

ExxonMobil
Environmental Services Company
4096 Piedmont Avenue #194
Oakland, California 94611
510 547 8196 Telephone
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Jennifer C. Sedlachek
Project Manager

ExxonMobil

RECEIVED

1:16 pm, Sep 24, 2008

Alameda County
Environmental Health

September 17, 2008

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

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

Dear Ms. Jakub:

Attached for your review and comment is a copy of the letter report entitled *Work Plan for Soil and Groundwater Assessment*, dated September 17, 2008, for the above-referenced site. The report was prepared by Environmental Resolutions, Inc. (ERI) of Petaluma, California, and details proposed activities for the subject site.

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

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

Sincerely,



Jennifer C. Sedlachek
Project Manager

Attachment: ERI's Work Plan for Soil and Groundwater Assessment, dated September 17, 2008

cc: w/ attachment
Mr. Robert C. Ehlers, M.S., P.E., The Valero Companies, Environmental Liability Management

w/o attachment
Ms. Paula Sime, Environmental Resolutions, Inc.



*Southern California
Northern California
Pacific Northwest
Southwest
Texas
Montana*

September 17, 2008

ERI 247603.W03

Ms. Jennifer C. Sedlachek
Exxon Mobil Environmental Services Company
4096 Piedmont Avenue #194
Oakland, California 94611

SUBJECT Work Plan for Soil and Groundwater Assessment

Former Exxon Service Station 70234
3450 35th Avenue
Oakland, California
ACEH RO No. 2515

Ms. Sedlachek:

At the request of ExxonMobil Environmental Services Company, on behalf of ExxonMobil Oil Corporation (ExxonMobil), Environmental Resolutions, Inc. (ERI) prepared this work plan for the subject site (Plate 1). The purpose of the work is to delineate the extent of dissolved-phase fuel constituents on and downgradient of the site, as required by the Alameda County Health Care Services Agency, Environmental Health Services (ACEH) in a letter dated June 20, 2008 (Appendix A). The proposed work consists of drilling three off-site soil borings (B19 through B21) and the installation of four on-site groundwater monitoring wells (MW4 through MW7) and two off-site groundwater monitoring wells (MW8 and MW9) (Plate 2).

SITE DESCRIPTION

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

The subject site is a former Exxon-branded service station, which was sold to Valero Energy Corporation (Valero) in 2000 and decommissioned with the removal of the underground fueling facilities in 2002 (TRC,

Environmental Resolutions, Inc.

601 North McDowell Blvd., Petaluma, CA 94954-2312 | Tel: 707.766.2000 | Fax: 707.789.0414 | Contractor # A/C10-611383

2002). The station building and canopy remain on site; however, the property is vacant and fenced, and the property redevelopment plans are not known at this time. The former UST cavity is filled with gravel and its surface remains unfinished.

GEOLOGY AND HYDROGEOLOGY

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

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

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

Assessment activities indicate that the soil beneath the site consists of clayey sand and sandy clay with varying amounts of silt and gravel to 40 feet bgs, the maximum depth investigated (ERI, 2007). Free groundwater occurs in a sandy gravel layer from approximately 37 to 40 feet bgs. Perched water is present at approximately 15 feet bgs in the former UST cavity, which remains unpaved and filled with coarse gravel fill material. During the groundwater monitoring events conducted from 1992 to 1999, the DTW in the wells ranged from 28 to 35 feet, and the groundwater flow direction was to the southwest with a horizontal gradient ranging from 0.022 to 0.034 (Table 1).

PREVIOUS WORK

Fueling System Activities

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

Site Assessment Activities

Multiple phases of assessment were conducted from 1986 to 2000 (prior to the initial closing of the environmental case at the site), including the advancement of soil borings B1 through B10, EB1, EB2, SB1, and SB2 and the installation of groundwater monitoring wells MW1 through MW3 (HLA, 1988; Alton, 1991; IT, 1992; and EA, 1997). Assessment results indicated maximum dissolved-phase TPHg, benzene, and MTBE concentrations of 75.0 µg/L, 6.6 µg/L, and 1.87 µg/L, respectively (Table 1). The groundwater monitoring wells were destroyed in 2000 when the ACEH closed the environmental case for the site (ERI, 2000).

The ACEH re-opened the environmental case for the site in March 2007 based on the discovery of dissolved-phase MTBE in groundwater samples collected from the UST cavity during its excavation and removal in 2002 (TRC, 2002). In September and November 2007, ERI advanced borings B11 through B18. Results of the assessment indicated maximum dissolved-phase TPHg, benzene, and MTBE concentrations of 18,000 µg/L, 3,400 µg/L, and 12,000 µg/L, respectively, in grab groundwater samples collected from boring B15 at the southeastern edge of the former UST cavity, at 38 feet bgs (Tables 2A and 2B). Maximum residual adsorbed-phase hydrocarbons are located in vadose zone soil in boring B15 from 20 to 30 feet bgs (Tables 3A and 3B) (ERI, 2007). Select soil analytical results are presented on Plates 3 through 5. Select grab groundwater analytical results are presented on Plate 6.

Remediation Activities

In 1991, International Technology Corporation (IT) excavated approximately 1,200 cubic yards of fill material and native soil when the gasoline USTs, dispensers, and product lines were removed and the UST pit was enlarged to accommodate larger new USTs (IT, 1992). Concentrations of TPHg and benzene were detected at up to 5 mg/kg and 0.36 mg/kg, respectively, in soil samples collected from the limits of the overexcavation.

In 2002, approximately 170 cubic yards of pea gravel and native soil was excavated and removed during the removal of the 12,000-gallon USTs (TRC, 2002). Petroleum hydrocarbons were not detected in the four soil samples collected from the sidewalls of the excavation. Residual TPHg (24 mg/kg), benzene (0.057 mg/kg), toluene (0.11 mg/kg), ethylbenzene (0.12 mg/kg), and total xylenes (1.2 mg/kg), and MTBE (0.020 mg/kg) were detected at 4.9 feet bgs in soil sample B, collected from beneath the northeastern dispenser island.

Groundwater Monitoring Activities

Groundwater monitoring was conducted quarterly at the site from 1992 to 1995, and once in 1999. NAPL was not encountered. Dissolved-phase TPHg, benzene, and MTBE were reported in groundwater samples from well MW1, located west of the northern corner of the UST cavity, and well MW3, located upgradient of the fueling system. Wells MW1 through MW3 were 45 feet deep and screened from 25 to 45 feet bgs (Table 4).

PROPOSED WORK

In the June 20, 2008, letter, the ACEH requested additional assessment to define the lateral extent of petroleum hydrocarbons in soil and groundwater beneath and downgradient of the subject site, based on the results of ERI's 2007 investigation and the ongoing groundwater monitoring at the ConocoPhillips site located southwest (downgradient) of the subject site (Appendix A).

The proposed work consists of the drilling of three off-site soil borings (B19 through B21) and installing four on-site groundwater monitoring wells (MW4 through MW7) and two off-site groundwater monitoring wells (MW8 and MW9) at the locations depicted on Plate 7. To avoid lengthy encroachment permitting delays associated with installing wells in the City of Oakland right-of-way, the advancement of soil borings B19 through B21 are proposed in Quigley Street instead of groundwater monitoring wells. ERI will attempt to gain access to the private property located south of the subject site for the installation of wells MW8 and MW9; however, if access negotiations are delayed, ERI will install monitoring wells MW8 and MW9 in a second, later mobilization once access negotiations are complete.

ERI will coordinate future groundwater monitoring and sampling events with the ConocoPhillips site.

Pre-Field Activities

Prior to the onset of drilling, soil boring and well installation permits will be obtained from the County of Alameda Public Works Department. ERI personnel will visit the site to check for obstructions and to mark

the proposed locations. Underground Service Alert and the ACEH will be notified at least 48 hours prior to the onset of field activities. Prior to drilling, the locations will be excavated with hand tools or vacuum excavation equipment in accordance with ExxonMobil's subsurface clearance protocol.

Soil Boring and Well Installation Activities

The proposed borings and wells will be drilled using hollow-stem auger equipment. Soil borings B19 through B21 will be advanced to approximately 40 feet bgs for collection of soil and groundwater samples. Soil from the borings will be sampled continuously for stratigraphic evaluation, field screening using a PID, and possible laboratory analysis.

Groundwater monitoring wells MW4 through MW8 will be advanced to approximately 45 feet bgs. Soil samples will be collected at 5-foot intervals throughout the upper portion and continuously through the expected well screen interval. The wells will be constructed using 2-inch diameter, Schedule 40 PVC casings, screened from approximately 35 to 45 feet bgs. Due to the periodic groundwater fluctuations of 5 feet or greater recorded at this site (Table 1) and the adjacent site, ERI does not recommend well screen intervals of less than 5 feet as requested by the ACEH.

The proposed groundwater monitoring wells will be surveyed in accordance with AB2886 and incorporated into the quarterly groundwater monitoring and sampling program for the site.

The procedures for drilling, decontamination, and well construction are described in the field protocol contained in Appendix B. The fieldwork will be conducted under the advisement of a State of California professional geologist and in accordance with applicable regulatory guidelines.

Laboratory Analyses

Select soil and groundwater samples will be submitted for analysis to an ExxonMobil-approved, state-certified analytical laboratory. The samples will be analyzed for TPHg by EPA Method 8015B and for BTEX, oxygenated compounds (including MTBE, ETBE, DIPE, TAME, and TBA), lead scavengers (including 1,2-DCA and EDB), and ethanol by EPA Method 8260B.

Waste Management Plan

The soil and decontamination water generated during drilling activities will be temporarily stored on site in DOT-approved 55-gallon drums. Soil cuttings and decontamination water will be transported to an ExxonMobil-approved facility for disposal. Copies of the waste manifests for the proper disposal of soil and water will be included in the report.

Site Safety Plan

Fieldwork will be performed in accordance with the site-specific safety plan.

Report

After completion of the proposed field activities and one quarterly groundwater monitoring event, a report summarizing field and laboratory procedures, boring logs, and laboratory results will be submitted to ExxonMobil and the ACEH. The report will be signed by a State of California professional geologist.

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 Ms. Paula Sime, Environmental Resolutions, Inc., 601 North McDowell Boulevard, Petaluma, California 94954. The agency contact is Ms. Barbara Jakub, Alameda County Health Care Services Agency, Environmental Health Services, 1131 Harbor Bay Parkway, Suite 250, Alameda, California, 94502-6577.

LIMITATIONS

For any reports cited that were not generated by ERI, the data taken from those reports is used "as is" and is assumed to be accurate. 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 reports.

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

For any questions concerning the content of this work plan, please contact Ms. Paula Sime at (707) 766-2000.



Sincerely,

Environmental Resolutions, Inc.

SCANNED
IMAGE
Paula Sime

Paula Sime

Senior Project Manager

SCANNED
IMAGE
Heidi Dieffenbach-Carle
Heidi L. Dieffenbach-Carle
P.G. 6793

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

Mr. Robert C. Ehlers, M.S., P.E., The Valero Companies, Environmental Liability Management, 685 West Third Street, Hanford, California 93230

Enclosures:

References

Acronym List

Plate 1	Site Vicinity Map
Plate 2	Generalized Site Plan
Plate 3	Select Soil Analytical Results - TPHg
Plate 4	Select Soil Analytical Results - Benzene
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Plate 6	Select Grab Groundwater Analytical Results
Plate 7	Proposed Soil Boring and Groundwater Monitoring Well Locations
Table 1	Cumulative Groundwater Monitoring and Sampling Data
Table 2A	Laboratory Analytical Results of Grab Groundwater Samples
Table 2B	Additional Laboratory Analytical Results of Grab Groundwater Samples
Table 3A	Laboratory Analytical Results of Soil Samples
Table 3B	Additional Laboratory Analytical Results of Soil Samples
Table 4	Well Construction Details
Appendix A	Correspondence
Appendix B	Field Protocol

REFERENCES

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

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

EA Engineering (EA). September 1997. *Analytical results for used-oil UST and hydraulic hoist confirmation soil samples.*

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Environmental Resolutions, Inc. (ERI). December 14, 2007. *Soil and Groundwater Investigation Report Former Exxon Service Station 7-0234, 3450 35th Avenue, Oakland, California.* ERI Project No. 247603.R03.

Graymer, R.W. 2000. Geologic map and map database of the Oakland metropolitan area, Alameda, Contra Costa, and San Francisco Counties, California. USGS, Miscellaneous Field Studies MF-2342.

Harding Lawson Associates (HLA). 1988. Plate 2, Site Plan.

