8	DG-AD13S-7.5-8	2/1/2019	**1,100 J**	**1,000 J**	**980 UJ**	**980 U**	**1,700 J**	<680	<820	**1601**	**2,400 J**	**860 J**	<470 UJ	**1,500 J**	<840 UJ	**810 J**	**1,700 J**	**1,100 J**	**3,800 J**	**4,200 J**	**8,400 J**	**10,000 J**
DG-AD13 (D)	4	7.5-8	DG-AD13 (D)S-7.5-8	2/1/2019	**2,400 J**	**2,200 J**	**1,500 J**	**1,200 U**	**4,400 J**	<860	<1,000	**3086**	**16,000 J**	**4,000 J**	**860 J**	**3,500 J**	**1,200 J**	**2,000 J**	**5,700 J**	**6,900 J**	**13,000 J**	**9,800 J**	**15,000 J**	**19,000 J**
DG-AE11	4	0.5-1	DG-AE11S-0.5-1	1/21/2019	**41**	**44**	**53**	**25**	**42**	<17	<20	**63**	<24	**28**	<11	**18 J**	**24**	**65**	**21 J**	<17	**73**	**71**	**170**	**130**
DG-AE11	4	3.5-4	DG-AE11S-3.5-4	1/21/2019	**46 J**	**75 J**	**61 J**	<39	**85 J**	<66	<79	**123**	<94	<53	<45	<38	<81	**52 J**	<41	<66	**56 J**	**320**	**390**	**900**
DG-AF13	4	0.5-1	DG-AF13S-0.5-1	11/21/2018	**1,300**	**740**	**580**	<41	**2,900**	**110**	**84 J**	**1,050**	**1,700**	**2,700**	**580**	**2,900**	**170**	**1,300**	**4,300**	**660**	**13,000**	**4,700**	**15,000**	**17,000**
DG-AF13	4	0.5-1	DG-AF13S-0.5-1	1/28/2019	<300	**980 U**	**670 J**	**980 U**	<280	<690	<830	**1,458**	<980	<550	<470	<390	<850	<280	<430	<690	<350	**1,000**	**1,500**	**3,700**
DG-AF13	4	3.5-4	DG-AF13S-3.5-4	11/21/2018	**1,200**	**740**	**600**	<100	**2,600**	<170	<200	**1,018**	**1,000**	**2,900**	**590**	**2,600**	**220 J**	**1,100**	**4,000**	**930**	**9,800**	**4,100**	**52,000**	**63,000**
DG-AF13	4	3.5-4	DG-AF13S-3.5-4	1/28/2019	**24**	**39**	**52**	**21**	**24**	**8.2 J**	**13**	**56**	<9.8	<5.5	<4.7	**6.2 J**	**15**	**31**	<4.3	<6.9	**16**	**52**	**22**	**52**
DG-AF13	4	7-7.5	DG-AF13S-7-7.5	11/21/2018	**36**	**36**	**51**	**19**	**64**	**5.5**	**17**	**52**	**96**	**130**	**17**	**66**	**22**	**180**	**88**	**500**	**250**	**160**	**190**	**140**
DG-AG11	4	0.5-1	DG-AG11S-0.5-1	1/21/2019	**75 J**	**180**	**200**	**74 J**	**87 J**	<68	<81	**246**	<97	<54	<46	<39	**150**	**83 J**	<43	<68	**39 J**	**160**	**420**	**1,000**
DG-AG11	4	3.5-4	DG-AG11S-3.5-4	1/21/2019	<15	**31 J**	**39 J**	<20	**32 J**	<34	<41	**55**	<49	<27	<23	<20	<42	**31 J**	<21	<34	**23 J**	**50**	**180**	**410**
DG-AG11	4	9.5-10	DG-AG11S-9.5-10	1/21/2019	**790**	**510**	**260 J**	<200	**1,400**	<340	<400	**807**	**1,500**	**1,900**	**370 J**	**1,700**	<410	**500**	**3,500**	**1,500**	**7,500**	**4,100**	**9,500**	**8,700**
DG-AH13	4	0.5-1	DG-AH13S-0.5-1	1/29/2019	<74	<94	<100	<100	<69	<170	<210	**152**	<250	<140	<120	<98	<210	<69	<110	<170	<89	<84	**670**	**2,200**
DG-AH13	4	3.5-4	DG-AH13S-3.5-4	1/29/2019	<150	<190	<210	<210	<140	<340	<410	**305**	<490	<280	<240	<200	<420	<140	<220	<340	<180	<170	**2,200**	**4,300**
DG-AH13	4	7.5-8	DG-AH13S-7.5-8	1/29/2019	<600	**2,000 U**	**1,600 J**	<830	**3,800**	<1,400	<1,700	**2,983**	<2,000	<1,100	**1,000 J**	**4,700**	<1,700	**2,100**	**5,300**	<1,400	**2,300**	**7,100**	**20,000**	**18,000**
DG-AI11	4	0.5-1	DG-AI11S-0.5-1	1/21/2019	<3.0	<3.8	<4.2	<4.2	<2.8	<6.9	<8.3	**6**	<9.9	<5.5	<4.8	<4.0	<8.5	<2.8	<4.4	<6.9	<3.6	<3.4	**24**	**78**
DG-AI11 (D)	4	0.5-1	DG-AI11 (D)S-0.5-1	1/21/2019	<2.8	**7.1 J**	**6.2 J**	**4.9 J**	**3.0 J**	<6.6	<7.9	**12**	<9.4	<5.3	<4.5	**4.1 J**	**11 J**	**3.3 J**	<4.2	<6.6	**3.7 J**	**7.9 J**	**47 J**	**160 J**
DG-AI11	4	3.5-4	DG-AI11S-3.5-4	1/21/2019	**330**	**440**	**200 J**	<100	**740 J**	<170 UJ	<210	**590**	<250	**520**	<120	**650**	**240 J**	**490 J**	**470**	**180 J**	**1,100 J**	**2,200 J**	**10,000**	**14,000**
DG-AI11	4	9.5-10	DG-AI11S-9.5-10	1/21/2019	**1,900**	**850**	**280 J**	<210	**3,400**	<340	<410	**1,263**	**16,000**	**2,600**	**410 J**	**2,800**	**440 J**	**800**	**3,200**	**1,200**	**11,000**	**6,800**	**5,200**	**5,100**
DG-AJ13	4	0.5-1	DG-AJ13S-0.5-1	1/29/2019	<74	**250 U**	**200 J**	**250 U**	<69	<170	<210	**372**	<250	<140	<120	<99	**250**	<69	<110	<170	<89	**130 J**	**3,300**	**8,200**
DG-AJ13	4	3.5-4	DG-AJ13S-3.5-4	1/29/2019	<7.3	**24 U**	**15 J**	**24 U**	**7.0 J**	<17	<21	**36**	<24	<14	<12	<9.8	<21	**9.5 J**	<11	<17	<8.8	**20 J**	**130**	**280**
DG-AK11	4	0.5-1	DG-AK11S-0.5-1	1/22/2019	**66 J**	**200 U**	**110 J**	**200 U**	**180 J**	<140	<170	**298**	**550**	<110	<94	**210**	<170	**82 J**	**160 J**	<140	**590**	**390**	**460**	**510**
DG-AK11	4	3.5-4	DG-AK11S-3.5-4	1/22/2019	**3,300 J**	**4,700 U**	**3,800 J**	<2,000	**6,300**	<3,300	<4,000	**7,276**	<4,700	<2,700	<2,300	**5,600**	<4,100	**2,700 J**	**3,000 J**	<3,300	**6,500**	**16,000**	**34,000**	**38,000**
DG-AL13	4	0.5-1	DG-AL13S-0.5-1	1/29/2019	**20**	**26**	**43**	**18**	**17**	**7.5 J**	**13**	**41**	<9.8	<5.5	**7.0 J**	**8.6 J**	**18**	**30**	<4.3	<6.9	**9.1 J**	**39**	**60**	**170**
DG-AL13	4	3.5-4	DG-AL13S-3.5-4	1/29/2019	<1.5	**5.0 U**	**4.7 J**	**5.0 U**	**2.5 J**	<3.5	<4.2	**8**	<5.0	<2.8	<2.4	**2.2 J**	**5.1**	**3.8 J**	<2.2	<3.5	<1.8	**6.3**	**6.3**	**17 J**
DG-AM11	4	0.5-1	DG-AM11S-0.5-1	1/22/2019	<1.5	**3.1 J**	**2.6 J**	**4.9 U**	<1.4	<3.4	<4.1	**5**	<4.9	<2.8	<2.4	<2.0	**4.2 J**	**1.5 J**	<2.2	<3.4	**2.4 J**	**3.9 J**	**22**	**79**
DG-AM11	4	3.5-4	DG-AM11S-3.5-4	1/22/2019	<150	<190	<210	<210	<140	<350	<420	**310**	<500	<280	<240	<200	<430	<140	<220	<350	<180	**200 J**	**1,600**	**3,300**
DG-AN13	4	0.5-1	DG-AN13S-0.5-1	1/31/2019	<730	<930	<1,000	<1,000	<690	<1,700	<2,100	**1,512**	<2,400	<1,400	<1,200	<980	<2,100	**700 J**	<1,100	<1,700	<880	**1,300 J**	**3,400 J-**	**6,700 J-**
DG-AN13	4	3.5-4	DG-AN13S-3.5-4	1/31/2019	<1.5	**6.4**	**9.5**	<2.1	**3.6 J**	<3.4	**4.7 J**	**10**	<4.9	<2.8	<2.4	**2.0 J**	**5.9**	**9.5**	<2.2	<3.4	**4.7 J**	**13**	**26**	**33**
DG-AN13	4	9.5-10	DG-AN13S-9.5-10	1/31/2019	<15	**38 J+**	**67 J+**	**34 J+**	**36 J**	<34 UJ	<41 UJ	**65**	**280**	**88**	**120**	**53**	<42 UJ	**120**	**34 J**	**4,900**	**330**	**160**	**54**	**31**
DG-AO11	5	0.5-1	DG-AO11S-0.5-1	1/22/2019	<73	**230 J**	**250**	**240 U**	**69 J**	<170	<200	**356**	<240	<140	<120	<97	<210	**120 J**	<110	<170	<87	**240**	**370**	**970**

Table 3: Polynuclear Aromatic Hydrocarbons and TPH as Diesel and Motor Oil Concentrations in Soil
Brisbane Baylands OU-2
Brisbane, California

Sample Location	Investigation Zone	Depth Range (ft bgs)	Sample Name	Collection Date	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Chrysene	Dibenzo(a,h)anthracene	Indeno(1,2,3-cd)pyrene	Benzo(a)pyrene Equivalent Total PAHs [4]	2-Methylnaphthalene	Acenaphthene	Acenaphthylene	Anthracene	Benzo(g,h,i)perylene	Fluoranthene	Fluorene	Naphthalene	Phenanthrene	Pyrene	TPH-Diesel (C10-C28)	TPH-Motor Oil (C24-C36)
Direct Exposure Human Health Risk Level Residential Soil Exposure ESL [1]					1.1E+03	1.1E+02	1.1E+03	1.1E+04	1.1E+05	1.1E+02	1.1E+03	--	2.4E+05	3.6E+06	--	1.8E+07	--	2.4E+06	2.4E+06	3.8E+03	--	1.8E+06	2.6E+02	1.2E+04
Leaching to Groundwater Levels Non-drinking Water ESL [2]					1.0E+04	5.7E+03	7.5E+04	3.9E+04	1.0E+04	3.9E+05	3.2E+04	--	8.8E+02	1.2E+04	6.4E+03	1.9E+03	2.7E+04	8.6E+04	6.0E+03	1.2E+03	1.1E+04	4.5E+04	7.3E+03	--
Regional Background [3]					--	--	--	--	--	--	--	9.0E+02	--	--	--	--	--	--	--	--	--	--	--	--
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	µg/kg	µg/kg	µg/kg	mg/kg	mg/kg
DG-AO11	5	3.5-4	DG-AO11S-3.5-4	1/22/2019	**240 J**	**500 UJ**	**390 J**	<210 UJ	**660**	<350 UJ	<420 UJ	**761**	<500	<280	<240	**720**	<430 UJ	**340 J**	<220	<350	<180	**1,700**	**14,000**	**15,000**
DG-AQ11	5	0.5-1	DG-AQ11S-0.5-1	1/30/2019	**13 J**	**16 J**	**28 J**	**9.0 J**	**21 J**	<3.9	**12 J**	**23**	<3.9	<3.9	**4.3 J**	**9.2 J**	**17 J**	**24 J**	<3.9	**6.1 J**	**17 J**	**25 J**	**48**	**91**
DG-AQ11	5	3.5-4	DG-AQ11S-3.5-4	1/30/2019	<4.0	<4.0	<4.0	<4.0	**4.6 J**	<4.0	<4.0	**5**	<4.0	<4.0	<4.0	<4.0	**4.7 J**	<4.0	<4.0	**6.1 J**	**5.9 J**	<4.0	**6.5**	**7.6**
DG-AT9	5	0.5-1	DG-AT9S-0.5-1	1/30/2019	**36**	**47**	**79**	**24 J**	**48**	**8.7 J**	**36**	**71**	**16 J**	<3.9	**12 J**	**25 J**	**42**	**55**	<3.9	**13 J**	**36**	**59**	**17**	**25**
DG-AT9	5	3.5-4	DG-AT9S-3.5-4	1/30/2019	<4.0	<4.0	**6.8 J**	<4.0	**7.0 J**	<4.0	<4.0	**5**	<4.0	<4.0	<4.0	<4.0	<4.0	**4.3 J**	<4.0	**6.6 J**	**6.3 J**	<4.0	**8.4**	**7.5**
DG-AV9	5	0.5-1	DG-AV9S-0.5-1	2/1/2019	**170**	**230**	**330**	**110**	**220**	**54 J**	**120 J**	**347**	**60 J**	**40 J**	**30 J**	**74**	**140 J**	**240**	**54**	**110**	**230 J**	**370**	**660**	**840**
DG-AV9	5	3.5-4	DG-AV9S-3.5-4	2/1/2019	**27**	**34**	**62**	**24**	**40**	**14 J**	**25**	**60**	**22 J**	<11	**14 J**	**15 J**	**29**	**62**	<8.3	**57**	**60**	**54**	**76**	**170**
DG-AV9	5	8.5-9	DG-AV9S-8.5-9	2/1/2019	**12**	**9.8 U**	**20**	**9.8 U**	**23**	<6.9	<8.2	**17**	**37**	**6.6 J**	**6.3 J**	**10**	<8.4	**39**	**13**	**61**	**69**	**45**	**160**	**220**
DG-AX9	5	0.5-1	DG-AX9S-0.5-1	1/23/2019	**120**	**200**	**220**	**63**	**150**	**19 J**	**130**	**267**	**32 J**	**17 J**	**30 J**	**30 J**	**160**	**290**	**26 J**	**22 J**	**180**	**360**	**34**	**66**
DG-AX9	5	3.5-4	DG-AX9S-3.5-4	1/23/2019	**500**	**830**	**790**	**290**	**690**	**73 J**	**720**	**1,108**	**45 J**	**150 J**	**130 J**	**150 J**	**810**	**1,500**	**82 J**	**96 J**	**1,000**	**1,800**	**590**	**930**
DG-AX9	5	9.5-10	DG-AX9S-9.5-10	1/23/2019	**5.9 J**	**8.7 J**	**12 J**	<3.9	**11 J**	<3.9	**9.6 J**	**13**	<3.9	<3.9	<3.9	<3.9	**10 J**	**19 J**	<3.9	**5.7 J**	**12 J**	**21 J**	**5.7**	**6.7**
DG-AB17	6	0.5-1	DG-AB17S-0.5-1	1/24/2019	**47 J**	<40	**46 J**	<40	**44 J**	<40	<40	**52**	<40	<40	<40	<40	**80 J**	**78 J**	<40	**120 J**	<40	**92 J**	**610**	**370**
DG-AB17	6	3.5-4	DG-AB17S-3.5-4	1/24/2019	**570 J**	**1,100 J**	**1,200**	**300 J**	**590 J**	<160	**1,100 J**	**1,471**	<160	<160	**250 J**	<160	**1,000 J**	**1,300**	<160	<160	**200 J**	**1,800**	**3,100**	**1,000**
DG-AC15	6	0.5-1	DG-AC15S-0.5-1	1/31/2019	<150	<190	<210	<210	<140	<340	<410	**305**	<490	<270	<240	<200	<420	**170 J**	<220	<340	**330 J**	**260 J**	**330 J**	**490 J**
DG-AC15 (D)	6	0.5-1	DG-AC15 (D)S-0.5-1	1/31/2019	<2.9	**6.2 J**	**9.6 J**	**4.9 J**	**5.0 J**	<6.9	<8.2	**11**	**10 J**	**48**	<4.7	**16**	<8.4	**16 J**	**50**	**9.8**	**79 J**	**15 J**	**910 J**	**1,100 J**
DG-AC15	6	3.5-4	DG-AC15S-3.5-4	1/31/2019	**2,000**	**2,100**	**3,200**	**1,200**	**2,400**	**250**	**650**	**2,949**	<98	**62 J**	**130**	**2,400**	**610**	**6,600**	**96 J**	**73 J**	**240**	**6,100**	**44 B**	**38**
DG-AC15	6	7.5-8	DG-AC15S-7.5-8	1/31/2019	**700**	**710**	**830**	**360 J**	**870**	<350	<420	**1,063**	**12,000**	**1,100**	**410 J**	**690**	<430	**1,400**	**2,200**	**6,500**	**4,200**	**2,800**	**3,800**	**2,300**
DG-AD17	6	0.5-1	DG-AD17S-0.5-1	1/24/2019	<16	<16	<16	<16	**32 J**	<16	<16	**19**	**18 J**	<16	<16	<16	<16	**22 J**	<16	<16	**27 J**	**34 J**	**170**	**300**
DG-AD17	6	3.5-4	DG-AD17S-3.5-4	1/24/2019	**86 J**	**140 J**	**190 J**	**51 J**	**99 J**	**33 J**	**140 J**	**215**	<7.8	**69**	<7.8	**27 J**	**95**	**170 J**	**16 J**	<7.8	**15 J**	**130 J**	**22 J**	**7.4 J**
DG-AD17	6	7-7.5	DG-AD17S-7-7.5	1/24/2019	**12 J**	**8.7 J**	**14 J**	**5.5 J**	**11 J**	<4.0	<4.0	**14**	<4.0	**13 J**	<4.0	**6.6 J**	**5.6 J**	**88**	**6.9 J**	<4.0	**14 J**	**51**	**13**	**13**
DG-AG15	6	0.5-1	DG-AG15S-0.5-1	1/24/2019	<16	<16	<16	<16	<16	<16	<16	**18**	<16	<16	<16	<16	**20 J**	<16	<16	<16	<16	<16	**5.7**	**11**
DG-AG15	6	3.5-4	DG-AG15S-3.5-4	1/24/2019	**47 J**	**43 J**	**59 J**	<39	**59 J**	<39	<39	**75**	<39	<39	<39	<39	**40 J**	**67 J**	<39	<39	**40 J**	**80 J**	**99**	**39**
DG-AG15	6	8.5-9	DG-AG15S-8.5-9	1/24/2019	**76 J**	**140**	**170**	**39 J**	**98 J**	**16 J**	**150**	**196**	<16	<16	<16	**20 J**	**140**	**160**	<16	<16	**47 J**	**150**	**27 J**	**5.5**
DG-AH17	6	0.5-1	DG-AH17S-0.5-1	1/24/2019	**5.3 J**	**6.9 J**	**12 J**	**4.7 J**	<4.0	<4.0	<4.0	**11**	<4.0	<4.0	<4.0	<4.0	<4.0	**9.0 J**	<4.0	<4.0	**5.6 J**	**11 J**	**3.6 J**	**5.2**
DG-AI15	6	0.5-1	DG-AI15S-0.5-1	1/24/2019	<79	<79	<79	<79	**170 J**	<79	<79	**91**	<79	<79	<79	<79	<79	<79	<79	<79	<79	**110 J**	**370**	**150**
DG-AI15	6	3.5-4	DG-AI15S-3.5-4	1/24/2019	<3.9	<3.9	<3.9 UJ	<3.9	<3.9 UJ	<3.9	<3.9	**5**	<3.9	<3.9	<3.9	<3.9	<3.9	<3.9 UJ	<3.9	<3.9	<3.9	<3.9 UJ	**11**	**12**
DG-AI15 (D)	6	3.5-4	DG-AI15 (D)S-3.5-4	1/24/2019	<3.9	<3.9	**5.3 J**	<3.9	**4.9 J**	<3.9	<3.9	**5**	<3.9	<3.9	<3.9	<3.9	<3.9	**4.9 J**	<3.9	<3.9	<3.9	**8.2 J**	**15**	**17**
DG-AJ17	6	0.5-1	DG-AJ17S-0.5-1	1/24/2019	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	**5**	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	**5.4**	**11**
DG-AJ17	6	3.5-4	DG-AJ17S-3.5-4	1/24/2019	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	**5**	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<2.5	**3.1 J**
DG-AJ17	6	9.5-10	DG-AJ17S-9.5-10	1/24/2019	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	**5**	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<2.5	<2.5
DG-AK15	6	0.5-1	DG-AK15S-0.5-1	1/23/2019	**17 J**	**20 J**	**32**	**9.2 J**	**30**	**4.5 J**	**12 J**	**31**	**9.6 J**	<3.9	**4.0 J**	**3.9 J**	**12 J**	**35**	<3.9	**11 J**	**61**	**36**	**14**	**20**
DG-AK15	6	3.5-4	DG-AK15S-3.5-4	1/23/2019	**230 J**	**140 J**	**390 J**	**83 J**	**600 J+**	<78	<78	**246**	<78	<78	**190 J**	**89 J**	<78	**590 J+**	<78	<78	**150 J**	**850 J+**	**140**	**93**
DG-AM15	6	0.5-1	DG-AM15S-0.5-1	1/23/2019	**9.1 J**	**8.4 J**	**16 J**	**4.6 J**	**12 J**	<4.0	**4.7 J**	**13**	**8.4 J**	<4.0	<4.0	<4.0	**4.9 J**	**16 J**	<4.0	**11 J**	**15 J**	**15 J**	**8.3**	**13**
DG-AM15	6	3.5-4	DG-AM15S-3.5-4	1/23/2019	**39**	**49**	**62**	**21 J**	**48**	**7.4 J**	**25 J**	**69**	<3.9	<3.9	**7.5 J**	**9.8 J**	**24 J**	**54**	<3.9	<3.9	**23 J**	**67**	**16**	**18**
DG-AM15	6	9.5-10	DG-AM15S-9.5-10	1/23/2019	<3.9 UJ	<3.9	**4.2 J**	<3.9	**6.7 J**	<3.9	<3.9	**5**	<3.9	<3.9	<3.9	<3.9	<3.9	**6.4 J**	<3.9	<3.9	**4.1 J**	**20 J**	**20 J**	**14 J**
DG-AM15 (D)	6	9.5-10	DG-AM15 (D)S-9.5-10	1/23/2019	**4.1 J**	<3.9	**4.8 J**	<3.9	**5.2 J**	<3.9	<3.9	**5**	<3.9	<3.9	<3.9	<3.9	<3.9	**7.4 J**	<3.9	<3.9	<3.9 UJ	**18 J**	**5.1 J**	**4.1 J**
DG-AP13	6	0.5-1	DG-AP13S-0.5-1	1/23/2019	**23 J**	**27 J**	**34 J**	**10 J**	**39 J**	<8.0	**18 J**	**39**	<8.0	<8.0	<8.0	<8.0	**23 J**	**63 J**	<8.0	<8.0	**53 J**	**78 J**	**130 J**	**270 J**
DG-AP13 (D)	6	0.5-1	DG-AP13 (D)S-0.5-1	1/23/2019	**11 J**	**15 J**	**20 J**	**5.8 J**	**17 J**	<3.9	**9.5 J**	**21**	<3.9	<3.9	<3.9	<3.9	**11 J**	**29 J**	<3.9	**4.0 J**	**17 J**	**36 J**	**40 J**	**69 J**
DG-AP13	6	3.5-4	DG-AP13S-3.5-4	1/23/2019	<4.0	<4.0	**4.5 J**	<4.0	**5.2 J**	<4.0	<4.0	**5**	<4.0	<4.0	<4.0	<4.0	<4.0	**8.1 J**	<4.0	**6.7 J**	**5.9 J**	**8.9 J**	**11**	**17**
DG-AP13	6	9.5-10	DG-AP13S-9.5-10	1/23/2019	<4.0	<4.0	<4.0	<4.0	**4.5 J**	<4.0	<4.0	**5**	<4.0	<4.0	<4.0	<4.0	<4.0	**5.2 J**	<4.0	**8.0 J**	**17 J**	<4.0	**10**	**8**
DG-AR13	6	0.5-1	DG-AR13S-0.5-1	1/23/2019	**110 J**	**180 J**	**210 J**	**66 J**	**140 J**	<40	**140 J**	**247**	<40	<40	<40	<40	**170 J**	**320**	<40	<40	**160 J**	**380**	**48 J**	**120**
DG-AR13	6	3.5-4	DG-AR13S-3.5-4	1/23/2019	**19 J**	**19 J**	**26 J**	**7.8 J**	**21 J**	**4.0 J**	**10 J**	**29**	<4.0	<4.0	<4.0	<4.0	**10 J**	**30**	<4.0	<4.0	**13 J**	**38**	**14**	**23**
DG-AR13	6	9.5-10	DG-AR13S-9.5-10	1/23/2019	<3.9	**5.2 J**	**16 J**	<3.9	**9.5 J**	<3.9	**17 J**	**11**	<3.9	<3.9	<3.9	<3.9	**20 J**	**9.3 J**	<3.9	**11 J**	**10 J**	**6.2 J**	**3.8 J**	**4.1 J**
DG-AS11	6	0.5-1	DG-AS11S-0.5-1	1/31/2019	<150	**460 J+**	**590 J+**	**490 U**	**190 J+**	<340	<410	**722**	<490	<280	<240	<200	**510 J+**	**400 J+**	<220	<340	**190 J+**	**460 J+**	**2,000**	**2,700**
DG-AS11	6	3.5-4	DG-AS11S-3.5-4	1/31/2019	**130**	**120**	**240**	**72**	**130**	**43 J**	**82**	**209**	<49	<27	<23	**29 J**	**90**	**220**	<21	**54**	**90**	**190**	**53**	**76**

Table 3: Polynuclear Aromatic Hydrocarbons and TPH as Diesel and Motor Oil Concentrations in Soil
Brisbane Baylands OU-2
Brisbane, California

Sample Location	Investigation Zone	Depth Range (ft bgs)	Sample Name	Collection Date	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Chrysene	Dibenzo(a,h)anthracene	Indeno(1,2,3-cd)pyrene	Benzo(a)pyrene Equivalent Total PAHs [4]	2-Methylnaphthalene	Acenaphthene	Acenaphthylene	Anthracene	Benzo(g,h,i)perylene	Fluoranthene	Fluorene	Naphthalene	Phenanthrene	Pyrene	TPH-Diesel (C10-C28)	TPH-Motor Oil (C24-C36)
Direct Exposure Human Health Risk Level Residential Soil Exposure ESL [1]					1.1E+03	1.1E+02	1.1E+03	1.1E+04	1.1E+05	1.1E+02	1.1E+03	--	2.4E+05	3.6E+06	--	1.8E+07	--	2.4E+06	2.4E+06	3.8E+03	--	1.8E+06	2.6E+02	1.2E+04
Leaching to Groundwater Levels Non-drinking Water ESL [2]					1.0E+04	5.7E+03	7.5E+04	3.9E+04	1.0E+04	3.9E+05	3.2E+04	--	8.8E+02	1.2E+04	6.4E+03	1.9E+03	2.7E+04	8.6E+04	6.0E+03	1.2E+03	1.1E+04	4.5E+04	7.3E+03	--
Regional Background [3]					--	--	--	--	--	--	--	9.0E+02	--	--	--	--	--	--	--	--	--	--	--	--
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	µg/kg	µg/kg	µg/kg	mg/kg	mg/kg
DG-AS11	6	7.5-8	DG-AS11S-7.5-8	1/31/2019	<1.5	**2.7 J**	**6**	**4.9 U**	**4.1 J**	<3.5	<4.2	**5**	<4.9	<2.8	<2.4	<2.0	<4.2	**6.1**	<2.2	**7.4**	**11**	**4.4 J**	**11**	**11**
DG-AT12	6	0.5-1	DG-AT12S-0.5-1	1/23/2019	**44 J**	**48 J**	**65**	**22 J**	**80**	**8.4 J**	**43 J**	**72**	**8.8 J**	<8.0	**8.8 J**	**11 J**	**52 J**	**99**	**11 J**	<8.0	**88**	**110**	**56**	**54**
DG-AT12	6	3.5-4	DG-AT12S-3.5-4	1/23/2019	**870**	**840**	**1,100**	**410**	**1,100**	**140**	**640**	**1,246**	**13 J**	**17 J**	**56 J**	**130**	**670**	**1,200**	**22 J**	**19 J**	**500**	**1,400**	**390**	**300**
DG-AT12	6	9.5-10	DG-AT12S-9.5-10	1/23/2019	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	**5**	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	**5.8**	**5.0 U**
DG-AU11	6	0.5-1	DG-AU11S-0.5-1	1/23/2019	**8.6 J**	**10 J**	**18 J**	**5.2 J**	**14 J**	<3.9	**6.5 J**	**15**	<3.9	<3.9	<3.9	<3.9	**7.8 J**	**16 J**	<3.9	<3.9	**7.9 J**	**17 J**	**33**	**83**
DG-AU11	6	3.5-4	DG-AU11S-3.5-4	1/23/2019	**280**	**240**	**400**	**160**	**360**	**33**	**130**	**356**	**6.8 J**	**12 J**	**43**	**42**	**100**	**380**	**13 J**	**10 J**	**160**	**340**	**26**	**39**
DG-AU11	6	9.5-10	DG-AU11S-9.5-10	1/23/2019	**110**	**120**	**170**	**64**	**130**	**25 J**	**84**	**182**	**4.6 J**	<4.0	<4.0	<4.0	**67**	**120**	<4.0	**36**	**47**	**120**	**16**	**9.3**
DG-AW11	6	0.5-1	DG-AW11S-0.5-1	1/23/2019	**27 J**	**39 J**	**47 J**	**15 J**	**41 J**	<7.9	**29 J**	**53**	<7.9	<7.9	<7.9	<7.9	**38 J**	**61**	<7.9	<7.9	**36 J**	**66**	**110**	**180**
DG-AW11	6	3.5-4	DG-AW11S-3.5-4	1/23/2019	<39	<39	**40 J**	<39	<39	<39	<39	**47**	<39	<39	<39	<39	<39	**45 J**	<39	<39 R	<39	**44 J**	**47**	**84**
DG-AW11	6	7.5-8	DG-AW11S-7.5-8	1/23/2019	<39 U	<39 U	<39 U	<39 U	**300**	<39 U	<39 U	**45**	<39 U	<39	<39 U	<39	<39 U	<39 U	<39 U	<39	<39	**150 J**	**1,600**	**1,700**

Table 3: Polynuclear Aromatic Hydrocarbons and TPH as Diesel and Motor Oil Concentrations in Soil
Brisbane Baylands OU-2
Brisbane, California

Notes:

1. San Francisco Bay RWQCB, 2019. Summary of Soil ESLs, Jan. 2019 (Rev. 1) - Direct Exposure Human Health Risk Levels (Table S-1) Res: Shallow Soil Exposure.
2. San Francisco Bay RWQCB, 2019. Summary of Soil ESLs, Jan. 2019 (Rev. 1) - Leaching to Groundwater Levels (Table S-3) Non-drinking Water.
3. For Benzo(a)pyrene Equivalent PAHs: DTSC, 2009. 95th percentile benzo(a)pyrene equivalent for ambient concentrations in northern California.
4. Total PAHs calculated based on the PEA Guidance Manual, Potency Equivalecy Factors for PAHs - Table 2-4.

- The lower RWQCB ESL is used as comparison criteria when available unless the regional background is higher, in which case regional background is used as the comparison criteria. The carcinogenic PAHs (benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, dibenzo(a,h)anthracene and indeno(1,2,3-cd)pyrene) were converted to total PAHs and that comparison criteria was used rather than individual ESLs.
- PAHs analyzed by USEPA Method 8270C SIM.
- TPH-diesel and TPH-motor oil analyzed by USEPA Method 8015B.
- Non-detect results are presented with "<" followed by the MDL.
- Results in bold font indicate a detection above the MDL.
- Gray shading indicates a detection above the comparison criteria.

Abbreviations and Symbols:

"J" - Analyte was detected but the associated numerical value is the approximate concentration.
"J+" - Analyte was detected but the associated numerical value is likely to be higher than the concentration of the analyte in the sample due to positive bias of associated QC or calibration data or attributable to matrix interference.
"J-" - Analyte was detected but the associated numerical value is likely to be lower than the concentration of the analyte in the sample due to negative bias of associated QC or calibration data or attributable to matrix interference.
"R" - The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.
"U" - Not detected at or above the reported result.
"UJ" - The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
"--" - Not Available
"<" - Non-detect result
(D) - Duplicate sample
ESL - Environmental Screening Level
ft bgs - Feet below ground surface
MDL - Method Detection Limit
mg/kg - milligram per kilogram
PAHs - Polynuclear Aromatic Hydrocarbons
QC - quality control
RWQCB - Regional Water Quality Control Board
SIM - selective ion monitoring
TPH - Total petroleum hydrocarbon
USEPA - United States Environmental Protection Agency

Table 4: Organochlorine Pesticides and Polychlorinated Biphenyls Concentrations in Soil
Brisbane Baylands OU-2
Brisbane, California

Sample Location	Investigation Zone	Depth Range (ft bgs)	Sample Name	Collection Date	4,4'-DDD	4,4'-DDE	4,4'-DDT	alpha-BHC	alpha-Chlordane	beta-BHC	Chlordane	Dieldrin	Endrin	Endrin aldehyde	Endrin ketone	gamma-BHC (Lindane)	gamma-Chlordane	PCB-1254 (Aroclor 1254)	PCB-1260 (Aroclor 1260)
Direct Exposure Human Health Risk Level Residential Soil Exposure ESL [1]					2.7E+03	1.8E+03	1.9E+03	--	--	--	4.8E+02	3.7E+01	2.1E+04	--	--	5.50E+02	--	2.30E+02	
Leaching to Groundwater Levels Non-drinking Water ESL [2]					6.5E+04	2.9E+04	5.6E+03	--	--	--	2.3E+04	6.3E+00	7.6E+00	--	--	7.4E+00	--	3.3E+05	
USEPA RSL for Resident Soil [3]					1.9E+03	2.0E+03	1.9E+03	8.6E+01	1.7E+03	3.0E+02	1.7E+03	3.4E+01	1.9E+04	--	--	5.7E+02	1.7E+03	2.4E+02	2.4E+02
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
DG-N1	1	0.5-1	DG-N1S-0.5-1	12/18/2018	<0.60	**2.7**	**10**	<0.54	**1.4 J**	<0.35	<2.8	<0.58	<0.45	<0.62	<0.32	<0.62	<0.45	<17	**50**
DG-N1	1	3.5-4	DG-N1S-3.5-4	12/18/2018	<0.61	<0.42	<0.41	<0.55	<0.40	<0.36	<2.9	<0.59	<0.46	<0.63	<0.33	<0.63	<0.46	<17	<17
DG-N5	1	0.5-1	DG-N5S-0.5-1	1/8/2019	<0.61	**0.83**	<0.41	<0.55	<0.40	<0.36	<3.2	<0.59	<0.46	<0.63	<0.33	<0.63	<0.46	<17	<17
DG-N5 (D)	1	0.5-1	DG-N5 (D)S-0.5-1	1/8/2019	<0.58	<0.40	<0.39	<0.52	<0.38	<0.34	<3.0	<0.56	<0.44	<0.60	<0.31	<0.60	<0.44	**200**	**160**
DG-N5 (D)	1	0.5-1	DG-N5 (D)S-0.5-1	1/24/2019	<1.5	<1.5	<1.5	<1.5	<2.0	<1.5	<9.9	<1.5	<1.5	<1.5	<2.0	<1.5	<1.5	<17	<17
DG-N5	1	3.5-4	DG-N5S-3.5-4	1/8/2019	<0.59	<0.41	<0.40	<0.54	<0.39	<0.35	<2.8	<0.57	<0.45	<0.61	<0.32	<0.61	<0.45	<17	<17
DG-O3	1	0.5-1	DG-O3S-0.5-1	12/18/2018	<0.60	<0.42	<0.41	<0.54	<0.40	<0.36	<3.2	<0.58	<0.46	<0.62	<0.33	<0.62	<0.46	<17	<17
DG-O3	1	3.5-4	DG-O3S-3.5-4	12/18/2018	<0.58	<0.40	<0.39	<0.52	<0.38	<0.34	<3.0	<0.56	<0.44	<0.60	<0.31	<0.60	<0.44	<17	<17
DG-P1	1	0.5-1	DG-P1S-0.5-1	11/21/2018	<0.58	<0.40	<0.39	<0.53	<0.38	<0.35	<3.1	<0.57	<0.44	<0.60	<0.32	<0.60	<0.44	<17	<17
DG-P1	1	3.5-4	DG-P1S-3.5-4	11/21/2018	<0.58	<0.40	<0.39	<0.52	<0.38	<0.34	<3.0	<0.56	<0.44	<0.60	<0.31	<0.60	<0.44	<17	<17
DG-P1 (D)	1	3.5-4	DG-P1 (D)S-3.5-4	11/21/2018	<0.59	<0.40	<0.39	<0.53	<0.39	<0.35	<3.1	<0.57	<0.44	<0.61	<0.32	<0.61	<0.44	<17	<17
DG-P5	1	0.5-1	DG-P5S-0.5-1	1/8/2019	<0.60	**0.88**	<0.40	<0.54	**1**	<0.35	<3.1	<0.58	<0.45	<0.62	<0.32	<0.62	<0.45	<17	**110**
DG-P5	1	3.5-4	DG-P5S-3.5-4	1/8/2019	<0.59	<0.41	<0.40	<0.54	<0.39	<0.35	<3.1	<0.57	<0.45	<0.61	<0.32	<0.61	<0.45	<17	<17
DG-Q3	1	0.5-1	DG-Q3S-0.5-1	12/18/2018	<0.60	<0.41	<0.40	<0.54	<0.39	<0.35	<2.8	<0.58	<0.45	<0.62	<0.32	<0.62	<0.45	<17	<17
DG-Q3	1	3.5-4	DG-Q3S-3.5-4	12/18/2018	<0.59	<0.41	<0.40	<0.53	<0.39	<0.35	<3.1	<0.57	<0.45	<0.61	<0.32	<0.61	<0.45	<17	<17
DG-Q7	1	0.5-1	DG-Q7S-0.5-1	1/8/2019	<0.60	<0.41	<0.40	<0.54	<0.39	<0.35	<3.1	<0.58	<0.45	<0.62	<0.32	<0.62	<0.45	<17	<17
DG-Q7	1	3.5-4	DG-Q7S-3.5-4	1/8/2019	<0.58	<0.40	<0.39	<0.52	<0.38	<0.34	<3.0	<0.56	<0.44	<0.60	<0.31	<0.60	<0.44	<17	<17
DG-Q7 (D)	1	3.5-4	DG-Q7 (D)S-3.5-4	1/8/2019	<0.58	**5.1**	<0.39	<0.53	**1.6**	<0.34	<3.1	<0.56	<0.44	<0.60	<0.32	<0.60	<0.44	<17	**520**
DG-R1	1	0.5-1	DG-R1S-0.5-1	12/17/2018	<0.58	<0.40	<0.39	<0.53	**1.2 J**	<0.34	<3.1	<0.56	<0.44	<0.60	<0.32	<0.60	<0.44	<17	**53**
DG-R1	1	3.5-4	DG-R1S-3.5-4	12/17/2018	<0.59	<0.41	<0.40	<0.53	<0.39	<0.35	<2.8	<0.57	<0.45	<0.61	<0.32	<0.61	<0.45	<17	<17
DG-R5	1	0.5-1	DG-R5S-0.5-1	1/29/2019	**1.5 J**	**18**	**17**	<0.54	<0.39	<0.35	<3.1	<0.58	<0.45	<0.62	<0.32	<0.62	<0.45	<17	**89**
DG-R5	1	3.5-4	DG-R5S-3.5-4	1/29/2019	<0.60	<0.41	<0.40	<0.54	<0.39	<0.35	<3.1	<0.58	<0.45	<0.62	<0.32	<0.62	<0.45	<17	<17
DG-R5 (D)	1	3.5-4	DG-R5 (D)S-3.5-4	1/29/2019	<0.60	<0.41	<0.40	<0.54	<0.39	<0.35	<3.2	<0.58	<0.45	<0.62	<0.33	<0.62	<0.45	<17	<17
DG-S3	1	0.5-1	DG-S3S-0.5-1	12/18/2018	<0.60	<0.41	<0.40	<0.54	<0.39	<0.35	<3.1	<0.58	<0.45	<0.62	<0.32	<0.62	<0.45	<17	<17
DG-S3	1	3.5-4	DG-S3S-3.5-4	12/18/2018	<1.2	<0.82	<0.80	<1.1	<0.78	<0.70	<6.2	<1.2	<0.90	<1.2	<0.64	<1.2	<0.90	<17	<17
DG-S7	1	0.5-1	DG-S7S-0.5-1	1/8/2019	<0.58	<0.40	<0.39	<0.53	<0.38	<0.34	<2.8	<0.56	<0.44	<0.60	<0.32	<0.60	<0.44	<17	**380**
DG-S7	1	3.5-4	DG-S7S-3.5-4	1/8/2019	<0.59	<0.41	<0.40	<0.54	<0.39	<0.35	<2.8	<0.57	<0.45	<0.61	<0.32	<0.61	<0.45	<170	**5300**
DG-T1	1	0.5-1	DG-T1S-0.5-1	12/17/2018	<0.60	<0.41	<0.40	<0.54	<0.39	<0.35	<2.8	<0.58	<0.45	<0.62	<0.32	<0.62	<0.45	<17	<17
DG-T1	1	3.5-4	DG-T1S-3.5-4	12/17/2018	<0.61	<0.42	<0.41	<0.55	<0.40	<0.36	<3.2	<0.59	<0.46	<0.63	<0.33	<0.63	<0.46	<17	<17
DG-T1 (D)	1	3.5-4	DG-T1 (D)S-3.5-4	12/17/2018	<0.61	<0.42	<0.41	<0.55	<0.40	<0.36	<2.9	<0.59	<0.46	<0.63	<0.33	<0.63	<0.46	<17	<17
DG-T5	1	0.5-1	DG-T5S-0.5-1	1/8/2019	<0.59	<0.41	<0.40	<0.53	<0.39	<0.35	<2.8	<0.57	<0.44	<0.61	<0.32	<0.61	<0.44	<17	<17
DG-T5	1	3.5-4	DG-T5S-3.5-4	1/8/2019	<0.60	<0.41	<0.40	<0.54	<0.39	<0.35	<2.8	<0.58	<0.45	<0.62	<0.32	<0.62	<0.45	<17	<17
DG-U3	1	0.5-1	DG-U3S-0.5-1	12/18/2018	<0.58	<0.40	**7.1 J**	<0.52	<0.38	<0.34	<3.0	<0.56	<0.44	<0.60	<0.31	<0.60	<0.44	<17	**33 J**
DG-U3	1	3.5-4	DG-U3S-3.5-4	12/18/2018	<0.60	<0.41	<0.40	<0.54	<0.39	<0.35	<2.8	<0.58	<0.45	<0.62	<0.32	<0.62	<0.45	<17	<17
DG-U7	1	0.5-1	DG-U7S-0.5-1	1/8/2019	<0.58	**0.8**	<0.39	<0.53	<0.38	<0.34	<2.8	<0.56	<0.44	<0.60	<0.32	<0.60	<0.44	<17	<17
DG-U7	1	3.5-4	DG-U7S-3.5-4	1/8/2019	<0.60	<0.41	<0.40	<0.54	<0.39	<0.35	<3.1	<0.58	<0.45	<0.62	<0.32	<0.62	<0.45	<17	**19**
DG-V1	1	0.5-1	DG-V1S-0.5-1	12/17/2018	<0.60	<0.41	<0.40	<0.54	<0.39	<0.36	<3.2	<0.58	<0.45	<0.62	<0.33	<0.62	<0.45	<17	<17

Table 4: Organochlorine Pesticides and Polychlorinated Biphenyls Concentrations in Soil
Brisbane Baylands OU-2
Brisbane, California

Sample Location	Investigation Zone	Depth Range (ft bgs)	Sample Name	Collection Date	4,4'-DDD	4,4'-DDE	4,4'-DDT	alpha-BHC	alpha-Chlordane	beta-BHC	Chlordane	Dieldrin	Endrin	Endrin aldehyde	Endrin ketone	gamma-BHC (Lindane)	gamma-Chlordane	PCB-1254 (Aroclor 1254)	PCB-1260 (Aroclor 1260)
Direct Exposure Human Health Risk Level Residential Soil Exposure ESL [1]					2.7E+03	1.8E+03	1.9E+03	--	--	--	4.8E+02	3.7E+01	2.1E+04	--	--	5.50E+02	--	2.30E+02	
Leaching to Groundwater Levels Non-drinking Water ESL [2]					6.5E+04	2.9E+04	5.6E+03	--	--	--	2.3E+04	6.3E+00	7.6E+00	--	--	7.4E+00	--	3.3E+05	
USEPA RSL for Resident Soil [3]					1.9E+03	2.0E+03	1.9E+03	8.6E+01	1.7E+03	3.0E+02	1.7E+03	3.4E+01	1.9E+04	--	--	5.7E+02	1.7E+03	2.4E+02	2.4E+02
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
DG-V1	1	3.5-4	DG-V1S-3.5-4	12/17/2018	<0.58	<0.40	<0.39	<0.53	<0.38	<0.34	<2.8	<0.56	<0.44	<0.60	<0.32	<0.60	<0.44	<17	<17
DG-V5	1	0.5-1	DG-V5S-0.5-1	1/8/2019	<0.59	<0.41	<0.40	<0.53	<0.39	<0.35	<3.1	<0.57	<0.45	<0.61	<0.32	<0.61	<0.45	<17	<17
DG-V5	1	3.5-4	DG-V5S-3.5-4	1/8/2019	<0.59	<0.40	<0.39	<0.53	<0.38	<0.35	<3.1	<0.57	<0.44	<0.61	<0.32	<0.61	<0.44	<17	<17
DG-V5	1	7.5-8	DG-V5S-7.5-8	1/8/2019	<0.59	<0.40	<0.39	<0.53	<0.38	<0.35	<3.1	<0.57	<0.44	<0.60	<0.32	<0.60	<0.44	<17	<17
DG-V9	1	0.5-1	DG-V9S-0.5-1	1/10/2019	<0.60	<0.41	<0.40	<0.54	<0.39	<0.35	<3.1	<0.58	<0.45	<0.62	<0.32	<0.62	<0.45	<17	<17
DG-V9	1	3.5-4	DG-V9S-3.5-4	1/10/2019	<0.59	<0.41	<0.40	<0.53	<0.39	<0.35	<3.1	<0.57	<0.45	<0.61	<0.32	<0.61	<0.45	<17	<17
DG-V9	1	7.5-8	DG-V9S-7.5-8	1/10/2019	<0.60	<0.41	<0.40	<0.54	<0.39	<0.35	<3.1	<0.58	<0.45	<0.62	<0.32	<0.62	<0.45	<17	<17
DG-W3	1	0.5-1	DG-W3S-0.5-1	2/5/2019	<0.60	<0.41	<0.40	<0.54	<0.39	<0.35	<3.2	<0.58	<0.45	<0.62	<0.33	<0.62	<0.45	<17	<17
DG-W3	1	3.5-4	DG-W3S-3.5-4	2/5/2019	<0.61	<0.42	<0.41	<0.55	<0.40	<0.36	<3.2	<0.59	<0.46	<0.63	<0.33	<0.63	<0.46	<17	<17
DG-W7	1	0.5-1	DG-W7S-0.5-1	1/29/2019	<0.60	<0.42	<0.41	<0.54	<0.40	<0.36	<3.2	<0.58	<0.46	<0.62	<0.33	<0.62	<0.46	<17	**47 J**
DG-W7	1	3.5-4	DG-W7S-3.5-4	1/29/2019	<0.60	<0.41	<0.40	<0.54	<0.39	<0.35	<3.1	<0.58	<0.45	<0.62	<0.32	<0.62	<0.45	<17	<17
DG-X1	1	0.5-1	DG-X1S-0.5-1	12/17/2018	<0.58	<0.40	<0.39	<0.52	<0.38	<0.34	<3.0	<0.56	<0.44	<0.60	<0.31	<0.60	<0.44	<17	<17
DG-X1 (D)	1	0.5-1	DG-X1 (D)S-0.5-1	12/17/2018	<0.58	<0.40	<0.39	<0.52	<0.38	<0.34	<2.8	<0.56	<0.44	<0.60	<0.31	<0.60	<0.44	<17	<17
DG-X1	1	3.5-4	DG-X1S-3.5-4	12/17/2018	<0.59	<0.41	<0.40	<0.54	<0.39	<0.35	<2.8	<0.57	<0.45	<0.61	<0.32	<0.61	<0.45	<17	<17
DG-X5	1	0.5-1	DG-X5S-0.5-1	1/8/2019	<0.58	<0.40	<0.39	<0.52	<0.38	<0.34	<2.8	<0.56	<0.44	<0.60	<0.31	<0.60	<0.44	<17	**90**
DG-X5	1	3.5-4	DG-X5S-3.5-4	1/8/2019	<0.59	<0.41	<0.40	<0.53	<0.39	<0.35	<3.1	<0.57	<0.45	<0.61	<0.32	<0.61	<0.45	<17	<17
DG-X9	1	0.5-1	DG-X9S-0.5-1	1/10/2019	<0.59	<0.41	<0.40	<0.53	<0.39	<0.35	<3.1	<0.57	<0.44	<0.61	<0.32	<0.61	<0.44	<17	<17
DG-X9	1	3.5-4	DG-X9S-3.5-4	1/10/2019	<0.59	<0.41	<0.40	<0.54	<0.39	<0.35	<3.1	<0.58	<0.45	<0.61	<0.32	**20**	<0.45	<17	<17
DG-Y3	1	0.5-1	DG-Y3S-0.5-1	2/5/2019	**7.1 J**	**4.5 J**	**35 J**	<1.1	<0.78	<0.71	<6.3	**25 J**	<0.90	<1.2	<0.65	<1.2	<0.90	<17	**210 J+**
DG-Y3	1	3.5-4	DG-Y3S-3.5-4	2/5/2019	<0.58	<0.40	<0.39	<0.52	<0.38	<0.34	<3.0	<0.56	<0.44	<0.60	<0.31	<0.60	<0.44	<17	<17
DG-Y7	1	0.5-1	DG-Y7S-0.5-1	1/9/2019	**1**	<0.41	<0.40	<0.54	<0.39	<0.35	<3.1	<0.58	<0.45	<0.61	<0.32	<0.61	<0.45	<17	**84**
DG-Y7	1	3.5-4	DG-Y7S-3.5-4	1/9/2019	<0.60	<0.42	<0.41	<0.54	<0.40	<0.36	<3.2	<0.58	<0.45	<0.62	<0.33	<0.62	<0.45	<16	<16
DG-Z5	1	0.5-1	DG-Z5S-0.5-1	1/8/2019	<0.61	<0.42	<0.41	<0.55	<0.40	<0.36	<2.9	<0.59	<0.46	<0.63	<0.33	<0.63	<0.46	<17	<17
DG-Z5	1	3.5-4	DG-Z5S-3.5-4	1/8/2019	<0.58	<0.40	<0.39	<0.53	<0.38	<0.34	<2.8	<0.56	<0.44	<0.60	<0.32	<0.60	<0.44	<17	<17
DG-Z9	1	0.5-1	DG-Z9S-0.5-1	1/9/2019	**1.4**	**1.2**	**3.3**	<0.53	<0.38	<0.35	<3.1	**1**	**2.8**	<0.60	<0.32	<0.60	<0.44	<17	**49**
DG-Z9 (D)	1	0.5-1	DG-Z9 (D)S-0.5-1	1/9/2019	<0.57	<0.39	**13**	<0.52	<0.38	<0.34	<3.0	<0.55	<0.43	<0.59	<0.31	<0.59	<0.43	<17	**23**
DG-Z9	1	3.5-4	DG-Z9S-3.5-4	1/9/2019	<0.57	<0.39	<0.39	<0.52	<0.38	<0.34	<3.0	<0.55	<0.43	<0.59	<0.31	**4.4**	<0.43	<17	<17
DG-AA3	1	0.5-1	DG-AA3S-0.5-1	2/5/2019	**1.7 J**	**1.9**	**3.8 J**	<0.52	**0.57 J**	<0.34	**9.7 J**	**2.0 J**	<0.44	<0.60	<0.31	<0.60	**0.82 J**	<17	**270 J+**
DG-AA3	1	3.5-4	DG-AA3S-3.5-4	2/5/2019	<0.60	<0.41	<0.40	<0.54	<0.39	<0.36	<3.2	<0.58	<0.45	<0.62	<0.33	<0.62	<0.45	<17	**19 J**
DG-AA3	1	7-7.5	DG-AA3S-7-7.5	2/5/2019	<0.58	<0.40	<0.39	<0.52	<0.38	<0.34	<3.0	<0.56	<0.44	<0.60	<0.31	<0.60	<0.44	<17	<17
DG-AA7	1	0.5-1	DG-AA7S-0.5-1	1/9/2019	**2.2**	**1.3**	**4.7**	<0.54	**0.67**	<0.35	<3.1	**4.9**	<0.45	<0.62	<0.32	<0.62	**0.9**	<17	**710**
DG-AA7	1	3.5-4	DG-AA7S-3.5-4	1/9/2019	<0.60	<0.41	<0.40	<0.54	<0.39	<0.36	<3.2	<0.58	<0.45	<0.62	<0.33	<0.62	<0.45	<17	**21**
DG-AB5	1	0.5-1	DG-AB5S-0.5-1	1/29/2019	<0.60	<0.42	<0.41	<0.54	<0.40	<0.36	<3.2	<0.58	<0.45	<0.62	<0.33	<0.62	<0.45	<17	<17
DG-AB5 (D)	1	0.5-1	DG-AB5 (D)S-0.5-1	1/29/2019	<0.60	<0.41	<0.40	<0.54	<0.39	<0.35	<3.1	<0.58	<0.45	<0.62	<0.32	<0.62	<0.45	<17	<17
DG-AB5	1	3.5-4	DG-AB5S-3.5-4	1/29/2019	<0.60	<0.41	<0.40	<0.54	<0.39	<0.35	<3.1	<0.58	<0.45	<0.62	<0.32	<0.62	<0.45	<17	<17
DG-AB9	1	0.5-1	DG-AB9S-0.5-1	1/30/2019	<1.5	<1.5	<1.5	<1.5	<2.0	<1.5	<9.9	<1.5	<1.5	<1.5	<2.0	<1.5	<1.5	<17	<17
DG-AB9	1	3.5-4	DG-AB9S-3.5-4	1/30/2019	<1.5	<1.5	<1.5	<1.5	<2.0	<1.5	<9.8	<1.5	<1.5	<1.5	<2.0	<1.5	<1.5	<17	<17

Table 4: Organochlorine Pesticides and Polychlorinated Biphenyls Concentrations in Soil
Brisbane Baylands OU-2
Brisbane, California

Sample Location	Investigation Zone	Depth Range (ft bgs)	Sample Name	Collection Date	4,4'-DDD	4,4'-DDE	4,4'-DDT	alpha-BHC	alpha-Chlordane	beta-BHC	Chlordane	Dieldrin	Endrin	Endrin aldehyde	Endrin ketone	gamma-BHC (Lindane)	gamma-Chlordane	PCB-1254 (Aroclor 1254)	PCB-1260 (Aroclor 1260)
Direct Exposure Human Health Risk Level Residential Soil Exposure ESL [1]					2.7E+03	1.8E+03	1.9E+03	--	--	--	4.8E+02	3.7E+01	2.1E+04	--	--	5.50E+02	--	2.30E+02	
Leaching to Groundwater Levels Non-drinking Water ESL [2]					6.5E+04	2.9E+04	5.6E+03	--	--	--	2.3E+04	6.3E+00	7.6E+00	--	--	7.4E+00	--	3.3E+05	
USEPA RSL for Resident Soil [3]					1.9E+03	2.0E+03	1.9E+03	8.6E+01	1.7E+03	3.0E+02	1.7E+03	3.4E+01	1.9E+04	--	--	5.7E+02	1.7E+03	2.4E+02	2.4E+02
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
DG-AC3	1	0.5-1	DG-AC3S-0.5-1	12/19/2018	<0.58 U	<0.40	<0.39	<0.52	<0.38	<0.34	<3.1	<0.56	<0.44	<0.60 U	<0.31	<0.60	<0.44	<17	<17
DG-AC3	1	3.5-4	DG-AC3S-3.5-4	12/19/2018	<0.61	<0.42	<0.41	<0.55	<0.40	<0.36	<2.9	<0.59	<0.46	<0.63	<0.33	<0.63	<0.46	<17	**23 J**
DG-AC7	1	0.5-1	DG-AC7S-0.5-1	1/9/2019	<0.60	**0.48**	<0.40	<0.54	<0.39	<0.35	<3.1	<0.58	<0.45	<0.62	<0.32	<0.62	<0.45	<16	**190**
DG-AC7 (D)	1	0.5-1	DG-AC7 (D)S-0.5-1	1/9/2019	<0.60	**0.89**	<0.40	<0.54	<0.39	<0.36	<3.2	<0.58	<0.45	<0.62	<0.33	<0.62	<0.45	<16	**120**
DG-AC7	1	3.5-4	DG-AC7S-3.5-4	1/9/2019	<3.0	<2.1	<2.0	<2.7	<2.0	<1.8	<16	<2.9	<2.3	<3.1	<1.6	<3.1	<2.3	<17	<17
DG-AC7	1	7.5-8	DG-AC7S-7.5-8	1/9/2019	<0.60	<0.41	<0.40	<0.54	<0.39	<0.35	<3.1	<0.58	<0.45	<0.62	<0.32	<0.62	<0.45	<17	<17
DG-AD5	1	0.5-1	DG-AD5S-0.5-1	1/8/2019	<0.60	<0.41	<0.40	<0.54	<0.39	<0.36	<3.2	<0.58	<0.45	<0.62	<0.33	<0.62	<0.45	<17	**99**
DG-AD5	1	3.5-4	DG-AD5S-3.5-4	1/8/2019	<0.60	<0.41	<0.40	<0.54	<0.39	<0.35	<2.8	<0.58	<0.45	<0.62	<0.32	<0.62	<0.45	<17	<17
DG-AD9	1	0.5-1	DG-AD9S-0.5-1	1/9/2019	**9**	**4.9**	**12**	<0.53	<0.38	<0.34	<3.1	**6.6**	**12**	<0.60	<0.32	<0.60	<0.44	<17	**200**
DG-AD9	1	3.5-4	DG-AD9S-3.5-4	1/9/2019	<0.60	<0.41	<0.40	**1**	<0.39	<0.35	<3.1	<0.58	<0.45	<0.62	<0.32	<0.62	<0.45	<17	<17
DG-AE3	1	0.5-1	DG-AE3S-0.5-1	12/19/2018	<0.61	<0.42	<0.41	<0.55	<0.40	<0.36	<3.2	<0.59	<0.46	<0.63	<0.33	<0.63	<0.46	<17	<17
DG-AE3	1	3.5-4	DG-AE3S-3.5-4	12/19/2018	<0.60	<0.42	<0.41	<0.54	<0.40	<0.36	<3.2	<0.58	<0.46	<0.62	<0.33	<0.62	<0.46	<17	<17
DG-AE7	1	0.5-1	DG-AE7S-0.5-1	1/9/2019	<0.60	<0.41	<0.40	<0.54	<0.39	<0.35	<3.1	<0.58	<0.45	<0.62	<0.32	<0.62	<0.45	<17	<17
DG-AE7	1	3.5-4	DG-AE7S-3.5-4	1/9/2019	<0.60	<0.41	<0.40	<0.54	<0.39	<0.35	<3.2	<0.58	<0.45	<0.62	<0.33	<0.62	<0.45	<17	<17
DG-AE7	1	8-8.5	DG-AE7S-8-8.5	1/9/2019	<0.60	<0.41	<0.40	<0.54	<0.39	<0.35	<3.1	<0.58	<0.45	<0.62	<0.32	<0.62	<0.45	<17	<17
DG-AF5	1	0.5-1	DG-AF5S-0.5-1	1/8/2019	**4.2**	**4.4**	**9.2**	<0.53	**11**	<0.35	**110**	<0.57	<0.44	<0.61	<0.32	<0.61	**11**	<17	**600**
DG-AF5	1	3.5-4	DG-AF5S-3.5-4	1/8/2019	<0.58	<0.40	<0.39	<0.52	<0.38	<0.34	<2.7	<0.56	<0.44	<0.60	<0.31	<0.60	<0.44	<17	<17
DG-AG3	1	0.5-1	DG-AG3S-0.5-1	12/19/2018	<0.59	<0.41	<0.40	<0.53	<0.39	<0.35	<3.1	<0.57	<0.45	<0.61	<0.32	<0.61	<0.45	<17	<17
DG-AG3	1	3.5-4	DG-AG3S-3.5-4	12/19/2018	<0.61	<0.42	<0.41	<0.55	<0.40	<0.36	<3.2	<0.59	<0.46	<0.63	<0.33	<0.63	<0.46	<17	<17
DG-AG7	1	0.5-1	DG-AG7S-0.5-1	1/30/2019	**1.8 J**	**4.4 J**	**2.7 J**	<1.5	<2.0	<1.5	<10	<1.5	<1.5	<1.5	<2.0	<1.5	<1.5	**120 J**	**110 J**
DG-AG7	1	3.5-4	DG-AG7S-3.5-4	1/30/2019	<1.5	<1.5	<1.5	<1.5	<2.0	<1.5	<9.8	<1.5	<1.5	<1.5	<2.0	<1.5	<1.5	<17	<17
DG-AH5	1	0.5-1	DG-AH5S-0.5-1	1/8/2019	<0.58	<0.40	<0.39	<0.53	<0.38	<0.34	<2.8	<0.56	<0.44	<0.60	<0.32	<0.60	<0.44	<17	**17**
DG-AH5	1	8-8.5	DG-AH5S-8-8.5	1/8/2019	<0.58	<0.40	<0.39	<0.52	<0.38	<0.34	<2.7	<0.56	<0.43	<0.59	<0.31	<0.59	<0.43	<17	<17
DG-AH9	2	0.5-1	DG-AH9S-0.5-1	1/30/2019	<1.5	<1.5	**2.2 J**	<1.5	<2.0	<1.5	<9.8	**1.6 J**	<1.5	<1.5	<2.0	<1.5	<1.5	<17	**38 J**
DG-AH9	2	3.5-4	DG-AH9S-3.5-4	1/30/2019	<1.5	<1.5	<1.5	<1.5	<2.0	<1.5	<9.8	<1.5	<1.5	<1.5	<2.0	<1.5	<1.5	<17	<17
DG-AI3	2	0.5-1	DG-AI3S-0.5-1	12/19/2018	<0.59 U	<0.41	<0.40	<0.53	<0.39	<0.35	<2.8	<0.57	<0.45	<0.61	<0.32	<0.61	<0.45	<17	<17
DG-AI3	2	3.5-4	DG-AI3S-3.5-4	12/19/2018	<0.58	<0.40	<0.39	<0.53	<0.38	<0.34	<2.8	<0.56	<0.44	<0.60	<0.32	<0.60	<0.44	<17	<17
DG-AI3 (D)	2	3.5-4	DG-AI3 (D)S-3.5-4	12/19/2018	<0.58	<0.40	<0.39	<0.52	<0.38	<0.34	<3.0	<0.56	<0.44	<0.60	<0.31	<0.60	<0.44	<17	<17
DG-AI7	2	0.5-1	DG-AI7S-0.5-1	1/9/2019	**12**	**12**	**31**	<0.54	<0.39	<0.35	<3.1	**14**	**26**	<0.62	<0.32	<0.62	<0.45	<170	**1,500**
DG-AI7	2	3.5-4	DG-AI7S-3.5-4	1/9/2019	<0.60	<0.41	<0.40	<0.54	<0.39	<0.35	<3.1	<0.58	<0.45	<0.62	<0.32	<0.62	<0.45	<17	<17
DG-AI7	2	8-8.5	DG-AI7S-8-8.5	1/9/2019	<0.61	<0.42	<0.41	<0.55	<0.40	<0.36	<3.2	<0.59	<0.46	<0.63	<0.33	<0.63	<0.46	<17	<17
DG-AJ5	2	0.5-1	DG-AJ5S-0.5-1	1/8/2019	<0.60	**0.44**	<0.40	<0.54	<0.39	<0.35	<2.8	<0.58	<0.45	<0.62	<0.32	<0.62	<0.45	<17	**320**
DG-AJ5	2	3.5-4	DG-AJ5S-3.5-4	1/8/2019	<0.60	<0.41	<0.40	<0.54	<0.39	<0.35	<3.1	<0.58	<0.45	<0.62	<0.32	<0.62	<0.45	<17	<17
DG-AJ9	2	0.5-1	DG-AJ9S-0.5-1	1/30/2019	<1.5	**1.6 J**	**54**	<1.5	<2.0	<1.5	<9.9	**4.4 J**	<1.5	<1.5	<2.0	<1.5	<1.5	<17	**820**
DG-AJ9	2	3.5-4	DG-AJ9S-3.5-4	1/30/2019	<1.5	<1.5	<1.5	<1.5	<2.0	<1.5	<9.8	<1.5	<1.5	<1.5	<2.0	<1.5	<1.5	<17	<17
DG-AK3	2	0.5-1	DG-AK3S-0.5-1	12/19/2018	<0.60	**0.76 J**	**1.2 J**	<0.54	<0.39	<0.35	<3.1	<0.58	<0.45	<0.61	<0.32	<0.61	<0.45	<17	<17
DG-AK3	2	3.5-4	DG-AK3S-3.5-4	12/19/2018	<0.60	<0.42	<0.41	<0.54	<0.40	<0.36	<2.9	<0.58	<0.46	<0.62	<0.33	<0.62	<0.46	<17	<17

Table 4: Organochlorine Pesticides and Polychlorinated Biphenyls Concentrations in Soil
Brisbane Baylands OU-2
Brisbane, California

Sample Location	Investigation Zone	Depth Range (ft bgs)	Sample Name	Collection Date	4,4'-DDD	4,4'-DDE	4,4'-DDT	alpha-BHC	alpha-Chlordane	beta-BHC	Chlordane	Dieldrin	Endrin	Endrin aldehyde	Endrin ketone	gamma-BHC (Lindane)	gamma-Chlordane	PCB-1254 (Aroclor 1254)	PCB-1260 (Aroclor 1260)
Direct Exposure Human Health Risk Level Residential Soil Exposure ESL [1]					2.7E+03	1.8E+03	1.9E+03	--	--	--	4.8E+02	3.7E+01	2.1E+04	--	--	5.50E+02	--	2.30E+02	
Leaching to Groundwater Levels Non-drinking Water ESL [2]					6.5E+04	2.9E+04	5.6E+03	--	--	--	2.3E+04	6.3E+00	7.6E+00	--	--	7.4E+00	--	3.3E+05	
USEPA RSL for Resident Soil [3]					1.9E+03	2.0E+03	1.9E+03	8.6E+01	1.7E+03	3.0E+02	1.7E+03	3.4E+01	1.9E+04	--	--	5.7E+02	1.7E+03	2.4E+02	2.4E+02
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
DG-AK7	2	0.5-1	DG-AK7S-0.5-1	1/9/2019	**19**	**18**	**32**	<0.55	<0.40	<0.36	<3.2	**22**	**30**	<0.63	<0.33	<0.63	<0.46	<84	**940**
DG-AK7	2	3.5-4	DG-AK7S-3.5-4	1/9/2019	<0.60	<0.41	<0.40	<0.54	<0.39	<0.36	<3.2	<0.58	<0.45	<0.62	<0.33	<0.62	<0.45	<17	<17
DG-AK7 (D)	2	3.5-4	DG-AK7 (D)S-3.5-4	1/9/2019	<0.61	<0.42	<0.41	<0.55	<0.40	<0.36	<3.2	<0.59	<0.46	<0.63	<0.33	<0.63	<0.46	<17	<17
DG-AL5	2	0.5-1	DG-AL5S-0.5-1	1/30/2019	<1.5	<1.5	<1.5	<1.5	<2.0	<1.5	<9.9	<1.5	<1.5	<1.5	<2.0	<1.5	<1.5	<17	**17 J**
DG-AL5	2	3.5-4	DG-AL5S-3.5-4	1/30/2019	<1.5	<1.5	<1.5	<1.5	<1.9	<1.5	<9.7	<1.5	<1.5	<1.5	<1.9	<1.5	<1.5	<17	<17
DG-AL5 (D)	2	3.5-4	DG-AL5 (D)S-3.5-4	1/30/2019	<1.5	<1.5	<1.5	<1.5	<2.0	<1.5	<9.9	<1.5	<1.5	<1.5	<2.0	<1.5	<1.5	<17	<17
DG-AL9	2	0.5-1	DG-AL9S-0.5-1	1/21/2019	**34 J**	**91 F2**	**26 J**	<0.54	<0.40	<0.36	<2.9	<0.58	<0.45	<0.62	<0.33	<0.62	<0.45	<17	<17
DG-AL9	2	3.5-4	DG-AL9S-3.5-4	1/21/2019	<0.60	<0.41	<0.40	<0.54	<0.39	<0.36	<2.9	<0.58	<0.45	<0.62	<0.33	<0.62	<0.45	<17	<17
DG-AL9	2	7-7.5	DG-AL9S-7-7.5	1/21/2019	<0.60	<0.41	<0.40	<0.54	<0.39	<0.36	<2.9	<0.58	<0.45	<0.62	<0.33	<0.62	<0.45	<17	<17
DG-AL9 (D)	2	7-7.5	DG-AL9 (D)S-7-7.5	1/21/2019	<0.60	<0.41	<0.40	<0.54	<0.39	<0.35	<3.1	<0.58	<0.45	<0.62	<0.32	<0.62	<0.45	<17	<17
DG-AM3	2	0.5-1	DG-AM3S-0.5-1	12/19/2018	<0.58	**3.1**	**12**	<0.52	<0.38	<0.34	<3.0	<0.56	<0.43	<0.59	<0.31	<0.59	<0.43	<17	**25 J**
DG-AM3	2	3.5-4	DG-AM3S-3.5-4	12/19/2018	<0.61	<0.42	<0.41	<0.55	<0.40	<0.36	<2.9	<0.59	<0.46	<0.63	<0.33	<0.63	<0.46	<17	<17
DG-AM7	2	0.5-1	DG-AM7S-0.5-1	1/9/2019	**7**	**6.1**	**23**	<0.54	**2.2**	<0.36	<3.2	**28**	<0.46	<0.62	<0.33	<0.62	**2.5**	<17	**430**
DG-AM7	2	3.5-4	DG-AM7S-3.5-4	1/9/2019	<0.61	<0.42	<0.41	<0.55	<0.40	<0.36	<3.2	<0.59	<0.46	<0.63	<0.33	<0.63	<0.46	<17	<17
DG-AM7	2	7.5-8	DG-AM7S-7.5-8	1/9/2019	<0.60	<0.41	<0.40	<0.54	<0.39	<0.35	<3.1	<0.58	<0.45	<0.62	<0.32	<0.62	<0.45	<17	<17
DG-AN5	2	0.5-1	DG-AN5S-0.5-1	12/20/2018	<0.61	**0.65 J**	<0.41	<0.55	<0.40	<0.36	<3.2	<0.59	<0.46	<0.63	<0.33	<0.63	<0.46	<17	**23 J**
DG-AN5	2	3.5-4	DG-AN5S-3.5-4	12/20/2018	<0.58	<0.40	<0.39	<0.53	<0.38	<0.34	<2.8	<0.56	<0.44	<0.60	<0.32	<0.60	<0.44	<17	<17
DG-AN9	2	0.5-1	DG-AN9S-0.5-1	1/21/2019	<0.60	**1.7 J**	<0.40	<0.54	<0.39	<0.35	<2.8	<0.58	<0.45	<0.62	<0.32	<0.62	<0.45	<17	<17
DG-AN9	2	3.5-4	DG-AN9S-3.5-4	1/21/2019	<0.59	<0.41	<0.40	<0.54	<0.39	<0.35	<3.1	<0.58	<0.45	<0.61	<0.32	<0.61	<0.45	<17	<17
DG-AN9	2	7-7.5	DG-AN9S-7-7.5	1/21/2019	<0.59	<0.41	<0.40	<0.53	<0.39	<0.35	<3.1	<0.57	<0.45	<0.61	<0.32	<0.61	<0.45	<17	<17
DG-AO3	2	0.5-1	DG-AO3S-0.5-1	12/19/2018	<0.58	<0.40	<0.39	<0.52	<0.38	<0.34	<3.0	<0.56	<0.43	<0.59	<0.31	<0.59	<0.43	<17	**24 J**
DG-AO3	2	3.5-4	DG-AO3S-3.5-4	12/19/2018	<0.61	<0.42	<0.41	<0.55	<0.40	<0.36	<3.2	<0.59	<0.46	<0.63	<0.33	<0.63	<0.46	<17	<17
DG-AO7	2	0.5-1	DG-AO7S-0.5-1	1/9/2019	**2.8**	**3.8**	**6.9**	<0.55	**2.1**	<0.36	**46**	<0.59	<0.46	<0.63	<0.33	<0.63	**2.4**	<17	**440**
DG-AO7	2	3.5-4	DG-AO7S-3.5-4	1/9/2019	<0.61	<0.42	<0.41	<0.55	<0.40	<0.36	<3.2	<0.59	<0.46	<0.63	<0.33	<0.63	<0.46	<17	<17
DG-AP5	2	0.5-1	DG-AP5S-0.5-1	12/20/2018	<0.59	<0.41	<0.40	<0.53	<0.39	<0.35	<3.1	<0.57	<0.45	<0.61	<0.32	<0.61	<0.45	<17	<17
DG-AP5	2	3.5-4	DG-AP5S-3.5-4	12/20/2018	<0.59	<0.41	<0.40	<0.53	<0.39	<0.35	<3.1	<0.57	<0.45	<0.61	<0.32	<0.61	<0.45	<17	<17
DG-AP9	2	0.5-1	DG-AP9S-0.5-1	1/21/2019	<0.60	<0.41	<0.40	<0.54	<0.39	<0.35	<3.2	<0.58	<0.45	<0.62	<0.33	<0.62	<0.45	<17	<17
DG-AP9	2	3.5-4	DG-AP9S-3.5-4	1/21/2019	<0.59	<0.41	<0.40	<0.54	<0.39	<0.35	<3.1	<0.58	<0.45	<0.61	<0.32	<0.61	<0.45	<17	<17
DG-AQ3	2	0.5-1	DG-AQ3S-0.5-1	12/19/2018	<0.60	<0.41	<0.40	<0.54	<0.39	<0.35	<3.1	<0.58	<0.45	<0.62	<0.32	<0.62	<0.45	<17	<17
DG-AQ3	2	3.5-4	DG-AQ3S-3.5-4	12/19/2018	<0.60	<0.41	<0.40	<0.54	<0.39	<0.35	<3.1	<0.58	<0.45	<0.62	<0.32	<0.62	<0.45	<17	<17
DG-AQ7	2	0.5-1	DG-AQ7S-0.5-1	1/30/2019	<1.5	<1.5	<1.5	<1.5	<1.9	<1.5	<9.7	<1.5	<1.5	<1.5	<1.9	<1.5	<1.5	<17	<17
DG-AQ7	2	3.5-4	DG-AQ7S-3.5-4	1/30/2019	<1.5	<1.5	<1.5	<1.5	<2.0	<1.5	<9.8	<1.5	<1.5	<1.5	<2.0	<1.5	<1.5	<17	<17
DG-AR5	2	0.5-1	DG-AR5S-0.5-1	12/20/2018	<0.60	<0.41	<0.40	<0.54	<0.39	<0.35	<3.1	<0.58	<0.45	<0.62	<0.32	<0.62	<0.45	<17	<17
DG-AR5	2	3.5-4	DG-AR5S-3.5-4	12/20/2018	<0.59	<0.40	<0.39	<0.53	<0.39	<0.35	<3.1	<0.57	<0.44	<0.61	<0.32	<0.61	<0.44	<17	<17
DG-AR9	2	0.5-1	DG-AR9S-0.5-1	1/9/2019	**4.3**	**3.4**	**15**	<0.54	**2.4**	<0.36	**35**	**3.9**	<0.46	<0.62	<0.33	<0.62	**3.1**	<17	**68**
DG-AR9	2	3.5-4	DG-AR9S-3.5-4	1/9/2019	<0.59	<0.41	<0.40	<0.53	<0.39	<0.35	<3.1	<0.57	<0.45	<0.61	<0.32	<0.61	<0.45	<17	<17
DG-AR9 (D)	2	3.5-4	DG-AR9 (D)S-3.5-4	1/9/2019	<0.60	<0.41	<0.40	<0.54	<0.39	<0.35	<3.2	<0.58	<0.45	<0.62	<0.33	<0.62	<0.45	<17	<17

Table 4: Organochlorine Pesticides and Polychlorinated Biphenyls Concentrations in Soil
Brisbane Baylands OU-2
Brisbane, California

Sample Location	Investigation Zone	Depth Range (ft bgs)	Sample Name	Collection Date	4,4'-DDD	4,4'-DDE	4,4'-DDT	alpha-BHC	alpha-Chlordane	beta-BHC	Chlordane	Dieldrin	Endrin	Endrin aldehyde	Endrin ketone	gamma-BHC (Lindane)	gamma-Chlordane	PCB-1254 (Aroclor 1254)	PCB-1260 (Aroclor 1260)
Direct Exposure Human Health Risk Level Residential Soil Exposure ESL [1]					2.7E+03	1.8E+03	1.9E+03	--	--	--	4.8E+02	3.7E+01	2.1E+04	--	--	5.50E+02	--	2.30E+02	
Leaching to Groundwater Levels Non-drinking Water ESL [2]					6.5E+04	2.9E+04	5.6E+03	--	--	--	2.3E+04	6.3E+00	7.6E+00	--	--	7.4E+00	--	3.3E+05	
USEPA RSL for Resident Soil [3]					1.9E+03	2.0E+03	1.9E+03	8.6E+01	1.7E+03	3.0E+02	1.7E+03	3.4E+01	1.9E+04	--	--	5.7E+02	1.7E+03	2.4E+02	2.4E+02
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
DG-AS3	2	0.5-1	DG-AS3S-0.5-1	12/20/2018	<0.60	<0.41 UJ	<0.40 UJ	<0.54	<0.39	<0.35	<2.9	<0.58	<0.45	<0.62	<0.32	<0.62	<0.45	<17	<17
DG-AS3 (D)	2	0.5-1	DG-AS3 (D)S-0.5-1	12/20/2018	<0.58	**2.6 J**	**2.5 J**	<0.53	<0.38	<0.34	<3.1	<0.56	<0.44	<0.60	<0.32	<0.60	<0.44	<17	<17
DG-AS3	2	3.5-4	DG-AS3S-3.5-4	12/20/2018	<0.60	<0.42	<0.41	<0.54	<0.40	<0.36	<3.2	<0.58	<0.45	<0.62	<0.33	<0.62	<0.45	<17	<17
DG-AS3	2	4.5-5	DG-AS3S-4.5-5	12/20/2018	<0.59	<0.40	<0.39	<0.53	<0.39	<0.35	<3.1	<0.57	<0.44	<0.61	<0.32	<0.61	<0.44	<17	<17
DG-AS7	2	0.5-1	DG-AS7S-0.5-1	1/9/2019	**2.9**	**2.3**	**16**	<0.54	<0.39	<0.35	<3.1	<0.58	<0.45	<0.62	<0.32	<0.62	<0.45	<17	**120**
DG-AS7	2	3.5-4	DG-AS7S-3.5-4	1/9/2019	<0.61	<0.42	<0.41	<0.55	<0.40	<0.36	<3.2	<0.59	<0.46	<0.63	<0.33	<0.63	<0.46	<17	<17
DG-AT5	2	0.5-1	DG-AT5S-0.5-1	12/20/2018	<0.58	<0.40	<0.39	<0.52	<0.38	<0.34	<2.8	<0.56	<0.44	<0.60	<0.31	<0.60	<0.44	<17	<17
DG-AT5	2	3.5-4	DG-AT5S-3.5-4	12/20/2018	<0.60	<0.41	<0.40	<0.54	<0.39	<0.35	<2.8	<0.58	<0.45	<0.62	<0.32	<0.62	<0.45	<17	<17
DG-AU3	2	0.5-1	DG-AU3S-0.5-1	12/20/2018	**2.6**	**0.79 J**	<0.40	<0.54	<0.39	<0.35	<3.2	<0.58	<0.45	<0.62	<0.33	<0.62	<0.45	<17	**36 J**
DG-AU3	2	3.5-4	DG-AU3S-3.5-4	12/20/2018	<0.59	<0.41	<0.40	<0.54	<0.39	<0.35	<3.1	<0.57	<0.45	<0.61	<0.32	<0.61	<0.45	<17	<17
DG-AU7	2	0.5-1	DG-AU7S-0.5-1	1/9/2019	**3.9**	**2.3**	**13**	<0.54	**0.84**	<0.36	<3.2	<0.58	<0.46	<0.62	<0.33	<0.62	**1**	<17	**220**
DG-AU7 (D)	2	0.5-1	DG-AU7 (D)S-0.5-1	1/9/2019	**3.6**	**2.8**	<0.40	<0.54	**1.2**	<0.35	<3.1	<0.58	<0.45	<0.62	<0.32	<0.62	**1**	<17	<17
DG-AU7	2	3.5-4	DG-AU7S-3.5-4	1/9/2019	<0.60	<0.41	<0.40	<0.54	<0.39	**2.5**	<3.2	<0.58	<0.45	<0.62	<0.33	<0.62	<0.45	<17	<17
DG-AV5	2	0.5-1	DG-AV5S-0.5-1	12/20/2018	<0.60	**5.7 J**	**14 J**	<0.54	<0.39 UJ	<0.36	<2.9 UJ	<0.58	<0.45	<0.62	<0.33	<0.62	<0.45 UJ	<17	**420 J**
DG-AV5 (D)	2	0.5-1	DG-AV5 (D)S-0.5-1	12/20/2018	<0.58	**7.8**	**21 J**	<0.53	**12 J**	<0.34	**160 J**	<0.56	<0.44	<0.60	<0.32	<0.60	**12 J**	<17	**740 J**
DG-AV5	2	3.5-4	DG-AV5S-3.5-4	12/20/2018	<0.59 U	<0.41	<0.40	<0.54	<0.39	<0.35	<3.1	<0.57	<0.45	<0.61	<0.32	<0.61	<0.45	<17	<17
DG-AV5	2	7.5-8	DG-AV5S-7.5-8	12/20/2018	<0.59	<0.40	<0.39	<0.53	<0.38	<0.35	<3.1	<0.57	<0.44	<0.61	<0.32	<0.61	<0.44	<17	<17
DG-AW3	2	0.5-1	DG-AW3S-0.5-1	1/31/2019	<1.5	<1.5	**1.5 J**	<1.5	<2.0	<1.5	<9.8	<1.5	<1.5	<1.5	<2.0	<1.5	<1.5	<17	**25 J**
DG-AW3	2	3.5-4	DG-AW3S-3.5-4	1/31/2019	<1.5	<1.5	<1.5	<1.5	<2.0	<1.5	<9.9	<1.5	<1.5	<1.5	<2.0	<1.5	<1.5	<17	<17
DG-AX5	2	0.5-1	DG-AX5S-0.5-1	12/20/2018	<0.61	<0.42	<0.41	<0.55	<0.40	<0.36	<2.9	<0.59	<0.46	<0.63	<0.33	<0.63	<0.46	<17	<17
DG-AX5	2	3.5-4	DG-AX5S-3.5-4	12/20/2018	<0.57	<0.40	<0.39	<0.52	<0.38	<0.34	<3.0	<0.56	<0.43	<0.59	<0.31	<0.59	<0.43	<17	<17
DG-AY3	2	0.5-1	DG-AY3S-0.5-1	1/31/2019	<1.5	<1.5	<1.5	<1.5	<2.0	<1.5	<9.9	<1.5	<1.5	<1.5	<2.0	<1.5	<1.5	<17	<17
DG-AY3	2	3.5-4	DG-AY3S-3.5-4	1/31/2019	<1.5	<1.5	<1.5	<1.5	<2.0	<1.5	<9.8	<1.5	<1.5	<1.5	<2.0	<1.5	<1.5	<17	<17
DG-N9	3	0.5-1	DG-N9S-0.5-1	1/10/2019	<1.2	<0.80	<0.78	<1.0	<0.76	<0.68	<6.1	<1.1	<0.87	<1.2	<0.63	<1.2	<0.87	<17	<17
DG-N9	3	3.5-4	DG-N9S-3.5-4	1/10/2019	<0.58	<0.40	<0.39	<0.53	<0.38	<0.34	<3.1	<0.56	<0.44	<0.60	<0.32	<0.60	<0.44	<17	<17
DG-N13	3	0.5-1	DG-N13S-0.5-1	1/10/2019	<0.61	<0.42	**1.4 J**	<0.55	**0.68 J**	<0.36	<3.2	<0.59	<0.46	<0.63	<0.33	<0.63	<0.46	<17	<17
DG-N13 (D)	3	0.5-1	DG-N13 (D)S-0.5-1	1/10/2019	<0.58	<0.40	**0.44 J**	<0.52	<0.38 UJ	<0.34	<3.0	<0.56	<0.43	<0.59	<0.31	<0.59	<0.43	<17	<17
DG-N13	3	3.5-4	DG-N13S-3.5-4	1/10/2019	**1.6 J**	<0.41	<0.40	<0.53	<0.39	<0.35	<3.1	<0.57	<0.45	<0.61	<0.32	<0.61	<0.45	<17	<17
DG-N13	3	7.5-8	DG-N13S-7.5-8	1/10/2019	<0.61	<0.42	<0.41	<0.55	<0.40	<0.36	<3.2	<0.59	<0.46	<0.63	<0.33	<0.63	<0.46	<17	<17
DG-O7	3	0.5-1	DG-O7S-0.5-1	1/8/2019	<0.58	<0.40	**1.4**	<0.52	<0.38	<0.34	<3.0	<0.56	<0.44	<0.60	<0.31	<0.60	<0.44	<17	<17
DG-O7	3	3.5-4	DG-O7S-3.5-4	1/8/2019	<0.59	<0.41	<0.40	<0.53	<0.39	<0.35	<3.1	<0.57	<0.44	<0.61	<0.32	<0.61	<0.44	<17	<17
DG-O11	3	0.5-1	DG-O11S-0.5-1	1/10/2019	<0.61	<0.42	<0.41	<0.55	<0.40	<0.36	<3.2	<0.59	<0.46	<0.63	<0.33	<0.63	<0.46	<17	<17
DG-O11	3	3.5-4	DG-O11S-3.5-4	1/10/2019	<0.60	**0.58 J**	<0.40	<0.54	<0.39	<0.35	<3.2	<0.58	<0.45	<0.62	<0.33	<0.62	<0.45	<17	<17
DG-O15	3	0.5-1	DG-O15S-0.5-1	1/10/2019	**0.62 J**	<0.40	<0.39	<0.52	<0.38 R	<0.34	<3.0	<0.56	<0.44	<0.60	<0.31	<0.60	<0.44	<17	<17
DG-O15	3	3.5-4	DG-O15S-3.5-4	1/10/2019	<0.59	<0.40	<0.39	<0.53	<0.39	<0.35	<3.1	<0.57	<0.44	<0.61	<0.32	<0.61	<0.44	<17	<17
DG-O15 (D)	3	3.5-4	DG-O15 (D)S-3.5-4	1/10/2019	<0.61	<0.42	<0.41	<0.55	<0.40	<0.36	<3.2	<0.59	<0.46	<0.63	<0.33	<0.63	<0.46	<17	<17
DG-O15	3	7.5-8	DG-O15S-7.5-8	1/10/2019	<0.61	<0.42	<0.41	<0.55	<0.40	<0.36	<3.2	<0.59	<0.46	<0.63	<0.33	<0.63	<0.46	<17	<17

Table 4: Organochlorine Pesticides and Polychlorinated Biphenyls Concentrations in Soil
Brisbane Baylands OU-2
Brisbane, California

Sample Location	Investigation Zone	Depth Range (ft bgs)	Sample Name	Collection Date	4,4'-DDD	4,4'-DDE	4,4'-DDT	alpha-BHC	alpha-Chlordane	beta-BHC	Chlordane	Dieldrin	Endrin	Endrin aldehyde	Endrin ketone	gamma-BHC (Lindane)	gamma-Chlordane	PCB-1254 (Aroclor 1254)	PCB-1260 (Aroclor 1260)
Direct Exposure Human Health Risk Level Residential Soil Exposure ESL [1]					2.7E+03	1.8E+03	1.9E+03	--	--	--	4.8E+02	3.7E+01	2.1E+04	--	--	5.50E+02	--	2.30E+02	
Leaching to Groundwater Levels Non-drinking Water ESL [2]					6.5E+04	2.9E+04	5.6E+03	--	--	--	2.3E+04	6.3E+00	7.6E+00	--	--	7.4E+00	--	3.3E+05	
USEPA RSL for Resident Soil [3]					1.9E+03	2.0E+03	1.9E+03	8.6E+01	1.7E+03	3.0E+02	1.7E+03	3.4E+01	1.9E+04	--	--	5.7E+02	1.7E+03	2.4E+02	2.4E+02
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
DG-P9	3	0.5-1	DG-P9S-0.5-1	11/21/2018	<0.59	<0.41	<0.40	<0.53	<0.39	<0.35	<3.1	<0.57	<0.45	<0.61	<0.32	<0.61	<0.45	<17	<17
DG-P9	3	3.5-4	DG-P9S-3.5-4	11/21/2018	<0.61	<0.42	<0.41	<0.55	<0.40	<0.36	<3.2	<0.59	<0.46	<0.63	<0.33	<0.63	<0.46	<17	<17
DG-P13	3	0.5-1	DG-P13S-0.5-1	1/10/2019	<0.60	<0.41	**9.6**	<0.54	<0.39	<0.35	<3.1	<0.58	<0.45	<0.62	<0.32	<0.62	<0.45	<17	<17
DG-P13	3	3.5-4	DG-P13S-3.5-4	1/10/2019	<0.61	<0.42	<0.41	<0.55	<0.40	<0.36	<3.2	<0.59	<0.46	<0.63	<0.33	<0.63	<0.46	<17	<17
DG-P13 (D)	3	3.5-4	DG-P13 (D)S-3.5-4	1/10/2019	<0.58	<0.40	<0.39	<0.52	<0.38	<0.34	<3.0	<0.56	<0.43	<0.59	<0.31	<0.59	<0.43	<17	<17
DG-Q11	3	0.5-1	DG-Q11S-0.5-1	1/10/2019	<1.2	<0.81	<0.79	<1.1	<0.77	<0.70	<6.2	<1.1	<0.89	<1.2	<0.64	<1.2	<0.89	<17	<17
DG-Q11 (D)	3	0.5-1	DG-Q11 (D)S-0.5-1	1/10/2019	<1.2	<0.83	<0.81	<1.1	<0.79	<0.71	<6.3	<1.2	<0.91	<1.2	<0.65	<1.2	<0.91	<17	<17
DG-Q11	3	3.5-4	DG-Q11S-3.5-4	1/10/2019	<2.9	<2.0	<1.9	<2.6	<1.9	<1.7	<15	<2.8	<2.2	<3.0	<1.6	<3.0	<2.2	<17	<17
DG-Q15	3	0.5-1	DG-Q15S-0.5-1	1/11/2019	<1.2	<0.83	<0.81 UJ	<1.1	<0.79	<0.72	<5.8	<1.2	<0.91	<1.3	<0.66	<1.3	<0.91	<17	<17 UJ
DG-Q15 (D)	3	0.5-1	DG-Q15 (D)S-0.5-1	1/11/2019	<1.2	<0.81	**6.0 J**	<1.1	<0.77	<0.69	<5.6	<1.1	<0.88	<1.2	<0.63	<1.2	<0.88	<17	<17 UJ
DG-Q15	3	3.5-4	DG-Q15S-3.5-4	1/11/2019	<0.59	<0.40	<0.39	<0.53	<0.39	<0.35	<2.8	<0.57	<0.44	<0.61	<0.32	<0.61	<0.44	<16	<16
DG-Q15	3	7.5-8	DG-Q15S-7.5-8	1/11/2019	<2.9	<2.0	<2.0	<2.6	<1.9	<1.7	<15	<2.8	<2.2	<3.0	<1.6	<3.0	<2.2	<17	<17
DG-R9	3	0.5-1	DG-R9S-0.5-1	1/22/2019	<0.58	<0.40	<0.39	<0.52	<0.38	<0.34	<2.8	<0.56	<0.44	<0.60	<0.31	<0.60	<0.44	<17	<17
DG-R9	3	3.5-4	DG-R9S-3.5-4	1/22/2019	<0.59	<0.41	<0.40	<0.53	<0.39	<0.35	<3.1	<0.57	<0.45	<0.61	<0.32	<0.61	<0.45	<17	<17
DG-R13	3	0.5-1	DG-R13S-0.5-1	1/28/2019	<0.60	<0.41	<0.40	<0.54	<0.39	<0.35	<3.2	<0.58	<0.45	<0.62	<0.33	<0.62	<0.45	<17	<17
DG-R13	3	3.5-4	DG-R13S-3.5-4	1/28/2019	<0.60	<0.41	<0.40	<0.54	<0.39	<0.36	<3.2	<0.58	<0.45	<0.62	<0.33	<0.62	<0.45	<17	<17
DG-S11	3	0.5-1	DG-S11S-0.5-1	1/10/2019	<2.9	<2.0	<1.9	<2.6	<1.9	<1.7	<15	<2.8	<2.2	<3.0	<1.6	<3.0	<2.2	<17	<17
DG-S11	3	3.5-4	DG-S11S-3.5-4	1/10/2019	<1.2	<0.84	<0.82	<1.1	<0.80	<0.72	<6.4	<1.2	<0.92	<1.3	<0.66	<1.3	<0.92	<17	<17
DG-S15	3	0.5-1	DG-S15S-0.5-1	1/11/2019	<1.2	<0.84	<0.82	<1.1	<0.80	<0.72	<6.4	<1.2	<0.92	<1.3	<0.66	<1.3	<0.92	<17	<17
DG-S15	3	3.5-4	DG-S15S-3.5-4	1/11/2019	<0.58	<0.40	<0.39	<0.52	<0.38	<0.34	<2.8	<0.56	<0.44	<0.60	<0.31	<0.60	<0.44	<17	<17
DG-S15 (D)	3	3.5-4	DG-S15 (D)S-3.5-4	1/11/2019	<0.59	<0.41	<0.40	<0.53	<0.39	<0.35	<2.8	<0.57	<0.45	<0.61	<0.32	<0.61	<0.45	<17	<17
DG-T9	3	0.5-1	DG-T9S-0.5-1	1/10/2019	**4.1 J**	**1.3 J**	**7.9**	<0.53	<0.38	<0.35	<3.1	<0.57	<0.44	<0.61	<0.32	<0.61	<0.44	<17	**17 J**
DG-T9	3	3.5-4	DG-T9S-3.5-4	1/10/2019	<0.59	<0.41	<0.40	<0.53	<0.39	<0.35	<3.1	<0.57	<0.45	<0.61	<0.32	<0.61	<0.45	<17	<17
DG-T13	3	0.5-1	DG-T13S-0.5-1	1/10/2019	<0.58	<0.40	<0.39	<0.52	<0.38	<0.34	<3.0	<0.56	<0.44	<0.60	<0.31	<0.60	<0.44	<17	<17
DG-T13 (D)	3	0.5-1	DG-T13 (D)S-0.5-1	1/10/2019	<1.2	<0.81	<0.79	<1.1	<0.78	<0.70	<6.2	<1.1	<0.89	<1.2	<0.64	<1.2	<0.89	<17	<17
DG-T13	3	3.5-4	DG-T13S-3.5-4	1/10/2019	<0.61	<0.42	<0.41	<0.55	<0.40	<0.36	<3.2	<0.59	<0.46	<0.63	<0.33	<0.63	<0.46	<17	<17
DG-T17	3	0.5-1	DG-T17S-0.5-1	1/28/2019	<1.2	**2.6 J**	<0.81	<1.1	<0.79	<0.71	<6.3	<1.2	<0.90	<1.2	<0.65	<1.2	<0.90	<17	**33 J**
DG-T17	3	3.5-4	DG-T17S-3.5-4	1/28/2019	<0.59	<0.40	<0.39	<0.53	<0.38	<0.35	<3.1	**0.94 J**	<0.44	<0.60	<0.32	<0.60	<0.44 U	<17	<17
DG-T17	3	7-7.5	DG-T17S-7-7.5	1/28/2019	<0.60	<0.41	<0.40	<0.54	<0.39	<0.36	<3.2	<0.58	<0.45	<0.62	<0.33	<0.62	<0.45	<17	<17
DG-T17 (D)	3	7-7.5	DG-T17 (D)S-7-7.5	1/28/2019	<6.0	<4.1	<4.0	<5.4	<3.9	<3.6	<32	<5.8	<4.5	<6.2	<3.3	<6.2	<4.5	<17	<17
DG-U11	3	0.5-1	DG-U11S-0.5-1	1/10/2019	<3.0	<2.1	<2.0	<2.7	<2.0	<1.8	<16	<2.9	<2.3	<3.1	<1.6	<3.1	<2.3	<17	<17
DG-U11	3	3.5-4	DG-U11S-3.5-4	1/10/2019	<0.61	<0.42	<0.41	<0.55	<0.40	<0.36	<3.2	<0.59	<0.46	<0.63	<0.33	<0.63	<0.46	<17	<17
DG-U15	3	3.5-4	DG-U15S-3.5-4	1/28/2019	<0.61	<0.42	<0.41	<0.55	<0.40	<0.36	<3.2	<0.59	<0.46	<0.63	<0.33	<0.63	<0.46	<17	<17
DG-U15	3	8.5-9	DG-U15S-8.5-9	1/28/2019	<6.0	<4.1	<4.0	<5.4	<3.9	<3.5	<31	<5.8	<4.5	<6.2	<3.2	<6.2	<4.5	<17	<17
DG-U17	3	0.5-1	DG-U17S-0.5-1	1/28/2019	<1.2	<0.83	<0.81	<1.1	<0.79	<0.71	<6.3	<1.2	<0.90	<1.2	<0.65	<1.2	<0.90	<17	**78**
DG-V13	3	0.5-1	DG-V13S-0.5-1	1/10/2019	<1.2	<0.81	<0.79	<1.1	<0.77	<0.69	<6.1	<1.1	<0.88	<1.2	<0.63	<1.2	<0.88	<17	<17
DG-V13	3	3.5-4	DG-V13S-3.5-4	1/10/2019	<0.59	<0.41	<0.40	<0.53	<0.39	<0.35	<3.1	<0.57	<0.44	<0.61	<0.32	<0.61	<0.44	<17	**21 J**

Table 4: Organochlorine Pesticides and Polychlorinated Biphenyls Concentrations in Soil
Brisbane Baylands OU-2
Brisbane, California

Sample Location	Investigation Zone	Depth Range (ft bgs)	Sample Name	Collection Date	4,4'-DDD	4,4'-DDE	4,4'-DDT	alpha-BHC	alpha-Chlordane	beta-BHC	Chlordane	Dieldrin	Endrin	Endrin aldehyde	Endrin ketone	gamma-BHC (Lindane)	gamma-Chlordane	PCB-1254 (Aroclor 1254)	PCB-1260 (Aroclor 1260)
Direct Exposure Human Health Risk Level Residential Soil Exposure ESL [1]					2.7E+03	1.8E+03	1.9E+03	--	--	--	4.8E+02	3.7E+01	2.1E+04	--	--	5.50E+02	--	2.30E+02	
Leaching to Groundwater Levels Non-drinking Water ESL [2]					6.5E+04	2.9E+04	5.6E+03	--	--	--	2.3E+04	6.3E+00	7.6E+00	--	--	7.4E+00	--	3.3E+05	
USEPA RSL for Resident Soil [3]					1.9E+03	2.0E+03	1.9E+03	8.6E+01	1.7E+03	3.0E+02	1.7E+03	3.4E+01	1.9E+04	--	--	5.7E+02	1.7E+03	2.4E+02	2.4E+02
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
DG-V13	3	7.5-8	DG-V13S-7.5-8	1/10/2019	<0.58	<0.40	<0.39	<0.52	<0.38	<0.34	<3.0	<0.56	<0.43	<0.60	<0.31	<0.60	<0.43	<17	<17
DG-V17	3	0.5-1	DG-V17S-0.5-1	1/28/2019	<0.60	<0.42	<0.41	<0.55	<0.40	<0.36	<3.2	<0.58	<0.46	<0.62	<0.33	<0.62	<0.46	<17	<17
DG-V17	3	3.5-4	DG-V17S-3.5-4	1/28/2019	<0.61	<0.42	<0.41	<0.55	<0.40	<0.36	<3.2	<0.59	<0.46	<0.63	<0.33	<0.63	<0.46	<17	<17
DG-V17 (D)	3	3.5-4	DG-V17 (D)S-3.5-4	1/28/2019	<0.58	<0.40	<0.39	<0.52	<0.38	<0.34	<3.0	<0.56	<0.44	<0.60	<0.31	<0.60	<0.44	<17	<17
DG-V17	3	9.5-10	DG-V17S-9.5-10	1/28/2019	<6.0	<4.1	<4.0	<5.4	<3.9	<3.5	<31	<5.8	<4.5	<6.2	<3.2	<6.2	<4.5	<17	<17
DG-W11	4	0.5-1	DG-W11S-0.5-1	1/29/2019	<1.2	<0.82	<0.80	<1.1	<0.78	<0.70	<6.2	<1.2	<0.90	<1.2	<0.64	<1.2	<0.90	<17	<17
DG-W11	4	3.5-4	DG-W11S-3.5-4	1/29/2019	<0.60	<0.41	<0.40	<0.54	<0.39	<0.35	<3.1	<0.58	<0.45	<0.62	<0.32	<0.62	<0.45	<17	<17
DG-W11 (D)	4	3.5-4	DG-W11 (D)S-3.5-4	1/29/2019	<0.60	<0.41	<0.40	<0.54	<0.39	<0.36	<3.2	<0.58	<0.45	<0.62	<0.33	<0.62 U	<0.45	<17	<17
DG-W15	4	0.5-1	DG-W15S-0.5-1	1/28/2019	<6.0	<4.1	<4.0	<5.4	<3.9	<3.5	<31	<5.8	<4.5	<6.2	<3.2	<6.2	<4.5	<17 UJ	<17 UJ
DG-W15 (D)	4	0.5-1	DG-W15 (D)S-0.5-1	1/28/2019	<6.0	<4.1	<4.0	<5.4	<3.9	<3.5	<31	<5.8	<4.5	<6.2	<3.2	<6.2	<4.5	<17	<17
DG-W15	4	3.5-4	DG-W15S-3.5-4	1/28/2019	<1.2	<0.83	<0.81 U	<1.1	<0.79	<0.71	<6.3	<1.2	<0.91 U	<1.2	<0.65	<1.2	<0.91 U	<17	<17
DG-X13	4	0.5-1	DG-X13S-0.5-1	1/22/2019	<0.60 F1	<0.41	<0.40	<0.54	<0.39	<0.35	<3.1	<0.58	<0.45	<0.62	<0.32	<0.62	<0.45	<17	**22 J**
DG-X13	4	3.5-4	DG-X13S-3.5-4	1/22/2019	<0.58	<0.40	<0.39	<0.53	<0.38	<0.35	<2.8	<0.57	<0.44	<0.60	<0.32	<0.60	<0.44	<17	<17
DG-X13 (D)	4	3.5-4	DG-X13 (D)S-3.5-4	1/22/2019	<0.61	<0.42	<0.41	<0.55	<0.40	<0.36	<2.9	<0.59	<0.46	<0.63	<0.33	<0.63	<0.46	<17	<17
DG-X17	4	0.5-1	DG-X17S-0.5-1	1/28/2019	<6.0	<4.1	<4.0	<5.4	<3.9	<3.5	<31	<5.8	<4.5	<6.2	<3.2	<6.2	<4.5	<17	<17
DG-X17	4	3.5-4	DG-X17S-3.5-4	1/28/2019	<1.2	<0.83	<0.81	<1.1	<0.79	<0.71	<6.3	<1.2	<0.91	<1.3	<0.65	<1.3	<0.91	<17	<17
DG-Y11	4	0.5-1	DG-Y11S-0.5-1	1/21/2019	<6.0	<4.1	<4.0	<5.4	<3.9	<3.5	<31	<5.8	<4.5	<6.2	<3.2	<6.2	<4.5	<17	<17
DG-Y11	4	3.5-4	DG-Y11S-3.5-4	1/21/2019	<0.60	<0.41	<0.40	<0.54	<0.39	<0.35	<2.8	<0.58	<0.45	<0.62	<0.32	<0.62	<0.45	<17	<17
DG-Y15	4	0.5-1	DG-Y15S-0.5-1	1/31/2019	<1.5	<1.5	<1.5	<1.5	<2.0	<1.5	<9.8	**2.4 J**	<1.5	<1.5	<2.0	<1.5	<1.5	<17	<17
DG-Y15	4	3.5-4	DG-Y15S-3.5-4	1/31/2019	<1.5	<1.5	<1.5	<1.5	<2.0	<1.5	<9.8	<1.5	<1.5	<1.5	<2.0	<1.5	<1.5	<17	<17
DG-Y15 (D)	4	3.5-4	DG-Y15 (D)S-3.5-4	1/31/2019	<1.5	<1.5	<1.5	<1.5	<2.0	<1.5	<9.9	<1.5	<1.5	<1.5	<2.0	<1.5	<1.5	<17	<17
DG-Y15	4	7.5-8	DG-Y15S-7.5-8	1/31/2019	<1.5	<1.5	<1.5	<1.5	<2.0	<1.5	<9.8	<1.5	<1.5	<1.5	<2.0	<1.5	<1.5	<17	<17
DG-Y19	4	0.5-1	DG-Y19S-0.5-1	1/28/2019	<6.0	<4.1	<4.0	<5.4	<3.9	<3.5	<31	<5.8	<4.5	<6.2	<3.2	<6.2	<4.5	<17	<17
DG-Y19	4	3.5-4	DG-Y19S-3.5-4	1/28/2019	<0.60	<0.41	<0.40	<0.54	<0.39	<0.35	<3.1	<0.58	<0.45	<0.62	<0.32	<0.62	<0.45	<17	<17
DG-Y19	4	7.5-8	DG-Y19S-7.5-8	1/28/2019	<0.60	<0.41	<0.40	<0.54	<0.39	<0.35	<3.1	<0.58	<0.45	<0.62	<0.32	<0.62	<0.45	<17	<17
DG-Z13	4	0.5-1	DG-Z13S-0.5-1	1/28/2019	<0.60	**4.5**	<0.40	<0.54	<0.39	<0.35	<3.1	<0.58	<0.45	<0.62	<0.32	<0.62	<0.45	<17	<17
DG-Z13	4	3.5-4	DG-Z13S-3.5-4	1/28/2019	<0.60	**0.69 J**	<0.41	<0.54	<0.40	<0.36	<3.2	<0.58	<0.46	<0.62	<0.33	<0.62	<0.46	<17	<17
DG-Z17	4	0.5-1	DG-Z17S-0.5-1	1/28/2019	<1.2	<0.80 UJ	<0.78 UJ	<1.0	<0.76	<0.68	<6.1	<1.1	<0.87	<1.2	<0.63 UJ	<1.2	<0.87	<17	<17
DG-Z17 (D)	4	0.5-1	DG-Z17 (D)S-0.5-1	1/28/2019	<1.2	**3.3 J**	**0.88 J**	<1.0	<0.76	<0.68	<6.0	<1.1	<0.87	<1.2	**0.70 J**	<1.2	<0.87	<17	<17
DG-Z17	4	3.5-4	DG-Z17S-3.5-4	1/28/2019	<3.0	<2.0	<2.0	<2.7	<2.0	<1.8	<16	<2.9	<2.2	<3.1	<1.6	<3.1	<2.2	<17	<17
DG-Z17	4	7.5-8	DG-Z17S-7.5-8	1/28/2019	<0.60	<0.42	<0.41	<0.55	<0.40	<0.36	<3.2	<0.58	<0.46	<0.62	<0.33	<0.62	<0.46	<17	<17
DG-AA11	4	0.5-1	DG-AA11S-0.5-1	1/29/2019	<0.61	<0.42	<0.41	<0.55	<0.40	<0.36	<3.2	<0.59	<0.46	<0.63	<0.33	<0.63	<0.46	<17	<17
DG-AA11	4	3.5-4	DG-AA11S-3.5-4	1/29/2019	<0.60	<0.41	<0.40	<0.54	<0.39	<0.35	<3.2	<0.58	<0.45	<0.62	<0.33	<0.62	<0.45	<17	<17
DG-AA15	4	0.5-1	DG-AA15S-0.5-1	1/22/2019	<1.1	<0.79	<0.77	<1.0	<0.75	<0.68	<5.5	<1.1	<0.87	<1.2	<0.62	<1.2	<0.87	<17	<17
DG-AA19	4	0.5-1	DG-AA19S-0.5-1	1/24/2019	<1.5	<1.5	<1.5	<1.5	<2.0	<1.5	<9.9	<1.5	<1.5	<1.5	<2.0	<1.5	<1.5	<17	<17
DG-AA19	4	3.5-4	DG-AA19S-3.5-4	1/24/2019	<1.5	<1.5	<1.5	<1.5	<2.0	<1.5	<9.9	<1.5	<1.5	<1.5	<2.0	<1.5	<1.5	<17	<17
DG-AA19	4	8.5-9	DG-AA19S-8.5-9	1/24/2019	<1.5	<1.5	<1.5	<1.5	<2.0	<1.5	<9.8	<1.5	<1.5	<1.5	<2.0	<1.5	<1.5	<17	<17

Table 4: Organochlorine Pesticides and Polychlorinated Biphenyls Concentrations in Soil
Brisbane Baylands OU-2
Brisbane, California

Sample Location	Investigation Zone	Depth Range (ft bgs)	Sample Name	Collection Date	4,4'-DDD	4,4'-DDE	4,4'-DDT	alpha-BHC	alpha-Chlordane	beta-BHC	Chlordane	Dieldrin	Endrin	Endrin aldehyde	Endrin ketone	gamma-BHC (Lindane)	gamma-Chlordane	PCB-1254 (Aroclor 1254)	PCB-1260 (Aroclor 1260)
Direct Exposure Human Health Risk Level Residential Soil Exposure ESL [1]					2.7E+03	1.8E+03	1.9E+03	--	--	--	4.8E+02	3.7E+01	2.1E+04	--	--	5.50E+02	--	2.30E+02	
Leaching to Groundwater Levels Non-drinking Water ESL [2]					6.5E+04	2.9E+04	5.6E+03	--	--	--	2.3E+04	6.3E+00	7.6E+00	--	--	7.4E+00	--	3.3E+05	
USEPA RSL for Resident Soil [3]					1.9E+03	2.0E+03	1.9E+03	8.6E+01	1.7E+03	3.0E+02	1.7E+03	3.4E+01	1.9E+04	--	--	5.7E+02	1.7E+03	2.4E+02	2.4E+02
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
DG-AB13	4	0.5-1	DG-AB13S-0.5-1	1/22/2019	<0.59	<0.41	<0.40	<0.53	<0.39	<0.35	<2.8	<0.57	<0.44	<0.61	<0.32	<0.61	<0.44	<17	<17
DG-AB13	4	3.5-4	DG-AB13S-3.5-4	1/22/2019	<0.59	<0.40	<0.39	<0.53	<0.38	<0.35	<3.1	<0.57	<0.44	<0.61	<0.32	<0.61	<0.44	<17	<17
DG-AB13 (D)	4	3.5-4	DG-AB13 (D)S-3.5-4	1/22/2019	<0.60	<0.41	<0.40	<0.54	<0.39	<0.35	<3.1	<0.58	<0.45	<0.62	<0.32	<0.62	<0.45	<17	<17
DG-AB13	4	13.5-14	DG-AB13S-13.5-14	1/22/2019	<12	<8.0	<7.8	<10	<7.6	<6.9	<61	<11	<8.8	<12	<6.3	<12	<8.8	<150	<150
DG-AC11	4	0.5-1	DG-AC11S-0.5-1	1/29/2019	**4.2 J**	**1.8 J**	<0.40	<0.54	<0.39	<0.35	<3.1	<0.58	<0.45	<0.62	<0.32	<0.62	<0.45	<17	<17
DG-AC11	4	3.5-4	DG-AC11S-3.5-4	1/29/2019	<6.0	<4.1	<4.0	<5.4	<3.9	<3.5	<31	<5.8	<4.5	<6.2	<3.2	<6.2	<4.5	<17 UJ	<17 UJ
DG-AC11	4	8.5-9	DG-AC11S-8.5-9	1/29/2019	<0.59	<0.41	<0.40	<0.54	<0.39	<0.35	<3.1	<0.57	<0.45	<0.61	<0.32	<0.61	<0.45	<17	<17
DG-AD13	4	0.5-1	DG-AD13S-0.5-1	2/1/2019	<1.2	<0.82	**5.1**	<1.1	**1.2 J**	<0.70	<6.3	<1.2	<0.90	<1.2	<0.65	<1.2	<0.90	<17	<17
DG-AD13	4	3.5-4	DG-AD13S-3.5-4	2/1/2019	<3.0 F2	<2.0 F2	<2.0 F2	<2.7	<1.9 F2	<1.8	<16	<2.9 F2	<2.2	<3.1	<1.6	<3.1	<2.2 F1	<17	<17
DG-AD13	4	7.5-8	DG-AD13S-7.5-8	2/1/2019	<6.1	<4.2	<4.1	<5.5	<4.0	<3.6	<32	<5.9	<4.6	<6.3	<3.3	<6.3	<4.6	<17	<17
DG-AD13 (D)	4	7.5-8	DG-AD13 (D)S-7.5-8	2/1/2019	<12	<8.3	<8.1	<11	<7.9	<7.1	<63	<12	<9.1	<12	<6.5	<12	<9.1	<17	<17
DG-AE11	4	0.5-1	DG-AE11S-0.5-1	1/21/2019	<0.59	<0.41	<0.40	<0.53	<0.39	<0.35	<2.8	<0.57	<0.45	<0.61	<0.32	<0.61	<0.45	<17	<17
DG-AE11	4	3.5-4	DG-AE11S-3.5-4	1/21/2019	<1.2	<0.81	<0.79	<1.1	<0.77	<0.69	<5.6	<1.1	<0.88	<1.2	<0.63	<1.2	<0.88	<17	<17
DG-AF13	4	0.5-1	DG-AF13S-0.5-1	11/21/2018	<12	<8.3	<8.1	<11	<7.9	<7.1	<63	<12	<9.1	<12	<6.5	<12	<9.1	<34	<34
DG-AF13	4	0.5-1	DG-AF13S-0.5-1	1/28/2019	<1.2	**2.2 J**	**14**	<1.1	**4.5**	<0.71	**64 J**	<1.2	<0.91	<1.2	<0.65	<1.2	**4.5**	<17	**41 J**
DG-AF13	4	3.5-4	DG-AF13S-3.5-4	11/21/2018	<29	<20	**42 J**	<26	<19	<17	<150	<28	<22	<30	<16	<30	<22	<34	<34
DG-AF13	4	3.5-4	DG-AF13S-3.5-4	1/28/2019	<0.60	<0.41	<0.40	<0.54	<0.39	<0.35	<3.2	<0.58	<0.45	<0.62	<0.33	<0.62	<0.45	<17	<17
DG-AF13	4	7-7.5	DG-AF13S-7-7.5	11/21/2018	<5.9	<4.0	<3.9	<5.3	<3.9	<3.5	<31	<5.7	<4.4	<6.1	<3.2	<6.1	<4.4	<17	<17
DG-AG11	4	0.5-1	DG-AG11S-0.5-1	1/21/2019	**3.3 J**	<0.79	**3.4 J**	<1.0	**2.1 J**	<0.68	<6.0	<1.1	<0.86	<1.2	<0.62	<1.2	**2.4 J**	<17	**28 J**
DG-AG11	4	3.5-4	DG-AG11S-3.5-4	1/21/2019	<0.58	<0.40	<0.39	<0.52	<0.38	<0.34	<3.1	<0.56	<0.44	<0.60	<0.31	<0.60	<0.44	<17	<17
DG-AG11	4	9.5-10	DG-AG11S-9.5-10	1/21/2019	<0.60	<0.42	<0.41	<0.54	<0.40	<0.36	<3.2	<0.58	<0.45	<0.62	<0.33	<0.62	<0.45	<17	<17
DG-AH13	4	0.5-1	DG-AH13S-0.5-1	1/29/2019	<1.2	<0.83	<0.81 UJ	<1.1	<0.79	<0.71 U	<6.3	<1.2	<0.91	<1.2 UJ	<0.65 UJ	<1.2	<0.91	<17 UJ	<17 UJ
DG-AH13	4	3.5-4	DG-AH13S-3.5-4	1/29/2019	<6.0	<4.2	<4.1	<5.4	<4.0	<3.6	<32	<5.8	<4.6	<6.2	<3.3	<6.2	<4.6	<17 UJ	<17 UJ
DG-AH13	4	7.5-8	DG-AH13S-7.5-8	1/29/2019	<6.1	<4.2	<4.1	<5.5	<4.0	<3.6	<32	<5.9	<4.6	<6.3	<3.3	<6.3	<4.6	<34	<34
DG-AI11	4	0.5-1	DG-AI11S-0.5-1	1/21/2019	<0.60	<0.41	<0.40	<0.54	<0.39	<0.35	<3.1	<0.58	<0.45	<0.62	<0.32	<0.62	<0.45	<17	<17
DG-AI11 (D)	4	0.5-1	DG-AI11 (D)S-0.5-1	1/21/2019	**1.3 J**	<0.41	<0.40	<0.54	<0.39	<0.35	<3.1	<0.58	<0.45	<0.62	<0.32	<0.62	<0.45	<17	<17
DG-AI11	4	3.5-4	DG-AI11S-3.5-4	1/21/2019	<3.0 U	<2.1	<2.0 U	<2.7	<2.0 U	<1.8 R	<14	<2.9	<2.3	<3.1	<1.6	<3.1 U	<2.3	<17	<17
DG-AI11	4	9.5-10	DG-AI11S-9.5-10	1/21/2019	<6.1	<4.2	<4.1	<5.5	<4.0	<3.6	<29	<5.9	<4.6	<6.3	<3.3	<6.3	<4.6	<17	<17
DG-AJ13	4	0.5-1	DG-AJ13S-0.5-1	1/29/2019	<6.0	<4.2	<4.1	<5.5	<4.0	<3.6	<32	<5.8	<4.6	<6.2	<3.3	<6.2	<4.6	<17 UJ	<17 UJ
DG-AJ13	4	3.5-4	DG-AJ13S-3.5-4	1/29/2019	<0.60	<0.41	<0.40	<0.54	<0.39	<0.36	<3.2	<0.58	<0.45	<0.62	<0.33	<0.62	<0.45	<17	<17
DG-AK11	4	0.5-1	DG-AK11S-0.5-1	1/22/2019	<0.60	<0.41	<0.40	<0.54	<0.39	<0.35	<2.9	<0.58	<0.45	<0.62	<0.33	<0.62	<0.45	<17	<17
DG-AK11	4	3.5-4	DG-AK11S-3.5-4	1/22/2019	<12	<8.0	<7.8	<11	<7.6	<6.9	<55	<11	<8.8	<12	<6.3	<12	<8.8	<17 UJ	<17 UJ
DG-AL13	4	0.5-1	DG-AL13S-0.5-1	1/29/2019	<0.60	<0.41	<0.40	<0.54	<0.39	<0.35	<3.1	<0.58	<0.45	<0.62	<0.32	<0.62	<0.45	<17	<17
DG-AL13	4	3.5-4	DG-AL13S-3.5-4	1/29/2019	<0.60	<0.41	<0.40	<0.54	<0.39	<0.36	<3.2	<0.58	<0.45	<0.62	<0.33	<0.62	<0.45	<17	<17
DG-AM11	4	0.5-1	DG-AM11S-0.5-1	1/22/2019	<0.58	<0.40	<0.39	<0.52	<0.38	<0.34	<3.1	<0.56	<0.44	<0.60	<0.31	<0.60	<0.44	<17	<17
DG-AM11	4	3.5-4	DG-AM11S-3.5-4	1/22/2019	<1.2	<0.83	<0.81	<1.1	<0.79	<0.71	<5.8	<1.2	<0.91	<1.2	<0.65	<1.2	<0.91	<17	<17
DG-AN13	4	0.5-1	DG-AN13S-0.5-1	1/31/2019	<1.5	**2.8 J**	<1.5	<1.5	<2.0	<1.5	<9.9	<1.5	<1.5	<1.5	<2.0	<1.5	<1.5	<17	<17

Table 4: Organochlorine Pesticides and Polychlorinated Biphenyls Concentrations in Soil
Brisbane Baylands OU-2
Brisbane, California

Sample Location	Investigation Zone	Depth Range (ft bgs)	Sample Name	Collection Date	4,4'-DDD	4,4'-DDE	4,4'-DDT	alpha-BHC	alpha-Chlordane	beta-BHC	Chlordane	Dieldrin	Endrin	Endrin aldehyde	Endrin ketone	gamma-BHC (Lindane)	gamma-Chlordane	PCB-1254 (Aroclor 1254)	PCB-1260 (Aroclor 1260)
Direct Exposure Human Health Risk Level Residential Soil Exposure ESL [1]					2.7E+03	1.8E+03	1.9E+03	--	--	--	4.8E+02	3.7E+01	2.1E+04	--	--	5.50E+02	--	2.30E+02	
Leaching to Groundwater Levels Non-drinking Water ESL [2]					6.5E+04	2.9E+04	5.6E+03	--	--	--	2.3E+04	6.3E+00	7.6E+00	--	--	7.4E+00	--	3.3E+05	
USEPA RSL for Resident Soil [3]					1.9E+03	2.0E+03	1.9E+03	8.6E+01	1.7E+03	3.0E+02	1.7E+03	3.4E+01	1.9E+04	--	--	5.7E+02	1.7E+03	2.4E+02	2.4E+02
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
DG-AN13	4	3.5-4	DG-AN13S-3.5-4	1/31/2019	<1.5	<1.5	<1.5	<1.5	<2.0	<1.5	<9.9	<1.5	<1.5	<1.5	<2.0	<1.5	<1.5	<17	<17
DG-AN13	4	9.5-10	DG-AN13S-9.5-10	1/31/2019	<1.5	<1.5	<1.5	<1.5	<2.0	<1.5	<9.9	<1.5	<1.5	<1.5	<2.0	<1.5	<1.5	<17	<17
DG-AO11	5	0.5-1	DG-AO11S-0.5-1	1/22/2019	<1.2	<0.80	<0.78	<1.0	<0.76	<0.68	<5.5	<1.1	<0.87	<1.2	<0.63	<1.2	<0.87	<17	<17
DG-AO11	5	3.5-4	DG-AO11S-3.5-4	1/22/2019	<2.9	<2.0	<1.9	<2.6	<1.9	<1.7	<15	<2.8	<2.2	<3.0	<1.6	<3.0	<2.2	<17	<17
DG-AQ11	5	0.5-1	DG-AQ11S-0.5-1	1/30/2019	<1.5	<1.5	<1.5	<1.5	<2.0	<1.5	<9.9	<1.5	<1.5	<1.5	<2.0	<1.5	<1.5	<17	<17
DG-AQ11	5	3.5-4	DG-AQ11S-3.5-4	1/30/2019	<1.5	<1.5	<1.5	<1.5	<1.9	<1.5	<9.7	<1.5	<1.5	<1.5	<1.9	<1.5	<1.5	<17	<17
DG-AT9	5	0.5-1	DG-AT9S-0.5-1	1/30/2019	**5.6**	**63**	**85**	<1.5	<1.9	<1.5	<9.7	**3.2 J**	<1.5	<1.5	<1.9	<1.5	**2.3 J**	<16	**52**
DG-AT9	5	3.5-4	DG-AT9S-3.5-4	1/30/2019	<1.5	**4.4 J**	**1.8 J**	<1.5	<2.0	<1.5	<9.9	<1.5	<1.5	<1.5	<2.0	<1.5	<1.5	<17	<17
DG-AV9	5	0.5-1	DG-AV9S-0.5-1	2/1/2019	**120**	**280**	**220**	<1.1	**61**	<0.71	**340**	**1.5 J**	<0.90	<1.2	<0.65	<1.2	**51**	<17	<17
DG-AV9	5	3.5-4	DG-AV9S-3.5-4	2/1/2019	**3.2**	**9.5**	**6.5**	<0.53	**1.8 J**	<0.35	**18 J**	**2.5**	<0.44	<0.60	<0.32	<0.60	**2.1**	<17	**24 J**
DG-AV9	5	8.5-9	DG-AV9S-8.5-9	2/1/2019	**1.9**	**1.6 J**	**5.7**	<0.53	<0.38	<0.34	<3.1	<0.56	<0.44	<0.60	<0.32	<0.60	<0.44	<17	<17
DG-AX9	5	0.5-1	DG-AX9S-0.5-1	1/23/2019	<1.5	<1.5	<1.5	<1.5	<2.0	<1.5	<9.8	<1.5	<1.5	<1.5	<2.0	<1.5	<1.5	<17	<17
DG-AX9	5	3.5-4	DG-AX9S-3.5-4	1/23/2019	<1.5	<1.5	<1.5	<1.5	<2.0	<1.5	<10	<1.5	<1.5	<1.5	<2.0	<1.5	<1.5	<17	<17
DG-AX9	5	9.5-10	DG-AX9S-9.5-10	1/23/2019	<1.5	<1.5	<1.5	<1.5	<2.0	<1.5	<9.8	<1.5	<1.5	<1.5	<2.0	<1.5	<1.5	<17	<17
DG-AB17	6	0.5-1	DG-AB17S-0.5-1	1/24/2019	<1.5	<1.5	**3.4 J**	<1.5	**3.1 J**	<1.5	**38 J**	<1.5	<1.5	<1.5	<2.0	<1.5	**3.0 J**	<17	**43 J**
DG-AB17	6	3.5-4	DG-AB17S-3.5-4	1/24/2019	<1.5	**1.6 J**	<1.5	<1.5	<1.9	<1.5	<9.7	<1.5	<1.5	<1.5	<1.9	<1.5	<1.5	<17	<17
DG-AC15	6	0.5-1	DG-AC15S-0.5-1	1/31/2019	<1.5	<1.5	<1.5	<1.5	<2.0	<1.5	<9.9	<1.5	<1.5	<1.5	<2.0	<1.5	<1.5	<17	<17 UJ
DG-AC15 (D)	6	0.5-1	DG-AC15 (D)S-0.5-1	1/31/2019	<1.5	<1.5	<1.5	<1.5	<1.9	<1.5	<9.7	<1.5	<1.5	<1.5	<1.9	<1.5	<1.5	<17	**18 J**
DG-AC15	6	3.5-4	DG-AC15S-3.5-4	1/31/2019	<1.5	<1.5	<1.5	<1.5	<2.0	<1.5	<9.8	<1.5	<1.5	<1.5	<2.0	<1.5	<1.5	<17	<17
DG-AC15	6	7.5-8	DG-AC15S-7.5-8	1/31/2019	<3.0	<3.0	<3.0	<3.0	<4.0	<3.0	<20	<3.0	<3.0	<3.0	<4.0	<3.0	<3.0	<34	<34
DG-AD17	6	0.5-1	DG-AD17S-0.5-1	1/24/2019	<1.5	<1.5	<1.5	<1.5	<2.0	<1.5	<9.8	<1.5	<1.5	<1.5	<2.0	<1.5	<1.5	<17	<17
DG-AD17	6	3.5-4	DG-AD17S-3.5-4	1/24/2019	<1.5	<1.5	<1.5	<1.5	<2.0	<1.5	<10	<1.5	<1.5	<1.5	<2.0	<1.5	<1.5	<17	<17
DG-AD17	6	7-7.5	DG-AD17S-7-7.5	1/24/2019	<1.5	<1.5	<1.5	<1.5	<2.0	<1.5	<9.9	<1.5	<1.5	<1.5	<2.0	<1.5	<1.5	<17	<17
DG-AG15	6	0.5-1	DG-AG15S-0.5-1	1/24/2019	<1.5	<1.5	<1.5	<1.5	**2.2 J**	<1.5	**35 J**	<1.5	<1.5	<1.5	<2.0	<1.5	**3.5 J**	<17	<17
DG-AG15	6	3.5-4	DG-AG15S-3.5-4	1/24/2019	<1.5	<1.5	<1.5	<1.5	<2.0	<1.5	<9.9	<1.5	<1.5	<1.5	<2.0	<1.5	<1.5	<17	<17
DG-AG15	6	8.5-9	DG-AG15S-8.5-9	1/24/2019	<1.5	<1.5	<1.5	<1.5	<2.0	<1.5	<9.9	<1.5	<1.5	<1.5	<2.0	<1.5	<1.5	<17	<17
DG-AH17	6	0.5-1	DG-AH17S-0.5-1	1/24/2019	<1.5	<1.5	<1.5	<1.5	<2.0	<1.5	<9.8	<1.5	<1.5	<1.5	<2.0	<1.5	<1.5	<17	<17
DG-AI15	6	0.5-1	DG-AI15S-0.5-1	1/24/2019	**2.9 J**	**4.4 J**	**6.3**	<1.5	<1.9	<1.5	<9.7	<1.5	<1.5	<1.5	<1.9	<1.5	<1.5	**130**	**70**
DG-AI15	6	3.5-4	DG-AI15S-3.5-4	1/24/2019	<1.5	<1.5	<1.5	<1.5	<2.0	<1.5	<9.9	<1.5	<1.5	<1.5	<2.0	<1.5	<1.5	<17	<17
DG-AI15 (D)	6	3.5-4	DG-AI15 (D)S-3.5-4	1/24/2019	<1.5	<1.5	<1.5	<1.5	<2.0	<1.5	<9.9	<1.5	<1.5	<1.5	<2.0	<1.5	<1.5	<17	<17
DG-AJ17	6	0.5-1	DG-AJ17S-0.5-1	1/24/2019	<1.5	<1.5	<1.5	<1.5	<2.0	<1.5	<9.8	<1.5	<1.5	<1.5	<2.0	<1.5	<1.5	<17	<17
DG-AJ17	6	3.5-4	DG-AJ17S-3.5-4	1/24/2019	<1.5	<1.5	<1.5	<1.5	<2.0	<1.5	<9.9	<1.5	<1.5	<1.5	<2.0	<1.5	<1.5	<17	<17
DG-AJ17	6	9.5-10	DG-AJ17S-9.5-10	1/24/2019	<1.5	<1.5	<1.5	<1.5	<2.0	<1.5	<10	<1.5	<1.5	<1.5	<2.0	<1.5	<1.5	<17	<17
DG-AK15	6	0.5-1	DG-AK15S-0.5-1	1/23/2019	<1.5	<1.5	<1.5	<1.5	<2.0	<1.5	<9.9	<1.5	<1.5	<1.5	<2.0	<1.5	<1.5	<17	<17
DG-AK15	6	3.5-4	DG-AK15S-3.5-4	1/23/2019	<1.5	<1.5	<1.5	<1.5	<2.0	<1.5	<9.9	<1.5	<1.5	<1.5	<2.0	<1.5	<1.5	<17	<17
DG-AM15	6	0.5-1	DG-AM15S-0.5-1	1/23/2019	<1.5	<1.5	<1.5	<1.5	<2.0	<1.5	<9.8	<1.5	<1.5	<1.5	<2.0	<1.5	<1.5	<17	<17
DG-AM15	6	3.5-4	DG-AM15S-3.5-4	1/23/2019	**2.4 J**	**27**	**7.4 J**	<1.5	<2.0	<1.5	<10	**3.0 J**	<1.5	<1.5	<2.0	<1.5	<1.5	**170 J+**	<17

Table 4: Organochlorine Pesticides and Polychlorinated Biphenyls Concentrations in Soil
Brisbane Baylands OU-2
Brisbane, California

Sample Location	Investigation Zone	Depth Range (ft bgs)	Sample Name	Collection Date	4,4'-DDD	4,4'-DDE	4,4'-DDT	alpha-BHC	alpha-Chlordane	beta-BHC	Chlordane	Dieldrin	Endrin	Endrin aldehyde	Endrin ketone	gamma-BHC (Lindane)	gamma-Chlordane	PCB-1254 (Aroclor 1254)	PCB-1260 (Aroclor 1260)
Direct Exposure Human Health Risk Level Residential Soil Exposure ESL [1]					2.7E+03	1.8E+03	1.9E+03	--	--	--	4.8E+02	3.7E+01	2.1E+04	--	--	5.50E+02	--	2.30E+02	
Leaching to Groundwater Levels Non-drinking Water ESL [2]					6.5E+04	2.9E+04	5.6E+03	--	--	--	2.3E+04	6.3E+00	7.6E+00	--	--	7.4E+00	--	3.3E+05	
USEPA RSL for Resident Soil [3]					1.9E+03	2.0E+03	1.9E+03	8.6E+01	1.7E+03	3.0E+02	1.7E+03	3.4E+01	1.9E+04	--	--	5.7E+02	1.7E+03	2.4E+02	2.4E+02
				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
DG-AM15	6	9.5-10	DG-AM15S-9.5-10	1/23/2019	<1.5	<1.5	<1.5	<1.5	<2.0	<1.5	<9.9	<1.5	<1.5	<1.5	<2.0	<1.5	<1.5	<17	<17
DG-AM15 (D)	6	9.5-10	DG-AM15 (D)S-9.5-10	1/23/2019	<1.5	<1.5	<1.5	<1.5	<2.0	<1.5	<9.9	<1.5	<1.5	<1.5	<2.0	<1.5	<1.5	<17	<17
DG-AP13	6	0.5-1	DG-AP13S-0.5-1	1/23/2019	<1.5	<1.5	<1.5	<1.5	<1.9	<1.5	<9.7	<1.5	<1.5	<1.5	<1.9	<1.5	<1.5	<16	<16
DG-AP13 (D)	6	0.5-1	DG-AP13 (D)S-0.5-1	1/23/2019	<1.5	<1.5	<1.5	<1.5	<2.0	<1.5	<9.8	<1.5	<1.5	<1.5	<2.0	<1.5	<1.5	<17	<17
DG-AP13	6	3.5-4	DG-AP13S-3.5-4	1/23/2019	<1.5	<1.5	<1.5	<1.5	<2.0	<1.5	<10	<1.5	<1.5	<1.5	<2.0	<1.5	<1.5	<17	<17
DG-AP13	6	9.5-10	DG-AP13S-9.5-10	1/23/2019	<1.5	<1.5	<1.5	<1.5	<2.0	<1.5	<9.8	<1.5	<1.5	<1.5	<2.0	<1.5	<1.5	<17	<17
DG-AR13	6	0.5-1	DG-AR13S-0.5-1	1/23/2019	<1.5	<1.5	<1.5	<1.5	<2.0	<1.5	<9.8	<1.5	<1.5	<1.5	<2.0	<1.5	<1.5	<17	<17
DG-AR13	6	3.5-4	DG-AR13S-3.5-4	1/23/2019	<1.5	<1.5	<1.5	<1.5	<2.0	<1.5	<9.9	<1.5	<1.5	<1.5	<2.0	<1.5	<1.5	<17	<17
DG-AR13	6	9.5-10	DG-AR13S-9.5-10	1/23/2019	<1.5	<1.5	<1.5	<1.5	<2.0	<1.5	<9.9	<1.5	<1.5	<1.5	<2.0	<1.5	<1.5	<17	<17
DG-AS11	6	0.5-1	DG-AS11S-0.5-1	1/31/2019	<1.5	**2.7 J**	**3.3 J**	<1.5	<2.0	<1.5	<9.8	<1.5	<1.5	<1.5	<2.0	<1.5	<1.5	**46 J**	**29 J**
DG-AS11	6	3.5-4	DG-AS11S-3.5-4	1/31/2019	<4.5	<4.5	<4.5	<4.5	<6.0	<4.5	<30	<4.5	<4.5	<4.5	<6.0	<4.5	<4.5	<17	**27 J**
DG-AS11	6	7.5-8	DG-AS11S-7.5-8	1/31/2019	<4.3	<4.3	<4.3	<4.3	<5.7	<4.3	<29	<4.3	<4.3	<4.3	<5.7	<4.3	<4.3	<17	<17
DG-AT12	6	0.5-1	DG-AT12S-0.5-1	1/23/2019	<1.5	<1.5	<1.5	<1.5	<2.0	<1.5	<9.9	<1.5	<1.5	<1.5	<2.0	<1.5	<1.5	<17	<17
DG-AT12	6	3.5-4	DG-AT12S-3.5-4	1/23/2019	<1.5	<1.5	<1.5	<1.5	<1.9	<1.5	<9.7	<1.5	<1.5	**6.6**	<1.9	<1.5	<1.5	<17	<17
DG-AT12	6	9.5-10	DG-AT12S-9.5-10	1/23/2019	<1.5	<1.5	<1.5	<1.5	<1.9	<1.5	<9.7	<1.5	<1.5	<1.5	<1.9	<1.5	<1.5	<17	<17
DG-AU11	6	0.5-1	DG-AU11S-0.5-1	1/23/2019	<1.5	<1.5	<1.5	<1.5	<1.9	<1.5	<9.7	<1.5	<1.5	<1.5	<1.9	<1.5	<1.5	<17	<17
DG-AU11	6	3.5-4	DG-AU11S-3.5-4	1/23/2019	**1.5 J**	**15**	**39 J**	<1.5	<2.0	<1.5	<9.8	**11 J**	<1.5	<1.5	<2.0	<1.5	<1.5	**760 J+**	**560 J+**
DG-AU11	6	9.5-10	DG-AU11S-9.5-10	1/23/2019	<1.5	<1.5	<1.5	<1.5	<2.0	<1.5	<9.9	<1.5	<1.5	<1.5	<2.0	<1.5	<1.5	**22 J**	<17
DG-AW11	6	0.5-1	DG-AW11S-0.5-1	1/23/2019	<1.5	<1.5	**14 J**	<1.5	<1.9	<1.5	<9.7	<1.5	<1.5	**1.9 J**	<1.9	<1.5	<1.5	<17	**230**
DG-AW11	6	3.5-4	DG-AW11S-3.5-4	1/23/2019	<1.5	**27**	**4.7 J**	<1.5	<1.9	<1.5	<9.7	**2.4 J**	<1.5	**1.7 J**	<1.9	<1.5	<1.5	<16	**66**
DG-AW11	6	7.5-8	DG-AW11S-7.5-8	1/23/2019	**4.0 J**	**11**	**5.4**	<1.5	<2.0	<1.5	<9.9	<1.5	<1.5	<1.5	<2.0	<1.5	<1.5	<17	<17

Table 4: Organochlorine Pesticides and Polychlorinated Biphenyls Concentrations in Soil
Brisbane Baylands OU-2
Brisbane, California

Notes:

1. San Francisco Bay RWQCB, 2019. Summary of Soil ESLs, Jan. 2019 (Rev. 1) - Direct Exposure Human Health Risk Levels (Table S-1) Res: Shallow Soil Exposure.
2. San Francisco Bay RWQCB, 2019. Summary of Soil ESLs, Jan. 2019 (Rev. 1) - Leaching to Groundwater Levels (Table S-3) Non-drinking Water.
3. USEPA, 2018. Regional Screening Levels - Generic Tables (April 2019). Screening level for "Resident Soil."

- The lower RWQCB ESL is used as comparison criteria when available. If RWQCB ESLs are not available, EPA RSLs was selected for use as comparison criteria.
- Organochlorine pesticides were analyzed by USEPA Method 8081A.
- PCBs were analyzed by USEPA Method 8082.
- Only analytes with detections are included in this table.
- Non-detect results are presented with "<" followed by the MDL.
- Results in bold font indicate a detection above the MDL.
- Gray shading indicates a detection above the comparison criteria.

Abbreviations and Symbols:

"F1" - Matrix spike and/or matrix spike duplicate recovery is outside of acceptance limits.
"F2" - Matrix spike and/or matrix spike duplicate relative percent difference exceeds control limits.
"J" - Analyte was detected but the associated numerical value is the approximate concentration.
"J+" - Analyte was detected but the associated numerical value is likely to be higher than the concentration of the analyte in the sample due to positive bias of associated QC or calibration data or attributable to matrix interference.
"J-" - Analyte was detected but the associated numerical value is likely to be lower than the concentration of the analyte in the sample due to negative bias of associated QC or calibration data or attributable to matrix interference.
"R" - The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.
"U" - Not detected at or above the reported result.
"UJ" - The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
"--" - Not Available
"<" - Non-detect result
(D) - Duplicate sample
µg/kg - microgram per kilogram
ESL - Environmental Screening Level
ft bgs - Feet below ground surface
MDL - Method Detection Limit
PCB - Polychlorinated Biphenyl
QC - quality control
RSL - Regional Screening Level
RWQCB - Regional Water Quality Control Board
USEPA - United States Environmental Protection Agency

Table 5: Volatile Organic Compounds and Total Petroleum Hydrocarbons as Gasoline
Concentrations in Soil
Brisbane Baylands OU-2
Brisbane, California

Sample Location	Investigation Zone	Depth Range (ft bgs)	Sample Name	Collection Date	1,1,1-Trichloroethane	1,1,2-Trichloro-1,2,2-trifluoroethane	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	2-Butanone	4-Isopropyltoluene	4-Methyl-2-pentanone	Benzene	Carbon disulfide	Chloroform	cis-1,2-Dichloroethene	Ethylbenzene	Isopropylbenzene	Methyl-tert-butyl ether (MTBE)	Naphthalene	n-Butylbenzene	n-Propylbenzene	sec-Butylbenzene	tert-Butylbenzene	Tetrachloroethene (PCE)	Toluene	trans-1,2-Dichloroethene	Trichloroethene (TCE)	Vinyl Chloride	Xylenes, Total	TPH-Gasoline (C4-C12)
Direct Exposure Human Health Risk Level Residential Soil Exposure ESL [1]					1.7E+06	--	--	--	--	--	--	3.3E+02	--	3.2E+02	1.9E+04	5.9E+03	--	4.7E+04	3.8E+03	--	--	--	--	5.9E+02	1.1E+06	1.3E+05	9.5E+02	8.3E+00	5.8E+05	4.3E+05
Leaching to Groundwater Levels Non-drinking Water ESL [2]					7.0E+03	--	--	--	--	--	--	2.5E+01	--	2.3E+01	1.6E+03	4.3E+02	--	2.5E+03	1.2E+03	--	--	--	--	8.0E+01	1.0E+04	1.4E+04	8.5E+01	1.5E+00	1.0E+04	4.9E+03
USEPA RSL for Resident Soil [3]					8.1E+06	6.7E+06	3.0E+05	2.7E+05	2.7E+07	--	3.3E+07	1.2E+03	7.7E+05	3.2E+02	1.6E+05	5.8E+03	1.9E+06	4.7E+04	3.8E+03	3.9E+06	3.8E+06	7.8E+06	7.8E+06	2.4E+04	4.9E+06	1.6E+06	9.4E+02	5.9E+01	5.8E+05	--
			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	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	mg/kg
DG-N1	1	0.5-1	DG-N1S-0.5-1	12/18/2018	<0.44	<4.4	<0.89	<0.89	<4.4	<0.44	<2.2	<0.44	<0.89	<0.44	<0.44	<0.44	<0.44	<0.89	<0.89	<0.89	<0.44	<0.89	<0.89	<0.44 U	<0.44	<0.44	<0.44	<0.89	<1.2	<0.062
DG-N1	1	3.5-4	DG-N1S-3.5-4	12/18/2018	<0.47	<4.7	<0.94	<0.94	<4.7	<0.47	<2.3	<0.47	<0.94	<0.47	<0.47	<0.47	<0.47	<0.94	<0.94	<0.94	<0.47	<0.94	<0.94	<0.47 U	<0.47	<0.47	<0.47	<0.94	<1.2	<0.066
DG-N4	1	4.5-5	DG-N4S-4.5-5	12/19/2018	<35	<140	<35	<35	<350	<35	<140	<35	<87	<35	<35	<35	<35	<70	**84 J**	<70	**35 J**	<35	<70	<35	<35	<35	<35	<70	<70	**39**
DG-N4	1	8.5-9	DG-N4S-8.5-9	12/19/2018	<0.29	<2.9	<0.57	<0.57	<2.9	<0.29	<1.4	<0.29	<0.57	<0.29	<0.29	<0.29	<0.29	<0.57	<0.57	<0.57	<0.29	<0.57	<0.57	<0.29	<0.29	<0.29	<0.29	<0.57	<0.74	**0.7**
DG-N5	1	0.5-1	DG-N5S-0.5-1	1/8/2019	<0.67	<6.7	<1.3	<1.3	<6.7	<0.67	<3.4	<0.67	<1.3	<0.67	<0.67	<0.67	<0.67	<1.3	<1.3	<1.3	<0.67	<1.3	<1.3	<0.67	<0.67	<0.67	<0.67	<1.3	<1.7	<0.094
DG-N5 (D)	1	0.5-1	DG-N5 (D)S-0.5-1	1/8/2019	<0.32	<3.2	<0.64	<0.64	<3.2	<0.32	<1.6	<0.32	<0.64	<0.32	<0.32	<0.32	<0.32	<0.64	<0.64	<0.64	<0.32	<0.64	<0.64	<0.32	<0.32	<0.32	<0.32	<0.64	<0.84	<0.045
DG-N5 (D)	1	0.5-1	DG-N5 (D)S-0.5-1	1/24/2019	<0.37	<3.7	<0.73	<0.73	<3.7	<0.37	<1.8	<0.37	<0.73	<0.37	<0.37	<0.37	<0.37	<0.73	<0.73	<0.73	<0.37	<0.73	<0.73	<0.37	<0.37	<0.37	<0.37	<0.73	<0.95	**0.47 J**
DG-N5	1	3.5-4	DG-N5S-3.5-4	1/8/2019	<0.29	<2.9	<0.59	<0.59	<2.9	<0.29	<1.5	<0.29	<0.59	<0.29	<0.29	<0.29	<0.29	<0.59	<0.59	<0.59	<0.29	<0.59	<0.59	<0.29	<0.29	<0.29	<0.29	<0.59	<0.77	<0.041
DG-O3	1	0.5-1	DG-O3S-0.5-1	12/18/2018	<0.43	<4.3	<0.87	<0.87	<4.3	<0.43	<2.2	<0.43	<0.87	<0.43	<0.43	<0.43	<0.43	<0.87	<0.87	<0.87	<0.43	<0.87	<0.87	<0.43 U	<0.43	<0.43	<0.43	<0.87	<1.1	<0.061
DG-O3	1	3.5-4	DG-O3S-3.5-4	12/18/2018	<0.44	<4.4	<0.88	<0.88	<4.4	<0.44	<2.2	<0.44	<0.88	<0.44	<0.44	<0.44	<0.44	<0.88	<0.88	<0.88	<0.44	<0.88	<0.88	<0.44 U	<0.44	<0.44	<0.44	<0.88	<1.1	<0.062
DG-O4	1	4.5-5	DG-O4S-4.5-5	12/19/2018	<210	<830	<210	<210	<2,100	<210	<830	<210	<520	<210	<210	<210	<210	<410	<410	<410	<210	<210	<410	<210	<210	<210	<210	<410	<410	**210**
DG-O4	1	7.5-8	DG-O4S-7.5-8	2/4/2019	<0.31	<3.1	<0.62	<0.62	<3.1	<0.31	<1.6	<0.31	<0.62	<0.31	<0.31	<0.31	<0.31	<0.62	<0.62	<0.62	<0.31	<0.62	<0.62	<0.31	<0.31	<0.31	<0.31	<0.62	<0.81	**0.31**
DG-O4	1	9.5-10	DG-O4S-9.5-10	12/19/2018	<0.30	<3.0	<0.60	<0.60	<3.0	<0.30	<1.5	<0.30	**1.5**	<0.30	<0.30	<0.30	<0.30	<0.60	<0.60	<0.60	<0.30	<0.60	<0.60	<0.30	<0.30	<0.30	<0.30	<0.60	<0.78	**0.94**
DG-P1	1	0.5-1	DG-P1S-0.5-1	12/18/2018	<0.42	<4.2	<0.83	<0.83	<4.2	<0.42	<2.1	<0.42	<0.83	<0.42	<0.42	<0.42	<0.42	<0.83	<0.83	<0.83	<0.42	<0.83	<0.83	<0.42 U	<0.42	<0.42	<0.42	<0.83	<1.1	<0.058
DG-P1 (D)	1	0.5-1	DG-P1 (D)S-0.5-1	12/18/2018	<0.36	<3.6	<0.72	<0.72	<3.6	<0.36	<1.8	<0.36	<0.72	<0.36	<0.36	<0.36	<0.36	<0.72	<0.72	<0.72	<0.36	<0.72	<0.72	<0.36 U	<0.36	<0.36	<0.36	<0.72	<0.94	<0.051
DG-P1	1	3.5-4	DG-P1S-3.5-4	12/18/2018	<0.42	<4.2	<0.84	<0.84	<4.2	<0.42	<2.1	<0.42	<0.84	<0.42	<0.42	<0.42	<0.42	<0.84	<0.84	<0.84	<0.42	<0.84	<0.84	<0.42	<0.42	<0.42	<0.42	<0.84	<1.1	<0.059
DG-P4	1	4.5-5	DG-P4S-4.5-5	12/19/2018	<270	<1,100	<270	<270	<2,700	<270	<1,100	<270	<680	<270	<270	<270	<270	<540	<540	<540	<270	<270	<540	<270	<270	<270	<270	<540	<540	**260**
DG-P4	1	7.5-8	DG-P4S-7.5-8	12/19/2018	<37	<150	<37	<37	<370	<37	<150	<37	<91	<37	<37	<37	<37	<73	<73	<73	<37	<37	<73	<37	<37	<37	<37	<73	<73	**20**
DG-P5	1	0.5-1	DG-P5S-0.5-1	1/8/2019	<0.36	<3.6	<0.71	<0.71	<3.6	<0.36	<1.8	<0.36	<0.71	<0.36	<0.36	<0.36	<0.36	<0.71	<0.71	<0.71	<0.36	<0.71	<0.71	<0.36	<0.36	<0.36	<0.36	<0.71	<0.93	<0.050
DG-P5	1	3.5-4	DG-P5S-3.5-4	1/8/2019	<0.41	<4.1	<0.81	<0.81	<4.1	<0.41	<2.0	<0.41	<0.81	<0.41	<0.41	<0.41	<0.41	<0.81	<0.81	<0.81	<0.41	<0.81	<0.81	<0.41	<0.41	<0.41	<0.41	<0.81	<1.1	<0.057
DG-Q3	1	0.5-1	DG-Q3S-0.5-1	12/18/2018	<0.37	<3.7	<0.74	<0.74	<3.7	<0.37	<1.8	<0.37	<0.74	<0.37	<0.37	<0.37	<0.37	<0.74	<0.74	<0.74	<0.37	<0.74	<0.74	<0.37 U	<0.37	<0.37	<0.37	<0.74	<0.96	<0.052
DG-Q3	1	3.5-4	DG-Q3S-3.5-4	12/18/2018	<0.35	<3.5	<0.69	<0.69	<3.5	<0.35	<1.7	<0.35	<0.69	<0.35	<0.35	<0.35	<0.35	<0.69	<0.69	<0.69	<0.35	<0.69	<0.69	<0.35	<0.35	<0.35	<0.35	<0.69	<0.90	<0.048
DG-Q7	1	0.5-1	DG-Q7S-0.5-1	1/8/2019	<0.39	<3.9	<0.78	<0.78	<3.9	<0.39	<2.0	<0.39	<0.78	<0.39	<0.39	<0.39	<0.39	<0.78	<0.78	<0.78	<0.39	<0.78	<0.78	<0.39	<0.39	<0.39	<0.39	<0.78	<1.0	<0.055
DG-Q7	1	3.5-4	DG-Q7S-3.5-4	1/8/2019	<0.37	<3.7	<0.75	<0.75	<3.7	<0.37	<1.9	<0.37	<0.75	<0.37	<0.37	<0.37	<0.37	<0.75	<0.75	<0.75	<0.37	<0.75	<0.75	<0.37	<0.37	<0.37	<0.37	<0.75	<0.97	<0.052
DG-Q7 (D)	1	3.5-4	DG-Q7 (D)S-3.5-4	1/8/2019	<0.36	<3.6	<0.72	<0.72	<3.6	<0.36	<1.8	<0.36	<0.72	<0.36	<0.36	<0.36	<0.36	<0.72	<0.72	<0.72	<0.36	<0.72	<0.72	<0.36	<0.36	<0.36	<0.36	<0.72	<0.93	<0.050
DG-R1	1	0.5-1	DG-R1S-0.5-1	12/17/2018	<0.36	<3.6	<0.72	<0.72	<3.6	<0.36	<1.8	<0.36	<0.72	<0.36	<0.36	<0.36	<0.36	<0.72	<0.72	<0.72	<0.36	<0.72	<0.72	<0.36 *	<0.36	<0.36	<0.36	<0.72	<0.93	<0.050
DG-R1	1	3.5-4	DG-R1S-3.5-4	12/17/2018	<0.46	<4.6	<0.92	<0.92	<4.6	<0.46	<2.3	<0.46	<0.92	<0.46	<0.46	<0.46	<0.46	<0.92	<0.92	<0.92	<0.46	<0.92	<0.92	<0.46	<0.46	<0.46	<0.46	<0.92	<1.2	<0.064
DG-R5	1	0.5-1	DG-R5S-0.5-1	1/29/2019	<0.45	<4.5	<0.90 U	<0.90 U	<4.5	<0.45 U	<2.2	<0.45	<0.90	<0.45	<0.45	<0.45	<0.45	<0.90	<0.90	<0.90 U	<0.45 U	<0.90 U	<0.90 U	<0.45	<0.45	<0.45	<0.45	<0.90	<1.2	<0.063
DG-R5	1	3.5-4	DG-R5S-3.5-4	1/29/2019	<0.38	<3.8	<0.76 U	<0.76 U	<3.8	<0.38 U	<1.9	<0.38	<0.76	<0.38	<0.38	<0.38	<0.38	<0.76	<0.76	<0.76 U	<0.38 U	<0.76 U	<0.76 U	<0.38	<0.38	<0.38	<0.38	<0.76	<0.99	<0.054
DG-R5 (D)	1	3.5-4	DG-R5 (D)S-3.5-4	1/29/2019	<0.37	<3.7	<0.73	<0.73	<3.7	<0.37	<1.8 R	<0.37	<0.73	<0.37	<0.37	<0.37	<0.37	<0.73	<0.73	<0.73	<0.37	<0.73	<0.73	<0.37	<0.37	<0.37	<0.37	<0.73	<0.95	<0.051
DG-S3	1	0.5-1	DG-S3S-0.5-1	12/18/2018	<0.40	<4.0	<0.79	<0.79	<4.0	<0.40	<2.0	<0.40	<0.79	<0.40	<0.40	<0.40	<0.40	<0.79	<0.79	<0.79	<0.40	<0.79	<0.79	<0.40	<0.40	<0.40	<0.40	<0.79	<1.0	<0.056
DG-S3	1	3.5-4	DG-S3S-3.5-4	12/18/2018	<0.44 UJ	<4.4 UJ	<0.87 UJ	<0.87 UJ	<4.4 UJ	<0.44 UJ	<2.2 UJ	<0.44 UJ	<0.87 UJ	<0.44 UJ	<0.44 UJ	<0.44 UJ	<0.44 UJ	<0.87 UJ	<0.87 UJ	<0.87 UJ	<0.44 UJ	<0.87 UJ	<0.87 UJ	<0.44 UJ	<0.44 UJ	<0.44 UJ	<0.44 UJ	<0.87 UJ	<1.1 UJ	<0.068
DG-S7	1	0.5-1	DG-S7S-0.5-1	1/8/2019	<0.36	<3.6	<0.73	<0.73	<3.6	<0.36	<1.8	<0.36	<0.73	<0.36	<0.36	<0.36	<0.36	<0.73	<0.73	<0.73	<0.36	<0.73	<0.73	<0.36	<0.36	<0.36	<0.36	<0.73	<0.95	<0.051
DG-S7	1	3.5-4	DG-S7S-3.5-4	1/8/2019	<0.35	<3.5	<0.70	<0.70	<3.5	<0.35	<1.8	<0.35	<0.70	<0.35	<0.35	<0.35	<0.35	<0.70	<0.70	<0.70	<0.35	<0.70	<0.70	<0.35	<0.35	<0.35	<0.35	<0.70	<0.92	<0.049
DG-S7	1	3.5-4	DG-S7S-3.5-4	2/4/2019	<0.42	<4.2	<0.84	<0.84	<4.2	<0.42	<2.1	<0.42	<0.84	<0.42	<0.42	<0.42	<0.42	<0.84	<0.84	<0.84	<0.42	<0.84	<0.84	<0.42	<0.42	<0.42	<0.42	<0.84	<1.1	<0.059
DG-T1	1	0.5-1	DG-T1S-0.5-1	12/17/2018	<0.44	<4.4	<0.89	<0.89	<4.4	<0.44	<2.2 F1	<0.44	<0.89	<0.44	<0.44	<0.44	<0.44	<0.89	<0.89	<0.89	<0.44	<0.89	<0.89	<0.44	<0.44	<0.44	<0.44	<0.89	<1.2	<0.062
DG-T1	1	3.5-4	DG-T1S-3.5-4	12/17/2018	<0.53	<5.3	<1.1	<1.1	<5.3	<0.53	<2.7	<0.53	<1.1	<0.53	<0.53	<0.53	<0.53	<1.1	<1.1	<1.1	<0.53	<1.1	<1.1	<0.53 *	<0.53	<0.53	<0.53	<1.1	<1.4	<0.075
DG-T1 (D)	1	3.5-4	DG-T1 (D)S-3.5-4	12/17/2018	<0.95	<9.5	<1.9	<1.9	<9.5	<0.95	<4.8	<0.95	<1.9	<0.95	<0.95	<0.95	<0.95	<1.9	<1.9 UJ	<1.9	<0.95	<1.9	<1.9	<0.95	<0.95	<0.95	<0.95	<1.9	<2.5	<0.13
DG-T5	1	0.5-1	DG-T5S-0.5-1	1/8/2019	<0.44	<4.4	<0.87	<0.87	<4.4	<0.44	<2.2	<0.44	<0.87	<0.44	<0.44	<0.44	<0.44	<0.87	<0.75	<0.87	<0.44	<0.87	<0.87	<0.44	<0.44	<0.44	<0.44	<0.87	<1.1	<0.061
DG-T5	1	3.5-4	DG-T5S-3.5-4	1/8/2019	<0.33	<3.3	<0.66	<0.66	<3.3	<0.33	<1.7	<0.33	<0.66	<0.33	<0.33	<0.33	<0.33	<0.66	<0.66	<0.66	<0.33	<0.66	<0.66	<0.33	<0.33	<0.33	<0.33	<0.66	<0.86	<0.046
DG-U3	1	0.5-1	DG-U3S-0.5-1	12/18/2018	<0.43	<4.3	<0.85	<0.85	<4.3	<0.43	<2.1	<0.43	<0.85	<0.43	<0.43	<0.43	<0.43	<0.85	<0.85	<0.85	<0.43	<0.85	<0.85	<0.43	<0.43	<0.43	<0.43	<0.85	<1.1	<0.060
DG-U3	1	3.5-4	DG-U3S-3.5-4	12/18/2018	<0.55	<5.5	<1.1	<1.1	<5.5	<0.55	<2.8	<0.55	<1.1	<0.55	<0.55	<0.55	<0.55	<1.1	<1.1	<1.1	<0.55	<1.1	<1.1	<0.55	<0.55	<0.55	**2.3**	<1.1	<1.4	<0.077
DG-U3 (D)	1	3.5-4	DG-U3 (D)S-3.5-4	12/18/2018	<0.36	<3.6	<0.73	<0.73	<3.6	<0.36	<1.8	<0.36	<0.73	<0.36	<0.36	<0.36	<0.36	<0.73	<0.73	<0.73	<0.36	<0.73	<0.73	<0.36	<0.36	<0.36	**2.1**	<0.73	<0.94	**0.18 J**
DG-U7	1	0.5-1	DG-U7S-0.5-1	1/8/2019	<0.36	<3.6	<0.71	<0.71	<3.6	<0.36	<1.8	<0.36	<0.71	<0.36	<0.36	<0.36	<0.36	<0.71	<0.71	<0.71	<0.36	<0.71	<0.71	<0.36	<0.36	<0.36	<0.36	<0.71	<0.93	<0.050
DG-U7	1	3.5-4	DG-U7S-3.5-4	1/8/2019	<0.36	<3.6	<0.71	<0.71	**15**	<0.36	<1.8	<0.36	<1.1	<0.36	<0.36	<0.36	<0.36	<0.71	<0.71	<0.71	<0.36	<0.71	<0.71	<0.36	<0.36	<0.36	<0.36	<0.71	<0.93	<0.050
DG-U7	1	3.5-4	DG-U7S-3.5-4	2/4/2019	<0.39	<3.9	<0.78	<0.78	**11**	<0.39	<2.0	<0.39	<0.78	<0.39	<0.39	<0.39	<0.39	<0.78	<0.78	<0.78	<0.39	<0.78	<0.78	<0.39	<0.39	<0.39	<0.39	<0.78	<1.0	<0.055
DG-V1	1	0.5-1	DG-V1S-0.5-1	12/17/2018	<0.37	<3.7	<0.75	<0.75	<3.7	<0.37	<1.9	<0.37	<0.75	<0.37	<0.37	<0.37	<0.37	<0.75	<0.75	<0.75	<0.37	<0.75	<0.75	<0.37 *	<0.37	<0.37	<0.37	<0.75	<0.97	<0.052
DG-V1	1	3.5-4	DG-V1S-3.5-4	12/17/2018	<0.56	<5.6	<1.1	<1.1	<5.6	<0.56	<2.8	<0.56	<1.1	<0.56	<0.56	<0.56	<0.56	<1.1	<1.1	<1.1	<0.56	<1.1	<1.1	<0.56 *	<0.56	<0.56	<0.56	<1.1	<1.5	<0.078
DG-V5	1	0.5-1	DG-V5S-0.5-1	1/8/2019	<0.43	<4.3	<0.86	<0.86	<4.3	<0.43	<2.2	<0.43	<0.86	<0.43	<0.43	<0.43	<0.43	<0.86	<0.86	<0.86	<0.43	<0.86	<0.86	<0.43	<0.43	<0.43	<0.43	<0.86	<1.1	<0.060
DG-V5	1	3.5-4	DG-V5S-3.5-4	1/8/2019	<0.34	<3.4	<0.69	<0.69	<3.4	<0.34	<1.7	**2.2**	<0.69	<0.34	<0.34	<0.34	<0.34	<0.69	<0.69	<0.69	<0.34	<0.69	<0.69	<0.34	**1.1**	<0.34	<0.34	<0.69	<0.90	<0.048
DG-V5	1	7.5-8	DG-V5S-7.5-8	1/8/2019	<0.34	<3.4	<0.69	<0.69	<3.4	<0.34	<1.7	<0.34	<0.69	<0.34	<0.34	<0.34	<0.34	<0.69	<0.69	<0.69	<0.34	<0.69	<0.69	<0.34	<0.34	<0.34	<0.34	<0.69	<0.90	<0.048
DG-V9	1	0.5-1	DG-V9S-0.5-1	1/10/2019	<0.37	<3.7	<0.74	<0.74	<3.7	<0.37	<1.8	<0.37	<0.74	<0.37	<0.37	<0.37	<0.37	<0.74	<0.74	<0.74	<0.37	<0.74	<0.74	<0.37	<0.37	<0.37	<0.37	<0.74	<0.96	<0.052
DG-V9	1	3.5-4	DG-V9S-3.5-4	1/10/2019	<0.39	<3.9	<0.78	<0.78	<3.9	<0.39	<1.9	<0.39	<0.78	<0.39	<0.39	<0.39	<0.39	<0.78	<0.78	<0.78	<0.39	<0.78	<0.78	<0.39	<0.39	<0.39	<0.39	<0.78	<1.0	<0.054
DG-V9	1	7.5-8	DG-V9S-7.5-8	1/10/2019	<0.36	<3.6	<0.71	<0.71	<3.6	<0.36	<1.8	<0.36	<0.71	<0.36	<0.36	<0.36	<0.36	<0.71	<0.71	<0.71	<0.36	<0.71	<0.71	<0.36	<0.36	<0.36	<0.36	<0.71	<0.93	<0.050
DG-W3	1	0.5-1	DG-W3S-0.5-1	12/18/2018	<0.44	<4.4	<0.87	<0.87	<4.4	<0.44	<2.2	<0.44	<0.87	<0.44	<0.44	<0.44	<0.44	<0.87	<0.87	<0.87	<0.44	<0.87	<0.87	<0.44	<0.44	<0.44	<0.44	<0.87	<1.1	<0.061
DG-W3	1	3.5-4	DG-W3S-3.5-4	12/18/2018	<0.61	<6.1	<1.2	<1.2	<6.1	<0.61	<3.0	<0.61	<1.2	<0.61	<0.61	<0.61	<0.61	<1.2	<1.2	<1.2	<0.61	<1.2	<1.2	<0.61	<0.61	<0.61	<0.61	<1.2	<1.6	<0.085

Table 5: Volatile Organic Compounds and Total Petroleum Hydrocarbons as Gasoline
Concentrations in Soil
Brisbane Baylands OU-2
Brisbane, California

Sample Location	Investigation Zone	Depth Range (ft bgs)	Sample Name	Collection Date	1,1,1-Trichloroethane	1,1,2-Trichloro-1,2,2-trifluoroethane	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	2-Butanone	4-Isopropyltoluene	4-Methyl-2-pentanone	Benzene	Carbon disulfide	Chloroform	cis-1,2-Dichloroethene	Ethylbenzene	Isopropylbenzene	Methyl-tert-butyl ether (MTBE)	Naphthalene	n-Butylbenzene	n-Propylbenzene	sec-Butylbenzene	tert-Butylbenzene	Tetrachloroethene (PCE)	Toluene	trans-1,2-Dichloroethene	Trichloroethene (TCE)	Vinyl Chloride	Xylenes, Total	TPH-Gasoline (C4-C12)
Direct Exposure Human Health Risk Level Residential Soil Exposure ESL [1]					1.7E+06	--	--	--	--	--	--	3.3E+02	--	3.2E+02	1.9E+04	5.9E+03	--	4.7E+04	3.8E+03	--	--	--	--	5.9E+02	1.1E+06	1.3E+05	9.5E+02	8.3E+00	5.8E+05	4.3E+05
Leaching to Groundwater Levels Non-drinking Water ESL [2]					7.0E+03	--	--	--	--	--	--	2.5E+01	--	2.3E+01	1.6E+03	4.3E+02	--	2.5E+03	1.2E+03	--	--	--	--	8.0E+01	1.0E+04	1.4E+04	8.5E+01	1.5E+00	1.0E+04	4.9E+03
USEPA RSL for Resident Soil [3]					8.1E+06	6.7E+06	3.0E+05	2.7E+05	2.7E+07	--	3.3E+07	1.2E+03	7.7E+05	3.2E+02	1.6E+05	5.8E+03	1.9E+06	4.7E+04	3.8E+03	3.9E+06	3.8E+06	7.8E+06	7.8E+06	2.4E+04	4.9E+06	1.6E+06	9.4E+02	5.9E+01	5.8E+05	--
				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	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	mg/kg
DG-W7	1	0.5-1	DG-W7S-0.5-1	1/29/2019	<0.36	<3.6	<0.72 U	<0.72 U	<3.6	<0.36 U	<1.8	<0.36	<0.72	<0.36	<0.36	<0.36	<0.36	<0.72	<0.72	<0.72 U	<0.36 U	<0.72 U	<0.72 U	<0.36	**0.40 J**	<0.36	<0.36	<0.72	<0.94	<0.050
DG-W7	1	3.5-4	DG-W7S-3.5-4	1/29/2019	<0.43	<4.3	<0.87 U	<0.87 U	<4.3	<0.43 U	<2.2	**0.46 J**	<0.87	<0.43	<0.43	<0.43	<0.43	<0.87	<0.87	<0.87 U	<0.43 U	<0.87 U	<0.87 U	<0.43	<0.43	<0.43	<0.43	<0.87	<1.1	<0.061
DG-X1	1	0.5-1	DG-X1S-0.5-1	12/17/2018	<0.43	<4.3	<0.86	<0.86	<4.3	<0.43	<2.1	<0.43	<0.86	<0.43	<0.43	<0.43	<0.43	<0.86	<0.86	<0.86	<0.43	<0.86	<0.86	<0.43 *	<0.43	<0.43	<0.43	<0.86	<1.1	<0.060
DG-X1 (D)	1	0.5-1	DG-X1 (D)S-0.5-1	12/17/2018	<0.40	<4.0	<0.80	<0.80	<4.0	<0.40	<2.0	<0.40	<0.80	<0.40	<0.40	<0.40	<0.40	<0.80	<0.80	<0.80	<0.40	<0.80	<0.80	<0.40 *	<0.40	<0.40	<0.40	<0.80	<1.0	<0.056
DG-X1	1	3.5-4	DG-X1S-3.5-4	12/17/2018	<0.48	<4.8	<0.97	<0.97	<4.8	<0.48	<2.4	<0.48	<0.97	<0.48	<0.48	<0.48	<0.48	<0.97	<0.97	<0.97	<0.48	<0.97	<0.97	<0.48 *	<0.48	<0.48	<0.48	<0.97	<1.3	<0.068
DG-X5	1	0.5-1	DG-X5S-0.5-1	1/8/2019	<0.37	<3.7	<0.74	<0.74	**20**	<0.37	<1.9	<0.37	<0.74	<0.37	<0.37	<0.37	<0.37	<0.74	<0.74	<0.74	<0.37	<0.74	<0.74	<0.37	<0.37	<0.37	<0.37	<0.74	<0.97	<0.052
DG-X5	1	3.5-4	DG-X5S-3.5-4	1/8/2019	<0.29	<2.9	<0.57	<0.57	<2.9	<0.29	<1.4	<0.29	<0.57	<0.29	<0.29	<0.29	<0.29	<0.57	<0.57	<0.57	<0.29	<0.57	<0.57	<0.29	<0.29	<0.29	<0.29	<0.57	<0.74	<0.040
DG-X9	1	0.5-1	DG-X9S-0.5-1	1/10/2019	<0.42	<4.2	<0.84	<0.84	<4.2	<0.42	<2.1	<0.42	<0.84	<0.42	<0.42	<0.42	<0.42	<0.84	<0.84	<0.84	<0.42	<0.84	<0.84	<0.42	<0.42	<0.42	<0.42	<0.84	<1.1	<0.059
DG-X9	1	3.5-4	DG-X9S-3.5-4	1/10/2019	<0.39	<3.9	<0.79	<0.79	<4.9	<0.39	<2.0	<0.39	<0.79	<0.39	<0.39	<0.39	<0.39	<0.79	<0.79	<0.79	<0.39	<0.79	<0.79	<0.39	<0.39	<0.39	<0.39	<0.79	<1.0	<0.055
DG-Y3	1	0.5-1	DG-Y3S-0.5-1	12/18/2018	<0.44	<4.4	<0.88	<0.88	<4.4	<0.44	<2.2	<0.44	<0.88	<0.44	<0.44	<0.44	<0.44	<0.88	<0.88	<0.88	<0.44	<0.88	<0.88	<0.44	<0.44	<0.44	<0.44	<0.88	<1.1	<0.061
DG-Y3	1	3.5-4	DG-Y3S-3.5-4	12/18/2018	<0.48	<4.8	<0.97	<0.97	<4.8	<0.48	<2.4	<0.48	<0.97	<0.48	<0.48	<0.48	<0.48	<0.97	<0.97	<0.97	<0.48	<0.97	<0.97	<0.48	<0.48	<0.48	<0.48	<0.97	<1.3	<0.068
DG-Y7	1	0.5-1	DG-Y7S-0.5-1	1/9/2019	<0.37	<3.7	<0.74	<0.74	<3.7	<0.37	<1.9	<0.37	<0.74	<0.37	<0.37	<0.37	<0.37	<0.74	<0.74	<0.74	<0.37	<0.74	<0.74	<0.37	<0.37	<0.37	<0.37	<0.74	<0.97	<0.052
DG-Y7	1	3.5-4	DG-Y7S-3.5-4	1/9/2019	<0.41	<4.1	<0.82	<0.82	<4.1	<0.41	<2.1	<0.41	<0.82	<0.41	<0.41	<0.41	<0.41	<0.82	<0.82	<0.82	<0.41	<0.82	<0.82	<0.41	<0.41	<0.41	<0.41	<0.82	<1.1	<0.058
DG-Z5	1	0.5-1	DG-Z5S-0.5-1	1/8/2019	<0.37	<3.7	<0.74	<0.74	<3.7	<0.37	<1.8	<0.37	<0.74	<0.37	<0.37	<0.37	<0.37	<0.74	<0.74	<0.74	<0.37	<0.74	<0.74	<0.37	<0.37	<0.37	<0.37	<0.74	<0.96	<0.051
DG-Z5	1	3.5-4	DG-Z5S-3.5-4	1/8/2019	<0.34	<3.4	<0.69	<0.69	<3.4	<0.34	<1.7	<0.34	<0.69	<0.34	<0.34	<0.34	<0.34	<0.69	<0.69	<0.69	<0.34	<0.69	<0.69	<0.34	<0.34	<0.34	<0.34	<0.69	<0.90	<0.048
DG-Z9	1	0.5-1	DG-Z9S-0.5-1	1/9/2019	<0.44	<4.4	<0.88	<0.88	<4.4	<0.44	<2.2	<0.44	<0.88	<0.44	<0.44	<0.44	<0.44	<0.88	<0.88	<0.88	<0.44	<0.88	<0.88	<0.44	<0.44	<0.44	<0.44	<0.88	<1.1	<0.061
DG-Z9 (D)	1	0.5-1	DG-Z9 (D)S-0.5-1	1/9/2019	<0.52	<5.2	<1.0	<1.0	<5.2	<0.52	<2.6	<0.52	<1.0	<0.52	<0.52	<0.52	<0.52	<1.0	<1.0	<1.0	<0.52	<1.0	<1.0	<0.52	<0.52	<0.52	<0.52	<1.0	<1.4	<0.073
DG-Z9	1	3.5-4	DG-Z9S-3.5-4	1/9/2019	<0.42	<4.2	<0.85	<0.85	<4.2	<0.42	<2.1	<0.42	<0.85	<0.42	<0.42	<0.42	<0.42	<0.85	<0.85	<0.85	<0.42	<0.85	<0.85	<0.42	<0.42	<0.42	<0.42	<0.85	<1.1	<0.059
DG-AA3	1	0.5-1	DG-AA3S-0.5-1	12/18/2018	<0.60	<6.0	<1.2	<1.2	**35 J**	<0.60	<3.0	<0.60	<1.2	<0.60	<0.60	<0.60	<0.60	<1.2	<1.2	<1.2	<0.60	<1.2	<1.2	<0.60	<0.60	<0.60	<0.60	<1.2	<1.6	<0.084
DG-AA3 (D)	1	0.5-1	DG-AA3 (D)S-0.5-1	12/18/2018	<0.42	<4.2	<0.83	<0.83	<4.2 UJ	<0.42	<2.1	<0.42	<0.83	<0.42	<0.42	<0.42	<0.42	<0.83	<0.83	<0.83	<0.42	<0.83	<0.83	<0.42	<0.42	<0.42	<0.42	<0.83	<1.1	<0.058
DG-AA3	1	3.5-4	DG-AA3S-3.5-4	12/18/2018	<0.35	<3.5	<0.71	<0.71	<3.5	<0.35	<1.8	<0.35	<0.71	<0.35	<0.35	<0.35	<0.35	<0.71	<0.71	<0.71	<0.35	<0.71	<0.71	<0.35	<0.35	<0.35	<0.35	<0.71	<0.92	<0.050
DG-AA3	1	7-7.5	DG-AA3S-7-7.5	12/18/2018	<0.46	<4.6	<0.92	<0.92	<4.6	<0.46	<2.3	<0.46	<0.92	<0.46	<0.46	<0.46	<0.46	<0.92	<0.92	<0.92	<0.46	<0.92	<0.92	<0.46	<0.46	<0.46	<0.46	<0.92	<1.2	<0.064
DG-AA7	1	0.5-1	DG-AA7S-0.5-1	1/9/2019	<0.36	<3.6	<0.72	<0.72	<3.6	<0.36	<1.8	<0.36	<0.72	<0.36	<0.36	<0.36	<0.36	<0.72	<0.72	<0.72	<0.36	<0.72	<0.72	<0.36	<0.36	<0.36	<0.36	<0.72	<0.94	<0.051
DG-AA7	1	3.5-4	DG-AA7S-3.5-4	1/9/2019	<0.37	<3.7	<0.74	<0.74	<3.7	<0.37	<1.9	<0.37	<0.74	<0.37	<0.37	<0.37	<0.37	<0.74	<0.74	<0.74	<0.37	<0.74	<0.74	<0.37	<0.37	<0.37	<0.37	<0.74	<0.96	<0.052
DG-AB5	1	0.5-1	DG-AB5S-0.5-1	1/29/2019	<0.32	<3.2	<0.64 U	<0.64 U	<3.2	<0.32 U	<1.6	<0.32	<0.64	<0.32	<0.32	<0.32	<0.32	<0.64	<0.64	<0.64 U	<0.32 U	<0.64 U	<0.64 U	<0.32	<0.32 UJ	<0.32	<0.32	<0.64	<0.83	<0.045
DG-AB5 (D)	1	0.5-1	DG-AB5 (D)S-0.5-1	1/29/2019	<0.31	<3.1	<0.62	<0.62	<3.1	<0.31	<1.7 R	<0.31	<0.62	<0.31	<0.31	<0.31	<0.31	<0.62	<0.62	<0.62	<0.31	<0.62	<0.62	<0.31	**0.45 J**	<0.31	<0.31	<0.62	<0.81	<0.044
DG-AB5	1	3.5-4	DG-AB5S-3.5-4	1/29/2019	<0.38	<3.8	<0.77	<0.77	<3.8	<0.38	<1.8 R	<0.38	<0.77	<0.38	<0.38	<0.38	<0.38	<0.77	<0.77	<0.77	<0.38	<0.77	<0.77	<0.38	<0.38	<0.38	<0.38	<0.77	<1.0	<0.054
DG-AB9	1	0.5-1	DG-AB9S-0.5-1	1/30/2019	<0.48	<4.8	<0.95	<0.95	<4.8	<0.48	<2.4	<0.48	<0.95	<0.48	<0.48	<0.48	<0.48	<0.95	<0.95	<0.95	<0.48	<0.95	<0.95	<0.48	<0.48	<0.48	<0.48	<0.95	<1.2	<0.067
DG-AB9	1	3.5-4	DG-AB9S-3.5-4	1/30/2019	<0.43	<4.3	<0.85	<0.85	<4.3	<0.43	<2.1	<0.43	<0.85	<0.43	<0.43	<0.43	<0.43	<0.85	<0.85	<0.85	<0.43	<0.85	<0.85	<0.43	<0.43	<0.43	<0.43	<0.85	<1.1	<0.060
DG-AC3	1	0.5-1	DG-AC3S-0.5-1	12/19/2018	<0.39	<3.9	<0.77	<0.77	<3.9	<0.39	<1.9	<0.39	<0.77	<0.39	<0.39	<0.39	<0.39	<0.77	<0.77	<0.77	<0.39	<0.77	<0.77	<0.39	<0.39	<0.39	<0.39	<0.77	<1.0	<0.054
DG-AC3	1	3.5-4	DG-AC3S-3.5-4	12/19/2018	<0.31	<3.1	<0.62	<0.62	<3.1	<0.31	<1.6	<0.31	<0.62	<0.31	<0.31	<0.31	<0.31	<0.62	<0.62	<0.62	<0.31	<0.62	<0.62	<0.31	<0.31	<0.31	<0.31	<0.62	<0.81	<0.044
DG-AC7	1	0.5-1	DG-AC7S-0.5-1	1/9/2019	<0.38	<3.8	<0.77	<0.77	<3.8	<0.38	<1.9	<0.38	<0.77	<0.38	<0.38	<0.38	<0.38	<0.77	<0.77	<0.77	<0.38	<0.77	<0.77	<0.38	<0.38	<0.38	<0.38	<0.77	<1.0	<0.054
DG-AC7 (D)	1	0.5-1	DG-AC7 (D)S-0.5-1	1/9/2019	<0.34	<3.4	<0.67	<0.67	<3.4	<0.34	<1.7	<0.34	<0.67	<0.34	<0.34	<0.34	<0.34	<0.67	<0.67	<0.67	<0.34	<0.67	<0.67	<0.34	<0.34	<0.34	<0.34	<0.67	<0.87	<0.047
DG-AC7	1	3.5-4	DG-AC7S-3.5-4	1/9/2019	<0.47	<4.7	<0.94	<0.94	<4.7	<0.47	<2.3	<0.47	<0.94	<0.47	<0.47	<0.47	<0.47	<0.94	<0.94	<0.94	<0.47	<0.94	<0.94	<0.47	<0.47	<0.47	<0.47	<0.94	<1.2	<0.066
DG-AC7	1	7.5-8	DG-AC7S-7.5-8	1/9/2019	<0.39	<3.9	<0.78	<0.78	<3.9	<0.39	<1.9	<0.39	<0.78	<0.39	<0.39	<0.39	<0.39	<0.78	<0.78	<0.78	<0.39	<0.78	<0.78	<0.39	<0.39	<0.39	<0.39	<0.78	<1.0	<0.054
DG-AD5	1	0.5-1	DG-AD5S-0.5-1	1/8/2019	<0.35	<3.5	<0.71	<0.71	<3.5	<0.35	<1.8	<0.35	<0.71	<0.35	<0.35	<0.35	<0.35	<0.71	<0.71	<0.71	<0.35	<0.71	<0.71	<0.35	<0.35	<0.35	<0.35	<0.71	<0.92	<0.050
DG-AD5	1	3.5-4	DG-AD5S-3.5-4	1/8/2019	<0.40	<4.0	<0.80	<0.80	**10**	<0.40	<2.0	<0.40	<0.80	<0.40	<0.40	<0.40	<0.40	<0.80	<0.80	<0.80	<0.40	<0.80	<0.80	<0.40	<0.40	<0.40	<0.40	<0.80	<1.0	<0.056
DG-AD9	1	0.5-1	DG-AD9S-0.5-1	1/9/2019	<0.31	<3.1	<0.63	<0.63	<3.1	<0.31	<1.6	<0.31	<0.63	<0.31	<0.31	<0.31	<0.31	<0.63	<0.63	<0.63	<0.31	<0.63	<0.63	<0.31	<0.31	<0.31	<0.31	<0.63	<0.82	<0.044
DG-AD9	1	3.5-4	DG-AD9S-3.5-4	1/9/2019	<0.33	<3.3	<0.67	<0.67	<3.3	<0.33	<1.7	<0.33	<0.67	<0.33	<0.33	<0.33	<0.33	<0.67	<0.67	<0.67	<0.33	<0.67	<0.67	<0.33	<0.33	<0.33	<0.33	<0.67	<0.87	<0.047
DG-AE3	1	0.5-1	DG-AE3S-0.5-1	12/19/2018	<0.45	<4.5	<0.90	<0.90	<4.5	<0.45	<2.2	<0.45	**1.1 J**	<0.45	<0.45	<0.45	<0.45	<0.90	<0.90	<0.90	<0.45	<0.90	<0.90	<0.45	<0.45	<0.45	<0.45	<0.90	<1.2	<0.063
DG-AE3	1	3.5-4	DG-AE3S-3.5-4	12/19/2018	<0.34	<3.4	<0.68	<0.68	<3.4	<0.34	<1.7	<0.34	<0.68	<0.34	<0.34	<0.34	<0.34	<0.68	<0.68	<0.68	<0.34	<0.68	<0.68	<0.34	<0.34	<0.34	<0.34	<0.68	<0.89	<0.048
DG-AE7	1	0.5-1	DG-AE7S-0.5-1	1/9/2019	<0.33	<3.3	<0.66	<0.66	<3.3	<0.33	<1.6	<0.33	<0.66	<0.33	<0.33	<0.33	<0.33	<0.66	<0.66	<0.66	<0.33	<0.66	<0.66	<0.33	<0.33	<0.33	<0.33	<0.66	<0.86	<0.046
DG-AE7	1	3.5-4	DG-AE7S-3.5-4	1/9/2019	<0.37	<3.7	<0.74	<0.74	**18**	<0.37	<1.8	<0.37	<0.74	<0.37	<0.37	<0.37	<0.37	<0.74	<0.74	<0.74	<0.37	<0.74	<0.74	<0.37	<0.37	<0.37	<0.37	<0.74	<0.96	<0.052
DG-AE7	1	8-8.5	DG-AE7S-8-8.5	1/9/2019	<0.38	<3.8	<0.76	<0.76	<3.8	<0.38	<1.9	<0.38	<0.76	<0.38	<0.38	<0.38	<0.38	<0.76	<0.76	<0.76	<0.38	<0.76	<0.76	<0.38	<0.38	<0.38	<0.38	<0.76	<0.99	<0.054
DG-AF5	1	0.5-1	DG-AF5S-0.5-1	1/8/2019	<0.36	<3.6	<0.73	<0.73	<3.6	<0.36	<1.8	<0.36	<0.73	<0.36	<0.36	<0.36	<0.36	<0.73	<0.73	<0.73	<0.36	<0.73	<0.73	<0.36	<0.36	<0.36	<0.36	<0.73	<0.95	<0.051
DG-AF5	1	3.5-4	DG-AF5S-3.5-4	1/8/2019	<0.49	<4.9	<0.98	<0.98	<4.9	<0.49	<2.5	<0.49	<0.98	<0.49	<0.49	<0.49	<0.49	<0.98	<0.98	<0.98	<0.49	<0.98	<0.98	<0.49	<0.49	<0.49	<0.49	<0.98	<1.3	<0.069
DG-AG3	1	0.5-1	DG-AG3S-0.5-1	12/19/2018	<0.48	<4.8	<0.97	<0.97	<4.8	<0.48	<2.4	<0.48	<0.97	<0.48	<0.48	<0.48	<0.48	<0.97	<0.97	<0.97	<0.48	<0.97	<0.97	<0.48	<0.48	<0.48	<0.48	<0.97	<1.3	<0.068
DG-AG3	1	3.5-4	DG-AG3S-3.5-4	12/19/2018	<0.37	<3.7	<0.74	<0.74	<3.7	<0.37	<1.8	<0.37	<0.74	<0.37	<0.37	<0.37	<0.37	<0.74	<0.74	<0.74	<0.37	<0.74	<0.74	<0.37	<0.37	<0.37	<0.37	<0.74	<0.96	<0.052
DG-AG3	1	3.5-4	DG-AG3S-3.5-4	2/4/2019	<0.32	<3.2	<0.64	<0.64	<3.2	<0.32	<1.6	<0.32	<0.64	<0.32	<0.32	<0.32	<0.32	<0.64	<0.64	<0.64	<0.32	<0.64	<0.64	<0.32	<0.32	<0.32	<0.32	<0.64	<0.84	<0.045
DG-AG7	1	0.5-1	DG-AG7S-0.5-1	1/30/2019	<0.34	<3.4	<0.69	<0.69	<3.4	<0.34	<1.7	<0.34	<0.69	<0.34	<0.34	<0.34	<0.34	<0.69	<0.69	<0.69	<0.34	<0.69	<0.69	<0.34	<0.34	<0.34	<0.34	<0.69	<0.89	<0.048
DG-AG7	1	3.5-4	DG-AG7S-3.5-4	1/30/2019	<0.97	<9.7	<1.9	<1.9	<9.7	<0.97	<4.9	<0.97	<1.9	<0.97	<0.97	<0.97	<0.97	<1.9	<1.9	<1.9	<0.97	<1.9	<1.9	<0.97	**1.3 J**	<0.97	<0.97	<1.9	<2.5	<0.14
DG-AH4	1	4-4.5	DG-AH4S-4-4.5	12/18/2018	<48	<190	**1,100**	**320**	<480	**500**	<190	<48	<120	<48	<48	**75 J**	**2,300**	<96	**570**	**680**	**340**	**650**	**1,100**	<48	<48	<48	<48	<96	**340**	**250**
DG-AH5	1	0.5-1	DG-AH5S-0.5-1	1/8/2019	<0.34	<3.4	<0.67	<0.67	<3.4	<0.34	<1.7	<0.34	<0.67	<0.34	<0.34	<0.34	<0.34	<0.67	<0.67	<0.67	<0.34	<0.67	<0.67	<0.34	<0.34	<0.34	<0.34	<0.67	<0.87	<0.047
DG-AH5	1	3.5-4	DG-AH5S-3.5-4	1/8/2019	<0.32	<3.2	<0.63	<0.63	<3.2	<0.32	<1.6	<0.32	<0.63	<0.32	<0.32	<0.32	<0.32	<0.63	<0.63	<0.63	<0.32	<0.63	<0.63	<0.32	<0.32	<0.32	<0.32	<0.63	<0.82	<0.044
DG-AH5	1	8-8.5	DG-AH5S-8-8.5	1/8/2019	<0.36	<3.6	<0.71	<0.71	<3.6	<0.36	<1.8	<0.36	<0.71	<0.36	<0.36	<0.36	<0.36	<0.71	<0.71	<0.71	<0.36	<0.71	<0.71	<0.36	<0.36	<0.36	<0.36	<0.71	<0.93	<0.050
DG-AH9	2	0.5-1	DG-AH9S-0.5-1	1/30/2019	<0.40	<4.0	<0.79	<0.79	<4.0	<0.40	<2.0	<0.40	<0.79	<0.40	<0.40	<0.40	<0.40	<0.79	<0.79	<0.79	<0.40	<0.79	<0.79	<0.40	<0.40	<0.40	<0.40	<0.79	<1.0	<0.055

Table 5: Volatile Organic Compounds and Total Petroleum Hydrocarbons as Gasoline
Concentrations in Soil
Brisbane Baylands OU-2
Brisbane, California

Sample Location	Investigation Zone	Depth Range (ft bgs)	Sample Name	Collection Date	1,1,1-Trichloroethane	1,1,2-Trichloro-1,2,2-trifluoroethane	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	2-Butanone	4-Isopropyltoluene	4-Methyl-2-pentanone	Benzene	Carbon disulfide	Chloroform	cis-1,2-Dichloroethene	Ethylbenzene	Isopropylbenzene	Methyl-tert-butyl ether (MTBE)	Naphthalene	n-Butylbenzene	n-Propylbenzene	sec-Butylbenzene	tert-Butylbenzene	Tetrachloroethene (PCE)	Toluene	trans-1,2-Dichloroethene	Trichloroethene (TCE)	Vinyl Chloride	Xylenes, Total	TPH-Gasoline (C4-C12)
Direct Exposure Human Health Risk Level Residential Soil Exposure ESL [1]					1.7E+06	--	--	--	--	--	--	3.3E+02	--	3.2E+02	1.9E+04	5.9E+03	--	4.7E+04	3.8E+03	--	--	--	--	5.9E+02	1.1E+06	1.3E+05	9.5E+02	8.3E+00	5.8E+05	4.3E+05
Leaching to Groundwater Levels Non-drinking Water ESL [2]					7.0E+03	--	--	--	--	--	--	2.5E+01	--	2.3E+01	1.6E+03	4.3E+02	--	2.5E+03	1.2E+03	--	--	--	--	8.0E+01	1.0E+04	1.4E+04	8.5E+01	1.5E+00	1.0E+04	4.9E+03
USEPA RSL for Resident Soil [3]					8.1E+06	6.7E+06	3.0E+05	2.7E+05	2.7E+07	--	3.3E+07	1.2E+03	7.7E+05	3.2E+02	1.6E+05	5.8E+03	1.9E+06	4.7E+04	3.8E+03	3.9E+06	3.8E+06	7.8E+06	7.8E+06	2.4E+04	4.9E+06	1.6E+06	9.4E+02	5.9E+01	5.8E+05	--
				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	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	mg/kg
DG-AH9	2	3.5-4	DG-AH9S-3.5-4	1/30/2019	<0.41	<4.1	<0.82	<0.82	**18**	<0.41	<2.0	<0.41	<0.82	<0.41	<0.41	<0.41	<0.41	<0.82	<0.82	<0.82	<0.41	<0.82	<0.82	<0.41	<0.41	<0.41	<0.41	<0.82	<1.1	<0.057
DG-AI3	2	0.5-1	DG-AI3S-0.5-1	12/19/2018	<0.47	<4.7	<0.95	<0.95	<4.7	<0.47	<2.4	<0.47	<0.95	<0.47	<0.47	<0.47	<0.47	<0.95	<0.95	<0.95	<0.47	<0.95	<0.95	<0.47	<0.47	<0.47	<0.47	<0.95	<1.2	<0.066
DG-AI3	2	3.5-4	DG-AI3S-3.5-4	12/19/2018	<0.37	<3.7	<0.75	<0.75	<3.7	<0.37	<1.9	<0.37	<0.75	<0.37	<0.37	<0.37	<0.37	<0.75	<0.75	<0.75	<0.37	<0.75	<0.75	<0.37	<0.37	<0.37	**0.40 J**	<0.75	<0.97	<0.052
DG-AI3 (D)	2	3.5-4	DG-AI3 (D)S-3.5-4	12/19/2018	<0.40	<4.0	<0.81	<0.81	<4.0	<0.40	<2.0	<0.40	<0.81	<0.40	<0.40	<0.40	<0.40	<0.81	<0.81	<0.81	<0.40	<0.81	<0.81	<0.40	<0.40	<0.40	**1.4 J**	<0.81	<1.0	**0.13 J**
DG-AI7	2	0.5-1	DG-AI7S-0.5-1	1/9/2019	<0.38	<3.8	<0.76	<0.76	<3.8	<0.38	<1.9	**0.72**	<0.76	<0.38	<0.38	<0.38	<0.38	<0.76	<0.76	<0.76	<0.38	<0.76	<0.76	<0.38	**0.65**	<0.38	<0.38	<0.76	<0.98	<0.053
DG-AI7	2	3.5-4	DG-AI7S-3.5-4	1/9/2019	<0.35	<3.5	<0.69	<0.69	<3.5	<0.35	<1.7	<0.35	<0.69	<0.35	<0.35	<0.35	<0.35	<0.69	<0.69	<0.69	<0.35	<0.69	<0.69	<0.35	<0.35	<0.35	<0.35	<0.69	<0.90	<0.048
DG-AI7	2	8-8.5	DG-AI7S-8-8.5	1/9/2019	<0.50	<5.0	<0.99	<0.99	<5.0	<0.50	<2.5	<0.50	<0.99	<0.50	<0.50	<0.50	<0.50	<0.99	<0.99	<0.99	<0.50	<0.99	<0.99	<0.50	<0.50	<0.50	<0.50	<0.99	<1.3	<0.070
DG-AJ5	2	0.5-1	DG-AJ5S-0.5-1	1/8/2019	<0.37	<3.7	<0.75	<0.75	<3.7	<0.37	<1.9	<0.37	<0.75	<0.37	<0.37	<0.37	<0.37	<0.75	<0.75	<0.75	<0.37	<0.75	<0.75	<0.37	<0.37	<0.37	<0.37	<0.75	<0.97	<0.052
DG-AJ5	2	3.5-4	DG-AJ5S-3.5-4	1/8/2019	<0.33	<3.3	<0.66	<0.66	**8.6**	<0.33	<1.7	<0.33	<0.66	<0.33	<0.33	<0.33	<0.33	<0.66	<0.66	<0.66	<0.33	<0.66	<0.66	<0.33	<0.33	<0.33	<0.33	<0.66	<0.86	<0.046
DG-AJ9	2	0.5-1	DG-AJ9S-0.5-1	1/30/2019	<0.39	<3.9	<0.79	<0.79	<3.9	<0.39	<2.0	<0.39	<0.79	<0.39	<0.39	<0.39	<0.39	<0.79	<0.79	<0.79	<0.39	<0.79	<0.79	<0.39	<0.39	<0.39	<0.39	<0.79	<1.0	<0.055
DG-AJ9	2	3.5-4	DG-AJ9S-3.5-4	1/30/2019	<0.40	<4.0	<0.80	<0.80	**12**	<0.40	<2.0	<0.40	<0.80	<0.40	<0.40	<0.40	<0.40	<0.80	<0.80	<0.80	<0.40	<0.80	<0.80	<0.40	<0.40	<0.40	<0.40	<0.80	<1.0	<0.056
DG-AK3	2	0.5-1	DG-AK3S-0.5-1	12/19/2018	<0.32	<3.2	<0.65	<0.65	<3.2	<0.32	<1.6	<0.32	<0.65	<0.32	<0.32	<0.32	<0.32	<0.65	<0.65	<0.65	<0.32	<0.65	<0.65	<0.32	<0.32	<0.32	<0.32	<0.65	<0.84	<0.045
DG-AK3	2	3.5-4	DG-AK3S-3.5-4	12/19/2018	<0.42	<4.2	<0.83	<0.83	<4.2	<0.42	<2.1	<0.42	<0.83	<0.42	<0.42	<0.42	<0.42	<0.83	<0.83	<0.83	<0.42	<0.83	<0.83	<0.42	<0.42	<0.42	<0.42	<0.83	<1.1	<0.058
DG-AK7	2	0.5-1	DG-AK7S-0.5-1	1/9/2019	<0.38	<3.8	<0.77	<0.77	<3.8	<0.38	<1.9	<0.38	<0.77	<0.38	<0.38	<0.38	<0.38	<0.77	<0.77	<0.77	<0.38	<0.77	<0.77	<0.38	<0.38	<0.38	<0.38	<0.77	<1.0	<0.054
DG-AK7	2	3.5-4	DG-AK7S-3.5-4	1/9/2019	<0.49	<4.9	<0.97	<0.97	**20**	<0.49	<2.4	<0.49	<0.97	<0.49	<0.49	<0.49	<0.49	<0.97	<0.97	<0.97	<0.49	<0.97	<0.97	<0.49	<0.49	<0.49	<0.49	<0.97	<1.3	<0.068
DG-AK7 (D)	2	3.5-4	DG-AK7 (D)S-3.5-4	1/9/2019	<0.44	<4.4	<0.88	<0.88	**22**	<0.44	<2.2	<0.44	<0.88	<0.44	<0.44	<0.44	<0.44	<0.88	<0.88	<0.88	<0.44	<0.88	<0.88	<0.44	<0.44	<0.44	<0.44	<0.88	<1.1	<0.062
DG-AL5	2	0.5-1	DG-AL5S-0.5-1	1/30/2019	<0.39	<3.9	<0.78	<0.78	<3.9	<0.39	<2.0	<0.39	<0.78	<0.39	<0.39	<0.39	<0.39	<0.78	<0.78	<0.78	<0.39	<0.78	<0.78	<0.39	<0.39	<0.39	<0.39	<0.78	<1.0	<0.055
DG-AL5	2	3.5-4	DG-AL5S-3.5-4	1/30/2019	<0.33	<3.3	<0.65	<0.65	<3.3	<0.33	<1.6	<0.33	<0.65	<0.33	<0.33	<0.33	<0.33	<0.65	<0.65	<0.65	<0.33	<0.65	<0.65	<0.33	<0.33 UJ	<0.33	<0.33	<0.65	<0.85	<0.046
DG-AL5 (D)	2	3.5-4	DG-AL5 (D)S-3.5-4	1/30/2019	<0.30	<3.0	<0.59	<0.59	**5.4 J**	<0.30	<1.5	<0.30	<0.59	<0.30	<0.30	<0.30	<0.30	<0.59	<0.59	<0.59	<0.30	<0.59	<0.59	<0.30	**0.71 J**	<0.30	<0.30	<0.59	<0.77	<0.041
DG-AL9	2	0.5-1	DG-AL9S-0.5-1	1/21/2019	<0.42	<4.2	<0.84	<0.84	<4.2	<0.42	<2.1	<0.42	<0.84	<0.42	<0.42	<0.42	<0.42	<0.84	<0.84	<0.84 F2	<0.42	<0.84	<0.84	<0.42	<0.42	<0.42	<0.42	<0.84	<1.1	<0.059
DG-AL9	2	3.5-4	DG-AL9S-3.5-4	1/21/2019	<0.34	<3.4	<0.68	<0.68	<3.4	<0.34	<1.7	<0.34	<0.68	<0.34	<0.34	<0.34	<0.34	<0.68	<0.68	<0.68	<0.34	<0.68	<0.68	<0.34	<0.34	<0.34	<0.34	<0.68	<0.89	<0.048
DG-AL9	2	7-7.5	DG-AL9S-7-7.5	1/21/2019	<0.32	<3.2	<0.64	<0.64	<3.2	<0.32	<1.6	<0.32	<0.64	<0.32	<0.32	<0.32	<0.32	<0.64	<0.64	<0.64	<0.32	<0.64	<0.64	<0.32	<0.32	<0.32	<0.32	<0.64	<0.83	<0.045
DG-AL9 (D)	2	7-7.5	DG-AL9 (D)S-7-7.5	1/21/2019	<0.27	<2.7	<0.54	<0.54	<2.7	<0.27	<1.3	<0.27	<0.54	<0.27	<0.27	<0.27	<0.27	<0.54	<0.54	<0.54	<0.27	<0.54	<0.54	<0.27	<0.27	<0.27	<0.27	<0.54	<0.70	<0.038
DG-AM3	2	0.5-1	DG-AM3S-0.5-1	12/19/2018	<0.41	<4.1	<0.82	<0.82	<4.1	<0.41	<2.1	<0.41	<0.82	<0.41	<0.41	<0.41	<0.41	<0.82	<0.82	<0.82	<0.41	<0.82	<0.82	<0.41	<0.41	<0.41	<0.41	<0.82	<1.1	<0.057
DG-AM3	2	3.5-4	DG-AM3S-3.5-4	12/19/2018	<0.34	<3.4	<0.68	<0.68	<3.4	<0.34	<1.7	<0.34	<0.68	<0.34	<0.34	<0.34	<0.34	**0.82 J**	<0.68	<0.68	<0.34	<0.68	<0.68	<0.34	**0.37 J**	<0.34	<0.34	<0.68	<0.88	**0.058 J**
DG-AM7	2	0.5-1	DG-AM7S-0.5-1	1/9/2019	<0.32	<3.2	<0.63	<0.63	<3.2	<0.32	<1.6	<0.32	<0.63	<0.32	<0.32	<0.32	<0.32	<0.63	<0.63	<0.63	<0.32	<0.63	<0.63	<0.32	<0.32	<0.32	<0.32	<0.63	<0.82	<0.044
DG-AM7	2	3.5-4	DG-AM7S-3.5-4	1/9/2019	<0.46	<4.6	<0.92	<0.92	<4.6	<0.46	<2.3	<0.46	<0.92	<0.46	<0.46	<0.46	<0.46	<0.92	<0.92	<0.92	<0.46	<0.92	<0.92	<0.46	<0.46	<0.46	<0.46	<0.92	<1.2	<0.064
DG-AM7	2	7.5-8	DG-AM7S-7.5-8	1/9/2019	<0.42	<4.2	<0.84	<0.84	<4.2	<0.42	<2.1	<0.42	<0.84	<0.42	<0.42	<0.42	<0.42	<0.84	<0.84	<0.84	<0.42	<0.84	<0.84	<0.42	<0.42	<0.42	<0.42	<0.84	<1.1	<0.059
DG-AN5	2	0.5-1	DG-AN5S-0.5-1	12/20/2018	<0.35	<3.5	<0.70	<0.70	<3.5	<0.35	<1.8	<0.35	<0.70	<0.35	<0.35	<0.35	<0.35	<0.70	<0.70	<0.70	<0.35	<0.70	<0.70	<0.35	<0.35	<0.35	<0.35	<0.70	<0.92	<0.049
DG-AN5	2	0.5-1	DG-AN5S-0.5-1	2/1/2019	<0.51	<5.1	<1.0	<1.0	<5.1	<0.51	<2.6	<0.51	<1.0	<0.51	<0.51	<0.51	<0.51	<1.0	<1.0	<1.0	<0.51	<1.0	<1.0	<0.51	<0.51	<0.51	<0.51	<1.0	<1.3	<0.072
DG-AN5	2	3.5-4	DG-AN5S-3.5-4	12/20/2018	<0.32	<3.2	<0.65	<0.65	<3.2	<0.32	<1.6	<0.32	<0.65	<0.32	<0.32	<0.32	<0.32	<0.65	<0.65	<0.65	<0.32	<0.65	<0.65	<0.32	<0.32	<0.32	<0.32	<0.65	<0.84	<0.045
DG-AN5	2	3.5-4	DG-AN5S-3.5-4	2/1/2019	<0.35	<3.5	<0.70	<0.70	<3.5	<0.35	<1.8	<0.35	<0.70	<0.35	<0.35	<0.35	<0.35	<0.70	<0.70	<0.70	<0.35	<0.70	<0.70	<0.35	<0.35	<0.35	<0.35	<0.70	<0.91	<0.049
DG-AN9	2	0.5-1	DG-AN9S-0.5-1	1/21/2019	<0.34	<3.4	<0.67	<0.67	<3.4	<0.34	<1.7	<0.34	<0.67	<0.34	<0.34	<0.34	<0.34	<0.67	<0.67	<0.67	<0.34	<0.67	<0.67	<0.34	<0.34	<0.34	<0.34	<0.67	<0.88	<0.047
DG-AN9	2	3.5-4	DG-AN9S-3.5-4	1/21/2019	<0.40	<4.0	<0.79	<0.79	<4.0	<0.40	<2.0	**0.79**	<0.79	<0.40	<0.40	<0.40	<0.40	<0.79	<0.79	<0.79	<0.40	<0.79	<0.79	<0.40	<0.40	<0.40	<0.40	<0.79	<1.0	<0.055
DG-AN9	2	7-7.5	DG-AN9S-7-7.5	1/21/2019	<0.35	<3.5	<0.70	<0.70	<3.5	<0.35	<1.8	<0.35	<0.70	<0.35	<0.35	<0.35	<0.35	<0.70	<0.70	<0.70	<0.35	<0.70	<0.70	<0.35	<0.35	<0.35	<0.35 *	<0.70	<0.91	<0.049
DG-AO3	2	0.5-1	DG-AO3S-0.5-1	12/19/2018	<0.37	<3.7	<0.74	<0.74	<3.7	<0.37	<1.9	<0.37	<0.74	<0.37	<0.37	<0.37	<0.37	<0.74	<0.74	<0.74	<0.37	<0.74	<0.74	<0.37	<0.37	<0.37	<0.37	<0.74	<0.96	<0.052
DG-AO3	2	3.5-4	DG-AO3S-3.5-4	12/19/2018	<0.41	<4.1	<0.83	<0.83	<4.1	<0.41	<2.1	<0.41	<0.83	<0.41	<0.41	<0.41	<0.41	**1.2 J**	<0.67	<0.83	<0.41	<0.83	<0.83	<0.41	<0.41	<0.41	<0.41	<0.83	<1.1	<0.058
DG-AO7	2	0.5-1	DG-AO7S-0.5-1	1/9/2019	<0.32	<3.2	<0.64	<0.64	<3.2	<0.32	<1.6	<0.32	<0.64	<0.32	<0.32	<0.32	<0.32	<0.64	<0.64	<0.64	<0.32	<0.64	<0.64	<0.32	<0.32	<0.32	<0.32	<0.64	<0.84	<0.045
DG-AO7	2	3.5-4	DG-AO7S-3.5-4	1/9/2019	<0.40	<4.0	<0.80	<0.80	<4.0	<0.40	<2.0	<0.40	<0.80	<0.40	<0.40	<0.40	<0.40	<0.80	<0.80	<0.80	<0.40	<0.80	<0.80	<0.40	<0.40	<0.40	<0.40	<0.80	<1.0	<0.056
DG-AP5	2	0.5-1	DG-AP5S-0.5-1	12/20/2018	<0.46	<4.6	<0.92	<0.92	<4.6	<0.46	<2.3	<0.46	<0.92	<0.46	<0.46	<0.46	<0.46	<0.92	<0.92	<0.92	<0.46	<0.92	<0.92	<0.46	<0.46	<0.46	<0.46	<0.92	<1.2	<0.064
DG-AP5	2	3.5-4	DG-AP5S-3.5-4	12/20/2018	<0.42	<4.2	<0.84	<0.84	<4.2	<0.42	<2.1	<0.42	<0.84	<0.42	<0.42	<0.42	<0.42	<0.84	<0.84	<0.84	<0.42	<0.84	<0.84	<0.42	<0.42	<0.42	<0.42	<0.84	<1.1	<0.059
DG-AP5	2	3.5-4	DG-AP5S-3.5-4	2/1/2019	<0.35	<3.5	<0.71	<0.71	<3.5	<0.35	<1.8	<0.35	<0.71	<0.35	<0.35	<0.35	<0.35	<0.71	<0.71	<0.71	<0.35	<0.71	<0.71	<0.35	<0.35	<0.35	<0.35	<0.71	<0.92	<0.049
DG-AP9	2	0.5-1	DG-AP9S-0.5-1	1/21/2019	<0.34	<3.4	<0.69	<0.69	<3.4	<0.34	<1.7	<0.34	<0.69	<0.34	<0.34	<0.34	<0.34	<0.69	<0.69	<0.69	<0.34	<0.69	<0.69	<0.34	<0.34	<0.34	<0.34	<0.69	<0.90	<0.048
DG-AP9	2	3.5-4	DG-AP9S-3.5-4	1/21/2019	<0.85	<8.5	<1.7	<1.7	<8.5	<0.85	<4.3	**3**	<1.7	<0.85	<0.85	<0.85	<0.85	<1.7	<1.7	<1.7	<0.85	<1.7	<1.7	<0.85	**1.8**	<0.85	<0.85	<1.7	<2.2	<0.12
DG-AQ3	2	0.5-1	DG-AQ3S-0.5-1	12/19/2018	<0.42	<4.2	<0.84	<0.84	<4.2	<0.42	<2.1	<0.42	<0.84	<0.42	<0.42	<0.42	<0.42	<0.84	<0.84	<0.84	<0.42	<0.84	<0.84	<0.42	<0.42	<0.42	<0.42	<0.84	<1.1	<0.059
DG-AQ3	2	3.5-4	DG-AQ3S-3.5-4	12/19/2018	<0.37	<3.7	<0.74	<0.74	<3.7	<0.37	<1.9	<0.37	<0.74	<0.37	<0.37	<0.37	<0.37	<0.74	<0.74	<0.74	<0.37	<0.74	<0.74	<0.37	<0.37	<0.37	<0.37	<0.74	<0.97	<0.052
DG-AQ7	2	0.5-1	DG-AQ7S-0.5-1	1/30/2019	<0.41	<4.1	<0.82	<0.82	<4.1	<0.41	<2.0	<0.41	<0.82	<0.41	<0.41	<0.41	<0.41	<0.82	<0.82	<0.82	<0.41	<0.82	<0.82	<0.41	<0.41	<0.41	<0.41	<0.82	<1.1	<0.057
DG-AQ7	2	3.5-4	DG-AQ7S-3.5-4	1/30/2019	<0.38	<3.8	<0.77	<0.77	<3.8	<0.38	<1.9	<0.38	<0.77	<0.38	<0.38	<0.38	<0.38	<0.77	<0.77	<0.77	<0.38	<0.77	<0.77	<0.38	<0.38	<0.38	<0.38	<0.77	<1.0	<0.054
DG-AR5	2	0.5-1	DG-AR5S-0.5-1	12/20/2018	<0.40	<4.0	<0.80	<0.80	<4.0	<0.40	<2.0	<0.40	<0.80	<0.40	<0.40	<0.40	<0.40	<0.80	<0.80	<0.80	<0.40	<0.80	<0.80	<0.40	<0.40	<0.40	<0.40	<0.80	<1.0	<0.056
DG-AR5	2	3.5-4	DG-AR5S-3.5-4	12/20/2018	<0.37	<3.7	<0.75	<0.75	<3.7	<0.37	<1.9	<0.37	<0.75	<0.37	<0.37	<0.37	<0.37	<0.75	<0.75	<0.75	<0.37	<0.75	<0.75	<0.37	<0.37	<0.37	<0.37	<0.75	<0.97	<0.052
DG-AR9	2	0.5-1	DG-AR9S-0.5-1	1/9/2019	<0.34	<3.4	<0.68	<0.68	<3.4	<0.34	<1.7	<0.34	<0.68	<0.34	<0.34	<0.34	<0.34	<0.68	<0.68	<0.68	<0.34	<0.68	<0.68	<0.34	<0.34	<0.34	<0.34	<0.68	<0.89	<0.048
DG-AR9	2	3.5-4	DG-AR9S-3.5-4	1/9/2019	<0.44	<4.4	<0.88	<0.88	<4.4	<0.44	<2.2	<0.44	<0.88	<0.44	<0.44	<0.44	<0.44	<0.88	<0.88	<0.88	<0.44	<0.88	<0.88	<0.44	<0.44	<0.44	<0.44	<0.88	<1.2	<0.062
DG-AR9 (D)	2	3.5-4	DG-AR9 (D)S-3.5-4	1/9/2019	<0.33	<3.3	<0.67	<0.67	<3.3	<0.33	<1.7	<0.33	<0.67	<0.33	<0.33	<0.33	<0.33	<0.67	<0.67	<0.67	<0.33	<0.67	<0.67	<0.33	<0.33	<0.33	<0.33	<0.67	<0.87	<0.047
DG-AS3	2	0.5-1	DG-AS3S-0.5-1	12/20/2018	<0.45	<4.5	<0.90	<0.90	<4.5	<0.45	<2.3	<0.45	<0.90	<0.45	<0.45	<0.45	<0.45	<0.90	<0.90	<0.90	<0.45	<0.90	<0.90	<0.45	<0.45	<0.45	<0.45	<0.90	<1.2	<0.063
DG-AS3 (D)	2	0.5-1	DG-AS3 (D)S-0.5-1	12/20/2018	<0.39	<3.9	<0.78	<0.78	<3.9	<0.39	<2.0	<0.39	<0.78	<0.39	<0.39	<0.39	<0.39	<0.78	<0.78	<0.78	<0.39	<0.78	<0.78	<0.39	<0.39	<0.39	<0.39	<0.78	<1.0	<0.055
DG-AS3	2	3.5-4	DG-AS3S-3.5-4	12/20/2018	<0.29	<2.9	<0.59	<0.59	<2.9	<0.29	<1.5	<0.29	<0.59	<0.29	<0.29	<0.29	<0.29	<0.59	<0.59	<0.59	<0.29	<0.59	<0.59	<0.29	<0.29	<0.29	<0.29	<0.59	<0.76	<0.041

Table 5: Volatile Organic Compounds and Total Petroleum Hydrocarbons as Gasoline
Concentrations in Soil
Brisbane Baylands OU-2
Brisbane, California

Sample Location	Investigation Zone	Depth Range (ft bgs)	Sample Name	Collection Date	1,1,1-Trichloroethane	1,1,2-Trichloro-1,2,2-trifluoroethane	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	2-Butanone	4-Isopropyltoluene	4-Methyl-2-pentanone	Benzene	Carbon disulfide	Chloroform	cis-1,2-Dichloroethene	Ethylbenzene	Isopropylbenzene	Methyl-tert-butyl ether (MTBE)	Naphthalene	n-Butylbenzene	n-Propylbenzene	sec-Butylbenzene	tert-Butylbenzene	Tetrachloroethene (PCE)	Toluene	trans-1,2-Dichloroethene	Trichloroethene (TCE)	Vinyl Chloride	Xylenes, Total	TPH-Gasoline (C4-C12)
Direct Exposure Human Health Risk Level Residential Soil Exposure ESL [1]					1.7E+06	--	--	--	--	--	--	3.3E+02	--	3.2E+02	1.9E+04	5.9E+03	--	4.7E+04	3.8E+03	--	--	--	--	5.9E+02	1.1E+06	1.3E+05	9.5E+02	8.3E+00	5.8E+05	4.3E+05
Leaching to Groundwater Levels Non-drinking Water ESL [2]					7.0E+03	--	--	--	--	--	--	2.5E+01	--	2.3E+01	1.6E+03	4.3E+02	--	2.5E+03	1.2E+03	--	--	--	--	8.0E+01	1.0E+04	1.4E+04	8.5E+01	1.5E+00	1.0E+04	4.9E+03
USEPA RSL for Resident Soil [3]					8.1E+06	6.7E+06	3.0E+05	2.7E+05	2.7E+07	--	3.3E+07	1.2E+03	7.7E+05	3.2E+02	1.6E+05	5.8E+03	1.9E+06	4.7E+04	3.8E+03	3.9E+06	3.8E+06	7.8E+06	7.8E+06	2.4E+04	4.9E+06	1.6E+06	9.4E+02	5.9E+01	5.8E+05	--
				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	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	mg/kg
DG-AS3	2	4.5-5	DG-AS3S-4.5-5	12/20/2018	<0.36	<3.6	<0.72	<0.72	<3.6	<0.36	<1.8	<0.36	<0.72	<0.36	<0.36	<0.36	<0.36	<0.72	<0.72	<0.72	<0.36	<0.72	<0.72	<0.36	<0.36	<0.36	<0.36	<0.72	<0.94	<0.050
DG-AS7	2	0.5-1	DG-AS7S-0.5-1	1/9/2019	<0.45	<4.5	<0.90	<0.90	<4.5	<0.45	<2.3	<0.45	<0.90	<0.45	<0.45	<0.45	<0.45	<0.90	<0.90	<0.90	<0.45	<0.90	<0.90	<0.45	<0.45	<0.45	<0.45	<0.90	<1.2	<0.063
DG-AS7	2	3.5-4	DG-AS7S-3.5-4	1/9/2019	<0.38	<3.8	<0.77	<0.77	<3.8	<0.38	<1.9	<0.38	<0.77	<0.38	<0.38	<0.38	<0.38	<0.77	<0.77	<0.77	<0.38	<0.77	<0.77	<0.38	<0.38	<0.38	<0.38	<0.77	<1.0	<0.054
DG-AT5	2	0.5-1	DG-AT5S-0.5-1	12/20/2018	<0.45	<4.5	<0.91	<0.91	<4.5	<0.45	<2.3	<0.45	<0.91	<0.45	<0.45	<0.45	<0.45	<0.91	<0.91	<0.91	<0.45	<0.91	<0.91	<0.45	<0.45	<0.45	<0.45	<0.91	<1.2	<0.064
DG-AT5	2	0.5-1	DG-AT5S-0.5-1	2/4/2019	<0.37	<3.7	<0.75	<0.75	<3.7	<0.37	<1.9	<0.37	<0.75	<0.37	<0.37	<0.37	<0.37	<0.75	<0.75	<0.75	<0.37	<0.75	<0.75	<0.37	<0.37	<0.37	<0.37	<0.75	<0.97	<0.052
DG-AT5	2	3.5-4	DG-AT5S-3.5-4	12/20/2018	<0.44	<4.4	<0.88	<0.88	<4.4	<0.44	<2.2	<0.44	<0.88	<0.44	<0.44	<0.44	<0.44	<0.88	<0.88	<0.88	<0.44	<0.88	<0.88	<0.44	<0.44	<0.44	<0.44	<0.88	<1.1	<0.062
DG-AT5	2	3.5-4	DG-AT5S-3.5-4	2/4/2019	<0.33	<3.3	<0.66	<0.66	<3.3	<0.33	<1.7	<0.33	<0.66	<0.33	<0.33	<0.33	<0.33	<0.66	<0.66	<0.66	<0.33	<0.66	<0.66	<0.33	<0.33	<0.33	<0.33	<0.66	<0.86	<0.046
DG-AU3	2	0.5-1	DG-AU3S-0.5-1	12/20/2018	<0.43	<4.3	<0.85	<0.85	<4.3	<0.43	<2.1	<0.43	<0.85	<0.43	<0.43	<0.43	<0.43	<0.85	<0.85	<0.85	<0.43	<0.85	<0.85	<0.43	<0.43	<0.43	<0.43	<0.85	<1.1	<0.060
DG-AU3	2	3.5-4	DG-AU3S-3.5-4	12/20/2018	<0.51	<5.1	<1.0	<1.0	<5.1	<0.51	<2.6	<0.51	<1.0	<0.51	<0.51	<0.51	<0.51	<1.0	<1.0	<1.0	<0.51	<1.0	<1.0	<0.51	<0.51	<0.51	<0.51	<1.0	<1.3	<0.072
DG-AU7	2	0.5-1	DG-AU7S-0.5-1	1/9/2019	<0.43	<4.3	<0.87	<0.87	<4.3	<0.43	<2.2	<0.43	<0.87	<0.43	<0.43	<0.43	<0.43	<0.87	<0.87	<0.87	<0.43	<0.87	<0.87	<0.43	<0.43	<0.43	<0.43	<0.87	<1.1	<0.061
DG-AU7 (D)	2	0.5-1	DG-AU7 (D)S-0.5-1	1/9/2019	<0.40	<4.0	<0.80	<0.80	<4.0	<0.40	<2.0	<0.40	<0.80	<0.40	<0.40	<0.40	<0.40	<0.80	<0.80	<0.80	<0.40	<0.80	<0.80	<0.40	<0.40	<0.40	<0.40	<0.80	<1.0	<0.056
DG-AU7	2	3.5-4	DG-AU7S-3.5-4	1/9/2019	<0.41	<4.1	<0.83	<0.83	<4.1	<0.41	<2.1	<0.41	<0.83	<0.41	<0.41	<0.41	<0.41	<0.83	<0.83	<0.83	<0.41	<0.83	<0.83	<0.41	<0.41	<0.41	<0.41	<0.83	<1.1	<0.058
DG-AV5	2	0.5-1	DG-AV5S-0.5-1	12/20/2018	<0.42	<4.2	<0.83	<0.83	<4.2	<0.42	<2.1	<0.42	<0.83	<0.42	<0.42	<0.42	<0.42	<0.83	<0.83	<0.83	<0.42	<0.83	<0.83	<0.42	<0.42	<0.42	<0.42	<0.83	<1.1	<0.058
DG-AV5 (D)	2	0.5-1	DG-AV5 (D)S-0.5-1	12/20/2018	<0.46	<4.6	<0.91	<0.91	<4.6	<0.46	<2.3	<0.46	<0.91	<0.46	<0.46	<0.46	<0.46	<0.91	<0.91	<0.91	<0.46	<0.91	<0.91	<0.46	<0.46	<0.46	<0.46	<0.91	<1.2	<0.064
DG-AV5	2	0.5-1	DG-AV5S-0.5-1	2/1/2019	<0.38	<3.8	<0.76	<0.76	<3.8	<0.38	<1.9	<0.38	<0.76	<0.38	<0.38	<0.38	<0.38	<0.76	<0.76	<0.76	<0.38	<0.76	<0.76	<0.38	<0.38	<0.38	<0.38	<0.76	<0.98	<0.053
DG-AV5 (D)	2	0.5-1	DG-AV5 (D)S-0.5-1	2/1/2019	<0.37	<3.7	<0.74	<0.74	<3.7	<0.37	<1.8	<0.37	<0.74	<0.37	<0.37	<0.37	<0.37	<0.74	<0.74	<0.74	<0.37	<0.74	<0.74	<0.37	<0.37	<0.37	<0.37	<0.74	<0.96	<0.052
DG-AV5	2	3.5-4	DG-AV5S-3.5-4	12/20/2018	<0.40	<4.0	<0.80	<0.80	<4.0	<0.40	<2.0	<0.40	<0.80	<0.40	<0.40	<0.40	<0.40	<0.80	<0.80	<0.80	<0.40	<0.80	<0.80	<0.40	**0.7**	<0.40	<0.40	<0.80	<1.0	<0.051
DG-AV5	2	3.5-4	DG-AV5S-3.5-4	2/1/2019	<0.63	<6.3	<1.3	<1.3	<6.3	<0.63	<3.1	**0.71 J**	<1.3	<0.63	<0.63	<0.63	<0.63	<1.3	<1.3	<1.3	<0.63	<1.3	<1.3	<0.63	**1.3**	<0.63	<0.63	<1.3	<1.6	<0.088
DG-AV5	2	7.5-8	DG-AV5S-7.5-8	12/20/2018	<0.37	<3.7	<0.74	<0.74	<3.7	<0.37	<1.8	<0.37	<0.74	<0.37	<0.37	<0.37	<0.37	<0.74	<0.74	<0.74	<0.37	<0.74	<0.74	<0.37	<0.37	<0.37	<0.37	<0.74	<0.96	<0.052
DG-AV5	2	7.5-8	DG-AV5S-7.5-8	2/1/2019	<0.31	<3.1	<0.62	<0.62	<3.1	<0.31	<1.5	<0.31	<0.62	<0.31	<0.31	<0.31	<0.31	<0.62	<0.62	<0.62	<0.31	<0.62	<0.62	<0.31	<0.31	<0.31	<0.31	<0.62	<0.80	<0.043
DG-AW3	2	0.5-1	DG-AW3S-0.5-1	1/31/2019	<0.51	<5.1	<1.0	<1.0	<5.1	<0.51	<2.6	<0.51	<1.0	<0.51	<0.51	<0.51	<0.51	<1.0	<1.0	<1.0	<0.51	<1.0	<1.0	<0.51	<0.51	<0.51	<0.51	<1.0	<1.3	<0.072
DG-AW3	2	3.5-4	DG-AW3S-3.5-4	1/31/2019	<0.38	<3.8	<0.75	<0.75	<3.8	<0.38	<1.9	<0.38	<0.75	<0.38	<0.38	<0.38	<0.38	<0.75	<0.75	<0.75	<0.38	<0.75	<0.75	<0.38	<0.38	<0.38	<0.38	<0.75	<0.98	<0.053
DG-AX5	2	0.5-1	DG-AX5S-0.5-1	12/20/2018	<0.54	<5.4	<1.1	<1.1	<5.4	<0.54	<2.7	<0.54	<1.1	<0.54	<0.54	<0.54	<0.54	<1.1	<1.1	<1.1	<0.54	<1.1	<1.1	<0.54	<0.54	<0.54	<0.54	<1.1	<1.4	<0.076
DG-AX5	2	3.5-4	DG-AX5S-3.5-4	12/20/2018	<0.43	<4.3	<0.87	<0.87	<4.3	<0.43	<2.2	<0.43	<0.87	<0.43	<0.43	<0.43	<0.43	<0.87	**2.1**	<0.87	<0.43	<0.87	<0.87	<0.43	<0.43	<0.43	<0.43	<0.87	<1.1	<0.061
DG-AY3	2	0.5-1	DG-AY3S-0.5-1	1/31/2019	<0.44	<4.4	<0.88	<0.88	<4.4	<0.44	<2.2	<0.44	<0.88	<0.44	<0.44	<0.44	<0.44	<0.88	<0.88	<0.88	<0.44	<0.88	<0.88	<0.44	<0.44	<0.44	<0.44	<0.88	<1.1	<0.062
DG-AY3	2	3.5-4	DG-AY3S-3.5-4	1/31/2019	<0.36	<3.6	<0.72	<0.72	<3.6	<0.36	<1.8	<0.36	<0.72	<0.36	<0.36	<0.36	<0.36	<0.72	<0.72	<0.72	<0.36	<0.72	<0.72	<0.36	<0.36	<0.36	<0.36	<0.72	<0.94	<0.051
DG-N9	3	0.5-1	DG-N9S-0.5-1	1/10/2019	<0.38	<3.8	<0.76 UJ	<0.76 UJ	<3.8	<0.38 UJ	<1.9	<0.38	<0.76	<0.38	<0.38	<0.38	<0.38	<0.76	<0.76 UJ	<0.76 UJ	<0.38 UJ	<0.76 UJ	<0.76 UJ	<0.38	<0.38	<0.38	<0.38	<0.76	<0.99	<0.053
DG-N9	3	3.5-4	DG-N9S-3.5-4	1/10/2019	<0.35	<3.5	<0.71 UJ	<0.71 UJ	<3.5	<0.35 UJ	<1.8	<0.35	<0.71	<0.35	<0.35	<0.35	<0.35	<0.71	<0.71 UJ	<0.71 UJ	<0.35 UJ	<0.71 UJ	<0.71 UJ	<0.35	<0.35	<0.35	<0.35	<0.71	<0.92	<0.050
DG-N13	3	0.5-1	DG-N13S-0.5-1	1/10/2019	<0.38	<3.8	<0.76	<0.76	<3.8	<0.38	<1.9	<0.38	<0.76	<0.38	<0.38	<0.38	<0.38	<0.76	<0.76	<0.76	<0.38	<0.76	<0.76	<0.38	<0.38	<0.38	<0.38	<0.76	<0.99	<0.053
DG-N13 (D)	3	0.5-1	DG-N13 (D)S-0.5-1	1/10/2019	<0.62	<6.2	<1.2 UJ	<1.2 UJ	<6.2	<0.62 UJ	<3.1	<0.62	<1.2	<0.62	<0.62	<0.62	<0.62	<1.2	<1.2 UJ	<1.2 UJ	<0.62 UJ	<1.2 UJ	<1.2 UJ	<0.62	<0.62	<0.62	<0.62	<1.2	<1.6	<0.086
DG-N13	3	3.5-4	DG-N13S-3.5-4	1/10/2019	<0.65 F2	<6.5	<1.3	<1.3	<6.5	<0.65	<3.2	<0.65 F2	<1.3 F2	<0.65 F2	<0.65	<0.65	<0.65	<1.3	<1.3	<1.3	<0.65	<1.3	<1.3	<0.65	<0.65 F2	<0.65	<0.65	<1.3	<1.7	<0.091
DG-N13	3	7.5-8	DG-N13S-7.5-8	1/10/2019	<0.59	<5.9	<1.2	<1.2	<5.9	<0.59	<3.0	<0.59	<1.2	<0.59	<0.59	<0.59	<0.59	<1.2	<1.2	<1.2	<0.59	<1.2	<1.2	<0.59	<0.59	<0.59	<0.59	<1.2	<1.5	<0.083
DG-O7	3	0.5-1	DG-O7S-0.5-1	1/8/2019	<0.54	<5.4	<1.1	<1.1	<5.4	<0.54	<2.7	<0.54	<1.1	<0.54	<0.54	<0.54	<0.54	<1.1	<1.1	<1.1	<0.54	<1.1	<1.1	<0.54	<0.54	<0.54	<0.54	<1.1	<1.4	<0.075
DG-O7	3	3.5-4	DG-O7S-3.5-4	1/8/2019	<0.32	<3.2	<0.64	<0.64	<3.2	<0.32	<1.6	<0.32	<0.64	<0.32	<0.32	<0.32	<0.32	<0.64	<0.64	<0.64	<0.32	<0.64	<0.64	<0.32	<0.32	<0.32	<0.32	<0.64	<0.83	<0.045
DG-O11	3	0.5-1	DG-O11S-0.5-1	1/10/2019	<0.54	<5.4	<1.1	<1.1	<5.4	<0.54	<2.7	<0.54	<1.1	<0.54	<0.54	<0.54	<0.54	<1.1	<1.1	<1.1	<0.54	<1.1	<1.1	<0.54	<0.54	<0.54	<0.54	<1.1	<1.4	<0.075
DG-O11	3	3.5-4	DG-O11S-3.5-4	1/10/2019	<0.39	<3.9	<0.78	<0.78	<3.9	<0.39	<2.0	<0.39	<0.78	<0.39	<0.39	<0.39	<0.39	<0.78	<0.78	<0.78	<0.39	<0.78	<0.78	<0.39	<0.39	<0.39	<0.39	<0.78	<1.0	<0.055
DG-O15	3	0.5-1	DG-O15S-0.5-1	1/10/2019	<0.72	<7.2	<1.4 F2	<1.4 F2	<7.2	<0.72	<3.6	<0.72	<1.4	<0.72	<0.72	<0.72	<0.72	<1.4	<1.4	<1.4	<0.72 F2	<1.4	<1.4 F2	<0.72	<0.72 F2	<0.72	<0.72	<1.4	<1.9	<0.10
DG-O15	3	3.5-4	DG-O15S-3.5-4	1/10/2019	<0.33	<3.3	<0.66	<0.66	**10 J**	<0.33	<1.7	<0.33	<0.66	<0.33	<0.33	<0.33	<0.33	<0.66	<0.66	<0.66	<0.33	<0.66	<0.66	<0.33	<0.33	<0.33	<0.33	<0.66	<0.86	<0.046
DG-O15 (D)	3	3.5-4	DG-O15 (D)S-3.5-4	1/10/2019	<0.34	<3.4	<0.69	<0.69	<3.4 UJ	<0.34	<1.7	<0.34	<0.69	<0.34	<0.34	<0.34	<0.34	<0.69	<0.69	<0.69	<0.34	<0.69	<0.69	<0.34	<0.34	<0.34	<0.34	<0.69	<0.90	<0.048
DG-O15	3	7.5-8	DG-O15S-7.5-8	1/10/2019	<0.32	<3.2	<0.65	<0.65	<3.2	<0.32	<1.6	<0.32	<0.65	<0.32	<0.32	<0.32	<0.32	<0.65	<0.65	<0.65	<0.32	<0.65	<0.65	<0.32	<0.32	<0.32	<0.32	<0.65	<0.84	<0.045
DG-P9	3	0.5-1	DG-P9S-0.5-1	1/10/2019	<0.32	<3.2	<0.63	<0.63	<3.2	<0.32	<1.6	<0.32	<0.63	<0.32	<0.32	<0.32	<0.32	<0.63	<0.63	<0.63	<0.32	<0.63	<0.63	<0.32	<0.32	<0.32	<0.32	<0.63	<0.82	<0.044
DG-P9	3	3.5-4	DG-P9S-3.5-4	1/10/2019	<0.34	<3.4	<0.69	<0.69	<3.4	<0.34	<1.7	<0.34	<0.69	<0.34	<0.34	<0.34	<0.34	<0.69	<0.69	<0.69	<0.34	<0.69	<0.69	<0.34	<0.34	<0.34	<0.34	<0.69	<0.89	<0.048
DG-P13	3	0.5-1	DG-P13S-0.5-1	1/10/2019	<0.45	<4.5	<0.91	<0.91	<4.5	<0.45	<2.3	<0.45	<0.91	<0.45	<0.45	<0.45	<0.45	<0.91	<0.91	<0.91	<0.45	<0.91	<0.91	<0.45	<0.45	<0.45	<0.45	<0.91	<1.2	<0.064
DG-P13	3	3.5-4	DG-P13S-3.5-4	1/10/2019	<0.30	<3.0	<0.60	<0.60	<3.0	<0.30	<1.5	<0.30	<0.60	<0.30	<0.30	<0.30	<0.30	<0.60	<0.60	<0.60	<0.30	<0.60	<0.60	<0.30	<0.30	<0.30	<0.30	<0.60	<0.78	<0.042
DG-P13 (D)	3	3.5-4	DG-P13 (D)S-3.5-4	1/10/2019	<0.30	<3.0	<0.59	<0.59	<3.0	<0.30	<1.5	<0.30	<0.59	<0.30	<0.30	<0.30	<0.30	<0.59	<0.59	<0.59	<0.30	<0.59	<0.59	<0.30	<0.30	<0.30	<0.30	<0.59	<0.77	<0.042
DG-Q11	3	0.5-1	DG-Q11S-0.5-1	1/10/2019	<0.39	<3.9	<0.79	<0.79	<3.9	<0.39	<2.0	<0.39	<0.79	<0.39	<0.39	<0.39	<0.39	<0.79	<0.79	<0.79	<0.39	<0.79	<0.79	<0.39	<0.39	<0.39	<0.39	<0.79	<1.0	<0.055
DG-Q11 (D)	3	0.5-1	DG-Q11 (D)S-0.5-1	1/10/2019	<0.38	<3.8	<0.77	<0.77	<3.8	<0.38	<1.9	<0.38	<0.77	<0.38	<0.38	<0.38	<0.38	<0.77	<0.77	<0.77	<0.38	<0.77	<0.77	<0.38	<0.38	<0.38	<0.38	<0.77	<1.0	<0.054
DG-Q11	3	3.5-4	DG-Q11S-3.5-4	1/10/2019	<0.36	<3.6	<0.72	<0.72	<3.6	<0.36	<1.8	<0.36	<0.72	<0.36	<0.36	<0.36	<0.36	<0.72	<0.72	<0.72	<0.36	<0.72	<0.72	<0.36	<0.36	<0.36	<0.36	<0.72	<0.94	<0.050
DG-Q15	3	0.5-1	DG-Q15S-0.5-1	1/11/2019	<0.48	<4.8	<0.97	<0.97	<4.8	<0.48	<2.4	**0.54 J**	<0.97	<0.48	<0.48	<0.48	<0.48	<0.97	<0.97	<0.97	<0.48	<0.97	<0.97	<0.48	<0.48 UJ	<0.48	<0.48	<0.97	<1.3	<0.068
DG-Q15 (D)	3	0.5-1	DG-Q15 (D)S-0.5-1	1/11/2019	<0.48	<4.8	<0.97	<0.97	<4.8	<0.48	<2.4	**1.9 J**	<0.97	<0.48	<0.48	<0.48	<0.48	<0.97	<0.97	<0.97	<0.48	<0.97	<0.97	<0.48	**1.0 J**	<0.48	<0.48	<0.97	<1.3	<0.068
DG-Q15	3	3.5-4	DG-Q15S-3.5-4	1/11/2019	<0.35	<3.5	<0.70	<0.70	<3.5	<0.35	<1.7	<0.35	<0.70	<0.35	<0.35	<0.35	<0.35	<0.70	<0.70	<0.70	<0.35	<0.70	<0.70	<0.35	<0.35	<0.35	<0.35	<0.70	<0.91	<0.049
DG-Q15	3	7.5-8	DG-Q15S-7.5-8	1/11/2019	<0.30	<3.0	<0.60	<0.60	<3.0	<0.30	<1.5	**0.79**	<0.60	<0.30	<0.30	<0.30	<0.30	<0.60	<0.60	<0.60	<0.30	<0.60	<0.60	<0.30	**1.5**	<0.30	<0.30	<0.60	<0.78	<0.042
DG-R9	3	0.5-1	DG-R9S-0.5-1	1/22/2019	<0.50	<5.0	<1.0	<1.0	<5.0	<0.50	<2.5	<0.50	<1.0	<0.50	<0.50	<0.50	<0.50	<1.0	<1.0	<1.0	<0.50	<1.0	<1.0	<0.50	<0.50	<0.50	<0.50	<1.0	<1.3	<0.070
DG-R9	3	3.5-4	DG-R9S-3.5-4	1/22/2019	<0.43	<4.3	<0.85	<0.85	<4.3	<0.43	<2.1	<0.43	<0.85	<0.43	<0.43	<0.43	<0.43	<0.85	<0.85	<0.85	<0.43	<0.85	<0.85	<0.43	<0.43	<0.43	<0.43	<0.85	<1.1	<0.060
DG-R13	3	0.5-1	DG-R13S-0.5-1	1/28/2019	<88	<350	**310**	**350**	<880	<88	<350	**2,300**	<220	<88	<88	**210**	<88	<180	**830**	<180	<88	<88	<180	<88 U	**4,200**	<88	<88	<180	**4,300**	**30**
DG-R13	3	3.5-4	DG-R13S-3.5-4	1/28/2019	<0.43	<4.3	<0.86	<0.86	<4.3	<0.43	<2.2	**1.3**	<0.86	<0.43	<0.43	<0.43	<0.43	<0.86	<0.86	<0.86	<0.43	<0.86	<0.86	<0.43	**0.67 J**	<0.43	<0.43	<0.86	<1.1	<0.060

Table 5: Volatile Organic Compounds and Total Petroleum Hydrocarbons as Gasoline
Concentrations in Soil
Brisbane Baylands OU-2
Brisbane, California

