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Project Manager



January 30, 2015

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

RECEIVED

By Alameda County Environmental Health at 11:51 am, Feb 02, 2015

RE: Former Exxon RAS #73006/720 High Street, Oakland, California.

Dear Ms. Detterman:

Attached for your review and comment is a copy of the letter report entitled *Soil Investigation, Groundwater Monitoring Report, and Request for Closure,* dated January 30, 2015, for the above-referenced site. The report was prepared by Cardno ERI of Petaluma, California, and details activities pertaining to 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

Attachment: Cardno ERI's Soil Investigation, Groundwater Monitoring Report, and Request for Closure,

dated January 30, 2015

cc: w/ attachment

Mr. Mansour Sepehr, Ph.D., P.E., SOMA Environmental Engineering, Incorporated

Mr. Mo Mashoon, Mash Petroleum, Inc.

w/o attachment

Mr. Greg Gurss, Cardno ERI

Soil Assessment, Groundwater Monitoring Report, and Request for Closure

Former Exxon Service Station 73006

Cardno ERI 2010C.R34

January 30, 2015



Soil Assessment, Groundwater Monitoring Report, and Request for Closure

Former Exxon Service Station 73006 720 High Street Oakland, California

Alameda County No. 491

Cardno ERI 2010C.R34

January 30, 2015



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1 Introduction

At the request of ExxonMobil Environmental Services (EMES), on behalf of Exxon Mobil Corporation, Cardno ERI prepared this soil investigation, groundwater monitoring report, and request for closure for the subject site. This report was prepared in response to electronic correspondence from Alameda County Environmental Health (County), dated September 25, 2014 (Appendix A). The work included the drilling and sampling of soil boring B38 (located in the vicinity of the former used-oil UST), the sampling of newly-installed wells MW20 and MW21, and evaluating the site under the State Water Resources Control Board's *Low-Threat Underground Storage Tank Case Closure Policy* (Low-Threat Policy), effective August 17, 2012 (SWRCB, 2012). The work was performed in accordance with the *Work Plan for Soil Boring* (Work Plan), dated October 29, 2014 (Cardno ERI, 2014b), which was approved by the County in electronic correspondence dated November 26, 2014 (Appendix A).

2 Site Description

Former Exxon Service Station 73006 is located at 720 High Street, Oakland, California (Assessor's Parcel Number 34-2290-6-3) on the southeastern corner of the intersection of High Street and Coliseum Way adjacent to an elevated portion of Interstate Highway 880 (Plate 1). The site operated as an Exxon-branded service station from 1970 to 1987. Prior to use as a service station, the site was used as an oil storage and distribution facility from 1912 to 1934, an automobile junkyard from 1953 to 1969, and a dump site prior to 1970 (RESNA, 1993a). The site is currently an active Gas and Food-branded station owned and operated by Mash Petroleum, Inc. The locations of select site features are shown on the Generalized Site Plan (Plate 2).

Additional information (including site history, features, geology, hydrogeology, and environmental activities) is included in Cardno ERI's *Updated SCM and Soil and Groundwater Investigation and Groundwater Monitoring Report* dated July 17, 2014 (Cardno ERI, 2014a).

3 Soil and Groundwater Assessment

Cardno ERI performed the fieldwork in accordance with the Work Plan (Cardno ERI, 2014b), standard field protocols (Appendix B), a site-specific safety plan, and applicable regulatory guidelines under the advisement of a professional geologist.

3.1 Pre-Field Work

Cardno ERI obtained permits from the Alameda County Public Works Agency (Appendix C), contacted Underground Service Alert (USA), and contracted with a private utility-locating company to locate underground utilities at the site.

3.2 Boring

On January 5, 2015, Cardno ERI observed Cascade Drilling, LP clear the location for boring B38 to 5 feet bgs using hand tools and drill the boring to 10 feet bgs using a direct-push drill rig. The boring log is included in Appendix D.

3.3 Groundwater Monitoring and Sampling

On September 18, 2014, Cardno ERI measured DTW and collected groundwater samples from newly-installed wells MW20 and MW21. Groundwater monitoring and sampling were performed in accordance with Cardno ERI's groundwater sampling protocol (Appendix B). Field data sheets are included in Appendix E.

3.4 Laboratory Analysis

Groundwater and soil samples were submitted to Eurofins Calscience, Inc., of Garden Grove, California, a California state-certified laboratory, under COC protocol, and analyzed for the analytes and methods listed in Tables 1A through 1D and Tables 3A through 3D. Laboratory analytical reports are included in Appendix F. Select soil and groundwater analytical results are illustrated on Plates 3 and 4, respectively.

3.5 Waste Disposal

Soil, groundwater, and purge and decon water generated during drilling activities and/or the groundwater monitoring and sampling event were temporarily stored on site in drums pending disposal at an EMES-approved facility. Waste disposal documentation is included in Appendix G. Soil disposal documentation will be submitted under separate cover.

4 Results

Cardno ERI installed soil boring B38 and collected groundwater samples from off-site wells MW20 and MW21 as part of this investigation.

4.1 Site Geology

The sediments encountered in boring B38 are consistent with previous observations. With the exception of fill material in the upper 1.5 feet of the boring, the soils encountered consisted primarily of silt and clay with lesser amounts of fine-grained sand to 10 feet bgs, the maximum depth explored.

4.2 Hydrocarbons in Soil

Soil samples from 3, 5.5, and 9.5 feet bgs were submitted for laboratory analysis. Concentrations of TPHg, TPHd, PAHs, and BTEX were not reported in the soil samples collected from boring B38. With the exception of select metals, the requested analytes were not detected above laboratory reporting limits.

4.3 Hydrocarbons in Groundwater

The dissolved-phase concentrations reported in wells MW20 and MW21 were consistent with previous results. Maximum concentrations were reported in well MW21 with TPHg and benzene concentrations of 2,200 µg/L and 170 µg/L, respectively. Benzene concentrations reported in well MW21 are greater than the concentrations reported in well MW20 and the other site wells sampled during recent years, suggesting that the concentrations reported in well MW21 (beneath Interstate 880) may be from another source. Well MW21 is located approximately 100 feet downgradient of well MW20 and approximately 180 feet from the site (Plate 4).

5 Low-Threat UST Case Closure Policy Evaluation

Cardno ERI evaluated the case under the Low-Threat Policy (SWRCB, 2012). Cardno ERI concludes that the site adequately meets the criteria for a low-threat closure for commercial land use. The criteria for low-threat closure are addressed in the following sections.

5.1 General Criteria

a. The unauthorized release is located within a service area of a public water system.

The site is located in an area of a public water system (EBMUD).

b. The unauthorized release consists only of petroleum.

Cumulative analytical data and the site history indicate that the unauthorized release related to operations associated with EMES at the site consist only of petroleum.

c. The unauthorized ("primary") release from the UST system has been stopped.

In April 1987, the four original USTs were excavated and removed (AGS, 1987a). The ongoing groundwater monitoring data indicate that there is not an ongoing release from the UST system.

d. Free product has been removed to the maximum extent practicable.

In 1987, NAPL was observed floating on top of the water at the bottom of the gasoline UST excavation; approximately 1,350 gallons of water (containing 99% water and 1% gasoline) were removed from the excavation (AGS, 1987b). Approximately 27 gallons of NAPL were removed in 1989 from wells MW2, MW3, MW4, and MW8 (AGS, 1989). Approximately 6.3 gallons of NAPL were removed in 1993 (RESNA, 1993b). Remediation systems operated at the site from 1995 to 1999 (ERI, 1999a; ERI, 1999b).

A grab groundwater sample collected from boring CPT2 in 2005 had reported concentrations of TPHg $(1,060,000 \mu g/L)$ indicative of the potential presence of NAPL off site to the west (ERI, 2005).

Since April 2011, NAPL and/or sheen have been periodically observed in well MW3. During fourth quarter 2012, Cardno ERI installed a passive NAPL skimmer in well MW3 (Cardno ERI, 2013a). NAPL samples collected from the skimmer indicated that the NAPL was consistent with weathered diesel with little to no BTEX and MTBE concentrations near or below 5 μ g/L. During pumping, well MW3 is observed to go dry after approximately two well casing volumes, indicating that significant NAPL recovery is not feasible. The NAPL does not extend off site and appears to be limited in extent to the area near well MW3.

e. A conceptual model that assesses the nature, extent, and mobility of the release has been developed.

Cumulative site reports, including the Site Conceptual Model (ERI, 2005), Soil and Groundwater Investigation Report with Updated Site Conceptual Model and Monitoring Well Replacement Recommendations (ERI, 2007), Conduit Study and Summary of Field Activities (ERI, 2008), Site Assessment Report (ERI, 2009), Site Conceptual Model Update and Data Gap Investigation Work Plan (Cardno ERI, 2013b), Updated SCM and Soil and Groundwater Investigation and Groundwater Monitoring Report (Cardno ERI, 2014a), and this document provide a conceptual model for the site.

f. Secondary source has been removed to the extent practicable.

Between May and July 1987, approximately 760 cubic yards of soil were excavated from the former gasoline UST excavation, aerated, and subsequently removed from the site for disposal (AGS, 1987a). In July 1989, approximately 300 cubic yards of soil and debris (including bricks and lumber) were excavated from the southern and southwestern sides of the former gasoline UST pit as far towards Coliseum Way as possible (AGS, 1989). In January 1991, approximately 500 cubic yards of soil were excavated from the northwestern corner of the site for the new UST cavity (AGS, 1991).

A GWPTS operated at the site from 1995 to 1998, removing approximately 10 pounds of TPHg and 3 pounds of benzene. An AS/SVE system operated from 1996 to 1999, removing approximately 5,144 pounds of TPHg and 61 pounds of benzene (ERI, 1999a; ERI, 1999b).

A biosparge system operated from 2001 to 2003. The biosparge system used an air compressor to inject air into the on-site groundwater interceptor trench to enhance biodegradation (ERI, 2005).

The cumulative site data including recent groundwater monitoring data indicate that additional active remediation is not warranted and secondary source has been removed the extent practicable.

g. Soil or groundwater has been tested for MTBE and the results reported in accordance with Health and Safety Code section 25296.15.

MTBE has been analyzed for in groundwater samples collected at the site since 1996 (Table 1A) and in soil samples collected at the site since 2005 (Table 3A).

h. Nuisance as defined by Water Code section 13050 does not exist at the site.

The site is an active gas station in an industrial part of Oakland adjacent to the elevated portion of Interstate 880. The current site conditions do not interfere with foreseeable use of the property. The off-site conditions did not prohibit the completion of an extensive infrastructure project that was recently completed across the street from the site beneath Interstate 880. The off-site concentrations are present on property located beneath an elevated freeway, which is unlikely to have residential land use in the foreseeable future.

The site is zoned for a variety of heavy commercial and industrial establishments (CIX-2). The adjacent property to the east is designated General Industrial (IG); to the north and south, CIX-2, and to the west Central Estuary District Industrial Zone -6 (D-CE-6) allowing for industrial and manufacturing uses, transportation facilities, warehousing and distribution, and similar related uses (City of Oakland, 2013).

5.2 Media-Specific Criteria

5.2.1 Groundwater

The site adequately meets two of the five criteria established for groundwater in the Low-Threat Policy. The site is compared to scenarios 3 and 4 from the Low-Threat Policy in the following subsections.

5.2.1.1 Criteria 3

1. The contaminant plume that exceeds WQOs is less than 250 feet in length.

Based on historic and recent on-site and off-site groundwater data (including data from the EkoTek at 4200 Alameda Avenue and the Shell branded service station at 620 High Street), petroleum hydrocarbons that originate from the site likely extend less than 250 feet in groundwater. The well network at the site extends approximately 300 feet in the downgradient direction. Dissolved-phase concentrations increase in well MW21 (as compared to well MW20), although it is further downgradient than well MW20. The reported concentration of benzene in well MW21 (170 µg/L) is not consistent with the general lack of benzene reported in recent samples collected from the site (even when NAPL was observed in well MW3, benzene was below reporting limits in the well). The industrial history of the area and multiple identified sources preclude delineating concentrations to a non-detect level. Assuming a plume originating from the former USTs and extending to the midpoint between wells MW20 and MW21, the estimated plume length would be approximately 185 feet.

2. Free product has been removed to the maximum extent practicable, may still be present below the site where the release originated, but does not extend off-site.

A grab groundwater sample collected in 2005 from boring CPT2, located off site to the west, had reported concentrations of TPHg (1,060,000 μ g/L) indicative of the potential presence of NAPL (ERI, 2005). The results from newly-installed well MW20 demonstrate that NAPL is not currently present in that vicinity.

NAPL and/or sheen have been periodically reported in well MW3 since April 2011; however, the quantities observed are not likely feasibly recoverable. During fourth quarter 2012, Cardno ERI installed a passive NAPL skimmer in well MW3 (Cardno ERI, 2013a). A NAPL sample was collected from the skimmer during second quarter 2014. The analytical results were consistent with weathered diesel with BTEX and MTBE concentrations near or below 5 µg/L. BTEX compounds have been below reporting limits in well MW3 for several years. Some NAPL with limited mobility may be present at the site; however, the NAPL is limited in extent and the volatile fraction (i.e., BTEX) is near or below laboratory reporting limits.

Destroyed well MW1, located across Coliseum Avenue, did not show evidence of NAPL between two observations of sheen in 1989 and the well destruction in 2007 to accommodate a construction project.

Between May and July 1987, approximately 760 cubic yards of soil were excavated from the former gasoline UST excavation, aerated, and subsequently removed from the site for disposal (AGS, 1987a). In July 1989, approximately 300 cubic yards of soil and debris (including bricks and lumber) were excavated from the southern and southwestern sides of the former gasoline UST pit as far towards Coliseum Way as possible (AGS, 1989). In January 1991, approximately 500 cubic yards of soil were excavated from the northwestern corner of the site for the new UST cavity (AGS, 1991).

A GWPTS operated at the site from 1995 to 1998, removing approximately 10 pounds of TPHg and 3 pounds of benzene. An AS/SVE system operated from 1996 to 1999, removing approximately 5,144 pounds of TPHg and 61 pounds of benzene (ERI, 1999a; ERI, 1999b).

A biosparge system operated from 2001 to 2003. The biosparge system used an air compressor to inject air into the on-site groundwater interceptor trench to enhance biodegradation (ERI, 2005).

The cumulative site data, including recent groundwater monitoring data, indicate that NAPL has been removed the extent practicable and does not extend off site.

3. The plume has been stable or decreasing for a minimum of five years.

Groundwater monitoring has been performed at the site since 1989. With the exception of minor fluctuations, concentrations at the site have shown stable or declining trends for a period greater than five years (Table 1A).

4. The nearest existing drinking water well or surface water body is greater than 1,000 feet from the defined plume boundary.

Records from the DWR and Public Works do not indicate the presence of municipal or domestic wells within a 2,000-foot radius of the site. Field reconnaissance has also not confirmed the presence of any water supply wells within a 2,000-foot radius of the site. There are reported wells that have not been confirmed to be present near the site during filed visits. Additional information on these reported wells is included in the *Updated SCM* and *Soil and Groundwater Investigation and Groundwater Monitoring Report* (Cardno ERI, 2014a).

The nearest surface water body (the Oakland Estuary Tidal Canal) is located approximately 1,900 northeast of the site. The canal is connected to the San Leandro Bay, which is part of the San Francisco Bay, and is located approximately 3,100 south of the site. Using the 90th percentile plume length for MTBE from the technical justification from the Low-Threat Policy provides a separation of approximately 1,350 feet to the surface water (SWRCB, 2011).

5. The property owner is willing to accept a land use restriction if the regulatory agency requires a land use restriction as a condition of closure.

During a conference call attended by the property owner, the County, and Cardno ERI representatives on September 19, 2014, the property owner indicated that he was amenable to a land use restriction. The zoning of the property and location of the property suggest that the land use is likely to be commercial for the foreseeable future regardless of a land use restriction.

5.2.1.2 Criteria 4

1. The contaminant plume that exceeds WQOs is less than 1,000 feet in length.

Based on the results of historical and recent on-site and off-site groundwater data (including the EkoTek located at 4200 Alameda Avenue and the Shell-branded service station at 620 High Street in Oakland), petroleum hydrocarbons that originate from the site appear to extend less than 1,000 feet in groundwater. The well network at the site extends approximately 300 feet in the downgradient direction. The industrial history of the area and multiple identified sources preclude delineating concentrations to a non-detect level.

To additionally evaluate the plume length, Cardno ERI used the plume lengths in the technical justification for the Low-Threat Policy (SWRCB, 2011). The average plume length and the 90th percentile plume length are shown on Plate 4 along with site-specific groundwater data. Both the average plume length and 90 percentile plume length are less than 1,000 feet long.

2. There is no free product.

A grab groundwater sample collected from boring CPT2 in 2005 had reported concentrations of TPHg $(1,060,000 \mu g/L)$ indicative of the potential presence of NAPL off site to the west (ERI, 2005). The results from newly-installed well MW20 demonstrate that NAPL is not currently present in that vicinity.

NAPL and/or sheen have been periodically reported in well MW3 since April 2011; however, the quantities observed are not likely feasibly recoverable. During fourth quarter 2012, Cardno ERI installed a passive NAPL skimmer in well MW3 (Cardno ERI, 2013a). A NAPL sample was collected from the skimmer during second quarter 2014. The analytical results were consistent with weathered diesel with little to no BTEX and MTBE concentrations near or below 5 μ g/L. BTEX compounds have been below reporting limits in well MW3 for several years. Some NAPL with limited mobility may be present at the site, but it is limited in extent with little to no volatile components.

3. The nearest existing drinking water well or surface water body is greater than 1,000 feet from the defined plume boundary.

Records from the DWR and Public Works do not indicate the presence of municipal or domestic wells within a 2,000-foot radius of the site. Field reconnaissance has not confirmed the presence of any water supply wells within a 2,000-foot radius of the site. There are some reported wells that have not been confirmed to be present near the site during filed visits. Additional information on these reported wells is included in the *Updated SCM and Soil and Groundwater Investigation and Groundwater Monitoring Report* (Cardno ERI, 2014a).

The nearest surface water body (the Oakland Estuary Tidal Canal) is located approximately 1,900 northeast of the site. The canal is connected to the San Leandro Bay, which is part of the San Francisco Bay, and is located approximately 3,100 south of the site. Using the 90th percentile plume length for MTBE from the technical justification from the Low-Threat Policy provides a separation of approximately 1,350 feet to the surface water.

5.2.2 Soil

Maximum post-remediation concentrations of petroleum hydrocarbons in soil were compared with the concentrations in soil that will have no significant risk of adversely affecting human health (SWRCB, 2012).

Concentrations of Petroleum Constituents in Soil That Will Have No Significant Risk of Adversely Affecting Human Health (SWRCB, 2012)

	Re	sidential	Commerc	ial/Industrial	Utility Worker
Constituent	0 to 5 feet bgs (mg/kg)	Volatilization to Outdoor Air (5 to 10 feet bgs) (mg/kg)	0 to 5 feet bgs (mg/kg)	Volatilization to Outdoor Air (5 to 10 feet bgs) (mg/kg)	0 to 10 feet bgs (mg/kg)
Benzene	1.9	2.8	8.2	12	14
Ethylbenzene	21	32	89	134	314
Naphthalene	9.7	9.7	45	45	219
PAH	0.063		0.68		4.5

Concentrations in post-remediation (2005 and later) soil samples collected at the site above these levels are listed in the following table.

Soil Concentrations Reported Remaining In Place at the Site in Excess of Soil Quality Goals

Son Concentration	is reported rei	maining in Flace at the	Site iii Excess of St	ni Quality Goals	
	Re	esidential	Commerc	ial/Industrial	Utility Worker
Constituent	0 to 5 feet bgs mg/kg	Volatilization to Outdoor Air (5 to 10 feet bgs) mg/kg	0 to 5 feet bgs mg/kg	Volatilization to Outdoor Air (5 to 10 feet bgs) mg/kg	0 to 10 feet bgs mg/kg
Benzene	None	7.79 (DP5, 2 feet) 6.99 (DP5, 8 feet)	None	None	None
Ethylbenzene	None	None	None	None	None
Naphthalene	None	None	None	None	None
PAH	None		None		None

Concentrations of ethylbenzene, naphthalene, and PAHs have not been reported at or above residential or commercial levels in post-remediation soil samples. Benzene was reported above residential levels in soil samples collected from boring DP5 in April 2005, but has not been reported above commercial levels. Naphthalene and PAHs were only analyzed for in borings MW20, MW21, and B38. The results of the soil samples collected since 2005 meet the Low-Threat Policy criteria assuming commercial land use.

5.2.3 Petroleum Vapor Intrusion to Indoor Air

The site is an active retail gasoline station; therefore, the media-specific criteria for petroleum vapor intrusion to indoor air are not applicable per the Low-Threat Policy (SWRCB, 2012). In addition, the lack of volatile components (i.e., benzene) in the remaining hydrocarbons greatly reduces the potential for off-site vapor intrusion risks. In addition, the area where off-site concentrations have been reported is beneath an elevated portion of Interstate 880 that is vacant and unlikely to have a change in land use in the foreseeable future.

6 Conclusions

Based on current site conditions, Cardno ERI concludes that:

- The site is in a long-industrialized part of Oakland and the surrounding area and historical land use make it difficult to perform environmental work without encountering concentrations associated with other sources.
- The site is zoned for industrial uses; land use is not expected to change in the foreseeable future.
- Residual petroleum hydrocarbon concentrations meet the commercial criteria listed in the Low-Threat Policy.
- Dissolved-phase petroleum hydrocarbons show overall stable and/or decreasing trends.
- Petroleum hydrocarbons remaining at the site are not likely to migrate to water wells, deeper drinking water aquifers, surface water, or other sensitive receptors and do not pose a significant risk to human health or the environment.
- The site adequately meets the criteria for Low-Threat Closure under a commercial land-use scenario.

7 Recommendations

Cardno ERI recommends the site be evaluated for case closure and that groundwater monitoring and sampling be suspended pending the evaluation.

8 Contact Information

The responsible party contact is Ms. Jennifer C. Sedlachek, ExxonMobil Environmental Services Company, 4096 Piedmont Avenue #194, Oakland, California, 94611. The consultant contact is Mr. Greg Gurss, Cardno ERI, 601 N. McDowell Boulevard, Petaluma, California, 94952. The agency contact is Ms. Karel Detterman, Alameda County Health Care Services Agency, Department of Environmental Health, 1131 Harbor Bay Parkway, Suite 250, California, 94502.

9 Distribution List

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10 Limitations

For 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 and the work performed have been undertaken in good faith, with due diligence and with the expertise, experience, capability, and specialized knowledge necessary to perform the work in a good and workmanlike manner and within all accepted standards pertaining to providers of environmental services 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.

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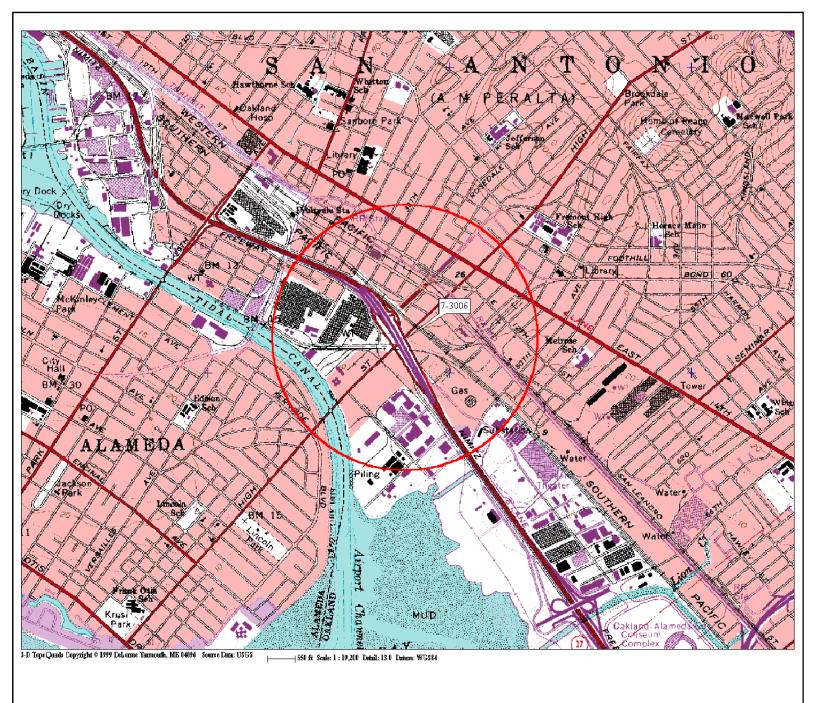
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12 Acronym List

μg/L	Micrograms per liter	NAPL	Non-aqueous phase liquid
μs	Microsiemens	NEPA	National Environmental Policy Act
1,2-DCA	1,2-dichloroethane	NGVD	National Geodetic Vertical Datum
acfm	Actual cubic feet per minute	NPDES	National Pollutant Discharge Elimination System
AS	Air sparge	O&M	Operations and Maintenance
bgs	Below ground surface	ORP	Oxidation-reduction potential
BTEX	Benzene, toluene, ethylbenzene, and total xylenes	OSHA	Occupational Safety and Health Administration
CEQA	California Environmental Quality Act	OVA	Organic vapor analyzer
cfm	Cubic feet per minute	P&ID	Process & Instrumentation Diagram
COC	Chain of Custody	PAH	Polycyclic aromatic hydrocarbon
CPT	Cone Penetration (Penetrometer) Test	PCB	Polychlorinated biphenyl
DIPE	Di-isopropyl ether	PCE	Tetrachloroethene or perchloroethylene
DO	Dissolved oxygen	PID	Photo-ionization detector
DOT	Department of Transportation	PLC	Programmable logic control
DPE	Dual-phase extraction	POTW	Publicly owned treatment works
DTW	Depth to water	ppmv	Parts per million by volume
EDB	1,2-dibromoethane	PQL	Practical quantitation limit
EPA	Environmental Protection Agency	psi	Pounds per square inch
EPH	Extractable petroleum hydrocarbons	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
GRO	Gasoline-range organics	SVE	Soil vapor extraction
GWPTS	Groundwater pump and treat system	SVOC	Semivolatile organic compound
HVOC	Halogenated volatile organic compound	TAME	Tertiary amyl methyl ether
J	Estimated value between MDL and PQL (RL)	TBA	Tertiary butyl alcohol
LEL	Lower explosive limit	TCE	Trichloroethene
LPC	Liquid-phase carbon	TOC	Top of well casing elevation; datum is msl
LRP	Liquid-ring pump	TOG	Total oil and grease
LUFT	Leaking underground fuel tank	TPHd	Total petroleum hydrocarbons as diesel
LUST	Leaking underground storage tank	TPHg	Total petroleum hydrocarbons as gasoline
MCL	Maximum contaminant level	TPHmo	Total petroleum hydrocarbons as motor oil
MDL	Method detection limit	TPHs	Total petroleum hydrocarbons as stoddard solvent
mg/kg	Milligrams per kilogram	TRPH	Total recoverable petroleum hydrocarbons
mg/L	Milligrams per liter	UCL	Upper confidence level
mg/m³	Milligrams per cubic meter	USCS	Unified Soil Classification System
MPE	Multi-phase extraction	USGS	United States Geologic Survey
MRL	Method reporting limit	UST	Underground storage tank
msl	Mean sea level	VCP	Voluntary Cleanup Program
MTBE	Methyl tertiary butyl ether	VOC	Volatile organic compound
MTCA	Model Toxics Control Act	VPC	Vapor-phase carbon
NAI	Natural attenuation indicators		



FN 2010

APPROXIMATE SCALE 1/2-mile radius circle SOURCE: Modified from a map provided by DeLorme 3-D TopoQuads

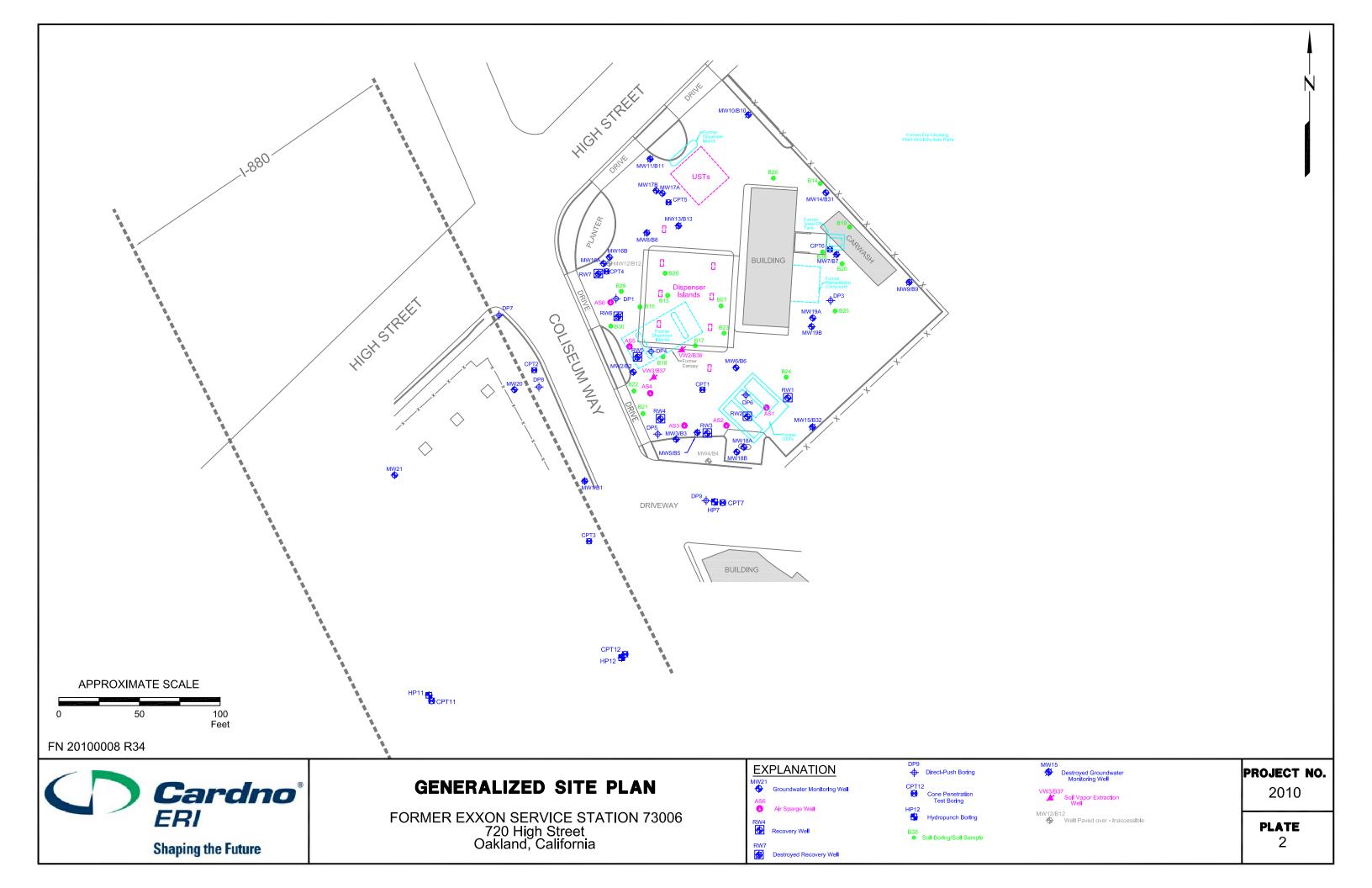


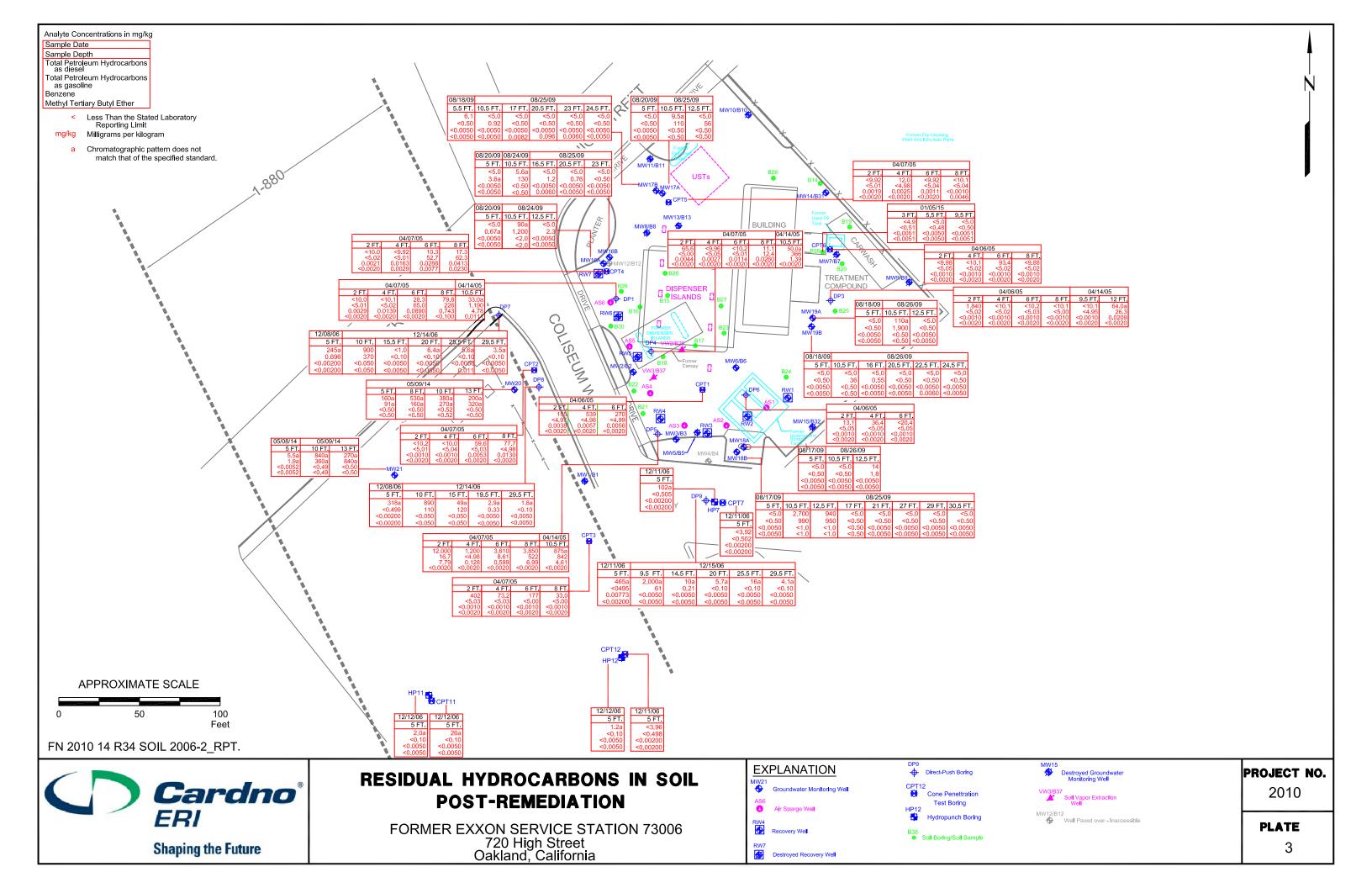
SITE VICINITY MAP

FORMER EXXON SERVICE STATION 73006 720 High Street Oakland, California PROJECT NO.

2010

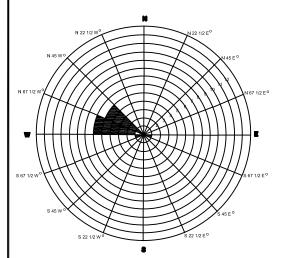
PLATE 1





GROUNDWATER FLOW DIRECTION ROSE DIAGRAM SHALLOW WATER-BEARING ZONE

March 11, 2003 through June 25, 2014



GROUNDWATER FLOW DIRECTION ROSE DIAGRAM DEEP WATER-BEARING ZONE

October 1, 2009 through June 25, 2014

NOTE:
Groundwater flow direction measured upgradient from well MW16B.

Analyte Concentrations in ug/L

Sample Date

Total Petroleum Hydrocarbons as gasoline

Benzene Methyl Tertiary Butyl Ether

Less than the Stated Laboratory Reporting Limit

ug/L Micrograms per Liter

g Hydrocarbon pattern is not consistent with that of the specified standard.

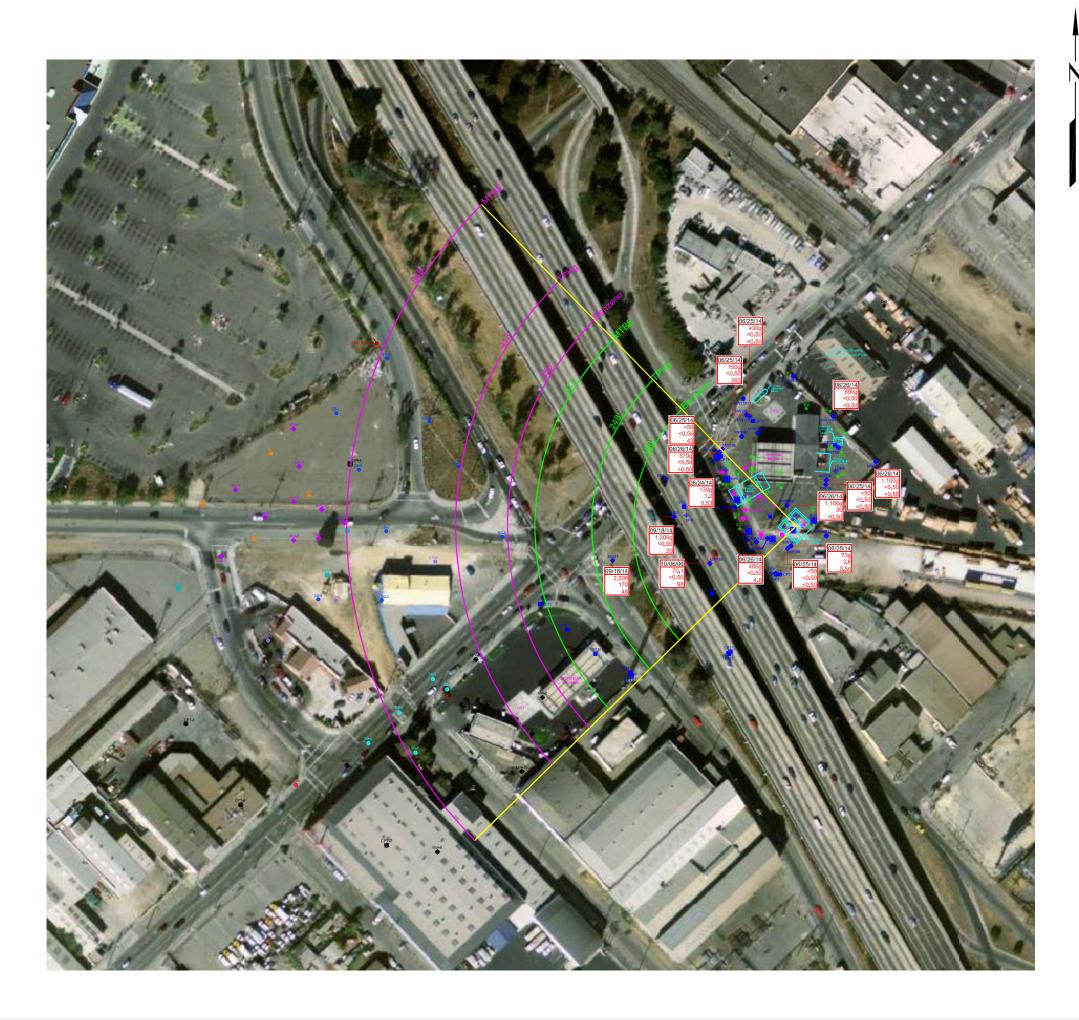
Most recent data for wells sampled since 2004 shown.

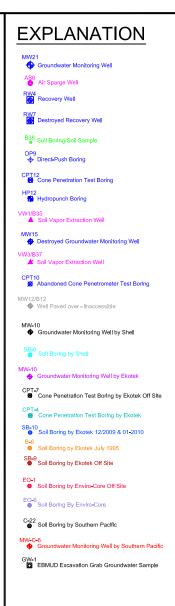
Plume lengths from SWRCB, 2011.

90th Percentile Plume Length

Average Plume Length

APPROXIMATE SCALE





DISSOLVED PHASE HYDROCARBONS IN GROUNDWATER

FORMER EXXON SERVICE STATION 720 High Street Oakland, California



Shaping the Future 2010

1"= 120'

2010 R34 TYPICAL PLUME LENGTH AERIAL SP

Well ID	Sampling Date	Depth (feet)	TOC Elev. (feet)	DTW (feet)	GW Elev. (feet)	NAPL (feet)	TPHd (µg/L)	TPHg (µg/L)	MTBE 8021Β (μg/L)	MTBE 8260B (μg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)
lonitoring	Well Samples													
MW1	05/21/88		Well insta	ılled.										
MW1	May-88		12.87				25				240	90	5	25
MW1	04/25/89		12.87	7.55	5.32	No								
MW1	04/27/89		12.87	10.16	2.71	Sheen								
ЛW1	09/06/89		12.87	10.88	1.99	Sheen								
ЛW1	09/22/89		12.87	11.06	1.81	No								
ЛW1	11/01/89		12.87	10.82	2.05	No								
/W1	11/15/89		12.87	11.07	1.80	No								
MW1	12/06/89		12.87	10.33	2.54	No	240	630			12	5.6	3.7	25
ЛW1	02/20/90		12.87	8.81	4.06	No								
ЛW1	04/19/90		12.87	9.33	3.54	No	<100	<20			<0.5	<0.5	<0.5	<0.5
ЛW1	07/03/90		12.87	8.44	4.43	No	160	130			6	<0.5	<0.5	<0.5
ЛW1	07/26/90		12.87	8.99	3.88	No								
ЛW1	08/20/90		12.87	9.50	3.37	No								
/W1	09/19/90		12.87	9.99	2.88	No								
/W1	11/27/90		12.87	10.62	2.25	No	<100	<50			0.7	<0.5	<0.5	<0.5
/W1	01/17/91		12.87	10.31	2.56	No								
ЛW1	03/26/91		12.87	7.79	5.08	No	<100	<50			<0.5	<0.5	<0.5	< 0.5
/W1	05/02/91		12.87	8.88	3.99	No								
/W1	06/20/91		12.87	9.62	3.25	No	<100	<50			<0.5	<0.5	<0.5	<0.5
/IW1	08/07/91		12.87	10.20	2.67	No								
/W1	09/17/91		12.87	10.40	2.47	No		<50			<0.5	<0.5	<0.5	<0.5
/IW1	11/13/91		12.87	10.20	2.67	No								
/IW1	12/10/91		12.87	10.23	2.64	No	<50	<50			1.5	<0.5	<0.5	< 0.5
ЛW1	01/21/92		12.87	9.32	3.55	No								
/W1	03/25/92		12.87	9.30	3.57	No	<50				1.5	<0.5	<0.5	<0.5
ЛW1	06/22/92		12.87	8.46	4.41	No	75	110			4.9	7.9	3.7	21
ЛW1	09/24/92		12.87	9.61	3.26	No	<50	<50			<0.5	<0.5	<0.5	<0.5
/IW1	10/14/92		12.87	9.85	3.02	No								
/IW1	11/16/92		12.87	9.65	3.22	No								
ЛW1	12/08/92		12.87	9.30	3.57	No	51	170			10	<0.5	<0.5	0.6
ЛW1	01/27/93		12.87	6.13	6.74	No								
/W1	02/18/93		12.87	6.07	6.80	No								
1W1	03/10/93		12.87	6.12	6.75	No	140	<50			<0.5	<0.5	<0.5	< 0.5
1W1	04/06/93		12.87	5.84	7.03	No								
/W1	05/28/93		12.87	7.27	5.60	No								
/W1	06/10/93		12.87	7.40	5.47	No	<100	<50			<0.5	<0.5	<0.5	<0.5
ЛW1	07/17/93		12.87	8.08	4.79	No								
ЛW1	08/11/93		12.87	8.54	4.33	No	<50p	<50			<0.5/<50	<0.5/<50	<0.5/<50	<0.5/<50
ЛW1	09/01/93		12.87	8.80	4.07	No								

Well ID	Sampling Date	Depth 7 (feet)	ΓΟC Elev. (feet)	DTW (feet)	GW Elev. (feet)	NAPL (feet)	TPHd (μg/L)	TPHg (μg/L)	MTBE 8021B (μg/L)	MTBE 8260B (μg/L)	B (µg/L)	Τ (μg/L)	Ε (μg/L)	X (µg/L)
MW1	10/26/93		12.87	9.41	3.46	No	<50	<50		<0.5	<0.5	<0.5	<0.5	<0.5
ЛW1	11/12/93		12.87	9.48	3.39	No								
ЛW1	12/27/93		12.87	8.62	4.25	No								
MW1	01/20/94		12.87	9.25	3.62	No								
MW1	02/02/94 - 02/03/94		12.87	8.60	4.27	No	70	<50			<0.5	<0.5	<0.5	0.7
MW1	03/10/94		12.87	8.31	4.56	No								
MW1	04/22/94		12.87	7.95	4.92	No								
MW1	05/10/94 - 05/11/94		12.87	7.48	5.39	No	100	<50			<0.5	<0.5	<0.5	1.6
MW1	06/27/94		12.87	7.65	5.22	No								
MW1	08/31/94		12.87	9.39	3.48	No								
MW1	09/29/94		12.87	9.83	3.04	No	<50	<50			<0.5	<0.5	<0.5	<0.5
MW1	10/25/94		12.87	10.19	2.68	No		<50	<50		<0.5	<0.5	<0.5	<0.5
MW1	11/30/94		12.87	8.97	3.90	No								
MW1	12/27/94		12.87	7.44	5.43	No								
MW1	02/06/95		12.87	5.71	7.16	No		<50	100		0.52	<0.5	<0.5	<0.5
MW1	06/07/95		12.87	7.62	5.25	No	81	<50	3.5		<0.5	<0.5	<0.5	<0.5
лw1	09/18/95		12.87	10.02	2.85	No	82	<50	6		<0.5	<0.5	<0.5	<0.5
лW1	11/01/95		12.87	10.74	2.13	No	160	<50	8.9		<0.5	<0.5	<0.5	<0.5
MW1	02/14/96		12.87	7.81	5.06	No	100	<50	7.8		<0.5	<0.5	<0.5	<0.5
MW1	06/19/96		12.87	7.47	5.40	No	93	<50	7.1		<0.5	<0.5	<0.5	<0.5
MW1	09/24/96		12.87	10.42	2.45	No	83	<50	9.5		<0.5	<0.5	<0.5	<0.5
MW1	12/11/96		12.87	8.50	4.37	No	81	<50	7.2		<0.5	<0.5	<0.5	<0.5
MW1	03/19/97		12.87	9.14	3.73	No	78	<50	6.4		<0.5	<0.5	<0.5	<0.5
MW1	06/04/97		12.87	9.82	3.05	No	58	<50	6.0		<0.5	<0.5	<0.5	<0.5
MW1	09/02/97		12.87	10.26	2.61	No	150	<50	5.4		<0.5	<0.5	<0.5	<0.5
MW1	12/02/97		12.87	9.32	3.55	No	88	<50	5.1		<0.5	<0.5	<0.5	<0.5
MW1	03/24/98		12.87	6.44	6.43	No	58	<50	5.6		<0.5	<0.5	<0.5	<0.5
MW1	06/23/98		12.87	9.23	3.64	No	84	<50	3.8		<0.5	<0.5	<0.5	<0.5
MW1	09/29/98		12.87	9.91	2.96	No	61	<50	2.6		<0.5	<0.5	<0.5	<0.5
MW1	12/30/98		12.87	9.21	3.66	No	80	<50	4.1		<0.5	<0.5	<0.5	<0.5
MW1	03/24/99		12.87	5.53	7.34	No	64.3	<50	4.95		<0.5	<0.5	<0.5	<0.5
MW1	06/22/99		12.87	7.39	5.48	No	83.5	<50	3.70		<0.5	<0.5	<0.5	<0.5
MW1	09/29/99		12.87	8.90	3.97	No	52.9	<50	4.81		<0.5	<0.5	<0.5	<0.5
лw1	12/21/99		12.87	8.94	3.93	No	60	<50	10		<0.5	<0.5	<0.5	<0.5
ЛW1	03/21/00		12.87	5.34	7.53	No		<50	4.5		<0.5	<0.5	<0.5	<0.5
лw1	03/30/01		12.87	5.29	7.58	No	79	<50			<0.5	<0.5	<0.5	<0.5
лw1	11/01/01		12.79	Well sur			- •					.3.0		-0.0
ЛW1	03/11/02 k		12.79	5.39	7.40	No	<50.0	116	110	160	1.10	<0.50	<0.50	< 0.50
MW1	03/11/03		12.79	6.63	6.16	No	<50	153	188	179	<0.5	<0.5	<0.5	<0.5
MW1	03/26/04		12.79	6.18	6.61	No	74g	<50.0		171	<0.50	0.5	<0.5	<0.5
MW1	11/02/04		12.79	6.44	6.35	No	7-g 75g	145		137	0.50	<0.5	<0.5	<0.5
MW1	02/04/05		12.79	5.01	7.78	No	73g 158g	132		120	<0.50	<0.5	<0.5	<0.5

Well ID	Sampling Date	Depth (feet)	TOC Elev. (feet)	DTW (feet)	GW Elev. (feet)	NAPL (feet)	TPHd (μg/L)	TPHg (μg/L)	MTBE 8021B (μg/L)	MTBE 8260B (μg/L)	B (µg/L)	Τ (μg/L)	Ε (μg/L)	X (µg/L)
MW1	05/02/05		12.79	4.66	8.13	No	386g	131		138	<0.50	<0.5	<0.5	<0.5
ЛW1	08/01/05		12.79	5.51	7.28	No	129g	89.8		98.4	0.70	<0.5	<0.5	<0.5
MW1	10/25/05		12.79	5.54	7.25	No	<50.0	67.2		84.1	<0.50	<0.50	<0.50	<0.50
лw1	01/24/06		12.79	4.07	8.72	No	<50	71		91	<0.50	<0.50	<0.50	< 0.50
MW1	04/28/06		12.79	4.01	8.78	No	<47	80 I		92n	<0.50n	<0.50	<0.50	<0.50
MW1	08/04/06		12.79	4.78	8.01	No	159	70.9		71.0	<0.50	<0.50	<0.50	< 0.50
ЛW1	10/06/06		12.79	7.02	5.77	No	<47	70 I		98	<0.50	<0.50	<0.50	<0.50
ЛW1	01/12/07		12.79		ccessible.									
MW1	03/26/07		Well dest											
4) 4/ 2	00/40/97		Mall insta	ماامط										
MW2 MW2	09/10/87		Well insta					1 115			222	910	EG	200
	Sept-87		12.98			 I DLI		1,445			233	810	56	209
MW2	May-88		12.98	0.27	 5 44	LPH								
ЛW2	04/25/89 07/19/89		12.98	9.27	5.44	2.16								
ИW2 ИW2			12.98	10.81	3.42	1.56								
vivv2 ViW2	07/27/89		12.98	10.18	2.90	0.13								
	09/06/89		12.98	10.89	2.16	0.09								
/W2	09/22/89		12.98	11.56	1.87	0.56								
ЛW2	11/01/89		12.98	10.85	2.20	0.09								
/W2	11/15/89		12.98	11.05	1.99	0.07								
MW2	12/06/89		12.98	10.23	2.85	0.13								
MW2	02/20/90		12.98	8.86	4.35	0.29								
MW2	04/19/90		12.98	9.09	3.97	0.10								
ЛW2	07/03/90		12.98	8.75	4.27	0.05								
MW2	07/26/90		12.98	8.71	4.35	0.10								
MW2	08/20/90		12.98	9.25	3.75	0.02								
MW2	09/19/90		12.98	9.79	3.21	0.02								
MW2	11/27/90		12.98	10.40	2.64	0.07								
MW2	01/17/91		12.98	10.03	2.99	0.05								
ЛW2	03/26/91		12.98	8.98	4.06	0.08								
ЛW2	05/02/91		12.98	8.73	4.27	0.02								
ЛW2	06/20/91		12.98	9.11	3.89	0.02								
ЛW2	08/07/91		12.98	10.00	3.01	0.04								
/W2	09/17/91		12.98	10.11	2.89	0.02								
/W2	11/13/91		12.98	9.88	3.12	0.02								
/IW2	12/10/91		12.98	9.02	3.98	0.03								
/IW2	01/21/92		12.98	9.08	3.92	0.03								
ЛW2	03/25/92		12.98	6.00	7.00	0.03								
MW2	06/22/92		12.98	8.46	4.53	0.01[1/2 c.]								
ИW2	09/24/92		12.98	9.08	3.90	Sheen								
∕lW2	10/14/92		12.98	9.34	3.66	0.02[1/2 c.]								
/IW2	11/16/92		12.98	9.16	3.84	0.02 [1/2 c.]								