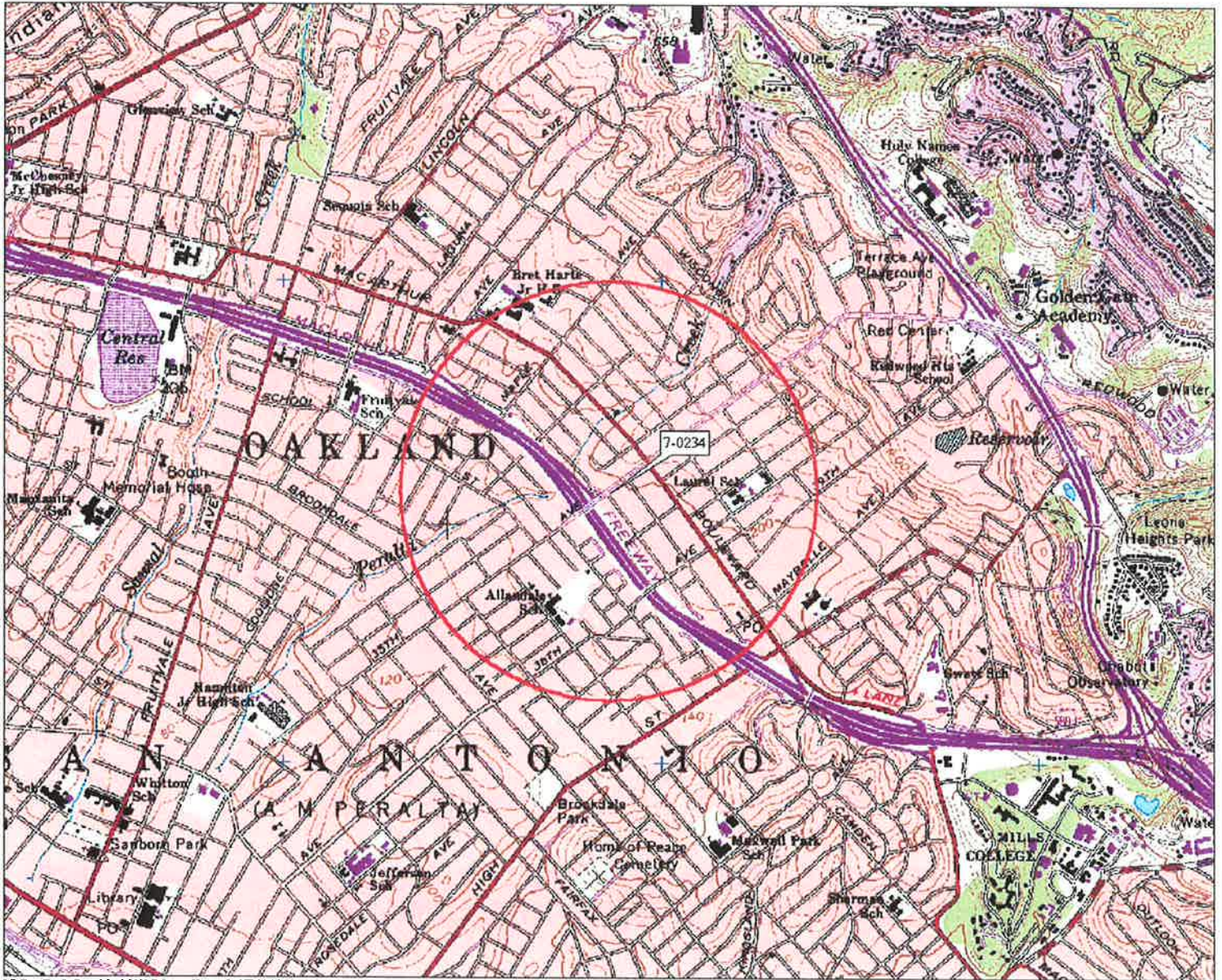
Hickenbottom, Kelvin and Muir, Kenneth S. June 1988. *Geohydrogeology and Groundwater Quality Overview of the East Bay Plain Area, Alameda County, CA.* Alameda County Flood Control and Water Conservation District. 83p.

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

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

ACRONYM LIST

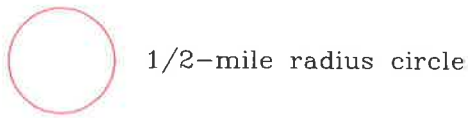
µg/L	Micrograms per liter	NEPA	National Environmental Policy Act
µs	Microsiemens	NGVD	National Geodetic Vertical Datum
1,2-DCA	1,2-dichloroethane	NPDES	National Pollutant Discharge Elimination System
acfm	Actual cubic feet per minute	O&M	Operations and Maintenance
AS	Air sparge	ORP	Oxidation-reduction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



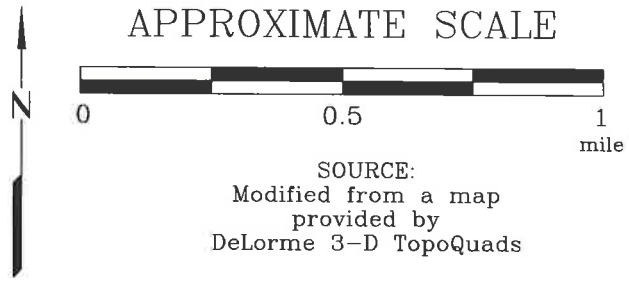
3-D TopoQuads Copyright © 1999 DeLorme Yezzerutti, ME 04896 Source Data: USGS 550 ft Scale: 1:19,200 Datum: NAD83 Contour: WGS84

2476TOPO
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EXPLANATION



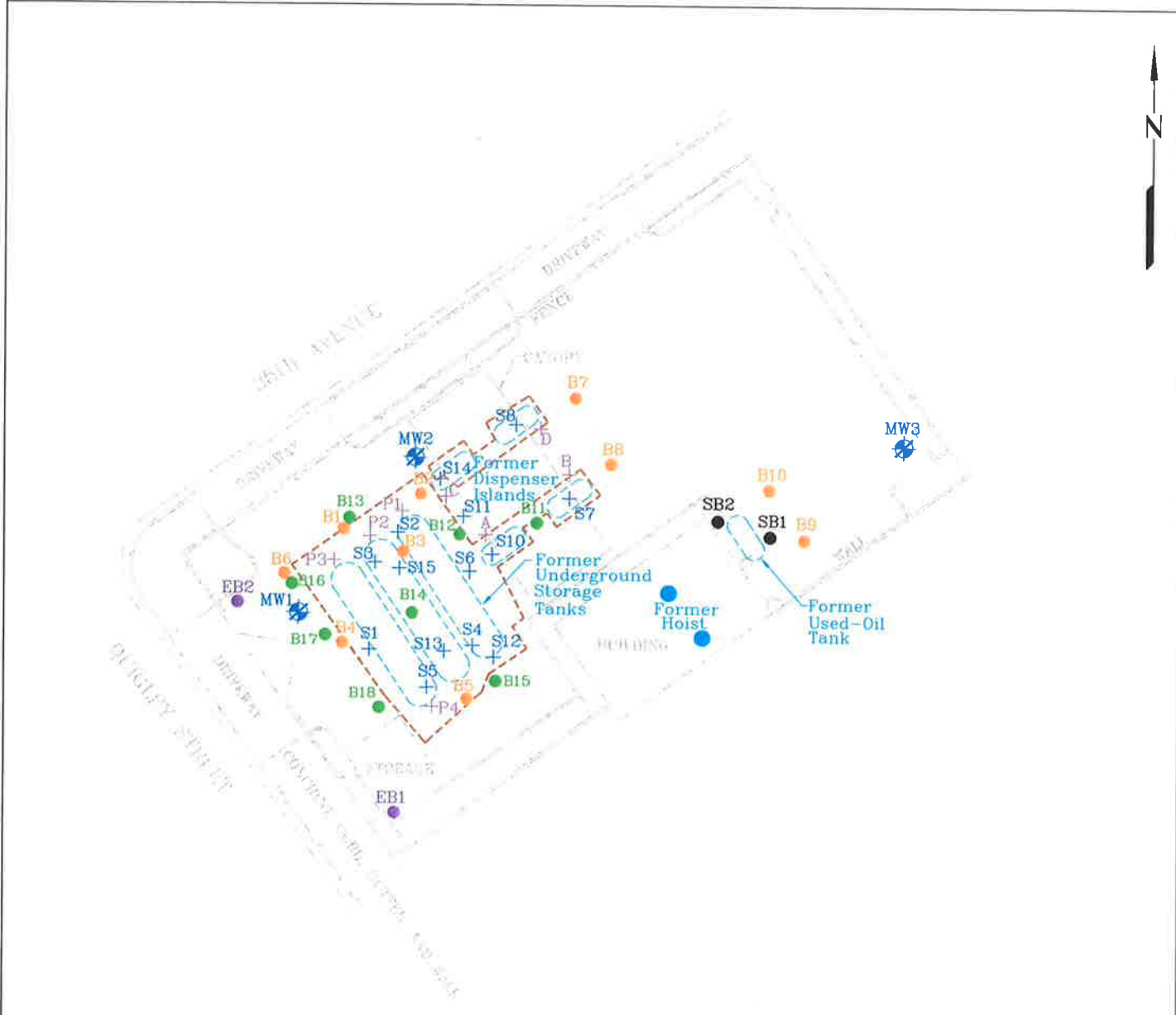
APPROXIMATE SCALE



SITE VICINITY MAP

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

PROJECT NO.
 2476
PLATE
 1



APPROXIMATE SCALE



SOURCE:
 Modified from a map
 provided by
 ExxonMobil Refining and Supply
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EXPLANATION

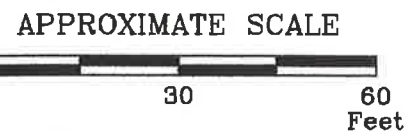
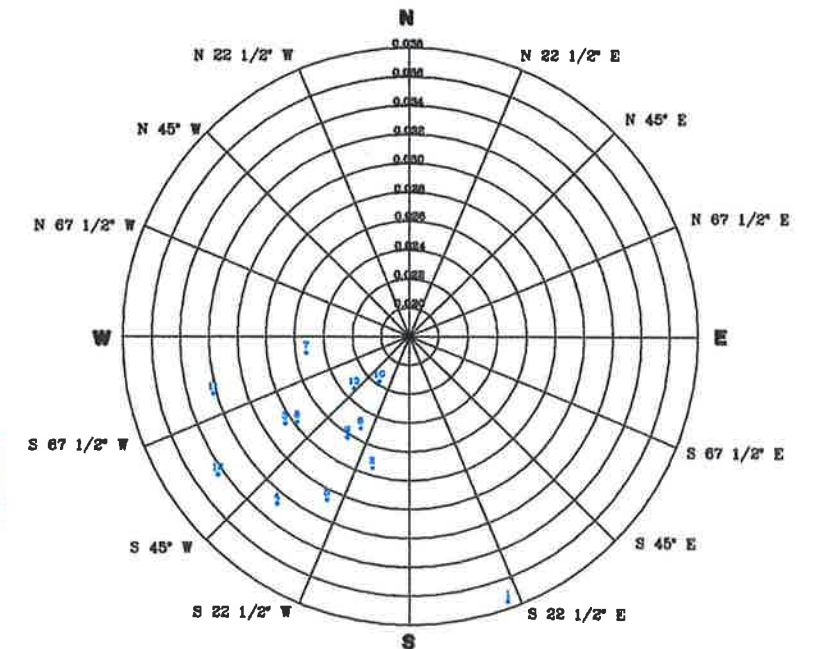
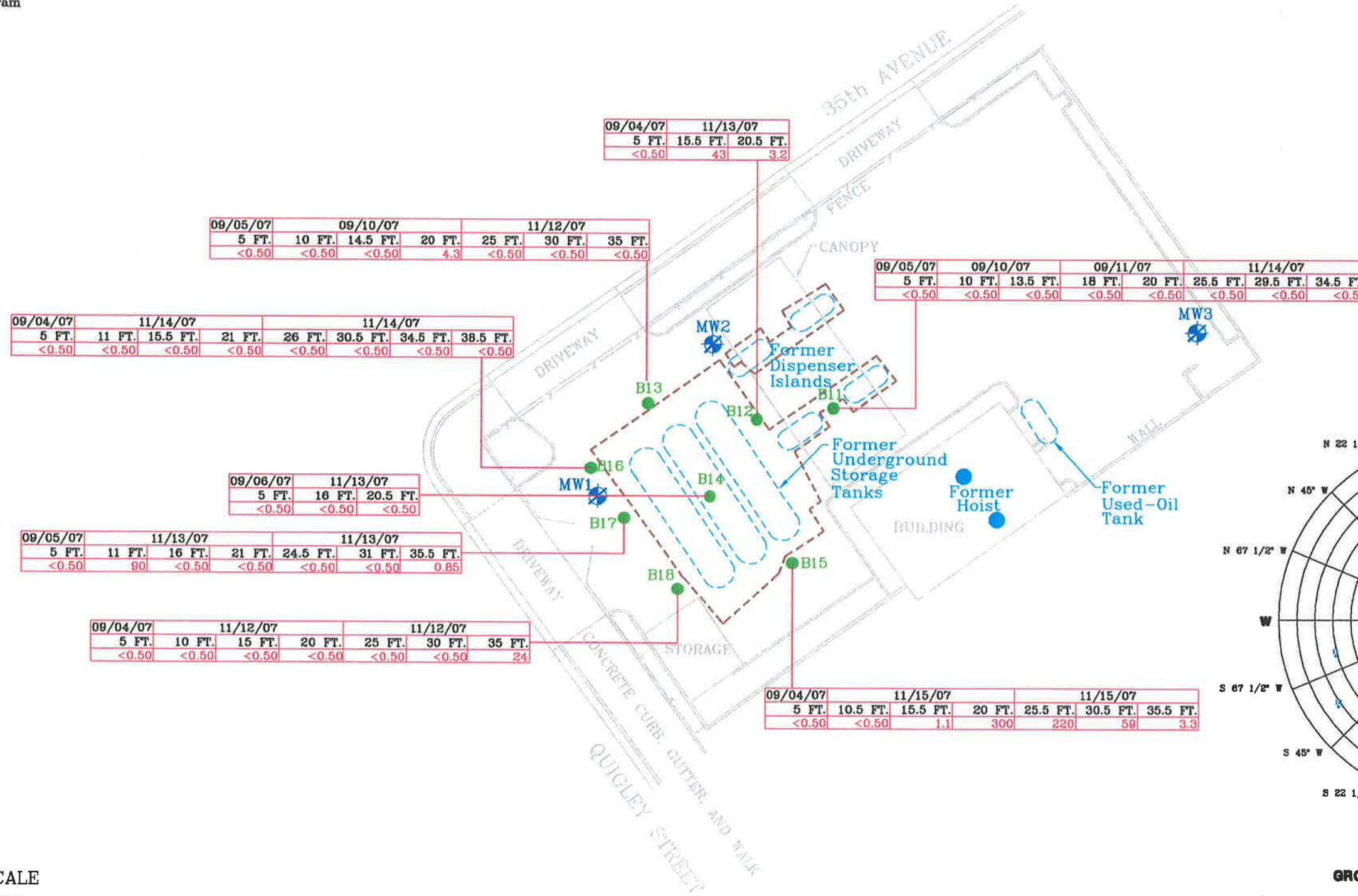
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|-----|---------------------------------------|-----|------------------------------------|
| MW1 | Destroyed Groundwater Monitoring Well | B10 | Soil Boring (Alton, 1991) |
| B18 | Soil Boring (ERI, 2007) | P4 | Soil Sample Location (TRC, 2002) |
| SB2 | Soil Boring (GTI, 1986) | S15 | Soil Sample Location (Alton, 1991) |
| EB2 | Soil Boring (HLA, 1988) | | |
| | | | Excavated Area |