Sample Location	Investigation Zone	Depth Range (ft bgs)	Sample Name	Collection Date	1,1,1-Trichloroethane	1,1,2-Trichloro-1,2,2-trifluoroethane	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	2-Butanone	4-Isopropyltoluene	4-Methyl-2-pentanone	Benzene	Carbon disulfide	Chloroform	cis-1,2-Dichloroethene	Ethylbenzene	Isopropylbenzene	Methyl-tert-butyl ether (MTBE)	Naphthalene	n-Butylbenzene	n-Propylbenzene	sec-Butylbenzene	tert-Butylbenzene	Tetrachloroethene (PCE)	Toluene	trans-1,2-Dichloroethene	Trichloroethene (TCE)	Vinyl Chloride	Xylenes, Total	TPH-Gasoline (C4-C12)
Direct Exposure Human Health Risk Level Residential Soil Exposure ESL [1]					1.7E+06	--	--	--	--	--	--	3.3E+02	--	3.2E+02	1.9E+04	5.9E+03	--	4.7E+04	3.8E+03	--	--	--	--	5.9E+02	1.1E+06	1.3E+05	9.5E+02	8.3E+00	5.8E+05	4.3E+05
Leaching to Groundwater Levels Non-drinking Water ESL [2]					7.0E+03	--	--	--	--	--	--	2.5E+01	--	2.3E+01	1.6E+03	4.3E+02	--	2.5E+03	1.2E+03	--	--	--	--	8.0E+01	1.0E+04	1.4E+04	8.5E+01	1.5E+00	1.0E+04	4.9E+03
USEPA RSL for Resident Soil [3]					8.1E+06	6.7E+06	3.0E+05	2.7E+05	2.7E+07	--	3.3E+07	1.2E+03	7.7E+05	3.2E+02	1.6E+05	5.8E+03	1.9E+06	4.7E+04	3.8E+03	3.9E+06	3.8E+06	7.8E+06	7.8E+06	2.4E+04	4.9E+06	1.6E+06	9.4E+02	5.9E+01	5.8E+05	--
				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	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	mg/kg
DG-R15	3	3.5-4	DG-R15S-3.5-4	12/21/2018	<160	<650	**11,000**	**6,000**	<1,600	**2,000**	<650	<160	<410	<160	<160	<160	**970**	<320	**2,900**	**1,700**	**1,600**	**1,600**	<320	<160	<160	<160	<160	<320	**2,200**	**1,300**
DG-R15	3	3.5-4	DG-R15S-3.5-4	2/5/2019	<0.34	<3.4	<0.69	<0.69	<3.4	<0.34	<1.7	<0.34	<0.69	<0.34	<0.34	<0.34	<0.34	<0.69	<0.69	<0.69	<0.34	<0.69	<0.69	<0.34	<0.34	<0.34	<0.34	<0.69	<0.90	<0.048
DG-S9	3	4.5-5	DG-S9S-4.5-5	12/20/2018	<0.26	<2.6	<0.53	<0.53	**22**	<0.26	<1.3	<0.26	<0.53	<0.26	<0.26	<0.26	<0.26	<0.53	<0.53	<0.53	<0.26	<0.53	<0.53	<0.26	<0.26	<0.26	<0.26	<0.53	<0.68	**0.061**
DG-S9	3	4.5-5	DG-S9S-4.5-5	2/4/2019	<0.40	<4.0	<0.80	<0.80	**22**	<0.40	<2.0	<0.40	<0.80	<0.40	<0.40	<0.40	<0.40	<0.80	<0.80	<0.80	<0.40	<0.80	<0.80	<0.40	**0.45 J**	<0.40	<0.40	<0.80	<1.0	<0.056
DG-S9	3	7-7.5	DG-S9S-7-7.5	2/4/2019	<0.31	<3.1	<0.63	<0.63	<3.1	<0.31	<1.6	<0.31	<0.63	<0.31	<0.31	<0.31	<0.31	<0.63	<0.63	<0.63	<0.31	<0.63	<0.63	<0.31	**0.49 J**	<0.31	<0.31	<0.63	<0.82	**0.16**
DG-S9	3	7.5-8	DG-S9S-7.5-8	12/20/2018	<0.18	<1.8	<0.36	<0.36	**10**	<0.18	<0.90	<0.18	<0.36	<0.18	<0.18	<0.18	<0.18	<0.36	<0.36	<0.36	<0.18	<0.36	<0.36	<0.18	<0.18	<0.18	<0.18	<0.36	<0.47	**0.37**
DG-S11	3	0.5-1	DG-S11S-0.5-1	1/10/2019	<0.41	<4.1	<0.81	<0.81	<4.1	<0.41	<2.0	<0.41	<0.81	<0.41	<0.41	<0.41	<0.41	<0.81	<0.81	<0.81	<0.41	<0.81	<0.81	<0.41	<0.41	<0.41	<0.41	<0.81	<1.1	<0.057
DG-S11	3	3.5-4	DG-S11S-3.5-4	1/10/2019	<0.47	<4.7	<0.95 UJ	<0.95 UJ	<4.7	<0.47 UJ	<2.4	<0.47	<0.95	<0.47	<0.47	<0.47	<0.47	<0.95	<0.95 UJ	<0.95 UJ	<0.47 UJ	<0.95 UJ	<0.95 UJ	**1.2**	<0.47	<0.47	<0.47	<0.95	<1.2	<0.066
DG-S15	3	0.5-1	DG-S15S-0.5-1	1/11/2019	<0.39	<3.9	<0.78	<0.78	<3.9	<0.39	<2.0	<0.39	<0.78	<0.39	<0.39	<0.39	<0.39	<0.78	<0.78	<0.78	<0.39	<0.78	<0.78	**0.67 J**	<0.39	<0.39	<0.39	<0.78	<1.0	<0.055
DG-S15	3	3.5-4	DG-S15S-3.5-4	1/11/2019	<0.32	<3.2	<0.64	<0.64	<3.2	<0.32	<1.6	<0.32	<0.64	<0.32	<0.32	<0.32	<0.32	<0.64	<0.64	<0.64	<0.32	<0.64	<0.64	**6.2 J**	<0.32	<0.32	**3.5**	<0.64	<0.83	<0.044
DG-S15 (D)	3	3.5-4	DG-S15 (D)S-3.5-4	1/11/2019	<0.35	<3.5	<0.71	<0.71	<3.5	<0.35	<1.8	<0.35	<0.71	<0.35	<0.35	<0.35	<0.35	<0.71	<0.71	<0.71	<0.35	<0.71	<0.71	**3.3 J**	<0.35	<0.35	**2.7**	<0.71	<0.92	<0.049
DG-S15	3	6-6.5	DG-S15S-6-6.5	1/11/2019	<0.39	<3.9	<0.78	<0.78	<3.9	<0.39	<1.9	<0.39	<0.78	<0.39	<0.39	<0.39	<0.39	<0.78	<0.78	<0.78	<0.39	<0.78	<0.78	<0.39	<0.39	<0.39	**0.43 J**	<0.78	<1.0	**3.2**
DG-T9	3	0.5-1	DG-T9S-0.5-1	1/10/2019	<0.46	<4.6	<0.92	<0.92	<4.6	<0.46	<2.3	<0.46	<0.92	<0.46	<0.46	<0.46	<0.46	<0.92	<0.92	<0.92	<0.46	<0.92	<0.92	<0.46	<0.46	<0.46	<0.46	<0.92	<1.2	<0.064
DG-T9	3	3.5-4	DG-T9S-3.5-4	1/10/2019	<0.39	<3.9	<0.77	<0.77	<3.9	<0.39	<1.9	<0.39	<0.77	<0.39	<0.39	<0.39	<0.39	<0.77	<0.77	<0.77	<0.39	<0.77	<0.77	<0.39	<0.39	<0.39	<0.39	<0.77	<1.0	<0.054
DG-T13	3	0.5-1	DG-T13S-0.5-1	1/10/2019	<0.33	<3.3	<0.66	<0.66	<3.3	<0.33	<1.7	<0.33	<0.66	<0.33	<0.33	<0.33	<0.33	<0.66	<0.66	<0.66	<0.33	<0.66	<0.66	<0.33	<0.33	<0.33	<0.33	<0.66	<0.86	<0.046
DG-T13 (D)	3	0.5-1	DG-T13 (D)S-0.5-1	1/10/2019	<0.39	<3.9	<0.78	<0.78	<3.9	<0.39	<1.9	<0.39	<0.78	<0.39	<0.39	<0.39	<0.39	<0.78	<0.78	<0.78	<0.39	<0.78	<0.78	<0.39	<0.39	<0.39	<0.39	<0.78	<1.0	<0.055
DG-T13	3	3.5-4	DG-T13S-3.5-4	1/10/2019	<0.34	<3.4	<0.68	<0.68	<3.4	<0.34	<1.7	<0.34	<0.68	<0.34	<0.34	<0.34	<0.34	<0.68	<0.68	<0.68	<0.34	<0.68	<0.68	<0.34	<0.34	<0.34	<0.34	<0.68	<0.88	<0.047
DG-T17	3	0.5-1	DG-T17S-0.5-1	1/28/2019	<49	<200	**450**	**99**	<490	**720**	<200	**450**	<120	<49	<49	**280**	**62 J**	<98	**260**	<98	**56 J**	<49	<98	<49 U	**1,600**	<49	<49	<98	**1,700**	**28**
DG-T17	3	3.5-4	DG-T17S-3.5-4	1/28/2019	<0.42 U	<4.2	<0.84	<0.84	<4.2	<0.42	<2.1	<0.42	<0.84 U	<0.42	<0.42	<0.42	<0.42	<0.84	<0.84	<0.84	<0.42	<0.84	<0.84	<0.42	<0.42	<0.42	<0.42	<0.84	<1.1	<0.059
DG-T17	3	7-7.5	DG-T17S-7-7.5	1/28/2019	<0.50	<5.0	<1.0	<1.0	**19**	<0.50	<2.5	<0.50	<1.0	<0.50	<0.50	<0.50	<0.50	<1.0	<1.0	<1.0	<0.50	<1.0	<1.0	<0.50	<0.50	<0.50	<0.50	<1.0	<1.3	<0.067
DG-T17 (D)	3	7-7.5	DG-T17 (D)S-7-7.5	1/28/2019	<0.52	<5.2	<1.0	<1.0	**18**	<0.52	<2.6	<0.52	<1.0	<0.52	<0.52	<0.52	<0.52	<1.0	<1.0	<1.0	<0.52	<1.0	<1.0	<0.52	<0.52	<0.52	<0.52	<1.0	<1.3	**0.19 J**
DG-U11	3	0.5-1	DG-U11S-0.5-1	1/10/2019	<0.39	<3.9	<0.77 UJ	<0.77 UJ	<3.9	<0.39 UJ	<1.9	<0.39	<0.77	<0.39	<0.39	<0.39	<0.39	<0.77	**3.0 J+**	<0.77 UJ	<0.39 UJ	<0.77 UJ	<0.77 UJ	<0.39	<0.39	<0.39	<0.39	<0.77	<1.0	**4.1**
DG-U11	3	3.5-4	DG-U11S-3.5-4	1/10/2019	<0.48	<4.8	<0.96	<0.96	<4.8	<0.48	<2.4	<0.48	<0.96	<0.48	<0.48	<0.48	<0.48	<0.96	<0.96	<0.96	<0.48	<0.96	<0.96	<0.48	<0.48	<0.48	<0.48	<0.96	<1.2	<0.067
DG-U13	3	7.5-8	DG-U13S-7.5-8	12/21/2018	<0.21	<2.1	<0.43	<0.43	<2.1	<0.21	<1.1	<0.21	<0.43	<0.21	**0.27 J**	<0.21	<0.21	<0.43	<0.43	<0.43	<0.21	<0.43	<0.43	<0.21	<0.21	<0.21	<0.21	<0.43	<0.56	**0.45**
DG-U13	3	7.5-8	DG-U13S-7.5-8	2/1/2019	<0.36	<3.6	<0.71	<0.71	<3.6	**0.70 J**	<1.8	<0.36	**1.4**	<0.36	**0.75**	<0.36	<0.36	<0.71	<0.71	<0.71	<0.36	<0.71	<0.71	<0.36	<0.36	<0.36	<0.36	**0.81 J**	<0.93	**0.74**
DG-U15	3	3.5-4	DG-U15S-3.5-4	1/28/2019	<0.40	<4.0	<0.79	<0.79	<4.0	<0.40	<2.0	**0.45 J**	<0.79	<0.40	<0.40	<0.40	<0.40	<0.79	<0.79	<0.79	<0.40	<0.79	<0.79	<0.40	<0.40	<0.40	<0.40	<0.79	<1.0	<0.055
DG-U15	3	8.5-9	DG-U15S-8.5-9	1/28/2019	<0.44	<4.4	<0.88	<0.88	<4.4	<0.44	<2.2	<0.44	**1.2 J**	<0.44	<0.44	<0.44	<0.44	<0.88	<0.88	<0.88	<0.44	<0.88	<0.88	<0.44	<0.44	<0.44	<0.44	<0.88	<1.1	**1**
DG-U17	3	0.5-1	DG-U17S-0.5-1	1/28/2019	<0.71	<7.1	<1.4	<1.4	<7.1	<0.71	<3.5	<0.71	<1.4	<0.71	<0.71	<0.71	<0.71	<1.4	<1.4	<1.4	<0.71	<1.4	<1.4	<0.71	<0.71	<0.71	<0.71	<1.4	<1.8	<0.099
DG-V13	3	0.5-1	DG-V13S-0.5-1	1/10/2019	<1.0	<10	<2.0	<2.0	<10	<1.0	<5.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<2.0	<2.0	<2.0	<1.0	<2.0	<2.0	<1.0	<1.0	<1.0	<1.0	<2.0	<2.6	<0.14
DG-V13	3	3.5-4	DG-V13S-3.5-4	1/10/2019	<0.44	<4.4	<0.89	<0.89	<4.4	<0.44	<2.2	<0.44	<0.89	<0.44	<0.44	<0.44	<0.44	<0.89	<0.89	<0.89	<0.44	<0.89	<0.89	<0.44	<0.44	<0.44	<0.44	<0.89	<1.2	<0.062
DG-V13	3	7.5-8	DG-V13S-7.5-8	1/10/2019	<0.39	<3.9	<0.78	<0.78	<3.9	<0.39	<2.0	<0.39	<0.78	<0.39	<0.39	<0.39	<0.39	<0.78	<0.78	<0.78	<0.39	<0.78	<0.78	<0.39	<0.39	<0.39	<0.39	<0.78	<1.0	<0.055
DG-V17	3	0.5-1	DG-V17S-0.5-1	1/28/2019	<0.40	<4.0	<0.81	<0.81	<4.0	<0.40	<2.0	<0.40	<0.81	<0.40	<0.40	<0.40	<0.40	<0.81	<0.81	<0.81	<0.40	<0.81	<0.81	<0.40	<0.40	<0.40	<0.40	<0.81	<1.1	<0.057
DG-V17	3	3.5-4	DG-V17S-3.5-4	1/28/2019	<0.34	<3.4	<0.68	<0.68	<3.4	<0.34	<1.7	**0.35 J**	<0.68	<0.34	<0.34	<0.34	<0.34	<0.68	<0.68	<0.68	<0.34	<0.68	<0.68	<0.34	**0.58 J**	<0.34	<0.34	<0.68	<0.88	<0.047
DG-V17 (D)	3	3.5-4	DG-V17 (D)S-3.5-4	1/28/2019	<0.37	<3.7	<0.74	<0.74	<3.7	<0.37	<1.8	<0.37	<0.74	<0.37	<0.37	<0.37	<0.37	<0.74	<0.74	<0.74	<0.37	<0.74	<0.74	<0.37	<0.37 UJ	<0.37	<0.37	<0.74	<0.96	<0.052
DG-V17	3	9.5-10	DG-V17S-9.5-10	1/28/2019	<0.53	<5.3	<1.1	<1.1	**25**	<0.53	<2.6	<0.53	<1.1	<0.53	<0.53	<0.53	<0.53	<1.1	<1.1	<1.1	<0.53	<1.1	<1.1	<0.53	<0.53	<0.53	<0.53	<1.1	<1.4	<0.074
DG-W11	4	0.5-1	DG-W11S-0.5-1	1/29/2019	<0.37	<3.7	<0.74 U	<0.74 U	<3.7	<0.37 U	<1.8	<0.37	<0.74	<0.37	<0.37	<0.37	<0.37	<0.74	<0.74	<0.74 U	<0.37 U	<0.74 U	<0.74 U	<0.37	<0.37	<0.37	<0.37	<0.74	<0.96	<0.051
DG-W11	4	3.5-4	DG-W11S-3.5-4	1/29/2019	<0.38	<3.8	<0.77 U	<0.77 U	<3.8	<0.38 U	<1.9	<0.38	<0.77	<0.38	<0.38	<0.38	<0.38	<0.77	<0.77	<0.77 U	<0.38 U	<0.77 U	<0.77 U	<0.38	<0.38	<0.38	<0.38	<0.77	<1.0	<0.054
DG-W11 (D)	4	3.5-4	DG-W11 (D)S-3.5-4	1/29/2019	<0.39	<3.9	<0.78	<0.78	<3.9	<0.39	<1.9 R	<0.39	<0.78	<0.39	<0.39	<0.39	<0.39	<0.78	<0.78	<0.78	<0.39	<0.78	<0.78	<0.39	<0.39	<0.39	<0.39	<0.78	<1.0	<0.055
DG-W15	4	0.5-1	DG-W15S-0.5-1	1/28/2019	<0.46	<4.6	<0.93	<0.93	<4.6	<0.46	<2.3	<0.46	<0.93	<0.46	<0.46	<0.46	<0.46	<0.93	<0.93	<0.93	<0.46	<0.93	<0.93	<0.46	**0.53 J**	<0.46	<0.46	<0.93	<1.2	<0.065
DG-W15 (D)	4	0.5-1	DG-W15 (D)S-0.5-1	1/28/2019	<0.41	<4.1	<0.83	<0.83	<4.1	<0.41	<2.1	<0.41	<0.83	<0.41	<0.41	<0.41	<0.41	<0.83	<0.83	<0.83	<0.41	<0.83	<0.83	<0.41	<0.41 UJ	<0.41	<0.41	<0.83	<1.1	<0.058
DG-W15	4	3.5-4	DG-W15S-3.5-4	1/28/2019	<0.70	<7.0	<1.4 UJ	<1.4 UJ	<7.0	<0.70 UJ	<3.5	<0.70	<1.4	<0.70	<0.70	<0.70 UJ	<0.70 UJ	<1.4	<1.4 UJ	<1.4 UJ	<0.70 UJ	<1.4 UJ	<1.4 UJ	<0.70 UJ	**3**	<0.70	<0.70	<1.4	<1.8 UJ	**0.24**
DG-X13	4	0.5-1	DG-X13S-0.5-1	1/22/2019	<0.53	<5.3	<1.1	<1.1	<5.3	<0.53	<2.6	<0.53	<1.1	<0.53	<0.53	<0.53	<0.53	<1.1	<1.1	<1.1	<0.53	<1.1	<1.1	<0.53	<0.53	<0.53	<0.53 *	<1.1	<1.4	<0.074
DG-X13	4	3.5-4	DG-X13S-3.5-4	1/22/2019	<0.39	<3.9	<0.78	<0.78	<3.9	<0.39	<2.0	<0.39	<0.78	<0.39	<0.39	<0.39	<0.39	<0.78	<0.78	<0.78	<0.39	<0.78	<0.78	<0.39	<0.39	<0.39	<0.39	<0.78	<1.0	<0.055
DG-X13 (D)	4	3.5-4	DG-X13 (D)S-3.5-4	1/22/2019	<0.34	<3.4	<0.68	<0.68	<3.4	<0.34	<1.7	<0.34	<0.68	<0.34	<0.34	<0.34	<0.34	<0.68	<0.68	<0.68	<0.34	<0.68	<0.68	<0.34	<0.34	<0.34	<0.34	<0.68	<0.88	<0.047
DG-X17	4	0.5-1	DG-X17S-0.5-1	1/28/2019	<0.49	<4.9	<0.97	<0.97	<4.9	<0.49	<2.4	<0.49	<0.97	<0.49	<0.49	<0.49	<0.49	<0.97	<0.97	<0.97	<0.49	<0.97	<0.97	<0.49	<0.49	<0.49	<0.49	<0.97	<1.3	<0.068
DG-X17	4	3.5-4	DG-X17S-3.5-4	1/28/2019	<0.39	<3.9	<0.78	<0.78	<3.9	<0.39	<1.9	<0.39	<0.78	<0.39	<0.39	<0.39	<0.39	<0.78	<0.78	<0.78	<0.39	<0.78	<0.78	<0.39	<0.39	<0.39	<0.39	<0.78	<1.0	<0.054
DG-Y11	4	0.5-1	DG-Y11S-0.5-1	1/21/2019	<0.37	<3.7	<0.75	<0.75	<3.7	<0.37	<1.9	<0.37	<0.75	<0.37	<0.37	<0.37	<0.37	<0.75	<0.75	<0.75	<0.37	<0.75	<0.75	<0.37	<0.37	<0.37	<0.37	<0.75	<0.97	<0.052
DG-Y11	4	3.5-4	DG-Y11S-3.5-4	1/21/2019	<0.37	<3.7	<0.74	<0.74	<3.7	<0.37	<1.8	<0.37	<0.74	<0.37	<0.37	<0.37	<0.37	<0.74	<0.74	<0.74	<0.37	<0.74	<0.74	<0.37	<0.37	<0.37	<0.37	<0.74	<0.96	<0.052
DG-Y15	4	0.5-1	DG-Y15S-0.5-1	1/31/2019	<0.44	<4.4	<0.89	<0.89	<4.4	<0.44	<2.2	<0.44	<0.89	<0.44	<0.44	<0.44	<0.44	<0.89	<0.89	<0.89	<0.44	<0.89	<0.89	**0.45 J**	<0.44	<0.44	<0.44	<0.89	<1.2	<0.062
DG-Y15	4	3.5-4	DG-Y15S-3.5-4	1/31/2019	<0.44	<4.4	<0.88	<0.88	<4.4	<0.44	<2.2	<0.44	<0.88	<0.44	<0.44	<0.44	<0.44	<0.88	<0.88	<0.88	<0.44	<0.88	<0.88	**1.2**	<0.44	<0.44	<0.44	<0.88	<1.1	<0.062
DG-Y15 (D)	4	3.5-4	DG-Y15 (D)S-3.5-4	1/31/2019	<0.36	<3.6	<0.73	<0.73	<3.6	<0.36	<1.8	<0.36	<0.73	<0.36	<0.36	<0.36	<0.36	<0.73	<0.73	<0.73	<0.36	<0.73	<0.73	**1.1**	<0.36	<0.36	<0.36	<0.73	<0.94	<0.051
DG-Y15	4	7.5-8	DG-Y15S-7.5-8	1/31/2019	**120 J**	<400	<100	<100	<1,000	<100	<400	<100	<250	<100	**540**	<100	<100	<200	<200	<200	<100	<100	<200	<100	<100	<100	**100 J**	<200	<200	**210**
DG-Y19	4	0.5-1	DG-Y19S-0.5-1	1/28/2019	<0.45	<4.5	<0.90	<0.90	<4.5	<0.45	<2.3	<0.45	<0.90	<0.45	<0.45	<0.45	<0.45	<0.90	<0.90	<0.90	<0.45	<0.90	<0.90	<0.45	<0.45	<0.45	<0.45	<0.90	<1.2	<0.060
DG-Y19	4	3.5-4	DG-Y19S-3.5-4	1/28/2019	<0.36	<3.6	<0.73	<0.73	<3.6	<0.36	<1.8	<0.36	<0.73	<0.36	<0.36	<0.36	<0.36	<0.73	<0.73	<0.73	<0.36	<0.73	<0.73	<0.36	<0.36	<0.36	<0.36	<0.73	<0.95	<0.047
DG-Y19	4	7.5-8	DG-Y19S-7.5-8	1/28/2019	<0.36	<3.6	<0.73	<0.73	<3.6	<0.36	<1.8	<0.36	<0.73	<0.36	<0.36	<0.36	<0.36	<0.73	<0.73	<0.73	<0.36	<0.73	<0.73	<0.36	<0.36	<0.36	<0.36	<0.73	<0.95	<0.051
DG-Z13	4	0.5-1	DG-Z13S-0.5-1	1/28/2019	<0.51	<5.1	<1.0	<1.0	**16**	<0.51	<2.6	**0.60 J**	<1.0	<0.51	<0.51	**0.91 J**	<0.51	<1.0	**5.1**	<1.0	<0.51	<1.0	<1.0	<0.51	**2.7**	<0.51	<0.51	<1.0	**12**	**0.1**

Table 5: Volatile Organic Compounds and Total Petroleum Hydrocarbons as Gasoline
Concentrations in Soil
Brisbane Baylands OU-2
Brisbane, California

Sample Location	Investigation Zone	Depth Range (ft bgs)	Sample Name	Collection Date	1,1,1-Trichloroethane	1,1,2-Trichloro-1,2,2-trifluoroethane	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	2-Butanone	4-Isopropyltoluene	4-Methyl-2-pentanone	Benzene	Carbon disulfide	Chloroform	cis-1,2-Dichloroethene	Ethylbenzene	Isopropylbenzene	Methyl-tert-butyl ether (MTBE)	Naphthalene	n-Butylbenzene	n-Propylbenzene	sec-Butylbenzene	tert-Butylbenzene	Tetrachloroethene (PCE)	Toluene	trans-1,2-Dichloroethene	Trichloroethene (TCE)	Vinyl Chloride	Xylenes, Total	TPH-Gasoline (C4-C12)
Direct Exposure Human Health Risk Level Residential Soil Exposure ESL [1]					1.7E+06	--	--	--	--	--	--	3.3E+02	--	3.2E+02	1.9E+04	5.9E+03	--	4.7E+04	3.8E+03	--	--	--	--	5.9E+02	1.1E+06	1.3E+05	9.5E+02	8.3E+00	5.8E+05	4.3E+05
Leaching to Groundwater Levels Non-drinking Water ESL [2]					7.0E+03	--	--	--	--	--	--	2.5E+01	--	2.3E+01	1.6E+03	4.3E+02	--	2.5E+03	1.2E+03	--	--	--	--	8.0E+01	1.0E+04	1.4E+04	8.5E+01	1.5E+00	1.0E+04	4.9E+03
USEPA RSL for Resident Soil [3]					8.1E+06	6.7E+06	3.0E+05	2.7E+05	2.7E+07	--	3.3E+07	1.2E+03	7.7E+05	3.2E+02	1.6E+05	5.8E+03	1.9E+06	4.7E+04	3.8E+03	3.9E+06	3.8E+06	7.8E+06	7.8E+06	2.4E+04	4.9E+06	1.6E+06	9.4E+02	5.9E+01	5.8E+05	--
				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	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	mg/kg
DG-Z13	4	3.5-4	DG-Z13S-3.5-4	1/28/2019	<0.35	<3.5	<0.70	<0.70	<3.5	<0.35	<1.7	<0.35	<0.70	<0.35	<0.35	<0.35	<0.35	<0.70	<0.70	<0.70	<0.35	<0.70	<0.70	<0.35	<0.35	<0.35	<0.35	<0.70	<0.91	<0.049
DG-Z17	4	0.5-1	DG-Z17S-0.5-1	1/28/2019	<0.47	<4.7	<0.94	<0.94	<4.7	<0.47	<2.3	<0.47	<0.94	<0.47	<0.47	<0.47	<0.47	<0.94	<0.97	<0.94	<0.47	<0.94	<0.94	<0.47	<0.47	<0.47	<0.47	<0.94	<1.2	<0.066
DG-Z17 (D)	4	0.5-1	DG-Z17 (D)S-0.5-1	1/28/2019	<0.45	<4.5	<0.89	<0.89	<4.5	<0.45	<2.2	<0.45	<0.89	<0.45	<0.45	<0.45	<0.45	<0.89	<0.89	<0.89	<0.45	<0.89	<0.89	<0.45	**0.80 J**	<0.45	<0.45	<0.89	<1.2	<0.063
DG-Z17	4	3.5-4	DG-Z17S-3.5-4	1/28/2019	<0.43	<4.3	<0.85	<0.85	<4.3	<0.43	<2.1	<0.43	<0.85	<0.43	<0.43	<0.43	<0.43	<0.85	<0.85	<0.85	<0.43	<0.85	<0.85	**2.2**	<0.43	<0.43	<0.43	<0.85	<1.1	<0.060
DG-Z17	4	7.5-8	DG-Z17S-7.5-8	1/28/2019	<43	<170	<43	<43	<430	<43	<170	<43	<110	<43	<43	<43	<43	<86	<86	<86	<43	<43	<86	<43 U	<43	<43	<43	<86	<86	**39**
DG-AA11	4	0.5-1	DG-AA11S-0.5-1	1/29/2019	<0.37	<3.7	<0.74 U	<0.74 U	<3.7	<0.37 U	<1.9	<0.37	<0.74	<0.37	<0.37	<0.37	<0.37	<0.74	<0.74	<0.74 U	<0.37 U	<0.74 U	<0.74 U	<0.37	<0.37	<0.37	<0.37	<0.74	<0.96	<0.052
DG-AA11	4	3.5-4	DG-AA11S-3.5-4	1/29/2019	<210	<850	<210	<210	<2,100	<210	<850	<210	<530	<210	<210	<210	<210	<430	<430	<430	<210	<210	<430	<210	<210	<210	<210	<430	<430	**390**
DG-AA15	4	0.5-1	DG-AA15S-0.5-1	1/22/2019	<0.39	<3.9	<0.79	<0.79	<3.9	<0.39	<2.0	<0.39	<0.79	<0.39	<0.39	<0.39	<0.39	<0.79	<0.79	<0.79	<0.39	<0.79	<0.79	<0.39	<0.39	<0.39	<0.39 *	<0.79	<1.0	<0.055
DG-AA19	4	0.5-1	DG-AA19S-0.5-1	1/24/2019	<0.50	<5.0	<1.0	<1.0	<5.0	<0.50	<2.5	<0.50	<1.0	<0.50	<0.50	<0.50	<0.50	<1.0	<1.0	<1.0	<0.50	<1.0	<1.0	<0.50	<0.50	<0.50	<0.50	<1.0	<1.3	<0.070
DG-AA19	4	3.5-4	DG-AA19S-3.5-4	1/24/2019	<0.43	<4.3	<0.85	<0.85	<4.3	<0.43	<2.1	<0.43	<0.85	<0.43	<0.43	<0.43	<0.43	<0.85	<0.85	<0.85	<0.43	<0.85	<0.85	<0.43	<0.43	<0.43	<0.43	<0.85	<1.1	**0.69**
DG-AA19	4	8.5-9	DG-AA19S-8.5-9	1/24/2019	<0.38	<3.8	<0.76	<0.76	**8**	<0.38	<1.9	<0.38	<0.76	<0.38	<0.38	<0.38	<0.38	<0.76	<0.76	<0.76	<0.38	<0.76	<0.76	<0.38	<0.38	<0.38	<0.38	<0.76	<0.98	<0.053
DG-AB13	4	0.5-1	DG-AB13S-0.5-1	1/22/2019	<0.34	<3.4	<0.69	<0.69	<3.4	<0.34	<1.7	<0.34	<0.69	<0.34	<0.34	<0.34	<0.34	<0.69	<0.69	<0.69	<0.34	<0.69	<0.69	<0.34	<0.34	<0.34	<0.34 *	<0.69	<0.90	<0.048
DG-AB13	4	3.5-4	DG-AB13S-3.5-4	1/22/2019	<0.41	<4.1	<0.81	<0.81	<4.1	<0.41	<2.0	<0.41	<0.81	<0.41	<0.41	<0.41	<0.41	<0.81	<0.81	<0.81	<0.41	<0.81	<0.81	<0.41	<0.41	<0.41	<0.41 *	<0.81	<1.1	<0.057
DG-AB13 (D)	4	3.5-4	DG-AB13 (D)S-3.5-4	1/22/2019	<0.47	<4.7	<0.94	<0.94	<4.7	<0.47	<2.4	<0.47	<0.94	<0.47	<0.47	<0.47	<0.47	<0.94	<0.94	<0.94	<0.47	<0.94	<0.94	<0.47	<0.47	<0.47	<0.47	<0.94	<1.2	<0.066
DG-AB13	4	13.5-14	DG-AB13S-13.5-14	1/22/2019	<600	<2,400	**8,600**	**1,800**	<6,000	**2,100**	<2,400	<600	<1,500	<600	<600	**730 J**	**1,200**	<1,200	**7,400**	**3,800**	**2,100**	**1,000 J**	<1,200	<600	<600	<600	<600	<1,200	**7,600**	**2,400**
DG-AC11	4	0.5-1	DG-AC11S-0.5-1	1/29/2019	<190	<740	<190	<190	<1,900	<190	<740	<190	<460	<190	<190	<190	<190	<370	<370 U	<370	<190	<190	<370	<190	<190	<190	<190	<370	<370	**220**
DG-AC11	4	3.5-4	DG-AC11S-3.5-4	1/29/2019	<0.36	<3.6	<0.71 U	<0.71 U	**6.9 J**	<0.36 U	<1.8	<0.36	<0.71	<0.36	<0.36	<0.36	<0.36	<0.71	<0.71	<0.71 U	<0.36 U	<0.71 U	<0.71 U	<0.36	<0.36	<0.36	<0.36	<0.71	<0.92	**0.099**
DG-AC11	4	8.5-9	DG-AC11S-8.5-9	1/29/2019	<0.36	<3.6	<0.71 U	<0.71 U	<3.6	<0.36 U	<1.8	<0.36	**2.7**	<0.36	<0.36	<0.36	<0.36	<0.71	<0.71	<0.71 U	<0.36 U	<0.71 U	<0.71 U	<0.36	**0.60 J**	<0.36	<0.36	<0.71	<0.93	<0.050
DG-AD13	4	0.5-1	DG-AD13S-0.5-1	2/1/2019	<0.40	<4.0	<0.80	<0.80	<4.0	<0.40	<2.0	<0.40	<0.80	<0.40	<0.40	<0.40	<0.40	<0.80	<0.80	<0.80	<0.40	<0.80	<0.80	<0.40	<0.40	<0.40	<0.40	<0.80	<1.0	<0.056
DG-AD13	4	3.5-4	DG-AD13S-3.5-4	2/1/2019	<0.40	<4.0	<0.79	<0.79	<4.0	<0.40	<2.0	**0.45 J**	**1.2 J**	<0.40	<0.40	<0.40	<0.40	<0.79	<0.79	<0.79	<0.40	<0.79	<0.79	<0.40	<0.40	<0.40	<0.40	<0.79	<1.0	<0.055
DG-AD13	4	7.5-8	DG-AD13S-7.5-8	2/1/2019	<200	<810	**1,800 J**	**480 J**	<2,000	**400 J**	<810	<200	<500	<200	<200	**590 J**	**200 J**	<400	**4,100 J**	**460 J**	**310 J**	**210 J**	<400	<200	**520 J**	<200	<200	<400	**1,700 J**	**370**
DG-AD13 (D)	4	7.5-8	DG-AD13 (D)S-7.5-8	2/1/2019	<160	<620	**1,000 J**	**290 J**	<1,600	**230 J**	<620	<160	<390	<160	<160	**290 J**	<160 UJ	<310	**2,100 J**	<310 UJ	**200 J**	<160 UJ	<310	<160	**240 J**	<160	<160	<310	**940 J**	**250**
DG-AE11	4	0.5-1	DG-AE11S-0.5-1	1/21/2019	<0.36	<3.6	<0.73	<0.73	<3.6	<0.36	<1.8	<0.36	<0.73	<0.36	<0.36	<0.36	<0.36	<0.73	<0.73	<0.73	<0.36	<0.73	<0.73	<0.36	<0.36	<0.36	<0.36	<0.73	<0.95	**0.46**
DG-AE11	4	3.5-4	DG-AE11S-3.5-4	1/21/2019	<0.40	<4.0	<0.80	<0.80	<4.0	<0.40	<2.0	<0.40	<0.80	<0.40	<0.40	<0.40	<0.40	<0.80	<0.80	<0.80	<0.40	<0.80	<0.80	<0.40	<0.40	<0.40	<0.40 U	<0.80	<1.0	**0.15**
DG-AF13	4	0.5-1	DG-AF13S-0.5-1	1/28/2019	<0.43	<4.3	<0.85	<0.85	<4.3	<0.43	<2.1	<0.43	<0.85	<0.43	<0.43	<0.43	<0.43	<0.85	<0.85	<0.85	<0.43	<0.85	<0.85	<0.43	<0.43	<0.43	<0.43	<0.85	<1.1	<0.060
DG-AF13	4	3.5-4	DG-AF13S-3.5-4	1/28/2019	<0.33	<3.3	<0.66	<0.66	<3.3	<0.33	<1.7	<0.33	<0.66	<0.33	<0.33	<0.33	<0.33	<0.66	<0.66	<0.66	<0.33	<0.66	<0.66	<0.33	<0.33	<0.33	<0.33	<0.66	<0.86	<0.047
DG-AG11	4	0.5-1	DG-AG11S-0.5-1	1/21/2019	<0.38	<3.8	<0.76	<0.76	<3.8	<0.38	<1.9	<0.38	<0.76	<0.38	<0.38	<0.38	<0.38	<0.76	<0.76	<0.76	<0.38	<0.76	<0.76	<0.38	<0.38	<0.38	<0.38	<0.76	<0.99	<0.053
DG-AG11	4	3.5-4	DG-AG11S-3.5-4	1/21/2019	<0.36	<3.6	<0.72	<0.72	**7.8**	<0.36	<1.8	<0.36	<0.72	<0.36	<0.36	<0.36	<0.36	<0.72	<0.72	<0.72	<0.36	<0.72	<0.72	<0.36	<0.36	<0.36	<0.36	<0.72	<0.94	<0.051
DG-AG11	4	9.5-10	DG-AG11S-9.5-10	1/21/2019	<78	<310	<78	<78	<780	<78	<310	<78	<200	<78	<78	<78	**99 J**	<160	<160	**160 J**	**120 J**	**110 J**	<160	<78	<78	<78	<78	<160	<160	**160**
DG-AH13	4	0.5-1	DG-AH13S-0.5-1	1/29/2019	<0.33	<3.3	<0.67 U	<0.67 U	<3.3	<0.33 U	<1.7	<0.33	<0.67	<0.33	<0.33	<0.33	<0.33	<0.67	<0.67	<0.67 U	<0.33 U	<0.67 U	<0.67 U	<0.33	<0.33	<0.33	<0.33	<0.67	<0.87	<0.047
DG-AH13	4	3.5-4	DG-AH13S-3.5-4	1/29/2019	<0.42	<4.2	<0.84	<0.84	<4.2	<0.42	<2.1	<0.42	<0.84	<0.42	<0.42	<0.42	<0.42	<0.84	<0.84	<0.84	<0.42	<0.84	<0.84	<0.42	<0.42	<0.42	<0.42	<0.84	<1.1	<0.059
DG-AH13	4	7.5-8	DG-AH13S-7.5-8	1/29/2019	<47	<190	<47	<47	<470	<47	<190	**82 J**	**210 J**	<47	<47	**59 J**	**330**	<93	**130 J**	**370**	**490**	**300**	<93	<47	<47	<47	<47	<93	<93	**120**
DG-AI11	4	0.5-1	DG-AI11S-0.5-1	1/21/2019	<0.73	<7.3	<1.5	<1.5	<7.3	<0.73	<3.6	**1.3 J**	<1.5	<0.73	<0.73	<0.73	<0.73	<1.5	<1.5	<1.5	<0.73	<1.5	<1.5	<0.73	<0.73	<0.73	<0.73 U	<1.5	<1.9	<0.10
DG-AI11 (D)	4	0.5-1	DG-AI11 (D)S-0.5-1	1/21/2019	<0.31	<3.1	<0.62	<0.62	<3.1	<0.31	<1.6	<0.31 UJ	<0.62	<0.31	<0.31	<0.31	<0.31	<0.62	<0.62	<0.62	<0.31	<0.62	<0.62	<0.31	<0.31	<0.31	<0.31	<0.62	<0.81	<0.043
DG-AI11	4	3.5-4	DG-AI11S-3.5-4	1/21/2019	<41	<160	<41	<41	<410	<41	<160	<41	<100	<41	<41	<41	<41	<82	<82	<82	<41	<41	<82	<41	<41	<41	<41	<82	<82	**46**
DG-AI11	4	9.5-10	DG-AI11S-9.5-10	1/21/2019	<0.55	<5.5	<1.1	<1.1	<5.5	<0.55	<2.7	<0.55	<1.1	<0.55	<0.55	<0.55	**0.77 J**	<1.1	**2.1 J**	<1.1	<0.55	<1.1	<1.1	<0.55	<0.55	<0.55	<0.55 U	<1.1	<1.4	**0.46**
DG-AJ13	4	0.5-1	DG-AJ13S-0.5-1	1/29/2019	<0.50	<5.0	<1.0 U	<1.0 U	<5.0	<0.50 U	<2.5	<0.50	<1.0	<0.50	<0.50	<0.50	<0.50	<1.0	<1.0	<1.0 U	<0.50 U	<1.0 U	<1.0 U	<0.50	<0.50	<0.50	<0.50	<1.0	<1.3	<0.070
DG-AJ13	4	3.5-4	DG-AJ13S-3.5-4	1/29/2019	<0.35	<3.5	<0.69 U	<0.69 U	<3.5	<0.35 U	<1.7	<0.35	<0.69	<0.35	<0.35	<0.35	<0.35	<0.69	<0.69	<0.69 U	<0.35 U	<0.69 U	<0.69 U	<0.35	<0.35	<0.35	<0.35	<0.69	<0.90	<0.049
DG-AK11	4	0.5-1	DG-AK11S-0.5-1	1/22/2019	<0.44	<4.4	<0.88	<0.88	<4.4	**0.82 J**	<2.2	<0.44	<0.88	<0.44	<0.44	<0.44	**2**	<0.88	**1.1 J**	**0.90 J**	**0.66 J**	<0.88	<0.88	<0.44	<0.44	<0.44	<0.44 *	<0.88	**1.3 J**	**0.75**
DG-AK11	4	3.5-4	DG-AK11S-3.5-4	1/22/2019	<150	<590	<150	<150	<1,500	<150	<590	<150	<370	<150	<150	<150	<150	<300	<300	<300	<150	<150	<300	<150	<150	<150	<150	<300	<300	**100**
DG-AL13	4	0.5-1	DG-AL13S-0.5-1	1/29/2019	<0.35	<3.5	<0.71 U	<0.71 U	<3.5	<0.35 U	<1.8	<0.35	<0.71	<0.35	<0.35	<0.35	<0.35	<0.71	<0.71	<0.71 U	<0.35 U	<0.71 U	<0.71 U	<0.35	<0.35	<0.35	<0.35	<0.71	<0.92	<0.049
DG-AL13	4	3.5-4	DG-AL13S-3.5-4	1/29/2019	<0.34	<3.4	<0.68 U	<0.68 U	<3.4	<0.34 U	<1.7	<0.34	<0.68	<0.34	<0.34	<0.34	<0.34	<0.68	<0.68	<0.68 U	<0.34 U	<0.68 U	<0.68 U	<0.34	<0.34	<0.34	<0.34	<0.68	<0.88	<0.048
DG-AM11	4	0.5-1	DG-AM11S-0.5-1	1/22/2019	<0.37	<3.7	<0.75	<0.75	<3.7	<0.37	<1.9	<0.37	<0.75	<0.37	<0.37	<0.37	<0.37	<0.75	<0.75	<0.75	<0.37	<0.75	<0.75	<0.37	<0.37	<0.37	<0.37 *	<0.75	<0.97	<0.052
DG-AM11	4	3.5-4	DG-AM11S-3.5-4	1/22/2019	<0.39	<3.9	<0.78	<0.78	<3.9	<0.39	<1.9	**0.45 J**	<0.78	<0.39	<0.39	<0.39	<0.39	<0.78	<0.78	<0.78	<0.39	<0.78	<0.78	<0.39	<0.39	<0.39	<0.39 *	<0.78	<1.0	<0.054
DG-AN13	4	0.5-1	DG-AN13S-0.5-1	1/31/2019	<0.48	<4.8	<0.96	<0.96	<4.8	<0.48	<2.4	<0.48	<0.96	<0.48	<0.48	<0.48	<0.48	<0.96	<0.96	<0.96	<0.48	<0.96	<0.96	<0.48	<0.48	<0.48	<0.48	<0.96	<1.3	<0.067
DG-AN13	4	3.5-4	DG-AN13S-3.5-4	1/31/2019	<0.36	<3.6	<0.72	<0.72	<3.6	<0.36	<1.8	<0.36	<0.72	<0.36	<0.36	<0.36	<0.36	<0.72	<0.72	<0.72	<0.36	<0.72	<0.72	<0.36	<0.36	<0.36	<0.36	<0.72	<0.93	<0.050
DG-AN13	4	9.5-10	DG-AN13S-9.5-10	1/31/2019	<0.50	<5.0	<0.99	<0.99	**46**	<0.50	<2.5	<0.50	**1.4 J**	<0.50	<0.50	<0.50	<0.50	<0.99	<0.99	**1.2 J**	<0.50	<0.99	<0.99	<0.50	<0.50	<0.50	<0.50	<0.99	<1.3	**0.079 J**
DG-AO11	5	0.5-1	DG-AO11S-0.5-1	1/22/2019	<0.40	<4.0	<0.79	<0.79	<4.0	<0.40	<2.0	<0.40	<0.79	<0.40	<0.40	<0.40	<0.40	<0.79	<0.79	<0.79	<0.40	<0.79	<0.79	<0.40	<0.40	<0.40	<0.40 *	<0.79	<1.0	<0.055
DG-AO11	5	3.5-4	DG-AO11S-3.5-4	1/22/2019	<150	<590	<150	<150	<1,500	<150	<590	<150	<370	<150	<150	<150	<150	<300	<300	<300	<150	<150	<300	<150	<150	<150	<150	<300	<300	**270**
DG-AQ11	5	0.5-1	DG-AQ11S-0.5-1	1/30/2019	<0.42	<4.2	<0.85	<0.85	<4.2	<0.42	<2.1	<0.42	<0.85	<0.42	<0.42	<0.42	<0.42	<0.85	<0.85	<0.85	<0.42	<0.85	<0.85	<0.42	<0.42	<0.42	<0.42	<0.85	<1.1	<0.059
DG-AQ11	5	3.5-4	DG-AQ11S-3.5-4	1/30/2019	<0.47	<4.7	<0.94	<0.94	<4.7	<0.47	<2.3	<0.47	<0.94	<0.47	<0.47	<0.47	<0.47	<0.94	<0.94	<0.94	<0.47	<0.94	<0.94	<0.47	<0.47	<0.47	<0.47	<0.94	<1.2	<0.066
DG-AT9	5	0.5-1	DG-AT9S-0.5-1	1/30/2019	<0.47	<4.7	<0.94	<0.94	<4.7	<0.47	<2.4	<0.47	<0.94	<0.47	<0.47	<0.47	<0.47	<0.94	<0.94	<0.94	<0.47	<0.94	<0.94	<0.47	<0.47	<0.47	<0.47	<0.94	<1.2	<0.066
DG-AT9	5	3.5-4	DG-AT9S-3.5-4	1/30/2019	<0.39	<3.9	<0.78	<0.78	<3.9	<0.39	<2.0	**1.1**	<0.78	<0.39	<0.39	<0.39	<0.39	<0.78	<0.78	<0.78	<0.39	<0.78	<0.78	<0.39	**0.52 J**	<0.39	<0.39	<0.78	<1.0	<0.055
DG-AV9	5	0.5-1	DG-AV9S-0.5-1	2/1/2019	<0.85	<8.5	<1.7	<1.7	<8.5	<0.85	<4.2	<0.85	<1.7	<0.85	<0.85	<0.85	<0.85	<1.7	<1.7	<1.7	<0.85	<1.7	<1.7	<0.85	<0.85	<0.85	<0.85	<1.7	<2.2	<0.12
DG-AV9	5	3.5-4	DG-AV9S-3.5-4	2/1/2019	<0.60	<6.0	<1.2	<1.2	<6.0	<0.60	<3.0	<0.60	<1.2	<0.60	<0.60	<0.60	<0.60	<1.2	<1.2	<1.2	<0.60	<1.2	<1.2	<0.60	<0.60	<0.60	<0.60	<1.2	<1.5	<0.083
DG-AV9	5	8.5-9	DG-AV9S-8.5-9	2/1/2019	<0.44	<4.4	<0.88	<0.88	<4.4	<0.44	<2.2	<0.44	<0.88	<0.44	<0.44	<0.44	<0.44	<0.88	<0.88	<0.88	<0.44	<0.88	<0.88	<0.44	<0.44	<0.44	<0.44	<0.88	<1.1	<0.062

Table 5: Volatile Organic Compounds and Total Petroleum Hydrocarbons as Gasoline
Concentrations in Soil
Brisbane Baylands OU-2
Brisbane, California

Sample Location	Investigation Zone	Depth Range (ft bgs)	Sample Name	Collection Date	1,1,1-Trichloroethane	1,1,2-Trichloro-1,2,2-trifluoroethane	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	2-Butanone	4-Isopropyltoluene	4-Methyl-2-pentanone	Benzene	Carbon disulfide	Chloroform	cis-1,2-Dichloroethene	Ethylbenzene	Isopropylbenzene	Methyl-tert-butyl ether (MTBE)	Naphthalene	n-Butylbenzene	n-Propylbenzene	sec-Butylbenzene	tert-Butylbenzene	Tetrachloroethene (PCE)	Toluene	trans-1,2-Dichloroethene	Trichloroethene (TCE)	Vinyl Chloride	Xylenes, Total	TPH-Gasoline (C4-C12)
Direct Exposure Human Health Risk Level Residential Soil Exposure ESL [1]					1.7E+06	--	--	--	--	--	--	3.3E+02	--	3.2E+02	1.9E+04	5.9E+03	--	4.7E+04	3.8E+03	--	--	--	--	5.9E+02	1.1E+06	1.3E+05	9.5E+02	8.3E+00	5.8E+05	4.3E+05
Leaching to Groundwater Levels Non-drinking Water ESL [2]					7.0E+03	--	--	--	--	--	--	2.5E+01	--	2.3E+01	1.6E+03	4.3E+02	--	2.5E+03	1.2E+03	--	--	--	--	8.0E+01	1.0E+04	1.4E+04	8.5E+01	1.5E+00	1.0E+04	4.9E+03
USEPA RSL for Resident Soil [3]					8.1E+06	6.7E+06	3.0E+05	2.7E+05	2.7E+07	--	3.3E+07	1.2E+03	7.7E+05	3.2E+02	1.6E+05	5.8E+03	1.9E+06	4.7E+04	3.8E+03	3.9E+06	3.8E+06	7.8E+06	7.8E+06	2.4E+04	4.9E+06	1.6E+06	9.4E+02	5.9E+01	5.8E+05	--
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	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	mg/kg
DG-AW7	5	0.5-1	DG-AW7S-0.5-1	1/11/2019	<0.40	<4.0	<0.79	<0.79	<4.0	<0.40	<2.0	**0.47 J**	<0.79	<0.40	<0.40	<0.40	<0.40	<0.79	<0.79	<0.79	<0.40	<0.79	<0.79	<0.40	<0.40	<0.40	<0.40	<0.79	<1.0	<0.055
DG-AW7	5	3.5-4	DG-AW7S-3.5-4	1/11/2019	<0.44	<4.4	<0.88	<0.88	<4.4	<0.44	<2.2	<0.44	<0.88	<0.44	<0.44	<0.44	<0.44	<0.88	<0.88	<0.88	<0.44	<0.88	<0.88	<0.44	<0.44	<0.44	<0.44	<0.88	<1.1	<0.062
DG-AX9	5	0.5-1	DG-AX9S-0.5-1	1/23/2019	<0.34	<3.4	<0.68	<0.68	**10**	<0.34	<1.7	<0.34	<0.68	<0.34	<0.34	<0.34	<0.34	<0.68	<0.68	<0.68	<0.34	<0.68	<0.68	<0.34	<0.34	<0.34	<0.34	<0.68	<0.89	<0.048
DG-AX9	5	3.5-4	DG-AX9S-3.5-4	1/23/2019	<0.43	<4.3	<0.85	<0.85	**7.5 J**	<0.43	<2.1	<0.43	<0.85	<0.43	<0.43	<0.43	<0.43	<0.85	<0.85	<0.85	<0.43	<0.85	<0.85	<0.43	<0.43	<0.43	<0.43	<0.85	<1.1	<0.060
DG-AX9	5	9.5-10	DG-AX9S-9.5-10	1/23/2019	<0.47	<4.7	<0.93	<0.93	<4.7	<0.47	<2.3	<0.47	<0.93	<0.47	<0.47	<0.47	<0.47	<0.93	<0.93	<0.93	<0.47	<0.93	<0.93	<0.47	<0.47	<0.47	<0.47	<0.93	<1.2	<0.065
DG-AB17	6	0.5-1	DG-AB17S-0.5-1	1/24/2019	<37	<150	**55 J**	**42 J**	<370	<37	**4,000**	<37	<93	<37	<37	**240**	**49 J**	<75	<75	<75	<37	<37	<75	<37 U	<37	<37	<37	<75	**3,100**	**11**
DG-AB17	6	3.5-4	DG-AB17S-3.5-4	1/24/2019	<0.59	<5.9	<1.2	<1.2	**16**	<0.59	<3.0	<0.59	<1.2	<0.59	<0.59	<0.59	<0.59	<1.2	<1.2	<1.2	<0.59	<1.2	<1.2	<0.59	<0.59	<0.59	<0.59	<1.2	<1.5	<0.083
DG-AC15	6	0.5-1	DG-AC15S-0.5-1	1/31/2019	<0.38	<3.8	<0.76	<0.76	<3.8	<0.38	<1.9	<0.38	<0.76	<0.38	<0.38	<0.38	<0.38	<0.76	<0.76	<0.76	<0.38	<0.76	<0.76	<0.38	<0.38	<0.38	<0.38	<0.76	<0.99	<0.053
DG-AC15 (D)	6	0.5-1	DG-AC15 (D)S-0.5-1	1/31/2019	<0.37	<3.7	<0.74	<0.74	<3.7	<0.37	<1.9	<0.37	<0.74	<0.37	<0.37	<0.37	<0.37	<0.74	<0.74	<0.74	<0.37	<0.74	<0.74	<0.37	<0.37	<0.37	<0.37	<0.74	<0.97	<0.052
DG-AC15	6	3.5-4	DG-AC15S-3.5-4	1/31/2019	<0.39	<3.9	<0.78	<0.78	<3.9	<0.39	<2.0	<0.39	<0.78	<0.39	<0.39	<0.39	<0.39	<0.78	<0.78	<0.78	<0.39	<0.78	<0.78	<0.39	<0.39	<0.39	<0.39	<0.78	<1.0	<0.055
DG-AC15	6	7.5-8	DG-AC15S-7.5-8	1/31/2019	<58	<230	**530**	**150**	<580	**180**	<230	<58	<150	<58	<58	**76 J**	**64 J**	<120	**1,400**	**130 J**	**91 J**	**67 J**	<120	<58	<58	<58	<58	<120	**370**	**97**
DG-AD17	6	0.5-1	DG-AD17S-0.5-1	1/24/2019	<0.42	<4.2	<0.84	<0.84	<4.2	<0.42	<2.1	<0.42	<0.84	<0.42	<0.42	<0.42	<0.42	<0.84	<0.84	<0.84	<0.42	<0.84	<0.84	<0.42	<0.42	<0.42	<0.42	<0.84	<1.1	<0.059
DG-AD17	6	3.5-4	DG-AD17S-3.5-4	1/24/2019	<76	<310	<76	<76	<760	<76	<310	<76	<190	<76	<76	<76	<76	<150	<150	<150	<76	<76	<150	<76	<76	<76	<76	<150	<150	**130**
DG-AD17	6	7-7.5	DG-AD17S-7-7.5	1/24/2019	<0.37	<3.7	<0.75	<0.75	<3.7	<0.37	<1.9	<0.37	<0.75	<0.37	<0.37	<0.37	<0.37	<0.75	**3.3**	<0.75	<0.37	<0.75	<0.75	<0.37	<0.37	<0.37	<0.37	<0.75	<0.97	**0.079**
DG-AG15	6	0.5-1	DG-AG15S-0.5-1	1/24/2019	<0.36	<3.6	<0.73	<0.73	<3.6	**0.46 J**	<1.8	<0.36	<0.73	<0.36	<0.36	<0.36	<0.36	<0.73	<0.73	<0.73	<0.36	<0.73	<0.73	<0.36	<0.36	<0.36	<0.36	<0.73	<0.94	<0.051
DG-AG15	6	3.5-4	DG-AG15S-3.5-4	1/24/2019	<0.32	<3.2	<0.64	<0.64	**4.2 J**	<0.32	<1.6	<0.32	<0.64	<0.32	<0.32	<0.32	<0.32	<0.64	<0.64	<0.64	<0.32	<0.64	<0.64	<0.32	<0.32	<0.32	<0.32	<0.64	<0.83	<0.045
DG-AG15	6	8.5-9	DG-AG15S-8.5-9	1/24/2019	<0.43	<4.3	**2.9**	**1.0 J**	**27**	**0.44 J**	<2.1	**15**	**3.7**	<0.43	<0.43	**2.1**	**3.4**	<0.86	**0.87 J**	**2.4**	**12**	<0.86	<0.86	<0.43	**1.1**	<0.43	<0.43	<0.86	**3.6**	**0.23**
DG-AH17	6	0.5-1	DG-AH17S-0.5-1	1/24/2019	<0.33	<3.3	<0.67	<0.67	<3.3	**130**	<1.7	<0.33	<0.67	<0.33	<0.33	<0.33	<0.33	<0.67	<0.67	<0.67	<0.33	<0.67	<0.67	<0.33	**0.33 J**	<0.33	<0.33	<0.67	<0.87	**0.43**
DG-AI15	6	0.5-1	DG-AI15S-0.5-1	1/24/2019	<0.33	<3.3	<0.66	<0.66	<3.3	<0.33	<1.6	<0.33	<0.66	<0.33	<0.33	<0.33	<0.33	<0.66	<0.66	<0.66	<0.33	<0.66	<0.66	<0.33	<0.33	<0.33	<0.33	<0.66	<0.85	<0.046
DG-AI15	6	3.5-4	DG-AI15S-3.5-4	1/24/2019	<0.35	<3.5	<0.71	<0.71	<3.5	<0.35	<1.8	<0.35	<0.71	<0.35	<0.35	<0.35	<0.35	**2.2**	<0.71	<0.71	<0.35	<0.71	<0.71	<0.35	<0.35	<0.35	<0.35	<0.71	<0.92	<0.049
DG-AI15 (D)	6	3.5-4	DG-AI15 (D)S-3.5-4	1/24/2019	<0.35	<3.5	<0.70	<0.70	<3.5	<0.35	<1.8	<0.35	<0.70	<0.35	<0.35	<0.35	<0.35	**2.4**	<0.70	<0.70	<0.35	<0.70	<0.70	<0.35	<0.35	<0.35	<0.35	<0.70	<0.91	<0.049
DG-AJ17	6	0.5-1	DG-AJ17S-0.5-1	1/24/2019	<0.35	<3.5	<0.69	<0.69	<3.5	<0.35	<1.7	<0.35	<0.69	<0.35	<0.35	<0.35	<0.35	<0.69	<0.69	<0.69	<0.35	<0.69	<0.69	<0.35	<0.35	<0.35	<0.35	<0.69	<0.90	<0.049
DG-AJ17	6	3.5-4	DG-AJ17S-3.5-4	1/24/2019	<0.36	<3.6	<0.73	<0.73	<3.6	<0.36	<1.8	<0.36	<0.73	<0.36	<0.36	<0.36	<0.36	<0.73	<0.73	<0.73	<0.36	<0.73	<0.73	<0.36	<0.36	<0.36	<0.36	<0.73	<0.94	<0.051
DG-AJ17	6	9.5-10	DG-AJ17S-9.5-10	1/24/2019	<0.33	<3.3	<0.66	<0.66	<3.3	<0.33	<1.7	<0.33	<0.66	<0.33	<0.33	<0.33	<0.33	<0.66	<0.66	<0.66	<0.33	<0.66	<0.66	<0.33	<0.33	<0.33	<0.33	<0.66	<0.86	<0.046
DG-AK15	6	0.5-1	DG-AK15S-0.5-1	1/23/2019	<0.43	<4.3	<0.87	<0.87	<4.3	<0.43	<2.2	<0.43	<0.87	<0.43	<0.43	<0.43	<0.43	<0.87	<0.87	<0.87	<0.43	<0.87	<0.87	**3.9**	<0.43	<0.43	<0.43	<0.87	<1.1	<0.061
DG-AK15	6	3.5-4	DG-AK15S-3.5-4	1/23/2019	<0.39	<3.9	<0.79	<0.79	<3.9	<0.39	<2.0	<0.39	<0.79	<0.39	<0.39	<0.39	<0.39	<0.79	<0.79	<0.79	<0.39	<0.79	<0.79	**11**	<0.39	<0.39	<0.39	<0.79	<1.0	<0.055
DG-AM15	6	0.5-1	DG-AM15S-0.5-1	1/23/2019	<0.47	**7.5 J**	<0.94	<0.94	<4.7	<0.47	<2.3	<0.47	<0.94	<0.47	<0.47	<0.47	<0.47	<0.94	<0.94	<0.94	<0.47	<0.94	<0.94	<0.47	<0.47	<0.47	<0.47	<0.94	<1.2	<0.066
DG-AM15	6	3.5-4	DG-AM15S-3.5-4	1/23/2019	<0.42	<4.2	<0.85	<0.85	<4.2	<0.42	<2.1	<0.42	<0.85	<0.42	<0.42	<0.42	<0.42	<0.85	<0.85	<0.85	<0.42	<0.85	<0.85	<0.42	<0.42	<0.42	<0.42	<0.85	<1.1	<0.059
DG-AM15	6	9.5-10	DG-AM15S-9.5-10	1/23/2019	<0.43	<4.3	<0.86	<0.86	<4.3	<0.43	<2.1	<0.43	**3.3 J**	<0.43	<0.43	<0.43	<0.43	<0.86	<0.86	<0.86	<0.43	<0.86	<0.86	<0.43	<0.43	<0.43	<0.43	<0.86	<1.1	<0.060
DG-AM15 (D)	6	9.5-10	DG-AM15 (D)S-9.5-10	1/23/2019	<0.58	<5.8	<1.2	<1.2	<5.8	<0.58	<2.9	<0.58	<1.2 UJ	<0.58	<0.58	<0.58	<0.58	<1.2	<1.2	<1.2	<0.58	<1.2	<1.2	<0.58	<0.58	<0.58	<0.58	<1.2	<1.5	<0.081
DG-AP13	6	0.5-1	DG-AP13S-0.5-1	1/23/2019	<0.33	<3.3	<0.66	<0.66	<3.3	<0.33	<1.7	<0.33	<0.66	<0.33	<0.33	<0.33	<0.33	<0.66	<0.66	<0.66	<0.33	<0.66	<0.66	<0.33	<0.33	<0.33	<0.33	<0.66	<0.86	<0.046
DG-AP13 (D)	6	0.5-1	DG-AP13 (D)S-0.5-1	1/23/2019	<0.38	<3.8	<0.75	<0.75	<3.8	<0.38	<1.9	<0.38	<0.75	<0.38	<0.38	<0.38	<0.38	<0.75	<0.75	<0.75	<0.38	<0.75	<0.75	<0.38	<0.38	<0.38	<0.38	<0.75	<0.98	<0.053
DG-AP13	6	3.5-4	DG-AP13S-3.5-4	1/23/2019	<0.36	<3.6	<0.73	<0.73	<3.6	<0.36	<1.8	<0.36	<0.73	<0.36	<0.36	<0.36	<0.36	<0.73	<0.73	<0.73	<0.36	<0.73	<0.73	<0.36	<0.36	<0.36	<0.36	<0.73	<0.94	<0.051
DG-AP13	6	9.5-10	DG-AP13S-9.5-10	1/23/2019	<0.46	<4.6	<0.91	<0.91	<4.6	<0.46	<2.3	**3.9**	<0.91	<0.46	<0.46	<0.46	<0.46	<0.91	<0.91	<0.91	<0.46	<0.91	<0.91	**0.64 J**	**1.7**	<0.46	<0.46	<0.91	<1.2	<0.064
DG-AR13	6	0.5-1	DG-AR13S-0.5-1	1/23/2019	<0.41	<4.1	<0.83	<0.83	<4.1	<0.41	<2.1	<0.41	<0.83	<0.41	<0.41	<0.41	<0.41	<0.83	<0.83	<0.83	<0.41	<0.83	<0.83	<0.41	<0.41	<0.41	<0.41	<0.83	<1.1	<0.058
DG-AR13	6	3.5-4	DG-AR13S-3.5-4	1/23/2019	<0.38	<3.8	<0.76	<0.76	<3.8	<0.38	<1.9	<0.38	<0.76	<0.38	<0.38	<0.38	<0.38	<0.76	<0.76	<0.76	<0.38	<0.76	<0.76	<0.38	<0.38	<0.38	<0.38	<0.76	<0.99	<0.054
DG-AR13	6	9.5-10	DG-AR13S-9.5-10	1/23/2019	<0.50	<5.0	<0.99	<0.99	<5.0	<0.50	<2.5	**7.1**	<0.99	<0.50	<0.50	<0.50	<0.50	<0.99	<0.99	<0.99	<0.50	<0.99	<0.99	<0.50	**2**	<0.50	<0.50	<0.99	<1.3	<0.069
DG-AS11	6	0.5-1	DG-AS11S-0.5-1	1/31/2019	<0.41	<4.1	<0.83	<0.83	<4.1	<0.41	<2.1	<0.41	<0.83	<0.41	<0.41	<0.41	<0.41	<0.83	<0.83	<0.83	<0.41	<0.83	<0.83	<0.41	<0.41	<0.41	<0.41	<0.83	<1.1	<0.058
DG-AS11	6	3.5-4	DG-AS11S-3.5-4	1/31/2019	<0.51	<5.1	<1.0	<1.0	<5.1	<0.51	<2.6	<0.51	<1.0	<0.51	<0.51	<0.51	<0.51	<1.0	<1.0	<1.0	<0.51	<1.0	<1.0	<0.51	<0.51	<0.51	<0.51	<1.0	<1.3	<0.072
DG-AS11	6	7.5-8	DG-AS11S-7.5-8	1/31/2019	<0.39	<3.9	<0.78	<0.78	<3.9	<0.39	<1.9	<0.39	<0.78	<0.39	<0.39	<0.39	<0.39	<0.78	<0.78	<0.78	<0.39	<0.78	<0.78	<0.39	<0.39	<0.39	<0.39	<0.78	<1.0	<0.054
DG-AT12	6	0.5-1	DG-AT12S-0.5-1	1/23/2019	<0.47	<4.7	<0.95	<0.95	<4.7	<0.47	<2.4	**1**	<0.95	<0.47	<0.47	<0.47	<0.47	<0.95	<0.95	<0.95	<0.47	<0.95	<0.95	<0.47	**1.7**	<0.47	<0.47	<0.95	<1.2	**0.18**
DG-AT12	6	3.5-4	DG-AT12S-3.5-4	1/23/2019	<0.57	<5.7	<1.1	<1.1	<5.7	<0.57	<2.9	<0.57	<1.1	**1.4**	<0.57	<0.57	<0.57	<1.1	<1.1	<1.1	<0.57	<1.1	<1.1	<0.57	<0.57	<0.57	<0.57	<1.1	<1.5	<0.080
DG-AT12	6	9.5-10	DG-AT12S-9.5-10	1/23/2019	<0.45	<4.5	<0.90	<0.90	<4.5	<0.45	<2.2	<0.45	<0.90	<0.45	<0.45	<0.45	<0.45	<0.90	<0.90	<0.90	<0.45	<0.90	<0.90	<0.45	<0.45	<0.45	<0.45	<0.90	<1.2	<0.063
DG-AU11	6	0.5-1	DG-AU11S-0.5-1	1/23/2019	<0.37	<3.7	<0.75	<0.75	<3.7	<0.37	<1.9	<0.37	<0.75	<0.37	<0.37	<0.37	<0.37	<0.75	<0.75	<0.75	<0.37	<0.75	<0.75	<0.37	<0.37	<0.37	<0.37	<0.75	<0.97	<0.052
DG-AU11	6	3.5-4	DG-AU11S-3.5-4	1/23/2019	<0.35	<3.5	<0.70	<0.70	**5.3 J**	<0.35	<1.8	<0.35	<0.70	<0.35	<0.35	<0.35	<0.35	<0.70	<0.70	<0.70	<0.35	<0.70	<0.70	<0.35	<0.35	<0.35	<0.35	<0.70	<0.91	<0.049
DG-AU11	6	9.5-10	DG-AU11S-9.5-10	1/23/2019	<0.44	<4.4	<0.89	<0.89	**5.6 J**	<0.44	<2.2	**2.3**	<0.89	<0.44	<0.44	<0.44	<0.44	<0.89	<0.89	<0.89	<0.44	<0.89	<0.89	<0.44	**0.62 J**	<0.44	<0.44	<0.89	<1.2	<0.062
DG-AW11	6	0.5-1	DG-AW11S-0.5-1	1/23/2019	<0.40	<4.0	<0.80	<0.80	**32**	<0.40	<2.0	<0.40	**1.7**	<0.40	<0.40	<0.40	<0.40	<0.80	<0.80	<0.80	<0.40	<0.80	<0.80	<0.40	<0.40	<0.40	<0.40	<0.80	<1.0	<0.056
DG-AW11	6	3.5-4	DG-AW11S-3.5-4	1/23/2019	<0.43 R	<4.3 R	<0.86 R	<0.86 R	**77 J**	<0.43 R	<2.2 R	<0.43 R	<0.86 R	<0.43 R	<0.43 R	<0.43 R	<0.43 R	<0.86 R	<0.86 R	<0.86 R	<0.43 R	<0.86 R	<0.86 R	<0.43 R	<0.43 R	<0.43 R	<0.43 R	<0.86 R	<1.1 R	<0.060
DG-AW11	6	7.5-8	DG-AW11S-7.5-8	1/23/2019	<0.41	<4.1	<0.83	<0.83	**75**	<0.41	<2.1	<0.41	**2**	<0.41	<0.41	<0.41	<0.41	<0.83	<0.83	<0.83	<0.41	<0.83	<0.83	<0.41	<0.41	<0.41	<0.41	<0.83	<1.1	<0.058
Historical Samples																														
C-34	4	3-4	C-34-3-4	8/30/06	<5	<5	--	--	--	--	--	<5	--	**7.7**	<5	<5	--	--	--	--	--	--	--	**15**	<5	<5	<5	<5	<10	--
C-34	4	7.5-8	C-34-7.5-8	8/30/06	<5	<5	--	--	--	--	--	<5	--	**7.7**	<5	**5.3**	--	--	--	--	--	--	--	<5	<5	<5	<5	<5	**31**	--
C-35	4	4.5-5	C-35-4.5-5	8/30/06	<500	<500	--	--	--	--	--	<500	--	<500	**3,200**	<500	--	--	--	--	--	--	--	<500	<500	<500	<500	**2,300**	<1,000	--
C-35	4	5.5-6	C-35-5.5-6	8/30/06	<2,500	<2,500	--	--	--	--	--	<2,500	--	<2,500	<2,500	<2,500	--	--	--	--	--	--	--	<2,500	<2,500	<2,500	<2,500	<2,500	<5,000	--
C-36	6	6-6.5	C-36-6-6.5	8/30/06	<2,500	<2,500	--	--	--	--	--	<2,500	--	<2,500	**27,000**	<2,500	--	--	--	--	--	--	--	**4,400**	<2,500	<2,500	<2,500	<2,500	<5,000	--
C-36	6	8-8.5	C-36-8-8.5	8/30/06	<2,500	<2,500	--	--	--	--	--	<2,500	--	<2,500	**12,000**	<2,500	--	--	--	--	--	--	--	**4,400**	<2,500	**2,800**	<2,500	<2,500	**7,100**	--

Table 5: Volatile Organic Compounds and Total Petroleum Hydrocarbons as Gasoline
Concentrations in Soil
Brisbane Baylands OU-2
Brisbane, California

Sample Location	Investigation Zone	Depth Range (ft bgs)	Sample Name	Collection Date	1,1,1-Trichloroethane	1,1,2-Trichloro-1,2,2-trifluoroethane	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	2-Butanone	4-Isopropyltoluene	4-Methyl-2-pentanone	Benzene	Carbon disulfide	Chloroform	cis-1,2-Dichloroethene	Ethylbenzene	Isopropylbenzene	Methyl-tert-butyl ether (MTBE)	Naphthalene	n-Butylbenzene	n-Propylbenzene	sec-Butylbenzene	tert-Butylbenzene	Tetrachloroethene (PCE)	Toluene	trans-1,2-Dichloroethene	Trichloroethene (TCE)	Vinyl Chloride	Xylenes, Total	TPH-Gasoline (C4-C12)
Direct Exposure Human Health Risk Level Residential Soil Exposure ESL [1]					1.7E+06	--	--	--	--	--	--	3.3E+02	--	3.2E+02	1.9E+04	5.9E+03	--	4.7E+04	3.8E+03	--	--	--	--	5.9E+02	1.1E+06	1.3E+05	9.5E+02	8.3E+00	5.8E+05	4.3E+05
Leaching to Groundwater Levels Non-drinking Water ESL [2]					7.0E+03	--	--	--	--	--	--	2.5E+01	--	2.3E+01	1.6E+03	4.3E+02	--	2.5E+03	1.2E+03	--	--	--	--	8.0E+01	1.0E+04	1.4E+04	8.5E+01	1.5E+00	1.0E+04	4.9E+03
USEPA RSL for Resident Soil [3]					8.1E+06	6.7E+06	3.0E+05	2.7E+05	2.7E+07	--	3.3E+07	1.2E+03	7.7E+05	3.2E+02	1.6E+05	5.8E+03	1.9E+06	4.7E+04	3.8E+03	3.9E+06	3.8E+06	7.8E+06	7.8E+06	2.4E+04	4.9E+06	1.6E+06	9.4E+02	5.9E+01	5.8E+05	--
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	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	mg/kg
C-37	6	4.5-5	C-37-4.5-5	8/30/06	<25	<25	--	--	--	--	--	<25	--	<25	**830**	<25	--	--	--	--	--	--	--	<25	<25	**160**	<25	**84**	<50	--
C-37	6	6.5-7	C-37-6.5-7	8/30/06	<500	<500	--	--	--	--	--	<500		<500	**630**	<500	--	--	--	--	--	--	--	**20,000**	<500	<500	**930**	<500	<1,000	--
C-38	4	4.5-5	C-38-4.5-5	8/30/06	<25,000	<25,000	--	--	--	--	--	<25,000	--	<25,000	**490,000**	<25,000	--	--	--	--	--	--	--	**310,000**	<25,000	<25,000	**40,000**	<25,000	<50,000	--
C-38	4	5.5-6	C-38-5.5-6	8/30/06	<25,000	<25,000	--	--	--	--	--	<2,500	--	<2,500	**80,000**	<2,500	--	--	--	--	--	--	--	**21,000**	<2,500	<2,500	<2,500	**3,100**	<5,000	--
C-39	6	3.5-4	C-39-3.5-4	8/30/06	<250,000	<250,000	--	--	--	--	--	<250,000	--	<250,000	**460,000 J**	<250,000	--	--	--	--	--	--	--	**4,200,000 J**	<250,000	<250,000	<250,000	<250,000	<500,000	--
C-39	6	4.5-5	C-39-4.5-5	8/30/06	<250,000	<250,000	--	--	--	--	--	<2,500	--	<250,000	**960,000**	<250,000	--	--	--	--	--	--	--	**9,400,000**	<250,000	<250,000	**860,000**	<250,000	<500,000	--
R-25	6	3.2-3.7	R-25-3.2-3.7	6/06/00	<130,000	<130,000	<130,000	<130,000	<130,000	<130,000	<130,000	<130,000	<130,000	<130,000	<130,000	<130,000	<130,000	<130,000	<130,000	<130,000	<130,000	<130,000	<130,000	**2,500,000**	<130,000	<130,000	**170,000**	<130,000	<260,000	--
S-9	4	5-5.5	S-9-5-5.5	11/08/00	<17,000	<17,000	<17,000	<17,000	<17,000	<17,000	<17,000	<17,000	<17,000	<17,000	**240,000**	<17,000	<17,000	<17,000	<10,000	<17,000	<17,000	<17,000	<17,000	**650,000**	<17,000	<17,000	**100,000**	<33,000	<34,000	--
S-10	6	5.5-6	S-10-5.5-6	11/08/00	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8	**5.3**	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8	**9.7**	<4.8	--
S-11	6	0.5-1	S-11-0.5-1	11/08/00	<170,000	<170,000	<170,000	<170,000	<170,000	<170,000	<170,000	<170,000	<170,000	<170,000	<170,000	<170,000	<170,000	<170,000	<170,000	<170,000	<170,000	<170,000	<170,000	**4,500,000**	<170,000	<170,000	<170,000	<330,000	<340,000	--
S-19	4	7.5-8	S-19-7.5-8	6/19/01	--	--	--	--	--	--	--	--	--	--	<4.8	--	--	--	--	--	--	--	--	**5.8**	--	--	<4.8	<9.6	--	--

Notes:

1. San Francisco Bay RWQCB, 2019. Summary of Soil ESLs, Jan. 2019 (Rev. 1) - Direct Exposure Human Health Risk Levels (Table S-1) Res: Shallow Soil Exposure.
2. San Francisco Bay RWQCB, 2019. Summary of Soil ESLs, Jan. 2019 (Rev. 1) - Leaching to Groundwater Levels (Table S-3) Non-drinking Water.
3. USEPA, 2018. Regional Screening Levels - Generic Tables (April 2019). Screening level for "Resident Soil."
- The RWQCB ESL is used as comparison criteria when available. If RWQCB ESLs are not available, EPA RSL was selected for use as comparison criteria.
- VOCs and TPH-gasoline were analyzed by USEPA Method 8260B.
- Only analytes with detections are included in this table.
- Non-detect results are presented with "<" followed by the MDL.
- Results in bold font indicate a detection above the MDL.
- Gray shading indicates a detection above the comparison criteria.

Abbreviations and Symbols:

"F1" - Matrix spike and/or matrix spike duplicate recovery is outside of acceptance limits.
"F2" - Matrix spike and/or matrix spike duplicate relative percent difference exceeds control limits.
"J" - Analyte was detected but the associated numerical value is the approximate concentration.
"J+" - Analyte was detected but the associated numerical value is likely to be higher than the concentration of the analyte in the sample due to positive bias of associated QC or calibration data or attributable to matrix interference.
"J-" - Analyte was detected but the associated numerical value is likely to be lower than the concentration of the analyte in the sample due to negative bias of associated QC or calibration data or attributable to matrix interference.
"U" - Not detected at or above the reported result.
"UJ" - The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
"R" - The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.
"--" - Not Available
"<" - Non-detect result
(D) - Duplicate sample
µg/kg - microgram per kilogram
ESL - Environmental Screening Level
ft bgs - Feet below ground surface
MDL - Method Detection Limit
mg/kg - milligram per kilogram
QC - quality control
RWQCB - Regional Water Quality Control Board
TPH - Total petroleum hydrocarbons
USEPA - United States Environmental Protection Agency
VOCs - volatile organic compounds

Table 6: Groundwater Elevation in Fill Water-Bearing Zone, December 2018

Brisbane Baylands OU-2
Brisbane, California

Well Name	Screened Interval (ft bgs)	Date	Top of Casing Elevation (ft MSL)[1,2]	Depth to Groundwater (ft bgs)	Groundwater Elevation (ft MSL)[1,2]
KMW-4A	2-11	12/18/2018	10.46	4.66	5.80
KMW-7A	2-11	12/18/2018	13.66	7.92	5.74
LF-3A	4-10	12/18/2018	10.95	5.02	5.93
LF-4A	4-14	12/18/2018	8.32	2.32	6.00
LF-5A	2.5-8	12/18/2018	8.49	2.78	5.71
LF-7A	4-8	12/18/2018	10.65	5.45	5.20
LF-8A	5-10	12/18/2018	9.36	4.03	5.33
MK-1A	3-13	12/18/2018	10.47	4.70	5.77
MK-2A	3-13	12/18/2018	12.81	4.49	8.32
MK-7A	3-10	12/18/2018	10.50	5.36	5.14
MK-8A	5-10	12/18/2018	16.58	10.55	6.03
MW-9A	3-13	12/18/2018	11.26	5.62	5.64
MW-10A	3-13	12/18/2018	9.59	4.89	4.70
MW-11AR	3-13	12/18/2018	14.19	9.61	4.58
MW-13A	3-13	12/18/2018	7.81	3.89	3.92
MW-15A	3-13	12/18/2018	8.67	3.77	4.90
MW-17A	3-13	12/18/2018	8.45	2.56	5.89

Notes:

1. Source: Levine-Fricke, 1990. *Supplemental Remedial Investigation Data Study Report*, The Bayshore Railyard, Brisbane, California. 18 July.
2. Elevations were measured during well installation and may have changed since the time of measurement.

Abbreviations and Symbols:

bgs - below ground surface
ft - feet
MSL - Mean Sea Level

Table 7: Dissolved Metals Concentrations in Fill Groundwater
Brisbane Baylands OU-2
Brisbane, California

Sample Location	Investigation Zone	Sample Name	Collection Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Chromium, Hexavalent	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
Aquatic Habitat Goal Saltwater Ecotox ESL [1]				5.0E+02	3.6E+01	--	--	9.3E+00	1.0E+03	5.0E+01	--	3.1E+00	8.1E+00	2.5E-02	--	8.2E+00	5.0E-01	1.9E-01	2.1E+02	--	8.1E+01
Site Specific Screening Level [2]				5.0E+04	3.6E+03	--	--	9.3E+02	1.0E+05	5.0E+03	--	3.1E+02	8.1E+02	2.5E+00	--	8.2E+02	5.0E+01	1.9E+01	2.1E+04	--	8.1E+03
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
DG-N1	1	DG-N1W	12/18/2018	<4.1	**12**	**51**	<0.59	<0.21	**0.85**	<3.7	**5**	**5.1**	**7.5**	<0.10	**4.6**	**8.4**	<4.6	<2.0	<3.5	**1**	<7.4
DG-N5	1	DG-N5W	1/10/2019	**4.4 J**	**63**	**220**	<0.59	**0.56 J**	**0.78 J**	<3.7	**3.2**	**13 J**	<2.2	<0.10	**19**	**2.8 J**	<4.6	<2.0	<3.5	**1.1 J**	**20**
DG-O3	1	DG-O3W	12/18/2018	<4.1	**36**	**40**	<0.59	<0.21	**0.93**	<3.7	**1.6**	<3.7	**6.8**	<0.10	**7.1**	**2.1**	<4.6	<2.0	<3.5	**1.5**	<7.4
DG-P5	1	DG-P5W	1/10/2019	<4.1	**56**	**180**	<0.59	<0.21	**0.81 J**	<3.7	**1.6 J**	**5.4 J**	<2.2	<0.10	**10**	<1.0	<4.6	<2.0	**8.1 J**	<0.87	<7.4
DG-Q7	1	DG-Q7W	1/10/2019	<4.1	**10 U**	**980**	<0.59	<0.21	**1.1 J**	<3.7	<0.68	<3.7	**3.2 J**	<0.10	<2.9 UJ	<1.0 UJ	<4.6	<2.0	**4.4 J**	<0.87	**27**
DG-Q7 (D)	1	DG-Q7 (D)W	1/10/2019	<4.1	**4.0 J**	**1,000 J**	<0.59	<0.21	**1.0 J**	<3.7	<0.68	<3.7	<2.2 UJ	<0.10	**2.9 J**	**1.1 J**	<4.6	<2.0	<3.5 UJ	<0.87	**28**
DG-R1	1	DG-R1W	12/17/2018	<4.1	**26**	**56**	<0.59	**0.23 J**	**0.81 J**	<3.7	**4.6**	**6.5 J**	**6.5**	<0.10	<2.9	**4.1 J**	<4.6	<2.0	<3.5	**1.0 J**	<7.4
DG-R5	1	DG-R5W	1/30/2019	**5.7 J**	**57**	**140**	<0.59	<0.21	<0.70	<3.7	**2.6**	<3.7	<2.2	<0.10	**14**	**1.7 J**	<4.6	<2.0	<3.5 R	<0.87	**14 J**
DG-S3	1	DG-S3W	12/18/2018	<4.1	**24**	**110**	<0.59	<0.21	**0.79**	<3.7	**1.6**	<3.7	**12**	<0.10	**8.7**	**1.4**	<4.6	<2.0	<3.5	**2**	<7.4
DG-S7	1	DG-S7W	1/10/2019	<4.1	**10 U**	**660**	<0.59	<0.21	<0.70	<3.7	<0.68	**4.6 J**	<2.2	<0.10	**12**	**1.5 J**	<4.6	<2.0	<3.5	<0.87	<7.4
DG-T1	1	DG-T1W	12/17/2018	<4.1	**9.5 J**	**48 J**	**1.1 J**	**0.90 J**	**2.0 J**	<3.7	**7.5**	**4.8 J**	**6.7**	<0.10	**4.1 J**	**7.1 J**	<4.6	<2.0 UJ	<3.5	**1.6 J**	<7.4
DG-T5	1	DG-T5W	1/7/2019	**9.2 J**	**120**	**310**	<0.59	<0.21	<0.70	<3.7	**1.5 J**	**8.0 J**	**14**	<0.10	**9.2 J**	<1.0	<4.6	<2.0	<3.5	**3.7 J**	**9.6 J**
DG-U3	1	DG-U3W	12/18/2018	<4.1	**36**	**14**	<0.59	<0.21	<0.70	<3.7	<0.68	<3.7	**5.4**	<0.10	**11**	**1.4**	<4.6	<2.0	<3.5	<0.87	<7.4
DG-U3 (D)	1	DG-U3 (D)W	12/18/2018	<4.1	**38**	**15**	<0.59	<0.21	<0.70	<3.7	<0.68	<3.7	**4.3**	<0.10	**11**	**1.2**	<4.6	<2.0	<3.5	<0.87	<7.4
DG-U7	1	DG-U7W	1/10/2019	<4.1	**17**	**1,000**	<0.59	<0.21	**0.73 J**	<3.7	<0.68	<3.7	<2.2	<0.10	**4.0 J**	<1.0	<4.6	<2.0	<3.5	<0.87	<7.4
DG-V1	1	DG-V1W	12/17/2018	<4.1	**12**	**49 J**	**0.61 J**	**0.41 J**	**1.4 J**	<3.7	**6.7**	<3.7	**7.4**	<0.10	<2.9	**6.4 J**	<4.6	<2.0	**3.7 J**	<0.87	<7.4
DG-V5	1	DG-V5W	1/7/2019	**12**	**610**	**120**	<0.59	<0.21	<0.70	<3.7	<0.68	**6.1 J**	**9.2**	<0.10	**3.7 J**	<1.0	<4.6	<2.0	<3.5	**7.2 J**	**17 J**
DG-V9	1	DG-V9W	1/14/2019	<4.1	**3.8 J**	**330**	<0.59	**1.2 J**	**0.92 J**	<3.7	**6.3**	**7.6 J**	<2.2	<0.10	<2.9	**9.4 J**	**5.2 J**	<2.0	**4.3 J**	<0.87	**310**
DG-W3	1	DG-W3W	12/18/2018	<4.1	**16**	**42**	<0.59	<0.21	<0.70	<3.7	**4.5**	**5.6**	**7.8**	<0.10	**3.1**	**4**	<4.6	<2.0	<3.5	<0.87	<7.4
DG-W7	1	DG-W7W	1/30/2019	<4.1	**4.3 J**	**210**	<0.59	<0.21	**0.89 J**	<3.7	**2.8**	<3.7	<2.2	<0.10	<2.9	**5.6 J**	<4.6	<2.0	<3.5 R	<0.87	**170**
DG-X1	1	DG-X1W	12/17/2018	<4.1	**11**	**59**	**0.59 J**	**0.72 J**	**1.7 J**	<3.7	**8.9**	**4.5 J**	**7.4**	<0.10	**5.3 J**	**9.2 J**	<4.6	<2.0	<3.5	**1.5 J**	<7.4
DG-X5	1	DG-X5W	1/7/2019	**12**	**65**	**260**	<0.59	<0.21	**1.6 J**	<3.7	**0.96 J**	**12 J**	**28**	<0.10	**11**	**1.3 J**	<4.6	<2.0	<3.5	**2.7 J**	**17 J**
DG-X9	1	DG-X9W	1/14/2019	<4.1	<2.9	**310**	<0.59	<0.21	**0.75 J**	<3.7	<0.68	<3.7	<2.2	**0.28**	<2.9	**1.4 J**	<4.6	<2.0	<3.5	<0.87	**20 U**
DG-Y3	1	DG-Y3W	12/18/2018	<4.1	**24**	**79**	<0.59	<0.21	<0.70	<3.7	**9.4**	<3.7	**9.5**	<0.10	<2.9	**7**	<4.6	<2.0	<3.5	<0.87	**8.7**
DG-Y7	1	DG-Y7W	1/11/2019	<4.1	**10 U**	**170**	<0.59	<0.21	<0.70	<3.7	**0.90 J**	**6.1 J**	<2.2	<0.10	<2.9	**2.0 J**	<4.6	<2.0	**9.5 J**	<0.87	**75**
DG-Z5	1	DG-Z5W	1/7/2019	<4.1	**22**	**120**	<0.59	<0.21	**1.4 J**	<3.7	**5.9**	<3.7	**9.2**	<0.10	**7.6 J**	**3.7 J**	<4.6	<2.0	<3.5	<0.87	<7.4
DG-Z9	1	DG-Z9W	1/15/2019	<4.1	**4.2 J**	**390**	<0.59	**0.47 J**	**2.1 J**	<3.7	**5.9**	**4.9 J**	**5.5**	<0.10	**13**	**7.5 J**	<4.6	<2.0	**19**	<0.87	**170**
DG-AA3	1	DG-AA3W	12/18/2018	<4.1	**27**	**310**	<0.59	<0.21	**1.3**	<3.7	**12**	**7.2**	**9.7**	<0.10	**4.9**	**14**	<4.6	<2.0	<3.5	**1.5**	<7.4
DG-AA7	1	DG-AA7W	1/11/2019	<4.1	**11**	**180**	<0.59	<0.21	<0.70	<3.7	**1.7 J**	**8.4 J**	**4.7 J**	<0.10	**4.9 J**	**2.1 J**	<4.6	<2.0	**5.5 J**	<0.87	**65**
DG-AB5	1	DG-AB5W	1/31/2019	<4.1	**39**	**69**	**1.2 J**	**0.88 J**	**1.2 J**	<3.7	**5.1**	**5.7 J**	**8.4**	<0.10	**5.3 J**	**3.8 J**	<4.6	<2.0 UJ	<3.5 R	<0.87	<7.4
DG-AB5 (D)	1	DG-AB5 (D)W	1/31/2019	<4.1	**49**	**70**	<0.59 UJ	<0.21 UJ	<0.70 UJ	<3.7	**4.2**	**6.5 J**	**8.2**	<0.10	**5.6 J**	**2.4 J**	<4.6	<2.0	<3.5 R	<0.87	<7.4
DG-AC3	1	DG-AC3W	12/19/2018	<4.1	**50**	**160**	<0.59	**0.21**	**3**	<3.7	**16**	**6**	**11**	<0.10	**5**	**17**	<4.6	<2.0	<3.5	**1.7**	**13**
DG-AC7	1	DG-AC7W	1/11/2019	**8.0 J**	**10 U**	**150**	<0.59	**0.32 J**	**1.3 J**	<3.7	**1.4 J**	**23**	<2.2 UJ	<0.10	**12**	**2.4 J**	<4.6	<2.0	**4.6 J**	<0.87 UJ	**43**
DG-AC7 (D)	1	DG-AC7 (D)W	1/11/2019	**5.9 J**	<2.9	**150**	<0.59	**0.38 J**	**10 U**	<3.7	**1.9 J**	**21**	**7.6 J**	<0.10	**11**	**2.6 J**	<4.6	<2.0	<3.5 UJ	**0.99 J**	**39**
DG-AD5	1	DG-AD5W	1/7/2019	**20**	**120**	**210**	<0.59	**0.43 J**	**0.96 J**	<3.7	**1.9 J**	**26**	**17**	<0.10	**13**	**1.2 J**	<4.6	<2.0	<3.5	<0.87	**11 J**
DG-AD9	1	DG-AD9W	1/11/2019	<4.1	**5.3 J**	**240**	<0.59	**0.42 J**	**10 U**	<3.7	**3.4**	**6.5 J**	**25**	<0.10	**6.1 J**	**16**	<4.6	**2.5 J**	<3.5	<0.87	**210**
DG-AE3	1	DG-AE3W	12/19/2018	<4.1	**120**	**220**	**0.75**	**0.27**	**4.7**	<3.7	**12**	<3.7	**9.6**	<0.10	**3.2**	**12**	<4.6	<2.0	<3.5	**2**	**8.2**
DG-AE7	1	DG-AE7W	1/11/2019	<4.1	**10**	**190**	<0.59	<0.21	**0.75 J**	<3.7	**2**	**4.5 J**	**6.6**	<0.10	**4.3 J**	**3.9 J**	<4.6	<2.0	**6.0 J**	<0.87	**18 J**
DG-AF5	1	DG-AF5W	1/7/2019	<4.1	**130**	**240**	<0.59	**1.4 J**	**0.99 J**	<3.7	**8.4**	**14 J**	**14**	**0.11 J**	**9.3 J**	**11**	<4.6	<2.0	<3.5	<0.87	**130**
DG-AG3	1	DG-AG3W	12/19/2018	<4.1	**86**	**150**	**0.74**	<0.21	**7.6**	<3.7	**13**	<3.7	<2.2	<0.10	**17**	**19**	<4.6	<2.0	**6.9**	**3.1**	**25**
DG-AG7	1	DG-AG7W	1/31/2019	<4.1	**9.9 J**	**230**	**0.64 J**	**0.41 J**	**1.4 J**	<3.7	**3.5**	**3.8 J**	**9.6**	<0.10	**7.2 J**	**3.1 J**	<4.6	<2.0	<3.5 R	<0.87	**27**
MW-11AR	1	MW-11ARW	12/18/2018	<2.7	**26**	**65**	<0.33	<1.3	<1.5	<3.7	**4.8**	<1.5	**7.8**	<0.10	<2.3	<0.80	<7.1	<1.2	<3.5	<0.70	<9.6
KMW-4A	1	KMW-4AW	12/18/2018	<2.7	**43**	**110**	<0.33	<1.3	<1.5	<3.7	**12**	<1.5	**9.2**	<0.10	<2.3	**12**	<7.1	<1.2	<3.5	<0.70	<9.6

Table 7: Dissolved Metals Concentrations in Fill Groundwater
Brisbane Baylands OU-2
Brisbane, California

Sample Location	Investigation Zone	Sample Name	Collection Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Chromium, Hexavalent	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
Aquatic Habitat Goal Saltwater Ecotox ESL [1]				5.0E+02	3.6E+01	--	--	9.3E+00	1.0E+03	5.0E+01	--	3.1E+00	8.1E+00	2.5E-02	--	8.2E+00	5.0E-01	1.9E-01	2.1E+02	--	8.1E+01
Site Specific Screening Level [2]				5.0E+04	3.6E+03	--	--	9.3E+02	1.0E+05	5.0E+03	--	3.1E+02	8.1E+02	2.5E+00	--	8.2E+02	5.0E+01	1.9E+01	2.1E+04	--	8.1E+03
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
DG-AH5	2	DG-AH5W	1/7/2019	**11**	**18**	**140**	**0.67 J**	<0.21	**1.5 J**	<3.7	**4.1**	**44**	**8.9**	<0.10	**24**	**4.0 J**	<4.6	<2.0	<3.5	**2.7 J**	<7.4
DG-AI3	2	DG-AI3W	12/19/2018	<4.1	**110**	**220**	<0.59	<0.21	**3.4**	<3.7	**13**	**4.2**	**10**	<0.10	**4**	**12**	<4.6	<2.0	<3.5	**2.5**	**8.6**
DG-AI3 (D)	2	DG-AI3 (D)W	12/19/2018	<4.1	**110**	**230**	<0.59	<0.21	**3.4**	<3.7	**14**	**4.6**	**11**	<0.10	**3.7**	**13**	<4.6	<2.0	<3.5	**2.6**	**12**
DG-AI7	2	DG-AI7W	1/11/2019	<4.1	**8.9 J**	**200**	**0.68 J**	**1.0 J**	**10 U**	<3.7	**2.5**	<3.7	**9.9**	<0.10	**4.1 J**	**2.6 J**	<4.6	<2.0	<3.5	<0.87	**15 J**
DG-AJ5	2	DG-AJ5W	1/7/2019	**21 J-**	**180 J**	**940 J**	**4.7**	**4.1**	**380 J**	<3.7	**77 J**	**450 J**	**320 J**	**0.14 J**	**14**	**420 J**	<4.6	**2.0 J**	<3.5	**280 J**	**540 J**
DG-AK3	2	DG-AK3W	12/19/2018	<4.1	**110**	**250**	<0.59	**0.23**	**3.1**	<3.7	**12**	**32**	**11**	**0.22**	**6.8**	**17**	<4.6	<2.0	<3.5	**2.8**	<7.4
DG-AK7	2	DG-AK7W	1/11/2019	<4.1	**7.9 J**	**200**	<0.59	**0.23 J**	**10 U**	<3.7	**3.2**	**3.7 J**	**11**	<0.10	**4.9 J**	**5.2 J**	<4.6	<2.0	<3.5	<0.87	**45**
DG-AK7 (D)	2	DG-AK7 (D)W	1/11/2019	<4.1	**8.0 J**	**200**	<0.59	<0.21 UJ	**10 U**	<3.7	**2.9**	<3.7 UJ	**11**	<0.10	**4.1 J**	**4.0 J**	<4.6	<2.0	<3.5	<0.87	**43**
DG-AL5	2	DG-AL5W	1/31/2019	<4.1	**160**	**170**	**0.61 J**	<0.21	**1.7 J**	<3.7	**6**	**11 J**	**11**	<0.10	**9.7 J**	**8.3 J**	<4.6	<2.0	<3.5 R	**1.5 J**	**14 J**
DG-AL9	2	DG-AL9W	1/22/2019	<4.1	**9.7 J**	**140**	<0.59	<0.21	**1.0 J**	<3.7	**1.7 J**	<3.7	<2.2	<0.10	<2.9	**2.0 J**	<4.6	<2.0	**13**	<0.87	**21**
DG-AM3	2	DG-AM3W	12/19/2018	<4.1	**110**	**390**	<0.59	<0.21	**3.1**	<3.7	**11**	**4.6**	<2.2	<0.10	**5.3**	**15**	<4.6	<2.0	**7.3**	**2.3**	**20**
DG-AM7	2	DG-AM7W	1/11/2019	<4.1	**15**	**280**	**0.61 J**	**0.47 J**	**10 U**	<3.7	**4.3**	**5.7 J**	**8.8**	<0.10	**4.9 J**	**4.7 J**	<4.6	**2.4 J**	<3.5	<0.87	**23**
DG-AN5	2	DG-AN5W	12/20/2018	<4.1	**200**	**160**	<0.59	<0.21	**2.2 J**	<3.7	**6.4**	<3.7	<2.2	<0.10	**4.6 J**	**6.6 J**	<4.6	<2.0	**5.6 J**	**10 U**	**21**
DG-AN9	2	DG-AN9W	1/21/2019	<4.1	**7.1 J**	**110**	<0.59	**0.21 J**	**1.2 J**	<3.7	**3.4**	**6.1 J**	**2.7 J**	<0.10	**4.0 J**	**3.4 J**	<4.6	<2.0	**8.9 J**	<0.87	**55**
DG-AO3	2	DG-AO3W	12/19/2018	<4.1	**110**	**150**	<0.59	<0.21	**4.1**	<3.7	**9.6**	<3.7	**12**	<0.10	**2.9**	**10**	<4.6	<2.0	<3.5	**2.3**	**24**
DG-AO7	2	DG-AO7W	1/11/2019	**5.3 J**	**13**	**290**	**0.64 J**	**1.4 J**	**10 U**	<3.7	**6.1**	**7.5 J**	**13**	<0.10	**8.4 J**	**7.6 J**	<4.6	**2.8 J**	<3.5	**1.1 J**	**57**
DG-AP5	2	DG-AP5W	12/20/2018	<4.1	**89**	**100**	<0.59	<0.21	**3.0 J**	<3.7	**7.4**	**5.5 J**	<2.2	<0.10	**4.4 J**	**8.0 J**	<4.6	<2.0	**7.6 J**	**10 U**	**11 J**
DG-AP9	2	DG-AP9W	1/21/2019	**4.7**	**3.9**	**140**	<0.59	**0.74 J**	**1.5 J**	<3.7	**4.2**	**17 J**	<2.2	<0.10	**4.4**	**4.8**	<4.6	<2.0	<3.5	<0.87	**78**
DG-AQ3	2	DG-AQ3W	12/19/2018	<4.1	**110**	**270**	<0.59	<0.21	**2.7**	<3.7	**12**	<3.7	**9.3**	<0.10	**3.5**	**11**	<4.6	<2.0	<3.5	**1.9**	**10**
DG-AQ7	2	DG-AQ7W	1/31/2019	<4.1	**34**	**82**	<0.59	**0.21 J**	**1.8 J**	<3.7	**6.5**	**12 J**	**16**	**0.19 J**	<2.9	**8.6 J**	<4.6	<2.0	<3.5 R	<0.87	**51**
DG-AR5	2	DG-AR5W	12/20/2018	<4.1	**70**	**190**	<0.59	<0.21	**2.9 J**	<3.7	**9**	**9.7 J**	<2.2	<0.10	**3.2 J**	**7.8 J**	**4.9 J**	<2.0	**8.1 J**	**10 U**	<7.4
DG-AR9	2	DG-AR9W	1/11/2019	<4.1	**12**	**120**	<0.59	<0.21	**10 U**	<3.7	**5.2**	**15 J**	**7.8**	<0.10	**7.4 J**	**5.5 J**	<4.6	**2.1 J**	<3.5	<0.87 UJ	**59**
DG-AR9 (D)	2	DG-AR9 (D)W	1/11/2019	<4.1	**11**	**140**	<0.59	<0.21	**10 U**	<3.7	**5.5**	**15 J**	**6.8**	<0.10	**7.4 J**	**5.7 J**	<4.6	**2.4 J**	<3.5	**0.88 J**	**59**
DG-AS3	2	DG-AS3W	12/20/2018	<4.1	**52**	**210**	<0.59	<0.21	**1.8 J**	<3.7	**5.8**	<3.7	<2.2	<0.10	**3.2 J**	**6.4 J**	<4.6 UJ	<2.0	**6.5 J**	**10 U**	<7.4
DG-AT5	2	DG-AT5W	12/20/2018	<4.1	**19**	**190**	<0.59	**0.30 J**	**1.1 J**	<3.7	**4.8**	**32**	<2.2	<0.10	**4.2 J**	**4.5 J**	<4.6	<2.0	<3.5	**10 U**	**60**
DG-AU3	2	DG-AU3W	12/20/2018	**9.0 J**	**100**	**120**	<0.59	<0.21	<0.70	<3.7	**2.4**	**7.7 J**	<2.2	<0.10	**15**	**2.8 J**	<4.6	<2.0	<3.5	**10 U**	**14 J**
DG-AU7	2	DG-AU7W	1/11/2019	<4.1	**61**	**98**	<0.59	<0.21	**1.1 J**	<3.7	**3.6**	**16 J**	**3.7 J**	<0.10	**3.5 J**	**3.6 J**	**20 U**	<2.0	**6.2 J**	<0.87	**52**
DG-AU7 (D)	2	DG-AU7 (D)W	1/11/2019	<4.1	**57**	**95**	<0.59	<0.21	**10 U**	<3.7	**4.2**	**12 J**	**11 J**	<0.10	**3.0 J**	**4.5 J**	<4.6	<2.0	<3.5 UJ	<0.87	**45**
DG-AV5	2	DG-AV5W	12/20/2018	**50**	**4,300**	**62**	<0.59	**0.25 J**	**6.1 J**	<3.7	**6.5**	**8.6 J**	**7.8**	<0.10	**6.2 J**	**11**	<4.6	<2.0	**43**	**10 U**	**15 J**
DG-AW3	2	DG-AW3W	1/31/2019	<4.1	**67**	**180**	<0.59	<0.21	**1.4 J**	<3.7	**7.9**	**6.0 J**	**9.9**	<0.10	**5.0 J**	**7.9 J**	<4.6	<2.0	<3.5 R	**1.9 J**	<7.4
DG-AY3	2	DG-AY3W	2/1/2019	<4.1	**38**	**85**	<0.59	<0.21	**5.3 J**	**5.8 J**	**4.3**	**13 J**	**11**	<0.10	**5.2 J**	**3.1 J**	<4.6	<2.0	<3.5 R	**2.1 J**	<7.4
LF-5A	2	LF-5AW	12/19/2018	<2.7	<2.6	**720**	<0.33	<1.3	<1.5	<3.7	<1.2	<1.5	<2.3	<0.10	<2.3	<0.80	<7.1	<1.2	<3.5	<0.70	<9.6
MW-10A	2	MW-10AW	12/19/2018	<2.7	**64**	**93 J**	<0.33	<1.3	<1.5	<3.7	**4.3**	<1.5	<2.3	<0.10	<2.3	<0.80	<7.1	<1.2	<3.5	<0.70	<9.6
KMW-7A	2	KMW-7AW	12/19/2018	<2.7	**41**	**170**	<0.33	<1.3	<1.5	<3.7	**8.7**	<1.5	<2.3	<0.10	<2.3	**11**	<7.1	<1.2	<3.5	<0.70	<9.6
DG-N9	3	DG-N9W	1/14/2019	<4.1	**42**	**67**	<0.59	<0.21	**1.0 J**	<3.7	**0.87 J**	**4.9 J**	<2.2	<0.10	<2.9	**1.6 J**	**7.2 J**	<2.0	<3.5	**1.1 J**	<7.4
DG-N13	3	DG-N13W	1/11/2019	**4.9 J**	**10 U**	**38 J**	<0.59	<0.21	**0.98 J**	<3.7	**0.93 J**	**5.7 J**	<2.2	<0.10	**5.8 J**	**1.7 J**	<4.6	<2.0	**3.6 J**	<0.87	<7.4
DG-N13 (D)	3	DG-N13 (D)W	1/11/2019	<4.1 UJ	**10 U**	**37 J**	<0.59	<0.21	**1.7 J**	<3.7	**1.2 J**	**6.3 J**	<2.2	<0.10	**5.3 J**	**1.5 J**	<4.6	<2.0	<3.5 UJ	<0.87	<7.4
DG-O7	3	DG-O7W	1/10/2019	<4.1	**10 U**	**75**	<0.59	<0.21	**1.9 J**	<3.7	**1.0 J**	**3.8 J**	<2.2	<0.10	**3.7 J**	**1.1 J**	<4.6	<2.0	**9.6 J**	**1.2 J**	<7.4
DG-O11	3	DG-O11W	1/14/2019	<4.1	**11**	**50 U**	<0.59	<0.21	**2.0 J**	<3.7	<0.68	<3.7	<2.2	<0.10	<2.9	**1.2 J**	<4.6	<2.0	<3.5	**6.2 J**	<7.4
DG-O15	3	DG-O15W	1/11/2019	<4.1	**68**	**110**	<0.59	<0.21	**0.85 J**	<3.7	**2.9**	**4.4 J**	<2.2	**0.14 J**	**6.9 J**	**10**	<4.6	<2.0	<3.5	**3.1 J**	<7.4
DG-P13	3	DG-P13W	1/11/2019	**6.6 J**	**10 U**	**42 J**	<0.59	<0.21	<0.70	<3.7	<0.68	**5.8 J**	<2.2	<0.10	**6.1 J**	<1.0	<4.6	<2.0	<3.5	**3.5 J**	<7.4
DG-Q11	3	DG-Q11W	1/15/2019	**4.6 J**	**12**	**48 J**	<0.59	<0.21	**1.4 J**	<3.7	**0.90 J**	<3.7	<2.2	<0.10	**4.8 J**	<1.0	<4.6	<2.0	**8.1 J**	<0.87 UJ	<7.4
DG-Q11 (D)	3	DG-Q11 (D)W	1/15/2019	<4.1 UJ	**12**	**44 J**	<0.59	<0.21	**1.6 J**	<3.7	**0.77 J**	<3.7	<2.2	<0.10	**4.9 J**	<1.0	<4.6	<2.0	**5.8 J**	**1.0 J**	<7.4

Table 7: Dissolved Metals Concentrations in Fill Groundwater
Brisbane Baylands OU-2
Brisbane, California

Sample Location	Investigation Zone	Sample Name	Collection Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Chromium, Hexavalent	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
Aquatic Habitat Goal Saltwater Ecotox ESL [1]				5.0E+02	3.6E+01	--	--	9.3E+00	1.0E+03	5.0E+01	--	3.1E+00	8.1E+00	2.5E-02	--	8.2E+00	5.0E-01	1.9E-01	2.1E+02	--	8.1E+01
Site Specific Screening Level [2]				5.0E+04	3.6E+03	--	--	9.3E+02	1.0E+05	5.0E+03	--	3.1E+02	8.1E+02	2.5E+00	--	8.2E+02	5.0E+01	1.9E+01	2.1E+04	--	8.1E+03
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
DG-Q15	3	DG-Q15W	1/11/2019	<4.1	**12**	**88**	<0.59	<0.21	**1.6 J**	<3.7	**17**	**7.1 J**	<2.2	<0.10	**5.7 J**	**23**	<4.6	<2.0	<3.5	**3.3 J**	<7.4
DG-R9	3	DG-R9W	1/25/2019	<4.1	**65**	**62**	<0.59	**0.25 J**	**1.7 J**	<3.7	<0.68	<3.7	<2.2	**0.12 J**	**43**	**2.9 J**	<4.6	<2.0	<3.5	<0.87	<7.4
DG-R13	3	DG-R13W	1/29/2019	**5.5 J**	**6.9 J**	**24 J**	<0.59	<0.21	**1.0 J**	<3.7	<0.68	<3.7	<2.2	<0.10	**4.4 J**	<1.0	<4.6	<2.0	<3.5 R	**0.91 J**	<7.4
DG-S11	3	DG-S11W	1/15/2019	**6.5 J**	**5.5 J**	**50**	**0.83 J**	**0.72 J**	<0.70	<3.7	**3**	<3.7	**9**	<0.10	**12**	**2.7 J**	<4.6	<2.0	<3.5	**2.2 J**	<7.4
DG-S15	3	DG-S15W	1/11/2019	<4.1	**10 U**	**38 J**	<0.59	<0.21	<0.70	<3.7	**0.73 J**	**4.9 J**	<2.2	<0.10	**5.3 J**	<1.0	<4.6	<2.0	<3.5	**1.3 J**	<7.4
DG-S15 (D)	3	DG-S15 (D)W	1/11/2019	<4.1	**10 U**	**38 J**	<0.59	<0.21	<0.70	<3.7	**1.0 J**	**4.2 J**	<2.2	<0.10	**5.5 J**	<1.0	<4.6	<2.0	<3.5	**1.9 J**	<7.4
DG-T9	3	DG-T9W	1/14/2019	<4.1	**16**	**690**	<0.59	<0.21	<0.70	<3.7	<0.68	<3.7	<2.2	<0.10	**5.7 J**	<1.0	**5.6 J**	<2.0	<3.5	<0.87	**20 U**
DG-T13	3	DG-T13W	1/15/2019	<4.1	**8.4 J**	**92**	<0.59	<0.21	**1.0 J**	<3.7	<0.68	<3.7	<2.2	<0.10	**17**	<1.0	<4.6	<2.0	**4.4 J**	<0.87	<7.4
DG-U11	3	DG-U11W	1/15/2019	<4.1	**31**	**87**	<0.59	<0.21	**0.86 J**	<3.7	**0.68 J**	<3.7	<2.2	<0.10	**3.4 J**	<1.0	<4.6	<2.0	**6.4 J**	**1.3 J**	<7.4
DG-U15	3	DG-U15W	1/28/2019	<4.1	**3.8 J**	**49 J**	<0.59	<0.21	<0.70	<3.7	<0.68	<3.7	<2.2	**0.23**	**3.8 J**	**1.7 J**	<4.6	<2.0	<3.5 R	<0.87	<7.4
DG-V13	3	DG-V13W	1/15/2019	<4.1	**4.4 J**	**47 J**	<0.59	<0.21	**0.88 J**	<3.7	<0.68	**8.2 J**	<2.2	<0.10	<2.9	**1.7 J**	<4.6	<2.0	<3.5	**1.5 J**	**7.8 J**
DG-V17	3	DG-V17W	1/28/2019	**5.5 J**	<2.9	**61**	<0.59	<0.21	<0.70	<3.7	<0.68	<3.7	<2.2	<0.10	**5.8 J**	<1.0	**6.9 J**	<2.0	<3.5 R	<0.87	<7.4
MW-9A	3	MW-9AW	12/18/2018	<2.7	<2.6	**93**	<0.33	<1.3	<1.5	<3.7	<1.2	<1.5	**13**	<0.10	<2.3	<0.80	<7.1	<1.2	<3.5	<0.70	<9.6
LF-3A	3	LF-3AW	12/18/2018	<2.7	<2.6	**47**	<0.33	<1.3	<1.5	<3.7	<1.2	<1.5	**12**	<0.10	<2.3	<0.80	<7.1	<1.2	<3.5	<0.70	<9.6
LF-3A (D)	3	LF-3A (D)W	12/18/2018	<2.7	<2.6	**48**	<0.33	<1.3	<1.5	<3.7	<1.2	<1.5	**14**	<0.10	<2.3	<0.80	<7.1	<1.2	<3.5	<0.70	<9.6
DG-W15	4	DG-W15W	1/29/2019	<4.1	**4.2 J**	**48 J**	<0.59	<0.21	<0.70	<3.7	<0.68	<3.7	<2.2	<0.10	**7.7 J**	<1.0	<4.6	<2.0	<3.5 R	<0.87	<7.4
DG-X13	4	DG-X13W	1/25/2019	<4.1	<2.9	**110**	<0.59	<0.21	**1.1 J**	<3.7	<0.68	<3.7	<2.2	<0.10	**3.6 J**	<1.0	<4.6	<2.0	<3.5	<0.87	<7.4
DG-X17	4	DG-X17W	1/28/2019	**6.0 J**	**3.8 J**	**52**	<0.59	<0.21	<0.70	<3.7	<0.68	**4.7 J**	<2.2	<0.10	**3.5 J**	<1.0	<4.6	<2.0	<3.5 R	**1.5 J**	<7.4
DG-Y11	4	DG-Y11W	1/22/2019	<4.1	**4.1 J**	**910**	<0.59	<0.21	**2.3 J**	<3.7	**4.5**	**6.8 J**	<2.2	<0.10	<2.9	**100**	<4.6	<2.0	<3.5	**2.2 J**	**57**
DG-Y15	4	DG-Y15W	2/1/2019	<4.1	<2.9	**50 U**	<0.59	<0.21	<0.70	<3.7	<0.68	<3.7	**7.4**	<0.10	<2.9	<1.0	<4.6	<2.0	<3.5 R	<0.87	<7.4
DG-Y19	4	DG-Y19W	1/28/2019	<4.1	**20**	**390**	<0.59	<0.21	**3.9 J**	<3.7	<0.68	**20**	**59**	<0.10	<2.9	**2.0 J**	<4.6	<2.0	<3.5 R	**3.7 J**	**27**
DG-Z17	4	DG-Z17W	1/28/2019	<4.1	<2.9	**96 J**	**0.82**	**0.45**	**1.0 J**	<3.7	**0.68**	<3.7	**8.8**	<0.10	**2.9 J**	**1.3 J**	<4.6	<2.0	<3.5 R	**1.5**	<7.4
DG-AA11	4	DG-AA11W	1/30/2019	**4.3 J**	**3.5 J**	**110**	**0.65 J**	<0.21	**1.4 J**	<3.7	<0.68	<3.7	<2.2	<0.10	<2.9	<1.0	<4.6	<2.0	<3.5 R	**0.99 J**	<7.4
DG-AA15	4	DG-AA15W	1/25/2019	<4.1	<2.9	**66**	<0.59	<0.21	**1.6 J**	<3.7	<0.68	<3.7	<2.2	<0.10	<2.9	<1.0	<4.6	<2.0	<3.5	<0.87	<7.4
DG-AA19	4	DG-AA19W	1/25/2019	<4.1	**17**	**1,700**	<0.59	<0.21	**1.3 J**	<3.7	<0.68	<3.7	<2.2	<0.10	<2.9	<1.0	<4.6	<2.0	<3.5	<0.87	<7.4
DG-AB13	4	DG-AB13W	1/25/2019	<4.1	**4.2 J**	**280**	<0.59	<0.21	**0.91 J**	<3.7	**0.83 J**	<3.7	<2.2	<0.10	<2.9	**3.1 J**	<4.6	<2.0	<3.5	**0.89 J**	**9.8 J**
DG-AB13 (D)	4	DG-AB13 (D)W	1/25/2019	<4.1	**5.3 J**	**290**	<0.59	<0.21	<0.70 UJ	<3.7	<0.68 UJ	<3.7	<2.2	<0.10	<2.9	<1.0 UJ	<4.6	<2.0	<3.5	<0.87 UJ	**8.6 J**
DG-AD13	4	DG-AD13W	2/1/2019	<4.1	**13**	**770**	<0.59	<0.21	**1.7 J**	**48**	**2.5**	<3.7 UJ	**8.8 J**	<0.10	**5.3 J**	**24**	<4.6	<2.0	<14	**20**	<7.4 UJ
DG-AD13 (D)	4	DG-AD13 (D)W	2/1/2019	<4.1	**12**	**890**	<0.59	<0.21	**1.9 J**	**47**	**2.8**	**6.0 J**	**15 J**	<0.10	**5.9 J**	**29**	<4.6	<2.0	**7.8 R**	**20**	**11 J**
DG-AE11	4	DG-AE11W	1/22/2019	<4.1	**27**	**1,200**	<0.59	<0.21	**0.77 J**	<3.7	<0.68	<3.7	<2.2	<0.10	**5.3 J**	**7.6 J**	<4.6	<2.0	**6.0 J**	<0.87	<7.4
DG-AG11	4	DG-AG11W	1/22/2019	<4.1	**28**	**1,900**	<0.59	<0.21	**1.1 J**	<3.7	<0.68	<3.7	<2.2	<0.10	<2.9	**1.8 J**	<4.6	<2.0	<3.5	<0.87	<7.4
DG-AH13	4	DG-AH13W	1/29/2019	<4.1	**4.7 J**	**110**	<0.59	<0.21	**2.0 J**	<3.7	**3.7**	**4.7 J**	<2.2	<0.10	<2.9	<1.0	<4.6	<2.0	<3.5 R	**4.2 J**	<7.4
DG-AJ13	4	DG-AJ13W	1/29/2019	<4.1	**9.8 J**	**1,300**	<0.59	<0.21	**1.2 J**	<3.7	**0.87 J**	<3.7	<2.2	<0.10	**3.5 J**	**1.2 J**	<4.6	<2.0	<3.5 R	**1.1 J**	**41**
DG-AK11	4	DG-AK11W	1/29/2019	<4.1	**12**	**1,700**	<0.59	<0.21	**1.4 J**	<3.7	<0.68	<3.7	<2.2	<0.10	**8.6 J**	<1.0	<4.6	<2.0	<3.5 R	<0.87	<7.4
DG-AL13	4	DG-AL13W	1/29/2019	**5.7 J**	**18**	**870**	<0.59	<0.21	**1.4 J**	<3.7	**1.3 J**	**6.6 J**	<2.2	<0.10	**4.0 J**	**1.8 J**	<4.6	<2.0	<3.5 R	<0.87	**56**
DG-AN13	4	DG-AN13W	2/1/2019	<4.1	**4.1 J**	**82**	<0.59	<0.21	<0.70	<3.7	**1.3 J**	**9.4 J**	**29**	<0.10	<2.9	<1.0	<4.6	<2.0	<3.5 R	<0.87	<7.4
MW-15A	4	MW-15AW	12/18/2018	<2.7	<2.6	**550**	<0.33	<1.3	<1.5	<3.7	<1.2	<1.5	**16**	<0.10	<2.3	**42**	<7.1	<1.2	<3.5	<0.70	<9.6
MW-17A	4	MW-17AW	12/18/2018	<2.7	<2.6	**97**	<0.33	<1.3	<1.5	<3.7	<1.2	<1.5	**8.5**	<0.10	<2.3	<0.80	<7.1	<1.2	<3.5	<0.70	<9.6
MW-17A (D)	4	MW-17A (D)W	12/18/2018	<2.7	<2.6	**100**	<0.33	<1.3	<1.5	<3.7	<1.2	<1.5	**11**	<0.10	<2.3	<0.80	<7.1	<1.2	<3.5	<0.70	<9.6
LF-4A	4	LF-4AW	12/18/2018	<2.7	**390**	**2,400**	<0.33	<1.3	<1.5	**12**	<1.2	**74**	**30**	<0.10	<2.3	**48**	<7.1	<1.2	<3.5	<0.70	<9.6
LF-8A	4	LF-8AW	12/19/2018	<2.7	**13**	**1,800**	<0.33	<1.3	<1.5	**14**	<1.2	<1.5	**9.4**	<0.10	<2.3	<0.80	<7.1	<1.2	<3.5	<0.70	<9.6
DG-AQ11	5	DG-AQ11W	1/31/2019	<4.1	**4.1 J**	**570**	**0.59 J**	<0.21	<0.70	<3.7	**1.8 J**	<3.7	**9.1**	<0.10	<2.9	<1.0	<4.6	<2.0	<3.5 R	<0.87	**12 J**
DG-AT9	5	DG-AT9W	1/31/2019	<4.1	<2.9	**500**	<0.59	**0.22 J**	<0.70	<3.7	**3.5**	**8.5 J**	**17**	<0.10	<2.9	**6.8 J**	<4.6	<2.0	<3.5 R	<0.87	**380**

Table 7: Dissolved Metals Concentrations in Fill Groundwater
Brisbane Baylands OU-2
Brisbane, California

Sample Location	Investigation Zone	Sample Name	Collection Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Chromium, Hexavalent	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
Aquatic Habitat Goal Saltwater Ecotox ESL [1]				5.0E+02	3.6E+01	--	--	9.3E+00	1.0E+03	5.0E+01	--	3.1E+00	8.1E+00	2.5E-02	--	8.2E+00	5.0E-01	1.9E-01	2.1E+02	--	8.1E+01
Site Specific Screening Level [2]				5.0E+04	3.6E+03	--	--	9.3E+02	1.0E+05	5.0E+03	--	3.1E+02	8.1E+02	2.5E+00	--	8.2E+02	5.0E+01	1.9E+01	2.1E+04	--	8.1E+03
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
DG-AV9	5	DG-AV9W	2/1/2019	<4.1	**4.0 J**	**110**	<0.59	**1.2 J**	**0.88 J**	<3.7	**2.9**	**15 J**	**28**	<0.10	<2.9	**12**	<4.6	<2.0	<3.5 R	<0.87	**430**
DG-AX5	5	DG-AX5W	12/20/2018	<4.1	**14**	**110**	<0.59	<0.21	**1.5 J**	<3.7	**2.1**	<3.7	<2.2	<0.10	**8.9 J**	**2.2 J**	**5.7 J**	<2.0	**6.8 J**	**10 U**	<7.4
MK-7A	5	MK-7AW	12/19/2018	<2.7	<2.6	**320**	<0.33	<1.3	<1.5	<3.7	**2.1**	**25**	<2.3	<0.10	<2.3	<0.80	<7.1	<1.2	<3.5	<0.70	**88**
LF-7A	5	LF-7AW	12/19/2018	<2.7	<2.6	**580**	<0.33	<1.3	<1.5	<3.7	<1.2	<1.5	<2.3	<0.10	<2.3	<0.80	<7.1	<1.2	<3.5	<0.70	**55**
MK-8A	5	MK-8AW	12/19/2018	<2.7	<2.6	**52**	<0.33	<1.3	<1.5	<3.7	<1.2	**23**	<2.3	<0.10	<2.3	**19**	<7.1	<1.2	<3.5	<0.70	**670**
DG-AB17	6	DG-AB17W	1/25/2019	<4.1	<2.9	**110**	<0.59	<0.21	<0.70	<3.7	<0.68	<3.7	<2.2	<0.10	<2.9	<1.0	<4.6	<2.0	<3.5	<0.87	<7.4
DG-AC15	6	DG-AC15W	2/1/2019	<4.1	**64**	**1,900**	<0.59	<0.21	<0.70	<3.7	**1.4 J**	**3.7 J**	**9.3**	<0.10	<2.9	**1.3 J**	<4.6	<2.0	<3.5 R	<0.87	<7.4
DG-AD17	6	DG-AD17W	1/25/2019	<4.1	**13**	**310**	<0.59	<0.21	<0.70	<3.7	**3.3**	<3.7	<2.2	<0.10	**12**	**7.2 J**	<4.6	<2.0	<3.5	<0.87	<7.4
DG-AG15	6	DG-AG15W	1/24/2019	<4.1	**7.5 J**	**220**	<0.59	<0.21	**2.3 J**	<3.7	**4.2**	<3.7	<2.2	**0.15 J**	<2.9	**4.9 J**	<4.6	<2.0	<3.5 R	**3.1 J**	<7.4
DG-AI15	6	DG-AI15W	1/25/2019	<4.1	**16**	**250**	<0.59	<0.21	<0.70	<3.7	<0.68	<3.7	<2.2	<0.10	<2.9	**6.9 J**	<4.6	<2.0	<3.5	<0.87	**7.4 J**
DG-AK15	6	DG-AK15W	1/24/2019	<4.1	**9.2 J**	**290**	<0.59	<0.21	**3.0 J**	<3.7	**5.8**	**5.5 J**	<2.2	<0.10	**7.0 J**	**2.0 J**	<4.6	<2.0	<3.5 R	**2.4 J**	<7.4
DG-AM15	6	DG-AM15W	1/24/2019	<4.1	**2.9 J**	**50 U**	<0.59	<0.21	**1.5 J**	<3.7	<0.68	**3.9 J**	<2.2	<0.10	**4.4 J**	**1.1 J**	<4.6	<2.0	<3.5 R	**2.3 J**	<7.4
DG-AS11	6	DG-AS11W	1/31/2019	<4.1	<2.9	**250**	**0.60 J**	**0.41 J**	<0.70	<3.7	**1.2 J**	**21**	**16**	<0.10	<2.9	**4.6 J**	<4.6	<2.0	<3.5 R	<0.87	**220**
DG-AW11	6	DG-AW11W	1/24/2019	<4.1	<2.9 UJ	**50 UJ**	<0.59	<0.21	**1.2 J**	<3.7	<0.68	**4.6 J**	<2.2	<0.10	**5.1 J**	**1.1 J**	<4.6	<2.0	<3.5 R	**2.6 J**	<7.4
DG-AW11 (D)	6	DG-AW11 (D)W	1/24/2019	<4.1	**4.5 J**	**70 J**	<0.59	<0.21	**1.8 J**	<3.7	<0.68	<3.7 UJ	<2.2	<0.10	<2.9 UJ	<1.0 UJ	<4.6	<2.0	<3.5 R	<0.87 UJ	<7.4
MW-13A	6	MW-13AW	12/18/2018	<2.7	<2.6	**96**	<0.33	<1.3	<1.5	<3.7	**3.3**	<1.5	**8.8**	<0.10	<2.3	<0.80	<7.1	<1.2	<3.5	<0.70	<9.6

Notes:

1. San Francisco Bay RWQCB, 2019. Summary of Groundwater ESLs, Jan. 2019 (Rev. 1) - Aquatic Habitat Goal Levels (Table GW-2): Saltwater Ecotoxicity.
2. Site specific screening level is the saltwater ecotoxicity ESL with a 100-fold attenuation factor.
- Metals were analyzed by USEPA Methods 6010B, 7196, and 7471A.
- Non-detect results are presented with "<" followed by the MDL.
- Results in bold font indicate a detection above the MDL.
- Gray shading indicates a detection above the comparison criteria.

Abbreviations and Symbols:

"J" - Analyte was detected but the associated numerical value is the approximate concentration.
"J+" - Analyte was detected but the associated numerical value is likely to be higher than the concentration of the analyte in the sample due to positive bias of associated QC or calibration data or attributable to matrix interference.
"J-" - Analyte was detected but the associated numerical value is likely to be lower than the concentration of the analyte in the sample due to negative bias of associated QC or calibration data or attributable to matrix interference.
"U" - Not detected at or above the reported result.
"UJ" - The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
"R" - The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.
"--" - Not Available
"<" - Non-detect result
(D) - Duplicate sample
µg/L - microgram per liter
ESL - Environmental Screening Level
MDL - Method Detection Limit
QC - quality control
RWQCB - Regional Water Quality Control Board
USEPA - United States Environmental Protection Agency

Table 8: Polynuclear Aromatic Hydrocarbons and TPH as Diesel and Motor Oil Concentrations in Fill Groundwater
Brisbane Baylands OU-2
Brisbane, California

Sample Location	Sample Name	Investigation Zone	Collection Date	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene	Dibenzo(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	Naphthalene	Phenanthrene	Pyrene	TPH-Diesel (C10-C28)	TPH-Motor Oil (C24-C36)
Aquatic Habitat Goal Levels Saltwater Ecotox ESL [1]				1.5E+01	1.5E+01	1.5E+01	1.5E+01	1.5E+01	1.5E+01	1.5E+01	1.5E+01	1.5E+01	8.0E+00	1.5E+01	1.5E+01	1.5E+01	4.6E+00	1.5E+01	6.4E+02	--
Site Specific Screening Level [2]				1.5E+03	1.5E+03	1.5E+03	1.5E+03	1.5E+03	1.5E+03	1.5E+03	1.5E+03	1.5E+03	8.0E+02	1.5E+03	1.5E+03	1.5E+03	4.6E+02	1.5E+03	6.4E+04	--
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
DG-N1	DG-N1W	1	12/18/2018	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	**0.2**	<0.10	**130**	<96
DG-N5	DG-N5W	1	1/10/2019	<0.11	<0.11	**0.26**	**0.24**	**0.35**	**0.20 J**	**0.16 J**	**0.24**	<0.11	**0.46**	<0.11	**0.19 J**	**0.11 J**	**0.21**	**0.46**	**140 J**	<0.25
DG-O3	DG-O3W	1	12/18/2018	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<110	<110
DG-P5	DG-P5W	1	1/10/2019	<0.098	<0.098	<0.098	<0.098	<0.098	<0.098	<0.098	<0.098	<0.098	<0.098	<0.098	<0.098	<0.098	<0.098	<0.098	<99	<99
DG-Q7	DG-Q7W	1	1/10/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	**150 J**	**160 J**
DG-Q7 (D)	DG-Q7 (D)W	1	1/10/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	**130 J**	**110 J**
DG-R1	DG-R1W	1	12/17/2018	<0.099	<0.099	<0.099	<0.099	<0.099	<0.099	<0.099	<0.099	<0.099	<0.099	<0.099	<0.099	<0.099	<0.099	**0.14 J**	**200 J**	**130 J**
DG-R5	DG-R5W	1	1/30/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	**0.32**	<0.10	**0.14 J**	**0.41**	**0.12 J**	**220 J**	**120 J**
DG-S3	DG-S3W	1	12/18/2018	<0.099	<0.099	<0.099	<0.099	<0.099	<0.099	<0.099	<0.099	<0.099	<0.099	<0.099	<0.099	<0.099	**0.11**	<0.099	**1,200**	**1,700**
DG-S7	DG-S7W	1	1/10/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<98	<98
DG-T1	DG-T1W	1	12/17/2018	<0.099	<0.099	<0.099	<0.099	<0.099	<0.099	<0.099	<0.099	<0.099	<0.099	<0.099	<0.099	<0.099	**0.15 J**	**0.23**	**270 J**	**160 J**
DG-T5	DG-T5W	1	1/7/2019	<0.99	<0.99	<0.99	<0.99	<0.99	<0.99	<0.99	<0.99	<0.99	<0.99	<0.99	<0.99	<0.99	<0.99	<0.99	**330 J**	<100
DG-U3	DG-U3W	1	12/18/2018	<0.20	**0.36**	<0.20	**0.26**	**0.46**	**0.24**	<0.20	**0.46**	<0.20	**0.73**	<0.20	<0.20	**1.5**	**1.5**	**0.77**	**1,000**	**2,600**
DG-U3 (D)	DG-U3 (D)W	1	12/18/2018	<0.20	**0.34**	<0.20	**0.23**	**0.46**	**0.21**	<0.20	**0.43**	<0.20	**0.64**	<0.20	<0.20	**0.87**	**1.1**	**0.67**	**310**	**750**
DG-U7	DG-U7W	1	1/10/2019	<0.099	<0.099	<0.099	<0.099	<0.099	<0.099	<0.099	<0.099	<0.099	<0.099	<0.099	<0.099	<0.099	<0.099	<0.099	<100	<100
DG-V1	DG-V1W	1	12/17/2018	<0.099	<0.099	<0.099	<0.099 UJ	**0.13 J**	**0.13 J**	<0.099 UJ	<0.099	<0.099 UJ	**0.11 J**	<0.099	<0.099 UJ	<0.099	**0.11 J**	**0.51**	**3,200**	**3,300**
DG-V5	DG-V5W	1	1/7/2019	<0.099 UJ	<0.099 UJ	<0.099	<0.099	<0.099	<0.099	<0.099	<0.099	<0.099	<0.099 UJ	<0.099 UJ	<0.099	<0.099	<0.099 UJ	<0.099 UJ	<100	<100
DG-V9	DG-V9W	1	1/14/2019	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<110	<110
DG-W3	DG-W3W	1	12/18/2018	<0.10	**0.16**	**0.18**	**0.26**	**0.29**	**0.24**	<0.10	**0.22**	<0.10	**1.3**	<0.10	**0.17**	<0.10	**0.48**	**1.4**	**170**	**130**
DG-W7	DG-W7W	1	1/30/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<100	<100
DG-X1	DG-X1W	1	12/17/2018	<0.099	<0.099	**0.12 J**	**0.51**	**0.47**	**0.88**	**0.14 J**	**0.19 J**	<0.099	**0.32**	<0.099	**0.64**	<0.099	**0.23**	**0.69**	**290 J**	**160 J**
DG-X5	DG-X5W	1	1/7/2019	**0.29 J**	**0.37 J**	**0.89**	**1.3**	**1.3**	**1.2**	**0.53**	**0.95**	<0.20	**1.6**	<0.20	**0.89**	**0.25 J**	**1.1**	**2.1**	<100	**--**
DG-X9	DG-X9W	1	1/14/2019	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<100	<100
DG-Y3	DG-Y3W	1	12/18/2018	<0.10	**0.15**	**0.29**	**0.72**	**0.76**	**0.78**	**0.24**	**0.41**	<0.10	**1.2**	<0.10	**0.63**	**0.16**	**0.53**	**1.5**	**240**	**180**
DG-Y7	DG-Y7W	1	1/11/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<100	<100
DG-Z5	DG-Z5W	1	1/7/2019	**0.12 J**	**0.15 J**	**0.26**	**0.83**	**0.83**	**1.1**	**0.29**	**0.38**	<0.099	**0.75**	<0.099	**0.79**	**0.38**	**0.28**	**0.96**	<110	<110
DG-Z9	DG-Z9W	1	1/15/2019	<0.11	<0.11	<0.11	**0.16 J**	**0.24**	**0.42**	<0.11	**0.17 J**	<0.11	**0.37**	<0.11	**0.25**	<0.11	**0.13 J**	**0.41**	**140 J**	**240 J**
DG-AA3	DG-AA3W	1	12/18/2018	<0.10	<0.10	<0.10	**0.11**	**0.16**	**0.1**	<0.10	**0.11**	<0.10	**0.19**	<0.10	<0.10	<0.10	**0.19**	**0.27**	**280**	**210**
DG-AA7	DG-AA7W	1	1/11/2019	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	**120 J**	**130 J**
DG-AB5	DG-AB5W	1	1/31/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	**160 J**	**110 J**
DG-AB5 (D)	DG-AB5 (D)W	1	1/31/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	**150 J**	**110 J**
DG-AC3	DG-AC3W	1	12/19/2018	<0.10	<0.10	**0.16**	**0.36**	**0.38**	**0.5**	**0.11**	**0.23**	<0.10	**0.46**	<0.10	**0.4**	<0.10	**0.16**	**0.7**	**340**	**240**
DG-AC7	DG-AC7W	1	1/11/2019	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	**110 J**	**140 J**
DG-AC7 (D)	DG-AC7 (D)W	1	1/11/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<100 UJ	<100 UJ
DG-AD5	DG-AD5W	1	1/7/2019	<0.099	**0.14 J**	**0.5**	**1.3**	**1.3**	**1.4**	**0.32**	**0.7**	<0.099	**2.9**	<0.099	**1**	**0.13 J**	**0.15 J**	**2.7**	**120 J**	**120 J**

Table 8: Polynuclear Aromatic Hydrocarbons and TPH as Diesel and Motor Oil Concentrations in Fill Groundwater
Brisbane Baylands OU-2
Brisbane, California

Sample Location	Sample Name	Investigation Zone	Collection Date	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene	Dibenzo(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	Naphthalene	Phenanthrene	Pyrene	TPH-Diesel (C10-C28)	TPH-Motor Oil (C24-C36)
Aquatic Habitat Goal Levels Saltwater Ecotox ESL [1]				1.5E+01	1.5E+01	1.5E+01	1.5E+01	1.5E+01	1.5E+01	1.5E+01	1.5E+01	1.5E+01	8.0E+00	1.5E+01	1.5E+01	1.5E+01	4.6E+00	1.5E+01	6.4E+02	--
Site Specific Screening Level [2]				1.5E+03	1.5E+03	1.5E+03	1.5E+03	1.5E+03	1.5E+03	1.5E+03	1.5E+03	1.5E+03	8.0E+02	1.5E+03	1.5E+03	1.5E+03	4.6E+02	1.5E+03	6.4E+04	--
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
DG-AD9	DG-AD9W	1	1/11/2019	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	**650**	**570**
DG-AE3	DG-AE3W	1	12/19/2018	<0.10	<0.10	**0.12**	**0.19**	**0.22**	**0.24**	<0.10	**0.15**	<0.10	**0.31**	<0.10	**0.19**	<0.10	**0.18**	**0.39**	**310**	**180**
DG-AE7	DG-AE7W	1	1/11/2019	<0.11	<0.11	**0.22**	**0.25**	**0.3**	**0.26**	**0.14 J**	**0.18 J**	<0.11	**0.47**	<0.11	**0.22**	<0.11	**0.14 J**	**0.42**	**230 J**	**190 J**
DG-AF5	DG-AF5W	1	1/7/2019	<0.10	**0.13 J**	**0.29**	**0.45**	**0.49**	**0.47**	**0.19 J**	**0.36**	<0.10	**0.69**	<0.10	**0.38**	**0.11 J**	**0.36**	**0.89**	**130 J**	<110
DG-AG3	DG-AG3W	1	12/19/2018	<0.51	<0.51	<0.51	<0.51	<0.51	<0.51	<0.51	<0.51	<0.51	<0.51	<0.51	<0.51	<0.51	<0.51	<0.51	**2,200**	**2,900**
DG-AG7	DG-AG7W	1	1/31/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	**180 J**	**130 J**
MW-11AR	MW-11ARW	1	12/18/2018	<0.41	<0.28	<0.62	<0.95	<0.32	<0.36	<0.30	<0.95	<0.38	<0.95	<0.47	<0.37	<0.95	<0.32	<0.30	**190**	**210**
KMW-4A	KMW-4AW	1	12/18/2018	<0.41	<0.28	<0.62	<0.95	<0.32	<0.36	<0.29	<0.95	<0.38	<0.95	<0.46	<0.37	<0.95	<0.32	<0.30	**450**	**240**
DG-AH5	DG-AH5W	2	1/7/2019	<0.099	<0.099	<0.099	<0.099	**0.12 J**	**0.11 J**	<0.099	<0.099	<0.099	**0.17 J**	<0.099	<0.099	<0.099	**0.14 J**	**0.23**	<100	<100
DG-AI3	DG-AI3W	2	12/19/2018	<0.099	<0.099	<0.099	<0.099	<0.099	<0.099	<0.099	<0.099	<0.099	<0.099	<0.099	<0.099	<0.099	<0.099	<0.099	**780**	**620**
DG-AI3 (D)	DG-AI3 (D)W	2	12/19/2018	**0.13**	**0.17**	**0.12**	**0.2**	**0.29**	**0.28**	**0.098**	**0.19**	<0.096	**0.46**	<0.096	**0.2**	**0.32**	**0.36**	**0.69**	**640**	**500**
DG-AI7	DG-AI7W	2	1/11/2019	<0.11	<0.11	<0.11	<0.11	<0.11	**0.13 J**	<0.11	<0.11	<0.11	**0.15 J**	<0.11	<0.11	<0.11	<0.11	**0.16 J**	**310 J**	--
DG-AJ5	DG-AJ5W	2	1/7/2019	**0.30 J**	**0.29 J**	**0.8**	**1.7**	**2**	**2.5**	**0.57**	**1.2**	<0.20	**3.7**	<0.20	**1.9**	**0.83**	**1.2**	**3.6**	**240 J**	<110
DG-AK3	DG-AK3W	2	12/19/2018	<0.099	<0.099	<0.099	<0.099	<0.099	<0.099	<0.099	<0.099	<0.099	**0.11**	<0.099	<0.099	<0.099	**0.15**	**0.13**	**500**	**380**
DG-AK7	DG-AK7W	2	1/11/2019	<0.11	<0.11	<0.11	**0.12 J**	**0.16 J**	**0.24 J**	<0.11	**0.11 J**	<0.11	**0.21 J**	<0.11	**0.16 J**	<0.11	<0.11	**0.23 J**	**170 J**	**120 J**
DG-AK7 (D)	DG-AK7 (D)W	2	1/11/2019	<0.11	<0.11	<0.11	<0.11 UJ	<0.11 UJ	<0.11 UJ	<0.11	<0.11 UJ	<0.11	<0.11 UJ	<0.11	<0.11 UJ	<0.11	<0.11	<0.11 UJ	**160 J**	**100 J**
DG-AL5	DG-AL5W	2	1/31/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	**460 J**	**350 J**
DG-AL9	DG-AL9W	2	1/22/2019	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	**130 J**	--
DG-AM3	DG-AM3W	2	12/19/2018	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	**400**	**190**
DG-AM7	DG-AM7W	2	1/11/2019	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	**0.14 J**	<0.11	<0.11	<0.11	<0.11	**0.15 J**	**180 J**	--
DG-AN5	DG-AN5W	2	12/20/2018	<0.099	<0.099	**0.33**	**0.46**	**0.65**	**0.44**	**0.21**	**0.41**	<0.099	**0.7**	<0.099	**0.38**	**0.11 J**	**0.47**	**0.69**	**290 J**	**120 J**
DG-AN9	DG-AN9W	2	1/21/2019	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	**150 J**	<110
DG-AO3	DG-AO3W	2	12/19/2018	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	**5,300**	**4,200**
DG-AO7	DG-AO7W	2	1/11/2019	<0.10	<0.10	<0.10	<0.10	**0.10 J**	<0.10	<0.10	<0.10	<0.10	**0.11 J**	<0.10	<0.10	<0.10	<0.10	**0.13 J**	**200 J**	**150 J**
DG-AP5	DG-AP5W	2	12/20/2018	<0.099	<0.099	<0.099	**0.11 J**	**0.16 J**	<0.099	<0.099	**0.12 J**	<0.099	**0.22**	<0.099	<0.099	<0.099	**0.15 J**	**0.22**	**330 J**	**250 J**
DG-AP9	DG-AP9W	2	1/21/2019	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	**130 J**	<110
DG-AQ3	DG-AQ3W	2	12/19/2018	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	**480**	**350**
DG-AQ7	DG-AQ7W	2	1/31/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	**280 J**	--
DG-AR5	DG-AR5W	2	12/20/2018	<0.098	<0.098	**0.10 J**	**0.11 J**	**0.13 J**	<0.098	<0.098	**0.10 J**	<0.098	**0.17 J**	<0.098	<0.098	<0.098	**0.12 J**	**0.19 J**	**990**	**220 J**
DG-AR9	DG-AR9W	2	1/11/2019	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	**0.20 J**	<0.11	<0.11	<0.11	<0.11	**0.23 J**	**180 J**	**160 J**
DG-AR9 (D)	DG-AR9 (D)W	2	1/11/2019	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11 UJ	<0.11	<0.11	<0.11	<0.11	<0.11 UJ	**150 J**	--
DG-AS3	DG-AS3W	2	12/20/2018	**0.4**	**0.18 J**	**1.1**	**2.1**	**2.2**	**1.2**	**0.71**	**1.8**	**0.3**	**1.2**	<0.10	**0.99**	**0.55**	**0.63**	**2.8**	**3,200**	**2,500**
DG-AS3 (D)	DG-AS3W (D)	2	12/20/2018	**0.38**	**0.19 J**	**1.2**	**2**	**2.2**	**1.1**	**0.77**	**1.8**	**0.23**	**1.2**	<0.10	**0.99**	**0.41**	**0.59**	**2.8**	**2,400**	**1,900**
DG-AS7	DG-AS7W	2	1/11/2019	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	**150 J**	<110
DG-AT5	DG-AT5W	2	12/20/2018	**0.19 J**	**0.18 J**	**0.78**	**0.84**	**0.93**	**0.55**	**0.38**	**0.84**	**0.16 J**	**1.1**	<0.10	**0.55**	<0.10 R	**0.52**	**1.3**	**240 J**	**220 J**

Table 8: Polynuclear Aromatic Hydrocarbons and TPH as Diesel and Motor Oil Concentrations in Fill Groundwater
Brisbane Baylands OU-2
Brisbane, California

Sample Location	Sample Name	Investigation Zone	Collection Date	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene	Dibenzo(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	Naphthalene	Phenanthrene	Pyrene	TPH-Diesel (C10-C28)	TPH-Motor Oil (C24-C36)
Aquatic Habitat Goal Levels Saltwater Ecotox ESL [1]				1.5E+01	1.5E+01	1.5E+01	1.5E+01	1.5E+01	1.5E+01	1.5E+01	1.5E+01	1.5E+01	8.0E+00	1.5E+01	1.5E+01	1.5E+01	4.6E+00	1.5E+01	6.4E+02	--
Site Specific Screening Level [2]				1.5E+03	1.5E+03	1.5E+03	1.5E+03	1.5E+03	1.5E+03	1.5E+03	1.5E+03	1.5E+03	8.0E+02	1.5E+03	1.5E+03	1.5E+03	4.6E+02	1.5E+03	6.4E+04	--
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
DG-AU3	DG-AU3W	2	12/20/2018	**0.29**	**0.18 J**	**0.82**	**1.2**	**1.4**	**0.77**	**0.43**	**1.1**	**0.17 J**	**1.1**	**0.14 J**	**0.65**	**0.79**	**0.88**	**1.7**	**250 J**	**250 J**
DG-AU7	DG-AU7W	2	1/11/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	**150 J**	<110 UJ
DG-AU7 (D)	DG-AU7 (D)W	2	1/11/2019	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	**160 J**	**110 J**
DG-AV5	DG-AV5W	2	12/20/2018	**0.11 J**	**0.34**	**0.19 J**	**0.2**	**0.33**	**0.19 J**	<0.10	**0.24**	<0.10	**0.67**	<0.10	**0.12 J**	**0.19 J**	**0.3**	**0.6**	**210 J**	**--**
DG-AW3	DG-AW3W	2	1/31/2019	**0.6**	**0.33**	**0.99**	**1.9**	**2**	**1.6**	**0.62**	**1.7**	**0.31**	**1.2**	<0.10	**1.2**	**1.1**	**0.59**	**2.5**	**310 J**	**210 J**
DG-AY3	DG-AY3W	2	2/1/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	**540**	**530**
LF-5A	LF-5AW	2	12/19/2018	<0.41	<0.28	<0.62	<0.96	<0.33	<0.36	<0.30	<0.96	<0.38	<0.96	<0.47	<0.37	<0.96	<0.33	<0.30	**420**	**400**
MW-10A	MW-10AW	2	12/19/2018	<0.42	<0.28	<0.63	<0.97	<0.33	<0.36	<0.30	<0.97	<0.39	<0.97	<0.47	<0.38	<0.97	<0.33	<0.31	**230**	**150**
KMW-7A	KMW-7AW	2	12/19/2018	<0.41	<0.28	<0.62	<0.95	<0.32	<0.36	<0.29	<0.95	<0.38	<0.95	<0.46	<0.37	<0.95	<0.32	<0.30	**350**	**230**
DG-N9	DG-N9W	3	1/14/2019	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	**0.11 J**	<0.11	<0.11	<0.11	<0.11	**0.20 J**	**120 J**	**130 J**
DG-N13	DG-N13W	3	1/11/2019	<0.099	<0.099	<0.099	<0.099	<0.099	<0.099	<0.099	<0.099 UJ	<0.099	<0.099 UJ	<0.099 UJ	<0.099	<0.099 UJ	<0.099 UJ	<0.099 UJ	<100	<100
DG-N13 (D)	DG-N13 (D)W	3	1/11/2019	<0.097	<0.097	<0.097	<0.097	<0.097	<0.097	<0.097	**0.11 J**	<0.097	**0.13 J**	**0.12 J**	<0.097	**0.35 J**	**0.54 J**	**0.18 J**	<110	<110
DG-O7	DG-O7W	3	1/10/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	**0.10 J**	<0.10	<0.10	<0.10	<0.10	**0.12 J**	**1,200**	**1,100**
DG-O11	DG-O11W	3	1/14/2019	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	**0.12 J**	<110	<110
DG-O15	DG-O15W	3	1/11/2019	<0.099	<0.099	<0.099	<0.099	<0.099	<0.099	<0.099	<0.099	<0.099	<0.099	<0.099	<0.099	<0.099	<0.099	<0.099	**480 U**	**480 U**
DG-P13	DG-P13W	3	1/11/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<110 UJ	<110 UJ
DG-Q11	DG-Q11W	3	1/15/2019	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	**340 J**	**410 J**
DG-Q11 (D)	DG-Q11 (D)W	3	1/15/2019	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	**980 J**	**1,400 J**
DG-Q15	DG-Q15W	3	1/11/2019	<0.097	<0.097	<0.097	<0.097	<0.097	<0.097	<0.097	**0.11 J**	<0.097	<0.097	<0.097	<0.097	**0.16 J**	**0.34**	<0.097	**480 U**	**480 U**
DG-R9	DG-R9W	3	1/25/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	**170 J**	<100
DG-R13	DG-R13W	3	1/29/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	**170 J**	**160 J**
DG-S11	DG-S11W	3	1/15/2019	<0.22	<0.22	<0.22	**0.30 J+**	**0.42 J+**	**0.29 J+**	<0.22 UJ	**0.31 J**	<0.22 UJ	**0.42 J**	<0.22	<0.22 UJ	**0.23 J**	**0.31 J**	**0.55**	**550 J**	**--**
DG-S15	DG-S15W	3	1/11/2019	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	**250 J**	**210 J**
DG-S15 (D)	DG-S15 (D)W	3	1/11/2019	<0.097	<0.097	<0.097	<0.097	<0.097	<0.097	<0.097	<0.097	<0.097	<0.097	<0.097	<0.097	<0.097	<0.097	<0.097	**140 J**	**120 J**
DG-T9	DG-T9W	3	1/14/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10 R	<0.10	<0.10	<110	<110
DG-T13	DG-T13W	3	1/15/2019	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	**160 J**	**150 J**
DG-U11	DG-U11W	3	1/15/2019	**0.38**	**2.2**	**0.52**	**0.20 J**	**0.27**	<0.11	**0.14 J**	**0.51**	<0.11	**3.2**	**3.7**	<0.11	**0.26**	**9.8**	**1.9**	**160 J**	<120
DG-U15	DG-U15W	3	1/28/2019	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	**0.20 J**	<0.20	<0.20	<0.20	<0.20	**0.39 J**	**2,700**	**2,700**
DG-V13	DG-V13W	3	1/15/2019	<0.22 UJ	<0.22	<0.22	<0.22 UJ	<0.22 UJ	<0.22 UJ	<0.22 UJ	<0.22	<0.22 UJ	**0.22 J**	<0.22 UJ	<0.22 UJ	<0.22	<0.22	**0.31 J**	**1,000**	**2,000**
DG-V17	DG-V17W	3	1/28/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	**300 J**	**290 J**
MW-9A	MW-9AW	3	12/18/2018	<0.41	<0.28	<0.62	<0.95	<0.32	<0.36	<0.29	<0.95	<0.38	<0.95	<0.47	<0.37	<0.95	<0.32	<0.30	<28	<68
LF-3A	LF-3AW	3	12/18/2018	<0.41	<0.28	<0.62	<0.95	<0.32	<0.36	<0.29	<0.95	<0.38	<0.95	<0.47	<0.37	<0.95	<0.32	<0.30	<28	<68
LF-3A (D)	LF-3A (D)W	3	12/18/2018	<0.41	<0.28	<0.62	<0.95	<0.32	<0.36	<0.29	<0.95	<0.38	<0.95	<0.47	<0.37	<0.95	<0.32	<0.30	<28	<68
DG-W15	DG-W15W	4	1/29/2019	**0.43**	**0.12 J**	<0.10	**0.12 J**	**0.12 J**	**0.25**	<0.10	<0.10	<0.10	**0.49**	<0.10	**0.17 J**	**0.13 J**	**0.17 J**	**0.47**	**1,100**	**1,100**
DG-X13	DG-X13W	4	1/25/2019	**0.19 J**	**0.11 J**	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	**0.42**	<0.10	<0.10	**0.33**	**0.13 J**	**1,400**	**190 J**

Table 8: Polynuclear Aromatic Hydrocarbons and TPH as Diesel and Motor Oil Concentrations in Fill Groundwater
Brisbane Baylands OU-2
Brisbane, California

Sample Location	Sample Name	Investigation Zone	Collection Date	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene	Dibenzo(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	Naphthalene	Phenanthrene	Pyrene	TPH-Diesel (C10-C28)	TPH-Motor Oil (C24-C36)
Aquatic Habitat Goal Levels Saltwater Ecotox ESL [1]				1.5E+01	1.5E+01	1.5E+01	1.5E+01	1.5E+01	1.5E+01	1.5E+01	1.5E+01	1.5E+01	8.0E+00	1.5E+01	1.5E+01	1.5E+01	4.6E+00	1.5E+01	6.4E+02	--
Site Specific Screening Level [2]				1.5E+03	1.5E+03	1.5E+03	1.5E+03	1.5E+03	1.5E+03	1.5E+03	1.5E+03	1.5E+03	8.0E+02	1.5E+03	1.5E+03	1.5E+03	4.6E+02	1.5E+03	6.4E+04	--
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
DG-X17	DG-X17W	4	1/28/2019	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1	**1.1 J**	<1.1	<1.1	<1.1	<1.1	**1.7 J**	**2,000**	**490 J**
DG-Y11	DG-Y11W	4	1/22/2019	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	**3.1**	<1.0	<1.0	**4.7**	<1.0	**6,900**	**530**
DG-Y15	DG-Y15W	4	2/1/2019	**0.64**	**0.16 J**	<0.10	<0.10	<0.10	<0.10	<0.10	**0.22**	<0.10	**0.26**	**0.82**	<0.10	**0.29**	**0.28**	**0.58**	**4,300**	**2,900**
DG-Y19	DG-Y19W	4	1/28/2019	**0.19 J**	**0.42**	**0.44**	**0.41**	**0.39**	**0.21**	**0.14 J**	**0.52**	<0.099	**0.89**	**0.33**	**0.21**	**0.32**	**1.5**	**1.1**	**560**	**300 J**
DG-Z17	DG-Z17W	4	1/28/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	**0.26**	<0.10	**2,400**	**1,400**
DG-AA11	DG-AA11W	4	1/30/2019	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1	**4.3**	<1.1	**1.9 J**	**3.5**	<1.1	**4,800**	**720**
DG-AA15	DG-AA15W	4	1/25/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	**0.13 J**	**870**	**450 J**
DG-AA19	DG-AA19W	4	1/25/2019	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	**1.7**	**2.4**	<0.52	**12,000**	**990**
DG-AB13	DG-AB13W	4	1/25/2019	<0.10	**0.21 J**	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	**0.17 J**	<0.10	<0.10 UJ	**0.40 J**	**0.21 J**	**400 J**	<100 UJ
DG-AB13 (D)	DG-AB13 (D)W	4	1/25/2019	<0.10	**0.14 J**	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10 UJ	<0.10	<0.10 UJ	**0.12 J**	**0.12 J**	**600 J**	**100 J**
DG-AD13	DG-AD13W	4	2/1/2019	<1.0	**1.2 J**	<1.0	<1.0	<1.0	<1.0	<1.0	**1.3 J**	<1.0	<1.0	**3.6 J**	<1.0	**17 J**	**5.6 J**	**2.3 J**	**21,000**	**9,900**
DG-AD13 (D)	DG-AD13 (D)W	4	2/1/2019	<0.50	**0.80 J**	<0.50	<0.50	<0.50	<0.50	<0.50	**0.97 J**	<0.50	<0.50	**2.5 J**	<0.50	**27 J**	**3.8 J**	**1.4 J**	**18,000**	--
DG-AE11	DG-AE11W	4	1/22/2019	<1.0	**2.2**	<1.0	<1.0	<1.0	<1.0	<1.0	**1.5 J**	<1.0	**1.0 J**	**5.5**	<1.0	**4.3**	**10**	**4.2**	**11,000**	**1,700**
DG-AG11	DG-AG11W	4	1/22/2019	<2.1	<2.1	<2.1	<2.1	<2.1	<2.1	<2.1	<2.1	<2.1	**2.7 J**	**5.6**	<2.1	<2.1	**10**	**5.2**	**7,400**	**1,300**
DG-AH13	DG-AH13W	4	1/29/2019	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	**14,000**	**6,300**
DG-AJ13	DG-AJ13W	4	1/29/2019	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	**4,700**	--
DG-AK11	DG-AK11W	4	1/29/2019	<2.0	**2.2 J**	<2.0	**2.3 J**	**2.4 J**	**2.4 J**	<2.0	**3.3 J**	<2.0	**4.0 J**	**4.8**	<2.0	**3.1 J**	**8.3**	**5.7**	**8,000**	**2,900**
DG-AL13	DG-AL13W	4	1/29/2019	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	**5,300**	**1,900**
DG-AN13	DG-AN13W	4	2/1/2019	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	**1,300**	**460 J**
MW-15A	MW-15AW	4	12/18/2018	<0.44	<0.30	<0.67	<1.0	<0.35	<0.39	<0.32	<1.0	<0.41	<1.0	<0.51	<0.40	<1.0	<0.35	<0.33	**4,700**	**2,400**
MW-17A	MW-17AW	4	12/18/2018	<0.42	<0.29	<0.64	<0.98	<0.33	<0.37	<0.30	<0.98	<0.39	<0.98	<0.48	<0.38	<0.98	<0.33	<0.31	**370**	**250**
MW-17A (D)	MW-17A (D)W	4	12/18/2018	<0.42	<0.29	<0.64	<0.98	<0.33	<0.37	<0.30	<0.98	<0.39	<0.98	<0.48	<0.38	<0.98	<0.33	<0.31	**380**	--
LF-4A	LF-4AW	4	12/18/2018	<0.42	<0.29	<0.64	<0.98	<0.33	<0.37	<0.30	<0.98	<0.39	<0.98	<0.48	<0.38	<0.98	<0.34	<0.31	**5,300**	**1,800**
LF-8A	LF-8AW	4	12/19/2018	<0.42	<0.28	<0.63	<0.97	<0.33	<0.37	<0.30	<0.97	<0.39	<0.97	<0.48	<0.38	<0.97	<0.33	<0.31	**4,900**	**1,400**
DG-AQ11	DG-AQ11W	5	1/31/2019	<0.51	<0.51	<0.51	<0.51	<0.51	<0.51	<0.51	<0.51	<0.51	<0.51	<0.51	<0.51	<0.51	<0.51	<0.51	**620**	**500 J**
DG-AT9	DG-AT9W	5	1/31/2019	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	**170 J**	**130 J**
DG-AV9	DG-AV9W	5	2/1/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	**0.13 J**	<0.10	<0.10	<0.10	<0.10	**0.15 J**	**230 J**	**220 J**
DG-AX5	DG-AX5W	5	12/20/2018	<0.099	<0.099	<0.099	**0.13 J**	**0.16 J**	<0.099	<0.099	**0.12 J**	<0.099	**0.23**	<0.099	<0.099	<0.099	**0.16 J**	**0.5**	**1,000**	**920 J**
MK-7A	MK-7AW	5	12/19/2018	<0.42	<0.28	<0.63	<0.97	<0.33	<0.37	<0.30	<0.97	<0.39	<0.97	<0.47	<0.38	<0.97	<0.33	<0.31	**190**	**140**
LF-7A	LF-7AW	5	12/19/2018	<0.41	<0.28	<0.62	<0.95	<0.32	<0.36	<0.30	<0.95	<0.38	<0.95	<0.47	<0.37	<0.95	<0.33	<0.30	**99**	<68
MK-8A	MK-8AW	5	12/19/2018	<0.42	<0.28	<0.63	<0.97	<0.33	<0.37	<0.30	<0.97	<0.39	<0.97	<0.48	<0.38	<0.97	<0.33	<0.31	<29	<70
DG-AB17	DG-AB17W	6	1/25/2019	**0.18 J**	**0.22 J**	<0.11	<0.11	<0.11	<0.11	<0.11	**0.12 J**	<0.11	**0.5**	**0.14 J**	<0.11	**0.25**	**0.32**	**0.53**	**1,100**	**630**
DG-AC15	DG-AC15W	6	2/1/2019	**0.24 J**	**0.55**	**0.77**	**1.5**	**1.3**	**1.5**	**0.38 J**	**1.1**	<0.20	**3.7**	**1.3**	**1.2**	**8.2**	**1.5**	**4.3**	**6,600**	**3,700**
DG-AD17	DG-AD17W	6	1/25/2019	<0.11	**0.56**	**0.16 J**	<0.11	**0.14 J**	<0.11	<0.11	**0.21**	<0.11	**1.6**	**1.3**	<0.11	**1.2**	**1.6**	**0.79**	**2,200**	**2,500**
DG-AG15	DG-AG15W	6	1/24/2019	<2.9	<2.9	<2.9	<2.9	<2.9	<2.9	<2.9	<2.9	<2.9	<2.9	<2.9	<2.9	<2.9	<2.9	<2.9	**1,700**	<200

Table 8: Polynuclear Aromatic Hydrocarbons and TPH as Diesel and Motor Oil Concentrations in Fill Groundwater
Brisbane Baylands OU-2
Brisbane, California

Sample Location	Sample Name	Investigation Zone	Collection Date	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene	Dibenzo(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	Naphthalene	Phenanthrene	Pyrene	TPH-Diesel (C10-C28)	TPH-Motor Oil (C24-C36)
Aquatic Habitat Goal Levels Saltwater Ecotox ESL [1]				1.5E+01	1.5E+01	1.5E+01	1.5E+01	1.5E+01	1.5E+01	1.5E+01	1.5E+01	1.5E+01	8.0E+00	1.5E+01	1.5E+01	1.5E+01	4.6E+00	1.5E+01	6.4E+02	--
Site Specific Screening Level [2]				1.5E+03	1.5E+03	1.5E+03	1.5E+03	1.5E+03	1.5E+03	1.5E+03	1.5E+03	1.5E+03	8.0E+02	1.5E+03	1.5E+03	1.5E+03	4.6E+02	1.5E+03	6.4E+04	--
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
DG-AI15	DG-AI15W	6	1/25/2019	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	**11**	<0.52	<0.52	**4,700**	**360 J**
DG-AK15	DG-AK15W	6	1/24/2019	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	**41 J**	<25	<25	**6,500**	**610**
DG-AM15	DG-AM15W	6	1/24/2019	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	**110 J**	<110
DG-AS11	DG-AS11W	6	1/31/2019	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	**260 J**	**300 J**
DG-AW11	DG-AW11W	6	1/24/2019	<0.10	<0.10	**0.14 J**	**0.20 J**	**0.19 J**	**0.21**	<0.10	**0.17 J**	<0.10	**0.43**	<0.10	**0.21**	<0.10	**0.15 J**	**0.55**	**1,100**	**500 J**
DG-AW11 (D)	DG-AW11 (D)W	6	1/24/2019	<0.10	<0.10	**0.14 J**	**0.20 J**	**0.19 J**	**0.22**	<0.10	**0.16 J**	<0.10	**0.36**	<0.10	**0.22**	<0.10	**0.12 J**	**0.46**	**1,100**	**500 J**
MW-13A	MW-13AW	6	12/18/2018	<0.42	<0.28	<0.63	<0.97	<0.33	<0.37	<0.30	<0.97	<0.39	<0.97	<0.48	<0.38	<0.97	<0.33	<0.31	**1,300**	**--**

Notes:

1. San Francisco Bay RWQCB, 2019. Summary of Groundwater ESLs, Jan. 2019 (Rev. 1) - Aquatic Habitat Goal Levels (Table GW-2): Saltwater Ecotoxicity.
2. Site specific screening level is the saltwater ecotoxicity ESL with a 100-fold attenuation factor.
- PAHs were analyzed by USEPA Method 8270C SIM.
- Non-detect results are presented with "<" followed by the MDL.
- Results in bold font indicate a detection above the MDL.
- Gray shading indicates a detection above the comparison criteria.

Abbreviations and Symbols:

"J" - Analyte was detected but the associated numerical value is the approximate concentration.
"J+" - Analyte was detected but the associated numerical value is likely to be higher than the concentration of the analyte in the sample due to positive bias of associated QC or calibration data or attributable to matrix interference.
"J-" - Analyte was detected but the associated numerical value is likely to be lower than the concentration of the analyte in the sample due to negative bias of associated QC or calibration data or attributable to matrix interference.
"R" - The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.
"U" - Not detected at or above the reported result.
"UJ" - The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
"--" - Not Available
"<" - Non-detect result
(D) - Duplicate sample
µg/L - microgram per liter
ESL - Environmental Screening Level
MDL - Method Detection Limit
PAHs - Polynuclear Aromatic Hydrocarbons
QC - quality control
RWQCB - Regional Water Quality Control Board
TPH - Total petroleum hydrocarbons
USEPA - United States Environmental Protection Agency

Table 9: Volatile Organic Compounds and Total Petroleum Hydrocarbon Concentrations as Gasoline in Fill Groundwater
Brisbane Baylands OU-2
Brisbane, California

Sample Location	Investigation Zone	Sample Name	Collection Date	1,1,1-Trichloroethane	1,1,2-Trichloro-1,2,2-trifluoroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichlorobenzene	1,2,4-Trimethylbenzene	1,2-Dichlorobenzene	1,3,5-Trimethylbenzene	4-Isopropyltoluene	Acetone	Benzene	Chloroethane	cis-1,2-Dichloroethene	Ethylbenzene	Isopropylbenzene	Methyl-tert-butyl ether (MTBE)	Naphthalene	n-Butylbenzene
Aquatic Habitat Goal Levels Saltwater Ecotox ESL [1]				3.1E+03	--	-	2.2E+04	--	--	6.5E+01	--	--	--	3.5E+02	-	2.2E+04	4.3E+01	--	8.0E+03	1.5E+01	--
Site Specific Screening Level [2]				3.1E+05	--	--	2.2E+06	--	--	6.5E+03	--	--	--	3.5E+04	--	2.2E+06	4.3E+03	--	8.0E+05	1.5E+03	--
Vapor Intrusion Human Health Risk Residential ESL [3]				1.5E+03	--	7.6E+00	6.6E+01	--	--	2.7E+03	--	--	2.3E+07	4.2E-01	2.3E+04	4.9E+01	3.5E+00	--	4.5E+02	4.6E+00	--
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
DG-AA3	1	DG-AA3W	12/18/2018	<0.25	<0.50	<0.25	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<10	<0.25	<0.40	<0.25	<0.25	<0.25	**1.7**	<0.40	<0.40
DG-AA7	1	DG-AA7W	1/11/2019	<0.25	<0.50	<0.25	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<10	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<0.40	<0.40
DG-AB5	1	DG-AB5W	1/31/2019	<0.25	<0.50	<0.25	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<10	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<0.40	<0.40
DG-AB5 (D)	1	DG-AB5 (D)W	1/31/2019	<0.25	<0.50	<0.25	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<10	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<0.40	<0.40
DG-AC3	1	DG-AC3W	12/19/2018	<0.25	<0.50	<0.25	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<10	<0.25	<0.40	<0.25	<0.25	<0.25	**2.6**	<0.40	<0.40
DG-AC7	1	DG-AC7W	1/11/2019	<0.25	<0.50	<0.25	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<10	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<0.40	<0.40
DG-AC7 (D)	1	DG-AC7 (D)W	1/11/2019	<0.25	<0.50	<0.25	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<10	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<0.40	<0.40
DG-AD5	1	DG-AD5W	1/7/2019	<0.25	<0.50	<0.25	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<10	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<0.40	<0.40
DG-AD9	1	DG-AD9W	1/11/2019	<0.25	<0.50	<0.25	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<10	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<0.40	<0.40
DG-AE3	1	DG-AE3W	12/19/2018	<0.25	<0.50	<0.25	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<10	<0.25	<0.40	<0.25	<0.25	<0.25	**3.7**	<0.40	<0.40
DG-AE7	1	DG-AE7W	1/11/2019	<0.25	<0.50	<0.25	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<10	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<0.40	<0.40
DG-AF5	1	DG-AF5W	1/7/2019	<0.25	<0.50	<0.25	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<10	<0.25	<0.40	<0.25	<0.25	<0.25	**0.82**	<0.40	<0.40
DG-AG3	1	DG-AG3W	12/19/2018	<0.25	<0.50	<0.25	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	**15**	<0.25	<0.40	<0.25	<0.25	<0.25	**7.9**	<0.40	<0.40
DG-AG7	1	DG-AG7W	1/31/2019	<0.25	<0.50	<0.25	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<10	<0.25	<0.40	<0.25	<0.25	<0.25	**0.54**	<0.40	<0.40
DG-N5	1	DG-N5W	1/10/2019	<0.25	<0.50	<0.25	<0.25	**0.41 J**	<0.25	<0.25	<0.25	<0.25	**20 U**	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	**0.45 J**	<0.40
DG-O3	1	DG-O3W	12/18/2018	<0.25	<0.50	<0.25	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<10	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<0.40	<0.40
DG-P5	1	DG-P5W	1/10/2019	<0.25	<0.50	<0.25	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<10	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<0.40	<0.40
DG-Q7	1	DG-Q7W	1/10/2019	<0.25	<0.50	<0.25	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<10	**0.29 J**	<0.40	<0.25	<0.25	<0.25	<0.25	<0.40	<0.40
DG-Q7 (D)	1	DG-Q7 (D)W	1/10/2019	<0.25	<0.50	<0.25	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<10	**0.29 J**	<0.40	<0.25	<0.25	<0.25	<0.25	<0.40	<0.40
DG-R1	1	DG-R1W	12/17/2018	<0.25	<0.50	<0.25	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<10	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<0.40	<0.40
DG-R5	1	DG-R5W	1/30/2019	<0.25	<0.50	<0.25	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<10	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<0.40	<0.40
DG-S3	1	DG-S3W	12/18/2018	<0.25	<0.50	<0.25	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<10	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<0.40	<0.40
DG-S7	1	DG-S7W	1/10/2019	<0.25	<0.50	<0.25	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	**20 U**	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<0.40	<0.40
DG-T1	1	DG-T1W	12/17/2018	<0.25	<0.50	<0.25	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<10	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<0.40	<0.40
DG-T5	1	DG-T5W	1/7/2019	<0.25	<0.50	<0.25	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<10	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<0.40	<0.40
DG-U3	1	DG-U3W	12/18/2018	<0.25	<0.50	<0.25	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<10	<0.25	<0.40	**0.33**	<0.25	<0.25	<0.25	<0.40	<0.40
DG-U3 (D)	1	DG-U3 (D)W	12/18/2018	<0.25	<0.50	<0.25	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<10	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<0.40	<0.40
DG-U7	1	DG-U7W	1/10/2019	<0.25	<0.50	<0.25	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<10	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<0.40	<0.40
DG-V1	1	DG-V1W	12/17/2018	<0.25	<0.50	<0.25	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<10	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<0.40	<0.40
DG-V5	1	DG-V5W	1/7/2019	<0.25	<0.50	<0.25	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<10	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<0.40	<0.40
DG-V9	1	DG-V9W	1/14/2019	<0.25	<0.50	<0.25	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<10	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<0.40	<0.40
DG-W3	1	DG-W3W	12/18/2018	<0.25	<0.50	<0.25	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<10	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<0.40	<0.40

Table 9: Volatile Organic Compounds and Total Petroleum Hydrocarbon Concentrations as Gasoline in Fill Groundwater
Brisbane Baylands OU-2
Brisbane, California

Sample Location	Investigation Zone	Sample Name	Collection Date	1,1,1-Trichloroethane	1,1,2-Trichloro-1,2,2-trifluoroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichlorobenzene	1,2,4-Trimethylbenzene	1,2-Dichlorobenzene	1,3,5-Trimethylbenzene	4-Isopropyltoluene	Acetone	Benzene	Chloroethane	cis-1,2-Dichloroethene	Ethylbenzene	Isopropylbenzene	Methyl-tert-butyl ether (MTBE)	Naphthalene	n-Butylbenzene
Aquatic Habitat Goal Levels Saltwater Ecotox ESL [1]				3.1E+03	--	-	2.2E+04	--	--	6.5E+01	--	--	--	3.5E+02	-	2.2E+04	4.3E+01	--	8.0E+03	1.5E+01	--
Site Specific Screening Level [2]				3.1E+05	--	--	2.2E+06	--	--	6.5E+03	--	--	--	3.5E+04	--	2.2E+06	4.3E+03	--	8.0E+05	1.5E+03	--
Vapor Intrusion Human Health Risk Residential ESL [3]				1.5E+03	--	7.6E+00	6.6E+01	--	--	2.7E+03	--	--	2.3E+07	4.2E-01	2.3E+04	4.9E+01	3.5E+00	--	4.5E+02	4.6E+00	--
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
DG-W7	1	DG-W7W	1/30/2019	<0.25	<0.50	<0.25	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<10	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<0.40	<0.40
DG-X1	1	DG-X1W	12/17/2018	<0.25	<0.50	<0.25	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<10	<0.25	<0.40	<0.25	<0.25	<0.25	**1.3**	<0.40	<0.40
DG-X5	1	DG-X5W	1/7/2019	<0.25	<0.50	<0.25	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	**20 U**	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<0.40	<0.40
DG-X9	1	DG-X9W	1/14/2019	<0.25	<0.50	<0.25	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<10	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<0.40	<0.40
DG-Y3	1	DG-Y3W	12/18/2018	<0.25	<0.50	<0.25	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<10	<0.25	<0.40	<0.25	<0.25	<0.25	**0.39**	<0.40	<0.40
DG-Y7	1	DG-Y7W	1/11/2019	<0.25	<0.50	<0.25	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<10	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<0.40	<0.40
DG-Z5	1	DG-Z5W	1/7/2019	<0.25	<0.50	<0.25	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<10	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<0.40	<0.40
DG-Z9	1	DG-Z9W	1/15/2019	<0.25	<0.50	<0.25	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<10	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<0.40	<0.40
KMW-4A	1	KMW-4AW	12/18/2018	<0.20	<0.091	<0.11	<0.20	<0.21	<0.20	<0.21	<0.17	<0.20	<20	<0.25	<0.17	<0.076	<0.13	<0.20	**6.5**	<0.22	<0.30
MW-11AR	1	MW-11ARW	12/18/2018	<0.20	<0.091	<0.11	<0.20	<0.21	<0.20	<0.21	<0.17	<0.20	<20	<0.25	<0.17	<0.076	<0.13	<0.20	<0.11	<0.22	<0.30
DG-AH5	2	DG-AH5W	1/7/2019	<0.25	<0.50	<0.25	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	**20 U**	<0.25	<0.40	<0.25	<0.25	<0.25	**0.30 J**	<0.40	<0.40
DG-AI3	2	DG-AI3W	12/19/2018	<0.25	<0.50	<0.25	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<10	<0.25	<0.40	<0.25	<0.25	<0.25	**6.2**	<0.40	<0.40
DG-AI3 (D)	2	DG-AI3 (D)W	12/19/2018	<0.25	<0.50	<0.25	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<10	<0.25	<0.40	<0.25	<0.25	<0.25	**6**	<0.40	<0.40
DG-AI7	2	DG-AI7W	1/11/2019	<0.25	<0.50	<0.25	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<10	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<0.40	<0.40
DG-AJ5	2	DG-AJ5W	1/7/2019	<0.25 R	<0.50 R	<0.25 R	<0.25 R	<0.40 R	<0.25 R	<0.25 R	<0.25 R	<0.25 R	<10 R	<0.25 R	<0.40 R	<0.25 R	<0.25 R	<0.25 R	**5.4 J**	<0.40 R	<0.40 R
DG-AK3	2	DG-AK3W	12/19/2018	<0.25	<0.50	<0.25	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<10	<0.25	<0.40	<0.25	<0.25	<0.25	**6.7**	<0.40	<0.40
DG-AK7	2	DG-AK7W	1/11/2019	<0.25	<0.50	<0.25	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<10	<0.25	<0.40	<0.25	<0.25	<0.25	**0.77**	<0.40	<0.40
DG-AK7 (D)	2	DG-AK7 (D)W	1/11/2019	<0.25	<0.50	<0.25	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<10	<0.25	<0.40	<0.25	<0.25	<0.25	**0.76**	<0.40	<0.40
DG-AL5	2	DG-AL5W	1/31/2019	<0.25	<0.50	<0.25	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<10	<0.25	<0.40	<0.25	<0.25	<0.25	**3**	<0.40	<0.40
DG-AL9	2	DG-AL9W	1/22/2019	<0.25	<0.50	<0.25	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<10 R	<0.25	<0.40	<0.25	<0.25	<0.25	**0.9**	<0.40	<0.40
DG-AM3	2	DG-AM3W	12/19/2018	<0.25	<0.50	<0.25	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<10	<0.25	<0.40	<0.25	<0.25	<0.25	**7.2**	<0.40	<0.40
DG-AM7	2	DG-AM7W	1/11/2019	<0.25	<0.50	<0.25	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<10	<0.25	<0.40	<0.25	<0.25	<0.25	**1.6**	<0.40	<0.40
DG-AN5	2	DG-AN5W	12/20/2018	<0.25	<0.50	<0.25	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<10	<0.25	<0.40	<0.25	<0.25	<0.25	**4**	<0.40	<0.40
DG-AN9	2	DG-AN9W	1/21/2019	<0.25	<0.50	<0.25	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	**20 U**	<0.25	<0.40	<0.25	<0.25	<0.25	**1.4**	<0.40	<0.40
DG-AO3	2	DG-AO3W	12/19/2018	<0.25	<0.50	<0.25	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	**10**	<0.25	<0.40	<0.25	<0.25	<0.25	**7.3**	<0.40	<0.40
DG-AO7	2	DG-AO7W	1/11/2019	<0.25	<0.50	<0.25	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<10	<0.25	<0.40	<0.25	<0.25	<0.25	**2.4**	<0.40	<0.40
DG-AP5	2	DG-AP5W	12/20/2018	<0.25	<0.50	<0.25	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<10	<0.25	<0.40	<0.25	<0.25	<0.25	**5**	<0.40	<0.40
DG-AP9	2	DG-AP9W	1/21/2019	<0.25	<0.50	<0.25	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	**20 U**	<0.25	<0.40	<0.25	<0.25	<0.25	**1.6**	<0.40	<0.40
DG-AQ3	2	DG-AQ3W	12/19/2018	<0.25	<0.50	<0.25	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<10	<0.25	<0.40	<0.25	<0.25	<0.25	**6.1**	<0.40	<0.40
DG-AQ7	2	DG-AQ7W	1/31/2019	<0.25	<0.50	<0.25	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<10	<0.25	<0.40	<0.25	<0.25	<0.25	**4.5**	<0.40	<0.40
DG-AR5	2	DG-AR5W	12/20/2018	<0.25	<0.50	<0.25	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<10	<0.25	<0.40	<0.25	<0.25	<0.25	**4.8**	<0.40	<0.40
DG-AR9	2	DG-AR9W	1/11/2019	<0.25	<0.50	<0.25	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<10	<0.25	<0.40	<0.25	<0.25	<0.25	**1.2**	<0.40	<0.40

Table 9: Volatile Organic Compounds and Total Petroleum Hydrocarbon Concentrations as Gasoline in Fill Groundwater
Brisbane Baylands OU-2
Brisbane, California

Sample Location	Investigation Zone	Sample Name	Collection Date	1,1,1-Trichloroethane	1,1,2-Trichloro-1,2,2-trifluoroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichlorobenzene	1,2,4-Trimethylbenzene	1,2-Dichlorobenzene	1,3,5-Trimethylbenzene	4-Isopropyltoluene	Acetone	Benzene	Chloroethane	cis-1,2-Dichloroethene	Ethylbenzene	Isopropylbenzene	Methyl-tert-butyl ether (MTBE)	Naphthalene	n-Butylbenzene
Aquatic Habitat Goal Levels Saltwater Ecotox ESL [1]				3.1E+03	--	-	2.2E+04	--	--	6.5E+01	--	--	--	3.5E+02	-	2.2E+04	4.3E+01	--	8.0E+03	1.5E+01	--
Site Specific Screening Level [2]				3.1E+05	--	--	2.2E+06	--	--	6.5E+03	--	--	--	3.5E+04	--	2.2E+06	4.3E+03	--	8.0E+05	1.5E+03	--
Vapor Intrusion Human Health Risk Residential ESL [3]				1.5E+03	--	7.6E+00	6.6E+01	--	--	2.7E+03	--	--	2.3E+07	4.2E-01	2.3E+04	4.9E+01	3.5E+00	--	4.5E+02	4.6E+00	--
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
DG-AR9 (D)	2	DG-AR9 (D)W	1/11/2019	<0.25	<0.50	<0.25	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<10	<0.25	<0.40	<0.25	<0.25	<0.25	**1.3**	<0.40	<0.40
DG-AS3	2	DG-AS3W	12/20/2018	<0.25	<0.50	<0.25	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<10	<0.25	<0.40	<0.25	<0.25	<0.25	**1.5**	<0.40	<0.40
DG-AS3 (D)	2	DG-AS3 (D)W	12/20/2018	<0.25	<0.50	<0.25	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<10	<0.25	<0.40	<0.25	<0.25	<0.25	**1.5**	<0.40	<0.40
DG-AS7	2	DG-AS7W	1/11/2019	<0.25	<0.50	<0.25	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<10	<0.25	<0.40	<0.25	<0.25	<0.25	**2.2**	<0.40	<0.40
DG-AT5	2	DG-AT5W	12/20/2018	<0.25 R	<0.50 R	<0.25 R	<0.25 R	<0.40 R	<0.25 R	<0.25 R	<0.25 R	<0.25 R	**20 U**	<0.25 R	<0.40 R	<0.25 R	<0.25 R	<0.25 R	**1.9 J**	<0.40 R	<0.40 R
DG-AU3	2	DG-AU3W	12/20/2018	<0.25	<0.50	<0.25	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<10	<0.25	<0.40	<0.25	<0.25	<0.25	**0.48 J**	<0.40	<0.40
DG-AU7	2	DG-AU7W	1/11/2019	<0.25	<0.50	<0.25	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<10	<0.25	<0.40	<0.25	<0.25	<0.25	**2.5**	<0.40	<0.40
DG-AU7 (D)	2	DG-AU7 (D)W	1/11/2019	<0.25	<0.50	<0.25	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<10	<0.25	<0.40	<0.25	<0.25	<0.25	**2.4**	<0.40	<0.40
DG-AV5	2	DG-AV5W	12/20/2018	<0.25	<0.50	<0.25	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<10	<0.25	<0.40	<0.25	<0.25	<0.25	**2.7**	<0.40	<0.40
DG-AW3	2	DG-AW3W	1/31/2019	<0.25	<0.50	<0.25	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<10	<0.25	<0.40	<0.25	<0.25	<0.25	**4.1**	<0.40	<0.40
DG-AY3	2	DG-AY3W	2/1/2019	<0.25	<0.50	<0.25	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<10	<0.25	<0.40	<0.25	<0.25	<0.25	**4.1**	<0.40	<0.40
KMW-7A	2	KMW-7AW	12/19/2018	<0.20	<0.091	<0.11	<0.20	<0.21	<0.20	<0.21	<0.17	<0.20	<20	<0.25	<0.17	<0.076	<0.13	<0.20	**6.1**	<0.22	<0.30
LF-5A	2	LF-5AW	12/19/2018	<0.20	<0.091	<0.11	<0.20	<0.21	<0.20	<0.21	<0.17	<0.20	<20	<0.25	<0.17	<0.076	<0.13	<0.20	<0.11	<0.22	<0.30
MW-10A	2	MW-10AW	12/19/2018	<0.20	<0.091	<0.11	<0.20	<0.21	<0.20	<0.21	<0.17	<0.20	<20	<0.25	<0.17	<0.076	<0.13	<0.20	**3.3**	<0.22	<0.30
DG-N13	3	DG-N13W	1/11/2019	<0.25	<0.50	<0.25	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	**10 J**	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<0.40 UJ	<0.40
DG-N13 (D)	3	DG-N13 (D)W	1/11/2019	<0.25	<0.50	<0.25	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<10 UJ	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<0.40	<0.40
DG-N9	3	DG-N9W	1/14/2019	<0.25	<0.50	<0.25	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<10	<0.25	<0.40	**2**	<0.25	<0.25	<0.25	<0.40	<0.40
DG-O11	3	DG-O11W	1/14/2019	<0.25	<0.50	<0.25	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<10	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<0.40	<0.40
DG-O15	3	DG-O15W	1/11/2019	<0.25	<0.50	<0.25	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<10	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<0.40	<0.40
DG-O7	3	DG-O7W	1/10/2019	<0.25	<0.50	<0.25	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	**20 U**	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<0.40	<0.40
DG-P13	3	DG-P13W	1/11/2019	<0.25	<0.50	<0.25	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<10	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<0.40	<0.40
DG-Q11	3	DG-Q11W	1/15/2019	<0.25	<0.50	<0.25	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<10	<0.25	<0.40	**0.56**	<0.25	<0.25	<0.25	<0.40	<0.40
DG-Q11 (D)	3	DG-Q11 (D)W	1/15/2019	<0.25	<0.50	<0.25	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<10	<0.25	<0.40	**0.7**	<0.25	<0.25	<0.25	<0.40	<0.40
DG-Q15	3	DG-Q15W	1/11/2019	<0.25	<0.50	<0.25	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<10	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<0.40	<0.40
DG-R13	3	DG-R13W	1/29/2019	<0.25	<0.50	<0.25	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<10	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<0.40	<0.40
DG-R9	3	DG-R9W	1/25/2019	<0.25	<0.50	<0.25	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	**24 U**	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<0.40	<0.40
DG-S11	3	DG-S11W	1/15/2019	<0.25	<0.50	<0.25	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<10	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<0.40	<0.40
DG-S15	3	DG-S15W	1/11/2019	<0.25	<0.50	<0.25	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<10	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<0.40	<0.40
DG-S15 (D)	3	DG-S15 (D)W	1/11/2019	<0.25	<0.50	<0.25	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<10	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<0.40	<0.40
DG-T13	3	DG-T13W	1/15/2019	<0.25	<0.50	<0.25	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<10	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<0.40	<0.40
DG-T17	3	DG-T17W	1/31/2019	<0.25	<0.50	<0.25	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	**21 U**	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<0.40	<0.40
DG-T9	3	DG-T9W	1/14/2019	<0.25 R	<0.50 R	<0.25 R	<0.25 R	<0.40 R	<0.25 R	<0.25 R	<0.25 R	<0.25 R	**18 J**	<0.25 R	<0.40 R	<0.25 R	<0.25 R	<0.25 R	<0.25 R	<0.40 R	<0.40 R

Table 9: Volatile Organic Compounds and Total Petroleum Hydrocarbon Concentrations as Gasoline in Fill Groundwater
Brisbane Baylands OU-2
Brisbane, California

Sample Location	Investigation Zone	Sample Name	Collection Date	1,1,1-Trichloroethane	1,1,2-Trichloro-1,2,2-trifluoroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichlorobenzene	1,2,4-Trimethylbenzene	1,2-Dichlorobenzene	1,3,5-Trimethylbenzene	4-Isopropyltoluene	Acetone	Benzene	Chloroethane	cis-1,2-Dichloroethene	Ethylbenzene	Isopropylbenzene	Methyl-tert-butyl ether (MTBE)	Naphthalene	n-Butylbenzene
Aquatic Habitat Goal Levels Saltwater Ecotox ESL [1]				3.1E+03	--	-	2.2E+04	--	--	6.5E+01	--	--	--	3.5E+02	-	2.2E+04	4.3E+01	--	8.0E+03	1.5E+01	--
Site Specific Screening Level [2]				3.1E+05	--	--	2.2E+06	--	--	6.5E+03	--	--	--	3.5E+04	--	2.2E+06	4.3E+03	--	8.0E+05	1.5E+03	--
Vapor Intrusion Human Health Risk Residential ESL [3]				1.5E+03	--	7.6E+00	6.6E+01	--	--	2.7E+03	--	--	2.3E+07	4.2E-01	2.3E+04	4.9E+01	3.5E+00	--	4.5E+02	4.6E+00	--
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
DG-U11	3	DG-U11W	1/15/2019	<0.25	<0.50	<0.25	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<10	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<0.40	<0.40
DG-U15	3	DG-U15W	1/28/2019	<0.25	<0.50	<0.25	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<10	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<0.40	<0.40
DG-V13	3	DG-V13W	1/15/2019	<0.25	<0.50	<0.25	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<10	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<0.40	<0.40
DG-V17	3	DG-V17W	1/28/2019	<0.25	<0.50	<0.25	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<10	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<0.40	<0.40
LF-3A	3	LF-3AW	12/18/2018	<0.20	<0.091	<0.11	<0.20	<0.21	<0.20	<0.21	<0.17	<0.20	<20	<0.25	<0.17	<0.076	<0.13	<0.20	<0.11	<0.22	<0.30
LF-3A (D)	3	LF-3A (D)W	12/18/2018	<0.20	<0.091	<0.11	<0.20	<0.21	<0.20	<0.21	<0.17	<0.20	<20	<0.25	<0.17	<0.076	<0.13	<0.20	<0.11	<0.22	<0.30
MW-9A	3	MW-9AW	12/18/2018	<0.20	<0.091	<0.11	<0.20	<0.21	<0.20	<0.21	<0.17	<0.20	<20	<0.25	<0.17	<0.076	<0.13	<0.20	<0.11	<0.22	<0.30
DG-AA11	4	DG-AA11W	1/30/2019	<0.25	<0.50	**1.3**	<0.25	<0.40	**0.65**	<0.25	<0.25	<0.25	<10	<0.25	**4.5**	**0.52**	<0.25	**0.25 J**	<0.25	<0.40	**0.73 J**
DG-AA15	4	DG-AA15W	1/25/2019	**1.3**	<0.50	**5.2**	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<10	<0.25	**10**	**3.6**	<0.25	<0.25	<0.25	<0.40	<0.40
DG-AA19	4	DG-AA19W	1/25/2019	<0.25 UJ	<0.50 UJ	<0.25 UJ	<0.25 UJ	<0.40 UJ	<0.25 UJ	<0.25 UJ	<0.25 UJ	<0.25 UJ	<10 UJ	<0.25 UJ	<0.40 UJ	<0.25 UJ	<0.25 UJ	<0.25 UJ	<0.25 UJ	<0.40 UJ	<0.40 UJ
DG-AB13	4	DG-AB13W	1/25/2019	<0.25 UJ	<0.50 UJ	<0.25 UJ	<0.25 UJ	<0.40 UJ	<0.25 UJ	<0.25 UJ	<0.25 UJ	<0.25 UJ	<10 UJ	<0.25 UJ	<0.40 UJ	<0.25 UJ	<0.25 UJ	<0.25 UJ	<0.25 UJ	<0.40 UJ	<0.40 UJ
DG-AB13 (D)	4	DG-AB13 (D)W	1/25/2019	<0.25 UJ	<0.50 UJ	<0.25 UJ	<0.25 UJ	<0.40 UJ	<0.25 UJ	<0.25 UJ	<0.25 UJ	<0.25 UJ	<10 UJ	<0.25 UJ	<0.40 UJ	<0.25 UJ	<0.25 UJ	<0.25 UJ	<0.25 UJ	<0.40 UJ	<0.40 UJ
DG-AD13	4	DG-AD13W	2/1/2019	<0.25	<0.50	<0.25	<0.25	<0.40	**4.9 J**	<0.25	**1.2 J**	**0.38 J**	**20 U**	**5.1 J**	<0.40	<0.25	**5.3 J**	**0.63 J**	<0.25	**18 J**	<0.40
DG-AD13 (D)	4	DG-AD13 (D)W	2/1/2019	<0.25	<0.50	<0.25	<0.25	<0.40	**3.4 J**	<0.25	**0.86 J**	<0.25 UJ	**20 U**	**3.7 J**	<0.40	<0.25	**3.7 J**	**0.43 J**	<0.25	**13 J**	<0.40
DG-AE11	4	DG-AE11W	1/22/2019	<0.25	<0.50	<0.25	<0.25	<0.40	**0.25 J**	<0.25	<0.25	**0.29 J**	**20 U**	**0.78**	<0.40	<0.25	**0.27 J**	**0.98**	<0.25	**2.2**	**0.48 J**
DG-AG11	4	DG-AG11W	1/22/2019	<0.25	<0.50	<0.25	<0.25	<0.40	**0.29 J**	<0.25	<0.25	<0.25	<10	**1.5**	<0.40	<0.25	<0.25	**1.4**	<0.25	<0.40	**0.50 J**
DG-AH13	4	DG-AH13W	1/29/2019	<0.25	<0.50	<0.25	<0.25	<0.40	**0.31 J**	<0.25	<0.25	<0.25	<10	**7.1**	<0.40	<0.25	**0.52**	**1.6**	**0.30 J**	<0.40	**0.50 J**
DG-AJ13	4	DG-AJ13W	1/29/2019	<0.25	<0.50	<0.25	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<10	<0.25	<0.40	<0.25	<0.25	<0.25	**0.77**	<0.40	<0.40
DG-AK11	4	DG-AK11W	1/29/2019	<0.25	<0.50	<0.25	<0.25	<0.40	**0.83**	<0.25	<0.25	**0.26 J**	<10	**1.5**	<0.40	<0.25	<0.25	**0.48 J**	**1.3**	**2.1**	<0.40
DG-AL13	4	DG-AL13W	1/29/2019	<0.25	<0.50	<0.25	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<10	**0.35 J**	<0.40	<0.25	<0.25	<0.25	**4**	<0.40	<0.40
DG-AN13	4	DG-AN13W	2/1/2019	<0.25	<0.50	<0.25	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<10	**0.31 J**	<0.40	<0.25	<0.25	<0.25	<0.25	**0.82 J**	<0.40
DG-W11	4	DG-W11W	1/30/2019	<0.25 R	<0.50 R	<0.25 R	<0.25 R	<0.40 R	<0.25 R	<0.25 R	<0.25 R	<0.25 R	<10 R	<0.25 R	<0.40 R	<0.25 R	<0.25 R	<0.25 R	<0.25 R	<0.40 R	<0.40 R
DG-W15	4	DG-W15W	1/29/2019	<0.25	<0.50	<0.25	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<10	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<0.40	<0.40
DG-X13	4	DG-X13W	1/25/2019	<0.25	<0.50	<0.25	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<10	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<0.40	<0.40
DG-X17	4	DG-X17W	1/28/2019	<0.25	<0.50	<0.25	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<10	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<0.40	<0.40
DG-Y11	4	DG-Y11W	1/22/2019	<0.25	<0.50	<0.25	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<10	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<0.40	<0.40
DG-Y15	4	DG-Y15W	2/1/2019	**18**	<0.50	**52**	**0.44 J**	<0.40	<0.25	**0.25 J**	<0.25	<0.25	<10	<0.25	**77**	**45**	<0.25	<0.25	<0.25	<0.40	<0.40
DG-Y19	4	DG-Y19W	1/28/2019	<0.25	<0.50	<0.25	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<10	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<0.40	<0.40
DG-Z17	4	DG-Z17W	1/28/2019	<0.25	<0.50	**0.26 J**	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<10	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	**0.43 J**	<0.40
LF-4A	4	LF-4AW	12/18/2018	<0.20	<0.091	<0.11	<0.20	<0.21	<0.20	<0.21	<0.17	<0.20	<20	<0.25	<0.17	<0.076	<0.13	<0.20	<0.11	<0.22	<0.30
LF-8A	4	LF-8AW	12/19/2018	<0.20	<0.091	<0.11	<0.20	<0.21	<0.20	<0.21	<0.17	<0.20	<20	<0.25	<0.17	<0.076	<0.13	<0.20	**5.3**	<0.22	<0.30
MW-15A	4	MW-15AW	12/18/2018	<0.20	<0.091	<0.11	<0.20	<0.21	<0.20	<0.21	<0.17	<0.20	<20	<0.25	<0.17	<0.076	<0.13	<0.20	<0.11	<0.22	<0.30

Table 9: Volatile Organic Compounds and Total Petroleum Hydrocarbon Concentrations as Gasoline in Fill Groundwater
Brisbane Baylands OU-2
Brisbane, California

Sample Location	Investigation Zone	Sample Name	Collection Date	1,1,1-Trichloroethane	1,1,2-Trichloro-1,2,2-trifluoroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichlorobenzene	1,2,4-Trimethylbenzene	1,2-Dichlorobenzene	1,3,5-Trimethylbenzene	4-Isopropyltoluene	Acetone	Benzene	Chloroethane	cis-1,2-Dichloroethene	Ethylbenzene	Isopropylbenzene	Methyl-tert-butyl ether (MTBE)	Naphthalene	n-Butylbenzene
Aquatic Habitat Goal Levels Saltwater Ecotox ESL [1]				3.1E+03	--	-	2.2E+04	--	--	6.5E+01	--	--	--	3.5E+02	-	2.2E+04	4.3E+01	--	8.0E+03	1.5E+01	--
Site Specific Screening Level [2]				3.1E+05	--	--	2.2E+06	--	--	6.5E+03	--	--	--	3.5E+04	--	2.2E+06	4.3E+03	--	8.0E+05	1.5E+03	--
Vapor Intrusion Human Health Risk Residential ESL [3]				1.5E+03	--	7.6E+00	6.6E+01	--	--	2.7E+03	--	--	2.3E+07	4.2E-01	2.3E+04	4.9E+01	3.5E+00	--	4.5E+02	4.6E+00	--
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
MW-17A	4	MW-17AW	12/18/2018	<0.20	<0.091	<0.11	<0.20	<0.21	<0.20	<0.21	<0.17	<0.20	<20	<0.25	<0.17	<0.076	<0.13	<0.20	<0.11	<0.22	<0.30
MW-17A (D)	4	MW-17A (D)W	12/18/2018	<0.20	<0.091	<0.11	<0.20	<0.21	<0.20	<0.21	<0.17	<0.20	<20	<0.25	<0.17	<0.076	<0.13	<0.20	<0.11	<0.22	<0.30
DG-AO11	5	DG-AO11W	1/31/2019	<0.25	<0.50	<0.25	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<10	<0.25	<0.40	<0.25	<0.25	<0.25	**1.5**	<0.40	<0.40
DG-AQ11	5	DG-AQ11W	1/31/2019	<0.25	<0.50	<0.25	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<10	<0.25	<0.40	<0.25	<0.25	<0.25	**0.36 J**	<0.40	<0.40
DG-AT9	5	DG-AT9W	1/31/2019	<0.25	<0.50	<0.25	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<10	<0.25	<0.40	<0.25	<0.25	<0.25	**2**	<0.40	<0.40
DG-AV9	5	DG-AV9W	2/1/2019	<0.25	<0.50	<0.25	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<10	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<0.40	<0.40
DG-AX5	5	DG-AX5W	12/20/2018	<0.25	<0.50	<0.25	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<10	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<0.40	<0.40
LF-7A	5	LF-7AW	12/19/2018	<0.20	<0.091	<0.11	<0.20	<0.21	<0.20	<0.21	<0.17	<0.20	<20	<0.25	<0.17	<0.076	<0.13	<0.20	**2**	<0.22	<0.30
MK-7A	5	MK-7AW	12/19/2018	<0.20	<0.091	<0.11	<0.20	<0.21	<0.20	<0.21	<0.17	<0.20	<20	<0.25	<0.17	<0.076	<0.13	<0.20	**1**	<0.22	<0.30
MK-8A	5	MK-8AW	12/19/2018	<0.20	<0.091	<0.11	<0.20	<0.21	<0.20	<0.21	<0.17	<0.20	<20	<0.25	<0.17	<0.076	<0.13	<0.20	<0.11	<0.22	<0.30
DG-AB17	6	DG-AB17W	1/25/2019	<0.25	<0.50	<0.25	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<10	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	**0.43 J**	<0.40
DG-AC15	6	DG-AC15W	2/1/2019	<0.25	<0.50	<0.25	<0.25	<0.40	**4**	<0.25	**1**	**0.40 J**	<10	**3.7**	<0.40	<0.25	**1.1**	**0.55**	<0.25	**11**	<0.40
DG-AD17	6	DG-AD17W	1/25/2019	<0.25	<0.50	<0.25	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	**20 U**	<0.25	<0.40	**0.34 J**	<0.25	<0.25	<0.25	**0.88 J**	<0.40
DG-AG15	6	DG-AG15W	1/24/2019	<0.25 R	<0.50 R	<0.25 R	<0.25 R	<0.40 R	<0.25 R	<0.25 R	<0.25 R	<0.25 R	<10 R	**4.6 J**	<0.40 R	<0.25 R	<0.25 R	**0.87 J**	<0.25 R	**0.69 J**	**1.1 J**
DG-AI15	6	DG-AI15W	1/25/2019	<0.25	<0.50	<0.25	<0.25	<0.40	**1.7**	<0.25	**0.44 J**	<0.25	**24 U**	**14**	<0.40	<0.25	**7.3**	**0.58**	**11**	**8.3**	<0.40
DG-AK15	6	DG-AK15W	1/24/2019	<0.25 R	<0.50 R	<0.25 R	<0.25 R	<0.40 R	**0.74 J**	<0.25 R	<0.25 R	<0.25 R	**20 U**	**4.6 J**	<0.40 R	<0.25 R	**0.74 J**	<0.25 R	<0.25 R	**45 J**	<0.40 R
DG-AM15	6	DG-AM15W	1/24/2019	<0.25	**1.1 J**	<0.25	<0.25	<0.40	<0.25	<0.25	<0.25	**4.5**	<10	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<0.40	<0.40
DG-AS11	6	DG-AS11W	1/31/2019	<0.25	<0.50	<0.25	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<10	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<0.40	<0.40
DG-AW11	6	DG-AW11W	1/24/2019	<0.25	<0.50	<0.25	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<10	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<0.40	<0.40
DG-AW11 (D)	6	DG-AW11 (D)W	1/24/2019	<0.25	<0.50	<0.25	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<10	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<0.40	<0.40
DG-N1	6	DG-N1W	12/18/2018	<0.25	<0.50	<0.25	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<10	<0.25	<0.40	<0.25	<0.25	<0.25	<0.25	<0.40	<0.40
MW-13A	6	MW-13AW	12/18/2018	<0.20	<0.091	<0.11	<0.20	<0.21	<0.20	<0.21	<0.17	<0.20	<20	<0.25	<0.17	<0.076	<0.13	**1**	<0.11	<0.22	<0.30

Table 9: Volatile Organic Compounds and Total Petroleum Hydrocarbon Concentrations as Gasoline in Fill Groundwater
Brisbane Baylands OU-2
Brisbane, California

Sample Location	Investigation Zone	Sample Name	Collection Date	n-Propylbenzene	sec-Butylbenzene	Styrene	Tetrachloroethene (PCE)	Toluene	trans-1,2-Dichloroethene	Trichloroethene (TCE)	Vinyl Chloride	Xylenes, Total	TPH-Gasoline (C4-C12)
Aquatic Habitat Goal Levels Saltwater Ecotox ESL [1]				--	--	--	2.3E+02	2.5E+03	2.2E+04	2.0E+02	-	1.0E+02	3.7E+03
Site Specific Screening Level [2]				--	--	--	2.3E+04	2.5E+05	2.2E+06	2.0E+04	--	1.0E+04	3.7E+05
Vapor Intrusion Human Health Risk Residential ESL [3]				--	--	8.5E+03	6.4E-01	1.2E+03	2.2E+02	1.2E+00	8.6E-03	3.9E+02	--
Units				µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
DG-AA3	1	DG-AA3W	12/18/2018	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.50	<35
DG-AA7	1	DG-AA7W	1/11/2019	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.50	<35
DG-AB5	1	DG-AB5W	1/31/2019	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.50	<35
DG-AB5 (D)	1	DG-AB5 (D)W	1/31/2019	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.50	<35
DG-AC3	1	DG-AC3W	12/19/2018	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.50	<35
DG-AC7	1	DG-AC7W	1/11/2019	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.50	<35
DG-AC7 (D)	1	DG-AC7 (D)W	1/11/2019	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.50	<35
DG-AD5	1	DG-AD5W	1/7/2019	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.50	<35
DG-AD9	1	DG-AD9W	1/11/2019	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.50	<35
DG-AE3	1	DG-AE3W	12/19/2018	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.50	<35
DG-AE7	1	DG-AE7W	1/11/2019	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.50	<35
DG-AF5	1	DG-AF5W	1/7/2019	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.50	<35
DG-AG3	1	DG-AG3W	12/19/2018	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.50	<35
DG-AG7	1	DG-AG7W	1/31/2019	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.50	<35
DG-N5	1	DG-N5W	1/10/2019	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.50	<35
DG-O3	1	DG-O3W	12/18/2018	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.50	<35
DG-P5	1	DG-P5W	1/10/2019	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.50	**50 U**
DG-Q7	1	DG-Q7W	1/10/2019	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.50	<35
DG-Q7 (D)	1	DG-Q7 (D)W	1/10/2019	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.50	**50 U**
DG-R1	1	DG-R1W	12/17/2018	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.50	<35
DG-R5	1	DG-R5W	1/30/2019	<0.25	<0.25	<0.25	<0.25	**0.35 J**	<0.25	<0.25	<0.25	<0.50	<35
DG-S3	1	DG-S3W	12/18/2018	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.50	<35
DG-S7	1	DG-S7W	1/10/2019	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.50	<35
DG-T1	1	DG-T1W	12/17/2018	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.50	<35
DG-T5	1	DG-T5W	1/7/2019	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.50	**790**
DG-U3	1	DG-U3W	12/18/2018	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	**0.77**	<0.25	<0.50	<35
DG-U3 (D)	1	DG-U3 (D)W	12/18/2018	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	**0.71**	<0.25	<0.50	<35
DG-U7	1	DG-U7W	1/10/2019	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.50	**50 U**
DG-V1	1	DG-V1W	12/17/2018	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.50	<35
DG-V5	1	DG-V5W	1/7/2019	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.50	<35
DG-V9	1	DG-V9W	1/14/2019	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.50	<35
DG-W3	1	DG-W3W	12/18/2018	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.50	<35

Table 9: Volatile Organic Compounds and Total Petroleum Hydrocarbon Concentrations as Gasoline in Fill Groundwater
Brisbane Baylands OU-2
Brisbane, California

Sample Location	Investigation Zone	Sample Name	Collection Date	n-Propylbenzene	sec-Butylbenzene	Styrene	Tetrachloroethene (PCE)	Toluene	trans-1,2-Dichloroethene	Trichloroethene (TCE)	Vinyl Chloride	Xylenes, Total	TPH-Gasoline (C4-C12)
Aquatic Habitat Goal Levels Saltwater Ecotox ESL [1]				--	--	--	2.3E+02	2.5E+03	2.2E+04	2.0E+02	-	1.0E+02	3.7E+03
Site Specific Screening Level [2]				--	--	--	2.3E+04	2.5E+05	2.2E+06	2.0E+04	--	1.0E+04	3.7E+05
Vapor Intrusion Human Health Risk Residential ESL [3]				--	--	8.5E+03	6.4E-01	1.2E+03	2.2E+02	1.2E+00	8.6E-03	3.9E+02	--
Units				µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
DG-W7	1	DG-W7W	1/30/2019	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.50	<35
DG-X1	1	DG-X1W	12/17/2018	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.50	<35
DG-X5	1	DG-X5W	1/7/2019	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.50	<35
DG-X9	1	DG-X9W	1/14/2019	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.50	<35
DG-Y3	1	DG-Y3W	12/18/2018	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.50	<35
DG-Y7	1	DG-Y7W	1/11/2019	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.50	<35
DG-Z5	1	DG-Z5W	1/7/2019	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.50	<35
DG-Z9	1	DG-Z9W	1/15/2019	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.50	<35
KMW-4A	1	KMW-4AW	12/18/2018	<0.20	<0.17	<0.22	<0.20	<0.17	<0.13	<0.20	<0.20	<0.40	<21
MW-11AR	1	MW-11ARW	12/18/2018	<0.20	<0.17	<0.22	<0.20	<0.17	<0.13	<0.20	<0.20	<0.40	<21
DG-AH5	2	DG-AH5W	1/7/2019	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.50	<35
DG-AI3	2	DG-AI3W	12/19/2018	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.50	<35
DG-AI3 (D)	2	DG-AI3 (D)W	12/19/2018	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.50	<35
DG-AI7	2	DG-AI7W	1/11/2019	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.50	<35
DG-AJ5	2	DG-AJ5W	1/7/2019	<0.25 R	<0.25 R	<0.25 R	<0.25 R	<0.25 R	<0.25 R	<0.25 R	<0.25 R	<0.50 R	<35 UJ
DG-AK3	2	DG-AK3W	12/19/2018	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.50	<35
DG-AK7	2	DG-AK7W	1/11/2019	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.50	<35
DG-AK7 (D)	2	DG-AK7 (D)W	1/11/2019	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.50	<35
DG-AL5	2	DG-AL5W	1/31/2019	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.50	<35
DG-AL9	2	DG-AL9W	1/22/2019	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.50	<35
DG-AM3	2	DG-AM3W	12/19/2018	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.50	<35
DG-AM7	2	DG-AM7W	1/11/2019	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.50	<35
DG-AN5	2	DG-AN5W	12/20/2018	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.50	<35
DG-AN9	2	DG-AN9W	1/21/2019	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.50	<35
DG-AO3	2	DG-AO3W	12/19/2018	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.50	<35
DG-AO7	2	DG-AO7W	1/11/2019	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.50	<35
DG-AP5	2	DG-AP5W	12/20/2018	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.50	<35
DG-AP9	2	DG-AP9W	1/21/2019	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.50	<35
DG-AQ3	2	DG-AQ3W	12/19/2018	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.50	<35
DG-AQ7	2	DG-AQ7W	1/31/2019	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.50	<35
DG-AR5	2	DG-AR5W	12/20/2018	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.50	<35
DG-AR9	2	DG-AR9W	1/11/2019	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.50	<35

Table 9: Volatile Organic Compounds and Total Petroleum Hydrocarbon Concentrations as Gasoline in Fill Groundwater
Brisbane Baylands OU-2
Brisbane, California

Sample Location	Investigation Zone	Sample Name	Collection Date	n-Propylbenzene	sec-Butylbenzene	Styrene	Tetrachloroethene (PCE)	Toluene	trans-1,2-Dichloroethene	Trichloroethene (TCE)	Vinyl Chloride	Xylenes, Total	TPH-Gasoline (C4-C12)
Aquatic Habitat Goal Levels Saltwater Ecotox ESL [1]				--	--	--	2.3E+02	2.5E+03	2.2E+04	2.0E+02	-	1.0E+02	3.7E+03
Site Specific Screening Level [2]				--	--	--	2.3E+04	2.5E+05	2.2E+06	2.0E+04	--	1.0E+04	3.7E+05
Vapor Intrusion Human Health Risk Residential ESL [3]				--	--	8.5E+03	6.4E-01	1.2E+03	2.2E+02	1.2E+00	8.6E-03	3.9E+02	--
Units				µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
DG-AR9 (D)	2	DG-AR9 (D)W	1/11/2019	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.50	<35
DG-AS3	2	DG-AS3W	12/20/2018	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.50	<35
DG-AS3 (D)	2	DG-AS3 (D)W	12/20/2018	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.50	<35
DG-AS7	2	DG-AS7W	1/11/2019	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.50	<35
DG-AT5	2	DG-AT5W	12/20/2018	<0.25 R	<0.25 R	<0.25 R	<0.25 R	<0.25 R	<0.25 R	<0.25 R	<0.25 R	<0.50 R	<35 R
DG-AU3	2	DG-AU3W	12/20/2018	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.50	<35
DG-AU7	2	DG-AU7W	1/11/2019	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.50	<35
DG-AU7 (D)	2	DG-AU7 (D)W	1/11/2019	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.50	<35
DG-AV5	2	DG-AV5W	12/20/2018	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.50	<35
DG-AW3	2	DG-AW3W	1/31/2019	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.50	<35
DG-AY3	2	DG-AY3W	2/1/2019	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.50	<35
KMW-7A	2	KMW-7AW	12/19/2018	<0.20	<0.17	<0.22	<0.20	<0.17	<0.13	<0.20	<0.20	<0.40	<21
LF-5A	2	LF-5AW	12/19/2018	<0.20	<0.17	<0.22	<0.20	<0.17	<0.13	<0.20	<0.20	<0.40	<21
MW-10A	2	MW-10AW	12/19/2018	<0.20	<0.17	<0.22	<0.20	<0.17	<0.13	<0.20	<0.20	<0.40	<21
DG-N13	3	DG-N13W	1/11/2019	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.50	<35
DG-N13 (D)	3	DG-N13 (D)W	1/11/2019	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.50	<35
DG-N9	3	DG-N9W	1/14/2019	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.50	<35
DG-O11	3	DG-O11W	1/14/2019	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.50	<35
DG-O15	3	DG-O15W	1/11/2019	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.50	<35
DG-O7	3	DG-O7W	1/10/2019	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.50	**50 U**
DG-P13	3	DG-P13W	1/11/2019	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.50	<35
DG-Q11	3	DG-Q11W	1/15/2019	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.50	<35
DG-Q11 (D)	3	DG-Q11 (D)W	1/15/2019	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.50	<35
DG-Q15	3	DG-Q15W	1/11/2019	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.50	**35 J**
DG-R13	3	DG-R13W	1/29/2019	<0.25	<0.25	<0.25	<0.25	**0.34 J**	<0.25	**0.92**	<0.25	<0.50	<35
DG-R9	3	DG-R9W	1/25/2019	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.50	<35
DG-S11	3	DG-S11W	1/15/2019	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.50	<35
DG-S15	3	DG-S15W	1/11/2019	<0.25	<0.25	<0.25	**0.72**	<0.25	<0.25	**0.55**	<0.25	<0.50	<35 UJ
DG-S15 (D)	3	DG-S15 (D)W	1/11/2019	<0.25	<0.25	<0.25	**0.66**	<0.25	<0.25	**0.56**	<0.25	<0.50	**37 J**
DG-T13	3	DG-T13W	1/15/2019	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.50	<35
DG-T17	3	DG-T17W	1/31/2019	<0.25	<0.25	<0.25	<0.25	**0.62**	<0.25	<0.25	<0.25	<0.50	<35
DG-T9	3	DG-T9W	1/14/2019	<0.25 R	<0.25 R	<0.25 R	<0.25 R	<0.25 R	<0.25 R	<0.25 R	<0.25 R	<0.50 R	<35 R

Table 9: Volatile Organic Compounds and Total Petroleum Hydrocarbon Concentrations as Gasoline in Fill Groundwater
Brisbane Baylands OU-2
Brisbane, California

Sample Location	Investigation Zone	Sample Name	Collection Date	n-Propylbenzene	sec-Butylbenzene	Styrene	Tetrachloroethene (PCE)	Toluene	trans-1,2-Dichloroethene	Trichloroethene (TCE)	Vinyl Chloride	Xylenes, Total	TPH-Gasoline (C4-C12)
Aquatic Habitat Goal Levels Saltwater Ecotox ESL [1]				--	--	--	2.3E+02	2.5E+03	2.2E+04	2.0E+02	-	1.0E+02	3.7E+03
Site Specific Screening Level [2]				--	--	--	2.3E+04	2.5E+05	2.2E+06	2.0E+04	--	1.0E+04	3.7E+05
Vapor Intrusion Human Health Risk Residential ESL [3]				--	--	8.5E+03	6.4E-01	1.2E+03	2.2E+02	1.2E+00	8.6E-03	3.9E+02	--
Units				µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
DG-U11	3	DG-U11W	1/15/2019	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.50	<35
DG-U15	3	DG-U15W	1/28/2019	<0.25	<0.25	<0.25	<0.25	**0.78**	<0.25	<0.25	<0.25	<0.50	**36 J**
DG-V13	3	DG-V13W	1/15/2019	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.50	<35
DG-V17	3	DG-V17W	1/28/2019	<0.25	<0.25	<0.25	<0.25	**0.46 J**	<0.25	<0.25	<0.25	<0.50	<35
LF-3A	3	LF-3AW	12/18/2018	<0.20	<0.17	<0.22	<0.20	<0.17	<0.13	<0.20	<0.20	<0.40	<21
LF-3A (D)	3	LF-3A (D)W	12/18/2018	<0.20	<0.17	<0.22	<0.20	<0.17	<0.13	<0.20	<0.20	<0.40	<21
MW-9A	3	MW-9AW	12/18/2018	<0.20	<0.17	<0.22	<0.20	<0.17	<0.13	<0.20	<0.20	<0.40	<21
DG-AA11	4	DG-AA11W	1/30/2019	**0.25 J**	**0.68**	<0.25	<0.25	<0.25	<0.25	<0.25	**0.44 J**	<0.50	**2,300**
DG-AA15	4	DG-AA15W	1/25/2019	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	**0.34 J**	**1.3**	<0.50	<35
DG-AA19	4	DG-AA19W	1/25/2019	<0.25 UJ	<0.25 UJ	<0.25 UJ	<0.25 UJ	<0.25 UJ	<0.25 UJ	<0.25 UJ	<0.25 UJ	<0.50 UJ	**1,600 J**
DG-AB13	4	DG-AB13W	1/25/2019	<0.25 UJ	<0.25 UJ	<0.25 UJ	<0.25 UJ	<0.25 UJ	<0.25 UJ	<0.25 UJ	<0.25 UJ	<0.50 UJ	<35
DG-AB13 (D)	4	DG-AB13 (D)W	1/25/2019	<0.25 UJ	<0.25 UJ	<0.25 UJ	<0.25 UJ	<0.25 UJ	<0.25 UJ	<0.25 UJ	<0.25 UJ	<0.50 UJ	<35
DG-AD13	4	DG-AD13W	2/1/2019	**0.78 J**	<0.25	**0.36 J**	<0.25	**15 J**	<0.25	<0.25	<0.25	**14**	**290 J**
DG-AD13 (D)	4	DG-AD13 (D)W	2/1/2019	**0.47 J**	<0.25	<0.25 UJ	<0.25	**11 J**	<0.25	<0.25	<0.25	**11**	**190 J**
DG-AE11	4	DG-AE11W	1/22/2019	**1.2**	**0.28 J**	<0.25	<0.25	**0.35 J**	<0.25	<0.25	<0.25	**0.59 J**	**190 J+**
DG-AG11	4	DG-AG11W	1/22/2019	**1.3**	**0.49 J**	<0.25	<0.25	**0.39 J**	<0.25	<0.25	<0.25	**0.69 J**	**390**
DG-AH13	4	DG-AH13W	1/29/2019	**1.7**	**0.5**	<0.25	<0.25	**0.72**	<0.25	<0.25	<0.25	**1.1**	**100**
DG-AJ13	4	DG-AJ13W	1/29/2019	<0.25	<0.25	<0.25	<0.25	**0.29 J**	<0.25	<0.25	<0.25	<0.50	<35
DG-AK11	4	DG-AK11W	1/29/2019	**0.35 J**	<0.25	<0.25	<0.25	**0.53**	<0.25	<0.25	<0.25	**1.5**	**87**
DG-AL13	4	DG-AL13W	1/29/2019	<0.25	<0.25	<0.25	<0.25	**0.31 J**	<0.25	<0.25	<0.25	<0.50	<35
DG-AN13	4	DG-AN13W	2/1/2019	<0.25	<0.25	<0.25	<0.25	**0.37 J**	<0.25	<0.25	<0.25	<0.50	<35
DG-W11	4	DG-W11W	1/30/2019	<0.25 R	<0.25 R	<0.25 R	<0.25 R	<0.25 R	<0.25 R	<0.25 R	<0.25 R	<0.50 R	<35 R
DG-W15	4	DG-W15W	1/29/2019	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.50	<35
DG-X13	4	DG-X13W	1/25/2019	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.50	<35
DG-X17	4	DG-X17W	1/28/2019	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.50	**67**
DG-Y11	4	DG-Y11W	1/22/2019	<0.25	**0.49 J**	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.50	**1,200**
DG-Y15	4	DG-Y15W	2/1/2019	<0.25	<0.25	<0.25	**0.97**	<0.25	**0.6**	**6.1**	**9.7**	<0.50	**290**
DG-Y19	4	DG-Y19W	1/28/2019	<0.25	<0.25	<0.25	<0.25	**0.26 J**	<0.25	<0.25	<0.25	<0.50	<35
DG-Z17	4	DG-Z17W	1/28/2019	<0.25	<0.25	<0.25	<0.25	**0.32 J**	<0.25	<0.25	<0.25	<0.50	**95**
LF-4A	4	LF-4AW	12/18/2018	<0.20	<0.17	<0.22	<0.20	<0.17	<0.13	<0.20	<0.20	<0.40	<21
LF-8A	4	LF-8AW	12/19/2018	<0.20	<0.17	<0.22	<0.20	<0.17	<0.13	<0.20	<0.20	<0.40	<21
MW-15A	4	MW-15AW	12/18/2018	<0.20	<0.17	<0.22	<0.20	<0.17	<0.13	<0.20	<0.20	<0.40	<21

Table 9: Volatile Organic Compounds and Total Petroleum Hydrocarbon Concentrations as Gasoline in Fill Groundwater
Brisbane Baylands OU-2
Brisbane, California

Sample Location	Investigation Zone	Sample Name	Collection Date	n-Propylbenzene	sec-Butylbenzene	Styrene	Tetrachloroethene (PCE)	Toluene	trans-1,2-Dichloroethene	Trichloroethene (TCE)	Vinyl Chloride	Xylenes, Total	TPH-Gasoline (C4-C12)
Aquatic Habitat Goal Levels Saltwater Ecotox ESL [1]				--	--	--	2.3E+02	2.5E+03	2.2E+04	2.0E+02	-	1.0E+02	3.7E+03
Site Specific Screening Level [2]				--	--	--	2.3E+04	2.5E+05	2.2E+06	2.0E+04	--	1.0E+04	3.7E+05
Vapor Intrusion Human Health Risk Residential ESL [3]				--	--	8.5E+03	6.4E-01	1.2E+03	2.2E+02	1.2E+00	8.6E-03	3.9E+02	--
Units				µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MW-17A	4	MW-17AW	12/18/2018	<0.20	<0.17	<0.22	<0.20	<0.17	<0.13	<0.20	<0.20	<0.40	<21
MW-17A (D)	4	MW-17A (D)W	12/18/2018	<0.20	<0.17	<0.22	<0.20	<0.17	<0.13	<0.20	<0.20	<0.40	<21
DG-AO11	5	DG-AO11W	1/31/2019	<0.25	<0.25	<0.25	<0.25	**0.88**	<0.25	<0.25	<0.25	**0.57 J**	<35
DG-AQ11	5	DG-AQ11W	1/31/2019	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.50	<35
DG-AT9	5	DG-AT9W	1/31/2019	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.50	<35
DG-AV9	5	DG-AV9W	2/1/2019	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.50	<35
DG-AX5	5	DG-AX5W	12/20/2018	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.50	<35
LF-7A	5	LF-7AW	12/19/2018	<0.20	<0.17	<0.22	<0.20	<0.17	<0.13	<0.20	<0.20	<0.40	<21
MK-7A	5	MK-7AW	12/19/2018	<0.20	<0.17	<0.22	<0.20	<0.17	<0.13	<0.20	<0.20	<0.40	<21
MK-8A	5	MK-8AW	12/19/2018	<0.20	<0.17	<0.22	**0.98**	<0.17	<0.13	<0.20	<0.20	<0.40	<21
DG-AB17	6	DG-AB17W	1/25/2019	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.50	**700**
DG-AC15	6	DG-AC15W	2/1/2019	**0.48 J**	<0.25	<0.25	<0.25	**1.2**	<0.25	<0.25	<0.25	**7.7**	**120**
DG-AD17	6	DG-AD17W	1/25/2019	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.50	<35
DG-AG15	6	DG-AG15W	1/24/2019	**1.7 J**	<0.25 R	<0.25 R	<0.25 R	<0.25 R	<0.25 R	<0.25 R	<0.25 R	<0.50 R	**160 J**
DG-AI15	6	DG-AI15W	1/25/2019	**1.6**	<0.25	<0.25	<0.25	**3.4**	<0.25	<0.25	<0.25	**16**	**260**
DG-AK15	6	DG-AK15W	1/24/2019	**0.41 J**	<0.25 R	<0.25 R	<0.25 R	**0.93 J**	<0.25 R	<0.25 R	<0.25 R	**2.4 J**	**170 J**
DG-AM15	6	DG-AM15W	1/24/2019	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.50	**150**
DG-AS11	6	DG-AS11W	1/31/2019	<0.25	<0.25	<0.25	<0.25	**0.26 J**	<0.25	<0.25	<0.25	<0.50	<35
DG-AW11	6	DG-AW11W	1/24/2019	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.50	**79 J**
DG-AW11 (D)	6	DG-AW11 (D)W	1/24/2019	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.50	<35 UJ
DG-N1	6	DG-N1W	12/18/2018	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.50	<35
MW-13A	6	MW-13AW	12/18/2018	<0.20	<0.17	<0.22	<0.20	<0.17	<0.13	<0.20	<0.20	<0.40	<21

Table 9: Volatile Organic Compounds and Total Petroleum Hydrocarbon Concentrations as Gasoline in Fill Groundwater
Brisbane Baylands OU-2
Brisbane, California

Notes:

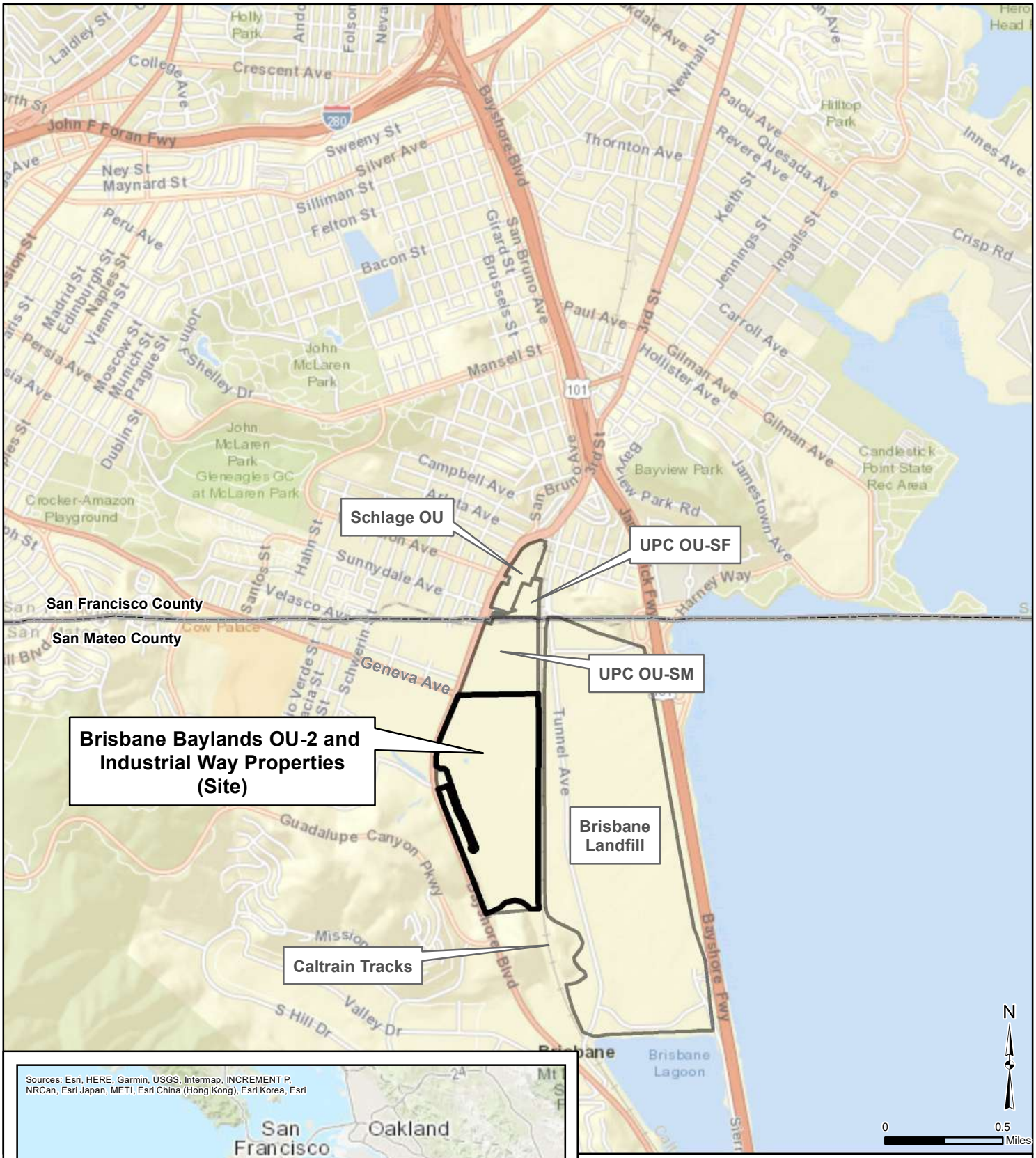
1. San Francisco Bay RWQCB, 2019. Summary of Groundwater ESLs, Jan. 2019 (Rev. 1) - Aquatic Habitat Goal Levels (Table GW-2): Saltwater Ecotoxicity.
2. Site specific screening level is the saltwater ecotoxicity ESL with a 100-fold attenuation factor.
3. San Francisco Bay RWQCB, 2019. Summary of Groundwater ESLs, Jan. 2019 (Rev. 1) - Groundwater Vapor Intrusion Human Health Risk Levels (Table GW-3): Residential.

- The lower of the site specific ecotoxicity screening level and the vapor intrusion screening level was used as comparison criteria.
- VOCs and TPH-gasoline were analyzed by USEPA Method 8260B.
- TPH-diesel and motor oil were analyzed by USEPA Method 8015B.
- Only analytes with detections are included in this table.
- Non-detect results are presented with "<" followed by the MDL.
- Results in bold font indicate a detection above the MDL.
- Gray shading indicates a detection above the comparison criteria.

Abbreviations and Symbols:

"J" - Analyte was detected but the associated numerical value is the approximate concentration.
"J+" - Analyte was detected but the associated numerical value is likely to be higher than the concentration of the analyte in the sample due to positive bias of associated QC or calibration data or attributable to matrix interference.
"J-" - Analyte was detected but the associated numerical value is likely to be lower than the concentration of the analyte in the sample due to negative bias of associated QC or calibration data or attributable to matrix interference.
"R" - The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.
"U" - Not detected at or above the reported result.
"UJ" - The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
"--" - Not Available
"<" - Non-detect result
(D) - Duplicate sample
µg/L - microgram per liter
ESL - Environmental Screening Level
MDL - Method Detection Limit
QC - quality control
RWQCB - Regional Water Quality Control Board
TPH - Total petroleum hydrocarbons
USEPA - United States Environmental Protection Agency
VOCs - volatile organic compounds

FIGURES



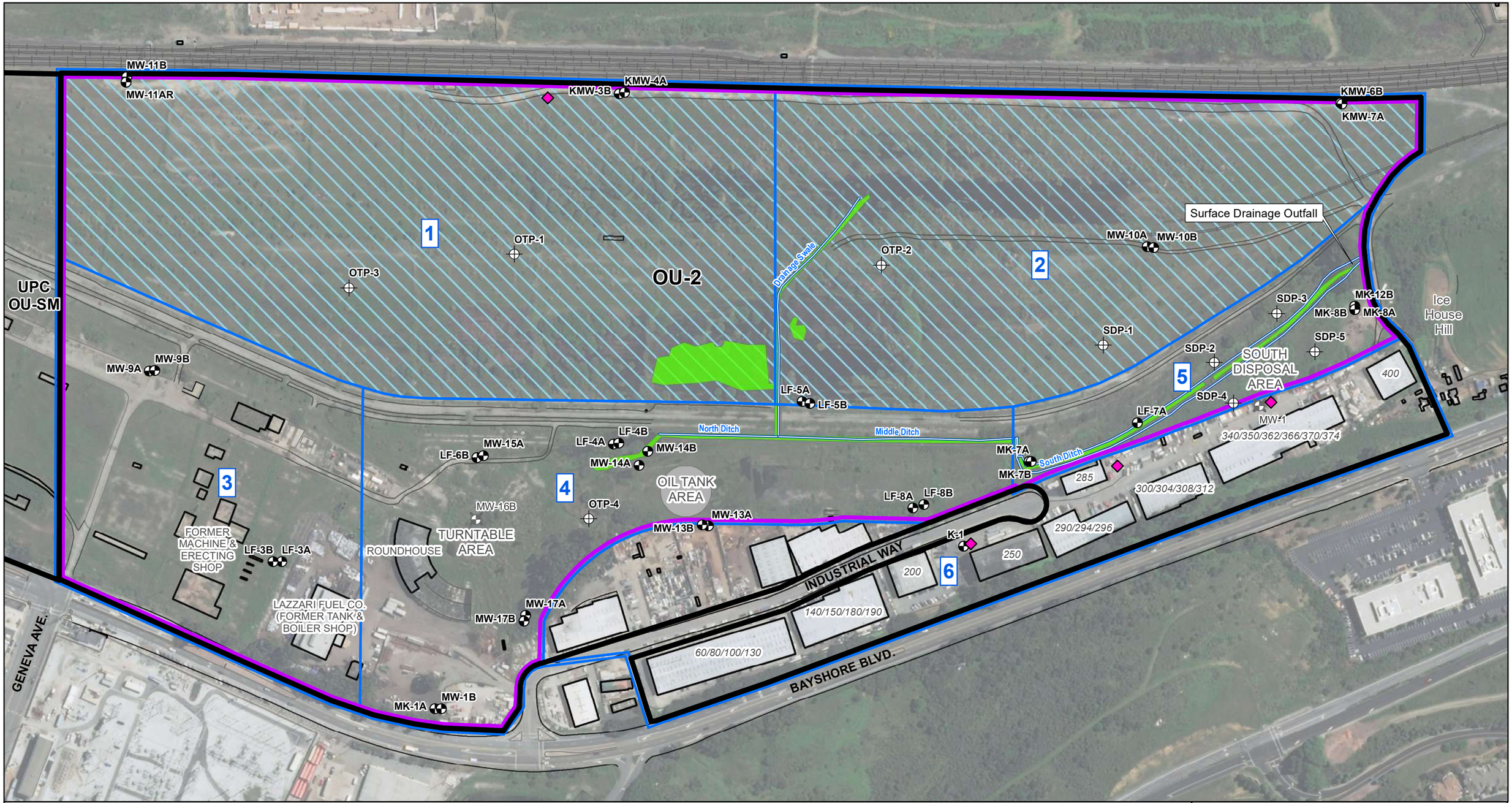
Site Location Map

Brisbane Baylands OU-2
Brisbane, California

Geosyntec consultants

WG2619	February 2020	Figure 1

\\Oakland-01\data\GIS\UPC\Brisbane\Project\2019_OU2_DGI\Fig01_SiteLocation_OU2.mxd 8/23/2019 5:46:51 PM



Legend

- Groundwater Monitoring Well
- Destroyed Groundwater Monitoring Well
- Piezometer Location
- Former UST Location
- Switching Yard
- Site Boundary
- OU2 Boundary
- Sampling Zone
- Railroad Tracks
- Current/Former Building Footprint

Industrial Way Properties
200 - historical address

- Drainage Ditch
- Wetlands (B&M, 2004)
- Approximate Former Oil Tank Location

Notes:
- All locations are approximate
- Basemap Source: Burns & McDonnell, 2006.
- Aerial Image Source: DigitalGlobe, 2017.

N

0 260 Feet

Site Plan and Well Locations

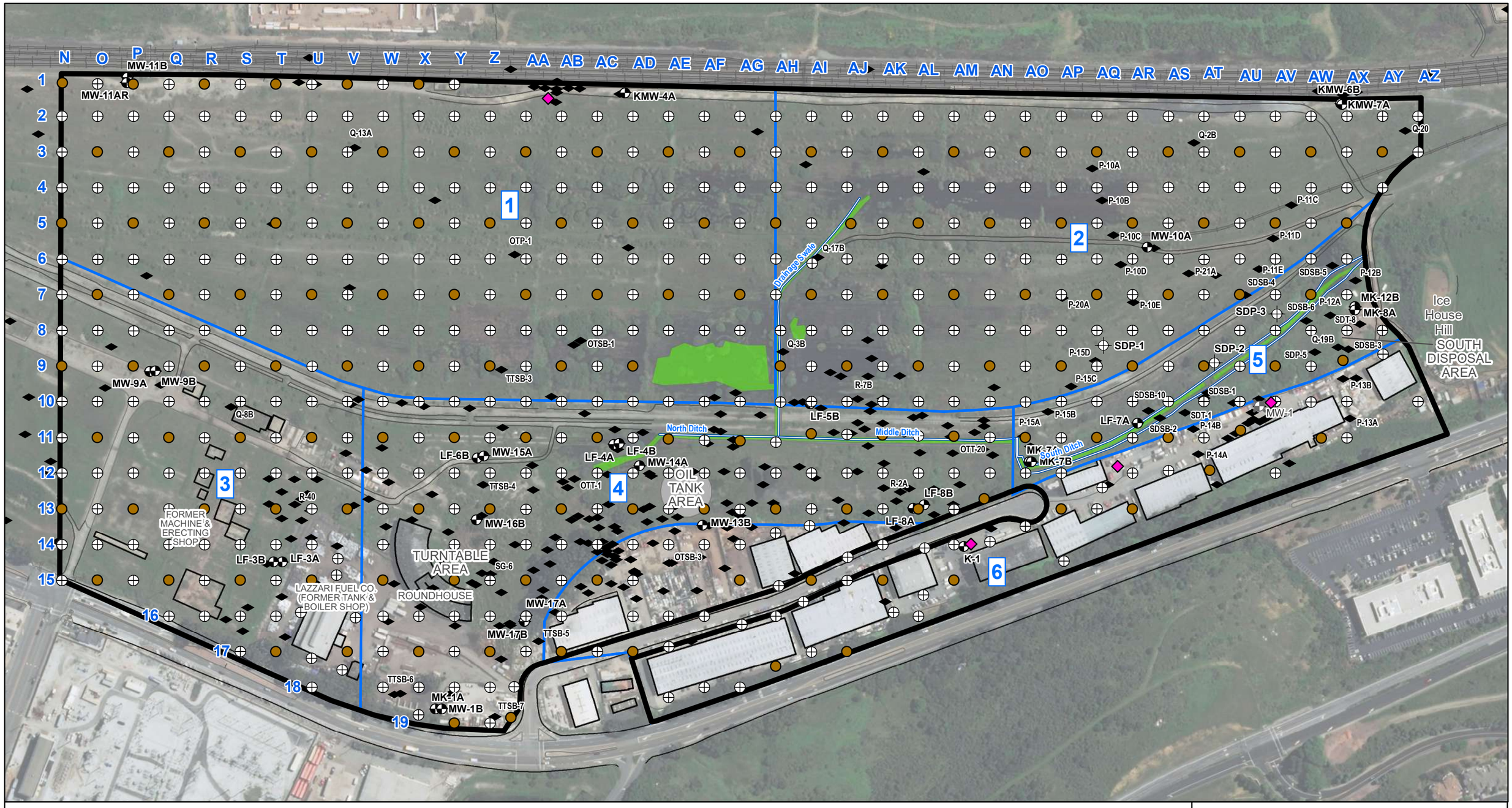
Brisbane Baylands OU-2
Brisbane, California

Geosyntec consultants

WG2619 | February 2020

Figure 2

\\Oakland-01\data\GIS\UPC\Brisbane\Project\2019_OU2_RAP\Fig02_SitePlanWellLocsV2.mxd 8/10/2020 2:26:44 PM



Legend

Sample Location and Soil Analyses
- Metals
- Metals, VOCs, SVOCs, PCBs, OCPs, TPH, Asbestos
- Historical Sample Location
- Groundwater Monitoring Well
- Destroyed Groundwater Monitoring Well
- Piezometer Location
- Former UST Location
- Drainage Ditch
- Sampling Zone
- Wetlands (B&M, 2004)
- Approximate Former Oil Tank Location
- Site Boundary
- Railroad Tracks
- Current/Former Building Footprint

Notes:
OCPs = organochlorine pesticides
PCBs = polychlorinated biphenyls
TPH = total petroleum hydrocarbons
SVOCs = semivolatile organic compounds
VOCs = volatile organic compounds
All locations are approximate.

N

0 260 Feet

Soil Sample Locations

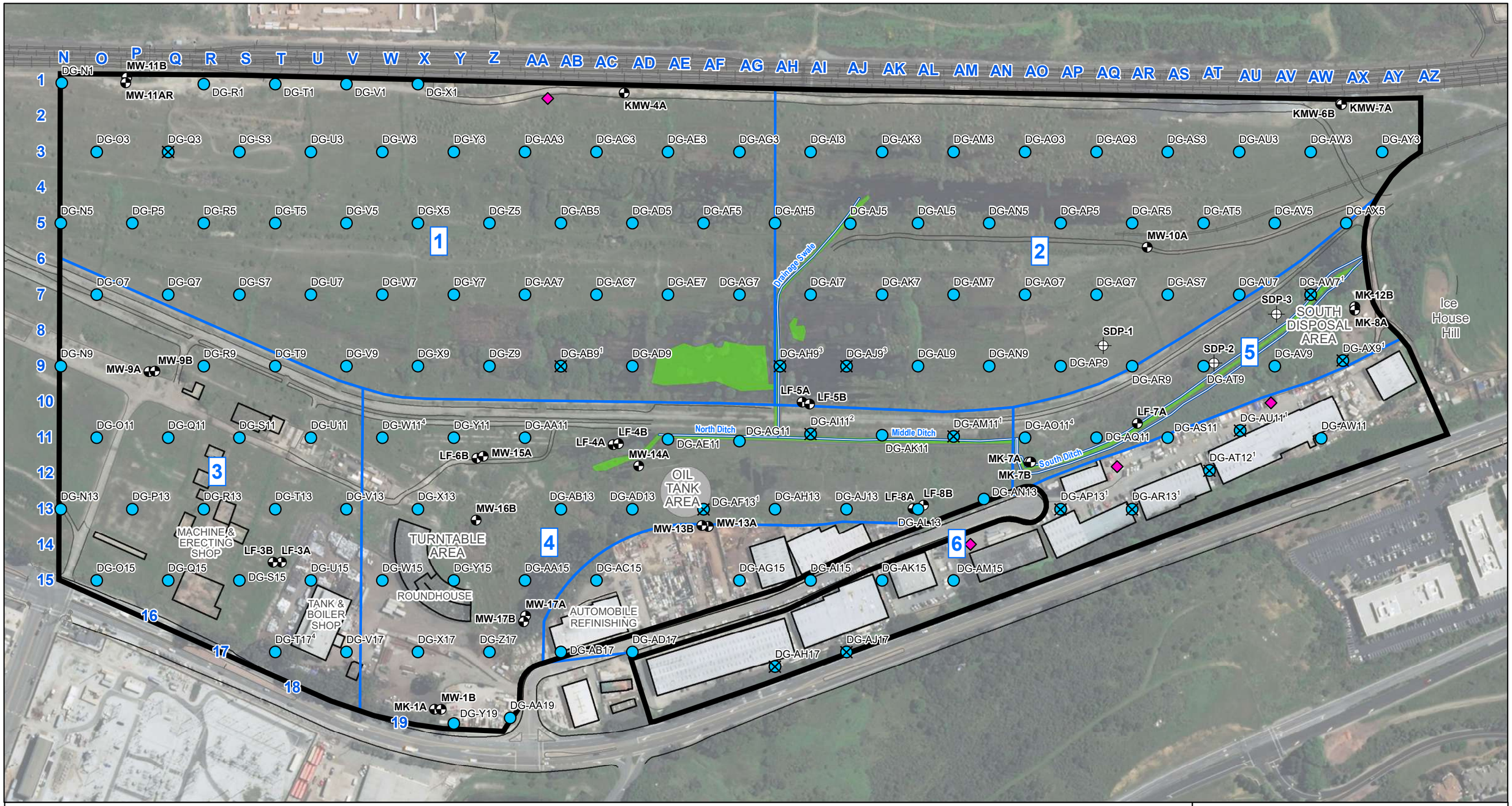
Brisbane Baylands OU-2
Brisbane, California

Geosyntec consultants

WG2619 | February 2020

Figure 3

\\Oakland-01\data\GIS\UPC\Brisbane\Project\2019_OU2_RAP\Fig05_SoilSampleLocations.mxd 5/6/2020 3:30:33 PM



Legend

- Grab Groundwater Sample Location
- Sample Planned, Could Not Be Collected
- Monitoring Well Location
- Piezometer Location
- Former UST Location
- Drainage Ditch
- Sampling Zone
- Wetlands (B&M, 2004)
- Approximate Former Oil Tank Location
- Site Boundary
- Railroad Tracks
- Current/Former Building Footprint

Notes:
[1] Borehole was dry or well had no to low recharge. A sample could not be collected.
[2] Tar found in well.
[3] Location in standing water, unable to collect groundwater sample.
[4] Only sampled for VOCs due to low recharge.
VOCs = volatile organic compounds
All locations are approximate.