Well ID	Sampling Date	Depth 7 (feet)	ΓΟC Elev. (feet)	DTW (feet)	GW Elev. (feet)	NAPL (feet)	TPHd (µg/L)	TPHg (µg/L)	MTBE 8021B (μg/L)	MTBE 8260B (μg/L)	B (µg/L)	T (µg/L)	E (µg/L)	Χ (μg/L)
MW2	12/08/92		12.98	8.93	4.07	0.02[1/2 c.]								
ЛW2	01/27/93		12.98	5.76	7.22	Sheen								
/IW2	02/18/93		12.98	4.21	8.78	0.01								
ЛW2	03/10/93		12.98	6.75	6.23	Sheen								
ЛW2	04/06/93		12.98	5.37	7.61	Sheen								
/IW2	05/28/93		12.98			[2 c.]								
/W2	06/10/93		12.98			[1/2 c.]								
/W2	07/17/93		12.98			[2 c.]								
/IW2	08/11/93		12.98			[1/2 c.]								
/W2	09/01/93		12.98			[1/2 c.]								
1W2	10/26/93		12.98			Sheen								
1W2	11/12/93		12.98											
/W2	12/27/93		12.98											
/W2	01/20/94		12.98											
/IW2	02/02/94 - 02/03/94		12.98											
1W2	03/10/94		12.98	6.96	6.29	[8 c.]								
IW2	04/22/94		12.98			[10 c.]								
IW2	05/10/94 - 05/11/94		12.98			[5 c.]								
lW2	06/27/94		12.98	7.10	5.88	Sheen								
IW2	08/31/94		12.98	8.58	4.40	Sheen								
lW2	09/29/94		12.98	9.11	3.87	Sheen								
1W2	10/25/94		12.98	7.76	5.22	Sheen								
1W2	11/30/94		12.98	7.33	5.65									
1W2	12/27/94		12.98	6.77	6.21	Sheen								
1W2	02/06/95		12.98	5.00	7.98	Sheen								
1W2	06/07/95		12.98	7.14	5.84	Sheen								
1W2	09/18/95		12.98	10.82	2.16	Sheen								
1W2	11/01/95		12.98	11.65	1.33	Sheen								
1W2	02/14/96		12.98	8.39	4.59	Sheen								
1W2	06/19/96		12.98	6.55	6.43	Sheen								
IW2	09/24/96		12.98	11.56	1.42	Sheen								
IW2	12/11/96		12.98	8.02	4.96	Sheen								
1W2	03/19/97		12.98	8.63	4.35	Sheen								
IW2	06/04/97		12.98	10.57	2.41	Sheen								
IW2	09/02/97		12.98	11.51	1.47	Sheen								
W2	12/02/97		12.98	11.24	1.74	No	820	1,400	57		15	2.8	8.6	<2.5
W2	03/27/98		12.98	6.06	6.92	No	2,000	7,400	<50		1,400	350	490	1,500
IW2	06/23/98		12.98	11.06	1.92	Sheen	2,900	180	9.5		3.2	0.55	0.92	1.3
IW2	09/29/98		12.98	10.51	2.47	No	180	290	9.3		<0.50	0.65	1.5	1.5
1W2 1W2	12/30/98		12.98	9.83	3.15	No	700	520	16		17	0.96	2.6	3.5
IW2	03/24/99		12.98	4.47	8.51	No	1,440	14,000	<40		1,300	336	786	3,420
1W2 1W2	06/22/99		12.98	6.42	6.56	No	2,310	1,080	25.2		54.3	14.9	38.8	3,420 107

Well ID	Sampling Date	Depth T (feet)	OC Elev (feet)	. DTW (feet)	GW Elev. (feet)	NAPL (feet)	TPHd (µg/L)	TPHg (µg/L)	MTBE 8021B (μg/L)	MTBE 8260B (μg/L)	B (µg/L)	Τ (μg/L)	Ε (μg/L)	X (μg/L)
ЛW2	09/29/99		12.98	8.00	4.98	No	2,720e	517	15.4		37.5	7.48	12.9	15.2
/W2	12/21/99		12.98	8.10	4.88	No	6,300	3,200	<2		360	5.5	120	106
/W2	03/21/00		12.98		ccessible.		-,	-,						
/W2	03/30/01		12.98	3.09	9.89	No	510	200		110	7.2	<0.5	2.4	2.1
/IW2	11/01/01		13.06	Well sur										
ЛW2	03/11/02 k		13.06	3.78	9.28	No	293	<1,000	62.0	30	<10.0	<10.0	<10.0	<10.0
ЛW2	03/11/03		13.06	5.49	7.57	No	422	1,490	325	428	279	3.0	9.8	18.9
1W2	03/27/04		13.06	4.65	8.41	No	184g	254		131	6.80	0.5	<0.5	1.2
/W2	11/02/04		13.06	4.43	8.63	No	96	52.0		8.00	1.40	<0.5	<0.5	<0.5
/W2	02/04/05		13.06	3.32	9.74	No	372g	66.0		8.30	<0.50	<0.5	<0.5	<0.5
/W2	05/02/05		13.06	2.74	10.32	No	195g	84.2		5.30	<0.50	<0.5	<0.5	<0.5
1W2	08/01/05		13.06	2.99	10.07	No	344g	<50.0		1.70	0.60	<0.5	<0.5	<0.5
1W2	10/25/05		13.06	2.08	10.98	No	55.3g	<50.0		1.22	<0.50	<0.50	<0.50	<0.50
ЛW2	01/24/06		13.06	2.77	10.29	No	170g	<50		1.6	<0.50	<0.50	<0.50	<0.50
ЛW2	04/28/06		13.06	1.46	11.60	No	6,900m	<50		1.4n	0.99n	<0.50	<0.50	<0.50
/W2	08/04/06		13.06	1.52	11.54	No	145	<50.0		0.820	<0.50	<0.50	<0.50	< 0.50
/W2	10/06/06		13.06	5.55	7.51	No	90g	<50		2.1	0.78	<0.50	<0.50	<0.50
1W2	01/12/07		13.06	5.50	7.56	No	180g	95		7.0	7.6	<0.50	<0.50	<0.50
/W2	04/09/07		13.06	5.68	7.38	No	230g	115		8.99	1.36j	<0.50	<0.50	0.62
/W2	08/06/07		13.06	6.15	6.91	No	160g	83		7.4	0.65	<0.50	<0.50	<0.50
/W2	11/15/07		13.06	6.71	6.35	No	120g	140		13	22	<0.50	<0.50	<0.50
1W2	01/02/08		13.06	6.20	6.86	No	430j	890		25	330	<5.0	<5.0	6.6
1W2	04/03/08		13.06	5.10	7.96	No	230g	170		13	<0.50	1.0	<0.50	1.9
1W2	07/09/08		13.06	6.23	6.83	No	350g	86		6.4	<0.50	<0.50	<0.50	<0.50
IW2	10/01/08		13.06		vered by as		aaag	00		0	10.00	10.00	10.00	10.00
1W2	01/07/09		13.06		vered by as	•								
1W2	01/16/09		13.06	6.99	6.07	No	1,100	1,000		14	290	3.6	1.2	11
/W2	04/24/09		13.06	5.76	7.30	No	310	570		6.1	< 0.50	<0.50	<0.50	<1.0
/W2	07/01/09		13.06	6.37	6.69	No	290	68		11	<0.50	<0.50	<0.50	<1.0
/W2	10/01/09		13.06	6.61	6.45	No								
1W2	03/04/10		13.06	3.84	9.22	No								
1W2	05/06/10		13.06	4.10	8.96	No	680	230g		1.8	<0.50	<0.50	<0.50	<1.0
1W2	08/06/10		13.06	6.10	6.96	No								
1W2	11/02/10		13.06	6.83	6.23	No	290	240g		4.4	15	<0.50	<0.50	<1.0
1W2	04/21/11		13.06	7.10	5.96	No	230	120g		1.2	<0.50	<0.50	<0.50	<1.0
IW2	10/18/11		13.06	7.51	5.55	No	270	100g		2.7	4.3	1.2	0.71t	3.0
1W2	04/25/12		13.06	4.77	8.29	No	200	140		< 0.50	<0.50	<0.50	<0.50	<1.0
1W2	10/04/12		13.06	7.27	5.79	No	420g	650g		1.5	34	3.8	<0.50	2.8
1W2	04/16/13		13.06	6.21	6.85	No	240	95g		1.3	3.1	<0.50	<0.50	< 0.50
1W2	11/13/13		13.06	6.85	6.21	No								
лw2 лw2	11/14/13		13.06				450g	930		1.1	37	1.1	1.6	3.0
лvv2 ЛW2	06/25/14		13.06	5.79	7.27	No	430g 							J.0

Well ID	Sampling Date	Depth (feet)	TOC Elev. (feet)	DTW (feet)	GW Elev. (feet)	NAPL (feet)	TPHd (µg/L)	TPHg (µg/L)	MTBE 8021B (μg/L)	MTBE 8260B (μg/L)	B (µg/L)	Τ (μg/L)	E (μg/L)	X (μg/L)
ЛW2	06/26/14		13.06				150g	130g		0.53	1.2	<0.50	<0.50	<0.50
/W3	09/10/87		Well insta	lled.										
/W3	Sept-87		12.92				660	2,101			360	1,062	68	298
MW3	May-88		12.92					8,700			3,980	280	240	600
1W3	04/25/89		12.92	7.57	5.43	0.08								
1W3	07/19/89		12.92	10.33	3.14	0.66								
1W3	07/27/89		12.92	Well ina	ccessible) .								
1W3	09/06/89		12.92	11.22	1.78	0.07								
1W3	09/22/89		12.92	11.38	1.78	0.28								
MW3	11/01/89		12.92	10.90	2.05	0.01								
1W3	11/15/89		12.92	11.18	1.85	0.11								
MW3	12/06/89		12.92	10.29	2.65	Sheen								
MW3	02/20/90		12.92	8.73	4.24	0.04								
1W3	04/19/90		12.92	9.20	3.81	0.09								
1W3	07/03/90		12.92	8.50	4.46	0.03								
1W3	07/26/90		12.92	8.58	4.39	0.04								
1W3	08/20/90		12.92	9.21	3.74	0.01								
1W3	09/19/90		12.92	10.02	3.20	0.35								
1W3	11/27/90		12.92	10.72	2.56	0.42								
IW3	01/17/91		12.92	10.05	2.97	0.10								
1W3	03/26/91		12.92	7.65	5.37	0.10								
1W3	05/02/91		12.92	8.54	4.42	0.03								
лwз	06/20/91		12.92	8.89	4.07	0.03								
MW3	08/07/91		12.92	9.99	2.97	0.03								
1W3	09/17/91		12.92	10.32	2.80	0.22								
MW3	11/13/91		12.92	10.14	2.99	0.24								
MW3	12/10/91		12.92	10.10	2.93	0.11								
MW3	01/21/92		12.92	9.07	3.92	0.06								
1W3	03/25/92		12.92	5.96	7.01	0.04								
1W3	06/22/92		12.92	8.07	4.89	0.02[1/2 c.]								
1W3	09/24/92		12.92	9.29	3.65	Sheen								
1W3	10/14/92		12.92	9.49	3.47	0.02[1/2 c.]								
IW3	11/16/92		12.92	9.49	3.67	0.02[1/2 c.] 0.02[1/2 c.]								
IW3	12/08/92		12.92	9.08	3.88	0.02[1/2 c.] 0.02[1/2 c.]								
	01/27/93													
W3			12.92	5.65	7.29	Sheen								
IW3	02/18/93		12.92	4.63	8.31	Sheen								
IW3	03/10/93		12.92	5.53	7.41	Sheen								
1W3	04/06/93		12.92	5.10	7.84	Sheen								
1W3	05/28/93		12.92	6.50	6.44	Sheen								
1W3	06/10/93		12.92	6.65	6.29	Sheen								
MW3	07/17/93		12.92	7.03	5.91	Sheen								

Well ID	Sampling Date	Depth (feet)	TOC Elev.	DTW (feet)	GW Elev. (feet)	NAPL (feet)	TPHd (µg/L)	TPHg (µg/L)	MTBE 8021Β (μg/L)	MTBE 8260B (μg/L)	B (µg/L)	Τ (μg/L)	Ε (μg/L)	X (μg/L)
MW3	08/11/93		12.92	7.56	5.38	Sheen	3,200/140q	5,100			1,300/2,000o	12/<2.50	87/160o	47/60o
MW3	09/01/93		12.92	8.20	4.75	0.01	5,200/140q 				1,500/2,0000	12/<2.50		
лwз лwз	10/26/93		12.92	8.88	4.06	Sheen								
MW3	11/12/93		12.92	8.96	3.98	Sheen								
MW3	12/27/93		12.92	9.03	3.91	Sheen								
лwз	01/20/94		12.92	8.24	4.70	Sheen								
лwз	02/02/94 - 02/03/94		12.92	7.68	5.26	Sheen								
ЛW3	03/10/94		12.92	7.24	5.68	Sheen								
лwз	04/22/94		12.92	6.79	6.13	Sheen								
лW3	05/10/94 - 05/11/94		12.92	6.43	6.49	Sheen								
лwз	06/27/94		12.92	6.97	5.95	0.01								
лwз	08/31/94		12.92	8.41	4.51	Sheen								
/W3	09/29/94		12.92	8.97	3.95	Sheen								
MW3	10/25/94		12.92	9.43	3.49	Sheen								
лwз	11/28/94		12.92	7.19	5.73									
лwз	12/27/94		12.92	6.64	6.28	Sheen								
лwз	02/06/95		12.92	4.87	8.05	Sheen								
ЛW3	06/07/95		12.92	7.05	5.87	Sheen								
ЛW3	09/18/95		12.92	10.61	2.31	Sheen								
лW3	11/01/95		12.92	11.58	1.34	Sheen								
лW3	02/14/96		12.92	8.34	4.58	Sheen								
ЛW3	06/19/96		12.92	6.35	6.57	Sheen								
ЛW3	09/24/96		12.92	11.45	1.47	Sheen								
ЛW3	12/11/96		12.92	7.89	5.03	No	17,000	4,800	30		340	<5.0	8.2	20
MW3	03/19/97		12.92	9.83	3.09	No	3,000	1,900	80		160	11	5.6	10
лW3	06/04/97		12.92	10.43	2.49	No	8,000	920	11		15	2.8	2.4	<2.0
ЛW3	09/02/97		12.92	12.45	0.47	Sheen								
лW3	12/02/97		12.92	11.21	1.71	No	6,700	920	21		10	2.1	<1.0	2.7
MW3	03/24/98		12.92	5.93	6.99	No	4,600	1,500	25		5,500	<5.0	<5.0	<5.0
лW3	06/23/98		12.92	11.13	1.79	No	39,000	1,300	9.4		53	<1.0	<1.0	<1.0
лW3	09/29/98		12.92	10.46	2.46	Sheen	2,600	540	<5.0		6.8	1.9	1.4	2.3
ЛW3	12/30/98		12.92	9.72	3.20	No	11,000	4,000	<50		74	<10	<10	<10
ЛW3	03/24/99		12.92	4.36	8.56	Sheen	3,850	2,330	<20		<5.0	<5.0	<5.0	<5.0
/W3	06/22/99		12.92	6.22	6.70	No	6,860	1,470	<10		492	<2.5	<2.5	<2.5
/W3	09/29/99		12.92	8.10	4.82	No	2,290e	315	<5.0		11.5	3.07	<1.0	2.54
1W3	12/21/99		12.92	7.99	4.93	No	37,000	6,600	4		22	5	5.1	31.4
1W3	01/26/00		12.92	5.48	7.44	No	2,600g							
MW3	03/21/00		12.92		ccessible.		. 3							
ЛW3	03/30/01		12.92	4.02	8.90	No	2,000	880		300	130	<0.5	1.2	2.4
ЛW3	11/01/01		13.71	Well sur			•							
ЛW3	03/11/02 k		13.71	4.72	8.99	No	19,100	<2,500	130	175	165	<25.0	<25.0	<25.0
MW3	03/11/03		13.71	6.23	7.48	No	1,190	887	122	119	71.9	0.8	1.1	2.0

Well ID	Sampling Date	Depth (feet)	ΓΟC Elev. (feet)	DTW (feet)	GW Elev. (feet)	NAPL (feet)	TPHd (µg/L)	TPHg (µg/L)	MTBE 8021Β (μg/L)	MTBE 8260B (μg/L)	B (µg/L)	Τ (μg/L)	Ε (μg/L)	X (µg/L)
MW3	03/26/04		13.71	5.47	8.24	No	16,500g	1,350		98.4	30.8	1.6	<0.5	3.8
лW3	11/02/04		13.71	5.30	8.41	No	3,620g	466		30.8	32.4	<0.5	<0.5	4.7
1W3	02/04/05		13.71	4.14	9.57	No	2,850g	531		22.7	19.3	<0.5	0.6	1.6
1W3	05/02/05		13.71	3.41	10.30	No	3,940g	586		29.5	36.3	3.1	0.8	4.3
ЛW3	08/01/05		13.71	3.88	9.83	No	1,550	815		18.1	36.6	0.6	1.1	2.4
/W3	10/25/05		13.71	3.11	10.60	No	4,010g	379		3.47	<0.50	<0.50	< 0.50	1.01
MW3	01/24/06		13.71	2.69	11.02	No	2,200g	510		13	35	<1.0	2.1	<1.0
1W3	04/28/06		13.71	2.44	11.27	No	100g	330		13n	3.8n	<1.0	<1.0	<1.0
MW3	08/04/06		13.71	2.51	11.20	No	3,890	441		10.1	14.7	0.57	1.44	4.23
/W3	10/06/06		13.71	6.33	7.38	No	5,300j	360		9.7	3.8	<1.0	<1.0	<1.0
MW3	01/12/07		13.71	6.20	7.51	No	4,700	300		9.0	3.9	<2.5	<2.5	<2.5
1W3	04/09/07		13.71	6.47	7.24	No	1,600	428		11.8	3.33i	<0.50	0.74	4.11
1W3	08/06/07		13.71	6.91	6.80	No	5,200	390		8.1	5.3	<0.50	<0.50	<0.50
1W3	11/15/07		13.71	7.47	6.24	No	7,000	290		6.2	3.0	<0.50	<0.50	<0.50
1W3	01/02/08		13.71	6.87	6.84	No	19,000i	390		9.9	6.4	<1.0	<1.0	<1.0
1W3	04/03/08		13.71	5.96	7.75	No	1,200	330		10	4.7	2.5	<0.50	2.9
1W3	07/09/08		13.71	7.00	6.71	No	2,500	640		11	10	3.2	<0.50	1.6
IW3	10/01/08		13.71	7.56	6.15	No	590	730		6.0	1.4	<0.50	<0.50	<1.0
1W3	01/07/09		13.71	7.61	6.10	No	6,900	760		5.9	<0.50	<0.50	1.5	3.0
1W3	01/16/09		13.71	7.74	5.97	No								
1W3	04/24/09		13.71	6.47	7.24	No	6,700	2,200		12	<0.50	<0.50	1.5	3.3
1W3	07/01/09		13.71	7.05	6.66	No	1,700	390		4.3	<0.50	<0.50	<0.50	2.8
1W3	10/01/09		13.71	7.36	6.35	No								
1W3	03/04/10		13.71	4.64	9.07	No								
1W3	05/06/10		13.71	4.83	8.88	No	2,700	1,300		8.9	<0.50	<0.50	< 0.50	<1.0
1W3	08/06/10		13.71	8.52	5.19	No								
1W3	11/02/10		13.71	7.37	6.34	No	1,300	1,100g		10	<0.50	<0.50	< 0.50	<1.0
1W3	04/21/11		13.71	7.67	6.04	0.04								
1W3	04/22/11		13.71				26,000	1,900g		5.4	<0.50	<0.50	< 0.50	<1.0
1W3	05/02/11		13.71	7.62	6.09	0.05								
lW3	10/18/11		13.71	8.45	5.26	0.13								
1W3	04/25/12		13.71	5.63	8.08	Sheen	9.100	3,200,000g		4.5v	<0.50	<0.50	< 0.50	<1.0
1W3	10/04/12		13.71	8.00	5.71	0.19	110,000g	5,400,000g		<50	< 0.50	<0.50	<0.50	<1.0
IW3	04/16/13		13.71	7.37	6.34	Sheen	3,600	570g		7.5	<0.50	<0.50	<0.50	< 0.50
lW3	11/13/13		13.71	7.90	5.85	0.05								
IW3	11/14/13		13.71				1,200g	320		4.3	<0.50	<0.50	<0.50	< 0.50
1W3	06/25/14		13.71	7.35	6.36	No								
1W3	06/26/14		13.71				3,900g	480g		4.6	<0.50	<0.50	<0.50	<0.50
lW4	09/10/87		Well insta	lled.										
1W4	Sept-87		12.77				740	92,500			70	7	10	16
/IW4	May-88		12.77			LPH								

Well ID	Sampling Date	Depth 7 (feet)	ΓΟC Elev (feet)	. DTW (feet)	GW Elev. (feet)	NAPL (feet)	TPHd (μg/L)	TPHg (μg/L)	MTBE 8021B (μg/L)	MTBE 8260B (μg/L)	B (µg/L)	T (µg/L)	E (µg/L)	Χ (μg/L)
MW4	04/25/89		12.77	7.26	5.64	0.16								
ЛW4	07/19/89		12.77	10.32	3.03	0.72								
ЛW4	07/27/89		12.77		accessible									
/W4	09/06/89		12.77	11.40	1.43	0.07								
ЛW4	09/22/89		12.77	11.64	1.28	0.19								
ЛW4	11/01/89		12.77	11.00	1.77	Sheen								
ЛW4	11/15/89		12.77	11.18	1.67	0.10								
/W4	12/06/89		12.77	10.25	2.52	Sheen								
ЛW4	02/20/90		12.77	8.40	4.37	No								
/W4	04/19/90		12.77	9.04	3.75	0.03								
/W4	07/03/90		12.77	8.00	4.77	Sheen								
1W4	07/26/90		12.77	8.57	4.23	0.04								
лw4	08/20/90		12.77	9.08	3.70	0.01								
ЛW4	09/19/90		12.77	9.76	3.03	0.03								
/W4	11/27/90		12.77	10.83	2.01	0.09								
/W4	01/17/91		12.77	9.96	2.97	0.20								
1W4	03/26/91		12.77	6.20	6.64	0.09								
1W4	05/02/91		12.77	7.50	5.30	0.04								
1W4	06/20/91		12.77	7.79	5.01	0.04								
1W4	08/07/91		12.77	9.81	3.00	0.05								
/W4	09/17/91		12.77	10.02	2.83	0.10								
/W4	11/13/91		12.77	9.90	2.97	0.12								
1W4	12/10/91		12.77	9.92	2.93	0.12								
1W4	01/21/92		12.77	9.50	3.33	0.08								
1W4 1W4	03/25/92		12.77	5.01	7.78	0.03								
1W4	06/22/92		12.77	7.34	5.45	0.03 0.02[1/2 c.]								
1W4 1W4	09/24/92		12.77	9.03	3.74	Sheen								
1W4	10/14/92		12.77	9.03	3.74	0.02[1/2 c.]								
1W4 1W4			12.77			0.02[1/2 c.] 0.02[1/2 c.]								
1W4 1W4	11/16/92 12/08/92		12.77	9.09 10.24	3.70 2.55									
						0.02[1/2 c.]								
IW4	01/27/93		12.77	4.95	7.85	0.04 0.01								
1W4	02/18/93 03/10/93		12.77	4.89	7.89									
1W4			12.77	6.40	6.37	Sheen								
1W4	04/06/93		12.77	4.36	8.41	Sheen								
1W4	05/28/93		12.77			[2 c.]								
1W4	06/10/93		12.77			[2 c.]								
1W4	07/17/93		12.77			2/5 gal.								
1W4	08/11/93		12.77			1/4 gal.								
/W4	09/01/93		12.77			1/4 gal.								
1W4	10/26/93		12.77											
/W4	11/12/93		12.77											
lW4	12/27/93		12.77											

Wall ID	Compling	Donth	TOC Elev	. DTW	GW	NADI	TDUA	TDU	MTBE	MTBE	В	Т	_	V
Well ID	Sampling Date	(feet)	(feet)	(feet)	Elev. (feet)	NAPL (feet)	TPHd (µg/L)	TPHg (µg/L)	8021B (µg/L)	8260B (µg/L)	B (µg/L)	ι (μg/L)	E (µg/L)	X (µg/L)
MW4	01/20/94		12.77											
MW4	02/02/94 - 02/03/94		12.77			[1 c.]								
MW4	03/10/94		12.77	7.12	5.65	[8 c.]								
MW4	04/22/94		12.77			[10 c.]								
MW4	05/10/94 - 05/11/94		12.77			[5 c.]								
MW4	06/27/94		12.77	6.5	6.27	0.01								
MW4	08/31/94		12.77	7.84	4.93	0.02								
MW4	09/29/94		12.77	8.43	4.34	0.03								
MW4	10/25/94		12.77	9.24	3.53	Sheen								
MW4	11/30/94		12.77	6.77	6.00									
MW4	12/27/94		12.77	6.14	6.63	Sheen								
MW4	02/06/95		12.77	4.87	7.90	Sheen								
MW4	06/07/95		12.77	6.91	5.86	Sheen								
MW4	09/18/95		12.77	9.59	3.18	Sheen								
MW4	11/01/95		12.77	11.52	1.25	Sheen								
MW4	02/14/96		12.77	8.56	4.21	Sheen								
MW4	06/19/96		12.77	6.09	6.68	Sheen								
MW4	09/24/96		12.77	10.20	2.57	Sheen								
MW4	12/11/96		12.77	7.78	4.99	Sheen								
MW4	03/19/97		12.77	8.56	4.21	Sheen								
MW4	06/04/97		12.77	9.31	3.46	Sheen								
MW4	09/02/97		12.77	10.00	2.77	Sheen								
MW4	12/02/97		12.77	8.72	4.05	No	15,000	1,500	50		<2.5	9.7	3.0	10
MW4	03/24/98		12.77	5.79	6.98	No	6,400	540	38		<0.5	4.4	1.6	5.4
MW4	06/23/98		12.77	8.50	4.27	Sheen	7,500	1,000	25		3.3	<2.0	<2.0	<2.0
MW4	09/29/98		12.77	9.77	3.00	Sheen	65,000	7,300	<50		<10	<10	<10	<10
MW4	12/30/98		12.77	8.54	4.23	Sheen	12,000	1,000	170		3.8	5.1	<2.5	4.1
MW4	03/24/99		12.77	4.41	8.36	Sheen	20,500	1,300	4.40		2.64	<1.0	<1.0	<1.0
MW4	06/22/99		12.77	5.71	7.06	No	9,760	1,470	<10		404	<2.5	<2.5	<2.5
MW4	09/29/99		12.77	7.32	5.45	No	2,470f	589c	8.12		12.6	<1.0	<1.0	<1.0
MW4	12/21/99		12.77	7.58	5.19	No	230,000	2,000	<2		<0.5	0.56	1.9	18.6
MW4	01/26/00		12.77	5.85	6.92	No	3,200g							
MW4	03/21/00		12.77	3.58	9.19	No	5,900	270	13		6.8	0.83	<0.5	3.6
MW4	03/30/01		12.77		vered by a		0,000		.0		0.0	0.00	10.0	0.0
MW5	09/10/87		Well insta	alled.										
MW5	Sept-87		8.38				37,220	26,600			560	1,710	1,580	7,150
MW5	May-88		8.38			LPH								
MW5	04/25/89		8.38	8.06	0.32	No								
MW5	07/18/89		Well dest											
MW6	09/10/87		Well insta	alled.										
MW6	May-88		14.27					29,300			12,820	550	1,440	5,500

Well ID	Sampling Date	Depth ⁻ (feet)	ΓΟC Elev. (feet)	DTW (feet)	GW Elev. (feet)	NAPL (feet)	TPHd (µg/L)	TPHg (µg/L)	MTBE 8021B (μg/L)	MTBE 8260B (μg/L)	B (µg/L)	Τ (μg/L)	E (µg/L)	X (µg/L)
MW6	04/25/89		14.27	8.02	6.25	No								
MW6	09/06/89		14.27	13.64	0.69	0.08								
MW6	09/22/89		14.27	13.79	0.54	0.07								
MW6	11/01/89		14.27	12.78	1.49	Sheen								
MW6	11/15/89		14.27	12.91	1.36	Sheen								
лW6	12/06/89		14.27	11.84	2.43	No	4,800	9,000			370	13	2.6	430
лW6	02/20/90		14.27	9.08	5.19	No								
лW6	04/19/90		14.27	9.72	4.55	No	26,000	27,000			3,000	120	490	2,100
MW6	07/03/90		14.27	8.00	6.27	No	13,000	30,000			5,500	1,400	1,200	3,100
ЛW6	07/26/90		14.27	8.70	5.57	No								
лW6	08/20/90		14.27	9.62	4.65	No								
ЛW6	09/19/90		14.27	10.25	4.02	Sheen								
лW6	11/27/90		14.27	10.82	3.45	Sheen	7,600	15,000			4,400	120	800	2,300
лW6	01/17/91		14.27	9.93	4.34	No								
ЛW6	03/26/91		14.27	8.45	5.82	No	<100	55,000			10,000	380	1,600	6,900
ЛW6	05/02/91		14.27	8.90	5.37	No								
лw6	06/20/91		14.27	9.47	4.80	Sheen								
ЛW6	08/07/91		14.27	10.10	4.17	Sheen								
ЛW6	09/17/91		14.27	10.21	4.06	Sheen		17,000			4,500	160	890	3,100
ЛW6	11/13/91		14.27	9.62	4.65	Sheen								
лW6	12/10/91		14.27	9.59	4.68	Sheen	1,200	32,000			6,000	290	1,400	4,700
лW6	01/21/92		14.27	9.25	5.02	Sheen								
ЛW6	03/25/92		14.27	6.88	7.39	No	2,700	21,000			8,000	250	1,700	5,000
лw6	06/22/92		14.27	7.38	6.89	No	1,700	43,000			11,000	150	2,100	5,000
лw6	09/24/92		14.27	8.70	5.57	No	2,000	45,000			9,800	270	1,700	3,600
лW6	10/14/92		14.27	8.91	5.36	Sheen								
лW6	11/16/92		14.27	8.75	5.52	No								
лw6	12/08/92		14.27	8.51	5.76	Sheen								
лw6	01/27/93		14.27	5.69	8.58	No								
лw6	02/18/93		14.27	4.90	9.45	0.10 [1/2 c.]								
/W6	03/10/93		14.27	6.07	8.24	0.05 [1/4 c.]								
лw6	04/06/93		14.27	4.98	9.29	Sheen								
лw6	05/28/93		14.27			[3 c.]								
лw6	06/10/93		14.27			[3 c.]	38,000	130,000			9,800	650	5,100	12,000
лW6	07/17/93		14.27											
1W6	08/11/93		14.27											
1W6	09/01/93		14.27			[1/2 c.]								
лw6	10/26/93		14.27											
лw6	11/12/93		14.27											
MW6	12/27/93		14.27											
MW6	01/20/94		14.27											
MW6	02/02/94 - 02/03/94		14.27											

Well ID	Sampling Date	Depth (feet)	TOC Elev (feet)	. DTW (feet)	GW Elev. (feet)	NAPL (feet)	TPHd (μg/L)	TPHg (μg/L)	MTBE 8021B (μg/L)	MTBE 8260B (μg/L)	B (µg/L)	Τ (μg/L)	E (μg/L)	Χ (μg/L)
MW6	03/10/94		14.27	7.82	6.45	[1/4 c.]								
MW6	04/22/94		14.27			[10 c.]								
MW6	05/10/94 - 05/11/94		14.27			[3 c.]								
MW6	06/27/94		14.27	7.77	6.50	Sheen								
MW6	08/31/94		14.27	9.02	5.25	Sheen								
MW6	09/29/94		14.27	9.51	4.76	Sheen								
MW6	10/25/94		14.27	9.93	4.34	Sheen								
MW6	11/30/94		14.27	8.05	6.22									
MW6	12/27/94		14.27	7.54	6.73									
MW6	02/06/95		14.27	5.86	8.41	Sheen								
MW6	06/07/95		14.27	8.07	6.20	Sheen								
MW6	09/18/95		14.27	10.54	3.73	Sheen								
MW6	11/01/95		14.27	11.41	2.86	Sheen								
MW6	02/14/96		14.27	9.17	5.10	Sheen								
MW6	06/19/96		14.27	7.13	7.14	Sheen								
MW6	09/24/96		14.27	11.24	3.03	Sheen								
MW6	12/11/96		14.27	9.20	5.07	No	2,900	9,100	<100		2,100	22	160	260
MW6	03/19/97		14.27	10.14	4.13	No	3,800	24,000	250		5,800	91	1,300	1,900
MW6	06/04/97		14.27	10.58	3.69	No	3,300	20,000	270		4,400	<50	540	480
MW6	09/02/97		14.27	11.02	3.25	No	2,100	8,100	<25		1,800	<25	140	170
MW6	12/02/97		14.27	10.45	3.82	No	2,300	6,800	<100		1,100	<20	77	74
MW6	03/24/98		14.27	7.09	7.18	No	3,800	20,000	<250		4,300	< 5 0	2,200	1,500
MW6	06/23/98		14.27	9.79	4.48	Sheen	4,100	19,000	<500		3,400	<100	1,800	1,100
MW6	09/29/98		14.27	10.56	3.71	No	2,300	8,600	<100		2,100	25	300	260
MW6	12/30/98		14.27	9.97	4.30	No	2,700	6,800	<125		1,600	<25	84	200
MW6	03/24/99		14.27	5.02	9.25	Sheen	2,670	12,600	<20		3,380	16.5	221	190
MW6	06/22/99		14.27	6.91	7.36	No	5,670	6,720	<40		2,400	<10	767	14.4
MW6	09/29/99		14.27	8.66	7.30 5.61	No	1,370f	6,720 6,310d	<250		2,400 <25	<25	133	<25
MW6	12/21/99		14.27	8.57	5.70	No	2,300	3,800	12		890	3.3	94	95
MW6	03/21/00		14.27		accessible.	NO	2,300	3,000	12		090	3.3	94	93
MW6	03/21/00		14.27	3.66	10.61	No	2,000	9,200		<5	3,100	9.1	130	31
MW6	11/01/01		14.23			NO	2,000	9,200		<3	3,100	9.1	130	31
MW6	03/11/02 k		14.23	Well su 4.55	9.68	No	1,460	7,660	45.0	<5.0	2,200	25.0 j	410	285
MW6	03/11/02 k		14.23	5.79	8.44	No	1,400	5,120	45.0 15.7	1.80	920	3.2	36	19.4
MW6	03/11/03		14.23	5.79	9.01	No	596g	5,120	15.7	0.70	1,130		164	62.9
MW6	11/02/04		14.23	5.22 4.84	9.01		•	•		0.70 <0.50	793	14.7	178	62.9 53.0
				-		No No	1,000g	4,320				3.6		
MW6	02/04/05		14.23	3.83	10.40	No No	1,410g	3,950		< 0.50	1,210	9.4	110	22.6
MW6	05/02/05		14.23	3.18	11.05	No No	852g	4,900		< 0.50	755 507	6.6	189	20.9
MW6	08/01/05		14.23	3.92	10.31	No No	1,290g	3,320		1.20	597	5.1	64.7	47.5
MW6	10/25/05		14.23	3.93	10.30	No	861g	2,870		1.48	496	4.24	63.5	35.9
MW6	01/24/06		14.23	2.81	11.42	No	570g	4,000		<5.0	590	<25	51	<25
MW6	04/28/06		14.23	2.68	11.55	No	400g	3,600		2.3n	600n	<12	60	<12

Well ID	Sampling Date	Depth (feet)	TOC Elev	. DTW (feet)	GW Elev. (feet)	NAPL (feet)	TPHd (µg/L)	TPHg (µg/L)	MTBE 8021B (μg/L)	MTBE 8260B (μg/L)	B (µg/L)	Τ (μg/L)	E (µg/L)	Χ (μg/L)
MW6	08/04/06		14.23	3.07	11.16	No	899	4,070		0.920	294	4.42	74.1	19.9
MW6	10/06/06		14.23	5.64	8.59	No	430g,j	1,900		< 0.50	140	<12	24	<12
MW6	01/12/07		14.23	5.82	8.41	No	430g,j 300g	1,700		<0.50	98	<5.0	16	<5.0
MW6	04/09/07		14.23	6.03	8.20	No	230g	2,150		<0.500	116j	1.66	12.3	6.39
MW6	08/06/07		14.23	6.40	7.83	No	230g 190g	<500		< 0.500	85	<5.0	<5.0	<5.0
MW6	11/15/07		14.23	6.93	7.30	No	390g	410		<0.50	57	<2.5	<2.5	<2.5
MW6	01/02/08		14.23	6.40	7.83	No	170g,j	670		<0.50	63	<2.5	<2.5	<2.5
MW6	04/03/08		14.23	5.47	8.76	No	340g	460		<0.50	13	1.9	2.3	2.9
MW6	07/09/08		14.23	6.50	7.73	No	290g	1,200		< 0.50	86	<5.0	<5.0	<5.0
MW6	10/01/08		14.23		vered by a		290g	1,200		<0.50	80	<3.0	<5.0	<3.0
MW6	01/07/09		14.23		•	•								
MW6	01/07/09		14.23	7.25	vered by a 6.98	ізрпан. No	110	200		<0.50	1.9	<0.50	<0.50	<1.0
								450						
MW6	04/24/09		14.23	5.91	8.32 7.76	No No	160			< 0.50	54	<0.50	0.570	<1.0
MW6	07/01/09		14.23	6.47		No	<50	150		<0.50	30	<0.50	<0.50	<1.0
MW6	10/01/09		14.23	6.70	7.53	No								
MW6	03/04/10		14.23	4.21	10.02	No	 74	400-				0.574	0.504	
MW6	05/06/10		14.23	4.46	9.77	No	74g	480g		<0.50	38	0.57t	0.56t	<1.0
MW6	08/06/10		14.23	6.07	8.16	No		200-						
MW6	11/02/10		14.23	6.92	7.31	No	84g	200g		<0.50	14	<0.50	<0.50	<1.0
MW6	04/21/11		14.23	6.22	8.01	No	110g	420g		<0.50	42	<0.50	<0.50	<1.0
MW6	10/18/11		14.23	6.64	7.59	No	<50	<50		<0.50	<0.50	<0.50	<0.50	<1.0
MW6	04/25/12		14.23	4.35	9.88	No	<50	200		<0.50	9.4	<0.50	<0.50	4.9
MW6	10/04/12		14.23	6.34	7.89	No	<50	93g		<0.50	7.2	2.0	<0.50	1.5t
MW6	04/16/13		14.23	5.52	8.71	No	120g	140g		<0.50	2.9	<0.50	<0.50	<0.50
MW6	11/13/13		14.23	5.87	8.36	No								
MW6	11/14/13		14.23				87g	160		<0.50	14	<0.50	<0.50	<0.50
MW6	06/25/14		14.23	4.73	9.50	No								
MW6	06/26/14		14.23				90g	1,100g		<0.50	30	<0.50	<0.50	< 0.50
MW7	09/10/87		Well insta	alled.										
MW7	Sept-87		14.84				1,531	2,790			258	2	<2	42
MW7	May-88		14.84					19			300o	<100	<100	<100
MW7	04/25/89		14.84	8.66	6.18	No								
MW7	09/06/89		14.84	11.72	3.12	Sheen								
MW7	09/22/89		14.84	11.89	2.95	No								
MW7	12/06/89		14.84	10.46	4.38	No	2,500	1,700			220	5.3	5	8.6
MW7	02/20/90		14.84	8.44	6.40	No								
MW7	04/19/90		14.84	9.54	5.30	No	3,500	2,700			220	8.6	7	20
MW7	07/03/90		14.84	7.54	7.39	No	910	2,500			380	13	16	35
MW7	07/26/90		14.84	8.08	6.76	No								
MW7	08/20/90		14.84	8.82	6.02	No								
MW7	09/19/90		14.84	9.01	5.83	No								

Well ID	Sampling Date	Depth 1 (feet)	ΓΟC Elev. (feet)	DTW (feet)	GW Elev. (feet)	NAPL (feet)	TPHd (µg/L)	TPHg (µg/L)	MTBE 8021Β (μg/L)	MTBE 8260B (μg/L)	B (µg/L)	Τ (μg/L)	E (µg/L)	X (µg/L)
/W7	11/27/90		14.84	9.54	5.30	No	1,300	2,300			630	16	32	29
/W7	01/17/91		14.84	8.50	6.34	No								
1W7	03/26/91		14.84	5.92	8.92	No	<100	<3,500			420	18	17	27
/W7	05/02/91		14.84	7.72	7.12	No								
лw7	06/20/91		14.84	8.19	6.65	No	<100	3,100			270	8.8	33	19
/W7	08/07/91		14.84	8.70	6.14	No								
1W7	09/17/91		14.84	8.77	6.07	No		2,400			390	10	15	18
1W7	11/13/91		14.84	8.51	6.33	No								
/W7	12/10/91		14.84	8.58	6.26	No	530	1,700			290	5.3	7.1	<0.5
1W7	01/21/92		14.84	8.32	6.52	No								
1W7	03/25/92		14.84	9.27	5.57	No	760	1,500			320	7.2	16	19
1W7	06/22/92		14.84	6.97	7.87	No	830	3,100			260	5.8	21	27
IW7	09/24/92		14.84	8.00	6.84	No	660	3,900			160	4.6	3.7	13
/W7	10/14/92		14.84	8.15	6.69	No								
IW7	11/16/92		14.84	7.92	6.92	No								
IW7	12/08/92		14.84	7.75	7.09	No	540	17,000			1,100	35	77	46
IW7	01/27/93		14.84	5.09	9.75	No								
1W7	02/18/93		14.84	4.51	10.33	No								
1W7	03/10/93		14.84	4.78	10.06	No	640	3,500			160	6.2	22	19
1W7	04/06/93		14.84	4.48	10.36	No								
1W7	05/28/93		14.84	5.44	9.40	No								
lW7	06/10/93		14.84	5.60	9.24	No	570	1,600			140	6.5	22	61
1W7	07/17/93		14.84	6.33	8.51	No								
1W7	08/11/93		14.84	6.87	7.97	No	370/2,000q	2,700			130/140o	1.3/50	13/120	12/10o
1W7	09/01/93		14.84	7.12	7.72	No								
1W7	10/26/93		14.84	7.67	7.17	No	1,000	2,500			90	4.7	6.6	15
lW7	11/12/93		14.84	7.69	7.15	No								
1W7	12/27/93		14.84	7.42	7.42	No								
IW7	01/20/94		14.84	8.67	6.17	No								
1W7	02/02/94 - 02/03/94		14.84	8.47	6.37	No	1,300	2,900			79	5.0	8.2	21
1W7	03/10/94		14.84	8.24	6.37	No								
1W7	04/22/94		14.84	7.95	6.89	No								
1W7	05/10/94 - 05/11/94		14.84	7.53	7.31	No	1,300	2,400			88	5.6	5.2	15
IW7	06/27/94		14.84	8.01	6.83	No								
IW7	08/31/94		14.84	9.19	5.65	No								
W7	09/29/94		14.84	9.65	5.19	No	56	1,900			71	3.1	3.5	7.8
IW7	10/25/94		14.84	9.96	4.88	No	89	1,400			51	1.5	24	6.8
IW7	11/30/94		14.84	7.78	7.06									
IW7	12/27/94		14.84	7.51	7.33									
1W7	02/06/95		14.84	5.79	9.05	No	1,300	2,500			130	<10	<10	<10
1W7	06/07/95		14.84	7.73	7.11	No	1,200	2,400	39		91	5	7.6	14
1W7	06/22/95		14.84	6.97	7.87	No	660	3,900			260	5.8	21	27

Well ID	Sampling Date	Depth (feet)	TOC Elev. (feet)	. DTW (feet)	GW Elev. (feet)	NAPL (feet)	TPHd (µg/L)	TPHg (μg/L)	MTBE 8021B (μg/L)	MTBE 8260B (μg/L)	B (µg/L)	Τ (μg/L)	Ε (μg/L)	Χ (μg/L)
MW7	09/18/95		14.84	9.81	5.03	No	1,100	1,800	<25		17	<5.0	<5.0	<5.0
MW7	11/01/95		14.84	10.56	4.28	No	1,700	3,000	<13		2.7	11	25	<2.5
лw7	02/14/96		14.84	8.04	6.80	No	1,200	1,900	<25		59	<5.0	<5.0	<5.0
лw7	06/19/96		14.84	7.33	7.51	No	1,400	2,000	<25		96	<5.0	<5.0	5.6
MW7	09/24/96		14.84	10.10	4.74	No	1,100	950	<25		6.8	<5.0	<5.0	<5.0
лw7	12/11/96		14.84	8.50	6.34	No	1,600	2,500	<10		50	<2.0	6.4	30
лw7	03/19/97		14.84	8.88	5.96	No	840	2,700	<25		61	8.0	21	68
лw7	06/04/97		14.84	9.38	5.46	No	1,000	1,900	<2.5		45	<2.0	5.3	13
лw7	09/02/97		14.84	9.69	5.15	No	790	1,700	<2.5		28	2.2	<2.0	5.9
лw7	12/02/97		14.84	8.65	6.19	No	1,100	2,000	14		33	2.2	2.0	5.8
лw7	03/24/98		14.84	6.40	8.44	No	950	2,300	<25		73	<5.0	<5.0	22
лw7	06/23/98		14.84	8.34	6.50	No	1,600	4,700	140		50	<5.0	12	20
MW7	09/29/98		14.84	9.76	5.08	No	630	700	<5.0		2.7	1.3	2.4	5.3
MW7	12/30/98		14.84	8.86	5.98	No	1,700	1,400	<5.0		17	7.7	2.8	16
лw7	03/24/99		14.84	5.48	9.36	Sheen	860	1,740	6.73		59.2	2.76	4.33	15.1
лw7	06/22/99		14.84	6.54	8.30	No	5,330	3,250	<4.0		59.5	3.96	2.89	6.38
/W7	09/29/99		14.84	8.45	6.39	No	1,750f	1,360c,d	<25		3.07	<2.5	5.02	6.32
/W7	12/21/99		14.84	8.39	6.45	No	4,600	2,900	<2		47	2	1.7	8.53
лW7	03/21/00		14.84	4.72	10.12	No	1,500	760	<2		43	2	2.2	10.8
/IW7	12/21/00		Well dest				1,000		-			_		
MW8	09/10/87		Well insta	alled.										
/IW8	Sept-87		13.45					1,325			81	74	42	182
∕IW8	May-88		13.45			LPH								
∕IW8	04/25/89		13.45	8.31	5.67	0.66								
∕IW8	07/19/89		13.45	10.97	3.48	1.25								
∕IW8	07/27/89		13.45	10.34	3.17	0.08								
/IW8	09/06/89		13.45	11.09	2.50	0.17								
/IW8	09/22/89		13.45	11.58	2.16	0.36								
/IW8	11/01/89		13.45	11.03	2.42	No								
/IW8	11/15/89		13.45	11.25	2.21	0.01								
/IW8	12/06/89		13.45	10.30	3.15	Sheen	34,000	42,000			2,600	630	210	3,700
/IW8	02/20/90		13.45	8.00	5.46	0.01								
/IW8	04/19/90		13.45	8.50	4.95	No	53,000	49,000			2,100	820	1,100	4,800
NW8	07/03/90		13.45	7.55	5.90	No	32,000	44,000			4,000	1,500	2,000	6,300
NW8	07/26/90		13.45	7.86	5.59	No								
/W8	08/20/90		13.45	8.92	4.53	No								
/IW8	09/19/90		13.45	9.55	3.90	No								
NW8	11/27/90		13.45	10.29	3.17	0.01								
8WN	01/17/91		13.45	9.97	3.48	Sheen								
AW8	03/26/91		13.45	8.45	5.00	Sheen								
AW8	05/02/91		13.45	8.85	4.60	Sheen								

Well ID	Sampling Date	Depth 1 (feet)	ΓΟC Elev. (feet)	DTW (feet)	GW Elev. (feet)	NAPL (feet)	TPHd (µg/L)	TPHg (μg/L)	MTBE 8021Β (μg/L)	MTBE 8260B (μg/L)	Β (μg/L)	T (µg/L)	E (µg/L)	X (μg/L)
MW8	06/20/91		13.45	9.45	4.00	Sheen								
MW8	08/07/91		13.45	10.00	3.45	Sheen								
MW8	09/17/91		13.45	10.11	3.34	Sheen		57,000			14,000	7,800	3,100	12,000
MW8	11/13/91		13.45	9.63	3.82	Sheen								
MW8	12/10/91		13.45	9.66	3.79	Sheen	1,400	66,000			9,500	5,000	3,100	12,000
MW8	01/21/92		13.45	9.35	4.10	Sheen								
MW8	03/25/92		13.45	8.02	5.43	Sheen								
MW8	06/22/92		13.45	7.01	6.44	Sheen								
MW8	09/24/92		13.45	8.33	5.12	Sheen								
MW8	10/14/92		13.45	8.65	4.80	Sheen								
MW8	11/16/92		13.45	8.27	5.18	Sheen								
MW8	12/08/92		13.45	8.25	5.20	Sheen								
MW8	01/27/93		13.45	5.22	8.23	Sheen								
MW8	02/18/93		13.45	4.27	9.18	Sheen								
MW8	03/10/93		13.45	5.30	8.15	Sheen								
MW8	04/06/93		13.45	4.56	8.89	Sheen								
MW8	05/28/93		13.45	5.62	7.83	Sheen								
MW8	06/10/93		13.45	5.75	7.70	Sheen								
MW8	07/17/93		13.45	6.43	7.02	Sheen								
MW8	08/11/93		13.45	6.99	6.46	Sheen	2,600/370q	53,000			4,200/4,9000	1,300/1,6000	2,600/3,300o	7,200/8,2000
MW8	09/01/93		13.45	7.33	6.12	Sheen								
MW8	10/26/93		13.45	7.98	5.47	Sheen								
MW8	11/12/93		13.45	8.07	5.38	Sheen								
MW8	12/27/93		13.45											
MW8	01/20/94		13.45	8.90	4.55	Sheen								
MW8	02/02/94 - 02/03/94		13.45	8.58	4.87	Sheen								
MW8	03/10/94		13.45	7.16	6.29	No								
MW8	04/22/94		13.45	7.34	6.11	Sheen								
MW8	05/10/94 - 05/11/94		13.45	7.04	6.41	Sheen								
MW8	06/27/94		13.45	6.01	7.44	Sheen								
MW8	08/31/94		13.45	9.26	4.19	Sheen								
MW8	09/29/94		13.45	9.76	3.69	Sheen								
MW8	10/25/94		13.45	10.05	3.40	Sheen								
MW8	11/30/94		13.45	7.68	5.77									
MW8	12/27/94		13.45	7.11	6.34	Sheen								
MW8	02/06/95		13.45	5.39	8.06	Sheen								
MW8	06/07/95		13.45	7.53	5.92	Sheen								
MW8	09/18/95		13.45	9.84	3.61	Sheen								
MW8	11/01/95		13.45	10.47	2.98	Sheen								
MW8	02/14/96		13.45	8.27	5.18	Sheen								
MW8	06/19/96		13.45	6.88	6.57	Sheen								
VIVO	00/19/90		13.43	0.00	0.57	SHEEH								

Well ID	Sampling Date	Depth (feet)	TOC Elev	DTW (feet)	GW Elev. (feet)	NAPL (feet)	TPHd (µg/L)	TPHg (µg/L)	MTBE 8021Β (μg/L)	MTBE 8260B (μg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)
MW8	12/11/96		13.45	8.53	4.92	Sheen								
MW8	03/19/97		13.45	9.09	4.36	Sheen								
MW8	06/04/97		13.45	9.52	3.93	Sheen								
/W8	09/02/97		13.45	9.72	3.73	No	8,000	20,000	<50		57	<50	850	660
WN8	12/02/97		13.45	8.83	4.62	No	2,700	6,900	130		83	<10	<10	100
/IW8	03/24/98		13.45	6.52	6.93	No	2,900	10,000	<125		190	<25	470	330
/W8	06/23/98		13.45	9.02	4.43	No	3,700	10,000	<50		140	<10	460	260
/W8	09/29/98		13.45	9.72	3.73	No	3,600	12,000	130		46	<10	340	190
/IW8	12/30/98		13.45	9.06	4.39	No	3,000	11,000	140		170	<25	230	160
лw8	03/24/99		13.45	5.21	8.24	Sheen	2,250	13,000	22.6		336	53.2	415	326
/W8	06/22/99		13.45	6.51	6.94	Sheen	4,010	13,000	64.9		174	<5.0	186	13.1
/IW8	09/29/99		13.45	8.22	5.23	No	2,170f	5,420	<25		20.4	<5.0	<5.0	38.5
/W8	12/21/99		13.45	8.41	5.04	No	2,100	4,700	<2		190	15	160	68.2
MW8	03/21/00		13.45	4.47	8.98	No		6,300	270		380	12	260	86
MW8	12/21/00		Well dest		0.00			0,000	0					
1W9	05/12/88		Well insta	alled.										
W9	May-88		14.64					<50			<0.5	1	<1	<1
IW9	04/25/89		14.64	8.25	6.39	No								
IW9	09/06/89		14.64	Well ina	ccessible.									
IW9	09/22/89		14.64	Well ina	ccessible.									
1W9	12/06/89		14.64	10.12	4.52	No	110	100			1.8	3.7	1.4	8.8
IW9	02/20/90		14.64	9.38	5.26	No								
∕IW9	04/19/90		14.64	9.40	5.25	No	<100	<20			<0.5	<0.5	<0.5	<0.5
/IW9	07/03/90		14.64	8.79	5.85	No	<100	<20			<0.5	< 0.5	<0.5	< 0.5
MW9	07/26/90		14.64	8.70	5.94	No								
1W9	08/20/90		14.64	9.09	5.55	No								
MW9	09/19/90		14.64	9.52	5.12	No								
1W9	11/27/90		14.64	9.89	4.75	No								
MW9	01/17/91		14.64	Well ina	ccessible.									
1W9	03/26/91		14.64	Well ina	ccessible.									
1W9	05/02/91		14.64	9.10	5.54	No								
1W9	06/20/91		14.64	8.76	5.88	No	<100	<50			<0.5	<0.5	<0.5	<0.5
1W9	08/07/91		14.64	9.37	5.27	No								
1W9	09/17/91		14.64	9.57	5.07	No		<50			<0.5	<0.5	<0.5	<0.5
IW9	11/13/91		14.64	9.46	5.18	No								
1W9	12/10/91		14.64	9.30	5.34	No	52	<50			<0.5	<0.5	<0.5	<0.5
1W9	01/21/92		14.64	9.68	4.96	No								
1W9	03/25/92		14.64	8.93	5.71	No	<50	<50			<0.5	<0.5	<0.5	<0.5
1W9	06/22/92		14.64	7.45	7.19	No	<50	<50			<0.5	<0.5	<0.5	<0.5
лwэ лwэ	09/24/92		14.64	8.69	5.95	No	<50	<50			<0.5	<0.5	<0.5	<0.5
лwэ лw9	10/14/92		14.64	8.83	5.81	No								

Well ID	Sampling Date	Depth 7 (feet)	TOC Elev. (feet)	DTW (feet)	GW Elev. (feet)	NAPL (feet)	TPHd (μg/L)	TPHg (µg/L)	MTBE 8021Β (μg/L)	MTBE 8260B (μg/L)	B (µg/L)	Τ (μg/L)	E (µg/L)	Χ (μg/L)
MW9	11/16/92		14.64	8.80	5.84	No								
ЛW9	12/08/92		14.64	8.70	5.94	No	<50	<50			<0.5	<0.5	<0.5	<0.5
ЛW9	01/27/93		14.64											
иW9	02/18/93		14.64	9.22	5.42	No								
лW9	03/10/93		14.64	5.25	9.39	No	<50	<50			<0.5	<0.5	<0.5	<0.5
/IW9	04/06/93		14.64	5.07	9.57	No								
/IW9	05/28/93		14.64	6.08	8.56	No								
IW9	06/10/93		14.64	6.27	8.37	No	<50	<50			<0.5	<0.5	<0.5	<0.5
/IW9	07/17/93		14.64	7.09	7.55	No								
/IW9	08/11/93		14.64	7.60	7.04	No	<50/<50p	<50			<0.5/<50	<0.5/<50	<0.5/<50	<0.5/<50
IW9	09/01/93		14.64	7.95	6.69	No								
1W9	10/26/93		14.64	8.44	6.20	No	<50	<50			<0.5	<0.5	<0.5	<0.5
/IW9	11/12/93		14.64	8.44	6.20	No								
/W9	12/27/93		14.64	8.37	6.27	No								
/W9	01/20/94		14.64											
/W9	02/02/94 - 02/03/94		14.64											
1W9	03/10/94		14.64	6.90	7.74	No								
1W9	04/22/94		14.64	7.38	7.26	No								
1W9	05/10/94 - 05/11/94		14.64	6.96	7.68	No								
1W9	06/27/94		14.64	7.65	6.99	No								
1W9	08/31/94		14.64	8.87	5.77	No								
1W9	09/29/94		14.64	9.19	5.45	No	<50	<50			<0.5	<0.5	<0.5	<0.5
1W9	10/25/94		14.64	9.66	4.98	No	<50	<50			< 0.5	<0.5	<0.5	<0.5
/W9	11/30/94		14.64	8.38	6.26									
1W9	12/27/94		14.64	7.29	7.35	No								
IW9	02/06/95		14.64	5.74	8.90	No	56	<50			<0.5	<0.5	<0.5	<0.5
1W9	06/07/95		14.64	8.33	6.31	No	72	<50	<2.5		<0.5	<0.5	<0.5	<0.5
1W9	09/18/95		14.64	9.28	5.36	No	60	<50	<2.5		<0.5	<0.5	<0.5	<0.5
1W9	11/01/95		14.64	10.09	4.55	No	61	<50	<2.5		<0.5	<0.5	<0.5	<0.5
1W9	02/14/96		14.64	6.26	8.38	No	83	<50	<2.5		<0.5	<0.5	<0.5	<0.5
1W9	06/19/96		14.64	6.68	7.96	No	68	<50	<2.5		<0.5	<0.5	<0.5	<0.5
1W9	09/24/96		14.64	9.72	4.92	No	<50	<50	<2.5		<0.5	<0.5	<0.5	<0.5
1W9	12/11/96		14.64	8.11	6.53	No	91	<50	<2.5		<0.5	<0.5	<0.5	<0.5
IW9	03/19/97		14.64	7.72	6.92	No	140	<50	<2.5		0.83	<0.5	<0.5	<0.5
IW9	06/04/97		14.64	8.87	5.77	No	<50	<50	<2.5		<0.5	<0.5	<0.5	< 0.5
IW9	09/02/97		14.64	9.44	5.20	No	140	<50	<2.5		<0.5	<0.5	<0.5	<0.5
IW9	12/02/97		14.64	8.43	6.21	No	71	<50	<2.5		<0.5	<0.5	<0.5	<0.5
1W9	03/24/98		14.64	5.84	8.80	No	62	<50	<2.5		<0.5	<0.5	<0.5	<0.5
IW9	06/23/98		14.64	7.81	6.83	No	69	<50	<2.5		<0.5	<0.5	<0.5	<0.5
1W9	09/29/98		14.64	9.26	5.38	No	52	<50	<2.5		<0.5	<0.5	<0.5	<0.5
1W9	12/30/98		14.64	8.28	6.36	No	74	<50	<2.5		<0.5	<0.5	<0.5	<0.5
1W9	03/24/99		14.64	4.74	9.90	No	71.1	b	b		b	b	b	b

