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Jennifer C. Sedlachek
Project Manager

RECEIVED
12:47 pm, Apr 13, 2007
Alameda County
Environmental Health

ExxonMobil
Refining & Supply

April 10, 2007

Mr. Steven Plunkett
Alameda County Health Care Services Agency
Department of Environmental Health
1131 Harbor Bay Parkway, Room 250
Alameda, California 94502-6577

RE: Former Exxon RAS #7-0238/2200 East 12th Street, Oakland California.

Dear Mr. Plunkett:

Attached for your review and comment is a copy of the letter report entitled ***Work Plan for Additional Soil and Groundwater Investigation,*** dated April 10, 2007, for the above-referenced site. The report was prepared by Environmental Resolutions, Inc. (ERI) of Petaluma, California, and presents information regarding 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 Additional Soil and Groundwater Investigation, dated April 10, 2007

cc: w/ attachment
Mr. Chuck Headlee, California Regional Water Quality Control Board, San Francisco Bay Region
Mr. Robert C. Ehlers, M.S., P.E., The Valero Companies, Environmental Liability Management

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

VALUE, QUALITY, RESPONSE

Southern California
Northern California
Pacific Northwest
Southwest
Texas
Montana

April 10, 2007
ERI 229303.W02

Ms. Jennifer C. Sedlachek
ExxonMobil Refining & Supply-Global Remediation
4096 Piedmont Avenue #194
Oakland, California 94611

SUBJECT Work Plan for Additional Soil and Groundwater Investigation
Former Exxon Service Station 7-0238
2200 East 12th Street, Oakland, California

Ms. Sedlachek:

At the request of Exxon Mobil Corporation (Exxon Mobil), Environmental Resolutions, Inc. (ERI) prepared this work plan for an additional soil and groundwater investigation at the subject site. This work plan was prepared in response to a letter from the Alameda County Health Services Agency (the County), dated January 17, 2007, and subsequent conversations and emails (Attachment A). The purpose of this investigation is to delineate the extent of petroleum hydrocarbons, in particular methyl tertiary butyl ether (MTBE) and tertiary butyl alcohol (TBA), in soil and groundwater downgradient of the site.

SITE BACKGROUND

The site is located on the eastern corner of 22nd Avenue and East 12th Street in Oakland, California (Plate 1). Land use in the vicinity of the site is mixed-use commercial/industrial and residential (Plate 2). The site is currently owned and operated by Mr. Stanley Wong and Mr. Aaron Wong as a Valero-branded service station. The locations of the former and current underground storage tanks (USTs), dispenser islands, groundwater monitoring wells, and select site features are shown on Plate 3. Groundwater monitoring has been conducted at the site since June 1988.

Previous Investigations

Investigations have been conducted at the site since 1988. A total of nine groundwater monitoring wells (MW9A through MW9I), four DPE wells (DPE1 through DPE4), and two vapor point wells (VP1 and VP2) have been installed at the site (HLA, 1989a; HLA, 1989b; HLA, 1991; ERI, 2001; ERI, 2003). Well MW9E was destroyed prior to excavating petroleum hydrocarbons in soil in the vicinity of the southwestern product dispensers and replaced with well MW9I (HLA, 1991). There are also two tank pit observation wells (TP1 and TP2) on site that were presumably installed during tank replacement in 1991; however, records describing the tank pit observation well installations are not available. Eleven soil borings (SB1, B9-1, B9-2, and SB4 through SB11) and 13 soil-gas probes were also advanced at the site (HLA, 1989b). A detailed summary of previous investigations is presented in ERI's *Site Conceptual Model*, dated March 14, 2007 (ERI, 2007a)

Laboratory analytical results for groundwater samples collected from the wells indicate the presence of total petroleum hydrocarbons as gasoline (TPHg); MTBE; TBA; and benzene, toluene, ethylbenzene, and total xylenes (BTEX). Groundwater monitoring and sampling data are summarized in Tables 1A and 1B. The most recent groundwater elevation data (December 15, 2006) and a rose diagram are shown on Plate 4. Soil sample analytical results are summarized in Tables 2A, 2B, and 2C. Well construction details are summarized in Table 3.

Remedial Measures

Exxon Mobil's remedial efforts at the site have included excavation and operation of a dual-phase extraction (DPE) system. In October 1990, Harding Lawson and Associates (HLA) excavated an area, approximately 12 by 23 feet, between the southwestern product dispensers and the sidewalk to 7 feet below ground surface (fbgs). In 1991, Woodward Clyde Consultants (WCC), excavated approximately 700 cubic yards of fill material and native soil when the gasoline USTs and product lines were removed and the UST pit was enlarged to accommodate larger new USTs (WCC, 1992). In 1997, EA Engineering, Science, and Technology (EA), excavated and removed a 550-gallon used-oil UST (EA, 1997).

ERI installed a DPE system designed to treat dissolved-phase petroleum hydrocarbons in groundwater and vapor-phase petroleum hydrocarbons present in the vadose zone at the site. The DPE system simultaneously extracts soil vapor and groundwater from four DPE wells (DPE1 through DPE4). The groundwater extraction portion of the DPE system began operation in January 2004, and the vapor extraction portion of the system began operation in March 2004. In May 2005, groundwater monitoring well MW9A was hooked up to the DPE system. To date, the DPE system has removed approximately <1,235 pounds TPHg, <11 pounds benzene, and <49 pounds MTBE from the vadose zone, and <1.8 pounds TPHg, <0.015 pounds benzene, and 1 .1 pounds MTBE from groundwater (ERI, 2007b).

Regional Geology and Hydrogeology

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 younger Holocene alluvial fan deposits consisting of poorly sorted, dense, sandy or gravelly clay and Pleistocene marine terrace deposits (Graymer, 2000). The site is located approximately 1,500 feet east-northeast of the Brooklyn Basin. The active northwest trending Hayward fault is located approximately 3½ miles east 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 1,400 east of the Brooklyn Basin. The basin is connected to 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. The San Francisco Bay is located approximately 5 miles west and 2 miles south of the site. Groundwater flow direction is predominantly to the west towards the San Francisco Bay consistent with site data. Groundwater recharge of the East Bay Plain occurs by infiltration from precipitation, irrigation, pipe leakage, and stream flow.

Local Geology

The local geology and hydrogeology of the site was evaluated using boring logs from previous investigations and monitoring data. The lithology of the site consists primarily of silt to sandy clay with lenses of fine sand and gravel.

Local Hydrogeology

The depth to groundwater beneath the site has varied over time and has ranged from approximately 4.2 fbgs to 16.5 fbgs. Currently, groundwater is encountered at depths ranging from approximately 5.1 fbgs to 16.2 fbgs. Cumulative results of groundwater monitoring and sampling indicate that the groundwater flow direction is predominantly towards the west-southwest. The most recent groundwater data from December 15, 2006, indicate that the groundwater flow direction is towards the west. A rose

diagram showing groundwater flow direction is included on Plate 4. Cumulative results of groundwater monitoring and sampling events are provided in Tables 1A and 1B.

