



December 12, 2012

Brian A. Waite
Project Manager
Marketing Business Unit

**Chevron Environmental
Management Company**
6101 Bollinger Canyon Road
San Ramon, CA 94583
Tel (925) 790-6486
BWaite@chevron.com

Mr. Mark Detterman
Alameda County Health Agency
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502

RECEIVED

By Alameda County Environmental Health at 5:35 pm, Dec 19, 2012

RE: Conceptual Site Model and Closure Request

Former Chevron Asphalt Plant and Bulk Terminal #20-6265
1520 Powell Street, Emeryville, California
Case Number: *RO0002535*

Dear Mr. Detterman,

I declare under penalty of perjury that to the best of my knowledge the information and/or recommendations contained in the attached report is/are true and correct.

If you have any questions or need additional information, please contact me at (925) 790-6486.

Sincerely,

Brian A. Waite

Digitally signed by Brian A. Waite
DN: cn=Brian A. Waite, o=Chevron Environmental Management Company,
ou=Marketing Business Unit, email=BWaite@chevron.com, c=US
Date: 2012.12.12 15:19:45 -08'00'

Brian A. Waite, P.G.
Chevron Environmental Management Company – Project Manager

Attachment
Conceptual Site Model and Closure Request



Mr. Mark Detterman
Alameda County Health Care Services Agency
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502-6577

ARCADIS
111 SW Columbia Street
Suite 670
Portland
Oregon 97229
Tel 503.220.8201
Fax 503.220.8209
www.arcadis-us.com

Subject:

Conceptual Site Model and Closure Request
Former Chevron Asphalt Plant Terminal #20-6265
1520 Powell Street
Emeryville, California
Case Number: *RO0002535*

ENVIRONMENT

Date:
December 14, 2012

Dear Mr. Detterman:

Contact:
Melissa Blanchette

On behalf of Chevron Environmental Management Company (CEMC), ARCADIS has prepared the attached Conceptual Site Model (CSM) and Closure Request for the site located at 1520 Powell Street in Emeryville, California, identified as Asphalt Plant Terminal #20-6265 and Case Number RO0002535.

Phone:
503.220.8201 x1113

Email:
Melissa.Blanchette@arcadis-us.com

Groundwater data, as presented in the CSM and Closure Request support a conclusion that the site and the impacted groundwater pose no significant threat to human health or the environment. Remaining groundwater impacts are limited to the southwest portion of the site and the Powell Street Release area and the City of Emeryville is currently conducting remediation in the Powell Street Release area under DTSC Case # 70000131. Therefore, effective immediately, ARCADIS shall cease groundwater monitoring and sampling activities pending a response and further direction from the Alameda County Health Care Services Agency.

Our ref:
B0046257.0005

If you have any questions, please contact me at (503) 220-8201, ext. 1113, or by e-mail at Melissa.Blanchette@arcadis-us.com.

Sincerely,

ARCADIS

Melissa Blanchette

Imagine the result

Certified Project Manager 2

Copies:

Mr. Brian Waite, Chevron Environmental Management Company

Ms. Cherie McCaulou, San Francisco Regional Water Quality Control Board (Region
2)

**Chevron Environmental Management
Company**

**Conceptual Site Model and
Closure Request**

Former Chevron Asphalt Plant and Bulk Terminal
#20-6265
Emeryville, California

December 2012



Melissa Armstrong
Hydrogeologist



Melissa Blanchette
Senior Project Manager



David Lay P.G. (8545)
Program Manager



Conceptual Site Model and Closure Request

Former Chevron Asphalt Plant and
Bulk Terminal #20-6265
Emeryville, California

Prepared for:
Chevron Environmental Management
Company

Prepared by:
ARCADIS U.S., Inc.
2999 Oak Road
Suite 300
Walnut Creek
California 94597
Tel 925 274 1100
Fax 925 274 1103

Our Ref.:
B0046257.0005.00002

Date:
December 14, 2012

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- A ACHCSA and SFBRWQCB Letters
- B Boring Logs
- C Summary of 2009 Investigation
- D Statistical Analysis

Acronyms and Abbreviations

ACHCSA	Alameda County Health Care Services Agency
ACHSEPD	Alameda County Health Services Environmental Protection Division
amsl	above mean sea level
ARCADIS	ARCADIS U.S., Inc.
AST	aboveground storage tank
bgs	below ground surface
BTEX	benzene, toluene, ethylbenzene, and total xylenes
CalEPA	California Environmental Protection Agency
CEPD	City of Emeryville Planning Department
Chevron	Chevron Environmental Management Company
cis-1,2-DCE	cis-1,2-dichloroethene
City	City of Emeryville
CGU	coarse gradient unit
COPC	constituent of potential concern
CSM and Closure Request	Conceptual Site Model and Request for Low-Risk Case Closure
CVOC	chlorinated volatile organic compound
cy	cubic yards
DCE	dichloroethene
DO	dissolved oxygen
DWR	California Department of Water Resources
EBMUD	East Bay Municipal Utility District
EDR	Environmental Data Resources Inc.
EKI	Erler & Kalinowski, Inc.
ESL	environmental screening level
EVO	emulsified vegetable oil

G&M	Geraghty & Miller, Inc.
GAC	granular activated carbon
Geomega	Geomega Inc.
GR	Gettler-Ryan, Inc.
HLA	Harding Lawson Associates
MCL	maximum contaminant level
MES	McKesson Environmental Services
mg/kg	milligram per kilogram
mg/L	milligram per liter
MNA	monitored natural attenuation
MUR	Mixed Use with Residential
PCB	polychlorinated biphenyl
PCE	tetrachloroethylene
PID	photo ionization detector
ppm	parts per million
PVC	polyvinyl chloride
Redevelopment Agency	Emeryville Redevelopment Agency
RWQCB	California Regional Water Quality Control Board
SFBRWQCB	California Regional Water Quality Control Board, San Francisco Bay
site	former Chevron Asphalt Plant and Bulk Terminal #20-6265, located at 1520 Powell Street in Emeryville, California
Site B	five properties southwest of the site
SWRCB	State Water Resources Control Board
TCE	trichloroethene
TDS	total dissolved solid
TFH	total fuel hydrocarbons

TOC	total organic carbon
TPH	total petroleum hydrocarbon
TPH-d	total petroleum hydrocarbons as diesel
TPH-g	total petroleum hydrocarbons as gasoline
TPH-o&g	total petroleum hydrocarbon as oil and grease
USEPA	United States Environmental Protection Agency
USGS	United States Geological Survey
VC	vinyl chloride
VOC	volatile organic compound
WGR	Western Geologic Resources, Inc.
WRCC	Western Regional Climate Center
°F	degrees Fahrenheit
µg/kg	micrograms per kilogram
µg/L	micrograms per liter

1. Introduction and Purpose

On behalf of Chevron Environmental Management Company (Chevron), ARCADIS U.S., Inc. (ARCADIS) is pleased to submit this Draft Conceptual Site Model and Request for Low-Risk Case Closure (CSM and Closure Request) for the former Chevron Asphalt Plant and Bulk Terminal #20-6265, located at 1520 Powell Street in Emeryville, California (site; Figure 1).

This CSM and Closure Request includes a comprehensive site assessment and remediation history; information regarding regional and site-specific geology and hydrogeology, and soil and groundwater conditions at the site (including the distribution of constituents of potential concern [COPCs]); and evaluation of human health exposure from site-related COPCs. Based on the information provided in the following sections, the site meets the criteria described in the Assessment Tool for Closure of Low-Threat Chlorinated Solvent Sites (California Regional Water Quality Control Board, San Francisco Bay [SFBRWQCB] 2009) and therefore, ARCADIS requests that the site be considered for low-risk closure.

2. Site Description and History

The site is a former Chevron asphalt plant and bulk terminal located at 1520 Powell Street in Emeryville, California (Figure 1). The facility was operated as a bulk fueling facility and asphalt testing laboratory from the early 1950s until June 1987. The 2.78-acre site is bordered to the north by the former Westinghouse Electric Property, currently known as the Emeryville Mound Property. The site is bordered to the east and south by Horton (a.k.a. Landregan Street) and Powell streets, respectively, and to the west by the Union Pacific Railroad (formerly Southern Pacific Railroad property) (Figure 2).

Chevron acquired the 2.78-acre property in four stages from 1914 through 1966 for use as a bulk terminal (Chevron West Central Division 1988). There is no indication of structures present on the site in Sanborn[®] maps from 1903 and 1911, obtained from Environmental Data Resources Inc. (EDR).

An aerial photograph from 1939 also obtained from EDR shows that four buildings were present on site. This configuration is confirmed in a 1951 Sanborn[®] map. One building was located on the southwest corner of the site, one building was located in the northeast corner of the site, and two buildings were located along the east and southeast portions of the site. Eleven aboveground storage tanks (ASTs) were located in the northwest portion of the site. A review of historical aerial photographs indicates that this main configuration remained until the ASTs were removed sometime between 1965 and 1974. The historical site buildings were removed sometime between 1982 and 1993. By 1998, an Amtrak station was built on the site and included a large parking lot. In 1999 and 2000, the northern portion of the site was redeveloped as an Amtrak passenger terminal, and the southern portion of the property was redeveloped with a parking/residential condominium complex¹. This configuration continues to the present day (EDR 2012).

¹ The condominium complex consists of residential dwellings on top of an aboveground parking structure.

ASTs in the northwestern portion of the site were used as part of a fuel storage and transfer facility for petroleum products (see former tank area on Figure 3). Buildings located in the eastern portion of the site include a shed and storeroom, garage, and an office building (Cambria 2006). However, according to records obtained from EDR, including Sanborn[®] maps and a city directory summary, Nash Solvents occupied the building in the northeast corner (labeled as the shed and storeroom on Figure 3) of the site sometime in the 1960s (EDR 2012). The buildings in the southwest corner of the site included an office building and laboratory, where various pavement products were researched and marketed (Cambria 2006).

According to the City of Emeryville Planning Department's (CEPD's) General Plan Land Use Map (CEPD 2012), the site is zoned as Mixed Use with Residential (MUR). Property to the west of the site is also zoned as MUR; property to the north of the site is zoned as Mixed Use with Non-Residential; property to the south of the site is zoned as Industrial; and property to the east of the site is zoned as Office/Technology Area (CEPD 2012).

Currently two monitoring wells are located on site and eight monitoring wells are located off site. Historically, 18 additional monitoring wells were present both on and off site; these wells were removed prior to the site remedial excavation and redevelopment. Historical and current monitoring well locations are presented on Figure 3 and well construction details are summarized in Table 1.

The City of Emeryville is actively remediating under DTSC case # 70000131 for on-site contamination of CVOCs (EKI 2007).

2.1.1 Geography, Topography, and Site Elevation

The site is located within the East Bay Alluvial Plain approximately 3.5 miles west of the Berkley Hills and the Hayward Fault and approximately 2,000 feet east of the San Francisco Bay. Historically, the shoreline of San Francisco Bay was located only 300 feet west of the site, but the shoreline was extended with artificial fill (EKI 2007). According to the U.S. Geological Survey (USGS) 7.5-minute topographic map for the Oakland West, California quadrant dated 1993, the site is located at an approximate

elevation of 15 feet above mean sea level (amsl) and is relatively flat (USGS 1993).

2.1.2 Surface-Water Drainage

The nearest surface-water body to the site is San Francisco Bay, located approximately 2,000 feet west of the site. Based on the USGS 7.5-minute topographic map for the Oakland West, California quadrant dated 1993 (USGS 1993), surface water at the site is generally expected to drain to the west.

2.1.3 Climate

According to the Western Regional Climate Center's (WRCCs) Oakland West, California (0446335) weather station, the monthly average temperatures near the site vary from a minimum average monthly temperature of 41.9 degrees Fahrenheit (°F) in January to a maximum average monthly temperature of 73.6°F in September. Annual average precipitation in the region of the site is approximately 18 inches per year (WRCC 2012).

2.1.4 Vegetation

The site is located in an urban area of Emeryville, California. Except for sidewalk planters, the site and surrounding areas are almost entirely paved with asphalt or concrete.

3. Conceptual Site Model

As part of the Conceptual Site Model (CSM), the site geology and hydrogeology, results from past investigations, distribution of COPCs within the subsurface and groundwater, and potential risks to human health and the environment were evaluated and are presented in Sections 4 through 7. This section summarizes the CSM.

Impacts to subsurface soil and groundwater were first discovered in 1985 after a preliminary investigation was conducted to assess potential impacts to the subsurface (Harding Lawson Associates [HLA] 1988). Various chemical compounds have been analyzed and detected in samples collected from site soil and groundwater including petroleum hydrocarbon constituents, chlorinated solvents, metals, and polychlorinated biphenyls (PCBs). Results from the historical soil investigations are summarized in Table 2 and the historical groundwater results are summarized in Tables 3 and 4. Chlorinated solvents and petroleum hydrocarbons were detected most frequently and were therefore identified as the COPCs.

Chlorinated solvents including trichloroethene (TCE), dichloroethene (DCE), and vinyl chloride (VC) impacts in soil and groundwater were likely associated with operations conducted in the former laboratory/office building where asphalt testing and research were reportedly conducted (Figure 3; Cambria 2006). Petroleum hydrocarbons, including total petroleum hydrocarbons as gasoline (TPH-g) and total petroleum hydrocarbons as diesel (TPH-d), and benzene, toluene, ethylbenzene, and total xylenes (BTEX), were primarily detected in soil in the central portion of the site between the former tank area and the laboratory/office building (Figure 3).

The majority of COPC-impacted soil was excavated on four occasions (see Section 9.2). After the 1992 remedial excavation, both the Alameda County Health Care Services Agency (ACHCSA) and SFBRWQCB issued letters stating that based on data collected to date, no additional remediation of soil was warranted. The ACHCSA and SFBRWQCB letters are included in Appendix A. In addition, in 1999, an additional 32,000 cubic yards (cy) of soil were excavated from the site during site redevelopment. As a result, little COPC-impacted soil remains on site (see Section 7.1). The remaining COPC-impacted soil is restricted to an area near the southwestern

boundary, adjacent to and on the railroad. In addition, in 2009 chlorinated solvents were detected in off-site soil borings installed near the Powell Street Release Area, south and southwest of the site.

As described in Section 7.2, dissolved-phase COPC impacts are currently present in wells installed in the Powell Street Release Area, which is currently being treated with carbon substrate amendments by EKI (see Sections 5.4.1 and 7.4.4) (EKI 2012). Low levels of TCE and cis-1,2-dichloroethene (cis-1,2-DCE) are present in on-site wells MWX-11A and MWX-10A below the MCLs.

4. Geology and Hydrogeology

4.1 Regional Geology and Hydrogeology

The site is located within the East Bay Alluvial Plain groundwater sub-basin (California Department of Water Resources [DWR] 2004). The sub-basin is bounded to the east by the Franciscan Basement Rock, which underlies the western flank of the Berkley Hills; to the west by San Francisco Bay; to the north by San Pablo Bay, and to the south by Niles Creek groundwater basin. The sub-basin consists of Quaternary alluvial deposits of the Alameda Formation, including artificial fill, young bay mud, and the San Antonio Formation. The San Antonio Formation is characterized by interbedded silty gravels, silty sand, silty clay, with high-energy sandy gravel deposits (EKI 2007).

4.2 Site Geology and Hydrogeology

As shown on cross sections A-A' and B-B', included on Figures 4 and 5, respectively, site lithology consists primarily of low-permeability silt and clay with some gravel and sand laminations to the maximum depth explored of 21.5 feet bgs. The locations of the cross sections are presented on Figure 3. Boring logs are included in Appendix B.

Cone penetrometer testing data collected by EKI from Site B, as well as in the Powell Street Release Area, identified several coarse-grained units, which are defined as the upper and lower coarse gradient unit (CGU). The upper CGU occurs from approximately 1 to 13 feet amsl and varies in thickness from 4 to 10 feet. The lower CGU occurs from 13 to 24 feet amsl and varies in thickness from 1 to 4 feet (EKI 2011). EKI identified a channel feature during installation of pilot study wells in the Powell Street Release Area. Channelized features such as this are common for the alluvial deposits that make up the Alameda Formation. Based on the results of the investigations conducted by EKI for Site B, the CGUs appear to influence the groundwater flow direction in and around Powell Street. The site monitoring wells are screened in the upper CGU.

As shown on the groundwater elevation contour map (Figure 6), groundwater elevations during the June 28, 2012 groundwater monitoring event ranged from 5.32 feet amsl in MWX-9 to 8.63 feet amsl at MW-11A.

The groundwater gradient was approximately 0.01 to the southwest. This groundwater elevations and gradients collected in June 2012 are consistent with elevations and gradients reported for previous groundwater monitoring and events conducted between 2009 and 2011 (ARCADIS 2012).

5. Summary of Previous Work

As described above, previous site investigations have identified potential on-site sources of petroleum hydrocarbons associated with former bulk fueling activities and chlorinated solvents associated with the activities conducted at the former asphalt testing laboratory. This section summarizes the site assessment history and remedial activities. Historical soil data are summarized in Table 2 and groundwater analytical results are summarized in Tables 3 and 4. Locations of monitoring wells, historical soil samples, and excavations are presented on Figure 7.

5.1 Site Assessment Activities

In 1985, Chevron's Marketing Department engaged McKesson Environmental Services (MES) to conduct a field investigation to evaluate potential soil and groundwater contamination at the site. MES installed groundwater monitoring wells MW-1 through MW-9, which were later abandoned as part of the remedial excavation and redevelopment activities (Figure 3).

In August 1988, HLA installed on-site wells MW-10, MW-11, and MW-12 to further delineate and characterize the on-site groundwater contamination (Figure 3). HLA also advanced 18 soil borings on the western half of the site, near the office and lab, the barrel platform, the former tank area, and the space between the former tank area and barrel platform. Soil sampling was conducted to further delineate and characterize the on-site soil contamination prior to excavation (HLA 1988).

In August and September 1988, both the loading dock and barrel storage area were removed to allow for further subsurface analysis (Cambria 2006). In September 1988, Western Geologic Resources, Inc. (WGR) advanced 42 soil borings on site near the former barrel storage area (Figure 7) and off site to evaluate the vertical extent of hydrocarbon

impacts to shallow soil. Residual fuel hydrocarbons, mainly in the diesel range, were reported at concentrations up to 2,700 parts per million (ppm) in soil from most of the borings. Low concentrations of BTEX were also detected in the soil samples (WGR 1989).

In December 1988, Groundwater Technology, Inc. advanced 33 additional soil borings to further evaluate the vertical and horizontal extent of fuel hydrocarbons and CVOCs in the unsaturated zone. Samples were collected from locations on the west side of the shed, garage, and office to the far side of the western fence line (Figure 7) (WGR 1990). CVOCs were reported in most samples, and less than one-half of the samples contained fuel range hydrocarbon concentrations. The extent of TPH-d impacts in soil greater than 100 ppm was estimated for future remedial excavations based on December 1999 analytical results (see Section 5.2) (Cambria 2006).

In February and March 1990, WGR advanced on-site borings B-1, B-2, and B-3 beyond the perimeter of the previous excavation. Two of the borings (B-2 and B-3) were completed as monitoring wells MW-13 and MW-14. Additional monitoring wells (MW-15 through MW-19) were installed off site (Figure 3).

In February 1990, WGR conducted a 24-hour pump test on at monitoring well MW-12 to determine the hydrologic characteristics of the aquifer and to evaluate the potential efficacy for groundwater extraction to remediate the contamination. A sustained yield of up to 0.26 gallon per minute was achieved during the test, resulting in a calculated transmissivity of 1.48 cubic feet per foot, or 11 gallons per day per foot of drawdown. An estimated downgradient radius of influence of 358 feet with approximately 500 days of pumping was calculated to remove one interstitial volume of groundwater in the downgradient direction. Due to the limited yield, WGR concluded that groundwater extraction was an inefficient and ineffective method for remediation (WGR 1990).

In March and April 1990, WGR advanced 43 shallow soil borings around the northern edge of the previous excavated area and along the western site boundary to further delineate potentially impacted soil. Samples were analyzed for BTEX, TPH-g, TPH-d, total oil and grease, CVOCs, and halocarbons.

In April and May 1992, Geraghty & Miller, Inc. (G&M) collected confirmation soil samples following the removal of a shed, storeroom, and garage. Four soil borings (SB-1 through SB-4) were advanced north of the shed and storeroom. Compliance sampling was conducted beneath the hydraulic lift and mechanic's pit in the former garage (Figure 7). Soil samples were analyzed for TPH-d, total petroleum hydrocarbon as oil and grease (TPH-o&g), VOCs, PCBs, and metals. Low concentrations of TPH-d, TPH-o&g, VOCs, and metals were detected in the soil samples. Based on the sampling results, approximately 15 cy of soil was over-excavated beneath the former mechanic's pit. Soil was excavated until photo ionization detector (PID) readings approached zero (Cambria 2006).

In July 1992, subsequent to their site investigation, G&M prepared a risk assessment report based on data collected earlier that year. The report discussed the extent of soil and groundwater impacts, toxicity effects and profiles, exposure pathways, and health-based remediation goals. Based on their risk assessment, the levels of COPCs in soil and groundwater were below health-based goals and further remediation was not warranted. On October 16, 1992, the ACHCSA issued a letter concurring with this conclusion (Appendix A) (Cambria 2006).

On November 20, 1992, the SFBRWQCB issued a letter indicating their opinion, with the concurrence of the ACHCSA, that soil and groundwater at this site do not pose an undue risk to human health or the environment and further excavation of soil is not warranted. Redevelopment of the site was permitted (Appendix A) (Cambria 2006).

During the April 1995 groundwater sampling event, MW-2 was found to be damaged as a result of recent paving activities. Therefore, the July 1995, MW-2 was abandoned and replaced with MW-2A (Gettler-Ryan, Inc. [GR] 1995). MW-19 was also abandoned and replaced at this time (GR 1995).

On October 27, 1997, Cambria submitted a Site Information Summary for Case Closure Report (Cambria 1997). The report summarizes results from previous investigations, references the letters issued by the SFBRWQCB and the ACHCSA (included as Appendix A), and summarized results from the groundwater monitoring program, which indicated that groundwater conditions were improving. Based on the lines of evidence, this site was

recommended for No Further Action status (Cambria 1997); however, no response ACHCSA to this request was received.

In November 1999 as part of the redevelopment activities, GR advanced 64 soil borings to 10 feet bgs and abandoned five on-site monitoring wells (MW-2A, MW-8, MW-10, MW-11, and MW-13) prior to construction of a condominium complex at the site. Monitoring wells MW-1 and MW-12 were also scheduled to be abandoned, but could not be located. Soil boring data were used to pre-profile soil to be excavated and removed from the site during construction (GR 2000).

In March 2006, Cambria submitted another closure request, the Site Conceptual Model and Request for Site Closure (Cambria 2006) to the ACHCSA. Cambria reported that the site appeared to meet the SFBRWQCB criteria for a low-risk groundwater site for the following reasons:

- Ongoing sources, including free product, were removed or remediated.
- The site was adequately characterized.
- The dissolved hydrocarbon plume was not migrating.
- No water wells, deeper drinking water aquifers, surface water, or other sensitive receptors were likely to be impacted.
- The site presented no significant risk to human health or the environment.

Cambria (2006) presented detailed evidence that the site met the criteria listed above. Based on their analysis of the site history and environmental conditions, Cambria requested that the ACHCSA grant case closure and no further action for the site. To date, the ACHCSA has not responded to this request.

On July 24, 2009, the Alameda County Health Services Environmental Protection Division (ACHSEPD) issued a letter stating that although the site was part of the Alameda County Environmental Health Department Spills, Leaks, Investigation, and Cleanup Program, the site needed to

continue semiannual monitoring unless there were changes to site-specific conditions and needs. The ruling was in accordance with Resolution No. 2009-0042 by the State Water Resources Control Board (SWRCB). As part of this directive, the site is currently monitored semiannually during the second and fourth quarters.

5.2 Site Remediation Activities

Remedial activities included the demolition and removal of site buildings and infrastructure as well as the excavation of more than 40,000 cy of COPC-impacted soil.

In October 1987, the ASTs and associated piping were removed to allow for access for subsurface investigation (Cambria 2006).

From April to September 1989, approximately 10,400 cy of soil containing hydrocarbons were excavated to a depth of 6 feet in the central area of the site. The excavation extent was based on the analytical results from the December 1988 soil borings. Soil was removed until hydrocarbons were no longer detected using a PID (Cambria 2006). An additional 256 cy of impacted soil were excavated and removed from three locations within the northern and eastern section of the office/lab former footprint and a fourth location just east of the former loading dock (Figure 7). Confirmation samples were collected from the floor and sidewalls of the excavations and analyzed for total fuel hydrocarbons (TFH) as diesel or kerosene, TCE, and PCB. The excavated areas were lined with plastic sheeting and then backfilled with 1.5-inch-diameter clean crushed rock. Excavated soil was transported to the American Rock and Asphalt Facility in Richmond, California (Cambria 2006).

In October 1990, approximately 500 cy of soil were excavated from two locations along the western edge of the site based on the March and April 1990 soil analytical results (Figure 7). The two locations were west of the covered storage and between MW-7 and MW-13.

In 1991, demolition and contamination delineation continued on site. The former laboratory building was demolished in 1991 by a contractor that was not identified in available documents (Figure 7). WGR collected soil samples from 24 shallow borings beneath the building in a 4x6 grid pattern.

Soil samples were analyzed for TPH-d, aromatic volatiles, and sludge. Soil samples collected mainly beneath the eastern half of the former laboratory building contained concentrations of TPH, TCE, benzene, and TPH-o&g (Cambria 2006).

In April and May 1992, G&M excavated approximately 15 cy of soil from the former mechanic's pit based on soil analytical data from that area. Soil was excavated until PID readings approached zero (Cambria 2006).

In December 1999, approximately 32,000 cy of soil were removed from the site. This volume of soil equals an excavation approximately 15 feet deep over the area of the proposed garage footprint on the southern half of the site (Figure 7). The final parking structure ultimately covered the area north of the 1999 excavation to include the northern half of the site (Cambria 2006). According to a wastewater discharge permit obtained in December 1999, up to 5,000 gallons per day of groundwater were removed by dewatering conducted during the 1999 excavation (East Bay Municipal Utilities District 1999). Documentation of the exact amount of water removed is not available.

5.3 Summary of 2009 Site Assessment Activities

In October 2008, remediation and redevelopment activities commenced at Site B (Figure 2). Geomega Inc. (Geomega) was engaged by Chevron as the expert witness in the litigation process in 2008. Geomega proposed to gather additional data to further characterize hydrogeologic conditions, identify potential migration pathways, and better delineate the nature and extent of CVOCs in soil and groundwater on and adjacent to the site. ARCADIS was then engaged by Chevron to conduct the site assessment. Proposed site assessment activities were detailed in ARCADIS' Supplemental Soil and Groundwater Investigation Work Plan (ARCADIS 2008).

The investigation, conducted in 2009, included the advancement of two soil borings (SB-1A and SB-2A) and installation of seven groundwater monitoring wells (MWX-2, MWX-3, MWX-6, MWX-8, MWX-9, MWX-10A, and MWX-11A) at the locations shown on Figure 3. Monitoring well construction details are included in Table 1. The details and procedures of the investigation are provided as Appendix C and are summarized below:

- Two soil borings were advanced using hand augers to approximately 3 feet bgs. Soil samples were collected to approximately 4 feet bgs.
- Groundwater monitoring wells were advanced to approximately 13 feet bgs and were constructed using 2-inch ID Schedule 40 polyvinyl chloride (PVC) casing with a 10-foot screen interval of 0.010-inch slotted PVC at the base of the well (3 to 13 feet bgs). Soil samples were collected at 4.5, 9.5, and 12.5 feet bgs. The monitoring wells were subsequently developed and sampled.
- Soil and groundwater samples were analyzed for the presence of CVOCs using United States Environmental Protection Agency (USEPA) Method 8260B
- Laboratory analysis of the soil samples indicated the presence of five CVOCs (tetrachloroethylene [PCE], TCE, cis-1,2-DCE, trans-1,2-dichloroethene [trans-1,2-DCE], and VC) in the soil samples collected. Maximum detected concentrations of these constituents are 0.22, 0.009, 0.21, 0.19, and 0.002 milligram per kilogram (mg/kg), respectively (Table 2).

Laboratory analysis of the groundwater samples from June 2012 indicated the presence of 10 CVOCs (chloroform, 1,4-dichlorobenzene, 1,1-dichloroethane, 1,1-dichloroethene, c-1,2-DCE, trans-1,2-DCE, 1,1,1,2-tetrachloroethane, PCE, TCE, and VC) in the groundwater samples collected during the June 2009 sampling event. Maximum detected concentrations were 0.9, 1, 3, 2, 670, 22, 2, 310, 2,100, and 24 micrograms per liter ($\mu\text{g/L}$), respectively.

5.4 Nearby Sites

Several other open environmental cases are located near the site. The two closest sites and most likely to influence conditions at the site are Site B located southwest of the site and the Westinghouse Electric Parcel located just north of the site. Monitoring wells for these sites are shown on Figure 8. Nearby sites with open environmental cases are summarized below.

5.4.1 Site B

Site B is located downgradient of the site to the southwest, at the intersection of Shellmound Street and Powell Street. The property comprised five separate properties purchased by the city of Emeryville in 2007 (EKI 2004). Environmental cleanup at the site is currently conducted by EKI under the direction of the city of Emeryville and the direction of the Department of Toxic Substance Control (DTSC).

- COPCs in groundwater include arsenic, antimony, TPH, and VOCs. COPCs in soil include arsenic, antimony, lead, TPH, and sulfides (secondary standard – nuisance odor).
- Site soil has been remediated by excavations completed from 2007 to 2009.
- A pilot test was completed in 2011 on site, as well as in the Powell Street Release Area (Figure 2) to evaluate enhanced reductive dechlorination, via emulsified vegetable oil (EVO). Results indicate that this would be an effective remedial option. EKI has completed at least three subsequent injections and continues to monitor the progress of remediation under the supervision of the DTSC.

5.4.2 Westinghouse Electric Parcel

The Westinghouse Electric Parcel encompasses approximately 69,000 square feet and is located at 59th Street and Horton Street (formerly Landregan Street) in Emeryville, California. CBS Corporation, formerly Westinghouse, is the current owner. Wareham Development currently leases the parcel for surface parking.

- COPCs in soil include PCBs, VOCs, SVOCs, arsenic, and lead. COPCs in groundwater include VOCs, SVOCs, arsenic, and lead.
- In 1984, Westinghouse entered into the Consent Agreement and Final Order with the USEPA. In 1985, as required by the Consent Agreement, Westinghouse constructed a subsurface slurry wall encompassing approximately 50,000 square feet of the parcel and a

surface cap over the entire parcel. The slurry wall and surface cap remain in place.

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6. Historical Impacts/Potential Sources

6.1 Soil

Historical soil analytical sample results are provided in Table 2. Historical soil sample locations and historical excavations are provided on Figure 7. Historical maximum concentrations for chlorinated VOCs and TPH constituents are summarized below.

6.1.1 Chlorinated Volatile Organic Compounds

- TCE was detected in 19 on-site sampling locations under and near the former asphalt laboratory, including S-17 and S-18 collected in 1988; B-1, B-2, B-3, B-4, B-6, B-7, B-9, B-10, B-11, B-18, B-19, B-20, B-21, and B-22 collected in February 1991; and composite samples G2, G3, and G4 collected in November 1999. TCE was detected in seven off-site sampling locations west and southwest of the site, under the Powell Street overpass and on the railroad property, including SB-42 collected in March 1990 and MWX-2, MWX-3, MWX-8, MWX-9, MWX-11A, and SB-1A collected in May 2009. The maximum detected concentration was 15,000 micrograms per kilogram ($\mu\text{g}/\text{kg}$) detected in a sample collected on March 26, 1990 from soil boring SB-42 located on the railroad property.
- PCE was detected at a low concentration ($7 \mu\text{g}/\text{kg}$) in one on-site sample (B-9 collected in March 1991 under the former garage located along the eastern edge of the site). PCE was detected at five of the 2009 investigation locations (MWX-2, MWX-8, MWX-9, SB-1A, and SB-2A) located off site under the Powell Street overpass. The maximum PCE concentration detected in on- and off-site samples was $210 \mu\text{g}/\text{kg}$ in a sample collected at SB-1A from 3.5 to 4 feet bgs. SB-1A is located just south of the 1519 Powell Street Property, on the south side of Powell Street closest to Site B. These data suggest that a source of PCE does not exist at the former Chevron asphalt terminal. PCE had been detected at Site B at concentrations as high as $977 \mu\text{g}/\text{kg}$, suggesting that the source of PCE is more likely from other off-site sources.

- cis-1,2-DCE was detected in samples collected in May 2009 at one on-site sampling location (MWX-11A) and four off-site sampling locations (MWX-2, MWX-3, MWX-8, and MWX-9). Cis-1,2-DCE was detected at concentrations ranging between 1 and 220 µg/kg. The maximum detected concentration of 220 µg/kg was collected on May 29, 2009 from location MWX-3, located underneath the Powell Street overpass southeast of the site.

6.1.2 Petroleum Hydrocarbons

Throughout the site's history, different analytical methods were used to detect TPH, including TPH-o&g, TFH, TPH-g, TPH-d, and total recoverable hydrocarbons. TPH has been detected in samples collected from 117 sampling locations, located in the central and southern portions of the site. Specific ranges of hydrocarbons including TPH-g, TPH-d, and benzene are discussed below because these constituents are the main COPCs considered when evaluating the potential risk to human health and the environment:

- TPH-g was historically detected in 35 samples. Detected concentrations ranged between 1,000 and 1,900,000 µg/kg. The maximum concentration detected was collected on March 26, 1990 from location SB-25, located on the western boundary of the site near the railroad.
- TPH-d was detected in 54 samples. Detected concentrations range between 11,000 and 3,500,000 µg/kg. The maximum concentration detected was collected from location S-6 on September 18, 1990. S-6 was also located along the western boundary of the site near the railroad.
- Benzene was detected in 13 samples. Detected concentrations ranged from 17 to 1,400 µg/L. The highest concentration was from composite samples collected from B-16 through B-20.

6.1.3 Vertical delineation

Vertical delineation of COPCs in soil are indicated on cross sections A-A' and B-B' on Figures 4 and 5, respectively. Soil samples for analysis of

petroleum hydrocarbon and CVOCs were collected from a maximum depth of 29 feet bgs at boring B-1 completed in February 1990 and located on the western portion of the site north of the former Barrel Platform. No constituents were detected in this sample. Petroleum hydrocarbon COPCs were detected in soil collected in May 1992 at a maximum depth of 12 feet bgs at location S-2, underneath the former sump on the eastern portion of the site, which has since been excavated.

6.2 Groundwater

6.2.1 Total Petroleum Hydrocarbons as Gasoline

Groundwater monitoring and sampling began at the site in 1985 and is currently ongoing. A total of 29 on- and off-site monitoring wells have historically been monitored in association with the site investigation activities. Of these 29 historical monitoring wells, 10 are currently monitored semiannually (MW-17, MW-18, MW-19A, MWX-2, MWX-3, MWX-8, MWX-9, MWX-10A, MWX-11A, MWX-6) for TPH-g, TPH-d, BTEX, and other VOCs including TCE and PCE.

Historically, TPH-g has been detected in on-site monitoring wells MW-1, MW-2A, MW-3 through MW-11, MWX-10A, MWX-11A, MW-13, and MW-14 and in off-site monitoring wells MWX-8, MW-15 through MW-19, and MW-19A. The maximum concentration detected was 20,000 µg/L in a sample collected from MW-8 in July 1988. This was the only sample collected from MW-8 in which TPH-g was detected and therefore does not accurately characterize the TPH-g dissolved-phase impacts. TPH-g was consistently detected (in more than 80 percent of samples) at MW-1, MW-6, MWX-2, MWX-3, MWX-8, and MW-19A, although only four samples were collected from MW-6.

6.2.2 Benzene

Historically, benzene has been consistently detected in samples collected from MW-1. The maximum concentration detected was 120 µg/L in two samples collected from MW-1 in March and September 1990. Other site wells had one or two sporadic detections of benzene.

6.2.3 Tetrachloroethylene

Historically, PCE was detected in samples collected from eight off-site monitoring wells including MWX-2, MWX-8, MWX-9, MW-16, MW-17, MW-18, MW-19, and MW-19A. The maximum concentration detected was 1,500 µg/L in MW-19A during the October 10, 1996 sampling event. MW-19A is located south of Powell Street between 1519 Powell Street and the railroad property. PCE was not detected in samples collected from on-site wells, suggesting that the source of PCE is not from the site.

6.2.4 Trichloroethene

Dissolved-phase TCE impacts have historically been restricted to the southwestern portion of the site near the former office and lab, and off-site in the Powell Street Release Area. Historically, TCE was detected in samples collected from seven on-site monitoring wells, including MW-1, MW-8 (detected in one sample collected in 1989), MW-10, MWX-10A (replaced MW-10 in 2009), MW-11, MWX-11A (replaced MW-11 in 2009), and MW-12 (detected in one sample collected in 1989). The maximum concentration detected (280 µg/L) in on-site wells was detected in a sample collected from MW-1 in 1991. TCE was detected historically in 10 off-site monitoring wells, including MWX-2, MWX-3, MWX-8, MWX-9, MW-15 (TCE was only detected in one sample in 1994), MW-16, MW-17, MW-18, MW-19, and MW-19A (replaced MW-19 in 1995). The maximum concentration detected in off-site wells was 2,100 µg/L in MWX-3 during the June 24, 2009 sampling event.

6.2.5 cis-1,2-Dichloroethene

Historically, cis-1,2-DCE was detected in samples collected from six on-site monitoring wells, including MW-1, MW-8 (detected in one sample collected in 1989), MW-10, MWX-10A (replaced MW-10), MW-11, and MWX-11A (replaced MW-11), and in 10 off-site monitoring wells, including MWX-2, MWX-3, MWX-6, MWX-8, MWX-9, MW-16, MW-17, MW-18, MW-19, and MW-19A (replaced MW-19). The maximum detected historical concentration was 5,900 µg/L in monitoring well MW-1 during the November 27, 1991 sampling event.

6.2.6 Vinyl Chloride

Historically, dissolved-phase VC impacts are generally consistent with cis-1,2-DCE impacts. VC was detected in samples collected from five on-site monitoring wells, including MW-1, MW-8 (detected in one sample collected in 1989), MW-10 (detected in one sample collected in 1997), MW-11, and MWX-11A (replaced MW-11), and in five off-site monitoring wells, including MWX-2, MWX-3, MWX-8, MWX-9 (detected in one sample collected in 2009), and MW-19A (replaced MW-19). The maximum detected historical concentration was 1,800 µg/L in monitoring well MW-1 during the May 10, 1991 sampling event.

7. Distribution of Residual Hydrocarbons and Chlorinated Solvents at Time of Closure Request (Current/Post-Remediation Environmental Conditions)

This section summarizes the current nature and extent of constituents in soil and groundwater at the site after remediation. In general, COPC-impacted soil and groundwater are limited in extent and well characterized. Remedial actions including excavation have affectively removed source mass from the site and COPC concentrations in groundwater have attenuated through time (see Section 7.4).

7.1 Soil

More than 40,000 cy of soil have been excavated, which has removed the majority of the impacted soil from the site to a maximum depth of 15 feet bgs. Concentrations of TPH, BTEX, and other VOCs remaining in soil after remedial excavation are presented on Figures 9, 10, and 11, respectively. COPC impacts remaining in soil are limited to samples along the southwestern boundary and on the Southern Pacific Railroad Property. In addition, low levels of CVOCs, including TCE and PCE, were detected in off-site soil borings installed during the ARCADIS 2009 investigation in the Powell Street Release Area. Concentrations of COPCs remaining in soil are summarized below.

- As shown on Figure 9, TPH-g was detected in soil samples collected from 17 boring locations, where soil was not removed during excavation. The maximum concentration was 1,900,000 µg/L detected at a soil boring SB-25 located on the railroad property south of the site. These samples were collected over 20 years ago and concentrations have likely decreased since the samples were collected.
- As shown on Figure 9, TPH-d was detected in soil samples collected from 13 boring locations, where soil was not removed during excavation. The maximum concentration was 3,500,000 µg/L detected at a soil boring S-6 located on the railroad property. As stated above, concentrations have likely decreased since the samples were collected over 20 years ago.

- As shown on Figure 10, benzene was detected in soil remaining on site in one sample collected from boring B-38, located south of the site on the railroad property. The benzene concentration in was 500 µg/kg.
- As shown on Figure 11, COVCs were detected in soil samples collected from three on-site borings B-20, B-21, B-22 and one on-site monitoring well MW-11A, located along the southern edge of the property behind the former office building/laboratory. The maximum concentration detected in these samples was 1,400 µg/kg of TCE. This sample was collected over 20 years ago. Current CVOCs concentrations are more accurately represented by soil samples collected in MW-11A in 2009. The maximum COVC concentration detected in samples collected from MW-11A was 120 µg/kg of TCE. CVOCs were detected in samples collected from two off-site borings SB-42 and SB-1A and four off-site monitoring wells MWX-2, MWX-3, MWX-8 and MWX-9. The maximum concentration (15,000 µg/kg of TCE) was detected in a sample collected from SB-42, however that sample was collected in 1990 and concentrations have likely decreased since then. The maximum TCE concentration in samples collected more recently was 190 µg/kg, detected in a sample collected from MWX-3. The highest concentration of PCE was 210 mg/kg detected in a sample collected from 4 feet bgs at SB-1A located off-site between 1519 Powell Street and the railroad.

7.2 Groundwater

Isoconcentration contours for the most recent groundwater sampling event for TPH-g, benzene, PCE, TCE, cis-1,2-DCE, and VC are presented on Figures 12 through 17. Groundwater analytical sample results for petroleum hydrocarbons are presented in Table 3 and groundwater analytical results for CVOCs, including TCE and PCE, are summarized in Table 4.

The current extent of dissolved COPCs in groundwater originating at the site is presently limited to the Powell Street Release Area. Dissolved-phase impacts are delineated downgradient by Site B monitoring wells. Groundwater remediation including carbohydrate injections, conducted by EKI in 2011 and 2012, have successfully reduced CVOCs in the Powell

Street Release Area. Current sampling results for each COPCs are discussed below.

7.2.1 Total Petroleum Hydrocarbons as Gasoline

As shown on Figure 12, TPH-g was detected in two off-site monitoring wells (MWX-3 and MW-19A) during the June 2012 groundwater monitoring event. The maximum concentration was 120 µg/L detected in the sample collected from MW-19A, which is located the furthest downgradient and closest to Site B.

7.2.2 Benzene

As shown on Figure 13, benzene was detected in the sample collected from monitoring well MWX-3 during the June 2012 groundwater monitoring event. The benzene concentration in this sample was 0.6 µg/L, which is below the California maximum contaminant level (MCL) of 1 µg/L. Prior to June 2012, benzene had not been detected in samples collected from MWX-3.

7.2.3 Tetrachloroethylene

As shown on Figure 14, PCE was detected in samples collected during the June 2012 groundwater monitoring event at two off-site monitoring wells (MW-18 and MWX-9) at concentrations of 8 and 4 µg/L, respectively. These concentrations mark a significant decrease from concentrations in samples collected during previous groundwater monitoring events (Tables 3 and 4). The large decrease in dissolved-phase PCE is a result of carbon amendments conducted by EKI in December 2011 in the Powell Street Release Area (EKI 2012). As discussed in Section 5.4.1 and 7.4.4, carbon amendments conducted in the Powell Street Release Area have successfully created a strong reducing zone, favorable for the reductive dechlorination of PCE and TCE and created a strong reducing zone.

7.2.4 Trichloroethene

As shown on Figure 15, TCE was detected in June 2012 in samples collected from MW-18, MWX-3, MWX-10A, and MWX-11A. The maximum concentration (27 µg/L) was detected in the sample collected from MW-18.

Dissolved-phase TCE impacts primarily occur in wells in the Powell Street Release Area, with lower concentrations (less than 10 µg/L) detected in on-site monitoring wells MWX-10A and MWX-11A. As discussed above, EKI is currently conducting carbon amendments in the Powell Street Release Area to remediate chlorinated solvents, which has successfully reduced concentrations in the Powell Street Release Area.

7.2.5 cis-1,2-Dichloroethene

As shown on Figure 16, dissolved-phase cis-1,2-DCE impacts are slightly greater than the PCE and TCE impacts, likely because cis-1,2-DCE is a breakdown product of PCE and TCE. Therefore, we would expect to see higher concentrations after conducting carbons substrate amendments. Cis-1,2-DCE was detected in June 2012 samples at concentrations ranging from 2 to 130 µg/L. The maximum concentration was detected in the sample collected from MWX-3.

7.2.6 Vinyl Chloride

As shown on Figure 17, VC was detected in one sample during the June 2012 groundwater monitoring event collected from MWX-3.

7.3 Nonaqueous Phase Liquid

No sheen or nonaqueous phase liquid has historically been observed in site monitoring wells. A black oil substance was detected in MW-2 during the April 1995 groundwater monitoring event. However, concentrations in samples collected from MW-2 were mostly not detected and it was assumed that asphalt inadvertently entered the well during construction of a new parking lot (Cambria 2006).

7.4 Evidence of Natural Attenuation and Plume Stability

7.4.1 Statistical Analysis Methodology

Linear regression analyses were conducted to evaluate the statistical significance of COPC concentration trends at the site. Linear regression analyses require a minimum of eight data points and were applicable at MW-17, MW-18, and MW-19A where data has been collected since 1990

(MW-17 and MW-18) and 1995 (MW-19A). A limited number of sampling events have been conducted (four to six observations) at monitoring wells installed in 2009, including: MWX-2, MWX-3, MWX-8, MWX-9, MWX-10A, and MWX-11A. Thus, sufficient data does not exist for linear regression analyses at these monitoring locations.

Linear regressions are statistical analyses that permit a quantitative assessment of COPC concentration trends. Linear regression analyses, using natural log-normalized concentration data, were conducted to estimate trend direction, attenuation rates, and approximate time to achieve cleanup goals in accordance with guidance from the USEPA (2002). Results of the linear regression analyses, including coefficients of determination (R^2 values), p-values of the correlation, and trend directions, are summarized in Table 5 and details of each analysis are included in Appendix D. The R^2 value is a measure of how well the linear regression fits the site data; R^2 values <0.1 indicate weak model fits, $0.1 > R^2 < 0.5$ indicate moderate model fits, and $R^2 > 0.5$ indicate stronger model fits. The p-value of the correlation provides a measure of the level of significance of the statistical test. Correlations were accepted as significant for p-values less than or equal to 0.05 and not significant for p-values greater than 0.05 (95 percent confidence level). The trend direction was defined as decreasing if the slope of the best fit line indicated that concentrations decreased with time (negative slope) and increasing if the slope of the best fit line indicated that concentrations increased with time (positive slope). Linear regression analysis allows for estimating the time to reach the screening levels at wells with decreasing COPC concentration trends, if the p-value of the analysis indicates that the trend is statistically significant.

7.4.2 Statistical Analysis Summary

Linear regression analyses were performed for active monitoring wells and for COPCs where the following criteria were met:

- A minimum of eight observations were available for analysis.
- COPC concentrations exceeded applicable screening criteria during at least 50 percent of the last 12 monitoring events conducted at the monitoring location.

- COPC concentrations exceeded laboratory reporting limits for at least 75 percent of historical monitoring events at the monitoring location.

To qualitatively assess trend direction, linear regression analysis was also conducted for VC at MW-19A, even though VC concentrations have not exceeded laboratory reporting limits for 75 percent of the historical monitoring events

Where non-detect values were used in computations for the linear regression analysis, a conservative approach was taken and concentrations were assumed to be equal to the laboratory reporting limits.

Site COPCs include PCE, TCE, cis-1,2-DCE, trans-1,2-DCE, VC, TPH-g, and TPH-d. The following screening levels were used in the determination of appropriate monitoring wells and COPCs to be evaluated in the statistical analysis.

COPC	Applicable Screening Level¹
PCE	5 µg/L
TCE	5 µg/L
cis-1,2-DCE	6 µg/L
trans-1,2-DCE	10 µg/L
VC	0.5 µg/L
TPH-g	100 µg/L

Notes:

1. PCE, TCE, cis-1,2-DCE, trans-1,2-DCE, and VC screening levels are the California Department of Public Health (2011) primary MCLs. CA MCLs have not been established for TPH-g and TPH-d. To be conservative, the screening levels used here for TPH-g and TPH-d are the SFBRWQCB groundwater environmental screening levels (ESLs) for groundwater that is a current or potential drinking water resource (SFBRWQCB 2008).

A total of 29 on- and off-site monitoring wells have historically been monitored in association with the ongoing site investigation. Of these 29 historical monitoring wells, 10 are currently monitored (MW-17, MW-18, MW-19A, MWX-2, MWX-3, MWX-8, MWX-9, MWX-10A, MWX-11A, MWX-

6). Of the 10 active monitoring wells, three (MW-17, MW-18, MW-19A) met the criteria for linear regression analyses. The following table summarizes the analyses performed.

Monitoring Well	Statistical Analysis	COPCs
MW-17	Linear Regression	PCE, TCE
MW-18	Linear Regression	PCE, TCE
MW-19A	Linear Regression	PCE, TCE, cis-1,2-DCE, VC, TPH-g

7.4.3 Statistical Results Summary

Linear regression analyses for each monitoring well – COPC pair were conducted both over the entire period of data collection (full data set) and over just the period following the source area excavation in December 1999 (remedial excavation). The linear regression analysis is presented in Appendix D and results are presented in Table 5. The results for individual COPCs are described below.

7.4.3.1 Tetrachloroethylene

PCE concentration trends at the three monitoring wells were found to be significantly decreasing for both the full datasets and the post-remedial datasets, with predicted dates for reaching the CA MCL ranging from 2010 at monitoring well MW-17 to 2046 at monitoring well MW-19A. The PCE concentration at MW-17 has been equal to the CA MCL of 5 µg/L since 2010, but has not yet fallen below this screening level. The PCE concentration at MW-19A decreased from 340 µg/L in November 2011 to below the laboratory reporting limit in June 2012. This dramatic decrease in PCE concentration is attributed to the injection of carbohydrate substrate (emulsified vegetable oil) conducted in the Powell Street Release Area (EKI 2011). This attribution is supported by a comparison of geochemical parameters before and after this preliminary injection event, as discussed in Section 7.4.4. Additional injection events are planned and are expected to further enhance the observed decreasing trends in PCE concentrations.

7.4.3.2 *Trichloroethene*

TCE concentration trends at the three monitoring wells were found to be significantly decreasing for both the full and post-remedial datasets, except the insignificantly increasing trend at monitoring well MW-18 when only data from the period following the remedial excavation was considered. Statistically insignificant trends can be considered stable. Dates to reach the screening level range from 2015 at monitoring well MW-17 to 2028 at monitoring well MW-19A. TCE is a degradation intermediate of PCE. As described by the USEPA (2011), the rate of attenuation of intermediates can be expected to increase as the mass of the parent compound is exhausted, because their attenuation rates are dependent both on their formation rates (during degradation) and their degradation rates. The additional injection events are expected to accelerate the observed decreasing trends in TCE concentrations.

7.4.3.3 *cis-1,2-Dichloroethene*

The cis-1,2-DCE concentration trend at MW-19A was significantly decreasing when the full dataset was considered and insignificantly decreasing (stable) when only the period following remedial excavation was considered. For the significant trend, the estimated year to reach the CA MCL is 2049. Cis-1,2-DCE is a degradation intermediate of PCE and TCE. As described by the USEPA (2011), the rate of attenuation of intermediates can be expected to increase as the mass of the parent compound is exhausted, because their attenuation rates are dependent both on their formation rates (during degradation) and their degradation rates. The additional injection events are expected to result in additional decreases in cis-1,2-DCE concentrations.

7.4.3.4 *Vinyl Chloride*

It should be noted that, for all monitoring wells, current laboratory reporting limits are one order of magnitude higher than the CA MCL and historical reporting limits have largely been at least double and up to eight times higher than the CA MCL. To qualitatively assess trend direction, linear regression analysis was conducted for VC at MW-19A, even though VC concentrations have not exceeded laboratory reporting limits for 75 percent of the historical monitoring events. With one exception, VC was not

detected above laboratory detection limits between 1995 and April 2000 and many of the detection limits during this time period were elevated above subsequent detection concentrations of VC. The dataset for the trend analysis was therefore restricted to October 2000 to present. The overall trend for VC during this timeframe was insignificantly decreasing (stable). VC is a degradation intermediate of PCE and TCE. As described by the USEPA (2011), the rate of attenuation of intermediates can be expected to increase as the mass of the parent compound is exhausted, because their attenuation rates are dependent both on their formation rates (during degradation) and their degradation rates. The additional injection events are expected to result in additional decreases in VC concentrations

7.4.3.5 Total Petroleum Hydrocarbons as Gasoline

TPH-g concentrations were found to be insignificantly increasing at MW-19A, considering both the full dataset and only the period following remedial excavation. Statistically insignificant trends can be considered stable.

7.4.4 Evaluation of Geochemical Parameters

Reductive dechlorination is the primary biodegradation process associated with natural attenuation of CVOCs. Reductive dechlorination occurs under reducing aquifer conditions. Reducing aquifer conditions are conducive to anaerobic microbiological metabolism, such as that used by dechlorinating bacteria to degrade chlorinated ethenes. By this process, CVOCs with greater degrees of chlorination (PCE and TCE) are sequentially reduced to TCE, DCE, VC, and finally ethene and ethane. Reductive dechlorination may occur naturally, provided that conditions are favorable for the growth of the appropriate microorganisms, and may also be enhanced with the amendment of an organic carbon substrate, nutrients, and/or appropriate microorganisms.

Bacteria gain metabolic energy from the transfer of electrons from compounds commonly referred to as electron donors to compounds referred to as electron acceptors. Electron donors are typically carbon substrates naturally found in the subsurface. Several electron acceptors are usually available in the subsurface. Examples of electron acceptors include oxygen, nitrate, ferric iron, manganese, sulfate, and carbon dioxide.

Dissolved oxygen (DO) is the most thermodynamically favorable electron acceptor and is used by aerobic microorganisms. Once DO is consumed, anaerobic microorganisms use electron acceptors in a predictable order of preference: nitrate, manganese, ferric iron, sulfate, and carbon dioxide. Reductive dechlorination of chlorinated ethenes typically occurs concurrently with sulfate-reducing and methanogenic conditions.

MNA parameters including concentrations of total organic carbon (TOC; an electron donor) and of the various electron acceptors (nitrate and sulfate), along with concentrations of anaerobic reaction products (methane, ferrous iron, reduced manganese, and carbon dioxide in the form of alkalinity) are typically used to evaluate if environmental conditions are conducive to degradation of CVOCs. In addition, the presence of the end-products of reductive dechlorination (ethene and ethane) is evidence that not only are environmental conditions conducive to the process, but that reductive dechlorination is in fact occurring. MNA parameters have been measured in groundwater water samples collected at the site since 2009. These data are summarized in Table 6 and discussed below.

7.4.4.1 *Total Organic Carbon*

TOC concentration is an indication of the concentration of potentially available electron donors in the subsurface. Hydrogen and volatile fatty acids are the electron donors used by microorganisms during reductive dechlorination (He et al. 2002). Hydrogen is generated by other microorganisms (e.g., fermenting bacteria) from the breakdown of larger carbon substrates. Reductive dechlorination can occur at any TOC concentration, as long as the environment remains reducing. However, conditions are most favorable at higher TOC concentrations (>20 milligrams per liter [mg/L]; USEPA 1998) and dechlorination rates may be slower at lower TOC concentrations. Prior to the most recent monitoring event, TOC concentrations at the site ranged from 1.6 to 19.7 mg/L, indicating the presence of potential electron donors to facilitate reductive dechlorination. During the most recent monitoring event, following the injection of a supplemental carbon source (emulsified vegetable oil; EKI 2011), TOC concentrations increased dramatically at monitoring wells MWX-3, MWX-8, and MWX-19A from concentrations of 4.5 to 6.3 mg/L to concentrations of 255 to 470 mg/L. This increase indicates that the

injection resulted in an ample supply of TOC to serve as a precursor for the electron donors required for reductive dechlorination.

7.4.4.2 Nitrate

Nitrate is the first electron acceptor used by anaerobic microorganisms after DO is depleted. Background levels of nitrate are site-specific, so it can be difficult to tell if concentrations are decreasing. Generally, reductive dechlorination is favorable when nitrate concentrations are depleted (<0.5 mg/L; Chapelle et al. 2009). At site monitoring wells, nitrate concentrations historically range from continually non-detect at some locations (MWX-6) to 5,400 to 7,200 µg/L at other locations (MWX-3). This broad difference in nitrate concentrations may indicate variably reducing conditions within the subsurface, with nitrate depletion at some monitoring locations and at some times, but not at others. Notably, at monitoring wells MWX-3, MWX-8, and MW-19A, nitrate concentrations decreased dramatically from 1,300 to 5,400 µg/L during the June 2011 monitoring event to concentrations below the 250 µg/L laboratory reporting limit during the June 2012 monitoring event. This decrease in concentration may be attributed to the complete reduction of nitrate in these locations following the injection of supplemental organic carbon.

7.4.4.3 Dissolved Manganese

Manganese reduction is an anaerobic redox reaction in which bacteria use manganese as an electron acceptor to facilitate biodegradation of organic compounds. When manganese is used as an electron acceptor during anaerobic microbial respiration, it is reduced to soluble manganese?. Measurement of dissolved manganese can thus be used to assess the occurrence of manganese reduction. Like ferrous iron, concentrations of dissolved manganese may be ultimately controlled by the bioavailability of manganese in the environment, so observed concentrations must be viewed in context. Changes in dissolved manganese concentrations along with the co-occurrence of dissolved manganese in conjunction with other indicative geochemical parameters are the most powerful lines of evidence in support of the demonstration of conditions conducive to reductive dechlorination with dissolved manganese data. Dissolved manganese has been historically detected at all site monitoring wells at concentrations ranging from 5.7 to 2,150 µg/L. Dissolved manganese concentrations

increased dramatically at monitoring wells MWX-3, MWX-8, and MW-19A between the June 2011 and June 2012 sampling events, ranging from 11,600 to 25,300 µg/L at these wells during the June 2012 sampling event.

7.4.4.4 *Ferrous Iron*

Iron reduction is an anaerobic redox reaction in which bacteria use ferric iron as an electron acceptor to facilitate biodegradation of organic compounds. When ferric iron is used as an electron acceptor during anaerobic microbial respiration, it is reduced to ferrous iron, which is typically soluble. Concentrations of ferrous iron may be ultimately controlled by the bioavailability of ferric iron in the environment, so observed concentrations must be viewed in context. Changes in ferrous iron concentrations along with the co-occurrence of ferrous iron in conjunction with other indicative geochemical parameters are the most powerful lines of evidence in support of the demonstration of conditions conducive to reductive dechlorination with ferrous iron data. Ferrous iron has been detected historically at the site, but prior to the most recent monitoring event has only been observed above the laboratory reporting limit once at monitoring well MWX-2 and during three monitoring events at MWX-6. These observations of elevated iron concentrations have been observed in conjunction with the most highly elevated methane concentrations observed. Together, these lines of evidence suggest strongly reducing conditions conducive to reductive dechlorination in some areas of the site. Elevated iron concentrations were also observed during the most recent monitoring event, at monitoring wells MWX-3, MWX-8, and MW-19A with concentrations ranging from 6,050 to 35,900 µg/L. This dramatic increase in ferrous iron concentrations following the injection of supplemental organic carbon provides further evidence that post-injection conditions at these monitoring locations are sufficiently reducing to support reductive dechlorination.

7.4.4.5 *Sulfate*

Sulfate reduction is an anaerobic redox reaction in which sulfate is used as an electron acceptor to oxidize organic carbon. Sulfate reduction typically occurs after DO, nitrate, and biologically available manganese and iron have been depleted, and indicates a strongly reducing groundwater environment. Like nitrate, sulfate concentrations have historically been

variable at site monitoring wells, with higher concentrations at some wells and during some time periods compared to others. Again, this may be due to variable reducing conditions. Because background sulfate concentrations are unknown, it cannot be readily determined if sulfate reduction has historically depleted background levels of sulfate. At monitoring wells MWX-3, MWX-8, and MW-19A, sulfate concentrations fell dramatically from 19,500 to 57,800 µg/L in June 2011 to 1,700 to 4,800 µg/L in June 2012. This decrease in concentration likely indicates sulfate-reducing conditions at these monitoring locations following the injection of supplemental organic carbon. Sulfate-reducing conditions are conducive to reductive dechlorination.

The reduction of sulfate produces sulfide; therefore, the detection of sulfide can provide additional evidence that conditions are conducive to reductive dechlorination. However, sulfide formed in the subsurface often precipitates with metals and is not detected in groundwater. Sulfide has not been detected at the site, but a decrease in sulfate concentrations following the injection event is sufficient to demonstrate sulfate-reducing conditions; thus, conditions that are conducive to reductive dechlorination.

7.4.4.6 *Methane*

When sulfate becomes depleted, microorganisms use carbon dioxide as an electron acceptor in a process that generates methane, called methanogenesis. Methanogenesis occurs under the most reducing aquifer conditions and reductive dechlorination can also occur under methanogenic conditions. The generation of methane above laboratory detection limits likely indicates that methanogenesis is occurring. Prior to the June 2012 monitoring event, methane was observed at most site monitoring wells, except MW-17 and MW-18. The presence of methane at site monitoring wells indicates that conditions are methanogenic, and thus are theoretically sufficiently reducing for the reductive dechlorination process. At some monitoring locations, methane was detected concurrently with the detection of nitrate. This observation is uncommon and may indicate variably reducing conditions within the subsurface (i.e., the presence of microenvironments of varying redox potential). A significant increase in methane concentrations was observed at monitoring wells MWX-3, MWX-8, and MW-19A from concentrations of <5 to 16 µg/L in June 2011 to concentrations of 2,600 to 15,000 µg/L in June 2012. This

increase in methane concentration, together with the dramatic decrease in nitrate and sulfate concentrations at these monitoring wells, indicates reducing conditions favorable for reductive dechlorination.

7.4.4.7 Alkalinity

Alkalinity can be generated during microbial degradation of organic compounds as carbon dioxide is produced and reacts within the carbonate system. Bicarbonate alkalinity at the site historically ranged from 69,300 to 411,000 µg/L. Alkalinity concentrations at monitoring wells MWX-3, MWX-8, and MW-19A increased from 105,000 to 68,000 µg/L in June 2011 to 850,000 to 1,040,000 µg/L in June 2012. These increases indicate increased carbon dioxide production, likely as a result of increased degradation of supplemented organic material and ultimately resulting in strongly reducing conditions favorable for sulfate reduction, methanogenesis, and reductive dechlorination.

7.4.4.8 Ethane and Ethene

The microbial process of reductive dechlorination produces ethene, and concentrations of ethene and ethane above method detection limits indicate that complete reductive dechlorination is occurring. Prior to the most recent monitoring event, ethane was detected during two monitoring events at monitoring well MWX-2 (at concentrations of 8.9 and 22 µg/L) and during a single monitoring event at MWX-8 (1.1 µg/L). Ethene was also detected during one monitoring event at MWX-2 (1.9 µg/L). These detections of ethane and ethene provide strong evidence that reductive dechlorination was naturally occurring in some areas of the site prior to the June 2011 injection event. Elevated concentrations of ethane (6.4 to 19 µg/L) and ethene (1.4 to 66 µg/L) were observed at MWX-3, MWX-8, and MW-19A during the most recent monitoring event, providing strong evidence that reductive dechlorination was enhanced by the injection of supplemental organic carbon.

The analysis of geochemical parameter data indicates variably reducing conditions present historically within the subsurface, with evidence of strongly reducing conditions conducive to natural reductive dechlorination at some locations. The historical detection of ethane and ethene at some monitoring locations suggests that reductive dechlorination was proceeding

to completion. The geochemical data provide strong evidence that reductive dechlorination was enhanced by the injection of supplemental organic carbon just prior to the most recent monitoring event.

8. Identification of Sensitive Receptors and Exposure Pathways

8.1 Water Supply

The site is located within the East Bay Plain Groundwater Subbasin of the Santa Clara Valley Groundwater Basin (DWR 2004, Section 4.1). According to the East Bay Plain Groundwater Basin Beneficial Use Evaluation Report (SFRWQCB 1999), shallow groundwater in the in Bay-front artificial fill, young bay mud and the San Antonio Formation exceeds 3000 milligrams per liter (mg/L) TDS and could not reasonably be expected to serve a public water supply (SFRWQCB 1999). As described in Section 3.1, site subsurface soil consist of artificial fill and bay mud, therefore meets the exception criteria of the State Water Resources Control Board's (SWRCB) Drinking Water Policy (SFRWQCB 1999). Site cleanup should be protective of ecological receptors and human health (SFRWQCB 1999).

Furthermore, water is supplied to the site by East Bay Municipal Utility District (EBMUD). The EBMUD water supply comes primarily from the Sierra Nevada Mountains via the Mokelumne River.

Finally, Cambria conducted a DWR well search, which identified four wells located adjacent to the Emeryville Amtrak Station north of the site. These wells are screened to 19 feet bgs and are likely used as groundwater monitoring wells and not for drinking water.

8.2 Ecological Receptors

Because the site is devoid of appropriate habitat for nesting or foraging and no surface water is present, it can be assumed that ecological receptors are rarely present onsite and are not exposed to site COPCs. Site conditions are expected to remain the same in the future. The nearest surface-water body to the site is San Francisco Bay, located approximately 2,000 feet to the west. It is unlikely that groundwater affected by site releases will reach the San Francisco Bay (Cambria 2006).

8.3 Exposure Pathway Summary

Figure 18 presents a summary of the human health exposure pathway evaluation detailing receptors and exposure points and media. Receptors

were chosen based on current and potential future uses of the site and downgradient (potentially affected) properties. Identified receptors include the following:

- On-site and off-site current and future resident: This receptor represents both child and adult residents.
- On-site and off-site commercial worker: This adult receptor would work full-time on or near the site performing mainly indoor work.
- On-site and off-site utility worker: This adult receptor would conduct short-term maintenance and emergency repair activities on underground utilities at or near the site to the depth at which groundwater is encountered. This worker is assumed to work on or near the site up to 20 days per year for 7 years. It is assumed that the same utility worker may provide services on multiple utility maintenance and/or repair tasks for several years.

Generally, chemicals detected in site media may be contacted by a potential receptor through one or more exposure routes. Three possible exposure routes were evaluated for each receptor: ingestion, dermal contact, and inhalation. When exposure routes are linked to specific media (e.g., soil, air), they are referred to as exposure pathways. Each of these exposure pathways is discussed below as they relate to the potential receptors.

8.3.1 Soil Exposure Pathways

Incidental Soil Ingestion

The intake of chemicals from incidental surface and subsurface soil ingestion is directly related to the amount of soil ingested. For this site, subsurface soil is defined as greater than 0.5 feet below ground surface (bgs). Because the majority of the site and surrounding area is paved or covered by buildings, exposure of current on-site and off-site residents and on-site and off-site commercial workers to surface and subsurface soil is considered incomplete.

Utility workers both onsite and offsite may ingest soil particles that adhere to food, cigarettes, or their hands, and may also incidentally ingest subsurface soil during intrusive soil activities. It is assumed that utility trenches will generally be above the depth of first-encountered groundwater, which has historically been no deeper than about 6 feet bgs in the site area. Historical soil data show concentrations in soil above screening levels for TPH, BTEX and TCE. However, most of these on-site sample locations have been excavated below the sampling depth, thereby removing any impacted soil. In addition, the data are greater than 20 years old and cannot be considered an accurate representation of current concentrations. It is reasonable to assume that concentrations have decreased as a result of natural attenuation (biodegradation, volatilization, abiotic degradation) since these data were collected. Therefore, exposure via ingestion of surface and subsurface soil is considered complete but insignificant for the on-site utility worker. Several soil samples, all collected more than 20 years ago, contain TPH above screening levels. Most are located along the western site boundary and in the railroad right-of-way, one is located to the south beneath Powell Street, and one is in the northeast corner of the site (Figure 15). Again, it is reasonable to assume natural attenuation has resulted in decreased concentrations and minimal, if any, potential impact currently. Thus, ingestion of surface and subsurface soil is considered a complete but insignificant exposure pathway for the off-site utility worker.

Dermal Contact with Soil

With the majority of the site and surrounding areas being covered by buildings and pavement and small areas of established landscaping, the pathways for both on-site and off-site residents and commercial workers exposed to surface and subsurface soil via dermal contact are considered incomplete. The utility worker may come into direct contact with chemicals in subsurface soil during invasive soil activities. However, as mentioned in the soil ingestion pathway above, affected soil on-site has been excavated and removed from the site to a large extent. Any remaining impacts both on-site and off-site have attenuated since the samples were collected more than 20 years ago. Therefore, exposure to constituents through dermal contact with soil for the on-site and off-site utility worker is considered potentially complete but insignificant.

Inhalation of Soil Particulates

Because the majority of the site and surrounding areas are covered by buildings and pavement with only small areas of established landscaping, the pathways for both on-site and off-site residents and commercial workers exposed to surface and subsurface soil via inhalation of dust particles are considered incomplete. The utility worker may come into contact with chemicals by inhaling airborne dust in subsurface soil during invasive soil activities. However, in line with the soil ingestion and dermal contact pathways mentioned above, the majority of affected soil onsite has been excavated and removed. Any remaining impacts both on-site and off-site can be considered to have attenuated since the samples were collected more than 20 years ago. Therefore, the exposure pathway for the on-site and off-site utility worker via inhalation of particulates in soil is considered complete but insignificant.

8.3.2 Groundwater Exposure Pathways

Groundwater from the site is not used for domestic or industrial purposes and is unlikely to be in the future. As described above, water on the site and surrounding areas is supplied by EBMUD. Therefore, the groundwater ingestion, dermal contact and inhalation of volatiles from tap water exposure pathways are incomplete for on-site and off-site residents and on-site and off-site commercial workers.

If groundwater is shallow, utility workers may contact it during subsurface work. Historically, depth to groundwater has been as shallow as 0.7 feet bgs in wells in the central area of the site. Recent data (since 2010) indicate that groundwater is encountered as shallow as 3.5 to 4.0 feet bgs in wells onsite and offsite in Powell Street wells. While historical data indicate TPH-g concentrations in on-site wells were greater than the screening level, groundwater concentrations have not exceeded the TPH-g screening level since 1989. TPH-g, BTEX, and MTBE concentrations in on-site and Powell Street wells have not exceeded their respective screening levels. PCE, TCE, and VC concentrations have exceeded their respective screening levels in wells in and across Powell Street since 2010. Concentrations of PCE and TCE were much lower in 2012. Utility workers are minimally exposed to VOCs in groundwater via incidental dermal contact and ingestion. Therefore, these pathways are considered

potentially complete but insignificant for on-site and off-site utility workers due to exceedances in only a few wells with decreasing concentrations.

8.3.3 Inhalation of Vapors from Soil and Groundwater

Inhalation of volatile emissions can potentially occur through the direct volatilization of VOCs from soil and/or groundwater to ambient air (for all receptors) and/or indoor air (for commercial workers and residents only). CalEPA (1994) defines VOCs as those chemicals with a vapor pressure greater than 1×10^{-3} millimeters of mercury and a Henry's Law Constant greater than 1×10^{-5} atmosphere-cubic meter (m^3) per mole. CalEPA (2004) guidance recommends evaluation of the vapor migration pathway if VOC contamination is found at a site, with a preference for use of soil gas data in lieu of soil or groundwater data to perform a screening level or site-specific evaluation of the vapor migration pathway. In the absence of soil gas data, soil and groundwater concentrations on-site and off-site were compared with ESLs to evaluate each pathway. Note that ESLs selected for comparison are for exposure in indoor air resulting from vapor intrusion, and concentrations in outdoor air are expected to be much lower than indoor air.

Inhalation of Vapors from Groundwater

Figures 12 through 17 illustrate the dissolved phase impacts currently present in downgradient on-site and off-site groundwater. The plumes are mainly beneath the area under the Powell Street overpass, and there are no buildings in this area. The plumes do extend beneath small areas of some buildings, described below.

Recent groundwater monitoring data indicate groundwater impacts from TCE, TCA, cis- and trans-1,2-DCE, and vinyl chloride under the residential building on the south end of the site; however, the indoor air vapor migration pathway is considered incomplete for on-site residents because the first floor of this building is an open-air parking garage. This allows for dissipation of any volatile chemicals before they would enter or accumulate in the building space above. Also, none of the VOC concentrations in groundwater prior to excavation of the soil in 1999 in preparation for the building construction exceeded ESLs pertaining to the vapor intrusion pathway. The plume map indicates there would be no impacts from any

chemicals under or in the vicinity of adjacent off-site residences (the nearest residential area lies approximately 500 feet to the east, upgradient or cross-gradient from the site). Therefore, the exposure pathway for off-site residences via indoor air vapor inhalation from groundwater is considered incomplete.

On the northeast corner of the southern on-site building, a car rental business employing commercial workers is situated on the same level as the parking garage. Historical wells in this area indicated groundwater was impacted by BTEX and TPH (in 1992 and 1999), but maximum concentrations did not exceed vapor migration ESLs for BTEX. Recent data are not available, as the wells were abandoned prior to the 1999 excavation for construction of the building, but concentrations would be lower than in 1999 due to natural attenuation processes. The northern end of the site houses an Amtrak train station with commercial workers potentially spending an 8-hour shift inside the building. Historical data from wells in this area indicated the presence of TPH-G in 1988 and 1990; however, these data are over 20 years old, and any potential exposure can be considered insignificant due to natural attenuation and degradation processes. Therefore, the exposure pathway for the on-site commercial worker via inhalation of indoor air affected by vapor migration is considered complete but insignificant.

PCE, vinyl chloride and TPH-g plumes (Figures 14, 17, and 12, respectively) have migrated south of the site across Powell Street and may extend beneath commercial buildings located there. This may result in exposure of off-site commercial workers to these constituents via vapor migration. PCE and vinyl chloride concentrations in wells just downgradient of the buildings across Powell Street (MW-19A and MWX-2) exceed vapor migration ESLs, but upgradient wells MW-17 and MW-18 do not. Groundwater concentrations appear to be stable or decreasing, and the plume appears to only extend beneath one corner of the building. In addition, the City of Emeryville Redevelopment Agency groundwater treatment pilot study and subsequent monitoring activity has shown a mostly decreasing trend of VOC concentrations in this area. Additional treatment will decrease concentrations to low levels. The pathway for inhalation of indoor air vapors migrating from groundwater for off-site commercial workers is therefore considered potentially complete but insignificant.

It is assumed that utility workers do not spend any working time indoors, thus inhalation of indoor vapors migrating from groundwater is an incomplete pathway.

Inhalation of vapors migrating from groundwater to outdoor air is considered incomplete or insignificant for on-site and off-site utility workers, residents, and commercial workers because concentrations are generally low, and vapors quickly dissipate into ambient air.

Inhalation of Vapors from Soil

In December 1999, the area directly below the portion of the site where the residential building is located was excavated to 15 feet bgs. Therefore, sources below this building (which includes a small rental car office) were removed to depths beneath the groundwater table. For the commercial workers at the train station on-site, historical soil data from under and adjacent to the building indicate TPH concentrations exceeded screening levels. However, the data are over 20 years old, and natural attenuation processes have likely reduced these levels to insignificant. In addition, on-site soil on the south side of the station was excavated to 6 feet bgs, removing much of the impacted soil. Therefore, the pathway for the on-site commercial worker via inhalation of indoor air vapors migrating from soil is considered potentially complete but insignificant. Inhalation of indoor vapors from soil by the on-site utility worker is considered incomplete due to insignificant time spent indoors. Off-site soil has not been impacted directly by former operations at the site in locations where buildings are present, so off-site receptors are not exposed to vapors from impacted soil migrating to indoor air.

Inhalation of vapors migrating from soil to outdoor air is considered an incomplete pathway for on-site and off-site residents because any potential sources for vapor migration from soil were removed during the 1999 excavation. For on-site commercial workers, though a few exceedances of TPH screening levels were found near the train station, natural attenuation as well as dissipation in ambient air renders this pathway incomplete. For on-site utility workers, TPH detects in soil along the western site boundary in samples collected over 20 years ago (1990) greater than ESLs were found, but natural attenuation has likely resulted in decreased

concentrations. Therefore, this pathway is considered complete but insignificant.

8.4 Summary of Receptors and Corresponding Exposure Pathways

For the purpose of this conceptual site model, typical pathways and receptors were listed based on known site conditions and potential future scenarios. The following is a summary of each receptor and potential exposure pathway.

8.4.1 On-Site and Off-Site Resident. Soil Depth Range Exposure: Surface and Subsurface Soil.

- No complete and potentially significant exposure pathways
- No potentially complete but insignificant pathways

8.4.2 On-Site and Off-Site Commercial Worker. Soil Depth Range Exposure: Surface soil.

- No complete and potentially significant exposure pathways
- Potentially complete but insignificant pathways:
 - For on-site commercial worker: inhalation of VOCs volatilizing from groundwater and subsurface soil to indoor air.
 - For off-site commercial worker: inhalation of VOCs from groundwater to indoor and outdoor air

8.4.3 On-Site and Off-Site Utility Worker. Soil Depth Range Exposure: Surface and Subsurface soil (greater than 0.5 feet bgs).

- No complete and potentially significant exposure pathways

Potentially complete but insignificant pathways: Ingestion and dermal contact with surface soil; ingestion and dermal contact with subsurface soil; inhalation of airborne dust; ingestion and dermal contact with groundwater;

inhalation of VOCs volatilizing from groundwater infiltrating a trench;
inhalation of VOCs volatilizing from subsurface soil outdoor air.

9. Evaluation of Site of Closure

9.1 Comparisons with Human Health Risk-Based Screening Levels

COPC concentrations in subsurface soil and groundwater were compared to screening levels, as shown in Tables 2, 3 and 4. If COPC concentrations do not exceed selected screening levels, it can be assumed that adverse effects on human health and the environment are unlikely. Screening levels were selected from Environmental Screening Levels (ESLs) (SFRWQCB 2008) that are applicable to the site.

For soil screening levels, residential ESLs from Table B, “Shallow Soils (≤ 3 meters bgs) Groundwater is not a Current or Potential Source of Drinking Water” were selected (SFCRWQCB 2008). These ESLs are derived considering human exposure (not including vapor migration of VOCs), groundwater protection, ecologic concerns in an urban setting, and nuisance concerns. Soil samples where COPC concentrations exceeded ESLs are summarized below.

- TPH-d and TPH-g concentrations exceed the TPH-g and TPH-d ESL of 100,000 $\mu\text{g}/\text{kg}$ in soil samples collected above 3 meter bgs at locations S-5, S-6, SB-25, SB-26, SB-27, SB-35 and SB-42 located adjacent to and on the railroad property west of the site; SB-1 located in the northeastern corner of the site; MW-14 located north of the former farm tank area; and MW-17 located on the south side of Powell Street. These samples were collected 20 years ago and current concentrations in soil are likely much lower due to biodegradation. In addition, the samples collected near and on the railroad property as well as in the Powell Street release area are likely associated with other off-site sources such as the pipeline located along the railroad, which are being monitored and treated by others.
- Benzene concentrations exceeded the ESL of 120 $\mu\text{g}/\text{kg}$ in one sample collected at B-38 located on the railroad property west of the site. Toluene, ethylbenzene and total xylenes concentrations did not exceed ESLs soil samples collected from soil remaining on site.
- TCE concentrations exceed the ESL of 1,900 $\mu\text{g}/\text{kg}$ in one sample (SB-42) located on the railroad property.

Because these samples were collected 20 years ago and COPCs in soil have likely degraded over time and because most of the samples where COPC concentrations exceeded ESLs were collected off-site and likely associated with other off-site sources, ARCADIS concludes that COPCs remaining in on-site soils are minimal and will not pose a risk to human health and the environment.

For groundwater, residential values from Table E-1, "Groundwater Screening Levels for Evaluation of Potential Vapor Intrusion Concerns (volatile chemicals only)" were selected (Table 4) (SFBRWQCB 2008). ESLs are not available for TPH-G and TPH-D for the vapor migration pathway; the ceiling value ESLs from Table F-1b, "Groundwater Screening Levels (groundwater is not a current or potential drinking water source)" were selected for these constituents (SFBRWQCB 2008). The only other ESLs available for TPH-G and TPH-D are aquatic habitat goals, which assume that the groundwater is discharging to surface water that provides habitat for aquatic organisms, which are not applicable to this site. A summary of groundwater samples with concentrations that exceed ESLs is provided below.

- Concentrations of petroleum hydrocarbons including TPH-g, TPH-d and benzene were below ESLs in groundwater samples collected during the June 2012 event.
- PCE concentrations were below the ESL in the June 2012 groundwater samples.
- TCE concentrations detected in the most recent sample collected from MWX-3 were well below the ESL due to the groundwater remediation activities conducted in the Powell Street Release area by EKI (see section 6.2 and 6.3).
- Vinyl chloride concentrations exceed the ESL in one sample collected from MWX-3 during the June 2012 groundwater monitoring event. Groundwater remediation in the Powell Street Release Area near MWX-3 has effectively reduced concentrations of COVCs and has successfully established reducing conditions favorable for reductive dechlorination to continue to progress (Section 6.4.4),

- In summary, dissolved phase COPC concentrations exceeded ESL for one constituent (vinyl chloride) in one sample collected during the June 2012 groundwater monitoring event from MWX-3. Concentrations in this well are expected to decrease below the vinyl chloride ESL in the near future because groundwater remediation conducted by EKI has successfully established reducing conditions favorable for reductive dechlorination.

9.2 Summary of Findings in Support of Closure

Site data described above and in the CSM indicate that COPC impacts remaining in site soil and groundwater are minimal and pose little threat to human health and the environment. As described in the Assessment Tool for Closure of Low-Threat Chlorinated Solvent Sites (SFBRWQCB 2009), sites must meet three main criteria to be considered for site closure:

1. Develop a complete CSM
2. Control sources and mitigate risks and threats
3. Demonstrate that residual pollution in all media will not adversely affect present and anticipated land and water uses.

Each of these main criteria have three sub criteria, which are summarized below.

1. Develop a complete CSM

1a) Pollutant sources are identified and evaluated

As described in Section 3, sources of petroleum hydrocarbons were identified on-site in the central portion of the property where bulk fueling and tanker truck loading activities were conducted and sources of chlorinated solvents were identified near the northern portion of the former office building and asphalt testing laboratory.

1b) The site is adequately characterized

COPC impacts in soil have been characterized through numerous site investigation conducted from 1988 through 2009 as described in section 6.1. Regular groundwater monitoring events have been completed from 1988 through the present. Soil analytical data are summarized in Table 2

and groundwater monitoring results and analytical data are summarized in Tables 3 and 4.

1c) Exposure pathways, receptors, and potential risks, threats and other environmental concerns are identified and assessed

Section 7 provides detail regarding the sensitive receptors and potential exposure pathways. Water for domestic and industrial use is supplied by EBMUD; groundwater affected by former site activities is not of sufficient quality to be used for these purposes due to high levels of TDS. Ecological receptors are not likely to be present at the site due to lack of suitable habitat, foraging material, and surface water. Potential human receptors identified include on-site and off-site current and future residents, on-site and off-site current and future commercial workers, and on-site and off-site future utility workers. There are no complete and potentially significant exposure pathways for any of these receptors. A few pathways are potentially complete but insignificant for the commercial worker and the utility worker, including inhalation of VOCs volatilizing from soil or groundwater into indoor or outdoor air.

2. Control sources and mitigate risks and threats

2a) Pollutant sources are remediated to the extent feasible

Approximately 40,000 cubic yards of soil were excavated to a maximum depth of 15 feet bgs and transported offsite. The excavation activities were conducted over four events as part of remediation and redevelopment activities between 1988 and 1999.

2b) Unacceptable risks to human health, ecological health, and sensitive receptors, considering current and future land and water uses, are mitigated

The exposure pathway evaluation included review of potentially complete pathways and comparison to health-protective screening levels (residential exposure was assumed), as described in Section 8 and 9.1. The evaluation of current and potential future human receptors (on-site and off-site) indicates:

- Most exposure pathways are incomplete.

- Potentially complete pathways would result in insignificant exposure levels, based on current COPC concentrations in soil and groundwater. Groundwater monitoring results from the June 2012 event indicate that COPC concentrations above the applicable ESLs were present in only one sample collected from MWX-2 located in the Powell Street Release Area. As a result of active groundwater remediation conducted by EKI, COPC concentrations (in the Powell Street Release Area and in MWX-2) are expected to decrease below ESLs in the near future.

The site does not pose risk to ecological receptors. The site and downgradient off-site areas do not provide adequate habitat for wildlife to acquire sufficient dietary or water intakes or for nesting. Affected groundwater does not discharge to surface water, thus, aquatic receptors are not exposed to COPCs in site-related plumes.

2c) Unacceptable threats to groundwater and surface water resources considering existing and potential beneficial uses, are mitigated

There are no groundwater wells located within a ½ mile of the site that are used for domestic water supply. In addition, high TDS concentrations limit the beneficial uses of shallow groundwater in the East Bay Plain groundwater subbasin.

Site COPCs are not likely to affect existing and potential beneficial uses of surface water because groundwater modeling completed by Cambria suggests that COPCs will attenuate prior to reaching the San Francisco Bay, which is the nearest surface water body (Cambria 2006). In addition, groundwater is being remediated in the Powell Street release area where only groundwater impacts exceeding ESLs are currently observed.

3. Demonstrate that residual pollution in all media will not adversely affect present and anticipated land and water uses

3a) Groundwater Plumes are decreasing

Linear regression analysis, described in Section 7.4, indicate that stable or decreasing trends were observed in all monitoring wells evaluated indicating the groundwater plume is decreasing in size. Furthermore,

COPC concentrations have recently decreased drastically as a result of groundwater remediation activities conducted in this area by EKI.

3b) Cleanup standards can be met within a reasonable timeframe

Groundwater monitoring results from the June 2012 event indicate that COPC concentrations above the applicable ESLs were present in only one sample collected from MWX-2 located in the Powell Street Release Area. Groundwater remediation conducted by EKI will continue to degrade COPCs in this area and concentrations in MWX-2 are expected to decrease below ESLs in the near future.

3c) Risk management measures are appropriate, documented and do not require future Water Board [regulatory] oversight

As described above COPCs in site soils and groundwater are of limited extent and are not likely to pose a threat to human health and the environment. EKI is currently conducting site remediation and monitoring site conditions under the supervision of the DTSC for the Site B property located downgradient former Chevron asphalt facility. As part of the monitoring and remediation for Site B, EKI is also completing groundwater remediation and monitoring the Powell Street Release area, where the only COPCs impacts that could be potentially associated with the site remain.

10. Conclusions and Recommendations

As described above the site meets the criteria for closure of Low-Threat chlorinated solvents sites. ARCADIS recommends that the site be closed at this time and that Chevron no longer be required to continue to monitor existing groundwater monitoring wells in the Powell Street Release Area for the following reasons.