Well ID	Sampling Date	Depth (feet)	TOC Elev. (feet)	DTW (feet)	GW Elev. (feet)	NAPL (feet)	TPHd (µg/L)	TPHg (µg/L)	MTBE 8021Β (μg/L)	MTBE 8260B (μg/L)	B (µg/L)	Τ (μg/L)	Ε (μg/L)	Χ (μg/L)
MW9	06/22/99		14.64											
ЛW9	09/29/99		14.64	8.41	6.23	No								
лW9	12/21/99		14.64	8.20	6.44	No								
MW9	03/21/00		14.64	4.59	10.05	No								
MW9	12/21/00		Well desti	royed.										
/W10	11/27/89		Well insta	ılled.										
/W10	12/06/89		14.05	10.46	3.59	No	<100	320			3.7	14	5.6	32
ЛW10	02/20/90		14.05	8.12	5.93	No								
ЛW10	04/19/90		14.05	8.54	5.51	No	<100	<20			<0.5	<0.5	<0.5	< 0.5
ЛW10	07/03/90		14.05	7.88	6.17	No	<100	<20			< 0.5	<0.5	<0.5	<0.5
/W10	07/26/90		14.05	8.19	5.86	No								
ЛW10	08/20/90		14.05	10.33	3.72	No								
ЛW10	09/19/90		14.05	9.49	4.56	No								
ЛW10	11/27/90		14.05	9.89	4.16	No	<100	<50			<0.5	<0.5	<0.5	< 0.5
/W10	01/17/91		14.05	9.19	4.86	No								
1W10	03/26/91		14.05	7.48	6.57	No	<100	<50			<0.5	<0.5	<0.5	< 0.5
1W10	05/02/91		14.05	8.16	5.89	No								
1W10	06/20/91		14.05	8.75	5.3	No	<100	<50			<0.5	<0.5	<0.5	< 0.5
1W10	08/07/91		14.05	9.53	4.52	No								
1W10	09/17/91		14.05	9.72	4.33	No	<100	<50			<0.5	<0.5	<0.5	< 0.5
1W10	11/13/91		14.05	10.02	4.03	No								
/W10	12/10/91		14.05	9.12	4.93	No	<50	<50			<0.5	<0.5	<0.5	< 0.5
/W10	01/21/92		14.05	8.31	5.74	No								
ЛW10	03/25/92		14.05	5.70	8.35	No	<50	<50			<0.5	<0.5	<0.5	< 0.5
/IW10	06/22/92		14.05	7.50	6.55	No	<50	<50			<0.5	0.6	<0.5	0.8
/IW10	09/24/92		14.05	8.68	5.37	No	<50	<50			<0.5	<0.5	<0.5	< 0.5
ЛW10	10/14/92		14.05	8.88	5.17	No								
/IW10	11/16/92		14.05	8.70	5.35	No								
/W10	12/08/92		14.05	8.31	5.74	No	<50	<50			<0.5	<0.5	<0.5	0.9
1W10	01/27/93		14.05	5.49	8.56	No								
/W10	02/18/93		14.05	4.26	9.79	No								
/W10	03/10/93		14.05	5.40	8.65	No	<50	<50			<0.5	<0.5	<0.5	< 0.5
/W10	04/06/93		14.05	5.28	8.77	No								
1W10	05/28/93		14.05	6.22	7.83	No								
1W10	06/10/93		14.05	6.49	7.56	No	<50	<50			<0.5	0.6	0.7	1.2
1W10	07/17/93		14.05	6.79	7.26	No								
/W10	08/11/93		14.05	7.20	6.85	No	<50/<50p	<50			<0.5/<50	<0.5/<50	<0.5/<50	1.4/<50
/W10	09/01/93		14.05	8.03	6.02	No								
/W10	10/26/93		14.05	8.38	5.67	No	<50	<50			<0.5	<0.5	<0.5	<0.5
/W10	11/12/93		14.05	8.49	5.56	No								
ЛW10	12/27/93		14.05	8.22	5.83	No								

Well ID	Sampling Date	Depth (feet)	TOC Elev. (feet)	DTW (feet)	GW Elev. (feet)	NAPL (feet)	TPHd (µg/L)	TPHg (µg/L)	MTBE 8021Β (μg/L)	MTBE 8260B (μg/L)	B (µg/L)	T (µg/L)	E (μg/L)	X (µg/L)
MW10	01/20/94		14.05	8.40	5.65	No								
ЛW10	02/02/94 - 02/03/94		14.05	8.00	6.05	No	<50	<50			<0.5	1.0	<0.5	1.8
ЛW10	03/10/94		14.05	7.56	6.49	No								
/IW10	04/22/94		14.05	7.35	6.70	No								
/IW10	05/10/94 - 05/11/94		14.05	7.06	6.99	No	<50	<50			<0.5	<0.5	< 0.5	<0.5
/IW10	06/27/94		14.05	7.59	6.46	No								
/W10	08/31/94		14.05	8.73	5.32	No								
/W10	09/29/94		14.05	9.07	4.98	No	<50	<50			<0.5	<0.5	< 0.5	< 0.5
/W10	10/25/94		14.05	9.41	4.64	No	<50	<50			<0.5	<0.5	< 0.5	< 0.5
1W10	11/30/94		14.05	7.62	6.43									
1W10	12/27/94		14.05	7.01	7.04	No								
1W10	02/06/95		14.05	5.60	8.45	No		<50	<50		<0.5	<0.5	<0.5	< 0.5
/W10	06/07/95		14.05	7.12	6.93	No	<50	<50	<2.5		<0.5	<0.5	<0.5	<0.5
/W10	09/18/95		14.05	8.54	5.51	No	<50	<50	<2.5		<0.5	<0.5	<0.5	<0.5
ЛW10	11/01/95		14.05	9.44	4.61	No	<50	<50	<2.5		<0.5	<0.5	<0.5	< 0.5
1W10	02/14/96		14.05	9.36	4.69	No	64	<50	<2.5		<0.5	<0.5	<0.5	<0.5
1W10	06/19/96		14.05	7.32	6.73	No	<50	<50	<2.5		<0.5	<0.5	<0.5	< 0.5
1W10	09/24/96		14.05	9.07	4.98	No	<50	<50	<2.5		<0.5	<0.5	<0.5	<0.5
1W10	12/11/96		14.05	7.73	6.32	No	67	<50	<2.5		<0.5	<0.5	<0.5	<0.5
1W10	03/19/97		14.05	7.62	6.43	No	51	<50	<2.5		<0.5	<0.5	<0.5	<0.5
1W10	06/04/97		14.05	8.38	5.67	No	<50	<50	<2.5		<0.5	<0.5	<0.5	<0.5
1W10	09/02/97		14.05	8.64	5.41	No	120	<50	<2.5		<0.5	<0.5	<0.5	<0.5
1W10	12/02/97		14.05	7.22	6.83	No	<50	<50	<2.5		<0.5	<0.5	<0.5	< 0.5
ЛW10	03/24/98		14.05	5.71	8.34	No	<50	<50	<2.5		<0.5	<0.5	<0.5	<0.5
1W10	06/23/98		14.05	7.23	6.82	No	90	<50	<2.5		<0.5	<0.5	<0.5	<0.5
1W10	09/29/98		14.05	8.39	5.66	No	<50	<50	<2.5		<0.5	<0.5	<0.5	< 0.5
1W10	12/06/98		14.05	10.46	3.59	No	<100	320			4	14	6	32
1W10	12/30/98		14.05	7.74	6.31	No	58	<50	<2.5		<0.5	<0.5	<0.5	< 0.5
1W10	03/24/99		14.05	4.74	9.31	No	<50	<50	<2.0		<0.5	<0.5	<0.5	< 0.5
1W10	06/22/99		14.05											
IW10	09/29/99		14.05	8.17	5.88	No								
1W10	12/21/99		14.05	7.87	6.18	No								
1W10	12/21/00		Well destr	royed.										
W11	11/27/89		Well insta	lled.										
1W11	12/06/89		13.55	10.62	2.93	No	<100	78			5.9	6.3	<0.5	48,000
IW11	02/20/90		13.55	9.20	4.35	No								
1W11	04/19/90		13.55	9.80	3.75	No	<100	<20			<0.5	<0.5	<0.5	<0.5
IW11	07/03/90		13.55	8.90	4.65	No	<100	<20			<0.5	<0.5	<0.5	<0.5
1W11	07/26/90		13.55	9.36	4.19	No								
1W11	08/20/90		13.55	9.90	3.65	No								
1W11	09/19/90		13.55	10.39	3.16	No								

Well ID	Sampling Date	Depth 7	ΓΟC Elev. (feet)	DTW (feet)	GW Elev. (feet)	NAPL (feet)	TPHd (μg/L)	TPHg (µg/L)	MTBE 8021Β (μg/L)	MTBE 8260B (μg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (μg/L)
MW11	11/27/90	` '	,	,	, ,	· /								
			13.55	10.97	2.58	No No	<100 	<50 			<0.5	<0.5	<0.5 	<0.5
MW11	01/17/91		13.55	10.76	2.79	No No								 -0 F
MW11	03/26/91		13.55	8.80	4.75	No	<100	<50			<0.5	<0.5	<0.5	<0.5
MW11	05/02/91		13.55	9.38	4.17	No								
MW11	06/20/91		13.55	10.16	3.39	No No	<100	<50 			<0.5	<0.5	<0.5	<0.5
MW11	08/07/91		13.55	10.69	2.86 2.75	No No								 -0.5
MW11	09/17/91		13.55	10.80		No		<50			<0.5	0.7	<0.5	<0.5
MW11	11/13/91		13.55	10.44	3.11	No								
MW11	12/10/91		13.55	10.84	3.07	No	<50	<50			<0.5	0.7	<0.5	<0.5
MW11	01/21/92		13.55	10.10	3.45	No								
MW11	03/25/92		13.55	7.30	6.25	No	<50	<50			<0.5	<0.5	<0.5	<0.5
MW11	06/22/92		13.55	9.02	4.53	No	57	84			1.5	3.1	1.4	9.6
MW11	09/24/92		13.55	9.91	3.64	No	<50	<50			<0.5	<0.5	<0.5	<0.5
MW11	10/14/92		13.55	10.11	3.44	No								
MW11	11/16/92		13.55	9.79	3.76	No								
MW11	12/08/92		13.55	9.77	3.78	No	310	<50			<0.5	<0.5	<0.5	<0.5
ЛW11	01/27/93		13.55	5.67	7.88	No								
/W11	02/18/93		13.55	5.06	8.49	No								
ЛW11	03/10/93		13.55	6.40	7.14	No	240	<50			<0.5	<0.5	<0.5	<0.5
ЛW11	04/06/93		13.55	6.42	7.13	No								
ЛW11	05/28/93		13.55	7.65	5.90	No								
ЛW11	06/10/93		13.55	7.80	5.75	No	50	<50			<0.5	<0.5	<0.5	<0.5
MW11	07/17/93		13.55	8.42	5.13	No								
ЛW11	08/11/93		13.55	8.87	4.68	No	<50/<50p	<50			0.5/<50	0.7/<50	1.2/<50	2.7/<50
ЛW11	09/01/93		13.55	9.09	4.46	No								
ЛW11	10/26/93		13.55	9.70	3.85	No	80	<50			<0.5	<0.5	<0.5	<0.5
ЛW11	11/12/93		13.55	9.72	3.83	No								
MW11	12/27/93		13.55	9.56	3.99	No								
/W11	01/20/94		13.55	9.61	3.94	No								
ЛW11	02/02/94 - 02/03/94		13.55	9.56	3.99	No	160	<50			<0.5	1.0	<0.5	0.9
ЛW11	03/10/94		13.55	8.59	4.96	No								
ЛW11	04/22/94		13.55	8.47	5.08	No								
ЛW11	05/10/94 - 05/11/94		13.55	8.12	5.43	No	100g	<50			<0.5a	<0.5	<0.5	3.2
/W11	06/24/94		13.55	8.65	4.90	No								
/W11	08/31/94		13.55	9.80	3.75	No								
/W11	09/29/94		13.55	10.16	3.39	No	<50	<50			<0.5	<0.5	<0.5	<0.5
/W11	10/25/94		13.55	10.48	3.07	No	<50	<50			<0.5	<0.5	<0.5	<0.5
/W11	11/30/94		13.55	8.55	5.00									
/W11	12/27/94		13.55	7.98	5.57	No								
/W11	02/06/95		13.55	6.49	7.06	No	160	<50			<0.5	<0.5	<0.5	<0.5
ЛW11	06/07/95		13.55	7.98	5.57	No	50	<50	42		<0.5	<0.5	<0.5	<0.5
MW11	09/18/95		13.55	10.12	3.43	No	56	<50	32		<0.5	<0.5	<0.5	< 0.5

Well ID	Sampling Date	Depth (feet)	ΓΟC Elev. (feet)	DTW (feet)	GW Elev. (feet)	NAPL (feet)	TPHd (µg/L)	TPHg (μg/L)	MTBE 8021B (μg/L)	MTBE 8260B (μg/L)	B (µg/L)	Τ (μg/L)	Ε (μg/L)	X (µg/L)
MW11	11/01/95		13.55	10.75	2.80	No	170	<50	35		<0.5	<0.5	<0.5	<0.5
ЛW11	02/14/96		13.55	8.03	5.52	No	76	<50	37		<0.5	<0.5	<0.5	<0.5
ЛW11	06/19/96		13.55	7.85	5.70	No	92	<50	33		<0.5	<0.5	<0.5	<0.5
ЛW11	09/24/96		13.55	10.45	3.10	No	58	<50	40		<0.5	<0.5	<0.5	<0.5
MW11	12/11/96		13.55	9.02	4.53	No	110	<50	10		<0.5	<0.5	<0.5	< 0.5
MW11	03/19/97		13.55	9.16	4.39	No	100	<50	6.9		<0.5	<0.5	<0.5	< 0.5
MW11	06/04/97		13.55	9.91	3.64	No	<50	<50	5.6		<0.5	<0.5	<0.5	<0.5
/W11	09/02/97		13.55	10.25	3.30	No	150	<50	4.5		<0.5	<0.5	<0.5	<0.5
MW11	12/02/97		13.55	9.33	4.22	No	70	<50	5.8		<0.5	<0.5	<0.5	<0.5
MW11	03/24/98		13.55	6.77	6.78	No	<50	<50	4.1		<0.5	<0.5	<0.5	<0.5
ЛW11	06/23/98		13.55	8.99	4.56	No	70	<50	<2.5		<0.5	<0.5	<0.5	<0.5
ЛW11	09/29/98		13.55	9.89	3.66	No	76	<50	7.7		<0.5	<0.5	<0.5	<0.5
лw11	12/30/98		13.55	9.17	4.38	No	71	<50	3.5		<0.5	<0.5	<0.5	<0.5
лw11	03/24/99		13.55	5.79	7.76	No	58.2	<50	4.51		<0.5	1.20	<0.5	<0.5
лw11	06/22/99		13.55											
ЛW11	09/29/99		13.55	9.14	4.41	No								
/W11	12/21/99		13.55	9.01	4.54	No								
1W11	03/21/00		13.55	5.68	7.87	No								
/W11	12/21/00		Well destr											
ЛW12	11/27/89		Well insta	lled.										
ЛW12	12/06/89		12.61	8.00	4.61	No	4,000	85,000			6,700	6,300	1,800	7,800
/W12	02/20/90		12.61	6.33	6.28	No								
/W12	04/19/90		12.61	7.18	5.43	No	97,000	110,000			6,600	7,400	1,800	11,000
/W12	07/03/90		12.61	7.41	5.20	No	50,000	92,000			11,000	11,000	3,100	13,000
/W12	07/26/90		12.61	6.54	6.07	No						· 	· 	
/W12	08/20/90		12.61	7.23	5.38	No								
/W12	09/19/90		12.61	7.77	4.84	No								
/W12	11/27/90		12.61	8.15	4.46	No		69,000			11,000	10,000	3,100	12,000
/W12	01/17/91		12.61	8.06	4.55	No								
/W12	03/26/91		12.61	7.21	5.40	No	<100	100,000			15,000	16,000	2,400	11,000
/W12	05/02/91		12.61	7.60	5.01	Sheen								
/W12	06/20/91		12.61	8.02	4.59	Sheen								
/W12	08/07/91		12.61	8.25	4.36	Sheen								
1W12	09/17/91		12.61	8.20	4.41	Sheen		82,000			22,000	18,000	3,900	16,000
1W12	11/13/91		12.61	7.77	4.84	Sheen								
1W12	12/01/91		12.61	7.75	4.86	Sheen	1,700	99,000			18,000	16,000	3,000	11,000
1W12	01/21/92		12.61	7.08	5.53	Sheen								
1W12	03/25/92		12.61	4.93	7.68	Sheen								
1W12	06/22/92		12.61	6.04	6.57	Sheen								
лw 12 ЛW12	09/24/92		12.61	6.94	5.67	No	3,100	570,000			62,000	46,000	15,000	57,000
	0012-1102		12.01	0.54	0.01	140	5,700	0,000			02,000	70,000	10,000	37,000

Well ID	Sampling Date	Depth (feet)	TOC Elev. (feet)	DTW (feet)	GW Elev. (feet)	NAPL (feet)	TPHd (µg/L)	TPHg (µg/L)	MTBE 8021B (μg/L)	MTBE 8260B (μg/L)	B (µg/L)	T (µg/L)	E (µg/L)	Χ (μg/L)
MW12	11/16/92		12.61	7.00	5.61	Sheen								
MW12	12/08/92		12.61	6.70	5.91	Sheen								
MW12	01/27/93		12.61	4.16	8.45	Sheen								
MW12	02/18/93		12.61	4.01	8.60	Sheen								
MW12	03/10/93		12.61	3.94	8.67	Sheen								
MW12	04/06/93		12.61	3.69	8.92	Sheen								
MW12	05/28/93		12.61	4.66	7.95	Sheen								
MW12	06/10/93		12.61	4.78	7.83	Sheen								
MW12	07/17/93		12.61	5.42	7.19	Sheen								
MW12	08/11/93		12.61	5.83	6.78	Sheen	2,400/190q	94,000			10,000/13,000o	8,300/11,000o	2,800/4,000o	13,000/15,000o
MW12	09/01/93		12.61	6.22	6.39	Sheen								
MW12	10/26/93		12.61	6.82	5.79	No	17,000	68,000			11,000	8,500	3,400	13,000
MW12	11/12/93		12.61	6.88	5.73	No							, 	
MW12	12/27/93		12.61	8.04	4.57	No								
MW12	01/20/94		12.61	7.81	4.80	No								
MW12	02/02/94 - 02/03/94		12.61	7.22	5.39	No	18,000	48,000			4,000	2,700	2,900	9,900
MW12	03/10/94		12.61	6.16	6.45	No							· 	
MW12	04/22/94		12.61	6.31	6.30	No								
MW12	05/10/94 - 05/11/94		12.61	6.16	6.45	No	8,200	46,000			3,000s	1,600	2,900	9,100
MW12	06/27/94		12.61	6.55	6.06	No								
MW12	08/31/94		12.61	7.97	4.64	No								
MW12	09/29/94		12.61	8.52	4.09	Sheen								
MW12	10/25/94		12.61	8.74	3.87	Sheen								
MW12	11/30/94		12.61	8.73	3.88									
MW12	12/30/94		12.61	6.17	6.44	No								
MW12	02/06/95		12.61	4.44	8.17	Sheen								
MW12	06/07/95		12.61	6.59	6.02	Sheen								
MW12	09/18/95		12.61	8.96	3.65	Sheen								
MW12	11/01/95		12.61	10.75	1.86	Sheen								
MW12	02/14/96		12.61	7.73	4.88	Sheen								
MW12	06/19/96		12.61	5.80	6.81	Sheen								
MW12	09/24/96		12.61	9.14	3.47	Sheen								
MW12	12/11/96		12.61	7.31	5.30	Sheen								
MW12	03/19/97		12.61	9.96	2.65	Sheen								
MW12	06/04/97		12.61	8.81	3.80	Sheen								
MW12	09/02/97		12.61	8.93	3.68	Sheen								
MW12	12/02/97		12.61	8.41	4.20	No	3,900	45,000	<250		1,800	560	3,100	8,700
MW12	03/24/98		12.61	5.37	7.24	No	8,800	42,000	<250		820	280	2,800	6,800
MW12	06/23/98		12.61	8.43	4.18	Sheen	7,800	39,000	560		1,000	200	2,300	4,900
MW12	09/29/98		12.61	8.94	3.67	Sheen	21,000	40,000	<500		1,100	150	2,200	3,100
MW12	12/30/98		12.61	8.47	4.14	Sheen	49,000	79,000	<500		1,400	400	3,300	8,500
MW12	03/24/99		12.61	3.71	8.90	Sheen	5,070	40,600	<20		328	182	1,690	3,930

Well ID	Sampling		TOC Elev		GW Elev.	NAPL	TPHd	TPHg	MTBE 8021B	MTBE 8260B	В	Т	Е	Х
	Date	(feet)	(feet)	(feet)	(feet)	(feet)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
MW12	06/22/99		12.61	4.91	7.70	Sheen	15,000	54,800	109		203	244	1,530	3,790
MW12	09/29/99		12.61	7.41	5.20	No	6,830f	22,900	194		422	72.6	1,790	2,270
MW12	12/21/99		12.61	7.46	5.15	No	10,000	25,000	<40		580	26	1,400	1,360
MW12	03/21/00		12.61	3.57	9.04	No	4,400	23,000	860		690	33	1,600	3,290
MW12	03/30/01		12.61	Well co	vered by as	phalt.								
MW13	11/27/89		Well insta	alled.										
MW13	12/06/89		14.20	9.35	4.85	No	31,000	52,000			2,100	2,000	1,400	6,100
MW13	02/20/90		14.20	7.73	6.47	No								
MW13	04/19/90		14.20	8.68	5.52	No	54,000	59,000			1,800	1,500	1,400	7,200
MW13	07/03/90		14.20	8.00	6.20	No	26,000	53,000			4,500	3,100	2,200	7,800
MW13	07/26/90		14.20	7.95	6.25	No								
MW13	08/20/90		14.20	8.66	5.54	No								
MW13	09/19/90		14.20	9.13	5.07	No								
MW13	11/27/90		14.20	9.49	4.71	No	1,600	20,000			4,500	1,100	880	3,300
MW13	01/17/91		14.20	9.61	4.59	No					· 			
MW13	03/26/91		14.20	9.25	4.95	No	<100	72,000			10,000	8,300	1,700	6,900
MW13	05/02/91		14.20	9.31	4.89	No								
MW13	06/20/91		14.20	9.73	4.47	No	<100	44,000			5,600	3,100	750	2,600
MW13	08/07/91		14.20	Well ina	ccessible.			•			•	,		,
MW13	09/17/91		14.20	9.72	4.48	No		40,000			11,000	6,500	2,400	8,100
MW13	11/13/91		14.20	9.06	5.14	No								
MW13	12/10/91		14.20	9.04	5.16	No	3,700	72,000			11,000	7,400	2,500	9,400
MW13	01/21/92		14.20	8.41	5.79	No							_,000	
MW13	03/25/92		14.20	5.72	8.48	Sheen								
MW13	06/22/92		14.20	7.31	6.89	Sheen								
MW13	09/24/92		14.20	8.30	5.90	No	2,900	86,000			9,500	6,100	2,400	10,000
MW13	10/14/92		14.20	8.56	5.64	Sheen							2,400	
MW13	11/16/92		14.20	8.36	5.84	Sheen								
MW13	12/08/92		14.20	8.10	6.10	Sheen								
MW13	01/27/93		14.20											
MW13	02/18/93		14.20	4.89	9.31	Sheen								
MW13	03/10/93		14.20	5.32	8.88	Sheen								
MW13	04/06/93		14.20	5.10	9.10	Sheen								
MW13	05/28/93		14.20	6.00	8.20	Sheen								
MW13 MW13	06/10/93 07/17/93		14.20 14.20	6.15 6.82	8.05 7.38	Sheen Sheen								
_			_					62,000			 F 600/7 700o	2 700/2 7000		11 000/14 0000
MW13	08/11/93		14.20	7.31	6.89	Sheen	2,500/360q	62,000			5,600/7,7000	2,700/3,7000	2,300/3,5000	11,000/14,0000
MW13	09/01/93		14.20	7.62	6.58	Sheen	45.000	40.000			F 000	2.000	0.500	44.000
MW13	10/26/93		14.20	8.22	5.98	No	15,000	46,000			5,200	3,200	2,500	11,000
MW13	11/12/93		14.20	8.29	5.91	No								
MW13	12/27/93		14.20											

Well ID	Sampling Date	Depth (feet)	TOC Elev. (feet)	DTW (feet)	GW Elev. (feet)	NAPL (feet)	TPHd (µg/L)	TPHg (μg/L)	MTBE 8021Β (μg/L)	MTBE 8260B (μg/L)	B (µg/L)	Τ (μg/L)	Ε (μg/L)	X (μg/L)
MW13	01/20/94		14.20	9.08	5.12	No								
ЛW13	02/02/94 - 02/03/94		14.20	8.75	5.45	No	8,100	41,000			3,800	1,500	2,700	9,500
/W13	03/10/94		14.20	7.46	6.74	Sheen								
/W13	04/22/94		14.20	7.78	6.42	Sheen								
MW13	05/10/94 - 05/11/94		14.20	7.61	6.59	No	15,000	39,000			3,400	930	2,400	8,900
ЛW13	06/27/94		14.20	7.97	6.23	No								
ЛW13	08/31/94		14.20	9.21	4.99	No								
ЛW13	09/29/94		14.20	9.61	4.59	No	320	57,000			2,100	470	2,600	8,100
/W13	10/25/94		14.20	9.93	4.27	Sheen								
/W13	11/30/94		14.20	8.16	6.04									
ЛW13	12/27/94		14.20	7.61	6.59									
/W13	02/06/95		14.20	5.89	8.31	Sheen								
ЛW13	06/07/95		14.20	8.05	6.15	Sheen								
ЛW13	09/18/95		14.20	9.94	4.26	Sheen								
MW13	11/01/95		14.20	10.48	3.72	Sheen								
ЛW13	02/14/96		14.20	8.88	5.32	Sheen								
/W13	06/19/96		14.20	7.22	6.98	Sheen								
/W13	09/24/96		14.20	10.27	3.93	Sheen								
/W13	12/11/96		14.20	8.77	5.43	Sheen								
/W13	03/19/97		14.20	9.46	4.74	Sheen								
/W13	06/04/97		14.20	9.59	4.61	Sheen								
/W13	09/02/97		14.20	9.68	4.52	Sheen								
ЛW13	12/02/97		14.20	9.16	5.04	No	16,000	14,000	<250		210	<50	920	1,000
ЛW13	03/24/98		14.20	6.71	7.49	No	1,700	5,600	55		110	6.0	420	330
/W13	06/23/98		14.20	8.87	5.33	No	3,800	12,000	200		120	<20	300	300
/W13	09/29/98		14.20	9.79	4.41	No	2,400	4,900	130		130	12.0	410	200
/W13	12/30/98		14.20	9.03	5.17	No	2,000	6,700	520		100	11	400	250
/W13	03/24/99		14.20	4.91	9.29	Sheen	688	3,730	15.5		35.9	1.58	150	112
/W13	06/22/99		14.20	5.66	8.54	Sheen	4,090	7,220	56.4		29.0	<5.0	496	318
/W13	09/29/99		14.20	8.62	5.58	No	1,060f	5,200	103		83.0	5.90	322	126
1W13	12/21/99		14.20	8.59	5.61	No	1,800	4,400	<2		52	1.9	340	115
ЛW13	03/21/00		14.20		ccessible.		-	•						
ЛW13	12/21/00		Well dest											
1W14	10/31/90		Well insta	alled.										
1W14	11/27/90		15.18	9.88	5.30	No	120	390			<0.5	<0.5	3.6	3.7
1W14	01/17/91		15.18	9.13	6.05	No								
1W14	03/26/91		15.18	8.51	6.67	No	<100	200			<0.5	1.5	0.8	3.6
1W14	05/02/91		15.18	8.45	6.73	No								
1W14	06/20/91		15.18	8.38	6.80	No	<100	110			<0.5	<0.5	<0.5	<0.5
/W14	09/17/91		15.18	9.14	6.04	No		450			<0.5	<0.5	3.2	2.3
/W14	11/13/91		15.18	8.83	6.35	No								

Well ID	Sampling Date	Depth 7 (feet)	ΓΟC Elev. (feet)	DTW (feet)	GW Elev. (feet)	NAPL (feet)	TPHd (μg/L)	TPHg (µg/L)	MTBE 8021B (μg/L)	MTBE 8260B (μg/L)	B (µg/L)	Τ (μg/L)	E (µg/L)	X (μg/L)
MW14	12/10/91		15.18	8.90	6.28	No	280	71			0.5	<0.5	<0.5	<0.5
MW14	01/21/92		15.18	8.58	6.60	No								
MW14	03/25/92		15.18	6.15	9.03	No	640	61			<0.5	<0.5	1.1	<0.5
MW14	06/22/92		15.18	7.70	7.48	No	350	140			<0.5	<0.5	0.6	2
MW14	09/24/92		15.18	9.34	5.84	No	300	75			<0.5	<0.5	<0.5	<0.5
ЛW14	10/14/92		15.18	9.40	5.78	No								
ЛW14	11/16/92		15.18	9.17	6.01	No								
ЛW14	12/08/92		15.18	8.89	6.29	No	220	350			2.5	1.0	1.5	8.1
ЛW14	01/17/93		15.18	8.54	6.64	No								
ЛW14	02/18/93		15.18											
ИW14	03/10/93		15.18	5.55	9.63	No	<250p	410			<0.5	<0.5	0.9	1.6
ЛW14	04/06/93		15.18	5.34	9.84	No								
MW14	05/28/93		15.18	6.07	9.11	No								
ЛW14	06/10/93		15.18	6.30	8.88	No	180	180			<0.5	<0.5	0.8	1.9/500r
ЛW14	07/17/93		15.18	7.77	7.41	No								
ЛW14	08/11/93		15.18	7.62	7.56	No	180/140q	180			0.6/<50	<0.5/<50	1.6/<50	3.7/<50
/W14	09/01/93		15.18	8.09	7.09	No								
1W14	10/26/93		15.18	8.18	7.00	No	200	260			<0.5	<0.5	<0.5	3.6
/W14	11/12/93		15.18	8.16	7.02	No								
/W14	12/27/93		15.18	7.95	7.23	No								
/W14	01/20/94		15.18											
ЛW14	02/02/94 - 02/03/94		15.18	Well ina	ccessible.									
/W14	03/10/94		15.18	7.84	7.34	No								
/W14	04/22/94		15.18	8.00	7.18	No								
ЛW14	05/10/94 - 05/11/94		15.18	7.93	7.25	No	1,100s	300			2.7	7.9	2.0	27
ЛW14	06/27/94		15.18	8.19	6.99	No								
/W14	08/31/94		15.18	9.44	5.74	No								
ЛW14	09/29/94		15.18	9.82	5.36	No		300	1,600		<0.5	<0.5	0.9	1.3
ЛW14	10/25/94		15.18	9.99	5.19	No		200	210		<0.5	<0.5	0.8	<0.5
ЛW14	11/30/94		15.18	8.16	7.02									
/W14	12/27/94		15.18	8.15	7.03	Sheen								
/W14	02/06/95		15.18	7.18	8.00	No	1,200	360			<1.0	<1.0	<1.0	<1.0
/W14	06/07/95		15.18	7.70	7.48	No	1,100	670	<2.5		<0.5	<0.5	3.6	< 0.5
/W14	09/18/95		15.18	9.88	5.30	No	1,900	1,300	<10		<2.0	<2.0	<2.0	3
1W14	11/01/95		15.18	10.56	4.62	No	2,700	1,100	<13		<2.5	<2.5	3.2	3.1
1W14	02/14/96		15.18	9.08	6.10	No	1,500	470	<2.5		<0.5	<0.5	1.3	<0.5
1W14	06/19/96		15.18	8.50	6.68	No	2,000	610	<12		<2.5	<2.5	<2.5	<2.5
1W14	09/24/96		15.18	10.23	4.95	No	5,100	1,000	<25		<5.0	<5.0	<5.0	<5.0
ЛW14	12/11/96		15.18	9.09	6.09	No	2,100 i	1,100	<10		<2.0	<2.0	<2.0	3.3
ЛW14	03/19/97		15.18	7.99	7.19	No	1,400	690	<2.5		0.65	1.7	2.5	8.3
MW14	06/04/97		15.18	9.30	5.88	No	1,500	730	<2.5		<1.2	<1.2	3.5	5.3
ЛW14	09/02/97		15.18	9.92	5.26	No	1,900	910	<5.0		<5.0	<5.0	<5.0	5.9

Well ID	Sampling Date	Depth (feet)	TOC Elev (feet)	. DTW (feet)	GW Elev. (feet)	NAPL (feet)	TPHd (µg/L)	TPHg (µg/L)	MTBE 8021B (μg/L)	MTBE 8260B (µg/L)	Β (μg/L)	T (µg/L)	E (µg/L)	Χ (μg/L)
MW14	12/02/97		15.18	9.13	6.05	No	1,200	570	<2.5		0.85	<0.5	<0.5	1.7
MW14	03/24/98		15.18	8.52	6.66	No	1,300	650	5.7		1.7	<1.0	<1.0	2.3
MW14	06/23/98		15.18	8.69	6.49	No	1,100	470	<2.5		<0.5	1.5	1.1	3.0
MW14	09/29/98		15.18	9.41	5.77	No	930	570	<2.5		<0.50	<0.50	2.5	3.5
MW14	12/30/98		15.18	9.31	5.87	No	2,000	420	<2.5		<0.5	<0.5	<0.5	2.8
MW14	03/24/99		15.18	4.23	10.95	No	936	456	<2.0		<0.5	<0.5	0.685	<0.5
MW14	06/22/99		15.18	7.24	7.94	No	1,720	403	<2.0		<0.5	<0.5	<0.5	<0.5
MW14	09/29/99		15.18	9.41	5.77	No	927f	388	<2.5		1.31	<0.5	0.864	2.07
MW14	12/21/99		15.18	8.93	6.25	No	1,400	420	<2		0.61	<0.5	<0.5	6.3
MW14	03/21/00		15.18	5.76	9.42	No		390	<2		1.4	<0.5	0.82	4.5
MW14	03/30/01		15.18	4.21	10.97	No	980	330		<5	<0.5	<0.5	1.3	3.03
MW14	11/01/01		15.14	Well su		140	500	000		10	νο.ο	40.0	1.0	0.00
MW14	03/11/02 k		15.14	4.87	10.27	No	954	146	1.40	0.6	<0.50	<0.50	0.90	5.70
MW14	03/11/03		15.14	6.99	8.15	No	1,020	331	<0.5		<0.50	<0.5	<0.5	<0.5
MW14	03/26/04		15.14	7.82	7.32	No	586g	235		< 0.50	1.20	0.8	0.6	1.4
MW14	11/02/04		15.14	7.02	8.08	No	1,110g	282		<0.50	0.90	<0.5	1.6	7.2
MW14	02/04/05		15.14	6.15	8.99	No	2,880g	327		<0.50	0.60	<0.5	0.8	1.8
MW14	05/02/05		15.14	4.97	10.17	No	2,590g	363		<0.50	1.20	0.5	1.4	2.5
MW14	08/01/05		15.14	5.31	9.83	No	2,690g	280		<0.50	0.90	<0.5	0.9	1.8
MW14	10/25/05		15.14	5.16	9.98	No	5,410g	342		<0.500	0.82	<0.50	<0.50	1.98
MW14	01/24/06		15.14	5.40	9.74	No	440g	290		<0.50	1.4	<0.50	1.9	<0.50
MW14	04/28/06		15.14	4.06	11.08	No	190g	370		<0.50n	1.9n	<0.50	4.2	<0.50
MW14	08/04/06		15.14	4.77	10.37	No	1,290	347		<0.500	1.14	<0.50	< 0.50	0.61
MW14	10/06/06		15.14	6.97	8.17	No	1,290 160g,j	290		<0.50	1.3	1.4	3.7	3.0
MW14	01/12/07		15.14	6.86	8.28	No	160g,j	250		<0.50	1.2	<0.50	2.0	<0.50
MW14	04/09/07		15.14	8.31	6.83	No	330g	309		<0.500	1.01	0.55	0.97	1.17
MW14	08/06/07		15.14	7.41	7.73	No	200g	290		<0.50	<0.50	<0.50	1.0	<0.50
MW14	11/15/07		15.14	7.97	7.17	No	200g 210g	260		<0.50	0.66	<0.50	<0.50	1.5
MW14	01/02/08		15.14	8.36	6.78	No	250g,j	380		<0.50	0.78	<0.50	1.4	3.4
MW14	04/03/08		15.14	8.75	6.39	No	230g,j 970g	400		<0.50	2.0	2.8	3.9	2.4
MW14	07/09/08		15.14	7.43	7.71	No	1,200g	280		<0.50	< 0.50	<0.50	<0.50	< 0.50
MW14	10/01/08		15.14	7.43	7.71	No	1,200g 95	500		<0.50	<0.50	<0.50	1.5	4.4
MW14	01/07/09		15.14	6.96	8.18	No	1,100	370		<0.50	<0.50	<0.50	1.4	2.2
MW14	01/16/09		15.14	7.53	7.61	No								
MW14	04/24/09		15.14	5.71	9.43	No	410	500		< 0.50	<0.50	<0.50	1.2	<1.0
MW14	07/01/09		15.14	6.71	8.43	No	130	360		<0.50	<0.50	<0.50	<0.50	<1.0
MW14	10/01/09		15.14	7.15	7.99	No					<0.50 		<0.50 	<1.0
MW14	03/04/10		15.14	4.75	10.39	No								
MW14	05/06/10		15.14	4.73 4.64	10.59	No	850g	990		<0.50	3.1	0.53	1.8	4.5
MW14	08/06/10		15.14	4.64 5.72	9.42	No	650g 	990		<0.50	3.1 	0.53	1.0	4.5
MW14	11/02/10		15.14	6.50	9.42 8.64	No		1,100g		<0.50	<0.50	<0.50	<0.50	<1.0
MW14			15.14 15.14		8.64 6.89	No No	730g							
IVIVV 14	04/21/11		15.14	8.25	0.09	INO								

Well ID	Sampling Date	Depth (feet)	TOC Elev. (feet)	DTW (feet)	GW Elev. (feet)	NAPL (feet)	TPHd (µg/L)	TPHg (µg/L)	MTBE 8021B (μg/L)	MTBE 8260B (μg/L)	B (µg/L)	Τ (μg/L)	Ε (μg/L)	X (μg/L)
MW14	04/22/11		15.14				750g	1,400g		<0.50	<0.50	<0.50	<0.50	<1.0
MW14	10/18/11		15.14	8.81	6.33	No	730g 							
MW14	10/19/11		15.14				810g	1,700g		<0.50	< 0.50	<0.50	<0.50	<1.0
лw 14 ЛW14	04/25/12		15.14	3.63	11.51	Sheen	1,400g	1,600g		<0.50	<0.50	<0.50	<0.50	<1.0
MW14	10/04/12		15.14	4.03	11.11	No	650g	1,700g		<0.50	6.0	<0.50	<0.50	<1.0
лw14	04/16/13		15.14	3.74	11.40	No	600g	2,000g		< 0.50	<0.50	<0.50	<0.50	<0.50
лW14	11/13/13		15.14	4.22	10.92	No								
ЛW14	11/14/13		15.14				970g	1,300		< 0.50	< 0.50	<0.50	<0.50	< 0.50
ЛW14	06/25/14		15.14	3.37	11.77	No								
ЛW14	06/26/14		15.14				610g	890g		<0.50	<0.50	<0.50	<0.50	<0.50
/W15	10/31/90		Well insta	ılled.										
/IW15	11/27/90		13.73	8.67	5.06	No	340	2,700			210	5.5	600	250
∕IW15	01/17/91		13.73	8.03	5.70	No								
∕IW15	03/26/91		13.73	Well ina	accessible.									
/IW15	05/02/91		13.73	7.09	6.64	No	<100	380			<0.5	<0.5	<0.5	1.3
1W15	06/20/91		13.73	7.06	6.67	No								
1W15	08/07/91		13.73	7.59	6.14	No								
1W15	09/17/91		13.73	7.89	5.84	No		490			2.9	1.7	33	1.3
1W15	11/13/91		13.73	9.07	4.66	No								
∕IW15	12/10/91		13.73	8.60	5.13	No	300	1,600			14	1.1	66	9.8
ЛW15	01/21/92		13.73	9.15	4.58	No								
ЛW15	03/25/92		13.73	8.10	5.63	No	1,400	3,400			150	13	690	250
ЛW15	06/22/92		13.73	5.80	7.93	No	860	6,600			99	<0.5	670	180
ЛW15	09/24/92		13.73	7.21	6.52	No	740	3,600			120	7	480	47
ЛW15	10/14/92		13.73	7.40	6.33	No								
ЛW15	11/16/92		13.73	7.55	6.18	No								
ЛW15	12/08/92		13.73	7.42	6.31	No	430	1,600			43	1.6	170	23
/IW15	01/27/93		13.73	4.37	9.36	No								
/IW15	02/18/93		13.73	4.14	9.59	Sheen								
/W15	03/10/93		13.73		accessible.	0.1								
/W15	04/06/93		13.73	3.16	10.57	Sheen								
ЛW15	05/28/93		13.73	4.47	9.26	No								
/W15	06/10/93		13.73	4.59	9.14	No								
/W15	07/17/93		13.73	5.51	8.22	No	74.0/200=	4.000			40/70-		440/040-	24/20-
/W15	08/11/93		13.73	6.13	7.60	Sheen	710/300q	4,800			49/70o	<2.5/<50	410/640o	34/260
/W15	09/01/93		13.73	6.45	7.28	Sheen		2.400						
/W15	10/26/93		13.73	7.16	6.57	No	970	3,400			79	<2.5	115	32
/W15	11/12/93		13.73	7.82	5.91	No								
MW15	12/27/93		13.73	7.50	6.23	No								
MW15	01/20/94		13.73	7.48	6.25	No	4.000	4.200					470	
MW15	02/02/94 - 02/03/94		13.73	7.30	6.43	No	1,200	4,300			24	6.7	170	26

Well ID	Sampling Date	Depth (feet)	TOC Elev	. DTW (feet)	GW Elev. (feet)	NAPL (feet)	TPHd (µg/L)	TPHg (μg/L)	MTBE 8021B (μg/L)	MTBE 8260B (μg/L)	B (µg/L)	Τ (μg/L)	Ε (μg/L)	Χ (μg/L)
MW15	03/10/94		13.73	7.32	6.41	No								
MW15	04/22/94		13.73	6.67	7.06	No								
MW15	05/10/94 - 05/11/94		13.73	5.81	7.92	No	1,400	3,900			16	<0.5	150	13
MW15	06/27/94		13.73	6.14	7.59	No								
MW15	08/31/94		13.73	7.20	6.53	No								
MW15	09/29/94		13.73	7.76	5.97	No	420	2,500			51	15	48	3.6
MW15	10/25/94		13.73	8.19	5.54	Sheen								
MW15	11/30/94		13.73	8.57	5.16									
MW15	12/27/94		13.73	6.49	7.24	No								
MW15	02/06/95		13.73	4.97	8.76	Sheen								
MW15	06/07/95		13.73	7.14	6.59	Sheen								
MW15	09/18/95		13.73	9.00	4.73	Sheen								
MW15	11/01/95		13.73	10.67	3.06	Sheen								
MW15	02/14/96		13.73	7.27	6.46	Sheen								
MW15	06/19/96		13.73	6.65	7.08	Sheen								
MW15	09/24/96		13.73	9.45	4.28	Sheen								
MW15	12/11/96		13.73	7.77	5.96	Sheen								
MW15	03/19/97		13.73	8.15	5.58	Sheen								
MW15	06/04/97		13.73	8.62	5.11	Sheen								
MW15	09/02/97		13.73	9.04	4.69	No	480	1,100	23		19	<2.0	11	4.9
MW15	12/02/97		13.73	8.43	5.30	No	600	1,700	58		20	<5.0	11	<5.0
MW15	03/24/98		13.73	6.35	7.38	No	450	2,100	<100		570	<20	<20	<20
MW15	06/23/98		13.73	7.79	5.94	No	570	2,300	<25		440	<5.0	30	<5.0
MW15	09/29/98		13.73	Well ina	ccessible.			,						
MW15	12/30/98		13.73	8.42	5.31	No	510	900	14		6.2	1.5	5.8	3.4
MW15	03/24/99		13.73	4.69	9.04	No	346	1,480	12.7		181	1.15	29.8	<1.0
MW15	06/22/99		13.73	5.42	8.31	No	558	864	6.49		12.7	<0.5	3.28	1.38
MW15	09/29/99		13.73	7.08	6.65	No	306f	316	<5.0		1.44	7.51	1.60	3.21
MW15	12/21/99		13.73	7.51	6.22	No	300	1,500	21		21	1.6	0.67	5.9
MW15	03/21/00		13.73	3.61	10.12	No	220	680	<2		10	<0.5	<0.5	4.5
MW15	12/21/00		Well dest											
MW16A	08/24/09		Well insta	alled.										
MW16A	09/11/09		13.02	Well su	rveyed.									
MW16A	10/01/09		13.02	6.72	6.30	No	1,000g	5,300g		12	96	5.9	45	20
MW16A	03/04/10		13.02	3.97	9.05	No	1,000g	3,000g		9.9	34	2.6	6.9	5.9
MW16A	05/06/10		13.02	4.20	8.82	No	1,000g	4,500g		7.7	31	2.7	8.9	7.2
MW16A	08/06/10		13.02	5.92	7.10	No	550g	2,900g		5.5	48	2.1	11	3.4
MW16A	11/02/10		13.02	6.64	6.38	No	610g	3,100g		4.3	63	< 0.50	7.2	4.0
MW16A	04/21/11		13.02	6.89	6.13	No								
MW16A	04/22/11		13.02				170g	2,100g		< 0.50	13	2.5	6.3	<1.0
MW16A	10/18/11		13.02	7.32	5.70	No								

Well ID	Sampling Date	Depth (feet)	TOC Elev (feet)	. DTW (feet)	GW Elev. (feet)	NAPL (feet)	TPHd (µg/L)	TPHg (µg/L)	MTBE 8021B (μg/L)	MTBE 8260B (μg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)
MW16A	10/19/11		13.02				320g	3,300g	(µg/L)	2.8	32	<0.50	12	<1.0
MW16A	04/25/12		13.02	4.62	8.40	No	340g	1,800g		< 0.50	19	<0.50	< 0.50	<1.0
MW16A	10/04/12		13.02	7.03	5.99	No	240g	2,400g		<0.50	28	<0.50	5.2	<1.0
MW16A	04/16/13		13.02	6.06	6.96	No	240g 230g	2,400g 1,300g		< 0.50	18	<0.50	<0.50	<0.50
MW16A	11/13/13		13.02	6.55	6.47	No	230g 	1,300g 				<0.50 	<0.30 	
MW16A	11/13/13		13.02				200g	1,600		<0.50	<0.50	<0.50	2.7	<0.50
MW16A	06/25/14		13.02	5.47	7.55	No	200g 					<0.50 	2.1 	<0.50
MW16A	06/26/14		13.02				120g	570g		<0.50	<0.50	<0.50	<0.50	<0.50
MW16B	08/24/09		Well insta	alled.										
MW16B	09/11/09		13.19	Well su	rveyed.									
MW16B	10/01/09		13.19	9.02	4.17	No	<50	180g		210	<0.50	< 0.50	< 0.50	<1.0
MW16B	03/04/10		13.19	7.21	5.98	No	<50	160g		210	<0.50	< 0.50	< 0.50	<1.0
MW16B	05/06/10		13.19	6.39	6.80	No	65g	120g		210	< 0.50	< 0.50	< 0.50	<1.0
MW16B	08/06/10		13.19	7.23	5.96	No	<50	160g		170	<0.50	< 0.50	< 0.50	<1.0
MW16B	11/02/10		13.19	8.25	4.94	No	<50	160g		170	<0.50	< 0.50	< 0.50	<1.0
MW16B	04/21/11		13.19	10.91	2.28	0.04								
MW16B	04/22/11		13.19				<50	130g		180	<0.50	< 0.50	< 0.50	<1.0
MW16B	10/18/11		13.19	10.71	2.48	No								
MW16B	10/19/11		13.19				<50	67g		90	<0.50	< 0.50	< 0.50	<1.0
MW16B	04/25/12		13.19	7.74	5.45	No	<50	86g		110	< 0.50	< 0.50	< 0.50	<1.0
MW16B	10/04/12		13.19	9.64	3.55	No	<50	59g		73	< 0.50	< 0.50	< 0.50	<1.0
MW16B	04/16/13		13.19	8.82	4.37	No	<50	<50		73	< 0.50	< 0.50	< 0.50	< 0.50
MW16B	11/13/13		13.19	9.29	3.90	No	<50	<50		57	< 0.50	< 0.50	< 0.50	< 0.50
MW16B	06/25/14		13.19	8.61	4.58	No	<48	<50		43	<0.50	<0.50	<0.50	<0.50
MW17A	08/25/09		Well insta											
MW17A	09/11/09		13.99	Well su	•									
MW17A	10/01/09		13.99	7.44	6.55	No	370g	2,200g		3.7	<0.50	<0.50	3.7	3.9
MW17A	03/04/10		13.99	4.73	9.26	No	310g	1,600g		1.7	<0.50	1.9	7.2	4.3
MW17A	05/06/10		13.99	4.89	9.10	No	260g	1,400g		<0.50	<0.50	1.2	6.2	3.0
MW17A	08/06/10		13.99	6.51	7.48	No	130g	1,600g		1.4	<0.50	<0.50	4.6	<1.0
MW17A	11/02/10		13.99	7.18	6.81	No	320g	1,900g		1.4	<0.50	<0.50	6.0	1.2
MW17A	04/21/11		13.99	7.04	6.95	No								
MW17A	04/22/11		13.99				150g	1,300g		<0.50	6.5	<0.50	3.5	<1.0
MW17A	10/18/11		13.99	7.51	6.48	No	<50	77g		0.85	<0.50	<0.50	<0.50	<1.0
MW17A	04/25/12		13.99	4.67	9.32	No	190g	990g		<0.50	3.2	<0.50	2.0	<1.0
MW17A	10/04/12		13.99	6.75	7.24	No	95g	430		<0.50	5.1	<0.50	<0.50	<1.0
MW17A	04/16/13		13.99	9.31	4.68	No	140g	550g		<0.50	<0.50	<0.50	<0.50	<0.50
MW17A	11/13/13		13.99	6.23	7.76	No	130g	480		<0.50	<0.50	<0.50	<0.50	<0.50
MW17A	06/25/14		13.99	5.03	8.96	No	72g	430g		<0.50	<0.50	<0.50	<0.50	<0.50
MW17B	08/25/09		Well insta	alled.										