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

PROJECT NO.
 2476
PLATE
 2

Analyte Concentrations in mg/kg
 11/15/07 Sample Date
 20 FT. Sample Depth
 300 Total Petroleum Hydrocarbons as gasoline
 < Less Than the Stated Laboratory Reporting Limit
 mg/kg Milligrams per kilogram



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 FN 2476 08 W03 ANALYTICAL_SP

Excavated Area



SELECT SOIL ANALYTICAL RESULTS - TPHg

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

EXPLANATION

- MW1 Destroyed Groundwater Monitoring Well
- B18 Soil Boring

PROJECT NO.
 2476
 PLATE
 3

Analyte Concentrations in mg/kg

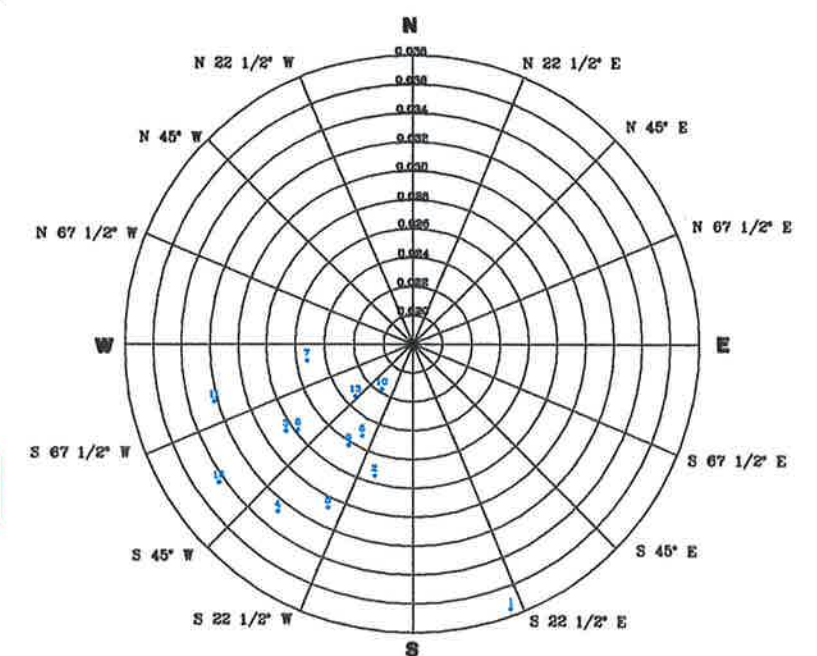
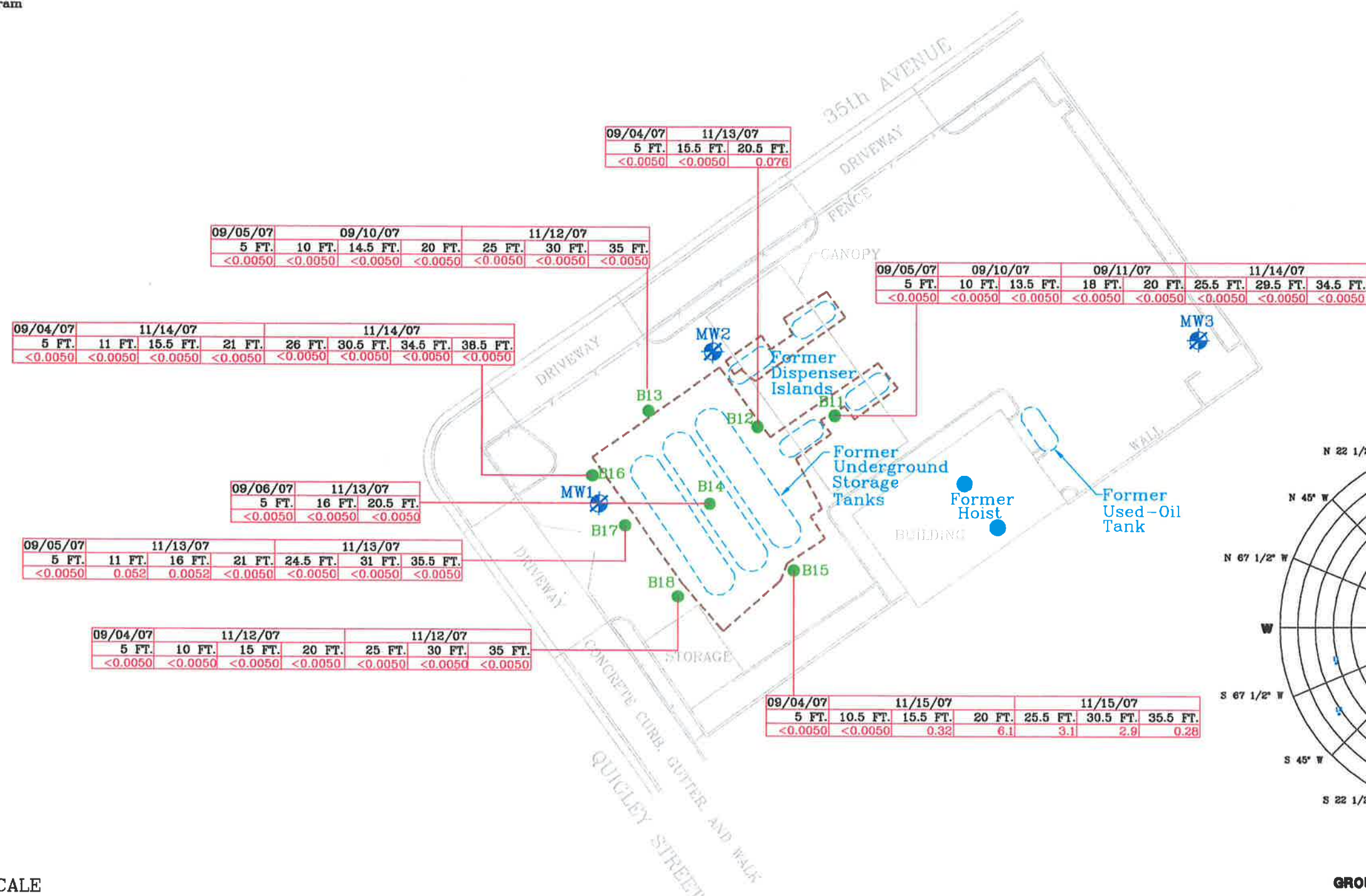
11/15/07 Sample Date

20 FT. Sample Depth

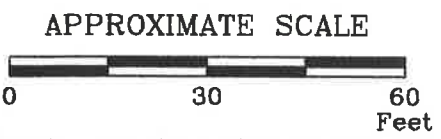
6.1 Benzene

< Less Than the Stated Laboratory Reporting Limit

mg/kg Milligrams per kilogram



GROUNDWATER FLOW DIRECTION ROSE DIAGRAM



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FN 2476 08 W03 ANALYTICAL_SP

Excavated Area



SELECT SOIL ANALYTICAL RESULTS - BENZENE
FORMER EXXON SERVICE STATION 70234
3450 35th Avenue
Oakland, California

EXPLANATION

- MW1 Destroyed Groundwater Monitoring Well
- B18 Soil Boring

PROJECT NO.
2476
PLATE
4

Analyte Concentrations in mg/kg

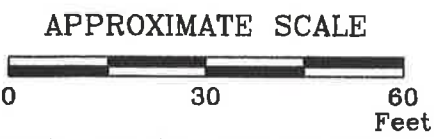
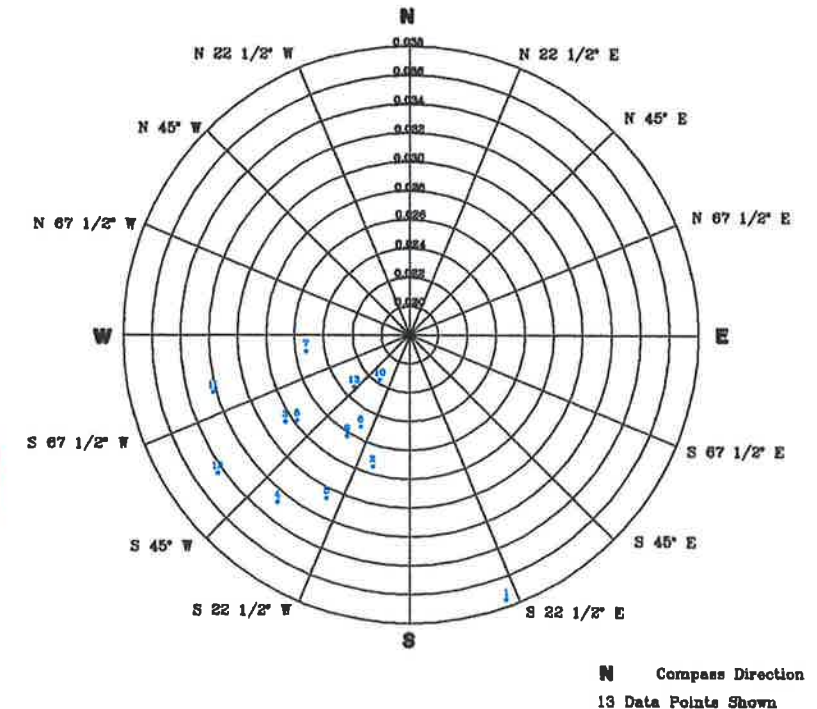
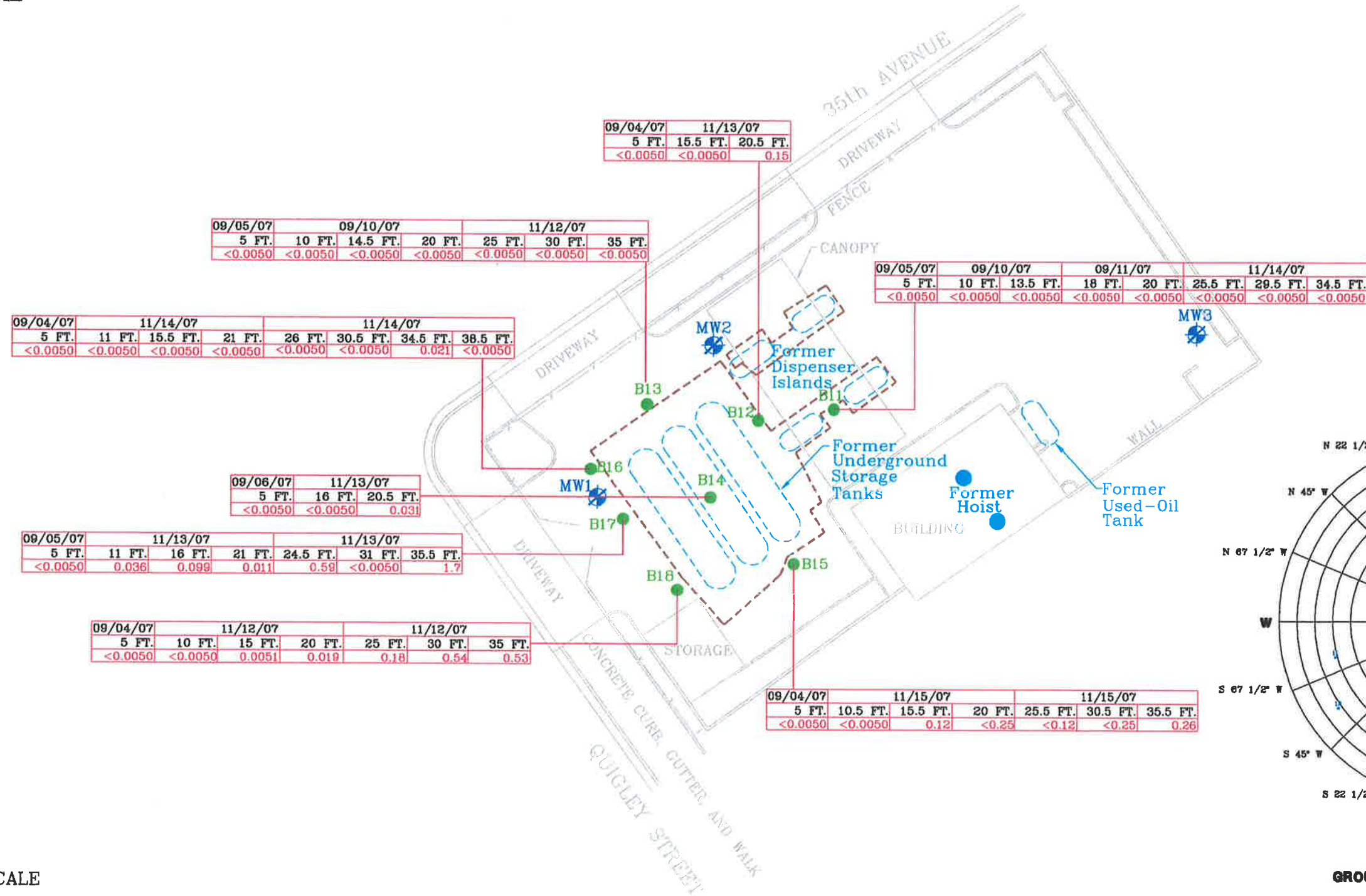
11/13/07 Sample Date

