ExxonMobil Environmental Services Company

4096 Piedmont Avenue #194 Oakland, California 94611 510 547 8196 Telephone 510 547 8706 Facsimile Jennifer C. Sedlachek Project Manager

RECEIVED

8:31 am, Dec 06, 2011

Alameda County Environmental Health

December 5, 2011



Ms. Barbara Jakub Alameda County Health Care Services Agency Department of Environmental Health 1131 Harbor Bay Parkway, Room 250 Alameda, California 94502-6577

RE: Former Exxon RAS #70234/3450 35th Avenue, Oakland, California.

Dear Ms. Jakub:

Attached for your review and comment is a copy of the letter report entitled *Work Plan for Well Installation and Feasibility Testing*, dated December 5, 2011, for the above-referenced site. The report was prepared by Cardno ERI of Petaluma, California, and details proposed activities for the subject site.

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

If you have any questions or comments, please contact me at 510.547.8196.

Sincerely,

Jennifer C. Sedlachek Project Manager

ERI's Work Plan for Well Installation and Feasibility Testing, dated December 5, 2011

cc: w/

Attachment:

w/ attachment

& Sedbulk

Mr. Shay Wideman, Valero Companies, Environmental Liability Management

w/o attachment

Ms. Janice A. Jacobson, Cardno ERI



December 5, 2011 Cardno ERI 247605.W04

Ms. Jennifer C. Sedlachek
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SUBJECT

Work Plan for Well Installation and Feasibility Testing

Former Exxon Service Station 70234 3450 35th Avenue, Oakland, California

Alameda Case RO#2515

Ms. Sedlachek:

At the request of ExxonMobil Environmental Services (EMES), on behalf of Exxon Mobil Corporation, Cardno ERI prepared this work plan for installing a groundwater recovery well and conducting feasibility testing including a step-drawdown and a constant rate groundwater pumping test. The purpose of the work is to observe aquifer characteristics and to assess the feasibility of groundwater pump and treat as a remediation strategy for dissolved-phase petroleum hydrocarbon concentrations in groundwater underlying the site.

SITE DESCRIPTION

Former Exxon Service Station 70234 is located at 3450 35th Avenue, on the eastern corner of the intersection of 35th Avenue and Quigley Street, in Oakland, California (Plate 1). The surrounding areas consist of residential and commercial properties. An active ConocoPhillips 76 Service Station (ConocoPhillips) is located southwest of the site directly across Quigley Street (Plate 2).

The subject site is a former Exxon-branded service station, which was sold to Valero Energy Corporation

(Valero) in 2000 and decommissioned with the removal of the underground fueling facilities in 2002 (TRC, 2002). The station building and canopy remain on site; however, the property is vacant and fenced, and the property redevelopment plans are not known at this time. The former UST cavity is filled with gravel and its surface remains unfinished.

GEOLOGY AND HYDROGEOLOGY

The site lies at an approximate elevation of 195 feet above msl, and the local topography slopes toward the southwest. The site is located along the eastern margin of the San Francisco Bay within the East Bay Plain (Hickenbottom and Muir, 1988). The surficial deposits in the site vicinity are mapped as Holocene and Pleistocene alluvial fan and fluvial deposits (Graymer, 2000). The site is located approximately 650 feet southeast of Peralta Creek. The active northwest trending Hayward fault is located approximately ½ mile northeast of the site.

The East Bay Plain is regionally divided into two major groundwater basins: the San Pablo and the San Francisco Basin. These basins are tectonic depressions that are filled primarily with a sequence of coalescing alluvial fans. The San Francisco Basin is further divided into seven sub-areas. The site is located in the Oakland Sub-Area, which is filled primarily by alluvial deposits that range from 300 to 700 feet thick with no well-defined aquitards (CRWQCB, 1999). Under natural conditions, the direction of groundwater flow in the East Bay Plain is east to west.

The site is located approximately 2 miles northeast of the Oakland Estuary tidal canal which connects to San Leandro Bay to the south and the Oakland Inner Harbor to the west, which connects to the San Francisco Bay. Groundwater flow direction is predominantly to the southwest towards the basin, consistent with site data. Groundwater recharge in the shallow aquifer occurs by infiltration from precipitation, irrigation, and stream flow.

Past assessment activities indicate that the soil beneath the site consists of clayey sand and sandy clay with varying amounts of silt and gravel to 45 feet bgs, the maximum depth investigated (ERI, 2009). Free groundwater occurs in a sandy gravel layer from approximately 37 to 40 feet bgs. Perched water is present at approximately 15 feet bgs in the former UST cavity, which remains unpaved and filled with coarse gravel fill material. During the March 27, 2011 groundwater monitoring and sampling event, the DTW in the wells ranged from 27.07 to 31.65 feet, and the groundwater flow direction was to the southwest with a horizontal gradient of approximately 0.020 (Plate 3).

PREVIOUS WORK

Cumulative groundwater monitoring analytical results is summarized on Tables 1A and 1B. Well construction details are presented on Table 2. Cumulative soil analytical results are summarized in Tables 3A and 3B.

Fueling System Activities

In 1991, three 8,000-gallon gasoline USTs were excavated and removed from the site and replaced with three 12,000-gallon USTs (IT, 1992). In 2002, the service station was abandoned and the three 12,000-gallon USTs and associated product piping were excavated and removed from the site. The former UST cavity and product line trenches were backfilled with gravel (TRC, 2002).

Site Assessment Activities

Multiple phases of assessment were conducted from 1986 to 2000 (prior to the initial closing of the environmental case at the site), including the advancement of soil borings B1 through B10, EB1, EB2, SB1, and SB2 and the installation of groundwater monitoring wells MW1 through MW3 (HLA, 1988; Alton, 1991; IT, 1992; EA, 1997). Groundwater monitoring wells MW1 through MW3 were destroyed in 2000 when the Alameda County Health Care Services Agency, Environmental Health Services (ACEH) closed the environmental case for the site (ERI, 2000).

The ACEH re-opened the environmental case for the site in March 2007 based on the discovery of dissolved-phase MTBE in groundwater samples collected from the UST cavity during its excavation and removal in June 2002 (TRC, 2002).

In November 2007, Cardno ERI advanced borings B11 through B18. Maximum dissolved-phase TPHg, benzene, and MTBE concentrations of 18,000 µg/L, 3,400 µg/L, and 12,000 µg/L, respectively, were reported in grab groundwater samples collected from boring B15 at the southeastern edge of the former UST cavity, at 38 feet bgs (Table 1A). Maximum residual adsorbed-phase hydrocarbons were located in vadose zone soil in boring B15 from 20 to 30 feet bgs (Tables 3A and 3B).

In March 2009, Cardno ERI advanced borings B19 through B21. Maximum dissolved-phase TPHg and MTBE concentrations of 4,400 μ g/L and 7,100 μ g/L, respectively, were reported in grab groundwater samples collected from boring B19 at the southwestern edge of the former UST cavity, at 35 feet bgs (Table 1A). Residual petroleum hydrocarbon concentrations were not reported in borings B19 through B21, with the exception of MTBE at 35.5 and 39.5 feet bgs in boring B19 (Tables 3A and 3B).

Groundwater Monitoring Activities

Groundwater monitoring and sampling was conducted quarterly at the site from 1992 to 1995 and once in 1999. Groundwater monitoring wells MW1 through MW3 were destroyed in 2000 when the ACEH closed the environmental case for the site (ERI, 2000). Groundwater monitoring and sampling of wells MW4 through MW9

has been ongoing since 2009. NAPL has not been observed. Maximum dissolved-phase concentrations have been reported in wells MW5 and MW6 located southeast and southwest, respectively, of the former USTs. The most recent sampling results for each well are shown on Plate 4.

PROPOSED WORK

The proposed work consists of installing of one recovery well (RW1) and performing a step-drawdown, a constant rate, and a multi-day pump test to see if groundwater pump and treat is a viable remedial strategy. The proposed well will be installed adjacent to monitoring wells MW5 and MW6, in the area of maximum dissolved-phase hydrocarbons, in the southwest corner of the site near the former USTs. The proposed well construction is shown on Plate 5. The proposed well location is shown on Plate 6.

The procedures for drilling, decontamination, well construction, and feasibility testing are described in the field protocol in Appendix A. Field work will be conducted under the advisement of a professional geologist, and in accordance with applicable regulatory guidelines and a site-specific health and safety plan.

Pre-Field Activities

Prior to field activities, Cardno ERI will obtain drilling permits from the ACEH, will notify Underground Service Alert (USA), will contract a private utility-locating company to locate underground utilities at the site, and will notify the property owner and the regulatory oversight agencies. Prior to drilling, the well location will be excavated with hand and/or air tools to a depth of 4 to 8 feet bgs in accordance with EMES subsurface clearance protocol.

Recovery Well Installation

Cardno ERI proposes to install recovery well RW1 in the southwest corner of the site near the former USTs. The proposed well will be drilled to approximately 40 feet bgs using 10-inch diameter hollow-stem augers. Soil samples will be collected every 5 feet to 25 feet bgs and continuously from 25 to 40 feet, the proposed screen interval. The well will be constructed using 4-inch continuous wrap stainless steel with 0.020-inch slots from approximately 25 to 40 feet bgs. A proposed well construction diagram is shown on Plate 5.

Laboratory Analyses

Select soil samples collected during well installation activities will be submitted for analysis to a California state-certified analytical laboratory. Samples will be analyzed for TPHg using EPA Method 8015B and BTEX, MTBE, 1,2-DCA, TAME, TBA, ETBE, and DIPE using EPA Method 8260B.

Well Development

Cardno ERI will develop well RW1 using surge and pump techniques prior to conducting feasibility testing in accordance with the well development protocol provided in Appendix A.

Survey

The proposed well will be surveyed in accordance with Assembly Bill 2886.

Feasibility Testing

Cardno ERI will conduct feasibility testing on recovery well RW1, including a step-drawdown test, a constant rate pumping test, and a multi-day pump test in accordance with the procedures outlined in Appendix A, using wells MW5 through MW8 as observation wells.

The tests will be performed using a mobile generator and pump. Pressure transducers, a water level indicator, and a flow gauge will be used to monitor system performance and influence. Transducers will be placed in wells MW5, MW7, MW8, and MW9 to monitor water levels. A step-drawdown test will be performed to find the sustainable pumping rate. A constant rate pumping test will be performed using well RW1 at the sustainable pumping rate observed during the step-drawdown test to determine aquifer characteristics. The constant rate pumping test will continue for approximately 24 hours. A multi-day pump test will follow the constant rate test and continue for approximately 72 hours to monitor dissolved-phase concentrations over time. Water samples will be taken at a minimum of the beginning and end of each testing period as well as every 12 hours during testing.

Waste Management Plan

The soil and groundwater generated during well installation activities will be temporarily stored on site in DOT-approved, 55-gallon drums. Water generated during the feasibility testing will be stored in an approximately 6,000-gallon tank. Soil cuttings will be transported to an EMES-approved facility for disposal. Water will be transported to Instrat, Inc., of Rio Vista, California, for disposal. Copies of the waste documentation for the disposal of soil and water will be included in the report.

Report Preparation

Cardno ERI will prepare a report describing the field activities outlined in this work plan. This report will include well installation procedures, results of feasibility testing, laboratory analytical results, conclusions, and recommendations.

LIMITATIONS

For any documents cited that were not generated by Cardno ERI, the data taken from those documents is used "as is" and is assumed to be accurate. Cardno ERI does not guarantee the accuracy of this data and makes no warranties for the referenced work performed nor the inferences or conclusions stated in these documents.

This document was prepared in accordance with generally accepted standards of environmental, geological, and engineering practices in California at the time of investigation. No soil engineering or geotechnical references are implied or should be inferred. The evaluation of the geologic conditions at the site for this investigation is made from a limited number of data points. Subsurface conditions may vary away from these data points.

Please contact Janice A. Jacobson, Cardno ERI's project manager for this site, at <u>janice.jacobson@cardno.com</u> or at (707) 766-2000 with any questions regarding this work plan.

Sincerely,

Jake Prowse Staff Geologist

for Cardno ERI 707 766 2000

CC:

Email: jake.prowse@cardno.com

David R. Daniels P.G. 8737

for Cardno ERI 707 766 2000

Email: david.daniels@cardno.com

Ms. Barbara Jakub, Alameda County Health Care Services Agency, Environmental Health Services, 1131 Harbor Bay Parkway, Suite 250, Alameda, California, 94502-6577

Mr. Shay Wideman, The Valero Companies, Environmental Liability Management, P.O. Box 696000, San Antonio, Texas, 78269

7 December 5, 2011 Cardno ERI 247605.W04 Former Exxon Service Station 70234, Oakland, California

Enclosures:

References

Acronym List

Plate 1	Site Vicinity Map
Plate 2	Generalized Site Plan
Plate 3	Groundwater Elevation Map
Plate 4	Select Groundwater Analytical Results
Plate 5	Recovery Well Detail
Plate 6	Proposed Well Location
Table 1A	Cumulative Groundwater Monitoring and Sampling Data
Table 1B	Additional Cumulative Groundwater Monitoring and Sampling Data
Table 2	Well Construction Details
Table 3A	Cumulative Soil Analytical Results
Table 3B	Additional Cumulative Soil Analytical Results

Appendix A Field Protocols

REFERENCES

Alton Geoscience (Alton). 1991. Boring logs B1 through B10.

California Regional Water Quality Control Board, San Francisco Bay Region, Groundwater Committee (CRWQCB). June 1999. East Bay Plain Groundwater Basin Beneficial Use Evaluation Report, Alameda and Contra Costa Counties, CA.