1. Remaining groundwater impacts are limited to the southwest portion of the site and the Powell Street Release area and the City of Emeryville is currently conducting remediation in the Powell Street release area.
2. COPC-impacted soil was removed from the site during four large scale excavation events and both ACHCSA and SFBRWQCB issued letters stating that no further remediation of site soils was required.
3. COPC concentrations in soil and groundwater do not pose a significant risk to human health or the environment.

Therefore, effectively immediately, ARCADIS shall cease groundwater monitoring and sampling activities pending a response and further direction from ACHCSA.

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Tables

Table 1
Well Construction Details
Former Chevron Asphalt Plant and Bulk Terminal #20-6265
1520 Powell Street
Emeryville, California

Well ID	Construction Date	Notes	Boring Depth	Well Diameter	Screen Top	Well Bottom	Screen Length	TOC Elevation	Latitude	Longitude
			(feet bgs)	(inches)	(feet bgs)	(feet bgs)	(feet)	(msl)	(decimal degrees)	(decimal degrees)
MW-1	3/12/1985	(ABD)	12	3	2	12	10	--	--	--
MW-2	3/12/1985	(ABD)	12	3	2	12	10	--	--	--
MW-3	3/12/1985	(ABD)	12	3	2	12	10	--	--	--
MW-4	3/12/1985	(ABD)	12	3	2	12	10	--	--	--
MW-5	3/12/1985	(ABD)	12	3	2	12	10	--	--	--
MW-6	3/13/1985	(ABD)	12	3	2	12	10	--	--	--
MW-7	3/13/1985	(ABD)	12	3	2	12	10	--	--	--
MW-8	3/13/1985	(ABD)	12	3	2	12	10	--	--	--
MW-9	3/13/1985	(ABD)	12	3	2	12	10	--	--	--
MW-12	8/18/1988	(ABD)	17.5	4	6.5	16.0	9.5	13.01	--	--
MW-10	8/19/1988	(ABD)	21.5	4	11	19	8	10.80	--	--
MW-11	8/19/1988	(ABD)	17	4	6.5	16.5	10	11.35	--	--
MW-13	2/1/1990	(ABD)	14	4	7.5	12.0	4.5	--	--	--
MW-14	2/1/1990	(ABD)	11.5	4	5	10.0	5.0	--	--	--
MW-15	2/2/1990	(ABD)	12	4	5.5	10.5	5.0	--	--	--
MW-17	3/21/1990	--	13.5	2	4	12	8	13.52	37.8390419	122.2911715
MW-18	3/22/1990	--	11.5	2	4	11	7	12.95	37.8389902	122.2914482
MW-19	3/22/1990	(ABD)	10.5	4	5	9	4	--	--	--
MW-16	3/23/1990	(ABD)	14.5	2	7	13.5	6.5	--	--	--
MW-19A	10/30/1995	--	16.5	2	3	15	12	11.79	37.8389341	122.2917242
MW-2A	10/30/1995	(ABD)	15	3	2.5	15	12.5	12.45	--	--
MWX-10A	5/28/2009	--	13	2	2.5	13	10	12.78	37.8391195	122.2917202
MWX-11A	5/28/2009	--	13	2	2.5	13	10	14.18	37.8393130	122.2917975
MWX-2	5/28/2009	--	13	2	2.5	13	10	12.10	37.8387710	122.2917048
MWX-6	5/28/2009	--	13	2	2.5	13	10	11.41	37.8388625	122.2924265
MWX-8	5/28/2009	--	13	2	2.5	13	10	12.77	37.8387710	122.2917048
MWX-3	5/29/2009	--	13	2	2.5	13	10	13.45	37.8390958	122.2913732
MWX-9	5/29/2009	--	13	2	2.5	13	10	11.46	37.8388923	122.2922482

Explanation:

ABD = Abandoned
bgs = below ground surface
msl = mean sea level

TOC = top of casing
-- = not applicable

Notes:

MW-17, MW-18, and MW-19A were resurveyed when the MWX well series were installed in May, 2009.
Latitude and longitude data are referenced to the North American Datum of 1983.
Top of casing is referenced to the National Geodetic Vertical Datum of 1988.

Table 2
Soil Analytical Sample Results
Former Chevron Asphalt Plant and Bulk Terminal #20-6265
1520 Powell Street
Emeryville, California

Location ID	Depth Interval	Sample Date	Analyte Units ESL	Petroleum Oil & Grease	Total Fuel Hydrocarbons	Total Oil & Grease	TPH-d	TPH-g	TRPH	Benzene	Toluene	Ethylbenzene	Xylenes, Total	Acetone	Bromo methane	Bromo dichloro methane	Bromoform		
				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
				--	--	--	100,000	100,000	--	120	9,300	2,300	11,000	500	700	570	24,000		
			Notes	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result		
S-1 to S-6	2.0-3.0	7/6/1988	1	--	70,000	--	--	--	--	--	--	--	500 U	--	--	--	--		
S-7 to S-10	2.0-3.0	7/6/1988	1, Soil Excavated	--	100,000	--	--	--	--	--	--	--	500 U	--	--	--	--		
S-11 to S-14	2.0-3.0	7/6/1988	1, Soil Excavated	--	840,000	--	--	--	--	--	--	--	1100	--	--	--	--		
S-15	2.0-3.0	7/6/1988	1, Soil Excavated	--	7,500,000	--	--	--	--	--	--	--	500 U	--	--	--	--		
S-17	2.0-3.0	8/8/1988	1, Soil Excavated	--	10,000 U	--	--	--	--	--	--	--	500 U	--	--	--	--		
S-18	2.0-3.0	8/8/1988	1, Soil Excavated	--	10,000 U	--	--	--	--	--	--	--	500 U	--	--	--	--		
B-1 to B-5	2.5-3.0	9/7/1988	2, Soil Excavated	--	1,700,000 D	--	--	--	--	300 U	300 U	300 U	300 U	--	--	--	--		
B-1 to B-5	4.5-5.0	9/7/1988	2, Soil Excavated	--	1,700,000 D	--	--	--	--	500	500	900	300 U	--	--	--	--		
B-6 to B-10	2.5-3.0	9/7/1988	2, Soil Excavated	--	490,000 D	--	--	--	--	300 U	300 U	300 U	300 U	--	--	--	--		
B-6 to B-10	4.5-5.0	9/7/1988	2, Soil Excavated	--	640,000 D	--	--	--	--	500	300 U	500	300 U	--	--	--	--		
B-11 to B-15	2.5-3.0	9/7/1988	2, Soil Excavated	--	1,900,000 D	--	--	--	--	300	300 U	5,400	300 U	--	--	--	--		
B-11 to B-15	4.5-5.0	9/7/1988	2, Soil Excavated	--	1,000,000 D	--	--	--	--	600	1300	3,300	300 U	--	--	--	--		
B-16 to B-20	2.5-3.0	9/7/1988	2, Soil Excavated	--	1,700,000 GD	--	--	--	--	1,400	6100	18,000	1400	--	--	--	--		
B-16 to B-20	4.5-5.0	9/7/1988	2, Soil Excavated	--	2,100,000 GD	--	--	--	--	1,400	1300	13,000	7800	--	--	--	--		
B-21	2.5-3.0	9/30/1988	2, Soil Excavated	--	10,000 U	--	--	--	--	300 U	300 U	300 U	300 U	--	--	--	--		
B-21	4.5-5.0	9/30/1988	2, Soil Excavated	--	10,000 U	--	--	--	--	300 U	300 U	300 U	300 U	--	--	--	--		
B-22	2.5-3.0	9/30/1988	2, Soil Excavated	--	93,000 D	--	--	--	--	300 U	300 U	300 U	300 U	--	--	--	--		
B-22	4.0-4.5	9/30/1988	2, Soil Excavated	--	10,000 U	--	--	--	--	300 U	300 U	300 U	300 U	--	--	--	--		
B-23	2.5-3.0	9/30/1988	2, Soil Excavated	--	10,000 U	--	--	--	--	300 U	300 U	300 U	300 U	--	--	--	--		
B-23	4.5-5.0	9/30/1988	2, Soil Excavated	--	10,000 U	--	--	--	--	300 U	300 U	300 U	300 U	--	--	--	--		
B-24	2.5-3.0	9/30/1988	2, Soil Excavated	--	10,000 U	--	--	--	--	300 U	300 U	300 U	300 U	--	--	--	--		
B-24	4.5-5.0	9/30/1988	2, Soil Excavated	--	310,000 D	--	--	--	--	300 U	300 U	300 U	2000	--	--	--	--		
B-25	2.5-3.0	9/30/1988	2, Soil Excavated	--	1,800,000 D	--	--	--	--	300 U	300 U	300 U	7000	--	--	--	--		
B-25	4.5-5.0	9/30/1988	2, Soil Excavated	--	2,700,000 D	--	--	--	--	300 U	300 U	300 U	20,000	--	--	--	--		
B-26	2.5-3.0	9/30/1988	2, Soil Excavated	--	210,000 D	--	--	--	--	300 U	300 U	300 U	2,000	--	--	--	--		
B-26	4.5-5.0	9/30/1988	2, Soil Excavated	--	1,000,000 D	--	--	--	--	300 U	300 U	300 U	4,200	--	--	--	--		
B-27	2.5-3.0	9/30/1988	2, Soil Excavated	--	840,000 D	--	--	--	--	300 U	300 U	300 U	7,400	--	--	--	--		
B-27	4.5-5.0	9/30/1988	2, Soil Excavated	--	1,900,000 D	--	--	--	--	300 U	300 U	300 U	16,000	--	--	--	--		
B-28	3.0-3.5	9/30/1988	2, Soil Excavated	--	240,000 D	--	--	--	--	300 U	300 U	300 U	2,500	--	--	--	--		
B-28	5.0-5.5	9/30/1988	2, Soil Excavated	--	270,000 D	--	--	--	--	300 U	300 U	300 U	1,300	--	--	--	--		
B-30	3.0-3.5	9/30/1988	2, Soil Excavated	--	290,000 D	--	--	--	--	300 U	300 U	300 U	1,400	--	--	--	--		
B-30	5.0-5.5	9/30/1988	2, Soil Excavated	--	1,700,000 D	--	--	--	--	300 U	300 U	300 U	6,200	--	--	--	--		
B-31	3.0-3.5	9/30/1988	2, Soil Excavated	--	460,000 DO	--	--	--	--	300 U	300 U	300 U	300 U	--	--	--	--		
B-31	5.0-5.5	9/30/1988	2, Soil Excavated	--	1,000,000 DO	--	--	--	--	300 U	300 U	300 U	2,600	--	--	--	--		
B-33	2.5-3.0	9/30/1988	2, Soil Excavated	--	2,000,000 DG	--	--	--	--	700	300 U	300 U	9,600	--	--	--	--		
B-33	4.5-5.0	9/30/1988	2, Soil Excavated	--	830,000 DG	--	--	--	--	300 U	900	300 U	4,200	--	--	--	--		
B-34	2.5-3.0	9/30/1988	2, Soil Excavated	--	10,000 U	--	--	--	--	300 U	300 U	300 U	300 U	--	--	--	--		
B-34	4.5-5.0	9/30/1988	2, Soil Excavated	--	2,700,000 DG	--	--	--	--	900	300 U	300 U	12,000	--	--	--	--		
B-37	2.5-3.0	9/30/1988	2, Soil Excavated	--	1,100,000 D	--	--	--	--	300 U	300 U	300 U	5,400	--	--	--	--		
B-38	2.5-3.0	9/30/1988	2	--	990,000 DG	--	--	--	--	500	900	300 U	2,200	--	--	--	--		
B-40	3.5-4.0	9/30/1988	2	--	180,000 O	--	--	--	--	300 U	300 U	300 U	300 U	--	--	--	--		
B-40	5.5-6.0	9/30/1988	2	--	10,000 U	--	--	--	--	300 U	300 U	300 U	300 U	--	--	--	--		
B-41	4.5-5.0	9/30/1988	2	--	430,000 G	--	--	--	--	300 U	300 U	300 U	4,700	--	--	--	--		
B-41	5.5-6.0	9/30/1988	2	--	160,000 G	--	--	--	--	300 U	300 U	300 U	300 U	--	--	--	--		
B-1	17.0-18.0	2/2/1990	3	--	--	--	10,000 U	10,000 U	--	10 U	20 U	20 U	20 U	50 U	--	--	--		
B-1	22.0-23.0	2/2/1990	3	--	--	--	10,000 U	10,000 U	--	10 U	20 U	20 U	20 U	50 U	--	--	--		
B-1	28.0-29.0	2/2/1990	3	--	--	--	10,000 U	10,000 U	--	10 U	20 U	20 U	20 U	50 U	--	--	--		
MW-13	2.5-3.5	2/2/1990	3, Soil Excavated	--	--	--	870,000	430,000	--	10 U	20 U	20 U	20 U	150	--	--	--		
MW-13	4.5-5.5	2/2/1990	3, Soil Excavated	--	--	--	260,000	130,000	--	10 U	20 U	20 U	20 U	100	--	--	--		
MW-13	9.5-10.5	2/2/1990	3	--	--	--	11,000	10,000 U	--	10 U	20 U	20 U	20 U	50 U	--	--	--		
MW-13	12.0-13.0	2/2/1990	3	--	--	--	10,000 U	10,000 U	--	10 U	20 U	20 U	20 U	50 U	--	--	--		

Table 2
Soil Analytical Sample Results
Former Chevron Asphalt Plant and Bulk Terminal #20-6265
1520 Powell Street
Emeryville, California

Location ID	Depth Interval	Sample Date	Notes	Analyte	Petroleum Oil & Grease	Total Fuel Hydrocarbons	Total Oil & Grease	TPH-d	TPH-g	TRPH	Benzene	Toluene	Ethylbenzene	Xylenes, Total	Acetone	Bromo methane	Bromo dichloro methane	Bromoform		
				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
				ESL	--	--	--	100,000	100,000	--	120	9,300	2,300	11,000	500	700	570	24,000		
MW-14	4.5-5.5	2/2/1990	3	--	--	--	--	60,000	10,000	--	10 U	20 U	20 U	20 U	50 U	--	--	--		
MW-14	7.5-8.5	2/2/1990	3	--	--	--	120,000	17,000	--	10 U	20 U	20 U	20 U	20 U	50 U	--	--	--		
MW-14	10.0-11.0	2/2/1990	3	--	--	--	10,000 U	10,000 U	--	10 U	20 U	20 U	20 U	20 U	50 U	--	--	--		
MW-15	5.0-6.0	2/2/1990	3	--	--	--	10,000 U	10,000 U	--	10 U	20 U	20 U	20 U	20 U	50 U	--	--	--		
MW-15	8.5-9.5	2/2/1990	3	--	--	--	10,000 U	10,000 U	--	10 U	20 U	20 U	20 U	20 U	50 U	--	--	--		
MW-16	7.3-8.3	2/2/1990	3	--	--	5,000 U	10,000 U	10,000 U	--	5 U	5 U	5 U	5 U	15 U	--	--	--	--		
MW-16	9.3-10.3	2/2/1990	3	--	--	5,000 U	10,000 U	10,000 U	--	5 U	5 U	5 U	5 U	15 U	--	--	--	--		
MW-17	3.8-4.8	3/21/1990	3	--	--	5,000 U	10,000 U	10,000 U	--	5 U	5 U	5 U	5 U	15 U	--	--	--	--		
MW-17	6.3-7.3	3/21/1990	3	--	--	640,000	220,000	10,000 U	--	5 U	5 U	5 U	5 U	15 U	--	--	--	--		
MW-17	8.3-9.3	3/21/1990	3	--	--	5,000 U	10,000 U	10,000 U	--	5 U	5 U	5 U	5 U	15 U	--	--	--	--		
MW-17	11.8-12.8	3/21/1990	3	--	--	5,000 U	10,000 U	10,000 U	--	5 U	5 U	5 U	5 U	15 U	--	--	--	--		
MW-18	3.8-4.8	3/22/1990	3	--	--	5,000 U	10,000 U	10,000 U	--	5 U	5 U	5 U	5 U	15 U	--	--	--	--		
MW-18	6.3-7.3	3/22/1990	3	--	--	5,000 U	10,000 U	10,000 U	--	5 U	5 U	5 U	5 U	15 U	--	--	--	--		
MW-18	8.3-9.3	3/22/1990	3	--	--	5,000 U	10,000 U	10,000 U	--	5 U	5 U	5 U	5 U	15 U	--	--	--	--		
MW-18	10.3-11.3	3/22/1990	3	--	--	5,000 U	10,000 U	10,000 U	--	5 U	5 U	5 U	5 U	15 U	--	--	--	--		
MW-19	4.8-5.8	3/22/1990	3	--	--	17,000	10,000 U	10,000 U	--	5 U	5 U	5 U	5 U	15 U	--	--	--	--		
MW-19	7.8-8.8	3/22/1990	3	--	--	5,000 U	10,000 U	10,000 U	--	5 U	5 U	5 U	5 U	15 U	--	--	--	--		
MW-19	9.3-10.3	3/22/1990	3	--	--	5,000 U	10,000 U	10,000 U	--	5 U	5 U	5 U	5 U	15 U	--	--	--	--		
SB-1	4-5	3/26/1990	4, Soil Excavated	--	--	17,000	10,000 U	10,000 U	--	5 U	5 U	5 U	5 U	100 U	--	--	--	--		
SB-2	4-5	3/26/1990	4, Soil Excavated	--	--	27,000	10,000 U	10,000 U	--	5 U	5 U	5 U	5 U	100 U	--	--	--	--		
SB-3	4-5	3/26/1990	4	--	--	5,000	10,000 U	10,000 U	--	5 U	5 U	5 U	5 U	100 U	--	--	--	--		
SB-4	4-5	3/26/1990	4	--	--	7,000	10,000 U	10,000 U	--	5 U	5 U	5 U	5 U	100 U	--	--	--	--		
SB-5	4-5	3/26/1990	4	--	--	6,000	10,000 U	10,000 U	--	5 U	5 U	5 U	5 U	100 U	--	--	--	--		
SB-6	4-5	3/26/1990	4	--	--	6,000	10,000 U	10,000 U	--	5 U	5 U	5 U	5 U	100 U	--	--	--	--		
SB-7	4-5	3/26/1990	4	--	--	15,000	10,000 U	10,000 U	--	5 U	5 U	5 U	5 U	100 U	--	--	--	--		
SB-8	4-5	3/26/1990	4	--	--	12,000	10,000 U	10,000 U	--	5 U	5 U	5 U	5 U	100 U	--	--	--	--		
SB-9	4-5	3/26/1990	4	--	--	8,000	10,000 U	10,000 U	--	5 U	5 U	5 U	5 U	100 U	--	--	--	--		
SB-10	4-5	3/26/1990	4	--	--	5,000 U	10,000 U	10,000 U	--	5 U	5 U	5 U	5 U	100 U	--	--	--	--		
SB-11	4-5	3/26/1990	4	--	--	420,000	10,000 U	10,000 U	--	5 U	5 U	5 U	5 U	100 U	--	--	--	--		
SB-12	4-5	3/26/1990	4	--	--	72,000	10,000 U	10,000 U	--	5 U	5 U	5 U	5 U	100 U	--	--	--	--		
SB-13	4-5	3/26/1990	4	--	--	5,000 U	10,000 U	10,000 U	--	5 U	5 U	5 U	5 U	100 U	--	--	--	--		
SB-14	4-5	3/26/1990	4	--	--	5,000 U	10,000 U	10,000 U	--	5 U	5 U	5 U	5 U	100 U	--	--	--	--		
SB-15	4-5	3/26/1990	4	--	--	8,000	10,000 U	10,000 U	--	5 U	5 U	5 U	5 U	100 U	--	--	--	--		
SB-16	4-5	3/26/1990	4	--	--	98,000	57,000	10,000 U	--	5 U	5 U	5 U	5 U	100 U	--	--	--	--		
SB-17	4-5	3/26/1990	4	530,000	--	1,300,000	10,000 U	10,000 U	--	5 U	5 U	5 U	5 U	100 U	--	--	--	--		
SB-18	4-5	3/26/1990	4	400,000	--	29,000	16,000	47,000	--	5 U	5 U	5 U	9	100 U	--	--	--	--		
SB-19	4-5	3/26/1990	4	420,000	--	280,000	38,000	78,000	--	5 U	5 U	5 U	5 U	100 U	--	--	--	--		
SB-20	4-5	3/26/1990	4	32,000	--	450,000	10,000 U	10,000 U	--	5 U	23	5 U	26	100 U	--	--	--	--		
SB-21	4-5	3/26/1990	4	56,000	--	22,000	10,000 U	10,000 U	--	5 U	5 U	5 U	5 U	100 U	--	--	--	--		
SB-22	4-5	3/26/1990	4	57,000	--	93,000	10,000 U	10,000 U	--	5 U	5 U	5 U	5 U	100 U	--	--	--	--		
SB-23	4-5	3/26/1990	4	31,000	--	230,000	10,000 U	78,000	--	5 U	5 U	5 U	5 U	100 U	--	--	--	--		
SB-24	4-5	3/26/1990	4, Soil Excavated	76,000	--	120,000	10,000 U	10,000 U	--	5 U	5 U	5 U	5 U	100 U	--	--	--	--		
SB-25	4-5	3/26/1990	4	2,300,000	--	3,900,000	10,000 U	1,900,000	--	5 U	5 U	5 U	5 U	100 U	--	--	--	--		
SB-26	4-5	3/26/1990	4	--	--	1,100,000	10,000 U	660,000	--	5 U	5 U	5 U	5 U	170	--	--	--	--		
SB-27	4-5	3/26/1990	4	--	--	110,000	10,000 U	390,000	--	5 U	5 U	5 U	5 U	100 U	--	--	--	--		
SB-28	4-5	3/26/1990	4	--	--	150,000	10,000 U	86,000	--	5 U	5 U	5 U	5 U	100 U	--	--	--	--		
SB-29	4-5	3/26/1990	4	--	--	570,000	10,000 U	97,000	--	5 U	5 U	5 U	5 U	100 U	--	--	--	--		
SB-30	4-5	3/26/1990	4	--	--	55,000	10,000 U	59,000	--	5 U	5 U	5 U	5 U	150	--	--	--	--		
SB-31	4-5	3/26/1990	4	--	--	64,000	10,000 U	10,000 U	--	5 U	5 U	5 U	5 U	100 U	--	--	--	--		
SB-32	4-5	3/26/1990	4	--	--	5,000 U	10,000 U	10,000 U	--	5 U	5 U	5 U	5 U	120	--	--	--	--		
SB-33	4-5	3/26/1990	4	--	--	5,000 U	10,000 U	10,000 U	--	5 U	5 U	5 U	5 U	100	--	--	--	--		

Table 2
Soil Analytical Sample Results
Former Chevron Asphalt Plant and Bulk Terminal #20-6265
1520 Powell Street
Emeryville, California

			Analyte	Petroleum Oil & Grease	Total Fuel Hydrocarbons	Total Oil & Grease	TPH-d	TPH-g	TRPH	Benzene	Toluene	Ethylbenzene	Xylenes, Total	Acetone	Bromo methane	Bromo dichloro methane	Bromoform
			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
			ESL	--	--	--	100,000	100,000	--	120	9,300	2,300	11,000	500	700	570	24,000
Location ID	Depth Interval	Sample Date	Notes	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
SB-34	4-5	3/26/1990	4	--	--	5,000 U	10,000 U	10,000 U	--	5 U	5 U	5 U	5 U	100 U	--	--	--
SB-35	4-5	3/26/1990	4	--	--	6,200,000	720,000	10,000 U	--	5 U	5 U	5 U	5 U	100 U	--	--	--
SB-36	4-5	3/26/1990	4	--	--	5,000 U	10,000 U	10,000 U	--	5 U	5 U	5 U	5 U	100 U	--	--	--
SB-37	4-5	3/26/1990	4	--	--	5,000 U	10,000 U	10,000 U	--	5 U	5 U	5 U	5 U	100 U	--	--	--
SB-38	4-5	3/26/1990	4	--	--	5,000 U	10,000 U	10,000 U	--	5 U	5 U	5 U	5 U	100 U	--	--	--
SB-39	4-5	3/26/1990	4	--	--	5,000 U	10,000 U	10,000 U	--	5 U	5 U	5 U	5 U	200	--	--	--
SB-40	4-5	3/26/1990	4	--	--	5,000 U	10,000 U	10,000 U	--	5 U	5 U	5 U	5 U	100 U	--	--	--
SB-41	4-5	3/26/1990	4	--	--	8,000	10,000 U	10,000 U	--	5 U	5 U	5 U	5 U	100 U	--	--	--
SB-42	4-5	3/26/1990	4	1,700,000	--	92,000,000	10,000 U	1,200,000	--	5 U	7.0	680	3,100	100 U	--	--	--
SB-43	4-5	3/26/1990	4	--	--	9,000	10,000 U	10,000 U	--	5 U	5 U	5 U	5 U	100 U	--	--	--
S-1	3.0-4.0	9/18/1990	5	--	--	730,000	10,000 U	40,000	--	--	--	--	--	--	--	--	--
S-2	3.0-4.0	9/18/1990	5	--	--	77,000	10,000 U	10,000 U	--	--	--	--	--	--	--	--	--
S-3	3.0-4.0	9/18/1990	5	--	--	150,000	10,000 U	10,000 U	--	--	--	--	--	--	--	--	--
S-4	3.0-4.0	9/18/1990	5	--	--	7,300,000	10,000 U	10,000 U	--	--	--	--	--	--	--	--	--
S-5	3.0-4.0	9/18/1990	5	--	--	1,100,000	10,000 U	230,000	--	--	--	--	--	--	--	--	--
S-6	3.0-4.0	9/18/1990	5	--	--	3,500,000	3,500,000	10,000 U	--	--	--	--	--	--	--	--	--
S-7	3.0-4.0	9/18/1990	5	--	--	29,000	10,000 U	10,000 U	--	--	--	--	--	--	--	--	--
B-1	2.5 - 3.0	2/1/1991	6, Soil Excavated	--	--	110,000	10,000 U	--	--	17	49	15 U	78	50 U	50 U	15 U	15 U
B-2	2.5 - 3.0	2/1/1991	6, Soil Excavated	--	--	56,000	10,000 U	--	--	10 U	15	15 U	15 U	50 U	50 U	15 U	15 U
B-3	2.5 - 3.0	2/1/1991	6, Soil Excavated	--	--	50,000 U	10,000 U	--	--	26	15 U	15 U	15 U	50 U	50 U	15 U	15 U
B-4	2.5 - 3.0	2/1/1991	6, Soil Excavated	--	--	690,000	70,000	--	--	10 U	15 U	15 U	15 U	50 U	50 U	15 U	15 U
B-5	2.5 - 3.0	2/1/1991	6, Soil Excavated	--	--	160,000	180,000	--	--	10 U	15 U	15 U	15 U	50 U	50 U	15 U	15 U
B-6	2.5 - 3.0	2/1/1991	6, Soil Excavated	--	--	75,000	250,000	--	--	17	66	44	140	120	50 U	15 U	15 U
B-7	3.5 - 4.0	2/1/1991	6, Soil Excavated	--	--	100,000	98,000	--	--	10 U	15 U	15 U	15 U	50 U	50 U	15 U	15 U
B-8	2.5 - 3.0	2/1/1991	6, Soil Excavated	--	--	50,000 U	10,000 U	--	--	10 U	15 U	15 U	15 U	50 U	50 U	15 U	15 U
B-9	2.5 - 3.0	2/1/1991	6, Soil Excavated	--	--	50,000 U	10,000 U	--	--	10 U	15 U	15 U	15 U	50 U	50 U	15 U	15 U
B-10	2.5 - 3.0	2/1/1991	6, Soil Excavated	--	--	50,000 U	10,000 U	--	--	10 U	15 U	15 U	15 U	50 U	50 U	15 U	15 U
B-11	2.5 - 3.0	2/1/1991	6, Soil Excavated	--	--	50,000 U	10,000 U	--	--	10 U	15 U	15 U	15 U	50 U	50 U	15 U	15 U
B-12	2.5 - 3.0	2/1/1991	6, Soil Excavated	--	--	50,000 U	10,000 U	--	--	10 U	15 U	15 U	15 U	50 U	50 U	15 U	15 U
B-13	2.5 - 3.0	2/1/1991	6, Soil Excavated	--	--	50,000 U	10,000 U	--	--	10 U	15 U	15 U	15 U	50 U	50 U	15 U	15 U
B-14	2.5 - 3.0	2/1/1991	6, Soil Excavated	--	--	50,000 U	10,000 U	--	--	10 U	15 U	15 U	15 U	50 U	50 U	15 U	15 U
B-15	2.5 - 3.0	2/1/1991	6, Soil Excavated	--	--	50,000 U	10,000 U	--	--	10 U	15 U	15 U	15 U	50 U	50 U	15 U	15 U
B-16	2.5 - 3.0	2/1/1991	6, Soil Excavated	--	--	50,000 U	10,000 U	--	--	10 U	15 U	15 U	15 U	50 U	50 U	15 U	15 U
B-17	2.5 - 3.0	2/1/1991	6, Soil Excavated	--	--	81,000	10,000 U	--	--	10 U	15 U	15 U	15 U	50 U	50 U	15 U	15 U
B-18	2.5 - 3.0	2/1/1991	6, Soil Excavated	--	--	50,000 U	10,000 U	--	--	10 U	15 U	15 U	15 U	50 U	50 U	15 U	15 U
B-19	2.5 - 3.0	2/1/1991	6	--	--	50,000	10,000 U	--	--	10 U	15 U	15 U	15 U	50 U	50 U	15 U	15 U
B-20	2.5 - 3.0	2/1/1991	6	--	--	50,000 U	10,000 U	--	--	10 U	15 U	15 U	15 U	50 U	50 U	15 U	15 U
B-21	2.5 - 3.0	2/1/1991	6	--	--	50,000 U	10,000 U	--	--	10 U	15 U	15 U	15 U	50 U	50 U	15 U	15 U
B-22	2.5 - 3.0	2/1/1991	6	--	--	50,000 U	10,000 U	--	--	10 U	15 U	15 U	15 U	50 U	50 U	15 U	15 U
B-23	2.5 - 3.0	2/1/1991	6	--	--	50,000 U	10,000 U	--	--	10 U	15 U	15 U	15 U	50 U	50 U	15 U	15 U
B-24	2.5 - 3.0	2/1/1991	6	--	--	50,000 U	18,000	--	--	10 U	15 U	15 U	15 U	50 U	50 U	15 U	15 U
B-1	2.5 - 3.0	3/18/1991	7, Soil Excavated	--	--	50,000 U	--	1,000 U	--	5 U	5	5 U	11	--	--	5 U	5 U
B-2	2.5 - 3.0	3/18/1991	7, Soil Excavated	--	--	50,000 U	--	1,000 U	--	5 U	6	5 U	11	--	--	5 U	5 U
B-3	2.5 - 3.0	3/18/1991	7, Soil Excavated	--	--	50,000 U	--	1,000 U	--	5 U	5	5 U	10	--	--	5 U	5 U
B-4	2.5 - 3.0	3/18/1991	7, Soil Excavated	--	--	50,000 U	--	1,000 U	--	5 U	6	5 U	11	--	--	5 U	5 U
B-5	2.5 - 3.0	3/18/1991	7, Soil Excavated	--	--	50,000 U	--	1,000 U	--	5 U	11	5 U	12	--	--	5 U	5 U
B-7	2.5 - 3.0	3/18/1991	7, Soil Excavated	--	--	50,000 U	--	1,000 U	--	5 U	6	5 U	11	--	--	5 U	5 U
B-9	5.5 - 6.0	3/18/1991	7, Soil Excavated	--	--	50,000 U	--	1,000 U	--	5 U	6	5 U	22	--	--	5 U	5 U
B-10	2.5 - 3.0	3/18/1991	7, Soil Excavated	--	--	50,000 U	--	1,000 U	--	5 U	6	5 U	13	--	--	5 U	5 U
B-11	2.5 - 3.0	3/18/1991	7, Soil Excavated	--	--	50,000 U	--	1,000 U	--	5 U	6	5 U	12	--	--	5 U	5 U
B-12	2.5 - 3.0	3/18/1991	7, Soil Excavated	--	--	50,000 U	--	1,000 U	--	5 U	5 U	5 U	10	--	--	5 U	5 U

Table 2
Soil Analytical Sample Results
Former Chevron Asphalt Plant and Bulk Terminal #20-6265
1520 Powell Street
Emeryville, California

Location ID	Depth Interval	Sample Date	Notes	Analyte	Petroleum Oil & Grease	Total Fuel Hydrocarbons	Total Oil & Grease	TPH-d	TPH-g	TRPH	Benzene	Toluene	Ethylbenzene	Xylenes, Total	Acetone	Bromo methane	Bromo dichloro methane	Bromoform		
				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
				ESL	--	--	--	100,000	100,000	--	120	9,300	2,300	11,000	500	700	570	24,000		
B-13	5.5 - 6.0	3/18/1991	7, Soil Excavated	--	--	50,000 U	--	--	1,000 U	--	5 U	5	5 U	10	--	--	5 U	5 U		
B-14	5.0 - 5.5	3/18/1991	7, Soil Excavated	--	--	50,000 U	--	--	1,000	--	5 U	5 U	5 U	16	--	--	5 U	5 U		
B-15	5.5 - 6.0	3/18/1991	7	--	--	51,000	--	--	1,000 U	--	5 U	5 U	5 U	10	--	--	5 U	5 U		
B-16	5.5 - 6.0	3/18/1991	7	--	--	50,000 U	--	--	1,000 U	--	5 U	9	5 U	17	--	--	5 U	5 U		
B-20	2.5 - 3.0	3/18/1991	7	--	--	50,000 U	--	--	1,000	--	5 U	6	5 U	14	--	--	5 U	5 U		
B-21	5.5 - 6.0	3/18/1991	7	--	--	50,000 U	--	--	53,000	--	5 U	5 U	5 U	16	--	--	5 U	5 U		
B-22	5.5 - 6.0	3/18/1991	7	--	--	260,000	--	--	1000 U	--	5 U	5 U	5 U	5 U	--	--	5 U	5 U		
SB-1	1.5 - 2.0	5/6/1992	8	--	--	170,000	21,000 E	--	--	--	5 U	15 U	15 U	15 U	350	50 U	15 U	15 U		
SB-1	4.5 - 5.0	5/6/1992	8	--	--	50,000 U	160,000 F	--	--	--	5 U	15 U	15 U	15 U	50 U	50 U	15 U	15 U		
SB-2	1.5 - 2.0	5/6/1992	8	--	--	290,000	85,000 E	--	--	--	5 U	15 U	15 U	15 U	420	50 U	15 U	15 U		
SB-2	4.5 - 5.0	5/6/1992	8	--	--	50,000 U	10000 U	--	--	--	5 U	15 U	50 U	15 U	50 U	50 U	15 U	15 U		
SB-3	1.5 - 2.0	5/6/1992	8	--	--	430,000	84,000 E	--	--	--	5 U	15 U	15 U	15 U	100	50 U	15 U	15 U		
SB-4	1.5 - 2.0	5/6/1992	8	--	--	250,000	17,000 E	--	--	--	5 U	15 U	15 U	15 U	170	50 U	15 U	15 U		
HL-4	7.5 - 8.0	5/8/1992	8, Soil Excavated	--	--	50,000 U	10,000 U	--	--	--	5 U	15 U	15 U	15 U	50 U	50 U	15 U	15 U		
HL-5	8.5 - 9.0	5/8/1992	8, Soil Excavated	--	--	50,000 U	10,000 U	--	--	--	5 U	15 U	15 U	15 U	50 U	50 U	15 U	15 U		
S-1	8.5 - 9.0	5/11/1992	8, Soil Excavated	--	--	50,000 U	10,000 U	--	--	--	5 U	15 U	15 U	15 U	50 U	50 U	15 U	15 U		
S-2	11.5 - 12.0	5/11/1992	8, Soil Excavated	--	--	87,000	180,000 G	--	--	--	5 U	15 U	15 U	15 U	50 U	50 U	15 U	15 U		
S-3	8.5 - 9.0	5/11/1992	8, Soil Excavated	--	--	50,000 U	21,000 G	--	--	--	5 U	15 U	15 U	15 U	50 U	--	--	--		
G1(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	--	--	--	2,100	1,000 U	82,000	5 U	5.0 U	5 U	5 U	5.0 U	500 U	100 U	100 U	100 U		
G2(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	--	--	--	5,900	1,000 U	91,000	5 U	5.0 U	5 U	5 U	5.0 U	500 U	100 U	100 U	100 U		
G3(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	--	--	--	1,600	1,000 U	50,000 U	5 U	5.0 U	5 U	5 U	5.0 U	500 U	100 U	100 U	100 U		
G4(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	--	--	--	6,700	1,000 U	100,000	5 U	5.0 U	5 U	5 U	5.0 U	500 U	100 U	100 U	100 U		
G5(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	--	--	--	38,000	7,300	310,000	5 U	8.9	7.3	49	--	--	--	--			
G6(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	--	--	--	13,000	46,000	110,000	100 U	100 U	150	460	--	--	--	--			
G7(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	--	--	--	89,000	56,000	330,000	250 U	250 U	250 U	250 U	--	--	--	--			
G8(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	--	--	--	14,000	39,000	150,000	25 U	25 U	25	140	--	--	--	--			
G9(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	--	--	--	10,000	10,000	240,000	50 U	52	50 U	190	--	--	--	--			
G10(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	--	--	--	16,000	5,700	340,000	5 U	8.4	6	39	--	--	--	--			
G11(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	--	--	--	12,000	11,000	160,000	25 U	25 U	25 U	25 U	--	--	--	--			
G12(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	--	--	--	390,000	130,000	310,000	100 U	100 U	100 U	480	--	--	--	--			
G13(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	--	--	--	18,000	22,000	330,000	100 U	100 U	100 U	450	500 U	100 U	100 U	100 U			
G14(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	--	--	--	20,000	550,000	130,000	350	5.0 U	5 U	2,400	500 U	100 U	100 U	100 U			
G15(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	--	--	--	8,900	1,000 U	340,000	5.0 U	5.0 U	5 U	5.0 U	500 U	100 U	100 U	100 U			
G16(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	--	--	--	3,100	1,000 U	50,000 U	5.0 U	5.0 U	5 U	5.0 U	500 U	100 U	100 U	100 U			
G17(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	--	--	--	2,900	1,000 U	120,000	5.0 U	5.0 U	5 U	5.0 U	500 U	100 U	100 U	100 U			
G18(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	--	--	--	1,500	1,000 U	140,000	5.0 U	5.0 U	5 U	5.0 U	500 U	100 U	100 U	100 U			
G19(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	--	--	--	6,300	7,100	200,000	5.0 U	5.8	16	75	500 U	100 U	100 U	100 U			
G20(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	--	--	--	1,500	1,000 U	57,000	5.0 U	6.1	5 U	5.0 U	500 U	100 U	100 U	100 U			
G21(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	--	--	--	3,300	1,000 U	120,000	5.0 U	5.9	5 U	9	--	--	--	--			
G22(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	--	--	--	24,000	1,000 U	750,000	5.0 U	5.0 U	5 U	5.0 U	--	--	--	--			
G23(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	--	--	--	25,000	1,000 U	600,000	5.0 U	5.0 U	5 U	5.0 U	--	--	--	--			
G24(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	--	--	--	4,600	1,000 U	410,000	5.0 U	22	7	43	--	--	--	--			
G25(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	--	--	--	19,000	15,000	250,000	5.0 U	5.5	11	44	--	--	--	--			
G26(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	--	--	--	6,300	14,000	180,000	5.0 U	5.0 U	5.0 U	29	--	--	--	--			
G27(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	--	--	--	2,500	5,800	110,000	5.0 U	5.0 U	5.0 U	13	--	--	--	--			
G28(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	--	--	--	6,900	3,300	95,000	5.0 U	5.0 U	5.0 U	5.0 U	--	--	--	--			
G29(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	--	--	--	2,200	1,000 U	89,000	5.0 U	5.0 U	5.0 U	5.0 U	500 U	100 U	100 U	100 U			
G30(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	--	--	--	3,400	1,000 U	50,000 U	5.0 U	5.0 U	5.0 U	5.0 U	500 U	100 U	100 U	100 U			
G31(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	--	--	--	23,000	1,000 U	230,000	5.0 U	5.0 U	5.0 U	5.0 U	500 U	100 U	100 U	100 U			
G32(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	--	--	--	25,000	1,900	50,000 U	5.0 U	5.0 U	5.0 U	5.0 U	500 U	100 U	100 U	100 U			
MWX-2	4.5-5.0	5/27/2009	10	--	--	--	--	--	--	--	--	--	--	--	--	2 U	1 U	1 U		

Table 2
Soil Analytical Sample Results
Former Chevron Asphalt Plant and Bulk Terminal #20-6265
1520 Powell Street
Emeryville, California

			Analyte	Petroleum Oil & Grease	Total Fuel Hydrocarbons	Total Oil & Grease	TPH-d	TPH-g	TRPH	Benzene	Toluene	Ethylbenzene	Xylenes, Total	Acetone	Bromo methane	Bromo dichloro methane	Bromoform
			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
			ESL	--	--	--	100,000	100,000	--	120	9,300	2,300	11,000	500	700	570	24,000
Location ID	Depth Interval	Sample Date	Notes	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
MWX-2	9.5-10.0	5/28/2009	10	--	--	--	--	--	--	--	--	--	--	--	2 U	0.9 U	0.9 U
MWX-2	12.5-13.0	5/28/2009	10	--	--	--	--	--	--	--	--	--	--	--	2 U	0.9 U	0.9 U
MWX-3	4.5-5.0	5/26/2009	10	--	--	--	--	--	--	--	--	--	--	--	2 U	1 U	1 U
MWX-3	9.5-10.0	5/29/2009	10	--	--	--	--	--	--	--	--	--	--	--	2 U	1 U	1 U
MWX-3	12.5-13.0	5/29/2009	10	--	--	--	--	--	--	--	--	--	--	--	2 U	1 U	1 U
MWX-6	4.5-5.0	5/28/2009	10	--	--	--	--	--	--	--	--	--	--	--	2 U	0.9 U	0.9 U
MWX-6	9.5-10.0	5/29/2009	10	--	--	--	--	--	--	--	--	--	--	--	2 U	1 U	1 U
MWX-6	12.5-13.0	5/29/2009	10	--	--	--	--	--	--	--	--	--	--	--	2 U	1 U	1 U
MWX-8	4.5-5.0	5/26/2009	10	--	--	--	--	--	--	--	--	--	--	--	2 U	1 U	1 U
MWX-8	9.5-10.0	5/28/2009	10	--	--	--	--	--	--	--	--	--	--	--	2 U	0.9 U	0.9 U
MWX-8	12.5-13.0	5/28/2009	10	--	--	--	--	--	--	--	--	--	--	--	2 U	0.9 U	0.9 U
MWX-9	4.5-5.0	5/28/2009	10	--	--	--	--	--	--	--	--	--	--	--	2 U	0.9 U	0.9 U
MWX-9	9.5-10.0	5/29/2009	10	--	--	--	--	--	--	--	--	--	--	--	2 U	1 U	1 U
MWX-9	12.5-13.0	5/29/2009	10	--	--	--	--	--	--	--	--	--	--	--	2 U	1 U	1 U
MWX-10A	4.5-5.0	5/27/2009	10	--	--	--	--	--	--	--	--	--	--	--	2 U	1 U	1 U
MWX-10A	9.5-10.0	5/28/2009	10	--	--	--	--	--	--	--	--	--	--	--	2 U	0.9 U	0.9 U
MWX-10A	12.5-13.0	5/28/2009	10	--	--	--	--	--	--	--	--	--	--	--	2 U	1 U	1 U
MWX-11A	4.5-5.0	5/27/2009	10	--	--	--	--	--	--	--	--	--	--	--	2 U	1 U	1 U
MWX-11A	9.5-10.0	5/28/2009	10	--	--	--	--	--	--	--	--	--	--	--	2 U	0.9 U	0.9 U
MWX-11A	12.5-13.0	5/28/2009	10	--	--	--	--	--	--	--	--	--	--	--	2 U	0.9 U	0.9 U
SB-1A	3.5-4.0	5/27/2009	10	--	--	--	--	--	--	--	--	--	--	--	2 U	1 U	1 U
SB-2A	3.5-4.0	5/27/2009	10	--	--	--	--	--	--	--	--	--	--	--	2 U	1 U	1 U

Table 2
Soil Analytical Sample Results
Former Chevron Asphalt Plant and Bulk Terminal #20-6265
1520 Powell Street
Emeryville, California

			Analyte	2-Butanone	Carbon disulfide	Carbon tetrachloride	Chloro benzene	Chloro ethane	2-Chloroethyl vinyl ether	Chloroform	Chloro methane	Dibromo chloro methane	1,1-DCA	1,2-DCA	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE
			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
			ESL	13,000	--	20	1,500	850	--	680	6,400	7,600	1,900	220	4300	6,500	10,000
Location ID	Depth Interval	Sample Date	Notes	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
S-1 to S-6	2.0-3.0	7/6/1988	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--
S-7 to S-10	2.0-3.0	7/6/1988	1, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--
S-11 to S-14	2.0-3.0	7/6/1988	1, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--
S-15	2.0-3.0	7/6/1988	1, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--
S-17	2.0-3.0	8/8/1988	1, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--
S-18	2.0-3.0	8/8/1988	1, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-1 to B-5	2.5-3.0	9/7/1988	2, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-1 to B-5	4.5-5.0	9/7/1988	2, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-6 to B-10	2.5-3.0	9/7/1988	2, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-6 to B-10	4.5-5.0	9/7/1988	2, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-11 to B-15	2.5-3.0	9/7/1988	2, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-11 to B-15	4.5-5.0	9/7/1988	2, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-16 to B-20	2.5-3.0	9/7/1988	2, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-16 to B-20	4.5-5.0	9/7/1988	2, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-21	2.5-3.0	9/30/1988	2, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-21	4.5-5.0	9/30/1988	2, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-22	2.5-3.0	9/30/1988	2, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-22	4.0-4.5	9/30/1988	2, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-23	2.5-3.0	9/30/1988	2, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-23	4.5-5.0	9/30/1988	2, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-24	2.5-3.0	9/30/1988	2, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-24	4.5-5.0	9/30/1988	2, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-25	2.5-3.0	9/30/1988	2, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-25	4.5-5.0	9/30/1988	2, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-26	2.5-3.0	9/30/1988	2, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-26	4.5-5.0	9/30/1988	2, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-27	2.5-3.0	9/30/1988	2, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-27	4.5-5.0	9/30/1988	2, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-28	3.0-3.5	9/30/1988	2, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-28	5.0-5.5	9/30/1988	2, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-30	3.0-3.5	9/30/1988	2, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-30	5.0-5.5	9/30/1988	2, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-31	3.0-3.5	9/30/1988	2, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-31	5.0-5.5	9/30/1988	2, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-33	2.5-3.0	9/30/1988	2, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-33	4.5-5.0	9/30/1988	2, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-34	2.5-3.0	9/30/1988	2, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-34	4.5-5.0	9/30/1988	2, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-37	2.5-3.0	9/30/1988	2, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-38	2.5-3.0	9/30/1988	2	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-40	3.5-4.0	9/30/1988	2	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-40	5.5-6.0	9/30/1988	2	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-41	4.5-5.0	9/30/1988	2	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-41	5.5-6.0	9/30/1988	2	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-1	17.0-18.0	2/2/1990	3	--	--	--	--	--	--	20 U	--	--	--	20 U	20 U	--	--
B-1	22.0-23.0	2/2/1990	3	--	--	--	--	--	--	20 U	--	--	--	20 U	20 U	--	--
B-1	28.0-29.0	2/2/1990	3	--	--	--	--	--	--	20 U	--	--	--	20 U	20 U	--	--
MW-13	2.5-3.5	2/2/1990	3, Soil Excavated	--	--	--	--	--	--	20 U	--	--	--	20 U	20 U	--	--
MW-13	4.5-5.5	2/2/1990	3, Soil Excavated	--	--	--	--	--	--	20 U	--	--	--	20 U	20 U	--	--
MW-13	9.5-10.5	2/2/1990	3	--	--	--	--	--	--	20 U	--	--	--	20 U	20 U	--	--
MW-13	12.0-13.0	2/2/1990	3	--	--	--	--	--	--	20 U	--	--	--	20 U	20 U	--	--

Table 2
Soil Analytical Sample Results
Former Chevron Asphalt Plant and Bulk Terminal #20-6265
1520 Powell Street
Emeryville, California

Location ID	Depth Interval	Sample Date	Analyte	2-Butanone	Carbon disulfide	Carbon tetrachloride	Chloro benzene	Chloro ethane	2-Chloroethyl vinyl ether	Chloroform	Chloro methane	Dibromo chloro methane	1,1-DCA	1,2-DCA	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	
			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
			ESL	13,000	--	20	1,500	850	--	680	6,400	7,600	1,900	220	4300	6,500	10,000	
Notes	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result		
MW-14	4.5-5.5	2/2/1990	3	--	--	--	--	--	--	20 U	--	--	--	20 U	20 U	--	--	
MW-14	7.5-8.5	2/2/1990	3	--	--	--	--	--	--	20 U	--	--	--	20 U	20 U	--	--	
MW-14	10.0-11.0	2/2/1990	3	--	--	--	--	--	--	20 U	--	--	--	20 U	20 U	--	--	
MW-15	5.0-6.0	2/2/1990	3	--	--	--	--	--	--	20 U	--	--	--	20 U	20 U	--	--	
MW-15	8.5-9.5	2/2/1990	3	--	--	--	--	--	--	20 U	--	--	--	20 U	20 U	--	--	
MW-16	7.3-8.3	2/2/1990	3	--	--	--	--	--	--	500 U	--	--	--	500 U	200 U	--	--	
MW-16	9.3-10.3	2/2/1990	3	--	--	--	--	--	--	500 U	--	--	--	500 U	200 U	--	--	
MW-17	3.8-4.8	3/21/1990	3	--	--	--	--	--	--	500 U	--	--	--	500 U	200 U	--	--	
MW-17	6.3-7.3	3/21/1990	3	--	--	--	--	--	--	500 U	--	--	--	500 U	200 U	--	--	
MW-17	8.3-9.3	3/21/1990	3	--	--	--	--	--	--	500 U	--	--	--	500 U	200 U	--	--	
MW-17	11.8-12.8	3/21/1990	3	--	--	--	--	--	--	500 U	--	--	--	500 U	200 U	--	--	
MW-18	3.8-4.8	3/22/1990	3	--	--	--	--	--	--	500 U	--	--	--	500 U	200 U	--	--	
MW-18	6.3-7.3	3/22/1990	3	--	--	--	--	--	--	500 U	--	--	--	500 U	200 U	--	--	
MW-18	8.3-9.3	3/22/1990	3	--	--	--	--	--	--	500 U	--	--	--	500 U	200 U	--	--	
MW-18	10.3-11.3	3/22/1990	3	--	--	--	--	--	--	500 U	--	--	--	500 U	200 U	--	--	
MW-19	4.8-5.8	3/22/1990	3	--	--	--	--	--	--	500 U	--	--	--	500 U	200 U	--	--	
MW-19	7.8-8.8	3/22/1990	3	--	--	--	--	--	--	500 U	--	--	--	500 U	200 U	--	--	
MW-19	9.3-10.3	3/22/1990	3	--	--	--	--	--	--	500 U	--	--	--	500 U	200 U	--	--	
SB-1	4-5	3/26/1990	4, Soil Excavated	100 U	--	--	--	--	--	--	--	--	--	--	--	--	5 U	
SB-2	4-5	3/26/1990	4, Soil Excavated	100 U	--	--	--	--	--	--	--	--	--	--	--	--	5 U	
SB-3	4-5	3/26/1990	4	100 U	--	--	--	--	--	--	--	--	--	--	--	--	5 U	
SB-4	4-5	3/26/1990	4	100 U	--	--	--	--	--	--	--	--	--	--	--	--	5 U	
SB-5	4-5	3/26/1990	4	100 U	--	--	--	--	--	--	--	--	--	--	--	--	5 U	
SB-6	4-5	3/26/1990	4	100 U	--	--	--	--	--	--	--	--	--	--	--	--	5 U	
SB-7	4-5	3/26/1990	4	100 U	--	--	--	--	--	--	--	--	--	--	--	--	5 U	
SB-8	4-5	3/26/1990	4	100 U	--	--	--	--	--	--	--	--	--	--	--	--	5 U	
SB-9	4-5	3/26/1990	4	100 U	--	--	--	--	--	--	--	--	--	--	--	--	5 U	
SB-10	4-5	3/26/1990	4	100 U	--	--	--	--	--	--	--	--	--	--	--	--	5 U	
SB-11	4-5	3/26/1990	4	100 U	--	--	--	--	--	--	--	--	--	--	--	--	5 U	
SB-12	4-5	3/26/1990	4	100 U	--	--	--	--	--	--	--	--	--	--	--	--	5 U	
SB-13	4-5	3/26/1990	4	100 U	--	--	--	--	--	--	--	--	--	--	--	--	5 U	
SB-14	4-5	3/26/1990	4	100 U	--	--	--	--	--	--	--	--	--	--	--	--	5 U	
SB-15	4-5	3/26/1990	4	100 U	--	--	--	--	--	--	--	--	--	--	--	--	5 U	
SB-16	4-5	3/26/1990	4	100 U	--	--	--	--	--	--	--	--	--	--	--	--	5 U	
SB-17	4-5	3/26/1990	4	100 U	--	--	--	--	--	--	--	--	--	--	--	--	5 U	
SB-18	4-5	3/26/1990	4	100 U	--	--	--	--	--	--	--	--	--	--	--	--	5 U	
SB-19	4-5	3/26/1990	4	100 U	--	--	--	--	--	--	--	--	--	--	--	--	5 U	
SB-20	4-5	3/26/1990	4	100 U	--	--	--	--	--	--	--	--	--	--	--	--	5 U	
SB-21	4-5	3/26/1990	4	100 U	--	--	--	--	--	--	--	--	--	--	--	--	5 U	
SB-22	4-5	3/26/1990	4	100 U	--	--	--	--	--	--	--	--	--	--	--	--	5 U	
SB-23	4-5	3/26/1990	4	100 U	--	--	--	--	--	--	--	--	--	--	--	--	5 U	
SB-24	4-5	3/26/1990	4, Soil Excavated	100 U	--	--	--	--	--	--	--	--	--	--	--	--	5 U	
SB-25	4-5	3/26/1990	4	100 U	--	--	--	--	--	--	--	--	--	--	--	--	5 U	
SB-26	4-5	3/26/1990	4	100 U	--	--	--	--	--	--	--	--	--	--	--	--	5 U	
SB-27	4-5	3/26/1990	4	100 U	--	--	--	--	--	--	--	--	--	--	--	--	5 U	
SB-28	4-5	3/26/1990	4	100 U	--	--	--	--	--	--	--	--	--	--	--	--	5 U	
SB-29	4-5	3/26/1990	4	220	--	--	--	--	--	--	--	--	--	--	--	--	5 U	
SB-30	4-5	3/26/1990	4	100 U	--	--	--	--	--	--	--	--	--	--	--	--	5 U	
SB-31	4-5	3/26/1990	4	100 U	--	--	--	--	--	--	--	--	--	--	--	--	5 U	
SB-32	4-5	3/26/1990	4	100 U	--	--	--	--	--	--	--	--	--	--	--	--	5 U	
SB-33	4-5	3/26/1990	4	100 U	--	--	--	--	--	--	--	--	--	--	--	--	5 U	

Table 2
Soil Analytical Sample Results
Former Chevron Asphalt Plant and Bulk Terminal #20-6265
1520 Powell Street
Emeryville, California

			Analyte	2-Butanone	Carbon disulfide	Carbon tetrachloride	Chloro benzene	Chloro ethane	2-Chloroethyl vinyl ether	Chloroform	Chloro methane	Dibromo chloro methane	1,1-DCA	1,2-DCA	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE
			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
			ESL	13,000	--	20	1,500	850	--	680	6,400	7,600	1,900	220	4300	6,500	10,000
Location ID	Depth Interval	Sample Date	Notes	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
SB-34	4-5	3/26/1990	4	100 U	--	--	--	--	--	--	--	--	--	--	--	--	5 U
SB-35	4-5	3/26/1990	4	100 U	--	--	--	--	--	--	--	--	--	--	--	--	5 U
SB-36	4-5	3/26/1990	4	100 U	--	--	--	--	--	--	--	--	--	--	--	--	5 U
SB-37	4-5	3/26/1990	4	100 U	--	--	--	--	--	--	--	--	--	--	--	--	6.6
SB-38	4-5	3/26/1990	4	100 U	--	--	--	--	--	--	--	--	--	--	--	--	5 U
SB-39	4-5	3/26/1990	4	100 U	--	--	--	--	--	--	--	--	--	--	--	--	5 U
SB-40	4-5	3/26/1990	4	100 U	--	--	--	--	--	--	--	--	--	--	--	--	5 U
SB-41	4-5	3/26/1990	4	100 U	--	--	--	--	--	--	--	--	--	--	--	--	5 U
SB-42	4-5	3/26/1990	4	100 U	--	--	--	--	--	--	--	--	--	--	--	--	1700
SB-43	4-5	3/26/1990	4	100 U	--	--	--	--	--	--	--	--	--	--	--	--	5 U
S-1	3.0-4.0	9/18/1990	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--
S-2	3.0-4.0	9/18/1990	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--
S-3	3.0-4.0	9/18/1990	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--
S-4	3.0-4.0	9/18/1990	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--
S-5	3.0-4.0	9/18/1990	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--
S-6	3.0-4.0	9/18/1990	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--
S-7	3.0-4.0	9/18/1990	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-1	2.5 - 3.0	2/1/1991	6, Soil Excavated	100 U	15 U	15 U	15 U	50 U	15 U	15 U	50 U	15 U	15 U	15 U	15 U	--	--
B-2	2.5 - 3.0	2/1/1991	6, Soil Excavated	100 U	15 U	15 U	15 U	50 U	15 U	15 U	50 U	15 U	15 U	15 U	15 U	--	--
B-3	2.5 - 3.0	2/1/1991	6, Soil Excavated	100 U	15 U	15 U	15 U	50 U	15 U	22	50 U	15 U	15 U	15 U	15 U	--	--
B-4	2.5 - 3.0	2/1/1991	6, Soil Excavated	100 U	15 U	15 U	15 U	50 U	15 U	15 U	50 U	15 U	15 U	15 U	15 U	--	--
B-5	2.5 - 3.0	2/1/1991	6, Soil Excavated	100 U	15 U	15 U	15 U	50 U	15 U	15 U	50 U	15 U	15 U	15 U	15 U	--	--
B-6	2.5 - 3.0	2/1/1991	6, Soil Excavated	100 U	15 U	15 U	15 U	50 U	15 U	15 U	50 U	15 U	15 U	15 U	15 U	--	--
B-7	3.5 - 4.0	2/1/1991	6, Soil Excavated	100 U	15 U	15 U	15 U	50 U	15 U	15 U	50 U	15 U	15 U	15 U	15 U	--	--
B-8	2.5 - 3.0	2/1/1991	6, Soil Excavated	100 U	15 U	15 U	15 U	50 U	15 U	15 U	50 U	15 U	15 U	15 U	15 U	--	--
B-9	2.5 - 3.0	2/1/1991	6, Soil Excavated	100 U	15 U	15 U	15 U	50 U	15 U	17	50 U	15 U	15 U	15 U	15 U	--	--
B-10	2.5 - 3.0	2/1/1991	6, Soil Excavated	100 U	15 U	15 U	15 U	50 U	15 U	15 U	50 U	15 U	15 U	15 U	15 U	--	--
B-11	2.5 - 3.0	2/1/1991	6, Soil Excavated	100 U	15 U	15 U	15 U	50 U	15 U	15 U	50 U	15 U	15 U	15 U	15 U	--	--
B-12	2.5 - 3.0	2/1/1991	6, Soil Excavated	100 U	15 U	15 U	15 U	50 U	15 U	15 U	50 U	15 U	15 U	15 U	15 U	--	--
B-13	2.5 - 3.0	2/1/1991	6, Soil Excavated	100 U	15 U	15 U	15 U	50 U	15 U	15 U	50 U	15 U	15 U	15 U	15 U	--	--
B-14	2.5 - 3.0	2/1/1991	6, Soil Excavated	100 U	15 U	15 U	15 U	50 U	15 U	15 U	50 U	15 U	15 U	15 U	15 U	--	--
B-15	2.5 - 3.0	2/1/1991	6, Soil Excavated	100 U	15 U	15 U	15 U	50 U	15 U	15 U	50 U	15 U	15 U	15 U	15 U	--	--
B-16	2.5 - 3.0	2/1/1991	6, Soil Excavated	100 U	15 U	15 U	15 U	50 U	15 U	15 U	50 U	15 U	15 U	15 U	15 U	--	--
B-17	2.5 - 3.0	2/1/1991	6, Soil Excavated	50 U	15 U	15 U	15 U	50 U	15 U	15 U	50 U	15 U	15 U	15 U	15 U	--	--
B-18	2.5 - 3.0	2/1/1991	6, Soil Excavated	100 U	15 U	15 U	15 U	50 U	15 U	15 U	50 U	15 U	15 U	15 U	15 U	--	--
B-19	2.5 - 3.0	2/1/1991	6	100 U	15 U	100 U	15 U	50 U	15 U	15 U	50 U	15 U	15 U	15 U	15 U	--	--
B-20	2.5 - 3.0	2/1/1991	6	100 U	15 U	15 U	15 U	50 U	15 U	15 U	50 U	15 U	15 U	15 U	15 U	--	--
B-21	2.5 - 3.0	2/1/1991	6	100 U	15 U	15 U	15 U	50 U	15 U	15 U	50 U	15 U	15 U	15 U	15 U	--	--
B-22	2.5 - 3.0	2/1/1991	6	100 U	15 U	15 U	15 U	50 U	15 U	15 U	50 U	15 U	15 U	15 U	15 U	--	--
B-23	2.5 - 3.0	2/1/1991	6	100 U	15 U	15 U	15 U	50 U	15 U	15 U	50 U	15 U	15 U	15 U	15 U	--	--
B-24	2.5 - 3.0	2/1/1991	6	100 U	15 U	15 U	15 U	50 U	15 U	15 U	50 U	15 U	15 U	15 U	15 U	--	--
B-1	2.5 - 3.0	3/18/1991	7, Soil Excavated	--	--	5 U	5 U	--	--	5 U	--	5 U	5 U	5 U	5 U	5 U	5 U
B-2	2.5 - 3.0	3/18/1991	7, Soil Excavated	--	--	5 U	5 U	--	--	5 U	--	5 U	5 U	5 U	5 U	5 U	5 U
B-3	2.5 - 3.0	3/18/1991	7, Soil Excavated	--	--	5 U	5 U	--	--	5 U	--	5 U	5 U	5 U	5 U	5 U	5 U
B-4	2.5 - 3.0	3/18/1991	7, Soil Excavated	--	--	5 U	5 U	--	--	5 U	--	5 U	5 U	5 U	5 U	5 U	5 U
B-5	2.5 - 3.0	3/18/1991	7, Soil Excavated	--	--	5 U	5 U	--	--	5 U	--	5 U	5 U	5 U	5 U	5 U	5 U
B-7	2.5 - 3.0	3/18/1991	7, Soil Excavated	--	--	5 U	5 U	--	--	5 U	--	5 U	5 U	5 U	5 U	5 U	5 U
B-9	5.5 - 6.0	3/18/1991	7, Soil Excavated	--	--	5 U	5 U	--	--	5 U	--	5 U	5 U	5 U	5 U	5 U	5 U
B-10	2.5 - 3.0	3/18/1991	7, Soil Excavated	--	--	5 U	5 U	--	--	5 U	--	5 U	5 U	5 U	5 U	5 U	5 U
B-11	2.5 - 3.0	3/18/1991	7, Soil Excavated	--	--	5 U	5 U	--	--	5 U	--	5 U	5 U	5 U	5 U	5 U	5 U
B-12	2.5 - 3.0	3/18/1991	7, Soil Excavated	--	--	5 U	5 U	--	--	5 U	--	5 U	5 U	5 U	5 U	5 U	5 U

Table 2
Soil Analytical Sample Results
Former Chevron Asphalt Plant and Bulk Terminal #20-6265
1520 Powell Street
Emeryville, California

Location ID	Depth Interval	Sample Date	Notes	Analyte	2-Butanone	Carbon disulfide	Carbon tetrachloride	Chloro benzene	Chloro ethane	2-Chloroethyl vinyl ether	Chloroform	Chloro methane	Dibromo chloro methane	1,1-DCA	1,2-DCA	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE		
				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
				ESL	13,000	--	20	1,500	850	--	680	6,400	7,600	1,900	220	4300	6,500	10,000		
				Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result		
B-13	5.5 - 6.0	3/18/1991	7, Soil Excavated	--	--	5 U	5 U	--	--	5 U	--	5 U	5 U	5 U	5 U	5 U	5 U	5 U		
B-14	5.0 - 5.5	3/18/1991	7, Soil Excavated	--	--	5 U	5 U	--	--	5 U	--	5 U	5 U	5 U	5 U	5 U	5 U	5 U		
B-15	5.5 - 6.0	3/18/1991	7	--	--	5 U	5 U	--	--	5 U	--	5 U	5 U	5 U	5 U	5 U	5 U	5 U		
B-16	5.5 - 6.0	3/18/1991	7	--	--	5 U	5 U	--	--	5 U	--	5 U	5 U	5 U	5 U	5 U	5 U	5 U		
B-20	2.5 - 3.0	3/18/1991	7	--	--	5 U	5 U	--	--	5 U	--	5 U	5 U	5 U	5 U	5 U	5 U	5 U		
B-21	5.5 - 6.0	3/18/1991	7	--	--	5 U	5 U	--	--	5 U	--	5 U	5 U	5 U	5 U	5 U	5 U	5 U		
B-22	5.5 - 6.0	3/18/1991	7	--	--	5 U	5 U	--	--	5 U	--	5 U	5 U	5 U	5 U	5 U	5 U	5 U		
SB-1	1.5 - 2.0	5/6/1992	8	100 U	15 U	15 U	15 U	50 U	15 U	15 U	15 U	50 U	15 U	15 U	5 U	15 U	15 U	15 U		
SB-1	4.5 - 5.0	5/6/1992	8	100 U	15 U	15 U	15 U	50 U	15 U	15 U	15 U	50 U	15 U	15 U	5 U	15 U	15 U	15 U		
SB-2	1.5 - 2.0	5/6/1992	8	100 U	15 U	15 U	15 U	50 U	15 U	15 U	15 U	50 U	15 U	15 U	5 U	15 U	15 U	15 U		
SB-2	4.5 - 5.0	5/6/1992	8	100 U	15 U	15 U	15 U	50 U	15 U	15 U	15 U	50 U	15 U	15 U	5 U	15 U	15 U	15 U		
SB-3	1.5 - 2.0	5/6/1992	8	100 U	15 U	15 U	15 U	50 U	15 U	15 U	15 U	50 U	15 U	15 U	5 U	15 U	15 U	15 U		
SB-4	1.5 - 2.0	5/6/1992	8	100 U	15 U	15 U	15 U	50 U	15 U	15 U	15 U	50 U	15 U	15 U	5 U	15 U	15 U	15 U		
HL-4	7.5 - 8.0	5/8/1992	8, Soil Excavated	100 U	15 U	15 U	15 U	50 U	15 U	15 U	15 U	50 U	15 U	15 U	5 U	15 U	15 U	15 U		
HL-5	8.5 - 9.0	5/8/1992	8, Soil Excavated	100 U	15 U	15 U	15 U	50 U	15 U	15 U	15 U	50 U	15 U	15 U	5 U	15 U	15 U	15 U		
S-1	8.5 - 9.0	5/11/1992	8, Soil Excavated	100 U	15 U	15 U	15 U	50 U	15 U	15 U	15 U	50 U	15 U	15 U	5 U	15 U	15 U	15 U		
S-2	11.5 - 12.0	5/11/1992	8, Soil Excavated	100 U	15 U	15 U	15 U	50 U	15 U	15 U	15 U	50 U	15 U	15 U	5 U	15 U	15 U	15 U		
S-3	8.5 - 9.0	5/11/1992	8, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
G1(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	500 U	100 U	100 U	100 U	100 U	--	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U		
G2(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	500 U	100 U	100 U	100 U	100 U	--	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U		
G3(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	500 U	100 U	100 U	100 U	100 U	--	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U		
G4(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	500 U	100 U	100 U	100 U	100 U	--	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U		
G5(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
G6(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
G7(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
G8(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
G9(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
G10(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
G11(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
G12(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
G13(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	500 U	100 U	100 U	100 U	100 U	--	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U		
G14(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	500 U	100 U	100 U	100 U	100 U	--	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U		
G15(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	500 U	100 U	100 U	100 U	400	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U		
G16(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	500 U	100 U	100 U	100 U	100 U	--	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U		
G17(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	500 U	100 U	100 U	100 U	100 U	--	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U		
G18(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	500 U	100 U	100 U	100 U	100 U	--	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U		
G19(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	500 U	100 U	100 U	100 U	100 U	--	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U		
G20(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	500 U	100 U	100 U	100 U	100 U	--	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U		
G21(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
G22(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
G23(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
G24(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
G25(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
G26(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
G27(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
G28(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
G29(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	500 U	100 U	100 U	100 U	100 U	--	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U		
G30(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	500 U	100 U	100 U	100 U	100 U	--	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U		
G31(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	500 U	100 U	100 U	100 U	100 U	--	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U		
G32(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	500 U	100 U	100 U	100 U	100 U	--	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U		
MWX-2	4.5-5.0	5/27/2009	10	--	--	1 U	1 U	2 U	--	1 U	2 U	1 U	1 U	1 U	1 U	6	1 U	1 U		

Table 2
Soil Analytical Sample Results
Former Chevron Asphalt Plant and Bulk Terminal #20-6265
1520 Powell Street
Emeryville, California

			Analyte	2-Butanone	Carbon disulfide	Carbon tetrachloride	Chloro benzene	Chloro ethane	2-Chloroethyl vinyl ether	Chloroform	Chloro methane	Dibromo chloro methane	1,1-DCA	1,2-DCA	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE
			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
			ESL	13,000	--	20	1,500	850	--	680	6,400	7,600	1,900	220	4300	6,500	10,000
Location ID	Depth Interval	Sample Date	Notes	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
MWX-2	9.5-10.0	5/28/2009	10	--	--	0.9 U	0.9 U	2 U	--	0.9 U	2 U	0.9 U	0.9 U	0.9 U	0.9 U	2	0.9 U
MWX-2	12.5-13.0	5/28/2009	10	--	--	0.9 U	0.9 U	2 U	--	0.9 U	2 U	0.9 U	0.9 U	0.9 U	0.9 U	2	0.9 U
MWX-3	4.5-5.0	5/26/2009	10	--	--	1 U	1 U	2 U	--	1 U	2 U	1 U	1 U	1 U	1 U	2	1 U
MWX-3	9.5-10.0	5/29/2009	10	--	--	1 U	1 U	2 U	--	1 U	2 U	1 U	1 U	1 U	1 U	220	5
MWX-3	12.5-13.0	5/29/2009	10	--	--	1 U	1 U	2 U	--	1 U	2 U	1 U	1 U	1 U	1 U	14	1 U
MWX-6	4.5-5.0	5/28/2009	10	--	--	0.9 U	0.9 U	2 U	--	0.9 U	2 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U
MWX-6	9.5-10.0	5/29/2009	10	--	--	1 U	1 U	2 U	--	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U
MWX-6	12.5-13.0	5/29/2009	10	--	--	1 U	1 U	2 U	--	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U
MWX-8	4.5-5.0	5/26/2009	10	--	--	1 U	1 U	2 U	--	1 U	2 U	1 U	1 U	1 U	1 U	1	1 U
MWX-8	9.5-10.0	5/28/2009	10	--	--	0.9 U	0.9 U	2 U	--	0.9 U	2 U	0.9 U	0.9 U	0.9 U	0.9 U	5	0.9 U
MWX-8	12.5-13.0	5/28/2009	10	--	--	0.9 U	0.9 U	2 U	--	0.9 U	2 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U
MWX-9	4.5-5.0	5/28/2009	10	--	--	0.9 U	0.9 U	2 U	--	0.9 U	2 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U
MWX-9	9.5-10.0	5/29/2009	10	--	--	1 U	1 U	2 U	--	1 U	2 U	1 U	1 U	1 U	1 U	2	1 U
MWX-9	12.5-13.0	5/29/2009	10	--	--	1 U	1 U	2 U	--	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U
MWX-10A	4.5-5.0	5/27/2009	10	--	--	1 U	1 U	2 U	--	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U
MWX-10A	9.5-10.0	5/28/2009	10	--	--	0.9 U	0.9 U	2 U	--	0.9 U	2 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U
MWX-10A	12.5-13.0	5/28/2009	10	--	--	1 U	1 U	2 U	--	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U
MWX-11A	4.5-5.0	5/27/2009	10	--	--	1 U	1 U	2 U	--	1 U	2 U	1 U	1 U	1 U	1 U	10	9
MWX-11A	9.5-10.0	5/28/2009	10	--	--	0.9 U	0.9 U	2 U	--	0.9 U	2 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U
MWX-11A	12.5-13.0	5/28/2009	10	--	--	0.9 U	0.9 U	2 U	--	0.9 U	2 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U
SB-1A	3.5-4.0	5/27/2009	10	--	--	1 U	1 U	2 U	--	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U
SB-2A	3.5-4.0	5/27/2009	10	--	--	1 U	1 U	2 U	--	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U

Table 2
Soil Analytical Sample Results
Former Chevron Asphalt Plant and Bulk Terminal #20-6265
1520 Powell Street
Emeryville, California

Location ID	Depth Interval	Sample Date	Notes	Analyte	cis-, trans-1,2-DCE	1,2-Dichloro benzene	1,3-Dichloro benzene	1,4-Dichloro benzene	1,2- and 1,4-Dichloro benzenes	1,2-Dichloro propane	cis-1,3-Dichloro propene	trans-1,3-Dichloro propene	Freon 113	2-Hexanone	4-Methyl-2-Pentanone	Methylene chloride	Styrene	1,1,2,2-Tetra chloro ethane		
				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
				ESL	--	1,600	7,400	1,200	--	460	170	170	--	--	3,900	7,200	15,000	270		
Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result			
S-1 to S-6	2.0-3.0	7/6/1988	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
S-7 to S-10	2.0-3.0	7/6/1988	1, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
S-11 to S-14	2.0-3.0	7/6/1988	1, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
S-15	2.0-3.0	7/6/1988	1, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
S-17	2.0-3.0	8/8/1988	1, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
S-18	2.0-3.0	8/8/1988	1, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
B-1 to B-5	2.5-3.0	9/7/1988	2, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
B-1 to B-5	4.5-5.0	9/7/1988	2, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
B-6 to B-10	2.5-3.0	9/7/1988	2, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
B-6 to B-10	4.5-5.0	9/7/1988	2, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
B-11 to B-15	2.5-3.0	9/7/1988	2, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
B-11 to B-15	4.5-5.0	9/7/1988	2, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
B-16 to B-20	2.5-3.0	9/7/1988	2, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
B-16 to B-20	4.5-5.0	9/7/1988	2, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
B-21	2.5-3.0	9/30/1988	2, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
B-21	4.5-5.0	9/30/1988	2, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
B-22	2.5-3.0	9/30/1988	2, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
B-22	4.0-4.5	9/30/1988	2, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
B-23	2.5-3.0	9/30/1988	2, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
B-23	4.5-5.0	9/30/1988	2, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
B-24	2.5-3.0	9/30/1988	2, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
B-24	4.5-5.0	9/30/1988	2, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
B-25	2.5-3.0	9/30/1988	2, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
B-25	4.5-5.0	9/30/1988	2, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
B-26	2.5-3.0	9/30/1988	2, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
B-26	4.5-5.0	9/30/1988	2, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
B-27	2.5-3.0	9/30/1988	2, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
B-27	4.5-5.0	9/30/1988	2, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
B-28	3.0-3.5	9/30/1988	2, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
B-28	5.0-5.5	9/30/1988	2, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
B-30	3.0-3.5	9/30/1988	2, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
B-30	5.0-5.5	9/30/1988	2, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
B-31	3.0-3.5	9/30/1988	2, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
B-31	5.0-5.5	9/30/1988	2, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
B-33	2.5-3.0	9/30/1988	2, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
B-33	4.5-5.0	9/30/1988	2, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
B-34	2.5-3.0	9/30/1988	2, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
B-34	4.5-5.0	9/30/1988	2, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
B-37	2.5-3.0	9/30/1988	2, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
B-38	2.5-3.0	9/30/1988	2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
B-40	3.5-4.0	9/30/1988	2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
B-40	5.5-6.0	9/30/1988	2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
B-41	4.5-5.0	9/30/1988	2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
B-41	5.5-6.0	9/30/1988	2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
B-1	17.0-18.0	2/2/1990	3	20 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
B-1	22.0-23.0	2/2/1990	3	20 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
B-1	28.0-29.0	2/2/1990	3	20 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
MW-13	2.5-3.5	2/2/1990	3, Soil Excavated	20 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
MW-13	4.5-5.5	2/2/1990	3, Soil Excavated	20 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
MW-13	9.5-10.5	2/2/1990	3	20 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
MW-13	12.0-13.0	2/2/1990	3	20 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--		

Table 2
Soil Analytical Sample Results
Former Chevron Asphalt Plant and Bulk Terminal #20-6265
1520 Powell Street
Emeryville, California

Location ID	Depth Interval	Sample Date	Notes	Analyte	cis-, trans-1,2-DCE	1,2-Dichloro benzene	1,3-Dichloro benzene	1,4-Dichloro benzene	1,2- and 1,4-Dichloro benzenes	1,2-Dichloro propane	cis-1,3-Dichloro propene	trans-1,3-Dichloro propene	Freon 113	2-Hexanone	4-Methyl-2-Pentanone	Methylene chloride	Styrene	1,1,2,2-Tetra chloro ethane		
				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
				ESL	--	1,600	7,400	1,200	--	460	170	170	--	--	3,900	7,200	15,000	270		
Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result		
MW-14	4.5-5.5	2/2/1990	3	20 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
MW-14	7.5-8.5	2/2/1990	3	20 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
MW-14	10.0-11.0	2/2/1990	3	20 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
MW-15	5.0-6.0	2/2/1990	3	20 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
MW-15	8.5-9.5	2/2/1990	3	20 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
MW-16	7.3-8.3	2/2/1990	3	500 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
MW-16	9.3-10.3	2/2/1990	3	500 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
MW-17	3.8-4.8	3/21/1990	3	500 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
MW-17	6.3-7.3	3/21/1990	3	500 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
MW-17	8.3-9.3	3/21/1990	3	500 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
MW-17	11.8-12.8	3/21/1990	3	500 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
MW-18	3.8-4.8	3/22/1990	3	500 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
MW-18	6.3-7.3	3/22/1990	3	500 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
MW-18	8.3-9.3	3/22/1990	3	500 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
MW-18	10.3-11.3	3/22/1990	3	500 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
MW-19	4.8-5.8	3/22/1990	3	500 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
MW-19	7.8-8.8	3/22/1990	3	500 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
MW-19	9.3-10.3	3/22/1990	3	500 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
SB-1	4-5	3/26/1990	4, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	5 U	--	--		
SB-2	4-5	3/26/1990	4, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	5 U	--	--		
SB-3	4-5	3/26/1990	4	--	--	--	--	--	--	--	--	--	--	--	--	5 U	--	--		
SB-4	4-5	3/26/1990	4	--	--	--	--	--	--	--	--	--	--	--	--	5 U	--	--		
SB-5	4-5	3/26/1990	4	--	--	--	--	--	--	--	--	--	--	--	--	5 U	--	--		
SB-6	4-5	3/26/1990	4	--	--	--	--	--	--	--	--	--	--	--	--	5 U	--	--		
SB-7	4-5	3/26/1990	4	--	--	--	--	--	--	--	--	--	--	--	--	5 U	--	--		
SB-8	4-5	3/26/1990	4	--	--	--	--	--	--	--	--	--	--	--	--	5 U	--	--		
SB-9	4-5	3/26/1990	4	--	--	--	--	--	--	--	--	--	--	--	--	5 U	--	--		
SB-10	4-5	3/26/1990	4	--	--	--	--	--	--	--	--	--	--	--	--	5 U	--	--		
SB-11	4-5	3/26/1990	4	--	--	--	--	--	--	--	--	--	--	--	--	5 U	--	--		
SB-12	4-5	3/26/1990	4	--	--	--	--	--	--	--	--	--	--	--	--	5 U	--	--		
SB-13	4-5	3/26/1990	4	--	--	--	--	--	--	--	--	--	--	--	--	5 U	--	--		
SB-14	4-5	3/26/1990	4	--	--	--	--	--	--	--	--	--	--	--	--	5 U	--	--		
SB-15	4-5	3/26/1990	4	--	--	--	--	--	--	--	--	--	--	--	--	5 U	--	--		
SB-16	4-5	3/26/1990	4	--	--	--	--	--	--	--	--	--	--	--	--	5 U	--	--		
SB-17	4-5	3/26/1990	4	--	--	--	--	--	--	--	--	--	--	--	--	5 U	--	--		
SB-18	4-5	3/26/1990	4	--	--	--	--	--	--	--	--	--	--	--	--	5 U	--	--		
SB-19	4-5	3/26/1990	4	--	--	--	--	--	--	--	--	--	--	--	--	5 U	--	--		
SB-20	4-5	3/26/1990	4	--	--	--	--	--	--	--	--	--	--	--	--	5 U	--	--		
SB-21	4-5	3/26/1990	4	--	--	--	--	--	--	--	--	--	--	--	--	5 U	--	--		
SB-22	4-5	3/26/1990	4	--	--	--	--	--	--	--	--	--	--	--	--	5 U	--	--		
SB-23	4-5	3/26/1990	4	--	--	--	--	--	--	--	--	--	--	--	--	5 U	--	--		
SB-24	4-5	3/26/1990	4, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	5 U	--	--		
SB-25	4-5	3/26/1990	4	--	--	--	--	--	--	--	--	--	--	--	--	5 U	--	--		
SB-26	4-5	3/26/1990	4	--	--	--	--	--	--	--	--	--	--	--	--	5 U	--	--		
SB-27	4-5	3/26/1990	4	--	--	--	--	--	--	--	--	--	--	--	--	5 U	--	--		
SB-28	4-5	3/26/1990	4	--	--	--	--	--	--	--	--	--	--	--	--	5 U	--	--		
SB-29	4-5	3/26/1990	4	--	--	--	--	--	--	--	--	--	--	--	--	5 U	--	--		
SB-30	4-5	3/26/1990	4	--	--	--	--	--	--	--	--	--	--	--	--	5 U	--	--		
SB-31	4-5	3/26/1990	4	--	--	--	--	--	--	--	--	--	--	--	--	5 U	--	--		
SB-32	4-5	3/26/1990	4	--	--	--	--	--	--	--	--	--	--	--	--	5 U	--	--		
SB-33	4-5	3/26/1990	4	--	--	--	--	--	--	--	--	--	--	--	--	5 U	--	--		

Table 2
Soil Analytical Sample Results
Former Chevron Asphalt Plant and Bulk Terminal #20-6265
1520 Powell Street
Emeryville, California