35.5 FT. Sample Depth

1.7 MTBE

< Less Than the Stated Laboratory Reporting Limit

mg/kg Milligrams per kilogram



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FN 2476 08 W03 ANALYTICAL_SP

Excavated Area



SELECT SOIL ANALYTICAL RESULTS - MTBE

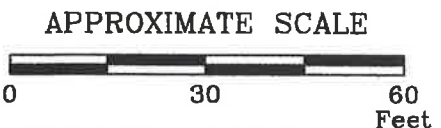
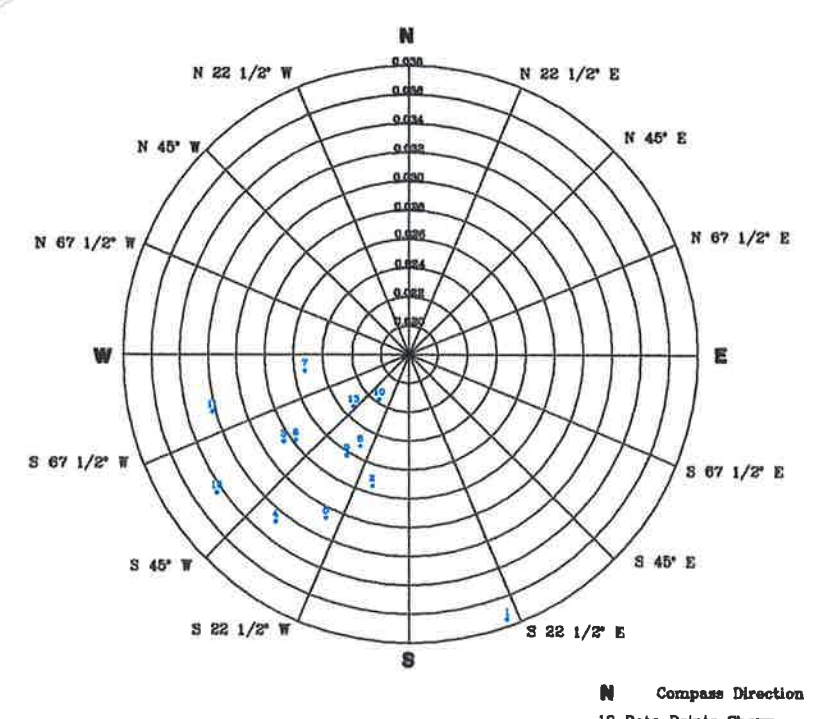
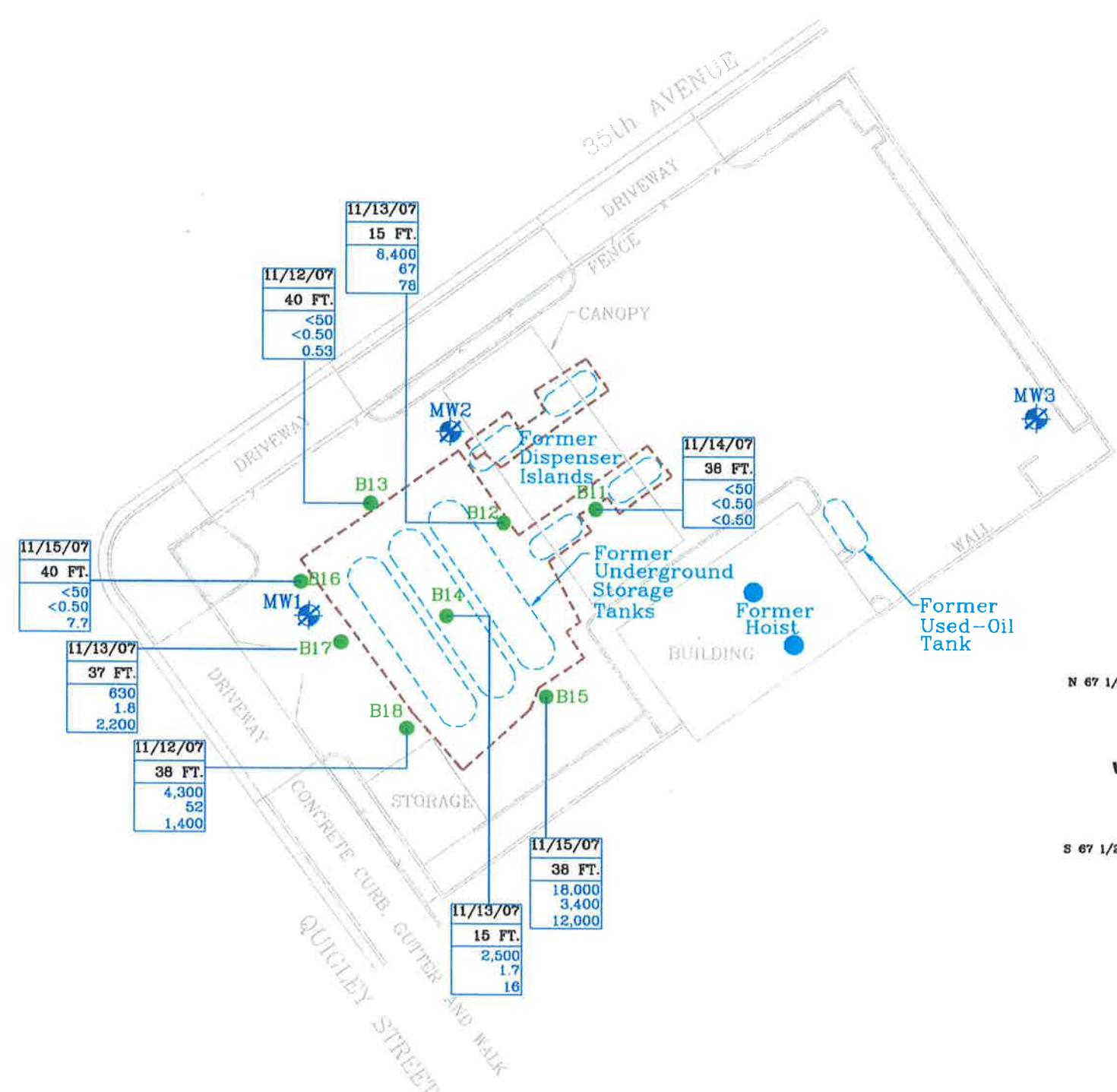
FORMER EXXON SERVICE STATION 70234
3450 35th Avenue
Oakland, California

- EXPLANATION**
- MW1 Destroyed Groundwater Monitoring Well
 - B18 Soil Boring

PROJECT NO.
2476

PLATE
5

Analyte Concentrations in ug/L
 11/15/07 Sample Date
 38 FT. Sample Depth
 18,000 Total petroleum hydrocarbons as gasoline
 3,400 Benzene
 12,000 MTBE
 < Less Than the Stated Laboratory Reporting Limit
 ug/L Micrograms per Liter



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 FN 2476 08 W03 ANALYTICAL_SP

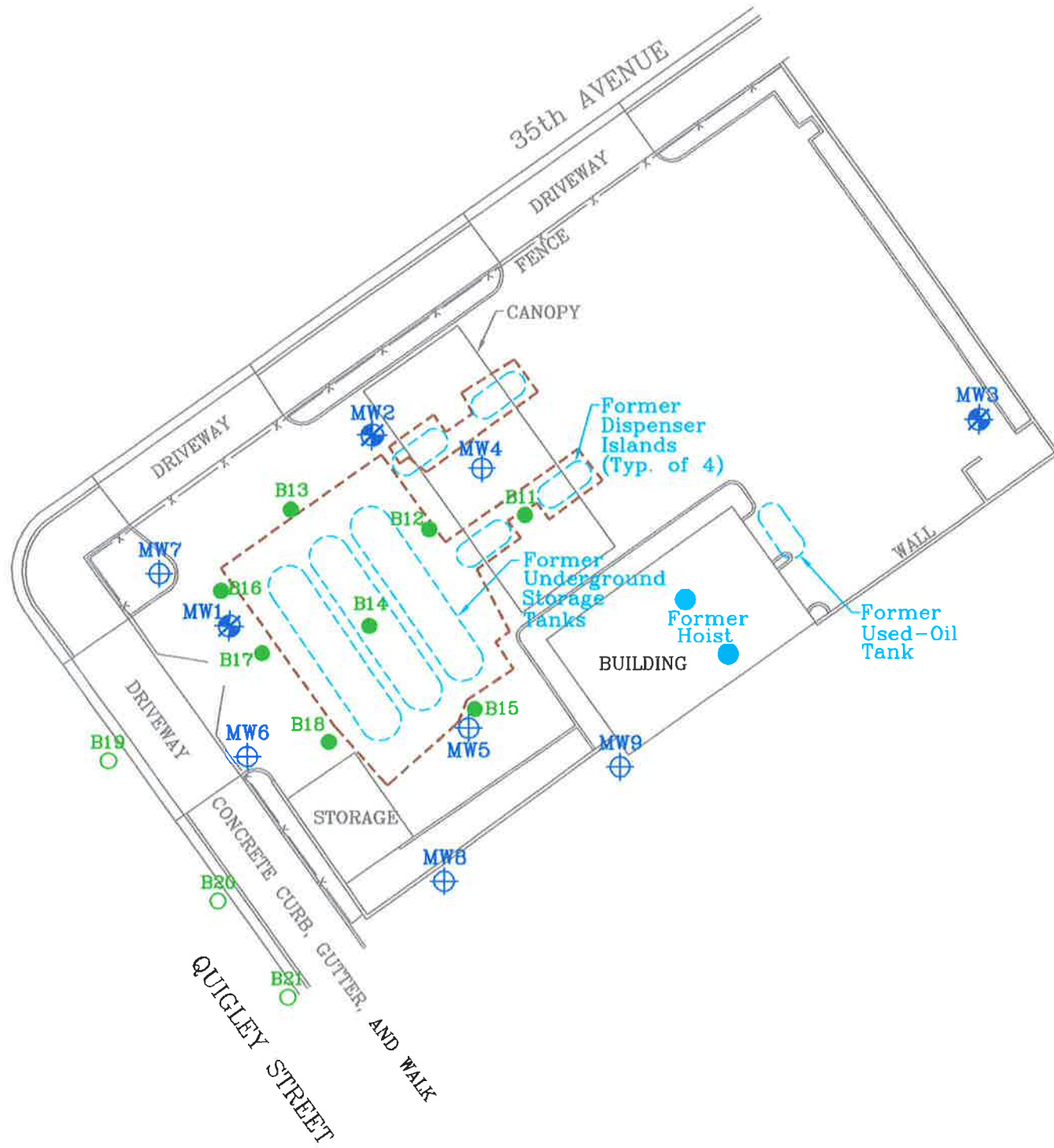
Excavated Area



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

- EXPLANATION**
- MW1 Destroyed Groundwater Monitoring Well
 - B18 Soil Boring

PROJECT NO.
2476
PLATE
6



APPROXIMATE SCALE



FN 2476 08 W03 PROP WELLS_SP

 Excavated Area



PROPOSED BORING AND WELL LOCATIONS
 FORMER EXXON SERVICE STATION 70234
 3450 35th Avenue
 Oakland, California

EXPLANATION

-  Destroyed Groundwater Monitoring Well
-  Proposed Groundwater Monitoring Well
-  Soil Boring
-  Proposed Soil Boring

PROJECT NO.
2476

PLATE
7

TABLE 1
CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA
Former Exxon Service Station 70234
3450 35th Avenue
Oakland, California