N

0 260 Feet

Groundwater Sample Locations

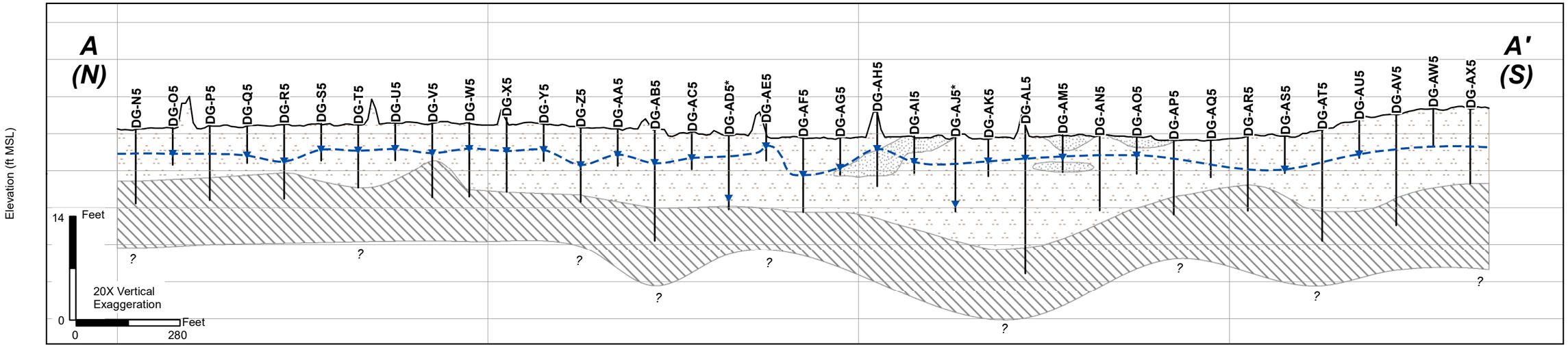
Brisbane Baylands OU-2
Brisbane, California

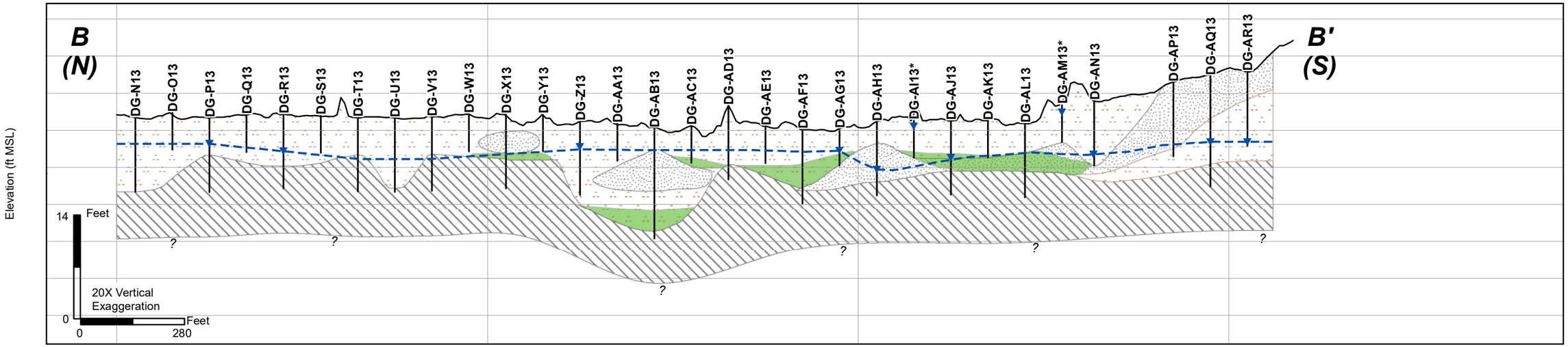
Geosyntec consultants

WG2619 | February 2020

Figure 4

\\Oakland-01\data\GIS\UPC\Brisbane\Project\2019_OU2_DGI\Fig04_GWSampleLocations.mxd 8/10/2020 2:39:17 PM

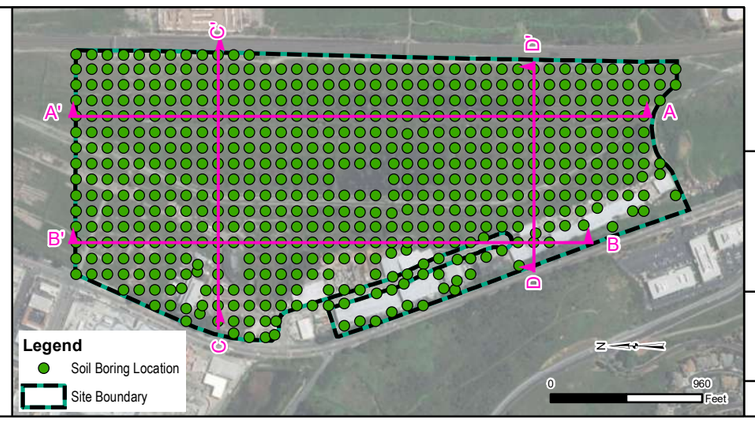




Legend

- Clay and/or Silt (Young Bay Mud)
- Coarse-Grained Fill
- Fine-Grained Fill
- Separate-Phase Hydrocarbons Observed
- Interpreted Water Table
- Ground Surface (NAVD88)

Notes:
* Water level may be anomalous due to drainage from coarse-grained material or stormwater infiltration during sampling.
ft = feet
ft MSL = feet above Mean Sea Level
NAVD88 = North American Vertical Datum of 1988



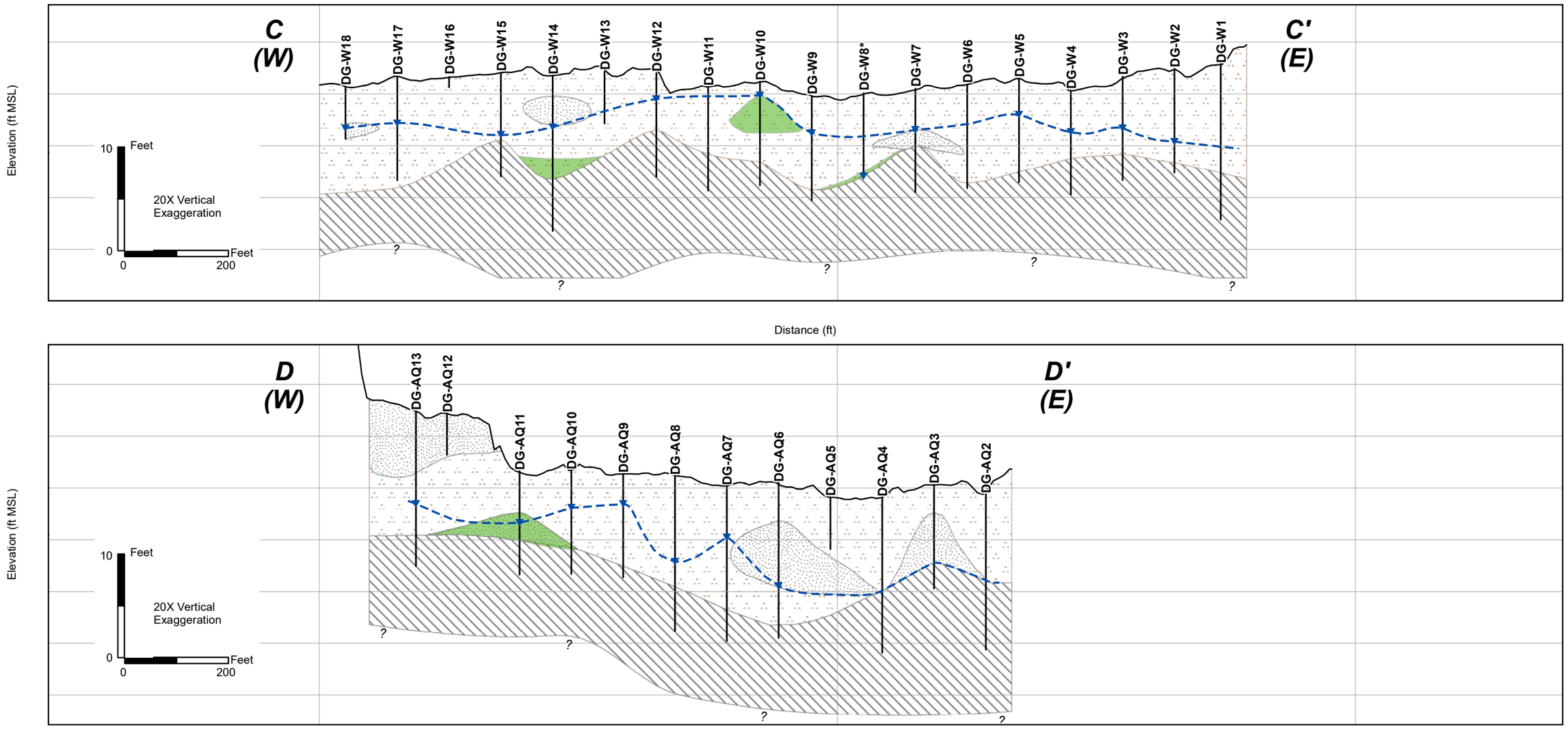
Geologic Cross-Sections A-A' and B-B'
Brisbane Baylands OU-2
Brisbane, California

Geosyntec consultants

WG2619 | February 2020

Figure 5a

\\Oakland-01\data\GIS\UPC\Brisbane\Project\2019_OU2_DGI\Fig5a_CrossSectionsA_B.mxd



Legend

- Clay and/or Silt (Young Bay Mud)
- Coarse-Grained Fill
- Fine-Grained Fill
- Separate-Phase Hydrocarbons Observed
- Interpreted Water Table
- Ground Surface (NAVD88)

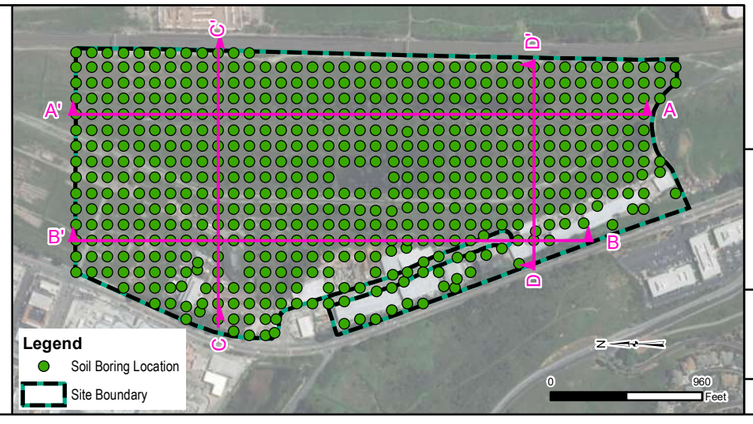
Notes:

* Water level may be anomalous due to drainage from coarse-grained material or stormwater infiltration during sampling

ft = feet

ft MSL = feet above Mean Sea Level

NAVD88 = North American Vertical Datum of 1988



Geologic Cross-Sections C-C' and D-D'

Brisbane Baylands OU-2

Brisbane, California

Geosyntec consultants

WG2619 | February 2020

Figure 5b

\\Oakland-01\data\GIS\UPC\Brisbane\Project\2019_OU2_DGI\Fig5b_CrossSectionsC_D.mxd



Legend

Sample Location and Soil Analyses
- Metals
- Metals, VOCs, SVOCs, PCBs, OCPs, TPH, Asbestos
- Visible Free Product
- Immobile Product Observed (likely Bunker C or similar heavy fuel oil)
- Sheen/Luster Observed
- Piezometer Location

- Groundwater Monitoring Well
- Destroyed Groundwater Monitoring Well
- Former UST Location
- Drainage Ditch
- Sampling Zone
- Wetlands (B&M, 2004)
- Approximate Former Oil Tank Location

- Site Boundary
- Railroad Tracks
- Current/Former Building Footprint

Previously Identified Impacted Areas
- HVOC-Impacted Area (B&M, 2007)

Bunker-Impacted Area (B&M, 2002)
- 50,000 mg/kg TPH
- 100 mg/kg TPH

Notes:
OCPs = organochlorine pesticides
PCBs = polychlorinated biphenyls
TPH = total petroleum hydrocarbons
HVOC = halogenated volatile organic compound
SVOCs = semivolatile organic compounds
VOCs = volatile organic compounds
All locations are approximate.

N

0 260 Feet

Residual Petroleum Products

Brisbane Baylands OU-2
Brisbane, California

Geosyntec consultants

WG2619 | February 2020

Figure 6

\\Oakland-01\data\GIS\UPC\Brisbane\Project\2019_OU2_DGI\Fig06_ResidualPetroleum.mxd 8/10/2020 2:44:43 PM



Legend

- Sample Location, exceeds screening level at shallow depth (0.5-1 or 1-1.5 ft bgs)
- Sample Location, exceeds screening level at intermediate depth (3.5-4 ft bgs)
- Sample Location, exceeds screening level at deep depth (depth varies)

Arsenic concentrations shown in Table 2.

- Sample Location, does not exceed screening level at shallow depth (0.5-1 or 1-1.5 ft bgs)
- Sample Location, does not exceed screening level at intermediate depth (3.5-4 ft bgs)
- Sample Location, does not exceed screening level at deep depth (depth varies)

- Groundwater Monitoring Well
- Destroyed Groundwater Monitoring Well
- Former UST Location
- Drainage Ditch
- Sampling Zone
- Wetlands (B&M, 2004)
- Approximate Former Oil Tank Location
- Site Boundary
- Railroad Tracks
- Current/Former Building Footprint

N

0 260 Feet

Notes:
mg/kg = milligrams per kilogram
ft bgs = feet below ground surface
Arsenic screening level in soil = 19 mg/kg
All locations are approximate.
Well IDs not included due to space limitation; refer to Figure 2.

Arsenic Concentrations in Soil

Brisbane Baylands OU-2
Brisbane, California

Geosyntec consultants

WG2619 | February 2020

Figure 7

\\Oakland-01\data\GIS\UPC\Brisbane\Project\2019_OU2_RAP\Fig06_Arsenic_SO.mxd 8/10/2020 2:53:27 PM



Legend

- Sample Location, exceeds screening level at shallow depth (0.5-1 or 1-1.5 ft bgs)
- Sample Location, exceeds screening level at intermediate depth (3.5-4 ft bgs)
- Sample Location, exceeds screening level at deep depth (depth varies)
- Sample Location, does not exceed screening level at shallow depth (0.5-1 or 1-1.5 ft bgs)
- Sample Location, does not exceed screening level at intermediate depth (3.5-4 ft bgs)
- Sample Location, does not exceed screening level at deep depth (depth varies)

Lead concentrations shown in Table 2.

- Groundwater Monitoring Well
- Destroyed Groundwater Monitoring Well
- Former UST Location
- Drainage Ditch
- Sampling Zone
- Wetlands (B&M, 2004)
- Approximate Former Oil Tank Location
- Site Boundary
- Railroad Tracks
- Current/Former Building Footprint

N

0 260 Feet

Notes:
mg/kg = milligrams per kilogram
ft bgs = feet below ground surface.
Lead screening level in soil = 80 mg/kg
All locations are approximate.
Well IDs not included due to space limitation; refer to Figure 2.

Lead Concentrations in Soil

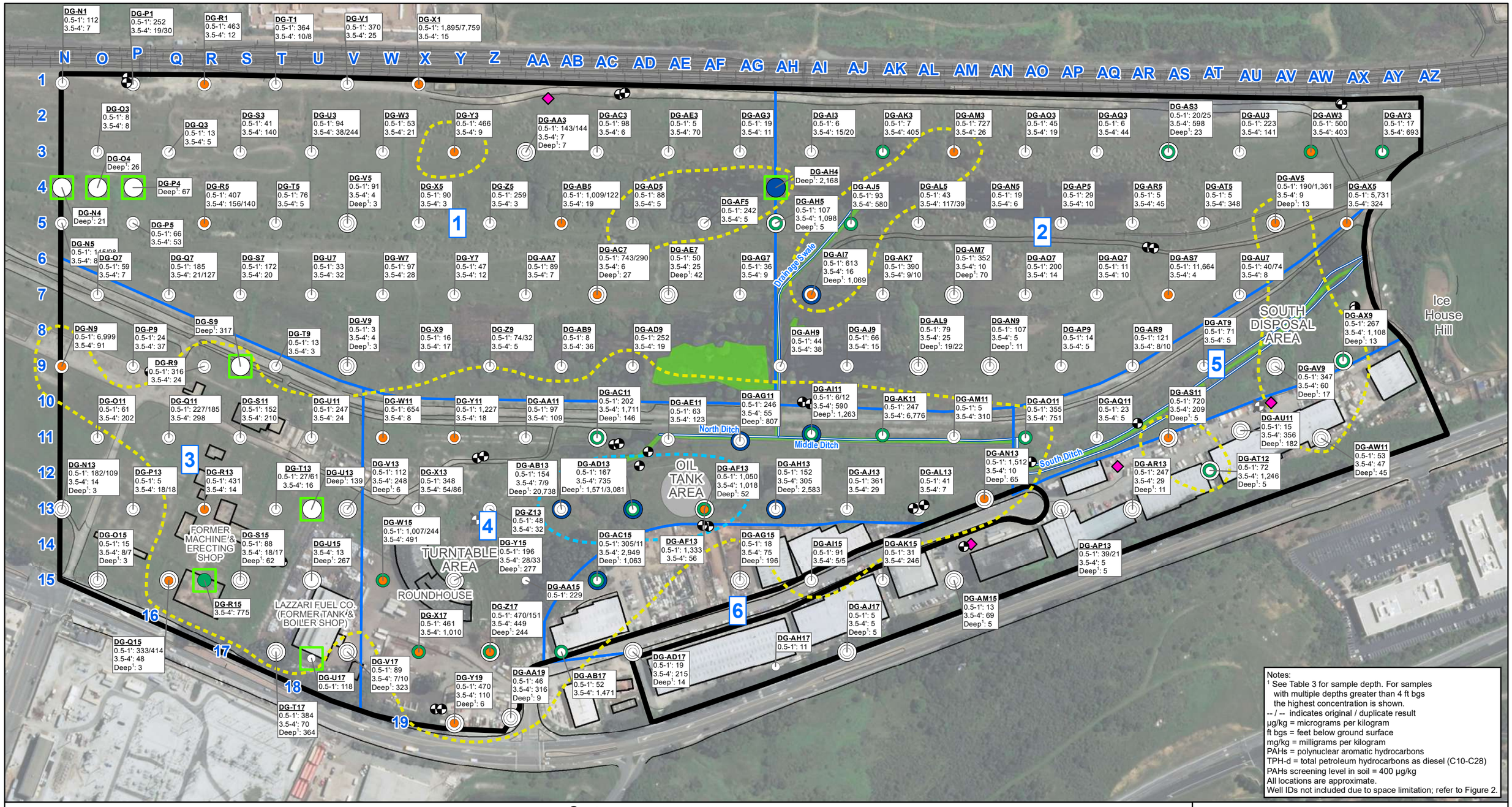
Brisbane Baylands OU-2
Brisbane, California

Geosyntec consultants

WG2619 | February 2020

Figure 8

\\Oakland-01\data\GIS\UPC\Brisbane\Project\2019_OU2_RAP\Fig07_Lead_SO.mxd 8/10/2020 2:53:47 PM



Notes:
[1] See Table 3 for sample depth. For samples with multiple depths greater than 4 ft bgs the highest concentration is shown.
-- / -- indicates original / duplicate result
µg/kg = micrograms per kilogram
ft bgs = feet below ground surface
mg/kg = milligrams per kilogram
PAHs = polynuclear aromatic hydrocarbons
TPH-d = total petroleum hydrocarbons as diesel (C10-C28)
PAHs screening level in soil = 400 µg/kg
All locations are approximate.
Well IDs not included due to space limitation; refer to Figure 2.

Legend

- Sample Location, exceeds screening level at shallow depth (0.5-1 or 1-1.5 ft bgs)
- Sample Location, exceeds screening level at intermediate depth (3.5-4 ft bgs)
- Sample Location, exceeds screening level at deep depth (depth varies)
- Locations added during investigation due to observation at neighboring boring(s) suggesting possible presence of separate-phase liquid
- Sample Location, does not exceed screening level at shallow depth (0.5-1 or 1-1.5 ft bgs)
- Sample Location, does not exceed screening level at intermediate depth (3.5-4 ft bgs)
- Sample Location, does not exceed screening level at deep depth (depth varies)

Benzo(a)pyrene equivalent total PAHs and TPH concentrations shown in Table 3.

- Groundwater Monitoring Well
- Destroyed Groundwater Monitoring Well
- Former UST Location
- Drainage Ditch
- Sampling Zone
- Wetlands (B&M, 2004)
- Approximate Former Oil Tank Location
- Site Boundary
- Railroad Tracks
- Current/Former Building Footprint

TPH-d Concentration Contours in Soil
- 50,000 mg/kg TPH-d
- 260 mg/kg TPH-d

N
0 260 Feet

Benzo(a)pyrene Equivalent Total PAHs Concentrations in Soil

Brisbane Baylands OU-2
Brisbane, California

Geosyntec consultants

WG2619 | February 2020

Figure 9

\\Oakland-01\data\GIS\UPC\Brisbane\Project\2019_OU2_RAP\Fig08_PAHs_SO.mxd 8/10/2020 2:59:38 PM

DG-N1 0.5-1': 33 3.5-4': 3.6
DG-P1 0.5-1': 25 3.5-4': 9.6/7.7
DG-R1 0.5-1': 110 3.5-4': 21
DG-T1 0.5-1': 78 3.5-4': 6.4/<3.5
DG-V1 0.5-1': 48 3.5-4': 9.5
DG-X1 0.5-1': 310/350 3.5-4': 5.3

DG-O3 0.5-1': <3.5 3.5-4': 4.7
DG-Q3 0.5-1': <3.5 3.5-4': <3.5
DG-S3 0.5-1': 17 3.5-4': <70
DG-U3 0.5-1': 72 3.5-4': 280/92
DG-W3 0.5-1': 17 3.5-4': 8.6
DG-Y3 0.5-1': <170 3.5-4': 7.3
DG-AA3 0.5-1': 24/47 3.5-4': <3.5 Deep[1]: 6.9
DG-AC3 0.5-1': 22 3.5-4': 5.2
DG-AE3 0.5-1': <3.5 3.5-4': 20
DG-AG3 0.5-1': 4.3 3.5-4': <3.5
DG-AI3 0.5-1': <3.5 3.5-4': 7.6/14
DG-AK3 0.5-1': 3.5 3.5-4': 120
DG-AM3 0.5-1': <70 3.5-4': 23
DG-AO3 0.5-1': 40 3.5-4': 12
DG-AQ3 0.5-1': <3.5 3.5-4': 5.2
DG-AS3 0.5-1': 5.6/12 3.5-4': 74 Deep[1]: 15
DG-AU3 0.5-1': 21 3.5-4': 23
DG-AW3 0.5-1': 75 3.5-4': 72
DG-AY3 0.5-1': <6.8 3.5-4': <350

DG-N4 Deep[1]: 280
DG-O4 Deep[1]: 97
DG-P4 Deep[1]: 520
DG-P5 0.5-1': 38 3.5-4': 25
DG-R5 0.5-1': 70 3.5-4': 12/14
DG-T5 0.5-1': 25 3.5-4': <3.5
DG-V5 0.5-1': 61 3.5-4': <3.5 Deep[1]: <3.4
DG-X5 0.5-1': 68 3.5-4': <3.4
DG-Z5 0.5-1': 85 3.5-4': <3.5
DG-AB5 0.5-1': 100/22 3.5-4': <3.4
DG-AD5 0.5-1': 340 3.5-4': 3.6
DG-AF5 0.5-1': 77 3.5-4': <3.4
DG-AH4 Deep[1]: 1,100
DG-AH5 0.5-1': 27 3.5-4': 660 Deep[1]: <3.4
DG-AJ5 0.5-1': 18 3.5-4': 630
DG-AL5 0.5-1': 63 3.5-4': 38/21
DG-AN5 0.5-1': 4.4 3.5-4': <3.5
DG-AP5 0.5-1': 240 3.5-4': <3.5
DG-AR5 0.5-1': <3.5 3.5-4': 5.1
DG-AT5 0.5-1': <3.5 3.5-4': 21
DG-AV5 0.5-1': 87/150 3.5-4': 8.5 Deep[1]: 5
DG-AX5 0.5-1': 130 3.5-4': 11

DG-N5 0.5-1': 23/16 3.5-4': 5

DG-O7 0.5-1': <17 3.5-4': <3.4
DG-Q7 0.5-1': 49 3.5-4': 40/40
DG-S7 0.5-1': 32 3.5-4': 34
DG-U7 0.5-1': 5.8 3.5-4': 79
DG-W7 0.5-1': 42 3.5-4': 69
DG-Y7 0.5-1': 12 3.5-4': 73
DG-AA7 0.5-1': 21 3.5-4': <3.3
DG-AC7 0.5-1': 28/43 3.5-4': 41 Deep[1]: 42
DG-AE7 0.5-1': 4.9 3.5-4': 14 Deep[1]: 15
DG-AG7 0.5-1': 6.1 3.5-4': <4.0
DG-AI7 0.5-1': 80 3.5-4': 14 Deep[1]: 510
DG-AK7 0.5-1': 45 3.5-4': 26/35
DG-AM7 0.5-1': 66 3.5-4': 25 Deep[1]: 90
DG-AO7 0.5-1': 20 3.5-4': 9.4
DG-AQ7 0.5-1': 49 3.5-4': 25
DG-AS7 0.5-1': <140 3.5-4': 5
DG-AU7 0.5-1': 22/59 3.5-4': 42

DG-N9 0.5-1': 1,100 3.5-4': 36
DG-P9 0.5-1': 10 3.5-4': <3.3
DG-S9 Deep[1]: 120
DG-T9 0.5-1': 6.8 3.5-4': <3.4
DG-V9 0.5-1': <3.4 3.5-4': 130 Deep[1]: <3.4
DG-X9 0.5-1': 8.9 3.5-4': 390
DG-Z9 0.5-1': 21/11 3.5-4': 41
DG-AB9 0.5-1': 18 3.5-4': 22
DG-AD9 0.5-1': 130 3.5-4': 170
DG-AH9 0.5-1': 6.3 3.5-4': 36
DG-AJ9 0.5-1': 20 3.5-4': 26
DG-AL9 0.5-1': 10 3.5-4': 82 Deep[1]: 6.7/4.4
DG-AN9 0.5-1': 13 3.5-4': <3.5 Deep[1]: 5.1
DG-AP9 0.5-1': <3.4 3.5-4': <3.4
DG-AR9 0.5-1': 58 3.5-4': 5.8/3.9
DG-AT9 0.5-1': 13 3.5-4': 6.6
DG-AV9 0.5-1': 110 3.5-4': 57 Deep[1]: 61
DG-AX9 0.5-1': 22 3.5-4': 96 Deep[1]: 5.7

DG-R9 0.5-1': 130 3.5-4': 5.1

DG-O11 0.5-1': 31 3.5-4': 78
DG-Q11 0.5-1': 150/130 3.5-4': <340
DG-S11 0.5-1': <170 3.5-4': <140
DG-U11 0.5-1': 380 3.5-4': 40
DG-W11 0.5-1': 86 3.5-4': <3.4/<3.4
DG-Y11 0.5-1': <340 3.5-4': <6.6
DG-AA11 0.5-1': <17 3.5-4': 90
DG-AC11 0.5-1': <140 3.5-4': <690 Deep[1]: <69
DG-AE11 0.5-1': <17 3.5-4': <66
DG-AG11 0.5-1': <68 3.5-4': <34 Deep[1]: 1,500
DG-AI11 0.5-1': <6.9/<6.6 3.5-4': 180 Deep[1]: 1,200
DG-AK11 0.5-1': <140 3.5-4': <3,300
DG-AM11 0.5-1': <3.4 3.5-4': <350
DG-AO11 0.5-1': <170 3.5-4': <350
DG-AQ11 0.5-1': 6.1 3.5-4': 6.1
DG-AS11 0.5-1': <340 3.5-4': 54 Deep[1]: 7.4
DG-AW11 0.5-1': <7.9 3.5-4': <39 Deep[1]: <39

DG-N13 0.5-1': 22/27 3.5-4': 79 Deep[1]: <3.4
DG-P13 0.5-1': <3.5 3.5-4': 45/37
DG-R13 0.5-1': 1,500 3.5-4': 32
DG-T13 0.5-1': 56/120 3.5-4': 5.2
DG-U13 Deep[1]: <69
DG-V13 0.5-1': 70 3.5-4': <68 Deep[1]: <3.4
DG-X13 0.5-1': <69 3.5-4': <34/<34
DG-Z13 0.5-1': 37 3.5-4': 35
DG-AB13 0.5-1': <83 3.5-4': <3.4/<3.3 Deep[1]: 13,000
DG-AF13 0.5-1': 660 3.5-4': 930 Deep[1]: 500
DG-AH13 0.5-1': <170 3.5-4': 340 Deep[1]: <1,400
DG-AJ13 0.5-1': <170 3.5-4': <17
DG-AL13 0.5-1': <6.9 3.5-4': <3.5
DG-AN13 0.5-1': <1,700 3.5-4': <3.4 Deep[1]: 4,900
DG-AR13 0.5-1': <40 3.5-4': <4.0 Deep[1]: 11
DG-AT12 0.5-1': <8.0 3.5-4': 19 Deep[1]: <4.0
DG-AU11 0.5-1': <3.9 3.5-4': 10 Deep[1]: 36

DG-O15 0.5-1': 11 3.5-4': 6.0/4.5 Deep[1]: <3.5
DG-S15 0.5-1': <69 3.5-4': 100/89 Deep[1]: <69
DG-U15 3.5-4': 9.0 Deep[1]: <170
DG-W15 0.5-1': <690/<170 3.5-4': <350
DG-Y15 0.5-1': <140 3.5-4': <17/<17 Deep[1]: 1,300
DG-AA15 0.5-1': <140
DG-AC15 0.5-1': <340/9.8 3.5-4': 73 Deep[1]: 6,500
DG-AD13 0.5-1': <67 3.5-4': <340 Deep[1]: 1,100/6,900
DG-AG15 0.5-1': <16 3.5-4': <39 Deep[1]: <16
DG-AI15 0.5-1': <79 3.5-4': <3.9/<3.9
DG-AK15 0.5-1': 11 3.5-4': <78
DG-AP13 0.5-1': <8.0/4.0 3.5-4': 6.7 Deep[1]: 8

DG-R15 3.5-4': 1,000
DG-V17 0.5-1': <17 3.5-4': <3.4/<3.3 Deep[1]: 290
DG-X17 0.5-1': <350 3.5-4': <690
DG-Z17 0.5-1': <170/<69 3.5-4': <350 Deep[1]: <170
DG-AH17 0.5-1': <4.0
DG-AJ17 0.5-1': <4.0 3.5-4': <4.0 Deep[1]: <4.0
DG-AM15 0.5-1': 11 3.5-4': <3.9 Deep[1]: <3.9/<3.9

DG-Q15 0.5-1': 590/580 3.5-4': 74 Deep[1]: <3.4
DG-U17 0.5-1': 300
DG-Y19 0.5-1': <350 3.5-4': 36 Deep[1]: <3.4
DG-AA19 0.5-1': <40 3.5-4': <31 Deep[1]: <8.0
DG-AB17 0.5-1': 120 3.5-4': <160
DG-AD17 0.5-1': <16 3.5-4': <7.8 Deep[1]: <4.0
DG-T17 0.5-1': 1,300 3.5-4': <34 Deep[1]: 480/470

1 2 3 4 5 6

Drainage Swale
North Ditch
Middle Ditch
South Ditch
OIL TANK AREA
FORMER MACHINE & ERECTING SHOP
ROUNDHOUSE
LAZZARI FUEL CO. (FORMER TANK & BOILER SHOP)
SOUTH DISPOSAL AREA
Ice House Hill

Notes:
[1] See Table 3 for sample depth. For samples with multiple depths greater than 4 ft bgs the highest concentration is shown.
< = result is less than the method detection limit
-- / -- indicates original / duplicate result
µg/kg = micrograms per kilogram
ft bgs = feet below ground surface
mg/kg = milligrams per kilogram
TPH-d = total petroleum hydrocarbons as diesel (C10-C28)
Naphthalene screening level in soil = 1,200 µg/kg
All locations are approximate.
Well IDs not included due to space limitation; refer to Figure 2.

Legend

- Sample Location, exceeds screening level at shallow depth (0.5-1 or 1-1.5 ft bgs)
- Sample Location, exceeds screening level at intermediate depth (3.5-4 ft bgs)
- Sample Location, exceeds screening level at deep depth (depth varies)
- Locations added during investigation due to observation at neighboring boring(s) suggesting possible presence of separate-phase liquid
- Sample Location, does not exceed screening level at shallow depth (0.5-1 or 1-1.5 ft bgs)
- Sample Location, does not exceed screening level at intermediate depth (3.5-4 ft bgs)
- Sample Location, does not exceed screening level at deep depth (depth varies)

Naphthalene concentrations shown are the maximum between concentrations in Tables 3 and 5.

- Groundwater Monitoring Well
- Destroyed Groundwater Monitoring Well
- Former UST Location
- Drainage Ditch
- Sampling Zone
- Wetlands (B&M, 2004)
- Approximate Former Oil Tank Location
- Site Boundary
- Railroad Tracks
- Current/Former Building Footprint

TPH-d Concentration Contours in Soil
- 50,000 mg/kg TPH-d
- 260 mg/kg TPH-d

N
0 260 Feet

Naphthalene Concentrations in Soil

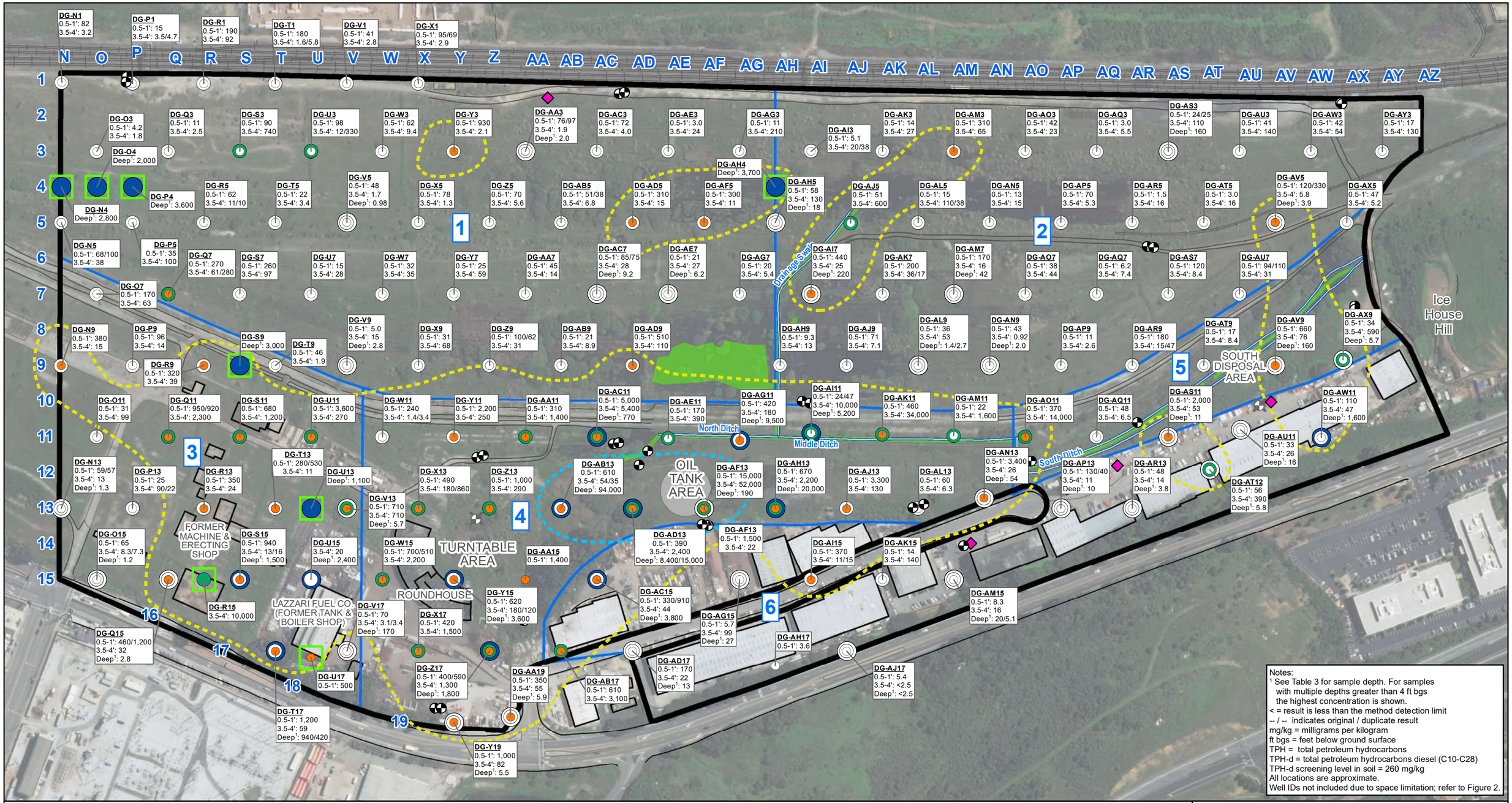
Brisbane Baylands OU-2
Brisbane, California

Geosyntec consultants

WG2619 | February 2020

Figure 10

\\Oakland-01\data\GIS\UPC\Brisbane\Project\2019_OU2_RAP\Fig09_Naphthalene_SO.mxd 5/7/2020 1:42:56 PM



Notes:
[1] See Table 3 for sample depth. For samples with multiple depths greater than 4 ft bgs the highest concentration is shown.
< = result is less than the method detection limit
-- / -- indicates original / duplicate result
mg/kg = milligrams per kilogram
ft bgs = feet below ground surface
TPH = total petroleum hydrocarbons
TPH-d = total petroleum hydrocarbons diesel (C10-C28)
TPH-d screening level in soil = 260 mg/kg
All locations are approximate.
Well IDs not included due to space limitation; refer to Figure 2.

Legend

- Sample Location, exceeds screening level at shallow depth (0.5-1 or 1-1.5 ft bgs)
- Sample Location, exceeds screening level at intermediate depth (3.5-4 ft bgs)
- Sample Location, exceeds screening level at deep depth (depth varies)
- Sample Location, does not exceed screening level at shallow depth (0.5-1 or 1-1.5 ft bgs)
- Sample Location, does not exceed screening level at intermediate depth (3.5-4 ft bgs)
- Sample Location, does not exceed screening level at deep depth (depth varies)
- Locations added during investigation due to observation at neighboring boring(s) suggesting possible presence of separate-phase liquid
- Groundwater Monitoring Well
- Destroyed Groundwater Monitoring Well
- Former UST Location
- Drainage Ditch
- Sampling Zone
- Wetlands (B&M, 2004)
- Approximate Former Oil Tank Location
- Site Boundary
- Railroad Tracks
- Current/Former Building Footprint

TPH-d Concentration Contours in Soil
- 50,000 mg/kg TPH-d
- 260 mg/kg TPH-d

N
0 260 Feet

Petroleum Hydrocarbon Concentrations in Soil (TPH-d)

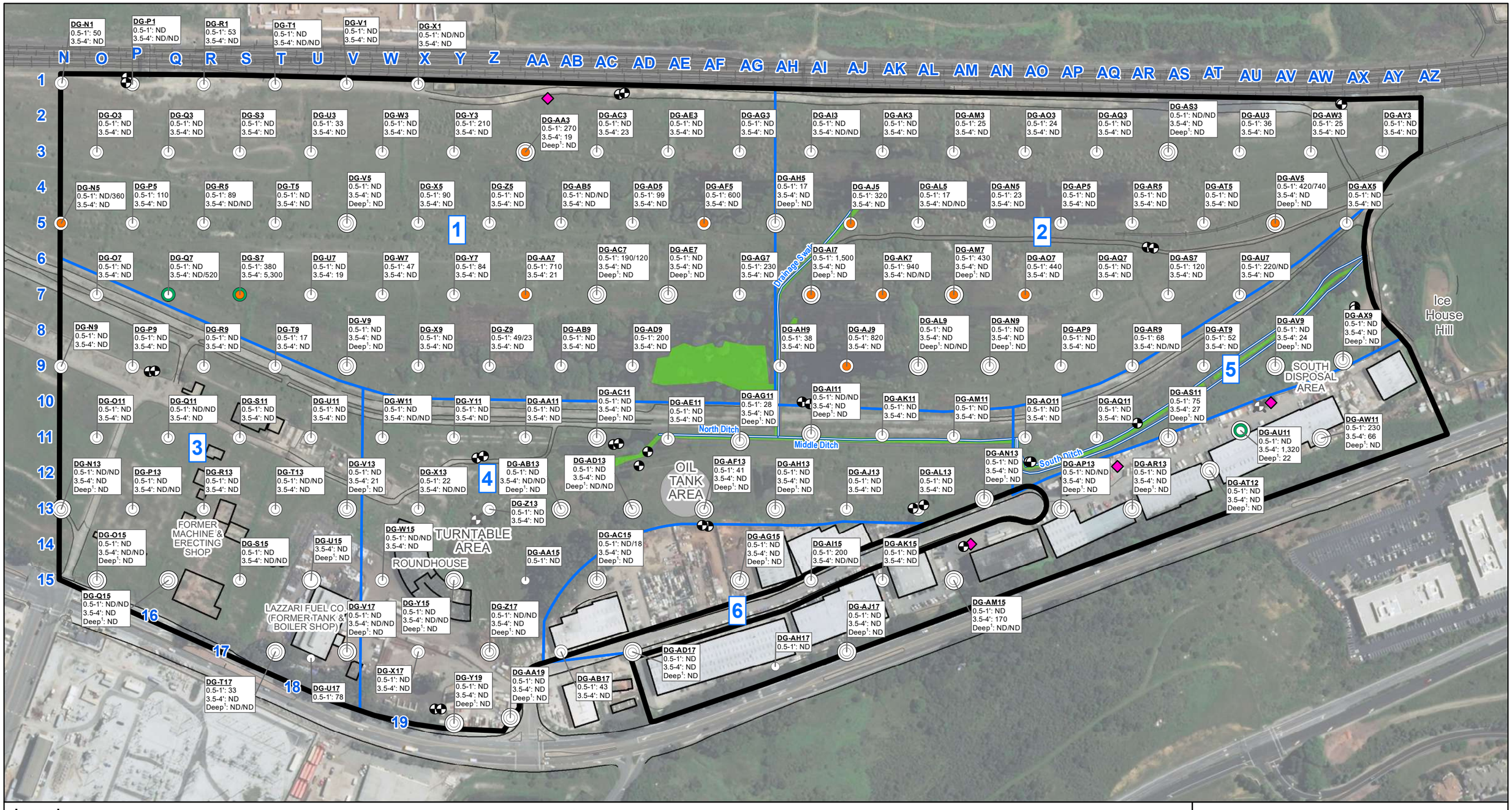
Brisbane Baylands OU-2
Brisbane, California

Geosyntec consultants

WG2619 | February 2020

Figure 11

\\Oakland-01\data\GIS\UPC\Brisbane\Project\2019_OU2_RAP\Fig10_TPHd_SO.mxd 8/10/2020 3:04:40 PM



Legend

- Sample Location, exceeds screening level at shallow depth (0.5-1 or 1-1.5 ft bgs)
- Sample Location, exceeds screening level at intermediate depth (3.5-4 ft bgs)

Posted values are sum of detected concentrations reported as Aroclors. PCB concentrations are shown in Table 4.

- Sample Location, does not exceed screening level at shallow depth (0.5-1 or 1-1.5 ft bgs)
- Sample Location, does not exceed screening level at intermediate depth (3.5-4 ft bgs)
- Sample Location, does not exceed screening level at deep depth (depth varies)

- Groundwater Monitoring Well
- Destroyed Groundwater Monitoring Well
- Former UST Location
- Drainage Ditch
- Sampling Zone
- Wetlands (B&M, 2004)
- Approximate Former Oil Tank Location
- Site Boundary
- Railroad Tracks
- Current/Former Building Footprint

Notes:
[1] See Table 3 for sample depth.
-- / -- indicates original / duplicate result
ND = not detected
µg/kg = micrograms per kilogram
ft bgs = feet below ground surface
PCB = polychlorinated biphenyl
PCB screening level in soil = 230 µg/kg
All locations are approximate.
Well IDs not included due to space limitation; refer to Figure 2.

N
0 260 Feet

PCB Concentrations in Soil

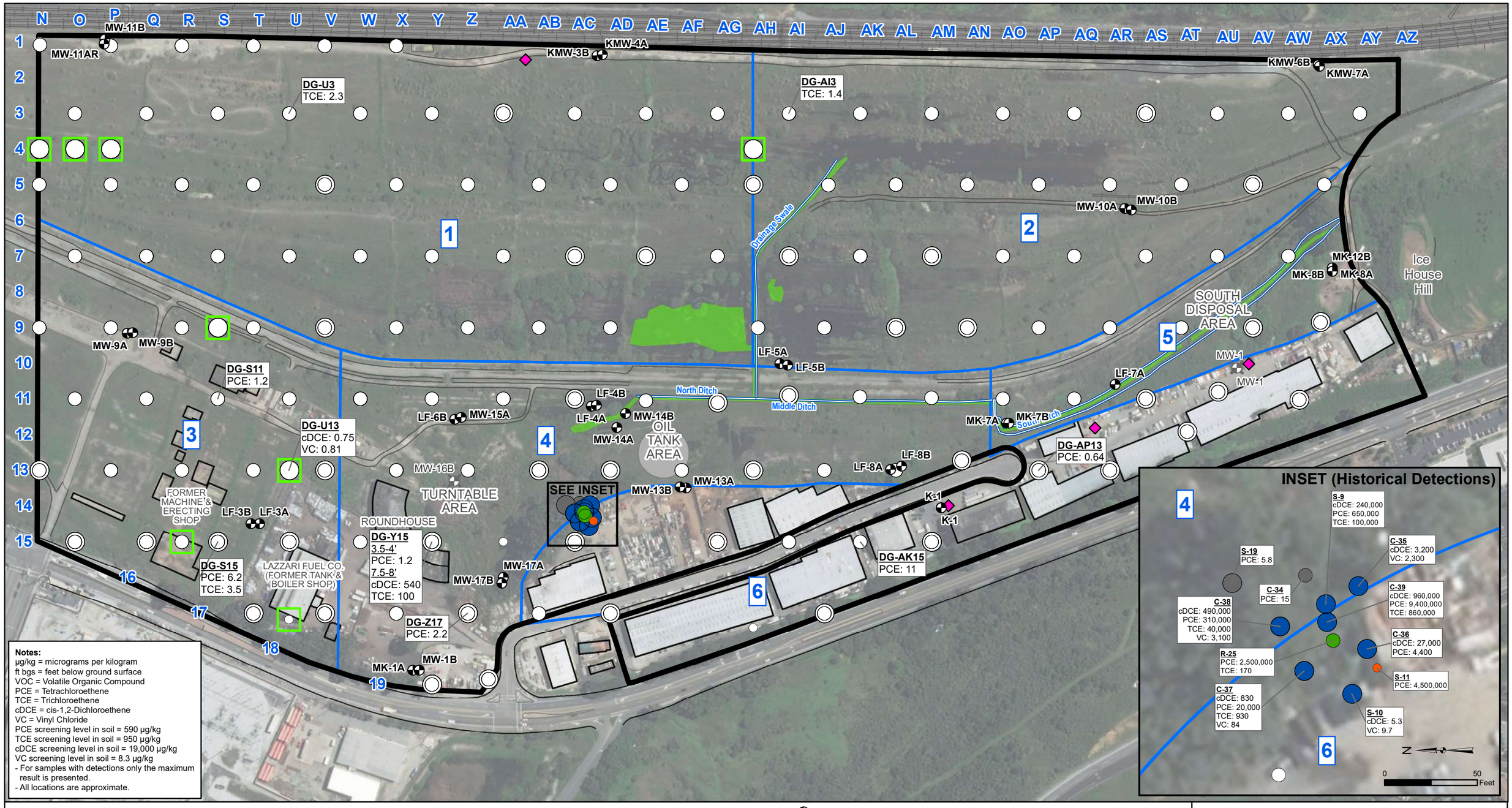
Brisbane Baylands OU-2
Brisbane, California

Geosyntec consultants

WG2619 | February 2020

Figure 12

\\Oakland-01\data\GIS\UPC\Brisbane\Project\2019_OU2_RAP\Fig11_TotalPCBs_SO.mxd 5/7/2020 1:48:39 PM



Notes:
µg/kg = micrograms per kilogram
ft bgs = feet below ground surface
VOC = Volatile Organic Compound
PCE = Tetrachloroethene
TCE = Trichloroethene
cDCE = cis-1,2-Dichloroethene
VC = Vinyl Chloride
PCE screening level in soil = 590 µg/kg
TCE screening level in soil = 950 µg/kg
cDCE screening level in soil = 19,000 µg/kg
VC screening level in soil = 8.3 µg/kg
- For samples with detections only the maximum result is presented.
- All locations are approximate.

Legend

2019 Soil Sample Location (only detections are labeled)

- Sample Location, does not exceed screening level at deep depth (depth varies)
- Sample Location, does not exceed screening level at intermediate depth (3.5-4 ft bgs)
- Sample Location, does not exceed screening level at shallow depth (0.5-1 or 1-1.5 ft bgs)

Historical Soil Sample Location (B&M, 2002, 2007)

- Sample Location, exceeds screening level at shallow depth (0.5-1 or 1-1.5 ft bgs)
- Sample Location, exceeds screening level at intermediate depth (3.5-4 ft bgs)
- Sample Location, exceeds screening level at deep depth (depth varies)

VOC concentrations shown in Table 5.

- Sample Location, does not exceed screening level at intermediate depth (3.5-4 ft bgs)
- Sample Location, does not exceed screening level at deep depth (depth varies)
- Locations added during investigation due to observation at neighboring boring(s) suggesting possible presence of separate-phase liquid

- Groundwater Monitoring Well
- Destroyed Groundwater Monitoring Well
- Former UST Location
- Drainage Ditch
- Wetlands (B&M, 2004)
- Approximate Former Oil Tank Location
- Site Boundary
- Sampling Zone
- Railroad Tracks
- Current/Former Building Footprint

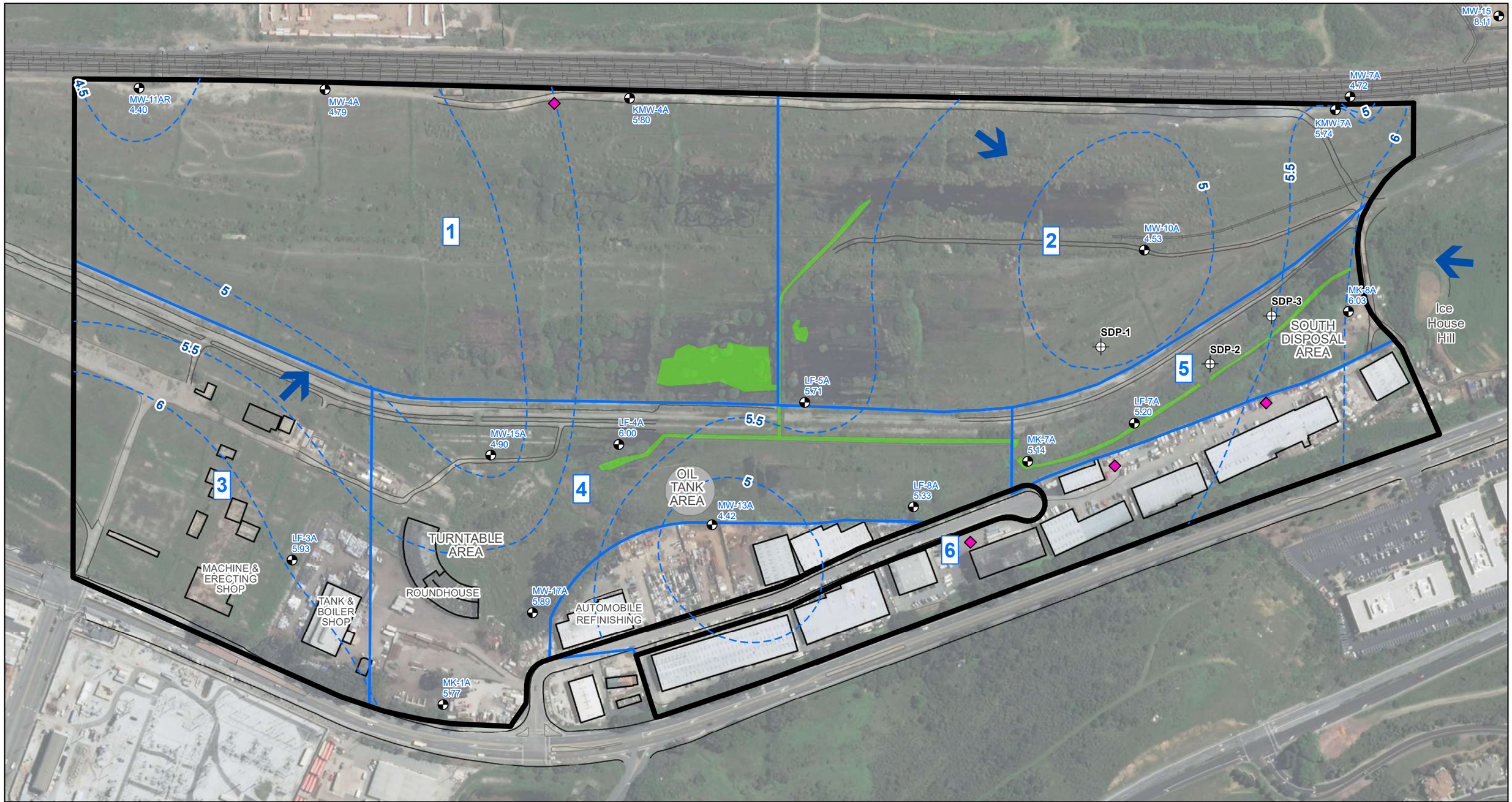
Maximum Chlorinated VOC Concentrations in Soil
Brisbane Baylands OU-2
Brisbane, California

Geosyntec consultants

Figure 13

WG2619 | February 2020

\\Oakland-01\data\GIS\UPC\Brisbane\Project\2019_OU2_RAP\Fig12_PCE_TCE_cDCE_VC_SO.mxd 5/7/2020 1:52:36 PM



Legend

- Monitoring Well Location
- Piezometer Location
- Groundwater Elevation Contour (ft aMSL)
- Wetlands (B&M, 2004)
- Approximate Former Oil Tank Location
- Site Boundary
- Sampling Zone
- Former UST Location
- Approximate Groundwater Flow Direction
- Railroad Tracks
- Current/Former Building Footprint

Notes:
ft aMSL = feet above mean sea level
All locations are approximate.

N

0 260 Feet

Potentiometric Surface Contours in Fill Groundwater (December 2018)

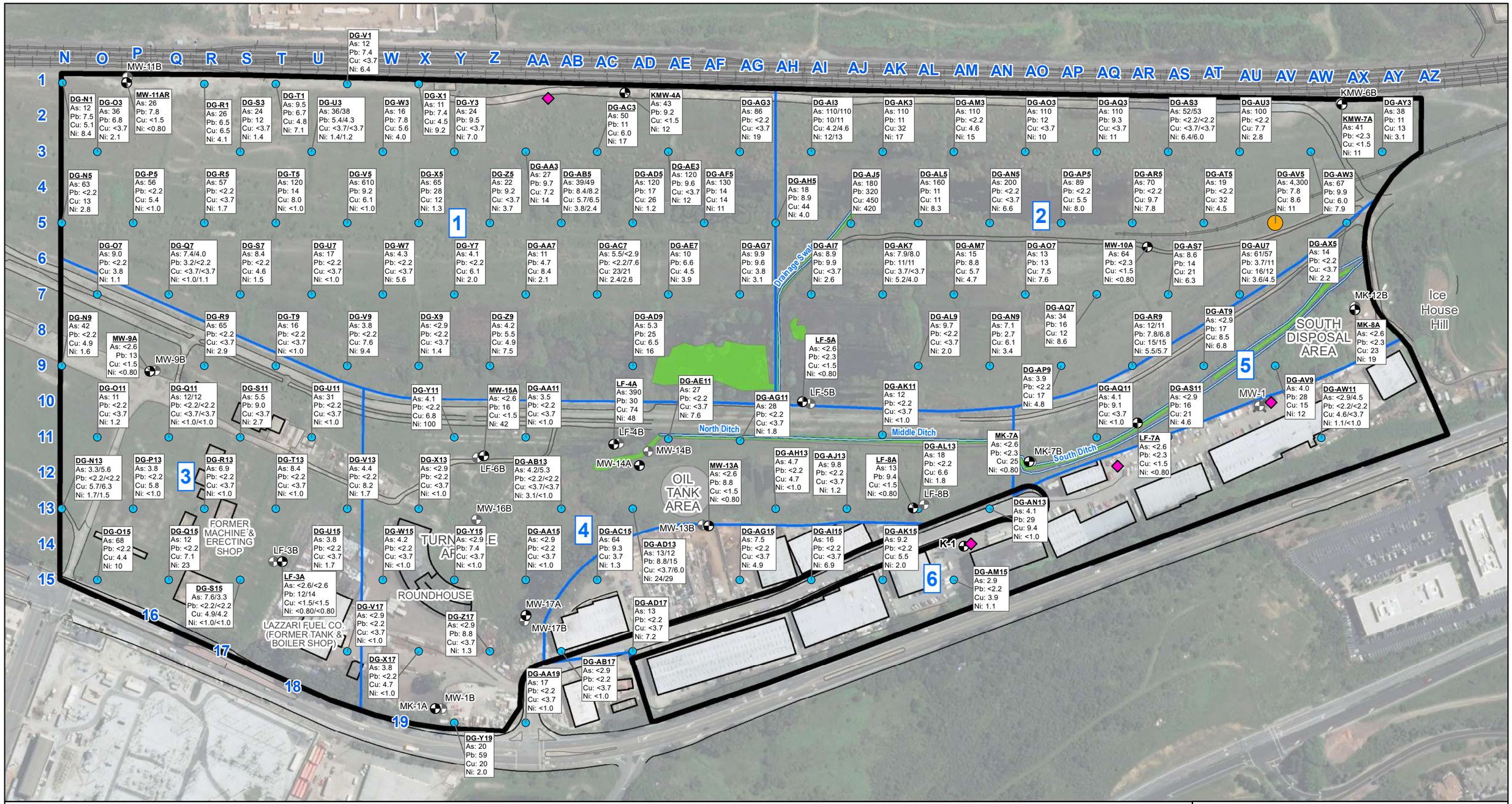
Brisbane Baylands OU-2
Brisbane, California

Geosyntec consultants

WG2619 | February 2020

Figure 14

\\Oakland-01\data\GIS\UPC\Brisbane\Project\2019_OU2_DGI\Fig14_GWE_Fill.mxd 8/10/2020 4:16:58 PM



Legend

- Sample Location, Exceeds Screening Level for Arsenic
- Sample Location Without Exceedance
- Fill-zone Groundwater Monitoring Well
- Groundwater Monitoring Well Not Screened in Fill-zone (not sampled during data gap investigation)
- Destroyed Groundwater Monitoring Well
- Former UST Location
- Drainage Ditch
- Sampling Zone
- Wetlands (B&M, 2004)
- Approximate Former Oil Tank Location
- Site Boundary
- Railroad Tracks
- Current/Former Building Footprint

Notes:
< = result is less than the method detection limit
-- / -- indicates original / duplicate result
µg/L = microgram per liter
As = Arsenic
Pb = Lead
Cu = Copper
Ni = Nickel
Arsenic screening level in groundwater = 3,600 µg/L
Lead screening level in groundwater = 3,100 µg/L
Copper screening level in groundwater = 820 µg/L
Nickel screening level in groundwater = 8,200 µg/L
Results are reported in µg/L.
All locations are approximate.

N

0 260 Feet

Dissolved Arsenic, Lead, Copper, and Nickel Concentrations in Fill Groundwater

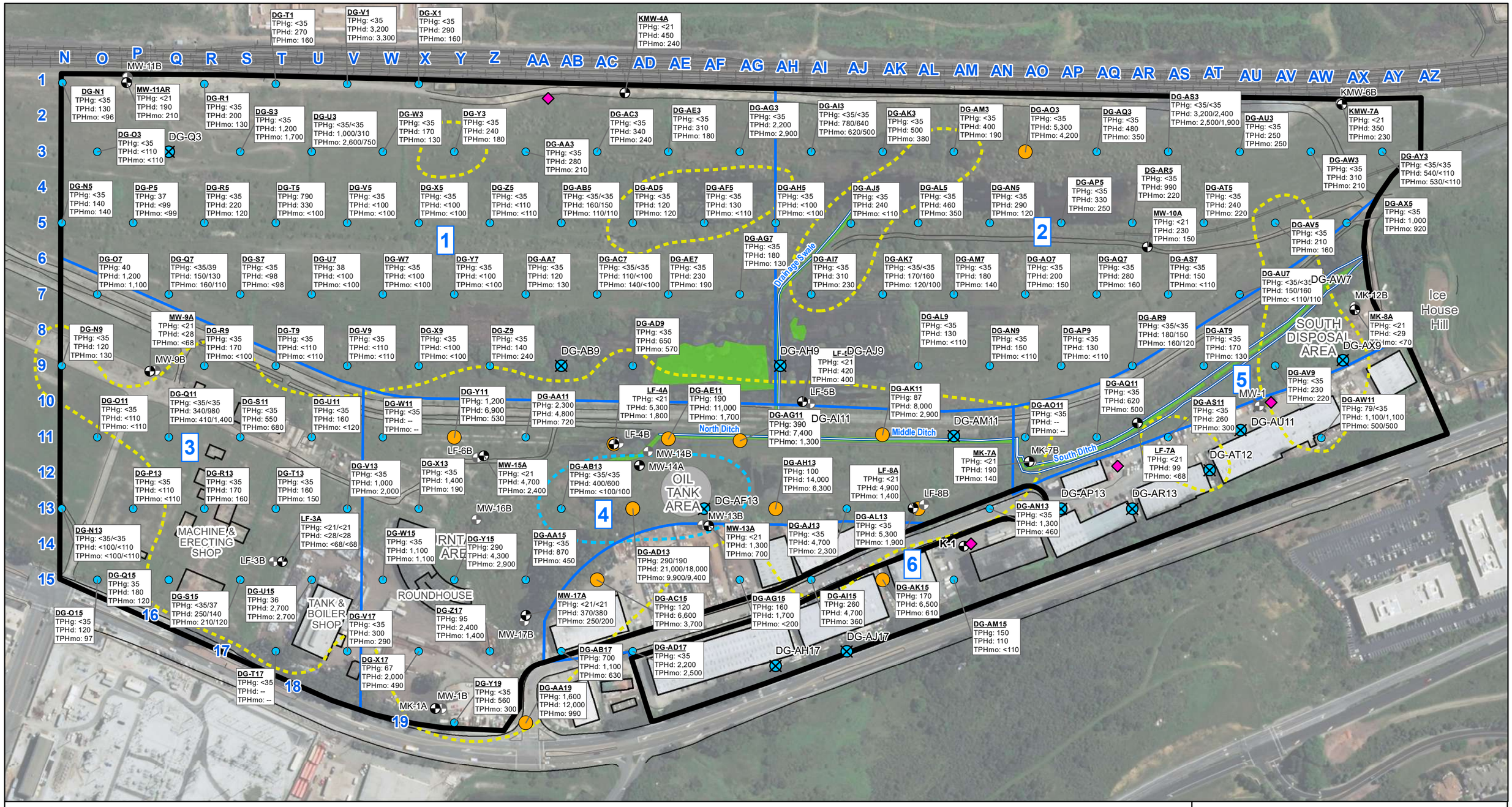
Brisbane Baylands OU-2
Brisbane, California

Geosyntec consultants

WG2619 | February 2020

Figure 15

\\Oakland-01\data\GIS\UPC\Brisbane\Project\2019_OU2_RAP\Fig14_As_Pb_Cu_Ni_GW.mxd 5/6/2020 3:54:51 PM



Legend

- TPH-d Screening Level Exceedance
- Sample Location Without TPH-d Exceedance
- Sample Planned, Could Not Be Collected
- Fill-zone Groundwater Monitoring Well
- Groundwater Monitoring Well Not Screened in Fill-zone (not sampled during data gap investigation)
- Destroyed Groundwater Monitoring Well

TPH-d and TPH-mo concentrations are in Table 8.

- Former UST Location
- Drainage Ditch
- Sampling Zone
- Wetlands (B&M, 2004)
- Approximate Former Oil Tank Location
- Site Boundary
- Railroad Tracks
- Current/Former Building Footprint

TPH-d Concentration Contours in Soil

- 50,000 mg/kg TPH-d
- 260 mg/kg TPH-d

Notes:
< = result is less than the method detection limit
-- / -- indicates original / duplicate result
µg/L = microgram per liter
mg/kg = milligrams per kilogram
TPH = total petroleum hydrocarbons
TPH-g = total petroleum hydrocarbons in the gasoline range (C4-C12)
TPH-d = total petroleum hydrocarbons in the diesel range (C10-C28)
TPH-mo = total petroleum hydrocarbons in the motor oil range (C24-C36)
TPH-g screening level in groundwater = 3,700 µg/L (no exceedances)
TPH-d screening level in groundwater = 5,000 µg/L
No screening level for TPH-mo in groundwater.
Results are reported in µg/L.
All locations are approximate.

N

0 260 Feet

Petroleum Hydrocarbon Concentrations in Fill Groundwater

Brisbane Baylands OU-2
Brisbane, California

Geosyntec consultants

WG2619 | February 2020

Figure 16

\\Oakland-01\data\GIS\UPC\Brisbane\Project\2019_OU2_RAP\Fig15_TPH_GW.mxd 8/10/2020 4:25:27 PM



Legend

2019 Groundwater Sample Location
(only detections are labeled)

- Sample Location, Exceeds Screening Level for BZ
- Sample Location, Exceeds Screening Level for ETBZ
- Sample Location, Exceeds Screening Level for NPTH

Benzene, ethylbenzene and total xylenes concentrations are shown in Table 9. The maximum naphthalene concentration is shown from Tables 8 and 9.

- Fill-zone Groundwater Monitoring Well
- Groundwater Monitoring Well Not Screened in Fill-zone (not sampled during data gap investigation)
- Destroyed Groundwater Monitoring Well
- Former UST Location
- Sample Planned, Could Not Be Collected

- Drainage Ditch
- Wetlands (B&M, 2004)
- Approximate Former Oil Tank Location
- Site Boundary
- Sampling Zone
- Railroad Tracks
- Current/Former Building Footprint

Notes:
< = result is less than the method detection limit
-- / -- indicates original / duplicate result
µg/L = microgram per liter
BZ = Benzene
ETBZ = Ethylbenzene
NPTH = Naphthalene
XYLS = Total xylenes
Benzene screening level in groundwater = 0.42 µg/L
Ethylbenzene screening level in groundwater = 3.5 µg/L
Naphthalene screening level in groundwater = 4.6 µg/L
Total xylenes screening level in groundwater = 390 µg/L
Results are reported in µg/L.
All locations are approximate.

N

0 260 Feet

Benzene, Ethylbenzene, Naphthalene, and Total Xylenes Concentrations in Fill Groundwater

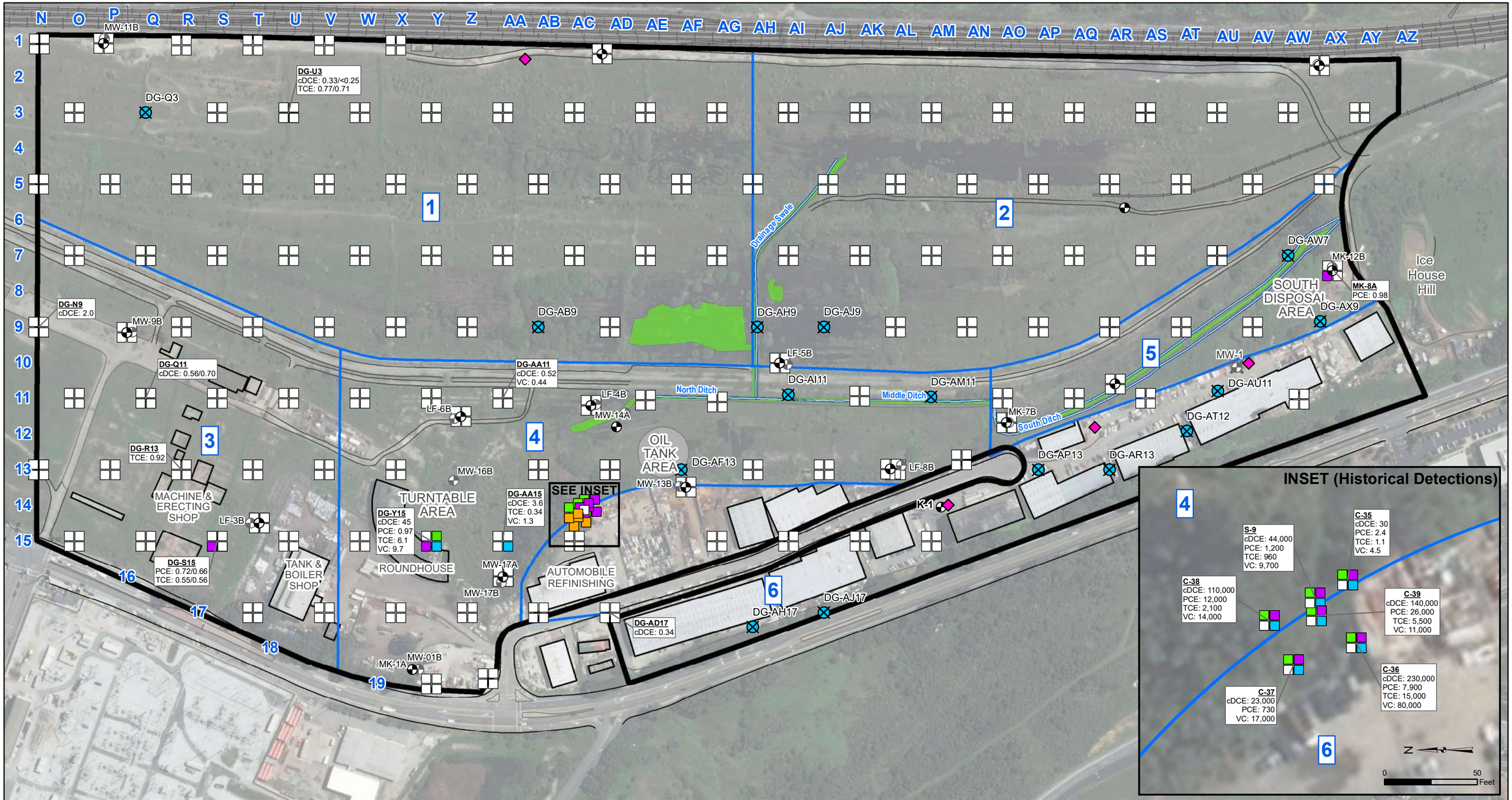
Brisbane Baylands OU-2
Brisbane, California

Geosyntec consultants

WG2619 | February 2020

Figure 17

\\Oakland-01\data\GIS\UPC\Brisbane\Project\2019_OU2_RAP\Fig16_BZ_EBZ_NAPH_XYL_GW.mxd 8/10/2020 4:23:15 PM



Legend

2019 Groundwater Sample Location
(only detections are labeled)

- Sample Location, Exceeds Screening Level for cDCE
- Sample Location, Exceeds Screening Level for PCE
- Sample Location, Exceeds Screening Level for TCE
- Sample Location, Exceeds Screening Level for VC

Chlorinated VOC concentrations are shown in Table 9.

- Fill-zone Groundwater Monitoring Well
- Groundwater Monitoring Well Not Screened in Fill-zone (not sampled during data gap investigation)
- Destroyed Groundwater Monitoring Well
- Former UST Location
- Sample Planned, Could Not Be Collected

- Drainage Ditch
- Wetlands (B&M, 2004)
- Approximate Former Oil Tank Location
- Site Boundary
- Sampling Zone
- Railroad Tracks
- Current/Former Building Footprint

Notes:
< = result is less than the method detection limit
-- / -- indicates original / duplicate result
µg/L = microgram per liter
VOC = Volatile Organic Compound
PCE = Tetrachloroethene
TCE = Trichloroethene
cDCE = cis-1,2-Dichloroethene
VC = Vinyl Chloride
PCE screening level in groundwater = 0.64 µg/L
TCE screening level in groundwater = 1.2 µg/L
cDCE screening level in groundwater = 49 µg/L
VC screening level in groundwater = 0.5 µg/L
Results are reported in µg/L.
All locations are approximate.

Chlorinated VOC Concentrations in Fill Groundwater

Brisbane Baylands OU-2
Brisbane, California

Geosyntec consultants

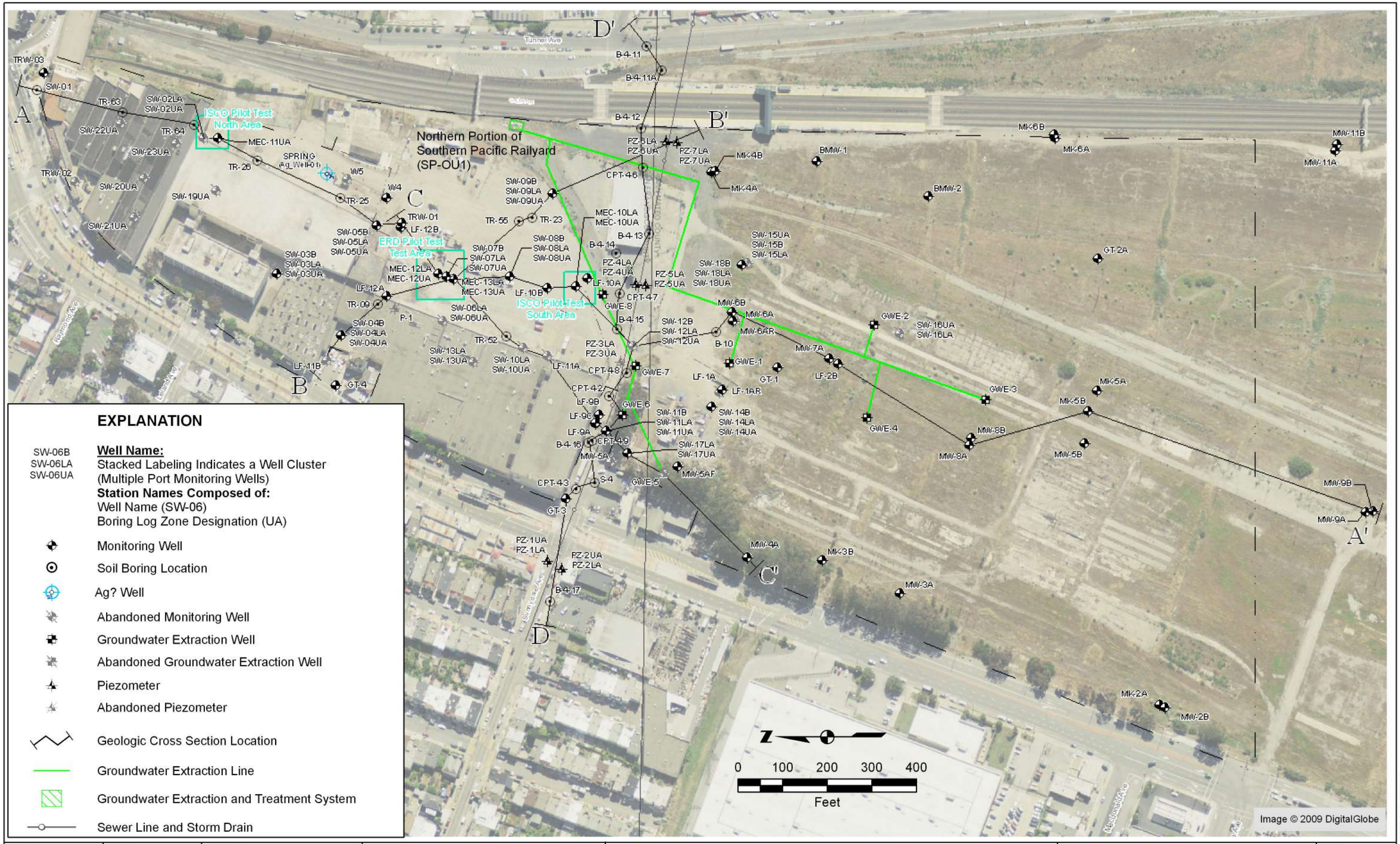
WG2619 | August 2020

Figure 18

\\Oakland-01\data\GIS\UPC\Brisbane\Project\2019_OU2_DGI\Fig18_PCE_TCE_cDCE_VC_GW.mxd 8/10/2020 4:42:18 PM

APPENDIX A

Cross-Sections of Schlage OU
[Mactec, 2010]



EXPLANATION

SW-06B
SW-06LA
SW-06UA

Well Name:
Stacked Labeling Indicates a Well Cluster (Multiple Port Monitoring Wells)
Station Names Composed of:
Well Name (SW-06)
Boring Log Zone Designation (UA)

- Monitoring Well
- Soil Boring Location
- Ag? Well
- Abandoned Monitoring Well
- Groundwater Extraction Well
- Abandoned Groundwater Extraction Well
- Piezometer
- Abandoned Piezometer
- Geologic Cross Section Location
- Groundwater Extraction Line
- Groundwater Extraction and Treatment System
- Sewer Line and Storm Drain

DRAWN:	RJP	REVISED:		PROJECT NO:	4096088522
ENGINEER:	WBC	DATE:		SCALE:	AS SHOWN
CHECKED:	NAM	CHECKED:		APPROVED:	
DATE:	4/2010	DATE:		DATE:	

MACTEC

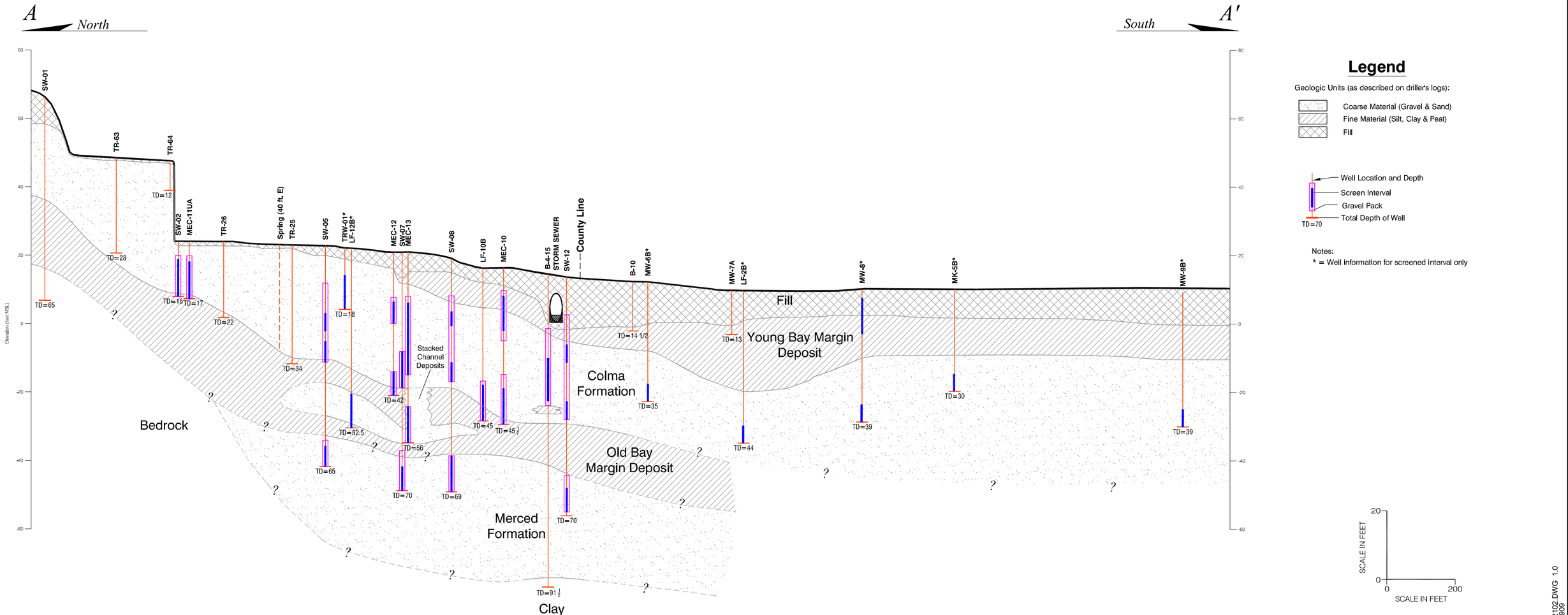
Groundwater Monitoring Report, First Quarter 2010

Schlage OU
San Francisco and Brisbane, California

Cross Section Location Map

FIGURE
B-1

Tuesday, May 18, 2010 6:07:38 PM
P:\4096088522_UPC_Schlage\GIS\Projects\2010Q1_QMR\FigureB-1_XSect-Locs.mxd



Legend

Geologic Units (as described on driller's logs):

- Coarse Material (Gravel & Sand)
- Fine Material (Silt, Clay & Peat)
- Fill

- Well Location and Depth
- Screen Interval
- Gravel Pack
- Total Depth of Well

TD=70

Notes:

* = Well information for screened interval only

SCALE IN FEET

20
0
0
200
SCALE IN FEET

4096088522102.DWG 1.0
20100521 0909

NO.	DATE	REVISIONS	DRAWN: PCB	PROJECT NO: 4096088522
			ENGINEER:	SCALE: AS SHOWN
			CHECKED: NAM	APPROVED:
			DATE:	DATE: 4/2010

MACTEC

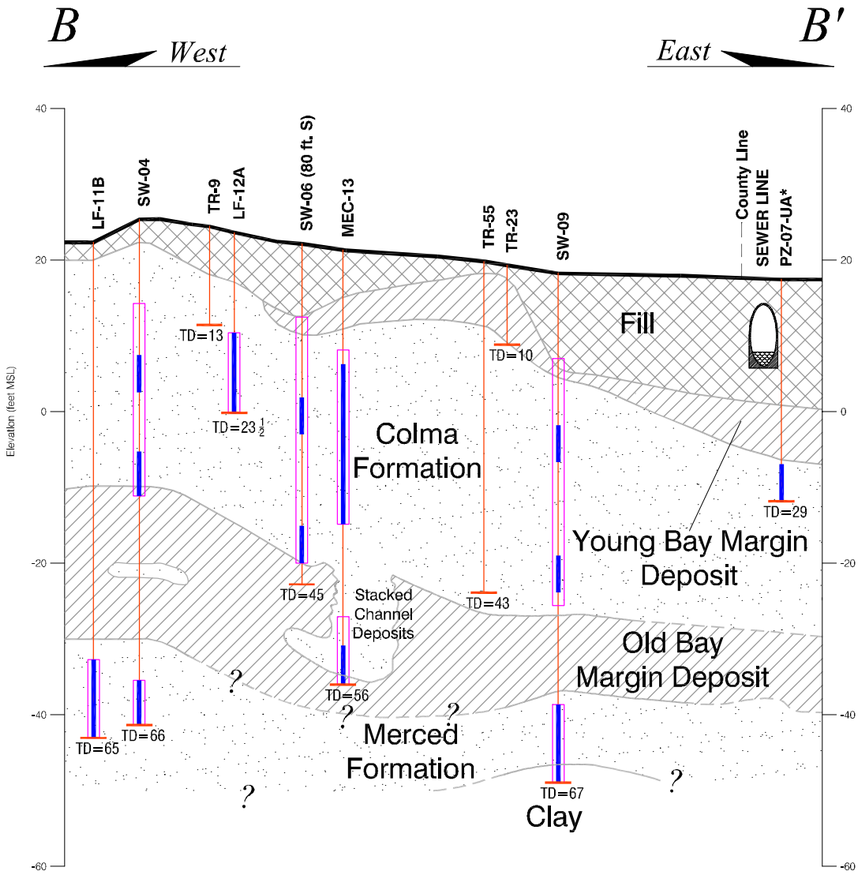
Quarterly Groundwater Monitoring Report

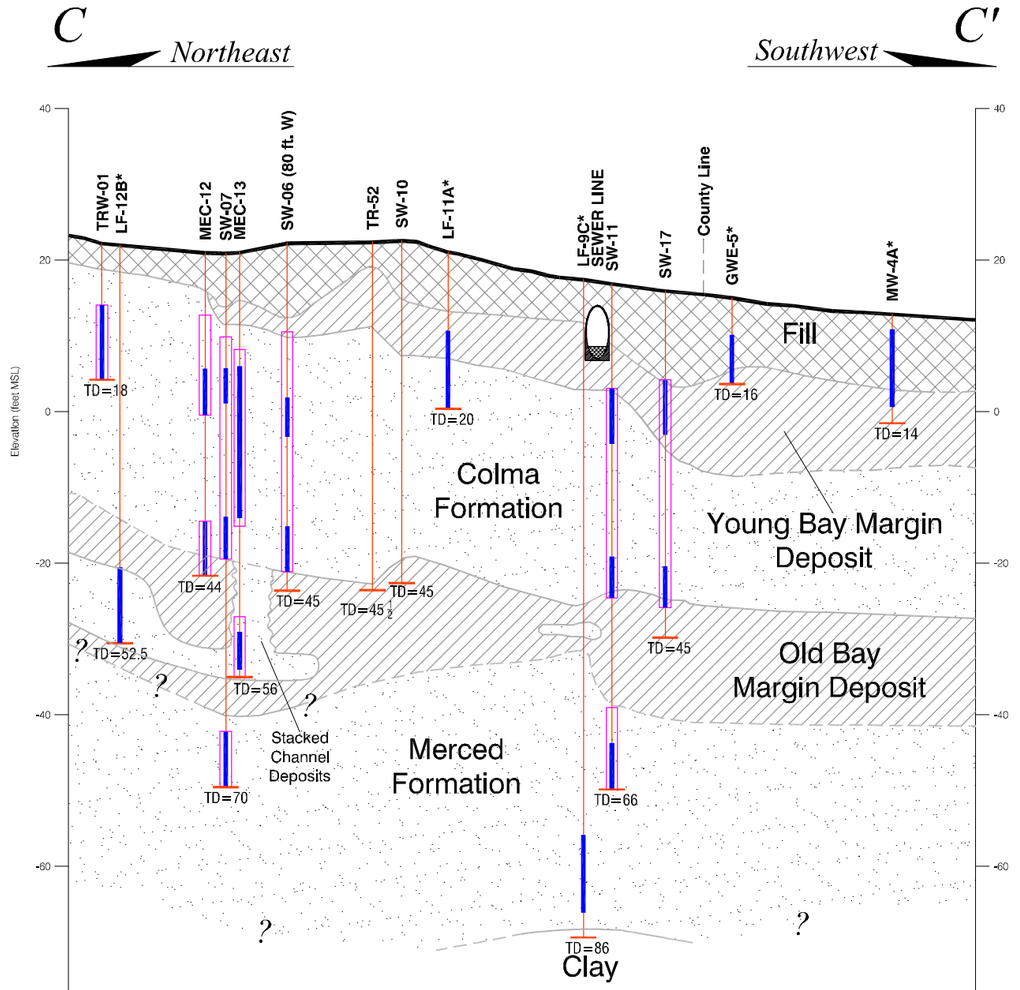
Schlage OU
San Francisco and Brisbane, California

Appendix B
Cross-Section A-A'

FIGURE

B-2





Legend

Geologic Units (as described on driller's logs):

- Coarse Material (Gravel & Sand)
- Fine Material (Silt, Clay & Peat)
- Fill

- Well Location and Depth
- Screen Interval
- Gravel Pack
- Total Depth of Well

TD=70

Notes:

* = Well information for screened interval only

SCALE IN FEET

20

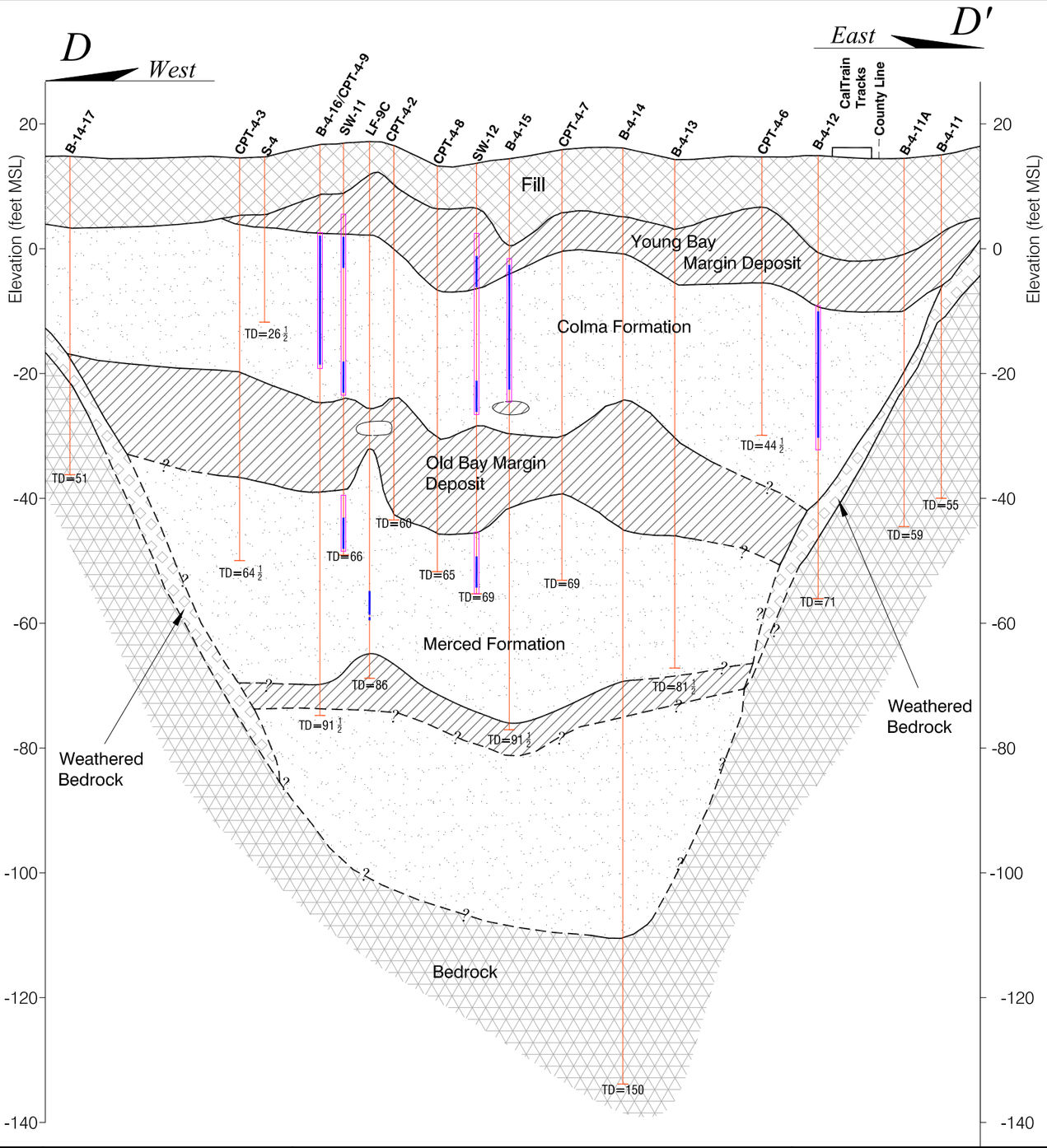
0

0 200

SCALE IN FEET

4096088522200.DWG 1.0
20100521.1110

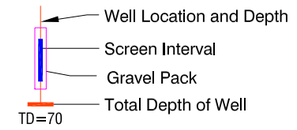
DRAWN PCB	JOB NUMBER 4096088522	MACTEC	Quarterly Groundwater Monitoring Report Schlage OU San Francisco and Brisbane, California	Appendix B Cross-Section B-B' and C-C'	FIGURE B-3
ENGINEER	SCALE AS SHOWN				
CHECKED NAM	DATE 4/2010				
APPROVED	DATE				

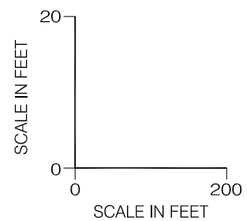


Legend

Geologic Units (as described on driller's logs):

- Coarse Material (Gravel & Sand)
- Fine Material (Silt, Clay & Peat)
- Fill
- Bedrock
- Weathered Bedrock





4096088522101.DWG 10.0
20100504.1413

DRAWN PCB	JOB NUMBER 4096088522	MACTEC	Groundwater Monitoring Report Schlage OU San Francisco and Brisbane, California	Cross Section D-D'
ENGINEER	SCALE as shown			FIGURE B-4
CHECKED	DATE 4/2010			
APPROVED	DATE			

APPENDIX B

Historical Concentrations of Constituents in Soil and Groundwater

APPENDIX B-1

Harding Lawson & Associates [1982]
Ecology & Environment [1985]
The Mark Group [1986]
S.S. Papadopoulos & Associates [1989]

REMEDIAL INVESTIGATION REPORT
JOINT GROUNDWATER OPERABLE UNIT

FOR
SUNQUEST PROPERTIES, INC. AND SCHLAGE LOCK COMPANY
BRISBANE AND SAN FRANCISCO, CALIFORNIA

April 2002

PROJECT NO.
30240

PROPERTY LINE SFPC AREA LEASED BY SCHLAGE LOCK

PROPERTY LINE SCHLAGE LOCK

PROPERTY LINE SUNQUEST OPERABLE UNIT 1

STORAGE BUILDING

STORAGE BUILDING

SHED

SHED

SCHLAGE LOCK PLANT 1

SCHLAGE LOCK PLANT 1-X

SCHLAGE LOCK 3-STORY OFFICE BLDG.

SCHLAGE LOCK PLANT 2-X

SCHLAGE LOCK PARKING LOT

SCHLAGE LOCK PLANT 2

SCHLAGE LOCK PLANT 3

SCHLAGE LOCK PLANT 3-X

CALTRAIN TRACKS

CALTRAIN PASSENGER PLATFORM

TREATMENT SYSTEM

SUNQUEST BUILDING

SEWER

RAILROAD TRACKS

STATUE COMPANY

CAR WASH

SEWER

LELAND AVE.

VISITACION AVE.

BAYSHORE BOULEVARD

SUNNYDALE AVENUE

BAYSHORE BOULEVARD

MACDONALD AVENUE

GENEVA AVENUE

FORMER PAINT SHOP

FORMER FORGE

FORMER BLACKSMITH SHOP

FORMER COACH REPAIR SHOP

FORMER FREIGHT REPAIR SHOP

FORMER MACHINE AND ERECTING SHOP

FORMER TIN SHOP

FORMER WHEEL AXLE SHOP

FORMER PAINT STORAGE HOUSE

FORMER CAR HOUSE

FORMER UNIT #1 OIL TANK

FORMER UNIT #3 SLUDGE PONDS

SOUTHERN LEGS OF OPERABLE UNIT 1

LEGEND

- HARDING LAWSON ABANDONED MONITORING WELL (1982)
- BROWN & CALDWELL MONITORING WELL (1982, 1985)
- ECOLOGY & ENVIRONMENT MONITORING WELL (1984-1985)
- ECOLOGY & ENVIRONMENT ABANDONED MONITORING WELL (1984-1985)
- MARK GROUP MONITORING WELL (1985-1986)
- LEVINE FRICKE MONITORING WELL (1990)
- GROUNDWATER TECHNOLOGY WELL (1993-1994)
- LEVINE FRICKE GROUNDWATER TREATMENT SYSTEM EXTRACTION WELL (1994)
- TREADWELL & ROLLO MONITORING WELL (1995)
- TREADWELL & ROLLO MULTI-LEVEL MONITORING WELL (1999-2001)
- TREADWELL & ROLLO MULTI-LEVEL ABANDONED MONITORING WELL (1999-2001)
- BURNS & MCDONNELL PIEZOMETER (2000)
- TREADWELL & ROLLO SVE PILOT TEST LOCATION (1997)
- BROWN & CALDWELL SOIL BORING (1982)
- ECOLOGY & ENVIRONMENT SOIL BORING (1984-1985)
- MARK GROUP SOIL BORING (1985-1986)
- LEVINE FRICKE SOIL BORING (1990)
- EMCON SOIL BORING (1993)
- TREADWELL & ROLLO SOIL BORING/ GROUNDWATER GRAB SAMPLING POINT
  - TR 1-18 (1994) PRELIMINARY ENDANGERMENT ASSESSMENT
  - TR 19-37 (1995) INTERIM REMEDIAL INVESTIGATION
  - TR 38-43 (1998) PLANT 3X LOADING DOCK AREA INVESTIGATION
  - TR 44 (1998) MAINTENANCE SHED INVESTIGATION
  - TR 45-60 (1998) FIELD INVESTIGATION
  - TR 61-78 (1998) PRELIMINARY SOIL AND GROUNDWATER INVESTIGATION PLANTS 1, 1X, AND 2X
  - TR 79 (2000) ADDITIONAL GROUNDWATER CHARACTERIZATION
  - TR 80-86 (2000) SVE SOIL VERIFICATION SAMPLING
- TREADWELL & ROLLO SOIL SAMPLING LOCATIONS (1996)
- IT CORP. CONFIRMATION SAMPLE (1993)
- EXISTING STRUCTURE
- FORMER STRUCTURE
- SEWER LINE

100' 0' 100' 200'
SCALE IN FEET

JOINT GROUNDWATER REMEDIAL INVESTIGATION REPORT APRIL 2002

Figure 2-1
LOCATIONS OF PREVIOUS INVESTIGATIONS
SCHLAGE LOCK CO./ SUNQUEST PROPERTIES, INC.
BRISBANE, CA

Source: Harding Lawson Associates, 1982
Environmental Assessment of Fill
Former Railyard

TABLE 6-14 GROUNDWATER QUALITY DATA - INORGANICS (mg/l)
(HARDING LAWSON SAMPLES, MAR. 1982)

Well ID EPA MCL*	Sb	As 0.05	Ba 1.00	Cd	Cr 0.05	Co	Cu 1.00#	Pb 0.05
HLA-1	N/A	N/A	N/A	N/A	0.03	N/A	N/A	N/A

Well ID EPA MCL*	Hg	Mo	Ni	Se	Ag	Tl	V	Zn 5.0
HLA-1	0.0003	N/A	N/A	N/A	N/A	N/A	N/A	N/A

N/A: Not Analyzed

* U.S.E.P.A. Maximum Concentration Limit for Drinking Water
Secondary (unenforceable) standard
Source: California Water Quality Control Board (1985)

Source: Ecology and Environment, Inc., 1985
Soil and Groundwater Investigation
of the Southern Pacific Transportation Co, Bayshore Railroad Yard

TABLE 6-15: GROUNDWATER QUALITY DATA - ORGANICS (mg/l)
(HARDING LAWSON SAMPLES, MAR. 1982)

Well ID DOHS AL*	pH	TOC	1,1-DCE 0.0004	PCE 0.004	t-1,2-DCE	TCE 0.005	Vinyl Chloride 0.002	Bis-2EHP	PID (ppm)	Visual Oil
HLA-1	7.3	91	0.075	0.600	2.77	10.0	0.46	0.030	360	No
HLA-2	7.5	5.0	NA	NA	NA	NA	NA	NA	0	No
HLA-3	7.2	6.5	NA	NA	NA	NA	NA	NA	0	No
HLA-4	5.4	9.8	NA	NA	NA	NA	NA	NA	10,000	No
HLA-13	7.5	11	NA	NA	NA	NA	NA	NA	NA	No
HLA-14	7.1	62	NA	NA	NA	NA	NA	NA	160	No
HLA-15	7.3	12	NA	NA	NA	NA	NA	NA	40	No
HLA-16	7.0	15	NA	NA	NA	NA	NA	NA	100	No

* California Department of Health Services Action Level (Source: California Water Resources Control Board, 1985). NA: Not Analyzed

TABLE 6-16: GROUNDWATER QUALITY DATA - INORGANICS (mg/l)
(ECOLOGY AND ENVIRONMENT SAMPLES, JAN. 1984)

Well ID EPA MCL*	As 0.05	Ba 1.00	Cr 0.05	Cu 1.00#	Pb 0.005	Zn 5.0
HLA-1	0.145	0.216	<0.005	.071	0.003	0.023
HLA-2	0.060	<0.200	<0.005	.063	0.009	0.030
HLA-3	0.043	<0.200	0.024	.085	0.014	0.052
HLA-4	0.043	<0.200	<0.005	.071	0.005	0.045
HLA-14	0.092	<0.200	<0.005	.071	0.004	0.030
HLA-15	0.068	<0.200	0.015	.085	0.018	0.074
HLA-16	0.916	<0.200	0.052	.078	0.051	0.067

* U.S.E.P.A. Maximum Concentration Limit for Drinking Water
Secondary (uneforceable) standard
Source: California Water Quality Control Board (1985)

TABLE 6-17: GROUNDWATER QUALITY DATA - ORGANICS (mg/l)
(ECOLOGY AND ENVIRONMENT SAMPLES, JAN. 1984)

Well ID DOHS AL*	Benzene 0.0007	Ethyl- Benzene	Chloroform 0.1#	Toluene 0.10	t-1,2- DCE	TCE 0.005	PCE 0.004
HLA-1	0.00715	0.0184	N/A	0.0275	2.36	0.014	N/A
HLA-2	N/A	N/A	N/A	N/A	1.15	0.747	2.08
HLA-3	N/A	N/A	N/A	N/A	0.0187	0.0094	N/A
HLA-4	N/A	N/A	N/A	N/A	Trace	N/A	N/A
HLA-14	N/A	N/A	N/A	N/A	N/A	0.005	N/A

N/A: Not Analyzed

* California Department of Health Services Action Level

\# EPA Maximum Concentration Limit for Drinking Water; Bromodichloromethane as total trihalomethane.

Source: California Water Resources Control Board (1985)

Table 4-A

ANIONS AND CATIONS IN WATER SAMPLES
(mg/l)

Monitoring Well	6A	6B
Total Alkalinity/ $CaCO_3$	383	251
Calcium	96	117
Iron	17	1.8
Magnesium	33	66.6
Potassium	12.3	3.05
Sodium	87	--
Sulfate	21	55

Source: Ecology and Environment, Inc. 1984.

recycled paper

ecology and environment

RESULTS OF METAL ANALYSES OF WATER SAMPLES

(All results in mg/L.

E & E Sample Number 84-	Sample Identity	Parameter					
		Arsenic	Barium	Lead	Copper	Chromium	Zinc
1604	MW2B [1]	0.011	<0.2	0.010	<0.05	0.094	0.040
1605	MW3A	1.90	2.93	2.84	1.560	1.81	4.88
1606	MW4A	0.126	1.07	0.126	0.181	0.251	0.428
1522	MW5A	0.173	0.915	0.277	0.301	1.515	0.752
1521	MW5B	<0.01	<0.2	0.026	<0.05	0.154	0.058
1527	MW6A	0.045	0.269	0.317	0.314	0.182	0.474
1528	MW6B	<0.01	<0.2	0.015	<0.05	0.111	0.051
1607	MW7A	0.066	0.687	3.06	1.17	0.194	1.98
1525	MW8A	<0.01	<0.2	0.168	0.102	0.088	0.149
1463	MW8B	<0.01	<0.2	0.004	<0.05	0.013	0.098

< = None detected at the stated detection limits.

recycled paper

printed on recycled paper

RESULTS OF WATER ANALYSIS FOR
BASE/NEUTRAL COMPOUNDS

(all results in ug/L)

PP #	CAS #	Compound	E & E Lab Number Sample I.D.	1604 MW 28	1605 MW 3A	1606 MW 4A
(18)	83-32-9	acenaphthene		<10	<10	<10
(58)	92-87-5	benzidine		<10	<10	<10
(88)	120-82-1	1,2,4-trichlorobenzene		<10	<10	<10
(98)	118-74-1	hexachlorobenzene		<10	<10	<10
(128)	67-72-1	hexachloroethane		<10	<10	<10
(188)	111-44-4	bis(2-chloroethyl) ether		<10	<10	<10
(208)	91-58-7	2-chloronaphthalene		<10	<10	<10
(258)	95-50-1	1,2-dichlorobenzene		<10	<10	<10
(268)	541-73-1	1,3-dichlorobenzene		<10	<10	<10
(278)	106-46-7	1,4-dichlorobenzene		<10	<10	<10
(288)	91-94-1	3,3'-dichlorobenzidine		<10	<10	<10
(358)	121-14-2	2,4-dinitrotoluene		<10	<10	<10
(368)	606-20-2	2,6-dinitrotoluene		<10	<10	<10
(378)	122-66-7	1,2-diphenylhydrazine		<10	<10	<10
(398)	206-44-0	fluoranthene		<10	<10	<10
(408)	7005-72-3	4-chlorophenyl phenyl ether		<10	<10	<10
(418)	101-55-3	4-bromophenyl phenyl ether		<10	<10	<10
(428)	39638-32-9	bis(2-chloroisopropyl) ether		<10	<10	<10
(438)	111-91-1	bis(2-chloroethoxy) methane		<10	<10	<10
(528)	87-68-3	hexachlorobutadiene		<10	<10	<10
538)	77-47-4	hexachlorocyclopentadiene		<10	<10	<10
548	78-59-1	isophorone		<10	<10	<10
(558)	91-20-1	naphthalene		<10	<10	<10
(568)	98-95-3	nitrobenzene		<10	<10	<10
(628)	86-30-6	N-nitrosodiphenylamine		<10	<10	<10
(638)	621-64-7	N-nitrosodipropylamine		<10	<10	<10
(668)	117-81-0	bis(2-ethylhexyl) phthalate		<10	<10	<10
(678)	85-68-7	benzyl butyl phthalate		<10	<10	<10
(688)	84-74-2	di-n-butyl phthalate		<10	<10	<10
(698)	117-84-0	di-n-octyl phthalate		<10	<10	<10
(708)	84-66-2	diethyl phthalate		<10	<10	<10
(718)	131-11-3	dimethyl phthalate		<10	<10	<10
(728)	56-55-3	benzo(a)anthracene		<10	<10	<10
(738)	50-32-8	benzo(a)pyrene		<10	<10	<10
(748)	205-99-2	benzo(b)fluoranthene		<10	<10	<10
(758)	207-08-9	benzo(k)fluoranthene		<10	<10	<10
(768)	218-01-9	chrysene		<10	<10	<10
(778)	208-96-8	acenaphthylene		<10	<10	<10
(788)	120-12-7	anthracene		<10	<10	<10
(798)	191-24-2	benzo(ghi)perylene		<10	<10	<10
(808)	86-73-7	fluorene		<10	<10	<10
(818)	85-01-8	phenanthrene		<10	<10	<10
(828)	53-70-3	dibenzo(a,h)anthracene		<10	<10	<10
(838)	193-39-5	indeno(1,2,3-cd)pyrene		<10	<10	<10
(848)	129-00-0	pyrene		<10	<10	<10

RESULTS OF WATER ANALYSIS FOR
VOLATILE ORGANIC COMPOUNDS

(all results in ug/L)

PP#	CAS#	Compound	E & E Lab Number Sample I.D.	1526 8A	1464 8B
(2V)	107-02-8	acrolein		<100	<100
(3V)	107-13-1	acrylonitrile		<100	<100
(4V)	71-43-2	benzene		BHDL*	<10
(6V)	56-23-5	carbon tetrachloride		<10	<10
(7V)	108-90-7	chlorobenzene		<10	<10
(10V)	107-06-2	1,2-dichloroethane		<10	<10
(11V)	71-55-6	1,1,1-trichloroethane		<10	<10
(13V)	75-34-3	1,1-dichloroethane		<10	<10
(14V)	79-00-5	1,1,2-trichloroethane		<10	<10
(15V)	79-34-5	1,1,2,2-tetrachloroethane		<10	<10
(16V)	75-00-3	chloroethane		<10	<10
(19V)	110-75-8	2-chloroethylvinyl ether		<10	<10
(23V)	67-66-3	chloroform		<10	<10
(29V)	75-35-4	1,1-dichloroethene		<10	<10
(30V)	156-60-5	trans-1,2-dichloroethene		1100	<10
(32V)	78-87-5	1,2-dichloropropane		<10	<10
(33V)	10061-02-6	trans-1,3-dichloropropene		<10	<10
	10061-01-05	cis-1,3-dichloropropene		<10	<10
(38V)	100-41-4	ethylbenzene		<10	<10
(44V)	75-09-2	methylene chloride		200	275
(45V)	74-87-3	chloromethane		<10	<10
(46V)	74-83-9	bromomethane		<10	<10
(47V)	75-25-2	bromoform		<10	<10
(48V)	75-27-4	bromodichloromethane		<10	<10
(49V)	75-69-4	fluorotrichloromethane		<10	<10
(50V)	75-71-8	dichlorodifluoromethane		<10	<10
(51V)	124-48-1	chlorodibromomethane		<10	<10
(85V)	127-18-4	tetrachloroethene		<10	<10
(86V)	108-88-3	toluene		<10	92
(87V)	79-01-6	trichloroethene		<10	<10
(88V)	75-01-4	vinyl chloride		<10	<10

*BHDL = Compound present but below measurable detection limits.

RESULTS OF WATER ANALYSIS FOR
VOLATILE ORGANIC COMPOUNDS

(all results in ug/L)

PP#	CAS#	Compound	E & E Lab Number Sample I.D.	1604 MW 28	1605 MW 34	1606 MW 44
(2V)	107-02-8	acrolein		<100	<100	<100
(3V)	107-13-1	acrylonitrile		<100	<100	<100
(4V)	71-43-2	benzene		<10	<10	<10
(6V)	56-23-5	carbon tetrachloride		<10	<10	<10
(7V)	108-90-7	chlorobenzene		<10	<10	<10
(10V)	107-06-2	1,2-dichloroethane		<10	<10	<10
(11V)	71-55-6	1,1,1-trichloroethane		<10	<10	<10
(13V)	75-34-3	1,1-dichloroethane		<10	<10	<10
(14V)	79-00-5	1,1,2-trichloroethane		<10	<10	<10
(15V)	79-34-5	1,1,2,2-tetrachloroethane		<10	<10	<10
(16V)	75-00-3	chloroethane		<10	<10	<10
(19V)	110-75-8	2-chloroethylvinyl ether		<10	<10	<10
(23V)	67-66-3	chloroform		<10	<10	<10
(29V)	75-35-4	1,1-dichloroethene		<10	<10	<10
(30V)	156-60-5	trans-1,2-dichloroethene		<10	<10	<10
(32V)	78-87-5	1,2-dichloropropane		<10	<10	<10
(33V)	10061-02-6	trans-1,3-dichloropropene		<10	<10	<10
	10061-01-05	cis-1,3-dichloropropene		<10	<10	<10
(38V)	100-41-4	ethylbenzene		<10	<10	<10
(44V)	75-09-2	methylene chloride		<10	<10	<10
(45V)	74-87-3	chloromethane		<10	<10	<10
(46V)	74-83-9	bromomethane		<10	<10	<10
(47V)	75-25-2	bromoform		<10	<10	<10
(48V)	75-27-4	bromodichloromethane		<10	<10	<10
(49V)	75-69-4	fluorotrichloromethane		<10	<10	<10
(50V)	75-71-8	dichlorodifluoromethane		<10	<10	<10
(51V)	124-48-1	chlorodibromomethane		<10	<10	<10
(85V)	127-18-4	tetrachloroethene		<10	<10	<10
(86V)	108-88-3	toluene		<10	BMDL	<10
(87V)	79-01-6	trichloroethene		<10	<10	<10
(88V)	75-01-4	vinyl chloride		<10	<10	<10

BMDL = Compound present but below measurable detection limits.

RESULTS OF WATER ANALYSIS FOR
VOLATILE ORGANIC COMPOUNDS

(all results in ug/L)

PP#	CAS#	Compound	E & E Lab Number / Sample I.D.	1522 5A	1521 5B	1527 6A	1529 6B	1607 7A
2V.	107-02-8	acrolein		<100	<100	<100	<100	<100
(3V)	107-13-1	acrylonitrile		<100	<100	<100	<100	<100
(4V)	71-43-2	benzene		<100	<10	BMDL	<10	<10
(6V)	56-23-5	carbon tetrachloride		<10	<10	<10	<10	<10
(7V)	108-90-7	chlorobenzene		<10	<10	<10	<10	<10
(10V	107-06-2	1,2-dichloroethane		<10	<10	<10	<10	<10
(11V)	71-55-6	1,1,1-trichloroethane		<10	<10	<10	<10	<10
(13V)	75-34-3	1,1-dichloroethane		<10	<10	<10	<10	<10
(14V	79-00-5	1,1,2-trichloroethane		<10	<10	<10	<10	<10
(15V	79-34-5	1,1,2,2-tetrachloroethane		<10	<10	<10	<10	<10
(16V	75-00-3	chloroethane		<10	<10	<10	<10	<10
(19V	110-75-8	2-chloroethylvinyl ether		<10	<10	<10	<10	<10
(23V	67-66-3	chloroform		<10	<10	<10	<10	<10
(29	75-35-4	1,1-dichloroethene		<10	<10	<10	<10	<10
30V	156-60-5	trans-1,2-dichloroethene		<10	<10	1230	<10	610
32V	78-87-5	1,2-dichloropropane		<10	<10	<10	<10	<10
33V	10061-02-6	trans-1,3-dichloropropene		<10	<10	<10	<10	<10
	10061-01-05	cis-1,3-dichloropropene		<10	<10	<10	<10	<10
38	100-41-4	ethylbenzene		<10	<10	<10	<10	<10
44V	75-09-2	methylene chloride		533	615	144	166	<10
45V	74-87-3	chloromethane		<10	<10	<10	<10	<10
46V	74-83-9	bromomethane		<10	<10	<10	<10	<10
47V	75-25-2	bromoform		<10	<10	<10	<10	<10
48	75-27-4	bromodichloromethane		<10	<10	<10	<10	<10
49V	75-69-4	fluorotrichloromethane		<10	<10	<10	<10	<10
(50V)	75-71-8	dichlorodifluoromethane		<10	<10	<10	<10	<10
(51V)	124-48-1	chlorodibromomethane		<10	<10	<10	<10	<10
(85V)	127-18-4	tetrachloroethene		10,100	16	17	<10	<10
(86V)	108-88-3	toluene		<10	12	<10	<10	<10
(87V)	79-01-6	trichloroethene		9,550	5,850	2,080	<10	<10
(88V)	75-01-4	vinyl chloride		<10	<10	<10	<10	<10

BMDL = Compound present but below measurable detection limits.

RESULTS OF WATER ANALYSIS FOR
BASE/NEUTRAL COMPOUNDS

(all results in ug/L)

PP #	CAS #	Compound	E & E Lab Number Sample I.D.	1525 8A	1464 8B
(1B)	83-32-9	acenaphthene		<10	<10
(5B)	92-87-5	benzidine		<10	<10
(8B)	120-82-1	1,2,4-trichlorobenzene		<10	<10
(9B)	118-74-1	hexachlorobenzene		<10	<10
(12B)	67-72-1	hexachloroethane		<10	<10
(18B)	111-44-4	bis(2-chloroethyl)ether		<10	<10
(20B)	91-58-7	2-chloronaphthalene		<10	<10
(25B)	95-50-1	1,2-dichlorobenzene		<10	<10
(26B)	541-73-1	1,3-dichlorobenzene		<10	<10
(27B)	106-46-7	1,4-dichlorobenzene		<10	<10
(28B)	91-94-1	3,3'-dichlorobenzidine		<10	<10
(35B)	121-14-2	2,4-dinitrotoluene		<10	<10
(36B)	606-20-2	2,6-dinitrotoluene		<10	<10
(37B)	122-66-7	1,2-diphenylhydrazine		<10	<10
(39B)	206-44-0	fluoranthene		<10	<10
(40B)	7005-72-3	4-chlorophenyl phenyl ether		<10	<10
(41B)	101-55-3	4-bromophenyl phenyl ether		<10	<10
(42B)	39638-32-9	bis(2-chloroisopropyl)ether		<10	<10
(43B)	111-91-1	bis(2-chloroethoxy) methane		<10	<10
(52B)	87-68-3	hexachlorobutadiene		<10	<10
(53B)	77-47-4	hexachlorocyclopentadiene		<10	<10
(54B)	78-59-1	isophorone		<10	<10
(55B)	91-20-1	naphthalene		<10	<10
(56B)	98-95-3	nitrobenzene		<10	<10
(62B)	86-30-6	N-nitrosodiphenylamine		<10	<10
(63B)	621-64-7	N-nitrosodipropylamine		<10	<10
(66B)	117-81-0	bis(2-ethylhexyl) phthalate		<10	<10
(67B)	85-68-7	benzyl butyl phthalate		<10	<10
(68B)	84-74-2	di-n-butyl phthalate		<10	<10
(69B)	117-84-0	di-n-octyl phthalate		<10	<10
(70B)	84-66-2	diethyl phthalate		<10	<10
(71B)	131-11-3	dimethyl phthalate		<10	<10
(72B)	56-55-3	benzo(a)anthracene		<10	<10
(73B)	50-32-8	benzo(a)pyrene		<10	<10
(74B)	205-99-2	benzo(b)fluoranthene		<10	<10
(75B)	207-08-9	benzo(k)fluoranthene		<10	<10
(76B)	218-01-9	chrysene		<10	<10
(77B)	208-96-8	acenaphthylene		<10	<10
(78B)	120-12-7	anthracene		<10	<10
(79B)	191-24-2	benzo(ghi)perylene		<10	<10
(80B)	86-73-7	fluorene		<10	<10
(81B)	85-01-8	phenanthrene		<10	<10
(82B)	53-70-3	dibenzo(a,h)anthracene		<10	<10
(83B)	193-39-5	indeno(1,2,3-cd)pyrene		<10	<10
(84B)	129-00-0	pyrene		<10	<10

RESULTS OF WATER ANALYSIS FOR
BASE/NEUTRAL COMPOUNDS

(all results in ug/L)

PP #	CAS #	Compound	E & E Lab Number Sample I.D.	1522 5A	1521 5B	1527 6A	1528 6B	1637 7A
(18)	83-32-9	acenaphthene		<10	<10	<10	<10	<10
(58)	92-87-5	benzidine		<10	<10	<10	<10	<10
(88)	120-82-1	1,2,4-trichlorobenzene		<10	<10	<10	<10	<10
(98)	118-74-1	hexachlorobenzene		<10	<10	<10	<10	<10
(128)	67-72-1	hexachloroethane		<10	<10	<10	<10	<10
(138)	111-44-4	bis(2-chloroethyl)ether		<10	<10	<10	<10	<10
(208)	91-58-7	2-chloronaphthalene		<10	<10	<10	<10	<10
(238)	95-50-1	1,2-dichlorobenzene		<10	<10	<10	<10	<10
(248)	541-73-1	1,3-dichlorobenzene		<10	<10	<10	<10	<10
278)	106-46-7	1,4-dichlorobenzene		<10	<10	<10	<10	<10
338	91-94-1	3,3'-dichlorobenzidine		<10	<10	<10	<10	<10
358	121-14-2	2,4-dinitrotoluene		<10	<10	<10	<10	<10
368)	606-20-2	2,6-dinitrotoluene		<10	<10	<10	<10	<10
378	122-66-7	1,2-diphenylhydrazine		<10	<10	<10	<10	<10
398	206-44-0	fluoranthene		<10	<10	<10	<10	<10
408	7005-72-3	4-chlorophenyl phenyl ether		<10	<10	<10	<10	<10
418	101-55-3	4-bromophenyl phenyl ether		<10	<10	<10	<10	<10
428	39638-32-9	bis(2-chloroisopropyl)ether		<10	<10	<10	<10	<10
438	111-91-1	bis(2-chloroethoxy) methane		<10	<10	<10	<10	<10
528	87-68-3	hexachlorobutadiene		<10	<10	<10	<10	<10
538	77-47-4	hexachlorocyclopentadiene		<10	<10	<10	<10	<10
548	78-59-1	isophorone		<10	<10	<10	<10	<10
558	91-20-3	naphthalene		<10	<10	<10	<10	<10
568)	98-95-3	nitrobenzene		<10	<10	<10	<10	<10
628)	86-30-6	N-nitrosodiphenylamine		<10	<10	<10	<10	<10
(638)	621-64-7	N-nitrosodipropylamine		<10	<10	<10	<10	<10
(668)	117-81-0	bis(2-ethylhexyl) phthalate		<10	<10	<10	<10	<10
(678)	85-68-7	benzyl butyl phthalate		<10	<10	<10	<10	<10
688)	84-74-2	di-n-butyl phthalate		<10	<10	<10	<10	<10
(698)	117-84-0	di-n-octyl phthalate		<10	<10	<10	<10	<10
(708)	84-66-2	diethyl phthalate		<10	<10	<10	<10	<10
(718)	131-11-3	dimethyl phthalate		<10	<10	<10	<10	<10
(728)	56-55-3	benzo(a)anthracene		<10	<10	<10	<10	<10
(738)	50-32-8	benzo(a)pyrene		<10	<10	<10	<10	<10
748)	205-99-2	benzo(b)fluoranthene		<10	<10	<10	<10	<10
758)	207-08-9	benzo(k)fluoranthene		<10	<10	<10	<10	<10
768)	218-01-9	chrysene		<10	<10	<10	<10	<10
778	208-96-8	acenaphthylene		<10	<10	<10	<10	<10
788)	120-12-7	anthracene		<10	<10	<10	<10	<10
798)	191-24-2	benzo(ghi)perylene		<10	<10	<10	<10	<10
808)	86-73-7	fluorene		<10	<10	<10	<10	<10
818)	85-01-8	phenanthrene		<10	<10	<10	<10	<10
828)	53-70-3	dibenzo(a,h)anthracene		<10	<10	<10	<10	<10
838)	193-39-5	indeno(1,2,3-cd)pyrene		<10	<10	<10	<10	<10
848	129-00-0	pyrene		<10	<10	<10	<10	<10

Source: Mark Group, 1986
Interim Report for the Remedial Action Alternative Feasibility Study
of the Bayshore Facility

TABLE 4-3: The MARK Group Analyses

Parameter	Detection Limit Water (mg/l)	Detection Limit Soil (mg/kg)	Analysis Method Water	Analysis Method Soil
Methyl Chloride	0.0002	0.002	601/602	8010/8020
Vinyl Chloride	0.0001	0.001	601/602	8010/8020
Methyl Bromide	0.0001	0.001	601/602	8010/8020
Ethyl Chloride	0.0001	0.001	601/602	8010/8020
Dichlorodifluoromethane	0.001	0.005	601/602	8010/8020
Trichlorotrifluoroethane (F-113)	0.010	0.010	601/602	8010/8020
Methylene Chloride	0.010	0.010	601/602	8010/8020
Trichlorofluoromethane	0.0001	0.001	601/602	8010/8020
t-1,2-Dichloroethene (t-1,2-DCE)	0.0001	0.001	601/602	8010/8020
1,1-Dichloroethane (1,1-DCA)	0.0001	0.001	601/602	8010/8020
Chloroform	0.0001	0.001	601/602	8010/8020
1,1,1-Trichloroethane (1,1,1-TCA)	0.0001	0.001	601/602	8010/8020
1,2-Dichloroethane (1,2-DCA)	0.0001	0.001	601/602	8010/8020
Carbon Tetrachloride (Carbon Tet.)	0.0001	0.001	601/602	8010/8020
Benezene	0.0001	0.001	601/602	8010/8020
1,2-Dichloropropane	0.0001	0.001	601/602	8010/8020
c-1,3-Dichloropropene	0.0001	0.001	601/602	8010/8020
Trichloroethene (TCE)	0.0001	0.001	601/602	8010/8020
Bromodichlormethane	0.0001	0.001	601/602	8010/8020
t-1,3-Dichloropropene	0.0001	0.001	601/602	8010/8020
Toluene	0.0002	0.002	601/602	8010/8020
1,1,2-Trichloroethane (TCA)	0.0001	0.0001	601/602	8010/8020
Dibromochloromethane	0.0001	0.001	601/602	8010/8020
Tetrachloroethylene (PCE)	0.0001	0.001	601/602	8010/8020
Chlorobenzene	0.0001	0.001	601/602	8010/8020
Ethylbenzene	0.0001	0.001	601/602	8010/8020
Bromoform	0.0002	0.002	601/602	8010/8020
1,1,2,2-Tetrachloroethane (1,1,2,2-PCA)	0.0005	0.005	601/602	8010/8020
Dichlorobenzenes	0.0001	0.001	601/602	8010/8020
Xylenes	0.0001	0.001	601/602	8010/8020
2-Chloroethylvinyl Ether	0.0001	0.001	601/602	8010/8020
Alicyclics Early	1.0	NA	8240	NA
Aliphatics Early	0.5	NA	8240	NA
Unsaturates Early	1.0	NA	8240	NA
Alklynaphthalenes Early	2.0	NA	8240	NA
Alicyclics Late	1.0	NA	8240	NA
Aliphatics Late	0.1	NA	8240	NA
Unsaturates Late	1.0	NA	8240	NA
Aklylaromatics	10.	NA	8240	NA
C-2 Alkylnaphthalenes	5	NA	8240	NA
Aklylnaphthalenes Late	2.0	NA	8240	NA

TABLE 6-21: GROUNDWATER QUALITY DATA - INORGANICS (mg/l)
(MARK GROUP SAMPLES APR. AND JUNE 1986)

I.D.	As	Ba	Cr	Cu	Pb	Zn
EPA MCL*	0.05	1.00	0.05	1.00#	0.05	5.0
MK-2A	0.07	<0.1	<0.005	<0.04	<0.005	<0.04
MW-2B	<0.005	0.1	<0.005	<0.04	<0.005	<0.04
MW-3A	<0.005	<0.1	<0.005	<0.04	<0.005	<0.04
MK-3B	<0.005	0.2	<0.005	<0.04	<0.005	<0.04
MK-4A	<0.005	<0.1	<0.005	<0.04	<0.005	<0.04
MK-4B	<0.005	<0.1	<0.005	<0.04	<0.005	<0.04
MW-4A	0.021	<0.1	<0.005	<0.04	<0.005	<0.04
MK-5A	0.02	<0.1	<0.005	<0.04	<0.005	<0.04
MK-5B	<0.005	<0.1	<0.005	<0.04	<0.005	<0.04
MW-5A	<0.005	0.2	0.04	<0.04	0.01	0.04
MW-5B	<0.005	0.2	0.03	<0.04	0.03	<0.04
MK-6A	0.028	0.1	0.01	<0.04	<0.005	<0.04
MK-6B	<0.005	0.2	0.01	<0.04	<0.005	<0.04
MW-6A	<0.005	<0.1	<0.005	<0.04	<0.005	<0.04
MW-6B	<0.005	<0.1	0.01	<0.04	<0.005	<0.04
MW-7A	<0.005	0.3	<0.005	0.09	0.46	0.12
MW-8A	<0.005	<0.1	<0.005	<0.04	<0.005	<0.04
MW-8B	<0.005	<0.1	<0.005	<0.04	<0.005	<0.04

* U.S.E.P.A. Maximum Concentration Limit for Drinking Water
\# Secondary (unenforceable) standard
Source: California Water Quality Control Board (1985)

TABLE 6-22: GROUNDWATER QUALITY DATA - ORGANICS (mg/l)
(MARK GROUP SAMPLES APR. AND JUNE 1986)

SAMPLE I.D.	Benzene	TCE	1,1,1-TCA	1,1,2-TCA	Toluene	PCE
DOHS AL*	0.0007	0.005	0.200		0.10	0.004
MK-2A	ND	ND	ND	ND	ND	ND
MK-22A	ND	0.015	ND	ND	ND	ND
MW-2B	ND	ND	ND	ND	ND	ND
MW-3A	0.0006	ND	ND	ND	0.0009	ND
MK-3B	ND	ND	ND	ND	ND	ND
MK-4A	ND	ND	ND	ND	ND	ND
MK-4B	ND	0.0013	ND	ND	ND	ND
MW-4A	0.0003	ND	ND	ND	0.0012	ND
MK-5A	ND	ND	ND	ND	ND	ND
MK-5B	ND	ND	ND	ND	ND	ND
MW-5A	ND	1000	ND	ND	NA	48.00
MW-5A@	ND	140	0.047	0.13	ND	8.7
MW-5B	0.0005	0.044	ND	ND	0.0002	ND
MW-5B@	ND	0.007	ND	ND	ND	ND
MK-6A	ND	ND	ND	ND	ND	ND
MK-6B	ND	ND	ND	ND	ND	ND
MW-6A	ND	0.079	ND	ND	0.0002	0.006
MW-6B	ND	0.018	ND	ND	ND	0.0031
MW-7A	0.0008	0.34	ND	ND	0.0006	0.076
MW-8A	0.0002	ND	ND	ND	ND	ND
MW-8B	ND	0.001	ND	ND	ND	0.0001

ND: Not Detected

TABLE 6-22: GROUNDWATER QUALITY DATA - ORGANICS (ug/l) (continued)
(MARK GROUP SAMPLES APR. AND JUNE 1986)

SAMPLE I.D.	Methylene Chloride	Ethyl Chloride	c-1,2-DCE	t-1,2-DCE	1,1-DCA	Chloroform
DOHS AL*	0.04				0.001	0.1#
MK-2A	ND	ND	ND	ND	ND	ND
MK-2A-2	ND	ND	ND	ND	ND	ND
MW-2B	ND	ND	ND	ND	ND	ND
MW-3A	ND	ND	ND	ND	ND	ND
MK-3B	ND	ND	ND	ND	ND	ND
MK-4A	ND	ND	ND	ND	ND	ND
MK-4B	ND	ND	ND	ND	ND	ND
MW-4A	ND	ND	ND	ND	ND	ND
MK-5A	0.50	ND	ND	ND	ND	ND
MK-5B	ND	ND	ND	ND	ND	ND
MW-5A	ND	ND	ND	ND	ND	ND
MW-5A@	ND	ND	0.83	ND	ND	ND
MW-5B	ND	ND	ND	ND	ND	0.0002
MW-5B@	ND	ND	ND	ND	ND	ND
MK-6A	ND	ND	ND	ND	ND	ND
MK-6B	ND	ND	ND	ND	ND	ND
MW-6A	ND	ND	0.059	ND	ND	ND
MW-6B	ND	ND	ND	ND	ND	ND
MW-7A	ND	ND	0.63	0.0029	ND	ND
MW-8A	ND	ND	0.64	ND	ND	ND
MW-8B	ND	ND	ND	ND	ND	ND

TABLE 6-22: GROUNDWATER QUALITY DATA - ORGANICS (mg/l) (continued)
(MARK GROUP SAMPLES APR. AND JUNE 1986)

SAMPLE I.D.	Chloro-benzene	Ethyl Benzene	Xylene	1,1,2,2-PCA	Carbon Tet.	dichloro-methane
DOHS AL*			0.62		0.005	.100#
MK-2A	ND	ND	ND	ND	ND	ND
MK-2A-2	ND	ND	0.0023	ND	ND	ND
MW-2B	ND	0.0004	0.0016	ND	ND	ND
MW-3A	ND	0.0005	0.0032	ND	ND	ND
MK-3B	ND	ND	0.0006	ND	ND	ND
MK-4A	ND	ND	ND	ND	ND	ND
MK-4B	ND	ND	ND	ND	ND	ND
MW-4A	ND	0.0005	0.0038	ND	ND	ND
MK-5A	ND	ND	ND	ND	ND	ND
MK-5B	ND	ND	ND	ND	ND	ND
MW-5A	ND	ND	ND	ND	ND	ND
MK-5A@	ND	ND	ND	ND	ND	ND
MW-5B	ND	0.0002	ND	ND	ND	ND
MW-5B@	ND	ND	ND	ND	ND	ND
MK-6A	ND	ND	ND	ND	ND	ND
MK-6B	ND	ND	ND	ND	ND	ND
MW-6A	ND	0.0001	ND	ND	ND	ND
MW-6B	ND	ND	ND	ND	ND	ND
MW-7A	0.0005	ND	ND	0.0018	ND	ND
MW-8A	ND	ND	ND	ND	ND	ND
MW-8B	ND	ND	ND	ND	ND	ND

* California Department of Health Services Action Level
@ June 1986 Sampling
EPA Maximum Concentration Limit for Drinking Water; Bromodichloromethane as total trihalomethanes. Source: California Water Resources Control Board (1985)

Source: S.S. Papadopulos and Associates, 1989
(tables taken from Levine-Fricke, 1990)
Groundwater Monitoring Plan, Southern Pacific Transportation Company
Bayshore Yard

Table 4-3
Southern Pacific Transportation Company (Bayshore Yard)
Ground Water Metals Analyses
Report Form #1

Sample Number	QAQC Identification	Lab Code	Date Sampled	Arsenic mg/l	Barium mg/l	Total Chromium mg/l	Copper mg/l	Lead mg/l	Zinc mg/l
MK-02A		CCA	04/22/86	0.07	<0.1	<0.005	<0.040	<0.005	<0.040
MK-02A	FDUPE-MK22-A	CCA	04/22/86	0.11	<0.1	<0.005	<0.040	<0.005	<0.040
MK-02A		SEQ	03/01/89	<0.01	0.13	<0.005	<0.01	<0.005	0.06
MK-03B		CCA	04/22/86	<0.005	0.2	<0.005	<0.040	<0.005	<0.040
MK-04A		CCA	04/22/86	<0.005	<0.1	<0.005	<0.040	<0.005	<0.040
MK-04B		CCA	04/22/86	<0.005	<0.1	<0.005	<0.040	<0.005	<0.040
MK-05A		CCA	04/22/86	0.020	<0.1	<0.005	<0.040	<0.005	<0.040
MK-05B		CCA	04/22/86	<0.005	<0.1	<0.005	<0.040	<0.005	<0.040
MK-06A		CCA	04/23/86	0.028	0.1	0.010	<0.040	<0.005	<0.040
MK-06A		SEQ	03/01/89	0.023	0.16	<0.005	<0.01	0.013	0.042
MK-06B		CCA	04/21/86	<0.005	0.2	0.01	<0.040	<0.005	<0.040
MK-06B	FDUPE MK-16B	CCA	04/21/86	<0.005	<0.1	<0.01	<0.040	<0.005	0.06
MK-06B		SEQ	03/01/89	<0.01	0.18	0.012	<0.01	<0.005	0.086

03/14/89

Table 4-3
Southern Pacific Transportation Company (Bayshore Yard)
Ground Water Metals Analyses
Report Form #1

Sample Number	DAQC Identification	Lab Code	Date Sampled	Arsenic mg/l	Barium mg/l	Total Chromium mg/l	Copper mg/l	Lead mg/l	Zinc mg/l
MK-09A		CCA	06/19/86	<0.005	<0.1	<0.005	<0.040	<0.005	0.06
MK-09A		SEQ	03/05/89	<0.01	0.11	<0.005	<0.01	<0.005	0.044
MK-09B		CCA	06/19/86	<0.005	<0.1	<0.005	<0.040	<0.005	0.09
MK-09B		SEQ	03/05/89	<0.01	0.13	<0.005	<0.01	<0.005	0.038
MK-09B	FDUPE MK-19B	SEQ	03/05/89	<0.01	0.14	0.11	<0.01	<0.005	0.046
MW-02B		CCA	04/22/86	<0.005	0.1	<0.005	<0.040	<0.005	<0.040
MW-02B		SEQ	03/01/89	<0.01	0.13	0.026	0.019	<0.005	0.041
MW-03A		CCA	04/22/86	<0.005	<0.1	<0.005	<0.040	<0.005	<0.040
MW-04A		CCA	04/22/86	0.021	<0.1	<0.005	<0.040	<0.005	<0.040
MW-05A		CCA	04/17/86	<0.005	0.2	0.036	<0.040	0.011	<0.040
MW-05B		CCA	04/17/86	<0.005	0.2	0.032	<0.040	0.030	<0.040
MW-06A		CCA	04/17/86	<0.005	<0.1	<0.005	<0.040	<0.005	<0.040

Table 4-3
Southern Pacific Transportation Company (Bayshore Yard)
Ground Water Metals Analyses
Report Form #1

Sample Number	OAOC Identification	Lab Code	Date Sampled	Arsenic mg/l	Barium mg/l	Total Chromium mg/l	Copper mg/l	Lead mg/l	Zinc mg/l
MW-06B		CCA	04/17/86	<0.005	<0.1	0.009	<0.040	<0.005	<0.040
MW-07A		CCA	04/17/86	<0.005	0.3	<0.005	0.09	0.46	0.12
MW-08A		CCA	04/17/86	<0.005	<0.1	<0.005	<0.040	<0.005	<0.040
MW-08A	UNFIL\PRESERVED	CCA	08/12/86	0.021	0.17	0.23	4.8	12	24
MW-08A	FILT\PRESERVED	CCA	08/12/86	- -	0.049	0.092	- -	- -	1.2
MW-08B		CCA	04/17/86	<0.005	<0.1	<0.005	<0.040	<0.005	<0.040

Table 4-4
Southern Pacific Transportation Company (Bayshore Yard)
Ground Water Organics Analyses
Report Form # 1

Sample Number	Test Method	QAQC Identification	Lab Code	Date Sampled	Benzene ug/l	Bromodichloro-methane ug/l	Bromoform ug/l	Bromo-methane ug/l	Carbontetra-chloride ug/l	Chloro-benzene ug/l	Chloro-ethane ug/l	2-Chloroethyl-vinyl ether ug/l	Chloroform ug/l	Chloromethane ug/l
MK-02A	601\602		CCA	04/22/86	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<1.0	<0.1	<0.2
MK-02A	8010/8020		SEQ	03/02/89	0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<0.5	<0.5
MK-03B	601\602		CCA	04/22/86	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<1.0	<0.1	<0.2
MK-03B	8010/8020		SEQ	03/07/89	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<0.5	<0.5
MK-04A	601\602		CCA	04/22/86	0.3	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<1.0	<0.1	<0.2
MK-04A	8010/8020		SEQ	03/03/89	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<0.5	<0.5
MK-04B	601\602		CCA	04/22/86	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<1.0	<0.1	<0.2
MK-04B	8010/8020		SEQ	03/03/89	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<0.5	<0.5
MK-05A	601\602		CCA	04/22/86	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<1.0	<0.1	<0.2
MK-05A	8010/8020		SEQ	03/05/89	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<0.5	<0.5
MK-05B	601\602		CCA	04/22/86	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<1.0	<0.1	<0.2
MK-06A	601\602		CCA	04/23/86	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<1.0	<0.1	<0.2
MK-06A	8010/8020		SEQ	03/03/89	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<0.5	<0.5
MK-06B	601\602		CCA	04/21/86	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<1.0	<0.1	<0.2
MK-06B	601\602	FOUPE MK-16B	CCA	04/29/86	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<1.0	<0.1	<0.2

Table 4-4
Southern Pacific Transportation Company (Bayshore Yard)
Ground Water Organics Analyses
Report Form # 1

Sample Number	Test Method	QAQC Identification	Lab Code	Date Sampled	Benzene ug/l	Bromodichloro-methane ug/l	Bromoform ug/l	Bromo-methane ug/l	Carbontetra-chloride ug/l	Chloro-benzene ug/l	Chloro-ethane ug/l	2-Chloroethyl-vinyl ether ug/l	Chloroform ug/l	Chloromethane ug/l
MK-06B	8010/8020		SEQ	03/03/89	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<0.5	<0.5
MK-09A	601\602		CCA	06/19/86	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<1.0	<0.1	<0.2
MK-09A	8010/8020		SEQ	03/07/89	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<0.5	<0.5
MK-09B	601\602		CCA	06/19/86	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<1.0	<0.1	<0.2
MK-09B	8010/8020		SEQ	03/07/89	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<0.5	<0.5
MK-09B	8010/8020	FDUPE MK-09B	SEQ	03/07/89	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<0.5	<0.5
MK-22A	601\602	FDUPE-MK02-A	CCA	04/22/86	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<1.0	<0.1	<0.2
MW-02B	601\602		CCA	04/22/86	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<1.0	<0.1	<0.2
MW-03B	601	170	SEQ	03/03/89	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<0.5	<0.5

Table 4-4
Southern Pacific Transportation Company (Bayshore Yard)
Ground Water Organics Analyses
Report Form # 1

Sample Number	Test Method	QAQC Identification	Lab Code	Date Sampled	Benzene ug/l	Bromodichloro-methane ug/l	Bromoform ug/l	Bromo-methane ug/l	Carbontetra-chloride ug/l	Chloro-benzene ug/l	Chloro-ethane ug/l	2-Chloroethyl-vinyl ether ug/l	Chloroform ug/l	Chloromethane ug/l
MW-03A	601\602		CCA	04/22/86	0.6	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<1.0	<0.1	<0.2
MW-03A	8010/8020		SEQ	03/07/89	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<0.5	<0.5
MW-04A	601\602		CCA	04/22/86	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<1.0	<0.1	<0.2
MW-04A	8010/8020		SEQ	03/05/89	<25	<50	<50	<50	<50	<50	<250	<50	<25	<25
MW-05A	601\602		CCA	04/17/86	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<1.0	<0.1	<0.2
MW-05A	601\602		CCA	06/30/86	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<1.0	<0.1	<0.2
MW-05A	5030/8020		SEQ	03/09/89	<0.5	- -	- -	- -	- -	- -	- -	- -	- -	- -
MW-05B	601\602		CCA	04/17/86	0.5	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<1.0	0.21	<0.2
MW-05B	601\602		CCA	06/30/86	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<1.0	<0.1	<0.2
MW-05B	5030/8010		SEQ	03/09/89	- -	<10	<10	<10	<10	<10	<50	<10	<5.0	<5.0
MW-05B	5030/8020		SEQ	03/09/89	<0.5	- -	- -	- -	- -	- -	- -	- -	- -	- -
MW-06A	601\602		CCA	04/17/86	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<1.0	<0.1	<0.2
MW-06A	8010/8020		SEQ	03/05/89	<25	<50	<50	<50	<50	<50	<250	<50	<25	<25
MW-06B	601\602		CCA	04/17/86	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<1.0	<0.1	<0.2
MW-06B	8010/8020		SEQ	03/05/89	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<0.5	<0.5
MW-07A	601\602		CCA	04/17/86	0.8	<0.1	<0.2	<0.1	<0.1	0.5	<0.1	<1.0	<0.1	<0.2
MW-08A	601\602		CCA	04/17/86	0.2	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<1.0	<0.1	<0.2
MW-08A	8010/8020		SEQ	03/05/89	<25	<50	<50	<50	<50	<50	<250	<50	<25	<25
MW-08B	8010/8020		SEQ	03/05/89	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<0.5	<0.5

Table 4-4 (cont)
Southern Pacific Transportation Company (Bayshore Yard)
Ground Water Organics Analyses
Report Form # 2

mple mber	Test Method	QAQC Identification	Date Sampled	Dibromochloro-methane ug/l	1,2-Dichloro-benzene ug/l	1,3-Dichloro-benzene ug/l	1,4-Dichloro-benzene ug/l	1,1-Dichloro-ethane ug/l	1,2-Dichloro-ethane ug/l	1,1-Dichloro-ethene ug/l	trans-1,2-Di-chloroethene ug/l	1,2-Dichloro-propane ug/l
)2A	601\602		04/22/86	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
12A	8010/8020		03/02/89	<0.5	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5
13B	601\602		04/22/86	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
13B	8010/8020		03/07/89	<0.5	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5
14A	601\602		04/22/86	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
14A	8010/8020		03/03/89	<0.5	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5
4B	601\602		04/22/86	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4B	8010/8020		03/03/89	<0.5	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5
5A	601\602		04/22/86	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
5A	8010/8020		03/05/89	<0.5	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5
5B	601\602		04/22/86	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
6A	601\602		04/23/86	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
6A	8010/8020		03/03/89	<0.5	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5
6B	601\602		04/21/86	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
6B	601\602	FDUPE MX-16B	04/29/86	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1

lo. 2
89

Table 4-4 (cont)
Southern Pacific Transportation Company (Bayshore Yard)
Ground Water Organics Analyses
Report form # 2

le er	Test Method	QAQC Identification	Date Sampled	Dibromochloro-methane ug/l	1,2-Dichloro-benzene ug/l	1,3-Dichloro-benzene ug/l	1,4-Dichloro-benzene ug/l	1,1-Dichloro-ethane ug/l	1,2-Dichloro-ethane ug/l	1,1-Dichloro-ethene ug/l	trans-1,2-Di-chloroethene ug/l	1,2-Dichloro-propane ug/l
	8010/8020		03/03/89	<0.5	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5
\	601\602		06/19/86	<0.1	<0.1	<0.1	<0.1	0.1	<0.1	<0.1	<0.1	<0.1
\	8010/8020		03/07/89	<0.5	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5
B	601\602		06/19/86	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
B	8010/8020		03/07/89	<0.5	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5
B	8010/8020	FDUPE MK-09B	03/07/89	<0.5	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5
'A	601\602	FDUPE-MK02-A	04/22/86	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
lB	8010/8020		03/03/89	<0.5	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5
lB	601\602		04/24/86	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
lB	8010/8020		02/26/89	<0.5	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5
2B	601\602		04/22/86	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2B	8010/8020		03/02/89	<0.5	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5

Table 4-4 (cont)
Southern Pacific Transportation Company (Bayshore Yard)
Ground Water Organics Analyses
Report Form # 2

Sample Number	Test Method	QAQC Identification	Date Sampled	Dibromochloro-methane ug/l	1,2-Dichloro-benzene ug/l	1,3-Dichloro-benzene ug/l	1,4-Dichloro-benzene ug/l	1,1-Dichloro-ethane ug/l	1,2-Dichloro-ethane ug/l	1,1-Dichloro-ethene ug/l	trans-1,2-Di-chloroethene ug/l	1,2-Dichloro propane ug/l
-03A	601\602		04/22/86	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
-03A	8010/8020		03/07/89	<0.5	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5
-04A	601\602		04/22/86	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
-04A	8010/8020		03/05/89	<25	<100	<50	<50	<50	<50	<50	<50	<25
-05A	601\602		04/17/86	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
-05A	601\602		06/30/86	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	830	<0.1
-05A	5030/8020		03/09/89	- -	- -	- -	- -	- -	- -	- -	- -	- -
-05B	601\602		04/17/86	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
-05B	601\602		06/30/86	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
-05B	5030/8010		03/09/89	<5.0	<20	<10	<10	<10	<10	<10	<10	<5.0
-05B	5030/8020		03/09/89	- -	- -	- -	- -	- -	- -	- -	- -	- -
-06A	601\602		04/17/86	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	59	<0.1
-06A	8010/8020		03/05/89	<25	<100	<50	<50	<50	<50	<50	790	<25
-06B	601\602		04/17/86	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
-06B	8010/8020		03/05/89	<0.5	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5
-07A	601\602		04/17/86	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	632.9	<0.1
-08A	601\602		04/17/86	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	640	<0.1
-08A	801		03/05/89	<25	<100	<5	<50	<50	<50	<50	98C	<25
	-08		/89	<0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5

Table 4-4 (cont)
Southern Pacific Transportation Company (Bayshore Yard)
Ground Water Organics Analyses
Report Form # 3

Sample Number	Test Method	QAQC Identification	Date Sampled	cis-1,3 Dichloro-propylene ug/l	trans-1,3-Dichloro-propylene ug/l	Ethyl Benzene ug/l	Methylene chloride ug/l	1,1,2,2-Tetra-chloroethane ug/l	Tetrachloro-ethylene ug/l	Toluene ug/l	1,1,1-Tri-chloroethane ug/l	1,1,2-Tri-chloroethane ug/l
K-02A	601\602		04/22/86	<0.1	<0.1	<0.1	<10	<0.5	<0.5	<0.2	<0.1	<0.1
K-02A	8010/8020		03/02/89	<0.5	<5.0	<0.5	<2.0	<0.5	<1.0	<0.5	<0.5	<0.5
K-03B	601\602		04/22/86	<0.1	<0.1	<0.1	<10	<0.5	<0.5	<0.2	<0.1	<0.1
K-03B	8010/8020		03/07/89	<0.5	<5.0	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5
K-04A	601\602		04/22/86	<0.1	<0.1	0.5	<10	<0.5	<0.5	1.2	<0.1	<0.1
K-04A	8010/8020		03/03/89	<0.5	<5.0	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5
K-04B	601\602		04/22/86	<0.1	<0.1	<0.1	<10	<0.5	<0.5	<0.2	<0.1	<0.1
K-04B	8010/8020		03/03/89	<0.5	<5.0	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5
K-05A	601\602		04/22/86	<0.1	<0.1	<0.1	500	<0.5	<0.5	<0.2	<0.1	<0.1
K-05A	8010/8020		03/05/89	<0.5	<5.0	<0.5	3.0	<0.5	<0.5	<0.5	<0.5	<0.5
K-05B	601\602		04/22/86	<0.1	<0.1	<0.1	<10	<0.5	<0.5	<0.2	<0.1	<0.1
K-06A	601\602		04/23/86	<0.1	<0.1	<0.1	<10	<0.5	<0.5	<0.2	<0.1	<0.1
K-06A	8010/8020		03/03/89	<0.5	<5.0	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5
K-06B	601\602		04/21/86	<0.1	<0.1	<0.1	<10	<0.5	<0.5	<0.2	<0.1	<0.1
K-06B	601\602	FDUPE MK-16B	04/29/86	<0.1	<0.1	<0.1	<10	<0.5	<0.5	<0.2	<0.1	<0.1

Table 4-4 (cont)
Southern Pacific Transportation Company (Bayshore Yard)
Ground Water Organics Analyses
Report Form # 3

Sample Number	Test Method	QAQC Identification	Date Sampled	cis-1,3 Dichloro-propylene ug/l	trans-1,3-Dichloro-propylene ug/l	Ethyl Benzene ug/l	Methylene chloride ug/l	1,1,2,2-Tetra-chloroethane ug/l	Tetrachloro-ethylene ug/l	Toluene ug/l	1,1,1-Tri-chloroethane ug/l	1,1,2-Tri-chloroethane ug/l
MK-06B	8010/8020		03/03/89	<0.5	<5.0	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5
MK-09A	601\602		06/19/86	<0.1	<0.1	<0.1	<10	<0.5	<0.5	<0.2	<0.1	<0.1
MK-09A	8010/8020		03/07/89	<0.5	<5.0	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5
MK-09B	601\602		06/19/86	<0.1	<0.1	0.1	<10	<0.5	<0.5	<0.2	<0.1	<0.1
MK-09B	8010/8020		03/07/89	<0.5	<5.0	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5
MK-09B	8010/8020	FDUPE MK-09B	03/07/89	<0.5	<5.0	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5
MK-22A	601\602	FDUPE-MK02-A	04/22/86	<0.1	<0.1	<0.1	<10	<0.5	<0.5	<0.2	<0.1	<0.1
MW-02B	601\602		04/22/86	<0.1	<0.1	0.4	<10	<0.5	<0.5	<0.2	<0.1	<0.1
MW-02B	8020		03/02/89	<0.5	<5.0	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5

No. 3
./89

Table 4-4 (cont)
Southern Pacific Transportation Company (Bayshore Yard)
Ground Water Organics Analyses
Report Form # 3

ple ber	Test Method	OAOC Identification	Date Sampled	cis-1,3 Dichloro-propylene ug/l	trans-1,3-Dichloro-propylene ug/l	Ethyl Benzene ug/l	Methylene chloride ug/l	1,1,2,2-Tetra-chloroethane ug/l	Tetrachloro-ethylene ug/l	Toluene ug/l	1,1,1-Tri-chloroethane ug/l	1,1,2-Tri-chloroethane ug/l
3A	601\602		04/22/86	<0.1	<0.1	0.5	<10	<0.5	<0.5	0.9	<0.1	<0.1
5A	8010/8020		03/07/89	<0.5	<5.0	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5
4A	601\602		04/22/86	<0.1	<0.1	<0.1	<10	<0.5	<0.5	<0.2	<0.1	<0.1
4A	8010/8020		03/05/89	<25	<250	<25	<100	<25	<25	<25	<25	<25
5A	601\602		04/17/86	<0.1	<0.1	<0.1	<10	<0.5	48000	<0.2	<0.1	<0.1
5A	601\602		06/30/86	<0.1	<0.1	<0.1	<10	<0.5	8700	<0.2	47	130
5A	5030/8020		03/09/89	- -	- -	<0.5	- -	- -	- -	<0.5	- -	
5B	601\602		04/17/86	<0.1	0.20	<0.1	<10	<0.5	<0.5	0.2	<0.1	<0.1
5B	601\602		06/30/86	<0.1	<0.1	<0.1	<10	<0.5	<0.5	<0.2	<0.1	<0.1
5B	5030/8010		03/09/89	<5.0	<50	- -	<20	<5.0	<5.0	- -	<5.0	<5.0
5B	5030/8020		03/09/89	- -	- -	<0.5	- -	- -	- -	<0.5	- -	- -
6A	601\602		04/17/86	<0.1	<0.1	0.10	<10	<0.5	6.0	<0.2	<0.1	<0.1
6A	8010/8020		03/05/89	<25	<250	<25	<100	<25	150	<25	<25	<25
6B	601\602		04/17/86	<0.1	<0.1	<0.1	<10	<0.5	3.1	<0.2	<0.1	<0.1
6B	8010/8020		03/05/89	<0.5	<5.0	<0.5	5.0	<0.5	1.9	<0.5	<0.5	<0.5
7A	601\602		04/17/86	<0.1	<0.1	<0.1	<10	1.8	76	0.6	<0.1	<0.1
8A	601\602		04/17/86	<0.1	<0.1	<0.1	<10	<0.5	<0.5	<0.2	<0.1	<0.1
8A	8010/8020		03/05/89	<25	<250	<25	<100	<25	<25	<25	<25	<25
8B	8010/8020		03/05/89	<0.5	<5.0	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5

Table 4-4 (cont)
Southern Pacific Transportation Company (Bayshore Yard)
Ground Water Organics Analyses
Report Form # 4

Sample Number	Test Method	QAQC Identification	Date Sampled	Trichloro-ethylene ug/l	Trichloro-fluormethane ug/l	Vinyl Chloride ug/l	Total Xylene ug/l	Total Petroleum Hydrocarbons mg/l
MK-02A	601\602		04/22/86	<0.1	<0.1	<0.1	<0.1	- -
MK-02A	8010/8020		03/02/89	<0.5	<1.0	<2.0	<0.5	- -
MK-03B	601\602		04/22/86	<0.1	<0.1	<0.1	0.6	- -
MK-03B	8010/8020		03/07/89	<0.5	<1.0.	<2.0	<0.5	- -
MK-04A	601\602		04/22/86	<0.1	<0.1	<0.i	3.8	- -
MK-04A	8010/8020		03/03/89	<0.5	<1.0	<2.0	<0.5	- -
MK-04B	601\602		04/22/86	1	<0.1	<0.1	<0.1	- -
MK-04B	8010/8020		03/03/89	<0.5	<1.0	<2.0	<0.5	- -
MK-05A	601\602		04/22/86	<0.1	<0.1	<0.1	<0.1	- -
MK-05A	8010/8020		03/05/89	<0.5	<1.0	<2.0	<0.5	- -
MK-05B	601\602		04/22/86	<0.1	<0.i	<0.1	<0.1	- -
MK-06A	601\602		04/23/86	<0.1	<0.1	<0.1	<0.1	- -
MK-06A	8010/8020		03/03/89	<0.5	<1.0	<2.0	<0.5	- -
MK-06B	601\602		04/21/86	<0.1	<0.1	<0.1	<0.1	- -
MK-06B	601\602	FDUPE MK-16B	04/29/86	<0.i	<0.1	<0.1	<0.1	- -

Table 4-4 (cont)
Southern Pacific Transportation Company (Bayshore Yard)
Ground Water Organics Analyses
Report Form # 4

Sample Number	Test Method	QAQC Identification	Date Sampled	Trichloro-ethylene ug/l	Trichloro-fluoromethane ug/l	Vinyl Chloride ug/l	Total Xylene ug/l	Total Petroleum Hydrocarbons mg/l
MK-06B	8010/8020		03/03/89	<0.5	<1.0	<2.0	<0.5	- -
MK-09A	601\602		06/19/86	<0.1	<0.1	<0.1	<0.1	- -
MK-09A	8010/8020		03/07/89	<0.5	<1.0	<2.0	<0.5	- -
MK-09B	601\602		06/19/86	<0.1	<0.1	<0.1	0.8	- -
MK-09B	8010/8020		03/07/89	<0.5	<1.0	<2.0	<0.5	- -
MK-09B	8010/8020	FDUPE MK-09B	03/07/89	<0.5	<1.0	<2.0	<0.5	- -
MK-22A	601\602	FDUPE-MK02-A	04/22/86	15	<0.1	<0.1	2.3	- -
MW-02B	601\602		04/22/86	<0.1	<0.1	<0.1	1.6	- -
MW-02B	8010/8020		03/02/89	<0.5	<1.0	<2.0	<0.5	- -

Table 4-4 (cont)
Southern Pacific Transportation Company (Bayshore Yard)
Ground Water Organics Analyses
Report Form # 4

Sample Number	Test Method	QAQC Identification	Date Sampled	Trichloro-ethylene ug/l	Trichloro-fluormethane ug/l	Vinyl Chloride ug/l	Total Xylene ug/l	Total Petroleum Hydrocarbons mg/l
MW-03A	601\602		04/22/86	<0.1	<0.1	<0.1	3.2	- -
MW-03A	8010/8020		03/07/89	<0.5	<1.0	<2.0	<0.5	- -
MW-04A	601\602		04/22/86	<0.1	<0.1	<0.1	<0.1	- -
MW-04A	8010/8020		03/05/89	1100	<50	<100	<25	- -
MW-05A	601\602		04/17/86	1000000	<0.1	<0.1	<0.1	- -
MW-05A	601\602		06/30/86	140000	<0.1	<0.1	<0.1	- -
MW-05A	5030/8020		03/09/89	- -	- -	- -	<0.5	- -
MW-05B	601\602		04/17/86	44	<0.1	<0.1	<0.1	- -
MW-05B	601\602		06/30/86	7	<0.1	<0.1	<0.1	- -
MW-05B	5030/8010		03/09/89	110	<10	<20	- -	- -
MW-05B	5030/8020		03/09/89	-	- -	- -	<0.5	- -
MW-06A	601\602		04/17/86	79	<0.1	<0.1	<0.1	- -
MW-06A	8010/8020		03/05/89	2100	<50	<100	<25	- -
MW-06B	601\602		04/17/86	18	<0.1	<0.1	<0.1	- -
MW-06B	8010/8020		03/05/89	43	<1.0	<2.0	<0.5	- -
MW-07A	601\602		04/17/86	340	<0.1	<0.1	<0.1	- -
MW-08A	601\602		04/17/86	<0.1	<0.1	<0.1	<0.1	- -
J-08A	8010/8020		03/05/89	<25	<5	<100	<25	- -
MW-08B	8010/8020		03/05/89	<0.5	<1.0	<2.0	<0.5	- -

APPENDIX B-2

Hydrologic Consultants [1989]

REMEDIAL INVESTIGATION
DATA STUDY REPORT

for

SOUTHERN PACIFIC TRANSPORTATION COMPANY
BAYSHORE FACILITY
BRISBANE, CALIFORNIA

HCI-705

May 16, 1989

HCI HYDROLOGIC CONSULTANTS, INC.

12596 W. Bayaud Avenue • Suite 290 • Lakewood, CO 80228
TEL: (303) 969-8033 • FAX: (303) 969-8357

260 Russell Blvd. • Suite B • Davis, CA 95616
TEL: (916) 756-0925 • FAX: (916) 756-9230

6.0 SUMMARY OF EXTENT OF CONTAMINATION AND POTENTIAL HEALTH AND ENVIRONMENTAL IMPACTS

6.1 CONTAMINANT DISTRIBUTIONS IN SOIL AND GROUND WATER

The distribution of metal and organic contaminants in soils and ground water was discussed in detail in Section 4.0. Detailed maps of the metals and volatile organic compounds were constructed and presented in Appendix B. Review of the maps of soil metals concentrations indicates that most of the metals analyzed show an essentially random distribution of areas of high concentrations throughout the Bayshore Facility. This pattern is even more pronounced if only the qualified data are considered, but this is partially an artifact of the sparse distribution of qualified sample locations (i.e., the MARK samples). Furthermore, most of the metals concentration distributions observed strongly indicate that they are probably associated with the random distribution of metal debris in the fill rather than a contaminant source associated with a past SPTCo practice.

The metals Cu, Pb, Zn, and possibly Cr do appear to be elevated in locations where past operations would likely have utilized and disposed of metallic compounds. All four of these metals appear to be significantly elevated in the south disposal area and moderately elevated in the turntable and former oil tank locations. Moderate concentrations also occur in localized areas near the former Freight Car Repair Shop.

The distribution of metals concentrations in both the A- and B-zone ground water showed an even more random pattern than soils distributions. Zinc and barium appeared to show some consistently elevated concentrations in A-zone ground water in the south disposal site and former oil tank locations, but the disparity in concentrations values obtained by MARK and SSP&A was significant. Another sampling event in which QA/QC protocols are strictly followed and the analyses results are validated will allow a better definition of the actual concentrations of metals in ground water at the Site.

The distributions of volatile organic compounds in soils was shown to be limited to the northern area of the Site. In this area, the highest total concentrations of volatile organics (chlorinated solvents) which were found were less than 0.6 mg/kg.

The distributions of volatile organics in ground water are very high in the A-zone (>1000 mg/l), and moderately high (>5 mg/l) in the B-zone ground water in the northern area of the Site. This observation has been consistent between analyses of several investigators. Some results showing low (<20 ug/l) BTX compounds have been reported in A-zone wells around the turntable. However, the results obtained by SSP&A did not agree well with the results obtained by MARK. Again, a future sampling in which strict QA/QC and validation procedures are followed should more clearly define the extent of BTX concentrations in ground water in this area.

Measurements of total petroleum hydrocarbons indicated that hydrocarbons exist in soil and ground water in the areas around the former oil tank and turntable. However, these measurements did not reflect the magnitude of the oil/fuel contamination in the A-zone which has been observed during drilling and trenching operations by E&E and MARK. It is possible that the screened intervals of some of the shallow wells are not allowing the floating fuel layer to enter the well during sampling, and thus that TPH compounds are not being collected in the samples. However, regardless of the analyzed fuel/oil constituent concentrations, a floating layer of oil has been shown to exist in this general area, and future investigations should be targeted at more accurately defining the extent of this problem.

6.2 PRELIMINARY PUBLIC HEALTH AND ENVIRONMENTAL EVALUATION

A preliminary assessment of the potential risks posed to public health and the environment was made based on partially qualified concentrations of metals and volatile organics which have been observed in soils and ground water at the Site. The pathways of human exposure considered in the risk assessment were inhalation of volatile emissions from contaminated soils, inhalation of metals contaminated

Table 4-1
Southern Pacific Transportation Company (Bayshore Yard)
Soil Metals Analyses
Report Form #1

Sample Number	QAQC Identification	Lab Code	Date Sampled	Top Depth (ft\mal)	Bottom Depth (ft\mal)	Arsenic mg/kg	Barium mg/kg	Chromium III mg/kg	Chromium VI (Hexavalent) mg/kg	Total Chromium mg/kg	Copper mg/kg	Lead mg/kg	Zinc mg/kg
MK1A	FDUPE-MK19A-01	CCA	01/15/86	1.5	2.0	0.78	170	- -	- -	0.34	18	17	60
MK1A-01		CCA	01/15/86	1.5	2.0	<0.1	250	- -	- -	0.2	7.8	5.0	50
MK1A-02		CCA	01/15/86	3.5	4.0	<0.1	200	- -	- -	0.2	2.0	6.8	30
MK1A-02	FDUPE-MK19A-02	CCA	01/15/86	3.5	4.0	<0.1	250	- -	- -	0.2	2.7	6.9	30
MK2A-01		CCA	01/13/86	1.5	2.0	<0.1	46	- -	- -	8.9	15	6.0	70
MK2A-03		CCA	01/13/86	6.0	6.5	17	31	- -	- -	8.9	1.4	1.0	13
MK3A-01	FDUPE-MK2A-01	CCA	01/13/86	1.5	2.0	0.2	60	- -	- -	16	20	5.2	50
MK3B-01		CCA	01/20/86	1.0	1.5	26.0	<1	- -	- -	4.0	85	3.8	40
MK3B-02		CCA	01/20/86	6.0	6.5	2.9	25	- -	- -	25	300	1100	270
MK3B-05		CCA	01/20/86	21.0	21.5	0.63	8	- -	- -	40	17	5	45
MK4B-01		CCA	01/22/86	1.5	2.0	120	220	18	<0.5	- -	220	900	480
MK4B-04		CCA	01/22/86	11.0	11.5	0.54	50	28	<0.5	- -	16	6.8	30
MK4B-06		CCA	01/22/86	21.0	21.5	0.87	50	25	<0.5	- -	17	6.8	30
MK4B-07		CCA	01/22/86	26.0	26.5	0.38	15	30	<0.5	- -	25	0.7	20
MK5B-01		CCA	01/20/86	1.5	2.0	2.1	<1	- -	- -	9.2	45	75	120
MK5B-01	FDUPE-MK15B-01	CCA	01/20/86	1.5	2.0	1.0	<1	- -	- -	15	75	170	140
MK5B-03		CCA	01/20/86	6.0	6.5	0.66	<1	- -	- -	12	55	120	75

Table 4-1
Southern Pacific Transportation Company (Bayshore Yard)
Soil Metals Analyses
Report Form #1

Sample Number	QAQC Identification	Lab Code	Date Sampled	Top Depth (ft\msl)	Bottom Depth (ft\msl)	Arsenic mg/kg	Barium mg/kg	Chromium III mg/kg	Chromium VI (Hexavalent) mg/kg	Total Chromium mg/kg	Copper mg/kg	Lead mg/kg	Zinc mg/kg
MK5B-06		CCA	01/20/86	21.0	21.5	1.0	13	- -	- -	35	4.1	1.9	12
MK6B-01	FDUPE-MK16B-01	CCA	01/21/86	1.5	2.0	12	20	- -	- -	11	75	130	90
MK6B-01		CCA	01/21/86	1.5	2.0	20	35	- -	- -	70	25	6.9	50
MK6B-04		CCA	01/21/86	11.0	11.5	2.4	20	- -	- -	18	160	6.1	75
MK6B-05		CCA	01/21/86	16.0	16.5	2.9	7.6	- -	- -	33	18	5.7	40
MK6B-09		CCA	01/21/86	36.0	36.5	4.0	11	- -	- -	35	25	5.8	60
MK7B-01		CCA	01/23/86	1.5	2.0	0.9	25	14	<0.5	- -	12	3.8	20
MK7B-02		CCA	01/23/86	3.5	4.0	1.2	<1	20	<0.5	- -	820	3800	1800
MK7B-09		CCA	01/23/86	36.0	36.5	1.6	70	30	<0.5	- -	25	5.2	30
MK8A-01		CCA	01/15/86	1.5	2.0	1.3	110	- -	- -	4.2	25	800	140
MK8A-02		CCA	01/15/86	3.5	4.0	0.7	460	- -	- -	55	4100	7800	2300
MK9B-01		CCA	06/12/86	1.5	2.0	0.5	51	- -	- -	18	13	12	33
MB02(2-1)	EPA-3050	CCA	08/12/86	11.0	11.5	3.5	75	- -	- -	- -	15	24	65
MB05(2)	EPA-3050	CCA	08/12/86	6.0	6.5	- -	50	- -	- -	- -	75	180	80
MB08A(2)	EPA-3050	CCA	08/12/86	3.5	4.0	- -	140	- -	- -	- -	90	1600	530
MB1-01		CCA	12/09/85	1.5	2.0	0.49	40	4.5	<0.5	- -	45	40	50
MB1-02		CCA	12/09/85	3.5	4.0	2.1	36	28	<0.5	- -	25	20	180
MB1-05		CCA	12/09/85	16.0	16.5	0.86	50	60	<0.5	- -	7.2	4.3	22

Table 4-1
Southern Pacific Transportation Company (Bayshore Yard)
Soil Metals Analyses
Report Form #1

Sample Number	QAQC Identification	Lab Code	Date Sampled	Top Depth (ft\msl)	Bottom Depth (ft\msl)	Arsenic mg/kg	Barium mg/kg	Chromium III mg/kg	Chromium VI (Hexavalent) mg/kg	Total Chromium mg/kg	Copper mg/kg	Lead mg/kg	Zinc mg/kg
MB10-01		CCA	12/16/85	1.5	2.0	<0.1	50	8.3	<0.5	- -	100	340	1500
MB10-03		CCA	12/16/85	6.0	6.5	<0.1	2.0	<0.5	<0.5	- -	0.9	0.4	40
MB10-07		CCA	12/16/85	26.0	26.5	<0.1	20	12	<0.5	- -	2.5	0.7	8.2
MB11-01		CCA	12/18/85	1.5	2.0	3.1	170	5.8	<0.5	- -	92	85	75
MB11-03		CCA	12/18/85	6.0	6.5	3.5	60	30	<0.5	- -	12	20	38
MB11-07		CCA	12/18/85	31.0	31.5	0.23	20	120	<0.5	- -	3.3	2.0	9.5
MB12-01		CCA	12/16/85	1.5	2.0	0.37	38	7.9	<0.5	- -	5.8	3.4	9.1
MB12-02		CCA	12/16/85	3.5	4.0	<0.1	85	7.4	<0.5	- -	9.8	4.4	15
MB12-07		CCA	12/16/85	26.0	26.5	<0.1	13	25	<0.5	- -	2.2	1.3	6.3
MB2-01		CCA	12/09/85	1.0	1.5	0.66	55	12	<0.5	- -	530	550	80
MB2-03		CCA	12/09/85	11.0	11.5	70	90	12	<0.5	- -	340	750	170
MB2-06		CCA	12/09/85	26.0	26.5	1.6	6.5	20	<0.5	- -	5.4	2.3	13
MB3-01		CCA	12/10/85	1.0	1.5	3	24	5.8	<0.5	- -	85	50	45
MB3-04		CCA	12/10/85	16.0	16.5	5	6	45	<0.5	- -	20	7.6	55
MB3-11		CCA	12/10/85	51.0	51.5	0.88	50	45	<0.5	- -	6.6	4.6	25
MB4-01		CCA	12/11/85	1.5	2.0	2.2	37	25	<0.5	- -	230	250	850
MB4-02		CCA	12/11/85	2.5	3.0	7.0	110	17	<0.5	- -	150	290	830
MB4-13		CCA	12/11/85	56.0	56.5	0.62	33	30	<0.5	- -	16	6	27

Table 4-1
Southern Pacific Transportation Company (Bayshore Yard)
Soil Metals Analyses
Report Form #1

Sample Number	QAQC Identification	Lab Code	Date Sampled	Top Depth (ft\msl)	Bottom Depth (ft\msl)	Arsenic mg/kg	Barium mg/kg	Chromium III mg/kg	Chromium VI (Hexavalent) mg/kg	Total Chromium mg/kg	Copper mg/kg	Lead mg/kg	Zinc mg/kg
MB5-01		CCA	12/11/85	1.5	2.0	3.3	65	22	<0.5	- -	530	275	660
MB5-03		CCA	12/11/85	6.0	6.5	1.1	140	30	<0.5	- -	550	5700	2200
MB5-11		CCA	12/11/85	46.0	46.5	0.58	120	35	<0.5	- -	16	7.8	43
MB6-01		CCA	12/13/85	1.0	1.5	1.8	<1	45	<0.5	- -	1000	4100	3400
MB6-02		CCA	12/13/85	3.5	4.0	2.0	20	15	<0.5	- -	500	1300	780
MB6-11		CCA	12/13/85	46.0	46.5	<0.1	100	4.6	<0.5	- -	6.4	2.3	30
MB6-12		CCA	12/13/85	51.0	51.5	1.1	70	50	<0.5	- -	20	7.2	50
MB7-01		CCA	12/13/85	1.5	2.0	0.81	600	28	<0.5	- -	600	16000	2500
MB7-03		CCA	12/13/85	6.0	6.5	1.4	170	7.2	<0.5	- -	550	850	390
MB7-08		CCA	12/13/85	31.0	31.5	0.77	45	40	<0.5	- -	11	9.7	50
MB8-01		CCA	12/13/85	1.5	2.0	0.33	17	8.2	<0.5	- -	12	90	33
MB8-02		CCA	12/13/85	3.5	4.0	0.67	30	6.0	<0.5	- -	20	95	50
MB8-09		CCA	12/13/85	36.0	36.5	2.0	25	20	<0.5	- -	8	3.4	38
MB9-01		CCA	12/17/85	1.5	2.0	<0.1	<1	6.8	<0.5	- -	1.0	<0.10	0.40
MB9-02		CCA	12/17/85	3.5	4.0	<0.1	15.0	21	<0.5	- -	35	25	65
MB9-10		CCA	12/17/85	46.0	46.5	<0.1	19	9.7	<0.5	- -	2.5	1.0	9.0
MW-08A	FDUPE-MK18A-01	CCA	01/15/86	1.5	2.0	<0.1	<1	- -	- -	10	100	17	800
MW-08A	FDUPE-MK18A-02	CCA	01/15/86	3.5	4.0	<0.1	120	- -	- -	1.3	900	1400	290

Table 4-1
Southern Pacific Transportation Company (Bayshore Yard)
Soil Metals Analyses
Report Form #1

Sample Number	QA/QC Identification	Lab Code	Date Sampled	Top Depth (ft\msl)	Bottom Depth (ft\msl)	Arsenic mg/kg	Barium mg/kg	Chromium III mg/kg	Chromium VI (Hexavalent) mg/kg	Total Chromium mg/kg	Copper mg/kg	Lead mg/kg	Zinc mg/kg
MD-01		CCA	01/23/86	0.0	0.0	8.4	17	14	<0.5	- -	5700	2900	1700
MD-02		CCA	01/23/86	0.0	0.0	23	25	14	<0.5	- -	50	70	75
MD-03		CCA	01/23/86	0.0	0.0	1.7	32	17	<0.5	- -	550	1400	590
MD-04		CCA	01/23/86	0.0	0.0	4.7	19	13	<0.5	- -	120	400	115

Table 4-1
Southern Pacific Transportation Company (Bayshore Yard)
Soil Metals Analyses
Report Form #1

Sample Number	QAQC Identification	Lab Code	Date Sampled	Top Depth (ft\mal)	Bottom Depth (ft\mal)	Arsenic mg/kg	Barium mg/kg	Chromium III mg/kg	Chromium VI (Hexavalent) mg/kg	Total Chromium mg/kg	Copper mg/kg	Lead mg/kg	Zinc mg/kg
MK1A	FDUPE-MK19A-01	CCA	01/15/86	1.5	2.0	0.78	170	- -	- -	0.34	18	17	60
MK1A-01		CCA	01/15/86	1.5	2.0	<0.1	250	- -	- -	0.2	7.8	5.0	50
MK1A-02		CCA	01/15/86	3.5	4.0	<0.1	200	- -	- -	0.2	2.0	6.8	30
MK1A-02	FDUPE-MK19A-02	CCA	01/15/86	3.5	4.0	<0.1	250	- -	- -	0.2	2.7	6.9	30
MK2A-01		CCA	01/13/86	1.5	2.0	<0.1	46	- -	- -	8.9	15	6.0	70
MK2A-03		CCA	01/13/86	6.0	6.5	17	31	- -	- -	8.9	1.4	1.0	13
MK3A-01	FDUPE-MK2A-01	CCA	01/13/86	1.5	2.0	0.2	60	- -	- -	16	20	5.2	50
MK3B-01		CCA	01/20/86	1.0	1.5	26.0	<1	- -	- -	4.0	85	3.8	40
MK3B-02		CCA	01/20/86	6.0	6.5	2.9	25	- -	- -	25	300	1100	270
MK3B-05		CCA	01/20/86	21.0	21.5	0.63	8	- -	- -	40	17	5	45
MK4B-01		CCA	01/22/86	1.5	2.0	120	220	18	<0.5	- -	220	900	480
MK4B-04		CCA	01/22/86	11.0	11.5	0.54	50	28	<0.5	- -	16	6.8	30
MK4B-06		CCA	01/22/86	21.0	21.5	0.87	50	25	<0.5	- -	17	6.8	30
MK4B-07		CCA	01/22/86	26.0	26.5	0.38	15	30	<0.5	- -	25	0.7	20
MK5B-01		CCA	01/20/86	1.5	2.0	2.1	<1	- -	- -	9.2	45	75	120
MK5B-01	FDUPE-MK15B-01	CCA	01/20/86	1.5	2.0	1.0	<1	- -	- -	15	75	170	140
MK5B-03		CCA	01/20/86	6.0	6.5	0.66	<1	- -	- -	12	55	120	75

Table 4-1
Southern Pacific Transportation Company (Bayshore Yard)
Soil Metals Analyses
Report Form #1

Sample Number	QAQC Identification	Lab Code	Date Sampled	Top Depth (ft\msl)	Bottom Depth (ft\msl)	Arsenic mg/kg	Barium mg/kg	Chromium III mg/kg	Chromium VI (Hexavalent) mg/kg	Total Chromium mg/kg	Copper mg/kg	Lead mg/kg	Zinc mg/kg
MK5B-06		CCA	01/20/86	21.0	21.5	1.0	13	- -	- -	35	4.1	1.9	12
MK6B-01	FDUPE-MK16B-01	CCA	01/21/86	1.5	2.0	12	20	- -	- -	11	75	130	90
MK6B-01		CCA	01/21/86	1.5	2.0	20	35	- -	- -	70	25	6.9	50
MK6B-04		CCA	01/21/86	11.0	11.5	2.4	20	- -	- -	18	160	6.1	75
MK6B-05		CCA	01/21/86	16.0	16.5	2.9	7.6	- -	- -	33	18	5.7	40
MK6B-09		CCA	01/21/86	36.0	36.5	4.0	11	- -	- -	35	25	5.8	60
MK7B-01		CCA	01/23/86	1.5	2.0	0.9	25	14	<0.5	- -	12	3.8	20
MK7B-02		CCA	01/23/86	3.5	4.0	1.2	<1	20	<0.5	- -	820	3800	1800
MK7B-09		CCA	01/23/86	36.0	36.5	1.6	70	30	<0.5	- -	25	5.2	30
MK8A-01		CCA	01/15/86	1.5	2.0	1.3	110	- -	- -	4.2	25	800	140
MK8A-02		CCA	01/15/86	3.5	4.0	0.7	460	- -	- -	55	4100	7800	2300
MK9B-01		CCA	06/12/86	1.5	2.0	0.5	51	- -	- -	18	13	12	33
MB02(2-1)	EPA-3050	CCA	08/12/86	11.0	11.5	3.5	75	- -	- -	- -	15	24	65
MB05(2)	EPA-3050	CCA	08/12/86	6.0	6.5	- -	50	- -	- -	- -	75	180	80
MB08A(2)	EPA-3050	CCA	08/12/86	3.5	4.0	- -	140	- -	- -	- -	90	1600	530
MB1-01		CCA	12/09/85	1.5	2.0	0.49	40	4.5	<0.5	- -	45	40	50
MB1-02		CCA	12/09/85	3.5	4.0	2.1	36	28	<0.5	- -	25	20	180
MB1-05		CCA	12/09/85	16.0	16.5	0.86	50	60	<0.5	- -	7.2	4.3	22

Table 4-1
Southern Pacific Transportation Company (Bayshore Yard)
Soil Metals Analyses
Report Form #1

Sample Number	QAQC Identification	Lab Code	Date Sampled	Top Depth (ft\msl)	Bottom Depth (ft\msl)	Arsenic mg/kg	Barium mg/kg	Chromium III mg/kg	Chromium VI (Hexavalent) mg/kg	Total Chromium mg/kg	Copper mg/kg	Lead mg/kg	Zinc mg/kg
MB10-01		CCA	12/16/85	1.5	2.0	<0.1	50	8.3	<0.5	- -	100	340	1500
MB10-03		CCA	12/16/85	6.0	6.5	<0.1	2.0	<0.5	<0.5	- -	0.9	0.4	40
MB10-07		CCA	12/16/85	26.0	26.5	<0.1	20	12	<0.5	- -	2.5	0.7	8.2
MB11-01		CCA	12/18/85	1.5	2.0	3.1	170	5.8	<0.5	- -	92	85	75
MB11-03		CCA	12/18/85	6.0	6.5	3.5	60	30	<0.5	- -	12	20	38
MB11-07		CCA	12/18/85	31.0	31.5	0.23	20	120	<0.5	- -	3.3	2.0	9.5
MB12-01		CCA	12/16/85	1.5	2.0	0.37	38	7.9	<0.5	- -	5.8	3.4	9.1
MB12-02		CCA	12/16/85	3.5	4.0	<0.1	85	7.4	<0.5	- -	9.8	4.4	15
MB12-07		CCA	12/16/85	26.0	26.5	<0.1	13	25	<0.5	- -	2.2	1.3	6.3
MB2-01		CCA	12/09/85	1.0	1.5	0.66	55	12	<0.5	- -	530	550	80
MB2-03		CCA	12/09/85	11.0	11.5	70	90	12	<0.5	- -	340	750	170
MB2-06		CCA	12/09/85	26.0	26.5	1.6	6.5	20	<0.5	- -	5.4	2.3	13
MB3-01		CCA	12/10/85	1.0	1.5	3	24	5.8	<0.5	- -	85	50	45
MB3-04		CCA	12/10/85	16.0	16.5	5	6	45	<0.5	- -	20	7.6	55
MB3-11		CCA	12/10/85	51.0	51.5	0.88	50	45	<0.5	- -	6.6	4.6	25
MB4-01		CCA	12/11/85	1.5	2.0	2.2	37	25	<0.5	- -	230	250	850
MB4-02		CCA	12/11/85	2.5	3.0	7.0	110	17	<0.5	- -	150	290	830
MB4-13		CCA	12/11/85	56.0	56.5	0.62	33	30	<0.5	- -	16	6	27

Table 4-1
Southern Pacific Transportation Company (Bayshore Yard)
Soil Metals Analyses
Report Form #1

Sample Number	QAQC Identification	Lab Code	Date Sampled	Top Depth (ft\msl)	Bottom Depth (ft\msl)	Arsenic mg/kg	Barium mg/kg	Chromium III mg/kg	Chromium VI (Hexavalent) mg/kg	Total Chromium mg/kg	Copper mg/kg	Lead mg/kg	Zinc mg/kg
MB5-01		CCA	12/11/85	1.5	2.0	3.3	65	22	<0.5	- -	530	275	660
MB5-03		CCA	12/11/85	6.0	6.5	1.1	140	30	<0.5	- -	550	5700	2200
MB5-11		CCA	12/11/85	46.0	46.5	0.58	120	35	<0.5	- -	16	7.8	43
MB6-01		CCA	12/13/85	1.0	1.5	1.8	<1	45	<0.5	- -	1000	4100	3400
MB6-02		CCA	12/13/85	3.5	4.0	2.0	20	15	<0.5	- -	500	1300	780
MB6-11		CCA	12/13/85	46.0	46.5	<0.1	100	4.6	<0.5	- -	6.4	2.3	30
MB6-12		CCA	12/13/85	51.0	51.5	1.1	70	50	<0.5	- -	20	7.2	50
MB7-01		CCA	12/13/85	1.5	2.0	0.81	600	28	<0.5	- -	600	16000	2500
MB7-03		CCA	12/13/85	6.0	6.5	1.4	170	7.2	<0.5	- -	550	850	390
MB7-08		CCA	12/13/85	31.0	31.5	0.77	45	40	<0.5	- -	11	9.7	50
MB8-01		CCA	12/13/85	1.5	2.0	0.33	17	8.2	<0.5	- -	12	90	33
MB8-02		CCA	12/13/85	3.5	4.0	0.67	30	6.0	<0.5	- -	20	95	50
MB8-09		CCA	12/13/85	36.0	36.5	2.0	25	20	<0.5	- -	8	3.4	38
MB9-01		CCA	12/17/85	1.5	2.0	<0.1	<1	6.8	<0.5	- -	1.0	<0.10	0.40
MB9-02		CCA	12/17/85	3.5	4.0	<0.1	15.0	21	<0.5	- -	35	25	65
MB9-10		CCA	12/17/85	46.0	46.5	<0.1	19	9.7	<0.5	- -	2.5	1.0	9.0
MW-08A	FDUPE-MK18A-01	CCA	01/15/86	1.5	2.0	<0.1	<1	- -	- -	10	100	17	800
MW-08A	FDUPE-MK18A-02	CCA	01/15/86	3.5	4.0	<0.1	120	- -	- -	1.3	900	1400	290

Table 4-1
Southern Pacific Transportation Company (Bayshore Yard)
Soil Metals Analyses
Report Form #1

Sample Number	QA/QC Identification	Lab Code	Date Sampled	Top Depth (ft\msl)	Bottom Depth (ft\msl)	Arsenic mg/kg	Barium mg/kg	Chromium III mg/kg	Chromium VI (Hexavalent) mg/kg	Total Chromium mg/kg	Copper mg/kg	Lead mg/kg	Zinc mg/kg
MD-01		CCA	01/23/86	0.0	0.0	8.4	17	14	<0.5	- -	5700	2900	1700
MD-02		CCA	01/23/86	0.0	0.0	23	25	14	<0.5	- -	50	70	75
MD-03		CCA	01/23/86	0.0	0.0	1.7	32	17	<0.5	- -	550	1400	590
MD-04		CCA	01/23/86	0.0	0.0	4.7	19	13	<0.5	- -	120	400	115

Table 4-2
Southern Pacific Transportation Company (Bayshore Yard)
Soils Organics Analyses
Report Form # 1

Sample Number	Test Method	QAQC Identification	Lab Code	Date Sampled	Benzene ug/kg	Bromodichloro-methane ug/kg	Bromoform ug/kg	Bromo-methane ug/kg	Carbontetra-chloride ug/kg	Chloro-benzene ug/kg	Chloro-ethane ug/kg	2-Chloroethyl-vinyl ether ug/kg	Chloroform ug/kg	Chloromethane ug/kg
MK01A-01	601\602		CCA	01/15/86	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<10.0	<1.0	<2.0
MK01A-02	601\602		CCA	01/15/86	- -	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<10.0	<1.0	<2.0
MK02A-01	601\602		CCA	01/13/86	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<10.0	<1.0	<2.0
MK02A-03	601\602		CCA	01/13/86	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<10.0	<1.0	<2.0
MK02A-01	601\602	FDUPE-MK3A-01	CCA	01/13/86	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<5	<1.0	<2.0
MK03B-01	601\602		CCA	01/20/86	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<5	<1.0	<2.0
MK03B-02	601\602		CCA	01/20/86	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<5	<1.0	<2.0
MK03B-05	601\602		CCA	01/20/86	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<5	<1.0	<2.0
MK04B-01	601\602		CCA	01/22/86	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<5	<1.0	<2.0
MK04B-04	601\602		CCA	01/22/86	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<5	<1.0	<2.0
MK04B-06	601\602		CCA	01/22/86	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<5	<1.0	<2.0
MK04B-07	601\602		CCA	01/22/86	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<5	<1.0	<2.0
MK05B-01	601\602		CCA	01/20/86	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<5	<1.0	<2.0
MK05B-01	601\602	FDUPE-MK15B-01	CCA	01/20/86	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<5	<1.0	<2.0
MK05B-03	601\602		CCA	01/20/86	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<5	<1.0	<2.0
MK05B-06	601\602		CCA	01/20/86	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<5	<1.0	<2.0
MK06B-01	601\602	FDUPE MK16B-01	CCA	01/21/86	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<5	<1.0	<2.0

Table 4-2
Southern Pacific Transportation Company (Bayshore Yard)
Soils Organics Analyses
Report Form # 1

Sample Number	Test Method	QAQC Identification	Lab Code	Date Sampled	Benzene ug/kg	Bromodichloro-methane ug/kg	Bromoform ug/kg	Bromo-methane ug/kg	Carbontetra-chloride ug/kg	Chloro-benzene ug/kg	Chloro-ethane ug/kg	2-Chloroethyl-vinyl ether ug/kg	Chloroform ug/kg	Chloromethane ug/kg
MK06B-01	601\602		CCA	01/21/86	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<5	<1.0	<2.0
MK06B-04	601\602		CCA	01/21/86	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<5	<1.0	<2.0
MK06B-05	601\602		CCA	01/21/86	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<5	<1.0	<2.0
MK06B-09	601\602		CCA	01/21/86	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<5	<1.0	<2.0
MK07B-01	601\602		CCA	01/23/86	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<5	<1.0	<2.0
MK07B-02	601\602		CCA	01/23/86	1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<5	<1.0	<2.0
MK07B-09	601\602		CCA	01/23/86	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<5	<1.0	<2.0
MK08A-01	601\602		CCA	01/15/86	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<5	<1.0	<2.0
MK08A-02	601\602		CCA	01/15/86	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<5	<1.0	<2.0
MK09B-02	8010\8020		CCA	06/12/86	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<1.0	<0.1	<2.0
MK18A-01	601\602	FDUPE MK8A-01	CCA	01/15/86	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<5	<1.0	<2.0
MK18A-02	601\602	FDUPE MK8A-02	CCA	01/15/86	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<5	<1.0	<2.0
MK1A-01	601\602	FDUPE-MK19A-01	CCA	01/15/86	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<5	<1.0	<2.0
MK1A-02	601\602	FDUPE-MK19A-02	CCA	01/15/86	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<5	<1.0	<2.0
MB2-04			CCA	12/09/85	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
MB2-06			CCA	12/09/85	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
MB3-01			CCA	12/10/85	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
MB8-02			CCA	12/13/85	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -

Table 4-2
Southern Pacific Transportation Company (Bayshore Yard)
Soils Organics Analyses
Report Form # 1

Sample Number	Test Method	QAQC Identification	Lab Code	Date Sampled	Benzene ug/kg	Bromodichloro-methane ug/kg	Bromoform ug/kg	Bromo-methane ug/kg	Carbontetra-chloride ug/kg	Chloro-benzene ug/kg	Chloro-ethane ug/kg	2-Chloroethyl-vinyl ether ug/kg	Chloroform ug/kg	Chloromethane ug/kg
MB9-03			CCA	12/17/85	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -

Table 4-2 (cont)
Southern Pacific Transportation Company (Bayshore Yard)
Soils Organics Analyses
Report Form # 2

Sample Number	Test Method	QAQC Identification	Date Sampled	Dibromochloro-methane ug/kg	1,2-Dichloro-benzene ug/kg	1,3-Dichloro-benzene ug/kg	1,4-Dichloro-benzene ug/kg	1,1-Dichloro-ethane ug/kg	1,2-Dichloro-ethane ug/kg	1,1-Dichloro-ethene ug/kg	trans-1,2-Di-chloroethene ug/kg	1,2-Dichloro-propane ug/kg
MK01A-01	601\602		01/15/86	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
MK01A-02	601\602		01/15/86	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
MK02A-01	601\602		01/13/86	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
MK02A-03	601\602		01/13/86	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
MK02A-01	601\602	FDUPE-MK3A-01	01/13/86	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
MK03B-01	601\602		01/20/86	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
MK03B-02	601\602		01/20/86	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
MK03B-05	601\602		01/20/86	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
MK04B-01	601\602		01/22/86	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
MK04B-04	601\602		01/22/86	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
MK04B-06	601\602		01/22/86	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
MK04B-07	601\602		01/22/86	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
MK05B-01	601\602		01/20/86	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
MK05B-01	601\602	FDUPE-MK15B-01	01/20/86	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
MK05B-03	601\602		01/20/86	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
MK05B-06	601\602		01/20/86	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
MK06B-01	601\602	FDUPE MK16B-01	01/21/86	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0

Table 4-2 (cont)
Southern Pacific Transportation Company (Bayshore Yard)
Soils Organics Analyses
Report Form # 2

Sample Number	Test Method	QAQC Identification	Date Sampled	Dibromochloro-methane ug/kg	1,2-Dichloro-benzene ug/kg	1,3-Dichloro-benzene ug/kg	1,4-Dichloro-benzene ug/kg	1,1-Dichloro-ethane ug/kg	1,2-Dichloro-ethane ug/kg	1,1-Dichloro-ethene ug/kg	trans-1,2-Di-chloroethene ug/kg	1,2-Dichloro-propane ug/kg
MK06B-01	601\602		01/21/86	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
MK06B-04	601\602		01/21/86	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
MK06B-05	601\602		01/21/86	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
MK06B-09	601\602		01/21/86	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
MK07B-01	601\602		01/23/86	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
MK07B-02	601\602		01/23/86	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
MK07B-09	601\602		01/23/86	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
MK08A-01	601\602		01/15/86	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
MK08A-02	601\602		01/15/86	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
MK09B-02	8010\8020		06/12/86	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MK18A-01	601\602	FDUPE MK8A-01	01/15/86	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
MK18A-02	601\602	FDUPE MK8A-02	01/15/86	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
MK1A-01	601\602	FDUPE-MK19A-01	01/15/86	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
MK1A-02	601\602	FDUPE-MK19A-02	01/15/86	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
MB2-04			12/09/85	--	--	--	--	--	--	--	--	--
MB2-06			12/09/85	--	--	--	--	--	--	--	--	--
MB3-01			12/10/85	--	--	--	--	--	--	--	--	--
MB8-02			12/13/85	--	--	--	--	--	--	--	--	--

Table 4-2 (cont)
Southern Pacific Transportation Company (Bayshore Yard)
Soils Organics Analyses
Report Form # 2

Sample Number	Test Method	QAQC Identification	Date Sampled	Dibromochloro-methane ug/kg	1,2-Dichloro-benzene ug/kg	1,3-Dichloro-benzene ug/kg	1,4-Dichloro-benzene ug/kg	1,1-Dichloro-ethane ug/kg	1,2-Dichloro-ethane ug/kg	1,1-Dichloro-ethene ug/kg	trans-1,2-Di-chloroethene ug/kg	1,2-Dichloro-propane ug/kg
MB9-03			12/17/85	- -	- -	- -	- -	- -	- -	- -	- -	- -

Table 4-2 (cont)
Southern Pacific Transportation Company (Bayshore Yard)
Soils Organics Analyses
Report Form # 3

Sample Number	Test Method	QAQC Identification	Date Sampled	cis-1,3 Dichloro-prepylene ug/kg	trans-1,3-Dichloro-propylene ug/kg	Ethyl Benzene ug/kg	Methylene-chloride ug/kg	1,1,2,2-Tetra-chloroethane ug/kg	Tetrachloro-ethylene ug/kg	Toluene ug/kg	1,1,1-Tri-chloroethane ug/kg	1,1,2-Tri-chloroethane ug/kg
MK01A-01	601\602		01/15/86	<1.0	<1.0	<1.0	<10	<5.0	<1.0	94	<1.0	<1.0
MK01A-02	601\602		01/15/86	<1.0	<1.0	<1.0	<10	<5.0	<1.0	13	<1.0	<1.0
MK02A-01	601\602		01/13/86	<1.0	<1.0	<1.0	<10	<5.0	<1.0	79	<1.0	<1.0
MK02A-03	601\602		01/13/86	<1.0	<1.0	<1.0	<10	<5.0	<1.0	65	- -	<1.0
MK02A-01	601\602	FDUPE-MK3A-01	01/13/86	<1.0	<1.0	<1.0	<5.0	<5.0	<1.0	170	<1.0	<1.0
MK03B-01	601\602		01/20/86	<1.0	<1.0	<1.0	<5.0	<5.0	<1.0	140	<1.0	<1.0
MK03B-02	601\602		01/20/86	<1.0	<1.0	<1.0	<5.0	<5.0	<1.0	2.0	<1.0	<1.0
MK03B-05	601\602		01/20/86	<1.0	<1.0	<1.0	<5.0	<5.0	<1.0	45	<1.0	<1.0
MK04B-01	601\602		01/22/86	<1.0	<1.0	<1.0	<5.0	<5.0	<1.0	<2.0	<1.0	<1.0
MK04B-04	601\602		01/22/86	<1.0	<1.0	<1.0	<5.0	<5.0	<1.0	<2.0	<1.0	<1.0
MK04B-06	601\602		01/22/86	<1.0	<1.0	<1.0	<5.0	<5.0	<1.0	3.9	<1.0	<1.0
MK04B-07	601\602		01/22/86	<1.0	<1.0	<1.0	<5.0	<5.0	<1.0	<2.0	<1.0	<1.0
MK05B-01	601\602		01/20/86	<1.0	<1.0	<1.0	<5.0	<5.0	<1.0	<2.0	<1.0	<1.0
MK05B-01	601\602	FDUPE-MK15B-01	01/20/86	<1.0	<1.0	<1.0	<5.0	<5.0	<1.0	22	<1.0	<1.0
MK05B-03	601\602		01/20/86	<1.0	<1.0	<1.0	<5.0	<5.0	<1.0	2.4	<1.0	<1.0
MK05B-06	601\602		01/20/86	<1.0	<1.0	<1.0	<5.0	<5.0	<1.0	2.1	<1.0	<1.0
MK06B-01	601\602	FDUPE MK16B-01	01/21/86	<1.0	<1.0	2.0	<5.0	<5.0	<1.0	100	<1.0	<1.0

Table 4-2 (cont)
Southern Pacific Transportation Company (Bayshore Yard)
Soils Organics Analyses
Report Form # 3

Sample Number	Test Method	QAQC Identification	Date Sampled	cis-1,3 Dichloro-propylene ug/kg	trans-1,3-Dichloro-propylene ug/kg	Ethyl Benzene ug/kg	Methylene-chloride ug/kg	1,1,2,2-Tetra-chloroethane ug/kg	Tetrachloro-ethylene ug/kg	Toluene ug/kg	1,1,1-Tri-chloroethane ug/kg	1,1,2-Tri-chloroethane ug/kg
MK06B-01	601\602		01/21/86	<1.0	<1.0	<1.0	<5.0	<2.0	<1.0	65	1.3	<1.0
MK06B-04	601\602		01/21/86	<1.0	<1.0	<1.0	<5.0	<5.0	<1.0	<2.0	<1.0	<1.0
MK06B-05	601\602		01/21/86	<1.0	<1.0	<1.0	<5.0	<5.0	<1.0	37	<1.0	<1.0
MK06B-09	601\602		01/21/86	<1.0	<1.0	<1.0	<5.0	<5.0	<1.0	57	<1.0	<1.0
MK07B-01	601\602		01/23/86	<1.0	<1.0	<1.0	<5.0	<5.0	<1.0	<2.0	<1.0	<1.0
MK07B-02	601\602		01/23/86	<1.0	<1.0	<1.0	<5.0	<5.0	<1.0	18	<1.0	<1.0
MK07B-09	601\602		01/23/86	<1.0	<1.0	<1.0	<5.0	<5.0	<1.0	<2.0	<1.0	<1.0
MK08A-01	601\602		01/15/86	<1.0	<1.0	<1.0	<5.0	<5.0	4.0	150	<1.0	<1.0
MK08A-02	601\602		01/15/86	<1.0	<1.0	<1.0	<5.0	<5.0	18.0	82	<1.0	<1.0
MK09B-02	8010\8020		06/12/86	<0.1	<0.1	<0.1	<10	<0.5	<0.5	3.5	<0.1	<0.1
MK18A-01	601\602	FDUPE MK8A-01	01/15/86	<1.0	<1.0	<1.0	<5.0	<5.0	8.7	64	<1.0	<1.0
MK18A-02	601\602	FDUPE MK8A-02	01/15/86	<1.0	<1.0	<1.0	<5.0	<5.0	6.4	150	<1.0	<1.0
MK1A-01	601\602	FDUPE-MK19A-01	01/15/86	<1.0	<1.0	<1.0	<5.0	<5.0	<1.0	44	<1.0	<1.0
MK1A-02	601\602	FDUPE-MK19A-02	01/15/86	<1.0	<1.0	<1.0	<5.0	<5.0	<1.0	230	<1.0	<1.0
MB2-04			12/09/85	- -	- -	- -	- -	- -	- -	- -	- -	- -
MB2-06			12/09/85	- -	- -	- -	- -	- -	- -	- -	- -	- -
MB3-01			12/10/85	- -	- -	- -	- -	- -	- -	- -	- -	- -
MB8-02			12/13/85	- -	- -	- -	- -	- -	- -	- -	- -	- -

Table 4-2 (cont)
Southern Pacific Transportation Company (Bayshore Yard)
Soils Organics Analyses
Report Form # 3

Sample Number	Test Method	QAQC Identification	Date Sampled	cis-1,3 Dichloropropylene ug/kg	trans-1,3-Dichloropropylene ug/kg	Ethyl Benzene ug/kg	Methylene-chloride ug/kg	1,1,2,2-Tetrachloroethane ug/kg	Tetrachloroethylene ug/kg	Toluene ug/kg	1,1,1-Trichloroethane ug/kg	1,1,2-Trichloroethane ug/kg
MB9-03			12/17/85	- -	- -	- -	- -	- -	- -	- -	- -	- -

Table 4-2 (cont)
Southern Pacific Transportation Company (Bayshore Yard)
Soils Organics Analyses
Report Form # 4

Sample Number	Test Method	QAQC Identification	Date Sampled	Trichloro-ethylene ug/kg	Trichloro-fluoromethane ug/kg	Vinyl Chloride ug/kg	Total Xylene ug/kg	Total Petroleum Hydrocarbons mg/kg
MK01A-01	601\602		01/15/86	<1.0	<1.0	<1.0	<1.0	- -
MK01A-02	601\602		01/15/86	<1.0	<1.0	<1.0	<1.0	- -
MK02A-01	601\602		01/13/86	<1.0	<1.0	<1.0	<1.0	- -
MK02A-03	601\602		01/13/86	<1.0	<1.0	<1.0	<1.0	- -
MK02A-01	601\602	FDUPE-MK3A-01	01/13/86	<10.0	<1.0	<1.0	<1.0	- -
MK03B-01	601\602		01/20/86	<1.0	<1.0	<1.0	1.2	- -
MK03B-02	601\602		01/20/86	<1.0	<1.0	<1.0	<1.0	- -
MK03B-05	601\602		01/20/86	<1.0	<1.0	<1.0	9.2	- -
MK04B-01	601\602		01/22/86	<1.0	<1.0	<1.0	<1.0	- -
MK04B-04	601\602		01/22/86	<1.0	<1.0	<1.0	<1.0	- -
MK04B-06	601\602		01/22/86	<1.0	<1.0	<1.0	6.8	- -
MK04B-07	601\602		01/22/86	<1.0	<1.0	<1.0	<1.0	- -
MK05B-01	601\602		01/20/86	<1.0	<1.0	<1.0	1.8	- -
MK05B-01	601\602	FDUPE-MK15B-01	01/20/86	<1.0	<1.0	<1.0	14	- -
MK05B-03	601\602		01/20/86	<1.0	<1.0	<1.0	4.6	- -
MK05B-06	601\602		01/20/86	<1.0	<1.0	<1.0	1.2	- -
MK06B-01	601\602	FDUPE MK16B-01	01/21/86	<1.0	<1.0	<1.0	28	- -

Table 4-2 (cont)
Southern Pacific Transportation Company (Bayshore Yard)
Soils Organics Analyses
Report Form # 4

Sample Number	Test Method	QA/QC Identification	Date Sampled	Trichloro-ethylene ug/kg	Trichloro-fluoromethane ug/kg	Vinyl Chloride ug/kg	Total Xylene ug/kg	Total Petroleum Hydrocarbons mg/kg
MK06B-01	601\602		01/21/86	<1.0	<1.0	<1.0	1.0	- -
MK06B-04	601\602		01/21/86	<1.0	<1.0	<1.0	<1.0	- -
MK06B-05	601\602		01/21/86	<1.0	<1.0	<1.0	8.0	- -
MK06B-09	601\602		01/21/86	<1.0	<1.0	<1.0	1.0	- -
MK07B-01	601\602		01/23/86	<1.0	<1.0	<1.0	<1.0	- -
MK07B-02	601\602		01/23/86	<1.0	<1.0	<1.0	5.0	- -
MK07B-09	601\602		01/23/86	<1.0	<1.0	<1.0	<1.0	- -
MK08A-01	601\602		01/15/86	<1.0	<1.0	<1.0	<1.0	- -
MK08A-02	601\602		01/15/86	<1.0	<1.0	<1.0	<1.0	- -
MK09B-02	8010\8020		06/12/86	<0.5	<0.1	<0.1	1.5	- -
MK18A-01	601\602	FDUPE MW8A-01	01/15/86	<1.0	<1.0	<1.0	<1.0	- -
MK18A-02	601\602	FDUPE MK8A-02	01/15/86	<1.0	<1.0	<1.0	<1.0	- -
MK1A-01	601\602	FDUPE-MK19A-01	01/15/86	<1.0	<1.0	<1.0	1.6	- -
MK1A-02	601\602	FDUPE-MK19A-02	01/15/86	<1.0	<1.0	<1.0	<1.0	- -
MB2-04			12/09/85	- -	- -	- -	- -	1
MB2-06			12/09/85	- -	- -	- -	- -	1.2
MB3-01			12/10/85	- -	- -	- -	- -	11000
MB8-02			12/13/85	- -	- -	- -	- -	9

Table 4-2 (cont)
Southern Pacific Transportation Company (Bayshore Yard)
Soils Organics Analyses
Report Form # 4

Sample Number	Test Method	QAQC Identification	Date Sampled	Trichloro-ethylene ug/kg	Trichloro-fluoromethane ug/kg	Vinyl Chloride ug/kg	Total Xylene ug/kg	Total Petroleum Hydrocarbons mg/kg
MB9-03			12/17/85	- -	- -	- -	- -	4

Table 4-3
Southern Pacific Transportation Company (Bayshore Yard)
Ground Water Metals Analyses
Report Form #1

Sample Number	QAQC Identification	Lab Code	Date Sampled	Arsenic mg/l	Barium mg/l	Total Chromium mg/l	Copper mg/l	Lead mg/l	Zinc mg/l
MK-01A		CCA	04/24/86	0.01	<0.1	<0.005	0.01	<0.005	0.06
MK-01A		SEQ	02/24/89	<0.01	0.27	<0.005	<0.01	<0.005	0.054
MK-02A		CCA	04/22/86	0.07	<0.1	<0.005	<0.040	<0.005	<0.040
MK-02A	FDUPE-MK22-A	CCA	04/22/86	0.11	<0.1	<0.005	<0.040	<0.005	<0.040
MK-02A		SEQ	03/01/89	<0.01	0.13	<0.005	<0.01	<0.005	0.06
MK-03B		CCA	04/22/86	<0.005	0.2	<0.005	<0.040	<0.005	<0.040
MK-04A		CCA	04/22/86	<0.005	<0.1	<0.005	<0.040	<0.005	<0.040
MK-04B		CCA	04/22/86	<0.005	<0.1	<0.005	<0.040	<0.005	<0.040
MK-05A		CCA	04/22/86	0.020	<0.1	<0.005	<0.040	<0.005	<0.040
MK-05B		CCA	04/22/86	<0.005	<0.1	<0.005	<0.040	<0.005	<0.040
MK-06A		CCA	04/23/86	0.028	0.1	0.010	<0.040	<0.005	<0.040
MK-06A		SEQ	03/01/89	0.023	0.16	<0.005	<0.01	0.013	0.042
MK-06B		CCA	04/21/86	<0.005	0.2	0.01	<0.040	<0.005	<0.040
MK-06B	FDUPE MK-16B	CCA	04/21/86	<0.005	<0.1	<0.01	<0.040	<0.005	0.06
MK-06B		SEQ	03/01/89	<0.01	0.18	0.012	<0.01	<0.005	0.086
MK-07A		CCA	04/28/86	<0.005	<0.1	<0.005	<0.040	0.04	0.05
MK-07A		SEQ	02/15/89	<0.01	0.13	<0.005	<0.01	<0.005	0.08

Table 4-3
Southern Pacific Transportation Company (Bayshore Yard)
Ground Water Metals Analyses
Report Form #1

Sample Number	QAQC Identification	Lab Code	Date Sampled	Arsenic mg/l	Barium mg/l	Total Chromium mg/l	Copper mg/l	Lead mg/l	Zinc mg/l
MK-07B		CCA	04/28/86	<0.005	<0.1	<0.005	<0.040	0.055	0.05
MK-07B		SEQ	02/15/89	<0.01	0.36	<0.005	<0.01	<0.005	0.026
MK-08A		CCA	04/24/86	<0.005	<0.1	0.009	0.07	<0.005	1.8
MK-08A		SEQ	02/21/89	<0.01	0.042	<0.005	0.024	<0.005	0.7
MK-09A		CCA	06/19/86	<0.005	<0.1	<0.005	<0.040	<0.005	0.06
MK-09A		SEQ	03/05/89	<0.01	0.11	<0.005	<0.01	<0.005	0.044
MK-09B		CCA	06/19/86	<0.005	<0.1	<0.005	<0.040	<0.005	0.09
MK-09B		SEQ	03/05/89	<0.01	0.13	<0.005	<0.01	<0.005	0.038
MK-09B	FDUPE MK-19B	SEQ	03/05/89	<0.01	0.14	0.11	<0.01	<0.005	0.046
MW-01B		CCA	04/24/86	<0.005	0.1	0.008	0.02	<0.005	0.06
MW-01B		SEQ	02/24/89	<0.01	0.58	<0.005	<0.01	0.11	0.039
MW-02B		CCA	04/22/86	<0.005	0.1	<0.005	<0.040	<0.005	<0.040
MW-02B		SEQ	03/01/89	<0.01	0.13	0.026	0.019	<0.005	0.041
MW-03A		CCA	04/22/86	<0.005	<0.1	<0.005	<0.040	<0.005	<0.040
MW-04A		CCA	04/22/86	0.021	<0.1	<0.005	<0.040	<0.005	<0.040
MW-05A		CCA	04/17/86	<0.005	0.2	0.036	<0.040	0.011	<0.040
MW-05B		CCA	04/17/86	<0.005	0.2	0.032	<0.040	0.030	<0.040
MW-06A		CCA	04/17/86	<0.005	<0.1	<0.005	<0.040	<0.005	<0.040

Table 4-3
Southern Pacific Transportation Company (Bayshore Yard)
Ground Water Metals Analyses
Report Form #1

Sample Number	QAQC Identification	Lab Code	Date Sampled	Arsenic mg/l	Barium mg/l	Total Chromium mg/l	Copper mg/l	Lead mg/l	Zinc mg/l
MW-06B		CCA	04/17/86	<0.005	<0.1	0.009	<0.040	<0.005	<0.040
MW-07A		CCA	04/17/86	<0.005	0.3	<0.005	0.09	0.46	0.12
MW-08A		CCA	04/17/86	<0.005	<0.1	<0.005	<0.040	<0.005	<0.040
MW-08A	UNFIL\PRESERVED	CCA	08/12/86	0.021	0.17	0.23	4.8	12	24
MW-08A	FILT\PRESERVED	CCA	08/12/86	- -	0.049	0.092	- -	- -	1.2
MW-08B		CCA	04/17/86	<0.005	<0.1	<0.005	<0.040	<0.005	<0.040
MW-09A		CCA	04/23/86	<0.005	0.2	<0.005	<0.040	<0.005	<0.040
MW-09B		CCA	04/23/86	<0.005	0.2	<0.005	<0.040	<0.005	<0.040
MW-10A		CCA	04/28/86	0.04	<0.1	<0.005	0.05	0.016	0.05
MW-10A		SEQ	02/17/89	0.047	0.11	<0.005	<0.01	<0.005	0.048
MW-10B		CCA	04/28/86	<0.005	<0.1	<0.005	<0.040	<0.005	0.06
MW-10B		SEQ	03/01/89	<0.01	0.12	<0.005	<0.01	<0.005	0.038
MW-11A		CCA	04/23/86	0.061	0.2	0.01	<0.040	<0.005	<0.040
MW-11A	FDUPE- MW-111A	CCA	04/21/86	0.069	- -	<0.005	<0.4	<0.005	<0.040
MW-11B		CCA	04/23/86	<0.005	<0.1	0.01	<0.040	<0.005	<0.040
MW-11B		SEQ	03/03/89	<0.01	0.63	<0.005	<0.01	0.081	0.045
MW-12B		CCA	04/24/86	<0.005	<0.1	<0.005	0.01	<0.005	0.07
MW-12B		SEQ	02/21/89	<0.01	0.27	0.009	<0.01	<0.005	0.066

Table 4-3
Southern Pacific Transportation Company (Bayshore Yard)
Ground Water Metals Analyses
Report Form #1

Sample Number	QAQC Identification	Lab Code	Date Sampled	Arsenic mg/l	Barium mg/l	Total Chromium mg/l	Copper mg/l	Lead mg/l	Zinc mg/l
MW-13A		CCA	04/21/86	<0.005	<0.010	0.03	<0.040	<0.005	0.08
MW-13A		SEQ	02/16/89	0.012	0.11	<0.005	<0.01	0.11	0.035
MW-13B		CCA	04/23/86	<0.005	<0.1	<0.01	<0.040	<0.005	0.12
MW-13B		SEQ	02/16/89	<0.01	0.77	0.021	<0.01	0.054	0.041
MW-14A		CCA	04/23/86	<0.005	1.5	<0.01	<0.040	0.025	0.06
MW-14A	UNFIL\PRESERVED	CCA	08/12/86	0.1	3.2	0.11	- -	12	1.7
MW-14A	FILT\PRESERVED	CCA	08/12/86	0.032	1.3	0.069	- -	- -	- -
MW-14B		CCA	04/23/86	<0.005	0.2	<0.01	<0.040	<0.005	0.07
MW-15A		CCA	04/23/86	<0.005	1.0	0.02	<0.040	0.010	0.45
MW-15A		SEQ	02/23/89	<0.01	0.61	<0.005	<0.01	<0.005	0.069
MW-16A		CCA	04/23/86	<0.005	<0.1	<0.005	<0.040	<0.005	0.06
MW-16A		SEQ	02/23/89	<0.01	0.18	<0.005	0.01	<0.005	0.051
MW-16B		CCA	04/23/86	<0.005	<0.1	0.02	<0.040	<0.005	0.17
MW-16B		SEQ	02/23/89	<0.01	0.81	0.05	<0.01	0.051	1.7
MW-17A		CCA	04/28/86	<0.005	0.2	<0.01	<0.040	<0.005	0.12
MW-17A		SEQ	02/23/89	<0.01	0.2	0.008	<0.01	<0.005	0.051
MW-17A		SEQ	02/22/89	<0.01	0.25	<0.005	<0.01	<0.005	0.046
MW-17B		CCA	04/28/86	<0.005	0.7	<0.01	<0.040	<0.005	0.06

Table 4-3
Southern Pacific Transportation Company (Bayshore Yard)
Ground Water Metals Analyses
Report Form #1

Sample Number	QAQC Identification	Lab Code	Date Sampled	Arsenic mg/l	Barium mg/l	Total Chromium mg/l	Copper mg/l	Lead mg/l	Zinc mg/l
KMW-06B		SEQ	03/07/89	<0.01	6.4	0.02	<0.01	0.015	0.032
KMW-07A		SEQ	03/01/89	<0.01	0.21	<0.005	0.012	<0.005	0.067
BR-305	BRNSE-3/5-1119	SEQ	03/05/89	<0.01	0.095	<0.05	<0.01	<0.005	<0.01
DW-303	DITCH N20-0679	SEQ	03/01/89	<0.01	0.17	<0.005	0.017	0.014	0.038
DW-SS-1AF	DW-FIL IN FIELD	CCA	11/13/86	<0.005	0.35	0.010	<0.04	<0.005	0.24
DW-SS-2AF	DW-FIL IN FIELD	CCA	11/13/86	<0.005	0.16	0.015	<0.04	0.005	0.20
MB02(2-1	FIL\GW\MW14A	CCA	08/12/86	0.11	1.3	- -	0.07	0.57	0.96
MB05(2)	FIL\GW\MW14A	CCA	08/12/86	- -	6.3	- -	0.6	34	9.6
MB08A(2)	CITRATE DI BUFF	CCA	08/12/86	- -	2.4	- -	9.1	71	36
DCNWT	DECON WATER2-16	SEQ	02/16/89	<0.01	<0.02	<0.005	<0.01	<0.005	0.013

Table 4-4
Southern Pacific Transportation Company (Bayshore Yard)
Ground Water Organics Analyses
Report Form # 1

Sample Number	Test Method	QAQC Identification	Lab Code	Date Sampled	Benzene ug/l	Bromodichloro-methane ug/l	Bromoform ug/l	Bromo-methane ug/l	Carbontetra-chloride ug/l	Chloro-benzene ug/l	Chloro-ethane ug/l	2-Chloroethyl-vinyl ether ug/l	Chloroform ug/l	Chloromethane ug/l
MK-01A	601\602		CCA	04/24/86	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	6.2	<1.0	<0.1	<0.2
MK-01A	8010/8020		SEQ	02/26/89	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<0.5	<0.5
MK-02A	601\602		CCA	04/22/86	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<1.0	<0.1	<0.2
MK-02A	8010/8020		SEQ	03/02/89	0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<0.5	<0.5
MK-03B	601\602		CCA	04/22/86	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<1.0	<0.1	<0.2
MK-03B	8010/8020		SEQ	03/07/89	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<0.5	<0.5
MK-04A	601\602		CCA	04/22/86	0.3	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<1.0	<0.1	<0.2
MK-04A	8010/8020		SEQ	03/03/89	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<0.5	<0.5
MK-04B	601\602		CCA	04/22/86	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<1.0	<0.1	<0.2
MK-04B	8010/8020		SEQ	03/03/89	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<0.5	<0.5
MK-05A	601\602		CCA	04/22/86	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<1.0	<0.1	<0.2
MK-05A	8010/8020		SEQ	03/05/89	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<0.5	<0.5
MK-05B	601\602		CCA	04/22/86	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<1.0	<0.1	<0.2
MK-06A	601\602		CCA	04/23/86	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<1.0	<0.1	<0.2
MK-06A	8010/8020		SEQ	03/03/89	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<0.5	<0.5
MK-06B	601\602		CCA	04/21/86	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<1.0	<0.1	<0.2
MK-06B	601\602	FDUPE MK-16B	CCA	04/29/86	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<1.0	<0.1	<0.2

Table 4-4
Southern Pacific Transportation Company (Bayshore Yard)
Ground Water Organics Analyses
Report Form # 1

Sample Number	Test Method	QAQC Identification	Lab Code	Date Sampled	Benzene ug/l	Bromodichloro-methane ug/l	Bromoform ug/l	Bromo-methane ug/l	Carbontetra-chloride ug/l	Chloro-benzene ug/l	Chloro-ethane ug/l	2-Chloroethyl-vinyl ether ug/l	Chloroform ug/l	Chloromethane ug/l
MK-06B	8010/8020		SEQ	03/03/89	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<0.5	<0.5
MK-07A	601\602		CCA	04/28/86	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<1.0	<0.1	<0.2
MK-07A	8010/8020		SEQ	02/17/89	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<0.5	<0.5
MK-07B	601\602		CCA	04/28/86	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<1.0	<0.1	<0.2
MK-07B	8010/8020		SEQ	02/17/89	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<0.5	<0.5
MK-08A	601\602		CCA	04/24/86	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<1.0	<0.1	<0.2
MK-08A	8010/8020		SEQ	02/23/89	<1.0	<2.0	<2.0	<2.0	<2.0	<2.0	<10.0	<2.0	<1.0	<1.0
MK-09A	601\602		CCA	06/19/86	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<1.0	<0.1	<0.2
MK-09A	8010/8020		SEQ	03/07/89	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<0.5	<0.5
MK-09B	601\602		CCA	06/19/86	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<1.0	<0.1	<0.2
MK-09B	8010/8020		SEQ	03/07/89	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<0.5	<0.5
MK-09B	8010/8020	FDUPE MK-09B	SEQ	03/07/89	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<0.5	<0.5
MK-22A	601\602	FDUPE-MK02-A	CCA	04/22/86	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<1.0	<0.1	<0.2
MW-10B	8010/8020		SEQ	03/03/89	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<0.5	<0.5
MW-01B	601\602		CCA	04/24/86	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<1.0	<0.1	<0.2
MW-01B	8010/8020		SEQ	02/26/89	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<0.5	<0.5
MW-02B	601\602		CCA	04/22/86	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<1.0	<0.1	<0.2
MW-02B	8010/8020		SEQ	03/02/89	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<0.5	<0.5

Table 4-4
Southern Pacific Transportation Company (Bayshore Yard)
Ground Water Organics Analyses
Report Form # 1

Sample Number	Test Method	QAQC Identification	Lab Code	Date Sampled	Benzene ug/l	Bromodichloro-methane ug/l	Bromoform ug/l	Bromo-methane ug/l	Carbontetra-chloride ug/l	Chloro-benzene ug/l	Chloro-ethane ug/l	2-Chloroethyl-vinyl ether ug/l	Chloroform ug/l	Chloromethane ug/l
MW-03A	601\602		CCA	04/22/86	0.6	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<1.0	<0.1	<0.2
MW-03A	8010/8020		SEQ	03/07/89	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<0.5	<0.5
MW-04A	601\602		CCA	04/22/86	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<1.0	<0.1	<0.2
MW-04A	8010/8020		SEQ	03/05/89	<25	<50	<50	<50	<50	<50	<250	<50	<25	<25
MW-05A	601\602		CCA	04/17/86	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<1.0	<0.1	<0.2
MW-05A	601\602		CCA	06/30/86	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<1.0	<0.1	<0.2
MW-05A	5030/8020		SEQ	03/09/89	<0.5	- -	- -	- -	- -	- -	- -	- -	- -	- -
MW-05B	601\602		CCA	04/17/86	0.5	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<1.0	0.21	<0.2
MW-05B	601\602		CCA	06/30/86	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<1.0	<0.1	<0.2
MW-05B	5030/8010		SEQ	03/09/89	- -	<10	<10	<10	<10	<10	<50	<10	<5.0	<5.0
MW-05B	5030/8020		SEQ	03/09/89	<0.5	- -	- -	- -	- -	- -	- -	- -	- -	- -
MW-06A	601\602		CCA	04/17/86	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<1.0	<0.1	<0.2
MW-06A	8010/8020		SEQ	03/05/89	<25	<50	<50	<50	<50	<50	<250	<50	<25	<25
MW-06B	601\602		CCA	04/17/86	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<1.0	<0.1	<0.2
MW-06B	8010/8020		SEQ	03/05/89	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<0.5	<0.5
MW-07A	601\602		CCA	04/17/86	0.8	<0.1	<0.2	<0.1	<0.1	0.5	<0.1	<1.0	<0.1	<0.2
MW-08A	601\602		CCA	04/17/86	0.2	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<1.0	<0.1	<0.2
MW-08A	8010/8020		SEQ	03/05/89	<25	<50	<50	<50	<50	<50	<250	<50	<25	<25

Table 4-4
Southern Pacific Transportation Company (Bayshore Yard)
Ground Water Organics Analyses
Report Form # 1

Sample Number	Test Method	QAQC Identification	Lab Code	Date Sampled	Benzene ug/l	Bromodichloro-methane ug/l	Bromoform ug/l	Bromo-methane ug/l	Carbontetra-chloride ug/l	Chloro-benzene ug/l	Chloro-ethane ug/l	2-Chloroethyl-vinyl ether ug/l	Chloroform ug/l	Chloromethane ug/l
MW-08B	8010/8020		SEQ	03/05/89	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<0.5	<0.5
MW-09A	601\602		CCA	04/23/86	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<1.0	<0.1	<0.2
MW-09A	8010/8020		SEQ	03/03/89	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<0.5	<0.5
MW-09B	601\602		CCA	04/17/86	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<1.0	<0.1	<0.2
MW-09B	601\602		CCA	04/22/86	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<1.0	<0.1	<0.2
MW-09B	8010/8020		SEQ	03/03/89	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<0.5	<0.5
MW-10A	601\602		CCA	04/28/86	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<1.0	<0.1	<0.2
MW-10A	8010/8020		SEQ	02/17/89	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<0.5	<0.5
MW-10B	601\602		CCA	04/28/86	0.2	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<1.0	0.3	<0.2
MW-11A	601\602		CCA	04/23/86	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<1.0	<0.1	<0.2
MW-11A	601\602	FDUPE-MW-111A	CCA	04/21/86	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<1.0	<0.1	<0.2
MW-11B	601\602		CCA	04/23/86	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<1.0	<0.1	<0.2
MW-11B	8010/8020		SEQ	03/05/89	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<0.5	<0.5
MW-12B	601\602		CCA	04/24/86	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<1.0	<0.1	<0.2
MW-13A	601\602		CCA	04/29/86	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<1.0	<0.1	<0.2
MW-13A	8010/8020		SEQ	02/18/89	<1.0	<2.0	<2.0	<2.0	<2.0	<2.0	<10	<2.0	<1.0	<1.0
MW-13B	601\602		CCA	04/29/86	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<1.0	<0.1	<0.2
MW-13B	8010/8020		SEQ	02/18/89	<1.0	<2.0	<2.0	<2.0	<2.0	<2.0	<10.0	<2.0	<1.0	<1.0

Table 4-4
Southern Pacific Transportation Company (Bayshore Yard)
Ground Water Organics Analyses
Report Form # 1

Sample Number	Test Method	QAQC Identification	Lab Code	Date Sampled	Benzene ug/l	Bromodichloro-methane ug/l	Bromoform ug/l	Bromo-methane ug/l	Carbontetra-chloride ug/l	Chloro-benzene ug/l	Chloro-ethane ug/l	2-Chloroethyl-vinyl ether ug/l	Chloroform ug/l	Chloromethane ug/l
MW-14A	601\602		CCA	04/29/86	0.7	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<1.0	<0.1	<0.2
MW-14B	601\602		CCA	04/29/86	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<1.0	<0.1	<0.2
MW-15A	601\602		CCA	04/29/86	6.6	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<1.0	<0.1	<0.2
MW-15A	8010/8020		SEQ	02/25/89	1.5	<1.0	<1.0	<1.0	<1.0	<1.0	5.4	<1.0	<0.5	<0.5
MW-15A	5030/8010		SEQ	03/09/89	- -	<5000	<5000	<5000	<5000	<5000	<25000	<5000	<2500	<2500
MW-15A	5030/8020		SEQ	03/09/89	<0.5	- -	- -	- -	- -	- -	- -	- -	- -	- -
MW-16A	601\602		CCA	04/29/86	0.9	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<1.0	<0.1	<0.2
MW-16A	8010/8020		SEQ	02/25/89	0.84	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<0.5	<0.5
MW-16B	601\602		CCA	04/29/86	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<1.0	<0.1	<0.2
MW-16B	8010/8020		SEQ	02/25/89	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<0.5	<0.5
MW-17A	601\602		CCA	04/28/86	0.3	0.6	<0.2	<0.1	<0.1	<0.1	60	<1.0	<0.1	<0.2
MW-17A	8010/8020		SEQ	02/25/89	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	6	<1.0	<0.5	<0.5
MW-17A	8010/8020		SEQ	02/24/89	<1.0	<2.0	<2.0	<2.0	<2.0	<2.0	<10.0	<2.0	<1.0	<1.0
MW-17B	601\602		CCA	04/28/86	0.1	<0.1	<0.2	<0.1	0.2	<0.1	<0.1	<1.0	<0.1	<0.2
MW-17B	8010/8020		SEQ	02/25/89	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<0.5	<0.5
MW-17B	8010/8020		SEQ	02/24/89	<0.5	<2.0	<2.0	<2.0	<2.0	<2.0	<10.0	<2.0	<1.0	<1.0
MW-03B	8010/8020		SEQ	03/02/89	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<0.5	<0.5
MW-04A	8010/8020		SEQ	03/02/89	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<0.5	<0.5

Table 4-4
Southern Pacific Transportation Company (Bayshore Yard)
Ground Water Organics Analyses
Report Form # 1

Sample Number	Test Method	QAQC Identification	Lab Code	Date Sampled	Benzene ug/l	Bromodichloro-methane ug/l	Bromoform ug/l	Bromo-methane ug/l	Carbontetra-chloride ug/l	Chloro-benzene ug/l	Chloro-ethane ug/l	2-Chloroethyl-vinyl ether ug/l	Chloroform ug/l	Chloromethane ug/l
KMW-05A	5030/8010		SEQ	03/09/89	- -	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<0.5	<0.5
KMW-06B	5030/8010		SEQ	03/09/89	- -	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<0.5	<0.5
KMW-06B	5030/8020		SEQ	03/09/89	<0.5	- -	- -	- -	- -	- -	- -	- -	- -	- -
KMW-07A	8010/8020		SEQ	03/02/89	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<0.5	<0.5
DW-224	8010/8020	DITCH H20-2791	SEQ	02/26/89	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<0.5	<0.5
DW-303	8010/8020	DITCH H20-0679	SEQ	03/03/89	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<0.5	<0.5
DW-SS-1AF			CCA	/ /	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
DW-SS-2AF			CCA	/ /	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
BR 305	8010/8020	BRNSE-3/S-1119	SEQ	03/07/89	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<0.5	<0.5
DCNWT	8010/8020	DECON WATER2-16	SEQ	02/18/89	<1.0	<2.0	<2.0	<2.0	<2.0	<2.0	<10.0	<2.0	13	<1.0
N-SUMP	601\602		CCA	04/22/86	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<1.0	<0.1	<0.2
S-SUMP	601\602	S-SUMP	CCA	04/29/86	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<1.0	<0.1	<0.2
TB-2009	601\602	TB-2009	CCA	04/22/86	0.4	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<1.0	<0.1	<0.2
TB-217	5030/8010	TB-217	SEQ	02/17/89	- -	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<0.5	<0.5
TB-218	5030/8010	TB-218	SEQ	02/18/89	- -	<2.0	<2.0	<2.0	<2.0	<2.0	<10.0	<2.0	<1.0	<1.0
TB-223	8010/8020	TB-223	SEQ	02/23/89	0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<0.5	<0.5
TB-224	8010/8020	TB-224	SEQ	02/24/89	<1.0	<2.0	<2.0	<2.0	<2.0	<2.0	<10.0	<2.0	<1.0	<1.0
TB-225	8010/8020	TB-225	SEQ	02/25/89	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<0.5	<0.5

Table 4-4
Southern Pacific Transportation Company (Bayshore Yard)
Ground Water Organics Analyses
Report Form # 1

Sample Number	Test Method	QAQC Identification	Lab Code	Date Sampled	Benzene ug/l	Bromodichloro-methane ug/l	Bromoform ug/l	Bromo-methane ug/l	Carbontetra-chloride ug/l	Chloro-benzene ug/l	Chloro-ethane ug/l	2-Chloroethyl-vinyl ether ug/l	Chloroform ug/l	Chloromethane ug/l
TB-226	8010/8020	TB-226	SEQ	02/26/89	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<0.5	<0.5
TB-302	8010/8020	TB-302	SEQ	03/02/89	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<0.5	<0.5
TB-305	8010/8020	TB-305	SEQ	03/05/89	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<0.5	<0.5
TB-309	5030/8010	TB-309	SEQ	03/09/89	<0.5	<1.0	<1.0	17	<1.0	<1.0	19	<1.0	<0.5	6.4
TB-417	601\602	TB - M-417	CCA	04/17/86	- -	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<1.0	<0.1	<0.2
TB-423	601\602	TB-M-423	CCA	04/23/86	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<1.0	<0.1	<0.2
TB-428	601\602	TB-M-428	CCA	04/28/86	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<1.0	<0.1	<0.2
TB-429	601\602	TB-M-429	CCA	04/29/86	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<1.0	<0.1	<0.2
TB-619	601\602	TB-M-619	CCA	06/19/86	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<1.0	<0.1	<0.2
TB-630	601\602	TB-630	CCA	06/30/86	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<1.0	<0.1	<0.2

Table 4-4 (cont)
Southern Pacific Transportation Company (Bayshore Yard)
Ground Water Organics Analyses
Report Form # 2

Sample Number	Test Method	QAQC Identification	Date Sampled	Dibromochloro-methane ug/l	1,2-Dichloro-benzene ug/l	1,3-Dichloro-benzene ug/l	1,4-Dichloro-benzene ug/l	1,1-Dichloro-ethane ug/l	1,2-Dichloro-ethane ug/l	1,1-Dichloro-ethene ug/l	trans-1,2-Di-chloroethene ug/l	1,2-Dichloro-propane ug/l
MK-01A	601\602		04/24/86	<0.1	<0.1	<0.1	<0.1	41	<0.1	<0.1	5.1	<0.1
MK-01A	8010/8020		02/26/89	<0.5	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5
MK-02A	601\602		04/22/86	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MK-02A	8010/8020		03/02/89	<0.5	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5
MK-03B	601\602		04/22/86	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MK-03B	8010/8020		03/07/89	<0.5	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5
MK-04A	601\602		04/22/86	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MK-04A	8010/8020		03/03/89	<0.5	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5
MK-04B	601\602		04/22/86	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MK-04B	8010/8020		03/03/89	<0.5	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5
MK-05A	601\602		04/22/86	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MK-05A	8010/8020		03/05/89	<0.5	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5
MK-05B	601\602		04/22/86	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MK-06A	601\602		04/23/86	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MK-06A	8010/8020		03/03/89	<0.5	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5
MK-06B	601\602		04/21/86	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MK-06B	601\602	FDUPE MK-16B	04/29/86	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1

Table 4-4 (cont)
Southern Pacific Transportation Company (Bayshore Yard)
Ground Water Organics Analyses
Report Form # 2

Sample Number	Test Method	QAQC Identification	Date Sampled	Dibromochloro-methane ug/l	1,2-Dichloro-benzene ug/l	1,3-Dichloro-benzene ug/l	1,4-Dichloro-benzene ug/l	1,1-Dichloro-ethane ug/l	1,2-Dichloro-ethane ug/l	1,1-Dichloro-ethene ug/l	trans-1,2-Di-chloroethene ug/l	1,2-Dichloro-propane ug/l
MK-06B	8010/8020		03/03/89	<0.5	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5
MK-07A	601\602		04/28/86	<0.1	<0.1	<0.1	<0.1	1.2	<0.1	<0.1	<0.1	<0.1
MK-07A	8010/8020		02/17/89	<0.5	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5
MK-07B	601\602		04/28/86	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MK-07B	8010/8020		02/17/89	<0.5	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5
MK-08A	601\602		04/24/86	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MK-08A	8010/8020		02/23/89	<1.0	<4.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0
MK-09A	601\602		06/19/86	<0.1	<0.1	<0.1	<0.1	0.1	<0.1	<0.1	<0.1	<0.1
MK-09A	8010/8020		03/07/89	<0.5	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5
MK-09B	601\602		06/19/86	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MK-09B	8010/8020		03/07/89	<0.5	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5
MK-09B	8010/8020	FDUPE MK-09B	03/07/89	<0.5	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5
MK-22A	601\602	FDUPE-MK02-A	04/22/86	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MW-10B	8010/8020		03/03/89	<0.5	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5
MW-01B	601\602		04/24/86	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MW-01B	8010/8020		02/26/89	<0.5	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5
MW-02B	601\602		04/22/86	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MW-02B	8010/8020		03/02/89	<0.5	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5

Table 4-4 (cont)
Southern Pacific Transportation Company (Bayshore Yard)
Ground Water Organics Analyses
Report Form # 2

Sample Number	Test Method	QA/QC Identification	Date Sampled	Dibromochloro-methane ug/l	1,2-Dichloro-benzene ug/l	1,3-Dichloro-benzene ug/l	1,4-Dichloro-benzene ug/l	1,1-Dichloro-ethane ug/l	1,2-Dichloro-ethane ug/l	1,1-Dichloro-ethene ug/l	trans-1,2-Di-chloroethene ug/l	1,2-Dichloro-propane ug/l
MW-03A	601\602		04/22/86	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MW-03A	8010/8020		03/07/89	<0.5	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5
MW-04A	601\602		04/22/86	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MW-04A	8010/8020		03/05/89	<25	<100	<50	<50	<50	<50	<50	<50	<25
MW-05A	601\602		04/17/86	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MW-05A	601\602		06/30/86	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	830	<0.1
MW-05A	5030/8020		03/09/89	- -	- -	- -	- -	- -	- -	- -	- -	- -
MW-05B	601\602		04/17/86	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MW-05B	601\602		06/30/86	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MW-05B	5030/8010		03/09/89	<5.0	<20	<10	<10	<10	<10	<10	<10	<5.0
MW-05B	5030/8020		03/09/89	- -	- -	- -	- -	- -	- -	- -	- -	- -
MW-06A	601\602		04/17/86	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	59	<0.1
MW-06A	8010/8020		03/05/89	<25	<100	<50	<50	<50	<50	<50	790	<25
MW-06B	601\602		04/17/86	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MW-06B	8010/8020		03/05/89	<0.5	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5
MW-07A	601\602		04/17/86	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	632.9	<0.1
MW-08A	601\602		04/17/86	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	640	<0.1
MW-08A	8010/8020		03/05/89	<25	<100	<50	<50	<50	<50	<50	980	<25

Table 4-4 (cont)
Southern Pacific Transportation Company (Bayshore Yard)
Ground Water Organics Analyses
Report Form # 2

Sample Number	Test Method	QAQC Identification	Date Sampled	Dibromochloro-methane ug/l	1,2-Dichloro-benzene ug/l	1,3-Dichloro-benzene ug/l	1,4-Dichloro-benzene ug/l	1,1-Dichloro-ethane ug/l	1,2-Dichloro-ethane ug/l	1,1-Dichloro-ethene ug/l	trans-1,2-Di-chloroethene ug/l	1,2-Dichloro-propane ug/l
MW-08B	8010/8020		03/05/89	<0.5	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5
MW-09A	601\602		04/23/86	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	2.5	<0.1
MW-09A	8010/8020		03/03/89	<0.5	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	12	<0.5
MW-09B	601\602		04/17/86	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MW-09B	601\602		04/22/86	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MW-09B	8010/8020		03/03/89	<0.5	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5
MW-10A	601\602		04/28/86	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MW-10A	8010/8020		02/17/89	<0.5	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5
MW-10B	601\602		04/28/86	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MW-11A	601\602		04/23/86	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MW-11A	601\602	FDUPE-MW-111A	04/21/86	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MW-11B	601\602		04/23/86	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MW-11B	8010/8020		03/05/89	<0.5	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5
MW-12B	601\602		04/24/86	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MW-13A	601\602		04/29/86	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MW-13A	8010/8020		02/18/89	<1.0	<4.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0
MW-13B	601\602		04/29/86	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MW-13B	8010/8020		02/18/89	<1.0	<4.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0

Table 4-4 (cont)
Southern Pacific Transportation Company (Bayshore Yard)
Ground Water Organics Analyses
Report Form # 2

Sample Number	Test Method	QAQC Identification	Date Sampled	Dibromochloro-methane ug/l	1,2-Dichloro-benzene ug/l	1,3-Dichloro-benzene ug/l	1,4-Dichloro-benzene ug/l	1,1-Dichloro-ethane ug/l	1,2-Dichloro-ethane ug/l	1,1-Dichloro-ethene ug/l	trans-1,2-Di-chloroethene ug/l	1,2-Dichloro-propane ug/l
MW-14A	601\602		04/29/86	<0.1	<0.1	<0.1	<0.1	0.2	<0.1	<0.1	<0.1	<0.1
MW-14B	601\602		04/29/86	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MW-15A	601\602		04/29/86	<0.1	<0.1	<0.1	<0.1	1.7	<0.1	<0.1	0.9	<0.1
MW-15A	8010/8020		02/25/89	<0.5	<2.0	<1.0	<1.0	.<1.0	<1.0	<1.0	<1.0	<0.5
MW-15A	5030/8010		03/09/89	<2500	<10000	<5000	<5000	<5000	<5000	<5000	<5000	<2500
MW-15A	5030/8020		03/09/89	- -	- -	- -	- -	- -	- -	- -	- -	- -
MW-16A	601\602		04/29/86	<0.1	<0.1	<0.1	<0.1	0.8	<0.1	<0.1	0.6	<0.1
MW-16A	8010/8020		02/25/89	<0.5	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5
MW-16B	601\602		04/29/86	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MW-16B	8010/8020		02/25/89	<0.5	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5
MW-17A	601\602		04/28/86	<0.1	<0.1	<0.1	<0.1	1.4	<0.1	<0.1	1.5	<0.1
MW-17A	8010/8020		02/25/89	<0.5	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5
MW-17A	8010/8020		02/24/89	<1.0	<4.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0
MW-17B	601\602		04/28/86	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MW-17B	8010/8020		02/25/89	<0.5	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5
MW-17B	8010/8020		02/24/89	<1.0	<4.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0
KMW-03B	8010/8020		03/02/89	<0.5	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5
KMW-04A	8010/8020		03/02/89	<0.5	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5

Table 4-4 (cont)
Southern Pacific Transportation Company (Bayshore Yard)
Ground Water Organics Analyses
Report Form # 2

Sample Number	Test Method	QAQC Identification	Date Sampled	Dibromochloro-methane ug/l	1,2-Dichloro-benzene ug/l	1,3-Dichloro-benzene ug/l	1,4-Dichloro-benzene ug/l	1,1-Dichloro-ethane ug/l	1,2-Dichloro-ethane ug/l	1,1-Dichloro-ethene ug/l	trans-1,2-Di-chloroethene ug/l	1,2-Dichloro-propane ug/l
KMW-05A	5030/8010		03/09/89	<0.5	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5
KMW-06B	5030/8010		03/09/89	<0.5	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5
KMW-06B	5030/8020		03/09/89	- -	- -	- -	- -	- -	- -	- -	- -	- -
KMW-07A	8010/8020		03/02/89	<0.5	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5
DW-224	8010/8020	DITCH H2O-2791	02/26/89	<0.5	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5
DW-303	8010/8020	DITCH H2O-0679	03/03/89	<0.5	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5
DW-SS-1AF			/ /	- -	- -	- -	- -	- -	- -	- -	- -	- -
DW-SS-2AF			/ /	- -	- -	- -	- -	- -	- -	- -	- -	- -
BR 305	8010/8020	BRNSE-3/5-1119	03/07/89	<0.5	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5
DCHWT	8010/8020	DECON WATER2-16	02/18/89	<1.0	<4.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0
N-SUMP	601\602		04/22/86	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
S-SUMP	601\602	S-SUMP	04/29/86	<0.1	<0.1	<0.1	<0.1	0.3	<0.1	<0.1	<0.1	<0.1
TB-2009	601\602	TB-2009	04/22/86	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TB-217	5030/8010	TB-217	02/17/89	<0.5	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5
TB-218	5030/8010	TB-218	02/18/89	<1.0	<4.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0
TB-223	8010/8020	TB-223	02/23/89	<0.5	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5
TB-224	8010/8020	TB-224	02/24/89	<1.0	<4.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0
TB-225	8010/8020	TB-225	02/25/89	<0.5	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5

Table 4-4 (cont)
Southern Pacific Transportation Company (Bayshore Yard)
Ground Water Organics Analyses
Report Form # 2

Sample Number	Test Method	QAQC Identification	Date Sampled	Dibromochloro-methane ug/l	1,2-Dichloro-benzene ug/l	1,3-Dichloro-benzene ug/l	1,4-Dichloro-benzene ug/l	1,1-Dichloro-ethane ug/l	1,2-Dichloro-ethane ug/l	1,1-Dichloro-ethene ug/l	trans-1,2-Di-chloroethene ug/l	1,2-Dichloro-propane ug/l
TB-226	8010/8020	TB-226	02/26/89	<0.5	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5
TB-302	8010/8020	TB-302	03/02/89	<0.5	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5
TB-305	8010/8020	TB-305	03/05/89	<0.5	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	21	<0.5
TB-309	5030/8010	TB-309	03/09/89	<0.5	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5
TB-417	601\602	TB - M-417	04/17/86	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TB-423	601\602	TB-M-423	04/23/86	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TB-428	601\602	TB-M-428	04/28/86	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TB-429	601\602	TB-M-429	04/29/86	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TB-619	601\602	TB-M-619	06/19/86	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TB-630	601\602	TB-630	06/30/86	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1

Table 4-4 (cont)
Southern Pacific Transportation Company (Bayshore Yard)
Ground Water Organics Analyses
Report Form # 3

Sample Number	Test Method	QAQC Identification	Date Sampled	cis-1,3 Dichloro-propylene ug/l	trans-1,3-Dichloro-propylene ug/l	Ethyl Benzene ug/l	Methylene chloride ug/l	1,1,2,2-Tetra-chloroethane ug/l	Tetrachloro-ethylene ug/l	Toluene ug/l	1,1,1-Tri-chloroethane ug/l	1,1,2-Tri-chloroethane ug/l
MK-01A	601\602		04/24/86	<0.1	<0.1	<0.1	<10	<0.5	<0.5	<0.2	<0.1	<0.1
MK-01A	8010/8020		02/26/89	<0.5	<5.0	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5
MK-02A	601\602		04/22/86	<0.1	<0.1	<0.1	<10	<0.5	<0.5	<0.2	<0.1	<0.1
MK-02A	8010/8020		03/02/89	<0.5	<5.0	<0.5	<2.0	<0.5	<1.0	<0.5	<0.5	<0.5
MK-03B	601\602		04/22/86	<0.1	<0.1	<0.1	<10	<0.5	<0.5	<0.2	<0.1	<0.1
MK-03B	8010/8020		03/07/89	<0.5	<5.0	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5
MK-04A	601\602		04/22/86	<0.1	<0.1	0.5	<10	<0.5	<0.5	1.2	<0.1	<0.1
MK-04A	8010/8020		03/03/89	<0.5	<5.0	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5
MK-04B	601\602		04/22/86	<0.1	<0.1	<0.1	<10	<0.5	<0.5	<0.2	<0.1	<0.1
MK-04B	8010/8020		03/03/89	<0.5	<5.0	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5
MK-05A	601\602		04/22/86	<0.1	<0.1	<0.1	500	<0.5	<0.5	<0.2	<0.1	<0.1
MK-05A	8010/8020		03/05/89	<0.5	<5.0	<0.5	3.0	<0.5	<0.5	<0.5	<0.5	<0.5
MK-05B	601\602		04/22/86	<0.1	<0.1	<0.1	<10	<0.5	<0.5	<0.2	<0.1	<0.1
MK-06A	601\602		04/23/86	<0.1	<0.1	<0.1	<10	<0.5	<0.5	<0.2	<0.1	<0.1
MK-06A	8010/8020		03/03/89	<0.5	<5.0	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5
MK-06B	601\602		04/21/86	<0.1	<0.1	<0.1	<10	<0.5	<0.5	<0.2	<0.1	<0.1
MK-06B	601\602	FDUPE MK-16B	04/29/86	<0.1	<0.1	<0.1	<10	<0.5	<0.5	<0.2	<0.1	<0.1

Table 4-4 (cont)
Southern Pacific Transportation Company (Bayshore Yard)
Ground Water Organics Analyses
Report Form # 3