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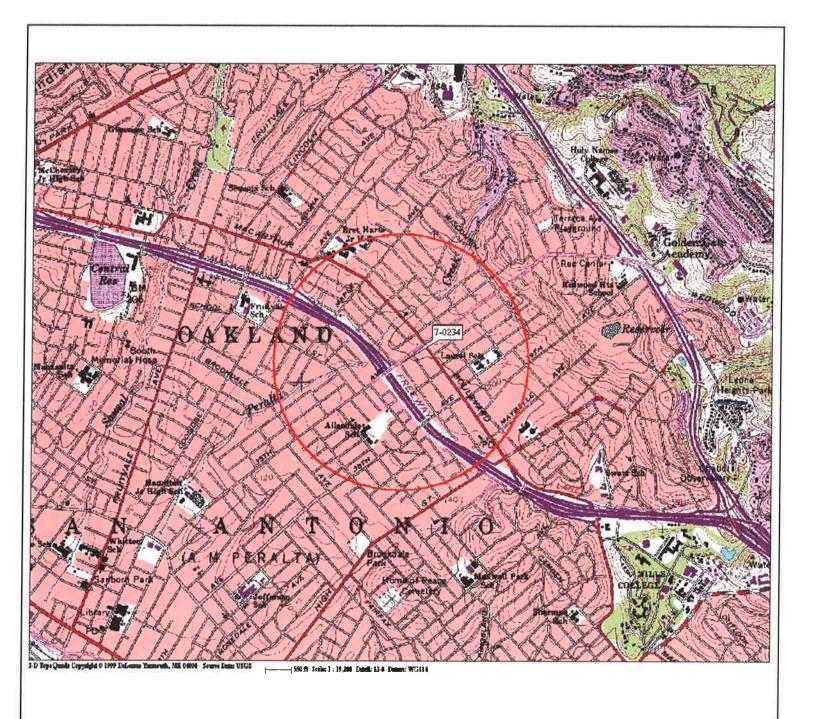
Hickenbottom, Kelvin and Muir, Kenneth S. June 1988. *Geohydrogeology and Groundwater Quality Overview of the East Bay Plain Area, Alameda County, CA*. Alameda County Flood Control and Water Conservation District. 83p.

International Technology Corporation (IT). September 1992. Site Assessment Report.

TRC. September 24, 2002. Report on Underground Storage Tank and Product Piping Removal, Valero Facility No. 3832, 3450 35th Avenue, Oakland, California. TRC Project No. 41-0412-01.

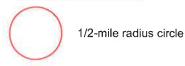
ACRONYM LIST

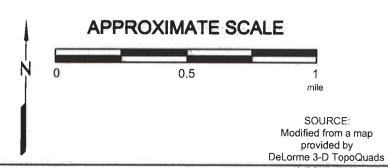
µg/L	Micrograms per liter	NEPA	National Environmental Policy Act
μs	Microsiemens	NGVD	National Geodetic Vertical Datum
1,2-DCA	1,2-dichloroethane	NPDES	National Pollutant Discharge Elimination System
acfm	Actual cubic feet per minute	O&M	Operations and Maintenance
AS	Air sparge	ORP	Oxidation-reduction potential
bgs	Below ground surface	OSHA	Occupational Safety and Health Administration
BTEX	Benzene, toluene, ethylbenzene, and total xylenes	OVA	Organic vapor analyzer
CEQA	California Environmental Quality Act	P&ID	Process & Instrumentation Diagram
cfm	Cubic feet per minute	PAH	Polycyclic aromatic hydrocarbon
COC	Chain of Custody	PCB	Polychlorinated biphenyl
CPT	Cone Penetration (Penetrometer) Test	PCE	Tetrachloroethene or perchloroethylene
DIPE	Di-isopropyl ether	PID	Photo-ionization detector
DO	Dissolved oxygen	PLC	Programmable logic control
DOT	Department of Transportation	POTW	Publicly owned treatment works
DPE	Dual-phase extraction	ppmv	Parts per million by volume
DTW	Depth to water	PQL	Practical quantitation limit
EDB	1,2-dibromoethane	psi	Pounds per square inch
EPA	Environmental Protection Agency	PVC	Polyvinyl chloride
ESL	Environmental screening level	QA/QC	Quality assurance/quality control
ETBE	Ethyl tertiary butyl ether	RBSL	Risk-based screening levels
FID	Flame-ionization detector	RCRA	Resource Conservation and Recovery Act
fpm	Feet per minute	RL	Reporting limit
GAC	Granular activated carbon	scfm	Standard cubic feet per minute
gpd	Gallons per day	SSTL	Site-specific target level
gpm	Gallons per minute	STLC	Soluble threshold limit concentration
GWPTS HVOC	Groundwater pump and treat system	SVE	Soil vapor extraction
J	Halogenated volatile organic compound	SVOC	Semivolatile organic compound
LEL	Estimated value between MDL and PQL (RL)	TAME	Tertiary amyl methyl ether
	Lower explosive limit	TBA	Tertiary butyl alcohol
LPC	Liquid-phase carbon	TCE	Trichloroethene
LRP LUFT	Liquid-ring pump	TOC	Top of well casing elevation; datum is msl
LUST	Leaking underground fuel tank	TOG	Total oil and grease
MCL	Leaking underground storage tank	TPHd	Total petroleum hydrocarbons as diesel
MDL	Maximum contaminant level	TPHg	Total petroleum hydrocarbons as gasoline
mg/kg	Method detection limit	TPHmo	Total petroleum hydrocarbons as motor oil
0 0	Milligrams per kilogram	TPHs	Total petroleum hydrocarbons as stoddard solvent
mg/L mg/m ³	Milligrams per liter	TRPH	Total recoverable petroleum hydrocarbons
MPE	Milligrams per cubic meter	UCL	Upper confidence level
MRL	Multi-phase extraction	USCS	Unified Soil Classification System
	Method reporting limit	USGS	United States Geologic Survey
msl	Mean sea level	UST	Underground storage tank
MTBE	Methyl tertiary butyl ether	VCP	Voluntary Cleanup Program
MTCA	Model Toxics Control Act	VOC	Volatile organic compound
NAI NAPL	Natural attenuation indicators	VPC	Vapor-phase carbon
IVACL	Non-aqueous phase liquid		



2476TOPO

EXPLANATION







SITE VICINITY MAP

FORMER EXXON SERVICE STATION 70234 3450 35th Avenue Oakland, California PROJECT NO.

2476

PLATE

1



APPROXIMATE SCALE 60

FN 247611 W04 GSP_SP

SOURCE: Modified from maps provided by MORROW SURVERING



GENERALIZED SITE PLAN

FORMER **EXXON SERVICE STATION 70234** 3450 35th Avenue Oakland, California

EXP	LANATION
MW9	
•	Groundwater Monitoring Well
MW3	
**	Destroyed Groundwater Monitoring Well
D04	· ·
B21	Soil Boring (ERI)
	Oon Bonng (LIN)

Soil Boring (GTI, 1986) EB2 Soil Boring (HLA, 1988) B10
Soil Boring (Alton, 1991)

+ Soil Sample Location (TRC, 2002)

S15 + Soil Sample Location (Alton, 1991)

Excavated Area

PLATE

PROJECT NO.

2476

2

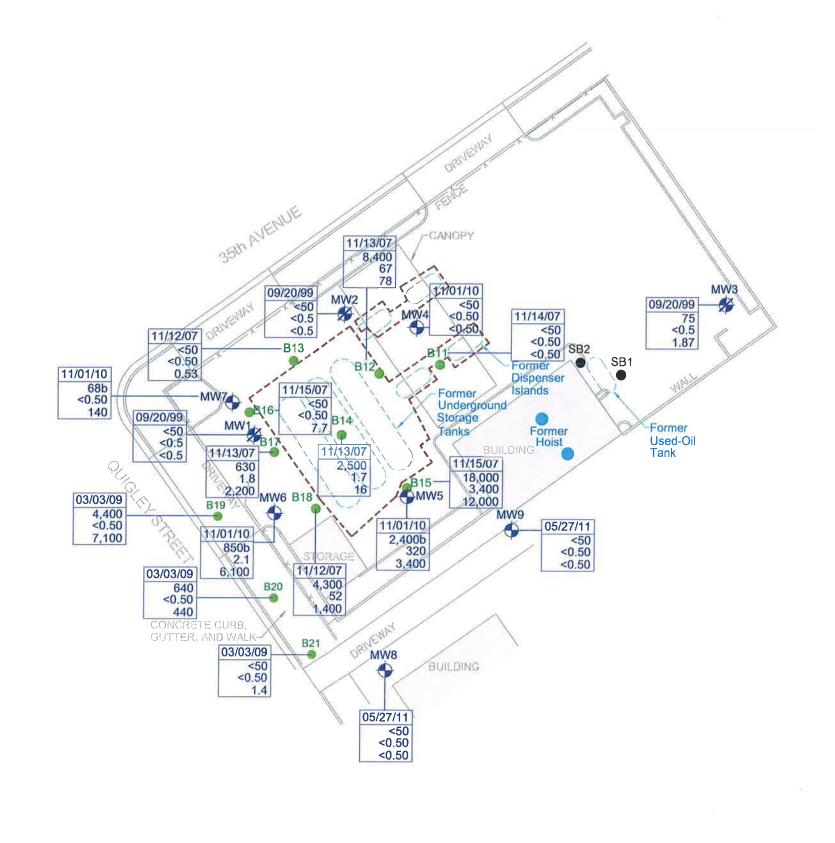
Sample Date

Total Petroleum Hydrocarbons as gasoline

Benzen

Methyl Tertiary Butyl Ether

- Less Than the Stated Laboratory Reporting Limit
- ug/L Micrograms per Liter
- b Hydrocarbon pattern does not match the requested fuel.



APPROXIMATE SCALE
0 30 60

FN 247611 W04 GW ANALYTICAL_SP

SOURCE: Modified from maps provided by MORROW SURVERING

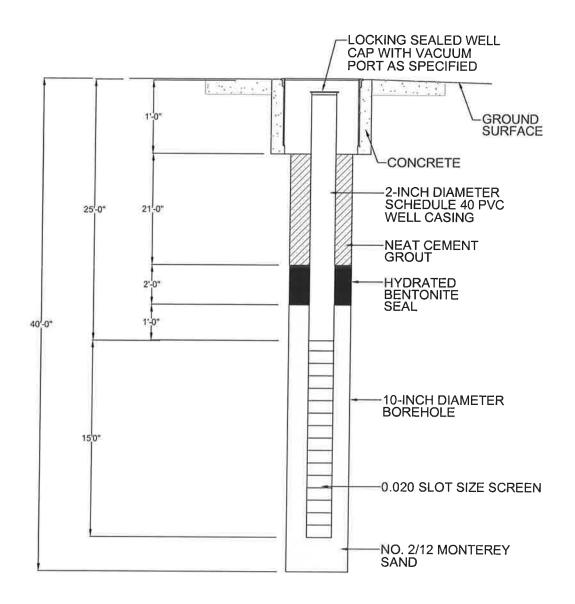


SELECT GROUNDWATER ANALYTICAL RESULTS
FORMER
EXXON SERVICE STATION 70234
3450 35th Avenue
Oakland, California

EXPL	ANATION	SB2			
IW9			Soil Boring (GTI, 1986)		
•	Groundwater Monitoring Well				
/W3	Destroyed Groundwater Monitoring Well				
21				r	
	Soil Boring (ERI)			i	Excavated Area

PROJECT NO. 2476

PLATE 4



NOT TO SCALE

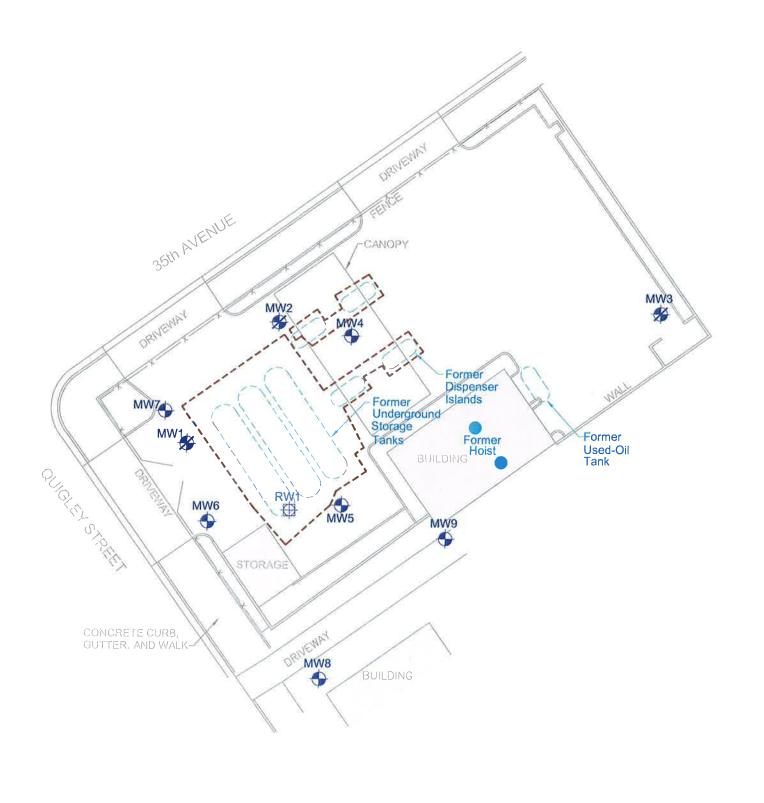
FN 2476 11 W04 RECOVERY WELL_SP



RECOVERY WELL DETAIL

FORMER EXXON SERVICE STATION 70234 3450 35th Avenue Oakland, California PROJECT NO. 2476

PLATE



APPROXIMATE SCALE FN 247611 W04 PROP WELL_SP

PROPOSED WELL LOCATION

FORMER EXXON SERVICE STATION 70234 3450 35th Avenue Oakland, California

EXPLANATION MW9 Groundwater Monitoring Well Destroyed Groundwater Monitoring Well