SITE CONDITIONS

Petroleum Hydrocarbon Concentrations in Soil

The vertical and lateral distribution of petroleum hydrocarbons in soil were delineated by 23 soil borings advanced between May 1988 and October 1989 (HLA, 1989a; HLA, 1989b). Concentrations of petroleum hydrocarbons were reported in soil samples collected in the vicinity of the dispenser islands located on the west side of the station. Concentrations of TPHg were reported in samples collected from boring SB4 (located between the station building and the dispenser island) at a maximum of 160 mg/kg and in boring MW9E (located on the southwest side of the dispenser island) at a maximum of 1,900 mg/kg. Concentrations of benzene were reported in soil samples collected from boring SB4 at a maximum concentration of 1.0 mg/kg. The vertical extent of TPHg and benzene in soil is defined at 9.0 fbgs at both borings SB4 and MW9E with concentrations not reported at or above the laboratory reporting limits.

In 1990, an area, approximately 12 by 23 feet, between the southwestern product dispensers and the sidewalk and also the location of boring MW9E, was excavated to 7 fbgs. Concentrations of TPHg and benzene were reported at a maximum of 290 mg/kg (S5, 5 fbgs) and 2.8 mg/kg (S5, 5 fbgs), respectively, in a sidewall sample.

In 1991, the USTs and approximately 115 feet of product lines were removed (WCC, 1992). Petroleum hydrocarbons were reported in six product line trench samples and in four of the six tank hole samples collected from the base of the sidewalls of the excavated UST pit. Concentrations of TPHg were detected in 10 samples at up to 1,200 mg/kg (P3, 6.0 fbgs, 09/04/91), and concentrations of benzene were detected in 10 samples at up to 0.88 mg/kg (TP2, 11.0 fbgs, 09/04/91).

The original tank pit was further excavated and confirmation soil samples were collected from the west and south sides of the tank pit. The three product line locations with TPHg concentrations in excess of 100 mg/kg were excavated vertically to depths of 11 to 13 fbgs and confirmation soil samples were collected. Concentrations of TPHg in the confirmation samples ranged from <0.2 mg/kg to 2.5 mg/kg (TC1, 12 fbgs).

The distribution of remaining TPHg and benzene concentrations in soil is shown on Plates 5 and 6. Cumulative soil analytical results are summarized in Tables 2A, 2B, and 2C. The locations of the excavation, tank pit, and product line trench samples are shown on Plates 3, 5, and 6.

Groundwater Conditions

Dissolved Constituent Distribution in Groundwater

Quarterly monitoring of groundwater has been conducted at the site since 1988. Groundwater monitoring data are summarized in Tables 1A and 1B. Select analytical results from the December 15, 2006, sampling event are shown on Plate 7. The groundwater monitoring report was submitted under separate cover (ERI, 2007b).

The site currently has five on-site groundwater monitoring wells (MW9A, MW9B, MW9C, MW9D, and MW9I), three off-site groundwater monitoring wells (MW9F, MW9G, and MW9H), two tank pit observation wells (TP1 and TP2), and four DPE wells (DPE1 through DPE4). The maximum concentrations of TPHg, MTBE, and TBA have been reported in well MW9C at 70,400 µg/L (04/12/02), 150,000 µg/L (04/21/98 using EPA Method 8260B), and 90,700 µg/L (01/06/04), respectively. Benzene was reported at a maximum concentration of 2,000 µg/L (02/26/99) in well MW9B. Beginning in January 2001, MTBE was also included in the calculation of TPHg results. Isoconcentration maps showing the distribution of TPHg, benzene, MTBE, and TBA on October 1, 2003 (prior to system startup) are shown on Plates 8 through 11, respectively.

Since the start up of the DPE remediation system in January 2004, declining concentration trends in groundwater have been observed and continue to be observed. During the last four quarters of monitoring the maximum reported concentrations of TPHg, benzene, and MTBE were found in well MW9A at 400 µg/L (03/07/06), <2.5 µg/L (12/15/06), and 560 µg/L (03/07/06), respectively. A concentration of 0.63 µg/L benzene was also reported in well MW9B (06/26/06). The maximum concentration of TBA was reported in well MW9I at 10,300 µg/L (09/25/06). Isoconcentration maps showing the distribution of TPHg, benzene, MTBE, and TBA on December 15, 2006 are shown on Plates 12 through 15, respectively.

The decline in analyte concentrations may be attributed to remediation. As described in the Remedial Measures section of this report, soil containing petroleum hydrocarbons was removed when soil was excavated between the southwestern product dispenser and the sidewalk, during the UST removal and replacement project, and the DPE system began operation in January 2004. These activities have contributed to subsurface source removal, resulting in groundwater analyte concentrations exhibiting stable or declining trends.

Lateral Delineation of Petroleum Hydrocarbons in Groundwater

The lateral extent of benzene concentrations in groundwater is defined across the site by wells MW9A through MW9D and MW9F through MW9I. Benzene has not been reported at or above the laboratory reporting limit since June 26, 2006, when it was reported at 0.63 µg/L in well MW9B.

The lateral extent of TPHg and MTBE concentrations in groundwater is not defined north of well MW9C or south of wells MW9A and MW9G; however, concentrations of TPHg are defined to the east by well MW9D and to the west by wells MW9B and MW9F. Concentrations of TPHg have not been reported at or above the laboratory reporting limit in wells MW9B, MW9D, and MW9F since June 26, 2006, when it was reported at 130 µg/L in well MW9B.

The lateral extent of TBA concentrations in groundwater is defined to the north by MW9C, to the east by MW9D, to the south by MW9G, and to the west by MW9F and MW9H. The lateral extent of TBA concentrations is not defined southwest of well MW9I and southeast of well MW9A.

Select groundwater analytical results from the December 15, 2006, monitoring and sampling event are shown on Plate 7. Isoconcentration maps showing TPHg, benzene, MTBE, and TBA concentrations on October 1, 2003 (before DPE remediation was started) are shown on Plates 8 through 11, respectively. Isoconcentration maps showing TPHg, benzene, MTBE, and TBA concentrations on December 15, 2006 (most recent quarterly monitoring event and DPE remediation ongoing) are shown on Plates 12 through 15, respectively. As shown on the plates the lateral extent of petroleum hydrocarbon constituents in groundwater has been reduced by active remediation.

PROPOSED INVESTIGATION

Soil and Groundwater Assessment

To investigate vertical distribution of dissolved TPHg, benzene, MTBE, and TBA in soil and groundwater, ERI proposes to advance one soil boring (SB12) in the vicinity of the former used-oil tank.

To investigate lateral distribution of dissolved TPHg, benzene, MTBE, and TBA in soil and groundwater, ERI proposes to advance three soil borings in the vicinity of the site as follows:

- One soil boring (SB13) southwest of well MW9A.
- Two soil borings (SB18 and SB19) at 2121 East 12th Street west-southwest of well MW9H and downgradient of the site.

To investigate the vertical and lateral distribution of dissolved TPHg, benzene, MTBE, and TBA in soil and groundwater, ERI proposes to advance four soil borings in the vicinity of the site as follows:

- One soil boring (SB14) southwest of well MW9I.
- One soil boring (SB15) west of well MW9B.
- Two soil borings (SB16 and SB17) beneath the elevated BART tracks southwest of well MW9I.

Proposed soil boring locations are shown on Plate 16.

Investigation Tasks

ERI and its subcontractors will perform field work in accordance with this work plan, ERI's Field Protocol (Attachment B), and a site-specific health and safety plan. Details of the work scope are described in the following subsections.