Location ID	Depth Interval	Sample Date	Notes	Analyte	cis-, trans-1,2-DCE	1,2-Dichloro benzene	1,3-Dichloro benzene	1,4-Dichloro benzene	1,2- and 1,4-Dichloro benzenes	1,2-Dichloro propane	cis-1,3-Dichloro propene	trans-1,3-Dichloro propene	Freon 113	2-Hexanone	4-Methyl-2-Pentanone	Methylene chloride	Styrene	1,1,2,2-Tetra chloro ethane		
				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
				ESL	--	1,600	7,400	1,200	--	460	170	170	--	--	3,900	7,200	15,000	270		
				Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result		
SB-34	4-5	3/26/1990	4	--	--	--	--	--	--	--	--	--	--	--	--	25	--	--		
SB-35	4-5	3/26/1990	4	--	--	--	--	--	--	--	--	--	--	--	--	5 U	--	--		
SB-36	4-5	3/26/1990	4	--	--	--	--	--	--	--	--	--	--	--	--	5 U	--	--		
SB-37	4-5	3/26/1990	4	--	--	--	--	--	--	--	--	--	--	--	--	5 U	--	--		
SB-38	4-5	3/26/1990	4	--	--	--	--	--	--	--	--	--	--	--	--	5 U	--	--		
SB-39	4-5	3/26/1990	4	--	--	--	--	--	--	--	--	--	--	--	--	5 U	--	--		
SB-40	4-5	3/26/1990	4	--	--	--	--	--	--	--	--	--	--	--	--	5 U	--	--		
SB-41	4-5	3/26/1990	4	--	--	--	--	--	--	--	--	--	--	--	--	5 U	--	--		
SB-42	4-5	3/26/1990	4	--	--	--	--	--	--	--	--	--	--	--	--	5 U	--	--		
SB-43	4-5	3/26/1990	4	--	--	--	--	--	--	--	--	--	--	--	--	5 U	--	--		
S-1	3.0-4.0	9/18/1990	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
S-2	3.0-4.0	9/18/1990	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
S-3	3.0-4.0	9/18/1990	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
S-4	3.0-4.0	9/18/1990	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
S-5	3.0-4.0	9/18/1990	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
S-6	3.0-4.0	9/18/1990	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
S-7	3.0-4.0	9/18/1990	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
B-1	2.5 - 3.0	2/1/1991	6, Soil Excavated	15 U	--	15 U	--	15 U	15 U	15 U	15 U	15 U	--	50 U	50 U	50 U	15 U	15 U		
B-2	2.5 - 3.0	2/1/1991	6, Soil Excavated	15 U	--	15 U	--	15 U	15 U	15 U	15 U	15 U	--	50 U	50 U	50 U	15 U	15 U		
B-3	2.5 - 3.0	2/1/1991	6, Soil Excavated	15 U	--	15 U	--	15 U	15 U	15 U	15 U	15 U	--	50 U	50 U	50 U	15 U	15 U		
B-4	2.5 - 3.0	2/1/1991	6, Soil Excavated	15 U	--	15 U	--	15 U	15 U	15 U	15 U	15 U	--	50 U	50 U	50 U	15 U	15 U		
B-5	2.5 - 3.0	2/1/1991	6, Soil Excavated	15 U	--	15 U	--	15 U	15 U	15 U	15 U	15 U	--	50 U	50 U	50 U	15 U	15 U		
B-6	2.5 - 3.0	2/1/1991	6, Soil Excavated	15 U	--	15 U	--	15 U	15 U	15 U	15 U	15 U	--	50 U	50 U	50 U	15 U	15 U		
B-7	3.5 - 4.0	2/1/1991	6, Soil Excavated	15 U	--	15 U	--	15 U	15 U	15 U	15 U	15 U	--	50 U	50 U	50 U	15 U	15 U		
B-8	2.5 - 3.0	2/1/1991	6, Soil Excavated	15 U	--	15 U	--	15 U	15 U	15 U	15 U	15 U	--	50 U	50 U	50 U	15 U	15 U		
B-9	2.5 - 3.0	2/1/1991	6, Soil Excavated	15 U	--	15 U	--	15 U	15 U	15 U	15 U	15 U	--	50 U	50 U	50 U	15 U	15 U		
B-10	2.5 - 3.0	2/1/1991	6, Soil Excavated	15 U	--	15 U	--	15 U	15 U	15 U	15 U	15 U	--	50 U	50 U	50 U	15 U	15 U		
B-11	2.5 - 3.0	2/1/1991	6, Soil Excavated	15 U	--	15 U	--	15 U	15 U	15 U	15 U	15 U	--	50 U	50 U	50 U	15 U	15 U		
B-12	2.5 - 3.0	2/1/1991	6, Soil Excavated	15 U	--	15 U	--	15 U	15 U	15 U	15 U	15 U	--	50 U	50 U	50 U	15 U	15 U		
B-13	2.5 - 3.0	2/1/1991	6, Soil Excavated	15 U	--	15 U	--	15 U	15 U	15 U	15 U	15 U	--	50 U	50 U	50 U	15 U	15 U		
B-14	2.5 - 3.0	2/1/1991	6, Soil Excavated	15 U	--	15 U	--	15 U	15 U	15 U	15 U	15 U	--	50 U	50 U	50 U	15 U	15 U		
B-15	2.5 - 3.0	2/1/1991	6, Soil Excavated	15 U	--	15 U	--	15 U	15 U	15 U	15 U	15 U	--	50 U	50 U	50 U	15 U	15 U		
B-16	2.5 - 3.0	2/1/1991	6, Soil Excavated	15 U	--	15 U	--	15 U	15 U	15 U	15 U	15 U	--	50 U	50 U	50 U	15 U	15 U		
B-17	2.5 - 3.0	2/1/1991	6, Soil Excavated	100 U	--	15 U	--	15 U	15 U	15 U	15 U	15 U	--	50 U	50 U	50 U	15 U	15 U		
B-18	2.5 - 3.0	2/1/1991	6, Soil Excavated	15 U	--	15 U	--	15 U	15 U	15 U	15 U	15 U	--	50 U	50 U	50 U	15 U	15 U		
B-19	2.5 - 3.0	2/1/1991	6	15 U	--	15 U	--	15 U	15 U	15 U	15 U	15 U	--	50 U	50 U	50 U	15 U	15 U		
B-20	2.5 - 3.0	2/1/1991	6	15 U	--	15 U	--	15 U	15 U	15 U	15 U	15 U	--	50 U	50 U	50 U	15 U	15 U		
B-21	2.5 - 3.0	2/1/1991	6	15 U	--	15 U	--	15 U	15 U	15 U	15 U	15 U	--	50 U	50 U	50 U	15 U	15 U		
B-22	2.5 - 3.0	2/1/1991	6	15 U	--	15 U	--	15 U	15 U	15 U	15 U	15 U	--	50 U	50 U	50 U	15 U	15 U		
B-23	2.5 - 3.0	2/1/1991	6	15 U	--	15 U	--	15 U	15 U	15 U	15 U	15 U	--	50 U	50 U	50 U	15 U	15 U		
B-24	2.5 - 3.0	2/1/1991	6	15 U	--	15 U	--	15 U	15 U	15 U	15 U	15 U	--	50 U	50 U	50 U	15 U	15 U		
B-1	2.5 - 3.0	3/18/1991	7, Soil Excavated	--	5 U	5 U	5 U	--	5 U	5 U	5 U	5 U	--	--	--	5 U	--	5 U		
B-2	2.5 - 3.0	3/18/1991	7, Soil Excavated	--	5 U	5 U	5 U	--	5 U	5 U	5 U	5 U	--	--	--	5 U	--	5 U		
B-3	2.5 - 3.0	3/18/1991	7, Soil Excavated	--	5 U	5 U	5 U	--	5 U	5 U	5 U	5 U	--	--	--	5 U	--	5 U		
B-4	2.5 - 3.0	3/18/1991	7, Soil Excavated	--	5 U	5 U	5 U	--	5 U	5 U	5 U	5 U	--	--	--	5 U	--	5 U		
B-5	2.5 - 3.0	3/18/1991	7, Soil Excavated	--	5 U	5 U	5 U	--	5 U	5 U	5 U	5 U	--	--	--	5 U	--	5 U		
B-7	2.5 - 3.0	3/18/1991	7, Soil Excavated	--	5 U	5 U	5 U	--	5 U	5 U	5 U	5 U	--	--	--	5 U	--	5 U		
B-9	5.5 - 6.0	3/18/1991	7, Soil Excavated	--	5 U	5 U	5 U	--	5 U	5 U	5 U	5 U	--	--	--	5 U	--	5 U		
B-10	2.5 - 3.0	3/18/1991	7, Soil Excavated	--	5 U	5 U	5 U	--	5 U	5 U	5 U	5 U	--	--	--	5 U	--	5 U		
B-11	2.5 - 3.0	3/18/1991	7, Soil Excavated	--	5 U	5 U	5 U	--	5 U	5 U	5 U	5 U	--	--	--	5 U	--	5 U		
B-12	2.5 - 3.0	3/18/1991	7, Soil Excavated	--	5 U	5 U	5 U	--	5 U	5 U	5 U	5 U	--	--	--	5 U	--	5 U		

Table 2
Soil Analytical Sample Results
Former Chevron Asphalt Plant and Bulk Terminal #20-6265
1520 Powell Street
Emeryville, California

Location ID	Depth Interval	Sample Date	Notes	Analyte	cis-, trans-1,2-DCE	1,2-Dichloro benzene	1,3-Dichloro benzene	1,4-Dichloro benzene	1,2- and 1,4-Dichloro benzenes	1,2-Dichloro propane	cis-1,3-Dichloro propene	trans-1,3-Dichloro propene	Freon 113	2-Hexanone	4-Methyl-2-Pentanone	Methylene chloride	Styrene	1,1,2,2-Tetra chloro ethane		
				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
				ESL	--	1,600	7,400	1,200	--	460	170	170	--	--	3,900	7,200	15,000	270		
				Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result		
B-13	5.5 - 6.0	3/18/1991	7, Soil Excavated	--	5 U	5 U	5 U	--	5 U	5 U	5 U	--	--	--	5 U	--	5 U			
B-14	5.0 - 5.5	3/18/1991	7, Soil Excavated	--	5 U	5 U	5 U	--	5 U	5 U	5 U	--	--	--	5 U	--	5 U			
B-15	5.5 - 6.0	3/18/1991	7	--	5 U	5 U	5 U	--	5 U	5 U	5 U	--	--	--	5 U	--	5 U			
B-16	5.5 - 6.0	3/18/1991	7	--	5 U	5 U	5 U	--	5 U	5 U	5 U	--	--	--	5 U	--	5 U			
B-20	2.5 - 3.0	3/18/1991	7	--	5 U	5 U	5 U	--	5 U	5 U	5 U	--	--	--	5 U	--	5 U			
B-21	5.5 - 6.0	3/18/1991	7	--	5 U	5 U	5 U	--	5 U	5 U	5 U	--	--	--	5 U	--	5 U			
B-22	5.5 - 6.0	3/18/1991	7	--	5 U	5 U	5 U	--	5 U	5 U	5 U	--	--	--	5 U	--	5 U			
SB-1	1.5 - 2.0	5/6/1992	8	--	15 U	15 U	15 U	--	15 U	15 U	15 U	--	50 U	50 U	50 U	50 U	15 U	15 U		
SB-1	4.5 - 5.0	5/6/1992	8	--	15 U	15 U	15 U	--	15 U	15 U	15 U	--	50 U	50 U	50 U	50 U	15 U	15 U		
SB-2	1.5 - 2.0	5/6/1992	8	--	15 U	15 U	15 U	--	15 U	15 U	15 U	--	50 U	50 U	50 U	50 U	15 U	15 U		
SB-2	4.5 - 5.0	5/6/1992	8	--	15 U	15 U	15 U	--	15 U	15 U	15 U	--	50 U	50 U	50 U	50 U	15 U	15 U		
SB-3	1.5 - 2.0	5/6/1992	8	--	15 U	15 U	15 U	--	15 U	15 U	15 U	--	50 U	50 U	50 U	50 U	15 U	15 U		
SB-4	1.5 - 2.0	5/6/1992	8	--	15 U	15 U	15 U	--	15 U	15 U	15 U	--	50 U	50 U	50 U	50 U	15 U	15 U		
HL-4	7.5 - 8.0	5/8/1992	8, Soil Excavated	--	15 U	15 U	15 U	--	15 U	15 U	15 U	--	50 U	50 U	50 U	50 U	15 U	15 U		
HL-5	8.5 - 9.0	5/8/1992	8, Soil Excavated	--	15 U	15 U	15 U	--	15 U	15 U	15 U	--	50 U	50 U	50 U	50 U	15 U	15 U		
S-1	8.5 - 9.0	5/11/1992	8, Soil Excavated	--	15 U	15 U	15 U	--	15 U	15 U	15 U	--	50 U	50 U	50 U	50 U	15 U	15 U		
S-2	11.5 - 12.0	5/11/1992	8, Soil Excavated	--	15 U	15 U	15 U	--	15 U	15 U	15 U	--	50 U	50 U	50 U	50 U	15 U	15 U		
S-3	8.5 - 9.0	5/11/1992	8, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
G1(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	--	--	--	--	--	100 U	100 U	100 U	--	500 U	500 U	500 U	500 U	100 U	100 U		
G2(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	--	--	--	--	--	100 U	100 U	100 U	--	500 U	500 U	500 U	500 U	100 U	100 U		
G3(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	--	--	--	--	--	100 U	100 U	100 U	--	500 U	500 U	500 U	500 U	100 U	100 U		
G4(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	--	--	--	--	--	100 U	100 U	100 U	--	500 U	500 U	500 U	500 U	100 U	100 U		
G5(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
G6(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
G7(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
G8(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
G9(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
G10(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
G11(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
G12(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
G13(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	--	--	--	--	--	100 U	100 U	100 U	--	500 U	500 U	500 U	500 U	100 U	100 U		
G14(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	--	--	--	--	--	100 U	100 U	100 U	--	500 U	500 U	500 U	500 U	100 U	100 U		
G15(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	--	--	--	--	--	100 U	100 U	100 U	--	500 U	500 U	500 U	500 U	100 U	100 U		
G16(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	--	--	--	--	--	100 U	100 U	100 U	--	500 U	500 U	500 U	500 U	100 U	100 U		
G17(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	--	--	--	--	--	100 U	100 U	100 U	--	500 U	500 U	500 U	500 U	100 U	100 U		
G18(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	--	--	--	--	--	100 U	100 U	100 U	--	500 U	500 U	500 U	500 U	100 U	100 U		
G19(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	--	--	--	--	--	100 U	100 U	100 U	--	500 U	500 U	500 U	500 U	100 U	100 U		
G20(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	--	--	--	--	--	100 U	100 U	100 U	--	500 U	500 U	500 U	500 U	100 U	100 U		
G21(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
G22(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
G23(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
G24(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
G25(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
G26(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
G27(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
G28(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
G29(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	--	--	--	--	--	100 U	100 U	100 U	--	500 U	500 U	500 U	500 U	100 U	100 U		
G30(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	--	--	--	--	--	100 U	100 U	100 U	--	500 U	500 U	500 U	500 U	100 U	100 U		
G31(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	--	--	--	--	--	100 U	100 U	100 U	--	500 U	500 U	500 U	500 U	100 U	100 U		
G32(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	--	--	--	--	--	100 U	100 U	100 U	--	500 U	500 U	500 U	500 U	100 U	100 U		
MWX-2	4.5-5.0	5/27/2009	10	--	1 U	1 U	1 U	--	1 U	1 U	1 U	2 U	--	--	19	--	1 U			

Table 2
Soil Analytical Sample Results
Former Chevron Asphalt Plant and Bulk Terminal #20-6265
1520 Powell Street
Emeryville, California

			Analyte	cis-, trans-1,2-DCE	1,2-Dichloro benzene	1,3-Dichloro benzene	1,4-Dichloro benzene	1,2- and 1,4-Dichloro benzenes	1,2-Dichloro propane	cis-1,3-Dichloro propene	trans-1,3-Dichloro propene	Freon 113	2-Hexanone	4-Methyl-2-Pentanone	Methylene chloride	Styrene	1,1,2,2-Tetra chloro ethane
			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
			ESL	--	1,600	7,400	1,200	--	460	170	170	--	--	3,900	7,200	15,000	270
Location ID	Depth Interval	Sample Date	Notes	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
MWX-2	9.5-10.0	5/28/2009	10	--	0.9 U	0.9 U	0.9 U	--	0.9 U	0.9 U	0.9 U	2 U	--	--	2 U	--	0.9 U
MWX-2	12.5-13.0	5/28/2009	10	--	0.9 U	0.9 U	0.9 U	--	0.9 U	0.9 U	0.9 U	2 U	--	--	2 U	--	0.9 U
MWX-3	4.5-5.0	5/26/2009	10	--	1 U	1 U	1 U	--	1 U	1 U	1 U	2 U	--	--	11	--	1 U
MWX-3	9.5-10.0	5/29/2009	10	--	1 U	1 U	1 U	--	1 U	1 U	1 U	2 U	--	--	2 U	--	1 U
MWX-3	12.5-13.0	5/29/2009	10	--	1 U	1 U	1 U	--	1 U	1 U	1 U	2 U	--	--	2 U	--	1 U
MWX-6	4.5-5.0	5/28/2009	10	--	0.9 U	0.9 U	0.9 U	--	0.9 U	0.9 U	0.9 U	2 U	--	--	2 U	--	0.9 U
MWX-6	9.5-10.0	5/29/2009	10	--	1 U	1 U	1 U	--	1 U	1 U	1 U	2 U	--	--	2 U	--	1 U
MWX-6	12.5-13.0	5/29/2009	10	--	1 U	1 U	1 U	--	1 U	1 U	1 U	2 U	--	--	2 U	--	1 U
MWX-8	4.5-5.0	5/26/2009	10	--	1 U	1 U	1 U	--	1 U	1 U	1 U	2 U	--	--	21	--	1 U
MWX-8	9.5-10.0	5/28/2009	10	--	0.9 U	0.9 U	0.9 U	--	0.9 U	0.9 U	0.9 U	2 U	--	--	2 U	--	0.9 U
MWX-8	12.5-13.0	5/28/2009	10	--	0.9 U	0.9 U	0.9 U	--	0.9 U	0.9 U	0.9 U	2 U	--	--	2	--	0.9 U
MWX-9	4.5-5.0	5/28/2009	10	--	0.9 U	0.9 U	0.9 U	--	0.9 U	0.9 U	0.9 U	2 U	--	--	2	--	0.9 U
MWX-9	9.5-10.0	5/29/2009	10	--	1 U	1 U	1 U	--	1 U	1 U	1 U	2 U	--	--	2 U	--	1 U
MWX-9	12.5-13.0	5/29/2009	10	--	1 U	1 U	1 U	--	1 U	1 U	1 U	2 U	--	--	3	--	1 U
MWX-10A	4.5-5.0	5/27/2009	10	--	1 U	1 U	1 U	--	1 U	1 U	1 U	2 U	--	--	13	--	1 U
MWX-10A	9.5-10.0	5/28/2009	10	--	0.9 U	0.9 U	0.9 U	--	0.9 U	0.9 U	0.9 U	2 U	--	--	2 U	--	0.9 U
MWX-10A	12.5-13.0	5/28/2009	10	--	1 U	1 U	1 U	--	1 U	1 U	1 U	2 U	--	--	2 U	--	1 U
MWX-11A	4.5-5.0	5/27/2009	10	--	1 U	1 U	1 U	--	1 U	1 U	1 U	2 U	--	--	23	--	1 U
MWX-11A	9.5-10.0	5/28/2009	10	--	0.9 U	0.9 U	0.9 U	--	0.9 U	0.9 U	0.9 U	2 U	--	--	2 U	--	0.9 U
MWX-11A	12.5-13.0	5/28/2009	10	--	0.9 U	0.9 U	0.9 U	--	0.9 U	0.9 U	0.9 U	2 U	--	--	2	--	0.9 U
SB-1A	3.5-4.0	5/27/2009	10	--	1 U	1 U	1 U	--	1 U	1 U	1 U	2 U	--	--	2	--	1 U
SB-2A	3.5-4.0	5/27/2009	10	--	1 U	1 U	1 U	--	1 U	1 U	1 U	2 U	--	--	3	--	1 U

Table 2
Soil Analytical Sample Results
Former Chevron Asphalt Plant and Bulk Terminal #20-6265
1520 Powell Street
Emeryville, California

Location ID	Depth Interval	Sample Date	Notes	Analyte	PCE	1,1,1-TCA	1,1,2-TCA	TCE	Trichloro fluoro methane	Vinyl acetate	Vinyl chloride	Chloro methane, Vinyl Chloride	Bromo methane, Chloro ethane	PCB	Antimony	Arsenic	Barium	Beryllium		
				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
				ESL	370	7,800	500	1,900	--	--	22	--	--	220	6,300	390	750,000	4,000		
Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result			
S-1 to S-6	2.0-3.0	7/6/1988	1	--	--	--	--	500 U	--	--	--	--	--	--	--	--	--	--		
S-7 to S-10	2.0-3.0	7/6/1988	1, Soil Excavated	--	--	--	--	500 U	--	--	--	--	--	--	--	--	--	--		
S-11 to S-14	2.0-3.0	7/6/1988	1, Soil Excavated	--	--	--	--	500 U	--	--	--	--	--	--	--	--	--	--		
S-15	2.0-3.0	7/6/1988	1, Soil Excavated	--	--	--	--	500 U	--	--	--	--	--	--	--	--	--	--		
S-17	2.0-3.0	8/8/1988	1, Soil Excavated	--	--	--	--	1,500	--	--	--	--	--	--	--	--	--	--		
S-18	2.0-3.0	8/8/1988	1, Soil Excavated	--	--	--	--	1,400	--	--	--	--	--	--	--	--	--	--		
B-1 to B-5	2.5-3.0	9/7/1988	2, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
B-1 to B-5	4.5-5.0	9/7/1988	2, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
B-6 to B-10	2.5-3.0	9/7/1988	2, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
B-6 to B-10	4.5-5.0	9/7/1988	2, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
B-11 to B-15	2.5-3.0	9/7/1988	2, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
B-11 to B-15	4.5-5.0	9/7/1988	2, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
B-16 to B-20	2.5-3.0	9/7/1988	2, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
B-16 to B-20	4.5-5.0	9/7/1988	2, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
B-21	2.5-3.0	9/30/1988	2, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
B-21	4.5-5.0	9/30/1988	2, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
B-22	2.5-3.0	9/30/1988	2, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
B-22	4.0-4.5	9/30/1988	2, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
B-23	2.5-3.0	9/30/1988	2, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
B-23	4.5-5.0	9/30/1988	2, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
B-24	2.5-3.0	9/30/1988	2, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
B-24	4.5-5.0	9/30/1988	2, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
B-25	2.5-3.0	9/30/1988	2, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
B-25	4.5-5.0	9/30/1988	2, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
B-26	2.5-3.0	9/30/1988	2, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
B-26	4.5-5.0	9/30/1988	2, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
B-27	2.5-3.0	9/30/1988	2, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
B-27	4.5-5.0	9/30/1988	2, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
B-28	3.0-3.5	9/30/1988	2, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
B-28	5.0-5.5	9/30/1988	2, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
B-30	3.0-3.5	9/30/1988	2, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
B-30	5.0-5.5	9/30/1988	2, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
B-31	3.0-3.5	9/30/1988	2, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
B-31	5.0-5.5	9/30/1988	2, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
B-33	2.5-3.0	9/30/1988	2, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
B-33	4.5-5.0	9/30/1988	2, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
B-34	2.5-3.0	9/30/1988	2, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
B-34	4.5-5.0	9/30/1988	2, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
B-37	2.5-3.0	9/30/1988	2, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
B-38	2.5-3.0	9/30/1988	2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
B-40	3.5-4.0	9/30/1988	2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
B-40	5.5-6.0	9/30/1988	2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
B-41	4.5-5.0	9/30/1988	2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
B-41	5.5-6.0	9/30/1988	2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
B-1	17.0-18.0	2/2/1990	3	20 U	20 U	--	--	20 U	--	--	--	--	--	--	--	--	--	--		
B-1	22.0-23.0	2/2/1990	3	20 U	20 U	--	--	20 U	--	--	--	--	--	--	--	--	--	--		
B-1	28.0-29.0	2/2/1990	3	20 U	20 U	--	--	20 U	--	--	--	--	--	--	--	--	--	--		
MW-13	2.5-3.5	2/2/1990	3, Soil Excavated	20 U	20 U	--	--	20 U	--	--	--	--	--	--	--	--	--	--		
MW-13	4.5-5.5	2/2/1990	3, Soil Excavated	20 U	20 U	--	--	20 U	--	--	--	--	--	--	--	--	--	--		
MW-13	9.5-10.5	2/2/1990	3	20 U	20 U	--	--	20 U	--	--	--	--	--	--	--	--	--	--		
MW-13	12.0-13.0	2/2/1990	3	20 U	20 U	--	--	20 U	--	--	--	--	--	--	--	--	--	--		

Table 2
Soil Analytical Sample Results
Former Chevron Asphalt Plant and Bulk Terminal #20-6265
1520 Powell Street
Emeryville, California

Location ID	Depth Interval	Sample Date	Analyte	PCE	1,1,1-TCA	1,1,2-TCA	TCE	Trichloro fluoro methane	Vinyl acetate	Vinyl chloride	Chloro methane, Vinyl Chloride	Bromo methane, Chloro ethane	PCB	Antimony	Arsenic	Barium	Beryllium	
			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
			ESL	370	7,800	500	1,900	--	--	22	--	--	220	6,300	390	750,000	4,000	
Notes	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result		
MW-14	4.5-5.5	2/2/1990	3	20 U	20 U	--	20 U	--	--	--	--	--	--	--	--	--	--	
MW-14	7.5-8.5	2/2/1990	3	20 U	20 U	--	20 U	--	--	--	--	--	--	--	--	--	--	
MW-14	10.0-11.0	2/2/1990	3	20 U	20 U	--	20 U	--	--	--	--	--	--	--	--	--	--	
MW-15	5.0-6.0	2/2/1990	3	20 U	20 U	--	20 U	--	--	--	--	--	--	--	--	--	--	
MW-15	8.5-9.5	2/2/1990	3	20 U	20 U	--	20 U	--	--	--	--	--	--	--	--	--	--	
MW-16	7.3-8.3	2/2/1990	3	500 U	500 U	--	500 U	--	--	--	--	--	--	--	--	--	--	
MW-16	9.3-10.3	2/2/1990	3	500 U	500 U	--	500 U	--	--	--	--	--	--	--	--	--	--	
MW-17	3.8-4.8	3/21/1990	3	500 U	500 U	--	500 U	--	--	--	--	--	--	--	--	--	--	
MW-17	6.3-7.3	3/21/1990	3	500 U	500 U	--	500 U	--	--	--	--	--	--	--	--	--	--	
MW-17	8.3-9.3	3/21/1990	3	500 U	500 U	--	500 U	--	--	--	--	--	--	--	--	--	--	
MW-17	11.8-12.8	3/21/1990	3	500 U	500 U	--	500 U	--	--	--	--	--	--	--	--	--	--	
MW-18	3.8-4.8	3/22/1990	3	500 U	500 U	--	500 U	--	--	--	--	--	--	--	--	--	--	
MW-18	6.3-7.3	3/22/1990	3	500 U	500 U	--	500 U	--	--	--	--	--	--	--	--	--	--	
MW-18	8.3-9.3	3/22/1990	3	500 U	500 U	--	500 U	--	--	--	--	--	--	--	--	--	--	
MW-18	10.3-11.3	3/22/1990	3	500 U	500 U	--	500 U	--	--	--	--	--	--	--	--	--	--	
MW-19	4.8-5.8	3/22/1990	3	500 U	500 U	--	500 U	--	--	--	--	--	--	--	--	--	--	
MW-19	7.8-8.8	3/22/1990	3	500 U	500 U	--	500 U	--	--	--	--	--	--	--	--	--	--	
MW-19	9.3-10.3	3/22/1990	3	500 U	500 U	--	500 U	--	--	--	--	--	--	--	--	--	--	
SB-1	4-5	3/26/1990	4, Soil Excavated	--	--	--	5 U	--	--	--	--	--	--	--	--	--	--	
SB-2	4-5	3/26/1990	4, Soil Excavated	--	--	--	5 U	--	--	--	--	--	--	--	--	--	--	
SB-3	4-5	3/26/1990	4	--	--	--	5 U	--	--	--	--	--	--	--	--	--	--	
SB-4	4-5	3/26/1990	4	--	--	--	5 U	--	--	--	--	--	--	--	--	--	--	
SB-5	4-5	3/26/1990	4	--	--	--	5 U	--	--	--	--	--	--	--	--	--	--	
SB-6	4-5	3/26/1990	4	--	--	--	5 U	--	--	--	--	--	--	--	--	--	--	
SB-7	4-5	3/26/1990	4	--	--	--	5 U	--	--	--	--	--	--	--	--	--	--	
SB-8	4-5	3/26/1990	4	--	--	--	5 U	--	--	--	--	--	--	--	--	--	--	
SB-9	4-5	3/26/1990	4	--	--	--	5 U	--	--	--	--	--	--	--	--	--	--	
SB-10	4-5	3/26/1990	4	--	--	--	5 U	--	--	--	--	--	--	--	--	--	--	
SB-11	4-5	3/26/1990	4	--	--	--	5 U	--	--	--	--	--	--	--	--	--	--	
SB-12	4-5	3/26/1990	4	--	--	--	5 U	--	--	--	--	--	--	--	--	--	--	
SB-13	4-5	3/26/1990	4	--	--	--	5 U	--	--	--	--	--	--	--	--	--	--	
SB-14	4-5	3/26/1990	4	--	--	--	5 U	--	--	--	--	--	--	--	--	--	--	
SB-15	4-5	3/26/1990	4	--	--	--	5 U	--	--	--	--	--	--	--	--	--	--	
SB-16	4-5	3/26/1990	4	--	--	--	5 U	--	--	--	--	--	--	--	--	--	--	
SB-17	4-5	3/26/1990	4	--	--	--	5 U	--	--	--	--	--	--	--	--	--	--	
SB-18	4-5	3/26/1990	4	--	--	--	5 U	--	--	--	--	--	--	--	--	--	--	
SB-19	4-5	3/26/1990	4	--	--	--	5 U	--	--	--	--	--	--	--	--	--	--	
SB-20	4-5	3/26/1990	4	--	--	--	5 U	--	--	--	--	--	--	--	--	--	--	
SB-21	4-5	3/26/1990	4	--	--	--	5 U	--	--	--	--	--	--	--	--	--	--	
SB-22	4-5	3/26/1990	4	--	--	--	5 U	--	--	--	--	--	--	--	--	--	--	
SB-23	4-5	3/26/1990	4	--	--	--	5 U	--	--	--	--	--	--	--	--	--	--	
SB-24	4-5	3/26/1990	4, Soil Excavated	--	--	--	5 U	--	--	--	--	--	--	--	--	--	--	
SB-25	4-5	3/26/1990	4	--	--	--	5 U	--	--	--	--	--	--	--	--	--	--	
SB-26	4-5	3/26/1990	4	--	--	--	5 U	--	--	--	--	--	--	--	--	--	--	
SB-27	4-5	3/26/1990	4	--	--	--	5 U	--	--	--	--	--	--	--	--	--	--	
SB-28	4-5	3/26/1990	4	--	--	--	5 U	--	--	--	--	--	--	--	--	--	--	
SB-29	4-5	3/26/1990	4	--	--	--	5 U	--	--	--	--	--	--	--	--	--	--	
SB-30	4-5	3/26/1990	4	--	--	--	5 U	--	--	--	--	--	--	--	--	--	--	
SB-31	4-5	3/26/1990	4	--	--	--	5 U	--	--	--	--	--	--	--	--	--	--	
SB-32	4-5	3/26/1990	4	--	--	--	5 U	--	--	--	--	--	--	--	--	--	--	
SB-33	4-5	3/26/1990	4	--	--	--	5 U	--	--	--	--	--	--	--	--	--	--	

Table 2
Soil Analytical Sample Results
Former Chevron Asphalt Plant and Bulk Terminal #20-6265
1520 Powell Street
Emeryville, California

			Analyte	PCE	1,1,1-TCA	1,1,2-TCA	TCE	Trichloro fluoro methane	Vinyl acetate	Vinyl chloride	Chloro methane, Vinyl Chloride	Bromo methane, Chloro ethane	PCB	Antimony	Arsenic	Barium	Beryllium
			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
			ESL	370	7,800	500	1,900	--	--	22	--	--	220	6,300	390	750,000	4,000
Location ID	Depth Interval	Sample Date	Notes	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
SB-34	4-5	3/26/1990	4	--	--	--	5 U	--	--	--	--	--	--	--	--	--	--
SB-35	4-5	3/26/1990	4	--	--	--	5 U	--	--	--	--	--	--	--	--	--	--
SB-36	4-5	3/26/1990	4	--	--	--	5 U	--	--	--	--	--	--	--	--	--	--
SB-37	4-5	3/26/1990	4	--	--	--	5 U	--	--	--	--	--	--	--	--	--	--
SB-38	4-5	3/26/1990	4	--	--	--	5 U	--	--	--	--	--	--	--	--	--	--
SB-39	4-5	3/26/1990	4	--	--	--	5 U	--	--	--	--	--	--	--	--	--	--
SB-40	4-5	3/26/1990	4	--	--	--	5 U	--	--	--	--	--	--	--	--	--	--
SB-41	4-5	3/26/1990	4	--	--	--	5 U	--	--	--	--	--	--	--	--	--	--
SB-42	4-5	3/26/1990	4	--	--	--	15,000	--	--	--	--	--	--	--	--	--	--
SB-43	4-5	3/26/1990	4	--	--	--	5 U	--	--	--	--	--	--	--	--	--	--
S-1	3.0-4.0	9/18/1990	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--
S-2	3.0-4.0	9/18/1990	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--
S-3	3.0-4.0	9/18/1990	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--
S-4	3.0-4.0	9/18/1990	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--
S-5	3.0-4.0	9/18/1990	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--
S-6	3.0-4.0	9/18/1990	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--
S-7	3.0-4.0	9/18/1990	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-1	2.5 - 3.0	2/1/1991	6, Soil Excavated	15 U	15 U	15 U	26	15 U	50 U	50 U	--	--	--	--	--	--	--
B-2	2.5 - 3.0	2/1/1991	6, Soil Excavated	15 U	15 U	15 U	120	15 U	50 U	50 U	--	--	--	--	--	--	--
B-3	2.5 - 3.0	2/1/1991	6, Soil Excavated	15 U	15 U	15 U	1,800	15 U	50 U	50 U	--	--	--	--	--	--	--
B-4	2.5 - 3.0	2/1/1991	6, Soil Excavated	15 U	15 U	15 U	30	15 U	50 U	50 U	--	--	--	--	--	--	--
B-5	2.5 - 3.0	2/1/1991	6, Soil Excavated	15 U	15 U	15 U	15 U	15 U	50 U	50 U	--	--	--	--	--	--	--
B-6	2.5 - 3.0	2/1/1991	6, Soil Excavated	15 U	15 U	15 U	330	15 U	50 U	50 U	--	--	--	--	--	--	--
B-7	3.5 - 4.0	2/1/1991	6, Soil Excavated	15 U	15 U	15 U	2300	15 U	50 U	50 U	--	--	--	--	--	--	--
B-8	2.5 - 3.0	2/1/1991	6, Soil Excavated	15 U	15 U	15 U	15 U	15 U	50 U	50 U	--	--	--	--	--	--	--
B-9	2.5 - 3.0	2/1/1991	6, Soil Excavated	15 U	15 U	15 U	530	15 U	50 U	50 U	--	--	--	--	--	--	--
B-10	2.5 - 3.0	2/1/1991	6, Soil Excavated	15 U	15 U	15 U	210	15 U	50 U	50 U	--	--	--	--	--	--	--
B-11	2.5 - 3.0	2/1/1991	6, Soil Excavated	15 U	15 U	15 U	350	15 U	50 U	50 U	--	--	--	--	--	--	--
B-12	2.5 - 3.0	2/1/1991	6, Soil Excavated	15 U	15 U	15 U	15 U	15 U	50 U	50 U	--	--	--	--	--	--	--
B-13	2.5 - 3.0	2/1/1991	6, Soil Excavated	15 U	15 U	15 U	15 U	15 U	50 U	50 U	--	--	--	--	--	--	--
B-14	2.5 - 3.0	2/1/1991	6, Soil Excavated	15 U	15 U	15 U	15 U	15 U	50 U	50 U	--	--	--	--	--	--	--
B-15	2.5 - 3.0	2/1/1991	6, Soil Excavated	15 U	15 U	15 U	15 U	15 U	50 U	50 U	--	--	--	--	--	--	--
B-16	2.5 - 3.0	2/1/1991	6, Soil Excavated	15 U	15 U	15 U	15 U	15 U	50 U	50 U	--	--	--	--	--	--	--
B-17	2.5 - 3.0	2/1/1991	6, Soil Excavated	15 U	15 U	15 U	15 U	15 U	15 U	50 U	--	--	--	--	--	--	--
B-18	2.5 - 3.0	2/1/1991	6, Soil Excavated	15 U	15 U	15 U	21	15 U	50 U	50 U	--	--	--	--	--	--	--
B-19	2.5 - 3.0	2/1/1991	6	15 U	100 U	15 U	42	15 U	50 U	50 U	--	--	--	--	--	--	--
B-20	2.5 - 3.0	2/1/1991	6	15 U	15 U	15 U	46	15 U	50 U	50 U	--	--	--	--	--	--	--
B-21	2.5 - 3.0	2/1/1991	6	15 U	15 U	15 U	1,400	15 U	50 U	50 U	--	--	--	--	--	--	--
B-22	2.5 - 3.0	2/1/1991	6	15 U	15 U	15 U	98	15 U	50 U	50 U	--	--	--	--	--	--	--
B-23	2.5 - 3.0	2/1/1991	6	15 U	15 U	15 U	15 U	15 U	50 U	50 U	--	--	--	--	--	--	--
B-24	2.5 - 3.0	2/1/1991	6	15 U	15 U	15 U	15 U	15 U	50 U	50 U	--	--	--	--	--	--	--
B-1	2.5 - 3.0	3/18/1991	7, Soil Excavated	5 U	5 U	5 U	5 U	5 U	--	--	10 U	10 U	--	--	--	--	--
B-2	2.5 - 3.0	3/18/1991	7, Soil Excavated	5 U	5 U	5 U	5 U	5 U	--	--	10 U	10 U	--	--	--	--	--
B-3	2.5 - 3.0	3/18/1991	7, Soil Excavated	5 U	5 U	5 U	5 U	5 U	--	--	10 U	10 U	--	--	--	--	--
B-4	2.5 - 3.0	3/18/1991	7, Soil Excavated	5 U	5 U	5 U	5 U	5 U	--	--	10 U	10 U	--	--	--	--	--
B-5	2.5 - 3.0	3/18/1991	7, Soil Excavated	5 U	5 U	5 U	5 U	5 U	--	--	10 U	10 U	--	--	--	--	--
B-7	2.5 - 3.0	3/18/1991	7, Soil Excavated	5 U	5 U	5 U	5 U	5 U	--	--	10 U	10 U	--	--	--	--	--
B-9	5.5 - 6.0	3/18/1991	7, Soil Excavated	7	5 U	5 U	5 U	5 U	--	--	10 U	10 U	--	--	--	--	--
B-10	2.5 - 3.0	3/18/1991	7, Soil Excavated	5 U	5 U	5 U	5 U	5 U	--	--	10 U	10 U	--	--	--	--	--
B-11	2.5 - 3.0	3/18/1991	7, Soil Excavated	5 U	5 U	5 U	5 U	5 U	--	--	10 U	10 U	--	--	--	--	--
B-12	2.5 - 3.0	3/18/1991	7, Soil Excavated	5 U	5 U	5 U	5 U	5 U	--	--	10 U	10 U	--	--	--	--	--

Table 2
Soil Analytical Sample Results
Former Chevron Asphalt Plant and Bulk Terminal #20-6265
1520 Powell Street
Emeryville, California

			Analyte	PCE	1,1,1-TCA	1,1,2-TCA	TCE	Trichloro fluoro methane	Vinyl acetate	Vinyl chloride	Chloro methane, Vinyl Chloride	Bromo methane, Chloro ethane	PCB	Antimony	Arsenic	Barium	Beryllium
			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
			ESL	370	7,800	500	1,900	--	--	22	--	--	220	6,300	390	750,000	4,000
Location ID	Depth Interval	Sample Date	Notes	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
B-13	5.5 - 6.0	3/18/1991	7, Soil Excavated	5 U	5 U	5 U	5 U	5 U	--	--	10 U	10 U	--	--	--	--	--
B-14	5.0 - 5.5	3/18/1991	7, Soil Excavated	5 U	5 U	5 U	5 U	5 U	--	--	10 U	10 U	--	--	--	--	--
B-15	5.5 - 6.0	3/18/1991	7	5 U	5 U	5 U	5 U	5 U	--	--	10 U	10 U	--	--	--	--	--
B-16	5.5 - 6.0	3/18/1991	7	5 U	5 U	5 U	5 U	5 U	--	--	10 U	10 U	--	--	--	--	--
B-20	2.5 - 3.0	3/18/1991	7	5 U	5 U	5 U	5 U	5 U	--	--	10 U	10 U	--	--	--	--	--
B-21	5.5 - 6.0	3/18/1991	7	5 U	5 U	5 U	5 U	5 U	--	--	10 U	10 U	--	--	--	--	--
B-22	5.5 - 6.0	3/18/1991	7	5 U	5 U	5 U	5 U	5 U	--	--	10 U	10 U	--	--	--	--	--
SB-1	1.5 - 2.0	5/6/1992	8	15 U	15 U	15 U	15 U	15 U	50 U	50 U	--	--	50 U	6,000	4,000	110,000	500 U
SB-1	4.5 - 5.0	5/6/1992	8	15 U	15 U	15 U	15 U	15 U	50 U	50 U	--	--	50 U	5,000 U	4,000	140,000	500 U
SB-2	1.5 - 2.0	5/6/1992	8	15 U	15 U	15 U	15 U	15 U	50 U	50 U	--	--	50 U	5,000 U	6,000	180,000	600
SB-2	4.5 - 5.0	5/6/1992	8	15 U	15 U	15 U	15 U	15 U	50 U	50 U	--	--	50 U	5,000 U	5,000	170,000	500
SB-3	1.5 - 2.0	5/6/1992	8	15 U	15 U	15 U	15 U	15 U	50 U	50 U	--	--	50 U	5,000 U	5,000	180,000	500 U
SB-4	1.5 - 2.0	5/6/1992	8	15 U	15 U	15 U	15 U	15 U	50 U	50 U	--	--	50 U	5,000 U	3,000	110,000	500 U
HL-4	7.5 - 8.0	5/8/1992	8, Soil Excavated	15 U	15 U	15 U	15 U	15 U	50 U	50 U	--	--	--	--	--	--	--
HL-5	8.5 - 9.0	5/8/1992	8, Soil Excavated	15 U	15 U	15 U	15 U	15 U	50 U	50 U	--	--	--	--	--	--	--
S-1	8.5 - 9.0	5/11/1992	8, Soil Excavated	15 U	15 U	15 U	15 U	15 U	50 U	50 U	--	--	--	--	--	--	--
S-2	11.5 - 12.0	5/11/1992	8, Soil Excavated	15 U	15 U	15 U	15 U	15 U	50 U	50 U	--	--	--	--	--	--	--
S-3	8.5 - 9.0	5/11/1992	8, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--
G1(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	100 U	100 U	100 U	100 U	100 U	100 U	100 U	--	--	--	--	--	--	--
G2(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	100 U	100 U	100 U	410	100 U	100	100 U	--	--	--	--	--	--	--
G3(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	100 U	100 U	100 U	120	100 U	100 U	100 U	--	--	--	--	--	--	--
G4(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	100 U	100 U	100 U	280	100 U	100 U	100 U	--	--	--	--	--	--	--
G5(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--
G6(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--
G7(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--
G8(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--
G9(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--
G10(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--
G11(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--
G12(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--
G13(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	100 U	100 U	100 U	100 U	100 U	100 U	100 U	--	--	--	--	--	--	--
G14(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	100 U	100 U	100 U	100 U	100 U	100 U	100 U	--	--	--	--	--	--	--
G15(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	100 U	100 U	100 U	100 U	100 U	100 U	100 U	--	--	--	--	--	--	--
G16(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	100 U	100 U	100 U	100 U	100 U	100 U	100 U	--	--	--	--	--	--	--
G17(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	100 U	100 U	100 U	100 U	100 U	100 U	100 U	--	--	--	--	--	--	--
G18(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	100 U	100 U	100 U	100 U	100 U	100 U	100 U	--	--	--	--	--	--	--
G19(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	100 U	100 U	100 U	100 U	100 U	100 U	100 U	--	--	--	--	--	--	--
G20(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	100 U	100 U	100 U	100 U	100 U	100 U	100 U	--	--	--	--	--	--	--
G21(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--
G22(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--
G23(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--
G24(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--
G25(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--
G26(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--
G27(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--
G28(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--	--
G29(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	100 U	100 U	100 U	100 U	100 U	100 U	100 U	--	--	--	--	--	--	--
G30(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	100 U	100 U	100 U	100 U	100 U	100 U	100 U	--	--	--	--	--	--	--
G31(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	100 U	100 U	100 U	100 U	100 U	100 U	100 U	--	--	--	--	--	--	--
G32(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	100 U	100 U	100 U	100 U	100 U	100 U	100 U	--	--	--	--	--	--	--
MWX-2	4.5-5.0	5/27/2009	10	30	1 U	1 U	1	2 U	--	2	--	--	--	--	--	--	--

Table 2
Soil Analytical Sample Results
Former Chevron Asphalt Plant and Bulk Terminal #20-6265
1520 Powell Street
Emeryville, California

			Analyte	PCE	1,1,1-TCA	1,1,2-TCA	TCE	Trichloro fluoro methane	Vinyl acetate	Vinyl chloride	Chloro methane, Vinyl Chloride	Bromo methane, Chloro ethane	PCB	Antimony	Arsenic	Barium	Beryllium
			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
			ESL	370	7,800	500	1,900	--	--	22	--	--	220	6,300	390	750,000	4,000
Location ID	Depth Interval	Sample Date	Notes	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
MWX-2	9.5-10.0	5/28/2009	10	10	0.9 U	0.9 U	15	2 U	--	9 U	--	--	--	--	--	--	--
MWX-2	12.5-13.0	5/28/2009	10	1	0.9 U	0.9 U	33	2 U	--	0.9 U	--	--	--	--	--	--	--
MWX-3	4.5-5.0	5/26/2009	10	1 U	1 U	1 U	3	2 U	--	1 U	--	--	--	--	--	--	--
MWX-3	9.5-10.0	5/29/2009	10	1 U	1 U	1 U	190	2 U	--	1 U	--	--	--	--	--	--	--
MWX-3	12.5-13.0	5/29/2009	10	1 U	1 U	1 U	79	2 U	--	1 U	--	--	--	--	--	--	--
MWX-6	4.5-5.0	5/28/2009	10	0.9 U	0.9 U	0.9 U	0.9 U	2 U	--	0.9 U	--	--	--	--	--	--	--
MWX-6	9.5-10.0	5/29/2009	10	1 U	1 U	1 U	1 U	2 U	--	1 U	--	--	--	--	--	--	--
MWX-6	12.5-13.0	5/29/2009	10	1 U	1 U	1 U	1 U	2 U	--	1 U	--	--	--	--	--	--	--
MWX-8	4.5-5.0	5/26/2009	10	1 U	1 U	1 U	2	2 U	--	1 U	--	--	--	--	--	--	--
MWX-8	9.5-10.0	5/28/2009	10	12	0.9 U	0.9 U	0.9 U	9	--	0.9 U	--	--	--	--	--	--	--
MWX-8	12.5-13.0	5/28/2009	10	0.9 U	0.9 U	0.9 U	8	2 U	--	0.9 U	--	--	--	--	--	--	--
MWX-9	4.5-5.0	5/28/2009	10	4	0.9 U	0.9 U	2	2 U	--	0.9 U	--	--	--	--	--	--	--
MWX-9	9.5-10.0	5/29/2009	10	1 U	1 U	1 U	4	2 U	--	1 U	--	--	--	--	--	--	--
MWX-9	12.5-13.0	5/29/2009	10	1 U	1 U	1 U	8	2 U	--	1 U	--	--	--	--	--	--	--
MWX-10A	4.5-5.0	5/27/2009	10	1 U	1 U	1 U	1 U	2 U	--	1 U	--	--	--	--	--	--	--
MWX-10A	9.5-10.0	5/28/2009	10	0.9 U	0.9 U	0.9 U	0.9 U	2 U	--	0.9 U	--	--	--	--	--	--	--
MWX-10A	12.5-13.0	5/28/2009	10	1 U	1 U	1 U	1 U	2 U	--	1 U	--	--	--	--	--	--	--
MWX-11A	4.5-5.0	5/27/2009	10	1 U	1 U	1 U	120	2 U	--	1 U	--	--	--	--	--	--	--
MWX-11A	9.5-10.0	5/28/2009	10	0.9 U	0.9 U	0.9 U	0.9 U	2 U	--	0.9 U	--	--	--	--	--	--	--
MWX-11A	12.5-13.0	5/28/2009	10	0.9 U	0.9 U	0.9 U	0.9 U	2 U	--	0.9 U	--	--	--	--	--	--	--
SB-1A	3.5-4.0	5/27/2009	10	210	1 U	1 U	6	2 U	--	1 U	--	--	--	--	--	--	--
SB-2A	3.5-4.0	5/27/2009	10	2	1 U	1 U	1 U	2 U	--	1 U	--	--	--	--	--	--	--

Table 2
Soil Analytical Sample Results
Former Chevron Asphalt Plant and Bulk Terminal #20-6265
1520 Powell Street
Emeryville, California

			Analyte	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
			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
			ESL	1,700	8,000	40,000	230,000	200,000	1,300	40,000	150,000	10,000	20,000	1,300	16,000	600,000
Location ID	Depth Interval	Sample Date	Notes	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
S-1 to S-6	2.0-3.0	7/6/1988	1	--	--	--	--	--	--	--	--	--	--	--	--	--
S-7 to S-10	2.0-3.0	7/6/1988	1, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--
S-11 to S-14	2.0-3.0	7/6/1988	1, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--
S-15	2.0-3.0	7/6/1988	1, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--
S-17	2.0-3.0	8/8/1988	1, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--
S-18	2.0-3.0	8/8/1988	1, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--
B-1 to B-5	2.5-3.0	9/7/1988	2, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--
B-1 to B-5	4.5-5.0	9/7/1988	2, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--
B-6 to B-10	2.5-3.0	9/7/1988	2, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--
B-6 to B-10	4.5-5.0	9/7/1988	2, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--
B-11 to B-15	2.5-3.0	9/7/1988	2, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--
B-11 to B-15	4.5-5.0	9/7/1988	2, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--
B-16 to B-20	2.5-3.0	9/7/1988	2, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--
B-16 to B-20	4.5-5.0	9/7/1988	2, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--
B-21	2.5-3.0	9/30/1988	2, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--
B-21	4.5-5.0	9/30/1988	2, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--
B-22	2.5-3.0	9/30/1988	2, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--
B-22	4.0-4.5	9/30/1988	2, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--
B-23	2.5-3.0	9/30/1988	2, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--
B-23	4.5-5.0	9/30/1988	2, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--
B-24	2.5-3.0	9/30/1988	2, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--
B-24	4.5-5.0	9/30/1988	2, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--
B-25	2.5-3.0	9/30/1988	2, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--
B-25	4.5-5.0	9/30/1988	2, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--
B-26	2.5-3.0	9/30/1988	2, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--
B-26	4.5-5.0	9/30/1988	2, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--
B-27	2.5-3.0	9/30/1988	2, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--
B-27	4.5-5.0	9/30/1988	2, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--
B-28	3.0-3.5	9/30/1988	2, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--
B-28	5.0-5.5	9/30/1988	2, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--
B-30	3.0-3.5	9/30/1988	2, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--
B-30	5.0-5.5	9/30/1988	2, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--
B-31	3.0-3.5	9/30/1988	2, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--
B-31	5.0-5.5	9/30/1988	2, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--
B-33	2.5-3.0	9/30/1988	2, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--
B-33	4.5-5.0	9/30/1988	2, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--
B-34	2.5-3.0	9/30/1988	2, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--
B-34	4.5-5.0	9/30/1988	2, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--
B-37	2.5-3.0	9/30/1988	2, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--
B-38	2.5-3.0	9/30/1988	2	--	--	--	--	--	--	--	--	--	--	--	--	--
B-40	3.5-4.0	9/30/1988	2	--	--	--	--	--	--	--	--	--	--	--	--	--
B-40	5.5-6.0	9/30/1988	2	--	--	--	--	--	--	--	--	--	--	--	--	--
B-41	4.5-5.0	9/30/1988	2	--	--	--	--	--	--	--	--	--	--	--	--	--
B-41	5.5-6.0	9/30/1988	2	--	--	--	--	--	--	--	--	--	--	--	--	--
B-1	17.0-18.0	2/2/1990	3	--	--	--	--	--	--	--	--	--	--	--	--	--
B-1	22.0-23.0	2/2/1990	3	--	--	--	--	--	--	--	--	--	--	--	--	--
B-1	28.0-29.0	2/2/1990	3	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-13	2.5-3.5	2/2/1990	3, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-13	4.5-5.5	2/2/1990	3, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-13	9.5-10.5	2/2/1990	3	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-13	12.0-13.0	2/2/1990	3	--	--	--	--	--	--	--	--	--	--	--	--	--

Table 2
Soil Analytical Sample Results
Former Chevron Asphalt Plant and Bulk Terminal #20-6265
1520 Powell Street
Emeryville, California

			Analyte	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
			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
			ESL	1,700	8,000	40,000	230,000	200,000	1,300	40,000	150,000	10,000	20,000	1,300	16,000	600,000
Location ID	Depth Interval	Sample Date	Notes	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
MW-14	4.5-5.5	2/2/1990	3	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-14	7.5-8.5	2/2/1990	3	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-14	10.0-11.0	2/2/1990	3	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-15	5.0-6.0	2/2/1990	3	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-15	8.5-9.5	2/2/1990	3	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-16	7.3-8.3	2/2/1990	3	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-16	9.3-10.3	2/2/1990	3	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-17	3.8-4.8	3/21/1990	3	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-17	6.3-7.3	3/21/1990	3	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-17	8.3-9.3	3/21/1990	3	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-17	11.8-12.8	3/21/1990	3	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-18	3.8-4.8	3/22/1990	3	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-18	6.3-7.3	3/22/1990	3	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-18	8.3-9.3	3/22/1990	3	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-18	10.3-11.3	3/22/1990	3	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-19	4.8-5.8	3/22/1990	3	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-19	7.8-8.8	3/22/1990	3	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-19	9.3-10.3	3/22/1990	3	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-1	4-5	3/26/1990	4, Soil Excavated	3 U	11	--	--	22	--	--	--	--	--	--	--	41
SB-2	4-5	3/26/1990	4, Soil Excavated	3 U	11	--	--	25	--	--	--	--	--	--	--	41
SB-3	4-5	3/26/1990	4	3 U	6	--	--	20	--	--	--	--	--	--	--	24
SB-4	4-5	3/26/1990	4	3 U	5	--	--	18	--	--	--	--	--	--	--	20
SB-5	4-5	3/26/1990	4	3 U	14	--	--	22	--	--	--	--	--	--	--	27
SB-6	4-5	3/26/1990	4	3 U	7	--	--	13	--	--	--	--	--	--	--	18
SB-7	4-5	3/26/1990	4	3 U	17	--	--	35	--	--	--	--	--	--	--	31
SB-8	4-5	3/26/1990	4	3 U	6	--	--	13	--	--	--	--	--	--	--	13
SB-9	4-5	3/26/1990	4	3 U	6	--	--	16	--	--	--	--	--	--	--	15
SB-10	4-5	3/26/1990	4	3 U	12	--	--	21	--	--	--	--	--	--	--	23
SB-11	4-5	3/26/1990	4	3 U	7	--	--	23	--	--	--	--	--	--	--	22
SB-12	4-5	3/26/1990	4	3 U	7	--	--	16	--	--	--	--	--	--	--	16
SB-13	4-5	3/26/1990	4	3 U	7	--	--	14	--	--	--	--	--	--	--	12
SB-14	4-5	3/26/1990	4	3 U	7	--	--	13	--	--	--	--	--	--	--	14
SB-15	4-5	3/26/1990	4	3 U	8	--	--	43	--	--	--	--	--	--	--	43
SB-16	4-5	3/26/1990	4	3	11	--	--	60	--	--	--	--	--	--	--	170
SB-17	4-5	3/26/1990	4	3 U	18	--	--	120	--	--	--	--	--	--	--	90
SB-18	4-5	3/26/1990	4	3 U	14	--	--	190	--	--	--	--	--	--	--	120
SB-19	4-5	3/26/1990	4	3 U	7	--	--	150	--	--	--	--	--	--	--	110
SB-20	4-5	3/26/1990	4	4	11	--	--	880	--	--	--	--	--	--	--	400
SB-21	4-5	3/26/1990	4	3 U	9	--	--	150	--	--	--	--	--	--	--	130
SB-22	4-5	3/26/1990	4	3 U	9	--	--	130	--	--	--	--	--	--	--	84
SB-23	4-5	3/26/1990	4	3 U	7	--	--	120	--	--	--	--	--	--	--	120
SB-24	4-5	3/26/1990	4, Soil Excavated	3 U	9	--	--	180	--	--	--	--	--	--	--	200
SB-25	4-5	3/26/1990	4	3 U	8	--	--	17	--	--	--	--	--	--	--	22
SB-26	4-5	3/26/1990	4	3 U	37	--	--	13	--	--	--	--	--	--	--	21
SB-27	4-5	3/26/1990	4	3 U	8	--	--	12	--	--	--	--	--	--	--	11
SB-28	4-5	3/26/1990	4	3 U	5	--	--	15	--	--	--	--	--	--	--	13
SB-29	4-5	3/26/1990	4	3 U	11	--	--	110	--	--	--	--	--	--	--	120
SB-30	4-5	3/26/1990	4	3 U	11	--	--	34	--	--	--	--	--	--	--	35
SB-31	4-5	3/26/1990	4	3 U	5	--	--	30	--	--	--	--	--	--	--	60
SB-32	4-5	3/26/1990	4	3 U	5 U	--	--	18	--	--	--	--	--	--	--	18
SB-33	4-5	3/26/1990	4	3 U	5 U	--	--	17	--	--	--	--	--	--	--	26

Table 2
Soil Analytical Sample Results
Former Chevron Asphalt Plant and Bulk Terminal #20-6265
1520 Powell Street
Emeryville, California

			Analyte	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
			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
			ESL	1,700	8,000	40,000	230,000	200,000	1,300	40,000	150,000	10,000	20,000	1,300	16,000	600,000
Location ID	Depth Interval	Sample Date	Notes	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
SB-34	4-5	3/26/1990	4	3 U	5	--	--	12	--	--	--	--	--	--	--	8
SB-35	4-5	3/26/1990	4	3 U	7	--	--	30	--	--	--	--	--	--	--	26
SB-36	4-5	3/26/1990	4	3 U	5 U	--	--	41	--	--	--	--	--	--	--	25
SB-37	4-5	3/26/1990	4	3 U	6	--	--	16	--	--	--	--	--	--	--	14
SB-38	4-5	3/26/1990	4	3 U	5 U	--	--	5	--	--	--	--	--	--	--	5
SB-39	4-5	3/26/1990	4	3 U	5 U	--	--	6	--	--	--	--	--	--	--	6
SB-40	4-5	3/26/1990	4	3 U	5 U	--	--	10	--	--	--	--	--	--	--	11
SB-41	4-5	3/26/1990	4	3 U	5 U	--	--	10 U	--	--	--	--	--	--	--	6
SB-42	4-5	3/26/1990	4	3 U	9 U	--	--	120	--	--	--	--	--	--	--	190
SB-43	4-5	3/26/1990	4	3 U	5	--	--	17	--	--	--	--	--	--	--	25
S-1	3.0-4.0	9/18/1990	5	--	--	--	--	--	--	--	--	--	--	--	--	--
S-2	3.0-4.0	9/18/1990	5	--	--	--	--	--	--	--	--	--	--	--	--	--
S-3	3.0-4.0	9/18/1990	5	--	--	--	--	--	--	--	--	--	--	--	--	--
S-4	3.0-4.0	9/18/1990	5	--	--	--	--	--	--	--	--	--	--	--	--	--
S-5	3.0-4.0	9/18/1990	5	--	--	--	--	--	--	--	--	--	--	--	--	--
S-6	3.0-4.0	9/18/1990	5	--	--	--	--	--	--	--	--	--	--	--	--	--
S-7	3.0-4.0	9/18/1990	5	--	--	--	--	--	--	--	--	--	--	--	--	--
B-1	2.5 - 3.0	2/1/1991	6, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--
B-2	2.5 - 3.0	2/1/1991	6, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--
B-3	2.5 - 3.0	2/1/1991	6, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--
B-4	2.5 - 3.0	2/1/1991	6, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--
B-5	2.5 - 3.0	2/1/1991	6, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--
B-6	2.5 - 3.0	2/1/1991	6, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--
B-7	3.5 - 4.0	2/1/1991	6, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--
B-8	2.5 - 3.0	2/1/1991	6, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--
B-9	2.5 - 3.0	2/1/1991	6, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--
B-10	2.5 - 3.0	2/1/1991	6, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--
B-11	2.5 - 3.0	2/1/1991	6, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--
B-12	2.5 - 3.0	2/1/1991	6, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--
B-13	2.5 - 3.0	2/1/1991	6, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--
B-14	2.5 - 3.0	2/1/1991	6, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--
B-15	2.5 - 3.0	2/1/1991	6, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--
B-16	2.5 - 3.0	2/1/1991	6, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--
B-17	2.5 - 3.0	2/1/1991	6, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--
B-18	2.5 - 3.0	2/1/1991	6, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--
B-19	2.5 - 3.0	2/1/1991	6	--	--	--	--	--	--	--	--	--	--	--	--	--
B-20	2.5 - 3.0	2/1/1991	6	--	--	--	--	--	--	--	--	--	--	--	--	--
B-21	2.5 - 3.0	2/1/1991	6	--	--	--	--	--	--	--	--	--	--	--	--	--
B-22	2.5 - 3.0	2/1/1991	6	--	--	--	--	--	--	--	--	--	--	--	--	--
B-23	2.5 - 3.0	2/1/1991	6	--	--	--	--	--	--	--	--	--	--	--	--	--
B-24	2.5 - 3.0	2/1/1991	6	--	--	--	--	--	--	--	--	--	--	--	--	--
B-1	2.5 - 3.0	3/18/1991	7, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--
B-2	2.5 - 3.0	3/18/1991	7, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--
B-3	2.5 - 3.0	3/18/1991	7, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--
B-4	2.5 - 3.0	3/18/1991	7, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--
B-5	2.5 - 3.0	3/18/1991	7, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--
B-7	2.5 - 3.0	3/18/1991	7, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--
B-9	5.5 - 6.0	3/18/1991	7, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--
B-10	2.5 - 3.0	3/18/1991	7, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--
B-11	2.5 - 3.0	3/18/1991	7, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--
B-12	2.5 - 3.0	3/18/1991	7, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--

Table 2
Soil Analytical Sample Results
Former Chevron Asphalt Plant and Bulk Terminal #20-6265
1520 Powell Street
Emeryville, California

			Analyte	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
			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
			ESL	1,700	8,000	40,000	230,000	200,000	1,300	40,000	150,000	10,000	20,000	1,300	16,000	600,000
Location ID	Depth Interval	Sample Date	Notes	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
B-13	5.5 - 6.0	3/18/1991	7, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--
B-14	5.0 - 5.5	3/18/1991	7, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--
B-15	5.5 - 6.0	3/18/1991	7	--	--	--	--	--	--	--	--	--	--	--	--	--
B-16	5.5 - 6.0	3/18/1991	7	--	--	--	--	--	--	--	--	--	--	--	--	--
B-20	2.5 - 3.0	3/18/1991	7	--	--	--	--	--	--	--	--	--	--	--	--	--
B-21	5.5 - 6.0	3/18/1991	7	--	--	--	--	--	--	--	--	--	--	--	--	--
B-22	5.5 - 6.0	3/18/1991	7	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-1	1.5 - 2.0	5/6/1992	8	1000 U	12,000	10,000 U	20,000	44,000	400	10,000 U	20,000	1,000 U	5,000 U	5,000 U	10,000	100,000
SB-1	4.5 - 5.0	5/6/1992	8	1000 U	23,000	10,000 U	20,000	7,000	200	10,000 U	20,000	1,000 U	5,000 U	5,000 U	30,000	30,000
SB-2	1.5 - 2.0	5/6/1992	8	1000 U	19,000	10,000 U	20,000	8,000	1,700	10,000 U	50,000	1,000 U	5,000 U	5,000 U	30,000	20,000
SB-2	4.5 - 5.0	5/6/1992	8	1000 U	19,000	10,000	20,000	13,000	100 U	10,000 U	50,000	1,000 U	5,000 U	5,000 U	30,000	30,000
SB-3	1.5 - 2.0	5/6/1992	8	1000 U	21,000	10,000	40,000	380,000	1,800	10,000 U	30,000	1,000 U	5,000 U	5,000 U	20,000	310,000
SB-4	1.5 - 2.0	5/6/1992	8	1000 U	16,000	10,000 U	40,000	230,000	1,400	10,000 U	20,000	1,000 U	5,000 U	5,000 U	20,000	110,000
HL-4	7.5 - 8.0	5/8/1992	8, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--
HL-5	8.5 - 9.0	5/8/1992	8, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--
S-1	8.5 - 9.0	5/11/1992	8, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--
S-2	11.5 - 12.0	5/11/1992	8, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--
S-3	8.5 - 9.0	5/11/1992	8, Soil Excavated	--	--	--	--	--	--	--	--	--	--	--	--	--
G1(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	--	--	--	--	12,000	--	--	--	--	--	--	--	--
G2(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	--	--	--	--	10,000	--	--	--	--	--	--	--	--
G3(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	--	--	--	--	34,000	--	--	--	--	--	--	--	--
G4(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	--	--	--	--	19,000	--	--	--	--	--	--	--	--
G5(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	--	--	--	--	36,000	--	--	--	--	--	--	--	--
G6(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	--	--	--	--	12,000	--	--	--	--	--	--	--	--
G7(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	--	--	--	--	34,000	--	--	--	--	--	--	--	--
G8(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	--	--	--	--	19,000	--	--	--	--	--	--	--	--
G9(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	--	--	--	--	140,000	--	--	--	--	--	--	--	--
G10(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	--	--	--	--	13,000	--	--	--	--	--	--	--	--
G11(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	--	--	--	--	48,000	--	--	--	--	--	--	--	--
G12(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	--	--	--	--	51,000	--	--	--	--	--	--	--	--
G13(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	--	--	--	--	14,000	--	--	--	--	--	--	--	--
G14(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	--	--	--	--	6,500	--	--	--	--	--	--	--	--
G15(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	--	--	--	--	36,000	--	--	--	--	--	--	--	--
G16(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	--	--	--	--	6,000	--	--	--	--	--	--	--	--
G17(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	--	--	--	--	8,500	--	--	--	--	--	--	--	--
G18(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	--	--	--	--	9,000	--	--	--	--	--	--	--	--
G19(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	--	--	--	--	9,000	--	--	--	--	--	--	--	--
G20(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	--	--	--	--	11,000	--	--	--	--	--	--	--	--
G21(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	--	--	--	--	12,000	--	--	--	--	--	--	--	--
G22(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	--	--	--	--	17,000	--	--	--	--	--	--	--	--
G23(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	--	--	--	--	13,000	--	--	--	--	--	--	--	--
G24(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	--	--	--	--	19,000	--	--	--	--	--	--	--	--
G25(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	--	--	--	--	17,000	--	--	--	--	--	--	--	--
G26(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	--	--	--	--	29,000	--	--	--	--	--	--	--	--
G27(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	--	--	--	--	65,000	--	--	--	--	--	--	--	--
G28(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	--	--	--	--	150,000	--	--	--	--	--	--	--	--
G29(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	--	--	--	--	10,000	--	--	--	--	--	--	--	--
G30(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	--	--	--	--	10,000	--	--	--	--	--	--	--	--
G31(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	--	--	--	--	600,000	--	--	--	--	--	--	--	--
G32(5,9.5,A5,A9.5)	4.0-10.0	11/22/1999	9, Soil Excavated	--	--	--	--	9,100	--	--	--	--	--	--	--	--
MWX-2	4.5-5.0	5/27/2009	10	--	--	--	--	--	--	--	--	--	--	--	--	--

Table 2
Soil Analytical Sample Results
Former Chevron Asphalt Plant and Bulk Terminal #20-6265
1520 Powell Street
Emeryville, California

			Analyte	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
			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
			ESL	1,700	8,000	40,000	230,000	200,000	1,300	40,000	150,000	10,000	20,000	1,300	16,000	600,000
Location ID	Depth Interval	Sample Date	Notes	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
MWX-2	9.5-10.0	5/28/2009	10	--	--	--	--	--	--	--	--	--	--	--	--	--
MWX-2	12.5-13.0	5/28/2009	10	--	--	--	--	--	--	--	--	--	--	--	--	--
MWX-3	4.5-5.0	5/26/2009	10	--	--	--	--	--	--	--	--	--	--	--	--	--
MWX-3	9.5-10.0	5/29/2009	10	--	--	--	--	--	--	--	--	--	--	--	--	--
MWX-3	12.5-13.0	5/29/2009	10	--	--	--	--	--	--	--	--	--	--	--	--	--
MWX-6	4.5-5.0	5/28/2009	10	--	--	--	--	--	--	--	--	--	--	--	--	--
MWX-6	9.5-10.0	5/29/2009	10	--	--	--	--	--	--	--	--	--	--	--	--	--
MWX-6	12.5-13.0	5/29/2009	10	--	--	--	--	--	--	--	--	--	--	--	--	--
MWX-8	4.5-5.0	5/26/2009	10	--	--	--	--	--	--	--	--	--	--	--	--	--
MWX-8	9.5-10.0	5/28/2009	10	--	--	--	--	--	--	--	--	--	--	--	--	--
MWX-8	12.5-13.0	5/28/2009	10	--	--	--	--	--	--	--	--	--	--	--	--	--
MWX-9	4.5-5.0	5/28/2009	10	--	--	--	--	--	--	--	--	--	--	--	--	--
MWX-9	9.5-10.0	5/29/2009	10	--	--	--	--	--	--	--	--	--	--	--	--	--
MWX-9	12.5-13.0	5/29/2009	10	--	--	--	--	--	--	--	--	--	--	--	--	--
MWX-10A	4.5-5.0	5/27/2009	10	--	--	--	--	--	--	--	--	--	--	--	--	--
MWX-10A	9.5-10.0	5/28/2009	10	--	--	--	--	--	--	--	--	--	--	--	--	--
MWX-10A	12.5-13.0	5/28/2009	10	--	--	--	--	--	--	--	--	--	--	--	--	--
MWX-11A	4.5-5.0	5/27/2009	10	--	--	--	--	--	--	--	--	--	--	--	--	--
MWX-11A	9.5-10.0	5/28/2009	10	--	--	--	--	--	--	--	--	--	--	--	--	--
MWX-11A	12.5-13.0	5/28/2009	10	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-1A	3.5-4.0	5/27/2009	10	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-2A	3.5-4.0	5/27/2009	10	--	--	--	--	--	--	--	--	--	--	--	--	--

Notes Appear on following page.

Table 2
Soil Analytical Sample Results
Former Chevron Asphalt Plant and Bulk Terminal #20-6265
1520 Powell Street
Emeryville, California

Notes:

- ¹ Data were compiled from Cambria's Site Information Summary for Case Closure, Former Asphalt Plant and Terminal No. 1001067, Emeryville, California, October 27, 1997. Soil sampling originally completed by Harding Lawson Associates in 1988.
- ² Data were compiled from Western Geologic Resources, Inc.'s memorandum to Chevron regarding the Chevron Asphalt Plant, Emeryville, California, February 27, 1989.
- ³ Data were compiled from Western Geologic Resources, Inc.'s Additional Subsurface Investigation, Abandoned Chevron Asphalt Plant, Emeryville, California, March 1990.
- ⁴ Data were compiled from Western Geologic Resources, Inc.'s memorandum to Chevron regarding Soil Sampling, Former Chevron Asphalt Plant and Terminal, Emeryville, California, April 24, 1990.
- ⁵ Data were compiled from Western Geologic Resources, Inc. memorandum to Chevron regarding Additional Soils Excavation, Western Boundary, Former Chevron Asphalt Plant, Emeryville, California, December 20, 1990.
- ⁶ Data were compiled from Western Geologic Resources, Inc.'s memorandum to Chevron regarding the Former Chevron Terminal, Emeryville, California, February 27, 1991.
- ⁷ Data were compiled from Western Geologic Resources, Inc.'s memorandum to Chevron regarding the Former Chevron Terminal, Emeryville, California, May 17, 1991.
- ⁸ Data were compiled from Geraghty & Miller, Inc.'s memorandum to Chevron regarding Results of the Soil Sampling Activities, Former Chevron Asphalt Plant Facility No. 1001067, Emeryville, California, June 8, 1992.
- ⁹ Data were compiled from Gettler-Ryan Inc.'s Pre-Construction Subsurface Investigation and Well Destruction Report, Former Chevron Bulk Fuel Terminal and Asphalt Plant, Emeryville, California, March 9, 2000.
- ¹⁰ Data from ARCADIS 2009 soil investigation.

Bold = Analyte detected.

D = Diesel fuel characterization

DCA = dichloroethane

DCE = dichloroethene

E = Chromatogram pattern shows heavy hydrocarbons.

ESL = Environmental screening levels for shallow soil in residential areas where groundwater is not a potential source of drinking water.

F = Chromatogram not typical of diesel.

G = Gas fuel characterization

O = Oil fuel characterization

PCB = polychlorinated biphenyl

PCE = tetrachloroethylene

TCA = trichloroethane

TCE = trichloroethylene

TPH-d = total petroleum hydrocarbons as diesel

TPH-g = total petroleum hydrocarbons as gasoline

TRPH = total recoverable petroleum hydrocarbons

U = Analyte not detected. Reporting limit provided.

µg/kg = micrograms per kilogram


 = Detected concentration exceeds ESL.

Table 3
Groundwater Monitoring and Analytical Results (Total Petroleum Hydrocarbons and BTEX)
Former Chevron Asphalt Plant and Bulk Terminal #20-6265
1520 Powell Street
Emeryville, California

Well ID	Date	Notes	TOC (feet)	GWE (msl)	DTW (feet)	SPHT (feet)	SPH REMOVED (gallons)	TPH-g (µg/L)	TPH-d (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	TOG (µg/L)
ESL	--		--	--	--	--	--	5,000	2,500	540	380,000	170,000	160,000	24,000	--
MW-1	4/26/1985		10.67	--	--	--	--	--	--	99	--	--	6.0	--	--
MW-1	9/11/1987		10.67	--	--	--	--	--	--	63	--	--	--	--	--
MW-1	7/7/1988		10.67	--	--	--	--	<100	--	55	--	--	--	--	--
MW-1	4/13/1989		10.67	6.95	3.72	--	--	--	--	--	--	--	--	--	--
MW-1	4/14/1989	14	10.67	--	--	--	--	<5,000	--	34	<5.0	<5.0	<10	--	--
MW-1	7/31/1989	15	10.67	4.95	5.72	--	--	7,000	--	57	1.2	<0.2	1.6	--	--
MW-1	12/8/1989		10.67	5.87	4.80	--	--	--	--	26	0.4	0.9	2.0	--	--
MW-1	3/21/1990		10.67	5.93	4.74	--	--	3,500	--	120	9.0	3.0	3.0	--	--
MW-1	6/19/1990		10.67	5.92	4.75	--	--	2,700	--	100	<0.3	<0.3	7.0	--	--
MW-1	9/20/1990		10.67	5.60	5.07	--	--	--	--	--	--	--	--	--	--
MW-1	9/21/1990	16	10.67	--	--	--	--	2,200	--	120	2.0	2.0	0.79	--	--
MW-1	12/28/1990	17	10.67	5.76	4.91	--	--	720	--	44	2.0	<0.5	9.0	--	--
MW-1	5/10/1991	18	10.67	5.37	5.30	--	--	530	--	47	2.0	0.5	8.0	--	--
MW-1	8/8/1991	19	10.67	4.82	5.85	--	--	1,400	--	37	8.3	3.7	12	--	--
MW-1	11/27/1991		10.67	5.54	5.13	--	--	840	--	16	7.1	4.5	11	--	--
MW-1	1/29/1992		10.67	5.85	4.82	--	--	350	--	18	9.3	3.7	7.7	--	--
MW-1	3/26/1992		10.67	6.35	4.32	--	--	420	--	19	2.2	1.2	4.0	--	--
MW-1	7/23/1992		10.67	5.25	5.42	--	--	4,000	--	50	82	40	160	--	--
MW-1	10/28/1992		10.67	5.11	5.56	--	--	980	--	36	6.7	3.0	10	--	--
MW-1	5/4/1993		10.67	4.37	6.30	--	--	650	--	9.4	2.4	1.2	4.5	--	--
MW-1	1/5/1994	END OF MONITORING	10.67	--	--	--	--	--	--	--	--	--	--	--	--
MW-2	4/26/1985		13.78	--	--	--	--	--	--	<10	--	--	--	--	--
MW-2	9/11/1987		13.78	--	--	--	--	--	--	--	--	--	--	--	--
MW-2	7/7/1988		13.78	--	--	--	--	<100	--	<5.0	--	--	--	--	--
MW-2	4/13/1989		13.78	11.16	2.62	--	--	--	--	--	--	--	--	--	--
MW-2	4/14/1989		13.78	--	--	--	--	<100	--	<0.2	<0.2	<0.2	<0.4	--	--
MW-2	7/31/1989		13.78	9.15	4.63	--	--	<100	--	<0.2	<1.0	<0.2	<0.4	--	--
MW-2	12/8/1989		13.78	7.80	5.98	--	--	--	--	<0.3	<0.3	<0.3	<0.6	--	--
MW-2	3/21/1990		13.78	7.93	5.85	--	--	<50	--	<0.3	<0.3	<0.3	<0.6	--	--
MW-2	6/19/1990		13.78	7.83	5.95	--	--	<50	--	<0.3	<0.3	<0.3	<0.6	--	--
MW-2	9/20/1990		13.78	6.92	6.86	--	--	--	--	--	--	--	--	--	--
MW-2	9/21/1990		13.78	--	--	--	--	<50	--	<1.5	<1.5	<1.5	<4.5	--	--
MW-2	12/28/1990		13.78	7.44	6.34	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	--	--
MW-2	5/10/1991		13.78	7.82	5.96	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	--	--
MW-2	8/8/1991		--	--	--	--	--	--	--	--	--	--	--	--	--
MW-2	11/27/1991		13.78	5.74	8.04	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	--	--
MW-2	1/29/1992		13.78	7.77	6.01	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	--	--
MW-2	3/26/1992		13.78	7.68	6.10	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	--	--
MW-2	7/23/1992		13.78	6.39	7.39	--	--	<50	--	<0.5	<0.5	<0.5	0.8	--	--

Table 3
Groundwater Monitoring and Analytical Results (Total Petroleum Hydrocarbons and BTEX)
Former Chevron Asphalt Plant and Bulk Terminal #20-6265
1520 Powell Street
Emeryville, California

Well ID	Date	Notes	TOC (feet)	GWE (msl)	DTW (feet)	SPHT (feet)	SPH REMOVED (gallons)	TPH-g (µg/L)	TPH-d (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	TOG (µg/L)
ESL	--		--	--	--	--	--	5,000	2,500	540	380,000	170,000	160,000	24,000	--
MW-2	10/28/1992		13.78	6.27	7.51	--	--	55	--	1.3	6.9	1.1	5.1	--	--
MW-2	5/4/1993	INACCESSIBLE	13.78	--	--	--	--	--	--	--	--	--	--	--	--
MW-2	1/5/1994	INACCESSIBLE	13.78	--	--	--	--	--	--	--	--	--	--	--	--
MW-2	5/13/1994	INACCESSIBLE	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-2	10/24/1994	DRY	13.78	--	--	--	--	--	--	--	--	--	--	--	--
MW-2	4/19/1995	ABANDONED	13.78	11.28	2.51	0.01	--	--	--	--	--	--	--	--	--
MW-2A	11/6/1995		12.45	7.94	4.51	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	<5.0	--
MW-2A	4/26/1996		12.45	8.35	4.10	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	<5.0	--
MW-2A	10/10/1996	2	12.45	7.13	5.32	--	--	60	--	<0.5	<0.5	<0.5	<0.5	<5.0	--
MW-2A	4/22/1997		12.45	8.50	3.95	--	--	<50	--	0.8	<0.5	<0.5	<0.5	<5.0	--
MW-2A	10/16/1997		12.45	7.77	4.68	--	--	80	--	<0.5	<0.5	<0.5	<0.5	<5.0	--
MW-2A	5/4/1998	2	12.45	8.91	3.54	--	--	96	--	<0.5	<0.5	<0.5	<0.5	<2.5	--
MW-2A	10/27/1998	2, 7	12.45	7.31	5.14	--	--	170	--	<0.5	<0.5	<0.5	9.6	44/<2.0	--
MW-2A	4/15/1999		12.45	9.83	2.62	--	--	116	--	0.609	<0.5	<0.5	<0.5	<5.0	--
MW-2A	11/4/1999	END OF MONITORING	12.45	7.38	5.07	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	<2.5	--
MW-3	4/26/1985		11.73	--	--	--	--	--	--	<10	--	--	--	--	--
MW-3	9/11/1987		11.73	--	--	--	--	--	--	<0.5	--	--	--	--	--
MW-3	7/7/1988		11.73	--	--	--	--	<100	--	<5.0	--	--	--	--	--
MW-3	4/13/1989		11.73	9.39	2.34	--	--	--	--	--	--	--	--	--	--
MW-3	4/14/1989		11.73	--	--	--	--	<100	--	<0.2	<0.2	<0.2	<0.4	--	<3,000,000
MW-3	7/31/1989		11.73	6.94	4.79	--	--	<100	--	<0.2	<1.0	<0.2	<0.4	--	--
MW-3	12/8/1989		11.73	8.70	3.03	--	--	--	--	<0.3	<0.3	<0.3	<0.6	--	--
MW-3	3/21/1990		11.73	9.18	2.55	--	--	<50	--	<0.3	<0.3	<0.3	<0.6	--	--
MW-3	6/19/1990		--	--	--	--	--	--	--	--	--	--	--	--	--
MW-3	9/20/1990		11.73	7.30	4.43	--	--	--	--	--	--	--	--	--	--
MW-3	9/21/1990		11.73	--	--	--	--	<50	--	<0.3	<0.3	<0.3	<0.6	--	--
MW-3	12/28/1990		11.73	8.06	3.67	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	--	--
MW-3	5/10/1991		11.73	8.90	2.83	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	--	--
MW-3	8/8/1991		11.73	6.64	5.09	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	--	--
MW-3	11/27/1991		11.73	6.36	5.37	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	--	--
MW-3	1/29/1992		11.73	8.27	3.46	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	--	--
MW-3	3/26/1992		11.73	9.63	2.10	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	--	--
MW-3	7/23/1992		11.73	7.13	4.60	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	--	--
MW-3	10/28/1992		11.73	6.66	5.07	--	--	92	--	1.8	12	2.0	10	--	--
MW-3	5/4/1993	INACCESSIBLE	11.73	--	--	--	--	--	--	--	--	--	--	--	--
MW-3	1/5/1994	INACCESSIBLE	11.73	--	--	--	--	--	--	--	--	--	--	--	--
MW-3	5/13/1994	END OF MONITORING	--	--	--	--	--	--	--	--	--	--	--	--	--

Table 3
Groundwater Monitoring and Analytical Results (Total Petroleum Hydrocarbons and BTEX)
Former Chevron Asphalt Plant and Bulk Terminal #20-6265
1520 Powell Street
Emeryville, California

Well ID	Date	Notes	TOC (feet)	GWE (msl)	DTW (feet)	SPHT (feet)	SPH REMOVED (gallons)	TPH-g (µg/L)	TPH-d (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	TOG (µg/L)
ESL	--		--	--	--	--	--	5,000	2,500	540	380,000	170,000	160,000	24,000	--
MW-4	4/26/1985		--	--	--	--	--	3,100	--	<10	--	--	--	--	--
MW-4	9/11/1987		--	--	--	--	--	--	--	<0.5	--	--	--	--	--
MW-4	7/7/1988		--	--	--	--	--	<100	--	<5.0	--	--	--	--	--
MW-4	4/13/1989		--	--	2.12	--	--	--	--	--	--	--	--	--	--
MW-4	4/14/1989	1, END OF MONITORING	--	--	--	--	--	380	--	<0.5	<1.0	<1.0	<1.0	--	<3,000,000
MW-5	4/26/1985		--	--	--	--	--	1,600	--	<100	--	--	--	--	--
MW-5	9/11/1987		--	--	--	--	--	--	--	<10	--	--	--	--	--
MW-5	7/7/1988		--	--	--	--	--	<100	--	<5.0	--	--	--	--	--
MW-5	4/13/1989		--	--	2.79	--	--	--	--	--	--	--	--	--	--
MW-5	4/14/1989	1, END OF MONITORING	--	--	--	--	--	4,300	--	<0.5	<1.0	<1.0	<1.0	--	<3,000,000
MW-6	4/26/1985		--	--	--	--	--	580	--	<100	--	--	--	--	--
MW-6	9/11/1987		--	--	--	--	--	--	--	<10	--	--	--	--	--
MW-6	7/7/1988		--	--	--	--	--	8,000	--	<5.0	--	--	--	--	--
MW-6	4/13/1989		--	--	1.90	--	--	--	--	--	--	--	--	--	--
MW-6	4/14/1989	1, END OF MONITORING	--	--	--	--	--	3,300	--	<0.5	<1.0	<1.0	<1.0	--	<3,000,000
MW-7	4/26/1985		10.47	--	--	--	--	700	--	ND	--	--	--	--	--
MW-7	9/11/1987		10.47	--	--	--	--	--	--	<10	--	--	--	--	--
MW-7	7/7/1988		10.47	--	--	--	--	17,000	--	<5.0	--	--	--	--	--
MW-7	4/13/1989		10.47	8.57	1.90	--	--	--	--	--	--	--	--	--	--
MW-7	4/14/1989		10.47	--	--	--	--	<50	--	<0.5	<1.0	<1.0	<1.0	--	<3,000,000
MW-7	7/31/1989	1, 20	10.47	6.23	4.24	--	--	160	--	<0.1	<0.5	<0.1	<0.2	--	--
MW-7	7/31/1989	1, 20	10.47	--	--	--	--	100	--	<0.1	<0.5	<0.1	<0.2	--	--
MW-7	12/8/1989		10.47	7.82	2.65	--	--	--	--	<0.3	<0.3	<0.3	<0.6	--	--
MW-7	3/21/1990		10.47	7.71	2.76	--	--	<50	--	<0.3	<0.3	<0.3	0.6	--	--
MW-7	6/19/1990		10.47	7.23	3.24	--	--	<50	--	<0.3	<0.3	<0.3	0.6	--	--
MW-7	9/20/1990		10.47	5.90	4.57	--	--	--	--	--	--	--	--	--	--
MW-7	9/21/1990		10.47	--	--	--	--	<50	--	1.5	<0.3	<0.3	<0.6	--	--
MW-7	12/28/1990		10.47	7.35	3.12	--	--	<50	--	0.7	<0.5	<0.5	0.7	--	--
MW-7	5/10/1991		10.47	6.94	3.53	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	--	--
MW-7	8/8/1991		10.47	5.83	4.64	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	--	--
MW-7	11/27/1991		10.47	6.81	3.66	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	--	--
MW-7	1/29/1992		10.47	7.23	3.24	--	--	<50	--	<0.5	<0.5	<0.5	0.9	--	--
MW-7	3/26/1992		10.47	7.86	2.61	--	--	<50	--	<0.5	<0.5	<0.5	0.9	--	--
MW-7	7/23/1992		10.47	6.28	4.19	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	--	--
MW-7	10/28/1992		10.47	6.08	4.39	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	--	--
MW-7	5/4/1993	INACCESSIBLE	10.47	--	--	--	--	--	--	--	--	--	--	--	--
MW-7	1/5/1994	INACCESSIBLE	10.47	--	--	--	--	--	--	--	--	--	--	--	--

Table 3
Groundwater Monitoring and Analytical Results (Total Petroleum Hydrocarbons and BTEX)
Former Chevron Asphalt Plant and Bulk Terminal #20-6265
1520 Powell Street
Emeryville, California