RW1
Proposed Recovery Well

PROJECT NO. 2476

> PLATE 6

SOURCE: Modified from maps provided by MORROW SURVERING

Shaping the Future

Cardno ERI

Excavated Area

TABLE 1A

WellID	Sampling Date	Depth (feet)	TOC Elev. (feet)	DTW (feet)	GW Elev. (feet)	NAPL (feet)	TPHg (µg/L)	MTBE (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	Total Pb (µg/L)	Organic Pb (mg/L)
lonitorin	g Well Samples													
MW1	07/15/92			Wellins	talled.									
MW1	07/17/92		192.00	33.02	158.98	No	67		6.6	6.9	2.0	4.5	17	
MW1	10/22/92		192.00	34.07	157.93	No	<50		2.9	<0.5	<0.5	<0.5	16	
MW1	02/04/93		192.00	29.43	162.57	No	<50		0.8	<0.5	<0.5	<0.5	4	
/IW1	05/03/93		192.00	29.72	162.28	No	71		2.8	7.2	2.2	22	40	
/IW1	07/30/93		192.00	32.95	159.05	No	<50		<0.5	<0.5	<0.5	<0.5	5	
/W1	10/19/93		192.00	34.34	157.66	No	<50	de serve	<0.5	<0.5	<0.5	<0.5	12	
/W1	02/23/94		192.00	31.72	160.28	No	<50		<0.5	<0.5	<0.5	<0.5	4	
/W1	06/06/94		192.00	31.77	160.23	No	<50		<0.5	<0.5	<0.5	<0.5	<3	
/W1	08/18/94		192.00	33.76	158.24	No	<50		<0.5	<0.5	<0.5	<0.5	130	1666
/W1	11/15/94		192.00	34.08	157.92	No	<50		<0.5	<0.5	<0.5	<0.5	<3.0	<100
/IW1	02/06/95		192.00	28.50	163.50	No	<50		<0.5	<0.5	<0.5	<0.5		
IW1	05/10/95	•••	192.00	29.30	162.70	No	<50		<0.5	<0.5	<0.5	<0.5		
1 W1	09/20/99	****	192.00	33.30	158.70	No	<50	<0.5	<0.5	<0.5	<0.5	<0.5	 <75	<50
1W1	Well destroyed	in June 2000.				110		0.0	40.0	40.0	~0.0	~0.0	~13	\50
1W2	07/15/92		il ato s	Well inst	alled.									
1W2	07/17/92		194.85	34.65	160.20	No	<50		<0.5	<0.5	<0.5	<0.5	<3	
1W2	10/22/92		194.85	35.64	159.21	No	<50		<0.5	<0.5	<0.5	<0.5		
IW2	02/04/93		194.85	31.13	163.72	No	<50		<0.5	<0.5	<0.5	<0.5	<3	
lW2	05/03/93		194.85	31.08	163.77	No	<50		<0.5	<0.5	<0.5	<0.5	3	
IW2	07/30/93		194.85	34.34	160.51	No	<50		<0.5	<0.5	<0.5	<0.5	14	
W2	10/19/93		194.85	36.00	158.85	No	<50		<0.5	<0.5	<0.5	<0.5	<3	
IW2	02/23/94		194.85	33.92	160.93	No	<50		<0.5	<0.5	<0.5	<0.5	<3	
IW2	06/06/94		194.85	33.50	161.35	No	<50		<0.5	<0.5	<0.5	<0.5	<3	
IW2	08/18/94		194.85	35.38	159.47	No	<50		<0.5	<0.5	<0.5	<0.5	<3.0	
W2	11/15/94		194.85	35.93	158.92	No	<50		<0.5	<0.5	<0.5	<0.5	<3.0	<100
W2	02/06/95		194.85	30.38	164.47	No	<50		<0.5	<0.5	<0.5	<0.5	~5.0	
W2	05/10/95		194.85	30.77	164.08	No	<50		<0.5	<0.5	<0.5	<0.5		***
W2	09/20/99		194.85	35.15	159.70	No	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<75	<0.5
W2	Well destroyed i	in June 2000.						0.0	-0.0	-0.0	-0.0	-0.0	-10	~0.5
W3	07/15/92	***	222	Well insta	alled.									
IW3	07/17/92	***	196.90	37.24	159.66	No	<50		<0.5	<0.5	<0.5	<0.5	50	

Well ID	Sampling Date	Depth (feet)	TOC Elev. (feet)	DTW (feet)	GW Elev. (feet)	NAPL (feet)	TPHg (µg/L)	MTBE (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (μg/L)	Total Pb (µg/L)	Organic Pb (mg/L)
MW3	10/22/92		196.90	35.95	160.95	No	<50		<0.5	<0.5	<0.5	<0.5	9	
MW3	02/04/93		196.90	29.85	167.05	No	<50		<0.5	<0.5	<0.5	<0.5	<3	
MW3	05/03/93		196.90	29.87	167.03	No	<50		<0.5	<0.5	<0.5	<0.5	3	
MW3	07/30/93		196.90	33.85	163.05	No	<50		<0.5	<0.5	<0.5	<0.5	22	
MW3	10/19/93		196.90	35.89	161.01	No	<50	-	<0.5	<0.5	<0.5	<0.5	12	
MW3	02/23/94		196.90	32.88	164.02	No	<50		<0.5	<0.5	<0.5	<0.5	25	
MW3	06/06/94		196.90	32.40	164.50	No	<50		<0.5	<0.5	<0.5	<0.5	<3	
MW3	08/18/94	***	196.90	35.07	161.83	No	<50		<0.5	<0.5	<0.5	<0.5	<3.0	-
MW3	11/15/94		196.90	35.97	160.93	No	<50		<0.5	<0.5	<0.5	<0.5	<3.0	<100
MW3	02/06/95		196.90	28.39	168.51	No	<50		<0.5	<0.5	<0.5	<0.5	### S	1100
MW3	05/10/95		196.90	28.90	168.00	No	<50		<0.5	<0.5	<0.5	<0.5	222	
MW3	09/20/99		196.90	34.68	162,22	No	75.0	1.87	<0.5	11.5	1.8	18.0	<75	<0.5
MW3	Well destroyed	in June 2000.										10.0	1,0	10.0
√W4	03/02/09	-		Well insta	alled.									
1W4	03/30/09	***	197.62	30.94	166.68	No	<50	<0.50	<0.50	<0.50	<0.50	<0.50		-
1W4	04/02/09		197.62	Well surv	eyed.						0.00	0.00		
1W4	05/28/09	200 I	197.62	32.00	165.62	No	<50	< 0.50	<0.50	<0.50	<0.50	<0.50		
/W4	08/31/09	-	197.62	35.43	162.19	No	<50	<0.50	<0.50	<0.50	<0.50	<0.50		
1W4	12/11/09		197.62	35.01	162.61	No	<50	<0.50	<0.50	0.83	<0.50	1.1		
1 W4	05/07/10		197.62	29.11	168.51	No	<50	<0.50	<0.50	<0.50	<0.50	<1.0		
1W4	11/01/10		197.62	34.95	162.67	No	<50	<0.50	<0.50	<0.50	<0.50	<1.0		
IW4	05/27/11 d		197.62	30.65	166.97	No								
W5	03/06/09			Well insta	lled.									
1W5	03/30/09		196.35	30.05	166.30	No	4,200	1,900	540	140	<12	310		***
W5	04/02/09		196.35	Well surve	eyed.			1,222				0.0		
IW5	05/28/09		196.35	31.45	164.90	No	5,300	3,600	890	150	<25	140		
IW5	08/31/09		196.35	34.70	161.65	No	5,800	3,500	550	<100	<100	<100		
IW5	12/11/09		196.35	34.52	161.83	No	4,000b	3,800	230	<100	<100	<100		
W5	05/07/10		196.35	30.84	165.51	No	2,700b	1,700	73	5.3	3.6	6.5		
W5	11/01/10		196.35	33.93	162.42	No	2,400b	3,400	320	71	21	40		
W5	05/27/11 d		196.35	31.65	164.70	No								
W6	03/09/09	-		Well instal	led.									
W6	03/30/09	***	192.41	26.94	165.47	No	2,800	4,800	0.91	<0.50	<0.50	<0.50		
W6	04/02/09	***	192.41	Well surve		110	2,000	7,000	0.51	~0.00	~0.50	~0.50		1075

Well ID	Sampling Date	Depth (feet)	TOC Elev. (feet)	DTW (feet)	GW Elev. (feet)	NAPL (feet)	TPHg (µg/L)	MTBΕ (μg/L)	B (µg/L)	T (µg/L)	Ε (μg/L)	X (µg/L)	Total Pb (µg/L)	Organic Pb (mg/L)
MW6	05/28/09		192.41	28.04	164.37	No	2,800	6,000	<100	<100	<100	<100		
MW6	08/31/09		192,41	30.57	161.84	No	4,900	6,600	<100	<100	<100	<100	***	****
MW6	12/11/09		192.41	30.78	161.63	No	4,900b	6,200	<100	<100	<100	<100		***
MW6	05/07/10	-	192.41	25.42	166.99	No	2,900b	3,700	2.7	<0.50	0.74c	<1.0	***	
MW6	11/01/10		192.41	30.68	161.73	No	850b	6,100	2.1	<0.50	<0.50	<1.0		
MW6	05/27/11 d		192.41	27.07	165.34	No							***	
MW7	03/09/09	(494)	***	Well inst	alled.									
MW7	03/30/09	2000	194.34	29.15	165.19	No	55	66	<0.50	<0.50	<0.50	<0.50		
MW7	04/02/09	***	194.34	Wellsun	veyed.				0.00	0.00	10.00	40.00	3.00	
MW7	05/28/09	***	194.34	30.16	164.18	No	50	67	<1.0	<1.0	<1.0	<1.0	222	
MW7	08/31/09	***	194.34	33.31	161.03	No	<50	12	<0.50	0.60	<0.50	<0.50		
MW7	12/11/09	***	194.34	32.71	161.63	No	<50	31	0.78	1.7	0.62	2.4		-
MW7	05/07/10	***	194.34	27.54	166.80	No	510b	700	<0.50	<0.50	<0.50	<1.0	There	1222
иW7	11/01/10	***	194.34	32.82	161.52	No	68b	140	<0.50	<0.50	<0.50	<1.0	***	
VIW7	05/27/11 d		194.34	28.85	165.49	No								
MW8	03/04/09		-252	Wellinsta	alled.									
8WI	03/30/09		192.96	27.35	165.61	No	<50	<0.50	<0.50	<0.50	<0.50	<0.50	***	***
/IW8	04/02/09		192.96	Wellsurv	reyed.			0.00	-0.00	-0.00	٠٥.٥٥	10.00		
/W8	05/28/09	1244	192.96	28.72	164.24	No	<50	<0.50	<0.50	<0.50	<0.50	<0.50	***	
/IW8	08/31/09		192.96	31.93	161.03	No	<50	<0.50	<0.50	<0.50	<0.50	<0.50	***	
/IW8	12/11/09		192.96	31.24	161.72	No	<50	<0.50	0.74	1.6	0.59	2.3	***	
8WN	05/07/10	200	192.96	25.68	167.28	No	<50	<0.50	<0.50	<0.50	<0.50	<1.0		
/IW8	11/01/10		192.96	31.18	161.78	No	<50	<0.50	<0.50	<0.50	<0.50	<1.0	***	
MW8	05/27/11		192.96	27.55	165.41	No	<50	<0.50	<0.50	<0.50	<0.50	<1.0		
W9	03/05/09			Wellinsta	lled.									
IW9	03/30/09	***	195.16	28.31	166.85	No	<50	<0.50	<0.50	<0.50	<0.50	<0.50		***
IW9	04/02/09		195.16	Well surv	eyed.						0.00	3.00		
IW9	05/28/09		195.16	29.69	165.47	No	<50	<0.50	<0.50	<0.50	<0.50	<0.50		
W9	08/31/09		195.16	33.20	161.96	No	<50	<0.50	<0.50	<0.50	<0.50	<0.50	222	
W9	12/11/09		195.16	32.62	162.54	No	<50	<0.50	0.73	1.7	0.54	2.2		
W9	05/07/10		195.16	26.59	168.57	No	<50	<0.50	<0.50	<0.50	<0.50	<1.0		
IW9	11/01/10	***	195.16	32.45	162.71	No	<50	<0.50	<0.50	<0.50	<0.50	<1.0	200	0.7777
W9	05/27/11		195.16	29.62	165.54	No	<50	<0.50	<0.50	<0.50	<0.50	<1.0		

Well ID	Sampling Date	Depth (feet)	TOC Elev. (feet)	DTW (feet)	GW Elev. (feet)	NAPL (feet)	TPHg (µg/L)	MTBE (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	Χ (μg/L)	Total Pb (µg/L)	Organic Pb (mg/L)
rab Grour	ndwater Sample	es												
Pit Water	06/14/02	11.5a					5,600	12,000	140	840	100	530		W
UST Pit	06/19/02	13.5a			***		680	640	2.7	36	18	130		
W-38-B11	11/14/07	38					<50	<0.50	<0.50	<0.50	<0.50	<0.50		
W-15-B12	11/13/07	15					8,400	78	67	<5.0	140	150		
W-40-B13	11/12/07	40					<50	0.53	<0.50	<0.50	<0.50	<0.50		
<i>N-</i> 15-B14	11/13/07	15					2,500	16	1.7	3.0	26	13		
W-38-B15	11/15/07	38					18,000	12,000	3.400	2,500	330	2,000		
V-40-B16	11/15/07	40					<50	7.7	<0.50	<0.50	<0.50	< 0.50		
N-37-B17	11/13/07	37					630	2,200	1.8	<0.50	4.1	1.4		
W-38-B18	11/12/07	38					4,300	1,400	52	<12	56	96		
W-35-B19	03/03/09	35			200		4,400	7,100	<0.50	<0.50	<0.50	<1.0		
N-35-B20	03/03/09	35				***	640	440	<0.50	<0.50	<0.50	<1.0		
W-35-B21	03/03/09	35			***	***	<50	1.4	<0.50	<0.50	<0.50	<1.0		

Notes:		Data prior to 1999 provided by EA Environmental Science and Engineering in previously submitted reports.
TOC Elev.	=	Top of well casing elevation; datum is mean sea level.
DTW	=	Depth to water.
GW Elev.	=	Groundwater elevation; datum is mean sea level.
NAPL	=	Non-aqueous phase liquid.
TPHg	=	Total petroleum hydrocarbons as gasoline analyzed using EPA Method 8015.
MTBE	=	Methyl tertiary butyl ether analyzed using EPA Method 8260.
BTEX	=	Benzene, toluene, ethylbenzene, and total xylenes analyzed using EPA Method 8260B8020/8021B; during March 2009, analyzed using EPA Method 8020/8021B.
Total Pb	=	Total lead analyzed using EPA Method 6010.
Organic Pb	=	Organic lead analyzed using CA DHS LUFT method.
EDB	=	1,2-dibromoethane analyzed using EPA Method 8260B.
1,2-DCA	=	1,2-dicloroethane analyzed using EPA Method 8260B.
TAME	=	Tertiary amyl methyl ether analyzed using EPA Method 8260B.
TBA	=	Tertiary butyl alcohol analyzed using EPA Method 8260B.
ETBE	=	Ethyl tertiary butyl ether analyzed using EPA Method 8260B.
DIPE	=	Di-isopropyl ether analyzed using EPA Method 8260B.
Ethanol	=	Ethanol analyzed using EPA Method 8260B.
μg/L	=	Micrograms per liter.
mg/L	$\dot{z}=\dot{z}$	Milligrams per liter.
<	17	Less than the stated laboratory reporting limit.
	=	Not sampled/Not analyzed/Not measured/Not applicable.
а	=	Approximate depth to groundwater surface at time of sampling.
b	=	Hydrocarbon pattern does not match the requested fuel.
С	=	Analyte presence was not confirmed by second column or GC/MS analysis.
d	=	Well inaccessible for sampling.