Task 1: Permitting and Access

ERI will obtain soil boring permits from the Alameda County Public Works Department (Public Works) prior to advancing the borings. ERI will obtain an encroachment permit from the City to advance boring SB13 through SB17 in the City right-of-way. ERI will negotiate access with the property owner of 2121 East 12th Street to advance soil borings SB18 and SB19.

Task 2: Subsurface Clearance

To avoid conflicts with existing underground utilities during the advancement of soil borings, ERI will:

- Mark the boring locations and contact Underground Service Alert (USA) at least 48 hours before field work begins.
- Obtain the services of a private utility locator to clear the boring locations of utilities.
- Clear each boring location using hand tools or vacuum excavation equipment to at least 4 fbgs.

Task 3: Direct-Push Soil Borings

For collection of soil samples using direct-push equipment, ERI will:

- Obtain the services of a licensed well driller and observe the advancement of borings SB12 through SB19 using direct-push equipment. Soil borings will be advanced to a maximum depth of approximately 30 fbgs.
- Collect and visually examine soil samples from each boring to construct a boring log and screen soil samples with a photo-ionization detector (PID). Soil samples will be identified using visual and manual methods and classified according to the Unified Soil Classification System (USCS). Soil samples will be collected continuously and retained for laboratory analysis at approximately 5-foot intervals.
- Upon completion of sampling, fill the boring with cement/bentonite grout and refinish the surface to match the surrounding ground conditions.
- Submit soil samples collected from the borings for analysis to a California state-certified analytical laboratory, under Chain-of-Custody protocol. Samples will be analyzed for total petroleum hydrocarbons as diesel (TPHd) and TPHg using Environmental Protection Agency (EPA) Method

8015B and BTEX, oxygenated compounds (MTBE, TBA, tertiary amyl methyl ether [TAME], ethyl tertiary butyl ether [ETBE], and di-isopropyl ether [DIPE]), and lead scavengers (1,2-dichloroethane [1,2-DCA] and 1,2-dibromoethane [EDB]) using EPA Method 8260B.

For collection of depth-discrete groundwater samples, ERI will:

- Collect grab groundwater samples from first-encountered groundwater through installation of a temporary polyvinyl chloride (PVC) well screen.
- Collect depth-discrete grab groundwater samples from water-bearing intervals using a Hydropunch® (or similar) sampling device in an adjacent boring.
- Upon completion of sampling, fill the borings with cement/bentonite grout and refinish the surface to match the surrounding ground conditions.
- Submit grab groundwater samples collected from the borings for analysis to a California state-certified analytical laboratory, under Chain-of-Custody protocol. Samples will be analyzed for TPHd and TPHg using EPA Method 8015B and BTEX, oxygenated compounds (MTBE, TBA, TAME, ETBE, DIPE), and lead scavengers (1,2-DCA and EDB) using EPA Method 8260B.

Task 4: Waste Disposal

Soil and rinsate water generated during the field work will be stored in 55-gallon metal drums at the station. ERI will collect one composite soil sample (four brass sleeves) from the drums for laboratory analysis. Upon receipt of the laboratory analytical results, ERI will evaluate disposal options and coordinate with Exxon Mobil for disposal of the soil and water at an appropriate disposal facility.

Task 5: Report Preparation and Submittal

After reviewing the results of the field investigation, ERI will prepare a report documenting the results. The report will include tabulated soil and groundwater analytical data, cross sections depicting soil stratigraphy, groundwater occurrence, analytical results, and ERI's conclusions and recommendations.

DOCUMENT DISTRIBUTION

ERI recommends that copies of this report be forwarded to the following:

Mr. Steven Plunkett
Alameda County Health Care Services Agency
Department of Environmental Health
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502-6577

Mr. Chuck Headlee
California Regional Water Quality Control Board
San Francisco Bay Region
1515 Clay Street, Suite 1400
Oakland, California 94612

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

LIMITATIONS

This report was prepared in accordance with generally accepted standards of environmental practice in California at the time this investigation was performed. This report has been prepared for Exxon Mobil, and any reliance on this report by third parties shall be at such party's sole risk.

Please contact Ms. Paula Sime, ERI's project manager for this site, at (707) 766-2000 with any questions regarding this report.

Sincerely,
Environmental Resolutions, Inc.

FOR:
Rebekah Westrup
Senior Staff Geologist

SCANNED IMAGE

Heidi Dieffenbach-Carle
P.G. 6793

Attachments: References

Table 1A:	Cumulative Groundwater Monitoring and Sampling Data
Table 1B:	Additional Cumulative Groundwater Monitoring and Sampling Data
Table 2A:	Cumulative Analytical Results of Soil Samples
Table 2B	Additional Cumulative Analytical Results of Soil Samples – Volatile Organic Compounds
Table 2C:	Additional Cumulative Analytical Results of Soil Samples – Metals
Table 3:	Well Construction Details
Plate 1:	Site Vicinity Map
Plate 2:	Local Area Map
Plate 3:	Generalized Site Plan
Plate 4:	Groundwater Elevation Map, December 15, 2006
Plate 5:	Residual TPHg Concentrations in Soil
Plate 6:	Residual Benzene Concentrations in Soil
Plate 7:	Select Groundwater Analytical Results, December 15, 2006
Plate 8:	TPHg Isoconcentration Map, October 1, 2003
Plate 9:	Benzene Isoconcentration Map, October 1, 2003
Plate 10:	MTBE Isoconcentration Map, October 1, 2003
Plate 11:	TBA Isoconcentration Map, October 1, 2003
Plate 12:	TPHg Isoconcentration Map, December 15, 2006
Plate 13:	Benzene Isoconcentration Map, December 15, 2006
Plate 14:	MTBE Isoconcentration Map, December 15, 2006
Plate 15:	TBA Isoconcentration Map, December 15, 2006
Plate 16:	Proposed Soil Boring Locations
Attachment A:	Regulatory Correspondence
Attachment B:	Field Protocol

REFERENCES

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, Science, and Technology (EA). November 13, 1997. *Analytical Results for Used-Oil UST Confirmation Soil Samples Collected at Exxon RS 7-0238, 2200 East 12th Street, Oakland, California.*

Environmental Resolutions, Inc. (ERI). September 19, 2001. *Executive Summary, Dual-Phase Extraction Feasibility Test Report and Conceptual Corrective Action Plan, Former Exxon Service Station 7-0238, 2200 East 12th Street, Oakland, California.*

Environmental Resolutions, Inc. (ERI). September 9, 2003. *Well Installation Report, Former Exxon Service Station 7-0238, 2200 East 12th Street, Oakland, California.*

Environmental Resolutions, Inc. (ERI). March 14, 2007a. *Site Conceptual Model, Former Exxon Service Station 7-0238, 2200 East 12th Street, Oakland, California.*

Environmental Resolutions, Inc. (ERI). February 6, 2007b. *Groundwater Monitoring and Remediation Status Report, Former Exxon Service Station 7-0238, 2200 East 12th Street, Oakland, California.*

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). July 25, 1989a. *Quarterly Technical Report, First Quarter of 1989, Former Texaco Station, 2200 East 12th Street, Oakland, California.* HLA Job No. 2251, 082.03.

Harding Lawson Associates (HLA). September 19, 1989b. *Environmental Assessment, Former Texaco Station No. 62488000088, 2200 East 12th Street, Oakland, California.* HLA Job No. 2251, 082.03.