Well ID	Sampling	Depth	TOC Elev	. DTW	GW Elev.	NAPL	TPHd	TPHg	MTBE 8021B	MTBE 8260B	В	Т	E	Х
	Date	(feet)	(feet)	(feet)	(feet)	(feet)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
MW17B	09/11/09		13.92	Well su	rveyed.									
MW17B	10/01/09		13.92	8.83	5.09	No	<50	450g		560	<0.50	<0.50	< 0.50	<1.0
MW17B	03/04/10		13.92	6.15	7.77	No	<50	490g		340	< 0.50	< 0.50	< 0.50	<1.0
MW17B	05/06/10		13.92	6.48	7.44	No	<50	270g		530	< 0.50	< 0.50	< 0.50	<1.0
MW17B	08/06/10		13.92	7.81	6.11	No	<50	380g		510	< 0.50	< 0.50	< 0.50	<1.0
MW17B	11/02/10		13.92	8.78	5.14	No	<50	390g		470	< 0.50	< 0.50	< 0.50	<1.0
MW17B	04/21/11		13.92	9.42	4.50	No								
MW17B	04/22/11		13.92				60	220g		290	< 0.50	< 0.50	< 0.50	<1.0
MW17B	10/18/11		13.92	10.01	3.91	No	<50	300g		390	< 0.50	< 0.50	< 0.50	<1.0
MW17B	04/25/12		13.92	8.39	5.53	No	<50	190g		230	< 0.50	< 0.50	< 0.50	<1.0
MW17B	10/04/12		13.92	10.24	3.68	No	<50	310g		400	< 0.50	< 0.50	< 0.50	1.8t
MW17B	04/16/13		13.92	5.87	8.05	No	<50	250g		410	< 0.50	< 0.50	< 0.50	< 0.50
MW17B	11/13/13		13.92	9.81	4.11	No								
MW17B	11/14/13		13.92				<50	180g		390	< 0.50	< 0.50	<0.50	< 0.50
MW17B	06/25/14		13.92	9.10	4.82	No	<48	150g		260	<0.50	<0.50	<0.50	<0.50
лW18A	08/26/09		Well insta	alled.										
/IW18A	09/11/09		13.55	Well su	rveved.									
/W18A	10/01/09		13.55	5.16	8.39	No	150	150g		93	<0.50	< 0.50	< 0.50	<1.0
/IW18A	03/04/10		13.55	3.97	9.58	No	130	<50		34	< 0.50	< 0.50	< 0.50	<1.0
лW18A	05/06/10		13.55	3.68	9.87	No	140	55g		35	<0.50	<0.50	< 0.50	<1.0
MW18A	08/06/10		13.55	4.40	9.15	No	110	110g		21	< 0.50	<0.50	<0.50	<1.0
MW18A	11/02/10		13.55	6.05	7.50	No	140	86g		11	<0.50	< 0.50	< 0.50	<1.0
MW18A	04/21/11		13.55	4.47	9.08	No	150	<50		9.8	< 0.50	< 0.50	< 0.50	<1.0
MW18A	10/18/11		13.55	4.53	9.02	No	60	<50		1.7	< 0.50	< 0.50	< 0.50	<1.0
MW18A	04/25/12		13.55	3.51	10.04	No	<50	<50		< 0.50	< 0.50	< 0.50	< 0.50	<1.0
MW18A	10/04/12		13.55	5.39	8.16	No	110g	<50		0.97	< 0.50	3.8	< 0.50	2.5
MW18A	04/16/13		13.55	4.66	8.89	No	<50	64g		1.0	<0.50	<0.50	<0.50	<0.50
MW18A	11/13/13		13.55	5.42	8.13	No	160g	69g		0.60	<0.50	<0.50	<0.50	<0.50
MW18A	06/25/14		13.55	4.17	9.38	No	110g	73g		0.54	3.6	<0.50	<0.50	<0.50
/W18B	08/25/09		Well insta	alled.										
/IW18B	09/11/09		13.21	Well su	rveyed.									
лW18В	10/01/09		13.21	7.19	6.02	No	<50	62		0.68	<0.50	<0.50	< 0.50	<1.0
/IW18B	03/04/10		13.21	4.97	8.24	No	<50	<50		<0.50	<0.50	<0.50	<0.50	<1.0
/IW18B	05/06/10		13.21	4.68	8.53	No	<50	<50		<0.50	<0.50	<0.50	<0.50	<1.0
/W18B	08/06/10		13.21	6.29	6.92	No	<50	<50		<0.50	<0.50	<0.50	<0.50	<1.0
/IW18B	11/02/10		13.21	7.37	5.84	No	<50	<50		<0.50	<0.50	<0.50	<0.50	<1.0
/W18B	04/21/11		13.21	5.69	7.52	No	<50	<50		<0.50	<0.50	0.60t	<0.50	<1.0
лW18В	10/18/11		13.21	6.45	6.76	No	<50	<50		<0.50	<0.50	<0.50	<0.50	<1.0
лW18В	04/25/12		13.21	4.66	8.55	No	<50	<50		<0.50	<0.50	<0.50	<0.50	3.8
MW18B	10/04/12		13.21	7.19	6.02	No	<50	85		<0.50	6.6	34	2.4	6.6
MW18B	04/16/13		13.21	5.73	7.48	No	<50	<50		<0.50	<0.50	<0.50	<0.50	< 0.50

					GW				MTBE	MTBE				
Well ID	Sampling	Depth	TOC Elev.	DTW	Elev.	NAPL	TPHd	TPHg	8021B	8260B	В	Т	E	X
	Date	(feet)	(feet)	(feet)	(feet)	(feet)	(µg/L)							
MW18B	11/13/13		13.21	6.83	6.38	No	<50	<50		<0.50	<0.50	<0.50	< 0.50	< 0.50
MW18B	06/25/14		13.21	5.73	7.48	No	<48	<50		<0.50	<0.50	<0.50	<0.50	<0.50
MW19A	08/26/09		Well insta	alled.										
MW19A	09/11/09		15.05	Well su	rveyed.									
MW19A	10/01/09		15.05	7.61	7.44	No	490g	2,700g		< 0.50	<0.50	< 0.50	44	62
MW19A	03/04/10		15.05	4.30	10.75	No	520g	2,300g		< 0.50	<0.50	< 0.50	30	32
MW19A	05/06/10		15.05	4.77	10.28	No	530g	2,100		< 0.50	5.3	1.3	25	28
MW19A	08/06/10		15.05	6.13	8.92	No	410g	1,800g		< 0.50	< 0.50	< 0.50	9.8	14
MW19A	11/02/10		15.05	7.25	7.80	No	420g	2,200g		< 0.50	< 0.50	< 0.50	9.8	12
MW19A	04/21/11		15.05	6.18	8.87	No	240g	1,900		< 0.50	< 0.50	< 0.50	3.6	6.9
MW19A	10/18/11		15.05	6.41	8.64	No	260g	560g		< 0.50	< 0.50	< 0.50	< 0.50	<1.0
MW19A	04/25/12		15.05	4.23	10.82	No	420g	2,000g		< 0.50	<0.50	< 0.50	< 0.50	<1.0
MW19A	10/04/12		15.05	6.22	8.83	No	450	2,000g		< 0.50	12	< 0.50	< 0.50	<1.0
MW19A	04/16/13		15.05	4.87	10.18	No	490g	2,300g		< 0.50	<0.50	< 0.50	< 0.50	< 0.50
MW19A	11/13/13		15.05	5.57	9.48	No	650g	2,200		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
MW19A	06/25/14		15.05	4.34	10.71	No								
MW19A	06/26/14		15.05				430g	1,100g		<0.50	<0.50	<0.50	<0.50	<0.50
MW19B	08/26/09		Well insta	alled.										
MW19B	09/11/09		15.05	Well su	rveyed.									
MW19B	10/01/09		15.05	8.66	6.39	No	<50	<50		< 0.50	< 0.50	< 0.50	< 0.50	<1.0
MW19B	03/04/10		15.05	5.11	9.94	No	<50	<50		< 0.50	< 0.50	< 0.50	< 0.50	<1.0
MW19B	05/06/10		15.05	5.07	9.98	No	<50	<50		< 0.50	< 0.50	< 0.50	< 0.50	<1.0
MW19B	08/06/10		15.05	6.42	8.63	No	<50	<50		< 0.50	< 0.50	< 0.50	< 0.50	<1.0
MW19B	11/02/10		15.05	7.58	7.47	No	<50	<50		< 0.50	<0.50	< 0.50	< 0.50	<1.0
MW19B	04/21/11		15.05	6.07	8.98	No	<50	<50		< 0.50	< 0.50	< 0.50	< 0.50	<1.0
MW19B	10/18/11		15.05	6.81	8.24	No	<50	<50		< 0.50	<0.50	< 0.50	< 0.50	<1.0
MW19B	04/25/12		15.05	4.78	10.27	No	<50	<50		< 0.50	< 0.50	< 0.50	< 0.50	<1.0
MW19B	10/04/12		15.05	6.75	8.30	No	<50	<50		< 0.50	<0.50	< 0.50	< 0.50	<1.0
MW19B	04/16/13		15.05	5.71	9.34	No	<50	<50		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
MW19B	11/13/13		15.05	6.61	8.44	No	<50	<50		< 0.50	<0.50	< 0.50	< 0.50	< 0.50
MW19B	06/25/14		15.05	5.45	9.60	No	<48	<50		<0.50	<0.50	<0.50	<0.50	<0.50
MW20	05/09/14		Well insta	ılled.										
MW20	06/06/14		12.58	Well su	rveyed.									
MW20	06/25/14		12.58	9.39	3.19	No								
MW20	06/26/14		12.58				5,900g	1,100g		14	<0.50	<0.50	<0.50	< 0.50
MW20	09/18/14		12.58	10.47	2.11	No	1,900g	1,200g		20	<0.50	<0.50	<0.50	<0.50
MW21	05/09/14		Well insta	alled.										
MW21	06/06/14		11.82	Well su	rveyed.									
MW21	06/25/14		11.82	10.31	1.51	No								

Well ID	Sampling Date	Depth (feet)	TOC Elev (feet)	. DTW (feet)	GW Elev. (feet)	NAPL (feet)	TPHd (µg/L)	TPHg (µg/L)	MTBE 8021Β (μg/L)	MTBE 8260B (μg/L)	B (µg/L)	Τ (μg/L)	E (μg/L)	X (μg/L)
1W21 1W21	06/26/14 09/18/14		11.82 11.82	10.55	1.27	 No	3,000g 1,700g	4,900g 2,200		29 46	170 170	<0.50 <0.50	27 67	<0.50 <0.50
/W1	02/11/93		Well insta	alled.										
/W1	02/18/93		14.01	4.52	9.49	No								
/W1	03/10/93		14.01	5.25	8.76	No								
/W1	04/06/93		14.01	5.06	8.95	No								
/W1	05/28/93		14.01	5.52	8.49	No								
/W1	06/10/93		14.01	6.23	7.78	No								
W1	08/11/93		14.01	Well dry										
'W1	09/01/93		14.01	Well dry										
'W1	10/26/93		14.01	Well dry										
′W1	11/12/93		14.01	Well dry										
′W1	12/27/93		14.01											
'W1	01/20/94		14.01	Well dry										
'W1	02/02/94 - 02/03/94		14.01	5.58	8.43	No								
'W1	03/10/94		14.01	6.19	7.82	No								
'W1	04/22/94		14.01	5.96	8.05	No								
W1	05/10/94 - 05/11/94		14.01	5.66	8.35	No								
W1	06/27/94		14.01	5.99	8.02	No								
′W2	02/11/93		Well insta	alled.										
W2	02/18/93		14.09	4.41	9.68	No								
/W2	03/10/93		14.09	5.17	8.92	No								
′W2	04/06/93		14.09	5.04	9.05	No								
′W2	05/28/93		14.09	5.46	8.63	No								
W2	06/10/93		14.09	5.60	8.49	No								
W2	07/17/93		14.09	6.38	7.71	No								
′W2	08/11/93		14.09	7.90	6.19	No								
'W2	09/01/93		14.09	7.31	6.79	0.01								
'W2	10/26/93		14.09	Well dry										
W2	11/12/93		14.09	Well dry										
W2	12/27/93		14.09	Well dry										
W2	01/20/94		14.09	7.75	6.34	No								
'W2	02/02/94 - 02/03/94		14.09	Well dry										
W2	03/10/94		14.09	6.85	7.24	No								
W2	04/22/94		14.09	7.30	6.79	No								
W2	05/10/94 - 05/11/94		14.09	7.20	6.89	No								
W2	06/27/94		14.09	7.29	6.80	No								
W3	02/11/93		Well insta	alled.										
W3	02/18/93		13.37	4.62	8.69	No								
'W3	03/10/93		13.37	4.41	8.90	No								

							Oakiai	nd, California						
Well ID	Sampling Date	Depth 7 (feet)	TOC Elev (feet)	DTW (feet)	GW Elev. (feet)	NAPL (feet)	TPHd (µg/L)	TPHg (µg/L)	MTBE 8021B (μg/L)	MTBE 8260B (μg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (μg/L)
VW3	04/06/93		13.37	4.10	9.21	No								
VW3	05/28/93		13.37	4.98	8.33	No								
VW3	06/10/93		13.37	4.98	8.33	No								
VW3	07/17/93		13.37	5.57	7.74	No								
VW3	08/11/93		13.37	7.69	5.62	No								
VW3	09/01/93		13.37	6.78	6.54	0.01								
VW3	10/26/93		13.37	Well dry	'.									
VW3	11/12/93		13.37	Well dry	'.									
VW3	12/27/93		13.37	7.24	6.13	No								
VW3	01/20/94		13.37	7.49	5.88	No								
VW3	02/02/94 - 02/03/94		13.37	7.15	6.22	No								
VW3	03/10/94		13.37	6.21	7.16	No								
VW3	04/22/94		13.37	6.34	7.03	No								
VW3	05/10/94 - 05/11/94		13.37	5.92	7.45	No								
VW3	06/27/94		13.37	6.66	6.71	No								
Grab Grou	ndwater Samples													
CPT Boring	_													
W-18-CPT1	04/12/05	18					187g	<50.0		1.00	<0.50	<0.5	<0.5	<0.5
W-10-CPT2	2 04/13/05	10						1,060,000		85.0	1,380	1,280	400	4,340
W-26-CPT2	2 04/13/05	26					283g	240		299	<0.50	<0.5	<0.5	<0.5
W-10-CPT3	04/13/05	10					76,800	358		107	<0.50	<0.5	<0.5	1.1
W-29-CPT3	04/13/05	29					450g	1,240		1.80	<0.50	<0.5	<0.5	<0.5
W-10-CPT4	04/12/05	10					15,700g	10,600		129	233	17.0	557	83.0
W-24-CPT4	04/12/05	24					377g	171		48.3	0.50	<0.5	2.5	2.9
W-10-CPT5	04/12/05	10					5,520g	2,200		<0.50	13.2	2.5	5.7	2.2
W-10-CPT6	04/11/05	10					1,110g	570		<0.50	<0.50	<0.5	<0.5	1.0
W-30-CPT6	04/11/05	30						177		< 0.50	<0.50	<0.5	<0.5	<0.5
W-30-CPT6	04/12/05	30					473g							
Direct-Push	Borings													
W-12-DP1	04/14/05	12					23,000g	30,000		146	1,700	250	770	4,980
W-12-DP3	04/14/05	12					11,100g	2,200		<0.50	12.6	5.7	2.3	13.8
W-12-DP4	04/14/05	12					20,200g	42,400		13.4	7,000	260	4,760	1,720
W-12-DP5	04/14/05	12					182,000	32,100		18.7	2,890	96.0	336	186

Well ID	Sampling Date	Depth T (feet)	OC Elev. (feet)	DTW (feet)	GW Elev. (feet)	NAPL (feet)	TPHd (µg/L)	TPHg (µg/L)	MTBE 8021B (μg/L)	MTBE 8260B (μg/L)	B (µg/L)	Τ (μg/L)	E (µg/L)	Χ (μg/L)
W-12-DP6	04/14/05	12					338g	<50.0		<0.50	<0.50	<0.5	<0.5	<0.5
W-30-DP9	12/15/06 <u>B Borings</u>	30					430g	<50		<0.50	<0.50	<0.50	<0.50	<0.50
W-13-HP7	12/12/06	13					570g	<50		1.1	11	<0.50	<0.50	<0.50
W-30-HP11	12/13/06	30					<50	<50		3.9	<0.50	<0.50	<0.50	<0.50
W-13.5-HP1 W-31-HP12	12/13/06 12/13/06	13.5 31					<62 <55	<50 <50		1.6 17	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50

Notes:		
TOC	=	Top of well casing elevation; datum is mean sea level.
DTW	=	Depth to water.
GW Elev.	=	Groundwater elevation; datum is mean sea level. If liquid-phase hydrocarbons present, elevation adjusted using TOC - [DTW - (PT x 0.8)].
NAPL	=	Non-aqueous phase liquid.
[]	=	Amount recovered in cups.
TPHd	=	Total petroleum hydrocarbons as diesel analyzed using EPA Method 3510/8015 (modified).
TPHg	=	Total petroleum hydrocarbons as gasoline analyzed using EPA Method 5030/8015 (modified).
MTBE 8021B	=	Methyl tertiary butyl ether analyzed using EPA Method 8021B.
MTBE 8260B	=	Methyl tertiary butyl ether analyzed using EPA Method 8260B.
BTEX	=	Benzene, toluene, ethylbenzene, and total xylenes analyzed using EPA Method 8021B.
TOG	=	Total oil and grease analyzed using Standard Method 5520.
EHCss	=	Extractable hydrocarbons as Stoddard Solvent analyzed using EPA Method 8015.
EDB	=	1,2-dibromoethane analyzed using EPA Method 8260B.
1,2-DCA	=	1,2-dichloroethane 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.
TPH Carbon Rang	ge =	Total petroleum hydrocarbon range analyzed using EPA Method 8015B(M).
μg/L	=	Micrograms per liter.
mg/kg	=	Milligrams per kilogram.
ND	=	Not detected at or above laboratory reporting limits.
	=	Not measured/Not sampled/Not analyzed.
<	=	Less than the stated laboratory reporting limit.
а	=	A peak eluting earlier than benzene, suspected to be MTBE, was present.
b	=	Sample containers broken in transit.
С	=	Chromatogram pattern: unidentified hydrocarbons C6 - C12.
d	=	Chromatogram pattern: weathered gasoline C6 - C12.
е	=	Chromatogram pattern: weathered diesel C9 - C24 and unidentified hydrocarbons C9 - C36.
f	=	Chromatogram pattern: unidentified hydrocarbons C9 - C24.
g	=	Hydrocarbon pattern is not consistent with that of the specified standard.
h	=	Analysis run. Results not available.
i	=	TPHd note: Analyst notes samples resemble paint thinner more than Stoddard Solvent.
j	=	Analyte detected in trip blank, method blank, and/or bailer blank; result is suspect.
k	=	Higher reported TPH concentrations in groundwater may be due to different laboratory quantitation procedures.
1	=	Elevated result due to single analyte peak in quantitation range.
m	=	Surrogate recovery above control limits; this may result in a high bias.
n	=	Laboratory QA/QC issue(s); ERI considers the result to be usable. Please refer to laboratory report for details.
0	=	Analyzed using EPA Method 624 (volatile organic compounds).
р	=	Analyzed for Stoddard Solvent using EPA Method 5030/8015.

Notes:		
q	=	Analyzed for Stoddard Solvent using modified EPA Method 5030/8015. Sample chromotogram was not representative of a Stoddard Solvent pattern.
		Pattern was representative of the heavier hydrocarbons found in a gasoline pattern.
r	=	Stoddard Solution detected in the sample at approximately 320 parts per billion (ppb).
S	=	Chloromethane.
t	=	Analyte presence was not confirmed by second column or GC/MS analysis.
u	=	Product detected in well; therefore, groundwater samples were not collected.
٧	=	Compound did not meet method-described identification guidelines. Identification was based on additional GC/MS characteristics.

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)	VOCs (µg/L)	EHCss (μg/L)	TOG (µg/L)
Monitoring	Well Samples											
MW1	05/21/88		Well instal	led.								
MW1	05/22/88 - 03/11/03		Not analyz	ed for these ana	lytes.							
MW1	06/19/96										<50	
MW1	03/26/04		< 0.50	1.60	< 0.50	<10.0	< 0.50	< 0.50				
MW1	11/02/04		< 0.50	1.80	< 0.50	<10.0	< 0.50	< 0.50				
MW1	02/04/05		< 0.50	1.90	< 0.50	<10.0	< 0.50	< 0.50				
MW1	05/02/05		< 0.50	2.10	< 0.50	<10.0	< 0.50	< 0.50	<100			
MW1	08/01/05		< 0.50	2.00	< 0.50	<10.0	< 0.50	< 0.50	<100			
MW1	10/25/05		< 0.500	1.61	< 0.500	22.6	< 0.500	< 0.500				
MW1	01/24/06		<2.5	<2.5	<2.5	<100	<2.5	<2.5	<500			
MW1	04/28/06		< 0.50	1.6	< 0.50	5.0n	<0.50	< 0.50				
MW1	08/04/06		< 0.500	1.63	< 0.500	<10.0	< 0.500	< 0.500				
MW1	10/06/06		< 0.50	2.3	< 0.50	<5.0	< 0.50	< 0.50				
MW1	01/12/07		Well inacc	essible.								
MW1	03/26/07		Well destr	oyed.								
MW2	09/10/87		Well instal	led.								
MW2	09/11/87 - 03/27/04		Not analyz	ed for these ana	lytes.							
MW2	03/27/04		< 0.50	<0.50	2.90	<10.0	<0.50	< 0.50				
MW2	11/02/04		< 0.50	<0.50	< 0.50	<10.0	<0.50	< 0.50				
MW2	02/04/05		< 0.50	<0.50	< 0.50	<10.0	<0.50	< 0.50				
MW2	05/02/05		< 0.50	<0.50	< 0.50	<10.0	<0.50	< 0.50	<100			
MW2	08/01/05		< 0.50	2.00	< 0.50	<10.0	< 0.50	< 0.50	<100			
MW2	10/25/05		< 0.500	< 0.500	< 0.500	<10.0	< 0.500	< 0.500				
MW2	01/24/06		< 0.50	< 0.50	< 0.50	20	< 0.50	< 0.50	<100			
MW2	04/28/06		< 0.50	< 0.50	< 0.50	<5.0n	< 0.50	< 0.50	<100			
MW2	08/04/06		< 0.500	1.34	< 0.500	<10.0	< 0.500	< 0.500	<50.0			
MW2	10/06/06		< 0.50	<0.50	< 0.50	<5.0	<0.50	< 0.50	<100			
MW2	01/12/07		< 0.50	< 0.50	< 0.50	23	< 0.50	< 0.50	<100			
MW2	04/09/07		< 0.500	< 0.500	< 0.500	<10.0	< 0.500	< 0.500	<50.0			
MW2	08/06/07		< 0.50	< 0.50	< 0.50	14	< 0.50	1.3	<100			
MW2	11/15/07		< 0.50	< 0.50	< 0.50	17	<0.50	1.1	<100			
MW2	01/02/08		< 0.50	<0.50	0.85	36	< 0.50	< 0.50	<100			
MW2	04/03/08		< 0.50	< 0.50	< 0.50	24	<0.50	< 0.50	<100			
√W2	07/09/08		< 0.50	< 0.50	< 0.50	<10	<0.50	1.2	<100			
MW2	10/01/08		Well cover	red by asphalt.								
MW2	01/07/09			red by asphalt.								
MW2	01/16/09		<5.0	<5.0	<5.0	<50	<5.0	<5.0	<500			
MW2	04/24/09		< 0.50	< 0.50	< 0.50	15	<0.50	< 0.50	<50			
MW2	07/01/09		< 0.50	<0.50	< 0.50	11	<0.50	< 0.50	<50			
MW2	10/01/09											

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)	VOCs (µg/L)	EHCss (µg/L)	TOG (µg/L)
MW2	03/04/10											
MW2	05/06/10		< 0.50	< 0.50	< 0.50	<5.0	< 0.50	< 0.50	<50			
MW2	08/06/10											
MW2	11/02/10		< 0.50	< 0.50	< 0.50	12	< 0.50	< 0.50	<50			
MW2	04/21/11		< 0.50	< 0.50	< 0.50	6.1	< 0.50	< 0.50	<50			
MW2	10/18/11		< 0.50	<0.50	< 0.50	<5.0	< 0.50	< 0.50	<50			
MW2	04/25/12		< 0.50	< 0.50	< 0.50	<5.0	< 0.50	< 0.50	<50			
MW2	10/04/12		< 0.50	< 0.50	< 0.50	<5.0	< 0.50	< 0.50	<50			
MW2	04/16/13		< 0.50	< 0.50	< 0.50	8.9	< 0.50	< 0.50	<50			
MW2	11/14/13		< 0.50	< 0.50	< 0.50	<5.0	< 0.50	< 0.50	<50			
MW2	06/26/14		<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<50			
MW3	09/10/87		Well instal	led.								
MW3	09/11/87 - 03/26/04		Not analyz	ed for these anal	ytes.							
MW3	03/26/04		< 0.50	<0.50	2.60	<10.0	< 0.50	0.60				
MW3	11/02/04		< 0.50	<0.50	< 0.50	<10.0	< 0.50	1.60				
MW3	02/04/05		< 0.50	<0.50	< 0.50	<10.0	< 0.50	< 0.50				
MW3	05/02/05		< 0.50	<0.50	< 0.50	<10.0	< 0.50	< 0.50	<100			
MW3	08/01/05		< 0.50	<0.50	< 0.50	<10.0	< 0.50	< 0.50	<100			
MW3	10/25/05		< 0.500	< 0.500	< 0.500	<10.0	< 0.500	< 0.500				
MW3	01/24/06		<1.0	<1.0	<1.0	<40	<1.0	<1.0	<200			
MW3	04/28/06		< 0.50	<0.50	< 0.50	7.8n	< 0.50	< 0.50				
MW3	08/04/06		< 0.500	1.45	< 0.500	<10.0	< 0.500	< 0.500				
MW3	10/06/06		< 0.50	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50				
MW3	01/12/07		< 0.50	< 0.50	< 0.50	<10	< 0.50	< 0.50				
MW3	04/09/07		< 0.500	< 0.500	< 0.500	<10.0	< 0.500	< 0.500				
MW3	08/06/07		< 0.50	<0.50	< 0.50	<10	< 0.50	< 0.50	<100			
MW3	11/15/07		< 0.50	<0.50	< 0.50	<10	< 0.50	< 0.50				
MW3	01/02/08		< 0.50	<0.50	< 0.50	12	< 0.50	< 0.50				
MW3	04/03/08		< 0.50	<0.50	< 0.50	23	< 0.50	< 0.50				
MW3	07/09/08		< 0.50	<0.50	< 0.50	10	< 0.50	< 0.50				
MW3	10/01/08		< 0.50	<0.50	< 0.50	9.7	< 0.50	< 0.50	<50			
MW3	01/07/09		< 0.50	<0.50	< 0.50	10	< 0.50	< 0.50	<50			
MW3	01/16/09											
MW3	04/24/09		< 0.50	<0.50	< 0.50	16	< 0.50	0.52	<50			
MW3	07/01/09		< 0.50	<0.50	< 0.50	9.7	< 0.50	< 0.50	<50			
MW3	10/01/09											
MW3	03/04/10											
MW3	05/06/10		< 0.50	<0.50	< 0.50	12	< 0.50	< 0.50	<50			
MW3	08/06/10											
MW3	11/02/10		< 0.50	<0.50	< 0.50	16	< 0.50	< 0.50	<50			
MW3	04/22/11		< 0.50	<0.50	< 0.50	13	< 0.50	< 0.50	<50			
MW3	10/18/11 u											

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)	VOCs (μg/L)	EHCss (µg/L)	TOG (µg/L)
MW3	04/25/12		<0.50	<0.50	<0.50	12	<0.50	<0.50	<50			
MW3	10/04/12		<50	<50	<50	<500	<50	<50	<5,000			
MW3	04/16/13		< 0.50	< 0.50	< 0.50	19	< 0.50	< 0.50	<50			
MW3	11/14/13		<0.50	< 0.50	< 0.50	11	< 0.50	< 0.50	<50			
MW3	06/26/14		<0.50	<0.50	<0.50	14	<0.50	<0.50	<50			
MW4	09/10/87		Well install	ed.								
MW4	09/10/87 - 03/26/04		Not analyz	ed for these anal	ytes.							
MW4	03/30/01		Well cover	ed by asphalt.								
MW4	04/25/12		Well cover	ed by asphalt.								
MW5	09/01/87 - 04/25/89		Not analyz	ed for these anal	ytes.							
MW5	09/10/87		Well install	ed.								
MW5	07/18/89		Well destro	oyed.								
MW6	09/10/87		Well install	ed.								
MW6	05/01/89 - 03/26/04		Not analyz	ed for these anal	ytes.							
MW6	03/26/04		< 0.50	34.0	< 0.50	11.7	< 0.50	< 0.50				
MW6	11/02/04		< 0.50	< 0.50	< 0.50	<10.0	< 0.50	< 0.50				
MW6	02/04/05		< 0.50	< 0.50	< 0.50	54.3	< 0.50	< 0.50				
MW6	05/02/05		< 0.50	< 0.50	< 0.50	<10.0	< 0.50	< 0.50	<100			
MW6	08/01/05		< 0.50	15.3	< 0.50	29.2	< 0.50	< 0.50	<100			
MW6	10/25/05		< 0.500	< 0.500	< 0.500	20.6	< 0.500	< 0.500				
MW6	01/24/06		<5.0	<5.0	<5.0	<200	<5.0	<5.0	<1,000			
MW6	04/28/06		< 0.50	< 0.50	12	41n	< 0.50	< 0.50	<100			
MW6	08/04/06		0.940	8.28	< 0.500	<10.0	< 0.500	< 0.500	<50.0			
MW6	10/06/06		<0.50	< 0.50	< 0.50	14	<0.50	< 0.50	<100			
MW6	01/12/07		<0.50	< 0.50	< 0.50	11	< 0.50	< 0.50	<100			
MW6	04/09/07		< 0.500	< 0.500	< 0.500	<10.0	< 0.500	< 0.500	<50.0			
MW6	08/06/07		<0.50	<0.50	<0.50	<10	<0.50	< 0.50	<100			
MW6	11/15/07		<0.50	<0.50	<0.50	<10	<0.50	< 0.50	<100			
MW6	01/02/08		<0.50	<0.50	<0.50	<10	<0.50	<0.50	<100			
MW6	04/03/08		<0.50	<0.50	<0.50	11	<0.50	<0.50	<100			
MW6	07/09/08		<0.50	<0.50	<0.50	<10	<0.50	<0.50	<100			
MW6	10/01/08			ed by asphalt.	νο.σο	110	νο.σο	٧٥.٥٥	2100			
MW6	01/07/09			ed by asphalt.								
MW6	01/16/09		<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<50			
MW6	04/24/09		<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<5.0 <5.0	<0.50 <0.50	<0.50 <0.50	<50 <50			
MW6	07/01/09		<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<50			
MW6	10/01/09											
MW6	03/04/10				0.50							
MW6	05/06/10		<0.50	<0.50	<0.50	5.2	<0.50	<0.50	<50			
MW6	08/06/10											
MW6	11/02/10		< 0.50	< 0.50	< 0.50	<5.0	< 0.50	< 0.50	<50			

MWN 1018/11	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)	VOCs (µg/L)	EHCss (µg/L)	TOG (µg/L)
MWN 0 425/12	MW6	04/21/11		<0.50	<0.50	<0.50	5.4	<0.50	<0.50	<50			
MWW 1004/12	MW6	10/18/11		< 0.50	< 0.50	< 0.50	<5.0	< 0.50	< 0.50	<50			
WWW 04/16/13	MW6	04/25/12		< 0.50	< 0.50	< 0.50	17v	< 0.50	< 0.50	<50			
MW6 0626/14	MW6	10/04/12		< 0.50	< 0.50	< 0.50	<5.0	< 0.50	< 0.50	<50			
WWY Sept-87	MW6	04/16/13		< 0.50	<0.50	< 0.50	<5.0	< 0.50	< 0.50	<50			
MW7	MW6	11/14/13		< 0.50	<0.50	< 0.50	<5.0	< 0.50	< 0.50	<50			
MW/Y 09/10/87 Well installed. Mp Section Mp Section	MW6	06/26/14		<0.50	<0.50	<0.50	14	<0.50	<0.50	<50			
MW7	MW7	Sept-87									ND		
MW7 04/25/89	MW7	09/10/87		Well instal	led.								
MW7 04/19/90 ND	MW7	May-88									ND		
MW7 07/03/90	MW7	04/25/89 - 09/22/89		Not analyz	ed for these anal	ytes.							
MW7	MW7	12/06/89									ND		<5,000
MW7	MW7	04/19/90									ND		
MW7 03/26/91	MW7	07/03/90									ND		
WW7 03/10/93	MW7	11/27/90									2.4s		
MW7 02/03/94	MW7	03/26/91									ND		
WW7 02/03/94	MW7	03/10/93									h		<5,000
MW7 03/10/94	MW7	08/11/93									ND		
WW7 04/22/94	MW7	02/03/94											470p
MW7 05/10/94 - 05/11/94 1,40 MW7 11/30/94 MW7 12/27/94 MW7 02/06/95 MW7 06/07/95 MW7 06/07/95 MW7 09/18/95 MW7 09/18/95 MW7 11/01/95 MW7 06/19/96 MW7 06/19/96 MW7 09/24/96 MW7 09/24/96 MW7 03/19/97 MW7 06/04/97 MW7 06/04/97 MW7 09/02/97 MW7 09/02/97 MW8 09/01/87 - 07/17/93 MW8 09/01/87 - 07/17/93 MW8 09/01/87 - 07/17/93 MW8 09/01/87 - 03/21/00 Not analyzed for these analytes.	MW7	03/10/94											
MW7 12/27/94	MW7	04/22/94											
MW7 12/27/94	MW7	05/10/94 - 05/11/94											1,400p
MW7 02/06/95	MW7	11/30/94											
MW7 06/07/95	MW7	12/27/94											
MW7 09/18/95	MW7	02/06/95										1,100	
MW7 11/01/95 1,400 MW7 02/14/96 1,400 MW7 06/19/96 1,000 MW7 09/24/96 1,000 MW7 12/11/96 1,000 MW7 03/19/97 1,100 MW7 06/04/97 1,000 MW7 09/02/97 1,000 MW7 09/02/97 1,000 MW7 09/02/97 1,000 MW7 09/02/97 1,000 MW8 09/01/87 -07/17/93 Well destroyed. WW8 09/10/87 -07/17/93 Well installed. WW8 09/10/87 Well installed. WW8 09/01/93 - 03/21/00 Not analyzed for these analytes.	MW7	06/07/95										1,000	
MW7 02/14/96	MW7											870	
MW7 06/19/96 1,000 1,000 MW7 09/24/96 1,000 1,	MW7	11/01/95										1,400	
MW7 09/24/96	MW7											940	
MW7 12/11/96	MW7	06/19/96										1,000	
MW7 03/19/97	MW7	09/24/96										910	
MW7 06/04/97	MW7	12/11/96										1,100	
MW7 09/02/97	MW7	03/19/97										580	
MW7 12/21/00 Well destroyed. MW8 09/01/87 - 07/17/93 Not analyzed for these analytes. MW8 09/10/87 Well installed. MW8 08/11/93 ND ND MW8 09/01/93 - 03/21/00 Not analyzed for these analytes.	MW7	06/04/97										780	
MW8 09/01/87 - 07/17/93 Not analyzed for these analytes. MW8 09/10/87 Well installed. MW8 08/11/93 ND ND MW8 09/01/93 - 03/21/00 Not analyzed for these analytes.	MW7	09/02/97										740	
VIW8 09/10/87 Well installed. VIW8 08/11/93 ND VIW8 09/01/93 - 03/21/00 Not analyzed for these analytes.	MW7	12/21/00		Well destre	oyed.								
MW8 08/11/93 ND	MW8	09/01/87 - 07/17/93		Not analyz	ed for these anal	ytes.							
MW8 09/01/93 - 03/21/00 Not analyzed for these analytes.	MW8	09/10/87		Well instal	led.								
	8WW	08/11/93									ND		
	8WW	09/01/93 - 03/21/00		Not analyz	ed for these anal	ytes.							
	MW8	12/21/00		Well destre	oyed.								

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)	VOCs (μg/L)	EHCss (µg/L)	TOG (µg/L)
MW9	May-88									ND		
MW9	05/12/88		Well instal	led.								
MW9	12/06/89									ND		<5,000
MW9	02/20/90									ND		
MW9	04/19/90									ND		
MW9	11/27/90									ND		
MW9	08/11/93									ND		
MW9	09/01/93 - 02/14/96		Not analyz	ed for these anal	ytes.							
MW9	06/19/96										<50	
MW9	09/24/96 - 12/21/00		Not analyz	ed for these anal	ytes.							
MW9	12/21/00		Well destro	oyed.								
MW10	11/27/89		Well instal	led.								
MW10	04/19/90									ND		
MW10	08/11/93									ND		
MW10	09/01/93 - 02/14/96		Not analyz	ed for these anal	ytes.							
MW10	06/19/96										<50	
MW10	09/24/96 - 12/21/00		Not analyz	ed for these anal	ytes.							
MW10	12/21/00		Well destro	oyed.								
MW11	11/27/89		Well instal	led.								
MW11	08/11/93									ND		
MW11	09/01/93 - 02/14/96		Not analyz	ed for these anal	ytes.							
MW11	06/19/96										<50	
MW11	09/24/96 - 12/21/00		Not analyz	ed for these anal	ytes.							
MW11	12/21/00		Well destro	oyed.								
MW12	11/27/89		Well instal	led.								
MW12	08/11/93									ND		
MW12	09/01/93 - 11/02/04		Not analyz	ed for these anal	ytes.							
MW12	03/30/01		Well cover	ed by asphalt.								
MW12	04/25/12		Well cover	ed by asphalt.								
MW13	11/28/89		Well instal	led.								
MW13	08/11/93											ND
MW13	09/01/93 - 12/21/00		Not analyz	ed for these anal	ytes.							
MW13	12/21/00		Well destro	oyed.								
MW14	10/31/90		Well instal	led.								
MW14	11/27/90 - 05/10/94		Not analyz	ed for these anal	ytes.							
MW14	05/10/94 - 05/11/94											210p
MW14	06/27/94											
MW14	02/06/95											400
MW14	06/07/95										450	

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)	VOCs (µg/L)	EHCss (µg/L)	TOG (µg/L)
MW14	09/18/95										1,200	
MW14	11/01/95										1,600	
MW14	02/14/96										680	
MW14	06/19/96										670	
MW14	09/24/96										4,500	
MW14	12/11/96										750	
MW14	03/19/97										470	
MW14	06/04/97										590	
MW14	09/02/97 - 03/26/04		Not analyz	ed for these ana	lytes.							
MW14	09/02/97										1,300	
MW14	03/26/04		< 0.50	< 0.50	< 0.50	<10.0	< 0.50	< 0.50				
MW14	11/02/04		< 0.50	<0.50	< 0.50	<10.0	< 0.50	< 0.50				
MW14	02/04/05		< 0.50	<0.50	< 0.50	<10.0	< 0.50	< 0.50				
MW14	05/02/05		< 0.50	<0.50	< 0.50	<10.0	< 0.50	< 0.50	<100			
MW14	08/01/05		< 0.50	1.90	< 0.50	<10.0	< 0.50	< 0.50	<100			
MW14	10/25/05		< 0.500	< 0.500	< 0.500	<10.0	< 0.500	< 0.500				
MW14	01/24/06		< 0.50	<0.50	< 0.50	<20	< 0.50	< 0.50	<100			
MW14	04/28/06		< 0.50	<0.50	< 0.50	<20n	< 0.50	< 0.50	<100			
MW14	08/04/06		< 0.500	1.39	< 0.500	<10.0	< 0.500	< 0.500	<50.0			
MW14	10/06/06		< 0.50	<0.50	< 0.50	<5.0	< 0.50	< 0.50	<100			
MW14	01/12/07		<0.50	<0.50	<0.50	<10	<0.50	< 0.50	<100			
MW14	04/09/07		< 0.500	< 0.500	< 0.500	<10.0	< 0.500	<0.500	<50.0			
MW14	08/06/07		< 0.50	<0.50	< 0.50	<10	< 0.50	< 0.50	<100			
MW14	11/15/07		< 0.50	<0.50	< 0.50	<10	< 0.50	< 0.50	<100			
MW14	01/02/08		<0.50	<0.50	<0.50	<10	<0.50	< 0.50	<100			
MW14	04/03/08		<0.50	<0.50	<0.50	<10	<0.50	< 0.50	<100			
MW14	07/09/08		< 0.50	<0.50	<0.50	<10	<0.50	< 0.50	<100			
MW14	10/01/08		< 0.50	<0.50	<0.50	<5.0	<0.50	< 0.50	<50			
MW14	01/07/09		<0.50	<0.50	<0.50	<5.0	<0.50	< 0.50	<50			
MW14	01/16/09											
MW14	04/24/09		< 0.50	<0.50	< 0.50	<5.0	< 0.50	< 0.50	<50			
MW14	07/01/09		<0.50	<0.50	<0.50	<5.0	<0.50	< 0.50	<50			
MW14	10/01/09											
MW14	03/04/10											
MW14	05/06/10		<0.50	<0.50	<0.50	<5.0	<0.50	< 0.50	<50			
MW14	08/06/10											
MW14	11/02/10		<0.50	<0.50	<0.50	<5.0	<0.50	< 0.50	<50			
MW14	04/22/11		<0.50	<0.50	<0.50	<5.0	<0.50	< 0.50	<50			
MW14	10/19/11		<0.50	<0.50	<0.50	<5.0	<0.50	< 0.50	<50			
MW14	04/25/12		<0.50	<0.50	<0.50	<5.0	<0.50	< 0.50	<50			
MW14	10/04/12		<0.50	<0.50	<0.50	<5.0	<0.50	< 0.50	<50			
MW14	04/16/13		<0.50	<0.50	<0.50	<5.0	<0.50	< 0.50	<50			
MW14	11/14/13		<0.50	<0.50	<0.50	<5.0	<0.50	< 0.50	<50			

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)	VOCs (µg/L)	EHCss (µg/L)	TOG (μg/L)
MW14	06/26/14		<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<50			
MW15	10/31/90		Well install	ed.								
MW15	08/11/93									ND		
MW15	09/01/93 - 12/21/00		Not analyz	ed for these anal	ytes.							
MW15	12/21/00		Well destro	oyed.								
MW16A	10/01/09		<2.0	<2.0	<2.0	<20	<2.0	<2.0	<200			
MW16A	03/04/10		< 0.50	< 0.50	< 0.50	28	< 0.50	< 0.50	<50			
MW16A	05/06/10		< 0.50	< 0.50	< 0.50	19	< 0.50	< 0.50	<50			
MW16A	08/06/10		< 0.50	< 0.50	< 0.50	5.6	< 0.50	< 0.50	<50			
MW16A	11/02/10		< 0.50	0.54	< 0.50	5.1	< 0.50	< 0.50	<50			
MW16A	04/22/11		< 0.50	< 0.50	< 0.50	<5.0	< 0.50	< 0.50	<50			
MW16A	10/19/11		< 0.50	< 0.50	< 0.50	<5.0	< 0.50	< 0.50	<50			
MW16A	04/25/12		< 0.50	< 0.50	< 0.50	22v	< 0.50	< 0.50	<50			
MW16A	10/04/12		< 0.50	< 0.50	< 0.50	<5.0	< 0.50	< 0.50	<50			
MW16A	04/16/13		< 0.50	< 0.50	< 0.50	<5.0	< 0.50	< 0.50	<50			
MW16A	11/14/13		< 0.50	< 0.50	< 0.50	<5.0	< 0.50	< 0.50	<50			
MW16A	06/26/14		<0.50	<0.50	<0.50	<5.0	<0.50	< 0.50	<50			
MW16B	10/01/09		<2.0	<2.0	<2.0	<20	<2.0	<2.0	<200			
MW16B	03/04/10		<5.0	<5.0	<5.0	<50	<5.0	<5.0	<500			
MW16B	05/06/10		<5.0	<5.0	<5.0	<50	<5.0	<5.0	<500			
MW16B	08/06/10		<0.50	1.1	<0.50	7.3	<0.50	< 0.50	<50			
MW16B	11/02/10		<0.50	1.0	<0.50	5.3	<0.50	<0.50	<50			
MW16B	04/22/11		<4.0	<4.0	<4.0	<40	<4.0	<4.0	<400			
MW16B	10/19/11		<2.5	<2.5	<2.5	<25	<2.5	<2.5	<250			
MW16B	04/25/12		<2.0	<2.0	<2.0	24	<2.0	<2.0	<200			
MW16B	10/04/12		<1.0	<1.0	<1.0	14	<1.0	<1.0	<100			
MW16B	04/16/13		<1.0	<1.0	<1.0	<10	<1.0	<1.0	<100			
MW16B	11/13/13		<1.0	1.1	<1.0	17	<1.0	<1.0	<100			
MW16B	06/25/14		<1.0	<1.0	<1.0	<10	<1.0	<1.0	<100			
MW17A	10/01/09		<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<50			
MW17A	03/04/10		< 0.50	<0.50	<0.50	<5.0	< 0.50	<0.50	<50			
MW17A	05/06/10		< 0.50	<0.50	<0.50	<5.0	< 0.50	<0.50	<50			
MW17A	08/06/10		< 0.50	<0.50	<0.50	<5.0	< 0.50	<0.50	<50			
MW17A	11/02/10		<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<50			
MW17A	04/22/11		< 0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<50			
MW17A	10/18/11		<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<50			
MW17A	04/25/12		<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<50			
MW17A	10/04/12		<0.50	<0.50	< 0.50	<5.0 <5.0	<0.50	<0.50	<50			
MW17A	04/16/13		<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<50			
MW17A	11/13/13		<0.50	<0.50	<0.50	<5.0	< 0.50	<0.50	<50 <50			
WIVV I / A	11/13/13		<0.50	<0.50	<0.50	V.C>	<0.50	<0.50	<50			

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)	VOCs (µg/L)	EHCss (µg/L)	TOG (µg/L)
MW17A	06/25/14		<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<50			
MW17B	10/01/09		< 0.50	1.2	1.2	5.3	<0.50	<0.50	<50			
MW17B	03/04/10		<5.0	<5.0	<5.0	<50	<5.0	< 5.0	<500			
MW17B	05/06/10		<5.0	<5.0	<5.0	<50	<5.0	<5.0	<500			
MW17B	08/06/10		< 0.50	1.1	1.2	11	< 0.50	< 0.50	<50			
MW17B	11/02/10		< 0.50	1.0	1.2	<5.0	<0.50	< 0.50	<50			
MW17B	04/22/11		<5.0	<5.0	<5.0	<50	<5.0	<5.0	<500			
MW17B	10/18/11		<5.0	<5.0	<5.0	<50	<5.0	<5.0	<500			
MW17B	04/25/12		<5.0	<5.0	<5.0	<50	<5.0	<5.0	<500			
MW17B	10/04/12		<5.0	<5.0	<5.0	<50	<5.0	<5.0	<500			
MW17B	04/16/13		<5.0	<5.0	<5.0	<50	<5.0	<5.0	<500			
MW17B	11/14/13		<10	<10	<10	<100	<10	<10	<1,000			
MW17B	06/25/14		<5.0	<5.0	<5.0	<50	<5.0	<5.0	<500			
MW18A	10/01/09		<0.50	<0.50	<0.50	20	<0.50	<0.50	<50			
MW18A	03/04/10		< 0.50	<0.50	< 0.50	7.0	<0.50	< 0.50	<50			
MW18A	05/06/10		< 0.50	< 0.50	< 0.50	<5.0	<0.50	< 0.50	<50			
MW18A	08/06/10		< 0.50	< 0.50	< 0.50	<5.0	< 0.50	< 0.50	<50			
MW18A	11/02/10		< 0.50	< 0.50	< 0.50	<5.0	<0.50	< 0.50	<50			
MW18A	04/21/11		< 0.50	< 0.50	< 0.50	<5.0	<0.50	< 0.50	<50			
MW18A	10/18/11		< 0.50	< 0.50	< 0.50	<5.0	<0.50	< 0.50	<50			
MW18A	04/25/12		< 0.50	< 0.50	< 0.50	<5.0	<0.50	< 0.50	<50			
MW18A	10/04/12		< 0.50	< 0.50	< 0.50	<5.0	<0.50	< 0.50	<50			
MW18A	04/16/13		< 0.50	<0.50	< 0.50	<5.0	<0.50	< 0.50	<50			
MW18A	11/13/13		< 0.50	< 0.50	< 0.50	<5.0	<0.50	< 0.50	<50			
MW18A	06/25/14		<0.50	<0.50	<0.50	10	<0.50	<0.50	<50			
MW18B	10/01/09		<0.50	0.74	<0.50	<5.0	<0.50	<0.50	<50			
MW18B	03/04/10		< 0.50	< 0.50	< 0.50	<5.0	<0.50	< 0.50	<50			
MW18B	05/06/10		<0.50	<0.50	< 0.50	<5.0	<0.50	<0.50	<50			
MW18B	08/06/10		< 0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<50			
MW18B	11/02/10		< 0.50	< 0.50	< 0.50	6.0	<0.50	< 0.50	<50			
MW18B	04/21/11		< 0.50	< 0.50	< 0.50	<5.0	<0.50	< 0.50	<50			
MW18B	10/18/11		<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<50			
MW18B	04/25/12		<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<50			
MW18B	10/04/12		<0.50	< 0.50	<0.50	<5.0	< 0.50	<0.50	<50			
MW18B	04/16/13		<0.50	< 0.50	<0.50	<5.0	<0.50	<0.50	<50			
MW18B	11/13/13		<0.50	< 0.50	<0.50	<5.0	<0.50	<0.50	<50			
MW18B	06/25/14		<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<50			
MW19A	10/01/09		<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<50			
MW19A	03/04/10		<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<50			
IVIVV I JA	33/0 4 /10		<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<50			

Well ID	Sampling	Depth	EDB	1,2-DCA	TAME	TBA	ETBE	DIPE	Ethanol	VOCs	EHCss	TOG
Mellin	Date	(feet)	(µg/L)	1,2-DCA (μg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	VOCS (μg/L)	EΠCSS (μg/L)	(µg/L)
MW19A	08/06/10		<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<50			
MW19A	11/02/10		< 0.50	<0.50	< 0.50	<5.0	<0.50	< 0.50	<50			
MW19A	04/21/11		< 0.50	<0.50	< 0.50	<5.0	< 0.50	< 0.50	<50			
MW19A	10/18/11		< 0.50	<0.50	< 0.50	<5.0	< 0.50	< 0.50	<50			
MW19A	04/25/12		< 0.50	<0.50	< 0.50	<5.0	< 0.50	< 0.50	<50			
MW19A	10/04/12		< 0.50	<0.50	< 0.50	<5.0	< 0.50	< 0.50	<50			
MW19A	04/16/13		< 0.50	<0.50	< 0.50	<5.0	< 0.50	< 0.50	<50			
MW19A	11/13/13		< 0.50	<0.50	< 0.50	<5.0	<0.50	< 0.50	<50			
MW19A	06/26/14		< 0.50	<0.50	<0.50	<5.0	<0.50	< 0.50	<50			
MW19B	10/01/09		<0.50	1.2	<0.50	<5.0	<0.50	<0.50	<50			
MW19B	03/04/10		< 0.50	1.4	< 0.50	< 5.0	<0.50	< 0.50	<50			
MW19B	05/06/10		< 0.50	1.3	< 0.50	< 5.0	<0.50	< 0.50	<50			
MW19B	08/06/10		< 0.50	1.4	< 0.50	<5.0	<0.50	< 0.50	<50			
MW19B	11/02/10		< 0.50	1.3	< 0.50	< 5.0	<0.50	< 0.50	<50			
MW19B	04/21/11		< 0.50	1.3	< 0.50	<5.0	< 0.50	< 0.50	<50			
MW19B	10/18/11		< 0.50	1.5	< 0.50	<5.0	< 0.50	< 0.50	<50			
MW19B	04/25/12		< 0.50	1.2	< 0.50	<5.0	< 0.50	< 0.50	<50			
MW19B	10/04/12		< 0.50	1.2	< 0.50	<5.0	< 0.50	< 0.50	<50			
MW19B	04/16/13		< 0.50	1.5	< 0.50	<5.0	< 0.50	< 0.50	<50			
MW19B	11/13/13		< 0.50	1.9	< 0.50	<5.0	< 0.50	< 0.50	<50			
MW19B	06/25/14		< 0.50	1.8	<0.50	<5.0	<0.50	< 0.50	<50			
MW20	05/09/14		Well instal	led.								
MW20	06/26/14		<1.0	<1.0	<1.0	68	<1.0	3.5	<100			
MW20	09/18/14		<1.0	<1.0	<1.0	56	<1.0	3.4	<100			
MW21	05/09/14		Well instal	led.								
MW21	06/26/14		<2.0	<2.0	<2.0	35	<2.0	4.7	<200			
MW21	09/18/14		<2.0	<2.0	<2.0	43	<2.0	5.5	<200			
VW1	02/11/93		Well instal	led.								
VW1	02/18/93 - Present			ed for these anal	ytes.							
VW2	02/11/93		Well instal	led.								
VW2	02/18/93 - Present			ed for these anal	ytes.							
					,							
VW3	02/11/93		Well instal									
VW3	03/10/93 - Present		Not analyz	ed for these anal	ytes.							
	dwater Samples											
CPT Borings	<u> </u>											
W-18-CPT1	04/12/05	18	<0.50	<0.50	<0.50	<10.0	<0.50	<0.50				

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)	VOCs (µg/L)	EHCss (µg/L)	TOG (μg/L)
W-10-CPT2	04/13/05	10	<5.00	<5.00	<5.00	<100	<5.00	18.0				
W-26-CPT2	04/13/05	26	<0.50	<0.50	<0.50	<10.0	<0.50	<0.50				
W-10-CPT3	04/13/05	10	<0.50	<0.50	<0.50	<10.0	<0.50	<0.50				
W-29-CPT3	04/13/05	29	<0.50	<0.50	<0.50	<10.0	<0.50	<0.50				
W-10-CPT4	04/12/05	10	<0.50	<0.50	<0.50	<10.0	<0.50	<0.50				
W-24-CPT4	04/12/05	24	<0.50	7.60	<0.50	<10.0	<0.50	<0.50				
W-10-CPT5	04/12/05	10	<0.50	<0.50	<0.50	<10.0	<0.50	<0.50				
W-10-CPT6	04/11/05	10	<0.50	<0.50	<0.50	<10.0	<0.50	<0.50				
W-30-CPT6	04/11/05	30	< 0.50	<0.50	< 0.50	<10.0	<0.50	< 0.50				
W-30-CPT6	04/12/05	30										
Direct-Push I	Borings											
W-12-DP1	04/14/05	12	<0.50	<0.50	4.80	138	<0.50	<0.50				
W-12-DP3	04/14/05	12	<0.50	<0.50	<0.50	<10.0	<0.50	<0.50				
W-12-DP4	04/14/05	12	<0.50	<0.50	<0.50	<10.0	<0.50	<0.50				
W-12-DP5	04/14/05	12	<0.50	<0.50	<0.50	<10.0	<0.50	0.60				
W-12-DP6	04/14/05	12	<0.50	<0.50	<0.50	<10.0	<0.50	<0.50				
W-30-DP9	12/15/06	30	<0.50	<0.50	<0.50	<20	<0.50	<0.50	<100			
Hydropunch@	® Borings											
W-13-HP7	12/12/06	13	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<100			
W-30-HP11	12/13/06	30	<0.50	<0.50	<0.50	<20	<0.50	<0.50	<100			
W-13.5-HP1	12/13/06	13.5	<0.50	<0.50	<0.50	<20	<0.50	<0.50	<100			
W-31-HP12	12/13/06	31	< 0.50	1.3	< 0.50	<20	<0.50	< 0.50	<100			

Notes:		
TOC	=	Top of well casing elevation; datum is mean sea level.
DTW	=	Depth to water.
GW Elev.	=	Groundwater elevation; datum is mean sea level. If liquid-phase hydrocarbons present, elevation adjusted using TOC - [DTW - (PT x 0.8)].
NAPL	=	Non-aqueous phase liquid.
[]	=	Amount recovered in cups.
TPHd	=	Total petroleum hydrocarbons as diesel analyzed using EPA Method 3510/8015 (modified).
TPHg	=	Total petroleum hydrocarbons as gasoline analyzed using EPA Method 5030/8015 (modified).
MTBE 8021B	=	Methyl tertiary butyl ether analyzed using EPA Method 8021B.
MTBE 8260B	=	Methyl tertiary butyl ether analyzed using EPA Method 8260B.
BTEX	=	Benzene, toluene, ethylbenzene, and total xylenes analyzed using EPA Method 8021B.
TOG	=	Total oil and grease analyzed using Standard Method 5520.
EHCss	=	Extractable hydrocarbons as Stoddard Solvent analyzed using EPA Method 8015.
EDB	=	1,2-dibromoethane analyzed using EPA Method 8260B.
1,2-DCA	=	1,2-dichloroethane 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.
TPH Carbon Rang	je =	Total petroleum hydrocarbon range analyzed using EPA Method 8015B(M).
μg/L	=	Micrograms per liter.
mg/kg	=	Milligrams per kilogram.
ND	=	Not detected at or above laboratory reporting limits.
	=	Not measured/Not sampled/Not analyzed.
<	=	Less than the stated laboratory reporting limit.
а	=	A peak eluting earlier than benzene, suspected to be MTBE, was present.
b	=	Sample containers broken in transit.
С	=	Chromatogram pattern: unidentified hydrocarbons C6 - C12.
d	=	Chromatogram pattern: weathered gasoline C6 - C12.
е	=	Chromatogram pattern: weathered diesel C9 - C24 and unidentified hydrocarbons C9 - C36.
f	=	Chromatogram pattern: unidentified hydrocarbons C9 - C24.
g	=	Hydrocarbon pattern is not consistent with that of the specified standard.
h	=	Analysis run. Results not available.
i	=	TPHd note: Analyst notes samples resemble paint thinner more than Stoddard Solvent.
j	=	Analyte detected in trip blank, method blank, and/or bailer blank; result is suspect.
k	=	Higher reported TPH concentrations in groundwater may be due to different laboratory quantitation procedures.
1	=	Elevated result due to single analyte peak in quantitation range.
m	=	Surrogate recovery above control limits; this may result in a high bias.
n	=	Laboratory QA/QC issue(s); ERI considers the result to be usable. Please refer to laboratory report for details.
0	=	Analyzed using EPA Method 624 (volatile organic compounds).
		A 1 1/4 O 11 10 1 1 1 ED 1 1/4 1

= Analyzed for Stoddard Solvent using EPA Method 5030/8015.