Well ID	Sampling Date	Depth (feet)	EDB (µg/L)	1,2-DCA (µg/L)	TAME (µg/L)	TBA (μg/L)	ETBE (µg/L)	DIPE (µg/L)	Ethanol (µg/L)
Monitoring	Well Samples					18.50. 2		10000	(10 -)
MW1	07/17/92 - 09/20/99	700	Not analyzed for	or these analytes.					
MW1	Well destroyed in June 200	0	,						
MW2	07/17/92 - 09/20/99		Not analyzed for	or these analytes.					
MW2	Well destroyed in June 200	0	-	•					
MW3	07/17/92 - 09/20/99		Not analyzed for	or these analytes.					
MW3	Well destroyed in June 2000	O							
MW4	03/30/09		<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	***
MW4	05/28/09		<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	***
MW4	08/31/09		<0.50	< 0.50	<0.50	<5.0	<0.50	<0.50	***
MW4	12/11/09	. PERSON	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	=
MW4	05/07/10	Contract Con	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	
MW4	11/01/10	***	< 0.50	<0.50	<0.50	<5.0	<0.50	<0.50	
MW4	05/27/11 d								•••
MW5	03/30/09	***	<12	17	<12	450	<12	<12	
MW5	05/28/09	***	<25	<25	<25	530	<25	<25	***
MW5	08/31/09		<100	<100	<100	<1,000	<100	<100	
MW5	12/11/09	***	<100	<100	<100	2,000	<100	<100	
MW5	05/07/10		<25	<25	<25	400	<25	<25	***
MW5	11/01/10	1996	<50	<50	<50	1,500	<50	<50	***
MW5	05/27/11 d					===			
MW6	03/30/09		<0.50	<0.50	1.3	410	<0.50	0.82	
MW6	05/28/09	***	<100	<100	<100	<1,000	<100	<100	***
MW6	08/31/09		<100	<100	<100	1,100	<100	<100	***
MW6	12/11/09		<100	<100	<100	2,600	<100	<100	-
MW6	05/07/10	***	<100	<100	<100	<1,000	<100	<100	
MW6	11/01/10		<50	<50	<50	2,400	<50	<50	1,644
MW6	05/27/11 d	•==				2,400			-
MW7	03/30/09		<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	200

Well ID	Sampling Date	Depth (feet)	EDB (µg/L)	1,2-DCA (µg/L)	TAME (µg/L)	TBA (µg/L)	ETBE (µg/L)	DIPE	Ethanol
MW7	05/28/09		<1.0	<1.0	<1.0			(µg/L)	(µg/L)
MW7	08/31/09	(***	<0.50	<0.50	<0.50	<10	<1.0	<1.0	
MW7	12/11/09	***	<0.50	<0.50		<5.0	<0.50	<0.50	
MW7	05/07/10	0-0000 ()	<0.50	<0.50	<0.50	12	<0.50	<0.50	
MW7	11/01/10	ener.	<2.5	<2.5	<0.50	130	<0.50	<0.50	
MW7	05/27/11 d	•••	~2.5		<2.5	27 	<2.5 	<2.5	
								10 One	
MW8	03/30/09		<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	
MW8	05/28/09		<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	
MW8	08/31/09		<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	
MW8	12/11/09		<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	
MW8	05/07/10		<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	
MW8	11/01/10		<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	
MW8	05/27/11		<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	
MW9	03/30/09								
MW9	05/28/09	-	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	
MW9	08/31/09	-	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	
MW9			<0.50	<0.50	<0.50	<5.0	<0.50	< 0.50	
MW9	12/11/09		<0.50	<0.50	<0.50	<5.0	<0.50	< 0.50	
	05/07/10		<0.50	<0.50	<0.50	<5.0	<0.50	< 0.50	
MW9	11/01/10		<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	
MW9	05/27/11	-	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	
Grab Ground	lwater Samples								
Pit Water	06/14/02	11.5a			***	***	3 494 5	***	
UST Pit	06/19/02	13.5a	***	e <u>=77</u> =2			(444)	-	
W-38-B11	11/14/07	38	<0.50	-0.50					
N-15-B12	11/13/07	15		<0.50	<0.50	<10	<0.50	<0.50	<50
V-40-B13	11/12/07	40	<5.0	<5.0	<5.0	<100	<5.0	<5.0	<500
V-40-B13 V-15-B14	11/13/07	40 15	<0.50	<0.50	<0.50	<10	<0.50	<0.50	<50
V-13-B14 V-38-B15	11/15/07		<1.0	<1.0	<1.0	<20	<1.0	<1.0	<100
V-30-B15 V-40-B16		38	<25	<25	<25	1,900	<25	<25	<2,500
V-40-B16 V-37-B17	11/15/07	40	<0.50	<0.50	<0.50	<10	<0.50	<0.50	85
	11/13/07	37	<0.50	<0.50	<0.50	58	<0.50	< 0.50	<50
V-38-B18	11/12/07	38	<12	<12	<12	<250	<12	<12	<1,200

Well ID	Sampling Date	Depth (feet)	EDB (µg/L)	1,2-DCA (µg/L)	TAME (µg/L)	TBA (µg/L)	ETBE (µg/L)	DIPE (µg/L)	Ethanol (µg/L)
W-35-B19	03/03/09	35	<50	<50	<50	<500	<50	<50	<5,000
W-35-B20	03/03/09	35	<0.50	<0.50	<0.50	12	<0.50	<0.50	<50
W-35-B21	03/03/09	35	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<50

Notes:		Data prior to 1999 provided by EA Environmental Science and Engineering in previously submitted reports.
TOC Elev.	=	Top of well casing elevation; datum is mean sea level.
DTW	=	Depth to water.
GW Elev.	=	Groundwater elevation; datum is mean sea level.
NAPL	=	Non-aqueous phase liquid.
TPHg	=	Total petroleum hydrocarbons as gasoline analyzed using EPA Method 8015.
MTBE	=	Methyl tertiary butyl ether analyzed using EPA Method 8260.
BTEX	=	Benzene, toluene, ethylbenzene, and total xylenes analyzed using EPA Method 8260B8020/8021B; during March 2009, analyzed using EPA Method 8020/8021B.
Total Pb	=	Total lead analyzed using EPA Method 6010.
Organic Pb	=	Organic lead analyzed using CA DHS LUFT method.
EDB	=	1,2-dibromoethane analyzed using EPA Method 8260B.
1,2-DCA	=	1,2-dicloroethane analyzed using EPA Method 8260B.
TAME	=	Tertiary amyl methyl ether analyzed using EPA Method 8260B.
TBA	=	Tertiary butyl alcohol analyzed using EPA Method 8260B.
ETBE	=	Ethyl tertiary butyl ether analyzed using EPA Method 8260B.
DIPE	=	Di-isopropyl ether analyzed using EPA Method 8260B.
Ethanol	=	Ethanol analyzed using EPA Method 8260B.
μg/L	=	Micrograms per liter.
mg/L	=	Milligrams per liter.
<	=	Less than the stated laboratory reporting limit.
	=	Not sampled/Not analyzed/Not measured/Not applicable.
а	=	Approximate depth to groundwater surface at time of sampling.
b	=	Hydrocarbon pattern does not match the requested fuel.
С	=	Analyte presence was not confirmed by second column or GC/MS analysis.
d	=	Well inaccessible for sampling.

TABLE 2

WELL CONSTRUCTION DETAILS
Former Exxon Service Station 70234
3450 35th Avenue
Oakland, California

Well ID	Well Installation Date	Well Destruction Date	TOC Elevation (feet)	Borehole Diameter (inches)	Total Depth of Boring (feet bgs)	Well Depth (feet bgs)	Casing Diameter (inches)	Well Casing Material	Screened Interval (feet bgs)	Slot Size (inches)	Filter Pack Interval (feet bgs)	Filter Pack Material
MW1	07/15/92	Jun-00	192.00	11	45	45	4	Schedule 40 PVC	25-45	0.010	23-45	2/12 Lonestar Sand
MW2	07/15/92	Jun-00	194.85	11	45	45	4	Schedule 40 PVC	25-45	0.010	23-45	2/12 Lonestar Sand
MW3	07/15/92	Jun-00	196.90	11	45	45	4	Schedule 40 PVC	25-45	0.010	23-45	2/12 Lonestar Sand
MW4	03/02/09		197.62	8	45	45	2	PVC	35-45	0.2	33-45	#3 Sand
MW5	03/06/09		196.35	8	40	40	2	PVC	30-40	0.2	28-40	#3 Sand
MW6	03/09/09		192.41	8	40	39	2	PVC	29-39	0.2	27-39	#3 Sand
MW7	03/09/09		194.34	8	40	40	2	PVC	30-40	0.2	28-40	#3 Sand
MW8	03/04/09		192.96	8	40	40	2	PVC	30-40	0.2	28-40	#3 Sand
MW9	03/05/09		195.16	8	40	40	2	PVC	30-40	0.2	28-40	#3 Sand

Notes:

TOC = Top of well casing elevation; datum is mean sea level.

PVC Polyvinyl chloride.

feet bgs = feet below ground surface.

Former Exxon Service Station 70234 3450 35th Avenue Oakland, California (Page 1 of 6)

Comple	0		1000000000			ugo : 0, 0,							
Sample ID	Sampling	Depth	TPHd	TPHg	TPHmo	EHC-HO	MTBE	В	T	E	X	Lead	TOG
ID	Date	(feet bgs)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg
sed-Oil UST Confirm	nation Soil Samn	le .											
T1-12	06/18/97	***	200b	8.6a	680c			ND	0.000	0.040			
	30, 10,01		2000	0.04	0000	-	200	ND	0.038	0.016	0.046		
lydraulic Hoist Confi	rmation Samples	<u> </u>											
H1-8	06/18/97			:ene:		99d				5945			
H2-8	06/18/97				-	2,100d	***		4-2			(555	
Samples from the U.S.	Towar ord											0.000	8.000
amples from the US' Pit1@12'		-											
	06/14/02	12	2 222	<1.0			<0.005	<0.005	< 0.005	< 0.005	< 0.005	***	
Pit2@11.5'	06/14/02	11.5		<1.0		•••	<0.005	<0.005	< 0.005	< 0.005	< 0.005	FERE	1000
Pit3@11'	06/14/02	11	0.000	<1.0	****		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005		***
Pit4@10'	06/14/02	10	***	<1.0	222	-	<0.005	<0.005	<0.005	<0.005	<0.005	1944	
amples from Beneat	b Broduct Dining												
A-6.4	06/25/02	6.4		<1.0			.0.00=						
B-4.9	06/25/02		***		-		<0.005	<0.005	<0.005	<0.005	<0.005		
		4.9		24			0.020	0.057	0.11	0.12	1.2		
C-6.5	06/25/02	6.5		<1.0			<0.005	<0.005	< 0.005	< 0.005	<0.005		
D-5.2	06/25/02	5.2		<1.0	-		<0.005	<0.005	<0.005	<0.005	<0.005		
oil Borings													
S-1	08/28/91	10		<1.0		Table :	***	<0.005	<0.005	<0.005	-0.005		
S-2	08/28/91	10	===	<1.0	***			<0.005	<0.005		<0.005	<5	nes.
S-3	08/28/91	10		<1.0		***		<0.005		<0.005	<0.005	<5	5000 c
S-4	08/28/91	10	****	290			7240		<0.005	<0.005	<0.005	<5	-
S-5	08/28/91	10		3.5				2.8	6.5	2	27	<5	-
S-6	08/28/91	11	11000 A	4.1		-	-	0.27	0.096	0.064	0.32	<5	***
S-7	08/28/91	3		4.0	444	2000 2000	1000	0.19	0.13	0.056	0.23	<5	
S-8	08/28/91	3		<1.0		***	N575	0.66	0.040	0.11	0.13	<5	
S-9	08/28/91	3		210				<0.005	<0.005	<0.005	<0.005	<5	-
S-10	08/28/91	3			7000)		****	1.4	7.2	3.0	18	<5	1500
S-11	08/28/91	1.5		<1.0		**************************************		<0.005	0.031	0.031	0.067	<5	1777
S-12	08/28/91	1.5		<1.0		### ()		<0.005	<0.005	<0.005	<0.005	<5	-
S-13	08/28/91		-	3.1		***		0.36	0.048	0.048	0.16	-	3444
S-13	08/28/91	15		1.8	***			0.26	0.008	800.0	0.041	(277)	STATE
S-14 S-15		4		5.0			(464)	0.047	0.063	0.063	0.041		
J-10	08/28/91	15		<1.0			1.000	<0.005	<0.005	<0.005	<0.005		
B-1	3/20/91	15.5	***	<1.0		***		0.011	0.007	0.011	0.04		
B-1	3/20/91	20.5		<1.0		· ****		0.011	0.007	0.011	0.04 0.04		-
B.C								5.512	3.001	0.01	0.04		
B-2	3/20/91	15.5	***	<1.0				0.036	0.026	0.012	0.055	***	

Former Exxon Service Station 70234 3450 35th Avenue Oakland, California (Page 2 of 6)