Harding Lawson Associates (HLA). March 6, 1991. *Quarterly Technical Report, Fourth Quarter of 1990, Former Texaco Station, 2200 East 12th St, Oakland, CA.* HLA Job No. 2251, 112.03.

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.

Woodward-Clyde Consultants (WCC). January 28, 1992. *Tank Excavation Assessment Report, Exxon RAS 7-0238, 2200 East 12th Street, Oakland, California.*

TABLE 1A
CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA
Former Exxon Service Station 7-0238
2200 East 12th Street
Oakland, California

Well ID	Sampling Date	TOC (feet)	DTW (feet)	GW Elev. (feet)	SUBJ	TPHg (µg/L)	MTBE 8021B (µg/L)	MTBE 8260B (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)
MW9A	06/13/88	—	—	—	—	—	—	—	<0.5	<1.0	<2.0	<1.0
MW9A	10/24/88	—	—	—	—	—	—	—	<0.5	<1.0	<2.0	<1.0
MW9A	10/13/89	100.07 l	—	—	—	—	—	—	<0.5	<0.5	<0.5	<3.0
MW9A	10/19/90	100.07 l	—	—	—	<50	—	—	<0.5	<0.5	<0.5	<0.5
MW9A	02/05/92	100.07 l	6.93	93.14	—	<50	—	—	1.1	1.8	0.6	1.3
MW9A	05/05/92	100.07 l	6.95	93.12	—	<50	—	—	<0.5	<0.5	<0.5	<0.5
MW9A	09/14/92	100.07 l	7.65	92.42	—	<50	—	—	<0.5	<0.5	<0.5	<0.5
MW9A	11/16/92	100.07 l	7.35	92.72	—	<50	—	—	1.1	<0.5	<0.5	<0.5
MW9A	02/03/93	100.07 l	7.85	92.22	—	140	—	—	17	19	1.6	20
MW9A	05/18/93	100.07 l	6.95	93.12	—	<50	—	—	0.8	<0.5	1.3	7
MW9A	08/26/93	100.07 l	7.14	92.93	—	<50	—	—	<0.5	<0.5	<0.5	<0.5
MW9A	11/04/93	100.07 l	7.23	92.84	—	<50	—	—	<0.5	<0.5	<0.5	<0.5
MW9A	02/04/94	100.07 l	6.70	93.37	—	<50	—	—	<0.5	<0.5	<0.5	<0.5
MW9A	05/31/94	100.07 l	6.74	93.33	—	<50	—	—	<0.5	<0.5	<0.5	<0.5
MW9A	10/26/94	11.46	7.06	4.40	—	<50	—	—	<0.5	<0.5	<0.5	<0.5
MW9A	05/15/95	11.46	6.32	5.14	—	<50	—	—	0.52	0.67	<0.5	<0.5
MW9A	11/02/95	11.46	7.16	4.30	NLPH	<50	<10	—	<0.5	<0.5	<0.5	<0.5
MW9A	04/26/96	11.46	6.33	5.13	NLPH	—	—	—	—	—	—	—
MW9A	08/22/96	11.46	7.02	4.44	NLPH	—	—	—	—	—	—	—
MW9A	02/24/97	11.46	—	—	—	—	—	—	—	—	—	—
MW9A	03/16/98	11.46	6.14	5.32	NLPH	<200	40,000	—	7.9	<2.0	<2.0	<2.0
MW9A	04/21/98	11.46	6.29	5.17	NLPH	<50	53,000	—	3.8	<0.5	<0.5	<0.5
MW9A	07/22/98	14.53	6.58	7.95	NLPH	<250	18,000	—	<2.5	<2.5	<2.5	<2.5
MW9A	12/22/98	14.53	6.47	8.06	NLPH	<50	5,200	—	<0.5	<0.5	<0.5	<0.5
MW9A	02/26/99	14.53	6.38	8.15	NLPH	<100	10,000	—	<1.0	<1.0	<1.0	<1.0
MW9A	05/27/99 a	14.53	6.56	7.97	NLPH	<5,000	15,300	—	<50	<50	<50	<50
MW9A	08/03/99	14.53	9.39	5.14	NLPH	<50	<2.5	—	<0.5	<0.5	<0.5	<0.5
MW9A	12/03/99	14.53	6.52	8.01	NLPH	<50	1,400	—	<0.5	<0.5	<0.5	0.67 b
MW9A	02/29/00	14.53	5.31	9.22	NLPH	<50	20,000	—	1.2	<0.5	<0.5	<0.5
MW9A	05/18/00	14.53	6.31	8.22	NLPH	<50	14,000	11,000	<0.5	<0.5	<0.5	<0.5
MW9A	07/24/00	14.53	6.54	7.99	NLPH	<50	7,400	—	<0.5	<0.5	<0.5	<0.5
MW9A	10/09/00	14.53	6.00	8.53	NLPH	<50	2,300	—	<0.5	<0.5	<0.5	<0.5
MW9A	01/10/01	14.53	6.34	8.19	NLPH	<50	3,700	—	<0.5	<0.5	<0.5	<0.5
MW9A	04/10/01	14.53	9.31	5.22	NLPH	<50	11,000	—	<0.5	<0.5	<0.5	<0.5
MW9A	07/12/01	14.53	—	—	NLPH	<50	3,600	—	<0.5	<0.5	<0.5	<0.5
MW9A	08/17/01 c	14.53	6.61	7.92	—	—	—	—	—	—	—	—
MW9A	10/11/01	14.53	7.03	7.50	NLPH	<50	1,700	—	<0.5	<0.5	<0.5	<0.5
MW9A	10/11/01	14.51	Well surveyed in compliance with AB2886 requirements.									
MW9A	01/11/02	14.51	5.93	8.58	NLPH	2,090e	31,000e	—	18.6e	<0.50	<0.50	<0.50
MW9A	04/12/02	14.51	6.41	8.10	NLPH	34,300	32,200	—	<5.00	<5.00	<5.00	<5.00
MW9A	07/12/02	14.51	6.64	7.87	NLPH	6,760	8,070	—	<0.5	<0.5	<0.5	<0.5
MW9A	10/11/02	14.51	6.76	7.75	NLPH	2,420	2,860	3,040	<0.5	<0.5	<0.5	<0.5

TABLE 1A
CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA
Former Exxon Service Station 7-0238
2200 East 12th Street
Oakland, California