Well ID	Sampling Date	TOC Elev. (feet)	DTW (feet)	GW Elev. (feet)	NAPL (feet)	TPHg (µg/L)	MTBE (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	Total Pb (µg/L)	Organic Pb (mg/L)
MW1	07/17/92	192.00	33.02	158.98	No	67	---	6.6	6.9	2.0	4.5	17	---
MW1	10/22/92	192.00	34.07	157.93	No	<50	---	2.9	<0.5	<0.5	<0.5	16	---
MW1	02/04/93	192.00	29.43	162.57	No	<50	---	0.8	<0.5	<0.5	<0.5	4	---
MW1	05/03/93	192.00	29.72	162.28	No	71	---	2.8	7.2	2.2	22	40	---
MW1	07/30/93	192.00	32.95	159.05	No	<50	---	<0.5	<0.5	<0.5	<0.5	5	---
MW1	10/19/93	192.00	34.34	157.66	No	<50	---	<0.5	<0.5	<0.5	<0.5	12	---
MW1	02/23/94	192.00	31.72	160.28	No	<50	---	<0.5	<0.5	<0.5	<0.5	4	---
MW1	06/06/94	192.00	31.77	160.23	No	<50	---	<0.5	<0.5	<0.5	<0.5	<3	---
MW1	08/18/94	192.00	33.76	158.24	No	<50	---	<0.5	<0.5	<0.5	<0.5	130	---
MW1	11/15/94	192.00	34.08	157.92	No	<50	---	<0.5	<0.5	<0.5	<0.5	<3.0	<100
MW1	02/06/95	192.00	28.50	163.50	No	<50	---	<0.5	<0.5	<0.5	<0.5	---	---
MW1	05/10/95	192.00	29.30	162.70	No	<50	---	<0.5	<0.5	<0.5	<0.5	---	---
MW1	09/20/99	192.00	33.30	158.70	No	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<75	<50
MW1	Well destroyed in June 2000.												
MW2	07/17/92	194.85	34.65	160.20	No	<50	---	<0.5	<0.5	<0.5	<0.5	<3	---
MW2	10/22/92	194.85	35.64	159.21	No	<50	---	<0.5	<0.5	<0.5	<0.5	---	---
MW2	02/04/93	194.85	31.13	163.72	No	<50	---	<0.5	<0.5	<0.5	<0.5	<3	---
MW2	05/03/93	194.85	31.08	163.77	No	<50	---	<0.5	<0.5	<0.5	<0.5	3	---
MW2	07/30/93	194.85	34.34	160.51	No	<50	---	<0.5	<0.5	<0.5	<0.5	14	---
MW2	10/19/93	194.85	36.00	158.85	No	<50	---	<0.5	<0.5	<0.5	<0.5	<3	---
MW2	02/23/94	194.85	33.92	160.93	No	<50	---	<0.5	<0.5	<0.5	<0.5	<3	---
MW2	06/06/94	194.85	33.50	161.35	No	<50	---	<0.5	<0.5	<0.5	<0.5	<3	---
MW2	08/18/94	194.85	35.38	159.47	No	<50	---	<0.5	<0.5	<0.5	<0.5	<3.0	---
MW2	11/15/94	194.85	35.93	158.92	No	<50	---	<0.5	<0.5	<0.5	<0.5	<3.0	<100
MW2	02/06/95	194.85	30.38	164.47	No	<50	---	<0.5	<0.5	<0.5	<0.5	---	---
MW2	05/10/95	194.85	30.77	164.08	No	<50	---	<0.5	<0.5	<0.5	<0.5	---	---
MW2	09/20/99	194.85	35.15	159.70	No	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<75	<0.5
MW2	Well destroyed in June 2000.												
MW3	07/17/92	196.90	37.24	159.66	No	<50	---	<0.5	<0.5	<0.5	<0.5	50	---
MW3	10/22/92	196.90	35.95	160.95	No	<50	---	<0.5	<0.5	<0.5	<0.5	9	---
MW3	02/04/93	196.90	29.85	167.05	No	<50	---	<0.5	<0.5	<0.5	<0.5	<3	---

TABLE 1
CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA
Former Exxon Service Station 70234
3450 35th Avenue
Oakland, California

Well ID	Sampling Date	TOC Elev. (feet)	DTW (feet)	GW Elev. (feet)	NAPL (feet)	TPHg (µg/L)	MTBE (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	Total Pb (µg/L)	Organic Pb (mg/L)
MW3	05/03/93	196.90	29.87	167.03	No	<50	---	<0.5	<0.5	<0.5	<0.5	3	---
MW3	07/30/93	196.90	33.85	163.05	No	<50	---	<0.5	<0.5	<0.5	<0.5	22	---
MW3	10/19/93	196.90	35.89	161.01	No	<50	---	<0.5	<0.5	<0.5	<0.5	12	---
MW3	02/23/94	196.90	32.88	164.02	No	<50	---	<0.5	<0.5	<0.5	<0.5	25	---
MW3	06/06/94	196.90	32.40	164.50	No	<50	---	<0.5	<0.5	<0.5	<0.5	<3	---
MW3	08/18/94	196.90	35.07	161.83	No	<50	---	<0.5	<0.5	<0.5	<0.5	<3.0	---
MW3	11/15/94	196.90	35.97	160.93	No	<50	---	<0.5	<0.5	<0.5	<0.5	<3.0	<100
MW3	02/06/95	196.90	28.39	168.51	No	<50	---	<0.5	<0.5	<0.5	<0.5	---	---
MW3	05/10/95	196.90	28.90	168.00	No	<50	---	<0.5	<0.5	<0.5	<0.5	---	---
MW3	09/20/99	196.90	34.68	162.22	No	75.0	1.87	<0.5	11.5	1.8	18.0	<75	<0.5
MW3	Well destroyed in June 2000.												

- Notes: Data prior to 1999 provided by EA Environmental Science and Engineering in previously submitted reports.
- TOC Elev. = Top of well casing elevation; datum is mean sea level.
 - DTW = Depth to water.
 - GW Elev. = Groundwater elevation; datum is mean sea level.
 - NAPL = Non-aqueous phase liquid.
 - TPHg = Total petroleum hydrocarbons as gasoline analyzed using EPA Method 8015.
 - MTBE = Methyl tertiary butyl ether analyzed using EPA Method 8260.
 - BTEX = Benzene, toluene, ethylbenzene, and total xylenes analyzed using EPA Method 8020.
 - Total Pb = Total lead analyzed using EPA Method 6010.
 - Organic Pb = Organic lead analyzed using CA DHS LUFT method.
 - µg/L = Micrograms per liter.
 - mg/L = Milligrams per liter.
 - < = Less than the stated laboratory reporting limit.
 -

TABLE 2A
LABORATORY ANALYTICAL RESULTS OF GRAB GROUNDWATER SAMPLES
Former Exxon Service Station 70234
3450 35th Avenue
Oakland, California
(Page 1 of 1)

Sample ID	Sampling Date	Depth (feet bgs)	TPHg (µg/L)	MTBE (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)
UST Cavity Samples								
Pit Water	06/14/02	11.5a	5,600	12,000	140	840	100	530
UST Pit	06/19/02	13.5a	680	640	2.7	36	18	130
Soil Borings								
W-38-B11	11/14/07	38	<50	<0.50	<0.50	<0.50	<0.50	<0.50
W-15-B12	11/13/07	15	8,400	78	67	<5.0	140	150
W-40-B13	11/12/07	40	<50	0.53	<0.50	<0.50	<0.50	<0.50
W-15-B14	11/13/07	15	2,500	16	1.7	3.0	26	13
W-38-B15	11/15/07	38	18,000	12,000	3,400	2,500	330	2,000
W-40-B16	11/15/07	40	<50	7.7	<0.50	<0.50	<0.50	<0.50
W-37-B17	11/13/07	37	630	2,200	1.8	<0.50	4.1	1.4
W-38-B18	11/12/07	38	4,300	1,400	52	<12	56	96

Notes:

TPHg = Total petroleum hydrocarbons as gasoline analyzed using modified EPA Method 8015M.

MTBE = Methyl tertiary butyl ether analyzed using EPA Method 8021B.

BTEX = Benzene, toluene, ethylbenzene, and total xylenes analyzed using EPA Method 8021B.

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

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

TBA = Tertiary butyl alcohol analyzed using EPA Method 8260B.

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

ETBE = Ethyl tertiary butyl ether analyzed using EPA Method 8260B.

TAME = Tertiary amyl methyl ether analyzed using EPA Method 8260B.

Ethanol = Ethanol analyzed using EPA Method 8260B.

feet bgs = Feet below ground surface.

µg/L = Micrograms per liter.

< = Less than the stated laboratory reporting limit.

a = Approximate depth to groundwater surface at time of sampling.

TABLE 2B
ADDITIONAL LABORATORY ANALYTICAL RESULTS OF GRAB GROUNDWATER SAMPLES
Former Exxon Service Station 70234
3450 35th Avenue
Oakland, California
(Page 1 of 1)

Sample ID	Sampling Date	Sample Depth (feet bgs)	1,2-DCA (µg/L)	EDB (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	Ethanol (µg/L)
UST Cavity Samples									
Not analyzed for these analytes.									
Soil Borings									
W-38-B11	11/14/07	38	<0.50	<0.50	<10	<0.50	<0.50	<0.50	<50
W-15-B12	11/13/07	15	<5.0	<5.0	<100	<5.0	<5.0	<5.0	<500
W-40-B13	11/12/07	40	<0.50	<0.50	<10	<0.50	<0.50	<0.50	<50
W-15-B14	11/13/07	15	<1.0	<1.0	<20	<1.0	<1.0	<1.0	<100
W-38-B15	11/15/07	38	<25	<25	1,900	<25	<25	<25	<2,500
W-40-B16	11/15/07	40	<0.50	<0.50	<10	<0.50	<0.50	<0.50	85
W-37-B17	11/13/07	37	<0.50	<0.50	58	<0.50	<0.50	<0.50	<50
W-38-B18	11/12/07	38	<12	<12	<250	<12	<12	<12	<1,200

Notes:

- TPHg = Total petroleum hydrocarbons as gasoline analyzed using modified EPA Method 8015M.
- MTBE = Methyl tertiary butyl ether analyzed using EPA Method 8021B.
- BTEX = Benzene, toluene, ethylbenzene, and total xylenes analyzed using EPA Method 8021B.
- 1,2-DCA = 1,2-dichloroethane analyzed using EPA Method 8260B.
- EDB = 1,2-dibromoethane analyzed using EPA Method 8260B.
- TBA = Tertiary butyl alcohol analyzed using EPA Method 8260B.
- DIPE = Di-isopropyl ether analyzed using EPA Method 8260B.
- ETBE = Ethyl tertiary butyl ether analyzed using EPA Method 8260B.
- TAME = Tertiary amyl methyl ether analyzed using EPA Method 8260B.
- Ethanol = Ethanol analyzed using EPA Method 8260B.
- feet bgs = Feet below ground surface.
- µg/L = Micrograms per liter.
- < = Less than the stated laboratory reporting limit.
- a = Approximate depth to groundwater surface at time of sampling.

TABLE 3A
LABORATORY ANALYTICAL RESULTS OF SOIL SAMPLES
Former Exxon Service Station 70234
3450 35th Avenue
Oakland, California
(Page 1 of 5)

Sample ID	Sampling Date	Depth (feet bgs)	TPHd (mg/kg)	TPHg (mg/kg)	TPHmo (mg/kg)	EHC-HO (mg/kg)	MTBE (mg/kg)	B (mg/kg)	T (mg/kg)	E (mg/kg)	X (mg/kg)	Lead (mg/kg)	TOG (mg/kg)
Used-Oil UST Confirmation Soil Sample													
T1-12	06/18/97	---	200b	8.6a	680c	---	---	ND	0.038	0.016	0.046	---	---
Hydraulic Hoist Confirmation Samples													
H1-8	06/18/97	---	---	---	---	99d	---	---	---	---	---	---	---
H2-8	06/18/97	---	---	---	---	2,100d	---	---	---	---	---	---	---
Samples from the UST Cavity Sidewall													
Pit1@12'	06/14/02	12	---	<1.0	---	---	<0.005	<0.005	<0.005	<0.005	<0.005	---	---
Pit2@11.5'	06/14/02	11.5	---	<1.0	---	---	<0.005	<0.005	<0.005	<0.005	<0.005	---	---
Pit3@11'	06/14/02	11	---	<1.0	---	---	<0.005	<0.005	<0.005	<0.005	<0.005	---	---
Pit4@10'	06/14/02	10	---	<1.0	---	---	<0.005	<0.005	<0.005	<0.005	<0.005	---	---
Samples from Beneath Product Piping													
A-6.4	06/25/02	6.4	---	<1.0	---	---	<0.005	<0.005	<0.005	<0.005	<0.005	---	---
B-4.9	06/25/02	4.9	---	24	---	---	0.020	0.057	0.11	0.12	1.2	---	---
C-6.5	06/25/02	6.5	---	<1.0	---	---	<0.005	<0.005	<0.005	<0.005	<0.005	---	---
D-5.2	06/25/02	5.2	---	<1.0	---	---	<0.005	<0.005	<0.005	<0.005	<0.005	---	---
Soil Borings													
S-1	08/28/91	10	---	<1.0	---	---	---	<0.005	<0.005	<0.005	<0.005	<5	---
S-2	08/28/91	10	---	<1.0	---	---	---	<0.005	<0.005	<0.005	<0.005	<5	---
S-3	08/28/91	10	---	<1.0	---	---	---	<0.005	<0.005	<0.005	<0.005	<5	---
S-4	08/28/91	10	---	290	---	---	---	2.8	6.5	2	27	<5	---
S-5	08/28/91	10	---	3.5	---	---	---	0.27	0.096	0.064	0.32	<5	---
S-6	08/28/91	11	---	4.1	---	---	---	0.19	0.13	0.056	0.23	<5	---
S-7	08/28/91	3	---	4.0	---	---	---	0.66	0.040	0.11	0.13	<5	---
S-8	08/28/91	3	---	<1.0	---	---	---	<0.005	<0.005	<0.005	<0.005	<5	---
S-9	08/28/91	3	---	210	---	---	---	1.4	7.2	3.0	18	<5	---
S-10	08/28/91	3	---	<1.0	---	---	---	<0.005	0.031	0.031	0.067	<5	---
S-11	08/28/91	1.5	---	<1.0	---	---	---	<0.005	<0.005	<0.005	<0.005	<5	---
S-12	08/28/91	15	---	3.1	---	---	---	0.36	0.048	0.048	0.16	---	---
S-13	08/28/91	15	---	1.8	---	---	---	0.26	0.008	0.008	0.041	---	---
S-14	08/28/91	4	---	5.0	---	---	---	0.047	0.063	0.063	0.041	---	---
S-15	08/28/91	15	---	<1.0	---	---	---	<0.005	<0.005	<0.005	<0.005	---	---