Sample	Sampling	Depth	TPHd	TPHg	TPHmo	EHC-HO	MTBE	В	Т	E	X	Lead	TOG
ID	Date	(feet bgs)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg
B-2	3/20/91	20.5		<1.0				0.0073	0.0063	0.0098	0.038	(mg/kg)	(mg/kg
B-3	3/20/91	10.5	1992	1				0.006	0.006	0.008	0.036		
B-3	3/20/91	15.5	1.000	440	***			0.7	5.4	4.7	24		
B-4	3/20/91	10.5	A	5	3.000			0.013	0.019	0.014	0.082	<5	
B-4	3/20/91	15.5	-	6.6	***		-	0.039	0.043	0.027	0.12		
B-4	3/20/91	20.5	***	<1.0	5		•••	0.0076	0.0073	0.011	0.054		
B-5	3/20/91	10.5		26	/****	: Her	***	0.055	0.061	0.17	0.67	***	
B-6	3/20/91	10.5	-	240	***			0.28	2.2	2.8	13		
B-6	3/20/91	15.5		1.4				0.0055	0.0054	0.009	0.034	***	
								0.0000	0.0004	0.009	0.034		
B-7	3/20/91	10.5		<1.0	770	S een .	ATT C	0.006	0.006	0.008	0.033	***	222
B-8	3/20/91	10.5		<1.0	5400	-		0.006	0.005	0.008	0.035	777.5	***
B-9	3/20/91	10.5				***	-21 -355		***		-	100-2	<50
B-10	3/20/91	10.5			***	1222	V		•••	, 	***	1999	<50
S-5-B11	09/05/07	5		<0.50	-	***	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050		
S-10-B11	09/10/07	10	***	< 0.50	***		< 0.0050	<0.0050	<0.0050	<0.0050	<0.0050		ATR/S
S-13.5-B11	09/10/07	13.5	****	<0.50	***	***	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050		530 0.
S-18-B11	09/11/07	18		<0.50	****		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	1.230 1.650	
S-20-B11	09/11/07	20		<0.50	****		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	See and the second	77=
S-25.5-B11	11/14/07	25.5	****	<0.50	***		< 0.0050	<0.0050	<0.0050	<0.0050	<0.0050	***	777
S-29.5-B11	11/14/07	29.5		<0.50)	<0.0050	<0.0050	<0.0050	<0.0050			
S-34.5-B11	11/14/07	34.5	(1)	<0.50	***	7775	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050 <0.0050		
0.5.040	00/01/2=	_											
S-5-B12	09/04/07	5		<0.50	7.77		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050		92150
S-15.5-B12	11/13/07	15.5	***	43	***	777	<0.0050	<0.0050	< 0.0050	<0.0050	<0.0050	***	244
S-20.5-B12	11/13/07	20.5	1717	3.2		TIPE.	0.15	0.076	<0.0050	0.0053	<0.0050		1000
S-5-B13	09/05/07	5	***	<0.50	7 <u>212</u>		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	***	
S-10-B13	09/10/07	10	***	<0.50	Tanana .		< 0.0050	<0.0050	<0.0050	<0.0050	<0.0050		
S-14.5-B13	09/10/07	14.5		<0.50			< 0.0050	<0.0050	<0.0050	<0.0050	<0.0050		
S-20-B13	09/10/07	20	***	4.3		222	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	:===:	0.000
S-25-B13	11/12/07	25		<0.50		1222	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050		
S-30-B13	11/12/07	30		<0.50			<0.0050	<0.0050	<0.0050	~0.0000	<0.0050		

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Sample	Sampling	Depth	TPHd	TPHg	TPHmo	EHC-HO	MTBE	В	Т	E	X	Lead	TOG
ID	Date	(feet bgs)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
S-35-B13	11/12/07	35	***	<0.50			<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	(1119/119)	(mg/kg)
S-5.0-B14	09/06/07	5		<0.50	2000	2200	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050		
S-16-B14	11/13/07	16		<0.50		222	< 0.0050	<0.0050	<0.0050	<0.0050			
S-20.5-B14	11/13/07	20.5		<0.50			0.031	<0.0050			<0.0050	***	
	1 17 10/07	20.0		-0.50			0.031	\0.0050	<0.0050	<0.0050	<0.0050		
S-5-B15	09/04/07	5	***	< 0.50	944	***	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050		3 ***
S-10.5-B15	11/15/07	10.5	****	< 0.50			< 0.0050	< 0.0050	< 0.0050	<0.0050	< 0.0050		***
S-15.5-B15	11/15/07	15.5		1.1	-		0.12	0.32	0.019	0.017	0.074	-	
S-20-B15	11/15/07	20		300	8 44);	***	< 0.25	6.1	36	14	72		
S-25.5-B15	11/15/07	25.5	1.555	220	****	***	<0.12	3.1	18	6.8	36	, Care	ame
S-30.5-B15	11/15/07	30.5	-	59	***	***	< 0.25	2.9	5.6	1.5	20		
S-35.5-B15	11/15/07	35.5	1000	3.3		-	0.26	0.28	0.21	0.26	0.79		-
S-5-B16	09/04/07	5		<0.50			-0.0050	.0.0050					
S-11-B16	11/14/07	11		<0.50	1970	***	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	-	
S-15.5-B16	11/14/07	15.5	***				<0.0050	<0.0050	<0.0050	<0.0050	<0.0050		***
S-13.3-B16 S-21-B16	11/14/07		***	<0.50	\ 	****	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050		
S-26-B16	11/14/07	21		<0.50	777	-	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	***	
S-30.5-B16		26	****	<0.50) 577.5	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	(4)10)	-
	11/14/07	30.5	***	<0.50		355	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	***	5644
S-34.5-B16	11/14/07	34.5		<0.50			0.021	<0.0050	<0.0050	<0.0050	<0.0050	***	***
S-38.5-B16	11/14/07	38.5		<0.50			<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	-	
S-5-B17	09/05/07	5	See at 1	<0.50	1222	****	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	***	***
S-11-B17	11/13/07	11		90		1200	0.036	0.052	<0.0050	0.086	0.020		****
S-16-B17	11/13/07	16		<0.50	-	-	0.099	0.0052	<0.0050	<0.0050	<0.0050		:
S-21-B17	11/13/07	21		<0.50	***		0.011	<0.0050	< 0.0050	<0.0050	<0.0050		
S-24.5-B17	11/13/07	24.5	-	<0.50			0.59	<0.0050	<0.0050	<0.0050	<0.0050	-	
S-31-B17	11/13/07	31	***	<0.50	***	***	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050		
S-35.5-B17	11/13/07	35.5	5550	0.85			1.7	<0.0050	<0.0050	<0.0050	<0.0050		
S-5-B18	09/04/07	5		<0.50	a nto o	(8000)	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050		
S-10-B18	11/12/07	10	777.	<0.50	200	(****	<0.0050	<0.0050	< 0.0050	<0.0050	< 0.0050		
S-15-B18	11/12/07	15		<0.50	555	***	0.0051	<0.0050	<0.0050	< 0.0050	<0.0050	1201	000
S-20-B18	11/12/07	20		<0.50			0.019	<0.0050	<0.0050	<0.0050	< 0.0050	3	444
S-25-B18	11/12/07	25		<0.50	7.77		0.18	<0.0050	<0.0050	<0.0050	< 0.0050	1444	
S-30-B18	11/12/07	30	***	<0.50	1		0.54	< 0.0050	<0.0050	<0.0050	< 0.0050	(1000)	1444
S-35-B18	11/12/07	35		24			0.53	<0.0050	<0.0050	<0.0050	<0.0050	-	10000
S-5-B19	02/25/09	5	***	<0.50		222	<0.0050	<0.0050	<0.0050	<0.0050	<0.010		
		-		50			-0.0000	70.0000	~0.0000	~0.0000	~0.010	-	***

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					,	,							
Sample	Sampling	Depth	TPHd	TPHg	TPHmo	EHC-HO	MTBE	В	Т	E	X	Lead	TOG
ID	Date	(feet bgs)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	
S-10-B19	03/02/09	10		<0.50	(33)	(119/19/	<0.0050	<0.0050	<0.0050	<0.0050	<0.010	(mg/kg)	(mg/kg)
S-15.5-B19	03/03/09	15.5	(mage)	<0.50	***		< 0.0050	<0.0050	< 0.0050	<0.0050	<0.010	***	
S-20.5-B19	03/03/09	20.5		<0.50		324	<0.0050	<0.0050	<0.0050	<0.0050	<0.010		-
S-25.5-B19	03/03/09	25.5	***	<0.50	444)	-	< 0.0050	<0.0050	<0.0050	<0.0050	<0.010	1000	***
S-30.5-B19	03/03/09	30.5		<0.50	W000		<0.0050	<0.0050	<0.0050	<0.0050	<0.010	1977	***
S-35.5-B19	03/03/09	35.5		<0.50			0.51	<0.0050	<0.0050	<0.0050	<0.010	S***	-
S-39.5-B19	03/03/09	39.5	1888	<0.50	***	***	0.048	<0.0050	<0.0050	<0.0050	<0.010		
S-5-B20	00/05/00	_											
S-10.5-B20	02/25/09	5		<0.50	2 3188	***	<0.0050	<0.0050	<0.0050	<0.0050	<0.010		
	03/03/09	10.5	N -111	<0.50	S 5585	1111)	<0.0050	<0.0050	<0.0050	<0.0050	<0.010	***	10000
S-15.0-B20	03/03/09	15.0	777	< 0.50		***	<0.0050	<0.0050	<0.0050	<0.0050	<0.010		
S-20.5-B20	03/03/09	20.5	•	<0.50	***	-	<0.0050	<0.0050	<0.0050	< 0.0050	<0.010		***
S-25.5-B20	03/03/09	25.5	••••	<0.50		1000	<0.0050	<0.0050	<0.0050	<0.0050	<0.010		
S-30.5-B20	03/03/09	30.5	200	<0.50		1/555	<0.0050	< 0.0050	<0.0050	< 0.0050	<0.010	-14	
S-35.5-B20	03/03/09	35.5	100	<0.50	***		<0.0050	< 0.0050	<0.0050	< 0.0050	< 0.010		
S-39.5-B20	03/03/09	39.5	-	<0.50	***		<0.0050	<0.0050	<0.0050	<0.0050	<0.010		
S-5-B21	02/25/09	5		<0.50			<0.0050	<0.0050	<0.0050	<0.0050	<0.010		-
S-10.5-B21	03/04/09	10.5	(*84)	<0.50			<0.0050	<0.0050	<0.0050	<0.0050	<0.010		
S-15-B21	03/04/09	15	(###)	<0.50	212		<0.0050	<0.0050	<0.0050	<0.0050	<0.010		***
S-20.5-B21	03/04/09	20.5		<0.50		***	<0.0050	< 0.0050	<0.0050	<0.0050	<0.010		
S-25.5-B21	03/04/09	25.5	***	<0.50	***	***	<0.0050	<0.0050	<0.0050	<0.0050	<0.010		
S-30.5-B21	03/04/09	30.5		<0.50	***		<0.0050	<0.0050	<0.0050	<0.0050	<0.010		***
S-35.5-B21	03/04/09	35.5	***	<0.50		3-4-	<0.0050	<0.0050	<0.0050	<0.0050	<0.010	ATE /	222 0
S-39.5-B21	03/04/09	39.5		<0.50	***	-	<0.0050	<0.0050	<0.0050	<0.0050	<0.010		775 C
onitoring Wells													
MW1	07/14/92	8		<1.0				40.0050	-0.00=0				
MW2	07/14/92	29.5	-	<1.0	7550 X		****	<0.0050	<0.0050	<0.0050	0.0064	<10	
MW3	07/14/92	28	-	<1.0	***	(550)	-	<0.0050	<0.0050	<0.0050	<0.0050	<10	***
MW4	07/14/92	29.5	1210	<1.0	****	-	200	<0.0050	<0.0050	<0.0050	<0.0050	<10	
1818.4	01/14/92	29.5		~1.0	THE A		1.555	<0.0050	<0.0050	<0.0050	<0.0050	<10	
S-5-MW4	02/25/09	5		<0.50			<0.0050	<0.0050	<0.0050	<0.0050	<0.010	-	
S-10.5-MW4	03/02/09	10.5	-	<0.50	****	777	<0.0050	< 0.0050	<0.0050	< 0.0050	<0.010		***
S-15.5-MW4	03/02/09	15.5		<0.50	-		<0.0050	< 0.0050	<0.0050	<0.0050	<0.010	***	-
S-20.5-MW4	03/02/09	20.5		<0.50		****	<0.0050	< 0.0050	<0.0050	<0.0050	<0.010	***	-
S-25.5-MW4	03/02/09	25.5		<0.50			<0.0050	<0.0050	<0.0050	<0.0050	<0.010		***
S-30.5-MW4	03/02/09	30.5		<0.50	722		<0.0050	<0.0050	<0.0050	<0.0050	<0.010	-	•••
S-35.5-MW4	03/02/09	35.5	ene.	< 0.50			< 0.0050	<0.0050	<0.0050	< 0.0050	<0.010	(description	