Well ID	Sampling Date	TOC (feet)	DTW (feet)	GW Elev. (feet)	SUBJ	TPHg (µg/L)	MTBE 8021B (µg/L)	MTBE 8260B (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)
MW9A	01/10/03	14.51	5.90	8.61	NLPH	38,800	51,900	—	103	15.0	<5.0	13.0
MW9A	04/09/03	14.51	6.38	8.13	NLPH	34,200	38,600	—	14.0	<5.0	<5.0	<5.0
MW9A	07/22/03	14.51	6.56	7.95	NLPH	20,200	19,500	—	0.50	<0.5	<0.5	<0.5
MW9A	10/01/03	14.51	6.72	7.79	NLPH	9,460	—	7,620	0.70	<0.5	<0.5	<0.5
MW9A	01/06/04	14.51	5.89	8.62	NLPH	8,540	11,600	—	<0.50	<0.5	<0.5	<0.5
MW9A	06/07/04	14.51	6.80	7.71	NLPH	3,470	—	5,600	<0.50	<0.5	<0.5	<0.5
MW9A	08/30/04 d	14.51	—	—	—	—	—	—	—	—	—	—
MW9A	12/13/04	14.51	5.99	8.52	NLPH	1,130	—	1,360	<0.50	<0.5	<0.5	<0.5
MW9A	03/14/05	14.51	6.03	8.48	NLPH	2,150	—	2,560	0.80	<0.5	<0.5	<0.5
MW9A	06/08/05	14.51	14.33	0.18	NLPH	1,610	—	2,040	<0.50	<0.5	<0.5	<0.5
MW9A	09/01/05	14.51	6.50	8.01	NLPH	1,020	—	1,320	<0.50	<0.50	<0.50	<0.50
MW9A	12/09/05 i	14.51	16.50	-1.99	NLPH	1,140	—	801	1.16	<0.50	<0.50	<0.50
MW9A	12/30/05	14.51	5.21	9.30	NLPH	—	—	—	—	—	—	—
MW9A	03/07/06	14.51	16.01	-1.50	NLPH	400	—	560	<2.5	<2.5	<2.5	<2.5
MW9A	06/26/06	14.51	6.10	8.41	NLPH	390	—	430	<2.5	<2.5	<2.5	<2.5
MW9A	09/25/06	14.51	6.54	7.97	NLPH	150	—	172	<0.50	<0.50	<0.50	<0.50
MW9A	**12/15/06**	**14.51**	**16.21**	**-1.70**	**NLPH**	**250k**	**—**	**190**	**<2.5**	**<2.5**	**<2.5**	**<2.5**
MW9B	06/13/88	—	—	—	—	—	—	—	350	7.8	66	160
MW9B	10/24/88	—	—	—	—	—	—	—	84	<1.0	3.1	3.2
MW9B	10/13/89	98.41 l	—	—	—	—	—	—	4.1	<0.5	<0.5	<3.0
MW9B	10/19/90	98.41 l	—	—	—	62	—	—	27	<0.5	2.3	<0.5
MW9B	02/05/92	98.41 l	5.95	92.46	—	60	—	—	14	<0.5	2.9	2.5
MW9B	05/05/92	98.41 l	5.92	92.49	—	620	—	—	180	2.4	8.4	2.2
MW9B	09/14/92	98.41 l	6.60	91.81	—	110	—	—	9.6	<0.5	<0.5	<0.5
MW9B	11/16/92	98.41 l	6.35	92.06	—	200	—	—	33	<0.5	4.2	1.4
MW9B	02/03/93	98.41 l	6.50	91.91	—	12,000	—	—	320	13	35	110
MW9B	05/18/93	98.41 l	6.42	91.99	—	180	—	—	1.1	<0.5	2.6	5.9
MW9B	08/26/93	98.41 l	6.28	92.13	—	180	—	—	36	<0.5	3	1.7
MW9B	11/04/93	98.41 l	6.23	92.18	—	98	—	—	13	<0.5	1.4	<0.5
MW9B	02/04/94	98.41 l	5.92	92.49	—	790	—	—	170	1.3	12	0.8
MW9B	05/31/94	98.41 l	9.22	89.19	—	1,000	—	—	150	2.5	8.0	2.1
MW9B	10/26/94	9.80	6.04	3.76	—	84	—	—	2.8	0.72	<0.5	<0.5
MW9B	05/15/95	9.80	5.34	4.46	—	2,800	—	—	420	25	27	6.7
MW9B	11/02/95	9.80	6.14	3.66	NLPH	130	<10	—	3.3	<0.5	<0.5	<0.5
MW9B	04/26/96	9.80	5.66	4.14	NLPH	270	70	—	130	2.8	6.7	<3
MW9B	08/22/96	9.80	6.16	3.64	NLPH	210	31	—	5.7	6.8	1.1	9.2
MW9B	02/24/97	9.80	5.58	4.22	NLPH	1,400	1,300	—	76	1.4	4.1	1.2
MW9B	03/16/98	12.83	5.32	7.51	NLPH	860	1,500	—	140	2.0	1.1	<2.0
MW9B	04/21/98	12.83	5.49	7.34	NLPH	1,800	18,000	—	300	<5.0	7.9	<5.0
MW9B	07/22/98	12.83	5.79	7.04	NLPH	<500	26,000	—	13	<5.0	<5.0	<5.0
MW9B	12/22/98	12.83	5.69	7.14	NLPH	700	21,000	—	110	3.1	9.1	14

TABLE 1A
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Former Exxon Service Station 7-0238
2200 East 12th Street
Oakland, California