Sample Number	Test Method	QAQC Identification	Date Sampled	cis-1,3 Dichloro-propylene ug/l	trans-1,3-Dichloro-propylene ug/l	Ethyl Benzene ug/l	Methylene chloride ug/l	1,1,2,2-Tetra-chloroethane ug/l	Tetrachloro-ethylene ug/l	Toluene ug/l	1,1,1-Tri-chloroethane ug/l	1,1,2-Tri-chloroethane ug/l
MK-06B	8010/8020		03/03/89	<0.5	<5.0	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5
MK-07A	601\602		04/28/86	<0.1	<0.1	<0.1	<10	<0.5	<0.5	<0.2	<0.1	<0.1
MK-07A	8010/8020		02/17/89	<0.5	<5.0	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5
MK-07B	601\602		04/28/86	<0.1	<0.1	<0.1	<10	<0.5	<0.5	<0.2	<0.1	<0.1
MK-07B	8010/8020		02/17/89	<0.5	<5.0	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5
MK-08A	601\602		04/24/86	<0.1	<0.1	<0.1	<10	<0.5	3.5	<0.2	0.2	<0.1
MK-08A	8010/8020		02/23/89	<1.0	<10	<1.0	<4.0	<1.0	2.9	<1.0	<1.0	<1.0
MK-09A	601\602		06/19/86	<0.1	<0.1	<0.1	<10	<0.5	<0.5	<0.2	<0.1	<0.1
MK-09A	8010/8020		03/07/89	<0.5	<5.0	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5
MK-09B	601\602		06/19/86	<0.1	<0.1	0.1	<10	<0.5	<0.5	<0.2	<0.1	<0.1
MK-09B	8010/8020		03/07/89	<0.5	<5.0	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5
MK-09B	8010/8020	FDUPE MK-09B	03/07/89	<0.5	<5.0	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5
MK-22A	601\602	FDUPE-MK02-A	04/22/86	<0.1	<0.1	<0.1	<10	<0.5	<0.5	<0.2	<0.1	<0.1
MW-10B	8010/8020		03/03/89	<0.5	<5.0	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5
MW-01B	601\602		04/24/86	<0.1	<0.1	<0.1	<10	<0.5	<0.5	<0.2	<0.1	<0.1
MW-01B	8010/8020		02/26/89	<0.5	<5.0	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5
MW-02B	601\602		04/22/86	<0.1	<0.1	0.4	<10	<0.5	<0.5	<0.2	<0.1	<0.1
MW-02B	8010/8020		03/02/89	<0.5	<5.0	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5

Table 4-4 (cont)
Southern Pacific Transportation Company (Bayshore Yard)
Ground Water Organics Analyses
Report Form # 3

Sample Number	Test Method	QAQC Identification	Date Sampled	cis-1,3 Dichloro-propylene ug/l	trans-1,3-Dichloro-propylene ug/l	Ethyl Benzene ug/l	Methylene chloride ug/l	1,1,2,2-Tetra-chloroethane ug/l	Tetrachloro-ethylene ug/l	Toluene ug/l	1,1,1-Tri-chloroethane ug/l	1,1,2-Tri-chloroethane ug/l
MW-03A	601\602		04/22/86	<0.1	<0.1	0.5	<10	<0.5	<0.5	0.9	<0.1	<0.1
MW-03A	8010/8020		03/07/89	<0.5	<5.0	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5
MW-04A	601\602		04/22/86	<0.1	<0.1	<0.1	<10	<0.5	<0.5	<0.2	<0.1	<0.1
MW-04A	8010/8020		03/05/89	<25	<250	<25	<100	<25	<25	<25	<25	<25
MW-05A	601\602		04/17/86	<0.1	<0.1	<0.1	<10	<0.5	48000	<0.2	<0.1	<0.1
MW-05A	601\602		06/30/86	<0.1	<0.1	<0.1	<10	<0.5	8700	<0.2	47	130
MW-05A	5030/8020		03/09/89	- -	- -	<0.5	- -	- -	- -	<0.5	- -	- -
MW-05B	601\602		04/17/86	<0.1	0.20	<0.1	<10	<0.5	<0.5	0.2	<0.1	<0.1
MW-05B	601\602		06/30/86	<0.1	<0.1	<0.1	<10	<0.5	<0.5	<0.2	<0.1	<0.1
MW-05B	5030/8010		03/09/89	<5.0	<50	- -	<20	<5.0	<5.0	- -	<5.0	<5.0
MW-05B	5030/8020		03/09/89	- -	- -	<0.5	- -	- -	- -	<0.5	- -	- -
MW-06A	601\602		04/17/86	<0.1	<0.1	0.10	<10	<0.5	6.0	<0.2	<0.1	<0.1
MW-06A	8010/8020		03/05/89	<25	<250	<25	<100	<25	150	<25	<25	<25
MW-06B	601\602		04/17/86	<0.1	<0.1	<0.1	<10	<0.5	3.1	<0.2	<0.1	<0.1
MW-06B	8010/8020		03/05/89	<0.5	<5.0	<0.5	5.0	<0.5	1.9	<0.5	<0.5	<0.5
MW-07A	601\602		04/17/86	<0.1	<0.1	<0.1	<10	1.8	76	0.6	<0.1	<0.1
MW-08A	601\602		04/17/86	<0.1	<0.1	<0.1	<10	<0.5	<0.5	<0.2	<0.1	<0.1
MW-08A	8010/8020		03/05/89	<25	<250	<25	<100	<25	<25	<25	<25	<25

Table 4-4 (cont)
Southern Pacific Transportation Company (Bayshore Yard)
Ground Water Organics Analyses
Report Form # 3

Sample Number	Test Method	QAQC Identification	Date Sampled	cis-1,3 Dichloro-propylene ug/l	trans-1,3-Dichloro-propylene ug/l	Ethyl Benzene ug/l	Methylene chloride ug/l	1,1,2,2-Tetra-chloroethane ug/l	Tetrachloro-ethylene ug/l	Toluene ug/l	1,1,1-Tri-chloroethane ug/l	1,1,2-Tri-chloroethane ug/l
MW-08B	8010/8020		03/05/89	<0.5	<5.0	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5
MW-09A	601\602		04/23/86	<0.1	<0.1	<0.1	<10	<0.5	<0.5	<0.2	<0.1	<0.1
MW-09A	8010/8020		03/03/89	<0.5	<5.0	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5
MW-09B	601\602		04/17/86	<0.1	<0.1	<0.1	<10	<0.5	<0.5	<0.2	<0.1	<0.1
MW-09B	601\602		04/22/86	<0.1	<0.1	<0.1	<10	<0.5	<0.5	<0.2	<0.1	<0.1
MW-09B	8010/8020		03/03/89	<0.5	<5.0	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5
MW-10A	601\602		04/28/86	<0.1	<0.1	<0.1	<10	<0.5	<0.5	<0.2	<0.1	<0.1
MW-10A	8010/8020		02/17/89	<0.5	<5.0	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5
MW-10B	601\602		04/28/86	<0.1	<0.1	0.2	<10	<0.5	<0.5	0.6	<0.1	<0.1
MW-11A	601\602		04/23/86	<0.1	<0.1	<0.1	<10	<0.5	<0.5	<0.2	<0.1	<0.1
MW-11A	601\602	FDUPE-MW-111A	04/21/86	<0.1	<0.1	<0.1	<10	<0.5	<0.5	<0.2	<0.1	<0.1
MW-11B	601\602		04/23/86	<0.1	<0.1	<0.1	<10	<0.5	<0.5	<0.2	<0.1	<0.1
MW-11B	8010/8020		03/05/89	<0.5	<5.0	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5
MW-12B	601\602		04/24/86	<0.1	<0.1	<0.1	<10	<0.5	<0.5	0.1	<0.1	<0.1
MW-13A	601\602		04/29/86	<0.1	<0.1	0.9	<10	<0.5	<0.5	<0.2	<0.1	<0.1
MW-13A	8010/8020		02/18/89	<1.0	<10	9.1	<4.0	<1.0	<1.0	2.2	<1.0	<1.0
MW-13B	601\602		04/29/86	<0.1	<0.1	<0.1	<10	<0.5	<0.5	<0.2	<0.1	<0.1
MW-13B	8010/8020		02/18/89	<1.0	<10	<1.0	<4.0	<1.0	<1.0	<1.0	<1.0	<1.0

Table 4-4 (cont)
Southern Pacific Transportation Company (Bayshore Yard)
Ground Water Organics Analyses
Report Form # 3

Sample Number	Test Method	QAQC Identification	Date Sampled	cis-1,3 Dichloropropylene ug/l	trans-1,3-Dichloropropylene ug/l	Ethyl Benzene ug/l	Methylene chloride ug/l	1,1,2,2-Tetrachloroethane ug/l	Tetrachloroethylene ug/l	Toluene ug/l	1,1,1-Trichloroethane ug/l	1,1,2-Trichloroethane ug/l
MW-14A	601\602		04/29/86	<0.1	<0.1	<0.1	<10	<0.5	<0.5	<0.2	<0.1	<0.1
MW-14B	601\602		04/29/86	<0.1	<0.1	0.1	<10	<0.5	<0.5	<0.2	<0.1	<0.1
MW-15A	601\602		04/29/86	<0.1	<0.1	<0.1	<10	<0.5	<0.5	0.7	<0.1	13
MW-15A	8010/8020		02/25/89	<0.5	<5.0	1.0	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5
MW-15A	5030/8010		03/09/89	<2500	<25000	- -	<10000	<2500	<2500	- -	<2500	<2500
MW-15A	5030/8020		03/09/89	- -	- -	<0.5	- -	- -	- -	<0.5	- -	- -
MW-16A	601\602		04/29/86	<0.1	<0.1	<0.1	<10	<0.5	<0.5	<0.2	<0.1	<0.1
MW-16A	8010/8020		02/25/89	<0.5	<5.0	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5
MW-16B	601\602		04/29/86	<0.1	<0.1	<0.1	<10	<0.5	<0.5	<0.2	<0.1	<0.1
MW-16B	8010/8020		02/25/89	<0.5	<5.0	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5
MW-17A	601\602		04/28/86	<0.1	<0.1	<0.1	<10	<0.5	<0.5	0.1	<0.1	<0.1
MW-17A	8010/8020		02/25/89	<0.5	<5.0	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5
MW-17A	8010/8020		02/24/89	<1.0	<10	<1.0	<4.0	<1.0	<1.0	<1.0	<1.0	<1.0
MW-17B	601\602		04/28/86	<0.1	<0.1	0.2	<10	<0.5	<0.5	0.2	0.10	<0.1
MW-17B	8010/8020		02/25/89	<0.5	<5.0	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5
MW-17B	8010/8020		02/24/89	<1.0	<10	<0.5	<4.0	<1.0	<1.0	<0.5	<1.0	<1.0
KMW-03B	8010/8020		03/02/89	<0.5	<5.0	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5
KMW-04A	8010/8020		03/02/89	<0.5	<5.0	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5

Table 4-4 (cont)
Southern Pacific Transportation Company (Bayshore Yard)
Ground Water Organics Analyses
Report Form #.3

Sample Number	Test Method	QAQC Identification	Date Sampled	cis-1,3 Dichloro-propylene ug/l	trans-1,3-Dichloro-propylene ug/l	Ethyl Benzene ug/l	Methylene chloride ug/l	1,1,2,2-Tetra-chloroethane ug/l	Tetrachloro-ethylene ug/l	Toluene ug/l	1,1,1-Tri-chloroethane ug/l	1,1,2-Tri-chloroethane ug/l
KMW-05A	5030/8010		03/09/89	<0.5	<5.0	- -	<2.0	<0.5	<0.5	- -	<0.5	<0.5
KMW-06B	5030/8010		03/09/89	<0.5	<5.0	- -	<2.0	<0.5	<0.5	- -	<0.5	<0.5
KMW-06B	5030/8020		03/09/89	- -	- -	<0.5	- -	- -	- -	<0.5	- -	- -
KMW-07A	8010/8020		03/02/89	<0.5	<5.0	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5
DW-224	8010/8020	DITCH H2O-2791	02/26/89	<0.5	<5.0	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5
DW-303	8010/8020	DITCH H2O-0679	03/03/89	<0.5	<5.0	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5
DW-SS-1AF			/ /	- -	- -	- -	- -	- -	- -	- -	- -	- -
DW-SS-2AF			/ /	- -	- -	- -	- -	- -	- -	- -	- -	- -
BR 305	8010/8020	BRNSE-3/5-1119	03/07/89	<0.5	<5.0	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5
DCNWT	8010/8020	DECON WATER2-16	02/18/89	<1.0	<10	<1.0	<4.0	<1.0	<1.0	<1.0	<1.0	<1.0
N-SUMP	601\602		04/22/86	<0.1	<0.1	<0.1	<10	<0.5	<0.5	<0.2	<0.1	<0.1
S-SUMP	601\602	S-SUMP	04/29/86	<0.1	<0.1	<0.1	<10	<0.5	<0.5	<0.2	<0.1	<0.1
TB-2009	601\602	TB-2009	04/22/86	<0.1	<0.1	0.5	<10	<0.5	<0.5	2.8	<0.1	<0.1
TB-217	5030/8010	TB-217	02/17/89	<0.5	<5.0	- -	<2.0	<0.5	<0.5	- -	<0.5	<0.5
TB-218	5030/8010	TB-218	02/18/89	<1.0	<10	- -	<4.0	<1.0	<1.0	- -	<1.0	<1.0
TB-223	8010/8020	TB-223	02/23/89	<0.5	<5.0	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5
TB-224	8010/8020	TB-224	02/24/89	<1.0	<10	<1.0	<4.0	<1.0	<1.0	<1.0	<1.0	<1.0
TB-225	8010/8020	TB-225	02/25/89	<0.5	<5.0	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5

Table 4-4 (cont)
Southern Pacific Transportation Company (Bayshore Yard)
Ground Water Organics Analyses
Report Form # 3

Sample Number	Test Method	QAQC Identification	Date Sampled	cis-1,3 Dichloro-propylene ug/l	trans-1,3-Dichloro-propylene ug/l	Ethyl Benzene ug/l	Methylene chloride ug/l	1,1,2,2-Tetra-chloroethane ug/l	Tetrachloro-ethylene ug/l	Toluene ug/l	1,1,1-Tri-chloroethane ug/l	1,1,2-Tri-chloroethane ug/l
TB-226	8010/8020	TB-226	02/26/89	<0.5	<5.0	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5
TB-302	8010/8020	TB-302	03/02/89	<0.5	<5.0	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5
TB-305	8010/8020	TB-305	03/05/89	<0.5	<5.0	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5
TB-309	5030/8010	TB-309	03/09/89	<0.5	<5.0	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5
TB-417	601\602	TB - M-417	04/17/86	<0.1	<0.1	<0.1	<10	<0.5	<0.5	<0.2	<0.1	<0.1
TB-423	601\602	TB-M-423	04/23/86	<0.1	<0.1	<0.1	<10	<0.5	<0.5	0.1	<0.1	<0.1
TB-428	601\602	TB-M-428	04/28/86	<0.1	<0.1	<0.1	<10	<0.5	<0.5	<0.2	<0.1	<0.1
TB-429	601\602	TB-M-429	04/29/86	<0.1	<0.1	<0.1	<10	<0.5	<0.5	<0.2	<0.1	<0.1
TB-619	601\602	TB-M-619	06/19/86	<0.1	<0.1	<0.1	<10	<0.5	<0.5	<0.2	<0.1	<0.1
TB-630	601\602	TB-630	06/30/86	<0.1	<0.1	<0.1	<10	<0.5	<0.5	<0.2	<0.1	<0.1

Table 4-4 (cont)
Southern Pacific Transportation Company (Bayshore Yard)
Ground Water Organics Analyses
Report Form # 4

Sample Number	Test Method	QA/QC Identification	Date Sampled	Trichloro-ethylene ug/l	Trichloro-fluormethane ug/l	Vinyl Chloride ug/l	Total Xylene ug/l	Total Petroleum Hydrocarbons mg/l
MK-01A	601\602		04/24/86	1.2	<0.1	<0.1	<0.1	- -
MK-01A	8010/8020		02/26/89	<0.5	<1.0	<2.0	<0.5	17
MK-02A	601\602		04/22/86	<0.1	<0.1	<0.1	<0.1	- -
MK-02A	8010/8020		03/02/89	<0.5	<1.0	<2.0	<0.5	- -
MK-03B	601\602		04/22/86	<0.1	<0.1	<0.1	0.6	- -
MK-03B	8010/8020		03/07/89	<0.5	<1.0	<2.0	<0.5	- -
MK-04A	601\602		04/22/86	<0.1	<0.1	<0.1	3.8	- -
MK-04A	8010/8020		03/03/89	<0.5	<1.0	<2.0	<0.5	- -
MK-04B	601\602		04/22/86	1	<0.1	<0.1	<0.1	- -
MK-04B	8010/8020		03/03/89	<0.5	<1.0	<2.0	<0.5	- -
MK-05A	601\602		04/22/86	<0.1	<0.1	<0.1	<0.1	- -
MK-05A	8010/8020		03/05/89	<0.5	<1.0	<2.0	<0.5	- -
MK-05B	601\602		04/22/86	<0.1	<0.1	<0.1	<0.1	- -
MK-06A	601\602		04/23/86	<0.1	<0.1	<0.1	<0.1	- -
MK-06A	8010/8020		03/03/89	<0.5	<1.0	<2.0	<0.5	- -
MK-06B	601\602		04/21/86	<0.1	<0.1	<0.1	<0.1	- -
MK-06B	601\602	FDUPE MK-16B	04/29/86	<0.1	<0.1	<0.1	<0.1	- -

Table 4-4 (cont)
Southern Pacific Transportation Company (Bayshore Yard)
Ground Water Organics Analyses
Report Form # 4

Sample Number	Test Method	QAQC Identification	Date Sampled	Trichloro-ethylene ug/l	Trichloro-fluoromethane ug/l	Vinyl Chloride ug/l	Total Xylene ug/l	Total Petroleum Hydrocarbons mg/l
MK-06B	8010/8020		03/03/89	<0.5	<1.0	<2.0	<0.5	- -
MK-07A	601\602		04/28/86	<0.1	<0.1	<0.1	<0.1	- -
MK-07A	8010/8020		02/17/89	<0.5	<1.0	<2.0	<0.5	<1
MK-07B	601\602		04/28/86	<0.1	<0.1	<0.1	<0.1	- -
MK-07B	8010/8020		02/17/89	<0.5	<1.0	<2.0	<0.5	<1
MK-08A	601\602		04/24/86	<0.1	<0.1	<0.1	<0.1	- -
MK-08A	8010/8020		02/23/89	<1.0	<2.0	<4.0	<1.0	- -
MK-09A	601\602		06/19/86	<0.1	<0.1	<0.1	<0.1	- -
MK-09A	8010/8020		03/07/89	<0.5	<1.0	<2.0	<0.5	- -
MK-09B	601\602		06/19/86	<0.1	<0.1	<0.1	0.8	- -
MK-09B	8010/8020		03/07/89	<0.5	<1.0	<2.0	<0.5	- -
MK-09B	8010/8020	FDUPE MK-09B	03/07/89	<0.5	<1.0	<2.0	<0.5	- -
MK-22A	601\602	FDUPE-MK02-A	04/22/86	15	<0.1	<0.1	2.3	- -
MW-10B	8010/8020		03/03/89	<0.5	<1.0	<2.0	<0.5	- -
MW-01B	601\602		04/24/86	<0.1	<0.1	<0.1	<0.1	- -
MW-01B	8010/8020		02/26/89	<0.5	<1.0	<2.0	<0.5	- -
MW-02B	601\602		04/22/86	<0.1	<0.1	<0.1	1.6	- -
MW-02B	8010/8020		03/02/89	<0.5	<1.0	<2.0	<0.5	- -

Table 4-4 (cont)
Southern Pacific Transportation Company (Bayshore Yard)
Ground Water Organics Analyses
Report Form # 4

Sample Number	Test Method	QAQC Identification	Date Sampled	Trichloro-ethylene ug/l	Trichloro-fluoromethane ug/l	Vinyl Chloride ug/l	Total Xylene ug/l	Total Petroleum Hydrocarbons mg/l
MW-03A	601\602		04/22/86	<0.1	<0.1	<0.1	3.2	- -
MW-03A	8010/8020		03/07/89	<0.5	<1.0	<2.0	<0.5	- -
MW-04A	601\602		04/22/86	<0.1	<0.1	<0.1	<0.1	- -
MW-04A	8010/8020		03/05/89	1100	<50	<100	<25	- -
MW-05A	601\602		04/17/86	1000000	<0.1	<0.1	<0.1	- -
MW-05A	601\602		06/30/86	140000	<0.1	<0.1	<0.1	- -
MW-05A	5030/8020		03/09/89	- -	- -	- -	<0.5	- -
MW-05B	601\602		04/17/86	44	<0.1	<0.1	<0.1	- -
MW-05B	601\602		06/30/86	7	<0.1	<0.1	<0.1	- -
MW-05B	5030/8010		03/09/89	110	<10	<20	- -	- -
MW-05B	5030/8020		03/09/89	- -	- -	- -	<0.5	- -
MW-06A	601\602		04/17/86	79	<0.1	<0.1	<0.1	- -
MW-06A	8010/8020		03/05/89	2100	<50	<100	<25	- -
MW-06B	601\602		04/17/86	18	<0.1	<0.1	<0.1	- -
MW-06B	8010/8020		03/05/89	43	<1.0	<2.0	<0.5	- -
MW-07A	601\602		04/17/86	340	<0.1	<0.1	<0.1	- -
MW-08A	601\602		04/17/86	<0.1	<0.1	<0.1	<0.1	- -
MW-08A	8010/8020		03/05/89	<25	<50	<100	<25	- -

Table 4-4 (cont)
Southern Pacific Transportation Company (Bayshore Yard)
Ground Water Organics Analyses
Report Form # 4

Sample Number	Test Method	QAQC Identification	Date Sampled	Trichloro-ethylene ug/l	Trichloro-fluoromethane ug/l	Vinyl Chloride ug/l	Total Xylene ug/l	Total Petroleum Hydrocarbons mg/l
MW-08B	8010/8020		03/05/89	<0.5	<1.0	<2.0	<0.5	- -
MW-09A	601\602		04/23/86	<0.1- -	<0.1	<0.1	<0.1	- -
MW-09A	8010/8020		03/03/89	<0.5	<1.0	<2.0	<0.5	- -
MW-09B	601\602		04/17/86	<0.5	<0.1	<0.1	<0.1	- -
MW-09B	601\602		04/22/86	<0.1	<0.1	<0.1	<0.1	- -
MW-09B	8010/8020		03/03/89	<0.5	<1.0	<2.0	<0.5	- -
MW-10A	601\602		04/28/86	<0.1	<0.1	<0.1	<0.1	- -
MW-10A	8010/8020		02/17/89	<0.5	<1.0	<2.0	<0.5	- -
MW-10B	601\602		04/28/86	<0.1	<0.1	<0.1	0.3	- -
MW-11A	601\602		04/23/86	<0.1	<0.1	<0.1	<0.1	- -
MW-11A	601\602	FDUPE-MW-111A	04/21/86	<0.1	<0.1	<0.1	<0.1	- -
MW-11B	601\602		04/23/86	<0.1	<0.1	<0.1	<0.1	- -
MW-11B	8010/8020		03/05/89	<0.5	<1.0	<2.0	<0.5	- -
MW-12B	601\602		04/24/86	<0.1	<0.1	<0.1	<0.1	- -
MW-13A	601\602		04/29/86	<0.1	<0.1	<0.1	2.1	- -
MW-13A	8010/8020		02/18/89	<1.0	<2.0	<4.0	47	120
MW-13B	601\602		04/29/86	<0.1	<0.1	<0.1	0.6	- -
MW-13B	8010/8020		02/18/89	<1.0	<2.0	<4.0	<1.0	<1

Table 4-4 (cont)
Southern Pacific Transportation Company (Bayshore Yard)
Ground Water Organics Analyses
Report Form # 4

Sample Number	Test Method	QA/QC Identification	Date Sampled	Trichloro-ethylene ug/l	Trichloro-fluoromethane ug/l	Vinyl Chloride ug/l	Total Xylene ug/l	Total Petroleum Hydrocarbons mg/l
MW-14A	601\602		04/29/86	<0.1	<0.1	<0.1	0.6	- -
MW-14B	601\602		04/29/86	<0.1	<0.1	<0.1	<0.1	- -
MW-15A	601\602		04/29/86	<0.1	<0.1	<0.1	15.0	- -
MW-15A	8010/8020		02/25/89	<0.5	<1.0	<2.0	<0.5	- -
MW-15A	5030/8010		03/09/89	200000	<5000	<100000	- -	300
MW-15A	5030/8020		03/09/89	- -	- -	- -	<0.5	- -
MW-16A	601\602		04/29/86	<0.1	<0.1	<0.1	<0.1	- -
MW-16A	8010/8020		02/25/89	<0.5	<1.0	<2.0	<0.5	73
MW-16B	601\602		04/29/86	<0.1	<0.1	<0.1	<0.1	- -
MW-16B	8010/8020		02/25/89	<0.5	<1.0	<2.0	<0.5	<1
MW-17A	601\602		04/28/86	<0.1	<0.1	<0.1	0.3	- -
MW-17A	8010/8020		02/25/89	<0.5	<1.0	<2.0	<0.5	24
MW-17A	8010/8020		02/24/89	<1.0	<2.0	<4.0	<1.0	1.1
MW-17B	601\602		04/28/86	<0.1	<0.1	<0.1	0.5	- -
MW-17B	8010/8020		02/25/89	<0.5	<1.0	<2.0	<0.5	<1
MW-17B	8010/8020		02/24/89	<1.0	<2.0	<4.0	<0.5	- -
KMW-03B	8010/8020		03/02/89	<0.5	<1.0	<2.0	<0.5	- -
KMW-04A	8010/8020		03/02/89	<0.5	<1.0	<2.0	<0.5	- -

Table 4-4 (cont)
Southern Pacific Transportation Company (Bayshore Yard)
Ground Water Organics Analyses
Report Form # 4

Sample Number	Test Method	QAQC Identification	Date Sampled	Trichloro-ethylene ug/l	Trichloro-fluoromethane ug/l	Vinyl Chloride ug/l	Total Xylene ug/l	Total Petroleum Hydrocarbons mg/l
KMW-05A	5030/8010		03/09/89	180000	<1.0	<2.0	- -	- -
KMW-06B	5030/8010		03/09/89	<0.5	<1.0	<2.0	- -	- -
KMW-06B	5030/8020		03/09/89	- -	- -	- -	<0.5	- -
KMW-07A	8010/8020		03/02/89	<0.5	<1.0	<2.0	<0.5	- -
DW-224	8010/8020	DITCH N20-2791	02/26/89	<0.5	<1.0	<2.0	<0.5	2.6
DW-303	8010/8020	DITCH N20-0679	03/03/89	<0.5	<1.0	<2.0	<0.5	- -
DW-SS-1AF			/ /	- -	- -	- -	- -	- -
DW-SS-2AF			/ /	- -	- -	- -	- -	- -
BR 305	8010/8020	BRNSE-3/5-1119	03/07/89	<0.5	<1.0	<2.0	<0.5	- -
DCNWT	8010/8020	DECON WATER2-16	02/18/89	<1.0	<2.0	<4.0	<1.0	<1
N-SUMP	601\602		04/22/86	<0.1	<0.1	<0.1	<0.1	- -
S-SUMP	601\602	S-SUMP	04/29/86	<0.1	<0.1	<0.1	<0.1	- -
TB-2009	601\602	TB-2009	04/22/86	<0.1	<0.1	<0.1	3.8	- -
TB-217	5030/8010	TB-217	02/17/89	<0.5	<1.0	<2.0	- -	- -
TB-218	5030/8010	TB-218	02/18/89	<1.0	<2.0	<4.0	- -	- -
TB-223	8010/8020	TB-223	02/23/89	<0.5	<1.0	<2.0	<0.5	- -
TB-224	8010/8020	TB-224	02/24/89	<1.0	<2.0	<4.0	<1.0	- -
TB-225	8010/8020	TB-225	02/25/89	<0.5	<1.0	<2.0	<0.5	- -

Table 4-4 (cont)
Southern Pacific Transportation Company (Bayshore Yard)
Ground Water Organics Analyses
Report Form # 4

Sample Number	Test Method	QAQC Identification	Date Sampled	Trichloro-ethylene ug/l	Trichloro-fluoromethane ug/l	Vinyl Chloride ug/l	Total Xylene ug/l	Total Petroleum Hydrocarbons mg/l
TB-226	8010/8020	TB-226	02/26/89	<0.5	<1.0	<2.0	<0.5	- -
TB-302	8010/8020	TB-302	03/02/89	<0.5	<1.0	<2.0	<0.5	- -
TB-305	8010/8020	TB-305	03/05/89	<0.5	<1.0	2.0	<0.5	- -
TB-309	5030/8010	TB-309	03/09/89	<0.5	<1.0	22	<0.5	- -
TB-417	601\602	TB - M-417	04/17/86	<0.1	<0.1	<0.1	<0.1	- -
TB-423	601\602	TB-M-423	04/23/86	<0.1	<0.1	<0.1	<0.1	- -
TB-428	601\602	TB-M-428	04/28/86	<0.1	<0.1	<0.1	<0.1	- -
TB-429	601\602	TB-M-429	04/29/86	<0.1	<0.1	<0.1	<0.1	- -
TB-619	601\602	TB-M-619	06/19/86	<0.1	<0.1	<0.1	<0.1	- -
TB-630	601\602	TB-630	06/30/86	<0.1	<0.1	<0.1	<0.1	- -

APPENDIX B-3

Levine-Fricke [1990]

D R A F T

Privileged and Confidential

Supplemental Remedial Investigation Data Study Report The Bayshore Railyard Brisbane, California

July 18, 1990
2034.16

Prepared for:

Tuntex Properties, Inc.
150 Executive Park Blvd.
Suite 4200
San Francisco, California 94134

LEVINE·FRICKE

TABLE 6
SOIL-GAS/GROUND-WATER SURVEY DATA
BRISBANE RAILYARD

		GROUND-WATER SAMPLES			SOIL-GAS SAMPLES		
Sample Location	Date of Sampling	Depth of Sample (feet)	Total VOCs (a) (ppb)	TPH (ppb)	Depth of Sample (feet)	Total VOCs (a) (ppb)	TPH (ppb)
SG1-1	05-Mar-90	9	0.11	<0.8	7	.32	<0.1
SG1-2	05-Mar-90	7	27	32	4	0.70	0.3
SG1-3	05-Mar-90	4	0.44	<0.8	3	--	<0.1
SG1-4	05-Mar-90	7	0.40	<0.8	3	--	<0.1
SG1-5	05-Mar-90	4	0.08	16	3	--	<0.1
SG1-6	05-Mar-90	5	0.42	<0.8	3	--	<0.1
SG1-7	05-Mar-90	5	4.6	<0.8	3	--	<0.1
SG1-8	05-Mar-90	3	0.22	<0.8	2	--	<0.1
SG1-9	05-Mar-90	5	0.41	<0.8	2	--	<0.1
SG1-10	05-Mar-90	2	0.61	<0.8	2	--	<0.1
SG1-11	06-Mar-90	3	9.8	4	2	0.90	<0.1
SG1-12	06-Mar-90	5	0.31	20	3	0.08	0.4
SG1-13	06-Mar-90	13	0.09	<0.8	6	0.01	<0.1
SG1-14	06-Mar-90	6	0.20	<0.8	4	--	<0.1
SG1-15	06-Mar-90	4	0.082	<0.8	2	0.4	<0.1
SG1-16	07-Mar-90	3	0.35	<3	2	0.002	2
SG1-17	07-Mar-90	3	0.16	<0.6	2	0.40	0.3
SG1-18	07-Mar-90	3	0.70	2	2	0.40	0.3
SG1-19	07-Mar-90	4	0.51	<0.6	2	0.002	<0.08
SG1-20	07-Mar-90	3	0.23	<0.6	2	0.40	0.2
SG1-21	07-Mar-90	3	1.0	<0.6	2	0.40	<0.08
SG1-22	07-Mar-90	4	9.0	22	3	0.81	0.8
SG1-23	07-Mar-90	4	0.22	<0.6	3	0.02	0.3
SG1-24	07-Mar-90	3	1.0	<0.6	2	0.002	<0.08
SG1-25	07-Mar-90	5	0.40	<0.6	3	0.0007	<0.08
SG1-26	07-Mar-90	4	200	160	3	9.3	3
SG1-34	07-Mar-90	8	1100	5400	6	211	140
SG1-35	09-Mar-90	5	0.46	1700	3	0.02	<0.08
SG1-36	09-Mar-90	5	0.31	<0.6	3	0.0006	<0.08
SG1-37	09-Mar-90	5	0.23	<0.6	3	0.0029	0.4(b)
SG1-38	09-Mar-90	5	0.31	<0.6	3	0.0003	<0.08
SG1-39	08-Mar-90	5	55	430	3	2.0	<0.8
SG1-40	08-Mar-90	6	140	430	4	8.4	2
SG1-41	08-Mar-90	5	0.24	20	3	--	<0.5
SG1-42	08-Mar-90	4	22	22	3	0.52	<0.2
SG1-43	08-Mar-90	10	8.3	10	6	2.0	2
SG1-44	08-Mar-90	9	0.42	<0.6	6	--	<0.08

TABLE 6
SOIL-GAS/GROUND-WATER SURVEY DATA
BRISBANE RAILYARD

		GROUND-WATER SAMPLES			SOIL-GAS SAMPLES		
Sample Location	Date of Sampling	Depth of Sample (feet)	Total VOCs (a) (ppb)	TPH (ppb)	Depth of Sample (feet)	Total VOCs (a) (ppb)	TPH (ppb)
SG1-45	08-Mar-90	5	2900	2600	3	25	9
SG1-46	09-Mar-90	6	0.42	<0.6	3	--	<0.08
SG1-47	09-Mar-90	5	0.21	<0.6	3	0.002	<0.08
SG1-48	09-Mar-90	5	2500	7200	3	73	32
SG1-49	09-Mar-90	5	0.45	<0.6	3	0.51	<0.08
SG1-50	09-Mar-90	5	300	340	3	6.3	2
SG1-51	12-Mar-90	8	4800	10000	6	1400	920
SG1-52	13-Mar-90	5	33	6	4	8.5	1
SG1-54	14-Mar-90	9	230	210	6	54	28
SG1-55	14-Mar-90	5	550	1000	3	45.0	16
SG1-56	14-Mar-90	5	800	1400	3	78	73
SG1-57	14-Mar-90	6	240	88	5	47	9
SG1-58	14-Mar-90	8	25	16	3	170	150
SG1-59	14-Mar-90	5	1.1	<0.08	3	0.03	<0.07
SG1-60	14-Mar-90	5	73	210	NS		
SG1-61	14-Mar-90	5	0.23	6	NS		
SG2-1	12-Mar-90	4	0.66	<0.6	NS		
SG2-2	12-Mar-90	4	48	34	3	5.8	0.4
SG2-3	13-Mar-90	4	53	52	3	3.4	0.3
SG2-4	12-Mar-90	4	0.03	<3	NS		
SG2-5	12-Mar-90	4	0.03	530	NS		
SG2-6	14-Mar-90	5	0.24	450	NS		
SG2-7	13-Mar-90	5	0.02	1300	NS		
SG2-8	12-Mar-90	4	0.12	<0.6	NS		
SG2-9	12-Mar-90	4	0.66	<0.6	NS		
SG2-10	12-Mar-90	4	0.04	3100	NS		
SG2-11	12-Mar-90	4	0.03	1900	NS		
SG2-12	12-Mar-90	4	0.03	820	NS		
SG2-13	09-Mar-90	3	0.01	620	NS		
SG2-14	12-Mar-90	5	0.10	270	NS		
SG2-15	13-Mar-90	2	0.02	<0.6	NS		
SG2-16	13-Mar-90	2	0.21	14	2	.0024	1.0
SG2-17	13-Mar-90	5	0.11	76	NS		
SG2-18	13-Mar-90	5	0.61	<0.6	NS		
SG2-19	13-Mar-90	5	0.06	<0.6	3	0.009	0.2
SG2-20	13-Mar-90	5	0.03	780	3	0.12	<0.07
SG2-21	13-Mar-90	5	0.21	6	NS		

TABLE 6
SOIL-GAS/GROUND-WATER SURVEY DATA
BRISBANE RAILYARD

		GROUND-WATER SAMPLES			SOIL-GAS SAMPLES		
Sample Location	Date of Sampling	Depth of Sample (feet)	Total VOCs (a) (ppb)	TPH (ppb)	Depth of Sample (feet)	Total VOCs (a) (ppb)	TPH (ppb)
SG2-22	14-Mar-90	5	0.22	<0.08	2	0.006	0.1
SG2-23	14-Mar-90	5	0.21	1100	NS		
SG2-24	14-Mar-90	9	6.1	<0.8	3	0.11	<0.07
SG2-25	14-Mar-90	5	0.27	<0.8	NS		

NOTES:

a) = Total VOCs is the sum of 1,1-DCE, 1,1-DCA, 1,1,1-TCA, trans-1,2-DCE, TCE, PCE, benzene, toluene, ethylbenzene and xylenes. For individual detection limits, please refer to the data sheets.

b) = Concentrations in blank exceeded or equaled sample concentration.

NS = Not Sampled. Soil gas sample was not collected at this location because water table was too high and/or shallow soils were saturated due to rainfall infiltration.

TABLE 7
SOIL-QUALITY DATA SUMMARY
VOLATILE ORGANIC COMPOUNDS
BRISBANE RAILYARD
(All results in parts per million)

Sample ID	Sample Depth (feet)	Date of Sample	Vinyl Chloride	Chloro-ethane	1,1-DCA	1,1-DCE	Total 1,2-DCE cis/trans	Chloro-form	Freon 113	1,2-DCA	1,1,1-TCA	1,2-DCP	TCE	1,1,2-TCA	PCE	Benzene	Toluene	Ethyl-benzene	Total Xylenes	Total Non-priority Pollutants
North Area																				
NSB-1-2A	2	04/11/90	<0.004	<0.004	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	0.007	<0.003	<0.004	<0.002	<0.002	<0.003	<0.003	ND
NSB-1-10A	10	04/11/90	0.007	<0.004	<0.003	<0.003	0.050	<0.003	<0.003	<0.003	<0.003	<0.003	0.025	<0.003	0.015	<0.002	<0.002	<0.003	<0.003	ND
NSB-2-5A	5	04/10/90	<0.004	<0.004	<0.003	<0.003	0.150	<0.003	<0.003	<0.003	<0.003	<0.003	0.067	<0.003	<0.004	<0.002	<0.002	<0.003	<0.003	ND
NSB-2-10A	10	04/10/90	<0.004	<0.004	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	0.240	<0.003	0.012	<0.002	<0.002	<0.003	<0.003	ND
NSB-2-15A	15	04/10/90	<0.004	<0.004	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	0.220	<0.003	<0.004	<0.002	<0.002	<0.003	<0.003	ND
NSB-3-2A	2	04/10/90	<0.004	<0.004	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	0.006	<0.003	0.007	<0.003	0.006	<0.002	0.005	<0.003	<0.003	ND
NSB-3-10A	10	04/10/90	<8	<10	<8	<5	<3	<4	<5	<4	<3	<3	<2	<3	<1	<3	<1	5	12	282
NSB-3-15A	15	04/10/90	18	<10	<8	<5	50	<4	<5	<3	<3	<3	3	<3	<1	<3	5	8	30	647
NSB-3-18A	18	04/10/90	<0.8	<1	<0.8	<0.5	<0.3	<0.4	<0.5	<0.4	<0.3	<0.3	1.8	<0.3	0.2	<0.3	<0.1	<0.2	<0.3	ND
NSB-4-6A	6	04/10/90	<4	<5	<4	<3	<2	<2	<3	<2	<2	<2	<1	<2	<0.5	<2	<0.5	<1	<2	314
NSB-4-9.5A	9.5	04/10/90	<0.004	<0.004	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.004	<0.003	<0.004	<0.002	<0.002	<0.003	<0.003	ND
NSB-5-2A	2	04/11/90	<0.004	<0.004	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.004	<0.003	<0.004	<0.002	<0.002	<0.003	<0.003	ND
NSB-5-10A	10	04/11/90	<0.004	<0.004	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	0.012	<0.003	<0.004	<0.002	<0.002	<0.003	<0.003	ND
NSB-6-2A	2	04/10/90	<0.004	<0.004	<0.003	<0.003	0.007	<0.003	<0.003	<0.003	<0.003	<0.003	0.056	<0.003	<0.004	<0.002	0.003	<0.003	<0.003	ND
NSB-6-11.5A	11.5	04/10/90	<0.004	<0.004	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	0.007	<0.003	<0.004	<0.002	<0.002	<0.003	<0.003	ND
NSB-6-15A	15	04/10/90	0.013	<0.004	<0.003	<0.003	0.120	<0.003	<0.003	<0.003	<0.003	<0.003	0.022	<0.003	<0.004	<0.002	<0.002	<0.003	<0.003	ND
LF-1A-5.5A	5.5	04/23/90	<0.2	<1	<0.2	<0.2	3.0	<0.2	<0.2	<0.4	<0.2	<0.3	21	<0.3	0.4	<0.2	<0.2	<0.2	<0.3	ND
LF-1A-11A	11	04/23/90	<0.2	<1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.4	<0.2	<0.3	<0.2	<0.3	<0.1	<0.2	<0.2	<0.2	<0.3	ND
LF-2B-41.5	41.5	04/26/90	<0.2	<1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.4	<0.2	<0.3	<0.2	<0.3	<0.1	<0.2	<0.2	<0.2	<0.3	ND
LF-3A-6A	6	04/23/90	<0.2	<1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.4	<0.2	<0.3	<0.2	<0.3	<0.1	<0.2	<0.2	<0.2	<0.3	ND
LF-3A-10.5A	10.5	04/23/90	<0.2	<1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.4	<0.2	<0.3	<0.2	<0.3	<0.1	<0.2	<0.2	<0.2	<0.3	ND
LF-3A-16.5A	16.5	04/23/90	<0.2	<1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.4	<0.2	<0.3	<0.2	<0.3	<0.1	<0.2	<0.2	<0.2	<0.3	ND
MP-1-10.5A	10.5	04/24/90	<0.2	<1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.4	<0.2	<0.3	<0.2	<0.3	<0.1	<0.2	<0.2	<0.2	<0.3	ND
LFP-1-5.0	5	04/25/90	<0.2	<1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.4	<0.2	<0.3	<0.2	<0.3	<0.1	<0.2	<0.2	<0.2	<0.3	ND

TABLE 7
SOIL-QUALITY DATA SUMMARY
VOLATILE ORGANIC COMPOUNDS
BRISBANE RAILYARD
(All results in parts per million)

Sample ID	Sample Depth (feet)	Date of Sample	Vinyl Chloride	Chloro-ethane	1,1-DCA	1,1-DCE	Total 1,2-DCE cis/trans	Chloro-form	Freon 113	1,2-DCA	1,1,1-TCA	1,2-DCP	TCE	1,1,2-TCA	PCE	Benzene	Toluene	Ethyl-benzene	Total Xylenes	Total Non-priority Pollutants
Off-Site Area																				
OSB-1-6	6	04/24/90	<0.2	<1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.4	<0.2	<0.3	1.9	<0.3	0.7	<0.2	<0.2	<0.2	<0.3	ND
OSB-1-11.5	11.5	04/24/90	<0.2	<1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.4	<0.2	<0.3	<0.2	<0.3	<0.1	<0.2	<0.2	<0.2	<0.3	ND
OSB-1-16A	16	04/24/90	<0.2	<1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.4	<0.2	<0.3	<0.2	<0.3	<0.1	<0.2	<0.2	<0.2	<0.3	ND
KPSB-3-3.5	3.5	05/11/90	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.005	<0.005	<0.005	<0.005	NA

NA = Not analyzed
ND = Not detected at or above limit of detection

TABLE 8
SOIL-QUALITY DATA SUMMARY
SEMI-VOLATILE ORGANIC COMPOUNDS
BRISBANE RAILYARD
(All results in parts per million)

Sample ID	Sample Depth (feet)	Date of Sample	Foot-note	Acena-phthene	Fluorene	Phenan-threne	Anthra-cene	Fluoran-thene	Pyrene	Benzo(a)-anthra-cene	Bis-(2-ethylhexyl) phthalate	Chrysene	Tentatively identified Semi-Quantified Compounds	Naph-thalene	2-methyl Naph-thalene
North Area															
SG1-4-0	0	04/19/90		<0.06	<0.06	0.070	<0.06	0.140	0.170	<0.06	1.1	<0.1	0.228	<0.06	<0.06
SG1-11-0	0	04/19/90		<1	<1	<1	<1	<1	<1	<1	<10	<2	0	<1	<1
SG1-15-0	0	04/19/90		<1	<1	2	<1	3	3	<1	30	<2	0	<1	<1
SG1-48-0	0	04/19/90		<0.1	<0.1	0.27	<0.1	0.36	0.48	<0.1	<1	<0.3	5.87	<1	<1
NSB-1-10A	10	04/11/90		<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.6	<0.1	0.352	<0.06	<0.06
NSB-3-10A	10	04/10/90		84	110	320	590	69	71	24	57	35	945	130	140
Turntable/Oil Tank Area															
TTSB-1-7A	7	04/12/90		<1	<1	<1	<1	<1	<1	<1	<10	<2	93	<1	<1
TTSB-3-15A	15	04/12/90		<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	2.000	<0.1	0.479	<0.06	<0.06
TTSB-5-2A	2	04/11/90		<1	<1	2	4	<1	<1	<1	<10	<2	0	<1	<1
TTSB-5-10A	10	04/11/90		<0.05	<0.06	<0.08	<0.06	<0.06	<0.06	<0.06	1.400	<0.1	4.740	<0.06	0.090
TTSB-7-7A	7	04/12/90		<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	2.300	<0.1	4.126	<0.06	<0.06
TTSB-9-9.5A	9.5	04/18/90		<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.6	<0.1	2.047	<0.06	<0.06
TTSB-10-8A	8	04/18/90		<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.6	<0.1	7.650	<0.06	<0.06
SG2-6-0	0	04/19/90		<1	<1	<1	<1	<1	<1	<1	<10	<2	0	<1	<1
OTT-1-0	0	04/19/90		<1	<1	<1	<1	<1	<1	<1	50	<2	0	<1	<1
OTT-20-0	0	04/19/90		<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	0.9	<0.1	0.091	<0.06	<0.06
OTSB-3-5A	5	04/16/90		<0.06	<0.06	<0.06	<0.06	0.220	0.250	<0.06	<0.6	<0.1	0.320	<0.06	<0.06
OTSB-3-9.5B	9	04/16/90		<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	1	<0.1	8.3	<0.06	<0.06
OTSB-6-6.5A	6.5	04/13/90		<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	3.600	<0.1	0.320	<0.06	<0.06
OTSB-10-6A	6	04/16/90		<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.6	<0.1	0	<0.06	<0.06

TABLE 8
SOIL-QUALITY DATA SUMMARY
SEMI-VOLATILE ORGANIC COMPOUNDS
BRISBANE RAILYARD
(All results in parts per million)

Sample ID	Sample Depth (feet)	Date of Sample	Foot-note	Acena-phthene	Fluorene	Phenan-threne	Anthra-cene	Fluoran-thene	Pyrene	Benzo(a)-anthra-cene	Bis-(2-ethylhexyl) phthalate	Chrysene	Tentatively Identified Semi-Quantified Compounds	Naph-thalene	2-methyl Naph-thalene
South Disposal Area															
SDT-8-0	0	04/19/90		<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	1.3	<0.1	0.076	<0.06	<0.06
Offsite															
KPSB-1-2.5	2.5	05/11/90		<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	0.400	<0.1	0	<0.06	<0.06
KPSB-5-1	1	05/11/90		<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	3.000	<0.1	0.630	<0.06	<0.06

Key:

SG1 - Soil Gas Point, North Area
NSB - North Area Soil Boring
TTSB - Turntable Area Soil Boring
SG2 - Soil Gas Point, Turntable Area
OTT - Oil Tank Area Trench
OTSB - Oil Tank Area Soil Boring
SDT - South Disposal Area Trench
KPSB - Kessler Property Soil Boring

SDP < South Disposal Area Piezometer
OSB < Offsite Soil Boring
LF < Levine<Fricke Monitoring Well
LFP < Levine<Fricke Piezometer
MW < Monitoring Well
NP < North Area Piezometer
OTP < Oil Tank Area Piezometer

TABLE 9
SOIL-QUALITY DATA SUMMARY
TITLE 22 METALS
BRISBANE RAILYARD

Sample ID	Sample Depth	mg/kg or mg/l extract	Date of Sample	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium + 6	Chromium Total	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
STLC		mg/l		15	5.0	100	0.75	1.0	5	560	80	25	5.0	0.2	350	20	1.0	5	7.0	24	250
TTLC		mg/kg		500	500	10,000	75	100	500	2,500	8,000	2,500	1,000	20	3,500	2,000	100	500	700	2,400	5,000
Mean Regional Background (a)		mg/kg		<1	10	1,000	<1	---	---	100	15	50	30	0.2	<3	30	<0.1	---	9.1	150	120
North Area																					
SG1-1-0	0	mg/kg	04/19/90	5	13	86	<0.1	1.7	NA	40	7	330	320	<0.1	2	36	<5	<0.5	<1	19	330
SG1-4-0	0	mg/kg	04/19/90	<1	7	50	<0.1	0.7	<0.1	13	8	110	110	0.1	<1	8	<5	<0.5	<1	49	140
SG1-11-0	0	mg/kg	04/19/90	16	8	85	<0.1	1.7	NA	44	10	220	790	0.1	<1	25	<5	<0.5	<1	41	350
SG1-15-0	0	mg/kg	04/19/90	4	11	83	<0.1	1.4	<0.1	30	9	140	320	0.1	1	25	<5	<0.5	<1	33	430
SG1-16-0	0	mg/kg	04/19/90	11	<5	120	<0.1	2.7	<0.1	50	9	140	550	<0.1	8	43	<5	<0.5	<1	34	560
SG1-39-0	0	mg/kg	04/19/90	16	9	130	<0.1	2.5	NA	42	15	430	450	0.2	2	37	<5	<0.5	<1	31	570
SG1-48-0	0	mg/kg	04/19/90	8	6	87	<0.1	2.7	<0.1	35	9	190	370	0.2	6	27	<5	<0.5	<1	33	630
NSB-1-2A	2	mg/kg	04/11/90	<1	15	82	<0.1	<0.1	NA	31	11	57	9	0.4	<1	78	0.4	<0.5	<1	41	36
NSB-1-2A	2	mg/L	04/11/90	<0.1	0.46	3	<0.05	<0.05	NA	<0.1	0.2	0.4	<0.1	<0.01	<0.1	1	<0.005	<0.1	<0.1	<0.1	0.2
NSB-5-2A	2	mg/kg	04/11/90	<1	1	34	<0.1	<0.1	NA	11	8	86	49	<0.1	<1	16	0.3	<0.5	<1	34	42
NSB-5-2A	2	mg/L	04/11/90	<0.2	0.03	0.9	<0.05	<0.05	NA	<0.1	0.1	1.4	1.8	<0.01	<0.1	0.1	<0.005	<0.1	<0.1	0.1	1
NSB-6-2A	2	mg/kg	04/10/90	<10	<0.3	65	<1	<1	NA	<10	<10	11	<10	<0.1	<10	<10	<0.5	<10	<10	<10	44
NSB-6-2A	2	mg/L	04/10/90	<0.1	<0.01	1	<0.05	<0.05	NA	<0.1	<0.1	<0.1	<0.1	<0.01	<0.1	0.1	<0.005	<0.1	<0.1	<0.1	0.4
Turntable/Oil Tank Area																					
TTSB-3-15A	15	mg/kg	04/12/90	<1	4.5	12	0.2	0.3	NA	27	6	16	27	<0.1	<1	31	<0.1	<0.5	<1	22	37
TTSB-4-5A	5	mg/kg	04/18/90	1	<5	48	0.7	0.4	NA	36	17	71	20	<0.1	<1	40	<5	<0.5	<2	43	140
TTSB-4-5A	5	mg/L	04/18/90	<0.1	<0.03	4.1	<0.05	<0.05	NA	<0.1	0.3	<0.1	<0.1	<0.01	0.1	0.3	<0.03	<0.1	<0.1	1.0	1.0
TTSB-5-2A	2	mg/kg	04/11/90	83	8.1	58	<0.1	0.6	NA	18	8	430	820	0.2	<1	55	<0.1	<0.5	<1	55	460
TTSB-5-2A	2	mg/L	04/11/90	0.8	0.01	3.2	<0.05	0.09	NA	0.3	<0.1	11	30	<0.01	<0.1	1.3	<0.005	<0.1	<0.1	0.5	16

TABLE 9
SOIL-QUALITY DATA SUMMARY
TITLE 22 METALS
BRISBANE RAILYARD

Sample ID	Sample Depth	mg/kg or mg/l extract	Date of Sample	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium + 6	Total Chromium	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
STLC		mg/l		15	5.0	100	0.75	1.0	5	560	80	25	5.0	0.2	350	20	1.0	5	7.0	24	250
TTLC		mg/kg		500	500	10,000	75	100	500	2,500	8,000	2,500	1,000	20	3,500	2,000	100	500	700	2,400	5,000
Mean Regional Background (a)		mg/kg		<1	10	1,000	<1	---	---	100	15	50	30	0.2	<3	30	<0.1	---	9.1	150	120
TTSB-5-10A	10	mg/kg	04/11/90	<1	2	24	0.1	<0.1	NA	20	8	34	48	<0.1	<1	26	0.3	<0.5	<1	36	61
TTSB-5-10A	10	mg/L	04/11/90	<0.1	0.16	0.6	<0.05	<0.05	NA	0.2	0.2	0.2	0.1	<0.01	<0.1	0.8	<0.005	<0.1	<0.1	0.6	0.4
TTSB-6-6.5A	6.5	mg/kg	04/12/90	<1	2.4	20	0.3	<0.1	NA	13	7	22	17	<0.1	<1	14	<0.1	<0.5	<1	19	56
TTSB-7-7A	7	mg/kg	04/12/90	<1	19	31	0.3	0.2	NA	23	9	51	27	0.1	<1	30	0.5	<0.5	<1	23	42
TTSB-7-16.5A	16.5	mg/kg	04/12/90	<1	3.1	9	0.2	0.3	NA	24	6	15	5	<0.1	<1	28	0.3	<0.5	<1	20	32
OTP-1-0	0	mg/kg	04/19/90	5	<5	61	<0.1	1.5	NA	38	8	140	130	0.1	6	25	<5	<0.5	<1	30	300
SG2-6-0	0	mg/kg	04/19/90	2	<5	37	<0.1	0.4	NA	16	9	110	110	<0.1	<1	19	<5	<0.5	<1	66	71
OTT-1-0	0	mg/kg	04/19/90	2	<5	53	<0.1	0.7	<0.1	21	8	220	320	0.1	2	130	<5	<0.5	<1	150	110
OTT-20-0	0	mg/kg	04/19/90	<1	<5	47	<0.1	0.1	NA	4	7	73	13	<0.1	<1	2	<5	<0.5	<1	64	30
OTSB-1-8.5A	8.5	mg/kg	04/13/90	<1	5	16	0.2	0.2	NA	30	9	28	27	<0.1	<1	36	<0.1	<0.5	<1	28	62
OTSB-1-8.5A	8.5	mg/L	04/13/90	<0.1	0.06	0.3	<0.05	<0.05	NA	0.2	<0.1	0.7	0.3	<0.01	<0.1	0.3	<0.005	<0.1	<0.1	0.5	0.6
OTSB-3-5A	5	mg/kg	04/16/90	<1	13	36	0.7	<0.1	NA	28	12	23	10	<0.1	<1	26	<3	<0.5	<1	37	48
OTSB-3-5A	5	mg/L	04/16/90	<0.1	0.19	1.7	<0.05	<0.05	NA	0.2	0.1	0.4	0.7	<0.01	<0.1	0.1	<0.005	<0.1	<0.1	0.3	0.6
OTSB-3-9.5B	9.5	mg/kg	04/16/90	<1	4.3	46	0.3	0.5	NA	36	8	46	270	<0.1	<1	36	<1	<0.5	<1	29	160
OTSB-3-9.5B	9.5	mg/L	04/16/90	<0.1	0.1	0.6	<0.05	<0.05	NA	0.2	0.4	0.2	2	<0.01	<0.1	0.9	<0.005	<0.1	<0.1	0.5	2.6
South Disposal Area																					
MW-10A-0	0	mg/kg	04/19/90	8	7	82	<0.1	1.6	<0.1	53	9	180	260	<0.1	6	43	<5	<0.5	<1	19	350
SDT-1-0	0	mg/kg	04/19/90	27	18	480	0.1	3.6	NA	100	13	910	2500	0.9	<1	49	<5	3.1	<3	34	1700
SDT-8-0	0	mg/kg	04/19/90	<1	<5	81	0.2	0.3	NA	30	10	25	52	<0.1	<1	23	<5	<0.5	<1	38	89
SDP-2-6	6	mg/kg	04/25/90	72	6	770	0.2	2.1	NA	20	9	570	3,800	0.9	<1	35	<1	4.1	3	20	1,400
SDP-2-10	10	mg/kg	04/25/90	<1	6	14	0.2	0.2	NA	38	9	18	4	<0.1	<1	42	<1	<0.5	<1	31	42
SDP-2-10	10	mg/l	04/25/90	<0.1	<0.2	0.2	<0.05	<0.05	NA	0.2	0.2	<0.1	0.2	<0.01	<0.1	0.8	<0.2	<0.1	<0.1	0.4	0.4

TABLE 9
SOIL-QUALITY DATA SUMMARY
TITLE 22 METALS
BRISBANE RAILYARD

Sample ID	Sample Depth	mg/kg or mg/l extract	Date of Sample	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium + 6	Total Chromium	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
STLC		mg/l		15	5.0	100	0.75	1.0	5	560	80	25	5.0	0.2	350	20	1.0	5	7.0	24	250
TTLC		mg/kg		500	500	10,000	75	100	500	2,500	8,000	2,500	1,000	20	3,500	2,000	100	500	700	2,400	5,000
Mean Regional Background (a)		mg/kg		<1	10	1,000	<1	---	---	100	15	50	30	0.2	<3	30	<0.1	---	9.1	150	120
SDP-3-5.5	5.5	mg/kg	04/25/90	14	8	520	0.1	1.4	NA	15	11	1,400	1,500	0.5	<1	21	<1	2.0	9	21	1,200
SDP-3-10.5	10.5	mg/kg	04/25/90	<1	5	16	0.3	0.2	NA	43	10	22	3	<0.1	<1	47	<1	<0.5	<1	37	47
SDP-3-10.5	10.5	mg/l	04/25/90	<0.1	<0.2	0.9	<0.05	<0.05	NA	0.2	0.2	0.4	2.4	<0.01	<0.1	0.4	<0.2	<0.1	<0.1	0.5	1.9
SDP-5-6	6	mg/kg	04/25/90	35	10	500	0.5	3.2	NA	38	11	900	4,600	4.1	<1	46	<5	4.2	3	26	2,300
SDP-5-11.5	11.5	mg/kg	04/25/90	<1	2	17	0.3	<0.1	NA	38	5	14	3	<0.1	<1	33	<1	<0.5	<1	33	40
SDSB-1-4.5A	4.5	mg/kg	04/17/90	36	3.1	480	<0.1	5.5	NA	27	16	3300	2700	0.5	<1	54	<10	2.4	<10	19	5700
SDSB-1-10A	10	mg/kg	04/17/90	<3	4.5	16	0.3	0.2	NA	43	8	20	5	<0.1	<1	42	<10	<0.5	<1	34	43
SDSB-2-8A	8	mg/kg	04/18/90	27	12	550	0.2	4.6	NA	52	14	3,500	3,700	<0.1	<1	4	<5	4.0	6	26	2,700
SDSB-2-8A	8	mg/L	04/18/90	0.5	0.06	4.4	<0.05	0.11	NA	0.1	0.1	45	120	<0.01	0	0.5	<0.03	<0.1	<0.1	<0.1	75
SDSB-2-14.5A	14.5	mg/kg	04/18/90	<1	<5	21	0.3	0.2	NA	55	11	27	5	<0.1	<1	56	<5	<0.5	<1	45	56
SDSB-2-14.5A	14.5	mg/L	04/18/90	<0.1	<0.03	0.2	<0.05	<0.05	NA	0.2	0.2	0.1	0.4	<0.01	<0.1	0.4	<0.03	<0.1	<0.1	0.5	0.5
SDSB-3-3.5A	3.5	mg/kg	04/16/90	13	13	420	<0.1	3	NA	31	11	3400	1700	7.4	<1	34	<10	2.5	<2	13	3500
SDSB-3-3.5A	3.5	mg/L	04/16/90	0.2	0.07	6.4	<0.05	0.14	NA	0.4	0.2	44	110	<0.01	<0.1	0.7	<0.005	<0.1	<0.1	<0.1	130
SDSB-3-10B	10	mg/kg	04/16/90	<1	3.8	64	0.5	<0.1	NA	22	12	48	8	<0.1	<1	24	<5	<0.5	<1	36	47
SDSB-3-10B	10	mg/L	04/16/90	<0.1	<0.01	4.1	<0.05	<0.05	NA	<0.1	0.4	0.2	0.3	<0.01	<0.1	0.1	<0.005	<0.1	<0.1	0.1	0.4
SDSB-4-4A	4	mg/kg	04/17/90	31	11	550	<0.1	6.2	NA	54	10	580	6400	0.3	<10	40	<10	<5	<10	20	2400
SDSB-4-4A	4	mg/L	04/17/90	0.3	0.13	5.4	<0.05	0.08	NA	0.1	<0.1	5.7	350	<0.01	<0.1	0.2	0.096	<0.1	<0.1	<0.1	31
SDSB-4-11A	11	mg/kg	04/17/90	<1	4.8	20	0.3	0.3	NA	48	10	23	7	<0.1	<1	48	<3	<0.5	<1	39	50
SDSB-4-11A	11	mg/L	04/17/90	<0.1	0.06	0.2	<0.05	<0.05	NA	0.2	0.2	0.1	0.1	<0.01	<0.1	0.4	<0.005	<0.1	<0.1	0.5	0.4
SDSB-5-4.5A	4.5	mg/kg	04/17/90	13	15	420	<0.1	2.4	NA	51	16	1500	2000	<0.1	<1	57	<6	6.6	<1	20	1500
SDSB-5-13A	13	mg/kg	04/17/90	<1	3.9	13	<0.1	<0.1	NA	22	6	12	7	<0.1	<1	19	<3	<0.5	<1	23	34
SDSB-6-4A	4	mg/kg	04/18/90	63	10	290	<0.1	7.1	NA	44	12	2,800	6,700	1.0	1	61	<5	5.3	8	24	4,800
SDSB-6-4A	4	mg/L	04/18/90	1.5	0.13	4.3	<0.05	0.35	NA	0.4	0.2	150	170	<0.01	<0.1	0.9	<0.03	<0.1	<0.1	<0.1	210
SDSB-6-16A	16	mg/kg	04/18/90	<1	<5	19	0.2	0.1	NA	29	6.1	16	8	0.1	<1	26	<5	<0.5	<1	26	37

TABLE 9
SOIL-QUALITY DATA SUMMARY
TITLE 22 METALS
BRISBANE RAILYARD

Sample ID	Sample Depth	mg/kg or mg/l extract	Date of Sample	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium + 6	Total Chromium	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
STLC		mg/l		15	5.0	100	0.75	1.0	5	560	80	25	5.0	0.2	350	20	1.0	5	7.0	24	250
TTLC		mg/kg		500	500	10,000	75	100	500	2,500	8,000	2,500	1,000	20	3,500	2,000	100	500	700	2,400	5,000
Mean Regional Background (a)		mg/kg		<1	10	1,000	<1	---	---	100	15	50	30	0.2	<3	30	<0.1	---	9.1	150	120
SDSB-6-16A	16	mg/L	04/18/90	<0.1	0.05	0.7	<0.05	<0.05	NA	0.2	0.1	0.2	0.8	<0.01	<0.1	0.3	<0.03	<0.1	<0.1	0.5	1.0
SDSB-7-5A	5	mg/kg	04/17/90	46	7.4	620	<0.1	2.4	NA	30	13	710	4700	0.6	<1	35	<10	2.8	<1	25	3200
SDSB-7-5A	5	mg/L	04/17/90	0.7	0.04	9.2	<0.05	0.09	NA	0.3	0.1	81	92	<0.01	<0.1	0.9	<0.005	<0.1	<0.1	0.1	90
SDSB-7-10A	10	mg/kg	04/17/90	<1	4.7	22	0.3	0.3	NA	47	10	30	28	<0.1	<1	46	<3	<0.5	<1	37	60
SDSB-7-10A	10	mg/L	04/17/90	<0.1	0.05	1.1	<0.05	<0.05	NA	0.1	<0.1	0.6	2.4	<0.01	<0.1	0.3	<0.005	<0.1	<0.1	0.3	2.2
SDSB-10-5A	5	mg/kg	04/19/90	33	11	370	0.2	4.7	NA	39	17	900	2,400	0.6	<1	37	<5	4.0	15	26	1,900
SDSB-10-10A	10	mg/kg	04/19/90	1	<5	29	0.3	0.4	NA	46	10	35	56	<0.1	<1	47	<5	<0.5	<1	37	79
LF-7A-11	11	mg/kg	04/24/90	<1	3	14	0.3	0.2	NA	37	8	21	3	<0.1	<1	40	<1	<0.5	<1	32	42
Offsite																					
Offsite-North	0	mg/kg	04/19/90	2	<5	84	<0.1	1	NA	41	6	68	190	0.2	2	29	<5	<0.5	<1	24	200
Offsite-South	0	mg/kg	04/19/90	<1	<5	20	<0.1	<0.1	NA	31	6	7	10	<0.1	<1	21	<5	<0.5	<1	32	35
OSB-1-6	6	mg/l	04/24/90	<0.1	<0.2	2.5	<0.05	<0.05	NA	0.3	0.2	0.2	<0.1	<0.01	<0.1	0.4	<0.2	<0.1	<0.1	0.4	0.7

NOTES:

NA = Not Analyzed
All samples analysed by EPA Method 200.
Sample concentrations reported as "mg/kg extract" are total metals concentrations.
Sample concentrations reported as "mg/l extract" were analysed using the Title 22 WET.
a = Mean Regional Background Concentrations from Shaklette (19XX).

TABLE 10

SOIL-QUALITY DATA SUMMARY
TOTAL PETROLEUM HYDROCARBONS
BRISBANE RAILYARD
(All results in mg/kg [ppm])

Sample ID	Foot-notes	Sample Depth	Date of Sample	Diesel Fuel	Waste Oil
North Area					
NSB-2-10A		10	04/10/90	<2	24
NSB-3-10A	a	10	04/10/90	16,000	21,000
NSB-3-15A	a	15	04/10/90	16,000	24,000
NSB-3-18A	a	18	04/10/90	110	250
NSB-3-2A	b	2	04/10/90	<800	7,900
NSB-4-6A		6	04/10/90	9,000	15,000
NSB-6-11.5A		11.5	04/10/90	<2	15
LF-1A-5.5A	a	5.5	04/23/90	2	20
LF-1A-11A		11	04/23/90	<2	17
LF-2B-41.5A		41.5	04/26/90	<2	11
LF-3A-6A	a,c	6	04/23/90	20	190
LF-3A-10.5A		10.5	04/23/90	<2	12
LF-3A-16.5A		16.5	04/23/90	<2	150
Turntable/Oil Tank Area					
TTSB-1-7A	a	7	04/12/90	300	3,300
TTSB-1-10A	a	10	04/12/90	5	110
TTSB-2-6A	a	6	04/11/90	<2	20
TTSB-2-15A		15	04/11/90	<2	20
TTSB-3-15A		15	04/12/90	<2	16
TTSB-4-5A		5	04/18/90	4,200	370
TTSB-4-12A		12	04/18/90	350	50
TTSB-5-2A	b,c	2	04/11/90	<80	300
TTSB-5-10A	a,c	10	04/11/90	140	580
TTSB-6-6.5A		6.5	04/12/90	<2	19
TTSB-6-15A		15	04/12/90	<2	17
TTSB-7-7A	a,c	7	04/12/90	600	3,200
TTSB-7-16.5A		16.5	04/12/90	<2	28
TTSB-9-9.5		9.5	04/18/90	<2	44
TTSB-9-14A		14	04/19/90	<2	53
TTSB-10-8A		8	04/18/90	220	<200
TTSB-10-12.5A	b	12.5	04/18/90	800	<2,000
TTSB-10-14A		14	04/18/90	10	<4
TTSB-11-7A	a	7	04/13/90	150	1,500
TTSB-11-10A		10	04/13/90	<2	36
OTP-2-5.5		5.5	04/25/90	<2	8
OTP-4-9.5	a	9.5	04/25/90	25	68
OTSB-1-8.5A		8.5	04/13/90	<2	24
OTSB-1-11A		11	04/13/90	<2	12

TABLE 10

SOIL-QUALITY DATA SUMMARY
TOTAL PETROLEUM HYDROCARBONS
BRISBANE RAILYARD
(All results in mg/kg [ppm])

Sample ID	Foot-notes	Sample Depth	Date of Sample	Diesel Fuel	Waste Oil
OTSB-5-9A	a	9	04/19/90	8,000	22,000
OTSB-5-12.5A		12.5	04/19/90	<2	8
OTSB-6-6.5A	b	6.5	04/13/90	<10	60
OTSB-6-11A		11	04/13/90	<2	8
OTSB-8-10A		10	04/16/90	<2	49
OTSB-10-6A		6	04/16/90	<2	170
OTSB-10-12A		12	04/16/90	<2	180
OTSB-11-7A		7	04/13/90	<2	11
OTSB-11-11A		11	04/13/90	<2	10
LF-4A-5.5A		5.5	04/23/90	100	60
LF-5A-9.5A		9.5	04/24/90	<2	11
LF-8A-5.5A	a	5.5	04/26/90	13,000	20,000
South Disposal Area					
SDSB-1-10A		10	04/17/90	<2	17
SDSB-5-4.5A		4.5	04/17/90	<2	60
SDSB-5-13A		13	04/17/90	<2	19
SDSB-10-7A	a	7	04/19/90	26	140
LF-7A-11		11	04/24/90	<2	38
Offsite					
KPSB-1-3.0		3	05/11/90	<2	4
KPSB-1-7.5	a	7.5	05/11/90	14	36
KPSB-3-3.5	b	3.5	05/11/90	<20	240
KPSB-5-1	b	1	05/11/90	<8	90
OSB-1-6		6	04/24/90	<2	53
OSB-1-11.5A	c	11.5	04/24/90	<2	19
OSB-1-16A		16	04/24/90	<2	5
OTSB-3-5A		5	04/16/90	61	50
OTSB-3-9.5B	a	9	04/16/90	36	160
OTSB-4-8.5A	a	8.5	04/20/90	17	74
OTSB-4-10A	a	10	04/20/90	4	7
OTSB-7-7A		7	04/20/90	<2	7
OTSB-9-8A	a	8	04/19/90	4	20
TTSB-8-1A	a	1	04/19/90	<80	500

All TPH analyses were conducted using modified EPA Method 8015.

NA - Not Analyzed

TABLE 10

SOIL-QUALITY DATA SUMMARY
TOTAL PETROLEUM HYDROCARBONS
BRISBANE RAILYARD
(All results in mg/kg (ppm))

Sample ID	Foot-notes	Sample Depth	Date of Sample	Diesel Fuel	Waste Oil

Footnotes:

a - Hydrocarbons present in diesel range may be part of waste oil present in sample.

b - Diesel detection limit increased due to matrix interference.

c - Soil samples LF-3A-6A, OSB-1-11.5A, TTSB-5-2A, TTSB-5-10A and TTSB-7-7A were also analyzed for total petroleum hydrocarbons (TPH) as gasoline. TPH as gasoline was not detected at or above the method detection limit in these samples.

TABLE 12
WATER-QUALITY DATA SUMMARY
VOLATILE ORGANIC COMPOUNDS
BRISBANE RAILYARD
(All results in parts per billion)

Sample ID	Date of Sample	Foot-note	Vinyl Chloride	Chloro-ethane	1,1-DCA	1,1-DCE	1,2-DCE cis/trans	Chloro-form	Freon 113	1,2-DCA	1,1,1-TCA	1,2-DCP	TCE	1,1,2-TCA	PCE	Benzene	Toluene	Ethyl-benzene	Total Xylenes
MCL			1	NE	NE	7	NE	100	NE	5	200	NE	5	NE	NE	5.0	NE	NE	1,750
DWAL			0.5	NE	5	6	6	100	1200	0.5	200	10	5	32	5	1.0	100	680	1,750
Surface Water																			
Ditch Middle	02/23/90		<1	<5	0.1 *	<0.5	<0.5	<0.5	<1	<1	<0.5	<1	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<1
Ditch North	02/26/90		<5	<25	<0.5	<2.5	<2.5	<2.5	<5	<5	<2.5	<5	<2.5	<5	<2.5	<2.5	<0.5	<0.5	<1
Ditch South	02/23/90		<1	<5	<0.5	<0.5	<0.5	<0.5	<1	<1	<0.5	<1	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<1
A-Zone Wells																			
KMW-4A	02/15/90		<1	<5	<0.5	<0.5	<0.5	<0.5	<1	<1	<0.5	<1	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<1
KMW-7A	02/28/90		<1	<5	<0.5	<0.5	<0.5	<0.5	<1	<1	<0.5	<1	<0.5	<1	<0.5	<0.5	<0.29 *	<0.5	<1
LF-1A	05/02/90		220	<4	<3	9	3,000	<3	<3	<3	<3	<3	1,000	<3	6	<2	<2	<3	<3
LF-1A	05/02/90	**	250	<5	<4	<2	2,100	<5	<6	<3	<5	<5	550	<6	5.4	NA	NA	NA	NA
LF-3A	05/03/90		<4	<4	<3	<3	6	<3	<3	<3	<3	<3	<4	<3	<4	<2	<2	<3	<3
LF-4A	05/04/90	***	<4	<4	<3	<3	<3	<3	<3	<3	<3	<3	<4	<3	<4	<2	<2	<3	<3
LF-5A	05/04/90		<4	<4	<3	<3	<3	<3	<3	<3	<3	<3	<4	<3	<4	<2	<2	<3	<3
LF-7A	05/02/90		<4	<4	<3	<3	<3	<3	<3	<3	<3	<3	<4	<3	<4	<2	<2	<3	<3
LF-7A	05/02/90	**	<0.5	<0.5	<0.4	<0.2	<0.4	<0.5	<0.6	<0.3	<0.5	<0.5	<0.3	<0.6	<0.5	NA	NA	NA	NA
LF-7A DUP	05/02/90	**	<1	<5	<0.5	<0.5	<0.5	<0.5	<1	<1	<0.5	<1	<0.5	<1	<0.5	NA	NA	NA	NA
LF-8A	05/02/90	**	<3	<3	<2	<1	<2	<3	<3	<2	<3	<3	<3	<3	<3	NA	NA	NA	NA
LF-8A	05/02/90		<4	<4	<3	<3	<3	<3	<3	<3	<3	<3	<4	<3	<4	<2	<2	<3	<3
LF-8A DUP	05/02/90	**	<1	<5	<0.5	<0.5	<0.5	<0.5	<1	<1	<0.5	<1	<0.5	<1	<0.5	NA	NA	NA	NA
LF-9A	04/30/90		9	<4	<3	88	62	<3	<3	<3	33	<3	52,000	14	10,000	<2	<2	<3	<3

TABLE 12
WATER-QUALITY DATA SUMMARY
VOLATILE ORGANIC COMPOUNDS
BRISBANE RAILYARD
(All results in parts per billion)

Sample ID	Date of Sample	Foot-note	Vinyl Chloride	Chloro-ethane	1,1-DCA	1,1-DCE	1,2-DCE cis/trans	Chloro-form	Freon 113	1,2-DCA	1,1,1-TCA	1,2-DCP	TCE	1,1,2-TCA	PCE	Benzene	Toluene	Ethyl-benzene	Total Xylenes
MCL			1	NE	NE	7	NE	100	NE	5	200	NE	5	NE	NE	5.0	NE	NE	1,750
DWAL			0.5	NE	5	6	6	100	1200	0.5	200	10	5	32	5	1.0	100	680	1,750
LF-9A	05/25/90	** f	<0.5	<0.5	<0.4	5.6	5.1	1.4	<0.6	0.7	1.0	<0.5	19,000	8.0	1,900	NA	NA	NA	NA
LF-10A	04/30/90		<4	<4	<3	5	<3	<3	<3	<3	<3	<3	1,900	<3	170	<2	<2	<3	<3
MK-1A	02/20/90		0.97 *	<5	<0.5	<0.5	<0.5	3.5	<1	<1	<0.5	<1	<0.5	<1	<0.5	<0.5	<0.22 *	<0.5	<1
MK-2A	02/22/90		<1	<5	<0.5	<0.5	<0.5	<0.5	<1	<1	<0.5	<1	<0.5	<1	<0.5	<0.5	<0.17 *	<0.5	0.21 *
MK-4A	02/15/90		<1	<5	<0.5	<0.5	<0.5	<0.5	<1	<1	<0.5	<1	<0.5	<1	<0.5	<0.5	<0.2 *	<0.5	<1
MK-5A	02/20/90		<1	<5	<0.5	<0.5	<0.5	<0.5	<1	<1	<0.5	<1	<0.5	<1	<0.5	<0.5	<0.4 *	<0.5	<0.1
MK-5A DUP	02/20/90		<1	<5	<0.5	<0.5	<0.5	<0.5	<1	<1	<0.5	<1	<0.5	<1	<0.5	<0.5	<0.4 *	<0.5	<0.1
MK-6A	02/22/90		<1	<5	<0.5	<0.5	0.67	<0.5	<1	<1	0.15	<1	<0.5	<1	<0.5	<0.5	<0.17 *	<0.5	<1
MK-7A	02/22/90		<1	<5	0.5	<0.5	<0.5	<0.5	<1	<1	<0.5	<1	<0.5	<1	<0.5	<0.5	<0.17 *	<0.5	<1
MK-8A	03/02/90		<1	<5	<0.5	<0.5	<0.5	<0.5	<1	<1	0.2 *	<1	0.1 *	<1	3.5	<0.1 *	<0.5	<0.5	<1
MK-9A	02/20/90		<1	<5	<0.5	<0.5	<0.5	<0.5	<1	<1	<0.5	<1	<0.5	<1	<0.5	<0.5	<0.22 *	<0.5	<1
MW-3A	02/20/90		<1	<5	<0.5	<0.5	<0.5	<0.5	<1	<1	<0.5	<1	<0.5	<1	<0.5	<0.5	<0.4 *	<0.5	<0.1
MW-4A	03/02/90		<1	<5	<0.5	<0.5	<0.5	<0.5	<1	<1	<0.5	<1	<0.5	<1	<0.5	<0.5	<4.3 *	0.16 *	0.37 *
MW-5A	02/23/90	b	<100	<500	<0.5	200	280	<50	<100	<100	20	<100	20,000	130	1300	<0.5	<0.2 *	0.3 *	0.6
MW-5A DUP	02/23/90	b	<100	<500	<0.5	190	250	<50	<100	<100	16	<100	20,000	110	1300	<0.5	<0.2 *	0.2 *	0.4 *
MW-5A	05/25/90	**	<500	<500	<400	<200	<400	<500	<600	<300	<500	<500	310,000	<500	700	NA	NA	NA	NA
MW-6A	02/23/90		34	<50	<0.5	<5	600	<5	<10	<10	<5	<10	920	<20	81	0.2 *	<0.5	<0.5	<1
MW-7A	03/02/90		100	<50	<0.5	3.5 *	980	<5	<10	<10	<5	<10	930	<10	180	<0.1 *	<4.3 *	<0.5	0.52 *
MW-8A	02/20/90		110	<50	<0.5	<5	410	<5	<10	<10	<5	<10	3.2 *	<20	<5	<0.2 *	<0.4 *	<0.5	<1
MW-9A	02/15/90		<1	0.4 *	<0.5	<0.5	5	<0.5	<1	<1	<0.5	<1	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<1

TABLE 12
WATER-QUALITY DATA SUMMARY
VOLATILE ORGANIC COMPOUNDS
BRISBANE RAILYARD
(All results in parts per billion)

Sample ID	Date of Sample	Foot-note	Vinyl Chloride	Chloro-ethane	1,1-DCA	1,1-DCE	1,2-DCE cis/trans	Chloro-form	Freon 113	1,2-DCA	1,1,1-TCA	1,2-DCP	TCE	1,1,2-TCA	PCE	Benzene	Toluene	Ethyl-benzene	Total Xylenes
MCL			1	NE	NE	7	NE	100	NE	5	200	NE	5	NE	NE	5.0	NE	NE	1,750
DWAL			0.5	NE	5	6	6	100	1200	0.5	200	10	5	32	5	1.0	100	680	1,750
MW-10A	02/28/90		<1	<5	<0.5	<0.5	<0.5	<0.5	<1	<1	<0.5	<1	<0.5	<1	<0.5	<0.5	<0.29 *	<0.5	<1
MW-10A DUP	02/28/90		<1	<5	<0.5	<0.5	<0.5	<0.5	<1	<1	<0.5	<1	<0.5	<1	<0.5	<0.5	<0.29 *	<0.5	<1
MW-11A	05/08/90	**	<0.5	<0.5	<0.4	<0.2	<0.4	<0.5	<0.6	<0.3	<0.5	<0.5	<0.3	<0.6	<0.5	NA	NA	NA	NA
MW-11A	05/08/90		<4	<4	<3	<3	<3	<3	<3	<3	<3	<3	<4	<3	<4	<2	<2	<3	<3
MW-13A	02/26/90		<5	<25	<0.5	<2.5	<2.5	<2.5	<5	<5	<2.5	<5	<2.5	<5	<2.5	1	6	6.8	14
MW-15A	03/02/90		<1	5.8	0.5	<0.5	0.4 *	<0.5	<1	<1	<0.5	<1	0.7	<1	<0.5	1.5	<4.3 *	<5	<10
MW-16A	03/05/90	a	<1	<5	<0.5	<0.5	0.22 *	<0.5	0.26 *	<1	<0.5	<1	<0.5	<1	<0.5	0.3 *	<0.11 *	<0.5	<1
MW-17A	03/05/90		<1	3.2 *	<0.5	<0.5	<0.5	<0.5	<1	<1	<0.5	<1	<0.5	<1	<0.5	<0.5	<0.11 *	<0.5	<1
B-Zone Wells																			
KMW-3B	02/15/90		<1	<5	<0.5	<0.5	<0.5	<0.5	<1	<1	<0.5	<1	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<1
KMW-6B	03/06/90		<1	<5	<0.5	<0.5	<0.5	0.1 *	0.31 *	<1	<0.5	<1	<0.5	<1	<0.5	0.16 *	<0.2 *	0.11 *	0.75 *
LF-2B	05/08/90		<4	<4	<3	<3	<3	<3	<3	<3	<3	<3	<4	<3	<4	<2	<2	<3	<3
LF-3B	05/07/90		<4	<4	<3	<3	<3	<3	<3	<3	<3	<3	27	<3	11	<2	<2	<3	<3
LF-4B	05/10/90		<4	<4	<3	<3	<3	<3	<3	<3	<3	<3	<4	<3	<4	<2	<2	<3	<3
LF-5B	05/09/90		<4	<4	<3	<3	<3	<3	<3	<3	<3	<3	<4	<3	<4	<2	<2	<3	<3
LF-6B	05/10/90		<4	<4	<3	<3	<3	<3	<3	<3	<3	<3	<4	<3	<4	<2	<2	<3	<3
LF-8B	05/22/90		<4	<4	<3	<3	<3	<3	<3	<3	<3	<3	<4	<3	<4	<2	<2	<3	<3
LF-9B	05/22/90		<4	<4	<3	6	5	<3	<3	<3	<3	<3	24,000	8	2,900	<2	<2	<3	<3
LF-9B DUP	05/22/90	**	<500	<500	<400	<200	<400	<500	<600	<300	<500	<500	28,000	<600	2,500	NA	NA	NA	NA

TABLE 12
WATER-QUALITY DATA SUMMARY
VOLATILE ORGANIC COMPOUNDS
BRISBANE RAILYARD
(All results in parts per billion)

Sample ID	Date of Sample	Foot-note	Vinyl Chloride	Chloro-ethane	1,1-DCA	1,1-DCE	1,2-DCE cis/trans	Chloro-form	Freon 113	1,2-DCA	1,1,1-TCA	1,2-DCP	TCE	1,1,2-TCA	PCE	Benzene	Toluene	Ethyl-benzene	Total Xylenes
MCL			1	NE	NE	7	NE	100	NE	5	200	NE	5	NE	NE	5.0	NE	NE	1,750
DWAL			0.5	NE	5	6	6	100	1200	0.5	200	10	5	32	5	1.0	100	680	1,750
LF-10B	05/22/90	g	<4	<4	<3	25	<3	5	<3	<3	8	7	28,000	200	3,000	<2	3	<3	<3
MK-3B	02/20/90		<1	<5	<0.5	<0.5	<0.5	<0.5	<1	<1	<0.5	<1	<0.5	<1	<0.5	<0.5	<0.4 *	<0.5	<0.1
MK-4B	02/15/90		<1	<5	<0.5	<0.5	<0.5	<0.5	<1	<1	<0.5	<1	0.4	<1	<0.5	<0.5	<0.2 *	<0.5	<1
MK-6B	02/22/90		<1	<5	<0.5	<0.5	<0.5	<0.5	<1	<1	<0.5	<1	<0.5	<1	<0.5	<0.5	0.32 *	<0.5	<1
MK-7B	02/27/90		<1	<5	<0.5	<0.5	<0.5	<0.5	<1	<1	<0.5	<1	<0.5	<1	<0.5	<0.5	<0.2 *	<0.5	0.6 *
MK-9B	02/20/90		<1	<5	<0.5	<0.5	<0.5	<0.5	<1	<1	<0.5	<1	<0.5	<1	<0.5	<0.5	<0.22 *	<0.5	<1
MW-1B	02/21/90		<1	<5	<0.5	<0.5	<0.5	<0.5	<1	<1	<0.5	<1	<0.5	<1	<0.5	<0.5	<0.22 *	<0.5	<1
MW-2B	03/02/90		<1	<5	<0.5	<0.5	<0.5	<0.5	<1	<1	<0.5	<1	<0.5	<1	<0.5	<0.1 *	<4.3 *	0.17 *	0.74
MW-5B	02/23/90		<1	<5	<0.5	<0.5	<0.5	0.1	<1	<1	<0.5	<1	35	<1	1	<0.5	<0.2 *	<0.5	<1
MW-5B DUP	02/23/90		<1	<5	<0.5	<0.5	<0.5	0.1	<1	<1	<0.5	<1	31	<1	1	<0.5	<0.2 *	<0.5	<1
MW-6B	02/23/90		<1	<5	<0.5	<0.5	<0.5	0.3	<1	<1	<0.5	<1	149	<1	2.1	0.5	<0.5	<0.5	<1
MW-8B	02/20/90		<1	<5	<0.5	<0.5	<0.5	<0.5	<1	<1	<0.5	<1	<0.5	<100	<100	<0.2 *	<0.4 *	<0.5	0.4 *
MW-9B	02/15/90		<1	<5	<0.5	<0.5	<0.5	<0.5	<1	<1	<0.5	<1	<0.5	<1	<0.5	<0.5	<0.2 *	<0.5	<1
MW-10B	02/28/90		<1	<5	<0.5	<0.5	<0.5	<0.5	<1	<1	<0.5	<1	<0.5	<1	<0.5	0.17 *	<0.29 *	0.34 *	<1
MW-11B	03/02/90		<1	<5	<0.5	<0.5	<0.5	<0.5	<1	<1	<0.5	<1	<0.5	<1	<0.5	<0.5	<4.3 *	<0.5	<1
MW-13B	02/26/90		<1	<5	<0.5	<0.5	<0.5	<0.5	<1	<1	<0.5	<1	<0.5	<1	<0.5	<0.5	<0.2 *	<0.5	0.2 *
MW-16B	03/05/90		<1	<5	<0.5	<0.5	<0.5	<0.5	0.32 *	<1	<0.5	<1	<0.5	<1	<0.5	<0.5	0.22 *	<0.5	<1
MW-17B	03/05/90		<1	<5	<0.5	<0.5	<0.5	<0.5	<1	<1	<0.5	<1	<0.5	<1	<0.5	<0.5	0.11 *	<0.5	<1

TABLE 12
WATER-QUALITY DATA SUMMARY
VOLATILE ORGANIC COMPOUNDS
BRISBANE RAILYARD
(All results in parts per billion)

Sample ID	Date of Sample	Foot-note	Vinyl Chloride	Chloro-ethane	1,1-DCA	1,1-DCE	1,2-DCE cis/trans	Chloro-form	Freon 113	1,2-DCA	1,1,1-TCA	1,2-DCP	TCE	1,1,2-TCA	PCE	Benzene	Toluene	Ethyl-benzene	Total Xylenes
MCL			1	NE	NE	7	NE	100	NE	5	200	NE	5	NE	NE	5.0	NE	NE	1,750
DWAL			0.5	NE	5	6	6	100	1200	0.5	200	10	5	32	5	1.0	100	680	1,750
QAQC																			
Equipment Blanks:																			
EQ MK-4B-FB	02/15/90		<1	<5	<0.5	<0.5	<0.5	0.11 *	<1	<1	<0.5	<1	<0.5	<1	<0.5	<0.5	0.2 *	<0.5	<1
EQ MK-9B-FB	02/20/90		<1	<5	<0.5	<0.5	<0.5	<0.5	<1	<1	<0.5	<1	<0.5	<1	<0.5	<0.5	0.22 *	<0.5	<1
EQ MW-8B-FB	02/21/90		<1	<5	<0.5	<0.5	<0.5	0.15 *	<1	<1	<0.5	<1	<0.5	<100	<100	0.2	0.4 *	<0.5	<0.1
EQ MK-2A-FB	02/22/90		<1	<5	<0.5	<0.5	<0.5	<0.5	<1	<1	<0.5	<1	<0.5	<1	<0.5	<0.5	1.1	<0.5	<1
EQ MW-6B-FB	02/23/90		<1	<5	<0.5	<0.5	<0.5	<0.5	<1	<1	<0.5	<1	<0.5	<1	<0.5	<0.5	0.2 *	<0.5	<1
EQ MW-13A-FB	02/26/90		<1	<5	<0.5	<0.5	<0.5	<0.5	<1	<1	<0.5	<1	<0.5	<1	<0.5	<0.5	0.2 *	<0.5	<1
EQ MK-7B-EB	02/27/90		<1	<5	<0.5	<0.5	<0.5	<0.5	<1	<1	<0.5	<1	<0.5	<1	<0.5	<0.5	0.2 *	<0.5	<1
EQ KMW-7A-EB	02/28/90		<1	<5	<0.5	<0.5	<0.5	<0.5	<1	<1	<0.5	<1	<0.5	<1	<0.5	<0.5	0.29 *	<0.5	<1
EQ MW-16A-EB	03/02/90		<1	<5	<0.5	<0.5	<0.5	<0.5	<1	<1	<0.5	<1	<0.5	<1	<0.5	<0.5	0.11 *	<0.5	<1
EQ MW-4A-EB	03/02/90		<1	<5	<0.5	<0.5	<0.5	<0.5	<1	<1	<0.5	<1	<0.5	<1	<0.5	0.1 *	4.3	<0.5	<1
EQ KMW-6B-EB	03/06/90	c	<1	<5	<0.5	<0.5	<0.5	<0.5	0.29 *	0.26 *	<0.5	<1	<0.5	<1	<0.5	<0.5	0.2 *	<0.5	<1
EQ LF-1A-FB	05/02/90		<4	<4	<3	<3	<3	<3	<3	<3	<3	<3	<4	<3	<4	<2	<2	<3	<3
EQ LF-3A-FB	05/03/90		<4	<4	<3	<3	<3	<3	<3	<3	<3	<3	<4	<3	<4	<2	<2	<3	<3
EQ LF-5A-FB	05/04/90		<4	<4	<3	<3	<3	<3	<3	<3	<3	<3	<4	<3	<4	<2	<2	<3	<3
EQ LF-3B-FB	05/07/90		<4	<4	<3	<3	<3	<3	<3	<3	<3	<3	<4	<3	<4	<2	<2	<3	<3
EQ MW-11A-FB	05/08/90		<4	<4	<3	<3	<3	<3	<3	<3	<3	<3	<4	<3	<4	<2	<2	<3	<3
EQ LF-5B-FB	05/09/90		<4	<4	<3	<3	<3	<3	<3	<3	<3	<3	<4	<3	<4	<2	<2	<3	<3

TABLE 12
WATER-QUALITY DATA SUMMARY
VOLATILE ORGANIC COMPOUNDS
BRISBANE RAILYARD
(All results in parts per billion)

Sample ID	Date of Sample	Foot-note	Vinyl Chloride	Chloro-ethane	1,1-DCA	1,1-DCE	1,2-DCE cis/trans	Chloro-form	Freon 113	1,2-DCA	1,1,1-TCA	1,2-DCP	TCE	1,1,2-TCA	PCE	Benzene	Toluene	Ethyl-benzene	Total Xylenes
MCL			1	NE	NE	7	NE	100	NE	5	200	NE	5	NE	NE	5.0	NE	NE	1,750
DWAL			0.5	NE	5	6	6	100	1200	0.5	200	10	5	32	5	1.0	100	680	1,750
EQ LF-10B-FB	05/22/90	**	<0.5	<0.5	<0.4	<0.2	<0.4	<0.5	<0.6	<0.3	<0.5	<0.5	<0.3	<0.6	<0.5	NA	NA	NA	NA
EQ MW-5A-FB	05/25/90	**	<0.5	<0.5	<0.4	<0.2	<0.4	<0.5	<0.6	<0.3	<0.5	<0.5	1.3	<0.6	<0.5	NA	NA	NA	NA
Trip Blanks:																			
FB	02/26/90		<1	<5	<0.5	<0.5	<0.5	<0.5	<1	<1	<0.5	<1	<0.5	<1	<0.5	<0.5	0.2 *	<0.5	<1
FB	02/27/90		<1	<5	<0.5	<0.5	<0.5	1.8	<1	<1	<0.5	1.8	<0.5	<1	<0.5	<0.5	0.2 *	<0.5	<1
FB	02/28/90		<1	<5	0.41	0.41	<0.5	1.6	<1	<1	<0.5	1.7	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<1
Water Supply:																			
TAP 2	02/14/90	d	<1	<5	<0.5	<0.5	<0.5	33	<1	<1	<0.5	<1	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<1

TABLE 12
WATER-QUALITY DATA SUMMARY
VOLATILE ORGANIC COMPOUNDS
BRISBANE RAILYARD
(All results in parts per billion)

Sample ID	Date of Sample	Foot-note	Vinyl Chloride	Chloro-ethane	1,1-DCA	1,1-DCE	1,2-DCE cis/trans	Chloro-form	Freon 113	1,2-DCA	1,1,1-TCA	1,2-DCP	TCE	1,1,2-TCA	PCE	Benzene	Toluene	Ethyl-benzene	Total Xylenes
MCL			1	NE	NE	7	NE	100	NE	5	200	NE	5	NE	NE	5.0	NE	NE	1,750
DWAL			0.5	NE	5	6	6	100	1200	0.5	200	10	5	32	5	1.0	100	680	1,750

NOTES:

* = Result below authorized analytic laboratory reporting limit and/or is an estimated concentration.
** = This sample analyzed by EPA Method 8010. All other samples were analyzed by EPA Method 8240.
*** = Tentative identification.
a = Sample also contained 0.24 ppb 1,2-dichlorobenzene. *
b = Samples also contained 0.1 ppb chlorobenzene. *
c = Samples also contained 1.5 ppb methylene chloride. *
d = Sample also contained 4.8 ppb bromodichloromethane.
TAP 2 was sample of water used for steam-cleaning equipment and grouting wells.
e = Sample also contained 1.6 ppb methylene chloride.
f = Sample also contained 6.2 ppb chlorobenzene and 0.6 ppb carbon tetrachloride.
g = Sample also contained 15 ppb carbon tetrachloride.

MCL = Environmental Protection Agency Maximum Contaminant Level for Drinking Water
DWAL = State Department of Health Services Drinking Water Action Level
NE = Not Established
NA = Not Analyzed

TABLE 13
WATER-QUALITY DATA SUMMARY
SEMI-VOLATILE ORGANIC COMPOUNDS
BRISBANE RAILYARD
(All results in parts per million)

Sample ID	Date of Sample	Acenaphthene	Fluorene	Phenanthrene	Anthracene	Fluoranthene	Pyrene	Benzo(a)anthracene	Bis-(2-ethylhexyl) phthalate	Chrysene	Naphthalene
A-Zone Wells											
LF-1A	05/02/90	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.004	<0.002
LF-3A	05/03/90	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.060*	<0.004	<0.002
LF-4A	05/04/90	0.015	0.020	0.055	<0.002	0.004	0.071	<0.002	0.550	<0.004	<0.002
LF-7A	05/02/90	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.004	<0.002
MW-11A	05/15/90	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.004	<0.002
B-Zone Wells											
LF-3B	05/15/90	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.11*	<0.004	<0.002
LF-4B	05/15/90	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.110*	<0.004	<0.002
LF-6B	05/15/90	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.110*	<0.004	<0.002

Analyses conducted using EPA Method 8270.
* = Result is an estimated concentration.

TABLE 14
WATER-QUALITY DATA SUMMARY
TITLE 22 METALS
BRISBANE RAILYARD
(All results in parts per million)

Sample ID	Date of Sample	Arsenic	Antimony	Barium	Beryllium	Cadmium	Total Chromium	Chromium 6	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
EPA Maximum Contaminant Levels		0.05	NE	1	NE	0.01	NE	0.005	NE	1	0.05	0.002	NE	NE	0.01	0.05	NE	NE	5
A-Zone Wells																			
KMW-7A	02/28/90	0.035	<0.05	0.065	<0.002	<0.005	<0.01	<0.01	<0.01	<0.01	<0.005	<0.0002	<0.02	<0.04	<0.2	<0.01	<2	<0.01	<0.01
LF-3A	05/03/90	0.006	<0.05	0.05	<0.005	<0.005	<0.05	NA	<0.05	<0.05	<0.05	<0.01	<0.05	<0.05	<0.005	<0.05	<0.05	<0.05	<0.05
LF-4A	05/04/90	0.43	<0.05	0.62	<0.005	<0.005	<0.05	NA	<0.05	<0.05	<0.05	<0.01	<0.05	<0.05	<0.005	<0.05	<0.05	<0.05	<0.05
LF-5A	05/04/90	<0.005	<0.05	0.34	<0.005	<0.005	<0.05	NA	<0.05	<0.05	<0.05	<0.01	<0.05	<0.05	0.007	<0.05	<0.05	<0.05	<0.05
LF-7A	05/02/90	<0.005	<0.05	0.12	<0.005	<0.005	<0.05	NA	<0.05	<0.05	<0.05	<0.01	<0.05	<0.05	<0.005	<0.05	<0.05	<0.05	<0.05
LF-7A DUP*	05/02/90	<0.005	<1.0	<5.0	<0.050	<0.005	<0.50	NA	<5.0	<2.0	<0.005	<0.0002	<30.0	<2.0	<0.20	<0.50	<2	<2	<20.0
LF-8A	05/02/90	0.04	<0.05	0.89	<0.005	<0.005	<0.05	NA	<0.05	<0.05	<0.05	<0.01	<0.05	<0.05	<0.01	<0.05	<0.05	<0.05	<0.05
MK-1A	02/21/90	0.011	<0.05	0.1	<0.002	<0.005	<0.01	NA	<0.01	<0.01	<0.005	<0.0002	<0.02	<0.04	<0.2	<0.01	<2	<0.01	<0.01
MK-2A	02/22/90	<0.005	<0.05	0.048	<0.002	<0.005	<0.01	<0.01	<0.01	0.013	<0.005	<0.0004	<0.02	<0.04	<0.2	<0.01	<2	<0.01	0.016
MK-6A	02/22/90	0.049	<0.05	0.076	<0.002	<0.005	<0.01	<0.01	<0.01	<0.01	<0.005	<0.0002	<0.02	<0.04	<0.2	<0.01	<2	<0.01	<20
MK-7A	06/20/90	<0.005	<0.05	0.15	<0.005	<0.005	<0.05	NA	<0.05	<0.05	<0.05	<0.0005	<0.05	<0.05	<0.005	<0.05	<0.05	<0.05	<0.05
MK-8A	02/23/90	<0.005	<0.05	0.036	<0.002	<0.005	<0.01	<0.01	<0.01	0.033	<0.005	<0.0002	<0.02	<0.04	<0.2	<0.01	<2	<0.01	0.72
MK-8A DUP	02/24/90	<0.005	<0.05	0.036	<0.002	<0.005	<0.01	<0.01	<0.01	0.029	<0.005	<0.0002	<0.02	<0.04	<0.2	<0.01	<2	<0.01	0.69
MK-9A	02/21/90	<0.005	<0.05	0.065	<0.002	<0.005	<0.01	NA	<0.01	<0.01	<0.005	0.0004	<0.02	<0.04	<0.2	<0.01	<2	0.013	<0.01
MW-10A	02/28/90	0.038	<0.05	0.041	<0.002	<0.005	<0.01	<0.01	<0.01	<0.01	<0.005	<0.0004	<0.02	<0.04	<0.2	<0.01	<2	<0.01	0.014
MW-10A DUP	02/28/90	0.035	<0.05	0.041	<0.002	<0.005	<0.01	<0.01	<0.01	<0.01	<0.005	<0.0002	<0.02	<0.04	<0.2	<0.01	<2	<0.01	<0.01
MW-11A	05/08/90	0.046	<0.05	0.10	<0.005	<0.005	<0.05	NA	<0.05	<0.05	<0.05	<0.01	<0.05	<0.05	<0.005	<0.05	<0.05	<0.05	<0.05
MW-15A	03/02/90	0.012	<0.05	0.23	<0.002	<0.005	<0.01	<0.01	<0.01	<0.01	<0.005	<0.0002	<0.02	<0.04	<0.2	<0.01	<2	<0.01	<0.01
MW-16A	03/05/90	<0.005	<0.05	0.12	<0.002	<0.005	<0.01	<0.01	<0.01	<0.01	<0.005	<0.0002	<0.02	<0.04	<0.2	<0.01	<2	<0.01	<0.01
MW-17A	03/05/90	<0.005	<0.05	0.13	<0.002	<0.005	<0.01	<0.01	<0.01	<0.01	<0.005	<0.0002	<0.02	<0.04	<0.2	<0.01	<2	<0.01	<0.01

TABLE 14
WATER-QUALITY DATA SUMMARY
TITLE 22 METALS
BRISBANE RAILYARD
(All results in parts per million)

Sample ID	Date of Sample	Arsenic	Antimony	Barium	Beryllium	Cadmium	Total Chromium	Chromium 6	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
EPA Maximum Contaminant Levels		0.05	NE	1	NE	0.01	NE	0.005	NE	1	0.05	0.002	NE	NE	0.01	0.05	NE	NE	5
B-Zone Wells																			
KMW-6B	03/06/90	<0.005	<0.05	6.4	<0.002	<0.005	<0.01	NA	0.01	<0.01	<0.005	<0.0002	<0.02	<0.04	<0.2	<0.01	<2	<0.01	<0.01
LF-3B	05/07/90	<0.005	<0.05	0.18	<0.005	<0.005	<0.05	NA	<0.05	<0.05	<0.05	<0.01	<0.05	<0.05	<0.005	<0.05	<0.05	<0.05	0.06
LF-4B	05/10/90	<0.005	<0.05	0.20	<0.005	<0.005	<0.05	NA	<0.05	<0.05	<0.05	<0.01	<0.05	<0.05	<0.005	<0.05	<0.05	<0.05	<0.05
LF-5B	05/09/90	<0.005	<0.05	0.14	<0.005	<0.005	<0.05	NA	<0.05	<0.05	<0.05	<0.01	<0.05	<0.05	<0.005	<0.05	<0.05	<0.05	<0.05
LF-6B	05/10/90	<0.005	<0.05	0.39	<0.005	<0.005	<0.05	NA	<0.05	<0.05	<0.05	<0.01	<0.05	<0.05	<0.005	<0.05	<0.05	<0.05	<0.05
LF-8B	05/22/90	<0.005	<0.05	0.50	<0.005	<0.005	<0.05	NA	<0.05	<0.05	<0.05	<0.0005	<0.05	<0.05	<0.01	<0.05	<0.05	<0.05	0.16
MK-6B	02/22/90	<0.005	<0.05	0.11	<0.002	<0.005	<0.01	<0.01	<0.01	<0.01	<0.005	<0.0002	<0.02	<0.04	<0.2	<0.01	<2	0.013	0.013
MK-7B	02/22/90	<0.1	<0.05	0.24	<0.002	<0.005	<0.01	<0.01	<0.01	0.011	<0.05	<0.0002	<0.02	<0.04	<0.2	<0.01	<2	<0.01	0.025
MK-9B	02/27/90	<0.005	<0.05	0.091	<0.002	<0.005	<0.01	<0.01	<0.01	<0.01	<0.005	<0.0004	<0.02	<0.04	<0.2	<0.01	<2	<0.01	<0.01
MW-1B	02/27/90	0.0079	<0.05	0.74	<0.002	<0.005	<0.01	<0.01	<0.01	<0.01	<0.005	NA	<0.02	<0.04	<0.2	<0.01	<2	0.014	<0.01
MW-2B	03/02/90	<0.005	<1	<5	<0.05	<0.005	<0.05	<0.01	<5	<2	<0.005	<0.0004	<30	<2	<0.2	<0.5	<2	<2	<20
MW-10B	02/28/90	0.02	<0.05	0.058	<0.002	<0.005	<0.01	<0.01	<0.01	<0.01	<0.005	<0.0002	<0.02	<0.04	<0.2	<0.01	<2	<0.01	<0.01
MW-11B	03/02/90	<0.005	<0.05	0.48	<0.002	<0.005	<0.01	<0.01	<0.01	<0.01	<0.005	<0.0002	<0.02	<0.04	<0.2	<0.01	<2	<0.01	<0.01
MW-12B	02/24/90	<0.005	<0.05	0.2	<0.002	<0.005	<0.01	<0.01	<0.01	<0.01	<0.005	<0.0002	<0.02	<0.04	<0.2	<0.01	<2	<0.01	0.013
MW-12B DUP	02/24/90	<0.005	<0.05	0.19	<0.002	<0.005	<0.01	<0.01	<0.01	0.015	<0.005	<0.0002	<0.02	<0.04	<0.2	<0.01	<2	<0.01	0.017
MW-16B	03/05/90	<0.005	<0.05	0.82	<0.002	<0.005	<0.01	<0.01	<0.01	<0.01	<0.005	<0.0002	<0.02	<0.04	<0.2	<0.01	<2	0.018	0.017
MW-17B	03/05/90	<0.005	<0.05	1.1	<0.002	<0.005	<0.01	<0.01	<0.01	<0.01	<0.005	<0.0002	<0.02	<0.04	<0.2	<0.01	<2	<0.01	<0.01

TABLE 14
WATER-QUALITY DATA SUMMARY
TITLE 22 METALS
BRISBANE RAILYARD
(All results in parts per million)

Sample ID	Date of Sample	Arsenic	Antimony	Barium	Beryllium	Cadmium	Total Chromium	Chromium 6	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
EPA Maximum Contaminant Levels		0.05	NE	1	NE	0.01	NE	0.005	NE	1	0.05	0.002	NE	NE	0.01	0.05	NE	NE	5
Surface Water																			
Ditch Middle	02/24/90	0.013	<0.05	0.09	<0.002	<0.005	<0.01	<0.01	<0.01	<0.01	<0.005	<0.0002	<0.02	<0.04	<0.2	<0.01	<2	<0.01	<0.01
Ditch North	02/26/90	<0.005	<0.05	0.019	<0.002	<0.005	<0.01	<0.01	<0.01	0.031	<0.005	<0.0002	<0.02	<0.04	<0.2	<0.01	<2	<0.01	0.01
Ditch North DUP	02/26/90	<0.005	<0.05	0.02	<0.002	<0.005	<0.01	NA	<0.01	0.036	<0.005	<0.0002	<0.02	<0.04	<0.2	<0.01	<2	<0.01	0.017
Ditch South	02/24/90	<0.005	<0.05	0.18	<0.002	<0.005	<0.01	<0.01	<0.01	<0.01	<0.005	<0.0002	<0.02	<0.04	<0.2	<0.01	<2	<0.01	0.089
TAP2 **	02/14/90	<0.005	<1	<5 ~	<0.05	<0.005	<0.05	NA	<5	<2	<0.005	<0.0002	<30	<2	<0.2	<0.5	<2	2	<20

NOTES:
NA = Not Analyzed
NE = Not Established

* Duplicate analyzed by Enseco Laboratories.
** Water used for steam-cleaning equipment and grouting wells.

TABLE 15
WATER-QUALITY DATA SUMMARY
TOTAL PETROLEUM HYDROCARBONS
BRISBANE RAILYARD
(All results in mg/l [ppm])

Sample ID	Date of Sample	Lab	Diesel Fuel	Waste Oil	Gaso-line	Unknown Hydro-carbons	Comments
A-Zone Wells							
LF-3A	05/03/90	Clayton	3.0	4.4	<0.050	NA	
LF-4A	05/04/90	Clayton	72.0	21.0	0.540	NA	
LF-5A	05/04/90	Clayton	0.15	1.4	NA	NA	
LF-7A	05/02/90	Clayton	0.09	0.3	NA	NA	
LF-8A	05/02/90	Clayton	2.8	5.7	NA	NA	
MK-1A	02/27/90	Enseco	<0.1	NA	<0.1	<0.1	
MW-11A	05/08/90	Clayton	7.300	14.000	<0.050	NA	
MW-13A	03/06/90	Enseco	<0.1	NA	<0.1	<0.1	
MW-15A	03/02/90	Enseco	<10	NA	<10	92	C-9 TO C-22
MW-16A	03/05/90	Enseco	<0.3	NA	<0.3	2.6	C-10 TO C-26
MW-17A	03/05/90	Enseco	<0.1	NA	<0.1	0.2	C-10 to C-26
B-Zone Wells							
LF-3B	05/07/90	Clayton	<0.050	0.240	NA	NA	
LF-4B	05/10/90	Clayton	<0.050	<0.100	NA	NA	
LF-5B	05/09/90	Clayton	0.150	0.140	NA	NA	
LF-6B	05/10/90	Clayton	0.100	0.480	NA	NA	
LF-8B	05/22/90	Clayton	<0.050	<0.100	NA	NA	
MW-13B	03/06/90	Enseco	<0.1	NA	<0.1	<0.1	
MW-16B	03/05/90	Enseco	<0.1	NA	<0.1	<0.1 *	* Peak @ C-25 to C-26
MW-17B	03/05/90	Enseco	<0.1	NA	<0.1	<0.1 *	* Peak @ C-11 to C-12
Surface Water							
Ditch Middle	03/05/90	Enseco	<0.1	NA	<0.1	<0.1	
Ditch North	03/05/90	Enseco	<0.1	NA	<0.1	<0.1	
Ditch South	03/05/90	Enseco	<0.1	NA	<0.1	<0.1	

All TPH analyses were by modified EPA Method 8015.

SFC | SMC

OU-1 | OU-2

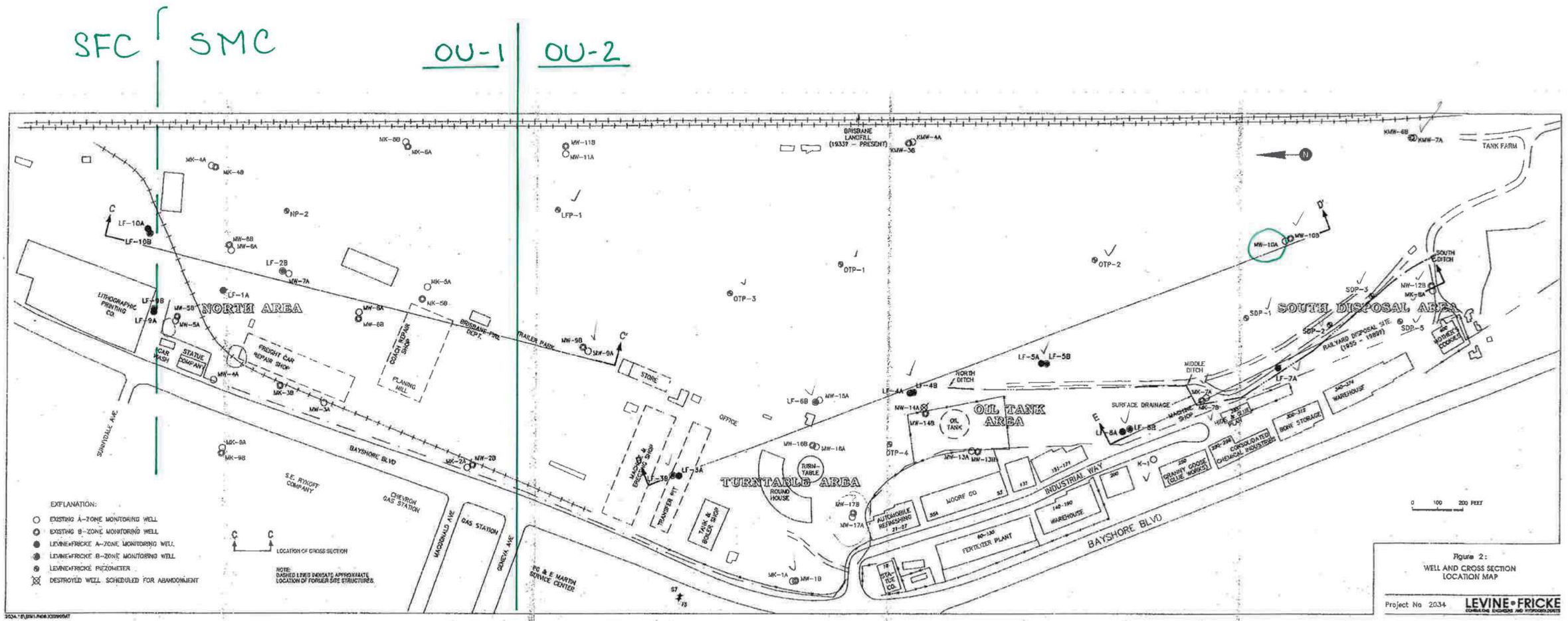


Figure 2:
WELL AND CROSS SECTION LOCATION MAP

Project No 2034 LEVINE•FRICKE

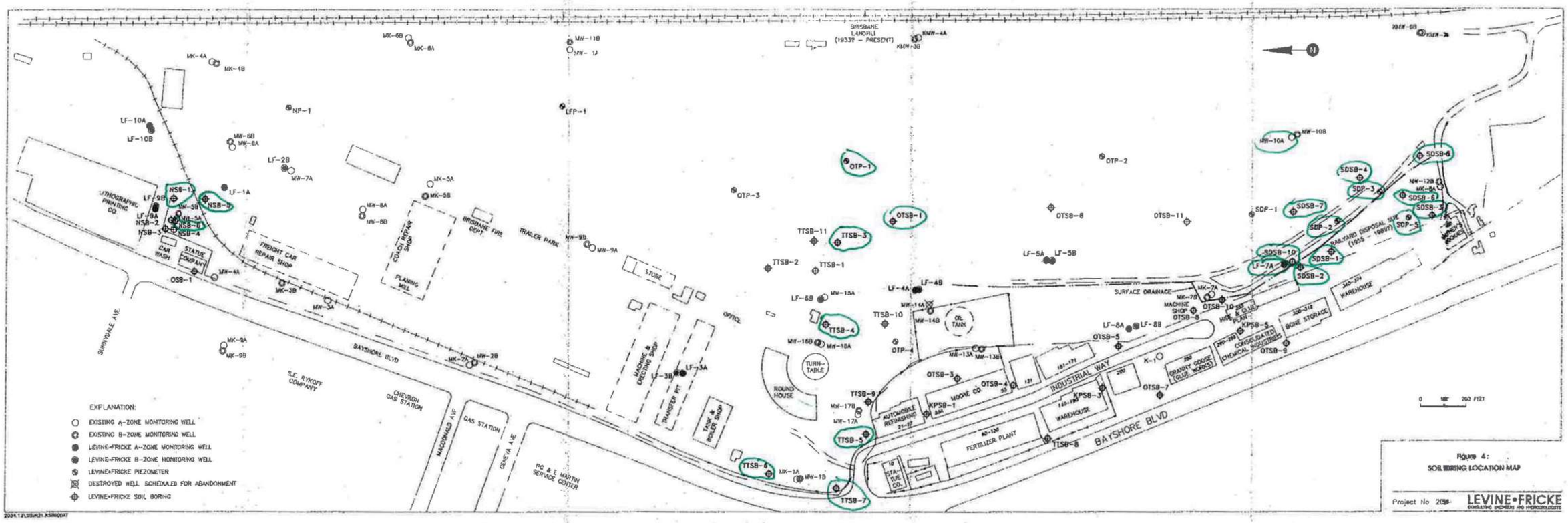


Figure 4:
SOIL BORING LOCATION MAP

Project No 2038 LEVINE•FRICKE
CONSULTING ENGINEERS AND HYDROGEOLOGISTS

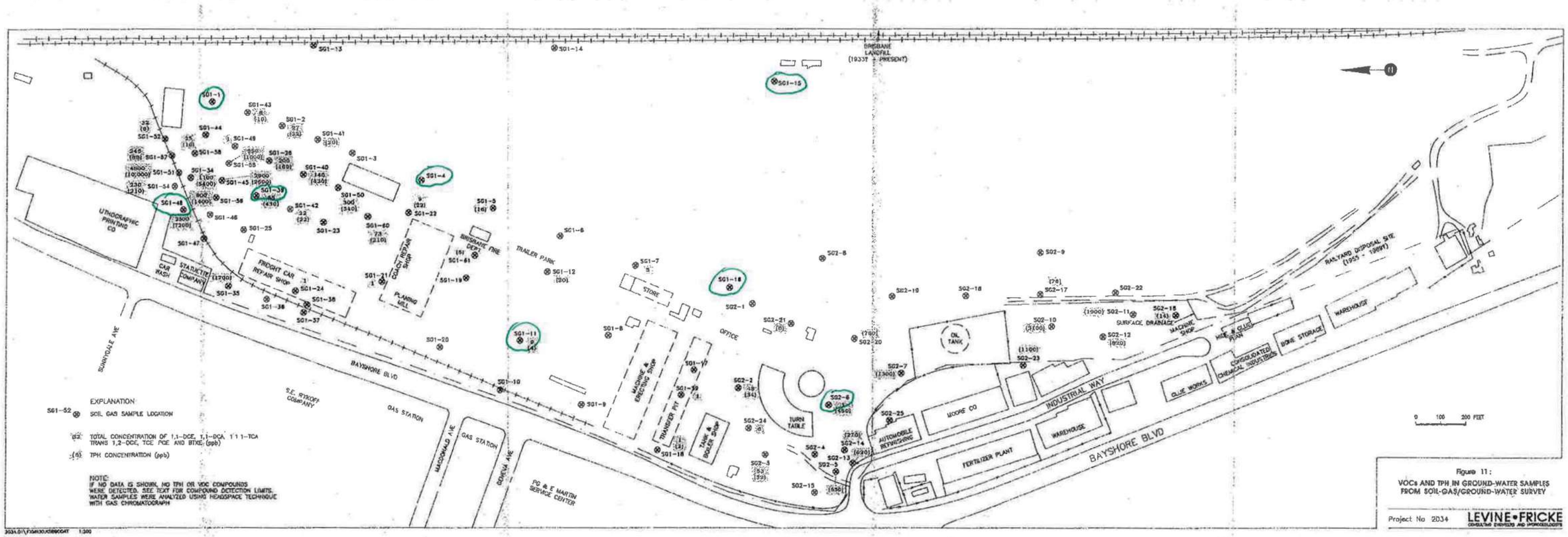


Figure 11:
VOCs AND TPH IN GROUND-WATER SAMPLES FROM SOIL-GAS/GROUND-WATER SURVEY

Project No 2034 LEVINE•FRICKE
CONSULTING ENGINEERS AND HYDROGEOLOGISTS

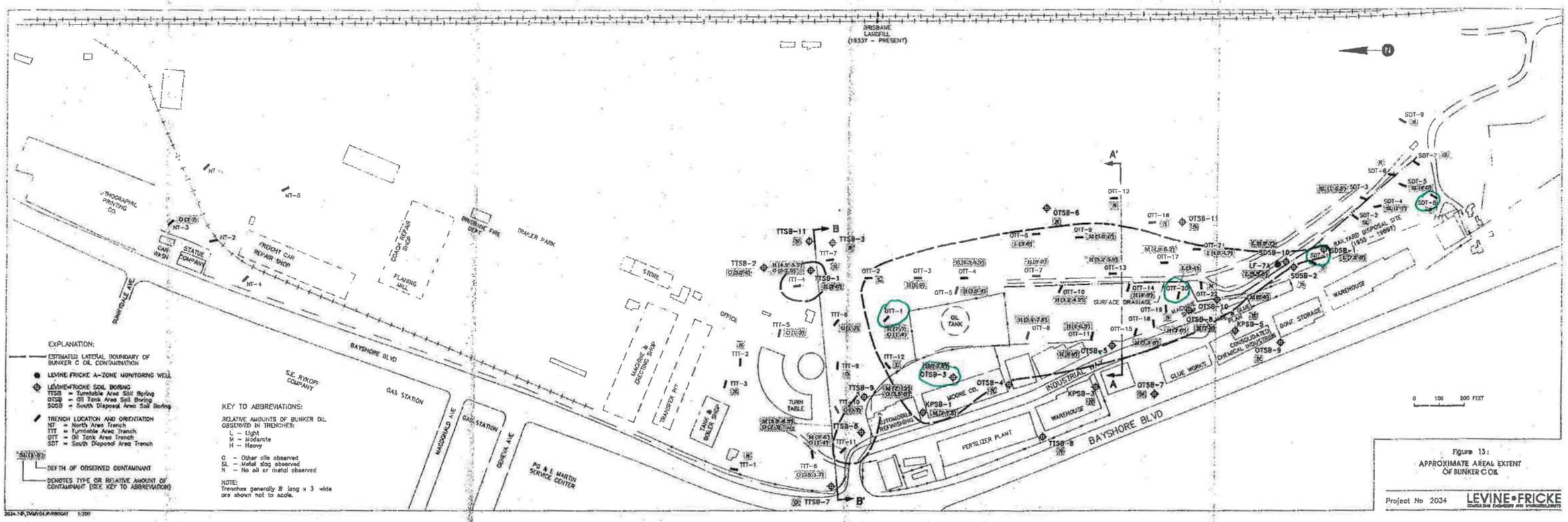
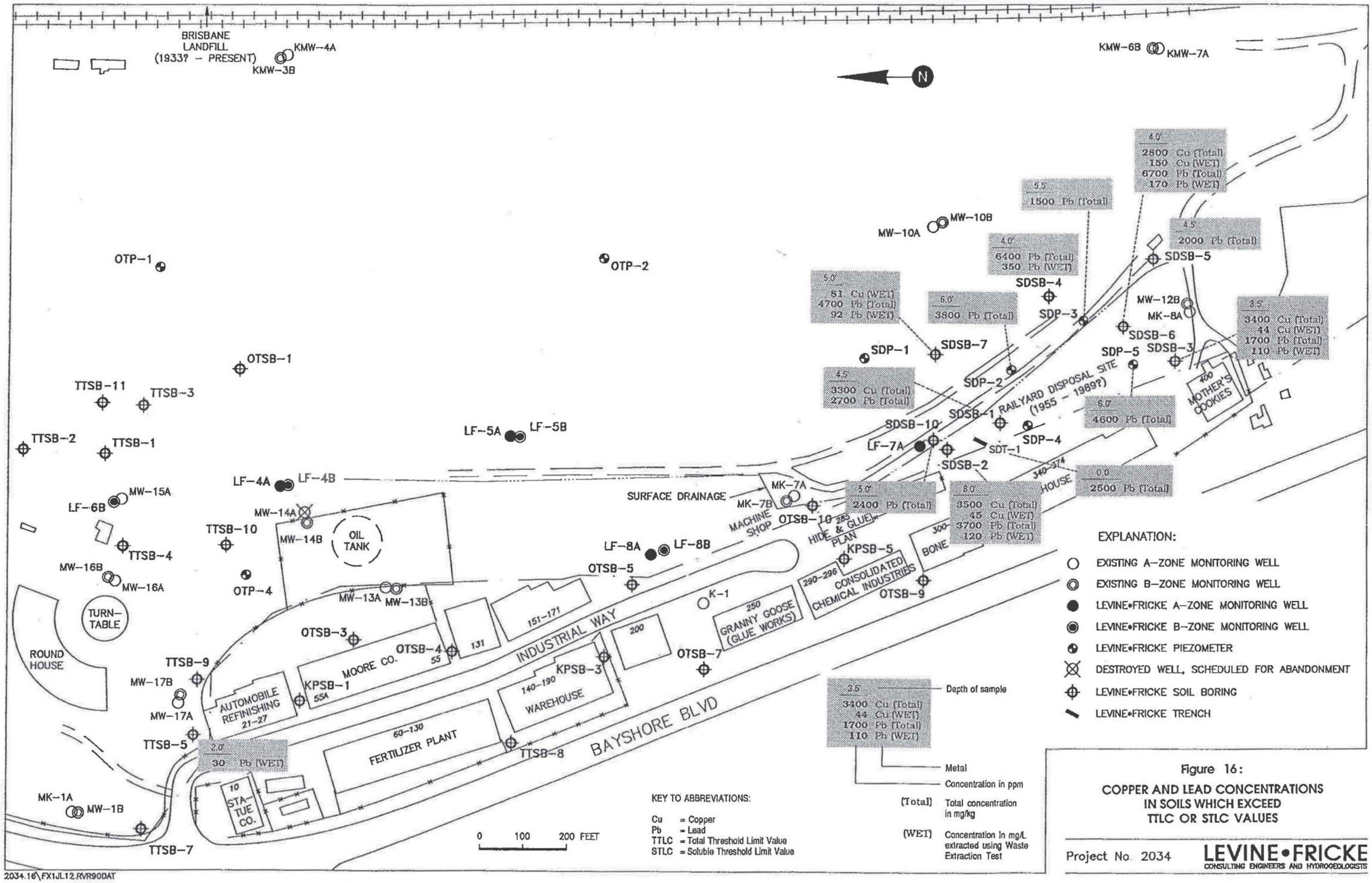


Figure 13:
APPROXIMATE AREAL EXTENT OF BUNKER C OIL

Project No 2034 LEVINE•FRICKE

OTSB-1 — (see Fig. 4)



2034.16\FX1JL12.RVR90DAT

Figure 16:

COPPER AND LEAD CONCENTRATIONS IN SOILS WHICH EXCEED TTLC OR STLC VALUES

Project No. 2034

LEVINE•FRICKE
CONSULTING ENGINEERS AND HYDROGEOLOGISTS

123957

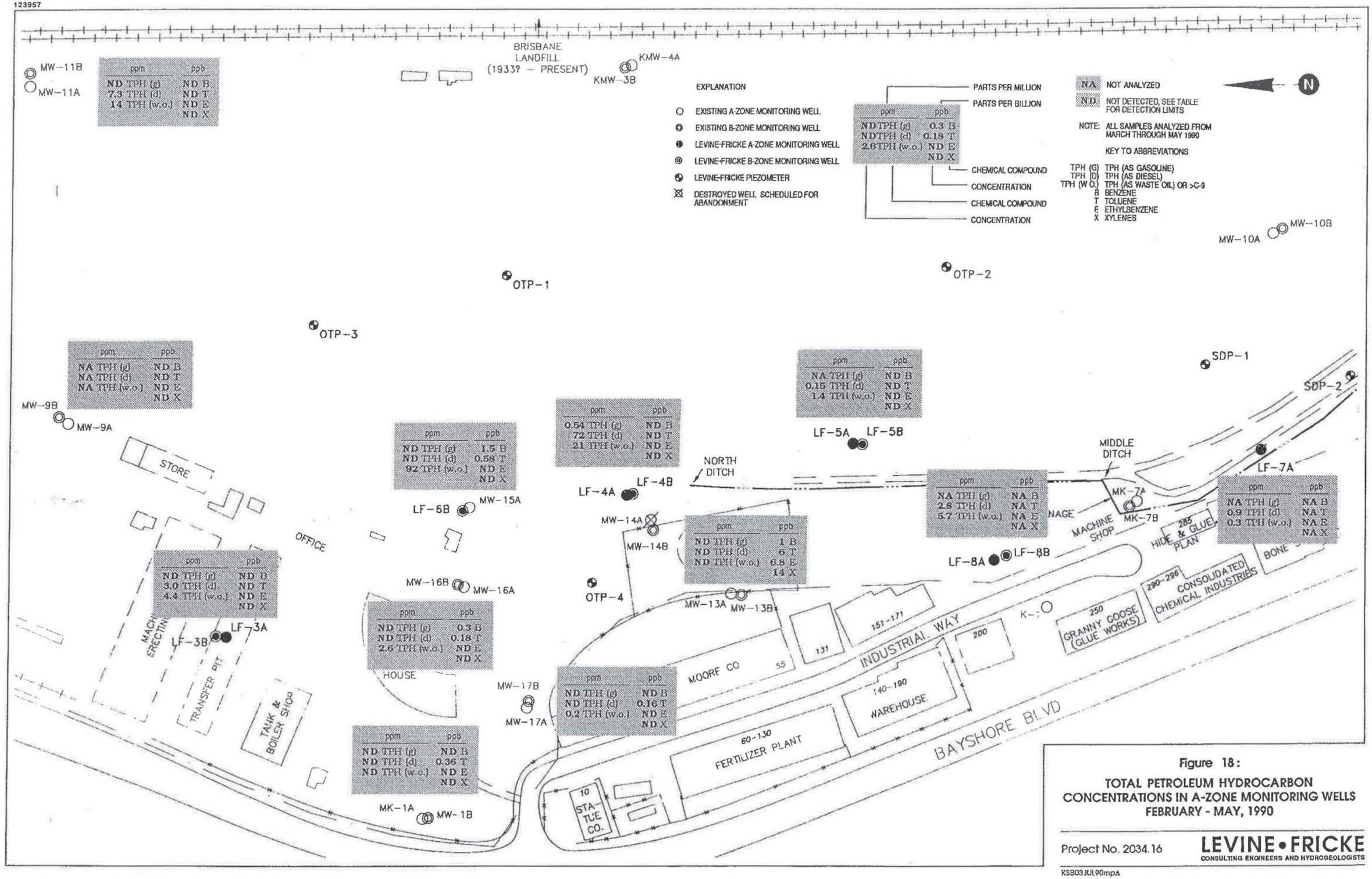


Figure 18:

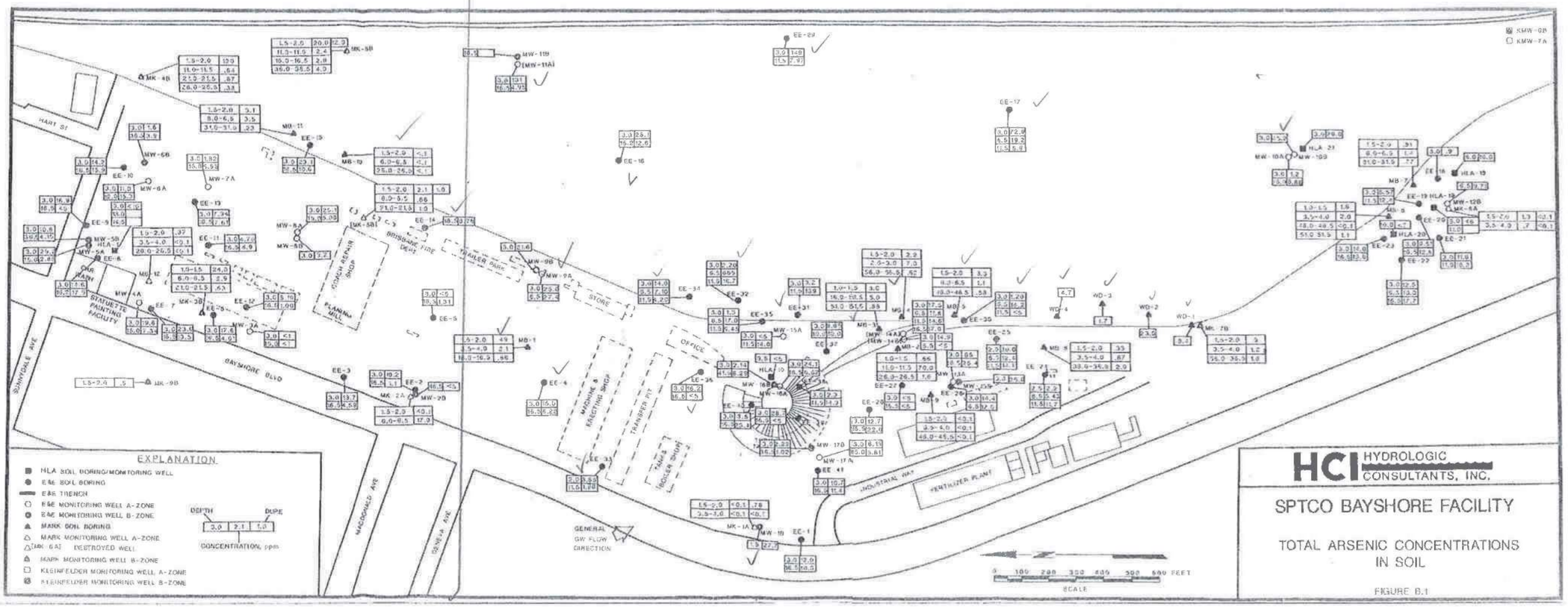
TOTAL PETROLEUM HYDROCARBON CONCENTRATIONS IN A-ZONE MONITORING WELLS FEBRUARY - MAY, 1990

Project No. 2034.16

LEVINE • FRICKE
CONSULTING ENGINEERS AND HYDROGEOLOGISTS

KSB03JUL90mpA

OU1 | OU2

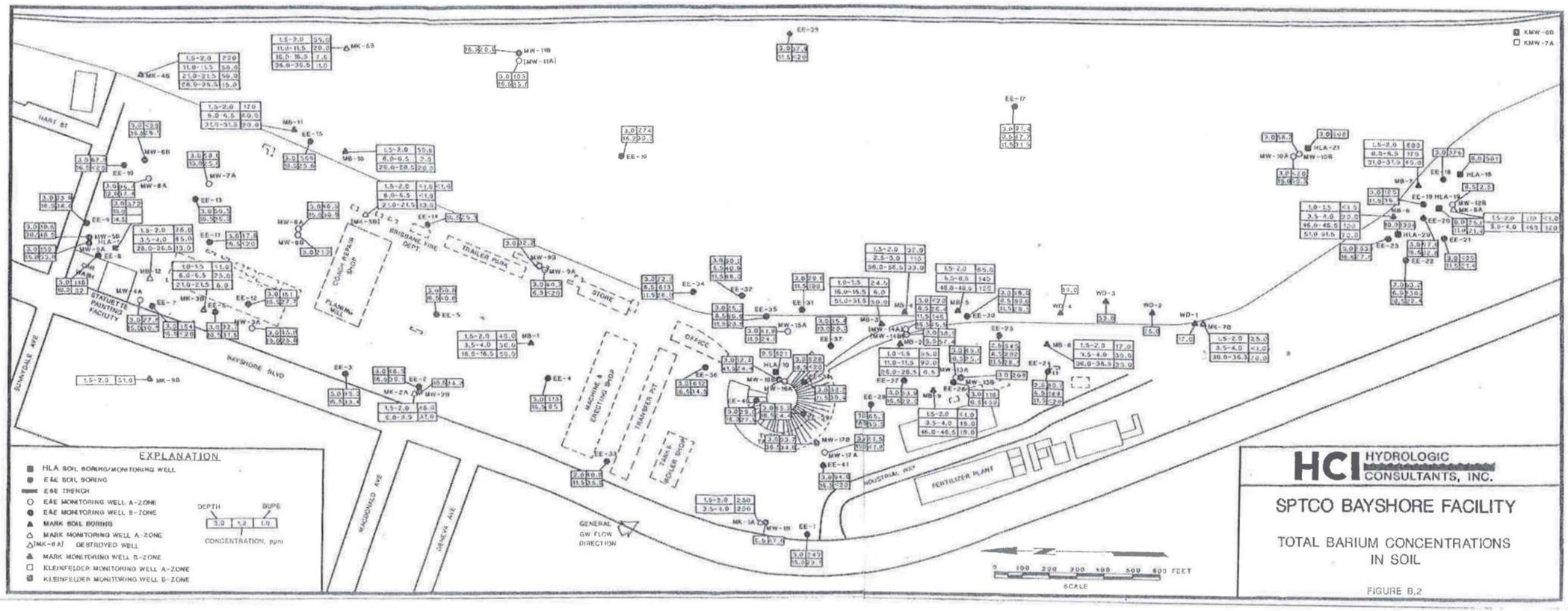


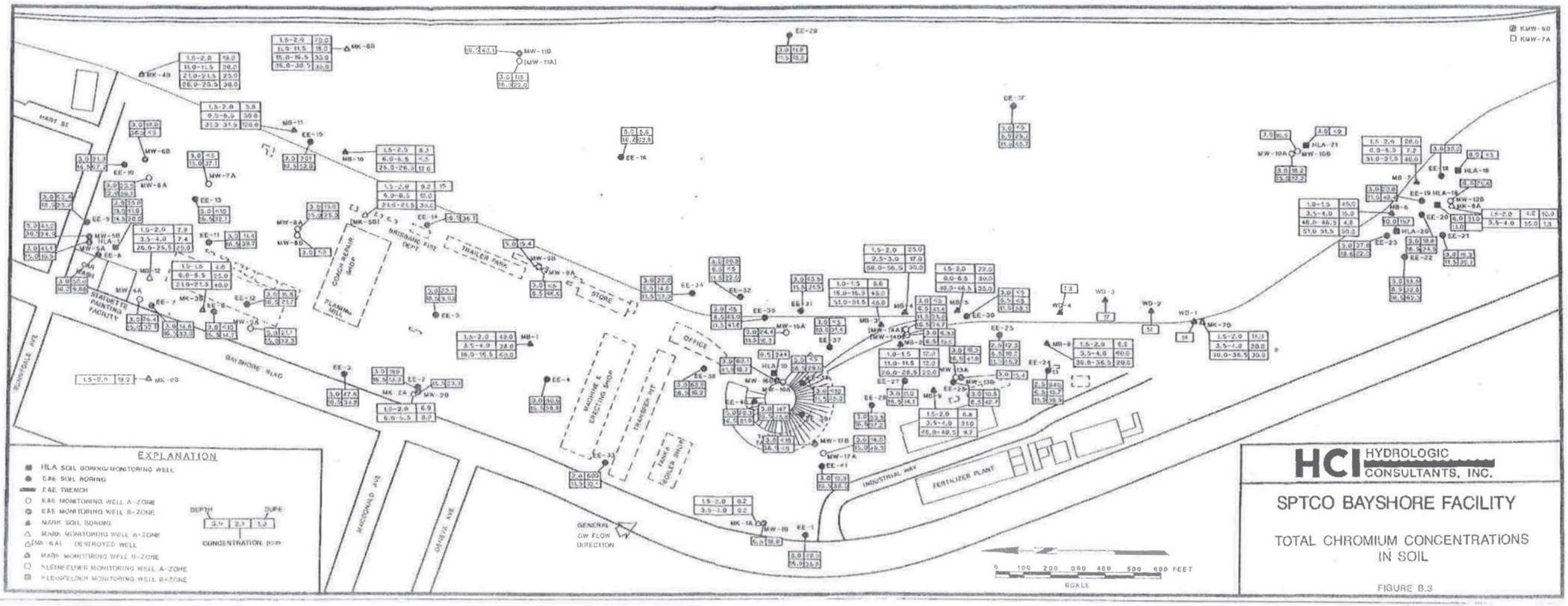
HCI HYDROLOGIC CONSULTANTS, INC.

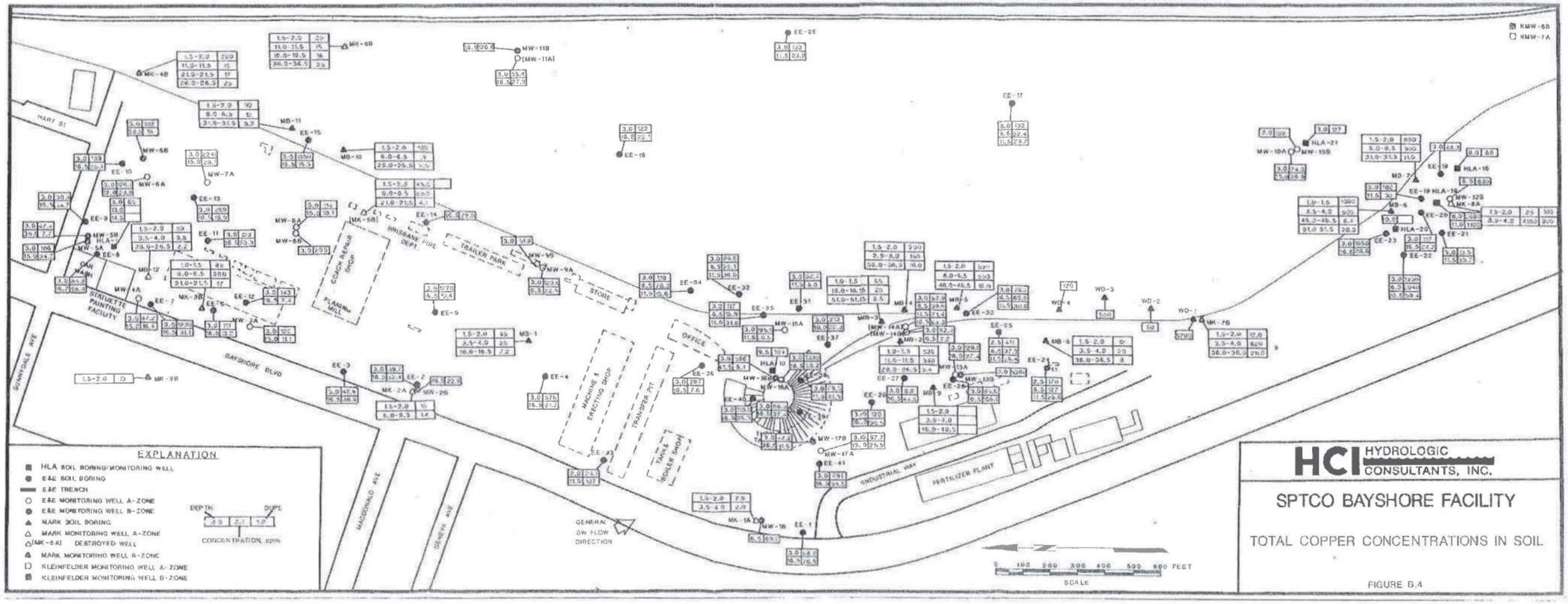
SPTCO BAYSHORE FACILITY

TOTAL ARSENIC CONCENTRATIONS IN SOIL

FIGURE 8.1


EXPLANATION
HLA SOIL BORING/MONITORING WELL
EAE SOIL BORING
EAE TRENCH
EAE MONITORING WELL A-ZONE
EAE MONITORING WELL B-ZONE
MARK SOIL BORING
MARK MONITORING WELL A-ZONE
(MK-6 A) DESTROYED WELL
MARK MONITORING WELL B-ZONE
KLEINFELDER MONITORING WELL A-ZONE
KLEINFELDER MONITORING WELL B-ZONE
DEPTH
DUPE
CONCENTRATION, ppm
KMW-6D
KMW-7A
HART ST
SUNYDALE AVE
BAYSHORE BLVD
MACDONALD AVE
GENEVA AVE
BRISBANE FIRE DEPT.
TRAILER PARK
COACH REPAIR SHOP
PLASTIC MFG.
STORE
OFFICE
MACHINE & ERECTING SHOP
TIMBER PIT
BOILER SHOP
INDUSTRIAL WAY
FERTILIZER PLANT
GENERAL GW FLOW DIRECTION
SCALE
0 100 200 300 400 500 600 FEET
HCI HYDROLOGIC CONSULTANTS, INC.
SPTCO BAYSHORE FACILITY
TOTAL BARIUM CONCENTRATIONS IN SOIL
FIGURE 6.2


EXPLANATION
HLA SOIL BORING/MONITORING WELL
EAE SOIL BORING
EAE TRENCH
EAB MONITORING WELL A-ZONE
EAB MONITORING WELL B-ZONE
MARK SOIL BORING
MARK MONITORING WELL A-ZONE
MARK MONITORING WELL B-ZONE
NLEIBFELDER MONITORING WELL A-ZONE
NLEIBFELDER MONITORING WELL B-ZONE
DESTROYED WELL
DEPTH
DUPE
CONCENTRATION ppb
GENERAL GW FLOW DIRECTION
BAYSHORE BLVD
HART ST
MACDONALD AVE
OAKDALE AVE
INDUSTRIAL WAY
FERTILIZER PLANT
OFFICE
STORE
SCALE
0 100 200 300 400 500 600 FEET
HCI HYDROLOGIC CONSULTANTS, INC.
SPTCO BAYSHORE FACILITY
TOTAL CHROMIUM CONCENTRATIONS IN SOIL
FIGURE 8.3



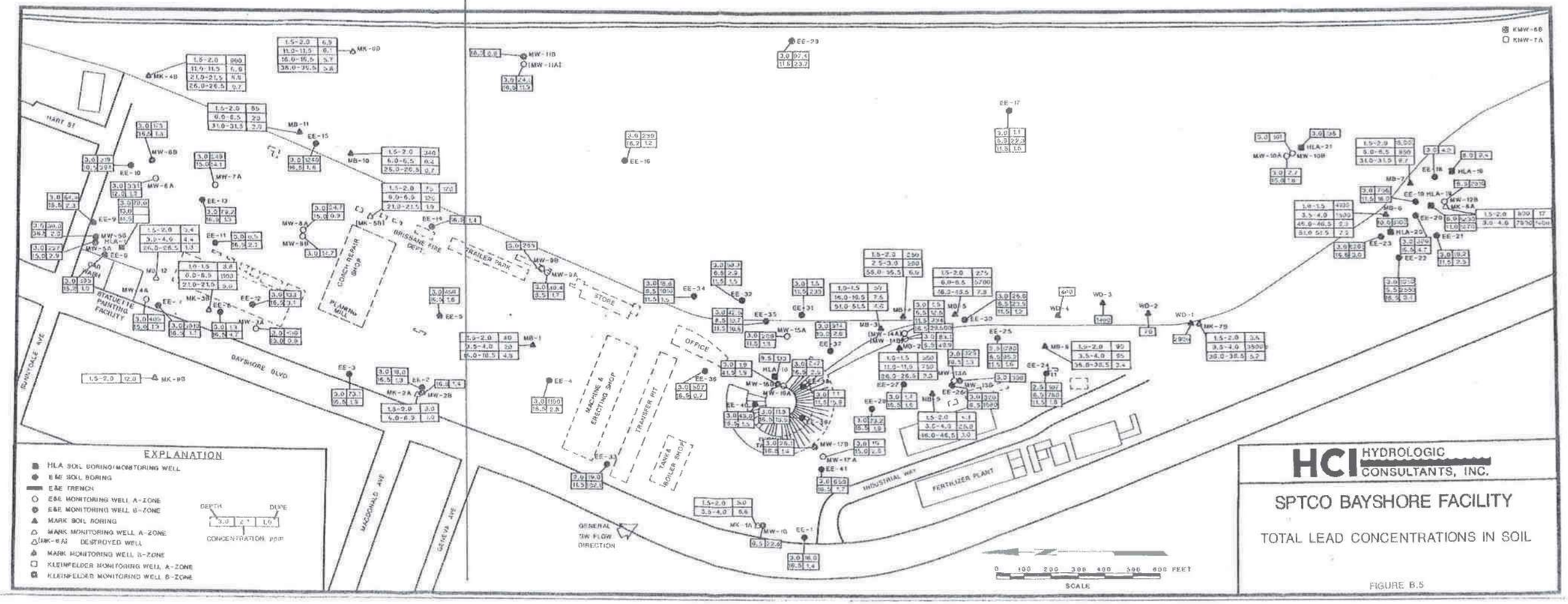
HCI HYDROLOGIC CONSULTANTS, INC.

SPTCO BAYSHORE FACILITY

TOTAL COPPER CONCENTRATIONS IN SOIL

FIGURE B.4

001 002

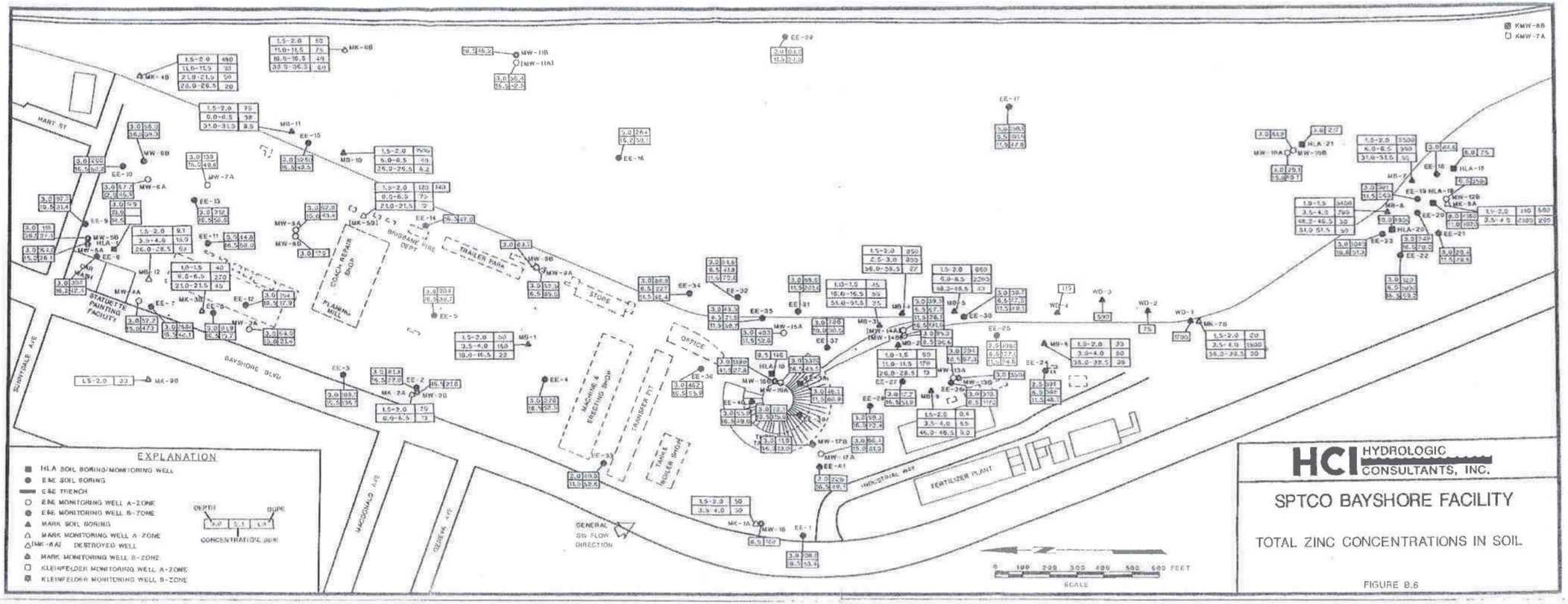


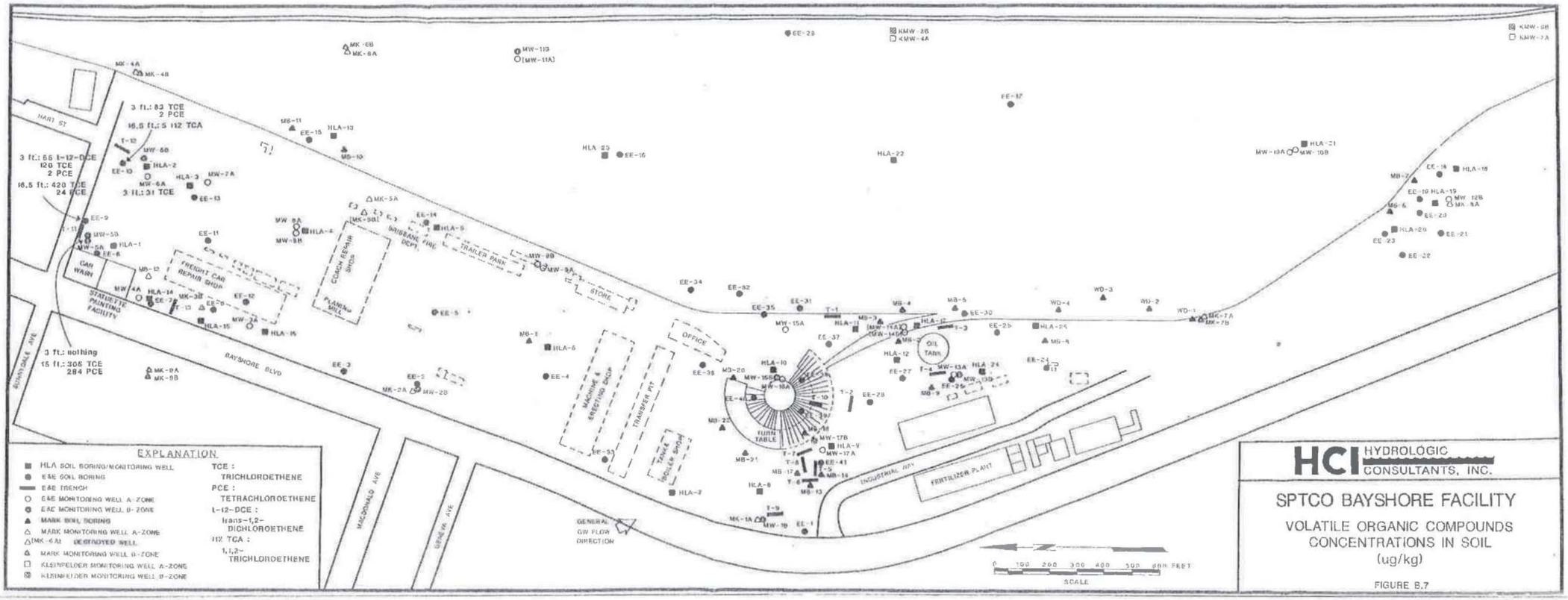
HCI HYDROLOGIC CONSULTANTS, INC.

SPTCO BAYSHORE FACILITY

TOTAL LEAD CONCENTRATIONS IN SOIL

FIGURE B.5


EXPLANATION
HLA SOIL BORING/MONITORING WELL
E&E SOIL BORING
C&E TRENCH
E&E MONITORING WELL A-ZONE
E&E MONITORING WELL B-ZONE
MARK SOIL BORING
MARK MONITORING WELL A-ZONE
MARK MONITORING WELL B-ZONE
KLEINFELDER MONITORING WELL A-ZONE
KLEINFELDER MONITORING WELL B-ZONE
DESTROYED WELL
DEPTH
DUPE
CONCENTRATION (ppm)
HART ST
SUNNYDALE AVE
BAYSHORE BLVD
MACDONALD AVE
OBERLIN AVE
CAR WASH
STATUETTE PAINTING FACILITY
COACH REPAIR SHOP
PLANNING
BRISBANE FIRE DEPT
TRAILER PARK
STORE
OFFICE
MACHINE & ERECTING SHOP
TRANSFER PIT
PAINT SHOP
INDUSTRIAL WAY
FERTILIZER PLANT
GENERAL SW FLOW DIRECTION
SCALE
0 100 200 300 400 500 600 FEET
HCI HYDROLOGIC CONSULTANTS, INC.
SPTCO BAYSHORE FACILITY
TOTAL ZINC CONCENTRATIONS IN SOIL
FIGURE B.6

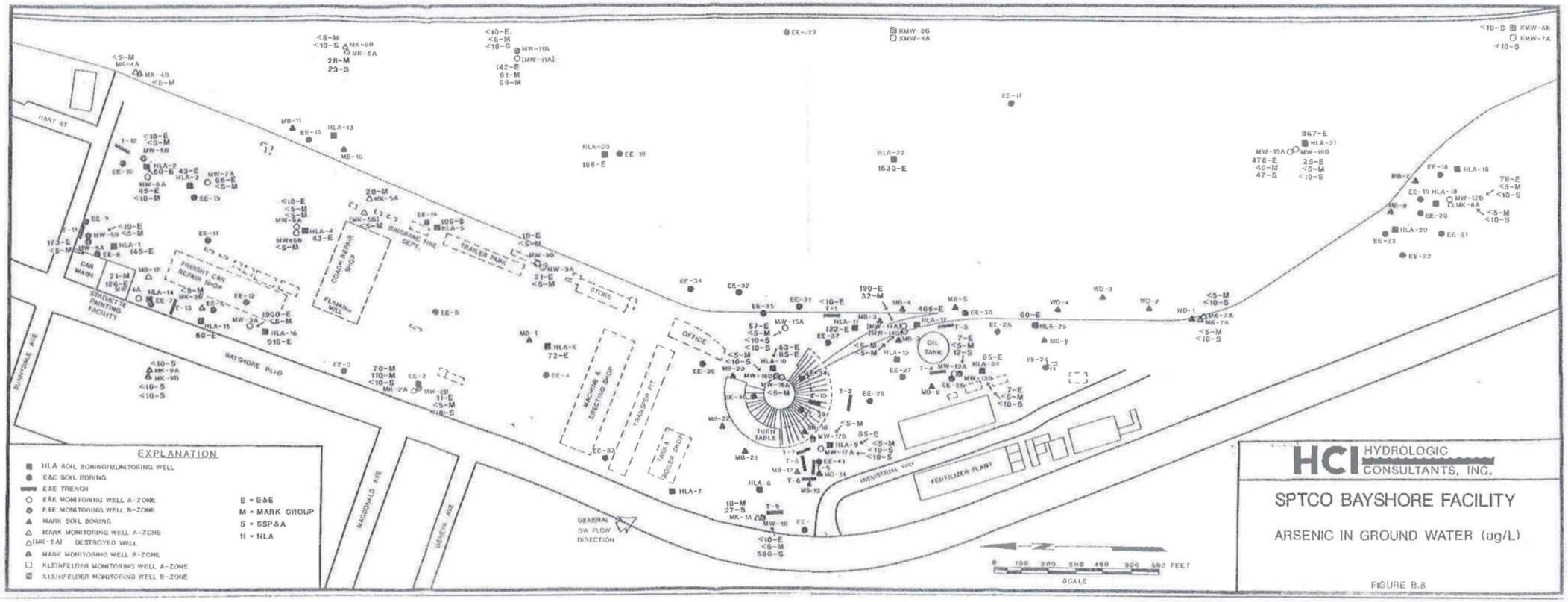


HCI HYDROLOGIC CONSULTANTS, INC.

SPTCO BAYSHORE FACILITY

VOLATILE ORGANIC COMPOUNDS CONCENTRATIONS IN SOIL (ug/kg)

FIGURE B.7

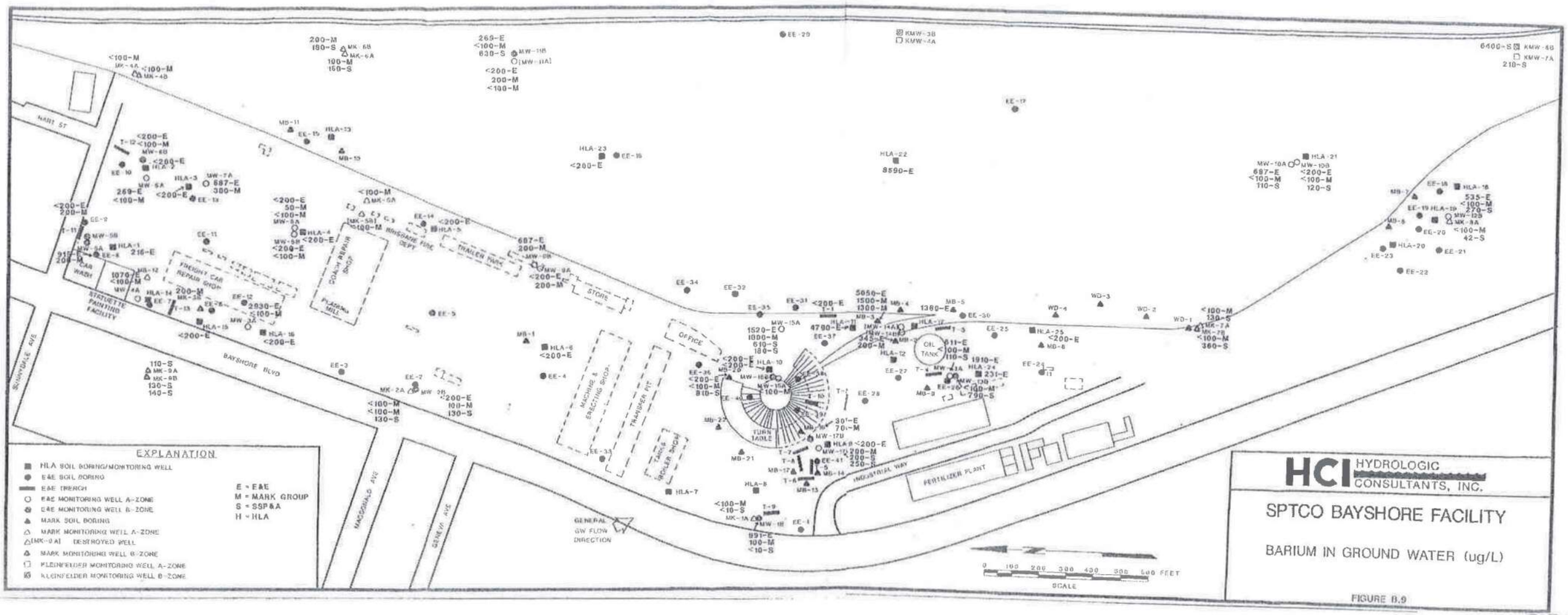


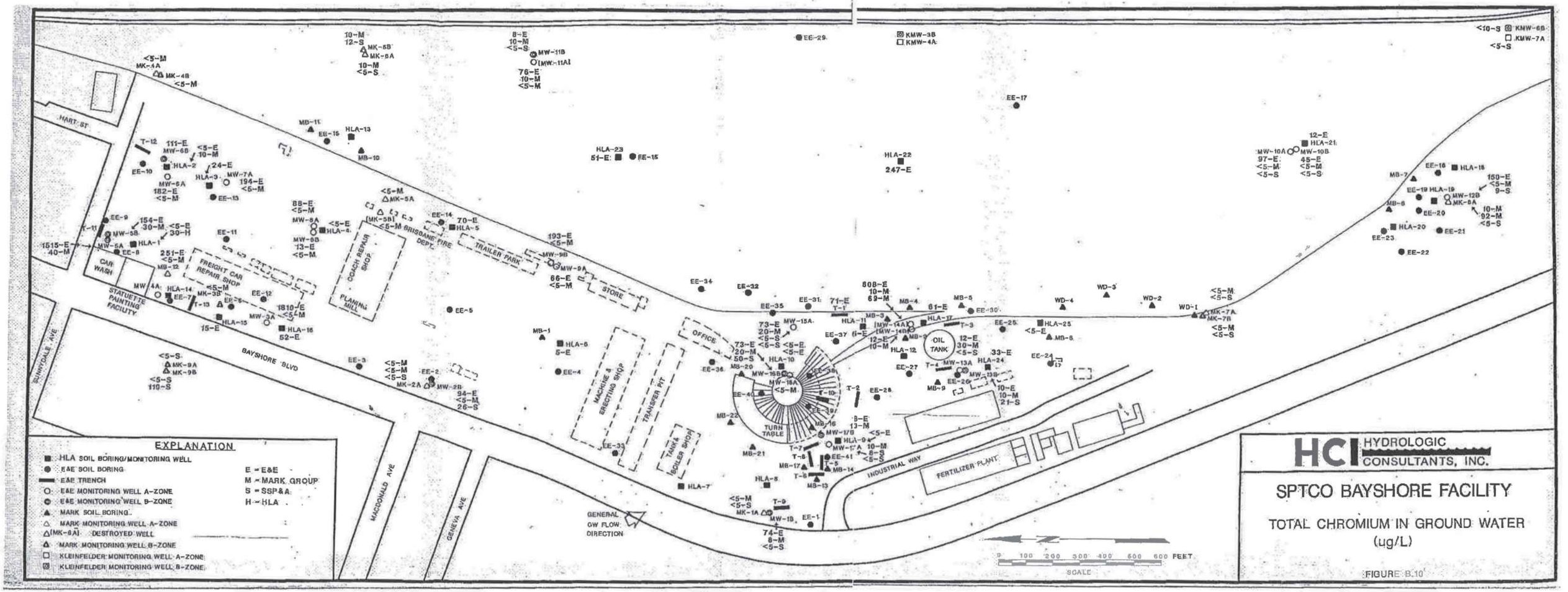
HCI HYDROLOGIC CONSULTANTS, INC.

SPTCO BAYSHORE FACILITY

ARSENIC IN GROUND WATER (ug/L)

FIGURE B.8


EXPLANATION
HLA SOIL BORING/MONITORING WELL
E&E SOIL BORING
E&E TRENCH
E&E MONITORING WELL A-ZONE
E&E MONITORING WELL B-ZONE
MARK SOIL BORING
MARK MONITORING WELL A-ZONE
(MK-9 A) DESTROYED WELL
MARK MONITORING WELL B-ZONE
KLEINFELDER MONITORING WELL A-ZONE
KLEINFELDER MONITORING WELL B-ZONE
E = E&E
M = MARK GROUP
S = SSP&A
H = HLA
GENERAL GW FLOW DIRECTION
BAYSHORE BLVD
SCALE
0 100 200 300 400 500 600 FEET
HCI HYDROLOGIC CONSULTANTS, INC.
SPTCO BAYSHORE FACILITY
BARIUM IN GROUND WATER (ug/L)
FIGURE 8.9

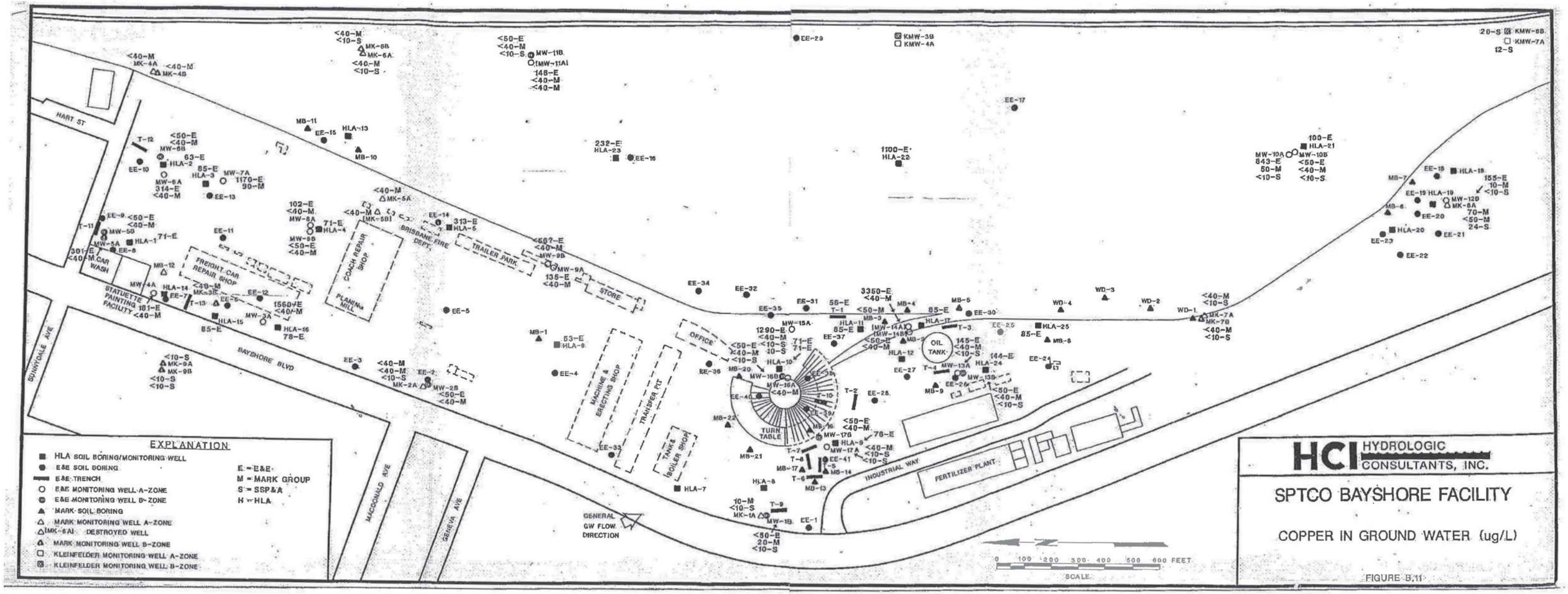


HCI HYDROLOGIC CONSULTANTS, INC.

SPTCO BAYSHORE FACILITY

TOTAL CHROMIUM IN GROUND WATER (ug/L)

FIGURE B.10

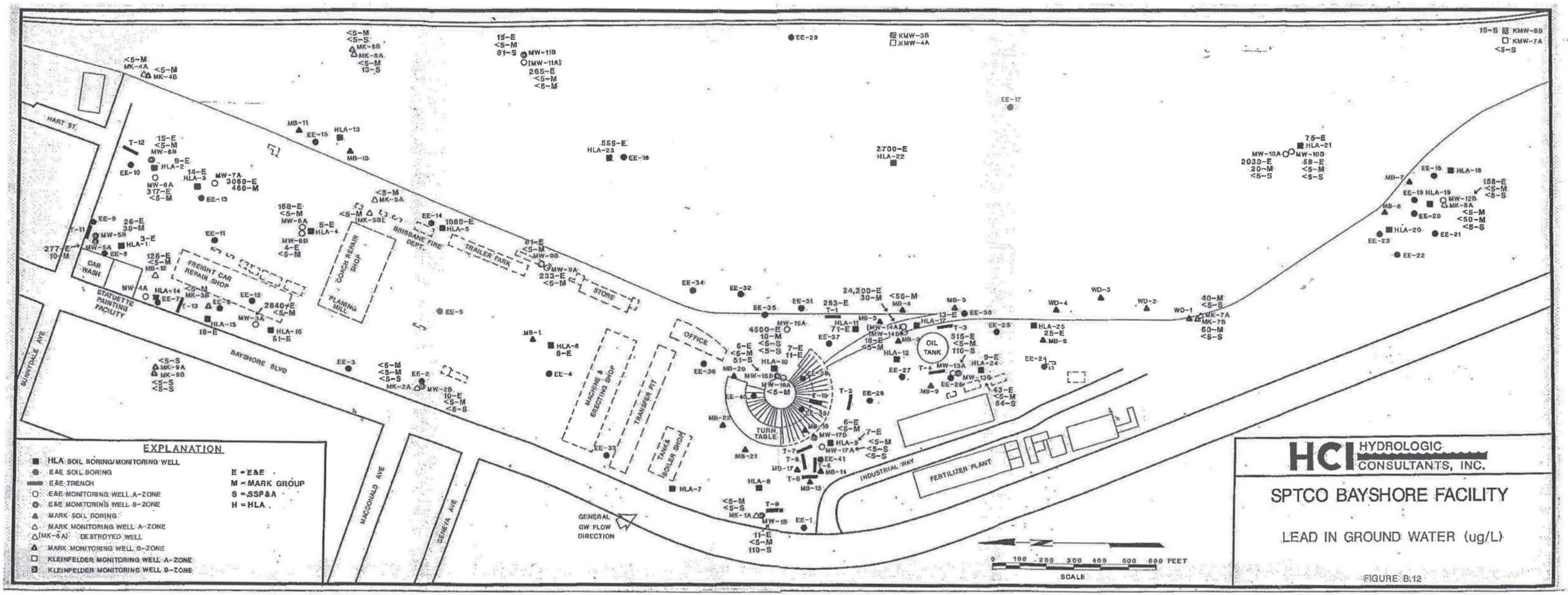


HCI HYDROLOGIC CONSULTANTS, INC.

SPTCO BAYSHORE FACILITY

COPPER IN GROUND WATER (ug/L)

FIGURE B.11



HCI HYDROLOGIC CONSULTANTS, INC.

SPTCO BAYSHORE FACILITY

LEAD IN GROUND WATER (ug/L)

FIGURE B-12

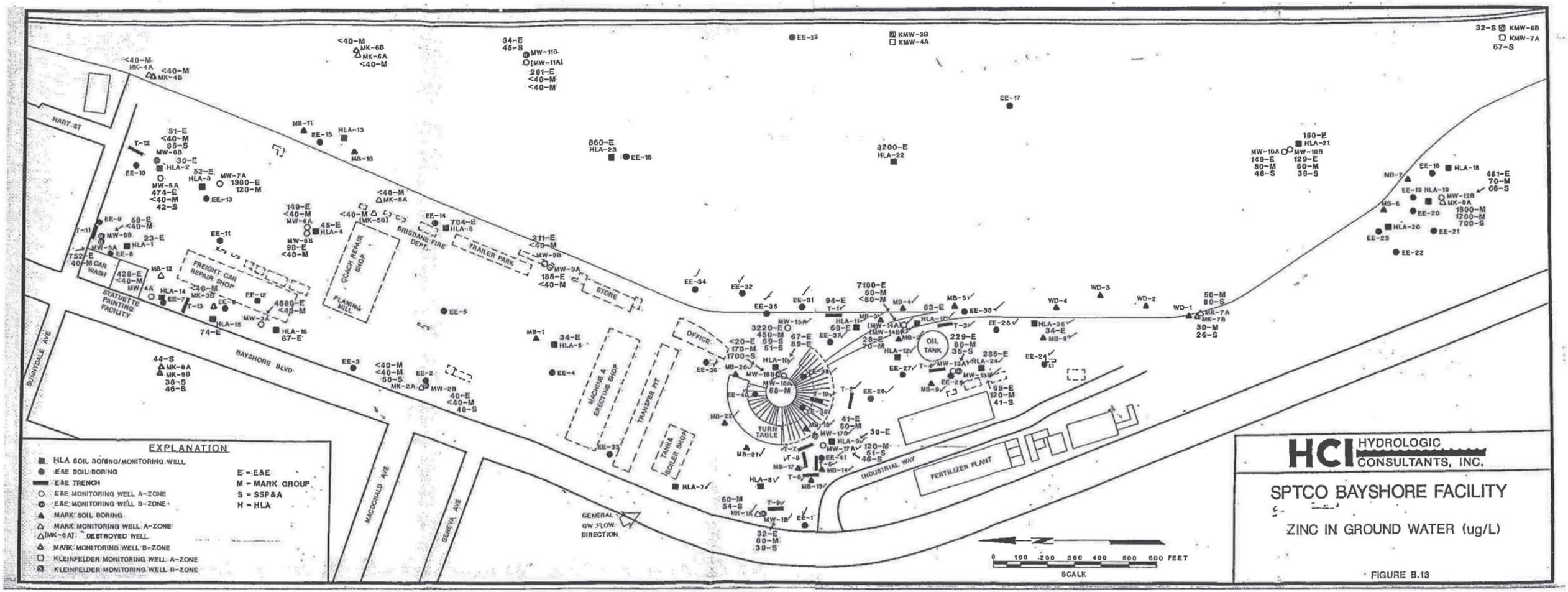
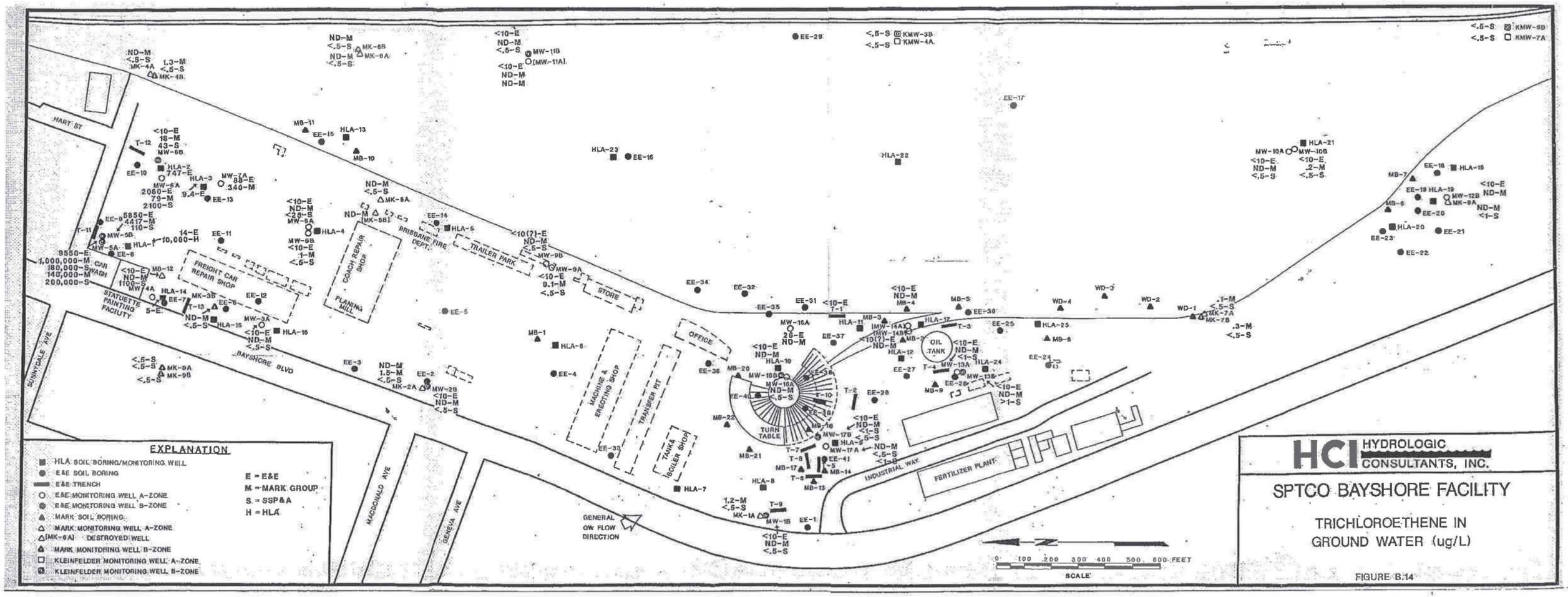

HART ST
BAYSHORE BLVD
SUNNYDALE AVE
MACDONALD AVE
GENEVA AVE
BRISBANE FIRE DEPT.
TRAILER PARK
FREIGHT CAR REPAIR SHOP
COACH REPAIR SHOP
PLANING MILL
STORE
STATUETTE PAINTING FACILITY
752-E 40-M CAR WASH
OFFICE
MACHINE & ERECTING SHOP
TRANSFER PIT
TANK & BOILER SHOP
TURN TABLE
OIL TANK
FERTILIZER PLANT
INDUSTRIAL WAY
GENERAL GW FLOW DIRECTION
EXPLANATION
HLA SOIL BORING/MONITORING WELL
E&E SOIL BORING
E&E TRENCH
E&E MONITORING WELL A-ZONE
E&E MONITORING WELL B-ZONE
MARK SOIL BORING
MARK MONITORING WELL A-ZONE
(MK-6A) DESTROYED WELL
MARK MONITORING WELL B-ZONE
KLEINFELDER MONITORING WELL A-ZONE
KLEINFELDER MONITORING WELL B-ZONE
E = E&E
M = MARK GROUP
S = SSP&A
H = HLA
0 100 200 300 400 500 600 FEET
SCALE
HCI HYDROLOGIC CONSULTANTS, INC.
SPTCO BAYSHORE FACILITY
ZINC IN GROUND WATER (ug/L)

FIGURE B.13


HART ST
SUNNYDALE AVE
BAYSHORE BLVD
MACDONALD AVE
GENEVA AVE
FREIGHT CAR REPAIR SHOP
COACH REPAIR SHOP
PLANING MILL
STATUETTE PAINTING FACILITY
CAR WASH
BRISBANE FIRE DEPT.
TRAILER PARK
STORE
OFFICE
MACHINE & ERECTING SHOP
TRANSFER PIT
TANK & BOILER SHOP
TURN TABLE
OIL TANK
INDUSTRIAL WAY
FERTILIZER PLANT
GENERAL GW FLOW DIRECTION
EXPLANATION
HLA SOIL BORING/MONITORING WELL
E&E SOIL BORING
E&E TRENCH
E&E MONITORING WELL A-ZONE
E&E MONITORING WELL B-ZONE
MARK SOIL BORING
MARK MONITORING WELL A-ZONE
(MK-6A) DESTROYED WELL
MARK MONITORING WELL B-ZONE
KLEINFELDER MONITORING WELL A-ZONE
KLEINFELDER MONITORING WELL B-ZONE
E = E&E
M = MARK GROUP
S = SSP&A
H = HLA
0 100 200 300 400 500 600 FEET
SCALE
HCI HYDROLOGIC CONSULTANTS, INC.
SPTCO BAYSHORE FACILITY
TRICHLOROETHENE IN GROUND WATER (ug/L)
FIGURE B-14

OU1 | OU2

EXPLANATION

- HLA SOIL BORING/MONITORING WELL
- E&E SOIL BORING
- E&E TRENCH
- E&E MONITORING WELL A-ZONE
- E&E MONITORING WELL B-ZONE
- MARK SOIL BORING
- MARK MONITORING WELL A-ZONE
- (MK-6A) DESTROYED WELL
- MARK MONITORING WELL B-ZONE
- KLEINFELDER MONITORING WELL A-ZONE
- KLEINFELDER MONITORING WELL B-ZONE

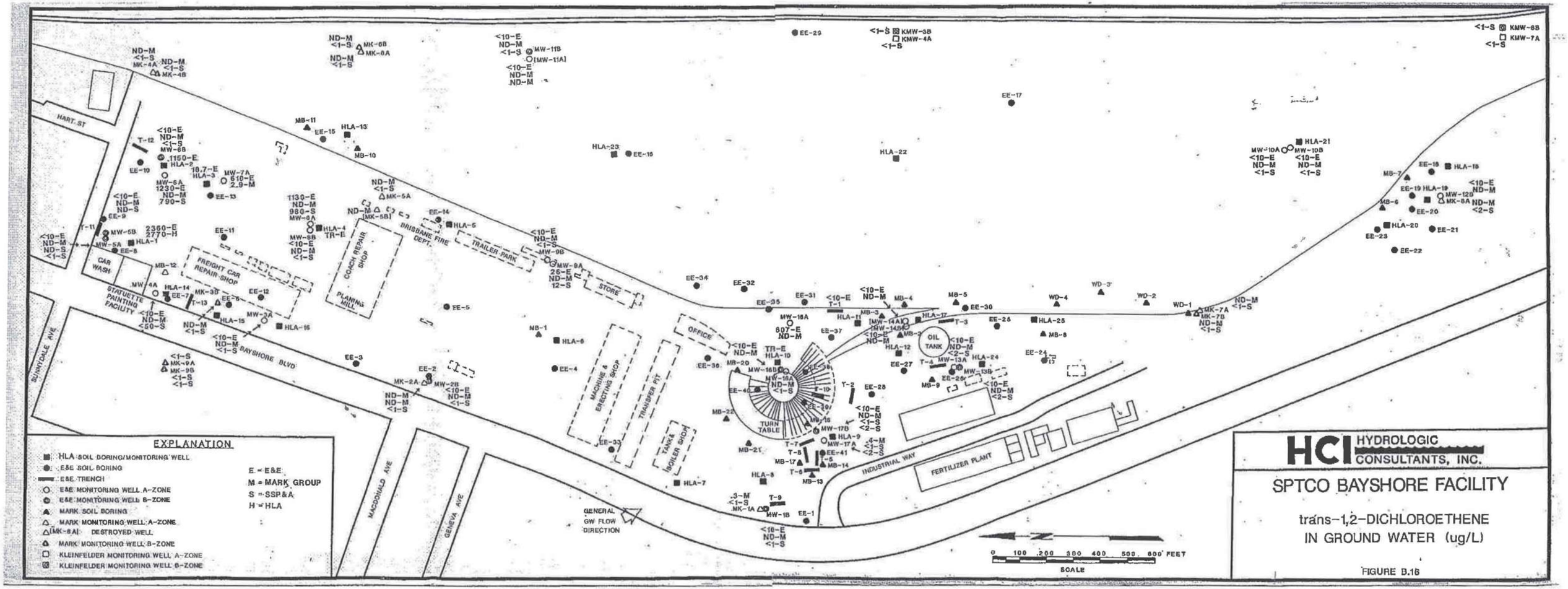
E = E&E
M = MARK GROUP
S = SSP&A
H = HLA

HCI HYDROLOGIC CONSULTANTS, INC.

SPTCO BAYSHORE FACILITY

TETRACHLOROETHENE IN GROUND WATER (ug/L)

FIGURE B.15



HCI HYDROLOGIC CONSULTANTS, INC.

SPTCO BAYSHORE FACILITY

trans-1,2-DICHLOROETHENE IN GROUND WATER (ug/L)

FIGURE B.16

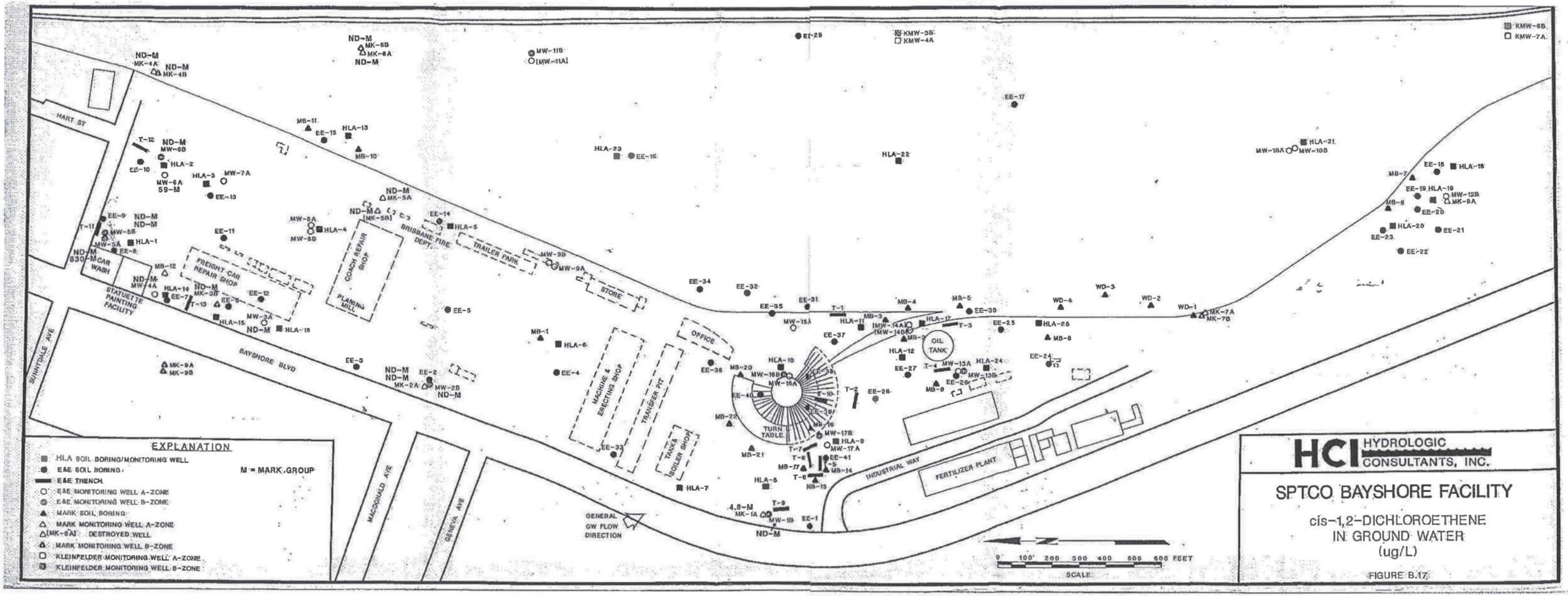
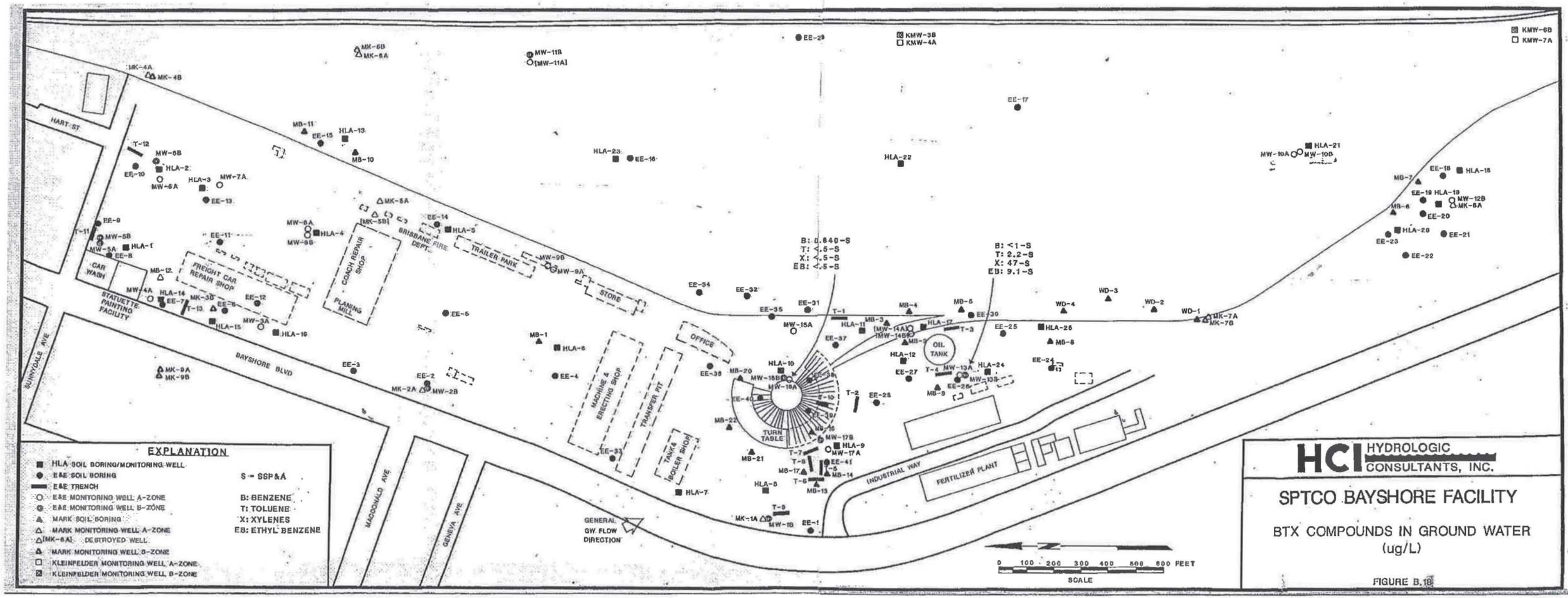

HART ST
BAYSHORE BLVD
SUNNYDALE AVE
MACDONALD AVE
GENEVA AVE
INDUSTRIAL WAY
FERTILIZER PLANT
TRAILER PARK
COACH REPAIR SHOP
PLANING MILL
FREIGHT CAR REPAIR SHOP
CAR WASH
STATUETTE PAINTING FACILITY
STORE
OFFICE
MACHINE & ERECTING SHOP
TRANSFER PIT
TANK & BOILER SHOP
TURN TABLE
OIL TANK
BRISBANE FIRE DEPT.
GENERAL GW FLOW DIRECTION
EXPLANATION
HLA SOIL BORING/MONITORING WELL
EAE SOIL BORING
EAE TRENCH
EAE MONITORING WELL A-ZONE
EAE MONITORING WELL B-ZONE
MARK SOIL BORING
MARK MONITORING WELL A-ZONE
(MK-6A) DESTROYED WELL
MARK MONITORING WELL B-ZONE
KLEINFELDER MONITORING WELL A-ZONE
KLEINFELDER MONITORING WELL B-ZONE
M = MARK GROUP
0 100' 200 300 400 500 600 FEET
SCALE
HCI HYDROLOGIC CONSULTANTS, INC.
SPTCO BAYSHORE FACILITY
cis-1,2-DICHLOROETHENE IN GROUND WATER (ug/L)

FIGURE B.17


HART ST
BAYSHORE BLVD
SUNNYDALE AVE
MACDONALD AVE
GENEVA AVE
INDUSTRIAL WAY
CAR WASH
STATUETTE PAINTING FACILITY
FREIGHT CAR REPAIR SHOP
COACH REPAIR SHOP
PLANING MILL
BRISBANE FIRE DEPT.
TRAILER PARK
STORE
OFFICE
MACHINE & ERECTING SHOP
TRANSFER PIT
TANK & BOILER SHOP
TURN TABLE
OIL TANK
FERTILIZER PLANT
GENERAL GW. FLOW DIRECTION
B: 0.840-S
T: <.5-S
X: <.5-S
EB: <.5-S
B: <1-S
T: 2.2-S
X: 47-S
EB: 9.1-S
EXPLANATION
HLA SOIL BORING/MONITORING WELL
EAE SOIL BORING
EAE TRENCH
EAE MONITORING WELL A-ZONE
EAE MONITORING WELL B-ZONE
MARK SOIL BORING
MARK MONITORING WELL A-ZONE
[MK-8A] DESTROYED WELL
MARK MONITORING WELL B-ZONE
KLEINFELDER MONITORING WELL A-ZONE
KLEINFELDER MONITORING WELL B-ZONE
S = SSP&A
B: BENZENE
T: TOLUENE
X: XYLENES
EB: ETHYL BENZENE
0 100 200 300 400 500 600 FEET
SCALE
HCI HYDROLOGIC CONSULTANTS, INC.
SPTCO BAYSHORE FACILITY
BTX COMPOUNDS IN GROUND WATER
(ug/L)
FIGURE B.18

APPENDIX B-4

Burns & McDonnell [1997]

STEVE - COPY OF FINAL TEXT & TABLES FOR YOUR FILES. - SCOTT

301

ADDITIONAL SITE CHARACTERIZATION REPORT
FORMER BAYSHORE RAILYARD
BRISBANE, CALIFORNIA

PREPARED FOR:
SUNQUEST PROPERTIES, INC.
150 EXECUTIVE PARK BLVD., STE. 4200
SAN FRANCISCO, CALIFORNIA

DECEMBER 1997

PROJECT NO. 97-221-4

Burns & McDonnell Waste Consultants, Inc.
Engineers-Geologists-Scientists
South San Francisco, California

Table 1

Total Petroleum Hydrocarbon Concentrations in Soil
Former Bayshore Railyard
Brisbane, California

Sample ID	Laboratory ID	Site Area	Date Sampled	Sample Depth (ft bgs)	TPHd (mg/kg)	TPHc (mg/kg)
P-1A-SB-1	130806-17	OTT	09/25/97	2.5 - 3.0	15	58
P-1A-SB-2	130806-18	OTT	09/25/97	5.5 - 6.0	ND < 10	ND < 50
P-1B-SB-1	130326-01	OTT	08/18/97	2.5 - 3.0	ND < 10	ND < 50
P-1B-SB-2	130326-02	OTT	08/18/97	6.0 - 6.5	160	950
P-1C-SB-1	130326-03	OTT	08/18/97	2.5 - 3.0	8,400	36,000
P-1C-SB-3	130326-05	OTT	08/18/97	8.0 - 8.5	560	1,900
P-2B-SB-1	130355-26	OTT	08/20/97	5.5 - 6.0	ND < 10	ND < 50
P-2C-SB-1	130326-06	OTT	08/18/97	5.5 - 6.0	14,000	44,000
P-3A-SB-1	130806-16	OTT	09/25/97	5.0 - 5.5	ND < 10	ND < 50
P-3B-SB-1	130806-15	OTT	09/25/97	5.5 - 6.0	6,600	27,000
P-3C-SB-1	130326-18	OTT	08/19/97	7.0 - 7.5	14,000	46,000
P-3D-SB-1	130326-15	OTT	08/19/97	8.5 - 9.0	13,000	39,000
P-4A-SB-1	130806-27	OTT	09/26/97	6.5 - 7.0	3,900	16,000
P-4B-SB-1	130806-33	OTT	09/26/97	6.0 - 6.5	1,400	5,700
P-4C-SB-1	130326-19	OTT	08/19/97	4.5 - 5.0	1,300	10,000
P-4D-SB-1	130326-16	OTT	08/19/97	5.0 - 5.5	3,500	11,000
P-5A-SB-1	130806-26	OTT	09/25/97	8.0 - 8.5	1,800	7,300
P-5B-SB-1	130326-17	OTT	08/19/97	5.5 - 6.0	24,000	75,000
P-6B-SB-1	130355-28	OTT	08/20/97	7.5 - 8.0	ND < 10	ND < 50
P-6C-SB-1	130326-07	OTT	08/18/97	4.5 - 5.0	41,000	120,000
P-7A-SB-1	130806-25	OTT	09/25/97	7.5 - 8.0	19,000	72,000
P-7B-SB-1	130355-27	OTT	08/20/97	7.0 - 7.5	7,100	25,000
P-7C-SB-1	130326-08	OTT	08/18/97	7.5 - 8.0	27,000	83,000
P-8A-SB-1	130806-23	OTT	09/25/97	3.0 - 3.5	15,000	42,000
P-8A-SB-2	130806-24	OTT	09/25/97	6.5 - 7.0	230	730
P-8B-SB-1	130326-20	OTT	08/19/97	2.5 - 3.0	310	2,900
P-8B-SB-2	130326-21	OTT	08/19/97	5.0 - 5.5	21	130
P-8C-SB-1	130326-09	OTT	08/18/97	2.5 - 3.0	590	5,000
P-8C-SB-2	130326-10	OTT	08/18/97	9.5 - 10.0	10,000	3,300
P-9A-SB-1	130806-19	OTT	09/25/97	3.0 - 3.5	4,100	8,100
P-9A-SB-2	130806-20	OTT	09/25/97	6.0 - 7.0	520	1,100
P-9B-SB-1	130326-11	OTT	08/18/97	2.5 - 3.0	11,000	18,000
P-9B-SB-2	130326-12	OTT	08/18/97	6.0 - 6.5	4,400	15,000
P-9C-SB-1	130326-13	OTT	08/18/97	2.5 - 3.0	380	3,600

TPHd - Total Petroleum Hydrocarbons as diesel using EPA Method 8015 (modified)
TPHc - Total Petroleum Hydrocarbons as Bunker C using EPA Method 8015 (modified)

mg/kg - milligrams per kilogram
ND - Not detected above indicated detection limit
ft bgs - feet below ground surface

OTT - Oil Tank / Turntable Area
SDA - South Disposal Area
UST - Former Underground Storage Tank Area

table1.xls

Table 1 (continued)

Total Petroleum Hydrocarbon Concentrations in Soil
Former Bayshore Railyard
Brisbane, California

Sample ID	Laboratory ID	Site Area	Date Collected	Sample Depth (ft bgs)	TPHd (mg/kg)	TPHc (mg/kg)
P-9C-SB-2	130326-14	OTT	08/18/97	8.0 - 8.5	ND < 10	ND < 50
P-15A-SB-2	130806-31	SDA	09/26/97	5.5 - 6.0	6,100	24,000
P-15B-SB-2	130806-29	SDA	09/26/97	6.0 - 6.5	380	1,800
P-16A-SB-1	130326-22	OTT	08/19/97	2.5 - 3.0	ND < 10	ND < 50
P-16A-SB-2	130326-23	OTT	08/19/97	4.0 - 4.5	240	2,200
P-17A-SB-1	130326-24	OTT	08/19/97	3.5 - 4.0	7,800	13,000
P-18A-SB-1	130355-14	OTT	08/19/97	1.5 - 2.0	2,000	7,200
P-18A-SB-2	130355-15	OTT	08/19/97	5.5 - 6.0	1,300	2,900
P-18B-SB-1	130806-21	OTT	09/25/97	3.0 - 3.5	8,600	16,000
P-18B-SB-2	130806-22	OTT	09/25/97	6.0 - 7.0	3,700	6,800
P-19A-SB-1	130355-24	UST	08/20/97	3.5 - 4.0	30	220
P-19A-SB-2	130355-25	UST	08/20/97	6.0 - 6.5	31	110
P-19B-SB-1	130355-16	UST	08/20/97	3.5 - 4.0	ND < 10	ND < 50
P-19B-SB-2	130355-17	UST	08/20/97	8.5 - 9.0	ND < 10	ND < 50
P-19C-SB-1	130355-18	UST	08/20/97	3.5 - 4.0	20	ND < 50
P-19C-SB-2	130355-19	UST	08/20/97	6.0 - 6.5	710	1,300
P-19D-SB-1	130355-20	UST	08/20/97	3.5 - 4.0	46	1,900
P-19D-SB-2	130355-21	UST	08/20/97	7.0 - 7.5	1,500	2,600
P-19E-SB-1	130355-22	UST	08/20/97	3.5 - 4.0	ND < 10	ND < 50
P-19E-SB-2	130355-23	UST	08/20/97	6.0 - 6.5	980	1,700
P-19G-SB-1	130806-01	UST	09/25/97	3.5 - 4.0	76	190
P-19G-SB-2	130806-02	UST	09/25/97	6.5 - 7.0	190	340
P-19H-SB-1	130806-03	UST	09/25/97	3.5 - 4.0	66	890
P-19H-SB-2	130806-04	UST	09/25/97	7.5 - 8.0	ND < 10	ND < 50
P-19I-SB-1	130806-05	UST	09/25/97	3.5 - 4.0	210	740
P-19I-SB-2	130806-06	UST	09/25/97	5.5 - 6.0	49	86

TPHd - Total Petroleum Hydrocarbons as diesel using EPA Method 8015 (modified)
TPHc - Total Petroleum Hydrocarbons as Bunker C using EPA Method 8015 (modified)

mg/kg - milligrams per kilogram
ND - Not detected above indicated detection limit
ft bgs - feet below ground surface

OTT - Oil Tank / Turntable Area
SDA - South Disposal Area
UST - Former Underground Storage Tank Area

Table 2

Semivolatile Organic Compound Concentrations in Soil
Former Bayshore Railyard
Brisbane, California

	Sample ID	P-1C-SB-3	P-3D-SB-1	P-5A-SB-1	P-7A-SB-1	P-9A-SB-1	P-19A-SB-1
	Laboratory ID	130326-05	130326-15	130806-26	130806-25	130806-19	130355-24
	Date Sampled	8/18/97	8/19/97	9/25/97	9/25/97	9/25/97	8/20/97
	Sample Depth (ft bgs)	8.0 - 8.5	6.5 - 7.0	8.0 - 8.5	7.5 - 8.0	3.0 - 3.5	3.5 - 4.0
	Site Area	OTT	OTT	OTT	OTT	OTT	UST
Parameter	Units						
Semivolatile Organic Compounds							
2-Methylnaphthalene	µg/kg	ND < 1,700	ND < 33,000	ND < 6,700	ND < 67,000	ND < 3,300	ND < 330
Phenanthrene	µg/kg	2,100	ND < 33,000	ND < 6,700	ND < 67,000	ND < 3,300	ND < 330
Fluoranthene	µg/kg	11,000	ND < 33,000	ND < 6,700	ND < 67,000	ND < 3,300	ND < 330
Pyrene	µg/kg	13,000	ND < 33,000	ND < 6,700	ND < 67,000	ND < 3,300	680
Benzo (a) anthracene	µg/kg	3,800	ND < 33,000	ND < 6,700	ND < 67,000	ND < 3,300	ND < 330
Chrysene	µg/kg	4,600	ND < 33,000	ND < 6,700	ND < 67,000	ND < 3,300	440
Benzo (b) fluoranthene	µg/kg	5,100	ND < 33,000	ND < 6,700	ND < 67,000	ND < 3,300	340
Benzo (k) fluoranthene	µg/kg	5,200	ND < 33,000	ND < 6,700	ND < 67,000	ND < 3,300	470
Benzo (a) pyrene	µg/kg	6,500	ND < 33,000	ND < 6,700	ND < 67,000	ND < 3,300	560
Indeno (1,2,3-cd) pyrene	µg/kg	3,700	ND < 33,000	ND < 6,700	ND < 67,000	ND < 3,300	ND < 330
Benzo (g,h,i) perylene	µg/kg	4,400	ND < 33,000	ND < 6,700	ND < 67,000	ND < 3,300	360

Semivolatile organic compounds analyzed using EPA Method 8270
ft bgs - feet below ground surface
µg/kg - micrograms per kilogram
ND - Not detected above indicated detection limit
OTT - Oil Tank / Turntable Area
UST - Former Underground Storage Tank Area
Please refer to the laboratory reports for dilution factors.

Table 3

Metal Concentrations in Soil
Former Bayshore Railyard
Brisbane, California

Sample ID	P-10A-SB-1	P-10A-SB-2	P-10B-SB-1	P-10C-SB-1	P-10C-SB-2	P-10D-SB-1	P-10E-SB-1
Laboratory ID	130806-12	130806-13	130806-11	130355-04	130355-05	130355-29	130355-06
Date	09/25/97	09/25/97	09/25/97	08/21/97	08/21/97	08/21/97	08/21/97
Sample Depth	0.5 - 1.0	5.5 - 6.0	5.5 - 6.0	0.25 - 0.75	5.5 - 6.0	5.5 - 6.0	0.25 - 0.75
Antimony	ND < 2.9	ND < 3.0	ND < 2.9	13	ND < 3.0	ND < 2.9	ND < 3.0
Arsenic	0.77	5.6	23	20	13	16	15
Barium	22	58	60	190	34	21	150
Beryllium	0.66	0.58	0.82	0.2	0.14	0.94	0.17
Cadmium	1.4	1.2	2.2	8.5	0.34	0.82	4.3
Total Chromium	10	9.9	25	76	19	22	71
Cobalt	7.8	7.4	14	47	4.4	12	10
Copper	76	52	36	610	16	26	220
Lead	5	1.6	20	900	44	40	250
Mercury	ND < 0.077	0.091	0.16	3	0.1	0.18	0.41
Molybdenum	2.4	1	ND < 0.95	15	ND < 1.0	ND < 0.97	5.4
Nickel	2.7	8.8	27	150	24	27	49
Selenium	0.35	ND < 0.25	ND < 0.24	1.1	ND < 0.24	ND < 0.24	0.46
Silver	ND < 0.48	ND < 0.50	ND < 0.48	1.5	ND < 0.50	ND < 0.48	0.77
Thallium	ND < 0.24	.25 U	ND < 0.24	ND < 0.25	ND < 0.25	ND < 0.24	ND < 0.25
Vanadium	69	51	34	34	14	29	37
Zinc	26	24	69	1,800	86	75	460

Sample ID	P-10E-SB-3	P-11C-SB-1	P-11C-SB-2	P-11D-SB-1	P-11E-SB-1	P-11E-SB-2	P-12A-SB-1
Laboratory ID	130355-07	130355-08	130355-09	130355-10	130355-11	130355-12	130806-07
Date	08/21/97	08/21/97	08/21/97	08/21/97	08/21/97	08/21/97	09/25/97
Sample Depth	5.5 - 6.0	0.25 - 0.75	6.0 - 6.5	6.5 - 7.0	0.25 - 0.75	4.5 - 5.0	0.5 - 1.0
Antimony	ND < 2.9	ND < 2.9	ND < 3.0	ND < 2.9	ND < 3.0	ND < 2.8	16
Arsenic	7.8	14	21	23	9.1	18	19
Barium	39	63	43	170	84	47	890
Beryllium	0.5	0.12	ND < 0.10	0.51	0.15	0.77	0.65
Cadmium	0.51	1.2	0.45	0.31	1.4	0.7	10
Total Chromium	24	18	6.3	16	25	26	69
Cobalt	9.5	4.8	9.3	8.3	7.4	17	13
Copper	19	100	110	6.6	250	51	880
Lead	15	170	0.45	9.4	200	31	1,900
Mercury	ND < 0.091	0.44	ND < 0.10	0.14	0.27	0.14	0.75
Molybdenum	ND < 0.98	1.5	ND < 1.0	ND < 0.96	2.2	ND < 0.95	3.6
Nickel	25	20	4	29	38	41	58
Selenium	ND < 0.24	ND < 0.24	ND < 0.25	ND < 0.24	0.77	0.29	0.46
Silver	ND < 0.49	ND < 0.49	ND < 0.50	ND < 0.48	ND < 0.50	ND < 0.47	3.7
Thallium	ND < 0.24	ND < 0.24	ND < 0.25	ND < 0.24	ND < 0.25	ND < 0.24	ND < 0.25
Vanadium	33	27	54	19	30	37	33
Zinc	250	200	29	32	220	140	4,000

Metals analyzed using 6000/7000 series of EPA Methods
ND - Not detected above indicated detection limit
All concentrations are in units of milligrams per kilogram (mg/kg)
Sample Depths are in units of feet below ground surface (ft bgs)
All samples collected from the South Disposal Area

table3.xls

Table 3 (continued)

Metal Concentrations in Soil
Former Bayshore Railyard
Brisbane, California

Sample ID	P-12A-SB-2	P-12B-SB-1	P-13A-SB-1	P-13B-SB-1	P-13B-SB-3	P-14A-SB-1	P-14B-SB-1
Laboratory ID	130806-08	130355-13	130806-32	130379-01	130379-02	130806-34	130379-03
Date Sampled	09/25/97	08/21/97	09/26/97	08/20/97	08/20/97	09/25/97	08/20/97
Sample Depth	5.5 - 6.0	9.5 - 10.0	6.0 - 6.5	7.0 - 7.5	9.5 - 10.0	6.5 - 7.0	5.5 - 6.0
Antimony	14	ND < 3.0	ND < 2.9	4.6	51	11	23
Arsenic	54	5	3.3	19	25	7.6	18
Barium	990	22	36	220	2,100	1,200	2,100
Beryllium	0.38	0.44	0.73	0.56	0.59	0.79	0.85
Cadmium	17	0.46	2	6.2	8.7	3.8	8.2
Total Chromium	54	19	30	79	73	25	380
Cobalt	23	7.3	9.7	18	11	5.2	7.9
Copper	1,100	12	11	220	3,400	690	1,500
Lead	11,000	6	3.9	460	6,000	3,600	7,500
Mercury	0.13	ND < 0.10	ND < 0.091	ND < 0.10	ND < 0.095	1	0.14
Molybdenum	2.9	ND < 0.99	ND < 0.96	2.6	1.9	ND < 0.98	1.2
Nickel	100	20	35	92	38	38	48
Selenium	ND < 0.24	ND < 0.25	0.64	0.32	ND < 0.24	0.61	ND < 0.25
Silver	4.4	ND < 0.49	ND < 0.48	0.63	9	8	8
Thallium	ND < 0.24	ND < 0.25	ND < 0.24	ND < 0.24	ND < 0.24	ND < 0.25	ND < 0.25
Vanadium	78	30	45	70	37	20	38
Zinc	2,900	44	32	5,900	4,600	1,900	4,700

Sample ID	P-14B-SB-2	P-15A-SB-1	P-15A-SB-2	P-15B-SB-1	P-15B-SB-2	P-15C-SB-1	P-15C-SB-3
Laboratory ID	130379-04	130806-30	130806-31	130806-28	130806-29	130355-02	130355-03
Date Sampled	08/20/97	09/26/97	09/26/97	09/26/97	09/26/97	08/21/97	08/21/97
Sample Depth	8.0 - 8.5	0.5 - 1.0	5.5 - 6.0	0.5 - 1.0	6.0 - 6.5	0.25 - 0.75	6.0 - 6.5
Antimony	17	ND < 2.9	ND < 2.9	ND < 3.0	ND < 3.0	ND < 2.9	ND < 2.9
Arsenic	37	12	9.9	0.85	21	19	8.9
Barium	1,300	48	27	13	42	140	18
Beryllium	0.5	0.32	0.79	0.76	0.82	0.17	0.38
Cadmium	14	1.4	1.6	1.8	2.2	0.73	0.63
Total Chromium	60	20	25	5.5	28	19	19
Cobalt	17	7.5	13	10	10	9.9	8.9
Copper	3,100	77	32	49	40	210	20
Lead	4,900	59	14	1.3	11	290	6
Mercury	2.2	0.19	ND < 0.074	ND < 0.071	ND < 0.091	0.39	0.1
Molybdenum	2.1	ND < 0.96	ND < 0.98	ND < 1	ND < 0.99	1.5	ND < 0.96
Nickel	58	36	30	3.5	29	16	20
Selenium	ND < 0.24	0.65	0.28	ND < 0.25	0.58	1.3	0.27
Silver	5.9	ND < 0.48	ND < 0.49	ND < 0.50	ND < 0.50	ND < 0.49	ND < 0.48
Thallium	ND < 0.24	ND < 0.24	ND < 0.25	ND < 0.25	ND < 0.25	ND < 0.24	ND < 0.24
Vanadium	41	26	31	77	37	66	30
Zinc	7,200	49	71	33	66	570	53

Metals analyzed using 6000/7000 series of EPA Methods
ND - Not detected above indicated detection limit
All concentrations are in units of milligrams per kilogram (mg/kg)
Sample Depths are in units of feet below ground surface (ft bgs)
All samples collected from the South Disposal Area

table3.xls

Table 3 (continued)

Metal Concentrations in Soil
Former Bayshore Railyard
Brisbane, California

Sample ID	P-15D-SB-1	P-20A-SB-1	P-21A-SB-1	P-21A-SB-2
Laboratory ID	130355-01	130806-14	130806-09	130806-10
Date Sampled	08/21/97	09/25/97	09/25/97	09/25/97
Sample Depth	5.0 - 5.5	5.5 - 6.0	0.5 - 1.0	3.5 - 4.0
Antimony	ND < 3	ND < 2.9	ND < 2.9	59
Arsenic	7.5	5.3	2.3	45
Barium	42	47	55	6,600
Beryllium	0.67	0.56	0.31	0.45
Cadmium	0.78	1.8	1	23
Total Chromium	20	20	25	140
Cobalt	18	7.3	5.5	13
Copper	39	50	15	18,000
Lead	17	61	12	13,000
Mercury	ND < 0.083	ND < 0.074	ND < 0.10	0.91
Molybdenum	ND < 0.99	ND < 0.95	ND < 0.95	2.7
Nickel	34	23	33	150
Selenium	ND < 0.25	0.78	ND < 0.24	2.8
Silver	ND < 0.49	ND < 0.48	ND < 0.48	40
Thallium	ND < 0.25	ND < 0.24	ND < 0.24	ND < 0.25
Vanadium	31	26	19	23
Zinc	80	78	25	17,000

Metals analyzed using 6000/7000 series of EPA Methods
ND - Not detected above indicated detection limit
All concentrations are in units of milligrams per kilogram (mg/kg)
Sample Depths are in units of feet below ground surface (ft bgs)
All samples collected from the South Disposal Area

Table 6

Total Petroleum Hydrocarbon Concentrations in Groundwater
Former Bayshore Railyard
Brisbane, California

Sample ID	Laboratory ID	Site Area	Date Sampled	TPHd (µg/L)	TPHc (µg/L)
P-1A	130863-08	OTT	10/01/97	2,100	6,500
P-1B	130379-08	OTT	08/22/97	1,600	3,800
P-1B DUP	130379-09	OTT	08/22/97	1,300	3,200
P-2C	130379-12	OTT	08/22/97	28,000	71,000
P-3A	130863-07	OTT	10/01/97	450	2,000
P-3D	130379-13	OTT	08/22/97	270,000	940,000
P-4A	130863-06	OTT	10/01/97	18,000	75,000
P-4D	130394-08	OTT	08/25/97	46,000	7,000
P-5A	130864-02	OTT	10/02/97	30,000	130,000
P-6C	130394-10	OTT	08/25/97	27,000	6,800
P-7A	130864-03	OTT	10/02/97	2,700,000	11,000,000
P-7C	130394-09	OTT	08/25/97	22,000	12,000
P-8A	130863-09	OTT	10/01/97	26,000	71,000
P-8C	130379-11	OTT	08/22/97	150,000	470,000
P-9A	130864-06	OTT	10/02/97	15,000	31,000
P-9C	130379-10	OTT	08/22/97	3,000	6,600
P-16	130379-07	OTT	08/22/97	5,300	6,500
P-17	130379-06	OTT	08/22/97	73,000	140,000
P-18	130379-05	OTT	08/22/97	83,000	230,000
P-18B	130864-07	OTT	10/02/97	51,000	97,000
P-15A	130863-05	SDA	10/01/97	10,000	43,000
P-19A	130394-06	UST	08/25/97	1,300	3,100
P-19C	130394-05	UST	08/25/97	1,400	3,600
P-19E	130394-07	UST	08/25/97	1,600	4,300
P-19G	130864-04	UST	10/02/97	4,300	12,000
P-19I	130864-05	UST	10/02/97	4,200	9,100

TPHd - Total Petroleum Hydrocarbons as Diesel analyzed using EPA Method 8015 (modified)
TPHc - Total Petroelum Hydrocarbons as Bunker C analyzed using EPA Method 8015 (modified)
µg/L - micrograms per liter
OTT - Oil Tank / Turntable Area
SDA - South Disposal Area
UST - Underground Storage Tank Area

Table 7

Semivolatile Organic Compound Concentrations in Groundwater
Former Bayshore Railyard
Brisbane, California

Sample ID	Laboratory ID	Site Area	Date Sampled	Phenol (µg/L)	Naphthalene (µg/L)	Phenanthrene (µg/L)
P-1B	130379-08	OTT	08/22/97	ND < 9.7	ND < 9.7	ND < 9.7
P-3D	130379-13	OTT	08/22/97	ND < 1,000	ND < 1,000	590
P-5A	130864-02	OTT	10/02/97	37	ND < 48	ND < 48
P-7C	130394-09	OTT	08/25/97	ND < 48	51	ND < 48
P-9A	130864-06	OTT	10/02/97	ND < 9.4	ND < 9.4	ND < 9.4
P-19A	130394-06	UST	08/25/97	ND < 9.4	ND < 9.4	ND < 9.4

Semivolatile organic compounds analyzed using EPA Method 8270
µg/L - micrograms per liter
ND - Not detected above indicated detection limit
OTT - Oil Tank / Turntable Area
UST - Underground Storage Tank Area

Table 8

Metal Concentrations in Groundwater
Former Bayshore Railyard
Brisbane, California

Sample ID	P-10A	P-10A	P-10E	P-10E	P-11E	P-11E
Laboratory ID	130863-02	130863-02	130394-03	130394-03	130394-02	130394-02
Date Sampled	10/01/97	10/01/97	08/25/97	08/26/97	08/25/97	08/26/97
Filtered/Unfiltered	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered
Antimony	ND < 60	ND < 60	ND < 60	ND < 60	ND < 60	ND < 60
Arsenic	380	98	15	10	130	45
Barium	680	270	360	250	900	150
Beryllium	5	ND < 2	ND < 2	ND < 2	ND < 2	ND < 2
Cadmium	13	ND < 5	5.8	ND < 5	ND < 5	ND < 5
Total Chromium	91	ND < 10	32	ND < 10	71	ND < 10
Cobalt	77	ND < 20	ND < 20	ND < 20	29	ND < 20
Copper	650	18	210	56	450	45
Lead	110	ND < 3	410	6.8	710	ND < 3
Mercury	0.52	ND < 0.20	0.42	ND < 0.20	0.69	ND < 0.20
Molybdenum	ND < 20	ND < 20	ND < 20	ND < 20	ND < 20	ND < 20
Nickel	100	ND < 20	38	ND < 20	110	ND < 20
Selenium	6.9	9.2	ND < 5	ND < 5	ND < 5	ND < 5
Silver	ND < 5	ND < 5	ND < 5	ND < 5	ND < 5	ND < 5
Thallium	ND < 5	ND < 5	ND < 5	ND < 5	ND < 5	ND < 5
Vanadium	460	ND < 10	23	ND < 10	83	ND < 10
Zinc	390	20 U	1,200	540	900	35

Sample ID	P-12B	P-13A	P-13A	P-14A	P-14A	P-15A
Laboratory ID	130394-01	130863-03	130864-01	130863-04	130966-01	130863-05
Date Sampled	08/25/97	10/01/97	10/02/97	10/01/97	10/09/97	10/01/97
Filtered/Unfiltered	Unfiltered	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered
Antimony	79	ND < 60	ND < 60	300	ND < 60	ND < 60
Arsenic	83	220	ND 5	98	9.9	450
Barium	3,500	3,400	52	4,500	67	1,500
Beryllium	4.4	31	ND < 2	8.3	ND < 2	9.1
Cadmium	18	72	ND < 5	32	ND < 5	32
Total Chromium	370	3,400	ND < 10	4,000	ND < 10	470
Cobalt	98	360	ND < 20	81	ND < 20	160
Copper	1,700	850	14	4,500	200	1,400
Lead	4,500	300	ND < 3	12,000	35	1,500
Mercury	1.7	0.56	ND < 0.20	9.3	ND < 0.20	1.4
Molybdenum	34	34	ND < 20	ND < 20	ND < 20	34
Nickel	300	1,200	33	610	29	480
Selenium	ND < 5	ND < 5	ND < 5	7.9	5.9	ND < 5
Silver	12	ND < 5	ND < 5	24	ND < 5	ND < 5
Thallium	ND < 5	ND < 5	ND < 5	ND < 5	ND < 5	ND < 5
Vanadium	350	1,500	ND < 10	380	ND < 10	580
Zinc	5,400	1,800	24	10,000	790	1,800

Metals analyzed using the 6000/7000 series of EPA Methods
ND - Not Detected above indicated detection limit
All concentrations are in units of micrograms per liter (µg/L)
All samples collected from the South Disposal Area

Table 8 (continued)

Metal Concentrations in Groundwater
Former Bayshore Railyard
Brisbane, California

Sample ID	P-15A	P-15C	P-21A	P-21A
Laboratory ID	130863-05	130394-04	130863-01	130863-01
Date Sampled	10/01/97	08/25/97	10/01/97	10/01/97
Filtered/Unfiltered	Filtered	Unfiltered	Unfiltered	Filtered
Antimony	ND < 60	ND < 60	110	ND < 60
Arsenic	13	25	50	18
Barium	220	270	2,600	220
Beryllium	ND < 2	ND < 2	ND < 2	ND < 2
Cadmium	ND < 5	ND < 5	15	ND < 5
Total Chromium	ND < 10	65	140	ND < 10
Cobalt	ND < 20	23	26	ND < 20
Copper	ND < 10	200	1,800	110
Lead	ND < 3	230	5,500	12
Mercury	ND < 0.20	0.3	4.9	ND < 0.20
Molybdenum	ND < 20	ND < 20	ND < 20	ND < 20
Nickel	ND < 20	70	130	ND < 20
Selenium	ND < 5	ND < 5	5.4	8.1
Silver	ND < 5	ND < 5	14	ND < 5
Thallium	ND < 5	ND < 5	ND < 5	ND < 5
Vanadium	ND < 10	91	85	ND < 10
Zinc	ND < 20	440	5,100	220

Metals analyzed using the 6000/7000 series of EPA Methods
ND - Not Detected above indicated detection limit
All concentrations are in units of micrograms per liter (µg/L)
All samples collected from the South Disposal Area

CALTRAIN RAILROAD TRACKS

P-19B P-19A P-19I P-19E P-19G P-19C P-19D P-19H KMW-4A KMW-3B

FORMER UST AREA

KMW-6B KMW-7A

P-10A P-10B P-11C

ABANDONED RAILROAD TRACKS

P-10C MW-10A MW-10B P-11D

E (OH) TP-2

P-10D P-21A P-11E

36" EUC 24" EUC 24" EUC 20" EUC 20" EUC STORM DRAIN JUNCTION BOX P-12B

P-20A P-10E FORMER METALS DISPOSAL AREA SDP-3 MK-12B MK-8A P-12A

DRAINAGE DITCH 12" SD

P-3A SDP-1 P-15D AC ROADWAY SDP-2

P-1A P-2B LF-5A LF-5B P-3B P-4A P-15C P-13B

AC ROADWAY P-1B P-16A P-1C P-2C P-3C AC ROADWAY P-4B P-15B LF-7A EXISTING DRAINAGE CHANNEL P-13A

LF-4A LF-4B P-4C P-14B

LF-6B MW-15A EXISTING DRAINAGE CHANNEL P-3D P-4D P-15A MK-7A MK-7B P-14A

MW-14A P-9B

FORMER OIL TANK (APPROXIMATE) P-9A P-9C P-17A P-5B LF-8B LF-8A 6' CHAIN LINK FENCE

MW-16B P-7C MW-13A P-6C MW-13B P-5A

P-8C P-6B P-8B TURNTABLE P-7B P-8A

ROUNDHOUSE P-7A

MW-17A MW-17B P-18B INDUSTRIAL WAY

P-18A

LEGEND

- GEOPROBE LOCATION
- MONITORING WELL LOCATION
- OVERHEAD ELECTRIC LINE POWER POLE/ LIGHT POLE
- 12" SD 12-INCH DIAMETER STORM DRAIN
- CHAIN LINK FENCE
- EUCALYPTUS TREE

100' 0' 100' 200'
SCALE IN FEET

Burns & McDonnell World Consultants Inc.

Figure 2

SITE PLAN
FORMER BAYSHORE RAILYARD
BRISBANE, CALIFORNIA

k:\eurojast\sun\mxd\136x24.dgn
k:\eurojast\sun\mxd\arcpad.dgn
SUN0001.DGN/27-OCT-97 13:36/CLW

CALTRAIN RAILROAD TRACKS

P-19B
P-19E P-19C
P-19I P-19G
P-19D P-19A
P-19H
KMW-4A
KMW-3B
PYRENE-680
CHRYSENE-440
BENZO (b) FLOURANTHENE-340
BENZO (k) FLOURANTHENE-470
BENZO (a) PYRENE-560
BENZO (g,h,i) PERYLENE
(3.5-4.0')

FORMER UST AREA

KMW-6B
KMW-7A

P-10A
P-10B
P-11C
ABANDONED RAILROAD TRACKS
P-10C
MW-10A
MW-10B
P-11D
E (OH)
TP-2
36" EUC
24" EUC
24" EUC
20" EUC
20" EUC
STORM DRAIN JUNCTION BOX
P-12B
P-10D
P-21A
P-11E
P-20A
P-10E
FORMER METALS DISPOSAL AREA
SDP-3
MK-12B
MK-8A
P-12A
P-1C
PHENANTHRENE-2,100
FLOURANTHENE-11,000
PYRENE-13,000
BENZO (a) ANTHRACENE-3,800
CHRYSENE-4,600
BENZO (b) FLOURANTHENE-5,100
BENZO(k) FLOURANTHENE-5,200
BENZO (a) PYRENE-6,500
INDENO (1,2,3-cd) PYRENE-3,700
BENZO (g,h,i) PERYLENE-4,400
(8.0-8.5')
DRAINAGE DITCH
P-3A
SDP-1
P-15D
AC ROADWAY
SDP-2
P-3B
P-4A
P-15C
P-13B
P-1A
P-2B
LF-5A
LF-5B
P-3C
AC ROADWAY
P-4B
P-15B
LF-7A
EXISTING DRAINAGE CHANNEL
P-13A
P-16A
P-1B
P-2C
12" SD
P-4C
P-15A
P-14B
LF-6B
MW-15A
LF-4A
LF-4B
EXISTING DRAINAGE CHANNEL
P-3D
ND
(6.5-7.0')
P-4D
MK-7B
MK-7A
P-14A
MW-14A
P-9B
P-9A
ND
(3.0-3.5')
FORMER OIL TANK (APPROXIMATE)
P-17A
P-9C
P-5B
LF-8B
LF-8A
6' CHAIN LINK FENCE
MW-16B
P-7C
MW-13A
P-6C
P-8C
MW-13B
P-6B
P-5A
ND
(8.0-8.5')
TURNTABLE
P-8B
P-8A
P-7B
ROUNDHOUSE
P-7A
2-METHYLNAPHTHALENE-54,000
(7.5-8.0')
MW-17A
MW-17B
P-18B
INDUSTRIAL WAY
P-18A

LEGEND

- ⊙ GEOPROBE LOCATION
- ◈ MONITORING WELL LOCATION
- PYRENE-680 SEMIVOLATILE ORGANIC COMPOUND CONCENTRATIONS (IN MICROGRAMS PER KILOGRAM)
- (3.0-3.5) SAMPLE DEPTH (IN FEET BELOW GROUND SURFACE)
- ND NOT DETECTED

100' 0' 100' 200'
SCALE IN FEET

Figure 4
SEMIVOLATILE ORAGANIC COMPOUND CONCENTRATIONS IN SOIL
FORMER BAYSHORE RAILYARD
BRISBANE, CALIFORNIA

Burns & McDonnell Waste Consultants, Inc.

SUN0003.DGN/25-NOV-97 13:46/CLW k:\sunquest\sustmwc136x24.dgn k:\sunquest\sustmwcproposed.dgn

CALTRAIN RAILROAD TRACKS

ABANDONED RAILROAD TRACKS

FORMER UST AREA

P-19B TD-ND TD-ND (8.5-9.0)
P-19E TD-1,700 TD-980 (6.0-6.5)
P-19C TD-1,300 TD-710 (6.0-6.5)
P-19I TD-740 TD-210 (3.5-4.0)
P-19A TD-220 TD-30 (3.5-4.0)
P-19G TD-340 TD-190 (6.5-7.0)
P-19H TD-890 TD-66 (3.5-4.0)
P-19D TD-2,600 TD-1,500 (7.0-7.5)
KMW-4A
KMW-3B
KMW-6B
KMW-7A
P-10A
P-10B
P-10C
P-10D
P-10E
P-11C
P-11D
P-11E
MW-10A
MW-10B
E (OH)
TP-2
P-21A
P-20A
FORMER METALS DISPOSAL AREA
36" EUC
24" EUC
24" EUC
20" EUC
20" EUC
STORM DRAIN JUNCTION BOX
P-12B
P-12A
MK-12B
MK-8A
SDP-3
SDP-1
SDP-2
AC ROADWAY
P-15D
P-15C
P-15B TC-1,800 TD-380 (6.0-6.5)
P-15A TC-24,000 TD-6,100 (5.5-6.0)
P-13B
P-13A
P-14B
P-14A
LF-7A
EXISTING DRAINAGE CHANNEL
MK-7B
MK-7A
DRAINAGE DITCH
12" SD
P-3A TC-ND TD-ND (5.0-5.5)
P-2B TC-ND TD-ND (5.5-6.0)
P-3B TC-27,000 TD-6,600 (5.5-6.0)
P-4A TC-16,000 TD-3,900 (6.5-7.0)
P-1A TC-58 TD-15 (2.5-3.0)
P-1B TC-950 TD-160 (6.0-6.5)
P-1C TC-36,000 TD-8,400 (2.5-3.0)
P-2C TC-44,000 TD-14,000 (6.5-6.0)
P-3C TC-46,000 TD-14,000 (7.0-7.5)
P-4B TC-5,700 TD-1,400 (6.0-6.5)
P-16A TC-2,200 TD-240 (4.0-4.5)
LF-5A
LF-5B
LF-4A
LF-4B
LF-6B
MW-15A
MW-14A
P-3C TC-39,000 TD-13,000 (8.5-9.0)
P-4C TC-10,000 TD-1,300 (4.5-5.0)
P-4D TC-11,000 TD-3,500 (5.0-5.5)
P-9B TC-18,000 TD-11,000 (2.5-3.0)
P-9A TC-8,100 TD-4,100 (3.0-3.5)
P-9C TC-3,600 TD-380 (2.5-3.0)
P-17A TC-13,000 TD-7,800 (3.5-4.0)
FORMER OIL TANK (APPROXIMATE)
P-7C TC-83,000 TD-27,000 (7.5-8.0)
P-6C TC-120,000 TD-41,000 (4.5-5.0)
P-5B TC-75,000 TD-24,000 (5.5-6.0)
P-5A TC-7,300 TD-1,800 (8.0-8.5)
LF-8B
LF-8A
6' CHAIN LINK FENCE
MW-16B
MW-13A
MW-13B
P-8C TC-3,300 TD-10,000 (9.5-10.0)
P-8B TC-2,900 TD-310 (2.5-3.0)
P-8A TC-42,000 TD-15,000 (3.0-3.5)
P-7B TC-25,000 TD-7,100 (7.0-7.5)
P-5B TC-ND TD-ND (7.5-8.0)
P-7A TC-72,000 TD-19,000 (7.5-8.0)
TURNTABLE
ROUNDHOUSE
MW-17A
MW-17B
P-18B TC-16,000 TD-8,600 (3.0-3.5)
P-18A TC-7,200 TD-2,000 (1.5-2.0)
INDUSTRIAL WAY
1,000
10,000
50,000

LEGEND

- ⊙ GEOPROBE LOCATION
- ⟡ MONITORING WELL LOCATION
- TC-58 TOTAL PETROLEUM HYDROCARBONS AS BUNKER C CONCENTRATIONS (IN MILLIGRAMS PER KILOGRAM)
- TC-15 TOTAL PETROLEUM HYDROCARBONS AS DIESEL FUEL CONCENTRATION (IN MILLIGRAMS PER KILOGRAMS)
- (2.5-3.0) SAMPLE DEPTH (IN FET BELOW GROUND SURFACE)
- ND NOT DETECTED
- 1,000 LINE OF EQUAL CONCENTRATION OF TPH AS BUNKER C (IN MILLIGRAMS PER KILOGRAM). DASHED WHERE INFERRED.

100' 0' 100' 200'
SCALE IN FEET

Burns & McDonnell Waste Consultants Inc.

Figure 3
MAXIMUM TOTAL PETROLEUM HYDROCARBON CONCENTRATIONS IN SOIL
FORMER BAYSHORE RAILYARD
BRISBANE, CALIFORNIA

K:\Rsunquest\Austmeu\35x24.dgn
K:\Rsunquest\Austmeu\mxpro.dgn
SUNQUEST.DGN/29-OCT-97 14:57/CJW

CALTRAIN RAILROAD TRACKS

P-19B
P-19E P-19C
P-19I P-19G
P-19D P-19A
P-19H
PYRENE-680
CHRYSENE-440
BENZO (b) FLOURANTHENE-340
BENZO (k) FLOURANTHENE-470
BENZO (a) PYRENE-560
BENZO (g,h,i) PERYLENE
(3.5-4.0)

KMW-4A
KMW-3B

FORMER UST AREA

KMW-6B
KMW-7A

P-10A
P-10B
P-11C
ABANDONED RAILROAD TRACKS
P-10C
MW-10A
MW-10B
P-11D
36" EUC
24" EUC
24" EUC
20" EUC
20" EUC
STORM DRAIN JUNCTION BOX
P-12B
P-10D
P-21A
P-11E
P-20A
P-10E
FORMER METALS DISPOSAL AREA
SDP-3
MK-12B
MK-8A
P-12A
E (OH)
TP-2
P-1C
PHENANTHRENE-2,100
FLOURANTHENE-11,000
PYRENE-13,000
BENZO (a) ANTHRACENE-3,800
CHRYSENE-4,600
BENZO (b) FLOURANTHENE-5,100
BENZO(k) FLOURANTHENE-5,200
BENZO (a) PYRENE-6,500
INDENO (1,2,3-cd) PYRENE-3,700
BENZO (g,h,i) PERYLENE-4,400
(8.0-8.5)
DRAINAGE DITCH
P-3A
SDP-1
P-15D
AC ROADWAY
SDP-2
P-1A
P-2B
LF-5A
LF-5B
P-3B
P-4A
P-15C
P-13B
P-1B
P-3C
AC ROADWAY
P-4B
P-15B
LF-7A
EXISTING DRAINAGE CHANNEL
P-16A
P-2C
12" SD
P-4C
P-15A
P-13A
P-14B
LF-6B
MW-15A
LF-4A
LF-4B
EXISTING DRAINAGE CHANNEL
P-3D
ND
(6.5-7.0)
P-4D
MK-7B
MK-7A
P-14A
MW-14A
P-9B
FORMER OIL TANK (APPROXIMATE)
P-9A
ND
(3.0-3.5)
P-9C
P-17A
P-5B
LF-8B
LF-8A
6' CHAIN LINK FENCE
MW-16B
P-6C
P-7C
MW-13A
P-8C
MW-13B
P-6B
P-5A
ND
(8.0-8.5)
P-8B
TURNTABLE
P-8A
P-7B
ROUNDHOUSE
P-7A
2-METHYLNAPHTHALENE-54,000
(7.5-8.0)
MW-17A
MW-17B
P-18B
INDUSTRIAL WAY
P-18A

LEGEND

- ⊙ GEOPROBE LOCATION
- ⊕ MONITORING WELL LOCATION
- PYRENE-680 SEMIVOLATILE ORGANIC COMPOUND CONCENTRATIONS (IN MICROGRAMS PER KILOGRAM)
- (3.0-3.5) SAMPLE DEPTH (IN FEET BELOW GROUND SURFACE)
- ND NOT DETECTED

100' 0' 100' 200'
SCALE IN FEET

Figure 4
SEMIVOLATILE ORAGANIC COMPOUND CONCENTRATIONS IN SOIL
FORMER BAYSHORE RAILYARD
BRISBANE, CALIFORNIA

Harris & McDonnell Waste Consultants Inc.

k:\eurquast\austin\ec135d24.dgn
k:\eurquast\austin\eurohsp.dgn
SUN0003.DGN/25-NOV-97 13:48/CJW

CALTRAIN RAILROAD TRACKS

P-19B
P-19E
P-19C
P-19I
P-19G
P-19A
P-19D
ND
P-19H
KMW-4A
KMW-3B

KMW-7A
KMW-6B

FORMER UST AREA

P-10A
P-10B
P-11C
ABANDONED RAILROAD TRACKS
P-10C
MW-10A
MW-10B
P-11D
E (OH)
TP-2
36" EUC
24" EUC
24" EUC
20" EUC
20" EUC
STORM DRAIN JUNCTION BOX
P-10D
P-21A
P-11E
P-12B
P-20A
P-10E
FORMER METALS DISPOSAL AREA
SDP-3
MK-12B
MK-8A
P-12A
DRAINAGE DITCH
P-3A
SDP-1
AC ROADWAY
P-15D
SDP-2
P-3B
P-15C
P-4A
P-13B
LF-5A
LF-5B
P-3C
AC ROADWAY
P-4B
P-15B
LF-7A
EXISTING DRAINAGE CHANNEL
P-1A
P-2B
P-2C
12" SD
P-4C
P-15A
P-13A
AC ROADWAY
P-16A
P-1B
ND
P-1C
LF-4A
LF-4B
EXISTING DRAINAGE CHANNEL
P-3D
PHENANTHRENE-590
P-4D
P-14B
MK-7B
MK-7A
P-14A
LF-6B
MW-15A
MW-14A
P-9B
FORMER OIL TANK (APPROXIMATE)
P-9A
ND
P-9C
P-17A
P-5B
LF-8B
LF-8A
6' CHAIN LINK FENCE
P-7C
NAPHTHALENE-51
MW-13A
P-6C
MW-16B
P-8C
MW-13B
P-6B
P-5A
PHENOL-37
P-8B
TURNTABLE
P-7B
P-8A
ROUNDHOUSE
P-7A
MW-17A
MW-17B
P-18B
INDUSTRIAL WAY
P-18A

LEGEND

- ⊙ GEOPROBE LOCATION
- ⊕ MONITORING WELL LOCATION
- PHENOL-37 SEMIVOLATILE ORGANIC COMPOUND CONCENTRATIONS (IN MICROGRAMS PER LITER)
- ND NOT DETECTED

100' 0' 100' 200'
SCALE IN FEET

Burns & McDonnell Waste Consultants Inc.

Figure 7
SEMIVOLATILE ORGANIC COMPOUND CONCENTRATIONS IN GROUNDWATER FORMER BAYSHORE RAILYARD BRISBANE, CALIFORNIA

k:\sun0006\gen\austmkwy136x24.dgn
k:\sun0006\gen\austmkwyhgnd.dgn
SUN0006.DGN/25-NOV-97 14:15/CJW

CALTRAIN RAILROAD TRACKS

KMW-7A
KMW-6B

P-19B
P-19E
P-19C
P-19I
P-19G
KMW-4A
KMW-3B
P-19A
P-19D
P-19H

FORMER UST AREA

P-10A
CU-18/650
PB-ND/110
P-10B
P-11C
ABANDONED RAILROAD TRACKS
P-10C
MW-10A
MW-10B
P-11D
P-10D
P-11E
CU-45/450
PB-ND/710
36" EUC
STORM DRAIN JUNCTION BOX
24" EUC
24" EUC
20" EUC
20" EUC
P-21A
CU-110/1,800
PB-12/5,500
P-12B
CU-NA/1700
PB-NA/1500
FORMER METALS DISPOSAL AREA
P-20A
P-10E
CU-56/210
PB-6.8/410
SDP-3
MK-12B
MK-8A
P-12A
SDP-1
P-15D
AC ROADWAY
SDP-2
P-13B
P-3A
P-3B
P-4A
P-15C
CU-NA/200
PB-NA/230
1,000
P-15B
P-4B
LF-7A
EXISTING DRAINAGE CHANNEL
P-13A
CU-14/850
PB-ND/300
P-14B
P-14A
CU-200/4,500
PB-35/12,000
P-15A
CU-ND/1,400
PB-ND/1,500
MK-7B
MK-7A
P-1A
P-2B
LF-5A
LF-5B
P-3C
AC ROADWAY
P-1B
P-16A
P-1C
P-2C
12" SD
P-4C
LF-4A
LF-4B
EXISTING DRAINAGE CHANNEL
P-3D
P-4D
LF-6B
MW-15A
MW-14A
P-9B
FORMER OIL TANK (APPROXIMATE)
P-17A
P-9A
P-9C
P-7C
MW-13A
P-6C
P-5B
LF-8B
LF-8A
6' CHAIN LINK FENCE
MW-16B
MW-13B
P-8C
P-5A
P-8B
P-6B
TURNTABLE
P-8A
P-7B
ROUNDHOUSE
P-7A
MW-17A
MW-17B
INDUSTRIAL WAY
P-18B
P-18A

TP-2
E (OH)
DRAINAGE DITCH

LEGEND

- ⊙ GEOPROBE LOCATION
- ⊕ MONITORING WELL LOCATION
- CU-56/210 DISSOLVED/ TOTAL COPPER CONCENTRATIONS (IN MICROGRAMS PER LITER)
- PB-6.8/410 DISSOLVED/ TOTAL LEAD CONCENTRATIONS (IN MICROGRAMS PER LITER)
- ND NOT DETECTED
- NA NOT ANALYZED
- 1,000 TOTAL LEAD CONCENTRATION (IN MICROGRAMS PER LITER) DASHED WHERE INFERED

100' 0' 100' 200'
SCALE IN FEET

Figure 8
COPPER AND LEAD CONCENTRATIONS IN GROUNDWATER
FORMER BAYSHORE RAILYARD
BRISBANE, CALIFORNIA

Burns & McDonnell Waste Consultants Inc.

k:\eurqas\austin\sc136024.dgn
k:\eurqas\austin\eurqmap.dgn
SUN0007.DGN/29-OCT-97 15:31/CJW

APPENDIX B-5

Burns & McDonnell [1998b]

Burns & McDonnell Waste Consultants, Inc.

October 9, 1998

Mr Randy Lee
San Francisco Bay Regional Water Quality Control Board
1515 Clay Street, Suite 1400
Oakland, CA 94612

Subject: **Groundwater Plume Stability Evaluation**
Former Bayshore Railyard, Brisbane, California

Dear Mr Lee:

This letter presents the results of the groundwater plume stability evaluation for the southern portion of the former Bayshore Railyard in Brisbane, California (the site) This evaluation was requested in your letter dated April 13, 1998, and was conducted on behalf of Sunquest Properties, Inc. (Sunquest) by Burns & McDonnell Waste Consultants, Inc (BMWCI). A Site Plan is attached as Figure 1

Purpose and Scope of Work

The purpose of the work was to evaluate groundwater plume stability to support the remedial action objectives (RAOs) currently being developed for the site Because RAO development must consider the risk to surface water bodies posed by residual contamination, the plume stability evaluation is a key component of the process

The scope of work for the evaluation included reviewing and compiling groundwater monitoring data, and plotting the data versus both time and distance from the source The resulting trends are indicators of groundwater plume stability In addition to this analytical evaluation, historical trends in annual precipitation amounts and laboratory analytical methods were evaluated for potential effects on the plume stability analysis.