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						-3/							
Sample	Sampling	Depth	TPHd	TPHg	TPHmo	EHC-HO	MTBE	В	Т	Е	X	Lead	TOG
ID	Date	(feet bgs)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg
S-40-MW4	03/02/09	40	***	< 0.50			< 0.0050	<0.0050	<0.0050	<0.0050	<0.010	1 3 3/	(56
S-44.5-MW4	03/02/09	44.5	****	<0.50	1110 3	222	<0.0050	<0.0050	<0.0050	<0.0050	<0.010		-
S-5-MW5	02/27/09	5	, week	<0.50	242		<0.0050	<0.0050	<0.0050	<0.0050	<0.010		-
S-10-MW5	03/05/09	10	10555	< 0.50	***	***	< 0.0050	<0.0050	<0.0050	<0.0050	<0.010	:===:	
S-15-MW5	03/05/09	15		0.70	***	***	0.036	0.22	0.022	0.071	0.31		
S-20-MW5	03/05/09	20	8888	260		****	<5.0e	5.4	19	11	63	1000	(-111
S-25-MW5	03/06/09	25		41	-	***	<0.50e	<0.0050	0.069	0.15	0.75	-	1999
S-30-MW5	03/06/09	30		0.91		***	<0.50e	0.14	0.0061	0.13	0.73	(****)	***
S-35-MW5	03/06/09	35		5.4			<0.50e	<0.050	3.9	1.5	15	(73.7).	3.511
S-39.5-MW5	03/06/09	39.5		<0.50	C OFFI		<0.0050e	<0.0050	<0.0050			***	
		0010		10.00		2.500	~0.0000e	~ 0.0050	<0.0050	<0.0050	<0.010		***
S-5-MW6	02/27/09	5		<0.50	0777	-	<0.0050	<0.0050	<0.0050	<0.0050	<0.010		-04
S-10-MW6	03/09/09	10	-202	<0.50			<0.0050	<0.0050	<0.0050	<0.0050	<0.010	***	
S-15.5-MW6	03/09/09	15.5		<0.50			0.011	<0.0050	< 0.0050	< 0.0050	<0.010	2429	-
S-20.5-MW6	03/09/09	20.5		<0.50			0.015	< 0.0050	< 0.0050	< 0.0050	<0.010	***	
S-25.5-MW6	03/09/09	25.5		< 0.50			< 0.0050	< 0.0050	< 0.0050	< 0.0050	<0.010	***	944
S-30.5-MW6	03/09/09	30.5		<0.50	404		0.063	<0.0050	< 0.0050	< 0.0050	<0.010	****	
S-35.5-MW6	03/09/09	35.5		<0.50			< 0.0050	< 0.0050	< 0.0050	< 0.0050	<0.010	9463	
S-39.5-MW6	03/09/09	39.5		<0.50		12001	<0.0050	<0.0050	<0.0050	<0.0050	<0.010	***	***
S-5-MW7	02/27/09	5	200000	<0.50			<0.0050	<0.0050	<0.0050	<0.0050	<0.010		
S-10.5-MW7	03/09/09	10.5	****	<0.50	***	5.000	<0.0050	<0.0050	<0.0050	<0.0050	<0.010	****	5590
S-15.5-MW7	03/09/09	15.5	***	<0.50			<0.0050	<0.0050	<0.0050	<0.0050	<0.010	1100	777
S-20.5-MW7	03/09/09	20.5		<0.50			<0.0050	<0.0050	<0.0050	<0.0050	<0.010	1.000	-
S-25.5-MW7	03/09/09	25.5		<0.50	***		<0.0050	<0.0050	<0.0050	<0.0050		(****	
S-30.5-MW7	03/09/09	30		<0.50	***		<0.0050	<0.0050	<0.0050	<0.0050	<0.010 <0.010	****	\
S-35.5-MW7	03/09/09	35.5		<0.50	***	-	<0.0050	<0.0050	<0.0050	<0.0050		***	1000
S-39.5-MW7	03/09/09	39.5	S=-NA	<0.50	ELIPEC C	***	<0.0050	<0.0050	<0.0050	<0.0050	<0.010		-
	00,00,00	00.0		10.00		275	~ 0.0050	\0.0050	<0.0050	<0.0050	<0.010		
S-5-MW8	02/25/09	5	(<u>1112</u>	< 0.50			<0.0050	<0.0050	<0.0050	<0.0050	<0.010		
S-10.5-MW8	03/04/09	10.5		<0.50			<0.0050	<0.0050	<0.0050	<0.0050	<0.010		
S-15.5-MW8	03/04/09	15.5		<0.50	-		<0.0050	<0.0050	<0.0050	<0.0050	<0.010		222
S-20.5-MW8	03/04/09	20.5	7224	<0.50			<0.0050	<0.0050	<0.0050	<0.0050	<0.010		
S-25.5-MW8	03/04/09	25.5		<0.50			<0.0050	<0.0050	<0.0050	<0.0050	<0.010		
S-30.5-MW8	03/04/09	30.5		<0.50	7200		<0.0050	<0.0050	<0.0050	<0.0050	<0.010		
S-35.5-MW8	03/04/09	35.5		<0.50	***	4166	<0.0050	<0.0050	<0.0050	<0.0050	<0.010	(4) (4)	
S-39.5-MW8	03/04/09	39.5		<0.50			<0.0050	<0.0050	<0.0050	<0.0050			\$0.00 mm
		00.0		0.00			-0.0000	~U.UUUU	~0.0050	~U.UU5U	<0.010		-

Former Exxon Service Station 70234 3450 35th Avenue Oakland, California (Page 6 of 6)

Sample Sampling Depth TPHd TPHg TPHmo EHC-HO MTBE B T E X T TE X MTBE TPHmo MTBE B T E X TTHMO TPHmo MTBE B T E X TTHMO TPHMO TPHMO MTBE TTHMO TPHMO MTBE TTHMO MTBE	Lead	
Date (feet bgs) (mg/kg) (ng/kg) (ng/		TOG
S-5-MW9 02/25/09 5 <0.50 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0010 S-10-MW9 03/05/09 10 <0.50 <0.050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050	(mg/kg)	(mg/kg)
S-10-MW9 03/05/09 10 <0.50 < <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050	(mg/kg)	(Hig/kg)
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S-30-MW9 03/05/09 30 < 0.50 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0010 S-35-MW9 03/05/09 35 < 0.50 < 0.050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0010 S-40-MW9 03/05/09 40 < 0.50 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0010 Soil Stockpile SP-1(S-SP1-S-SP4) 09/12/07 < 0.10 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 SP(1-4) 06/18/97 47b ND 150c ND ND ND ND ND ND SP-2 03/09/09 < 0.050 < 0.50 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0		
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S-40-MW9 03/05/09 40 < 0.50 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050		
SP-1(S-SP1-S-SP4) 09/12/07 < < <- <- <- <- <- <- <- <- <->		
Notes: TPHg		
Notes: TPHg		
Notes: TPHg = Total petroleum hydrocarbons as gasoline analyzed using modified EPA Method 8015M. MTBE = Methyl tertiary butyl ether analyzed using EPA Method 8021B/8260B BTEX = Benzene, toluene, ethylbenzene, and total xylenes analyzed using EPA Method 8021B/8260B. Lead = Lead analyzed using EPA Method 6010B.	7.2	
Notes: TPHg = Total petroleum hydrocarbons as gasoline analyzed using modified EPA Method 8015M. MTBE = Methyl tertiary butyl ether analyzed using EPA Method 8021B/8260B BTEX = Benzene, toluene, ethylbenzene, and total xylenes analyzed using EPA Method 8021B/8260B. Lead = Lead analyzed using EPA Method 6010B.	8.7	
TPHg = Total petroleum hydrocarbons as gasoline analyzed using modified EPA Method 8015M. MTBE = Methyl tertiary butyl ether analyzed using EPA Method 8021B/8260B BTEX = Benzene, toluene, ethylbenzene, and total xylenes analyzed using EPA Method 8021B/8260B. Lead analyzed using EPA Method 6010B.	5.83	
MTBE = Methyl tertiary butyl ether analyzed using EPA Method 8021B/8260B BTEX = Benzene, toluene, ethylbenzene, and total xylenes analyzed using EPA Method 8021B/8260B. Lead analyzed using EPA Method 6010B.		
MTBE = Methyl tertiary butyl ether analyzed using EPA Method 8021B/8260B BTEX = Benzene, toluene, ethylbenzene, and total xylenes analyzed using EPA Method 8021B/8260B. Lead analyzed using EPA Method 6010B.		
BTEX = Benzene, toluene, ethylbenzene, and total xylenes analyzed using EPA Method 8021B/8260B. Lead = Lead analyzed using EPA Method 6010B.		
Lead = Lead analyzed using EPA Method 6010B.		
TOG = Total oil and grease.		
1,2-DCA = 1,2-dichloroethane analyzed using EPA Method 8260B.		
EDB = 1,2-dibromoethane analyzed using EPA Method 8260B.		
TBA = Tertiary butyl alcohol analyzed using EPA Method 8260B.		
DIPE = Di-isopropyl ether analyzed using EPA Method 8260B.		
ETBE = Ethyl tertiary butyl ether analyzed using EPA Method 8260B.		
TAME = Tertiary amyl methyl ether analyzed using EPA Method 8260B.		
Ethanol = Ethanol analyzed using EPA Method 8260B.		
Add'l SVOCs = Additional semi-volatile organic compounds.		
HVOCs = Halogenated volatile organic compounds analyzed using EPA Method 8260B.		
feet bgs = Feet below ground surface.		
mg/kg = Milligrams per kilogram.		
 Less than the stated laboratory reporting limit. 		
Not analyzed/Not applicable.		
a = Unidentified C8-C12.		
b = Unidentified C9-C24.		
c = Unidentified C16-C36.		
- Shadhuna 010-040.		
e = Reporting limits are elevated due to high levels of non-target compounds.		

TABLE 3B ADDITIONAL CUMULATIVE SOIL ANALYTICAL RESULTS

Former Exxon Service Station 70234 3450 35th Avenue Oakland, California (Page 1 of 6)

Sample	Sampling	Depth	1,2-DCA	EDB	TBA	DIPE	ETBE	TAME	Ethanol	Add'l SVOCs	HVOCs	Cadmium	Chromium	Nickel	Zinc
ID	Date	(feet bgs)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)							
<u>Used-Oil UST Confirm</u> T1-12	ation Soil Sar 06/18/97	mple				1.000	###./	i den		ND	ND	ND	47	56	84

Hydraulic Hoist Confirmation Samples

Not analyzed for these analytes.

Samples from the UST Cavity Sidewall

Not analyzed for these analytes.

Samples from Beneath Product Piping

Not analyzed for these analytes.

Soil Borings

Soil borings sampled prior to 2007 not analyzed for these analytes.

S-5-B11	09/05/07	5	< 0.0050	<0.0050	<0.050	<0.010	<0.010	<0.010	 	 		
S-10-B11	09/10/07	10	< 0.0050	<0.0050	< 0.050	<0.010	<0.010	<0.010	 	 	 	
S-13.5-B11	09/10/07	13.5	< 0.0050	<0.0050	<0.050	<0.010	<0.010	<0.010	 	 		
S-18-B11	09/11/07	18	< 0.0050	< 0.0050	< 0.050	<0.010	<0.010	<0.010	 	 	 	
S-20-B11	09/11/07	20	< 0.0050	< 0.0050	< 0.050	<0.010	<0.010	<0.010	 		 	
S-25.5-B11	11/14/07	25.5	< 0.0050	< 0.0050	< 0.050	<0.010	<0.010	<0.010	 	 	 	
S-29.5-B11	11/14/07	29.5	< 0.0050	< 0.0050	< 0.050	<0.010	<0.010	<0.010	 		 ***	
S-34.5-B11	11/14/07	34.5	< 0.0050	<0.0050	<0.050	<0.010	<0.010	<0.010	 	 ~	 	
					0.000	0.0.0	-0.010	40.010	 	 	 	
S-5-B12	09/04/07	5	< 0.0050	<0.0050	<0.050	<0.010	<0.010	<0.010				
S-15.5-B12	11/13/07	15.5	< 0.0050	<0.0050	<0.050	<0.010	<0.010	<0.010	 	 	 	
S-20.5-B12	11/13/07	20.5	< 0.0050	<0.0050	<0.050	<0.010	<0.010	<0.010	 	 	 	
				0.000	0.000	10.010	40.010	~0.010	 	 	 	
S-5-B13	09/05/07	5	<0.0050	<0.0050	<0.050	<0.010	<0.010	<0.010				
S-10-B13	09/10/07	10	<0.0050	<0.0050	<0.050	<0.010	<0.010	<0.010		 	 	
S-14.5-B13	09/10/07	14.5	<0.0050	<0.0050	<0.050	<0.010	<0.010	<0.010	 	 	 	
S-20-B13	09/10/07	20	<0.0050	<0.0050	<0.050	<0.010	<0.010	<0.010	 	 	 	
S-25-B13	11/12/07	25	<0.0050	<0.0050	<0.050	<0.010	<0.010	<0.010	 	 	 	
S-30-B13	11/12/07	30	<0.0050	<0.0050	< 0.050	<0.010	<0.010	<0.010	 	 	 	
S-35-B13	11/12/07	35	<0.0050	< 0.0050	<0.050	<0.010	<0.010	<0.010	 	 	 	
	,	00	0.0000	40.0000	40.000	~0.0 IQ	~0.010	\0.010	 	 	 	
S-5.0-B14	09/06/07	5	<0.0050	<0.0050	<0.050	<0.010	<0.010	<0.010				
S-16-B14	11/13/07	16	<0.0050	<0.0050	<0.050	<0.010	<0.010		 17000S	 	 	
S-20.5-B14	11/13/07	20.5	<0.0050	<0.0050	<0.050	<0.010		<0.010	 -	 	 	
	11710707	20.0	-0.0000	-0.0000	~0.000	~0.010	<0.010	<0.010	 200	 	 -	

TABLE 3B ADDITIONAL CUMULATIVE SOIL ANALYTICAL RESULTS

Former Exxon Service Station 70234 3450 35th Avenue Oakland, California (Page 2 of 6)