Well ID	Date	Notes	TOC (feet)	GWE (msl)	DTW (feet)	SPHT (feet)	SPH REMOVED (gallons)	TPH-g (µg/L)	TPH-d (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	TOG (µg/L)
ESL	--		--	--	--	--	--	5,000	2,500	540	380,000	170,000	160,000	24,000	--
MW-7	5/13/1994		10.47	6.06	4.41	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	--	--
MW-7	10/24/1994		10.47	5.44	5.03	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	--	--
MW-7	4/19/1995		10.47	5.94	4.53	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	--	--
MW-7	11/6/1995		10.47	5.36	5.11	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	<5.0	--
MW-7	4/26/1996		10.47	6.07	4.40	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	<5.0	--
MW-7	10/10/1996		10.47	5.45	5.02	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	<5.0	--
MW-7	4/22/1997		10.47	5.93	4.54	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	<5.0	--
MW-7	10/16/1997		10.47	6.05	4.42	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	<5.0	--
MW-7	5/4/1998		10.47	6.05	4.42	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	<2.5	--
MW-7	10/27/1998		10.47	5.66	4.81	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	<2.5	--
MW-7	4/15/1999		10.47	6.07	4.40	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	<5.0	--
MW-7	11/4/1999		10.47	5.50	4.97	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	<2.5	--
MW-7	4/13/2000	INACCESSIBLE	10.47	--	--	--	--	--	--	--	--	--	--	--	--
MW-7	10/5/2000	UNABLE TO LOCATE	10.47	--	--	--	--	--	--	--	--	--	--	--	--
MW-7	4/23/2001	UNABLE TO LOCATE	10.47	--	--	--	--	--	--	--	--	--	--	--	--
MW-7	10/4/2001	UNABLE TO LOCATE	10.47	--	--	--	--	--	--	--	--	--	--	--	--
MW-7	4/1/2002	UNABLE TO LOCATE	10.47	--	--	--	--	--	--	--	--	--	--	--	--
MW-7	10/19/2002	UNABLE TO LOCATE	10.47	--	--	--	--	--	--	--	--	--	--	--	--
MW-7	4/16/2003	UNABLE TO LOCATE	10.47	--	--	--	--	--	--	--	--	--	--	--	--
MW-7	10/29/2003	UNABLE TO LOCATE	10.47	--	--	--	--	--	--	--	--	--	--	--	--
MW-8	4/26/1985		10.46	--	--	--	--	--	--	ND	--	--	--	--	--
MW-8	9/11/1987		10.46	--	--	--	--	--	--	<10	--	--	--	--	--
MW-8	7/7/1988		10.46	--	--	--	--	20,000	--	<5.0	--	--	--	--	--
MW-8	4/13/1989		10.46	7.66	2.80	--	--	--	--	--	--	--	--	--	--
MW-8	4/14/1989		10.46	--	--	--	--	<50	--	<0.5	<1.0	<1.0	<1.0	<3,000	<3,000,000
MW-8	7/31/1989		10.46	4.76	5.70	--	--	<50	--	<0.1	<0.5	<0.1	<0.2	--	--
MW-8	12/8/1989		10.46	6.33	4.13	--	--	--	--	<0.3	<0.3	<0.3	<0.6	--	--
MW-8	3/21/1990		10.46	6.39	4.07	--	--	<50	--	<0.3	<0.3	<0.3	<0.6	--	--
MW-8	6/19/1990		10.46	6.21	4.25	--	--	<50	--	<0.3	<0.3	<0.3	<0.6	--	--
MW-8	9/20/1990		10.46	5.47	4.99	--	--	--	--	--	--	--	--	--	--
MW-8	9/21/1990		10.46	--	--	--	--	<50	--	6.0	<0.3	<0.3	<0.6	--	--
MW-8	12/28/1990		10.46	6.07	4.39	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	--	--
MW-8	5/10/1991		10.46	6.33	4.13	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	--	--
MW-8	8/8/1991		10.46	4.93	5.53	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	--	--
MW-8	11/27/1991		10.46	5.87	4.59	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	--	--
MW-8	1/29/1992		--	--	--	--	--	--	--	--	--	--	--	--	--
MW-8	3/26/1992		10.46	6.87	3.59	--	--	<50	--	<0.5	<0.5	<0.5	0.7	--	--
MW-8	7/23/1992		10.46	5.40	5.06	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	--	--
MW-8	10/28/1992	INACCESSIBLE	10.46	--	--	--	--	--	--	--	--	--	--	--	--

Table 3
Groundwater Monitoring and Analytical Results (Total Petroleum Hydrocarbons and BTEX)
Former Chevron Asphalt Plant and Bulk Terminal #20-6265
1520 Powell Street
Emeryville, California

Well ID	Date	Notes	TOC (feet)	GWE (msl)	DTW (feet)	SPHT (feet)	SPH REMOVED (gallons)	TPH-g (µg/L)	TPH-d (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	TOG (µg/L)
ESL	--		--	--	--	--	--	5,000	2,500	540	380,000	170,000	160,000	24,000	--
MW-8	5/4/1993	INACCESSIBLE	10.46	--	--	--	--	--	--	--	--	--	--	--	--
MW-8	1/5/1994	INACCESSIBLE	10.46	--	--	--	--	--	--	--	--	--	--	--	--
MW-8	5/13/1994		10.46	4.87	5.59	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	--	--
MW-8	10/24/1994	INACCESSIBLE	10.46	--	--	--	--	--	--	--	--	--	--	--	--
MW-8	4/19/1995	3, INACCESSIBLE	10.46	--	--	--	--	--	--	--	--	--	--	--	--
MW-8	11/6/1995	INACCESSIBLE	10.46	--	--	--	--	--	--	--	--	--	--	--	--
MW-8	4/26/1996	INACCESSIBLE	10.46	--	--	--	--	--	--	--	--	--	--	--	--
MW-8	10/10/1996	INACCESSIBLE	10.46	--	--	--	--	--	--	--	--	--	--	--	--
MW-8	4/22/1997		10.46	4.67	5.79	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	<5.0	--
MW-8	10/16/1997		10.46	5.14	5.32	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	<5.0	--
MW-8	5/4/1998		10.46	4.91	5.55	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	<2.5	--
MW-8	10/27/1998		10.46	4.49	5.97	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	<2.5	--
MW-8	4/15/1999		10.46	5.21	5.25	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	<5.0	--
MW-8	11/4/1999	END OF MONITORING	10.46	4.04	6.42	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	<2.5	--
MW-9	4/26/1985		--	--	--	--	--	--	--	--	--	--	--	--	--
MW-9	9/11/1987		--	--	--	--	--	--	--	--	--	--	--	--	--
MW-9	7/7/1988		--	--	--	--	--	400	--	--	--	--	--	--	--
MW-9	5/10/1991	END OF MONITORING	--	--	--	--	--	--	--	--	--	--	--	--	--
MWX-2	6/24/2009		12.10	7.35	4.75	0.00	0.00	--	--	--	--	--	--	--	--
MWX-2	10/27/2009		--	--	--	--	--	--	--	--	--	--	--	--	--
MWX-2	5/19/2010		12.10	7.91	4.19	0.00	0.00	200	240	<0.5	<0.5	<0.5	<0.5	<0.5	--
MWX-2	10/27/2010		12.10	7.98	4.12	0.00	0.00	420	110	<0.5	<0.5	<0.5	<0.5	<0.5	--
MWX-2	6/9/2011		12.10	8.31	3.79	--	--	180	330	<0.5	<0.5	<0.5	<0.5	<0.5	--
MWX-2	12/2/2011		12.10	7.79	4.31	--	--	340 [330]	<50 [<49]	<0.5 [<0.5]	<0.5 [<0.5]	<0.5 [<0.5]	<0.5 [<0.5]	<0.5 [<0.5]	--
MWX-2	6/26/2012	NOT ACCESSIBLE	--	--	--	--	--	--	--	--	--	--	--	--	--
MWX-3	6/24/2009		13.45	7.52	5.93	0.00	0.00	--	--	--	--	--	--	--	--
MWX-3	10/27/2009		--	--	--	--	--	--	--	--	--	--	--	--	--
MWX-3	5/19/2010		13.45	7.83	5.62	0.00	0.00	470	93	<0.5	<0.5	<0.5	<0.5	<0.5	--
MWX-3	10/27/2010		13.45	8.03	5.42	0.00	0.00	440	68	<0.5	<0.5	<0.5	<0.5	<0.5	--
MWX-3	6/7/2011		13.45	8.04	5.41	--	--	590	65	<0.5	<0.5	<0.5	<0.5	<0.5	--
MWX-3	12/2/2011		13.45	7.50	5.95	--	--	900	<51	<0.5	<0.5	<0.5	<0.5	<0.5	--
MWX-3	06/27/2012		13.45	8.44	5.01	--	--	92	<53	0.6	<0.5	<0.5	<0.5	<0.5	--
MWX-6	6/24/2009		11.41	4.89	6.52	0.00	0.00	--	--	--	--	--	--	--	--
MWX-6	10/27/2009		--	--	--	--	--	--	--	--	--	--	--	--	--
MWX-6	5/20/2010		11.41	5.46	5.95	0.00	0.00	<50	85	<0.5	<0.5	<0.5	<0.5	<0.5	--
MWX-6	10/26/2010		11.41	5.64	5.77	0.00	0.00	<50	<51	<0.5	<0.5	<0.5	<0.5	<0.5	--

Table 3
Groundwater Monitoring and Analytical Results (Total Petroleum Hydrocarbons and BTEX)
Former Chevron Asphalt Plant and Bulk Terminal #20-6265
1520 Powell Street
Emeryville, California

Well ID	Date	Notes	TOC (feet)	GWE (msl)	DTW (feet)	SPHT (feet)	SPH REMOVED (gallons)	TPH-g (µg/L)	TPH-d (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	TOG (µg/L)
ESL	--		--	--	--	--	--	5,000	2,500	540	380,000	170,000	160,000	24,000	--
MWX-6	6/8/2011		11.41	6.40	5.01	--	--	<50	53	<0.5	<0.5	<0.5	<0.5	<0.5	--
MWX-6	11/30/2011		11.41	5.36	6.05	--	--	<50	<49	<0.5	<0.5	<0.5	<0.5	<0.5	--
MWX-6	06/27/2012		11.41	5.32	6.09	--	--	<50	<49	<0.5	<0.5	<0.5	<0.5	<0.5	--
MWX-8	6/24/2009		13.12	7.11	6.01	0.00	0.00	--	--	--	--	--	--	--	--
MWX-8	10/27/2009		--	--	--	--	--	--	--	--	--	--	--	--	--
MWX-8	5/18/2010		13.12	7.75	5.37	0.00	0.00	170	67	<0.5	<0.5	<0.5	<0.5	<0.5	--
MWX-8	10/26/2010		13.12	7.94	5.18	0.00	0.00	270	<49	<0.5	<0.5	<0.5	<0.5	<0.5	--
MWX-8	6/8/2011		13.12	8.24	4.53	--	--	160	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
MWX-8	12/2/2011		13.12	7.52	5.25	--	--	230	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
MWX-8	06/27/2012		13.12	8.32	4.80	--	--	<50	<51	<0.5	<0.5	<0.5	<0.5	<0.5	--
MWX-9	6/24/2009		11.46	4.86	6.60	0.00	0.00	--	--	--	--	--	--	--	--
MWX-9	10/27/2009		--	--	--	--	--	--	--	--	--	--	--	--	--
MWX-9	5/20/2010		11.46	5.42	6.04	0.00	0.00	<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
MWX-9	10/26/2010		11.46	5.65	5.81	0.00	0.00	<50 [<50]	<47 [<47]	<0.5 [<0.5]	<0.5 [<0.5]	<0.5 [<0.5]	<0.5 [<0.5]	<0.5 [<0.5]	--
MWX-9	6/9/2011		11.46	6.26	5.2	--	--	<50 [<50]	<48 [<48]	<0.5 [<0.5]	<0.5 [<0.5]	<0.5 [<0.5]	<0.5 [<0.5]	<0.5 [<0.5]	--
MWX-9	11/30/2011		11.46	5.38	6.08	--	--	<50	<54	<0.5	<0.5	<0.5	<0.5	<0.5	--
MWX-9	06/27/2012		11.46	5.40	6.06	--	--	<50	130	<0.5	<0.5	<0.5	<0.5	<0.5	--
MW-10	7/7/1988		10.82	--	--	--	--	--	--	<5.0	--	--	--	--	--
MW-10	4/14/1989		10.82	--	--	--	--	<50	--	<0.5	<1.0	<1.0	<1.0	--	<3,000,000
MW-10	7/31/1989		10.82	--	--	--	--	<50	--	<0.1	<0.5	<0.1	<0.2	--	--
MW-10	12/8/1989		10.82	--	--	--	--	--	--	<0.3	<0.3	<0.3	<0.6	--	--
MW-10	3/21/1990		10.82	6.22	4.60	--	--	<50	--	<0.3	<0.3	<0.3	<0.6	--	--
MW-10	6/19/1990		10.82	5.93	4.89	--	--	<50	--	<0.3	<0.3	<0.3	<0.6	--	--
MW-10	9/20/1990		10.82	5.05	5.77	--	--	--	--	--	--	--	--	--	--
MW-10	9/21/1990		10.82	--	--	--	--	<50	--	<0.3	<0.3	<0.3	<0.6	--	--
MW-10	12/28/1990		10.82	5.83	4.99	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	--	--
MW-10	5/10/1991		10.82	5.02	5.80	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	--	--
MW-10	8/8/1991		10.82	4.96	5.86	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	--	--
MW-10	11/27/1991		10.82	5.43	5.39	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	--	--
MW-10	1/29/1992		10.82	5.38	5.44	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	--	--
MW-10	3/26/1992		10.82	5.86	4.96	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	--	--
MW-10	7/23/1992		10.82	5.02	5.80	--	--	<50	--	<0.5	1.8	0.5	1.9	--	--
MW-10	10/28/1992		10.82	4.76	6.06	--	--	<50	--	0.6	0.7	<0.5	1.2	--	--
MW-10	5/4/1993	INACCESSIBLE	10.82	--	--	--	--	--	--	--	--	--	--	--	--
MW-10	1/5/1994		10.82	4.90	5.92	--	--	<50	--	<0.5	<0.5	<0.5	0.6	--	--
MW-10	5/13/1994		10.82	5.73	5.09	--	--	140	--	<0.5	<0.5	<0.5	1.3	--	--
MW-10	10/24/1994		10.82	4.58	6.24	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	--	--

Table 3
Groundwater Monitoring and Analytical Results (Total Petroleum Hydrocarbons and BTEX)
Former Chevron Asphalt Plant and Bulk Terminal #20-6265
1520 Powell Street
Emeryville, California

Well ID	Date	Notes	TOC (feet)	GWE (msl)	DTW (feet)	SPHT (feet)	SPH REMOVED (gallons)	TPH-g (µg/L)	TPH-d (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	TOG (µg/L)
ESL	--		--	--	--	--	--	5,000	2,500	540	380,000	170,000	160,000	24,000	--
MW-10	4/19/1995		10.82	5.56	5.26	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	--	--
MW-10	11/6/1995		10.82	4.57	6.25	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	<5.0	--
MW-10	4/26/1996	INACCESSIBLE	10.82	--	--	--	--	--	--	--	--	--	--	--	--
MW-10	10/10/1996	8	10.82	4.72	6.10	--	--	<50	--	<0.5	<0.5	<0.5	0.6	34 / <5.0	--
MW-10	4/22/1997		10.82	5.32	5.50	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	<5.0	--
MW-10	10/16/1997		10.82	5.74	5.08	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	34	--
MW-10	5/4/1998	4	10.82	5.81	5.01	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	--	--
MW-10	10/27/1998		10.82	5.30	5.52	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	<2.5	--
MW-10	4/15/1999		10.82	6.27	4.55	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	9.45	--
MW-10	11/4/1999	END OF MONITORING	10.82	4.61	6.21	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	21	--
MWX-10A	6/24/2009		12.78	8.26	4.52	0.00	0.00	--	--	--	--	--	--	--	--
MWX-10A	10/27/2009		--	--	--	--	--	--	--	--	--	--	--	--	--
MWX-10A	5/20/2010		12.78	8.3	4.48	0.00	0.00	<50	96	<0.5	<0.5	<0.5	<0.5	<0.5	--
MWX-10A	10/28/2010		12.78	8.63	4.15	0.00	0.00	<50	300	<0.5	<0.5	<0.5	<0.5	<0.5	--
MWX-10A	6/10/2011		12.78	8.71	4.07	--	--	<50	250	<0.5	<0.5	<0.5	<0.5	<0.5	--
MWX-10A	12/1/2011		12.78	8.37	4.41	--	--	<50	<49	<0.5	<0.5	<0.5	<0.5	<0.5	--
MWX-10A	06/26/2012		12.78	8.46	4.32	--	--	<50	<55	<0.5	<0.5	<0.5	<0.5	<0.5	--
MW-11	7/7/1988		11.38	--	--	--	--	--	--	<5.0	--	--	--	--	--
MW-11	4/14/1989		11.38	--	--	--	--	<50	--	<0.5	<1.0	<1.0	<1.0	<3,000	--
MW-11	7/31/1989		11.38	--	--	--	--	<100	--	<0.2	<0.2	<0.2	<0.2	--	--
MW-11	12/8/1989		11.38	--	--	--	--	--	--	<0.3	<0.3	<0.3	<0.6	--	--
MW-11	3/21/1990	21	11.38	6.56	4.82	--	--	<50	--	<0.3	<0.3	<0.3	<0.6	--	--
MW-11	6/19/1990		11.38	6.24	5.14	--	--	<50	--	<0.3	<0.3	<0.3	<0.6	--	--
MW-11	9/20/1990		11.38	5.27	6.11	--	--	--	--	--	--	--	--	--	--
MW-11	9/21/1990		11.38	--	--	--	--	<50	--	<0.3	<0.3	<0.3	<0.6	--	--
MW-11	12/28/1990		11.38	6.22	5.16	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	--	--
MW-11	5/10/1991		11.38	3.55	7.83	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	--	--
MW-11	8/8/1991		11.38	5.06	6.32	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	--	--
MW-11	11/27/1991		11.38	5.71	5.67	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	--	--
MW-11	1/29/1992		11.38	5.55	5.83	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	--	--
MW-11	3/26/1992		11.38	7.29	4.09	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	--	--
MW-11	7/23/1992		11.38	5.19	6.19	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	--	--
MW-11	10/28/1992		11.38	4.87	6.51	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	--	--
MW-11	5/4/1993	INACCESSIBLE	11.38	--	--	--	--	--	--	--	--	--	--	--	--
MW-11	1/5/1994	INACCESSIBLE	11.38	--	--	--	--	--	--	--	--	--	--	--	--
MW-11	5/13/1994		11.38	5.71	5.67	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	--	--
MW-11	10/24/1994		11.38	4.59	6.79	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	--	--

Table 3
Groundwater Monitoring and Analytical Results (Total Petroleum Hydrocarbons and BTEX)
Former Chevron Asphalt Plant and Bulk Terminal #20-6265
1520 Powell Street
Emeryville, California

Well ID	Date	Notes	TOC (feet)	GWE (msl)	DTW (feet)	SPHT (feet)	SPH REMOVED (gallons)	TPH-g (µg/L)	TPH-d (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	TOG (µg/L)
ESL	--		--	--	--	--	--	5,000	2,500	540	380,000	170,000	160,000	24,000	--
MW-11	4/19/1995	2, 22	11.38	5.69	5.69	--	--	58	--	0.6	<0.5	<0.5	0.5	--	--
MW-11	11/6/1995	INACCESSIBLE	11.38	--	--	--	--	--	--	--	--	--	--	--	--
MW-11	4/26/1996	INACCESSIBLE	11.38	--	--	--	--	--	--	--	--	--	--	--	--
MW-11	10/10/1996	INACCESSIBLE	11.38	--	--	--	--	--	--	--	--	--	--	--	--
MW-11	4/22/1997		11.38	5.44	5.94	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	<5.0	--
MW-11	10/16/1997		11.38	5.90	5.48	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	18	--
MW-11	5/4/1998	4	11.38	5.86	5.52	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	--	--
MW-11	10/27/1998	7	11.38	5.23	6.15	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	12/<2.0	--
MW-11	4/15/1999		11.38	6.38	5.00	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	<5.0	--
MW-11	11/4/1999	END OF MONITORING	11.38	4.69	6.69	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	9.88	--
MWX-11A	6/24/2009		14.18	8.37	5.81	0.00	0.00	--	--	--	--	--	--	--	--
MWX-11A	10/27/2009		--	--	--	--	--	--	--	--	--	--	--	--	--
MWX-11A	5/20/2010		14.18	8.74	5.44	0.00	0.00	<50	110	<0.5	<0.5	<0.5	<0.5	<0.5	--
MWX-11A	10/28/2010		14.18	9.11	5.07	0.00	0.00	<50	66	<0.5	<0.5	<0.5	<0.5	<0.5	--
MWX-11A	6/10/2011		--	--	--	--	--	<50	250	<0.5	<0.5	<0.5	<0.5	<0.5	--
MWX-11A	11/30/2011		--	--	--	--	--	<50	<48	<0.5	<0.5	<0.5	<0.5	<0.5	--
MWX-11A	06/26/2012		14.18	8.63	5.55	--	--	<50 [<50]	<49 [<49]	<0.5 [<0.5]	<0.5 [<0.5]	<0.5 [<0.5]	<0.5 [<0.5]	<0.5 [<0.5]	--
MW-12	7/7/1988		13.03	--	--	--	--	<100	--	<5.0	--	--	--	--	--
MW-12	4/14/1989		13.03	--	--	--	--	<50	--	<0.5	<1.0	<1.0	<1.0	--	<3,000,000
MW-12	7/31/1989		13.03	--	--	--	--	<100	--	<0.1	<0.5	<0.1	<0.2	--	--
MW-12	12/8/1989		13.03	--	--	--	--	--	--	<0.3	<0.3	<0.3	<0.6	--	--
MW-12	3/21/1990		13.03	6.27	6.76	--	--	<50	--	<0.3	<0.3	<0.3	<0.3	--	--
MW-12	6/19/1990		13.03	6.41	6.62	--	--	<50	--	<0.3	<0.3	<0.3	<0.3	--	--
MW-12	9/20/1990		13.03	8.03	5.00	--	--	--	--	--	--	--	--	--	--
MW-12	9/21/1990		13.03	--	--	--	--	<50	--	<0.3	<0.3	<0.3	<0.3	--	--
MW-12	12/28/1990		13.03	6.41	6.62	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	--	--
MW-12	5/10/1991		13.03	6.55	6.48	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	--	--
MW-12	8/8/1991		13.03	5.02	8.01	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	--	--
MW-12	11/27/1991		13.03	5.08	7.95	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	--	--
MW-12	1/29/1992		13.03	5.35	7.68	--	--	<50	--	<0.5	<0.5	<0.5	1.0	--	--
MW-12	3/26/1992		13.03	6.43	6.60	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	--	--
MW-12	7/23/1992	END OF MONITORING	13.03	--	--	--	--	--	--	--	--	--	--	--	--
MW-13	3/21/1990		11.15	7.07	4.08	--	--	480	--	<0.3	<0.3	1.0	5.0	--	--
MW-13	6/19/1990		11.15	6.81	4.34	--	--	180	--	<0.3	<0.3	0.8	3.0	--	--
MW-13	9/20/1990		11.15	5.84	5.31	--	--	150	--	<0.3	<0.3	<0.3	0.54	--	--
MW-13	12/28/1990		11.15	6.36	4.79	--	--	160	--	<0.5	<0.5	<0.5	1.0	--	--

Table 3
Groundwater Monitoring and Analytical Results (Total Petroleum Hydrocarbons and BTEX)
Former Chevron Asphalt Plant and Bulk Terminal #20-6265
1520 Powell Street
Emeryville, California

Well ID	Date	Notes	TOC (feet)	GWE (msl)	DTW (feet)	SPHT (feet)	SPH REMOVED (gallons)	TPH-g (µg/L)	TPH-d (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	TOG (µg/L)
ESL	--		--	--	--	--	--	5,000	2,500	540	380,000	170,000	160,000	24,000	--
MW-13	5/10/1991	23	11.15	6.95	4.20	--	--	110	--	<0.5	<0.5	<0.5	2.0	--	--
MW-13	8/8/1991	3	11.15	6.02	5.13	--	--	220	--	<0.5	<0.5	<0.5	1.8	--	--
MW-13	11/27/1991		11.15	6.43	4.72	--	--	70	--	<0.5	<0.5	<0.5	1.2	--	--
MW-13	1/29/1992		11.15	6.46	4.69	--	--	150	--	<0.5	<0.5	3.1	7.1	--	--
MW-13	3/26/1992		11.15	7.11	4.04	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	--	--
MW-13	7/23/1992		11.15	6.03	5.12	--	--	190	--	<0.5	<0.5	<0.5	2.1	--	--
MW-13	10/28/1992		11.15	5.85	5.30	--	--	190	--	<0.5	<0.5	<0.5	2.0	--	--
MW-13	5/4/1993	INACCESSIBLE	11.15	--	--	--	--	--	--	--	--	--	--	--	--
MW-13	1/5/1994	INACCESSIBLE	11.15	--	--	--	--	--	--	--	--	--	--	--	--
MW-13	5/13/1994		11.15	5.87	5.28	--	--	220	--	<0.5	1.2	<0.5	1.7	--	--
MW-13	10/24/1994		11.15	5.11	6.04	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	--	--
MW-13	4/19/1995	2	11.15	5.78	5.37	--	--	140	--	<0.5	<0.5	<0.5	1.2	--	--
MW-13	11/6/1995		11.15	5.02	6.13	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	<5.0	--
MW-13	4/26/1996		11.15	5.93	5.22	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	<5.0	--
MW-13	10/10/1996	INACCESSIBLE	11.15	--	--	--	--	--	--	--	--	--	--	--	--
MW-13	4/22/1997		11.15	5.69	5.46	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	<5.0	--
MW-13	10/16/1997		11.15	5.98	5.17	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	<5.0	--
MW-13	5/4/1998		11.15	5.94	5.21	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	<2.5	--
MW-13	10/27/1998		11.15	5.44	5.71	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	<2.5	--
MW-13	4/15/1999	INACCESSIBLE	11.15	--	--	--	--	--	--	--	--	--	--	--	--
MW-13	11/4/1999	END OF MONITORING	11.15	5.09	6.06	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	<2.5	--
MW-14	3/21/1990		9.78	8.87	0.91	--	--	170	--	<0.3	<0.3	<0.4	2.0		
MW-14	6/19/1990		--	--	--	--	--	--	--	--	--	--	--	--	--
MW-14	9/20/1990		9.78	7.25	2.53	--	--	<50	--	<0.3	<0.3	<0.3	<0.6	--	--
MW-14	12/28/1990		9.78	8.17	1.61	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	--	--
MW-14	5/10/1991		9.78	8.56	1.22	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	--	--
MW-14	8/8/1991		9.78	7.33	2.45	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	--	--
MW-14	11/27/1991		9.78	7.19	2.59	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	--	--
MW-14	1/29/1992		9.78	8.68	1.10	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	--	--
MW-14	3/26/1992		9.78	9.04	0.74	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	--	--
MW-14	7/23/1992		9.78	7.48	2.30	--	--	<50	--	0.6	<0.5	<0.5	0.8	--	--
MW-14	10/28/1992	END OF MONITORING	9.78	7.02	2.76	--	--	56	--	0.7	4.0	0.8	3.8	--	--
MW-15	3/21/1990		11.01	6.29	4.72	--	--	<50	--	<0.3	<0.3	<0.3	<0.6	--	--
MW-15	6/19/1990		11.01	6.23	4.78	--	--	<50	--	<0.3	<0.3	<0.3	<0.6	--	--
MW-15	9/20/1990		11.01	6.03	4.98	--	--	<50	--	<0.3	<0.3	<0.3	<0.6	--	--
MW-15	12/28/1990		11.01	6.17	4.84	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	--	--

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1520 Powell Street
Emeryville, California

Well ID	Date	Notes	TOC (feet)	GWE (msl)	DTW (feet)	SPHT (feet)	SPH REMOVED (gallons)	TPH-g (µg/L)	TPH-d (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	TOG (µg/L)
ESL	--		--	--	--	--	--	5,000	2,500	540	380,000	170,000	160,000	24,000	--
MW-15	5/10/1991	24	11.01	6.43	4.58	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	--	--
MW-15	8/8/1991		11.01	5.98	5.03	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	--	--
MW-15	11/27/1991		11.01	5.13	5.88	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	--	--
MW-15	1/29/1992		11.01	6.19	4.82	--	--	<50	--	1.9	2.6	0.8	2.6	--	--
MW-15	3/26/1992		11.01	6.66	4.35	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	--	--
MW-15	7/23/1992		11.01	5.97	5.04	--	--	<50	--	<0.5	<0.5	<0.5	0.5	--	--
MW-15	10/28/1992		11.01	5.84	5.17	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	--	--
MW-15	5/4/1993	INACCESSIBLE	11.01	--	--	--	--	--	--	--	--	--	--	--	--
MW-15	1/5/1994	INACCESSIBLE	11.01	--	--	--	--	--	--	--	--	--	--	--	--
MW-15	5/13/1994		11.01	6.51	4.50	--	--	110	--	<0.5	0.7	<0.5	2.0	--	--
MW-15	10/24/1994		--	--	--	--	--	--	--	--	--	--	--	--	--
MW-15	4/19/1995		--	--	--	--	--	--	--	--	--	--	--	--	--
MW-15	11/6/1995		11.01	5.73	5.28	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	<5.0	--
MW-15	4/26/1996		11.01	6.41	4.60	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	<5.0	--
MW-15	10/10/1996		11.01	5.79	5.22	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	<5.0	--
MW-15	4/22/1997		11.01	6.16	4.85	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	<5.0	--
MW-15	10/16/1997		11.01	6.19	4.82	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	<5.0	--
MW-15	5/4/1998		11.01	7.02	3.99	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	<2.5	--
MW-15	10/17/1998	INACCESSIBLE	11.01	--	--	--	--	--	--	--	--	--	--	--	--
MW-15	4/15/1999		11.01	5.26	5.75	--	--	--	--	--	--	--	--	--	--
MW-15	11/4/1999		11.01	4.83	6.18	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	<2.5	--
MW-15	4/13/2000	34	11.01	4.09	6.92	0.00	0.00	<50	--	<0.50	<0.50	<0.50	<0.50	<2.5	--
MW-15	10/6/2000	UNABLE TO LOCATE	11.01	--	--	--	--	--	--	--	--	--	--	--	--
MW-15	4/23/2001	UNABLE TO LOCATE	11.01	--	--	--	--	--	--	--	--	--	--	--	--
MW-15	10/4/2001	UNABLE TO LOCATE	11.01	--	--	--	--	--	--	--	--	--	--	--	--
MW-15	4/1/2002	UNABLE TO LOCATE	11.01	--	--	--	--	--	--	--	--	--	--	--	--
MW-15	10/19/2002	UNABLE TO LOCATE	11.01	--	--	--	--	--	--	--	--	--	--	--	--
MW-15	4/16/2003	UNABLE TO LOCATE	11.01	--	--	--	--	--	--	--	--	--	--	--	--
MW-15	10/29/2003	END OF MONITORING	11.01	--	--	--	--	--	--	--	--	--	--	--	--
MW-16	3/21/1990		11.11	5.27	5.84	--	--	<50	--	<0.3	<0.3	<0.3	<0.6	--	--
MW-16	6/19/1990		11.11	5.21	5.90	--	--	<50	--	<0.3	<0.3	<0.3	<0.6	--	--
MW-16	9/20/1990		11.11	4.75	6.36	--	--	<50	--	<0.3	<0.3	<0.3	<0.6	--	--
MW-16	12/28/1990	25	11.11	5.13	5.98	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	--	--
MW-16	5/10/1991		11.11	5.22	5.89	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	--	--

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1520 Powell Street
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Well ID	Date	Notes	TOC (feet)	GWE (msl)	DTW (feet)	SPHT (feet)	SPH REMOVED (gallons)	TPH-g (µg/L)	TPH-d (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	TOG (µg/L)
ESL	--		--	--	--	--	--	5,000	2,500	540	380,000	170,000	160,000	24,000	--
MW-16	8/8/1991		11.11	4.83	6.28	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	--	--
MW-16	11/27/1991	26	11.11	5.49	5.62	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	--	--
MW-16	1/29/1992		11.11	5.23	5.88	--	--	65	--	3.6	6.2	1.9	6.6	--	--
MW-16	3/26/1992		11.11	5.55	5.56	--	--	270	--	21	27	9.5	41	--	--
MW-16	7/23/1992		11.11	4.82	6.29	--	--	<50	--	<0.5	<0.5	<0.5	0.7	--	--
MW-16	10/28/1992		11.11	4.82	6.29	--	--	<50	--	0.9	1.4	<0.5	1.1	--	--
MW-16	5/4/1993		11.11	5.36	5.75	--	--	51	--	<0.5	1.0	0.6	1.7	--	--
MW-16	1/5/1994	END OF MONITORING	11.11	--	--	--	--	--	--	--	--	--	--	--	--
MW-17	3/21/1990		10.41	4.80	5.61	--	--	<50	--	<0.3	<0.3	<0.3	<0.6	--	--
MW-17	6/19/1990		10.41	--	--	--	--	<50	--	<0.3	<0.3	<0.3	<0.6	--	--
MW-17	9/20/1990		10.41	4.39	6.02	--	--	<50	--	<0.3	<0.3	<0.3	<0.6	--	--
MW-17	12/28/1990		10.41	4.68	5.73	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	--	--
MW-17	5/10/1991		10.41	4.76	5.65	--	--	<50	--	<0.5	<0.5	<0.5	0.8	--	--
MW-17	8/8/1991		10.41	4.47	5.94	--	--	82	--	1.9	2.5	0.9	5.4	--	--
MW-17	11/27/1991		10.41	4.41	6.00	--	--	<50	--	<0.5	<0.5	<0.5	0.5	--	--
MW-17	1/29/1992		10.41	4.8	5.61	--	--	<50	--	<0.5	0.9	<0.5	0.5	--	--
MW-17	3/26/1992		10.41	5.10	5.31	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	--	--
MW-17	7/23/1992		10.41	4.44	5.97	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	--	--
MW-17	10/28/1992		10.41	4.45	5.96	--	--	78	--	1.0	7.1	1.4	6.5	--	--
MW-17	5/4/1993		10.41	2.88	7.53	--	--	60	--	0.8	1.7	1.1	3.0	--	--
MW-17	1/5/1994		10.41	4.91	5.50	--	--	<50	--	<0.5	0.7	<0.5	<0.5	--	--
MW-17	5/13/1994		10.41	5.24	5.17	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	--	--
MW-17	10/24/1994		10.41	4.33	6.08	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	--	--
MW-17	4/19/1995		10.41	4.93	5.48	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	--	--
MW-17	11/6/1995		10.41	4.41	6.00	--	--	<50	--	<0.5	<0.5	<0.5	<5.0	--	--
MW-17	4/26/1996		10.41	4.96	5.45	--	--	<50	--	<0.5	<0.5	<0.5	<5.0	--	--
MW-17	10/10/1996		10.41	4.69	5.72	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	<5.0	--
MW-17	4/22/1997		10.41	5.03	5.38	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	<5.0	--
MW-17	10/16/1997		10.41	5.05	5.36	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	<5.0	--
MW-17	4/15/1998	INACCESSIBLE	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-17	5/4/1998		10.41	5.13	5.28	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	<2.5	--
MW-17	10/27/1998	INACCESSIBLE	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-17	11/4/1999		10.41	4.69	5.72	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	<2.5	--
MW-17	4/13/2000	34	10.41	5.33	5.08	0.00	0.00	<50	--	<0.50	<0.50	<0.50	<0.50	<2.5	--
MW-17	10/5/2000	34	10.41	4.80	5.61	0.00	0.00	<50	--	<0.50	<0.50	<0.50	<0.50	<2.5	--
MW-17	4/23/2001	34	10.41	5.13	5.28	0.00	0.00	<50	--	<0.50	<0.50	<0.50	<0.50	<2.5	--

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Well ID	Date	Notes	TOC (feet)	GWE (msl)	DTW (feet)	SPHT (feet)	SPH REMOVED (gallons)	TPH-g (µg/L)	TPH-d (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	TOG (µg/L)
ESL	--		--	--	--	--	--	5,000	2,500	540	380,000	170,000	160,000	24,000	--
MW-17	10/4/2001	34	10.41	4.53	5.88	0.00	0.00	<50	--	<0.50	<0.50	<0.50	<1.5	<2.5	--
MW-17	4/1/2002	34	10.41	5.15	5.26	0.00	0.00	<50	--	<0.50	<0.50	<0.50	<1.5	<2.5	--
MW-17	10/19/2002		10.41	4.62	5.79	0.00	0.00	<50	--	<0.50	<0.50	<0.50	<1.5	<2.5	--
MW-17	4/16/2003		10.41	5.33	5.08	0.00	0.00	<50	--	<0.5	<0.5	<0.5	<1.5	<2.5	--
MW-17	10/29/2003		10.41	4.62	5.79	0.00	0.00	<50	--	<0.5	<0.5	<0.5	<1	<0.5	--
MW-17	4/1/2004		10.41	5.16	5.25	0.00	0.00	<50	--	<0.5	<0.5	<0.5	<1	<0.5	--
MW-17	10/1/2004		10.41	5.02	5.39	0.00	0.00	<50	--	<0.5	<0.7	<0.8	<1.6	<0.5	--
MW-17	4/8/2005		10.41	5.70	4.71	0.00	0.00	<50	--	<0.5	<0.5	<0.5	<1.0	<0.5	--
MW-17	10/20/2005		10.41	5.03	5.38	0.00	0.00	<50	--	<0.5	<0.5	<0.5	<1.0	<0.5	--
MW-17	4/20/2006		10.41	5.43	4.98	0.00	0.00	<50	--	<0.5	<0.5	<0.5	<1.0	<0.5	--
MW-17	10/25/2006		10.41	4.88	5.53	0.00	0.00	<50	--	<0.5	<0.5	<0.5	<1.0	<0.5	--
MW-17	4/13/2007		10.41	5.07	5.34	0.00	0.00	<50	--	<0.5	<0.5	<0.5	<1.0	<0.5	--
MW-17	10/19/2007		10.41	4.76	5.65	0.00	0.00	<50	--	<0.5	<0.5	<0.5	<1.0	<0.5	--
MW-17	4/11/2008		10.41	5.33	5.08	0.00	0.00	<50	--	<0.5	<0.5	<0.5	<1.0	<0.5	--
MW-17	10/17/2008		10.41	4.63	5.78	0.00	0.00	<50	--	<0.5	<0.5	<0.5	<1.0	<0.5	--
MW-17	4/30/2009		13.52	7.65	5.87	0.00	0.00	<50	--	<0.5	<0.5	<0.5	<0.5	<0.5	--
MW-17	6/24/2009		13.52	7.88	5.64	0.00	0.00	--	--	--	--	--	--	--	--
MW-17	10/27/2009		13.52	8.16	5.36	0.00	0.00	110	--	<0.5	<0.5	<0.5	<0.5	<0.5	--
MW-17	5/19/2010		13.52	8.21	5.31	0.00	0.00	<50 [<50]	<50 [<49]	<0.5 [0.5]	<0.5 [0.5]	<0.5 [0.5]	<0.5 [0.5]	<0.5 [0.5]	--
MW-17	10/28/2010		13.52	8.11	5.41	0.00	0.00	<50	<48	<0.5	<0.5	<0.5	<0.5	<0.5	--
MW-17	6/9/2011		13.52	8.32	5.2	--	--	<50	<48	<0.5	<0.5	<0.5	<0.5	<0.5	--
MW-17	12/1/2011		13.52	7.97	5.55	--	--	<50	<51	<0.5	<0.5	<0.5	<0.5	<0.5	--
MW-17	6/27/2012	INACCESSIBLE	13.52	8.49	5.03	--	--	--	--	--	--	--	--	--	--
MW-18	3/21/1990		9.80	4.65	5.15	--	--	<50	--	<0.3	<0.3	<0.3	<0.6	--	--
MW-18	6/19/1990		9.80	4.61	5.19	--	--	<50	--	<0.3	<0.3	<0.3	<0.6	--	--
MW-18	9/20/1990		9.80	4.26	5.54	--	--	<50	--	<0.3	<0.3	<0.3	<0.6	--	--
MW-18	12/28/1990		9.80	4.54	5.26	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	--	--
MW-18	5/10/1991		9.80	4.62	5.18	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	--	--
MW-18	8/8/1991		9.80	4.35	5.45	--	--	52	--	<0.5	<0.5	<0.5	<0.5	--	--
MW-18	11/27/1991		9.80	4.56	5.24	--	--	<50	--	0.6	1.5	0.6	2.1	--	--
MW-18	1/29/1992		9.80	4.68	5.12	--	--	67	--	3.7	5.2	1.5	5.0	--	--
MW-18	3/26/1992		9.80	4.96	4.84	--	--	80	--	<0.5	<0.5	<0.5	0.8	--	--
MW-18	7/23/1992		9.80	4.31	5.49	--	--	50	--	1.3	2.1	0.5	3.0	--	--
MW-18	10/28/1992		9.80	4.33	5.47	--	--	54	--	<0.5	1.3	<0.5	1.1	--	--
MW-18	5/4/1993	27	9.80	4.73	5.07	--	--	<50	--	<0.5	<0.5	<0.5	<1.5	--	--
MW-18	1/5/1994		9.80	4.75	5.05	--	--	<50	--	<0.5	0.5	<0.5	0.6	--	--
MW-18	5/13/1994		9.80	5.04	4.76	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	--	--
MW-18	10/24/1994		9.80	4.15	5.65	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	--	--
MW-18	10/27/1994		--	--	--	--	--	--	--	--	--	--	--	--	--

Table 3
Groundwater Monitoring and Analytical Results (Total Petroleum Hydrocarbons and BTEX)
Former Chevron Asphalt Plant and Bulk Terminal #20-6265
1520 Powell Street
Emeryville, California

Well ID	Date	Notes	TOC (feet)	GWE (msl)	DTW (feet)	SPHT (feet)	SPH REMOVED (gallons)	TPH-g (µg/L)	TPH-d (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	TOG (µg/L)
ESL	--		--	--	--	--	--	5,000	2,500	540	380,000	170,000	160,000	24,000	--
MW-18	4/19/1995	28	9.80	4.70	5.10	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	--	--
MW-18	11/6/1995		9.80	4.23	5.57	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	<5.0	--
MW-18	4/26/1996		9.80	4.73	5.07	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	<5.0	--
MW-18	10/10/1996	INACCESSIBLE	9.80	--	--	--	--	--	--	--	--	--	--	--	--
MW-18	4/22/1997		9.80	4.77	5.03	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	<5.0	--
MW-18	10/16/1997		9.80	3.82	5.98	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	<5.0	--
MW-18	5/4/1998		9.80	4.89	4.91	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	<0.5	--
MW-18	10/27/1998		9.80	4.70	5.10	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	<2.5	--
MW-18	4/15/1999		9.80	5.05	4.75	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	<5.0	--
MW-18	11/4/1999		9.80	4.43	5.37	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	<2.5	--
MW-18	4/13/2000	INACCESSIBLE	9.80	5.16	4.64	0.00	0.00	--	--	--	--	--	--	--	--
MW-18	10/5/2000	34	9.80	4.55	5.25	0.00	0.00	<50	--	<0.50	<0.50	<0.50	<0.50	<2.5	--
MW-18	4/23/2001	34	9.80	4.89	4.91	0.00	0.00	<50	--	<0.50	<0.50	<0.50	<0.50	<2.5	--
MW-18	10/4/2001	34	9.80	4.33	5.47	0.00	0.00	<50	--	<0.50	<0.50	<0.50	<1.5	<2.5	--
MW-18	4/1/2002	34	9.80	4.89	4.91	0.00	0.00	<50	--	<0.50	<0.50	<0.50	<1.5	<2.5	--
MW-18	10/19/2002		9.80	4.42	5.38	0.00	0.00	<50	--	<0.50	<0.50	<0.50	1.6	<2.5	--
MW-18	4/16/2003		9.80	5.12	4.68	0.00	0.00	<50	--	<0.5	<0.5	<0.5	<1.5	<2.5	--
MW-18	10/29/2003		9.80	4.42	5.38	0.00	0.00	<50	--	<0.5	1	<0.5	0.7	1	--
MW-18	4/1/2004	INACCESSIBLE	9.80	--	--	--	--	--	--	--	--	--	--	--	--
MW-18	10/1/2004	INACCESSIBLE	9.80	--	--	--	--	--	--	--	--	--	--	--	--
MW-18	4/8/2005		9.80	5.47	4.33	0.00	0.00	<50	--	<0.5	<0.5	<0.5	<1.0	<0.5	--
MW-18	10/20/2005	INACCESSIBLE	9.80	--	--	--	--	--	--	--	--	--	--	--	--
MW-18	4/20/2006		9.80	5.20	4.60	0.00	0.00	<50	--	<0.5	<0.5	<0.5	<1.0	<0.5	--
MW-18	10/25/2006		9.80	4.65	5.15	0.00	0.00	<50	--	<0.5	<0.5	<0.5	<1.0	<0.5	--
MW-18	4/13/2007		9.80	4.82	4.98	0.00	0.00	<50	--	<0.5	<0.5	<0.5	<1.0	<0.5	--
MW-18	10/19/2007		9.80	4.62	5.18	0.00	0.00	<50	--	<0.5	<0.5	<0.5	<1.0	<0.5	--
MW-18	4/11/2008		9.80	5.09	4.71	0.00	0.00	<50	--	<0.5	<0.5	<0.5	<1.0	<0.5	--
MW-18	10/17/2008		9.80	4.39	5.41	0.00	0.00	<50	--	<0.5	<0.5	<0.5	<1.0	<0.5	--
MW-18	4/30/2009		12.95	7.40	5.55	0.00	0.00	<50	--	<0.5	<0.5	<0.5	<0.5	<0.5	--
MW-18	6/24/2009		12.95	7.70	5.25	0.00	0.00	--	--	--	--	--	--	--	--
MW-18	10/27/2009		12.95	8.05	4.90	0.00	0.00	<50	--	<0.5	<0.5	<0.5	<0.5	<0.5	--
MW-18	5/18/2010		12.95	7.53	5.42	0.00	0.00	<50	<48	<0.5	<0.5	<0.5	<0.5	<0.5	--
MW-18	10/27/2010		12.95	7.97	4.98	0.00	0.00	<50	<51	<0.5	<0.5	<0.5	<0.5	<0.5	--
MW-18	6/7/2011		12.95	8.34	4.61	--	--	<50	<48	<0.5	<0.5	<0.5	<0.5	<0.5	--
MW-18	12/2/2011		12.95	7.80	5.15	--	--	<50	<51	<0.5	<0.5	<0.5	<0.5	<0.5	--
MW-18	06/27/2012		12.95	8.36	4.59	--	--	<50	<49	<0.5	<0.5	<0.5	<0.5	<0.5	--
MW-19	3/21/1990		8.45	3.45	5.00	--	--	<50	--	<0.3	<0.3	<0.3	<0.6	--	--
MW-19	6/19/1990		8.45	3.39	5.06	--	--	<50	--	<0.3	<0.3	<0.3	<0.6	--	--
MW-19	9/20/1990		8.45	3.20	5.25	--	--	<50	--	<0.3	<0.3	<0.3	<0.6	--	--

Table 3
Groundwater Monitoring and Analytical Results (Total Petroleum Hydrocarbons and BTEX)
Former Chevron Asphalt Plant and Bulk Terminal #20-6265
1520 Powell Street
Emeryville, California

Well ID	Date	Notes	TOC (feet)	GWE (msl)	DTW (feet)	SPHT (feet)	SPH REMOVED (gallons)	TPH-g (µg/L)	TPH-d (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	TOG (µg/L)
ESL	--		--	--	--	--	--	5,000	2,500	540	380,000	170,000	160,000	24,000	--
MW-19	12/28/1990		8.45	3.38	5.07	--	--	66	--	<0.5	<0.5	<0.5	<0.5	--	--
MW-19	5/10/1991	3	8.45	3.43	5.02	--	--	60	--	<0.5	<0.5	<0.5	<0.5	--	--
MW-19	8/8/1991		8.45	3.28	5.17	--	--	58	--	<0.5	<0.5	<0.5	<0.5	--	--
MW-19	11/27/1991		8.45	3.39	5.06	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	--	--
MW-19	1/29/1992		8.45	3.52	4.93	--	--	<50	--	1.7	2.6	0.7	2.1	--	--
MW-19	3/26/1992	29	8.45	3.66	4.79	--	--	80	--	<0.5	<0.5	<0.5	<0.5	--	--
MW-19	7/23/1992		8.45	3.23	5.22	--	--	70	--	0.6	0.5	<0.5	1.5	--	--
MW-19	10/28/1992		8.45	3.29	5.16	--	--	170	--	4.3	28	5.1	24	--	--
MW-19	5/4/1993		8.45	3.52	4.93	--	--	120	--	2.0	4.7	2.8	8.1	--	--
MW-19	1/5/1994		8.45	3.54	4.91	--	--	<50	--	2.0	1.4	1.7	2.5	--	--
MW-19	5/13/1994		8.45	4.27	4.18	--	--	<50	--	<0.5	0.9	<0.5	<0.5	--	--
MW-19	10/24/1994		8.45	3.60	4.85	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	--	--
MW-19	4/19/1995	2, END OF MONITORING	8.45	4.25	4.20	--	--	270	--	<0.5	<0.5	<0.5	<0.5	--	--
MW-19A	11/6/1995		9.96	5.11	4.85	--	--	420	--	<0.5	<0.5	<0.5	<0.5	<5.0	--
MW-19A	4/26/1996		9.96	5.78	4.18	--	--	<50	--	<0.5	<0.5	<0.5	<0.5	<5.0	--
MW-19A	10/10/1996	2	9.96	5.40	4.56	--	--	610	--	<0.5	<0.5	<0.5	<0.5	21	--
MW-19A	4/22/1997		9.96	5.79	4.17	--	--	43	--	<0.5	<0.5	<0.5	<0.5	<5.0	--
MW-19A	10/16/1997	30	9.96	5.83	4.13	--	--	380	--	<0.5	<0.5	<0.5	<0.5	22	--
MW-19A	5/4/1998	2	9.96	5.93	4.03	--	--	200	--	<0.5	<0.5	<0.5	<0.5	--	--
MW-19A	5/4/1998		9.96	5.93	4.03	--	--	--	--	--	--	--	--	<2.0	--
MW-19A	10/27/1998	7	9.96	5.75	4.21	--	--	170	--	<0.5	<0.5	<0.5	<0.5	12/<2.0	--
MW-19A	4/15/1999	INACCESSIBLE	9.96	--	--	--	--	--	--	--	--	--	--	--	--
MW-19A	11/4/1999	5, 7	9.96	5.45	4.51	--	--	290	--	<0.5	<0.5	<0.5	<0.5	26.8/<0.5	--
MW-19A	4/13/2000	34	9.96	6.81	3.15	0.00	0.00	<50	--	<0.50	<0.50	<0.50	<0.50	<2.5	--
MW-19A	10/5/2000	9, 10, 35	9.96	5.51	4.45	0.00	0.00	130	--	<0.50	<0.50	<0.50	<0.50	26/<2.0	--
MW-19A	4/23/2001	10, 11, 34	9.96	5.89	4.07	0.00	0.00	100	--	<0.50	<0.50	<0.50	<0.50	3.4/<2.0	--
MW-19A	10/4/2001	36	9.96	5.28	4.68	0.00	0.00	380	--	<0.50	<0.50	<0.50	<1.5	<2.5	--
MW-19A	4/1/2002	37	9.96	5.82	4.14	0.00	0.00	310	--	<0.50	<0.50	<0.50	<1.5	<2.5	--
MW-19A	10/19/2002	38	9.96	5.36	4.60	0.00	0.00	300	--	<0.50	<0.50	<0.50	<1.5	<2.5	--
MW-19A	4/16/2003	23	9.96	6.25	3.71	0.00	0.00	280	--	<0.5	<0.5	<0.5	<1.5	<2.5	--
MW-19A	10/29/2003	12, 39	9.96	5.36	4.60	0.00	0.00	330	--	<0.5	<0.5	<0.5	<1	<0.5	--
MW-19A	4/1/2004	12	9.96	5.91	4.05	0.00	0.00	260	--	<0.5	<0.5	<0.5	<1	<0.5	--
MW-19A	10/1/2004	12, 40	9.96	5.66	4.30	0.00	0.00	260	--	<0.5	<0.7	<0.8	<1.6	<0.5	--
MW-19A	4/8/2005	12, 41	9.96	6.88	3.08	0.00	0.00	190	--	<0.5	<0.5	<0.5	<1.0	<0.5	--
MW-19A	10/20/2005	12, 42	9.96	5.58	4.38	0.00	0.00	180	--	<0.5	<0.5	<0.5	<1.0	<0.5	--
MW-19A	4/20/2006	12, 42	9.96	6.26	3.70	0.00	0.00	180	--	<0.5	<0.5	<0.5	<1.0	<0.5	--
MW-19A	10/25/2006	12, 43	9.96	5.51	4.45	0.00	0.00	210	--	<0.5	<0.5	<0.5	<1.0	<0.5	--
MW-19A	4/13/2007	12, 44	9.96	5.76	4.20	0.00	0.00	290	--	<0.5	<0.5	<0.5	<1.0	<0.5	--
MW-19A	10/19/2007	12, 45	9.96	5.58	4.38	0.00	0.00	200	--	<0.5	<0.5	<0.5	<1.0	<0.5	--

Table 3
Groundwater Monitoring and Analytical Results (Total Petroleum Hydrocarbons and BTEX)
Former Chevron Asphalt Plant and Bulk Terminal #20-6265
1520 Powell Street
Emeryville, California

Well ID	Date	Notes	TOC (feet)	GWE (msl)	DTW (feet)	SPHT (feet)	SPH REMOVED (gallons)	TPH-g (µg/L)	TPH-d (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	TOG (µg/L)
ESL	--		--	--	--	--	--	5,000	2,500	540	380,000	170,000	160,000	24,000	--
MW-19A	4/11/2008	12, 44	9.96	6.14	3.82	0.00	0.00	300	--	<0.5	<0.5	<0.5	<1.0	<0.5	--
MW-19A	10/17/2008	41	9.96	5.29	4.67	0.00	0.00	240	--	<0.5	<0.5	<0.5	<1.0	<0.5	--
MW-19A	4/30/2009		11.79	6.71	5.08	0.00	0.00	200	--	<0.5	<0.5	<0.5	<0.5	<0.5	--
MW-19A	6/24/2009		11.79	7.19	4.60	0.00	0.00	--	--	--	--	--	--	--	--
MW-19A	10/27/2009		11.79	7.68	4.11	0.00	0.00	230	--	<0.5	<0.5	<0.5	<0.5	<0.5	--
MW-19A	5/19/2010		11.79	6.83	4.96	0.00	0.00	200	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
MW-19A	10/27/2010		11.79	7.99	3.80	0.00	0.00	220	56	<0.5	<0.5	<0.5	<0.5	<0.5	--
MW-19A	6/8/2011		11.79	8.26	3.53	--	--	130	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
MW-19A	11/30/2011		11.79	7.56	4.23	--	--	240	<48	<0.5	<0.5	<0.5	<0.5	<0.5	--
MW-19A	06/27/2012		11.79	7.18	4.61	--	--	120	<49	<0.5	<0.5	<0.5	<0.5	<0.5	--

Notes appear on the following page.

Table 3
Groundwater Monitoring and Analytical Results (Total Petroleum Hydrocarbons and BTEX)
Former Chevron Asphalt Plant and Bulk Terminal #20-6265
1520 Powell Street
Emeryville, California

Well ID	Date	Notes	TOC (feet)	GWE (msl)	DTW (feet)	SPHT (feet)	SPH REMOVED (gallons)	TPH-g (µg/L)	TPH-d (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	TOG (µg/L)
ESL	--		--	--	--	--	--	5,000	2,500	540	380,000	170,000	160,000	24,000	--

Notes:

Bold = Analyte detected above reporting limit.

< = not detected at or above the indicated reporting limit

µg/L = micrograms per liter

TPH-g = total petroleum hydrocarbons as gasoline

TOG = total oil and grease

TPH-d = total petroleum hydrocarbons as diesel

MTBE = methyl tertiary butyl ether

[Redacted] = Detected concentration exceeds environmental screening levels (ESL) for groundwater (Table F-1B, Interim Final Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater, Regional Water Quality Control Board, San Francisco Bay Region, May 2008 and Table E-1 Groundwater Screening Levels for Evaluation of Potential Vapor Intrusion Concerns).

- 1 TPH was reported as Diesel #2.
- 2 Chromatogram pattern indicates an unidentified hydrocarbon.
- 3 Monitoring well was destroyed during soil excavation in 1989.
- 4 Sample has chlorinated hydrocarbon pattern, needs GSMS confirmation of MTBE.
- 5 Sample was analyzed outside the USEPA recommended holding time.
- 6 Unable to sample due to car parked over the well.
- 7 Confirmation run.
- 8 MTBE by USEPA Method 8240
- 9 MTBE by USEPA Method 8260.
- 10 Laboratory report indicates discrete peaks.
- 11 MTBE by USEPA Method 8260 was analyzed outside the USEPA recommended holding time.
- 12 BTEX and MTBE by USEPA Method 8260.
- 13 The value reported for xylene (total) is probably due to carryover from the previous sample. The analysis was repeated using a previously opened vial. This compound was not detected in the re-analysis. The reported results are from the initial analysis.
- 14 6 ppb 1,2-dichloropropane detected; other HVOCs not detected.
- 15 0.6 ppb 1,2-dichloroethane detected; other HVOCs not detected.
- 16 63 ppb chloromethane and 0.6 ppb methylene chloride detected; other HVOCs not detected; sample contained 1,250 ppb total dissolved solids.
- 17 0.9 ppb trans-1,3-dichloropropane detected; other HVOCs not detected; sample contained 810 ppb total dissolved solids.
- 18 0.9 ppb trichlorofluoromethane and 1 ppb trans-1,3-dichloropropane detected; other HVOCs not detected.
- 19 11 ppb trans-1,3-dichloropropane detected; other HVOCs not detected.
- 20 0.1 ppb 1,2-dichlorobenzene detected; other HVOCs not detected.
- 21 1.8 ppb 1,2-dichloroethane detected; other HVOCs not detected.
- 22 Chloromethane was detected at 2.4 ppb. Other HVOCs not detected at detection limits of 0.5 ppb.
- 23 3 ppb 1,1,2,2-tetrachloroethane detected; other HVOCs not detected.
- 24 0.9 ppb 1,2-dichlorobenzene detected; other HVOCs not detected.
- 25 0.5 ppb 1,2-dichloroethane detected; other HVOCs not detected.
- 26 0.9 ppb 1,2-dichloroethane detected; other HVOCs not detected.
- 27 Dichloromethane detected at 6.2 ppb. Other HVOCs not detected at detection limits of 0.5 ppb.
- 28 Chloromethane was detected at 0.6 ppb. Other HVOCs not detected at detection limits of 0.5 ppb.
- 29 1,1,2,2-Tetrachloroethane detected at 1.8 ppb; other HVOCs not detected at detection limits of 1.2 to 2.5 ppb.

Table 3
Groundwater Monitoring and Analytical Results (Total Petroleum Hydrocarbons and BTEX)
Former Chevron Asphalt Plant and Bulk Terminal #20-6265
1520 Powell Street
Emeryville, California

Well ID	Date	Notes	TOC (feet)	GWE (msl)	DTW (feet)	SPHT (feet)	SPH REMOVED (gallons)	TPH-g (µg/L)	TPH-d (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	TOG (µg/L)
ESL	--		--	--	--	--	--	5,000	2,500	540	380,000	170,000	160,000	24,000	--

³⁰ Laboratory report indicates 1,1,2,2-tetrachloroethane was detected at 3.8 ppb. Reported values for cis-1,2-dichloroethene; trichloroethene and tetrachloroethene are from 50X dilution sample re-analysis.

³¹ Trace concentrations of trihalomethane compounds detected in bailer blank.

³² 3.1 ppb 1,2-dichlorobenzene detected; other HVOCs not detected.

³³ Trace concentrations of trihalomethane compounds detected in bailer blank.

³⁴ Laboratory report indicates all other HVOCs were ND; see specific laboratory analytical report.

³⁵ Laboratory report indicates all other HVOCs were ND, except Freon 113 was detected at 2.3 ppb and 1,1,2,2-tetrachloroethane was 3.9 ppb.

³⁶ Laboratory report indicates all other HVOCs were ND, except Freon 113 detected at 5 ppb and 1,1,2,2-tetrachloroethane at 3 ppb; see specific laboratory analytical report.

³⁷ Laboratory report indicates all other HVOCs were ND, except for 1,1,2,2-tetrachloroethane detected at 4 ppb; see specific laboratory analytical report.

³⁸ Laboratory report indicates all other HVOCs were less than the reporting limit, except 1,1,2,2-tetrachloroethane was detected at 2 ppb and Freon 113 was detected at 4 ppb.

³⁹ Laboratory report indicates all other HVOCs were ND, except Freon 113 was detected at 3 ppb and 1,1,2,2-tetrachloroethane was 3 ppb.

⁴⁰ Laboratory report indicates all other HVOCs were ND, except Freon 113 was detected at 5 ppb and 1,1,2,2-tetrachloroethane was 2 ppb.

⁴¹ Laboratory report indicates all other HVOCs were ND, except 1,1,2,2-tetrachloroethane was 2 µg/L.

⁴² Laboratory report indicates all other HVOCs were ND, except 1,1,2,2-tetrachloroethane was 1 ppb.

⁴³ Laboratory report indicates all other HVOCs were ND, except Freon 113 was detected at 3 ppb.

⁴⁴ Laboratory report indicates all other HVOCs were ND, except 1,1,2,2-tetrachloroethane was 3 ppb.

⁴⁵ Laboratory report indicates all other HVOCs were ND, except 1,1,2,2-tetrachloroethane was 4 ppb.

Table 4
Groundwater Analytical Results (Chlorinated Solvents)
Former Chevron Asphalt Plant and Bulk Terminal #20-6265
1520 Powell Street
Emeryville, California

Well ID	Date	Notes	PCE (µg/L)	TCE (µg/L)	1,1-DCE (µg/L)	1,2-DCE (total) (µg/L)	trans-1,2- DCE (µg/L)	cis-1,2- DCE (µg/L)	1,1,1-TCA (µg/L)	1,1-DCA (µg/L)	Vinyl Chloride (µg/L)	Chloroform (µg/L)	HVOCs (µg/L)
ESL	--		120	530	6,300	--	6,700	6,200	130,000	1,000	3.8	330	--
MW-1	4/26/1985		--	--	--	--	--	--	--	--	--	--	--
MW-1	9/11/1987		--	--	--	--	--	--	--	--	--	--	--
MW-1	7/7/1988		--	--	--	--	--	--	--	--	--	--	--
MW-1	4/13/1989		--	--	--	--	--	--	--	--	--	--	--
MW-1	4/14/1989	14	<5.0	11	<5.0	--	19	720	<5.0	<5.0	340	<20	ND
MW-1	7/31/1989	15	<0.2	57	6.8	--	54	2,600	7.2	2.7	760	<1.0	ND
MW-1	12/8/1989		<0.5	59	4.3	2,700	--	--	1.4	1.7	520	<0.5	--
MW-1	3/21/1990		<0.5	130	7.1	7,000	--	--	1.1	2.1	1,100	<0.5	--
MW-1	6/19/1990		<0.5	81	12	6,100	--	--	<0.5	3.1	1,200	<0.5	--
MW-1	9/20/1990		--	--	--	--	--	--	--	--	--	--	--
MW-1	9/21/1990	16	<0.5	60	1.8	2,400	--	--	1.7	2.2	1,100	<0.5	ND
MW-1	12/28/1990	17	<0.5	15	2.0	--	28	1,500	0.6	1.0	510	<0.5	ND
MW-1	5/10/1991	18	<0.5	280	10	--	69	5,500	<0.5	2.0	1,800	<0.5	ND
MW-1	8/8/1991	19	<0.5	110	2.9	--	45	2,300	<0.5	1.5	<1.0	<0.5	ND
MW-1	11/27/1991		<25	<25	<25	--	<25	5,900	<25	<25	540	<25	<25
MW-1	1/29/1992		<25	<25	<25	--	26	1,900	<25	<25	320	<25	<25
MW-1	3/26/1992		<50	<50	<50	--	<50	1,500	<50	<50	260	<50	<50
MW-1	7/23/1992		<50	<50	<50	--	<50	2,300	<50	<50	170	<50	<50
MW-1	10/28/1992		<0.5	16	4.2	--	30	1,600	<0.5	3.6	810	<0.5	ND
MW-1	5/4/1993		<0.5	9.2	1.0	--	16	670	<0.5	0.5	110	<0.5	<0.5
MW-1	1/5/1994	END OF MONITORING	--	--	--	--	--	--	--	--	--	--	--
MW-2	4/26/1985		--	--	--	--	--	--	--	--	--	--	--
MW-2	9/11/1987		--	--	--	--	--	--	--	--	--	--	--
MW-2	7/7/1988		--	--	--	--	--	--	--	--	--	--	--
MW-2	4/13/1989		--	--	--	--	--	--	--	--	--	--	--
MW-2	4/14/1989		<0.2	<0.2	<0.2	<0.2	--	--	<0.2	<0.2	<0.2	<1.0	--
MW-2	7/31/1989		<0.2	<0.2	<0.2	<0.2	--	--	0.5	<0.4	<0.2	<1.0	--
MW-2	12/8/1989		<0.5	<0.5	<0.2	<0.5	--	--	<0.5	<0.5	<1.0	<0.5	--
MW-2	3/21/1990		<0.5	<0.5	<0.2	<0.5	--	--	<0.5	<0.5	<1.0	<0.5	--
MW-2	6/19/1990		<0.5	<0.5	<0.2	<0.5	--	--	<0.5	<0.5	<1.0	<0.5	--
MW-2	9/20/1990		--	--	--	--	--	--	--	--	--	--	--
MW-2	9/21/1990		<0.5	<0.5	<0.2	<0.5	--	--	<0.5	<0.5	<1.0	<0.5	--
MW-2	12/28/1990		<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	--
MW-2	5/10/1991		<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	ND
MW-2	8/8/1991		<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	ND
MW-2	11/27/1991		<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	ND
MW-2	1/29/1992		<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	ND
MW-2	3/26/1992		<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	ND

Table 4
Groundwater Analytical Results (Chlorinated Solvents)
Former Chevron Asphalt Plant and Bulk Terminal #20-6265
1520 Powell Street
Emeryville, California

Well ID	Date	Notes	PCE (µg/L)	TCE (µg/L)	1,1-DCE (µg/L)	1,2-DCE (total) (µg/L)	trans-1,2- DCE (µg/L)	cis-1,2- DCE (µg/L)	1,1,1-TCA (µg/L)	1,1-DCA (µg/L)	Vinyl Chloride (µg/L)	Chloroform (µg/L)	HVOCs (µg/L)
ESL	--		120	530	6,300	--	6,700	6,200	130,000	1,000	3.8	330	--
MW-2	7/23/1992		<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
MW-2	10/28/1992		<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	ND
MW-2	5/4/1993	INACCESSIBLE	--	--	--	--	--	--	--	--	--	--	--
MW-2	1/5/1994	INACCESSIBLE	--	--	--	--	--	--	--	--	--	--	--
MW-2	5/13/1994	INACCESSIBLE	--	--	--	--	--	--	--	--	--	--	--
MW-2	10/24/1994	DRY	--	--	--	--	--	--	--	--	--	--	--
MW-2	4/19/1995	ABANDONED	--	--	--	--	--	--	--	--	--	--	--
MW-2A	11/6/1995		<1.0	<1.0	<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	ND
MW-2A	4/26/1996		<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.8	<0.5	<0.5-<5.0
MW-2A	10/10/1996	2	<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.8	<0.5	ND
MW-2A	4/22/1997		<2.5	<2.5	<2.5	--	<2.5	<2.5	<2.5	<2.5	<4.0	<2.5	ND
MW-2A	10/16/1997		<1.0	<1.0	<1.0	--	<1.0	<1.0	<1.0	<1.0	<0.5	<1.0	ND
MW-2A	5/4/1998	2	<0.5	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	ND
MW-2A	10/27/1998	2, 7	<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	ND
MW-2A	4/15/1999		<1.25	<1.25	<1.25	--	<1.25	<1.25	<1.25	<1.25	<2.50	<1.25	ND
MW-2A	11/4/1999	END OF MONITORING	<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ND
MWX-2	6/24/2009		23 [23]	69 [60]	<0.8 [<0.8]	--	3 [4]	91 [91]	<0.8 [<0.8]	<1 [<1]	6 [17]	0.9 [<0.8]	--
MWX-2	10/27/2009		--	--	--	--	--	--	--	--	--	--	--
MWX-2	5/19/2010		130	43	0.9	--	5	230	<0.8	<1	62	<0.8	--
MWX-2	10/27/2010		760	48	<0.8	--	2	150	<0.8	<1	<1	<0.8	--
MWX-2	6/9/2011		310	30	<0.8	--	2	130	<0.8	<1	8	<0.8	--
MWX-2	12/2/2011		480 [510]	45 [44]	<0.8 [<0.8]	--	2 [3]	130 [140]	<0.8 [<0.8]	<1 [<1]	3 [3]	<0.8 [<0.8]	--
MWX-2	6/26/2012	NOT ACCESSIBLE	--	--	--	--	--	--	--	--	--	--	--
MW-3	4/26/1985		--	--	--	--	--	--	--	--	--	--	--
MW-3	9/11/1987		--	--	--	--	--	--	--	--	--	--	--
MW-3	7/7/1988		--	--	--	--	--	--	--	--	--	--	--
MW-3	4/13/1989		--	--	--	--	--	--	--	--	--	--	--
MW-3	4/14/1989		<0.2	<0.2	<0.2	<0.2	--	--	<0.2	<0.2	<0.2	<1.0	--
MW-3	7/31/1989		<0.2	<0.2	<0.2	<0.2	--	--	0.5	<0.4	<0.2	<1.0	--
MW-3	12/8/1989		<0.5	<0.5	<0.2	<0.5	--	--	<0.5	<0.5	<1.0	<0.5	--
MW-3	3/21/1990		<0.5	<0.5	<0.2	<0.5	--	--	<0.5	<0.5	<1.0	<0.5	--
MW-3	6/19/1990		<0.5	<0.5	<0.2	<0.5	--	--	<0.5	<0.5	<1.0	<0.5	--
MW-3	9/20/1990		--	--	--	--	--	--	--	--	--	--	--
MW-3	9/21/1990		<0.5	<0.5	<0.2	<0.5	--	--	<0.5	<0.5	<1.0	<0.5	--
MW-3	12/28/1990		<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	--
MW-3	5/10/1991		<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	ND
MW-3	8/8/1991		<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	ND
MW-3	11/27/1991		<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	ND

Table 4
Groundwater Analytical Results (Chlorinated Solvents)
Former Chevron Asphalt Plant and Bulk Terminal #20-6265
1520 Powell Street
Emeryville, California

Well ID	Date	Notes	PCE (µg/L)	TCE (µg/L)	1,1-DCE (µg/L)	1,2-DCE (total) (µg/L)	trans-1,2- DCE (µg/L)	cis-1,2- DCE (µg/L)	1,1,1-TCA (µg/L)	1,1-DCA (µg/L)	Vinyl Chloride (µg/L)	Chloroform (µg/L)	HVOCs (µg/L)
ESL	--		120	530	6,300	--	6,700	6,200	130,000	1,000	3.8	330	--
MW-3	1/29/1992		<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	ND
MW-3	3/26/1992		<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	ND
MW-3	7/23/1992		<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
MW-3	10/28/1992		<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	ND
MW-3	5/4/1993	INACCESSIBLE	--	--	--	--	--	--	--	--	--	--	--
MW-3	1/5/1994	INACCESSIBLE	--	--	--	--	--	--	--	--	--	--	--
MW-3	5/13/1994	END OF MONITORING	--	--	--	--	--	--	--	--	--	--	--
MWX-3	6/24/2009		<2	2,100	2	--	22	670	<2	3	24	<2	--
MWX-3	10/27/2009		--	--	--	--	--	--	--	--	--	--	--
MWX-3	5/19/2010		<0.8	490	<0.8	--	10	480	<0.8	<1	12	<0.8	--
MWX-3	10/27/2010		<0.8	330	<0.8	--	8	500	<0.8	<1	5	1	--
MWX-3	6/7/2011		<0.8	430	<0.8	--	14	630	<0.8	<1	8	<0.8	--
MWX-3	12/2/2011		<0.8	630	1	--	12	430	<0.8	1	13	<0.8	--
MWX-3	06/27/2012		<0.8	3	<0.8	--	10	130	<0.8	3	6	3	--
MW-4	4/26/1985		--	--	--	--	--	--	--	--	--	--	--
MW-4	9/11/1987		--	--	--	--	--	--	--	--	--	--	--
MW-4	7/7/1988		--	--	--	--	--	--	--	--	--	--	--
MW-4	4/13/1989		--	--	--	--	--	--	--	--	--	--	--
MW-4	4/14/1989	1, END OF MONITORING	<1.0	<1.0	<1.0	<1.0	--	--	<1.0	2.0	<1.0	<2.0	--
MW-5	4/26/1985		--	--	--	--	--	--	--	--	--	--	--
MW-5	9/11/1987		--	--	--	--	--	--	--	--	--	--	--
MW-5	7/7/1988		--	--	--	--	--	--	--	--	--	--	--
MW-5	4/13/1989		--	--	--	--	--	--	--	--	--	--	--
MW-5	4/14/1989	1, END OF MONITORING	<1.0	<1.0	<1.0	<1.0	--	--	<1.0	2.0	<1.0	<2.0	--
MW-6	4/26/1985		--	--	--	--	--	--	--	--	--	--	--
MW-6	9/11/1987		--	--	--	--	--	--	--	--	--	--	--
MW-6	7/7/1988		--	--	--	--	--	--	--	--	--	--	--
MW-6	4/13/1989		--	--	--	--	--	--	--	--	--	--	--
MW-6	4/14/1989	1, END OF MONITORING	<1.0	<1.0	<1.0	<1.0	--	--	<1.0	2.0	<1.0	<2.0	--
MWX-6	6/24/2009		<0.8	<1	<0.8	--	<0.8	1.0	<0.8	<1	<1	<0.8	--
MWX-6	10/27/2009		--	--	--	--	--	--	--	--	--	--	--
MWX-6	5/20/2010		<0.8	<1	<0.8	--	<0.8	2.0	<0.8	<1	<1	<0.8	--
MWX-6	10/26/2010		<0.8	<1	<0.8	--	<0.8	2.0	<0.8	<1	<1	<0.8	--
MWX-6	6/8/2011		<0.8	<1	<0.8	--	<0.8	1.0	<0.8	<1	<1	<0.8	--
MWX-6	11/30/2011		<0.8	<1	<0.8	--	<0.8	1.0	<0.8	<1	<1	<0.8	--
MWX-6	06/27/2012		<0.8	<1	<0.8	--	<0.8	1	<0.8	<1	<1	<0.8	--
MW-7	4/26/1985		--	--	--	--	--	--	--	--	--	--	--
MW-7	9/11/1987		--	--	--	--	--	--	--	--	--	--	--

Table 4
Groundwater Analytical Results (Chlorinated Solvents)
Former Chevron Asphalt Plant and Bulk Terminal #20-6265
1520 Powell Street
Emeryville, California

Well ID	Date	Notes	PCE (µg/L)	TCE (µg/L)	1,1-DCE (µg/L)	1,2-DCE (total) (µg/L)	trans-1,2- DCE (µg/L)	cis-1,2- DCE (µg/L)	1,1,1-TCA (µg/L)	1,1-DCA (µg/L)	Vinyl Chloride (µg/L)	Chloroform (µg/L)	HVOCs (µg/L)
ESL	--		120	530	6,300	--	6,700	6,200	130,000	1,000	3.8	330	--
MW-7	7/7/1988		--	--	--	--	--	--	--	--	--	--	--
MW-7	4/13/1989		--	--	--	--	--	--	--	--	--	--	--
MW-7	4/14/1989		<1.0	<1.0	<1.0	<1.0	--	--	1.0	1.0	<1.0	<2.0	--
MW-7	7/31/1989	1, 20	<0.1	<0.1	<0.1	0.3	--	--	4.5	0.3	<0.1	<0.5	ND
MW-7	7/31/1989	1, 20	<0.1	<0.1	<0.1	0.4	--	--	2.6	0.2	<0.1	<0.5	ND
MW-7	12/8/1989		<0.5	<0.5	<0.2	<0.5	--	--	0.67	<0.5	<1.0	<0.5	--
MW-7	3/21/1990		<0.5	<0.5	<0.2	<0.5	--	--	1.4	<0.5	<1.0	<0.5	--
MW-7	6/19/1990		<0.5	<0.5	<0.2	<0.5	--	--	0.67	<0.5	<1.0	<0.5	--
MW-7	9/20/1990		--	--	--	--	--	--	--	--	--	--	--
MW-7	9/21/1990		<0.5	<0.5	<0.2	<0.5	--	--	<0.5	<0.5	<1.0	<0.5	--
MW-7	12/28/1990		<0.5	<0.5	<0.5	--	<0.5	<0.5	0.9	<0.5	<1.0	<0.5	--
MW-7	5/10/1991		<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	ND
MW-7	8/8/1991		<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	ND
MW-7	11/27/1991		<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	ND
MW-7	1/29/1992		<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	ND
MW-7	3/26/1992		<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	ND
MW-7	7/23/1992		<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
MW-7	10/28/1992		<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	ND
MW-7	5/4/1993	INACCESSIBLE	--	--	--	--	--	--	--	--	--	--	--
MW-7	1/5/1994	INACCESSIBLE	--	--	--	--	--	--	--	--	--	--	--
MW-7	5/13/1994		<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5-<1.0
MW-7	10/24/1994		<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5-<1.0
MW-7	4/19/1995		<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
MW-7	11/6/1995		<1.0	<1.0	--	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	ND
MW-7	4/26/1996		<0.5	<0.5	--	--	<0.5	<0.5	<0.5	<0.5	<0.8	<0.5	<0.5-<5.0
MW-7	10/10/1996		<0.5	<0.5	--	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ND
MW-7	4/22/1997		<0.5	<0.5	--	--	<0.5	<0.5	<0.5	<0.5	<0.8	<0.5	ND
MW-7	10/16/1997		<1.0	<10	--	--	<1.0	<1.0	<1.0	<1.0	<0.5	<1.0	ND
MW-7	5/4/1998		<0.5	<0.5	--	--	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	ND
MW-7	10/27/1998		<0.5	<0.5	--	--	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	ND
MW-7	4/15/1999		<0.5	<0.5	--	--	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	ND
MW-7	11/4/1999		<0.5	<0.5	--	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ND
MW-7	4/13/2000	INACCESSIBLE	--	--	--	--	--	--	--	--	--	--	--
MW-7	10/5/2000	UNABLE TO LOCATE	--	--	--	--	--	--	--	--	--	--	--
MW-7	4/23/2001	UNABLE TO LOCATE	--	--	--	--	--	--	--	--	--	--	--
MW-7	10/4/2001	UNABLE TO LOCATE	--	--	--	--	--	--	--	--	--	--	--
MW-7	4/1/2002	UNABLE TO LOCATE	--	--	--	--	--	--	--	--	--	--	--
MW-7	10/19/2002	UNABLE TO LOCATE	--	--	--	--	--	--	--	--	--	--	--

Table 4
Groundwater Analytical Results (Chlorinated Solvents)
Former Chevron Asphalt Plant and Bulk Terminal #20-6265
1520 Powell Street
Emeryville, California

Well ID	Date	Notes	PCE (µg/L)	TCE (µg/L)	1,1-DCE (µg/L)	1,2-DCE (total) (µg/L)	trans-1,2- DCE (µg/L)	cis-1,2- DCE (µg/L)	1,1,1-TCA (µg/L)	1,1-DCA (µg/L)	Vinyl Chloride (µg/L)	Chloroform (µg/L)	HVOCs (µg/L)
ESL	--		120	530	6,300	--	6,700	6,200	130,000	1,000	3.8	330	--
MW-7	4/16/2003	UNABLE TO LOCATE	--	--	--	--	--	--	--	--	--	--	--
MW-7	10/29/2003	UNABLE TO LOCATE	--	--	--	--	--	--	--	--	--	--	--
MW-8	4/26/1985		--	--	--	--	--	--	--	--	--	--	--
MW-8	9/11/1987		--	--	--	--	--	--	--	--	--	--	--
MW-8	7/7/1988		--	--	--	--	--	--	--	--	--	--	--
MW-8	4/13/1989		--	--	--	--	--	--	--	--	--	--	--
MW-8	4/14/1989		<1.0	<1.0	<1.0	<1.0	--	--	<1.0	<1.0	<1.0	<2.0	--
MW-8	7/31/1989		<0.1	0.4	<0.1	--	0.6	1.9	1.7	1.7	1.2	<0.5	ND
MW-8	12/8/1989		<0.5	<0.5	<0.2	0.53	--	--	0.84	<0.5	<1.0	<0.5	--
MW-8	3/21/1990		<0.5	<0.5	<0.2	0.96	--	--	0.72	<0.5	<1.0	<0.5	--
MW-8	6/19/1990		<0.5	<0.5	<0.2	0.59	--	--	0.67	<0.5	<1.0	<0.5	--
MW-8	9/20/1990		--	--	--	--	--	--	--	--	--	--	--
MW-8	9/21/1990		<0.5	<0.5	<0.2	<0.5	--	--	<0.5	<0.5	<1.0	<0.5	--
MW-8	12/28/1990		<0.5	<0.5	<0.5	--	<0.5	<0.5	2.0	<0.5	<1.0	<0.5	--
MW-8	5/10/1991		<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	ND
MW-8	8/8/1991		<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	ND
MW-8	11/27/1991		<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	ND
MW-8	1/29/1992		<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	ND
MW-8	3/26/1992		<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	ND
MW-8	7/23/1992		<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
MW-8	10/28/1992	INACCESSIBLE	--	--	--	--	--	--	--	--	--	--	--
MW-8	5/4/1993	INACCESSIBLE	--	--	--	--	--	--	--	--	--	--	--
MW-8	1/5/1994	INACCESSIBLE	--	--	--	--	--	--	--	--	--	--	--
MW-8	5/13/1994		<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5-<1.0
MW-8	10/24/1994	INACCESSIBLE	--	--	--	--	--	--	--	--	--	--	--
MW-8	4/19/1995	3, INACCESSIBLE	--	--	--	--	--	--	--	--	--	--	--
MW-8	11/6/1995	INACCESSIBLE	--	--	--	--	--	--	--	--	--	--	--
MW-8	4/26/1996	INACCESSIBLE	--	--	--	--	--	--	--	--	--	--	--
MW-8	10/10/1996	INACCESSIBLE	--	--	--	--	--	--	--	--	--	--	--
MW-8	4/22/1997		<0.5	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.8	<0.5	ND
MW-8	10/16/1997		<1.0	<10	<1.0	--	<1.0	<1.0	<1.0	<1.0	<0.5	<1.0	ND
MW-8	5/4/1998		<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	ND
MW-8	10/27/1998		<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	ND
MW-8	4/15/1999		<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	ND
MW-8	11/4/1999	END OF MONITORING	<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ND
MWX-8	6/24/2009		260	64	<0.8	--	3	84	<0.8	<1	6	<0.8	--
MWX-8	10/27/2009		--	--	--	--	--	--	--	--	--	--	--
MWX-8	5/18/2010		260	67	<0.8	--	3	91	<0.8	<1	6	<0.8	--

Table 4
Groundwater Analytical Results (Chlorinated Solvents)
Former Chevron Asphalt Plant and Bulk Terminal #20-6265
1520 Powell Street
Emeryville, California

Well ID	Date	Notes	PCE (µg/L)	TCE (µg/L)	1,1-DCE (µg/L)	1,2-DCE (total) (µg/L)	trans-1,2- DCE (µg/L)	cis-1,2- DCE (µg/L)	1,1,1-TCA (µg/L)	1,1-DCA (µg/L)	Vinyl Chloride (µg/L)	Chloroform (µg/L)	HVOCs (µg/L)
ESL	--		120	530	6,300	--	6,700	6,200	130,000	1,000	3.8	330	--
MWX-8	10/26/2010		290	170	<0.8	--	5	230	<0.8	<1	19	<0.8	--
MWX-8	6/8/2011		280	49	<0.8	--	4	100	<0.8	<1	1	<0.8	--
MWX-8	12/2/2011		240	78	<0.8	--	4	120	<0.8	<1	3	<0.8	--
MWX-8	06/27/2012		<0.8	<1	<0.8	--	3	23	<0.8	<1	3	<0.8	--
MW-9	4/26/1985		--	--	--	--	--	--	--	--	--	--	--
MW-9	9/11/1987		--	--	--	--	--	--	--	--	--	--	--
MW-9	7/7/1988		--	--	--	--	--	--	--	--	--	--	--
MW-9	5/10/1991	END OF MONITORING	--	--	--	--	--	--	--	--	--	--	--
MWX-9	6/24/2009		9	17	<0.8	--	1	37	<0.8	<1	3	<0.8	--
MWX-9	10/27/2009		--	--	--	--	--	--	--	--	--	--	--
MWX-9	5/20/2010		7	20	<0.8	--	1	8	<0.8	<1	<1	<0.8	--
MWX-9	10/26/2010		5 [6]	18 [18]	<0.8 [<0.8]	--	1 [1]	21 [26]	<0.8 [<0.8]	<1 [<1]	<1 [<1]	<0.8 [<0.8]	--
MWX-9	6/9/2011		5 [10]	21 [21]	<0.8 [<0.8]	--	1 [<1]	7 [13]	<0.8 [<0.8]	<1 [<1]	<1 [<1]	<0.8 [<0.8]	--
MWX-9	11/30/2011		3	13	<0.8	--	0.9	6	<0.8	<1	<1	<0.8	--
MWX-9	06/27/2012		4	16	<0.8	--	0.9	23	<0.8	<1	<1	<0.8	--
MW-10	7/7/1988		--	--	--	--	--	--	--	--	--	--	--
MW-10	4/14/1989		<1.0	5.0	<1.0	15	--	--	<1.0	2.0	<1.0	<2.0	--
MW-10	7/31/1989		<0.1	5.3	0.7	--	6.3	27	<0.1	2.9	<0.1	<0.5	ND
MW-10	12/8/1989		<0.5	4.9	<0.2	24	--	--	<0.5	3.1	<1.0	0.6	--
MW-10	3/21/1990		<0.5	3.5	0.7	30	--	--	<0.5	2.5	<1.0	<0.5	--
MW-10	6/19/1990		<0.5	6.3	0.3	33	--	--	<0.5	2.6	<1.0	<0.5	--
MW-10	9/20/1990		--	--	--	--	--	--	--	--	--	--	--
MW-10	9/21/1990		<0.5	5.9	<0.2	32	--	--	<0.5	5.0	<1.0	<0.5	--
MW-10	12/28/1990		<0.5	5.0	<0.5	--	6.0	19	<0.5	2.0	<1.0	<0.5	--
MW-10	5/10/1991		<0.5	6.0	0.6	--	7.0	24	<0.5	2.0	<1.0	<0.5	ND
MW-10	8/8/1991		<0.5	6.2	<0.5	--	7.0	33	<0.5	3.1	<1.0	<0.5	ND
MW-10	11/27/1991		<0.5	8.5	<0.5	--	6.8	100	<0.5	<0.5	<1.0	<0.5	ND
MW-10	1/29/1992		<0.5	7.4	<0.5	--	9.1	30	<0.5	2.8	<1.0	<0.5	ND
MW-10	3/26/1992		<0.5	6.8	0.7	--	9.2	29	<0.5	2.5	<1.0	<0.5	ND
MW-10	7/23/1992		<0.5	4.7	<0.5	--	6.1	21	<0.5	1.5	<0.5	<0.5	<0.5
MW-10	10/28/1992		<0.5	4.1	<0.5	--	4.3	16	<0.5	2.1	<1.0	<0.5	ND
MW-10	5/4/1993	INACCESSIBLE	--	--	--	--	--	--	--	--	--	--	--
MW-10	1/5/1994		<0.5	0.8	<0.5	--	1.3	5.2	1.0	0.5	<1.0	<0.5	<0.5
MW-10	5/13/1994		<0.5	4.8	<0.5	--	12	31	<0.5	2.7	<0.5	<0.5	<0.5-<1.0
MW-10	10/24/1994		<10	<10	<10	--	13	44	<10	<10	<10	<10	<10-<20
MW-10	4/19/1995		<0.5	9.2	0.7	--	14	36	<0.5	<0.5	<0.5	<0.5	<0.5
MW-10	11/6/1995		<1.0	14	1.0	--	19	41	<1.0	1.4	<1.0	<1.0	ND