Well ID	Sampling Date	TOC (feet)	DTW (feet)	GW Elev. (feet)	SUBJ	TPHg (µg/L)	MTBE 8021B (µg/L)	MTBE 8260B (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)
MW9B	02/26/99	12.83	5.10	7.73	NLPH	8,800	8,000	—	2,000	<25	52	38
MW9B	05/18/99	12.83	5.65	7.18	NLPH	<10,000	42,100	—	158	<100	<100	<100
MW9B	08/03/99	12.83	6.24	6.59	NLPH	960	24,900	—	<5.0	<5.0	<5.0	<5.0
MW9B	12/03/99	12.83	5.66	7.17	NLPH	<50	1,000	—	<0.5	<0.5	<0.5	<0.5
MW9B	02/29/00	12.83	4.61	8.22	NLPH	3,100	25,000	—	900	7	23	7.1
MW9B	05/18/00	12.83	5.54	7.29	NLPH	780	34,000	26,000	150	<2.5	4.5	<2.5
MW9B	07/24/00	12.83	8.75	4.08	NLPH	<250	39,000	—	8	<2.5	<2.5	<2.5
MW9B	10/09/00	12.83	4.84	7.99	NLPH	<1,200	30,000	—	1.7	<0.5	<0.5	<0.5
MW9B	01/10/01	12.83	5.56	7.27	NLPH	<250	32,000	—	5.3	<0.5	<0.5	<0.5
MW9B	04/10/01	12.83	5.40	7.43	NLPH	360	27,000	—	69.0	<2.5	22.0	29.8
MW9B	07/12/01	12.83	—	—	NLPH	<250	41,000	—	<2.5	<2.5	<2.5	<2.5
MW9B	08/17/01 c	12.83	5.83	7.00	—	—	—	—	—	—	—	—
MW9B	10/11/01	12.83	8.70	4.13	NLPH	<250	24,000	—	<2.5	<2.5	<2.5	<2.5
MW9B	11/01/01	12.84	Well surveyed in compliance with AB2886 requirements.									
MW9B	01/11/02	12.84	5.16	7.68	NLPH	9,170e	14,600e	—	66.0e	<10.0	54.0	<10.0
MW9B	04/12/02	12.84	5.57	7.27	NLPH	29,600	28,600	—	12.0	<5.00	<5.00	<5.00
MW9B	07/12/02	12.84	5.81	7.03	NLPH	20,200	27,700	—	<10.0	14.0	<10.0	16.0
MW9B	10/11/02 f	12.84	5.91	6.93	NLPH	18,900	24,300	28,200	2.3	<0.5	<0.5	<0.5
MW9B	01/10/03	12.84	5.09	7.75	NLPH	14,900	18,600	—	118	1.0	6.5	3.6
MW9B	04/09/03	12.84	5.51	7.33	NLPH	21,800	24,900	—	51.0	<5.0	<5.0	<5.0
MW9B	07/22/03	12.84	6.09	6.75	NLPH	33,500	36,900	—	<0.50	<0.5	<0.5	<0.5
MW9B	10/01/03	12.84	6.16	6.68	NLPH	25,500	—	19,100	1.10	<0.5	<0.5	<0.5
MW9B	01/06/04	12.84	5.14	7.70	NLPH	10,400	—	15,700	16.9	1.8	18.6	1.7
MW9B	06/07/04	12.84	9.47	3.37	NLPH	3,910	—	1,960	<0.50	<0.5	<0.5	<0.5
MW9B	08/30/04	12.84	h	h	h	954h	—	925h	<0.50h	<0.5h	<0.5	<0.5h
MW9B	12/13/04	12.84	4.96	7.88	NLPH	233	—	140	0.90	<0.5	<0.5	<0.5
MW9B	03/14/05	12.84	5.52	7.32	NLPH	523	—	504	<0.50	<0.5	<0.5	<0.5
MW9B	06/08/05	12.84	6.70	6.14	NLPH	114	—	130	<0.50	<0.5	<0.5	<0.5
MW9B	09/01/05	12.84	5.92	6.92	NLPH	90.5	—	82.6	0.55	<0.50	<0.50	<0.50
MW9B	12/09/05	12.84	8.46	4.38	NLPH	207	—	149	<0.50	<0.50	<0.50	<0.50
MW9B	12/30/05	12.84	4.59	8.25	NLPH	—	—	—	—	—	—	—
MW9B	03/07/06	12.84	6.41	6.43	NLPH	98	—	64	<0.50	<0.50	<0.50	<0.50
MW9B	06/26/06	12.84	5.71	7.13	NLPH	130	—	39	0.63	<0.50	0.53	0.53
MW9B	09/25/06	12.84	6.35	6.49	NLPH	<50.0	—	7.40	<0.50	<0.50	<0.50	<0.50
MW9B	**12/15/06**	**12.84**	**6.77**	**6.07**	**NLPH**	**<50**	**—**	**11**	**<0.50**	**<0.50**	**<0.50**	**<0.50**
MW9C	06/13/88	—	—	—	—	—	—	—	<0.5	<1.0	<2.0	<1.0
MW9C	10/24/88	—	—	—	—	—	—	—	<0.5	<1.0	<2.0	<1.0
MW9C	10/13/89	99.73 l	—	—	—	—	—	—	<0.5	<0.5	<0.5	<3.0
MW9C	10/19/90	99.73 l	—	—	—	<50	—	—	<0.5	<0.5	<0.5	<0.5
MW9C	02/05/92	99.73 l	6.44	93.29	—	<50	—	—	<0.5	<0.5	<0.5	<0.5
MW9C	05/05/92	99.73 l	6.50	93.23	—	<50	—	—	<0.5	<0.5	<0.5	<0.5

TABLE 1A
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Former Exxon Service Station 7-0238
2200 East 12th Street
Oakland, California

Well ID	Sampling Date	TOC (feet)	DTW (feet)	GW Elev. (feet)	SUBJ	TPHg (µg/L)	MTBE 8021B (µg/L)	MTBE 8260B (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)
MW9C	09/14/92	99.73 l	7.00	92.73	—	<50	—	—	<0.5	<0.5	<0.5	<0.5
MW9C	11/16/92	99.73 l	6.72	93.01	—	<50	—	—	<0.5	<0.5	<0.5	<0.5
MW9C	02/03/93	99.73 l	5.75	93.98	—	<50	—	—	<0.5	<0.5	<0.5	<0.5
MW9C	05/18/93	99.73 l	6.72	93.01	—	<50	—	—	<0.5	<0.5	<0.5	<0.5
MW9C	08/26/93	99.73 l	6.84	92.89	—	<50	—	—	<0.5	<0.5	<0.5	<0.5
MW9C	11/04/93	99.73 l	6.90	92.83	—	<50	—	—	<0.5	<0.5	<0.5	<0.5
MW9C	02/04/94	99.73 l	6.28	93.45	—	<50	—	—	<0.5	<0.5	<0.5	<0.5
MW9C	05/31/94	99.73 l	6.42	93.31	—	—	—	—	<0.5	<0.5	<0.5	<0.5
MW9C	10/26/94	11.14	6.80	4.34	—	—	—	—	<0.5	<0.5	<0.5	<0.5
MW9C	05/15/95	11.14	5.72	5.42	—	—	—	—	<0.5	<0.5	<0.5	<0.5
MW9C	11/02/95	11.14	6.88	4.26	—	—	—	—	<0.5	<0.5	<0.5	<0.5
MW9C	04/26/96	11.14	6.28	4.86	—	—	—	—	<0.5	<0.5	<0.5	<0.5
MW9C	08/22/96	11.14	6.65	4.49	—	—	—	—	<0.5	<0.5	<0.5	<0.5
MW9C	03/16/98	11.14	5.51	5.63	NLPH	<500	150,000	—	24	<5.0	<5.0	<5.0
MW9C	04/21/98	11.14	5.83	5.31	NLPH	150	130,000	150,000	<0.5	<0.5	<0.5	<0.5
MW9C	07/22/98	14.19	6.43	7.76	NLPH	<500	95,000	—	<5.0	<5.0	<5.0	<5.0
MW9C	12/22/98	14.19	6.16	8.03	NLPH	<500	84,000	—	<5.0	<5.0	<5.0	<5.0
MW9C	02/26/99	14.19	5.46	8.73	NLPH	<250	55,000	—	<2.5	<2.5	<2.5	<2.5
MW9C	05/18/99	14.19	6.27	7.92	NLPH	<25,000	68,900	—	<250	<250	<250	<250
MW9C	08/03/99	14.19	7.13	7.06	NLPH	210	69,200	—	<1.0	1.3	<1.0	<1.0
MW9C	12/03/99	14.19	6.17	8.02	NLPH	290	50,000	—	<2.5	<2.5	<2.5	<2.5
MW9C	02/29/00	14.19	4.49	9.70	NLPH	<250	40,000	—	<2.5	<2.5	<2.5	<2.5
MW9C	05/18/00	14.19	5.96	8.23	NLPH	<250	46,000	33,000	<2.5	<2.5	<2.5	<2.5
MW9C	07/24/00	14.19	6.47	7.72	NLPH	<250	44,000	—	<2.5	<2.5	<2.5	<2.5
MW9C	10/09/00	14.19	6.57	7.62	NLPH	<250	39,000	—	<2.5	<2.5	<2.5	<2.5
MW9C	01/10/01	14.19	6.09	8.10	NLPH	<250	42,000	—	<2.5	<2.5	<2.5	<2.5
MW9C	04/10/01	14.19	7.88	6.31	NLPH	<250	35,000	—	<2.5	<2.5	<2.5	<2.5
MW9C	07/12/01	14.19	—	—	NLPH	<250	32,000	—	<2.5	<2.5	<2.5	<2.5
MW9C	08/17/01 c	14.19	6.60	7.59	—	—	—	—	—	—	—	—
MW9C	10/11/01	14.19	6.67	7.52	NLPH	<250	53,000	—	<2.5	<2.5	<2.5	<2.5
MW9C	11/01/01	14.16	Well surveyed in compliance with AB2886 requirements.									
MW9C	01/11/02	14.16	5.29	8.87	NLPH	2,470e	90,000e	—	0.90e	<0.50	<0.50	<0.50
MW9C	04/12/02	14.16	6.14	8.02	NLPH	70,400	66,800	—	<5.00	<5.00	<5.00	<5.00
MW9C	07/12/02	14.16	6.54	7.62	NLPH	50,900	58,300	—	<500	<500	<500	<500
MW9C	10/11/02	14.16	6.73	7.43	NLPH	52,100	58,800	76,000	<10.0	<10.0	<10.0	<10.0
MW9C	01/10/03	14.16	5.21	8.95	NLPH	40,600	55,500	—	<0.5	<0.5	<0.5	<0.5
MW9C	04/09/03	14.16	6.08	8.08	NLPH	24,700	29,600	—	<5.00	<5.0	<5.0	<5.0
MW9C	07/22/03	14.16	6.47	7.69	NLPH	13,800	13,100	—	1.40	<0.5	<0.5	<0.5
MW9C	10/01/03	14.16	6.62	7.54	NLPH	9,100	—	38,400	0.70	<0.5	<0.5	<0.5
MW9C	01/06/04	14.16	4.86	9.30	NLPH	4,160	—	5,020	0.70	<0.5	<0.5	<0.5
MW9C	06/07/04	14.16	7.35	6.81	NLPH	4,480	—	3,420	<0.50	<0.5	<0.5	<0.5
MW9C	08/30/04	14.16	h	h	h	1,950h	—	1,950h	<0.50h	<0.5h	<0.5h	<0.5h