Sample	Sampling	Depth	1,2-DCA	EDB	TBA	DIPE	ETBE	TAME	Ethanol	Add'l SVOCs	HVOCs	Cadmium	Chromium	Nickel	Zinc
ID	Date	(feet bgs)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
S-5-B15	09/04/07	5	<0.0050	< 0.0050	<0.050	<0.010	<0.010	<0.010		(99)	(9/19)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
S-10.5-B15	11/15/07	10.5	<0.0050	< 0.0050	< 0.050	<0.010	<0.010	<0.010	<0.25						
S-15.5-B15	11/15/07	15.5	0.011	< 0.0050	< 0.050	<0.010	<0.010	<0.010	<0.25						
S-20-B15	11/15/07	20	< 0.25	< 0.25	<2.5	< 0.50	< 0.50	<0.50	<12						
S-25.5-B15	11/15/07	25.5	< 0.12	<0.12	<1.2	< 0.25	<0.25	<0.25	<6.2						
S-30.5-B15	11/15/07	30.5	< 0.25	< 0.25	<2.5	< 0.50	<0.50	<0.50	<12	220					
S-35.5-B15	11/15/07	35.5	<0.0050	<0.0050	0.25	<0.010	<0.010	<0.010	<0.25	2212					
S-5-B16	09/04/07	5	<0.0050	<0.0050	<0.050	<0.010	<0.010	<0.010							
S-11-B16	11/14/07	11	<0.0050	< 0.0050	<0.050	<0.010	<0.010	<0.010							
S-15.5-B16	11/14/07	15.5	<0.0050	<0.0050	<0.050	<0.010	<0.010	<0.010							
S-21-B16	11/14/07	21	<0.0050	<0.0050	<0.050	<0.010	<0.010	<0.010							
S-26-B16	11/14/07	26	< 0.0050	<0.0050	< 0.050	<0.010	<0.010	<0.010							
S-30.5-B16	11/14/07	30.5	<0.0050	<0.0050	<0.050	<0.010	<0.010	<0.010							
S-34.5-B16	11/14/07	34.5	<0.0050	<0.0050	<0.050	<0.010	<0.010	<0.010							
S-38.5-B16	11/14/07	38.5	<0.0050	<0.0050	<0.050	<0.010	<0.010	<0.010							
S-5-B117	09/05/07	5	< 0.0050	< 0.0050	< 0.050	<0.010	<0.010	<0.010							
S-11-B17	11/13/07	11	< 0.0050	<0.0050	< 0.050	<0.010	<0.010	<0.010							4
S-16-B17	11/13/07	16	< 0.0050	< 0.0050	<0.050	<0.010	<0.010	<0.010							
S-21-B17	11/13/07	21	< 0.0050	< 0.0050	<0.050	<0.010	<0.010	<0.010							
S-24.5-B17	11/13/07	24.5	<0.0050	< 0.0050	0.20	<0.010	<0.010	<0.010							
S-31-B17	11/13/07	31	< 0.0050	<0.0050	0.15	<0.010	<0.010	<0.010							
S-35.5-B17	11/13/07	35.5	<0.0050	<0.0050	<0.050	<0.010	<0.010	<0.010							
S-5-B18	09/04/07	5	<0.0050	<0.0050	<0.050	<0.010	-0.010	-0.040							
S-10-B18	11/12/07	10	<0.0050	<0.0050	<0.050	<0.010	<0.010	<0.010							
S-15-B18	11/12/07	15	<0.0050	<0.0050	<0.050		<0.010	<0.010							
S-20-B18	11/12/07	20	<0.0050	<0.0050	<0.050	<0.010	<0.010	<0.010							
S-25-B18	11/12/07	25	<0.0050	<0.0050	<0.050	<0.010	<0.010	<0.010							
S-30-B18	11/12/07	30	<0.0050	<0.0050		<0.010	<0.010	<0.010							
S-35-B18	11/12/07	35	<0.0050		<0.050	<0.010	<0.010	<0.010							
O-00-D 10	11/12/07	30	~ 0.0050	<0.0050	0.70	<0.010	<0.010	<0.010							
S-5-B19	02/25/09	5	<0.0050	<0.0050	<0.050	<0.010	<0.010	<0.010	<0.25	***					
S-10-B19	03/02/09	10	<0.0050	<0.0050	<0.050	<0.010	<0.010	<0.010	<0.25						
S-15.5-B19	03/03/09	15.5	<0.0050	<0.0050	<0.050	<0.010	<0.010	<0.010	<0.25						
S-20.5-B19	03/03/09	20.5	<0.0050	<0.0050	<0.050	<0.010	<0.010	<0.010	<0.25						
	03/03/09	25.5	< 0.0050	< 0.0050	< 0.050	<0.010	<0.010	<0.010	<0.25						
S-25.5-B19 S-30.5-B19	03/03/03	20.0				01010	-0.010	-0.010	~0.20						

TABLE 3B ADDITIONAL CUMULATIVE SOIL ANALYTICAL RESULTS

Former Exxon Service Station 70234 3450 35th Avenue Oakland, California (Page 3 of 6)

Sample ID Sampling Date Depth (feet bgs) 1,2-DCA (mg/kg) EDB (mg/kg) TBA (mg/kg) DIPE (mg/kg) ETBE (mg/kg) TAME (mg/kg) Ethanol (mg/kg) Add'I SVOCs (mg/kg) HVOCs Cadmium Chromium Nickel (mg/kg) Nickel (mg/kg)	Zinc (mg/kg)
S-35.5-B19 03/03/09 35.5 <0.0050 <0.050 <0.050 <0.010 <0.010 <0.025	
S-39.5-B19 03/03/09 39.5 <0.0050 <0.0050 <0.050 <0.010 <0.010 <0.010 <0.025	
S-5-B20 02/25/09 5 <0.0050 <0.050 <0.050 <0.010 <0.010 <0.010 <0.25	
S-10.5-B20 03/03/09 10.5 <0.0050 <0.0050 <0.050 <0.010 <0.010 <0.010 <0.25	
S-10.5-B20 03/03/09 10.5 <0.0050 <0.0050 <0.010 <0.010 <0.010 <0.25	
S-15.0-B20 03/03/09 15.0 <0.0050 <0.0050 <0.050 <0.010 <0.010 <0.010 <0.25	
S-20.5-B20 03/03/09 20.5 <0.0050 <0.0050 <0.010 <0.010 <0.010 <0.25	
S-25.5-B20 03/03/09 25.5 <0.0050 <0.0050 <0.050 <0.010 <0.010 <0.010 <0.25	
S-30.5-B20 03/03/09 30.5 <0.0050 <0.050 <0.050 <0.010 <0.010 <0.010 <0.25	
S-35.5-B20 03/03/09 35.5 <0.0050 <0.0050 <0.050 <0.010 <0.010 <0.050 <0.050	
S-39.5-B20 03/03/09 39.5 <0.0050 <0.0050 <0.050 <0.010 <0.010 <0.010 <0.055	
S-5-B21 02/25/09 5 <0.0050 <0.0050 <0.050 <0.010 <0.010 <0.010 <0.25	
S-10.5-B21 03/04/09 10.5 <0.0050 <0.0050 <0.050 <0.010 <0.010 <0.010 <0.25	
S-15-B21 03/04/09 15 <0.0050 <0.050 <0.050 <0.010 <0.010 <0.010 <0.25	
S-20.5-B21 03/04/09 20.5 <0.0050 <0.0050 <0.050 <0.010 <0.010 <0.010 <0.055	
S-25.5-B21 03/04/09 25.5 <0.0050 <0.0050 <0.050 <0.010 <0.010 <0.010 <0.25	
S-30.5-B21 03/04/09 30.5 <0.0050 <0.0050 <0.050 <0.010 <0.010 <0.010 <0.25	
S-35.5-B21 03/04/09 35.5 <0.0050 <0.0050 <0.050 <0.010 <0.010 <0.010 <0.25	
S-39.5-B21 03/04/09 39.5 <0.0050 <0.0050 <0.050 <0.010 <0.010 <0.010 <0.25	
Monitoring Wells	
MW1 07/14/92 8	***
MW2 07/14/92 29.5	***
MW3 07/14/92 28	
MW4 07/14/92 29.5	***
S-5-MW4 02/25/09 5 <0.0050 <0.0050 <0.050 <0.010 <0.010 <0.010 <0.25	
S-10 5-MW/4 03/03/09 10 5 <0.000	
S-15 5-MW/ 03/02/09 15 5 <0.000	
0.00 5.10.14	
0.00 5.000	
0.00 = 1.004	
0.05 5.100.4	
20.000 0.000 0.000 0.000 0.000 0.000	
0.44 5 18844 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000	
S-44.5-MW4 03/02/09 44.5 <0.0050 <0.0050 <0.050 <0.010 <0.010 <0.025	
S-5-MW5 02/27/09 5 <0.0050 <0.0050 <0.010 <0.010 <0.010 <0.25	Calcul
S-10-MW5 03/05/09 10 <0.0050 <0.0050 <0.010 <0.010 <0.010 <0.25	0000
S-15-MW5 03/05/09 15 <0.0050 <0.0050 <0.010 <0.010 <0.010 <0.25	

TABLE 3B ADDITIONAL CUMULATIVE SOIL ANALYTICAL RESULTS

Former Exxon Service Station 70234 3450 35th Avenue Oakland, California (Page 4 of 6)

Sample	Sampling	Depth	1,2-DCA	EDB	TBA	DIPE	ETBE	TAME	Ethanol	Add'l SVOCs	HVOCs	Cadmium	Chromium	Nickel	Zinc
ID	Date	(feet bgs)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
S-20-MW5	03/05/09	20	<5.0e	<5.0e	<50e	<10e	<10e	<10e	<250e						
S-25-MW5	03/06/09	25	<0.50e	<0.50e	<5.0e	<1.0e	<1.0e	<1.0e	<25e	(***			(4114)	***	
S-30-MW5	03/06/09	30	<0.50e	<0.50e	<5.0e	<1.0e	<1.0e	<1.0e	<25e	9 310 1				***	1
S-35-MW5	03/06/09	35	<0.50e	<0.50e	<5.0e	<1.0e	<1.0e	<1.0e	<25e				3466	F440	-
S-39.5-MW5	03/06/09	39.5	<0.0050	<0.0050	<0.050	<0.010	<0.010	<0.010	<0.25	-8927				***	3
S-5-MW6	02/27/09	5	<0.0050	<0.0050	<0.050	<0.010	<0.010	<0.010	<0.25						
S-10-MW6	03/09/09	10	<0.0050	<0.0050	< 0.050	< 0.010	< 0.010	<0.010	< 0.25						
S-15.5-MW6	03/09/09	15.5	<0.0050	< 0.0050	< 0.050	<0.010	<0.010	<0.010	< 0.25						
S-20.5-MW6	03/09/09	20.5	< 0.0050	< 0.0050	< 0.050	<0.010	<0.010	<0.010	<0.25						
S-25.5-MW6	03/09/09	25.5	< 0.0050	< 0.0050	< 0.050	<0.010	<0.010	<0.010	<0.25						
S-30.5-MW6	03/09/09	30.5	< 0.0050	< 0.0050	< 0.050	<0.010	<0.010	<0.010	<0.25						
S-35.5-MW6	03/09/09	35.5	< 0.0050	<0.0050	0.054	<0.010	<0.010	<0.010	<0.25						
S-39.5-MW6	03/09/09	39.5	<0.0050	<0.0050	<0.050	<0.010	<0.010	<0.010	<0.25						
S-5-MW7	02/27/09	5	<0.0050	<0.0050	<0.050	<0.010	<0.010	<0.010	<0.25						
S-10.5-MW7	03/09/09	10.5	< 0.0050	<0.0050	<0.050	<0.010	<0.010	<0.010	<0.25						
S-15.5-MW7	03/09/09	15.5	<0.0050	<0.0050	< 0.050	<0.010	<0.010	<0.010	<0.25						
S-20.5-MW7	03/09/09	20.5	<0.0050	< 0.0050	<0.050	<0.010	<0.010	<0.010	<0.25						
S-25.5-MW7	03/09/09	25.5	< 0.0050	<0.0050	< 0.050	<0.010	<0.010	<0.010	<0.25						
S-30.5-MW7	03/09/09	30	<0.0050	< 0.0050	< 0.050	<0.010	<0.010	<0.010	<0.25						
S-35.5-MW7	03/09/09	35.5	<0.0050	< 0.0050	<0.050	<0.010	<0.010	<0.010	<0.25						
S-39.5-MW7	03/09/09	39.5	<0.0050	<0.0050	<0.050	<0.010	<0.010	<0.010	<0.25						
S-5-MW8	02/25/09	5	<0.0050	<0.0050	<0.050	<0.010	<0.010	<0.010	<0.25						
S-10.5-MW8	03/04/09	10.5	<0.0050	< 0.0050	<0.050	<0.010	<0.010	<0.010	<0.25						
S-15.5-MW8	03/04/09	15.5	<0.0050	<0.0050	<0.050	<0.010	<0.010	<0.010	<0.25						
S-20.5-MW8	03/04/09	20.5	<0.0050	<0.0050	< 0.050	<0.010	<0.010	<0.010	<0.25						
S-25.5-MW8	03/04/09	25.5	< 0.0050	<0.0050	<0.050	<0.010	<0.010	<0.010	<0.25			~~~			
S-30.5-MW8	03/04/09	30.5	<0.0050	<0.0050	<0.050	<0.010	<0.010	<0.010	<0.25						
S-35.5-MW8	03/04/09	35.5	< 0.0050	<0.0050	<0.050	<0.010									
S-39.5-MW8	03/04/09	39.5	<0.0050	<0.0050	<0.050	<0.010	<0.010 <0.010	<0.010 <0.010	<0.25 <0.25						
	50,01,00	00.0	0.0000	.0.000	-0.000	10.010	40.010	10.010	~0.25						
S-5-MW9	02/25/09	5	<0.0050	<0.0050	< 0.050	<0.010	<0.010	<0.010	<0.25						
S-10-MW9	03/05/09	10	<0.0050	<0.0050	<0.050	<0.010	<0.010	<0.010	<0.25						
S-15-MW9	03/05/09	15	<0.0050	<0.0050	<0.050	<0.010	<0.010	<0.010	<0.25					***	
S-20-MW9	03/05/09	20	<0.0050	<0.0050	<0.050	<0.010	<0.010	<0.010	<0.25						
S-25-MW9	03/05/09	25	<0.0050	<0.0050	< 0.050	<0.010	<0.010	<0.010	<0.25						
S-30-MW9	03/05/09	30	<0.0050	<0.0050	< 0.050	<0.010	<0.010	<0.010	<0.25						
S-35-MW9	03/05/09	35	<0.0050	<0.0050	< 0.050	<0.010	<0.010	<0.010	<0.25						

TABLE 3B ADDITIONAL CUMULATIVE SOIL ANALYTICAL RESULTS

Former Exxon Service Station 70234 3450 35th Avenue Oakland, California (Page 5 of 6)