TABLE 3A
LABORATORY ANALYTICAL RESULTS OF SOIL SAMPLES
Former Exxon Service Station 70234
3450 35th Avenue
Oakland, California
(Page 2 of 5)

Sample ID	Sampling Date	Depth (feet bgs)	TPHd (mg/kg)	TPHg (mg/kg)	TPHmo (mg/kg)	EHC-HO (mg/kg)	MTBE (mg/kg)	B (mg/kg)	T (mg/kg)	E (mg/kg)	X (mg/kg)	Lead (mg/kg)	TOG (mg/kg)
B-1	3/20/91	15.5	---	<1.0	---	---	---	0.011	0.007	0.011	0.04	---	---
B-1	3/20/91	20.5	---	<1.0	---	---	---	0.012	0.007	0.01	0.04	---	---
B-2	3/20/91	15.5	---	<1.0	---	---	---	0.036	0.026	0.012	0.055	---	---
B-2	3/20/91	20.5	---	<1.0	---	---	---	0.0073	0.0063	0.0098	0.038	---	---
B-3	3/20/91	10.5	---	1	---	---	---	0.006	0.006	0.008	0.036	---	---
B-3	3/20/91	15.5	---	440	---	---	---	0.7	5.4	4.7	24	---	---
B-4	3/20/91	10.5	---	5	---	---	---	0.013	0.019	0.014	0.082	<5	---
B-4	3/20/91	15.5	---	6.6	---	---	---	0.039	0.043	0.027	0.12	---	---
B-4	3/20/91	20.5	---	<1.0	---	---	---	0.0076	0.0073	0.011	0.054	---	---
B-5	3/20/91	10.5	---	26	---	---	---	0.055	0.061	0.17	0.67	---	---
B-6	3/20/91	10.5	---	240	---	---	---	0.28	2.2	2.8	13	---	---
B-6	3/20/91	15.5	---	1.4	---	---	---	0.0055	0.0054	0.009	0.034	---	---
B-7	3/20/91	10.5	---	<1.0	---	---	---	0.006	0.006	0.008	0.033	---	---
B-8	3/20/91	10.5	---	<1.0	---	---	---	0.006	0.005	0.008	0.035	---	---
B-9	3/20/91	10.5	---	---	---	---	---	---	---	---	---	---	<50
B-10	3/20/91	10.5	---	---	---	---	---	---	---	---	---	---	<50
S-5-B11	09/05/07	5	---	<0.50	---	---	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	---	---
S-10-B11	09/10/07	10	---	<0.50	---	---	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	---	---
S-13.5-B11	09/10/07	13.5	---	<0.50	---	---	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	---	---
S-18-B11	09/11/07	18	---	<0.50	---	---	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	---	---
S-20-B11	09/11/07	20	---	<0.50	---	---	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	---	---
S-25.5-B11	11/14/07	25.5	---	<0.50	---	---	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	---	---
S-29.5-B11	11/14/07	29.5	---	<0.50	---	---	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	---	---
S-34.5-B11	11/14/07	34.5	---	<0.50	---	---	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	---	---
S-5-B12	09/04/07	5	---	<0.50	---	---	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	---	---

TABLE 3A
LABORATORY ANALYTICAL RESULTS OF SOIL SAMPLES
Former Exxon Service Station 70234
3450 35th Avenue
Oakland, California
(Page 3 of 5)

Sample ID	Sampling Date	Depth (feet bgs)	TPHd (mg/kg)	TPHg (mg/kg)	TPHmo (mg/kg)	EHC-HO (mg/kg)	MTBE (mg/kg)	B (mg/kg)	T (mg/kg)	E (mg/kg)	X (mg/kg)	Lead (mg/kg)	TOG (mg/kg)
S-15.5-B12	11/13/07	15.5	---	43	---	---	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	---	---
S-20.5-B12	11/13/07	20.5	---	3.2	---	---	0.15	0.076	<0.0050	0.0053	<0.0050	---	---
S-5-B13	09/05/07	5	---	<0.50	---	---	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	---	---
S-10-B13	09/10/07	10	---	<0.50	---	---	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	---	---
S-14.5-B13	09/10/07	14.5	---	<0.50	---	---	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	---	---
S-20-B13	09/10/07	20	---	4.3	---	---	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	---	---
S-25-B13	11/12/07	25	---	<0.50	---	---	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	---	---
S-30-B13	11/12/07	30	---	<0.50	---	---	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	---	---
S-35-B13	11/12/07	35	---	<0.50	---	---	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	---	---
S-5.0-B14	09/06/07	5	---	<0.50	---	---	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	---	---
S-16-B14	11/13/07	16	---	<0.50	---	---	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	---	---
S-20.5-B14	11/13/07	20.5	---	<0.50	---	---	0.031	<0.0050	<0.0050	<0.0050	<0.0050	---	---
S-5-B15	09/04/07	5	---	<0.50	---	---	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	---	---
S-10.5-B15	11/15/07	10.5	---	<0.50	---	---	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	---	---
S-15.5-B15	11/15/07	15.5	---	1.1	---	---	0.12	0.32	0.019	0.017	0.074	---	---
S-20-B15	11/15/07	20	---	300	---	---	<0.25	6.1	36	14	72	---	---
S-25.5-B15	11/15/07	25.5	---	220	---	---	<0.12	3.1	18	6.8	36	---	---
S-30.5-B15	11/15/07	30.5	---	59	---	---	<0.25	2.9	5.6	1.5	20	---	---
S-35.5-B15	11/15/07	35.5	---	3.3	---	---	0.26	0.28	0.21	0.26	0.79	---	---
S-5-B16	09/04/07	5	---	<0.50	---	---	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	---	---
S-11-B16	11/14/07	11	---	<0.50	---	---	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	---	---
S-15.5-B16	11/14/07	15.5	---	<0.50	---	---	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	---	---
S-21-B16	11/14/07	21	---	<0.50	---	---	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	---	---
S-26-B16	11/14/07	26	---	<0.50	---	---	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	---	---
S-30.5-B16	11/14/07	30.5	---	<0.50	---	---	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	---	---
S-34.5-B16	11/14/07	34.5	---	<0.50	---	---	0.021	<0.0050	<0.0050	<0.0050	<0.0050	---	---
S-38.5-B16	11/14/07	38.5	---	<0.50	---	---	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	---	---
S-5-B17	09/05/07	5	---	<0.50	---	---	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	---	---
S-11-B17	11/13/07	11	---	90	---	---	0.036	0.052	<0.0050	0.086	0.020	---	---
S-16-B17	11/13/07	16	---	<0.50	---	---	0.099	0.0052	<0.0050	<0.0050	<0.0050	---	---
S-21-B17	11/13/07	21	---	<0.50	---	---	0.011	<0.0050	<0.0050	<0.0050	<0.0050	---	---

TABLE 3A
LABORATORY ANALYTICAL RESULTS OF SOIL SAMPLES
Former Exxon Service Station 70234
3450 35th Avenue
Oakland, California
(Page 4 of 5)

Sample ID	Sampling Date	Depth (feet bgs)	TPHd (mg/kg)	TPHg (mg/kg)	TPHmo (mg/kg)	EHC-HO (mg/kg)	MTBE (mg/kg)	B (mg/kg)	T (mg/kg)	E (mg/kg)	X (mg/kg)	Lead (mg/kg)	TOG (mg/kg)
S-24.5-B17	11/13/07	24.5	---	<0.50	---	---	0.59	<0.0050	<0.0050	<0.0050	<0.0050	---	---
S-31-B17	11/13/07	31	---	<0.50	---	---	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	---	---
S-35.5-B17	11/13/07	35.5	---	0.85	---	---	1.7	<0.0050	<0.0050	<0.0050	<0.0050	---	---
S-5-B18	09/04/07	5	---	<0.50	---	---	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	---	---
S-10-B18	11/12/07	10	---	<0.50	---	---	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	---	---
S-15-B18	11/12/07	15	---	<0.50	---	---	0.0051	<0.0050	<0.0050	<0.0050	<0.0050	---	---
S-20-B18	11/12/07	20	---	<0.50	---	---	0.019	<0.0050	<0.0050	<0.0050	<0.0050	---	---
S-25-B18	11/12/07	25	---	<0.50	---	---	0.18	<0.0050	<0.0050	<0.0050	<0.0050	---	---
S-30-B18	11/12/07	30	---	<0.50	---	---	0.54	<0.0050	<0.0050	<0.0050	<0.0050	---	---
S-35-B18	11/12/07	35	---	24	---	---	0.53	<0.0050	<0.0050	<0.0050	<0.0050	---	---
Monitoring Wells													
MW1	07/14/92	8	---	<1.0	---	---	---	<0.0050	<0.0050	<0.0050	0.0064	<10	---
MW2	07/14/92	29.5	---	<1.0	---	---	---	<0.0050	<0.0050	<0.0050	<0.0050	<10	---
MW3	07/14/92	28	---	<1.0	---	---	---	<0.0050	<0.0050	<0.0050	<0.0050	<10	---
MW4	07/14/92	29.5	---	<1.0	---	---	---	<0.0050	<0.0050	<0.0050	<0.0050	<10	---
Soil Stockpile													
SP-1(S-SP1-S-SP4)	09/12/07	---	---	<0.10	---	---	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	7.2	---
SP(1-4)	06/18/97	---	47b	ND	150c	---	---	ND	ND	ND	ND	8.7	---

TABLE 3A
LABORATORY ANALYTICAL RESULTS OF SOIL SAMPLES

Former Exxon Service Station 70234

3450 35th Avenue

Oakland, California

(Page 5 of 5)

Notes:

TPHg	=	Total petroleum hydrocarbons as gasoline analyzed using modified EPA Method 8015M.
MTBE	=	Methyl tertiary butyl ether analyzed using EPA Method 8021B/8260B
BTEX	=	Benzene, toluene, ethylbenzene, and total xylenes analyzed using EPA Method 8021B/8260B.
Lead	=	Lead analyzed using EPA Method 6010B.
1,2-DCA	=	1,2-dichloroethane analyzed using EPA Method 8260B.
EDB	=	1,2-dibromoethane analyzed using EPA Method 8260B.
TBA	=	Tertiary butyl alcohol analyzed using EPA Method 8260B.
DIPE	=	Di-isopropyl ether analyzed using EPA Method 8260B.
ETBE	=	Ethyl tertiary butyl ether analyzed using EPA Method 8260B.
TAME	=	Tertiary amyl methyl ether analyzed using EPA Method 8260B.
Ethanol	=	Ethanol analyzed using EPA Method 8260B.
feet bgs	=	Feet below ground surface.
mg/kg	=	Milligrams per kilogram.
<	=	Less than the stated laboratory reporting limit.
---	=	Not analyzed/Not applicable.
a	=	Unidentified C8-C12.
b	=	Unidentified C9-C24.
c	=	Unidentified C16-C36.
d	=	Unidentified C16-C40.

**TABLE 3B
ADDITIONAL LABORATORY ANALYTICAL RESULTS OF SOIL SAMPLES**

Former Exxon Service Station 70234

3450 35th Avenue

Oakland, California

(Page 1 of 3)

Sample ID	Sampling Date	Depth (feet bgs)	1,2-DCA (mg/kg)	EDB (mg/kg)	TBA (mg/kg)	DIPE (mg/kg)	ETBE (mg/kg)	TAME (mg/kg)	Ethanol (mg/kg)	Add'l SVOCs (mg/kg)	Cadmium (mg/kg)	Chromium (mg/kg)	Nickel (mg/kg)	Zinc (mg/kg)
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Used-Oil UST Confirmation Soil Sample

T1-12	06/18/97	---	---	---	---	---	---	---	---	ND	ND	47	56	84
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Hydraulic Hoist Confirmation Samples

Not analyzed for these analytes.

Samples from the UST Cavity Sidewall

Not analyzed for these analytes.

Samples from Beneath Product Piping

Not analyzed for these analytes.