р

Notes:	·	
q	=	Analyzed for Stoddard Solvent using modified EPA Method 5030/8015. Sample chromotogram was not representative of a Stoddard Solvent pattern.
		Pattern was representative of the heavier hydrocarbons found in a gasoline pattern.
r	=	Stoddard Solution detected in the sample at approximately 320 parts per billion (ppb).
s	=	Chloromethane.
t	=	Analyte presence was not confirmed by second column or GC/MS analysis.
u	=	Product detected in well; therefore, groundwater samples were not collected.
V	=	Compound did not meet method-described identification guidelines. Identification was based on additional GC/MS characteristics.

TABLE 1C ADDITIONAL CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA - CARBON RANGE

Former Exxon Service Station 73006 720 High Street Oakland, California

								O.	aniana, Cam	orriid								
Sample ID Samp Date	oling	C6 (µg/L)	C7 (µg/L)	C8 (µg/L)	C9-C10 (µg/L)	C11-C12 (µg/L)	C13-C14 (µg/L)	C15-C16 (µg/L)	C17-C18 (µg/L)	C19-C20 (µg/L)	C21-C22 (µg/L)	C23-C24 (µg/L)	C25-C28 (µg/L)	C29-C32 (µg/L)	C33-C36 (µg/L)	C37-C40 (µg/L)	C41-C44 (µg/L)	C6-C44 (µg/L)
Monitoring Well	Samp	oles																
MW3 06/26	6/14	<48	65	110	340	710	780	780	760	330	290	<48	110	<48	<48	<48	<48	4,400g
Notes:																		
TOC	=	Top of we	ell casing	elevation; o	datum is me	ean sea lev	el.											
DTW	=	Depth to	water.															
GW Elev.	=	Groundw	ater eleva	tion; datum	n is mean s	ea level. If	liquid-phase	e hydrocarl	oons presen	t, elevation	adjusted us	sing TOC -	[DTW - (PT	x 0.8)].				
NAPL	=	Non-aque	eous phas	e liquid.														
[]	=	Amount r	ecovered	in cups.														
TPHd	=	Total pet	troleum hy	drocarbon	s as diesel	analyzed u	sing EPA M	ethod 3510	0/8015 (mod	lified).								
TPHg	=	Total pet	troleum hy	drocarbon	s as gasolir	ne analyzed	l using EPA	Method 50	030/8015 (m	odified).								
MTBE 8021B	=	Methyl te	rtiary buty	l ether ana	lyzed using	EPA Meth	od 8021B.											
MTBE 8260B	=	Methyl te	rtiary buty	l ether ana	lyzed using	EPA Meth	od 8260B.											
BTEX	=	Benzene	, toluene,	ethylbenze	ne, and tota	al xylenes a	nalyzed usi	ng EPA M	ethod 8021E	3.								
TOG	=	Total oil a	and grease	e analyzed	using Stan	dard Metho	d 5520.											
EHCss	=	Extractab	ole hydroca	arbons as S	Stoddard S	olvent analy	zed using E	EPA Metho	d 8015.									
EDB	=	1,2-dibro	moethane	analyzed (using EPA I	Method 826	60B.											
1,2-DCA	=	1,2-dichlo	oroethane	analyzed ι	using EPA I	Method 826	0B.											
TAME	=	Tertiary a	amyl methy	yl ether and	alyzed using	g EPA Meth	od 8260B.											
TBA	=	Tertiary b	outyl alcoh	ol analyzed	d using EP/	A Method 8	260B.											
ETBE	=	Ethyl terti	iary butyl e	ether analy	zed using E	PA Method	8260B.											
DIPE	=	Di-isopro	pyl ether a	analyzed us	sing EPA M	ethod 8260	B.											
Ethanol	=	Ethanol a	analyzed u	sing EPA I	Method 826	60B.												
TPH Carbon Rang	ge =	Total peti	roleum hyd	drocarbon	range analy	zed using l	EPA Method	d 8015B(M).									
μg/L	=	_	ms per lite															
mg/kg	=	Milligram	s per kilog	ıram.														
ND	=	Not detec	cted at or a	above labo	ratory repo	rting limits.												
	=	Not meas	sured/Not	sampled/N	ot analyzed	ł.												
<	=	Less than	n the state	d laborator	y reporting	limit.												
а	=	A peak e	luting earli	er than be	nzene, susp	pected to be	e MTBE, wa	s present.										
b	=	Sample of	containers	broken in	transit.													
С	=	Chromato	ogram pat	tern: unide	ntified hydr	ocarbons C	6 - C12.											
d	=	Chromato	ogram pat	tern: weath	ered gasoli	ne C6 - C1	2.											
е	=	Chromato	ogram pat	tern: weath	ered diese	C9 - C24 a	and unidenti	fied hydrod	carbons C9	- C36.								
f	=	Chromato	ogram pat	tern: unide	ntified hydr	ocarbons C	9 - C24.											
g	=	Hydrocar	bon patter	n is not co	nsistent wit	h that of the	e specified s	standard.										
h	=	Analysis	run. Resu	ılts not ava	ilable.													
i	=	TPHd no	te: Analys	t notes sar	mples resei	mble paint t	hinner more	than Stod	ldard Solver	nt.								
j	=	•					bailer blank		•									
k	=	Higher re	ported TP	H concent	rations in g	roundwater	may be due	to differer	nt laboratory	quantitatio	n procedure	es.						

TABLE 1C

Notes:		
1	=	Elevated result due to single analyte peak in quantitation range.
m	=	Surrogate recovery above control limits; this may result in a high bias.
n	=	Laboratory QA/QC issue(s); ERI considers the result to be usable. Please refer to laboratory report for details.
0	=	Analyzed using EPA Method 624 (volatile organic compounds).
р	=	Analyzed for Stoddard Solvent using EPA Method 5030/8015.
q	=	Analyzed for Stoddard Solvent using modified EPA Method 5030/8015. Sample chromotogram was not representative of a Stoddard Solvent pattern.
		Pattern was representative of the heavier hydrocarbons found in a gasoline pattern.
r	=	Stoddard Solution detected in the sample at approximately 320 parts per billion (ppb).
S	=	Chloromethane.
t	=	Analyte presence was not confirmed by second column or GC/MS analysis.
u	=	Product detected in well; therefore, groundwater samples were not collected.
V	=	Compound did not meet method-described identification guidelines. Identification was based on additional GC/MS characteristics.

TABLE 1D ADDITIONAL CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA - CARBON RANGE, PRODUCT SAMPLES

Former Exxon Service Station 73006 720 High Street Oakland, California

								Oc	ikianu, Calli	Onna								
Sample ID			C7	C8	C9-C10		C13-C14	C15-C16		C19-C20	C21-C22	C23-C24	C25-C28	C29-C32	C33-C36	C37-C40	C41-C44	C6-C44
	Date	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Product Sa	-																	
MW3-OIL	04/27/11	<5,000	<5,000	<5,000	7,500	18,000	25,000	19,000	18,000	9,400	6,100	<5,000	<5,000	<5,000	<5,000	<5,000	<5,000	110,000
MW3-OIL	04/25/12	21,000	68,000	56,000	130,000	190,000	210,000	130,000	160,000	76,000	39,000	25,000	12,000	<10,000	<10,000	<10,000	•	1,100,000
MW3-OIL MW3-OIL	10/04/12 06/26/14		<50,000	<50,000 <10,000	150,000 43,000	230,000 75,000	260,000 83,000	180,000 76,000	210,000 78,000	99,000 37,000	55,000 19,000	<50,000 11,000	<50,000 <10,000	<50,000 <10,000	<50,000 <10,000	<50,000 <10,000	<50,000 <10,000	1,300,000 430,000
		<10,000	< 10,000	<10,000	43,000	73,000	03,000	70,000	70,000	37,000	19,000	11,000	<10,000	<10,000	<10,000	<10,000	<10,000	430,000
Note TO		Top of w	oll casing	alovation: d	datum is me	on coa lov	al.											
DTV		Depth to	Ŭ	elevation, o	iatum is me	an sea leve	∄.											
GW E		•		tion: datum	ie maan e	a level If	liquid-phas	a hydrocarh	one precen	t alevation	adjusted us	sing TOC -	IDTW - (DT	v 0 8)1				
NAF			eous phas		i is ilicali si	ea level. II	iiquiu-priasi	e riyurocar.	ons presen	i, elevation	aujusteu us	sing roc -	[D144 - (F1	x 0.0)].				
[]		•	recovered	•														
TPH				•	e ac diacal	analyzed us	sing EDA M	ethod 3510	/8015 (mod	ified)								
TPH			-			-	_		30/8015 (m									
MTBE 8	•		-		lyzed using	-	_	i Metrioù 30	130/0013 (111	odined).								
MTBE 8		•			lyzed using lyzed using													
BTE		•						ina EPA Me	ethod 8021E	.								
TO				•	using Stan	•	•	ing Li 70 Mc	74104 002 12	,.								
EHC			-	-	Stoddard So			PA Metho	d 8015.									
EDI					using EPA I	-	_											
1,2-D				•	ising EPA N													
TAM		•		•	alyzed using													
TBA	= A	•			d using EP	-												
ETB	E =	-	-	-	zed using E													
DIP	E =	-		-	sing EPA M													
Ethar	nol =	Ethanol a	analyzed u	sing EPA N	Method 826	0B.												
TPH Carbo	n Range =	Total pet	roleum hyd	drocarbon r	range analy	zed using E	EPA Method	d 8015B(M)										
μg/l	L =	Microgra	ms per lite	r.														
mg/l	(g =	Milligram	s per kilog	ıram.														
ND) =	Not dete	cted at or a	above laboi	ratory repoi	ting limits.												
	=	Not mea	sured/Not	sampled/N	ot analyzed	l.												
<	=	Less tha	n the state	d laborator	y reporting	limit.												
а	=	A peak e	A peak eluting earlier than benzene, suspected to be MTBE, was present.															
b	=	Sample	containers	broken in	transit.													
С	=	Chromat	ogram pat	tern: unider	ntified hydro	ocarbons C	6 - C12.											
d	=	Chromat	ogram pat	tern: weath	ered gasoli	ne C6 - C1	2.											
е	=	Chromat	Chromatogram pattern: weathered diesel C9 - C24 and unidentified hydrocarbons C9 - C36.															
f	=	Chromatogram pattern: unidentified hydrocarbons C9 - C24.																
g	=	Hydrocai	rbon patter	n is not co	nsistent wit	h that of the	specified s	standard.										
h	=	Analysis	run. Resu	ılts not ava	ilable.													

TABLE 1D

ADDITIONAL CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA - CARBON RANGE, PRODUCT SAMPLES Former Exxon Service Station 73006 720 High Street Oakland, California

Notes:		
i	=	TPHd note: Analyst notes samples resemble paint thinner more than Stoddard Solvent.
j	=	Analyte detected in trip blank, method blank, and/or bailer blank; result is suspect.
k	=	Higher reported TPH concentrations in groundwater may be due to different laboratory quantitation procedures.
1	=	Elevated result due to single analyte peak in quantitation range.
m	=	Surrogate recovery above control limits; this may result in a high bias.
n	=	Laboratory QA/QC issue(s); ERI considers the result to be usable. Please refer to laboratory report for details.
0	=	Analyzed using EPA Method 624 (volatile organic compounds).
р	=	Analyzed for Stoddard Solvent using EPA Method 5030/8015.
q	=	Analyzed for Stoddard Solvent using modified EPA Method 5030/8015. Sample chromotogram was not representative of a Stoddard Solvent pattern.
		Pattern was representative of the heavier hydrocarbons found in a gasoline pattern.
r	=	Stoddard Solution detected in the sample at approximately 320 parts per billion (ppb).
s	=	Chloromethane.
t	=	Analyte presence was not confirmed by second column or GC/MS analysis.
u	=	Product detected in well; therefore, groundwater samples were not collected.
V	=	Compound did not meet method-described identification guidelines. Identification was based on additional GC/MS characteristics.

TABLE 2

WELL CONSTRUCTION DETAILS
Former Exxon Service Station 73006
720 High Street
Oakland, California

					Oak	lianu, Camonna						
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	05/21/88	03/26/07	12.79	10	29	29	4	Sch 40 PVC	4-29		2-29	
MW2	09/10/87		13.06		36	36	4		10-35		8-36	
MW3	09/10/87		13.71		36	36	4		10-35		8-36	
MW4	09/10/87		12.77		36	36	4		10-35		8-36	
MW5	09/10/87	07/18/89	8.38		36	36	4		8-33		6-36	
MW6	09/10/87		14.23		36	36	4		10-35		8-36	
MW7	09/10/87	12/21/00	14.84		36	36	4		10-35		8-36	
MW8	09/10/87	12/21/00	13.45		36	36	4		10-35		8-36	
MW9	05/12/88	12/21/00	14.64		33	33	4		7-32		6-33	
MW10	11/27/89	12/21/00	14.05	10	25.5	25	4	Sch 40 PVC	15-25	0.010	13-25	
MW11	11/27/89	12/21/00	13.55	10	30.5	30	4	Sch 40 PVC	15-30	0.010	14-30	
MW12	11/28/89		12.61	10	15.5	15.5	4	Sch 40 PVC	5-15	0.010	4-15.5	
MW13	11/28/89	12/21/00	14.20	10	15.5	15	4	Sch 40 PVC	5-15	0.010	4-15	
MW14	10/31/90		15.14	10	18.5	17	4	PVC	7-17	0.010	5.5-17	
MW15	10/31/90	12/21/00	13.73	10	17	17	4	PVC	7-17	0.010	5.5-17	
MW16A	08/24/09		13.02	8	14	12.5	2	PVC	7.5-12.5	0.020	6.5-14	#3 Sand
MW16B	08/24/09		13.19	8	24	24	2	PVC	20-24	0.020	18-24	#3 Sand
MW17A	08/25/09		13.99	8	13	13	2	PVC	8-13	0.020	6.5-13	#3 Sand
MW17B	08/25/09		13.92	8	26	26	2	PVC	22-26	0.020	20-26	#3 Sand
MW18A	08/25/09		13.55	8	14	14	2	PVC	9-14	0.020	7-14	#3 Sand
MW18B	08/25/09		13.21	8	31	31	2	PVC	26-31	0.020	24-31	#3 Sand
MW19A	08/26/09		15.05	8	14	14	2	PVC	9-14	0.020	7-14	#3 Sand
MW19B	08/26/09		15.05	8	26	24	2	PVC	20-24	0.020	18-26	#3 Sand
MW20	05/09/14		12.58	10	13.5	13.5	2	PVC	8-13.5	0.020	7-13.5	#3 Sand
MW21	05/09/14		11.82	10	13	13	2	PVC	8-13	0.020	7-13	#3 Sand
VW1	02/11/93	Destroyed	14.01	12	8	7	4	Sch 40 PVC	4-7	0.10	3-7	
VW2	02/11/93	12/21/00	14.09	12	10	10	4	Sch 40 PVC	5-10	0.10	4-10	
VW3	02/11/93	12/21/00	13.37	12	8	8	4	Sch 40 PVC	5-8	0.10	4-8	

TABLE 2

WELL CONSTRUCTION DETAILS
Former Exxon Service Station 73006 720 High Street
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
RW1	April 1994		13.76				6					
RW2	April 1994		13.45				6					
RW3	April 1994		13.12				6					
RW4	April 1994		12.65				6					
RW5	April 1994	12/21/00					6					
RW6	April 1994	12/21/00					6					
RW7	April 1994	12/21/00					6					
AS1	April 1994											
AS2	April 1994											
AS3	April 1994											
AS4	April 1994											
AS5	April 1994											
AS6	April 1994											

Notes:

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

PVC Polyvinyl chloride.

Feet below ground surface. feet bgs

Not measured.

					Oakiano, Cai						
Sample ID	Associated Well/Boring	Sampling Date	Depth (feet bgs)	TPHmo (mg/kg)	TPHd (mg/kg)	TPHg (mg/kg)	MTBE (mg/kg)	B (mg/kg)	T (mg/kg)	E (mg/kg)	X (mg/kg)
Excavation Sa	amples										
Former Gasolin	e UST Excavation										
S-5-T1F		04/28/87	5.0			1,846		0.9	6.3	5.6	28
S-5-T1P		04/28/87	5.0			2,613		0.89	3	2.9	14
S-5-T2F		04/28/87	5.0			454		<0.2	<0.2	1.4	2.9
S-5-T2P		04/28/87	5.0			1,735		0.54	0.77	2.1	10
S-5-T3F		04/28/87	5.0			1,936		0.61	0.5	1.7	6.3
S-5-T3P		04/28/87	5.0			5,995		< 0.01	0.035	0.015	0.039
S-5-WOT		04/28/87	5.0		<5			0.21	<0.2	0.6	2.7
S-8-N		05/05/87	8.0			96.8					
S-10-E		05/05/87	10.0			186.6					
S-7-S		05/05/87	7.0			13.55					
S-6-W		05/05/87	6.0			8.69					
S-16-S		05/06/87	16.0			0.86					
S1		05/14/87	14.0		С	С	С	С	С	С	С
S2		05/14/87	14.0		С	С	С	С	С	С	С
S-14EE		05/15/87	14.0					20	40	60	180
Former Product	t Line Trench Samp	oles									
S3-Trench		04/28/87	3.0		434						
S(3A+3B)		05/05/87				17.0					
S(3C+3D)		05/05/87				4,299.0					
S-1T		06/03/87				0.71					
S-2T		06/03/87				1.70					
S-3T		06/03/87				3.21					
S-4T		06/03/87				0.44					
Former Gasolin	e UST Pit										
S-1A		07/26/89	5.0		<5						
S-1B		07/26/89	9.0			61					
S-2A		08/04/89	9.0			3.8		< 0.050	< 0.050	< 0.050	< 0.050
S-3A		08/04/89	9.0		4,200	290		0.77	0.15	0.30	0.63
S-4A		08/04/89	9.0			93		<0.097	<0.050	< 0.050	< 0.050
		33,31,00	3.0			30		-0.001	-0.000	-0.000	-0.000

					Oakland, Cali						
Sample ID	Associated Well/Boring	Sampling Date	Depth (feet bgs)	TPHmo (mg/kg)	TPHd (mg/kg)	TPHg (mg/kg)	MTBE (mg/kg)	B (mg/kg)	T (mg/kg)	E (mg/kg)	X (mg/kg)
New Tank Pit Ex	cavation										
S-12-TPW1		01/15/91	12.0		<10	6.2		< 0.005	0.010	0.18	0.31
S-8-TPW2		01/15/91	8.0		<10	6.5		< 0.005	< 0.005	0.25	0.41
S-12-TPW4		01/15/91	12.0		<10	<1.0		< 0.005	< 0.005	< 0.005	< 0.005
S-8-TPW5		01/15/91	8.0		<10	<1.0		< 0.005	< 0.005	< 0.005	< 0.005
S-4-TPW6		01/15/91	4.0		<10	<1.0		< 0.005	< 0.005	< 0.005	< 0.005
S-8-TPW8		01/15/91	8.0		<10	53		< 0.005	0.053	0.48	0.70
S-4-TPW9		01/15/91	4.0		<10	<1.0		< 0.005	< 0.005	< 0.005	0.010
S-12-TPW10		01/15/91	12.0		<10	19		< 0.005	0.15	0.25	0.86
S-8-TPW11		01/15/91	8.0		<10	8.8		< 0.005	0.017	0.13	0.36
S-4-TPW12		01/15/91	4.0		<10	<1.0		< 0.005	< 0.005	< 0.005	0.012
S-15-TPF1		01/15/91	15.0		<10	1.1		< 0.005	< 0.005	0.016	0.078
S-15-TPF2		01/15/91	15.0		<10	12		< 0.005	0.15	0.13	0.44
S-15-TPF3		01/15/91	15.0		<10	1.3		0.007	0.014	0.025	0.097
S-15-TPF4		01/15/91	15.0		<10	<1.0		< 0.005	< 0.005	< 0.005	< 0.005
Monitoring We	lls and Soil Borir	ngs									
Monitoring Wells	5										
S-7.5-B1	MW1	05/21/88	7.5		25	<10		<0.050	<0.050	<0.15	<0.15
S-10-B2	MW2	09/10/87	10.0			9.97		4.14	0.09	1.09	0.38
S-10-B3	MW3	09/10/87	10.0		4,261	2,689		126	17	41	131
S-10-B4	MW4	09/10/87	10.0		2,938	209.9		14.9	0.5	6.4	11.1
S-10-B5	MW5	09/10/87	10.0		848	90.83		9.27	0.24	1.45	6.62
S-10-B6	MW6	09/10/87	10.0			448.0		5.7	3.7	14.1	63.2
S-10-B7	MW7	09/10/87	10.0		1,338	901.6		26.4	5.3	41.4	54.2
S-10-B8	MW8	09/10/87	10.0			0.48		<0.05	<0.05	<0.05	< 0.05
S-9-B9	MW9	05/12/88	10.0			<2		<0.05	<0.05	<0.05	<0.05
S-10-B10	MW10	11/27/89	10.0		<10	<2		<0.05	<0.05	<0.05	<0.05
S-10-B11	MW11	11/27/89	11.0		<10	<2		0.064	0.11	<0.05	0.076
S-7.5-B12	MW12	11/28/89	7.5		23	160		1.2	3.1	3.4	14
S-10-B12	MW12	11/28/89	10.0		16	3.1		0.86	0.090	0.18	0.17

Oakland, California												
Sample ID	Associated Well/Boring	Sampling Date	Depth (feet bgs)	TPHmo (mg/kg)	TPHd (mg/kg)	TPHg (mg/kg)	MTBE (mg/kg)	B (mg/kg)	T (mg/kg)	E (mg/kg)	X (mg/kg)	
S-7.5-B13	MW13	11/28/89	7.5		<10	<2		<0.05	0.12	<0.05	0.10	
S-10-B13	MW13	11/28/89	10.0		<10	17		<0.05	0.14	0.33	1.2	
S-3-MW14	B31	10/31/90	3.0		<10	<1.0		<0.005	< 0.005	< 0.005	< 0.007	
S-8-MW14	B31	10/31/90	8.0		<10	<1.0		< 0.005	< 0.005	< 0.005	< 0.007	
S-18-MW14	B31	10/31/90	18.0		<10	837		0.10	1.6	6.0	34	
S-6-MW15	B32	10/31/90	6.0		<10	<1.0		< 0.005	< 0.005	<0.005	< 0.007	
S-8.5-MW15	B32	10/31/90	8.5		<10	<1.0		< 0.005	< 0.005	< 0.005	< 0.007	
S-13.5-MW15	B32	10/31/90	13.5		<10	<1.0		< 0.005	< 0.005	< 0.005	< 0.007	
S-5.0-MW16A	MW16A	08/20/09	5.0		<5.0	0.67a	< 0.0050	<0.0050	<0.0050	< 0.0050	<0.0050	
S-10.5-MW16A	MW16A	08/24/09	10.5		90a	1,200	<2.0	<2.0	<2.0	16	3.3	
S-12.5-MW16A	MW16A	08/24/09	12.5		<5.0	2.3	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	
S-5.0-MW16B	MW16B	08/20/09	5.0		<5.0	3.6a	< 0.0050	<0.0050	<0.0050	<0.0050	<0.0050	
S-10.5-MW16B	MW16B	08/24/09	10.5		5.6a	130	< 0.50	< 0.50	< 0.50	1.9	1.0	
S-16.5-MW16B	MW16B	08/25/09	16.5		<5.0	1.2	0.0060	< 0.0050	< 0.0050	< 0.0050	< 0.0050	
S-20.5-MW16B	MW16B	08/25/09	20.5		<5.0	0.76	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	
S-23.0-MW16B	MW16B	08/25/09	23.0		<5.0	<0.50	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	
S-5.0-MW17A	MW17A	08/20/09	5.0		<5.0	<0.50	< 0.0050	<0.0050	<0.0050	< 0.0050	<0.0050	
S-10.5-MW17A	MW17A	08/25/09	10.5		9.5a	110	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	
S-12.5-MW17A	MW17A	08/25/09	12.5		<5.0	56	<0.50	<0.50	<0.50	<0.50	<0.50	
S-5.5-MW17B	MW17B	08/18/09	5.5		6.1	<0.50	< 0.0050	<0.0050	<0.0050	< 0.0050	<0.0050	
S-10.5-MW17B	MW17B	08/25/09	10.5		<5.0	0.92	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	
S-17.0-MW17B	MW17B	08/25/09	17.0		<5.0	<0.50	0.0082	< 0.0050	< 0.0050	< 0.0050	< 0.0050	
S-20.5-MW17B	MW17B	08/25/09	20.5		<5.0	< 0.50	0.096	< 0.0050	< 0.0050	< 0.0050	< 0.0050	
S-23.0-MW17B	MW17B	08/25/09	23.0		<5.0	<0.50	0.0060	< 0.0050	< 0.0050	< 0.0050	< 0.0050	
S-24.5-MW17B	MW17B	08/25/09	24.5		<5.0	<0.50	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	
S-5-MW18A	MW18A	08/17/09	5.0		<5.0	<0.50	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	
S-10.5-MW18A	MW18A	08/26/09	10.5		<5.0	<0.50	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	
S-12.5-MW18A	MW18A	08/26/09	12.5		14	1.8	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	
S-5-MW18B	MW18B	08/17/09	5.0		<5.0	<0.50	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	
S-10.5-MW18B	MW18B	08/25/09	10.5		2,700	990	<1.0	<1.0	<1.0	<1.0	<1.0	
S-12.5-MW18B	MW18B	08/25/09	12.5		940	950	<1.0	<1.0	<1.0	<1.0	<1.0	
S-17.0-MW18B	MW18B	08/25/09	17.0		<5.0	<0.50	<0.50	< 0.50	< 0.50	< 0.50	< 0.50	
S-21.0-MW18B	MW18B	08/25/09	21.0		<5.0	<0.50	<0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	
S-27.0-MW18B	MW18B	08/25/09	27.0		<5.0	<0.50	<0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	
S-29.0-MW18B	MW18B	08/25/09	29.0		<5.0	<0.50	<0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	
S-30.5-MW18B	MW18B	08/25/09	30.5		<5.0	< 0.50	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	

					Oakland, Cali						
Sample ID	Associated	Sampling	Depth	TPHmo	TPHd	TPHg	MTBE	B (*** **/* **)	T (****)	E (****)	X (*** **/! * **)
	Well/Boring	Date	(feet bgs)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
S-5.0-MW19A	MW19A	08/18/09	5.0		<5.0	<0.50	< 0.0050	<0.0050	<0.0050	<0.0050	<0.0050
S-10.5-MW19A	MW19A	08/26/09	10.5		110a	1,900	< 0.50	< 0.50	< 0.50	19	20
S-12.5-MW19A	MW19A	08/26/09	12.5		<5.0	<0.50	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
S-5.0-MW19B	MW19B	08/18/09	5.0		<5.0	<0.50	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
S-10.5-MW19B	MW19B	08/26/09	10.5		<5.0	36	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
S-16.0-MW19B	MW19B	08/26/09	16.0		<5.0	0.55	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
S-20.5-MW19B	MW19B	08/26/09	20.5		<5.0	< 0.50	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
S-22.5-MW19B	MW19B	08/26/09	22.5		<5.0	< 0.50	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
S-24.5-MW19B	MW19B	08/26/09	24.5		<5.0	<0.50	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
S-5-MW20	MW20	05/09/14	5.0		160a	91a	<0.50	<0.50	<0.50	<0.50	<0.50
S-8-MW20	MW20	05/09/14	8.0		530a	160a	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
S-10-MW20	MW20	05/09/14	10.0		380a	270a	< 0.52	< 0.52	< 0.52	< 0.52	< 0.52
S-13-MW20	MW20	05/09/14	13.0		200a	320a	<0.50	<0.50	<0.50	<0.50	<0.50
S-5-MW21	MW21	05/08/14	5.0		5.5a	1.9a	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052
S-10-MW21	MW21	05/09/14	10.0		840a	360a	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49
S-13-MW21	MW21	05/09/14	13.0		270a	840a	<0.50	<0.50	<0.50	0.81	<0.50
Soil Borings											
S-10-B14	B14	11/29/89	10.0		1,900	3,400		<0.5	<0.5	1.2	1.2
S-5-B15	B15	11/28/89	5.0		<10	130		2.2	7.2	2.2	11
S-7.5-B15	B15	11/28/89	7.5		28	98		0.97	3.9	1.8	9.8
S-10-B15	B15	11/28/89	10.0		82	180		1.4	4.4	3.6	16
S-5-B16	B16	11/28/89	5.0		43	87		2.2	4.4	1.7	7.6
S-7.5-B16	B16	11/28/89	7.5		1,500	1,100		9.0	60	23	109
S-10-B16	B16	11/28/89	10.0		110	380		4.2	11	8.4	35
S-5-B17	B17	11/29/89	5.0		<10	<2		< 0.050	<0.050	< 0.050	< 0.050
S-7.5-B17	B17	11/29/89	7.5		<10	8.1		0.085	< 0.050	0.19	0.24
S-10-B17	B17	11/29/89	10.0		200	7.1		0.091	<0.050	0.20	0.25
S-5-B18	B18	11/29/89	5.0		46	210		1.6	0.71	3.9	12
S-7.5-B18	B18	11/29/89	7.5		270	210		2.4	0.50	4.8	20
S-10-B18	B18	11/29/89	10.0		2,000	130		0.93	0.36	2.8	11
S-10-B19	B19	11/29/89	10.0		21	21		<0.5	<0.5	<0.5	1.7
S-10-B20	B20	11/29/89	10.0		360	3,100		<5	<5	64	120
S-3-B21	B21	11/01/90	3.0		1,125	433		9.0	0.9	7.5	13
S-8-B21	B21	11/01/90	8.0		2,112	1,084		22	3.5	31	100

Oakland, California											
Sample ID	Associated Well/Boring	Sampling Date	Depth (feet bgs)	TPHmo (mg/kg)	TPHd (mg/kg)	TPHg (mg/kg)	MTBE (mg/kg)	B (mg/kg)	T (mg/kg)	E (mg/kg)	X (mg/kg)
S-5.5-B22	B22	11/01/90	5.5		2,570	423		6.9	1.0	19	18
S-8-B22	B22	11/01/90	8.0		210	3,232		31	123	137	493
S-3-B23	B23	11/01/90	3.0		<10	20		0.50	0.08	0.41	0.70
S-8-B23	B23	11/01/90	8.0		<10	277		2.4	3.5	7.2	28
S-5.5-B24	B24	11/01/90	5.5		<10	<1.0		< 0.005	< 0.005	< 0.005	< 0.007
S-8-B24	B24	11/01/90	8.0		<10	80		0.70	0.26	<0.005	0.70
S-5.5-B25	B25	11/01/90	5.5		<10	<1.0		< 0.005	< 0.005	< 0.005	< 0.007
S-8-B25	B25	11/01/90	8.0		<10	15		0.27	0.05	0.17	0.75
S-5.5-B26	B26	11/01/90	5.5		<10	<1.0		<0.005	< 0.005	<0.005	<0.007
S-8-B26	B26	11/01/90	8.0		<10	<1.0		<0.005	<0.005	<0.005	<0.007
S-5.5-B27	B27	11/01/90	5.5		<10	12		0.17	0.05	1.7	0.91
S-8-B27	B27	11/01/90	8.0		<10	608		8.1	2.7	19	30
S-3-B28 S-8-B28	B28 B28	11/02/90 11/02/90	3.0 8.0		<10 <10	22 1,295		1.0 10	1.0 45	0.43 52	2.5 156
3-0-D20	DZ0	11/02/90	6.0		<10			10	45	52	150
S-5.5-B29 S-8-B29	B29 B29	11/02/90 11/02/90	5.5 8.0		<10 <10	1,931 1,262		31 14	122 68	84 49	240 153
S-5.5-B30 S-8-B30	B30 B30	11/02/90 11/02/90	5.5 8.0		<10 <10	1,069 1,118		20 9.3	39 62	44 47	116 143
S-3.5-B35 S-6.5-B35	VW1 VW1	02/11/93 02/11/93	3.5 6.5		<5.0 6.3	<1 120		0.033 2	<0.0050 3.2	<0.0050 1.8	0.0062 7.3
S-7.5-B35	VW1	02/11/93	7.5		30b	410		3.7	9.6	8.2	35
S-9-B35	VW1	02/11/93	9.0		12	950		7.6	28	21	89
S-4-B36	VW2	02/11/93	4.0		<5.0	1.7		0.023	<0.0050	<0.0050	0.021
S-7-B36	VW2	02/11/93	7.0		<5.0	<1		0.0054	< 0.0050	< 0.0050	< 0.0050
S-9.5-B36	VW2	02/11/93	9.5		<5.0	160		0.65	0.34	2.3	5.2
S-4-B37	VW3	02/11/93	4.0		5.8	92		2.1	0.75	2.4	7.9
S-6-B37	VW3	02/11/93	6.0		21	220		2	5.6	5.8	21
S-7.5-B37	VW3	02/11/93	7.5		14	220		1.7	2.9	4.9	21
S-3-B38	B38	01/05/15	3.0	<25	<4.9	<0.51	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051
S-5.5-B38	B38	01/05/15	5.5	<25	<5.0	<0.48	<0.0050	<0.0050	<0.0050	< 0.0050	< 0.0050
S-9.5-B38	B38	01/05/15	9.5	<25	<5.0	<0.50	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051

Comple ID	Accesiated	Complina	Donth	TDLI	Oakland, Cali		MTDE	P	Т		
Sample ID	Associated Well/Boring	Sampling Date	Depth (feet bgs)	TPHmo (mg/kg)	TPHd (mg/kg)	TPHg (mg/kg)	MTBE (mg/kg)	B (mg/kg)	ı (mg/kg)	E (mg/kg)	X (mg/kg)
			· · · · · · · · · · · · · · · · · · ·								
CPT Borings											
S-2-CPT1	CPT1	04/06/05	2.0		155	<4.97	<0.0020	0.0038	<0.0050	< 0.0050	< 0.0050
S-4-CPT1	CPT1	04/06/05	4.0		539	<4.98	< 0.0020	0.0057	< 0.0050	< 0.0050	0.0218
S-6-CPT1	CPT1	04/06/05	6.0		270	<4.99	<0.0020	0.0056	<0.0050	<0.0050	0.0219
S-2-CPT2	CPT2	04/07/05	2.0		<10.2	<5.01	<0.0020	<0.0010	<0.0050	<0.0050	< 0.0050
S-4-CPT2	CPT2	04/07/05	4.0		<10.0	<5.04	< 0.0020	< 0.0010	< 0.0050	< 0.0050	< 0.0050
S-6-CPT2	CPT2	04/07/05	6.0		59.6	<5.03	< 0.0020	0.0053	< 0.0050	< 0.0050	0.0210
S-8-CPT2	CPT2	04/07/05	8.0		77.7	<4.98	<0.0020	0.0130	0.0053	<0.0050	0.0092
S-2-CPT3	CPT3	04/07/05	2.0		402	<5.03	<0.0020	<0.0010	<0.0050	<0.0050	<0.0050
S-4-CPT3	CPT3	04/07/05	4.0		73.2	<5.03	<0.0020	< 0.0010	< 0.0050	<0.0050	< 0.0050
S-6-CPT3	CPT3	04/07/05	6.0		177	<5.00	<0.0020	< 0.0010	< 0.0050	<0.0050	< 0.0050
S-8-CPT3	CPT3	04/07/05	8.0		33.0	<5.00	<0.0020	<0.0010	<0.0050	<0.0050	<0.0050
S-2-CPT4	CPT4	04/07/05	2.0		<10.0	<5.02	<0.0020	0.0021	<0.0050	0.0094	<0.0050
S-4-CPT4	CPT4	04/07/05	4.0		<9.92	<5.01	0.0029	0.0163	< 0.0050	0.189	0.159
S-6-CPT4	CPT4	04/07/05	6.0		10.3	52.7	0.0077	0.0288	0.0196	5.70	19.1
S-8-CPT4	CPT4	04/07/05	8.0		17.3	62.3	0.0230	0.0413	0.0289	0.112	5.40
S-2-CPT5	CPT5	04/07/05	2.0		<9.92	<5.01	<0.0020	0.0019	<0.0050	<0.0050	<0.0050
S-4-CPT5	CPT5	04/07/05	4.0		12.0	<4.98	<0.0020	0.0025	< 0.0050	<0.0050	< 0.0050
S-6-CPT5	CPT5	04/07/05	6.0		<9.92	<5.04	<0.0020	0.0011	< 0.0050	<0.0050	< 0.0050
S-8-CPT5	CPT5	04/07/05	8.0		<10.1	<5.04	0.0046	<0.0010	<0.0050	<0.0050	<0.0050
S-2-CPT6	CPT6	04/06/05	2.0		<9.98	<5.05	<0.0020	<0.0010	<0.0051	<0.0051	<0.0051
S-4-CPT6	CPT6	04/06/05	4.0		<10.1	<5.02	<0.0020	<0.0010	<0.0050	<0.0050	< 0.0050
S-6-CPT6	CPT6	04/06/05	6.0		93.4	<5.02	<0.0020	<0.0010	< 0.0050	<0.0050	<0.0050
S-8-CPT6	CPT6	04/06/05	8.0		<9.88	<5.02	<0.0020	<0.0010	<0.0050	<0.0050	<0.0050
S-5-CPT7	CPT7	12/11/06	5.0		<3.92	<0.502	<0.00200	<0.00200	<0.00200	<0.00200	<0.00500
S-5-CPT11	CPT11	12/12/06	5.0		26a	<0.10	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
S-5-CPT12	CPT12	12/11/06	5.0		<3.96	<0.498	<0.00200	<0.00200	<0.00200	<0.00200	<0.00500
Direct-Push Samp	ples										
S-2-DP1	DP1	04/07/05	2.0		<10.0	<5.01	<0.0020	0.0029	<0.0050	<0.0050	<0.0050
S-4-DP1	DP1	04/07/05	4.0		<10.1	<5.02	< 0.0020	0.0139	< 0.0050	0.0061	0.0223
S-6-DP1	DP1	04/07/05	6.0		28.3	65.0	< 0.0020	0.0890	0.0131	11.6	56.5
S-8-DP1	DP1	04/07/05	8.0		79.8	226	<0.100	0.743	<1.24	6.34	17.5
S-10.5-DP1	DP1	04/14/05	10.5		33.0a	1,190	0.0111	4.78	6.67	32.9	130

					Oakiand, Cali						
Sample ID	Associated	Sampling	Depth (fact base)	TPHmo	TPHd	TPHg	MTBE	B (*** **/* **)	T	E (****)	X (*** **/***)
	Well/Boring	Date	(feet bgs)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
S-2-DP3	DP3	04/06/05	2.0		1,840	<5.02	<0.0020	<0.0010	<0.0050	<0.0050	<0.0050
S-4-DP3	DP3	04/06/05	4.0		<10.1	<5.02	< 0.0020	< 0.0010	< 0.0050	<0.0050	< 0.0050
S-6-DP3	DP3	04/06/05	6.0		<10.2	<5.03	<0.0020	<0.0010	<0.0050	<0.0050	<0.0050
S-8-DP3	DP3	04/06/05	8.0		<10.1	<5.00	<0.0020	<0.0010	<0.0050	< 0.0050	< 0.0050
S-9.5-DP3	DP3	04/14/05	9.5		<10.1	<4.95	<0.0020	<0.0010	<0.0050	<0.0050	<0.0050
S-12-DP3	DP3	04/14/05	12.0		64.0a	26.3	<0.0020	0.0209	<0.0050	0.0079	0.0780
S-2-DP4	DP4	04/07/05	2.0		65.6	<5.00	< 0.0020	0.0044	< 0.0050	<0.0050	0.0091
S-4-DP4	DP4	04/07/05	4.0		<9.96	<5.05	< 0.0020	0.0027	< 0.0051	<0.0051	<0.0051
S-6-DP4	DP4	04/07/05	6.0		<10.2	<5.01	< 0.0020	0.0114	< 0.0050	0.136	1.55
S-8-DP4	DP4	04/07/05	8.0		11.1	12.4	< 0.0020	0.0260	0.0086	1.82	2.36
S-10.5-DP4	DP4	04/14/05	10.5		50.0a	366	<0.0020	1.39	1.49	5.76	33.9
S-2-DP5	DP5	04/07/05	2.0		12,000	16.7	<0.0020	7.79	0.0235	0.0116	0.0588
S-4-DP5	DP5	04/07/05	4.0		1,200	<4.98	<0.0020	0.128	<0.0050	0.0100	0.0228
S-6-DP5	DP5	04/07/05	6.0		3,610	8.61	<0.0020	0.599	< 0.0050	0.0095	0.0339
S-8-DP5	DP5	04/07/05	8.0		3,850	522	<0.0020	6.99	<1.26	<1.26	2.09
S-10.5-DP5	DP5	04/14/05	10.5		875a	842	<0.0020	4.61	1.14	7.90	1.75
S-2-DP6	DP6	04/06/05	2.0		13.1	<5.05	<0.0020	<0.0010	<0.0051	<0.0051	<0.0051
S-4-DP6	DP6	04/06/05	4.0		36.4	<5.05	<0.0020	<0.0010	<0.0051	<0.0051	<0.0051
S-6-DP6	DP6	04/06/05	6.0		<20.4	<5.05	<0.0020	<0.0010	<0.0051	<0.0051	<0.0051
S-5-DP7	DP7	12/08/06	5.0		245a	0.696	<0.00200	< 0.00200	< 0.00200	<0.00200	< 0.00500
S-10-DP7	DP7	12/14/06	10.0		900	370	< 0.050	< 0.050	< 0.050	< 0.050	0.056
S-15.5-DP7	DP7	12/14/06	15.5		<1.0	<0.10	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
S-20-DP7	DP7	12/14/06	20.0		6.4a	<0.10	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
S-25.5-DP7	DP7	12/14/06	25.5		5.6a	<0.10	0.011	< 0.0050	< 0.0050	< 0.0050	< 0.0050
S-29.5-DP7	DP7	12/14/06	29.5		3.5a	<0.10	< 0.0050	< 0.0050	< 0.0050	<0.0050	< 0.0050
S-5-DP8	DP8	12/08/06	5.0		318a	<0.499	<0.00200	<0.00200	<0.00200	<0.00200	<0.00500
S-10-DP8	DP8	12/14/06	10.0		890	110	<0.050	<0.050	<0.050	<0.050	<0.050
S-15-DP8	DP8	12/14/06	15.0		49a	120	<0.050	<0.050	<0.050	<0.050	<0.050
S-19.5-DP8	DP8	12/14/06	19.5		2.9a	0.33	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
S-29.5-DP8	DP8	12/14/06	29.5		1.8a	<0.10	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
0 20.0 2. 0		,, 00	20.0			10.10	10.0000	10.0000	10.000	10.000	10.000
S-5-DP9	DP9	12/11/06	5.0		465a	< 0.495	< 0.00200	0.00773	< 0.00200	< 0.00200	<0.00500
S-9.5-DP9	DP9	12/15/06	9.5		2,000a	61	< 0.0050	< 0.0050	<0.0050	< 0.0050	0.013
S-14.5-DP9	DP9	12/15/06	14.5		10a	0.21	< 0.0050	< 0.0050	<0.0050	<0.0050	< 0.0050
S-20-DP9	DP9	12/15/06	20.0		5.7a	<0.10	< 0.0050	< 0.0050	<0.0050	< 0.0050	< 0.0050
S-25.5-DP9	DP9	12/15/06	25.5		16a	<0.10	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
S-29.5-DP9	DP9	12/15/06	29.5		4.1a	<0.10	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Hydropunch Sar	nples										
S-5-HP7	HP7	12/11/06	5.0		102a	<0.505	<0.00200	<0.00200	<0.00200	<0.00200	<0.00500
0 0-111 7	111 /	12/11/00	5.0	_ _ _	1020	\0.000	~U.UUZUU	~U.UUZUU	~0.00Z00	~U.UUZUU	~0.00000

TABLE 3A CUMULATIVE SOIL ANALYTICAL RESULTS

Former Exxon Service Station 73006 720 High Street

					Oakland, Cali	fornia					
Sample ID	Associated Well/Boring	Sampling Date	Depth (feet bgs)	TPHmo (mg/kg)	TPHd (mg/kg)	TPHg (mg/kg)	MTBE (mg/kg)	B (mg/kg)	T (mg/kg)	E (mg/kg)	X (mg/kg)
S-5-HP11	HP11	12/11/06	5.0		2.0a	<0.10	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
S-5-HP12	HP12	12/12/06	5.0		1.2a	<0.10	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Soil Stockpi	le Samples										
Soil Stockpile	e Samples										
SP-1 (A-D)		12/15/06			270	3.6	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
SP1-(1-4)		09/01/09			10	22	<0.50	<0.50	< 0.50	<0.50	< 0.50
SP-1		05/09/14				790a	<0.51	<0.51	<0.51	<0.51	<0.51
Notes:	Highlighted sample re	presentative of so	il removed from si	te. Sample in g	rey font represen	tative of pre-reme	ediation conditions				
S-2-CPT1	= Soil - Sample De	pth - Sample Loca	tion.								
TPHmo	= Total petroleum h	nydrocarbons as m	otor oil analyzed	using EPA Meth	od 8015B.						
TPHd	 Total petroleum h 	nydrocarbons as di	esel analyzed usi	ng EPA Method	8015B.						
TPHg	 Total petroleum h 	nydrocarbons as ga	asoline analyzed ι	using EPA Meth	od 8015B.						
MTBE	 Methyl tertiary bu 	ityl ether analyzed	using EPA Metho	d 8260B.							
BTEX	= Benzene, toluene	e, ethylbenzene, ar	nd total xylenes ar	nalyzed using EF	PA Method 8021E	3.					
ETBE	 Ethyl tertiary buty 	l ether analyzed u	sing EPA Method	8260B.							
TAME	 Tertiary amyl met 	thyl ether analyzed	d using EPA Meth	od 8260B.							
TBA	= Tertiary butyl alco	ohol analyzed usin	g EPA Method 82	60B.							
1,2-DCA	= 1,2-dichloroethan	ne analyzed using I	- EPA Method 8260)B.							
•	·	, ,									

DIPE = Di-isopropyl ether analyzed using EPA Method 8260B.

Ethanol = Ethanol analyzed using EPA Method 8260B.

Metals = Total metals analyzed using EPA Method 6010B.

PAHs = Polyaromatic hydrocarbons analyzed using EPA Method 8310.

= 1,2-dibromoethane analyzed using EPA Method 8260B.

feet bgs = Feet below ground surface.

EDB

mg/kg = Milligrams per kilogram.

= Less than the stated reporting limit.

a = Chromatographic pattern does not match that of the specified standard.

b = Hydrocarbons greater than C22 were detected; 460 mg/kg of oil and grease analyzed using Standard Method 5520 were detected.

c = Data missing from historical files.

d = n-Butylbenzene.

= Sample analyzed beyond recommended hold time.