Data Review and Compilation

BMWCI reviewed and compiled relevant historical groundwater monitoring data for use in the groundwater plume stability analysis. Since it is critical to evaluate plume stability along the direction of groundwater flow beneath the site, previous groundwater monitoring reports were reviewed to confirm the predominant groundwater flow direction. The groundwater flow direction has been reported to be to the south or the southeast, with some local variations

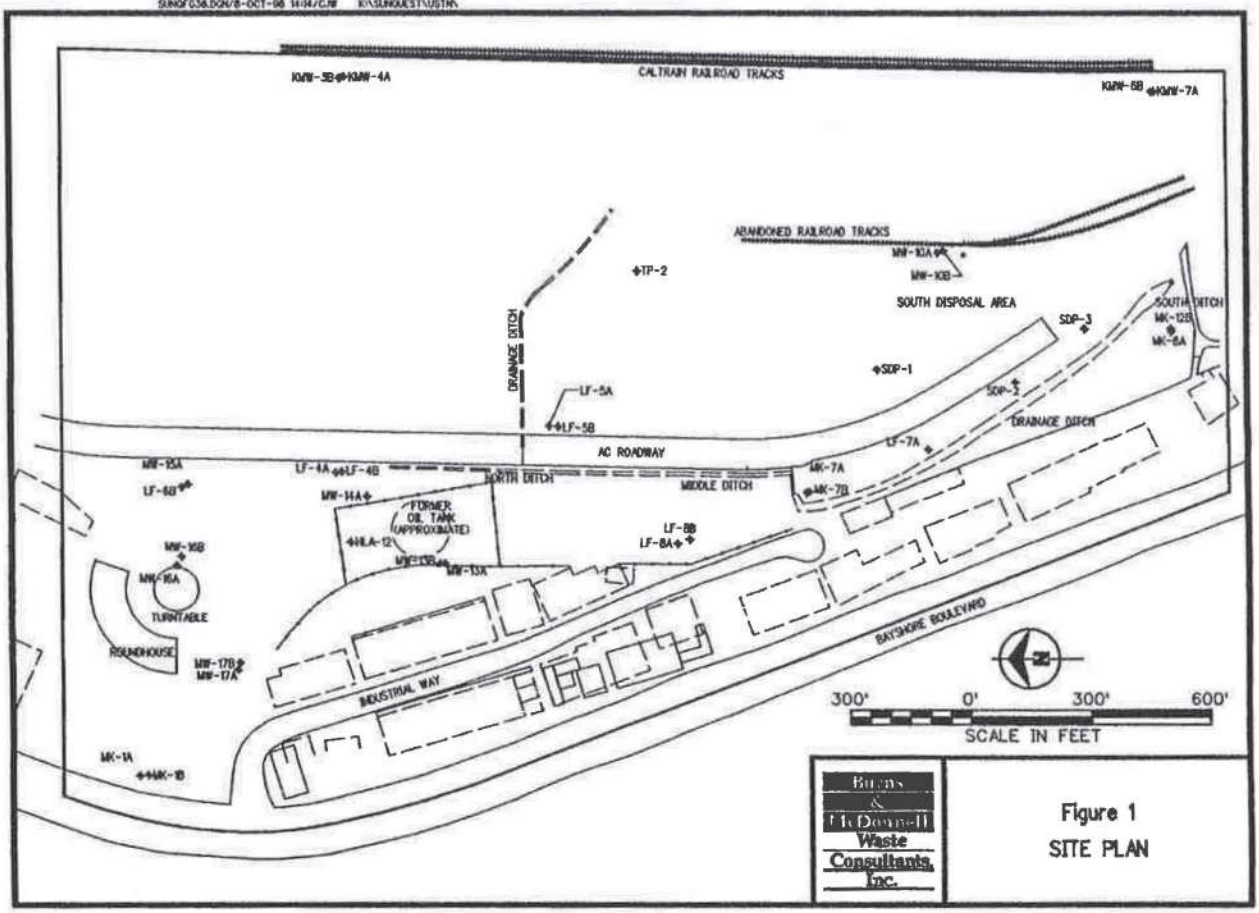
377 Oyster Point Boulevard
Suite 13
South San Francisco, California 94080

Phone: 650 871-2926
Fax: 650 871-2653
http://www.burnsmcd.com
California Contractor #709602

a Burns & McDonnell Company

Table 1
TPH as Bunker C Oil Concentrations
Former Bayshore Railyard
Sunquest Properties, Inc.

	Nov-95		Sep-96		Jun-97		Dec-97		Jun-98	
Well Number	GW Elevation (feet)	Bunker C Conc. (mg/l)	GW Elevation (feet)	Bunker C Conc. (mg/l)	GW Elevation (feet)	Bunker C Conc. (mg/l)	GW Elevation (feet)	Bunker C Conc. (mg/l)	GW Elevation (feet)	Bunker C Conc. (mg/l)
MW-15A	4.04	98	4.08	83	4.47	93	1.14	22	5.82	47
LF-4A	4.02	90.6	4.04	32	4.47	77	6.07	79	5.75	89
LF-5A	4.03	5.95	4.05	5.9	4.44	5.9	5.86	5.3	5.66	3.7
LF-8A	3.71	33.4	3.74	36	4.15	50	5.42	30	5.07	35
MK-7A	3.66	1	3.74	ND<0.05	4.14	0.51	4.99	0.68	5.65	0.62


CALTRAIN RAILROAD TRACKS
ABANDONED RAILROAD TRACKS
SOUTH DISPOSAL AREA
DRAINAGE DITCH
AC ROADWAY
NORTH DITCH
MIDDLE DITCH
SOUTH DITCH
DRAINAGE DITCH
FORMER OIL TANK (APPROXIMATE)
TURNTABLE
ROUNDHOUSE
INDUSTRIAL WAY
BAYSHORE BOULEVARD
300' 0' 300' 600'
SCALE IN FEET
Burns & McDonnell Waste Consultants, Inc.
Figure 1
SITE PLAN

APPENDIX B-6

Burns & McDonnell [1999]

REMEDIAL ACTION PLAN

SOUTHERN AREA OF
FORMER BAYSHORE RAILYARD SITE
BRISBANE, CALIFORNIA

Prepared For:

SUNQUEST PROPERTIES, INC
150 Executive Park Boulevard, Suite 4200
San Francisco, California

October 1999

Prepared by:

Burns & McDonnell Waste Consultants, Inc.
Engineers-Geologists-Scientists
South San Francisco, California

Project Number 98-380-4

Table 1
Recent Characterization
Non-Metals Analytical Results

Sunquest Properties, Inc.
Former Bayshore Railyard

Boring ID	Sample Depth	TPH (mg/Kg)				PCBs	VOCs	SVOCs
		diesel	motor oil	bunker C	gas & BTEX	(ug/Kg)	(ug/Kg)	(ug/Kg)
Q-1	5.0-6.0	220	1000	2200	...	...	...	...
Q-2A	3.5-4.0	<10	<50	<50	...	...	...	...
Q-2B	6.0-6.5	...	...	...	...	...	...	...
Q-3A	1.5-2.0	<10	<50	<50	...	...	...	...
Q-3B	6.0-6.5	...	...	...	...	...	...	...
Q-4A	1.5-2.0	...	...	...	...	ND	...	...
Q-4B	4.5-5.0	<10	<50	<50	...	...	...	...
Q-5A	6.5-7.5	170	240	730	580(1)	...	ND	...
Q-6	8.0-9.0	260	930	2200	...	...	...	ND
Q-7A	1.5-2.0	...	...	...	...	7	...	
Q-7B	5.5-6.0	3200	8300	21000	...	...	...	ND
Q-8A	4.0-4.5	...	...	...	...	12	...	...
Q-8B	4.5-5.0	790	2800	6300	...	...	...	...
Q-9	5.5-6.5	16000	18000	69000	...	...	...	ND
Q-10	7.0-8.0	<10	<50	<50	...	ND	...	...
Q-11	3.0-4.0	<10	<50	<50	...	...	ND	...
Q-12	2.5-3.0	15	<50	69	...	...	...	...
Q-13A	1.0-1.5	...	...	...	...	ND	...	...
Q-13B	4.0-4.5	<10	<50	<50	...	...	ND	...
Q-14	3.5-4.0	180	900	2100	...	...	...	ND
Q-15	4.0-4.5	<10	<50	<50	...	...	ND	...
Q-16	3.0-4.0	20	81	160	...	...	...	...
Q-17A	1.0-1.5	50	120	280	...	28	...	...
Q-17B	7.5-8.0	...	...	...	...	...	...	...
Q-18A	2.0-2.5	...	...	...	...	ND	...	...
Q-18B	5.0-5.5	37	120	260	...	...	ND	ND
Q-19A	1.5-2.0	...	...	...	...	ND	...	...
Q-19B	6.5-7.0	<10	<50	<50	...	...	...	...
Q-19C	7.0-7.5	...	...	...	...	...	ND	...
Q-20	3.0-4.0	<10	<50	100	...	...	...	...
Q-21	6.0-7.0	<10	<50	59	...	...	...	...

1 - Q-5a toulene=1400 ug/L

Table 2
Recent Characterization
Metals Analytical Results

Sunquest Properties, Inc.
Former Bayshore Railyard

Boring ID	Sample Depth	Antimony	Arsenic	Barium	Cadmium	Copper	Lead	Molybdenum	Silver	Zinc
Q-2B	6.0-6.5	ND	20	70	ND	17	2.5	ND	ND	37
Q-3B	6.0-6.5	24	14	1100	2.3	580	7600	ND	4.7	1700
Q-8B	4.5-5.0	10	24	61	0.95	240	640	1.5	ND	320
Q-13A	1.0-1.5	ND	99	50	ND	21	7.7	ND	ND	52
Q-17B	7.5-8.0	19	20	880	1.2	390	1700	1.4	3.4	1500
Q-19B	6.5-7.0	18	21	1000	2.8	480	7400	ND	6.1	2100
Q-20	3.0-4.0	ND	86	39	0.17	19	12	ND	ND	61

All results in mg/Kg

Sb As Ba Cd Cu Pb Mo Ag Zn

Title 22 Metals

CALTRAIN RAILROAD TRACKS

CALTRAIN RAILROAD TRACKS

NORTHERN LIMIT OF OBSERVATE UNIT-2

P-19A P-19B P-19I P-19G P-19C P-19E P-19D P-19H KMW-4A KMW-3B

KMW-7B KMW-7A

Q-13 Q-16 Q-18 Q-2 Q-20

Q-14 P-10A P-10B P-11C

ABANDONED RAILROAD TRACKS MW-10B P-10C MW-10A P-11D

Q-15 Q-17 OTP-2 P-10D P-21A Q-1 P-11E

Q-12 P-20A P-10E SDP-3 P-12B MK-12B MK-8A

Q-21 LF-3B LF-3B Q-5 Q-11 Q-8 SDP-1 P-15D SDP-2 DRAINAGE CHANNEL P-12A Q-19

Q-3 P-3A LF-5A P-3B P-4A P-15C P-13B

P-1A P-2B LF-5B P-3C P-4B P-15B LF-7A P-13A

P-16A ROADWAY P-1B P-1C P-2C P-4C P-15A MK-7B P-14B

LF-4A LF-4B DRAINAGE CHANNEL P-3D P-4D MK-7A P-14A

LF-6B MW-15A P-9B MW-14A OIL TANK LF-8A

MACHINE AND ELECTRIC SHOP P-17A P-9A P-9C MW-13A P-5B LF-8B

Q-9 TRANSFER PIT MW-16B P-7C P-6C P-5A

LF-3A LF-3B Q-4 TURNTABLE P-8C MW-13B P-6B

Q-10 GATE P-8B P-8A P-7B

ROUNDHOUSE MW-17A MW-17B P-7A

P-18B INDUSTRIAL BLVD. BAYSHORE BOULEVARD

Q-7 FORMER TANK AND BOILER SHOP P-18A

GENEVA AVENUE BAYSHORE BOULEVARD MW-1B MW-1A Q-6

LEGEND

- GEOPROBE LOCATION (BMWCI 1997)
- GEOPROBE LOCATION (BMWCI 1999)
- MONITORING WELL LOCATION
- EXISTING STRUCTURE
- FORMER STRUCTURE
- FENCE
- DRAINAGE CHANNEL

NORTH

200' 0' 200' 400'

SCALE IN FEET

Burns & McDonnell Waste Consultants, Inc.

Figure 2

SITE PLAN

SUNQUEST PROPERTIES, INC.

BRISBANE, CA

K:\SUNQUEST\SITN\Q12_R8P\

SUN01.DGN/11-JUN-99 15:17/FB

APPENDIX B-7

Burns & McDonnell [2001]

INVESTIGATION REPORT

Supplemental Bunker C Delineation

Southern Area of the

Former Bayshore Railyard Site

Brisbane, California

Prepared For:

SUNQUEST PROPERTIES, INC.

150 Executive Park Boulevard, Suite 4200

San Francisco, California

August 2001

Prepared By:

Burns & McDonnell Engineering, Inc.

Engineers-Geologists-Scientists

South San Francisco, California

Project Number 23672

Table 3
Bunker C Oil Concentrations in Groundwater
Southern Portion of the Former Bayshore Railyard
Brisbane, CA

Sample ID	TPHc	TPHc SGCU
KMW-4A	1,400 Y	ND
KMW-7A	3,000 Y	ND
LF-3A	910 Y	ND
LF-4A	84,000 Y	300 Y
LF-5A	3,800 Y	ND
LF-7A	930 Y	ND
LF-8A	32,000 Y	9,200 Y
MK-1A	2,200 Y	ND
MK-7A	1,600 Y	ND
MK-8A	ND	ND
MW-10A	510 Y	ND
MW-11A	NA	NA
MW-13A	8,300 Y	ND
MW-15A	65,000 Y	1,700 Y
MW-17A	16,000 Y	ND
North Ditch	NA	NA
Middle Ditch	NA	NA
South Ditch	2,900 Y	ND
Outflow	2,000 Y	ND

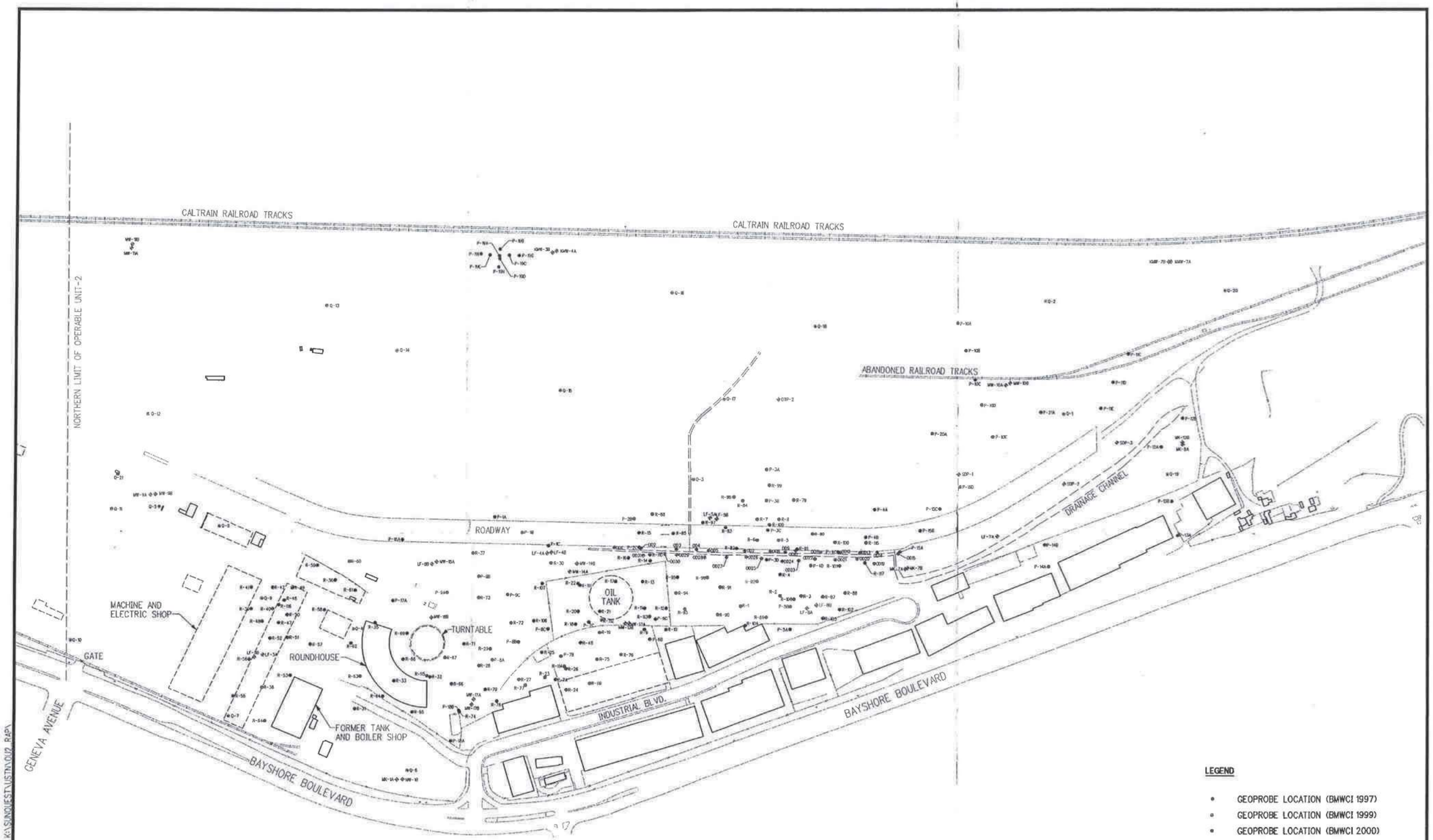
Concentrations are in units of micrograms per liter (ug/L.)
TPH - Total Petroleum Hydrocarbons
TPHg - TPH as gasoline
TPHd - TPH as diesel
TPHm - TPH as motor oil
TPHc - TPH as Bunker C oil
Y - Sample exhibits fuel pattern which does not resemble standard
ND - Not Detected
NA - Not Analyzed
SGCU- Analysis performed with Silica Gel Cleanup

Table 4
Comparison of Cu and Pb Concentrations in Soil and Groundwater
A-Fill Zone
Southern Portion of the Former Bayshore Railyard

Groundwater Data					Soil Data [2]				
Sample ID	Depth [1]	Date	Cu (mg/L)	Pb (mg/L)	Sample ID	Depth [1]	Date	Cu (mg/kg)	Pb (mg/kg)
LF-7A	6.38	Dec 2000	ND	ND	LF-7A-11	11	1990	21	3
					P-14A	6.5		690	3600
					P-15D	5		39	17
					SDSB-1-4.5A	4.5	1990	3300	2700
					SDSB-2-8A	8	1990	3500	3700
					SDSB-10-5A	10	1990	900	2400
MK-7A	6.33	Dec 2000	ND	ND	MK-7B-1	2	1986	12	3.8
					MK-7B-2	4	1986	820	3800
					P-15A	0.5		77	59
					P-15B	6		40	11
MK-8A	11.1	Dec 2000	ND	ND	MK-8A-1	2	1986	25	800
					MK-8A-2	4	1986	4100	7800
					MW-12B	6.5	1984	2810	3590
					P-12A	5.5		1100	11000
					P-12B	9.5		12	6
					P-13B	9.5		3400	6000
					SDP-5-6	6	1990	900	4600
					SDSB-3-3.5A	3.5	1990	3400	1700
					SDSB-3-10B	10	1990	48	8
					SDSB-5-4.5	4.5	1990	1500	2000
					SDSB-6-4A	4	1990	2800	6700
MW-10A	6.58	36861	ND	ND	MW-10A-1	3	1984	74.3	2.7
					MW-10B-1	3	1984	132	101
					P-10-B	5.5		36	20
					P-10-C	0.25		610	900
					P-10-D	5.5		26	40
					P-10-E	0.25		220	250
					P-21A	3.5		13000	13000

1 Depths are in feet below ground surface.
2 Soil data within 200 feet of the water sample.

Highest soil sample result within the 200 foot radius

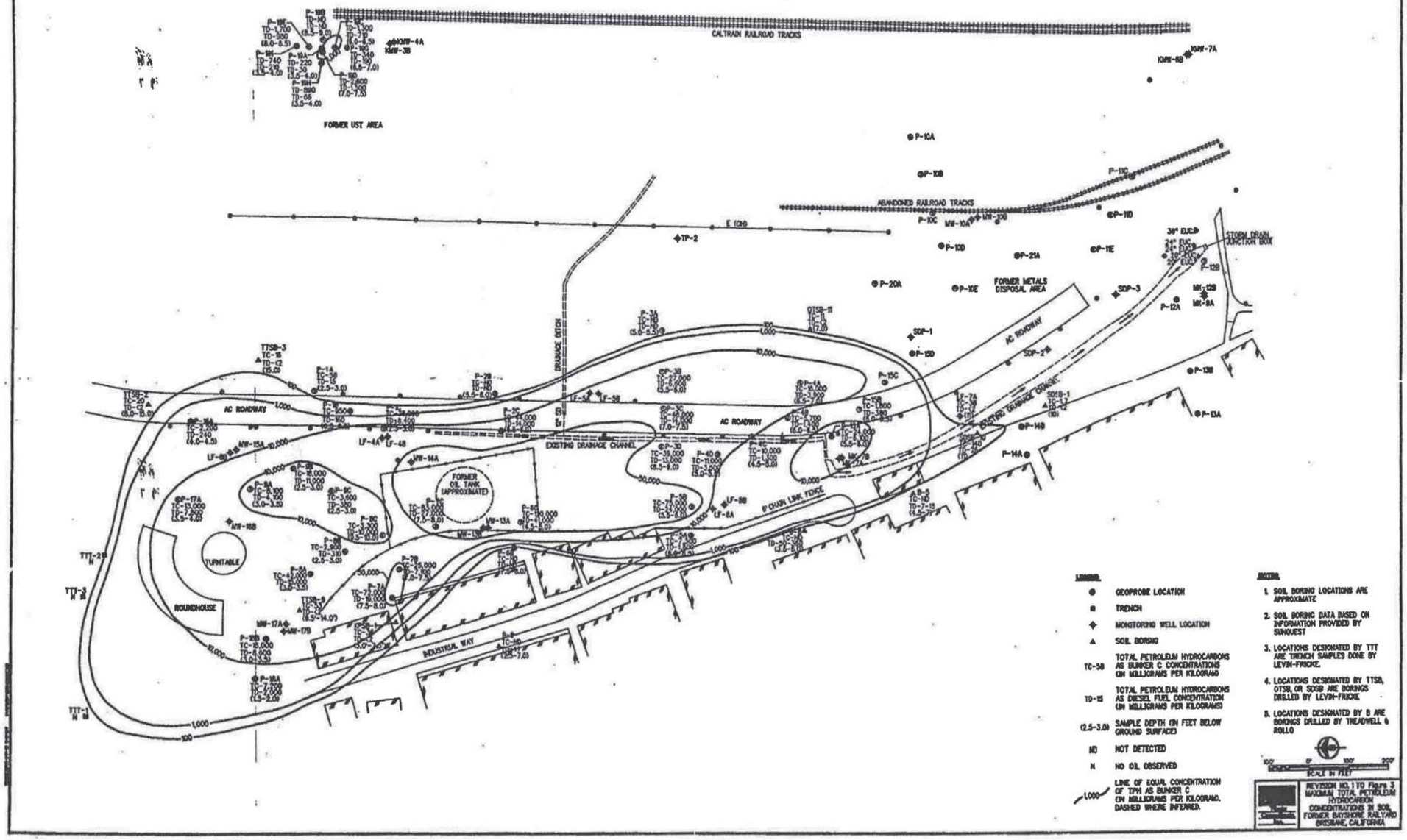


Burns & McDonnell Waste Consultants, Inc.

Figure 2

SITE PLAN
SUNQUEST PROPERTIES, INC.
BRISBANE, CA

SUNSITE.DGN 8-14-2001 12:53 FB K:\SUNQUEST\SITM\DGN\2 RAPA


CALTRAIN RAILROAD TRACKS
FORMER UST AREA
ABANDONED RAILROAD TRACKS
E 1040
TP-2
DRAINAGE DITCH
FORMER METALS DISPOSAL AREA
AC ROADWAY
EXISTING DRAINAGE CHANNEL
FORMER OIL TANK (APPROXIMATE)
TURNTABLE
ROUNDHOUSE
INDUSTRIAL WAY
6' CHAIN LINK FENCE
STORM DRAIN JUNCTION BOX
LEGEND:
GEOPROBE LOCATION
TRENCH
MONITORING WELL LOCATION
SOIL BORING
TC-58 TOTAL PETROLEUM HYDROCARBONS AS BUNKER C CONCENTRATIONS (IN MILLIGRAMS PER KILOGRAM)
TD-15 TOTAL PETROLEUM HYDROCARBONS AS DIESEL FUEL CONCENTRATION (IN MILLIGRAMS PER KILOGRAM)
(2.5-3.0) SAMPLE DEPTH (IN FEET BELOW GROUND SURFACE)
ND NOT DETECTED
N NO OIL OBSERVED
1,000 LINE OF EQUAL CONCENTRATION OF TPH AS BUNKER C (IN MILLIGRAMS PER KILOGRAM). DASHED WHERE INFERRED.
NOTES:
1. SOIL BORING LOCATIONS ARE APPROXIMATE
2. SOIL BORING DATA BASED ON INFORMATION PROVIDED BY SUNQUEST
3. LOCATIONS DESIGNATED BY TTT ARE TRENCH SAMPLES DONE BY LEVIN-FRICKE.
4. LOCATIONS DESIGNATED BY TTSB, OTSB, OR SDSB ARE BORINGS DRILLED BY LEVIN-FRICKE
5. LOCATIONS DESIGNATED BY B ARE BORINGS DRILLED BY TREADWELL & ROLLO
SCALE IN FEET
REVISION NO. 1 TO Figure 3
MAXIMUM TOTAL PETROLEUM HYDROCARBON CONCENTRATIONS IN SOIL
FORMER BAYSHORE RAILYARD
BRISBANE, CALIFORNIA

CALTRAIN RAILROAD TRACKS

CALTRAIN RAILROAD TRACKS

NORTHERN LIMIT OF OPERABLE UNIT-2

ABANDONED RAILROAD TRACKS

ROADWAY

DRAINAGE CHANNEL

TRANSFER PIT

MACHINE AND ELECTRIC SHOP

OIL TANK

TURNTABLE

GATE

FORMER TANK AND BOILER SHOP

ROUNDHOUSE

GENEVA AVENUE

INDUSTRIAL BLVD.

BAYSHORE BOULEVARD

DRAINAGE CHANNEL

DRAFT

LEGEND

- GEOPROBE LOCATION (BMWCI 1997)
- GEOPROBE LOCATION (BMWCI 1999)
- GEOPROBE LOCATION (BMWCI 2000)
- MONITORING WELL LOCATION
- LEAD CONCENTRATION IN EXCEEDENCE OF BASE CASE RAO OF 2,500 mg/Kg
- LEAD CONCENTRATION IN EXCEEDENCE OF UTILITY WORKER RAO OF 132 mg/Kg
- 3,800 LEAD CONCENTRATION (mg/Kg)
- EXISTING STRUCTURE
- FORMER STRUCTURE
- FENCE
- DRAINAGE CHANNEL

NOTE

Metals analyses in May to June 2000 included Antimony, Arsenic, Barium, Beryllium, Cadmium, Cobalt, Copper, Lead, Molybdenum, Nickel, Selenium, Silver, Thallium, Vanadium, and Zinc. See Table 2 for other detections.

NORTH

200' 0' 200' 400'

SCALE IN FEET

Burns & McDonnell Waste Consultants, Inc.

Figure 4

LEAD IMPACTED AREAS
A-FILL ZONE SOIL
SUNQUEST PROPERTIES, INC.
BRISBANE, CA

SINGLED_RON/ 5-01-2001 12:22:FEB K:\SUNQUEST\ISTN\OU2 RAP\

CALTRAIN RAILROAD TRACKS

CALTRAIN RAILROAD TRACKS

NORTHERN LIMIT OF OPERABLE UNIT-2

ABANDONED RAILROAD TRACKS

DRAINAGE CHANNEL

ROADWAY

OIL TANK

TURNTABLE

MACHINE AND ELECTRIC SHOP

GATE

FORMER TANK AND BOILER SHOP

ROUNDHOUSE

INDUSTRIAL BLVD.

GENEVA AVENUE

BAYSHORE BOULEVARD

BAYSHORE BOULEVARD

LEGEND

- GEOPROBE LOCATION (BMWCI 2000)
- BORING LOCATION (BY OTHERS)
- MONITORING WELL LOCATION
- 00 INDICATES CHLORINATED VOCs RESULTS (mg/Kg)
- 2.1 INDICATES NON-CHLORINATED VOCs RESULTS (mg/Kg)
- EXISTING STRUCTURE
- FORMER STRUCTURE
- FENCE
- DRAINAGE CHANNEL

NORTH

200' 0' 200' 400'

SCALE IN FEET

McDonnell Waste Consultants, Inc.

Figure 5
VOCs RESULTS
A-FILL ZONE
SUNQUEST PROPERTIES, INC.
BRISBANE, CA

K:\UNITED\SUNQUEST\DWG\FIGURES\ DWG OFF-7.01
K:\UNITED\SUNQUEST\STN\DUP\SUNQUEST DWG OFF-13-4,13,15- R.22-14,23,33-35,43-43,48-47,51-53,62-63

SUNQVOCS.DGN 8-14-2001 13:30:FB K:\SUNQUEST\USTN\DUP\ RAPL

APPENDIX B-8

Burns & McDonnell [2002a]

REVISED REMEDIAL ACTION PLAN

Southern Area of the
Former Bayshore Railyard Site
Brisbane, California

February 2002

Prepared For:

SUNQUEST PROPERTIES, INC.
150 Executive Park Boulevard, Suite 4200
San Francisco, California 94134

Project Number 26158

Prepared By:

Burns & McDonnell Engineering, Inc
Engineers-Geologists-Scientists
South San Francisco, California

Table 2
Soil Investigation Results
May to June 2000
Southern Area, Former Bayshore Railyard (OU-2)
Brisbane, California
Sunquest Properties, Inc.

Sample Name			R-1A_SC	R-1B	R-2A_SC	R-2B_SC	R-3B_SC	R-4_SC
Ground Surface Elevation			NS	NS	NS	NS	NS	NS
Bay Mud Depth	RAO*		9.9	9.9	8-12 (NR)	8-12 (NR)	9.8	9.6
Sample Depth (ft)	Base Case		5.5 - 6.0	6.0 - 6.5	5.0 - 5.5	7.0 - 7.5	8.0 - 8.5	8.6 - 9.6
Sampling Date	(Commercial		6/1/00	6/1/00	6/1/00	6/1/00	6/1/00	6/1/00
Laboratory Episode Number	Maint. Worker)		145942-001	C&T 0601.269	145942-003	145942-004	145942-005	145942-006
Parameter		Units						
Total Volatile Hydrocarbons								
Gasoline Range		mg/kg	NA	NA	NA	NA	NA	NA
Stoddard Solvent Range		mg/kg	NA	NA	NA	NA	NA	NA
Total Extractable Hydrocarbons								
Diesel Range	46,000	mg/kg	16,400	NA	NA	686	86,900	7,220
Motor Oil Range		mg/kg	25,000	NA	NA	1,130	130,000	10,600
Bunker C Range	46,000	mg/kg	73,900	NA	NA	3,150	384,000	31,700
VOCs (EPA 8021)								
Benzene		ug/kg	NA	NA	NA	NA	NA	NA
Toluene		ug/kg	NA	NA	NA	NA	NA	NA
Ethylbenzene		ug/kg	NA	NA	NA	NA	NA	NA
m,p-Xylenes		ug/kg	NA	NA	NA	NA	NA	NA
o-Xylenes		ug/kg	NA	NA	NA	NA	NA	NA
HVOCs** (EPA 8260)								
1,2,4-Trimethylbenzene		ug/kg	NA	NA	NA	NA	NA	NA
1,3,5-Trimethylbenzene		ug/kg	NA	NA	NA	NA	NA	NA
Acetone		ug/kg	NA	NA	NA	NA	NA	NA
Ethylbenzene		ug/kg	NA	NA	NA	NA	NA	NA
Isopropylbenzene		ug/kg	NA	NA	NA	NA	NA	NA
m,p-Xylenes		ug/kg	NA	NA	NA	NA	NA	NA
Napthalene		ug/kg	NA	NA	NA	NA	NA	NA
n-Butylbenzene		ug/kg	NA	NA	NA	NA	NA	NA
o-Xylenes		ug/kg	NA	NA	NA	NA	NA	NA
para-Isopropyl Toluene		ug/kg	NA	NA	NA	NA	NA	NA
Propylbenzene		ug/kg	NA	NA	NA	NA	NA	NA
sec-Butylbenzene		ug/kg	NA	NA	NA	NA	NA	NA
Tetrachloroethene		ug/kg	NA	NA	NA	NA	NA	NA
Toluene		ug/kg	NA	NA	NA	NA	NA	NA
Trichloroethene		ug/kg	NA	NA	NA	NA	NA	NA
Semivolatile Organics** (EPA 8270)								
2-Methylnaphthalene	216,236,000	ug/kg	<200,000	NA	NA	NA	<57,000	NA
TITLE 26 Metals								
Antimony	1,658	mg/kg	NA	NA	<58	NA	NA	NA
Arsenic	19	mg/kg	NA	NA	39.0	NA	NA	NA
Barium	290,217	mg/kg	NA	NA	1,300.0	NA	NA	NA
Beryllium		mg/kg	NA	NA	2.4	NA	NA	NA
Cadmium	2,073	mg/kg	NA	NA	6.1	NA	NA	NA
Chromium (total)		mg/kg	NA	NA	23.0	NA	NA	NA
Cobalt		mg/kg	NA	NA	<19	NA	NA	NA
Copper		mg/kg	NA	NA	330.0	NA	NA	NA
Lead	2,464	mg/kg	NA	NA	5,000.0	NA	NA	NA
Molybdenum		mg/kg	NA	NA	<4.9	NA	NA	NA
Nickel		mg/kg	NA	NA	72.0	NA	NA	NA
Selenium		mg/kg	NA	NA	<4.9	NA	NA	NA
Silver	90,603	mg/kg	NA	NA	2.3	NA	NA	NA
Thallium		mg/kg	NA	NA	<4.9	NA	NA	NA
Vanadium		mg/kg	NA	NA	34.0	NA	NA	NA
Zinc		mg/kg	NA	NA	2,400.0	NA	NA	NA
Mercury (EPA 7470)		mg/kg	NA	NA	0.1	NA	NA	NA
Lead (STLC - EPA 6010B)		ug/L	NA	NA	14,000.0	NA	NA	NA
Other								
Herbicides (EPA 8151A)		ug/kg	NA	NA	NA	NA	NA	NA
Pesticides/PCBs (EPA 8081A/8082)		ug/kg	NA	NA	NA	NA	NA	NA
96 hour LC50 Bioassay			NA	PASS	NA	NA	NA	NA

Notes:

*RAO = Soil Remedial Action Objective is listed for Base Case only
is for Commercial Maintenance Worker (see Table 1).

Bold entry indicates exceedence of Base Case RAO.

**Only compounds with detections above reporting limits
are listed for VOCs and SVOCs.

NA - Not analyzed or not applicable.

NS - Elevation not surveyed; see report for coordinates.

NR - No recovery.

ug/kg - micrograms per kilogram

mg/kg - milligrams per kilogram

< less than (not detected at or above this value)

Y - sample exhibits pattern which does not resemble standard

H - heavier hydrocarbons than indicated on standard

L - lighter hydrocarbons than indicated on standard

J - estimated value

Table 2
Soil Investigation Results
May to June 2000
Southern Area, Former Bayshore Railyard (OU-2)
Brisbane, California
Sunquest Properties, Inc.

Sample Name			R-5	R-6B_SC	R-7A_SC	R-7B_SC	R-8B_SC	R-9_SC
Ground Surface Elevation			NS	NS	NS	NS	NS	NS
Bay Mud Depth	RAO*		6	10	9.5	9.5	11.4	9.9
Sample Depth (ft)	Base Case		NA	6.7 - 7.4	6.8 - 7.6	8.4 - 9.0	10.8 - 11.4	4.2 - 5.0
Sampling Date	(Commercial		5/31/00	6/1/00	6/1/00	6/1/00	6/1/00	6/2/00
Laboratory Episode Number	Maint. Worker)		NA	145938-013	145938-014	145938-015	145938-016	145942-013
Parameter		Units						
Total Volatile Hydrocarbons								
Gasoline Range		mg/kg	NA	NA	NA	NA	NA	<0.92
Stoddard Solvent Range		mg/kg	NA	NA	NA	NA	NA	<4.6
Total Extractable Hydrocarbons								
Diesel Range	46,000	mg/kg	NA	48,900	38	NA	827	NA
Motor Oil Range		mg/kg	NA	98,100	101	NA	1,660	NA
Bunker C Range	46,000	mg/kg	NA	230,000	197	NA	4,060	NA
VOCs (EPA 8021)								
Benzene		ug/kg	NA	NA	NA	NA	NA	NA
Toluene		ug/kg	NA	NA	NA	NA	NA	NA
Ethylbenzene		ug/kg	NA	NA	NA	NA	NA	NA
m,p-Xylenes		ug/kg	NA	NA	NA	NA	NA	NA
o-Xylenes		ug/kg	NA	NA	NA	NA	NA	NA
HVOCs** (EPA 8260)								
1,2,4-Trimethylbenzene		ug/kg	NA	NA	NA	NA	NA	<4.8
1,3,5-Trimethylbenzene		ug/kg	NA	NA	NA	NA	NA	<4.8
Acetone		ug/kg	NA	NA	NA	NA	NA	20
Ethylbenzene		ug/kg	NA	NA	NA	NA	NA	<4.8
Isopropylbenzene		ug/kg	NA	NA	NA	NA	NA	<4.8
m,p-Xylenes		ug/kg	NA	NA	NA	NA	NA	<4.8
Napthalene		ug/kg	NA	NA	NA	NA	NA	<4.8
n-Butylbenzene		ug/kg	NA	NA	NA	NA	NA	<4.8
o-Xylenes		ug/kg	NA	NA	NA	NA	NA	<4.8
para-Isopropyl Toluene		ug/kg	NA	NA	NA	NA	NA	<4.8
Propylbenzene		ug/kg	NA	NA	NA	NA	NA	<4.8
sec-Butylbenzene		ug/kg	NA	NA	NA	NA	NA	<4.8
Tetrachloroethene		ug/kg	NA	NA	NA	NA	NA	<4.8
Toluene		ug/kg	NA	NA	NA	NA	NA	<4.8
Trichloroethene		ug/kg	NA	NA	NA	NA	NA	<4.8
Semivolatile Organics** (EPA 8270)								
2-Methylnaphthalene	216,236,000	ug/kg	NA	86000J	NA	NA	NA	NA
TITLE 26 Metals								
Antimony	1,658	mg/kg	NA	NA	NA	<59	NA	NA
Arsenic	19	mg/kg	NA	NA	NA	15.0	NA	NA
Barium	290,217	mg/kg	NA	NA	NA	1,200.0	NA	NA
Beryllium		mg/kg	NA	NA	NA	2.4	NA	NA
Cadmium	2,073	mg/kg	NA	NA	NA	4.6	NA	NA
Chromium (total)		mg/kg	NA	NA	NA	20.0	NA	NA
Cobalt		mg/kg	NA	NA	NA	<20	NA	NA
Copper		mg/kg	NA	NA	NA	580.0	NA	NA
Lead	2,464	mg/kg	NA	NA	NA	**2,500.0**	NA	NA
Molybdenum		mg/kg	NA	NA	NA	<0.99	NA	NA
Nickel		mg/kg	NA	NA	NA	57.0	NA	NA
Selenium		mg/kg	NA	NA	NA	<5	NA	NA
Silver	90,603	mg/kg	NA	NA	NA	4.9	NA	NA
Thallium		mg/kg	NA	NA	NA	5U	NA	NA
Vanadium		mg/kg	NA	NA	NA	22.0	NA	NA
Zinc		mg/kg	NA	NA	NA	2,700.0	NA	NA
Mercury (EPA 7470)		mg/kg	NA	NA	NA	0.6	NA	NA
Lead (STLC - EPA 6010B)		ug/L	NA	NA	NA	180.0	NA	NA
Other								
Herbicides (EPA 8151A)		ug/kg	NA	NA	NA	NA	NA	NA
Pesticides/PCBs (EPA 8081A/8082)		ug/kg	NA	NA	NA	NA	NA	NA
96 hour LC50 Bioassay			NA	NA	NA	NA	NA	NA

Notes:
*RAO = Soil Remedial Action Objective is listed for Base Case only is for Commercial Maintenance Worker (see Table 1).
Bold entry indicates exceedence of Base Case RAO.
**Only compounds with detections above reporting limits are listed for VOCs and SVOCs.
NA - Not analyzed or not applicable.
NS - Elevation not surveyed; see report for coordinates.
NR - No recovery.
ug/kg - micrograms per kilogram
mg/kg - milligrams per kilogram
< less than (not detected at or above this value)
Y - sample exhibits pattern which does not resemble standard
H - heavier hydrocarbons than indicated on standard
L - lighter hydrocarbons than indicated on standard
J - estimated value

Table 2
Soil Investigation Results
May to June 2000
Southern Area, Former Bayshore Railyard (OU-2)
Brisbane, California
Sunquest Properties, Inc.

Sample Name Ground Surface Elevation Bay Mud Depth Sample Depth (ft) Sampling Date Laboratory Episode Number	RAO* Base Case (Commercial Maint. Worker)		R-10A_SC NS 10.4 1.5 - 2.0 6/2/00 00-06-0304-1	R-11B_SC NS 7.8 7.2 - 7.8 6/2/00 145956-001	R-12 NS (Free product at ground surface; not drilled.)	R-13 NS (Free product at ground surface; not drilled.)	R-14B_SC NS Refusal 10.5 10.0 - 10.5 6/1/00 145956-002	R-15B_SC NS 10.4 9.4 - 10.4 6/1/00 145938-017
Parameter		Units						
Total Volatile Hydrocarbons								
Gasoline Range		mg/kg	NA	NA	NA	NA	NA	NA
Stoddard Solvent Range		mg/kg	NA	NA	NA	NA	NA	NA
Total Extractable Hydrocarbons								
Diesel Range	46,000	mg/kg	NA	**117,000**	NA	NA	8,140	23,800
Motor Oil Range		mg/kg	NA	**228,000**	NA	NA	14,800	39,000
Bunker C Range	46,000	mg/kg	NA	**552,000**	NA	NA	36,900	**109,000**
VOCs (EPA 8021)								
Benzene		ug/kg	NA	NA	NA	NA	NA	NA
Toluene		ug/kg	NA	NA	NA	NA	NA	NA
Ethylbenzene		ug/kg	NA	NA	NA	NA	NA	NA
m,p-Xylenes		ug/kg	NA	NA	NA	NA	NA	NA
o-Xylenes		ug/kg	NA	NA	NA	NA	NA	NA
HVOCs** (EPA 8260)								
1,2,4-Trimethylbenzene		ug/kg	NA	NA	NA	NA	NA	NA
1,3,5-Trimethylbenzene		ug/kg	NA	NA	NA	NA	NA	NA
Acetone		ug/kg	NA	NA	NA	NA	NA	NA
Ethylbenzene		ug/kg	NA	NA	NA	NA	NA	NA
Isopropylbenzene		ug/kg	NA	NA	NA	NA	NA	NA
m,p-Xylenes		ug/kg	NA	NA	NA	NA	NA	NA
Napthalene		ug/kg	NA	NA	NA	NA	NA	NA
n-Butylbenzene		ug/kg	NA	NA	NA	NA	NA	NA
o-Xylenes		ug/kg	NA	NA	NA	NA	NA	NA
para-Isopropyl Toluene		ug/kg	NA	NA	NA	NA	NA	NA
Propylbenzene		ug/kg	NA	NA	NA	NA	NA	NA
sec-Butylbenzene		ug/kg	NA	NA	NA	NA	NA	NA
Tetrachloroethene		ug/kg	NA	NA	NA	NA	NA	NA
Toluene		ug/kg	NA	NA	NA	NA	NA	NA
Trichloroethene		ug/kg	NA	NA	NA	NA	NA	NA
Semivolatile Organics** (EPA 8270)								
2-Methylnaphthalene	216,236,000	ug/kg	NA	NA	NA	NA	<150,000	NA
TITLE 26 Metals								
Antimony	1,658	mg/kg	NA	NA	NA	NA	NA	NA
Arsenic	19	mg/kg	NA	NA	NA	NA	NA	NA
Barium	290,217	mg/kg	NA	NA	NA	NA	NA	NA
Beryllium		mg/kg	NA	NA	NA	NA	NA	NA
Cadmium	2,073	mg/kg	NA	NA	NA	NA	NA	NA
Chromium (total)		mg/kg	NA	NA	NA	NA	NA	NA
Cobalt		mg/kg	NA	NA	NA	NA	NA	NA
Copper		mg/kg	NA	NA	NA	NA	NA	NA
Lead	2,464	mg/kg	NA	NA	NA	NA	NA	NA
Molybdenum		mg/kg	NA	NA	NA	NA	NA	NA
Nickel		mg/kg	NA	NA	NA	NA	NA	NA
Selenium		mg/kg	NA	NA	NA	NA	NA	NA
Silver	90,603	mg/kg	NA	NA	NA	NA	NA	NA
Thallium		mg/kg	NA	NA	NA	NA	NA	NA
Vanadium		mg/kg	NA	NA	NA	NA	NA	NA
Zinc		mg/kg	NA	NA	NA	NA	NA	NA
Mercury (EPA 7470)		mg/kg	NA	NA	NA	NA	NA	NA
Lead (STLC - EPA 6010B)		ug/L	NA	NA	NA	NA	NA	NA
Other								
Herbicides (EPA 8151A)		ug/kg	ND	NA	NA	NA	NA	NA
Pesticides/PCBs (EPA 8081A/8082)		ug/kg	ND	NA	NA	NA	NA	NA
96 hour LC50 Bioassay			NA	NA	NA	NA	NA	NA

Notes:

*RAO = Soil Remedial Action Objective is listed for Base Case only is for Commercial Maintenance Worker (see Table 1).

Bold entry indicates exceedence of Base Case RAO.

**Only compounds with detections above reporting limits are listed for VOCs and SVOCs.

NA - Not analyzed or not applicable.

NS - Elevation not surveyed; see report for coordinates.

NR - No recovery.

ug/kg - micrograms per kilogram

mg/kg - milligrams per kilogram

< less than (not detected at or above this value)

Y - sample exhibits pattern which does not resemble standard

H - heavier hydrocarbons than indicated on standard

L - lighter hydrocarbons than indicated on standard

J - estimated value

Table 2
Soil Investigation Results
May to June 2000
Southern Area, Former Bayshore Railyard (OU-2)
Brisbane, California
Sunquest Properties, Inc.

Sample Name Ground Surface Elevation Bay Mud Depth Sample Depth (ft) Sampling Date Laboratory Episode Number	*RAO* Base Case (Commercial Maint. Worker)*		R-16B_SC NS 10.7 10.0 - 10.5 6/2/00 145956-003	R-17 8.00 (Free product at ground surface; not drilled.)	R-18 8.42 (Free product at ground surface; not drilled.)	R-19A_SC NS 7.7 2.0 - 2.5 6/2/00 145942-010	R-19B_SC NS 7.7 7.0 - 7.7 6/2/00 145942-011
Parameter		Units					
Total Volatile Hydrocarbons							
Gasoline Range		mg/kg	NA	NA	NA	<1	NA
Stoddard Solvent Range		mg/kg	NA	NA	NA	<5	NA
Total Extractable Hydrocarbons							
Diesel Range	*46,000*	mg/kg	16,300	NA	NA	NA	30,700
Motor Oil Range		mg/kg	24,200	NA	NA	NA	50,700
Bunker C Range	*46,000*	mg/kg	71,200	NA	NA	NA	**140,000**
VOCs (EPA 8021)							
Benzene		ug/kg	NA	NA	NA	NA	NA
Toluene		ug/kg	NA	NA	NA	NA	NA
Ethylbenzene		ug/kg	NA	NA	NA	NA	NA
m,p-Xylenes		ug/kg	NA	NA	NA	NA	NA
o-Xylenes		ug/kg	NA	NA	NA	NA	NA
HVOCs** (EPA 8260)							
1,2,4-Trimethylbenzene		ug/kg	NA	NA	NA	<5.1	NA
1,3,5-Trimethylbenzene		ug/kg	NA	NA	NA	<5.1	NA
Acetone		ug/kg	NA	NA	NA	<20	NA
Ethylbenzene		ug/kg	NA	NA	NA	<5.1	NA
Isopropylbenzene		ug/kg	NA	NA	NA	<5.1	NA
m,p-Xylenes		ug/kg	NA	NA	NA	<5.1	NA
Napthalene		ug/kg	NA	NA	NA	<5.1	NA
n-Butylbenzene		ug/kg	NA	NA	NA	<5.1	NA
o-Xylenes		ug/kg	NA	NA	NA	<5.1	NA
para-Isopropyl Toluene		ug/kg	NA	NA	NA	<5.1	NA
Propylbenzene		ug/kg	NA	NA	NA	<5.1	NA
sec-Butylbenzene		ug/kg	NA	NA	NA	<5.1	NA
Tetrachloroethene		ug/kg	NA	NA	NA	<5.1	NA
Toluene		ug/kg	NA	NA	NA	<5.1	NA
Trichloroethene		ug/kg	NA	NA	NA	<5.1	NA
Semivolatile Organics** (EPA 8270)							
2-Methylnaphthalene	*216,236,000*	ug/kg	NA	NA	NA	NA	NA
TITLE 26 Metals							
Antimony	*1,658*	mg/kg	NA	NA	NA	NA	NA
Arsenic	*19*	mg/kg	NA	NA	NA	NA	NA
Barium	*290,217*	mg/kg	NA	NA	NA	NA	NA
Beryllium		mg/kg	NA	NA	NA	NA	NA
Cadmium	*2,073*	mg/kg	NA	NA	NA	NA	NA
Chromium (total)		mg/kg	NA	NA	NA	NA	NA
Cobalt		mg/kg	NA	NA	NA	NA	NA
Copper		mg/kg	NA	NA	NA	NA	NA
Lead	*2,464*	mg/kg	NA	NA	NA	NA	NA
Molybdenum		mg/kg	NA	NA	NA	NA	NA
Nickel		mg/kg	NA	NA	NA	NA	NA
Selenium		mg/kg	NA	NA	NA	NA	NA
Silver	*90,603*	mg/kg	NA	NA	NA	NA	NA
Thallium		mg/kg	NA	NA	NA	NA	NA
Vanadium		mg/kg	NA	NA	NA	NA	NA
Zinc		mg/kg	NA	NA	NA	NA	NA
Mercury (EPA 7470)		mg/kg	NA	NA	NA	NA	NA
Lead (STLC - EPA 6010B)		ug/L	NA	NA	NA	NA	NA
Other							
Herbicides (EPA 8151A)		ug/kg	NA	NA	NA	NA	NA
Pesticides/PCBs (EPA 8081A/8082)		ug/kg	NA	NA	NA	NA	NA
96 hour LC50 Bioassay			NA	NA	NA	NA	NA

Notes:

*RAO = Soil Remedial Action Objective is listed for Base Case only is for Commercial Maintenance Worker (see Table 1).

Bold entry indicates exceedence of Base Case RAO.

**Only compounds with detections above reporting limits are listed for VOCs and SVOCs.

NA - Not analyzed or not applicable.

NS - Elevation not surveyed; see report for coordinates.

NR - No recovery.

ug/kg - micrograms per kilogram

mg/kg - milligrams per kilogram

< less than (not detected at or above this value)

Y - sample exhibits pattern which does not resemble standard

H - heavier hydrocarbons than indicated on standard

L - lighter hydrocarbons than indicated on standard

J - estimated value

Table 2
Soil Investigation Results
May to June 2000
Southern Area, Former Bayshore Railyard (OU-2)
Brisbane, California
Sunquest Properties, Inc.

Sample Name Ground Surface Elevation Bay Mud Depth Sample Depth (ft) Sampling Date Laboratory Episode Number	*RAO* Base Case (Commercial Maint. Worker)*		R-20 NS (Free product at ground surface; not drilled.)	R-21 NS (Free product at ground surface; not drilled.)	R-22B_SC NS 10.7 9.4 - 10.2 6/2/00 145956-004	R-23A_SC 6.10 9.2 1.4 - 2.0 6/2/00 145942-009	R-23B_SC 6.10 9.2 7.6 - 8.4 6/2/00 146015-001
Parameter		Units					
Total Volatile Hydrocarbons							
Gasoline Range		mg/kg	NA	NA	NA	<1	NA
Stoddard Solvent Range		mg/kg	NA	NA	NA	<5.1	NA
Total Extractable Hydrocarbons							
Diesel Range	*46,000*	mg/kg	NA	NA	25,700	NA	40,600
Motor Oil Range		mg/kg	NA	NA	56,800	NA	64,000
Bunker C Range	*46,000*	mg/kg	NA	NA	126,000	NA	182,000
VOCs (EPA 8021)							
Benzene		ug/kg	NA	NA	NA	NA	NA
Toluene		ug/kg	NA	NA	NA	NA	NA
Ethylbenzene		ug/kg	NA	NA	NA	NA	NA
m,p-Xylenes		ug/kg	NA	NA	NA	NA	NA
o-Xylenes		ug/kg	NA	NA	NA	NA	NA
HVOCs** (EPA 8260)							
1,2,4-Trimethylbenzene		ug/kg	NA	NA	NA	<4.6	NA
1,3,5-Trimethylbenzene		ug/kg	NA	NA	NA	<4.6	NA
Acetone		ug/kg	NA	NA	NA	<19	NA
Ethylbenzene		ug/kg	NA	NA	NA	<4.6	NA
Isopropylbenzene		ug/kg	NA	NA	NA	<4.6	NA
m,p-Xylenes		ug/kg	NA	NA	NA	<4.6	NA
Napthalene		ug/kg	NA	NA	NA	<4.6	NA
n-Butylbenzene		ug/kg	NA	NA	NA	<4.6	NA
o-Xylenes		ug/kg	NA	NA	NA	<4.6	NA
para-Isopropyl Toluene		ug/kg	NA	NA	NA	<4.6	NA
Propylbenzene		ug/kg	NA	NA	NA	<4.6	NA
sec-Butylbenzene		ug/kg	NA	NA	NA	<4.6	NA
Tetrachloroethene		ug/kg	NA	NA	NA	<4.6	NA
Toluene		ug/kg	NA	NA	NA	<4.6	NA
Trichloroethane		ug/kg	NA	NA	NA	<4.6	NA
Semivolatile Organics** (EPA 8270)							
2-Methylnaphthalene	*216,236,000*	ug/kg	NA	NA	<67,000	NA	NA
TITLE 26 Metals							
Antimony	*1,658*	mg/kg	NA	NA	NA	NA	NA
Arsenic	*19*	mg/kg	NA	NA	NA	NA	NA
Barium	*290,217*	mg/kg	NA	NA	NA	NA	NA
Beryllium		mg/kg	NA	NA	NA	NA	NA
Cadmium	*2,073*	mg/kg	NA	NA	NA	NA	NA
Chromium (total)		mg/kg	NA	NA	NA	NA	NA
Cobalt		mg/kg	NA	NA	NA	NA	NA
Copper		mg/kg	NA	NA	NA	NA	NA
Lead	*2,464*	mg/kg	NA	NA	NA	NA	NA
Molybdenum		mg/kg	NA	NA	NA	NA	NA
Nickel		mg/kg	NA	NA	NA	NA	NA
Selenium		mg/kg	NA	NA	NA	NA	NA
Silver	*90,603*	mg/kg	NA	NA	NA	NA	NA
Thallium		mg/kg	NA	NA	NA	NA	NA
Vanadium		mg/kg	NA	NA	NA	NA	NA
Zinc		mg/kg	NA	NA	NA	NA	NA
Mercury (EPA 7470)		mg/kg	NA	NA	NA	NA	NA
Lead (STLC - EPA 6010B)		ug/L	NA	NA	NA	NA	NA
Other							
Herbicides (EPA 8151A)		ug/kg	NA	NA	NA	NA	NA
Pesticides/PCBs (EPA 8081A/8082)		ug/kg	NA	NA	NA	NA	NA
96 hour LC50 Bioassay			NA	NA	NA	NA	NA

Notes:

*RAO = Soil Remedial Action Objective is listed for Base Case only is for Commercial Maintenance Worker (see Table 1).

Bold entry indicates exceedence of Base Case RAO.

**Only compounds with detections above reporting limits are listed for VOCs and SVOCs.

NA - Not analyzed or not applicable.

NS - Elevation not surveyed; see report for coordinates.

NR - No recovery.

ug/kg - micrograms per kilogram

mg/kg - milligrams per kilogram

< less than (not detected at or above this value)

Y - sample exhibits pattern which does not resemble standard

H - heavier hydrocarbons than indicated on standard

L - lighter hydrocarbons than indicated on standard

J - estimated value

Table 2
Soil Investigation Results
May to June 2000
Southern Area, Former Bayshore Railyard (OU-2)
Brisbane, California
Sunquest Properties, Inc.

Sample Name			R-24_SC	R-25A_SC	R-25B_SC	R-26_SC	R-27B_SC
Ground Surface Elevation			NS	6.15	6.15	NS	6.12
Bay Mud Depth	RAO*		8-12 (NR)	7.1	7.1	9.8	8-12 (NR)
Sample Depth (ft)	Base Case		6.0 - 6.5	3.2 - 3.7	6.5 - 7.0	9.0 - 9.8	7.4 - 8.0
Sampling Date	(Commercial		6/2/00	6/6/00	6/6/00	6/1/00	6/2/00
Laboratory Episode Number	Maint. Worker)		145942-008	146015-002	146015-003	145942-007	145956-005
Parameter		Units					
Total Volatile Hydrocarbons							
Gasoline Range		mg/kg	NA	1100YZ	NA	NA	NA
Stoddard Solvent Range		mg/kg	NA	520YZ	NA	NA	NA
Total Extractable Hydrocarbons							
Diesel Range	46,000	mg/kg	7,590	NA	15,000	**67,000**	89
Motor Oil Range		mg/kg	12,300	NA	29,500	**113,000**	156
Bunker C Range	46,000	mg/kg	34,700	NA	73,400	**299,000**	387
VOCs (EPA 8021)							
Benzene		ug/kg	NA	NA	NA	NA	NA
Toluene		ug/kg	NA	NA	NA	NA	NA
Ethylbenzene		ug/kg	NA	NA	NA	NA	NA
m,p-Xylenes		ug/kg	NA	NA	NA	NA	NA
o-Xylenes		ug/kg	NA	NA	NA	NA	NA
HVOCs** (EPA 8260)							
1,2,4-Trimethylbenzene		ug/kg	NA	<130,000	NA	NA	NA
1,3,5-Trimethylbenzene		ug/kg	NA	<130,000	NA	NA	NA
Acetone		ug/kg	NA	<500,000	NA	NA	NA
Ethylbenzene		ug/kg	NA	<130,000	NA	NA	NA
Isopropylbenzene		ug/kg	NA	<130,000	NA	NA	NA
m,p-Xylenes		ug/kg	NA	<130,000	NA	NA	NA
Napthalene		ug/kg	NA	<130,000	NA	NA	NA
n-Butylbenzene		ug/kg	NA	<130,000	NA	NA	NA
o-Xylenes		ug/kg	NA	<130,000	NA	NA	NA
para-Isopropyl Toluene		ug/kg	NA	<130,000	NA	NA	NA
Propylbenzene		ug/kg	NA	<130,000	NA	NA	NA
sec-Butylbenzene		ug/kg	NA	<130,000	NA	NA	NA
Tetrachloroethene		ug/kg	NA	2,500,000	NA	NA	NA
Toluene		ug/kg	NA	<130,000	NA	NA	NA
Trichloroethene		ug/kg	NA	170,000	NA	NA	NA
Semivolatile Organics** (EPA 8270)							
2-Methylnaphthalene	216,236,000	ug/kg	NA	NA	NA	15000J	NA
TITLE 26 Metals							
Antimony	1,658	mg/kg	NA	NA	NA	NA	NA
Arsenic	19	mg/kg	NA	NA	NA	NA	NA
Barium	290,217	mg/kg	NA	NA	NA	NA	NA
Beryllium		mg/kg	NA	NA	NA	NA	NA
Cadmium	2,073	mg/kg	NA	NA	NA	NA	NA
Chromium (total)		mg/kg	NA	NA	NA	NA	NA
Cobalt		mg/kg	NA	NA	NA	NA	NA
Copper		mg/kg	NA	NA	NA	NA	NA
Lead	2,464	mg/kg	NA	NA	NA	NA	NA
Molybdenum		mg/kg	NA	NA	NA	NA	NA
Nickel		mg/kg	NA	NA	NA	NA	NA
Selenium		mg/kg	NA	NA	NA	NA	NA
Silver	90,603	mg/kg	NA	NA	NA	NA	NA
Thallium		mg/kg	NA	NA	NA	NA	NA
Vanadium		mg/kg	NA	NA	NA	NA	NA
Zinc		mg/kg	NA	NA	NA	NA	NA
Mercury (EPA 7470)		mg/kg	NA	NA	NA	NA	NA
Lead (STLC - EPA 6010B)		ug/L	NA	NA	NA	NA	NA
Other							
Herbicides (EPA 8151A)		ug/kg	NA	NA	NA	NA	NA
Pesticides/PCBs (EPA 8081A/8082)		ug/kg	NA	NA	NA	NA	NA
96 hour LC50 Bioassay			NA	NA	NA	NA	NA

Notes:
*RAO = Soil Remedial Action Objective is listed for Base Case only
is for Commercial Maintenance Worker (see Table 1).
Bold entry indicates exceedence of Base Case RAO.
**Only compounds with detections above reporting limits
are listed for VOCs and SVOCs.
NA - Not analyzed or not applicable.
NS - Elevation not surveyed; see report for coordinates.
NR - No recovery.
ug/kg - micrograms per kilogram
mg/kg - milligrams per kilogram
< less than (not detected at or above this value)
Y - sample exhibits pattern which does not resemble standard
H - heavier hydrocarbons than indicated on standard
L - lighter hydrocarbons than indicated on standard
J - estimated value

Table 2
Soil Investigation Results
May to June 2000
Southern Area, Former Bayshore Railyard (OU-2)
Brisbane, California
Sunquest Properties, Inc.

Sample Name			R-28B_SC	R-29_SC	R-30A_SC	R-30B_SC	R-31B_SC
Ground Surface Elevation			NS	NS	6.78	6.78	NS
Bay Mud Depth			10	10.3	12-14 (NR)	12-14 (NR)	9.3
Sample Depth (ft)	RAO*		9.5 - 10.0	9.5 - 10.5	2.2 - 3.0	7.0 - 8.0	9.0 - 9.4
Sampling Date	Base Case		5/31/00	5/31/00	6/1/00	6/1/00	5/31/00
Laboratory Episode Number	(Commercial Maint. Worker)		145938-001	145956-011	145938-018	145938-019	145956-006
Parameter		Units					
Total Volatile Hydrocarbons							
Gasoline Range		mg/kg	NA	NA	380HY	NA	NA
Stoddard Solvent Range		mg/kg	NA	NA	190Y	NA	NA
Total Extractable Hydrocarbons							
Diesel Range	46,000	mg/kg	832	1,190	NA	16,100	22
Motor Oil Range		mg/kg	1,890	2,940	NA	6,200	52
Bunker C Range	46,000	mg/kg	4,210	5,880	NA	57,100	119
VOCs (EPA 8021)							
Benzene		ug/kg	NA	NA	NA	NA	NA
Toluene		ug/kg	NA	NA	NA	NA	NA
Ethylbenzene		ug/kg	NA	NA	NA	NA	NA
m,p-Xylenes		ug/kg	NA	NA	NA	NA	NA
o-Xylenes		ug/kg	NA	NA	NA	NA	NA
HVOCs** (EPA 8260)							
1,2,4-Trimethylbenzene		ug/kg	NA	NA	100J	NA	NA
1,3,5-Trimethylbenzene		ug/kg	NA	NA	<130	NA	NA
Acetone		ug/kg	NA	NA	<500	NA	NA
Ethylbenzene		ug/kg	NA	NA	<130	NA	NA
Isopropylbenzene		ug/kg	NA	NA	320	NA	NA
m,p-Xylenes		ug/kg	NA	NA	<130	NA	NA
Napthalene		ug/kg	NA	NA	1,700	NA	NA
n-Butylbenzene		ug/kg	NA	NA	1,500	NA	NA
o-Xylenes		ug/kg	NA	NA	<130	NA	NA
para-Isopropyl Toluene		ug/kg	NA	NA	330	NA	NA
Propylbenzene		ug/kg	NA	NA	780	NA	NA
sec-Butylbenzene		ug/kg	NA	NA	780	NA	NA
Tetrachloroethene		ug/kg	NA	NA	<130	NA	NA
Toluene		ug/kg	NA	NA	<130	NA	NA
Trichloroethene		ug/kg	NA	NA	<130	NA	NA
Semivolatile Organics** (EPA 8270)							
2-Methylnaphthalene	216,236,000	ug/kg	NA	<17,000	NA	NA	NA
TITLE 26 Metals							
Antimony	1,658	mg/kg	NA	NA	NA	NA	NA
Arsenic	19	mg/kg	NA	NA	NA	NA	NA
Barium	290,217	mg/kg	NA	NA	NA	NA	NA
Beryllium		mg/kg	NA	NA	NA	NA	NA
Cadmium	2,073	mg/kg	NA	NA	NA	NA	NA
Chromium (total)		mg/kg	NA	NA	NA	NA	NA
Cobalt		mg/kg	NA	NA	NA	NA	NA
Copper		mg/kg	NA	NA	NA	NA	NA
Lead	2,464	mg/kg	NA	NA	NA	NA	NA
Molybdenum		mg/kg	NA	NA	NA	NA	NA
Nickel		mg/kg	NA	NA	NA	NA	NA
Selenium		mg/kg	NA	NA	NA	NA	NA
Silver	90,603	mg/kg	NA	NA	NA	NA	NA
Thallium		mg/kg	NA	NA	NA	NA	NA
Vanadium		mg/kg	NA	NA	NA	NA	NA
Zinc		mg/kg	NA	NA	NA	NA	NA
Mercury (EPA 7470)		mg/kg	NA	NA	NA	NA	NA
Lead (STLC - EPA 6010B)		ug/L	NA	NA	NA	NA	NA
Other							
Herbicides (EPA 8151A)		ug/kg	NA	NA	NA	NA	NA
Pesticides/PCBs (EPA 8081A/8082)		ug/kg	NA	NA	NA	NA	NA
96 hour LC50 Bioassay			NA	NA	NA	NA	NA

Notes:
*RAO = Soil Remedial Action Objective is listed for Base Case only
is for Commercial Maintenance Worker (see Table 1).
Bold entry indicates exceedence of Base Case RAO.
**Only compounds with detections above reporting limits
are listed for VOCs and SVOCs.
NA - Not analyzed or not applicable.
NS - Elevation not surveyed; see report for coordinates.
NR - No recovery.
ug/kg - micrograms per kilogram
mg/kg - milligrams per kilogram
< less than (not detected at or above this value)
Y - sample exhibits pattern which does not resemble standard
H - heavier hydrocarbons than indicated on standard
L - lighter hydrocarbons than indicated on standard
J - estimated value

Table 2
Soil Investigation Results
May to June 2000
Southern Area, Former Bayshore Railyard (OU-2)
Brisbane, California
Sunquest Properties, Inc.

Sample Name			R-32C_SC	R-33B_SC	R-34	R-35B_SC	R-36C_SC
Ground Surface Elevation			7.97	NS	8.73	9.27	NS
Bay Mud Depth	RAO*		11.4	10.3	Refusal 4.5	9.3	12.8
Sample Depth (ft)	Base Case		11.0 - 11.5	9.8 - 10.3	NA	5.0 - 5.5	12.3 - 12.8
Sampling Date	(Commercial		5/31/00	5/31/00	5/31/00	5/31/00	5/31/00
Laboratory Episode Number	Maint. Worker)		145938-003	145938-004	NA	145938-005	145938-006
Parameter		Units					
Total Volatile Hydrocarbons							
Gasoline Range		mg/kg	NA	NA	NA	NA	NA
Stoddard Solvent Range		mg/kg	NA	NA	NA	NA	NA
Total Extractable Hydrocarbons							
Diesel Range	46,000	mg/kg	316	4,310	NA	5,980	1,520
Motor Oil Range		mg/kg	503	8,790	NA	13,500	5,430
Bunker C Range	46,000	mg/kg	1,410	20,800	NA	30,800	8,530
VOCs (EPA 8021)							
Benzene		ug/kg	NA	NA	NA	NA	NA
Toluene		ug/kg	NA	NA	NA	NA	NA
Ethylbenzene		ug/kg	NA	NA	NA	NA	NA
m,p-Xylenes		ug/kg	NA	NA	NA	NA	NA
o-Xylenes		ug/kg	NA	NA	NA	NA	NA
HVOCs** (EPA 8260)							
1,2,4-Trimethylbenzene		ug/kg	NA	NA	NA	NA	NA
1,3,5-Trimethylbenzene		ug/kg	NA	NA	NA	NA	NA
Acetone		ug/kg	NA	NA	NA	NA	NA
Ethylbenzene		ug/kg	NA	NA	NA	NA	NA
Isopropylbenzene		ug/kg	NA	NA	NA	NA	NA
m,p-Xylenes		ug/kg	NA	NA	NA	NA	NA
Napthalene		ug/kg	NA	NA	NA	NA	NA
n-Butylbenzene		ug/kg	NA	NA	NA	NA	NA
o-Xylenes		ug/kg	NA	NA	NA	NA	NA
para-Isopropyl Toluene		ug/kg	NA	NA	NA	NA	NA
Propylbenzene		ug/kg	NA	NA	NA	NA	NA
sec-Butylbenzene		ug/kg	NA	NA	NA	NA	NA
Tetrachloroethene		ug/kg	NA	NA	NA	NA	NA
Toluene		ug/kg	NA	NA	NA	NA	NA
Trichloroethene		ug/kg	NA	NA	NA	NA	NA
Semivolatile Organics** (EPA 8270)							
2-Methylnaphthalene	216,236,000	ug/kg	<3,400	<23,000	NA	NA	NA
TITLE 26 Metals							
Antimony	1,658	mg/kg	NA	NA	NA	NA	NA
Arsenic	19	mg/kg	NA	NA	NA	NA	NA
Barium	290,217	mg/kg	NA	NA	NA	NA	NA
Beryllium		mg/kg	NA	NA	NA	NA	NA
Cadmium	2,073	mg/kg	NA	NA	NA	NA	NA
Chromium (total)		mg/kg	NA	NA	NA	NA	NA
Cobalt		mg/kg	NA	NA	NA	NA	NA
Copper		mg/kg	NA	NA	NA	NA	NA
Lead	2,464	mg/kg	NA	NA	NA	NA	NA
Molybdenum		mg/kg	NA	NA	NA	NA	NA
Nickel		mg/kg	NA	NA	NA	NA	NA
Selenium		mg/kg	NA	NA	NA	NA	NA
Silver	90,603	mg/kg	NA	NA	NA	NA	NA
Thallium		mg/kg	NA	NA	NA	NA	NA
Vanadium		mg/kg	NA	NA	NA	NA	NA
Zinc		mg/kg	NA	NA	NA	NA	NA
Mercury (EPA 7470)		mg/kg	NA	NA	NA	NA	NA
Lead (STLC - EPA 6010B)		ug/L	NA	NA	NA	NA	NA
Other							
Herbicides (EPA 8151A)		ug/kg	NA	NA	NA	NA	NA
Pesticides/PCBs (EPA 8081A/8082)		ug/kg	NA	NA	NA	NA	NA
96 hour LC50 Bioassay			NA	NA	NA	NA	NA

Notes:
*RAO = Soil Remedial Action Objective is listed for Base Case only is for Commercial Maintenance Worker (see Table 1).
Bold entry indicates exceedence of Base Case RAO.
**Only compounds with detections above reporting limits are listed for VOCs and SVOCs.
NA - Not analyzed or not applicable.
NS - Elevation not surveyed; see report for coordinates.
NR - No recovery.
ug/kg - micrograms per kilogram
mg/kg - milligrams per kilogram
< less than (not detected at or above this value)
Y - sample exhibits pattern which does not resemble standard
H - heavier hydrocarbons than indicated on standard
L - lighter hydrocarbons than indicated on standard
J - estimated value

Table 2
Soil Investigation Results
May to June 2000
Southern Area, Former Bayshore Railyard (OU-2)
Brisbane, California
Sunquest Properties, Inc.

Sample Name			R-37B_SC	R-38_SC	R-39	R-40_SC	R-41
Ground Surface Elevation			NS	9.20	NS	NS	NS
Bay Mud Depth	RAO*		8	8-12 (NR)	7.4	9.1	Refusal 9.5
Sample Depth (ft)	Base Case		6.0 - 6.5	5.0 - 5.5	NA	7.0 - 7.5	NA
Sampling Date	(Commercial		5/31/00	5/30/00	5/30/00	5/30/00	5/30/00
Laboratory Episode Number	Maint. Worker)		145938-007	145938-008	NA	145880-01	NA
Parameter		Units					
Total Volatile Hydrocarbons							
Gasoline Range		mg/kg	NA	NA	NA	NA	NA
Stoddard Solvent Range		mg/kg	NA	NA	NA	NA	NA
Total Extractable Hydrocarbons							
Diesel Range	46,000	mg/kg	9,790	2,300	NA	474	NA
Motor Oil Range		mg/kg	1,700	4,880	NA	2,030	NA
Bunker C Range	46,000	mg/kg	31,800	11,100	NA	2,800	NA
VOCs (EPA 8021)							
Benzene		ug/kg	NA	NA	NA	NA	NA
Toluene		ug/kg	NA	NA	NA	NA	NA
Ethylbenzene		ug/kg	NA	NA	NA	NA	NA
m,p-Xylenes		ug/kg	NA	NA	NA	NA	NA
o-Xylenes		ug/kg	NA	NA	NA	NA	NA
HVOCs** (EPA 8260)							
1,2,4-Trimethylbenzene		ug/kg	NA	NA	NA	NA	NA
1,3,5-Trimethylbenzene		ug/kg	NA	NA	NA	NA	NA
Acetone		ug/kg	NA	NA	NA	NA	NA
Ethylbenzene		ug/kg	NA	NA	NA	NA	NA
Isopropylbenzene		ug/kg	NA	NA	NA	NA	NA
m,p-Xylenes		ug/kg	NA	NA	NA	NA	NA
Napthalene		ug/kg	NA	NA	NA	NA	NA
n-Butylbenzene		ug/kg	NA	NA	NA	NA	NA
o-Xylenes		ug/kg	NA	NA	NA	NA	NA
para-Isopropyl Toluene		ug/kg	NA	NA	NA	NA	NA
Propylbenzene		ug/kg	NA	NA	NA	NA	NA
sec-Butylbenzene		ug/kg	NA	NA	NA	NA	NA
Tetrachloroethene		ug/kg	NA	NA	NA	NA	NA
Toluene		ug/kg	NA	NA	NA	NA	NA
Trichloroethene		ug/kg	NA	NA	NA	NA	NA
Semivolatile Organics** (EPA 8270)							
2-Methylnaphthalene	216,236,000	ug/kg	NA	NA	NA	<17,000	NA
TITLE 26 Metals							
Antimony	1,658	mg/kg	NA	NA	NA	<2.9	NA
Arsenic	19	mg/kg	NA	NA	NA	9.3	NA
Barium	290,217	mg/kg	NA	NA	NA	38.0	NA
Beryllium		mg/kg	NA	NA	NA	0.5	NA
Cadmium	2,073	mg/kg	NA	NA	NA	2.4	NA
Chromium (total)		mg/kg	NA	NA	NA	20.0	NA
Cobalt		mg/kg	NA	NA	NA	13.0	NA
Copper		mg/kg	NA	NA	NA	37.0	NA
Lead	2,464	mg/kg	NA	NA	NA	51.0	NA
Molybdenum		mg/kg	NA	NA	NA	<0.98	NA
Nickel		mg/kg	NA	NA	NA	34.0	NA
Selenium		mg/kg	NA	NA	NA	<0.25	NA
Silver	90,603	mg/kg	NA	NA	NA	<0.25	NA
Thallium		mg/kg	NA	NA	NA	0.6	NA
Vanadium		mg/kg	NA	NA	NA	27.0	NA
Zinc		mg/kg	NA	NA	NA	62.0	NA
Mercury (EPA 7470)		mg/kg	NA	NA	NA	0.1	NA
Lead (STLC - EPA 6010B)		ug/L	NA	NA	NA	NA	NA
Other							
Herbicides (EPA 8151A)		ug/kg	NA	NA	NA	NA	NA
Pesticides/PCBs (EPA 8081A/8082)		ug/kg	NA	NA	NA	NA	NA
96 hour LC50 Bioassay			NA	NA	NA	PASS	NA

Notes:

*RAO = Soil Remedial Action Objective is listed for Base Case only is for Commercial Maintenance Worker (see Table 1).

Bold entry indicates exceedence of Base Case RAO.

**Only compounds with detections above reporting limits are listed for VOCs and SVOCs.

NA - Not analyzed or not applicable.

NS - Elevation not surveyed; see report for coordinates.

NR - No recovery.

ug/kg - micrograms per kilogram

mg/kg - milligrams per kilogram

< less than (not detected at or above this value)

Y - sample exhibits pattern which does not resemble standard

H - heavier hydrocarbons than indicated on standard

L - lighter hydrocarbons than indicated on standard

J - estimated value

Table 2
Soil Investigation Results
May to June 2000
Southern Area, Former Bayshore Railyard (OU-2)
Brisbane, California
Sunquest Properties, Inc.

Sample Name			R-42	R-45_SC	R-46	R-47	R-48A_SC
Ground Surface Elevation			NS	7.32	9.10	8.90	9.15
Bay Mud Depth	RAO*		11	8.4	9.6	9.5	9
Sample Depth (ft)	Base Case		NA	7.8 - 8.4	NA	NA	5.5 - 6.0
Sampling Date	(Commercial		5/30/00	6/2/00	5/30/00	5/30/01	5/30/00
Laboratory Episode Number	Maint. Worker)		NA	145942-012	NA	NA	145880-02
Parameter		Units					
Total Volatile Hydrocarbons							
Gasoline Range		mg/kg	NA	NA	NA	NA	NA
Stoddard Solvent Range		mg/kg	NA	NA	NA	NA	NA
Total Extractable Hydrocarbons							
Diesel Range	46,000	mg/kg	NA	19,400	NA	NA	56
Motor Oil Range		mg/kg	NA	27,400	NA	NA	154
Bunker C Range	46,000	mg/kg	NA	90,600	NA	NA	308
VOCs (EPA 8021)							
Benzene		ug/kg	NA	NA	NA	NA	NA
Toluene		ug/kg	NA	NA	NA	NA	NA
Ethylbenzene		ug/kg	NA	NA	NA	NA	NA
m,p-Xylenes		ug/kg	NA	NA	NA	NA	NA
o-Xylenes		ug/kg	NA	NA	NA	NA	NA
HVOCs** (EPA 8260)							
1,2,4-Trimethylbenzene		ug/kg	NA	NA	NA	NA	NA
1,3,5-Trimethylbenzene		ug/kg	NA	NA	NA	NA	NA
Acetone		ug/kg	NA	NA	NA	NA	NA
Ethylbenzene		ug/kg	NA	NA	NA	NA	NA
Isopropylbenzene		ug/kg	NA	NA	NA	NA	NA
m,p-Xylenes		ug/kg	NA	NA	NA	NA	NA
Napthalene		ug/kg	NA	NA	NA	NA	NA
n-Butylbenzene		ug/kg	NA	NA	NA	NA	NA
o-Xylenes		ug/kg	NA	NA	NA	NA	NA
para-Isopropyl Toluene		ug/kg	NA	NA	NA	NA	NA
Propylbenzene		ug/kg	NA	NA	NA	NA	NA
sec-Butylbenzene		ug/kg	NA	NA	NA	NA	NA
Tetrachloroethene		ug/kg	NA	NA	NA	NA	NA
Toluene		ug/kg	NA	NA	NA	NA	NA
Trichloroethene		ug/kg	NA	NA	NA	NA	NA
Semivolatile Organics** (EPA 8270)							
2-Methylnaphthalene	216,236,000	ug/kg	NA	NA	NA	NA	NA
TITLE 26 Metals							
Antimony	1,658	mg/kg	NA	NA	NA	NA	NA
Arsenic	19	mg/kg	NA	NA	NA	NA	NA
Barium	290,217	mg/kg	NA	NA	NA	NA	NA
Beryllium		mg/kg	NA	NA	NA	NA	NA
Cadmium	2,073	mg/kg	NA	NA	NA	NA	NA
Chromium (total)		mg/kg	NA	NA	NA	NA	NA
Cobalt		mg/kg	NA	NA	NA	NA	NA
Copper		mg/kg	NA	NA	NA	NA	NA
Lead	2,464	mg/kg	NA	NA	NA	NA	NA
Molybdenum		mg/kg	NA	NA	NA	NA	NA
Nickel		mg/kg	NA	NA	NA	NA	NA
Selenium		mg/kg	NA	NA	NA	NA	NA
Silver	90,603	mg/kg	NA	NA	NA	NA	NA
Thallium		mg/kg	NA	NA	NA	NA	NA
Vanadium		mg/kg	NA	NA	NA	NA	NA
Zinc		mg/kg	NA	NA	NA	NA	NA
Mercury (EPA 7470)		mg/kg	NA	NA	NA	NA	NA
Lead (STLC - EPA 6010B)		ug/L	NA	NA	NA	NA	NA
Other							
Herbicides (EPA 8151A)		ug/kg	NA	NA	NA	NA	NA
Pesticides/PCBs (EPA 8081A/8082)		ug/kg	NA	NA	NA	NA	NA
96 hour LC50 Bioassay			NA	NA	NA	NA	NA

Notes:

*RAO = Soil Remedial Action Objective is listed for Base Case only
Is for Commercial Maintenance Worker (see Table 1).

Bold entry indicates exceedence of Base Case RAO.

**Only compounds with detections above reporting limits
are listed for VOCs and SVOCs.

NA - Not analyzed or not applicable.

NS - Elevation not surveyed; see report for coordinates.

NR - No recovery.

ug/kg - micrograms per kilogram

mg/kg - milligrams per kilogram

< less than (not detected at or above this value)

Y - sample exhibits pattern which does not resemble standard

H - heavier hydrocarbons than indicated on standard

L - lighter hydrocarbons than indicated on standard

J - estimated value

Table 2
Soil Investigation Results
May to June 2000
Southern Area, Former Bayshore Railyard (OU-2)
Brisbane, California
Sunquest Properties, Inc.

Sample Name			R-48B_SC	R-49_SC	R-50_SC	R-51_SC	R-52_SC
Ground Surface Elevation			9.15	8.68	8.93	8.90	9.30
Bay Mud Depth	RAO*		9	8	8-12 (NR)	9	9.5
Sample Depth (ft)	Base Case		8.5 - 9.0	5.5 - 6.0	5.0 - 5.5	8.5 - 9.0	4.5 - 5.0
Sampling Date	(Commercial		5/30/00	5/30/00	5/30/00	5/30/00	5/30/00
Laboratory Episode Number	Maint. Worker)		145880-001	145938-009	145938-010	145938-011	145938-012
Parameter		Units					
Total Volatile Hydrocarbons							
Gasoline Range		mg/kg	NA	NA	NA	NA	NA
Stoddard Solvent Range		mg/kg	NA	NA	NA	NA	NA
Total Extractable Hydrocarbons							
Diesel Range	46,000	mg/kg	23	3,420	2,070	1,060	1,130
Motor Oil Range		mg/kg	89	10,200	7,170	3,220	1,940
Bunker C Range	46,000	mg/kg	134	18,500	12,500	5,860	5,150
VOCs (EPA 8021)							
Benzene		ug/kg	NA	NA	NA	NA	NA
Toluene		ug/kg	NA	NA	NA	NA	NA
Ethylbenzene		ug/kg	NA	NA	NA	NA	NA
m,p-Xylenes		ug/kg	NA	NA	NA	NA	NA
o-Xylenes		ug/kg	NA	NA	NA	NA	NA
HVOCs** (EPA 8260)							
1,2,4-Trimethylbenzene		ug/kg	NA	NA	NA	NA	NA
1,3,5-Trimethylbenzene		ug/kg	NA	NA	NA	NA	NA
Acetone		ug/kg	NA	NA	NA	NA	NA
Ethylbenzene		ug/kg	NA	NA	NA	NA	NA
Isopropylbenzene		ug/kg	NA	NA	NA	NA	NA
m,p-Xylenes		ug/kg	NA	NA	NA	NA	NA
Napthalene		ug/kg	NA	NA	NA	NA	NA
n-Butylbenzene		ug/kg	NA	NA	NA	NA	NA
o-Xylenes		ug/kg	NA	NA	NA	NA	NA
para-Isopropyl Toluene		ug/kg	NA	NA	NA	NA	NA
Propylbenzene		ug/kg	NA	NA	NA	NA	NA
sec-Butylbenzene		ug/kg	NA	NA	NA	NA	NA
Tetrachloroethene		ug/kg	NA	NA	NA	NA	NA
Toluene		ug/kg	NA	NA	NA	NA	NA
Trichloroethene		ug/kg	NA	NA	NA	NA	NA
Semivolatile Organics** (EPA 8270)							
2-Methylnaphthalene	216,236,000	ug/kg	NA	NA	NA	NA	NA
TITLE 26 Metals							
Antimony	1,658	mg/kg	NA	NA	NA	NA	NA
Arsenic	19	mg/kg	NA	NA	NA	NA	NA
Barium	290,217	mg/kg	NA	NA	NA	NA	NA
Beryllium		mg/kg	NA	NA	NA	NA	NA
Cadmium	2,073	mg/kg	NA	NA	NA	NA	NA
Chromium (total)		mg/kg	NA	NA	NA	NA	NA
Cobalt		mg/kg	NA	NA	NA	NA	NA
Copper		mg/kg	NA	NA	NA	NA	NA
Lead	2,464	mg/kg	NA	NA	NA	NA	NA
Molybdenum		mg/kg	NA	NA	NA	NA	NA
Nickel		mg/kg	NA	NA	NA	NA	NA
Selenium		mg/kg	NA	NA	NA	NA	NA
Silver	90,603	mg/kg	NA	NA	NA	NA	NA
Thallium		mg/kg	NA	NA	NA	NA	NA
Vanadium		mg/kg	NA	NA	NA	NA	NA
Zinc		mg/kg	NA	NA	NA	NA	NA
Mercury (EPA 7470)		mg/kg	NA	NA	NA	NA	NA
Lead (STLC - EPA 6010B)		ug/L	NA	NA	NA	NA	NA
Other							
Herbicides (EPA 8151A)		ug/kg	NA	NA	NA	NA	NA
Pesticides/PCBs (EPA 8081A/8082)		ug/kg	NA	NA	NA	NA	NA
96 hour LC50 Bioassay			NA	NA	NA	NA	NA

Notes:

*RAO = Soil Remedial Action Objective is listed for Base Case only is for Commercial Maintenance Worker (see Table 1).

Bold entry indicates exceedence of Base Case RAO.

**Only compounds with detections above reporting limits are listed for VOCs and SVOCs.

NA - Not analyzed or not applicable.

NS - Elevation not surveyed; see report for coordinates.

NR - No recovery.

ug/kg - micrograms per kilogram

mg/kg - milligrams per kilogram

< less than (not detected at or above this value)

Y - sample exhibits pattern which does not resemble standard

H - heavier hydrocarbons than indicated on standard

L - lighter hydrocarbons than indicated on standard

J - estimated value

Table 2
Soil Investigation Results
May to June 2000
Southern Area, Former Bayshore Railyard (OU-2)
Brisbane, California
Sunquest Properties, Inc.

Sample Name			R-53	R-54	R-55	R-56	R-57
Ground Surface Elevation			8.92	9.12	9.13	9.37	9.23
Bay Mud Depth	RAO*		8	8	7.5	7.5	6
Sample Depth (ft)	Base Case		NA	NA	NA	NA	NA
Sampling Date	(Commercial		6/5/00	6/5/00	6/5/00	6/5/00	6/5/00
Laboratory Episode Number	Maint. Worker)		NA	NA	NA	NA	NA
Parameter		Units					
Total Volatile Hydrocarbons							
Gasoline Range		mg/kg	NA	NA	NA	NA	NA
Stoddard Solvent Range		mg/kg	NA	NA	NA	NA	NA
Total Extractable Hydrocarbons							
Diesel Range	46,000	mg/kg	NA	NA	NA	NA	NA
Motor Oil Range		mg/kg	NA	NA	NA	NA	NA
Bunker C Range	46,000	mg/kg	NA	NA	NA	NA	NA
VOCs (EPA 8021)							
Benzene		ug/kg	NA	NA	NA	NA	NA
Toluene		ug/kg	NA	NA	NA	NA	NA
Ethylbenzene		ug/kg	NA	NA	NA	NA	NA
m,p-Xylenes		ug/kg	NA	NA	NA	NA	NA
o-Xylenes		ug/kg	NA	NA	NA	NA	NA
HVOCs** (EPA 8260)							
1,2,4-Trimethylbenzene		ug/kg	NA	NA	NA	NA	NA
1,3,5-Trimethylbenzene		ug/kg	NA	NA	NA	NA	NA
Acetone		ug/kg	NA	NA	NA	NA	NA
Ethylbenzene		ug/kg	NA	NA	NA	NA	NA
Isopropylbenzene		ug/kg	NA	NA	NA	NA	NA
m,p-Xylenes		ug/kg	NA	NA	NA	NA	NA
Napthalene		ug/kg	NA	NA	NA	NA	NA
n-Butylbenzene		ug/kg	NA	NA	NA	NA	NA
o-Xylenes		ug/kg	NA	NA	NA	NA	NA
para-Isopropyl Toluene		ug/kg	NA	NA	NA	NA	NA
Propylbenzene		ug/kg	NA	NA	NA	NA	NA
sec-Butylbenzene		ug/kg	NA	NA	NA	NA	NA
Tetrachloroethene		ug/kg	NA	NA	NA	NA	NA
Toluene		ug/kg	NA	NA	NA	NA	NA
Trichloroethene		ug/kg	NA	NA	NA	NA	NA
Semivolatile Organics** (EPA 8270)							
2-Methylnaphthalene	216,236,000	ug/kg	NA	NA	NA	NA	NA
TITLE 26 Metals							
Antimony	1,658	mg/kg	NA	NA	NA	NA	NA
Arsenic	19	mg/kg	NA	NA	NA	NA	NA
Barium	290,217	mg/kg	NA	NA	NA	NA	NA
Beryllium		mg/kg	NA	NA	NA	NA	NA
Cadmium	2,073	mg/kg	NA	NA	NA	NA	NA
Chromium (total)		mg/kg	NA	NA	NA	NA	NA
Cobalt		mg/kg	NA	NA	NA	NA	NA
Copper		mg/kg	NA	NA	NA	NA	NA
Lead	2,464	mg/kg	NA	NA	NA	NA	NA
Molybdenum		mg/kg	NA	NA	NA	NA	NA
Nickel		mg/kg	NA	NA	NA	NA	NA
Selenium		mg/kg	NA	NA	NA	NA	NA
Silver	90,603	mg/kg	NA	NA	NA	NA	NA
Thallium		mg/kg	NA	NA	NA	NA	NA
Vanadium		mg/kg	NA	NA	NA	NA	NA
Zinc		mg/kg	NA	NA	NA	NA	NA
Mercury (EPA 7470)		mg/kg	NA	NA	NA	NA	NA
Lead (STLC - EPA 6010B)		ug/L	NA	NA	NA	NA	NA
Other							
Herbicides (EPA 8151A)		ug/kg	NA	NA	NA	NA	NA
Pesticides/PCBs (EPA 8081A/8082)		ug/kg	NA	NA	NA	NA	NA
96 hour LC50 Bioassay			NA	NA	NA	NA	NA

Notes:
*RAO = Soil Remedial Action Objective is listed for Base Case only
is for Commercial Maintenance Worker (see Table 1)
Bold entry indicates exceedence of Base Case RAO.
**Only compounds with detections above reporting limits
are listed for VOCs and SVOCs.
NA - Not analyzed or not applicable.
NS - Elevation not surveyed; see report for coordinates.
NR - No recovery.
ug/kg - micrograms per kilogram
mg/kg - milligrams per kilogram
< less than (not detected at or above this value)
Y - sample exhibits pattern which does not resemble standard
H - heavier hydrocarbons than indicated on standard
L - lighter hydrocarbons than indicated on standard
J - estimated value

Table 2
Soil Investigation Results
May to June 2000
Southern Area, Former Bayshore Railyard (OU-2)
Brisbane, California
Sunquest Properties, Inc.

Sample Name			R-58_SC	R-59	R-60B	R-61B	R-62B
Ground Surface Elevation			9.04	9.83	7.83	9.79	9.33
Bay Mud Depth	RAO*		8-12 (NR)	7.4	10	7.6	7.8
Sample Depth (ft)	Base Case		7.0 - 7.5	NA	9.5 - 10.0	7.0 - 7.7	7.0 - 7.5
Sampling Date	(Commercial		6/5/00	6/5/00	6/5/00	6/5/00	6/5/00
Laboratory Episode Number	Maint. Worker)		145956-007	NA	145956-009	145956-008	145956-010
Parameter		Units					
Total Volatile Hydrocarbons							
Gasoline Range		mg/kg	NA	NA	NA	NA	NA
Stoddard Solvent Range		mg/kg	NA	NA	NA	NA	NA
Total Extractable Hydrocarbons							
Diesel Range	46,000	mg/kg	497	NA	42	37	672
Motor Oil Range		mg/kg	1,230	NA	90	116	912
Bunker C Range	46,000	mg/kg	2,540	NA	200	198	2,700
VOCs (EPA 8021)							
Benzene		ug/kg	NA	NA	NA	NA	NA
Toluene		ug/kg	NA	NA	NA	NA	NA
Ethylbenzene		ug/kg	NA	NA	NA	NA	NA
m,p-Xylenes		ug/kg	NA	NA	NA	NA	NA
o-Xylenes		ug/kg	NA	NA	NA	NA	NA
HVOCs** (EPA 8260)							
1,2,4-Trimethylbenzene		ug/kg	NA	NA	NA	NA	NA
1,3,5-Trimethylbenzene		ug/kg	NA	NA	NA	NA	NA
Acetone		ug/kg	NA	NA	NA	NA	NA
Ethylbenzene		ug/kg	NA	NA	NA	NA	NA
Isopropylbenzene		ug/kg	NA	NA	NA	NA	NA
m,p-Xylenes		ug/kg	NA	NA	NA	NA	NA
Napthalene		ug/kg	NA	NA	NA	NA	NA
n-Butylbenzene		ug/kg	NA	NA	NA	NA	NA
o-Xylenes		ug/kg	NA	NA	NA	NA	NA
para-Isopropyl Toluene		ug/kg	NA	NA	NA	NA	NA
Propylbenzene		ug/kg	NA	NA	NA	NA	NA
sec-Butylbenzene		ug/kg	NA	NA	NA	NA	NA
Tetrachloroethene		ug/kg	NA	NA	NA	NA	NA
Toluene		ug/kg	NA	NA	NA	NA	NA
Trichloroethene		ug/kg	NA	NA	NA	NA	NA
Semivolatile Organics** (EPA 8270)							
2-Methylnaphthalene	216,236,000	ug/kg	NA	NA	NA	NA	NA
TITLE 26 Metals							
Antimony	1,658	mg/kg	NA	NA	NA	NA	NA
Arsenic	19	mg/kg	NA	NA	NA	NA	NA
Barium	290,217	mg/kg	NA	NA	NA	NA	NA
Beryllium		mg/kg	NA	NA	NA	NA	NA
Cadmium	2,073	mg/kg	NA	NA	NA	NA	NA
Chromium (total)		mg/kg	NA	NA	NA	NA	NA
Cobalt		mg/kg	NA	NA	NA	NA	NA
Copper		mg/kg	NA	NA	NA	NA	NA
Lead	2,464	mg/kg	NA	NA	NA	NA	NA
Molybdenum		mg/kg	NA	NA	NA	NA	NA
Nickel		mg/kg	NA	NA	NA	NA	NA
Selenium		mg/kg	NA	NA	NA	NA	NA
Silver	90,603	mg/kg	NA	NA	NA	NA	NA
Thallium		mg/kg	NA	NA	NA	NA	NA
Vanadium		mg/kg	NA	NA	NA	NA	NA
Zinc		mg/kg	NA	NA	NA	NA	NA
Mercury (EPA 7470)		mg/kg	NA	NA	NA	NA	NA
Lead (STLC - EPA 6010B)		ug/L	NA	NA	NA	NA	NA
Other							
Herbicides (EPA 8151A)		ug/kg	NA	NA	NA	NA	NA
Pesticides/PCBs (EPA 8081A/8082)		ug/kg	NA	NA	NA	NA	NA
96 hour LC50 Bioassay			NA	NA	NA	NA	NA

Notes:
*RAO = Soil Remedial Action Objective is listed for Base Case only is for Commercial Maintenance Worker (see Table 1).
Bold entry indicates exceedence of Base Case RAO.
**Only compounds with detections above reporting limits are listed for VOCs and SVOCs.
NA - Not analyzed or not applicable.
NS - Elevation not surveyed; see report for coordinates.
NR - No recovery.
ug/kg - micrograms per kilogram
mg/kg - milligrams per kilogram
< less than (not detected at or above this value)
Y - sample exhibits pattern which does not resemble standard
H - heavier hydrocarbons than indicated on standard
L - lighter hydrocarbons than indicated on standard
J - estimated value

Table 2
Soil Investigation Results
May to June 2000
Southern Area, Former Bayshore Railyard (OU-2)
Brisbane, California
Sunquest Properties, Inc.

Sample Name			R-63	R-64	R-65B	R-66	R-67A
Ground Surface Elevation			8.94	8.53	7.45	7.57	8.11
Bay Mud Depth	RAO*		9.5	9.8	10.2	9.5	9.5
Sample Depth (ft)	Base Case		NA	8.6 - 9.3	9.2 - 9.8	NA	6.0 - 6.7
Sampling Date	(Commercial		6/5/00	6/5/00	6/5/00	6/6/00	6/6/00
Laboratory Episode Number	Maint. Worker)		NA	146016-001	146016-003	NA	146016-004
Parameter		Units					
Total Volatile Hydrocarbons							
Gasoline Range		mg/kg	NA	NA	NA	NA	NA
Stoddard Solvent Range		mg/kg	NA	NA	NA	NA	NA
Total Extractable Hydrocarbons							
Diesel Range	46,000	mg/kg	NA	75	1,200	NA	1,670
Motor Oil Range		mg/kg	NA	182	840	NA	1,850
Bunker C Range	46,000	mg/kg	NA	383	4,310	NA	6,150
VOCs (EPA 8021)							
Benzene		ug/kg	NA	NA	NA	NA	NA
Toluene		ug/kg	NA	NA	NA	NA	NA
Ethylbenzene		ug/kg	NA	NA	NA	NA	NA
m,p-Xylenes		ug/kg	NA	NA	NA	NA	NA
o-Xylenes		ug/kg	NA	NA	NA	NA	NA
HVOCs** (EPA 8260)							
1,2,4-Trimethylbenzene		ug/kg	NA	NA	NA	NA	NA
1,3,5-Trimethylbenzene		ug/kg	NA	NA	NA	NA	NA
Acetone		ug/kg	NA	NA	NA	NA	NA
Ethylbenzene		ug/kg	NA	NA	NA	NA	NA
Isopropylbenzene		ug/kg	NA	NA	NA	NA	NA
m,p-Xylenes		ug/kg	NA	NA	NA	NA	NA
Napthalene		ug/kg	NA	NA	NA	NA	NA
n-Butylbenzene		ug/kg	NA	NA	NA	NA	NA
o-Xylenes		ug/kg	NA	NA	NA	NA	NA
para-Isopropyl Toluene		ug/kg	NA	NA	NA	NA	NA
Propylbenzene		ug/kg	NA	NA	NA	NA	NA
sec-Butylbenzene		ug/kg	NA	NA	NA	NA	NA
Tetrachloroethene		ug/kg	NA	NA	NA	NA	NA
Toluene		ug/kg	NA	NA	NA	NA	NA
Trichloroethene		ug/kg	NA	NA	NA	NA	NA
Semivolatile Organics** (EPA 8270)							
2-Methylnaphthalene	216,236,000	ug/kg	NA	NA	NA	NA	NA
TITLE 26 Metals							
Antimony	1,658	mg/kg	NA	NA	NA	NA	NA
Arsenic	19	mg/kg	NA	NA	NA	NA	NA
Barium	290,217	mg/kg	NA	NA	NA	NA	NA
Beryllium		mg/kg	NA	NA	NA	NA	NA
Cadmium	2,073	mg/kg	NA	NA	NA	NA	NA
Chromium (total)		mg/kg	NA	NA	NA	NA	NA
Cobalt		mg/kg	NA	NA	NA	NA	NA
Copper		mg/kg	NA	NA	NA	NA	NA
Lead	2,464	mg/kg	NA	NA	NA	NA	NA
Molybdenum		mg/kg	NA	NA	NA	NA	NA
Nickel		mg/kg	NA	NA	NA	NA	NA
Selenium		mg/kg	NA	NA	NA	NA	NA
Silver	90,603	mg/kg	NA	NA	NA	NA	NA
Thallium		mg/kg	NA	NA	NA	NA	NA
Vanadium		mg/kg	NA	NA	NA	NA	NA
Zinc		mg/kg	NA	NA	NA	NA	NA
Mercury (EPA 7470)		mg/kg	NA	NA	NA	NA	NA
Lead (STLC - EPA 6010B)		ug/L	NA	NA	NA	NA	NA
Other							
Herbicides (EPA 8151A)		ug/kg	NA	NA	NA	NA	NA
Pesticides/PCBs (EPA 8081A/8082)		ug/kg	NA	NA	NA	NA	NA
96 hour LC50 Bioassay			NA	NA	NA	NA	NA

Notes:
*RAO = Soil Remedial Action Objective is listed for Base Case only
is for Commercial Maintenance Worker (see Table 1).
Bold entry indicates exceedence of Base Case RAO.
**Only compounds with detections above reporting limits
are listed for VOCs and SVOCs.
NA - Not analyzed or not applicable.
NS - Elevation not surveyed; see report for coordinates.
NR - No recovery.
ug/kg - micrograms per kilogram
mg/kg - milligrams per kilogram
< less than (not detected at or above this value)
Y - sample exhibits pattern which does not resemble standard
H - heavier hydrocarbons than indicated on standard
L - lighter hydrocarbons than indicated on standard
J - estimated value

Table 2
Soil Investigation Results
May to June 2000
Southern Area, Former Bayshore Railyard (OU-2)
Brisbane, California
Sunquest Properties, Inc.

Sample Name			R-68	R-69B_SC	R-70A_SC	R-71	R-72
Ground Surface Elevation			7.95	8.16	6.78	7.63	7.78
Bay Mud Depth	RAO*		9.5	9.3	12.5	9.5	8.7
Sample Depth (ft)	Base Case		NA	8.3 - 9.0	8.5 - 9.0	NA	NA
Sampling Date	(Commercial		6/6/00	6/6/00	6/6/00	6/6/00	6/6/00
Laboratory Episode Number	Maint. Worker)		NA	146016-003	146016-006	NA	NA
Parameter		Units					
Total Volatile Hydrocarbons							
Gasoline Range		mg/kg	NA	NA	NA	NA	NA
Stoddard Solvent Range		mg/kg	NA	NA	NA	NA	NA
Total Extractable Hydrocarbons							
Diesel Range	46,000	mg/kg	NA	3,330	48	NA	NA
Motor Oil Range		mg/kg	NA	4,520	51	NA	NA
Bunker C Range	46,000	mg/kg	NA	12,700	180	NA	NA
VOCs (EPA 8021)							
Benzene		ug/kg	NA	NA	NA	NA	NA
Toluene		ug/kg	NA	NA	NA	NA	NA
Ethylbenzene		ug/kg	NA	NA	NA	NA	NA
m,p-Xylenes		ug/kg	NA	NA	NA	NA	NA
o-Xylenes		ug/kg	NA	NA	NA	NA	NA
HVOCs** (EPA 8260)							
1,2,4-Trimethylbenzene		ug/kg	NA	NA	NA	NA	NA
1,3,5-Trimethylbenzene		ug/kg	NA	NA	NA	NA	NA
Acetone		ug/kg	NA	NA	NA	NA	NA
Ethylbenzene		ug/kg	NA	NA	NA	NA	NA
Isopropylbenzene		ug/kg	NA	NA	NA	NA	NA
m,p-Xylenes		ug/kg	NA	NA	NA	NA	NA
Napthalene		ug/kg	NA	NA	NA	NA	NA
n-Butylbenzene		ug/kg	NA	NA	NA	NA	NA
o-Xylenes		ug/kg	NA	NA	NA	NA	NA
para-Isopropyl Toluene		ug/kg	NA	NA	NA	NA	NA
Propylbenzene		ug/kg	NA	NA	NA	NA	NA
sec-Butylbenzene		ug/kg	NA	NA	NA	NA	NA
Tetrachloroethene		ug/kg	NA	NA	NA	NA	NA
Toluene		ug/kg	NA	NA	NA	NA	NA
Trichloroethene		ug/kg	NA	NA	NA	NA	NA
Semivolatile Organics** (EPA 8270)							
2-Methylnaphthalene	216,236,000	ug/kg	NA	NA	NA	NA	NA
TITLE 26 Metals							
Antimony	1,658	mg/kg	NA	NA	NA	NA	NA
Arsenic	19	mg/kg	NA	NA	NA	NA	NA
Barium	290,217	mg/kg	NA	NA	NA	NA	NA
Beryllium		mg/kg	NA	NA	NA	NA	NA
Cadmium	2,073	mg/kg	NA	NA	NA	NA	NA
Chromium (total)		mg/kg	NA	NA	NA	NA	NA
Cobalt		mg/kg	NA	NA	NA	NA	NA
Copper		mg/kg	NA	NA	NA	NA	NA
Lead	2,464	mg/kg	NA	NA	NA	NA	NA
Molybdenum		mg/kg	NA	NA	NA	NA	NA
Nickel		mg/kg	NA	NA	NA	NA	NA
Selenium		mg/kg	NA	NA	NA	NA	NA
Silver	90,603	mg/kg	NA	NA	NA	NA	NA
Thallium		mg/kg	NA	NA	NA	NA	NA
Vanadium		mg/kg	NA	NA	NA	NA	NA
Zinc		mg/kg	NA	NA	NA	NA	NA
Mercury (EPA 7470)		mg/kg	NA	NA	NA	NA	NA
Lead (STLC - EPA 6010B)		ug/L	NA	NA	NA	NA	NA
Other							
Herbicides (EPA 8151A)		ug/kg	NA	NA	NA	NA	NA
Pesticides/PCBs (EPA 8081A/8082)		ug/kg	NA	NA	NA	NA	NA
96 hour LC50 Bioassay			NA	NA	NA	NA	NA

Notes:

*RAO = Soil Remedial Action Objective is listed for Base Case only
is for Commercial Maintenance Worker (see Table 1).

Bold entry indicates exceedance of Base Case RAO.

**Only compounds with detections above reporting limits
are listed for VOCs and SVOCs.

NA - Not analyzed or not applicable.

NS - Elevation not surveyed; see report for coordinates.

NR - No recovery.

ug/kg - micrograms per kilogram

mg/kg - milligrams per kilogram

< less than (not detected at or above this value)

Y - sample exhibits pattern which does not resemble standard

H - heavier hydrocarbons than indicated on standard

L - lighter hydrocarbons than indicated on standard

J - estimated value

Table 2
Soil Investigation Results
May to June 2000
Southern Area, Former Bayshore Railyard (OU-2)
Brisbane, California
Sunquest Properties, Inc.

Sample Name			R-73	R-74A_SC	R-74B_SC	R-75	R-76
Ground Surface Elevation			8.17	7.43	7.43	6.80	7.50
Bay Mud Depth	RAO*		10	Refusal 8.3	Refusal 8.3	9.5	10
Sample Depth (ft)	Base Case		NA	2.0 - 2.6	5.3 - 6.0	NA	NA
Sampling Date	(Commercial		6/6/00	6/6/00	6/6/00	6/6/00	6/6/00
Laboratory Episode Number	Maint. Worker)		NA	146016-006	146016-005	NA	NA
Parameter		Units					
Total Volatile Hydrocarbons							
Gasoline Range		mg/kg	NA	250HY	NA	NA	NA
Stoddard Solvent Range		mg/kg	NA	130HY	NA	NA	NA
Total Extractable Hydrocarbons							
Diesel Range	46,000	mg/kg	NA	48	4,830	NA	NA
Motor Oil Range		mg/kg	NA	51	1,290	NA	NA
Bunker C Range	46,000	mg/kg	NA	180	14,100	NA	NA
VOCs (EPA 8021)							
Benzene		ug/kg	NA	NA	NA	NA	NA
Toluene		ug/kg	NA	NA	NA	NA	NA
Ethylbenzene		ug/kg	NA	NA	NA	NA	NA
m,p-Xylenes		ug/kg	NA	NA	NA	NA	NA
o-Xylenes		ug/kg	NA	NA	NA	NA	NA
HVOCs** (EPA 8260)							
1,2,4-Trimethylbenzene		ug/kg	NA	<25	NA	NA	NA
1,3,5-Trimethylbenzene		ug/kg	NA	<25	NA	NA	NA
Acetone		ug/kg	NA	<100	NA	NA	NA
Ethylbenzene		ug/kg	NA	<25	NA	NA	NA
Isopropylbenzene		ug/kg	NA	<25	NA	NA	NA
m,p-Xylenes		ug/kg	NA	<25	NA	NA	NA
Napthalene		ug/kg	NA	<25	NA	NA	NA
n-Butylbenzene		ug/kg	NA	120	NA	NA	NA
o-Xylenes		ug/kg	NA	<25	NA	NA	NA
para-Isopropyl Toluene		ug/kg	NA	<25	NA	NA	NA
Propylbenzene		ug/kg	NA	<25	NA	NA	NA
sec-Butylbenzene		ug/kg	NA	73	NA	NA	NA
Tetrachloroethene		ug/kg	NA	87	NA	NA	NA
Toluene		ug/kg	NA	<25	NA	NA	NA
Trichloroethene		ug/kg	NA	<25	NA	NA	NA
Semivolatile Organics** (EPA 8270)							
2-Methylnaphthalene	216,236,000	ug/kg	NA	NA	NA	NA	NA
TITLE 26 Metals							
Antimony	1,658	mg/kg	NA	NA	NA	NA	NA
Arsenic	19	mg/kg	NA	NA	NA	NA	NA
Barium	290,217	mg/kg	NA	NA	NA	NA	NA
Beryllium		mg/kg	NA	NA	NA	NA	NA
Cadmium	2,073	mg/kg	NA	NA	NA	NA	NA
Chromium (total)		mg/kg	NA	NA	NA	NA	NA
Cobalt		mg/kg	NA	NA	NA	NA	NA
Copper		mg/kg	NA	NA	NA	NA	NA
Lead	2,464	mg/kg	NA	NA	NA	NA	NA
Molybdenum		mg/kg	NA	NA	NA	NA	NA
Nickel		mg/kg	NA	NA	NA	NA	NA
Selenium		mg/kg	NA	NA	NA	NA	NA
Silver	90,603	mg/kg	NA	NA	NA	NA	NA
Thallium		mg/kg	NA	NA	NA	NA	NA
Vanadium		mg/kg	NA	NA	NA	NA	NA
Zinc		mg/kg	NA	NA	NA	NA	NA
Mercury (EPA 7470)		mg/kg	NA	NA	NA	NA	NA
Lead (STLC - EPA 6010B)		ug/L	NA	NA	NA	NA	NA
Other							
Herbicides (EPA 8151A)		ug/kg	NA	NA	NA	NA	NA
Pesticides/PCBs (EPA 8081A/8082)		ug/kg	NA	NA	NA	NA	NA
96 hour LC50 Bioassay			NA	NA	NA	NA	NA

Notes:
*RAO = Soil Remedial Action Objective is listed for Base Case only
is for Commercial Maintenance Worker (see Table 1).
Bold entry indicates exceedence of Base Case RAO.
**Only compounds with detections above reporting limits
are listed for VOCs and SVOCs.
NA - Not analyzed or not applicable.
NS - Elevation not surveyed; see report for coordinates.
NR - No recovery.
ug/kg - micrograms per kilogram
mg/kg - milligrams per kilogram
< less than (not detected at or above this value)
Y - sample exhibits pattern which does not resemble standard
H - heavier hydrocarbons than indicated on standard
L - lighter hydrocarbons than indicated on standard
J - estimated value

Table 2
Soil Investigation Results
May to June 2000
Southern Area, Former Bayshore Railyard (OU-2)
Brisbane, California
Sunquest Properties, Inc.

Sample Name			R-77_SC	R-78	R-79	R-80B_SC	R-81_SC
Ground Surface Elevation			5.57	5.53	6.51	8.12	7.59
Bay Mud Depth	RAO*		5.3	10	6	6.5	5.9
Sample Depth (ft)	Base Case		4.3 - 4.8	NA	NA	5.0 - 5.5	5.0 - 5.9
Sampling Date	(Commercial		6/6/00	6/6/00	6/7/00	6/7/00	6/7/00
Laboratory Episode Number	Maint. Worker)		146015-004	NA	NA	146015-005	146015-006
Parameter		Units					
Total Volatile Hydrocarbons							
Gasoline Range		mg/kg	NA	NA	NA	NA	NA
Stoddard Solvent Range		mg/kg	NA	NA	NA	NA	NA
Total Extractable Hydrocarbons							
Diesel Range	46,000	mg/kg	121,000	NA	NA	42	16,100
Motor Oil Range		mg/kg	208,000	NA	NA	142	32,000
Bunker C Range	46,000	mg/kg	550,000	NA	NA	250	83,500
VOCs (EPA 8021)							
Benzene		ug/kg	NA	NA	NA	NA	NA
Toluene		ug/kg	NA	NA	NA	NA	NA
Ethylbenzene		ug/kg	NA	NA	NA	NA	NA
m,p-Xylenes		ug/kg	NA	NA	NA	NA	NA
o-Xylenes		ug/kg	NA	NA	NA	NA	NA
HVOCs** (EPA 8260)							
1,2,4-Trimethylbenzene		ug/kg	NA	NA	NA	NA	NA
1,3,5-Trimethylbenzene		ug/kg	NA	NA	NA	NA	NA
Acetone		ug/kg	NA	NA	NA	NA	NA
Ethylbenzene		ug/kg	NA	NA	NA	NA	NA
Isopropylbenzene		ug/kg	NA	NA	NA	NA	NA
m,p-Xylenes		ug/kg	NA	NA	NA	NA	NA
Napthalene		ug/kg	NA	NA	NA	NA	NA
n-Butylbenzene		ug/kg	NA	NA	NA	NA	NA
o-Xylenes		ug/kg	NA	NA	NA	NA	NA
para-Isopropyl Toluene		ug/kg	NA	NA	NA	NA	NA
Propylbenzene		ug/kg	NA	NA	NA	NA	NA
sec-Butylbenzene		ug/kg	NA	NA	NA	NA	NA
Tetrachloroethene		ug/kg	NA	NA	NA	NA	NA
Toluene		ug/kg	NA	NA	NA	NA	NA
Trichloroethene		ug/kg	NA	NA	NA	NA	NA
Semivolatile Organics** (EPA 8270)							
2-Methylnaphthalene	216,236,000	ug/kg	<13,000	NA	NA	NA	NA
TITLE 26 Metals							
Antimony	1,658	mg/kg	NA	NA	NA	NA	NA
Arsenic	19	mg/kg	NA	NA	NA	NA	NA
Barium	290,217	mg/kg	NA	NA	NA	NA	NA
Beryllium		mg/kg	NA	NA	NA	NA	NA
Cadmium	2,073	mg/kg	NA	NA	NA	NA	NA
Chromium (total)		mg/kg	NA	NA	NA	NA	NA
Cobalt		mg/kg	NA	NA	NA	NA	NA
Copper		mg/kg	NA	NA	NA	NA	NA
Lead	2,464	mg/kg	NA	NA	NA	NA	NA
Molybdenum		mg/kg	NA	NA	NA	NA	NA
Nickel		mg/kg	NA	NA	NA	NA	NA
Selenium		mg/kg	NA	NA	NA	NA	NA
Silver	90,603	mg/kg	NA	NA	NA	NA	NA
Thallium		mg/kg	NA	NA	NA	NA	NA
Vanadium		mg/kg	NA	NA	NA	NA	NA
Zinc		mg/kg	NA	NA	NA	NA	NA
Mercury (EPA 7470)		mg/kg	NA	NA	NA	NA	NA
Lead (STLC - EPA 6010B)		ug/L	NA	NA	NA	NA	NA
Other							
Herbicides (EPA 8151A)		ug/kg	NA	NA	NA	NA	NA
Pesticides/PCBs (EPA 8081A/8082)		ug/kg	NA	NA	NA	NA	NA
96 hour LC50 Bioassay			NA	NA	NA	NA	NA

Notes:
*RAO = Soil Remedial Action Objective is listed for Base Case only is for Commercial Maintenance Worker (see Table 1).
Bold entry indicates exceedence of Base Case RAO.
**Only compounds with detections above reporting limits are listed for VOCs and SVOCs.
NA - Not analyzed or not applicable.
NS - Elevation not surveyed; see report for coordinates.
NR - No recovery.
ug/kg - micrograms per kilogram
mg/kg - milligrams per kilogram
< less than (not detected at or above this value)
Y - sample exhibits pattern which does not resemble standard
H - heavier hydrocarbons than indicated on standard
L - lighter hydrocarbons than indicated on standard
J - estimated value

Table 2
Soil Investigation Results
May to June 2000
Southern Area, Former Bayshore Railyard (OU-2)
Brisbane, California
Sunquest Properties, Inc.

Sample Name			R-82_SC	R-83_SC	R-84_SC	R-85_SC	R-86
Ground Surface Elevation			7.40	7.45	6.41	7.06	6.14
Bay Mud Depth	RAO*		Refusal 4.5	5.5	5	7.5	6
Sample Depth (ft)	Base Case		4.0 - 4.5	4.9 - 5.6	4.5 - 5.0	5.4 - 6.0	NA
Sampling Date	(Commercial		6/7/00	6/7/00	6/7/00	6/7/00	6/7/00
Laboratory Episode Number	Maint. Worker)		146015-007	146015-008	146015-009	146015-010	NA
Parameter		Units					
Total Volatile Hydrocarbons							
Gasoline Range		mg/kg	NA	NA	NA	NA	NA
Stoddard Solvent Range		mg/kg	NA	NA	NA	NA	NA
Total Extractable Hydrocarbons							
Diesel Range	46,000	mg/kg	12,800	615	4,170	270	NA
Motor Oil Range		mg/kg	27,300	1,120	7,420	195	NA
Bunker C Range	46,000	mg/kg	63,400	2,900	20,000	1,040	NA
VOCs (EPA 8021)							
Benzene		ug/kg	NA	NA	NA	NA	NA
Toluene		ug/kg	NA	NA	NA	NA	NA
Ethylbenzene		ug/kg	NA	NA	NA	NA	NA
m,p-Xylenes		ug/kg	NA	NA	NA	NA	NA
o-Xylenes		ug/kg	NA	NA	NA	NA	NA
HVOCs** (EPA 8260)							
1,2,4-Trimethylbenzene		ug/kg	NA	NA	NA	NA	NA
1,3,5-Trimethylbenzene		ug/kg	NA	NA	NA	NA	NA
Acetone		ug/kg	NA	NA	NA	NA	NA
Ethylbenzene		ug/kg	NA	NA	NA	NA	NA
Isopropylbenzene		ug/kg	NA	NA	NA	NA	NA
m,p-Xylenes		ug/kg	NA	NA	NA	NA	NA
Napthalene		ug/kg	NA	NA	NA	NA	NA
n-Butylbenzene		ug/kg	NA	NA	NA	NA	NA
o-Xylenes		ug/kg	NA	NA	NA	NA	NA
para-Isopropyl Toluene		ug/kg	NA	NA	NA	NA	NA
Propylbenzene		ug/kg	NA	NA	NA	NA	NA
sec-Butylbenzene		ug/kg	NA	NA	NA	NA	NA
Tetrachloroethene		ug/kg	NA	NA	NA	NA	NA
Toluene		ug/kg	NA	NA	NA	NA	NA
Trichloroethene		ug/kg	NA	NA	NA	NA	NA
Semivolatile Organics** (EPA 8270)							
2-Methylnaphthalene	216,236,000	ug/kg	NA	NA	NA	NA	NA
TITLE 26 Metals							
Antimony	1,658	mg/kg	NA	NA	NA	NA	NA
Arsenic	19	mg/kg	NA	NA	NA	NA	NA
Barium	290,217	mg/kg	NA	NA	NA	NA	NA
Beryllium		mg/kg	NA	NA	NA	NA	NA
Cadmium	2,073	mg/kg	NA	NA	NA	NA	NA
Chromium (total)		mg/kg	NA	NA	NA	NA	NA
Cobalt		mg/kg	NA	NA	NA	NA	NA
Copper		mg/kg	NA	NA	NA	NA	NA
Lead	2,464	mg/kg	NA	NA	NA	NA	NA
Molybdenum		mg/kg	NA	NA	NA	NA	NA
Nickel		mg/kg	NA	NA	NA	NA	NA
Selenium		mg/kg	NA	NA	NA	NA	NA
Silver	90,603	mg/kg	NA	NA	NA	NA	NA
Thallium		mg/kg	NA	NA	NA	NA	NA
Vanadium		mg/kg	NA	NA	NA	NA	NA
Zinc		mg/kg	NA	NA	NA	NA	NA
Mercury (EPA 7470)		mg/kg	NA	NA	NA	NA	NA
Lead (STLC - EPA 6010B)		ug/L	NA	NA	NA	NA	NA
Other							
Herbicides (EPA 8151A)		ug/kg	NA	NA	NA	NA	NA
Pesticides/PCBs (EPA 8081A/8082)		ug/kg	NA	NA	NA	NA	NA
96 hour LC50 Bioassay			NA	NA	NA	NA	NA

Notes:

*RAO = Soil Remedial Action Objective is listed for Base Case only
is for Commercial Maintenance Worker (see Table 1).

Bold entry indicates exceedence of Base Case RAO.

**Only compounds with detections above reporting limits
are listed for VOCs and SVOCs.

NA - Not analyzed or not applicable.

NS - Elevation not surveyed; see report for coordinates.

NR - No recovery.

ug/kg - micrograms per kilogram

mg/kg - milligrams per kilogram

< less than (not detected at or above this value)

Y - sample exhibits pattern which does not resemble standard

H - heavier hydrocarbons than indicated on standard

L - lighter hydrocarbons than indicated on standard

J - estimated value

Table 2
Soil Investigation Results
May to June 2000
Southern Area, Former Bayshore Railyard (OU-2)
Brisbane, California
Sunquest Properties, Inc.

Sample Name			R-87_SC	R-88	R-89_SC	R-90_SC	R-91B_SC
Ground Surface Elevation			7.55	7.80	8.08	7.80	8.21
Bay Mud Depth	RAO*		6	5	9-12 (NR)	5	6.5
Sample Depth (ft)	Base Case		4.5 - 5.0	NA	7.8 - 8.4	4.0 - 4.3	5.8 - 6.5
Sampling Date	(Commercial		6/7/00	6/7/00	6/7/00	6/7/00	6/7/00
Laboratory Episode Number	Maint. Worker)		146015-011	NA	146015-012	146015-013	146013-001
Parameter		Units					
Total Volatile Hydrocarbons							
Gasoline Range		mg/kg	NA	NA	NA	NA	NA
Stoddard Solvent Range		mg/kg	NA	NA	NA	NA	NA
Total Extractable Hydrocarbons							
Diesel Range	46,000	mg/kg	10,800	NA	22,100	17,400	2,560
Motor Oil Range		mg/kg	18,600	NA	44,700	34,700	8,560
Bunker C Range	46,000	mg/kg	50,100	NA	104,000	84,800	14,800
VOCs (EPA 8021)							
Benzene		ug/kg	NA	NA	NA	NA	NA
Toluene		ug/kg	NA	NA	NA	NA	NA
Ethylbenzene		ug/kg	NA	NA	NA	NA	NA
m,p-Xylenes		ug/kg	NA	NA	NA	NA	NA
o-Xylenes		ug/kg	NA	NA	NA	NA	NA
HVOCs** (EPA 8260)							
1,2,4-Trimethylbenzene		ug/kg	NA	NA	NA	NA	NA
1,3,5-Trimethylbenzene		ug/kg	NA	NA	NA	NA	NA
Acetone		ug/kg	NA	NA	NA	NA	NA
Ethylbenzene		ug/kg	NA	NA	NA	NA	NA
Isopropylbenzene		ug/kg	NA	NA	NA	NA	NA
m,p-Xylenes		ug/kg	NA	NA	NA	NA	NA
Napthalene		ug/kg	NA	NA	NA	NA	NA
n-Butylbenzene		ug/kg	NA	NA	NA	NA	NA
o-Xylenes		ug/kg	NA	NA	NA	NA	NA
para-Isopropyl Toluene		ug/kg	NA	NA	NA	NA	NA
Propylbenzene		ug/kg	NA	NA	NA	NA	NA
sec-Butylbenzene		ug/kg	NA	NA	NA	NA	NA
Tetrachloroethene		ug/kg	NA	NA	NA	NA	NA
Toluene		ug/kg	NA	NA	NA	NA	NA
Trichloroethene		ug/kg	NA	NA	NA	NA	NA
Semivolatile Organics** (EPA 8270)							
2-Methylnaphthalene	216,236,000	ug/kg	NA	NA	NA	NA	NA
TITLE 26 Metals							
Antimony	1,658	mg/kg	NA	NA	NA	NA	NA
Arsenic	19	mg/kg	NA	NA	NA	NA	NA
Barium	290,217	mg/kg	NA	NA	NA	NA	NA
Beryllium		mg/kg	NA	NA	NA	NA	NA
Cadmium	2,073	mg/kg	NA	NA	NA	NA	NA
Chromium (total)		mg/kg	NA	NA	NA	NA	NA
Cobalt		mg/kg	NA	NA	NA	NA	NA
Copper		mg/kg	NA	NA	NA	NA	NA
Lead	2,464	mg/kg	NA	NA	NA	NA	NA
Molybdenum		mg/kg	NA	NA	NA	NA	NA
Nickel		mg/kg	NA	NA	NA	NA	NA
Selenium		mg/kg	NA	NA	NA	NA	NA
Silver	90,603	mg/kg	NA	NA	NA	NA	NA
Thallium		mg/kg	NA	NA	NA	NA	NA
Vanadium		mg/kg	NA	NA	NA	NA	NA
Zinc		mg/kg	NA	NA	NA	NA	NA
Mercury (EPA 7470)		mg/kg	NA	NA	NA	NA	NA
Lead (STLC - EPA 6010B)		ug/L	NA	NA	NA	NA	NA
Other							
Herbicides (EPA 8151A)		ug/kg	NA	NA	NA	NA	NA
Pesticides/PCBs (EPA 8081A/8082)		ug/kg	NA	NA	NA	NA	NA
96 hour LC50 Bioassay			NA	NA	NA	NA	NA

Notes:
*RAO = Soil Remedial Action Objective is listed for Base Case only is for Commercial Maintenance Worker (see Table 1).
Bold entry indicates exceedence of Base Case RAO.
**Only compounds with detections above reporting limits are listed for VOCs and SVOCs.
NA - Not analyzed or not applicable.
NS - Elevation not surveyed; see report for coordinates.
NR - No recovery.
ug/kg - micrograms per kilogram
mg/kg - milligrams per kilogram
< less than (not detected at or above this value)
Y - sample exhibits pattern which does not resemble standard
H - heavier hydrocarbons than indicated on standard
L - lighter hydrocarbons than indicated on standard
J - estimated value

Table 2
Soil Investigation Results
May to June 2000
Southern Area, Former Bayshore Railyard (OU-2)
Brisbane, California
Sunquest Properties, Inc.

Sample Name			R-92_SC	R-93A_SC	R-93B_SC	R-94_SC	R-95
Ground Surface Elevation			8.78	7.72	7.72	6.35	6.94
Bay Mud Depth	RAO*		6	10	10	6	8
Sample Depth (ft)	Base Case		4.0 - 4.5	1.5 - 2.0	5.5 - 6.0	4.5 - 5.0	NA
Sampling Date	(Commercial		6/7/00	6/7/00	6/7/00	6/7/00	6/9/00
Laboratory Episode Number	Maint. Worker)		146013-002	146015-003	146013-004	146013-005	NA
Parameter		Units					
Total Volatile Hydrocarbons							
Gasoline Range		mg/kg	NA	2.7Y	NA	NA	NA
Stoddard Solvent Range		mg/kg	NA	1.3Y	NA	NA	NA
Total Extractable Hydrocarbons							
Diesel Range	46,000	mg/kg	**60,100**	NA	514	32,500	NA
Motor Oil Range		mg/kg	103,000	NA	981	66,600	NA
Bunker C Range	46,000	mg/kg	**273,000**	NA	2,400	157,000	NA
VOCs (EPA 8021)							
Benzene		ug/kg	NA	NA	NA	NA	NA
Toluene		ug/kg	NA	NA	NA	NA	NA
Ethylbenzene		ug/kg	NA	NA	NA	NA	NA
m,p-Xylenes		ug/kg	NA	NA	NA	NA	NA
o-Xylenes		ug/kg	NA	NA	NA	NA	NA
HVOCs** (EPA 8260)							
1,2,4-Trimethylbenzene		ug/kg	NA	<5.0	NA	NA	NA
1,3,5-Trimethylbenzene		ug/kg	NA	<5.0	NA	NA	NA
Acetone		ug/kg	NA	63	NA	NA	NA
Ethylbenzene		ug/kg	NA	<5.0	NA	NA	NA
Isopropylbenzene		ug/kg	NA	<5.0	NA	NA	NA
m,p-Xylenes		ug/kg	NA	<5.0	NA	NA	NA
Napthalene		ug/kg	NA	<5.0	NA	NA	NA
n-Butylbenzene		ug/kg	NA	7	NA	NA	NA
o-Xylenes		ug/kg	NA	<5.0	NA	NA	NA
para-Isopropyl Toluene		ug/kg	NA	<5.0	NA	NA	NA
Propylbenzene		ug/kg	NA	<5.0	NA	NA	NA
sec-Butylbenzene		ug/kg	NA	3	NA	NA	NA
Tetrachloroethene		ug/kg	NA	<5.0	NA	NA	NA
Toluene		ug/kg	NA	<5.0	NA	NA	NA
Trichloroethene		ug/kg	NA	<5.0	NA	NA	NA
Semivolatile Organics** (EPA 8270)							
2-Methylnaphthalene	216,236,000	ug/kg	NA	NA	NA	NA	NA
TITLE 26 Metals							
Antimony	1,658	mg/kg	NA	NA	NA	NA	NA
Arsenic	19	mg/kg	NA	NA	NA	NA	NA
Barium	290,217	mg/kg	NA	NA	NA	NA	NA
Beryllium		mg/kg	NA	NA	NA	NA	NA
Cadmium	2,073	mg/kg	NA	NA	NA	NA	NA
Chromium (total)		mg/kg	NA	NA	NA	NA	NA
Cobalt		mg/kg	NA	NA	NA	NA	NA
Copper		mg/kg	NA	NA	NA	NA	NA
Lead	2,464	mg/kg	NA	NA	NA	NA	NA
Molybdenum		mg/kg	NA	NA	NA	NA	NA
Nickel		mg/kg	NA	NA	NA	NA	NA
Selenium		mg/kg	NA	NA	NA	NA	NA
Silver	90,603	mg/kg	NA	NA	NA	NA	NA
Thallium		mg/kg	NA	NA	NA	NA	NA
Vanadium		mg/kg	NA	NA	NA	NA	NA
Zinc		mg/kg	NA	NA	NA	NA	NA
Mercury (EPA 7470)		mg/kg	NA	NA	NA	NA	NA
Lead (STLC - EPA 6010B)		ug/L	NA	NA	NA	NA	NA
Other							
Herbicides (EPA 8151A)		ug/kg	NA	NA	NA	NA	NA
Pesticides/PCBs (EPA 8081A/8082)		ug/kg	NA	NA	NA	NA	NA
96 hour LC50 Bioassay			NA	NA	NA	NA	NA

Notes:

*RAO = Soil Remedial Action Objective is listed for Base Case only is for Commercial Maintenance Worker (see Table 1).

Bold entry indicates exceedence of Base Case RAO.

**Only compounds with detections above reporting limits are listed for VOCs and SVOCs.

NA - Not analyzed or not applicable.

NS - Elevation not surveyed; see report for coordinates.

NR - No recovery.

ug/kg - micrograms per kilogram

mg/kg - milligrams per kilogram

< less than (not detected at or above this value)

Y - sample exhibits pattern which does not resemble standard

H - heavier hydrocarbons than indicated on standard

L - lighter hydrocarbons than indicated on standard

J - estimated value

Table 2
Soil Investigation Results
May to June 2000
Southern Area, Former Bayshore Railyard (OU-2)
Brisbane, California
Sunquest Properties, Inc.

Sample Name			R-96	R-97_SC	R-98	R-99	R-100
Ground Surface Elevation			7.97	6.71	6.39	6.56	8.19
Bay Mud Depth	RAO*		6	7.2	7	7.5	9.5
Sample Depth (ft)	Base Case		NA	6.5 - 7.0	NA	NA	NA
Sampling Date	(Commercial		6/9/00	6/9/00	6/9/00	6/9/00	6/9/00
Laboratory Episode Number	Maint. Worker)		NA	146036-006	NA	NA	NA
Parameter		Units					
Total Volatile Hydrocarbons							
Gasoline Range		mg/kg	NA	NA	NA	NA	NA
Stoddard Solvent Range		mg/kg	NA	NA	NA	NA	NA
Total Extractable Hydrocarbons							
Diesel Range	46,000	mg/kg	NA	20,000HY	NA	NA	NA
Motor Oil Range		mg/kg	NA	NA	NA	NA	NA
Bunker C Range	46,000	mg/kg	NA	**83,000Y**	NA	NA	NA
VOCs (EPA 8021)							
Benzene		ug/kg	NA	NA	NA	NA	NA
Toluene		ug/kg	NA	NA	NA	NA	NA
Ethylbenzene		ug/kg	NA	NA	NA	NA	NA
m,p-Xylenes		ug/kg	NA	NA	NA	NA	NA
o-Xylenes		ug/kg	NA	NA	NA	NA	NA
HVOCs** (EPA 8260)							
1,2,4-Trimethylbenzene		ug/kg	NA	NA	NA	NA	NA
1,3,5-Trimethylbenzene		ug/kg	NA	NA	NA	NA	NA
Acetone		ug/kg	NA	NA	NA	NA	NA
Ethylbenzene		ug/kg	NA	NA	NA	NA	NA
Isopropylbenzene		ug/kg	NA	NA	NA	NA	NA
m,p-Xylenes		ug/kg	NA	NA	NA	NA	NA
Napthalene		ug/kg	NA	NA	NA	NA	NA
n-Butylbenzene		ug/kg	NA	NA	NA	NA	NA
o-Xylenes		ug/kg	NA	NA	NA	NA	NA
para-Isopropyl Toluene		ug/kg	NA	NA	NA	NA	NA
Propylbenzene		ug/kg	NA	NA	NA	NA	NA
sec-Butylbenzene		ug/kg	NA	NA	NA	NA	NA
Tetrachloroethene		ug/kg	NA	NA	NA	NA	NA
Toluene		ug/kg	NA	NA	NA	NA	NA
Trichloroethene		ug/kg	NA	NA	NA	NA	NA
Semivolatile Organics** (EPA 8270)							
2-Methylnaphthalene	216,236,000	ug/kg	NA	NA	NA	NA	NA
TITLE 26 Metals							
Antimony	1,658	mg/kg	NA	NA	NA	NA	NA
Arsenic	19	mg/kg	NA	NA	NA	NA	NA
Barium	290,217	mg/kg	NA	NA	NA	NA	NA
Beryllium		mg/kg	NA	NA	NA	NA	NA
Cadmium	2,073	mg/kg	NA	NA	NA	NA	NA
Chromium (total)		mg/kg	NA	NA	NA	NA	NA
Cobalt		mg/kg	NA	NA	NA	NA	NA
Copper		mg/kg	NA	NA	NA	NA	NA
Lead	2,464	mg/kg	NA	NA	NA	NA	NA
Molybdenum		mg/kg	NA	NA	NA	NA	NA
Nickel		mg/kg	NA	NA	NA	NA	NA
Selenium		mg/kg	NA	NA	NA	NA	NA
Silver	90,603	mg/kg	NA	NA	NA	NA	NA
Thallium		mg/kg	NA	NA	NA	NA	NA
Vanadium		mg/kg	NA	NA	NA	NA	NA
Zinc		mg/kg	NA	NA	NA	NA	NA
Mercury (EPA 7470)		mg/kg	NA	NA	NA	NA	NA
Lead (STLC - EPA 6010B)		ug/L	NA	NA	NA	NA	NA
Other							
Herbicides (EPA 8151A)		ug/kg	NA	NA	NA	NA	NA
Pesticides/PCBs (EPA 8081A/8082)		ug/kg	NA	NA	NA	NA	NA
96 hour LC50 Bioassay			NA	NA	NA	NA	NA

Notes:
*RAO = Soil Remedial Action Objective is listed for Base Case only
is for Commercial Maintenance Worker (see Table 1).
Bold entry indicates exceedence of Base Case RAO.
**Only compounds with detections above reporting limits
are listed for VOCs and SVOCs.
NA - Not analyzed or not applicable.
NS - Elevation not surveyed; see report for coordinates.
NR - No recovery.
ug/kg - micrograms per kilogram
mg/kg - milligrams per kilogram
< less than (not detected at or above this value)
Y - sample exhibits pattern which does not resemble standard
H - heavier hydrocarbons than indicated on standard
L - lighter hydrocarbons than indicated on standard
J - estimated value

Table 2
Soil Investigation Results
May to June 2000
Southern Area, Former Bayshore Railyard (OU-2)
Brisbane, California
Sunquest Properties, Inc.

Sample Name			R-101	R-102_SC	R-103_SC	R-104_SC	R-106
Ground Surface Elevation			7.59	6.85	6.70	9.16	7.15
Bay Mud Depth	RAO*		7	4.8	6	6.5	6
Sample Depth (ft)	Base Case		NA	4.0 - 4.3	4.0 - 4.5	6.0 - 6.5	NA
Sampling Date	(Commercial		6/9/00	6/9/00	6/9/00	6/9/00	6/9/00
Laboratory Episode Number	Maint. Worker)		NA	146036-004	146036-003	146036-005	NA
Parameter		Units					
Total Volatile Hydrocarbons							
Gasoline Range		mg/kg	NA	NA	NA	NA	NA
Stoddard Solvent Range		mg/kg	NA	NA	NA	NA	NA
Total Extractable Hydrocarbons							
Diesel Range	46,000	mg/kg	NA	7,500HY	13,000HY	31,000HY	NA
Motor Oil Range		mg/kg	NA	NA	NA	NA	NA
Bunker C Range	46,000	mg/kg	NA	31,000Y	58,000Y	130,000Y	NA
VOCs (EPA 8021)							
Benzene		ug/kg	NA	NA	NA	NA	NA
Toluene		ug/kg	NA	NA	NA	NA	NA
Ethylbenzene		ug/kg	NA	NA	NA	NA	NA
m,p-Xylenes		ug/kg	NA	NA	NA	NA	NA
o-Xylenes		ug/kg	NA	NA	NA	NA	NA
HVOCs** (EPA 8260)							
1,2,4-Trimethylbenzene		ug/kg	NA	NA	NA	NA	NA
1,3,5-Trimethylbenzene		ug/kg	NA	NA	NA	NA	NA
Acetone		ug/kg	NA	NA	NA	NA	NA
Ethylbenzene		ug/kg	NA	NA	NA	NA	NA
Isopropylbenzene		ug/kg	NA	NA	NA	NA	NA
m,p-Xylenes		ug/kg	NA	NA	NA	NA	NA
Napthalene		ug/kg	NA	NA	NA	NA	NA
n-Butylbenzene		ug/kg	NA	NA	NA	NA	NA
o-Xylenes		ug/kg	NA	NA	NA	NA	NA
para-Isopropyl Toluene		ug/kg	NA	NA	NA	NA	NA
Propylbenzene		ug/kg	NA	NA	NA	NA	NA
sec-Butylbenzene		ug/kg	NA	NA	NA	NA	NA
Tetrachloroethene		ug/kg	NA	NA	NA	NA	NA
Toluene		ug/kg	NA	NA	NA	NA	NA
Trichloroethene		ug/kg	NA	NA	NA	NA	NA
Semivolatile Organics** (EPA 8270)							
2-Methylnaphthalene	216,236,000	ug/kg	NA	NA	NA	NA	NA
TITLE 26 Metals							
Antimony	1,658	mg/kg	NA	NA	NA	NA	NA
Arsenic	19	mg/kg	NA	NA	NA	NA	NA
Barium	290,217	mg/kg	NA	NA	NA	NA	NA
Beryllium		mg/kg	NA	NA	NA	NA	NA
Cadmium	2,073	mg/kg	NA	NA	NA	NA	NA
Chromium (total)		mg/kg	NA	NA	NA	NA	NA
Cobalt		mg/kg	NA	NA	NA	NA	NA
Copper		mg/kg	NA	NA	NA	NA	NA
Lead	2,464	mg/kg	NA	NA	NA	NA	NA
Molybdenum		mg/kg	NA	NA	NA	NA	NA
Nickel		mg/kg	NA	NA	NA	NA	NA
Selenium		mg/kg	NA	NA	NA	NA	NA
Silver	90,603	mg/kg	NA	NA	NA	NA	NA
Thallium		mg/kg	NA	NA	NA	NA	NA
Vanadium		mg/kg	NA	NA	NA	NA	NA
Zinc		mg/kg	NA	NA	NA	NA	NA
Mercury (EPA 7470)		mg/kg	NA	NA	NA	NA	NA
Lead (STLC - EPA 6010B)		ug/L	NA	NA	NA	NA	NA
Other							
Herbicides (EPA 8151A)		ug/kg	NA	NA	NA	NA	NA
Pesticides/PCBs (EPA 8081A/8082)		ug/kg	NA	NA	NA	NA	NA
96 hour LC50 Bioassay			NA	NA	NA	NA	NA

Notes:

*RAO = Soil Remedial Action Objective is listed for Base Case only
is for Commercial Maintenance Worker (see Table 1).

Bold entry indicates exceedence of Base Case RAO.

**Only compounds with detections above reporting limits
are listed for VOCs and SVOCs.

NA - Not analyzed or not applicable.

NS - Elevation not surveyed; see report for coordinates.

NR - No recovery.

ug/kg - micrograms per kilogram

mg/kg - milligrams per kilogram

< less than (not detected at or above this value)

Y - sample exhibits pattern which does not resemble standard

H - heavier hydrocarbons than indicated on standard

L - lighter hydrocarbons than indicated on standard

J - estimated value

Table 2
Soil Investigation Results
May to June 2000
Southern Area, Former Bayshore Railyard (OU-2)
Brisbane, California
Sunquest Properties, Inc.

Sample Name			R-107	R-108_SC	R-108_Comp	R-109_SC	R-109_Comp
Ground Surface Elevation			6.61	8.26	8.26	6.80	6.80
Bay Mud Depth	RAO*		12	6	6	6.5	6.5
Sample Depth (ft)	Base Case		NA	5.0 - 5.4	Composite	5.5 - 6.0	Composite
Sampling Date	(Commercial		6/9/00	6/14/00	6/14/00	6/14/00	6/14/00
Laboratory Episode Number	Maint. Worker)		NA	146124-009	146124-010	146124-012	146124-013
Parameter		Units					
Total Volatile Hydrocarbons							
Gasoline Range		mg/kg	NA	310Y	NA	180HY	NA
Stoddard Solvent Range		mg/kg	NA	160	NA	88Y	NA
Total Extractable Hydrocarbons							
Diesel Range	46,000	mg/kg	NA	NA	NA	NA	NA
Motor Oil Range		mg/kg	NA	NA	NA	NA	NA
Bunker C Range	46,000	mg/kg	NA	NA	NA	NA	NA
VOCs (EPA 8021)							
Benzene		ug/kg	NA	<50	NA	55	NA
Toluene		ug/kg	NA	<50	NA	50U	NA
Ethylbenzene		ug/kg	NA	1900C	NA	310C	NA
m,p-Xylenes		ug/kg	NA	950C	NA	530	NA
o-Xylenes		ug/kg	NA	1,400	NA	550	NA
HVOCs** (EPA 8260)							
1,2,4-Trimethylbenzene		ug/kg	NA	200J	NA	1,700	NA
1,3,5-Trimethylbenzene		ug/kg	NA	<250	NA	440	NA
Acetone		ug/kg	NA	<1000	NA	<1000	NA
Ethylbenzene		ug/kg	NA	<250	NA	<250	NA
Isopropylbenzene		ug/kg	NA	400	NA	<250	NA
m,p-Xylenes		ug/kg	NA	<250	NA	380	NA
Napthalene		ug/kg	NA	500	NA	3,100	NA
n-Butylbenzene		ug/kg	NA	410	NA	370	NA
o-Xylenes		ug/kg	NA	<250	NA	330	NA
para-Isopropyl Toluene		ug/kg	NA	150J	NA	430	NA
Propylbenzene		ug/kg	NA	420	NA	200J	NA
sec-Butylbenzene		ug/kg	NA	480	NA	140J	NA
Tetrachloroethene		ug/kg	NA	<250	NA	<250	NA
Toluene		ug/kg	NA	<250	NA	<250	NA
Trichloroethene		ug/kg	NA	<250	NA	<250	NA
Semivolatile Organics** (EPA 8270)							
2-Methylnaphthalene	215,236,000	ug/kg	NA	NA	NA	NA	NA
TITLE 26 Metals							
Antimony	1,658	mg/kg	NA	NA	<3	NA	<3
Arsenic	19	mg/kg	NA	NA	1.7	NA	7.3
Barium	290,217	mg/kg	NA	NA	31.0	NA	240.0
Beryllium		mg/kg	NA	NA	<0.099	NA	0.3
Cadmium	2,073	mg/kg	NA	NA	0.9	NA	2.7
Chromium (total)		mg/kg	NA	NA	8.7	NA	12.0
Cobalt		mg/kg	NA	NA	1.8	NA	4.0
Copper		mg/kg	NA	NA	19.0	NA	170.0
Lead	2,464	mg/kg	NA	NA	140.0	NA	900.0
Molybdenum		mg/kg	NA	NA	<0.99	NA	<0.99
Nickel		mg/kg	NA	NA	21.0	NA	18.0
Selenium		mg/kg	NA	NA	<0.25	NA	<0.25
Silver	90,603	mg/kg	NA	NA	<0.25	NA	1.3
Thallium		mg/kg	NA	NA	<0.25	NA	<0.25
Vanadium		mg/kg	NA	NA	12.0	NA	17.0
Zinc		mg/kg	NA	NA	81.0	NA	400.0
Mercury (EPA 7470)		mg/kg	NA	NA	0.2	NA	0.2
Lead (STLC - EPA 6010B)		ug/L	NA	NA	NA	NA	NA
Other							
Herbicides (EPA 8151A)		ug/kg	NA	NA	ND	NA	ND
Pesticides/PCBs (EPA 8081A/8082)		ug/kg	NA	NA	ND	NA	ND
96 hour LC50 Bioassay			NA	NA	NA	NA	NA

Notes:

*RAO = Soil Remedial Action Objective is listed for Base Case only
Is for Commercial Maintenance Worker (see Table 1).

Bold entry indicates exceedence of Base Case RAO.

**Only compounds with detections above reporting limits
are listed for VOCs and SVOCs.

NA - Not analyzed or not applicable.

NS - Elevation not surveyed; see report for coordinates.

NR - No recovery.

ug/kg - micrograms per kilogram

mg/kg - milligrams per kilogram

< less than (not detected at or above this value)

Y - sample exhibits pattern which does not resemble standard

H - heavier hydrocarbons than indicated on standard

L - lighter hydrocarbons than indicated on standard

J - estimated value

Table 2
Soil Investigation Results
May to June 2000
Southern Area, Former Bayshore Railyard (OU-2)
Brisbane, California
Sunquest Properties, Inc.

Sample Name Ground Surface Elevation Bay Mud Depth Sample Depth (ft) Sampling Date Laboratory Episode Number	RAO* Base Case (Commercial Maint. Worker)		R-110_Comp 6.87 7.5 Composite 6/14/00 146124-011	R-111_Comp 7.30 7 Composite 6/14/00 146124-005	R-112_Comp 7.98 8 Composite 6/14/00 146124-006	R-113_SC 7.52 9-12 (NR) 5.4 - 5.8 6/14/00 146124-007	R-113_Comp 7.52 9-12 (NR) Composite 6/14/00 146124-008
Parameter		Units					
Total Volatile Hydrocarbons							
Gasoline Range		mg/kg	NA	NA	NA	270HY	NA
Stoddard Solvent Range		mg/kg	NA	NA	NA	130Y	NA
Total Extractable Hydrocarbons							
Diesel Range	46,000	mg/kg	NA	NA	NA	NA	NA
Motor Oil Range		mg/kg	NA	NA	NA	NA	NA
Bunker C Range	46,000	mg/kg	NA	NA	NA	NA	NA
VOCs (EPA 8021)							
Benzene		ug/kg	NA	NA	NA	57C	NA
Toluene		ug/kg	NA	NA	NA	180C	NA
Ethylbenzene		ug/kg	NA	NA	NA	2,300	NA
m,p-Xylenes		ug/kg	NA	NA	NA	1,400	NA
o-Xylenes		ug/kg	NA	NA	NA	810	NA
HVOCs** (EPA 8260)							
1,2,4-Trimethylbenzene		ug/kg	NA	NA	NA	2,400	NA
1,3,5-Trimethylbenzene		ug/kg	NA	NA	NA	650	NA
Acetone		ug/kg	NA	NA	NA	<1000	NA
Ethylbenzene		ug/kg	NA	NA	NA	1,500	NA
Isopropylbenzene		ug/kg	NA	NA	NA	350	NA
m,p-Xylenes		ug/kg	NA	NA	NA	1,100	NA
Napthalene		ug/kg	NA	NA	NA	3,000	NA
n-Butylbenzene		ug/kg	NA	NA	NA	620	NA
o-Xylenes		ug/kg	NA	NA	NA	200J	NA
para-Isopropyl Toluene		ug/kg	NA	NA	NA	220J	NA
Propylbenzene		ug/kg	NA	NA	NA	710	NA
sec-Butylbenzene		ug/kg	NA	NA	NA	330	NA
Tetrachloroethene		ug/kg	NA	NA	NA	<250	NA
Toluene		ug/kg	NA	NA	NA	200J	NA
Trichloroethene		ug/kg	NA	NA	NA	<250	NA
Semivolatile Organics** (EPA 8270)							
2-Methylnaphthalene	216,236,000	ug/kg	NA	NA	NA	NA	NA
TITLE 26 Metals							
Antimony	1,658	mg/kg	<3	6.0	<3	NA	<2.9
Arsenic	19	mg/kg	20.0	5.2	2.6	NA	2.7
Barium	290,217	mg/kg	130.0	36.0	69.0	NA	67.0
Beryllium		mg/kg	<0.099	<0.1	0.2	NA	0.2
Cadmium	2,073	mg/kg	2.9	0.9	1.4	NA	1.7
Chromium (total)		mg/kg	24.0	20.0	19.0	NA	45.0
Cobalt		mg/kg	2.7	1.7	3.9	NA	7.3
Copper		mg/kg	470.0	130.0	37.0	NA	17.0
Lead	2,464	mg/kg	110.0	1,100.0	200.0	NA	55.0
Molybdenum		mg/kg	<0.99	<1	<0.99	NA	<0.97
Nickel		mg/kg	68.0	8.8	25.0	NA	37.0
Selenium		mg/kg	0.5	<0.25	<0.25	NA	<0.24
Silver	90,603	mg/kg	<0.25	<0.25	0.4	NA	<0.24
Thallium		mg/kg	<0.25	<0.25	0.3	NA	0.5
Vanadium		mg/kg	54.0	6.6	15.0	NA	33.0
Zinc		mg/kg	29.0	100.0	120.0	NA	57.0
Mercury (EPA 7470)		mg/kg	0.3	0.2	0.3	NA	0.1
Lead (STLC - EPA 6010B)		ug/L	NA	26.0	NA	NA	NA
Other							
Herbicides (EPA 8151A)		ug/kg	ND	ND	ND	NA	ND
Pesticides/PCBs (EPA 8081A/8082)		ug/kg	ND	ND	ND	NA	ND
96 hour LC50 Bioassay			NA	NA	NA	NA	NA

Notes:

*RAO = Soil Remedial Action Objective is listed for Base Case only is for Commercial Maintenance Worker (see Table 1).

Bold entry indicates exceedence of Base Case RAO.

**Only compounds with detections above reporting limits are listed for VOCs and SVOCs.

NA - Not analyzed or not applicable.

NS - Elevation not surveyed; see report for coordinates.

NR - No recovery.

ug/kg - micrograms per kilogram

mg/kg - milligrams per kilogram

< less than (not detected at or above this value)

Y - sample exhibits pattern which does not resemble standard

H - heavier hydrocarbons than indicated on standard

L - lighter hydrocarbons than indicated on standard

J - estimated value

Table 2
Soil Investigation Results
May to June 2000
Southern Area, Former Bayshore Railyard (OU-2)
Brisbane, California
Sunquest Properties, Inc.

Sample Name			R-114_SC	R-114_Comp	R-115_SC	R-115_Comp	R-116_SC
Ground Surface Elevation			6.70	6.70	7.91	7.91	9.19
Bay Mud Depth	RAO*		6.5	6.5	7.5	7.5	6
Sample Depth (ft)	Base Case		6.5 - 7.0	Composite	3.3 - 3.8	Composite	5.7 - 6.0
Sampling Date	(Commercial		6/14/00	6/14/00	6/14/00	6/14/00	6/14/00
Laboratory Episode Number	Maint. Worker)		146124-014	146124-015		146124-004	
Parameter		Units					
Total Volatile Hydrocarbons							
Gasoline Range		mg/kg	230HY	NA	8.4HY	NA	22HY
Stoddard Solvent Range		mg/kg	110Y	NA	4.2Y	NA	11Y
Total Extractable Hydrocarbons							
Diesel Range	46,000	mg/kg	NA	NA	NA	NA	NA
Motor Oil Range		mg/kg	NA	NA	NA	NA	NA
Bunker C Range	46,000	mg/kg	NA	NA	NA	NA	NA
VOCs (EPA 8021)							
Benzene		ug/kg	<50	NA	<4.5	NA	5.0U
Toluene		ug/kg	260	NA	<4.5	NA	5.0U
Ethylbenzene		ug/kg	910	NA	<4.5	NA	5.0U
m,p-Xylenes		ug/kg	1,400	NA	<4.5	NA	5.0U
o-Xylenes		ug/kg	1,300	NA	<4.5	NA	5.0U
HVOCs** (EPA 8260)							
1,2,4-Trimethylbenzene		ug/kg	2,100	NA	<25	NA	<130
1,3,5-Trimethylbenzene		ug/kg	640	NA	<25	NA	<130
Acetone		ug/kg	<1000	NA	<100	NA	<500
Ethylbenzene		ug/kg	410	NA	<25	NA	<130
Isopropylbenzene		ug/kg	240J	NA	<25	NA	<130
m,p-Xylenes		ug/kg	1,000	NA	<25	NA	<130
Napthalene		ug/kg	3,200	NA	59	NA	<130
n-Butylbenzene		ug/kg	<250	NA	<25	NA	<130
o-Xylenes		ug/kg	700	NA	<25	NA	<130
para-Isopropyl Toluene		ug/kg	490	NA	<25	NA	<130
Propylbenzene		ug/kg	370	NA	<25	NA	<130
sec-Butylbenzene		ug/kg	260	NA	<25	NA	<130
Tetrachloroethene		ug/kg	<250	NA	<25	NA	<130
Toluene		ug/kg	250	NA	<25	NA	<130
Trichloroethene		ug/kg	<250	NA	<25	NA	<130
Semivolatile Organics** (EPA 8270)							
2-Methylnaphthalene	216,236,000	ug/kg	NA	NA	NA	NA	NA
TITLE 26 Metals							
Antimony	1,658	mg/kg	NA	<2.9	NA	<3	NA
Arsenic	19	mg/kg	NA	34.0	NA	4.3	NA
Barium	290,217	mg/kg	NA	68.0	NA	30.0	NA
Beryllium		mg/kg	NA	0.1	NA	0.3	NA
Cadmium	2,073	mg/kg	NA	2.1	NA	2.1	NA
Chromium (total)		mg/kg	NA	19.0	NA	49.0	NA
Cobalt		mg/kg	NA	6.5	NA	9.7	NA
Copper		mg/kg	NA	75.0	NA	25.0	NA
Lead	2,464	mg/kg	NA	110.0	NA	22.0	NA
Molybdenum		mg/kg	NA	<0.98	NA	<1	NA
Nickel		mg/kg	NA	24.0	NA	62.0	NA
Selenium		mg/kg	NA	<0.25	NA	<0.25	NA
Silver	90,603	mg/kg	NA	0.3	NA	<0.25	NA
Thallium		mg/kg	NA	0.5	NA	0.7	NA
Vanadium		mg/kg	NA	35.0	NA	28.0	NA
Zinc		mg/kg	NA	150.0	NA	50.0	NA
Mercury (EPA 7470)		mg/kg	NA	0.1	NA	0.2	NA
Lead (STLC - EPA 6010B)		ug/L	NA	NA	NA	NA	NA
Other							
Herbicides (EPA 8151A)		ug/kg	NA	ND	NA	ND	NA
Pesticides/PCBs (EPA 8081A/8082)		ug/kg	NA	ND	NA	ND	NA
96 hour LC50 Bioassay			NA	NA	NA	NA	NA

Notes:

*RAO = Soil Remedial Action Objective is listed for Base Case only is for Commercial Maintenance Worker (see Table 1).

Bold entry indicates exceedence of Base Case RAO.

**Only compounds with detections above reporting limits are listed for VOCs and SVOCs.

NA - Not analyzed or not applicable.

NS - Elevation not surveyed; see report for coordinates.

NR - No recovery.

ug/kg - micrograms per kilogram

mg/kg - milligrams per kilogram

< less than (not detected at or above this value)

Y - sample exhibits pattern which does not resemble standard

H - heavier hydrocarbons than indicated on standard

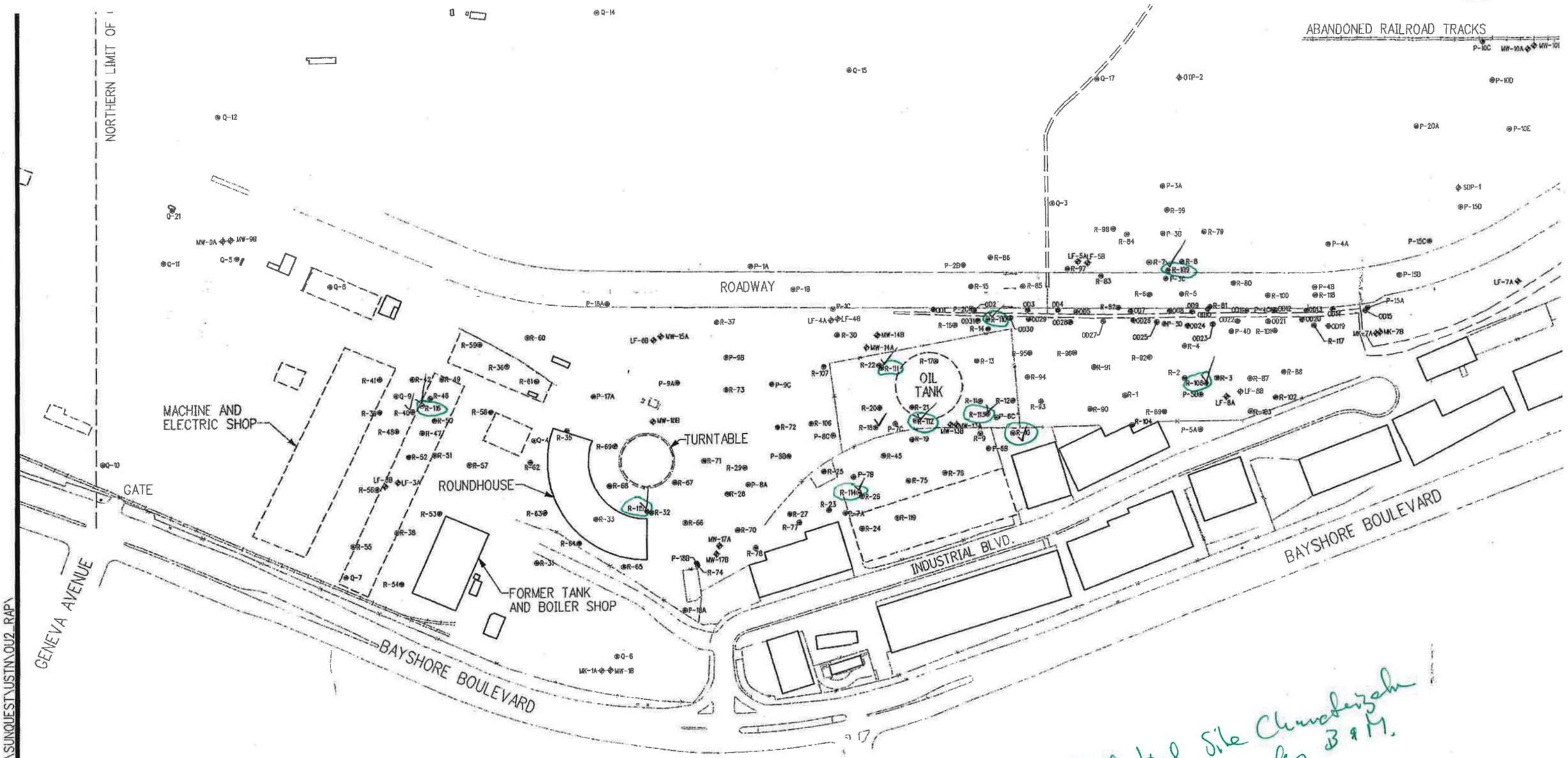
L - lighter hydrocarbons than indicated on standard

J - estimated value

Table 2
Soil Investigation Results
May to June 2000
Southern Area, Former Bayshore Railyard (OU-2)
Brisbane, California
Sunquest Properties, Inc.

Sample Name			R-116_Comp	R-117A_SC	R-118_SC	R-119_SC
Ground Surface Elevation			9.19	7.66	8.14	7.81
Bay Mud Depth	RAO*		6	11	7	6.5
Sample Depth (ft)	Base Case		Composite	6.0 - 7.0	6.5 - 7.0	5.6 - 6.0
Sampling Date	(Commercial		6/14/00	6/9/00	6/9/00	6/9/00
Laboratory Episode Number	Maint. Worker)		146124-002	146036-001	146036-002	146036-007
Parameter		Units				
Total Volatile Hydrocarbons						
Gasoline Range		mg/kg	NA	NA	NA	NA
Stoddard Solvent Range		mg/kg	NA	NA	NA	NA
Total Extractable Hydrocarbons						
Diesel Range	46,000	mg/kg	NA	4,500HY	25,000HY	31,000HY
Motor Oil Range		mg/kg	NA	NA	NA	NA
Bunker C Range	46,000	mg/kg	NA	19,000Y	110,000Y	140,000Y
VOCs (EPA 8021)						
Benzene		ug/kg	NA	NA	NA	NA
Toluene		ug/kg	NA	NA	NA	NA
Ethylbenzene		ug/kg	NA	NA	NA	NA
m,p-Xylenes		ug/kg	NA	NA	NA	NA
o-Xylenes		ug/kg	NA	NA	NA	NA
HVOCs** (EPA 8260)						
1,2,4-Trimethylbenzene		ug/kg	NA	NA	NA	NA
1,3,5-Trimethylbenzene		ug/kg	NA	NA	NA	NA
Acetone		ug/kg	NA	NA	NA	NA
Ethylbenzene		ug/kg	NA	NA	NA	NA
Isopropylbenzene		ug/kg	NA	NA	NA	NA
m,p-Xylenes		ug/kg	NA	NA	NA	NA
Napthalene		ug/kg	NA	NA	NA	NA
n-Butylbenzene		ug/kg	NA	NA	NA	NA
o-Xylenes		ug/kg	NA	NA	NA	NA
para-Isopropyl Toluene		ug/kg	NA	NA	NA	NA
Propylbenzene		ug/kg	NA	NA	NA	NA
sec-Butylbenzene		ug/kg	NA	NA	NA	NA
Tetrachloroethene		ug/kg	NA	NA	NA	NA
Toluene		ug/kg	NA	NA	NA	NA
Trichloroethene		ug/kg	NA	NA	NA	NA
Semivolatile Organics** (EPA 8270)						
2-Methylnaphthalene	216,236,000	ug/kg	NA	NA	NA	NA
TITLE 26 Metals						
Antimony	1,658	mg/kg	<2.9	NA	NA	NA
Arsenic	19	mg/kg	2.8	NA	NA	NA
Barium	290,217	mg/kg	33.0	NA	NA	NA
Beryllium		mg/kg	0.2	NA	NA	NA
Cadmium	2,073	mg/kg	2.5	NA	NA	NA
Chromium (total)		mg/kg	220.0	NA	NA	NA
Cobalt		mg/kg	32.0	NA	NA	NA
Copper		mg/kg	16.0	NA	NA	NA
Lead	2,464	mg/kg	6.2	NA	NA	NA
Molybdenum		mg/kg	<0.97	NA	NA	NA
Nickel		mg/kg	550.0	NA	NA	NA
Selenium		mg/kg	<0.24	NA	NA	NA
Silver	90,603	mg/kg	<0.24	NA	NA	NA
Thallium		mg/kg	0.7	NA	NA	NA
Vanadium		mg/kg	22.0	NA	NA	NA
Zinc		mg/kg	31.0	NA	NA	NA
Mercury (EPA 7470)		mg/kg	0.0	NA	NA	NA
Lead (STLC - EPA 6010B)		ug/L	NA	NA	NA	NA
Other						
Herbicides (EPA 8151A)		ug/kg	ND	NA	NA	NA
Pesticides/PCBs (EPA 8081A/8082)		ug/kg	ND	NA	NA	NA
96 hour LC50 Bioassay			NA	NA	NA	NA

Notes:
*RAO = Soil Remedial Action Objective is listed for Base Case only
is for Commercial Maintenance Worker (see Table 1).
Bold entry indicates exceedence of Base Case RAO.
**Only compounds with detections above reporting limits
are listed for VOCs and SVOCs.
NA - Not analyzed or not applicable.
NS - Elevation not surveyed; see report for coordinates.
NR - No recovery.
ug/kg - micrograms per kilogram
mg/kg - milligrams per kilogram
< less than (not detected at or above this value)
Y - sample exhibits pattern which does not resemble standard
H - heavier hydrocarbons than indicated on standard
L - lighter hydrocarbons than indicated on standard
J - estimated value



Additional Site Characterization by B & M. 1997

SUNOSITE.DGN/ 8-14-2001 12:53/FB K:\SUNQUEST\USTN\OU2_RAP\

CALTRAIN RAILROAD TRACKS

CALTRAIN RAILROAD TRACKS

NORTHERN LIMIT OF OPERABLE UNIT-2

ABANDONED RAILROAD TRACKS

DRAINAGE CHANNEL

ROADWAY

OIL TANK

MACHINE AND ELECTRIC SHOP

TURNTABLE

GATE

ROUNDHOUSE

FORMER TANK AND BOILER SHOP

INDUSTRIAL BLVD.

GENEVA AVENUE

BAYSHORE BOULEVARD

BAYSHORE BOULEVARD

LEGEND

- GEOPROBE LOCATION (BMWCI 1997)
- GEOPROBE LOCATION (BMWCI 1999)
- GEOPROBE LOCATION (BMWCI 2000)
- BORING LOCATION (BY OTHERS)
- MONITORING WELL LOCATION
- EXISTING STRUCTURE
- FORMER STRUCTURE
- FENCE
- DRAINAGE CHANNEL

NORTH

200' 0' 200' 400'

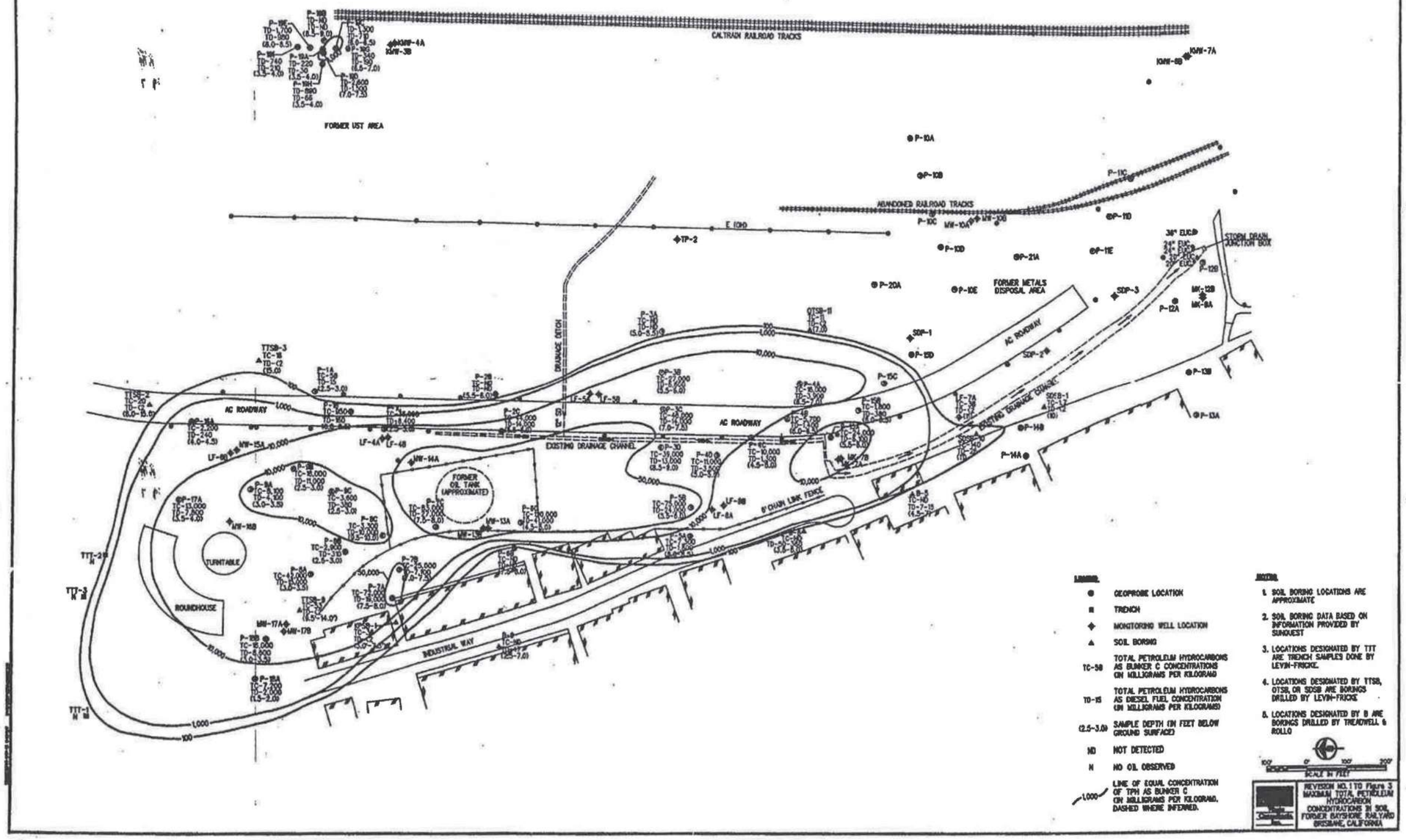
SCALE IN FEET

Burns & McDonnell Waste Consultants, Inc.

Figure 2

SITE PLAN
SUNQUEST PROPERTIES, INC.
BRISBANE, CA

SUNSITE.DGN/ 8-14-2001 12:53:/FB K:\SUNQUEST\USTN\OU2 RAP\


CALTRAIN RAILROAD TRACKS
FORMER UST AREA
KMW-4A
KMW-3B
KMW-6B
KMW-7A
P-10A
P-10B
P-10C
P-10D
P-10E
P-11C
P-11D
P-11E
P-12A
P-12B
P-13A
P-13B
P-13C
P-13D
P-14A
P-14B
P-20A
P-21A
ABANDONED RAILROAD TRACKS
MW-10A
MW-10B
TP-2
E 10HO
36" EUCP
24" EUCP
24" EUCP
24" EUCP
STORM DRAIN JUNCTION BOX
FORMER METALS DISPOSAL AREA
SDP-3
MW-12B
MW-9A
SDP-1
SDP-2
AC ROADWAY
DRAINAGE DITCH
EXISTING DRAINAGE CHANNEL
EXISTING DRAINAGE CHANNEL
SDSB-1
LF-5A
LF-5B
LF-4A
LF-4B
LF-8A
LF-8B
MW-14A
FORMER OIL TANK (APPROXIMATE)
MW-13A
MW-13B
6' CHAIN LINK FENCE
TURNTABLE
ROUNDHOUSE
MW-17A
MW-17B
INDUSTRIAL WAY
P-17A
P-18A
P-18B
TTTSP-3
TTT-2
TTT-3
TTT-1
OTSB-11
TTSB-3
TTSB-9
LEGEND:
GEOPROBE LOCATION
TRENCH
MONITORING WELL LOCATION
SOIL BORING
TC-58 TOTAL PETROLEUM HYDROCARBONS AS BUNKER C CONCENTRATIONS ON MILLIGRAMS PER KILOGRAM
TD-15 TOTAL PETROLEUM HYDROCARBONS AS DIESEL FUEL CONCENTRATION ON MILLIGRAMS PER KILOGRAMS
(2.5-3.0) SAMPLE DEPTH (IN FEET BELOW GROUND SURFACE)
ND NOT DETECTED
N NO OIL OBSERVED
1,000 LINE OF EQUAL CONCENTRATION OF TPH AS BUNKER C ON MILLIGRAMS PER KILOGRAM. DASHED WHERE INFERRED.
NOTES:
1. SOIL BORING LOCATIONS ARE APPROXIMATE
2. SOIL BORING DATA BASED ON INFORMATION PROVIDED BY SUNDQUIST
3. LOCATIONS DESIGNATED BY TTT ARE TRENCH SAMPLES DONE BY LEVIN-FRICKE.
4. LOCATIONS DESIGNATED BY TTSB, OTSB, OR SDSB ARE BORINGS DRILLED BY LEVIN-FRICKE
5. LOCATIONS DESIGNATED BY B ARE BORINGS DRILLED BY TREADWELL & ROLLO
100' 0' 100' 200'
SCALE IN FEET
REVISION NO. 1 TO Figure 3
MAXIMUM TOTAL PETROLEUM HYDROCARBON CONCENTRATIONS IN SOIL
FORMER BAYSHORE RAILYARD
BRISBANE, CALIFORNIA

CALTRAIN RAILROAD TRACKS

CALTRAIN RAILROAD TRACKS

NORTHERN LIMIT OF OPERABLE UNIT-2

ABANDONED RAILROAD TRACKS

DRAINAGE CHANNEL

ROADWAY

DRAINAGE CHANNEL

TRANSFER PIT

MACHINE AND ELECTRIC SHOP

OIL TANK

TURNTABLE

GATE

FORMER TANK AND BOILER SHOP

ROUNDHOUSE

INDUSTRIAL BLVD.

BAYSHORE BOULEVARD

GENEVA AVENUE

SUNQ_FIG.DGN 5-01-2001 12:27:28 KA S:\NQUEST\USTN\OU2-RAP\

DRAFT

LEGEND

- GEOPROBE LOCATION (BMWCI 1997)
- GEOPROBE LOCATION (BMWCI 1999)
- GEOPROBE LOCATION (BMWCI 2000)
- MONITORING WELL LOCATION
- LEAD CONCENTRATION IN EXCEEDENCE OF BASE CASE RAO OF 2,500 mg/Kg
- LEAD CONCENTRATION IN EXCEEDENCE OF UTILITY WORKER RAO OF 132 mg/Kg
- 3,800 LEAD CONCENTRATION (mg/Kg)
- EXISTING STRUCTURE
- FORMER STRUCTURE
- FENCE
- DRAINAGE CHANNEL

NOTE

Metals analyses in May to June 2000 included Antimony, Arsenic, Barium, Beryllium, Cadmium, Cobalt, Copper, Lead, Molybdenum, Nickel, Selenium, Silver, Thallium, Vanadium, and Zinc. See Table 2 for other detections.

NORTH

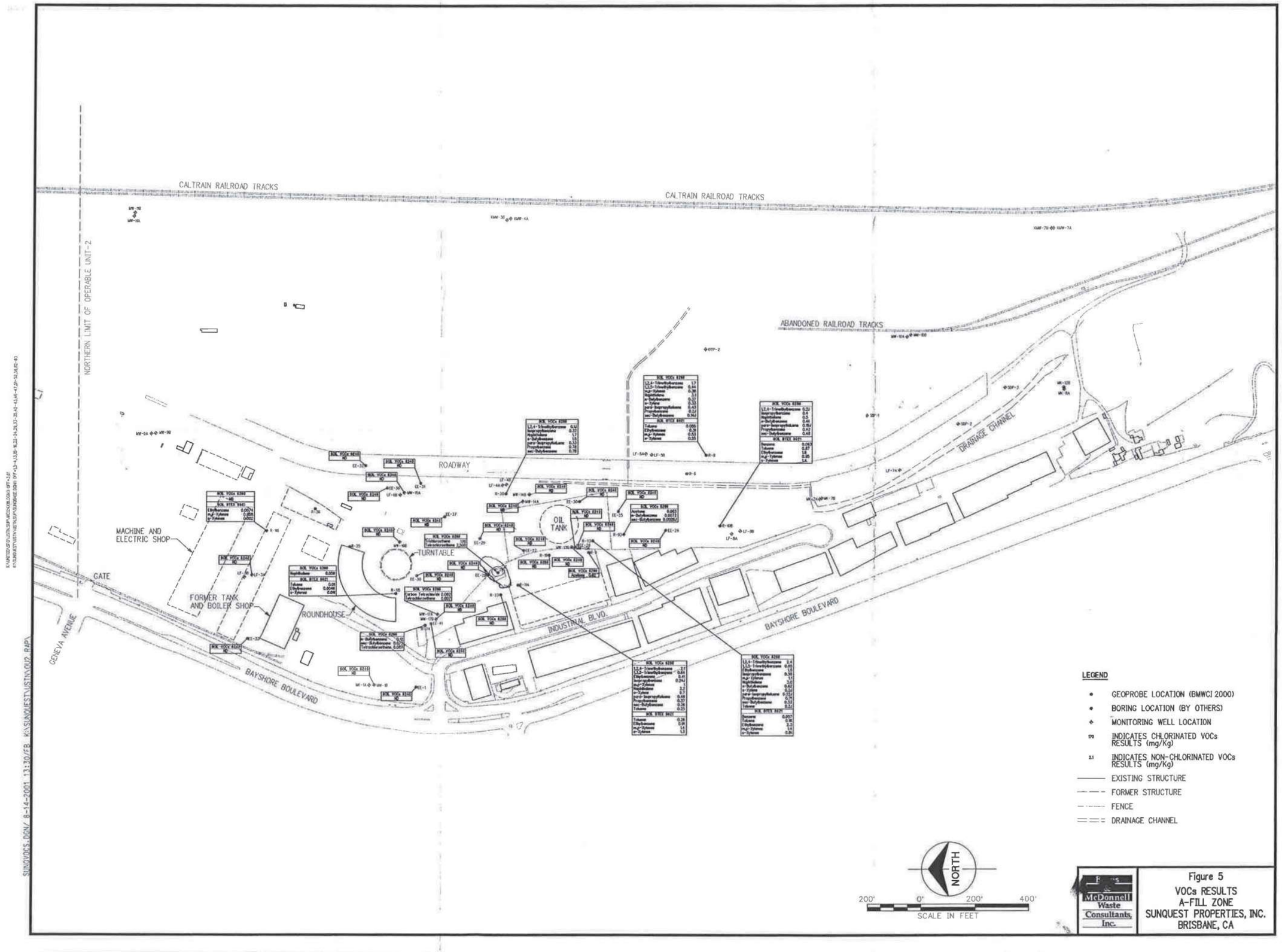
200' 0' 200' 400'

SCALE IN FEET

Burns & McDonnell Waste Consultants, Inc.

Figure 4

LEAD IMPACTED AREAS
A-FILL ZONE SOIL
SUNQUEST PROPERTIES, INC.
BRISBANE, CA


CALTRAIN RAILROAD TRACKS
CALTRAIN RAILROAD TRACKS
NORTHERN LIMIT OF OPERABLE UNIT-2
ABANDONED RAILROAD TRACKS
DRAINAGE CHANNEL
ROADWAY
OIL TANK
TURNTABLE
MACHINE AND ELECTRIC SHOP
GATE
FORMER TANK AND BOILER SHOP
ROUNDHOUSE
INDUSTRIAL BLVD.
BAYSHORE BOULEVARD
GENEVA AVENUE
BAYSHORE BOULEVARD
LEGEND
GEOPROBE LOCATION (BMWCI 2000)
BORING LOCATION (BY OTHERS)
MONITORING WELL LOCATION
INDICATES CHLORINATED VOCs RESULTS (mg/Kg)
INDICATES NON-CHLORINATED VOCs RESULTS (mg/Kg)
EXISTING STRUCTURE
FORMER STRUCTURE
FENCE
DRAINAGE CHANNEL
NORTH
200' 0' 200' 400'
SCALE IN FEET
McDonnell Waste Consultants, Inc.
Figure 5
VOCs RESULTS
A-FILL ZONE
SUNQUEST PROPERTIES, INC.
BRISBANE, CA

CALTRAIN RAILROAD TRACKS

CALTRAIN RAILROAD TRACKS

NORTHERN LIMIT OF OPERABLE UNIT-2

ABANDONED RAILROAD TRACKS

DRAINAGE CHANNEL

ROADWAY

MACHINE AND ELECTRIC SHOP

GATE

ROUNDHOUSE

TURNTABLE

OIL TANK

FORMER TANK AND BOILER SHOP

INDUSTRIAL BLVD.

BAYSHORE BOULEVARD

GENEVA AVENUE

BAYSHORE BOULEVARD

LEGEND

- GEOPROBE LOCATION (BMWCI 1997)
- GEOPROBE LOCATION (BMWCI 1999)
- GEOPROBE LOCATION (BMWCI 2000)
- GEOPROBE LOCATION
- MONITORING WELL LOCATION
- CONTOUR FOR APPROXIMATE ELEVATION OF TOP OF BAYMUD (FEET ABOVE MEAN SEA LEVEL)
- EXISTING STRUCTURE
- FORMER STRUCTURE
- FENCE
- DRAINAGE CHANNEL

NORTH

200' 0' 200' 400'

SCALE IN FEET

Burns & McDonnell Waste Consultants, Inc.

Figure 6

BAYMUD ELEVATION
SUNQUEST PROPERTIES, INC.
BRISBANE, CA

K:\SUNQUEST\DWG\SUNMUD.DGN/ 8-14-2001 13:11:11/EB K:\SUNQUEST\LISTING\OU2.RAP\

APPENDIX B-9

Burns & McDonnell [2002b]

INVESTIGATION REPORT
CHLORINATED SOLVENTS

South Area, Former Bayshore Railyard
Brisbane, California

Prepared For:

Sunquest Properties, Inc.
150 Executive Park Blvd., Suite 4200
San Francisco, California, 94134

May 2002

Prepared By:

Burns & McDonnell Engineering Company, Inc.
Engineers-Geologists-Scientists
South San Francisco, California

Table 1a
SUMMARY OF VOC ANALYTICAL DATA
(S-series Soil)
Former Bayshore Railyard (OU-2)
Sunquest Properties, Inc.

Sample ID:		S-1	S-2	S-3	S-4	S-5	S-6	S-7	S-8	S-9
Sample Depth (ft):		8.5	8.0	5.5	6.0	4.0	7.0	6.5	6.0	5.0
Bay Mud Depth (ft):		NA	9.2	NA	NA	5.0	8.0	7.0	7.0	5.5
Date Sampled:		11/08/00	11/08/00	11/08/00	11/08/00	11/08/00	11/8/2000	11/08/00	11/08/00	11/08/00
Laboratory ID:		148622-005	148622-006	148622-004	148622-010	148622-009	148622-012	148622-001	148622-011	148622-008
Parameter	**Units**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**
EPA 8260B (detections only)										
Vinyl Chloride	mg/Kg	0.025 U	0.017 U	0.01 U	0.25 U	0.05 U	0.0096 U	0.0093 U	0.4 U	33 U
Methylene Chloride	mg/Kg	**0.061**	0.033 U	0.02 U	0.5 U	0.1 U	0.019 U	**0.028**	0.8 U	67 U
cis-1,2-Dichloroethene	mg/Kg	0.013 U	0.0083 U	0.0051 U	0.13 U	0.025 U	0.0048 U	0.0046 U	0.2 U	**240**
Trichloroethene	mg/Kg	0.013 U	0.0083 U	0.0051 U	0.13 U	0.025 U	0.0048 U	0.0046 U	0.2 U	**100**
Tetrachloroethene	mg/Kg	0.013 U	0.0083 U	0.0051 U	0.13 U	0.025 U	0.0048 U	0.0046 U	0.2 U	**650**
m,p-Xylenes	mg/Kg	0.013 U	0.0083 U	0.0051 U	0.13 U	0.025 U	0.0048 U	0.0046 U	**0.78**	17 U
o-Xylene	mg/Kg	0.013 U	0.0083 U	0.0051 U	0.13 U	0.025 U	0.0048 U	0.0046 U	**0.49**	17 U
Isopropylbenzene	mg/Kg	0.013 U	0.0083 U	0.0051 U	0.13 U	0.025 U	0.0048 U	0.0046 U	**0.27**	17 U
Propylbenzene	mg/Kg	0.013 U	0.0083 U	0.0051 U	0.13 U	0.025 U	0.0048 U	0.0046 U	**0.42**	17 U
1,3,5-Trimethylbenzene	mg/Kg	0.013 U	0.0083 U	0.0051 U	0.13 U	0.025 U	0.0048 U	0.0046 U	**0.63**	17 U
1,2,4-Trimethylbenzene	mg/Kg	0.013 U	0.0083 U	0.0051 U	0.13 U	0.025 U	0.0048 U	0.0046 U	**2.4**	17 U
sec-Butylbenzene	mg/Kg	0.013 U	0.0083 U	0.0051 U	0.13 U	0.025 U	0.0048 U	0.0046 U	**0.34**	17 U
para-Isopropyl Toluene	mg/Kg	0.013 U	0.0083 U	0.0051 U	0.13 U	0.025 U	0.0048 U	0.0046 U	**0.67**	17 U
n-Butylbenzene	mg/Kg	0.013 U	0.0083 U	0.0051 U	**0.2**	0.025 U	0.0048 U	0.0046 U	**0.69**	17 U
Naphthalene	mg/Kg	0.013 U	0.0083 U	0.0051 U	**0.15**	0.025 U	0.0048 U	0.0046 U	**5**	10 U

EPA 8260B detections reported only; refer to the laboratory report for the complete list of analytes.
U - Qualified by the analytical laboratory as not detected above the indicated detection limit.
J - Qualified as estimated by the analytical laboratory.
mg/Kg - Milligrams per kilogram
NA - Not analyzed

Table 1a
SUMMARY OF VOC ANALYTICAL DATA
(S-series Soil)
Former Bayshore Railyard (OU-2)
Sunquest Properties, Inc.

Sample ID:		S-10	S-11	S-13	S-14	S-15	S-16	S-17	S-18	S-19	S-20
Sample Depth (ft):		5.5	0.5	5.0	8.5	11.0	6.5	7.5	7.5	7.5	15.5
		NA	4.0	NA	10.0	12.0	7.0	8.0	8.0	8.0	16.0
Date Sampled:		11/08/00	11/08/00	11/08/00	06/15/01	06/19/01	06/19/01	06/19/01	06/19/01	06/19/01	06/19/01
Laboratory ID:		148622-002	148622-003	148622-007	152588-001	152649-001	152649-003	152649-005	152649-007	152649-009	152649-010
Parameter	**Units**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**
EPA 8260B (detections only)											
Vinyl Chloride	mg/Kg	**0.0097**	330 U	0.25 U	0.01 U	0.01 U	0.0096 U	0.01 U	0.0096 U	0.0096 U	0.0098 U
Methylene Chloride	mg/Kg	**0.021**	670 U	0.5 U	0.02 U	0.02 U	0.019 U	0.02 U	0.019 U	0.019 U	0.02 U
cis-1,2-Dichloroethene	mg/Kg	**0.0053**	170 U	0.13 U	0.005 U	0.005 U	0.0048 U	0.005 U	0.0048 U	0.0048 U	0.0049 U
Trichloroethene	mg/Kg	0.0048 U	170 U	0.13 U	0.005 U	0.005 U	0.0048 U	0.005 U	0.0048 U	0.0048 U	0.0049 U
Tetrachloroethene	mg/Kg	0.0048 U	**4,500**	0.13 U	0.005 U	0.005 U	0.0048 U	0.005 U	0.0048 U	**0.0058**	0.0049 U
m,p-Xylenes	mg/Kg	0.0048 U	170 U	0.13 U	NA	NA	NA	NA	NA	NA	NA
o-Xylene	mg/Kg	0.0048 U	170 U	**0.13**	NA	NA	NA	NA	NA	NA	NA
Isopropylbenzene	mg/Kg	0.0048 U	170 U	0.13 U	NA	NA	NA	NA	NA	NA	NA
Propylbenzene	mg/Kg	0.0048 U	170 U	0.13 U	NA	NA	NA	NA	NA	NA	NA
1,3,5-Trimethylbenzene	mg/Kg	0.0048 U	170 U	0.25	NA	NA	NA	NA	NA	NA	NA
1,2,4-Trimethylbenzene	mg/Kg	0.0048 U	170 U	0.6	NA	NA	NA	NA	NA	NA	NA
sec-Butylbenzene	mg/Kg	0.0048 U	170 U	**0.15**	NA	NA	NA	NA	NA	NA	NA
para-Isopropyl Toluene	mg/Kg	0.0048 U	170 U	**0.19**	NA	NA	NA	NA	NA	NA	NA
n-Butylbenzene	mg/Kg	0.0048 U	170 U	**0.22**	NA	NA	NA	NA	NA	NA	NA
Naphthalene	mg/Kg	0.0048 U	170 U	**0.5**	NA	NA	NA	NA	NA	NA	NA

EPA 8260B detections reported only; refer to the laboratory report for the complete list of analytes.
U - Qualified by the analytical laboratory as not detected above the indicated detection limit.
J - Qualified as estimated by the analytical laboratory.
mg/Kg - Milligrams per kilogram
NA - Not analyzed
Boring SA-12 met refusal and no samples were collected for analysis.

TABLE 1b
SUMMARY OF VOCs ANALYTICAL DATA
(R-series Soil)
Former Bayshore Railyard (OU-2)
Sunquest Properties, Inc.

Sample ID:		R-25A_SC	R-74A_SC	R-114_SC
Sample Depth (ft):		3.2 - 3.7	2.0 - 2.6	6.5 - 7.0
Bay Mud Depth (ft):		7.1	refusal at 8.3	8.5
Date Sampled:		06/06/00	06/06/00	06/14/00
Laboratory ID:		146015-002	146016-007	146124-014
Parameter	**Units**	**Result**	**Result**	**Result**
EPA 8260B (detections only)				
Acetone	mg/kg	500 U	0.1 U	? U
Trichloroethene	mg/kg	**170**	0.025 U	0.25 U
Toluene	mg/kg	130 U	0.025 U	**0.25**
Tetrachloroethene	mg/kg	**2,500**	**0.087**	0.25 U
Ethylbenzene	mg/kg	130 U	0.025 U	**0.41**
m,p-Xylenes	mg/kg	130 U	0.025 U	**1**
o-Xylene	mg/kg	130 U	0.025 U	**0.7**
Isopropylbenzene	mg/kg	130 U	0.025 U	**0.24 J**
Propylbenzene	mg/kg	130 U	0.025 U	**0.37**
1,3,5-Trimethylbenzene	mg/kg	130 U	0.025 U	**0.64**
1,2,4-Trimethylbenzene	mg/kg	130 U	0.025 U	**2.1**
para-Isopropyl Toluene	mg/kg	130 U	0.025 U	**0.49**
sec-Butylbenzene	mg/kg	130 U	**0.073**	**0.26**
n-Butylbenzene	mg/kg	130 U	**0.12**	0.25 U
Naphthalene	mg/kg	130 U	0.025 U	**3.2**

EPA 8260B detections reported only; refer to the laboratory report for the complete list of analytes.

U - Qualified by the analytical laboratory as not detected above the indicated detection limit.

J - Qualified as estimated by the analytical laboratory.

mg/kg - Milligrams per kilogram

NA - Not analyzed

Selected R-series samples shown. See *Investigation Report Supplemental Bunker C Delineation*, dated August 2001 for other R-series boring results.

Table 2
SUMMARY OF VOC ANALYTICAL DATA
(Groundwater)
Former Bayshore Railyard (OU-2)
Sunquest Properties, Inc.

Sample ID:		S-4-GW	S-8-GW	S-9-GW	S-15-GW	S-16-GW	S-17-GW
Date Sampled:		11/08/00	11/09/00	11/08/00	06/19/01	06/19/01	06/19/01
Laboratory ID:		148622-013	148622-014	148622-015	152649-002	152649-004	152649-006
Parameter	**Units**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**
EPA 8260B (detections only)							
Vinyl Chloride	ug/L	10 U	10 U	**9700**	0.5 U	0.5 U	0.5 U
Chloroethane	ug/L	**11**	10 U	710 U	**40**	1 U	1 U
Acetone	ug/L	20 U	**90**	1400 U	NA	NA	NA
trans-1,2-Dichloroethene	ug/L	5 U	5 U	**700**	0.5 U	0.5 U	0.5 U
2-Butanone	ug/L	10 U	**19**	710 U	NA	NA	NA
cis-1,2-Dichloroethene	ug/L	5 U	5 U	**44000**	0.5 U	0.5 U	0.5 U
Benzene	ug/L	0.5 U	**1.7**	36 U	NA	NA	NA
Trichloroethene	ug/L	5 U	5 U	**960**	0.5 U	0.5 U	0.5 U
Toluene	ug/L	0.5 U	**1.4**	36 U	NA	NA	NA
Tetrachloroethene	ug/L	5 U	5 U	**1200**	0.5 U	0.5 U	0.5 U
Ethylbenzene	ug/L	0.5 U	**0.6**	36 U	NA	NA	NA
m,p-Xylenes	ug/L	0.5 U	**3.9**	36 U	NA	NA	NA
o-Xylene	ug/L	0.5 U	**2.6**	36 U	NA	NA	NA
1,2,4-Trimethylbenzene	ug/L	5 U	**5.5**	360 U	NA	NA	NA
Naphthalene	ug/L	5 U	**13**	360 U	NA	NA	NA

EPA 8260B detections reported only; refer to the laboratory report for the complete list of analytes.

S-4, S-8 and S-9 were analyzed for the full EPA 8260B list.

S-15, S16 and S-17 were analyzed for the EPA 8010 list, by EPA Method 8260B.

U - Qualified by the analytical laboratory as not detected above the indicated detection limit.

J - Qualified as estimated by the analytical laboratory.

ug/L - Micrograms per Liter

NA - Not analyzed

DRAINAGE CHANNEL

AC ROADWAY

ROADWAY

DRAINAGE CHANNEL

SAMPLE DEPTH = 5.5'
HVOCs ND
S-3

SAMPLE DEPTH = 8.5'
Methylene Chloride 0.061
S-1

SAMPLE DEPTH = 8.0'
BAY MUD DEPTH = 8.3'
HVOCs ND
S-2

MACHINE AND ELECTRIC SHOP

SAMPLE DEPTH = 8.5'
BAY MUD DEPTH = 10.0'
HVOCs ND

SAMPLE DEPTH = 11.0'
BAY MUD DEPTH = 12.0'
HVOCs ND

SAMPLE DEPTH = 8.5'
BAY MUD DEPTH = 7.0'
HVOCs ND

SAMPLE DEPTH = 5.0'
BAY MUD DEPTH = 5.5'
cis-1,2-Dichloroethene 240
Trichloroethene 100
Tetrachloroethene 650

OIL TANK

SAMPLE DEPTH = 7.5'
BAY MUD DEPTH = 8.0'
Tetrachloroethene 0.0056
S-15

S-14

S-17

SAMPLE DEPTH = 7.5'
BAY MUD DEPTH = 8.0'
HVOCs ND

S-16

S-18

SAMPLE DEPTH = 7.5'
BAY MUD DEPTH = 8.0'
HVOCs ND

SAMPLE DEPTH = 15.5'
BAY MUD DEPTH = 16.0'
HVOCs ND
S-20

S-19

S-9

R-25

S-13

ROUNDHOUSE

SAMPLE DEPTH = 3.2'
BAY MUD DEPTH = 7.7'
Trichloroethene 170
Tetrachloroethene 2,500

S-11

S-10

FORMER CONSOLIDATED CHEMICALS BUILDING

R-114

S-6

SAMPLE DEPTH = 7.0'
BAY MUD DEPTH = 8.0'
HVOCs ND

S-12
REFUSAL

SAMPLE DEPTH = 1.4'
BAY MUD DEPTH = 9.2'
HVOCs ND

R-23

S-7

SAMPLE DEPTH = 6.5'
BAY MUD DEPTH = 7.0'
Methylene Chloride 0.028

S-8

SAMPLE DEPTH = 4.0'
BAY MUD DEPTH = 5.0'
HVOCs ND

SAMPLE DEPTH = 5.5'
Vinyl Chloride 0.0097
Methylene Chloride 0.021
Cis-1,2-Dichloroethene 0.0053

SAMPLE DEPTH = 6.5'
BAY MUD DEPTH = 9.5'
1,2,4-Trimethylbenzene 2.1
1,3,5-Trimethylbenzene 0.84
Ethylbenzene 0.41
Isopropylbenzene 0.24
m,p-Xylenes 1.0
Naphthalene 3.2
o-Xylene 0.7
para-Isopropyltoluene 0.48
Propylbenzene 0.37
sec-Butylbenzene 0.29
Toluene 0.35

INDUSTRIAL BLVD.

SAMPLE DEPTH = 6.0'
n-Butylbenzene 0.3
Naphthalene 0.15

SAMPLE DEPTH = 2.0'
REFUSAL AT 8.3'
n-Butylbenzene 0.12
sec-Butylbenzene 0.073
Tetrachloroethene 0.087

R-74

S-4

S-5

SAMPLE DEPTH = 1.0'
BAY MUD DEPTH = 4.0'
Tetrachloroethene 4,500

SAMPLE DEPTH = 5.0'
1,2,4-Trimethylbenzene 0.6
1,3,5-Trimethylbenzene 0.25
Naphthalene 0.5
n-Butylbenzene 0.22
o-Xylene 0.13
sec-Butylbenzene 0.15
para-Isopropyltoluene 0.19

SAMPLE DEPTH = 6.0'
BAY MUD DEPTH = 7.0'
m,p-Xylenes 0.78
o-Xylene 0.49
Isopropylbenzene 0.27
Propylbenzene 0.42
1,3,5-Trimethylbenzene 0.63
1,2,4-Trimethylbenzene 2.4
sec-Butylbenzene 0.34
para-Isopropyltoluene 0.87
n-Butylbenzene 0.88
Naphthalene 5.0

INACTIVE OIL/WATER SEPARATOR (APPROXIMATE LOCATION)

FORMER TANK AND BOILER SHOP

BAYSHORE BOULEVARD

LEGEND

- GEOPROBE LOCATION (BMW01 2000/2001)
- 170 INDICATES CHLORINATED VOCs RESULTS (mg/Kg)
- 2.1 INDICATES NON-CHLORINATED VOCs RESULTS (mg/Kg)
- ND(0.1) NOT DETECTED AT SAMPLE DEPTH (BELOW GROUND SURFACE)
- APPROXIMATE AREA OF CHLORINATED VOCs IMPACT IN SOIL
- EXISTING STRUCTURE
- FORMER STRUCTURE
- FENCE
- DRAINAGE CHANNEL

NOTES

1. ANALYSIS METHODS INCLUDED EPA 8260 AND EPA 8021. WHERE COMPOUNDS ARE DETECTED IN BOTH EPA 8260 AND EPA 8021, THE HIGHEST VALUE IS SHOWN.
2. BAY MUD DEPTH IS SHOWN WHERE AVAILABLE.
3. SAMPLE DEPTHS REPRESENT THE TOP OF THE SAMPLE SECTION.
4. SELECTED R-SERIES BORING SHOWN. SEE "INVESTIGATION REPORT SUPPLEMENTAL BUNKER C DELINEATION" DATED AUGUST 2001 FOR OTHER R-SERIES RESULTS.

NORTH

100' 0' 100' 200'

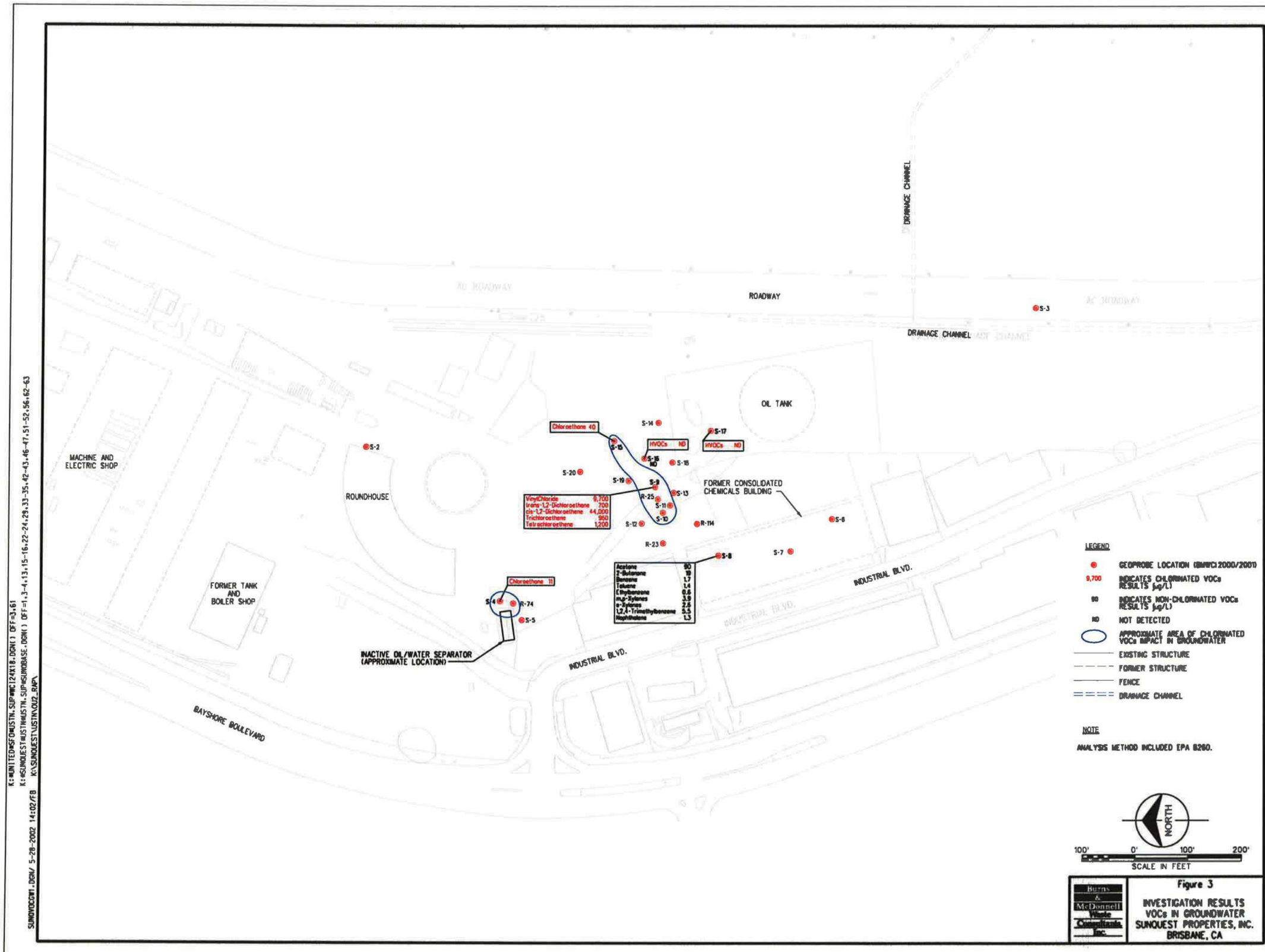
SCALE IN FEET

Burns & McDonnell Waste Consultants Inc.

Figure 2

INVESTIGATION RESULTS VOCs IN SOIL SUNQUEST PROPERTIES, INC. BRISBANE, CA

SUNQVOCSOIL1.DGN/ 4-03-2002 9:53/FB K:\SUNQUEST\USTIN\DWG\RAP\



K:\UNITED\SFO\USTIN.SUP\WC12416.DGN) DF=3.61
K:\SUNQUEST\UST\WUSTIN.SUP\SUMDBASE.DGN) DF=1,3-4,13,15-16,22-24,29,33-35,42-43,46-47,51-52,56,62-63
K:\SUNQUEST\UST\NVOU2.RAP\
SUNOVOCW1.DGN/ 5-28-2002 14:02/FB

APPENDIX B-10

Burns & McDonnell [2007]

February 19, 2007

Mr. Vic Pal
Regional Water Quality Control Board
1515 Clay Street, Suite 1400
Oakland, Ca 94612

Subject: OU- 2 Additional Investigation in the area of HVOC plume
San Francisco and Brisbane, California
Burns & McDonnell Project No. 43348

Dear Mr. Pal:

Burns & McDonnell Engineering Company, Inc. (Burns & McDonnell) has been retained by Universal Paragon Corporation (Sunquest) to prepare a letter report summarizing the results of additional investigation at Operable Unit (OU) 2 (Site) which is located on the southern portion of the former Bayshore Railyard located in San Mateo County. This investigation was initiated by Sunquest and is intended to provide useful data for assessment of remediation approach at of the halogenated volatile organic compound (HVOC) plume in OU-2. A workplan was submitted to the Regional Water Quality Control Board (RWQCB) on August 25, 2206. The data obtained in this investigation supplements the previous investigation data summarized in the Investigations Report, Chlorinated Solvents prepared for Sunquest Properties, Inc. in May 2002, and other historical reports.

1.0 Site Description

The Former Bayshore Railyard is located in San Francisco and San Mateo Counties and is bounded by Bayshore Boulevard to the west; the former Schlage Lock Company (Schlage) facility to the north; a CalTrain right-of-way to the east; and hills to the south. The OU-2 portion of the property is comprised of only the southern portion of the former railyard, that is the portion extending southward from Geneva Avenue. Figure 1 shows the boundaries of this portion of the Site.

2.0 Regional and Site Geology

The Site is near the San Francisco Bay, and in the recent geologic past was part of the Bay. The near-surface geology has largely been controlled by the changing morphology of the Bay Area over geologic time.

TABLE 1A
HVOCs Analytical Results in Shallow Soil
OU-2 Additional Investigation

Sample Location		C-34	C-35	C-36	C-37	C-38	C-39
Sample Date		8/30/06	8/30/06	8/30/06	8/30/06	8/30/06	8/30/06
Sample Depth (ft bgs)		3-4'	4.5-5'	6-6.5'	4.5-5'	4.5-5'	3.5-4'
VOCs (µg/kg)	Screening Level						
1,1,1-Trichloroethane	1,200,000	<5	<500	<2,500	<25	<25,000	<250,000
1,1,2-Trichloroethane	730	<5	<500	<2,500	<25	<25,000	<250,000
1,1-Dichloroethane	2,800	<5	<500	<2,500	<25	<25,000	<250,000
1,1-Dichloroethene	120,000	<5	<500	<2,500	<25	<25,000	<250,000
1,2-Dichloroethane	280	<5	<500	<2,500	<25	<25,000	<250,000
Acetone	14,000,000	<100	<10,000	<50,000	<500	<500,000	<5,000,000
Benzene	640	<5	<500	<2,500	<25	<25,000	<250,000
Chloroform	220	7.7	<500	<2,500	<25	<25,000	<250,000
Cis-1,2-Dichloroethene	43,000	<5	3,200	27,000	830	490,000	460,000 J
Ethylbenzene	400,000	<5	<500	<2,500	<25	<25,000	<250,000
Methylene Chloride	9,100	<5	<500	<2,500	<120	<120,000	<1,300,000
Tetrachloroethene	480	15	<500	4,400	<25	310,000	4,200,000 J
Trichloroethene	53	<5	<500	<2,500	<25	40,000	<250,000
Toluene	523,000	<5	<500	<2,500	<25	<25,000	<250,000
Trans-1,2-dichloroethene	69,000	<5	<500	<2,500	160	<25,000	<250,000
Vinyl Chloride	79	<5	2,300	<2,500	84	<25,000	<250,000
Total Xylenes	270,000	<10	<1,000	<5,000	<50	<50,000	<500,000

VOCs = Volatile Organic Compounds
VOCs Analyzed by EPA Method 8260B
Screening Level - Region IX PRG Residential
Exceeds Screening Level
J qualifier - Elevated Surrogate Recovery - indicates potential bias.

TABLE 1B
HVOCs Analytical Results in Deep Soil
OU-2 Additional Investigation

Sample Location		C-34	C-35	C-36	C-37	C-38	C-39
Sample Date		8/30/06	8/30/06	8/30/06	8/30/06	8/30/06	8/30/06
Sample Depth (ft bgs)		7.5-8'	5.5-6'	8-8.5'	6.5-7'	5.5-6'	4.5-5'
VOCs (µg/kg)	Screening Level						
1,1,1-Trichloroethane	1,200,000	<5	<2,500	<2,500	<500	<2,500	<250,000
1,1,2-Trichloroethane	730	<5	<2,500	<2,500	<500	<2,500	<250,000
1,1-Dichloroethane	2,800	<5	<2,500	<2,500	<500	<2,500	<250,000
1,1-Dichloroethene	120,000	<5	<2,500	<2,500	<500	<2,500	<250,000
1,2-Dichloroethane	280	<5	<2,500	<2,500	<500	<2,500	<250,000
Acetone	14,000,000	<100	<50,000	<50,000	<10,000	<50,000	<5,000,000
Benzene	640	<5	<2,500	<2,500	<500	<2,500	<250,000
Chloroform	220	7.7	<2,500	<2,500	<500	<2,500	<250,000
Cis-1,2-Dichloroethene	43,000	<5	<2,500	12,000	630	80,000	960,000
Ethylbenzene	400,000	5.3	<2,500	<2,500	<500	<2,500	<250,000
Methylene Chloride	9,100	<50	<2,500	<2,500	<2,500	<2,500	<1,300,000
Tetrachloroethene	480	<5	<2,500	4,400	20,000	21,000	9,400,000
Trichloroethene	53	<5	<2,500	<2,500	930	<2,500	860,000
Toluene	523,000	<5	<2,500	<2,500	<500	<2,500	<250,000
Trans-1,2-Dichloroethene	69,000	<5	<2,500	2,800	<500	<2,500	<250,000
Vinyl Chloride	79	<5	<2,500	<2,500	<500	3,100	<250,000
Total Xylenes	270,000	31	<5,000	7,100	<1,000	<5,000	<500,000

VOCs = Volatile Organic Compounds
VOCs Analyzed by EPA Method 8260B
Screening Level - Region IX PRG Residential
Exceeds Screening Level

TABLE 2A
HVOCs Analytical Results in Shallow Groundwater
OU-2 Additional Investigation

Sample Location		C-34	C-35	C-36	C-37	C-38	C-39
Sample Date		8/30/06	8/30/06	08/30/06	08/30/06	08/30/06	08/30/06
VOCs (µg/L)	CA MCL						
1,1,1-Trichloroethane	200	<0.5	<0.5	<1,200	<250	<1,000	<500
1,1-Dichloroethane	5	<0.5	<0.5	<1,200	<250	<1,000	<500
1,1-Dichloroethene	6	<0.5	<0.5	<1,200	<250	<1,000	<500
1,2-Dichloroethane	0.5	<0.5	<0.5	<1,200	<250	<1,000	<500
Acetone	5,500	<0.5	<20	<50,000	<10,000	<40,000	<20,000
Carbon Disulfide	1,000	<0.5	<0.5	<1,200	<250	<1,000	<500
Chloroform	80	<0.5	<0.5	<1,200	<250	<1,000	<500
Cis-1,2-Dichloroethene	6	<0.5	30	150,000	23,000	110,000	91,000
Ethylbenzene	300	0.6	31	<1,200	<250	<1,000	<500
Tetrachloroethene	5	<0.5	2.4	79,000	500	7,900	20,000
Trichloroethene	5	<0.5	1.1	15,000	<250	1,300	2,800
Toluene	150	0.62	0.67	<1200	<250	<1,000	<500
Trans-1,2-dichloroethene	10	<0.5	0.67	2,800	<250	<1,000	<500
Vinyl Chloride	0.5	<0.5	4.3	49,000	7,400	14,000	2,500
Total Xylenes	1,750	6.1	13	<1,200	<250	<1,000	<500

VOCs = Volatile Organic Compounds
VOCs Analyzed by EPA Method 5030C/8260B
Screening Level - Region IX PRG Residential
Exceeds Screening Level

TABLE 2B
HVOCs Analytical Results in Deep Groundwater
OU-2 Additional Investigation

Sample Location		C-34	C-35	C-36	C-37	C-38	C-39
Sample Date		8/30/06	8/30/06	8/30/06	8/30/06	8/30/06	8/30/06
VOCs (µg/L)	CA MCL						
1,1,1-Trichloroethane	200	<0.5	<0.5	<2,500	<250	<1,000	<1,000
1,1-Dichloroethane	5	<0.5	<0.5	<2,500	<250	<1,000	<1,000
1,1-Dichloroethene	6	<0.5	<0.5	<2,500	<250	<1,000	<1,000
1,2-Dichloroethane	0.5	<0.5	<0.5	<2,500	<250	<1,000	<1,000
Acetone	5,500	<0.5	<0.5	<100,000	<10,000	<40,000	<40,000
Carbon Disulfide	1,000	<0.5	<0.5	<2,500	<250	<1,000	<1,000
Chloroform	80	<0.5	<0.5	<2,500	<250	<1,000	<1,000
Cis-1,2-Dichloroethene	6	<0.5	25	230,000	23,000	85,000	140,000
Ethylbenzene	300	0.66	3.2	<2,500	<250	<1,000	<1,000
Tetrachloroethene	5	<0.5	1.1	7,600	730	12,000	26,000
Trichloroethene	5	<0.5	0.7	11,000	<250	2,100	5,500
Toluene	150	0.8	4.7	<2,500	<250	<1,000	<1,000
Trans-1,2-dichloroethene	10	<0.5	0.63	4,600	<250	<1,000	<1,000
Vinyl Chloride	0.5	<0.5	4.5	80,000	17,000	11,000	11,000
Total Xylenes	1,750	8.1	16	<2,500	<250	<1,000	<1,000

VOCs = Volatile Organic Compounds
VOCs Analyzed by EPA Method 5030C/8260B
Screening Level - Region IX PRG Residential
Exceeds Screening Level

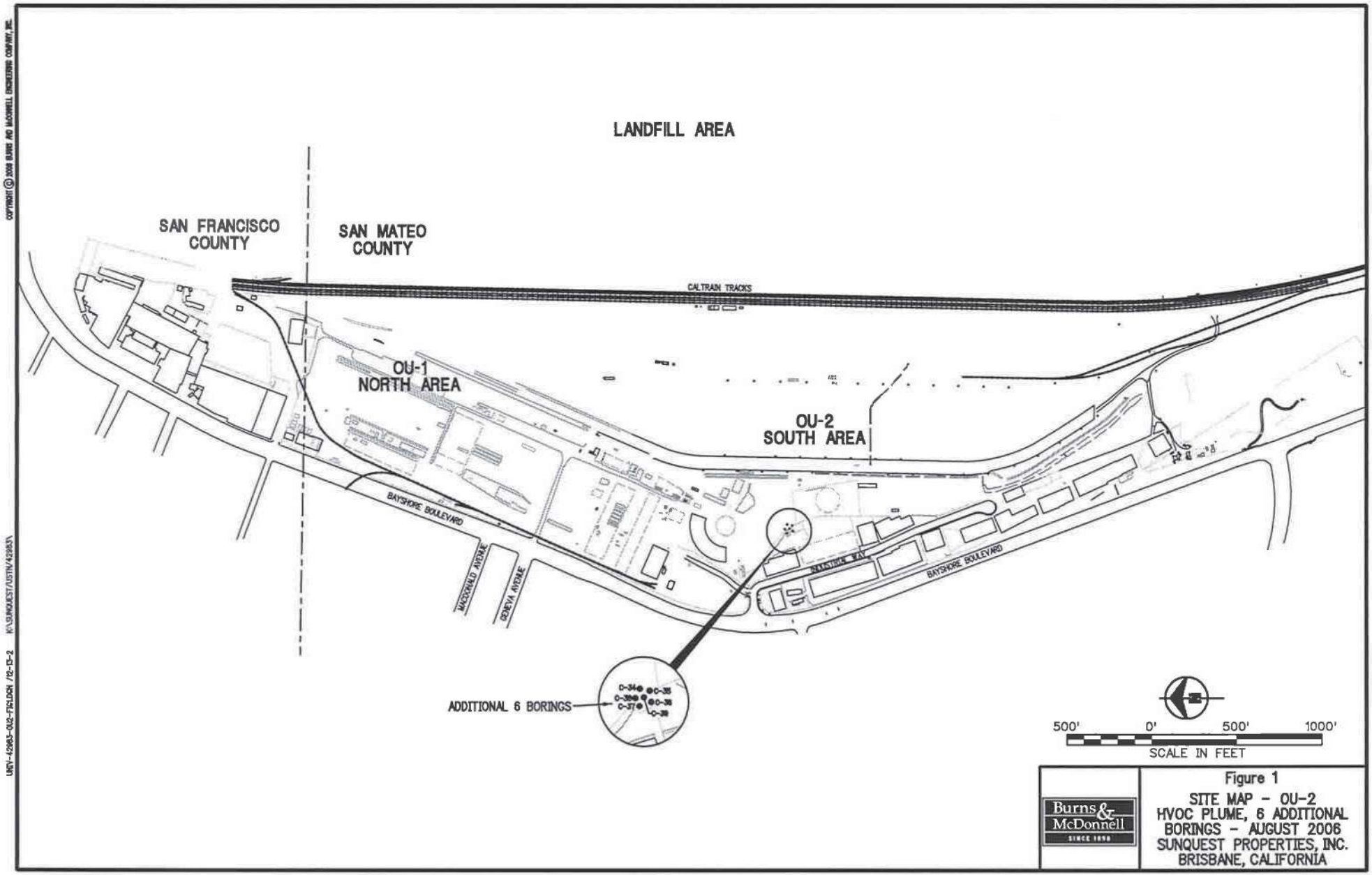
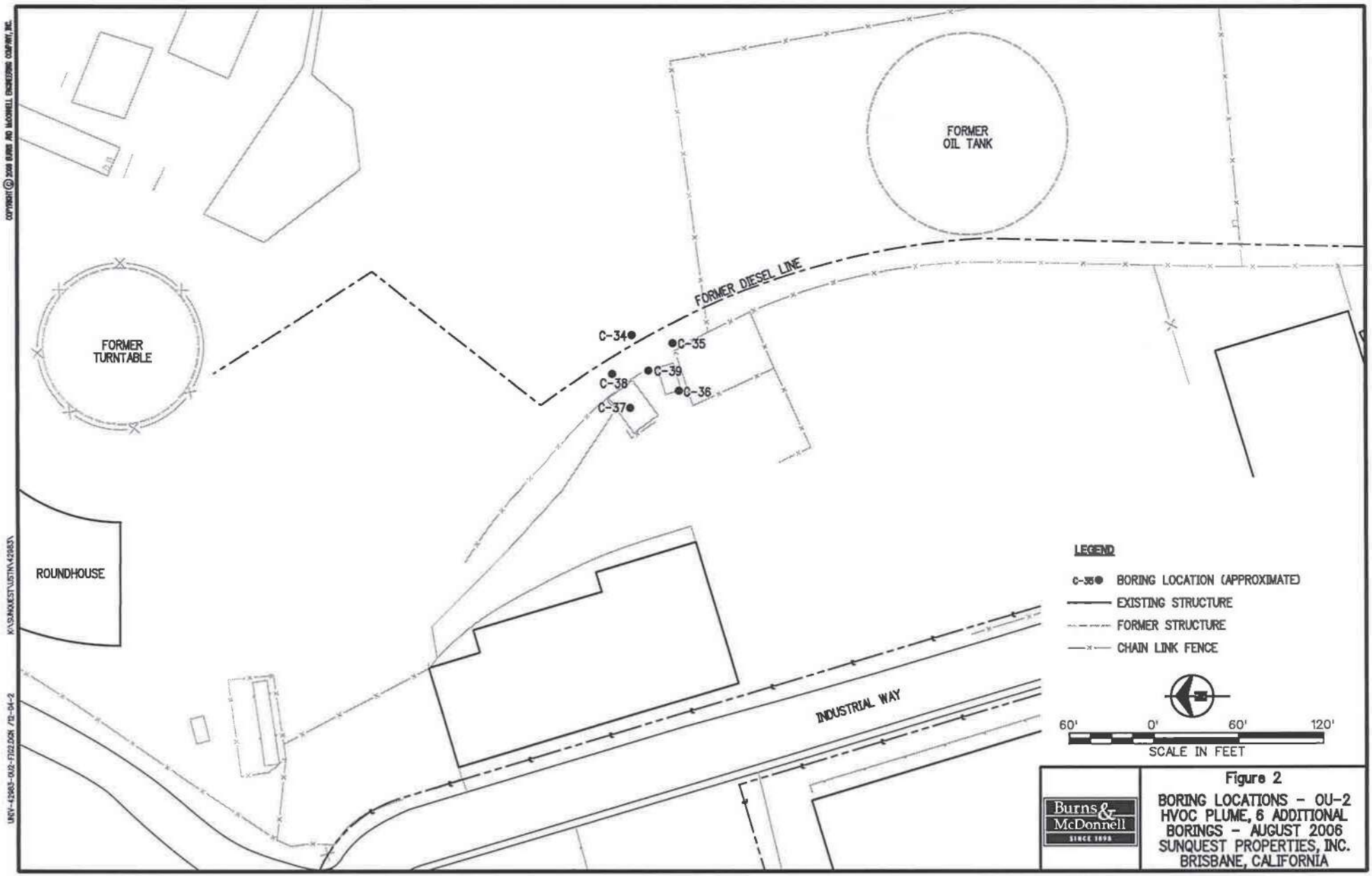


Figure 1
SITE MAP - OU-2
HVOC PLUME, 6 ADDITIONAL BORINGS - AUGUST 2006
SUNQUEST PROPERTIES, INC.
BRISBANE, CALIFORNIA

Burns & McDonnell
SINCE 1898

COPYRIGHT © 2006 BURNS AND MCDONNELL ENGINEERING COMPANY, INC.

UNV-42983-002-FIGLOCN /12-13-2 K:\SUNQUEST\AUSTIN\42983\


FORMER OIL TANK
FORMER DIESEL LINE
FORMER TURNTABLE
C-34
C-35
C-38
C-39
C-36
C-37
ROUNDHOUSE
INDUSTRIAL WAY
LEGEND
C-36 BORING LOCATION (APPROXIMATE)
EXISTING STRUCTURE
FORMER STRUCTURE
CHAIN LINK FENCE
60' 0' 60' 120'
SCALE IN FEET
Burns & McDonnell
SINCE 1898
Figure 2
BORING LOCATIONS - OU-2 HVOC PLUME, 6 ADDITIONAL BORINGS - AUGUST 2006
SUNQUEST PROPERTIES, INC.
BRISBANE, CALIFORNIA

COPYRIGHT © 2006 BURNS AND McDONNELL ENGINEERING COMPANY, INC.

FORMER OIL TANK

FORMER TURNTABLE

INDUSTRIAL BLVD.

S-14
SAMPLE DEPTH = 8.5'
BAY MUD DEPTH = 10.0'
ND

S-15
SAMPLE DEPTH = 11.0'
BAY MUD DEPTH = 12.0'
ND

S-17
SAMPLE DEPTH = 7.5'
BAY MUD DEPTH = 8.0'
ND

C-34
SAMPLE DEPTH = 3.0'
Chloroform 7.7
Tetrachloroethene 15
SAMPLE DEPTH = 7.5'
BAY MUD DEPTH = 9.0'
Chloroform 7.7
Ethylbenzene 5.3
Total Xylenes 31

S-16
SAMPLE DEPTH = 6.5'
BAY MUD DEPTH = 7.0'
ND

S-18
SAMPLE DEPTH = 7.5'
BAY MUD DEPTH = 8.0'
ND

C-35
SAMPLE DEPTH = 4.5'
Cis-1,2-Dichloroethene 3,200
Vinyl Chloride 2,300
SAMPLE DEPTH = 5.5'
BAY MUD DEPTH = 6.0'
ND

S-19
SAMPLE DEPTH = 7.5'
BAY MUD DEPTH = 8.0'
Tetrachloroethene 5.8

S-20
SAMPLE DEPTH = 15.5'
BAY MUD DEPTH = 16.0'
ND

S-9
SAMPLE DEPTH = 5.0'
BAY MUD DEPTH = 5.5'
cis-1,2-Dichloroethene 240,000
Trichloroethene 100,000
Tetrachloroethene 650,000

S-13
SAMPLE DEPTH = 5.0'
1,2,4-Trimethylbenzene 800
1,3,5-Trimethylbenzene 250
Naphthalene 300
n-Butylbenzene 220
Total Xylenes 130
sec-Butylbenzene 150
para-Isopropyltoluene 180

C-38
SAMPLE DEPTH = 4.5'
Cis-1,2-Dichloroethene 490,000
Tetrachloroethene 310,000
Trichloroethene 40,000
SAMPLE DEPTH = 5.5'
BAY MUD DEPTH = 6.0'
Cis-1,2-Dichloroethene 80,000
Tetrachloroethene 21,000
Vinyl Chloride 3,100

C-36
SAMPLE DEPTH = 6.0'
Cis-1,2-Dichloroethene 27,000
Tetrachloroethene 4,400
SAMPLE DEPTH = 8.0'
BAY MUD DEPTH = 8.5'
Cis-1,2-Dichloroethene 12,000
Tetrachloroethene 4,400
Trans-1,2-Dichloroethene 2,800
Total Xylenes 7,100

S-11
SAMPLE DEPTH = 1.0'
BAY MUD DEPTH = 4.0'
Tetrachloroethene 4,500,000

S-6
SAMPLE DEPTH = 7.0'
BAY MUD DEPTH = 8.0'
ND

C-39
SAMPLE DEPTH = 3.5'
Cis-1,2-Dichloroethene 480,000
Tetrachloroethene 4,200,000
SAMPLE DEPTH = 5.5'
BAY MUD DEPTH = 6.0'
Cis-1,2-Dichloroethene 960,000
Tetrachloroethene 9,400,000
Trichloroethene 860,000

C-37
SAMPLE DEPTH = 4.5'
Cis-1,2-Dichloroethene 830
Trans-1,2-Dichloroethene 160
Vinyl Chloride 84
SAMPLE DEPTH = 6.5'
BAY MUD DEPTH = 7.0'
Cis-1,2-Dichloroethene 630
Tetrachloroethene 20,000
Trichloroethene 930

R-25
SAMPLE DEPTH = 3.2'
BAY MUD DEPTH = 7.7'
Trichloroethene 170
Tetrachloroethene 2,500,000

S-10
SAMPLE DEPTH = 5.5'
Vinyl Chloride 9.7
Methylene Chloride 21
Cis-1,2-Dichloroethene 5.3

S-7
SAMPLE DEPTH = 6.5'
BAY MUD DEPTH = 7.0'
Methylene Chloride 28

R-23
SAMPLE DEPTH = 1.4'
BAY MUD DEPTH = 9.2'
ND

R-114
SAMPLE DEPTH = 6.5'
BAY MUD DEPTH = 8.5'
1,2,4-Trimethylbenzene 2,100
1,3,5-Trimethylbenzene 840
Ethylbenzene 410
Isopropylbenzene 240
Total Xylenes 1,700
Naphthalene 3,200
para-Isopropyltoluene 480
Propylbenzene 370
sec-Butylbenzene 250
Toluene 250

S-8
SAMPLE DEPTH = 6.0'
BAY MUD DEPTH = 7.0'
Total Xylenes 1,270
Isopropylbenzene 270
Propylbenzene 420
1,3,5-Trimethylbenzene 830
1,2,4-Trimethylbenzene 2,400
sec-Butylbenzene 340
para-Isopropyltoluene 870
n-Butylbenzene 690
Naphthalene 5,000

LEGEND

- C-● NEW BORING LOCATION (AUGUST 2006)
- R-● PREVIOUS BORING LOCATION (JUNE 2000)
- S-● PREVIOUS BORING LOCATION (NOVEMBER 2000)
- 21 INDICATES HALOGENATED VOCs RESULTS
- 270 INDICATES NON-HALOGENATED VOCs RESULTS
- ND NO HVOCs OR VOCs DETECTED ABOVE REPORTING LIMITS
- APPROXIMATE AREA OF HALOGENATED VOCs IMPACT IN SOIL
- EXISTING STRUCTURE
- FORMER STRUCTURE

NOTES

1. NEW BORINGS WERE DRILLED ON AUGUST 30, 2006.
2. ALL DEPTHS ARE IN FEET BELOW GROUND SURFACE.
3. SAMPLE DEPTHS REPRESENT THE TOP OF THE SAMPLE SECTION.
4. ALL CONCENTRATIONS ARE IN UNITS OF MICROGRAMS PER KILOGRAM (ug/Kg).
5. SEE TABLES 1A AND 1B FOR COMPLETE ANALYTICAL RESULTS AND DETECTION LIMITS.
6. SEE "INVESTIGATION REPORT CHLORINATED SOLVENTS - SOUTH AREA, FORMER BAYSHORE RAILYARD - BRISBANE, CALIFORNIA", BURNS & McDONNELL, DATED MAY 2002 FOR COMPLETE R- AND S- BORINGS ANALYTICAL RESULTS.

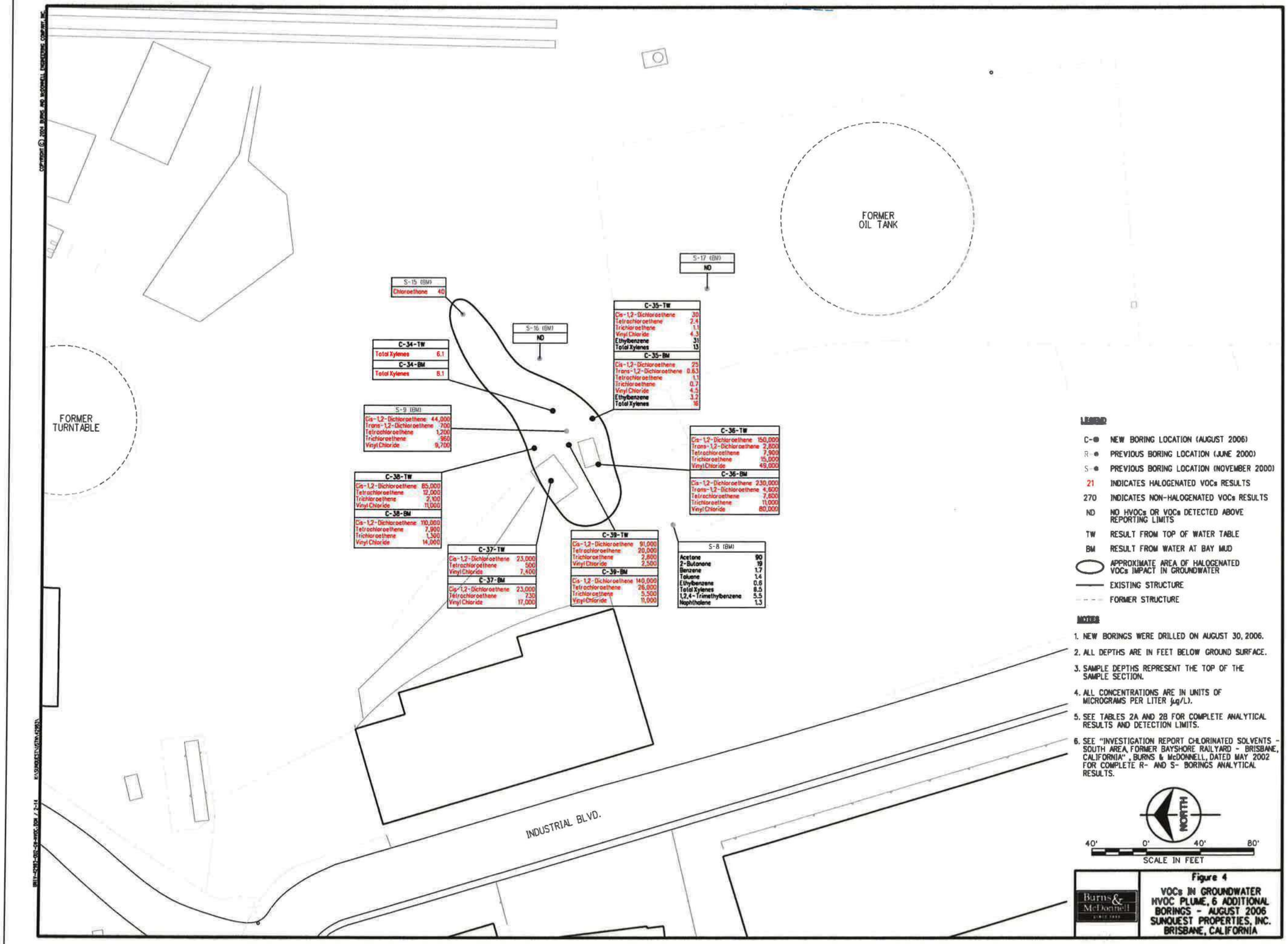
NORTH

40' 0' 40' 80'

SCALE IN FEET

Burns & McDonnell

Figure 3
VOCs CONCENTRATIONS IN SOIL HVOC PLUME, 6 ADDITIONAL BORINGS - AUGUST 2006 SUNQUEST PROPERTIES, INC. BRISBANE, CALIFORNIA


FORMER
OIL TANK
FORMER
TURNTABLE
INDUSTRIAL BLVD.
S-15 (BM)
Chloroethane 40
S-16 (BM)
ND
S-17 (BM)
ND
C-34-TW
Total Xylenes 6.1
C-34-BM
Total Xylenes 8.1
C-35-TW
Cis-1,2-Dichloroethene 30
Tetrachloroethene 2.4
Trichloroethene 1.1
Vinyl Chloride 4.3
Ethylbenzene 31
Total Xylenes 13
C-35-BM
Cis-1,2-Dichloroethene 25
Trans-1,2-Dichloroethene 0.63
Tetrachloroethene 1.1
Trichloroethene 0.7
Vinyl Chloride 4.5
Ethylbenzene 3.2
Total Xylenes 16
S-9 (BM)
Cis-1,2-Dichloroethene 44,000
Trans-1,2-Dichloroethene 700
Tetrachloroethene 1,200
Trichloroethene 950
Vinyl Chloride 9,700
C-36-TW
Cis-1,2-Dichloroethene 150,000
Trans-1,2-Dichloroethene 2,800
Tetrachloroethene 7,900
Trichloroethene 15,000
Vinyl Chloride 49,000
C-36-BM
Cis-1,2-Dichloroethene 230,000
Trans-1,2-Dichloroethene 4,600
Tetrachloroethene 7,600
Trichloroethene 11,000
Vinyl Chloride 80,000
C-38-TW
Cis-1,2-Dichloroethene 85,000
Tetrachloroethene 12,000
Trichloroethene 2,100
Vinyl Chloride 11,000
C-38-BM
Cis-1,2-Dichloroethene 110,000
Tetrachloroethene 7,900
Trichloroethene 1,300
Vinyl Chloride 14,000
C-37-TW
Cis-1,2-Dichloroethene 23,000
Tetrachloroethene 500
Vinyl Chloride 7,400
C-37-BM
Cis-1,2-Dichloroethene 23,000
Tetrachloroethene 730
Vinyl Chloride 17,000
C-39-TW
Cis-1,2-Dichloroethene 91,000
Tetrachloroethene 20,000
Trichloroethene 2,800
Vinyl Chloride 2,500
C-39-BM
Cis-1,2-Dichloroethene 140,000
Tetrachloroethene 26,000
Trichloroethene 5,500
Vinyl Chloride 11,000
S-8 (BM)
Acetone 90
2-Butanone 19
Benzene 1.7
Toluene 1.4
Ethylbenzene 0.6
Total Xylenes 8.5
1,2,4-Trimethylbenzene 5.5
Naphthalene 1.3
LEGEND
C-● NEW BORING LOCATION (AUGUST 2006)
R-● PREVIOUS BORING LOCATION (JUNE 2000)
S-● PREVIOUS BORING LOCATION (NOVEMBER 2000)
21 INDICATES HALOGENATED VOCs RESULTS
270 INDICATES NON-HALOGENATED VOCs RESULTS
ND NO HVOCs OR VOCs DETECTED ABOVE REPORTING LIMITS
TW RESULT FROM TOP OF WATER TABLE
BM RESULT FROM WATER AT BAY MUD
APPROXIMATE AREA OF HALOGENATED VOCs IMPACT IN GROUNDWATER
EXISTING STRUCTURE
FORMER STRUCTURE
NOTES
1. NEW BORINGS WERE DRILLED ON AUGUST 30, 2006.
2. ALL DEPTHS ARE IN FEET BELOW GROUND SURFACE.
3. SAMPLE DEPTHS REPRESENT THE TOP OF THE SAMPLE SECTION.
4. ALL CONCENTRATIONS ARE IN UNITS OF MICROGRAMS PER LITER (µg/L).
5. SEE TABLES 2A AND 2B FOR COMPLETE ANALYTICAL RESULTS AND DETECTION LIMITS.
6. SEE "INVESTIGATION REPORT CHLORINATED SOLVENTS - SOUTH AREA, FORMER BAYSHORE RAILYARD - BRISBANE, CALIFORNIA", BURNS & McDONNELL, DATED MAY 2002 FOR COMPLETE R- AND S- BORINGS ANALYTICAL RESULTS.
NORTH
40' 0' 40' 80'
SCALE IN FEET
Figure 4
VOCs IN GROUNDWATER
HVOC PLUME, 6 ADDITIONAL
BORINGS - AUGUST 2006
SUNQUEST PROPERTIES, INC.
BRISBANE, CALIFORNIA
Burns & McDonnell

APPENDIX B-11

Weiss Associates [2008]

Weiss Associates *Environmental Science, Engineering and Management*

*5801 Christie Avenue, Suite 600, Emeryville, CA 94608-1939 Fax: 510-547-5043 Phone: **510-450-6000***

March 28, 2008

Mr. Jason Lin
Director of Technical Affairs
Sunquest Properties, Inc.
150 Executive Park Blvd., Suite 4200
San Francisco, California 94134-3309

RE: **Site Characterization Report**
Former UST Sites
250 and 350 Industrial Way
Brisbane, California
Weiss Project No. 174-1323-24-1

Dear Mr. Na:

Weiss Associates (Weiss) is pleased to provide Sunquest Properties, Inc. (Sunquest) this report describing soil investigations at the locations of two former underground storage tanks (USTs) at 250 and 350 Industrial Way in Brisbane, California (the Site). For reference, we have provided a brief overview of our understanding of the project background and have then outlined the scope of work and methods. Location diagrams for the site and a table summarizing analytical results are are included in at the end of this report. Boring logs and laboratory analytical reports are provided in Attachments A and B, respectively.

PROJECT BACKGROUND

The Site is located on Industrial Way in Brisbane, California (Attachment A, Figure 1). The former UST pit areas are located in building-front paved parking areas bounded to the east and west by adjacent paved parking areas, to the north by Industrial Way, and to the south by industrial buildings at 250 and 350/362 Industrial Way. The Site is bounded to the north and west by property pertaining to the former Bayshore Railyard.

One of the UST pit areas is located at 250 Industrial Way. The pit area is estimated to be approximately 5.5 ft wide and 15 ft long, and located approximately 40 ft south of an existing 2-inch-diameter monitoring well (K-1) advanced to 27 ft bgs. The well was rehabilitated and sampled in February, 2008 at the request of the California Regional Water Quality Control Board, San Francisco Bay Region (CRWQCB), and a report summarizing the results is pending.

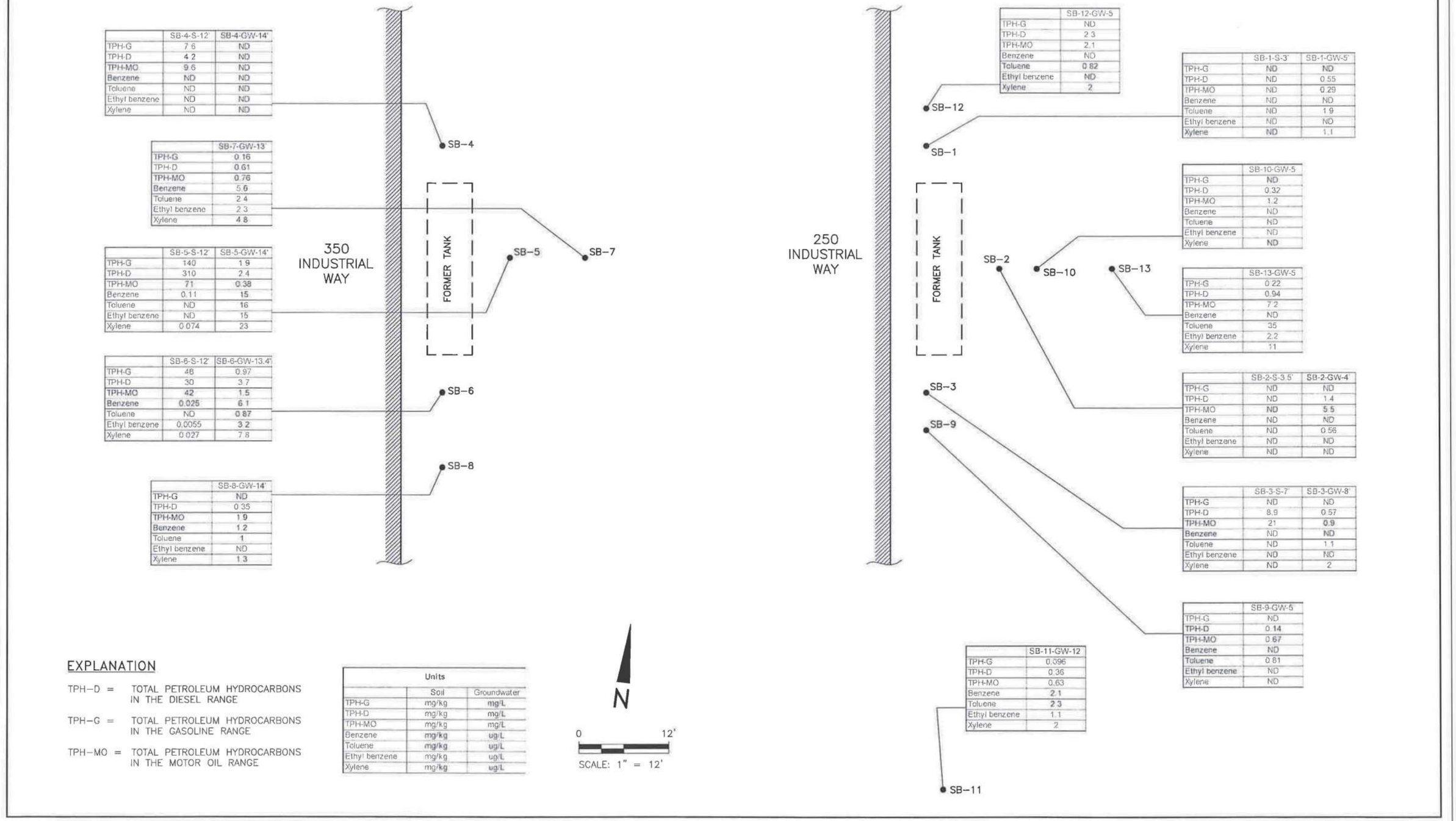
The second UST pit area is located at 350 Industrial Way. The pit area is estimated to be approximately 5.5 ft wide and 30 ft long, and located approximately 10 ft east and 5 ft south of the location of a former monitoring well (MW-1) destroyed in November, 2006, at the request of the County of San Mateo Health Department (CSMHD).