Table 4
Groundwater Analytical Results (Chlorinated Solvents)
Former Chevron Asphalt Plant and Bulk Terminal #20-6265
1520 Powell Street
Emeryville, California

Well ID	Date	Notes	PCE (µg/L)	TCE (µg/L)	1,1-DCE (µg/L)	1,2-DCE (total) (µg/L)	trans-1,2- DCE (µg/L)	cis-1,2- DCE (µg/L)	1,1,1-TCA (µg/L)	1,1-DCA (µg/L)	Vinyl Chloride (µg/L)	Chloroform (µg/L)	HVOCs (µg/L)
ESL	--		120	530	6,300	--	6,700	6,200	130,000	1,000	3.8	330	--
MW-10	4/26/1996	INACCESSIBLE	--	--	--	--	--	--	--	--	--	--	--
MW-10	10/10/1996	8	<0.5	14	0.7	--	17	38	<0.5	0.8	<0.8	<0.5	ND
MW-10	4/22/1997		<0.5	13	<0.5	--	12	27	<0.5	0.5	<0.8	<0.5	ND
MW-10	10/16/1997		<1.0	<10	<1.0	--	11	23	<1.0	<1.0	0.7	<1.0	ND
MW-10	5/4/1998	4	<0.5	7.6	<0.5	--	6.5	16	<0.5	<0.5	<1.0	<0.5	ND
MW-10	10/27/1998		<0.5	9.6	<0.5	--	7.7	18	<0.5	0.54	<1.0	<0.5	ND
MW-10	4/15/1999		<0.5	11.3	<0.5	--	8.32	19.1	<0.5	0.603	<1.0	<0.5	ND
MW-10	11/4/1999	END OF MONITORING	<0.5	8.23	<0.5	--	5.17	13.8	<0.5	<0.5	<0.5	<0.5	ND
MWX-10A	6/24/2009		<0.8	17	<0.8	--	<0.8	2	<0.8	<1	<1	<0.8	--
MWX-10A	10/27/2009		--	--	--	--	--	--	--	--	--	--	--
MWX-10A	5/20/2010		<0.8	6	<0.8	--	<0.8	3	<0.8	<1	<1	<0.8	--
MWX-10A	10/28/2010		<0.8	14	<0.8	--	<0.8	4	<0.8	<1	<1	<0.8	--
MWX-10A	6/10/2011		<0.8	5	<0.8	--	<0.8	3	<0.8	<1	<1	<0.8	--
MWX-10A	12/1/2011		<0.8	6	<0.8	--	<0.8	5	<0.8	<1	<1	<0.8	--
MWX-10A	06/26/2012		<0.8	3	<0.8	--	<0.8	3	<0.8	<1	<1	<0.8	--
MW-11	7/7/1988		--	--	--	--	--	--	--	--	--	--	--
MW-11	4/14/1989		<1.0	4.0	<1.0	120	--	--	<1.0	<1.0	10	<2.0	--
MW-11	7/31/1989		<0.2	2.9	0.9	--	40	110	1.4	2.2	<0.2	<0.2	ND
MW-11	12/8/1989		<0.5	4.1	0.5	120	--	--	1.2	2.1	2.4	<0.5	--
MW-11	3/21/1990	21	<0.5	3.5	1.3	150	--	--	1.7	1.2	4.3	<0.5	ND
MW-11	6/19/1990		<0.5	5.0	0.068	140	--	--	<0.5	1.3	1.0	<0.5	--
MW-11	9/20/1990		--	--	--	--	--	--	--	--	--	--	--
MW-11	9/21/1990		<0.5	3.8	<0.2	100	--	--	<0.5	1.1	<1.0	<0.5	--
MW-11	12/28/1990		<0.5	3.0	<0.5	--	23	43	0.7	0.9	<1.0	<0.5	--
MW-11	5/10/1991		<0.5	5.0	0.9	--	44	110	<0.5	0.5	<1.0	<0.5	ND
MW-11	8/8/1991		<0.5	2.4	<0.5	--	29	77	<0.5	0.9	<1.0	<0.5	ND
MW-11	11/27/1991		<0.5	<0.5	<0.5	--	34	240	<0.5	<0.5	<1.0	<0.5	ND
MW-11	1/29/1992		<5.0	<5.0	<5.0	--	33	91	<5.0	<5.0	<10	<5.0	ND
MW-11	3/26/1992		<2.5	<2.5	<2.5	--	21	51	<2.5	<2.5	<5.0	<2.5	ND
MW-11	7/23/1992		<0.5	1.4	<0.5	--	18	46	<0.5	0.6	<0.5	<0.5	<0.5
MW-11	10/28/1992		<0.5	4.6	0.5	--	36	80	<0.5	<0.5	<1.0	<0.5	ND
MW-11	5/4/1993	INACCESSIBLE	--	--	--	--	--	--	--	--	--	--	--
MW-11	1/5/1994	INACCESSIBLE	--	--	--	--	--	--	--	--	--	--	--
MW-11	5/13/1994		<0.5	7.9	<0.5	--	62	82	<0.5	<0.5	1.7	<0.5	<0.5-<1.0
MW-11	10/24/1994		<10	<10	<10	--	28	75	<10	<10	<10	<10	<10-<20
MW-11	4/19/1995	2, 22	<0.5	6.5	<0.5	--	18	39	<0.5	<0.5	<0.5	1.0	ND

Table 4
Groundwater Analytical Results (Chlorinated Solvents)
Former Chevron Asphalt Plant and Bulk Terminal #20-6265
1520 Powell Street
Emeryville, California

Well ID	Date	Notes	PCE (µg/L)	TCE (µg/L)	1,1-DCE (µg/L)	1,2-DCE (total) (µg/L)	trans-1,2- DCE (µg/L)	cis-1,2- DCE (µg/L)	1,1,1-TCA (µg/L)	1,1-DCA (µg/L)	Vinyl Chloride (µg/L)	Chloroform (µg/L)	HVOCs (µg/L)
ESL	--		120	530	6,300	--	6,700	6,200	130,000	1,000	3.8	330	--
MW-11	11/6/1995	INACCESSIBLE	--	--	--	--	--	--	--	--	--	--	--
MW-11	4/26/1996	INACCESSIBLE	--	--	--	--	--	--	--	--	--	--	--
MW-11	10/10/1996	INACCESSIBLE	--	--	--	--	--	--	--	--	--	--	--
MW-11	4/22/1997		<0.5	3.0	<0.5	--	4.7	12	<0.5	<0.5	<0.8	<0.5	ND
MW-11	10/16/1997		<1.0	<10	<1.0	--	5.1	24	<1.0	<1.0	3.7	<1.0	ND
MW-11	5/4/1998	4	<0.5	2.8	<0.5	--	4.2	12	<0.5	<0.5	<1.0	<0.5	ND
MW-11	10/27/1998	7	<0.5	1.8	<0.5	--	2.7	8.3	<0.5	<0.5	<1.0	<0.5	ND
MW-11	4/15/1999		<0.5	2.87	<0.5	--	3.29	10.1	<0.5	<0.5	<1.0	<0.5	ND
MW-11	11/4/1999	END OF MONITORING	<0.5	2.19	<0.5	--	2.29	7.36	<0.5	<0.5	<0.5	<0.5	ND
MWX-11A	6/24/2009		<0.8	3.0	<0.8	--	<0.8	2	<0.8	<1	<1	<0.8	--
MWX-11A	10/27/2009		--	--	--	--	--	--	--	--	--	--	--
MWX-11A	5/20/2010		<0.8	3	<0.8	--	0.9	2	<0.8	<1	<1	<0.8	--
MWX-11A	10/28/2010		<0.8	4	<0.8	--	<0.8	2	1	<1	<1	<0.8	--
MWX-11A	6/10/2011		<0.8	11	<0.8	--	4	8	<0.8	<1	<1	<0.8	--
MWX-11A	11/30/2011		<0.8	4	<0.8	--	1	5	<0.8	<1	<1	<0.8	--
MWX-11A	06/26/2012		<0.8 [<0.8]	5 [5]	<0.8 [<0.8]	--	0.8 [0.8]	2 [2]	0.8 [0.9]	<1 [<1]	<1 [<1]	<0.8 [<0.8]	--
MW-12	7/7/1988		--	--	--	--	--	--	--	--	--	--	--
MW-12	4/14/1989		<1.0	<1.0	<1.0	1.0	--	--	<1.0	<1.0	<1.0	<2.0	--
MW-12	7/31/1989		<0.1	0.8	<0.1	1.7	--	--	<0.1	<0.1	<0.1	<0.5	ND
MW-12	12/8/1989		<0.5	<0.5	<0.2	<0.5	--	--	<0.5	<0.5	<1.0	<0.5	--
MW-12	3/21/1990		<0.5	<0.5	<0.2	<0.5	<0.5	--	<0.5	<0.5	<1.0	<0.5	--
MW-12	6/19/1990		<0.5	<0.5	<0.2	<0.5	<0.5	--	<0.5	<0.5	<1.0	<0.5	--
MW-12	9/20/1990		--	--	--	--	--	--	--	--	--	--	--
MW-12	9/21/1990		<0.5	<0.5	<0.2	<0.5	<0.5	--	<0.5	<0.5	<1.0	<0.5	--
MW-12	12/28/1990		<0.5	<0.5	<0.2	--	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	--
MW-12	5/10/1991		<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	ND
MW-12	8/8/1991		<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<0.5	<1.0	0.9	ND
MW-12	11/27/1991		<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	ND
MW-12	1/29/1992		<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	ND
MW-12	3/26/1992		<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	ND
MW-12	7/23/1992	END OF MONITORING	--	--	--	--	--	--	--	--	--	--	--
MW-13	3/21/1990		<0.5	<0.5	<0.2	<0.5	--	--	<0.5	<0.5	<1.0	<0.5	--
MW-13	6/19/1990		<0.5	<0.5	<0.2	<0.5	--	--	<0.5	<0.5	<1.0	<0.5	--
MW-13	9/20/1990		<0.5	<0.5	<0.2	<0.5	--	--	<0.5	<0.5	<1.0	<0.5	--
MW-13	12/28/1990		<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	--
MW-13	5/10/1991	23	<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	ND
MW-13	8/8/1991	3	<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	ND

Table 4
Groundwater Analytical Results (Chlorinated Solvents)
Former Chevron Asphalt Plant and Bulk Terminal #20-6265
1520 Powell Street
Emeryville, California

Well ID	Date	Notes	PCE (µg/L)	TCE (µg/L)	1,1-DCE (µg/L)	1,2-DCE (total) (µg/L)	trans-1,2- DCE (µg/L)	cis-1,2- DCE (µg/L)	1,1,1-TCA (µg/L)	1,1-DCA (µg/L)	Vinyl Chloride (µg/L)	Chloroform (µg/L)	HVOCs (µg/L)
ESL	--		120	530	6,300	--	6,700	6,200	130,000	1,000	3.8	330	--
MW-13	11/27/1991		<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	ND
MW-13	1/29/1992		<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	ND
MW-13	3/26/1992		<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	ND
MW-13	7/23/1992		<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
MW-13	10/28/1992		<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	ND
MW-13	5/4/1993	INACCESSIBLE	--	--	--	--	--	--	--	--	--	--	--
MW-13	1/5/1994	INACCESSIBLE	--	--	--	--	--	--	--	--	--	--	--
MW-13	5/13/1994		<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5-<1.0
MW-13	10/24/1994		<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5-<1.0
MW-13	4/19/1995	2	<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
MW-13	11/6/1995		<1.0	<1.0	<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	ND
MW-13	4/26/1996		<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.8	<0.5	<0.5-<5.0
MW-13	10/10/1996	INACCESSIBLE	--	--	--	--	--	--	--	--	--	--	--
MW-13	4/22/1997		<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.8	<0.5	ND
MW-13	10/16/1997		<1.0	<1.0	<1.0	--	<1.0	<1.0	<1.0	<1.0	<0.5	<1.0	ND
MW-13	5/4/1998		<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	ND
MW-13	10/27/1998		<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	ND
MW-13	4/15/1999	INACCESSIBLE	--	--	--	--	--	--	--	--	--	--	--
MW-13	11/4/1999	END OF MONITORING	<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ND
MW-14	3/21/1990		<0.5	<0.5	<2.0	<0.5	--	--	<0.5	<0.5	<1.0	<0.5	--
MW-14	6/19/1990		<0.5	<0.5	<2.0	<0.5	--	--	<0.5	<0.5	<1.0	<0.5	--
MW-14	9/20/1990		<0.5	<0.5	<2.0	<0.5	--	--	<0.5	<0.5	<1.0	<0.5	--
MW-14	12/28/1990		<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	--
MW-14	5/10/1991		<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	ND
MW-14	8/8/1991		<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	ND
MW-14	11/27/1991		<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	ND
MW-14	1/29/1992		<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	ND
MW-14	3/26/1992		<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	ND
MW-14	7/23/1992		<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
MW-14	10/28/1992	END OF MONITORING	<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	ND
MW-15	3/21/1990		<0.5	<0.5	<0.2	<0.5	--	--	<0.5	<0.5	<1.0	<0.5	--
MW-15	6/19/1990		<0.5	<0.5	<0.2	<0.5	--	--	<0.5	<0.5	<1.0	<0.5	--
MW-15	9/20/1990		<0.5	<0.5	<0.2	<0.5	--	--	<0.5	<0.5	<1.0	<0.5	--
MW-15	12/28/1990		<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	--
MW-15	5/10/1991	24	<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	ND
MW-15	8/8/1991		<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	ND

Table 4
Groundwater Analytical Results (Chlorinated Solvents)
Former Chevron Asphalt Plant and Bulk Terminal #20-6265
1520 Powell Street
Emeryville, California

Well ID	Date	Notes	PCE (µg/L)	TCE (µg/L)	1,1-DCE (µg/L)	1,2-DCE (total) (µg/L)	trans-1,2- DCE (µg/L)	cis-1,2- DCE (µg/L)	1,1,1-TCA (µg/L)	1,1-DCA (µg/L)	Vinyl Chloride (µg/L)	Chloroform (µg/L)	HVOCs (µg/L)
ESL	--		120	530	6,300	--	6,700	6,200	130,000	1,000	3.8	330	--
MW-15	11/27/1991		<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	ND
MW-15	1/29/1992		<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	ND
MW-15	3/26/1992		<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	ND
MW-15	7/23/1992		<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
MW-15	10/28/1992		<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	ND
MW-15	5/4/1993	INACCESSIBLE	--	--	--	--	--	--	--	--	--	--	--
MW-15	1/5/1994	INACCESSIBLE	--	--	--	--	--	--	--	--	--	--	--
MW-15	5/13/1994		<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5-<1.0
MW-15	10/24/1994		<0.5	3.1	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.5	3.8	<0.5-<1.0
MW-15	4/19/1995		<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
MW-15	11/6/1995		<1.0	<1.0	<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	ND
MW-15	4/26/1996		<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.8	<0.5	<0.5-<5.0
MW-15	10/10/1996		<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.8	<0.5	ND
MW-15	4/22/1997		<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.8	<0.5	ND
MW-15	10/16/1997		<1.0	<10	<1.0	--	<1.0	<1.0	<1.0	<1.0	<0.5	<1.0	ND
MW-15	5/4/1998		<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	ND
MW-15	10/17/1998	INACCESSIBLE	--	--	--	--	--	--	--	--	--	--	--
MW-15	4/15/1999		--	--	--	--	--	--	--	--	--	--	--
MW-15	11/4/1999		<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ND
MW-15	4/13/2000	34	<1.0	<1.0	<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--
MW-15	10/6/2000	UNABLE TO LOCATE	--	--	--	--	--	--	--	--	--	--	--
MW-15	4/23/2001	UNABLE TO LOCATE	--	--	--	--	--	--	--	--	--	--	--
MW-15	10/4/2001	UNABLE TO LOCATE	--	--	--	--	--	--	--	--	--	--	--
MW-15	4/1/2002	UNABLE TO LOCATE	--	--	--	--	--	--	--	--	--	--	--
MW-15	10/19/2002	UNABLE TO LOCATE	--	--	--	--	--	--	--	--	--	--	--
MW-15	4/16/2003	UNABLE TO LOCATE	--	--	--	--	--	--	--	--	--	--	--
MW-15	10/29/2003	END OF MONITORING	--	--	--	--	--	--	--	--	--	--	--
MW-16	3/21/1990		8.0	27	<0.2	0.8	--	--	<0.5	<0.5	<1.0	2.0	--
MW-16	6/19/1990		7.0	35	<0.2	<0.5	--	--	<0.5	<0.5	<1.0	2.0	--
MW-16	9/20/1990		15	49	<0.2	0.9	--	--	<0.5	<0.5	<1.0	4.1	--
MW-16	12/28/1990	25	18	29	<0.5	--	<0.5	<0.5	<0.5	<0.5	<1.0	4.0	ND
MW-16	5/10/1991		10	32	<0.5	--	<0.5	0.5	<0.5	<0.5	<1.0	4.0	ND
MW-16	8/8/1991		13	35	<0.5	--	<0.5	<0.5	<0.5	<0.5	<1.0	1.9	ND

Table 4
Groundwater Analytical Results (Chlorinated Solvents)
Former Chevron Asphalt Plant and Bulk Terminal #20-6265
1520 Powell Street
Emeryville, California

Well ID	Date	Notes	PCE (µg/L)	TCE (µg/L)	1,1-DCE (µg/L)	1,2-DCE (total) (µg/L)	trans-1,2- DCE (µg/L)	cis-1,2- DCE (µg/L)	1,1,1-TCA (µg/L)	1,1-DCA (µg/L)	Vinyl Chloride (µg/L)	Chloroform (µg/L)	HVOCs (µg/L)
ESL	--		120	530	6,300	--	6,700	6,200	130,000	1,000	3.8	330	--
MW-16	11/27/1991	26	12	47	<0.5	--	<0.5	1.3	<0.5	<0.5	<1.0	1.8	ND
MW-16	1/29/1992		11	31	<0.5	--	<0.5	0.9	<0.5	<0.5	<1.0	1.8	ND
MW-16	3/26/1992		8.5	24	<0.8	--	<0.8	<0.8	<0.8	<0.8	<1.7	1.7	<0.8-<1.7
MW-16	7/23/1992		12	37	<0.5	--	<0.5	0.9	<0.5	<0.5	<0.5	1.0	<0.5
MW-16	10/28/1992		14	39	<0.5	--	<0.5	1.7	<0.5	<0.5	<1.0	1.1	ND
MW-16	5/4/1993		10	32	<0.5	--	<0.5	<0.5	<0.5	<0.5	<1.0	1.1	<0.5
MW-16	1/5/1994	END OF MONITORING	--	--	--	--	--	--	--	--	--	--	--
MW-17	3/21/1990		11	32	<0.2	5.2	--	--	1.3	0.7	<1.0	1.1	--
MW-17	6/19/1990		13	38	<0.2	3.1	--	--	1.0	<0.5	<1.0	1.2	--
MW-17	9/20/1990		16	44	<0.2	2.4	--	--	1.4	<0.5	<1.0	2.8	--
MW-17	12/28/1990		15	34	<0.5	--	<0.5	2.0	0.6	<0.5	<1.0	2.0	--
MW-17	5/10/1991		14	37	<0.5	--	<0.5	3.0	0.6	<0.5	<1.0	1.0	ND
MW-17	8/8/1991		15	69	<0.5	--	<0.5	2.5	<0.5	<0.5	<1.0	0.9	ND
MW-17	11/27/1991		14	59	<0.5	--	<0.5	13	<0.5	<0.5	<1.0	2.4	ND
MW-17	1/29/1992		15	35	<0.5	--	<0.5	2.9	0.8	<0.5	<1.0	1.1	ND
MW-17	3/26/1992		12	41	<0.5	--	<0.5	1.5	0.7	<0.5	<1.0	0.6	ND
MW-17	7/23/1992		14	31	<0.5	--	<0.5	1.1	<0.5	<0.5	<0.5	0.8	<0.5
MW-17	10/28/1992		11	42	<0.5	--	<0.5	1.6	<0.5	<0.5	<1.0	0.8	ND
MW-17	5/4/1993		12	26	<0.5	--	<0.5	1.1	<0.5	<0.5	<1.0	0.6	<0.5
MW-17	1/5/1994		13	25	<0.5	--	<0.5	1.1	<0.5	<0.5	<1.0	0.8	<0.5
MW-17	5/13/1994		13	23	<0.5	--	<0.5	1.0	0.6	<0.5	<0.5	<0.5	<0.5-<1.0
MW-17	10/24/1994		13	26	<0.5	--	<0.5	1.4	<0.5	<0.5	<0.5	<0.5	<0.5-<1.0
MW-17	4/19/1995		12	21	<0.5	--	<0.5	0.9	1.1	<0.5	<0.5	1.2	<0.5
MW-17	11/6/1995		13	29	<1.0	--	<1.0	1.1	<1.0	<1.0	<1.0	<1.0	ND
MW-17	4/26/1996		11	24	<0.5	--	<0.5	0.8	1.2	<0.5	<0.8	0.6	<0.5-<5.0
MW-17	10/10/1996		15	31	<0.5	--	<0.5	1.5	0.9	<0.5	<0.8	0.6	ND
MW-17	4/22/1997		11	21	<0.5	--	<0.5	1.2	1.7	<0.5	<0.8	<0.5	ND
MW-17	10/16/1997		7.9	21	<1.0	--	<1.0	1.1	1.2	<1.0	<0.5	<1.0	ND
MW-17	4/15/1998	INACCESSIBLE	--	--	--	--	--	--	--	--	--	--	--
MW-17	5/4/1998		11	20	<0.5	--	<0.5	1.4	2.1	<0.5	<1.0	0.58	ND
MW-17	10/27/1998	INACCESSIBLE	--	--	--	--	--	--	--	--	--	--	--
MW-17	11/4/1999		7.75	15.4	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ND
MW-17	4/13/2000	34	8.7	14	<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--
MW-17	10/5/2000	34	11	18	<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--
MW-17	4/23/2001	34	5.7	10	<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--

Table 4
Groundwater Analytical Results (Chlorinated Solvents)
Former Chevron Asphalt Plant and Bulk Terminal #20-6265
1520 Powell Street
Emeryville, California

Well ID	Date	Notes	PCE (µg/L)	TCE (µg/L)	1,1-DCE (µg/L)	1,2-DCE (total) (µg/L)	trans-1,2- DCE (µg/L)	cis-1,2- DCE (µg/L)	1,1,1-TCA (µg/L)	1,1-DCA (µg/L)	Vinyl Chloride (µg/L)	Chloroform (µg/L)	HVOCs (µg/L)
ESL	--		120	530	6,300	--	6,700	6,200	130,000	1,000	3.8	330	--
MW-17	10/4/2001	34	8	14	<1	--	<1	<1	<1	<1	<1	<1	--
MW-17	4/1/2002	34	6	10	<1	--	<1	<1	<1	<1	<1	<1	--
MW-17	10/19/2002		8	15	<1	--	<1	<1	<1	<1	<1	<1	<1-<2.0
MW-17	4/16/2003		7	11	<0.8	--	<0.8	<0.8	<0.8	<1	<1	<0.8	<0.8-<2
MW-17	10/29/2003		9	15	<0.8	--	<0.8	<0.8	<0.8	<1	<1	<0.8	<0.5-<2
MW-17	4/1/2004		8	12	<0.8	--	<0.8	<0.8	<0.8	<1	<1	<0.8	<0.5-<2
MW-17	10/1/2004		7	13	<0.8	--	<0.8	1	<0.8	<1	<1	0.9	<0.5-<2
MW-17	4/8/2005		7	10	<0.8	--	<0.8	2	<0.8	<1	<1	<0.8	<0.5-<2
MW-17	10/20/2005		6	12	<0.8	--	<0.8	3	<0.8	<0.5	<1	0.9	<0.5-<2
MW-17	4/20/2006		5	10	<0.8	--	<0.8	1	<0.8	<1	<1	<0.8	<0.8-<2
MW-17	10/25/2006		6	14	<0.8	--	<0.8	3	<0.8	<1	<1	<0.8	<0.8-<2
MW-17	4/13/2007		6	9	<0.8	--	<0.8	2	<0.8	<1	<1	<0.8	<0.8-<2
MW-17	10/19/2007		6	12	<0.8	--	<0.8	3	<0.8	<1	<1	<0.8	<0.8-<2
MW-17	4/11/2008		5	8	<0.8	--	<0.8	2	<0.8	<1	<1	<0.8	<0.5-<2
MW-17	10/17/2008		6	14	<0.8	--	<0.8	3	<0.8	<1	<1	<0.8	<0.8-<2
MW-17	4/30/2009		5	7	<0.8	--	<0.8	2	<0.8	<1	<1	<0.8	--
MW-17	6/24/2009		4	8	<0.8	--	<0.8	2	<0.8	<1	<1	<0.8	--
MW-17	10/27/2009		6	7	<0.8	--	<0.8	1	<0.8	<1	<1	<0.8	--
MW-17	5/19/2010		5 [5]	7 [6]	<0.8 [<0.8]	--	<0.8 [<0.8]	1 [1]	<0.8 [<0.8]	<1 [<1]	<1 [<1]	<0.8 [<0.8]	--
MW-17	10/28/2010		5	8	<0.8	--	<0.8	1	<0.8	<1	<1	<0.8	--
MW-17	6/9/2011		5	7	<0.8	--	<0.8	1	<0.8	<1	<1	<0.8	--
MW-17	12/1/2011		5	8	<0.8	--	<0.8	1	<0.8	<1	<1	<0.8	--
MW-17	6/27/2012	INACCESSIBLE	--	--	--	--	--	--	--	--	--	--	--
MW-18	3/21/1990		20	33	<0.2	1.7	--	--	2.4	<0.5	<1.0	0.9	--
MW-18	6/19/1990		20	63	<0.2	2.7	--	--	0.9	<0.5	<1.0	0.73	--
MW-18	9/20/1990		25	76	<0.2	3.3	--	--	1.6	<0.5	<1.0	1.7	--
MW-18	12/28/1990		21	44	<0.5	--	<0.5	2.0	0.8	<0.5	<1.0	1.0	--
MW-18	5/10/1991		20	47	<0.5	--	<0.5	2.0	0.7	<0.5	<1.0	2.0	ND
MW-18	8/8/1991		25	32	<0.5	--	<0.5	2.0	0.7	<0.5	<1.0	1.0	ND
MW-18	11/27/1991		18	60	<0.5	--	<0.5	3.6	0.5	<0.5	<1.0	1.5	ND
MW-18	1/29/1992		17	67	<5.0	--	<5.0	<5.0	<5.0	<5.0	<10	<5.0	ND
MW-18	3/26/1992		19	130	<1.2	--	<1.2	6.4	<1.2	<1.2	<2.5	1.7	ND
MW-18	7/23/1992		19	67	<0.5	--	<0.5	3.0	0.5	<0.5	<0.5	0.8	<0.5
MW-18	10/28/1992		14	52	<0.5	--	<0.5	1.1	<0.5	<0.5	<1.0	0.8	ND
MW-18	5/4/1993	27	18	48	<0.5	--	<0.5	1.9	0.7	<0.5	<1.0	2.5	ND
MW-18	1/5/1994		17	94	<0.5	--	<0.5	4.0	0.8	<0.5	<1.0	1.0	<0.5
MW-18	5/13/1994		15	16	<0.5	--	<0.5	0.8	0.8	<0.5	<0.5	0.8	<0.5-<1.0
MW-18	10/24/1994		--	--	--	--	--	--	--	--	--	--	--

Table 4
Groundwater Analytical Results (Chlorinated Solvents)
Former Chevron Asphalt Plant and Bulk Terminal #20-6265
1520 Powell Street
Emeryville, California

Well ID	Date	Notes	PCE (µg/L)	TCE (µg/L)	1,1-DCE (µg/L)	1,2-DCE (total) (µg/L)	trans-1,2- DCE (µg/L)	cis-1,2- DCE (µg/L)	1,1,1-TCA (µg/L)	1,1-DCA (µg/L)	Vinyl Chloride (µg/L)	Chloroform (µg/L)	HVOCs (µg/L)
ESL	--		120	530	6,300	--	6,700	6,200	130,000	1,000	3.8	330	--
MW-18	10/27/1994		15	22	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.5	1.2	<0.5-<1.0
MW-18	4/19/1995	28	14	46	<0.5	--	<0.5	2.2	1.3	<0.5	<0.5	1.1	ND
MW-18	11/6/1995		18	45	<1.0	--	<1.0	1.8	1.2	<1.0	<1.0	<1.0	ND
MW-18	4/26/1996		17	31	<0.5	--	0.9	2.8	3.0	<0.5	<0.8	0.6	<0.5-<5.0
MW-18	10/10/1996	INACCESSIBLE	--	--	--	--	--	--	--	--	--	--	--
MW-18	4/22/1997		15	26	<0.5	--	<0.5	1.7	3.2	<0.5	<0.8	<0.5	ND
MW-18	10/16/1997		11	25	<1.0	--	<1.0	1.0	2.2	<1.0	<0.5	<1.0	ND
MW-18	5/4/1998		<1.0	40	1.1	--	1.7	4.5	3.1	2.5	<2.0	<1.0	ND
MW-18	10/27/1998		14	19	<0.5	--	<0.5	0.77	1.7	<0.5	<1.0	<0.5	ND
MW-18	4/15/1999		14.5	27.4	<0.625	--	1.78	3.45	2.29	<0.625	<1.25	0.908	ND
MW-18	11/4/1999		10.2	18.5	<0.5	--	<0.5	<0.5	1.51	<0.5	<0.5	<0.5	ND
MW-18	4/13/2000	INACCESSIBLE	--	--	--	--	--	--	--	--	--	--	--
MW-18	10/5/2000	34	11	13	<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--
MW-18	4/23/2001	34	9.3	10	<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--
MW-18	10/4/2001	34	11	13	<1	--	<1	<1	<1	<1	<1	<1	--
MW-18	4/1/2002	34	9	10	<1	--	<1	<1	<1	<1	<1	<1	--
MW-18	10/19/2002		10	15	<1	--	<1	<1	<1	<1	<1	<1	<1-<2.0
MW-18	4/16/2003		9	9	<0.8	--	<0.8	<0.8	<0.8	<1	<1	<0.8	<0.8-<2
MW-18	10/29/2003		9	20	<0.8	--	<0.8	1	<0.8	<1	<1	<0.8	<0.5-<2
MW-18	4/1/2004	INACCESSIBLE	--	--	--	--	--	--	--	--	--	--	--
MW-18	10/1/2004	INACCESSIBLE	--	--	--	--	--	--	--	--	--	--	--
MW-18	4/8/2005		8	13	<0.8	--	<0.8	2	<0.8	<1	<1	3	<0.5-<2
MW-18	10/20/2005	INACCESSIBLE	--	--	--	--	--	--	--	--	--	--	--
MW-18	4/20/2006		7	27	<0.8	--	<0.8	3	<0.8	<1	<1	<0.8	<0.8-<2
MW-18	10/25/2006		6	15	<0.8	--	<0.8	1	<0.8	<1	<1	<0.8	<0.8-<2
MW-18	4/13/2007		7	15	<0.8	--	<0.8	1	<0.8	<1	<1	<0.8	<0.8-<2
MW-18	10/19/2007		6	9	<0.8	--	<0.8	<0.8	<0.8	<1	<1	<0.8	<0.5-<2
MW-18	4/11/2008		6	13	<0.8	--	<0.8	0.8	<0.8	<1	<1	<0.8	<0.5-<2
MW-18	10/17/2008		7	8	<0.8	--	<0.8	<0.8	<0.8	<1	<1	<0.8	<0.5-<2
MW-18	4/30/2009		6	7	<0.8	--	<0.8	1	<0.8	<1	<1	<0.8	--
MW-18	6/24/2009		6	8	<0.8	--	<0.8	1	<0.8	<1	<1	<0.8	--
MW-18	10/27/2009		7	6	<0.8	--	<0.8	1	<0.8	<1	<1	<0.8	--
MW-18	5/18/2010		7	16	<0.8	--	<0.8	1	<0.8	<1	<1	<0.8	--
MW-18	10/27/2010		7	10	<0.8	--	<0.8	<0.8	<0.8	<1	<1	<0.8	--
MW-18	6/7/2011		7	28	<0.8	--	1	2	<0.8	<1	<1	<0.8	--
MW-18	12/2/2011		6	12	<0.8	--	<0.8	<0.8	<0.8	<1	<1	<0.8	--
MW-18	06/27/2012		8	27	<0.8	--	<0.8	7	<0.8	<1	<1	<0.8	--
MW-19	3/21/1990		53	41	<0.2	10	--	--	2.5	<0.5	<1.0	3.2	--

Table 4
Groundwater Analytical Results (Chlorinated Solvents)
Former Chevron Asphalt Plant and Bulk Terminal #20-6265
1520 Powell Street
Emeryville, California

Well ID	Date	Notes	PCE (µg/L)	TCE (µg/L)	1,1-DCE (µg/L)	1,2-DCE (total) (µg/L)	trans-1,2- DCE (µg/L)	cis-1,2- DCE (µg/L)	1,1,1-TCA (µg/L)	1,1-DCA (µg/L)	Vinyl Chloride (µg/L)	Chloroform (µg/L)	HVOCs (µg/L)
ESL	--		120	530	6,300	--	6,700	6,200	130,000	1,000	3.8	330	--
MW-19	6/19/1990		47	46	<0.2	13	--	--	1.5	<0.5	<1.0	2.8	--
MW-19	9/20/1990		32	39	<0.2	5.8	--	--	2.5	<0.5	<1.0	3.1	--
MW-19	12/28/1990		44	40	<0.5	--	0.8	22	1.0	<0.5	<1.0	3.0	--
MW-19	5/10/1991	3	47	47	<0.5	--	2.0	12	1.0	<0.5	<1.0	3.0	ND
MW-19	8/8/1991		35	41	<0.5	--	1.1	4.8	1.1	<0.5	<1.0	2.8	ND
MW-19	11/27/1991		31	59	<0.5	--	1.9	29	0.9	<0.5	<1.0	2.7	ND
MW-19	1/29/1992		44	51	<5.0	--	<5.0	8.9	<5.0	<5.0	<10	3	ND
MW-19	3/26/1992	29	130	68	<1.2	--	1.7	23	1.5	<1.2	<2.5	1.4	ND
MW-19	7/23/1992		38	61	1.1	--	1.4	5.6	1.0	<0.5	<0.5	3.3	<0.5
MW-19	10/28/1992		24	46	<0.5	--	0.9	5.3	1.1	<0.5	<1.0	2.2	ND
MW-19	5/4/1993		32	69	<0.5	--	2.5	8.7	1.1	0.5	<1.0	3.9	<0.5
MW-19	1/5/1994		46	49	<0.5	--	1.7	1.7	16	<0.5	<1.0	<0.5	<0.5
MW-19	5/13/1994		58	40	<0.5	--	1.8	22	0.7	<0.5	<0.5	<0.5	<0.5-<1.0
MW-19	10/24/1994		300	98	<50	--	110	54	<50	<50	<50	<50	<50-<100
MW-19	4/19/1995	2, END OF MONITORING	670	130	<0.5	--	<0.5	65	<0.5	<0.5	<0.5	<0.5	<0.5
MW-19A	11/6/1995		1,500	160	1.0	--	<1.0	110	<1.0	<1.0	<1.0	<1.0	ND
MW-19A	4/26/1996		990	200	<5.0	--	<5.0	140	<5.0	<5.0	<8.0	<5.0	<5.0-<50
MW-19A	10/10/1996	2	1,500	150	<10	--	<10	110	<10	<10	<16	<10	ND
MW-19A	4/22/1997		830	150	<5.0	--	7.1	85	<5.0	9.1	<8.0	<5.0	ND
MW-19A	10/16/1997	30	660	130	1.6	--	6.9	100	<1.0	5.5	4.2	<1.0	ND
MW-19A	5/4/1998	2	500	230	<10	--	13	80	<10	<10	<20	<10	ND
MW-19A	5/4/1998		--	--	--	--	--	--	--	--	--	--	--
MW-19A	10/27/1998	7	910	80	<25	--	<25	70	<25	<25	<50	<25	ND
MW-19A	4/15/1999	INACCESSIBLE	--	--	--	--	--	--	--	--	--	--	--
MW-19A	11/4/1999	5, 7	209	<50	<50	--	<50	<50	<50	<50	<50	<50	ND
MW-19A	4/13/2000	34	1,100	140	<25	--	<25	68	<25	<25	<25	<25	--
MW-19A	10/5/2000	9, 10, 35	940	82	2.5	--	9.5	50	1.0	5.5	5.0	<1.0	--
MW-19A	4/23/2001	10, 11, 34	690	180	1.6	--	9.9	100	<1.0	5.2	1.6	<1.0	--
MW-19A	10/4/2001	36	720	130	2	--	11	61	<1	4	3	<1	--
MW-19A	4/1/2002	37	530	100	<1	--	7	71	<1	2	2	<1	--
MW-19A	10/19/2002	38	600	130	<1	--	8	44	<1	1	2	<1	<1-<3.0
MW-19A	4/16/2003	23	570	82	<0.8	--	6	69	<0.8	<1	1	<0.8	<0.8-2
MW-19A	10/29/2003	12, 39	630	98	<0.8	--	8	47	<0.8	1	2	<0.8	<0.5-<2
MW-19A	4/1/2004	12	660	78	<0.8	--	5	54	<0.8	<1	<1	<0.8	<0.5-<2
MW-19A	10/1/2004	12, 40	540	95	<0.8	--	8	46	<0.8	<1	1	<0.8	<0.5-<2
MW-19A	4/8/2005	12, 41	370	51	<0.8	--	4	48	<0.8	<1	<1	<0.8	<0.5-<2
MW-19A	10/20/2005	12, 42	350	77	<0.8	--	5	26	<0.8	<1	<1	2	<0.5-<2
MW-19A	4/20/2006	12, 42	330	57	<0.8	--	3	39	<0.8	<1	2	<0.8	<0.5-<2

Table 4
Groundwater Analytical Results (Chlorinated Solvents)
Former Chevron Asphalt Plant and Bulk Terminal #20-6265
1520 Powell Street
Emeryville, California

Well ID	Date	Notes	PCE (µg/L)	TCE (µg/L)	1,1-DCE (µg/L)	1,2-DCE (total) (µg/L)	trans-1,2- DCE (µg/L)	cis-1,2- DCE (µg/L)	1,1,1-TCA (µg/L)	1,1-DCA (µg/L)	Vinyl Chloride (µg/L)	Chloroform (µg/L)	HVOCs (µg/L)
ESL	--		120	530	6,300	--	6,700	6,200	130,000	1,000	3.8	330	--
MW-19A	10/25/2006	12, 43	370	54	<0.8	--	4	24	<0.8	<1	<1	2	<0.5-<2
MW-19A	4/13/2007	12, 44	610	51	<0.8	--	4	55	<0.8	<1	<1	<0.8	<0.5-<2
MW-19A	10/19/2007	12, 45	420	40	<0.8	--	3	42	<0.8	<1	<1	<0.8	<0.8-<2
MW-19A	4/11/2008	12, 44	540	41	<0.8	--	3	37	<0.8	<1	<1	<0.8	<0.5-<2
MW-19A	10/17/2008	41	440	71	<0.8	--	5	22	<0.8	<1	<1	1	<0.5-<2
MW-19A	4/30/2009		390	43	<0.8	--	2	17	<0.8	<1	<1	<0.8	--
MW-19A	6/24/2009		310	42	<0.8	--	2	13	<0.8	<1	<1	<0.8	--
MW-19A	10/27/2009		490	57	<0.8	--	4	42	<0.8	<1	<1	<0.8	--
MW-19A	5/19/2010		400	54	<0.8	--	4	100	<0.8	<1	2	<0.8	--
MW-19A	10/27/2010		360	45	<0.8	--	4	110	<0.8	<1	2	<0.8	--
MW-19A	6/8/2011		290	26	<0.8	--	3	54	<0.8	<1	<1	<0.8	--
MW-19A	11/30/2011		340	56	<0.8	--	4	89	<0.8	<1	1	<0.8	--
MW-19A	06/27/2012		<0.8	<1	<0.8	--	2	73	<0.8	<1	3	<0.8	--

Notes:

Bold = Analyte detected above reporting limit.

< = not detected at or above the indicated reporting limit

µg/L = micrograms per liter

HVOC = halogenated volatile organic compounds

ND = not detected

1,1-DCE = 1,1-dichloroethene

1,2-DCE = 1,2-dichloroethene

trans-1,2-DCE = trans-1,2-dichloroethene

cis-1,2-DCE = cis-1,2-dichloroethene

1,2-DCE (total) = cis- and trans-1,2-dichloroethene

1,1-DCA = 1,1-dichloroethane

1,1,1-TCA = 1,1,1-trichloroethane

TCE = trichloroethene

PCE = tetrachloroethene

TOG = total oil and grease

= Detected concentration exceeds environmental screening levels (ESL) for groundwater (Table F-1B, Interim Final Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater, Regional Water Quality Control Board, San Francisco Bay Region, May 2008 and Table E-1 Groundwater Screening Levels for Evaluation of Potential Vapor Intrusion Concerns).

- 1 TPH was reported as Diesel #2.
- 2 Chromatogram pattern indicates an unidentified hydrocarbon.
- 3 Monitoring well was destroyed during soil excavation in 1989.
- 4 Sample has chlorinated hydrocarbon pattern, needs GSMS confirmation of MTBE.
- 5 Sample was analyzed outside the USEPA recommended holding time.
- 6 Unable to sample due to car parked over the well.
- 7 Confirmation run.
- 8 MTBE by USEPA Method 8240
- 9 MTBE by USEPA Method 8260.
- 10 Laboratory report indicates discrete peaks.
- 11 MTBE by USEPA Method 8260 was analyzed outside the USEPA recommended holding time.
- 12 BTEX and MTBE by USEPA Method 8260.

Table 4
Groundwater Analytical Results (Chlorinated Solvents)
Former Chevron Asphalt Plant and Bulk Terminal #20-6265
1520 Powell Street
Emeryville, California

Well ID	Date	Notes	PCE (µg/L)	TCE (µg/L)	1,1-DCE (µg/L)	1,2-DCE (total) (µg/L)	trans-1,2- DCE (µg/L)	cis-1,2- DCE (µg/L)	1,1,1-TCA (µg/L)	1,1-DCA (µg/L)	Vinyl Chloride (µg/L)	Chloroform (µg/L)	HVOCs (µg/L)
ESL	--		120	530	6,300	--	6,700	6,200	130,000	1,000	3.8	330	--

¹³ The value reported for xylene (total) is probably due to carryover from the previous sample. The analysis was repeated using a previously opened vial. This compound was not detected in the re-analysis. The reported results are from the initial analysis.

¹⁴ 6 ppb 1,2-dichloropropane detected; other HVOCs not detected.

¹⁵ 0.6 ppb 1,2-dichloroethane detected; other HVOCs not detected.

¹⁶ 63 ppb chloromethane and 0.6 ppb methylene chloride detected; other HVOCs not detected; sample contained 1,250 ppb total dissolved solids.

¹⁷ 0.9 ppb trans-1,3-dichloropropane detected; other HVOCs not detected; sample contained 810 ppb total dissolved solids.

¹⁸ 0.9 ppb trichlorofluoromethane and 1 ppb trans-1,3-dichloropropane detected; other HVOCs not detected.

¹⁹ 11 ppb trans-1,3-dichloropropane detected; other HVOCs not detected.

²⁰ 0.1 ppb 1,2-dichlorobenzene detected; other HVOCs not detected.

²¹ 1.8 ppb 1,2-dichloroethane detected; other HVOCs not detected.

²² Chloromethane was detected at 2.4 ppb. Other HVOCs not detected at detection limits of 0.5 ppb.

²³ 3 ppb 1,1,2,2-tetrachloroethane detected; other HVOCs not detected.

²⁴ 0.9 ppb 1,2-dichlorobenzene detected; other HVOCs not detected.

²⁵ 0.5 ppb 1,2-dichloroethane detected; other HVOCs not detected.

²⁶ 0.9 ppb 1,2-dichloroethane detected; other HVOCs not detected.

²⁷ Dichloromethane detected at 6.2 ppb. Other HVOCs not detected at detection limits of 0.5 ppb.

²⁸ Chloromethane was detected at 0.6 ppb. Other HVOCs not detected at detection limits of 0.5 ppb.

²⁹ 1,1,2,2-Tetrachloroethane detected at 1.8 ppb; other HVOCs not detected at detection limits of 1.2 to 2.5 ppb.

³⁰ Laboratory report indicates 1,1,2,2-tetrachloroethane was detected at 3.8 ppb. Reported values for cis-1,2-dichloroethene; trichloroethene and tetrachloroethene are from 50X dilution sample re-analysis.

³¹ Trace concentrations of trihalomethane compounds detected in bailer blank.

³² 3.1 ppb 1,2-dichlorobenzene detected; other HVOCs not detected.

³³ Trace concentrations of trihalomethane compounds detected in bailer blank.

³⁴ Laboratory report indicates all other HVOCs were ND; see specific laboratory analytical report.

³⁵ Laboratory report indicates all other HVOCs were ND, except Freon 113 was detected at 2.3 ppb and 1,1,2,2-tetrachloroethane was 3.9 ppb.

³⁶ Laboratory report indicates all other HVOCs were ND, except Freon 113 was detected at 5 ppb and 1,1,2,2-tetrachloroethane at 3 ppb; see specific laboratory analytical report.

³⁷ Laboratory report indicates all other HVOCs were ND, except 1,1,2,2-tetrachloroethane detected at 4 ppb; see specific laboratory analytical report.

³⁸ Laboratory report indicates all other HVOCs were less than the reporting limit, except 1,1,2,2-tetrachloroethane was detected at 2 ppb and Freon 113 was detected at 4 ppb.

³⁹ Laboratory report indicates all other HVOCs were ND, except Freon 113 was detected at 3 ppb and 1,1,2,2-tetrachloroethane was 3 ppb.

⁴⁰ Laboratory report indicates all other HVOCs were ND, except Freon 113 was detected at 5 ppb and 1,1,2,2-tetrachloroethane was 2 ppb.

⁴¹ Laboratory report indicates all other HVOCs were ND, except 1,1,2,2-tetrachloroethane was 2 µg/L.

⁴² Laboratory report indicates all other HVOCs were ND, except 1,1,2,2-tetrachloroethane was 1 ppb.

⁴³ Laboratory report indicates all other HVOCs were ND, except Freon 113 was detected at 3 ppb.

⁴⁴ Laboratory report indicates all other HVOCs were ND, except 1,1,2,2-tetrachloroethane was 3 ppb.

⁴⁵ Laboratory report indicates all other HVOCs were ND, except 1,1,2,2-tetrachloroethane was 4 ppb.

Table 5
Summary of Statistical Analysis of Groundwater Analytical Data
Former Chevron Asphalt Plant Terminal #206265
1520 Powell Street Emeryville, CA

Constituent	Well	Cleanup Goal/Screening Level/Remediation goal (µg/L) ¹	Data Range				Linear Regression Analysis							
			Minimum Concentration (µg/L)	Maximum Concentration (µg/L)	Concentration Measured Most Recently (µg/L)	% of Data Above Laboratory Reporting Limit	Start Date	End Date	Coefficient of Determination, R ²	p-value of Correlation (Significance of Slope)	Attenuation Half-life (days)	Trend Direction	Significance of Trend ²	Projected Year to Screening Level
PCE	MW-17	5	4	16	5	100	3/21/1990	12/1/2011	8.71E-01	4.39E-22	4,636	Decreasing	Significant	2010
PCE	MW-17 ³	5	4	11	5	100	4/13/2000	12/1/2011	6.02E-01	5.17E-06	4,895	Decreasing	Significant	2010
PCE	MW-18	5	1	25	8	98	3/21/1990	6/27/2012	5.22E-01	1.46E-08	4,379	Decreasing	Significant	2013
PCE	MW-18 ³	5	6	11	8	100	10/5/2000	6/27/2012	6.11E-01	1.75E-05	5,954	Decreasing	Significant	2016
PCE	MW-19A	5	5	1,500	5	97	11/6/1995	6/27/2012	3.45E-01	2.58E-04	2,329	Decreasing	Significant	2046
PCE	MW-19A ³	5	5	1,100	5	96	4/13/2000	6/27/2012	3.35E-01	1.96E-03	1,684	Decreasing	Significant	2035
TCE	MW-17	5	7	69	8	100	3/21/1990	12/1/2011	8.78E-01	1.28E-22	3,010	Decreasing	Significant	2015
TCE	MW-17 ³	5	7	18	8	100	4/13/2000	12/1/2011	5.49E-01	2.27E-05	4,252	Decreasing	Significant	2018
TCE	MW-18	5	6	130	27	100	3/21/1990	6/27/2012	5.92E-01	4.17E-10	3,099	Decreasing	Significant	2019
TCE	MW-18 ³	5	6	28	27	100	10/5/2000	6/27/2012	4.73E-03	7.61E-01	NA	Increasing	NS	NA
TCE	MW-19A	5	5	230	5	94	11/6/1995	6/27/2012	6.11E-01	4.93E-08	2,311	Decreasing	Significant	2028
TCE	MW-19A ³	5	5	180	5	96	4/13/2000	6/27/2012	5.79E-01	6.43E-06	1,864	Decreasing	Significant	2024
cis-1,2 DCE	MW-19A	6	13	140	73	97	11/6/1995	6/27/2012	2.04E-01	7.41E-03	5,134	Decreasing	Significant	2049
cis-1,2 DCE	MW-19A ³	6	13	110	73	96	4/13/2000	6/27/2012	1.23E-02	5.90E-01	16,312	Decreasing	NS	NA
VC	MW-19A ⁴	0.5	1	5	3	52	10/5/2000	6/27/2012	1.17E-01	9.45E-02	5,620	Decreasing	NS	NA
TPH-g	MW-19A	100	43	610	120	94	11/6/1995	6/27/2012	4.72E-03	7.04E-01	NA	Increasing	NS	NA
TPH-g	MW-19A ³	100	50	380	120	96	4/13/2000	6/27/2012	6.52E-03	7.01E-01	NA	Increasing	NS	NA

Notes, Abbreviations, and Assumptions:

µg/L = micrograms per liter
cis-1,2-DCE = cis isomer of 1,2-Dichloroethene
NS = not significant
NA = not applicable due to increasing trend or non-significant trend
PCE = Tetrachloroethene
TCE = Trichloroethene
TPHg = Total petroleum hydrocarbons as gasoline
VC = Vinyl Chloride

¹ Screening levels for PCE, TCE, cis-1,2-DCE are California Maximum Contaminant Levels (CA MCLs; July 2011). Screening level for TPH-g is from SFRWQCB (2008) Table F-1 - Screening levels for groundwater that is a current or potential drinking water resource.

² Statistically significant trend defined as having p-values < 0.05

³ Linear regression on data collected after final excavation in December 1999 only.

⁴ Linear regression on data collected after last elevated detection limit, from October 2000 through the present
ND taken at reporting limit/reported value

Table 6
Monitored Natural Attenuation Parameters
Former Chevron Asphalt Plant and Bulk Terminal #20-6265
1520 Powell Street
Emeryville, California

Well ID	Date	Notes	Ethane (µg/L)	Ethene (µg/L)	Methane (µg/L)	Nitrate (µg/L)	Sulfate (µg/L)	TOC (µg/L)	Alkalinity (<4.5) (µg/L)	Alkalinity (<8.3) (µg/L)	Bicarbonate Alkalinity (µg/L)	Sulfide (µg/L)	Iron (µg/L)	Manganese (µg/L)
MWX-2	6/24/2009		--	--	--	--	--	--	--	--	--	--	--	--
MWX-2	10/27/2009		--	--	--	--	--	--	--	--	--	--	--	--
MWX-2	5/19/2010		22	1.9	830	1,000	18,000	4,800	152,000	<460	152,000	<54	475	2,150
MWX-2	10/27/2010		<1.0	<1.0	<5.0	1,000	28,900	19,700	69,300	<460	69,300	<54	<52.2	202
MWX-2	6/9/2011		8.9	<1.0	220	1,200	21,200	8,500	95,600	<460	95,600	<54	<14.1	151
MWX-2	6/26/2012	NOT SAMPLED	--	--	--	--	--	--	--	--	--	--	--	--
MWX-3	6/24/2009		--	--	--	--	--	--	--	--	--	--	--	--
MWX-3	10/27/2009		--	--	--	--	--	--	--	--	--	--	--	--
MWX-3	5/19/2010		<1.0	<1.0	13	6,200	41,300	4,500	187,000	<460	187,000	<54	<52.2	37.3
MWX-3	10/27/2010		<1.0	<1.0	15	7,200	47,700	8,800	19,800	<460	198,000	<54	<52.2	46.9
MWX-3	6/7/2011		<1.0	<1.0	16	5,400	57,800	5,100	168,000	<460	168,000	<54	<52.2	52.2
MWX-3	06/27/2012		19	66	2,600	<250	4,800	279,000	1,020,000		1,020,000	<54	35,900	25,300
MWX-6	6/24/2009		--	--	--	--	--	--	--	--	--	--	--	--
MWX-6	10/27/2009		--	--	--	--	--	--	--	--	--	--	--	--
MWX-6	5/20/2010		<1.0	<1.0	270	<250	22,300	5,200	225,000	<460	225,000	<54	<52.2	1,360
MWX-6	10/26/2010		<1.0	<1.0	110	<250	23,900	4,900	244,000	<460	244,000	<54	195	1,590
MWX-6	6/8/2011		<1.0	<1.0	170	<250	31,800	5,800	209,000	<460	209,000	<54	92.4	1,330
MWX-6	06/27/2012		<1.0	<1.0	130	<250	28,000	4,800	236,000	--	236,000	<54	109	1,330
MWX-8	6/24/2009		--	--	--	--	--	--	--	--	--	--	--	--
MWX-8	10/27/2009		--	--	--	--	--	--	--	--	--	--	--	--
MWX-8	5/18/2010		<1.0	<1.0	5.3	340	24,200	3,200	131,000	<460	131,000	<54	<52.2	17.3
MWX-8	10/27/2010		1.1	<1.0	22	390	26,700	6,300	115,000	<460	115,000	<54	<52.2	26.3
MWX-8	6/8/2011		<1.0	<1.0	<5	1300	27,900	4,500	123,000	<460	123,000	<54	<52.2	13.7
MWX-8	06/27/2012		6.4	55	8,400	<250	3,700	255,000	850,000	--	850,000	<54	6050	13,800
MWX-9	6/24/2009		--	--	--	--	--	--	--	--	--	--	--	--
MWX-9	10/27/2009		--	--	--	--	--	--	--	--	--	--	--	--
MWX-9	5/20/2010		<1.0	<1.0	54	<250	26,500	4,700	246,000	<460	246,000	<54	<52.2	522
MWX-9	10/26/2010		<1.0	<1.0	39	<250	25,000	4,700	271,000	<460	271,000	<54	<52.2	413
MWX-9	6/9/2011		<1.0	<1.0	14	630	27,200	4,500	207,000	<460	207,000	<54	<14.1	262
MWX-9	06/27/2012		<1.0	<1.0	51	<250	25,500	4,600	233,000	--	233,000	<54	<33.3	371
MWX-10A	6/24/2009		--	--	--	--	--	--	--	--	--	--	--	--
MWX-10A	10/27/2009		--	--	--	--	--	--	--	--	--	--	--	--
MWX-10A	5/20/2010		<1.0	<1.0	140	<250	68,500	8,100	244,000	<460	244,000	<54	<52.2	751
MWX-10A	10/28/2010		<1.0	<1.0	97	<250	101,000	11,300	201,000	<460	201,000	<54	<52.2	217
MWX-10A	6/10/2011		<1.0	<1.0	97	570	80,700	8,400	269,000	<460	269,000	<54	<14.1	538
MWX-10A	06/26/2012		<1.0	<1.0	26	<250	72,100	8,100	259,000	--	259,000	<54	<33.3	289

Table 6
Monitored Natural Attenuation Parameters
Former Chevron Asphalt Plant and Bulk Terminal #20-6265
1520 Powell Street
Emeryville, California

Well ID	Date	Notes	Ethane (µg/L)	Ethene (µg/L)	Methane (µg/L)	Nitrate (µg/L)	Sulfate (µg/L)	TOC (µg/L)	Alkalinity (<4.5) (µg/L)	Alkalinity (<8.3) (µg/L)	Bicarbonate Alkalinity (µg/L)	Sulfide (µg/L)	Iron (µg/L)	Manganese (µg/L)
MWX-11A	6/24/2009		--	--	--	--	--	--	--	--	--	--	--	--
MWX-11A	10/27/2009		--	--	--	--	--	--	--	--	--	--	--	--
MWX-11A	5/20/2010		<1.0	<1.0	17	<250	73,300	8,200	411,000	<460	411,000	<54	<52.2	86.5
MWX-11A	10/28/2010		<1.0	<1.0	6.9	<250	83,300	13,200	377,000	<460	377,000	<54	<52.2	10.9
MWX-11A	6/10/2011		<1.0	<1.0	5.5	1,100	102,000	12,700	339,000	<460	339,000	<54	<14.1	164
MWX-11A	06/26/2012		<1.0 [<1.0]	<1.0 [<1.0]	<5 [<5]	560 [540]	73,300 [70,200]	14,000 [13,900]	394,000 [396,000]	--	394,000 [396,000]	<54 [<54]	<33.3 [<33.3]	2.6 [<5.0]
MW-17	4/30/2009		--	--	--	--	--	--	--	--	--	--	--	--
MW-17	6/24/2009		--	--	--	--	--	--	--	--	--	--	--	--
MW-17	10/27/2009		--	--	--	--	--	--	--	--	--	--	--	--
MW-17	5/19/2010		<1.0	<1.0	<5.0	1,900	48,000	1,800	118,000	<460	118,000	<54	<52.2	77.7
MW-17	10/28/2010		<1.0	<1.0	<5.0	2,100	48,900	1,900	111,000	<460	111,000	<54	<52.2	154
MW-17	6/9/2011		<1.0	<1.0	<5.0	2,700	51,100	1,800	112,000	<460	112,000	<54	<14.1	63.7
MW-17	6/26/2012	NOT SAMPLED	--	--	--	--	--	--	--	--	--	--	--	--
MW-18	4/30/2009		--	--	--	--	--	--	--	--	--	--	--	--
MW-18	6/24/2009		--	--	--	--	--	--	--	--	--	--	--	--
MW-18	10/27/2009		--	--	--	--	--	--	--	--	--	--	--	--
MW-18	5/18/2010		<1.0	<1.0	<5.0	2,700	35,200	1,600	145,000	<460	145,000	<54	<52.2	16.0
MW-18	10/27/2010		<1.0	<1.0	<5.0	2,200	38,400	1,900	142,000	<460	142,000	<54	<52.2	41.5
MW-18	6/7/2011		<1.0	<1.0	<5.0	3,900	46,100	1,700	148,000	<460	148,000	<54	<52.2	6.2
MW-18	6/27/2012		<1.0	<1.0	150	3,300	40,900	1,100	164,000	--	164,000	<54	<33.3	326
MW-19A	4/30/2009		--	--	--	--	--	--	--	--	--	--	--	--
MW-19A	6/24/2009		--	--	--	--	--	--	--	--	--	--	--	--
MW-19A	10/27/2009		--	--	--	--	--	--	--	--	--	--	--	--
MW-19A	5/19/2010		<1.0	<1.0	5.6	710	23,300	3,500	137,000	<460	137,000	<54	<52.2	5.7
MW-19A	10/27/2010		<1.0	<1.0	6.1	1,400	19,600	11,000	122,000	<460	122,000	<54	<52.2	13.9
MW-19A	6/8/2011		<1.0	<1.0	<5.0	1,600	19,500	6,300	105,000	<460	105,000	<54	<52.2	11.7
MW-19A	06/27/2012		7.5	1.4	15,000	<250	1,700	470,000	1,040,000	--	1,040,000	<54	11,600	7,010

Notes appear on the following page.

Table 6
Monitored Natural Attenuation Parameters
Former Chevron Asphalt Plant and Bulk Terminal #20-6265
1520 Powell Street
Emeryville, California

Well ID	Date	Notes	Ethane (µg/L)	Ethene (µg/L)	Methane (µg/L)	Nitrate (µg/L)	Sulfate (µg/L)	TOC (µg/L)	Alkalinity (<4.5) (µg/L)	Alkalinity (<8.3) (µg/L)	Bicarbonate Alkalinity (µg/L)	Sulfide (µg/L)	Iron (µg/L)	Manganese (µg/L)
---------	------	-------	------------------	------------------	-------------------	-------------------	-------------------	---------------	--------------------------------	--------------------------------	-------------------------------------	-------------------	----------------	---------------------

Notes:

TOC = total organic carbon

Alkalinity (<8.3)=alkalinity to pH 8.3

Alkalinity (<4.5)=alkalinity to pH 4.5

-- = not analyzed

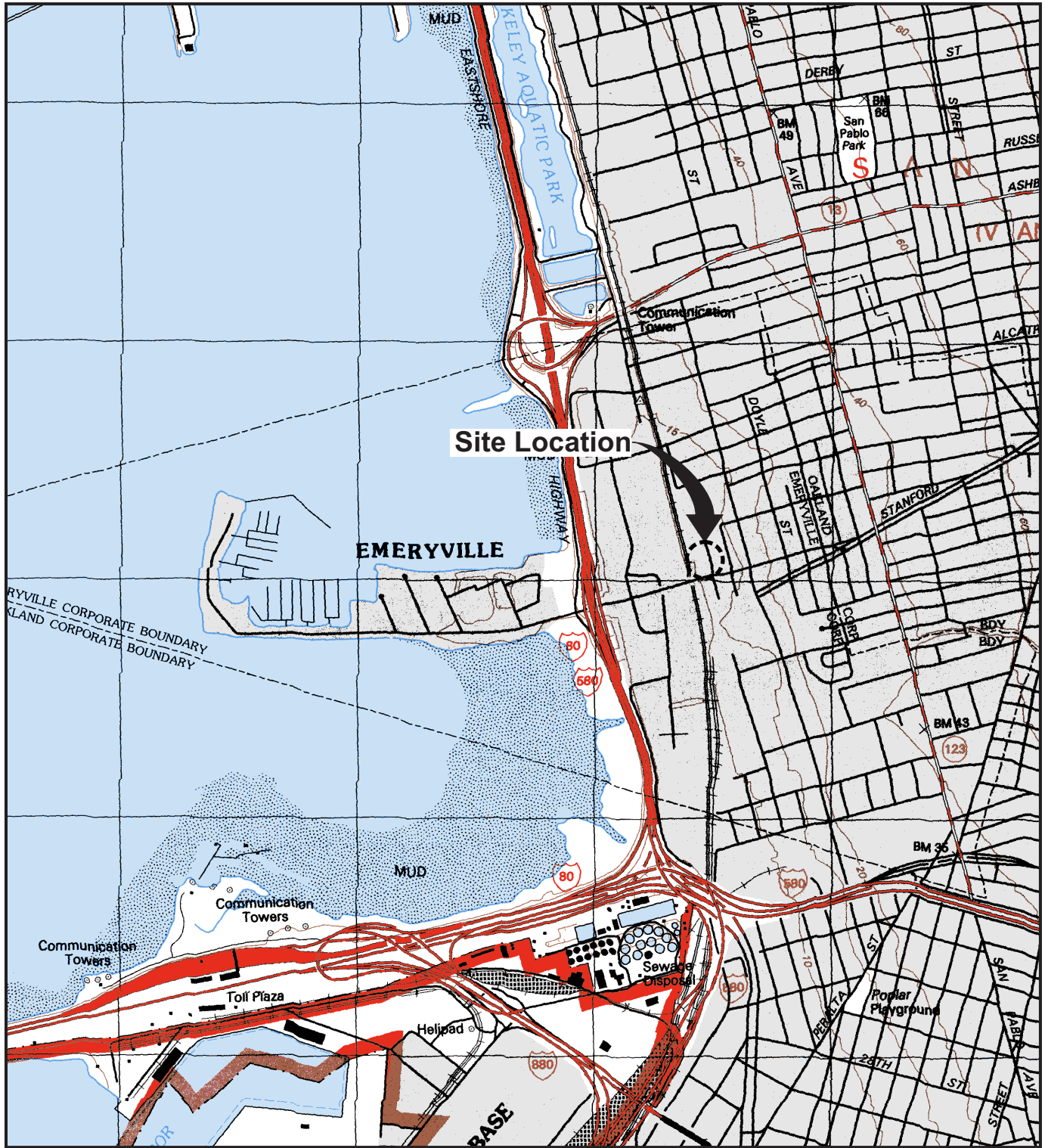
µg/L = micrograms per liter

Bold = Analyte detected above reporting limit.

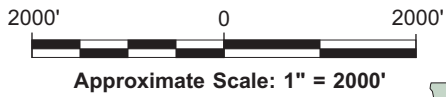
< = not detected at or above the indicated reporting limit

1. Methane, ethane, and ethene were analyzed by Method RSK 175
2. Iron and manganese were analyzed by USEPA Method 200.7
3. Metals sample was field filtered
4. Sulfate and nitrate nitrogen were analyzed by USEPA Method 300.0
5. Sulfide was analyzed by SM4500S2-D
6. Bicarbonate and alkalinity were analyzed by EM2320B
7. Total organic carbon was analyzed by SM5310 C
8. MW-17 sample was duplicated and the higher reported concentration listed

Figures



REFERENCE: BASE MAP USGS 7.5 MIN. QUAD., OAKLAND WEST, CA., 1993.



FORMER CHEVRON ASPHALT PLANT AND BULK TERMINAL 20-6265
1520 POWELL STREET
EMERYVILLE, CA

SITE LOCATION MAP



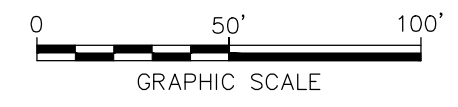
FIGURE
1

CITY: PETALUMA, CA DIV/GROUP: ENV/CAD DB: (L FORAKER), J. HARRIS PIC: J. VOGELY PM: J. WAGLER TM: J. WAGLER LVR: ON OFF: REF: C:\Users\jharris\Desktop\ENV\CAD\B0046257\0005\0020\DWG\46257\004.dwg LAYOUT: 2 SAVED: 9/19/2012 3:36 PM ACADVER: 18.1S (LMS TECH) PAGES: 2 SETUP: SETUP2 PLOTSTYLETABLE: PLTFULL.CTB PLOTTED: 9/27/2012 9:31 AM BY: HARRIS, JESSICA XREFS: IMAGES: PROJECTNAME: 46257\001.jpg



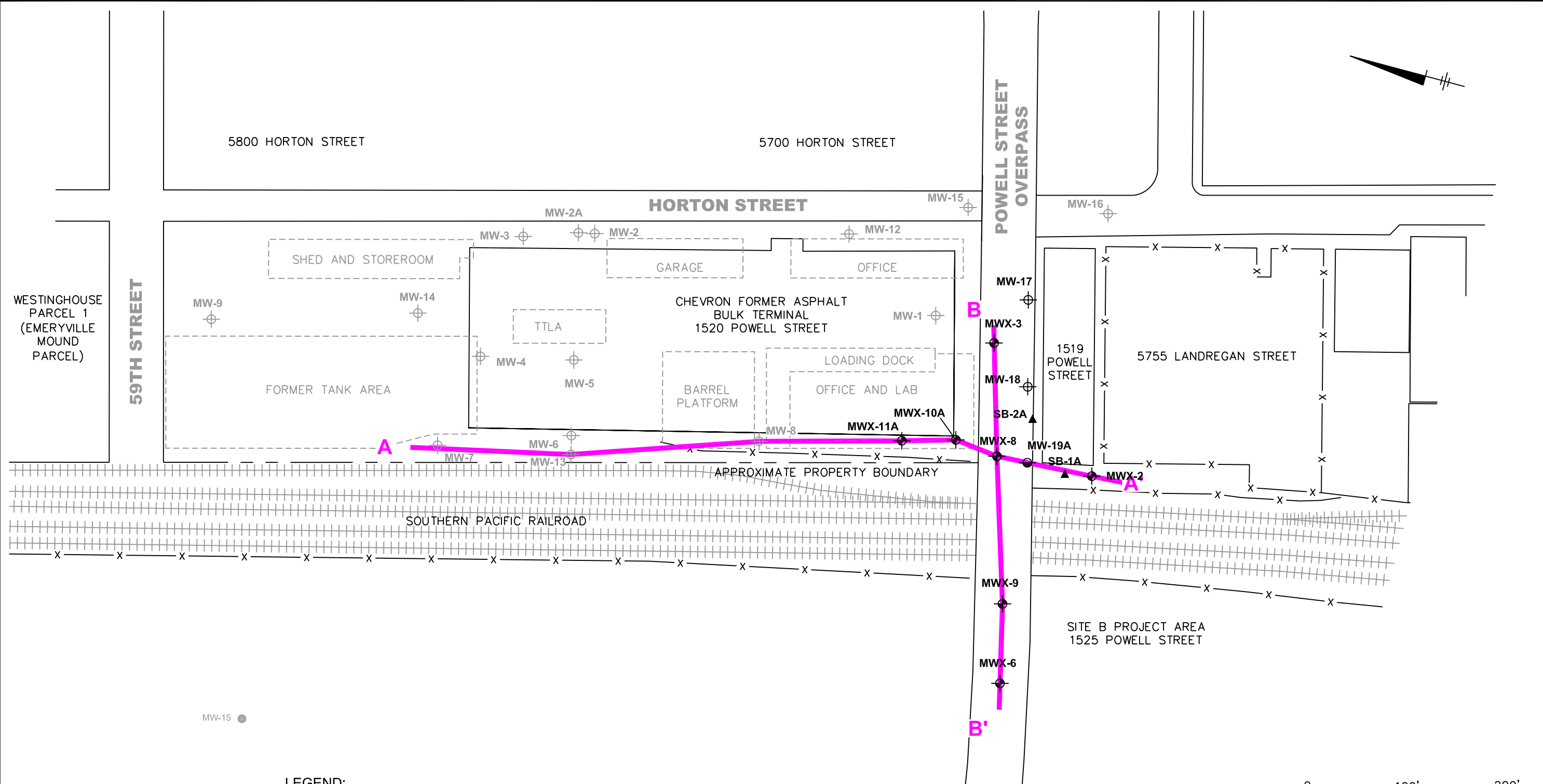
NOTES:

1. AERIAL PHOTOGRAPH OBTAINED FROM GOOGLE EARTH ON AUGUST 4, 2010.
2. BRIEF DESCRIPTIONS OF THE SITES SHOWN ARE INCLUDED IN SECTION 2.



FORMER CHEVRON ASPHALT PLANT AND BULK TERMINAL 20-6265 1520 POWELL STREET EMERYVILLE, CA	
SITE VICINITY MAP	
	FIGURE 2

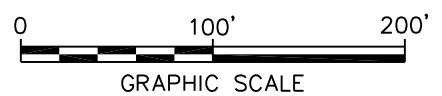
CITY: PETALUMA, CA. GROUP: ENVCAD. DR: (P. LISTER), L. FORAKER, J. HARRIS. PIC: J. VOGELY. PM: J. WAGLER. TM: B. MCKENNA. LVR: ON*OFF=REF.
 G:\ENVCAD\Irvine\Emeryville-Cairturn-TOS\Irvine-Emeryville\18.1S (LMS TECH) LAYOUT: 3. SAVED: 9/27/2012 9:38 AM. ACADVER: 18.1S (LMS TECH) PAGES: 18.1S (LMS TECH) PLOT: 9/27/2012 9:38 AM. BY: ROBITAILLE, BEVERLY
 XREFS: 46257X02. PROJECTNAME:



MW-15 ●

- LEGEND:**
- MONITORING WELL LOCATION (ARCADIS 2009)
 - MONITORING WELL LOCATION (WGR 1990)
 - MONITORING WELL LOCATION (GETTLER-RYAN 1995)
 - SOIL BORING LOCATION (ARCADIS 2009)
 - DESTROYED WELL LOCATION
 - CURRENT BUILDING
 - HISTORICAL FEATURE
 - A—A' CROSS SECTION TRANSECT LINE

- NOTES:**
- BASE MAP MODIFIED FROM A DRAWING BY GETTLER-RYAN TITLED "SITE PLAN", DATED 07/00, AT A SCALE OF 1" = 100'.
 - HISTORICAL FEATURE INFORMATION BASED ON A FIGURE BY HARDING LAWSON ASSOCIATES ENTITLED "POTENTIOMETRIC SURFACE MAP, UPPERMOST AQUIFER 8/24/88", BASED ON MCKESSON ENVIRONMENTAL SERVICES GROUNDWATER INVESTIGATION.

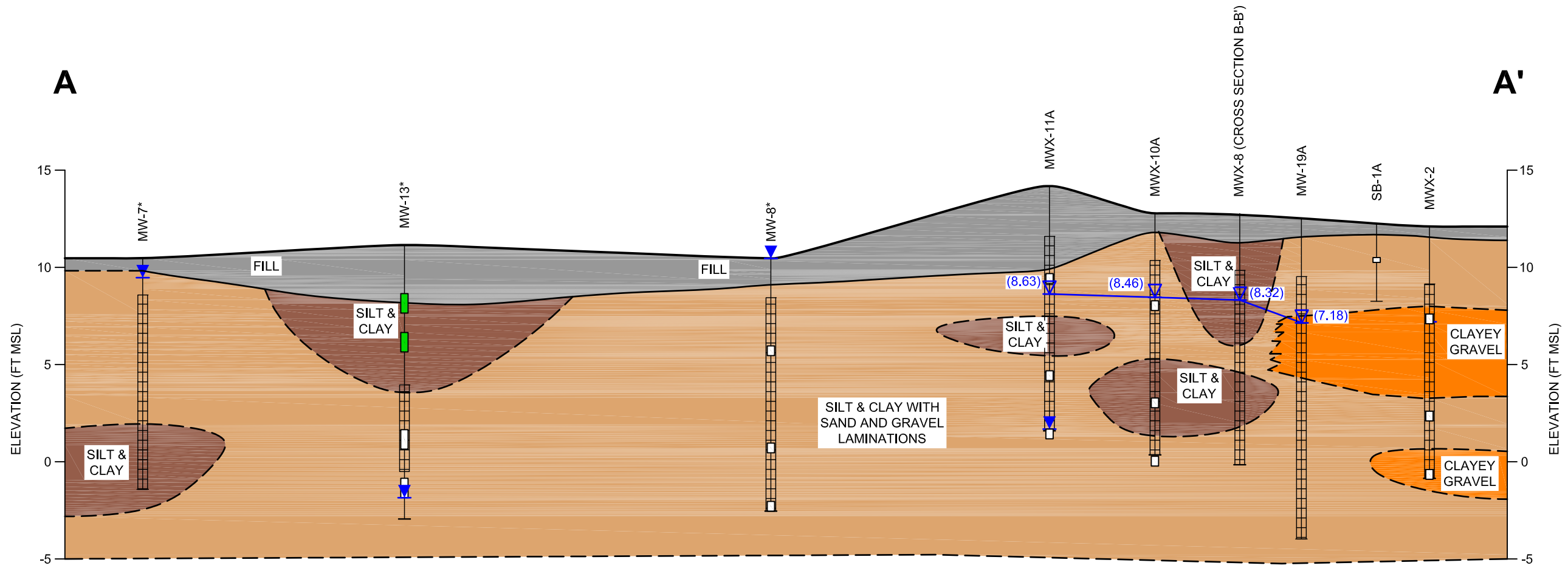


FORMER CHEVRON ASPHALT PLANT AND
BULK TERMINAL 20-6265
1520 POWELL STREET
EMERYVILLE, CA

**SITE PLAN WITH CROSS
SECTION LOCATIONS**

FIGURE
3

CITY:Syracuse DIV:GROUP:EmCAD DBA:Schilling LD:(Opt) PIC:(Opt) PM:(Recpt) TMS:(Opt) LYS:(Opt)ON:OFF=REF*
 G:\ENVCAD\Fossil\file-CAIRETURN\TO\Syracuse\NY\B0046257\001\DWG\46257\01.dwg LAYOUT: 4 SAVED: 9/27/2012 9:38 AM ACADVER: 18.1S (LMS TECH) PAGES: 18 PLOT: PLT FULL CTB PLOTTED: 9/27/2012 9:40 AM BY: ROBITAILLE, BEVERLY
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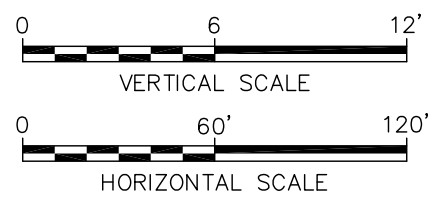


LEGEND:

- | | | | |
|-------|---|--------|---|
| MW-7* | BORING ID | | FILL |
| | GROUNDWATER FIRST ENCOUNTERED | | SILT AND CLAY WITH SAND AND GRAVEL LAMINATIONS |
| | STATIC WATER LEVEL | | CLAYEY SAND AND GRAVEL |
| | WELL SCREEN | | SILT AND CLAY (MEDIUM TO HIGH PLASTICITY, TRACE SAND) |
| | FINAL DEPTH | FT MSL | FEET ABOVE MEAN SEA LEVEL |
| | SOIL ANALYTICAL SAMPLE RESULT EXCEEDS ESL | (7.52) | GROUNDWATER ELEVATION MEASURED JUNE 26, 2012 |
| | SOIL ANALYTICAL SAMPLE RESULTS DO NOT EXCEED ESLS | — | POTENTIOMETRIC SURFACE MEASURED JUNE 26, 2012 (DASHED WHERE INFERRED) |

NOTE:

1. ASTERISK (*) INDICATES ABANDONED WELL.
2. SOIL ANALYTICAL SAMPLE RESULTS SCREENED AGAINST ENVIRONMENTAL SCREENING LEVELS (ESLS) FOR SHALLOW SOIL IN RESIDENTIAL AREAS WHERE GROUNDWATER IS NOT A POTENTIAL SOURCE OF DRINKING WATER FROM TABLE B, "SCREENING FOR ENVIRONMENTAL CONCERNS AT SITES WITH CONTAMINATED SOIL AND GROUNDWATER", REGIONAL WATER QUALITY CONTROL BOARD, SAN FRANCISCO BAY REGION, REVISED MAY 2008.

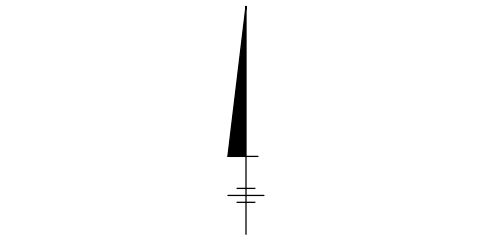
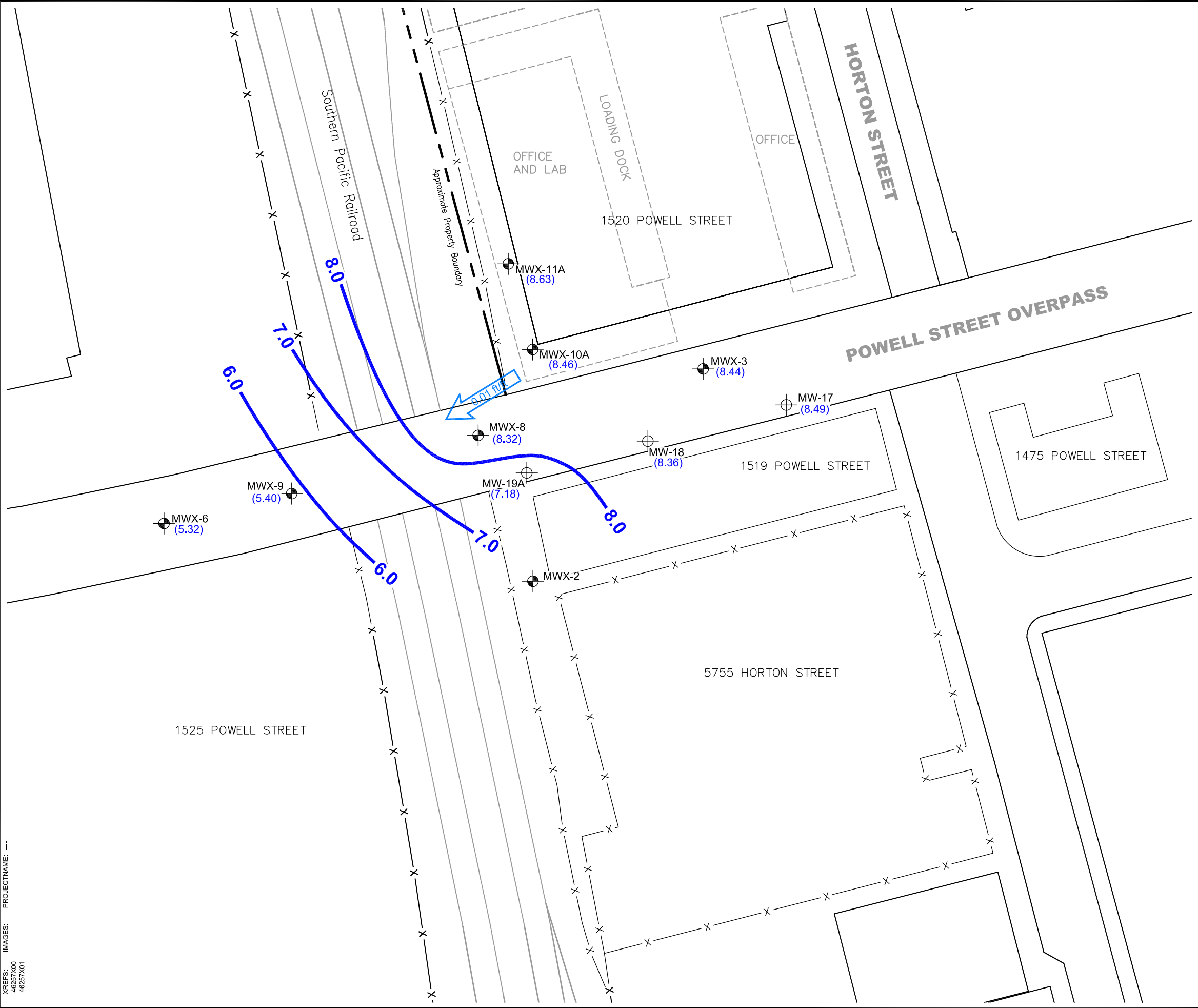


FORMER CHEVRON ASPHALT PLANT AND BULK TERMINAL 20-6265
 1520 POWELL STREET
 EMERYVILLE, CA

CROSS SECTION A - A'

FIGURE 4

CITY: PETALUMA, CA GROUP: ENVCAD DB: (R/PETRIE), J. HARRIS PIC: M.Fleischer PIM: M.Blanchette TW: M.Blanchette LYS: ON** OFF**REF**
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 XREFS: IMAGES: PROJECTNAME: 46257X00 46257X01



LEGEND:

- MONITORING WELL LOCATION (ARCADIS 2009)
- MONITORING WELL LOCATION (WGR 1990)
- HISTORICAL FEATURE
- (8.36) GROUNDWATER ELEVATION
- 7.0 GROUNDWATER ELEVATION CONTOUR (DASHED WHERE INFERRED)
- 0.01 ft/ft GROUNDWATER GRADIENT IN FOOT PER FOOT (ft/ft)

NOTES:

1. BASE MAP MODIFIED FROM A DRAWING BY GETTLER-RYAN TITLED "SITE PLAN", DATED JULY 2000, ORIGINAL DRAWING SCALE 1" = 100'.
2. HISTORICAL FEATURE INFORMATION BASED ON A FIGURE BY HARDING LAWSON ASSOCIATES ENTITLED "POTENTIOMETRIC SURFACE MAP, UPPERMOST AQUIFER 8/24/88", BASED ON MCKESSON ENVIRONMENTAL SERVICES GROUNDWATER INVESTIGATION.
3. GROUNDWATER ELEVATIONS LISTED IN FEET ABOVE MEAN SEA LEVEL.