					Oakland, Ca	ilifornia					
Sample ID	Associated Well/Boring	Sampling Date	Depth (feet bgs)	EDB (mg/kg)	1,2-DCA (mg/kg)	TAME (mg/kg)	TBA (mg/kg)	ETBE (mg/kg)	DIPE (mg/kg)	Ethanol (mg/kg)	Add'l VOCs (mg/kg)
Excavation Sam	ples										
Former Gasoli	ne UST Excavation	on									
S-5-T1F		04/28/87	5.0								
S-5-T1P		04/28/87	5.0								
S-5-T2F		04/28/87	5.0								
S-5-T2P		04/28/87	5.0								
S-5-T3F		04/28/87	5.0								
S-5-T3P		04/28/87	5.0								
S-5-WOT		04/28/87	5.0								
S-8-N		05/05/87	8.0								
S-10-E		05/05/87	10.0								
S-7-S		05/05/87	7.0								
S-6-W		05/05/87	6.0								
S-16-S		05/06/87	16.0								
S1		05/14/87	14.0								
S2		05/14/87	14.0								
S-14EE		05/15/87	14.0								
Former Produ	ct Line Trench Sa	mples									
S3-Trench		04/28/87	3.0								
S(3A+3B)		05/05/87									
S(3C+3D)		05/05/87									
S-1T		06/03/87									
S-2T		06/03/87									
S-3T		06/03/87									
S-4T		06/03/87									
Former Gasoli	ne UST Pit										
S-1A		07/26/89	5.0								
S-1B		07/26/89	9.0								
S-2A		08/04/89	9.0								
S-3A		08/04/89	9.0								
S-4A		08/04/89	9.0								
New Tank Pit I	Excavation										
S-12-TPW1		01/15/91	12.0								
S-8-TPW2		01/15/91	8.0								
S-12-TPW4		01/15/91	12.0								
S-8-TPW5		01/15/91	8.0								
S-4-TPW6		01/15/91	4.0								
S-8-TPW8		01/15/91	8.0								
3-0-1E NAQ		01/13/91	0.0								

Oakland, California												
Sample ID	Associated Well/Boring	Sampling Date	Depth (feet bgs)	EDB (mg/kg)	1,2-DCA (mg/kg)	TAME (mg/kg)	TBA (mg/kg)	ETBE (mg/kg)	DIPE (mg/kg)	Ethanol (mg/kg)	Add'I VOCs (mg/kg)	
S-4-TPW9		01/15/91	4.0									
S-12-TPW10		01/15/91	12.0									
S-8-TPW11		01/15/91	8.0									
S-4-TPW12		01/15/91	4.0									
S-15-TPF1 S-15-TPF2		01/15/91 01/15/91	15.0 15.0									
S-15-TPF3		01/15/91	15.0									
S-15-TPF4		01/15/91	15.0									
Monitoring Wells	and Soil Borings											
Monitoring Wel	lls											
S-7.5-B1	MW1	05/21/88	7.5									
S-10-B2	MW2	09/10/87	10.0									
S-10-B3	MW3	09/10/87	10.0									
S-10-B4	MW4	09/10/87	10.0									
S-10-B5	MW5	09/10/87	10.0									
S-10-B6	MW6	09/10/87	10.0									
S-10-B7	MW7	09/10/87	10.0									
S-10-B8	MW8	09/10/87	10.0									
S-9-B9	MW9	05/12/88	10.0									
S-10-B10	MW10	11/27/89	10.0									
S-10-B11	MW11	11/27/89	11.0									
S-7.5-B12	MW12	11/28/89	7.5									
S-10-B12	MW12	11/28/89	10.0									
S-7.5-B13 S-10-B13	MW13 MW13	11/28/89 11/28/89	7.5 10.0									
S-3-MW14	B31	10/31/90	3.0									
S-8-MW14	B31	10/31/90	8.0									
S-18-MW14	B31	10/31/90	18.0									
S-6-MW15	B32	10/31/90	6.0									
S-8.5-MW15	B32	10/31/90	8.5									
S-13.5-MW15	B32	10/31/90	13.5									

					Oakland, Ca	litornia					
Sample ID	Associated Well/Boring	Sampling Date	Depth (feet bgs)	EDB (mg/kg)	1,2-DCA (mg/kg)	TAME (mg/kg)	TBA (mg/kg)	ETBE (mg/kg)	DIPE (mg/kg)	Ethanol (mg/kg)	Add'I VOCs (mg/kg)
	vvcii/boring	Date	(icci bgs)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
S-5.0-MW16A	MW16A	08/20/09	5.0	< 0.0050	< 0.0050	<0.010	< 0.050	<0.010	< 0.010	<0.25	
S-10.5-MW16A	MW16A	08/24/09	10.5	<2.0	<2.0	<4.0	<20	<4.0	<4.0	<100	
S-12.5-MW16A	MW16A	08/24/09	12.5	<0.0050	<0.0050	<0.010	<0.050	<0.010	<0.010	<0.25	
S-5.0-MW16B	MW16B	08/20/09	5.0	<0.0050	<0.0050	<0.010	<0.050	<0.010	<0.010	<0.25	
S-10.5-MW16B	MW16B	08/24/09	10.5	< 0.50	< 0.50	<1.0	<5.0	<1.0	<1.0	<25	
S-16.5-MW16B	MW16B	08/25/09	16.5	< 0.0050	< 0.0050	< 0.010	< 0.050	< 0.010	< 0.010	< 0.25	
S-20.5-MW16B	MW16B	08/25/09	20.5	< 0.0050	< 0.0050	< 0.010	< 0.050	< 0.010	< 0.010	< 0.25	
S-23.0-MW16B	MW16B	08/25/09	23.0	<0.0050	<0.0050	<0.010	<0.050	<0.010	<0.010	<0.25	
S-5.0-MW17A	MW17A	08/20/09	5.0	<0.0050	<0.0050	<0.010	<0.050	<0.010	<0.010	<0.25	
S-10.5-MW17A	MW17A	08/25/09	10.5	<0.50	<0.50	<1.0	<5.0	<1.0	<1.0	<25	
S-12.5-MW17A	MW17A	08/25/09	12.5	<0.50	<0.50	<1.0	<5.0	<1.0	<1.0	<25	
S-5.5-MW17B	MW17B	08/18/09	5.5	<0.0050	<0.0050	<0.010	<0.050	<0.010	<0.010	<0.25	
S-10.5-MW17B	MW17B	08/25/09	10.5	<0.0050	<0.0050	< 0.010	< 0.050	<0.010	<0.010	<0.25	
S-17.0-MW17B	MW17B	08/25/09	17.0	<0.0050	< 0.0050	< 0.010	< 0.050	<0.010	<0.010	< 0.25	
S-20.5-MW17B	MW17B	08/25/09	20.5	<0.0050	< 0.0050	< 0.010	< 0.050	<0.010	<0.010	<0.25	
S-23.0-MW17B	MW17B	08/25/09	23.0	<0.0050	< 0.0050	< 0.010	< 0.050	<0.010	<0.010	<0.25	
S-24.5-MW17B	MW17B	08/25/09	24.5	< 0.0050	< 0.0050	<0.010	< 0.050	<0.010	<0.010	<0.25	
S-5-MW18A	MW18A	08/17/09	5.0	<0.0050	<0.0050	<0.010	<0.050	<0.010	<0.010	<0.25	
S-10.5-MW18A	MW18A	08/26/09	10.5	<0.0050	<0.0050	<0.010	<0.050	<0.010	<0.010	<0.25	
S-12.5-MW18A	MW18A	08/26/09	12.5	<0.0050	<0.0050	<0.010	< 0.050	<0.010	<0.010	<0.25	
S-5-MW18B	MW18B	08/17/09	5.0	<0.0050	<0.0050	<0.010	<0.050	<0.010	<0.010	<0.25	
S-10.5-MW18B	MW18B	08/25/09	10.5	<1.0	<1.0	<2.0	<10	<2.0	<2.0	<50	
S-12.5-MW18B	MW18B	08/25/09	12.5	<1.0	<1.0	<2.0	<10	<2.0	<2.0	<50	
S-17.0-MW18B	MW18B	08/25/09	17.0	<0.50	<0.50	<1.0	<5.0	<1.0	<1.0	<25	
S-21.0-MW18B	MW18B	08/25/09	21.0	<0.0050	< 0.0050	<0.010	< 0.050	<0.010	<0.010	<0.25	
S-27.0-MW18B	MW18B	08/25/09	27.0	<0.0050	<0.0050	<0.010	<0.050	<0.010	<0.010	<0.25	
S-29.0-MW18B	MW18B	08/25/09	29.0	<0.0050	<0.0050	<0.010	<0.050	<0.010	<0.010	<0.25	
S-30.5-MW18B	MW18B	08/25/09	30.5	<0.0050	<0.0050	<0.010	<0.050	<0.010	<0.010	<0.25	
S-5.0-MW19A	MW19A	08/18/09	5.0	<0.0050	<0.0050	<0.010	< 0.050	<0.010	<0.010	<0.25	
S-10.5-MW19A	MW19A	08/26/09	10.5	< 0.50	< 0.50	<1.0	<5.0	<1.0	<1.0	<25	
S-12.5-MW19A	MW19A	08/26/09	12.5	<0.0050	<0.0050	<0.010	<0.050	<0.010	<0.010	<0.25	
S-5.0-MW19B	MW19B	08/18/09	5.0	< 0.0050	<0.0050	< 0.010	<0.050	<0.010	<0.010	<0.25	
S-10.5-MW19B	MW19B	08/26/09	10.5	<0.50	< 0.50	<1.0	<5.0	<1.0	<1.0	<25	
S-16.0-MW19B	MW19B	08/26/09	16.0	< 0.0050	< 0.0050	<0.010	< 0.050	< 0.010	< 0.010	< 0.25	
S-20.5-MW19B	MW19B	08/26/09	20.5	< 0.0050	< 0.0050	< 0.010	< 0.050	< 0.010	< 0.010	< 0.25	
S-22.5-MW19B	MW19B	08/26/09	22.5	< 0.0050	< 0.0050	< 0.010	< 0.050	< 0.010	< 0.010	< 0.25	
S-24.5-MW19B	MW19B	08/26/09	24.5	<0.0050	<0.0050	<0.010	<0.050	<0.010	<0.010	<0.25	
S-5-MW20	MW20	05/09/14	5.0	<0.50	<0.50	<0.99	<5.0	<0.99	<0.99	<25	

Sample ID	Aggaigted	Compling	Donth	EDB	Oakland, Ca		TDA	ETDE	DIPE	Ethanal	V 4411 //OC2
Sample ID	Associated Well/Boring	Sampling Date	Depth (feet bgs)	EDB (mg/kg)	1,2-DCA (mg/kg)	TAME (mg/kg)	TBA (mg/kg)	ETBE (mg/kg)	(mg/kg)	Ethanol (mg/kg)	Add'l VOCs (mg/kg)
S-8-MW20	MW20	05/09/14	8.0	<0.50	<0.50	<1.0	<5.0	<1.0	<1.0	<25	
S-10-MW20	MW20	05/09/14	10.0	< 0.52	< 0.52	<1.0	<5.2	<1.0	<1.0	<26	
S-13-MW20	MW20	05/09/14	13.0	<0.50	<0.50	<0.99	<5.0	<0.99	<0.99	<25	
S-5-MW21	MW21	05/08/14	5.0	<0.0052	<0.0052	<0.010	<0.052	<0.010	<0.010	<0.26	
S-10-MW21	MW21	05/09/14	10.0	< 0.49	< 0.49	< 0.98	<4.9	< 0.98	< 0.98	<25	
S-13-MW21	MW21	05/09/14	13.0	<0.50	<0.50	<1.0	<5.0	<1.0	<1.0	<25	
Soil Borings											
S-10-B14	B14	11/29/89	10.0								
S-5-B15	B15	11/28/89	5.0								
S-7.5-B15	B15	11/28/89	7.5								
S-10-B15	B15	11/28/89	10.0								
S-5-B16	B16	11/28/89	5.0								
S-7.5-B16	B16	11/28/89	7.5								
S-10-B16	B16	11/28/89	10.0								
S-5-B17	B17	11/29/89	5.0								
S-7.5-B17	B17	11/29/89	7.5								
S-10-B17	B17	11/29/89	10.0								
S-5-B18	B18	11/29/89	5.0								
S-7.5-B18	B18	11/29/89	7.5								
S-10-B18	B18	11/29/89	10.0								
S-10-B19	B19	11/29/89	10.0								
S-10-B20	B20	11/29/89	10.0								
S-3-B21	B21	11/01/90	3.0								
S-8-B21	B21	11/01/90	8.0								
S-5.5-B22	B22	11/01/90	5.5								
S-8-B22	B22	11/01/90	8.0								
S-3-B23	B23	11/01/90	3.0								
S-8-B23	B23	11/01/90	8.0								
S-5.5-B24	B24	11/01/90	5.5								
S-8-B24	B24	11/01/90	8.0								
S-5.5-B25	B25	11/01/90	5.5								
S-8-B25	B25	11/01/90	8.0								
S-5.5-B26	B26	11/01/90	5.5								

					Oakland, Ca	lifornia					
Sample ID	Associated Well/Boring	Sampling Date	Depth (feet bgs)	EDB (mg/kg)	1,2-DCA (mg/kg)	TAME (mg/kg)	TBA (mg/kg)	ETBE (mg/kg)	DIPE (mg/kg)	Ethanol (mg/kg)	Add'l VOCs (mg/kg)
S-8-B26	B26	11/01/90	8.0								
S-5.5-B27	B27	11/01/90	5.5								
S-8-B27	B27	11/01/90	8.0								
S-3-B28	B28	11/02/90	3.0								
S-8-B28	B28	11/02/90	8.0								
S-5.5-B29	B29	11/02/90	5.5								
S-8-B29	B29	11/02/90	8.0								
S-5.5-B30	B30	11/02/90	5.5								
S-8-B30	B30	11/02/90	8.0								
S-3.5-B35	VW1	02/11/93	3.5								
S-6.5-B35	VW1	02/11/93	6.5								
S-7.5-B35	VW1	02/11/93	7.5								
S-9-B35	VW1	02/11/93	9.0								
S-4-B36	VW2	02/11/93	4.0								
S-7-B36	VW2	02/11/93	7.0								
S-9.5-B36	VW2	02/11/93	9.5								
S-4-B37	VW3	02/11/93	4.0								
S-6-B37	VW3	02/11/93	6.0								
S-7.5-B37	VW3	02/11/93	7.5								
S-3-B38	B38	01/05/15	3.0			<0.010	<0.051	<0.010	<0.010		
S-5.5-B38	B38	01/05/15	5.5			<0.0099	< 0.050	< 0.0099	< 0.0099		
S-9.5-B38	B38	01/05/15	9.5			<0.010	<0.051	<0.010	<0.010		
CPT Borings											
S-2-CPT1	CPT1	04/06/05	2.0	<0.0020	<0.00201	<0.0502	<0.0020	<0.0020	<0.0020		
S-4-CPT1	CPT1	04/06/05	4.0	< 0.0020	< 0.00200	< 0.0501	< 0.0020	< 0.0020	< 0.0020		
S-6-CPT1	CPT1	04/06/05	6.0	<0.0020	<0.00199	<0.0497	<0.0020	<0.0020	<0.0020		
S-2-CPT2	CPT2	04/07/05	2.0	<0.0020	<0.00202	< 0.0504	<0.0020	<0.0020	<0.0020		
S-4-CPT2	CPT2	04/07/05	4.0	< 0.0020	< 0.00201	< 0.0502	< 0.0020	< 0.0020	< 0.0020		
S-6-CPT2	CPT2	04/07/05	6.0	< 0.0020	< 0.00200	< 0.0501	< 0.0020	< 0.0020	< 0.0020		
S-8-CPT2	CPT2	04/07/05	8.0	<0.0020	<0.00200	<0.0500	<0.0020	<0.0020	<0.0020		
S-2-CPT3	CPT3	04/07/05	2.0	<0.0020	<0.00199	<0.0498	<0.0020	<0.0020	<0.0020		
S-4-CPT3	CPT3	04/07/05	4.0	<0.0020	<0.00198	< 0.0496	< 0.0020	< 0.0020	< 0.0020		
S-6-CPT3	CPT3	04/07/05	6.0	<0.0020	<0.00200	<0.0501	<0.0020	<0.0020	<0.0020		
S-8-CPT3	CPT3	04/07/05	8.0	<0.0020	<0.00201	<0.0502	<0.0020	<0.0020	<0.0020		
S-2-CPT4	CPT4	04/07/05	2.0	<0.0020	<0.00198	< 0.0496	<0.0020	<0.0020	<0.0020		

					Oakland, Cal						
Sample ID	Associated Well/Boring	Sampling Date	Depth (feet bgs)	EDB (mg/kg)	1,2-DCA (mg/kg)	TAME (mg/kg)	TBA (mg/kg)	ETBE (mg/kg)	DIPE (mg/kg)	Ethanol (mg/kg)	Add'I VOCs (mg/kg)
S-4-CPT4	CPT4	04/07/05	4.0	<0.0020	<0.00202	<0.0505	<0.0020	<0.0020	<0.0020		
S-6-CPT4	CPT4	04/07/05	6.0	< 0.0020	< 0.00200	< 0.0500	< 0.0020	< 0.0020	< 0.0020		
S-8-CPT4	CPT4	04/07/05	8.0	<0.0020	<0.00199	0.0567	<0.0020	<0.0020	<0.0020		
S-2-CPT5	CPT5	04/07/05	2.0	<0.0020	<0.00199	<0.0497	<0.0020	<0.0020	<0.0020		
S-4-CPT5	CPT5	04/07/05	4.0	< 0.0020	< 0.00200	< 0.0501	< 0.0020	< 0.0020	< 0.0020		
S-6-CPT5	CPT5	04/07/05	6.0	< 0.0020	<0.00198	< 0.0495	< 0.0020	< 0.0020	< 0.0020		
S-8-CPT5	CPT5	04/07/05	8.0	<0.0020	<0.00200	<0.0499	<0.0020	<0.0020	<0.0020		
S-2-CPT6	CPT6	04/06/05	2.0	<0.0020	<0.00200	<0.0499	<0.0020	<0.0020	<0.0020		
S-4-CPT6	CPT6	04/06/05	4.0	< 0.0020	< 0.00201	< 0.0502	< 0.0020	< 0.0020	< 0.0020		
S-6-CPT6	CPT6	04/06/05	6.0	< 0.0020	< 0.00202	< 0.0504	< 0.0020	< 0.0020	< 0.0020		
S-8-CPT6	CPT6	04/06/05	8.0	<0.0020	<0.00201	<0.0502	<0.0020	<0.0020	<0.0020		
S-5-CPT7	CPT7	12/11/06	5.0	<0.00200	<0.00200	<0.0500	<0.00200	<0.00500	<0.00200		
S-5-CPT11	CPT11	12/12/06	5.0	<0.0050	<0.0050	<0.020	<0.0050	<0.0050	<0.0050	<0.10	
S-5-CPT12	CPT12	12/11/06	5.0	<0.00200	<0.00200	<0.0500	<0.00200	<0.00500	<0.00200		
Direct-Push Sa	amples										
S-2-DP1	DP1	04/07/05	2.0	<0.0020	<0.00202	<0.0504	<0.0020	<0.0020	<0.0020		
S-4-DP1	DP1	04/07/05	4.0	< 0.0020	< 0.00201	< 0.0502	< 0.0020	< 0.0020	< 0.0020		
S-6-DP1	DP1	04/07/05	6.0	< 0.0020	<0.00198	< 0.0496	< 0.0020	< 0.0020	< 0.0020		
S-8-DP1	DP1	04/07/05	8.0	< 0.100	< 0.100	<2.50	< 0.100	<0.100	< 0.100		
S-10.5-DP1	DP1	04/14/05	10.5	<0.0020	<0.00200	< 0.0500	<0.0020	<0.0020	<0.0020		
S-2-DP3	DP3	04/06/05	2.0	<0.0020	<0.00202	<0.0504	<0.0020	<0.0020	<0.0020		
S-4-DP3	DP3	04/06/05	4.0	< 0.0020	< 0.00201	< 0.0502	< 0.0020	< 0.0020	< 0.0020		
S-6-DP3	DP3	04/06/05	6.0	< 0.0020	< 0.00200	< 0.0501	< 0.0020	< 0.0020	< 0.0020		
S-8-DP3	DP3	04/06/05	8.0	< 0.0020	< 0.00201	< 0.0502	< 0.0020	< 0.0020	< 0.0020		
S-9.5-DP3	DP3	04/14/05	9.5	< 0.0020	<0.00198	< 0.0496	< 0.0020	< 0.0020	< 0.0020		
S-12-DP3	DP3	04/14/05	12.0	<0.0020	<0.00198	<0.0496	<0.0020	<0.0020	<0.0020		
S-2-DP4	DP4	04/07/05	2.0	<0.0020	<0.00199	<0.0498	<0.0020	<0.0020	<0.0020		
S-4-DP4	DP4	04/07/05	4.0	< 0.0020	< 0.00201	< 0.0503	< 0.0020	< 0.0020	< 0.0020		
S-6-DP4	DP4	04/07/05	6.0	< 0.0020	< 0.00199	<0.0498	< 0.0020	< 0.0020	< 0.0020		
S-8-DP4	DP4	04/07/05	8.0	< 0.0020	< 0.00199	< 0.0497	< 0.0020	< 0.0020	< 0.0020		
S-10.5-DP4	DP4	04/14/05	10.5	<0.0020	<0.00201	<0.0502	<0.0020	<0.0020	<0.0020		
S-2-DP5	DP5	04/07/05	2.0	<0.0020	<0.00198	<0.0496	<0.0020	<0.0020	<0.0020		
S-4-DP5	DP5	04/07/05	4.0	< 0.0020	< 0.00199	<0.0498	<0.0020	<0.0020	< 0.0020		
S-6-DP5	DP5	04/07/05	6.0	< 0.0020	< 0.00200	<0.0501	<0.0020	<0.0020	< 0.0020		
S-8-DP5	DP5	04/07/05	8.0	< 0.0020	< 0.00200	< 0.0500	<0.0020	<0.0020	< 0.0020		
S-10.5-DP5	DP5	04/14/05	10.5	< 0.0020	< 0.00200	< 0.0501	< 0.0020	<0.0020	< 0.0020		

					Oakland, Ca						
Sample ID	Associated	Sampling	Depth	EDB	1,2-DCA	TAME	TBA	ETBE	DIPE	Ethanol	Add'I VOCs
	Well/Boring	Date	(feet bgs)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
S-2-DP6	DP6	04/06/05	2.0	<0.0020	<0.00200	<0.0500	<0.0020	<0.0020	<0.0020		
S-4-DP6	DP6	04/06/05	4.0	<0.0020	< 0.00199	< 0.0498	< 0.0020	< 0.0020	<0.0020		
S-6-DP6	DP6	04/06/05	6.0	<0.0020	<0.00199	<0.0498	<0.0020	<0.0020	<0.0020		
S-5-DP7	DP7	12/08/06	5.0	<0.00200	<0.00200	<0.0500	<0.00200	<0.00500	<0.00200		
S-10-DP7	DP7	12/14/06	10.0	< 0.050	< 0.050	< 0.20	< 0.050	< 0.050	< 0.050	<1.0	
S-15.5-DP7	DP7	12/14/06	15.5	< 0.0050	< 0.0050	< 0.020	< 0.0050	< 0.0050	< 0.0050	<0.10	
S-20-DP7	DP7	12/14/06	20.0	< 0.0050	< 0.0050	< 0.020	< 0.0050	< 0.0050	< 0.0050	<0.10	
S-25.5-DP7	DP7	12/14/06	25.5	< 0.0050	< 0.0050	< 0.020	< 0.0050	< 0.0050	< 0.0050	<0.10	
S-29.5-DP7	DP7	12/14/06	29.5	<0.0050	<0.0050	<0.020	<0.0050	<0.0050	<0.0050	<0.10	
S-5-DP8	DP8	12/08/06	5.0	<0.00200	<0.00200	<0.0500	<0.00200	<0.00500	<0.00200		
S-10-DP8	DP8	12/14/06	10.0	< 0.050	< 0.050	< 0.20	< 0.050	< 0.050	< 0.050	<1.0	
S-15-DP8	DP8	12/14/06	15.0	< 0.050	< 0.050	< 0.20	< 0.050	< 0.050	< 0.050	<1.0	
S-19.5-DP8	DP8	12/14/06	19.5	< 0.0050	<0.0050	< 0.020	< 0.0050	< 0.0050	<0.0050	<0.10	
S-29.5-DP8	DP8	12/14/06	29.5	<0.0050	<0.0050	<0.020	<0.0050	<0.0050	<0.0050	<0.10	
S-5-DP9	DP9	12/11/06	5.0	<0.00200	<0.00200	<0.0500	<0.00200	<0.00500	<0.00200		
S-9.5-DP9	DP9	12/15/06	9.5	< 0.0050	< 0.0050	< 0.020	< 0.0050	< 0.0050	< 0.0050	<0.10	
S-14.5-DP9	DP9	12/15/06	14.5	< 0.0050	< 0.0050	< 0.020	< 0.0050	< 0.0050	< 0.0050	<0.10	
S-20-DP9	DP9	12/15/06	20.0	< 0.0050	< 0.0050	< 0.020	< 0.0050	< 0.0050	< 0.0050	<0.10	
S-25.5-DP9	DP9	12/15/06	25.5	< 0.0050	< 0.0050	< 0.020	< 0.0050	< 0.0050	< 0.0050	<0.10	
S-29.5-DP9	DP9	12/15/06	29.5	<0.0050	<0.0050	<0.020	<0.0050	<0.0050	<0.0050	<0.10	
Hydropunch S	amples										
S-5-HP7	HP7	12/11/06	5.0	<0.00200	<0.00200	<0.0500	<0.00200	<0.00500	<0.00200		
S-5-HP11	HP11	12/11/06	5.0	<0.0050	<0.0050	<0.020	<0.0050	<0.0050	<0.0050	<0.10	
S-5-HP12	HP12	12/12/06	5.0	<0.0050	<0.0050	<0.020	<0.0050	<0.0050	<0.0050	<0.10	
Soil Stockpile S	amples										
Soil Stockpile	Samples										
SP-1 (A-D)		12/15/06		<0.0050	<0.0050	<0.020	<0.0050	<0.0050	<0.0050	<0.10	
SP1-(1-4)		09/01/09		<0.50	<0.50	<1.0	<5.0	<1.0	<1.0		ND
SP-1		05/09/14		<0.51	<0.51	<1.0	<5.1	<1.0	<1.0		0.70d

Notes:	Hig	phlighted sample representative of soil removed from site. Sample in grey font representative of pre-remediation conditions.
S-2-CPT1	=	Soil - Sample Depth - Sample Location.
TPHmo	=	Total petroleum hydrocarbons as motor oil analyzed using EPA Method 8015B.
TPHd	=	Total petroleum hydrocarbons as diesel analyzed using EPA Method 8015B.
TPHg	=	Total petroleum hydrocarbons as gasoline analyzed using EPA Method 8015B.
MTBE	=	Methyl tertiary butyl ether analyzed using EPA Method 8260B.
BTEX	=	Benzene, toluene, ethylbenzene, and total xylenes analyzed using EPA Method 8021B.
ETBE	=	Ethyl tertiary butyl ether analyzed using EPA Method 8260B.
TAME	=	Tertiary amyl methyl ether analyzed using EPA Method 8260B.
TBA	=	Tertiary butyl alcohol analyzed using EPA Method 8260B.
1,2-DCA	=	1,2-dichloroethane analyzed using EPA Method 8260B.
EDB	=	1,2-dibromoethane analyzed using EPA Method 8260B.
DIPE	=	Di-isopropyl ether analyzed using EPA Method 8260B.
Ethanol	=	Ethanol analyzed using EPA Method 8260B.
Metals	=	Total metals analyzed using EPA Method 6010B.
PAHs	=	Polyaromatic hydrocarbons analyzed using EPA Method 8310.
feet bgs	=	Feet below ground surface.
mg/kg	=	Milligrams per kilogram.
<	=	Less than the stated reporting limit.
а	=	Chromatographic pattern does not match that of the specified standard.
b	=	Hydrocarbons greater than C22 were detected; 460 mg/kg of oil and grease analyzed using Standard Method 5520 were detected.
С	=	Data missing from historical files.
d	=	n-Butylbenzene.
е	=	Sample analyzed beyond recommended hold time.

ADDITIONAL CUMULATIVE SOIL ANALYTICAL RESULTS - PAHS
Former Exxon Service Station 73006
720 High Street
Oakland, California

			Benzo (a)	Benzo	Benzo (b)	Benzo	Benzo (k)		Dibenze			Indeno			
		Acenaph- Acenaph- A	nthr- anth-	(a)	fluor-	(g,h,i)	fluor-	Chry-	(a,h)	Fluor-	Fluo-	(1,2,3-cd)	Naph-	Phenan-	
Sampling	Associated Sampling Depth	thene thylene a	cene racene	pyrene	anthene	perylene	anthene	sene	anthracene	anthene	rene	pyrene	thalene	threne	Pyrene
ID	Well/Boring Date (feet)	(mg/kg) (mg/kg) (m	ng/kg) (mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)

Excavation Samples

Former Gaso	line UST	Excavation									
S-5-T3F		04/28/87	5.0	 							
S-5-T1F		04/28/87	5.0	 							
S-5-T1P		04/28/87	5.0	 							
S-5-T2P		04/28/87	5.0	 							
S-5-T3P		04/28/87	5.0	 							
S-5-WOT		04/28/87	5.0	 							
S-5-T2F		04/28/87	5.0	 							
S-6-W		05/05/87	6.0	 							
S-7-S		05/05/87	7.0	 							
S-8-N		05/05/87	8.0	 							
S-10-E		05/05/87	10.0	 							
S1		05/14/87	14.0	 							
S-14EE		05/15/87	14.0	 							
S2		05/14/87	14.0	 							
S-16-S		05/06/87	16.0	 							
Former Produ	uct Line T	rench Sam	ples								
S-1T		06/03/87		 							
S-2T		06/03/87		 							
S(3C+3D)		05/05/87		 							
S-4T		06/03/87		 							
S-3T		06/03/87		 							
S(3A+3B)		05/05/87		 							
S3-Trench		04/28/87	3.0	 							
Former Gaso	line UST	Pit									
S-1A		07/26/89	5.0	 							
S-2A		08/04/89	9.0	 							
S-3A		08/04/89	9.0	 							
S-4A		08/04/89	9.0	 							
S-1B		07/26/89	9.0	 							
New Tank Pit	Excavati	on									
S-4-TPW6		01/15/91	4.0	 							
S-4-TPW9		01/15/91	4.0	 							
S-4-TPW12		01/15/91	4.0	 							

Sampling	A '- 1 1				_		Benzo (a)	Benzo	Benzo (b)	Benzo	Benzo (k)		Dibenze			Indeno		
ID	Well/Boring	Sampling Date	Depth (feet)	thene (mg/kg)	Acenaph- thylene (mg/kg)	Anthr- acene (mg/kg)	anth- racene (mg/kg)	(a) pyrene (mg/kg)	fluor- anthene (mg/kg)	(g,h,i) perylene (mg/kg)	fluor-`´	Chry- sene (mg/kg)	(a,h) anthracene (mg/kg)	Fluor- anthene (mg/kg)	Fluo- rene (mg/kg)	(1,2,3-cd) pyrene (mg/kg)	Phenan- threne (mg/kg)	Pyrene (mg/kg)
S-8-TPW5		01/15/91	8.0														 	
S-8-TPW11		01/15/91	8.0														 	
S-8-TPW8		01/15/91	8.0														 	
S-8-TPW2		01/15/91	8.0														 	
S-12-TPW1		01/15/91	12.0														 	
S-12-TPW10		01/15/91	12.0														 	
S-12-TPW4		01/15/91	12.0														 	
S-15-TPF2		01/15/91	15.0														 	
S-15-TPF4		01/15/91	15.0														 	
S-15-TPF1		01/15/91	15.0														 	
S-15-TPF3		01/15/91	15.0														 	
Monitoring V	Wells and	Soil Bor	ings															
Monitoring W	ells																	
S-7.5-B1	MW1	05/21/88	7.5														 	
S-10-B2	MW2	09/10/87	10.0														 	
S-10-B3	MW3	09/10/87	10.0														 	
S-10-B4	MW4	09/10/87	10.0														 	
S-10-B5	MW5	09/10/87	10.0															
S-10-B6	MW6	09/10/87	10.0														 	
S-10-B7	MW7	09/10/87	10.0														 	
S-10-B8	MW8	09/10/87	10.0														 	
S-9-B9	MW9	05/12/88	10.0														 	
S-10-B10	MW10	11/27/89	10.0														 	
S-10-B11	MW11	11/27/89	11.0														 	
S-7.5-B12	MW12	11/28/89	7.5														 	
S-10-B12	MW12	11/28/89	10.0														 	
S-7.5-B13 S-10-B13	MW13 MW13	11/28/89 11/28/89	7.5 10.0														 	
S-3-MW14	B31	10/31/90	3.0														 	

									akiano, Ca										
Sampling ID	Associated Well/Boring	Sampling Date	Depth (feet)	Acenaph- thene (mg/kg)	Acenaph- thylene (mg/kg)	Anthr- acene (mg/kg)	Benzo (a) anth- racene (mg/kg)	Benzo (a) pyrene (mg/kg)	Benzo (b) fluor- anthene (mg/kg)	Benzo (g,h,i) perylene (mg/kg)	Benzo (k) fluor- anthene (mg/kg)	Chry- sene (mg/kg)	Dibenze (a,h) anthracene (mg/kg)	Fluor- anthene (mg/kg)	Fluo- rene (mg/kg)	Indeno (1,2,3-cd) pyrene (mg/kg)	Naph- thalene (mg/kg)	Phenan- threne (mg/kg)	Pyrene (mg/kg)
S-8-MW14	B31	10/31/90	8.0																
S-18-MW14	B31	10/31/90	18.0																
S-6-MW15	B32	10/31/90	6.0																
S-8.5-MW15	B32	10/31/90	8.5																
S-13.5-MW15	B32	10/31/90	13.5																
S-5.0-MW16A	MW16A	08/20/09	5.0																
S-10.5-MW16A	MW16A	08/24/09	10.5																
S-12.5-MW16A	MW16A	08/24/09	12.5																
S-5.0-MW16B	MW16B	08/20/09	5.0																
S-10.5-MW16B	MW16B	08/24/09	10.5																
S-16.5-MW16B	MW16B	08/25/09	16.5																
S-20.5-MW16B	MW16B	08/25/09	20.5																
S-23.0-MW16B	MW16B	08/25/09	23.0																
S-5.0-MW17A	MW17A	08/20/09	5.0																
S-10.5-MW17A	MW17A	08/25/09	10.5																
S-12.5-MW17A	MW17A	08/25/09	12.5																
S-5.5-MW17B	MW17B	08/18/09	5.5																
S-10.5-MW17B	MW17B	08/25/09	10.5																
S-17.0-MW17B	MW17B	08/25/09	17.0																
S-20.5-MW17B	MW17B	08/25/09	20.5																
S-23.0-MW17B	MW17B	08/25/09	23.0																
S-24.5-MW17B	MW17B	08/25/09	24.5																
S-5-MW18A	MW18A	08/17/09	5.0																
S-10.5-MW18A	MW18A	08/26/09	10.5																
S-12.5-MW18A	MW18A	08/26/09	12.5																
S-5-MW18B	MW18B	08/17/09	5.0																
S-10.5-MW18B	MW18B	08/25/09	10.5																
S-12.5-MW18B	MW18B	08/25/09	12.5																
S-17.0-MW18B	MW18B	08/25/09	17.0																
S-21.0-MW18B	MW18B	08/25/09	21.0																
S-27.0-MW18B	MW18B	08/25/09	27.0																
S-29.0-MW18B	MW18B	08/25/09																	
S-30.5-MW18B	MW18B	08/25/09	30.5																
S-5.0-MW19A	MW19A	08/18/09	5.0																
S-10.5-MW19A	MW19A	08/26/09	10.5																

								0.	akland, Cal	IIOITIIa									
Sampling ID	Associated Well/Boring	Sampling Date	Depth (feet)	Acenaph- thene (mg/kg)	Acenaph- thylene (mg/kg)		Benzo (a) anth- racene (mg/kg)	Benzo (a) pyrene (mg/kg)	Benzo (b) fluor- anthene (mg/kg)	Benzo (g,h,i) perylene (mg/kg)	Benzo (k) fluor- anthene (mg/kg)	Chry- sene (mg/kg)	Dibenze (a,h) anthracene (mg/kg)	Fluor- anthene (mg/kg)	Fluo- rene (mg/kg)	Indeno (1,2,3-cd) pyrene (mg/kg)	Naph- thalene (mg/kg)	Phenan- threne (mg/kg)	Pyrene (mg/kg)
S-12.5-MW19A	MW19A	08/26/09	12.5																
S-5.0-MW19B S-10.5-MW19B S-16.0-MW19B S-20.5-MW19B S-22.5-MW19B S-24.5-MW19B	MW19B MW19B MW19B MW19B MW19B	08/18/09 08/26/09 08/26/09 08/26/09 08/26/09	5.0 10.5 16.0 20.5 22.5 24.5	 	 	 	 	 	 	 	 	 	 	 	 	 	 	 	
S-5-MW20 S-8-MW20 S-10-MW20 S-13-MW20	MW20 MW20 MW20 MW20	05/09/14 05/09/14 05/09/14 05/09/14	5.0 8.0 10.0 13.0	<0.015 <0.015 <0.015 <0.015	<0.015 <0.015 <0.015 <0.015	<0.010 0.029 <0.010 0.052	<0.010 <0.010 <0.010 <0.010	<0.010 <0.010 <0.010 <0.010	<0.010 <0.010 <0.010 <0.010	<0.010 <0.010 <0.010 <0.010	<0.010 <0.010 <0.010 <0.010	<0.010 <0.010 <0.010 <0.010	<0.010 <0.010 <0.010 <0.010	<0.010 <0.010 <0.010 <0.010	0.015 0.074 0.064 0.130	<0.010 <0.010 <0.010 <0.010	<0.015 <0.015 <0.015 0.030	0.022 0.120 0.089 0.190	<0.010 0.024 <0.010 0.040
S-5-MW21 S-10-MW21 S-13-MW21	MW21 MW21 MW21	05/08/14 05/09/14 05/09/14	5.0 10.0 13.0	<0.015e <0.015 <0.015	<0.015e <0.015 <0.015	<0.010e 0.028 <0.010	<0.010e <0.010 <0.010	<0.010e <0.010 <0.010	<0.010e <0.010 <0.010	<0.010e <0.010 <0.010	<0.010e <0.010 <0.010	<0.010e <0.010 <0.010	<0.010e <0.010 <0.010	<0.010e <0.010 <0.010	<0.010e 0.078 0.040	<0.010e <0.010 <0.010	<0.015e <0.015 <0.015	<0.010e 0.092 0.060	<0.010e <0.010 <0.010
Soil Borings																			
S-10-B14	B14	11/29/89	10.0																
S-5-B15 S-7.5-B15 S-10-B15	B15 B15 B15	11/28/89 11/28/89 11/28/89	5.0 7.5 10.0										 						
S-5-B16 S-7.5-B16 S-10-B16	B16 B16 B16	11/28/89 11/28/89 11/28/89	5.0 7.5 10.0										 						
S-5-B17 S-7.5-B17 S-10-B17	B17 B17 B17	11/29/89 11/29/89 11/29/89	5.0 7.5 10.0																
S-5-B18 S-7.5-B18 S-10-B18	B18 B18 B18	11/29/89 11/29/89 11/29/89	5.0 7.5 10.0										 						
S-10-B19	B19	11/29/89	10.0																
S-10-B20	B20	11/29/89	10.0																
S-3-B21 S-8-B21	B21 B21	11/01/90 11/01/90	3.0 8.0																

Sampling ID	Associated Well/Boring	Sampling Date	Depth (feet)	Acenaph- thene (mg/kg)	Acenaph- thylene (mg/kg)	Anthr- acene (mg/kg)	Benzo (a) anth- racene (mg/kg)		Benzo (b) fluor- anthene (mg/kg)		Benzo (k) fluor- anthene (mg/kg)	Chry- sene (mg/kg)	Dibenze (a,h) anthracene (mg/kg)	Fluor- anthene (mg/kg)	Fluo- rene (mg/kg)	Indeno (1,2,3-cd) pyrene (mg/kg)	thalene		Pyrene (mg/kg)
-	Won, Boning	Date	(1001)	(g/.tg/	(g/.tg/	(mg/ng/	(g/.tg/	(1119/119)	(1119/119)	(9/1.9)	(g/.kg/	(mg/ng/	(9/1.9/	(1119/119)	(1119/119)	(g/.tg/	(mg/ng/	(1119/119)	(9/119)
S-5.5-B22	B22	11/01/90	5.5																
S-8-B22	B22	11/01/90	8.0																
S-3-B23	B23	11/01/90	3.0																
S-8-B23	B23	11/01/90	8.0																
S-5.5-B24	B24	11/01/90	5.5																
S-8-B24	B24	11/01/90	8.0																
S-5.5-B25	B25	11/01/90	5.5																
S-8-B25	B25	11/01/90	8.0																
S-5.5-B26 S-8-B26	B26 B26	11/01/90 11/01/90	5.5 8.0																
3-0-D20	D20	11/01/90	0.0																
S-5.5-B27	B27	11/01/90	5.5																
S-8-B27	B27	11/01/90	8.0																
S-3-B28	B28	11/02/90	3.0																
S-8-B28	B28	11/02/90	8.0																
S-5.5-B29	B29	11/02/90	5.5																
S-8-B29	B29	11/02/90	8.0																
S-5.5-B30	B30	11/02/90	5.5																
S-8-B30	B30	11/02/90	8.0																
S-3.5-B35	VW1	02/11/93	3.5																
S-6.5-B35 S-7.5-B35	VW1 VW1	02/11/93 02/11/93	6.5 7.5																
S-9-B35	VW1	02/11/93	9.0																
S-4-B36	VW2	02/11/93	4.0																
S-4-B36	VW2 VW2	02/11/93	7.0																
S-9.5-B36	VW2	02/11/93	9.5																
C 4 D07	\/\\/0		4.0																
S-4-B37 S-6-B37	VW3 VW3	02/11/93 02/11/93	4.0 6.0																
S-7.5-B37	VW3	02/11/93	7.5																
S-3-B38 S-5.5-B38 S-9.5-B38	B38 B38 B38	01/05/15 01/05/15 01/05/15	3.0 5.5 9.5	<0.015 <0.015 <0.015	<0.030 <0.030 <0.030	<0.010 <0.010 <0.010	<0.010 <0.010 <0.010	<0.010 <0.010 <0.010	<0.010 <0.010 <0.010	<0.010 <0.010 <0.010	<0.010 0.013 <0.010	<0.010 <0.010 <0.010	<0.010 <0.010 <0.010	<0.010 <0.010 <0.010	<0.010 <0.010 <0.010	<0.010 <0.010 <0.010	<0.015 <0.015 <0.015	<0.010 <0.010 <0.010	<0.010 <0.010 <0.010

								U	akland, Cal	lifornia								
Sampling ID	Associated Well/Boring	Sampling Date	Depth (feet)	Acenaph- thene (mg/kg)	Acenaph- thylene (mg/kg)	Anthr- acene (mg/kg)	Benzo (a) anth- racene (mg/kg)	Benzo (a) pyrene (mg/kg)	Benzo (b) fluor- anthene (mg/kg)	(g,h,i)	Benzo (k) fluor- anthene (mg/kg)	Chry- sene (mg/kg)	Dibenze (a,h) anthracene (mg/kg)	Fluor- anthene (mg/kg)	Fluo- rene (mg/kg)	Indeno (1,2,3-cd) pyrene (mg/kg)	thalene	Pyrene (mg/kg)
CPT Borings																		
S-2-CPT1	CPT1	04/06/05	2.0															
S-4-CPT1	CPT1	04/06/05	4.0															
S-6-CPT1	CPT1	04/06/05	6.0															
S-2-CPT2	CPT2	04/07/05	2.0															
S-4-CPT2	CPT2	04/07/05	4.0															
S-6-CPT2	CPT2	04/07/05	6.0															
S-8-CPT2	CPT2	04/07/05	8.0															
S-2-CPT3	CPT3	04/07/05	2.0															
S-4-CPT3	CPT3	04/07/05	4.0															
S-6-CPT3	CPT3	04/07/05	6.0															
S-8-CPT3	CPT3	04/07/05	8.0															
S-2-CPT4	CPT4	04/07/05	2.0															
S-4-CPT4	CPT4	04/07/05	4.0															
S-6-CPT4	CPT4	04/07/05	6.0															
S-8-CPT4	CPT4	04/07/05	8.0															
S-2-CPT5	CPT5	04/07/05	2.0															
S-4-CPT5	CPT5	04/07/05	4.0															
S-6-CPT5	CPT5	04/07/05	6.0															
S-8-CPT5	CPT5	04/07/05	8.0															
S-2-CPT6	CPT6	04/06/05	2.0															
S-4-CPT6	CPT6	04/06/05	4.0															
S-6-CPT6	CPT6	04/06/05	6.0															
S-8-CPT6	CPT6	04/06/05	8.0															
S-5-CPT7	CPT7	12/11/06	5.0															
S-5-CPT11	CPT11	12/12/06	5.0															
S-5-CPT12	CPT12	12/11/06	5.0															
Direct-Push S	Samples																	
S-2-DP1	DP1	04/07/05	2.0															
S-4-DP1	DP1	04/07/05	4.0															
S-6-DP1	DP1	04/07/05	6.0															
S-8-DP1	DP1	04/07/05	8.0															

									akland, Ca										
Sampling ID	Associated Well/Boring	Sampling Date	Depth (feet)	Acenaph- thene (mg/kg)	Acenaph- thylene (mg/kg)	Anthr- acene (mg/kg)	Benzo (a) anth- racene (mg/kg)	Benzo (a) pyrene (mg/kg)	Benzo (b) fluor- anthene (mg/kg)	Benzo (g,h,i) perylene (mg/kg)	Benzo (k) fluor- anthene (mg/kg)	Chry- sene (mg/kg)	Dibenze (a,h) anthracene (mg/kg)	Fluor- anthene (mg/kg)	Fluo- rene (mg/kg)	Indeno (1,2,3-cd) pyrene (mg/kg)	Naph- thalene (mg/kg)	Phenan- threne (mg/kg)	Pyrene (mg/kg)
S-10.5-DP1	DP1	04/14/05	10.5																
S-2-DP3	DP3	04/06/05	2.0																
S-4-DP3	DP3	04/06/05	4.0																
S-6-DP3	DP3	04/06/05	6.0																
S-8-DP3	DP3	04/06/05	8.0																
S-9.5-DP3	DP3	04/14/05	9.5																
S-12-DP3	DP3	04/14/05	12.0																
S-2-DP4	DP4	04/07/05	2.0																
S-4-DP4	DP4	04/07/05	4.0																
S-6-DP4	DP4	04/07/05	6.0																
S-8-DP4	DP4	04/07/05	8.0																
S-10.5-DP4	DP4	04/14/05	10.5																
S-2-DP5	DP5	04/07/05	2.0																
S-4-DP5	DP5	04/07/05	4.0																
S-6-DP5	DP5	04/07/05	6.0																
S-8-DP5	DP5	04/07/05	8.0																
S-10.5-DP5	DP5	04/14/05	10.5																
S-2-DP6	DP6	04/06/05	2.0																
S-4-DP6	DP6	04/06/05	4.0																
S-6-DP6	DP6	04/06/05	6.0																
S-5-DP7	DP7	12/08/06	5.0																
S-10-DP7	DP7	12/14/06	10.0																
S-15.5-DP7	DP7	12/14/06	15.5																
S-20-DP7	DP7	12/14/06	20.0																
S-25.5-DP7	DP7	12/14/06	25.5																
S-29.5-DP7	DP7	12/14/06	29.5																
S-5-DP8	DP8	12/08/06	5.0																
S-10-DP8	DP8	12/14/06	10.0																
S-15-DP8	DP8	12/14/06	15.0																
S-19.5-DP8	DP8	12/14/06	19.5																
S-29.5-DP8	DP8	12/14/06	29.5																
S-5-DP9	DP9	12/11/06	5.0																
S-9.5-DP9	DP9	12/15/06	9.5																
S-14.5-DP9	DP9	12/15/06	14.5																
S-20-DP9	DP9	12/15/06	20.0																
S-25.5-DP9	DP9	12/15/06	25.5																

								_	aniana, oa	o.iiia									
				Acenanh-	Acenaph-	Anthr-	Benzo (a) anth-	Benzo (a)	Benzo (b) fluor-	Benzo (g,h,i)	Benzo (k) fluor-	Chry-	Dibenze (a,h)	Fluor-	Fluo-	Indeno (1,2,3-cd)	Nanh-	Phenan-	
Sampling ID	Associated Well/Boring		Depth (feet)	•	thylene (mg/kg)	acene (mg/kg)	racene	pyrene (mg/kg)	anthene	perylene (mg/kg)		sene (mg/kg)			rene (mg/kg)	pyrene (mg/kg)	thalene (mg/kg)		Pyrene (mg/kg)
S-29.5-DP9	DP9	12/15/06	29.5																
Hydropunch	Samples																		
S-5-HP7	HP7	12/11/06	5.0																
S-5-HP11	HP11	12/11/06	5.0																
S-5-HP12	HP12	12/12/06	5.0																
Soil Stockp	ile Sample	S																	
Soil Stockpil	e Samples																		
SP-1		05/09/14																	
SP1-(1-4)		09/01/09																	

P1-(1-4) P-1 (A-D)			12/15/06												
Notes:	Hio	ahliahted	sample re	presenta	ative of so	il remove	d from site	. Sample	in grey fon	t represen	tative of pr	e-remedia	tion condit	ions.	_
S-2-CPT1	=		Sample De	•					5 ,						
TPHmo	=	Total p	etroleum h	nydrocarl	oons as m	notor oil ar	nalyzed us	ing EPA I	Method 801	5B.					
TPHd	=	Total p	etroleum h	nydrocarl	oons as d	iesel anal	yzed using	EPA Me	thod 8015E	3.					
TPHg	=	Total p	etroleum h	nydrocarl	oons as g	asoline ar	alyzed us	ing EPA	Method 801	5B.					
MTBE	=	Methyl	tertiary bu	tyl ether	analyzed	using EP	A Method	8260B.							
BTEX	=	Benzer	ne, toluene	e, ethylbe	enzene, a	nd total xy	lenes ana	lyzed usin	g EPA Met	hod 8021E	3.				
ETBE	=	Ethyl te	ertiary buty	d ether a	nalyzed u	ising EPA	Method 8	260B.							
TAME	=	Tertiar	y amyl met	thyl ethe	r analyze	d using EF	PA Method	l 8260B.							
TBA	=	Tertiar	y butyl alco	ohol ana	lyzed usin	ig EPA Me	ethod 8260	DB.							
1,2-DCA	=	1,2-dic	hloroethan	ie analyz	ed using	EPA Meth	od 8260B								
EDB	=	1,2-dib	romoethar	ne analyz	zed using	EPA Meth	nod 8260B	h.							
DIPE	=	Di-isop	ropyl ethe	r analyze	ed using E	PA Metho	od 8260B.								
Ethanol	=	Ethano	ol analyzed	using E	PA Metho	od 8260B.									
Metals	=	Total n	netals anal	yzed usi	ng EPA N	Method 60	10B.								
PAHs	=	,	omatic hyd		,	ed using E	PA Metho	d 8310.							
feet bgs	=		elow groun		e.										
mg/kg	=	·	ıms per kile	Ū											
<	=		nan the sta		J										
а	=		atographic	•			•								
b	=	•	•			re detecte	ed; 460 mg	y/kg of oil a	and grease	analyzed	using Stan	dard Meth	od 5520 w	ere detected	i.
С	=		nissing fror	n historio	cal files.										
d	=	,	lbenzene.												
е	=	Sample	e analyzed	beyond	recomme	ended hold	d time.								

Well/Boring	Sampling Date	Depth (feet bgs)	Cadmium (mg/kg)	Chromium (mg/kg)	Lead (mg/kg)	Nickel (mg/kg)	Zinc (mg/kg)
amples							
ne UST Excavation	n						
	04/28/87	5.0					
	04/28/87	5.0					
	04/28/87	5.0					
	04/28/87	5.0					
	04/28/87	5.0					
	04/28/87	5.0					
	04/28/87	5.0					
	05/05/87	8.0					
	05/05/87	10.0					
	05/05/87	7.0					
	05/05/87	6.0					
	05/06/87	16.0					
	05/14/87	14.0					
	05/14/87	14.0					
	05/15/87	14.0					
t Line Trench San	nples						
	04/28/87	3.0					
	05/05/87						
	05/05/87						
	06/03/87						
ne UST Pit							
	07/26/89	5.0					
	08/04/89	9.0					
	amples ne UST Excavation	amples ne UST Excavation 04/28/87 04/28/87 04/28/87 04/28/87 04/28/87 04/28/87 04/28/87 04/28/87 05/05/87 05/05/87 05/05/87 05/05/87 05/14/87 05/14/87 05/15/87 05/05/87 05/05/87 05/05/87 05/05/87 05/05/87 05/05/87 06/03/87	amples ne UST Excavation	amples ne UST Excavation 04/28/87 5.0 04/28/87 5.0 04/28/87 5.0 04/28/87 5.0 04/28/87 5.0 04/28/87 5.0 04/28/87 5.0 04/28/87 5.0 04/28/87 5.0 04/28/87 5.0 04/28/87 5.0 05/05/87 8.0 05/05/87 8.0 05/05/87 10.0 05/05/87 7.0 05/05/87 7.0 05/05/87 7.0 05/05/87 6.0 05/05/87 14.0 05/14/87 14.0 05/14/87 14.0 05/14/87 14.0 05/15/87 14.0 05/15/87 14.0 05/15/87 14.0 05/15/87 14.0 05/15/87 14.0 05/15/87 14.0 05/15/87 14.0 05/15/87 14.0 05/15/87 14.0 05/05/87 05/05/89 9.0 05/05/89 9.0 05/05/89 9.0 05/05/89 9.0 05/05/89 9.0 05/05/89 9.0 05/05/89 9.0 05/05/89 9.0 05/05/89 9.0 05/05/89 9.0 05/05/89 9.0 05/05/89 9.0 05/05/89 9.0 05/05/89 9.0 05/05/89 9.0 05/05/89 9.0 05/05/	amples	amples ne UST Excavation	amples The UST Excavation The UST Excavation

					id, California			
Sample ID	Associated Well/Boring	Sampling Date	Depth (feet bgs)	Cadmium (mg/kg)	Chromium (mg/kg)	Lead (mg/kg)	Nickel (mg/kg)	Zinc (mg/kg)
New Tank Pit E	xcavation							
S-12-TPW1		01/15/91	12.0					
S-8-TPW2		01/15/91	8.0					
S-12-TPW4		01/15/91	12.0					
S-8-TPW5		01/15/91	8.0					
S-4-TPW6		01/15/91	4.0					
S-8-TPW8		01/15/91	8.0					
S-4-TPW9		01/15/91	4.0					
S-12-TPW10		01/15/91	12.0					
S-8-TPW11		01/15/91	8.0					
S-4-TPW12		01/15/91	4.0					
S-15-TPF1		01/15/91	15.0					
S-15-TPF2		01/15/91	15.0					
S-15-TPF3		01/15/91	15.0					
S-15-TPF4		01/15/91	15.0					
Monitoring We	ells and Soil Bo	rings						
Monitoring Wel	ls							
S-7.5-B1	MW1	05/21/88	7.5					
S-10-B2	MW2	09/10/87	10.0					
S-10-B3	MW3	09/10/87	10.0					
S-10-B4	MW4	09/10/87	10.0					
S-10-B5	MW5	09/10/87	10.0					
S-10-B6	MW6	09/10/87	10.0					
S-10-B7	MW7	09/10/87	10.0					
S-10-B8	MW8	09/10/87	10.0					
S-9-B9	MW9	05/12/88	10.0					
S-10-B10	MW10	11/27/89	10.0					
S-10-B11	MW11	11/27/89	11.0					
S-7.5-B12	MW12	11/28/89	7.5					
S-10-B12	MW12	11/28/89	10.0					

	Oakland, California											
Sample ID	Associated Well/Boring	Sampling Date	Depth (feet bgs)	Cadmium (mg/kg)	Chromium (mg/kg)	Lead (mg/kg)	Nickel (mg/kg)	Zinc (mg/kg)				
S-7.5-B13	MW13	11/28/89	7.5									
S-10-B13	MW13	11/28/89	10.0									
S-3-MW14	B31	10/31/90	3.0									
S-8-MW14	B31	10/31/90	8.0									
S-18-MW14	B31	10/31/90	18.0									
S-6-MW15	B32	10/31/90	6.0									
S-8.5-MW15	B32	10/31/90	8.5									
S-13.5-MW15	B32	10/31/90	13.5									
S-5.0-MW16A	MW16A	08/20/09	5.0									
S-10.5-MW16A	MW16A	08/24/09	10.5									
S-12.5-MW16A	MW16A	08/24/09	12.5									
S-5.0-MW16B	MW16B	08/20/09	5.0									
S-10.5-MW16B	MW16B	08/24/09	10.5									
S-16.5-MW16B	MW16B	08/25/09	16.5									
S-20.5-MW16B	MW16B	08/25/09	20.5									
S-23.0-MW16B	MW16B	08/25/09	23.0									
S-5.0-MW17A	MW17A	08/20/09	5.0									
S-10.5-MW17A	MW17A	08/25/09	10.5									
S-12.5-MW17A	MW17A	08/25/09	12.5									
S-5.5-MW17B	MW17B	08/18/09	5.5									
S-10.5-MW17B	MW17B	08/25/09	10.5									
S-17.0-MW17B	MW17B	08/25/09	17.0									
S-20.5-MW17B	MW17B	08/25/09	20.5									
S-23.0-MW17B	MW17B	08/25/09	23.0									
S-24.5-MW17B	MW17B	08/25/09	24.5									
S-5-MW18A	MW18A	08/17/09	5.0									
S-10.5-MW18A	MW18A	08/26/09	10.5									
S-12.5-MW18A	MW18A	08/26/09	12.5									
S-5-MW18B	MW18B	08/17/09	5.0									
S-10.5-MW18B	MW18B	08/25/09	10.5									
S-12.5-MW18B	MW18B	08/25/09	12.5									
S-17.0-MW18B	MW18B	08/25/09	17.0									
S-21.0-MW18B	MW18B	08/25/09	21.0									
S-27.0-MW18B	MW18B	08/25/09	27.0									
S-29.0-MW18B	MW18B	08/25/09	29.0									
S-30.5-MW18B	MW18B	08/25/09	30.5									

	Oakland, California											
Sample ID	Associated	Sampling	Depth	Cadmium	Chromium	Lead	Nickel	Zinc				
	Well/Boring	Date	(feet bgs)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)				
S-5.0-MW19A	MW19A	08/18/09	5.0									
S-10.5-MW19A	MW19A	08/26/09	10.5									
S-12.5-MW19A	MW19A	08/26/09	12.5									
S-5.0-MW19B	MW19B	08/18/09	5.0									
S-10.5-MW19B	MW19B	08/26/09	10.5									
S-16.0-MW19B	MW19B	08/26/09	16.0									
S-20.5-MW19B	MW19B	08/26/09	20.5									
S-22.5-MW19B	MW19B	08/26/09	22.5									
S-24.5-MW19B	MW19B	08/26/09	24.5									
S-5-MW20	MW20	05/09/14	5.0									
S-8-MW20	MW20	05/09/14	8.0									
S-10-MW20	MW20	05/09/14	10.0									
S-13-MW20	MW20	05/09/14	13.0									
S-5-MW21	MW21	05/08/14	5.0									
S-10-MW21	MW21	05/09/14	10.0									
S-13-MW21	MW21	05/09/14	13.0									
Soil Borings												
S-10-B14	B14	11/29/89	10.0									
S-5-B15	B15	11/28/89	5.0									
S-7.5-B15	B15	11/28/89	7.5									
S-10-B15	B15	11/28/89	10.0									
S-5-B16	B16	11/28/89	5.0									
S-7.5-B16	B16	11/28/89	7.5									
S-10-B16	B16	11/28/89	10.0									
S-5-B17	B17	11/29/89	5.0									
S-7.5-B17	B17	11/29/89	7.5									
S-10-B17	B17	11/29/89	10.0									
S-5-B18	B18	11/29/89	5.0									
S-7.5-B18	B18	11/29/89	7.5									
S-10-B18	B18	11/29/89	10.0									
S-10-B19	B19	11/29/89	10.0									
S-10-B20	B20	11/29/89	10.0									
S-3-B21	B21	11/01/90	3.0									

Sample ID	Associated Well/Boring	Sampling Date	Depth (feet bgs)	Cadmium (mg/kg)	Chromium (mg/kg)	Lead (mg/kg)	Nickel (mg/kg)	Zinc (mg/kg)
	vven/builig	Date	(reer bys)	(ilig/kg)	(iiig/kg)	(ilig/kg)	(mg/kg)	(Hig/kg)
S-5.5-B22	B22	11/01/90	5.5					
S-8-B22	B22	11/01/90	8.0					
S-3-B23	B23	11/01/90	3.0					
S-8-B23	B23	11/01/90	8.0					
S-5.5-B24	B24	11/01/90	5.5					
S-8-B24	B24	11/01/90	8.0					
S-5.5-B25	B25	11/01/90	5.5					
S-8-B25	B25	11/01/90	8.0					
S-5.5-B26	B26	11/01/90	5.5					
S-8-B26	B26	11/01/90	8.0					
S-5.5-B27	B27	11/01/90	5.5					
S-8-B27	B27	11/01/90	8.0					
S-3-B28	B28	11/02/90	3.0					
S-8-B28	B28	11/02/90	8.0					
S-5.5-B29	B29	11/02/90	5.5					
S-8-B29	B29	11/02/90	8.0					
S-5.5-B30	B30	11/02/90	5.5					
S-8-B30	B30	11/02/90	8.0					
S-3.5-B35	VW1	02/11/93	3.5					
S-6.5-B35	VW1	02/11/93	6.5					
S-7.5-B35	VW1	02/11/93	7.5					
S-9-B35	VW1	02/11/93	9.0					
S-4-B36	VW2	02/11/93	4.0					
S-7-B36	VW2	02/11/93	7.0					
S-9.5-B36	VW2	02/11/93	9.5					
S-4-B37	VW3	02/11/93	4.0					
S-6-B37	VW3	02/11/93	6.0					
S-7.5-B37	VW3	02/11/93	7.5					
S-3-B38	B38	01/05/15	3.0	<0.500	33.3	153	38.1	246
S-5.5-B38	B38	01/05/15	5.5	< 0.500	38.2	8.56	87.6	32.1
S-9.5-B38	B38	01/05/15	9.5	<0.515	108	4.22	183	39.7

Sample ID	Associated	Sampling	Depth	Cadmium	Chromium	Lead	Nickel	Zinc
Sample 15	Well/Boring	Date	(feet bgs)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
CPT Borings								
_	0.07.4	0.4/0.0/0.5	0.0					
S-2-CPT1	CPT1	04/06/05	2.0					
S-4-CPT1	CPT1	04/06/05	4.0					
S-6-CPT1	CPT1	04/06/05	6.0					
S-2-CPT2	CPT2	04/07/05	2.0					
S-4-CPT2	CPT2	04/07/05	4.0					
S-6-CPT2	CPT2	04/07/05	6.0					
S-8-CPT2	CPT2	04/07/05	8.0					
S-2-CPT3	CPT3	04/07/05	2.0					
S-4-CPT3	CPT3	04/07/05	4.0					
S-6-CPT3	CPT3	04/07/05	6.0					
S-8-CPT3	CPT3	04/07/05	8.0					
S-2-CPT4	CPT4	04/07/05	2.0					
S-4-CPT4	CPT4	04/07/05	4.0					
S-6-CPT4	CPT4	04/07/05	6.0					
S-8-CPT4	CPT4	04/07/05	8.0					
S-2-CPT5	CPT5	04/07/05	2.0					
S-4-CPT5	CPT5 CPT5	04/07/05	2.0 4.0					
S-6-CPT5	CPT5 CPT5	04/07/05						
			6.0					
S-8-CPT5	CPT5	04/07/05	8.0					
S-2-CPT6	CPT6	04/06/05	2.0					
S-4-CPT6	CPT6	04/06/05	4.0					
S-6-CPT6	CPT6	04/06/05	6.0					
S-8-CPT6	CPT6	04/06/05	8.0					
S-5-CPT7	CPT7	12/11/06	5.0					
S-5-CPT11	CPT11	12/12/06	5.0					
S-5-CPT12	CPT12	12/11/06	5.0					
Direct-Push Sar	mples							
S-2-DP1	DP1	04/07/05	2.0					
S-4-DP1	DP1	04/07/05	4.0					
S-6-DP1	DP1	04/07/05	6.0					
S-8-DP1	DP1	04/07/05	8.0					
S-10.5-DP1	DP1	04/14/05	10.5					
C 10.0 D1 1	D1 1	0 1, 1 7, 00	10.0					

					d, California			
Sample ID	Associated	Sampling	Depth	Cadmium	Chromium	Lead	Nickel	Zinc
	Well/Boring	Date	(feet bgs)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
S-2-DP3	DP3	04/06/05	2.0					
S-4-DP3	DP3	04/06/05	4.0					
S-6-DP3	DP3	04/06/05	6.0					
S-8-DP3	DP3	04/06/05	8.0					
S-9.5-DP3	DP3	04/14/05	9.5					
S-12-DP3	DP3	04/14/05	12.0					
S-2-DP4	DP4	04/07/05	2.0					
S-4-DP4	DP4	04/07/05	4.0					
S-6-DP4	DP4	04/07/05	6.0					
S-8-DP4	DP4	04/07/05	8.0					
S-10.5-DP4	DP4	04/14/05	10.5					
S-2-DP5	DP5	04/07/05	2.0					
S-4-DP5	DP5	04/07/05	4.0					
S-6-DP5	DP5	04/07/05	6.0					
S-8-DP5	DP5	04/07/05	8.0					
S-10.5-DP5	DP5	04/14/05	10.5					
S-2-DP6	DP6	04/06/05	2.0					
S-4-DP6	DP6	04/06/05	4.0					
S-6-DP6	DP6	04/06/05	6.0					
S-5-DP7	DP7	12/08/06	5.0					
S-10-DP7	DP7	12/14/06	10.0					
S-15.5-DP7	DP7	12/14/06	15.5					
S-20-DP7	DP7	12/14/06	20.0					
S-25.5-DP7	DP7	12/14/06	25.5					
S-29.5-DP7	DP7	12/14/06	29.5					
S-5-DP8	DP8	12/08/06	5.0					
S-10-DP8	DP8	12/14/06	10.0					
S-15-DP8	DP8	12/14/06	15.0					
S-19.5-DP8	DP8	12/14/06	19.5					
S-29.5-DP8	DP8	12/14/06	29.5					
S-5-DP9	DP9	12/11/06	5.0					
S-9.5-DP9	DP9	12/15/06	9.5					
S-14.5-DP9	DP9	12/15/06	14.5					
S-20-DP9	DP9	12/15/06	20.0					
S-25.5-DP9	DP9	12/15/06	25.5					
S-29.5-DP9	DP9	12/15/06	29.5					
Hydropunch Sar	nples							
S-5-HP7	HP7	12/11/06	5.0					

Sample ID	Associated Well/Boring	Sampling Date	Depth (feet bgs)	Cadmium (mg/kg)	Chromium (mg/kg)	Lead (mg/kg)	Nickel (mg/kg)	Zinc (mg/kg)
S-5-HP11	HP11	12/11/06	5.0					
S-5-HP12	HP12	12/12/06	5.0					
Soil Stockpil	e Samples							
Soil Stockpile	Samples							
SP-1 (A-D)		12/15/06				12		
SP1-(1-4)		09/01/09				3.78		
SP-1		05/09/14				0.0862		
Notes:	Highlighted sample	representative of	soil removed from site	e. Sample in grey font re	presentative of pre-remediation	on conditions.		
S-2-CPT1	= Soil - Sample I	Depth - Sample Lo	cation.	, , ,				
TPHmo	 Total petroleur 	n hydrocarbons as	motor oil analyzed u	sing EPA Method 8015B	i.			
TPHd	= Total petroleur	n hydrocarbons as	diesel analyzed usin	g EPA Method 8015B.				
TPHg	 Total petroleur 	n hydrocarbons as	gasoline analyzed us	sing EPA Method 8015B				
MTBE	 Methyl tertiary 	butyl ether analyze	ed using EPA Method	8260B.				
BTEX	= Benzene, tolue	ene, ethylbenzene,	and total xylenes and	alyzed using EPA Method	l 8021B.			
ETBE	= Ethyl tertiary b	utyl ether analyzed	using EPA Method 8	3260B.				
TAME	 Tertiary amyl n 	nethyl ether analyz	ed using EPA Metho	d 8260B.				
TBA	 Tertiary butyl a 	alcohol analyzed us	sing EPA Method 826	0B.				
1,2-DCA	= 1,2-dichloroeth	nane analyzed usin	g EPA Method 8260E	3.				
EDB	= 1,2-dibromoeth	nane analyzed usin	g EPA Method 8260l	3.				
DIPE	= Di-isopropyl et	her analyzed using	EPA Method 8260B					
Ethanol	 Ethanol analyz 	ed using EPA Met	hod 8260B.					
Metals	 Total metals ar 	nalyzed using EPA	Method 6010B.					
PAHs	 Polyaromatic h 	ydrocarbons analy	zed using EPA Meth	od 8310.				
feet bgs	= Feet below gro	ound surface.						
mg/kg	 Milligrams per 	kilogram.						
<	= Less than the	stated reporting lim	nit.					
а	= Chromatograp	hic pattern does no	ot match that of the s	pecified standard.				
b	= Hydrocarbons	greater than C22 v	vere detected; 460 m	g/kg of oil and grease and	alyzed using Standard Metho	d 5520 were detected.		
С	 Data missing from the properties of the properties of	rom historical files.						
d	= n-Butylbenzen	e.						
е	 Sample analyz 	ed beyond recomm	mended hold time.					