Table 1. Summary of Analytical Results, Former UST Site Characterization, 250 Industrial Way, Brisbane, California

Sample Name	Total Petroleum Hydrocarbons (TPH)			Volatile Organic Compounds (VOCs)																
	TPH-G	TPH-D	TPH-MO	Acetone	Benzene	Ethylbenzene	Toluene	Xylenes	MTBE	Naphthalene	1,2,4-Trimethylbenzene	1,2-Dichloroethane	1,3,5-Trimethylbenzene	2-Butanone	Carbon disulfide	Chloroberzene	Isopropylbenzene	n-Butyl benzene	n-Propyl benzene	Sec-Butyl benzene	tert-Butyl benzene
	(ppm)			(ppm)																
250 Industrial Way																				
SB-1-S-3'	ND	ND	ND	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.0066	<0.004	<0.005	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
SB-2-S-3.5'	ND	ND	ND	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.004	<0.005	<0.02	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
SB-3-S-7'	ND	8.9, g, b	21	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.004	<0.005	<0.02	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
	(ppm)			(ppb)																
SB-1-GW-5'	ND, w	0.55, b, g, i	0.29	<10	<0.5	<0.5	1.9	1.1	<0.5	<0.5	1.0	<0.5	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SB-2-GW-4'	ND, w	1.4, g, b, i	5.5	<10	<0.5	<0.5	0.56	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SB-3-GW-8'	ND, w	0.57, g, b, i	0.9	<20	<0.5	<0.5	1.1	2	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SB-9-GW-5'	ND, w	0.14, g, b, i	0.67	<20	<0.5	<0.5	0.81	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	5.7	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SB-10-GW-5'	ND, w	0.32, g, b, i	1.2	<20	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SB-12-GW-5'	ND, w	2.3, b, g, i	2.1	<10	<0.5	<0.5	0.82	2	<0.5	<0.5	0.58	<0.5	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SB-13-GW-5'	0.22, (w, x)	0.94, g, b, i	7.2	<20	ND<1.0	2.2	35	11	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<4.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0
350 Industrial Way																				
	(ppm)			(ppm)																
SB-4-S-12'	7.6,	4.2, g, b, d	9.6	0.17	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.004	<0.005	0.073	0.0065	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
SB-5-S-12'	140,y,z	310, n, b, g	71	<10	0.11	ND<0.050	ND<0.050	0.074	ND<0.050	ND<0.050	ND<0.050	ND<0.040	ND<0.050	ND<0.20	ND<0.50	ND<0.050	0.3	0.99	0.98	0.36	ND<0.050
SB-6-S-12'	48, y,z	30, g, n	42	0.20	0.025	0.0055	<0.005	0.027	<0.005	<0.005	0.02	<0.004	0.0090	0.081	0.0062	<0.005	0.031	0.14	0.063	0.072	0.0077
	(ppm)			(ppb)																
SB-4-GW-14'	ND	<0.05	<0.25	<10	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SB-5-GW-14'	1.9 w,x	2.4 , d, i	0.38	<10	15	15	1.6	23	ND	<0.5	40	0.55	10	3.3	<0.5	0.65	26	14	50	9.1	2.4
SB-6-GW-13.4'	0.97, w,x	3.7,n,g,b,i	1.5	<10	6.1	3.2	0.87	7.8	<0.5	<0.5	8.4	<0.5	3.0	<2.0	<0.5	<0.5	12	3.8	3.3	5.2	0.76
SB-7-GW-13'	0.16, x,z	0.61, g, b, d, i	0.76	<20	5.6	2.3	2.4	4.8	<0.5	<0.5	1.1	<0.5	0.80	<2.0	<0.5	<0.5	2.1	<0.5	2.1	<0.5	<0.5
SB-8-GW-14'	ND, x	0.35, g, b, i	1.9	<20	1.2	<0.5	1.0	1.3	<0.5	<0.5	1.1	0.74	<0.5	<2.0	<0.5	<0.5	2.1	<0.5	2.1	<0.5	<0.5
SB-11-GW-12'	0.096, x,z	0.36, g, b, d, i	0.63	<10	2.1	1.1	2.3	2	<0.5	<0.5	0.69	<0.5	<0.5	<2.0	<0.5	<0.5	1.4	<0.5	0.95	<0.5	<0.5

Notes

a = unmodified or weakly modified diesel is significant
b = diesel range compounds are significant
d = gasoline range compounds are significant
g = oil range compounds are significant
I = liquid sample that contains greater than ~ 1 vol. % sediment
n = stoddard solvent/mineral spirit
w = liquid sample that contains greater than ~ 1 vol. % sediment
x = heavier gasoline range compounds are significant
y = strongly aged gasoline or diesel range compounds are significant
z = unmodified or weakly modified gasoline is significant



	SB-4-S-12'	SB-4-GW-14'
TPH-G	7.6	ND
TPH-D	4.2	ND
TPH-MO	9.6	ND
Benzene	ND	ND
Toluene	ND	ND
Ethyl benzene	ND	ND
Xylene	ND	ND

	SB-7-GW-13'
TPH-G	0.16
TPH-D	0.61
TPH-MO	0.76
Benzene	5.6
Toluene	2.4
Ethyl benzene	2.3
Xylene	4.8

	SB-5-S-12'	SB-5-GW-14'
TPH-G	140	1.9
TPH-D	310	2.4
TPH-MO	71	0.38
Benzene	0.11	15
Toluene	ND	16
Ethyl benzene	ND	15
Xylene	0.074	23

	SB-6-S-12'	SB-6-GW-13.4'
TPH-G	48	0.97
TPH-D	30	3.7
TPH-MO	42	1.5
Benzene	0.025	6.1
Toluene	ND	0.87
Ethyl benzene	0.0055	3.2
Xylene	0.027	7.8

	SB-8-GW-14'
TPH-G	ND
TPH-D	0.35
TPH-MO	1.9
Benzene	1.2
Toluene	1
Ethyl benzene	ND
Xylene	1.3

	SB-12-GW-5
TPH-G	ND
TPH-D	2.3
TPH-MO	2.1
Benzene	ND
Toluene	0.82
Ethyl benzene	ND
Xylene	2

	SB-1-S-3'	SB-1-GW-5'
TPH-G	ND	ND
TPH-D	ND	0.55
TPH-MO	ND	0.29
Benzene	ND	ND
Toluene	ND	1.9
Ethyl benzene	ND	ND
Xylene	ND	1.1

	SB-10-GW-5
TPH-G	ND
TPH-D	0.32
TPH-MO	1.2
Benzene	ND
Toluene	ND
Ethyl benzene	ND
Xylene	ND

	SB-13-GW-5
TPH-G	0.22
TPH-D	0.94
TPH-MO	7.2
Benzene	ND
Toluene	35
Ethyl benzene	2.2
Xylene	11

	SB-2-S-3.5'	SB-2-GW-4'
TPH-G	ND	ND
TPH-D	ND	1.4
TPH-MO	ND	5.5
Benzene	ND	ND
Toluene	ND	0.56
Ethyl benzene	ND	ND
Xylene	ND	ND

	SB-3-S-7'	SB-3-GW-8'
TPH-G	ND	ND
TPH-D	8.9	0.57
TPH-MO	21	0.9
Benzene	ND	ND
Toluene	ND	1.1
Ethyl benzene	ND	ND
Xylene	ND	2

	SB-9-GW-5
TPH-G	ND
TPH-D	0.14
TPH-MO	0.67
Benzene	ND
Toluene	0.81
Ethyl benzene	ND
Xylene	ND

	SB-11-GW-12
TPH-G	0.096
TPH-D	0.36
TPH-MO	0.63
Benzene	2.1
Toluene	2.3
Ethyl benzene	1.1
Xylene	2

Units		
	Soil	Groundwater
TPH-G	mg/kg	mg/L
TPH-D	mg/kg	mg/L
TPH-MO	mg/kg	mg/L
Benzene	mg/kg	ug/L
Toluene	mg/kg	ug/L
Ethyl benzene	mg/kg	ug/L
Xylene	mg/kg	ug/L

Figure 2. Boring Locations and Summary of Analytical Results, Former UST Sites, 250 and 350 Industrial Way, Brisbane, California

APPENDIX C

Drilling Permits

ORDINANCE: 04023

ENVIRONMENTAL HEALTH
SAN MATEO COUNTY

Protecting Our Health and Environment

PERMIT 18-1876

P/E: 2010 **MONITORING WELLS - INSTALLATION/DESTRUCTION**

FACILITY:
2500 BAYSHORE BLVD, BRISBANE (10)

OWNER:
UNIVERSAL PARAGON CORP
150 EXECUTIVE PARK BLVD STE 4000

WP0012127 FA0065283
005340060
AMOUNT PAID: 747.00

CONTRACTOR:
PENECORE DRILLING

TERMS & CONDITIONS:

CONSTRUCT SOIL BORINGS (10)
CONSULTANT: GEOSYNTEC CONSULTANTS
PROJECT MANAGER: ANTHONY SMITH

KIAN ATKINSON
ENVIRONMENTAL HEALTH SPECIALIST

DATE ISSUED: 12/6/2018

EXPIRATION DATE: 4/6/2019

THIS PERMIT IS NONTRANSFERABLE AND MUST BE POSTED ON-SITE IN A CONSPICUOUS PLACE

PAID $747.00 CK # 267 via mail

App lot 6

SAN MATEO COUNTY ENVIRONMENTAL HEALTH

DEC 04 2018

RECEIVED

COUNTY OF SAN MATEO
HEALTH SYSTEM

Environmental Health Services
Groundwater Protection Program
2000 Alameda de las Pulgas, Suite #100
San Mateo, CA 94403
Phone:(650) 372-6200 Fax: (650) 627-8244
smchealth.org/gpp

SUBSURFACE DRILLING PERMIT APPLICATION

Allow three (3) full working days for processing a complete permit application which includes payment (one permit per parcel). Drilling **start date & time** must be scheduled with County staff at (650) 464-0047 or drilling@smcgov.org **at least 2 full working days (i.e. 48 hours) in advance.** Visit smchealth.org/ehfees for Groundwater Protection Program Fees

PURPOSE OF APPLICATION ☐ Groundwater Monitoring/Vapor Well Installation ☒ Construct Soil Borings (variance request if to be left open >24 hrs)
☐ Groundwater Monitoring/Vapor Well Destruction Extension of Permit # _____
No. of Wells 0 No. of Borings 10 Well/Boring Names See figure

PURPOSE OF DRILLING ☒ Environmental ☐ Geotechnical **LEAD AGENCY** ☐ County GPP (permit approval is not to be considered work plan approval) ☒ RWQCB/DTSC/USEPA (Provide approval letter) ☐ None (i.e. voluntary)

SITE / DRILLING INFORMATION

Agency Case # 2020111 Assessor's Parcel # (required) 005-340-060 (one per permit)
Drilling Location Address: 2500 Bayshore Blvd. City: Brisbane Zip: 94134
To Be Constructed In: ☐ Public Property ☒ Private Property ☐ Refuse
Maximum Proposed Depth (wells/borings) 10 (feet) Drilling Method: Direct Push
Boring Diameter: 3-inch Casing Diameter: N/A Filter Pack Interval: N/A Screen Interval: N/A
Destruction Method: ☐ Pressure Grouting (provide well construction logs and grout calcs)
(6 gallons water max/94 lb cement, up to 5% bentonite) ☐ Overdrilling (guide rods for total depth prior to starting required)

WELL/BORING OWNER (Well/boring owner name or contact person should match signature)

Name: Universal Paragon Corporation Contact Person: Howard Pearce
Address: 150 Executive Park Blvd., Suite 4000 City, State, Zip: San Francisco, CA 94134
Telephone: 415.468.6676x114 Email: hpearce@upcsf.com
It is my responsibility to notify the County of any known changes in the purpose of this well/boring from that which is indicated on this application, to submit indication of annual usage of wells to the County, and to maintain the well in good condition. (*Letter signed by well/boring owner/contact person, containing above language and attesting to knowledge of all permit requirements and conditions, may be substituted for signature.*)
Well/Boring Owner's/Contact Person's Signature: _____ Date: 12-3-18

PROPERTY OWNER (Name as appears on assessor's rolls should match signature)

Name: Universal Paragon Corporation Contact Person: Howard Pearce
Address: 150 Executive Park Blvd., Suite 4000 City, State, Zip: San Francisco, CA 94134
Telephone: 415.468.6676x114 Email: hpearce@upcsf.com
I understand that a well/boring is being installed on my property. I agree to notify the County and Well Owner of any known damage or future access issues to the well (*Letter signed by property owner, containing above language, or encroachment permit may be substituted for signature*)
Property Owner's Signature: _____ Date: 12-3-18

DRILLING COMPANY

Drilling Company: Penecore Drilling Contact Person: Xavier Green
Address: 220 N. East Street City, State, Zip: Woodland, CA 95776
Telephone: 530-661-3600 Email: xavier@penecore.com C57 Drillers License # 906899
I certify that the well/boring will be constructed in compliance with the conditions of this permit (see reverse), the San Mateo County Well Ordinance, and the State Water Well Standards, and that the license listed above is considered current and active by the Contractors State License Board.
Driller's Signature: _____ Date: 12.3.18

CONSULTANT COMPANY

Consultant Company: Geosyntec Consultants Project Manager: Anthony Smith
Address: 1111 Broadway, 6th Floor City, State, Zip: Oakland, CA 94607
Telephone: 510-285-2770 Email: tsmith@geosyntec.com
Field Contact & Cell # (if known): Miranda Kahrilas, 847.530.7602
I certify that this application is correct to the best of my knowledge and the well/boring will be constructed/destroyed in compliance with the conditions of this permit (see reverse), the San Mateo County Well Ordinance, and the State Water Well Standards. I understand that I am responsible for General Conditions E, F, K, and L of this permit and if I indicated the purpose of drilling is geotechnical, then no one will use the boring to collect any samples for environmental analyses. If there is a change in Responsible Professional, I will notify San Mateo County GPP staff.
Responsible Professional's Name (Please print legibly): Anthony Smith
Responsible Professional's Signature: _____ Date: 12/3/18
California Professional Geologist (PG) No. _____ or Civil Engineer (PE) No. C81473

REV. 5/23/18

FA0065283

 2018 SUBSURFACE DRILLING PERMIT APPLICATION

REQUIREMENTS:

An accurate and correct map **must** be submitted with the application and include the following: north arrow, existing and historic site features, existing and proposed well/boring locations with ID's to scale, property lines and any other pertinent information. A work plan describing the drilling and construction/destruction methodology may be requested by County staff. A complete application with appropriate fees must be submitted 3 working days in advance of drilling and notification of start date and time must be provided at least 2 working days prior to drilling. The permit is subject to both General and Special Conditions stated below. A copy of the approved Subsurface Drilling Permit **must** be available on site while work related to the permit is being performed. **Drilling may begin at the notified date and time whether County staff is present or not.**

GENERAL CONDITIONS:

A. Field notification must be provided to GPP drilling inspection staff at least 2 full working days prior to the start of drilling. GPP Caseworker needs a separate notification if it is a contaminated site.
B. Well and boring construction and destruction under this permit are subject to the Standards for the Construction of Wells in San Mateo County, County Groundwater Protection Program (GPP) Guidelines, Policies & Procedures, the State Water Well Standards, and any instructions by a Health Department representative.
C. Well/Boring Owner, Driller, and Responsible Professional assume responsibility for all activities and uses under the permit, including compliance with Workmen's Compensation Laws, and indemnify, defend and save the County of San Mateo, its officers, agents and employees, free and harmless from any and all expense, cost, or liability in connection with or resulting from work or stopped-work associated with the permit, including, but not limited to, property damage, personal injury, wrongful death, and loss of income.
D. All borings **must** be properly destroyed (grouted/sealed) within 24 hours of drilling, unless special conditions are approved beforehand in writing as part of this permit, and must be continuously protected and stabilized.
E. Analytical results of all soil, vapor, and groundwater samples collected during the execution of drilling under this permit **must** be submitted to County GPP staff by the Responsible Professional within 60 days of sample collection. If contamination is discovered during drilling, verbal notification to County GPP by the Responsible Professional is **required** within 72 hours of discovery. Proper storage, labeling & disposal of investigation-derived residual wastes are the responsibility of the consultant unless stated otherwise contractually.
F. A copy of the State DWR Form 188, boring logs, well construction details, and finalized as-built locations for all borings/ wells (except geotechnical borings) signed by a Responsible Professional, **must** be submitted to County GPP by the Responsible Professional within 60 days of drilling/construction/destruction.
G. Permit is valid only for the purpose specified herein. No change in purpose or required procedures, as described on this permit application, in the associated workplan, or in the special conditions below, will be allowed except upon written permission from the County. Construction aspects can be changed based on conditions encountered in the field.
H. **Permit is valid for one mobilization** associated with originally permitted boring/well locations only, including contingency locations, and is automatically canceled if not exercised, or if an extension is not applied for and granted within 120 days of the original permit issuance date. Failure to notify staff of cancellation or delay in start time will result in the Consultant being billed an Inspection Cancellation fee of $342 as of August 1, 2017 if GPP staff attempted to perform an inspection.
I. Wells installed under this permit may not be used for domestic, municipal, agricultural, or irrigation water supply.
J. All work performed **must** conform to Business and Profession Codes and State Water Well Standards.
K. Top-of-casing elevation of all wells **must** be surveyed to the nearest 0.01-foot relative to Mean Sea Level or NAVD88 and submitted to County GPP within 60 days of drilling, and to State GeoTracker as appropriate. Geotechnical wells are exempt from this requirement if a written variance from GPP is obtained prior to drilling.
L. Latitude and longitude of all wells **must** be surveyed with sub-meter accuracy relative to NAD83 and submitted to County GPP within 60 days of drilling, and to State GeoTracker as appropriate.
M. Violation of any requirement or general or special permit condition may result in an order by GPP staff to cease work under this permit, correct the violation, potentially re-permit the work as a new mobilization, and potential actions may be taken against the Well Owner, Property Owner, or Responsible Professional by GPP.

SPECIAL CONDITIONS: _____
(agency use only)

For Agency Use Only:
County Approval _____ FA# _____ Date: 12/5/18

Revised every January 1



Legend

Proposed Sample Location and Soil Analyses
- Metals
- Metals, VOCs, SVOCs, PCBs, OCPs, TPH, Asbestos
- Monitoring Well Location
- Piezometer Location
- Property Boundary

- Drainage Ditch
- Parcel Boundary and APN
- Wetlands
- Approximate Former Oil Tank Location
- Approximate Former Underground Storage Tank (UST) Location

- Railroad Tracks
- Current/Former Building Footprint

Note:
- All locations are approximate

N

0 260 Feet

Proposed Sample Locations

Brisbane OU-2
Brisbane, California

Geosyntec consultants

WG2245 | November 2018

Figure X

D:\GIS\UPC\Brisbane\Project\2018_DataGapAnalysis - OU2\Fig0X_SPropSampleLocsv2.mxd 11/26/2018 10:05:30 AM

ENVIRONMENTAL HEALTH
SAN MATEO COUNTY

Protecting Our Health and Environment

ORDINANCE: 04023

PERMIT 18-1877

P/E: 2010 **MONITORING WELLS - INSTALLATION/DESTRUCTION**

FACILITY:
2500 BAYSHORE BLVD, BRISBANE (21)

OWNER:
UNIVERSAL PARAGON CORP
150 EXECUTIVE PARK BLVD STE 4000
SAN FRANCISCO

WP0012128 FA0065283
005340090
AMOUNT PAID: 747.00

CONTRACTOR:
PENECORE DRILLING

TERMS & CONDITIONS:

CONSTRUCT SOIL BORINGS (21)
CONSULTANT: GEOSYNTEC CONSULTANTS
PROJECT MANAGER: ANTHONY SMITH

KIAN ATKINSON
ENVIRONMENTAL HEALTH SPECIALIST

DATE ISSUED: 12/6/2018

EXPIRATION DATE: 4/6/2019

THIS PERMIT IS NONTRANSFERABLE AND MUST BE POSTED ON-SITE IN A CONSPICUOUS PLACE

PAID $747.00 CK # 267 via mail App 2 of 6

SAN MATEO COUNTY ENVIRONMENTAL HEALTH
DEC 04 2018
RECEIVED

COUNTY OF SAN MATEO
HEALTH SYSTEM

Environmental Health Services
Groundwater Protection Program
2000 Alameda de las Pulgas, Suite #100
San Mateo, CA 94403
Phone:(650) 372-6200 Fax: (650) 627-8244
smchealth.org/gpp

SUBSURFACE DRILLING PERMIT APPLICATION

Allow three (3) full working days for processing a complete permit application which includes payment (one permit per parcel). Drilling **start date & time** must be scheduled with County staff at (650) 464-0047 or drilling@smcgov.org **at least 2 full working days (i.e. 48 hours) in advance.** Visit smchealth.org/ehfees for Groundwater Protection Program Fees

PURPOSE OF APPLICATION ☐ Groundwater Monitoring/Vapor Well Installation ☒ Construct Soil Borings (variance request if to be left open >24 hrs)
☐ Groundwater Monitoring/Vapor Well Destruction Extension of Permit # ____
No. of Wells 0 No. of Borings 21 Well/Boring Names See figure

PURPOSE OF DRILLING ☒ Environmental ☐ Geotechnical **LEAD AGENCY** ☐ County GPP (permit approval is not to be considered work plan approval) ☒ RWQCB/DTSC/USEPA (Provide approval letter) ☐ None (i.e. voluntary)

SITE / DRILLING INFORMATION

Agency Case # 2020111 Assessor's Parcel # (required) 005-340-090 (one per permit)
Drilling Location Address: 2500 Bayshore Blvd. City: Brisbane Zip: 94134
To Be Constructed In: ☐ Public Property ☒ Private Property ☐ Refuse
Maximum Proposed Depth (wells/borings) 10 (feet) Drilling Method: Direct Push
Boring Diameter: 3-inch Casing Diameter: N/A Filter Pack Interval: N/A Screen Interval: N/A
Destruction Method: ☐ Pressure Grouting (provide well construction logs and grout calcs)
(6 gallons water max/94 lb cement, up to 5% bentonite) ☐ Overdrilling (guide rods for total depth prior to starting required)

WELL/BORING OWNER (Well/boring owner name or contact person should match signature)

Name: Universal Paragon Corporation Contact Person: Howard Pearce
Address: 150 Executive Park Blvd., Suite 4000 City, State, Zip: San Francisco, CA 94134
Telephone: 415.468.6676x114 Email: hpearce@upcsf.com
It is my responsibility to notify the County of any known changes in the purpose of this well/boring from that which is indicated on this application, to submit indication of annual usage of wells to the County, and to maintain the well in good condition. *(Letter signed by well/boring owner/contact person, containing above language and attesting to knowledge of all permit requirements and conditions, may be substituted for signature.)*
Well/Boring Owner's/Contact Person's Signature: [signature] Date: 12-3-18

PROPERTY OWNER (Name as appears on assessor's roles should match signature)

Name: Universal Paragon Corporation Contact Person: Howard Pearce
Address: 150 Executive Park Blvd., Suite 4000 City, State, Zip: San Francisco, CA 94134
Telephone: 415.468.6676x114 Email: hpearce@upcsf.com
I understand that a well/boring is being installed on my property. I agree to notify the County and Well Owner of any known damage or future access issues to the well *(Letter signed by property owner, containing above language, or encroachment permit may be substituted for signature)*
Property Owner's Signature: [signature] Date: 12-3-18

DRILLING COMPANY

Drilling Company: Penecore Drilling Contact Person: Xavier Green
Address: 220 N. East Street City, State, Zip: Woodland, CA 95776
Telephone: 530-661-3600 Email: xavier@penecore.com C57 Drillers License # 906899
I certify that the well/boring will be constructed in compliance with the conditions of this permit (see reverse), the San Mateo County Well Ordinance, and the State Water Well Standards, and that the license listed above is considered current and active by the Contractors State License Board.
Driller's Signature: [signature] Date: 12.3.18

CONSULTANT COMPANY

Consultant Company: Geosyntec Consultants Project Manager: Anthony Smith
Address: 1111 Broadway, 6th Floor City, State, Zip: Oakland, CA 94607
Telephone: 510-285-2770 Email: tsmith@geosyntec.com
Field Contact & Cell # (if known): Miranda Kahrilas, 847.530.7602
I certify that this application is correct to the best of my knowledge and the well/boring will be constructed/destroyed in compliance with the conditions of this permit (see reverse), the San Mateo County Well Ordinance, and the State Water Well Standards. I understand that I am responsible for General Conditions E, F, K, and L of this permit and if I indicated the purpose of drilling is geotechnical, then no one will use the boring to collect any samples for environmental analyses. If there is a change in Responsible Professional, I will notify San Mateo County GPP staff.
Responsible Professional's Name (Please print legibly): Anthony Smith
Responsible Professional's Signature: [signature] Date: 12/3/18
California Professional Geologist (PG) No. ____ or Civil Engineer (PE) No. C8473

REV 5/23/18

FA0065283

 2018 SUBSURFACE DRILLING PERMIT APPLICATION

REQUIREMENTS:

An accurate and correct map **must** be submitted with the application and include the following: north arrow, existing and historic site features, existing and proposed well/boring locations with ID's to scale, property lines and any other pertinent information. A work plan describing the drilling and construction/destruction methodology may be requested by County staff. A complete application with appropriate fees must be submitted 3 working days in advance of drilling and notification of start date and time must be provided at least 2 working days prior to drilling. The permit is subject to both General and Special Conditions stated below. A copy of the approved Subsurface Drilling Permit **must** be available on site while work related to the permit is being performed. **Drilling may begin at the notified date and time whether County staff is present or not.**

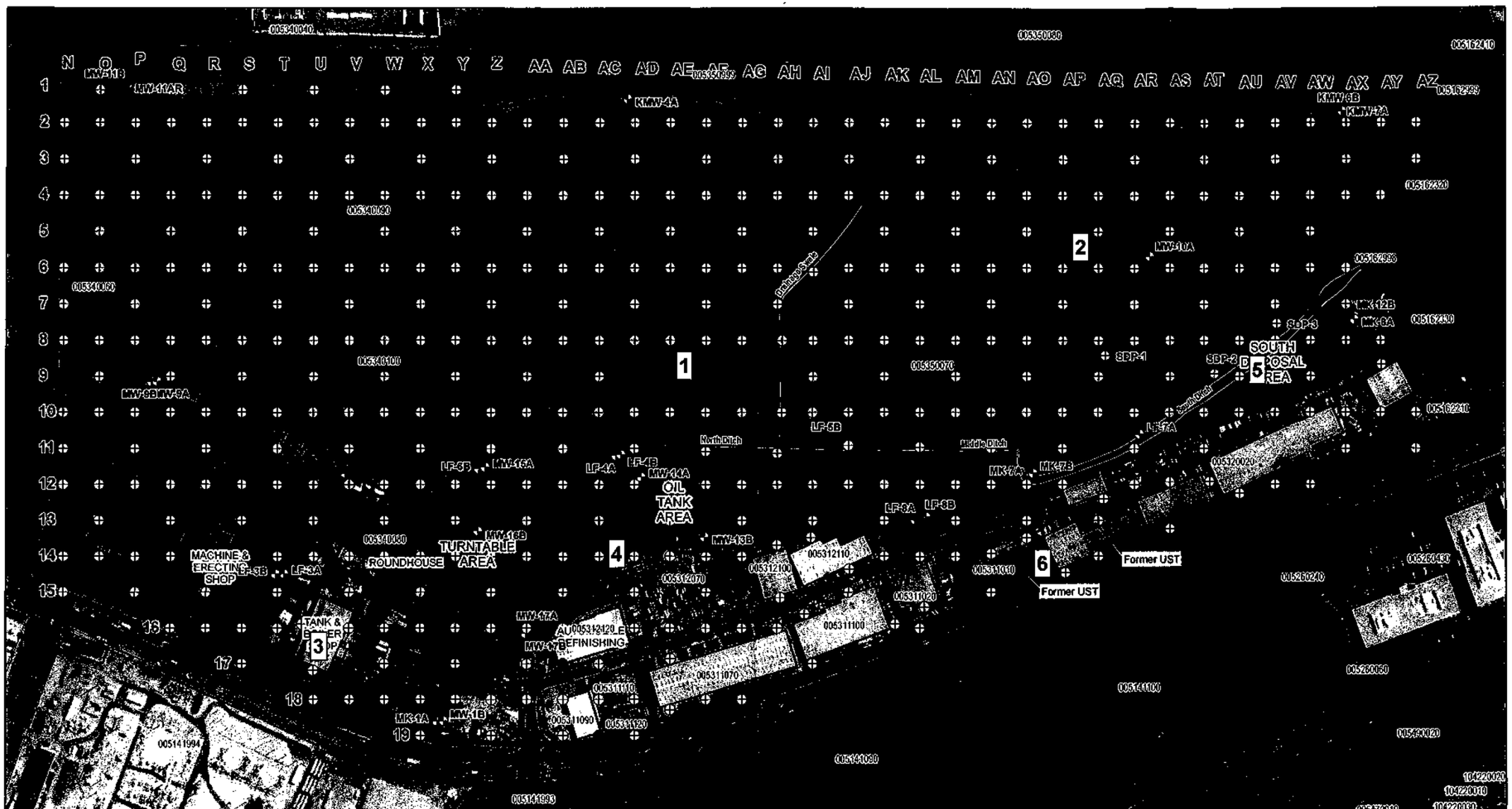
GENERAL CONDITIONS:

A. Field notification must be provided to GPP drilling inspection staff at least 2 full working days prior to the start of drilling. GPP Caseworker needs a separate notification if it is a contaminated site.
B. Well and boring construction and destruction under this permit are subject to the Standards for the Construction of Wells in San Mateo County, County Groundwater Protection Program (GPP) Guidelines, Policies & Procedures, the State Water Well Standards, and any instructions by a Health Department representative.
C. Well/Boring Owner, Driller, and Responsible Professional assume responsibility for all activities and uses under the permit, including compliance with Workmen's Compensation Laws, and indemnify, defend and save the County of San Mateo, its officers, agents and employees, free and harmless from any and all expense, cost, or liability in connection with or resulting from work or stopped-work associated with the permit, including, but not limited to, property damage, personal injury, wrongful death, and loss of income.
D. All borings **must** be properly destroyed (grouted/sealed) within 24 hours of drilling, unless special conditions are approved beforehand in writing as part of this permit, and must be continuously protected and stabilized.
E. Analytical results of all soil, vapor, and groundwater samples collected during the execution of drilling under this permit **must** be submitted to County GPP staff by the Responsible Professional within 60 days of sample collection. If contamination is discovered during drilling, verbal notification to County GPP by the Responsible Professional is **required** within 72 hours of discovery. Proper storage, labeling & disposal of investigation-derived residual wastes are the responsibility of the consultant unless stated otherwise contractually.
F. A copy of the State DWR Form 188, boring logs, well construction details, and finalized as-built locations for all borings/ wells (except geotechnical borings) signed by a Responsible Professional, **must** be submitted to County GPP by the Responsible Professional within 60 days of drilling/construction/destruction.
G. Permit is valid only for the purpose specified herein. No change in purpose or required procedures, as described on this permit application, in the associated workplan, or in the special conditions below, will be allowed except upon written permission from the County. Construction aspects can be changed based on conditions encountered in the field.
H. **Permit is valid for one mobilization** associated with originally permitted boring/well locations only, including contingency locations, and is automatically canceled if not exercised, or if an extension is not applied for and granted within 120 days of the original permit issuance date. Failure to notify staff of cancellation or delay in start time will result in the Consultant being billed an Inspection Cancellation fee of $342 as of August 1, 2017 if GPP staff attempted to perform an inspection.
I. Wells installed under this permit may not be used for domestic, municipal, agricultural, or irrigation water supply.
J. All work performed **must** conform to Business and Profession Codes and State Water Well Standards.
K. Top-of-casing elevation of all wells **must** be surveyed to the nearest 0.01-foot relative to Mean Sea Level or NAVD88 and submitted to County GPP within 60 days of drilling, and to State GeoTracker as appropriate. Geotechnical wells are exempt from this requirement if a written variance from GPP is obtained prior to drilling.
L. Latitude and longitude of all wells **must** be surveyed with sub-meter accuracy relative to NAD83 and submitted to County GPP within 60 days of drilling, and to State GeoTracker as appropriate.
M. Violation of any requirement or general or special permit condition may result in an order by GPP staff to cease work under this permit, correct the violation, potentially re-permit the work as a new mobilization, and potential actions may be taken against the Well Owner, Property Owner, or Responsible Professional by GPP.

SPECIAL CONDITIONS: _____
(agency use only)

For Agency Use Only:
County Approval: _____ FA# _____ Date: 12/5/18

Revised every January 1



Legend

Proposed Sample Location and Soil Analyses
- Metals
- Metals, VOCs, SVOCs, PCBs, OCPs, TPH, Asbestos
- Monitoring Well Location
- Piezometer Location
- Property Boundary
- Drainage Ditch
- Parcel Boundary and APN
- Wetlands
- Approximate Former Oil Tank Location
- Approximate Former Underground Storage Tank (UST) Location
- Railroad Tracks
- Current/Former Building Footprint

Note:
- All locations are approximate

N

0 250 Feet

Proposed Sample Locations

Brisbane OU-2
Brisbane, California

Geosyntec consultants

WG2245 | November 2018

Figure X

D:\GIS\UPC\Brisbane\Project\2018_DataGapAnalysis - OU2\Fig0X_SPropSampleLocsv2.mxd 11/26/2018 10:05:30 AM

ORDINANCE: 04023

ENVIRONMENTAL HEALTH
SAN MATEO COUNTY

Protecting Our Health and Environment

PERMIT 18-1878

P/E: 2100 **BUSINESS PLAN - GENERAL**

FACILITY:
2500 BAYSHORE BLVD, BRISBANE (13)

OWNER:
UNIVERSAL PARAGON CORP
150 EXECUTIVE PARK BLVD STE 4000
SAN FRANCISCO

WP0012129 FA0065283
005340100
AMOUNT PAID: 747.00

CONTRACTOR:
PENECORE DRILLING

TERMS & CONDITIONS:

CONSTRUCT SOIL BORINGS (13)
CONSULTANT: GEOSYNTEC CONSULTANTS
PROJECT MANAGER: ANTHONY SMITH

KIAN ATKINSON
ENVIRONMENTAL HEALTH SPECIALIST

DATE ISSUED: 12/6/2018

EXPIRATION DATE: 4/6/2019

THIS PERMIT IS NONTRANSFERABLE AND MUST BE POSTED ON-SITE IN A CONSPICUOUS PLACE

PAID
$747.00
CK # 267 via mail

App 3 of 6

SAN MATEO COUNTY
ENVIRONMENTAL HEALTH
DEC 04 2018
RECEIVED

COUNTY OF SAN MATEO
HEALTH SYSTEM

Environmental Health Services
Groundwater Protection Program
2000 Alameda de las Pulgas, Suite #100
San Mateo, CA 94403
Phone:(650) 372-6200 Fax: (650) 627-8244
smchealth.org/gpp

SUBSURFACE DRILLING PERMIT APPLICATION

Allow three (3) full working days for processing a complete permit application which includes payment (one permit per parcel). Drilling **start date & time** must be scheduled with County staff at (650) 464-0047 or drilling@smcgov.org **at least 2 full working days (i.e. 48 hours) in advance.** Visit smchealth.org/ehfees for Groundwater Protection Program Fees

PURPOSE OF APPLICATION ☐ Groundwater Monitoring/Vapor Well Installation ☒ Construct Soil Borings (variance request if to be left open >24 hrs)
☐ Groundwater Monitoring/Vapor Well Destruction Extension of Permit # _____
No. of Wells 0 No. of Borings 13 Well/Boring Names See figure

PURPOSE OF DRILLING ☒ Environmental ☐ Geotechnical
LEAD AGENCY ☐ County GPP (permit approval is not to be considered work plan approval) ☒ RWQCB/DTSC/USEPA (Provide approval letter) ☐ None (i.e. voluntary)

SITE / DRILLING INFORMATION

Agency Case # 2020111 Assessor's Parcel # (required) 005-340-100 (one per permit)
Drilling Location Address: 2500 Bayshore Blvd. City: Brisbane Zip: 94134
To Be Constructed In: ☐ Public Property ☒ Private Property ☐ Refuse
Maximum Proposed Depth (wells/borings) 10 (feet) Drilling Method: Direct Push
Boring Diameter: 3-inch Casing Diameter: N/A Filter Pack Interval: N/A Screen Interval: N/A
Destruction Method: ☐ Pressure Grouting (provide well construction logs and grout calcs)
(6 gallons water max/94 lb cement, up to 5% bentonite) ☐ Overdrilling (guide rods for total depth prior to starting required)

WELL/BORING OWNER (Well/boring owner name or contact person should match signature)

Name: Universal Paragon Corporation Contact Person: Howard Pearce
Address: 150 Executive Park Blvd., Suite 4000 City, State, Zip: San Francisco, CA 94134
Telephone: 415.468.6676x114 Email: hpearce@upcsf.com

It is my responsibility to notify the County of any known changes in the purpose of this well/boring from that which is indicated on this application, to submit indication of annual usage of wells to the County, and to maintain the well in good condition. *(Letter signed by well/boring owner/contact person, containing above language and attesting to knowledge of all permit requirements and conditions, may be substituted for signature.)*
Well/Boring Owner's/Contact Person's Signature: _____ Date: 12-3-18

PROPERTY OWNER (Name as appears on assessor's roles should match signature)

Name: Universal Paragon Corporation Contact Person: Howard Pearce
Address: 150 Executive Park Blvd., Suite 4000 City, State, Zip: San Francisco, CA 94134
Telephone: 415.468.6676x114 Email: hpearce@upcsf.com

I understand that a well/boring is being installed on my property. I agree to notify the County and Well Owner of any known damage or future access issues to the well *(Letter signed by property owner, containing above language, or encroachment permit may be substituted for signature)*
Property Owner's Signature: _____ Date: 12-3-18

DRILLING COMPANY

Drilling Company: Penecore Drilling Contact Person: Xavier Green
Address: 220 N. East Street City, State, Zip: Woodland, CA 95776
Telephone: 530-661-3600 Email: xavier@penecore.com C57 Drillers License # 906899

I certify that the well/boring will be constructed in compliance with the conditions of this permit (see reverse), the San Mateo County Well Ordinance, and the State Water Well Standards, and that the license listed above is considered current and active by the Contractors State License Board.
Driller's Signature: _____ Date: 12.3.18

CONSULTANT COMPANY

Consultant Company: Geosyntec Consultants Project Manager: Anthony Smith
Address: 1111 Broadway, 6th Floor City, State, Zip: Oakland, CA 94607
Telephone: 510-285-2770 Email: tsmith@geosyntec.com
Field Contact & Cell # (if known): Miranda Kahrilas, 847.530.7602

I certify that this application is correct to the best of my knowledge and the well/boring will be constructed/destroyed in compliance with the conditions of this permit (see reverse), the San Mateo County Well Ordinance, and the State Water Well Standards. I understand that I am responsible for General Conditions E, F, K, and L of this permit and if I indicated the purpose of drilling is geotechnical, then no one will use the boring to collect any samples for environmental analyses. If there is a change in Responsible Professional, I will notify San Mateo County GPP staff.
Responsible Professional's Name (Please print legibly): Anthony Smith
Responsible Professional's Signature: _____ Date: 12/3/18
California Professional Geologist (PG) No. _____ or Civil Engineer (PE) No. C8473

REV 5/23/18

FA0065283

REQUIREMENTS:

An accurate and correct map **must** be submitted with the application and include the following: north arrow, existing and historic site features, existing and proposed well/boring locations with ID's to scale, property lines and any other pertinent information. A work plan describing the drilling and construction/destruction methodology may be requested by County staff. A complete application with appropriate fees must be submitted 3 working days in advance of drilling and notification of start date and time must be provided at least 2 working days prior to drilling. The permit is subject to both General and Special Conditions stated below. A copy of the approved Subsurface Drilling Permit **must** be available on site while work related to the permit is being performed. **Drilling may begin at the notified date and time whether County staff is present or not.**

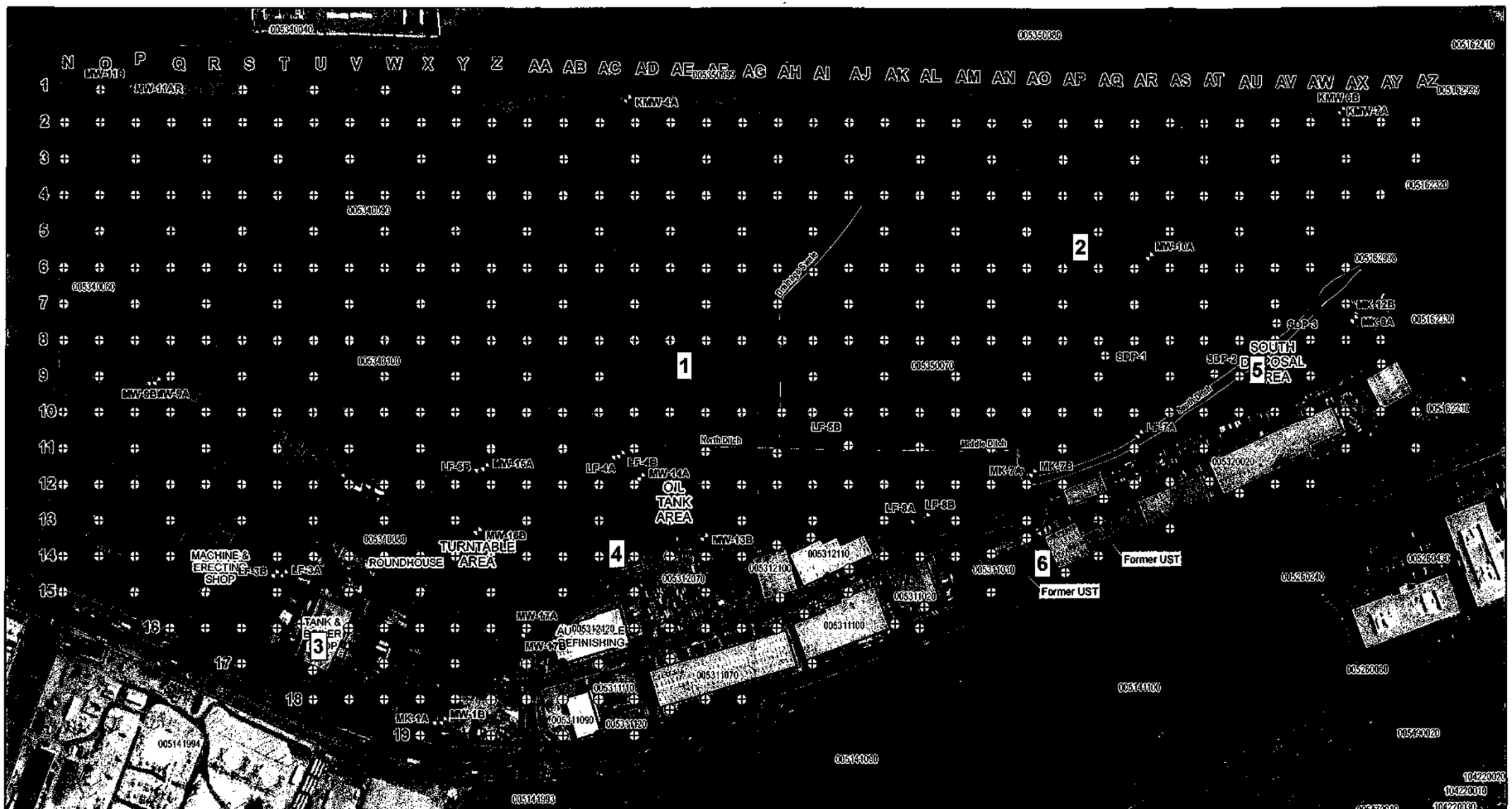
GENERAL CONDITIONS:

A. Field notification must be provided to GPP drilling inspection staff at least 2 full working days prior to the start of drilling. GPP Caseworker needs a separate notification if it is a contaminated site.
B. Well and boring construction and destruction under this permit are subject to the Standards for the Construction of Wells in San Mateo County, County Groundwater Protection Program (GPP) Guidelines, Policies & Procedures, the State Water Well Standards, and any instructions by a Health Department representative.
C. Well/Boring Owner, Driller, and Responsible Professional assume responsibility for all activities and uses under the permit, including compliance with Workmen's Compensation Laws, and indemnify, defend and save the County of San Mateo, its officers, agents and employees, free and harmless from any and all expense, cost, or liability in connection with or resulting from work or stopped-work associated with the permit, including, but not limited to, property damage, personal injury, wrongful death, and loss of income.
D. All borings **must** be properly destroyed (grouted/sealed) within 24 hours of drilling, unless special conditions are approved beforehand in writing as part of this permit, and must be continuously protected and stabilized.
E. Analytical results of all soil, vapor, and groundwater samples collected during the execution of drilling under this permit **must** be submitted to County GPP staff by the Responsible Professional within 60 days of sample collection. If contamination is discovered during drilling, verbal notification to County GPP by the Responsible Professional is **required** within 72 hours of discovery. Proper storage, labeling & disposal of investigation-derived residual wastes are the responsibility of the consultant unless stated otherwise contractually.
F. A copy of the State DWR Form 188, boring logs, well construction details, and finalized as-built locations for all borings/ wells (except geotechnical borings) signed by a Responsible Professional, **must** be submitted to County GPP by the Responsible Professional within 60 days of drilling/construction/destruction.
G. Permit is valid only for the purpose specified herein. No change in purpose or required procedures, as described on this permit application, in the associated workplan, or in the special conditions below, will be allowed except upon written permission from the County. Construction aspects can be changed based on conditions encountered in the field.
H. **Permit is valid for one mobilization** associated with originally permitted boring/well locations only, including contingency locations, and is automatically canceled if not exercised, or if an extension is not applied for and granted within 120 days of the original permit issuance date. Failure to notify staff of cancellation or delay in start time will result in the Consultant being billed an Inspection Cancellation fee of $342 as of August 1, 2017 if GPP staff attempted to perform an inspection.
I. Wells installed under this permit may not be used for domestic, municipal, agricultural, or irrigation water supply.
J. All work performed **must** conform to Business and Profession Codes and State Water Well Standards.
K. Top-of-casing elevation of all wells **must** be surveyed to the nearest 0.01-foot relative to Mean Sea Level or NAVD88 and submitted to County GPP within 60 days of drilling, and to State GeoTracker as appropriate. Geotechnical wells are exempt from this requirement if a written variance from GPP is obtained prior to drilling.
L. Latitude and longitude of all wells **must** be surveyed with sub-meter accuracy relative to NAD83 and submitted to County GPP within 60 days of drilling, and to State GeoTracker as appropriate.
M. Violation of any requirement or general or special permit condition may result in an order by GPP staff to cease work under this permit, correct the violation, potentially re-permit the work as a new mobilization, and potential actions may be taken against the Well Owner, Property Owner, or Responsible Professional by GPP.

SPECIAL CONDITIONS: _____
(agency use only)

For Agency Use Only:
County Approval: _____ FA# _____ Date: 12/5/18

Revised every January 1



Legend

Proposed Sample Location and Soil Analyses
- Metals
- Metals, VOCs, SVOCs, PCBs, OCPs, TPH, Asbestos
- Monitoring Well Location
- Piezometer Location
- Property Boundary
- Drainage Ditch
- Parcel Boundary and APN
- Wetlands
- Approximate Former Oil Tank Location
- Approximate Former Underground Storage Tank (UST) Location
- Railroad Tracks
- Current/Former Building Footprint

Note:
- All locations are approximate

N

0 250 Feet

Proposed Sample Locations

Brisbane OU-2
Brisbane, California

Geosyntec consultants

WG2245 | November 2018

Figure X

D:\GIS\UPC\Brisbane\Project\2018_DataGapAnalysis - OU2\Fig0X_SPropSampleLocsv2.mxd 11/26/2018 10:05:30 AM

ORDINANCE: 04023

ENVIRONMENTAL HEALTH
SAN MATEO COUNTY

Protecting Our Health and Environment

PERMIT 18-1879

P/E: 2010 **MONITORING WELLS - INSTALLATION/DESTRUCTION**

FACILITY:
2500 BAYSHORE BLVD, BRISBANE (49)

OWNER:
UNIVERSAL PARAGON CORP
150 EXECUTIVE PARK BLVD STE 4000
SAN FRANCISCO

WP0012130 FA0065283
005350070
AMOUNT PAID: 747.00

CONTRACTOR:
PENECORE DRILLING

TERMS & CONDITIONS:

CONSTRUCT SOIL BORINGS (49)
CONSULTANT: GEOSYNTEC CONSULTANTS
PROJECT MANAGER: ANTHONY SMITH

KIAN ATKINSON
ENVIRONMENTAL HEALTH SPECIALIST

DATE ISSUED: 12/6/2018

EXPIRATION DATE: 4/6/2019

THIS PERMIT IS NONTRANSFERABLE AND MUST BE POSTED ON-SITE IN A CONSPICUOUS PLACE

PAID $747.00 CK #267 via mail App 4 of 6

SAN MATEO COUNTY ENVIRONMENTAL HEALTH
DEC 04 2018
RECEIVED

COUNTY OF SAN MATEO
HEALTH SYSTEM

Environmental Health Services
Groundwater Protection Program
2000 Alameda de las Pulgas, Suite #100
San Mateo, CA 94403
Phone:(650) 372-6200 Fax: (650) 627-8244
smchealth.org/gpp

SUBSURFACE DRILLING PERMIT APPLICATION

Allow three (3) full working days for processing a complete permit application which includes payment (one permit per parcel). Drilling **start date & time** must be scheduled with County staff at (650) 464-0047 or drilling@smcgov.org **at least 2 full working days (i.e. 48 hours) in advance.** Visit smchealth.org/ehfees for Groundwater Protection Program Fees

PURPOSE OF APPLICATION ☐ Groundwater Monitoring/Vapor Well Installation ☒ Construct Soil Borings (variance request if to be left open >24 hrs)
☐ Groundwater Monitoring/Vapor Well Destruction Extension of Permit # _____
No. of Wells 0 No. of Borings 49 Well/Boring Names See figure

PURPOSE OF DRILLING ☒ Environmental ☐ Geotechnical **LEAD AGENCY** ☐ County GPP (permit approval is not to be considered work plan approval) ☒ RWQCB/DTSC/USEPA (Provide approval letter) ☐ None (i.e. voluntary)

SITE / DRILLING INFORMATION

Agency Case # 2020111 Assessor's Parcel # (required) 005-350-070 (one per permit)
Drilling Location Address: 2500 Bayshore Blvd. City: Brisbane Zip: 94134
To Be Constructed In: ☐ Public Property ☒ Private Property ☐ Refuse
Maximum Proposed Depth (wells/borings) 10 (feet) Drilling Method: Direct Push
Boring Diameter: 3-inch Casing Diameter: N/A Filter Pack Interval: N/A Screen Interval: N/A
Destruction Method: ☐ Pressure Grouting (provide well construction logs and grout calcs)
(6 gallons water max/94 lb cement, up to 5% bentonite) ☐ Overdrilling (guide rods for total depth prior to starting required)

WELL/BORING OWNER (Well/boring owner name or contact person should match signature)

Name: Universal Paragon Corporation Contact Person: Howard Pearce
Address: 150 Executive Park Blvd., Suite 4000 City, State, Zip: San Francisco, CA 94134
Telephone: 415.468.6676x114 Email: hpearce@upcsf.com
It is my responsibility to notify the County of any known changes in the purpose of this well/boring from that which is indicated on this application, to submit indication of annual usage of wells to the County, and to maintain the well in good condition. *(Letter signed by well/boring owner/contact person, containing above language and attesting to knowledge of all permit requirements and conditions, may be substituted for signature.)*
Well/Boring Owner's/Contact Person's Signature: [signature] Date: 12-3-18

PROPERTY OWNER (Name as appears on assessor's roles should match signature)

Name: Universal Paragon Corporation Contact Person: Howard Pearce
Address: 150 Executive Park Blvd., Suite 4000 City, State, Zip: San Francisco, CA 94134
Telephone: 415.468.6676x114 Email: hpearce@upcsf.com
I understand that a well/boring is being installed on my property. I agree to notify the County and Well Owner of any known damage or future access issues to the well *(Letter signed by property owner, containing above language, or encroachment permit may be substituted for signature)*
Property Owner's Signature: [signature] Date: 12-3-18

DRILLING COMPANY

Drilling Company: Penecore Drilling Contact Person: Xavier Green
Address: 220 N. East Street City, State, Zip: Woodland, CA 95776
Telephone: 530-661-3600 Email: xavier@penecore.com C57 Drillers License # 906899
I certify that the well/boring will be constructed in compliance with the conditions of this permit (see reverse), the San Mateo County Well Ordinance, and the State Water Well Standards, and that the license listed above is considered current and active by the Contractors State License Board.
Driller's Signature: [signature] Date: 12.3.18

CONSULTANT COMPANY

Consultant Company: Geosyntec Consultants Project Manager: Anthony Smith
Address: 1111 Broadway, 6th Floor City, State, Zip: Oakland, CA 94607
Telephone: 510-285-2770 Email: tsmith@geosyntec.com
Field Contact & Cell # (if known): Miranda Kahrilas, 847.530.7602
I certify that this application is correct to the best of my knowledge and the well/boring will be constructed/destroyed in compliance with the conditions of this permit (see reverse), the San Mateo County Well Ordinance, and the State Water Well Standards. I understand that I am responsible for General Conditions E, F, K, and L of this permit and if I indicated the purpose of drilling is geotechnical, then no one will use the boring to collect any samples for environmental analyses. If there is a change in Responsible Professional, I will notify San Mateo County GPP staff.
Responsible Professional's Name (Please print legibly): Anthony Smith
Responsible Professional's Signature: [signature] Date: 12/3/18
California Professional Geologist (PG) No. _____ or Civil Engineer (PE) No. C81473

REV. 5/23/18

FA0065283

REQUIREMENTS:

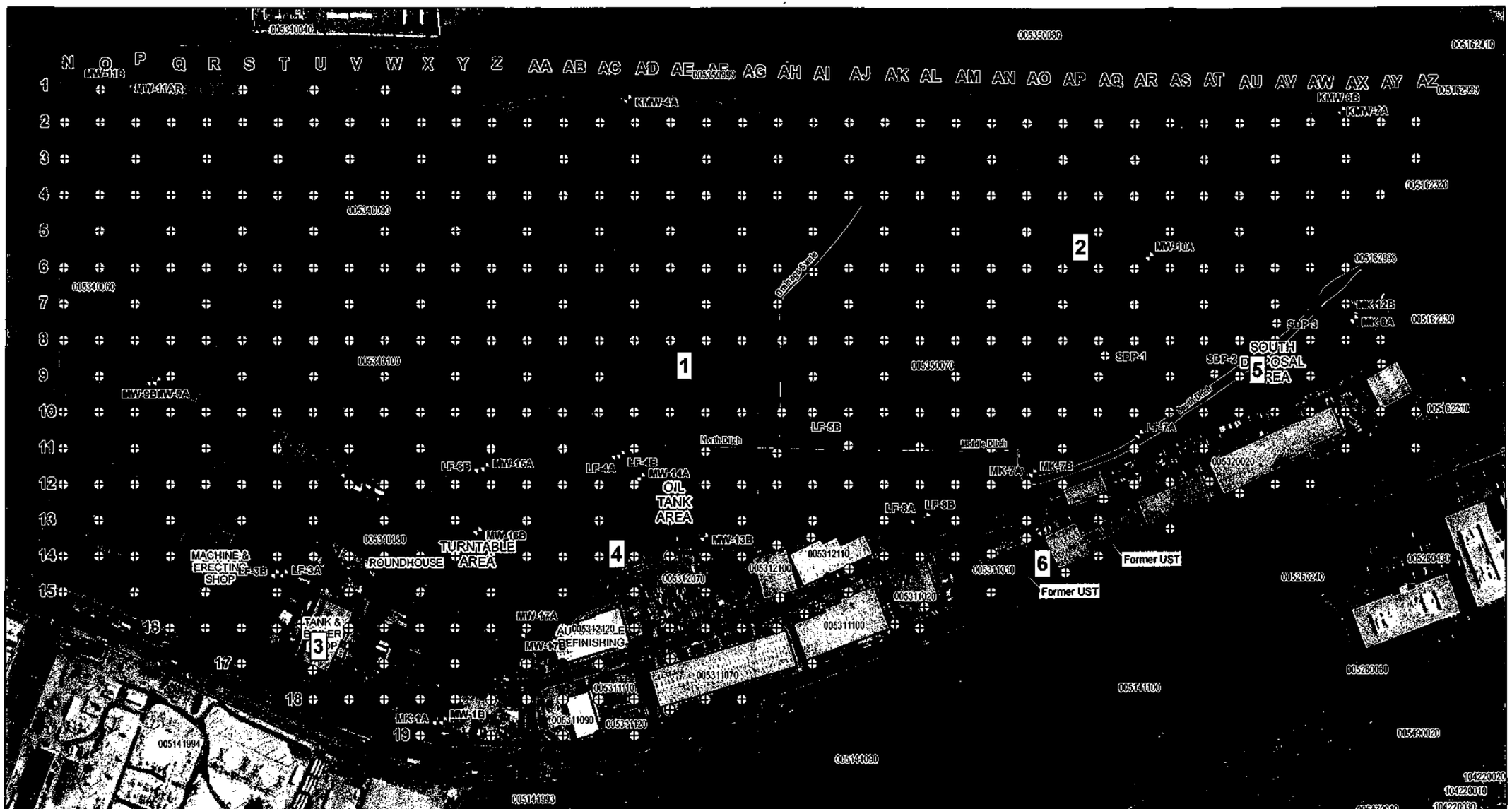
An accurate and correct map **must** be submitted with the application and include the following: north arrow, existing and historic site features, existing and proposed well/boring locations with ID's to scale, property lines and any other pertinent information. A work plan describing the drilling and construction/destruction methodology may be requested by County staff. A complete application with appropriate fees must be submitted 3 working days in advance of drilling and notification of start date and time must be provided at least 2 working days prior to drilling. The permit is subject to both General and Special Conditions stated below. A copy of the approved Subsurface Drilling Permit **must** be available on site while work related to the permit is being performed. **Drilling may begin at the notified date and time whether County staff is present or not.**

GENERAL CONDITIONS:

A. Field notification must be provided to GPP drilling inspection staff at least 2 full working days prior to the start of drilling. GPP Caseworker needs a separate notification if it is a contaminated site.
B. Well and boring construction and destruction under this permit are subject to the Standards for the Construction of Wells in San Mateo County, County Groundwater Protection Program (GPP) Guidelines, Policies & Procedures, the State Water Well Standards, and any instructions by a Health Department representative.
C. Well/Boring Owner, Driller, and Responsible Professional assume responsibility for all activities and uses under the permit, including compliance with Workmen's Compensation Laws, and indemnify, defend and save the County of San Mateo, its officers, agents and employees, free and harmless from any and all expense, cost, or liability in connection with or resulting from work or stopped-work associated with the permit, including, but not limited to, property damage, personal injury, wrongful death, and loss of income.
D. All borings **must** be properly destroyed (grouted/sealed) within 24 hours of drilling, unless special conditions are approved beforehand in writing as part of this permit, and must be continuously protected and stabilized.
E. Analytical results of all soil, vapor, and groundwater samples collected during the execution of drilling under this permit **must** be submitted to County GPP staff by the Responsible Professional within 60 days of sample collection. If contamination is discovered during drilling, verbal notification to County GPP by the Responsible Professional is **required** within 72 hours of discovery. Proper storage, labeling & disposal of investigation-derived residual wastes are the responsibility of the consultant unless stated otherwise contractually.
F. A copy of the State DWR Form 188, boring logs, well construction details, and finalized as-built locations for all borings/ wells (except geotechnical borings) signed by a Responsible Professional, **must** be submitted to County GPP by the Responsible Professional within 60 days of drilling/construction/destruction.
G. Permit is valid only for the purpose specified herein. No change in purpose or required procedures, as described on this permit application, in the associated workplan, or in the special conditions below, will be allowed except upon written permission from the County. Construction aspects can be changed based on conditions encountered in the field.
H. **Permit is valid for one mobilization** associated with originally permitted boring/well locations only, including contingency locations, and is automatically canceled if not exercised, or if an extension is not applied for and granted within 120 days of the original permit issuance date. Failure to notify staff of cancellation or delay in start time will result in the Consultant being billed an Inspection Cancellation fee of $342 as of August 1, 2017 if GPP staff attempted to perform an inspection.
I. Wells installed under this permit may not be used for domestic, municipal, agricultural, or irrigation water supply.
J. All work performed **must** conform to Business and Profession Codes and State Water Well Standards.
K. Top-of-casing elevation of all wells **must** be surveyed to the nearest 0.01-foot relative to Mean Sea Level or NAVD88 and submitted to County GPP within 60 days of drilling, and to State GeoTracker as appropriate. Geotechnical wells are exempt from this requirement if a written variance from GPP is obtained prior to drilling.
L. Latitude and longitude of all wells **must** be surveyed with sub-meter accuracy relative to NAD83 and submitted to County GPP within 60 days of drilling, and to State GeoTracker as appropriate.
M. Violation of any requirement or general or special permit condition may result in an order by GPP staff to cease work under this permit, correct the violation, potentially re-permit the work as a new mobilization, and potential actions may be taken against the Well Owner, Property Owner, or Responsible Professional by GPP.

SPECIAL CONDITIONS: _____
(agency use only)

For Agency Use Only:
County Approval: _____ FA# _____ Date: 12/5/18



Legend

Proposed Sample Location and Soil Analyses
- Metals
- Metals, VOCs, SVOCs, PCBs, OCPs, TPH, Asbestos
- Monitoring Well Location
- Piezometer Location
- Property Boundary
- Drainage Ditch
- Parcel Boundary and APN
- Wetlands
- Approximate Former Oil Tank Location
- Approximate Former Underground Storage Tank (UST) Location
- Railroad Tracks
- Current/Former Building Footprint

Note:
- All locations are approximate

N

0 250 Feet

Proposed Sample Locations

Brisbane OU-2
Brisbane, California

Geosyntec consultants

WG2245 | November 2018

Figure X

D:\GIS\UPC\Brisbane\Project\2018_DataGapAnalysis - OU2\Fig0X_SPropSampleLocsv2.mxd 11/26/2018 10:05:30 AM

ORDINANCE: 04023

ENVIRONMENTAL HEALTH
SAN MATEO COUNTY

Protecting Our Health and Environment

PERMIT 18-1880

P/E: 2010 **MONITORING WELLS - INSTALLATION/DESTRUCTION**

FACILITY:
2500 BAYSHORE BLVD, BRISBANE (22)

OWNER:
UNIVERSAL PARAGON CORP
150 EXECUTIVE PARK BLVD STE 4000
SAN FRANCISCO

WP0012131 FA0065283
005340080
AMOUNT PAID: 747.00

CONTRACTOR:
PENECORE DRILLING

TERMS & CONDITIONS:

CONSTRUCT SOIL BORINGS (22)
CONSULTANT: GEOSYNTEC CONSULTANTS
PROJECT MANAGER: ANTHONY SMITH

KIAN ATKINSON
ENVIRONMENTAL HEALTH SPECIALIST

DATE ISSUED: 12/6/2018

EXPIRATION DATE: 4/6/2019

THIS PERMIT IS NONTRANSFERABLE AND MUST BE POSTED ON-SITE IN A CONSPICUOUS PLACE

PAID $747.00 CK# 267 via mail App 5 of 6

SAN MATEO COUNTY ENVIRONMENTAL HEALTH
DEC 04 2018
RECEIVED

COUNTY OF SAN MATEO
HEALTH SYSTEM

Environmental Health Services
Groundwater Protection Program
2000 Alameda de las Pulgas, Suite #100
San Mateo, CA 94403
Phone:(650) 372-6200 Fax: (650) 627-8244
smchealth.org/gpp

SUBSURFACE DRILLING PERMIT APPLICATION

Allow three (3) full working days for processing a complete permit application which includes payment (one permit per parcel). Drilling **start date & time** must be scheduled with County staff at (650) 464-0047 or drilling@smcgov.org **at least 2 full working days (i.e. 48 hours) in advance.** Visit smchealth.org/ehfees for Groundwater Protection Program Fees

PURPOSE OF APPLICATION ☐ Groundwater Monitoring/Vapor Well Installation ☒ Construct Soil Borings (variance request if to be left open >24 hrs)
☐ Groundwater Monitoring/Vapor Well Destruction Extension of Permit # ____
No. of Wells 0 No. of Borings 22 Well/Boring Names see figure

PURPOSE OF DRILLING ☒ Environmental ☐ Geotechnical **LEAD AGENCY** ☐ County GPP (permit approval is not to be considered work plan approval) ☒ RWQCB/DTSC/USEPA (Provide approval letter) ☐ None (i.e. voluntary)

SITE / DRILLING INFORMATION

Agency Case # 2020111 Assessor's Parcel # (required) 005-340-080 (one per permit)
Drilling Location Address: 2500 Bayshore Blvd. City: Brisbane Zip: 94134
To Be Constructed In: ☐ Public Property ☒ Private Property ☐ Refuse
Maximum Proposed Depth (wells/borings) 10 (feet) Drilling Method: Direct Push
Boring Diameter: 3-inch Casing Diameter: N/A Filter Pack Interval: N/A Screen Interval: N/A
Destruction Method: ☐ Pressure Grouting (provide well construction logs and grout calcs)
(6 gallons water max/94 lb cement, up to 5% bentonite) ☐ Overdrilling (guide rods for total depth prior to starting required)

WELL/BORING OWNER (Well/boring owner name or contact person should match signature)

Name: Universal Paragon Corporation Contact Person: Howard Pearce
Address: 150 Executive Park Blvd., Suite 4000 City, State, Zip: San Francisco, CA 94134
Telephone: 415.468.6676x114 Email: hpearce@upcsf.com
It is my responsibility to notify the County of any known changes in the purpose of this well/boring from that which is indicated on this application, to submit indication of annual usage of wells to the County, and to maintain the well in good condition. *(Letter signed by well/boring owner/contact person, containing above language and attesting to knowledge of all permit requirements and conditions, may be substituted for signature.)*
Well/Boring Owner's/Contact Person's Signature: [signature] Date: 12-3-18

PROPERTY OWNER (Name as appears on assessor's roles should match signature)

Name: Universal Paragon Corporation Contact Person: Howard Pearce
Address: 150 Executive Park Blvd., Suite 4000 City, State, Zip: San Francisco, CA 94134
Telephone: 415.468.6676x114 Email: hpearce@upcsf.com
I understand that a well/boring is being installed on my property. I agree to notify the County and Well Owner of any known damage or future access issues to the well *(Letter signed by property owner, containing above language, or encroachment permit may be substituted for signature)*
Property Owner's Signature: [signature] Date: 12-3-18

DRILLING COMPANY

Drilling Company: Penecore Drilling Contact Person: Xavier Green
Address: 220 N. East Street City, State, Zip: Woodland, CA 95776
Telephone: 530-661-3600 Email: xavier@penecore.com C57 Drillers License # 906899
I certify that the well/boring will be constructed in compliance with the conditions of this permit (see reverse), the San Mateo County Well Ordinance, and the State Water Well Standards, and that the license listed above is considered current and active by the Contractors State License Board.
Driller's Signature: [signature] Date: 12.3.18

CONSULTANT COMPANY

Consultant Company: Geosyntec Consultants Project Manager: Anthony Smith
Address: 1111 Broadway, 6th Floor City, State, Zip: Oakland, CA 94607
Telephone: 510-285-2770 Email: tsmith@geosyntec.com
Field Contact & Cell # (if known): Miranda Kahrilas, 847.530.7602
I certify that this application is correct to the best of my knowledge and the well/boring will be constructed/destroyed in compliance with the conditions of this permit (see reverse), the San Mateo County Well Ordinance, and the State Water Well Standards. I understand that I am responsible for General Conditions E, F, K, and L of this permit and if I indicated the purpose of drilling is geotechnical, then no one will use the boring to collect any samples for environmental analyses. If there is a change in Responsible Professional, I will notify San Mateo County GPP staff.
Responsible Professional's Name (Please print legibly): Anthony Smith
Responsible Professional's Signature: [signature] Date: 12/3/18
California Professional Geologist (PG) No. ____ or Civil Engineer (PE) No. C8/473

REV 5/23/18

FA0065283

 2018 SUBSURFACE DRILLING PERMIT APPLICATION

REQUIREMENTS:

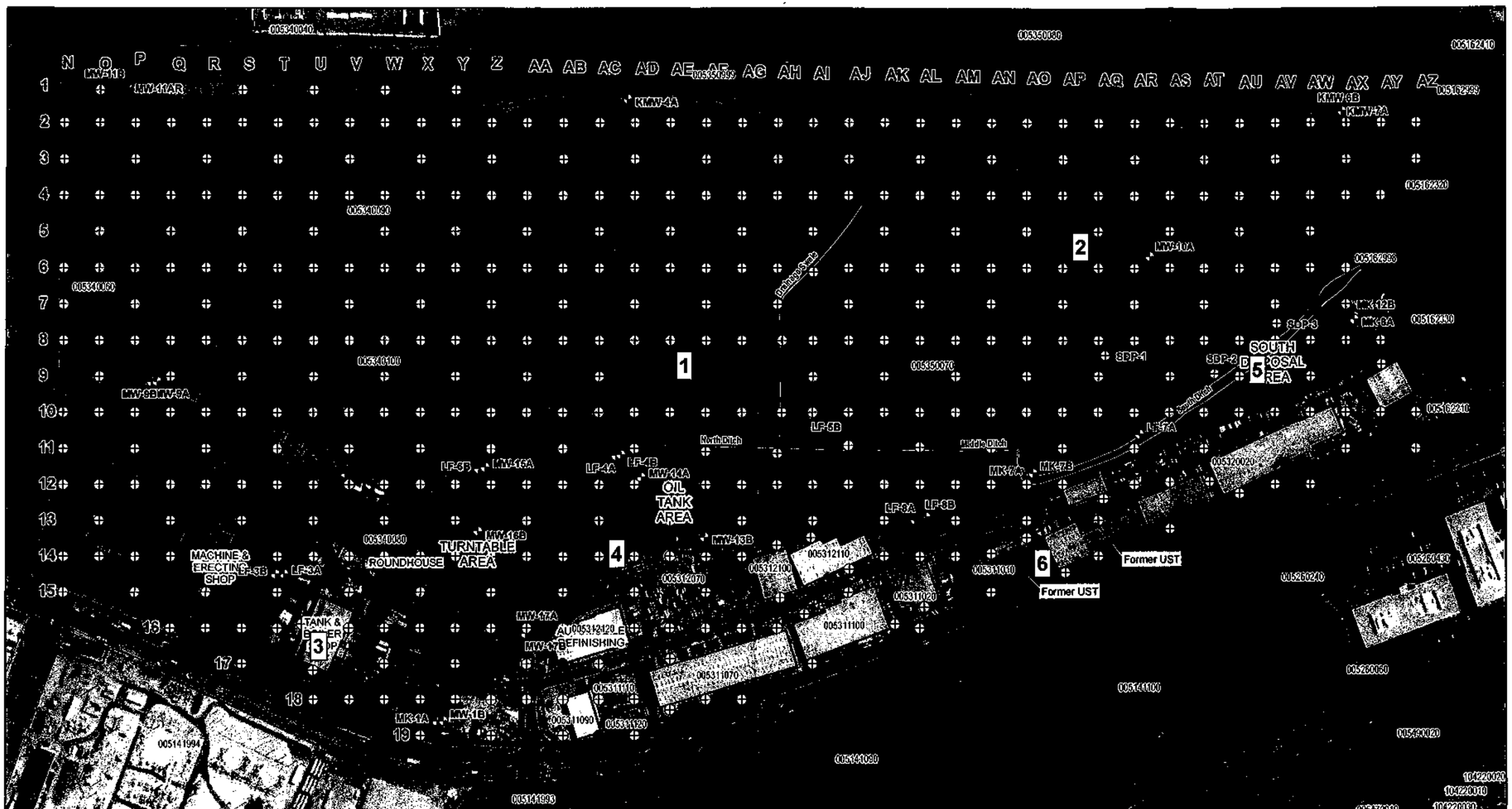
An accurate and correct map **must** be submitted with the application and include the following: north arrow, existing and historic site features, existing and proposed well/boring locations with ID's to scale, property lines and any other pertinent information. A work plan describing the drilling and construction/destruction methodology may be requested by County staff. A complete application with appropriate fees must be submitted 3 working days in advance of drilling and notification of start date and time must be provided at least 2 working days prior to drilling. The permit is subject to both General and Special Conditions stated below. A copy of the approved Subsurface Drilling Permit **must** be available on site while work related to the permit is being performed. **Drilling may begin at the notified date and time whether County staff is present or not.**

GENERAL CONDITIONS:

A. Field notification must be provided to GPP drilling inspection staff at least 2 full working days prior to the start of drilling. GPP Caseworker needs a separate notification if it is a contaminated site.
B. Well and boring construction and destruction under this permit are subject to the Standards for the Construction of Wells in San Mateo County, County Groundwater Protection Program (GPP) Guidelines, Policies & Procedures, the State Water Well Standards, and any instructions by a Health Department representative.
C. Well/Boring Owner, Driller, and Responsible Professional assume responsibility for all activities and uses under the permit, including compliance with Workmen's Compensation Laws, and indemnify, defend and save the County of San Mateo, its officers, agents and employees, free and harmless from any and all expense, cost, or liability in connection with or resulting from work or stopped-work associated with the permit, including, but not limited to, property damage, personal injury, wrongful death, and loss of income.
D. All borings **must** be properly destroyed (grouted/sealed) within 24 hours of drilling, unless special conditions are approved beforehand in writing as part of this permit, and must be continuously protected and stabilized.
E. Analytical results of all soil, vapor, and groundwater samples collected during the execution of drilling under this permit **must** be submitted to County GPP staff by the Responsible Professional within 60 days of sample collection. If contamination is discovered during drilling, verbal notification to County GPP by the Responsible Professional is **required** within 72 hours of discovery. Proper storage, labeling & disposal of investigation-derived residual wastes are the responsibility of the consultant unless stated otherwise contractually.
F. A copy of the State DWR Form 188, boring logs, well construction details, and finalized as-built locations for all borings/ wells (except geotechnical borings) signed by a Responsible Professional, **must** be submitted to County GPP by the Responsible Professional within 60 days of drilling/construction/destruction.
G. Permit is valid only for the purpose specified herein. No change in purpose or required procedures, as described on this permit application, in the associated workplan, or in the special conditions below, will be allowed except upon written permission from the County. Construction aspects can be changed based on conditions encountered in the field.
H. **Permit is valid for one mobilization** associated with originally permitted boring/well locations only, including contingency locations, and is automatically canceled if not exercised, or if an extension is not applied for and granted within 120 days of the original permit issuance date. Failure to notify staff of cancellation or delay in start time will result in the Consultant being billed an Inspection Cancellation fee of $342 as of August 1, 2017 if GPP staff attempted to perform an inspection.
I. Wells installed under this permit may not be used for domestic, municipal, agricultural, or irrigation water supply.
J. All work performed **must** conform to Business and Profession Codes and State Water Well Standards.
K. Top-of-casing elevation of all wells **must** be surveyed to the nearest 0.01-foot relative to Mean Sea Level or NAVD88 and submitted to County GPP within 60 days of drilling, and to State GeoTracker as appropriate. Geotechnical wells are exempt from this requirement if a written variance from GPP is obtained prior to drilling.
L. Latitude and longitude of all wells **must** be surveyed with sub-meter accuracy relative to NAD83 and submitted to County GPP within 60 days of drilling, and to State GeoTracker as appropriate.
M. Violation of any requirement or general or special permit condition may result in an order by GPP staff to cease work under this permit, correct the violation, potentially re-permit the work as a new mobilization, and potential actions may be taken against the Well Owner, Property Owner, or Responsible Professional by GPP.

SPECIAL CONDITIONS: _____
(agency use only)

For Agency Use Only
County Approval: _____ FA# _____ Date: 12/5/18



Legend

Proposed Sample Location and Soil Analyses
- Metals
- Metals, VOCs, SVOCs, PCBs, OCPs, TPH, Asbestos
- Monitoring Well Location
- Piezometer Location
- Property Boundary
- Drainage Ditch
- Parcel Boundary and APN
- Wetlands
- Approximate Former Oil Tank Location
- Approximate Former Underground Storage Tank (UST) Location
- Railroad Tracks
- Current/Former Building Footprint

Note:
- All locations are approximate

N

0 250 Feet

Proposed Sample Locations

Brisbane OU-2
Brisbane, California

Geosyntec consultants

WG2245 | November 2018

Figure X

D:\GIS\UPC\Brisbane\Project\2018_DataGapAnalysis - OU2\Fig0X_SPropSampleLocsv2.mxd 11/26/2018 10:05:30 AM

ORDINANCE: 04023

ENVIRONMENTAL HEALTH
SAN MATEO COUNTY

Protecting Our Health and Environment

PERMIT 18-1881

P/E: **2010 MONITORING WELLS - INSTALLATION/DESTRUCTION**

FACILITY:
2500 BAYSHORE BLVD, BRISBANE (7)

OWNER:
UNIVERSAL PARAGON CORP
150 EXECUTIVE PARK BLVD STE 4000
SAN FRANCISCO

WP0012132 FA0065283
005320020
AMOUNT PAID: 747.00

CONTRACTOR:
PENECORE DRILLING

TERMS & CONDITIONS:

CONSTRUCT SOIL BORINGS (7)
CONSULTANT: GEOSYNTEC CONSULTANTS
PROJECT MANAGER: ANTHONY SMITH

KIAN ATKINSON
ENVIRONMENTAL HEALTH SPECIALIST

DATE ISSUED: 12/6/2018

EXPIRATION DATE: 4/6/2019

THIS PERMIT IS NONTRANSFERABLE AND MUST BE POSTED ON-SITE IN A CONSPICUOUS PLACE

PAID App 6 of 6
$747.00
CK # 267 via mail

SAN MATEO COUNTY
ENVIRONMENTAL HEALTH
DEC 04 2018
RECEIVED

COUNTY OF SAN MATEO
HEALTH SYSTEM

Environmental Health Services
Groundwater Protection Program
2000 Alameda de las Pulgas, Suite #100
San Mateo, CA 94403
Phone:(650) 372-6200 Fax: (650) 627-8244
smchealth.org/gpp

SUBSURFACE DRILLING PERMIT APPLICATION

Allow three (3) full working days for processing a complete permit application which includes payment (one permit per parcel). Drilling **start date & time** must be scheduled with County staff at (650) 464-0047 or drilling@smcgov.org at **least 2 full working days (i.e. 48 hours) in advance.** Visit smchealth.org/ehfees for Groundwater Protection Program Fees

PURPOSE OF APPLICATION ☐ Groundwater Monitoring/Vapor Well Installation ☒ Construct Soil Borings (variance request if to be left open >24 hrs)
☐ Groundwater Monitoring/Vapor Well Destruction Extension of Permit # ____
No. of Wells 0 No. of Borings 7 Well/Boring Names See figure

PURPOSE OF DRILLING ☒ Environmental ☐ Geotechnical
LEAD AGENCY ☐ County GPP (permit approval is not to be considered work plan approval) ☒ RWQCB/DTSC/USEPA (Provide approval letter) ☐ None (i.e. voluntary)

SITE / DRILLING INFORMATION

Agency Case # 2020111 Assessor's Parcel # (required) 005-320-020 (one per permit)
Drilling Location Address: 2500 Bayshore Blvd. City: Brisbane Zip: 94134
To Be Constructed In: ☐ Public Property ☒ Private Property ☐ Refuse
Maximum Proposed Depth (wells/borings) 10 (feet) Drilling Method: Direct Push
Boring Diameter: 3-inch Casing Diameter: N/A Filter Pack Interval: N/A Screen Interval: N/A
Destruction Method: ☐ Pressure Grouting (provide well construction logs and grout calcs)
(6 gallons water max/94 lb cement, up to 5% bentonite) ☐ Overdrilling (guide rods for total depth prior to starting required)

WELL/BORING OWNER (Well/boring owner name or contact person should match signature)

Name: Universal Paragon Corporation Contact Person: Howard Pearce
Address: 150 Executive Park Blvd., Suite 4000 City, State, Zip: San Francisco, CA 94134
Telephone: 415.468.6676x114 Email: hpearce@upcsf.com
It is my responsibility to notify the County of any known changes in the purpose of this well/boring from that which is indicated on this application, to submit indication of annual usage of wells to the County, and to maintain the well in good condition. *(Letter signed by well/boring owner/contact person, containing above language and attesting to knowledge of all permit requirements and conditions, may be substituted for signature)*
Well/Boring Owner's/Contact Person's Signature: [signature] Date: 12-3-18

PROPERTY OWNER (Name as appears on assessor's roles should match signature)

Name: Universal Paragon Corporation Contact Person: Howard Pearce
Address: 150 Executive Park Blvd., Suite 4000 City, State, Zip: San Francisco, CA 94134
Telephone: 415.468.6676x114 Email: hpearce@upcsf.com
I understand that a well/boring is being installed on my property. I agree to notify the County and Well Owner of any known damage or future access issues to the well *(Letter signed by property owner, containing above language, or encroachment permit may be substituted for signature)*
Property Owner's Signature: [signature] Date: 12-3-18

DRILLING COMPANY

Drilling Company: Penecore Drilling Contact Person: Xavier Green
Address: 220 N. East Street City, State, Zip: Woodland, CA 95776
Telephone: 530-661-3600 Email: xavier@penecore.com C57 Drillers License # 906899
I certify that the well/boring will be constructed in compliance with the conditions of this permit (see reverse), the San Mateo County Well Ordinance, and the State Water Well Standards, and that the license listed above is considered current and active by the Contractors State License Board.
Driller's Signature: [signature] Date: 12-3-18

CONSULTANT COMPANY

Consultant Company: Geosyntec Consultants Project Manager: Anthony Smith
Address: 1111 Broadway, 6th Floor City, State, Zip: Oakland, CA 94607
Telephone: 510-285-2770 Email: tsmith@geosyntec.com
Field Contact & Cell # (if known): Miranda Kahrilas, 847.530.7602
I certify that this application is correct to the best of my knowledge and the well/boring will be constructed/destroyed in compliance with the conditions of this permit (see reverse), the San Mateo County Well Ordinance, and the State Water Well Standards. I understand that I am responsible for General Conditions E, F, K, and L of this permit and if I indicated the purpose of drilling is geotechnical, then no one will use the boring to collect any samples for environmental analyses. If there is a change in Responsible Professional, I will notify San Mateo County GPP staff.
Responsible Professional's Name (Please print legibly): Anthony Smith
Responsible Professional's Signature: [signature] Date: 12/3/18
California Professional Geologist (PG) No. ____ or Civil Engineer (PE) No. C8473

REV. 5/23/18

FA0065283

REQUIREMENTS:

An accurate and correct map **must** be submitted with the application and include the following: north arrow, existing and historic site features, existing and proposed well/boring locations with ID's to scale, property lines and any other pertinent information. A work plan describing the drilling and construction/destruction methodology may be requested by County staff. A complete application with appropriate fees must be submitted 3 working days in advance of drilling and notification of start date and time must be provided at least 2 working days prior to drilling. The permit is subject to both General and Special Conditions stated below. A copy of the approved Subsurface Drilling Permit **must** be available on site while work related to the permit is being performed. **Drilling may begin at the notified date and time whether County staff is present or not.**

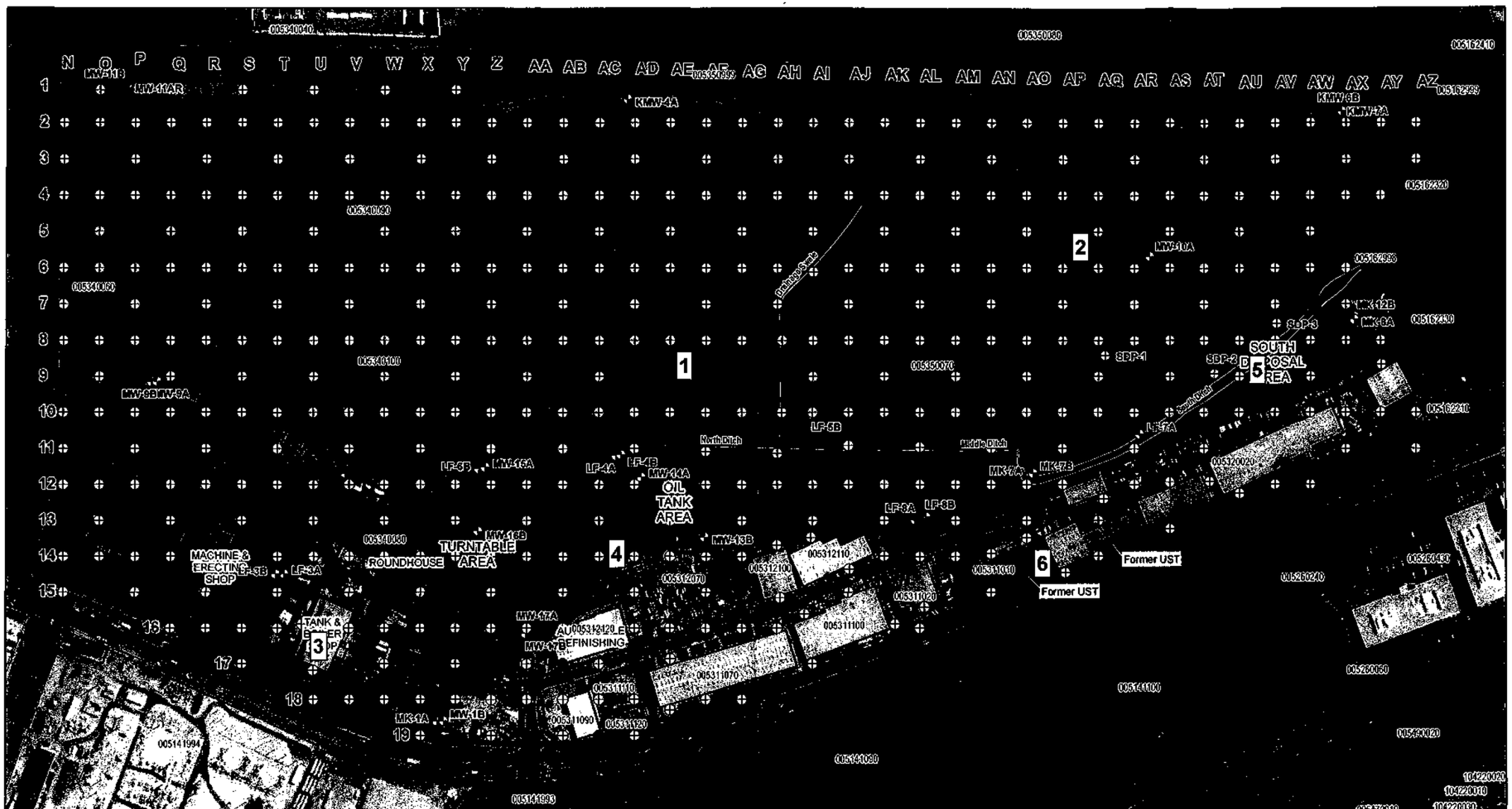
GENERAL CONDITIONS:

A. Field notification must be provided to GPP drilling inspection staff at least 2 full working days prior to the start of drilling. GPP Caseworker needs a separate notification if it is a contaminated site.
B. Well and boring construction and destruction under this permit are subject to the Standards for the Construction of Wells in San Mateo County, County Groundwater Protection Program (GPP) Guidelines, Policies & Procedures, the State Water Well Standards, and any instructions by a Health Department representative.
C. Well/Boring Owner, Driller, and Responsible Professional assume responsibility for all activities and uses under the permit, including compliance with Workmen's Compensation Laws, and indemnify, defend and save the County of San Mateo, its officers, agents and employees, free and harmless from any and all expense, cost, or liability in connection with or resulting from work or stopped-work associated with the permit, including, but not limited to, property damage, personal injury, wrongful death, and loss of income.
D. All borings **must** be properly destroyed (grouted/sealed) within 24 hours of drilling, unless special conditions are approved beforehand in writing as part of this permit, and must be continuously protected and stabilized.
E. Analytical results of all soil, vapor, and groundwater samples collected during the execution of drilling under this permit **must** be submitted to County GPP staff by the Responsible Professional within 60 days of sample collection. If contamination is discovered during drilling, verbal notification to County GPP by the Responsible Professional is **required** within 72 hours of discovery. Proper storage, labeling & disposal of investigation-derived residual wastes are the responsibility of the consultant unless stated otherwise contractually.
F. A copy of the State DWR Form 188, boring logs, well construction details, and finalized as-built locations for all borings/ wells (except geotechnical borings) signed by a Responsible Professional, **must** be submitted to County GPP by the Responsible Professional within 60 days of drilling/construction/destruction.
G. Permit is valid only for the purpose specified herein. No change in purpose or required procedures, as described on this permit application, in the associated workplan, or in the special conditions below, will be allowed except upon written permission from the County. Construction aspects can be changed based on conditions encountered in the field.
H. **Permit is valid for one mobilization** associated with originally permitted boring/well locations only, including contingency locations, and is automatically canceled if not exercised, or if an extension is not applied for and granted within 120 days of the original permit issuance date. Failure to notify staff of cancellation or delay in start time will result in the Consultant being billed an Inspection Cancellation fee of $342 as of August 1, 2017 if GPP staff attempted to perform an inspection.
I. Wells installed under this permit may not be used for domestic, municipal, agricultural, or irrigation water supply.
J. All work performed **must** conform to Business and Profession Codes and State Water Well Standards.
K. Top-of-casing elevation of all wells **must** be surveyed to the nearest 0.01-foot relative to Mean Sea Level or NAVD88 and submitted to County GPP within 60 days of drilling, and to State GeoTracker as appropriate. Geotechnical wells are exempt from this requirement if a written variance from GPP is obtained prior to drilling.
L. Latitude and longitude of all wells **must** be surveyed with sub-meter accuracy relative to NAD83 and submitted to County GPP within 60 days of drilling, and to State GeoTracker as appropriate.
M. Violation of any requirement or general or special permit condition may result in an order by GPP staff to cease work under this permit, correct the violation, potentially re-permit the work as a new mobilization, and potential actions may be taken against the Well Owner, Property Owner, or Responsible Professional by GPP.

SPECIAL CONDITIONS: _____
(agency use only)

For Agency Use Only:
County Approval: _____ FA# _____ Date: 12/5/18

Revised every January 1



Legend

Proposed Sample Location and Soil Analyses
- Metals
- Metals, VOCs, SVOCs, PCBs, OCPs, TPH, Asbestos
- Monitoring Well Location
- Piezometer Location
- Property Boundary
- Drainage Ditch
- Parcel Boundary and APN
- Wetlands
- Approximate Former Oil Tank Location
- Approximate Former Underground Storage Tank (UST) Location
- Railroad Tracks
- Current/Former Building Footprint

Note:
- All locations are approximate

N

0 250 Feet

Proposed Sample Locations

Brisbane OU-2
Brisbane, California

Geosyntec consultants

WG2245 | November 2018

Figure X

D:\GIS\UPC\Brisbane\Project\2018_DataGapAnalysis - OU2\Fig0X_SPropSampleLocsv2.mxd 11/26/2018 10:05:30 AM

ORDINANCE: 04023

ENVIRONMENTAL HEALTH
SAN MATEO COUNTY

Protecting Our Health and Environment

PERMIT 19-0131

P/E: 2010 **MONITORING WELLS - INSTALLATION/DESTRUCTION**

FACILITY:
21 INDUSTRIAL WAY, BRISBANE

OWNER:
UNIVERSAL PARAGON CORP
150 EXECUTIVE PARK BLVD # 4000
SAN FRANCISCO

WP0012174 FA0065487
005312120
AMOUNT PAID: 747.00

CONTRACTOR:
PENECORE DRILLING

TERMS & CONDITIONS:

CONSTRUCT SOIL BORINGS (2)
CONSULTANT: GEOSYNTEC CONSULTANTS
PROEJCT MGR: ANTHONY SMITH

KIAN ATKINSON
ENVIRONMENTAL HEALTH SPECIALIST

DATE ISSUED: 1/24/2019

EXPIRATION DATE: 5/24/2019

THIS PERMIT IS NONTRANSFERABLE AND MUST BE POSTED ON-SITE IN A CONSPICUOUS PLACE

mail

PAID
$ 747.00
check # 280

ENVIRONMENTAL HEALTH

JAN 22 2019

RECEIVED

APP 1 OF 5

COUNTY OF SAN MATEO
HEALTH SYSTEM

Environmental Health Services
Groundwater Protection Program
2000 Alameda de las Pulgas, Suite #100
San Mateo, CA 94403
Phone: (650) 372-6200 Fax: (650) 627-6244
smchealth.org/gpp

SUBSURFACE DRILLING PERMIT APPLICATION

Allow three (3) full working days for processing a complete permit application which includes payment (one permit per parcel). Drilling **start date & time** must be scheduled with County staff at (650) 464-0047 or drilling@smcgov.org **at least 2 full working days (i.e. 48 hours) in advance.** Visit smchealth.org/ehfees for Groundwater Protection Program Fees

PURPOSE OF APPLICATION ☐ Groundwater Monitoring/Vapor Well Installation ☒ Construct Soil Borings (variance request if to be left open >24 hrs)
☐ Groundwater Monitoring/Vapor Well Destruction Extension of Permit # _____
No. of Wells _____ No. of Borings 2 Well/Boring Names AB-17, AC-15

PURPOSE OF DRILLING ☒ Environmental ☐ Geotechnical **LEAD AGENCY** ☐ County GPP (permit approval is not to be considered work plan approval) ☒ RWQCB/DTSC/USEPA (Provide approval letter) ☐ None (i.e. voluntary)

SITE / DRILLING INFORMATION

Agency Case # 2020111 Assessor's Parcel # (required) 005-312-120 (one per permit)
Drilling Location Address: 21 INDUSTRIAL WAY City: Brisbane Zip: 94134
To Be Constructed In: ☐ Public Property ☒ Private Property ☐ Refuse
Maximum Proposed Depth (wells/borings) 20 (feet) Drilling Method: Direct Push or augers
Boring Diameter: 3-inch Casing Diameter: N/A Filter Pack Interval: N/A Screen Interval: N/A
Destruction Method: ☐ Pressure Grouting (provide well construction logs and grout calcs)
(6 gallons water max/94 lb cement, up to 5% bentonite) ☐ Overdrilling (guide rods for total depth prior to starting required)

WELL/BORING OWNER (Well/boring owner name or contact person should match signature)

Name: Universal Paragon Corporation Contact Person: Howard Pearce
Address: 150 Executive Park Blvd., Suite 4000 City, State, Zip: San Francisco, CA 94134
Telephone: 415.468.6676x114 Email: hpearce@upcsf.com

It is my responsibility to notify the County of any known changes in the purpose of this well/boring from that which is indicated on this application, to submit indication of annual usage of wells to the County, and to maintain the well in good condition. (*Letter signed by well/boring owner/contact person, containing above language and attesting to knowledge of all permit requirements and conditions, may be substituted for signature.*)
Well/Boring Owner's/Contact Person's Signature: _____ Date: _____

PROPERTY OWNER (Name as appears on assessor's roles should match signature)

Name: Universal Paragon Corporation Contact Person: Howard Pearce
Address: 150 Executive Park Blvd., Suite 4000 City, State, Zip: San Francisco, CA 94134
Telephone: 415.468.6676x114 Email: hpearce@upcsf.com

I understand that a well/boring is being installed on my property. I agree to notify the County and Well Owner of any known damage or future access issues to the well (*Letter signed by property owner, containing above language, or encroachment permit may be substituted for signature*)
Property Owner's Signature: _____ Date: _____

DRILLING COMPANY

Drilling Company: Penecore Drilling Contact Person: Xavier Green
Address: 220 N. East Street City, State, Zip: Woodland, CA 95776
Telephone: 530-661-3600 Email: xavier@penecore.com C57 Drillers License # 906899

I certify that the well/boring will be constructed in compliance with the conditions of this permit (see reverse), the San Mateo County Well Ordinance, and the State Water Well Standards, and that the license listed above is considered current and active by the Contractors State License Board.
Driller's Signature: _____ Date: 1/18/2019

CONSULTANT COMPANY

Consultant Company: Geosyntec Consultants Project Manager: Anthony Smith
Address: 1111 Broadway, 6th Floor City, State, Zip: Oakland, CA 94607
Telephone: 510-285-2770 Email: tsmith@geosyntec.com
Field Contact & Cell # (if known): Miranda Kahrilas, 847.530.7602

I certify that this application is correct to the best of my knowledge and the well/boring will be constructed/destroyed in compliance with the conditions of this permit (see reverse), the San Mateo County Well Ordinance, and the State Water Well Standards. I understand that I am responsible for General Conditions E, F, K, and L of this permit and if I indicated the purpose of drilling is geotechnical, then no one will use the boring to collect any samples for environmental analyses. If there is a change in Responsible Professional, I will notify San Mateo County GPP staff.
Responsible Professional's Name (Please print legibly): Anthony Smith
Responsible Professional's Signature: Anthony Smith Date: 1/18/2019
California Professional Geologist (PG) No. _____ or Civil Engineer (PE) No. C81473

REV. 5/23/18

FAG5487

SUBSURFACE DRILLING PERMIT APPLICATION

REQUIREMENTS:

An accurate and correct map **must** be submitted with the application and include the following: north arrow, existing and historic site features, existing and proposed well/boring locations with ID's to scale, property lines and any other pertinent information. A work plan describing the drilling and construction/destruction methodology may be requested by County staff. A complete application with appropriate fees must be submitted 3 working days in advance of drilling and notification of start date and time must be provided at least 2 working days prior to drilling. The permit is subject to both General and Special Conditions stated below. A copy of the approved Subsurface Drilling Permit **must** be available on site while work related to the permit is being performed. **Drilling may begin at the notified date and time whether County staff is present or not.**

GENERAL CONDITIONS:

A. Field notification must be provided to GPP drilling inspection staff at least 2 full working days prior to the start of drilling. GPP Caseworker also must be notified if site is associated with a remedial action case.
B. Well and boring construction and destruction under this permit are subject to the Standards for the Construction of Wells in San Mateo County, County Groundwater Protection Program (GPP) Guidelines, Policies & Procedures, the State Water Well Standards, and any instructions by a Health Department representative.
C. Well/Boring Owner, Driller, and Responsible Professional assume responsibility for all activities and uses under the permit, including compliance with Workmen's Compensation Laws, and indemnify, defend and save the County of San Mateo, its officers, agents and employees, free and harmless from any and all expense, cost, or liability in connection with or resulting from work or stopped-work associated with the permit, including, but not limited to, property damage, personal injury, wrongful death, and loss of income.
D. All borings **must** be properly destroyed (grouted/sealed) within 24 hours of drilling, unless special conditions are approved beforehand in writing as part of this permit, and must be continuously protected and stabilized.
E. Analytical results of all soil, vapor, and groundwater samples collected during the execution of drilling under this permit **must** be submitted to County GPP staff by the Responsible Professional within 60 days of sample collection. If contamination is discovered during drilling, verbal notification to County GPP by the Responsible Professional is **required** within 72 hours of discovery. Proper storage, labeling & disposal of investigation-derived residual wastes are the responsibility of the consultant unless stated otherwise contractually.
F. Boring logs, well construction details, and finalized as-built location map for all borings/ wells (except geotechnical borings) signed by a Responsible Professional, **must** be submitted to County GPP by the Responsible Professional within 60 days of drilling/construction/destruction. DWR Form 188 must be filed with the State per water code 13752.
G. Permit is valid only for the purpose specified herein. No change in purpose or required procedures, as described on this permit application, in the associated workplan, or in the special conditions below, will be allowed except upon written permission from the County. Construction aspects can be changed based on conditions encountered in the field.
H. **Permit is valid for one mobilization** associated with originally permitted boring/well locations only, including contingency locations, and is automatically canceled if not exercised, or if an extension is not applied for and granted within 120 days of the original permit issuance date. Failure to notify staff of cancellation or delay in start time will result in the Consultant being billed an Inspection Cancellation fee if GPP staff attempted to perform an inspection. Fees are listed at smchealth.org/ehfees
I. Wells installed under this permit may not be used for domestic, municipal, agricultural, or irrigation water supply.
J. All work performed **must** conform to Business and Profession Codes and State Water Well Standards.
K. Top-of-casing elevation of all wells **must** be surveyed to the nearest 0.01-foot relative to Mean Sea Level or NAVD88 and submitted to County GPP within 60 days of drilling, and to State GeoTracker as appropriate. Geotechnical wells are exempt from this requirement if a written variance from GPP is obtained prior to drilling.
L. Latitude and longitude of all wells **must** be surveyed with sub-meter accuracy relative to NAD83 and submitted to County GPP within 60 days of drilling, and to State GeoTracker as appropriate.
M. Violation of any requirement or general or special permit condition may result in an order by GPP staff to cease work under this permit, correct the violation, potentially re-permit the work as a new mobilization, and potential actions may be taken against the Well Owner, Property Owner, or Responsible Professional by GPP.

SPECIAL CONDITIONS: _____

(agency use only) _____

_____

_____

For Agency Use Only:
County Approval: _____ FA # _____ Date: 1/22/19

COUNTY OF SAN MATEO HEALTH SYSTEM

Environmental Health Services
Groundwater Protection Program
2000 Alameda de las Pulgas, Suite #100
San Mateo, CA 94403
Phone:(650) 372-6200 Fax: (650) 627-8244
smchealth.org/gpp

SUBSURFACE DRILLING PERMIT APPLICATION

Allow three (3) full working days for processing a complete permit application which includes payment (one permit per parcel). Drilling start date & time must be scheduled with County staff at (650) 464-0047 or drilling@smcgov.org at least 2 full working days (i.e. 48 hours) in advance. Visit smchealth.org/ehfees for Groundwater Protection Program Fees

PURPOSE OF APPLICATION ☐ Groundwater Monitoring/Vapor Well Installation ☒ Construct Soil Borings (variance request if to be left open >24 hrs)
☐ Groundwater Monitoring/Vapor Well Destruction Extension of Permit # _____
No. of Wells _____ No. of Borings 2 Well/Boring Names see previous page

PURPOSE OF DRILLING ☒ Environmental ☐ Geotechnical
LEAD AGENCY ☐ County GPP (permit approval is not to be considered work plan approval) ☒ RWQCB/DTSC/USEPA (Provide approval letter) ☐ None (i.e. voluntary)

SITE / DRILLING INFORMATION

Agency Case # 2020111 Assessor's Parcel # (required) 005-312-120 (one per permit)
Drilling Location Address: 2500 Bayshore Blvd. City: Brisbane Zip: 94134
To Be Constructed In: ☐ Public Property ☒ Private Property ☐ Refuse
Maximum Proposed Depth (wells/borings) 20 (feet) Drilling Method: Direct Push or augers
Boring Diameter: 3-inch Casing Diameter: N/A Filter Pack Interval: N/A Screen Interval: N/A
Destruction Method: ☐ Pressure Grouting (provide well construction logs and grout calcs)
(6 gallons water max/94 lb cement, up to 5% bentonite) ☐ Overdrilling (guide rods for total depth prior to starting required)

WELL/BORING OWNER (Well/boring owner name or contact person should match signature)

Name: Universal Paragon Corporation Contact Person: Howard Pearce
Address: 150 Executive Park Blvd., Suite 4000 City, State, Zip: San Francisco, CA 94134
Telephone: 415.468.6676x114 Email: hpearce@upcsf.com
It is my responsibility to notify the County of any known changes in the purpose of this well/boring from that which is indicated on this application, to submit indication of annual usage of wells to the County, and to maintain the well in good condition. *(Letter signed by well/boring owner/contact person, containing above language and attesting to knowledge of all permit requirements and conditions, may be substituted for signature.)*
Well/Boring Owner's/Contact Person's Signature: [signature] Date: 1-16-19

PROPERTY OWNER (Name as appears on assessor's roles should match signature)

Name: Universal Paragon Corporation Contact Person: Howard Pearce
Address: 150 Executive Park Blvd., Suite 4000 City, State, Zip: San Francisco, CA 94134
Telephone: 415.468.6676x114 Email: hpearce@upcsf.com
I understand that a well/boring is being installed on my property. I agree to notify the County and Well Owner of any known damage or future access issues to the well *(Letter signed by property owner, containing above language, or encroachment permit may be substituted for signature)*
Property Owner's Signature: [signature] Date: 1-16-19

DRILLING COMPANY

Drilling Company: Penecore Drilling Contact Person: Xavier Green
Address: 220 N. East Street City, State, Zip: Woodland, CA 95776
Telephone: 530-661-3600 Email: xavier@penecore.com C57 Drillers License # 906899
I certify that the well/boring will be constructed in compliance with the conditions of this permit (see reverse), the San Mateo County Well Ordinance, and the State Water Well Standards, and that the license listed above is considered current and active by the Contractors State License Board.
Driller's Signature: _____ Date: _____

CONSULTANT COMPANY

Consultant Company: Geosyntec Consultants Project Manager: Anthony Smith
Address: 1111 Broadway, 6th Floor City, State, Zip: Oakland, CA 94607
Telephone: 510-285-2770 Email: tsmith@geosyntec.com
Field Contact & Cell # (if known): Miranda Kahrilas, 847.530.7602
I certify that this application is correct to the best of my knowledge and the well/boring will be constructed/destroyed in compliance with the conditions of this permit (see reverse), the San Mateo County Well Ordinance, and the State Water Well Standards. I understand that I am responsible for General Conditions E, F, K, and L of this permit and if I indicated the purpose of drilling is geotechnical, then no one will use the boring to collect any samples for environmental analyses. If there is a change in Responsible Professional, I will notify San Mateo County GPP staff.
Responsible Professional's Name (Please print legibly): Anthony Smith
Responsible Professional's Signature: _____ Date: _____
California Professional Geologist (PG) No. _____ or Civil Engineer (PE) No. _____



Legend

Proposed Sample Location and Soil Analyses
- Metals
- Metals, VOCs, SVOCs, PCBs, OCPs, TPH, Asbestos
- Monitoring Well Location
- Piezometer Location
- Property Boundary
- Drainage Ditch
- Parcel Boundary and APN
- Wetlands
- Approximate Former Oil Tank Location
- Approximate Former Underground Storage Tank (UST) Location
- Railroad Tracks
- Current/Former Building Footprint

Note:
- All locations are approximate

Proposed Sample Locations

Brisbane OU-2
Brisbane, California

Geosyntec consultants

Figure X

WG2245 | November 2018

ORDINANCE: 04023

ENVIRONMENTAL HEALTH
SAN MATEO COUNTY

Protecting Our Health and Environment

PERMIT 19-0132

P/E: 2010 **MONITORING WELLS - INSTALLATION/DESTRUCTION**

FACILITY:
151 INDUSTRIAL WAY, BRISBANE

OWNER:
UNIVERSAL PARAGON CORP
150 EXECUTIVE PARK BLVD # 4000
SAN FRANCISCO

WP0012175 FA0065488
005312110
AMOUNT PAID: 747.00

CONTRACTOR:
PENECORE DRILLING

TERMS & CONDITIONS:

CONSTRUCT SOIL BORINGS (1)
CONSULTANT: GEOSYNTEC CONSULTANTS
PROEJCT MGR: ANTHONY SMITH

KIAN ATKINSON
ENVIRONMENTAL HEALTH SPECIALIST

DATE ISSUED: 1/24/2019

EXPIRATION DATE: 5/24/2019

THIS PERMIT IS NONTRANSFERABLE AND MUST BE POSTED ON-SITE IN A CONSPICUOUS PLACE

PAID
$747.00
CK #280

SAN MATEO COUNTY
ENVIRONMENTAL HEALTH

JAN 22 2019

RECEIVED

APP 2 OF 5

COUNTY OF SAN MATEO
HEALTH SYSTEM

Environmental Health Services
Groundwater Protection Program
[illegible] Alameda de las Pulgas, Suite #100
San Mateo, CA 94403
Phone:(650) 372-6200 Fax: (650) 627-8244
smchealth.org/gpp

SUBSURFACE DRILLING PERMIT APPLICATION

Allow three (3) full working days for processing a complete permit application which includes payment (one permit per parcel). Drilling **start date & time** must be scheduled with County staff at (650) 464-0047 or drilling@smcgov.org **at least 2 full working days (i.e. 48 hours) in advance.** Visit smchealth.org/ehfees for Groundwater Protection Program Fees

PURPOSE OF APPLICATION
☐ Groundwater Monitoring/Vapor Well Installation ☒ Construct Soil Borings (variance request if to be left open >24 hrs)
☐ Groundwater Monitoring/Vapor Well Destruction Extension of Permit #

No. of Wells ____ No. of Borings 1 Well/Boring Names AI-15

PURPOSE OF DRILLING
☒ Environmental ☐ Geotechnical

LEAD AGENCY
☐ County GPP (permit approval is not to be considered work plan approval)
☒ RWQCB/DTSC/USEPA (Provide approval letter) ☐ None (i.e. voluntary)

SITE / DRILLING INFORMATION

Agency Case # 2020111 Assessor's Parcel # (required) 005-312-110 (one per permit)

Drilling Location Address: 151 Industrial Way City: Brisbane Zip: 94134

To Be Constructed In: ☐ Public Property ☒ Private Property ☐ Refuse

Maximum Proposed Depth (wells/borings) 20 (feet) Drilling Method: Direct Push or augers

Boring Diameter: 3-inch Casing Diameter: N/A Filter Pack Interval: N/A Screen Interval: N/A

Destruction Method: ☐ Pressure Grouting (provide well construction logs and grout calcs)
(6 gallons water max/94 lb cement, up to 5% bentonite) ☐ Overdrilling (guide rods for total depth prior to starting required)

WELL/BORING OWNER

(Well/boring owner name or contact person should match signature)

Name: Universal Paragon Corporation Contact Person: Howard Pearce

Address: 150 Executive Park Blvd., Suite 4000 City, State, Zip: San Francisco, CA 94134

Telephone: 415.468.6676x114 Email: hpearce@upcsf.com

It is my responsibility to notify the County of any known changes in the purpose of this well/boring from that which is indicated on this application, to submit indication of annual usage of wells to the County, and to maintain the well in good condition. *(Letter signed by well/boring owner/contact person, containing above language and attesting to knowledge of all permit requirements and conditions, may be substituted for signature.)*

Well/Boring Owner's/Contact Person's Signature: ____ Date: ____

PROPERTY OWNER

(Name as appears on assessor's roles should match signature)

Name: Universal Paragon Corporation Contact Person: Howard Pearce

Address: 150 Executive Park Blvd., Suite 4000 City, State, Zip: San Francisco, CA 94134

Telephone: 415.468.6676x114 Email: hpearce@upcsf.com

I understand that a well/boring is being installed on my property. I agree to notify the County and Well Owner of any known damage or future access issues to the well *(Letter signed by property owner, containing above language, or encroachment permit may be substituted for signature)*

Property Owner's Signature: ____ Date: ____

DRILLING COMPANY

Drilling Company: Penecore Drilling Contact Person: Xavier Green

Address: 220 N. East Street City, State, Zip: Woodland, CA 95776

Telephone: 530-661-3600 Email: xavier@penecore.com C57 Drillers License # 906899

I certify that the well/boring will be constructed in compliance with the conditions of this permit (see reverse), the San Mateo County Well Ordinance, and the State Water Well Standards, and that the license listed above is considered current and active by the Contractors State License Board.

Driller's Signature: [signature] Date: 1/18/2019

CONSULTANT COMPANY

Consultant Company: Geosyntec Consultants Project Manager: Anthony Smith

Address: 1111 Broadway, 6th Floor City, State, Zip: Oakland, CA 94607

Telephone: 510-285-2770 Email: tsmith@geosyntec.com

Field Contact & Cell # (if known): Miranda Kahrilas, 847.530.7602

I certify that this application is correct to the best of my knowledge and the well/boring will be constructed/destroyed in compliance with the conditions of this permit (see reverse), the San Mateo County Well Ordinance, and the State Water Well Standards. I understand that I am responsible for General Conditions E, F, K, and L of this permit and if I indicated the purpose of drilling is geotechnical, then no one will use the boring to collect any samples for environmental analyses. If there is a change in Responsible Professional, I will notify San Mateo County GPP staff.

Responsible Professional's Name (Please print legibly): Anthony Smith

Responsible Professional's Signature: [signature] Date: 1/18/2019

California Professional Geologist (PG) No. ____ or Civil Engineer (PE) No. C81473

REV 5/23/18

FA65488

SUBSURFACE DRILLING PERMIT APPLICATION

REQUIREMENTS:

An accurate and correct map **must** be submitted with the application and include the following: north arrow, existing and historic site features, existing and proposed well/boring locations with ID's to scale, property lines and any other pertinent information. A work plan describing the drilling and construction/destruction methodology may be requested by County staff. A complete application with appropriate fees must be submitted 3 working days in advance of drilling and notification of start date and time must be provided at least 2 working days prior to drilling. The permit is subject to both General and Special Conditions stated below. A copy of the approved Subsurface Drilling Permit **must** be available on site while work related to the permit is being performed. **Drilling may begin at the notified date and time whether County staff is present or not.**

GENERAL CONDITIONS:

A. Field notification must be provided to GPP drilling inspection staff at least 2 full working days prior to the start of drilling. GPP Caseworker also must be notified if site is associated with a remedial action case.
B. Well and boring construction and destruction under this permit are subject to the Standards for the Construction of Wells in San Mateo County, County Groundwater Protection Program (GPP) Guidelines, Policies & Procedures, the State Water Well Standards, and any instructions by a Health Department representative.
C. Well/Boring Owner, Driller, and Responsible Professional assume responsibility for all activities and uses under the permit, including compliance with Workmen's Compensation Laws, and indemnify, defend and save the County of San Mateo, its officers, agents and employees, free and harmless from any and all expense, cost, or liability in connection with or resulting from work or stopped-work associated with the permit, including, but not limited to, property damage, personal injury, wrongful death, and loss of income.
D. All borings **must** be properly destroyed (grouted/sealed) within 24 hours of drilling, unless special conditions are approved beforehand in writing as part of this permit, and must be continuously protected and stabilized.
E. Analytical results of all soil, vapor, and groundwater samples collected during the execution of drilling under this permit **must** be submitted to County GPP staff by the Responsible Professional within 60 days of sample collection. If contamination is discovered during drilling, verbal notification to County GPP by the Responsible Professional is **required** within 72 hours of discovery. Proper storage, labeling & disposal of investigation-derived residual wastes are the responsibility of the consultant unless stated otherwise contractually.
F. Boring logs, well construction details, and finalized as-built location map for all borings/ wells (except geotechnical borings) signed by a Responsible Professional, **must** be submitted to County GPP by the Responsible Professional within 60 days of drilling/construction/destruction. DWR Form 188 must be filed with the State per water code 13752.
G. Permit is valid only for the purpose specified herein. No change in purpose or required procedures, as described on this permit application, in the associated workplan, or in the special conditions below, will be allowed except upon written permission from the County. Construction aspects can be changed based on conditions encountered in the field.
H. **Permit is valid for one mobilization** associated with originally permitted boring/well locations only, including contingency locations, and is automatically canceled if not exercised, or if an extension is not applied for and granted within 120 days of the original permit issuance date. Failure to notify staff of cancellation or delay in start time will result in the Consultant being billed an Inspection Cancellation fee if GPP staff attempted to perform an inspection. Fees are listed at smchealth.org/ehfees
I. Wells installed under this permit may not be used for domestic, municipal, agricultural, or irrigation water supply.
J. All work performed **must** conform to Business and Profession Codes and State Water Well Standards.
K. Top-of-casing elevation of all wells **must** be surveyed to the nearest 0.01-foot relative to Mean Sea Level or NAVD88 and submitted to County GPP within 60 days of drilling, and to State GeoTracker as appropriate. Geotechnical wells are exempt from this requirement if a written variance from GPP is obtained prior to drilling.
L. Latitude and longitude of all wells **must** be surveyed with sub-meter accuracy relative to NAD83 and submitted to County GPP within 60 days of drilling, and to State GeoTracker as appropriate.
M. Violation of any requirement or general or special permit condition may result in an order by GPP staff to cease work under this permit, correct the violation, potentially re-permit the work as a new mobilization, and potential actions may be taken against the Well Owner, Property Owner, or Responsible Professional by GPP.

SPECIAL CONDITIONS: _____

(agency use only) _____

_____

_____

For Agency Use Only:

County Approval: _____ FA # _____ Date: 1/22/19

SAN MATEO COUNTY ENVIRONMENTAL HEALTH
JAN 22 2019
RECEIVED

COUNTY OF SAN MATEO HEALTH SYSTEM

Environmental Health Services
Groundwater Protection Program
2000 Alameda de las Pulgas, Suite #100
San Mateo, CA 94403
Phone:(650) 372-6200 Fax: (650) 627-8244
smchealth.org/gpp

SUBSURFACE DRILLING PERMIT APPLICATION

Allow three (3) full working days for processing a complete permit application which includes payment (one permit per parcel). Drilling **start date & time** must be scheduled with County staff at (650) 464-0047 or drilling@smcgov.org **at least 2 full working days (i.e. 48 hours) in advance.** Visit smchealth.org/ehfees for Groundwater Protection Program Fees

PURPOSE OF APPLICATION ☐ Groundwater Monitoring/Vapor Well Installation ☒ Construct Soil Borings (variance request if to be left open >24 hrs)
☐ Groundwater Monitoring/Vapor Well Destruction Extension of Permit # _____
No. of Wells _____ No. of Borings 1 Well/Boring Names see previous page

PURPOSE OF DRILLING ☒ Environmental ☐ Geotechnical
LEAD AGENCY ☐ County GPP (permit approval is not to be considered work plan approval) ☒ RWQCB/DTSC/USEPA (Provide approval letter) ☐ None (i.e. voluntary)

SITE / DRILLING INFORMATION

Agency Case # 2020111 Assessor's Parcel # (required) 005-312-110 (one per permit)
Drilling Location Address: 2500 Bayshore Blvd. City: Brisbane Zip: 94134
To Be Constructed In: ☐ Public Property ☒ Private Property ☐ Refuse
Maximum Proposed Depth (wells/borings) 20 (feet) Drilling Method: Direct Push or augers
Boring Diameter: 3-inch Casing Diameter: N/A Filter Pack Interval: N/A Screen Interval: N/A
Destruction Method: ☐ Pressure Grouting (provide well construction logs and grout calcs)
(6 gallons water max/94 lb cement, up to 5% bentonite) ☐ Overdrilling (guide rods for total depth prior to starting required)

WELL/BORING OWNER

(Well/boring owner name or contact person should match signature)

Name: Universal Paragon Corporation Contact Person: Howard Pearce
Address: 150 Executive Park Blvd., Suite 4000 City, State, Zip: San Francisco, CA 94134
Telephone: 415.468.6676x114 Email: hpearce@upcsf.com

It is my responsibility to notify the County of any known changes in the purpose of this well/boring from that which is indicated on this application, to submit indication of annual usage of wells to the County, and to maintain the well in good condition. *(Letter signed by well/boring owner/contact person, containing above language and attesting to knowledge of all permit requirements and conditions, may be substituted for signature.)*
Well/Boring Owner's/Contact Person's Signature: _____ Date: 1-18-19

PROPERTY OWNER

(Name as appears on assessor's roles should match signature)

Name: Universal Paragon Corporation Contact Person: Howard Pearce
Address: 150 Executive Park Blvd., Suite 4000 City, State, Zip: San Francisco, CA 94134
Telephone: 415.468.6676x114 Email: hpearce@upcsf.com

I understand that a well/boring is being installed on my property. I agree to notify the County and Well Owner of any known damage or future access issues to the well *(Letter signed by property owner, containing above language, or encroachment permit may be substituted for signature)*
Property Owner's Signature: _____ Date: 1-18-19

DRILLING COMPANY

Drilling Company: Penecore Drilling Contact Person: Xavier Green
Address: 220 N. East Street City, State, Zip: Woodland, CA 95776
Telephone: 530-661-3600 Email: xavier@penecore.com C57 Drillers License # 906899

I certify that the well/boring will be constructed in compliance with the conditions of this permit (see reverse), the San Mateo County Well Ordinance, and the State Water Well Standards, and that the license listed above is considered current and active by the Contractors State License Board.
Driller's Signature: _____ Date: _____

CONSULTANT COMPANY

Consultant Company: Geosyntec Consultants Project Manager: Anthony Smith
Address: 1111 Broadway, 6th Floor City, State, Zip: Oakland, CA 94607
Telephone: 510-285-2770 Email: tsmith@geosyntec.com
Field Contact & Cell # (if known): Miranda Kahrilas, 847.530.7602

I certify that this application is correct to the best of my knowledge and the well/boring will be constructed/destroyed in compliance with the conditions of this permit (see reverse), the San Mateo County Well Ordinance, and the State Water Well Standards. I understand that I am responsible for General Conditions E, F, K, and L of this permit and if I indicated the purpose of drilling is geotechnical, then no one will use the boring to collect any samples for environmental analyses. If there is a change in Responsible Professional, I will notify San Mateo County GPP staff.
Responsible Professional's Name (Please print legibly): Anthony Smith
Responsible Professional's Signature: _____ Date: _____
California Professional Geologist (PG) No. _____ or Civil Engineer (PE) No. _____

REV. 5/23/16



Legend

Proposed Sample Location and Soil Analyses

- Metals
- Metals, VOCs, SVOCs, PCBs, OCPs, TPH, Asbestos
- Monitoring Well Location
- Piezometer Location
- Property Boundary
- Drainage Ditch
- Parcel Boundary and APN
- Wetlands
- Approximate Former Oil Tank Location
- Approximate Former Underground Storage Tank (UST) Location
- Railroad Tracks
- Current/Former Building Footprint

Note:
- All locations are approximate

N

0 200 Feet

Proposed Sample Locations

Brisbane OU-2
Brisbane, California

Geosyntec consultants

WO2245 | November 2018

Figure X

D:\GIS\WORK\Brisbane\Project\2018_DataGapAnalysis - Ch2M\Fig5X_SProposedSampleLocsv2.mxd 11/26/2018 10:09:39 AM

ORDINANCE: 04023

ENVIRONMENTAL HEALTH
SAN MATEO COUNTY

Protecting Our Health and Environment

PERMIT 19-0133

P/E: 2010 **MONITORING WELLS - INSTALLATION/DESTRUCTION**

FACILITY:
55 INDUSTRIAL WAY, BRISBANE

OWNER:
UNIVERSAL PARAGON CORP
150 EXECUTIVE PARK BLVD # 4000
SAN FRANCISCO

WP0012176 FA0065489
005312070
AMOUNT PAID: 747.00

CONTRACTOR:
PENECORE DRILLING

TERMS & CONDITIONS:

CONSTRUCT SOIL BORINGS (2)
CONSULTANT: GEOSYNTEC CONSULTANTS
PROEJCT MGR: ANTHONY SMITH

KIAN ATKINSON
ENVIRONMENTAL HEALTH SPECIALIST

DATE ISSUED: 1/24/2019

EXPIRATION DATE: 5/24/2019

THIS PERMIT IS NONTRANSFERABLE AND MUST BE POSTED ON-SITE IN A CONSPICUOUS PLACE

PAID
$747.00
CK # 280

APP 3 OF 5

SAN MATEO COUNTY
ENVIRONMENTAL HEALTH

JAN 22 2019

RECEIVED

COUNTY OF SAN MATEO
HEALTH SYSTEM

Environmental Health Services
Groundwater Protection Program
2000 Alameda de las Pulgas, Suite #100
[illegible] 94403
[illegible] 6200 Fax: (650) 627-8244
smchealth.org/gpp

SUBSURFACE DRILLING PERMIT APPLICATION

Allow three (3) full working days for processing a complete permit application which includes payment (one permit per parcel). Drilling **start date & time** must be scheduled with County staff at (650) 464-0047 or drilling@smcgov.org **at least 2 full working days (i.e. 48 hours) in advance.** Visit smchealth.org/ehfees for Groundwater Protection Program Fees

PURPOSE OF APPLICATION ☐ Groundwater Monitoring/Vapor Well Installation ☒ Construct Soil Borings (variance request if to be left open >24 hrs)
☐ Groundwater Monitoring/Vapor Well Destruction Extension of Permit # _____
No. of Wells _____ No. of Borings 2 Well/Boring Names AE-15, AG-15

PURPOSE OF DRILLING ☒ Environmental ☐ Geotechnical LEAD AGENCY ☐ County GPP (permit approval is not to be considered work plan approval) ☒ RWQCB/DTSC/USEPA (Provide approval letter) ☐ None (i.e. voluntary)

SITE / DRILLING INFORMATION

Agency Case # 2020111 Assessor's Parcel # (required) 005-312-070 (one per permit)
Drilling Location Address: 55 INDUSTRIAL WAY City: Brisbane Zip: 94134
To Be Constructed In: ☐ Public Property ☒ Private Property ☐ Refuse
Maximum Proposed Depth (wells/borings) 20 (feet) Drilling Method: Direct Push or augers
Boring Diameter: 3-inch Casing Diameter: N/A Filter Pack Interval: N/A Screen Interval: N/A
Destruction Method: ☐ Pressure Grouting (provide well construction logs and grout calcs)
(6 gallons water max/94 lb cement, up to 5% bentonite) ☐ Overdrilling (guide rods for total depth prior to starting required)

WELL/BORING OWNER

(Well/boring owner name or contact person should match signature)

Name: Universal Paragon Corporation Contact Person: Howard Pearce
Address: 150 Executive Park Blvd., Suite 4000 City, State, Zip: San Francisco, CA 94134
Telephone: 415.468.6676x114 Email: hpearce@upcsf.com

It is my responsibility to notify the County of any known changes in the purpose of this well/boring from that which is indicated on this application, to submit indication of annual usage of wells to the County, and to maintain the well in good condition. *(Letter signed by well/boring owner/contact person, containing above language and attesting to knowledge of all permit requirements and conditions, may be substituted for signature.)*
Well/Boring Owner's/Contact Person's Signature: _____ Date: _____

PROPERTY OWNER

(Name as appears on assessor's roles should match signature)

Name: Universal Paragon Corporation Contact Person: Howard Pearce
Address: 150 Executive Park Blvd., Suite 4000 City, State, Zip: San Francisco, CA 94134
Telephone: 415.468.6676x114 Email: hpearce@upcsf.com

I understand that a well/boring is being installed on my property. I agree to notify the County and Well Owner of any known damage or future access issues to the well *(Letter signed by property owner, containing above language, or encroachment permit may be substituted for signature)*
Property Owner's Signature: _____ Date: _____

DRILLING COMPANY

Drilling Company: Penecore Drilling Contact Person: Xavier Green
Address: 220 N. East Street City, State, Zip: Woodland, CA 95776
Telephone: 530-661-3600 Email: xavier@penecore.com C57 Drillers License # 906899

I certify that the well/boring will be constructed in compliance with the conditions of this permit (see reverse), the San Mateo County Well Ordinance, and the State Water Well Standards, and that the license listed above is considered current and active by the Contractors State License Board.
Driller's Signature: _____ Date: 1/18/2019

CONSULTANT COMPANY

Consultant Company: Geosyntec Consultants Project Manager: Anthony Smith
Address: 1111 Broadway, 6th Floor City, State, Zip: Oakland, CA 94607
Telephone: 510-285-2770 Email: tsmith@geosyntec.com
Field Contact & Cell # (if known): Miranda Kahrilas, 847.530.7602

I certify that this application is correct to the best of my knowledge and the well/boring will be constructed/destroyed in compliance with the conditions of this permit (see reverse), the San Mateo County Well Ordinance, and the State Water Well Standards. I understand that I am responsible for General Conditions E, F, K, and L of this permit and if I indicated the purpose of drilling is geotechnical, then no one will use the boring to collect any samples for environmental analyses. If there is a change in Responsible Professional, I will notify San Mateo County GPP staff.
Responsible Professional's Name (Please print legibly): Anthony Smith
Responsible Professional's Signature: Anthony Smith Date: 1/18/2019
California Professional Geologist (PG) No. _____ or Civil Engineer (PE) No. C81473

REV 5/23/18

FA65489

SUBSURFACE DRILLING PERMIT APPLICATION

REQUIREMENTS:

An accurate and correct map **must** be submitted with the application and include the following: north arrow, existing and historic site features, existing and proposed well/boring locations with ID's to scale, property lines and any other pertinent information. A work plan describing the drilling and construction/destruction methodology may be requested by County staff. A complete application with appropriate fees must be submitted 3 working days in advance of drilling and notification of start date and time must be provided at least 2 working days prior to drilling. The permit is subject to both General and Special Conditions stated below. A copy of the approved Subsurface Drilling Permit **must** be available on site while work related to the permit is being performed. **Drilling may begin at the notified date and time whether County staff is present or not.**

GENERAL CONDITIONS:

A. Field notification must be provided to GPP drilling inspection staff at least 2 full working days prior to the start of drilling. GPP Caseworker also must be notified if site is associated with a remedial action case.
B. Well and boring construction and destruction under this permit are subject to the Standards for the Construction of Wells in San Mateo County, County Groundwater Protection Program (GPP) Guidelines, Policies & Procedures, the State Water Well Standards, and any instructions by a Health Department representative.
C. Well/Boring Owner, Driller, and Responsible Professional assume responsibility for all activities and uses under the permit, including compliance with Workmen's Compensation Laws, and indemnify, defend and save the County of San Mateo, its officers, agents and employees, free and harmless from any and all expense, cost, or liability in connection with or resulting from work or stopped-work associated with the permit, including, but not limited to, property damage, personal injury, wrongful death, and loss of income.
D. All borings **must** be properly destroyed (grouted/sealed) within 24 hours of drilling, unless special conditions are approved beforehand in writing as part of this permit, and must be continuously protected and stabilized.
E. Analytical results of all soil, vapor, and groundwater samples collected during the execution of drilling under this permit **must** be submitted to County GPP staff by the Responsible Professional within 60 days of sample collection. If contamination is discovered during drilling, verbal notification to County GPP by the Responsible Professional is **required** within 72 hours of discovery. Proper storage, labeling & disposal of investigation-derived residual wastes are the responsibility of the consultant unless stated otherwise contractually.
F. Boring logs, well construction details, and finalized as-built location map for all borings/ wells (except geotechnical borings) signed by a Responsible Professional, **must** be submitted to County GPP by the Responsible Professional within 60 days of drilling/construction/destruction. DWR Form 188 must be filed with the State per water code 13752.
G. Permit is valid only for the purpose specified herein. No change in purpose or required procedures, as described on this permit application, in the associated workplan, or in the special conditions below, will be allowed except upon written permission from the County. Construction aspects can be changed based on conditions encountered in the field.
H. **Permit is valid for one mobilization** associated with originally permitted boring/well locations only, including contingency locations, and is automatically canceled if not exercised, or if an extension is not applied for and granted within 120 days of the original permit issuance date. Failure to notify staff of cancellation or delay in start time will result in the Consultant being billed an Inspection Cancellation fee if GPP staff attempted to perform an inspection. Fees are listed at smchealth.org/ehfees
I. Wells installed under this permit may not be used for domestic, municipal, agricultural, or irrigation water supply.
J. All work performed **must** conform to Business and Profession Codes and State Water Well Standards.
K. Top-of-casing elevation of all wells **must** be surveyed to the nearest 0.01-foot relative to Mean Sea Level or NAVD88 and submitted to County GPP within 60 days of drilling, and to State GeoTracker as appropriate. Geotechnical wells are exempt from this requirement if a written variance from GPP is obtained prior to drilling.
L. Latitude and longitude of all wells **must** be surveyed with sub-meter accuracy relative to NAD83 and submitted to County GPP within 60 days of drilling, and to State GeoTracker as appropriate.
M. Violation of any requirement or general or special permit condition may result in an order by GPP staff to cease work under this permit, correct the violation, potentially re-permit the work as a new mobilization, and potential actions may be taken against the Well Owner, Property Owner, or Responsible Professional by GPP.

SPECIAL CONDITIONS: _____

(agency use only) _____

_____

_____

_____

For Agency Use Only:
County Approval: KNA FA # _____ Date: 1/22/19

SAN MATEO COUNTY
ENVIRONMENTAL HEALTH
JAN 22 2019
PAID

COUNTY OF SAN MATEO
HEALTH SYSTEM

Environmental Health Services
Groundwater Protection Program
2000 Alameda de las Pulgas, Suite #100
San Mateo, CA 94403
Phone:(650) 372-6200 Fax: (650) 627-8244
smchealth.org/gpp

SUBSURFACE DRILLING PERMIT APPLICATION

Allow three (3) full working days for processing a complete permit application which includes payment (one permit per parcel). Drilling start date & time must be scheduled with County staff at (650) 464-0047 or drilling@smcgov.org at least 2 full working days (i.e. 48 hours) in advance. Visit smchealth.org/ehfees for Groundwater Protection Program Fees

PURPOSE OF APPLICATION ☐ Groundwater Monitoring/Vapor Well Installation ☒ Construct Soil Borings (variance request if to be left open >24 hrs)
☐ Groundwater Monitoring/Vapor Well Destruction Extension of Permit # _____
No. of Wells _____ No. of Borings 2 Well/Boring Names see previous page

PURPOSE OF DRILLING ☒ Environmental ☐ Geotechnical
LEAD AGENCY ☐ County GPP (permit approval is not to be considered work plan approval) ☒ RWQCB/DTSC/USEPA (Provide approval letter) ☐ None (i.e. voluntary)

SITE / DRILLING INFORMATION

Agency Case # 2020111 Assessor's Parcel # (required) 005-312-070 (one per permit)
Drilling Location Address: 2500 Bayshore Blvd. City: Brisbane Zip: 94134
To Be Constructed In: ☐ Public Property ☒ Private Property ☐ Refuse
Maximum Proposed Depth (wells/borings) 20 (feet) Drilling Method: Direct Push or augers
Boring Diameter: 3-inch Casing Diameter: N/A Filter Pack Interval: N/A Screen Interval: N/A
Destruction Method: ☐ Pressure Grouting (provide well construction logs and grout calcs)
(6 gallons water max/94 lb cement, up to 5% bentonite) ☐ Overdrilling (guide rods for total depth prior to starting required)

WELL/BORING OWNER (Well/boring owner name or contact person should match signature)

Name: Universal Paragon Corporation Contact Person: Howard Pearce
Address: 150 Executive Park Blvd., Suite 4000 City, State, Zip: San Francisco, CA 94134
Telephone: 415.468.6676x114 Email: hpearce@upcsf.com
It is my responsibility to notify the County of any known changes in the purpose of this well/boring from that which is indicated on this application, to submit indication of annual usage of wells to the County, and to maintain the well in good condition. *(Letter signed by well/boring owner/contact person, containing above language and attesting to knowledge of all permit requirements and conditions, may be substituted for signature.)*
Well/Boring Owner's/Contact Person's Signature: [signature] Date: 1-18-19

PROPERTY OWNER (Name as appears on assessor's roles should match signature)

Name: Universal Paragon Corporation Contact Person: Howard Pearce
Address: 150 Executive Park Blvd., Suite 4000 City, State, Zip: San Francisco, CA 94134
Telephone: 415.468.6676x114 Email: hpearce@upcsf.com
I understand that a well/boring is being installed on my property. I agree to notify the County and Well Owner of any known damage or future access issues to the well *(Letter signed by property owner containing above language, or encroachment permit may be substituted for signature)*
Property Owner's Signature: [signature] Date: 1-18-19

DRILLING COMPANY

Drilling Company: Penecore Drilling Contact Person: Xavier Green
Address: 220 N. East Street City, State, Zip: Woodland, CA 95776
Telephone: 530-661-3600 Email: xavier@penecore.com C57 Drillers License # 906899
I certify that the well/boring will be constructed in compliance with the conditions of this permit (see reverse), the San Mateo County Well Ordinance, and the State Water Well Standards, and that the license listed above is considered current and active by the Contractors State License Board.
Driller's Signature: _____ Date: _____

CONSULTANT COMPANY

Consultant Company: Geosyntec Consultants Project Manager: Anthony Smith
Address: 1111 Broadway, 6th Floor City, State, Zip: Oakland, CA 94607
Telephone: 510-285-2770 Email: tsmith@geosyntec.com
Field Contact & Cell # (if known): Miranda Kahrilas, 847.530.7602
I certify that this application is correct to the best of my knowledge and the well/boring will be constructed/destroyed in compliance with the conditions of this permit (see reverse), the San Mateo County Well Ordinance, and the State Water Well Standards. I understand that I am responsible for General Conditions E, F, K, and L of this permit and if I indicated the purpose of drilling is geotechnical, then no one will use the boring to collect any samples for environmental analyses. If there is a change in Responsible Professional, I will notify San Mateo County GPP staff.
Responsible Professional's Name (Please print legibly): Anthony Smith
Responsible Professional's Signature: _____ Date: _____
California Professional Geologist (PG) No. _____ or Civil Engineer (PE) No. _____



Legend

Proposed Sample Location and Soil Analyses
- Metals
- Metals, VOCs, SVOCs, PCBs, OCPs, TPH, Asbestos
- Monitoring Well Location
- Piezometer Location
- Property Boundary

- Drainage Ditch
- Parcel Boundary and APN
- Wetlands
- Approximate Former Oil Tank Location
- Approximate Former Underground Storage Tank (UST) Location
- Railroad Tracks
- Current/Former Building Footprint

Note:
- All locations are approximate

0 200 Feet

Proposed Sample Locations

Brisbane OU-2
Brisbane, California

Geosyntec consultants

Figure X

WG2245 | November 2018

D:\GIS\PC\Brisbane\Projects\2018_DataGapAnalysis - OU2\Fig6X_ProposedSampleLocsv2.mxd 11/28/2018 10:05:30 AM

ORDINANCE: 04023

ENVIRONMENTAL HEALTH
SAN MATEO COUNTY

Protecting Our Health and Environment

PERMIT 19-0134

P/E: 2010 MONITORING WELLS - INSTALLATION/DESTRUCTION

FACILITY:
256 INDUSTRIAL WAY, BRISBANE

OWNER:
UNIVERSAL PARAGON CORP
150 EXECUTIVE PARK BLVD # 4000
SAN FRANCISCO

WP0012177 FA0065491
005311010
AMOUNT PAID: 747.00

CONTRACTOR:
PENECORE DRILLING

TERMS & CONDITIONS:

CONSTRUCT SOIL BORINGS (2)
CONSULTANT: GEOSYNTEC CONSULTANTS
PROEJCT MGR: ANTHONY SMITH

KIAN ATKINSON
ENVIRONMENTAL HEALTH SPECIALIST

DATE ISSUED: 1/24/2019

EXPIRATION DATE: 5/24/2019

THIS PERMIT IS NONTRANSFERABLE AND MUST BE POSTED ON-SITE IN A CONSPICUOUS PLACE

PAID
$747.00
CK #280

SAN MATEO COUNTY
ENVIRONMENTAL HEALTH

JAN 22 2019

RECEIVED

App 4 of 5

COUNTY OF SAN MATEO
HEALTH SYSTEM

Environmental Health Services
Groundwater Protection Program
[illegible] las Pulgas, Suite #100
San Mateo, CA 94403
Phone:(650) 372-6200 Fax: (650) 627-8244
smchealth.org/gpp

SUBSURFACE DRILLING PERMIT APPLICATION

Allow three (3) full working days for processing a complete permit application which includes payment (one permit per parcel). Drilling **start date & time** must be scheduled with County staff at (650) 464-0047 or drilling@smcgov.org **at least 2 full working days (i.e. 48 hours) in advance.** Visit smchealth.org/ehfees for Groundwater Protection Program Fees

PURPOSE OF APPLICATION
☐ Groundwater Monitoring/Vapor Well Installation ☒ Construct Soil Borings (variance request if to be left open >24 hrs)
☐ Groundwater Monitoring/Vapor Well Destruction Extension of Permit # _____
No. of Wells _____ No. of Borings 2 Well/Boring Names AM-15, AO-15

PURPOSE OF DRILLING
☒ Environmental ☐ Geotechnical

LEAD AGENCY
☐ County GPP (permit approval is not to be considered work plan approval)
☒ RWQCB/DTSC/USEPA (Provide approval letter) ☐ None (i.e. voluntary)

SITE / DRILLING INFORMATION

Agency Case # 2020111 Assessor's Parcel # (required) 005-311-010 (one per permit)
Drilling Location Address: 256 INDUSTRIAL WAY City: Brisbane Zip: 94134
To Be Constructed In: ☐ Public Property ☒ Private Property ☐ Refuse
Maximum Proposed Depth (wells/borings) 20 (feet) Drilling Method: Direct Push or augers
Boring Diameter: 3-inch Casing Diameter: N/A Filter Pack Interval: N/A Screen Interval: N/A
Destruction Method: ☐ Pressure Grouting (provide well construction logs and grout calcs)
(6 gallons water max/94 lb cement, up to 5% bentonite) ☐ Overdrilling (guide rods for total depth prior to starting required)

WELL/BORING OWNER (Well/boring owner name or contact person should match signature)

Name: Universal Paragon Corporation Contact Person: Howard Pearce
Address: 150 Executive Park Blvd., Suite 4000 City, State, Zip: San Francisco, CA 94134
Telephone: 415.468.6676x114 Email: hpearce@upcsf.com

It is my responsibility to notify the County of any known changes in the purpose of this well/boring from that which is indicated on this application, to submit indication of annual usage of wells to the County, and to maintain the well in good condition. *(Letter signed by well/boring owner/contact person, containing above language and attesting to knowledge of all permit requirements and conditions, may be substituted for signature.)*
Well/Boring Owner's/Contact Person's Signature: _____ Date: _____

PROPERTY OWNER (Name as appears on assessor's roles should match signature)

Name: Universal Paragon Corporation Contact Person: Howard Pearce
Address: 150 Executive Park Blvd., Suite 4000 City, State, Zip: San Francisco, CA 94134
Telephone: 415.468.6676x114 Email: hpearce@upcsf.com

I understand that a well/boring is being installed on my property. I agree to notify the County and Well Owner of any known damage or future access issues to the well *(Letter signed by property owner, containing above language, or encroachment permit may be substituted for signature)*
Property Owner's Signature: _____ Date: _____

DRILLING COMPANY

Drilling Company: Penecore Drilling Contact Person: Xavier Green
Address: 220 N. East Street City, State, Zip: Woodland, CA 95776
Telephone: 530-661-3600 Email: xavier@penecore.com C57 Drillers License # 906899

I certify that the well/boring will be constructed in compliance with the conditions of this permit (see reverse), the San Mateo County Well Ordinance, and the State Water Well Standards, and that the license listed above is considered current and active by the Contractors State License Board.
Driller's Signature: _____ Date: 1/18/2019

CONSULTANT COMPANY

Consultant Company: Geosyntec Consultants Project Manager: Anthony Smith
Address: 1111 Broadway, 6th Floor City, State, Zip: Oakland, CA 94607
Telephone: 510-285-2770 Email: tsmith@geosyntec.com
Field Contact & Cell # (If known): Miranda Kahrilas, 847.530.7602

I certify that this application is correct to the best of my knowledge and the well/boring will be constructed/destroyed in compliance with the conditions of this permit (see reverse), the San Mateo County Well Ordinance, and the State Water Well Standards. I understand that I am responsible for General Conditions E, F, K, and L of this permit and if I indicated the purpose of drilling is geotechnical, then no one will use the boring to collect any samples for environmental analyses. If there is a change in Responsible Professional, I will notify San Mateo County GPP staff.
Responsible Professional's Name (Please print legibly): Anthony Smith
Responsible Professional's Signature: Anthony Smith Date: 1/18/2019
California Professional Geologist (PG) No. _____ or Civil Engineer (PE) No. C81473

REV 5/23/18

FA65491

SUBSURFACE DRILLING PERMIT APPLICATION

REQUIREMENTS:

An accurate and correct map **must** be submitted with the application and include the following: north arrow, existing and historic site features, existing and proposed well/boring locations with ID's to scale, property lines and any other pertinent information. A work plan describing the drilling and construction/destruction methodology may be requested by County staff. A complete application with appropriate fees must be submitted 3 working days in advance of drilling and notification of start date and time must be provided at least 2 working days prior to drilling. The permit is subject to both General and Special Conditions stated below. A copy of the approved Subsurface Drilling Permit **must** be available on site while work related to the permit is being performed. **Drilling may begin at the notified date and time whether County staff is present or not.**

GENERAL CONDITIONS:

A. Field notification must be provided to GPP drilling inspection staff at least 2 full working days prior to the start of drilling. GPP Caseworker also must be notified if site is associated with a remedial action case.
B. Well and boring construction and destruction under this permit are subject to the Standards for the Construction of Wells in San Mateo County, County Groundwater Protection Program (GPP) Guidelines, Policies & Procedures, the State Water Well Standards, and any instructions by a Health Department representative.
C. Well/Boring Owner, Driller, and Responsible Professional assume responsibility for all activities and uses under the permit, including compliance with Workmen's Compensation Laws, and indemnify, defend and save the County of San Mateo, its officers, agents and employees, free and harmless from any and all expense, cost, or liability in connection with or resulting from work or stopped-work associated with the permit, including, but not limited to, property damage, personal injury, wrongful death, and loss of income.
D. All borings **must** be properly destroyed (grouted/sealed) within 24 hours of drilling, unless special conditions are approved beforehand in writing as part of this permit, and must be continuously protected and stabilized.
E. Analytical results of all soil, vapor, and groundwater samples collected during the execution of drilling under this permit **must** be submitted to County GPP staff by the Responsible Professional within 60 days of sample collection. If contamination is discovered during drilling, verbal notification to County GPP by the Responsible Professional is **required** within 72 hours of discovery. Proper storage, labeling & disposal of investigation-derived residual wastes are the responsibility of the consultant unless stated otherwise contractually.
F. Boring logs, well construction details, and finalized as-built location map for all borings/ wells (except geotechnical borings) signed by a Responsible Professional, **must** be submitted to County GPP by the Responsible Professional within 60 days of drilling/construction/destruction. DWR Form 188 must be filed with the State per water code 13752.
G. Permit is valid only for the purpose specified herein. No change in purpose or required procedures, as described on this permit application, in the associated workplan, or in the special conditions below, will be allowed except upon written permission from the County. Construction aspects can be changed based on conditions encountered in the field.
H. **Permit is valid for one mobilization** associated with originally permitted boring/well locations only, including contingency locations, and is automatically canceled if not exercised, or if an extension is not applied for and granted within 120 days of the original permit issuance date. Failure to notify staff of cancellation or delay in start time will result in the Consultant being billed an Inspection Cancellation fee if GPP staff attempted to perform an inspection. Fees are listed at smchealth.org/ehfees
I. Wells installed under this permit may not be used for domestic, municipal, agricultural, or irrigation water supply.
J. All work performed **must** conform to Business and Profession Codes and State Water Well Standards.
K. Top-of-casing elevation of all wells **must** be surveyed to the nearest 0.01-foot relative to Mean Sea Level or NAVD88 and submitted to County GPP within 60 days of drilling, and to State GeoTracker as appropriate. Geotechnical wells are exempt from this requirement if a written variance from GPP is obtained prior to drilling.
L. Latitude and longitude of all wells **must** be surveyed with sub-meter accuracy relative to NAD83 and submitted to County GPP within 60 days of drilling, and to State GeoTracker as appropriate.
M. Violation of any requirement or general or special permit condition may result in an order by GPP staff to cease work under this permit, correct the violation, potentially re-permit the work as a new mobilization, and potential actions may be taken against the Well Owner, Property Owner, or Responsible Professional by GPP.

SPECIAL CONDITIONS: _____

(agency use only) _____

_____

_____

_____

For Agency Use Only:

County Approval: _____ FA # _____ Date: 1/22/19

COUNTY OF SAN MATEO HEALTH SYSTEM

Environmental Health Services
Groundwater Protection Program
2000 Alameda de las Pulgas, Suite #100
San Mateo, CA 94403
Phone:(650) 372-6200 Fax: (650) 627-8244
smchealth.org/gpp

SUBSURFACE DRILLING PERMIT APPLICATION

Allow three (3) full working days for processing a complete permit application which includes payment (one permit per parcel). Drilling start **date & time** must be scheduled with County staff at (650) 464-0047 or drilling@smcgov.org **at least 2 full working days (i.e. 48 hours) in advance.** Visit smchealth.org/ehfees for Groundwater Protection Program Fees

PURPOSE OF APPLICATION ☐ Groundwater Monitoring/Vapor Well Installation ☒ Construct Soil Borings (variance request if to be left open >24 hrs)
☐ Groundwater Monitoring/Vapor Well Destruction Extension of Permit # _____
No. of Wells _____ No. of Borings 2 Well/Boring Names see previous page

PURPOSE OF DRILLING ☒ Environmental ☐ Geotechnical **LEAD AGENCY** ☐ County GPP (permit approval is not to be considered work plan approval) ☒ RWQCB/DTSC/USEPA (Provide approval letter) ☐ None (i.e. voluntary)

SITE / DRILLING INFORMATION

Agency Case # 2020111 Assessor's Parcel # (required) 005-311-010 (one per permit)
Drilling Location Address: 2500 Bayshore Blvd. City: Brisbane Zip: 94134
To Be Constructed In: ☐ Public Property ☒ Private Property ☐ Refuse
Maximum Proposed Depth (wells/borings) 20 (feet) Drilling Method: Direct Push or augers
Boring Diameter: 3-inch Casing Diameter: N/A Filter Pack Interval: N/A Screen Interval: N/A
Destruction Method: ☐ Pressure Grouting (provide well construction logs and grout calcs)
(6 gallons water max/94 lb cement, up to 5% bentonite) ☐ Overdrilling (guide rods for total depth prior to starting required)

WELL/BORING OWNER (Well/boring owner name or contact person should match signature)

Name: Universal Paragon Corporation Contact Person: Howard Pearce
Address: 150 Executive Park Blvd., Suite 4000 City, State, Zip: San Francisco, CA 94134
Telephone: 415.468.6676x114 Email: hpearce@upcsf.com

It is my responsibility to notify the County of any known changes in the purpose of this well/boring from that which is indicated on this application, to submit indication of annual usage of wells to the County, and to maintain the well in good condition. *(Letter signed by well/boring owner/contact person, containing above language and attesting to knowledge of all permit requirements and conditions, may be substituted for signature.)*
Well/Boring Owner's/Contact Person's Signature: [signature] Date: 1-18-19

PROPERTY OWNER (Name as appears on assessor's roles should match signature)

Name: Universal Paragon Corporation Contact Person: Howard Pearce
Address: 150 Executive Park Blvd., Suite 4000 City, State, Zip: San Francisco, CA 94134
Telephone: 415.468.6676x114 Email: hpearce@upcsf.com

I understand that a well/boring is being installed on my property. I agree to notify the County and Well Owner of any known damage or future access issues to the well *(Letter signed by property owner, containing above language, or encroachment permit may be substituted for signature)*
Property Owner's Signature: [signature] Date: 1-18-19

DRILLING COMPANY

Drilling Company: Penecore Drilling Contact Person: Xavier Green
Address: 220 N. East Street City, State, Zip: Woodland, CA 95776
Telephone: 530-661-3600 Email: xavier@penecore.com C57 Drillers License # 906899

I certify that the well/boring will be constructed in compliance with the conditions of this permit (see reverse), the San Mateo County Well Ordinance, and the State Water Well Standards, and that the license listed above is considered current and active by the Contractors State License Board.
Driller's Signature: _____ Date: _____

CONSULTANT COMPANY

Consultant Company: Geosyntec Consultants Project Manager: Anthony Smith
Address: 1111 Broadway, 6th Floor City, State, Zip: Oakland, CA 94607
Telephone: 510-285-2770 Email: tsmith@geosyntec.com
Field Contact & Cell # (if known): Miranda Kahrilas, 847.530.7602

I certify that this application is correct to the best of my knowledge and the well/boring will be constructed/destroyed in compliance with the conditions of this permit (see reverse), the San Mateo County Well Ordinance, and the State Water Well Standards. I understand that I am responsible for General Conditions E, F, K, and L of this permit and if I indicated the purpose of drilling is geotechnical, then no one will use the boring to collect any samples for environmental analyses. If there is a change in Responsible Professional, I will notify San Mateo County GPP staff.
Responsible Professional's Name (Please print legibly): Anthony Smith
Responsible Professional's Signature: _____ Date: _____
California Professional Geologist (PG) No. _____ or Civil Engineer (PE) No. _____



Legend

Proposed Sample Location and Soil Analysis

- Metals
- Metals, VOCs, SVOCs, PCBs, OCPs, TPH, Asbestos
- Monitoring Well Location
- Piezometer Location
- Property Boundary
- Drainage Ditch
- Parcel Boundary and APN
- Wetlands
- Approximate Former Oil Tank Location
- Approximate Former Underground Storage Tank (UST) Location
- Railroad Tracks
- Current/Former Building Footprint

Note:
- All locations are approximate

N

0 200 Feet

Proposed Sample Locations

Bishane OU-2
Brisbane, California

Geosyntec consultants

WG2245	November 2018	Figure X

D:\GS\UP\Brisbane\Project\2018_DataGapAnalysis - OU2\Fig03_SProbSamples.mxd 11/20/2018 10:05:30 AM

ORDINANCE: 04023

ENVIRONMENTAL HEALTH
SAN MATEO COUNTY

Protecting Our Health and Environment

PERMIT 19-0135

P/E: 2010 MONITORING WELLS - INSTALLATION/DESTRUCTION

FACILITY:
160 INDUSTRIAL WAY, BRISBANE

OWNER:
UNIVERSAL PARAGON CORP
150 EXECUTIVE PARK BLVD # 4000
SAN FRANCISCO

WP0012178 FA0065492
005311100
AMOUNT PAID: 747.00

CONTRACTOR:
PENECORE DRILLING

TERMS & CONDITIONS:

CONSTRUCT SOIL BORINGS (1)
CONSULTANT: GEOSYNTEC CONSULTANTS
PROEJCT MGR: ANTHONY SMITH

KIAN ATKINSON
ENVIRONMENTAL HEALTH SPECIALIST

DATE ISSUED: 1/24/2019

EXPIRATION DATE: 5/24/2019

THIS PERMIT IS NONTRANSFERABLE AND MUST BE POSTED ON-SITE IN A CONSPICUOUS PLACE

PAID
$747.00
CK #280

SAN MATEO COUNTY
ENVIRONMENTAL HEALTH

JAN 22 2019

RECEIVED

APP 1 OF 5

COUNTY OF SAN MATEO
HEALTH SYSTEM

Environmental Health Services
Groundwater Protection Program
2000 Alameda de las Pulgas, Suite #100
San Mateo, CA 94403
Phone:(650) 372-6200 Fax: (650) 627-8244
smchealth.org/gpp

SUBSURFACE DRILLING PERMIT APPLICATION

Allow three (3) full working days for processing a complete permit application which includes payment (one permit per parcel). Drilling **start date & time** must be scheduled with County staff at (650) 464-0047 or drilling@smcgov.org **at least 2 full working days (i.e. 48 hours) in advance.** Visit smchealth.org/ehfees for Groundwater Protection Program Fees

PURPOSE OF APPLICATION ☐ Groundwater Monitoring/Vapor Well Installation ☒ Construct Soil Borings (variance request if to be left open >24 hrs)
☐ Groundwater Monitoring/Vapor Well Destruction Extension of Permit # _____
No. of Wells _____ No. of Borings 1 Well/Boring Names AJ-17

PURPOSE OF DRILLING ☒ Environmental ☐ Geotechnical **LEAD AGENCY** ☐ County GPP (permit approval is not to be considered work plan approval) ☒ RWQCB/DTSC/USEPA (Provide approval letter) ☐ None (i.e. voluntary)

SITE / DRILLING INFORMATION

Agency Case # 2020111 Assessor's Parcel # (required) 005-311-100 (one per permit)
Drilling Location Address: 160 INDUSTRIAL WAY City: Brisbane Zip: 94134
To Be Constructed In: ☐ Public Property ☒ Private Property ☐ Refuse
Maximum Proposed Depth (wells/borings) 20 (feet) Drilling Method: Direct Push or augers
Boring Diameter: 3-inch Casing Diameter: N/A Filter Pack Interval: N/A Screen Interval: N/A
Destruction Method: ☐ Pressure Grouting (provide well construction logs and grout calcs)
(6 gallons water max/94 lb cement, up to 5% bentonite) ☐ Overdrilling (guide rods for total depth prior to starting required)

WELL/BORING OWNER (Well/boring owner name or contact person should match signature)

Name: Universal Paragon Corporation Contact Person: Howard Pearce
Address: 150 Executive Park Blvd., Suite 4000 City, State, Zip: San Francisco, CA 94134
Telephone: 415.468.6676x114 Email: hpearce@upcsf.com
It is my responsibility to notify the County of any known changes in the purpose of this well/boring from that which is indicated on this application, to submit indication of annual usage of wells to the County, and to maintain the well in good condition. *(Letter signed by well/boring owner/contact person, containing above language and attesting to knowledge of all permit requirements and conditions, may be substituted for signature.)*
Well/Boring Owner's/Contact Person's Signature: _____ Date: _____

PROPERTY OWNER (Name as appears on assessor's roles should match signature)

Name: Universal Paragon Corporation Contact Person: Howard Pearce
Address: 150 Executive Park Blvd., Suite 4000 City, State, Zip: San Francisco, CA 94134
Telephone: 415.468.6676x114 Email: hpearce@upcsf.com
I understand that a well/boring is being installed on my property. I agree to notify the County and Well Owner of any known damage or future access issues to the well *(Letter signed by property owner, containing above language, or encroachment permit may be substituted for signature)*
Property Owner's Signature: _____ Date: _____

DRILLING COMPANY

Drilling Company: Penecore Drilling Contact Person: Xavier Green
Address: 220 N. East Street City, State, Zip: Woodland, CA 95776
Telephone: 530-661-3600 Email: xavier@penecore.com C57 Drillers License # 906899
I certify that the well/boring will be constructed in compliance with the conditions of this permit (see reverse), the San Mateo County Well Ordinance, and the State Water Well Standards, and that the license listed above is considered current and active by the Contractors State License Board.
Driller's Signature: _____ Date: 1/18/2019

CONSULTANT COMPANY

Consultant Company: Geosyntec Consultants Project Manager: Anthony Smith
Address: 1111 Broadway, 6th Floor City, State, Zip: Oakland, CA 94607
Telephone: 510-285-2770 Email: tsmith@geosyntec.com
Field Contact & Cell # (if known): Miranda Kahrilas, 847.530.7602
I certify that this application is correct to the best of my knowledge and the well/boring will be constructed/destroyed in compliance with the conditions of this permit (see reverse), the San Mateo County Well Ordinance, and the State Water Well Standards. I understand that I am responsible for General Conditions E, F, K, and L of this permit and if I indicated the purpose of drilling is geotechnical, then no one will use the boring to collect any samples for environmental analyses. If there is a change in Responsible Professional, I will notify San Mateo County GPP staff.
Responsible Professional's Name (Please print legibly): Anthony Smith
Responsible Professional's Signature: _____ Date: 1/18/2019
California Professional Geologist (PG) No. _____ or Civil Engineer (PE) No. C81473

REV 5/29/18

FA 65492

SUBSURFACE DRILLING PERMIT APPLICATION

REQUIREMENTS:

An accurate and correct map **must** be submitted with the application and include the following: north arrow, existing and historic site features, existing and proposed well/boring locations with ID's to scale, property lines and any other pertinent information. A work plan describing the drilling and construction/destruction methodology may be requested by County staff. A complete application with appropriate fees must be submitted 3 working days in advance of drilling and notification of start date and time must be provided at least 2 working days prior to drilling. The permit is subject to both General and Special Conditions stated below. A copy of the approved Subsurface Drilling Permit **must** be available on site while work related to the permit is being performed. **Drilling may begin at the notified date and time whether County staff is present or not.**

GENERAL CONDITIONS:

A. Field notification must be provided to GPP drilling inspection staff at least 2 full working days prior to the start of drilling. GPP Caseworker also must be notified if site is associated with a remedial action case.
B. Well and boring construction and destruction under this permit are subject to the Standards for the Construction of Wells in San Mateo County, County Groundwater Protection Program (GPP) Guidelines, Policies & Procedures, the State Water Well Standards, and any instructions by a Health Department representative.
C. Well/Boring Owner, Driller, and Responsible Professional assume responsibility for all activities and uses under the permit, including compliance with Workmen's Compensation Laws, and indemnify, defend and save the County of San Mateo, its officers, agents and employees, free and harmless from any and all expense, cost, or liability in connection with or resulting from work or stopped-work associated with the permit, including, but not limited to, property damage, personal injury, wrongful death, and loss of income.
D. All borings **must** be properly destroyed (grouted/sealed) within 24 hours of drilling, unless special conditions are approved beforehand in writing as part of this permit, and must be continuously protected and stabilized.
E. Analytical results of all soil, vapor, and groundwater samples collected during the execution of drilling under this permit **must** be submitted to County GPP staff by the Responsible Professional within 60 days of sample collection. If contamination is discovered during drilling, verbal notification to County GPP by the Responsible Professional is **required** within 72 hours of discovery. Proper storage, labeling & disposal of investigation-derived residual wastes are the responsibility of the consultant unless stated otherwise contractually.
F. Boring logs, well construction details, and finalized as-built location map for all borings/ wells (except geotechnical borings) signed by a Responsible Professional, **must** be submitted to County GPP by the Responsible Professional within 60 days of drilling/construction/destruction. DWR Form 188 must be filed with the State per water code 13752.
G. Permit is valid only for the purpose specified herein. No change in purpose or required procedures, as described on this permit application, in the associated workplan, or in the special conditions below, will be allowed except upon written permission from the County. Construction aspects can be changed based on conditions encountered in the field.
H. **Permit is valid for one mobilization** associated with originally permitted boring/well locations only, including contingency locations, and is automatically canceled if not exercised, or if an extension is not applied for and granted within 120 days of the original permit issuance date. Failure to notify staff of cancellation or delay in start time will result in the Consultant being billed an Inspection Cancellation fee if GPP staff attempted to perform an inspection. Fees are listed at smchealth.org/ehfees
I. Wells installed under this permit may not be used for domestic, municipal, agricultural, or irrigation water supply.
J. All work performed **must** conform to Business and Profession Codes and State Water Well Standards.
K. Top-of-casing elevation of all wells **must** be surveyed to the nearest 0.01-foot relative to Mean Sea Level or NAVD88 and submitted to County GPP within 60 days of drilling, and to State GeoTracker as appropriate. Geotechnical wells are exempt from this requirement if a written variance from GPP is obtained prior to drilling.
L. Latitude and longitude of all wells **must** be surveyed with sub-meter accuracy relative to NAD83 and submitted to County GPP within 60 days of drilling, and to State GeoTracker as appropriate.
M. Violation of any requirement or general or special permit condition may result in an order by GPP staff to cease work under this permit, correct the violation, potentially re-permit the work as a new mobilization, and potential actions may be taken against the Well Owner, Property Owner, or Responsible Professional by GPP.

SPECIAL CONDITIONS: _____

(agency use only) _____

_____

_____

For Agency Use Only:

County Approval: _____ FA # _____ Date: 1/22/19

COUNTY OF SAN MATEO HEALTH SYSTEM

Environmental Health Services
Groundwater Protection Program
2000 Alameda de las Pulgas, Suite #100
San Mateo, CA 94403
Phone:(650) 372-6200 Fax: (650) 627-8244
smchealth.org/gpp

SUBSURFACE DRILLING PERMIT APPLICATION

Allow three (3) full working days for processing a complete permit application which includes payment (one permit per parcel). Drilling **start date & time** must be scheduled with County staff at (650) 464-0047 or drilling@smcgov.org **at least 2 full working days (i.e. 48 hours) in advance.** Visit smchealth.org/ehfees for Groundwater Protection Program Fees

PURPOSE OF APPLICATION: ☐ Groundwater Monitoring/Vapor Well Installation ☒ Construct Soil Borings (variance request if to be left open >24 hrs) ☐ Groundwater Monitoring/Vapor Well Destruction Extension of Permit # _____

No. of Wells _____ No. of Borings 1 Well/Boring Names see previous page

PURPOSE OF DRILLING: ☒ Environmental ☐ Geotechnical

LEAD AGENCY: ☐ County GPP (permit approval is not to be considered work plan approval) ☒ RWQCB/DTSC/USEPA (Provide approval letter) ☐ None (i.e. voluntary)

SITE / DRILLING INFORMATION

Agency Case # 2020111 Assessor's Parcel # (required) 005-311-100 (one per permit)

Drilling Location Address: 2500 Bayshore Blvd. City: Brisbane Zip: 94134

To Be Constructed In: ☐ Public Property ☒ Private Property ☐ Refuse

Maximum Proposed Depth (wells/borings) 20 (feet) Drilling Method: Direct Push or augers

Boring Diameter: 3-inch Casing Diameter: N/A Filter Pack Interval: N/A Screen Interval: N/A

Destruction Method: ☐ Pressure Grouting (provide well construction logs and grout calcs)

(6 gallons water max/94 lb cement, up to 5% bentonite) ☐ Overdrilling (guide rods for total depth prior to starting required)

WELL/BORING OWNER

(Well/boring owner name or contact person should match signature)

Name: Universal Paragon Corporation Contact Person: Howard Pearce

Address: 150 Executive Park Blvd., Suite 4000 City, State, Zip: San Francisco, CA 94134

Telephone: 415.468.6676x114 Email: hpearce@upcsf.com

It is my responsibility to notify the County of any known changes in the purpose of this well/boring from that which is indicated on this application, to submit indication of annual usage of wells to the County, and to maintain the well in good condition. *(Letter signed by well/boring owner/contact person, containing above language and attesting to knowledge of all permit requirements and conditions, may be substituted for signature.)*

Well/Boring Owner's/Contact Person's Signature: _____ Date: 1-18-19

PROPERTY OWNER

(Name as appears on assessor's roles should match signature)

Name: Universal Paragon Corporation Contact Person: Howard Pearce

Address: 150 Executive Park Blvd., Suite 4000 City, State, Zip: San Francisco, CA 94134

Telephone: 415.468.6676x114 Email: hpearce@upcsf.com

I understand that a well/boring is being installed on my property. I agree to notify the County and Well Owner of any known damage or future access issues to the well *(Letter signed by property owner, containing above language, or encroachment permit may be substituted for signature)*

Property Owner's Signature: _____ Date: 1-18-19

DRILLING COMPANY

Drilling Company: Penecore Drilling Contact Person: Xavier Green

Address: 220 N. East Street City, State, Zip: Woodland, CA 95776

Telephone: 530-661-3600 Email: xavier@penecore.com C57 Drillers License # 906899

I certify that the well/boring will be constructed in compliance with the conditions of this permit (see reverse), the San Mateo County Well Ordinance, and the State Water Well Standards, and that the license listed above is considered current and active by the Contractors State License Board.

Driller's Signature: _____ Date: _____

CONSULTANT COMPANY

Consultant Company: Geosyntec Consultants Project Manager: Anthony Smith

Address: 1111 Broadway, 6th Floor City, State, Zip: Oakland, CA 94607

Telephone: 510-285-2770 Email: tsmith@geosyntec.com

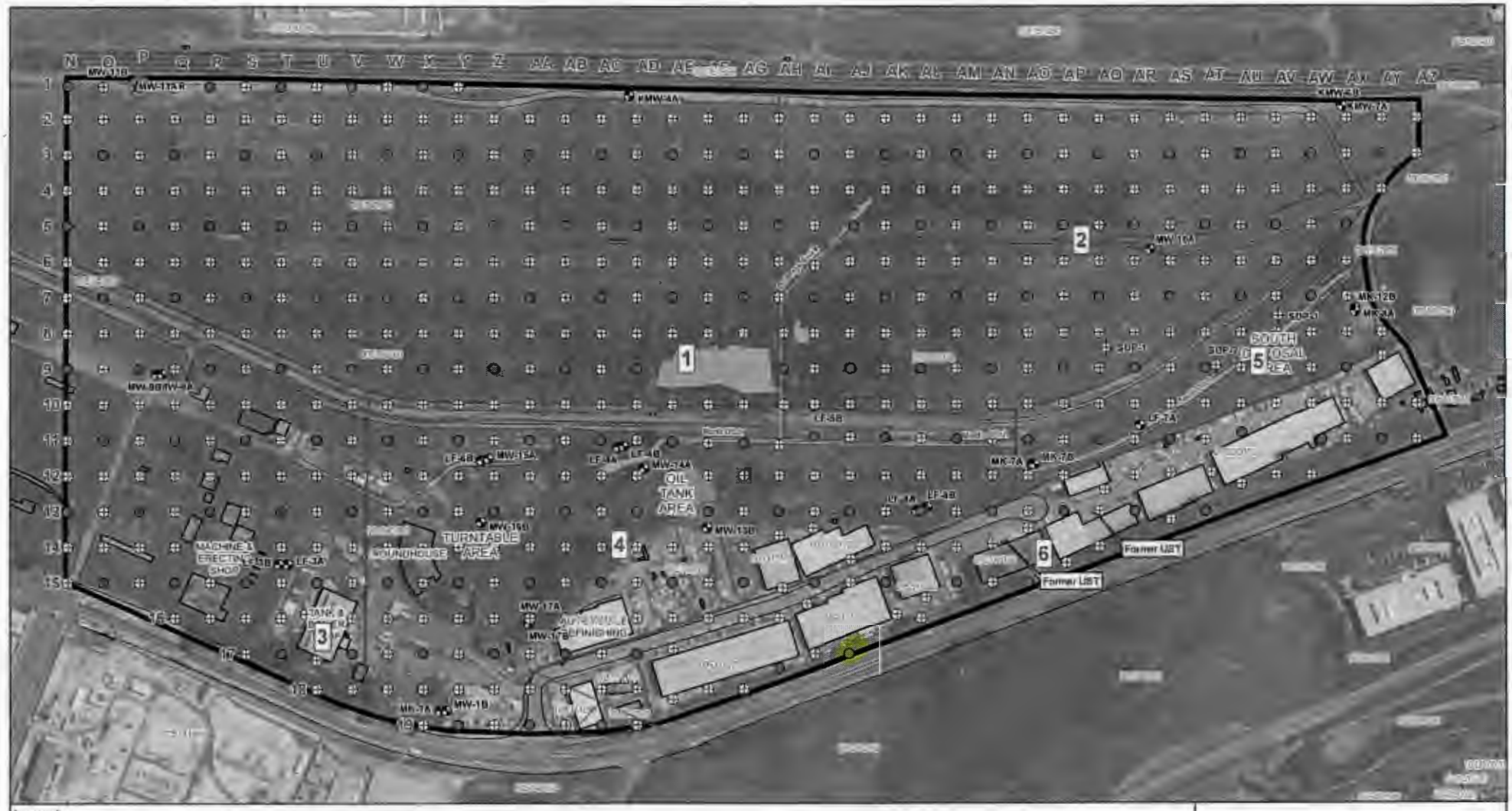
Field Contact & Cell # (if known): Miranda Kahrilas, 847.530.7602

I certify that this application is correct to the best of my knowledge and the well/boring will be constructed/destroyed in compliance with the conditions of this permit (see reverse), the San Mateo County Well Ordinance, and the State Water Well Standards. I understand that I am responsible for General Conditions E, F, K, and L of this permit and if I indicated the purpose of drilling is geotechnical, then no one will use the boring to collect any samples for environmental analyses. If there is a change in Responsible Professional, I will notify San Mateo County GPP staff.

Responsible Professional's Name (Please print legibly): Anthony Smith

Responsible Professional's Signature: _____ Date: _____

California Professional Geologist (PG) No. _____ or Civil Engineer (PE) No. _____



Proposed Sample Locations

Brisbane OU-2
Brisbane, California

Geosyntec consultants

WG2245 | November 2018

Figure X

D:\GIS\JP Chiles\Project\2018_Data\DataAnalysis - OU2\Fig1F_SProsSamplesLocs.mxd 11/26/2018 10:05:30 AM

ORDINANCE: 04023

SAN MATEO COUNTY HEALTH
ENVIRONMENTAL HEALTH SERVICES

Permit 19-0256

P/E: 2010 MONITORING WELLS - INSTALLATION/DESTRUCTION

FACILITY:
100 INDUSTRIAL WAY, BRISBANE

OWNER:
UNIVERSAL PARAGON CORP
150 EXECUTIVE PARK BLVD 4000
SAN FRANCISCO

WP0012185 FA0065537
005311070
AMOUNT PAID: 747.00

CONTRACTOR:
PENECORE DRILLING

TERMS & CONDITIONS:

CONSTRUCT SOIL BORINGS (2)
CONSULTANT: GEOSYNTEC CONSULTANTS
PROJECT MGR: ANTHONY SMITH

KIAN ATKINSON
ENVIRONMENTAL HEALTH SPECIALIST

DATE ISSUED: 2/1/2019

EXPIRATION DATE: 6/1/2019

THIS CERTIFICATE IS NONTRANSFERABLE AND MUST BE POSTED ON-SITE IN A CONSPICUOUS PLACE.

SAN MATEO COUNTY ENVIRONMENTAL HEALTH

COUNTY OF SAN MATEO HEALTH SYSTEM

PAID VIA MAIL
$747.—
CK # 282 ($2241)

Environmental Health Services
Groundwater Protection Program
2000 Alameda de las Pulgas, Suite #100
San Mateo, CA 94403
Phone:(650) 372-6200 Fax: (650) 627-8244
smchealth.org/gpp

RECEIVED JAN 30 2019

SUBSURFACE DRILLING PERMIT APPLICATION

Allow three (3) full working days for processing a complete permit application which includes payment (one permit per parcel). Drilling start date & time must be scheduled with County staff at (650) 464-0047 or drilling@smcgov.org at least 2 full working days (i.e. 48 hours) in advance. Visit smchealth.org/ehfees for Groundwater Protection Program Fees

PURPOSE OF APPLICATION: ☐ Groundwater Monitoring/Vapor Well Installation ☒ Construct Soil Borings (variance request if to be left open >24 hrs) ☐ Groundwater Monitoring/Vapor Well Destruction Extension of Permit # ____

No. of Wells ____ No. of Borings 2 Well/Boring Names AD-17, AH-18

PURPOSE OF DRILLING: ☒ Environmental ☐ Geotechnical

LEAD AGENCY: ☐ County GPP (permit approval is not to be considered work plan approval) ☒ RWQCB/DTSC/USEPA (Provide approval letter) ☐ None (i.e. voluntary)

SITE / DRILLING INFORMATION

Agency Case # 2020111 Assessor's Parcel # (required) 005-311-070 (one per permit)

Drilling Location Address: 100 INDUSTRIAL WAY City: Brisbane Zip: 94134

To Be Constructed In: ☐ Public Property ☒ Private Property ☐ Refuse

Maximum Proposed Depth (wells/borings) 20 (feet) Drilling Method: Direct Push or augers

Boring Diameter: 3-inch Casing Diameter: N/A Filter Pack Interval: N/A Screen Interval: N/A

Destruction Method: ☐ Pressure Grouting (provide well construction logs and grout calcs)
(6 gallons water max/94 lb cement, up to 5% bentonite) ☐ Overdrilling (guide rods for total depth prior to starting required)

WELL/BORING OWNER (Well/boring owner name or contact person should match signature)

Name: Universal Paragon Corporation Contact Person: Howard Pearce

Address: 150 Executive Park Blvd., Suite 4000 City, State, Zip: San Francisco, CA 94134

Telephone: 415.468.6676x114 Email: hpearce@upcsf.com

It is my responsibility to notify the County of any known changes in the purpose of this well/boring from that which is indicated on this application, to submit indication of annual usage of wells to the County, and to maintain the well in good condition. *(Letter signed by well/boring owner/contact person, containing above language and attesting to knowledge of all permit requirements and conditions, may be substituted for signature.)*

Well/Boring Owner's/Contact Person's Signature: [signature] Date: 1-18-19

PROPERTY OWNER (Name as appears on assessor's roles should match signature)

Name: Universal Paragon Corporation Contact Person: Howard Pearce

Address: 150 Executive Park Blvd., Suite 4000 City, State, Zip: San Francisco, CA 94134

Telephone: 415.468.6676x114 Email: hpearce@upcsf.com

I understand that a well/boring is being installed on my property. I agree to notify the County and Well Owner of any known damage or future access issues to the well *(Letter signed by property owner, containing above language or encroachment permit may be substituted for signature)*

Property Owner's Signature: [signature] Date: 1-18-19

DRILLING COMPANY

Drilling Company: Penecore Drilling Contact Person: Xavier Green

Address: 220 N. East Street City, State, Zip: Woodland, CA 95776

Telephone: 530-661-3600 Email: xavier@penecore.com C57 Drillers License # 906899

I certify that the well/boring will be constructed in compliance with the conditions of this permit (see reverse), the San Mateo County Well Ordinance, and the State Water Well Standards, and that the license listed above is considered current and active by the Contractors State License Board.

Driller's Signature: ____ Date: ____

CONSULTANT COMPANY

Consultant Company: Geosyntec Consultants Project Manager: Anthony Smith

Address: 1111 Broadway, 6th Floor City, State, Zip: Oakland, CA 94607

Telephone: 510-285-2770 Email: tsmith@geosyntec.com

Field Contact & Cell # (if known): Miranda Kahrilas, 847.530.7602

I certify that this application is correct to the best of my knowledge and the well/boring will be constructed/destroyed in compliance with the conditions of this permit (see reverse), the San Mateo County Well Ordinance, and the State Water Well Standards. I understand that I am responsible for General Conditions E, F, K, and L of this permit and if I indicated the purpose of drilling is geotechnical, then no one will use the boring to collect any samples for environmental analyses. If there is a change in Responsible Professional, I will notify San Mateo County GPP staff.

Responsible Professional's Name (Please print legibly): Anthony Smith

Responsible Professional's Signature: [signature] Date: 1/25/2019

California Professional Geologist (PG) No. ____ or Civil Engineer (PE) No. C81473

REV. 5/23/18

FA65537

SUBSURFACE DRILLING PERMIT APPLICATION

REQUIREMENTS:

An accurate and correct map **must** be submitted with the application and include the following: north arrow, existing and historic site features, existing and proposed well/boring locations with ID's to scale, property lines and any other pertinent information. A work plan describing the drilling and construction/destruction methodology may be requested by County staff. A complete application with appropriate fees must be submitted 3 working days in advance of drilling and notification of start date and time must be provided at least 2 working days prior to drilling. The permit is subject to both General and Special Conditions stated below. A copy of the approved Subsurface Drilling Permit **must** be available on site while work related to the permit is being performed. **Drilling may begin at the notified date and time whether County staff is present or not.**

GENERAL CONDITIONS:

A. Field notification must be provided to GPP drilling inspection staff at least 2 full working days prior to the start of drilling. GPP Caseworker also must be notified if site is associated with a remedial action case.
B. Well and boring construction and destruction under this permit are subject to the Standards for the Construction of Wells in San Mateo County, County Groundwater Protection Program (GPP) Guidelines, Policies & Procedures, the State Water Well Standards, and any instructions by a Health Department representative.
C. Well/Boring Owner, Driller, and Responsible Professional assume responsibility for all activities and uses under the permit, including compliance with Workmen's Compensation Laws, and indemnify, defend and save the County of San Mateo, its officers, agents and employees, free and harmless from any and all expense, cost, or liability in connection with or resulting from work or stopped-work associated with the permit, including, but not limited to, property damage, personal injury, wrongful death, and loss of income.
D. All borings **must** be properly destroyed (grouted/sealed) within 24 hours of drilling, unless special conditions are approved beforehand in writing as part of this permit, and must be continuously protected and stabilized.
E. Analytical results of all soil, vapor, and groundwater samples collected during the execution of drilling under this permit **must** be submitted to County GPP staff by the Responsible Professional within 60 days of sample collection. If contamination is discovered during drilling, verbal notification to County GPP by the Responsible Professional is **required** within 72 hours of discovery. Proper storage, labeling & disposal of investigation-derived residual wastes are the responsibility of the consultant unless stated otherwise contractually.
F. Boring logs, well construction details, and finalized as-built location map for all borings/ wells (except geotechnical borings) signed by a Responsible Professional, **must** be submitted to County GPP by the Responsible Professional within 60 days of drilling/construction/destruction. DWR Form 188 must be filed with the State per water code 13752.
G. Permit is valid only for the purpose specified herein. No change in purpose or required procedures, as described on this permit application, in the associated workplan, or in the special conditions below, will be allowed except upon written permission from the County. Construction aspects can be changed based on conditions encountered in the field.
H. **Permit is valid for one mobilization** associated with originally permitted boring/well locations only, including contingency locations, and is automatically canceled if not exercised, or if an extension is not applied for and granted within 120 days of the original permit issuance date. Failure to notify staff of cancellation or delay in start time will result in the Consultant being billed an Inspection Cancellation fee if GPP staff attempted to perform an inspection. Fees are listed at smchealth.org/ehfees
I. Wells installed under this permit may not be used for domestic, municipal, agricultural, or irrigation water supply.
J. All work performed **must** conform to Business and Profession Codes and State Water Well Standards.
K. Top-of-casing elevation of all wells **must** be surveyed to the nearest 0.01-foot relative to Mean Sea Level or NAVD88 and submitted to County GPP within 60 days of drilling, and to State GeoTracker as appropriate. Geotechnical wells are exempt from this requirement if a written variance from GPP is obtained prior to drilling.
L. Latitude and longitude of all wells **must** be surveyed with sub-meter accuracy relative to NAD83 and submitted to County GPP within 60 days of drilling, and to State GeoTracker as appropriate.
M. Violation of any requirement or general or special permit condition may result in an order by GPP staff to cease work under this permit, correct the violation, potentially re-permit the work as a new mobilization, and potential actions may be taken against the Well Owner, Property Owner, or Responsible Professional by GPP.

SPECIAL CONDITIONS: _____

(agency use only) _____

_____

_____

For Agency Use Only:

County Approval: _____ FA # _____ Date: 1/3/19

COUNTY OF SAN MATEO HEALTH SYSTEM

Environmental Health Services
Groundwater Protection Program
2000 Alameda de las Pulgas, Suite #100
San Mateo, CA 94403
Phone (650) 372-6200 Fax: (650) 627-8244
smchealth.org/gpp

SUBSURFACE DRILLING PERMIT APPLICATION

Allow three (3) full working days for processing a complete permit application which includes payment (one permit per parcel). Drilling **start date & time** must be scheduled with County staff at (650) 464-0047 or drilling@smcgov.org **at least 2 full working days (i.e. 48 hours) in advance.** Visit smchealth.org/ehfees for Groundwater Protection Program Fees

PURPOSE OF APPLICATION: ☐ Groundwater Monitoring/Vapor Well Installation ☒ Construct Soil Borings (variance request if to be left open >24 hrs)
☐ Groundwater Monitoring/Vapor Well Destruction Extension of Permit # _____
No. of Wells _____ No. of Borings 2 Well/Boring Names _____

PURPOSE OF DRILLING: ☒ Environmental ☐ Geotechnical
LEAD AGENCY: ☐ County GPP (permit approval is not to be considered work plan approval) ☒ RWQCB/DTSC/USEPA (Provide approval letter) ☐ None (i.e. voluntary)

SITE / DRILLING INFORMATION

Agency Case # 2020111 Assessor's Parcel # (required) 005-311-070 (one per permit)
Drilling Location Address: 2500 Bayshore Blvd. City: Brisbane Zip: 94134
To Be Constructed In: ☐ Public Property ☒ Private Property ☐ Refuse
Maximum Proposed Depth (wells/borings) 20 (feet) Drilling Method: Direct Push or augers
Boring Diameter: 3-inch Casing Diameter: N/A Filter Pack Interval: N/A Screen Interval: N/A
Destruction Method: ☐ Pressure Grouting (provide well construction logs and grout calcs)
(6 gallons water max/94 lb cement, up to 5% bentonite) ☐ Overdrilling (guide rods for total depth prior to starting required)

WELL/BORING OWNER (Well/boring owner name or contact person should match signature)

Name: Universal Paragon Corporation Contact Person: Howard Pearce
Address: 150 Executive Park Blvd., Suite 4000 City, State, Zip: San Francisco, CA 94134
Telephone: 415.468.6676x114 Email: hpearce@upcsf.com

It is my responsibility to notify the County of any known changes in the purpose of this well/boring from that which is indicated on this application, to submit indication of annual usage of wells to the County, and to maintain the well in good condition. *(Letter signed by well/boring owner/contact person, containing above language and attesting to knowledge of all permit requirements and conditions, may be substituted for signature.)*

Well/Boring Owner's/Contact Person's Signature: _____ Date: _____

PROPERTY OWNER (Name as appears on assessor's roles should match signature)

Name: Universal Paragon Corporation Contact Person: Howard Pearce
Address: 150 Executive Park Blvd., Suite 4000 City, State, Zip: San Francisco, CA 94134
Telephone: 415.468.6676x114 Email: hpearce@upcsf.com

I understand that a well/boring is being installed on my property. I agree to notify the County and Well Owner of any known damage or future access issues to the well *(Letter signed by property owner, containing above language, or encroachment permit may be substituted for signature)*

Property Owner's Signature: _____ Date: _____

DRILLING COMPANY

Drilling Company: Penecore Drilling Contact Person: Xavier Green
Address: 220 N. East Street City, State, Zip: Woodland, CA 95776
Telephone: 530-661-3600 Email: xavier@penecore.com C57 Drillers License # 906899

I certify that the well/boring will be constructed in compliance with the conditions of this permit (see reverse), the San Mateo County Well Ordinance, and the State Water Well Standards, and that the license listed above is considered current and active by the Contractors State License Board.

Driller's Signature: [redacted] Date: 1/18/2019

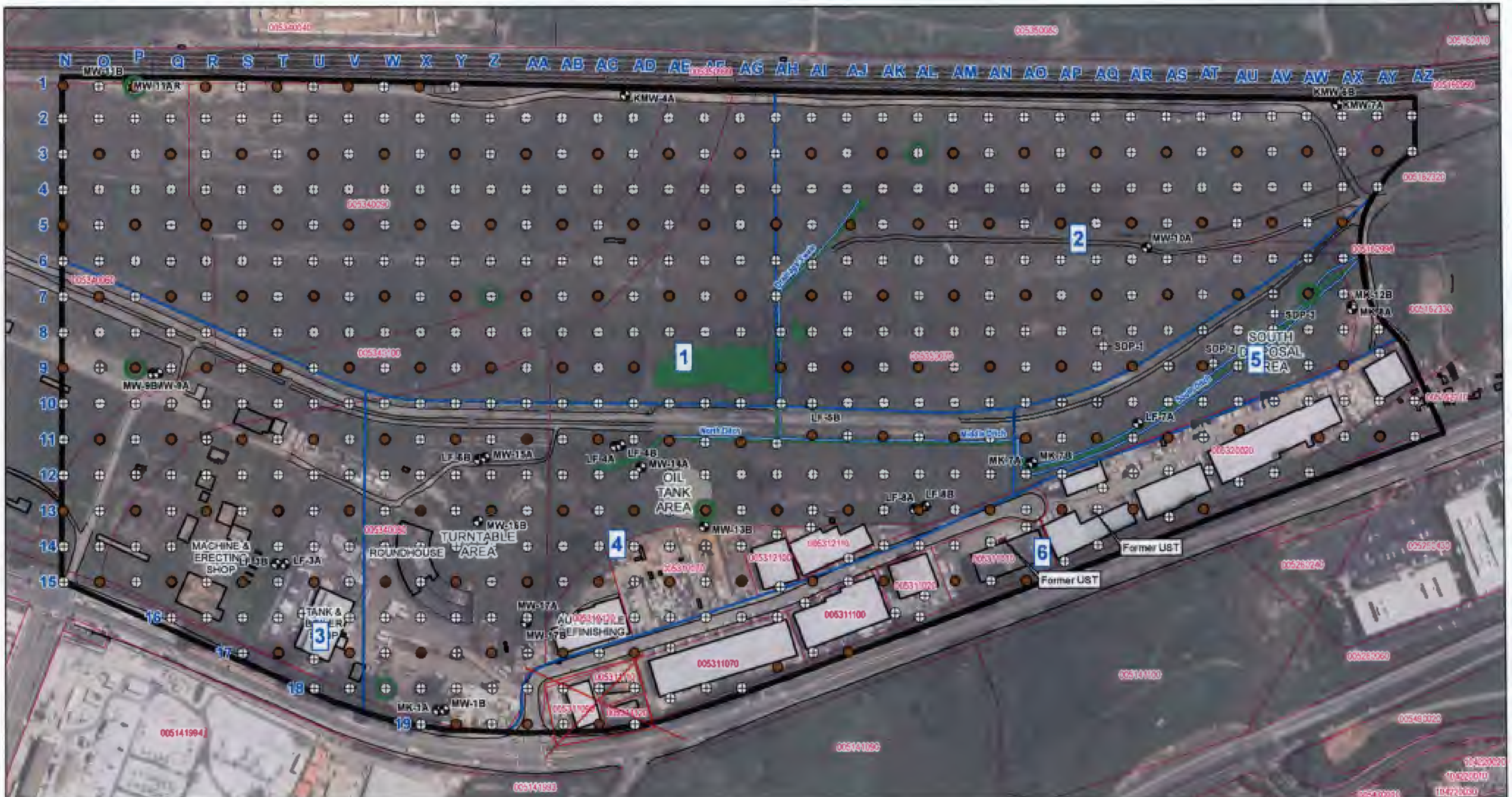
CONSULTANT COMPANY

Consultant Company: Geosyntec Consultants Project Manager: Anthony Smith
Address: 1111 Broadway, 6th Floor City, State, Zip: Oakland, CA 94607
Telephone: 510-285-2770 Email: tsmith@geosyntec.com
Field Contact & Cell # (if known): Miranda Kahrilas, 847.530.7602

I certify that this application is correct to the best of my knowledge and the well/boring will be constructed/destroyed in compliance with the conditions of this permit (see reverse), the San Mateo County Well Ordinance and the State Water Well Standards. I understand that I am responsible for General Conditions E, F, K, and L of this permit and if I indicated the purpose of drilling is geotechnical, then no one will use the boring to collect any samples for environmental analyses. If there is a change in Responsible Professional, I will notify San Mateo County GPP staff.

Responsible Professional's Name (Please print legibly): Anthony Smith
Responsible Professional's Signature: _____ Date: _____
California Professional Geologist (PG) No. _____ or Civil Engineer (PE) No. _____

RE: 5/23/2



Legend

Proposed Sample Location and Soil Analyses
- Metals
- Metals, VOCs, SVOCs, PCBs, OCPs, TPH, Asbestos
- Monitoring Well Location
- Piezometer Location
- Property Boundary
- Drainage Ditch
- Parcel Boundary and APN
- Wetlands
- Approximate Former Oil Tank Location
- Approximate Former Underground Storage Tank (UST) Location
- Railroad Tracks
- Current/Former Building Footprint

Note:
- All locations are approximate

Proposed Sample Locations

Brisbane OU-2
Brisbane, California

Geosyntec consultants

Figure X

WG2245 | November 2018

D:\GIS\UPC\Brisbane\Project\2018_DataGapAnalysis - OU2\Fig0X_SPropSampleLocsv2.mxd 11/26/2018 10:05:30 AM

ORDINANCE: 04023

SAN MATEO COUNTY HEALTH
ENVIRONMENTAL HEALTH SERVICES

Permit 19-0257

P/E: 2010 MONITORING WELLS - INSTALLATION/DESTRUCTION

FACILITY:
200 INDUSTRIAL WAY, BRISBANE

OWNER:
UNIVERSAL PARAGON CORP
150 EXECUTIVE PARK BLVD 4000
SAN FRANCISCO

WP0012186 FA0065538
005311020
AMOUNT PAID: 747.00

CONTRACTOR:
PENECORE DRILLING

TERMS & CONDITIONS:

CONSTRUCT SOIL BORINGS (1)
CONSULTANT: GEOSYNTEC CONSULTANTS
PROJECT MGR: ANTHONY SMITH

KIAN ATKINSON
ENVIRONMENTAL HEALTH SPECIALIST

DATE ISSUED: 2/1/2019

EXPIRATION DATE: 6/1/2019

THIS CERTIFICATE IS NONTRANSFERABLE AND MUST BE POSTED ON-SITE IN A CONSPICUOUS PLACE.

COUNTY OF SAN MATEO HEALTH SYSTEM
SAN MATEO COUNTY ENVIRONMENTAL HEALTH

PAID VIA MAIL
$747.-
Ck#282 ($2241)

Environmental Health Services
Groundwater Protection Program
2000 Alameda de las Pulgas, Suite #100
San Mateo, CA 94403
Phone:(650) 372-6200 Fax: (650) 627-8244
smchealth.org/gpp

JAN 3 0 2019
RECEIVED

SUBSURFACE DRILLING PERMIT APPLICATION

Allow three (3) full working days for processing a complete permit application which includes payment (one permit per parcel). Drilling start date & time must be scheduled with County staff at (650) 464-0047 or drilling@smcgov.org at least 2 full working days (i.e. 48 hours) in advance. Visit smchealth.org/ehfees for Groundwater Protection Program Fees

PURPOSE OF APPLICATION: ☐ Groundwater Monitoring/Vapor Well Installation ☒ Construct Soil Borings (variance request if to be left open >24 hrs) ☐ Groundwater Monitoring/Vapor Well Destruction Extension of Permit #

No. of Wells ____ No. of Borings 1 Well/Boring Names AK-15

PURPOSE OF DRILLING: ☒ Environmental ☐ Geotechnical

LEAD AGENCY: ☐ County GPP (permit approval is not to be considered work plan approval) ☒ RWQCB/DTSC/USEPA (Provide approval letter) ☐ None (i.e. voluntary)

SITE / DRILLING INFORMATION

Agency Case # 2020111 Assessor's Parcel # (required) 005-311-020 (one per permit)

Drilling Location Address: 200 INDUSTRIAL WAY City: Brisbane Zip: 94134

To Be Constructed In: ☐ Public Property ☒ Private Property ☐ Refuse

Maximum Proposed Depth (wells/borings) 20 (feet) Drilling Method: Direct Push or augers

Boring Diameter: 3-inch Casing Diameter: N/A Filter Pack Interval: N/A Screen Interval: N/A

Destruction Method: (6 gallons water max/94 lb cement, up to 5% bentonite) ☐ Pressure Grouting (provide well construction logs and grout calcs) ☐ Overdrilling (guide rods for total depth prior to starting required)

WELL/BORING OWNER (Well/boring owner name or contact person should match signature)

Name: Universal Paragon Corporation Contact Person: Howard Pearce

Address: 150 Executive Park Blvd., Suite 4000 City, State, Zip: San Francisco, CA 94134

Telephone: 415.468.6676x114 Email: hpearce@upcsf.com

It is my responsibility to notify the County of any known changes in the purpose of this well/boring from that which is indicated on this application, to submit indication of annual usage of wells to the County, and to maintain the well in good condition. *(Letter signed by well/boring owner/contact person, containing above language and attesting to knowledge of all permit requirements and conditions, may be substituted for signature.)*

Well/Boring Owner's/Contact Person's Signature: [signature] Date: 1-18-19

PROPERTY OWNER (Name as appears on assessor's roles should match signature)

Name: Universal Paragon Corporation Contact Person: Howard Pearce

Address: 150 Executive Park Blvd., Suite 4000 City, State, Zip: San Francisco, CA 94134

Telephone: 415.468.6676x114 Email: hpearce@upcsf.com

I understand that a well/boring is being installed on my property. I agree to notify the County and Well Owner of any known damage or future access issues to the well *(Letter signed by property owner, containing above language, or encroachment permit may be substituted for signature)*

Property Owner's Signature: [signature] Date: 1-18-19

DRILLING COMPANY

Drilling Company: Penecore Drilling Contact Person: Xavier Green

Address: 220 N. East Street City, State, Zip: Woodland, CA 95776

Telephone: 530-661-3600 Email: xavier@penecore.com C57 Drillers License # 906899

I certify that the well/boring will be constructed in compliance with the conditions of this permit (see reverse), the San Mateo County Well Ordinance, and the State Water Well Standards, and that the license listed above is considered current and active by the Contractors State License Board.

Driller's Signature: Date:

CONSULTANT COMPANY

Consultant Company: Geosyntec Consultants Project Manager: Anthony Smith

Address: 1111 Broadway, 6th Floor City, State, Zip: Oakland, CA 94607

Telephone: 510-285-2770 Email: tsmith@geosyntec.com

Field Contact & Cell # (if known): Miranda Kahrilas, 847.530.7602

I certify that this application is correct to the best of my knowledge and the well/boring will be constructed/destroyed in compliance with the conditions of this permit (see reverse), the San Mateo County Well Ordinance, and the State Water Well Standards. I understand that I am responsible for General Conditions E, F, K, and L of this permit and if I indicated the purpose of drilling is geotechnical, then no one will use the boring to collect any samples for environmental analyses. If there is a change in Responsible Professional, I will notify San Mateo County GPP staff.

Responsible Professional's Name (Please print legibly): Anthony Smith

Responsible Professional's Signature: [signature] Date: 1/25/2019

California Professional Geologist (PG) No. ____ or Civil Engineer (PE) No. C81473

REV. 5/23/18

FA65538

SUBSURFACE DRILLING PERMIT APPLICATION

REQUIREMENTS:

An accurate and correct map **must** be submitted with the application and include the following: north arrow, existing and historic site features, existing and proposed well/boring locations with ID's to scale, property lines and any other pertinent information. A work plan describing the drilling and construction/destruction methodology may be requested by County staff. A complete application with appropriate fees must be submitted 3 working days in advance of drilling and notification of start date and time must be provided at least 2 working days prior to drilling. The permit is subject to both General and Special Conditions stated below. A copy of the approved Subsurface Drilling Permit **must** be available on site while work related to the permit is being performed. **Drilling may begin at the notified date and time whether County staff is present or not.**

GENERAL CONDITIONS:

A. Field notification must be provided to GPP drilling inspection staff at least 2 full working days prior to the start of drilling. GPP Caseworker also must be notified if site is associated with a remedial action case.
B. Well and boring construction and destruction under this permit are subject to the Standards for the Construction of Wells in San Mateo County, County Groundwater Protection Program (GPP) Guidelines, Policies & Procedures, the State Water Well Standards, and any instructions by a Health Department representative.
C. Well/Boring Owner, Driller, and Responsible Professional assume responsibility for all activities and uses under the permit, including compliance with Workmen's Compensation Laws, and indemnify, defend and save the County of San Mateo, its officers, agents and employees, free and harmless from any and all expense, cost, or liability in connection with or resulting from work or stopped-work associated with the permit, including, but not limited to, property damage, personal injury, wrongful death, and loss of income.
D. All borings **must** be properly destroyed (grouted/sealed) within 24 hours of drilling, unless special conditions are approved beforehand in writing as part of this permit, and must be continuously protected and stabilized.
E. Analytical results of all soil, vapor, and groundwater samples collected during the execution of drilling under this permit **must** be submitted to County GPP staff by the Responsible Professional within 60 days of sample collection. If contamination is discovered during drilling, verbal notification to County GPP by the Responsible Professional is **required** within 72 hours of discovery. Proper storage, labeling & disposal of investigation-derived residual wastes are the responsibility of the consultant unless stated otherwise contractually.
F. Boring logs, well construction details, and finalized as-built location map for all borings/ wells (except geotechnical borings) signed by a Responsible Professional, **must** be submitted to County GPP by the Responsible Professional within 60 days of drilling/construction/destruction. DWR Form 188 must be filed with the State per water code 13752.
G. Permit is valid only for the purpose specified herein. No change in purpose or required procedures, as described on this permit application, in the associated workplan, or in the special conditions below, will be allowed except upon written permission from the County. Construction aspects can be changed based on conditions encountered in the field.
H. **Permit is valid for one mobilization** associated with originally permitted boring/well locations only, including contingency locations, and is automatically canceled if not exercised, or if an extension is not applied for and granted within 120 days of the original permit issuance date. Failure to notify staff of cancellation or delay in start time will result in the Consultant being billed an Inspection Cancellation fee if GPP staff attempted to perform an inspection. Fees are listed at smchealth.org/ehfees
I. Wells installed under this permit may not be used for domestic, municipal, agricultural, or irrigation water supply.
J. All work performed **must** conform to Business and Profession Codes and State Water Well Standards.
K. Top-of-casing elevation of all wells **must** be surveyed to the nearest 0.01-foot relative to Mean Sea Level or NAVD88 and submitted to County GPP within 60 days of drilling, and to State GeoTracker as appropriate. Geotechnical wells are exempt from this requirement if a written variance from GPP is obtained prior to drilling.
L. Latitude and longitude of all wells **must** be surveyed with sub-meter accuracy relative to NAD83 and submitted to County GPP within 60 days of drilling, and to State GeoTracker as appropriate.
M. Violation of any requirement or general or special permit condition may result in an order by GPP staff to cease work under this permit, correct the violation, potentially re-permit the work as a new mobilization, and potential actions may be taken against the Well Owner, Property Owner, or Responsible Professional by GPP.

SPECIAL CONDITIONS: _____

(agency use only) _____

_____

_____

For Agency Use Only:
County Approval: _____ FA # _____ Date: 1/31/19

COUNTY OF SAN MATEO
HEALTH SYSTEM

Environmental Health Services
Groundwater Protection Program
2000 Alameda de las Pulgas, Suite #100
San Mateo, CA 94403
Phone (650) 372-6200 Fax: (650) 627-8244
smchealth.org/gpp

SUBSURFACE DRILLING PERMIT APPLICATION

Allow three (3) full working days for processing a complete permit application which includes payment (one permit per parcel). Drilling **start date & time** must be scheduled with County staff at (650) 464-0047 or drilling@smcgov.org **at least 2 full working days (i.e. 48 hours) in advance.** Visit smchealth.org/ehfees for Groundwater Protection Program Fees

PURPOSE OF APPLICATION: ☐ Groundwater Monitoring/Vapor Well Installation ☒ Construct Soil Borings (variance request if to be left open >24 hrs) ☐ Groundwater Monitoring/Vapor Well Destruction Extension of Permit # _____

No. of Wells _____ No. of Borings 1 Well/Boring Names _____

PURPOSE OF DRILLING: ☒ Environmental ☐ Geotechnical

LEAD AGENCY: ☐ County GPP (permit approval is not to be considered work plan approval) ☒ RWQCB/DTSC/USEPA (Provide approval letter) ☐ None (i.e. voluntary)

SITE / DRILLING INFORMATION

Agency Case # 2020111 Assessor's Parcel # (required) 005-311-020 (one per permit)

Drilling Location Address: 2500 Bayshore Blvd. City: Brisbane Zip: 94134

To Be Constructed In: ☐ Public Property ☒ Private Property ☐ Refuse

Maximum Proposed Depth (wells/borings) 20 (feet) Drilling Method: Direct Push or augers

Boring Diameter: 3-inch Casing Diameter: N/A Filter Pack Interval: N/A Screen Interval: N/A

Destruction Method: ☐ Pressure Grouting (provide well construction logs and grout calcs)

(6 gallons water max/94 lb cement, up to 5% bentonite) ☐ Overdrilling (guide rods for total depth prior to starting required)

WELL/BORING OWNER (Well/boring owner name or contact person should match signature)

Name: Universal Paragon Corporation Contact Person: Howard Pearce

Address: 150 Executive Park Blvd., Suite 4000 City, State, Zip: San Francisco, CA 94134

Telephone: 415.468.6676x114 Email: hpearce@upcsf.com

It is my responsibility to notify the County of any known changes in the purpose of this well/boring from that which is indicated on this application, to submit indication of annual usage of wells to the County, and to maintain the well in good condition. *(Letter signed by well/boring owner/contact person, containing above language and attesting to knowledge of all permit requirements and conditions, may be substituted for signature.)*

Well/Boring Owner's/Contact Person's Signature: _____ Date: _____

PROPERTY OWNER (Name as appears on assessor's roles should match signature)

Name: Universal Paragon Corporation Contact Person: Howard Pearce

Address: 150 Executive Park Blvd., Suite 4000 City, State, Zip: San Francisco, CA 94134

Telephone: 415.468.6676x114 Email: hpearce@upcsf.com

I understand that a well/boring is being installed on my property. I agree to notify the County and Well Owner of any known damage or future access issues to the well *(Letter signed by property owner, containing above language, or encroachment permit may be substituted for signature)*

Property Owner's Signature: _____ Date: _____

DRILLING COMPANY

Drilling Company: Penecore Drilling Contact Person: Xavier Green

Address: 220 N. East Street City, State, Zip: Woodland, CA 95776

Telephone: 530-661-3600 Email: xavier@penecore.com C57 Drillers License # 906899

I certify that the well/boring will be constructed in compliance with the conditions of this permit (see reverse), the San Mateo County Well Ordinance, and the State Water Well Standards, and that the license listed above is considered current and active by the Contractors State License Board.

Driller's Signature: _____ Date: 1/18/2019

CONSULTANT COMPANY

Consultant Company: Geosyntec Consultants Project Manager: Anthony Smith

Address: 1111 Broadway, 6th Floor City, State, Zip: Oakland, CA 94607

Telephone: 510-285-2770 Email: tsmith@geosyntec.com

Field Contact & Cell # (if known): Miranda Kahrilas, 847.530.7602

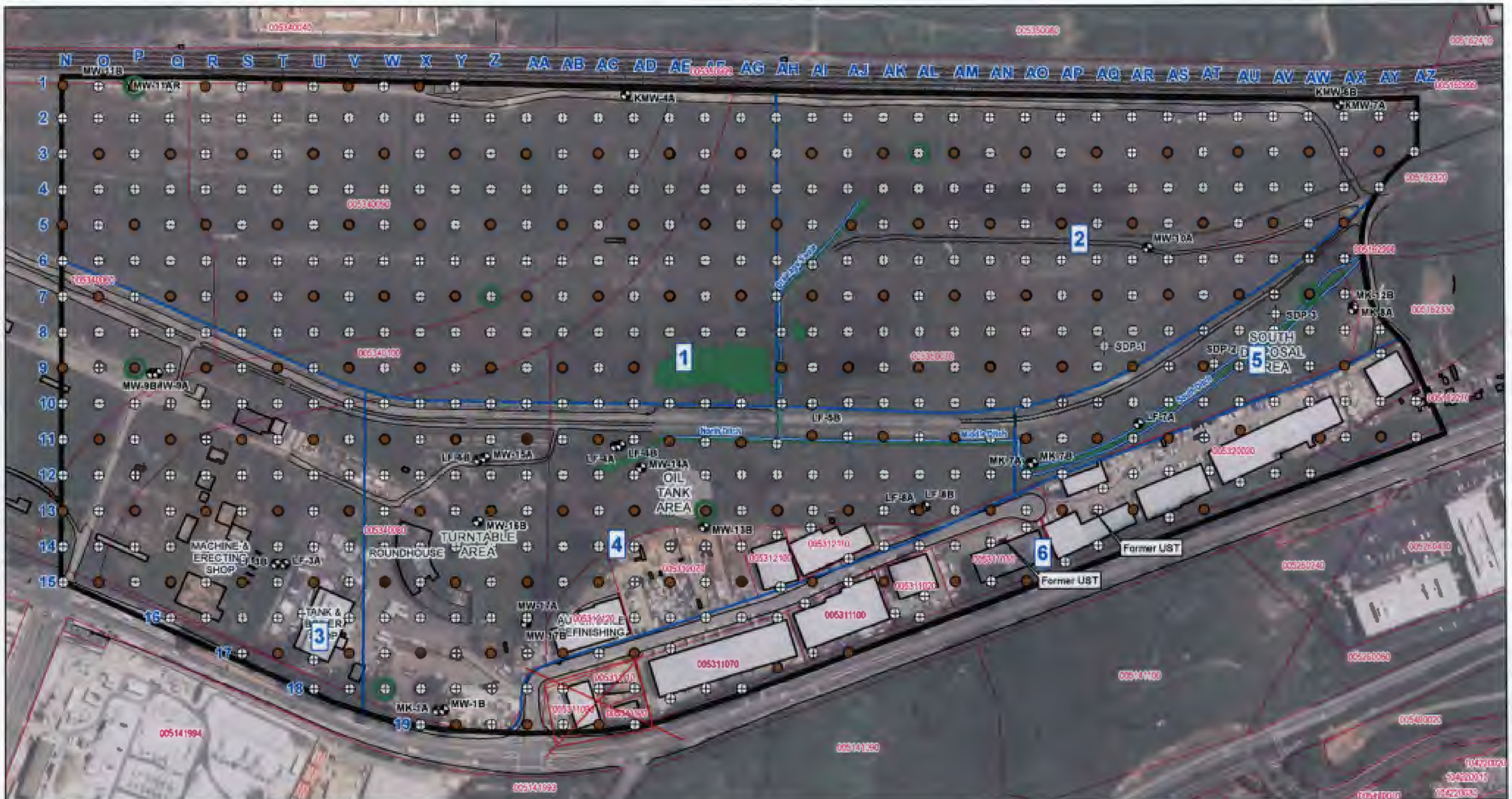
I certify that this application is correct to the best of my knowledge and the well/boring will be constructed/destroyed in compliance with the conditions of this permit (see reverse), the San Mateo County Well Ordinance, and the State Water Well Standards. I understand that I am responsible for General Conditions E, F, K, and L of this permit and if I indicated the purpose of drilling is geotechnical, then no one will use the boring to collect any samples for environmental analyses. If there is a change in Responsible Professional, I will notify San Mateo County GPP staff.

Responsible Professional's Name (Please print legibly): Anthony Smith

Responsible Professional's Signature: _____ Date: _____

California Professional Geologist (PG) No. _____ or Civil Engineer (PE) No. _____

RE: 5.23.18



Legend

Proposed Sample Location and Soil Analyses
- Metals
- Metals, VOCs, SVOCs, PCBs, OCPs, TPH, Asbestos
- Monitoring Well Location
- Piezometer Location
- Property Boundary
- Drainage Ditch
- Parcel Boundary and APN
- Wetlands
- Approximate Former Oil Tank Location
- Approximate Former Underground Storage Tank (UST) Location
- Railroad Tracks
- Current/Former Building Footprint

Note:
- All locations are approximate

0 — 250 Feet

Proposed Sample Locations

Brisbane OU-2
Brisbane, California

Geosyntec consultants

Figure X

WG2245 | November 2018

D:\GIS\UPC\Brisbane\Project\2018_DataGapAnalysis - OU2\Fig0X_SPropSampleLocsv2.mxd 11/26/2018 10:05:30 AM

ORDINANCE: 04023

SAN MATEO COUNTY HEALTH
ENVIRONMENTAL HEALTH SERVICES

Permit 19-0258

P/E: 2010 MONITORING WELLS - INSTALLATION/DESTRUCTION

FACILITY:
2500 BAYSHORE BLVD, BRISBANE

OWNER:
UNIVERSAL PARAGON CORP
150 EXECUTIVE PARK BLVD 4000
SAN FRANCISCO

WP0012187 FA0065539
005162320
AMOUNT PAID: 747.00

CONTRACTOR:
PENECORE DRILLING

TERMS & CONDITIONS:

CONSTRUCT SOIL BORINGS (2)
CONSULTANT: GEOSYNTEC CONSULTANTS
PROJECT MGR: ANTHONY SMITH

KIAN ATKINSON
ENVIRONMENTAL HEALTH SPECIALIST

DATE ISSUED: 2/1/2019

EXPIRATION DATE: 6/1/2019

THIS CERTIFICATE IS NONTRANSFERABLE AND MUST BE POSTED ON-SITE IN A CONSPICUOUS PLACE.

SAN MATEO COUNTY ENVIRONMENTAL HEALTH

JAN 30 2019

COUNTY OF SAN MATEO HEALTH SYSTEM

PAID $747.- CK# 282 ($2241.-) VIA MAIL

Environmental Health Services
Groundwater Protection Program
2000 Alameda de las Pulgas, Suite #100
San Mateo, CA 94403
Phone:(650) 372-6200 Fax: (650) 627-8244
smchealth.org/gpp

SUBSURFACE DRILLING PERMIT APPLICATION

RECEIVED

Allow 10 working days for processing a complete permit application which includes payment (one permit per parcel). Drilling start date & time must be scheduled with County staff at (650) 464-0047 or drilling@smcgov.org at least 2 full working days (i.e. 48 hours) in advance. Visit smchealth.org/ehfees for Groundwater Protection Program Fees

PURPOSE OF APPLICATION: ☐ Groundwater Monitoring/Vapor Well Installation ☒ Construct Soil Borings (variance request if to be left open >24 hrs) ☐ Groundwater Monitoring/Vapor Well Destruction Extension of Permit #

No. of Wells ____ No. of Borings 2 Well/Boring Names AX-5, AY-3

PURPOSE OF DRILLING: ☒ Environmental ☐ Geotechnical

LEAD AGENCY: ☐ County GPP (permit approval is not to be considered work plan approval) ☒ RWQCB/DTSC/USEPA (Provide approval letter) ☐ None (i.e. voluntary)

SITE / DRILLING INFORMATION

Agency Case # 2020111 Assessor's Parcel # (required) 005-162-320 (one per permit)

Drilling Location Address: 2500 Bayshore Blvd. City: Brisbane Zip: 94134

To Be Constructed In: ☐ Public Property ☒ Private Property ☐ Refuse

Maximum Proposed Depth (wells/borings) 20 (feet) Drilling Method: Direct Push or augers

Boring Diameter: 3-inch Casing Diameter: N/A Filter Pack Interval: N/A Screen Interval: N/A

Destruction Method: ☐ Pressure Grouting (provide well construction logs and grout calcs)

(6 gallons water max/94 lb cement, up to 5% bentonite) ☐ Overdrilling (guide rods for total depth prior to starting required)

WELL/BORING OWNER (Well/boring owner name or contact person should match signature)

Name: Universal Paragon Corporation Contact Person: Howard Pearce

Address: 150 Executive Park Blvd., Suite 4000 City, State, Zip: San Francisco, CA 94134

Telephone: 415.468.6676x114 Email: hpearce@upcsf.com

It is my responsibility to notify the County of any known changes in the purpose of this well/boring from that which is indicated on this application, to submit indication of annual usage of wells to the County, and to maintain the well in good condition. *(Letter signed by well/boring owner/contact person, containing above language and attesting to knowledge of all permit requirements and conditions, may be substituted for signature.)*

Well/Boring Owner's/Contact Person's Signature: [signature] Date: 1-18-19

PROPERTY OWNER (Name as appears on assessor's roles should match signature)

Name: Universal Paragon Corporation Contact Person: Howard Pearce

Address: 150 Executive Park Blvd., Suite 4000 City, State, Zip: San Francisco, CA 94134

Telephone: 415.468.6676x114 Email: hpearce@upcsf.com

I understand that a well/boring is being installed on my property. I agree to notify the County and Well Owner of any known damage or future access issues to the well *(Letter signed by property owner, containing above language, or encroachment permit may be substituted for signature)*

Property Owner's Signature: [signature] Date: 1-18-19

DRILLING COMPANY

Drilling Company: Penecore Drilling Contact Person: Xavier Green

Address: 220 N. East Street City, State, Zip: Woodland, CA 95776

Telephone: 530-661-3600 Email: xavier@penecore.com C57 Drillers License # 906899

I certify that the well/boring will be constructed in compliance with the conditions of this permit (see reverse), the San Mateo County Well Ordinance, and the State Water Well Standards, and that the license listed above is considered current and active by the Contractors State License Board.

Driller's Signature: ____ Date: ____

CONSULTANT COMPANY

Consultant Company: Geosyntec Consultants Project Manager: Anthony Smith

Address: 1111 Broadway, 6th Floor City, State, Zip: Oakland, CA 94607

Telephone: 510-285-2770 Email: tsmith@geosyntec.com

Field Contact & Cell # (if known): Miranda Kahrilas, 847.530.7602

I certify that this application is correct to the best of my knowledge and the well/boring will be constructed/destroyed in compliance with the conditions of this permit (see reverse), the San Mateo County Well Ordinance, and the State Water Well Standards. I understand that I am responsible for General Conditions E, F, K, and L of this permit and if I indicated the purpose of drilling is geotechnical, then no one will use the boring to collect any samples for environmental analyses. If there is a change in Responsible Professional, I will notify San Mateo County GPP staff.

Responsible Professional's Name (Please print legibly): Anthony Smith

Responsible Professional's Signature: Anthony Smith Date: 1/25/2019

California Professional Geologist (PG) No. ____ or Civil Engineer (PE) No. C81473

REV. 5/23/18

FA6S539

SUBSURFACE DRILLING PERMIT APPLICATION

REQUIREMENTS:

An accurate and correct map **must** be submitted with the application and include the following: north arrow, existing and historic site features, existing and proposed well/boring locations with ID's to scale, property lines and any other pertinent information. A work plan describing the drilling and construction/destruction methodology may be requested by County staff. A complete application with appropriate fees must be submitted 3 working days in advance of drilling and notification of start date and time must be provided at least 2 working days prior to drilling. The permit is subject to both General and Special Conditions stated below. A copy of the approved Subsurface Drilling Permit **must** be available on site while work related to the permit is being performed. **Drilling may begin at the notified date and time whether County staff is present or not.**

GENERAL CONDITIONS:

A. Field notification must be provided to GPP drilling inspection staff at least 2 full working days prior to the start of drilling. GPP Caseworker also must be notified if site is associated with a remedial action case.
B. Well and boring construction and destruction under this permit are subject to the Standards for the Construction of Wells in San Mateo County, County Groundwater Protection Program (GPP) Guidelines, Policies & Procedures, the State Water Well Standards, and any instructions by a Health Department representative.
C. Well/Boring Owner, Driller, and Responsible Professional assume responsibility for all activities and uses under the permit, including compliance with Workmen's Compensation Laws, and indemnify, defend and save the County of San Mateo, its officers, agents and employees, free and harmless from any and all expense, cost, or liability in connection with or resulting from work or stopped-work associated with the permit, including, but not limited to, property damage, personal injury, wrongful death, and loss of income.
D. All borings **must** be properly destroyed (grouted/sealed) within 24 hours of drilling, unless special conditions are approved beforehand in writing as part of this permit, and must be continuously protected and stabilized.
E. Analytical results of all soil, vapor, and groundwater samples collected during the execution of drilling under this permit **must** be submitted to County GPP staff by the Responsible Professional within 60 days of sample collection. If contamination is discovered during drilling, verbal notification to County GPP by the Responsible Professional is **required** within 72 hours of discovery. Proper storage, labeling & disposal of investigation-derived residual wastes are the responsibility of the consultant unless stated otherwise contractually.
F. Boring logs, well construction details, and finalized as-built location map for all borings/ wells (except geotechnical borings) signed by a Responsible Professional, **must** be submitted to County GPP by the Responsible Professional within 60 days of drilling/construction/destruction. DWR Form 188 must be filed with the State per water code 13752.
G. Permit is valid only for the purpose specified herein. No change in purpose or required procedures, as described on this permit application, in the associated workplan, or in the special conditions below, will be allowed except upon written permission from the County. Construction aspects can be changed based on conditions encountered in the field.
H. **Permit is valid for one mobilization** associated with originally permitted boring/well locations only, including contingency locations, and is automatically canceled if not exercised, or if an extension is not applied for and granted within 120 days of the original permit issuance date. Failure to notify staff of cancellation or delay in start time will result in the Consultant being billed an Inspection Cancellation fee if GPP staff attempted to perform an inspection. Fees are listed at smchealth.org/ehfees
I. Wells installed under this permit may not be used for domestic, municipal, agricultural, or irrigation water supply.
J. All work performed **must** conform to Business and Profession Codes and State Water Well Standards.
K. Top-of-casing elevation of all wells **must** be surveyed to the nearest 0.01-foot relative to Mean Sea Level or NAVD88 and submitted to County GPP within 60 days of drilling, and to State GeoTracker as appropriate. Geotechnical wells are exempt from this requirement if a written variance from GPP is obtained prior to drilling.
L. Latitude and longitude of all wells **must** be surveyed with sub-meter accuracy relative to NAD83 and submitted to County GPP within 60 days of drilling, and to State GeoTracker as appropriate.
M. Violation of any requirement or general or special permit condition may result in an order by GPP staff to cease work under this permit, correct the violation, potentially re-permit the work as a new mobilization, and potential actions may be taken against the Well Owner, Property Owner, or Responsible Professional by GPP.

SPECIAL CONDITIONS: _____

(agency use only) _____

_____

_____

For Agency Use Only:
County Approval: KMA FA # _____ Date: 1/31/19

COUNTY OF SAN MATEO HEALTH SYSTEM

Environmental Health Services
Groundwater Protection Program
2000 Alameda de las Pulgas, Suite #100
San Mateo, CA 94403
Phone (650) 372-6200 Fax (650) 627-8244
smchealth.org/gpp

SUBSURFACE DRILLING PERMIT APPLICATION

Allow three (3) full working days for processing a complete permit application which includes payment (one permit per parcel). Drilling **start date & time** must be scheduled with County staff at (650) 464-0047 or drilling@smcgov.org **at least 2 full working days (i.e. 48 hours) in advance.** Visit smchealth.org/ehfees for Groundwater Protection Program Fees

PURPOSE OF APPLICATION ☐ Groundwater Monitoring/Vapor Well Installation ☒ Construct Soil Borings (variance request if to be left open >24 hrs)
☐ Groundwater Monitoring/Vapor Well Destruction Extension of Permit # _____
No. of Wells _____ No. of Borings 2 Well/Boring Names _____

PURPOSE OF DRILLING ☒ Environmental ☐ Geotechnical
LEAD AGENCY ☐ County GPP (permit approval is not to be considered work plan approval) ☒ RWQCB/DTSC/USEPA (Provide approval letter) ☐ None (i.e. voluntary)

SITE / DRILLING INFORMATION

Agency Case # 2020111 Assessor's Parcel # (required) 005-162-320 (one per permit)
Drilling Location Address: 2500 Bayshore Blvd. City: Brisbane Zip: 94134
To Be Constructed In: ☐ Public Property ☒ Private Property ☐ Refuse
Maximum Proposed Depth (wells/borings) 20 (feet) Drilling Method: Direct Push or augers
Boring Diameter: 3-inch Casing Diameter: N/A Filter Pack Interval: N/A Screen Interval: N/A
Destruction Method: ☐ Pressure Grouting (provide well construction logs and grout calcs)
(6 gallons water max/94 lb cement, up to 5% bentonite) ☐ Overdrilling (guide rods for total depth prior to starting required)

WELL/BORING OWNER (Well/boring owner name or contact person should match signature)

Name: Universal Paragon Corporation Contact Person: Howard Pearce
Address: 150 Executive Park Blvd., Suite 4000 City, State, Zip: San Francisco, CA 94134
Telephone: 415.468.6676x114 Email: hpearce@upcsf.com

It is my responsibility to notify the County of any known changes in the purpose of this well/boring from that which is indicated on this application, to submit indication of annual usage of wells to the County, and to maintain the well in good condition. *(Letter signed by well/boring owner/contact person, containing above language and attesting to knowledge of all permit requirements and conditions, may be substituted for signature.)*
Well/Boring Owner's/Contact Person's Signature: _____ Date: _____

PROPERTY OWNER (Name as appears on assessor's roles should match signature)

Name: Universal Paragon Corporation Contact Person: Howard Pearce
Address: 150 Executive Park Blvd., Suite 4000 City, State, Zip: San Francisco, CA 94134
Telephone: 415.468.6676x114 Email: hpearce@upcsf.com

I understand that a well/boring is being installed on my property. I agree to notify the County and Well Owner of any known damage or future access issues to the well *(Letter signed by property owner, containing above language, or encroachment permit may be substituted for signature)*
Property Owner's Signature: _____ Date: _____

DRILLING COMPANY

Drilling Company: Penecore Drilling Contact Person: Xavier Green
Address: 220 N. East Street City, State, Zip: Woodland, CA 95776
Telephone: 530-661-3600 Email: xavier@penecore.com C57 Drillers License # 906899

I certify that the well/boring will be constructed in compliance with the conditions of this permit (see reverse), the San Mateo County Well Ordinance, and the State Water Well Standards, and that the license listed above is considered current and active by the Contractors State License Board.
Driller's Signature: _____ Date: 1/18/2019

CONSULTANT COMPANY

Consultant Company: Geosyntec Consultants Project Manager: Anthony Smith
Address: 1111 Broadway, 6th Floor City, State, Zip: Oakland, CA 94607
Telephone: 510-285-2770 Email: tsmith@geosyntec.com
Field Contact & Cell # (if known): Miranda Kahrilas, 847.530.7602

I certify that this application is correct to the best of my knowledge and the well/boring will be constructed/destroyed in compliance with the conditions of this permit (see reverse), the San Mateo County Well Ordinance, and the State Water Well Standards. I understand that I am responsible for General Conditions E, F, K, and L of this permit and if I indicated the purpose of drilling is geotechnical, then no one will use the boring to collect any samples for environmental analyses. If there is a change in Responsible Professional, I will notify San Mateo County GPP staff.
Responsible Professional's Name (Please print legibly): Anthony Smith
Responsible Professional's Signature: _____ Date: _____
California Professional Geologist (PG) No. _____ or Civil Engineer (PE) No. _____



Legend

Proposed Sample Location and Soil Analyses
- Metals
- Metals, VOCs, SVOCs, PCBs, OCPs, TPH, Asbestos
- Monitoring Well Location
- Piezometer Location
- Property Boundary
- Drainage Ditch
- Parcel Boundary and APN
- Wetlands
- Approximate Former Oil Tank Location
- Approximate Former Underground Storage Tank (UST) Location
- Railroad Tracks
- Current/Former Building Footprint

Note:
- All locations are approximate

N

0 280 Feet

Proposed Sample Locations

Brisbane OU-2
Brisbane, California

Geosyntec consultants

WG2245 | November 2018

Figure X

D:\GIS\UPC\Brisbane\Project\2018_DataGapAnalysis - OU2\Fig0X_SProposSampleLocsv2.mxd 11/26/2018 10:05:30 AM

APPENDIX D

Waste Disposal Manifests

Please print or type. Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: CAL000444109
2. Page 1 of: 1
3. Emergency Response Phone: (415) 468-6676
4. Manifest Tracking Number: 013711443 FLE

5. Generator's Name and Mailing Address
Sunquest Properties, Inc.
150 Executive Park Blvd.
San Francisco, CA 94134
Generator's Phone: (415) 468-6676

Generator's Site Address (if different than mailing address)
Brisbane Baylands
Lat: 37.4216 N
Brisbane, CA 94005

6. Transporter 1 Company Name: BELSHIRE
U.S. EPA ID Number: CAR000183913

7. Transporter 2 Company Name
U.S. EPA ID Number

8. Designated Facility Name and Site Address
U.S. Ecology, Nevada Operations
Highway 95, 11 miles S. of Beatty
Beatty, NV 89003
Facility's Phone: (775) 553-2203
U.S. EPA ID Number: NVT330010000

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
	1. Non-RCRA Hazardous Waste, Solid (Soil impacted with Lead)	018	DM	9,000	P	611
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
ERG # 171
Soil impacted with Lead
WEAR ALL APPROPRIATE PROTECTIVE CLOTHING
BESI:306471
PROFILE # 070128300-30974

15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: HOWARD PEARCE
Signature:
Month: 5 Day: 21 Year: 19

INT'L
16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER
17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: Frank Torres
Signature:
Month: 5 Day: 21 Year: 19
Transporter 2 Printed/Typed Name
Signature
Month Day Year

DESIGNATED FACILITY
18. Discrepancy
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number:
18b. Alternate Facility (or Generator)
U.S. EPA ID Number
Facility's Phone:
18c. Signature of Alternate Facility (or Generator)
Month Day Year
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)
1. 2. 3. 4.
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a
Printed/Typed Name
Signature
Month Day Year

EPA Form 8700-22 (Rev. 12-17) Previous editions are obsolete.

DESIGNATED FACILITY TO EPA's e-MANIFEST SYSTEM

RE
Designated Facility Owner or Operator: Certification of receipt of materials covered by this data form.

NO. 756087

NON-HAZARDOUS WASTE DATA FORM

BESI # 306471

GENERATOR

Generator's Name and Mailing Address
SUNQUEST PROPERTIES, INC.
150 EXECUTIVE PARK BLVD.
SAN FRANCISCO, CA 94134

Generator's Site Address (if different than mailing address)
BRISBANE BAYLANDS
LAT: 37.4216 N
BRISBANE, CA 94005

Generator's Phone: 415-468-6676

Container type removed from site:
☒ Drums ☐ Vacuum Truck ☐ Roll-off Truck ☐ Dump Truck
☐ Other _____
Quantity 003

Container type transported to receiving facility:
☐ Drums ☒ Vacuum Truck ☐ Roll-off Truck ☐ Dump Truck
☐ Other _____
Quantity 001 Volume 150gal

WASTE DESCRIPTION NON-HAZARDOUS WATER
GENERATING PROCESS WELL PURGING / DECON WATER

COMPONENTS OF WASTE	PPM	%	COMPONENTS OF WASTE	PPM	%
1. WATER		99-100%	3.		
2. TPH		<1%	4.		

Waste Profile _____ PROPERTIES: pH 7-10 ☐ SOLID ☒ LIQUID ☐ SLUDGE ☐ SLURRY ☐ OTHER _____

HANDLING INSTRUCTIONS: _____

Generator Printed/Typed Name: HOWARD PEARLE | Signature: [signature] | Month 5 Day 21 Year 19

The Generator certifies that the waste as described is 100% non-hazardous

TRANSPORTER

Transporter 1 Company Name: BELSHIRE | Phone#: 949-460-5200

Transporter 1 Printed/Typed Name: Frank Torres | Signature: [signature] | Month 5 Day 21 Year 19

Transporter Acknowledgment of Receipt of Materials

Transporter 2 Company Name: NIETO & SONS TRUCKING, INC. | Phone#: 714-990-6855

Transporter 2 Printed/Typed Name: | Signature: | Month Day Year

Transporter Acknowledgment of Receipt of Materials

RECEIVING FACILITY

Designated Facility Name and Site Address
DEMENNO KERDOON
2000 N. ALAMEDA ST.
COMPTON, CA 90222

Phone#: 310-537-7100

Printed/Typed Name: | Signature: | Month Day Year

Designated Facility Owner or Operator: Certification of receipt of materials covered by this data form.