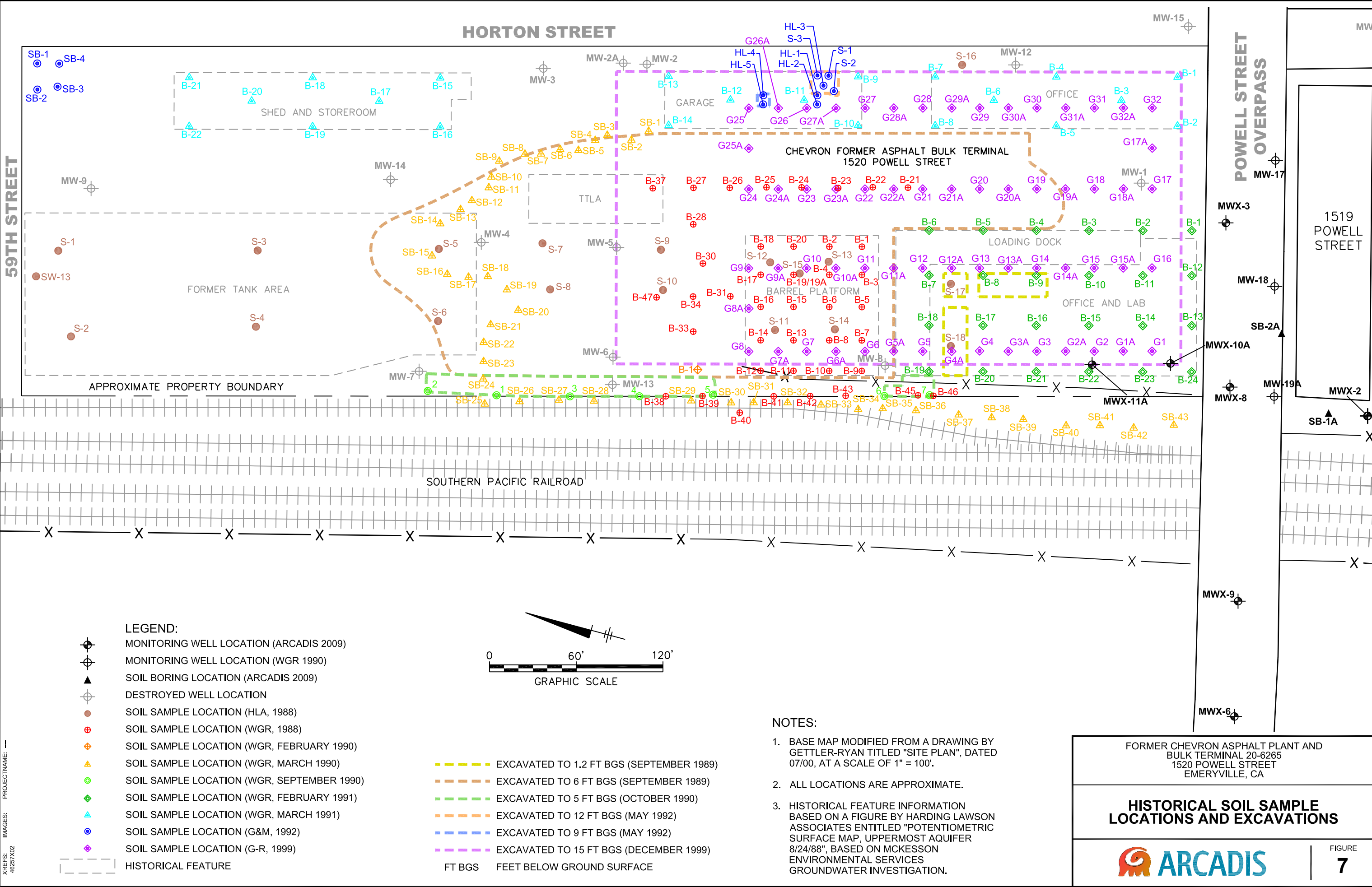


FORMER CHEVRON ASPHALT PLANT
 AND BULK TERMINAL 20-6265
 1520 POWELL STREET
 EMERYVILLE, CA

**GROUNDWATER ELEVATION CONTOUR MAP
 JUNE 26, 2012**

FIGURE
6

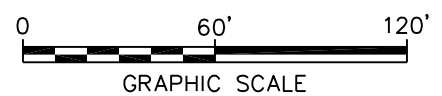
CITY: PETALUMA, CA. GROUP: ENV/CAD. DB: (P. LISTER), L. FORAKER, J. HARRIS. PIC: J. VOGELY. PM: J. WAGLER. TM: B. MCKENNA. LVR: ONE. OFF: REF.
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LEGEND:

- MONITORING WELL LOCATION (ARCADIS 2009)
- MONITORING WELL LOCATION (WGR 1990)
- SOIL BORING LOCATION (ARCADIS 2009)
- DESTROYED WELL LOCATION
- SOIL SAMPLE LOCATION (HLA, 1988)
- SOIL SAMPLE LOCATION (WGR, 1988)
- SOIL SAMPLE LOCATION (WGR, FEBRUARY 1990)
- SOIL SAMPLE LOCATION (WGR, MARCH 1990)
- SOIL SAMPLE LOCATION (WGR, SEPTEMBER 1990)
- SOIL SAMPLE LOCATION (WGR, FEBRUARY 1991)
- SOIL SAMPLE LOCATION (WGR, MARCH 1991)
- SOIL SAMPLE LOCATION (G&M, 1992)
- SOIL SAMPLE LOCATION (G-R, 1999)
- HISTORICAL FEATURE

- EXCAVATED TO 1.2 FT BGS (SEPTEMBER 1989)
 - EXCAVATED TO 6 FT BGS (SEPTEMBER 1989)
 - EXCAVATED TO 5 FT BGS (OCTOBER 1990)
 - EXCAVATED TO 12 FT BGS (MAY 1992)
 - EXCAVATED TO 9 FT BGS (MAY 1992)
 - EXCAVATED TO 15 FT BGS (DECEMBER 1999)
- FT BGS FEET BELOW GROUND SURFACE



NOTES:

1. BASE MAP MODIFIED FROM A DRAWING BY GETTLER-RYAN TITLED "SITE PLAN", DATED 07/00, AT A SCALE OF 1" = 100'.
2. ALL LOCATIONS ARE APPROXIMATE.
3. HISTORICAL FEATURE INFORMATION BASED ON A FIGURE BY HARDING LAWSON ASSOCIATES ENTITLED "POTENTIOMETRIC SURFACE MAP, UPPERMOST AQUIFER 8/24/88", BASED ON MCKESSON ENVIRONMENTAL SERVICES GROUNDWATER INVESTIGATION.

FORMER CHEVRON ASPHALT PLANT AND
BULK TERMINAL 20-6265
1520 POWELL STREET
EMERYVILLE, CA








**HISTORICAL SOIL SAMPLE
LOCATIONS AND EXCAVATIONS**

FIGURE
7

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 46257X02 46257X01.jpg

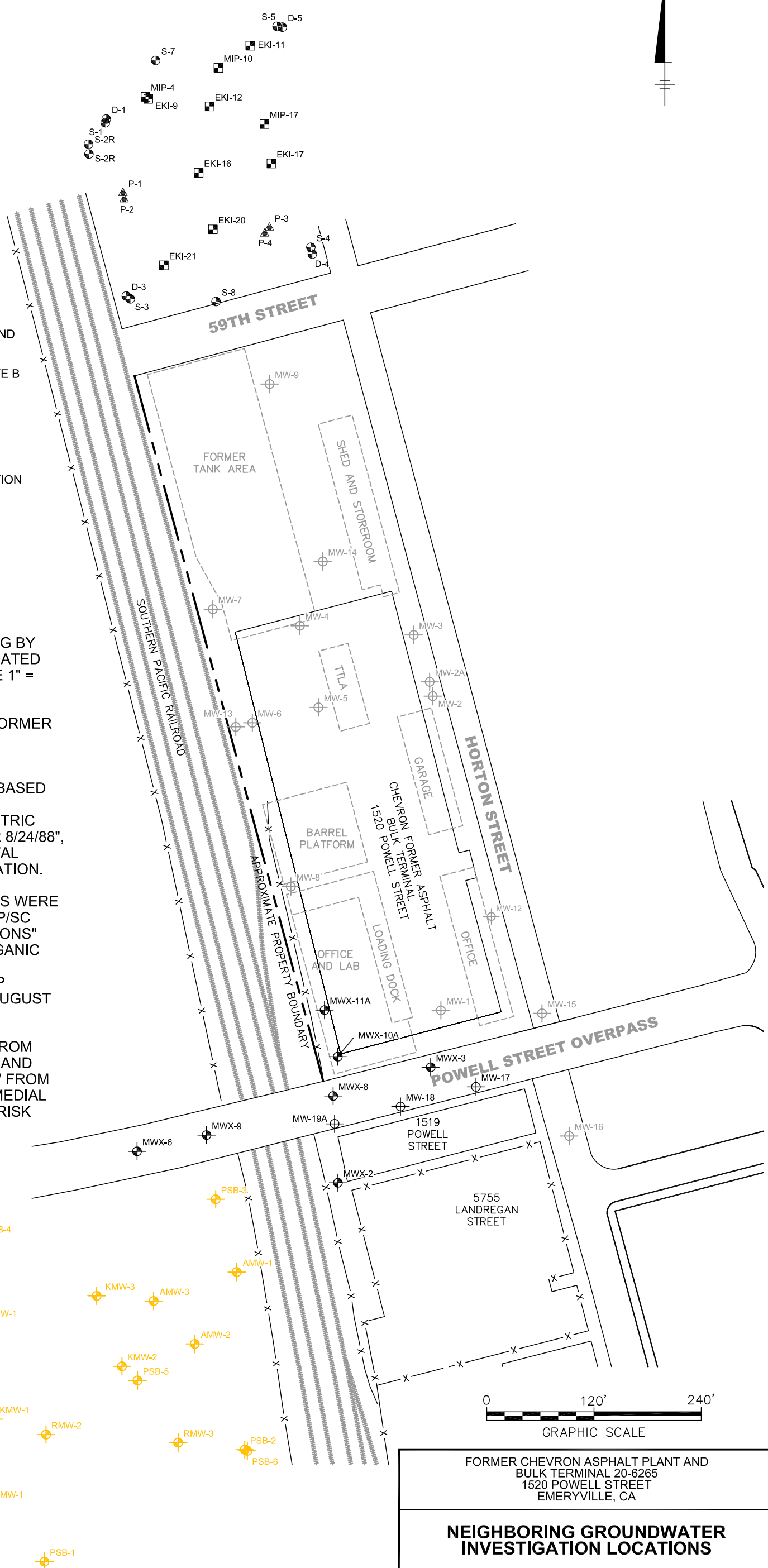


LEGEND:

-  MONITORING WELL LOCATION FOR FORMER CHEVRON ASPHALT PLANT AND BULK TERMINAL
-  MONITORING WELL LOCATION FOR SITE B
-  MONITORING WELL LOCATION FOR WESTINGHOUSE PARCEL 1
-  PIEZOMETER LOCATION FOR WESTINGHOUSE PARCEL 1
-  GRAB GROUNDWATER SAMPLE LOCATION FOR WESTINGHOUSE PARCEL 1
-  DESTROYED WELL LOCATION
-  HISTORICAL FEATURE

NOTES:

1. BASE MAP MODIFIED FROM A DRAWING BY GETTLER-RYAN TITLED "SITE PLAN", DATED JULY 2000, ORIGINAL DRAWING SCALE 1" = 100'.
2. DESTROYED WELL LOCATIONS FOR FORMER CHEVRON ASPHALT PLANT AND BULK TERMINAL ARE APPROXIMATE.
3. HISTORICAL FEATURE INFORMATION BASED ON A FIGURE BY HARDING LAWSON ASSOCIATES ENTITLED "POTENTIOMETRIC SURFACE MAP, UPPERMOST AQUIFER 8/24/88", BASED ON MCKESSON ENVIRONMENTAL SERVICES GROUNDWATER INVESTIGATION.
4. WESTINGHOUSE PARCEL 1 LOCATIONS WERE DIGITIZED FROM FIGURE 2 TITLED "MIP/SC AND GROUNDWATER SAMPLE LOCATIONS" FROM REPORT TITLED "VOLATILE ORGANIC COMPOUND MITIGATION WORK PLAN, EMERYVILLE MOUND PARCEL" BY WSP ENVIRONMENT & ENERGY, REVISED AUGUST 6, 2010.
5. SITE B LOCATIONS WERE DIGITIZED FROM FIGURE 1-3B TITLED "GROUNDWATER AND STORM DRAIN SAMPLING LOCATIONS" FROM REPORT TITLED "REVISED DRAFT REMEDIAL INVESTIGATION AND HUMAN HEALTH RISK ASSESSMENT REPORT" BY ERLER & KALINOWSKI, INC., MAY 2007.



FORMER CHEVRON ASPHALT PLANT AND
 BULK TERMINAL 20-6265
 1520 POWELL STREET
 EMERYVILLE, CA

**NEIGHBORING GROUNDWATER
 INVESTIGATION LOCATIONS**


 **ARCADIS**

FIGURE
8

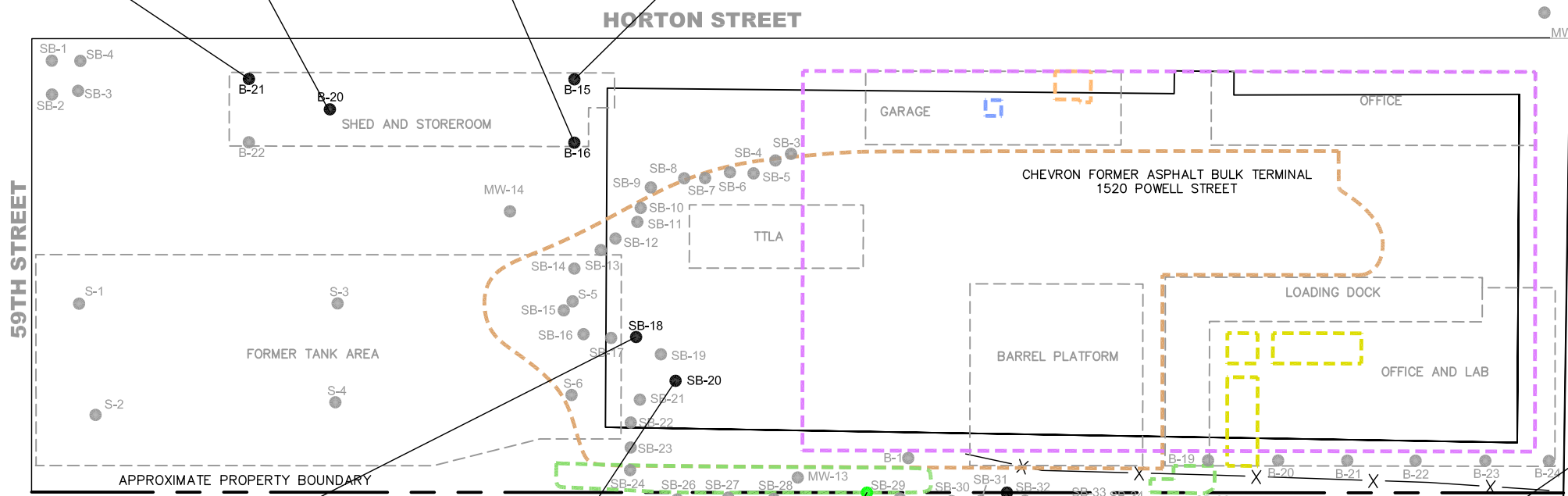
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DEPTH	B	T	E	X	
5.5	5 U	5 U	5 U		16

B-20 (MARCH 18, 1991)					
DEPTH	B	T	E	X	
2.5-3.0	5 U	6	5 U		14

B-16 (MARCH 18, 1991)					
DEPTH	B	T	E	X	
5.5-6.0	5 U	9	5 U		17

B-15 (MARCH 18, 1991)					
DEPTH	B	T	E	X	
5.5-6.0	5 U	5 U	5 U		10



SB-18 (MARCH 26, 1990)					
DEPTH	B	T	E	X	
4-5	5 U	5 U	5 U		9

SB-20 (MARCH 26, 1990)					
DEPTH	B	T	E	X	
4-5	5 U	23	5 U		26

B-38 (SEPTEMBER 30, 1988)					
DEPTH	B	T	E	X	
2.5-3.0	500	900	300 U		2,200

B-41 (SEPTEMBER 30, 1988)					
DEPTH	B	T	E	X	
4.5-5.0	300 U	300 U	300 U		4,700
5.5-6.0	300 U	300 U	300 U		

SB-42 (MARCH 26, 1990)					
DEPTH	B	T	E	X	
4-5	5 U	7.0	680		3,100

LEGEND:

- SB-22 CONSTITUENT WAS NOT DETECTED IN SOIL ANALYTICAL SAMPLES
- SB-23 CONSTITUENT WAS DETECTED IN SOIL AT CONCENTRATIONS THAT DO NOT EXCEED ESLS
- SB-25 CONSTITUENT WAS DETECTED IN SOIL AT CONCENTRATIONS EXCEEDING ESLS
- - - HISTORICAL FEATURE
- - - EXCAVATED TO 1.2 FT BGS (SEPTEMBER 1989)
- - - EXCAVATED TO 6 FT BGS (SEPTEMBER 1989)
- - - EXCAVATED TO 5 FT BGS (OCTOBER 1990)
- - - EXCAVATED TO 12 FT BGS (MAY 1992)

- - - EXCAVATED TO 9 FT BGS (MAY 1992)
- - - EXCAVATED TO 15 FT BGS (DECEMBER 1999)

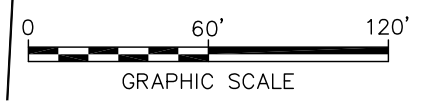
B-38 (SEPTEMBER 30, 1988)					
DEPTH	B	T	E	X	
2.5-3.0	500	900	300 U		2,200

LOCATION ID
 DETECTED CONCENTRATION (MICROGRAMS PER KILOGRAM)
 ANALYTE NOT DETECTED ABOVE REPORTING LIMIT
 DETECTED CONCENTRATION EXCEEDS ESL
 SAMPLE DEPTH IN FEET BELOW GROUND SURFACE

B = BENZENE
 T = TOLUENE
 E = ETHYLBENZENE
 X = TOTAL XYLENES

NOTES:

1. BASE MAP MODIFIED FROM A DRAWING BY GETTLER-RYAN TITLED "SITE PLAN", DATED 07/00, AT A SCALE OF 1" = 100'.
2. ALL LOCATIONS ARE APPROXIMATE.
3. HISTORICAL FEATURE INFORMATION BASED ON A FIGURE BY HARDING LAWSON ASSOCIATES ENTITLED "POTENTIOMETRIC SURFACE MAP, UPPERMOST AQUIFER 8/24/88", BASED ON MCKESSON ENVIRONMENTAL SERVICES GROUNDWATER INVESTIGATION.
4. CONCENTRATIONS IN MICROGRAMS PER KILOGRAM
5. DEPTH = FEET BELOW GROUND SURFACE
6. SOIL ANALYTICAL SAMPLE RESULTS SCREENED AGAINST ENVIRONMENTAL SCREENING LEVELS (ESLS) FOR SHALLOW SOIL IN RESIDENTIAL AREAS WHERE GROUNDWATER IS NOT A POTENTIAL SOURCE OF DRINKING WATER FROM TABLE B, "SCREENING FOR ENVIRONMENTAL CONCERNS AT SITES WITH CONTAMINATED SOIL AND GROUNDWATER", REGIONAL WATER QUALITY CONTROL BOARD, SAN FRANCISCO BAY REGION, REVISED MAY 2008.

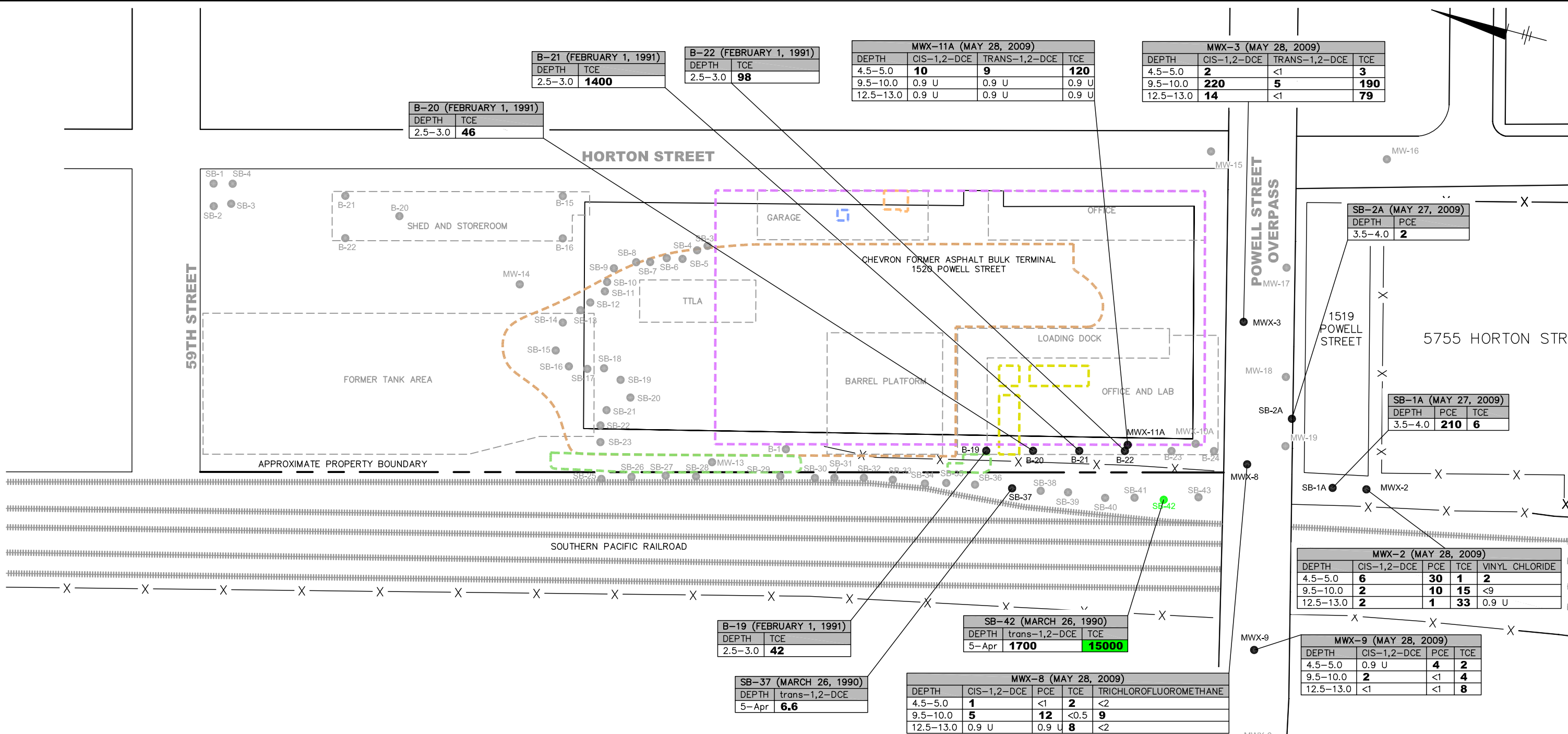


FORMER CHEVRON ASPHALT PLANT AND BULK TERMINAL 20-6265
 1520 POWELL STREET
 EMERYVILLE, CA

BTEX IN SOIL

FIGURE
10

CITY: Syracuse GROUP: EnvCAD DB: P. LISTER (J. HARRIS), A. Schilling PIC: J. VOGELY Pk: J. WAGLER Tm: B. McKenna Lyr: ON=OFF=REF
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 XREFS: 46257X02 PROJECTNAME:



B-21 (FEBRUARY 1, 1991)	
DEPTH	TCE
2.5-3.0	1400

B-22 (FEBRUARY 1, 1991)	
DEPTH	TCE
2.5-3.0	98

MWX-11A (MAY 28, 2009)			
DEPTH	CIS-1,2-DCE	TRANS-1,2-DCE	TCE
4.5-5.0	10	9	120
9.5-10.0	0.9 U	0.9 U	0.9 U
12.5-13.0	0.9 U	0.9 U	0.9 U

MWX-3 (MAY 28, 2009)			
DEPTH	CIS-1,2-DCE	TRANS-1,2-DCE	TCE
4.5-5.0	2	<1	3
9.5-10.0	220	5	190
12.5-13.0	14	<1	79

SB-2A (MAY 27, 2009)	
DEPTH	PCE
3.5-4.0	2

SB-1A (MAY 27, 2009)		
DEPTH	PCE	TCE
3.5-4.0	210	6

B-19 (FEBRUARY 1, 1991)	
DEPTH	TCE
2.5-3.0	42

SB-42 (MARCH 26, 1990)		
DEPTH	trans-1,2-DCE	TCE
5-Apr	1700	15000

SB-37 (MARCH 26, 1990)	
DEPTH	trans-1,2-DCE
5-Apr	6.6

MWX-8 (MAY 28, 2009)				
DEPTH	CIS-1,2-DCE	PCE	TCE	TRICHLOROFLUOROMETHANE
4.5-5.0	1	<1	2	<2
9.5-10.0	5	12	<0.5	9
12.5-13.0	0.9 U	0.9 U	8	<2

MWX-2 (MAY 28, 2009)					
DEPTH	CIS-1,2-DCE	PCE	TCE	VINYL CHLORIDE	
4.5-5.0	6	30	1	2	
9.5-10.0	2	10	15	<9	
12.5-13.0	2	1	33	0.9 U	

MWX-9 (MAY 28, 2009)			
DEPTH	CIS-1,2-DCE	PCE	TCE
4.5-5.0	0.9 U	4	2
9.5-10.0	2	<1	4
12.5-13.0	<1	<1	8

LEGEND:

- SB-22 CONSTITUENT WAS NOT DETECTED IN SOIL ANALYTICAL SAMPLES
- SB-23 CONSTITUENT WAS DETECTED IN SOIL AT CONCENTRATIONS THAT DO NOT EXCEED ESLS
- SB-25 CONSTITUENT WAS DETECTED IN SOIL AT CONCENTRATIONS EXCEEDING ESLS
- HISTORICAL FEATURE
- EXCAVATED TO 1.2 FT BGS (SEPTEMBER 1989)
- EXCAVATED TO 6 FT BGS (SEPTEMBER 1989)
- EXCAVATED TO 5 FT BGS (OCTOBER 1990)
- EXCAVATED TO 12 FT BGS (MAY 1992)

- EXCAVATED TO 9 FT BGS (MAY 1992)
- EXCAVATED TO 15 FT BGS (DECEMBER 1999)
- FT BGS FEET BELOW GROUND SURFACE

SB-42 (MARCH 26, 1990)		
DEPTH	trans-1,2-DCE	TCE
5-Apr	1700	15000

MWX-9 (MAY 28, 2009)			
DEPTH	CIS-1,2-DCE	PCE	TCE
4.5-5.0	0.9 U	4	2
9.5-10.0	2	<1	4
12.5-13.0	<1	<1	8

- LOCATION ID
- DETECTED CONCENTRATION (MICROGRAMS PER LITER)
- DETECTED CONCENTRATION EXCEEDS ESL
- SAMPLE DEPTH IN FEET BELOW GROUND SURFACE
- ANALYTE NOT DETECTED ABOVE REPORTING LIMIT

DCE = DICHLOROETHENE
 TCE = TRICHLOROETHENE
 PCE = TETRACHLOROETHENE

NOTES:

- BASE MAP MODIFIED FROM A DRAWING BY GETTLER-RYAN TITLED "SITE PLAN", DATED 07/00, AT A SCALE OF 1" = 100'.
- ALL LOCATIONS ARE APPROXIMATE.
- HISTORICAL FEATURE INFORMATION BASED ON A FIGURE BY HARDING LAWSON ASSOCIATES ENTITLED "POTENTIOMETRIC SURFACE MAP, UPPERMOST AQUIFER 8/24/88", BASED ON MCKESSON ENVIRONMENTAL SERVICES GROUNDWATER INVESTIGATION.
- CONCENTRATIONS IN MICROGRAMS PER KILOGRAM
- DEPTH = FEET BELOW GROUND SURFACE

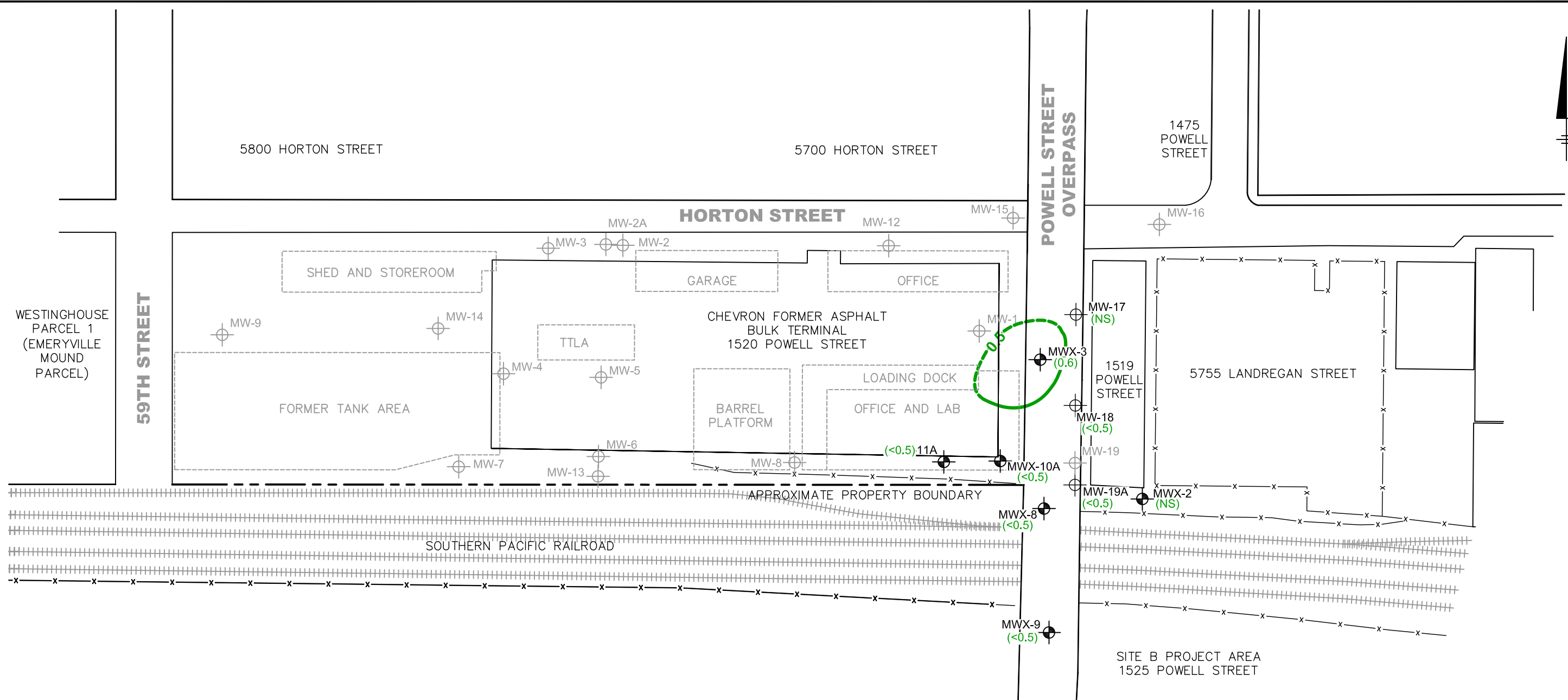
FORMER CHEVRON ASPHALT PLANT AND BULK TERMINAL 20-6265
 1520 POWELL STREET
 EMERYVILLE, CA

OTHER VOCs IN SOIL



CITY: Syracuse GROUP: EnvCAD DB: R.Petite L.Foraker A.Schilling PIC: M.Fleischer PM: M.Blanchette T.M: M.Blanchette L.YR: ON: OFF: REF: G:\ENVCAD\Roseville-CAR\RETURN\TO\Syracuse\NY\B0046257\00400200\DWG\46257M09.dwg LAYOUT: 13 SAVED: 9/20/2012 9:48 AM ACADVER: 18 IS (LMS TECH) PAGES: 18 PLOTTED: 9/27/2012 10:37 AM BY: ROBITAILLE, BEVERLY

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 46257X04



LEGEND:

- MONITORING WELL LOCATION (ARCADIS 2009)
- MONITORING WELL LOCATION (WGR 1990)
- DESTROYED WELL LOCATION

HISTORICAL FEATURE

0.5 --- ISOCONCENTRATION CONTOUR (µg/L) (DASHED WHERE INFERRED)

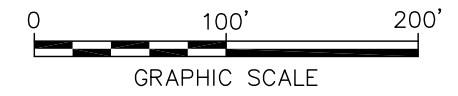
(NS) NOT SAMPLED

(0.6) DETECTED CONCENTRATION (µg/L)

µg/L MICROGRAMS PER LITER

NOTES:

1. BASE MAP MODIFIED FROM A DRAWING BY GETTLER-RYAN TITLED "SITE PLAN", DATED 07/00'.
2. HISTORICAL FEATURE INFORMATION BASED ON A FIGURE BY HARDING LAWSON ASSOCIATES ENTITLED "POTENTIOMETRIC SURFACE MAP, UPPERMOST AQUIFER 8/24/88", BASED ON MCKESSON ENVIRONMENTAL SERVICES GROUNDWATER INVESTIGATION.
3. ANALYTICAL SAMPLES COLLECTED JUNE 26-27, 2012.
4. ENVIRONMENTAL SCREENING LEVELS (ESLS) FROM TABLE F-1B, "INTERIM FINAL SCREENING FOR ENVIRONMENTAL CONCERNS AT SITES WITH CONTAMINATED SOIL AND GROUNDWATER", REGIONAL WATER QUALITY CONTROL BOARD, SAN FRANCISCO BAY REGION, MAY 2008.
5. NO SAMPLES EXCEED ESL FOR BENZENE (540 µg/L)



FORMER CHEVRON ASPHALT PLANT AND BULK TERMINAL 20-6265
 1520 POWELL STREET
 EMERYVILLE, CA

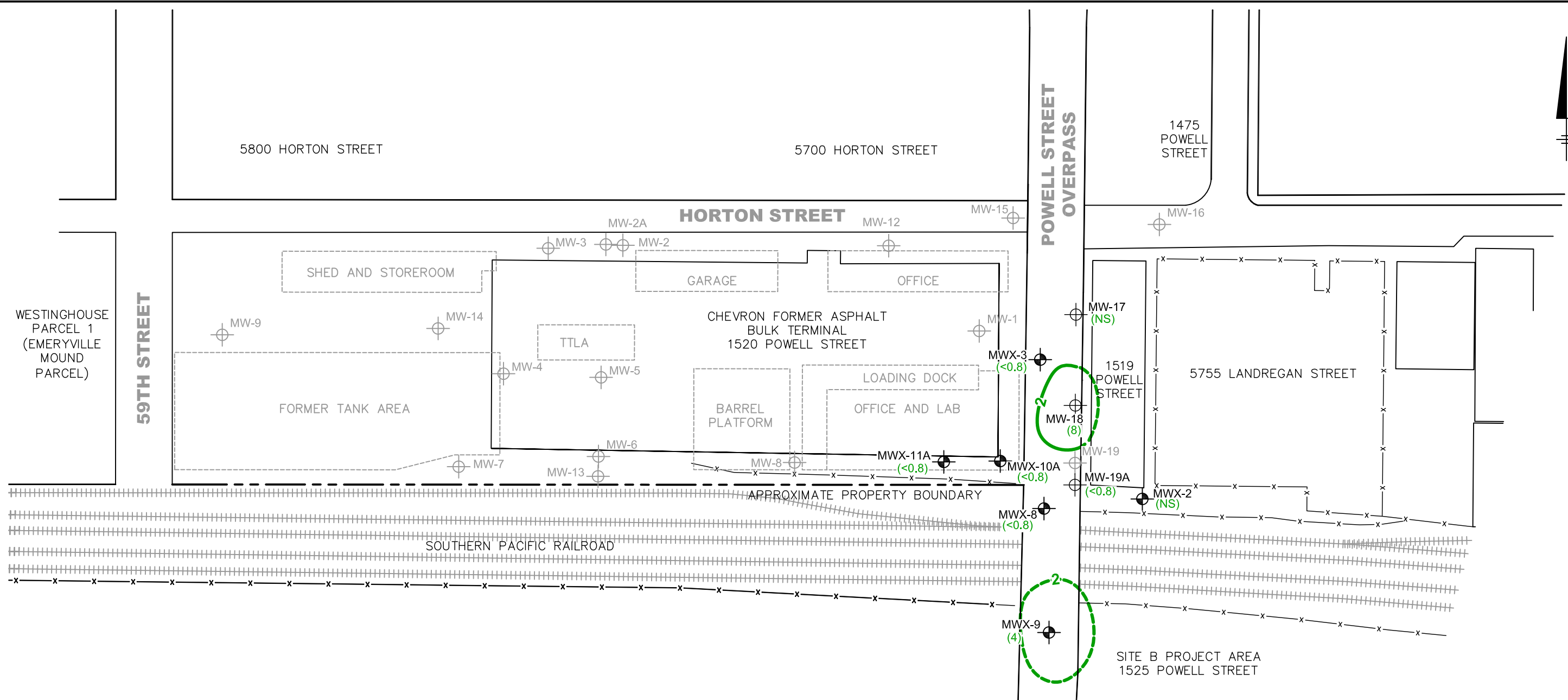
EXTENT OF BENZENE IN GROUNDWATER

ARCADIS

FIGURE
13

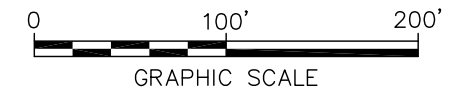
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XREFS: 46257X00 46257X02 46257X03 46257X04
 IMAGES: PROJECTNAME: --



- LEGEND:**
- MONITORING WELL LOCATION (ARCADIS 2009)
 - MONITORING WELL LOCATION (WGR 1990)
 - HISTORICAL FEATURE
 - ISOCONCENTRATION CONTOUR (µg/L) (DASHED WHERE INFERRED)
 - (NS) NOT SAMPLED
 - (8) DETECTED CONCENTRATION (µg/L)
 - PCE TETRACHLOROETHENE
 - µg/L MICROGRAMS PER LITER

- NOTES:**
1. BASE MAP MODIFIED FROM A DRAWING BY GETTLER-RYAN TITLED "SITE PLAN", DATED 07/00'.
 2. HISTORICAL FEATURE INFORMATION BASED ON A FIGURE BY HARDING LAWSON ASSOCIATES ENTITLED "POTENTIOMETRIC SURFACE MAP, UPPERMOST AQUIFER 8/24/88", BASED ON MCKESSON ENVIRONMENTAL SERVICES GROUNDWATER INVESTIGATION.
 3. ANALYTICAL SAMPLES COLLECTED JUNE 26-27, 2012.
 4. ENVIRONMENTAL SCREENING LEVELS (ESLS) FROM TABLE F-1B, "INTERIM FINAL SCREENING FOR ENVIRONMENTAL CONCERNS AT SITES WITH CONTAMINATED SOIL AND GROUNDWATER", REGIONAL WATER QUALITY CONTROL BOARD, SAN FRANCISCO BAY REGION, MAY 2008.
 5. NO SAMPLES EXCEED ESL FOR PCE (120 µg/L)



FORMER CHEVRON ASPHALT PLANT AND BULK TERMINAL 20-6265
 1520 POWELL STREET
 EMERYVILLE, CA

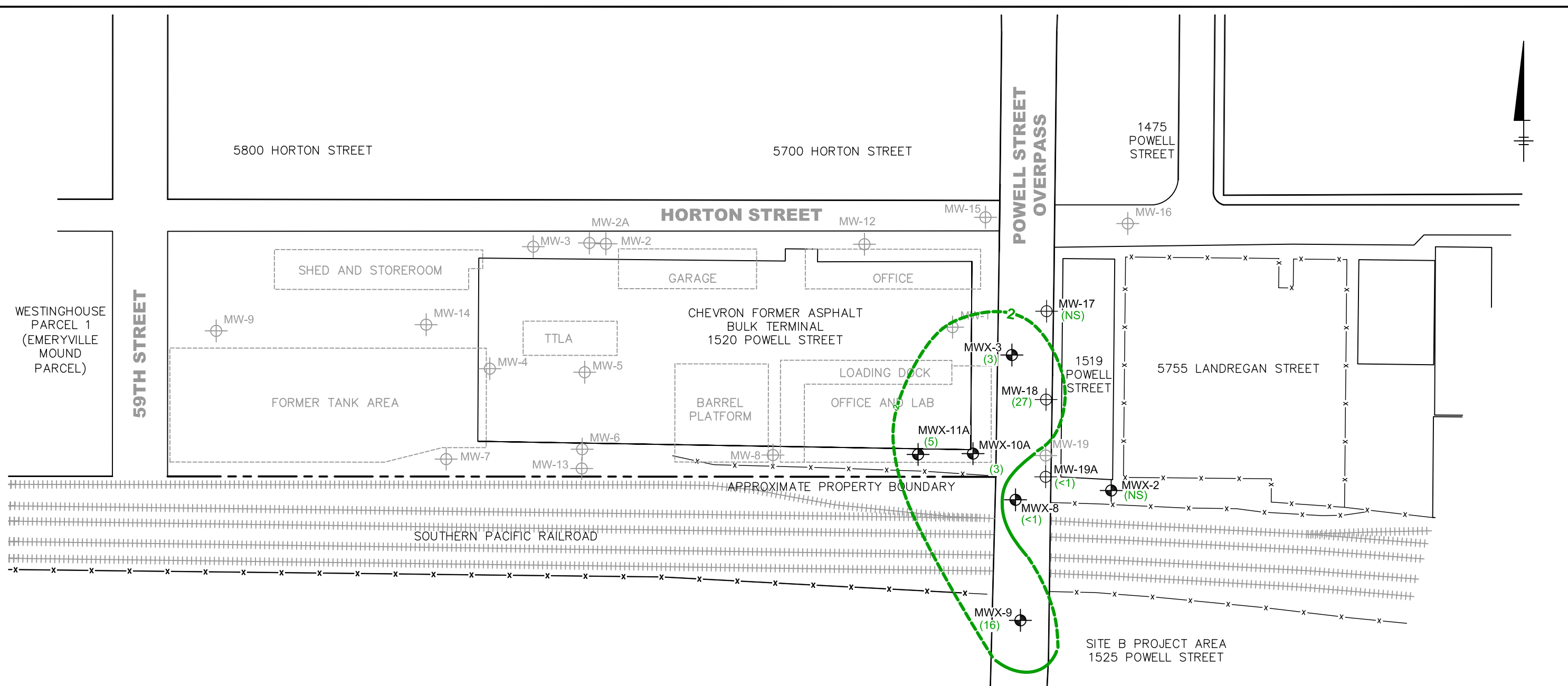
EXTENT OF PCE IN GROUNDWATER

ARCADIS

FIGURE
14

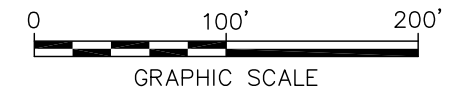
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- LEGEND:**
- MONITORING WELL LOCATION (ARCADIS 2009)
 - MONITORING WELL LOCATION (WGR 1990)
 - HISTORICAL FEATURE
 - ISOCONCENTRATION CONTOUR (µg/L) (DASHED WHERE INFERRED)
 - (NS)** NOT SAMPLED
 - (27)** DETECTED CONCENTRATION (µg/L)
 - TCE** TRICHLOROETHENE
 - µg/L** MICROGRAMS PER LITER

- NOTES:**
1. BASE MAP MODIFIED FROM A DRAWING BY GETTLER-RYAN TITLED "SITE PLAN", DATED 07/00'.
 2. HISTORICAL FEATURE INFORMATION BASED ON A FIGURE BY HARDING LAWSON ASSOCIATES ENTITLED "POTENTIOMETRIC SURFACE MAP, UPPERMOST AQUIFER 8/24/88", BASED ON MCKESSON ENVIRONMENTAL SERVICES GROUNDWATER INVESTIGATION.
 3. ANALYTICAL SAMPLES COLLECTED JUNE 26-27, 2012.
 4. ENVIRONMENTAL SCREENING LEVELS (ESLS) FROM TABLE F-1B, "INTERIM FINAL SCREENING FOR ENVIRONMENTAL CONCERNS AT SITES WITH CONTAMINATED SOIL AND GROUNDWATER", REGIONAL WATER QUALITY CONTROL BOARD, SAN FRANCISCO BAY REGION, MAY 2008.
 5. NO SAMPLES EXCEED ESL FOR TCE (530 µg/L).



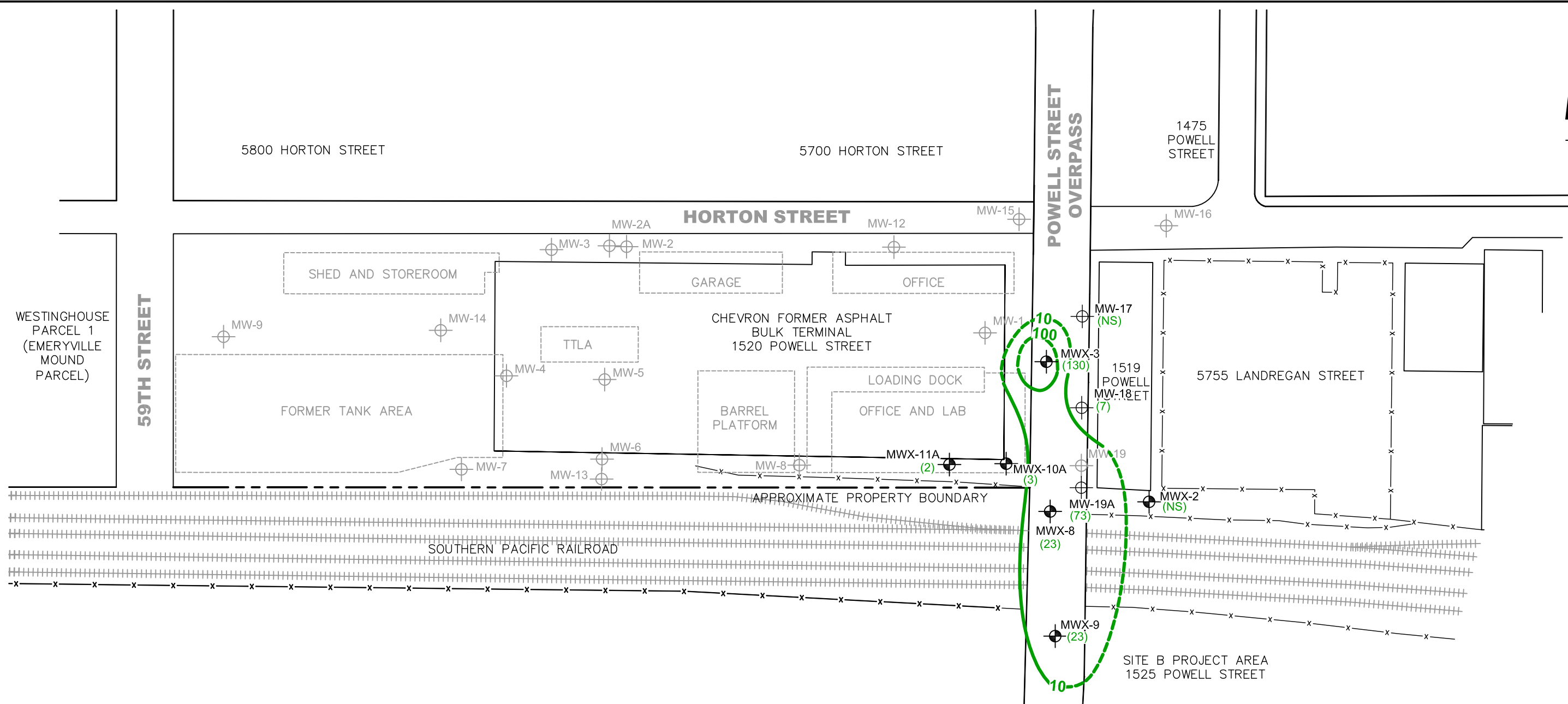
FORMER CHEVRON ASPHALT PLANT AND BULK TERMINAL 20-6265
 1520 POWELL STREET
 EMERYVILLE, CA

EXTENT OF TCE IN GROUNDWATER

ARCADIS

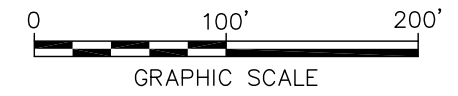
FIGURE
15

CITY: Syracuse GROUP: EnvCAD DB: R.Petite, L.Foraker, A.Schilling, PIC: M.Fleischer, PM: M.Blanchette, LVR: ON=*, OFF=REF*
 G:\ENV\CAD\Roseville-CA\RETURN\TO\Syracuse\NY\B0046257\0040100200\DWG\46257M12.dwg LAYOUT: 16 SAVED: 9/20/2012 9:54 AM ACADVER: 18, IS (LMS TECH) PAGES: 18, PLOTSTYLETABLE: PLT\FULL.CTB PLOTTED: 9/27/2012 10:40 AM BY: ROBITAILLE, BEVERLY
 XREFS: 46257X00 46257X02 46257X03 46257X04
 IMAGES: PROJECTNAME: --



- LEGEND:**
- MONITORING WELL LOCATION (ARCADIS 2009)
 - MONITORING WELL LOCATION (WGR 1990)
 - HISTORICAL FEATURE
 - 10 ISOCONCENTRATION CONTOUR (µg/L) (DASHED WHERE INFERRED)
 - (NS) NOT SAMPLED
 - (130) DETECTED CONCENTRATION (µg/L)
 - DCE TRICHLOROETHENE
 - µg/L MICROGRAMS PER LITER

- NOTES:**
- BASE MAP MODIFIED FROM A DRAWING BY GETTLER-RYAN TITLED "SITE PLAN", DATED 07/00'.
 - HISTORICAL FEATURE INFORMATION BASED ON A FIGURE BY HARDING LAWSON ASSOCIATES ENTITLED "POTENTIOMETRIC SURFACE MAP, UPPERMOST AQUIFER 8/24/88", BASED ON MCKESSON ENVIRONMENTAL SERVICES GROUNDWATER INVESTIGATION.
 - ANALYTICAL SAMPLES COLLECTED JUNE 26-27, 2012.
 - ENVIRONMENTAL SCREENING LEVELS (ESLS) FROM TABLE F-1B, "INTERIM FINAL SCREENING FOR ENVIRONMENTAL CONCERNS AT SITES WITH CONTAMINATED SOIL AND GROUNDWATER", REGIONAL WATER QUALITY CONTROL BOARD, SAN FRANCISCO BAY REGION, MAY 2008.
 - NO SAMPLES EXCEED ESL FOR CIS-1,2-DCE (6,200 µg/L).



FORMER CHEVRON ASPHALT PLANT AND BULK TERMINAL 20-6265
1520 POWELL STREET
EMERYVILLE, CA

**EXTENT OF
cis-1,2-DCE IN GROUNDWATER**

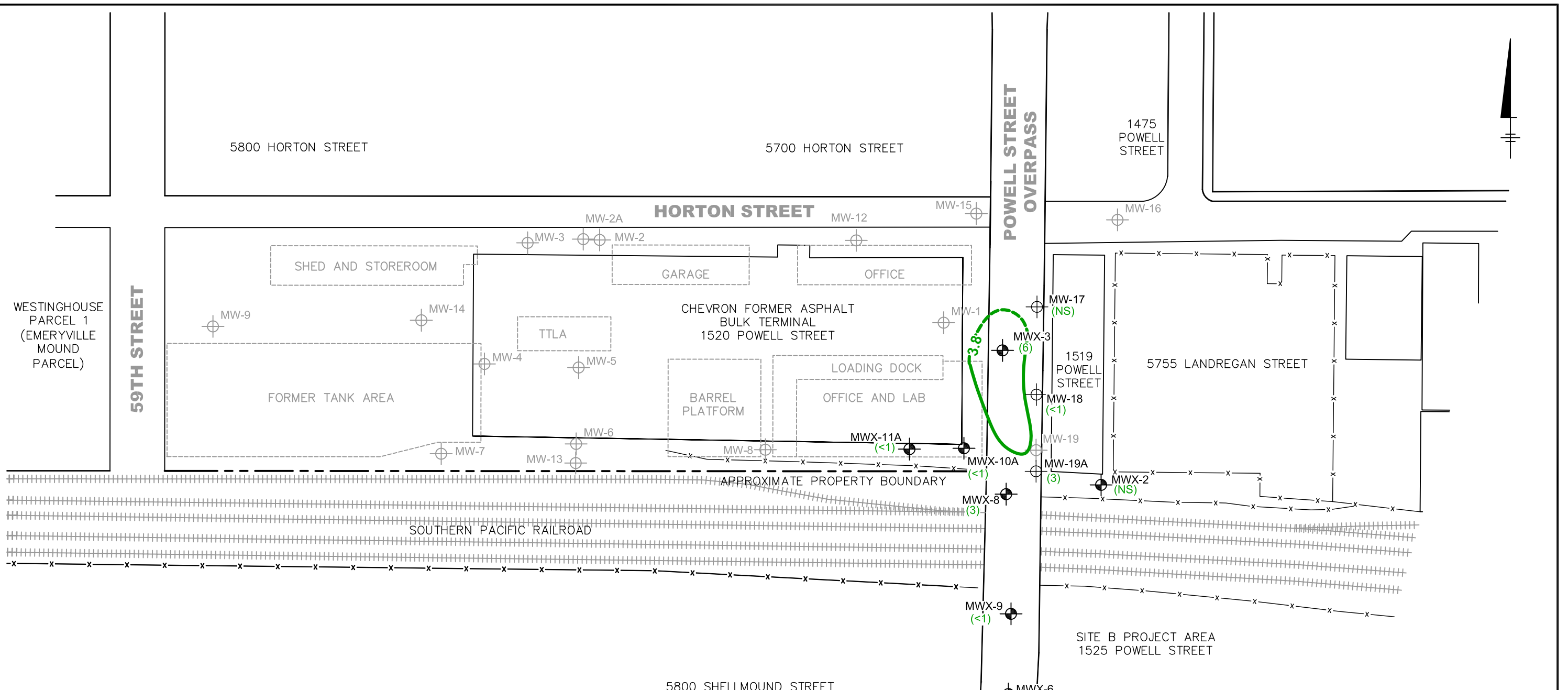
ARCADIS

FIGURE
16

CITY: Syracuse GROUP: EnvCAD DB: R.Petite L.Foraker A.Schilling PIC: M.Fleischer PM: M.Blanchette TR: M.Blanchette LVR: ON= OFF=REF= G:\ENV\CAD\Roseville-CA\RETURN\TO\Syracuse\NY\B0046257\004010200\DWG\46257M13.dwg LAYOUT: 17 SAVED: 9/20/2012 10:02 AM ACADVER: 18.1.1 (LMS TECH) PAGES: 17 PLOTSTYLETABLE: PLTFULL.CTB PLOTTED: 9/27/2012 10:40 AM BY: ROBITALLE, BEVERLY

XREFS: IMAGES: PROJECTNAME: --

46257X00
46257X02
46257X03
46257X04



LEGEND:

- MONITORING WELL LOCATION (ARCADIS 2009)
- MONITORING WELL LOCATION (WGR 1990)

HISTORICAL FEATURE

3.8 ISOCONCENTRATION CONTOUR (µg/L) (DASHED WHERE INFERRED)

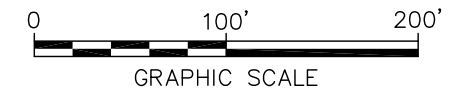
(NS) NOT SAMPLED

(6) DETECTED CONCENTRATION (µg/L)

µg/L MICROGRAMS PER LITER

NOTES:

1. BASE MAP MODIFIED FROM A DRAWING BY GETTLER-RYAN TITLED "SITE PLAN", DATED 07/00'.
2. HISTORICAL FEATURE INFORMATION BASED ON A FIGURE BY HARDING LAWSON ASSOCIATES ENTITLED "POTENTIOMETRIC SURFACE MAP, UPPERMOST AQUIFER 8/24/88", BASED ON MCKESSON ENVIRONMENTAL SERVICES GROUNDWATER INVESTIGATION.
3. ANALYTICAL SAMPLES COLLECTED JUNE 26-27, 2012.
4. ENVIRONMENTAL SCREENING LEVEL (ESL) FROM TABLE F-1B, "INTERIM FINAL SCREENING FOR ENVIRONMENTAL CONCERNS AT SITES WITH CONTAMINATED SOIL AND GROUNDWATER", REGIONAL WATER QUALITY CONTROL BOARD, SAN FRANCISCO BAY REGION, MAY 2008.
5. ESL FOR VINYL CHLORIDE IS 3.8 µg/L.

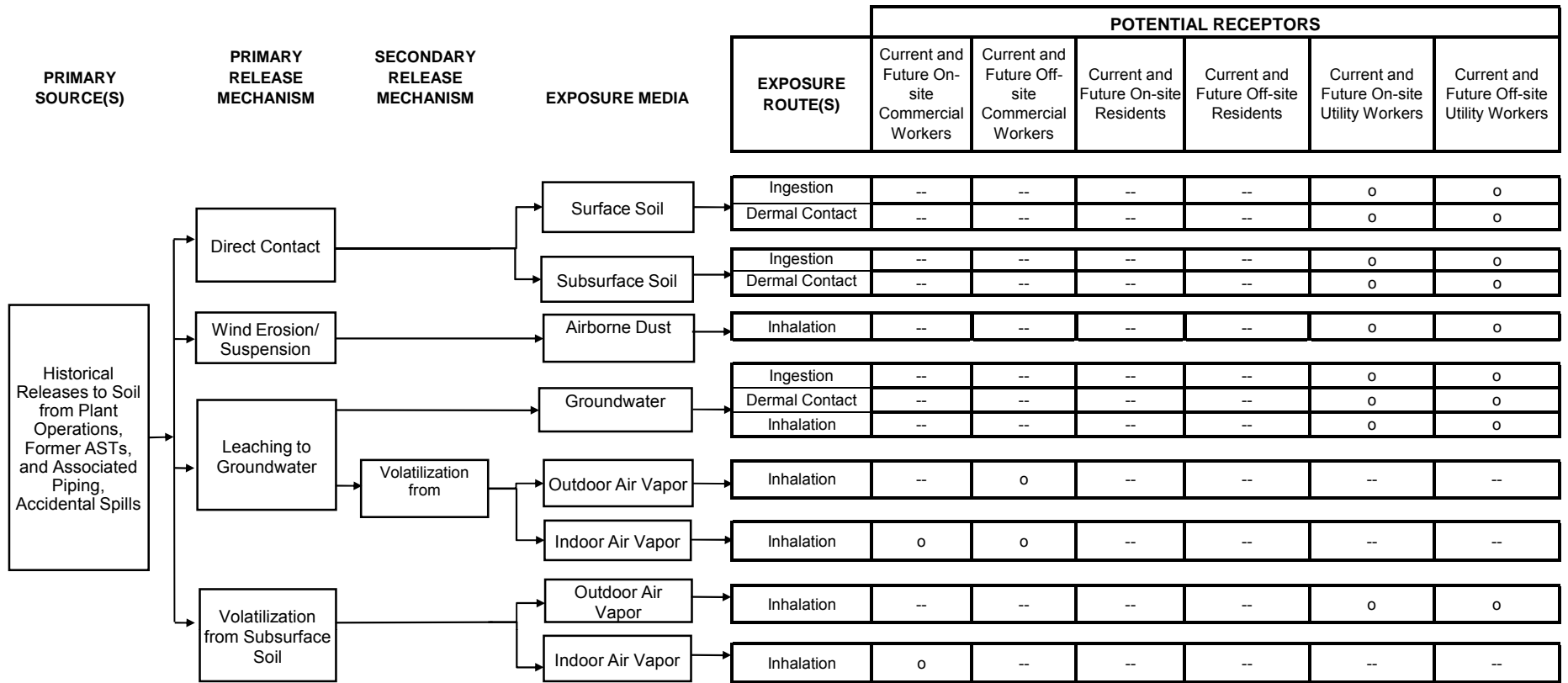


FORMER CHEVRON ASPHALT PLANT AND BULK TERMINAL 20-6265
1520 POWELL STREET
EMERYVILLE, CA

EXTENT OF VINYL CHLORIDE IN GROUNDWATER


ARCADIS

FIGURE
17



Notes:

- = Potentially complete exposure pathway
- o = Potentially complete but insignificant exposure pathway
- = Incomplete exposure pathway

FORMER CHEVRON ASPHALT TERMINAL 206265 1520 POWELL STREET EMERYVILLE, CA	
EXPOSURE PATHWAY SUMMARY	
	FIGURE 18



Appendix A

ACHCSA and SFBRWQCB Letters

**ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY**

DAVID J. KEARS, Agency Director



RAFAT A. SHAHID, ASST. AGENCY DIRECTOR

February 24, 1993
STID# 402

Mr. Kenneth Kan
Chevron U.S.A. Inc.
P.O. Box 5004
San Ramon, California

Post-It™ brand fax transmittal memo 7671		# of pages >	4
To	KEN KAN	From	SUSAN HUGO
Co.	CHEVRON	Co.	ACHD
Dept		Phone #	
Fax #	842-8252	Fax #	

ENTAL HEALTH
as Control Board
Water Programs
ersight Program
an Way, Rm 200
kland, CA 94621
(510) 271-4530

**RE: Status of the Soil and Groundwater Investigation/Remediation
at Former Chevron Service Station (# 9-3864)
5101 Telegraph Avenue, Oakland 94609**

Dear Mr. Kan:

The Alameda County Department of Environmental Health, Hazardous Materials Division has recently reviewed the files concerning the soil and groundwater investigation/remediation at the referenced site. We are in receipt of the following reports:

- * Work Plan dated October 13, 1992 and prepared by Pacific Environmental Group
- * Letter dated October 29, 1992 proposing risk assessment to be performed at the site
- * Soil and Groundwater Investigation Report (December 18, 1992) prepared by Pacific Environmental Group, Inc.
- * Risk-Based Analysis Work Plan and Report (December 29, 1992) prepared by Geraghty & Miller, Inc.
- * Quarterly Monitoring and Sampling Report (January 13, 1993) prepared by Sierra Environmental Services
- * Letter to City of Oakland (January 21, 1993) regarding permits to install five off-site monitoring wells
- * Analytical Results of monitoring well C-3 sampling on January 20, 1993
- * Work Plan for Off-Site Verification of Soil and Groundwater and Risk Management Plan (January 20, 1993) prepared by Resna
- * Site Plan (February 2, 1993) for the proposed installation of one on-site monitoring well to replace C-2 and C-4
- * Letter to Office of Planning and Building (February 5, 1993) regarding permits to install five off-site monitoring wells
- * Conceptual design of a remediation system (extraction well and activated carbon treatment)

Mr. Kenneth Kan

RE: 5101 Telegraph Avenue, Oakland, California 94609

February 24, 1993

Page 2 of 4

- * Sampling Report for monitoring well C-3 (February 10, 1993) prepared by Sierra Environmental Services

Based upon the review of recent reports submitted to this office for the referenced site, the following comments are summarized below:

- 1) The work plan dated October 13, 1992 prepared by Pacific Environmental Group, Inc. which proposes the installation of five off-site monitoring wells was approved during the October 26, 1992 meeting between Chevron (Jeff Hartwig, Betty Owens and yourself) and this office (Ravi Arulanantham and Susan Hugo).
- 2) The risk-based analysis work plan and report dated December 29, 1992 and prepared by Geraghty & Miller, Inc. was reviewed by Ravi Arulanantham of our department. Based on the data presented in the report, we concur with the findings that exposure to residual soil and groundwater contamination at the site do not appear to pose a threat to human health. Further excavation of soil is not necessary and this office has no objection to the redevelopment of this site.
- 3) The work plan for off-site verification of soil and groundwater and risk management plan dated January 20, 1993 and prepared by Resna is not acceptable due to the recent data documented in the quarterly monitoring and sampling report (January 13, 1993) prepared by Sierra Environmental Services showing a significant increase of TPH gasoline (13,000 ppb) and benzene (390 ppb) in monitoring well C-3 during the December 21, 1992 sampling event. This well (C-3) was resampled on January 20, 1993 and exhibited a decrease of TPH gasoline (4,800 ppb) and benzene (120 ppb). **A more aggressive monitoring and verification / management plan must be implemented because of the presence of residual soil and groundwater contamination at the site. This plan must include quarterly monitoring of all the wells (on-site and off-site) for one year to establish a baseline. After one year of quarterly monitoring, the frequency of sampling events will be evaluated. All the monitoring wells must be sampled and analyzed for target compounds (TPH as gasoline, benzene, ethyl benzene, toluene, xylene). Groundwater elevation readings must be included in the monitoring program and any changes in the groundwater flow direction and/or gradient must be explained.**

Mr. Kenneth Kan
RE: 5101 Telegraph Avenue, Oakland, California 94609
February 24, 1993
Page 3 of 4

The following risk management issues were discussed during our telephone conversation on February 2, 1993:

- An indemnification letter must be submitted to this office and RWQCB stating that Chevron is responsible for the clean-up of the contamination at the referenced site and any future sites affected by the off-site migration of the residual contamination. Per our telephone conversation today, it is my understanding that Chevron is waiting for the approval and signature of the current property owner on this letter.
- A copy of the indemnification letter must be submitted to the City of Oakland, Office of Planning and Building in lieu of the deed notification since Chevron is a lessee and not the owner of the referenced site.
- Five off-site monitoring wells (MW-1, MW-2, MW-3, MW-4, MW-5) and one on-site monitoring well (to replace C-2 and C-4) will be installed in the location indicated in the Site Plan dated February 2, 1993.
- The contaminant plume must be contained on -site. If site conditions indicate a trend of increasing contaminant levels or the plume is migrating off-site, mitigating measures (conceptual design of a remediation system submitted to office dated February 9, 1993) must be implemented. The treatment system consists of an extraction well and activated carbon (specifications and construction are site specific). Location of the treatment system will depend on future property improvements.

In addition, monitoring wells C-2 and C-4 can be abandoned after the next sampling event on March 3, 1993. These wells must be properly abandoned.

Please give us 48 hours advance notice for the installation of the additional on site and off-site monitoring wells so a site visit by a representative of this department can be scheduled.

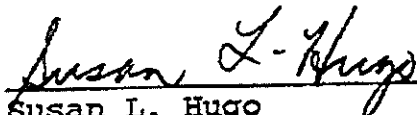
Quarterly reports must be submitted to this office and to Rich Hiatt of the RWQCB. All reports and proposals must be submitted under seal of a California Registered Geologist or Registered Civil Engineer with a statement of qualifications for each lead professionals involved with the project.

Mr. Kenneth Kan
RE: 5101 Telegraph Avenue, Oakland, California 94609
February 24, 1993
Page 4 of 4

Because we are overseeing this site under the designated authority of the Regional Water Quality Control Board, this letter constitutes a formal request for technical reports pursuant to California Water Code Section 13267 (b). Any extensions of stated deadlines or changes in the work plan must be confirmed in writing and approved by this agency or RWQCB.

Please contact anyone of the undersigned at (510) 271-4530 if you have any questions concerning this letter.

Sincerely,



Susan L. Hugo
Senior Hazardous Materials Specialist



Ravi Arulanantham, Ph.D.
Senior Hazardous Materials Specialist

cc: Rafat A. Shahid, Asst. Agency Director, Environmental Health
Donald Dalke, San Francisco Bay RWQCB
Lester Feldman, San Francisco Bay RWQCB
Rich Hiatt, San Francisco Bay RWQCB
Gil Jensen, Alameda County District Attorney's Office
Edgar B. Howell, Chief, Hazardous Materials Division - files
Jeff Hartwig, Chevron U.S.A. Inc.
Charles Gwynn - 120 Caperton Ave., Piedmont CA 94611
Paul Eveloff - 80 E. Sir Francis Drake Blvd., Wood Island,
Suite 3A, Larkspur, CA 94939

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
 SAN FRANCISCO BAY REGION
 2101 WEBSTER STREET, SUITE 500
 OAKLAND, CA 94612

TEL: (510) 286-1255
 FAX: (510) 286-1380



DEC 02 '92 JST

Chevron U.S.A. Products Company
 Attn: Ms. Lucia R. Chou
 P.O. Box 5004
 San Ramon, CA 94583-0804

November 20, 1992
 File: 2223.09 and SLIC

SUBJECT: FORMER CHEVRON ASPHALT PLANT, 1520 POWELL STREET,
 EMERYVILLE, ALAMEDA COUNTY

Dear Ms. Chou:

Staff from the Regional Board have reviewed investigative and remedial activities associated with the above site. Based on information submitted by the discharger it appears that further excavation of site soils is not warranted. However, the presence of chlorinated and fuel hydrocarbons in the groundwater will require semi-annual monitoring. This monitoring program shall include: total extractable hydrocarbons (as gasoline), volatile organics, and halogenated volatile organics. Results of these monitoring events should be submitted to both this office and the Alameda County Department of Environmental Health.

It is the opinion of staff from the Alameda County Health Department that the soil and groundwater on your site does not pose an undue risk to human health or the environment and have no objection to the redevelopment of this property into retail or commercial development. Regional Board staff have no objection to the redevelopment of this site.

If you have any questions with the contents of this letter please do not hesitate to contact Richard Hiatt from my staff at (510) 286-4359.

Facility Number 206265
 General Correspondences
 Service Reqs./Proposals
 Permits/Bonds
 Drawings/Photos/Notes
 Spill & Leak Reports
 Legal/Easements/Lic.
 Reports

Sincerely,

Donald D. Dalke
 Division Chief
 Toxic Cleanup Division

cc: Dr. Ravi Arulanantham, ACHD, 80 Swan Way, Oakland, CA. 94621

ALAMEDA COUNTY
HEALTH CARE SERVICES

AGENCY
DAVID J. KEARS, Agency Director



RAFAT A. SHAHID, Assistant Agency Director

October 16, 1992

DEPARTMENT OF ENVIRONMENTAL HEALTH
Hazardous Materials Division
80 Swan Way, Rm. 200
Oakland, CA 94621
(510) 271-4320

Lucia R. Chou
Chevron U.S.A. Products Company
P.O. Box 5004
San Ramon, CA 94583-0804

RE: RISK ASSESSMENT FOR THE FORMER CHEVRON ASPHALT PLANT -
1520 POWELL STREET, EMERYVILLE, CALIFORNIA

OCT 26 '92 IST

Dear Ms. Chou:

This letter is to confirm the substantive points discussed at the recent Water Board meeting. In your risk assessment report you have evaluated the probability and the magnitude of adverse health effects to humans and the environment from potential exposure to various chemical residues found both in soil and shallow ground water at this site. The former Chevron asphalt plant is approximately 3 acres and the site is currently vacant. Chevron intends to redevelop this property into commercial or retail uses only.

This office is fully satisfied with the method of risk evaluation conducted for this site. We concur with your findings that significant exposures to construction workers and future building occupants are unlikely to result from the presence of residual chemicals in soil and groundwater. Therefore, no further soil remediation is necessary at this time, and this office has no objections for the redevelopment of this site to commence.

please be aware that this letter is limited only to the health risks associated with chemical residues found in the soil and groundwater. Further action may be required if information received subsequent to this letter indicates a need for it. If you have any questions, please call me at (510) 271-4320.

Sincerely,

Ravi Arulanantham, Ph.D., CHMM
Hazardous Materials Specialist

c: Richard Hiett, RWQCB
Dr. Shawn Sager, Geraghty & Miller, Inc.
CHEV.EMV



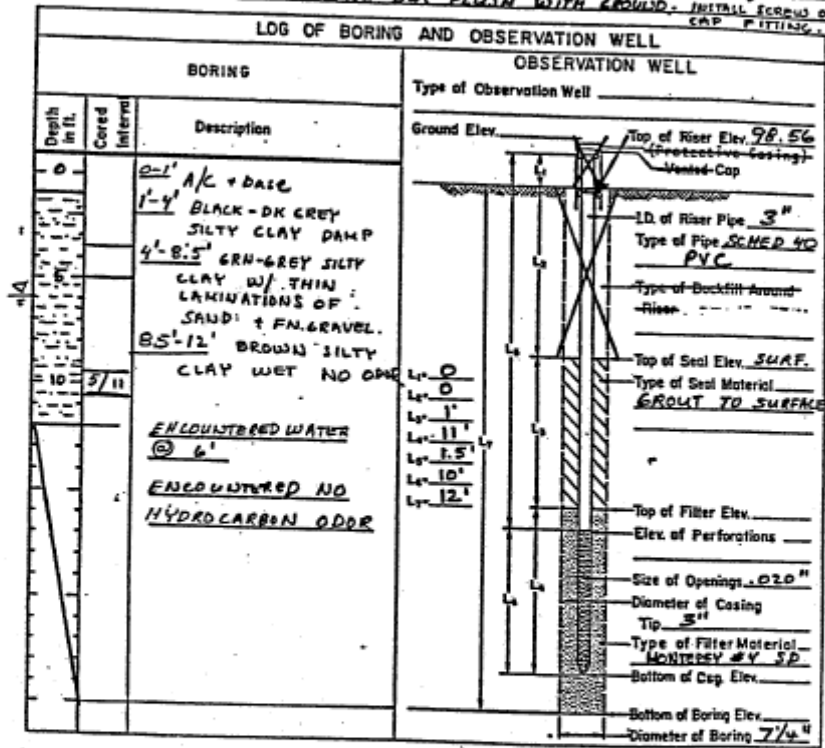
Appendix B

Boring Logs

Boring Logs

APPENDIX 2 OBSERVATION WELL INSTALLATION REPORT

Project EMERYVILLE TERMINAL Observation Well No. 1
 Location ANDREWS + POWELL ST.
 Type of Rig HOLLOW AUGER Installed By GETTLER-RYAN INC. Date 3/10/85 Time _____
 Method of Installation DRILLED WITH HOLLOW STEM AUGER TO 12' TAKING SPLIT
SPECIAL SAMPLES AT APPROPRIATE INTERVALS. INSTALLED 4" SCREEN WITH
1 1/2" x 2" # 10 BLANK ON TOP (ONE PIECE, NO JOINT). INSTALLED CORREL PACK, GROUT
TAP INSTALLED PROTECTIVE BOX FLUSH WITH GROUND. INITIAL GROUND ON
CAP FITTING.

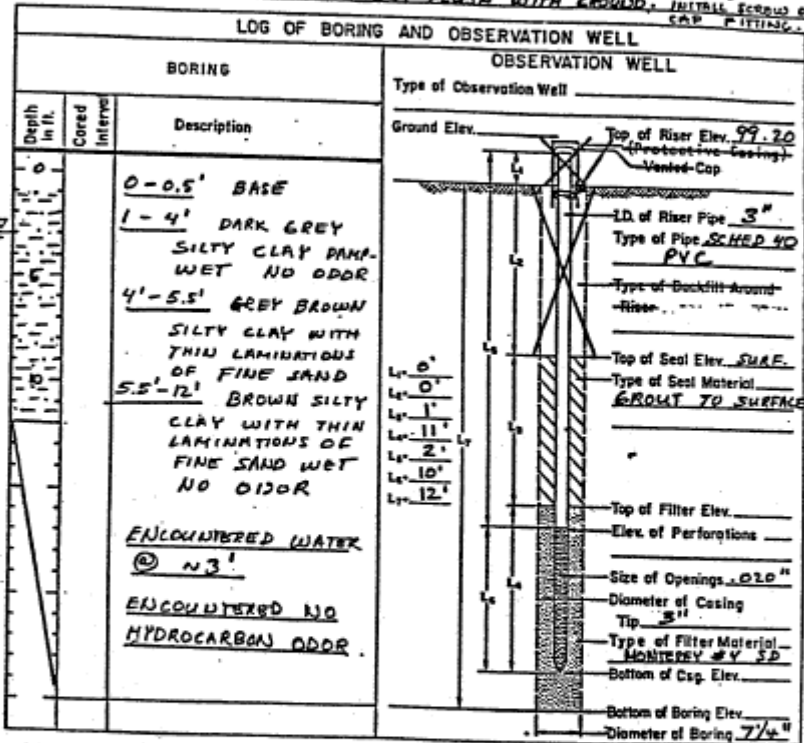


Remarks ELEVATIONS ARE SURVEYED TO ARBITRARY DATUM OF 100' EST
AT SW CORNER OF TLR. AUGERS WERE STEAM CLEANED BEFORE
DRILLING. WELL WAS DEVELOPED BY PUMPING ~50 GAL ~2 WEEKS AFTER
DRILLING.

Inspected By W. J. ...

OBSERVATION WELL INSTALLATION REPORT

Project EMERYVILLE TERMINAL Observation Well No. 2
 Location LANDFILL + POWELL ST.
 Type of Rig HOLLOW AUGER Installed By GETTLER-RYAN INC. Date 3/11/85 Time _____
 Method of Installation DRILLED WITH HOLLOW STEM AUGER TO 12' TAKING SOIL
SPOON SAMPLES AT APPROPRIATE INTERVALS. INSTALLED 3" SCREEN WITH
1 1/2" x 2" #4 BARS ON TOP (ONE PIECE, NO JOINT), INSTALLED GRAVEL PACK, GROUT
TOP INSTALLED PROTECTIVE BOX FLUSH WITH GROUND. INSTALL SCREEN ON
CAP FITTING.



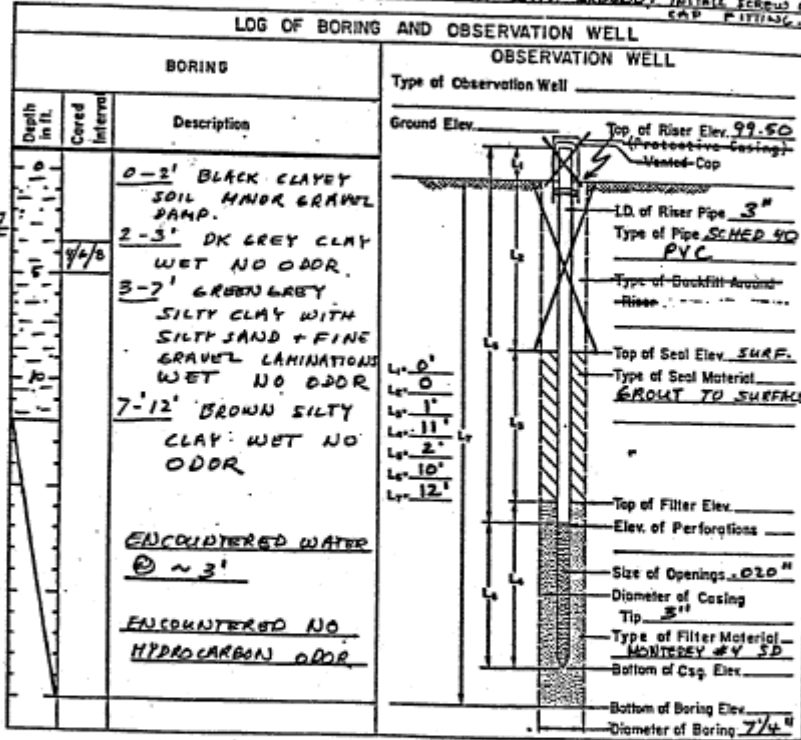
Remarks ELEVATIONS ARE SURVEYED TO ARBITRARY DATUM OF 100' SET
AT SW CORNER OF TLR. AUGERS WERE STEAM CLEANED BEFORE
DRILLING. WELL WAS DEVELOPED BY PUMPING NEURAL FLUIDS AFTER
DRILLING.

Inspected By U. KELLER

Gettler-Ryan, Inc.						Log of Boring MW-2A		
PROJECT: <i>Former chevron Asphalt Plant No. 1001067</i>						LOCATION: <i>Powell Street Overpass at Landregan, Emeryvil</i>		
G-R PROJECT NO. : <i>5161.01</i>						SURFACE ELEVATION: <i>12.45 feet MSL</i>		
DATE STARTED: <i>10/30/95</i>						WL (ft. bgs):	DATE: TIME:	
DATE FINISHED: <i>10/30/95</i>						WL (ft. bgs): <i>13.5</i>	DATE: <i>10/30/95</i> TIME: <i>14:00</i>	
DRILLING METHOD: <i>8 in. Hollow Stem Auger</i>						TOTAL DEPTH: <i>15.0 Feet</i>		
DRILLING COMPANY: <i>Bay Area Exploration</i>						GEOLOGIST: <i>B. Sieminski</i>		
DEPTH feet	PTD (ppm)	BLOWS/FT. *	SAMPLE NUMBER	SAMPLE INT.	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION	WELL DIAGRAM
5							Existing well MW-2 was overdrilled to 15 feet and well casing was removed. Well MW-2A was constructed in the same hole.	
10								
15								
20								
25								
30								
35								

OBSERVATION WELL INSTALLATION REPORT

Project EMERYVILLE TERMINAL Observation Well No. 3
 Location ANDERSON + POWELL ST.
 Type of Rig HOLLOW AUGER Installed By GETTLER-RYAN INC Date 3/12/85 Time _____
 Method of Installation DRILLED WITH HOLLOW STEM AUGER TO 12' TAKING SOIL
SPOON SAMPLES AT APPROPRIATE INTERVALS. INSTALLED 8" SCREEN WITH
1 1/2" x 2' x 1/4" ALUM ON TOP (ONE PIECE, NO JOINT), INSTALLED COARSE PACK, GROUT
TOP INSTALLED PROTECTIVE BOX FLUSH WITH GROUND. INITIAL SCREEN &
CAP FITTING.

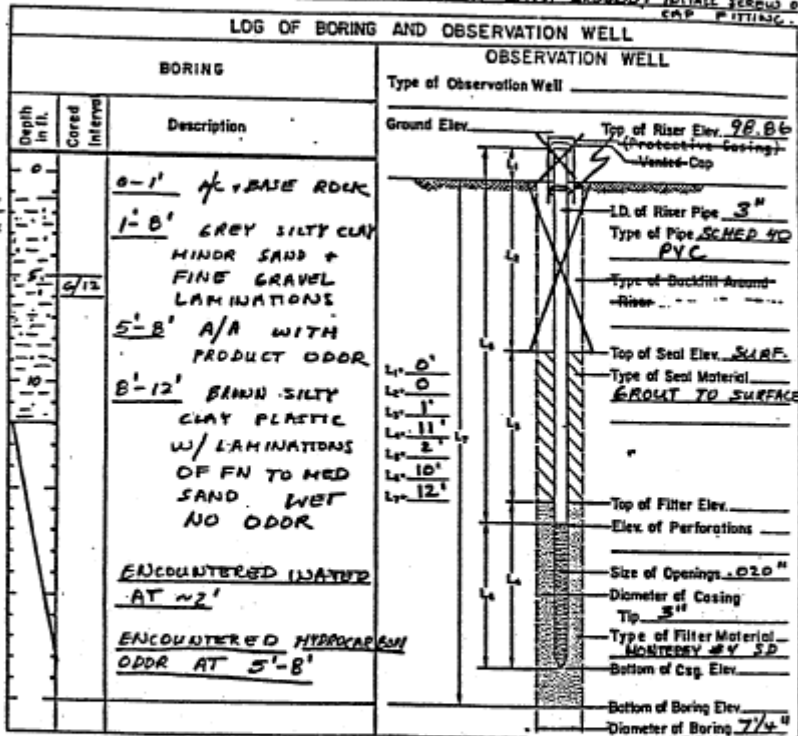


Remarks ELEVATIONS ARE SURVEYED TO ARBITRARY DATUM OF 100' SET
AT SW CORNER OF T.T.L.R. AUGERS WERE STEAM CLEANED BEFORE
DRILLING. WELL WAS DEVELOPED BY PUMPING MSD CAL ~ 2 WEEKS AFTER
DRILLING.

Inspected By U. KILMER

OBSERVATION WELL INSTALLATION REPORT

Project EMERYVILLE TERMINAL Observation Well No. Y
 Location CANDACEAN + POWELL ST.
 Type of Rig HOLLOW AUGER Installed By SETTLER-RYAN INC Date 3/12/85 Time _____
 Method of Installation DRILLED WITH HOLLOW STEM AUGER TO 12' TAKING SPLIT
SPONGE SAMPLES AT APPROPRIATE INTERVALS. INSTALLED 4" SCREEN WITH
1 1/2" x 2" #4 BLANK ON TOP (ONE PIECE, NO JOINT). INSTALLED GROUT PACK, GROUT
TOP INSTALLED PROTECTIVE BOX FLUSH WITH GROUND. INITIAL FERRIS ON
CAP FITTING.

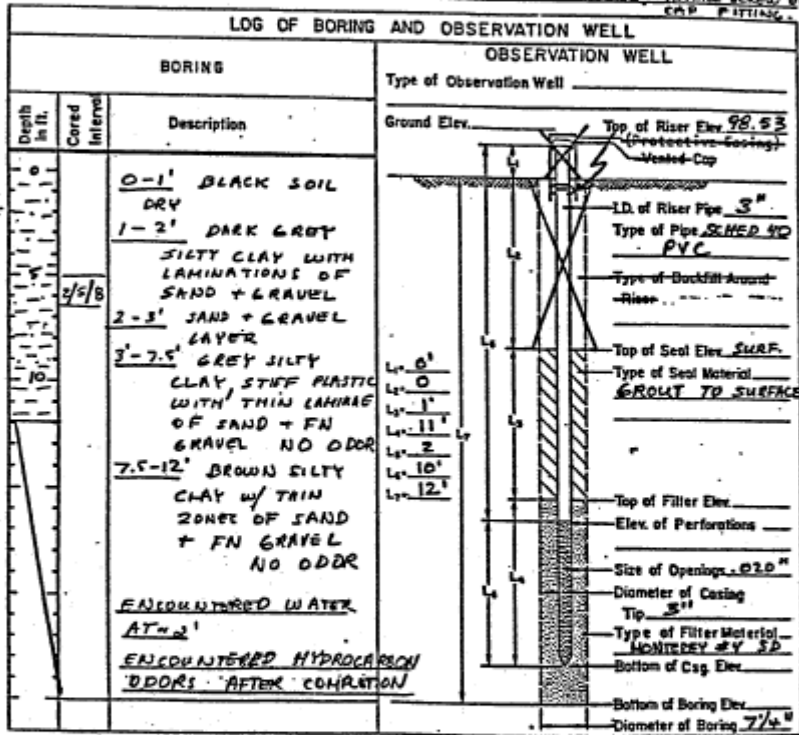


Remarks ELEVATIONS ARE SURVEYED TO ARDMARK DATUM OF 100' SET
AT SW CORNER OF T.T.L.R. AUGERS WERE STEAM CLEANED BEFORE
DRILLING. WELL WAS DEVELOPED BY PUMPING 150 GAL #2 WATERS
AFTER DRILLING.

Inspected By W. RIMMER

OBSERVATION WELL INSTALLATION REPORT

Project EMERYVILLE TERMINAL Observation Well No. 5
 Location CAMPBELLAN + POWELL ST.
 Type of Rig HOLLOW AUGER Installed By GETTLER-RYAN INC. Date 3/12/85 Time _____
 Method of Installation DRILLED WITH HOLLOW STEM AUGER TO 12' TAKING SOIL
SPOON SAMPLES AT APPROPRIATE INTERVALS. INSTALLED 4" SCREEN WITH
1 1/2" x 2" BLANK ON TOP (ONE PIECE, NO JOINT), INSTALLED COARSE PACK, GROUT
TAP INSTALLED PROTECTIVE BOX FLUSH WITH GROUND. INSTALL SCREW ON
CAP FITTING.

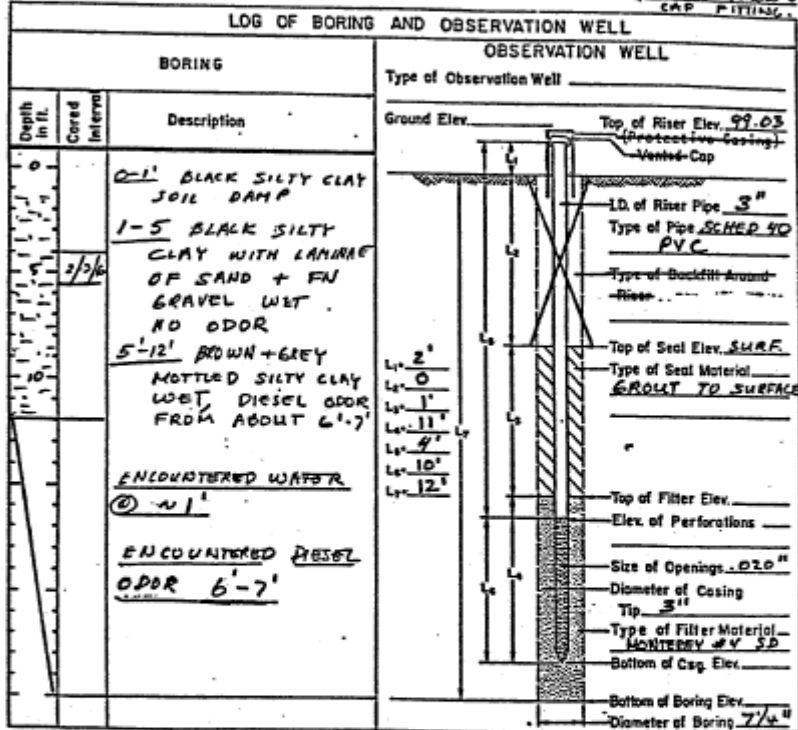


Remarks ELEVATIONS ARE SURVEYED TO ARBITRARY DATUM OF 100' FEET
AT SW CORNER OF T.T.L.R. AUGERS WERE STEAM CLEANED BEFORE
DRILLING. WELL WAS DEVELOPED BY PUMPING #2 OIL W/ 2 WEEKS
AFTER DRILLING.