National Property and Company of the	2100 7000														
Sample	Sampling	Depth	1,2-DCA	EDB	TBA	DIPE	ETBE	TAME	Ethanol	Add'l SVOCs	HVOCs	Cadmium	Chromium	Nickel	Zinc
ID	Date	(feet bgs)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
C 40 MANO	00/0=/00	4.0	-0.0000	0.0000						(3/3/	(1119/119)	(mg/ng/	(mg/kg)	(mg/kg)	(mg/kg)
S-40-MW9	03/05/09	40	< 0.0050	< 0.0050	< 0.050	< 0.010	< 0.010	< 0.010	< 0.25	(Marie)				2230	15000

TABLE 3B ADDITIONAL CUMULATIVE SOIL ANALYTICAL RESULTS

Former Exxon Service Station 70234 3450 35th Avenue Oakland, California (Page 6 of 6)

							(. ago o o	/							
Sample	Sampling	10000 10000 100	1,2-DCA	EDB	TBA	DIPE	ETBE	TAME	Ethanol	Add'l SVOCs	HVOCs	Cadmium	Chromium	Nickel	Zinc
ID	Date	(feet bgs)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Soil Stockpile															
SP-1(S-SP1-S-SP4)	09/12/07	***	<0.0050	<0.0050	<0.020	<0.0050	<0.0050	<0.0050	***						
SP(1-4)	06/18/97									ND		ND	55	53	43
SP-2	03/09/09	Same	<0.0050	<0.0050	<0.050	<0.010	<0.010	<0.010	<0.25	1	ND	-		200	
Notes:															
TPHg	=	Total petrole	um hydrocar	bons as gas	soline analy	zed using	modified EF	A Method 8	015M.						
MTBE	=														
BTEX	=7		Methyl tertiary butyl ether analyzed using EPA Method 8021B/8260B Benzene, toluene, ethylbenzene, and total xylenes analyzed using EPA Method 8021B/8260B.												
Lead	Ξ.	Lead analyzed using EPA Method 6010B.													
TOG	=	Total oil and grease.													
1,2-DCA	. =		1,2-dichloroethane analyzed using EPA Method 8260B.												
EDB	=	1,2-dibromoethane analyzed using EPA Method 8260B.													
TBA	=	Tertiary butyl alcohol analyzed using EPA Method 8260B.													
DIPE	=	Di-isopropyl e													
ETBE	=	Ethyl tertiary I					3.								
TAME	120	Tertiary amyl													
Ethanol	=	Ethanol analy													
Add'l SVOCs	=	Additional ser	_												
HVOCs	=	Halogenated	volatile orgar	nic compou	nds analyz	ed using Ef	PA Method 8	3260B.							
feet bgs	.=.	Feet below gr			•	· ·									
mg/kg	=	Milligrams per	r kilogram.												
<	=	Less than the		atory report	ina limit										
	=	Not analyzed/		-	g										
а	=	Unidentified C													
b	=	Unidentified C													
c	= 1	Unidentified C													
d	=														
		Unidentified C													
е	=	Reporting limit	ts are elevat	ed due to hi	gh levels o	f non-targe	t compound	s.							

APPENDIX A FIELD PROTOCOLS

Cardno ERI Field Protocol - Groundwater Pump Test

A groundwater pump test is performed to determine various aquifer parameters such as the optimal pumping rate, capture zone, storativity and hydraulic conductivity for use in evaluating dissolved phase transport and potential remediation system design. The pump test is performed by reviewing the lithology and selecting an extraction well central to the source area. The pump is placed in the well so that its intake is approximately 2 feet above the bottom of the well. Observation wells are chosen at various radial distances and flow directions from the extraction well. One observation well is chosen outside the anticipated cone of depression to monitor barometric pressure changes that occur during the test. Transducers with data loggers are placed in the observation wells one day in advance to allow the suspension cables to stretch and/or unwind. Transducers with a sensitivity range spanning the anticipated drawdowns are placed at a depth below the anticipated drawdowns for each observation well. The data logging program is initiated to ensure that all transducers are functioning and recording properly. A pump that can extract water at approximately twice the anticipated flow rate with a variable speed controller is placed in the extraction well. Prior to starting the test, water levels in the extraction and observation wells are measured to an accuracy of 0.01 foot using a water level meter.

Step-Drawdown Test

The pump, transducers, water level meter and sampling equipment are decontaminated or obtained new prior to starting the test. The water level meter is decontaminated using a three-bucket soap and water rinse each time before being inserted into a new well.

A step-drawdown test is performed initially to determine the optimum pumping rate for the extraction well. The optimum pumping rate is defined as the rate that produces a drawdown of approximately 75% of the available water column (pump intake depth minus water table depth). The test is performed by pumping at 3 to 5 flow rates at successively higher rates. Pumping rates are measured using an accurate flow meter or a bucket and stopwatch. The speed of the pump is controlled to maintain a constant flow rate during each step of the test. Generally, the pumping rates are selected at a minimum of 33%, 67% and 100% of the anticipated optimal pumping rate. However, each subsequent pumping rate depends on the drawdown in the pumping well at the current pumping rate. Water levels in the extraction well are monitored closely and the pumping rate is adjusted accordingly. Larger steps between pumping rates are used if the change in stabilized water levels is minimal or if greater drawdown in the extraction well is desired. The pumping rate is maintained until the water level in the pumping well begins to stabilize (difference between three successive readings is less than 10% of total drawdown) or for a minimum of 15 minutes at each rate. Water levels in the observations wells are recorded during each step of the test using the transducers and data logger, and are periodically checked with a water level indicator. The results of the step-drawdown test are used to determine the optimum sustainable rate for the constantrate pump test.

Constant-Rate Pumping Test

Water levels are allowed to recover from the step-drawdown test prior to starting the constant-rate pumping test. The constant-rate pump test is performed by pumping from the extraction well at the optimal pumping rate determined from the step-drawdown test and measuring the drawdown in the surrounding observation wells. Data loggers are programmed to record information more frequently (every few seconds) during the initial phase of this test progressing to less frequently (every 15 minutes) during later phases. The test continues until the water depths (unconfined aquifers) or piezometric heads (confined aquifers) in the observations wells have stabilized (difference between three successive readings is less than 10% of total drawdown). The speed of the pump is controlled to maintain the selected constant flow rate. Tighter soils (silt and clay) have longer tests than coarser soils (sand and gravel) due to delayed drainage, slower pump rates, etc. Upon completion of the test, the pump is shut off, and the water levels in the observation wells and pumping well are monitored and recorded until they recover to near initial static levels. Equipment is decontaminated before leaving the site

FN: Cardno ERI Field Protocol - Pump Test - v1

Groundwater Disposal

Extracted groundwater is stored on site in a tank and subsequently treated at a client- and regulatory-approved facility, treated with a permitted mobile carbon treatment system, or transported off site in a truck or trailer-mounted tank and disposed of in accordance with regulatory requirements. Water samples are collected and analyzed as appropriate under chain-of-custody protocol.

Cardno ERI Soil Boring and Well Installation Field Protocol

Preliminary Activities

Prior to the onset of field activities at the site, Cardno ERI obtains the appropriate permit(s) from the governing agency(s). Advance notification is made as required by the agency(s) prior to the start of work. Cardno ERI marks the borehole locations and contacts the local one call utility locating service at least 48 hours prior to the start of work to mark buried utilities. Borehole locations may also be checked for buried utilities by a private geophysical surveyor. Prior to drilling, the borehole location is cleared in accordance with the client's procedures. Fieldwork is conducted under the advisement of a registered professional geologist and in accordance with an updated site-specific safety plan prepared for the project, which is available at the job site during field activities.

Drilling and Soil Sampling Procedures

Cardno ERI contracts a licensed driller to advance the boring and collect soil samples. The specific drilling method (e.g., hollow-stem auger, direct push method, or sonic drilling), sampling method [e.g., core barrel or California-modified split spoon sampler (CMSSS)] and sampling depths are documented on the boring log and may be specified in a work plan. Soil samples are typically collected at the capillary fringe and at 5-foot intervals to the total depth of the boring. To determine the depth of the capillary fringe prior to drilling, the static groundwater level is measured with a water level indicator in the closest monitoring well to the boring location, if available.

The borehole is advanced to just above the desired sampling depth. For CMSSSs, the sampler is placed inside the auger and driven to a depth of 18 inches past the bit of the auger. The sampler is driven into the soil with a standard 140-pound hammer repeatedly dropped from a height of 30 inches onto the sampler. The number of blows required to drive the sampler each 6-inch increment is recorded on the boring log. For core samplers (e.g., direct push), the core is driven 18 inches using the rig apparatus.

Soil samples are preserved in the metal or plastic sleeve used with the CMSSS or core sampler, in glass jars or other manner required by the local regulatory agency (e.g., Environmental Protection Agency Method 5035). Sleeves are removed from the sample barrel, and the lowermost sample sleeve is immediately sealed with TeflonTM tape, capped, labeled, placed in a cooler chilled to 4° Celsius and transported to a state-certified laboratory. The samples are transferred under chain-of-custody (COC) protocol.

Field Screening Procedures

Cardno ERI places the soil from the middle of the sampling interval into a plastic re-sealable bag. The bag is placed away from direct sunlight for a period of time which allows volatilization of chemical constituents, after which the tip of a photo-ionization detector (PID) or similar device is inserted through the plastic bag to measure organic vapor concentrations in the headspace. The PID measurement is recorded on the boring log. At a minimum, the PID or other device is calibrated on a daily basis in accordance with manufacturer's specifications using a hexane or isobutylene standard. The calibration gas and concentration are recorded on a calibration log. Instruments such as the PID are useful for evaluating relative concentrations of volatilized hydrocarbons, but they do not measure the concentration of petroleum hydrocarbons in the soil matrix with the same precision as laboratory analysis. Cardno ERI trained personnel describe the soil in the bag according to the Unified Soil Classification System and record the description on the boring log, which is included in the final report.

Air Monitoring Procedures

Cardno ERI performs a field evaluation for volatile hydrocarbon concentrations in the breathing zone using a calibrated photo-ionization detector or lower explosive level meter.

Groundwater Sampling

A groundwater sample, if desired, is collected from the boring by using HydropunchTM sampling technology or installing a well in the borehole. In the case of using HydropunchTM technology, after collecting the capillary fringe soil sample, the boring is advanced to the top of the soil/groundwater interface and a sampling probe is pushed to approximately 2 feet below the top of the static water level. The probe is opened by partially withdrawing it and thereby exposing the screen. A new or decontaminated bailer is used to collect a water sample from the probe. The water sample is then emptied into laboratory-supplied containers constructed of the correct material and with the correct volume and preservative to comply with the proposed laboratory test. The container is slowly filled with the retrieved water sample until no headspace remains and then promptly sealed with a Teflon-lined cap, checked for the presence of bubbles, labeled, entered onto a COC record and placed in chilled storage at 4° Celsius. Laboratory-supplied trip blanks accompany the water samples as a quality assurance/quality control procedure. Equipment blanks may be collected as required. The samples are kept in chilled storage and transported under COC protocol to a client-approved, state-certified laboratory for analysis.

Backfilling of Soil Boring

If a well is not installed, the boring is backfilled from total depth to approximately 5 feet below ground surface (bgs) with either neat cement or bentonite grout using a tremie pipe and either the boring is backfilled from 5 feet bgs to approximately 1 foot bgs with hydrated bentonite chips or backfill is continued to just below grade with neat cement grout. The borehole is completed to surface grade with material that best matches existing surface conditions and meets local agency requirements. Site-specific backfilling details are shown on the respective boring log.

Well Construction

A well (if constructed) is completed using materials documented on the boring log or specified in a work plan. The well is constructed with slotted casing across the desired groundwater sampling depth(s) and completed with blank casing to within 6 inches of surface grade. No further construction is conducted on temporary wells. For permanent wells, the annular space of the well is backfilled with Monterey sand from the total depth to approximately 2 feet above the top of the screened casing. A hydrated granular bentonite seal is placed on top of the sand filter pack. Grout may be placed on top of the bentonite seal to the desired depth using a tremie pipe. The well may be completed to surface grade with a 1-foot thick concrete pad. A traffic-rated well vault and locking cap for the well casing may be installed to protect against surface-water infiltration and unauthorized entry. Site-specific well construction details including type of well, well depth, casing diameter, slot size, length of screen interval and sand size are documented on the boring log or specified in the work plan.

Well Development and Sampling

If a permanent groundwater monitoring well is installed, the grout is allowed to cure a minimum of 48 hours before development. Cardno ERI personnel or a contracted driller use a submersible pump or surge block to develop the newly installed well. Prior to development, the pump is decontaminated by allowing it to run and re-circulate while immersed in a non-phosphate solution followed by successive immersions in potable water and de-ionized water baths. The well is developed until sufficient well casing volumes are removed so that turbidity is within allowable limits and pH, conductivity and temperature levels stabilize in the purge water. The volume of groundwater extracted is recorded on a log.

Following development, groundwater within the well is allowed to recharge until at least 80% of the drawdown is recovered. A new or decontaminated bailer is slowly lowered past the air/water interface in the well, and a water sample is collected and checked for the presence of non-aqueous phase liquid, sheen or emulsions. The water sample is then emptied into laboratory-supplied containers as discussed above.

Surveying

If required, wells are surveyed by a licensed land surveyor relative to an established benchmark of known elevation above mean sea level to an accuracy of +/- 0.01 foot. The casing is notched or marked on one side to identify a consistent surveying and measuring point.

Decontamination Procedures

Cardno ERI or the contracted driller decontaminates soil and water sampling equipment between each sampling event with a non-phosphate solution, followed by a minimum of two tap water rinses. Deionized water may be used for the final rinse. Downhole drilling equipment is steam-cleaned prior to drilling the borehole and at completion of the borehole.

Waste Treatment and Soil Disposal

Soil cuttings generated from the drilling or sampling are stored on site in labeled, Department of Transportation-approved, 55-gallon drums or other appropriate storage container. The soil is removed from the site and transported under manifest to a client- and regulatory-approved facility for recycling or disposal. Decontamination fluids and purge water from well development and sampling activities, if conducted, are stored on site in labeled, regulatory-approved storage containers. Fluids are subsequently transported under manifest to a client- and regulatory-approved facility for disposal or treated with a permitted mobile or fixed-base carbon treatment system.