APPENDIX E

Boring Logs

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AA2 **SHEET** 1 **OF** 1
START DATE 12/14/2018
FINISH DATE 12/14/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER 1.5 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): dark brown (10YR 3/3), dry, fine-coarse gravel, fine-coarse sand, silt, [15,70,15].			DG-AA2S-0.5-1			0.5		
	(1.5') WELL-GRADED GRAVEL with SILT and SAND (GW-GM): dark yellowish-brown (10YR 3/4), wet, fine-coarse gravel, fine-coarse sand, clay, [50,40,10].		▼			48/60			water level
	(2.8') CLAYEY GRAVEL with SAND (GC): dark yellowish-brown (10YR 3/4), wet, fine-coarse gravel, fine-coarse sand, clay, [45,35,20].			DG-AA2S-3.5-4			0.6		
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER CB
REVIEWER G. Thrupp, P.G. No. 5849

NORTHING 2083337.18
EASTING 6011350.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AA3 **SHEET** 1 **OF** 1
START DATE 12/18/2019
FINISH DATE 12/18/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619

ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 10 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') WELL-GRADED SAND with SILT and GRAVEL (SW-SM): very dark brown (10YR 2/2), moist, fine gravel, fine-coarse sand, fines, [20,70,10].			DG-AA3S-0.5-1			1.2		
	(2') SILTY SAND with GRAVEL (SM): dark yellowish-brown (10YR 3/4), moist, coarse gravel, fine-coarse sand, fines, [25,50,25]. (2.5') wet.			DG-AA3S-3.5-4		54/60	0.8		
5	(5') WELL-GRADED GRAVEL (GW): dark gray (10YR 4/1), wet, fine-coarse gravel, trace fine-medium sand, [100,tr,0], cobbles 2.5" x 2.5".								no recovery from 4.5-5'
	(6') SANDY LEAN CLAY with GRAVEL (CL): olive brown (2.5Y 4/4), fine-coarse gravel, fine-coarse sand, [20,30,50], low plasticity, firm. (7') cobbles 3" x 2.5".			DG-AA3S-7-7.5		36/60	0.5		
	(7.6') FAT CLAY (CH): gray (5/N), wet, [0,0,100], high plasticity, soft.								no recovery from 8-10'
10	(10') Boring terminated.								
15									
20									
25									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 8040 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER BL **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2083337.18
EASTING 6011250.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AA4 **SHEET** 1 **OF** 1
START DATE 12/18/2018
FINISH DATE 12/18/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER 3 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): very dark gray (10YR 3/1), moist, medium grained, [30,50,20].			DG-AA4S-0.5-1			4.2		
	(1.7') coarse grained.								
	(2.4') WELL-GRADED GRAVEL (GW): very dark grayish brown (10YR 3/2), wet, coarse grained, [95,0,5].		▼			45/60			
				DG-AA4S-3.5-4			9.7		
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER KB
REVIEWER G. Thrupp, P.G. No. 5849
NORTHING 2083337.18
EASTING 6011150.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AA5 **SHEET** 1 **OF** 1
START DATE 12/18/2018
FINISH DATE 12/18/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619

ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER 3.5 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND (SM): dark brown (10YR 3/3), moist, fine-coarse gravel, fine-medium sand, fines, [10,70,20], trace roots from 1.0-1.5'.			DG-AA5S-0.5-1		60/60	0.4		0.0-1.0' compressed
	(3') lens of coarse, well-graded gravel 2" thick.								
	(3.5') SILTY SAND (SM): very dark greenish gray (5GY 3/1), wet, fine-coarse gravel, medium sand, fines, [5,80,15].		▼	DG-AA5S-3.5-4			0.6		water level
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 6610 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2083337.18
EASTING 6011050.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AA6 **SHEET** 1 **OF** 1
START DATE 12/20/2018
FINISH DATE 12/20/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): dark brown (10YR 3/3), fine-coarse gravel, fine-coarse sand, fines, [20,65,15].			DG-AA6S-0.5-1			0.4		
	(2.5') pea gravel.					43/60			
				DG-AA6S-3.5-4			0.1		
5	(5') Boring terminated.								rock at bottom
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 788201
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER KJ **REVIEWER** G. Thrupp, P.G. No. 5849
NORTHING 2083337.18
EASTING 6010950.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AA7 **SHEET** 1 **OF** 1
START DATE 1/9/2019
FINISH DATE 1/9/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 10 ft bgs
DEPTH TO WATER 4 ft

DEPTH (ft)	MATERIAL DESCRIPTION	SAMPLE ID	RECOVERY	PID READING (ppm)	COMMENTS
	(0') SILTY SAND (SM): dark grayish brown (10YR 4/2), moist, fine gravel, fine-medium sand, fines, [10,55,35].	DG-AA7S-0.5-1		1.7	0.0-1.5' compressed
	(2.5') 4" of pea gravel.		60/60		
		DG-AA7S-3.5-4		1.9	
	(4') SILTY GRAVEL with SAND (GM): dark grayish brown (10YR 4/2), wet, fine-coarse gravel, fine-medium sand, fines, [45,25,30].				water level
5	(5') core loss.				
			42/60		
	(8') coarse gravel, from 8.0-9.5'.				no deeper sample taken; too gravelly
	(9.5') FAT CLAY (CH): very dark greenish gray (10GY 3/1), moist, fines, [0,0,100], high plasticity, firm, Bay Mud.				
10	(10') Boring terminated.				
15					
20					
25					

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 8040 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF
REVIEWER G. Thrupp, P.G. No. 5849
NORTHING 2083337.18
EASTING 6010850.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AA8 **SHEET** 1 **OF** 1
START DATE 1/29/2019
FINISH DATE 1/29/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER 0.1 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') POORLY GRADED GRAVEL with SILT (GP-GM): dark gray (10YR 4/1), wet, fine gravel, [85,5,10].		▼	DG-AA8S-0.5-1			0.6		
	(0.9') POORLY GRADED SAND with GRAVEL (SP): dark gray (10YR 4/1), medium sand, [20,75,5].								
	(1.8') SILTY GRAVEL with SAND (GM): pale brown (10YR 6/3), wet, fine-coarse gravel to cobbles, [50,20,30], 15% glass, plastic, and porcelain debris.			DG-AA8S-3.5-4		40/60	0.8		
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 6600
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NR
REVIEWER G. Thrupp, P.G. No. 5849

NORTHING 2083337.18
EASTING 6010750.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AA9 **SHEET** 1 **OF** 1
START DATE 12/20/2018
FINISH DATE 12/20/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER 3.5 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') WELL-GRADED SAND with SILT and GRAVEL (SW-SM): dark gray (10YR 4/1), moist, fine-coarse gravel, fine-medium sand, fines, [15,75,10], trace roots throughout.			DG-AA9S-0.5-1		60/60	1.1		0.0-1.5' compressed
	(2.5') SILTY GRAVEL (GM): gray (10YR 5/1), wet, fine-coarse gravel, fine-medium sand, fines, [70,10,20], trace glass and ceramic fragments.		▼				1.2		no sample taken from 3.5-4' interval - too gravelly, groundwater
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 6610 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2083337.18
EASTING 6010650.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AA10 **SHEET** 1 OF 1
START DATE 1/29/2019 **ELEVATION DATA**
FINISH DATE 1/29/2019 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 5 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** 0.4 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): gray (10YR 5/1), moist, fine gravel, [20,55,25].		▼	DG-AA10S-0.5-1			1.6		
	(1.2') SILTY GRAVEL (GM): black (10YR 5/1), wet, cobbles, [10,60,30], oily sheen.					35/60			
				DG-AA10S-3.5-4			3.0		
	(4') SILTY GRAVEL with SAND (GM): very dark brown (10YR 2/2), wet, coarse gravel, [70,15,15], organic matter and trash (broken plastic and glass).								
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore **NORTHING** 2083337.18
EQUIPMENT Geoprobe 6600 **EASTING** 6010550.57
DRILL MTHD Direct Push **ANGLE** Vertical
DIAMETER 3 inches
LOGGER NR **REVIEWER** G. Thrupp, P.G. No. 5849

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AA11 **SHEET** 1 **OF** 1
START DATE 1/29/2019
FINISH DATE 1/29/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 10 ft bgs
DEPTH TO WATER 5 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): very dark greenish gray (10GY 3/1), moist, fine gravel, fine-coarse sand, fines, [35,40,25].			DG-AA11S-0.5-1			4.5		0.0-1.5' compressed
						60/60			
				DG-AA11S-3.5-4			92.7		
5	(5') CLAYEY GRAVEL (GC): very dark greenish gray (10Y 3/1), wet, fine-coarse gravel, fine sand, fines, [70,10,20].		▼						water level
						30/60			no deep sample taken due to core loss and prevalent gravel
							8.9		
10	(10') Boring terminated.								
15									
20									
25									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 8040 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF
REVIEWER G. Thrupp, P.G. No. 5849
NORTHING 2083337.18
EASTING 6010450.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AA12 **SHEET** 1 **OF** 1
START DATE 1/25/2019
FINISH DATE 1/25/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619

ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): dark brown (10YR 3/3), moist, fine gravel, fine-medium sand, fines, [15,45,40], odor.			DG-AA12S-0.5-1		60/60	3.7		0.0-2.0' compressed
				DG-AA12S-3.5-4			3.0		
	(4') 4" cobble.								
	(4.5') trace ceramics, gravel increases to 30% from 4.5-5.0'.								
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 8040 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2083337.18
EASTING 6010350.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AA13 **SHEET** 1 **OF** 1
START DATE 1/24/2019
FINISH DATE 1/24/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): very dark brown (10YR 2/2), moist, fine-coarse gravel, fine-medium sand, fines, [20,60,20].			DG-AA13S-0.5-1			6.8		0.0-1.5' compressed
	(2') concrete cobble.					60/60			
				DG-AA13S-3.5-4			2.8		
	(4') GRAVELLY FAT CLAY (CH): very dark gray (10YR 3/1), moist, fine-coarse gravel, fine-medium sand, fines, [40,10,50], high plasticity, soft, luster.								
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 7822 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2083337.18
EASTING 6010250.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AA14 **SHEET** 1 **OF** 1
START DATE 1/24/2019
FINISH DATE 1/24/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): very dark brown (10YR 2/2), moist, fine-coarse gravel, fine-medium sand, fines, [20,60,20], trace roots throughout sample.			DG-AA14S-0.5-1			1.9		0.0-2.0' compressed
	(2.5') 3" brick cobble.					60/60			
				DG-AA14S-3.5-4			11.9		
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 7822 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2083337.18
EASTING 6010150.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AA15 **SHEET** 1 **OF** 1
START DATE
FINISH DATE
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 10 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') WELL-GRADED GRAVEL (GW): light brownish gray (10YR 6/2), dry, [100,0,0], crushed gravel aggregate.			DG-AA15S-0.5-1			0.8		rocky; some gravel aggregate; three attempts: #1 - no recovery; #2 - 10% recovery; #3
	(0.5') POORLY GRADED SAND with CLAY (SP-SC): dark brown (10YR 3/3), moist, fine-coarse gravel, fine-medium sand, clay, [tr,90,10].								
	(1.5') GRAVEL with CLAY and SAND (GW-GC): dark yellowish-brown (10YR 3/3), wet, fine-coarse gravel, fine-coarse sand, clay, [60,30,10], large cobbles.					24/60			no recovery from 2-5'
									no sample taken from 3.5-4.0'; too gravelly
5									no recovery from 5-10' bgs; noted sheen and strong odor from core sleeve
						0/60			
10	(10') Boring terminated.								
15									
20									
25									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER CB
REVIEWER G. Thrupp, P.G. No. 5849

NORTHING 2083337.18
EASTING 6010050.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AA16 **SHEET** 1 **OF** 1
START DATE 1/24/2019
FINISH DATE 1/24/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619

ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): black (10YR 2/1), moist, fine-coarse gravel, fine-coarse sand, fines, [20,45,35], 10% brick cobble.			DG-AA16S-0.5-1		60/60	4.4		0.0-2.0' compressed
	(4') 2" metal bolt, luster and strong odor from 4.0-5.0'.			DG-AA16S-3.5-4			2.2		
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 7822 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2083337.18
EASTING 6009950.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AA17 **SHEET** 1 **OF** 1
START DATE 2/5/2019
FINISH DATE 2/5/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY GRAVEL with SAND (GM): grayish brown (10YR 5/2), moist, fine-coarse gravel, fine-medium sand, fines, [50,20,30], cobble at 4.0'.			DG-AA17S-0.5-1		60/60	0.4		
				DG-AA17S-3.5-4			1.1		
	(4') SILTY SAND (SM): dark gray (10YR 4/1), moist, fine gravel, fine-medium sand, fines, [5,50,45].								
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 7822 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2083337.18
EASTING 6009850.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AA18 **SHEET** 1 **OF** 1
START DATE 1/23/2019 **ELEVATION DATA**
FINISH DATE 1/23/2019 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 5 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY GRAVEL with SAND (GM): brown (10YR 5/3), moist, fine-coarse gravel, fine-medium sand, fines, [40,30,30].			DG-AA18S-0.5-1		60/60	1.7		0.5-1.0' compressed
	(3') SILTY SAND (SM): dark grayish brown (10YR 4/2), moist, fine-coarse gravel, fine-medium sand, fines, [10,55,35].								
	(3.5') black (10YR 2/1), from 3.5-5.0'.			DG-AA18S-3.5-4			1.6		
	(4.5') yellow (10YR 8/6), 3" cobble.								
5	(5') Boring terminated.						2.6		
10									

CONTRACTOR PeneCore **NORTHING** 2083337.18
EQUIPMENT Geoprobe 7822 DT **EASTING** 6009750.57
DRILL MTHD Direct Push **ANGLE** Vertical
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AA19 **SHEET** 1 **OF** 1
START DATE 1/24/2019
FINISH DATE 1/24/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619

ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 10 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') ASPHALT.								
	(0.5') CLAYEY GRAVEL with SAND (GC): very dark gray (10YR 3/1), dry, fine-coarse gravel, fine-coarse sand, [55,30,15].			DG-AA19S-0.5-1			0.6		
						30/60	2.0		
				DG-AA19S-3.5-4			12.0		
5	(5') POORLY GRADED SAND with GRAVEL (SP): gray (10YR 5/1), wet, fine-coarse gravel, coarse sand, fines, [15,80,5].						3.8		
	(6') CLAYEY GRAVEL (GC): yellowish brown (10YR 5/6), dry, fine gravel, fine-coarse sand, fines, [60,10,30].						6.0		
						42/60			
	(8.5') POORLY GRADED SAND (SP): grayish brown (10YR 5/2), wet, medium sand, [0,95,5].			DG-AA19s-8.5-9			16		
10	(9') FAT CLAY (CH): very dark gray (10YR 3/1), dry, fine sand, fines, [0,10,90], high plasticity, firm. (9.5') wet, [0,0,100], soft.						2.0		
	(10') Boring terminated.								
15									
20									
25									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 8040 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER JR **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2083337.18
EASTING 6009650.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AB2 **SHEET** 1 **OF** 1
START DATE 12/14/2018
FINISH DATE 12/14/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619

ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 10 ft bgs
DEPTH TO WATER 7 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): dark grayish brown (2.5Y 3/2), dry, fine gravel, fine-coarse sand (predominantly fine), silt, [15,70,15].			DG-AB-2S-0.5-1					
	(1.5') dark yellowish-brown (10YR 3/4), moist, fine-coarse gravel, sand fraction coarsens, [25,60,15].					42/60			
	(2.5') CLAYEY SAND with GRAVEL (SC): olive brown (2.5YR 4/3), moist, fine-coarse gravel, fine-coarse sand, clay, [30,50,20].			DG-AB-2S-3-3.5					
5									
	(7') wet.		▼	DG-AB-2S-7-7.5		48/60			water level
	(8') POORLY GRADED GRAVEL with SILT and SAND (GP-GM): black (10YR 2/1) with dark gray (2.5Y 4/1), wet, gravel and silt, [70,20,10].								
	(9') FAT CLAY (CH): greenish black (5G 2.5/1), moist, high plasticity, shells.								
10	(10') Boring terminated.								
15									
20									
25									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER CB
REVIEWER G. Thrupp, P.G. No. 5849

NORTHING 2083237.18
EASTING 6011350.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AB3 **SHEET** 1 **OF** 1
START DATE 12/14/2018
FINISH DATE 12/14/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 15 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') WELL-GRADED SAND with SILT and GRAVEL (SW-SM): very dark brown (10YR 2/2), dry, fine-coarse gravel, fine-coarse sand, fines, [20,70,10].			DG-AB3S-0.5-1			1.0		
	(2') GRAVELLY LEAN CLAY (CL): dark brown (10YR 3/3), moist, fine-coarse gravel, fine-medium sand, fines, [30,10,60], low-medium plasticity, soft.					45/60			
	(4') SILTY GRAVEL (GM): dark yellowish-brown (10YR 4/6), wet, fine-coarse gravel, fine-medium sand, fines, [75,10,15].			DG-AB3S-3.5-4			0.7		
5				DG-AB3S-6-6.5			0.5		
	(7.5') WELL-GRADED GRAVEL with CLAY (GW-GC): very dark grayish brown (10YR 3/2), wet, fine-coarse gravel, fine-coarse sand, fines, [80,10,10].					30/60			
10	(10') LEAN CLAY (CL): very dark greenish gray (10Y 3/1), moist, fines, [0,0,100], medium-high plasticity, soft.					43/60			shells throughout core
15	(15') Boring terminated.								
20									
25									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 6600
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER KJ **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2083237.18
EASTING 6011250.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AB4 **SHEET** 1 **OF** 1
START DATE 12/18/2018
FINISH DATE 12/18/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619

ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 15 ft bgs
DEPTH TO WATER 5 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND (SM): dark gray , moist, fine grained, [10,70,20].			DG-AB4S-0.5-1			12.4		
	(1.2') coarse grained.								
	(1.7') fine grained.								
	(2.2') coarse grained.					43/60			
	(3.8') POORLY GRADED SAND (SP): dark yellowish brown (10YR 4/4), moist, fine grained, [0,100,0].			DG-AB4S-3.5-4			6.2		
5	(5') SILTY SAND (SM): dark yellowish brown (10YR 4/6), moist, fine grained, [10,70,20].		▼						water in liner from 5-10'; boring diameter changed from 3" to 1.5" from 5-15'
	(7.7') WELL-GRADED GRAVEL (GW): dark gray (10YR 4/1), wet, fine grained, [95,0,5].					18/60			
				DG-AB4s-9-9.5					
10	(10.3') LEAN CLAY (CL): dark gray (10YR 4/1), wet, [0,0,100], medium plasticity, very soft, 5% shells.								
						55/60			
15	(15') Boring terminated.								
20									
25									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe
DRILL MTHD Direct Push
DIAMETER 3/1.5 inches
LOGGER KB
REVIEWER G. Thrupp, P.G. No. 5849

NORTHING 2083237.18
EASTING 6011150.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AB5 **SHEET** 1 **OF** 1
START DATE 1/29/2019
FINISH DATE 1/29/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 15 ft bgs
DEPTH TO WATER 4.5 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND (SM): very dark grayish brown (10YR 3/2), moist, fine gravel, fine-medium sand, fines, [5,60,35].			DG-AB5S-0.5-1		60/60	2.5		0.0-1.5' compressed
				DG-AB5S-3.5-4			2.8		
5	(4.5') wet.		▼						water level
	(5') WELL-GRADED GRAVEL with SILT (GW-GM): dark grayish brown (10YR 4/2), wet, fine-coarse gravel, fine sand, fines, [80,10,10].					60/60			no deep sample taken due to prevalent gravel
10	(10.5') FAT CLAY (CH): very dark greenish gray (10GY 3/1), moist, fines, [0,0,100], high plasticity, firm, trace shells throughout, Bay Mud.					60/60			
15	(15') Boring terminated.								
20									
25									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 8040 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF
REVIEWER G. Thrupp, P.G. No. 5849
NORTHING 2083237.18
EASTING 6011050.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AB6 **SHEET** 1 **OF** 1
START DATE 12/20/2018
FINISH DATE 12/20/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 15 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND and GRAVEL (SM): dark yellowish-brown (10YR 3/4), dry, fine-coarse gravel, fine-coarse sand, fines, [20,65,15].			DG-AB6S-0.5-1			0.4		
	(3') pea gravel layer.			DG-AB6S-3.5-4		42/60	0.3		
5	(5') SILTY SAND and GRAVEL (SM): dark yellowish-brown (10YR 3/6), wet, fine-coarse gravel, fine-coarse sand, fines, [20,65,15].					24/60			progressed with 1.5" casing from 5-10'
	(8.5') SILTY GRAVEL (GM): yellowish-brown (10YR 5/6), wet, fine-coarse gravel, fine sand, fines, [80,5,15].								
10	(10') SILTY GRAVEL with SAND (GM): dark yellowish-brown (10YR 4/6), fine-coarse gravel, fine-coarse sand, fines, [60,25,15].								
	(14') FAT CLAY (CH): very dark greenish gray (10Y 3/1), fines, [0,0,100], medium-high plasticity, soft.								
15	(15') Boring terminated.								
20									
25									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 788201
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER KJ **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2083237.18
EASTING 6010950.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AB7 **SHEET** 1 **OF** 1
START DATE 12/19/2018
FINISH DATE 12/19/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619

ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 12 ft bgs
DEPTH TO WATER 4 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND (SM): dark grayish brown (10YR 4/2), moist, fine gravel, fine-medium sand, fines, [10,75,15].			DG-AB7S-0.5-1			4.2		0.0-1.5' compressed
	(2.5') POORLY GRADED GRAVEL (GP): grayish brown (10YR 5/2), moist, fine gravel, medium-coarse sand, fines, [95,3,2].					60/60			
	(3.5') SILTY GRAVEL with SAND (GM): very dark brown (10YR 2/2), fine-coarse gravel, medium-coarse sand, fines, [40,25,35], lens of poorly graded medium sand 4" wide at 3.5'. (3.8') lens of fat clay (CH) 2" wide. (4') trace ceramic and metal fragments from 4.0-5.0'.		▼	DG-AB7S-3.5-4			4.4		water level
5									
	(6.5') CLAYEY GRAVEL with SAND (GC): grayish brown (10YR 5/2), wet, fine-coarse gravel, medium sand, fines, [50,20,30].					59/84			
10									went back to drill 10-15' at 1025-1026, refusal at 10.5'
	(12') Boring terminated.								went back in again 1045-1050, refusal at 12', did not hit Bay Mud
15									
20									
25									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 6610 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2083237.18
EASTING 6010850.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AB8 **SHEET** 1 OF 1
START DATE 1/31/2019 **ELEVATION DATA**
FINISH DATE 1/31/2019 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 10 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY GRAVEL with SAND (GM): dark gray (10YR 4/1), wet, coarse gravel to cobbles, [45,30,25].			DG-AB8S-0.5-1			1.3		
	(0.4') POORLY GRADED GRAVEL (GP): gray (10YR 5/1), wet, fine gravel, [90,5,5].								
	(0.9') POORLY GRADED SAND (SP): dark gray (10YR 4/1), wet, medium sand, [0,95,5].					45/60			
	(2.3') SILTY GRAVEL with SAND (GM): very dark brown (10YR 2/2), wet, cobbles, [50,15,35], 20% trash debris, slight sheen.			DG-AB8S-3.5-4			1.8		
5									
	(6.9') WELL-GRADED GRAVEL with SAND (GW): gray (10YR 5/1), wet, cobbles, [80,15,5].					29/60			
10	(10') Boring terminated.								
15									
20									
25									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 6600
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NR **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2083237.18
EASTING 6010750.57
ANGLE Vertical

REMARKS under standing water

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AB9 **SHEET** 1 **OF** 1
START DATE 1/30/2019
FINISH DATE 1/30/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619

ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 10 ft bgs
DEPTH TO WATER 3.5 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): very dark brown (10YR 2/2), moist, fine gravel, medium-coarse sand, fines, [30,40,30].			DG-AB9S-0.5-1			2.4		0.0-2.0' compressed
						60/60			
	(3.5') wet, trace metal and glass fragments from 3.5-7.0'.		▼	DG-AB9S-3.5-4			2.4		
5	(5') GRAVELLY LEAN CLAY (CL): dark gray (10YR 4/1), wet, fine-coarse gravel, fine sand, fines, [40,5,55], medium plasticity, firm, 10% cobbles.								
	(7') FAT CLAY (CH): very dark greenish gray (10GY 3/1), moist, fines, [0,0,100], high plasticity, firm, Bay Mud.					60/60			did not collect deeper sample; Bay Mud encountered at 7.0' bgs
10	(10') Boring terminated.								
15									
20									
25									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 8040 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2083237.18
EASTING 6010650.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AB10 **SHEET** 1 **OF** 1
START DATE 1/29/2019
FINISH DATE 1/29/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619

ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER 0.5 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): gray (10YR 5/1), moist, coarse sand, [10,55,35].		▼	DG-AB10S-0.5-1			1.8		
	(1.7') LEAN CLAY (CL): light yellowish brown , wet, low plasticity, lens.								
	(2.4') SILTY GRAVEL with SAND (GM): very dark brown (10YR 2/2), wet, fine gravel, [55,15,30].			DG-AB10S-3.5-4		40/60	1.6		
	(4.5') SILTY GRAVEL (GM): grayish brown (10YR 5/2), wet, cobbles, [70,0,30].								
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 6600
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NR
REVIEWER G. Thrupp, P.G. No. 5849

NORTHING 2083237.18
EASTING 6010550.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AB11 **SHEET** 1 **OF** 1
START DATE 1/28/2019
FINISH DATE 1/28/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619

ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER 0.5 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): very dark gray (10YR 3/1), moist, fine sand (poorly sorted), [15,60,25].		▼	DG-AB11S-0.5-1			77.0		
						32/60			
				DG-AB11S-3.5-4			86.0		
	(4.1') SILTY GRAVEL with SAND (GM): black (10YR 2/1), wet, fine gravel, [70,15,15], oily sheen and odor.								
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 6600
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NR
REVIEWER G. Thrupp, P.G. No. 5849

NORTHING 2083237.18
EASTING 6010450.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AB12 **SHEET** 1 **OF** 1
START DATE 1/25/2019
FINISH DATE 1/25/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY GRAVEL with SAND (GM): very dark brown (10YR 2/2), moist, fine-coarse gravel, fine-coarse sand, fines, [45,20,35], whole sample has a sheen and a strong odor.			DG-AB12S-0.5-1			45.6		0.0-1.0' compressed
	(1') 5% ceramic and glass fragments from 1.0-1.5'.					60/60			
				DG-AB12S-3.5-4			124.0		
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 8040 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF
REVIEWER G. Thrupp, P.G. No. 5849
NORTHING 2083237.18
EASTING 6010350.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AB13 **SHEET** 1 OF 1
START DATE 1/22/2019 **ELEVATION DATA**
FINISH DATE 1/22/2019 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 15 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') POORLY GRADED SAND (SP): very dark brown (10YR 2/2), wet, fine sand, silt, [0,95,5].			DG-AB13S-0.5-1			1.6		
	(1') dark brown (10YR 3/3), increased gravel (fine-coarse gravel), [10,85,5], wood.								
	(1.8') CLAYEY SAND (SC): very dark brown (10YR 3/3), fine-coarse gravel, fine-coarse sand, clay, [5,65,30].					48/60			
	(3') LEAN CLAY with GRAVEL (CL): yellowish-brown (10YR 5/8), wet around gravel and moist in clay, fine-coarse gravel, fine sand, clay, [20,5,75].			DG-AB13S-3.5-4			2.2		
5	(5') black (10YR 2/1), dry, less gravel, [10,5,85].					24/60			
	(8.3') WELL-GRADED GRAVEL with CLAY and SAND (GW-GC): very dark gray (10YR 3/1), wet, fine-coarse gravel, fine-coarse sand, clay, [50,40,10], slight odor.								
10	(12') bluish black (10B 2.5/1), free-flowing free product between 12 and 14', strong odor.			DG-AB13s-13.5-14			40.0		
	(14') FAT CLAY (CH): very dark greenish gray , moist, clay, [0,0,100], high plasticity.								
15	(15') Boring terminated.								
20									
25									

CONTRACTOR PeneCore **NORTHING** 2083237.18
EQUIPMENT Geoprobe **EASTING** 6010250.57
DRILL MTHD Direct Push **ANGLE** Vertical
DIAMETER 3 inches
LOGGER CB **REVIEWER** G. Thrupp, P.G. No. 5849

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AB14 **SHEET** 1 **OF** 1
START DATE 1/31/2019
FINISH DATE 1/31/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): very dark brown (10YR 2/2), moist, fine-coarse gravel, medium-coarse sand, fines, [20,50,30].			DG-AB14S-0.5-1		60/60	2.4		0.0-2.0' compressed
	(3.5') sticky from 3.5-4.0' with strong odor and luster from 3.5-5.0'.			DG-AB14S-3.5-4			14.9		
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 8040 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2083237.18
EASTING 6010150.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AB15 **SHEET** 1 **OF** 1
START DATE 2/1/2019
FINISH DATE 2/1/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER 4 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND (SM): black (10YR 2/1), moist, fine gravel, fine-medium sand, fines, [5,70,25].			DG-AB15S-0.5-1			1.2		0.0-1.0' compressed
	(2') 2" of brick.					60/60			
			▼	DG-AB15S-3.5-4			1.3		water level
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 8040 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF
REVIEWER G. Thrupp, P.G. No. 5849
NORTHING 2083237.18
EASTING 6010050.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AB16 **SHEET** 1 **OF** 1
START DATE 2/1/2019
FINISH DATE 2/1/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER 4 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND (SM): black (10YR 2/1), moist, fine gravel, fine-medium sand, fines, [10,60,30].			DG-AB16S-0.5-1		60/60	3.6		0.0-2.5' compressed
	(4') 2" lens of brick fragments.		▼	DG-AB16S-3.5-4			8.4		water level
	(4.5') 4" metal fragment.								
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 8040 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF
REVIEWER G. Thrupp, P.G. No. 5849
NORTHING 2083237.18
EASTING 6009950.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AB17 **SHEET** 1 **OF** 1
START DATE 1/24/2019
FINISH DATE 1/24/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619

ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 10 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') POORLY GRADED SAND (SP): dark yellowish brown (10YR 4/4), wet, fine gravel, medium sand, fines, [5,90,5].			DG-AB17S-0.5-1					
	(2') CLAYEY GRAVEL with SAND (GC): grayish brown (10YR 5/2), moist, fine gravel, medium-coarse sand, fines, [50,20,30].					48/60			
	(3.5') CLAYEY SAND (SC): very dark brown (10YR 2/2), wet, fine-coarse gravel, medium-coarse sand, fines.			DG-AB17S-3.5-4			0.7		
5	(5') oil with sparse chunks of unidentified soil and mainly rocks.						1.2		strong odor; PID reading approximately 0.0 ppm in breathing zone
						18/60			
10	(10') Boring terminated.								
15									
20									
25									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 8040 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER JR **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2083237.18
EASTING 6009850.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AC2 **SHEET** 1 **OF** 1
START DATE 12/14/2018
FINISH DATE 12/14/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER 2.5 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): olive gray (5Y 4/2), dry, fine gravel, fine-coarse sand, silt, [15,70,15].			DG-AC-2S-0.5-1			0.5		
	(1.5') [25,60,15].								
	(2') CLAYEY SAND with GRAVEL (SC): dark reddish brown (5YR 3/2), moist, coarse gravel, fine sand, clay, [35,45,20].								
	(2.4') WELL-GRADED GRAVEL with CLAY and SAND (GW-GC): yellowish-brown (10YR 5/4), wet, fine-coarse gravel, fine-coarse sand, clay, [50,40,10].		▼			48/60			water level
	(3.7') light olive brown (2.5Y 5/3).			DG-AC-2S-3.5-4			0.8		
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER CB
REVIEWER G. Thrupp, P.G. No. 5849

NORTHING 2083137.18
EASTING 6011350.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AC3 **SHEET** 1 **OF** 1
START DATE 12/19/2019
FINISH DATE 12/19/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619

ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 10 ft bgs
DEPTH TO WATER 3 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): very dark greenish gray (10Y 3/1), moist, fine-coarse gravel, fine-coarse sand, fines, [15,70,15].			DG-AC3S-0.5-1			0.7		
	(1') very dark grayish brown (10YR 3/2), [15,60,25].								
	(2') chunk of oxidized metal 3" x 2".					48/60			
	(3') CLAYEY GRAVEL with SAND (GC): brown (7.5YR 5/4), wet, fine gravel, fine-coarse sand, fines, [60,20,20].		▼	DG-AC3S-3.5-4			0.3		
5	(5') same as above.								
	(5.5') WELL-GRADED GRAVEL (GW): dark gray (10YR 4/1), wet, fine-coarse gravel, medium-fine sand, fines, [90,5,5].								
	(6.5') CLAYEY GRAVEL with SAND (GC): very dark grayish brown (2.5Y 3/2), wet, fine-coarse gravel, fine-coarse sand, [60,15,25].					36/60			
	(7') WELL-GRADED GRAVEL (GW): dark gray (10YR 4/1), wet, fine-coarse gravel, medium-fine sand, fines, [90,5,5].								no recovery from 8-10'
10	(10') Boring terminated.								
15									
20									
25									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 8040 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER BL **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2083137.18
EASTING 6011250.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AC4 **SHEET** 1 **OF** 1
START DATE 12/18/2018
FINISH DATE 12/18/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND (SM): dark grayish brown (10YR 4/2), moist, medium grained, [10,70,20].			DG-AC4S-0.5-1			3.1		
						48/60			
	(3.5') SILTY SAND with GRAVEL (SM): black (10YR 2/1), wet, medium to coarse grained, [20,60,20].			DG-AC4S-3.5-4			12.1		
	(4.5') grayish brown (10YR 5/2).								
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER KB
REVIEWER G. Thrupp, P.G. No. 5849
NORTHING 2083137.18
EASTING 6011150.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AC5 **SHEET** 1 **OF** 1
START DATE 12/18/2018
FINISH DATE 12/18/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619

ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER 3.5 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND (SM): dark brown (10YR 3/3), moist, fine-coarse gravel, medium sand, fines, [10,70,20], trace roots from 0.5-1.5'.			DG-AC5S-0.5-1		60/60	0.5		0.0- 0.5' compressed
	(3.5') WELL-GRADED SAND with SILT (SW-SM): very dark gray (10YR 3/1), wet, fine-coarse gravel, fine-medium sand, fines, [10,80,10].		▼	DG-AC5S-3.5-4			0.3		water level
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 6610 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2083137.18
EASTING 6011050.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AC6 **SHEET** 1 **OF** 1
START DATE 12/20/2018
FINISH DATE 12/20/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): very dark grayish brown (10YR 3/2), dry, fine-coarse gravel, fine-coarse sand, fines, [20,65,15].			DG-AC6S-0.5-1			0.5		
	(3') pea gravel.					45/60			
	(4.5') wet.			DG-AC6S-3.5-4			0.5		
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 788201
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER KJ **REVIEWER** G. Thrupp, P.G. No. 5849
NORTHING 2083137.18
EASTING 6010950.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AC7 **SHEET** 1 **OF** 1
START DATE 1/9/2019 **ELEVATION DATA**
FINISH DATE 1/9/2019 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 10 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** 3.5 ft

DEPTH (ft)	MATERIAL DESCRIPTION	SAMPLE ID	RECOVERY	PID READING (ppm)	COMMENTS
	(0') SILTY SAND (SM): dark gray (10YR 4/1), moist, fine gravel, fine-medium sand, fines, [15,55,30].	DG-AC7S-0.5-1		2.3	0.0-1.0' compressed
	(2') pea gravel from 2.0-2.5'.		60/60		
	(3') SILTY GRAVEL with SAND (GM): very dark gray (10YR 3/1), wet, fine-coarse gravel, medium sand, fines, [45,35,20], 15% glass and ceramic fragments, slight luster or sheen from 3.0-4.0'.	DG-AC7S-3.5-4		2.5	water level
5	(3.5') wet.				
	(7.5') lens of fat clay (CH) from 7.5-8.0'.	DG-AC7S-7.5-8	48/60	0.6	
	(8') CLAYEY GRAVEL (GC): greenish gray (5GY 5/1), wet, fine-coarse gravel, medium sand, fines, [60,10,30].				
10	(10') Boring terminated.				
15					
20					
25					

CONTRACTOR PeneCore **NORTHING** 2083137.18
EQUIPMENT Geoprobe 8040 DT **EASTING** 6010850.57
DRILL MTHD Direct Push **ANGLE** Vertical
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AC8 **SHEET** 1 **OF** 1
START DATE 1/31/2019
FINISH DATE 1/31/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY GRAVEL with SAND (GM): dark gray (10YR 4/1), wet, coarse gravel to cobbles, [45,30,25].								
	(0.3') POORLY GRADED GRAVEL (GP): gray (10YR 5/1), wet, fine gravel, [90,5,5].			DG-AC8S-0.5-1			0.8		
	(0.9') POORLY GRADED SAND (SP): dark gray (10YR 4/1), wet, medium sand, [0,95,5].								
	(2') SILTY GRAVEL with SAND (GM): very dark brown (10YR 2/2), wet, cobbles, [50,15,35], 20% trash debris, slight sheen.					39/60			
				DG-AC8S-3.5-4			2.3		
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 6600
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NR
REVIEWER G. Thrupp, P.G. No. 5849

NORTHING 2083137.18
EASTING 6010750.57
ANGLE Vertical

REMARKS under standing water

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AC9 **SHEET** 1 **OF** 1
START DATE 12/20/2018
FINISH DATE 12/20/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER 4 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') WELL-GRADED SAND with SILT and GRAVEL (SW-SM): dark gray (10YR 4/1), moist, fine gravel, fine-medium sand, fines, [20,70,10].			DG-AC9S-0.5-1		60/60	1.0		0.0-1.0' compressed
	(3') SILTY SAND with GRAVEL (SM): very dark gray (10YR 3/1), wet, fine-coarse gravel, fine-medium sand, fines, [20,60,20], trace glass and ceramic fragments.		▼	DG-AC9S-3.5-4			1.0		water level
5	(4.8') fat clay (CH) mixed with cobbles from 4.8-5.0'.								
	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 6610 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849
NORTHING 2083137.18
EASTING 6010650.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AC10 **SHEET** 1 OF 1
START DATE 1/29/2019 **ELEVATION DATA**
FINISH DATE 1/29/2019 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 5 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** 0.5 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') WELL-GRADED GRAVEL (GW): gray (10YR 5/1), wet, coarse gravel, [80,15,5].		▼	DG-AC10S-0.5-1			0.9		
	(1.4') SILTY SAND with GRAVEL (SM): dark brown (10YR 3/3), wet, fine-medium sand, [15,60,25].								
	(2.3') SILTY GRAVEL with SAND (GM): gray (10YR 6/1), wet, fine gravel, [55,20,25].					49/60			
	(3') WELL-GRADED SAND (SW): gray (10YR 6/1), wet, medium sand, [5,90,5].			DG-AC10S-3.5-4			2.0		
5	(4.8') SILTY GRAVEL (GM): black (10YR 2/1), wet, coarse gravel to cobbles, [55,10,35], oily sheen and odor.								
	(5') Boring terminated.								
10									

CONTRACTOR PeneCore **NORTHING** 2083137.18
EQUIPMENT Geoprobe 6600 **EASTING** 6010550.57
DRILL MTHD Direct Push **ANGLE** Vertical
DIAMETER 3 inches
LOGGER NR **REVIEWER** G. Thrupp, P.G. No. 5849

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AC11 **SHEET** 1 **OF** 1
START DATE 1/29/2019 **ELEVATION DATA**
FINISH DATE 1/29/2019 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 10 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** 5.5 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') GRAVEL (GP): lens of fine gravel, luster.								standing water over drill location; 0.0-2.0' compressed
	(0.5') SILTY SAND with GRAVEL (SM): very dark gray (N 3/), moist, fine-coarse gravel, fine-coarse sand, fines, [15,60,25].			DG-AC11S-0.5-1			13.5		
	(2.5') GRAVELLY SILT with SAND (ML): black (10YR 2/1), moist, fine gravel, fine-medium sand, fines, [25,15,60], low plasticity, soft, strong odor, luster, sticky, 15% brick, glass, and ceramic debris.			DG-AC11S-3.5-4		60/60	8.3		
5	(5.5') wet.		▼						water level
	(6.5') SILTY SAND (SM): very dark brown (10YR 3/2), wet, fine gravel, fine-medium sand, fines, [5,75,20], odor, luster.			DG-AC11s-8.5-9		60/60	4.3		
	(9') FAT CLAY (CH): very dark greenish gray (10GY 3/1), moist, fines, [0,0,100], high plasticity, firm, Bay Mud.								
10	(10') Boring terminated.								
15									
20									
25									

CONTRACTOR PeneCore **NORTHING** 2083137.18
EQUIPMENT Geoprobe 8040 DT **EASTING** 6010450.57
DRILL MTHD Direct Push **ANGLE** Vertical
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AC12 **SHEET** 1 **OF** 1
START DATE 1/31/2019 **ELEVATION DATA**
FINISH DATE 1/31/2019 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 5 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') WELL-GRADED SAND with GRAVEL (SW): gray (10YR 6/1), wet, coarse sand, [10,85,5].			DG-AC12S-0.5-1			1.5		
	(1.4') POORLY GRADED SAND (SP): brownish yellow (10YR 6/8), wet, coarse sand, [0,95,5].					43/60			
	(2.6') SILTY GRAVEL with SAND (GM): gray (10YR 5/1), wet, fine gravel, [50,15,35].			DG-AC12S-3.5-4			1.2		
	(4') POORLY GRADED SAND with SILT and GRAVEL (SP-SM): black (10YR 2/1), wet, coarse sand, [25,60,15], 10% trash debris, oily sheen and odor.								
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore **NORTHING** 2083137.18
EQUIPMENT Geoprobe 6600 **EASTING** 6010350.57
DRILL MTHD Direct Push **ANGLE** Vertical
DIAMETER 3 inches
LOGGER NR **REVIEWER** G. Thrupp, P.G. No. 5849

REMARKS under standing water

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AC13 **SHEET** 1 **OF** 1
START DATE 1/24/2019
FINISH DATE 1/24/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): very dark brown (10YR 2/2), moist, fine-coarse gravel, medium-coarse sand, fines, [30,45,25].			DG-AC13S-0.5-1			1.5		0.0-2.0' compressed
						60/60			
	(3.5') 3" cobble.			DG-AC13S-3.5-4			1.9		
	(4') strong odor from 4.0-5.0'.								
	(4.5') light brownish gray (10YR 6/2), lens of silt (ML), 5% sticky black (10YR 2/1) substance.								
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 7822 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2083137.18
EASTING 6010250.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AC14 **SHEET** 1 **OF** 1
START DATE 1/24/2019
FINISH DATE 1/24/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND (SM): very dark brown (10YR 2/2), moist, fine-coarse gravel, fine-medium sand, fines, [10,55,35], trace roots and wood scraps throughout.			DG-AC14S-0.5-1		60/60	4.6		0.0-1.5' compressed
	(3') 2" cobble.			DG-AC14S-3.5-4			3.2		
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 7822 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849
NORTHING 2083137.18
EASTING 6010150.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AC15 **SHEET** 1 OF 1
START DATE 1/31/2019 **ELEVATION DATA**
FINISH DATE 1/31/2019 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 10 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') CLAYEY GRAVEL with SAND (GC): very dark grayish brown (10YR 3/2), moist, fine gravel, fine-coarse sand, fines, [45,15,40].			DG-AC15S-0.5-1			2.3		
	(1.5') lens of lean clay (CL), yellowish-brown (10YR 5/4), moist, fine gravel, fine-medium sand, fines, [5,10,85], medium plasticity, hard.					60/60			
				DG-AC15S-3.5-4			6.6		
	(4') SILTY SAND (SM): very dark grayish brown (10YR 3/2), moist, fine gravel, fine-medium sand, fines, [tr,75,25].								
5	(5') GRAVELLY SILT with SAND (ML): black (10YR 2/1), moist, fine gravel, coarse sand, fines, [35,15,50], low plasticity, soft, sticky, 5% ceramic and glass debris, trace metal debris.								
	(7.5') lens of lean clay.			DG-AC15S-7.5-8		60/60	75.4		
	(8') FAT CLAY (CH): very dark greenish gray (10GY 3/1), moist, fines, [0,0,100], high plasticity, firm, black (10YR 2/1) from 8.0-8.5', Bay Mud.								
10	(10') Boring terminated.								
15									
20									
25									

CONTRACTOR PeneCore **NORTHING** 2083137.18
EQUIPMENT Geoprobe 8040 DT **EASTING** 6010050.57
DRILL MTHD Direct Push **ANGLE** Vertical
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AC17 **SHEET** 1 **OF** 1
START DATE 1/23/2019
FINISH DATE 1/23/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619

ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY GRAVEL with SAND (GM): very dark gray (10YR 3/1), moist, fine-coarse gravel, fine-coarse sand, fines, [50,30,20].			DG-AC17S-0.5-1			1.4		0.0-1.0' compressed
	(1') asphalt fragments from 1.0-1.5'.					60/60			
	(3') CLAYEY GRAVEL with SAND (GC): dark gray (10YR 4/1), moist, fine-coarse gravel, fine-medium sand, fines, [45,20,35].			DG-AC17S-3.5-4			1.5		
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 7822 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2083137.18
EASTING 6009850.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AD2 **SHEET** 1 **OF** 1
START DATE 12/14/2018
FINISH DATE 12/14/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): light olive brown (2.5Y 5/3), dry, fine-medium gravel, fine-coarse sand, silt, [15,70,15].			DG-AD-2S-0.5-1			0.4		
	(1.8') CLAYEY SAND with GRAVEL (SC): dark yellowish-brown (10YR 3/4), [20,50,30].								
	(2.5') wet, [30,50,20].			DG-AD-2S-3.5-4		48/60	0.8		
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER CB
REVIEWER G. Thrupp, P.G. No. 5849

NORTHING 2083037.18
EASTING 6011350.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AD3 **SHEET** 1 **OF** 1
START DATE 12/14/2018
FINISH DATE 12/14/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') WELL-GRADED SAND with SILT and GRAVEL (SW-SM): brown (10YR 4/3), dry, fine-coarse gravel, fine-coarse sand, fines, [25,65,10].			DG-AD3S-0.5-1		48/60	0.8		
	(3') GRAVELLY LEAN CLAY (CL): dark grayish brown (10YR 4/2), moist, fine-coarse gravel, fine-medium sand, fines, [30,10,60], medium-high plasticity, soft.			DG-AD3S-3.5-4			0.4		
	(4') WELL-GRADED GRAVEL with SAND (GW): very dark grayish brown (10YR 3/2), wet, fine-coarse gravel, fine-coarse sand, fines, [75,20,5].								
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 6600
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER KJ **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2083037.18
EASTING 6011250.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AD4 **SHEET** 1 **OF** 1
START DATE 12/18/2018
FINISH DATE 12/18/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND (SM): very dark gray (10YR 3/1), moist, fine grained, [0,80,20].			DG-AD4S-0.5-1			10.3		
	(1.3') SILTY SAND with GRAVEL (SM): dark grayish brown (10YR 4/2), wet, coarse grained, [20,60,20].								
	(2.6') SILTY SAND (SM): black (10YR 2/1), moist, fine grained, [0,80,20].					47/60			
				DG-AD4S-3.5-4			4.5		
	(4') SILTY SAND with GRAVEL (SM): gray (10YR 5/1), wet, coarse grained, [20,60,20].								
	(4.5') SILTY SAND (SM): black (10YR 2/1), moist, fine grained, [0,80,20].								
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER KB
REVIEWER G. Thrupp, P.G. No. 5849

NORTHING 2083037.18
EASTING 6011150.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AD5 **SHEET** 1 **OF** 1
START DATE 1/7/2019
FINISH DATE 1/7/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619

ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 10 ft bgs
DEPTH TO WATER 8.5 ft

DEPTH (ft)	MATERIAL DESCRIPTION	SAMPLE ID	RECOVERY	PID READING (ppm)	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): dark grayish brown (10YR 4/2), moist, fine-coarse gravel, fine-medium sand, fines, [25,55,20].	DG-AD5S-0.5-1	60/60	0.7	0.0-1.0' compressed
	(3.5') SILT with SAND (ML): very dark gray (10YR 3/1), moist, fine-medium sand, fines, [0,20,80], non-plastic.	DG-AD5S-3.5-4		0.5	
5	(5') CLAYEY GRAVEL (GC): grayish brown (10YR 5/2), moist, fine-coarse gravel, fine-medium sand, fines, [60,10,30].		60/60		5.0-6.0' compressed
	(8.5') wet, from 8.5-9.0'.				water level
10	(9.5') FAT CLAY (CH): very dark greenish gray (5GY 3/1), moist, fines, [0,0,100], high plasticity, firm, Bay Mud.				
	(10') Boring terminated.				
15					
20					
25					

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 8040 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2083037.18
EASTING 6011050.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AD6 **SHEET** 1 **OF** 1
START DATE 12/20/2018
FINISH DATE 12/20/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): brown (7.5YR 4/4), fine-coarse gravel, fine-coarse sand, fines, [20,65,15].			DG-AD6S-0.5-1		45/60	0.5		
	(3.5') pea gravel layer.			DG-AD6S-3.5-4			0.5		
	(4') very dark brown (10YR 2/2), wet.								
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 788201
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER KJ **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2083037.18
EASTING 6010950.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AD7 **SHEET** 1 **OF** 1
START DATE 12/19/2018
FINISH DATE 12/19/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER 4 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND (SM): dark grayish brown (10YR 4/2), moist, fine-coarse gravel, fine-medium sand, fines, [10,75,15].			DG-AD7S-0.5-1			5.8		0.0-1.5' compressed
	(2') POORLY GRADED GRAVEL (GP): grayish brown (10YR 5/2), moist, fine gravel, medium-coarse sand, fines, [95,3,2].					60/60			
	(3') POORLY GRADED SAND with SILT (SP-SM): dark gray (10YR 4/1), moist, medium sand, fines, [0,90,10].			DG-AD7S-3.5-4			5.7		
	(4') SILTY GRAVEL with SAND (GM): very dark brown (10YR 2/2), wet, fine-coarse gravel, medium-coarse sand, fines, [40,25,35], trace glass and ceramic fragments.		▼						water level
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 6610 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2083037.18
EASTING 6010850.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AD8 **SHEET** 1 **OF** 1
START DATE 1/31/2019 **ELEVATION DATA**
FINISH DATE 1/31/2019 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 5 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY GRAVEL with SAND (GM): dark gray (10YR 4/1), wet, coarse gravel to cobbles, [45,30,25].								
	(0.5') POORLY GRADED GRAVEL (GP): gray (10YR 5/1), wet, fine gravel, [90,5,5].			DG-AD8S-0.5-1			0.9		
	(2') POORLY GRADED SAND (SP): dark gray (10YR 4/1), wet, medium sand, [0,95,5].								
	(2.4') SILTY GRAVEL with SAND (GM): very dark brown (10YR 2/2), wet, cobbles, [50,15,35], 30% trash debris.					45/60			
				DG-AD8S-3.5-4			1.4		
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore **NORTHING** 2083037.18
EQUIPMENT Geoprobe 6600 **EASTING** 6010750.57
DRILL MTHD Direct Push **ANGLE** Vertical
DIAMETER 3 inches
LOGGER NR **REVIEWER** G. Thrupp, P.G. No. 5849

REMARKS under standing water

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AD9 **SHEET** 1 **OF** 1
START DATE 1/9/2019
FINISH DATE 1/9/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 10 ft bgs
DEPTH TO WATER 3.5 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): dark grayish brown (10YR 4/2), moist, fine-coarse gravel, medium-coarse sand, fines, [25,55,20].			DG-AD9S-0.5-1			1.9		0.0-1.0' compressed
						60/60			
	(3.5') wet.		▼	DG-AD9S-3.5-4			1.6		water level
5	(4') SILTY GRAVEL (GM): very dark brown (10YR 2/2), wet, fine-coarse gravel, fine-medium sand, fines, [55,10,35], 5% debris.								
	(6') FAT CLAY (CH): very dark greenish gray (10GY 3/1), moist, fines, [0,0,100], high plasticity, firm, Bay Mud.					60/60			no deeper sample taken; Bay Mud at 6.0' bgs
10	(10') Boring terminated.								
15									
20									
25									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 8040 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2083037.18
EASTING 6010650.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AD10 **SHEET** 1 **OF** 1
START DATE 1/15/2019
FINISH DATE 1/15/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619

ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): grayish brown (10YR 5/2), moist, fine-coarse gravel, medium-coarse sand, fines, [20,45,35].			DG-AD10S-0.5-1		60/60			0.0-1.0' compressed unable to collect PID readings because battery discharged
				DG-AD10S-3.5-4					
	(4.5') LEAN CLAY (CL): brown (10YR 4/3).								
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 6600
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF
REVIEWER G. Thrupp, P.G. No. 5849

NORTHING 2083037.18
EASTING 6010550.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AD11 **SHEET** 1 **OF** 1
START DATE 1/31/2019
FINISH DATE 1/31/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') POORLY GRADED GRAVEL with SAND (GP): black (10YR 2/1), wet, fine gravel, [75,20,5], oily sheen and odor.			DG-AD11S-0.5-1			1.3		
	(0.8') WELL-GRADED SAND with SILT and GRAVEL (GW-GM): very dark gray (10YR 3/1), wet, coarse sand, [15,75,10], oily sheen and odor.			DG-AD11S-3.5-4			1.1		black tar balls
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 6600
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NR
REVIEWER G. Thrupp, P.G. No. 5849
NORTHING 2083037.18
EASTING 6010450.57
ANGLE Vertical

REMARKS under standing water

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AD12 **SHEET** 1 **OF** 1
START DATE 1/31/2019
FINISH DATE 1/31/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY GRAVEL with SAND (GM): very dark gray (10YR 3/1), wet, coarse gravel, [50,35,15].			DG-AD12S-0.5-1			2.1		
	(2') WELL-GRADED SAND with SILT and GRAVEL (SW-SM): very dark gray (10YR 3/1), wet, coarse sand, [15,70,15], 5% trash debris, oily sheen and odor including tar balls.			DG-AD12S-3.5-4		40/60	1.3		tar balls present in unit, oily leaking residue, odor
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 6600
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NR
REVIEWER G. Thrupp, P.G. No. 5849
NORTHING 2083037.18
EASTING 6010350.57
ANGLE Vertical

REMARKS under standing water

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AD13 **SHEET** 1 **OF** 1
START DATE 2/1/2019
FINISH DATE 2/1/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 10 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): black (10YR 2/1), moist, fine gravel, fine-coarse sand, fines, [25,50,25], trace glass, sheen and luster from 1.5-2.0'.			DG-AD13S-0.5-1		60/60	5.3		0.0-1.5' compressed
				DG-AD13S-3.5-4			3.4		
5	(5') luster, strong odor, sticky from 5.0-8.0'.								
				DG-AD13S-7.5-8		60/60	62.1		
	(8') FAT CLAY (CH): very dark greenish gray (10GY 3/1), moist, fines, [0,0,100], high plasticity, firm, Bay Mud.								
10	(10') Boring terminated.								
15									
20									
25									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 8040 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF
REVIEWER G. Thrupp, P.G. No. 5849

NORTHING 2083037.18
EASTING 6010250.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AD14 **SHEET** 1 **OF** 1
START DATE 2/1/2019
FINISH DATE 2/1/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): very dark brown (10YR 2/2), moist, fine-coarse gravel, fine-medium sand, fines, [30,40,30].			DG-AD14S-0.5-1			2.7		0.0-1.5' compressed
	(2') brick fragments.					60/60			
				DG-AD14S-3.5-4			3.1		
	(4.5') sticky, trace luster, cobble from 4.5-5.0'.								
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 8040 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2083037.18
EASTING 6010150.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AD15 **SHEET** 1 **OF** 1
START DATE 1/23/2019
FINISH DATE 1/23/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619

ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY GRAVEL with SAND (GM): very dark gray (10YR 3/1), moist, fine-coarse gravel, fine-coarse sand, fines, [45,30,25], black (10YR 2/1) from 0.0-2.0'.			DG-AD15S-0.5-1			0.9		
	(3') trace nails.			DG-AD15S-3.5-4		60/60	1.2		
	(4') SILTY SAND (SM): dark greenish gray (10Y 4/1), moist, fine-medium sand, fines, [0,75,25].								
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 7822 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2083037.18
EASTING 6010050.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AD16 **SHEET** 1 **OF** 1
START DATE 1/23/2019
FINISH DATE 1/23/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER 4 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY GRAVEL with SAND (GM): grayish brown (10YR 5/2), moist, fine-coarse gravel, fine-coarse sand, fines, [50,20,30], trace plastic pieces and concrete cobbles.			DG-AD16S-0.5-1			0.9		0.0-1.0' compressed
	(1') 10% concrete fragments the size of coarse gravel from 1.0-2.0'.								
	(2.5') dark yellowish brown (10YR 4/6), lens of lean clay (CL) from 2.5-3.0'.					60/60			
				DG-AD16S-3.5-4			3.0		
	(4') very dark greenish gray (5G_/1 3/1), wet.		▼						water level
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 7822 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2083037.18
EASTING 6009950.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AD17 **SHEET** 1 **OF** 1
START DATE 1/24/2019
FINISH DATE 1/24/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 10 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') ASPHALT.								
	(0.5') CLAYEY SAND with GRAVEL (SC): dark reddish brown (5YR 3/4), dry, fine-coarse gravel, medium-coarse sand, fines, [20,60,20].			DG-AD17S-0.5-1		24/60	0.2 0.7		
	(3.5') LEAN CLAY with SAND (CL): dark greenish gray (5GY 4/1), moist, fine gravel, fine-coarse sand, fines, [5,20,75], medium plasticity, firm.			DG-AD17S-3.5-4			20.0 0.2		
	(7.5') FAT CLAY (CH): very dark greenish gray (5GY 3/1), moist-wet, fines, [0,0,100], high plasticity, soft.					42/60	2.0 0.0 0.0		
	(10') Boring terminated.								

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 8040 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER JR **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2083037.18
EASTING 6009850.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AE2 **SHEET** 1 **OF** 1
START DATE 12/14/2018
FINISH DATE 12/14/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND (SM): grayish brown (10YR 5/2), dry, trace fine gravel, fine sand, silt, [tr,85,15].			DG-AE-2S-0.5-1			0.8		
	(2.5') LEAN CLAY with SAND (CL): gray (10YR 5/1), moist, trace gravel, fine-coarse sand, clay, [tr,20,80].					54/60			
	(3') CLAYEY SAND with GRAVEL (SC): gray (10YR 5/1), wet, fine-medium gravel, fine-coarse sand, clay, [20,65,15].			DG-AE-2S-3.5-4			0.5		
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER CB
REVIEWER G. Thrupp, P.G. No. 5849

NORTHING 2082937.18
EASTING 6011350.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AE3 **SHEET** 1 **OF** 1
START DATE 12/19/2019
FINISH DATE 12/19/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619

ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 10 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') GRASS/ORGANICS (OL).								
	(0.2') SILTY SAND with GRAVEL (SM): very dark brown (10YR 2/2), fine gravel, fine-coarse sand, fines, [15,65,20].			DG-AE3S-0.5-1			2.1		
	(1') WELL-GRADED SAND (SW): dark greenish gray (10Y 4/1), fine-coarse sand, fines, [0,95,5].					42/60			
	(2.5') CLAYEY GRAVEL with SAND (GC): brown (7.5YR 5/4), wet, fine-coarse gravel, fine-coarse sand, fines, [60,20,20].			DG-AE3S-3.5-4			2.1		no recovery from 3.5-5'
5	(5') WELL-GRADED GRAVEL (GW): dark gray (10YR 4/1), wet, fine-coarse gravel, fine-coarse sand, fines, [90,5,5], cobbles.								
	(7.5') FAT CLAY (CH): gray (5/N), wet, trace fine sand, [0,tr,100], high plasticity, soft, shell pieces, Bay Mud.								no recovery from 8-10'
10	(10') Boring terminated.								
15									
20									
25									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 8040 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER BL **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2082937.18
EASTING 6011250.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AE4 **SHEET** 1 **OF** 1
START DATE 12/18/2018
FINISH DATE 12/18/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619

ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): very dark grayish brown (10YR 3/2), moist, medium grained, [20,60,20].			DG-AE4S-0.5-1			5.7		
	(2') SILTY SAND (SM): dark gray (10YR 4/1), moist, fine grained, [0,80,20].					47/60			
	(3.4') SILTY SAND with GRAVEL (SM): yellowish brown (10YR 5/4), moist, medium grained, [20,60,20].			DG-AE4S-3.5-4			4.5		
	(4.3') SILTY SAND (SM): very dark grayish brown (10YR 3/2), moist, fine grained, [0,80,20].								
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER KB
REVIEWER G. Thrupp, P.G. No. 5849

NORTHING 2082937.18
EASTING 6011150.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AE5 **SHEET** 1 **OF** 1
START DATE 12/17/2018
FINISH DATE 12/17/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER 3 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILT with SAND (ML): dark grayish brown (10YR 4/2), moist, fine-coarse gravel, medium sand, fines, [10,30,60], non-plastic, very soft.			DG-AE5S-0.5-1		60/60	5.0		0.0-1.0' compressed
	(3') WELL-GRADED SAND with SILT (SW-SM): very dark gray (10YR 3/1), wet-moist, fine-coarse gravel, medium-fine sand, fines, [10,80,10].		▼						water level, with sheen from 3.0-3.5'
	(3.5') lens of coarse sand from 3.5-4.0'.			DG-AE5S-3.5-4			12.0		
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 6610 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2082937.18
EASTING 6011050.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AE6 **SHEET** 1 **OF** 1
START DATE 12/20/2018
FINISH DATE 12/20/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND and GRAVEL (SM): dark brown (10YR 3/3), fine-coarse gravel, fine-coarse sand, fines, [20,65,15].			DG-AE6S-0.5-1			0.4		
				DG-AE6S-3.5-4			0.6		
	(4') pea gravel layer.								
	(4.5') very dark grayish brown , wet.								
5	(5') Boring terminated.								broken rock at bottom
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 788201
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER KJ **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2082937.18
EASTING 6010950.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AE7 **SHEET** 1 **OF** 1
START DATE 1/9/2019
FINISH DATE 1/9/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 10 ft bgs
DEPTH TO WATER 5 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND (SM): very dark gray (10YR 3/1), moist, fine gravel, fine-medium sand, fines, [15,50,35].			DG-AE7S-0.5-1			2.3		0.0-1.5' compressed
	(2') pea gravel lens from 2.0-3.0'.					60/60			
				DG-AE7S-3.5-4			2.5		
5	(4') SILTY GRAVEL (GM): very dark brown (10YR 2/2), moist, fine gravel, fine-medium sand, fines, [50,10,40], 10% glass/debris. (5') wet, from 5.0-10.0'.		▼						water level
	(7.5') CLAYEY GRAVEL (GC): greenish gray (5GY 5/1), wet, fine-coarse gravel, medium sand, fines, [60,5,35].			DG-AE7S-8-8.5			3.0		
10	(10') Boring terminated.								
15									
20									
25									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 8040 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF
REVIEWER G. Thrupp, P.G. No. 5849
NORTHING 2082937.18
EASTING 6010850.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AE8 **SHEET** 1 **OF** 1
START DATE 1/31/2019 **ELEVATION DATA**
FINISH DATE 1/31/2019 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 5 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY GRAVEL with SAND (GM): dark gray (10YR 4/1), wet, coarse gravel to cobbles, [45,30,25].			DG-AE8S-0.5-1			1.4		
	(0.7') POORLY GRADED GRAVEL (GP): gray (10YR 5/1), wet, fine gravel, [90,5,5].								
	(2.4') POORLY GRADED SAND (SP): dark gray (10YR 4/1), wet, medium sand, [0,95,5].					39/60			
	(3.7') SILTY GRAVEL with SAND (GM): very dark brown (10YR 2/2), wet, cobbles, [50,15,35], 20% trash debris, oily sheen.			DG-AE8S-3.5-4			2.6		
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore **NORTHING** 2082937.18
EQUIPMENT Geoprobe 6600 **EASTING** 6010750.57
DRILL MTHD Direct Push **ANGLE** Vertical
DIAMETER 3 inches
LOGGER NR **REVIEWER** G. Thrupp, P.G. No. 5849

REMARKS under standing water

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AE10 **SHEET** 1 **OF** 1
START DATE 1/15/2019
FINISH DATE 1/15/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619

ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') WELL-GRADED GRAVEL (GW): dark gray (10YR 4/1), moist, fine gravel, medium sand, fines, [85,10,5].			DG-AE10S-0.5-1					0.0-1.0' compressed unable to collect PID readings because battery discharged
	(2') SILTY SAND (SM): dark grayish brown (10YR 4/2), moist, fine gravel, fine-medium sand, fines, [15,45,40].			DG-AE10S-3.5-4		60/60			
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 6600
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2082937.18
EASTING 6010550.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AE11 **SHEET** 1 **OF** 1
START DATE 1/21/2019
FINISH DATE 1/21/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619

ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 10 ft bgs
DEPTH TO WATER ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') POORLY GRADED SAND (SP): dark brown (10YR 3/3), moist, trace gravel, fine sand, silt, [tr,100,tr].			DG-AE11S-0.5-1			4.0		odor
	(1.3') WELL-GRADED SAND (SW): greenish black (10GY 2.5/1), wet, fine-coarse sand (predominantly coarse), silt, [0,95,5].					30/60			
	(2') WELL-GRADED SAND with SILT and GRAVEL (SW-SM): black (2.5/N), moist, fine gravel, fine-coarse sand, silt, [20,70,10], staining, odor, spongy texture.			DG-AE11S-3.5-4			10.6		
5	(5') POORLY GRADED SAND (SP): black (2.5/N), moist, fine sand, [0,100,0], free product, sheen and odor.					24/60			strong odor
	(8.9') POORLY GRADED SAND with GRAVEL (SP): black (2.5/N), moist, fine-coarse gravel, fine sand, [15,85,0], sheen and odor.								
10	(10') Boring terminated.								
15									
20									
25									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER CB
REVIEWER G. Thrupp, P.G. No. 5849

NORTHING 2082937.18
EASTING 6010446.01
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AE12 **SHEET** 1 **OF** 1
START DATE 1/25/2019
FINISH DATE 1/25/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619

ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SANDY SILT (ML): dark grayish brown (10YR 4/2), moist, fine gravel, fine sand, fines, [5,30,65], low plasticity, firm.			DG-AE12S-0.5-1		60/60	0.8		0.0-1.0' compressed
	(3.5') black (10YR 2/1), strong odor from 3.5-4.0'.			DG-AE12S-3.5-4			23.5		
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 8040 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2082937.18
EASTING 6010350.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AE13 **SHEET** 1 **OF** 1
START DATE 1/25/2019
FINISH DATE 1/25/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SANDY SILT with GRAVEL (ML): very dark brown (10YR 2/2), moist, fine gravel, fine sand, fines, [20,25,55], low plasticity, soft, odor.			DG-AE13S-0.5-1		60/60	2.7		0.0-1.0' compressed
	(3') 3" lens of coarse gravel.								
	(3.3') SILTY SAND (SM): very dark gray (10YR 4/1), moist, fine gravel, fine-medium sand, fines, [tr,75,25].			DG-AE13S-3.5-4			2.4		
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 8040 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2082937.18
EASTING 6010250.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AE14 **SHEET** 1 **OF** 1
START DATE 1/23/2019
FINISH DATE 1/23/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER 3 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY GRAVEL with SAND (GM): very dark grayish brown (10YR 3/2), moist, fine-coarse gravel, fine-coarse sand, fines, [50,20,30], trace brick fragments from 0.0-5.0'.			DG-AE14S-0.5-1			1.0		
	(3') wet, concrete cobble.		▼	DG-AE14S-3.5-4		60/60	1.1		water level
	(4') CLAYEY GRAVEL (GC): very dark grayish brown (10YR 3/2), wet, fine-coarse gravel, fine-coarse sand, fines, [50,10,40], lean clay matrix.								
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 7822 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2082937.18
EASTING 6010150.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AE16 **SHEET** 1 **OF** 1
START DATE 1/23/2019
FINISH DATE 1/23/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY GRAVEL with SAND (GM): brown (10YR 4/3), dry, fine-coarse gravel, fine-coarse sand, fines, [45,25,30].			DG-AE16S-0.5-1		60/60	0.8		0.0-1.0' compressed
	(1') black (10YR 2/1), asphalt fragments as fine gravel from 1.0-1.5'.								
	(4') moist.			DG-AE16S-3.5-4			1.9		
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 7822 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2082937.18
EASTING 6009950.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AE17 **SHEET** 1 **OF** 1
START DATE 1/23/2019
FINISH DATE 1/23/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY GRAVEL with SAND (GM): dark grayish brown (10YR 4/2), moist, fine-coarse gravel, fine-coarse sand, fines, [40,35,25].			DG-AE17S-0.5-1		60/60	0.6		
	(3') SILTY SAND (SM): dark gray (N 4/), moist, fine gravel, fine-medium sand, fines, [10,50,40].			DG-AE17S-3.5-4			0.9		
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 7822 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2082936.5
EASTING 6009864.33
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AE18 **SHEET** 1 **OF** 1
START DATE 1/23/2019 **ELEVATION DATA**
FINISH DATE 1/23/2019 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 5 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') WELL-GRADED GRAVEL with SILT (GW-GM): very pale brown (10YR 8/3), moist, fine-coarse gravel, medium-coarse sand, fines, [80,10,10].			DG-AE18S-0.5-1			2.4		
	(1') GRAVELLY LEAN CLAY with SAND (CL): dark grayish brown (10YR 4/2), moist, fine-coarse gravel, fine-medium sand, fines, [30,20,50].					60/60			
	(2') brick cobbles from 2.0-2.5'.			DG-AE18S-3.5-4			11.6		
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore **NORTHING** 2082937.87
EQUIPMENT Geoprobe 7822 DT **EASTING** 6009722.38
DRILL MTHD Direct Push **ANGLE** Vertical
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AF2 **SHEET** 1 **OF** 1
START DATE 12/14/2018 **ELEVATION DATA**
FINISH DATE 12/14/2018 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 5 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SANDY ORGANIC SOIL with GRAVEL (OL): dark brown (10YR 3/3), dry, fine-medium gravel, fine-coarse sand, silt, [15,70,15], roots.			DG-AF-2S-0.5-1			0.3		
	(0.7') SILTY SAND with GRAVEL (SM): olive (5Y 5/3), dry, fine gravel, fine-coarse sand, silt, [15,70,15].					54/60			
	(2.6') CONCRETE.								
	(2.8') SANDY LEAN CLAY with GRAVEL (CL): dark gray (10YR 4/1), dry, fine gravel, fine-coarse sand, clay, [20,30,50].			DG-AF-2S-3.5-4			0.5		
	(4') CLAYEY SAND with GRAVEL (SC): yellowish-brown (10YR 5/4), wet, fine-coarse gravel, fine-coarse sand, clay, [20,60,20].								water level
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore **NORTHING** 2082837.18
EQUIPMENT Geoprobe **EASTING** 6011350.57
DRILL MTHD Direct Push **ANGLE** Vertical
DIAMETER 3 inches
LOGGER CB **REVIEWER** G. Thrupp, P.G. No. 5849

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AF3 **SHEET** 1 **OF** 1
START DATE 12/14/2018 **ELEVATION DATA**
FINISH DATE 12/14/2018 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 5 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') WELL-GRADED SAND (SW): grayish brown (10YR 5/2), dry, fine-coarse gravel, fine-coarse sand, fines, [10,85,5].			DG-AF3S-0.5-1		42/60	1.5		
				DG-AF3S-3.5-4			0.8		
	(4') WELL-GRADED GRAVEL with CLAY (GW-GC): very dark grayish brown (10YR 3/2), wet, fine-coarse gravel, fine-coarse sand, fines, [75,15,10].								
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore **NORTHING** 2082837.18
EQUIPMENT Geoprobe 6600 **EASTING** 6011250.57
DRILL MTHD Direct Push **ANGLE** Vertical
DIAMETER 3 inches
LOGGER KJ **REVIEWER** G. Thrupp, P.G. No. 5849

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AF4 **SHEET** 1 **OF** 1
START DATE 12/18/2018 **ELEVATION DATA**
FINISH DATE 12/18/2018 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 5 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): very dark grayish brown (10YR 3/2), moist, medium grained, [20,60,20].			DG-AF4S-0.5-1			1.8		
	(1.6') SILTY SAND (SM): dark gray (10YR 4/1), moist, fine grained, [0,80,20].					47/60			
	(3.2') WELL-GRADED GRAVEL (GW): dark grayish brown (10YR 4/2), wet, fine-coarse gravel, [95,0,5].			DG-AF4S-3.5-4			3.0		
	(4.2') SILTY SAND (SM): dark brown (10YR 3/3), wet, fine grained, [0,80,20].								
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER KB
REVIEWER G. Thrupp, P.G. No. 5849

NORTHING 2082837.18
EASTING 6011150.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AF5 **SHEET** 1 **OF** 1
START DATE 1/7/2019
FINISH DATE 1/7/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619

ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 10 ft bgs
DEPTH TO WATER 5 ft

DEPTH (ft)	MATERIAL DESCRIPTION	SAMPLE ID	RECOVERY	PID READING (ppm)	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): very dark grayish brown (10YR 3/2), moist, fine-coarse gravel, fine-medium sand, fines, [20,60,20], gravel increases from 3.0-3.5'.	DG-AF5S-0.5-1	60/60	1.8	0.0-1.0' compressed
		DG-AF5S-3.5-4		1.2	
	(4') SILT with SAND (ML): very dark gray (10YR 3/1), moist, fine-medium sand, fines, [0,15,85], non-plastic.	DG-AF5S-4.5-5		1.1	
5	(5') WELL-GRADED GRAVEL with CLAY (GW-GC): grayish brown (10YR 5/2), wet, fine-coarse gravel, medium sand, fines, [80,10,10].		60/60		water level; 5.0-6.5' compressed
10	(10') Boring terminated.				
15					
20					
25					

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 8040 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2082837.18
EASTING 6011050.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AF6 **SHEET** 1 **OF** 1
START DATE 12/20/2018 **ELEVATION DATA**
FINISH DATE 12/20/2018 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 5 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): dark grayish brown (10YR 4/2), fine-coarse gravel, fine-coarse sand, fines, [20,65,15].			DG-AF6S-0.5-1			0.7		
	(2') dark yellowish-brown (10YR 4/6).					45/60			
	(3.5') pea gravel layer.			DG-AF6S-3.5-4			0.8		
	(4.5') very dark brown (10YR 2/2), wet.								
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore **NORTHING** 2082837.18
EQUIPMENT Geoprobe 788201 **EASTING** 6010950.57
DRILL MTHD Direct Push **ANGLE** Vertical
DIAMETER 3 inches
LOGGER KJ **REVIEWER** G. Thrupp, P.G. No. 5849

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AF7 **SHEET** 1 **OF** 1
START DATE 12/19/2018 **ELEVATION DATA**
FINISH DATE 12/19/2018 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 5 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND (SM): brown (10YR 4/3), moist, fine-coarse gravel, medium-coarse sand, fines, [10,70,20].			DG-AF7S-0.5-1		60/60	5.1		0.0-1.5' compressed
	(3') POORLY GRADED GRAVEL (GP): grayish brown (10YR 5/2), moist, fine gravel, medium-coarse sand, fines, [95,3,2].			DG-AF7S-3.5-4			5.0		
	(4') WELL-GRADED SAND with SILT and GRAVEL (SW-SM): very dark brown (10YR 2/2), moist, fine-coarse gravel, medium sand, fines, [25,65,10]. (4.5') trace glass fragments from 4.5-5.0'.								
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore **NORTHING** 2082837.18
EQUIPMENT Geoprobe 6610 DT **EASTING** 6010850.57
DRILL MTHD Direct Push **ANGLE** Vertical
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AF8 **SHEET** 1 **OF** 1
START DATE 1/31/2019 **ELEVATION DATA**
FINISH DATE 1/31/2019 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 5 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY GRAVEL with SAND (GM): dark gray (10YR 4/1), wet, coarse gravel to cobbles, [45,30,25].			DG-AF8S-0.5-1			2.2		
	(1.1') POORLY GRADED GRAVEL (GP): gray (10YR 5/1), wet, fine gravel, [90,5,5].					41/60			
	(3.4') POORLY GRADED SAND (SP): dark gray (10YR 4/1), wet, medium sand, [0,95,5].			DG-AF8S-3.5-4			2.0		
5	(4.8') SILTY GRAVEL with SAND (GM): very dark brown (10YR 2/2), wet, cobbles, [50,15,35], 20% trash debris, oily sheen.								
	(5') Boring terminated.								
10									

CONTRACTOR PeneCore **NORTHING** 2082837.18
EQUIPMENT Geoprobe 6600 **EASTING** 6010750.57
DRILL MTHD Direct Push **ANGLE** Vertical
DIAMETER 3 inches
LOGGER NR **REVIEWER** G. Thrupp, P.G. No. 5849

REMARKS under standing water

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AF10 **SHEET** 1 **OF** 1
START DATE 1/15/2019
FINISH DATE 1/15/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): grayish brown (10YR 5/2), moist, fine-coarse gravel, medium-coarse sand, fines, [20,45,35].			DG-AF10S-0.5-1		60/60			0.0-1.0' compressed unable to collect PID readings because battery discharged
				DG-AF10S-3.5-4					
	(4') GRAVELLY LEAN CLAY (CL): very dark gray (10YR 3/1), moist, fine-coarse gravel, fine sand, fines, [25,10,65], medium plasticity, soft.								
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 6600
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF
REVIEWER G. Thrupp, P.G. No. 5849
NORTHING 2082837.18
EASTING 6010550.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AF11 **SHEET** 1 **OF** 1
START DATE 1/28/2019
FINISH DATE 1/28/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619

ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER 0.5 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): dark grayish brown (10YR 4/2), wet, fine sand, [5,80,15].		▼	DG-AF11S-0.5-1			1.3		
	(1.2') SILTY GRAVEL with SAND (GM): dark gray (10YR 4/1), wet, fine gravel, [55,30,15].								
	(2.3') SILTY GRAVEL (GM): dark yellowish brown (10YR 4/4), wet, coarse gravel to cobbles, [70,5,25].			DG-AF11S-3.5-4		28/60	1.2		
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 6600
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NR
REVIEWER G. Thrupp, P.G. No. 5849

NORTHING 2082837.18
EASTING 6010442.35
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AF12 **SHEET** 1 **OF** 1
START DATE 1/25/2019 **ELEVATION DATA**
FINISH DATE 1/25/2019 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 5 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SANDY SILT (ML): yellowish brown (10YR 5/4), moist, fine-coarse gravel, fine sand, fines, [10,20,70].			DG-AF12S-0.5-1			2.2		0.0-1.5' compressed
	(2.5') SILTY SAND with GRAVEL (SM): black (10YR 2/1), moist, fine-coarse gravel, fine-medium sand, fines, [20,50,30], strong odor, has a sheen.			DG-AF12S-3.5-4		60/60	20.9		
	(4') lens of silty sand (SM) from 4.0-4.5'.								
	(4.5') 1" layer of glass shards about the size of fine gravel and coarse sand.								
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore **NORTHING** 2082837.18
EQUIPMENT Geoprobe 8040 DT **EASTING** 6010350.57
DRILL MTHD Direct Push **ANGLE** Vertical
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AF13 **SHEET** 1 **OF** 1
START DATE 1/28/2019
FINISH DATE 1/28/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 10 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND (SM): grayish brown (10YR 5/2), moist, fine-coarse gravel, fine-medium sand, fines, [10,65,25].			DG-AF13S-0.5-1		60/60	5.0		0.0-2.0' compressed
				DG-AF13S-3.5-4			3.6		
5	(4.5') SILT with SAND (ML): black (10YR 2/1), moist, fine sand, fines, [0,15,85], low plasticity, soft, strong odor, sticky, 45% glass, ceramic, and metal debris.						16.7		
	(7') FAT CLAY (CH): very dark greenish gray (10GY 3/1), moist, fines, [0,0,100], high plasticity, firm, Bay Mud.								did not collect deeper sample; Bay Mud encountered at 7.0' bgs
10	(10') Boring terminated.								
15									
20									
25									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 8040 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2082837.18
EASTING 6010250.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AF14 **SHEET** 1 **OF** 1
START DATE 2/5/2019
FINISH DATE 2/5/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY GRAVEL with SAND (GM): very dark brown (10YR 2/2), moist, fine-coarse gravel, medium-coarse sand, fines, [60,15,25].			DG-AF14xS-0.5-1			2.1		0.0-2.0' compressed
						60/60			
				DG-AF14xS-3.5-4			4.2		
	(4') wet.								water level
	(4.5') LEAN CLAY with SAND (CL): dark grayish brown (10YR 4/2), moist, fine gravel, fine-medium sand, fines, [5,20,75], medium plasticity, firm.								
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 7822 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2082837.18
EASTING 6010150.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AF16 **SHEET** 1 **OF** 1
START DATE 1/23/2019
FINISH DATE 1/23/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') ASPHALT.								
	(0.2') SILTY GRAVEL with SAND (GM): dusky red (10YR 3/3), moist, fine-coarse gravel, fine-coarse sand, fines, [50,30,20].			DG-AF16S-0.5-1			0.8		
	(2') LEAN CLAY with SAND (CL): brown (10YR 5/3), moist, fine sand, fines, [0,15,85], medium plasticity, firm.					60/60			
				DG-AF16S-3.5-4			4.0		
	(4') SILTY SAND (SM): grayish brown (10YR 5/2), moist, fine-medium sand, fines, [0,70,30].								
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 7822 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF
REVIEWER G. Thrupp, P.G. No. 5849
NORTHING 2082837.18
EASTING 6009950.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AF18 **SHEET** 1 **OF** 1
START DATE 1/23/2019 **ELEVATION DATA**
FINISH DATE 1/23/2019 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 5 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY GRAVEL with SAND (GM): grayish brown (10YR 4/2), moist, fine-coarse gravel, fine-coarse sand, fines, [45,20,35]. (0.5') dark yellowish brown (10YR 4/4), lean clay-5".			DG-AF18S-0.5-1			6.8		
	(2') SANDY LEAN CLAY with GRAVEL (CL): dark yellowish brown (10YR 4/4), moist, fine-coarse gravel, fine-medium sand, fines, [20,30,50].			DG-AF18S-3.5-4		60/60	43.0		
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore **NORTHING** 2082837.18
EQUIPMENT Geoprobe 7822 DT **EASTING** 6009750.57
DRILL MTHD Direct Push **ANGLE** Vertical
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AG2 **SHEET** 1 **OF** 1
START DATE 12/14/2018
FINISH DATE 12/14/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619

ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 15 ft bgs
DEPTH TO WATER 4.5 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SANDY ORGANIC SOIL with GRAVEL (OL): dark brown (10YR 3/3), dry, [15,70,15], roots.			DG-AG2S-0.5-1			0.4		
	(0.5') SILTY SAND with GRAVEL (SM): olive (5Y 5/3), dry, [15,70,15].								
	(2.4') CLAYEY SAND (SC): yellowish-brown (10YR 5/6), fine gravel, fine-medium sand, clay, [10,70,20].					54/60			
	(3.5') black , strong odor.		▼	DG-AG2S-3.5-4			8.7		sample material for extra analysis DG-AG2-3-3.5-UNK
5	(4.4') CLAYEY SAND with GRAVEL (SC): dark yellowish-brown (10YR 3/4), wet, fine gravel, fine-coarse sand, clay, [20,60,20].								
	(7.5') [25,50,25].								
10				DG-AG2S-10-10.5					
	(10.5') FAT CLAY (CH): greenish black (5GY 2.5/1), moist, high plasticity.								
15	(15') Boring terminated.								
20									
25									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER CB
REVIEWER G. Thrupp, P.G. No. 5849

NORTHING 2082737.18
EASTING 6011350.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AG3 **SHEET** 1 **OF** 1
START DATE 12/19/2019
FINISH DATE 12/19/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 10 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') GRASS/ORGANICS (OL).								
	(0.2') SILTY SAND (SM): dark greenish gray (10Y 4/1), moist, fine gravel, fine-coarse sand, non-plastic fines, [5,75,20].			DG-AG3S-0.5-1			1.8		
	(1.5') olive brown (2.5Y 4/4), [5,55,40].					48/60			
	(2.5') CLAYEY SAND with GRAVEL (SC): brown (7.5YR 5/4), wet, fine-coarse gravel, fine-coarse sand, plastic fines, [20,60,20].			DG-AG3S-3.5-4			1.5		no recovery from 4-5'
5	(5') CLAYEY GRAVEL (GC): dark gray (10YR 4/1), wet, fine-coarse gravel, fine-coarse sand, plastic fines, [60,20,20].								
	(6.5') cobbles up to 4" x 3.5".					42/60			
	(7.5') FAT CLAY (CH): gray (5/N), wet, trace fine sand, [0,tr,100], high plasticity, soft, trace shell pieces, Bay Mud.								
10						60/60			
15	(15') Boring terminated.								
20									
25									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 8040 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER BL **REVIEWER** G. Thrupp, P.G. No. 5849
NORTHING 2082737.18
EASTING 6011250.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AG4 **SHEET** 1 **OF** 1
START DATE 12/18/2018
FINISH DATE 12/18/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 15 ft bgs
DEPTH TO WATER 1.7 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND (SM): very dark gray (10YR 3/1), moist, medium grained, [0,80,20].			DG-AG4S-0.5-1			7.6		
	(1') dark brown (10YR 3/3).								
	(1.3') SILT (ML): very dark grayish brown (10YR 3/2), wet, [0,10,90], non-plastic, very soft.		▼			45/60			saturated at 20"
				DG-AG4S-3.5-4			5.3		
5									boring diameter changed from 3" to 1.5" from 5-15'
	(6.5') WELL-GRADED GRAVEL with SILT (GW-GM): very dark gray (10YR 3/1), wet, fine gravel, [90,0,10].					25/60			
10				DG-AG4S-11-11.5					
						12/60			
	(13') LEAN CLAY (CL): very dark gray (10YR 3/1), wet, [0,0,100], medium plasticity, very soft.								
15	(15') Boring terminated.								
20									
25									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe
DRILL MTHD Direct Push
DIAMETER 3/1.5 inches
LOGGER KB
REVIEWER G. Thrupp, P.G. No. 5849

NORTHING 2082737.18
EASTING 6011150.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AG5 **SHEET** 1 **OF** 1
START DATE 12/17/2018
FINISH DATE 12/17/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER 4 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') POORLY GRADED SAND with SILT (SP-SM): very dark greenish gray (10Y 3/1), moist, fine-coarse gravel, medium sand, fines, [10,80,10].			DG-AG5S-0.5-1			3.0		0.0-2.0' compressed
	(2.5') 1" layer of organics.					60/60			
	(3.5') GRAVELLY SILT (ML): dark grayish brown (10YR 4/2), moist, fine-coarse gravel, medium sand, fines, [25,10,65], low plasticity, very soft-soft.		▼	DG-AG5S-3.5-4			3.0		water level
5	(4.8') lens of poorly graded medium sand from 4.8-5.0'.								
	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 6610 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849
NORTHING 2082737.18
EASTING 6011050.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AG6 **SHEET** 1 **OF** 1
START DATE 12/20/2018
FINISH DATE 12/20/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619

ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 15 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') WELL-GRADED GRAVEL with SILT and SAND (GW-GM): dark brown (10YR 3/3), fine-coarse gravel, fine-coarse sand, fines, [60,30,10].			DG-AG6S-0.5-1			0.8		
	(3') pea gravel layer.			DG-AG6S-3.5-4		46/60	0.6		
	(4') SILTY SAND (SM): very dark brown (10YR 2/2), fine-coarse sand, fines, [5,80,15].								
5	(5') SILTY GRAVEL (GM): dark brown (10YR 3/3), wet, fine-coarse gravel, fine-coarse sand, fines, [75,10,15].					21/60			
10	(10') SILTY GRAVEL (GM): brown (10YR 5/3), wet, fine-coarse gravel, fine sand, fines, [80,5,15].					30/60			
	(14') brownish yellow (10YR 6/8), dry.								
15	(14.5') FAT CLAY (CL): very dark greenish gray (10Y 3/1), fines, [0,0,100], medium-high plasticity, soft.								
	(15') Boring terminated.								
20									
25									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 788201
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER KJ **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2082737.18
EASTING 6010950.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AG7 **SHEET** 1 OF 1
START DATE 1/30/2019 **ELEVATION DATA**
FINISH DATE 1/30/2019 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 15 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** 3 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND (SM): dark gray (10YR 4/1), moist, fine gravel, fine-medium sand, fines, [5,65,30].			DG-AG7S-0.5-1		60/60	0.5		at around 10', hit what the driller described as a "coarse gravel layer" that was getting jammed in the casing making it difficult for the drill to advance; after multiple attempts called refusal at 15'; 0.0-2.0' compressed
	(3') wet, lens of pea gravel, fine gravel with trace coarse sand from 3.0-4.0'.		▼	DG-AG7S-3.5-4			16.9		water level
5	(5') SILTY GRAVEL (GM): very dark brown (10YR 2/2), wet, fine-coarse gravel, fine sand, fines, [55,10,35], trace bone and ceramic fragments.					60/60			
	(9') CLAYEY GRAVEL (GC): dark gray (10YR 4/1), wet, fine-coarse gravel, fine sand, fines, [70,10,20], 50% cobbles.								
10	(10') WELL-GRADED GRAVEL with SAND (GW): dark gray (10YR 4/1), wet, fine-coarse gravel, coarse sand, fines, [75,20,5], trace cobbles, pea gravel.					60/60			
							18.2		no deep sample taken due to prevalent gravel
15	(15') Boring terminated.								
20									
25									

CONTRACTOR PeneCore **NORTHING** 2082737.18
EQUIPMENT Geoprobe 8040 DT **EASTING** 6010850.57
DRILL MTHD Direct Push **ANGLE** Vertical
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AG8 **SHEET** 1 **OF** 1
START DATE 1/31/2019
FINISH DATE 1/31/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY GRAVEL with SAND (GM): dark gray (10YR 4/1), wet, coarse gravel to cobbles, [45,30,25].			DG-AG8S-0.5-1			1.1		
	(1.1') POORLY GRADED GRAVEL (GP): gray (10YR 5/1), wet, fine gravel, [90,5,5].								
	(2.5') POORLY GRADED SAND (SP): dark gray (10YR 4/1), wet, medium sand, [0,95,5].					41/60			
				DG-AG8S-3.5-4			2.6		
5	(4.7') SILTY GRAVEL with SAND (GM): black (10YR 2/1), wet, cobbles, [50,15,35], 15% trash debris, oily sheen.								
	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 6600
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NR
REVIEWER G. Thrupp, P.G. No. 5849

NORTHING 2082737.18
EASTING 6010750.57
ANGLE Vertical

REMARKS under standing water

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AG10 **SHEET** 1 **OF** 1
START DATE 1/15/2019
FINISH DATE 1/15/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY GRAVEL with SAND (GM): dark gray (10YR 4/1), moist, fine-coarse gravel, medium-coarse sand, fines, [40,30,30].			DG-AG10S-0.5-1		60/60	0.5		0.0-2.0' compressed
				DG-AG10S-3.5-4			0.5		
5	(4.5') GRAVELLY LEAN CLAY (CL): very dark gray (10YR 3/1), moist, fine-coarse gravel, fine sand, fines, [25,10,65], medium plasticity, soft.								
	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 6600
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF
REVIEWER G. Thrupp, P.G. No. 5849

NORTHING 2082737.18
EASTING 6010550.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AG11 **SHEET** 1 **OF** 1
START DATE 1/21/2019 **ELEVATION DATA**
FINISH DATE 1/21/2019 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 10 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') CLAYEY SAND with GRAVEL (SC): very dark grayish brown (10YR 3/2), moist, fine-coarse gravel, fine sand, clay, [15,70,15], roots.			DG-AG11S-0.5-1			0.1		
	(1') very dark brown (10YR 2/2), increased gravel, [20,65,15].								
	(2') dark yellowish-brown (10YR 3/4).					42/60			
	(3') very dark brown (10YR 2/2), staining.			DG-AG11S-3.5-4			0.1		
	(4.5') dark greenish gray (5GY 4/1), wet, odor and sheen.								
5	(5') POORLY GRADED SAND with CLAY (SP-SC): dark greenish gray (5GY 4/1), wet, fine sand, clay, [0,90,10].								
						48/60			
	(8') black sheen, staining, visible free product.								
				DG-AG11S-9.5-10			23.6		
10	(10') Boring terminated.								
15									
20									
25									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER CB
REVIEWER G. Thrupp, P.G. No. 5849

NORTHING 2082736.88
EASTING 6010440.83
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AG12 **SHEET** 1 **OF** 1
START DATE 1/25/2019
FINISH DATE 1/25/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619

ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND (SM): dark grayish brown (10YR 4/2), moist, fine gravel, medium sand, fines, [10,60,30].			DG-AG12S-0.5-1		60/60	6.8		0.0-0.5' compressed
	(3') GRAVELLY SILT (ML): black (10YR 2/1), moist, fine-coarse gravel, fine-medium sand, fines, [35,10,55], medium plasticity, soft, 5% glass, very strong odor, luster.			DG-AG12S-3.5-4			119.0		
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 8040 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2082737.18
EASTING 6010350.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AG13 **SHEET** 1 OF 1
START DATE 1/25/2019 **ELEVATION DATA**
FINISH DATE 1/25/2019 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 5 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** 3 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY GRAVEL with SAND (GM): very dark brown (10YR 2/2), moist, fine-coarse gravel, fine sand, fines, [50,15,35].			DG-AG13S-0.5-1		60/60	7.5		0.0-2.0' compressed
	(3') wet, strong odor, 5% glass fragments from 3.0-5.0'.		▼	DG-AG13S-3.5-4			2.5		
5	(4.75') black (10YR 2/1), luster. (5') Boring terminated.								
10									

CONTRACTOR PeneCore **NORTHING** 2082737.18
EQUIPMENT Geoprobe 8040 DT **EASTING** 6010250.57
DRILL MTHD Direct Push **ANGLE** Vertical
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AG14 **SHEET** 1 **OF** 1
START DATE 2/5/2019
FINISH DATE 2/5/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): very dark grayish brown (10YR 3/2), moist, fine-coarse gravel, fine-medium sand, fines, [20,45,35].			DG-AG14S-0.5-1		60/60	3.0		
	(3') SILTY GRAVEL (GM): very dark gray (10YR 3/1), moist, fine-coarse gravel, fine-medium sand, fines, [50,10,40].			DG-AG14S-3.5-4			2.2		
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 7822 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2082737.18
EASTING 6010150.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AG15 **SHEET** 1 **OF** 1
START DATE 1/24/2019
FINISH DATE 1/24/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 10 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') ASPHALT.								
	(0.5') POORLY GRADED SAND (SP): dark yellowish brown (10YR 4/4), moist, medium sand, [0,100,0].			DG-AG15S-0.5-1			0.0 0.0		
	(1') SANDY LEAN CLAY (CL): olive (5Y 5/4), dry, fine gravel, fine-medium sand, fines, [10,25,65], medium plasticity, very hard.			DG-AG15S-3.5-4		36/60	0.0 0.0		
5	(5') POORLY GRADED SAND (SP): dark yellowish brown (10YR 4/4), wet, medium sand, [0,95,5].					60/60	0.0 0.0		
	(9') FAT CLAY (CH): black (10YR 2/1), wet, trace coarse sand, fines, [0,tr,100], high plasticity, soft.			DG-AG15S-8.5-9			9.0		
10	(9.5') dark bluish gray (10B 4/1), [0,0,100].						0.5		
	(10') Boring terminated.								
15									
20									
25									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 8040 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER JR **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2082737.18
EASTING 6010050.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AG16 **SHEET** 1 **OF** 1
START DATE 1/22/2019
FINISH DATE 1/22/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY GRAVEL with SAND (GM): black (10YR 2/1), moist, fine gravel, medium-fine sand, fines, [50,30,20].			DG-AG16S-0.5-1			1.1		
	(1') dark gray (10YR 4/1), from 1.0-3.0'.					60/60			
	(3') SILTY SAND (SM): dark yellowish brown (10YR 4/4), moist, fine gravel, fine-medium sand, fines, [5,75,20].			DG-AG16S-3.5-4			1.6		
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 7822 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF
REVIEWER G. Thrupp, P.G. No. 5849
NORTHING 2082737.18
EASTING 6009950.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AG18 **SHEET** 1 **OF** 1
START DATE 1/23/2019
FINISH DATE 1/23/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') WELL-GRADED GRAVEL with SILT (GW-GM): very pale brown (10YR 8/3), moist, fine-coarse gravel, medium-coarse sand, fines, [80,10,10].			DG-AG18S-0.5-1			2.4		
	(1') SANDY LEAN CLAY (CL): yellowish brown (10YR 5/6), moist, fine-medium sand, fines, [0,30,70], medium plasticity, hard, trace roots.					60/60			
				DG-AG18S-3.5-4			1.9		
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 7822 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2082737.18
EASTING 6009750.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AH2 **SHEET** 1 **OF** 1
START DATE 12/14/2018 **ELEVATION DATA**
FINISH DATE 12/14/2018 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 5 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SANDY ORGANIC SOIL with GRAVEL (OL): dark brown (10YR 3/3), dry, fine-medium gravel, fine-coarse sand, silt, [15,70,15], roots.								
	(0.5') SILTY SAND with GRAVEL (SM): dark gray (10YR 4/1), moist, fine gravel, predominantly fine sand, silt, [15,70,15].			DG-AH2S-0.5-1			0.9		
	(1.8') yellowish-brown (10YR 5/4), wet, increased gravel and coarser sand fraction, [30,55,15].					48/60			water level
				DG-AH2S-3.5-4			0.1		no recovery from 4-5'
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore **NORTHING** 2082637.18
EQUIPMENT Geoprobe **EASTING** 6011350.57
DRILL MTHD Direct Push **ANGLE** Vertical
DIAMETER 3 inches
LOGGER CB **REVIEWER** G. Thrupp, P.G. No. 5849

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AH3 **SHEET** 1 **OF** 1
START DATE 12/14/2018 **ELEVATION DATA**
FINISH DATE 12/14/2018 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 5 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') WELL-GRADED SAND with GRAVEL (SW): yellowish-brown (10YR 5/6), dry, fine-coarse gravel, fine-coarse sand, fines, [20,75,5].			DG-AH3S-0.5-1			0.8		
				DG-AH3S-3.5-4		40/60			
	(4') brick approximately 3".								
	(4.2') WELL-GRADED GRAVEL with CLAY (GW-GC): very dark grayish brown , moist, fine-coarse gravel, fine-medium sand, fines, [80,10,10], medium-high plasticity, soft.								
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore **NORTHING** 2082637.18
EQUIPMENT Geoprobe 6600 **EASTING** 6011250.57
DRILL MTHD Direct Push **ANGLE** Vertical
DIAMETER 3 inches
LOGGER KJ **REVIEWER** G. Thrupp, P.G. No. 5849

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AH4 **SHEET** 1 **OF** 1
START DATE 12/18/2018
FINISH DATE 12/18/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 10 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	SAMPLE ID	RECOVERY	PID READING (ppm)	COMMENTS
	(0') SILTY SAND (SM): dark brown (10YR 3/3), moist, fine-medium grained, [0,60,40].	DG-AH4S-0.5-1		6.4	
	(1.3') SILTY SAND with GRAVEL (SM): very dark grayish brown (10YR 3/2), moist, medium grained, [30,50,20].				coarse gravel at 13"
	(2.4') SILTY SAND (SM): black (10YR 2/1), moist, fine grained, [0,70,30]. (3') wet.		44/60		free product and odor at 30" two cobbles at 32"
		DG-AH4S-3.5-4		18.8	
				19.4	PID below free product
5	(5.2') SILTY GRAVEL with SAND (GM): yellowish brown (10YR 5/4), wet, fine gravel, [60,20,20].				water in 5-10' casing; boring diameter changed from 3" to 1.5" from 5-15'
		DG-AH4S-6-6.5		3.2	sampled for organics
	(7') SILT with SAND (ML): yellowish brown (10YR 5/6), dry, [0,20,80], non-plastic.		24/60		cobble at 80"
	(8.7') grayish brown (10YR 5/2).				
10	(10') Boring terminated.				
15					
20					
25					

CONTRACTOR PeneCore
EQUIPMENT Geoprobe
DRILL MTHD Direct Push
DIAMETER 3/1.5 inches
LOGGER KB
REVIEWER G. Thrupp, P.G. No. 5849

NORTHING 2082637.18
EASTING 6011150.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AH5 **SHEET** 1 **OF** 1
START DATE 1/7/2019
FINISH DATE 1/7/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 10 ft bgs
DEPTH TO WATER 5 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): very dark grayish brown (10YR 3/2), moist, fine gravel, fine-medium sand, fines, [20,60,20].			DG-AH5S-0.5-1		60/60	0.6		0.0-1.5' compressed
				DG-AH5S-3.5-4			0.7		
5	(5') SILT with SAND (ML): very dark gray (10YR 3/1), wet, fine-medium sand, fines, [0,15,85], non-plastic.		▼			60/60			water level
				DG-AH5S-8-8.5			0.3		
	(8.5') WELL-GRADED GRAVEL with CLAY (GW-GC): grayish brown (10YR 5/2), wet, fine-coarse gravel, medium sand, fines, [80,10,10].								
10	(10') Boring terminated.								
15									
20									
25									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 8040 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2082637.18
EASTING 6011050.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AH6 **SHEET** 1 **OF** 1
START DATE 12/20/2018
FINISH DATE 12/20/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND and GRAVEL (SM): dark yellowish-brown (10YR 4/6), fine-coarse gravel, fine-coarse sand, fines, [20,65,15].			DG-AH6S-0.5-1			0.8		
	(2.5') grayish brown (10YR 5/2).			DG-AH6S-3.5-4		41/60	0.8		
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 788201
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER KJ **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2082637.18
EASTING 6010950.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AH7 **SHEET** 1 **OF** 1
START DATE 12/19/2018
FINISH DATE 12/19/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): brown (10YR 4/3), moist, fine-coarse gravel, medium-coarse sand, fines, [20,60,20].			DG-AH7S-0.5-1		60/60	3.2		0.0-1.5' compressed
	(3') POORLY GRADED GRAVEL (GP): grayish brown (10YR 5/2), moist, fine gravel, medium-coarse sand, fines, [95,3,2].			DG-AH7S-3.5-4			3.2		
	(4') POORLY GRADED SAND with SILT (SP-SM): very dark gray (10YR 3/1), moist, fine-coarse gravel, medium sand, fines, [10,80,10].								
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 6610 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2082637.18
EASTING 6010850.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AH8 **SHEET** 1 **OF** 1
START DATE 1/30/2019 **ELEVATION DATA**
FINISH DATE 1/30/2019 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 5 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY GRAVEL with SAND (GM): very dark gray (10YR 3/1), wet, fine gravel, [50,15,35].			DG-AH8S-0.5-1			3.2		
	(0.8') POORLY GRADED GRAVEL (GP): gray (10YR 5/1), wet, fine gravel, [90,5,5].								
	(2.1') POORLY GRADED SAND (SP): very dark gray (10YR 3/1), wet, medium sand, [5,90,5].			DG-AH8S-3.5-4			6.0		
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore **NORTHING** 2082623.55
EQUIPMENT Geoprobe 6600 **EASTING** 6010750.18
DRILL MTHD Direct Push **ANGLE** Vertical
DIAMETER 3 inches
LOGGER NR **REVIEWER** G. Thrupp, P.G. No. 5849

REMARKS under standing water

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AH9 **SHEET** 1 **OF** 1
START DATE 1/30/2019
FINISH DATE 1/30/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619

ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 10 ft bgs
DEPTH TO WATER 4.5 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): very dark gray (10YR 3/1), moist, fine gravel, fine-medium sand, fines, [25,55,20].			DG-AH9S-0.5-1			2.1		0.0-1.0' compressed
						60/60			
	(3') pea gravel lens from 3.0-3.5'.			DG-AH9S-3.5-4			7.3		
	(4.5') wet.		▼						
5	(5') SILTY GRAVEL with SAND (GM): very dark gray (10YR 3/1), wet, fine gravel, medium-coarse sand, fines, [50,20,30], 10% glass and ceramic debris.								
						36/60			no deep sample taken due to poor recovery and prevalent gravel
	(8') FAT CLAY (CH): very dark greenish gray (10GY 3/1), moist, fines, [0,0,100], high plasticity, firm, Bay Mud.								
10	(10') Boring terminated.								
15									
20									
25									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 8040 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2082623.55
EASTING 6010650.18
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AH10 **SHEET** 1 **OF** 1
START DATE 1/15/2019
FINISH DATE 1/15/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): dark grayish brown (10YR 4/2), moist, fine-coarse gravel, medium-fine sand, fines, [20,45,35].			DG-AH10S-0.5-1			0.4		0.0-1.5' compressed
						60/60			
				DG-AH10S-3.5-4			0.4		
	(4') very dark gray (10YR 3/1).								
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 6600
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF
REVIEWER G. Thrupp, P.G. No. 5849

NORTHING 2082623.55
EASTING 6010550.18
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AH11 **SHEET** 1 **OF** 1
START DATE 1/28/2019 **ELEVATION DATA**
FINISH DATE 1/28/2019 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 5 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** 1 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND (SM): grayish brown (10YR 5/2), moist, fine sand, [0,80,20], densely packed.		▼	DG-AH11S-0.5-1			1.5		
	(1') SILTY GRAVEL with SAND (GM): gray (10YR 5/1), wet, fine gravel, [50,30,20].								
	(1.7') SILTY SAND (SM): dark brown (10YR 3/3), wet, fine sand, [5,75,20], slight oily sheen.					26/60			
				DG-AH11S-3.5-4			0.7		
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore **NORTHING** 2082636.88
EQUIPMENT Geoprobe 6600 **EASTING** 6010437.79
DRILL MTHD Direct Push **ANGLE** Vertical
DIAMETER 3 inches
LOGGER NR **REVIEWER** G. Thrupp, P.G. No. 5849

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AH12 **SHEET** 1 **OF** 1
START DATE 1/25/2019
FINISH DATE 1/25/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND (SM): very dark grayish brown (10YR 3/2), fine-coarse gravel, fine-medium sand, fines, [10,60,30], luster.			DG-AH12S-0.5-1		60/60	17.2		first run had only 20% recovery; redrilled; 0.0-2.0' compressed
				DG-AH12S-3.5-4			6.7		
	(4') SILTY GRAVEL (GM): black (10YR 2/1), moist, fine gravel, fine sand, fines, [60,10,30], strong odor, luster, 5% glass and ceramic fragments.								
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 8040 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2082637.18
EASTING 6010350.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AH13 **SHEET** 1 **OF** 1
START DATE 1/29/2019
FINISH DATE 1/29/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619

ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 10 ft bgs
DEPTH TO WATER 6.5 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND (SM): dark greenish gray (5GY 4/1), moist, fine gravel, fine-coarse sand, fines, [5,75,20].			DG-AH13S-0.5-1		60/60	5.6		0.0-1.0' compressed
	(3') GRAVELLY SILT (ML): black (10YR 2/1), moist, fine gravel, fine sand, fines, [25,10,65], low plasticity, soft, very strong odor, sticky, 25% ceramic and glass debris, luster/sheen.			DG-AH13S-3.5-4			6.4		sticky sample made it difficult to determine plasticity of fines from 3-8' bgs
5	(6.5') wet.		▼						water level
				DG-AH13S-7.5-8		60/60	91.9		
	(8') FAT CLAY (CH): very dark greenish gray (10GY 3/1), moist, fines, [0,0,100], high plasticity, firm, Bay Mud.								
10	(10') Boring terminated.								
15									
20									
25									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 8040 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2082637.18
EASTING 6010250.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AH14 **SHEET** 1 **OF** 1
START DATE 2/5/2019
FINISH DATE 2/5/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): dark grayish brown (10YR 4/2), moist, fine gravel, fine-medium sand, fines, [15,60,25].			DG-AF14S-0.5-1		60/60	4.9		PID read 1.0 ppm ambient; 10.0 ppm in soil cuttings disposal bucket
	(3') GRAVELLY LEAN CLAY (CL): black (10YR 2/1), moist, fine gravel, fine-medium sand, fines, [30,10,60], medium plasticity, firm-soft, very strong odor.			DG-AF14S-3.5-4			27.2		
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 7822 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2082637.9
EASTING 6010182.81
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AH15 **SHEET** 1 **OF** 1
START DATE 1/22/2019 **ELEVATION DATA**
FINISH DATE 1/22/2019 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 3 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY GRAVEL with SAND (GM): black (10YR 2/1), moist, fine-coarse gravel, fine-coarse sand, fines, [55,25,20].								refusal at 3.0'; redrilled, refusal at 3.0' bgs; no sample collected from 3.5-4.0'
	(0.5') very dark gray (10YR 3/1).			DG-AH15S-0.5-1			1.6		
	(1.5') white (10YR 8/1), dry, from 1.5-2.0'.					36/36			
	(2') black (10YR 2/1), from 2.0-3.0'.								
	(3') Boring terminated.								
5									
10									

CONTRACTOR PeneCore **NORTHING** 2082627.87
EQUIPMENT Geoprobe 7822 DT **EASTING** 6010034.81
DRILL MTHD Direct Push **ANGLE** Vertical
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AH16 **SHEET** 1 **OF** 1
START DATE 1/22/2019
FINISH DATE 1/22/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') GRAVELLY LEAN CLAY with SAND (CL): very dark grayish brown (10YR 3/2), moist, fine-coarse gravel, fine-medium sand, fines, [25,15,60], medium plasticity, firm.			DG-AH16S-0.5-1			1.8		
	(1.5') SILTY GRAVEL with SAND (GM): gray (10YR 6/1), moist, fine-coarse gravel, fine-medium sand, fines, [50,20,30].					60/60			
	(3.5') GRAVELLY LEAN CLAY (CL): dark greenish gray (5G_/1 4/1), moist, fine-coarse gravel, fine-medium sand, fines, [25,10,65], medium plasticity, firm.			DG-AH16S-3.5-4			4.5		
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 7822 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2082637.18
EASTING 6009950.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AH17 **SHEET** 1 **OF** 1
START DATE 1/24/2019
FINISH DATE 1/24/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619

ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 3 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') ASPHALT.								
	(0.5') SANDY LEAN CLAY (CL): yellowish brown (10YR 5/6), dry, fine sand, fines, [0,35,65], low plasticity, very hard.			DG-AH17S-0.5-1		18/36	0.0		
	(2') fractured sandstone.								
	(3') Boring terminated.								
5									
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 8040 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER JR **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2082637.18
EASTING 6009810
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AI2 **SHEET** 1 **OF** 1
START DATE 12/14/2018
FINISH DATE 12/14/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SANDY ORGANIC SOIL with GRAVEL (OL): dark brown (10YR 3/3), dry, [15,70,15], roots.								
	(0.6') SILTY SAND (SM): dark brown (10YR 3/3), moist, fine gravel, predominantly fine sand, silt, [10,75,15].			DG-AI2S-0.5-1			0.6		
	(2') SILTY SAND with GRAVEL (SM): dark grayish brown (10YR 4/2), moist, coarser sand, increased gravel, [15,70,15].					48/60			
	(3.5') CLAYEY GRAVEL with SAND (GC): light olive brown (10YR 5/3), wet, fine-medium gravel, fine-coarse sand, clay, [50,35,15].			DG-AI2S-3.5-4			0.3		
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER CB
REVIEWER G. Thrupp, P.G. No. 5849

NORTHING 2082537.18
EASTING 6011350.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AI3 **SHEET** 1 **OF** 1
START DATE 12/19/2019
FINISH DATE 12/19/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619

ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 10 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') GRASS/ORGANICS (OL).								
	(0.1') SILTY SAND and GRAVEL (SM): very dark brown (10YR 2/2), fine gravel, fine-coarse sand, fines, [15,70,15].			DG-AI3S-0.5-1			1.4		
	(0.5') WELL-GRADED SAND (SW): dark greenish gray (10Y 4/1), fine-coarse sand, fines, [0,95,5].								
	(1.5') SILTY SAND with GRAVEL (SM): grayish brown (10YR 5/2), fine-coarse gravel, fine-coarse sand, fines, [15,65,20]. (3') approximately 2" of gravel.					48/60			
				DG-AI3S-3.5-4			1.6		no recovery from 4-5'
5	(5') CLAYEY GRAVEL (GC): strong brown (7.5YR 5/6), wet, fine-coarse gravel, fine-coarse sand, plastic fines, [60,20,20]. (6') gray (5/N), wet, [70,20,10], cobbles up to 3" x 2".								
	(7.5') FAT CLAY (CH): dark gray (4/N), wet, trace fine sand, [0,tr,100], high plasticity, soft, shell pieces, Bay Mud.					51/60			
10	(10') Boring terminated.								
15									
20									
25									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 8040 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER BL **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2082537.18
EASTING 6011250.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AI4 **SHEET** 1 **OF** 1
START DATE 12/18/2018
FINISH DATE 12/18/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY GRAVEL with SAND (GM): black (10YR 2/1), moist, fine grained, [50,30,20].			DG-AI4S-0.5-1			3.0		
	(1.3') SILTY SAND (SM): very dark greenish gray (3/10 GY), moist, fine grained, [10,70,20].					52/60			sheen and odor at 33"
				DG-AI4S-3.5-4			5.8		
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER KB
REVIEWER G. Thrupp, P.G. No. 5849

NORTHING 2082537.18
EASTING 6011150.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AI5 **SHEET** 1 **OF** 1
START DATE 12/17/2018
FINISH DATE 12/17/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER 3.5 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILT with SAND (ML): brown (10YR 5/3), moist, fine-coarse gravel, fine-medium sand, fines, [5,15,80], low plasticity, very soft, trace roots.			DG-AI5S-0.5-1			3.0		0.0-1.0' compressed
	(2') SILTY SAND (SM): dark grayish brown (10YR 4/2), moist, medium-coarse gravel, fine-medium sand, fines, [10,75,15].		▼	DG-AI5S-3.5-4			3.0		water level
	(4') GRAVELLY SILT (ML): very dark gray (10YR 3/1), wet, coarse gravel, fine sand, fines, [30,5,65], low plasticity, very soft.								
	(4.5') WELL-GRADED SAND with SILT (SW-SM): dark gray (10YR 4/1), wet, fine-coarse gravel, medium sand, fines, [5,85,10].								
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 6610 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2082537.18
EASTING 6011050.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AI6 **SHEET** 1 **OF** 1
START DATE 12/20/2018
FINISH DATE 12/20/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') LEAN CLAY with GRAVEL (CL): dark yellowish-brown (10YR 4/6), fine-coarse gravel, fine sand, fines, [20,5,75], low-medium plasticity, hard.			DG-AI6S-0.5-1			1.0		
	(3') SILTY SAND with GRAVEL (SM): dark brown (10YR 3/3), fine-coarse gravel, fine-coarse sand, fines, [15,70,15].			DG-AI6S-3.5-4			0.7		
	(4.5') pea gravel layer.								
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 788201
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER KJ **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2082535.63
EASTING 6010939.2
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AI7 **SHEET** 1 **OF** 1
START DATE 1/9/2019
FINISH DATE 1/9/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619

ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 10 ft bgs
DEPTH TO WATER 5 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND (SM): brown (10YR 4/3), moist, fine-coarse gravel, fine-medium sand, fines, [10,55,35].			DG-AI7S-0.5-1			2.9		0.0-1.0' compressed
	(2.5') lens of pea gravel from 2.5-3.5'.					60/60			
	(3.5') black (10YR 2/1), from 3.5-6.5'.			DG-AI7S-3.5-4			1.3		
5	(5') 10% glass/industrial material from 5.0-8.0'.		▼						water level
						54/60			
	(8.5') WELL-GRADED GRAVEL with SILT (GW-GM): gray (10YR 5/1), wet, fine-coarse gravel, medium-coarse sand, fines, [80,10,10].			DG-AI7S-8-8.5			0.5		
10	(10') Boring terminated.								
15									
20									
25									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 8040 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2082537.18
EASTING 6010850.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AI8 **SHEET** 1 **OF** 1
START DATE 1/30/2019
FINISH DATE 1/30/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY GRAVEL with SAND (GM): very dark gray (10YR 3/1), wet, fine gravel, [50,15,35].			DG-AI8S-0.5-1			4.5		
	(0.7') POORLY GRADED GRAVEL (GP): gray (10YR 5/1), wet, fine gravel, [90,5,5].								
	(1.7') POORLY GRADED SAND (SP): very dark gray (10YR 3/1), wet, medium sand, [5,90,5].					39/60			
				DG-AI8S-3.5-4			5.1		
	(4.4') SILTY GRAVEL with SAND (GM): dark brown (10YR 3/3), wet, coarse gravel to cobbles, [45,25,30], 35% trash debris.								
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 6600
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NR
REVIEWER G. Thrupp, P.G. No. 5849

NORTHING 2082537.18
EASTING 6010750.57
ANGLE Vertical

REMARKS under standing water

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AI9 **SHEET** 1 **OF** 1
START DATE 1/30/2019
FINISH DATE 1/30/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') POORLY GRADED GRAVEL with SAND (GP): dark gray (10YR 4/1), wet, cobbles, [75,20,5].			DG-AI9S-0.5-1			5.2		
	(0.6') POORLY GRADED SAND with SILT and GRAVEL (SP-SM): dark gray (10YR 4/1), wet, coarse-medium sand, [40,50,10].								
	(1.7') POORLY GRADED GRAVEL (GP): gray (10YR 5/1), wet, fine gravel, [90,5,5].					39/60			
	(2.7') POORLY GRADED SAND (SP): dark brown (10YR 3/3), wet, medium sand, [5,90,5].			DG-AI9S-3.5-4			5.6		
	(4.6') SILTY GRAVEL with SAND (GM): dark brown (10YR 3/3), wet, coarse gravel to cobbles, [45,20,35], 30% trash debris.								
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 6600
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NR
REVIEWER G. Thrupp, P.G. No. 5849

NORTHING 2082537.18
EASTING 6010650.57
ANGLE Vertical

REMARKS under standing water

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AI10 **SHEET** 1 **OF** 1
START DATE 1/29/2019 **ELEVATION DATA**
FINISH DATE 1/29/2019 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 5 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** 1.4 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): dark gray (10YR 4/1), moist, coarse sand, [15,70,15].			DG-AI10S-0.5-1			1.3		
	(1.4') SILTY GRAVEL with SAND (GM): dark gray (10YR 4/1), wet, fine gravel, [60,25,15].		▼						
	(2.2') SILTY GRAVEL with SAND (GM): light brownish gray (10YR 6/2), wet, fine gravel, [55,25,20].					45/60			
	(3.2') SILTY SAND (SM): black (10YR 2/1), wet, fine-medium sand, [0,70,30], oily sheen.			DG-AI10S-3.5-4			3.0		
	(4.4') SILTY GRAVEL with SAND (GM): black (10YR 2/1), coarse gravel to cobbles, [55,15,30], oily sheen and odor.								
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore **NORTHING** 2082537.18
EQUIPMENT Geoprobe 6600 **EASTING** 6010550.57
DRILL MTHD Direct Push **ANGLE** Vertical
DIAMETER 3 inches
LOGGER NR **REVIEWER** G. Thrupp, P.G. No. 5849

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AI11 **SHEET** 1 OF 1
START DATE 1/21/2019 **ELEVATION DATA**
FINISH DATE 1/21/2019 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 10 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') CONCRETE: broken up concrete, white (8/N), gravel and roots.			DG-AI11S-0.5-1			3.4		
	(0.3') SAND with GRAVEL (SW): olive (5Y 5/3), dry, fine gravel, fine-coarse sand, silt, [15,80,5].					48/60			
	(2.9') CLAYEY SAND (SC): black (10YR 2/1), moist, fine gravel, fine-coarse sand (predominantly medium), clay, [5,75,20], wood, odor, glass.			DG-AI11S-3.5-4			0.4		
5	(7') free product, black staining/sheen, strong odor.								
	(8') crushed boulder, white gravel (10YR 8/1),dry.								
	(8.9') FAT CLAY (CH).			DG-AI11S-9.5-10			26.3		high PID reading may be due to smeared free product on liner
10	(10') Boring terminated.								
15									
20									
25									

CONTRACTOR PeneCore **NORTHING** 2082537.18
EQUIPMENT Geoprobe **EASTING** 6010460.62
DRILL MTHD Direct Push **ANGLE** Vertical
DIAMETER 3 inches
LOGGER CB **REVIEWER** G. Thrupp, P.G. No. 5849

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AI12 **SHEET** 1 **OF** 1
START DATE 1/25/2019
FINISH DATE 1/25/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND (SM): very dark grayish brown (10YR 3/2), moist, fine gravel, fine-medium sand, fines, [5,65,30], odor.			DG-AI12S-0.5-1			16.2		0.0-1.0' compressed
	(2') black (10YR 2/1), odor, sticky from 2.0-2.5'.					60/60			
				DG-AI12S-3.5-4			19.3		
	(4') SILTY GRAVEL (GM): black (10YR 2/1), moist, fine gravel, fine sand, fines, [60,10,30], odor, luster.								
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 8040 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF
REVIEWER G. Thrupp, P.G. No. 5849
NORTHING 2082537.18
EASTING 6010350.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AI13 **SHEET** 1 **OF** 1
START DATE 2/1/2019
FINISH DATE 2/1/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER 0.8 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): dark gray (10YR 4/1), moist, fine gravel, coarse-medium sand, [20,50,30].			DG-AI13S-0.5-1			4.1		
	(0.7') WELL-GRADED SAND with SILT (SW-SM): gray (10YR 5/1), wet, coarse sand, [0,90,10].		▼						
	(1.8') SILTY GRAVEL with SAND (GM): black (10YR 2/1), wet, fine gravel to cobbles, coarse sand, [50,20,30], 10% trash debris, oily sheen and strong odor.			DG-AI13S-3.5-4		40/60	4.3		
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 6600
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NR
REVIEWER G. Thrupp, P.G. No. 5849

NORTHING 2082537.18
EASTING 6010250.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AI14 **SHEET** 1 **OF** 1
START DATE 2/1/2019
FINISH DATE 2/1/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND (SM): very dark grayish brown (10YR 3/2), moist, fine gravel, fine-medium sand, fines, [10,55,35].			DG-AI14S-0.5-1		60/60	5.7		0.0-1.0' compressed
				DG-AI14S-3.5-4			37.7		
	(4') SILTY GRAVEL with SAND (GM): black (10YR 2/1), moist, fine gravel, fine-coarse sand, fines, [50,15,35], sticky, odor.								
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 8040 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF
REVIEWER G. Thrupp, P.G. No. 5849
NORTHING 2082542.2
EASTING 6010203.58
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AI15 **SHEET** 1 **OF** 1
START DATE 1/24/2019
FINISH DATE 1/24/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619

ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 10 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') ASPHALT.								
	(0.5') WELL-GRADED SAND with GRAVEL (SW): black (10YR 2/1), dry, fine-coarse gravel, fine-coarse sand, fines, [30,65,5].			DG-AI15S-0.5-1		42/60	0.0		
	(3') SANDY LEAN CLAY (CL): olive (5Y 5/4), dry, fine gravel, fine-medium sand, fines, [10,25,65], medium plasticity, very hard.			DG-AI15S-3.5-4			1.1		
5	(5') debris, cement blocks.						0.1		
	(5.5') CLAYEY SAND (SC): light brownish gray (10YR 6/2), wet, medium sand, fines, [0,70,30].						0.3		
	(6') FAT CLAY (CH): dark bluish gray (10B 4/1), wet, trace fine sand, fines, [0,tr,100], high plasticity, soft.					48/60	0.5 0.4		
10	(10') Boring terminated.						0.0		
15									
20									
25									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 8040 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER JR **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2082537.18
EASTING 6010050.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AI16 **SHEET** 1 **OF** 1
START DATE 1/22/2019
FINISH DATE 1/22/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 2 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY GRAVEL with SAND (GM): dark reddish gray (2.5YR 3/1), moist, fine-coarse gravel, fine-coarse sand, fines, [60,20,20], capped by 3" of asphalt.			DG-AI16S-1-1.5		24/24	0.8		refusal 2.0' bgs; did not collect sample from 3.5-4.0'
	(2') Boring terminated.								
5									
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 7822 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2082559.88
EASTING 6009990.46
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AI17 **SHEET** 1 **OF** 1
START DATE 1/22/2019
FINISH DATE 1/22/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY GRAVEL with SAND (GM): dark gray (10YR 4/1), moist, fine-coarse gravel, fine-coarse sand, fines, [55,25,20].			DG-AI17S-0.5-1			2.2		0.0-0.5' compressed
	(2') very pale brown (10YR 7/3).					60/60			
				DG-AI17S-3.5-4			2.1		
	(4.5') LEAN CLAY (CL): very pale brown (10YR 7/3), moist, fine-medium sand, fines, [0,10,90], medium plasticity, firm.								
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 7822 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2082537.18
EASTING 6009850.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AJ2 **SHEET** 1 **OF** 1
START DATE 12/14/2018
FINISH DATE 12/14/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SANDY ORGANIC SOIL (OL): very dark brown (10YR 2/2), trace gravel, fine-coarse sand, silt, [tr,80,20], roots.								
	(0.5') SILTY SAND with GRAVEL (SM): brown (10YR 4/3), moist, fine-medium gravel, fine-coarse sand, silt, [15,70,15].			DG-AJ2S-0.5-1			0.6		
	(2') CLAYEY SAND with GRAVEL (SC): grayish brown (10YR 5/2), wet, fine-coarse gravel, fine-coarse sand, clay, [20,50,30].					48/60			
	(3') dark grayish brown (10YR 4/2).			DG-AJ2S-3.5-4			0.6		no recovery from 4-5'
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER CB
REVIEWER G. Thrupp, P.G. No. 5849

NORTHING 2082437.18
EASTING 6011350.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AJ3 **SHEET** 1 **OF** 1
START DATE 12/14/2018
FINISH DATE 12/14/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619

ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND (SM): very dark gray (10YR 3/1), dry, fine-coarse gravel, fine-coarse sand, fines, [10,75,15].			DG-AJ3S-0.5-1		56/60	0.0		
				DG-AJ3S-3.5-4			0.2		
	(4.5') SILTY GRAVEL (GM): dark yellowish-brown (10YR 4/4), wet, fine-coarse gravel, fine-coarse sand, fines, [75,10,15].								
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 6600
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER KJ **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2082437.18
EASTING 6011250.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AJ4 **SHEET** 1 **OF** 1
START DATE 12/18/2018
FINISH DATE 12/18/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND (SM): very dark grayish brown (10YR 3/2), moist, medium grained, [5,75,20].			DG-AJ4S-0.5-1			2.5		
	(1.7') SILTY SAND with GRAVEL (SM): very dark gray (10YR 3/1), moist, coarse grained, [30,50,20].								
	(2.1') medium grained.								
	(2.7') wet.								cobble at 34"
				DG-AJ4S-3.5-4			3.0		
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER KB
REVIEWER G. Thrupp, P.G. No. 5849
NORTHING 2082437.18
EASTING 6011150.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AJ5 **SHEET** 1 **OF** 1
START DATE 1/7/2019
FINISH DATE 1/7/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 10 ft bgs
DEPTH TO WATER 9 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): very dark grayish brown (10YR 3/2), moist, fine-coarse gravel, medium-fine sand, fines, [20,55,25].			DG-AJ5S-0.5-1			1.0		0.0-1.0' compressed
						60/60			
	(3') yellowish-brown (10YR 5/6), 4" layer.								
	(3.5') very dark gray (10YR 3/1).			DG-AJ5S-3.5-4			0.9		
5									5.0-6.0' compressed
	(6') greenish gray (10Y 6/1).								
						60/60			
	(7.5') SILT with SAND (ML): very dark gray (10YR 3/1), moist, fine-medium sand, fines, [0,15,85], non-plastic.								
	(9') WELL-GRADED GRAVEL with CLAY (GW-GC): greenish gray (10Y 6/1), wet, fine-coarse gravel, medium sand, fines, [80,10,10].		▼						water level
10	(10') Boring terminated.								
15									
20									
25									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 8040 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF
REVIEWER G. Thrupp, P.G. No. 5849
NORTHING 2082426.33
EASTING 6011049.54
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AJ6 **SHEET** 1 **OF** 1
START DATE 12/20/2018
FINISH DATE 12/20/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619

ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY GRAVEL with SAND (GM): dark brown (10YR 3/3), fine-coarse gravel, fine-coarse sand, fines, [65,20,15].			DG-AJ6S-0.5-1			0.9		
	(3') wet.					42/60			
	(4') pea gravel layer.			DG-AJ6S-3.5-4			0.7		
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 788201
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER KJ **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2082437.18
EASTING 6010950.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AJ7 **SHEET** 1 **OF** 1
START DATE 12/19/2018
FINISH DATE 12/19/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619

ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND (SM): dark brown (10YR 3/3), moist, fine-coarse gravel, fine-medium sand, fines, [10,70,20].			DG-AJ7S-0.5-1		60/60	5.1		0.0-1.0' compressed
	(3') POORLY GRADED GRAVEL (GP): grayish brown (10YR 5/2), moist, fine gravel, medium-coarse sand, fines, [95,3,2].			DG-AJ7S-3.5-4			4.8		
	(4') WELL-GRADED SAND with SILT and GRAVEL (SW-SM): very dark brown (10YR 2/2), moist, fine-coarse gravel, medium sand, fines, [20,70,10], trace glass and ceramic fragments.								
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 6610 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2082437.18
EASTING 6010850.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AJ8 **SHEET** 1 **OF** 1
START DATE 1/30/2019
FINISH DATE 1/30/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') POORLY GRADED GRAVEL with SAND (GP): dark gray (10YR 4/1), wet, cobbles, [75,20,5].								
	(0.5') POORLY GRADED SAND with SILT and GRAVEL (SP-SM): dark gray (10YR 4/1), wet, coarse-medium sand, [40,50,10].			DG-AJ8S-0.5-1			3.5		
	(1.5') POORLY GRADED GRAVEL (GP): gray (10YR 5/1), wet, fine gravel, [90,5,5].								
	(2.1') POORLY GRADED SAND (SP): very dark gray (10YR 3/1), wet, medium sand, [5,90,5].					41/60			
				DG-AJ8S-3.5-4			6.1		
	(4.2') SILTY GRAVEL with SAND (GM): dark brown (10YR 3/3), wet, coarse gravel to cobbles, [50,20,30], 30% trash debris.								
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 6600
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NR
REVIEWER G. Thrupp, P.G. No. 5849

NORTHING 2082437.18
EASTING 6010750.57
ANGLE Vertical

REMARKS under standing water

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AJ9 **SHEET** 1 **OF** 1
START DATE 1/30/2019
FINISH DATE 1/30/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619

ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 10 ft bgs
DEPTH TO WATER 5 ft

DEPTH (ft)	MATERIAL DESCRIPTION	SAMPLE ID	RECOVERY	PID READING (ppm)	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): dark grayish brown (10YR 4/2), moist, fine gravel, fine-medium sand, fines, [20,50,30].	DG-AJ9S-0.5-1	60/60	0.7	0.0-1.0' compressed
		DG-AJ9S-3.5-4		1.6	
5	(4') SILTY GRAVEL with SAND (GM): very dark brown (10YR 2/2), moist, fine gravel, fine-coarse sand, fines, [50,20,30], 10% glass and ceramic debris.				water level
	(7') FAT CLAY (CH): very dark greenish gray (10GY 3/1), moist, fines, [0,0,100], high plasticity, firm, Bay Mud.				did not collect deeper sample; Bay Mud encountered at 7.0' bgs
10	(10') Boring terminated.				
15					
20					
25					

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 8040 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2082437.18
EASTING 6010650.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AJ10 **SHEET** 1 **OF** 1
START DATE 1/15/2019
FINISH DATE 1/15/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619

ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): gray (10YR 5/1), moist, fine-coarse gravel, medium-coarse sand, fines, [20,55,25].			DG-AJ10S-0.5-1		60/60	0.7		0.0-1.5' compressed
				DG-AJ10S-3.5-4			0.8		
	(4') 2" lens of fat clay (CH).								
	(4.2') SILTY SAND (SM): very dark gray (10YR 3/1), moist, fine gravel, fine-medium sand, fines, [5,60,35].								
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 6600
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF
REVIEWER G. Thrupp, P.G. No. 5849

NORTHING 2082437.18
EASTING 6010550.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AJ11 **SHEET** 1 **OF** 1
START DATE 1/28/2019 **ELEVATION DATA**
FINISH DATE 1/28/2019 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 5 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** 2.5 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND (SM): pale brown (10YR 6/3), moist, fine sand, [0,85,15].			DG-AJ11S-0.5-1			2.9		
	(1') SILTY SAND with GRAVEL (SM): gray (10YR 5/1), moist, coarse sand, [20,65,15].								
	(2.2') SILTY SAND (SM): dark brown (10YR 3/3), wet, coarse sand, [0,80,20].		▼			43/60			
				DG-AJ11S-3.5-4			3.5		
	(4.2') SILTY GRAVEL with SAND (GM): black (10YR 2/1), wet, fine gravel, [55,20,25].								
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore **NORTHING** 2082437.18
EQUIPMENT Geoprobe 6600 **EASTING** 6010458.79
DRILL MTHD Direct Push **ANGLE** Vertical
DIAMETER 3 inches
LOGGER NR **REVIEWER** G. Thrupp, P.G. No. 5849

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AJ12 **SHEET** 1 **OF** 1
START DATE 1/25/2019
FINISH DATE 1/25/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND (SM): very dark grayish brown (10YR 3/2), moist, fine-coarse gravel, fine-medium sand, fines, [10,60,30].			DG-AJ12S-0.5-1		60/60	0.8		0.0-1.0' compressed
				DG-AJ12S-3.5-4			2.0		
	(4.5') SILTY GRAVEL (GM): very dark brown (10YR 2/2), moist, fine gravel, fine-medium sand, fines, [60,10,30].								
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 8040 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2082437.18
EASTING 6010350.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AJ13 **SHEET** 1 **OF** 1
START DATE 1/29/2019
FINISH DATE 1/29/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 10 ft bgs
DEPTH TO WATER 5 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY GRAVEL (GM): grayish brown (10YR 5/2), moist, fine-coarse gravel, fine-coarse sand, fines, [50,15,35].			DG-AJ13S-0.5-1		60/60	4.1		0.0-2.0' compressed
	(3.5') brick cobble.			DG-AJ13S-3.5-4			5.2		
	(4') 15% ceramic debris from 4.0-5.0'.								
	(4.5') luster.		▼						
5	(5') GRAVELLY SILT (ML): black (10YR 2/1), wet, fine gravel, fine sand, fines, [25,10,65], low plasticity, soft, luster/sheen, odor, 10% glass debris.								water level
	(6.5') FAT CLAY (CH): very dark greenish gray (10GY 3/1), moist, fines, [0,0,100], high plasticity, firm, Bay Mud.								did not collect deeper sample; Bay Mud encountered at 6.5' bgs
10	(10') Boring terminated.								
15									
20									
25									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 8040 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2082437.18
EASTING 6010250.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AJ14 **SHEET** 1 **OF** 1
START DATE 1/22/2019
FINISH DATE 1/22/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') CLAYEY GRAVEL with SAND (GC): dark gray (10YR 4/1), moist, fine-coarse gravel, fine-medium sand, fines, [45,25,30].			DG-AJ14S-0.5-1		60/60	3.6		0.0-0.5' compressed
				DG-AJ14S-3.5-4			4.8		
	(4') SILTY SAND (SM): brown (10YR 4/3), moist, fine gravel, fine-medium sand, fines, [5,55,40].								
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 7822 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2082435.75
EASTING 6010114.75
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AJ15 **SHEET** 1 **OF** 1
START DATE 1/22/2019 **ELEVATION DATA**
FINISH DATE 1/22/2019 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 5 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') CLAYEY GRAVEL with SAND (GC): dark grayish brown (10YR 4/2), moist, fine-coarse gravel, fine-medium sand, fines, [45,20,35].			DG-AJ15S-0.5-1		60/60	1.4		0.0-0.5' compressed
	(3') SILTY SAND (SM): brown (10YR 4/3), moist, fine gravel, fine-medium sand, fines, [5,55,40].			DG-AJ15S-3.5-4			2.0		
	(4') dark yellowish brown (10YR 4/6).								
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore **NORTHING** 2082437.18
EQUIPMENT Geoprobe 7822 DT **EASTING** 6010050.57
DRILL MTHD Direct Push **ANGLE** Vertical
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AJ17 **SHEET** 1 **OF** 1
START DATE 1/24/2019
FINISH DATE 1/24/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 10 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') ASPHALT.								
	(0.5') LEAN CLAY (CL): yellowish brown (10YR 5/6), dry, trace sand, fines, [0,tr,100], medium plasticity, very hard.			DG-AJ17S-0.5-1		60/60	0.0		
				DG-AJ17S-3.5-4			0.0		
5							0.0		
						60/60	0.0		
				DG-AJ17S-9.5-10			0.0		
10	(10') Boring terminated.								
15									
20									
25									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 8040 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER JR **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2082437.18
EASTING 6009850.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AK2 **SHEET** 1 **OF** 1
START DATE 12/14/2018
FINISH DATE 12/14/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SANDY ORGANIC SOIL (OL): very dark brown (10YR 2/2), trace gravel, fine-coarse sand, silt, [tr,85,15].								
	(0.5') SILTY SAND with GRAVEL (SM): very dark grayish brown (10YR 3/2), moist, fine-medium gravel, fine-coarse sand, silt, [15,70,15].			DG-AK-2S-0.5-1			0.6		
	(1.5') grayish brown (10YR 5/2), wet.								
	(1.7') CLAYEY GRAVEL (GC): brown (10YR 4/3), wet, fine-coarse gravel, fine-coarse sand, clay, [50,30,20].								
	(2.5') decreasing gravel, [35,40,25].					48/60			
				DG-AK-2S-3.5-4			0.4		no recovery from 4-5'
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER CB
REVIEWER G. Thrupp, P.G. No. 5849

NORTHING 2082337.18
EASTING 6011350.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AK3 **SHEET** 1 **OF** 1
START DATE 12/19/2019
FINISH DATE 12/19/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 10 ft bgs
DEPTH TO WATER 1 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') GRASS/ORGANICS (OL).								
	(0.1') SILTY SAND (SM): dark olive brown (2.5Y 3/3), moist, fine gravel, fine-medium sand, [5,75,20].		▼	DG-AK3S-0.5-1			1.4		
	(1') POORLY GRADED GRAVEL (GP): dark greenish gray (10Y 4/1), wet, fine gravel, fine-coarse sand, fines, [85,10,5].								
	(1.5') SILTY SAND (SM): dark greenish gray (5GY 4/1), fine gravel, fine-medium sand, fines, [5,75,20]. (3') increased gravel, [15,60,25].					54/60			
	(3.5') black (5Y 2.5/1), approximately 6".			DG-AK3S-3.5-4			2.0		no visible sheen
	(4') CLAYEY SAND with GRAVEL (SC): brown (7.5YR 5/4), wet, gravel up to 1", fine-coarse sand, fines, [30,50,20].								no recovery from 4.5-5'
5	(5') CLAYEY SAND with GRAVEL (SC): brown (7.5YR 5/4), wet, gravel up to 1", fine-coarse sand, fines, [30,50,20].								
	(6.5') WELL-GRADED GRAVEL (GW): dark gray (10YR 4/1), wet, fine-coarse gravel, fine sand, fines, [85,10,5], cobbles up to 3".					36/60			
	(7.5') FAT CLAY (CH): dark gray (4/N), wet, trace fine sand, [0,tr,100], high plasticity, soft, shell pieces, Bay Mud.								no recovery from 8-10'
10	(10') Boring terminated.								
15									
20									
25									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 8040 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER BL **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2082337.18
EASTING 6011250.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AK4 **SHEET** 1 **OF** 1
START DATE 12/18/2018
FINISH DATE 12/18/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): very dark grayish brown (10YR 3/2), moist, coarse grained, [20,60,20].			DG-AK4S-0.5-1			5.8		
	(1.6') medium grained. (1.8') wet, medium grained.					42/60			
				DG-AK4S-3.5-4			6.1		
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER KB
REVIEWER G. Thrupp, P.G. No. 5849

NORTHING 2082337.18
EASTING 6011150.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AK5 **SHEET** 1 **OF** 1
START DATE 12/17/2018
FINISH DATE 12/17/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER 3 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILT with SAND (ML): brown (10YR 5/3), moist, fine-coarse gravel, fine-medium sand, fines, [5,15,80], low plasticity, very soft, trace roots.			DG-AK5S-0.5-1			2.8		0.0-1.0' compressed
	(2') SILTY SAND (SM): dark grayish brown (10YR 4/2), moist, medium-coarse gravel, fine-medium sand, fines, [10,75,15].		▼			60/60			water level
				DG-AK5S-3.5-4			4.4		
	(4') GRAVELLY SILT (ML): very dark gray (10YR 3/1), wet, coarse gravel, fine sand, fines, [30,5,65], low plasticity, very soft.								
	(4.5') WELL-GRADED SAND with SILT (SW-SM): dark gray (10YR 4/1), wet, fine-coarse gravel, medium sand, fines, [5,85,10].								
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 6610 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2082337.18
EASTING 6011050.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AK6 **SHEET** 1 **OF** 1
START DATE 12/20/2018
FINISH DATE 12/20/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): dark yellowish-brown (10YR 4/4), dry, fine-coarse gravel, fine-coarse sand, fines, [20,65,15].			DG-AK6S-0.5-1			1.0		
	(3') dark brown (7.5YR 3/3), wet.			DG-AK6S-3.5-4		40/60	0.6		
	(4.5') pea gravel layer.								
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 788201
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER KJ **REVIEWER** G. Thrupp, P.G. No. 5849
NORTHING 2082337.18
EASTING 6010950.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AK7 **SHEET** 1 **OF** 1
START DATE 1/9/2019
FINISH DATE 1/9/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 10 ft bgs
DEPTH TO WATER 5 ft

DEPTH (ft)	MATERIAL DESCRIPTION	SAMPLE ID	RECOVERY	PID READING (ppm)	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): dark grayish brown (10YR 4/2), moist, fine-coarse gravel, fine-medium sand, fines, [30,50,20].	DG-AK7S-0.5-1		2.1	0.0-1.5' compressed
	(1.5') large metal fragment 2 x 2".		60/60		
	(3') pea gravel from 3.0-3.5'.	DG-AK7S-3.5-4		1.6	
5	(4.5') 10% glass/ceramic fragments from 4.5-7.0'.				water level
	(7') CLAYEY GRAVEL (GC): greenish gray (5GY 5/1), wet, fine-coarse gravel, medium-coarse sand, fines, [70,5,25].		54/60		no deeper sample taken; too gravelly
	(8') FAT CLAY (CH): very dark greenish gray (10GY 3/1), moist, fines, [0,0,100], high plasticity, firm, Bay Mud.				
10	(10') Boring terminated.				
15					
20					
25					

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 8040 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF
REVIEWER G. Thrupp, P.G. No. 5849
NORTHING 2082337.18
EASTING 6010850.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AK8 **SHEET** 1 **OF** 1
START DATE 2/1/2019
FINISH DATE 2/1/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER 0.2 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): dark gray (10YR 4/1), wet, coarse gravel to cobbles, [20,60,20].		▼	DG-AK8S-0.5-1			2.6		
	(1.1') WELL-GRADED GRAVEL with SILT and SAND (GW-GM): light gray (10YR 7/1), wet, fine gravel, coarse sand, [70,20,10].								
	(2.2') POORLY GRADED SAND (SP): dark gray (10YR 4/1), wet, fine-medium sand, [0,95,5].			DG-AK8S-3.5-4		41/60	4.1		
	(4') SILTY GRAVEL with SAND (GM): black (10YR 2/1), wet, coarse gravel, coarse sand, [50,15,35], oily sheen and odor.								
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 6600
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NR
REVIEWER G. Thrupp, P.G. No. 5849

NORTHING 2082337.18
EASTING 6010750.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AK9 **SHEET** 1 **OF** 1
START DATE 1/30/2019 **ELEVATION DATA**
FINISH DATE 1/30/2019 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 5 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') POORLY GRADED GRAVEL with SAND (GP): dark gray (10YR 4/1), wet, cobbles, [75,20,5].			DG-AK9S-0.5-1			2.6		
	(0.9') POORLY GRADED SAND with SILT and GRAVEL (SP-SM): dark gray (10YR 4/1), wet, coarse-medium sand, [40,50,10].								
	(2.4') POORLY GRADED GRAVEL (GP): gray (10YR 5/1), wet, fine gravel, [90,5,5].					44/60			
	(3.5') POORLY GRADED SAND (SP): dark brown (10YR 3/3), wet, medium sand, [5,90,5].			DG-AK9S-3.5-4			3.0		
	(4.2') SILTY GRAVEL with SAND (GM): dark brown (10YR 3/3), wet, coarse gravel to cobbles, [45,20,35], 30% trash debris.								
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore **NORTHING** 2082337.18
EQUIPMENT Geoprobe 6600 **EASTING** 6010650.57
DRILL MTHD Direct Push **ANGLE** Vertical
DIAMETER 3 inches
LOGGER NR **REVIEWER** G. Thrupp, P.G. No. 5849

REMARKS under standing water

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AK10 **SHEET** 1 **OF** 1
START DATE 1/15/2019
FINISH DATE 1/15/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): gray (10YR 5/1), moist, fine-coarse gravel, medium-coarse sand, fines, [20,55,25].			DG-AK10S-0.5-1		60/60	0.8		0.0-2.0' compressed
				DG-AK10S-3.5-4			0.9		
	(4') SILTY SAND (SM): black (10YR 2/1), moist, fine gravel, fine-medium sand, fines, [10,60,30].								
	(4.5') luster from 4.5-5.0'.			DG-AK10S-4.5-5					
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 6600
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF
REVIEWER G. Thrupp, P.G. No. 5849
NORTHING 2082337.18
EASTING 6010550.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AK11 **SHEET** 1 **OF** 1
START DATE 1/22/2019 **ELEVATION DATA**
FINISH DATE 1/22/2019 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 10 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') ORGANIC SOIL with SAND (OL): very dark brown (7.5YR 2.5/2), dry.			DG-AK11S-0.5-1		42/60	0.3		
	(0.2') WELL-GRADED GRAVEL with SAND (GW): very dark brown (7.5YR 2.5/2), dry, fine-coarse gravel, fine-coarse sand, clay, [80,15,5].								
	(0.7') CLAYEY SAND with GRAVEL (SC): olive (5Y 4/4), moist, fine-coarse gravel, fine-coarse sand, clay, [15,65,20].								
	(3') strong odor, black staining, sheen, timber and glass.			DG-AK11S-3.5-4			1.4		
5	(5.5') FAT CLAY (CH): black (2.5/1), moist, clay, [0,0,100], no sheen.								
10	(10') Boring terminated.								
15									
20									
25									

CONTRACTOR PeneCore **NORTHING** 2082337.49
EQUIPMENT Geoprobe **EASTING** 6010457.27
DRILL MTHD Direct Push **ANGLE** Vertical
DIAMETER 3 inches
LOGGER CB **REVIEWER** G. Thrupp, P.G. No. 5849

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AK12 **SHEET** 1 **OF** 1
START DATE 1/25/2019
FINISH DATE 1/25/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND (SM): dark grayish brown (10YR 4/2), moist, fine gravel, fine sand, fines, [5,50,45].			DG-AK12S-0.5-1		60/60	4.4		0.0-2.0' compressed
	(3') LEAN CLAY with SAND (CL): yellowish brown (10YR 5/4), moist, fine gravel, fine-medium sand, fines, [10,10,80].			DG-AK12S-3.5-4			11.0		
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 8040 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2082337.18
EASTING 6010350.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AK13 **SHEET** 1 **OF** 1
START DATE 1/25/2019
FINISH DATE 1/25/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): dark grayish brown (10YR 3/2), moist, fine-coarse gravel, fine-coarse sand, fines, [20,50,30].			DG-AK13S-0.5-1			34.5		0.0-2.5' compressed
	(2.5') odor, luster.					60/60			
				DG-AK13S-3.5-4			34.4		
	(4.5') black (10YR 2/1), odor, sticky, trace ceramic fragments from 4.5-5.0'.								
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 8040 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF
REVIEWER G. Thrupp, P.G. No. 5849
NORTHING 2082337.18
EASTING 6010250.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AK14 **SHEET** 1 **OF** 1
START DATE 1/22/2019 **ELEVATION DATA**
FINISH DATE 1/22/2019 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 5 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY GRAVEL with SAND (GM): dark gray (10YR 4/1), moist, fine-coarse gravel, fine-medium sand, fines, [45,20,35], capped by 4" of asphalt.								
	(0.5') brick fragment coarse gravel sized.			DG-AK14S-0.5-1			2.5		
	(2') trace brick fragments from 2.0-2.5'.					60/60			
				DG-AK14S-3.5-4			2.4		
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore **NORTHING** 2082337.18
EQUIPMENT Geoprobe 7822 DT **EASTING** 6010150.57
DRILL MTHD Direct Push **ANGLE** Vertical
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AK15 **SHEET** 1 OF 1
START DATE 1/23/2019 **ELEVATION DATA**
FINISH DATE 1/23/2019 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 10 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') ASPHALT.								
	(0.5') POORLY GRADED SAND with GRAVEL (SP): very dark brown (7.5YR 2.5/2), dry, fine-coarse gravel, medium-coarse sand, fines, [15,80,5], mottled.			DG-AM15S-0.5-1		30/60	0.5		
	(3') SANDY LEAN CLAY with GRAVEL (CL): dark yellowish brown (10YR 4/4), dry, fine-coarse gravel, fine-coarse sand, fines, [15,20,65], low plasticity, firm.			DG-AM15S-3.5-4			0.0 0.0		
	(4.5') construction debris, oxidation (brick), sandy.								
5	(5') CLAY (CH): dark bluish gray (5B 4/1), moist-wet, fines, [0,0,100], high plasticity, soft.						5.4 6.4		
	(6.5') coarse sand, medium sand and gravel.					48/60	0.8		
	(9.5') SANDY LEAN CLAY (CL): bluish black (5PB 2.5/1), wet, fine sand, fines, [0,40,60], medium plasticity, soft.						0.0 0.0		
10	(10') Boring terminated.								
15									
20									
25									

CONTRACTOR PeneCore **NORTHING** 2082337.18
EQUIPMENT Geoprobe 8040 DT **EASTING** 6010050.57
DRILL MTHD Direct Push **ANGLE** Vertical
DIAMETER 3 inches
LOGGER JR **REVIEWER** G. Thrupp, P.G. No. 5849

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AK16 **SHEET** 1 **OF** 1
START DATE 1/22/2019
FINISH DATE 1/22/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): dark yellowish brown (10YR 4/4), moist, fine-coarse gravel, fine-medium sand, fines, [20,45,35], capped by 2" of concrete.			DG-AK16S-0.5-1		60/60	1.8		
				DG-AK16S-3.5-4			2.8		
	(4') lens of high plasticity clay (CH) from 4.0-5.0'.								
	(4.75') black (10YR 2/1), no odor or luster.						3.1		
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 7822 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2082306.93
EASTING 6009960.89
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AL2 **SHEET** 1 **OF** 1
START DATE 12/17/2018
FINISH DATE 12/17/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619

ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 15 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): very dark grayish brown (10YR 3/2), moist, medium-grained, [30,55,15].			DG-AL-2S-0.5-1			1.7		
						43/60			
				DG-AL-2S-3.5-4			1.3		
5									
	(6.5') WELL-GRADED GRAVEL (GW): very dark gray (10YR 3/1), wet, [85,10,5], cobble.			DG-AL-2S-7.5-8		40/60			
	(8.5') LEAN CLAY (CL): dark greenish gray (4/10Y), wet, [0,0,100], medium plasticity, firm, few shells.								
10									
						60/60			
15	(15') Boring terminated.								
20									
25									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER KB
REVIEWER G. Thrupp, P.G. No. 5849

NORTHING 2082237.18
EASTING 6011350.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AL3 **SHEET** 1 **OF** 1
START DATE 11/21/2018
FINISH DATE 11/21/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): grayish brown (10YR 5/2), moist, [15,60,25], loose.			DG-AL3S-0.5-1			0.2		FID=4.4 ppm; CH4=0%; CO2=0.1%; 02=20.3%; H2S=0.0 ppm; CO=3.0 ppm
	(1.5') yellowish-brown (10YR 5/4).								
	(2.5') very dark grayish brown (10YR 3/2), [20,55,25].					52/60			
	(4') brown (10YR 5/3).			DG-AL3S-3.5-4			0.2		FID=4.9 ppm; CH4=0%; CO2=0.1%; 02=20.3%; H2S=0.0 ppm; CO=3.0 ppm
5	(5') Boring terminated.								background FID=4.1 ppm; only done with ML7
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 8040 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER MK **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2082237.18
EASTING 6011250.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AL4 **SHEET** 1 **OF** 1
START DATE 12/18/2018
FINISH DATE 12/18/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 15 ft bgs
DEPTH TO WATER 9 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): brown (10YR 4/3), moist, medium grained, [20,60,20].			DG-AL4S-0.5-1			5.6		
	(1.5') SILTY SAND (SM): dark grayish brown (10YR 4/2), moist, medium grained, [5,75,20].					46/60			
	(3.5') SILTY SAND with GRAVEL (SM): black (10YR 2/1), wet, medium to coarse grained, [20,60,20].			DG-AL4S-3.5-4			4.6		large tan brick at 40"
5	(4.7') SILTY SAND (SM): black (10YR 2/1), wet, fine grained, [0,60,40].								boring diameter changed from 3" to 1.5" from 5-15'
	(6') Light yellowish brown (10YR 6/4), dry.								
	(7') dark greenish gray (3/10Y), moist.			DG-AL4S-7.5-8		24/60			
	(8.3') SILTY GRAVEL (GM): dark greenish gray (3/10Y), wet, fine gravel, [80,0,20], trace shells.		▼						
10									casing filled with water
						4/60			
15	(15') Boring terminated.								
20									
25									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe
DRILL MTHD Direct Push
DIAMETER 3/1.5 inches
LOGGER KB
REVIEWER G. Thrupp, P.G. No. 5849

NORTHING 2082237.18
EASTING 6011150.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AL5 **SHEET** 1 OF 1
START DATE 1/30/2019 **ELEVATION DATA**
FINISH DATE 1/30/2019 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 20 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** 4.5 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): dark grayish brown (10YR 4/2), moist, fine gravel, fine-medium sand, fines, [25,45,30].			DG-AL5S-0.5-1		60/60	1.6		0.0-2.0' compressed
				DG-AL5S-3.5-4			2.0		
5	(4.5') wet.		▼						water level
	(5') GRAVELLY LEAN CLAY (CL): dark greenish gray (5GY 4/1), wet, fine-coarse gravel, fine-medium sand, fines, [40,10,50], medium plasticity, firm.								
	(6.5') SILTY SAND (SM): very dark gray (N 3/), wet, fine sand, fines, [0,60,40].					60/60			
	(8') CLAYEY GRAVEL (GC): dark greenish gray (10Y 4/1), moist, fine-coarse gravel, fine-medium sand, fines, [55,10,35].								
10									
15									no deep sample taken due to prevalent gravel
	(16.5') FAT CLAY (CH): very dark greenish gray (10GY 3/1), moist, fines, [0,0,100], high plasticity, firm, Bay Mud.					60/60			
20	(20') Boring terminated.								
25									

CONTRACTOR PeneCore **NORTHING** 2082237.18
EQUIPMENT Geoprobe 8040 DT **EASTING** 6011050.57
DRILL MTHD Direct Push **ANGLE** Vertical
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AL6 **SHEET** 1 **OF** 1
START DATE 12/20/2018
FINISH DATE 12/20/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619

ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 18 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND and GRAVEL (SM): dark yellowish-brown (10YR 4/6), dry, fine-coarse gravel, fine-coarse sand, fines, [20,65,15].			DG-AL6S-0.5-1		42/60	1.2		
	(3.5') wet.			DG-AL6S-3.5-4			1.1		
	(4') pea gravel layer.								
5	(5') SILTY SAND with GRAVEL (SM): black (10YR 2/1), fine-coarse gravel, fine-coarse sand, fines, [15,70,15].								
10	(10') SILTY GRAVEL (GM): light brownish gray (10YR 6/2), wet, fine-coarse gravel, fines, [80,5,15].								
15									
	(18') Boring terminated.								refusal
20									
25									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 788201
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER KJ **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2082237.18
EASTING 6010950.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AL7 **SHEET** 1 OF 1
START DATE 12/19/2018
FINISH DATE 12/19/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619

ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 20 ft bgs
DEPTH TO WATER 7 ft

DEPTH (ft)	MATERIAL DESCRIPTION	SAMPLE ID	RECOVERY	PID READING (ppm)	COMMENTS
	(0') SILTY SAND (SM): dark brown (10YR 3/3), moist, fine-coarse gravel, fine-medium sand, fines, [10,70,20].	DG-AL7S-0.5-1	60/60	5.5	0.0-1.0' compressed, drilled from 1307-1310, redrilled from 1405-1415 due to poor recovery
	(2.5') POORLY GRADED GRAVEL (GP): grayish brown (10YR 5/2), moist, fine gravel, medium-coarse sand, fines, [95,3,2].				
	(3') WELL-GRADED SAND with SILT and GRAVEL (SW-SM): very dark brown (10YR 2/2), moist, fine-coarse gravel, medium sand, fines, [20,70,10], trace metal scraps.	DG-AL7S-3.5-4		6.1	
5					
	(7') CLAYEY GRAVEL with SAND (GC): grayish brown (10YR 5/2), wet, fine-coarse gravel, medium sand, fines, [50,20,30].		15/60		water level
10			15/60		
15		DG-AL7S-14.5-15			
	(15') FAT CLAY (CH): very dark greenish gray (10GY 3/1), moist, fines, [0,0,100], high plasticity, firm, Bay Mud.		15/60		
20	(20') Boring terminated.				
25					

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 6610 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2082237.18
EASTING 6010850.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AL8 **SHEET** 1 **OF** 1
START DATE 1/30/2019 **ELEVATION DATA**
FINISH DATE 1/30/2019 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 10 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** 0.1 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY GRAVEL with SAND (GM): very dark brown (10YR 2/2), wet, coarse gravel, [50,15,35].		▼	DG-AL8S-0.5-1			1.8		
	(1.1') POORLY GRADED GRAVEL with SILT and SAND (GP-GM): gray (10YR 5/1), wet, fine gravel, [80,10,10].								
	(2') POORLY GRADED SAND with SILT (SP-SM): very dark gray (10YR 3/1), wet, medium sand, [0,90,10], oily sheen in bottom 3" of soil unit.			DG-AL8S-3.5-4		43/60	2.1		
5	(4.6') SILTY GRAVEL with SAND (GM): black (10YR 2/1), wet, coarse gravel, [50,20,30], 15% glass and plastic debris, oily sheen and odor.								
	(7') POORLY GRADED GRAVEL with SILT and SAND (GP-GM): gray (10YR 5/1), fine gravel, [70,20,10].					23/60			
	(7.9') LEAN CLAY (CL): light brownish gray (10YR 6/2), wet, [5,5,90], low plasticity, firm.								
	(8.7') FAT CLAY (CH): gray (10YR 5/1), wet, [0,0,100], high plasticity, soft, Bay Mud.								
10	(10') Boring terminated.								
15									
20									
25									

CONTRACTOR PeneCore **NORTHING** 2082237.18
EQUIPMENT Geoprobe 6600 **EASTING** 6010750.57
DRILL MTHD Direct Push **ANGLE** Vertical
DIAMETER 3 inches
LOGGER NR **REVIEWER** G. Thrupp, P.G. No. 5849

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AL9 **SHEET** 1 **OF** 1
START DATE 1/21/2019
FINISH DATE 1/21/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 10 ft bgs
DEPTH TO WATER ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') WELL-GRADED GRAVEL (GW): greenish gray (10GY 3/1), wet, fine gravel, fine-coarse sand, silt, [10,85,5].			DG-AL9S-0.5-1		30/60	0.0		
	(3.5') POORLY GRADED SAND with GRAVEL (SP): black (10YR 2/1), moist, fine-coarse gravel, fine sand, silt, [15,80,5], spongy texture, plastic shards.			DG-AL9S-3.5-4			0.0		
5	(4.5') dark reddish brown (2.5YR 2.5/3), moist.								
	(5.3') WELL-GRADED GRAVEL with CLAY and SAND (GW-GC): dark brown (10YR 3/3), wet, fine-coarse gravel, fine-coarse sand, clay, [15,65,20], cobbles.								
	(6.5') increased sand and decreased clay, [20,65,15].			DG-AL9S-7-7.5		30/60	0.0		
	(7.5') FAT CLAY (CH): dark greenish gray (5G 4/1), moist, clay, [0,0,100].								
10	(10') Boring terminated.								
15									
20									
25									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER CB
REVIEWER G. Thrupp, P.G. No. 5849
NORTHING 2082237.18
EASTING 6010650.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AL10 **SHEET** 1 **OF** 1
START DATE 1/15/2019
FINISH DATE 1/15/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') WELL-GRADED SAND with SILT (SW-SM): dark gray (10YR 4/1), moist, fine-coarse gravel, medium-coarse sand, fines, [15,75,10].			DG-AL10S-0.5-1			0.8		0.0-2.0' compressed
						60/60			
				DG-AL10S-3.5-4			0.7		
	(4.5') very dusky red (2.5YR 2.5/2), 25% ceramic and glass debris from 4.5-5.0'.								
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 6600
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF
REVIEWER G. Thrupp, P.G. No. 5849

NORTHING 2082237.18
EASTING 6010550.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AL11 **SHEET** 1 **OF** 1
START DATE 1/28/2019
FINISH DATE 1/28/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER 2.2 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') WELL-GRADED SAND (SW): grayish brown (10YR 5/2), moist, fine sand, [0,95,5].			DG-AL11S-0.5-1			1.3		
	(1') SILTY GRAVEL with SAND (GM): very dark brown (10YR 2/2), moist, coarse gravel, [55,30,15].								
	(2') SILTY SAND with GRAVEL (SM): gray (10YR 5/1), wet, coarse sand, [20,55,25].		▼			47/60			
	(3') CLAYEY GRAVEL with SAND (GC): dark yellowish brown (10YR 3/4), wet, coarse gravel to cobbles, low plasticity fines, [55,10,35].			DG-AL11S-3.5-4			2.4		
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 6600
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NR
REVIEWER G. Thrupp, P.G. No. 5849

NORTHING 2082237.18
EASTING 6010455.14
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AL12 **SHEET** 1 **OF** 1
START DATE 1/25/2019
FINISH DATE 1/25/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND (SM): dark grayish brown (10YR 4/2), moist, fine gravel, fine-medium sand, fines, [5,70,25].			DG-AL12S-0.5-1		60/60	6.7		0.0-2.0' compressed
	(3.5') SILTY GRAVEL (GM): very dark brown (10YR 2/2), moist, fine gravel, fine sand, fines, [50,10,40], odor.			DG-AL12S-3.5-4			11.6		
	(4') 2" layer of lean clay (ML).								
	(4.5') black (10YR 2/1).								
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 8040 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF
REVIEWER G. Thrupp, P.G. No. 5849
NORTHING 2082237.18
EASTING 6010350.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AL13 **SHEET** 1 OF 1
START DATE 1/29/2019 **ELEVATION DATA**
FINISH DATE 1/29/2019 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 10 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND (SM): dark greenish gray (5GY 4/1), moist, fine gravel, fine-coarse sand, fines, [10,70,20].			DG-AL13S-0.5-1		48/60	2.3		0.0-2.5' compressed
				DG-AL13S-3.5-4			1.4		
5	(4') GRAVELLY SILT (ML): black (10YR 2/1), moist, fine gravel, fine-medium sand, fines, [30,10,60], low plasticity, soft, strong odor, luster, sticky, 15% glass and ceramic debris.								sticky core from 4-6.5' made it difficult to determine plasticity of fines
	(6.5') FAT CLAY (CH): very dark greenish gray (10GY 3/1), moist, fines, [0,0,100], high plasticity, firm, Bay Mud.								did not collect deeper sample; Bay Mud encountered at 6.5' bgs
10	(10') Boring terminated.								
15									
20									
25									

CONTRACTOR PeneCore **NORTHING** 2082237.18
EQUIPMENT Geoprobe 8040 DT **EASTING** 6010250.57
DRILL MTHD Direct Push **ANGLE** Vertical
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AL14 **SHEET** 1 **OF** 1
START DATE 1/22/2019
FINISH DATE 1/22/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619

ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') CONCRETE and ASPHALT.								
	(0.5') CLAYEY GRAVEL with SAND (GC): dark gray (10YR 4/1), moist, fine-coarse gravel, fine-medium sand, fines, [45,25,30].			DG-AL14S-0.5-1			0.9		
						60/60			
				DG-AL14S-3.5-4			0.7		
	(4') SANDY LEAN CLAY (CL): yellowish brown (10YR 5/4), moist, fine gravel, fine-medium sand, fines, [5,45,50].								
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 7822 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2082237.18
EASTING 6010150.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AL15 **SHEET** 1 **OF** 1
START DATE 1/22/2019
FINISH DATE 1/22/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 2 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY GRAVEL with SAND (GM): dark gray (10YR 4/1), moist, fine-coarse gravel, fine-medium sand, fines, [60,20,20].								refusal at 2.0' bgs, did not collect sample from 3.5-4.0'
	(1') SILTY SAND (SM): dark yellowish brown (10YR 4/4), moist, fine gravel, fine-medium sand, fines, [5,55,40].			DG-AL15S-1-1.5		24/24	10.3		
	(2') Boring terminated.								
5									
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 7822 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849
NORTHING 2082223.43
EASTING 6010009.31
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AL16 **SHEET** 1 **OF** 1
START DATE 1/22/2019
FINISH DATE 1/22/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 2 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SANDY SILT (ML): very dark grayish brown (10YR 3/2), moist, fine gravel, fine-medium sand, fines, [5,30,65], low plasticity, soft.			DG-AL16S-0.5-1		24/24	2.0		refusal at 2.0'; did not collect deeper sample
	(1') CLAYEY GRAVEL (GC): dark gray (10YR 4/1), moist, fine-coarse gravel, fine-medium sand, fines, [60,10,30].								
	(2') Boring terminated.								
5									
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 7822 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2082237.18
EASTING 6009950.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AM2 **SHEET** 1 **OF** 1
START DATE 12/17/2018
FINISH DATE 12/17/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): very dark gray (10YR 3/1), moist to wet at 2.5', medium-coarse at 1.3', [25,55,20].			DG-AM2S-0.5-1			1.6		
						36/60			
				DG-AM2S-3.5-4			1.4		
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER KB
REVIEWER G. Thrupp, P.G. No. 5849

NORTHING 2082137.18
EASTING 6011350.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AM3 **SHEET** 1 **OF** 1
START DATE 12/19/2019
FINISH DATE 12/19/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619

ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 10 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') GRASS/ORGANICS (OL).								
	(0.1') SILTY SAND (SM): very dark brown (10YR 2/2), moist, fine-coarse sand, non-plastic fines, [0,75,25].			DG-AM3S-0.5-1			0.0		
	(1') WELL-GRADED SAND (SW): dark greenish gray (10Y 4/1), moist, fine-medium sand, [0,95,5].								
	(1.5') SILTY SAND with GRAVEL (SM): dark greenish gray (5GY 4/1), wet, fine-coarse gravel, fine-coarse sand, fines, [15,60,25].					48/60			
	(3.5') GRAVELLY LEAN CLAY with SAND (CL): black (5Y 2.5/1) and very dark grayish brown (10YR 3/2), wet, fine gravel, fine-coarse sand, plastic fines, [35,15,50].			DG-AM3S-3.5-4			1.2		
5	(5') same as above.								
	(6.5') CLAYEY SAND with GRAVEL (SC): brown (7.5YR 5/4), wet, fine-coarse gravel, fine-coarse sand, plastic fines, [25,50,25]. (7.5') dark gray (4/N), cobbles 3" x 2.5".					42/60			no recovery from 8.5-10'
10	(10') Boring terminated.								
15									
20									
25									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 8040 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER BL **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2082137.18
EASTING 6011250.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AM4 **SHEET** 1 **OF** 1
START DATE 12/18/2018
FINISH DATE 12/18/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): very dark grayish brown (10YR 3/2), moist, medium-coarse grained, [20,60,20].			DG-AM4S-0.5-1		41/60	2.0		red brick at 33"
	(3.8') SILTY GRAVEL (GM): very dark gray (10YR 3/1), wet, coarse gravel to cobbles, [80,0,20].			DG-AM4S-3.5-4			2.2		
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER KB
REVIEWER G. Thrupp, P.G. No. 5849
NORTHING 2082137.18
EASTING 6011150.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AM5 **SHEET** 1 **OF** 1
START DATE 12/17/2018
FINISH DATE 12/17/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER 3 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILT with SAND (ML): brown (10YR 5/3), moist, fine-coarse gravel, fine sand, fines, [5,15,80], low plasticity, very soft, trace roots, plastic, and other organics.			DG-AM5S-0.5-1			3.0		0.0-1.0' compressed
	(2') SILTY SAND (SM): dark grayish brown (10YR 4/2), moist, medium-coarse gravel, fine-medium sand, fines, [10,75,15].					60/60			
	(2.7') lens of well-graded gravel (GW) from 2.7-3.0'.		▼						water level
				DG-AM5S-3.5-4			2.0		
	(4.2') GRAVELLY SILT (ML): very dark gray (10YR 3/1), wet, coarse gravel, fine sand, fines, [30,5,65], low plasticity, very soft.								
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 6610 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2082137.18
EASTING 6011050.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AM6 **SHEET** 1 **OF** 1
START DATE 12/20/2018
FINISH DATE 12/20/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND and GRAVEL (SM): dark gray (10YR 4/1), dry, fine-coarse gravel, fine-coarse sand, fines, [20,65,15].			DG-AN6S-0.5-1			1.0		
	(3.5') dark brown (10YR 3/3), wet.			DG-AN6S-3.5-4			0.8		
	(4') pea gravel layer.								
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 788201
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER KJ **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2082137.18
EASTING 6010950.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AM7 **SHEET** 1 **OF** 1
START DATE 1/9/2019
FINISH DATE 1/9/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 10 ft bgs
DEPTH TO WATER 5 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND (SM): dark grayish brown (10YR 4/2), moist, fine gravel, fine-medium sand, fines, [10,65,25].			DG-AM7S-0.5-1		60/60	1.1		0.0-2.0' compressed
	(3') 3" of pea gravel.			DG-AM7S-3.5-4			0.6		
5	(5') wet.		▼						water level
	(8') WELL-GRADED GRAVEL with SILT (GW-GM): dark gray (10YR 4/1), wet, fine-coarse gravel, medium-coarse sand, fines, [85,10,5].			DG-AM7S-7.5-8		48/60	0.7		
	(9') large cobbles from 9.0-10.0'.								
10	(10') Boring terminated.								
15									
20									
25									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 8040 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF
REVIEWER G. Thrupp, P.G. No. 5849
NORTHING 2082137.18
EASTING 6010850.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AM8 **SHEET** 1 **OF** 1
START DATE 1/30/2019 **ELEVATION DATA**
FINISH DATE 1/30/2019 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 5 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** 0.1 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') WELL-GRADED GRAVEL with SAND (GW): gray (10YR 6/1), wet, fine-coarse gravel, [80,15,5].		▼	DG-AM8S-0.5-1			2.1		
	(2') POORLY GRADED SAND (SP): gray (10YR 5/1), wet, coarse sand, [0,95,5].					45/60			
	(3') SILTY GRAVEL with SAND (GM): brown (10YR 4/3), fine-coarse gravel, [50,15,35], 35% glass, plastic, and porcelain debris, slight oily sheen in bottom 2".			DG-AM8S-3.5-4			1.5		
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore **NORTHING** 2082137.18
EQUIPMENT Geoprobe 6600 **EASTING** 6010750.57
DRILL MTHD Direct Push **ANGLE** Vertical
DIAMETER 3 inches
LOGGER NR **REVIEWER** G. Thrupp, P.G. No. 5849

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AM9 **SHEET** 1 **OF** 1
START DATE 1/30/2019 **ELEVATION DATA**
FINISH DATE 1/30/2019 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 5 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') POORLY GRADED GRAVEL with SAND (GP): dark gray (10YR 4/1), wet, cobbles, [75,20,5].			DG-AM9S-0.5-1			1.8		
	(0.8') POORLY GRADED GRAVEL (GP): gray (10YR 5/1), wet, fine gravel, [90,5,5].					42/60			
	(2.8') POORLY GRADED SAND (SP): very dark gray (10YR 3/1), wet, medium-coarse sand, [5,90,5].			DG-AM9S-3.5-4			1.8		
	(3.9') SILTY GRAVEL with SAND (GM): dark brown (10YR 3/3), wet, coarse gravel to cobbles, [45,20,35], 30% trash debris, oily sheen.								
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore **NORTHING** 2082137.18
EQUIPMENT Geoprobe 6600 **EASTING** 6010650.57
DRILL MTHD Direct Push **ANGLE** Vertical
DIAMETER 3 inches
LOGGER NR **REVIEWER** G. Thrupp, P.G. No. 5849

REMARKS under standing water

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AM10 **SHEET** 1 OF 1
START DATE 1/15/2019 **ELEVATION DATA**
FINISH DATE 1/15/2019 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 5 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): dark grayish brown (10YR 4/2), moist, fine-coarse gravel, medium-coarse sand, fines, [20,45,35].			DG-AM10S-0.5-1		60/60	1.6		0.0-2.0' compressed
				DG-AM10S-3.5-4			1.3		
	(4.5') very dusky red (2.5YR 2.5/2), 5% ceramic and glass debris from 4.5-5.0'.								
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore **NORTHING** 2082137.18
EQUIPMENT Geoprobe 6600 **EASTING** 6010550.57
DRILL MTHD Direct Push **ANGLE** Vertical
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AM11 **SHEET** 1 **OF** 1
START DATE 1/22/2019 **ELEVATION DATA**
FINISH DATE 1/22/2019 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 10 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') ORGANIC SOIL with SAND (OL): dark reddish-brown (5YR 3/2), fine sand, silt, [0,50,50], roots.			DG-AM11S-0.5-1			0.1		
	(0.2') WELL-GRADED GRAVEL with SAND (GW): very dark brown (7.5YR 2.5/2), fine-coarse gravel, fine-coarse sand, silt, [25,70,5].								
	(0.6') CLAYEY SAND with GRAVEL (SC): olive (5Y 4/4), moist, fine-coarse gravel, fine-coarse sand, clay, [15,65,20].					42/60			
	(2') reddish-brown (5YR 4/4), wet, with staining and glass shards.			DG-AM11S-3.5-4			0.1		
	(4') very dark gray (2.5Y 3/1).								
5	(5.5') FAT CLAY (CH): very dark greenish gray (10Y 3/1), moist, clay, [0,0,100], high plasticity.					54/60			
10	(10') Boring terminated.								
15									
20									
25									

CONTRACTOR PeneCore **NORTHING** 2082137.49
EQUIPMENT Geoprobe **EASTING** 6010454.23
DRILL MTHD Direct Push **ANGLE** Vertical
DIAMETER 3 inches
LOGGER CB **REVIEWER** G. Thrupp, P.G. No. 5849

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AM12 **SHEET** 1 **OF** 1
START DATE 1/25/2019
FINISH DATE 1/25/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND (SM): brown (10YR 4/3), moist, fine-coarse gravel, fine-medium sand, fines, [5,75,20].			DG-AM12S-0.5-1		60/60	15.1		0.0-2.0' compressed
	(3.5') GRAVELLY LEAN CLAY (CL): dark grayish brown (10YR 3/2), moist, fine gravel, fine sand, [30,10,60], odor.			DG-AM12S-3.5-4			12.3		
	(4.5') black (10YR 2/1), odor, luster.								
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 8040 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2082137.18
EASTING 6010350.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AM13 **SHEET** 1 **OF** 1
START DATE 1/31/2019 **ELEVATION DATA**
FINISH DATE 1/31/2019 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 5 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** 1.1 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') POORLY GRADED SAND (SP): dark gray (10YR 4/1), moist, medium sand, [5,90,5].		▼	DG-AM13S-0.5-1			3.7		
	(2.6') SILTY GRAVEL with SAND (GM): black (10YR 2/1), wet, cobbles, [45,15,40], 15% trash debris, oily sheen and strong odor.			DG-AM13S-3.5-4		43/60	6.5		bottom approximately 0.5' black with petroleum product
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore **NORTHING** 2082137.18
EQUIPMENT Geoprobe 6600 **EASTING** 6010250.57
DRILL MTHD Direct Push **ANGLE** Vertical
DIAMETER 3 inches
LOGGER NR **REVIEWER** G. Thrupp, P.G. No. 5849

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AM14 **SHEET** 1 **OF** 1
START DATE 1/22/2019
FINISH DATE 1/22/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 2 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND (SM): dark yellowish brown (10YR 4/6), moist, fine-coarse gravel, fine-medium sand, fines, [5,60,35], concrete and fine-coarse gravel from 0.0-1.0' bgs.			DG-AM14S-1-1.5		24/24	0.6		refusal at 2.0'; redrilled, second refusal at 2.0'
	(2') Boring terminated.								
5									
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 7822 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2082137.18
EASTING 6010150.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AM15 **SHEET** 1 **OF** 1
START DATE 1/23/2019
FINISH DATE 1/23/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 10 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') ASPHALT.								
	(0.5') WELL-GRADED GRAVEL with CLAY and SAND (GW-GC): very dark gray (10YR 3/1), dry, road base.			DG-AM15S-0.5-1			0.0		
	(2.5') dark red (10R 3/6), solid material similar to brick, fractured.					48/60			
	(3.5') CLAYEY GRAVEL with SAND (GC): yellowish brown (10YR 5/4), wet.			DG-AM15S-3.5-4			0.0		
	(4') same as 2.5'.						0.0		
5	(4.5') black (10YR 2/1), wet, same as 3.5'.								
	(5') POORLY GRADED SAND (SP): very dark gray (10YR 3/1), wet.						0.0		
	(7') CLAYEY GRAVEL with SAND (GC): yellowish brown (10YR 5/4), wet.					18/60	0.0		
				DG-AM15S-9.5-10					
10	(10') Boring terminated.								
15									
20									
25									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 8040 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER JR
REVIEWER G. Thrupp, P.G. No. 5849

NORTHING 2082137.18
EASTING 6010050.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AN2 **SHEET** 1 **OF** 1
START DATE 12/17/2018
FINISH DATE 12/17/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND (SM): very dark gray (10YR 3/1), moist, fine-grained, [5,75,20].			DG-AN2S-0.5-1		48/60	4.2		
	(3.8') SILTY SAND and GRAVEL (SM): very dark gray (10YR 3/1), wet, medium-coarse grained with depth, [30,50,20].			DG-AN2S-3.5-4			1.1		large gravel/cobble
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER KB
REVIEWER G. Thrupp, P.G. No. 5849

NORTHING 2082037.18
EASTING 6011350.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AN3 **SHEET** 1 **OF** 1
START DATE 12/14/2018
FINISH DATE 12/14/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') WELL-GRADED SAND with SILT and GRAVEL (SW-SM): very dark brown (10YR 2/2), dry, fine-coarse gravel, fine-coarse sand, fines, [20,70,10].			DG-AN3S-0.5-1			0.1		
	(3') dark yellowish-brown (10YR 4/4).			DG-AN3S-3.5-4		45/60	0.0		
	(4') CLAYEY GRAVEL (GC): very dark grayish brown (10YR 3/2), moist, fine-coarse gravel, fine-coarse sand, fines, [75,10,15]. (4.5') black (10YR 2/1).								
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 6600
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER KJ **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2082037.18
EASTING 6011250.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AN4 **SHEET** 1 **OF** 1
START DATE 12/17/2018
FINISH DATE 12/17/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): dark yellowish-brown (10YR 3/4), moist to wet at 2.5', medium-coarse, [20,60,20].			DG-AN4S-0.5-1			2.5		
	(1.2') dark gray (10YR 4/1).								
	(2.4') black (10YR 2/1).					42/60			large red brick from 2.8-3'
				DG-AN4S-3.5-4			1.6		
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER KB
REVIEWER G. Thrupp, P.G. No. 5849
NORTHING 2082037.18
EASTING 6011150.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AN5 **SHEET** 1 **OF** 1
START DATE 12/20/2019
FINISH DATE 12/20/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 10 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): dark brown (7.5YR 3/3), moist, fine gravel, fine-medium sand, fines, [15,60,25], organics (roots). (0.25') dark gray (2.5Y 4/1).			DG-AN5S-0.5-1			0.4		
	(0.5') WELL-GRADED SAND (SW): very dark greenish gray (5GY 3/1), moist, fine-coarse sand, [0,95,5]. (1') wet, coarse gravel.					57/60			
	(2') SILTY SAND (SM): dark yellowish-brown (10YR 3/6), trace fine gravel, fine-coarse sand, fines, [tr,80,20].			DG-AN5S-3.5-4			0.4		
	(2.25') WELL-GRADED SAND (SW): very dark greenish gray (5GY 3/1), moist, fine-coarse sand, [0,95,5].								
5	(3.75') SILTY GRAVEL (GM): black (2.5/N), wet, fine-coarse gravel, fine sand, fines, [80,5,15], pieces of red brick, wood pieces.								
	(5') POORLY GRADED SAND (SP): black (2.5/N), wet, fine sand, [0,95,5].								
	(6.5') SANDY SILT (ML): black (2.5/N), wet, fine gravel, fine sand, [5,30,65].								
	(7.5') CLAYEY GRAVEL with SAND (GC): olive gray (5Y 4/2), fine-coarse gravel, fine-coarse sand, plastic fines, [60,15,25].								
10	(9.5') WELL-GRADED GRAVEL (GW): dark olive gray (5Y 3/2), wet, fine-coarse angular gravel, coarse sand, [90,5,5].								
	(10') Boring terminated.								
15									
20									
25									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 8040 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER BL **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2082037.18
EASTING 6011050.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AN6 **SHEET** 1 **OF** 1
START DATE 12/21/2018
FINISH DATE 12/21/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER 3.5 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND (SM): very dark gray (10YR 3/1), moist, medium grained, [10,70,20].			DG-AN6S-0.5-1			0.1		
	(2') dark brown (10YR 3/3).					43/60			
	(3.6') SILTY GRAVEL with SAND (GM): dark grayish brown (10YR 4/2), wet, fine gravel, [70,10,20].		▼	DG-AN6S-3.5-4			0.2		
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER KB
REVIEWER G. Thrupp, P.G. No. 5849

NORTHING 2082037.18
EASTING 6010950.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AN7 **SHEET** 1 **OF** 1
START DATE 12/19/2018
FINISH DATE 12/19/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND (SM): dark brown (10YR 3/3), moist, fine-coarse gravel, fine-medium sand, fines, [10,70,20].			DG-AN7S-0.5-1			5.0		0.0-1.0' compressed
	(2') POORLY GRADED GRAVEL (GP): grayish brown (10YR 5/2), moist, fine gravel, medium-coarse sand, fines, [90,8,2].					60/60			
	(3') SILTY SAND (SM): very dark gray (10YR 3/1), moist, fine gravel, medium sand, fines, [5,75,20].			DG-AN7S-3.5-4			3.1		
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 6610 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF
REVIEWER G. Thrupp, P.G. No. 5849
NORTHING 2082037.18
EASTING 6010850.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AN8 **SHEET** 1 **OF** 1
START DATE 1/15/2019
FINISH DATE 1/15/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') WELL-GRADED GRAVEL with SILT (GW-GM): dark gray (10YR 4/1), moist, fine-coarse gravel, medium-coarse sand, fines, [80,10,10].					60/60			0.0-2.0' compressed; not sampled from 0.0-0.5'-too gravelly
	(3.5') SILTY SAND (SM): dark gray (10YR 4/1), moist, fine gravel, medium sand, fines, [10,65,25].			DG-AN8S-3.5-4			1.3		
5	(4.8') dark reddish brown (2.5YR 3/4), from 4.8-5.0'.								
	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 6600
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF
REVIEWER G. Thrupp, P.G. No. 5849
NORTHING 2082037.18
EASTING 6010750.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AN9 **SHEET** 1 **OF** 1
START DATE 1/21/2019
FINISH DATE 1/21/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 10 ft bgs
DEPTH TO WATER ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') WELL-GRADED SAND with SILT and GRAVEL (SW-SM): brown (7.5YR 4/2), moist, fine gravel, fine-coarse sand, silt, [30,60,10], topsoil in top 0.2' with roots.			DG-AN9S-0.5-1			0.0		
	(0.9') POORLY GRADED GRAVEL (GP): brown (7.5YR 4/2), wet, fine gravel, fine-coarse sand, silt, [5,90,5].								
	(2') POORLY GRADED SAND (SP): brown (7.5YR 4/2), moist, trace gravel, fine sand, silt, [tr,95,5].					30/60			
	(3.5') WELL-GRADED SAND with CLAY and GRAVEL (SW-SC): dark reddish-brown (5YR 3/4), moist, fine-coarse gravel, fine-coarse sand, clay, [25,65,10].			DG-AN9S-3.5-4			0.0		
5	(5') WELL-GRADED GRAVEL with CLAY and SAND (GW-GC): dark grayish brown (10YR 4/2), wet, fine-coarse gravel, fine-coarse sand, clay, [60,30,10], gravel aggregate.								
	(7.5') FAT CLAY (CH): dark greenish gray (5G 4/1), moist, clay, [0,0,100].			DG-AN9S-7-7.5		36/60			
10	(10') Boring terminated.								
15									
20									
25									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER CB
REVIEWER G. Thrupp, P.G. No. 5849

NORTHING 2082037.18
EASTING 6010650.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AN10 **SHEET** 1 **OF** 1
START DATE 1/15/2019
FINISH DATE 1/15/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): dark grayish brown (10YR 4/2), moist, fine-coarse gravel, medium-coarse sand, fines, [30,45,25].			DG-AN10S-0.5-1		60/60	0.7		0.0-2.0' compressed; boring moved 6' west because too muddy for the rig
	(3') 3" lens of pea gravel.								
	(3.5') SILTY GRAVEL (GM): very dark brown (10YR 2/2), moist, fine-coarse gravel, fine sand, fines, [55,10,35], 20% glass, ceramic, and metal fragments.			DG-AN10S-3.5-4			0.8		
	(4.5') black (10YR 2/1), odor, from 4.5-5.0', luster at 5.0'.			DG-AN10S-4.5-5			13.2		
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 6600
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF
REVIEWER G. Thrupp, P.G. No. 5849

NORTHING 2082037.18
EASTING 6010550.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AN11 **SHEET** 1 **OF** 1
START DATE 1/28/2019
FINISH DATE 1/28/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER 3.1 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY GRAVEL with SAND (GM): dark gray (10YR 4/1), moist, coarse grained gravel to cobbles, [50,30,20].		▼	DG-AN11S-0.5-1		50/60	1.8		
				DG-AN11S-3.5-4			2.6		
	(4') CLAYEY GRAVEL with SAND (GC): black (10YR 2/1), wet, fine gravel, [50,15,35], oily sheen.								
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 6600
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NR
REVIEWER G. Thrupp, P.G. No. 5849
NORTHING 2082037.18
EASTING 6010452.1
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AN12 **SHEET** 1 **OF** 1
START DATE 1/25/2019
FINISH DATE 1/25/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619

ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER 4.5 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND (SM): brown (10YR 5/3), moist, fine gravel, fine-medium sand, fines, [5,70,25].			DG-AN12S-0.5-1		60/60	8.3		0.0-2.0' compressed
	(3.5') SILTY GRAVEL (GM): very dark grayish brown (10YR 3/2), moist, fine-coarse gravel, fine-medium sand, fines, [60,10,30], luster.			DG-AN12S-3.5-4			5.1		
	(4.5') wet, trace ceramic fragments.		▼						water level
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 8040 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2082037.18
EASTING 6010350.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AN13 **SHEET** 1 **OF** 1
START DATE 1/31/2019
FINISH DATE 1/31/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 10 ft bgs
DEPTH TO WATER 7.5 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): dark reddish brown (5YR 3/2), moist, fine gravel, fine-coarse sand, fines, [25,40,35].			DG-AN13S-0.5-1		60/60	2.2		0.0-0.5' compressed
				DG-AN13S-3.5-4			2.6		
5	(4') SILTY SAND (SM): yellowish brown (10YR 5/4), moist, fine-medium sand, fines, [0,75,25].								
	(7.5') wet.		▼			60/60			water level
	(9') GRAVELLY SILT (ML): black (10YR 2/1), moist, fine gravel, fine sand, fines, [40,10,50], 10% glass and ceramic debris.			DG-AN13S-9.5-10			3.5		
10	(10') Boring terminated.								
15									
20									
25									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 8040 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2082037.18
EASTING 6010250.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AN14 **SHEET** 1 **OF** 1
START DATE 1/21/2019
FINISH DATE 1/21/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 2 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY GRAVEL with SAND (GM): gray (10YR 5/1), moist, fine-coarse gravel, medium-coarse sand, fines, [55,25,20], concrete fragments.			DG-AN14S-0.5-1		24/24	5.7		refusal at 2.0' bgs; re-drilled to 2.0', refusal again
	(2') Boring terminated.								
5									
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 7822 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849
NORTHING 2082037.18
EASTING 6010158.14
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AO2 **SHEET** 1 **OF** 1
START DATE 12/17/2018
FINISH DATE 12/17/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND (SM): very dark gray (10YR 3/1), moist, fine-grained, [0,80,20].			DG-AO-2S-0.5-1		43/60	2.6		
	(2.7') SILTY GRAVEL with SAND (GM): dark yellowish-brown (10YR 4/4), moist to wet at 2.6', fine-coarse gravel, [50,30,20].			DG-AO-2S-3.5-4			3.2		increasing gravel content with depth
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER KB
REVIEWER G. Thrupp, P.G. No. 5849

NORTHING 2081937.18
EASTING 6011350.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AO3 **SHEET** 1 OF 1
START DATE 12/19/2019 **ELEVATION DATA**
FINISH DATE 12/19/2019 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 10 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') GRASS/ORGANICS (OL).								
	(0.2') SILTY SAND (SM): very dark brown (10YR 2/2), moist, fine gravel, fine-coarse sand, [5,70,25].			DG-AO3S-0.5-1			0.6		
	(0.5') olive gray (5Y 4/2), [10,75,15].								
	(1.5') SILTY SAND with GRAVEL (SM): dark greenish gray (5GY 4/1), moist, fine-coarse gravel, fine-coarse sand, fines, [20,60,20].					42/60			
	(3') black (5Y 2.5/1), fine-coarse gravel, fine sand only.			DG-AO3S-3.5-4			0.0		
5	(5') wet, free product, oily sheen.								
	(7.25') WELL-GRADED GRAVEL (GW): dark gray (10YR 4/1), wet, fine-coarse gravel, coarse sand, [90,10,tr]. (8') cobbles 3.5" x 2" from 8-8.5'.								no recovery from 8.5-10'
10	(10') Boring terminated.								
15									
20									
25									

CONTRACTOR PeneCore **NORTHING** 2081937.18
EQUIPMENT Geoprobe 8040 DT **EASTING** 6011250.57
DRILL MTHD Direct Push **ANGLE** Vertical
DIAMETER 3 inches
LOGGER BL **REVIEWER** G. Thrupp, P.G. No. 5849

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AO4 **SHEET** 1 **OF** 1
START DATE 12/17/2018
FINISH DATE 12/17/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): very dark grayish brown (10YR 3/2), moist, medium-grained, [20,60,20].			DG-AO4S-0.5-1			2.5		
	(1.2') SILTY SAND (SM): dark gray (10YR 4/1), moist to wet at 2.5', fine-medium grained at 2', [10,70,20].					45/60			
	(3.7') SILTY GRAVEL (GM): very dark grayish brown (10YR 3/2), wet, fine-coarse gravel, [70,0,30].			DG-AO4S-3.5-4			1.7		
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER KB
REVIEWER G. Thrupp, P.G. No. 5849

NORTHING 2081937.18
EASTING 6011150.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AO5 **SHEET** 1 **OF** 1
START DATE 12/17/2018 **ELEVATION DATA**
FINISH DATE 12/17/2018 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 5 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** 2.5 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILT with SAND (ML): brown (10YR 5/3), moist, fine-coarse gravel, fine-medium sand, fines, [5,15,80], non-plastic to low plasticity, very soft, trace roots and glass.			DG-AO5S-0.5-1			2.0		0.0-1.0' compressed
	(2') POORLY GRADED SAND with SILT (SP-SM): grayish brown (10YR 5/2), moist-wet, fine-coarse gravel, fine-medium sand, fines, [10,80,10], with 3" layer of poorly graded coarse gravel.		▼			60/60			water level
	(3') brown (10YR 4/3), from 3.0-3.3'.			DG-AO5S-3.5-4			1.9		
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore **NORTHING** 2081937.18
EQUIPMENT Geoprobe 6610 DT **EASTING** 6011050.57
DRILL MTHD Direct Push **ANGLE** Vertical
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AO6 **SHEET** 1 **OF** 1
START DATE 12/21/2018
FINISH DATE 12/21/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619

ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND (SM): very dark gray (10YR 3/1), moist, medium grained, [10,70,20].			DG-AO6S-0.5-1			0.2		
	(1.2') very dark grayish brown.					38/60			
	(3.3') WELL-GRADED GRAVEL with SAND (GW): dark gray (10YR 4/1), moist, fine-grained, [80,20,0].			DG-AO6S-3.5-4			0.2		
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER KB
REVIEWER G. Thrupp, P.G. No. 5849

NORTHING 2081937.18
EASTING 6010950.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AO7 **SHEET** 1 **OF** 1
START DATE 1/9/2019
FINISH DATE 1/9/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 10 ft bgs
DEPTH TO WATER 5 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND (SM): dark gray (10YR 4/1), moist, fine gravel, fine-medium sand, fines, [10,65,25].			DG-AO7S-0.5-1		60/60	1.2		0.0-1.5' compressed
				DG-AO7S-3.5-4			1.7		
5	(4.5') SILTY GRAVEL with SAND (GM): very dark gray (10YR 3/1), moist, fine-coarse gravel, fine-medium sand, fines, [55,25,20], 10% glass shards from 4.5-5.0'. (5') wet.		▼			48/60			water level
	(8') CLAYEY GRAVEL (GC): greenish gray (5GY 5/1), wet, fine-coarse gravel, medium-coarse sand, fines, [65,5,30].								no deeper sample taken; too gravelly
10	(10') Boring terminated.								
15									
20									
25									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 8040 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2081937.18
EASTING 6010850.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AO8 **SHEET** 1 **OF** 1
START DATE 1/30/2019 **ELEVATION DATA**
FINISH DATE 1/30/2019 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 5 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** 3.1 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY GRAVEL with SAND (GM): brown (10YR 4/3), moist, coarse gravel, [50,20,30].								
	(0.5') POORLY GRADED GRAVEL (GP): gray (10YR 6/1), moist, fine gravel, [90,5,5].			DG-AO8S-0.5-1			1.3		
	(2.4') POORLY GRADED SAND (SP): gray (10YR 5/1), moist, medium sand, [0,95,5].		▼			33/60			
	(3.5') SILTY GRAVEL with SAND (GM): very dark brown (10YR 2/2), wet, fine-coarse gravel, [50,15,35], 20% glass and ceramic debris, oily sheen.			DG-AO8S-3.5-4			2.4		core loss due to heavily saturated soil matrix
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore **NORTHING** 2081937.18
EQUIPMENT Geoprobe 6600 **EASTING** 6010750.57
DRILL MTHD Direct Push **ANGLE** Vertical
DIAMETER 3 inches
LOGGER NR **REVIEWER** G. Thrupp, P.G. No. 5849

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AO9 **SHEET** 1 OF 1
START DATE 1/30/2019 **ELEVATION DATA**
FINISH DATE 1/30/2019 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 10 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** 1.6 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): dark gray (10YR 4/1), moist, fine gravel, coarse sand, [35,45,20].			DG-AO9S-0.5-1			2.5		
	(1.2') WELL-GRADED GRAVEL with SILT (GW-GM): gray (10YR 5/1), moist, fine gravel, [75,5,20].		▼						
	(2.1') SILTY SAND with GRAVEL (SM): gray (10YR 5/1), wet, coarse sand, [25,50,25].					44/60			
	(3.3') SILTY GRAVEL with SAND (GM): very dark brown (10YR 2/2), wet, fine gravel to cobbles, [45,35,20], 15% trash debris.			DG-AO9S-3.5-4			2.5		
5									
	(6.6') WELL-GRADED SAND with GRAVEL (SW): gray (10YR 6/1), wet, fine gravel, coarse sand, [80,15,5].								
	(7.5') GRAVELLY LEAN CLAY (CL): yellowish brown (10YR 5/4), wet, [40,10,50], low plasticity, soft.					24/60			
	(8.1') FAT CLAY (CH): gray (10YR 5/1), wet, [0,0,100], high plasticity, soft, Bay Mud.								
10	(10') Boring terminated.								
15									
20									
25									

CONTRACTOR PeneCore **NORTHING** 2081937.18
EQUIPMENT Geoprobe 6600 **EASTING** 6010650.57
DRILL MTHD Direct Push **ANGLE** Vertical
DIAMETER 3 inches
LOGGER NR **REVIEWER** G. Thrupp, P.G. No. 5849

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AO10 **SHEET** 1 **OF** 1
START DATE 1/15/2019
FINISH DATE 1/15/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): grayish brown (10YR 5/2), moist, fine-coarse gravel, medium-coarse sand, fines, [20,50,30].			DG-AO10S-0.5-1		60/60	0.8		0.0-2.0' compressed
	(3.5') SILTY GRAVEL (GM): very dark brown (10YR 2/2), moist, fine-coarse gravel, fine sand, fines, [55,10,35], 20% glass, metal and ceramic debris.			DG-AO10S-3.5-4			1.0		
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 6600
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF
REVIEWER G. Thrupp, P.G. No. 5849

NORTHING 2081937.18
EASTING 6010550.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AO11 **SHEET** 1 OF 1
START DATE 1/22/2019 **ELEVATION DATA**
FINISH DATE 1/22/2019 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 10 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') CLAYEY SAND (SC): brown (10YR 4/3), moist, fine gravel, fine-coarse sand, clay, [10,70,20], roots.			DG-AO11S-0.5-1			0.1		
	(1') CLAYEY SAND with GRAVEL (SC): brown (10YR 4/3), moist, fine-coarse gravel, fine-coarse sand (predominantly coarse), clay, [20,65,15].								
	(1.5') POORLY GRADED SAND (SP): very dark brown (10YR 2/2), moist, fine gravel, fine sand, silt, [5,90,5].					36/60			
	(2') CLAYEY SAND (SC): grayish brown (10YR 5/2), moist, fine gravel, fine-coarse sand, clay, [10,65,25].			DG-AO11S-3.5-4			0.1		
	(2.4') LEAN CLAY (CL): dark grayish brown (10YR 4/2), moist, fine gravel, fine sand, clay, [10,10,80].								
5	(3') cobble >3" diameter.								
	(5') WELL-GRADED GRAVEL with SAND (GW): olive gray (5Y 5/2), fine-coarse gravel, fine sand, silt, [75,20,5], black sheen and odor.								
	(6') FAT CLAY (CH): very dark greenish gray (10Y 3/1), dry, clay, [0,0,100], odor and black sheen in top 2".					24/60			
10	(10') Boring terminated.								
15									
20									
25									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER CB
REVIEWER G. Thrupp, P.G. No. 5849

NORTHING 2081937.18
EASTING 6010450.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AO12 **SHEET** 1 **OF** 1
START DATE 1/31/2019 **ELEVATION DATA**
FINISH DATE 1/31/2019 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 5 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** 3.7 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') GRAVELLY SILT with SAND (ML): very dark brown (10YR 2/2), moist, coarse gravel to cobbles, [40,15,45].			DG-AO12S-0.5-1		45/60	2.8		
	(2.7') SILTY GRAVEL with SAND (GM): dark brown (10YR 3/3), wet, cobbles, [50,15,35], 25% trash debris, oily sheen and odor.		▼	DG-AO12S-3.5-4			4.2		
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore **NORTHING** 2081937.18
EQUIPMENT Geoprobe 6600 **EASTING** 6010350.57
DRILL MTHD Direct Push **ANGLE** Vertical
DIAMETER 3 inches
LOGGER NR **REVIEWER** G. Thrupp, P.G. No. 5849

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AO14 **SHEET** 1 **OF** 1
START DATE 1/21/2019
FINISH DATE 1/21/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 2 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') CLAYEY GRAVEL (GC): dark gray (10YR 4/1), moist, fine-coarse gravel, fine-medium sand, fines, [50,10,40].			DG-AO14S-0.5-1		24/24	1.2		refusal at 2.0' bgs; redrilled, refusal at 2.0' again
	(1.5') SILTY SAND with GRAVEL (SM): dark grayish brown (10YR 4/2), moist, fine-coarse gravel, fine-medium sand, fines, [20,50,30], trace brick fragments.								
	(2') Boring terminated.								no sample collected from 3.5-4.0'; refusal at 2'
5									
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 7822 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849
NORTHING 2081937.18
EASTING 6010201.46
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AP2 **SHEET** 1 **OF** 1
START DATE 12/17/2018
FINISH DATE 12/17/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): dark gray (10YR 4/1), moist, fine-medium grained, [20,60,20].			DG-AP-2S-0.5-1			3.5		
	(2.5') SILTY GRAVEL with SAND (GM): dark brown (10YR 3/3), wet, fine-coarse gravel, [60,20,20].			DG-AP-2S-3.5-4		38/60	3.0		
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER KB
REVIEWER G. Thrupp, P.G. No. 5849

NORTHING 2081837.18
EASTING 6011350.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AP3 **SHEET** 1 **OF** 1
START DATE 12/14/2018
FINISH DATE 12/14/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') WELL-GRADED SAND with SILT and GRAVEL (SW-SM): very dark gray (10YR 3/1), dry, fine-coarse gravel, fine-coarse sand, fines, [15,75,10].			DG-AP3S-0.5-1			0.0		
	(3') yellowish-brown (10YR 5/6).			DG-AP3S-3.5-4		40/60	0.0		
	(4') SILTY GRAVEL with SAND (GM): very dark brown (10YR 2/2), wet, fine-coarse gravel, fine-coarse sand, fines, [65,20,15].								
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 6600
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER KJ
REVIEWER G. Thrupp, P.G. No. 5849

NORTHING 2081837.18
EASTING 6011250.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AP4 **SHEET** 1 **OF** 1
START DATE 12/17/2018
FINISH DATE 12/17/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND (SM): very dark grayish brown (10YR 3/2), moist, fine-medium grained with depth, [0,80,20].			DG-AP4S-0.5-1		40/60	2.0		red brick cobble from 2.8-3.2' and large cobble at 3.2'
	(3.2') SILTY GRAVEL with SAND (GM): very dark grayish brown (10YR 3/2), wet, fine-coarse, [60,20,20].			DG-AP4S-3.5-4			2.4		
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER KB
REVIEWER G. Thrupp, P.G. No. 5849

NORTHING 2081837.18
EASTING 6011150.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AP5 **SHEET** 1 **OF** 1
START DATE 12/20/2019
FINISH DATE 12/20/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619

ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 10 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): dark olive brown (2.5Y 3/3), fine gravel, fine-medium sand, fines, [15,65,20]. (0.75') coarse sand, [15,70,15]. (1.5') Dark brown , coarse gravel up to 1.5".			DG-AP5S-0.5-1			0.1		
	(2.5') WELL-GRADED SAND with GRAVEL (SW): very dark greenish gray (5GY 3/1).					60/60			
	(3.2') POORLY GRADED SAND (SP): black (2.5/N), wet, fine sand, fines, [0,95,5].			DG-AP5S-3.5-4			0.0		no odor or PID hit
5	(5') CLAYEY GRAVEL (GC): light olive brown (2.5Y 5/4), fine-coarse gravel, fine-coarse sand, fines, [50,20,30].								
	(7.5') FAT CLAY (CH): dark greenish gray (10Y 4/1), [0,0,100], high plasticity, soft, shell pieces, Bay Mud.					36/60			no recovery from 8-10'
10	(10') Boring terminated.								
15									
20									
25									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 8040 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER BL **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2081837.18
EASTING 6011050.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AP6 **SHEET** 1 **OF** 1
START DATE 12/21/2018
FINISH DATE 12/21/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND (SM): very dark brown (10YR 2/2), moist, medium grained, [10,70,20].			DG-AP6S-0.5-1			0.4		
	(1.1') dark brown (10YR 3/3).					38/60			
	(2.8') WELL-GRADED GRAVEL with SAND (GW): dark gray (10YR 4/1), moist, fine gravel, [80,20,0].			DG-AP6S-3.5-4			0.3		
	(3.9') SILTY SAND (SM): black (10YR 2/1), moist, fine-grained, [0,80,20].								
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER KB
REVIEWER G. Thrupp, P.G. No. 5849

NORTHING 2081837.18
EASTING 6010950.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AP7 **SHEET** 1 **OF** 1
START DATE 12/19/2018 **ELEVATION DATA**
FINISH DATE 12/19/2018 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 5 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND (SM): dark brown (10YR 3/3), moist, fine-coarse gravel, fine-medium sand, fines, [10,70,20].			DG-AP7S-0.5-1		60/60	4.4		0.0-1.5' compressed
	(2.5') POORLY GRADED GRAVEL (GP): grayish brown (10YR 5/2), moist, fine gravel, medium-coarse sand, fines, [95,3,2].								
	(3') WELL-GRADED SAND with SILT (SW-SM): very dark brown (10YR 2/2), moist, fine-coarse gravel, medium sand, fines, [20,70,10].			DG-AP7S-3.5-4			6.2		
	(4.5') 1" lens of fat clay (CH), metal and ceramic fragments from 4.5-5.0'.								
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore **NORTHING** 2081837.18
EQUIPMENT Geoprobe 6610 DT **EASTING** 6010850.57
DRILL MTHD Direct Push **ANGLE** Vertical
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AP8 **SHEET** 1 **OF** 1
START DATE 12/21/2018
FINISH DATE 12/21/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER 2.2 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): dark brown (10YR 3/3), moist, fine gravel, fine sand, [20,60,20].			DG-AP8S-0.5-1			1.4		
	(1.8') POORLY GRADED SAND with SILT (SP-SM): dark gray (10YR 4/1), moist, fine sand, [0,90,10].		▼			36/60			cobble
	(3.3') SILTY GRAVEL with SAND (GM): dark yellowish brown (10YR 3/4), wet, fine gravel, medium sand, [60,20,20].			DG-AP8S-3.5-4			1.9		
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER KB
REVIEWER G. Thrupp, P.G. No. 5849

NORTHING 2081837.18
EASTING 6010750.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AP9 **SHEET** 1 **OF** 1
START DATE 1/21/2019 **ELEVATION DATA**
FINISH DATE 1/21/2019 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 10 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') FAT CLAY (CH): dark greenish gray (5G 4/1), moist, fine gravel, fine-coarse sand, clay, [10,10,80], high plasticity.			DG-AP9S-0.5-1			0.0		
	(0.2') WELL-GRADED SAND with GRAVEL (SW): dark brown (7.5YR 3/3), moist, fine gravel, fine-coarse sand, silt, [20,75,5].								
	(2') POORLY GRADED SAND with SILT (SP-SM): dark brown (7.5YR 3/2), moist, medium sand, silt, [0,90,10].					30/60			
				DG-AP9S-3.5-4			0.0		
	(4') WELL-GRADED SAND with CLAY and GRAVEL (SW-SC): very dark brown (7.5YR 2.5/2), moist, fine-coarse gravel, fine-coarse sand, clay, [30,60,10].								
5	(5') WELL-GRADED GRAVEL with CLAY and SAND (SW-SC): dark yellowish-brown (10YR 4/4), wet, fine-coarse gravel, fine-coarse sand, clay, [60,30,10].								
	(7') FAT CLAY (CH): dark greenish gray (5G 4/1), moist, clay, [0,0,100], high plasticity.					30/60			
10	(10') Boring terminated.								
15									
20									
25									

CONTRACTOR PeneCore **NORTHING** 2081837.18
EQUIPMENT Geoprobe **EASTING** 6010650.57
DRILL MTHD Direct Push **ANGLE** Vertical
DIAMETER 3 inches
LOGGER CB **REVIEWER** G. Thrupp, P.G. No. 5849

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AP10 **SHEET** 1 **OF** 1
START DATE 1/28/2019
FINISH DATE 1/28/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER 2.7 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') POORLY GRADED GRAVEL with SAND (GP): dark gray (10YR 4/1), moist, coarse gravel with some cobbles, [60,35,5].			DG-AP10S-0.5-1			0.5		
	(1.3') SILTY SAND with GRAVEL (SM): very dark grayish brown (10YR 3/2), wet, fine sand, [15,70,15].								
	(2.3') WELL-GRADED GRAVEL with SAND (GW): very dark gray (10YR 3/1), wet, fine gravel, [85,15,0].		▼			49/60			
	(3.2') SILTY GRAVEL with SAND (GM): dark brown (10YR 3/3), wet, fine gravel, [50,30,20].			DG-AP10S-3.5-4			1.7		
	(4') SILTY SAND (SM): light yellowish brown (10YR 6/4), wet, fine sand, [5,80,15].								
5	(4.8') SILTY GRAVEL with SAND (GM): dark gray (10YR 4/1), wet, coarse gravel to cobbles, [70,10,20].								
	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 6600
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NR
REVIEWER G. Thrupp, P.G. No. 5849

NORTHING 2081837.18
EASTING 6010550.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AP11 **SHEET** 1 **OF** 1
START DATE 1/31/2019
FINISH DATE 1/31/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER 1.9 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY GRAVEL with SAND (GM): very dark gray (10YR 3/1), moist, fine-coarse gravel, [65,20,15].		▼	DG-AP11S-0.5-1		41/60	3.7		
	(2.9') SILTY GRAVEL with SAND (GM): very dark brown (10YR 2/2), wet, cobbles, [50,15,35], 15% trash debris, oily sheen.			DG-AP11S-3.5-4			1.0		
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 6600
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NR
REVIEWER G. Thrupp, P.G. No. 5849

NORTHING 2081837.18
EASTING 6010450.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AP12 **SHEET** 1 **OF** 1
START DATE 1/31/2019
FINISH DATE 1/31/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER 1.7 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') GRAVELLY SILT with SAND (ML): very dark brown (10YR 2/2), moist, [25,35,40].		▼	DG-AP12S-0.5-1			0.9		
	(2.2') SILTY GRAVEL with SAND (GM): black (10YR 2/1), wet, mostly fine gravel with some cobbles, [60,10,30], 10% trash debris, oily sheen and odor.			DG-AP12S-3.5-4		46/60	4.3		
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 6600
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NR
REVIEWER G. Thrupp, P.G. No. 5849
NORTHING 2081837.18
EASTING 6010350.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AP13 **SHEET** 1 **OF** 1
START DATE 1/23/2019
FINISH DATE 1/23/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 10 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') ASPHALT.								
	(0.5') LEAN CLAY with SAND (CL): dark brown (7.5YR 3/3), dry, fine-coarse gravel, fine-coarse sand, fines, [5,20,75], firm, mottled, cobbles.			DG-AP13S-0.5-1		30/60	0.0		
	(4') light yellowish brown (10YR 6/4).			DG-AP13S-3.5-4			0.0		
5	(5') SANDY LEAN CLAY (CL): dark brown (7.5YR 3/3), dry, fine-coarse gravel, fine-coarse sand, fines, [5,30,65], firm, mottled.					12/60	0.0		
	(9') POORLY GRADED SAND (SP): wet, with debris, 5" hard and solid, either rock or debris.			DG-AP13S-9.5-10			0.0		
10	(10') Boring terminated.								
15									
20									
25									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 8040 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER JR **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2081837.18
EASTING 6010250.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AP14 **SHEET** 1 **OF** 1
START DATE 1/22/2019
FINISH DATE 1/22/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619

ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SANDY SILT (ML): dark yellowish brown (10YR 4/6), moist, fine gravel, fine-medium sand, fines, [5,45,50], low plasticity, soft.			DG-AP14S-0.5-1		60/60	9.5		0.0-2.0' compressed
				DG-AP14S-3.5-4			3.0		
	(4') SILTY SAND (SM): dark yellowish brown (10YR 4/4), moist, fine gravel, fine-medium sand, fines, [5,55,40].								
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 7822 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2081829.62
EASTING 6010104.5
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AQ2 **SHEET** 1 **OF** 1
START DATE 12/17/2018 **ELEVATION DATA**
FINISH DATE 12/17/2018 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 15 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): dark grayish brown (10YR 4/2), moist, medium-grained, [20,60,20].			DG-AQ2S-0.5-1			2.3		
	(2.3') SILTY GRAVEL with SAND (GM): very dark grayish brown (10YR 3/2), wet, fine, [60,20,20].					35/60			
				DG-AQ2S-3.5-4			4.1		
5	(6.3') dark gray (10YR 4/1), dry.								
				DG-AQ2S-7.5-8		16/60			
	(8.3') LEAN CLAY (CL): dark greenish gray (4/10Y), moist, [0,0,100], medium plasticity, soft.								
10									
						46/60			
15	(15') Boring terminated.								
20									
25									

CONTRACTOR PeneCore **NORTHING** 2081737.18
EQUIPMENT Geoprobe **EASTING** 6011350.57
DRILL MTHD Direct Push **ANGLE** Vertical
DIAMETER 3 inches
LOGGER KB **REVIEWER** G. Thrupp, P.G. No. 5849

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AQ3 **SHEET** 1 **OF** 1
START DATE 12/19/2019 **ELEVATION DATA**
FINISH DATE 12/19/2019 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 10 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') GRASS/ORGANICS (OL).								
	(0.2') SILTY SAND (SM): very dark brown (10YR 2/2), moist, fine-coarse sand, non-plastic fines, [0,75,25]. (0.5') olive gray (5Y 4/2), fine gravel, [10,75,15].			DG-AQ3S-0.5-1			0.0		
	(2') SILTY SAND with GRAVEL (SM): yellowish-brown (10YR 5/6), fine-coarse gravel, fine-coarse sand, nonplastic fines, [20,60,20].					42/60			
	(2.7') GRAVELLY LEAN CLAY with SAND (CL): grayish brown (10YR 5/2), wet, fine-coarse gravel, fine-coarse sand, plastic fines, [30,20,50].			DG-AQ3S-3.5-4			0.0		
5	(5') same as above.								
	(7') WELL-GRADED GRAVEL (GW): dark gray (10YR 4/1), wet, fine-coarse gravel, coarse sand, fines, [90,5,5].					42/60			
	(7.5') FAT CLAY (CH): dark gray (4/N), wet, trace fine sand, [0,tr,100], high plasticity, soft, shell pieces, Bay Mud.								no recovery from 8.5-10'
10	(10') Boring terminated.								
15									
20									
25									

CONTRACTOR PeneCore **NORTHING** 2081737.18
EQUIPMENT Geoprobe 8040 DT **EASTING** 6011250.57
DRILL MTHD Direct Push **ANGLE** Vertical
DIAMETER 3 inches
LOGGER BL **REVIEWER** G. Thrupp, P.G. No. 5849

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AQ4 **SHEET** 1 **OF** 1
START DATE 12/17/2018
FINISH DATE 12/17/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 15 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND (SM): dark gray (10YR 4/1), moist, medium-fine at 2', [5,75,20].			DG-AQ4S-0.5-1			2.5		
	(2') black (10YR 2/1).					48/60			red brick
	(3.5') SILTY GRAVEL (GM): dark yellowish-brown (10YR 4/4), wet, coarse gravel, [70,0,30], pieces to cobble size.			DG-AQ4S-3.5-4			1.5		
5	(5') SILTY SAND (SM): yellowish-brown (10YR 5/6), wet, fine-grained, [0,80,20].								
	(7') SILTY SAND with GRAVEL (SM): light gray (10YR 7/2), dry, fine-grained, [20,50,30].					28/60			
	(9') LEAN CLAY (CL): very dark greenish gray (3/10Y), wet, [0,0,100], medium plasticity, soft.			DG-AQ4S-9-9.5					
10						25/60			
15	(15') Boring terminated.								
20									
25									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER KB
REVIEWER G. Thrupp, P.G. No. 5849

NORTHING 2081737.18
EASTING 6011150.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AQ5 **SHEET** 1 **OF** 1
START DATE 12/17/2018 **ELEVATION DATA**
FINISH DATE 12/17/2018 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 5 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') POORLY GRADED SAND with SILT (SP-SM): grayish brown (10YR 5/2), moist-wet, fine-coarse gravel, fine-medium sand, fines, [5,85,10].			DG-AQ5S-0.5-1			2.4		
	(1') gray (2.5Y 5/1), wet, from 1.0-1.4'.								
	(1.4') 2" layer of organics.					60/60			
	(3') gray (2.5Y 5/1), wet, from 3.0-4.0'.								
	(3.5') 2" layer of bark, organics.			DG-AQ5S-3.5-4			1.7		
	(4') WELL-GRADED GRAVEL with SILT (GW-GM): grayish brown (10YR 5/2), wet, fine-coarse gravel, fine-medium sand, fines, [85,5,10].								water level
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore **NORTHING** 2081737.18
EQUIPMENT Geoprobe 6610 DT **EASTING** 6011050.57
DRILL MTHD Direct Push **ANGLE** Vertical
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AQ6 **SHEET** 1 **OF** 1
START DATE 12/21/2018
FINISH DATE 12/21/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619

ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 15 ft bgs
DEPTH TO WATER 10 ft

DEPTH (ft)	MATERIAL DESCRIPTION	SAMPLE ID	RECOVERY	PID READING (ppm)	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): dark brown (10YR 3/3), moist, coarse gravel, medium grained sand, [20,60,20].	DG-AQ6S-0.5-1		0.2	
	(1') WELL-GRADED GRAVEL with SAND (GW): dark gray (10YR 4/1), moist, fine gravel, coarse sand, [80,20,0].		40/60		
	(2.5') SILTY SAND (SM): dark gray (10YR 4/1), moist, fine sand, [0,80,20].	DG-AQ6S-3.5-4		0.4	
	(3.7') SILT (ML): dark gray (10YR 4/1), moist, [0,10,90], low plasticity, hard.				
5					boring diameter changed from 3" to 1.5" from 5-15'
	(7') very dark grayish brown (10YR 3/2), dry.		27/60		
10	(10') SILTY GRAVEL (GM): dark gray (10YR 4/1), wet, fine gravel, [70,10,20].	DG-AQ6S-11-11.5		0.3	
	(13.7') LEAN CLAY (CL): dark gray (10YR 4/1), moist, [0,0,100], medium plasticity, soft.				
15	(15') Boring terminated.				
20					
25					

CONTRACTOR PeneCore
EQUIPMENT Geoprobe
DRILL MTHD Direct Push
DIAMETER 3/1.5 inches
LOGGER KB
REVIEWER G. Thrupp, P.G. No. 5849

NORTHING 2081737.18
EASTING 6010950.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AQ7 **SHEET** 1 **OF** 1
START DATE 1/30/2019
FINISH DATE 1/30/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 15 ft bgs
DEPTH TO WATER 5 ft

DEPTH (ft)	MATERIAL DESCRIPTION	SAMPLE ID	RECOVERY	PID READING (ppm)	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): dark grayish brown (10YR 4/2), moist, fine gravel, fine-medium sand, fines, [20,55,25].	DG-AQ7S-0.5-1	60/60	0.1	1245-1300: 1st run - 0 recovery for the 5-10' interval, re-drilled; 0.0-2.5' compressed
		DG-AQ7S-3.5-4		0.9	
	(4') trace glass and ceramic fragments from 4.0-5.0'.				
5	(5') CLAYEY GRAVEL (GC): dark gray (10YR 4/1), wet, fine-coarse gravel, fine-coarse sand, fines, [50,15,35].				water level
10	(12') FAT CLAY (CH): very dark greenish gray (10GY 3/1), moist, fines, [0,0,100], high plasticity, firm, Bay Mud.				
				1.1	no deep sample taken due to prevalent gravel
15	(15') Boring terminated.				
20					
25					

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 8040 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF
REVIEWER G. Thrupp, P.G. No. 5849

NORTHING 2081737.18
EASTING 6010850.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AQ8 **SHEET** 1 **OF** 1
START DATE 12/21/2018
FINISH DATE 12/21/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619

ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 15 ft bgs
DEPTH TO WATER 0.8 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): very dark brown (10YR 2/2), moist, fine gravel, fine sand, [20,60,20].		▼	DG-AQ8S-0.5-1		36/60	1.6		
	(3.3') SILTY GRAVEL with SAND (GM): very dark brown (10YR 2/2), moist, fine gravel, medium sand, [60,20,20].			DG-AQ8S-3.5-4			1.9		
5	(6.7') SILTY SAND (SM): yellowish brown (10YR 5/6), dry, fine sand, [0,80,20].					15/60			
	(8.3') SILTY GRAVEL (GM): dark gray (10YR 4/1), wet, fine gravel, [80,0,20].			DG-AQ8S-8-8.5					
10	(10.7') LEAN CLAY (CL): dark gray (10YR 4/1), moist, [0,0,100], medium plasticity, soft.					43/60			
15	(15') Boring terminated.								
20									
25									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER KB
REVIEWER G. Thrupp, P.G. No. 5849

NORTHING 2081737.18
EASTING 6010750.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AQ9 **SHEET** 1 **OF** 1
START DATE 1/30/2019
FINISH DATE 1/30/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619

ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 10 ft bgs
DEPTH TO WATER 2.9 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') WELL-GRADED SAND with GRAVEL (SW): dark gray (10YR 4/1), moist, fine gravel, coarse sand, [20,75,5].			DG-AQ9S-0.5-1			1.0		
	(1.3') POORLY GRADED GRAVEL with SAND (GP): gray (10YR 6/1), moist, fine gravel, [80,15,5].								
	(2.2') POORLY GRADED SAND with SILT (SP-SM): dark gray (10YR 4/1), moist, medium sand, [0,85,15].		▼			50/60			
	(3.3') SILTY GRAVEL with SAND (GM): very dark brown (10YR 2/2), wet, fine gravel to cobbles, [50,15,35], 10% trash debris.			DG-AQ9S-3.5-4			2.4		
5									
						23/60			
	(8.2') POORLY GRADED SAND with SILT (SP-SM): gray (10YR 5/1), wet, coarse sand, [0,80,20].								
	(8.9') FAT CLAY (CH): gray (10YR 5/1), wet, [0,0,100], high plasticity, soft.								
10	(10') Boring terminated.								
15									
20									
25									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 6600
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NR **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2081737.18
EASTING 6010650.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AQ10 **SHEET** 1 **OF** 1
START DATE 2/1/2019
FINISH DATE 2/1/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 10 ft bgs
DEPTH TO WATER 3.6 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY GRAVEL with SAND (GM): very dark brown (10YR 2/2), moist, fine gravel, coarse sand, [50,15,35].			DG-AQ10S-0.5-1		40/60	8.5		
			▼	DG-AQ10S-3.5-4			4.0		
5									low recovery
	(7.4') FAT CLAY (CH): gray (10YR 5/1), [0,0,100], high plasticity, soft, Bay Mud.					31/60			Bay Mud
10	(10') Boring terminated.								
15									
20									
25									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 6600
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NR
REVIEWER G. Thrupp, P.G. No. 5849

NORTHING 2081737.18
EASTING 6010550.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AQ11 **SHEET** 1 **OF** 1
START DATE 1/30/2019
FINISH DATE 1/30/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 10 ft bgs
DEPTH TO WATER 5 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): dark greenish gray (10Y 4/1), moist, fine gravel, medium-coarse sand, fines, [15,55,30].			DG-AQ11S-0.5-1		42/60	0.3		0.0-2.5' compressed
				DG-AQ11S-3.5-4			1.7		
5	(4') GRAVELLY SILT (ML): black (10YR 2/1), moist, fine gravel, medium-coarse sand, fines, [40,10,50], low plasticity, soft, sticky, luster, no odor, trace glass. (5') wet.		▼						water level
							2.6		
	(6.5') FAT CLAY (CH): very dark greenish gray (10GY 3/1), moist, fines, [0,0,100], high plasticity, firm, Bay Mud.					60/60			did not collect deeper sample; Bay Mud encountered at 6.5' bgs
10	(10') Boring terminated.								
15									
20									
25									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 8040 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2081737.18
EASTING 6010450.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AQ12 **SHEET** 1 **OF** 1
START DATE 1/21/2019 **ELEVATION DATA**
FINISH DATE 1/21/2019 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 4 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') GRAVELLY FAT CLAY with SAND (CH): yellowish brown (10YR 5/4), moist, fine-coarse gravel, fine-medium sand, fines, [30,25,45], high plasticity, firm.			DG-AQ12S-0.5-1		48/48	0.5		drilled to 4', hit refusal with 1.5" casing; redrilled to 4' and hit refusal again but used 1.5" casing; final redrill with 3" casing but hit refusal at 4'; 0.0-0.5' compressed
	(3.5') decrease in gravel from 3.5-4.0'.			DG-AQ12S-3.5-4			0.7		
	(4') Boring terminated.								
5									
10									

CONTRACTOR PeneCore **NORTHING** 2081722.74
EQUIPMENT Geoprobe 7822 DT **EASTING** 6010310
DRILL MTHD Direct Push **ANGLE** Vertical
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AQ13 **SHEET** 1 **OF** 1
START DATE 1/21/2019 **ELEVATION DATA**
FINISH DATE 1/21/2019 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 15 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** 9 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') CONCRETE.								
	(0.5') GRAVELLY FAT CLAY with SAND (CH): yellowish brown (10YR 5/4), moist, fine-coarse gravel, fine-coarse sand, fines, [35,20,45], high plasticity, firm.			DG-AQ13S-0.5-1		60/60	0.5		
	(3.5') SANDY SILT (ML): yellowish brown (10YR 5/4), moist, fine sand, fines, [0,40,60], low plasticity, soft.			DG-AQ13S-3.5-4			0.5		
5	(4.5') 2" lens of concrete and gravel.								
	(6') SILTY GRAVEL with SAND (GM): very dark grayish brown (10YR 3/2), fine-coarse gravel, fine sand, fines, [40,25,35], 5% ceramic and glass debris.					60/60			
	(8') very dark grayish brown (10YR 3/2), from 8.0-9.0'.								
	(9') dark reddish brown (2.5YR 3/4), wet, lens of coarse sand introduced to facies from 9.0-10.0'.		▼						water level
10				DG-AQ13S-11.5-12			1.4		
	(12') FAT CLAY (CH): dark greenish gray (5GY 4/1), moist, fines, [0,0,100], high plasticity, firm, Bay Mud.					60/60			Bay Mud at 12.0', end drilling at 15.0'
15	(15') Boring terminated.								
20									
25									

CONTRACTOR PeneCore **NORTHING** 2081737.18
EQUIPMENT Geoprobe 7822 DT **EASTING** 6010250.57
DRILL MTHD Direct Push **ANGLE** Vertical
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AR2 **SHEET** 1 **OF** 1
START DATE 12/17/2018
FINISH DATE 12/17/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND (SM): very dark gray (10YR 3/1), moist, fine-grained, [0,80,20].			DG-AR-2S-0.5-1			1.8		
	(2.6') SILTY SAND with GRAVEL (SM): very dark gray (10YR 3/1), wet, fine-medium grained with depth, [30,50,20].			DG-AR-2S-3.5-4		48/60	1.1		
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER KB
REVIEWER G. Thrupp, P.G. No. 5849

NORTHING 2081637.18
EASTING 6011350.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AR3 **SHEET** 1 **OF** 1
START DATE 12/14/2018 **ELEVATION DATA**
FINISH DATE 12/14/2018 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 5 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') WELL-GRADED SAND with SILT and GRAVEL (SW-SM): dark yellowish-brown (10YR 3/4), dry, fine-coarse gravel, fine-coarse sand, fines, [15,75,10].			DG-AR3S-0.5-1			0.4		
						45/60			
	(3') wet.								
	(3.5') dry.			DG-AR3S-3.5-4			0.3		
	(4') wet.								
	(4.5') black (10YR 2/1), dry.								
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore **NORTHING** 2081637.18
EQUIPMENT Geoprobe 6600 **EASTING** 6011250.57
DRILL MTHD Direct Push **ANGLE** Vertical
DIAMETER 3 inches
LOGGER KJ **REVIEWER** G. Thrupp, P.G. No. 5849

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AR4 **SHEET** 1 **OF** 1
START DATE 12/17/2018
FINISH DATE 12/17/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619

ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND (SM): dark gray (10YR 4/1), moist, fine-medium grained with depth, [5,75,20].			DG-AR4S-0.5-1			1.7		
						40/60			large red brick burnt wood pieces
	(3.1') SILTY GRAVEL with SAND (GM): black (10YR 2/1) and at 3.2' brown (10YR 5/3), wet, fine gravel, [60,20,20].			DG-AR4S-3.5-4			1.7		
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER KB
REVIEWER G. Thrupp, P.G. No. 5849

NORTHING 2081637.18
EASTING 6011150.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AR5 **SHEET** 1 **OF** 1
START DATE 12/20/2019
FINISH DATE 12/20/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619

ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 10 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') WELL-GRADED SAND (SW): dark olive gray (5Y 3/2), moist, fine-medium sand, [0,100,tr].			DG-AR5S-0.5-1					poor recovery on first hole; step out and re-drill
	(1.2') rock pieces/gravel.								
	(2') black (2.5Y 2.5/1).								
	(2.25') 2" red brick debris.					42/60			
	(2.5') WELL-GRADED GRAVEL (GW): light olive brown (2.5Y 5/4), wet, fine-coarse gravel, fine-coarse sand, fines, [80,20,tr], angular gravel and coarse sand.			DG-AR5S-3.5-4					
	(3.25') WELL-GRADED SAND with CLAY (SW-SC): [75,15,10], same as above.								
5	(5') WELL-GRADED GRAVEL (GW): light olive brown (2.5Y 5/4), wet, fine-coarse gravel, fine-coarse sand, fines, [80,20,tr], angular gravel and coarse sand.								
	(6.5') FAT CLAY (CH): dark greenish gray (10Y 4/1), wet, [0,0,100], high plasticity, soft.					42/60			
	(7.5') shell pieces.								
10	(10') Boring terminated.								
15									
20									
25									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 8040 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER BL **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2081637.18
EASTING 6011050.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AR6 **SHEET** 1 **OF** 1
START DATE 12/21/2018
FINISH DATE 12/21/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND (SM): dark brown (10YR 3/3), moist, medium sand, [10,70,20].			DG-AR6S-0.5-1			0.4		
	(1') WELL-GRADED GRAVEL with SAND (GW): very dark gray (10YR 4/1), moist, fine gravel, coarse sand, [80,20,0].								
	(2.2') SILTY SAND (SM): very dark grayish brown (10YR 3/2), fine sand, [0,80,20].					44/60			
	(3.4') SILT (ML): yellowish brown (10YR 5/6), moist, [0,0,100], low plasticity, hard. (3.5') greenish gray (5/10Y).			DG-AR6S-3.5-4			0.5		
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER KB
REVIEWER G. Thrupp, P.G. No. 5849

NORTHING 2081637.18
EASTING 6010950.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AR7 **SHEET** 1 **OF** 1
START DATE 12/19/2018 **ELEVATION DATA**
FINISH DATE 12/19/2018 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 5 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND (SM): dark brown (10YR 3/3), moist, fine-coarse gravel, fine-medium sand, fines, [10,70,20], 3" layer of poorly graded gravel at 2'.			DG-AR7S-0.5-1			3.9		0.0-1.0' compressed
	(2') POORLY GRADED SAND with SILT (SP-SM): dark gray (10YR 4/1), moist, fine gravel, medium-coarse sand, fines, [10,80,10].					60/60			
				DG-AR7S-3.5-4			4.0		
	(4.5') black (10YR 2/1), 1" layer.								
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore **NORTHING** 2081637.18
EQUIPMENT Geoprobe 6610 DT **EASTING** 6010850.57
DRILL MTHD Direct Push **ANGLE** Vertical
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AR8 **SHEET** 1 **OF** 1
START DATE 12/21/2018
FINISH DATE 12/21/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER 2.8 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') WELL-GRADED GRAVEL with SAND (GW): dark grayish brown (10YR 4/2), moist, fine gravel, coarse sand, [80,20,0].			DG-AR8S-0.5-1			1.5		glass throughout
	(1.8') SILTY SAND (SM): very dark grayish brown (10YR 3/2), moist, fine sand, [0,80,20].		▼			35/60			
	(3.4') SILTY GRAVEL with SAND (GM): dark brown (10YR 3/3), moist-wet at 2.8', fine gravel, medium sand, [60,20,20].			DG-AR8S-3.5-4			2.0		
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER KB
REVIEWER G. Thrupp, P.G. No. 5849

NORTHING 2081637.18
EASTING 6010750.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AR9 **SHEET** 1 **OF** 1
START DATE 1/9/2019
FINISH DATE 1/9/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 10 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): dark grayish brown (10YR 4/2), moist, fine-coarse gravel, fine-medium sand, fines, [20,45,35].			DG-AR9S-0.5-1			1.6		0.0-1.0' compressed
	(3') 5" lens of silt, yellow (10YR 7/8).			DG-AR9S-3.5-4		60/60	2.7		
5	(5') FAT CLAY (CH): very dark greenish gray (10GY 3/1), moist, fines, [0,0,100], high plasticity, firm, brick cobble at 5.0', Bay Mud.					60/60			no deeper sample taken; Bay Mud at 5.0' bgs
10	(10') Boring terminated.								
15									
20									
25									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 8040 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF
REVIEWER G. Thrupp, P.G. No. 5849
NORTHING 2081637.18
EASTING 6010650.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AR10 **SHEET** 1 **OF** 1
START DATE 1/31/2019 **ELEVATION DATA**
FINISH DATE 1/31/2019 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 5 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** 1.8 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY GRAVEL with SAND (GM): dark gray (10YR 4/1), moist, fine gravel, [50,20,30].			DG-AR10S-0.5-1			3.6		
	(0.7') POORLY GRADED GRAVEL (GP): gray (10YR 5/1), moist, fine gravel, [90,5,5].		▼						
	(2.1') SILTY GRAVEL with SAND (GM): very dark gray (10YR 3/1), wet, cobbles, [60,10,30], 25% trash debris, oily sheen.					42/60			
				DG-AR10S-3.5-4			3.6		
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 6600
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NR **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2081637.18
EASTING 6010550.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AR11 **SHEET** 1 OF 1
START DATE 1/30/2019 **ELEVATION DATA**
FINISH DATE 1/30/2019 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 5 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** 4.2 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') GRAVELLY SILT (ML): very dark brown (10YR 2/2), moist, coarse gravel to cobbles, [30,5,65].			DG-AR11S-0.5-1			1.7		
	(1') CONCRETE.								
	(1.3') SILTY GRAVEL with SAND (GM): very dark brown (10YR 2/2), moist to wet at bottom, coarse gravel to cobbles, [45,15,40], 15% glass debris.		▼			47/60			
				DG-AR11S-3.5-4			4.3		
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore **NORTHING** 2081637.18
EQUIPMENT Geoprobe 6600 **EASTING** 6010450.57
DRILL MTHD Direct Push **ANGLE** Vertical
DIAMETER 3 inches
LOGGER NR **REVIEWER** G. Thrupp, P.G. No. 5849

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AR12 **SHEET** 1 **OF** 1
START DATE 1/21/2019 **ELEVATION DATA**
FINISH DATE 1/21/2019 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 5 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') GRAVELLY FAT CLAY (CH): dark grayish brown (10YR 4/2), moist, fine-coarse gravel, fine sand, fines, [40,10,50], high plasticity, firm, capped by 2" of concrete.								
	(0.5') FAT CLAY (CH): yellowish brown (10YR 5/4), moist, fine gravel, fine sand, fines, [5,10,85], high plasticity, firm.			DG-AR12S-0.5-1			1.7		
						60/60			
	(3') SILTY SAND with GRAVEL (SM): dark grayish brown (10YR 4/2), moist, fine-coarse gravel, fine sand, fines, [20,45,35], 5% ceramic and glass debris.			DG-AR12S-3.5-4			0.9		
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore **NORTHING** 2081637.18
EQUIPMENT Geoprobe 7822 DT **EASTING** 6010350.57
DRILL MTHD Direct Push **ANGLE** Vertical
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AR13 **SHEET** 1 **OF** 1
START DATE 1/23/2019
FINISH DATE 1/23/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 10 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') ASPHALT.								
	(0.5') SANDY LEAN CLAY (CL): dark brown (10YR 3/3), dry, fine-coarse gravel, fine-coarse sand, fines, [10,25,65], medium plasticity, firm, wood and ceramic debris, mottled.			DG-AR13S-0.5-1		45/60	0.3		
				DG-AR13S-3.5-4			0.0		
	(4') POORLY GRADED SAND (SP): dark reddish brown (5YR 3/3), dry-moist, fine gravel, medium-coarse sand, fines, [5,90,5], mottled, ceramic and metallic debris of various color.						0.2		
5						24/60	0.2		
	(9.5') wet.			DG-AR13S-9.5-10			0.1		
10	(10') Boring terminated.								
15									
20									
25									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 8040 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER JR **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2081637.18
EASTING 6010250.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AS2 **SHEET** 1 **OF** 1
START DATE 12/17/2018
FINISH DATE 12/17/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619

ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND (SM): very dark gray (10YR 3/1), moist, fine-grained, [0,80,20].			DG-AS2S-0.5-1		44/60	3.8		
	(2.8') SILTY SAND with GRAVEL (SM): yellowish-brown (10YR 5/4), moist, medium-coarse grained, [20,60,20].			DG-AS2S-3.5-4			2.7		
	(4.1') SILTY GRAVEL with SAND (GM): dark grayish brown (10YR 4/2), wet, fine-coarse gravel with depth, [60,20,20].								
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER KB
REVIEWER G. Thrupp, P.G. No. 5849

NORTHING 2081537.18
EASTING 6011350.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AS3 **SHEET** 1 **OF** 1
START DATE 12/20/2019
FINISH DATE 12/20/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619

ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 10 ft bgs
DEPTH TO WATER 5 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): very dark brown (10YR 2/2), moist, fine gravel, fine-coarse sand, [15,60,25].			DG-AS3S-0.5-1			0.0		
	(0.5') olive gray (5Y 4/2).								
	(2') SILTY SAND (SM): olive gray (5Y 4/2), moist, fine gravel, fine-coarse sand, fines, [5,75,20].					48/60			
				DG-AS3S-3.5-4			0.0		
5	(5') wet.		▼	DG-AS3S-4.5-5					
	(5.5') CLAYEY SAND with GRAVEL (SC): light yellowish-brown (2.5Y 6/4), fine gravel, fine-coarse sand, fines, [25,55,20].								
	(6') 3" of dark wood debris.								
	(7') brown (7.5YR 5/4).								
	(7.5') broken rock, cobble size 2.5" x 2".					42/60	5.2		
	(8') CLAYEY GRAVEL with SAND (GC): olive gray (5Y 4/2), wet, fine-coarse gravel, coarse sand, plastic fines, [60,20,20].								free product no recovery from 8.5-10'
10	(10') Boring terminated.								
15									
20									
25									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 8040 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER BL **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2081537.18
EASTING 6011250.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AS4 **SHEET** 1 **OF** 1
START DATE 12/17/2018
FINISH DATE 12/17/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND (SM): very dark gray (10YR 3/1), moist, fine-medium grained with depth, [0,80,20].			DG-AS4S-0.5-1		40/60	2.5		
	(3') SILTY GRAVEL (GM): yellowish-brown (10YR 5/4), wet, fine-coarse with depth, [70,10,20].			DG-AS4S-3.5-4			1.6		
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER KB
REVIEWER G. Thrupp, P.G. No. 5849

NORTHING 2081537.18
EASTING 6011150.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AS5 **SHEET** 1 **OF** 1
START DATE 12/17/2018
FINISH DATE 12/17/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER 4.5 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILT with SAND (ML): dark grayish brown (10YR 4/2), moist, fine-coarse gravel, fine-medium sand, fines, [5,15,80], non-plastic to low plasticity, very soft, trace roots within upper 1.5'.			DG-AS5S-0.5-1			2.0		0.0-1.5' compressed
	(2') POORLY GRADED SAND with SILT (SP-SM): dark gray (2.5Y 4/1), moist, fine-coarse gravel, fine-medium sand, fines, [5,85,10].					60/60			
	(3') dusky red (5R 3/3), for 2.0".			DG-AS5S-3.5-4			2.0		
	(4') 3" of brick.								
	(4.5') WELL-GRADED GRAVEL with SILT (GW-GM): grayish brown (10YR 5/2), wet, fine-coarse gravel, fine-medium sand, fines, [85,5,10].		▼						water level
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 6610 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2081537.18
EASTING 6011050.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AS6 **SHEET** 1 **OF** 1
START DATE 12/21/2018
FINISH DATE 12/21/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619

ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND (SM): dark brown (10YR 3/3), moist, fine gravel, medium sand, [10,70,20].			DG-AS6S-0.5-1			0.5		
	(1.2') WELL-GRADED GRAVEL with SAND (GW): dark gray (10YR 4/1), fine gravel, coarse sand, [80,20,0].					43/60			
	(2.6') SILTY SAND (SM): brown (10YR 5/3), moist, fine sand, [0,80,20].			DG-AS6S-3.5-4			2.5		
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER KB
REVIEWER G. Thrupp, P.G. No. 5849

NORTHING 2081537.18
EASTING 6010950.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AS7 **SHEET** 1 **OF** 1
START DATE 1/9/2019
FINISH DATE 1/9/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619

ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 10 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): dark gray (10YR 4/1), fine-coarse gravel, fine-coarse sand, fines, [20,50,30].			DG-AS7S-0.5-1			1.3		0.0-1.5' compressed
						60/60			
	(3') approximately 4" of pea gravel.			DG-AS7S-3.5-4			1.0		no groundwater depth recorded-difficult to distinguish between wet and moist due to rain
5	(4.5') 5% glass and ceramic debris from 4.5-6.0'.								
	(6') CLAYEY GRAVEL (GC): greenish gray (5GY 5/1), fine-coarse gravel, medium-coarse sand, fines, [60,5,35].								
						60/60			
	(7.5') FAT CLAY (CH): very dark greenish gray (10GY 3/1), moist, fines, [0,0,100], high plasticity, firm, Bay Mud.								no deeper sample taken; Bay mud at 7.5' bgs
10	(10') Boring terminated.								
15									
20									
25									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 8040 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2081537.18
EASTING 6010850.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AS8 **SHEET** 1 **OF** 1
START DATE 12/21/2018
FINISH DATE 12/21/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619

ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') WELL-GRADED GRAVEL with SAND (GW): dark gray (10YR 4/1), moist, fine gravel, coarse sand, [80,20,0].			DG-AS8S-0.5-1			3.4		
	(0.7') SILTY SAND with GRAVEL (SM): brown (10YR 4/3), moist, coarse gravel, medium sand, [20,60,20].					41/60			red brick; large rock in clay
	(3') POORLY GRADED SAND with SILT (SP-SM): dark yellowish brown (10YR 4/6), moist, fine sand, [0,90,10].			DG-AS8S-3.5-4			2.3		
	(4.3') LEAN CLAY (CL): dark gray (10YR 4/1), moist, [0,0,100], medium plasticity, soft.								
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER KB
REVIEWER G. Thrupp, P.G. No. 5849

NORTHING 2081537.18
EASTING 6010750.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AS9 **SHEET** 1 **OF** 1
START DATE 12/20/2018
FINISH DATE 12/20/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER 3 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') POORLY GRADED SAND with SILT and GRAVEL (SP-SM): dark gray (10YR 4/1), moist, fine-coarse gravel, fine-medium sand, fines, [20,70,10].			DG-AS9S-0.5-1			1.8		0.0-1.0' compressed
	(2') POORLY GRADED GRAVEL (GP): grayish brown (10YR 5/2), moist, fine gravel, medium-coarse sand, fines, [90,5,5].								
	(2.5') SILT (ML): brownish yellow (10YR 6/6), moist, fine sand, fines, [0,5,95], low plasticity, firm.					60/60			
	(3') SILTY SAND with GRAVEL (SM): very dark grayish brown (10YR 3/2), fine-coarse gravel, fine-medium sand, fines, [20,60,20], trace glass and metal fragments.		▼	DG-AS9S-3.5-4			1.8		water level
	(4') POORLY GRADED GRAVEL (GP): grayish brown (10YR 5/2), wet, fine gravel, medium-coarse sand, fines, [90,5,5].								
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 6610 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2081537.18
EASTING 6010650.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AS10 **SHEET** 1 OF 1
START DATE 1/31/2019 **ELEVATION DATA**
FINISH DATE 1/31/2019 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 5 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** 3.9 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY GRAVEL (GM): very dark brown (10YR 2/2), moist, coarse gravel, [50,5,45].			DG-AS10S-0.5-1			2.9		
	(0.7') FAT CLAY (CH): gray (10YR 5/1), moist, [5,5,90], high plasticity, soft.								
	(1.2') SILTY GRAVEL with SAND (GM): very dark brown (10YR 2/2), moist-wet, cobbles, [45,15,40], 10% trash debris.		▼	DG-AS10S-3.5-4		44/60	5.0		
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore **NORTHING** 2081537.18
EQUIPMENT Geoprobe 6600 **EASTING** 6010550.57
DRILL MTHD Direct Push **ANGLE** Vertical
DIAMETER 3 inches
LOGGER NR **REVIEWER** G. Thrupp, P.G. No. 5849

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AS11 **SHEET** 1 **OF** 1
START DATE 1/31/2019 **ELEVATION DATA**
FINISH DATE 1/31/2019 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 10 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** 5 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILT with GRAVEL (ML): very dark grayish brown (10YR 3/2), moist, fine gravel, fine sand, fines, [15,10,75], low plasticity, soft.			DG-AS11S-0.5-1		60/60	0.7		0.0-1.5' compressed
				DG-AS11S-3.5-4			1.2		
5	(4.5') SILTY GRAVEL (GM): very dark grayish brown (10YR 3/2), moist, fine gravel, fine sand, fines, [50,10,40], 10% glass and ceramic debris. (5') wet.		▼						water level
				DG-AS11S-7.5-8		60/60	1.1		
	(9') FAT CLAY (CH): very dark greenish gray (10GY 3/1), moist, fines, [0,0,100], high plasticity, firm, Bay Mud.								
10	(10') Boring terminated.								
15									
20									
25									

CONTRACTOR PeneCore **NORTHING** 2081537.18
EQUIPMENT Geoprobe 8040 DT **EASTING** 6010450.57
DRILL MTHD Direct Push **ANGLE** Vertical
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AS12 **SHEET** 1 OF 1
START DATE 1/21/2019 **ELEVATION DATA**
FINISH DATE 1/21/2019 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 5 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') GRAVELLY FAT CLAY (CH): dark grayish brown (10YR 4/2), moist, fine-coarse gravel, fine sand, fines, [40,10,50], high plasticity, firm, capped by 2" of concrete.			DG-AS12S-0.5-1		60/60	3.2		0.0-0.5' compressed
	(3') SILTY SAND with GRAVEL (SM): dark grayish brown (10YR 4/2), moist, fine-coarse gravel, fine sand, fines, [20,50,30], 5% ceramic and glass debris.			DG-AS12S-3.5-4			1.2		
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore **NORTHING** 2081537.18
EQUIPMENT Geoprobe 7822 DT **EASTING** 6010357.45
DRILL MTHD Direct Push **ANGLE** Vertical
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AT2 **SHEET** 1 **OF** 1
START DATE 12/17/2018
FINISH DATE 12/17/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND (SM): very dark gray (10YR 3/1), moist, fine-medium grained with depth, [10,70,20].			DG-AT2S-0.5-1		48/60	4.0		
	(3.5') SILTY SAND with GRAVEL (SM): very dark gray (10YR 3/1), moist to wet at 3.8', medium-coarse grained, [20,60,20].			DG-AT2S-3.5-4			4.6		cobble
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER KB
REVIEWER G. Thrupp, P.G. No. 5849

NORTHING 2081437.18
EASTING 6011350.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AT3 **SHEET** 1 **OF** 1
START DATE 12/14/2018
FINISH DATE 12/14/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): dark yellowish-brown (10YR 4/6), dry, fine-coarse gravel, fine-coarse sand, fines, [15,70,15].			DG-AT3S-0.5-1			0.8		
	(3') SANDY LEAN CLAY with GRAVEL (CL): dark brown (10YR 3/3), moist, fine-coarse gravel, fine-coarse sand, fines, [15,25,60], low-medium plasticity, soft.			DG-AT3S-3.5-4			0.5		
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 6600
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER KJ **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2081437.18
EASTING 6011250.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AT4 **SHEET** 1 **OF** 1
START DATE 12/17/2018 **ELEVATION DATA**
FINISH DATE 12/17/2018 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 5 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND (SM): very dark gray (10YR 3/1), moist, fine-medium grained, [10,70,20].			DG-AT4S-0.5-1		42/60	1.8		
	(3.3') SILTY GRAVEL with SAND (GM): brownish yellow (10YR 6/6) to yellowish-brown (10YR 5/4), wet, fine gravel, [60,20,20].			DG-AT4S-3.5-4			1.5		
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER KB
REVIEWER G. Thrupp, P.G. No. 5849

NORTHING 2081437.18
EASTING 6011150.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AT5 **SHEET** 1 **OF** 1
START DATE 12/20/2019
FINISH DATE 12/20/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619

ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 15 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): dark brown (7.5YR 3/3), moist, fine gravel, fine-medium sand, fines, [15,70,15].			DG-AT5S-0.5-1			0.1		
	(0.5') WELL-GRADED SAND (SW): dark greenish gray (10Y 4/1), moist, fine-medium sand, [0,95,5]. (1.5') dark reddish brown (5YR 2.5/2), 2" thick. (2').					42/60			2'-15' red brick fragments
				DG-AT5S-3.5-4			0.2		
5	(5') WELL-GRADED GRAVEL (GW): dark gray (5Y 4/1), wet, fine-coarse gravel, coarse sand, trace fines.								broken rock
						24/60			no recovery from 7-10'
10	(10') CLAYEY GRAVEL with SAND (GC): light olive brown (2.5Y 5/4), fine-coarse gravel, fine-coarse sand, fines, [50,20,30].								
	(11') FAT CLAY (CH): dark greenish gray (10Y 4/1), wet, [0,0,100], high plasticity, soft, Bay Mud.					60/60			
15	(15') Boring terminated.								
20									
25									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 8040 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER BL **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2081437.18
EASTING 6011050.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AT6 **SHEET** 1 **OF** 1
START DATE 12/21/2018 **ELEVATION DATA**
FINISH DATE 12/21/2018 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 5 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): dark brown (10YR 3/3), moist, fine gravel, medium sand, [15,65,20].			DG-AT6S-0.5-1			0.2		
	(1.6') WELL-GRADED GRAVEL with SAND (GW): dark gray (10YR 4/1), moist, fine gravel, coarse sand, [80,20,0].					46/60			
	(3') SILTY SAND (SM): dark gray (10YR 4/1), moist, fine sand, [0,80,20].			DG-AT6S-3.5-4			0.9		
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER KB **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2081437.18
EASTING 6010950.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AT7 **SHEET** 1 **OF** 1
START DATE 12/19/2018 **ELEVATION DATA**
FINISH DATE 12/19/2018 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 5 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** 3.5 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') POORLY GRADED GRAVEL with SAND (GP): dark gray (10YR 4/1), moist, fine gravel, medium-coarse sand, fines, [75,20,5].						1.5		0.0-1.5' compressed no sample taken from 0.5-1.0' interval - too gravelly
						60/60			
	(3.5') SILTY GRAVEL (GM): gray (10YR 5/1), wet, fine-coarse gravel, coarse sand, fines, [65,10,25], cobbles present with diameters up to 5".		▼	DG-AT7S-3.5-4			2.9		water level
5	(4.8') SILTY SAND (SM): yellowish-brown (10YR 5/4), wet, fine gravel, medium sand, fines, [5,80,15].								
	(5') Boring terminated.								
10									

CONTRACTOR PeneCore **NORTHING** 2081437.18
EQUIPMENT Geoprobe 6610 DT **EASTING** 6010850.57
DRILL MTHD Direct Push **ANGLE** Vertical
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AT8 **SHEET** 1 **OF** 1
START DATE 12/21/2018 **ELEVATION DATA**
FINISH DATE 12/21/2018 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 5 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): very dark grayish brown (10YR 3/2), moist, coarse gravel, fine sand, [20,60,20].			DG-AT8S-0.5-1			1.1		
	(1.5') WELL-GRADED GRAVEL with SAND (GW): gray (10YR 5/1), moist, fine gravel, coarse sand, [80,20,0].								pink brick; glass throughout
	(2.7') SILTY SAND (SM): dark brown (10YR 3/3), moist, fine sand, [0,80,20].			DG-AT8S-3.5-4			1.0		
	(4') SILTY GRAVEL with SAND (GM): dark brown (10YR 3/3), moist, fine gravel, medium-coarse sand, [60,20,20].								
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER KB
REVIEWER G. Thrupp, P.G. No. 5849

NORTHING 2081437.18
EASTING 6010750.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AT9 **SHEET** 1 **OF** 1
START DATE 1/30/2019
FINISH DATE 1/30/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619

ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 10 ft bgs
DEPTH TO WATER 4.5 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): dark grayish brown (10YR 4/2), moist, fine-coarse gravel, fine-medium sand, fines, [20,50,30].			DG-AT9S-0.5-1		60/60	3.1		0.0-1.5' compressed
	(3.5') GRAVELLY SILT (ML): very dark brown (10YR 2/2), moist, fine gravel, medium-coarse sand, fines, [40,10,50], low plasticity, soft, 10% glass and ceramic debris.		▼	DG-AT9S-3.5-4			3.2		water level
5	(7') FAT CLAY (CH): very dark greenish gray (10GY 3/1), moist, fines, [0,0,100], high plasticity, firm, Bay Mud.								did not collect deeper sample; Bay Mud encountered at 7.0' bgs
10	(10') Boring terminated.								
15									
20									
25									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 8040 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2081437.18
EASTING 6010650.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AT10 **SHEET** 1 **OF** 1
START DATE 1/30/2019
FINISH DATE 1/30/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') GRAVELLY SILT (ML): very dark grayish brown (10YR 3/2), moist, coarse gravel to cobbles, [45,5,50], 20% trash debris.			DG-AT10S-0.5-1			3.0		
	(1.8') SILTY GRAVEL with SAND (GM): white (10YR 8/1), moist, fine gravel, [45,20,35], possibly similar unit to silt in DG-AU9.					44/60			
	(3') SILTY GRAVEL with SAND (GM): very dark brown (10YR 2/2), moist, coarse gravel to cobbles, [45,20,35], 30% trash debris.			DG-AT10S-3.5-4			1.8		
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 6600
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NR
REVIEWER G. Thrupp, P.G. No. 5849

NORTHING 2081437.18
EASTING 6010550.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AT11 **SHEET** 1 **OF** 1
START DATE 1/21/2019 **ELEVATION DATA**
FINISH DATE 1/21/2019 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 5 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') CONCRETE.						4.0		did not sample shallow interval due to concrete/gravel
	(1.5') SILTY SAND (SM): dark grayish brown (10YR 4/2), moist, fine gravel, medium-coarse sand, fines, [10,60,30].								
	(2') brick fragments.								
	(2.5') lens of lean clay (CL), yellowish-brown (10YR 5/4) from 2.5-3.5'.					60/60			
				DG-AT11S-3.5-4			3.8		
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore **NORTHING** 2081437.18
EQUIPMENT Geoprobe 7822 DT **EASTING** 6010450.57
DRILL MTHD Direct Push **ANGLE** Vertical
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AT12 **SHEET** 1 **OF** 1
START DATE 1/23/2019 **ELEVATION DATA**
FINISH DATE 1/23/2019 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 10 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') ASPHALT.								
	(0.5') LEAN CLAY with SAND (CL): strong brown (7.5YR 5/6), dry, fine-coarse sand, fines, [0,15,85], medium plasticity, very hard.			DG-AT12S-0.5-1		45/60	0.5		
	(4') brown (7.5YR 5/2), mottled, oxidized metal debris and nails.			DG-AT12S-3.5-4			0.8 0.2		
5	(5') POORLY GRADED SAND (SP): dark reddish brown (5YR 3/3), dry, medium sand, fines, [0,95,5], mottled, oxidized metal, glass, and ceramic debris and nails.					39/60	0.3 0.0		
10	(10') Boring terminated.			DG-AT12S-9.5-10			0.0		
15									
20									
25									

CONTRACTOR PeneCore **NORTHING** 2081420.68
EQUIPMENT Geoprobe 8040 DT **EASTING** 6010358.83
DRILL MTHD Direct Push **ANGLE** Vertical
DIAMETER 3 inches
LOGGER JR **REVIEWER** G. Thrupp, P.G. No. 5849

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AU2 **SHEET** 1 **OF** 1
START DATE 12/17/2018
FINISH DATE 12/17/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND (SM): very dark gray (10YR 3/1), moist, fine-grained, [10,70,20].			DG-AU2S-0.5-1		40/60	1.3		cobble
	(3.3') SILTY SAND with GRAVEL (SM): dark yellowish-brown (10YR 4/4), moist to wet at 3.2', medium-coarse grained with depth, [30,50,20].			DG-AU2S-3.5-4			0.9		
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER KB
REVIEWER G. Thrupp, P.G. No. 5849

NORTHING 2081337.18
EASTING 6011350.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AU3 **SHEET** 1 **OF** 1
START DATE 12/20/2019 **ELEVATION DATA**
FINISH DATE 12/20/2019 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 15 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') GRASS/ORGANICS (OL).								
	(0.1') SILTY SAND with GRAVEL (SM): very dark brown (10YR 2/2), fine-coarse gravel, fine-coarse sand, fines, [25,55,20]. (1') dark olive gray (5Y 3/2). (1.5') dark brown (10YR 3/3). (2.2') red brick debris with black silt around brick from 2.2-2.7'.			DG-AU3S-0.5-1		42/60	0.0		
	(3') WELL-GRADED SAND (SW): olive gray (5Y 4/2), fine-coarse gravel, fine-coarse sand, fines, [10,85,5].			DG-AU3S-3.5-4			0.0		
5	(5') strong brown (7.5YR 5/6), wet.								
	(5.5') CLAYEY SAND with GRAVEL (SC): strong brown (7.5YR 5/6), fine-coarse gravel, fine-coarse sand, fines, [30,55,15].								
	(7') WELL-GRADED GRAVEL (GW): dark gray (5Y 4/1), wet, fine-coarse gravel, coarse sand, trace fines.					30/60			no recovery from 7.4-10'
10	(10') WELL-GRADED GRAVEL (GW): dark gray (5Y 4/1), wet, fine-coarse gravel, coarse sand, trace fines.					24/60			no recovery from 12-15'
15	(15') Boring terminated.								
20									
25									