Soil Borings

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

S-5-B11	09/05/07	5	<0.0050	<0.0050	<0.050	<0.010	<0.010	<0.010	---	---	---	---	---	---
S-10-B11	09/10/07	10	<0.0050	<0.0050	<0.050	<0.010	<0.010	<0.010	---	---	---	---	---	---
S-13.5-B11	09/10/07	13.5	<0.0050	<0.0050	<0.050	<0.010	<0.010	<0.010	---	---	---	---	---	---
S-18-B11	09/11/07	18	<0.0050	<0.0050	<0.050	<0.010	<0.010	<0.010	---	---	---	---	---	---
S-20-B11	09/11/07	20	<0.0050	<0.0050	<0.050	<0.010	<0.010	<0.010	---	---	---	---	---	---
S-25.5-B11	11/14/07	25.5	<0.0050	<0.0050	<0.050	<0.010	<0.010	<0.010	---	---	---	---	---	---
S-29.5-B11	11/14/07	29.5	<0.0050	<0.0050	<0.050	<0.010	<0.010	<0.010	---	---	---	---	---	---
S-34.5-B11	11/14/07	34.5	<0.0050	<0.0050	<0.050	<0.010	<0.010	<0.010	---	---	---	---	---	---
S-5-B12	09/04/07	5	<0.0050	<0.0050	<0.050	<0.010	<0.010	<0.010	---	---	---	---	---	---
S-15.5-B12	11/13/07	15.5	<0.0050	<0.0050	<0.050	<0.010	<0.010	<0.010	---	---	---	---	---	---
S-20.5-B12	11/13/07	20.5	<0.0050	<0.0050	<0.050	<0.010	<0.010	<0.010	---	---	---	---	---	---
S-5-B13	09/05/07	5	<0.0050	<0.0050	<0.050	<0.010	<0.010	<0.010	---	---	---	---	---	---
S-10-B13	09/10/07	10	<0.0050	<0.0050	<0.050	<0.010	<0.010	<0.010	---	---	---	---	---	---
S-14.5-B13	09/10/07	14.5	<0.0050	<0.0050	<0.050	<0.010	<0.010	<0.010	---	---	---	---	---	---
S-20-B13	09/10/07	20	<0.0050	<0.0050	<0.050	<0.010	<0.010	<0.010	---	---	---	---	---	---
S-25-B13	11/12/07	25	<0.0050	<0.0050	<0.050	<0.010	<0.010	<0.010	---	---	---	---	---	---
S-30-B13	11/12/07	30	<0.0050	<0.0050	<0.050	<0.010	<0.010	<0.010	---	---	---	---	---	---
S-35-B13	11/12/07	35	<0.0050	<0.0050	<0.050	<0.010	<0.010	<0.010	---	---	---	---	---	---

TABLE 3B
ADDITIONAL LABORATORY ANALYTICAL RESULTS OF SOIL SAMPLES
Former Exxon Service Station 70234
3450 35th Avenue
Oakland, California
(Page 2 of 3)

Sample ID	Sampling Date	Depth (feet bgs)	1,2-DCA (mg/kg)	EDB (mg/kg)	TBA (mg/kg)	DIPE (mg/kg)	ETBE (mg/kg)	TAME (mg/kg)	Ethanol (mg/kg)	Add'l SVOCs (mg/kg)	Cadmium (mg/kg)	Chromium (mg/kg)	Nickel (mg/kg)	Zinc (mg/kg)
S-5.0-B14	09/06/07	5	<0.0050	<0.0050	<0.050	<0.010	<0.010	<0.010	---	---	---	---	---	---
S-16-B14	11/13/07	16	<0.0050	<0.0050	<0.050	<0.010	<0.010	<0.010	---	---	---	---	---	---
S-20.5-B14	11/13/07	20.5	<0.0050	<0.0050	<0.050	<0.010	<0.010	<0.010	---	---	---	---	---	---
S-5-B15	09/04/07	5	<0.0050	<0.0050	<0.050	<0.010	<0.010	<0.010	---	---	---	---	---	---
S-10.5-B15	11/15/07	10.5	<0.0050	<0.0050	<0.050	<0.010	<0.010	<0.010	<0.25	---	---	---	---	---
S-15.5-B15	11/15/07	15.5	0.011	<0.0050	<0.050	<0.010	<0.010	<0.010	<0.25	---	---	---	---	---
S-20-B15	11/15/07	20	<0.25	<0.25	<2.5	<0.50	<0.50	<0.50	<12	---	---	---	---	---
S-25.5-B15	11/15/07	25.5	<0.12	<0.12	<1.2	<0.25	<0.25	<0.25	<6.2	---	---	---	---	---
S-30.5-B15	11/15/07	30.5	<0.25	<0.25	<2.5	<0.50	<0.50	<0.50	<12	---	---	---	---	---
S-35.5-B15	11/15/07	35.5	<0.0050	<0.0050	0.25	<0.010	<0.010	<0.010	<0.25	---	---	---	---	---
S-5-B16	09/04/07	5	<0.0050	<0.0050	<0.050	<0.010	<0.010	<0.010	---	---	---	---	---	---
S-11-B16	11/14/07	11	<0.0050	<0.0050	<0.050	<0.010	<0.010	<0.010	---	---	---	---	---	---
S-15.5-B16	11/14/07	15.5	<0.0050	<0.0050	<0.050	<0.010	<0.010	<0.010	---	---	---	---	---	---
S-21-B16	11/14/07	21	<0.0050	<0.0050	<0.050	<0.010	<0.010	<0.010	---	---	---	---	---	---
S-26-B16	11/14/07	26	<0.0050	<0.0050	<0.050	<0.010	<0.010	<0.010	---	---	---	---	---	---
S-30.5-B16	11/14/07	30.5	<0.0050	<0.0050	<0.050	<0.010	<0.010	<0.010	---	---	---	---	---	---
S-34.5-B16	11/14/07	34.5	<0.0050	<0.0050	<0.050	<0.010	<0.010	<0.010	---	---	---	---	---	---
S-38.5-B16	11/14/07	38.5	<0.0050	<0.0050	<0.050	<0.010	<0.010	<0.010	---	---	---	---	---	---
S-5-B117	09/05/07	5	<0.0050	<0.0050	<0.050	<0.010	<0.010	<0.010	---	---	---	---	---	---
S-11-B17	11/13/07	11	<0.0050	<0.0050	<0.050	<0.010	<0.010	<0.010	---	---	---	---	---	---
S-16-B17	11/13/07	16	<0.0050	<0.0050	<0.050	<0.010	<0.010	<0.010	---	---	---	---	---	---
S-21-B17	11/13/07	21	<0.0050	<0.0050	<0.050	<0.010	<0.010	<0.010	---	---	---	---	---	---
S-24.5-B17	11/13/07	24.5	<0.0050	<0.0050	0.20	<0.010	<0.010	<0.010	---	---	---	---	---	---
S-31-B17	11/13/07	31	<0.0050	<0.0050	0.15	<0.010	<0.010	<0.010	---	---	---	---	---	---
S-35.5-B17	11/13/07	35.5	<0.0050	<0.0050	<0.050	<0.010	<0.010	<0.010	---	---	---	---	---	---
S-5-B18	09/04/07	5	<0.0050	<0.0050	<0.050	<0.010	<0.010	<0.010	---	---	---	---	---	---
S-10-B18	11/12/07	10	<0.0050	<0.0050	<0.050	<0.010	<0.010	<0.010	---	---	---	---	---	---
S-15-B18	11/12/07	15	<0.0050	<0.0050	<0.050	<0.010	<0.010	<0.010	---	---	---	---	---	---
S-20-B18	11/12/07	20	<0.0050	<0.0050	<0.050	<0.010	<0.010	<0.010	---	---	---	---	---	---
S-25-B18	11/12/07	25	<0.0050	<0.0050	<0.050	<0.010	<0.010	<0.010	---	---	---	---	---	---
S-30-B18	11/12/07	30	<0.0050	<0.0050	<0.050	<0.010	<0.010	<0.010	---	---	---	---	---	---
S-35-B18	11/12/07	35	<0.0050	<0.0050	0.70	<0.010	<0.010	<0.010	---	---	---	---	---	---

**TABLE 3B
ADDITIONAL LABORATORY ANALYTICAL RESULTS OF SOIL SAMPLES**

Former Exxon Service Station 70234

3450 35th Avenue

Oakland, California

(Page 3 of 3)

Sample ID	Sampling Date	Depth (feet bgs)	1,2-DCA (mg/kg)	EDB (mg/kg)	TBA (mg/kg)	DIPE (mg/kg)	ETBE (mg/kg)	TAME (mg/kg)	Ethanol (mg/kg)	Add'l SVOCs (mg/kg)	Cadmium (mg/kg)	Chromium (mg/kg)	Nickel (mg/kg)	Zinc (mg/kg)
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Monitoring Wells

Not analyzed for these analytes.

Soil Stockpile

SP-1(S-SP1-S-SP4)	09/12/07	---	<0.0050	<0.0050	<0.020	<0.0050	<0.0050	<0.0050	---	---	---	---	---	---
SP(1-4)	06/18/97	---	---	---	---	---	---	---	---	ND	ND	55	53	43

Notes:

TPHg	=	Total petroleum hydrocarbons as gasoline analyzed using modified EPA Method 8015M.
MTBE	=	Methyl tertiary butyl ether analyzed using EPA Method 8021B/8260B
BTEX	=	Benzene, toluene, ethylbenzene, and total xylenes analyzed using EPA Method 8021B/8260B.
Lead	=	Lead analyzed using EPA Method 6010B.
1,2-DCA	=	1,2-dichloroethane analyzed using EPA Method 8260B.
EDB	=	1,2-dibromoethane analyzed using EPA Method 8260B.
TBA	=	Tertiary butyl alcohol analyzed using EPA Method 8260B.
DIPE	=	Di-isopropyl ether analyzed using EPA Method 8260B.
ETBE	=	Ethyl tertiary butyl ether analyzed using EPA Method 8260B.
TAME	=	Tertiary amyl methyl ether analyzed using EPA Method 8260B.
Ethanol	=	Ethanol analyzed using EPA Method 8260B.
feet bgs	=	Feet below ground surface.
mg/kg	=	Milligrams per kilogram.
<	=	Less than the stated laboratory reporting limit.
---	=	Not analyzed/Not applicable.
a	=	Unidentified C8-C12.
b	=	Unidentified C9-C24.
c	=	Unidentified C16-C36.
d	=	Unidentified C16-C40.

TABLE 4
WELL CONSTRUCTION DETAILS
Former Exxon Service Station 70234
3450 35th Avenue
Oakland, California

Well ID	Well Installation Date	Well Destruction Date	TOC Elevation (feet)	Borehole Diameter (inches)	Total Depth of Boring (feet bgs)	Well Depth (feet bgs)	Casing Diameter (inches)	Well Casing Material	Screened Interval (feet bgs)	Slot Size (inches)	Filter Pack Interval (feet bgs)	Filter Pack Material
MW1	07/15/92	Jun-00	192.00	11	45	45	4	Schedule 40 PVC	25-45	0.010	23-45	2/12 Lonestar Sand
MW2	07/15/92	Jun-00	194.85	11	45	45	4	Schedule 40 PVC	25-45	0.010	23-45	2/12 Lonestar Sand
MW3	07/15/92	Jun-00	196.90	11	45	45	4	Schedule 40 PVC	25-45	0.010	23-45	2/12 Lonestar Sand

Notes:

- TOC = Top of well casing elevation; datum is mean sea level.
- PVC = Polyvinyl chloride.
- feet bgs = feet below ground surface.

APPENDIX A

CORRESPONDENCE



ENVIRONMENTAL HEALTH SERVICES
ENVIRONMENTAL PROTECTION
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577
(510) 567-6700
FAX (510) 337-9335

June 20, 2008

Mr. Robert Ehlers (robert.ehlers@valero.com)
Valero Refining Company
PO Box 696000
San Antonio, TX 78269

Ms. Jennifer Sedlachek (via electronic mail)
ExxonMobil
4096 Piedmont Avenue, #194
Oakland, CA 94520

Mr. R.J. Dold
BNY Western Trust Company
3200 SW FRWY #3050
Houston, TX 77027

MHCB (USA) Leasing Corp
c/o Ad Valorem Tax Department
PO Box 690110
San Antonio, TX 78269-0110

Subject: Fuel Leak Case No. RO0002515 and Geotracker Global ID #T06019757161, Exxon
#7-0234 3450 35th Avenue, Oakland, CA 94619 – Request for Work Plan

Dear Messrs. Ehlers, Dold and Ms. Sedlachek:

Alameda County Environmental Health (ACEH) staff have reviewed the fuel leak case file and the report submitted by ERI entitled, *Soil and Groundwater Investigation Report* dated December 14, 2007. The report summarizes results from the soil borings that were advanced at locations between two of the dispensers and around the former underground storage tanks (USTs). ACEH agrees with the need for additional assessment to investigate the extent of the hydrocarbon and oxygenate plumes in soil and groundwater both on- and off-site.

Currently, elevated concentrations of petroleum hydrocarbons and oxygenates were detected in the vicinity of the former underground storage tanks (USTs), in particular on the southeastern and southwestern side of the former USTs. Elevated oxygenate concentrations have also been detected in downgradient borings on an adjacent property. Since the borings were located well upgradient of the tanks and piping for that fuel station, the concentrations are likely from the Exxon property. We request that you submit a work plan to investigate the off-site extent of your contamination. Please see the technical comments below and submit the requested work plan and other information by the date specified.

TECHNICAL COMMENTS

1. **Off-site Oxygenate Plume.** In November 2003, the ConocoPhillips site downgradient and adjacent to your site began analyzing groundwater samples from their upgradient well for methyl tertiary butyl ether (MTBE) by EPA Method 8260. Concentrations were 2,100 microgram per liter ($\mu\text{g/L}$) MTBE at that time. Concentrations have declined to 930 $\mu\text{g/L}$ MTBE in the well but during a recent soil boring investigation, grab groundwater samples collected upgradient of the USTs, dispensers and piping locations contained a maximum concentration of 2,500 $\mu\text{g/L}$ MTBE. Given the elevated concentrations detected at your site and at the adjacent ConocoPhillips site, ACEH concurs with ERI's recommendation to further assess dissolved-phase petroleum hydrocarbon and oxygenate concentrations to the southeast and southwest of the former UST pit.