TABLE 1A
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Former Exxon Service Station 7-0238
2200 East 12th Street
Oakland, California

Well ID	Sampling Date	TOC (feet)	DTW (feet)	GW Elev. (feet)	SUBJ	TPHg (µg/L)	MTBE 8021B (µg/L)	MTBE 8260B (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)
MW9C	12/13/04	14.16	5.03	9.13	NLPH	610	—	705	<0.50	<0.5	<0.5	<0.5
MW9C	03/14/05	14.16	5.63	8.53	NLPH	906	—	1,110	<0.50	<0.5	<0.5	<0.5
MW9C	06/08/05	14.16	12.75	1.41	NLPH	854	—	1,100	<0.50	<0.5	<0.5	<0.5
MW9C	09/01/05	14.16	6.95	7.21	NLPH	361	—	409	<0.50	<0.50	<0.50	<0.50
MW9C	12/09/05	14.16	7.54	6.62	NLPH	217	—	171	<0.50	<0.50	<0.50	<0.50
MW9C	12/30/05	14.16	4.21	9.95	NLPH	—	—	—	—	—	—	—
MW9C	03/07/06	14.16	12.48	1.68	NLPH	320	—	480	<2.0	<2.0	<2.0	<2.0
MW9C	06/26/06	14.16	6.36	7.80	NLPH	350	—	300	<2.0	<2.0	<2.0	<2.0
MW9C	09/25/06	14.16	6.71	7.45	NLPH	136	—	234	<0.50	<0.50	<0.50	<0.50
MW9C	**12/15/06**	**14.16**	**12.21**	**1.95**	**NLPH**	**190k**	**—**	**260**	**<1.0**	**<1.0**	**<1.0**	**<1.0**
MW9D	10/24/88	—	—	—	—	—	—	—	<0.5	<1.0	<2.0	<1.0
MW9D	10/13/89	101.46 I	—	—	—	—	—	—	<0.5	<0.5	<0.5	<3.0
MW9D	10/19/90	101.46 I	—	—	—	<50	—	—	<0.5	<0.5	<0.5	<0.5
MW9D	02/05/92	101.46 I	7.78	93.68	—	<50	—	—	<0.5	<0.5	<0.5	<0.5
MW9D	05/05/92	101.46 I	7.90	93.56	—	<50	—	—	<0.5	<0.5	<0.5	<0.5
MW9D	09/14/92	101.46 I	8.45	93.01	—	<50	—	—	<0.5	<0.5	<0.5	<0.5
MW9D	11/16/92	101.46 I	8.10	93.36	—	<50	—	—	<0.5	<0.5	<0.5	<0.5
MW9D	02/03/93	101.46 I	7.07	94.39	—	<50	—	—	<0.5	<0.5	<0.5	<0.5
MW9D	05/18/93	101.46 I	7.85	93.61	—	<50	—	—	<0.5	<0.5	<0.5	<0.5
MW9D	08/26/93	101.46 I	8.30	93.16	—	<50	—	—	<0.5	<0.5	<0.5	<0.5
MW9D	11/04/93	101.46 I	8.33	93.13	—	<50	—	—	<0.5	<0.5	<0.5	<0.5
MW9D	02/04/94	101.46 I	7.66	93.80	—	<50	—	—	<0.5	<0.5	<0.5	<0.5
MW9D	05/31/94	101.46 I	6.80	94.66	—	—	—	—	<0.5	<0.5	<0.5	<0.5
MW9D	10/26/94	12.90	8.34	4.56	—	—	—	—	<0.5	<0.5	<0.5	<0.5
MW9D	05/15/95	12.90	7.22	5.68	—	—	—	—	<0.5	<0.5	<0.5	<0.5
MW9D	11/02/95	12.90	8.31	4.59	—	—	—	—	<0.5	<0.5	<0.5	<0.5
MW9D	04/26/96	12.90	7.58	5.32	—	—	—	—	<0.5	<0.5	<0.5	<0.5
MW9D	08/22/96	12.90	8.12	4.78	—	—	—	—	<0.5	<0.5	<0.5	<0.5
MW9D	03/16/98	12.90	6.94	5.96	NLPH	<50	10	—	<0.5	<0.5	<0.5	<0.5
MW9D	04/21/98	12.90	7.22	5.68	NLPH	<50	12	—	<0.5	<0.5	<0.5	<0.5
MW9D	07/22/98	15.98	7.85	8.13	NLPH	<50	13	—	<0.5	<0.5	<0.5	<0.5
MW9D	12/22/98	15.98	7.58	8.40	NLPH	<50	12	—	<0.5	<0.5	<0.5	<0.5
MW9D	02/26/99	15.98	6.42	9.56	NLPH	<50	310	—	<0.5	<0.5	<0.5	<0.5
MW9D	05/18/99	15.98	6.55	9.43	NLPH	<2,500	13,500	—	<25	<25	<25	<25
MW9D	08/03/99	15.98	8.34	7.64	NLPH	<50	<2.5	—	<0.5	<0.5	<0.5	<0.5
MW9D	12/03/99	15.98	7.56	8.42	NLPH	<50	<2	—	<0.5	<0.5	<0.5	<0.5
MW9D	02/29/00	15.98	4.82	11.16	NLPH	<50	2.5	—	<0.5	<0.5	<0.5	<0.5
MW9D	05/18/00	15.98	7.40	8.58	NLPH	<50	6.2	—	<0.5	<0.5	<0.5	<0.5
MW9D	07/24/00	15.98	7.91	8.07	NLPH	<50	14	—	<0.5	<0.5	0.85	0.74
MW9D	10/09/00	15.98	8.02	7.96	NLPH	<50	14	—	<0.5	<0.5	<0.5	<0.5
MW9D	01/10/01	15.98	7.26	8.72	NLPH	<50	18	—	<0.5	<0.5	<0.5	<0.5