CONTRACTOR PeneCore **NORTHING** 2081337.18
EQUIPMENT Geoprobe 8040 DT **EASTING** 6011250.57
DRILL MTHD Direct Push **ANGLE** Vertical
DIAMETER 3 inches
LOGGER BL **REVIEWER** G. Thrupp, P.G. No. 5849

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AU4 **SHEET** 1 **OF** 1
START DATE 12/17/2018
FINISH DATE 12/17/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND (SM): very dark gray (10YR 3/1), moist, fine-grained, [0,80,20].			DG-AU4S-0.5-1		38/60	0.0		
	(2.8') SILTY GRAVEL (GM): brown (10YR 4/3), wet, fine-coarse with depth, [70,10,20].			DG-AU4S-3.5-4			1.2		cobble
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER KB
REVIEWER G. Thrupp, P.G. No. 5849

NORTHING 2081337.18
EASTING 6011150.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AU5 **SHEET** 1 **OF** 1
START DATE 12/17/2018 **ELEVATION DATA**
FINISH DATE 12/17/2018 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 5 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** 4.5 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILT with SAND (ML): dark grayish brown (10YR 4/2), moist, fine-coarse gravel, fine-medium sand, fines, [5,15,80], non-plastic to low plasticity, very soft, trace roots within upper 2'.			DG-AU5S-0.5-1			0.4		
	(1.5') SILTY SAND (SM): dark yellowish-brown (10YR 4/4), dry-moist, fine-coarse gravel, fine-medium sand, fines, [5,75,20].								
	(2.5') grayish brown (10YR 5/2), from 2.5-3.0'.					60/60			
				DG-AU5S-3.5-4			1.1		
	(4.5') wet, from 4.5-5.0'.		▼						water level
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore **NORTHING** 2081337.18
EQUIPMENT Geoprobe 6610 DT **EASTING** 6011050.57
DRILL MTHD Direct Push **ANGLE** Vertical
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AU6 **SHEET** 1 **OF** 1
START DATE 12/21/2018
FINISH DATE 12/21/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND (SM): dark brown (10YR 3/3), moist, fine gravel, medium sand, [10,70,20].			DG-AU6S-0.5-1			0.3		
	(0.7') WELL-GRADED GRAVEL with SAND (GW): dark gray (10YR 4/1), fine gravel, coarse sand, [80,20,0].					40/60			
	(3.1') SILTY SAND with GRAVEL (SM): very dark grayish brown (10YR 3/2), coarse gravel, medium sand, [20,60,20].			DG-AU6S-3.5-4			1.1		
	(4.1') SILTY SAND (SM): dark yellowish brown (10YR 4/6), moist, fine sand, [0,80,20].								
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER KB
REVIEWER G. Thrupp, P.G. No. 5849

NORTHING 2081337.18
EASTING 6010950.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AU7 **SHEET** 1 **OF** 1
START DATE 1/9/2019
FINISH DATE 1/9/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 10 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): dark gray (10YR 4/1), moist, fine-coarse gravel, medium-coarse sand, fines, [20,50,30].			DG-AU7S-0.5-1			2.7		0.0-1.0' compressed
	(2.5') 5" of pea gravel.					60/60			
	(3.5') 5% ceramic debris from 3.5-4.5'.			DG-AU7S-3.5-4			2.9		
5	(5') CLAYEY GRAVEL (GC): greenish gray (5GY 5/1), moist, fine-coarse gravel, medium-coarse sand, fines, [55,5,40].								
	(6.5') FAT CLAY (CH): very dark greenish gray (10GY 3/1), moist, fines, [0,0,100], high plasticity, firm, Bay Mud.								no deeper sample taken; Bay Mud at 6.5' bgs
10	(10') Boring terminated.								
15									
20									
25									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 8040 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF
REVIEWER G. Thrupp, P.G. No. 5849

NORTHING 2081337.18
EASTING 6010850.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AU8 **SHEET** 1 **OF** 1
START DATE 12/21/2018
FINISH DATE 12/21/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): very dark grayish brown (10YR 3/2), fine gravel, fine sand, [20,60,20].			DG-AU8S-0.5-1			0.8		wood pieces in top few"
	(2.1') coarse gravel.					30/60			
				DG-AU8S-3.5-4			1.6		
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER KB
REVIEWER G. Thrupp, P.G. No. 5849

NORTHING 2081337.18
EASTING 6010750.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AU9 **SHEET** 1 **OF** 1
START DATE 1/30/2019
FINISH DATE 1/30/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') GRAVELLY SILT (ML): very dark brown (10YR 2/2), moist, coarse gravel, [15,5,80], some organics.			DG-AU9S-0.5-1			0.9		poor recovery on first run; redrilled and still got fairly poor recovery; drilled AU9 instead of AV9; this was??; 1.0-3.0' compressed
	(1') SILT (ML): white (10YR 8/1), moist, [0,5,95], non-plastic, same unit as was encountered as DG-AW9 (presumed).								
	(2') GRAVELLY SILT with SAND (ML): very dark grayish brown (10YR 3/2), moist, [35,15,50], non-plastic, 10% glass, plastic, and ceramic debris.					42/60			
				DG-AU9S-3.5-4			1.4		
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 6600
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NR
REVIEWER G. Thrupp, P.G. No. 5849
NORTHING 2081337.18
EASTING 6010650.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AU10 **SHEET** 1 **OF** 1
START DATE 1/30/2019 **ELEVATION DATA**
FINISH DATE 1/30/2019 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 5 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') GRAVELLY SILT with SAND (ML): very dark brown (10YR 2/2), moist, cobbles to fine gravel, [35,20,45], 30% trash debris.			DG-AU10S-0.5-1		52/60	0.2		
				DG-AU10S-3.5-4			0.6		
	(4.1') GRAVELLY SILT with SAND (ML): black (10YR 2/1), moist, coarse gravel to cobbles, [30,20,50], most of gravel is trash debris, 40% of total soil unit.								
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore **NORTHING** 2081337.18
EQUIPMENT Geoprobe 6600 **EASTING** 6010550.57
DRILL MTHD Direct Push **ANGLE** Vertical
DIAMETER 3 inches
LOGGER NR **REVIEWER** G. Thrupp, P.G. No. 5849

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AU11 **SHEET** 1 **OF** 1
START DATE 1/23/2019 **ELEVATION DATA**
FINISH DATE 1/23/2019 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 10 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') ASPHALT.								
	(0.5') SANDY LEAN CLAY with GRAVEL (CL): yellowish brown (10YR 5/4), dry, fine-coarse gravel, fine-coarse sand, fines, [20,25,55], medium plasticity, stiff.			DG-AU11S-0.5-1			0.0		
						30/60	0.0		
				DG-AU11S-3.5-4			0.0		
	(4.5') 6" brick, construction material.								
5	(5') SANDY SILT (ML): very dark brown (10YR 2/2), moist-wet, fine gravel, fine-coarse sand, fines, [5,35,60], low plasticity, soft, mottled.						0.2		
						15/60	0.0		
	(9') black (10YR 2/1), moist, [0,40,60], mottled, glass debris.								
				DG-AU11S-9.5-10			0.5		
10	(10') Boring terminated.								
15									
20									
25									

CONTRACTOR PeneCore **NORTHING** 2081334.43
EQUIPMENT Geoprobe 8040 DT **EASTING** 6010470.52
DRILL MTHD Direct Push **ANGLE** Vertical
DIAMETER 3 inches
LOGGER JR **REVIEWER** G. Thrupp, P.G. No. 5849

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AV2 **SHEET** 1 **OF** 1
START DATE 2/1/2019
FINISH DATE 2/1/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER 3.8 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY GRAVEL with SAND (GM): very dark gray (10YR 3/1), moist, cobbles, [50,15,35].								
	(0.5') WELL-GRADED SAND (SW): very dark gray (10YR 3/1), moist, fine-medium sand, [90,5,5].			DG-AV2S-0.5-1			1.8		
	(2.4') SILTY GRAVEL with SAND (GM): dark brown (10YR 3/3), moist, cobbles, [70,10,20], 10% trash debris.					53/60			
	(3.4') LEAN CLAY with GRAVEL (CL): light yellowish brown (10YR 6/4), wet, [15,0,85], low-medium plasticity, very firm.		▼	DG-AV2S-3.5-4			2.6		
	(4.3') SILTY GRAVEL with SAND (GM): light gray (10YR 7/1), wet, cobbles, [45,35,20].								
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 6600
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NR **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2081237.18
EASTING 6011350.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AV3 **SHEET** 1 **OF** 1
START DATE 2/1/2019
FINISH DATE 2/1/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER 4.4 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY GRAVEL with SAND (GM): very dark brown (10YR 2/2), moist, coarse gravel to cobbles, coarse sand, [50,20,30].			DG-AV3S-0.5-1			4.2		
	(0.6') POORLY GRADED SAND (SP): dark gray (10YR 4/1), moist, fine sand, [5,90,5].								
	(1.2') SILTY GRAVEL with SAND (GM): dark brown (10YR 3/3), moist, coarse gravel, coarse sand, [50,20,30].								
	(1.9') GRAVELLY LEAN CLAY with SAND (CL): dark yellowish brown (10YR 3/4), moist, coarse gravel to cobbles, coarse sand, [25,10,65], low plasticity, very hard.					46/60			
	(3.1') SILTY GRAVEL with SAND (GM): dark gray (10YR 4/1), wet, coarse gravel to cobbles, coarse sand, [45,25,30].		▼	DG-AV3S-3.5-4			2.6		
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 6600
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NR
REVIEWER G. Thrupp, P.G. No. 5849

NORTHING 2081237.18
EASTING 6011250.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AV4 **SHEET** 1 OF 1
START DATE 12/17/2018
FINISH DATE 12/17/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 15 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND (SM): very dark gray (10YR 3/1), moist, fine-grained, [0,80,20].			DG-AV4S-0.5-1		41/60	1.2		
	(3.3') SILTY GRAVEL with SAND (GM): brown (10YR 4/3), wet, fine gravel, [60,20,20].			DG-AV4S-3.5-4			2.0		cobble
5									
				DG-AV4S-8-8.5		24/60			
10	(10.5') LEAN CLAY with GRAVEL (CL): dark greenish gray (4/10Y), wet, [20,0,80], medium plasticity.					19/60			
15	(15') Boring terminated.								
20									
25									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER KB
REVIEWER G. Thrupp, P.G. No. 5849
NORTHING 2081237.18
EASTING 6011150.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AV5 **SHEET** 1 **OF** 1
START DATE 12/20/2019
FINISH DATE 12/20/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619

ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 15 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): dark yellowish-brown (10YR 3/6), moist, fine gravel, fine-coarse sand, fines, [20,60,20].			DG-AV5S-0.5-1			0.2		
	(1.3') WELL-GRADED GRAVEL (GW): grayish brown (2.5Y 5/2), moist, fine gravel, fine-coarse sand, [90,10,tr].					48/60			
	(2.5') black (2.5Y 2.5/1), increased fines, [85,10,5], approximately 1".								
	(3.2') red brick approximately 2" thick.			DG-AV5S-3.5-4			0.4		
	(3.3') POORLY GRADED SAND (SP): olive brown (2.5Y 4/3), moist, fine sand, [0,100,tr].								no recovery from 4-5'
5	(5') POORLY GRADED SAND (SP): olive brown (2.5Y 4/3), moist, fine sand, [0,100,tr].								
	(5.4') 5" of rock/cobbles up to 4.5" x 3".								
	(6') CLAYEY GRAVEL with SAND (GC): light olive brown (2.5Y 5/4), wet, fine-coarse gravel, fine-coarse sand, fines, [50,20,30].			DG-AV5S-7.5-8		42/60			
10	(10') same as above.								
	(11.2') FAT CLAY (CH): dark greenish gray (10Y 4/1), wet, [0,0,100], high plasticity, soft, Bay Mud.					57/60			
15	(15') Boring terminated.								
20									
25									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 8040 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER BL **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2081237.18
EASTING 6011050.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AV6 **SHEET** 1 **OF** 1
START DATE 12/21/2018
FINISH DATE 12/21/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 10 ft bgs
DEPTH TO WATER 2.4 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): very dark grayish brown (10YR 3/2), moist, fine gravel, medium sand, [15,65,20].			DG-AV6S-0.5-1			2.1		
	(1.3') WELL-GRADED GRAVEL with SAND (GW): dark gray (10YR 4/1), moist, fine gravel, coarse sand, [80,20,0].		▼			37/60			
	(3') SILTY SAND with GRAVEL (SM): very dark grayish brown (10YR 3/2), moist-wet at 2.4', fine gravel, medium sand, [20,60,20].			DG-AV6S-3.5-4			1.7		
5	(4.5') dark reddish brown (5YR 3/4).								
	(7.5') brownish yellow (10YR 6/8).			DG-AV6S-7-7.5		24/60	1.0		
	(8') grayish brown (10YR 5/2).								
	(8.7') LEAN CLAY (CL): dark greenish gray (4/10Y), moist, [0,0,100], medium plasticity, soft.								
10	(10') Boring terminated.								
15									
20									
25									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER KB
REVIEWER G. Thrupp, P.G. No. 5849

NORTHING 2081237.18
EASTING 6010950.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AV7 **SHEET** 1 **OF** 1
START DATE 12/20/2018 **ELEVATION DATA**
FINISH DATE 12/20/2018 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 10 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** 4 ft

DEPTH (ft)	MATERIAL DESCRIPTION	SAMPLE ID	RECOVERY	PID READING (ppm)	COMMENTS
	(0') POORLY GRADED SAND with SILT and GRAVEL (SP-SM): gray (10YR 6/1), moist, fine-coarse gravel, fine-medium sand, fines, [20,70,10].	DG-AV7S-0.5-1	60/60	0.8	0.0-1.5' compressed
	(2.5') POORLY GRADED GRAVEL (GP): grayish brown (10YR 5/2), moist, fine gravel, medium-coarse sand, fines, [90,5,5].				
	(3') SILTY SAND with GRAVEL (SM): very dark grayish brown (10YR 3/2), wet, fine-coarse gravel, fine-medium sand, fines, [20,60,20], 5% glass and metal fragments.	DG-AV7S-3.5-4		0.8	water level
5	(7.5') black (N 2.5/).	DG-AV7S-7.5-8	36/60	1.3	
	(8') FAT CLAY (CH): very dark greenish gray (10GY 3/1), moist, fines, [0,0,100], high plasticity, firm, Bay Mud.				
10	(10') Boring terminated.				
15					
20					
25					

CONTRACTOR PeneCore **NORTHING** 2081237.18
EQUIPMENT Geoprobe 6610 DT **EASTING** 6010850.57
DRILL MTHD Direct Push **ANGLE** Vertical
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AV8 **SHEET** 1 **OF** 1
START DATE 12/21/2018
FINISH DATE 12/21/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619

ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 10 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') ORGANIC SOIL with GRAVEL (OL): very dark brown (10YR 2/2), moist, [20,0,80].			DG-AV8S-0.5-1			2.5		
	(1') SILT (ML): brown (10YR 5/3), dry, fine gravel, [10,0,90], low plasticity, hard.								large rock; glass throughout core
	(2.3') SILTY SAND (SM): very dark grayish brown (10YR 3/2), moist, fine gravel, fine sand, [10,70,20].					38/60			
5				DG-AV8S-3.5-4			1.2		
	(6.5') LEAN CLAY (CL): dark greenish gray (4/10Y), moist, [0,0,100], medium plasticity, soft.					26/60			
10	(10') Boring terminated.								
15									
20									
25									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER KB
REVIEWER G. Thrupp, P.G. No. 5849

NORTHING 2081237.18
EASTING 6010750.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AV9 **SHEET** 1 **OF** 1
START DATE 2/1/2019
FINISH DATE 2/1/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619

ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 10 ft bgs
DEPTH TO WATER 8 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') GRAVELLY SILT with SAND (ML): dark reddish gray (2.5YR 3/1), moist, fine gravel, fine-coarse sand, fines, [40,15,45], 5% brick and ceramic debris, 10% glass debris.			DG-AV9S-0.5-1			4.2		0.0-3.0' compressed
						60/60			
				DG-AV9S-3.5-4			1.3		
5									5.0-8.0' compressed
						60/60			
	(8') wet, luster from 8.0-9.0'.		▼						water level
				DG-AV9S-8.5-9			3.2		
	(9') FAT CLAY (CH): very dark greenish gray (10GY 3/1), moist, fines, [0,0,100], high plasticity, firm, Bay Mud.								
10	(10') Boring terminated.								
15									
20									
25									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 8040 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2081237.18
EASTING 6010650.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AV10 **SHEET** 1 OF 1
START DATE 1/21/2019 **ELEVATION DATA**
FINISH DATE 1/21/2019 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 20 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') CONCRETE and ASPHALT.			DG-AV10S-0.5-1		60/60	2.2		drilled from 1019-1030; poor recovery; redrilled from 1040-1052
	(1') WELL-GRADED GRAVEL with SILT and SAND (GW-GM): dark gray (10YR 4/1), moist, fine-coarse gravel, medium sand, fines, [70,20,10]. (1.5') 3" lens of FAT CLAY (CH): yellowish brown (10YR 5/4). (1.7') GRAVELLY LEAN CLAY (CL): brown (10YR 5/3), moist, fine-coarse gravel, fine-medium sand, fines, [30,10,60].			DG-AV10S-3.5-4			2.4		
5	(4.5') SILTY SAND with GRAVEL (SM): very dark grayish brown (10YR 3/2), moist, fine-coarse gravel, fine-medium sand, fines, [20,45,35], 10% glass and ceramic debris.					60/60			
10	(10') dark reddish brown (2.5YR 3/4), from 10.0-15.0'.					18/60			
15				DG-AV10S-14.5-15			2.3		
	(16') FAT CLAY (CH): dark greenish gray (5GY 4/1), moist, fines, [0,0,100], high plasticity, firm, Bay Mud.					60/60			
20	(20') Boring terminated.								
25									

CONTRACTOR PeneCore **NORTHING** 2081237.18
EQUIPMENT Geoprobe 7822 DT **EASTING** 6010550.57
DRILL MTHD Direct Push **ANGLE** Vertical
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AV12 **SHEET** 1 **OF** 1
START DATE 1/22/2019
FINISH DATE 1/22/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619

ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 20 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') CONCRETE.								
	(0.2') SILTY SAND (SM): dark grayish brown (10YR 4/2), moist, fine-coarse gravel, fine-medium sand, fines, [10,50,40].			DG-AV12S-0.5-1			0.4		
	(2.5') SANDY LEAN CLAY (CL): yellowish brown (10YR 5/4), moist, fine gravel, fine-medium sand, fines, [5,35,60], high plasticity, hard.					60/60			
				DG-AV12S-3.5-4			1.0		
5									
						60/60			
10									
						54/60			
	(14.5') firm.								
15	(15') soft.								
						60/60			
				DG-AV12S-19.5-20			0.4		
20	(20') Boring terminated.								
25									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 7822 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2081237.18
EASTING 6010350.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AW2 **SHEET** 1 **OF** 1
START DATE 1/31/2019 **ELEVATION DATA**
FINISH DATE 1/31/2019 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 10 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** 5 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): dark grayish brown (10YR 4/2), moist, fine-coarse gravel, medium-coarse sand, fines, [25,45,30].			DG-AW2S-0.5-1			1.7		drilled ahead of schedule on 1/31/2019 and overdrilled to 10' instead of 5'; 0.0-2.0' compressed
						60/60			
				DG-AW2S-3.5-4			1.2		
	(4') 4" lens of lean clay (CL).								
5	(5') CLAYEY GRAVEL (GC): brown (10YR 5/3), wet, fine gravel, fine-coarse sand, fines, [60,10,30].		▼						water level
						60/60			no deeper sample collected and analyzed for metals only
10	(10') Boring terminated.								
15									
20									
25									

CONTRACTOR PeneCore **NORTHING** 2081137.18
EQUIPMENT Geoprobe 8040 DT **EASTING** 6011350.57
DRILL MTHD Direct Push **ANGLE** Vertical
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AW3 **SHEET** 1 **OF** 1
START DATE 1/31/2019
FINISH DATE 1/31/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 10 ft bgs
DEPTH TO WATER 5 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): dark grayish brown , moist, fine gravel, fine-coarse sand, fines, [15,50,35].			DG-AW3S-0.5-1			3.8		0.0-2.5' compressed
	(2.5') 2" brick cobble.			DG-AW3S-3.5-4		36/60	1.8		
5	(5') CLAYEY GRAVEL (GC): brown (10YR 5/3), wet, fine-coarse gravel, fine sand, fines, [70,10,20].		▼						water level; 5.0-7.5' compressed
						36/60	1.5		no deep sample taken due to prevalent gravel
	(9.5') wood fragments, slight luster.								
10	(10') Boring terminated.								
15									
20									
25									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 8040 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF
REVIEWER G. Thrupp, P.G. No. 5849
NORTHING 2081137.18
EASTING 6011250.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AW4 **SHEET** 1 **OF** 1
START DATE 2/1/2019
FINISH DATE 2/1/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER 4.7 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY GRAVEL with SAND (GM): gray (10YR 5/1), moist, coarse gravel, coarse sand, [70,15,15].			DG-AW4S-0.5-1			3.7		
	(0.7') SILTY SAND with GRAVEL (SM): very dark gray (10YR 3/1), moist, fine gravel, coarse sand, [15,55,30].					48/60			
	(3.7') CLAYEY SAND with GRAVEL (SC): dark brown (10YR 3/3), coarse gravel, fine sand, [15,70,15].			DG-AW4S-3.5-4			3.0		
	(4.4') SILTY GRAVEL with SAND (GM): light brownish gray (10YR 6/2), wet, fine gravel, coarse sand, [60,15,25].		▼						
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 6600
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NR
REVIEWER G. Thrupp, P.G. No. 5849

NORTHING 2081137.18
EASTING 6011150.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AW5 **SHEET** 1 **OF** 1
START DATE 12/14/2018
FINISH DATE 12/14/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): very dark brown (10YR 2/2), dry, fine-coarse gravel, fine-coarse sand, fines, [25,60,15].			DG-AW5S-0.5-1			2.3		
	(4') dark reddish brown (5YR 3/3).			DG-AW5S-3.5-4			0.6		ceramic ware
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 6600
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER KJ **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2081137.18
EASTING 6011050.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AW6 **SHEET** 1 **OF** 1
START DATE 12/21/2018
FINISH DATE 12/21/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') WELL-GRADED GRAVEL with SAND (GW): very dark grayish brown (10YR 3/2), moist, fine gravel, coarse sand, [80,20,0].			DG-AW6S-0.5-1			0.9		
	(1.4') SILTY SAND with GRAVEL (SM): very dark brown (10YR 2/2), moist, fine gravel, fine sand, [20,60,20].					37/60			red brick; glass throughout bottom section
				DG-AW6S-3.5-4			1.1		
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER KB
REVIEWER G. Thrupp, P.G. No. 5849
NORTHING 2081137.18
EASTING 6010950.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AW7 **SHEET** 1 **OF** 1
START DATE 11/21/2018 **ELEVATION DATA**
FINISH DATE 11/21/2018 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 10 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') POORLY GRADED GRAVEL (GP): dark gray (10YR 4/1), moist, [90,10,0], loose.			DG-AW7S-0.5-1			0.2		FID=5.2 ppm
	(1') SILTY SAND with GRAVEL (SM): dark brown (10YR 3/3), moist, [20,60,20], medium dense.					50/60			
				DG-AW7S-3.5-4			0.2		FID=4.8 ppm
5	(5') FAT CLAY (CH): dark gray (10YR 4/1), moist, high plasticity, soft, Bay Mud.								background=4.8 ppm
						52/60			
10	(10') Boring terminated.								
15									
20									
25									

CONTRACTOR PeneCore **NORTHING** 2081137.18
EQUIPMENT Geoprobe 8040 DT **EASTING** 6010850.57
DRILL MTHD Direct Push **ANGLE** Vertical
DIAMETER 3 inches
LOGGER MK **REVIEWER** G. Thrupp, P.G. No. 5849

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AW8 **SHEET** 1 **OF** 1
START DATE 1/30/2019 **ELEVATION DATA**
FINISH DATE 1/30/2019 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 5 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILT with GRAVEL (ML): dark grayish brown (10YR 4/2), moist, [20,5,75], non-plastic, contains 5% glass and ceramic debris.			DG-AW8S-0.5-1			2.1		clogged push tube; dislodged with hammer
						48/60			
				DG-AW8S-3.5-4			1.7		
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore **NORTHING** 2081137.18
EQUIPMENT Geoprobe 6600 **EASTING** 6010750.57
DRILL MTHD Direct Push **ANGLE** Vertical
DIAMETER 3 inches
LOGGER NR **REVIEWER** G. Thrupp, P.G. No. 5849

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AW9 **SHEET** 1 **OF** 1
START DATE 1/30/2019 **ELEVATION DATA**
FINISH DATE 1/30/2019 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 5 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') GRAVELLY SILT with SAND (ML): dark grayish brown (10YR 4/2), moist, cobble gravel, [20,5,75], 5% trash debris.			DG-AW9S-0.5-1			1.3		
	(2') SILT (ML): white (10YR 8/1), moist, [0,5,95], non-plastic.					51/60			
	(3') GRAVELLY SILT with SAND (ML): dark brown (10YR 3/3), moist, fine-coarse gravel to cobbles, [30,15,55], 20% trash debris.			DG-AW9S-3.5-4			2.7		
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore **NORTHING** 2081137.18
EQUIPMENT Geoprobe 6600 **EASTING** 6010650.57
DRILL MTHD Direct Push **ANGLE** Vertical
DIAMETER 3 inches
LOGGER NR **REVIEWER** G. Thrupp, P.G. No. 5849

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AW10 **SHEET** 1 OF 1
START DATE 1/21/2019 **ELEVATION DATA**
FINISH DATE 1/21/2019 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 5 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') WELL-GRADED GRAVEL with SILT and SAND (GW-GM): very dark brown (10YR 2/2), moist, fine-coarse gravel, medium-coarse sand, fines, [75,15,10], capped by concrete.			DG-AW10S-0.5-1			0.8		
	(1.5') WELL-GRADED SAND with SILT (SW-SM): brown (10YR 5/3), moist, fine gravel, fine-medium sand, fines, [5,85,10].			DG-AW10S-3.5-4		60/60	1.7		
5	(4.5') FAT CLAY (CH): very dark gray (N 3/), moist, fine gravel, fine sand, fines, [5,10,85], high plasticity, firm, brick cobble at 4.5'.								
	(5') Boring terminated.								
10									

CONTRACTOR PeneCore **NORTHING** 2081137.18
EQUIPMENT Geoprobe 7822 DT **EASTING** 6010550.57
DRILL MTHD Direct Push **ANGLE** Vertical
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AW11 **SHEET** 1 OF 1
START DATE 1/23/2019 **ELEVATION DATA**
FINISH DATE 1/23/2019 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 10 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') ASPHALT.								
	(0.5') SANDY LEAN CLAY with GRAVEL (CL): very dark grayish brown (10YR 3/2), dry, fine-coarse gravel, fines, [15,25,60], low plasticity, firm, mottled, very dark greenish gray (5GY 3/1).			DG-AW11S-0.5-1		15/60	0.5		
				DG-AW11S-3.5-4			1.5		
5	(5') rock 3".								
	(5.25') SANDY SILT (ML): black (10YR 2/1), moist-wet, fine-coarse sand, fines, [0,40,60], soft, glass debris.						0.6		
				DG-AW11S-7.5-8		18/60	0.0		
	(8') LEAN CLAY (CL): very dark gray (10YR 3/1), wet, fine sand, fines, [0,5,95], medium plasticity, soft.						0.0		
10	(10') Boring terminated.								
15									
20									
25									

CONTRACTOR PeneCore **NORTHING** 2081107.61
EQUIPMENT Geoprobe 8040 DT **EASTING** 6010448.51
DRILL MTHD Direct Push **ANGLE** Vertical
DIAMETER 3 inches
LOGGER JR **REVIEWER** G. Thrupp, P.G. No. 5849

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AX2 **SHEET** 1 **OF** 1
START DATE 2/1/2019
FINISH DATE 2/1/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY GRAVEL with SAND (GM): pale brown (10YR 6/3), moist, coarse gravel, coarse sand, [45,20,35], 5% trash debris.			DG-AX2S-0.5-1			2.8		
						43/60			
				DG-AX2S-3.5-4			2.4		
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 6600
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NR
REVIEWER G. Thrupp, P.G. No. 5849

NORTHING 2081037.18
EASTING 6011350.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AX3 **SHEET** 1 **OF** 1
START DATE 2/1/2019
FINISH DATE 2/1/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER 4.9 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY GRAVEL with SAND (GM): brown (10YR 4/3), moist, coarse gravel to cobbles, coarse sand, [45,25,30], 10% trash debris.			DG-AX3S-0.5-1		50/60	3.6		
	(3.3') SANDY LEAN CLAY with GRAVEL (CL): very pale brown (10YR 7/3), moist, fine gravel, fine sand, [15,30,55], low plasticity, very hard.			DG-AX3S-3.5-4			3.8		
	(4.2') FAT CLAY (CH): grayish brown (10YR 5/2), wet, [0,0,100], high plasticity, soft.		▼						not Bay Mud
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 6600
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NR
REVIEWER G. Thrupp, P.G. No. 5849
NORTHING 2081037.18
EASTING 6011250.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AX4 **SHEET** 1 **OF** 1
START DATE 2/1/2019
FINISH DATE 2/1/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') GRAVELLY SILT with SAND (ML): dark gray (10YR 4/1), moist, coarse gravel to cobbles, coarse sand, [40,15,45].			DG-AX4S-0.5-1			2.3		
	(2.5') SANDY LEAN CLAY (CL): brownish yellow (10YR 6/8), moist, fine sand, [5,20,75], low plasticity, hard.			DG-AX4S-3.5-4			5.1		
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 6600
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NR
REVIEWER G. Thrupp, P.G. No. 5849
NORTHING 2081037.18
EASTING 6011150.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AX5 **SHEET** 1 **OF** 1
START DATE 12/20/2019
FINISH DATE 12/20/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619

ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 10 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): very dark brown (10YR 2/2), moist, fine gravel, fine-coarse sand, fines, [20,60,20].			DG-AX5S-0.5-1			0.0		
	(0.8') yellowish-brown (10YR 5/6), coarse gravel.						0.0		
	(1.2') SANDY SILT with GRAVEL (ML): yellowish-brown (10YR 5/6), fine-coarse gravel, medium-fine sand, fines, [15,30,55], low plasticity, hard.					48/60			
	(1.4') 2 inches of black.						0.0		
	(2') strong brown (7.5YR 5/6).								
	(2.5') SILTY SAND with GRAVEL (SM): strong brown (7.5YR 5/6), fine-coarse gravel, medium-fine sand, fines, [15,60,25].			DG-AX5S-3.5-4					
5	(5') same as above.								
	(6') LEAN CLAY with SAND and GRAVEL (CL): dark olive gray (5Y 3/2), wet, fine-coarse gravel, medium-fine sand, [15,15,70], medium plasticity, soft.								
	(7') LEAN CLAY (CL): dark gray (4/N), wet, trace fine sand, [0,tr,100], medium plasticity, soft.								
	(8') SILTY SAND with GRAVEL (SM): dark gray (4/N), wet, fine-coarse gravel, medium-fine sand, fines, [20,50,30].								
10	(10') Boring terminated.								
15									
20									
25									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 8040 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER BL **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2081037.18
EASTING 6011050.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AX6 **SHEET** 1 **OF** 1
START DATE 2/1/2019
FINISH DATE 2/1/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY GRAVEL with SAND (GM): very dark grayish brown (10YR 3/2), moist, coarse gravel, coarse sand, [50,10,40].			DG-AX6S-0.5-1			2.2		
	(1.7') SILTY GRAVEL (GM): brownish yellow (10YR 6/8), moist, fine gravel, [55,5,40].			DG-AX6S-3.5-4			6.2		
	(4.2') SANDY LEAN CLAY (CL): dark yellowish brown (10YR 4/4), moist, fine sand, [0,20,80], non-plastic, very hard.								
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 6600
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NR
REVIEWER G. Thrupp, P.G. No. 5849
NORTHING 2081037.18
EASTING 6010950.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AX7 **SHEET** 1 **OF** 1
START DATE 1/30/2019
FINISH DATE 1/30/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') LEAN CLAY with SAND (CL): very dark gray (10YR 3/1), moist, [5,15,80], low plasticity, firm.			DG-AX7S-0.5-1			1.4		
	(1.2') GRAVELLY SILT with SAND (ML): dark yellowish brown (10YR 3/4), moist, [30,20,50], non-plastic, 5% trash debris at bottom of unit, 10% organic matter.					48/60			
				DG-AX7S-3.5-4			2.1		
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 6600
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NR
REVIEWER G. Thrupp, P.G. No. 5849
NORTHING 2081037.18
EASTING 6010850.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AX8 **SHEET** 1 **OF** 1
START DATE 1/30/2019 **ELEVATION DATA**
FINISH DATE 1/30/2019 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 5 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') GRAVELLY LEAN CLAY (CL): very dark gray (10YR 3/1), [15,5,80], non-plastic, firm.			DG-AX8S-0.5-1			2.4		
	(0.8') GRAVELLY SILT with SAND (ML): black (10YR 2/1), moist, coarse gravel, [20,15,65], 5% trash debris.					43/60			
	(2.6') POORLY GRADED SAND (SP): very dark grayish brown (10YR 3/2), moist, fine-medium sand, [0,95,5].								
	(3.4') GRAVELLY SILT with SAND (ML): dark yellowish brown (10YR 3/4), moist, [30,15,55].			DG-AX8S-3.5-4			2.6		
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore **NORTHING** 2081037.18
EQUIPMENT Geoprobe 6600 **EASTING** 6010750.57
DRILL MTHD Direct Push **ANGLE** Vertical
DIAMETER 3 inches
LOGGER NR **REVIEWER** G. Thrupp, P.G. No. 5849

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AX9 **SHEET** 1 **OF** 1
START DATE 1/23/2019 **ELEVATION DATA**
FINISH DATE 1/23/2019 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 10 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') ASPHALT.								
	(0.5') SANDY LEAN CLAY with GRAVEL (CL): grayish brown (10YR 5/2), dry, fine-coarse gravel, fine-coarse sand, fines, [20,25,55], medium plasticity, stiff.			DG-AX9S-0.5-1			0.0		
						42/60	0.0		
				DG-AX9S-3.5-4			0.0		
	(4.5') 7 mm gravel (broken rock).								
5	(5') dark reddish brown (5YR 3/3).						0.0		
						42/60	0.0		
	(8.5') brick fragments.								
	(9') black (10YR 2/1), [15,30,55], soft.			DG-AX9S-9.5-10			0.0		no odor
10	(10') Boring terminated.								
15									
20									
25									

CONTRACTOR PeneCore **NORTHING** 2081037.18
EQUIPMENT Geoprobe 8040 DT **EASTING** 6010650.57
DRILL MTHD Direct Push **ANGLE** Vertical
DIAMETER 3 inches
LOGGER JR **REVIEWER** G. Thrupp, P.G. No. 5849

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AX10 **SHEET** 1 **OF** 1
START DATE 1/21/2019 **ELEVATION DATA**
FINISH DATE 1/21/2019 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 5 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') GRAVELLY FAT CLAY with SAND (CH): dark greenish gray (5YR 4/1), moist, fine-coarse gravel, fine-coarse sand, fines, [25,15,60].			DG-AX10S-0.5-1			0.9		
	(1') 3" lens of coarse gravel.					60/60			
				DG-AX10S-3.5-4			1.1		
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore **NORTHING** 2081037.18
EQUIPMENT Geoprobe 7822 DT **EASTING** 6010550.57
DRILL MTHD Direct Push **ANGLE** Vertical
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AX11 **SHEET** 1 **OF** 1
START DATE 1/21/2019 **ELEVATION DATA**
FINISH DATE 1/21/2019 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 5 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** 3 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') GRAVELLY FAT CLAY (CH): brown (10YR 5/3), moist, fine-coarse gravel, fine-medium sand, fines, [50,10,40].			DG-AX11S-0.5-1		60/60	1.3		0.0-0.5' compressed
	(3') yellowish brown (10YR 5/4), wet.		▼	DG-AX11S-3.5-4			2.2		water level
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore **NORTHING** 2081037.18
EQUIPMENT Geoprobe 7822 DT **EASTING** 6010450.57
DRILL MTHD Direct Push **ANGLE** Vertical
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AY2 **SHEET** 1 **OF** 1
START DATE 2/1/2019
FINISH DATE 2/1/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY GRAVEL with SAND (GM): dark gray (10YR 4/1), moist, fine-coarse gravel to cobbles, coarse sand, [45,15,40].			DG-AY2S-0.5-1		45/60	4.9		
				DG-AY2S-3.5-4			4.6		
	(4') LEAN CLAY with SAND (CL): yellow (10YR 8/6), moist to mostly dry, fine sand, [0,15,85], low plasticity, very hard.								
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 6600
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NR
REVIEWER G. Thrupp, P.G. No. 5849

NORTHING 2080937.18
EASTING 6011350.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AY3 **SHEET** 1 **OF** 1
START DATE 1/31/2019 **ELEVATION DATA**
FINISH DATE 1/31/2019 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 10 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** 8.5 ft

DEPTH (ft)	MATERIAL DESCRIPTION	SAMPLE ID	RECOVERY	PID READING (ppm)	COMMENTS
	(0') SILTY SAND (SM): greenish gray (10Y 5/1), moist, fine gravel, fine-coarse sand, fines, [10,60,30].	DG-AY3S-0.5-1	60/60	2.3	0.0-2.0' compressed
		DG-AY3S-3.5-4		2.2	
5	(4.5') CLAYEY GRAVEL (GC): dark yellowish brown (10YR 4/6), moist, fine-coarse gravel, medium-coarse sand, fines, [70,10,20].				5.0-7.0' compressed
	(8') grayish brown (10YR 5/2). (8.5') wet.			2.5	no deep sample taken due to prevalent gravel
10	(9.5') cobbles from 9.5-10.0'. (10') Boring terminated.				
15					
20					
25					

CONTRACTOR PeneCore **NORTHING** 2080937.18
EQUIPMENT Geoprobe 8040 DT **EASTING** 6011250.57
DRILL MTHD Direct Push **ANGLE** Vertical
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AY4 **SHEET** 1 **OF** 1
START DATE 2/1/2019
FINISH DATE 2/1/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619

ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY GRAVEL with SAND (GM): very dark gray (10YR 3/1), moist, fine-coarse gravel, coarse sand, [60,15,25].			DG-AY4S-0.5-1			2.5		
	(2.3') SILTY GRAVEL with SAND (GM): very pale brown (10YR 8/2), moist, coarse gravel to cobbles, coarse sand, [70,15,15].					49/60			
	(3.5') CLAYEY GRAVEL with SAND (GC): yellow (10YR 7/8), moist, coarse gravel to cobbles, fine sand, [50,20,30].			DG-AY4S-3.5-4			3.3		
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 6600
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NR **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2080937.18
EASTING 6011150.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AY8 **SHEET** 1 **OF** 1
START DATE 1/30/2019
FINISH DATE 1/30/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619

ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILT (ML): dark yellowish brown (10YR 4/4), moist, [5,0,95], non-plastic, 5% trash debris.			DG-AY8S-0.5-1			1.3		
	(1') CONCRETE: chunk, width of borehole.								
	(1.3') GRAVELLY SILT (ML): light gray (10YR 7/2), moist, gravel cobbles, [20,0,80], 5% trash debris.					51/60			
				DG-AY8S-3.5-4			4.3		
	(4.5') GRAVELLY SILT with SAND (ML): brownish yellow (10YR 6/6), moist, cobbles, [30,20,50], 5% trash debris.								
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 6600
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NR
REVIEWER G. Thrupp, P.G. No. 5849

NORTHING 2080937.18
EASTING 6010750.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AY9 **SHEET** 1 **OF** 1
START DATE 1/21/2019 **ELEVATION DATA**
FINISH DATE 1/21/2019 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 5 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') GRAVELLY LEAN CLAY (CL): very dark brown (10YR 2/2), moist, fine-coarse gravel, fine-medium sand, fines, [35,10,55], medium plasticity, soft.			DG-AY9S-0.5-1			0.9		0.0-0.5' compressed
	(2') SILTY SAND (SM): very dark grayish brown (10YR 3/2), moist, fine gravel, fine-medium sand, fines, [5,50,45].					60/60			
	(3') LEAN CLAY with SAND (CL): yellowish brown (10YR 5/6), fine-medium sand, fines, [0,20,80], medium plasticity, soft.			DG-AY9S-3.5-4			2		
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore **NORTHING** 2080935.81
EQUIPMENT Geoprobe 7822 DT **EASTING** 6010684.27
DRILL MTHD Direct Push **ANGLE** Vertical
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AZ2 **SHEET** 1 **OF** 1
START DATE 2/1/2019
FINISH DATE 2/1/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619

ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY GRAVEL with SAND (GM): gray (10YR 6/1), moist, coarse gravel to cobbles, coarse sand, [50,15,35].			DG-AZ2S-0.5-1		47/60	2.6		
				DG-AZ2S-3.5-4			2.9		
	(4.3') LEAN CLAY with SAND (CL): brown (10YR 4/3), moist, fine sand, [5,20,75], non-plastic, very hard.								
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 6600
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NR
REVIEWER G. Thrupp, P.G. No. 5849

NORTHING 2080837.18
EASTING 6011350.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AZ3 **SHEET** 1 **OF** 1
START DATE 2/1/2019
FINISH DATE 2/1/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY GRAVEL with SAND (GM): very dark gray (10YR 3/1), moist, coarse gravel, coarse sand, [60,15,25].								
	(0.6') GRAVELLY SILT with SAND (ML): dark yellowish brown (10YR 4/4), moist, fine gravel, coarse sand, [40,15,45].			DG-AZ3S-0.5-1			4.6		
	(1.4') WELL-GRADED SAND with SILT and GRAVEL (SW-SM): dark gray (10YR 4/1), moist, fine gravel, coarse sand, [25,65,10].								
	(2.5') SILTY GRAVEL with SAND (GM): pale brown (10YR 6/3), moist, coarse gravel to cobbles, coarse sand, [70,15,15].					54/60			
	(3.4') GRAVELLY LEAN CLAY with SAND (CL): brown (10YR 5/3), moist, coarse gravel, coarse sand, [15,20,65], non-plastic, hard.			DG-AZ3S-3.5-4			5.2		
	(4.4') SILTY GRAVEL with SAND (GM): moist, coarse gravel, coarse sand, [55,15,30].								
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 6600
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NR
REVIEWER G. Thrupp, P.G. No. 5849

NORTHING 2080837.18
EASTING 6011250.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-AZ10 **SHEET** 1 **OF** 1
START DATE 1/21/2019 **ELEVATION DATA**
FINISH DATE 1/21/2019 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 5 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') LEAN CLAY with SAND (CL): very dark gray (10YR 3/1), moist, fine-coarse gravel, fine-medium sand, fines, [5,20,75], medium plasticity, firm, 2" lens of concrete, fine-coarse gravel.			DG-AZ10S-0.5-1		60/60	1.4		0.0-0.5' compressed
	(3') brownish yellow (10YR 6/6), high plasticity from 3.0-4.0'.			DG-AZ10S-3.5-4			3.0		
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore **NORTHING** 2080837.18
EQUIPMENT Geoprobe 7822 DT **EASTING** 6010550.57
DRILL MTHD Direct Push **ANGLE** Vertical
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-N1 **SHEET** 1 **OF** 1
START DATE 12/18/2019 **ELEVATION DATA**
FINISH DATE 12/18/2019 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 10 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** 4.75 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND (SM): very dark gray (3/N), moist, fine-coarse gravel, fine-coarse sand, fines, [10,70,20].			DG-N1S-0.5-1			0.3		
	(2') SILTY SAND with GRAVEL (SM): very dark grayish brown (10YR 3/2), moist, fine-coarse gravel, fine-coarse sand, fines, [25,55,20].					48/60			
	(4') cobbles 2.5" x 2.5", 6" thick layer.			DG-N1S-3.5-4			0.8		
5	(4.75') CLAYEY GRAVEL with SAND (GC): yellowish-brown (10YR 5/6), wet, fine-coarse gravel, fine-coarse sand, plastic fines, [50,25,25].		▼						
	(7') very dark gray (10YR 3/1).					36/60			no recovery from 8-10'
10	(10') Boring terminated.								
15									
20									
25									

CONTRACTOR PeneCore **NORTHING** 2084635.33
EQUIPMENT Geoprobe 8040 DT **EASTING** 6011443.52
DRILL MTHD Direct Push **ANGLE** Vertical
DIAMETER 3 inches
LOGGER BL **REVIEWER** G. Thrupp, P.G. No. 5849

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-N2 **SHEET** 1 **OF** 1
START DATE 12/13/2018
FINISH DATE 12/13/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619

ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): dark brown (10YR 3/3), moist, medium-grained sand, [20,60,20].			DG-N2S-0.5-1		48/60	0.3		CO=0.0 ppm; 02=20.9%; H2S=0.0 ppm
	(3.4') WELL-GRADED GRAVEL with CLAY (GW-GC): very dark gray (10YR 3/1), dry to moist, coarse gravel, [80,10,10].			DG-N2S-3.5-4			0.9		
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER KB
REVIEWER G. Thrupp, P.G. No. 5849

NORTHING 2084637.18
EASTING 6011350.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-N3 **SHEET** 1 **OF** 1
START DATE 12/13/2018
FINISH DATE 12/13/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND (SM): brown (10YR 4/3), dry, fine-medium gravel, fine-coarse sand, fines, [10,75,15].			DG-N3S-0.5-1			1.1		
	(2') brownish yellow (10YR 6/8).					48/60			
	(3') black (10YR 2.5/1), moist.			DG-N3S-3.5-4			0.6		
	(4') brown (10YR 5/3).								
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 6600
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER KJ **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2084637.18
EASTING 6011250.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-N4 **SHEET** 1 **OF** 1
START DATE 12/19/2018
FINISH DATE 12/19/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619

ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 10 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): dark brown (10YR 3/3), dry, fine-coarse gravel, fine-coarse sand, fines, [15,70,15].			DG-N4S-0.5-1		46/60	3.1		
	(3.5') CLAYEY SAND (SC): very dark greenish gray (10Y 3/1), wet, fine-medium sand, fines, [0,85,15], sheen.			DG-N4S-3.5-4			38.5		
5				DG-N4S-4.5-5			41.7		
	(5') SILTY GRAVEL (GM): yellowish-brown (10YR 5/6), wet, fine-coarse gravel, fine-coarse sand, fines, [75,10,15].					25/60			rock at bottom
	(8.5') sheen ends.			DG-N4S-8.5-9			0.2		
	(9') LEAN CLAY (CL): very dark greenish gray (10Y 3/1), moist, fines, [0,0,100], medium-high plasticity, soft.								
10	(10') Boring terminated.								
15									
20									
25									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 788201
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER KJ **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2084637.18
EASTING 6011150.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-N5 **SHEET** 1 **OF** 1
START DATE 1/8/2019
FINISH DATE 1/8/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619

ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 10 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): dark grayish brown (10YR 4/2), moist, fine-coarse gravel, fine-coarse sand, fines, [25,50,25].			DG-N5S-0.5-1			1.1		0.0-1.0' compressed
	(2.5') lens of mostly fine gravel from 2.5-3.0'.					60/60			
	(3.5') glass, brick, tile from 3.5-4.0'.			DG-N5S-3.5-4			0.6		
	(4') CLAYEY GRAVEL (GC): dark greenish gray (10Y 4/1), moist, fine-coarse gravel, medium-coarse sand, fines, [55,5,40].								
5	(6.5') luster from 6.5-7.0'.						2.6		
	(7') FAT CLAY (CH): very dark greenish gray (5GY 3/1), moist, fines, [0,0,100], high plasticity, firm, Bay Mud.					60/60			no deeper sample taken; Bay Mud at 7.0' bgs
10	(10') Boring terminated.								
15									
20									
25									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 8040 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2084637.18
EASTING 6011050.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-N6 **SHEET** 1 **OF** 1
START DATE 12/19/2018
FINISH DATE 12/19/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') WELL-GRADED SAND with GRAVEL (SW): dark yellowish-brown (10YR 4/4), dry, fine-coarse gravel, fine-coarse sand, fines, [15,80,5].			DG-N6S-0.5-1			0.1		
	(3.5') dark brown (7.5YR 3/3).			DG-N6S-3.5-4			0.1		
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 788201
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER KJ **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2084637.18
EASTING 6010950.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-N7 **SHEET** 1 **OF** 1
START DATE 12/18/2018
FINISH DATE 12/18/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY GRAVEL with SAND (GM): grayish brown (10YR 5/2), moist, fine-coarse gravel, medium-coarse sand, fines, [50,35,15].			DG-N7S-0.5-1			1.8		borehole moved about 9' north due to uneven terrain, 0.0-2.5' compressed
						60/60			
				DG-N7S-3.5-4			4.5		
	(4.5') light olive brown (2.5Y 5/4), from 4.5-5.0'.								
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 6610 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2084637.18
EASTING 6010850.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-N8 **SHEET** 1 **OF** 1
START DATE 1/15/2019
FINISH DATE 1/15/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND (SM): dark grayish brown (10YR 4/2), moist, fine gravel, medium-coarse sand, fines, [10,60,30].			DG-N8S-0.5-1		60/60	0.3		0.0-2.0' compressed
	(3') dark gray (10YR 4/1), from 3.0-4.0'.			DG-N8S-3.5-4			0.5		
	(4') GRAVELLY FAT CLAY (CH): dark yellowish-brown (10YR 4/6), moist, fine-coarse gravel, fine sand, fines, [30,10,60], high plasticity, firm.								
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 6600
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF
REVIEWER G. Thrupp, P.G. No. 5849

NORTHING 2084637.18
EASTING 6010750.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-N9 **SHEET** 1 **OF** 1
START DATE 1/10/2019
FINISH DATE 1/10/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 10 ft bgs
DEPTH TO WATER 6 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): dark grayish brown (10YR 4/2), moist, fine-coarse gravel, fine-medium sand, fines, [20,50,30].			DG-N9S-0.5-1			1.2		0.0-1.0' compressed
	(2.5') large brick and concrete cobbles from 2.5-3'.			DG-N9S-3.5-4		60/60	1.9		
5	(4') CLAYEY GRAVEL (GC): dark greenish gray (10GY 4/1), moist, fine-coarse gravel, medium-coarse sand, fines, [65,10,25].								
	(6') wet.		▼						water level
	(7') FAT CLAY (CH): dark greenish gray (10GY 4/1), moist, fines, [0,0,100], high plasticity, firm, Bay Mud.								no deeper sample taken; Bay mud at 7.0' bgs
10	(10') Boring terminated.								
15									
20									
25									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 8040 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2084637.18
EASTING 6010650.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-N10 **SHEET** 1 **OF** 1
START DATE 1/14/2019
FINISH DATE 1/14/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): very dark brown (10YR 2/2), moist, fine gravel, medium-fine sand, fines, [20,50,30].			DG-N10S-0.5-1		60/60	1.7		0.0-2.0' compressed
				DG-N10S-3.5-4			1.5		
	(4') WELL-GRADED GRAVEL with CLAY (GW-GC): dark grayish brown (10YR 4/2), moist, fine-coarse gravel, fine sand, fines, [80,10,10].								
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 8040 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2084637.18
EASTING 6010550.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-N11 **SHEET** 1 **OF** 1
START DATE 12/20/2018 **ELEVATION DATA**
FINISH DATE 12/20/2018 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 5 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND (SM): dark brown (7.5YR 3/2), moist, fine gravel, medium-coarse sand, fines, [10,70,20], trace glass fragments.			DG-N11S-0.5-1		60/60	0.8		0.0-2.0' compressed
				DG-N11S-3.5-4			2.0		
	(4') WELL-GRADED GRAVEL with CLAY (GW-GC): dark gray (10YR 4/1), moist, fine-coarse gravel, medium-coarse sand, fines, [80,10,10].								
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore **NORTHING** 2084637.18
EQUIPMENT Geoprobe 6610 DT **EASTING** 6010450.57
DRILL MTHD Direct Push **ANGLE** Vertical
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-N12 **SHEET** 1 **OF** 1
START DATE 1/14/2019 **ELEVATION DATA**
FINISH DATE 1/14/2019 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 5 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): grayish brown (10YR 5/2), moist, fine-coarse gravel, fine-coarse sand, fines, [30,40,30].			DG-N12S-0.5-1		60/60	0.9		0.0-1.5' compressed
				DG-N12S-3.5-4			1.3		
	(4') CLAYEY GRAVEL (GC): dark gray (10YR 4/1), moist, fine-coarse gravel, fine-coarse sand, fines, [50,10,40].								
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore **NORTHING** 2084637.18
EQUIPMENT Geoprobe 8040 DT **EASTING** 6010350.57
DRILL MTHD Direct Push **ANGLE** Vertical
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-N13 **SHEET** 1 **OF** 1
START DATE 1/10/2019
FINISH DATE 1/10/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619

ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 10 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
0	(0') SILTY SAND with GRAVEL (SM): brown (10YR 5/3), moist, fine-coarse gravel, medium-coarse sand, fines, [20,50,30].			DG-N13S-0.5-1			1.9		
	(1.5') 3" lens of wood pieces.					60/60			
	(3') large cobble, fine gravel percentage increases to 40% for 1'.			DG-N13S-3.5-4			1.1		
5	(3.5') SILTY SAND (SM): grayish brown (10YR 5/2), moist, fine gravel, fine-medium sand, fines, [5,55,40].								
	(5') greenish black (10Y 2.5/1), from 5.0-7.0', 5% plant matter from 5.0-8.0'.			DG-N13S-7.5-8		60/60	1.9		
10	(10') Boring terminated.								
15									
20									
25									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 8040 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2084637.18
EASTING 6010250.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-N14 **SHEET** 1 **OF** 1
START DATE 1/14/2019
FINISH DATE 1/14/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619

ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND (SM): dark grayish brown (10YR 4/2), moist, fine gravel, fine-medium sand, fines, [5,55,40].			DG-N14S-0.5-1		60/60	1.1		0.0-1.5' compressed
	(3.5') CLAYEY GRAVEL (GC): dark gray (10YR 4/1), moist, fine-coarse gravel, fine sand, fines, [50,5,45].			DG-N14S-3.5-4			1.4		
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 8040 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2084637.18
EASTING 6010150.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-N15 **SHEET** 1 **OF** 1
START DATE 12/21/2018
FINISH DATE 12/21/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND (SM): dark grayish brown (10YR 4/2), moist, fine-coarse gravel, medium-coarse sand, fines, [10,65,25].			DG-N15S-0.5-1		60/60	1.7		0.0-1.5' compressed
	(3.5') lens of fat clay with sand (CH), very dark greenish gray (10GY 3/1), moist, fine gravel, medium-coarse sand, fines (5,10,85).			DG-N15S-3.5-4			1.5		
5	(4.9') black (10YR 2/1), fines and fine sand, from 4.9-5.0'.								
	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 6610 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF
REVIEWER G. Thrupp, P.G. No. 5849
NORTHING 2084637.18
EASTING 6010050.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-O1 **SHEET** 1 **OF** 1
START DATE 12/13/2018
FINISH DATE 12/13/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND (SM): dark brown (10YR 3/3), dry, fine-coarse gravel, fine-coarse sand, fines, [10,75,15].			DG-O1S-0.5-1			0.4		
						48/60			
	(3') large rock approximately 3".			DG-O1S-3.5-4			0.3		
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 6600
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER KJ **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2084537.18
EASTING 6011441.29
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-O2 **SHEET** 1 **OF** 1
START DATE 12/13/2018
FINISH DATE 12/13/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND (SM): very dark grayish brown (10YR 3/2), medium-grained sand, [10,70,20].			DG-O2S-0.5-1			0.6		
	(1.3') SILTY SAND with GRAVEL (SM): dark brown (10YR 3/3), medium-grained sand, [20,60,20], large gravel/cobble at 2.7'.					45/60			
				DG-O2S-3.5-4			0.6		
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER KB
REVIEWER G. Thrupp, P.G. No. 5849
NORTHING 2084537.18
EASTING 6011350.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-O3 **SHEET** 1 OF 1
START DATE 12/18/2019
FINISH DATE 12/18/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 10 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') WELL-GRADED SAND with SILT and GRAVEL (SW-SM): olive gray (5Y 4/2), moist, fine-coarse gravel, fine-coarse sand, [20,70,10].			DG-O3S-0.5-1					1" of red brick (debris)
	(1.5') CLAYEY SAND with GRAVEL (SC): very dark brown (10YR 2/2), moist, fine-coarse gravel, fine-coarse sand, plastic fines, [20,60,20].					45/60			
	(3') 4" of cobbles 2" x 2.5".								
	(3.5') CLAYEY GRAVEL with SAND (GC): dark grayish brown (2.5Y 4/2), wet, fine-coarse gravel, fine-coarse sand, plastic fines, [60,20,20], cobbles up to 3.5".			DG-O3S-3.5-4					
5									
	(7.5') FAT CLAY (CH): gray (5/N), wet, trace fine sand, [0,0,100], high plasticity, soft, Bay Mud.					54/60			
10	(10') Boring terminated.								
15									
20									
25									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 8040 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER BL **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2084537.18
EASTING 6011250.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-O4 **SHEET** 1 **OF** 1
START DATE 12/19/2018 **ELEVATION DATA**
FINISH DATE 12/19/2018 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 10 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') POORLY GRADED SAND with SILT and GRAVEL (SP-SM): dark brown (10YR 3/3), dry, fine-coarse gravel, fine-coarse sand, fines, [20,70,10].			DG-O4S-0.5-1		42/60	3.5		
	(3.5') LEAN CLAY with SAND (CL): very dark gray (10YR 3/1), wet, fine-medium sand, fines, [0,20,80], sheen.			DG-O4S-3.5-4			43.0		
5				DG-O4S-4.5-5			64.8		
	(5') SILTY GRAVEL (GM): very dark grayish brown (10YR 3/2), wet, fine-coarse gravel, fine-coarse sand, fines, [80,5,15].					25/60			rock broken through at bottom
				DG-O4S-8-8.5			25.8		
				DG-O4S-9-9.5			1.0		
10	(10') Boring terminated.								
15									
20									
25									

CONTRACTOR PeneCore **NORTHING** 2084537.18
EQUIPMENT Geoprobe 788201 **EASTING** 6011150.57
DRILL MTHD Direct Push **ANGLE** Vertical
DIAMETER 3 inches
LOGGER KJ **REVIEWER** G. Thrupp, P.G. No. 5849

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-O5 **SHEET** 1 **OF** 1
START DATE 12/18/2018
FINISH DATE 12/18/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER 3.5 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') WELL-GRADED SAND with SILT (SW-SM): brown (10YR 4/3), moist, fine-coarse gravel, medium sand, fines, [10,80,10], trace roots to 2.5'.			DG-O5S-0.5-1			4.4		0.0-1.5' compressed
	(2.5') dark yellowish-brown (10YR 4/6).					60/60			
	(3.5') SILTY GRAVEL with SAND (GM): very dark gray (10YR 3/1), wet, fine-coarse gravel, fine-medium sand, fines, [60,20,20].		▼	DG-O5S-3.5-4			4.5		water level
5	(4.8') coarse gravel lens from 4.8-5.0'.								
	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 6610 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2084537.18
EASTING 6011050.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-O6 **SHEET** 1 **OF** 1
START DATE 12/19/2018
FINISH DATE 12/19/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') WELL-GRADED SAND with SILT and GRAVEL (SW-SM): yellowish-brown (10YR 5/6), dry, fine-coarse gravel, fine-coarse sand, fines, [25,65,10].			DG-O6S-0.5-1			0.1		
						45/60			
				DG-O6S-3.5-4			0.0		
	(4') SILTY SAND with GRAVEL (SM): very dark grayish brown (10YR 3/2), wet, fine-coarse gravel, fine-coarse sand, fines, [20,65,15].								
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 788201
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER KJ **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2084537.18
EASTING 6010950.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-O7 **SHEET** 1 OF 1
START DATE 1/8/2019 **ELEVATION DATA**
FINISH DATE 1/8/2019 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 10 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): greenish gray (10GY 5/1), moist, fine-coarse gravel, medium-coarse sand, fines, [20,55,25].			DG-O7S-0.5-1		60/60	0.9		0.0-0.5' compressed
				DG-O7S-3.5-4			1.4		
	(4') SANDY FAT CLAY (CH): black (N 2.5/), moist, fine-medium sand, fines, [0,40,60], high plasticity.								
5	(5') FAT CLAY (CH): dark greenish gray (5GY 4/1), moist, fine gravel, fines, [5,0,95], high plasticity, firm, Bay Mud.								
	(6') fine gravel approximately 5% from 6.0-7.0'.								
	(7') black (N 2.5/), glass, brick, wood from 7.0-7.5'.					60/60			no deeper sample taken; Bay Mud at 5.0' bgs
10	(10') Boring terminated.								
15									
20									
25									

CONTRACTOR PeneCore **NORTHING** 2084537.18
EQUIPMENT Geoprobe 8040 DT **EASTING** 6010850.57
DRILL MTHD Direct Push **ANGLE** Vertical
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-O8 **SHEET** 1 OF 1
START DATE 1/29/2019 **ELEVATION DATA**
FINISH DATE 1/29/2019 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 5 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** 2.3 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY GRAVEL with SAND (GM): very dark brown (10YR 2/2), moist, cobbles, [60,15,25].			DG-O8S-0.5-1			1.4		
	(1.2') WELL-GRADED SAND with SILT (SW-SM): brown (10YR 4/3), moist, fine sand, [0,90,10].								
	(1.9') POORLY GRADED SAND with GRAVEL (SP): very dark grayish brown (10YR 3/2), wet, fine sand, [45,50,5].		▼			51/60			
	(2.9') POORLY GRADED SAND with SILT (SP-SM): very dark gray (10YR 3/1), wet, fine sand, [0,90,10].			DG-O8S-3.5-4			2.4		
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore **NORTHING** 2084537.18
EQUIPMENT Geoprobe 6600 **EASTING** 6010750.57
DRILL MTHD Direct Push **ANGLE** Vertical
DIAMETER 3 inches
LOGGER NR **REVIEWER** G. Thrupp, P.G. No. 5849

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-O9 **SHEET** 1 **OF** 1
START DATE 12/20/2018
FINISH DATE 12/20/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') WELL-GRADED SAND with SILT (SW-SM): dark gray (10YR 4/1), moist, fine gravel, fine-medium sand, fines, [10,80,10].			DG-O9S-0.5-1		60/60	1.7		0.0-1.0' compressed
	(3') LEAN CLAY with GRAVEL (CL): yellowish-brown (10YR 5/6), moist, fine-coarse gravel, fine sand, fines, [20,10,70], medium plasticity, firm.			DG-O9S-3.5-4			1.9		
	(4.5') dark gray (10YR 4/1), from 4.5-5.0'.								
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 6610 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849
NORTHING 2084537.18
EASTING 6010650.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-O10 **SHEET** 1 OF 1
START DATE 1/14/2019 **ELEVATION DATA**
FINISH DATE 1/14/2019 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 5 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): very dark brown (10YR 2/2), moist, fine gravel, medium-fine sand, fines, [20,50,30].			DG-O10S-0.5-1		54/60	1.5		0.0-2.0' compressed
				DG-O10S-3.5-4			1.4		
	(4') WELL-GRADED GRAVEL with CLAY (GW-GC): dark grayish brown (10YR 4/2), moist, fine-coarse gravel, fine sand, fines, [80,10,10].								
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore **NORTHING** 2084537.18
EQUIPMENT Geoprobe 8040 DT **EASTING** 6010550.57
DRILL MTHD Direct Push **ANGLE** Vertical
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-O11 **SHEET** 1 OF 1
START DATE 1/10/2019 **ELEVATION DATA**
FINISH DATE 1/10/2019 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 10 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** 3.5 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND (SM): dark grayish brown (10YR 4/2), moist, fine gravel, medium-coarse sand, fines, [10,55,35], 5% brick.			DG-O11S-0.5-1		54/60	1.9		0.0-2.0' compressed
	(3') CLAYEY GRAVEL (GC): brown (10YR 5/3), wet, fine-coarse gravel, medium sand, fines, [75,5,20].		▼	DG-O11S-3.5-4			1.9		water level
5	(4.5') FAT CLAY (CH): dark greenish gray (10GY 4/1), moist, fines, [0,0,100], high plasticity, firm, Bay Mud. (5') lens of greenish black (10GY 2.5/1) silt, moist, fines (0,0,100), medium plasticity, soft, 5% shells from 5.0-6.0'.					60/60			no deeper sample taken; Bay Mud at 4.5 and again at 6.0' bgs
10	(10') Boring terminated.								
15									
20									
25									

CONTRACTOR PeneCore **NORTHING** 2084537.18
EQUIPMENT Geoprobe 8040 DT **EASTING** 6010450.57
DRILL MTHD Direct Push **ANGLE** Vertical
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-O12 **SHEET** 1 OF 1
START DATE 1/14/2019
FINISH DATE 1/14/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND (SM): very dark grayish brown (10YR 3/2), moist, fine-coarse gravel, medium-coarse sand, fines, [10,50,40].			DG-O12S-0.5-1		60/60	0.7		0.0-2.0' compressed
				DG-O12S-3.5-4			0.9		
5	(4.5') CLAYEY GRAVEL (GC): very dark gray (10YR 3/1), moist, fine-coarse gravel, fine sand, fines, [50,10,40], large cobbles at 5.0'.								
	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 8040 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF
REVIEWER G. Thrupp, P.G. No. 5849
NORTHING 2084537.18
EASTING 6010350.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-O13 **SHEET** 1 OF 1
START DATE 12/21/2018
FINISH DATE 12/21/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND (SM): dark grayish brown (10YR 4/2), moist, fine gravel, fine-medium sand, fines, [5,70,25].			DG-O13S-0.5-1			1.1		0.0-1.5' compressed
						60/60			
				DG-O13S-3.5-4			1.8		
	(4') black (10YR 2/1), 2" layer.								
	(4.5') WELL-GRADED GRAVEL with CLAY (GW-GC): brown (10YR 5/3), moist, fine-coarse gravel, medium-fine sand, fines, [80,10,10].								
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 6610 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2084537.18
EASTING 6010250.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-O14 **SHEET** 1 **OF** 1
START DATE 1/14/2019
FINISH DATE 1/14/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND (SM): grayish brown (10YR 5/2), moist, fine-coarse gravel, fine-medium sand, fines, [15,50,35].			DG-O14S-0.5-1		60/60	1.0		0.0-2.0' compressed
	(3.5') FAT CLAY (CH): 1" layer.			DG-O14S-3.5-4			1.3		
	(3.6') SILTY GRAVEL (GM): dark gray (10YR 4/1), moist, fine gravel, fine sand, fines, [55,5,40].								
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 8040 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF
REVIEWER G. Thrupp, P.G. No. 5849
NORTHING 2084537.18
EASTING 6010150.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-O15 **SHEET** 1 OF 1
START DATE 1/10/2019 **ELEVATION DATA**
FINISH DATE 1/10/2019 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 10 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): dark grayish brown (10YR 4/2), moist, fine-coarse gravel, fine-medium sand, fines, [25,45,30].			DG-O15S-0.5-1		60/60	1.5		0.0-1.0' compressed
				DG-O15S-3.5-4			1.9		
5	(4') LEAN CLAY with SAND (CL): yellowish-brown (10YR 5/8), moist, fine sand, fines, [0,25,75], medium plasticity, firm, very dark gray (10YR 3/1) and soft from 4.0-5.0'.								
				DG-O15S-7.5-8		60/60	0.5		
10	(10') Boring terminated.								
15									
20									
25									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 8040 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2084537.18
EASTING 6010050.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-P1 **SHEET** 1 **OF** 1
START DATE 11/21/2018
FINISH DATE 11/21/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 10 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): dark yellowish-brown (10YR 4/4), moist, [20,50,30], medium dense.			DG-P1S-0.5-1		48/60	0.0		FID=4.5 ppm; CH4=0%; CO2=0.1%; 02=20.2%; H2S=0.0 ppm; CO=1.0 ppm
				DG-P1S-3.5-4			0.0		FID=4.5 ppm; CH4=0%; CO2=0.1%; 02=20.2%; H2S=0.0 ppm; CO=1.0 ppm
5	(4.3') WELL-GRADED GRAVEL (GW): light gray (10YR 7/1), moist, [90,10,0], loose.					38/60			no deep sample since mostly coarse gravel; FID background=4.5 ppm
10	(9.3') WELL-GRADED GRAVEL with SILT (GW-GM): pale brown (10YR 6/3), [80,10,10].								
	(10') Boring terminated.								
15									
20									
25									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 8040 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER MK **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2084437.18
EASTING 6011439.8
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-P2 **SHEET** 1 **OF** 1
START DATE 12/13/2018
FINISH DATE 12/13/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND (SM): very dark grayish brown (10YR 3/2), moist, medium-grained sand, [0,70,30].			DG-P2S-0.5-1			0.7		
	(1') WELL-GRADED SAND with GRAVEL (SW): very dark grayish brown (10YR 3/2), moist, medium-grained sand, [20,75,5], large rock at 2.3'.					48/60			
	(3.7') SILTY SAND (SM): dark yellowish-brown (10YR 3/6), moist, medium-grained sand, [5,70,25].			DG-P2S-3.5-4			0.8		
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER KB
REVIEWER G. Thrupp, P.G. No. 5849
NORTHING 2084437.18
EASTING 6011350.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-P3 **SHEET** 1 **OF** 1
START DATE 12/13/2018
FINISH DATE 12/13/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') WELL-GRADED SAND with SILT and GRAVEL (SW-SM): dark brown (10YR 3/3), fine-coarse gravel, fine-coarse sand, fines, [20,70,10].			DG-P3S-0.5-1			0.4		
						48/60			
				DG-P3S-3.5-4			0.6		
	(4') CLAYEY SAND with GRAVEL (SC): yellowish-brown (10YR 5/8), fine-coarse gravel, fine-medium sand, fines, [20,60,20].								
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 6600
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER KJ
REVIEWER G. Thrupp, P.G. No. 5849

NORTHING 2084437.18
EASTING 6011250.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-P4 **SHEET** 1 **OF** 1
START DATE 12/19/2018
FINISH DATE 12/19/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 10 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') WELL-GRADED SAND with SILT and GRAVEL (SW-SM): dark yellowish-brown (10YR 4/6), dry, fine-coarse gravel, fine-coarse sand, fines, [20,70,10].			DG-P4S-0.5-1		42/60	3.5		
	(3.5') LEAN CLAY with SAND (CL): brown (10YR 5/3), wet, fine sand, fines, [0,20,80], medium-high plasticity, soft.			DG-P4S-3.5-4			6.9		
5	(4.5') WELL-GRADED GRAVEL with SAND (GW): black (10YR 2/1), wet, fine-coarse gravel, fine-coarse sand, fines, [80,15,5], with free product.			DG-P4S-4.5-5			80.1		
	(5') SILTY SAND with GRAVEL (SM): brown (10YR 4/3), dry, fine-coarse gravel, fine-coarse sand, fines, [20,65,15].			DG-P4S-7.5-8		23/60	6.5		
10	(9') WELL-GRADED GRAVEL with SAND (GW): brownish yellow (10YR 6/6), dry, fine-coarse gravel, fine-coarse sand, [60,0,40].								
	(10') Boring terminated.								
15									
20									
25									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 788201
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER KJ **REVIEWER** G. Thrupp, P.G. No. 5849
NORTHING 2084437.18
EASTING 6011150.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-P5 **SHEET** 1 OF 1
START DATE 1/8/2019 **ELEVATION DATA**
FINISH DATE 1/8/2019 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 10 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND (SM): dark gray (10YR 4/1), moist, fine gravel, medium-coarse sand, fines, [10,65,25].			DG-P5S-0.5-1		60/60	2.1		0.0-1.0' compressed
	(3.5') SILTY GRAVEL with SAND (GM): dark grayish brown (10YR 4/2), moist, fine-coarse gravel, medium-coarse sand, fines, [60,20,20].			DG-P5S-3.5-4			2.4		refusal at 4'; moved drill hole location slightly and redrilled to target depth
	(7') FAT CLAY (CH): very dark greenish gray (5GY 3/1), moist, fines, [0,0,100], high plasticity, firm, Bay Mud.					60/60			no deeper sample taken; Bay Mud at 7.0' bgs
	(10') Boring terminated.								

CONTRACTOR PeneCore **NORTHING** 2084437.18
EQUIPMENT Geoprobe 8040 DT **EASTING** 6011050.57
DRILL MTHD Direct Push **ANGLE** Vertical
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-P6 **SHEET** 1 **OF** 1
START DATE 12/19/2018
FINISH DATE 12/19/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND and GRAVEL (SM): very dark brown (10YR 2/2), dry, fine-coarse gravel, fine-coarse sand, fines, [20,65,15].			DG-P6S-0.5-1			0.1		
	(2') wet.					43/60			
				DG-P6S-3.5-4			0.1		
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 788201
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER KJ **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2084437.18
EASTING 6010950.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-P7 **SHEET** 1 **OF** 1
START DATE 12/18/2018
FINISH DATE 12/18/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 10 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND (SM): grayish brown (10YR 5/2), moist, fine-coarse gravel, fine-medium sand, fines, [10,65,25].			DG-P7S-0.5-1		42/60	2.6		PaleoWest authorizes deeper hole, 0.0-1.0' compressed
				DG-P7S-3.5-4			7.0		
5	(4') SILT with SAND (ML): brownish yellow (10YR 6/6), moist, fine gravel, fine sand, fines, [5,15,80], low plasticity, firm, 1" of dark bark at 4.0'.								
	(6') SILTY GRAVEL with SAND (GM): black (N 2.5/), wet, fine-coarse gravel, medium-coarse sand, fines, [50,30,20].					42/60			
	(9') FAT CLAY (CH): very dark greenish gray (10GY 3/1), moist, fines, [0,0,100], high plasticity, firm, Bay Mud.			DG-P7S-9-9.5			5.6		high PID reading may be due to smeared free product on liner
10	(10') Boring terminated.								
15									
20									
25									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 6610 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2084437.18
EASTING 6010850.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-P8 **SHEET** 1 **OF** 1
START DATE 12/18/2018
FINISH DATE 12/18/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND (SM): grayish brown (10YR 5/2), moist, fine-coarse gravel, fine-medium sand, fines, [10,65,25].			DG-P8S-0.5-1		60/60	1.3		0.0-1.0' compressed
	(3') POORLY GRADED SAND with SILT (SP-SM): very dark gray (2.5Y 3/1), moist, coarse gravel, medium sand, fines, [2,88,10].			DG-P8S-3.5-4			2.4		
	(4') olive brown (2.5Y 4/4), from 3.0-4.0'.								
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 6610 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2084437.18
EASTING 6010750.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-P9 **SHEET** 1 **OF** 1
START DATE 11/21/2018
FINISH DATE 11/21/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 10 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): very pale brown (10YR 7/3) and yellowish-brown (10YR 5/4), moist, [15,45,40], medium dense.			DG-P9S-0.5-1			0.0		FID background=2.3 ppm FID=2.3 ppm; CH4=0.0%; CO2=0.1%; O2=20.7%; H2S=0.0%; CO=0.0 ppm
	(2.5') [25,40,35].			DG-P9S-3.5-4		52/60	0.0		FID=2.2 ppm; CH4=0.0%; CO2=0.0%; O2=20.7%; H2S=0.0%; CO=0.0 ppm
5	(4.5') WELL-GRADED GRAVEL (GW): very pale brown (10YR 7/3) and very dark gray moist, [100,0,0], loose.								
	(6') FAT CLAY (CH): very dark gray (10YR 3/1), moist, [0,0,100], high plasticity, soft, Bay Mud.					55/60			
10	(10') Boring terminated.								
15									
20									
25									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 8040 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER MK **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2084437.18
EASTING 6010650.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-P10 **SHEET** 1 OF 1
START DATE 1/14/2019 **ELEVATION DATA**
FINISH DATE 1/14/2019 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 5 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND (SM): dark yellowish-brown (10YR 4/4), moist, fine-coarse gravel, medium-coarse sand, fines, [10,55,35].			DG-P10S-0.5-1			2.3		0.0-2.0' compressed
	(2.5') 3" lens of 10% shells about the size of coarse-medium sand.			DG-P10S-3.5-4		60/60	2.2		
	(4') CLAYEY GRAVEL (GC): brown (10YR 4/3), moist, fine-coarse gravel, fine sand, fines, [55,5,40].								
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore **NORTHING** 2084437.18
EQUIPMENT Geoprobe 8040 DT **EASTING** 6010550.57
DRILL MTHD Direct Push **ANGLE** Vertical
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-P11 **SHEET** 1 **OF** 1
START DATE 12/20/2018
FINISH DATE 12/20/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND (SM): dark brown (7.5YR 3/2), moist, fine gravel, medium-coarse sand, fines, [10,70,20].			DG-P11S-0.5-1			3.7		0.0-1.5' compressed
	(2') WILL GRADED SAND with SILT (SW-SM): black (10YR 2/1), moist, fine gravel, medium-coarse sand, fines, [5,85,10].					60/60			
	(3') WELL-GRADED GRAVEL with CLAY (GW-GC): dark gray (10YR 4/1), moist, fine-coarse gravel, medium-coarse sand, fines, [80,10,10]. (3.5') 2" layer of coarse gravel and brick.						2.0		no sample taken from 3.5-4' interval - too gravelly
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 6610 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2084437.18
EASTING 6010450.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-P12 **SHEET** 1 **OF** 1
START DATE 1/14/2019
FINISH DATE 1/14/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619

ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER 4.5 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND (SM): dark grayish brown (10YR 4/2), moist, fine-coarse gravel, fine-coarse sand, fines, [15,50,35].			DG-P12S-0.5-1		60/60	1.2		0.0-2.0' compressed
				DG-P12S-3.5-4			1.4		
	(4') CLAYEY GRAVEL (GC): grayish brown (10YR 5/2), moist, fine-coarse gravel, fine-medium sand, fines, [70,10,20].		▼						water level
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 8040 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2084437.18
EASTING 6010350.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-P13 **SHEET** 1 OF 1
START DATE 1/10/2019 **ELEVATION DATA**
FINISH DATE 1/10/2019 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 10 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** 3.5 ft

DEPTH (ft)	MATERIAL DESCRIPTION	SAMPLE ID	RECOVERY	PID READING (ppm)	COMMENTS
	(0') SILTY SAND (SM): brown (10YR 4/3), moist, fine gravel, medium-coarse sand, fines, [5,70,25].	DG-P13S-0.5-1		0.1	0.0-1.5' compressed
	(2') greenish gray (10GY 5/1), from 2.0-2.5'.		60/60		
	(2.5') dark reddish brown (2.5YR 2.5/4), from 2.5-3.0'.				
	(3.5') CLAYEY GRAVEL (GC): very dark gray (10YR 3/1), wet, fine-coarse gravel, medium sand, fines, [50,10,40], 5% ceramic debris.	DG-P13S-3.5-4		2.0	water level
5	(5') FAT CLAY (CH): dark greenish gray (10GY 4/1), moist, fines, [0,0,100], high plasticity, firm, Bay Mud.				no deeper sample taken; Bay Mud at 5.0'
	(9') lens of black (10YR 2/1) silt with trace shells from 9.0-10.0'.				
10	(10') Boring terminated.				
15					
20					
25					

CONTRACTOR PeneCore **NORTHING** 2084437.18
EQUIPMENT Geoprobe 8040 DT **EASTING** 6010250.57
DRILL MTHD Direct Push **ANGLE** Vertical
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-P14 **SHEET** 1 **OF** 1
START DATE 1/14/2019
FINISH DATE 1/14/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND (SM): dark gray (10YR 4/1), moist, fine-coarse gravel, fine-medium sand, fines, [10,50,40].			DG-P14S-0.5-1			0.8		0.0-1.0' compressed
	(2.5') 3" lens of fat clay (CH), brownish yellow (10YR 6/6).					60/60			
	(3') 20% glass and ceramic fragments from 3.0-3.5'.								
	(3.5') SILTY GRAVEL with SAND (GM).			DG-P14S-3.5-4			1.3		
	(4.5') pale green (5G_/2 6/2).								
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 8040 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF
REVIEWER G. Thrupp, P.G. No. 5849
NORTHING 2084437.18
EASTING 6010150.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-P15 **SHEET** 1 **OF** 1
START DATE 12/21/2018
FINISH DATE 12/21/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619

ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND (SM): dark grayish brown (10YR 4/2), moist, fine-coarse gravel, medium-coarse and, fines, [10,60,30], 1" seam of coarse gravel at 3.5'.			DG-P15S-0.5-1		60/60	1.5		0.0-1.5' compressed
	(3.5') CLAYEY GRAVEL (GC): very dark greenish gray (10GY 3/1), moist, fine-coarse gravel, medium-coarse sand, fines, [60,10,30].			DG-P15S-3.5-4			1.7		
5	(4.8') brown (10YR 4/3), from 4.8-5.0'.								
	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 6610 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2084437.18
EASTING 6010050.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-Q1 **SHEET** 1 **OF** 1
START DATE 12/13/2018
FINISH DATE 12/13/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): yellowish-brown (10YR 5/6), dry, fine-coarse gravel, fine-coarse sand, fines, [20,65,15].			DG-Q1S-0.5-1			0.7		
	(2.5') CLAYEY SAND with GRAVEL (SC): very dark grayish brown (10YR 3/2), moist, fine-coarse gravel, fine-coarse sand, fines, [25,60,15].			DG-Q1S-3.5-4		48/60	0.5		
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 6600
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER KJ **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2084337.18
EASTING 6011439.8
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-Q2 **SHEET** 1 **OF** 1
START DATE 12/13/2018
FINISH DATE 12/13/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619

ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND (SM): very dark brown (10YR 2/2), moist, fine-grained, [0,60,40].			DG-Q2S-0.5-1			0.7		
	(1.2') WELL-GRADED SAND with GRAVEL (SW): dark brown (10YR 3/3), moist, medium-grained, [20,75,5], large gravel at 2.7'.					48/60			
	(3.8') SILTY SAND (SM): dark yellowish-brown (10YR 4/6), moist, fine-grained, [5,70,25].			DG-Q2S-3.5-4			1.0		
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER KB
REVIEWER G. Thrupp, P.G. No. 5849

NORTHING 2084337.18
EASTING 6011350.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-Q3 **SHEET** 1 **OF** 1
START DATE 12/18/2019
FINISH DATE 12/18/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619

ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 10 ft bgs
DEPTH TO WATER 3 ft

DEPTH (ft)	MATERIAL DESCRIPTION	SAMPLE ID	RECOVERY	PID READING (ppm)	COMMENTS
	(0') WELL-GRADED SAND with GRAVEL (SW): olive gray (5Y 4/2), moist, fine gravel, fine-coarse sand, [20,75,5].	DG-Q3S-0.5-1		6.9	
	(1') CLAYEY SAND with GRAVEL (SC): dark brown (7.5YR 3/4), moist, fine-coarse gravel, fine-coarse sand, fines, [20,60,20].				1" of red brick (debris)
	(2.5') POORLY GRADED SAND (SP): strong brown (7.5YR 5/6), wet, fine-medium sand, [0,95,5].		54/60		
		DG-Q3S-3.5-4		1.5	
5					no recovery from 4.5-5'
	(5') FAT CLAY (CH): gray (5/N), wet, trace fine sand, [0,tr,100], high plasticity, soft, Bay Mud.		60/60		
10	(10') Boring terminated.				
15					
20					
25					

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 8040 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER BL **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2084337.18
EASTING 6011250.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-Q4 **SHEET** 1 **OF** 1
START DATE 12/19/2018
FINISH DATE 12/19/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619

ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): dark brown (10YR 3/3), dry, fine-coarse gravel, fine-coarse sand, fines, [20,65,15].			DG-Q4S-0.5-1		45/60	4.1		
	(3.5') LEAN CLAY (CL): dark brown (10YR 3/3), wet, fine-medium sand, fines, [0,10,90], medium-high plasticity, soft.			DG-Q4S-3.5-4			4.0		
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 788201
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER KJ **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2084337.18
EASTING 6011150.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-Q5 **SHEET** 1 **OF** 1
START DATE 12/18/2018
FINISH DATE 12/18/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER 4 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') WELL-GRADED SAND with SILT and GRAVEL (SW-SM): very dark grayish brown (10YR 3/2), moist, fine-coarse gravel, fine-medium sand, fines, [20,70,10], trace roots from 1.5-4.0'.			DG-Q5S-0.5-1		60/60	3.7		0.0-1.5' compressed
	(3.5') WELL-GRADED GRAVEL with SILT and SAND (GW-GM): very dark gray (10YR 3/1), wet, fine-coarse gravel, medium sand, fines, [65,25,10]. (4') trace bone fragments.		▼	DG-Q5S-3.5-4			4.5		water level
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 6610 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2084337.18
EASTING 6011050.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-Q6 **SHEET** 1 **OF** 1
START DATE 12/19/2018
FINISH DATE 12/19/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619

ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') WELL-GRADED GRAVEL with SILT and SAND (GW-GM): very dark brown (10YR 2/2), dry, fine-coarse gravel, fine-coarse sand, fines, [70,20,10].			DG-Q6S-0.5-1			0.1		
	(1.5') pea gravel layer.								
	(2') wet.			DG-Q6S-3.5-4			0.2		
5	(5') Boring terminated.								broken rock at bottom
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 788201
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER KJ **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2084337.18
EASTING 6010950.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-Q7 **SHEET** 1 **OF** 1
START DATE 1/8/2019
FINISH DATE 1/8/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619

ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 10 ft bgs
DEPTH TO WATER 6 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): dark grayish brown (10YR 4/2), moist, fine-coarse gravel, fine-coarse sand, fines, [25,55,20].			DG-Q7S-0.5-1		60/60	0.4		0.0-2.0' compressed
				DG-Q7S-3.5-4			0.4		
5	(5') SILTY GRAVEL (GM): black (10YR 2/1), wet, fine-coarse gravel, medium-coarse sand, fines, [65,10,25], 20% glass, luster.		▼						water level
	(7') FAT CLAY (CH): dark greenish gray (5GY 4/1), moist, fines, [0,0,100], high plasticity, firm, Bay Mud.					60/60			no deeper sample taken; Bay Mud at 7.0' bgs
10	(10') Boring terminated.								
15									
20									
25									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 8040 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2084337.18
EASTING 6010850.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-Q8 **SHEET** 1 **OF** 1
START DATE 1/15/2019
FINISH DATE 1/15/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619

ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER 5 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): very dark grayish brown (10YR 3/2), moist, fine-coarse gravel, medium-coarse sand, fines, [20,50,30].			DG-Q8S-0.5-1		60/60	0.5		0.0-1.5' compressed
				DG-Q8S-3.5-4			0.9		
5	(4.9') wet, brick cobble at 5.0'.		▼						water level
	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 6600
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2084337.18
EASTING 6010750.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-Q9 **SHEET** 1 **OF** 1
START DATE 12/20/2018
FINISH DATE 12/20/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER 4 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND (SM): dark gray (10YR 4/1), moist, fine-coarse gravel, fine-medium sand, fines, [10,65,25].			DG-Q9S-0.5-1			1.3		0.0-1.0' compressed
	(2') CLAYEY GRAVEL (GC): brown (10YR 4/3), moist, fine-coarse gravel, fine-medium sand, fines, [55,10,35].					60/60			
				DG-Q9S-3.5-4			1.7		
	(4') wet, from 4.0-5.0'.		▼						water level
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 6610 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2084337.18
EASTING 6010650.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-Q10 **SHEET** 1 OF 1
START DATE 1/14/2019 **ELEVATION DATA**
FINISH DATE 1/14/2019 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 5 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND (SM): very dark gray (10YR 3/1), moist, fine-coarse gravel, fine-medium sand, fines, [10,50,40].			DG-Q10S-0.5-1			1.9		0.0-2.0' compressed
	(2.5') 10% shell fragments about the size of coarse sand from 2.5-3.0'.			DG-Q10S-3.5-4		60/60	3.0		
	(4') CLAYEY GRAVEL (GC): dark grayish brown (10YR 4/2), moist, fine-coarse gravel, fine sand, fines, [55,5,40].								
	(4.5') WELL-GRADED GRAVEL with SILT (GW-GM): dark grayish brown (10YR 4/2), moist, fine-coarse gravel, medium-coarse sand, fines, [80,10,10].								
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore **NORTHING** 2084337.18
EQUIPMENT Geoprobe 8040 DT **EASTING** 6010550.57
DRILL MTHD Direct Push **ANGLE** Vertical
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-Q11 **SHEET** 1 OF 1
START DATE 1/10/2019 **ELEVATION DATA**
FINISH DATE 1/10/2019 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 10 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** 5 ft

DEPTH (ft)	MATERIAL DESCRIPTION	SAMPLE ID	RECOVERY	PID READING (ppm)	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): very dark grayish brown (10YR 3/2), moist, fine-coarse gravel, medium-coarse sand, fines, [20,50,30].	DG-Q11S-0.5-1	54/60	1.4	0.0-2.0' compressed
	(3') CLAYEY GRAVEL (GC): very dark grayish brown (10YR 3/2), moist, fine-coarse gravel, medium sand, fines, [65,10,25].	DG-Q11S-3.5-4		1.9	
5	(5') dark gray (10YR 4/1), wet.		42/60		water level; poor recovery from 5.0-7.5'
					no deeper sample taken; poor recovery and gravel
	(9') FAT CLAY (CH): dark greenish gray (10GY 4/1), moist, fines, [0,0,100], high plasticity, firm, Bay Mud.				
10	(10') Boring terminated.				
15					
20					
25					

CONTRACTOR PeneCore **NORTHING** 2084337.18
EQUIPMENT Geoprobe 8040 DT **EASTING** 6010450.57
DRILL MTHD Direct Push **ANGLE** Vertical
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-Q12 **SHEET** 1 **OF** 1
START DATE 1/14/2019
FINISH DATE 1/14/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619

ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER 4.5 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND (SM): dark grayish brown (10YR 4/2), moist, fine-coarse gravel, medium-coarse sand, fines, [15,50,35].			DG-Q12S-0.5-1		60/60	1.2		0.0-1.5' compressed
	(3') CLAYEY GRAVEL (GC): brown (10YR 4/3), moist, fine-coarse gravel, fine-medium sand, fines, [55,10,35].			DG-Q12S-3.5-4			1.4		
	(4.5') wet.		▼						water level
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 8040 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2084337.18
EASTING 6010350.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-Q13 **SHEET** 1 **OF** 1
START DATE 12/21/2018
FINISH DATE 12/21/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619

ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND (SM): grayish brown (10YR 5/2), moist, fine-coarse gravel, fine-medium sand, fines, [10,70,20].			DG-Q13S-0.5-1			0.6		0.0-1.0' compressed
	(2') black (10YR 2/1), for 1".								
	(2.5') yellowish-brown (10YR 5/4), from 2.5-3.5'.								
	(3.5') WELL-GRADED GRAVEL with CLAY (GW-GC): brown (10YR 5/3), moist, fine-coarse gravel, medium-fine sand, fines, [80,10,10].			DG-Q13S-3.5-4			1.4		
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 6610 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2084337.18
EASTING 6010250.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-Q14 **SHEET** 1 **OF** 1
START DATE 1/14/2019
FINISH DATE 1/14/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND (SM): dark grayish brown (10YR 4/2), moist, fine gravel, fine-medium sand, fines, [10,55,35].			DG-Q14S-0.5-1		60/60	0.8		0.0-2.0' compressed
	(3') brown (10YR 5/3), trace gravel, from 3.0-4.5'.			DG-Q14S-3.5-4			1.2		
	(4.5') CLAYEY GRAVEL (GC): grayish brown (10YR 5/2), moist, fine-coarse gravel, fine-medium sand, fines, [50,5,45].								
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 8040 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF
REVIEWER G. Thrupp, P.G. No. 5849
NORTHING 2084337.18
EASTING 6010150.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-Q15 **SHEET** 1 OF 1
START DATE 1/11/2019
FINISH DATE 1/11/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 10 ft bgs
DEPTH TO WATER 5.5 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): dark grayish brown (10YR 4/2), moist, fine-coarse gravel, medium-coarse sand, fines, [20,45,35].			DG-Q15S-0.5-1			1.0		0.0-1.0' compressed
	(2') black (10YR 2/1), 2" layer of sediment.					60/60			
	(2.5') brown (10YR 4/3), from 2.5-3.5', cobble at 2.5'.			DG-Q15S-3.5-4			0.9		
5	(4.5') CLAYEY GRAVEL with SAND (GC): dark gray (10YR 4/1), moist, fine-coarse gravel, fine-coarse sand, fines, [45,20,35].		▼						water level
	(5') SANDY SILT (ML): dark gray (10YR 4/1), moist, fine gravel, fine-medium sand, fines, [5,40,55], low plasticity, soft.								
	(5.5') wet.			DG-Q15S-7.5-8		60/60	1.2		
10	(10') Boring terminated.								
15									
20									
25									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 8040 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF
REVIEWER G. Thrupp, P.G. No. 5849
NORTHING 2084337.18
EASTING 6010050.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-Q16 **SHEET** 1 **OF** 1
START DATE 1/14/2019
FINISH DATE 1/14/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): grayish brown (10YR 5/2), moist, fine-coarse gravel, fine-medium sand, fines, [20,45,35].			DG-Q16S-0.5-1			0.2		0.0-1.5' compressed
	(2') 2" lens of coarse gravel, large metal fragment.					60/60			
				DG-Q16S-3.5-4			0.3		
	(4') CLAYEY GRAVEL (GC): dark grayish brown (10YR 4/2), moist, fine gravel, fine sand, fines, [50,10,40].								
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 8040 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF
REVIEWER G. Thrupp, P.G. No. 5849
NORTHING 2084337.18
EASTING 6009950.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-R1 **SHEET** 1 **OF** 1
START DATE 12/17/2019 **ELEVATION DATA**
FINISH DATE 12/17/2019 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 15 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): black (10YR 2/1), moist, coarse gravel, fine-coarse sand, fines, [15,70,15]. (0.2') brown (10YR 4/3), dry.			DG-R1S-0.5-1			0.8		
	(1') SILTY SAND with GRAVEL (SM): brown (10YR 4/3), dry, fine-coarse gravel, fine-coarse sand, fines, [30,55,15].					48/48			
				DG-R1S-3.5-4			0.2		no recovery from 4-5'
5						0			
	(5') COBBLES: cobbles 3" x 2".								
	(5.5') CLAYEY GRAVEL with SAND (GC): dark yellowish brown (10YR 4/6), wet, fine-coarse gravel, fine-medium sand, plastic fines, [60,20,20], cobbles up to 3" x 2".								no recovery from 6.5-10'
10									
	(10') FAT CLAY (CH): gray (5/N), wet, [0,0,100], high plasticity, soft, shell pieces, Bay Mud.					48/60			
									no recovery from 14-15'
15	(15') Boring terminated.								
20									
25									

CONTRACTOR PeneCore **NORTHING** 2084237.18
EQUIPMENT Geoprobe 8040 DT **EASTING** 6011439.8
DRILL MTHD Direct Push **ANGLE** Vertical
DIAMETER 3 inches
LOGGER BL **REVIEWER** G. Thrupp, P.G. No. 5849

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-R2 **SHEET** 1 **OF** 1
START DATE 12/13/2018
FINISH DATE 12/13/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 10 ft bgs
DEPTH TO WATER 3 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') WELL-GRADED SAND with GRAVEL (SW): dark brown (10YR 3/3), moist, medium-grained, [25,70,5], large rock at 1.7'; brick at 1.3'.			DG-R2S-0.5-1			0.7		
	(2.8') SILTY SAND (SM): very dark brown (10YR 2/2), moist to wet at 3', fine-grained, [0,70,30].		▼	DG-R2S-3.5-4		45/60	0.6		
5	(5') LEAN CLAY (CL): very dark gray (10YR 3/1), wet, [0,0,100], medium plasticity, few shells.			DG-R2S-4.5-5		60/60	0.7		Bay Mud
10	(10') Boring terminated.								
15									
20									
25									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER KB
REVIEWER G. Thrupp, P.G. No. 5849

NORTHING 2084237.18
EASTING 6011350.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-R3 **SHEET** 1 **OF** 1
START DATE 12/13/2018
FINISH DATE 12/13/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619

ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 20 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND (SM): very dark grayish brown (10YR 3/2), fine-coarse gravel, fine-coarse sand, fines, [10,75,15].			DG-R3S-0.5-1		48/60	0.6		
	(3') LEAN CLAY with SAND (CL): dark yellowish-brown (10YR 3/6), wet, fine-medium sand, fines, [0,15,85], medium plasticity, soft.			DG-R3S-3.5-4			0.3		
5				DG-R3S-5-6			0.3		
10	(10') rock approximately 1".								
15									
20	(19.9') LEAN CLAY (CL): black (10YR 2/1), wet, fines, [0,0,100], medium-high plasticity, soft.								
	(20') Boring terminated.								
25									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 6600
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER KJ **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2084237.18
EASTING 6011250.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-R4 **SHEET** 1 **OF** 1
START DATE 12/19/2018
FINISH DATE 12/19/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 15 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): dark brown (10YR 3/3), dry, fine-coarse gravel, fine-coarse sand, fines, [15,70,15].			DG-R4S-0.5-1		42/60	1.9		
5	(3.5') GRAVELLY LEAN CLAY (CL): dark yellowish-brown (10YR 4/6), fine-coarse gravel, fine-coarse sand, fines, [30,10,60], medium plasticity, soft.			DG-R4S-3.5-4		30/60	2.6		
	(8') SILTY GRAVEL (GM): yellowish-brown (10YR 5/6), wet, fine-coarse gravel, fine-coarse sand, fines, [75,10,15].								
10	(10') LEAN CLAY (CL): very dark greenish gray (10Y 3/1), moist, fines, [0,0,100], medium-high plasticity, soft.			DG-R4S-9.5-10			6.0		
15	(15') Boring terminated.								
20									
25									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 788201
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER KJ **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2084237.18
EASTING 6011150.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-R5 **SHEET** 1 **OF** 1
START DATE 1/29/2019
FINISH DATE 1/29/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 10 ft bgs
DEPTH TO WATER 5 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND (SM): very dark gray (10YR 3/1), moist, fine gravel, fine-coarse sand, fines, [5,55,40].			DG-R5S-0.5-1			0.9		0.0-2.5' compressed
						36/60			
				DG-R5S-3.5-4			1.4		
5	(4.5') WELL-GRADED GRAVEL with SILT (GW-GM): dark grayish brown (10YR 4/2), moist, fine-coarse gravel, fine-coarse sand, fines, [75,15,10]. (5') wet.		▼						water level
	(6.5') FAT CLAY (CH): very dark greenish gray (10GY 3/1), moist, fines, [0,0,100], high plasticity, firm, Bay Mud.					60/60			did not collect deeper sample; Bay Mud encountered at 6.5' bgs
10	(10') Boring terminated.								
15									
20									
25									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 8040 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF
REVIEWER G. Thrupp, P.G. No. 5849

NORTHING 2084237.18
EASTING 6011050.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-R6 **SHEET** 1 **OF** 1
START DATE 12/19/2018 **ELEVATION DATA**
FINISH DATE 12/19/2018 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 10 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') WELL-GRADED SAND with SILT and GRAVEL (SW-SM): dark brown (10YR 3/3), dry, fine-coarse gravel, fine-coarse sand, fines, [20,70,10].			DG-R6S-0.5-1			0.2		
	(2') pea gravel layer.					33/60			
	(4') wet.			DG-R6S-3.5-4			0.2		
5	(5') LEAN CLAY with GRAVEL (CL): dark grayish brown (10YR 4/2), moist, fine-coarse gravel, fine-medium sand, fines, [20,5,75], medium plasticity, hard.								
	(7') LEAN CLAY (CL): dark gray (10YR 4/1), moist, fines, [0,0,100], medium-high plasticity, soft.					30/60			
10	(10') Boring terminated.								
15									
20									
25									

CONTRACTOR PeneCore **NORTHING** 2084237.18
EQUIPMENT Geoprobe 788201 **EASTING** 6010950.57
DRILL MTHD Direct Push **ANGLE** Vertical
DIAMETER 3 inches
LOGGER KJ **REVIEWER** G. Thrupp, P.G. No. 5849

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-R7 **SHEET** 1 **OF** 1
START DATE 12/19/2018
FINISH DATE 12/19/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619

ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 10 ft bgs
DEPTH TO WATER 3.5 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') WELL-GRADED GRAVEL with SILT and SAND (GW-GM): dark gray (10YR 4/1), moist, fine-coarse gravel, fine-medium sand, fines, [50,40,10].			DG-R7S-0.5-1		42/60	4.3		0.0-1.5' compressed
	(3.5') SILTY GRAVEL with SAND (GM): very dark brown (10YR 2/2), wet, fine-coarse gravel, medium-coarse sand, fines, [40,25,35], metal at 3.5'.		▼	DG-R7S-3.5-4			3.3		water level
5	(4') ceramic fragments from 4.0-4.5'.								5.0-8.0' compressed
	(8.5') FAT CLAY (CH): very dark greenish gray (10GY 3/1), moist, fines, [0,0,100], high plasticity, firm, Bay Mud.			DG-R7S-8-8.5			3.0		
10	(10') Boring terminated.								
15									
20									
25									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 6610 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2084237.18
EASTING 6010850.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-R8 **SHEET** 1 **OF** 1
START DATE 1/29/2019
FINISH DATE 1/29/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619

ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 10 ft bgs
DEPTH TO WATER 2.6 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): gray (10YR 5/1), moist, coarse sand, [15,50,35].			DG-R8S-0.5-1			2.6		
	(2') WELL-GRADED SAND with SILT (SW-SM): gray (10YR 5/1), moist, medium sand, [5,85,10].		▼			54/60			
	(3') WELL-GRADED SAND with SILT (SW-SM): gray (10YR 5/1), wet, fine-coarse gravel, coarse sand, fines, [0,90,10].			DG-R8S-3.5-4			2.9		
	(3.8') SILTY SAND with GRAVEL (SM): very dark gray (10YR 3/1), wet, fine-medium sand, [20,50,30].								
5	(4.8') LEAN CLAY (CL): light gray (10YR 7/2), [0,0,100], low plasticity, firm.								
	(6') FAT CLAY (CH): gray (10YR 5/1), wet, [0,0,100], high plasticity, very soft, oily sheen (isolated to small regions), Bay Mud.					11/60			low recovery due to groundwater saturation of Bay Mud that was additionally tainted with nonaqueous phase liquid
10	(10') Boring terminated.								
15									
20									
25									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 6600
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NR **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2084237.18
EASTING 6010750.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-R9 **SHEET** 1 **OF** 1
START DATE 1/22/2019 **ELEVATION DATA**
FINISH DATE 1/22/2019 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 10 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') CLAYEY SAND with GRAVEL (SC): dark brown (10YR 3/3), moist, fine-coarse gravel, fine-coarse sand, clay, [20,60,20].			DG-R9S-0.5-1			0.7		
	(1') CLAYEY GRAVEL with SAND (GC): dark brown (10YR 3/3), moist, fine-coarse gravel, fine-coarse sand, clay, [50,30,20].					48/60			
	(2.6') GRAVELLY CLAY with SAND (CL): dark yellowish-brown (10YR 4/4), moist, fine-coarse gravel, fine-coarse sand, clay, [25,15,60], cobbles >3" diameter.			DG-R9S-3.5-4			1.0		
5									
	(5.5') FAT CLAY (CH): very dark greenish gray (10GB 3/1), moist, clay, [0,0,100].								
10	(10') Boring terminated.								
15									
20									
25									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER CB **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2084237.18
EASTING 6010650.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-R10 **SHEET** 1 OF 1
START DATE 1/29/2019 **ELEVATION DATA**
FINISH DATE 1/29/2019 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 10 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** 1.5 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') WELL-GRADED GRAVEL (GW): black (10YR 2/1), dry, fine gravel, [90,5,5].			DG-R10S-0.5-1			2.1		
	(0.6') SILTY SAND (SM): dark grayish brown (10YR 4/2), moist, fine sand, [tr,85,15].		▼						
	(1.3') LEAN CLAY with GRAVEL (CL): light gray (10YR 7/2), wet, [40,5,55], low plasticity, firm.					41/60			
	(3.5') SILTY GRAVEL (GM): very pale brown (10YR 7/3), wet, cobbles, [80,0,20], very large cobbles broken by direct push bit.			DG-R10S-3.5-4			3.9		
5									
	(7.5') FAT CLAY (CH): gray (10YR 5/1), wet, [0,0,100], high plasticity, soft, Bay Mud.					34/60			
10	(10') Boring terminated.								
15									
20									
25									

CONTRACTOR PeneCore **NORTHING** 2084237.18
EQUIPMENT Geoprobe 6600 **EASTING** 6010550.57
DRILL MTHD Direct Push **ANGLE** Vertical
DIAMETER 3 inches
LOGGER NR **REVIEWER** G. Thrupp, P.G. No. 5849

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-R11 **SHEET** 1 **OF** 1
START DATE 12/20/2018
FINISH DATE 12/20/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 10 ft bgs
DEPTH TO WATER 5 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND (SM): dark gray (10YR 4/1), moist, fine gravel, medium-coarse sand, fines, [5,75,20].			DG-R11S-0.5-1			1.9		0.0-1.0' compressed
	(1.5') SILTY SAND with GRAVEL (SM): dark grayish brown (10YR 4/2), moist, fine-coarse gravel, fine-medium sand, fines, [25,55,20].					60/60			
				DG-R11S-3.5-4			2.5		
5	(4.5') WELL-GRADED GRAVEL with CLAY and SAND (GW-GC): dark gray (10YR 4/1), moist, fine-coarse gravel, medium-coarse sand, fines, [75,15,10]. (5') wet, from 5.0-8.0'.		▼						water level
				DG-R11S-7.5-8		30/60			
	(8') FAT CLAY (CH): very dark greenish gray (10GY 3/1), moist, fines, [0,0,100], high plasticity, firm, Bay Mud.								
10	(10') Boring terminated.								
15									
20									
25									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 6610 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF
REVIEWER G. Thrupp, P.G. No. 5849

NORTHING 2084237.18
EASTING 6010450.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-R12 **SHEET** 1 OF 1
START DATE 1/28/2019 **ELEVATION DATA**
FINISH DATE 1/28/2019 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 10 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** 4 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND (SM): dark gray (10YR 4/1), moist, fine gravel, fine-coarse sand, fines, [10,60,30].			DG-R12S-0.5-1			1.3		
	(1.5') gray (10YR 6/1).								
	(2') yellowish brown (10YR 5/4).					52/60			
			▼	DG-R12S-3.5-4			3.8		
	(4') WELL-GRADED GRAVEL (GW): brown (10YR 4/3), wet, fine-coarse gravel, fine-coarse sand, fines, [85,10,5].								
5									
	(6.1') FAT CLAY (CH): dark gray (N 4/), wet, fines, [0,0,100], high plasticity, soft.					18/60			
10	(10') Boring terminated.								
15									
20									
25									

CONTRACTOR PeneCore **NORTHING** 2084237.18
EQUIPMENT Geoprobe 7822 DT **EASTING** 6010350.57
DRILL MTHD Direct Push **ANGLE** Vertical
DIAMETER 3 inches
LOGGER MK **REVIEWER** G. Thrupp, P.G. No. 5849

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-R13 **SHEET** 1 **OF** 1
START DATE 1/28/2019 **ELEVATION DATA**
FINISH DATE 1/28/2019 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 10 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** 5 ft

DEPTH (ft)	MATERIAL DESCRIPTION	SAMPLE ID	RECOVERY	PID READING (ppm)	COMMENTS
	(0') SILTY SAND (SM): dark grayish brown (10YR 4/2), moist, fine-coarse gravel, fine-coarse sand, fines, [10,55,35].	DG-R13S-0.5-1	60/60	3.7	0.0-2.0' compressed
	(4') brown (10YR 4/3), from 4.0-4.5'.	DG-R13S-3.5-4		3.7	
5	(4.5') WELL-GRADED GRAVEL with CLAY (GW-GC): dark grayish brown (10YR 4/2), moist, fine-coarse gravel, medium-coarse sand, fines, [80,10,10]. (5') wet.				water level
	(7') FAT CLAY (CH): very dark greenish gray (10GY 3/1), moist, fines, [0,0,100], high plasticity, firm, Bay Mud.		60/60		did not collect deeper sample; Bay Mud encountered at 7.0' bgs
10	(10') Boring terminated.				
15					
20					
25					

CONTRACTOR PeneCore **NORTHING** 2084237.18
EQUIPMENT Geoprobe 8040 DT **EASTING** 6010250.57
DRILL MTHD Direct Push **ANGLE** Vertical
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-R14 **SHEET** 1 OF 1
START DATE 1/28/2019
FINISH DATE 1/28/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619

ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 10 ft bgs
DEPTH TO WATER 4.25 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND (SM): very dark grayish brown (10YR 3/2), moist, fine gravel, fine-coarse sand, fines, [10,60,30], 15% shells.			DG-R14S-0.5-1		37/60	1.0		
				DG-R14S-3.5-4			1.9		
5	(4.2') WELL-GRADED GRAVEL (GW): very dark grayish brown (10YR 3/2), wet, fine-coarse gravel, fine-coarse sand, [90,10,0].								
	(6.5') FAT CLAY (CH): dark gray (N 4/), wet, fines, [0,0,100], high plasticity, soft.					19/60			
	(9') SILTY SAND (SM): very dark gray (10YR 3/1), wet, fine sand, fines, [0,60,40].								
10	(10') Boring terminated.								
15									
20									
25									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 7822 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER MK **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2084237.18
EASTING 6010150.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-R15 **SHEET** 1 **OF** 1
START DATE 12/21/2018
FINISH DATE 12/21/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 4 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND (SM): dark yellowish-brown (10YR 3/4), moist, fine gravel, medium-coarse sand, fines, [5,75,20].			DG-R15S-0.5-1		48/60	1.9		0.0-2.0' compressed
	(3') thin plastic sheets and 3" metal fragments.			DG-R15S-3.5-4			1.5		
	(3.8') sheen/luster from 3.8-4.0'.								
	(4') Boring terminated.						13.0		refusal at 4'; re-drill 1150-1151; refusal at 4' again
5									
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 6610 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2084237.18
EASTING 6010050.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-R16 **SHEET** 1 OF 1
START DATE 1/28/2019 **ELEVATION DATA**
FINISH DATE 1/28/2019 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 20 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** 4 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): very dark grayish brown (10YR 3/2), moist, fine-coarse gravel, fine-coarse sand, fines, [20,50,30].			DG-R16S-0.5-1		45/60	1.2		
			▼	DG-R16S-3.5-4			3.1		
	(4') SANDY SILT with GRAVEL (ML): brown (10YR 4/3), wet, fine-coarse gravel, fine-coarse sand, fines, [20,25,55], low plasticity, soft.								
5	(5.5') SILTY SAND (SM): very dark gray (10YR 3/1), wet, fine sand, fines, [0,75,25].					33/60			
10						60/60			
15	(14.1') SANDY LEAN CLAY (CL): very dark gray (10YR 3/1), wet, fine sand, fines, [0,40,60], low plasticity, soft.								
	(17') SILTY SAND (SM): yellowish brown (10YR 5/4), wet, fine sand, fines, [0,70,30].					60/60			
20	(20') Boring terminated.			DG-R16S-19.5-20			1.2		
25									

CONTRACTOR PeneCore **NORTHING** 2084237.18
EQUIPMENT Geoprobe 7822 DT **EASTING** 6009950.57
DRILL MTHD Direct Push **ANGLE** Vertical
DIAMETER 3 inches
LOGGER MK **REVIEWER** G. Thrupp, P.G. No. 5849

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-S1 **SHEET** 1 **OF** 1
START DATE 12/13/2018
FINISH DATE 12/13/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') WELL-GRADED SAND with SILT and GRAVEL (SW-SM): dark grayish brown (10YR 4/2), dry, fine-coarse gravel, fine-coarse sand, fines, [25,65,10].			DG-S1S-0.5-1			0.4		
	(2') moist.					48/60			
				DG-S1S-3.5-4			0.2		
	(4.5') oxidation present and a broken rock is present.								
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 6600
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER KJ
REVIEWER G. Thrupp, P.G. No. 5849
NORTHING 2084137.18
EASTING 6011439.8
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-S2 **SHEET** 1 **OF** 1
START DATE 12/13/2018
FINISH DATE 12/13/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER 3 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') WELL-GRADED SAND with GRAVEL (SW): brown (10YR 4/3), moist, fine-grained, [25,70,5].			DG-S2S-0.5-1			0.6		
	(2.4') POORLY GRADED SAND with SILT (SP-SM): dark yellowish-brown (10YR 3/4), moist, fine-grained, [0,90,10].		▼			53/60			
	(3.6') WELL-GRADED GRAVEL (GW): very dark grayish brown (10YR 3/2), wet, coarse gravel, [90,10,0].			DG-S2S-3.5-4			0.6		
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER KB
REVIEWER G. Thrupp, P.G. No. 5849

NORTHING 2084137.18
EASTING 6011350.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-S3 **SHEET** 1 **OF** 1
START DATE 12/18/2019
FINISH DATE 12/18/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619

ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 10 ft bgs
DEPTH TO WATER 5.5 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') WELL-GRADED SAND with GRAVEL (SW): gray (5/N), moist, fine gravel, fine-coarse sand, fines, [20,75,5].			DG-S3S-0.5-1			2.3		
	(1.5') POORLY GRADED SAND (SP): very dark brown (10YR 2/2), moist, fine sand, [0,100,tr].					48/60			
	(1.7') WELL-GRADED SAND with GRAVEL (SW): gray (5/N), moist, fine gravel, fine-coarse sand, fines, [20,75,5].			DG-S3S-3.5-4					
	(4') cobbles up to 4" x 2.5", 4" of cobbles.								
5	(5') POORLY GRADED SAND (SP): strong brown (7.5YR 5/6), dry, fine-medium sand, [0,100,0].		▼						
	(5.5') brown (10YR 4/3), wet.					60/60			
	(8.3') FAT CLAY (CH): gray (5/N), wet, trace fine sand, [0,tr,100], high plasticity, soft, Bay Mud.								
10	(10') Boring terminated.								
15									
20									
25									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 8040 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER BL **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2084137.18
EASTING 6011250.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-S4 **SHEET** 1 **OF** 1
START DATE 12/19/2018
FINISH DATE 12/19/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND and GRAVEL (SM): dark brown (10YR 3/3), dry, fine-coarse gravel, fine-coarse sand, fines, [15,70,15].			DG-S4S-0.5-1			3.3		
				DG-S4S-3.5-4		40/60	2.8		
	(4.5') SILTY GRAVEL (GM): very dark grayish brown , wet, fine-coarse gravel, fine-coarse sand, fines, [75,10,15].								
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 788201
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER KJ **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2084137.18
EASTING 6011150.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-S5 **SHEET** 1 **OF** 1
START DATE 12/18/2018
FINISH DATE 12/18/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER 3.5 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') POORLY GRADED SAND with SILT (SP-SM): very dark grayish brown (10YR 3/2), moist, fine-coarse gravel, fine-medium sand, fines, [10,80,10].			DG-S5S-0.5-1		60/60	0.3		0.0-1.0' compressed
	(3') trace brick and bone fragments.		▼						
	(3.5') POORLY GRADED SAND with SILT (SP-SM): very dark greenish gray (5GY 3/1), wet, fine-coarse gravel, medium sand, fines, [10,80,10].			DG-S5S-3.5-4			0.3		water level
5	(4.8') lens of coarse gravel from 4.8-5.0'.								
	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 6610 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2084137.18
EASTING 6011050.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-S6 **SHEET** 1 **OF** 1
START DATE 12/19/2018
FINISH DATE 12/19/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') WELL-GRADED SAND with SILT and GRAVEL (SW-SM): dark brown (10YR 3/3), dry, fine-coarse gravel, fine-coarse sand, fines, [20,70,10].			DG-S6S-0.5-1			0.2		
				DG-S6S-3.5-4		35/60	0.1		
	(4') WELL-GRADED GRAVEL with SAND (GW): dark brown (10YR 3/3), fine-coarse gravel, fine-coarse sand, fines, [80,15,5].								
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 788201
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER KJ **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2084137.18
EASTING 6010950.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-S7 **SHEET** 1 **OF** 1
START DATE 1/8/2019
FINISH DATE 1/8/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619

ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 10 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): grayish brown (10YR 5/2), moist, fine-coarse gravel, medium-coarse sand, fines, [25,55,20].			DG-S7S-0.5-1			1.1		
	(1.5') lens of mostly fine gravel, pea gravel from 1.5-2.0'.					60/60			
	(3') SILTY GRAVEL (GM): very dark brown (10YR 2/2), moist, fine gravel, fine-medium sand, fines, [50,10,40], 20% glass and ceramic fragments.			DG-S7S-3.5-4			1.2		
5	(5.5') black (10YR 2/1), from 5.5-6.0'.								
	(6') FAT CLAY (CH): dark greenish gray (5GY 4/1), moist, fines, [0,0,100], high plasticity, firm, Bay Mud.								no deeper sample taken; Bay Mud at 6.0' bgs
10	(10') Boring terminated.								
15									
20									
25									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 8040 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2084137.18
EASTING 6010850.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-S8 **SHEET** 1 **OF** 1
START DATE 1/29/2019
FINISH DATE 1/29/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER 3.2 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY GRAVEL with SAND (GM): dark gray (10YR 4/1), moist, fine gravel, [50,30,20].			DG-S8S-0.5-1		44/60	3.7		
	(2.7') POORLY GRADED GRAVEL with SILT and SAND (GP-GM): gray (10YR 6/1), wet, fine gravel, [60,30,10].		▼	DG-S8S-3.5-4			2.4		
	(4') SILTY GRAVEL with SAND (GM): black (10YR 2/1), wet, coarse gravel, [70,10,20], oily sheen.								
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 6600
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NR
REVIEWER G. Thrupp, P.G. No. 5849
NORTHING 2084137.18
EASTING 6010750.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-S9 **SHEET** 1 **OF** 1
START DATE 12/20/2018
FINISH DATE 12/20/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 10 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') WELL-GRADED SAND with SILT (SW-SM): dark gray (10YR 4/1), moist, fine gravel, fine-medium sand, fines, [10,80,10].			DG-S9S-0.5-1			1.5		0.0-1.0' compressed
	(2') WELL-GRADED SAND with SILT and GRAVEL (SW-SM): dark gray (10YR 4/1), moist, fine-coarse gravel, medium-coarse sand, fines, [20,70,10].					60/60			redrilled to 10' from 1256-1305 to investigate possible free product
	(3.5') brick.			DG-S9S-3.5-4			1.3		
5	(4.8') fat clay (CH) lens mixed with cobbles from 4.8-5.0'.						26.0		
	(5') CLAYEY SAND (SC): yellowish-brown (10YR 5/4), moist, fine gravel, fine-medium sand, fines, [5,70,25].						23.0		
				DG-S9S-7.5-8		60/60	23.0		
	(8') FAT CLAY (CH): very dark greenish gray (10GY 3/1), moist, fines, [0,0,100], high plasticity, firm, 2" layer of mostly fine gravel with luster or sheen at 8.0'. (8.5') black (N 2.5/), from 8.0-8.5'.						3.0		
10	(10') Boring terminated.								
15									
20									
25									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 6610 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2084137.18
EASTING 6010650.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-S10 **SHEET** 1 OF 1
START DATE 1/14/2019 **ELEVATION DATA**
FINISH DATE 1/14/2019 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 5 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND (SM): yellowish-brown (10YR 5/8), moist, fine-coarse gravel, fine-medium sand, fines, [10,70,20].			DG-S10S-0.5-1		54/60	2.4		0.0-2.5' compressed
				DG-S10S-3.5-4			2.9		
	(4') CLAYEY GRAVEL (GC): dark grayish brown (10YR 4/2), moist, fine-coarse gravel, fine sand, fines, [55,5,40].								
5	(4.7') WELL-GRADED GRAVEL with SILT (GW-GM): [80,10,10].								
	(5') Boring terminated.								
10									

CONTRACTOR PeneCore **NORTHING** 2084137.18
EQUIPMENT Geoprobe 8040 DT **EASTING** 6010550.57
DRILL MTHD Direct Push **ANGLE** Vertical
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-S11 **SHEET** 1 OF 1
START DATE 1/10/2019 **ELEVATION DATA**
FINISH DATE 1/10/2019 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 10 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): dark gray (10YR 4/1), moist, fine gravel, medium-coarse sand, fines, [20,50,30].			DG-S11S-0.5-1			0.9		0.0-1.5' compressed
	(2') 25% shell fragments about the size of coarse sand from 2.0-3.0'.					60/60			
	(3.5') cobble.			DG-S11S-3.5-4			1.0		
	(4') CLAYEY GRAVEL (GC): grayish brown (10YR 5/2), moist, fine-coarse gravel, medium sand, fines, [65,10,25].								
5	(5') FAT CLAY (CH): dark greenish gray (10GY 4/1), moist, fines, [0,0,100], high plasticity, firm, Bay Mud.								
	(6') 2" lens of silt, greenish black (10GY 2.5/1).					60/60			no deeper sample taken; Bay Mud at 5.0' bgs
10	(10') Boring terminated.								
15									
20									
25									

CONTRACTOR PeneCore **NORTHING** 2084137.18
EQUIPMENT Geoprobe 8040 DT **EASTING** 6010450.57
DRILL MTHD Direct Push **ANGLE** Vertical
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-S12 **SHEET** 1 OF 1
START DATE 1/14/2019 **ELEVATION DATA**
FINISH DATE 1/14/2019 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 5 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') CLAYEY GRAVEL (GC): dark grayish brown (10YR 4/2), moist, fine-coarse gravel, fine sand, fines, [50,5,45].			DG-S12S-0.5-1		60/60	0.9		0.0-2.0' compressed
	(3') 20% shell fragments about the size of coarse sand from 3.0-4.0'.			DG-S12S-3.5-4			1.3		
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore **NORTHING** 2084137.18
EQUIPMENT Geoprobe 8040 DT **EASTING** 6010350.57
DRILL MTHD Direct Push **ANGLE** Vertical
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-S13 **SHEET** 1 OF 1
START DATE 12/21/2018 **ELEVATION DATA**
FINISH DATE 12/21/2018 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 5 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY GRAVEL (GM): very dark grayish brown (10YR 3/2), moist, coarse gravel, fine-medium sand, fines, [55,10,35], 80% concrete fragments.			DG-S13S-0.5-1		60/60	0.6		0.0-2.0' compressed
	(3') WELL-GRADED SAND with SILT and GRAVEL (SW-SM): dark gray (10YR 4/1), moist, fine-coarse gravel, medium-coarse sand, fines, [20,70,10].			DG-S13S-3.5-4			0.9		
	(4') WELL-GRADED GRAVEL with CLAY (GW-GC): grayish brown (10YR 5/2), moist, fine-coarse gravel, medium-coarse sand, fines, [80,10,10], clam shell at 4.0'.								
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore **NORTHING** 2084137.18
EQUIPMENT Geoprobe 6610 DT **EASTING** 6010250.57
DRILL MTHD Direct Push **ANGLE** Vertical
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-S14 **SHEET** 1 **OF** 1
START DATE 1/14/2019
FINISH DATE 1/14/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND (SM): dark gray (10YR 4/1), moist, fine-coarse gravel, fine-medium sand, fines, [15,50,35], trace brick fragments.			DG-S14S-0.5-1		60/60	1.2		0.0-2.0' compressed; drilled from 0855-0857; refusal at 4.5'; redrilled from 0911-0912 and advanced to 5' bgs
	(3') concrete fragments from 3.0-3.5'.								
	(3.5') 15% shell fragments about the size of coarse sand from 3.5-4.0'.			DG-S14S-3.5-4			1.5		
	(4') CLAYEY GRAVEL (GC): yellowish-brown (10YR 5/4), moist, fine-coarse gravel, medium sand, fines, [50,5,45].								
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 8040 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2084137.18
EASTING 6010150.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-S15 **SHEET** 1 OF 1
START DATE 1/11/2019
FINISH DATE 1/11/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 10 ft bgs
DEPTH TO WATER 4 ft

DEPTH (ft)	MATERIAL DESCRIPTION	SAMPLE ID	RECOVERY	PID READING (ppm)	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): grayish brown (10YR 5/2), moist, fine-coarse gravel, medium-coarse sand, fines, [20,45,35].	DG-S15S-0.5-1		1.0	0.0-1.5' compressed
	(2.5') lens of medium plasticity (CL) lean clay, brownish yellow (10YR 6/8) from 2.5-3.0'.		60/60		
	(4') CLAYEY GRAVEL (GC): dark gray (10YR 4/1), wet, fine-coarse gravel, medium-coarse sand, fines, [65,5,30].	DG-S15S-3.5-4		1.3	water level
5	(5') luster and odor from 5.0-6.5'.				
	(6.5') FAT CLAY (CH): dark greenish gray (10GY 4/1), moist, fines, [0,0,100], high plasticity, firm, Bay Mud.	DG-S15S-6-6.5		2.5	
	(8.5') SANDY LEAN CLAY (CL): black (N 2.5/), moist, fine sand, fines, [0,35,65], medium plasticity, soft, 20% ceramic debris, slight luster from 8.5-9.0'.		60/60		
10	(9') greenish black (5GY 2.5/1).				
	(10') Boring terminated.				
15					
20					
25					

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 8040 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF
REVIEWER G. Thrupp, P.G. No. 5849
NORTHING 2084137.18
EASTING 6010050.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-S16 **SHEET** 1 OF 1
START DATE 1/14/2019
FINISH DATE 1/14/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER 5 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): grayish brown (10YR 5/2), moist, fine-coarse gravel, fine-medium sand, fines, [20,45,35].			DG-S16S-0.5-1		60/60	0.6		0.0-1.0' compressed
	(3.5') LEAN CLAY with GRAVEL (CL): very dark gray (10YR 3/1), moist, fine-coarse gravel, fine-medium sand, fines, [20,10,70], medium plasticity, soft, 10% metal and ceramic debris, becomes wet at 5.0'.			DG-S16S-3.5-4			0.9		
5	(5') Boring terminated.		▼						water level
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 8040 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2084137.18
EASTING 6009950.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-S17 **SHEET** 1 **OF** 1
START DATE 2/5/2019
FINISH DATE 2/5/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY GRAVEL with SAND (GM): dark grayish brown (10YR 4/2), moist, fine-coarse gravel, fine-medium sand, fines, [50,15,35].			DG-S17S-0.5-1		60/60	0.6		0.0-1.0' compressed
				DG-S17S-3.5-4			0.4		
	(4.5') SILTY SAND (SM): dark grayish brown (10YR 4/2), moist, fine gravel, fine-medium sand, fines, [5,70,25].								
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 7822 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2084137.18
EASTING 6009850.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-T1 **SHEET** 1 **OF** 1
START DATE 12/17/2019
FINISH DATE 12/17/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 10 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') WELL-GRADED SAND with SILT and GRAVEL (SW-SM): black (10YR 2/1), moist, coarse gravel, fine-coarse sand, fines, [20,70,10].			DG-T1S-0.5-1			0.3		
	(1') SILTY SAND with GRAVEL (SM): dark brown (10YR 3/3), moist, coarse gravel, fine-coarse sand, fines, [25,60,15].					45/60			
	(4') cobbles up to 3" x 2.5", layer is approximately 10" thick.			DG-T1S-3.5-4			0.5		
5	(4.75') GRAVELLY LEAN CLAY (CL): dark grayish brown (10YR 4/2), coarse gravel, fine-coarse sand, plastic fines, [30,15,55], low plasticity. (5.25') wet, cobbles up to 3" x 2.5".								
	(7') FAT CLAY (CH): gray (5/N), wet, fines, [0,0,100], high plasticity, soft, shell pieces, Bay Mud.					42/60			no recovery from 8.5-10'
10	(10') Boring terminated.								
15									
20									
25									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 8610 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER BL **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2084037.18
EASTING 6011439.8
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-T2 **SHEET** 1 **OF** 1
START DATE 12/13/2018
FINISH DATE 12/13/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619

ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): dark brown (10YR 3/3), moist, medium-grained, [20,60,20].			DG-T2S-0.5-1			1.1		
	(1.3') POORLY GRADED SAND with SILT (SP-SM): dark yellowish-brown (10YR 3/6), moist, fine-grained, [0,90,10].					40/60			
	(4') WELL-GRADED GRAVEL (GW): light gray (10YR 7/1), dry, [90,10,0], cobble.			DG-T2S-3.5-4			1.1		
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER KB
REVIEWER G. Thrupp, P.G. No. 5849

NORTHING 2084037.18
EASTING 6011350.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-T3 **SHEET** 1 **OF** 1
START DATE 12/14/2018
FINISH DATE 12/14/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') WELL-GRADED GRAVEL with SILT and SAND (GW-GM): dark brown , dry, fine-coarse gravel, fine-coarse sand, fines, [70,20,10].			DG-T3S-0.5-1			0.3		
						60/60			
				DG-T3S-3.5-4			1.0		
	(4.5') rock approximately 4".								
5	(4.9') LEAN CLAY (CL): very dark greenish gray (10Y 3/1), moist, coarse gravel, fines, [10,0,90], medium-high plasticity, soft.								
	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 6600
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER KJ **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2084037.18
EASTING 6011250.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-T4 **SHEET** 1 **OF** 1
START DATE 12/19/2018
FINISH DATE 12/19/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') WELL-GRADED SAND with SILT and GRAVEL (SW-SM): dark brown (10YR 3/3), dry, fine-coarse gravel, fine-coarse, fines, [20,70,10].			DG-T4S-0.5-1		45/60	3.0		
	(3.5') yellowish-brown (10YR 5/6), wet.			DG-T4S-3.5-4			0.5		
	(4.5') GRAVELLY LEAN CLAY (CL): brown (10YR 4/3), moist, fine-coarse gravel, fine-medium sand, fines, [30,10,60], medium plasticity, soft.								
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 788201
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER KJ **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2084037.18
EASTING 6011150.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-T5 **SHEET** 1 **OF** 1
START DATE 1/7/2019 **ELEVATION DATA**
FINISH DATE 1/7/2019 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 8.5 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND (SM): dark brown (10YR 3/3), moist, fine-coarse gravel, fine-medium sand, fines, [10,60,30].			DG-T5S-0.5-1			1.0		0.0-1.5' compressed
	(3') large piece of scrap metal.								
	(3.5') wet.			DG-T5S-3.5-4			0.6		water level
5	(5') WELL-GRADED GRAVEL with CLAY (GW-GC): dark gray (10YR 4/1), wet, fine-coarse gravel, medium-coarse sand, fines, [80,10,10].								
	(8.5') Boring terminated.								refusal at 8.5'
10									

CONTRACTOR PeneCore **NORTHING** 2084037.18
EQUIPMENT Geoprobe 8040 DT **EASTING** 6011050.57
DRILL MTHD Direct Push **ANGLE** Vertical
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-T6 **SHEET** 1 **OF** 1
START DATE 12/19/2018
FINISH DATE 12/19/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): very dark grayish brown (10YR 3/2), dry, fine-coarse gravel, fine-coarse sand, fines, [20,65,15].			DG-T6S-0.5-1			0.1		
	(2.5') pea gravel layer.								
	(3.5') wet.			DG-T6S-3.5-4			0.2		
5	(5') Boring terminated.								rock at bottom
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 788201
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER KJ **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2084037.18
EASTING 6010950.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-T7 **SHEET** 1 **OF** 1
START DATE 12/19/2018
FINISH DATE 12/19/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER 3.5 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') POORLY GRADED SAND with SILT (SP-SM): very dark grayish brown (10YR 3/2), moist, fine-coarse gravel, fine-medium sand, fines, [10,80,10].						3.6		0.0-1.5' compressed no sample taken from 0.5-1' interval - too gravelly
	(2') POORLY GRADED GRAVEL (GP): grayish brown (10YR 5/2), moist, fine gravel, medium-coarse sand, fines, [95,3,2], lens of poorly graded medium sand 3" wide at 3.0'.					60/60			
	(3') SILTY GRAVEL with SAND (GM): very dark brown (10YR 2/2), wet, fine-coarse gravel, medium-coarse sand, fines, [40,25,35].		▼	DG-T7S-3.5-4			3.6		water level
	(4.5') trace glass fragments from 4.5-5.0'.								
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 6610 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2084037.18
EASTING 6010850.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-T8 **SHEET** 1 **OF** 1
START DATE 1/15/2019 **ELEVATION DATA**
FINISH DATE 1/15/2019 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 5 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND (SM): dark gray (10YR 4/1), moist, fine-coarse gravel, medium-coarse sand, fines, [15,60,25].			DG-T8S-0.5-1		60/60	0.9		0.0-2.0' compressed
	(3') SILTY GRAVEL (GM): very dark brown (10YR 2/2), moist, fine-coarse gravel, fine-medium sand, fines, [55,10,35], 10% glass and ceramic debris. (3.5') grayish brown (10YR 5/2), for 2".			DG-T8S-3.5-4			0.7		
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore **NORTHING** 2084037.18
EQUIPMENT Geoprobe 6600 **EASTING** 6010750.57
DRILL MTHD Direct Push **ANGLE** Vertical
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-T9 **SHEET** 1 **OF** 1
START DATE 1/10/2019
FINISH DATE 1/10/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 10 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY GRAVEL with SAND (GM): greenish gray (10Y 5/1), moist, fine-coarse gravel, medium-coarse sand, fines, [40,35,25].			DG-T9S-0.5-1			1.2		0.0-1.5' compressed
				DG-T9S-3.5-4		60/60	2.0		
5	(4.5') very dark brown (10YR 2/2), 30% glass and ceramics from 4.5-6.5'.								
	(6.3') black (10YR 2/1), from 6.3-6.5'.								
	(6.5') FAT CLAY (CH): dark greenish gray (10GY 4/1), moist, fines, [0,0,100], high plasticity, firm, Bay Mud.					60/60			no deeper sample taken; Bay mud at 6.5' bgs
10	(10') Boring terminated.								
15									
20									
25									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 8040 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2084037.18
EASTING 6010650.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-T10 **SHEET** 1 **OF** 1
START DATE 1/14/2019
FINISH DATE 1/14/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND (SM): dark grayish brown (10YR 4/2), moist, fine gravel, fine-medium sand, fines, [10,55,35].			DG-T10S-0.5-1		60/60	1.9		0.0-2.0' compressed
	(3.5') CLAYEY GRAVEL (GC): dark grayish brown (10YR 4/2), moist, fine-coarse gravel, fine sand, fines, [55,5,40].			DG-T10S-3.5-4			1.9		
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 8040 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2084037.18
EASTING 6010550.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-T11 **SHEET** 1 **OF** 1
START DATE 12/21/2018
FINISH DATE 12/21/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619

ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') WELL-GRADED SAND with SILT (SW-SM): brown (10YR 5/3), moist, fine gravel, fine-medium sand, fines, [5,85,10].			DG-T11S-0.5-1			0.5		0.0-1.5' compressed
	(2.5') 1" lens of mostly fine gravel.			DG-T11S-3.5-4		60/60	1.0		
	(4') CLAYEY SAND (SC): very dark grayish brown (10YR 3/2), moist, fine gravel, fine-medium sand, fines, [5,70,25], trace roots and large wood fragments.								
5	(5') Boring terminated.								pushed through a large piece of wood at 5' that got stuck in the casing
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 6610 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2084037.18
EASTING 6010450.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-T12 **SHEET** 1 **OF** 1
START DATE 1/14/2019 **ELEVATION DATA**
FINISH DATE 1/14/2019 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 5 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND (SM): very dark brown (10YR 2/2), moist, fine-coarse gravel, fine-medium sand, fines, [15,50,35].			DG-T12S-0.5-1		60/60	1.1		0.0-2.0' compressed
	(3.5') SILTY GRAVEL (GM): very pale brown (10YR 8/2), dry, fine-coarse gravel, fine sand, fines, [55,10,35].			DG-T12S-3.5-4			2.7		
	(4.5') yellowish-brown (10YR 5/4), moist, from 4.5-5.0'.								
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore **NORTHING** 2084037.18
EQUIPMENT Geoprobe 8040 DT **EASTING** 6010350.57
DRILL MTHD Direct Push **ANGLE** Vertical
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-T13 **SHEET** 1 **OF** 1
START DATE 1/10/2019
FINISH DATE 1/10/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 10 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): very dark grayish brown (10YR 3/2), moist, fine-coarse gravel, medium-coarse sand, fines, [20,55,25].			DG-T13S-0.5-1		60/60	2.4		0.0-2.0' compressed
				DG-T13S-3.5-4			1.7		
5	(4.5') WELL-GRADED GRAVEL with CLAY (GW-GC): grayish brown (10YR 5/2), moist, coarse gravel, medium sand, fines, [80,10,10].								
	(5') FAT CLAY (CH): dark greenish gray (10GY 4/1), moist, fines, [0,0,100], high plasticity, firm, Bay Mud. (5.5') coarse gravel lens from 5.5-6' mixed into Bay Mud.								no deeper sample taken; Bay Mud at 5.0'
10	(10') Boring terminated.								
15									
20									
25									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 8040 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2084037.18
EASTING 6010250.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-T14 **SHEET** 1 OF 1
START DATE 1/14/2019 **ELEVATION DATA**
FINISH DATE 1/14/2019 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 5 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** 4.5 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND (SM): very dark grayish brown (10YR 3/2), moist, fine-coarse gravel, fine-medium sand, fines, [10,50,40].			DG-T14S-0.5-1		60/60	0.8		0.0-2.0' compressed
				DG-T14S-3.5-4			0.9		
	(4') trace brick fragments.								
	(4.5') wet.		▼						water level
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore **NORTHING** 2084037.18
EQUIPMENT Geoprobe 8040 DT **EASTING** 6010150.57
DRILL MTHD Direct Push **ANGLE** Vertical
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-T15 **SHEET** 1 **OF** 1
START DATE 12/21/2018
FINISH DATE 12/21/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619

ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER 4.5 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') WELL-GRADED SAND with SILT and GRAVEL (SW-SM): dark gray (10YR 4/1), moist, fine gravel, medium-coarse sand, fines, [35,55,10].			DG-T15S-0.5-1			1.1		0.0-1.0' compressed
	(1.5') CLAYEY GRAVEL (GC): very dark greenish gray (10GY 3/1), moist, fine-coarse gravel, medium-coarse sand, fines, [50,10,40].					60/60			
				DG-T15S-3.5-4			1.4		
			▼						water level
5	(4.8') very dark grayish brown (10YR 3/2), from 4.8-5.0'.								
	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 6610 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2084037.18
EASTING 6010050.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-T16 **SHEET** 1 OF 1
START DATE 1/24/2019 **ELEVATION DATA**
FINISH DATE 1/24/2019 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 5 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** 4.5 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND (SM): black (10YR 2/1), moist, fine-coarse gravel, medium-coarse sand, fines, [10,60,30], 4" metal bolt at 4'.			DG-T16S-0.5-1		60/60	0.8		location inaccessible; moved drill hole 20' south; 0.0-1.0' compressed
				DG-T16S-3.5-4			5.0		
	(4') WELL-GRADED GRAVEL with SILT (GW-GM): brown (10YR 4/3), moist, fine-coarse gravel, fine-medium sand, fines, [85,5,10].		▼						
	(4.5') wet, slight luster.								water level
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore **NORTHING** 2084037.18
EQUIPMENT Geoprobe 7822 DT **EASTING** 6009950.57
DRILL MTHD Direct Push **ANGLE** Vertical
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-T17 **SHEET** 1 **OF** 1
START DATE 1/28/2019 **ELEVATION DATA**
FINISH DATE 1/28/2019 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 10 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): grayish brown (10YR 5/2), moist, fine-coarse gravel, fine-medium sand, fines, [15,50,35].			DG-T17S-0.5-1		60/60	3.8		0.0-2.0' compressed
	(4') yellow (10YR 7/8), from 4.0-5.0'.			DG-T17S-3.5-4			4.1		
5	(5') CLAYEY GRAVEL (GC): very dark brown (10YR 2/2), moist, fine-coarse gravel, fine-medium sand, fines, [50,10,40], 5% ceramic debris, trace rubber debris.								
	(7.5') FAT CLAY (CH): very dark greenish gray (10GY 3/1), moist, fine gravel, fines, [tr,0,100], 15% organic debris, strong odor, Bay Mud.			DG-T17S-7-7.5		60/60	10.5		
10	(10') Boring terminated.								
15									
20									
25									

CONTRACTOR PeneCore **NORTHING** 2084037.18
EQUIPMENT Geoprobe 8040 DT **EASTING** 6009850.57
DRILL MTHD Direct Push **ANGLE** Vertical
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-U1 **SHEET** 1 **OF** 1
START DATE 12/13/2018
FINISH DATE 12/13/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') WELL-GRADED GRAVEL with SILT and SAND (GW-GM): dark brown (10YR 3/3), dry, fine-coarse gravel, fine-coarse sand, fines, [60,30,10], 3" rock.			DG-U1S-0.5-1			0.5		
	(2.5') moist, oxidized.			DG-U1S-3.5-4		48/60	1.1		
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 6600
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER KJ **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2083937.18
EASTING 6011439.8
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-U2 **SHEET** 1 **OF** 1
START DATE 12/13/2018
FINISH DATE 12/13/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619

ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND (SM): dark brown (10YR 3/3), moist, fine-grained, [5,75,20].			DG-U2S-0.5-1			1.2		
	(1.8') SILTY SAND with GRAVEL (SM): very dark grayish brown (10YR 3/2), moist, medium-grained, [25,60,15].					46/60			
	(3.3') WELL-GRADED GRAVEL (GW): light gray (10YR 7/1), dry, [90,10,0], cobble.			DG-U2S-3.5-4			1.2		
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER KB
REVIEWER G. Thrupp, P.G. No. 5849

NORTHING 2083937.18
EASTING 6011350.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-U3 **SHEET** 1 OF 1
START DATE 12/18/2019 **ELEVATION DATA**
FINISH DATE 12/18/2019 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 10 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	SAMPLE ID	RECOVERY	PID READING (ppm)	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): black (10YR 2/1), moist, fine gravel, fine-coarse sand, fines, [15,60,25].	DG-U3S-0.5-1		1.2	
	(1.5') SILTY GRAVEL (GM): light gray (10YR 7/2), fine-coarse gravel, fine-coarse sand, fines, [60,20,20], cobbles up to 3" x 2".		48/60		
	(3.7') wet.	DG-U3S-3.5-4		1.2	no recovery from 3.8-5'
5	(5') CLAYEY GRAVEL (GC): gray (5/N), wet, fine-coarse gravel, fine-coarse sand, fines, [60,10,30].				
	(6.5') 3" of black wood debris.				no PID hit on black wood
	(7') POORLY GRADED SAND (SP): brown (10YR 5/3), wet, fine-medium sand, [0,95,5], becomes very dark gray (10YR 3/1) with 3" x 2" cobble at 7.5'.		30/60		no recovery from 7.5-10'
10	(10') Boring terminated.				
15					
20					
25					

CONTRACTOR PeneCore **NORTHING** 2083937.18
EQUIPMENT Geoprobe 8040 DT **EASTING** 6011250.57
DRILL MTHD Direct Push **ANGLE** Vertical
DIAMETER 3 inches
LOGGER BL **REVIEWER** G. Thrupp, P.G. No. 5849

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-U4 **SHEET** 1 **OF** 1
START DATE 12/18/2018
FINISH DATE 12/18/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER 3 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND (SM): dark brown (10YR 3/3), moist, fine to medium grained with depth, [10,70,20].			DG-U4S-0.5-1			4.1		
	(2.7') WELL-GRADED GRAVEL (GW): very dark gray (10YR 3/1), wet, cobble, [95,0,5].		▼	DG-U4S-3.5-4		44/60	1.4		
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER KB
REVIEWER G. Thrupp, P.G. No. 5849

NORTHING 2083937.18
EASTING 6011150.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-U5 **SHEET** 1 **OF** 1
START DATE 12/18/2018
FINISH DATE 12/18/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619

ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER 3.5 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') POORLY GRADED SAND with SILT (SP-SM): very dark grayish brown (10YR 3/2), moist, fine-coarse gravel, fine-medium sand, fines, [10,80,10].			DG-U5S-0.5-1			0.7		borehole moved 2.5' south of planned location to avoid hitting a rock, 0.0-1.0' compressed
	(2.5') trace brick fragments.					60/60			
	(3') trace ceramic fragments.								
	(3.5') POORLY GRADED SAND with SILT (SP-SM): very dark greenish gray (5GY 3/1), wet, fine-coarse gravel, medium sand, fines, [10,80,10].		▼	DG-U5S-3.5-4			0.6		water level
	(4.5') lens of coarse gravel from 4.5-5.0'.								
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 6610 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2083937.18
EASTING 6011050.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-U6 **SHEET** 1 **OF** 1
START DATE 12/19/2018
FINISH DATE 12/19/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND and GRAVEL (SM): very dark grayish brown (10YR 3/2), dry, fine-coarse gravel, fine-coarse sand, fines, [20,65,15].			DG-U6S-0.5-1			0.2		
	(1.5') pea gravel layer.					40/60			
	(3.5') dark yellowish-brown (10YR 4/4), wet.			DG-U6S-3.5-4			0.1		
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 788201
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER KJ **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2083937.18
EASTING 6010950.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-U7 **SHEET** 1 **OF** 1
START DATE 1/8/2019 **ELEVATION DATA**
FINISH DATE 1/8/2019 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 10 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): grayish brown (10YR 5/2), moist, fine-coarse gravel, medium-coarse sand, fines, [20,50,30]. (1') pea gravel and fine gravel from 1.0-1.5'.			DG-U7S-0.5-1		60/60	1.1		
	(3.5') SILTY GRAVEL (GM): very dark brown (10YR 2/2), moist, fine gravel, fine-medium sand, fines, [50,10,40], 20% glass, ceramic, and metal scraps. (5') black (10YR 2/1), from 5.0-5.5'.			DG-U7S-3.5-4			2.5		
5	(5.5') FAT CLAY (CH): dark greenish gray (5GY 4/1), moist, fines, [0,0,100], high plasticity, firm, Bay Mud.								no deeper sample taken; Bay Mud at 5.5' bgs
10	(10') Boring terminated.								
15									
20									
25									

CONTRACTOR PeneCore **NORTHING** 2083937.18
EQUIPMENT Geoprobe 8040 DT **EASTING** 6010850.57
DRILL MTHD Direct Push **ANGLE** Vertical
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-U8 **SHEET** 1 OF 1
START DATE 1/15/2019 **ELEVATION DATA**
FINISH DATE 1/15/2019 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 5 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** 3 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): grayish brown (10YR 5/2), moist, fine-coarse gravel, medium-coarse sand, fines, [20,50,30].			DG-U8S-0.5-1		60/60	0.9		0.0-1.0' compressed
	(3') SILTY GRAVEL (GM): very dark brown (10YR 2/2), wet, fine-coarse gravel, fine-medium sand, fines, [45,15,40], 15% glass and ceramic debris.		▼	DG-U8S-3.5-4			1.1		water level
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore **NORTHING** 2083937.18
EQUIPMENT Geoprobe 6600 **EASTING** 6010750.57
DRILL MTHD Direct Push **ANGLE** Vertical
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-U9 **SHEET** 1 **OF** 1
START DATE 12/20/2018
FINISH DATE 12/20/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') WELL-GRADED SAND with SILT (SW-SM): dark gray (10YR 4/1), moist, fine gravel, fine-medium sand, fines, [10,80,10].			DG-U9S-0.5-1		60/60	1.4		0.0-1.0' compressed
	(3') SILTY SAND with GRAVEL (SM): very dark gray (10YR 3/1), moist, fine gravel, medium-coarse sand, fines, [20,50,30], trace ceramic, metal, and glass fragments.								
	(3.5') SILTY GRAVEL (GM): gray (10YR 5/1), wet, fine-coarse gravel, fine-medium sand, fines, [60,10,30].			DG-U9S-3.5-4			1.0		
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 6610 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2083937.18
EASTING 6010650.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-U10 **SHEET** 1 OF 1
START DATE 1/14/2019 **ELEVATION DATA**
FINISH DATE 1/14/2019 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 5 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): dark greenish gray (10Y 4/1), moist, fine-coarse gravel, medium-coarse sand, fines, [25,45,30], with brick cobble at 4.0'.			DG-U10S-0.5-1		60/60	2.4		0.0-2.0' compressed
				DG-U10S-3.5-4			2.5		
	(4') WELL-GRADED GRAVEL with SILT (GW-GM): brown (10YR 4/3), moist, fine-coarse gravel, medium-coarse sand, fines, [80,10,10].								
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore **NORTHING** 2083937.18
EQUIPMENT Geoprobe 8040 DT **EASTING** 6010550.57
DRILL MTHD Direct Push **ANGLE** Vertical
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-U11 **SHEET** 1 OF 1
START DATE 1/10/2019 **ELEVATION DATA**
FINISH DATE 1/10/2019 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 10 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** 5 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND (SM): dark gray (10YR 4/1), moist, fine gravel, fine-medium sand, fines, [10,55,35].			DG-U11S-0.5-1			7.9		0.0-2.0' compressed
	(2.5') 25% shell fragments about the size of coarse sand from 2.5-3.5'.					60/60			
	(3.5') CLAYEY GRAVEL (GC): olive gray (5Y 4/2), moist, fine-coarse gravel, fine-medium sand, fines, [50,10,40].			DG-U11S-3.5-4			1.0		
5	(5') very dark greenish gray (10Y 3/1), wet.		▼						water level
	(8') greenish gray (5G_/1 5/1), from 8.0-8.5'.					60/60	2.6		odor from 8.0-8.5'
	(8.5') FAT CLAY (CH): dark greenish gray (10GY 4/1), moist, fines, [0,0,100], high plasticity, firm, Bay Mud.								no deeper sample taken; too gravelly
10	(10') Boring terminated.								
15									
20									
25									

CONTRACTOR PeneCore **NORTHING** 2083937.18
EQUIPMENT Geoprobe 8040 DT **EASTING** 6010450.57
DRILL MTHD Direct Push **ANGLE** Vertical
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-U12 **SHEET** 1 **OF** 1
START DATE 1/28/2019
FINISH DATE 1/28/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER 4 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND (SM): dark grayish brown (10YR 4/2), moist, fine gravel, fine-coarse sand, fines, [10,65,25].			DG-U12S-0.5-1			1.7		
	(1') LEAN CLAY (CL): grayish brown (10YR 5/2), moist, fine sand, fines, [0,10,90], low plasticity, firm.					50/60			
			▼	DG-U12S-3.5-4			3.1		
	(4') WELL-GRADED GRAVEL (GW): brown (10YR 5/3), wet, fine-coarse gravel, fine-coarse sand, [90,10,0].								
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 7822 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER MK **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2083937.18
EASTING 6010350.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-U13 **SHEET** 1 **OF** 1
START DATE 12/21/2018
FINISH DATE 12/21/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 10 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') WELL-GRADED SAND with SILT (SW-SM): dark grayish brown (10YR 4/2), moist, fine-coarse gravel, fine-medium sand, fines, [10,80,10].			DG-U13S-0.5-1			1.8		0.0-1.0' compressed 0912-0919 went back to drill to 10'
	(2.4') brick.					60/60			
	(2.5') CLAYEY GRAVEL (GC): dark greenish gray (5GY 4/1), moist, fine-coarse gravel, medium-coarse sand, fines, [45,15,40].			DG-U13S-3.5-4			1.7		
5	(3.5') SILTY SAND (SM): very dark grayish brown (10YR 3/2), moist, fine-coarse gravel, fine-medium sand, fines, [5,70,25]. (4.8') black (10YR 2/1), from 4.8-5.0', with odor. (5') sheen/luster from 5.0-9.5'.			DG-U13S-7.5-8		60/60	22.0		
	(8') WELL-GRADED GRAVEL with SILT (GW-GM): dark greenish gray (10GY 4/1), moist, fine-coarse gravel, medium-coarse sand, fines, [80,10,10].								
	(9.5') FAT CLAY (CH): Bay Mud.								
10	(10') Boring terminated.						4.8		
15									
20									
25									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 6610 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF
REVIEWER G. Thrupp, P.G. No. 5849

NORTHING 2083937.18
EASTING 6010250.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-U14 **SHEET** 1 **OF** 1
START DATE 1/24/2019
FINISH DATE 1/24/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619

ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER 4.5 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): black (10YR 2/1), moist, fine-coarse gravel, fine-coarse sand, fines, [25,45,30].			DG-U16S-0.5-1			1.3		
	(2.5') Dark greenish gray (5GY 4/1).					60/60			
	(3.5') SILTY SAND (SM): dark yellowish brown (10YR 4/4), moist, fine gravel, fine-medium sand, fines, [5,65,30].			DG-U16S-3.5-4			1.4		
	(4.5') WELL-GRADED GRAVEL with SILT (GW-GM): brown (10YR 4/3), wet, fine-coarse gravel, fine sand, fines, [85,5,10].		▼						
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 7822 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2083937.18
EASTING 6010150.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-U15 **SHEET** 1 **OF** 1
START DATE 1/28/2019
FINISH DATE 1/28/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 10 ft bgs
DEPTH TO WATER 5 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): grayish brown (10YR 5/2), moist, fine gravel, fine-coarse sand, fines, [20,45,35].			DG-U15S-0.5-1		60/60	3.0		0.0-1.5' compressed
				DG-U15S-3.5-4			3.4		
	(4') CLAYEY GRAVEL (GC): grayish brown (10YR 5/2), moist, fine-coarse gravel, fine-medium sand, fines, [50,10,40].		▼						water level
5						60/60			
				DG-U15S-8.5-9			8.4		
	(9') FAT CLAY (CH): very dark greenish gray (10GY 3/1), moist, fines, [0,0,100], high plasticity, firm, Bay Mud.								
10	(10') Boring terminated.								
15									
20									
25									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 8040 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF
REVIEWER G. Thrupp, P.G. No. 5849
NORTHING 2083937.18
EASTING 6010050.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-U16 **SHEET** 1 **OF** 1
START DATE 1/24/2019
FINISH DATE 1/24/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619

ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER 4.5 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): black (10YR 2/1), moist, fine-coarse gravel, fine-coarse sand, fines, [25,45,30].			DG-U16S-0.5-1			1.6		0.0-0.5' compressed
	(2') Dark greenish gray (5GY 4/1).					60/60			
	(3.5') SILTY SAND (SM): dark yellowish brown (10YR 4/4), moist, fine gravel, fine-medium sand, fines, [5,55,40].			DG-U16S-3.5-4			1.8		
	(4.5') WELL-GRADED GRAVEL with SILT (GW-GM): brown (10YR 4/3), wet, fine-coarse gravel, fine sand, fines, [85,5,10].		▼						
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 7822 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2083967.62
EASTING 6009961.44
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-U17 **SHEET** 1 **OF** 1
START DATE 1/24/2019
FINISH DATE 1/24/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619

ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') WELL-GRADED GRAVEL with SILT (GW-GM): very pale brown (10YR 8/2), dry, fine-coarse gravel, fine-coarse sand, fines, [60,20,20].			DG-U17S-0.5-1			3.5		
	(1') SILTY SAND (SM): dark grayish brown (10YR 4/2), fine gravel, fine-medium sand, fines, [10,55,35].					60/60			
	(3') GRAVELLY LEAN CLAY with SAND (CL): brown (10YR 4/3), moist, fine-coarse gravel, fine-medium sand, fines, [35,20,45], medium plasticity, firm.			DG-U17S-3.5-4			3.8		
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 7822 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2083937.73
EASTING 6009832.64
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-U18 **SHEET** 1 **OF** 1
START DATE 1/24/2019
FINISH DATE 1/24/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILT with SAND (ML): dark grayish brown (10YR 4/2), moist, fine-coarse gravel, fine sand, fines, [10,15,75], low plasticity, soft, 30% wood and roots.			DG-U18S-0.5-1		60/60	1.6		0.0-2.0' compressed
				DG-U18S-3.5-4			1.9		
	(4') GRAVELLY LEAN CLAY with SAND (CL): yellowish brown (10YR 5/4), moist, fine-coarse gravel, fine-coarse sand, fines, [20,15,65], medium plasticity, firm, 10% wood and roots.								
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 7822 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2083937.18
EASTING 6009750.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-V1 **SHEET** 1 **OF** 1
START DATE 12/17/2019
FINISH DATE 12/17/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619

ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 10 ft bgs
DEPTH TO WATER 5 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') WELL-GRADED SAND with SILT and GRAVEL (SW-SM): black (10YR 2/1), moist, coarse gravel, fine-coarse sand, non-plastic fines, [20,70,10].			DG-V1S-0.5-1			0.1		
	(1') cobbles.								
	(1.25') SILTY SAND with GRAVEL (SM): dark yellowish-brown (10YR 3/4), moist, coarse gravel, fine-coarse sand, non-plastic fines, [30,55,15].					48/60			
	(3.5') cobbles up to 3.5".			DG-V1S-3.5-4			1.3		no recovery from 4-5'
5	(5') CLAYEY GRAVEL with SAND (GC): dark yellowish-brown (10YR 3/6), wet, gravel up to 2", fine-coarse sand, [50,20,30].		▼						
	(6') cobbles up to 3.5".					24/60			no recovery from 7-10'
10	(10') Boring terminated.								
15									
20									
25									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 8040 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER BL **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2083837.18
EASTING 6011439.8
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-V2 **SHEET** 1 **OF** 1
START DATE 12/13/2018
FINISH DATE 12/13/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619

ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY GRAVEL with SAND (GM): very dark grayish brown (10YR 3/2), moist, fine-coarse with depth, [65,20,15].			DG-V2S-0.5-1			1.1		
						49/60			
				DG-V2S-3.5-4			0.9		
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER KB
REVIEWER G. Thrupp, P.G. No. 5849

NORTHING 2083837.18
EASTING 6011350.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-V3 **SHEET** 1 **OF** 1
START DATE 12/14/2018
FINISH DATE 12/14/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') WELL-GRADED SAND with SILT and GRAVEL (SW-SM): dark brown (10YR 3/3), dry, fine-coarse gravel, fine-coarse sand, fines, [20,70,10].			DG-V3S-0.5-1		45/60	0.7		
	(3') SILTY SAND with GRAVEL (SM): dark yellowish-brown (10YR 4/6), dry, fine-coarse gravel, fine-medium sand, fines, [10,75,15].			DG-V3S-3.5-4			0.4		
	(4') CLAYEY GRAVEL (GC): dark yellowish-brown (10YR 3/4), wet, fine-coarse gravel, fines, [80,0,20].								
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 6600
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER KJ
REVIEWER G. Thrupp, P.G. No. 5849

NORTHING 2083837.18
EASTING 6011250.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-V4 **SHEET** 1 **OF** 1
START DATE 12/18/2018
FINISH DATE 12/18/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER 3.5 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND (SM): very dark grayish brown (10YR 3/2), moist, fine grained, [10,70,20].			DG-V4S-0.5-1		46/60	9.5		
	(3.4') WELL-GRADED GRAVEL (GW): very dark gray (10YR 3/1), wet, cobble, [95,0,5].		▼	DG-V4S-3.5-4			2.8		
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER KB
REVIEWER G. Thrupp, P.G. No. 5849

NORTHING 2083837.18
EASTING 6011150.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-V5 **SHEET** 1 **OF** 1
START DATE 1/7/2019
FINISH DATE 1/7/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 10 ft bgs
DEPTH TO WATER 4 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND (SM): dark grayish brown (10YR 4/2), moist, fine gravel, fine-coarse sand, fines, [10,65,25].			DG-V5S-0.5-1		60/60	0.6		0.0-1.0' compressed
			▼	DG-V5S-3.5-4			0.8		water level
5	(4') WELL-GRADED GRAVEL with CLAY (GW-GC): dark gray (10YR 4/1), wet, fine-coarse gravel, coarse sand, fines, [85,5,10].								
	(5') FAT CLAY (CH): yellowish-brown (10YR 5/4), moist, fine gravel, fine-medium sand, fines, [5,5,90], high plasticity, firm.								
	(7') very dark gray (10YR 3/1), from 7.0-8.0'.			DG-V5S-7.5-8		60/60	0.6		
10	(10') Boring terminated.								
15									
20									
25									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 8040 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF
REVIEWER G. Thrupp, P.G. No. 5849
NORTHING 2083837.18
EASTING 6011050.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-V6 **SHEET** 1 **OF** 1
START DATE 12/19/2018
FINISH DATE 12/19/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): very dark brown (10YR 2/2), dry, fine-coarse gravel, fine-coarse sand, fines, [20,65,15].			DG-V6S-0.5-1			0.1		
	(2.5') pea gravel layer.					43/60			
				DG-V6S-3.5-4			0.0		
	(4') yellowish-brown (10YR 5/6).								
5	(5') Boring terminated.								rock at bottom
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 788201
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER KJ **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2083837.18
EASTING 6010950.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-V7 **SHEET** 1 **OF** 1
START DATE 12/19/2018 **ELEVATION DATA**
FINISH DATE 12/19/2018 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 5 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** 3.5 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND (SM): dark grayish brown (10YR 4/2), moist, fine gravel, fine-medium sand, fines, [10,75,15].			DG-V7S-0.5-1			3.0		0.0-2.0' compressed
	(2.5') POORLY GRADED GRAVEL (GP): grayish brown (10YR 5/2), moist, fine gravel, medium-coarse sand, fines, [95,3,2].					60/60			
	(3') 3" lens of poorly graded medium sand.								
	(3.5') SILTY GRAVEL with SAND (GM): very dark brown (10YR 2/2), wet, fine-coarse gravel, medium-coarse sand, fines, [40,25,35].		▼	DG-V7S-3.5-4			6.3		water level
	(4.5') brick, glass, and ceramic fragments from 4.5-5.0'.								
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore **NORTHING** 2083837.18
EQUIPMENT Geoprobe 6610 DT **EASTING** 6010850.57
DRILL MTHD Direct Push **ANGLE** Vertical
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-V8 **SHEET** 1 **OF** 1
START DATE 1/15/2019
FINISH DATE 1/15/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER 3.5 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): dark gray (10YR 4/1), moist, fine-coarse gravel, fine-medium sand, fines, [30,40,30].			DG-V8S-0.5-1			0.8		0.0-1.5' compressed
	(2') 4" lens of pea gravel.								
	(2.5') SILTY GRAVEL (GM): very dark brown (10YR 2/2), moist, fine-coarse gravel, fine-medium sand, fines, [45,15,40].					60/60			
	(3.5') wet.		▼	DG-V8S-3.5-4			1.0		water level
	(4.5') LEAN CLAY (CL): brown (10YR 5/3).								
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 6600
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2083837.18
EASTING 6010750.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-V9 **SHEET** 1 **OF** 1
START DATE 1/10/2019
FINISH DATE 1/10/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 10 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND (SM): greenish gray (10Y 5/1), moist, fine gravel, medium-coarse sand, fines, [10,60,30].			DG-V9S-0.5-1		60/60	2.2		0.0-2.0' compressed
	(3') SILTY GRAVEL (GM): very dark brown (10YR 2/2), moist, fine-coarse gravel, fine sand, fines, [60,10,30], 40% glass and tile debris.			DG-V9S-3.5-4			1.3		
5	(4') FAT CLAY (CH): olive (2.5Y 4/3), moist, fine gravel, fine sand, fines, [5,5,90], high plasticity, firm, trace ceramic debris.			DG-V9S-7.5-8			1.9		
10	(10') Boring terminated.								
15									
20									
25									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 8040 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2083837.18
EASTING 6010650.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-V10 **SHEET** 1 **OF** 1
START DATE 1/14/2019
FINISH DATE 1/14/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND (SM): dark greenish gray (10Y 4/1), moist, fine-coarse gravel, fine-medium sand, fines, [10,55,35].			DG-V10S-0.5-1		60/60	0.8		0.0-2.0' compressed
				DG-V10S-3.5-4			2.3		
	(4') very dusky red (2.5YR 2.5/2), coarse gravel, 5% asphalt and cloth debris, trace metal scraps from 4.0-5.0'.								
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 8040 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2083837.18
EASTING 6010550.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-V11 **SHEET** 1 **OF** 1
START DATE 12/21/2018
FINISH DATE 12/21/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') WELL-GRADED SAND with SILT and GRAVEL (SW-SM): dark gray (10YR 4/1), moist, fine gravel, medium-coarse sand, fines, [35,55,10].			DG-V11S-0.5-1		60/60	0.6		0.0-1.0' compressed
				DG-V11S-3.5-4			0.6		
	(4') FAT CLAY (CH): dark greenish gray (10GY 4/1), moist, fines, [0,0,100], high plasticity, firm, Bay Mud.								
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 6610 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2083837.18
EASTING 6010450.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-V12 **SHEET** 1 **OF** 1
START DATE 1/28/2019 **ELEVATION DATA**
FINISH DATE 1/28/2019 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 5 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** 4 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND (SM): very dark grayish brown (10YR 3/2), moist, fine sand, fines, [tr,70,30].			DG-V12S-0.5-1			2.6		
	(1') LEAN CLAY (CL): yellowish brown (10YR 5/4), moist, fines, [0,0,100], low plasticity, firm.								
	(2.5') sheen to bottom of core.					58/60			
				DG-V12S-3.5-4			2.9		
	(4') WELL-GRADED GRAVEL (GW): very dark gray (10YR 3/1), wet, fine-coarse gravel, coarse sand, [90,10,tr].		▼						
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore **NORTHING** 2083837.18
EQUIPMENT Geoprobe 7822 DT **EASTING** 6010350.57
DRILL MTHD Direct Push **ANGLE** Vertical
DIAMETER 3 inches
LOGGER MK **REVIEWER** G. Thrupp, P.G. No. 5849

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-V13 **SHEET** 1 OF 1
START DATE 1/10/2019
FINISH DATE 1/10/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 10 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND (SM): very dark gray (10YR 3/1), moist, fine gravel, fine-medium sand, fines, [10,55,35].			DG-V13S-0.5-1		60/60	1.4		0.0-2.5' compressed
				DG-V13S-3.5-4			2.0		
5	(4.5') WELL-GRADED GRAVEL with CLAY (GW-GC): grayish brown (10YR 5/2), moist, coarse gravel, medium sand, fines, [80,10,10].								
	(5') FAT CLAY (CH): dark gray (10YR 4/1), moist, fine gravel, fine sand, fines, [5,5,90], high plasticity, soft, Bay Mud.			DG-V13S-7.5-8			2.1		
	(9') dark greenish gray (10GY 4/1), fines, firm.								
10	(10') Boring terminated.								
15									
20									
25									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 8040 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF
REVIEWER G. Thrupp, P.G. No. 5849
NORTHING 2083837.18
EASTING 6010250.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-V14 **SHEET** 1 **OF** 1
START DATE 1/23/2019
FINISH DATE 1/23/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): grayish brown (10YR 5/2), moist, fine-coarse gravel, fine-coarse sand, fines, [25,45,30].			DG-V14S-0.5-1			2.2		0.0-1.0' compressed
	(1') black (10YR 2/1), asphalt fragments from 1.0-1.5'.					60/60			
	(1.5') brick cobble.			DG-V14S-3.5-4			2.7		
	(4') LEAN CLAY with SAND (CL): yellowish brown (10YR 5/4), moist, fine gravel, fine-medium sand, fines, [5,20,75], medium plasticity, hard.								
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 7822 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2083837.18
EASTING 6010150.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-V15 **SHEET** 1 **OF** 1
START DATE 1/23/2019
FINISH DATE 1/23/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER 5 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY GRAVEL with SAND (GM): dark brown (10YR 3/3), moist, fine-coarse gravel, fine-medium sand, fines, [55,20,25].			DG-V15S-0.5-1		60/60	1.8		0.0-1.5' compressed
				DG-V15S-3.5-4			2.3		
	(4.5') cobbles and coarse gravel from 4.5-5.0', wet at 5.0'.								
5	(5') Boring terminated.		▼						water level
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 7822 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2083837.18
EASTING 6010050.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-V16 **SHEET** 1 **OF** 1
START DATE 1/24/2019
FINISH DATE 1/24/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 1 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY GRAVEL with SAND (GM): gray (10YR 5/1), moist, fine-coarse gravel, fine-medium sand, fines, [60,20,20].			DG-V16S-0.5-1		12/12	4.2		refusal at 1'; set up again; refusal at 1' bgs
	(1') Boring terminated.								
5									
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 7822 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849
NORTHING 2083837.18
EASTING 6009950.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-V17 **SHEET** 1 **OF** 1
START DATE 1/28/2019
FINISH DATE 1/28/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619

ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 10 ft bgs
DEPTH TO WATER 5 ft

DEPTH (ft)	MATERIAL DESCRIPTION	SAMPLE ID	RECOVERY	PID READING (ppm)	COMMENTS
	(0') SILTY GRAVEL with SAND (GM): gray (10YR 5/1), dry, fine-coarse gravel, fine-coarse sand, fines, [50,20,30].	DG-V17S-0.5-1		4.3	0.0-2.0' compressed
	(2') concrete fragments from 2.0-3.0'.		60/60		
	(3') yellowish brown (10YR 5/4), from 3.0-5.0'.	DG-V17S-3.5-4		5.2	
5	(5') very dark grayish brown (10YR 3/2), wet, luster, from 5.0-8.5'.				water level
	(8') 3" cobble.		60/60		
	(8.5') FAT CLAY (CH): very dark greenish gray (10GY 3/1), moist, fines, [0,0,100], high plasticity, firm, Bay Mud lens.				
10	(9.5') SILTY SAND (SM): black (10YR 2/1), wet, fine-medium sand, fines, [0,60,40], 5% shell fragments.	DG-V17S-9.5-10		5.2	
	(10') Boring terminated.				
15					
20					
25					

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 8040 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2083837.18
EASTING 6009850.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-V18 **SHEET** 1 **OF** 1
START DATE 1/24/2019
FINISH DATE 1/24/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER 4.5 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND (SM): dark gray (10YR 4/1), moist, fine gravel, fine-coarse sand, fines, [5,55,40].			DG-V18S-0.5-1		60/60	2.0		0.0-1.0' compressed
				DG-V18S-3.5-4			0.9		
	(4') WELL-GRADED GRAVEL with CLAY (GW-GC): grayish brown (10YR 5/2), moist, fine-coarse gravel, fine sand, fines, [85,5,10]. (4.5') wet.		▼						water level
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 7822 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2083837.18
EASTING 6009750.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-W1 **SHEET** 1 **OF** 1
START DATE 12/13/2018
FINISH DATE 12/13/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619

ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 15 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): dark brown (10YR 3/3), dry, fine-coarse gravel, fine-coarse sand, fines, [25,60,15].			DG-W1S-0.5-1			1.0-2.0		
						48/60			
	(3') moist, cobbles greater than 3".			DG-W1S-3.5-4			1.4		
5	(5') broken rock (6").								switched to 2" rods
						6/30			
						6/30			
	(9') CLAYEY GRAVEL with SAND (GC): black (2.5 N), wet, fine-coarse gravel, fine-coarse sand, fines, [70,15,15].			DG-W1S-9-10					
10	(10.5') LEAN CLAY (CL): black (2.5 N), wet, fines, [0,0,100], medium-high plasticity, soft.								
						36/60			
							1.0		
15	(15') Boring terminated.								
20									
25									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 6600
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER KJ **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2083737.18
EASTING 6011439.8
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-W2 **SHEET** 1 **OF** 1
START DATE 12/14/2018
FINISH DATE 12/14/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 10 ft bgs
DEPTH TO WATER 7 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND and GRAVEL (SM): dark brown (10YR 3/3), dry, fine-coarse gravel, fine-coarse sand, silt, [15,65,20], loose.			DG-W2S-0.5-1		54/60	0.2		
	(3') moist.			DG-W2S-3.5-4			0.2		
	(4') cement 2" thick.								
5	(4.5') yellowish-brown (10YR 5/8), decreased coarse gravel.								
	(7') wet, increased gravel fraction, [30,60,10].		▼			54/60			water level
	(9') FAT CLAY (CH): greenish black (5G 2.5/1), moist, clay, [0,0,100], high plasticity.			DG-W2S-8.5-9			0.3		
10	(9.5') shells.								
	(10') Boring terminated.								
15									
20									
25									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER CB
REVIEWER G. Thrupp, P.G. No. 5849

NORTHING 2083737.18
EASTING 6011350.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-W3 **SHEET** 1 OF 1
START DATE 12/18/2019
FINISH DATE 12/18/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 10 ft bgs
DEPTH TO WATER 5 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): very dark gray (10YR 3/1), moist, fine gravel, fine-coarse sand, fines, [15,60,25].			DG-W3S-0.5-1			1.2		
	(1.5') dark yellowish-brown (10YR 4/4).					48/60			
	(2.5') cobbles 2" x 2.5".			DG-W3S-3.5-4			1.0		no recovery from 3.7-5'
5	(5') CLAYEY GRAVEL (GC): gray (5/N), wet, fine-coarse gravel, fine-coarse sand, non-plastic fines, [70,15,15], cobbles 3" x 2".		▼						
	(7.5') FAT CLAY (CH): gray (5/N), wet, trace fine sand, [0,tr,100], high plasticity, soft, Bay Mud.					51/60			no recovery from 8.5-10'
10	(10') Boring terminated.								
15									
20									
25									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 8040 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER BL
REVIEWER G. Thrupp, P.G. No. 5849
NORTHING 2083737.18
EASTING 6011250.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-W4 **SHEET** 1 **OF** 1
START DATE 12/18/2018
FINISH DATE 12/18/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619

ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 10 ft bgs
DEPTH TO WATER 4 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): brown (10YR 4/3), moist, fine grained, [20,60,20].			DG-W4S-0.5-1			6.7		
	(0.9') coarse grained.								
	(1.7') black.								
	(2.3') POORLY GRADED SAND (SP): dark yellowish brown (10YR 3/4), moist, fine grained, [0,100,0].					40/60			
	(3.7') WELL-GRADED GRAVEL (GW): very dark gray (10YR 3/1), wet, cobble, [100,0,0].		▼	DG-W4S-3.5-4			2.8		
5									
	(6.5') LEAN CLAY (CL): dark greenish gray (4/5 GY), moist, [0,0,100], medium plasticity, soft.					45/60			
10	(10') Boring terminated.								
15									
20									
25									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER KB
REVIEWER G. Thrupp, P.G. No. 5849

NORTHING 2083737.18
EASTING 6011150.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-W5 **SHEET** 1 **OF** 1
START DATE 12/18/2018
FINISH DATE 12/18/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619

ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 10 ft bgs
DEPTH TO WATER 3.5 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND (SM): dark brown (10YR 3/3), moist, fine-coarse gravel, fine-medium sand, fines, [5,75,20].			DG-W5S-0.5-1			1.3		0.0-1.5' compressed
	(2.2') 2" lens of coarse gravel.					60/60			
	(3') POORLY GRADED SAND with SILT (SP-SM): very dark greenish gray (5GY 3/1), wet, fine gravel, medium sand, fines, [5,85,10].		▼	DG-W5S-3.5-4			1.3		water level
5	(4.8') dark yellowish-brown (10YR 4/4), from 4.8-5.0'.								
	(6') WELL-GRADED SAND with SILT and GRAVEL (SW-SM): dark yellowish-brown (10YR 4/6), wet, fine-coarse gravel, fine-medium sand, fines, [20,70,10].					60/60			
	(9') FAT CLAY (CH): very dark greenish gray (10GY 3/1), moist, fines, [0,0,100], high plasticity, firm, Bay Mud.			DG-W5S-9-9.5					
10	(10') Boring terminated.								
15									
20									
25									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 6610 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2083737.18
EASTING 6011050.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-W6 **SHEET** 1 **OF** 1
START DATE 12/20/2018
FINISH DATE 12/20/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 10 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): dark brown (10YR 3/3), dry, fine-coarse gravel, fine-coarse sand, fines, [20,65,15].			DG-W6S-0.5-1			0.0		
						42/60			
	(3') pea gravel layer.								
				DG-W6S-3.5-4			0.2		
	(4') wet.								
5	(5') SILTY GRAVEL (GM): dark yellowish-brown (10YR 4/4), wet, fine-coarse gravel, fine-medium sand, fines, [75,10,15].								
						33/60			
	(9.5') LEAN CLAY (CL): dark gray (N4/0), fines, [0,0,100], medium-high plasticity, soft.								
10	(10') Boring terminated.								
15									
20									
25									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 788201
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER KJ **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2083737.18
EASTING 6010950.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-W7 **SHEET** 1 **OF** 1
START DATE 1/29/2019
FINISH DATE 1/29/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619

ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 10 ft bgs
DEPTH TO WATER 4 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') POORLY GRADED GRAVEL with SILT (GP-GM): grayish brown (10YR 5/2), moist, fine gravel, medium-coarse sand, fines, [80,10,10].			DG-W7S-0.5-1		39/60	1.7		0.0-2.5' compressed
	(4') GRAVELLY SILT with SAND (ML): very dark brown (10YR 2/2), wet, fine gravel, fine-coarse sand, fines, [20,15,65], low plasticity, soft.		▼	DG-W7S-3.5-4			10.0		water level
5	(5.5') FAT CLAY (CH): very dark greenish gray (10GY 3/1), moist, fines, [0,0,100], high plasticity, firm, Bay Mud.					60/60			did not collect deeper sample; Bay Mud encountered at 5.5' bgs
10	(10') Boring terminated.								
15									
20									
25									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 8040 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2083737.18
EASTING 6010850.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-W8 **SHEET** 1 OF 1
START DATE 1/29/2019
FINISH DATE 1/29/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619

ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 10 ft bgs
DEPTH TO WATER 0.5 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY GRAVEL with SAND (GM): dark gray (10YR 4/1), wet, fine gravel, [50,30,20]. (0.8') black (10YR 2/1), oily tar, free product in soil matrix.		▼	DG-W8S-0.5-1			2.1		
	(1.4') SILTY SAND with GRAVEL (SM): very dark brown (10YR 2/2), wet, coarse sand, [30,50,20].								
	(2.4') CLAYEY GRAVEL with SAND (GC): very dark brown (10YR 2/2), wet, cobbles, [50,15,35], oily sheen.					45/60			
	(3.3') SILTY GRAVEL (GM): black (10YR 2/1), wet, coarse gravel to cobbles, [60,5,35], oily sheen and odor with dense free product at 8' bgs.			DG-W8S-3.5-4			3.9		
5									low soil recovery due to saturated soft state of clay/soil matrix
	(8') FAT CLAY (CH): gray (10YR 5/1), wet, [0,0,100], high plasticity, soft, oily free product in top 0.5' of clay.					27/60			
10	(10') Boring terminated.								
15									
20									
25									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 6600
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NR **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2083737.18
EASTING 6010750.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-W9 **SHEET** 1 **OF** 1
START DATE 12/20/2018
FINISH DATE 12/20/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619

ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 10 ft bgs
DEPTH TO WATER 3.5 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') WELL-GRADED SAND with SILT (SW-SM): dark gray (10YR 4/1), moist, fine-coarse gravel, medium-coarse sand, fines, [10,80,10].			DG-W9S-0.5-1		60/60	1.2		0.0-1.5' compressed
	(3.5') SILTY SAND with GRAVEL (SM): very dark gray (10YR 3/1), wet, fine gravel, fine-medium sand, fines, [20,50,30], 15% metal glass and ceramic.		▼	DG-W9S-3.5-4		24/60	2.2		water level
5									
	(9') FAT CLAY (CH): very dark greenish gray (10GY 3/1), moist, fines, [0,0,100], high plasticity, firm, Bay Mud.			DG-W9S-8.5-9			2.0		
10	(10') Boring terminated.								
15									
20									
25									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 6610 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2083737.18
EASTING 6010650.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-W10 **SHEET** 1 OF 1
START DATE 1/29/2019 **ELEVATION DATA**
FINISH DATE 1/29/2019 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 10 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** 1.3 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): light brownish gray (10YR 6/2), moist, coarse sand, [20,50,30].			DG-W10S-0.5-1			2.8		
	(1') SILTY GRAVEL with SAND (GM): gray (10YR 5/1), wet, fine gravel, [70,15,15].		▼						
	(1.8') SILTY GRAVEL with SAND (GM): very dark brown (10YR 2/2), wet, coarse gravel, [60,20,20], 25% glass debris, oily sheen.					45/60			
				DG-W10S-3.5-4			3.7		
5	(4.7') WELL-GRADED GRAVEL with SILT and SAND (GW-GM): very dark brown (10YR 2/2), wet, fine gravel, [70,25,5].								
	(7.7') FAT CLAY (CH): gray (10YR 5/1), wet, [0,0,100], high plasticity, soft, Bay Mud.					31/60			
10	(10') Boring terminated.								
15									
20									
25									

CONTRACTOR PeneCore **NORTHING** 2083737.18
EQUIPMENT Geoprobe 6600 **EASTING** 6010550.57
DRILL MTHD Direct Push **ANGLE** Vertical
DIAMETER 3 inches
LOGGER NR **REVIEWER** G. Thrupp, P.G. No. 5849

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-W11 **SHEET** 1 OF 1
START DATE 1/29/2019 **ELEVATION DATA**
FINISH DATE 1/29/2019 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 10 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND (SM): very dark grayish brown (10YR 3/2), moist, fine-coarse gravel, fine-medium sand, fines, [10,65,25].			DG-W11S-0.5-1			6.6		0.0-1.5' compressed
	(3') yellowish brown (10YR 5/4), from 3.0-4.0'.			DG-W11S-3.5-4			4.6		
	(4') very dark grayish brown (10YR 3/2), from 4.0-5.0'.								
5	(5') SILTY SAND with GRAVEL (SM): dark greenish gray (5GY 4/1), moist, fine-coarse gravel, medium-coarse sand, fines, [35,45,20].								
	(6.5') FAT CLAY (CH): very dark greenish gray (10GY 3/1), moist, fines, [0,0,100], high plasticity, firm, Bay Mud.								did not collect deeper sample; Bay Mud encountered at 6.5' bgs
10	(10') Boring terminated.								
15									
20									
25									

CONTRACTOR PeneCore **NORTHING** 2083737.18
EQUIPMENT Geoprobe 8040 DT **EASTING** 6010450.57
DRILL MTHD Direct Push **ANGLE** Vertical
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-W12 **SHEET** 1 OF 1
START DATE 1/28/2019 **ELEVATION DATA**
FINISH DATE 1/28/2019 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 10 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** 2.5 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): black (10YR 2/1), moist, fine-coarse gravel, fine-coarse sand, [30,50,20].			DG-W12S-0.5-1			1.8		
	(2.5') wet.		▼			48/60			
	(3.7') WELL-GRADED GRAVEL with SILT and SAND (GW-GM): dark grayish brown (10YR 4/2), wet, fine-coarse gravel, fine-coarse sand, fines, [70,20,10].			DG-W12S-3.5-4			3.1		
5	(5.5') FAT CLAY (CH): very dark greenish gray (10Y 3/1), wet, fines, [0,0,100], high plasticity, soft.								sheen in top 6"
10	(10') Boring terminated.								
15									
20									
25									

CONTRACTOR PeneCore **NORTHING** 2083737.18
EQUIPMENT Geoprobe 7822 DT **EASTING** 6010350.57
DRILL MTHD Direct Push **ANGLE** Vertical
DIAMETER 3 inches
LOGGER MK **REVIEWER** G. Thrupp, P.G. No. 5849

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-W13 **SHEET** 1 OF 1
START DATE 1/30/2019 **ELEVATION DATA**
FINISH DATE 1/30/2019 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 10 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** 5 ft

DEPTH (ft)	MATERIAL DESCRIPTION	SAMPLE ID	RECOVERY	PID READING (ppm)	COMMENTS
	(0') SILTY SAND (SM): dark grayish brown (10YR 4/2), moist, fine-coarse gravel, fine-coarse sand, fines, [10,50,40].	DG-W13S-0.5-1		4.9	0.0-1.0' compressed
	(3') CLAYEY GRAVEL (GC): very dark gray (10YR 3/1), moist, fine-coarse gravel, fine sand, fines, [55,10,35].	DG-W13S-3.5-4		7.2	
5	(5') wet, with luster from 5.0-8.5'.	DG-W13S-7.5-8	60/60	7.8	
	(8.5') FAT CLAY (CH): very dark greenish gray (10GY 3/1), moist, fines, [0,0,100], high plasticity, firm, Bay Mud.				
10	(10') Boring terminated.				
15					
20					
25					

CONTRACTOR PeneCore **NORTHING** 2083737.18
EQUIPMENT Geoprobe 8040 DT **EASTING** 6010350.57
DRILL MTHD Direct Push **ANGLE** Vertical
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-W14 **SHEET** 1 OF 1
START DATE 1/23/2019 **ELEVATION DATA**
FINISH DATE 1/23/2019 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 15 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** 5 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND (SM): brown (10YR 4/3), moist, fine-coarse gravel, fine-medium sand, fines, [10,50,40].			DG-W14S-0.5-1			1.7		
	(2') GRAVELLY LEAN CLAY (CL): dark grayish brown (10YR 4/2), moist, fine-coarse gravel, fine-medium sand, fines, [25,10,65], medium plasticity, firm.					60/60			
				DG-W14S-3.5-4			2.3		
	(4.5') 4" lens of coarse angular gravel.		▼						
5	(5') SILTY SAND with GRAVEL (SM): dark yellowish brown (10YR 4/4), wet, fine-coarse gravel, fine-medium sand, fines, [30,40,30].								water level; poor recovery from 5.0-8.0'
						42/60			
	(8') CLAYEY GRAVEL (GC): black (10YR 2/1), wet, fine-coarse gravel, fine-medium sand, fines, [50,10,40], luster.								
10				DG-W14S-9.5-10			11.1		
	(10') FAT CLAY (CH): dark greenish gray (5GY 4/1), moist, fines, [0,0,100], high plasticity, firm-soft, Bay Mud.								
						60/60			
15	(15') Boring terminated.								
20									
25									

CONTRACTOR PeneCore **NORTHING** 2083737.18
EQUIPMENT Geoprobe 7822 DT **EASTING** 6010150.57
DRILL MTHD Direct Push **ANGLE** Vertical
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-W15 **SHEET** 1 OF 1
START DATE 1/28/2019
FINISH DATE 1/28/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619

ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 10 ft bgs
DEPTH TO WATER 6 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND (SM): very dark brown (10YR 2/2), moist, fine-coarse gravel, fine-medium sand, fines, [10,50,40].			DG-W15S-0.5-1			3.6		0.0-2.0' compressed
	(3') 3" concrete layer, 85% coarse gravel.					60/60			
	(4') 2" layer of 30% shell fragments, lens of lean clay (CL), yellowish brown (10YR 5/8) from 4.0-4.5'.			DG-W15S-3.5-4			5.4		
5	(5') WELL-GRADED GRAVEL with CLAY (GW-GC): dark grayish brown (10YR 4/2), moist, fine-coarse gravel, medium-coarse sand, fines, [80,10,10].								
	(6') wet.		▼						water level
	(6.5') FAT CLAY (CH): very dark greenish gray (10GY 3/1), moist, fines, [0,0,100], high plasticity, firm, Bay Mud.					60/60			did not collect deeper sample; Bay Mud encountered at 6.5' bgs
10	(10') Boring terminated.								
15									
20									
25									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 8040 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2083737.18
EASTING 6010050.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-W16 **SHEET** 1 OF 1
START DATE 1/23/2019 **ELEVATION DATA**
FINISH DATE 1/23/2019 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 1 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') CONCRETE.					12/12			refusal at 1' bgs; move drilling location to try again, refusal at 1' bgs again; relocated hole, third refusal at 1' bgs; did not sample this boring due to concrete and shallow refusal
	(1') Boring terminated.								
5									
10									

CONTRACTOR PeneCore **NORTHING** 2083737.18
EQUIPMENT Geoprobe 7822 DT **EASTING** 6009950.57
DRILL MTHD Direct Push **ANGLE** Vertical
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-W17 **SHEET** 1 **OF** 1
START DATE 1/24/2019
FINISH DATE 1/24/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619

ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 20 ft bgs
DEPTH TO WATER 4.5 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): dark grayish brown (10YR 4/2), moist, fine-coarse gravel, fine-coarse sand, fines, [15,50,35].			DG-W17S-0.5-1		60/60	3.5		0.0-1.0' compressed; boring location relocated 20' north for access
	(3.5') WELL-GRADED GRAVEL with SILT (GW-GM): brown (10YR 5/3), moist, fine-coarse gravel, medium-coarse sand, fines, [85,5,10].		▼	DG-W17S-3.5-4			7.0		water level
5	(4.5') wet.					60/60			
	(9') CLAYEY GRAVEL (GC): dark greenish gray (5G_/1 4/1), wet, fine-coarse gravel, coarse sand, fines, [50,5,45].								very poor recovery; the rest of the casing was filled with water
10						1.8/60			
15									no recovery from 15-20 ft
20	(20') Boring terminated.								
25									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 7822 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2083737.18
EASTING 6009850.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-W18 **SHEET** 1 OF 1
START DATE 1/24/2019 **ELEVATION DATA**
FINISH DATE 1/24/2019 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 5 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** 4 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY GRAVEL with SAND (GM): dark brown (10YR 3/3), moist, fine-coarse gravel, fine-medium sand, fines, [45,15,40].			DG-W18S-0.5-1		60/60	1.5		0.0-1.0' compressed
	(3') SILTY SAND with GRAVEL (SM): gray (10YR 5/1), moist, fine gravel, medium-coarse sand, fines, [15,50,35]. (3.5') 2" brick cobble.			DG-W18S-3.5-4			2.3		
	(3.7') GRAVELLY FAT CLAY (CH): grayish brown (10YR 5/2), moist, fine-coarse gravel, fine sand, fines, [35,10,55]. (4') wet.		▼						water level
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore **NORTHING** 2083737.18
EQUIPMENT Geoprobe 7822 DT **EASTING** 6009750.57
DRILL MTHD Direct Push **ANGLE** Vertical
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-X1 **SHEET** 1 **OF** 1
START DATE 12/17/2019
FINISH DATE 12/17/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 10 ft bgs
DEPTH TO WATER 4 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): dark brown (10YR 3/3), moist, fine gravel, fine-coarse sand, fines, [25,60,15].			DG-X1S-0.5-1		36/60	0.3		
			▼	DG-X1S-3.5-4			0.4		no recovery from 4-5', cobbles up to 4"
5	(5') WELL-GRADED SAND with CLAY and GRAVEL (SW-SC): dark yellowish-brown (10YR 4/4), wet, fine-coarse gravel, fine-coarse sand, fines, [20,70,10].								
	(8') FAT CLAY (CH): gray (5/N), wet, [0,0,100], high plasticity, soft, shell pieces, Bay Mud.								
10	(10') Boring terminated.								
15									
20									
25									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER BL
REVIEWER G. Thrupp, P.G. No. 5849

NORTHING 2083637.18
EASTING 6011439.8
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-X2 **SHEET** 1 **OF** 1
START DATE 12/14/2018
FINISH DATE 12/14/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER 4 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): dark brown (10YR 3/3), moist, fine-coarse gravel, fine-coarse sand, silt, [25,60,15], loose.			DG-X2S-0.5-1			0.6		
	(3') cement.								
	(3.5') dark yellowish-brown (10YR 4/4), moist.			DG-X2S-3.5-4			0.4		
	(4') WELL-GRADED GRAVEL with CLAY and SAND (GW-GC): brown (10YR 4/3), wet, fine-coarse gravel, fine-coarse sand, clay, [60,30,10].		▼						water level
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER CB
REVIEWER G. Thrupp, P.G. No. 5849

NORTHING 2083637.18
EASTING 6011350.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-X3 **SHEET** 1 **OF** 1
START DATE 12/14/2018
FINISH DATE 12/14/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') WELL-GRADED SAND with SILT and GRAVEL (SW-SM): dark yellowish-brown (10YR 3/4), dry, fine-coarse gravel, fine-coarse sand, fines, [25,65,10].			DG-X3S-0.5-1			1.0		
						45/60			
				DG-X3S-3.5-4			0.7		
	(4') CLAYEY GRAVEL (GC): yellowish-brown (10YR 5/6), wet, fine-coarse grained gravel, fines, [75,5,20].								
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 6600
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER KJ **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2083637.18
EASTING 6011250.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-X4 **SHEET** 1 **OF** 1
START DATE 12/18/2018
FINISH DATE 12/18/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): very dark brown (10YR 2/2), moist, fine grained, [20,60,20].			DG-X4S-0.5-1			9.5		
	(1.1') coarse grained.								cobble at 20"
	(2.2') POORLY GRADED SAND (SP): yellowish brown (10YR 5/8), moist, fine grained, [0,100,0].					48/60			
	(3.2') FAT CLAY with SAND (CH): brown (10YR 4/3), moist, [0,20,80], high plasticity, firm.			DG-X4S-3.5-4			2.7		
	(4.1') WELL-GRADED GRAVEL (GW): brown (10YR 4/3), moist, cobble, [100,0,0].								
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER KB
REVIEWER G. Thrupp, P.G. No. 5849

NORTHING 2083637.18
EASTING 6011150.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-X5 **SHEET** 1 **OF** 1
START DATE 1/7/2019
FINISH DATE 1/7/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 10 ft bgs
DEPTH TO WATER 4.5 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND (SM): dark grayish brown (10YR 4/2), moist, fine-coarse gravel, fine-medium sand, fines, [15,55,30].			DG-X5S-0.5-1			2.1		0.0-1.0' compressed
	(3') 2" of brick.			DG-X5S-3.5-4		60/60	0.9		
	(4.5') wet.		▼						water level
5	(5') CLAYEY GRAVEL with SAND (GC): grayish brown (10YR 5/2), wet, fine-coarse gravel, medium sand, fines, [55,25,20].								5.0-6.5' compressed
	(7') coarse gravel, small cobbles from 7.0-7.5'.					60/60			
	(8.5') yellowish-brown (10YR 5/6).								
10	(10') Boring terminated.								
15									
20									
25									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 8040 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF
REVIEWER G. Thrupp, P.G. No. 5849
NORTHING 2083637.18
EASTING 6011050.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-X6 **SHEET** 1 **OF** 1
START DATE 12/20/2018
FINISH DATE 12/20/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): dark brown (10YR 3/3), dry, fine-coarse gravel, fine-coarse sand, fines, [20,65,15].			DG-X6S-0.5-1			0.0		
						44/60			
	(3') pea gravel layer.								
				DG-X6S-3.5-4			0.0		
	(4') wet.								
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 788201
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER KJ **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2083637.18
EASTING 6010950.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-X7 **SHEET** 1 **OF** 1
START DATE 12/19/2018
FINISH DATE 12/19/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER 3.5 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND (SM): dark grayish brown (10YR 4/2), moist, fine gravel, fine-medium sand, fines, [10,75,15].			DG-X7S-0.5-1			3.4		0.0-1.0' compressed
	(2') POORLY GRADED GRAVEL (GP): grayish brown (10YR 5/2), moist, fine gravel, medium-coarse sand, fines, [95,3,2], 3" lens of poorly graded medium sand at 3.0'.					60/60			
	(3') SILTY GRAVEL with SAND (GM): very dark brown (10YR 2/2), wet, fine-coarse gravel, medium-coarse sand, fines, [40,25,35].		▼	DG-X7S-3.5-4			5.0		water level
	(4') 10% ceramic, glass, brick fragments from 4.0-5.0'.								
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 6610 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2083637.18
EASTING 6010850.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-X8 **SHEET** 1 **OF** 1
START DATE 1/29/2019
FINISH DATE 1/29/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER 0.25 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') POORLY GRADED GRAVEL (GP): gray (10YR 6/1), wet, fine gravel, [90,5,5].		▼	DG-X8S-0.5-1			0.5		
	(1.1') SILTY SAND with GRAVEL (SM): very dark gray (10YR 3/1), wet, medium sand, [15,70,15].								
	(2.3') SILTY GRAVEL with SAND (GM): very dark brown (10YR 2/2), wet, coarse gravel to cobbles, [50,15,35], 30% glass and plastic debris, oily sheen.			DG-X8S-3.5-4		40/60	0.4		
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 6600
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NR
REVIEWER G. Thrupp, P.G. No. 5849

NORTHING 2083637.18
EASTING 6010750.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-X9 **SHEET** 1 **OF** 1
START DATE 1/10/2019 **ELEVATION DATA**
FINISH DATE 1/10/2019 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 10 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND (SM): greenish gray (10Y 5/1), moist, fine gravel, medium-coarse sand, fines, [10,60,30].			DG-X9S-0.5-1		60/60	0.5		0.0-1.0' compressed
	(3') SILTY GRAVEL (GM): very dark brown (10YR 2/2), moist, fine-coarse gravel, fine sand, fines, [60,10,30], trace glass.			DG-X9S-3.5-4			1.5		
5	(4.7') black (N 2.5/), from 4.7-5.0'.						1.7		
	(5') FAT CLAY (CH): dark greenish gray (10GY 4/1), moist, fines, [0,0,100], high plasticity, firm, Bay Mud.					60/60			no deeper sample taken; Bay Mud at 5' bgs
10	(10') Boring terminated.								
15									
20									
25									

CONTRACTOR PeneCore **NORTHING** 2083637.18
EQUIPMENT Geoprobe 8040 DT **EASTING** 6010650.57
DRILL MTHD Direct Push **ANGLE** Vertical
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-X10 **SHEET** 1 OF 1
START DATE 1/29/2019 **ELEVATION DATA**
FINISH DATE 1/29/2019 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 5 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** 2.8 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY GRAVEL with SAND (GM): light brownish gray (10YR 6/2), moist, fine gravel, [50,30,20].			DG-X10S-0.5-1			2.7		
	(1.5') WELL-GRADED SAND with SILT (SW-SM): gray (10YR 6/1), moist, medium sand, [5,85,10].								
	(2.3') WELL-GRADED GRAVEL with SAND (GW): gray (10YR 6/1), wet, fine gravel, [70,25,5].		▼			46/60			
	(3') SILTY GRAVEL with SAND (GM): black (10YR 2/1), wet, cobbles, [50,20,30], 15-20% glass and trash debris, oily sheen.			DG-X10S-3.5-4			3.6		
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 6600
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NR **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2083637.18
EASTING 6010550.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-X11 **SHEET** 1 OF 1
START DATE 1/28/2019 **ELEVATION DATA**
FINISH DATE 1/28/2019 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 5 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** 3.2 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): very dark gray (10YR 3/1), moist, coarse-medium sand, [5,75,20].			DG-X11S-0.5-1			3.2		
	(2.3') POORLY GRADED SAND with SILT and GRAVEL (SP-SM): dark gray (10YR 4/1), moist, coarse sand, [40,50,10].		▼			52/60			
	(3.3') SILTY SAND (SM): light yellowish brown (10YR 6/4), wet, fine sand, [0,85,15].			DG-X11S-3.5-4			1.5		
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 6600
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NR **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2083637.18
EASTING 6010450.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-X12 **SHEET** 1 OF 1
START DATE 1/28/2019 **ELEVATION DATA**
FINISH DATE 1/28/2019 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 5 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** 3.5 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): very dark grayish brown (10YR 3/2), moist, fine-coarse gravel, fine-coarse sand, fines, [25,50,25].			DG-X12S-0.5-1			2.0		
	(3.25') 4" red brick.					50/60			
	(3.5') Very dark gray (10YR 3/1), sheen and odor.		▼	DG-X12S-3.5-4			7.2		
	(4.5') piece of cinder block.								
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore **NORTHING** 2083637.18
EQUIPMENT Geoprobe 7822 DT **EASTING** 6010350.57
DRILL MTHD Direct Push **ANGLE** Vertical
DIAMETER 3 inches
LOGGER MK **REVIEWER** G. Thrupp, P.G. No. 5849

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-X13 **SHEET** 1 **OF** 1
START DATE 1/22/2019
FINISH DATE 1/22/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 10 ft bgs
DEPTH TO WATER ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): very dark brown (10YR 2/2), dry, fine-coarse gravel, fine-coarse sand, silt, [20,60,20].			DG-X13S-0.5-1			1.9		
	(1.4') dark reddish brown (2.5YR 2.5/4), moist.								
	(2') olive (5Y 4/3).					30/60			
	(2.4') LEAN CLAY with GRAVEL (CL): yellowish-brown (10YR 5/8), moist, coarse gravel, fine sand, clay, [15,tr,85].								
	(3') cobble blocking core sleeve.			DG-X13S-3.5-4			1.5		
5	(5') WELL-GRADED GRAVEL (GW): dark gray (10YR 4/1), broken boulder, free product visible flowing, odor.								
	(6') FAT CLAY (CH): very dark greenish gray (10GB 3/1), moist, clay, [0,0,100].								
10	(10') Boring terminated.								
15									
20									
25									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER CB
REVIEWER G. Thrupp, P.G. No. 5849

NORTHING 2083637.18
EASTING 6010250.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-X16 **SHEET** 1 OF 1
START DATE 1/23/2019 **ELEVATION DATA**
FINISH DATE 1/23/2019 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 5 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** 5 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND (SM): very dark brown (10YR 2/2), moist, fine-coarse gravel, fine sand, fines, [10,50,40].			DG-X16S-0.5-1			53.8		0.0-1.0' compressed; whole core has a strong odor
	(2') wood pieces and odor from 2.0-3.0'.					60/60			
	(3') CLAYEY GRAVEL (GC): very dark brown (10YR 2/2), moist, fine-coarse gravel, medium sand, fines, [55,10,35], 10% cobbles, becomes wet at 5.0'.			DG-X16S-3.5-4			24.9		
5	(5') Boring terminated.		▼						water level
10									

CONTRACTOR PeneCore **NORTHING** 2083637.18
EQUIPMENT Geoprobe 7822 DT **EASTING** 6009950.57
DRILL MTHD Direct Push **ANGLE** Vertical
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-X17 **SHEET** 1 **OF** 1
START DATE 1/28/2019
FINISH DATE 1/28/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619

ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 10 ft bgs
DEPTH TO WATER 6 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND (SM): very dark brown (10YR 2/2), moist, fine-coarse gravel, fine-coarse sand, fines, [10,55,35].			DG-X17S-0.5-1			5.0		0.0-1.5' compressed
	(3') 5% metal scraps from 3.0-3.5'.			DG-X17S-3.5-4		60/60	2.1		
5	(5') WELL-GRADED GRAVEL with CLAY (GW-GC): dark grayish brown (10YR 4/2), moist, fine-coarse gravel, medium-coarse sand, fines, [80,10,10], luster.		▼						water level
	(6.5') FAT CLAY (CH): very dark greenish gray (10GY 3/1), moist, fines, [0,0,100], high plasticity, firm, Bay mud.					60/60			did not collect deeper sample; Bay Mud encountered at 6.5' bgs
10	(10') Boring terminated.								
15									
20									
25									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 8040 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2083637.18
EASTING 6009850.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-X18 **SHEET** 1 OF 1
START DATE 1/24/2019 **ELEVATION DATA**
FINISH DATE 1/24/2019 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 5 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY GRAVEL with SAND (GM): dark brown (10YR 3/3), moist, fine-coarse gravel, fine-medium sand, fines, [45,15,40].			DG-X18S-0.5-1		60/60	1.0		0.0-1.0' compressed
				DG-X18S-3.5-4			2.0		
	(4.5') 2" layer of wood.								
5	(4.7') SILTY SAND with GRAVEL (SM): very dark grayish brown (10YR 3/2), moist, fine gravel, medium-coarse sand, fines, [15,50,35], luster.								
	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 7822 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2083637.18
EASTING 6009750.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-X19 **SHEET** 1 OF 1
START DATE 2/5/2019
FINISH DATE 2/5/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY GRAVEL (GM): brown (10YR 5/3), moist, fine-coarse gravel, fine sand, fines, [70,10,20].			DG-X19S-0.5-1		60/60	0.6		0.0-1.0' compressed
				DG-X19S-3.5-4			1.0		
	(4') GRAVELLY SILT (ML): very dark brown (10YR 2/2), moist, fine-coarse gravel, fine-medium sand, fines, [40,10,50], low plasticity, soft, trace shell fragments.								
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 7822 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2083637.18
EASTING 6009650.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-Y1 **SHEET** 1 **OF** 1
START DATE 12/13/2018
FINISH DATE 12/13/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') WELL-GRADED SAND with GRAVEL (SW): dark gray (10YR 4/1), dry, fine-coarse gravel, fine-coarse sand, fines, [20,75,5].			DG-Y1S-0.5-1			0.2		
						48/60	0.8		
	(3') WELL-GRADED GRAVEL with CLAY and SAND (GW-GC): strong brown (7.5YR 5/6), moist, fine-coarse gravel, medium-coarse sand, fines, [50,40,10].			DG-Y1S-3.5-4			0.0		
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 6600
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER KJ **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2083537.18
EASTING 6011439.8
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-Y2 **SHEET** 1 **OF** 1
START DATE 12/14/2018
FINISH DATE 12/14/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619

ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER 4.5 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') POORLY GRADED SAND with SILT and GRAVEL (SP-SM): dark brown (10YR 3/3), dry, fine-coarse gravel, predominantly fine sand, silt, [15,75,10], roots.			DG-Y2S-0.5-1			0.4		
	(2') 2" thick cement.								
	(2.5') WELL-GRADED SAND with GRAVEL (SW): dark yellowish-brown (10YR 4/4), dry, fine-coarse gravel, predominantly fine sand, silt, [20,75,5].					54/60			
	(3.5') moist, sand fraction coarsens.			DG-Y2S-3.5-4			0.5		
	(4') approximately 2" thick cement.								
	(4.2') CLAYEY GRAVEL with SAND (GC): very dark grayish brown (10YR 3/2), wet, fine-coarse gravel, fine-coarse sand, clay, [50,30,20].		▼						water level
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER CB
REVIEWER G. Thrupp, P.G. No. 5849

NORTHING 2083537.18
EASTING 6011350.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-Y3 **SHEET** 1 **OF** 1
START DATE 12/18/2019
FINISH DATE 12/18/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619

ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 10 ft bgs
DEPTH TO WATER 4 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND (SM): black (10YR 2/1), moist, fine gravel, fine-medium sand, fines, [5,70,25].			DG-Y3S-0.5-1			1.4		
	(1') SILTY SAND with GRAVEL (SM): dark yellowish-brown (10YR 4/4), moist, fine-coarse gravel, fine-coarse sand, fines, [20,55,25].					54/60			
	(3') POORLY GRADED SAND (SP): strong brown (7.5YR 4/6), dry, fine-medium sand, [0,95,5].		▼	DG-Y3S-3.5-4			0.7		
	(3.25') SILTY SAND with GRAVEL (SM): dark yellowish-brown (10YR 4/4), moist, fine-coarse gravel, fine-coarse sand, fines, [20,55,25].								
5									no recovery from 4.5-5'
	(5') CLAYEY GRAVEL (GC): olive brown (2.5Y 4/4), wet, fine-coarse gravel, fine-medium sand, [75,10,15], cobbles up to 3" x 2".								
	(6.5') FAT CLAY (CH): gray (5/N), wet, trace fine sand, [0,tr,100], high plasticity, soft, shell pieces, Bay Mud.					54/60			
10									no recovery from 9.5-10'
	(10') Boring terminated.								
15									
20									
25									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 8040 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER BL **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2083537.18
EASTING 6011250.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-Y4 **SHEET** 1 **OF** 1
START DATE 12/18/2018
FINISH DATE 12/18/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619

ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER 3.5 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND (SM): very dark brown (10YR 2/2), moist, fine grained, [10,60,30].			DG-Y4S-0.5-1			5.4		
	(1.2') coarse grained.					45/60			
	(3.6') WELL-GRADED GRAVEL (GW): yellowish brown (10YR 5/4), wet, cobble, [85,10,5].		▼	DG-Y4S-3.5-4			3.4		
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER KB
REVIEWER G. Thrupp, P.G. No. 5849

NORTHING 2083537.18
EASTING 6011150.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-Y5 **SHEET** 1 **OF** 1
START DATE 12/18/2018
FINISH DATE 12/18/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER 3.5 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND (SM): dark brown (10YR 3/3), moist, fine-coarse gravel, fine-medium sand, fines, [5,75,20].			DG-Y5S-0.5-1			0.7		borehole moved 7' southwest of planned location, 0.0-1.0' compressed
	(2.2') 3" lens of coarse gravel.					60/60			
	(3') POORLY GRADED SAND with SILT (SP-SM): very dark greenish gray (5GY 3/1), wet, fine gravel, medium sand, fines, [2,88,10], brick fragments at 3.0'.		▼	DG-Y5S-3.5-4			0.5		water level
5	(4.8') dark yellowish-brown (10YR 4/4), from 4.8-5.0'.								
	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 6610 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2083537.18
EASTING 6011050.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-Y6 **SHEET** 1 **OF** 1
START DATE 12/20/2018
FINISH DATE 12/20/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619

ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): dark brown (10YR 3/3), dry, fine-coarse gravel, fine-coarse sand, fines, [20,65,15].			DG-Y6S-0.5-1			0.1		
						46/60			
	(3') pea gravel layer.								
				DG-Y6S-3.5-4			0.0		
	(4') wet.								
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 788201
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER KJ **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2083537.18
EASTING 6010950.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-Y7 **SHEET** 1 **OF** 1
START DATE 1/9/2019
FINISH DATE 1/9/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619

ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 10 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): very dark grayish brown (10YR 3/2), moist, fine-coarse gravel, fine-coarse sand, fines, [20,50,30].			DG-Y7S-0.5-1			0.3		0.0-1.0' compressed
	(1.5') pea gravel from 1.5-2.0'.					60/60			
	(2.5') large metal scrap about 2.5" x 2.5", metal and glass fragments from 2.5-5.0'.			DG-Y7S-3.5-4			0.6		
5	(5') FAT CLAY (CH): very dark greenish gray (10GY 3/1), moist, fines, [0,0,100], high plasticity, firm, Bay Mud.					60/60			no deeper sample taken; Bay Mud at 5.0' bgs
10	(10') Boring terminated.								
15									
20									
25									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 8040 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2083537.18
EASTING 6010850.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-Y8 **SHEET** 1 **OF** 1
START DATE 1/29/2019
FINISH DATE 1/29/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619

ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER 0.1 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') POORLY GRADED GRAVEL with SILT (GP-GM): dark gray (10YR 4/1), wet, fine gravel, [85,5,10].		▼	DG-Y8S-0.5-1			0.9		
	(1.1') SILTY GRAVEL with SAND (GM): very dark brown (10YR 2/2), wet, coarse gravel to cobbles, [50,15,35], slight oily sheen.					41/60			
				DG-Y8S-3.5-4			2.4		
	(3.9') SILTY GRAVEL with SAND (GM): dark brown (10YR 3/3), wet, fine gravel, [70,15,15].								
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 6600
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NR
REVIEWER G. Thrupp, P.G. No. 5849

NORTHING 2083537.18
EASTING 6010750.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-Y9 **SHEET** 1 **OF** 1
START DATE 12/20/2018
FINISH DATE 12/20/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER 4 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') WELL-GRADED SAND with SILT (SW-SM): dark gray (10YR 4/1), moist, fine-coarse gravel, medium-coarse sand, fines, [10,80,10], ceramic fragments and glass at 2.0'.			DG-Y9S-0.5-1		60/60	1.6		0.0-1.5' compressed
	(3') SILTY SAND with GRAVEL (SM): very dark gray (10YR 3/1), wet, fine gravel, fine-medium sand, fines, [20,50,30], 20% metal glass and ceramics scraps.		▼	DG-Y9S-3.5-4			1.3		water level
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 6610 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2083537.18
EASTING 6010650.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-Y10 **SHEET** 1 OF 1
START DATE 1/29/2019 **ELEVATION DATA**
FINISH DATE 1/29/2019 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 5 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** 2.8 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY GRAVEL with SAND (GM): gray (10YR 6/1), moist, fine-coarse gravel, [60,20,20].			DG-Y10S-0.5-1			2.3		
	(1.2') WELL-GRADED GRAVEL with SILT and SAND (GW-GM): gray (10YR 5/1), wet, fine gravel, [50,35,15].		▼			49/60			
				DG-Y10S-3.5-4			2.0		
	(4.5') WELL-GRADED GRAVEL with SILT and SAND (GW-GM): black (10YR 2/1), wet, fine-coarse gravel, [60,25,15], oily sheen and odor.								
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore **NORTHING** 2083537.18
EQUIPMENT Geoprobe 6600 **EASTING** 6010550.57
DRILL MTHD Direct Push **ANGLE** Vertical
DIAMETER 3 inches
LOGGER NR **REVIEWER** G. Thrupp, P.G. No. 5849

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-Y11 **SHEET** 1 OF 1
START DATE 1/21/2019
FINISH DATE 1/21/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 10 ft bgs
DEPTH TO WATER ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') WELL-GRADED SAND with GRAVEL (SW): very dark brown (10YR 2/2), moist, fine gravel, fine-coarse sand, silt, [20,75,5], glass.			DG-Y11S-0.5-1			0.0		
	(1.2') CLAYEY GRAVEL with SAND (GC): dark yellowish brown (10YR 4/4), moist, fine-coarse gravel, fine-coarse sand, clay, [30,50,20].					30/60			
				DG-Y11S-3.5-4			0.0		
	(4') POORLY GRADED SAND (SP): dark reddish gray (2.5YR 4/1), moist, fine sand, [0,100,0].								
5	(4.5') Increased gravel, [20,80,0].								
	(6') FAT CLAY (CH): dark greenish gray (5GY 4/1), moist, clay, [0,0,100], high plasticity.					36/60			
10	(10') Boring terminated.								
15									
20									
25									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER CB
REVIEWER G. Thrupp, P.G. No. 5849

NORTHING 2083537.18
EASTING 6010450.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-Y12 **SHEET** 1 OF 1
START DATE 1/25/2019 **ELEVATION DATA**
FINISH DATE 1/25/2019 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 5 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND (SM): very dark gray (10YR 3/1), moist.			DG-Y12S-0.5-1		60/60	6.1		0.0-2.5' compressed
	(3') yellowish brown (10YR 5/4), 3" layer of well-graded sand with silt.			DG-Y12S-3.5-4			4.2		
	(4') CLAYEY GRAVEL with SAND (GC): very dark gray (10YR 3/1), moist, fine-coarse gravel, fine-medium sand, fines, [50,15,35], odor, sheen. (4.5') black (10YR 2/1).								
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 8040 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2083537.18
EASTING 6010350.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-Y13 **SHEET** 1 **OF** 1
START DATE 1/31/2019
FINISH DATE 1/31/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND (SM): yellowish brown (10YR 5/4), moist, fine-coarse gravel, fine-medium sand, fines, [5,70,25].			DG-Y13S-0.5-1			1.8		0.0-1.5' compressed
	(2.5') GRAVELLY SILT with SAND (ML): very dark grayish brown (10YR 3/2), moist, fine-coarse gravel, fine-coarse sand, fines, [40,15,45].			DG-Y13S-3.5-4		60/60	114.8		
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 8040 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2083537.18
EASTING 6010250.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-Y14 **SHEET** 1 **OF** 1
START DATE 1/31/2019
FINISH DATE 1/31/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY GRAVEL with SAND (GM): very dark gray (10YR 3/1), moist, fine-coarse gravel, coarse sand, fines, [55,15,30], luster, odor.			DG-Y14S-0.5-1			50.3		0.0-1.0' compressed
	(2') SILTY SAND with GRAVEL (SM): very dark grayish brown (10YR 3/2), moist, fine gravel, medium-coarse sand, fines, [15,60,25].					60/60			
	(3') CLAYEY GRAVEL (GC): very dark greenish gray (10GY 3/1), moist, fine-coarse gravel, fine sand, fines, [50,10,40].			DG-Y14S-3.5-4			10.6		
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 8040 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2083537.18
EASTING 6010150.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-Y15 **SHEET** 1 **OF** 1
START DATE 1/31/2019 **ELEVATION DATA**
FINISH DATE 1/31/2019 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 10 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** 5 ft

DEPTH (ft)	MATERIAL DESCRIPTION	SAMPLE ID	RECOVERY	PID READING (ppm)	COMMENTS
	(0') SILTY SAND (SM): dark grayish brown (10YR 4/2), moist, fine gravel, fine-coarse sand, fines, [10,55,35].	DG-Y15S-0.5-1	60/60	2.3	moved drill hole about 15' east to avoid drilling under potentially hazardous overhang; 0.0-2.0' compressed
		DG-Y15S-3.5-4		1.9	
5	(4') CLAYEY GRAVEL (GC): dark gray (N 4/), wet, fine-coarse gravel, fine sand, fines, [60,5,35], 20% cobbles, strong odor, luster, very dark brown (10YR 2/2) spots. ▼	DG-Y15S-7.5-8	60/60	149.8	water level; 5.0-7.0' compressed
10	(10') Boring terminated.				
15					
20					
25					

CONTRACTOR PeneCore **NORTHING** 2083537.18
EQUIPMENT Geoprobe 8040 DT **EASTING** 6010050.57
DRILL MTHD Direct Push **ANGLE** Vertical
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-Y16 **SHEET** 1 OF 1
START DATE 1/24/2019 **ELEVATION DATA**
FINISH DATE 1/24/2019 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 5 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** 3.5 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): very dark grayish brown (10YR 3/2), moist, fine-coarse gravel, medium-coarse sand, fines, [15,50,35].			DG-Y16S-0.5-1		60/60	4.4		0.0-1.0' compressed
	(3.5') WELL-GRADED GRAVEL with CLAY (GW-GC): brownish yellow (10YR 6/6), wet, fine-coarse gravel, fine-coarse sand, fines, [80,10,10].		▼	DG-Y16S-3.5-4			7.7		
5	(4.75') dark gray (10YR 4/1), lens of lean clay (CL) from 4.75-5.0'.								
	(5') Boring terminated.								
10									

CONTRACTOR PeneCore **NORTHING** 2083537.18
EQUIPMENT Geoprobe 7822 DT **EASTING** 6009950.57
DRILL MTHD Direct Push **ANGLE** Vertical
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-Y17 **SHEET** 1 **OF** 1
START DATE 1/23/2019
FINISH DATE 1/23/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): very dark brown (10YR 2/2), moist, fine-coarse gravel, fine-coarse sand, fines, [25,45,30].			DG-Y17S-0.5-1			1.6		0.0-1.0' compressed
						60/60			
	(3') black (10YR 2/1), odor, slight luster from 3.0-5.0'.			DG-Y17S-3.5-4			38.0		
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 7822 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2083537.18
EASTING 6009850.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-Y18 **SHEET** 1 OF 1
START DATE 1/23/2019 **ELEVATION DATA**
FINISH DATE 1/23/2019 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 5 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') CLAYEY GRAVEL with SAND (GC): very dark brown (10YR 2/2), moist, fine-coarse gravel, medium-coarse sand, fines, [45,35,20].			DG-Y18S-0.5-1			0.3		0.0-1.0' compressed
	(2.5') white (10YR 8/1), lens of coarse sand from 2.5-3.0'.			DG-Y18S-3.5-4		60/60	1.8		
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore **NORTHING** 2083537.18
EQUIPMENT Geoprobe 7822 DT **EASTING** 6009750.57
DRILL MTHD Direct Push **ANGLE** Vertical
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-Y19 **SHEET** 1 **OF** 1
START DATE 1/28/2019
FINISH DATE 1/28/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 10 ft bgs
DEPTH TO WATER 6.5 ft

DEPTH (ft)	MATERIAL DESCRIPTION	SAMPLE ID	RECOVERY	PID READING (ppm)	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): very dark grayish brown (10YR 3/2), moist, fine gravel, fine-medium sand, fines, [20,50,30], 2" lens of gravel at 2.0'.	DG-Y19S-0.5-1	60/60	2.9	0.0-2.0' compressed
		DG-Y19S-3.5-4		3.6	
5	(4') GRAVELLY LEAN CLAY (CL): dark grayish brown (10YR 4/2), moist, fine-coarse gravel, fine sand, fines, [35,10,55], medium plasticity, firm.				
	(5') WELL-GRADED SAND with SILT (SW-SM): dark gray (10YR 4/1), moist, fine gravel, fine-medium sand, fines, [5,85,10].				
	(6.5') SILTY GRAVEL (GM): very dark gray (10YR 3/1), wet, fine-coarse gravel, fine-coarse sand, fines, [60,10,30].	DG-Y19S-7.5-8	60/60	4.1	water level
	(8') SANDY LEAN CLAY (CL): very dark gray (10YR 3/1), wet, fine gravel, fine-medium sand, fines, [5,40,55], medium plasticity, soft, trace ceramics.				
10	(9') SILTY GRAVEL (GM): black (10YR 2/1), wet, fine-coarse gravel, fine-coarse sand, fines, [60,10,30], 5% ceramic and glass debris.				
	(10') Boring terminated.				
15					
20					
25					

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 8040 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF
REVIEWER G. Thrupp, P.G. No. 5849
NORTHING 2083537.18
EASTING 6009650.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-Z2 **SHEET** 1 **OF** 1
START DATE 12/14/2018
FINISH DATE 12/14/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER 3 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): dark brown (10YR 3/3), dry, fine-coarse gravel, fine-coarse sand, silt, [15,70,15].			DG-Z2S-0.5-1			0.4		
	(1.5') BRICK and AGGREGATE (FILL).								
	(2') SILTY SAND with GRAVEL (SM): dark brown (10YR 3/3), dry, fine-coarse gravel, fine-coarse sand, silt, [15,70,15].					48/60			
	(3') CLAYEY SAND with GRAVEL (SC): dark yellowish-brown (10YR 3/4), wet, fine-coarse gravel, fine-coarse sand, clay, [35,50,15].		▼	DG-Z2S-3.5-4			0.5		water level no recovery from 4-5'; cobble lodged in bottom of sleeve
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER CB
REVIEWER G. Thrupp, P.G. No. 5849
NORTHING 2083437.18
EASTING 6011350.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-Z3 **SHEET** 1 **OF** 1
START DATE 12/14/2018
FINISH DATE 12/14/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') WELL-GRADED SAND with SILT and GRAVEL (SW-SM): dark yellowish-brown (10YR 3/6), dry, fine-coarse gravel, fine-coarse sand, fines, [25,65,10].			DG-Z3S-0.5-1			1.1		
						48/60			
				DG-Z3S-3.5-4			0.3		
	(4') rock approximately 3".								
	(4.2') SILTY GRAVEL with SAND (GM): yellowish-brown (10YR 5/6), wet, fine-coarse gravel, fine-coarse sand, fines, [70,15,15].								
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 6600
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER KJ
REVIEWER G. Thrupp, P.G. No. 5849

NORTHING 2083437.18
EASTING 6011250.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-Z4 **SHEET** 1 **OF** 1
START DATE 12/18/2018
FINISH DATE 12/18/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER 3 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): very dark grayish brown (10YR 3/2), moist, fine grained, [15,65,20].			DG-Z4S-0.5-1			1.8		
	(1.1') coarse grained.					44/60			
	(2.9') WELL-GRADED GRAVEL (GW): black (10YR 2/1), wet, cobble, [100,0,0].		▼	DG-Z4S-3.5-4			10.2		
	(4') SILTY GRAVEL with SAND (GM): brown (10YR 4/2), wet, coarse grained, [60,20,20].								
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER KB
REVIEWER G. Thrupp, P.G. No. 5849

NORTHING 2083437.18
EASTING 6011150.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-Z5 **SHEET** 1 **OF** 1
START DATE 1/7/2019
FINISH DATE 1/7/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619

ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 10 ft bgs
DEPTH TO WATER 5 ft

DEPTH (ft)	MATERIAL DESCRIPTION	SAMPLE ID	RECOVERY	PID READING (ppm)	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): dark grayish brown (10YR 4/2), moist, fine-coarse gravel, medium-coarse sand, fines, [30,50,20].	DG-Z5S-0.5-1	60/60	0.7	0.0-1.0' compressed
	(3.5') SANDY SILT (ML): very dark gray (10YR 3/1), moist, fine-medium sand, fines, [0,30,70], non-plastic.	DG-Z5S-3.5-4		1.0	
5	(4.5') yellowish-brown (10YR 5/6), from 4.5-5.0'.				
	(5') WELL-GRADED GRAVEL with CLAY (GW-GC): grayish brown (10YR 5/2), wet, fine-coarse gravel, coarse sand, fines, [80,10,10].		42/60		water level
	(9') FAT CLAY (CH): very dark greenish gray (5GY 3/1), moist, fines, [0,0,100], high plasticity, firm, Bay Mud.				
10	(9.5') shell layer.				
	(10') Boring terminated.				
15					
20					
25					

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 8040 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2083437.18
EASTING 6011050.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-Z6 **SHEET** 1 **OF** 1
START DATE 12/20/2018
FINISH DATE 12/20/2018
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619

ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): dark brown (10YR 3/3), dry, fine-coarse gravel, fine-coarse sand, fines, [20,65,15].			DG-Z6S-0.5-1			0.0		
	(2') pea gravel layer.								
	(3') very dark brown (7.5YR 2.5/2), wet.			DG-Z6S-3.5-4			0.0		
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 788201
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER KJ **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2083437.18
EASTING 6010950.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-Z7 **SHEET** 1 **OF** 1
START DATE 2/4/2019
FINISH DATE 2/4/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') POORLY GRADED GRAVEL (GP): grayish brown (10YR 5/2), moist, fine gravel, medium-coarse sand, fines, [85,10,5].			DG-Z7S-0.5-1			0.4		0.0-1.0' compressed
	(2.5') SILTY SAND (SM): light yellowish brown (10YR 6/4), moist, fine gravel, fine-medium sand, fines, [tr,75,25].					60/60			
	(3') GRAVELLY SILT (ML): very dark brown (10YR 2/2), moist, fine gravel, fine-medium sand, fines, [40,10,50], 5% glass debris.			DG-Z7S-3.5-4			0.4		
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 7822 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2083437.18
EASTING 6010850.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-Z8 **SHEET** 1 **OF** 1
START DATE 1/29/2019
FINISH DATE 1/29/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619

ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER 0.1 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') POORLY GRADED GRAVEL with SILT (GP-GM): dark gray (10YR 4/1), wet, fine gravel, [85,5,10].		▼	DG-Z8S-0.5-1			0.8		low recovery due to highly saturated state of soil matrix
	(1.2') POORLY GRADED SAND with GRAVEL (SP): dark gray (10YR 4/1), wet, medium sand, [20,75,5].								
	(2.4') SILTY GRAVEL with SAND (GM): black (10YR 2/1), wet, coarse gravel to cobbles, [50,20,30], 25% glass and plastic debris, oily sheen.			DG-Z8S-3.5-4		33/60	1.4		
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 6600
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NR **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2083437.18
EASTING 6010750.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-Z9 **SHEET** 1 **OF** 1
START DATE 1/9/2019
FINISH DATE 1/9/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619

ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 10 ft bgs
DEPTH TO WATER 3.5 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): very dark gray (10YR 3/1), moist, fine-coarse gravel, fine-coarse sand, fines, [20,50,30].			DG-Z9S-0.5-1			2.3		0.0-1.0' compressed
	(2.5') 5% ceramic debris from 2.5-3.5'.					60/60			
	(3.5') wet.		▼	DG-Z9S-3.5-4			1.7		water level
5	(4') SILTY GRAVEL with SAND (GM): dark greenish gray (10Y 4/1), wet, fine-coarse gravel, fine-medium sand, fines, [50,30,20].								poor recovery from 6.0-8.0'
						30/60			no deeper sample taken; poor recovery/gravel
	(9') FAT CLAY (CH): very dark greenish gray (10GY 3/1), moist, fines, [0,0,100], high plasticity, firm, Bay Mud.								
10	(10') Boring terminated.								
15									
20									
25									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 8040 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2083437.18
EASTING 6010650.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-Z10 **SHEET** 1 OF 1
START DATE 1/29/2019
FINISH DATE 1/29/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER 1.3 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): gray (10YR 5/1), moist, coarse sand, [50,20,30].		▼	DG-Z10S-0.5-1			2.6		
	(1.7') WELL-GRADED GRAVEL with SILT and SAND (GW-GM): gray (10YR 6/1), wet, fine-coarse gravel, [70,20,10].					46/60			
	(2.6') SILTY GRAVEL with SAND (GM): grayish brown (10YR 5/2), wet, fine gravel, [55,15,30].								
	(3.6') SILTY GRAVEL with SAND (GM): very dark brown (10YR 2/2), wet, coarse gravel to cobbles, [55,15,30], trash debris (plastic and glass shards), oily sheen.			DG-Z10S-3.5-4			2.9		
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 6600
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NR
REVIEWER G. Thrupp, P.G. No. 5849

NORTHING 2083437.18
EASTING 6010550.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-Z11 **SHEET** 1 OF 1
START DATE 1/28/2019
FINISH DATE 1/28/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER 2 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): dark grayish brown (10YR 4/2), moist, coarse-medium grained, [5,70,25].			DG-Z11S-0.5-1			3.3		
	(1.8') SILTY GRAVEL with SAND (GM): black (10YR 2/1), wet, fine gravel, [60,15,25], loosely packed, oily sheen and odor.		▼			38/60			
				DG-Z11S-3.5-4			12.7		
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 6600
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NR
REVIEWER G. Thrupp, P.G. No. 5849
NORTHING 2083437.18
EASTING 6010450.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-Z12 **SHEET** 1 **OF** 1
START DATE 1/25/2019
FINISH DATE 1/25/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619

ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER 4 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): very dark grayish brown (10YR 3/2), moist, fine-coarse gravel, fine-coarse sand, fines, [30,45,25].			DG-Z12S-0.5-1			9.0		0.0-2.0' compressed
	(3') trace ceramics and glass from 3.0-4.0'.					60/60			
	(3.5') CLAYEY GRAVEL with SAND (GC): very dark gray (10YR 3/1), moist, fine-coarse gravel, fine-medium sand, fines, [50,15,35], very strong odor, sheen.		▼	DG-Z12S-3.5-4			106.0		water level
	(4.5') 3" cobble.								
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 8040 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2083437.18
EASTING 6010350.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-Z13 **SHEET** 1 **OF** 1
START DATE 1/28/2019
FINISH DATE 1/28/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619

ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 10 ft bgs
DEPTH TO WATER 3.5 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY GRAVEL (GM): white (10YR 8/1), fine-coarse gravel, medium-coarse sand, fines, [50,15,35].			DG-Z13S-0.5-1		60/60	10.9		poor recovery from 5-10'; redrilled, poor recovery again; 0.0-2.0' compressed
	(3.5') grayish brown (10YR 5/2), wet.		▼	DG-Z13S-3.5-4			3.6		water level
5	(4.5') CLAYEY GRAVEL (GC): dark gray (10YR 4/1), wet, fine-coarse gravel, fine-medium sand, fines, [70,5,25]. (5') luster and faint odor from 5.0-10.0'.					24/60			no deeper sample taken due to core loss and prevalent gravel
10	(10') Boring terminated.								
15									
20									
25									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 8040 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2083437.18
EASTING 6010250.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-Z14 **SHEET** 1 **OF** 1
START DATE 1/24/2019
FINISH DATE 1/24/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): very dark grayish brown (10YR 3/2), moist, fine-coarse gravel, fine-coarse sand, fines, [15,50,35].			DG-Z14S-0.5-1			2.7		
						60/60			
				DG-Z14S-3.5-4			11.4		
	(4') WELL-GRADED GRAVEL with SILT (GW-GM): dark gray (10YR 4/1), moist, fine-coarse gravel, fine-medium sand, fines, [80,10,10], luster, odor.								
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 7822 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2083437.18
EASTING 6010150.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-Z15 **SHEET** 1 **OF** 1
START DATE 1/24/2019
FINISH DATE 1/24/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619

ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): dark grayish brown (10YR 4/2), moist, fine-coarse gravel, medium-coarse sand, fines, [30,40,30].			DG-Z15S-0.5-1		60/60	2.1		0.0-2.0' compressed
				DG-Z15S-3.5-4			11.0		
	(4.5') lens of coarse gravel, luster, odor from 4.5-5.0'.								
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 7822 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2083437.18
EASTING 6010050.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-Z16 **SHEET** 1 **OF** 1
START DATE 1/24/2019
FINISH DATE 1/24/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619

ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILT with SAND (ML): black (10YR 2/1), moist, fine-coarse gravel, fine-medium sand, fines, [5,15,80].			DG-Z16S-0.5-1		60/60	6.8		0.0-2.0' compressed
				DG-Z16S-3.5-4			18.8		
	(4') brick cobble.								
	(4.5') luster, strong odor.								
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 7822 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2083437.18
EASTING 6009950.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-Z17 **SHEET** 1 OF 1
START DATE 1/28/2019 **ELEVATION DATA**
FINISH DATE 1/28/2019 **GROUND SURFACE** ft msl
LOCATION Brisbane, CA **DATUM**
PROJECT Brisbane UPC **TOTAL DEPTH** 10 ft bgs
PROJECT NUMBER WG2619 **DEPTH TO WATER** 5 ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY SAND with GRAVEL (SM): very dark brown (10YR 2/2), moist, fine-coarse gravel, fine-coarse sand, fines, [15,60,25].			DG-Z17S-0.5-1		60/60	7.3		0.0-2.0' compressed
				DG-Z17S-3.5-4			1.3		
5	(5') CLAYEY GRAVEL (GC): dark gray (10YR 4/1), wet, fine-coarse gravel, fine sand, fines, [60,5,35], odor, luster.		▼						water level
				DG-Z17S-7.5-8		60/60	5.8		
	(8') FAT CLAY (CH): very dark greenish gray (10GY 3/1), moist, fines, [0,0,100], high plasticity, firm, Bay Mud.								
10	(10') Boring terminated.								
15									
20									
25									

CONTRACTOR PeneCore **NORTHING** 2083437.18
EQUIPMENT Geoprobe 8040 DT **EASTING** 6009850.57
DRILL MTHD Direct Push **ANGLE** Vertical
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-Z18 **SHEET** 1 **OF** 1
START DATE 1/23/2019
FINISH DATE 1/23/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619

ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') GRAVELLY LEAN CLAY with SAND (CL): dark grayish brown (10YR 4/2), moist, fine-coarse gravel, fine-coarse sand, fines, [35,15,50].			DG-Z18S-0.5-1		60/60	2.4		
	(3.5') SILTY SAND (SM): black (10YR 2/1), moist, fine-coarse sand, fines, [10,60,30], trace glass fragments.			DG-Z18S-3.5-4			3.5		
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 7822 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2083437.18
EASTING 6009750.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

Geosyntec consultants
1111 Broadway, 6th Fl
Oakland, CA 94607
Phone: (510) 836-3034
Fax: (510) 836-3036

GS FORM: BORE_HYDROPUNCH

BOREHOLE RECORD

BORING DG-Z19 **SHEET** 1 **OF** 1
START DATE 2/5/2019
FINISH DATE 2/5/2019
LOCATION Brisbane, CA
PROJECT Brisbane UPC
PROJECT NUMBER WG2619
ELEVATION DATA
GROUND SURFACE ft msl
DATUM
TOTAL DEPTH 5 ft bgs
DEPTH TO WATER NA ft

DEPTH (ft)	MATERIAL DESCRIPTION	GRAPHIC LOG	GROUNDWATER	SAMPLE ID	TYPE	RECOVERY	PID READING (ppm)	TIME	COMMENTS
	(0') SILTY GRAVEL with SAND (GM): dark greenish gray (5GY 4/1), moist, fine-coarse gravel, fine-medium sand, fines, [45,20,35].			DG-Z19S-0.5-1		60/60	0.9		
	(3.5') CLAYEY GRAVEL (GC): dark greenish gray (5GY 4/1), moist, fine-coarse gravel, fine sand, fines, [50,10,40].			DG-Z19S-3.5-4			1.2		
5	(5') Boring terminated.								
10									

CONTRACTOR PeneCore
EQUIPMENT Geoprobe 7822 DT
DRILL MTHD Direct Push
DIAMETER 3 inches
LOGGER NF **REVIEWER** G. Thrupp, P.G. No. 5849

NORTHING 2083437.18
EASTING 6009650.57
ANGLE Vertical

REMARKS

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

BORE_HYDROPUNCH GEOS BRISBANE UPC.GPJ GEOSNTEC.GDT 5/20/19

APPENDIX F

Photograph Log

APPENDIX F – PHOTOGRAPH LOG

SITE: Brisbane Baylands Operable Unit 2, Brisbane, CA
SUBJECT: Data Gap Investigation Report
DATES: 21 November 2018 through 5 February 2019



PHOTOGRAPH 1.

View: DG-AR9 core of silty sand with gravel from 0 to 5 feet below ground surface (bgs) (top core, right to left) underlain by fat clay known as native bay mud (bottom core, right to left).



PHOTOGRAPH 2.

View: DG-AE7 cores show typical coarse-grained fill at the Site. Silty sand (0 to 4 feet bgs, top core from right to left) underlain with silty gravel (4 to 7.5 feet bgs top and bottom core from right to left), underlain with clayey gravel (7.5 to 10 feet bgs, bottom core from right to left). A pea gravel lens is present from 2-3 feet bgs.

APPENDIX F – PHOTOGRAPH LOG

SITE: Brisbane Baylands Operable Unit 2, Brisbane, CA
SUBJECT: Data Gap Investigation Report
DATES: 21 November 2018 through 5 February 2019



PHOTOGRAPH 3.

View: DG-AD11 core of poorly graded gravel with sand (0 to 0.8 feet bgs, right to left) underlain by well graded sand with silt and gravel (0.8 to 5 feet bgs). The well-graded sand with silt and gravel has an oily sheen and odor.



PHOTOGRAPH 4.

View: DG-U13 core of coarse-grained fill (0 to 9.5 feet bgs, form right to left) underlain with fat clay (9.5 to 10 feet bgs). The coarse-grained fill, which contains red brick, has a sheen and elevated photoionization detector (PID) readings from 5 to 9.5 feet bgs.

APPENDIX F – PHOTOGRAPH LOG

SITE: Brisbane Baylands Operable Unit 2, Brisbane, CA
SUBJECT: Data Gap Investigation Report
DATES: 21 November 2018 through 5 February 2019



PHOTOGRAPH 5.

View: AD14 core of silty sand with gravel from 0 to 5 feet bgs (right to left). Sticky product and a slight sheen were observed from 4.5 to 5 feet bgs.



PHOTOGRAPH 6.

View: DG-AD14 core closeup of 4.5 to 5 feet bgs to see the sticky product.

APPENDIX F – PHOTOGRAPH LOG

SITE: Brisbane Baylands Operable Unit 2, Brisbane, CA
SUBJECT: Data Gap Investigation Report
DATES: 21 November 2018 through 5 February 2019



PHOTOGRAPH 7.

View: DG-AB13 core of coarse-grained fill underlain with clay. Shallow core of 0 to 5 feet bgs is the bottom up to the deeper core at the top of 10 to 15 feet bgs. Blueish-black free flowing product was observed from 12 to 14 feet bgs in a well graded gravel with clay and sand.



PHOTOGRAPH 8.

View: DG-AA16 core close up of the bottom of the core (4.5 to 5 feet bgs) to show silty sand with gravel that has a sheen and strong odor.

APPENDIX F – PHOTOGRAPH LOG

SITE: Brisbane Baylands Operable Unit 2, Brisbane, CA
SUBJECT: Data Gap Investigation Report
DATES: 21 November 2018 through 5 February 2019



PHOTOGRAPH 9.

View: DG-AH7 core of silty sand with gravel (0 to 3 feet bgs, right to left) underlain with poorly graded gravel (3 to 4 feet bgs) and poorly graded sand with silt (4 to 5 feet bgs).



PHOTOGRAPH 10.

View: DG-AS9 core from 0 to 5 (right to left) feet bgs. Poorly graded sand with silt and gravel underlain by a silty sand with gravel and a poorly graded gravel. Trace glass and metal fragments were found throughout the boring.

APPENDIX F – PHOTOGRAPH LOG

SITE: Brisbane Baylands Operable Unit 2, Brisbane, CA
SUBJECT: Data Gap Investigation Report
DATES: 21 November 2018 through 5 February 2019



PHOTOGRAPH 11.

View: DG-S9 core of well graded sand with silt underlain by a fat clay lens mixed with large cobbles from 0 to 5 feet bgs (left to right, bottom core). Top core is 5 to 10 feet bgs (left to right) and consists of clayey sand underlain with fat clay (native bay mud). The top of the fat clay has a lens of fine gravel with a sheen and elevated PID readings.



PHOTOGRAPH 12.

View: DG-AV8 core close up of gravelly silt with sand (0 to 9 feet bgs, bottom core) underlain with fat clay (9 to 10 feet bgs, top core). Note the gravelly silt with sand has brick, ceramic and glass debris.

APPENDIX F – PHOTOGRAPH LOG

SITE: Brisbane Baylands Operable Unit 2, Brisbane, CA
SUBJECT: Data Gap Investigation Report
DATES: 21 November 2018 through 5 February 2019



PHOTOGRAPH 13.

View: DG-Y15 core consists of silty sand from 0 to 5 feet bgs (left to right, top core) underlain with clayey gravel from 5 to 10 feet bgs (bottom). Note the sheen in the core at the approximate water level starting at 5 feet bgs.



PHOTOGRAPH 14.

View: DG-Y15 from approximately 4 to 5 feet bgs. Closeup of free product within the clayey gravel layer.

APPENDIX F – PHOTOGRAPH LOG

SITE: Brisbane Baylands Operable Unit 2, Brisbane, CA
SUBJECT: Data Gap Investigation Report
DATES: 21 November 2018 through 5 February 2019



PHOTOGRAPH 15.

View: DG-AH4 consists of silty sand with gravel underlain with silty sand from 0 to 5 feet bgs (left to right).



PHOTOGRAPH 16.

View: DG-AH4 from approximately 2 to 3 feet bgs. Metallic material and free product were observed within this silty sand layer.

APPENDIX F – PHOTOGRAPH LOG

SITE: Brisbane Baylands Operable Unit 2, Brisbane, CA
SUBJECT: Data Gap Investigation Report
DATES: 21 November 2018 through 5 February 2019



PHOTOGRAPH 17.

View: DG-AG4 consists of well graded gravel with silt underlain with a lean clay from to 15 feet bgs (left to right).



PHOTOGRAPH 18.

View: DG-AF2 consists of a sandy organic soil with gravel (0 to 0.7 feet bgs, right to left) underlain by a silty sand with gravel (0.7 to 2.6 feet bgs), sandy lean clay (2.8 to 4 feet bgs) and clayey sand with gravel (4 to 5 feet bgs).

APPENDIX F – PHOTOGRAPH LOG

SITE: Brisbane Baylands Operable Unit 2, Brisbane, CA
SUBJECT: Data Gap Investigation Report
DATES: 21 November 2018 through 5 February 2019



PHOTOGRAPH 19.

View: DG-AK7 consists of silty sand with gravel (0 to 7 feet bgs, right to left, top core) underlain with clayey gravel (7 to 8 feet bgs, bottom core) and fat clay (8 to 10 feet bgs).



PHOTOGRAPH 20.

View: DG-X9 consists of a silty sand (0 to 3 feet bgs, right to left, top core) underlain with silty gravel (3 to 5 feet bgs) and fat clay known as Bay Mud (5 to 10 feet bgs, bottom core).

APPENDIX F – PHOTOGRAPH LOG

SITE: Brisbane Baylands Operable Unit 2, Brisbane, CA
SUBJECT: Data Gap Investigation Report
DATES: 21 November 2018 through 5 February 2019



PHOTOGRAPH 21.

View: DG-U11 consists of silty sand (0 to 3.5 feet bgs, right to left, top core) underlain with clayey gravel (3.5 to 8 feet bgs) and fat clay known as Bay Mud (8.5 to 10 feet bgs. Silty sand from 2.5 to 3.5 feet bgs contained sed approximately 25 percent shell fragments.



PHOTOGRAPH 22.

View: DG-T12 consists of silty sand underlain by silty gravel from 0 to 5 feet bgs (right to left).

APPENDIX F – PHOTOGRAPH LOG

SITE: Brisbane Baylands Operable Unit 2, Brisbane, CA
SUBJECT: Data Gap Investigation Report
DATES: 21 November 2018 through 5 February 2019



PHOTOGRAPH 23.

View: PVC sample tubing coated in viscous product encountered when sampling groundwater at temporary well DG-AI11.



PHOTOGRAPH 24.

View: Groundwater extracted from temporary well DG-AD13. From left to right, the containers contain unfiltered groundwater for total metals, field-filtered groundwater for dissolved metals, and unfiltered groundwater for VOCs.