2. **Vertical Delineation of Soil and Dissolved Contaminant Plumes.** Up to 18,000 µg/L total petroleum hydrocarbons as gasoline (TPHg) and 12,000 µg/L MTBE were detected in groundwater sample B-15 from 38 feet bgs. The vertical extent of the groundwater plume is undefined since groundwater contains elevated petroleum hydrocarbon and MTBE concentrations. Up to 3.3 milligrams per kilogram (mg/kg) TPHg and 1.7 mg/kg MTBE were detected in soil from 35.5 feet bgs leaving the extent of soil contamination vertically undefined. We recommend that your investigation incorporate expedited site assessment techniques to collect soil samples, and depth-discrete groundwater samples prior to the installation of groundwater monitoring wells. Expedited site assessment tools and methods are a scientifically valid and cost-effective approach to fully define the three-dimensional extent of groundwater contamination. Technical protocol for expedited site assessments are provide in the U.S Environmental Protection Agency's "Expedited Site Assessments for Underground Storage Tanks: a Guide for Regulators," (EPA 510-B-97-001), dated March 1997. .
3. **Monitoring Well Installation.** ACEH recommends that you install groundwater monitoring wells at your site and potentially off-site and implement quarterly monitoring. ACEH recommends installing a groundwater monitoring network which allows for collecting depth discrete groundwater samples. This may be accomplished with well clusters or multi-chamber wells with sandpack intervals between two and five feet. Please submit your proposed work plan for this work in the work plan requested below.
4. **Coordinated Groundwater Monitoring.** Two known fuel leak cases are present in the vicinity of 35th Avenue and Quigley Street: the subject site and the Conoco Phillips at 3420 35th Avenue. Available information indicates that the Exxon release may have contributed to the contamination under the ConocoPhillips site. Available information is insufficient to determine the relative magnitude of each release and the extent of each plume. Plume commingling does not exempt any of the responsible parties from cooperating to define the extent of contamination in all directions.
5. We request that ExxonMobil and Conoco Phillips (by copy of this letter) coordinate water level measurements and groundwater sample collection dates for the two sites. This includes collecting water level data and contaminant concentration data on the same day, sharing these results, and including the data in each report. Coordinated sampling should begin once ExxonMobil installs groundwater monitoring wells. **Maps and data tables in each quarterly monitoring report are to include data from wells on and off of both sites.**

TECHNICAL REPORT REQUEST

Please submit technical reports to Alameda County Environmental Health (Attention: Barbara Jakub), according to the following schedule:

September 22, 2008 – Work Plan for Site Assessment

These reports are 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.

ELECTRONIC SUBMITTAL OF REPORTS

ACEH's Environmental Cleanup Oversight Programs (LOP and SLIC) require submission of reports in electronic form. The electronic copy replaces paper copies and is expected to be used for all public information requests, regulatory review, and compliance/enforcement activities. Instructions for submission of electronic documents to the Alameda County Environmental Cleanup Oversight Program FTP site are provided on the attached "Electronic Report Upload Instructions." Submission of reports to the Alameda County FTP site is an addition to existing requirements for electronic submittal of information to the State Water Resources Control Board (SWRCB) Geotracker website. In September 2004, the SWRCB adopted regulations that require electronic submittal of information for all groundwater cleanup programs. For several years, responsible parties for cleanup of leaks from underground storage tanks (USTs) have been required to submit groundwater analytical data, surveyed locations of monitoring wells, and other data to the Geotracker database over the Internet. Beginning July 1, 2005, these same reporting requirements were added to Spills, Leaks, Investigations, and Cleanup (SLIC) sites. Beginning July 1, 2005, electronic submittal of a complete copy of all reports for all sites is required in Geotracker (in PDF format). Please visit the SWRCB website for more information on these requirements (http://www.swrcb.ca.gov/ust/electronic_submittal/report_rqmts.shtml).

PERJURY STATEMENT

All work plans, technical reports, or technical documents submitted to ACEH must be accompanied by a cover letter from the responsible party that states, at a minimum, the following: "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." This letter must be signed by an officer or legally authorized representative of your company. Please include a cover letter satisfying these requirements with all future reports and technical documents submitted for this fuel leak case.

PROFESSIONAL CERTIFICATION & CONCLUSIONS/RECOMMENDATIONS

The California Business and Professions Code (Sections 6735, 6835, and 7835.1) requires that work plans and technical or implementation reports containing geologic or engineering evaluations and/or judgments be performed under the direction of an appropriately registered or certified professional. For your submittal to be considered a valid technical report, you are to present site specific data, data interpretations, and recommendations prepared by an appropriately licensed professional and include the professional registration stamp, signature, and statement of professional certification. Please ensure all that all technical reports submitted for this fuel leak case meet this requirement.

LANDOWNER NOTIFICATION REQUIREMENTS

Pursuant to California Health & Safety Code Section 25297.15, the active or primary responsible party for a fuel leak case must inform all current property owners of the site of cleanup actions or requests for closure. Furthermore, ACEH may not consider any cleanup proposals or requests for case closure without assurance that this notification requirement has been met. Additionally, the active or primary responsible party is required to forward to ACEH a complete mailing list of all record fee title holders to the site.

Ms Jennifer Sedlachek and Mr. Robert Ehlers
RO0002515
June 20, 2008, Page 4

UNDERGROUND STORAGE TANK CLEANUP FUND

Please be aware that you may be eligible for reimbursement of the costs of investigation from the California Underground Storage Tank Cleanup Fund (Fund). In some cases, a deductible amount may apply. If you believe you meet the eligibility requirements, we strongly encourage you to call the Fund for an application.

AGENCY OVERSIGHT

If it appears as though significant delays are occurring or reports are not submitted as requested, we will consider referring your case to the Regional Board or other appropriate agency, including the County District Attorney, for possible enforcement actions. California Health and Safety Code, Section 25299.76 authorizes enforcement including administrative action or monetary penalties of up to \$10,000 per day for each day of violation.

If you have any questions, please call me at (510) 639-1287.

Sincerely,



Barbara J. Jakub, P.G.
Hazardous Materials Specialist

Enclosure: ACEH Electronic Report Upload (ftp) Instructions

cc: Paula Sime, Environmental Resolutions, Inc., 601 North McDowell Blvd., Petaluma, CA
94954-2312 (via electronic mail)
Bill Borgh, Conoco Phillips, 76 Broadway, Sacramento, CA 95818 (via electronic mail)
Mr. Dennis Dettloff, Delta Environmental Consultants, Inc., 11050 White Rock Road, Rancho
Cordova, CA 95670, (via electronic mail)

Donna Drogos, ACEH (via electronic mail)
Barbara Jakub, ACEH
File

Alameda County Environmental Cleanup Oversight Programs (LOP and SLIC)	ISSUE DATE: July 5, 2005
	REVISION DATE: December 16, 2005
	PREVIOUS REVISIONS: October 31, 2005
SECTION: Miscellaneous Administrative Topics & Procedures	SUBJECT: Electronic Report Upload (ftp) Instructions

Effective **January 31, 2006**, the Alameda County Environmental Cleanup Oversight Programs (LOP and SLIC) require submission of all reports in electronic form to the county's ftp site. Paper copies of reports will no longer be accepted. The electronic copy replaces the paper copy and will be used for all public information requests, regulatory review, and compliance/enforcement activities.

REQUIREMENTS

- Entire report including cover letter must be submitted to the ftp site as a **single portable document format (PDF) with no password protection**. (Please do not submit reports as attachments to electronic mail.)
- It is **preferable** that reports be converted to PDF format from their original format, (e.g., Microsoft Word) rather than scanned.
- Signature pages and perjury statements must be included and have either original or electronic signature.
- **Do not password protect the document**. Once indexed and inserted into the correct electronic case file, the document will be secured in compliance with the County's current security standards and a password. **Documents with password protection will not be accepted.**
- Each page in the PDF document should be rotated in the direction that will make it easiest to read on a computer monitor.
- Reports must be named and saved using the following naming convention:
RO#_Report Name_Year-Month-Date (e.g., RO#5555_WorkPlan_2005-06-14)

Additional Recommendations

- A separate copy of the tables in the document should be submitted by e-mail to your Caseworker in Excel format. These are for use by assigned Caseworker only.

Submission Instructions

- 1) Obtain User Name and Password:
 - a) Contact the Alameda County Environmental Health Department to obtain a User Name and Password to upload files to the ftp site.
 - i) Send an e-mail to dehloptoxic@acgov.org
or
 - ii) Send a fax on company letterhead to (510) 337-9335, to the attention of Alicia Lam-Finneke.
 - b) In the subject line of your request, be sure to include "**ftp PASSWORD REQUEST**" and in the body of your request, include the **Contact Information, Site Addresses, and the Case Numbers (RO# available in Geotracker) you will be posting for.**

- 2) Upload Files to the ftp Site
 - a) Using Internet Explorer (IE4+), go to <ftp://alcoftp1.acgov.org>
 - (i) Note: Netscape and Firefox browsers will not open the FTP site.
 - b) Click on File, then on Login As.
 - c) Enter your User Name and Password. (Note: Both are Case Sensitive.)
 - d) Open "My Computer" on your computer and navigate to the file(s) you wish to upload to the ftp site.
 - e) With both "My Computer" and the ftp site open in separate windows, drag and drop the file(s) from "My Computer" to the ftp window.

- 3) Send E-mail Notifications to the Environmental Cleanup Oversight Programs
 - a) Send email to dehloptoxic@acgov.org notify us that you have placed a report on our ftp site.
 - b) Copy your Caseworker on the e-mail. Your Caseworker's e-mail address is the entire first name then a period and entire last name at acgov.org. (e.g., firstname.lastname@acgov.org)
 - c) The subject line of the e-mail must start with the RO# followed by **Report Upload**. (e.g., Subject: RO1234 Report Upload)

APPENDIX B

FIELD PROTOCOL

FIELD PROTOCOL

Site Safety Plan

Field work will be performed by ERI personnel in accordance with a Site Safety Plan developed for the site. This plan describes the basic safety requirements for the subsurface investigation at the site. The Site Safety Plan is applicable to personnel and subcontractors of ERI. Personnel at the site are informed of the contents of the Site Safety Plan before work begins. A copy of the Site Safety Plan is kept at the work site and is available for reference during the work. The ERI geologist will act as the Site Safety Officer.

Drilling of Soil Borings

Prior to the drilling of soil borings, ERI will acquire necessary permits from the appropriate agency(ies). ERI will also contact Underground Service Alert (USA) and a private underground utility locator (per ExxonMobil protocol) before drilling to help locate utility lines at the site. ERI will clear the proposed locations to a depth of approximately 4 or 8 feet (depending on the location), before drilling to reduce the risk of damaging underground structures.

The borings will be advanced using hollow-stem auger drilling equipment. During drilling, soil samples will be collected continuously until the first occurrence of groundwater, and thereafter at 5-foot intervals. Samples will be collected with a California-modified, split-spoon sampler fitted with clean brass sleeves. Samples will be collected by advancing the auger to a point just above the sampling depth and driving the sampler into the undisturbed soil. The sampler will be driven 18 inches with a standard 140-pound hammer repeatedly dropped 30 inches. The number of blows required to drive the sampler each successive 6-inch interval will be counted and recorded to give an indication of soil consistency.

Drilling will be performed under the observation of a field geologist. Sediments in the boring will be identified using visual and manual methods, and classified as drilling progresses using the Unified Soil Classification System.

Auger flights and sampling equipment will be steam-cleaned before use to minimize the possibility of cross-hole contamination. The rinsate will be containerized and stored on site. ERI will coordinate with Exxon Mobil for appropriate disposal of the rinsate.

Soil samples will be monitored with a photo-ionization detector (PID), which measures hydrocarbon concentrations in the ambient air or headspace above the soil sample. Field instruments such as the PID are useful for indicating relative levels of hydrocarbon vapors, but do not detect concentrations of hydrocarbons with the same precision as laboratory analyses. The samples will be labeled and placed in iced storage for transport to the laboratory. Chain of Custody records will be initiated by the geologist in the field, updated throughout handling of the samples, and sent with the samples to the laboratory. Copies of these records will be in the final report. Cuttings generated during drilling will be placed on plastic sheeting and covered, or in 55-gallon metal drums, and stored at the site. ERI will coordinate with ExxonMobil for the soil to be removed to an appropriate disposal facility.

Groundwater Monitoring Well Installation

The monitoring wells will be constructed in the soil borings using thread-jointed, 2-inch inner diameter, Schedule 40 PVC casing. No chemical cements, glues, or solvents will be used in well construction. The screened portion of the wells will consist of factory-perforated casing with a slot size appropriate for the grain size of the screened sediments. Unperforated casing will be installed from the top of each screen to the ground surface. The annular space in the well will be packed with sand to approximately one foot above the slotted interval. Approximately 3 feet of bentonite will be added above the sand pack, and the well will be sealed with cement grout from the top of the bentonite to the ground surface. A locking cap and steel monument will be installed to protect against precipitation-water infiltration.

Well Development and Sampling

ERI will wait a minimum of 24 hours before development of the wells to allow the grout to set. The wells will be developed with a submersible pump or disposable bailer. Well development will continue until the discharge water is clear of silt and sand. Clay-size sediments derived from the screened portion of the formation cannot be entirely eliminated by well development. Groundwater samples will be collected from the wells at least 72 hours after development occurs.