Inspected By W. KEMNER

OBSERVATION WELL INSTALLATION REPORT

Project EMERYVILLE TERMINAL Observation Well No. 6
 Location CANDLERMAN + POWELL ST.
 Type of Rig HOLLOW AUGER Installed By GETLER-RYAN INC. Date 3/11/85 Time _____
 Method of Installation DRILLED WITH HOLLOW STEEL AUGER TO 12' TAKING SPLIT
SPoon SAMPLES AT APPROPRIATE INTERVALS. INSTALLED 3" SCREEN WITH
1 1/2" x 2' x 1/2" BLANK ON TOP (ONE PIECE, NO JOINT), INSTALLED GRAB MACK, GROUT
TAP INSTALLED PROTECTIVE BOX FLUSH WITH GROUND. INITIAL SCREEN ON
CAP FITTING.

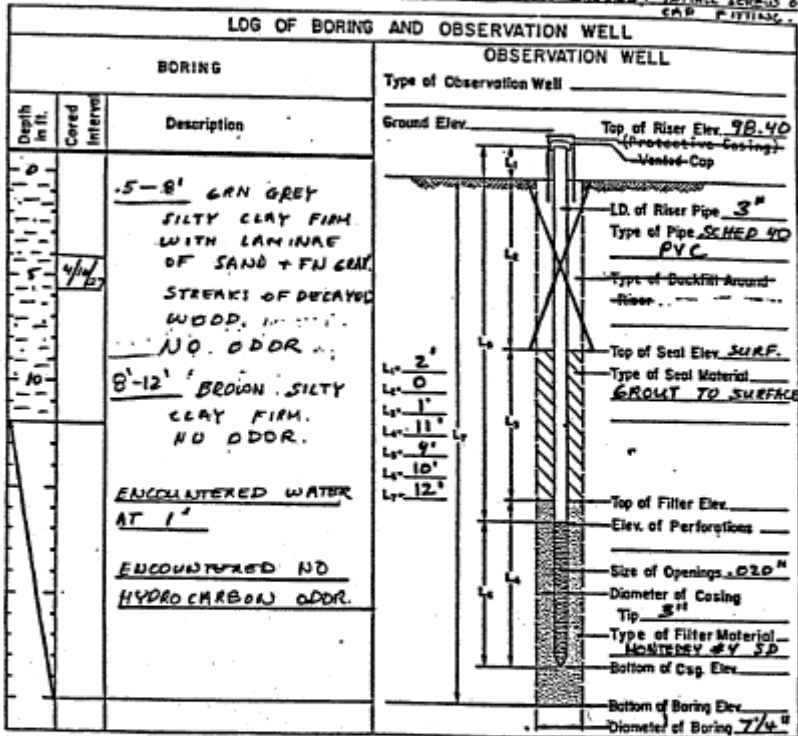


Remarks ELEVATIONS ARE SURVEYED TO ARBITRARY DATUM OF 100' EET
AT SW CORNER OF ITR. RULERS WERE CLEANED BEFORE DRILLING.
WELL WAS DEVELOPED AS OTHERS

Inspected By U. PELMER

OBSERVATION WELL INSTALLATION REPORT

Project EMERYVILLE TERMINAL Observation Well No. 7
 Location CANDLERMAN + POWELL ST.
 Type of Rig HOLLOW AUGER Installed By GETTLER-RYAN INC. Date 3/17/88 Time _____
 Method of Installation DRILLED WITH HOLLOW STEM AUGER TO 12' TAKING SPLIT
SPONGE SAMPLES AT APPROPRIATE INTERVALS. INSTALLED 3" SCREEN WITH
1 1/2" x 2" #1 BLANK AISI TOP (ONE PIECE, NO JOINT), INSTALLED GRAPE MACK, GROUT
TOP INSTALLED PROTECTIVE BOX FLUSH WITH GROUND, INITIAL RECORD ON
CAP FITTING.

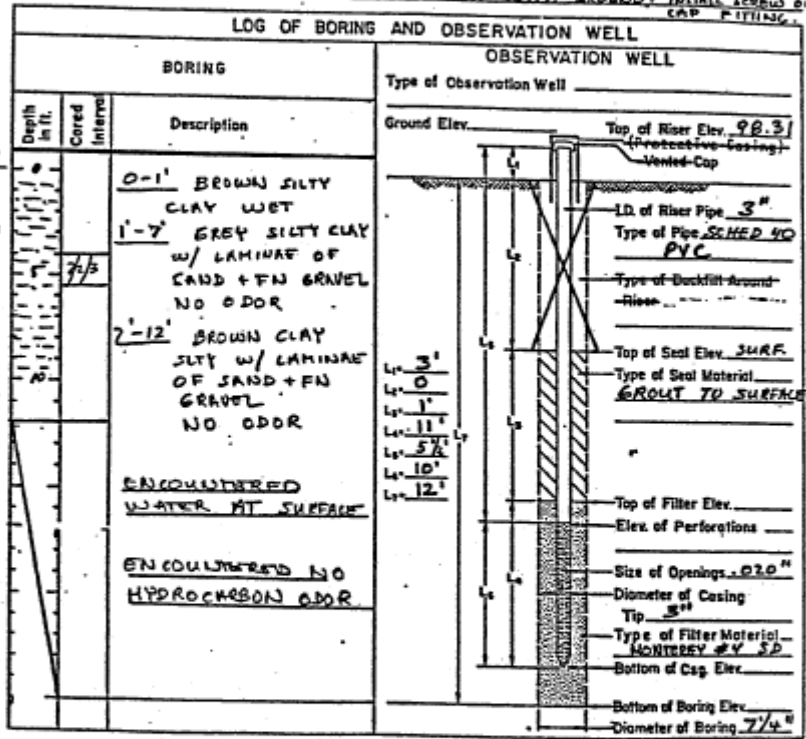


Remarks ELEVATIONS ARE SUREVEYED TO ARBITRARY DATUM OF 100' ERT
AT SW CORNER OF T.T.L.R. AUGERS WERE STEEL CLEANED AND
WELL DEVELOPED AS OTHERS.

Inspected By U. KETNER

OBSERVATION WELL INSTALLATION REPORT

Project EMERYVILLE TERMINAL Observation Well No. B
 Location CANDELAN + POWELL ST.
 Type of Rig HOLLOW AUGER Installed By GETTLER-RYAN INC. Date 3/12/85 Time _____
 Method of Installation DRILLED WITH HOLLOW STEM AUGER TO 12' TAKING SOIL
SPOON SAMPLES AT APPROPRIATE INTERVALS. INSTALLED 3" SCREEN WITH
1 1/4" x 2' x BLANK ON TOP (ONE PIECE, NO JOINT), INSTALLED COARSE MESH, GROUT
TOP. INSTALLED PROTECTIVE GAS FLUVE WITH APPROX. 2" INSTALL FORMS OF
CAP FITTING.

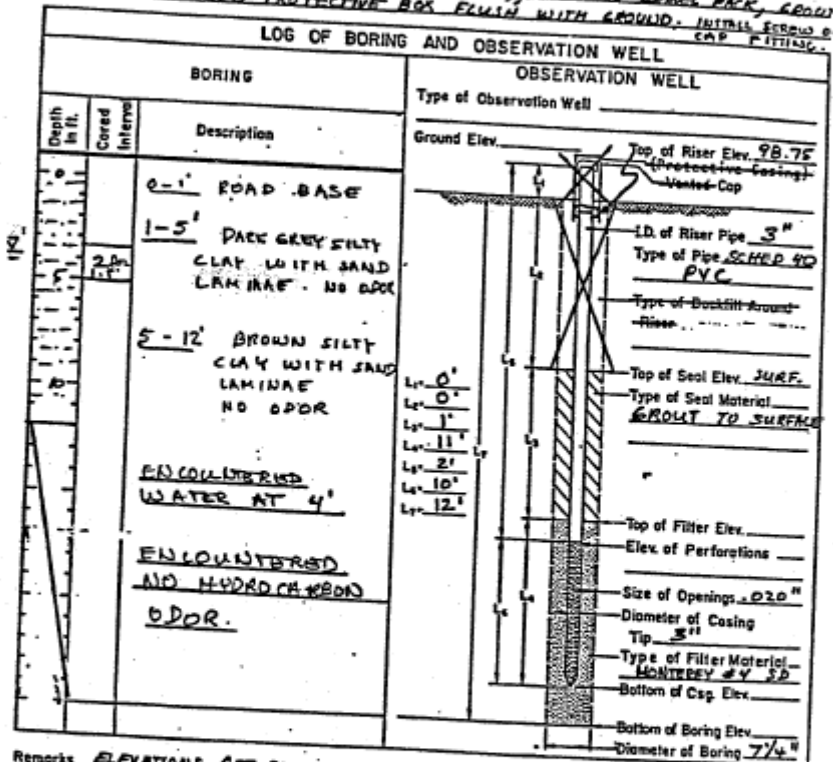


Remarks ELEVATIONS ARE SURVEYED TO ARBITRARY DATUM OF 100' EST
AT SW CORNER OF TLR. AUGERS WERE CLEANED AND BOWLS
DEVELOPED AS BEFORE

Inspected By W. KEMMER

OBSERVATION WELL INSTALLATION REPORT

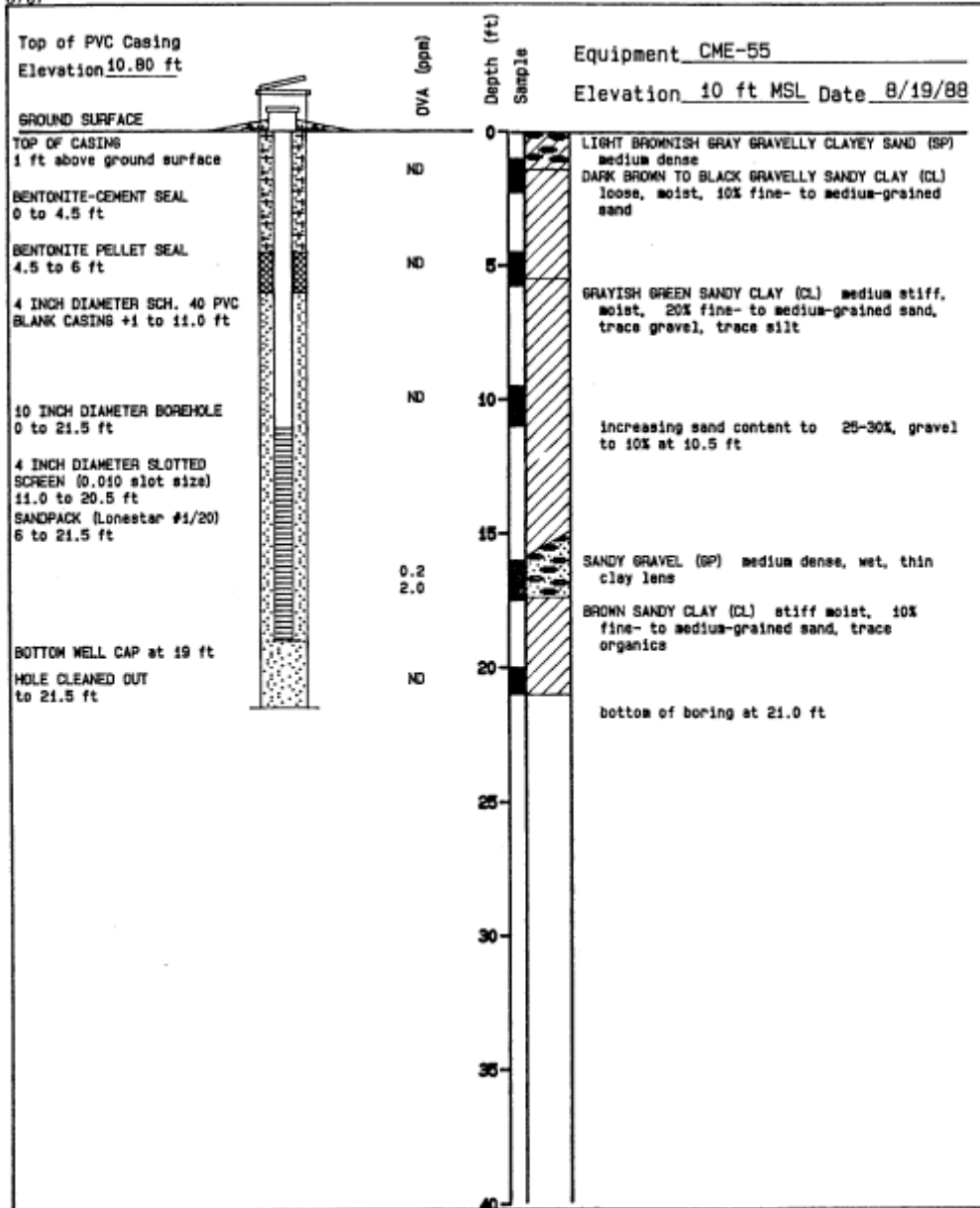
Project EMERYVILLE TERMINAL Observation Well No. 9
 Type of Rig HOLLOW AUGER Installed By GETTLER-RYAN INC. Location CANDLERMAN + POWELL ST.
 Date 3/13/85 Time _____
 Method of Installation DRILLED WITH HOLLOW STEM AUGER TO 12' TAKING SPLIT
SPIDER SAMPLES AT APPROPRIATE INTERVALS. INSTALLED 3" SCREEN WITH
1 1/2 x 2' BLANK ON TOP (ONE RISE, NO JOINT), INITIALLY GRAVEL PACK, GROUT
TOP INSTALLED PROTECTIVE BOX FLUSH WITH GROUND. INSTALL GROUND CAP FITTING.



Remarks ELEVATIONS ARE SURVEYED TO ARBITRARY DATUM OF 100' SET
AT SW CORNER OF TLR. ALLSOLS WERE CLEANED AND
WELLS DEVELOPED AS OTHERS

Inspected By W. KELLER

6787

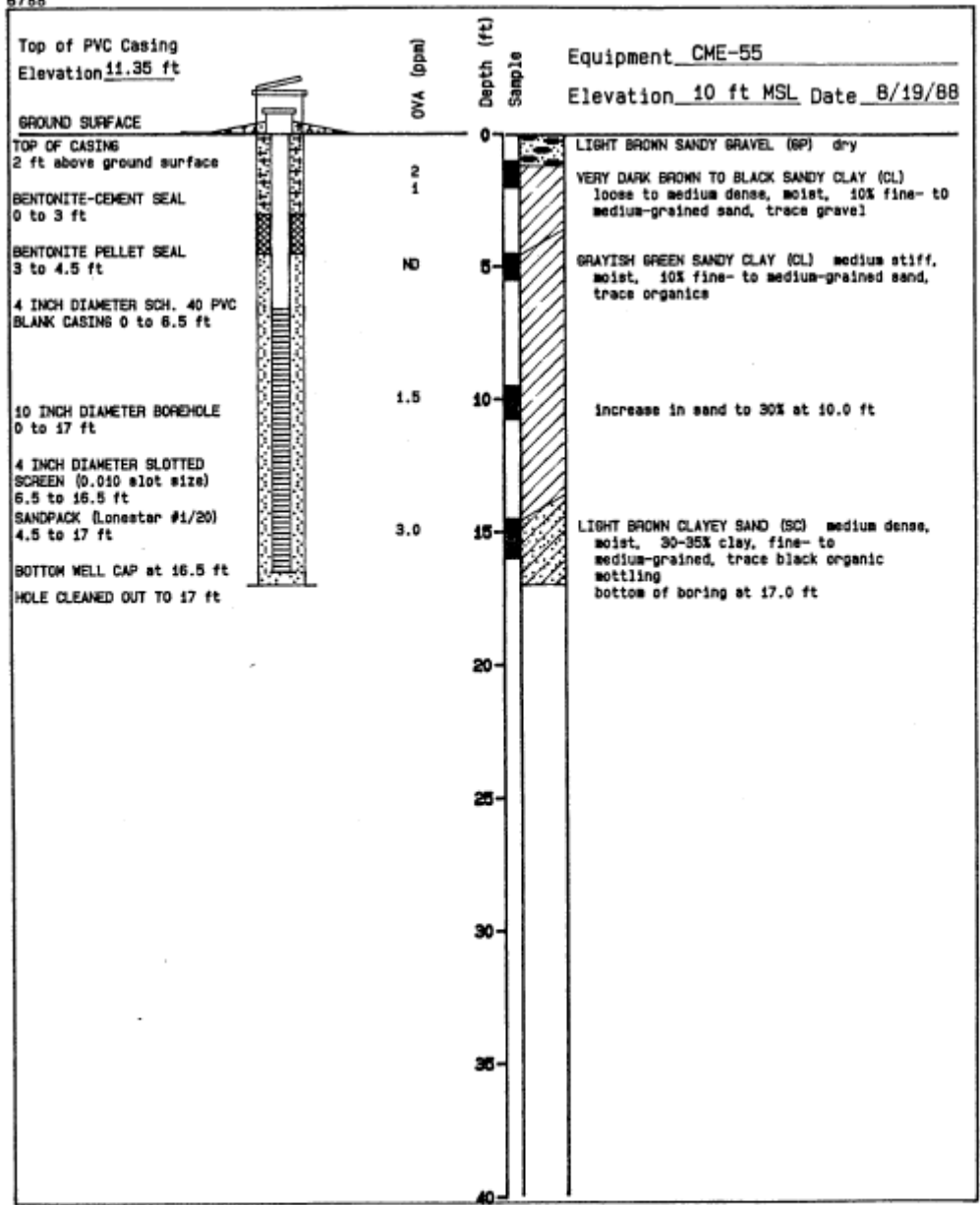


Harding Lawson Associates
 Engineers and Geoscientists

Log of Boring and Well Completion Detail 10
 1520 Powell St
 Emeryville, California

PLATE

DRAWN	JOB NUMBER	APPROVED	DATE	REVISED	DATE
EH	18452,005.02	<i>[Signature]</i>	10/88		

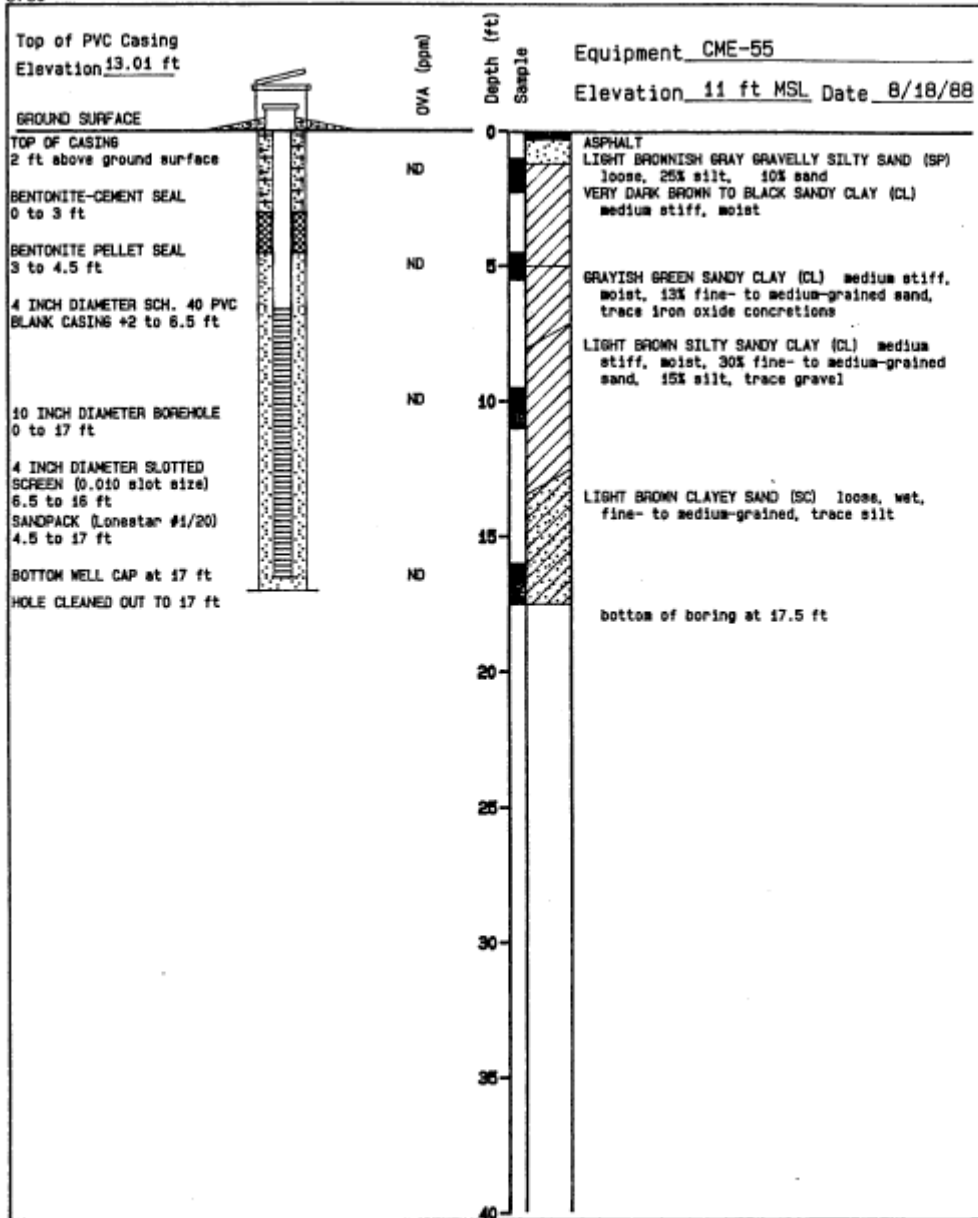


HLA **Harding Lawson Associates**
Engineers and Geoscientists

Log of Boring and Well Completion Detail 11 PLATE
1520 Powell St
Emeryville, California

DRAWN	JOB NUMBER	APPROVED	DATE	REVISED	DATE
EH	18452.005.02	<i>[Signature]</i>	10/88		

6789

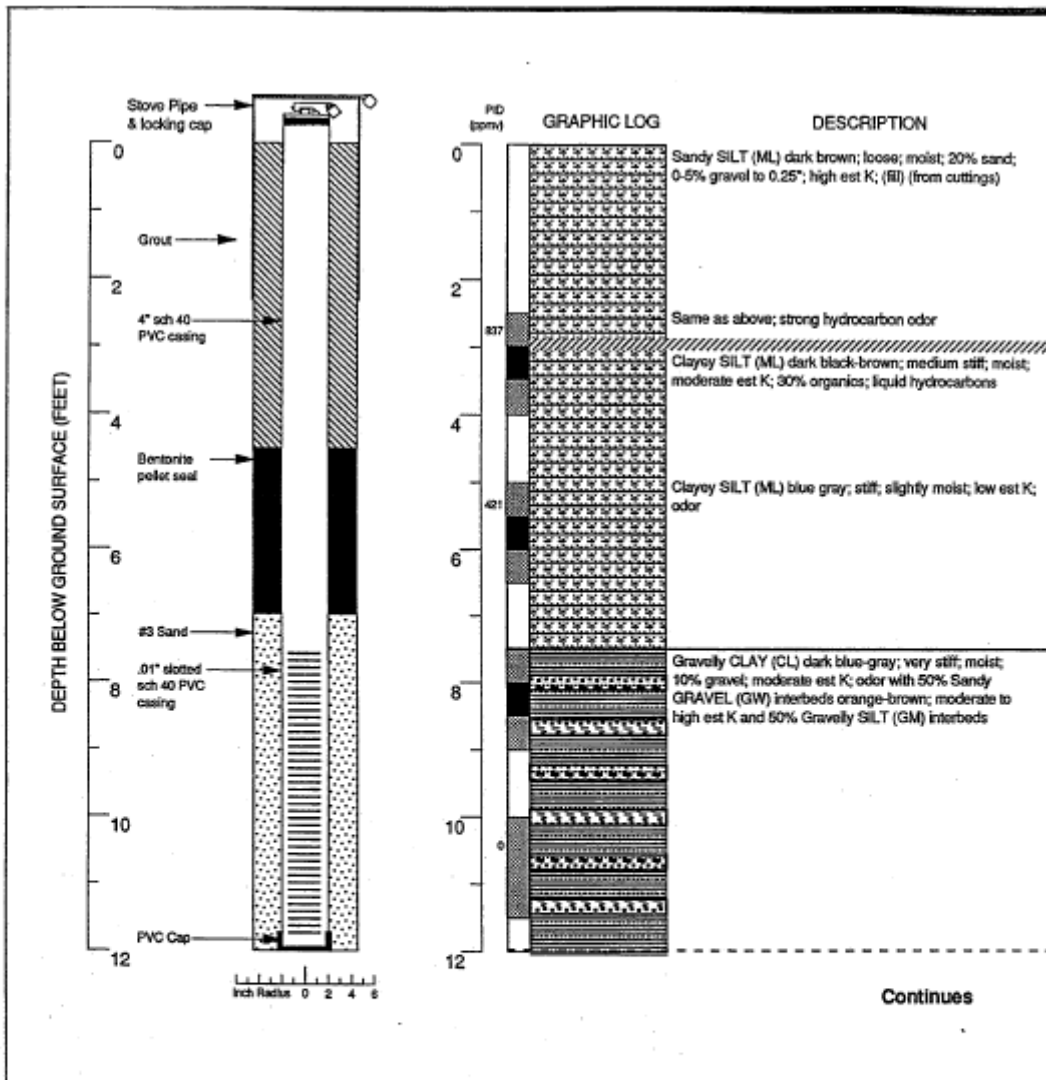


Harding Lawson Associates
Engineers and Geoscientists

Log of Boring and Well Completion Detail 12
1520 Powell St
Emeryville, California

PLATE

DRAWN	JOB NUMBER	APPROVED	DATE	REVISED	DATE
EH	18452,005.02	<i>[Signature]</i>	10/88		



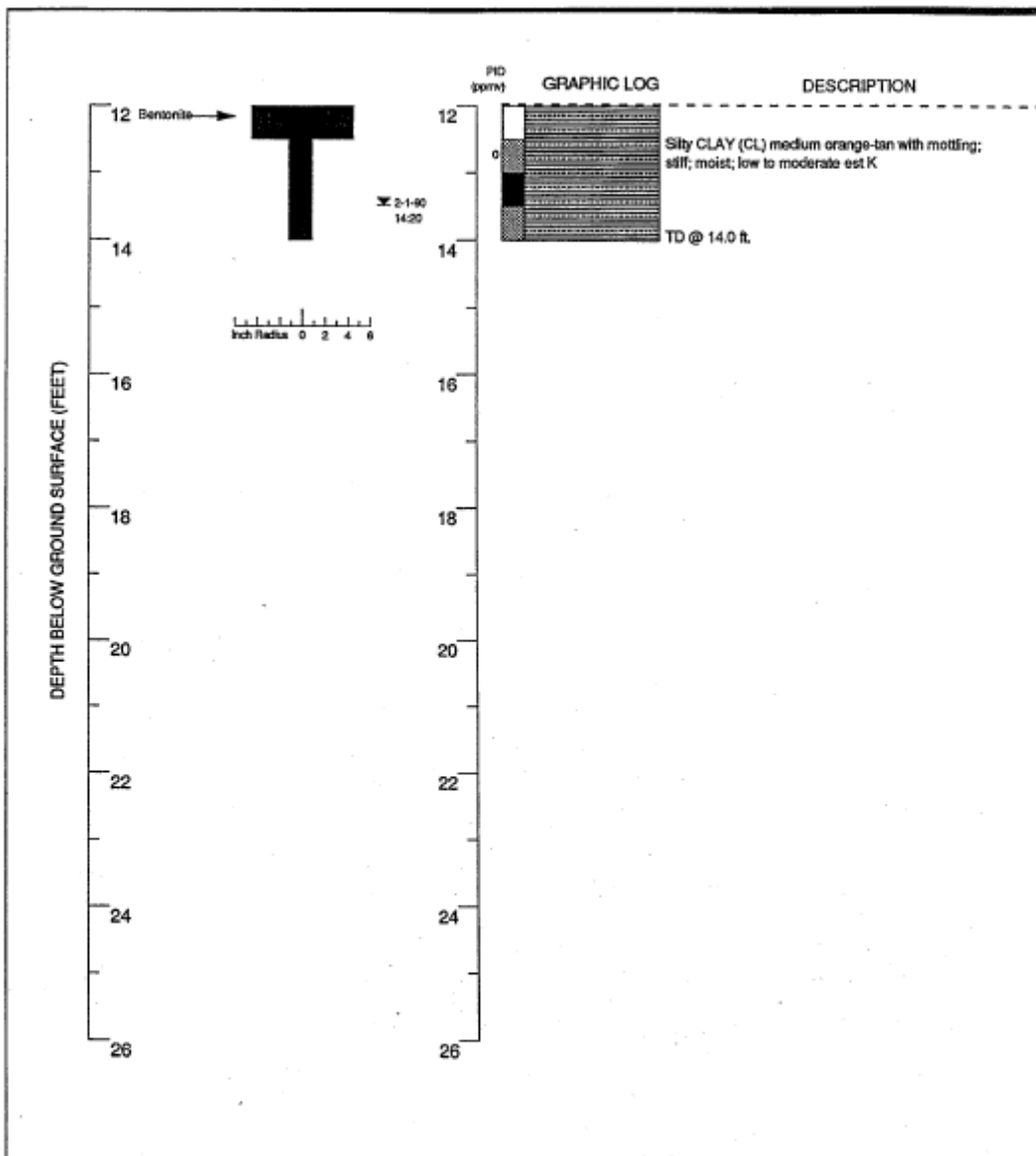
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Logged by: Chris Alger
 Project Mgr: Chris Alger / Tom Howard
 Dates Drilled: 2/1/90
 Drilling Company: Exploration Geoservices
 Drilling Method: 9" Hollow stem auger
 Driller: Mike Yeager
 Well Head Completion: Stove pipe & locking cap
 Type of Sampler: 2" split barrel
 TD (Total Depth): 14.0 ft.

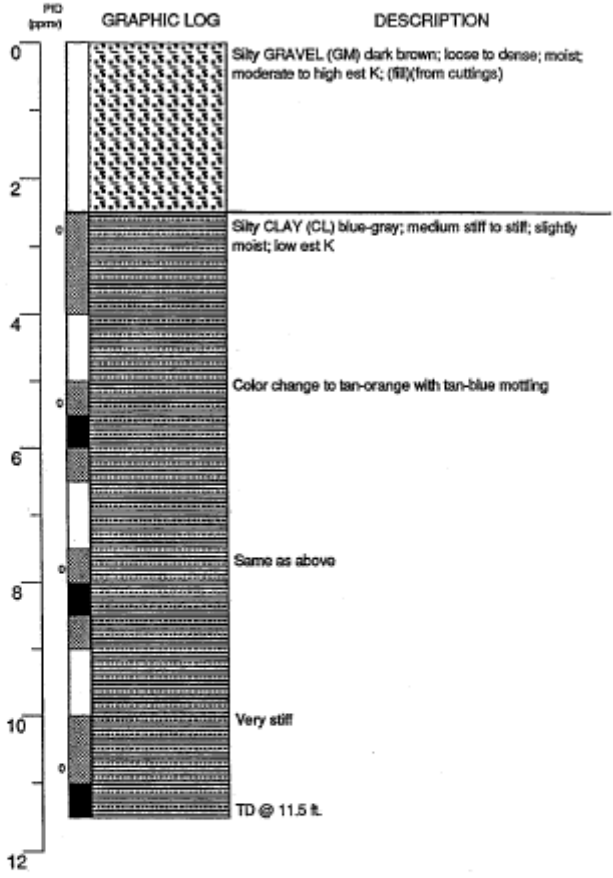
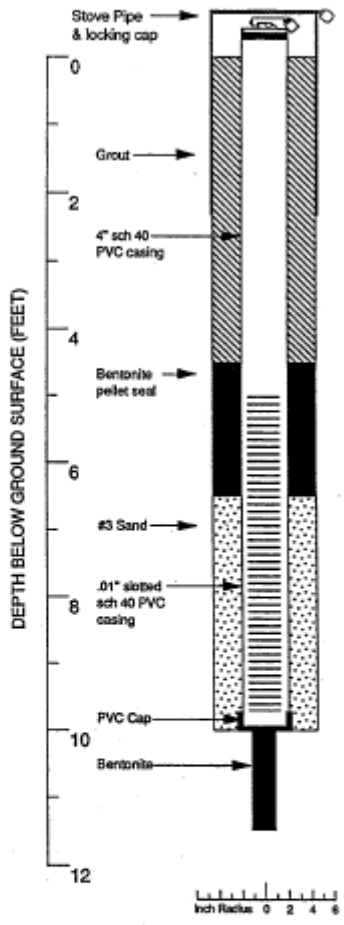
EXPLANATION	
☒ Water level during drilling	——— Contacts
☒ Water level in completed well	——— Solid where certain
☒ Location of recovered drill sample Dotted where approximate
☒ Location of sample sealed for chemical analysis	- - - Dashed where uncertain
☒ Sieve sample	////// Hatched where gradational
☒ Grab sample	est K Estimated permeability (hydraulic conductivity) 1K = primary 2K = secondary
	NR No recovery

Boring Log and Well Completion Details
 MW-13 (Boring B-2)
 Emeryville Asphalt Plant
 Emeryville, California
WESTERN GEOLOGIC RESOURCES, INC.

MONITOR WELL
13
 1-045.45



EXPLANATION		Boring Log and Well Completion Details MW-13 (Boring B-2)		MONITOR WELL
☒ Water level during drilling	——— Contact	Emeryville Asphalt Plant Emeryville, California		13
☒ Water level in completed well Dotted where approximate			
☒ Location of recovered drill sample	- - - Dashed where uncertain			
☒ Location of sample sealed for chemical analysis	////// Hatched where gradational			
☒ Sieve sample	est K Estimated permeability (hydraulic conductivity)			
☒ Grab sample	1K = primary 2K = secondary			
	NR No recovery			

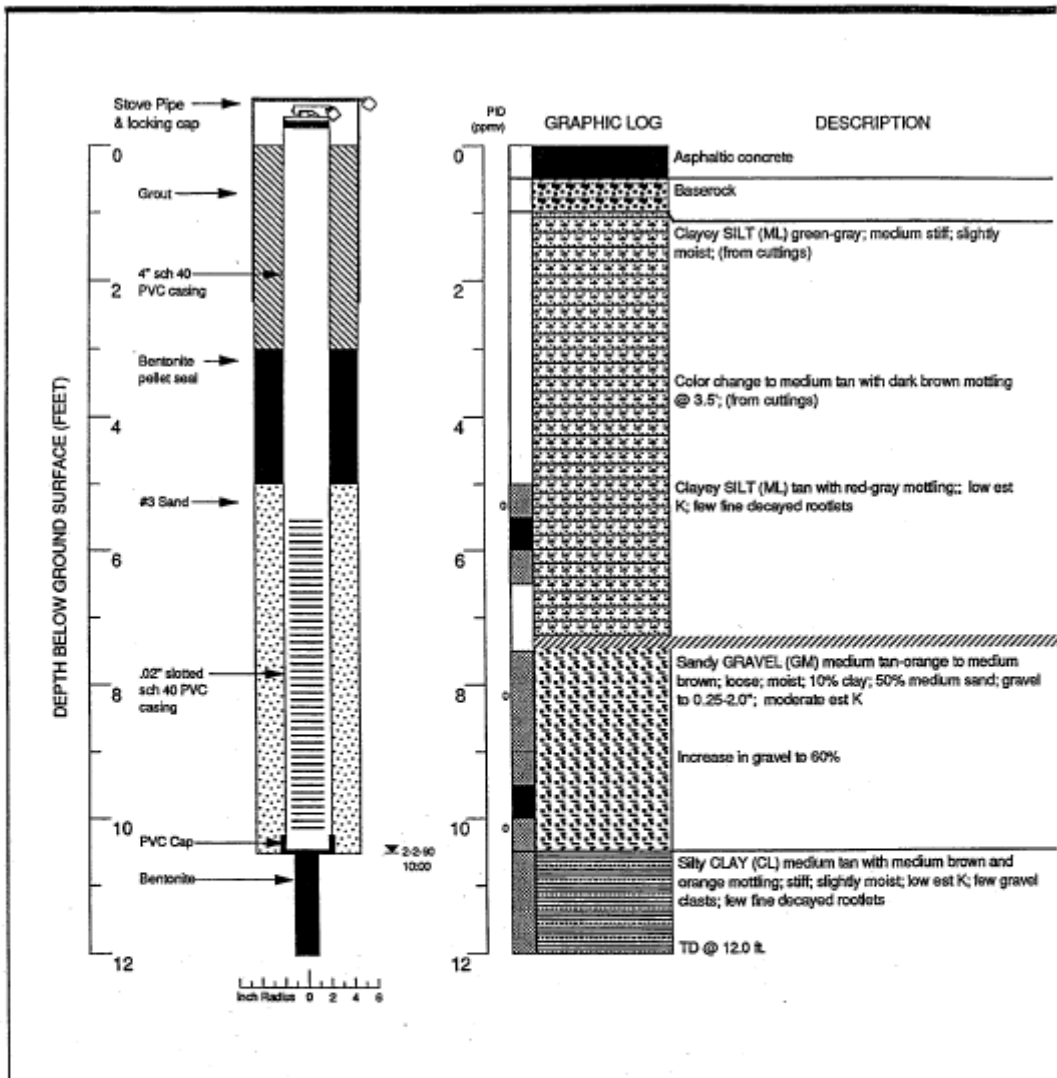


Logged by: Chris Alger
 Project Mgr: Chris Alger / Tom Howard
 Dates Drilled: 2/1/90
 Drilling Company: Exploration Geoservices
 Drilling Method: 9" Hollow stem auger
 Driller: Mike Yeager
 Well Head Completion: Stove pipe & locking cap
 Type of Sampler: 2' split barrel
 TD (Total Depth): 11.5 ft.

EXPLANATION	
☒ Water level during drilling	— Contacts: Solid where certain
☒ Water level in completed well Dotted where approximate
☒ Location of recovered drill sample	- - - Dashed where uncertain
☒ Location of sample sealed for chemical analysis	////// Hatched where gradational
☒ Sieve sample	est K Estimated permeability (hydraulic conductivity) 1K = primary 2K = secondary
☒ Grab sample	NR No recovery

Boring Log and Well Completion Details
 MW-14 (Boring B-3)
 Emeryville Asphalt Plant
 Emeryville, California
 WESTERN GEOLOGIC RESOURCES, INC.

MONITOR WELL
14
 1-045.45



Logged by: Chris Alger
Project Mgr: Chris Alger/
Tom Howard
Dates Drilled: 2/2/90

Drilling Company: Exploration Geoservices
Drilling Method: 9" Hollow stem auger
Driller: Mike Yeager

Well Head Completion: Stove pipe & locking cap
Type of Sampler: 2" split barrel
TD (Total Depth): 12.0 ft.

EXPLANATION	
☒ Water level during drilling	— Contacts: Solid where certain
☒ Water level in completed well Dotted where approximate
☒ Location of recovered drill sample	- - - Dashed where uncertain
☒ Location of sample sealed for chemical analysis	////// Hatched where gradational
☒ Slave sample	est K Estimated permeability (hydraulic conductivity)
☒ Grab sample	1K = primary 2K = secondary
	NR No recovery

**Boring Log and Well Completion Details
MW-15 (Boring B-4)**

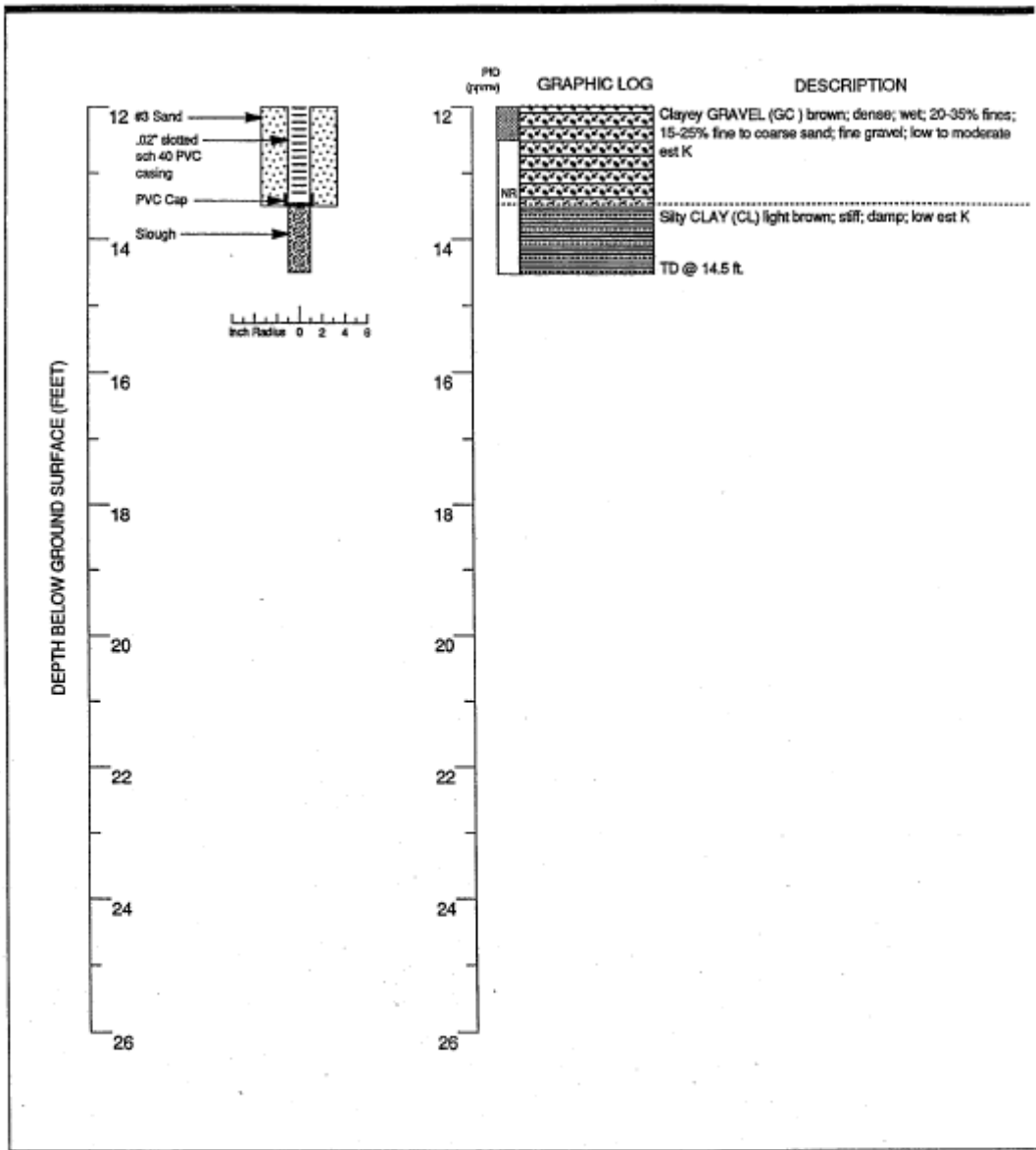
Emeryville Asphalt Plant
Emeryville, California

WESTERN GEOLOGIC RESOURCES, INC.

MONITOR
WELL

15

1-04545



EXPLANATION	
☒ Water level during drilling	— Contacts: Solid where certain
☒ Water level in completed well Dotted where approximate
▣ Location of recovered drill sample	- - - Dashed where uncertain
▣ Location of sample sealed for chemical analysis	////// Hatched where gradational
▣ Sieve sample	est K Estimated permeability (hydraulic conductivity)
☒ Grab sample	IK = primary 2K = secondary
	NR No recovery

Boring Log and Well Completion Details
 MW-16 (Boring B-16)

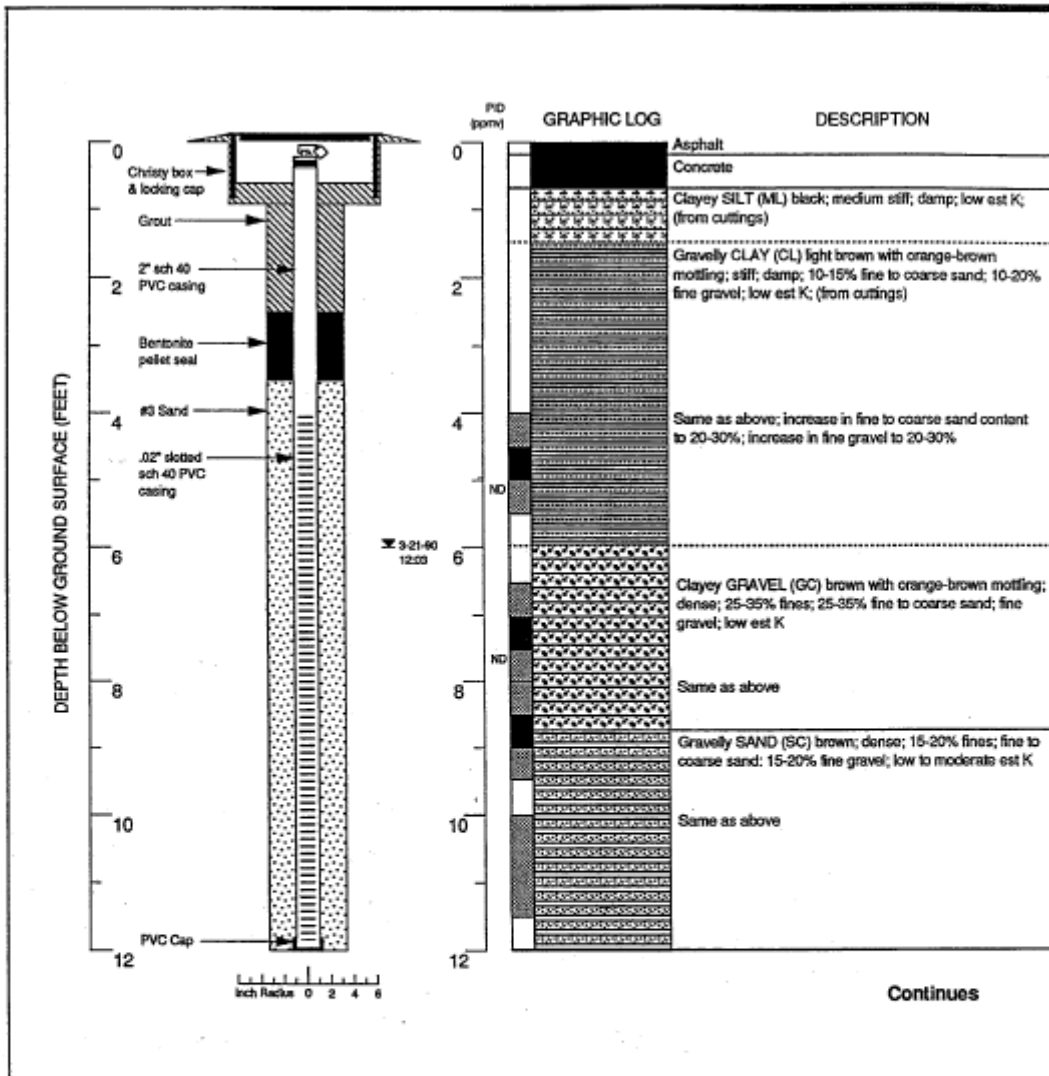
Chevron Emeryville Asphalt
 Emeryville, California

WESTERN GEOLOGIC RESOURCES, INC.

MONITOR WELL

16

1-045.45



Logged by: Mike Edmonson
Project Mgr: Tom Howard
Dates Drilled: 3-21-90

Drilling Company: Western Geologic Resources
Drilling Method: 6.75" Hollow stem auger
Driller: Dave Reichard

Well Head Completion: Christy box & locking cap
Type of Sampler: 1.4" split barrel
TD (Total Depth): 13.5 ft.

EXPLANATION	
☒ Water level during drilling	— Contacts: Solid where certain
☒ Water level in completed well	----- Dotted where approximate
☒ Location of recovered drill sample	- - - Dashed where uncertain
☒ Location of sample sealed for chemical analysis	////// Hatched where gradational
☒ Sieve sample	est K Estimated permeability (hydraulic conductivity)
☒ Grab sample	1K = primary 2K = secondary
	NR No recovery

Boring Log and Well Completion Details
MW-17 (Boring B-17)

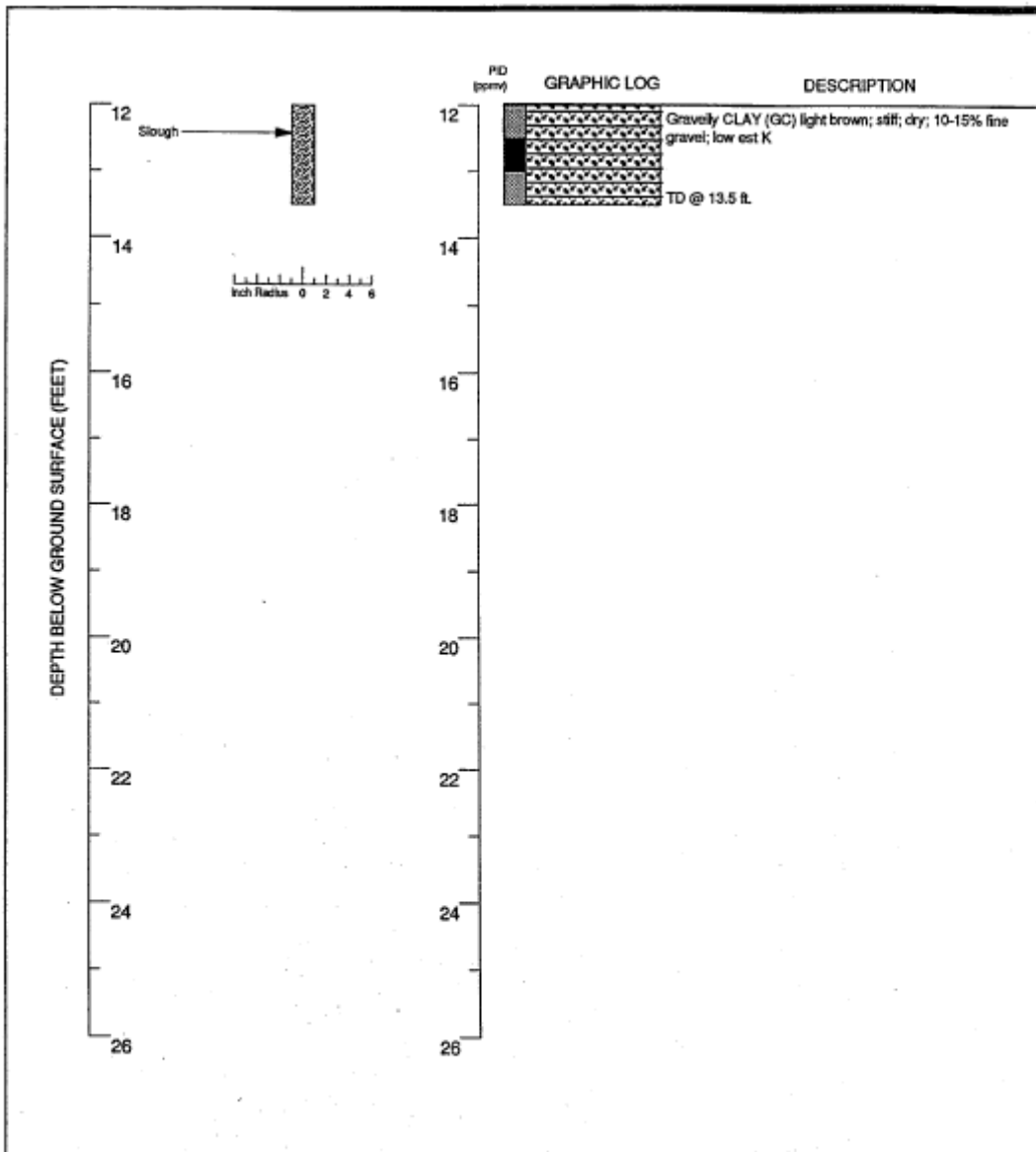
Chevron Emeryville Asphalt
Emeryville, California

WESTERN GEOLOGIC RESOURCES, INC.

MONITOR WELL

17

1-045.45



EXPLANATION	
☒ Water level during drilling	——— Contact: Solid where certain
☒ Water level in completed well Dotted where approximate
☒ Location of recovered drill sample	- - - Dashed where uncertain
☒ Location of sample sealed for chemical analysis	////// Hatched where gradational
☒ Sieve sample	est K Estimated permeability (hydraulic conductivity) K' = primary 2K = secondary
☒ Core sample	NR No recovery

Boring Log and Well Completion Details
 MW-17 (Boring B-17)

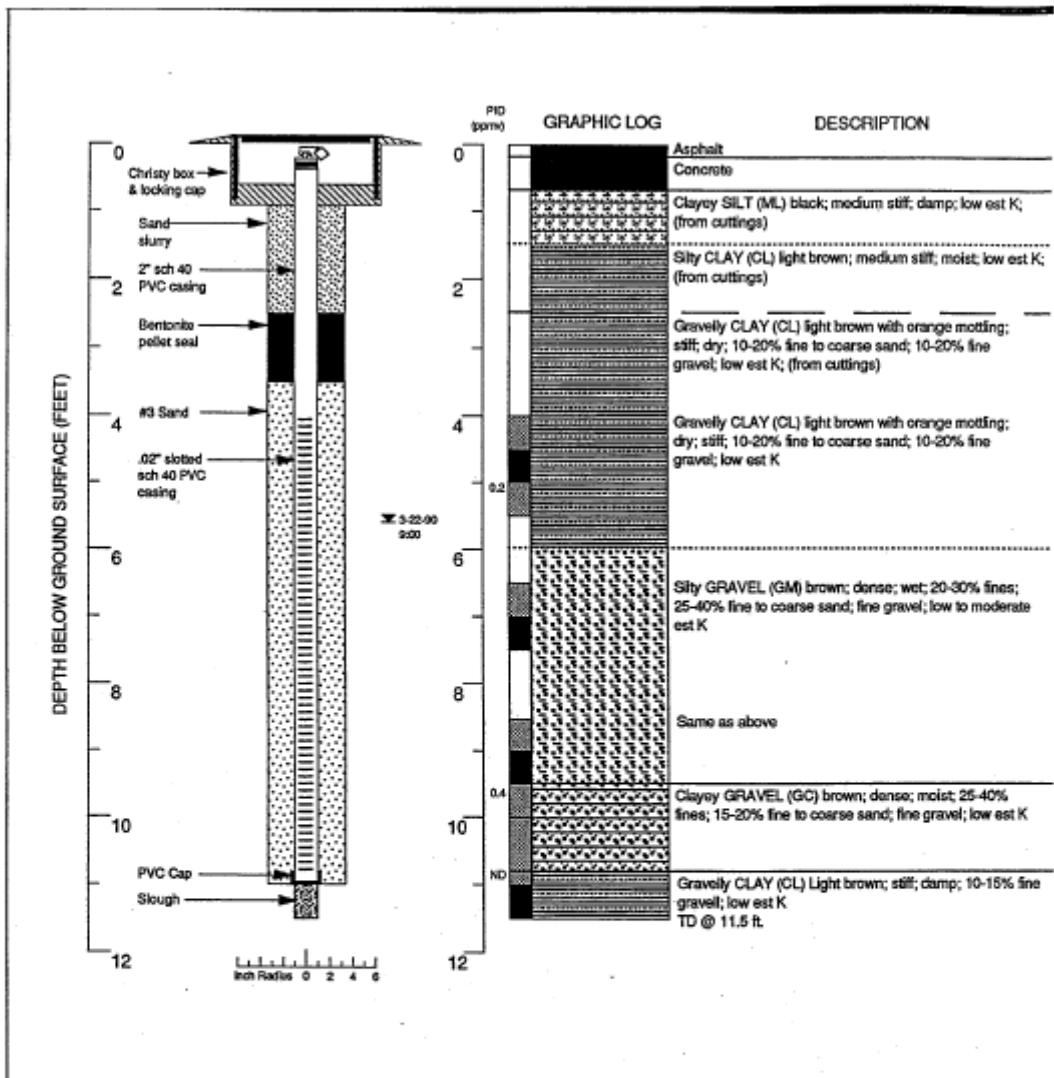
Chevron Emeryville Asphalt
 Emeryville, California

WESTERN GEOLOGIC RESOURCES, INC.

MONITOR WELL

17

1-045.45



Logged by: Mike Edmonson Drilling Company: Western Geologic Resources Well Head Completion: Christy box & locking cap
 Project Mgr: Tom Howard Drilling Method: 6.75" Hollow stem auger Type of Sampler: 1.4" split barrel
 Dates Drilled: 3-22-90 Driller: Dave Reichard TD (Total Depth): 11.5 ft.

EXPLANATION	
☒ Water level during drilling	— Contacts
☒ Water level in completed well	— Solid where certain
☐ Location of recovered drill sample Dotted where approximate
☐ Location of sample sealed for chemical analysis	- - - Dashed where uncertain
☐ Sieve sample	////// Hatched where geological
☐ Grab sample	est K Estimated permeability (hydraulic conductivity)
	1K = primary 2K = secondary
	NR No recovery

Boring Log and Well Completion Details
MW-18 (Boring B-18)

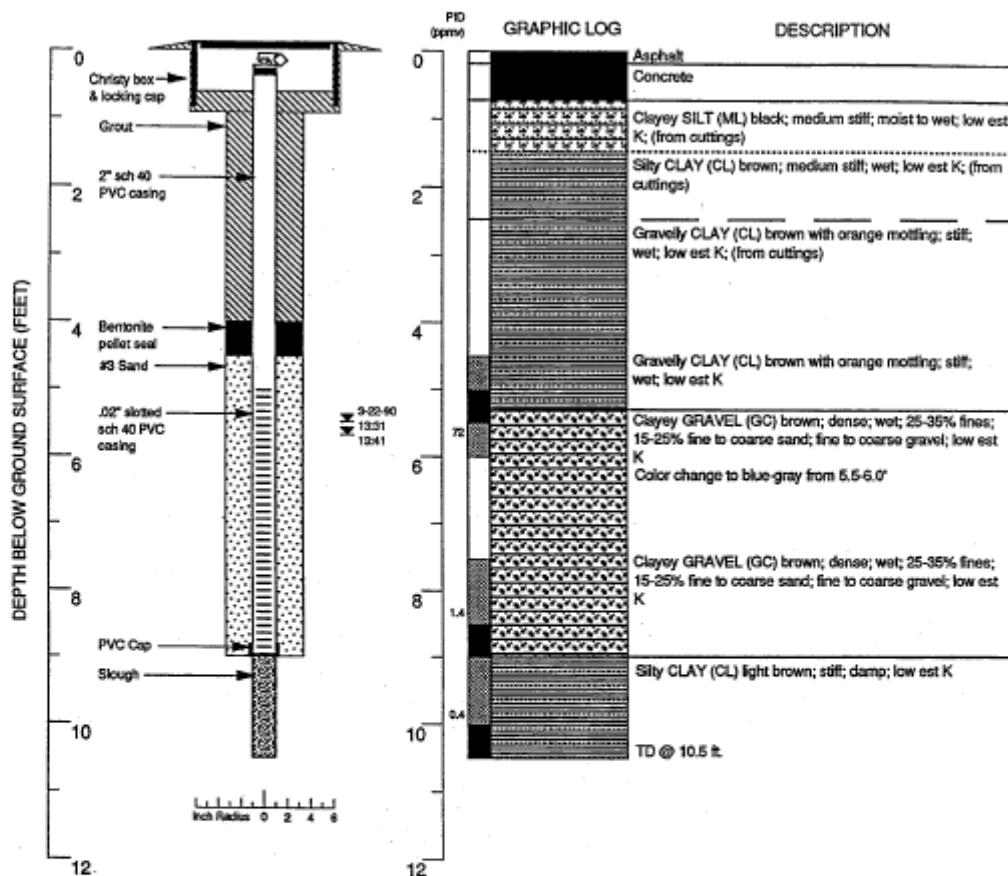
 Chevron Emeryville Asphalt
 Emeryville, California

WESTERN GEOLOGIC RESOURCES, INC.

MONITOR
 WELL

18

 1-045.45



Logged by: Mike Edmonson
 Project Mgr: Tom Howard
 Dates Drilled: 3-22-90

Drilling Company: Western Geologic Resources
 Drilling Method: 6.75" Hollow stem auger
 Driller: Dave Reichard

Well Head Completion: Christy box & locking cap
 Type of Sampler: 1.4" split barrel
 TD (Total Depth): 10.5 ft.

EXPLANATION

- ☒ Water level during drilling
 - ☒ Water level in completed well
 - ☒ Location of recovered drill sample
 - ☒ Location of sample sealed for chemical analysis
 - ☒ Sieve sample
 - ☒ Grab sample
- Contacts:**
 Solid where certain
 Dotted where approximate
 Dashed where uncertain
 Hatched where gradational
- est K Estimated permeability (hydraulic conductivity)
 1K = primary 2K = secondary
- NR No recovery

Boring Log and Well Completion Details
 MW-19 (Boring B-19)

Chevron Emeryville Asphalt
 Emeryville, California

WESTERN GEOLOGIC RESOURCES, INC.

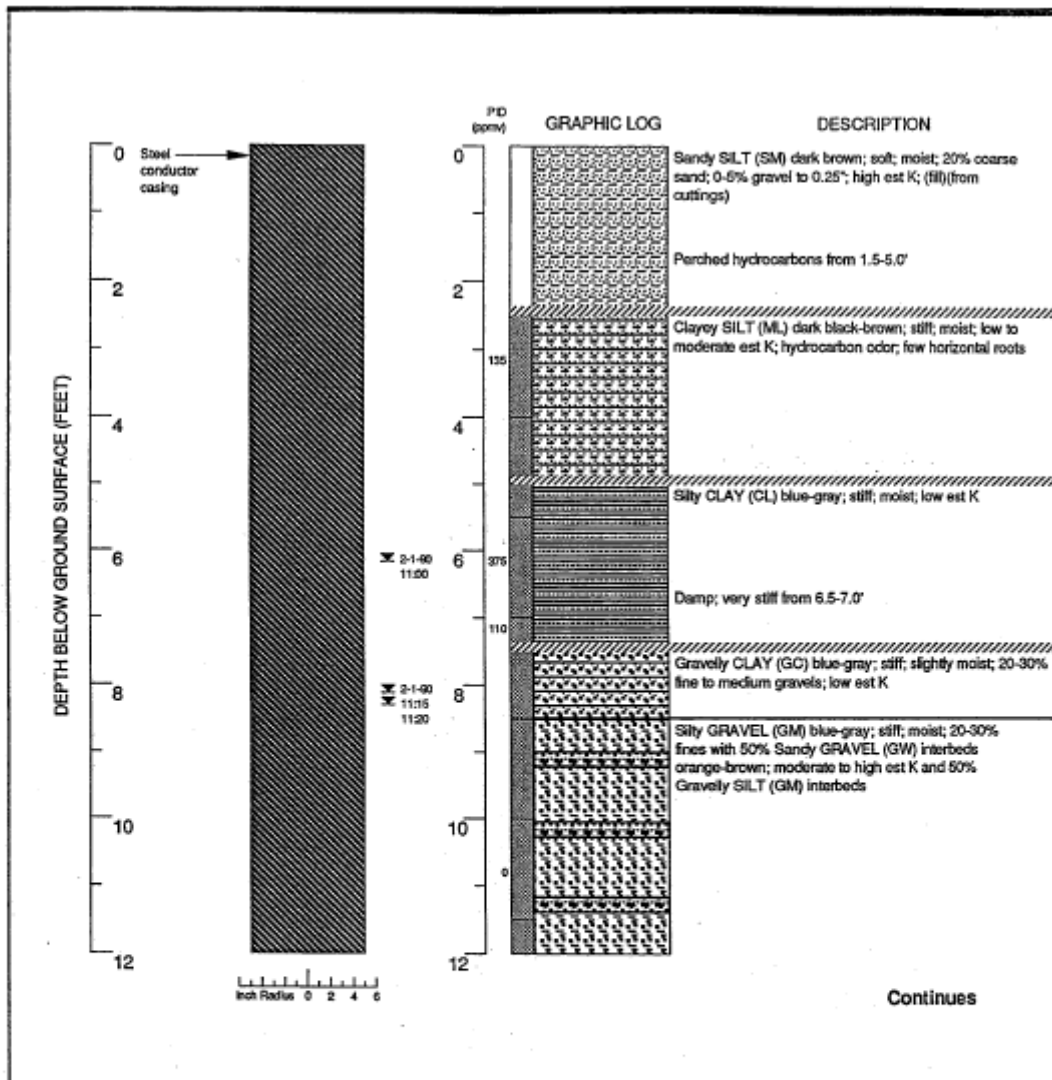
MONITOR
 WELL

19

1-045.45

Gettler-Ryan, Inc.					Log of Boring MW-19A	
PROJECT: Former Chevron Asphalt Plant No. 1001067			LOCATION: Powell Street Overpass at Landregan, Emeryville			
G-R PROJECT NO.: 5161.01			SURFACE ELEVATION: 9.96 feet MSL			
DATE STARTED: 10/30/95			ML (ft. bgs): 6.0 DATE: 10/30/95 TIME: 12:05			
DATE FINISHED: 10/30/95			ML (ft. bgs): 6.0 DATE: 10/30/95 TIME: 13:40			
DRILLING METHOD: 8 in. Hollow Stem Auger			TOTAL DEPTH: 18.5 Feet			
DRILLING COMPANY: Bay Area Exploration, Inc.			GEOLOGIST: B. Sieminski			

DEPTH feet	PID (ppm)	BLOWS/FT. *	SAMPLE NUMBER	SAMPLE INT.	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION	WELL DIAGRAM
0	NA		MW19A-3			CL	PAVEMENT - asphalt over baserock.	
5	0	18	MW19A-5.5			GC	GRAVELLY CLAY WITH SAND (GC) - dark brown (10YR 3/3), moist, low plasticity; 60% clay, 30% fine gravel, 10% fine to coarse sand; pieces of brick; fill.	
10	0	5				CL	CLAYEY GRAVEL WITH SAND (GC) - dark yellowish brown (10YR 4/4), saturated, medium dense; 55% fine gravel, 15% clay, 30% fine to coarse sand; pieces of brick; fill.	
15	0	14	MW19A-16			CL	SANDY CLAY (CL) - yellowish brown (10YR 5/4), saturated, medium stiff, low plasticity; 70% clay, 30% fine sand.	
18.5							<p>Becomes stiff, color change to light olive brown (2.5Y 5/6); roots.</p> <p>Sand decreases to 15%; becomes moist at 18 feet.</p> <p>Bottom of boring at 18.5 feet, 10/30/95.</p> <p>(* = converted to equivalent standard penetration blows/ft.)</p>	



Logged by: Chris Alger
 Project Mgr: Chris Alger
 Dates Drilled: 2/1-2/2/90

Drilling Company: Exploration Geoservices
 Drilling Method: 12" Hollow stem auger
 Driller: Mike Yeager

Well Head Completion: None
 Type of Sampler: 2" split barrel
 TD (Total Depth): 32.0 ft.

EXPLANATION

- ☒ Water level during drilling
- ☒ Water level in completed well
- ▣ Location of recovered drill sample
- ▣ Location of sample sealed for chemical analysis
- ▣ Sieve sample
- ▣ Grab sample
- Contacts: Solid where certain
- Dotted where approximate
- - - Dashed where uncertain
- ////// Hatched where gradational
- est K Estimated permeability (hydraulic conductivity) 1K = primary 2K = secondary
- NR No recovery

Boring Log
 Boring B-1

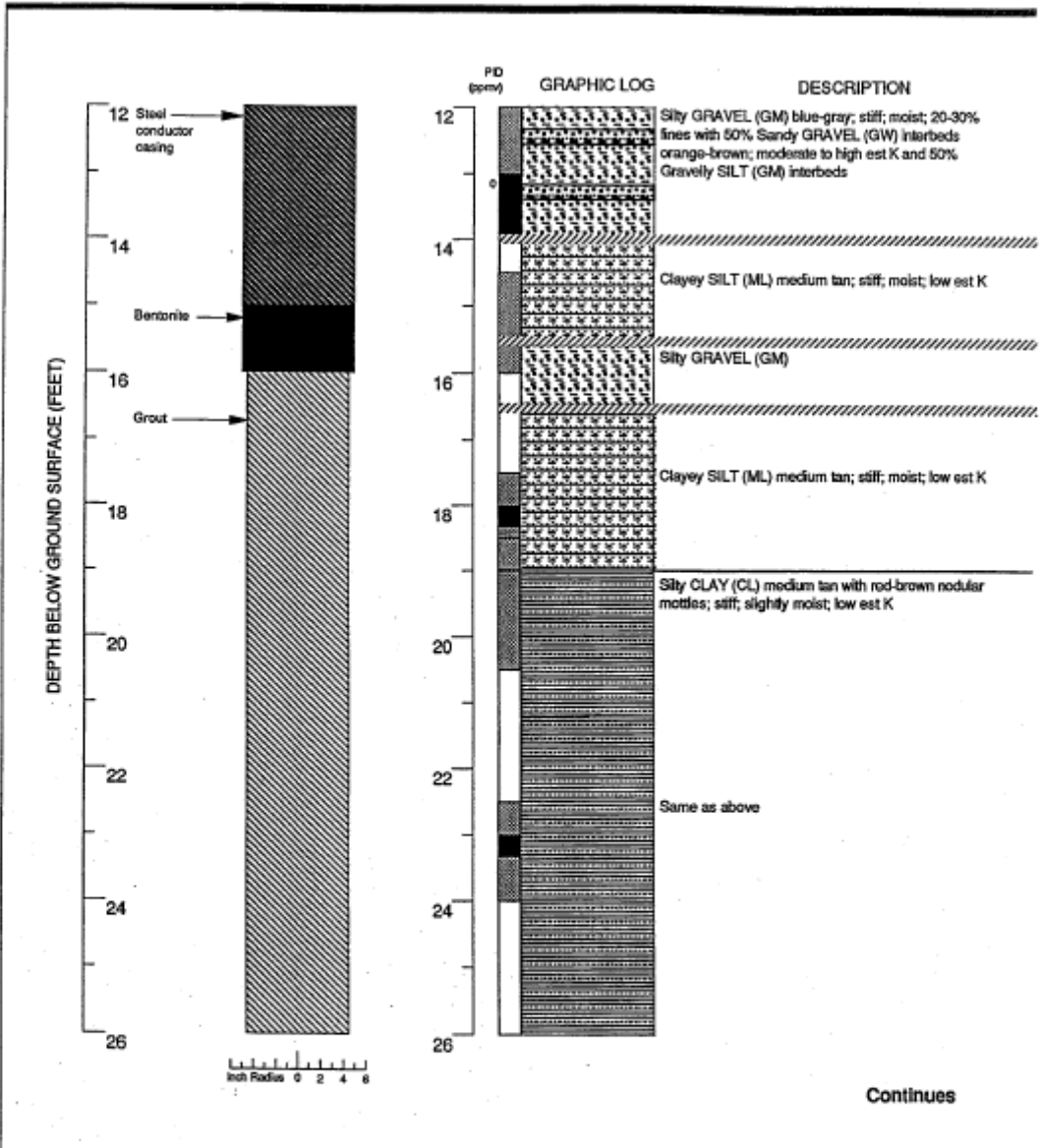
Emeryville Asphalt Plant
 Emeryville, California

WESTERN GEOLOGIC RESOURCES, INC.

BORING

1

1-045.45



EXPLANATION	
	Water level during drilling
	Water level in completed well
	Location of recovered drill sample
	Location of sample sealed for chemical analysis
	Sieve sample
	Grab sample
	Contacts
	Solid where certain
	Dotted where approximate
	Dashed where uncertain
	Hachured where gradational
	est K Estimated permeability (hydraulic conductivity)
	1K = primary 2K = secondary
	NR No recovery

Boring Log
Boring B-1

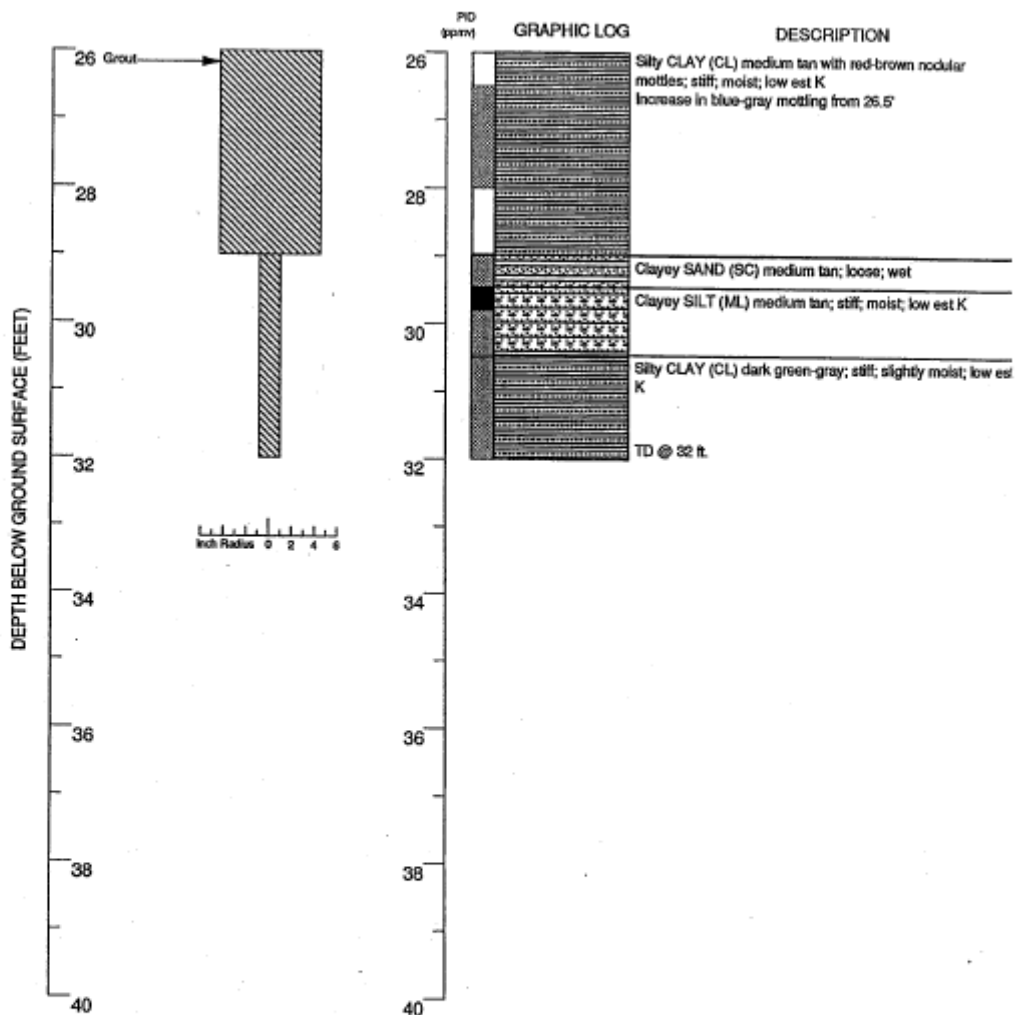
Emeryville Asphalt Plant
Emeryville, California

WESTERN GEOLOGIC RESOURCES, INC.

BORING

1

1-04545



EXPLANATION

- | | |
|---|---|
| ☒ Water level during drilling | —— Contact |
| ☒ Water level in completed well | —— Solid where certain |
| ☒ Location of recovered drill sample | Dotted where approximate |
| ☒ Location of sample sealed for chemical analysis | - - - Dashed where uncertain |
| ☒ Sieve sample | ////// Hatched where gradational |
| ☒ Grab sample | est K Estimated permeability (hydraulic conductivity) |
| | IK - primary 2K - secondary |
| | NR No recovery |

Boring Log
Boring B-1

Emeryville Asphalt Plant
Emeryville, California

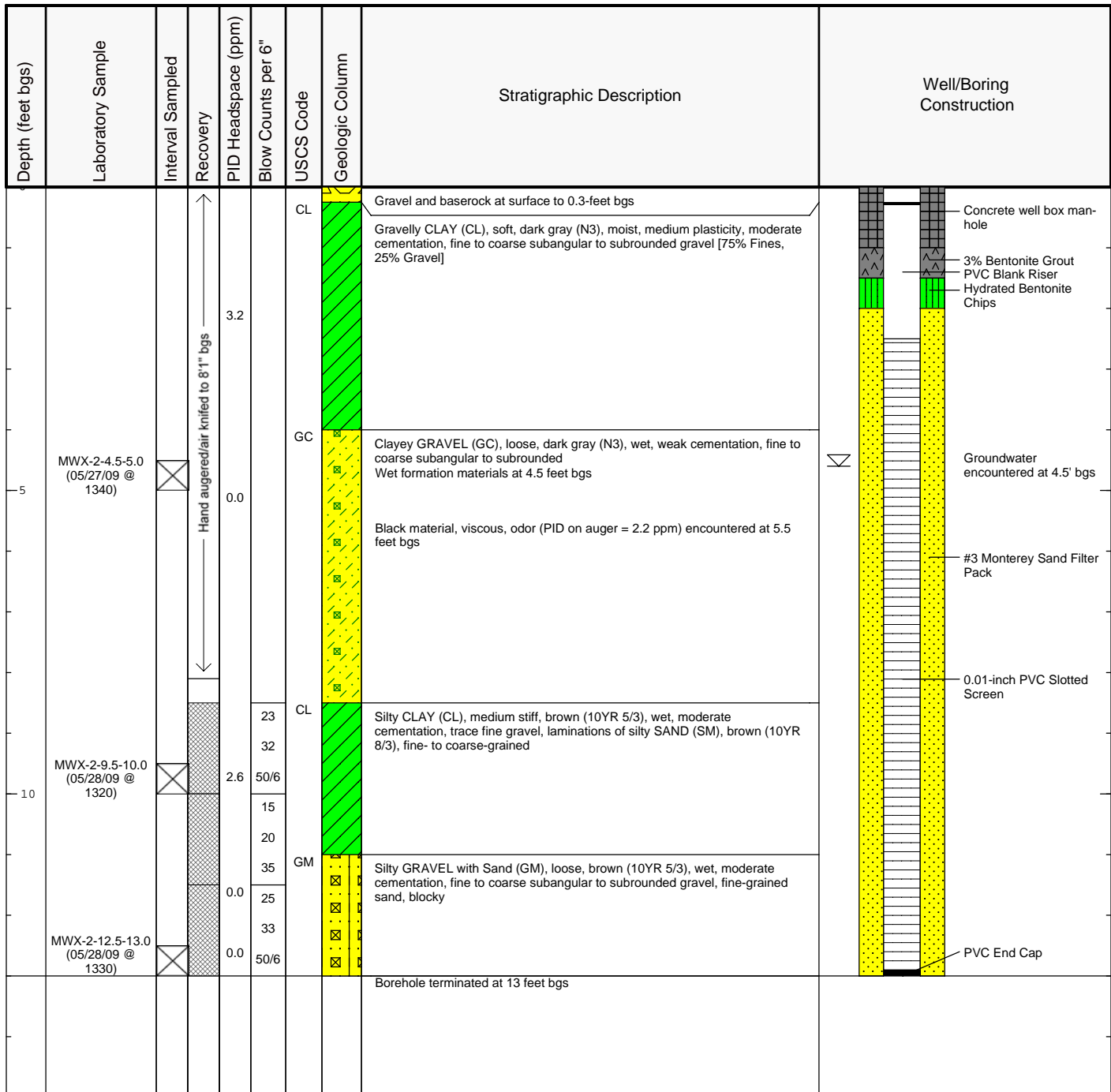
WESTERN GEOLOGIC RESOURCES, INC.


BORING

1

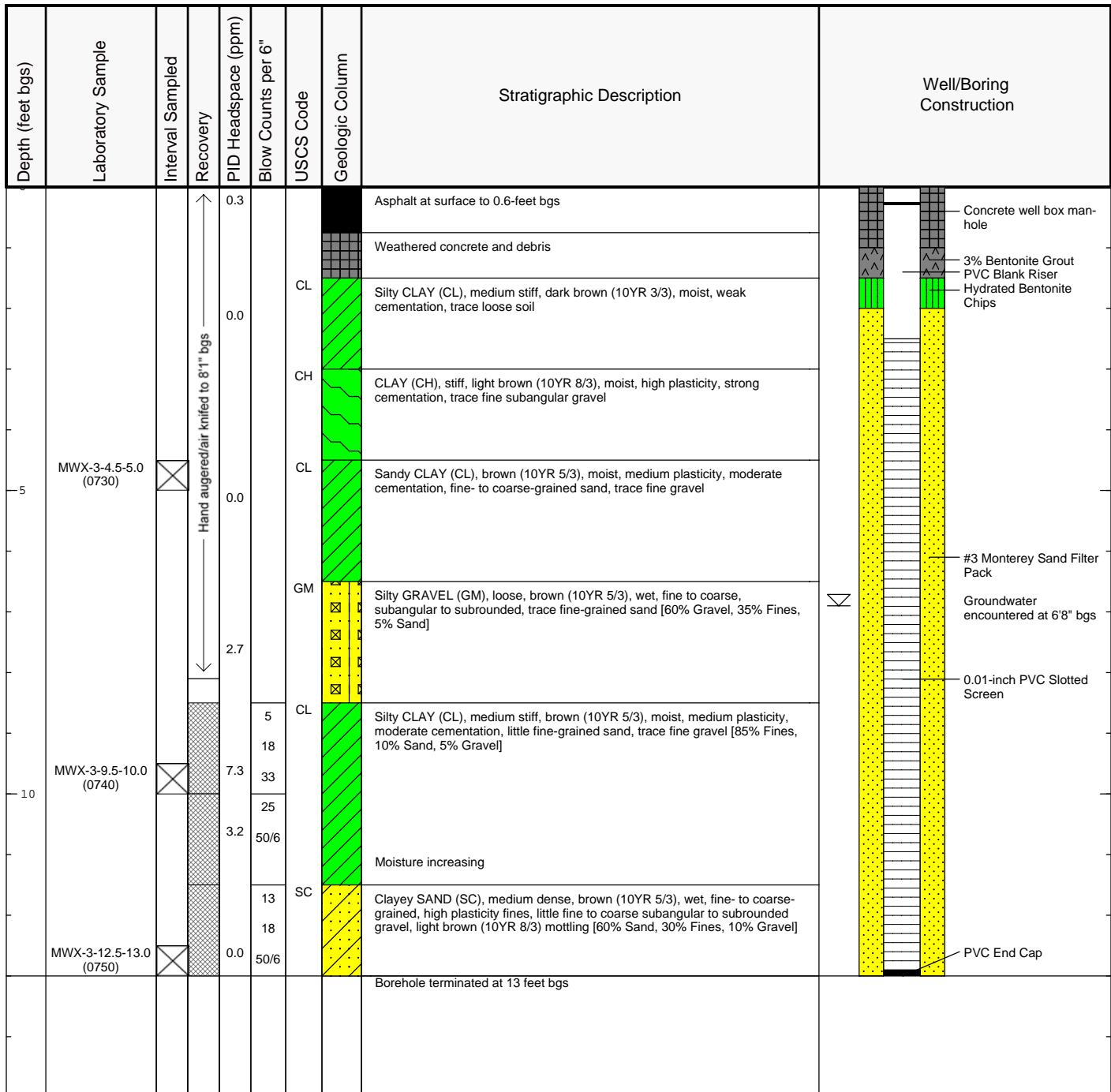
1-045.45

Date Start/Finish: 05/28/09 - 05/29/09	Borehole Depth: 13 feet bgs	Well/Boring ID: MWX-2
Drilling Company: Cascade Drilling, Inc.	Latitude (NAD83): 37.8387710	Client: Chevron
Driller's Name: Jay Admire	Longitude (NAD83): 122.2917048	Location: 1520 Powell Street Emeryville, CA 94608
Drilling Method: Hollow Stem Auger	Casing Elevation: 12.10 feet amsl	
Bit Size: 8-inch	Surface Elevation: 12.51 feet amsl	
Auger Size: 8-inch	Geologist: Jamey Peterson	
Rig Type: Limited Access Rig	Reviewed By: Ben McKenna	
Sampling Method: Hand Auger/Split Spoon		



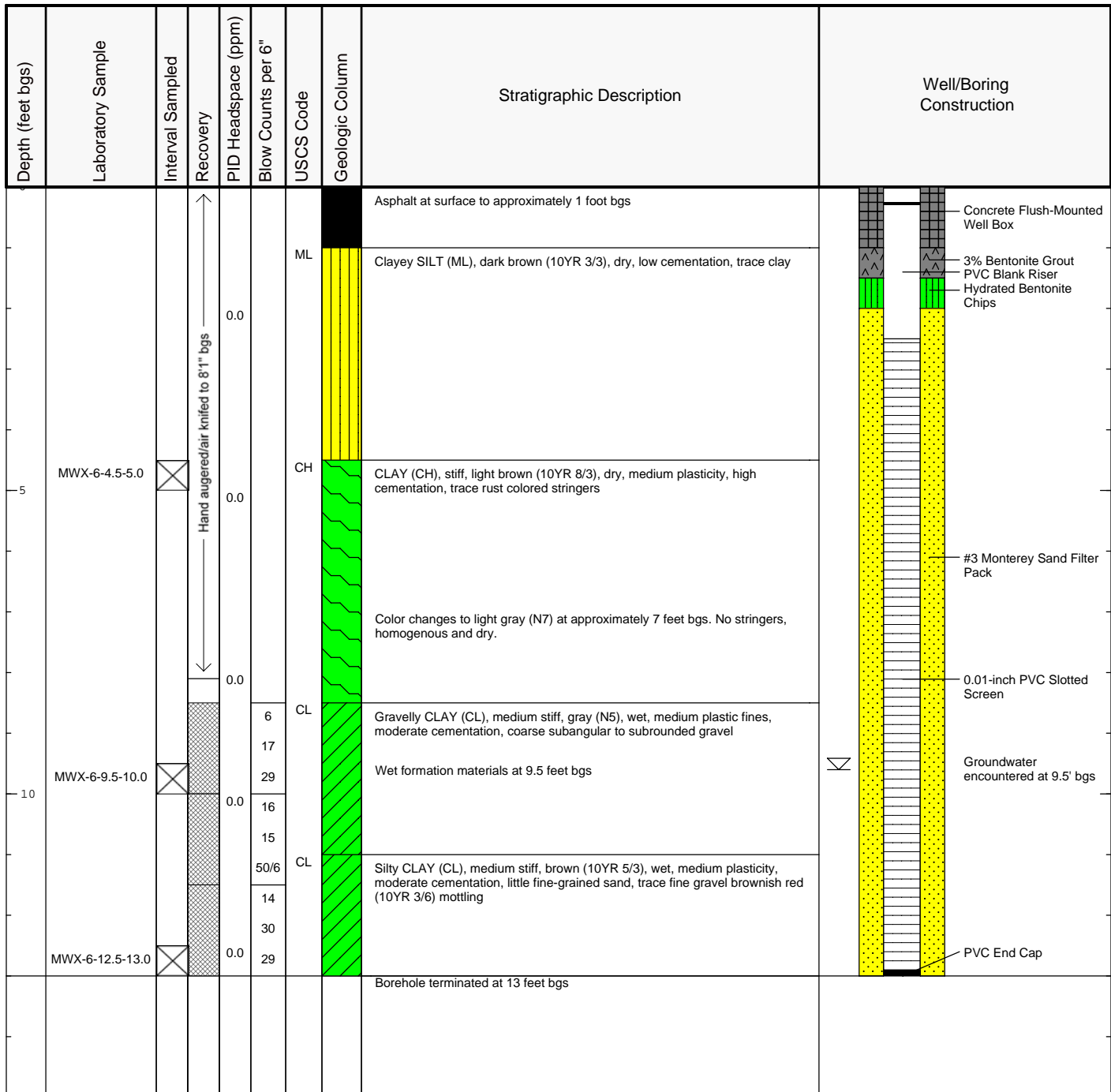
	Abbreviations: amsl = above mean sea level bgs = below ground surface NA = not applicable NAD83 = North American Datum 1983 NM = not measured PID = photoionization detector ppm = parts per million USCS = Unified Soil Classification System
	Note: Density of sands and consistency of silts and clays based on field observations and not blow counts.