APPENDIX



CORRESPONDENCE



David R. Daniels

From: Detterman, Karel, Env. Health < Karel. Detterman@acgov.org>

Sent: Wednesday, November 26, 2014 5:53 PM

To: Greg Gurss; David R. Daniels; mashpetroleum@yahoo.com; 'Sedlachek, Jennifer C'

Cc: Roe, Dilan, Env. Health; 'Mansour Sepehr'

Subject: FW: Fuel Leak Case No. RO491 and GeoTracker Global ID T0600100552, EXXON #

7-3006, 720 High Street, Oakland, CA 94601

Attachments: Attachment_1_and_ftpUploadInstructions_2014-05-15.pdf

Hello Everyone:

Thank you for submittal of the October 30, 2014 Work Plan for Soil Boring (Work Plan) prepared and submitted on your behalf by Cardno ERI (Cardno).

Based on ACEH staff review of the work plan, the proposed scope of work is conditionally approved for implementation provided that the technical comment below is incorporated during the proposed work. Submittal of a revised work plan or a work plan addendum is not required unless an alternate scope of work outside that described in the work plan or these technical comments is proposed. We request that you address the following technical comments, perform the proposed work, and send us the report described below. Please provide 72-hour advance written notification to this office (e-mail preferred to:karel.detterman@acgov.org) prior to the start of field activities.

TECHNICAL COMMENTS

- 1. LTCP Media Specific Criteria for Direct Contact and Outdoor Air Criteria: Please ensure that the soil boring adjacent to the waste oil UST is advanced by a hollow stem augur, direct push method, or sonic drilling as per Cardno's Soil Boring Field Protocol and not hand augured as stated in the Work Plan. Please ensure that soil samples are selected for analyses from 0 to 5 and 5 to 10-foot intervals to characterize the vertical extent as per the LTCP's Media Specific Criteria for Direct Contact and Outdoor Air Criteria.
- 2. Technical Comments 2 and 3: Please include responses to Technical Comments 2 and 3 in ACEH's 9/25/2014 Directive Letter in the Request for Closure.

TECHNICAL REPORT REQUEST

Please upload technical report to the ACEH ftp site (Attention: Karel Detterman), and to the State Water Resources Control Board's Geotracker website, in accordance with the following specified file naming convention and schedule:

January 30, 2015 – Request for Closure
 File to be named: RO491_RFC_R_yyyy-mm-dd

This report is being requested pursuant to California Health and Safety Code Section 25296.10. 23 CCR Sections 2652 through 2654, and 2721 through 2728 outline the responsibilities of a responsible party in response to an unauthorized release from a petroleum UST system, and require your compliance with this request.

Thank you for your cooperation. Should you have any questions or concerns regarding this correspondence or your case, please send me an e-mail message at karel.detterman@acgov.org or call me at (510) 567-6708.

Karel Detterman, PG
Hazardous Materials Specialist
Alameda County Environmental Health
1131 Harbor Bay Parkway
Alameda, CA 94502

Direct: 510.567.6708 Fax: 510.337.9335 Email: karel.detterman@acgov.org

PDF copies of case files can be downloaded at:

http://www.acgov.org/aceh/lop/ust.htm

From: Detterman, Karel, Env. Health

Sent: Thursday, September 25, 2014 2:39 PM

To: Greg Gurss; 'David R. Daniels'; mashpetroleum@yahoo.com; 'Mansour Sepehr'

Cc: 'Sedlachek, Jennifer C'; Roe, Dilan, Env. Health

Subject: Fuel Leak Case No. RO491 and GeoTracker Global ID T0600100552, EXXON #7-3006, 720 High Street,

Oakland, CA 94601

Hello Everyone:

Thank you for attending the conference call-meeting at our office on Friday 9/19/2014. The purpose of was to discuss the results of the *Updated Site Conceptual Model (SCM)* and *Soil and Groundwater Investigation and Groundwater Monitoring Report* (Report) dated 7/13/2014 in conjunction with Alameda County Environmental Health's (ACEH) Low Threat Closure Policy (LTCP) Evaluation and identify remaining data gaps on the path to closure. As discussed in the conference call-meeting, three data gaps were identified, as listed below under Technical Comments.

Please submit a Data Gap Work Plan to address the first Technical Comment; to expedite review, please e-mail the draft Data Gap Work Plan to my attention by 10/15/2014. I will send comments so that the Work Plan can be finalized and uploaded per the schedule in the Technical Report Request section. In the Soil and Groundwater Investigation, include responses to Technical Comments 2 and 3 and submit the report as a Request for Closure (RFC).

TECHNICAL COMMENTS

- 1. LTCP Media Specific Criteria for Direct Contact and Outdoor Air Criteria: Soil and ground water has not been delineated for volatile organic compounds (VOCs) and polynuclear aromatic hydrocarbon (PAHs) between 0 to 5 feet and 5 to 10 feet below ground surface adjacent to the former waste oil underground storage tank (UST). To close this data gap, please prepare a Data Gap Investigation Work Plan to characterize the vertical extent (0 to 5 and 5 to 10-foot intervals) for volatile organic compounds (VOCs) or polynuclear aromatic hydrocarbon (PAHs) in soil and groundwater by advancing a soil boring adjacent to the former waste oil UST location. Additionally, ACEH requests collection and analysis of appropriate soil samples from the capillary fringe, saturated zone, stained interval(s), areas with high PID readings, and the bottom of the soil boring. If visual indications are not encountered, please collect soil samples at or just above the soil water interface and the bottom of the boring.
- 2. **LTCP Media Specific Criteria for Groundwater:** Please use the criteria listed in Table 1 of the LTCP's *Technical Justification for Groundwater Media-Specific Criteria* to define the length of the plume. The LTCP defines the length of the plume as the maximum extent from the point of release of any petroleum related constituent (GRO) in groundwater that exceeds the water quality objectives. Please prepare a figure plotting the estimated GRO plume length(s) in the groundwater gradient direction on an aerial photograph base map, identifying sensitive receptors within 1,000 feet of the edge of the plume.
- 3. **Groundwater Monitoring Event:** Please present the results of the groundwater monitoring and sampling event conducted after June 2014, and which includes new wells MW-20 and MW-21.

Technical report request

October 15, 2014 – E-mailed Draft Data Gap Work Plan to karel.detterman@acgov.org

Please upload the technical report to the ACEH ftp site (Attention: Karel Detterman), and to the State Water Resources Control Board's Geotracker website, in accordance with the following specified file naming convention and schedule:

October 29, 2014 – Data Gap Work Plan
 File to be named: RO491_WP_R_yyyy-mm-dd

Sixty days After Work Plan Approval - Request for Closure
 File to be named: RO491_RFC_R_vyyy-mm-dd

This report is being requested pursuant to California Health and Safety Code Section 25296.10. 23 CCR Sections 2652 through 2654, and 2721 through 2728 outline the responsibilities of a responsible party in response to an unauthorized release from a petroleum UST system, and require your compliance with this request.

Thank you,

Karel Detterman, PG Hazardous Materials Specialist Alameda County Environmental Health 1131 Harbor Bay Parkway Alameda, CA 94502

Direct: 510.567.6708 Fax: 510.337.9335

Email: karel.detterman@acgov.org

PDF copies of case files can be downloaded at:

http://www.acgov.org/aceh/lop/ust.htm

APPENDIX

В

FIELD PROTOCOLS





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 Teflon 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. De-ionized 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.

GROUNDWATER SAMPLING PROTOCOL

The static water level and separate-phase product level, if present, in each well that contained water and/or separate-phase product are measured with a ORS Interface Probe, which is accurate to the nearest 0.01 foot. To calculate groundwater elevations and evaluate groundwater gradient, depth to water (DTW) levels are subtracted from top of casing elevations.

Groundwater samples collected for subjective evaluation are collected by gently lowering approximately half the length of a clean Teflon® or polypropylene bailer past the air-water interface (if possible) and collecting a sample from near the surface of the water in the well. The samples are checked for measurable free-phase hydrocarbons or sheen. If appropriate, free-phase hydrocarbons are removed from the well.

Before water samples are collected from the groundwater monitoring wells, the wells are purged until a minimum of three well casing volumes is purged and stabilization of the temperature, pH, and conductivity is obtained. Water samples from the wells that do not obtain stability of the temperature, pH, and conductivity are considered to be "grab samples." The quantity of water purged from each well is calculated as follows:

1 well casing volume = $\pi r^2 h(7.48)$ where:

r = radius of the well casing in feet h = column of water in the well in feet (depth to bottom - depth to water)

7.48 = conversion constant from cubic feet to gallons π = ratio of the circumference of a circle to its diameter

Gallons of water purged/gallons in 1 well casing volume = well casing volumes removed.

The wells are purged using a submersible pump. Prior to use at the site and between wells the pump is cleaned.

Five gallons of water are placed in three 15-gallon tubs. Liquinox detergent is added to the first tub of water. The pump and tubing are submerged in the first tub and the water is pumped through the pump. The process is repeated in the second and third tub.

After purging, each well is allowed to recharge to at least 80% of the initial water level. Water samples from wells that do not recover at least 80% (due to slow recharging of the well) between purging and sampling are considered to be "grab samples." Water samples are collected with a new, disposable Teflon® or polypropylene bailer. The groundwater is carefully poured into selected sample containers (40-milliliter [ml] glass vials, 1,000-ml glass amber bottles, etc.), which are filled so as to produce a positive meniscus.

Depending on the required analysis, each sample container is preserved with hydrochloric acid, nitric acid, etc., or it is preservative free. The type of preservative used for each sample is specified on the Chain-of-Custody record.

Each vial and glass amber bottle is sealed with a cap containing a Teflon® septum, and subsequently examined for air bubbles to avoid headspace, which would allow volatilization to occur. The samples are promptly transported in iced storage in a thermally-insulated ice chest, accompanied by a Chain-of-Custody record, to a California state-certified laboratory.

Water generated during purging and cleaning is contained and transported off site for treatment and disposal.

APPENDIX

C

PERMITS



Alameda County Public Works Agency - Water Resources Well Permit



399 Elmhurst Street Hayward, CA 94544-1395 Telephone: (510)670-6633 Fax:(510)782-1939

Application Approved on: 12/16/2014 By priest

Permit Numbers: W2014-1166 Permits Valid from 01/05/2015 to 01/05/2015

Phone: 707-280-7487

\$265.00

Application Id: 1417563693407 City of Project Site: Oakland Site Location:

720 High Street, Oakland (Former Exxon 73006

Project Start Date: 01/05/2015 Completion Date: 01/05/2015 **Assigned Inspector:** Contact Sam Brathwaite at (925) 570-7609 or sbrathwaite@groundzonees.com

Applicant: Cardno ERI - Nadya Vicente

601 North McDowell Blvd, Petaluma, CA 94954

Property Owner: Victor Chu

3915 Forest Hill Ave, Oakland, CA 94602

Client: Jennifer Sedlachek ExxonMobil

4096 Piedmont Ave, # 194, Oakland, CA 94611

Contact: **Greg Gurss** Phone: 916-692-3100

Cell: --

Phone: --

Phone: --

Total Due: Receipt Number: WR2014-0516 **Total Amount Paid:**

<u>\$265.00</u> **PAID IN FULL**

Payer Name : nadya m vicente Paid By: MC

Works Requesting Permits:

Borehole(s) for Investigation-Environmental/Monitorinig Study - 1 Boreholes

Driller: Cascade Drilling - Lic #: 938110 - Method: DP Work Total: \$265.00

Specifications

Issued Dt Permit Expire Dt Hole Diam Max Depth Number **Boreholes**

W2014-12/16/2014 04/05/2015 1 4.00 in. 10.00 ft

1166

Specific Work Permit Conditions

- 1. Backfill bore hole by tremie with cement grout or cement grout/sand mixture. Upper two-three feet replaced in kind or with compacted cuttings. All cuttings remaining or unused shall be containerized and hauled off site. The containers shall be clearly labeled to the ownership of the container and labeled hazardous or non-hazardous.
- 2. Boreholes shall not be left open for a period of more than 24 hours. All boreholes left open more than 24 hours will need approval from Alameda County Public Works Agency, Water Resources Section. All boreholes shall be backfilled according to permit destruction requirements and all concrete material and asphalt material shall be to Caltrans Spec or County/City Codes. No borehole(s) shall be left in a manner to act as a conduit at any time.
- 3. Permittee shall assume entire responsibility for all activities and uses under this permit and shall indemnify, defend and save the Alameda County Public Works Agency, its officers, agents, and employees free and harmless from any and all expense, cost, liability in connection with or resulting from the exercise of this Permit including, but not limited to, properly damage, personal injury and wrongful death.
- 4. Applicant shall contact assigned inspector listed on the top of the permit at least five (5) working days prior to starting, once the permit has been approved. Confirm the scheduled date(s) at least 24 hours prior to drilling.
- 5. Copy of approved drilling permit must be on site at all times. Failure to present or show proof of the approved permit application on site shall result in a fine of \$500.00.

Alameda County Public Works Agency - Water Resources Well Permit

6. NOTE:

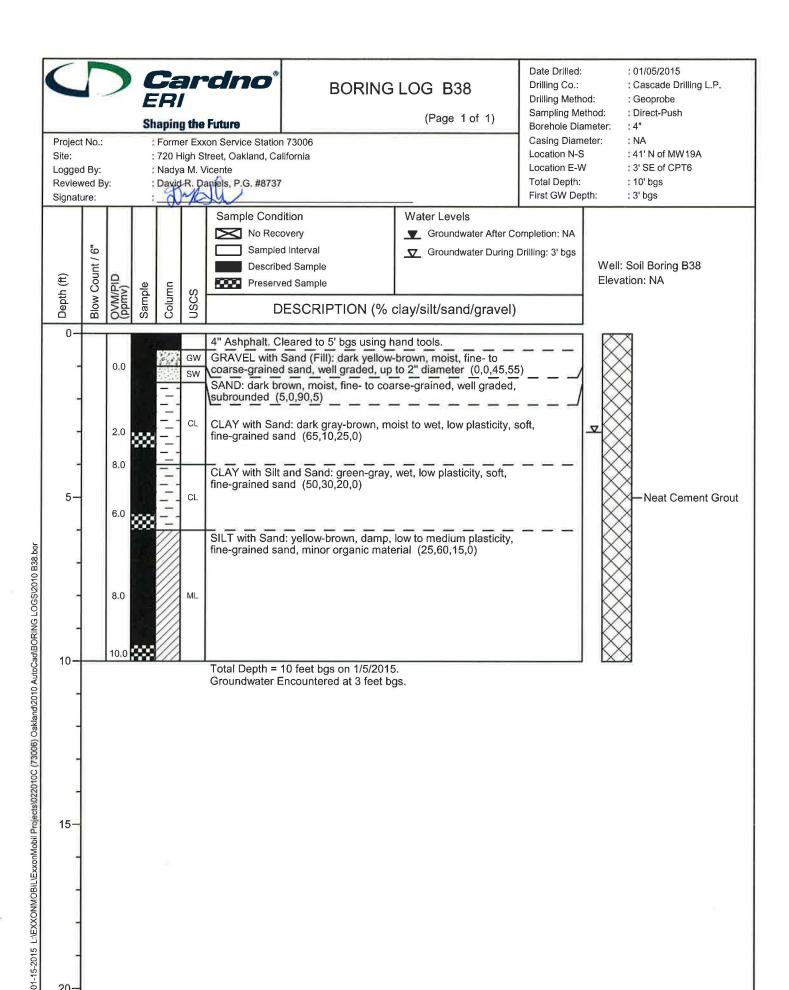
Under California laws, the owner/operator are responsible for reporting the contamination to the governmental regulatory agencies under Section 25295(a). The owner/operator is liable for civil penalties under Section 25299(a)(4) and criminal penalties under Section 25299(d) for failure to report a leak. The owner/operator is liable for civil penalties under Section 25299(b)(4) for knowing failure to ensure compliance with the law by the operator. These penalty provisions do not apply to a potential buyer.

- 7. Prior to any drilling activities onto any public right-of-ways, it shall be the applicants responsibilities to contact and coordinate a Underground Service Alert (USA), obtain encroachment permit(s), excavation permit(s) or any other permits required for that City or to the County and follow all City or County Ordinances. It shall also be the applicants responsibilities to provide to the Cities or to Alameda County a Traffic Safety Plan for any lane closures or detours planned. No work shall begin until all the permits and requirements have been approved or obtained.
- 8. Permit is valid only for the purpose specified herein. No changes in construction procedures, as described on this permit application. Boreholes shall not be converted to monitoring wells, without a permit application process.

APPENDIX

BORING LOG





APPENDIX

Е

FIELD DATA SHEETS



		Daily Field Report	
	Cardno * ERI	Daily Flora Report	
	Shaping the Future	Project ID #: 7 3006	ERI Job # 2016
1	onspring and votare	Subject: Monitoring + Sampling	Date: 9 - 18 - 14
		Equipment Used: Bailers, DTW tape	Sheet: of
		Name(s): Darin Einhell	
		Time Arrived On Site: Time Departed Site:	Total Travel:
	1.00		
On	Site		945
H+ <	Meetir	rey	945-1000
Open	red Welle		1000-1015
BIAKO	en well	with bailer MWZI, MWZO	1030-1136
Sam	pled Wes	13 MWZI MWZO	1055-1700
044	Site		1230
ace	B		1345
	- M. L.C.C.		
Pur	al wate	er- 1 gal.	
Toda	at hi late	v - Comt.	
0.110			

Cardno ERI Groundwater M+S Depth To Water

Case Volume= $H(r^2x0.163)$

H=Height of Water Column in Feet r=Radius of well casing in inches

Common conversion factors: 2"=0.163, 4"=0.652, 6"=1.457

Project

Location

Date

Name

2010

73006

9-18-14

Davin Einhell

WELL	WELL	ODOR?	TOTAL	Pre-Purge	Case	80%	COMMENTS
ID	DIAMETER	SHEEN?	DEPTH	DTW	volume	r/chrg. DTW	
	inches		feet	feet	Gal.	feet	
MW20	2		13.86	10-47	0.55	11, 14	
MW21	2		12.58	10.55	0.33	10.95	
				•			
	2		-	-		:	
	4						
	-			-			
				-			

WATI	ER S	AMP	LING	SIT	E ST	ATU	S								Date: 9-18-14
															Inspected by: Darin Einhell
ERI Job	Numb	oer Z	510	Station	No.	730	56	Site Ad	dress:	77	ی د	4 isl	sa sa	Mal	Wand, CA
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	/	ad /	(/	/s ./	2-28/	10 al	ad /	ir aut	/ /	Over /	Gate	/2/	15/	Shirton Shirton	tance
MellID	Mel	Clent Qubb	aske Well	OCH OCH	nell Cou	del Mell S	VC Nater	ell age	Well	Lence	ondiff	Drum Orum	Onte Building	ondifficite ADD	Comments / Well Covers
	N/R/ok	N/R/ok	N/R/ok	N/R/ok	N/R/ok	N/R/ok	Y/N	N/R/ok	N/R/ok	N/R/ok	Ť	s/w/e	g/v/o	N/R/ok	
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N = Not re	epairable	e in time	available	e-see co	mments	()	Y =	Yes.			s = S	Soil.		g = Gr	raffitti on walls.
R = Repa	ired-see	comme	nts				N =	No.			w = \	Vater.		v = Va	agrants (or evidence of).
ok = No a	action ne	eded.									e = E	Empty.		o = Op	pen (not secured).

					GR	OUNDV	VATER SA	MPLING	FIELD	LOG				
Client Name	EX	XON M	OFIL		Cardno E	ERI Job #:	2010	<u> </u>			Date: 9	-18-1	Fage 1	_ of
					Field Cle	aning Pe	rformed:				Case Vo	olume =	(TD - DTV	V) x F where F =
Location: Field Crew:	Da	in Ei	nhell		Analysis:					_	0.163 for 2" inside-diameter well casing			
			(nter well casing
											1.45/	tor 6" in	side-diam	nter well casing
Well ID	Time	Case Volume	Purge Volume	Temp	Cond	pН	Post-Purge DTW	80% Recharge	BB	40mil	Amber	DO	ORP	Comments Well Box Condition
MW21	1030	0.33				34	[0.9]	У						Dry @ 0.5 gal
	1033	4	1	14.2	602	6.73								
			2				ω	- 1)	- 1	MW S	-1 @	105	5	
nwzo	436	0.55	7		l		11.10	Y						Dry @ 0.5 gal
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APPENDIX

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LABORATORY ANALYTICAL REPORTS





Calscience



WORK ORDER NUMBER: 14-09-1638

The difference is service



AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: Cardno ERI

Client Project Name: ExxonMobil 73006/022010C

Attention: Greg Gurss

601 North McDowell Blvd. Petaluma, CA 94954-2312

Coup L. u Dung

Approved for release on 10/01/2014 by: Cecile deGuia Project Manager

ResultLink ▶

Email your PM >



Eurofins Calscience, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.



Contents

Client Project Name:	ExxonMobil	73006/022010C
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Work Order Number: 14-09-1638

1	Work Order Narrative
2	Sample Summary
3	Client Sample Data. 3.1 EPA 8015B (M) TPH Diesel (Aqueous). 3.2 EPA 8015B (M) TPH Gasoline (Aqueous). 3.3 EPA 8021B BTEX (Aqueous). 3.4 EPA 8260B Volatile Organics (Aqueous).
4	Quality Control Sample Data. 1 4.1 MS/MSD. 1 4.2 LCS/LCSD. 1
5	Glossary of Terms and Qualifiers
6	Chain-of-Custody/Sample Receipt Form



Work Order Narrative

Work Order: 14-09-1638 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain-of-Custody (COC) on 09/20/14. They were assigned to Work Order 14-09-1638.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

New York NELAP air certification does not certify for all reported methods and analytes, reference the accredited items here: http://www.calscience.com/PDF/New_York.pdf

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.



Sample Summary

Client: Cardno ERI Work Order: 14-09-1638
601 North McDowell Blvd. Project Name: ExxonMobil 73006/022010C

601 North McDowell Blvd. Project Name: ExxonMobil 73006/022010C
Petaluma, CA 94954-2312 PO Number: 022010C

Date/Time 09/20/14 09:30 Received:

Number of 17

Containers:

Attn: Greg Gurss

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
W-11-MW20	14-09-1638-1	09/18/14 12:00	8	Aqueous
W-11-MW21	14-09-1638-2	09/18/14 10:55	7	Aqueous
QCBB	14-09-1638-3	09/18/14 13:45	2	Aqueous



 Cardno ERI
 Date Received:
 09/20/14

 601 North McDowell Blvd.
 Work Order:
 14-09-1638

 Petaluma, CA 94954-2312
 Preparation:
 EPA 3510C

 Method:
 EPA 8015B (M)

 Units:
 ug/L

Project: ExxonMobil 73006/022010C Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
W-11-MW20	14-09-1638-1-G	09/18/14 12:00	Aqueous	GC 46	09/22/14	09/24/14 07:22	140922B05S
Parameter		<u>Result</u>	RL		<u>DF</u> <u>Qualifiers</u>		alifiers
TPH as Diesel		1900	50		1.00	SG,	HD
Surrogate		Rec. (%)	<u>Co</u>	ntrol Limits	<u>Qualifiers</u>		
n-Octacosane		81	68-	140			
W-11-MW21	14-09-1638-2-G	09/18/14 10:55	Aqueous	GC 46	09/22/14	09/24/14 07:40	140922B05S
<u>Parameter</u>		Result	RL		DF	Qua	alifiers
TPH as Diesel		1700	50		1.00	SG,	HD
Surrogate		Rec. (%)	<u>Co</u>	ntrol Limits	<u>Qualifiers</u>		
n-Octacosane		69	68-	140			

Method Blank	099-15-304-825	N/A	Aqueous	GC 46	09/22/14	09/24/14 06:30	140922B05S
Parameter TPH as Diesel		Result ND	<u>RL</u> 50		<u>DF</u> 1.00	<u>Quali</u>	<u>fiers</u>
Surrogate n-Octacosane		<u>Rec. (%)</u> 89		ntrol Limits -140	<u>Qualifiers</u>		



 Cardno ERI
 Date Received:
 09/20/14

 601 North McDowell Blvd.
 Work Order:
 14-09-1638

 Petaluma, CA 94954-2312
 Preparation:
 EPA 5030C

 Method:
 EPA 8015B (M)

 Units:
 ug/L

Project: ExxonMobil 73006/022010C Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix Ins	trument	Date Prepared	Date/Time Analyzed	QC Batch ID
W-11-MW20	14-09-1638-1-F	09/18/14 12:00	Aqueous GC	57	09/30/14	09/30/14 20:18	140930L040
Parameter		Result	<u>RL</u>		<u>DF</u>	Qua	<u>alifiers</u>
TPH as Gasoline		1200	250		5.00	HD	
Surrogate		Rec. (%)	Control	<u>Limits</u>	Qualifiers		
1,4-Bromofluorobenzene		75	38-134				
W-11-MW21	14-09-1638-2-D	09/18/14 10:55	Aqueous GC	57	09/30/14	09/30/14 20:50	140930L040
Parameter		Result	RL		DF	Qua	alifiers

	10:55		20:	:50	
<u>Parameter</u>	Result	<u>RL</u>	<u>DF</u>	Qualifiers	
TPH as Gasoline	2200	250	5.00		
Ourseasts	D = = (0/)	On a track the street	0.00 116 0.00		
Surrogate	Rec. (%)	Control Limits	<u>Qualifiers</u>		
1,4-Bromofluorobenzene	76	38-134			

Method Blank	099-12-436-9585	N/A	Aqueous G	GC 57	09/30/14	09/30/14 15:58	140930L040
<u>Parameter</u>		Result	RL		<u>DF</u>	Qua	alifiers
TPH as Gasoline		ND	50		1.00		
Surrogate		Rec. (%)	Contro	rol Limits	Qualifiers		
1,4-Bromofluorobenzene		74	38-13	34			



 Cardno ERI
 Date Received:
 09/20/14

 601 North McDowell Blvd.
 Work Order:
 14-09-1638

 Petaluma, CA 94954-2312
 Preparation:
 EPA 5030C

 Method:
 EPA 8021B

 Units:
 ug/L

Project: ExxonMobil 73006/022010C Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix Instru	ument Date Prepared	Date/Time Analyzed	QC Batch ID
W-11-MW20	14-09-1638-1-D	09/18/14 12:00	Aqueous GC 2	21 09/23/14	09/23/14 12:44	140923L043
Parameter		Result	<u>RL</u>	<u>DF</u>	Qua	alifiers
Benzene		ND	0.50	1.00		
Toluene		ND	0.50	1.00		
Ethylbenzene		ND	0.50	1.00		
p/m-Xylene		ND	1.0	1.00		
o-Xylene		ND	0.50	1.00		
Xylenes (total)		ND	0.50	1.00		
Surrogate		Rec. (%)	Control Li	imits Qualifiers	i	
1,4-Bromofluorobenzene		120	70-130			

W-11-MW21	14-09-1638-2-D	09/18/14 10:55	Aqueous GC 21	09/23/14	09/23/14 13:50	140923L043
Parameter		Result	<u>RL</u>	<u>DF</u>	Qua	alifiers
Benzene		170	0.50	1.00		
Toluene		ND	0.50	1.00		
Ethylbenzene		67	0.50	1.00		
p/m-Xylene		ND	1.0	1.00		
o-Xylene		ND	0.50	1.00		
Xylenes (total)		ND	0.50	1.00		
Surrogate		Rec. (%)	Control Limits	Qualifiers		
1,4-Bromofluorobenzene		151	70-130	AZ		

Method Blank	099-12-667-2130	N/A	Aqueous GC 21	09/23/14	09/23/14 12:05	140923L043
Parameter	•	Result	<u>RL</u>	<u>DF</u>	Qua	alifiers
Benzene		ND	0.50	1.00		
Toluene		ND	0.50	1.00		
Ethylbenzene		ND	0.50	1.00		
p/m-Xylene		ND	1.0	1.00		
o-Xylene		ND	0.50	1.00		
Xylenes (total)		ND	0.50	1.00		
Surrogate		Rec. (%)	Control Limits	<u>Qualifiers</u>		
1,4-Bromofluorobenzene		110	70-130			



 Cardno ERI
 Date Received:
 09/20/14

 601 North McDowell Blvd.
 Work Order:
 14-09-1638

 Petaluma, CA 94954-2312
 Preparation:
 EPA 5030C

 Method:
 EPA 8260B

Units: ug/L Page 1 of 2

Project: ExxonMobil 73006/022010C

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
W-11-MW20	14-09-1638-1-A	09/18/14 12:00	Aqueous	GC/MS FFF	09/23/14	09/24/14 07:37	140923L036
Parameter		Result	RL		<u>DF</u>	Qua	alifiers
Methyl-t-Butyl Ether (MTBE)		20	1.0	1	2.00		
Tert-Butyl Alcohol (TBA)		56	10		2.00		
Diisopropyl Ether (DIPE)		3.4	1.0	1	2.00		
Ethyl-t-Butyl Ether (ETBE)		ND	1.0	1	2.00		
Tert-Amyl-Methyl Ether (TAME)		ND	1.0)	2.00		
Ethanol		ND	100)	2.00		
1,2-Dibromoethane		ND	1.0	1	2.00		
1,2-Dichloroethane		ND	1.0	1	2.00		
Surrogate		Rec. (%)	<u>Co</u>	ntrol Limits	<u>Qualifiers</u>		
1,4-Bromofluorobenzene		103	68-	120			
Dibromofluoromethane		111	80-	127			
1,2-Dichloroethane-d4		119	80-	128			
Toluene-d8		99	80-	·120			
W-11-MW21	14-09-1638-2-A	09/18/14 10:55	Aqueous	GC/MS FFF	09/23/14	09/24/14 08:05	140923L036
		-	-		DE		alifiers
<u>Parameter</u>		Result	<u>RL</u>		<u>DF</u>	<u>Qua</u>	illieis
Parameter Methyl-t-Butyl Ether (MTBE)		Result 46	<u>RL</u> 2.0		<u>DF</u> 4.00	<u>Qua</u>	amers
<u> </u>						<u>Qua</u>	aillici <u>s</u>
Methyl-t-Butyl Ether (MTBE)		46	2.0		4.00	Qua	<u>uniers</u>
Methyl-t-Butyl Ether (MTBE) Tert-Butyl Alcohol (TBA)		46 43	2.0 20		4.00 4.00	Qua	aineis
Methyl-t-Butyl Ether (MTBE) Tert-Butyl Alcohol (TBA) Diisopropyl Ether (DIPE)		46 43 5.5	2.0 20 2.0		4.00 4.00 4.00	Qua	aineis
Methyl-t-Butyl Ether (MTBE) Tert-Butyl Alcohol (TBA) Diisopropyl Ether (DIPE) Ethyl-t-Butyl Ether (ETBE)		46 43 5.5 ND	2.0 20 2.0 2.0		4.00 4.00 4.00 4.00	Qua	<u>aimers</u>
Methyl-t-Butyl Ether (MTBE) Tert-Butyl Alcohol (TBA) Diisopropyl Ether (DIPE) Ethyl-t-Butyl Ether (ETBE) Tert-Amyl-Methyl Ether (TAME)		46 43 5.5 ND ND	2.0 20 2.0 2.0 2.0		4.00 4.00 4.00 4.00 4.00	Qua	aineis
Methyl-t-Butyl Ether (MTBE) Tert-Butyl Alcohol (TBA) Diisopropyl Ether (DIPE) Ethyl-t-Butyl Ether (ETBE) Tert-Amyl-Methyl Ether (TAME) Ethanol		46 43 5.5 ND ND ND	2.0 20 2.0 2.0 2.0 20		4.00 4.00 4.00 4.00 4.00 4.00	Qua	aineis
Methyl-t-Butyl Ether (MTBE) Tert-Butyl Alcohol (TBA) Diisopropyl Ether (DIPE) Ethyl-t-Butyl Ether (ETBE) Tert-Amyl-Methyl Ether (TAME) Ethanol 1,2-Dibromoethane		46 43 5.5 ND ND ND ND	2.0 20 2.0 2.0 2.0 2.0 2.0		4.00 4.00 4.00 4.00 4.00 4.00 4.00	Qua	aineis
Methyl-t-Butyl Ether (MTBE) Tert-Butyl Alcohol (TBA) Diisopropyl Ether (DIPE) Ethyl-t-Butyl Ether (ETBE) Tert-Amyl-Methyl Ether (TAME) Ethanol 1,2-Dibromoethane 1,2-Dichloroethane		46 43 5.5 ND ND ND ND ND	2.0 20 2.0 2.0 2.0 2.0 2.0 2.0		4.00 4.00 4.00 4.00 4.00 4.00 4.00 4.00	Qua	ainieis
Methyl-t-Butyl Ether (MTBE) Tert-Butyl Alcohol (TBA) Diisopropyl Ether (DIPE) Ethyl-t-Butyl Ether (ETBE) Tert-Amyl-Methyl Ether (TAME) Ethanol 1,2-Dibromoethane 1,2-Dichloroethane Surrogate		46 43 5.5 ND ND ND ND ND ND	2.0 20 2.0 2.0 2.0 2.0 2.0 2.0 68-	D ntrol Limits	4.00 4.00 4.00 4.00 4.00 4.00 4.00 4.00	Qua	ainieis
Methyl-t-Butyl Ether (MTBE) Tert-Butyl Alcohol (TBA) Diisopropyl Ether (DIPE) Ethyl-t-Butyl Ether (ETBE) Tert-Amyl-Methyl Ether (TAME) Ethanol 1,2-Dibromoethane 1,2-Dichloroethane Surrogate 1,4-Bromofluorobenzene		46 43 5.5 ND ND ND ND ND ND	2.0 20 2.0 2.0 2.0 2.0 2.0 68- 80-	ntrol Limits	4.00 4.00 4.00 4.00 4.00 4.00 4.00 4.00	Qua	ainicis
Methyl-t-Butyl Ether (MTBE) Tert-Butyl Alcohol (TBA) Diisopropyl Ether (DIPE) Ethyl-t-Butyl Ether (ETBE) Tert-Amyl-Methyl Ether (TAME) Ethanol 1,2-Dibromoethane 1,2-Dichloroethane Surrogate 1,4-Bromofluorobenzene Dibromofluoromethane		46 43 5.5 ND ND ND ND ND ND ND ND	2.0 20 2.0 2.0 2.0 2.0 2.0 68- 80-	ntrol Limits -120	4.00 4.00 4.00 4.00 4.00 4.00 4.00 4.00	Qua	ainicis



 Cardno ERI
 Date Received:
 09/20/14

 601 North McDowell Blvd.
 Work Order:
 14-09-1638

 Petaluma, CA 94954-2312
 Preparation:
 EPA 5030C

 Method:
 EPA 8260B

 Units:
 ug/L

Project: ExxonMobil 73006/022010C Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-12-884-1202	N/A	Aqueous	GC/MS FFF	09/23/14	09/24/14 01:07	140923L036
Parameter		Result	RL	•	<u>DF</u>	Qua	alifiers
Methyl-t-Butyl Ether (MTBE)		ND	0.5	50	1.00		
Tert-Butyl Alcohol (TBA)		ND	5.0)	1.00		
Diisopropyl Ether (DIPE)		ND	0.5	50	1.00		
Ethyl-t-Butyl Ether (ETBE)		ND	0.5	50	1.00		
Tert-Amyl-Methyl Ether (TAME)		ND	0.5	50	1.00		
Ethanol		ND	50		1.00		
1,2-Dibromoethane		ND	0.5	50	1.00		
1,2-Dichloroethane		ND	0.5	50	1.00		
Surrogate		Rec. (%)	<u>Cc</u>	ntrol Limits	<u>Qualifiers</u>		
1,4-Bromofluorobenzene		99	68	-120			
Dibromofluoromethane		113	80	-127			
1,2-Dichloroethane-d4		122	80	-128			
Toluene-d8		96	80	-120			



Quality Control - Spike/Spike Duplicate

 Cardno ERI
 Date Received:
 09/20/14

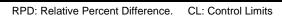
 601 North McDowell Blvd.
 Work Order:
 14-09-1638

 Petaluma, CA 94954-2312
 Preparation:
 EPA 5030C

 Method:
 EPA 8015B (M)

 Project: ExxonMobil 73006/022010C
 Page 1 of 3

Quality Control Sample ID	Туре		Matrix	ı	nstrument	Date Prepared	Date Ana	lyzed	MS/MSD Bat	ch Number
14-09-2185-4	Sample		Aqueou	ıs (GC 57	09/30/14	09/30/14	16:37	140930S011	
14-09-2185-4	Matrix Spike		Aqueou	ıs (GC 57	09/30/14	09/30/14	17:09	140930S011	
14-09-2185-4	Matrix Spike D	uplicate	Aqueou	ıs (GC 57	09/30/14	09/30/14	17:40	140930S011	
Parameter	Sample Conc.	<u>Spike</u> Added	MS Conc.	MS %Rec	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
TPH as Gasoline	ND	2000	1708	85	1600	80	68-122	7	0-18	





Quality Control - Spike/Spike Duplicate

Cardno ERI Date Received: 09/20/14
601 North McDowell Blvd. Work Order: 14-09-1638
Petaluma, CA 94954-2312 Preparation: EPA 5030C
Method: EPA 8021B

Project: ExxonMobil 73006/022010C Page 2 of 3

Quality Control Sample ID	Туре		Matrix	li	nstrument	Date Prepared	Date Ana	lyzed	MS/MSD Bat	ch Number
W-11-MW20	Sample		Aqueou	is G	GC 21	09/23/14	09/23/14	12:44	140923S034	
W-11-MW20	Matrix Spike		Aqueou	ıs G	SC 21	09/23/14	09/23/14	15:32	140923S034	
W-11-MW20	Matrix Spike D	Duplicate	Aqueou	ıs G	SC 21	09/23/14	09/23/14	16:05	140923S034	
Parameter	Sample Conc.	<u>Spike</u> Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Benzene	ND	100.0	94.65	95	106.6	107	57-129	12	0-23	
Toluene	ND	100.0	91.25	91	106.7	107	50-134	16	0-26	
Ethylbenzene	ND	100.0	93.65	94	106.3	106	58-130	13	0-26	
p/m-Xylene	ND	200.0	193.1	97	218.9	109	58-130	12	0-28	
o-Xylene	ND	100.0	94.46	94	104.6	105	57-123	10	0-26	



Quality Control - Spike/Spike Duplicate

 Cardno ERI
 Date Received:
 09/20/14

 601 North McDowell Blvd.
 Work Order:
 14-09-1638

 Petaluma, CA 94954-2312
 Preparation:
 EPA 5030C

 Method:
 EPA 8260B

Project: ExxonMobil 73006/022010C Page 3 of 3

Quality Control Sample ID	Туре		Matrix	Ins	strument	Date Prepared	Date Ana	lyzed	MS/MSD Ba	tch Number
14-09-1764-1	Sample		Aqueou	ıs GC	MS FFF	09/23/14	09/24/14	02:03	140923S028	
14-09-1764-1	Matrix Spike		Aqueou	ıs GC	MS FFF	09/23/14	09/24/14	04:22	140923S028	
14-09-1764-1	Matrix Spike	Duplicate	Aqueou	ıs GC	MS FFF	09/23/14	09/24/14	04:50	140923S028	1
Parameter	Sample Conc.	<u>Spike</u> Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Methyl-t-Butyl Ether (MTBE)	ND	10.00	12.05	121	12.31	123	71-131	2	0-20	
Tert-Butyl Alcohol (TBA)	ND	50.00	53.01	106	53.20	106	20-180	0	0-40	
Diisopropyl Ether (DIPE)	ND	10.00	10.33	103	10.43	104	64-136	1	0-20	
Ethyl-t-Butyl Ether (ETBE)	ND	10.00	11.29	113	11.41	114	73-133	1	0-20	
Tert-Amyl-Methyl Ether (TAME)	ND	10.00	11.03	110	11.38	114	75-125	3	0-20	
Ethanol	ND	100.0	100.8	101	100.3	100	73-139	0	0-27	
1,2-Dibromoethane	ND	10.00	11.77	118	12.18	122	75-126	3	0-20	
1,2-Dichloroethane	ND	10.00	11.85	118	12.23	122	75-127	3	0-20	





Quality Control - LCS/LCSD

 Cardno ERI
 Date Received:
 09/20/14

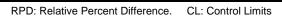
 601 North McDowell Blvd.
 Work Order:
 14-09-1638

 Petaluma, CA 94954-2312
 Preparation:
 EPA 3510C

 Method:
 EPA 8015B (M)

Project: ExxonMobil 73006/022010C Page 1 of 4

Quality Control Sample ID	Туре	Mat	rix	Instrument	Date Pre	pared Date	Analyzed	LCS/LCSD Ba	atch Number
099-15-304-825	LCS	Aqı	ieous	GC 46	09/22/14	09/24	4/14 06:48	140922B05S	
099-15-304-825	LCSD	Aqı	ueous	GC 46	09/22/14	09/24	4/14 07:06	140922B05S	
Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
TPH as Diesel	2000	1786	89	1932	97	75-117	8	0-13	





Quality Control - LCS

 Cardno ERI
 Date Received:
 09/20/14

 601 North McDowell Blvd.
 Work Order:
 14-09-1638

 Petaluma, CA 94954-2312
 Preparation:
 EPA 5030C

 Method:
 EPA 8015B (M)

 Project: ExxonMobil 73006/022010C
 Page 2 of 4

Quality Control Sample ID	Туре	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-12-436-9585	LCS	Aqueous	GC 57	09/30/14	09/30/14 15:26	140930L040
<u>Parameter</u>		Spike Added	Conc. Recover	red LCS %R	ec. %Rec	. CL Qualifiers
TPH as Gasoline		2000	1880	94	78-12	0



Quality Control - LCS

 Cardno ERI
 Date Received:
 09/20/14

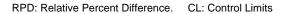
 601 North McDowell Blvd.
 Work Order:
 14-09-1638

 Petaluma, CA 94954-2312
 Preparation:
 EPA 5030C

 Method:
 EPA 8021B

Project: ExxonMobil 73006/022010C Page 3 of 4

Quality Control Sample ID	Туре	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-12-667-2130	LCS	Aqueous	GC 21	09/23/14	09/23/14 10:59	140923L043
<u>Parameter</u>		Spike Added	Conc. Recovere	ed LCS %Re	ec. %Rec	. CL Qualifiers
Benzene		100.0	89.42	89	70-118	3
Toluene		100.0	85.29	85	66-11	4
Ethylbenzene		100.0	87.86	88	72-114	4
p/m-Xylene		200.0	178.7	89	74-110	6
o-Xylene		100.0	87.64	88	72-114	4





Quality Control - LCS

 Cardno ERI
 Date Received:
 09/20/14

 601 North McDowell Blvd.
 Work Order:
 14-09-1638

 Petaluma, CA 94954-2312
 Preparation:
 EPA 5030C

 Method:
 EPA 8260B

Project: ExxonMobil 73006/022010C Page 4 of 4

Quality Control Sample ID	Туре	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-12-884-1202	LCS	Aqueous	GC/MS FFF	09/23/14	09/24/14 00:11	140923L036
Parameter		Spike Added	Conc. Recove	ered LCS %Re	ec. %Rec	. CL Qualifiers
Methyl-t-Butyl Ether (MTBE)		10.00	11.42	114	75-123	3
Tert-Butyl Alcohol (TBA)		50.00	49.83	100	80-120)
Diisopropyl Ether (DIPE)		10.00	9.586	96	73-12 ²	1
Ethyl-t-Butyl Ether (ETBE)		10.00	10.65	106	76-124	4
Tert-Amyl-Methyl Ether (TAME)		10.00	10.74	107	80-120)
Ethanol		100.0	97.01	97	73-133	3
1,2-Dibromoethane		10.00	11.15	111	80-120)
1,2-Dichloroethane		10.00	11.39	114	80-122	2





SG

SN

A silica gel cleanup procedure was performed.

Glossary of Terms and Qualifiers

Work Order: 14-09-1638 Page 1 of 1

<u>Qualifiers</u>	<u>Definition</u>
AZ	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
В	Analyte was present in the associated method blank.
BA	The MS/MSD RPD was out of control due to suspected matrix interference.
ВВ	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
DF	Reporting limits elevated due to matrix interferences.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
GE	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
HD	Chromat. profile inconsistent with pattern(s) of ref. fuel stnds.
НО	High concentration matrix spike recovery out of limits
HT	Analytical value calculated using results from associated tests.
HX	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to matrix interference. The associated LCS was in control.
IL	Relative percent difference out of control.
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
LD	Analyte presence was not confirmed by second column or GC/MS analysis.
LP	The LCS and/or LCSD recoveries for this analyte were above the upper control limit. The associated sample was non-detected. Therefore, the sample data was reported without further clarification.
LQ	LCS recovery above method control limits.
LR	LCS recovery below method control limits.
ND	Parameter not detected at the indicated reporting limit.
QO	Compound did not meet method-described identification guidelines. Identification was based on additional GC/MS characteristics.
RU	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).

See applicable analysis comment.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

Eurofins Calscience, Inc.

7440 Lincoln Way

Phone: 714-895-5494

EXonNobil

Garden Grove, CA 92841

Fax: 714-894-7501

14-09-1638

Cons	q-esteratura biffini es-plifen aminimi esci	Ac										Acc	ount	#: <u>1</u>	#: NA PO#ect Bill Cardno ERI									opoloji nama malama je jim minga								
Consult	nountaineassannountainea	Invoice To											ľo: l	o: Direct Bill Cardno ERI																		
Consultant City/State/Zip: Petaluma, California, 94954							Report To											fo: [o: Greg Gurss													
ExxonMobil	k Project Name:													ne: _(o: 02 2010 C																	
Consultant	Greg Gurs	eg Gurss										ExxonMobil Site #:						73006 Major Project (AFE #):														
Consultant Teleph	707-766-20	00	Fax No.: 707-789-0414 Site Address:										68: <u>]</u>	: 720 High Street																		
Sampler	Name (Print):	Davi				Andrew Street	Site City, State, Zij									p: Oakland, California																
	er Signature:	6.7%	mi	Oversight Agency										су: _	: Alameda County Environmental Health Department																	
					Preservative								Matrix						Analyze For:													
Sample ID W- \ -MW20 W- \ -MW21 QCBB	MW20 MW21 QCBB	Date Sampled	1700 1055 1345	No. of Containers Shipped	Grab	Field Filtered	Methanol	<u>_</u> ;	ζ .	H ₂ SO ₄ Plastic	H ₂ SO ₄ Glass	HNO3	Ó Cúther	None	X X Groundwater	Wastewater	Drinking Water Sludoe	jos	Air	X Other (specify): Distilled Water		x	х	x :	×	8015B (Crbon range -	oil C6-C44)		RUSH TAT (Pre-Schedule)		X X X Standard 10-day IA	Due Date of Report
Comments/Special Instructions:	L		L	<u> </u>	7.0	Oxy:	al	TDE		roe	L		TD	اا	no	12	<u> </u>	۸ ۲۷		Laborat	-				ceipt		Minimum Marian M				十	
PLEASE E-MAIL ALL P norcallabs@eri-us.com					TBA c			-							1,2.	-00	м, ы	r <u>L</u> .	Sam	•		•			•		,	Y	1	1		
GLOBAL ID # T0600100552						TPHd - Silica gel cleanup											_	VOCs Free of Headspace? Y N														
Relinquished by: Constitution of the Constitut		9/19/14 /10			5 7	Received by: Toomaller								Date Time //0/				20	QC Deliverables (please circle one) Level 2 Level 3													
Relinquished by: Ton Omally	9/19,) Rec	oceived by (Lab personnel).								9	Date: Time Level 4 Site Specific - if yes, please attach pre-schedule w/ Tesi Project Manager or attach specific instructions								Ame	rica											



〈WebShip〉〉〉〉

800-322-5555 WWW.gso.com

Ship From: ALAN KEMP CAL SCIENCE- CONCORD 5063 COMMERCIAL CIRCLE #H CONCORD, CA 94520

Ship To: SAMPLE RECEIVING CEL 7440 LINCOLN WAY GARDEN GROVE, CA 92841

COD: \$0.00

Reference: CARDNO ERI, SCHNITZER STEEL

Delivery Instructions:

Signature Type: SIGNATURE REQUIRED

525677156 Tracking #:

GARDEN GROVE

D92845A



Print Date: 09/19/14 13:24 PM

Package 1 of 1

Send Label To Printer

☑ Print All

Edit Shipment

Finish

LABEL INSTRUCTIONS:

Do not copy or reprint this label for additional shipments - each package must have a unique barcode.