Date Start/Finish: 05/29/09	Borehole Depth: 13 feet bgs	Well/Boring ID: MWX-3
Drilling Company: Cascade Drilling, Inc.	Latitude (NAD83): 37.8390958	Client: Chevron
Driller's Name: Jay Admire	Longitude (NAD83): 122.2913732	Location: 1520 Powell Street Emeryville, CA 94608
Drilling Method: Hollow Stem Auger	Casing Elevation: 13.45 feet amsl	
Bit Size: 8-inch	Surface Elevation: 13.69 feet amsl	
Auger Size: 8-inch	Geologist: Jamey Peterson	
Rig Type: Limited Access Rig	Reviewed By: Ben McKenna	
Sampling Method: Hand Auger/Split Spoon		



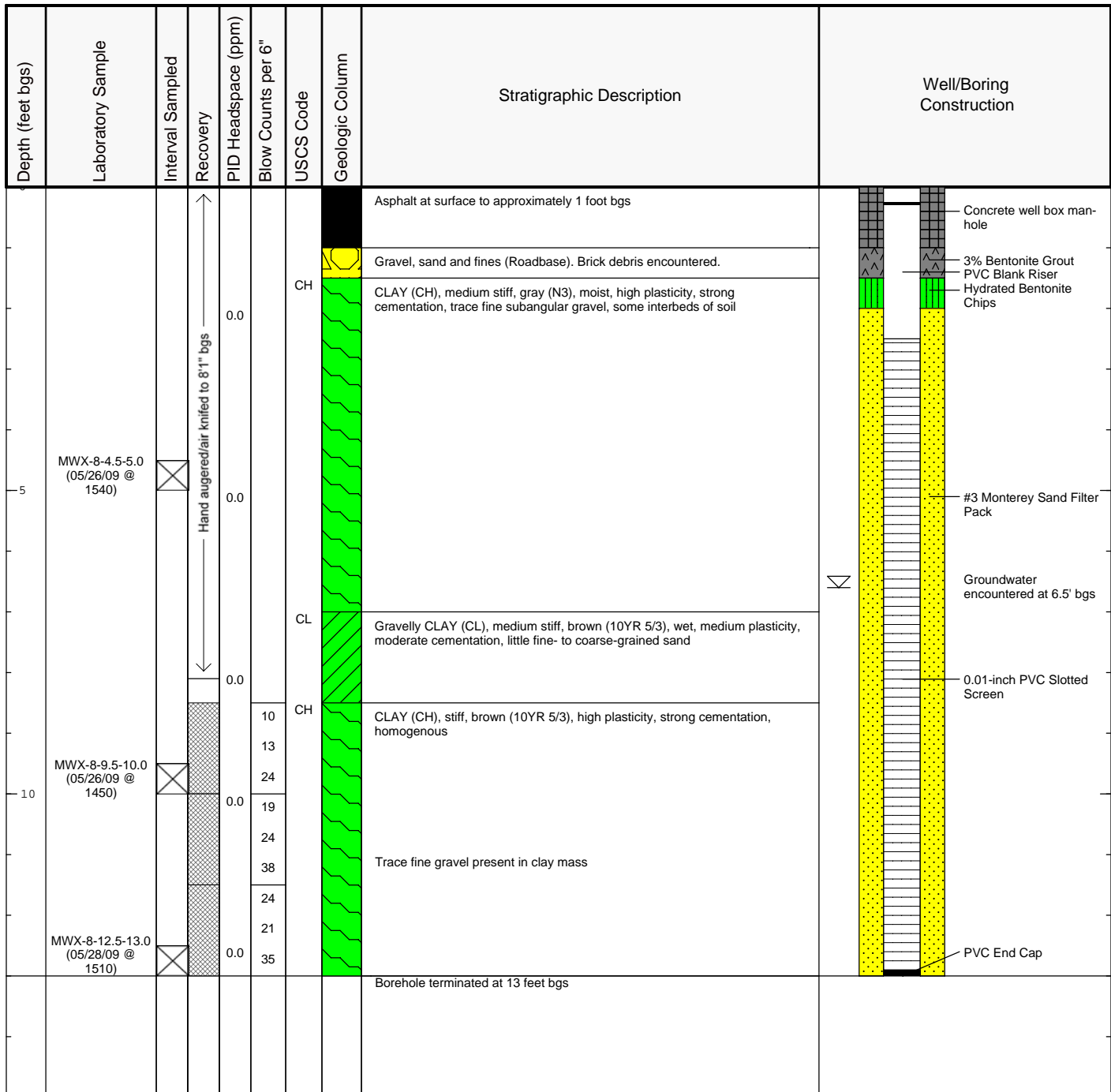
	Abbreviations: amsl = above mean sea level bgs = below ground surface NA = not applicable NAD83 = North American Datum 1983 NM = not measured PID = photoionization detector ppm = parts per million USCS = Unified Soil Classification System
	Note: Density of sands and consistency of silts and clays based on field observations and not blow counts.


Date Start/Finish: 05/28/09	Borehole Depth: 13 feet bgs	Well/Boring ID: MWX-6
Drilling Company: Cascade Drilling, Inc.	Latitude (NAD83): 37.8388625	Client: Chevron
Driller's Name: Jay Admire	Longitude (NAD83): 122.2924265	Location: 1520 Powell Street Emeryville, CA 94608
Drilling Method: Hollow Stem Auger	Casing Elevation: 11.41 feet amsl	
Bit Size: 8-inch	Surface Elevation: 11.69 feet amsl	
Auger Size: 8-inch	Geologist: Jamey Peterson	
Rig Type: Limited Access Rig	Reviewed By: Ben McKenna	
Sampling Method: Hand Auger/Split Spoon		



	Abbreviations: amsl = above mean sea level bgs = below ground surface NA = not applicable NAD83 = North American Datum 1983 NM = not measured PID = photoionization detector ppm = parts per million USCS = Unified Soil Classification System
	Note: Density of sands and consistency of silts and clays based on field observations and not blow counts.

Date Start/Finish: 05/28/09	Borehole Depth: 13 feet bgs	Well/Boring ID: MWX-8
Drilling Company: Cascade Drilling, Inc.	Latitude (NAD83): 37.8387710	Client: Chevron
Driller's Name: Jay Admire	Longitude (NAD83): 122.2917048	Location: 1520 Powell Street Emeryville, CA 94608
Drilling Method: Hollow Stem Auger	Casing Elevation: 13.12 feet amsl	
Bit Size: 8-inch	Surface Elevation: 12.77 feet amsl	
Auger Size: 8-inch	Geologist: Jamey Peterson	
Rig Type: Limited Access Rig	Reviewed By: Ben McKenna	
Sampling Method: Hand Auger/Split Spoon		

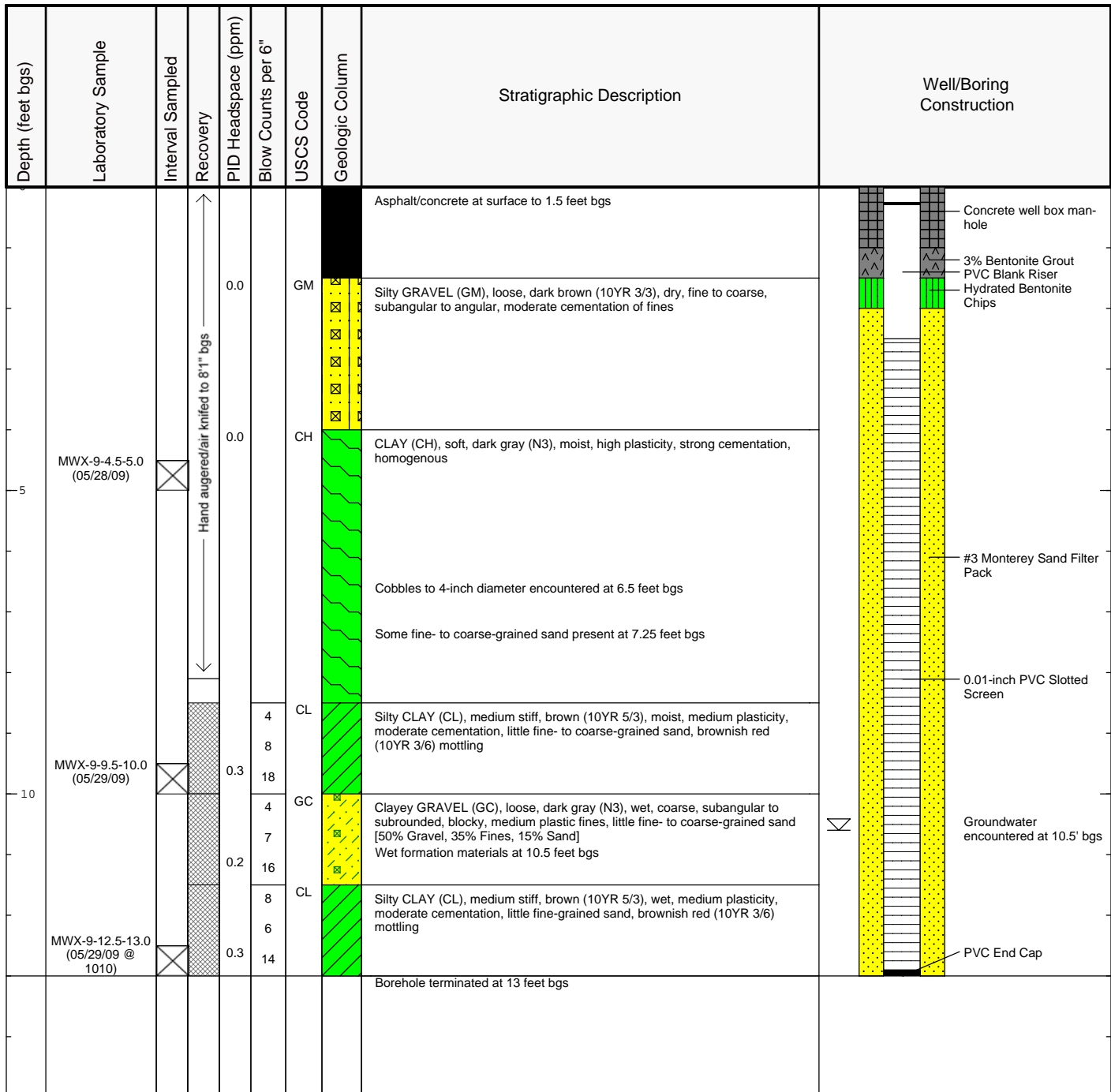





Abbreviations: amsl = above mean sea level
bgs = below ground surface
NA = not applicable
NAD83 = North American Datum 1983
NM = not measured
PID = photoionization detector
ppm = parts per million
USCS = Unified Soil Classification System

Note: Density of sands and consistency of silts and clays based on field observations and not blow counts.

Date Start/Finish: 05/29/09	Borehole Depth: 13 feet bgs	Well/Boring ID: MWX-9
Drilling Company: Cascade Drilling, Inc.	Latitude (NAD83): 37.8388923	Client: Chevron
Driller's Name: Jay Admire	Longitude (NAD83): 122.2922482	Location: 1520 Powell Street Emeryville, CA 94608
Drilling Method: Hollow Stem Auger	Casing Elevation: 11.46 feet amsl	
Bit Size: 8-inch	Surface Elevation: 11.83 feet amsl	
Auger Size: 8-inch	Geologist: Jamey Peterson	
Rig Type: Limited Access Rig	Reviewed By: Ben McKenna	
Sampling Method: Hand Auger/Split Spoon		

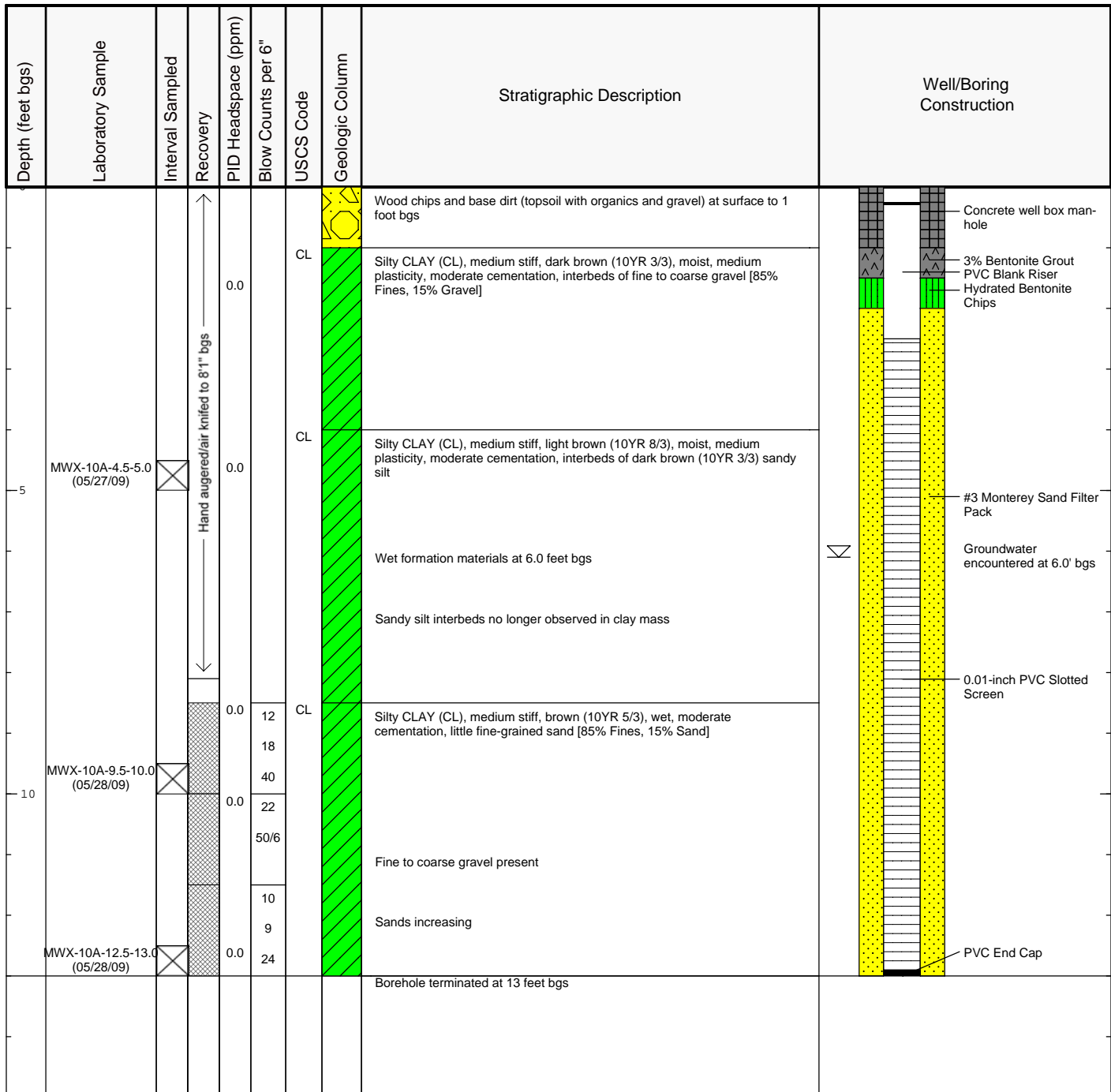




Abbreviations: amsl = above mean sea level
bgs = below ground surface
NA = not applicable
NAD83 = North American Datum 1983
NM = not measured
PID = photoionization detector
ppm = parts per million
USCS = Unified Soil Classification System

Note: Density of sands and consistency of silts and clays based on field observations and not blow counts.

Date Start/Finish: 05/28/09	Borehole Depth: 13 feet bgs	Well/Boring ID: MWX-10A
Drilling Company: Cascade Drilling, Inc.	Latitude (NAD83): 37.8391195	Client: Chevron
Driller's Name: Jay Admire	Longitude (NAD83): 122.2917202	Location: 1520 Powell Street Emeryville, CA 94608
Drilling Method: Hollow Stem Auger	Casing Elevation: 12.78 feet amsl	
Bit Size: 8-inch	Surface Elevation: 13.28 feet amsl	
Auger Size: 8-inch	Geologist: Jamey Peterson	
Rig Type: Limited Access Rig	Reviewed By: Ben McKenna	
Sampling Method: Hand Auger/Split Spoon		



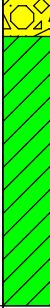

	Abbreviations: amsl = above mean sea level bgs = below ground surface NA = not applicable NAD83 = North American Datum 1983 NM = not measured PID = photoionization detector ppm = parts per million USCS = Unified Soil Classification System
	Note: Density of sands and consistency of silts and clays based on field observations and not blow counts.


Date Start/Finish: 05/27/09	Borehole Depth: 4 feet bgs	Well/Boring ID: SB-1A
Drilling Company: Cascade Drilling, Inc.	Latitude (NAD83): 37.8388264	Client: Chevron
Driller's Name: Jay Admire	Longitude (NAD83): 122.2917298	Location: 1520 Powell Street Emeryville, CA 94608
Drilling Method: Hand Auger	Casing Elevation: NA	
Bit Size: 4-inch	Surface Elevation: 12.56 feet amsl	
Auger Size: 4-inch	Geologist: Jamey Peterson	
Rig Type: NA	Reviewed By: Ben McKenna	
Sampling Method: Hand Auger		

Depth (feet bgs)	Laboratory Sample	Interval Sampled	Recovery	PID Headspace (ppm)	Blow Counts per 6"	USCS Code	Geologic Column	Stratigraphic Description	Well/Boring Construction
0.0	SB-1A-3.5-4.0 (1240)	Hand augered to 4' bgs	0.0	NA	CL	CL		Gravel baserock up to 4-inch diameter at surface to 0.5 feet bgs Silty CLAY (CL), medium stiff, dark brown (10YR 3/3), moist, medium plasticity, moderate cementation, little fine to coarse gravel [85% Fines, 15% Gravel] Light brown (10YR 8/3) sand lenses within clay mass	
4.0								Borehole terminated at 4.0 feet bgs	

	Abbreviations: amsl = above mean sea level bgs = below ground surface NA = not applicable NM = not measured PID = photoionization detector ppm = parts per million SAA = same as above USCS = Unified Soil Classification System
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Date Start/Finish: 05/27/09	Borehole Depth: 4 feet bgs	Well/Boring ID: SB-2A
Drilling Company: Cascade Drilling, Inc.	Latitude (NAD83): 37.8389438	Client: Chevron
Driller's Name: Jay Admire	Longitude (NAD83): 122.2915843	Location: 1520 Powell Street Emeryville, CA 94608
Drilling Method: Hand Auger	Casing Elevation: NA	
Bit Size: 4-inch	Surface Elevation: 12.14 feet amsl	
Auger Size: 4-inch	Geologist: Jamey Peterson	
Rig Type: NA	Reviewed By: Ben McKenna	
Sampling Method: Hand Auger		

Depth (feet bgs)	Laboratory Sample	Interval Sampled	Recovery	PID Headspace (ppm)	Blow Counts per 6"	USCS Code	Geologic Column	Stratigraphic Description	Well/Boring Construction
			↑ Hand augered to 4' bgs ↓		NA	CL		Gravel baserock up to 3-inch diameter at surface to 0.5 feet bgs Silty CLAY (CL), medium stiff, dark brown (10YR 3/3), moist, medium plasticity, moderate cementation, little fine to coarse subangular to subrounded gravel [85% Fines, 15% Gravel] Light brown (10YR 8/3) sand lenses within clay mass	 Neat Cement Grout
5								Borehole terminated at 4.0 feet bgs	
10									
15									

	Abbreviations: amsl = above mean sea level bgs = below ground surface NA = not applicable NM = not measured PID = photoionization detector ppm = parts per million SAA = same as above USCS = Unified Soil Classification System
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Appendix 7

Summary of 2009 Investigation

In October 2008, remediation and redevelopment activities began to take place on 1525 and 1535 Powell Street, adjacent to the site (referred to as Site B; Figure 2 of the Conceptual Site Model and Closure Request [CSM] and Closure Request). ARCADIS U.S., Inc. (ARCADIS) proposed to gather additional data to further characterize hydrogeologic conditions, identify potential migration pathways, and better delineate the nature and extent of the chlorinated volatile organic compounds (CVOCs) in soil and groundwater on and adjacent to the site. Site assessment activities are detailed in the Supplemental Soil and Groundwater Investigation Work Plan (ARCADIS 2008).

In June 2009, ARCADIS advanced the nine soil borings, seven of which were converted into groundwater monitoring wells MWX-2, MWX-3, MWX-6, MWX-8, MWX-9, MWX-10A, and MWX-11A. Locations are presented on Figure 3 of the CSM and Closure Request. Soil samples were collected to evaluate the potential existence of CVOCs in the area near the site. Groundwater monitoring wells were sampled to evaluate concentrations of CVOCs in groundwater near the site.

This appendix presents the procedures for the soil boring advancement and well installation. Results of this off-site investigation were incorporated into the CSM and Closure Request.

Site-Specific Health and Safety Plan

ARCADIS prepared a site-specific health and safety plan (HASP) prior to commencement of fieldwork, as required by:

- Occupational Health and Safety Administration Standard, Hazardous Waste Operations and Emergency Response guidelines (29 Code of Federal Regulations Section 1910.120)
- California Occupational Health and Safety Administration's Hazardous Waste Operations and Emergency Response guidelines (California Code of Regulations Title 8, Section 5192), ARCADIS prepared a site-specific health and safety plan (HASP) prior to commencement of fieldwork.

Field staff and contractors reviewed the HASP before beginning field operations at the site.

Permitting

Soil boring and monitoring well installation permits were obtained from the Alameda County Department of Environmental Health; encroachment permits and impervious surface and a Stormwater Treatment Measures Worksheet were obtained from the City of Emeryville prior to commencing field activities..

Underground Utility Locating

Underground Service Alert was notified a minimum of 48 hours prior to commencing field activities to identify any public utility alignments that may have been in conflict with the proposed borings. Additionally, a private utility locating company, Cruz Brothers, Inc., cleared the proposed boring locations for underground utilities.

Soil Borings

Two soil borings (SB-1A and SB-2A) were advanced at the locations shown on Figure 3 of the CSM and Closure Request. The two soil borings were advanced using hand augers to approximately 3 feet below ground surface (bgs) and soil samples were collected to approximately 4 feet bgs.

A minimum of one soil sample was collected from each of the hand auger soil borings at approximately 4 feet bgs and submitted for laboratory analysis. Soil samples were analyzed in the field for ionized organic compounds using a photo ionization detector (PID). The soil screening procedures involved measuring approximately 30 grams from a relatively undisturbed soil sample and placing this sample in a sealed container (plastic bag). The bag was warmed in the sun for approximately 20 minutes. The head space within the bag was then tested for total organic vapor, measured in parts per million (ppm: volume/volume). The PID results were noted on the field logs. PID readings are useful for indicating relative levels of contamination, but cannot be used to evaluate organic compound levels with the confidence of laboratory results. Each sample was retained in laboratory-supplied glass jars, sealed, labeled, placed in an ice-chilled cooler, cooled to approximately 4 degrees Celsius (°C), and shipped with appropriate chain-of-custody documentation to a Chevron Environmental Management Company- (Chevron-) approved and California Department of Health Services- (CDHS-) certified laboratory for chemical analysis. Soil samples were analyzed for the presence of CVOCs using United States Environmental Protection Agency (USEPA) Method 8260B.

Groundwater Monitoring Well Installation

Prior to drilling, the well locations were hand cleared using both an air knife and a hand auger to a minimum depth of 8 feet 1 inch (utility clearance depth) bgs. Depth-to-water readings were collected from the existing monitoring well network during well installation activities.

The borings were advanced using 8-inch-outer-diameter hollow-stem augers to approximately 13 feet bgs using a limited-access hollow-stem auger rig and a continuous split-spoon soil sampler. Discrete soil samples were collected approximately every 5 feet in each boring, using either a hand sampling device (for depths shallower than 8 feet) or a split-spoon sampler. Soil samples were screened in the field using a PID and described by the supervising geologist using visual and manual methods of the Unified Soil Classification System. Upon completion of drilling, each boring was converted to a monitoring well. The

monitoring well was constructed using 2-inch ID Schedule 40 polyvinyl chloride (PVC) casing with a 10-foot screen interval of 0.010-inch slotted PVC at the base of the well (13 to 3 feet bgs). A #3 sand filter pack was placed around the well from the bottom of the bore hole to approximately 1 foot above the screen interval (13 to 2 feet bgs) followed by 6 inches of coated bentonite chips (2 to 1.5 feet bgs), which was allowed to hydrate for approximately 30 minutes prior to adding the grout seal. The remainder of the space was filled with grout (1.5 to 1 feet bgs). The well was finished at grade with a traffic-rated well vault set in concrete (1 to 0 foot bgs). Monitoring well construction details are included in Table 1 of the CSM and Closure Request.

Selected soil samples from the monitoring well borings were submitted for laboratory analysis. Soil samples for chemical analysis were retained in 16 oz glass jars, capped with Teflon[®]-coated caps, and sealed in plastic bags. Collected samples were packed on ice, cooled to approximately 4°C, and shipped with appropriate chain-of-custody documentation to Lancaster Laboratories, a Chevron-approved and CDHS-certified laboratory for chemical analysis. Soil samples were analyzed for the presence of CVOCs using USEPA Method 8260B.

Groundwater Monitoring Well Development/Sampling

The newly installed groundwater monitoring wells were developed a minimum of 48 hours following installation. Well development consisted of rigorously surging the well with a surge block followed by removing approximately 10 case volumes of water from the well. During the purge cycle, groundwater field parameter measurements consisting of specific conductance, pH, and temperature were measured using a water-quality meter.

Groundwater samples were collected a minimum of 24 hours following development activities. A low-flow pre-sampling purge and disposable bailer sample collection technique will be used to collect groundwater samples from each well. Purging was performed using a submersible pump with disposable Teflon[®] tubing and a flow-through cell.

Collected samples were packed on ice, cooled to approximately 4°C, and shipped with appropriate chain-of-custody documentation to a Chevron-approved and CDHS-certified laboratory for chemical analysis. Samples were analyzed for the presence of CVOCs using USEPA Method 8260B. The requisite numbers of quality assurance/quality control samples were collected including blind duplicates, field blanks, and trip blanks.

Investigation-Derived Waste Management

All down-hole drilling and sampling equipment was steam-cleaned following the completion of the soil boring. Down-hole sampling equipment was washed in a tri-sodium phosphate or Alconox[®] solution between samples.

Soil cuttings generated during drilling operations were containerized in 55-gallon Department of Transportation- (DOT-) approved drums and temporarily stored on the neighboring property with the property owner's permission, pending characterization and disposal. Soil cuttings were removed by Chevron's disposal contractor, Integrated Waste Management (IWM), to an appropriate disposal facility. Water generated during sampling equipment decontamination, steam cleaning, and sampling of the monitoring wells was temporarily stored on an adjacent property in DOT-approved 55-gallon drums pending transport by IWM to an appropriate disposal or treatment facility.

Waste in the category of disposable sampling materials and personal protective equipment was placed in heavyweight garbage bags or other appropriate containers and disposed of as general waste.



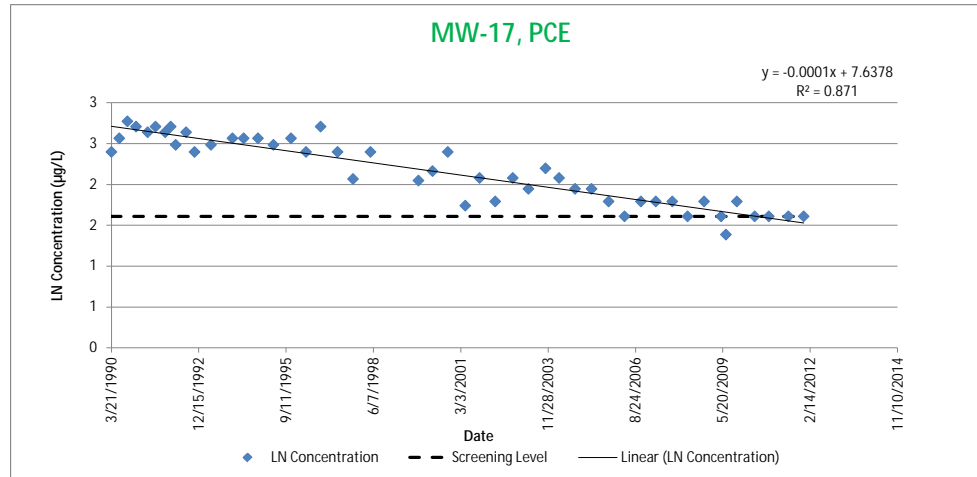
Appendix 8

Statistical Analysis

Sample Information
Sample Location
Constituent

MW-17
PCE

Sample Date	Concentration (ug/L)	LN Concentration
3/21/1990	11	2.40
6/19/1990	13	2.56
9/20/1990	16	2.77
12/28/1990	15	2.71
5/10/1991	14	2.64
8/8/1991	15	2.71
11/27/1991	14	2.64
1/29/1992	15	2.71
3/26/1992	12	2.48
7/23/1992	14	2.64
10/28/1992	11	2.40
5/4/1993	12	2.48
1/5/1994	13	2.56
5/13/1994	13	2.56
10/24/1994	13	2.56
4/19/1995	12	2.48
11/6/1995	13	2.56
4/26/1996	11	2.40
10/10/1996	15	2.71
4/22/1997	11	2.40
10/16/1997	7.9	2.07
5/4/1998	11	2.40
11/4/1999	7.75	2.05
4/13/2000	8.7	2.16
10/5/2000	11	2.40
4/23/2001	5.7	1.74
10/4/2001	8	2.08
4/1/2002	6	1.79
10/19/2002	8	2.08
4/16/2003	7	1.95
10/29/2003	9	2.20
4/1/2004	8	2.08
10/1/2004	7	1.95
4/8/2005	7	1.95
10/20/2005	6	1.79
4/20/2006	5	1.61
10/25/2006	6	1.79
4/13/2007	6	1.79
10/19/2007	6	1.79
4/11/2008	5	1.61
10/17/2008	6	1.79
4/30/2009	5	1.61
6/24/2009	4	1.39
10/27/2009	6	1.79
5/19/2010	5	1.61
10/28/2010	5	1.61
6/9/2011	5	1.61
12/1/2011	5	1.61

**Notes:**

ND taken at reporting limit/reported value
Qualified data converted to reported value

Data quality

Total # of data points used in regression	48
# of nondetects	0
% of data as detects	100

Results

Coefficient of Determination (R^2) =	0.8710
p-Value =	4.39E-22
Attenuation Rate in Groundwater (K) =	0.0001 days ⁻¹
Attenuation Rate in Groundwater at 90% confidence (K) =	0.0001 days ⁻¹
Chemical Half Life in Groundwater ($t_{1/2}$) =	4.64E+03 days

Date Screening Level Reached

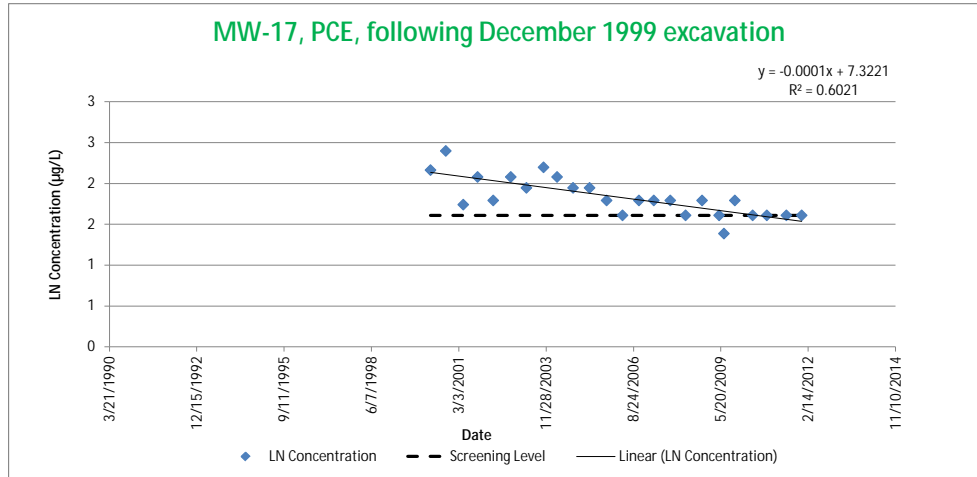
Screening Level	5
LN Screening Level	1.6
Intercept	7.638
Slope	-0.0001
Date to Screening Level	5/30/2010

Abbreviations and Notes

ug/l = micrograms per liter
LN = Natural Logarithm

Sample Information
 Sample Location MW-17
 Constituent PCE

Sample Date	Concentration (ug/L)	LN Concentration
4/13/2000	8.7	2.16
10/5/2000	11	2.40
4/23/2001	5.7	1.74
10/4/2001	8	2.08
4/1/2002	6	1.79
10/19/2002	8	2.08
4/16/2003	7	1.95
10/29/2003	9	2.20
4/1/2004	8	2.08
10/1/2004	7	1.95
4/8/2005	7	1.95
10/20/2005	6	1.79
4/20/2006	5	1.61
10/25/2006	6	1.79
4/13/2007	6	1.79
10/19/2007	6	1.79
4/11/2008	5	1.61
10/17/2008	6	1.79
4/30/2009	5	1.61
6/24/2009	4	1.39
10/27/2009	6	1.79
5/19/2010	5	1.61
10/28/2010	5	1.61
6/9/2011	5	1.61
12/1/2011	5	1.61



Notes:

- ND taken at reporting limit/reported value
- Qualified data converted to reported value

Data quality	
Total # of data points used in regression	25
# of nondetects	0
% of data as detects	100

Results		
Coefficient of Determination (R ²) =	0.6021	
p-Value =	5.17E-06	
Attenuation Rate in Groundwater (K) =	0.0001	days ⁻¹
Attenuation Rate in Groundwater at 90% confidence (K) =	0.0001	days ⁻¹
Chemical Half Life in Groundwater (t _{1/2}) =	4.89E+03	days

Date Screening Level Reached	
Screening Level	5
LN Screening Level	1.6
Intercept	7.322
Slope	-0.0001
Date to Screening Level	6/21/2010

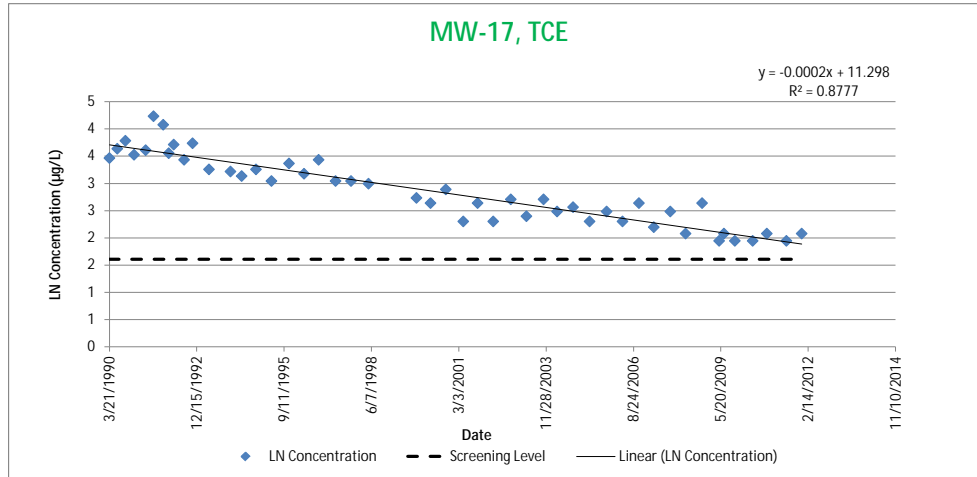
Abbreviations and Notes

ug/l = micrograms per liter
 LN = Natural Logarithm

Sample Information
 Sample Location
 Constituent

MW-17
 TCE

Sample Date	Concentration (ug/L)	LN Concentration
3/21/1990	32	3.47
6/19/1990	38	3.64
9/20/1990	44	3.78
12/28/1990	34	3.53
5/10/1991	37	3.61
8/8/1991	69	4.23
11/27/1991	59	4.08
1/29/1992	35	3.56
3/26/1992	41	3.71
7/23/1992	31	3.43
10/28/1992	42	3.74
5/4/1993	26	3.26
1/5/1994	25	3.22
5/13/1994	23	3.14
10/24/1994	26	3.26
4/19/1995	21	3.04
11/6/1995	29	3.37
4/26/1996	24	3.18
10/10/1996	31	3.43
4/22/1997	21	3.04
10/16/1997	21	3.04
5/4/1998	20	3.00
11/4/1999	15.4	2.73
4/13/2000	14	2.64
10/5/2000	18	2.89
4/23/2001	10	2.30
10/4/2001	14	2.64
4/1/2002	10	2.30
10/19/2002	15	2.71
4/16/2003	11	2.40
10/29/2003	15	2.71
4/1/2004	12	2.48
10/1/2004	13	2.56
4/8/2005	10	2.30
10/20/2005	12	2.48
4/20/2006	10	2.30
10/25/2006	14	2.64
4/13/2007	9	2.20
10/19/2007	12	2.48
4/11/2008	8	2.08
10/17/2008	14	2.64
4/30/2009	7	1.95
6/24/2009	8	2.08
10/27/2009	7	1.95
5/19/2010	7	1.95
10/28/2010	8	2.08
6/9/2011	7	1.95
12/1/2011	8	2.08



Notes:

- ND taken at reporting limit/reported value
- Qualified data converted to reported value

Data quality

Total # of data points used in regression	48
# of nondetects	0
% of data as detects	100

Results

Coefficient of Determination (R^2) =	0.8777
p-Value =	1.28E-22
Attenuation Rate in Groundwater (K) =	0.0002 days ⁻¹
Attenuation Rate in Groundwater at 90% confidence (K) =	0.0002 days ⁻¹
Chemical Half Life in Groundwater ($t_{1/2}$) =	3.01E+03 days

Date Screening Level Reached

Screening Level	5
LN Screening Level	1.6
Intercept	11.298
Slope	-0.0002
Date to Screening Level	3/13/2015

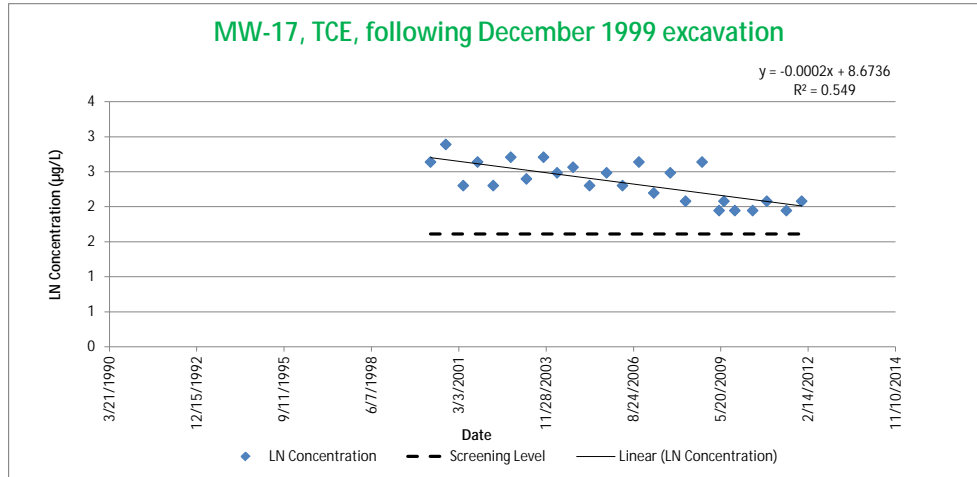
Abbreviations and Notes

ug/l = micrograms per liter
 LN = Natural Logarithm

Sample Information
 Sample Location
 Constituent

MW-17
 TCE

Sample Date	Concentration (ug/L)	LN Concentration
4/13/2000	14	2.64
10/5/2000	18	2.89
4/23/2001	10	2.30
10/4/2001	14	2.64
4/1/2002	10	2.30
10/19/2002	15	2.71
4/16/2003	11	2.40
10/29/2003	15	2.71
4/1/2004	12	2.48
10/1/2004	13	2.56
4/8/2005	10	2.30
10/20/2005	12	2.48
4/20/2006	10	2.30
10/25/2006	14	2.64
4/13/2007	9	2.20
10/19/2007	12	2.48
4/11/2008	8	2.08
10/17/2008	14	2.64
4/30/2009	7	1.95
6/24/2009	8	2.08
10/27/2009	7	1.95
5/19/2010	7	1.95
10/28/2010	8	2.08
6/9/2011	7	1.95
12/1/2011	8	2.08



Notes:

- ND taken at reporting limit/reported value
- Qualified data converted to reported value

Data quality	
Total # of data points used in regression	25
# of nondetects	0
% of data as detects	100

Results		
Coefficient of Determination (R ²) =	0.5490	
p-Value =	2.27E-05	
Attenuation Rate in Groundwater (K) =	0.0002	days ⁻¹
Attenuation Rate in Groundwater at 90% confidence (K) =	0.0001	days ⁻¹
Chemical Half Life in Groundwater (t _{1/2}) =	4.25E+03	days

Date Screening Level Reached	
Screening Level	5
LN Screening Level	1.6
Intercept	8.674
Slope	-0.0002
Date to Screening Level	8/28/2018

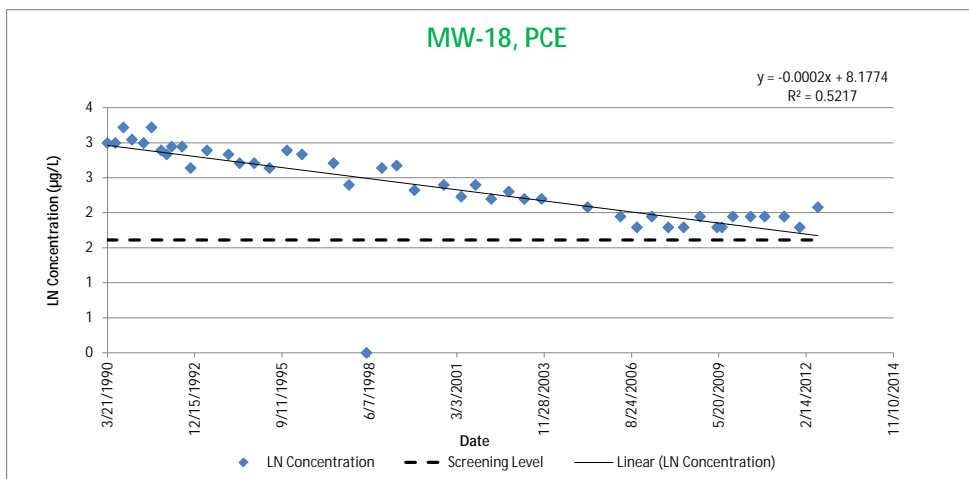
Abbreviations and Notes

ug/l = micrograms per liter
 LN = Natural Logarithm

Sample Information
 Sample Location
 Constituent

MW-18
 PCE

Sample Date	Concentration (ug/L)	LN Concentration
3/21/1990	20	3.00
6/19/1990	20	3.00
9/20/1990	25	3.22
12/28/1990	21	3.04
5/10/1991	20	3.00
8/8/1991	25	3.22
11/27/1991	18	2.89
1/29/1992	17	2.83
3/26/1992	19	2.94
7/23/1992	19	2.94
10/28/1992	14	2.64
5/4/1993	18	2.89
1/5/1994	17	2.83
5/13/1994	15	2.71
10/27/1994	15	2.71
4/19/1995	14	2.64
11/6/1995	18	2.89
4/26/1996	17	2.83
4/22/1997	15	2.71
10/16/1997	11	2.40
5/4/1998	1	0.00
10/27/1998	14	2.64
4/15/1999	14.5	2.67
11/4/1999	10.2	2.32
10/5/2000	11	2.40
4/23/2001	9.3	2.23
10/4/2001	11	2.40
4/1/2002	9	2.20
10/19/2002	10	2.30
4/16/2003	9	2.20
10/29/2003	9	2.20
4/8/2005	8	2.08
4/20/2006	7	1.95
10/25/2006	6	1.79
4/13/2007	7	1.95
10/19/2007	6	1.79
4/11/2008	6	1.79
10/17/2008	7	1.95
4/30/2009	6	1.79
6/24/2009	6	1.79
10/27/2009	7	1.95
5/18/2010	7	1.95
10/27/2010	7	1.95
6/7/2011	7	1.95
12/2/2011	6	1.79
6/27/2012	8	2.08



Notes:

ND taken at reporting limit/reported value
 Qualified data converted to reported value

Data quality

Total # of data points used in regression	46
# of nondetects	1
% of data as detects	98

Results

Coefficient of Determination (R^2) =	0.5217
p-Value =	1.46E-08
Attenuation Rate in Groundwater (K) =	0.0002 days ⁻¹
Attenuation Rate in Groundwater at 90% confidence (K) =	0.0001 days ⁻¹
Chemical Half Life in Groundwater ($t_{1/2}$) =	4.38E+03 days

Date Screening Level Reached

Screening Level	5
LN Screening Level	1.6
Intercept	8.177
Slope	-0.0002
Date to Screening Level	8/15/2013

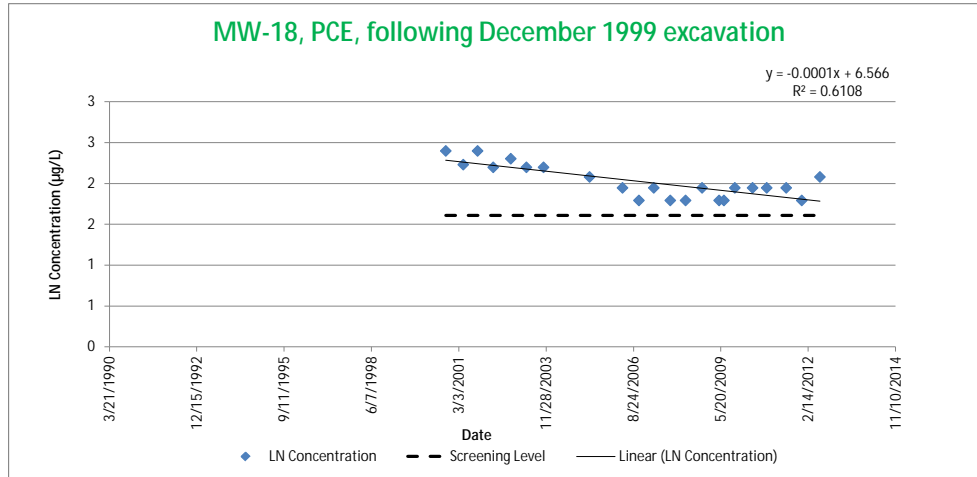
Abbreviations and Notes

ug/l = micrograms per liter
 LN = Natural Logarithm

Sample Information
 Sample Location
 Constituent

MW-18
 PCE

Sample Date	Concentration (ug/L)	LN Concentration
10/5/2000	11	2.40
4/23/2001	9.3	2.23
10/4/2001	11	2.40
4/1/2002	9	2.20
10/19/2002	10	2.30
4/16/2003	9	2.20
10/29/2003	9	2.20
4/8/2005	8	2.08
4/20/2006	7	1.95
10/25/2006	6	1.79
4/13/2007	7	1.95
10/19/2007	6	1.79
4/11/2008	6	1.79
10/17/2008	7	1.95
4/30/2009	6	1.79
6/24/2009	6	1.79
10/27/2009	7	1.95
5/18/2010	7	1.95
10/27/2010	7	1.95
6/7/2011	7	1.95
12/2/2011	6	1.79
6/27/2012	8	2.08



Notes:

- ND taken at reporting limit/reported value
- Qualified data converted to reported value

Data quality	
Total # of data points used in regression	22
# of nondetects	0
% of data as detects	100

Results		
Coefficient of Determination (R^2) =	0.6108	
p-Value =	1.75E-05	
Attenuation Rate in Groundwater (K) =	0.0001	days ⁻¹
Attenuation Rate in Groundwater at 90% confidence (K) =	0.0001	days ⁻¹
Chemical Half Life in Groundwater ($t_{1/2}$) =	5.95E+03	days

Date Screening Level Reached	
Screening Level	5
LN Screening Level	1.6
Intercept	6.566
Slope	-0.0001
Date to Screening Level	8/2/2016

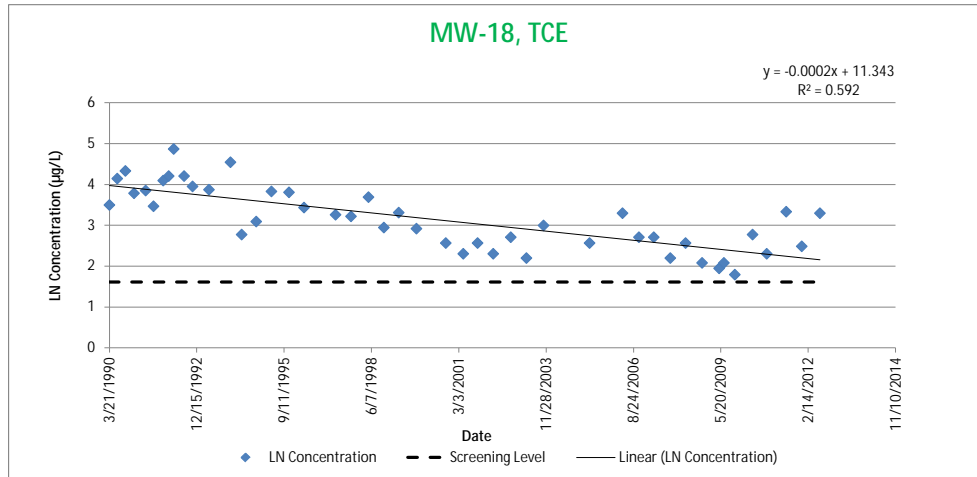
Abbreviations and Notes

ug/l = micrograms per liter
 LN = Natural Logarithm

Sample Information
 Sample Location
 Constituent

MW-18
 TCE

Sample Date	Concentration (ug/L)	LN Concentration
3/21/1990	33	3.50
6/19/1990	63	4.14
9/20/1990	76	4.33
12/28/1990	44	3.78
5/10/1991	47	3.85
8/8/1991	32	3.47
11/27/1991	60	4.09
1/29/1992	67	4.20
3/26/1992	130	4.87
7/23/1992	67	4.20
10/28/1992	52	3.95
5/4/1993	48	3.87
1/5/1994	94	4.54
5/13/1994	16	2.77
10/27/1994	22	3.09
4/19/1995	46	3.83
11/6/1995	45	3.81
4/26/1996	31	3.43
4/22/1997	26	3.26
10/16/1997	25	3.22
5/4/1998	40	3.69
10/27/1998	19	2.94
4/15/1999	27.4	3.31
11/4/1999	18.5	2.92
10/5/2000	13	2.56
4/23/2001	10	2.30
10/4/2001	13	2.56
4/1/2002	10	2.30
10/19/2002	15	2.71
4/16/2003	9	2.20
10/29/2003	20	3.00
4/8/2005	13	2.56
4/20/2006	27	3.30
10/25/2006	15	2.71
4/13/2007	15	2.71
10/19/2007	9	2.20
4/11/2008	13	2.56
10/17/2008	8	2.08
4/30/2009	7	1.95
6/24/2009	8	2.08
10/27/2009	6	1.79
5/18/2010	16	2.77
10/27/2010	10	2.30
6/7/2011	28	3.33
12/2/2011	12	2.48
6/27/2012	27	3.30



Notes:

- ND taken at reporting limit/reported value
- Qualified data converted to reported value

Data quality	
Total # of data points used in regression	46
# of nondetects	0
% of data as detects	100

Results		
Coefficient of Determination (R^2) =	0.5920	
p-Value =	4.17E-10	
Attenuation Rate in Groundwater (K) =	0.0002	days ⁻¹
Attenuation Rate in Groundwater at 90% confidence (K) =	0.0002	days ⁻¹
Chemical Half Life in Groundwater ($t_{1/2}$) =	3.10E+03	days

Date Screening Level Reached	
Screening Level	5
LN Screening Level	1.6
Intercept	11.343
Slope	-0.0002
Date to Screening Level	2/27/2019

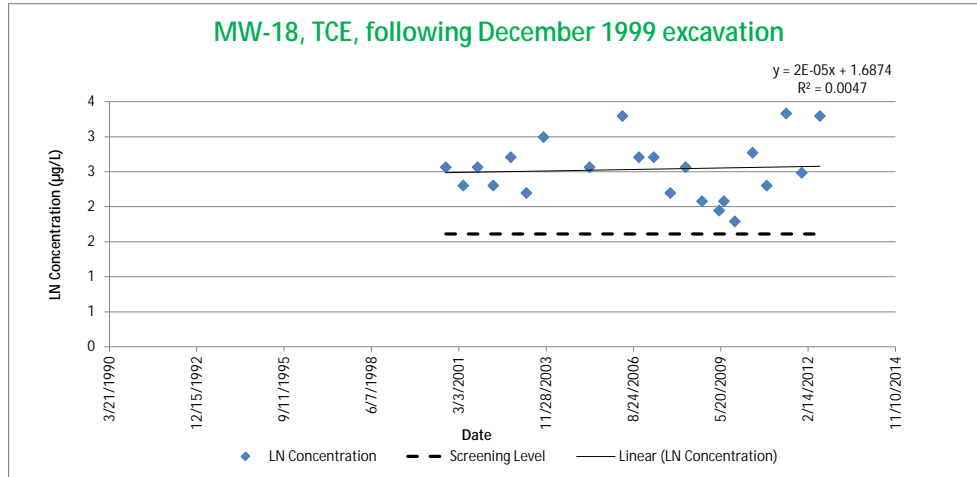
Abbreviations and Notes

ug/l = micrograms per liter
 LN = Natural Logarithm

Sample Information
 Sample Location
 Constituent

MW-18
 TCE

Sample Date	Concentration (ug/L)	LN Concentration
10/5/2000	13	2.56
4/23/2001	10	2.30
10/4/2001	13	2.56
4/1/2002	10	2.30
10/19/2002	15	2.71
4/16/2003	9	2.20
10/29/2003	20	3.00
4/8/2005	13	2.56
4/20/2006	27	3.30
10/25/2006	15	2.71
4/13/2007	15	2.71
10/19/2007	9	2.20
4/11/2008	13	2.56
10/17/2008	8	2.08
4/30/2009	7	1.95
6/24/2009	8	2.08
10/27/2009	6	1.79
5/18/2010	16	2.77
10/27/2010	10	2.30
6/7/2011	28	3.33
12/2/2011	12	2.48
6/27/2012	27	3.30



Notes:

ND taken at reporting limit/reported value
 Qualified data converted to reported value

Data quality	
Total # of data points used in regression	22
# of nondetects	0
% of data as detects	100

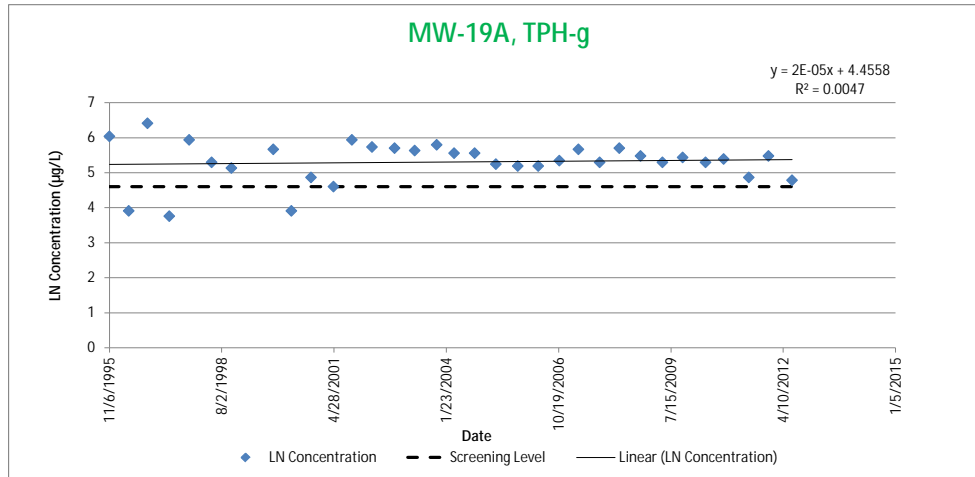
Results		
Coefficient of Determination (R ²) =	0.0047	
p-Value =	7.61E-01	
Attenuation Rate in Groundwater (K) =	0.0000	days ⁻¹
Attenuation Rate in Groundwater at 90% confidence (K) =	-0.0001	days ⁻¹
Chemical Half Life in Groundwater (t _{1/2}) =	NA	days

Date Screening Level Reached	
Screening Level	5
LN Screening Level	1.6
Intercept	1.687
Slope	0.0000
Date to Screening Level	NA

Abbreviations and Notes
 ug/l = micrograms per liter
 LN = Natural Logarithm

Sample Information
 Sample Location MW-19A
 Constituent TPH-g

Sample Date	Concentration (ug/L)	LN Concentration
11/6/1995	420	6.04
4/26/1996	50	3.91
10/10/1996	610	6.41
4/22/1997	43	3.76
10/16/1997	380	5.94
5/4/1998	200	5.30
10/27/1998	170	5.14
11/4/1999	290	5.67
4/13/2000	50	3.91
10/5/2000	130	4.87
4/23/2001	100	4.61
10/4/2001	380	5.94
4/1/2002	310	5.74
10/19/2002	300	5.70
4/16/2003	280	5.63
10/29/2003	330	5.80
4/1/2004	260	5.56
10/1/2004	260	5.56
38450	190	5.25
10/20/2005	180	5.19
4/20/2006	180	5.19
10/25/2006	210	5.35
4/13/2007	290	5.67
10/19/2007	200	5.30
4/11/2008	300	5.70
10/17/2008	240	5.48
4/30/2009	200	5.30
10/27/2009	230	5.44
5/19/2010	200	5.30
10/27/2010	220	5.39
6/8/2011	130	4.87
11/30/2011	240	5.48
6/27/2012	120	4.79

**Notes:**

ND taken at reporting limit/reported value
 Qualified data converted to reported value

Data quality

Total # of data points used in regression	33
# of nondetects	2
% of data as detects	94

Results

Coefficient of Determination (R^2) =	0.0047	
p-Value =	7.04E-01	
Attenuation Rate in Groundwater (K) =	0.0000	days ⁻¹
Attenuation Rate in Groundwater at 90% confidence (K) =	-0.0001	days ⁻¹
Chemical Half Life in Groundwater ($t_{1/2}$) =	NA	days

Date Screening Level Reached

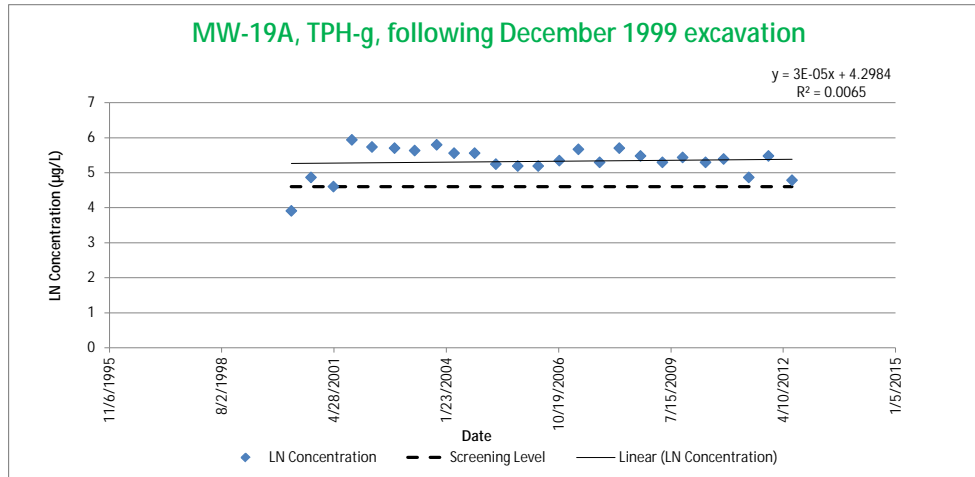
Screening Level	100
LN Screening Level	4.6
Intercept	4.456
Slope	0.0000
Date to Screening Level	NA

Abbreviations and Notes

ug/l = micrograms per liter
 LN = Natural Logarithm

Sample Information
 Sample Location MW-19A
 Constituent TPH-g

Sample Date	Concentration (ug/L)	LN Concentration
4/13/2000	50	3.91
10/5/2000	130	4.87
4/23/2001	100	4.61
10/4/2001	380	5.94
4/1/2002	310	5.74
10/19/2002	300	5.70
4/16/2003	280	5.63
10/29/2003	330	5.80
4/1/2004	260	5.56
10/1/2004	260	5.56
38450	190	5.25
10/20/2005	180	5.19
4/20/2006	180	5.19
10/25/2006	210	5.35
4/13/2007	290	5.67
10/19/2007	200	5.30
4/11/2008	300	5.70
10/17/2008	240	5.48
4/30/2009	200	5.30
10/27/2009	230	5.44
5/19/2010	200	5.30
10/27/2010	220	5.39
6/8/2011	130	4.87
11/30/2011	240	5.48
6/27/2012	120	4.79

**Notes:**

ND taken at reporting limit/reported value
 Qualified data converted to reported value

Data quality

Total # of data points used in regression	25
# of nondetects	1
% of data as detects	96

Results

Coefficient of Determination (R^2) =	0.0065	
p-Value =	7.01E-01	
Attenuation Rate in Groundwater (K) =	0.0000	days ⁻¹
Attenuation Rate in Groundwater at 90% confidence (K) =	-0.0001	days ⁻¹
Chemical Half Life in Groundwater ($t_{1/2}$) =	NA	days

Date Screening Level Reached

Screening Level	100
LN Screening Level	4.6
Intercept	4.298
Slope	0.0000
Date to Screening Level	NA

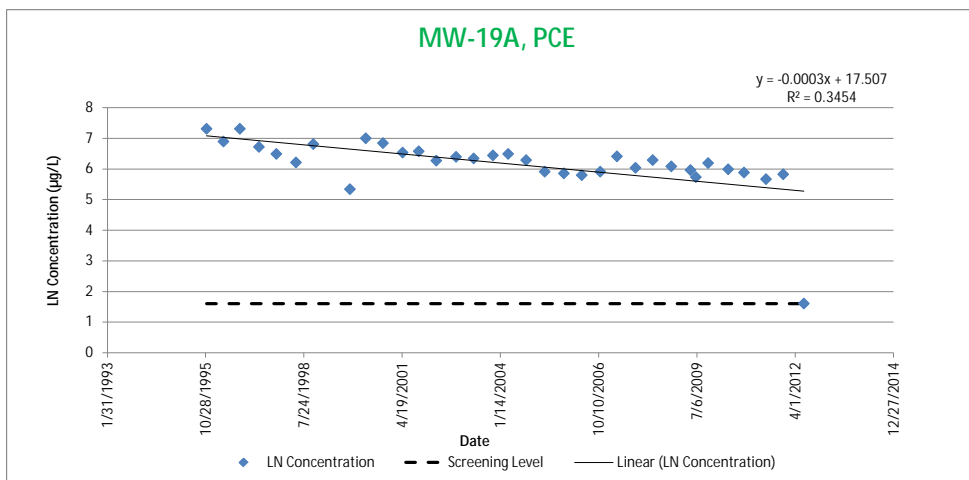
Abbreviations and Notes

ug/l = micrograms per liter
 LN = Natural Logarithm

Sample Information
 Sample Location
 Constituent

MW-19A
 PCE

Sample Date	Concentration (ug/L)	LN Concentration
11/6/1995	1500	7.31
4/26/1996	990	6.90
10/10/1996	1500	7.31
4/22/1997	830	6.72
10/16/1997	660	6.49
5/4/1998	500	6.21
10/27/1998	910	6.81
11/4/1999	209	5.34
4/13/2000	1100	7.00
10/5/2000	940	6.85
4/23/2001	690	6.54
10/4/2001	720	6.58
4/1/2002	530	6.27
10/19/2002	600	6.40
4/16/2003	570	6.35
10/29/2003	630	6.45
4/1/2004	660	6.49
10/1/2004	540	6.29
38450	370	5.91
10/20/2005	350	5.86
4/20/2006	330	5.80
10/25/2006	370	5.91
4/13/2007	610	6.41
10/19/2007	420	6.04
4/1/2008	540	6.29
10/17/2008	440	6.09
4/30/2009	390	5.97
6/24/2009	310	5.74
10/27/2009	490	6.19
5/19/2010	400	5.99
10/27/2010	360	5.89
6/8/2011	290	5.67
11/30/2011	340	5.83
6/27/2012	5	1.61



Notes:

- ND taken at reporting limit/reported value
- Qualified data converted to reported value

Data quality

Total # of data points used in regression	34
# of nondetects	1
% of data as detects	97

Results

Coefficient of Determination (R^2) =	0.3454
p-Value =	2.58E-04
Attenuation Rate in Groundwater (K) =	0.0003 days ⁻¹
Attenuation Rate in Groundwater at 90% confidence (K) =	0.0002 days ⁻¹
Chemical Half Life in Groundwater ($t_{1/2}$) =	2.33E+03 days

Date Screening Level Reached

Screening Level	5
LN Screening Level	1.6
Intercept	17.507
Slope	-0.0003
Date to Screening Level	3/30/2046

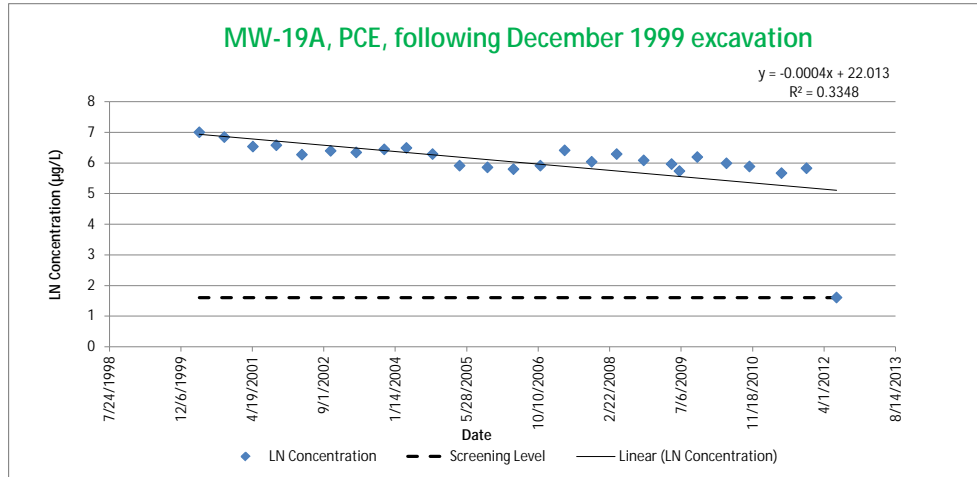
Abbreviations and Notes

ug/l = micrograms per liter
 LN = Natural Logarithm

Sample Information
 Sample Location
 Constituent

MW-19A
 PCE

Sample Date	Concentration (ug/L)	LN Concentration
4/13/2000	1100	7.00
10/5/2000	940	6.85
4/23/2001	690	6.54
10/4/2001	720	6.58
4/1/2002	530	6.27
10/19/2002	600	6.40
4/16/2003	570	6.35
10/29/2003	630	6.45
4/1/2004	660	6.49
10/1/2004	540	6.29
4/8/2005	370	5.91
10/20/2005	350	5.86
4/20/2006	330	5.80
10/25/2006	370	5.91
4/13/2007	610	6.41
10/19/2007	420	6.04
4/11/2008	540	6.29
10/17/2008	440	6.09
4/30/2009	390	5.97
6/24/2009	310	5.74
10/27/2009	490	6.19
5/19/2010	400	5.99
10/27/2010	360	5.89
6/8/2011	290	5.67
11/30/2011	340	5.83
6/27/2012	5	1.61



Notes:

- ND taken at reporting limit/reported value
- Qualified data converted to reported value

Data quality	
Total # of data points used in regression	26
# of nondetects	1
% of data as detects	96

Results	
Coefficient of Determination (R^2) =	0.3348
p-Value =	1.96E-03
Attenuation Rate in Groundwater (K) =	0.0004 days ⁻¹
Attenuation Rate in Groundwater at 90% confidence (K) =	0.0003 days ⁻¹
Chemical Half Life in Groundwater ($t_{1/2}$) =	1.68E+03 days

Date Screening Level Reached	
Screening Level	5
LN Screening Level	1.6
Intercept	22.013
Slope	-0.0004
Date to Screening Level	10/1/2035

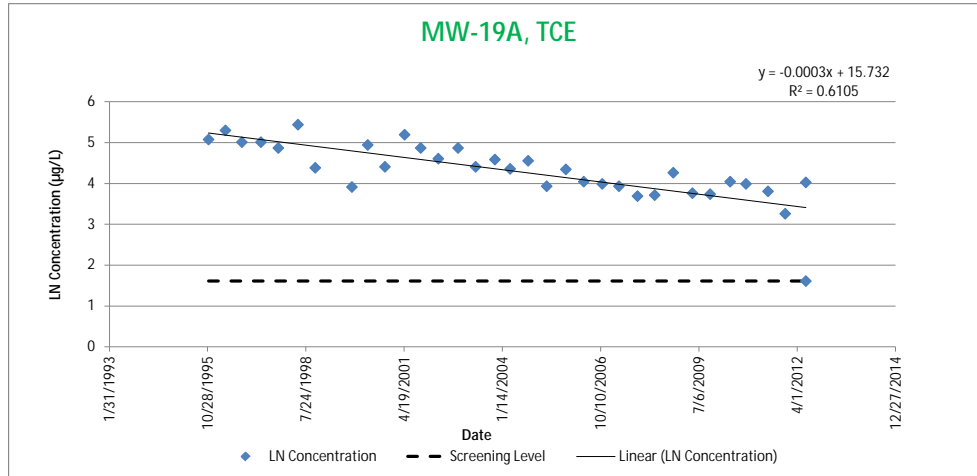
Abbreviations and Notes

ug/l = micrograms per liter
 LN = Natural Logarithm

Sample Information
 Sample Location
 Constituent

MW-19A
 TCE

Sample Date	Concentration (ug/L)	LN Concentration
11/6/1995	160	5.08
4/26/1996	200	5.30
10/10/1996	150	5.01
4/22/1997	150	5.01
10/16/1997	130	4.87
5/4/1998	230	5.44
10/27/1998	80	4.38
11/4/1999	50	3.91
4/13/2000	140	4.94
10/5/2000	82	4.41
4/23/2001	180	5.19
10/4/2001	130	4.87
4/1/2002	100	4.61
10/19/2002	130	4.87
4/16/2003	82	4.41
10/29/2003	98	4.58
4/1/2004	78	4.36
10/1/2004	95	4.55
38450	51	3.93
10/20/2005	77	4.34
4/20/2006	57	4.04
10/25/2006	54	3.99
4/13/2007	51	3.93
10/19/2007	40	3.69
4/11/2008	41	3.71
10/17/2008	71	4.26
4/30/2009	43	3.76
10/27/2009	42	3.74
5/19/2010	57	4.04
10/27/2010	54	3.99
6/8/2011	45	3.81
11/30/2011	26	3.26
6/27/2012	56	4.03
6/27/2012	5	1.61



Notes:

- ND taken at reporting limit/reported value
- Qualified data converted to reported value

Data quality	
Total # of data points used in regression	34
# of nondetects	2
% of data as detects	94

Results	
Coefficient of Determination (R^2) =	0.6105
p-Value =	4.93E-08
Attenuation Rate in Groundwater (K) =	0.0003 days ⁻¹
Attenuation Rate in Groundwater at 90% confidence (K) =	0.0002 days ⁻¹
Chemical Half Life in Groundwater ($t_{1/2}$) =	2.31E+03 days

Date Screening Level Reached	
Screening Level	5
LN Screening Level	1.6
Intercept	15.732
Slope	-0.0003
Date to Screening Level	12/8/2028

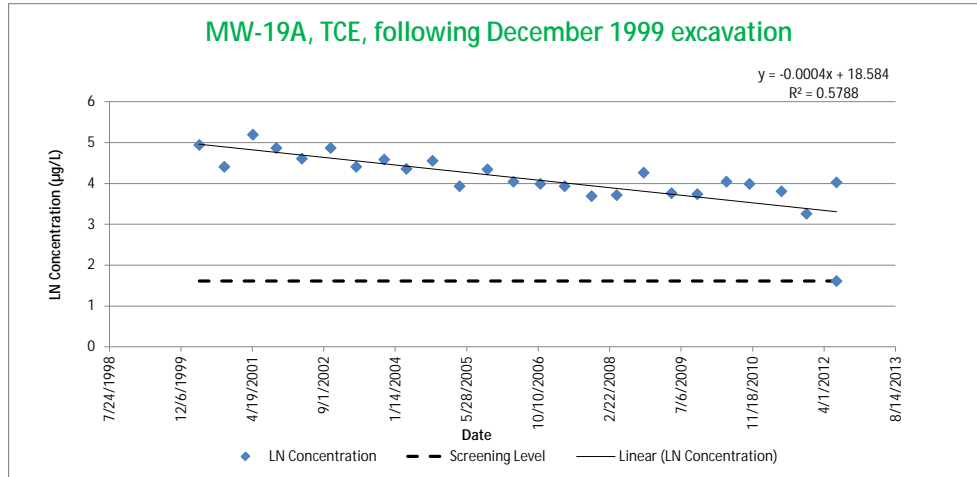
Abbreviations and Notes

ug/l = micrograms per liter
 LN = Natural Logarithm

Sample Information
 Sample Location
 Constituent

MW-19A
 TCE

Sample Date	Concentration (ug/L)	LN Concentration
4/13/2000	140	4.94
10/5/2000	82	4.41
4/23/2001	180	5.19
10/4/2001	130	4.87
4/1/2002	100	4.61
10/19/2002	130	4.87
4/16/2003	82	4.41
10/29/2003	98	4.58
4/1/2004	78	4.36
10/1/2004	95	4.55
38450	51	3.93
10/20/2005	77	4.34
4/20/2006	57	4.04
10/25/2006	54	3.99
4/13/2007	51	3.93
10/19/2007	40	3.69
4/11/2008	41	3.71
10/17/2008	71	4.26
4/30/2009	43	3.76
10/27/2009	42	3.74
5/19/2010	57	4.04
10/27/2010	54	3.99
6/8/2011	45	3.81
11/30/2011	26	3.26
6/27/2012	56	4.03
6/27/2012	5	1.61



Notes:

- ND taken at reporting limit/reported value
- Qualified data converted to reported value

Data quality	
Total # of data points used in regression	26
# of nondetects	1
% of data as detects	96

Results	
Coefficient of Determination (R^2) =	0.5788
p-Value =	6.43E-06
Attenuation Rate in Groundwater (K) =	0.0004 days ⁻¹
Attenuation Rate in Groundwater at 90% confidence (K) =	0.0003 days ⁻¹
Chemical Half Life in Groundwater ($t_{1/2}$) =	1.86E+03 days

Date Screening Level Reached	
Screening Level	5
LN Screening Level	1.6
Intercept	18.584
Slope	-0.0004
Date to Screening Level	12/22/2024

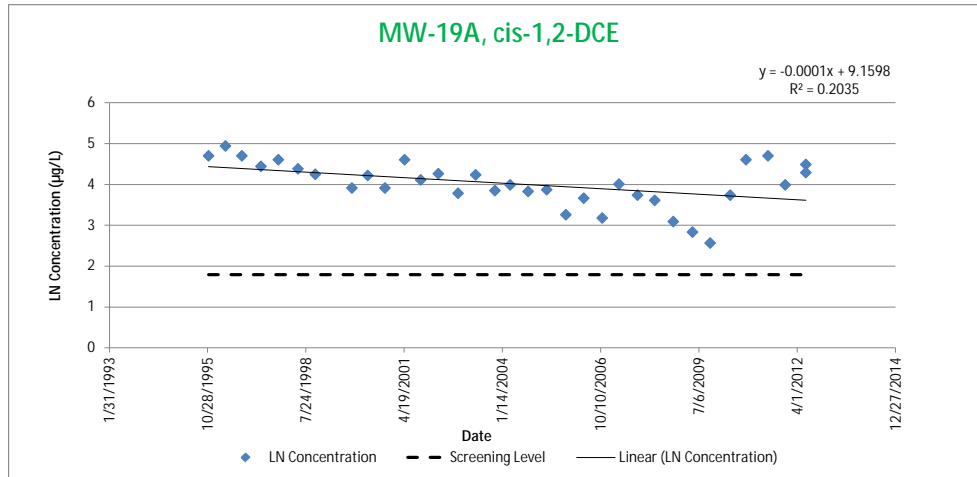
Abbreviations and Notes

ug/l = micrograms per liter
 LN = Natural Logarithm

Sample Information
 Sample Location
 Constituent

MW-19A
 cis-1,2_DCE

Sample Date	Concentration (ug/L)	LN Concentration
11/6/1995	110	4.70
4/26/1996	140	4.94
10/10/1996	110	4.70
4/22/1997	85	4.44
10/16/1997	100	4.61
5/4/1998	80	4.38
10/27/1998	70	4.25
11/4/1999	50	3.91
4/13/2000	68	4.22
10/5/2000	50	3.91
4/23/2001	100	4.61
10/4/2001	61	4.11
4/1/2002	71	4.26
10/19/2002	44	3.78
4/16/2003	69	4.23
10/29/2003	47	3.85
4/1/2004	54	3.99
10/1/2004	46	3.83
38450	48	3.87
10/20/2005	26	3.26
4/20/2006	39	3.66
10/25/2006	24	3.18
4/13/2007	55	4.01
10/19/2007	42	3.74
4/11/2008	37	3.61
10/17/2008	22	3.09
4/30/2009	17	2.83
10/27/2009	13	2.56
5/19/2010	42	3.74
10/27/2010	100	4.61
6/8/2011	110	4.70
11/30/2011	54	3.99
6/27/2012	89	4.49
6/27/2012	73	4.29



Notes:

- ND taken at reporting limit/reported value
- Qualified data converted to reported value

Data quality	
Total # of data points used in regression	34
# of nondetects	1
% of data as detects	97

Results		
Coefficient of Determination (R^2) =	0.2035	
p-Value =	7.41E-03	
Attenuation Rate in Groundwater (K) =	0.0001	days ⁻¹
Attenuation Rate in Groundwater at 90% confidence (K) =	0.0001	days ⁻¹
Chemical Half Life in Groundwater ($t_{1/2}$) =	5.13E+03	days

Date Screening Level Reached	
Screening Level	6
LN Screening Level	1.8
Intercept	9.160
Slope	-0.0001
Date to Screening Level	6/16/2049

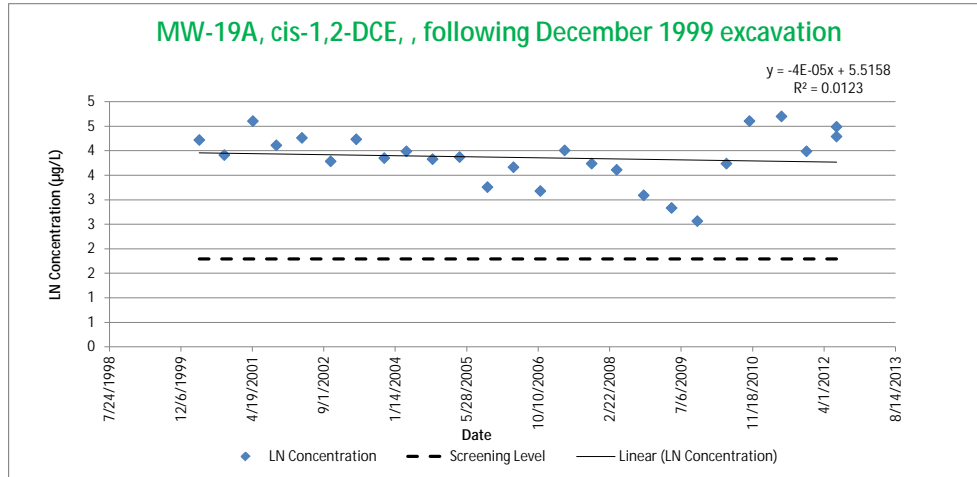
Abbreviations and Notes

ug/l = micrograms per liter
 LN = Natural Logarithm

Sample Information
 Sample Location
 Constituent

MW-19A
 cis-1,2_DCE

Data		
Sample Date	Concentration (ug/L)	LN Concentration
4/13/2000	68	4.22
10/5/2000	50	3.91
4/23/2001	100	4.61
10/4/2001	61	4.11
4/1/2002	71	4.26
10/19/2002	44	3.78
4/16/2003	69	4.23
10/29/2003	47	3.85
4/1/2004	54	3.99
10/1/2004	46	3.83
4/8/2005	48	3.87
10/20/2005	26	3.26
4/20/2006	39	3.66
10/25/2006	24	3.18
4/13/2007	55	4.01
10/19/2007	42	3.74
4/11/2008	37	3.61
10/17/2008	22	3.09
39933	17	2.83
10/27/2009	13	2.56
5/19/2010	42	3.74
10/27/2010	100	4.61
6/8/2011	110	4.70
11/30/2011	54	3.99
6/27/2012	89	4.49
6/27/2012	73	4.29



Notes:

- ND taken at reporting limit/reported value
- Qualified data converted to reported value

Data quality	
Total # of data points used in regression	26
# of nondetects	1
% of data as detects	96

Results		
Coefficient of Determination (R^2) =	0.0123	
p-Value =	5.90E-01	
Attenuation Rate in Groundwater (K) =	0.0000	days ⁻¹
Attenuation Rate in Groundwater at 90% confidence (K) =	-0.0001	days ⁻¹
Chemical Half Life in Groundwater ($t_{1/2}$) =	1.63E+04	days

Date Screening Level Reached	
Screening Level	6
LN Screening Level	1.8
Intercept	5.516
Slope	0.0000
Date to Screening Level	NA

Abbreviations and Notes

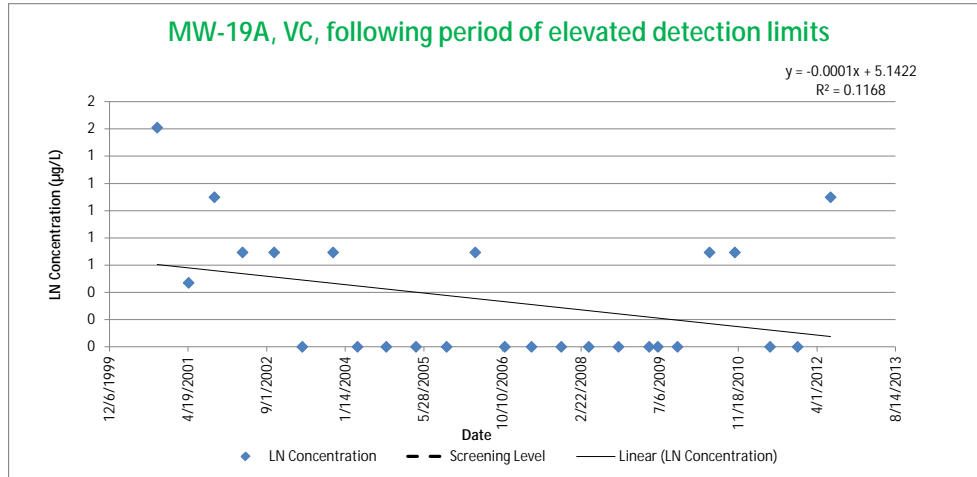
ug/l = micrograms per liter
 LN = Natural Logarithm

Sample Information
 Sample Location
 Constituent

MW-19A
 VC

1

Sample Date	Concentration (ug/L)	LN Concentration
10/5/2000	5	1.61
4/23/2001	1.6	0.47
10/4/2001	3	1.10
4/1/2002	2	0.69
10/19/2002	2	0.69
4/16/2003	1	0.00
10/29/2003	2	0.69
4/1/2004	1	0.00
10/1/2004	1	0.00
4/8/2005	1	0.00
10/20/2005	1	0.00
4/20/2006	2	0.69
10/25/2006	1	0.00
4/13/2007	1	0.00
10/19/2007	1	0.00
4/11/2008	1	0.00
10/17/2008	1	0.00
4/30/2009	1	0.00
6/24/2009	1	0.00
10/27/2009	1	0.00
5/19/2010	2	0.69
10/27/2010	2	0.69
6/8/2011	1	0.00
11/30/2011	1	0.00
6/27/2012	3	1.10



Notes:

- ND taken at reporting limit/reported value
- Qualified data converted to reported value

Data quality	
Total # of data points used in regression	25
# of nondetects	12
% of data as detects	52

Less than 75% data above reporting limits.

Results

Coefficient of Determination (R ²) =	0.1168
p-Value =	9.45E-02
Attenuation Rate in Groundwater (K) =	0.0001 days ⁻¹
Attenuation Rate in Groundwater at 90% confidence (K) =	0.0000 days ⁻¹
Chemical Half Life in Groundwater (t _{1/2}) =	5.62E+03 days

Date Screening Level Reached

Screening Level	0.5
LN Screening Level	-0.7
Intercept	5.142
Slope	-0.0001
Date to Screening Level	NA

Abbreviations and Notes

ug/l = micrograms per liter
 LN = Natural Logarithm