STEP 1 - Use the "Send Label to Printer" button on this page to print the shipping label on a laser or inkjet printer.

STEP 2 - Fold this page in half.

STEP 3 - Securely attach this label to your package, do not cover the barcode.

STEP 4 - Request an on-call pickup for your package, if you do not have scheduled daily pickup service or Drop-off your package at the nearest GSO drop box. Locate nearest GSO dropbox locations using this link.

ADDITIONAL OPTIONS:

Send Label Via Email

Create Return Label

TERMS AND CONDITIONS:

By giving us your shipment to deliver, you agree to all the service terms and conditions described in this section. Our liability for loss or damage to any package is limited to your actual damages or \$100 whichever is less, unless you pay for and declare a higher authorized value. If you declare a higher value and pay the additional charge, our liability will be the lesser of your declared value or the actual value of your loss or damage. In any event, we will not be liable for any damage, whether direct, incidental, special or consequential, in excess of the declared value of a shipment whether or not we had knowledge that such damage might be incurred including but not limited to loss of income or profit. We will not be liable for your acts or omissions, including but not limited to improper or insufficient packaging, securing, marking or addressing. Also, we will not be liable if you or the recipient violates any of the terms of our agreement. We will not be liable for loss, damage or delay caused by events we cannot control, including but not limited to acts of God, perils of the air, weather conditions, act of public enemies, war, strikes, or civil commotion. The highest declared value for our GSO Priority Letter or GSO Priority Package is \$500. For other shipments the highest declared value is \$10,000 unless your package contains items of "extraordinary value", in which case the highest declared value we allow is \$500. Items of "extraordinary value" include, but or not limited to, artwork, jewelry, furs, precious metals, tickets, negotiable instruments and other items with intrinsic value.







Calscience

WORK ORDER #: 14-09- 1 5

SAMPLE RECEIPT FORM Cooler _/ of _/

CLIENT: <u>Cardno</u> TKI	DATE:	09/20/	<u>14</u>
TEMPERATURE: Thermometer ID: SC1 (Criteria: 0.0 °C – 6.0 °C, not froze	n except se	ediment/tissue)
Temperature 3 °C - 0.3°C (CF) = 3 °C - 2	A.C.	☐ Sample	
☐ Sample(s) outside temperature criteria (PM/APM contacted by:)			
☐ Sample(s) outside temperature criteria but received on ice/chilled on same c	lay of samn	lina	
		mig.	
☐ Received at ambient temperature, placed on ice for transport by Co	Juliel.	Checked by	. Dr
Ambient Temperature: Air Filter		Cnecked by	: <u>0 - </u>
CUSTODY SEALS INTACT:			
☐ Cooler ☐ ☐ No (Not Intact) ☐ Not Present	□ N/A	Checked by:	<u> </u>
□ Sample □ □ No (Not Intact) □ Not Present		Checked by:	—
SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples			
COC document(s) received complete	. <u>P</u>		
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.		_	
Sampler's name indicated on COC			
Sample container label(s) consistent with COC	_		
Sample container(s) intact and good condition	_		
Proper containers and sufficient volume for analyses requested			
Analyses received within holding time			
Aqueous samples received within 15-minute holding time			
☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfides ☐ Dissolved Oxygen	. 🗆		Ø
Proper preservation noted on COC or sample container	. 🗹		
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	. 🖊		
Tedlar bag(s) free of condensation CONTAINER TYPE:	. 🗆		
Solid: □4ozCGJ □8ozCGJ □16ozCGJ □Sleeve () □EnCore	s® □Terra	ıCores [®] □	
Aqueous: □VOA ☑VOAh □VOAna₂ □125AGB □125AGBh □125AGBp	□1AGB [□1AGB na ₂ □	1AGB s
□500AGB Ø500AGJ □500AGJs □250AGB □250CGB □250CGBs	a □1PB	□1PB na □5	600PB
□250PB □250PBn □125PB □125PB znna □100PJ □100PJ na₂ □			
Air: □Tedlar [®] □Canister Other: □ Trip Blank Lot#:		/Checked by:	739
Container: C: Clear A: Amber P: Plastic G: Glass J: Jar B: Bottle Z: Ziploc/Resealable Bag E: Er Preservative: h: HCL n: HNO ₃ na ₂ :Na ₂ S ₂ O ₃ na: NaOH p: H ₃ PO ₄ s: H ₂ SO ₄ u: Ultra-pure znna: ZnAc ₂ +Na	•	Reviewed by: _ Scanned bv:	
1 1 1 1 2 2 1 1 2 2 2 2 2 2 2 2 2 2 2 2			



Calscience

Supplemental Report 1

The original report has been revised/corrected.



WORK ORDER NUMBER: 15-01-0215

The difference is service



AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: Cardno ERI

Client Project Name: ExxonMobil 73006/022010C

Attention: Greg Curss

601 North McDowell Blvd. Petaluma, CA 94954-2312

Coul L. u Dung

Approved for release on 01/26/2015 by: Cecile deGuia Project Manager



ResultLink >
Email your PM >

Eurofins Calscience, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.



Contents

Client Project Name:	ExxonMobil 73006/022010C

Work Order Number: 15-01-0215

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2	Sample Summary	4
3	Client Sample Data. 3.1 EPA 8015B (M) TPH Motor Oil (Solid). 3.2 EPA 8015B (M) TPH Diesel (Solid). 3.3 EPA 8015B (M) TPH Gasoline (Solid). 3.4 EPA 6010B ICP Metals (Solid).	5 5 6 7 8
	3.5 EPA 8310 Polynuclear Aromatic Hydrocarbons (Solid)	13
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Work Order Narrative

Work Order: 15-01-0215 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain-of-Custody (COC) on 01/07/15. They were assigned to Work Order 15-01-0215.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

New York NELAP air certification does not certify for all reported methods and analytes, reference the accredited items here: http://www.calscience.com/PDF/New_York.pdf

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Note that the report has been amended to reflect the corrected units to mg/kg for soil samples as per email instruction on January 22, 2015.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.



Sample Summary

Client: Cardno ERI Work Order: 15-01-0215 601 North McDowell Blvd. Project Name: ExxonMobil 73006/022010C

PO Number: 022010C Petaluma, CA 94954-2312

Date/Time 01/07/15 10:00 Received:

3 Number of Containers:

Greg Curss Attn:

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
S-3-B38	15-01-0215-1	01/05/15 09:40	1	Solid
S-5.5-B38	15-01-0215-2	01/05/15 09:50	1	Solid
S-9.5-B38	15-01-0215-3	01/05/15 09:55	1	Solid



 Cardno ERI
 Date Received:
 01/07/15

 601 North McDowell Blvd.
 Work Order:
 15-01-0215

 Petaluma, CA 94954-2312
 Preparation:
 EPA 3550B

 Method:
 EPA 8015B (M)

 Units:
 mg/kg

 Project: ExxonMobil 73006/022010C
 Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
S-3-B38	15-01-0215-1-A	01/05/15 09:40	Solid	GC 47	01/08/15	01/09/15 03:53	150108B09S
<u>Parameter</u>		Result		RL	<u>DF</u>	Qua	alifiers
TPH as Motor Oil		ND		25	1.00	SG	
Surrogate		Rec. (%)		Control Limits	<u>Qualifiers</u>		
n-Octacosane		90		61-145			
C.5.5.D29	15-01-0215-2-A	01/05/15	Solid	GC 47	01/09/15	01/00/15	150109B009

S-5.5-B38	15-01-0215-2-A	01/05/15 09:50	Solid	GC 47	01/08/15	01/09/15 04:11	150108B09S
<u>Parameter</u>		Result	<u>R</u>	<u>L</u>	<u>DF</u>	Qua	<u>llifiers</u>
TPH as Motor Oil		ND	2	5	1.00	SG	
Surrogate n-Octacosane		<u>Rec. (%)</u> 98	_	control Limits 1-145	<u>Qualifiers</u>		

S-9.5-B38	15-01-0215-3-A	01/05/15 09:55	Solid	GC 47	01/08/15	01/09/15 04:28	150108B09S
<u>Parameter</u>		Result	B	<u>RL</u>	<u>DF</u>	Qua	alifiers
TPH as Motor Oil		ND	2	5	1.00	SG	
Surrogate		Rec. (%)	<u>C</u>	Control Limits	<u>Qualifiers</u>		
n-Octacosane		79	6	1-145			

Method Blank	099-15-420-1192	N/A	Solid	GC 47	01/08/15	01/09/15 01:52	150108B09S
<u>Parameter</u>		Result	<u>R</u>	<u>L</u>	<u>DF</u>	Qu	<u>alifiers</u>
TPH as Motor Oil		ND	25	5	1.00		
<u>Surrogate</u>		Rec. (%)	<u>C</u>	ontrol Limits	<u>Qualifiers</u>		
n-Octacosane		99	61	I-145			



n-Octacosane

Analytical Report

 Cardno ERI
 Date Received:
 01/07/15

 601 North McDowell Blvd.
 Work Order:
 15-01-0215

 Petaluma, CA 94954-2312
 Preparation:
 EPA 3550B

 Method:
 EPA 8015B (M)

 Units:
 mg/kg

 Project: ExxonMobil 73006/022010C
 Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
S-3-B38	15-01-0215-1-A	01/05/15 09:40	Solid	GC 47	01/08/15	01/09/15 03:53	150108B08S
<u>Parameter</u>		<u>Result</u>		<u>RL</u>	<u>DF</u>	Qua	<u>lifiers</u>
TPH as Diesel		ND		4.9	1.00	SG	
Surrogate		Rec. (%)		Control Limits	Qualifiers		
n-Octacosane		90		61-145			
S-5.5-B38	15-01-0215-2-A	01/05/15 09:50	Solid	GC 47	01/08/15	01/09/15 04:11	150108B08S
Parameter		Result		RL	DF	Qua	lifiers
TPH as Diesel		ND		5.0	1.00	SG	
Surrogate		Rec. (%)		Control Limits	<u>Qualifiers</u>		

S-9.5-B38	15-01-0215-3-A	01/05/15 09:55	Solid	GC 47	01/08/15	01/09/15 04:28	150108B08S
<u>Parameter</u>		<u>Result</u>	<u> </u>	<u>RL</u>	<u>DF</u>	Qua	<u>alifiers</u>
TPH as Diesel		ND	5	5.0	1.00	SG	
Surrogate		Rec. (%)	<u>C</u>	Control Limits	<u>Qualifiers</u>		
n-Octacosane		79	6	31-145			

61-145

Method Blank	099-15-422-1559	N/A	Solid	GC 47	01/08/15	01/09/15 01:52	150108B08S
<u>Parameter</u>		Result	<u>R</u>	<u>_</u>	<u>DF</u>	Qu	alifiers
TPH as Diesel		ND	5.	0	1.00		
<u>Surrogate</u>		Rec. (%)	<u>C</u>	ontrol Limits	<u>Qualifiers</u>		
n-Octacosane		99	61	I-145			



 Cardno ERI
 Date Received:
 01/07/15

 601 North McDowell Blvd.
 Work Order:
 15-01-0215

 Petaluma, CA 94954-2312
 Preparation:
 EPA 5030C

 Method:
 EPA 8015B (M)

 Units:
 mg/kg

 Project: ExxonMobil 73006/022010C
 Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
S-3-B38	15-01-0215-1-A	01/05/15 09:40	Solid	GC 56	01/07/15	01/07/15 18:25	150107L022
Parameter		Result		RL	<u>DF</u>	Qua	alifiers
TPH as Gasoline		ND		0.51	1.00		
Surrogate		Rec. (%)		Control Limits	<u>Qualifiers</u>		
1,4-Bromofluorobenzene - FID		77		42-126			

S-5.5-B38	15-01-0215-2-A	01/05/15 09:50	Solid	GC 56	01/07/15	01/07/15 19:59	150107L022
<u>Parameter</u>		<u>Result</u>		<u>RL</u>	<u>DF</u>	Qua	<u>alifiers</u>
TPH as Gasoline		ND		0.48	1.00		
Surrogate		Rec. (%)		Control Limits	<u>Qualifiers</u>		
1,4-Bromofluorobenzene - FID		79		42-126			

S-9.5-B38	15-01-0215-3-A	01/05/15 09:55	Solid	GC 56	01/07/15	01/07/15 20:31	150107L022
Parameter		Result	<u> </u>	<u>RL</u>	DF	Qu	alifiers
TPH as Gasoline		ND	(0.50	1.00		
Surrogate		Rec. (%)	<u>(</u>	Control Limits	<u>Qualifiers</u>		
1,4-Bromofluorobenzene - FID		76	4	2-126			

Method Blank	099-14-571-2054	N/A	Solid	GC 56	01/07/15	01/07/15 17:53	150107L022
<u>Parameter</u>		Result	<u>R</u>	<u>L</u>	<u>DF</u>	Qu	alifiers
TPH as Gasoline		ND	0.	50	1.00		
<u>Surrogate</u>		Rec. (%)	<u>C</u>	ontrol Limits	<u>Qualifiers</u>		
1,4-Bromofluorobenzene - FID		79	42	2-126			



 Cardno ERI
 Date Received:
 01/07/15

 601 North McDowell Blvd.
 Work Order:
 15-01-0215

 Petaluma, CA 94954-2312
 Preparation:
 EPA 3050B

 Method:
 EPA 6010B

 Units:
 mg/kg

 Project: ExxonMobil 73006/022010C
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			Units:				mg/kg
Project: ExxonMobil 73006	/022010C					Pa	ige 1 of 1
Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
S-3-B38	15-01-0215-1-A	01/05/15 09:40	Solid	ICP 7300	01/08/15	01/09/15 13:25	150108L09A
<u>Parameter</u>		Result		RL	<u>DF</u>	Qua	alifiers
Cadmium		ND		0.500	1.00		
Chromium		33.3		0.250	1.00		
Lead		153		0.500	1.00		
Nickel		38.1		0.250	1.00		
Zinc		246		1.00	1.00		
S-5.5-B38	15-01-0215-2-A	01/05/15 09:50	Solid	ICP 7300	01/08/15	01/09/15 13:29	150108L09A
Parameter		Result		<u>RL</u>	<u>DF</u>	Qua	alifiers
Cadmium		ND		0.500	1.00		
Chromium		38.2		0.250	1.00		
Lead		8.56		0.500	1.00		
Nickel		87.6		0.250	1.00		
Zinc		32.1		1.00	1.00		
S-9.5-B38	15-01-0215-3-A	01/05/15 09:55	Solid	ICP 7300	01/08/15	01/09/15 13:30	150108L09A
<u>Parameter</u>		Result		RL	<u>DF</u>	Qua	alifiers
Cadmium		ND		0.515	1.03		
Lead		4.22		0.515	1.03		
Zinc		39.7		1.03	1.03		
S-9.5-B38	15-01-0215-3-A	01/05/15 09:55	Solid	ICP 7300	01/08/15	01/17/15 16:08	150108L09A
Parameter		Result		RL	<u>DF</u>	Qua	alifiers
Chromium		108		2.58	10.3		
Nickel		183		2.58	10.3		
Method Blank	097-01-002-20143	N/A	Solid	ICP 7300	01/08/15	01/10/15 15:57	150108L09A
Parameter		Result		RL	<u>DF</u>	Qua	alifiers
Cadmium		ND		0.500	1.00		
Chromium		ND		0.250	1.00		
Lead		ND		0.500	1.00		
Nickel		ND		0.250	1.00		
Zinc		ND		1.00	1.00		



 Cardno ERI
 Date Received:
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 601 North McDowell Blvd.
 Work Order:
 15-01-0215

 Petaluma, CA 94954-2312
 Preparation:
 EPA 3545

 Method:
 EPA 8310

Units: mg/kg

Project: ExxonMobil 73006/022010C Page 1 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
S-3-B38	15-01-0215-1-A	01/05/15 09:40	Solid	HPLC 5	01/15/15	01/16/15 21:18	150115L05
Parameter		Result	ļ	<u>RL</u>	<u>DF</u>	Qualifiers	
Naphthalene		ND	(0.015	1.00		
Acenaphthylene		ND	(0.030	1.00		
Acenaphthene		ND	(0.015	1.00		
Fluorene		ND	(0.010	1.00		
Phenanthrene		ND	(0.010	1.00		
Anthracene		ND	(0.010	1.00		
Fluoranthene		ND	(0.010	1.00		
Pyrene		ND	(0.010	1.00		
Benzo (a) Anthracene		ND	(0.010	1.00		
Chrysene		ND	(0.010	1.00		
Benzo (b) Fluoranthene		ND	(0.010	1.00		
Benzo (k) Fluoranthene		ND	(0.010	1.00		
Benzo (a) Pyrene		ND	(0.010	1.00		
Dibenz (a,h) Anthracene		ND	(0.010	1.00		
Benzo (g,h,i) Perylene		ND	(0.010	1.00		
Indeno (1,2,3-c,d) Pyrene		ND	(0.010	1.00		
Surrogate		Rec. (%)	<u>(</u>	Control Limits	Qualifiers		
Decafluorobiphenyl		48	8	8-120			



 Cardno ERI
 Date Received:
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 601 North McDowell Blvd.
 Work Order:
 15-01-0215

 Petaluma, CA 94954-2312
 Preparation:
 EPA 3545

 Method:
 EPA 8310

Units: mg/kg

Project: ExxonMobil 73006/022010C Page 2 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
S-5.5-B38	15-01-0215-2-A	01/05/15 09:50	Solid	HPLC 5	01/15/15	01/16/15 21:50	150115L05
Parameter		Result		RL	<u>DF</u>	Qualifiers	
Naphthalene		ND		0.015	1.00		
Acenaphthylene		ND		0.030	1.00		
Acenaphthene		ND		0.015	1.00		
Fluorene		ND		0.010	1.00		
Phenanthrene		ND		0.010	1.00		
Anthracene		ND		0.010	1.00		
Fluoranthene		ND		0.010	1.00		
Pyrene		ND		0.010	1.00		
Benzo (a) Anthracene		ND		0.010	1.00		
Chrysene		ND		0.010	1.00		
Benzo (b) Fluoranthene		ND		0.010	1.00		
Benzo (k) Fluoranthene		0.013		0.010	1.00		
Benzo (a) Pyrene		ND		0.010	1.00		
Dibenz (a,h) Anthracene		ND		0.010	1.00		
Benzo (g,h,i) Perylene		ND		0.010	1.00		
Indeno (1,2,3-c,d) Pyrene		ND		0.010	1.00		
Surrogate		Rec. (%)		Control Limits	Qualifiers		
Decafluorobiphenyl		53		8-120			

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 Cardno ERI
 Date Received:
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 601 North McDowell Blvd.
 Work Order:
 15-01-0215

 Petaluma, CA 94954-2312
 Preparation:
 EPA 3545

 Method:
 EPA 8310

Units: mg/kg

Project: ExxonMobil 73006/022010C

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
S-9.5-B38	15-01-0215-3-A	01/05/15 09:55	Solid	HPLC 5	01/15/15	01/16/15 20:46	150115L05
Parameter		<u>Result</u>		<u>RL</u>	<u>DF</u>	Qualifiers	
Naphthalene		ND		0.015	1.00		
Acenaphthylene		ND		0.030	1.00		
Acenaphthene		ND		0.015	1.00		
Fluorene		ND		0.010	1.00		
Phenanthrene		ND		0.010	1.00		
Anthracene		ND		0.010	1.00		
Fluoranthene		ND		0.010	1.00		
Pyrene		ND		0.010	1.00		
Benzo (a) Anthracene		ND		0.010	1.00		
Chrysene		ND		0.010	1.00		
Benzo (b) Fluoranthene		ND		0.010	1.00		
Benzo (k) Fluoranthene		ND		0.010	1.00		
Benzo (a) Pyrene		ND		0.010	1.00		
Dibenz (a,h) Anthracene		ND		0.010	1.00		
Benzo (g,h,i) Perylene		ND		0.010	1.00		
Indeno (1,2,3-c,d) Pyrene		ND		0.010	1.00		
Surrogate		Rec. (%)		Control Limits	Qualifiers		
Decafluorobiphenyl		38		8-120			

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 Cardno ERI
 Date Received:
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 601 North McDowell Blvd.
 Work Order:
 15-01-0215

 Petaluma, CA 94954-2312
 Preparation:
 EPA 3545

 Method:
 EPA 8310

Units: mg/kg

Project: ExxonMobil 73006/022010C

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-07-002-1759	N/A	Solid	HPLC 5	01/15/15	01/16/15 16:52	150115L05
Parameter		Result	<u> </u>	<u>RL</u>	<u>DF</u>	Qualifiers	
Naphthalene		ND	(0.015	1.00		
Acenaphthylene		ND	(0.030	1.00		
Acenaphthene		ND	(0.015	1.00		
Fluorene		ND	(0.010	1.00		
Phenanthrene		ND	(0.010	1.00		
Anthracene		ND	(0.010	1.00		
Fluoranthene		ND	(0.010	1.00		
Pyrene		ND	(0.010	1.00		
Benzo (a) Anthracene		ND	(0.010	1.00		
Chrysene		ND	(0.010	1.00		
Benzo (b) Fluoranthene		ND	(0.010	1.00		
Benzo (k) Fluoranthene		ND	(0.010	1.00		
Benzo (a) Pyrene		ND	(0.010	1.00		
Dibenz (a,h) Anthracene		ND	(0.010	1.00		
Benzo (g,h,i) Perylene		ND	(0.010	1.00		
Indeno (1,2,3-c,d) Pyrene		ND	(0.010	1.00		
Surrogate		Rec. (%)	<u>(</u>	Control Limits	Qualifiers		
Decafluorobiphenyl		88	8	8-120			



Cardno ERI Date Received: 01/07/15
601 North McDowell Blvd. Work Order: 15-01-0215
Petaluma, CA 94954-2312 Preparation: EPA 5030C
Method: EPA 8260B

Units: mg/kg

Project: ExxonMobil 73006/022010C

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
S-3-B38	15-01-0215-1-A	01/05/15 09:40	Solid	GC/MS Q	01/07/15	01/07/15 17:55	150107L045
<u>Parameter</u>		Result		RL	<u>DF</u>	Qua	<u>lifiers</u>
Benzene		ND		0.0051	1.00		
Toluene		ND		0.0051	1.00		
Ethylbenzene		ND		0.0051	1.00		
o-Xylene		ND		0.0051	1.00		
p/m-Xylene		ND		0.0051	1.00		
Xylenes (total)		ND		0.0051	1.00		
Methyl-t-Butyl Ether (MTBE)		ND		0.0051	1.00		
Tert-Butyl Alcohol (TBA)		ND		0.051	1.00		
Diisopropyl Ether (DIPE)		ND		0.010	1.00		
Ethyl-t-Butyl Ether (ETBE)		ND		0.010	1.00		
Tert-Amyl-Methyl Ether (TAME)		ND		0.010	1.00		
Surrogate		Rec. (%)		Control Limits	<u>Qualifiers</u>		
1,4-Bromofluorobenzene		95		60-132			
Dibromofluoromethane		96		63-141			
1,2-Dichloroethane-d4		98		62-146			
Toluene-d8		118		80-120			



Cardno ERIDate Received:01/07/15601 North McDowell Blvd.Work Order:15-01-0215Petaluma, CA 94954-2312Preparation:EPA 5030C

Method: EPA 8260B Units: mg/kg

Project: ExxonMobil 73006/022010C Page 2 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
S-5.5-B38	15-01-0215-2-A	01/05/15 09:50	Solid	GC/MS Q	01/07/15	01/07/15 18:21	150107L045
Parameter		Result		<u>RL</u>	<u>DF</u>	Qua	alifiers
Benzene		ND		0.0050	1.00		
Toluene		ND		0.0050	1.00		
Ethylbenzene		ND		0.0050	1.00		
o-Xylene		ND		0.0050	1.00		
p/m-Xylene		ND		0.0050	1.00		
Xylenes (total)		ND		0.0050	1.00		
Methyl-t-Butyl Ether (MTBE)		ND		0.0050	1.00		
Tert-Butyl Alcohol (TBA)		ND		0.050	1.00		
Diisopropyl Ether (DIPE)		ND		0.0099	1.00		
Ethyl-t-Butyl Ether (ETBE)		ND		0.0099	1.00		
Tert-Amyl-Methyl Ether (TAME)		ND		0.0099	1.00		
Surrogate		Rec. (%)		Control Limits	<u>Qualifiers</u>		
1,4-Bromofluorobenzene		98		60-132			
Dibromofluoromethane		96		63-141			
1,2-Dichloroethane-d4		93		62-146			
Toluene-d8		100		80-120			

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Analytical Report

Cardno ERI Date Received: 01/07/15
601 North McDowell Blvd. Work Order: 15-01-0215
Petaluma, CA 94954-2312 Preparation: EPA 5030C
Method: EPA 8260B

Units: mg/kg

Project: ExxonMobil 73006/022010C

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
S-9.5-B38	15-01-0215-3-A	01/05/15 09:55	Solid	GC/MS Q	01/07/15	01/07/15 18:47	150107L045
Parameter		<u>Result</u>	ļ	<u>RL</u>	<u>DF</u>	Qualifiers	
Benzene		ND	(0.0051	1.00		
Toluene		ND	(0.0051	1.00		
Ethylbenzene		ND	(0.0051	1.00		
o-Xylene		ND	(0.0051	1.00		
p/m-Xylene		ND	(0.0051	1.00		
Xylenes (total)		ND	(0.0051	1.00		
Methyl-t-Butyl Ether (MTBE)		ND	(0.0051	1.00		
Tert-Butyl Alcohol (TBA)		ND	(0.051	1.00		
Diisopropyl Ether (DIPE)		ND	(0.010	1.00		
Ethyl-t-Butyl Ether (ETBE)		ND	(0.010	1.00		
Tert-Amyl-Methyl Ether (TAME)		ND	(0.010	1.00		
Surrogate		Rec. (%)	<u>9</u>	Control Limits	Qualifiers		
1,4-Bromofluorobenzene		95	(60-132			
Dibromofluoromethane		94	(63-141			
1,2-Dichloroethane-d4		93	(62-146			
Toluene-d8		97	8	30-120			



 Cardno ERI
 Date Received:
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 601 North McDowell Blvd.
 Work Order:
 15-01-0215

 Petaluma, CA 94954-2312
 Preparation:
 EPA 5030C

Method: EPA 8260B Units: mg/kg

Project: ExxonMobil 73006/022010C Page 4 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-12-882-1697	N/A	Solid	GC/MS Q	01/07/15	01/07/15 11:36	150107L045
<u>Parameter</u>		Result	<u> </u>	RL	<u>DF</u>	Qua	<u>llifiers</u>
Benzene		ND	(0.0050	1.00		
Toluene		ND	(0.0050	1.00		
Ethylbenzene		ND	(0.0050	1.00		
o-Xylene		ND	(0.0050	1.00		
p/m-Xylene		ND	(0.0050	1.00		
Xylenes (total)		ND	(0.0050	1.00		
Methyl-t-Butyl Ether (MTBE)		ND	(0.0050	1.00		
Tert-Butyl Alcohol (TBA)		ND	(0.050	1.00		
Diisopropyl Ether (DIPE)		ND	(0.010	1.00		
Ethyl-t-Butyl Ether (ETBE)		ND	(0.010	1.00		
Tert-Amyl-Methyl Ether (TAME)		ND	(0.010	1.00		
Surrogate		Rec. (%)	<u>0</u>	Control Limits	<u>Qualifiers</u>		
1,4-Bromofluorobenzene		99	6	60-132			
Dibromofluoromethane		103	6	63-141			
1,2-Dichloroethane-d4		99	6	62-146			
Toluene-d8		100	8	30-120			



 Cardno ERI
 Date Received:
 01/07/15

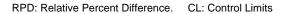
 601 North McDowell Blvd.
 Work Order:
 15-01-0215

 Petaluma, CA 94954-2312
 Preparation:
 EPA 3550B

 Method:
 EPA 8015B (M)

Project: ExxonMobil 73006/022010C Page 1 of 6

Quality Control Sample ID	Туре		Matrix	Insti	rument	Date Prepared	Date Ana	yzed	MS/MSD Bat	ch Number
S-9.5-B38	Sample		Solid	GC	47	01/08/15	01/09/15	04:28	150108S09	
S-9.5-B38	Matrix Spike		Solid	GC	47	01/08/15	01/09/15	03:19	150108S09	
S-9.5-B38	Matrix Spike Du	uplicate	Solid	GC	47	01/08/15	01/09/15	03:36	150108S09	
Parameter	Sample Conc.	<u>Spike</u> Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
TPH as Motor Oil	ND	400.0	378.9	95	366.3	92	64-130	3	0-15	





 Cardno ERI
 Date Received:
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 601 North McDowell Blvd.
 Work Order:
 15-01-0215

 Petaluma, CA 94954-2312
 Preparation:
 EPA 3550B

 Method:
 EPA 8015B (M)

 Project: ExxonMobil 73006/022010C
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Quality Control Sample ID	Type		Matrix	Instr	ument	Date Prepared	Date Ana	lyzed	MS/MSD Bat	ch Number
S-9.5-B38	Sample		Solid	GC	47	01/08/15	01/09/15	04:28	150108S08	
S-9.5-B38	Matrix Spike		Solid	GC -	47	01/08/15	01/09/15	02:44	150108S08	
S-9.5-B38	Matrix Spike Duplicate		Solid	GC -	47	01/08/15	01/09/15	03:02	150108S08	
Parameter	Sample Conc.	<u>Spike</u> Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
TPH as Diesel	ND	400.0	384.8	96	355.5	89	64-130	8	0-15	



 Cardno ERI
 Date Received:
 01/07/15

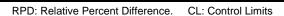
 601 North McDowell Blvd.
 Work Order:
 15-01-0215

 Petaluma, CA 94954-2312
 Preparation:
 EPA 5030C

 Method:
 EPA 8015B (M)

 Project: ExxonMobil 73006/022010C
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Quality Control Sample ID	Туре		Matrix	Inst	rument	Date Prepared	Date Ana	lyzed	MS/MSD Bat	ch Number
S-3-B38	Sample		Solid	GC	56	01/07/15	01/07/15	18:25	150107S014	
S-3-B38	Matrix Spike		Solid	GC	56	01/07/15	01/07/15	18:56	150107S014	
S-3-B38	Matrix Spike D	Ouplicate	Solid	GC	56	01/07/15	01/07/15	19:28	150107S014	
Parameter	Sample Conc.	<u>Spike</u> Added	MS Conc.	<u>MS</u> %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
TPH as Gasoline	ND	10.00	6.221	62	7.390	74	48-114	17	0-23	





 Cardno ERI
 Date Received:
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 601 North McDowell Blvd.
 Work Order:
 15-01-0215

 Petaluma, CA 94954-2312
 Preparation:
 EPA 3050B

 Method:
 EPA 6010B

Project: ExxonMobil 73006/022010C Page 4 of 6

Quality Control Sample ID	Туре		Matrix	Inst	rument	Date Prepared	Date Ana	lyzed	MS/MSD Ba	tch Number
S-3-B38	Sample		Solid	ICP	7300	01/08/15	01/09/15	13:25	150108S09	
S-3-B38	Matrix Spike		Solid	ICP	7300	01/08/15	01/09/15	13:26	150108S09	
S-3-B38	Matrix Spike Du	uplicate	Solid	ICP	7300	01/08/15	01/09/15	13:28	150108S09	
Parameter		<u>Spike</u> Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Cadmium	ND	25.00	25.77	103	24.87	99	75-125	4	0-20	
Chromium	33.32	25.00	60.01	107	59.19	103	75-125	1	0-20	
Lead	153.4	25.00	185.9	4X	151.1	4X	75-125	4X	0-20	BB
Nickel	38.10	25.00	68.02	120	64.74	107	75-125	5	0-20	
Zinc	246.0	25.00	296.9	4X	292.2	4X	75-125	4X	0-20	ВВ





 Cardno ERI
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 01/07/15

 601 North McDowell Blvd.
 Work Order:
 15-01-0215

 Petaluma, CA 94954-2312
 Preparation:
 EPA 3545

 Method:
 EPA 8310

Project: ExxonMobil 73006/022010C Page 5 of 6

Quality Control Sample ID	Type		Matrix	Insti	rument	Date Prepared	d Date Ana	lyzed	MS/MSD Ba	tch Number
S-5.5-B38	Sample		Solid	HPL	.C 5	01/15/15	01/16/15	21:50	150115S05	
S-5.5-B38	Matrix Spike		Solid	HPL	.C 5	01/15/15	01/16/15	22:23	150115805	
S-5.5-B38	Matrix Spike	Duplicate	Solid	HPL	.C 5	01/15/15	01/16/15	22:55	150115805	
Parameter	Sample Conc.	<u>Spike</u> Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Naphthalene	ND	0.1000	0.09716	97	0.1092	109	23-167	12	0-46	
Acenaphthylene	ND	0.1000	0.05933	59	0.05298	53	24-120	11	0-47	
Acenaphthene	ND	0.1000	0.04954	50	0.04332	43	16-120	13	0-46	
Fluorene	ND	0.1000	0.05034	50	0.04812	48	32-120	4	0-44	
Phenanthrene	ND	0.1000	0.05250	53	0.05214	52	34-120	1	0-38	
Anthracene	ND	0.1000	0.04750	47	0.04479	45	27-120	6	0-45	
Fluoranthene	ND	0.1000	0.05458	55	0.05362	54	32-122	2	0-41	
Pyrene	ND	0.1000	0.06515	65	0.05828	58	31-127	11	0-38	
Benzo (a) Anthracene	ND	0.1000	0.05745	57	0.05674	57	32-122	1	0-43	
Chrysene	ND	0.1000	0.06129	61	0.06104	61	30-132	0	0-42	
Benzo (b) Fluoranthene	ND	0.1000	0.05772	58	0.05608	56	33-120	3	0-44	
Benzo (k) Fluoranthene	0.01269	0.1000	0.06344	51	0.07054	58	23-149	11	0-44	
Benzo (a) Pyrene	ND	0.1000	0.06456	65	0.05934	59	12-132	8	0-48	
Dibenz (a,h) Anthracene	ND	0.1000	0.05218	52	0.04779	48	29-125	9	0-43	
Benzo (g,h,i) Perylene	ND	0.1000	0.06142	61	0.05574	56	24-132	10	0-42	
Indeno (1,2,3-c,d) Pyrene	ND	0.1000	0.05968	60	0.05584	56	29-143	7	0-42	



 Cardno ERI
 Date Received:
 01/07/15

 601 North McDowell Blvd.
 Work Order:
 15-01-0215

 Petaluma, CA 94954-2312
 Preparation:
 EPA 5030C

 Method:
 EPA 8260B

Project: ExxonMobil 73006/022010C Page 6 of 6

Quality Control Sample ID	Туре		Matrix	Instr	ument	Date Prepared	Date Ana	lyzed	MS/MSD Bat	ch Number
15-01-0055-1	Sample		Solid	GC/	MS Q	01/06/15	01/07/15	12:29	150107S003	
15-01-0055-1	Matrix Spike		Solid	GC/	MS Q	01/06/15	01/07/15	12:55	150107S003	
15-01-0055-1	Matrix Spike	Duplicate	Solid	GC/	MS Q	01/06/15	01/07/15	13:22	150107S003	
Parameter	Sample Conc.	<u>Spike</u> <u>Added</u>	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Benzene	ND	0.05000	0.04796	96	0.04750	95	61-127	1	0-20	
Toluene	ND	0.05000	0.04841	97	0.04913	98	63-123	1	0-20	
Ethylbenzene	ND	0.05000	0.04855	97	0.04912	98	57-129	1	0-22	
o-Xylene	ND	0.05000	0.04842	97	0.04826	97	70-130	0	0-30	
p/m-Xylene	ND	0.1000	0.09857	99	0.09863	99	70-130	0	0-30	
Methyl-t-Butyl Ether (MTBE)	ND	0.05000	0.04190	84	0.04793	96	57-123	13	0-21	
Tert-Butyl Alcohol (TBA)	ND	0.2500	0.2648	106	0.2692	108	30-168	2	0-34	
Diisopropyl Ether (DIPE)	ND	0.05000	0.04643	93	0.04740	95	57-129	2	0-20	
Ethyl-t-Butyl Ether (ETBE)	ND	0.05000	0.04651	93	0.04865	97	55-127	5	0-20	
Tert-Amyl-Methyl Ether (TAME)	ND	0.05000	0.04947	99	0.05027	101	58-124	2	0-20	



Quality Control - PDS/PDSD

 Cardno ERI
 Date Received:
 01/07/15

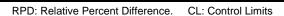
 601 North McDowell Blvd.
 Work Order:
 15-01-0215

 Petaluma, CA 94954-2312
 Preparation:
 EPA 3050B

 Method:
 EPA 6010B

Project: ExxonMobil 73006/022010C Page 1 of 1

Quality Control Sample ID	Type		Ma	atrix	Instrument	Date P	repared Date	e Analyzed	PDS/PDSD Number	Batch
S-3-B38	Sample		So	lid	ICP 7300	01/08/1	15 00:00 01/0	9/15 13:25	150108S09	
S-3-B38	PDS		So	lid	ICP 7300	01/08/1	15 00:00 01/0	9/15 18:19	150108S09	
S-3-B38	PDSD		So	olid	ICP 7300	01/08/1	15 00:00 01/0	9/15 18:20	150108S09	
Parameter	Sample Conc.	<u>Spike</u> Added	PDS Conc.	PDS %Rec.	PDSD Conc.	PDSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Cadmium	ND	25.00	25.30	101	25.48	102	75-125	1	0-20	
Chromium	33.32	25.00	61.14	111	61.22	112	75-125	0	0-20	
Lead	153.4	25.00	183.7	4X	185.0	4X	75-125	4X	0-20	BB
Nickel	38.10	25.00	65.50	110	65.73	111	75-125	0	0-20	
Zinc	246.0	25.00	289.7	4X	293.9	4X	75-125	4X	0-20	BB





 Cardno ERI
 Date Received:
 01/07/15

 601 North McDowell Blvd.
 Work Order:
 15-01-0215

 Petaluma, CA 94954-2312
 Preparation:
 EPA 3550B

 Method:
 EPA 8015B (M)

 Project: ExxonMobil 73006/022010C
 Page 1 of 6

Quality Control Sample ID	Туре	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-15-420-1192	LCS	Solid	GC 47	01/08/15	01/09/15 02:27	150108B09S
<u>Parameter</u>		Spike Added	Conc. Recove	red LCS %F	Rec. %Rec	:. CL Qualifiers
TPH as Motor Oil		400.0	387.1	97	75-12	3



 Cardno ERI
 Date Received:
 01/07/15

 601 North McDowell Blvd.
 Work Order:
 15-01-0215

 Petaluma, CA 94954-2312
 Preparation:
 EPA 3550B

 Method:
 EPA 8015B (M)

 Project: ExxonMobil 73006/022010C
 Page 2 of 6

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-15-422-1559	LCS	Solid	GC 47	01/08/15	01/09/15 02:09	150108B08S
<u>Parameter</u>		Spike Added	Conc. Recovere	ed LCS %R	ec. %Rec	. CL Qualifiers
TPH as Diesel		400.0	317.9	79	75-12	3



 Cardno ERI
 Date Received:
 01/07/15

 601 North McDowell Blvd.
 Work Order:
 15-01-0215

 Petaluma, CA 94954-2312
 Preparation:
 EPA 5030C

 Method:
 EPA 8015B (M)

 Project: ExxonMobil 73006/022010C
 Page 3 of 6

Quality Control Sample ID	Туре	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-14-571-2054	LCS	Solid	GC 56	01/07/15	01/07/15 16:50	150107L022
<u>Parameter</u>		Spike Added	Conc. Recovere	ed LCS %Re	ec. %Rec	. CL Qualifiers
TPH as Gasoline		10.00	9.348	93	70-124	4

RPD: Relative Percent Difference. CL: Control Limits



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 Work Order:
 15-01-0215

 Petaluma, CA 94954-2312
 Preparation:
 EPA 3050B

 Method:
 EPA 6010B

Project: ExxonMobil 73006/022010C Page 4 of 6

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
097-01-002-20143	LCS	Solid	ICP 7300	01/08/15	01/09/15 13:24	150108L09A
Parameter		Spike Added	Conc. Recovere	ed LCS %Re	ec. %Rec.	CL Qualifiers
Cadmium		25.00	24.80	99	80-120)
Chromium		25.00	25.35	101	80-120)
Lead		25.00	25.60	102	80-120)
Nickel		25.00	26.02	104	80-120)
Zinc		25.00	26.46	106	80-120)





 Cardno ERI
 Date Received:
 01/07/15

 601 North McDowell Blvd.
 Work Order:
 15-01-0215

 Petaluma, CA 94954-2312
 Preparation:
 EPA 3545

 Method:
 EPA 8310

Project: ExxonMobil 73006/022010C Page 5 of 6

Quality Control Sample ID	Туре	Matrix	Instrumen	t Date Prep	ared Date Anal	yzed LCS Batch N	lumber
099-07-002-1759	LCS	Solid	HPLC 5	01/15/15	01/16/15	17:24 150115L05	
<u>Parameter</u>		Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
Naphthalene		0.1000	0.1103	110	17-203	0-234	
Acenaphthylene		0.1000	0.07790	78	50-120	38-132	
Acenaphthene		0.1000	0.07583	76	41-120	28-133	
Fluorene		0.1000	0.07642	76	51-120	40-132	
Phenanthrene		0.1000	0.08070	81	56-120	45-131	
Anthracene		0.1000	0.08160	82	49-120	37-132	
Fluoranthene		0.1000	0.08654	87	60-120	50-130	
Pyrene		0.1000	0.09141	91	61-121	51-131	
Benzo (a) Anthracene		0.1000	0.09123	91	61-121	51-131	
Chrysene		0.1000	0.09047	90	61-121	51-131	
Benzo (b) Fluoranthene		0.1000	0.08684	87	61-121	51-131	
Benzo (k) Fluoranthene		0.1000	0.08969	90	57-129	45-141	
Benzo (a) Pyrene		0.1000	0.08870	89	43-120	30-133	
Dibenz (a,h) Anthracene		0.1000	0.08129	81	59-125	48-136	
Benzo (g,h,i) Perylene		0.1000	0.08887	89	57-123	46-134	
Indeno (1,2,3-c,d) Pyrene		0.1000	0.08451	85	64-130	53-141	

Total number of LCS compounds: 16
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

RPD: Relative Percent Difference. CL: Control Limits



 Cardno ERI
 Date Received:
 01/07/15

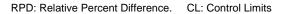
 601 North McDowell Blvd.
 Work Order:
 15-01-0215

 Petaluma, CA 94954-2312
 Preparation:
 EPA 5030C

 Method:
 EPA 8260B

Project: ExxonMobil 73006/022010C Page 6 of 6

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed LCS Ba	tch Number
099-12-882-1697	LCS	Solid	GC/MS Q	01/07/15	01/07/15 10:40 150107	L045
<u>Parameter</u>		Spike Added	Conc. Recovere	ed LCS %Re	ec. %Rec. CL	Qualifiers
Benzene		0.05000	0.05025	101	78-120	
Toluene		0.05000	0.05037	101	77-120	
Ethylbenzene		0.05000	0.04859	97	76-120	
o-Xylene		0.05000	0.04714	94	75-125	
p/m-Xylene		0.1000	0.09760	98	75-125	
Methyl-t-Butyl Ether (MTBE)		0.05000	0.04667	93	77-120	
Tert-Butyl Alcohol (TBA)		0.2500	0.2466	99	68-122	
Diisopropyl Ether (DIPE)		0.05000	0.05059	101	78-120	
Ethyl-t-Butyl Ether (ETBE)		0.05000	0.04774	95	78-120	
Tert-Amyl-Methyl Ether (TAME)		0.05000	0.04952	99	75-120	





Sample Analysis Summary Report

Work Order: 15-01-0215						
<u>Method</u>	Extraction	Chemist ID	Instrument	Analytical Location		
EPA 6010B	EPA 3050B	771	ICP 7300	1		
EPA 8015B (M)	EPA 3550B	682	GC 47	1		
EPA 8015B (M)	EPA 5030C	933	GC 56	2		
EPA 8260B	EPA 5030C	905	GC/MS Q	2		
EPA 8310	EPA 3545	949	HPLC 5	1		

Location 1: 7440 Lincoln Way, Garden Grove, CA 92841 Location 2: 7445 Lampson Avenue, Garden Grove, CA 92841



Glossary of Terms and Qualifiers

Work Order: 15-01-0215 Page 1 of 1

Qualifiers	<u>Definition</u>
AZ	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
В	Analyte was present in the associated method blank.
BA	The MS/MSD RPD was out of control due to suspected matrix interference.
BB	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
DF	Reporting limits elevated due to matrix interferences.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
GE	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
HD	Chromat. profile inconsistent with pattern(s) of ref. fuel stnds.
НО	High concentration matrix spike recovery out of limits
HT	Analytical value calculated using results from associated tests.
HX	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to matrix interference. The associated LCS was in control.
IL	Relative percent difference out of control.
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
LD	Analyte presence was not confirmed by second column or GC/MS analysis.
LP	The LCS and/or LCSD recoveries for this analyte were above the upper control limit. The associated sample was non-detected. Therefore, the sample data was reported without further clarification.
LQ	LCS recovery above method control limits.
LR	LCS recovery below method control limits.
ND	Parameter not detected at the indicated reporting limit.
QO	Compound did not meet method-described identification guidelines. Identification was based on additional GC/MS characteristics.
RU	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
00	

SG A silica gel cleanup procedure was performed.

SN See applicable analysis comment.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

n to Contents

Sandy Tat

From: NorCal Labs <norcallabs@cardno.com>
Sent: Thursday, January 22, 2015 10:19 AM

To: Sandy Tat

Subject: RE: ExxonMobil 73006/022010C / CEL 15-01-0215

Hi Sandy,

For all of the work going forward. We'd like all of our soil data to be in mg/kg.

Thanks!

Christine Capwell

SENIOR TECHNICAL EDITOR, ENGINEERING & ENVIRONMENTAL SERVICES DIVISION CARDNO

Office (+1) 707-766-2000 Direct (+1) 707-766-2055 Fax (+1) 707-789-0414 Address 601 North Mcdowell Blvd., Petaluma, CA 94954 Email christine.capwell@cardno.com Web www.cardno.com

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From: Sandy Tat [mailto:SandyTat@eurofinsUS.com]

Sent: Thursday, January 22, 2015 9:37 AM

To: NorCal Labs

Subject: RE: ExxonMobil 73006/022010C / CEL 15-01-0215

Hi Christine,

Sure, I'll do that. But we never convert the unit for PAH in the past. Therefore, going forward, we need to convert the unit for the PAH to mg/kg for all soil samples or just for this work order? Please advise.

Thanks!

Sandy Tat Project Manager Assistant

From: NorCal Labs [mailto:norcallabs@cardno.com]

Sent: Thursday, January 22, 2015 9:32 AM

To: Sandy Tat

Subject: FW: ExxonMobil 73006/022010C / CEL 15-01-0215

Hi Sandy,

The PAH results were reported in ug/kg. Can you please have the lab and EDF revised so that they are reported in mg/kg? Thanks!

Christine Capwell

SENIOR TECHNICAL EDITOR, ENGINEERING & ENVIRONMENTAL SERVICES DIVISION **CARDNO**

Office (+1) 707-766-2000 Direct (+1) 707-766-2055 Fax (+1) 707-789-0414 Address 601 North Mcdowell Blvd., Petaluma, CA 94954 Email christine.capwell@cardno.com Web www.cardno.com

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From: Sandy Tat [mailto:SandyTat@eurofinsUS.com]

Sent: Monday, January 19, 2015 3:51 PM

To: Greg Gurss; NorCal Labs

Subject: ExxonMobil 73006/022010C / CEL 15-01-0215

PDF, EDDs, & Invoice are attached.

Thanks!

Sandy Tat Project Manager Assistant

Eurofins Calscience, Inc.

7440 Lincoln Way Garden Grove, CA 92841-1427 USA

Phone: (714) 895-5494 Fax: (714) 894-7501

Email: SandyTat@eurofinsus.com Website: www.Calscience.com

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	40 Lincoln Way, Garden Grove, CA 92841-1427 • (714) 895-5494 r courier service / sample drop off information, contact us26_sales@eurofinsus.com or call us.												15-01-0215 PAGE:							1 OF 1							
	LABORATORY CLIENT: Cardno / ExxonMobil										VT PRO	JECT NA	ME/N	UMBER:		<u> Sanimina I</u>			************	P.O. NO.:							
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601 N. McDowell Blvd										PRO	JECT CC	ONTACT	:							SAMPLER(S): (PRINT)							
CITY: STATE: ZIP: CA 94954 Greg Gurss												Nadya Vicente															
TEL: (707) 766-2000 REQUESTED A) AN	NALYSES																
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SAMPLE RECEIPT FORM

Cooler / of /

CLIENT: Cardno EP	DATE:	01/07	<u>'/15</u>
TEMPERATURE: Thermometer ID: SC4 (Criteria: 0.0 °C – 6.0 °C, not froz	en except s	ediment/tiss	ue)
Temperature $\frac{2}{\sqrt{9}} \cdot \frac{7}{\sqrt{9}} \circ C + 0.2 \circ C \text{ (CF)} = \frac{2}{\sqrt{9}} \cdot \frac{9}{\sqrt{9}} \circ C$	Blank	☐ Samp	ple
☐ Sample(s) outside temperature criteria (PM/APM contacted by:)			
☐ Sample(s) outside temperature criteria but received on ice/chilled on same	day of samp	ling.	
☐ Received at ambient temperature, placed on ice for transport by C			
Ambient Temperature: □ Air □ Filter		Checked	by: <u>836</u>
CUSTODY SEALS INTACT:			•
☑ Cooler □ □ No (Not Intact) □ Not Present	t □ N/A	Checked I	
□ Sample □ □ No (Not Intact) ☑ Not Presen	t	Checked I	by: <u>977 </u>
SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	and the		
COC document(s) received complete	a.		
☐ Collection date/time, matrix, and/or # of containers logged in based on sample label	•		
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	🖊		
Sample container label(s) consistent with COC			
Sample container(s) intact and good condition	🗹		
Proper containers and sufficient volume for analyses requested	<u>, </u>		
Analyses received within holding time	🗹		
Aqueous samples received within 15-minute holding time			2
☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfides ☐ Dissolved Oxygen	🗆		Z.
Proper preservation noted on COC or sample container	🗆		4
☐ Unpreserved vials received for Volatiles analysis			_
Volatile analysis container(s) free of headspace			4
Tedlar bag(s) free of condensation CONTAINER TYPE:			Æ
Solid: 40zCGJ 80zCGJ 160zCGJ Sleeve (S/P) EnCol	res [®] □Terr	aCores [®] □]
Aqueous: □VOA □VOAh □VOAna₂ □125AGB □125AGBh □125AGB	p □1AGB	□1AGB na ₂	₂ □1AGB s
□500AGB □500AGJ □500AGJs □250AGB □250CGB □250CGE	Bs □1PB	□1PB na	□500PB
□250PB □250PBn □125PB □125PBznna □100PJ □100PJna ₂ □_			J
Air: □Tedlar [®] □Canister Other: □ Trip Blank Lot# :	Labele	d/Checked b	y: <u>977</u>
Container: C: Clear A: Amber P: Plastic G: Glass J: Jar B: Bottle Z: Ziploc/Resealable Bag E: Preservative: h: HCL n: HNO ₃ na ₂ :Na ₂ S ₂ O ₃ na: NaOH p: H ₃ PO ₄ s: H ₂ SO ₄ u: Ultra-pure znna: ZnAc ₂ +		Reviewed by Scanned by	7

APPENDIX

G

WASTE DISPOSAL DOCUMENTATION



NON-HAZARDOUS WASTE

NON-HAZARDOUS WASTE MANIFEST

Plos	se print or type (Form designed for use on elite (12 pitch) typewriter)								
	NON-HAZARDOUS 1. Generator's US EPA ID No. WASTE MANIFEST			Manifest Document No.	ERIZOIO	2. Page 1 of			
ten.	3 Genorator's Name and Mailing Address EXXONMOBIL OIL CORP. 2555 W. 190TH ST. #1106 TORRANCE, CA 90504 4 Generator's Phona (310) 212-2938	. Oakland	, CA		4				
	5. Transporter & Company Name 6,	US EPA ID Number		A State Transp	onter's ID 707-766-	2000			
1000	CARDNO ERI			B. Transporler					
	7. Transporter 2 Company Name 8,	C. State Transporter's ID							
Canal Canal	Designated Facility Name and Sito Address 10	US EPA ID Number		D. Transporter					
	INSTRAT INC.	CO ELY ID MUNICO		E. State Facility	's ID				
	1105 C. AIRPORT ROAD RIO VISTA, CA 94571	F Facility's Phone 530-753-1829							
Contract of the contract of th	11, WASTE DESCRIPTION		12. Co	ntainers	19. Total Quantity	14. Unit Wt./Vol			
			No.	Туре	Quantity	Wt./Vol.			
	NON-HAZARDOUS PURGE WATE	ER	0 !	Twiter	1	GAL			
GHZHRAFOR	b.								
R	C:								
A									
Ö	d.				- SALES THE THE SECOND				
	u,								
		¥							
illus.	G. Additional Descriptions for Materials Listed Above			H Handling Co	des for Wastes Listed Above)			
	54								
line.	•	÷I							
1000	•				4/100				
	15. Special Handling Instructions and Additional Information								
		NE NOTES PROPERTY NEW		SHEEPE AND					
Titles	16. GENERATOR'S CERTIFICATION: I hereby certify that the contents of this shipmen in proper condition for transport. The materials described on this manifest are not suit	are fully and accurately describe	d and are in	all respects	ar Asserte annyan	ASSESSED STREET			
	in proper condition for transport. The materials described on this manifest are not sur	diaci io iedėlai liasaidonė mazie	годинаколь.						
(Steen						Date			
	Exxan Mob. 1 Azat R. Maydanov.	Signature			> Monl				
	17. Transporter 1 Acknowledgement of Receipt of Materials	- Commence of the commence of	- with the same of the	- All Supple	-	Date			
RA	Printed/Typed Nume	Signature			Mont	h Day Year			
SP		************************************							
e R	18. Transporter 2 Acknowledgement of Receipt of Materials					Date			
→広々区の中の広⊢世代	Printed/Typed Name	Signature			Мол	h Day Year			
	19. Discrepancy Indication Space	100 to							
FAC			ــــــــــــــــــــــــــــــــــــــ	1/0 	and the second second				
L	20. Facility Owner or Operator; Certification of receipt of the waste materials covered by	this manifest, except as noted in	Item 19.	-	• [-	Date			
1	Printed/Typed Name	Signature		7	Mon	th Day Year			
Ÿ	MICHAEL WHITEHERD	NU	hla		10	128114			