TABLE 1A
CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA
Former Exxon Service Station 7-0238
2200 East 12th Street
Oakland, California

Well ID	Sampling Date	TOC (feet)	DTW (feet)	GW Elev. (feet)	SUBJ	TPHg (µg/L)	MTBE 8021B (µg/L)	MTBE 8260B (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)
MW9D	04/10/01	15.98	7.32	8.66	NLPH	<50	14	—	<0.5	<0.5	<0.5	<0.5
MW9D	07/12/01	15.98	–	–	NLPH	<50	22	—	<0.5	<0.5	<0.5	<0.5
MW9D	08/17/01 d	15.98	—	—	—	—	—	—	—	—	—	—
MW9D	10/11/01	15.98	8.16	7.82	NLPH	<50	24	—	<0.5	<0.5	<0.5	<0.5
MW9D	11/01/01	15.97	Well surveyed in compliance with AB2886 requirements.									
MW9D	01/11/02	15.97	6.64	9.33	NLPH	352e	2.0e	—	<0.50	<0.50	<0.50	<0.50
MW9D	04/12/02	15.97	7.58	8.39	NLPH	191	192	—	<0.50	<0.50	<0.50	<0.50
MW9D	07/12/02	15.97	8.01	7.96	NLPH	108	124	—	<0.5	<0.5	<0.5	<0.5
MW9D	10/11/02	15.97	8.13	7.84	NLPH	187	243	—	<0.5	<0.5	<0.5	<0.5
MW9D	01/10/03	15.97	5.98	9.99	NLPH	386	132	—	4.1	<0.5	<0.5	<0.5
MW9D	04/09/03	15.97	7.53	8.44	NLPH	468	292	—	3.80	<0.5	<0.5	<0.5
MW9D	07/22/03	15.97	7.87	8.10	NLPH	446	339	—	0.70	<0.5	<0.5	<0.5
MW9D	10/01/03	15.97	8.04	7.93	NLPH	402	—	362	<0.50	<0.5	<0.5	<0.5
MW9D	01/06/04	15.97	6.31	9.66	NLPH	72.2	—	80.9	<0.50	<0.5	<0.5	<0.5
MW9D	06/07/04	15.97	8.17	7.80	NLPH	237	—	353	<0.50	<0.5	<0.5	<0.5
MW9D	08/30/04 d	15.97	—	—	—	—	—	—	—	—	—	—
MW9D	12/13/04	15.97	5.39	10.58	NLPH	379	—	353	4.80	0.7	<0.5	0.9
MW9D	03/14/05	15.97	6.93	9.04	NLPH	<50.0	—	13.8	<0.50	<0.5	<0.5	<0.5
MW9D	06/08/05	15.97	8.83	7.14	NLPH	<50.0	—	57.2	<0.50	<0.5	<0.5	<0.5
MW9D	09/01/05	15.97	7.99	7.98	NLPH	64.3	—	51.8	<0.50	<0.50	<0.50	<0.50
MW9D	12/09/05	15.97	7.96	8.01	NLPH	56.3	—	33.0	<0.50	<0.50	<0.50	<0.50
MW9D	12/30/05 d	15.97	—	—	—	—	—	—	—	—	—	—
MW9D	03/07/06	15.97	6.19	9.78	NLPH	<50	—	9.3	<0.50	<0.50	<0.50	<0.50
MW9D	06/26/06	15.97	7.68	8.29	NLPH	<50	—	9.7	<0.50	<0.50	<0.50	<0.50
MW9D	09/25/06	15.97	8.00	7.97	NLPH	<50.0	—	13.8	<0.50	<0.50	<0.50	<0.50
MW9D	**12/15/06**	**15.97**	**6.91**	**9.06**	**NLPH**	**<50**	**—**	**11**	**<0.50**	**<0.50**	**<0.50**	**<0.50**
MW9E	10/24/88	—	—	—	—	—	—	—	1.3	<1.0	<2.0	<1.0
MW9E	10/13/89	—	—	—	—	—	—	—	15	<0.5	2.1	<3.0
MW9E	10/19/90	—	—	—	—	<50	—	—	4.0	<0.5	0.9	<0.5
MW9F	12/06/88	—	—	—	—	—	—	—	<0.5	<1.0	<2.0	<1.0
MW9F	10/13/89	—	—	—	—	—	—	—	<0.5	<0.5	<0.5	<3.0
MW9F	10/19/90	—	—	—	—	<50	—	—	<0.5	<0.5	<0.5	<0.5
MW9F	02/05/92	96.96 l	5.81	91.15	—	<50	—	—	<0.5	<0.5	<0.5	<0.5
MW9F	05/05/92	96.96 l	5.86	91.10	—	<50	—	—	<0.5	<0.5	<0.5	<0.5
MW9F	09/14/92	96.96 l	—	—	—	—	—	—	—	—	—	—
MW9F	11/16/92	96.96 l	5.82	91.14	—	<50	—	—	<0.5	<0.5	<0.5	<0.5
MW9F	02/03/93	96.96 l	5.55	91.41	—	<50	—	—	<0.5	<0.5	<0.5	<0.5
MW9F	05/18/93	96.96 l	5.86	91.10	—	—	—	—	—	—	—	—
MW9F	05/19/93	96.96 l	—	—	—	<50	—	—	<0.5	—	1.2	6.8
MW9F	08/26/93	96.96 l	5.86	91.10	—	<50	—	—	<0.5	<0.5	<0.5	<0.5

TABLE 1A
CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA
Former Exxon Service Station 7-0238
2200 East 12th Street
Oakland, California

Well ID	Sampling Date	TOC (feet)	DTW (feet)	GW Elev. (feet)	SUBJ	TPHg (µg/L)	MTBE 8021B (µg/L)	MTBE 8260B (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)
MW9F	11/04/93	96.96 l	5.96	91.00	—	<50	—	—	<0.5	<0.5	<0.5	<0.5
MW9F	02/04/94	96.96 l	5.68	91.28	—	<50	—	—	<0.5	<0.5	<0.5	<0.5
MW9F	05/31/94	96.96 l	5.76	91.20	—	—	—	—	<0.5	<0.5	<0.5	<0.5
MW9F	10/26/94	8.37	5.96	2.41	—	—	—	—	<0.5	<0.5	<0.5	<0.5
MW9F	05/15/95	8.37	5.52	2.85	—	—	—	—	<0.5	<0.5	<0.5	<0.5
MW9F	11/02/95	8.37	6.60	1.77	—	—	—	—	—	—	—	—
MW9F	04/26/96	8.37	6.50	1.87	NLPH	<50	57	—	<0.5	<0.5	<0.5	<0.5
MW9F	08/22/96	8.37	5.74	2.63	NLPH	<50	5.8	—	<0.5	<0.5	<0.5	<0.5
MW9F	02/24/97	8.37	—	—	NLPH	<50	<30	—	<0.5	<0.5	<0.5	<0.5
MW9F	03/16/98	8.37	—	—	NLPH	—	—	—	—	—	—	—
MW9F	04/21/98	8.37	—	—	—	—	—	—	—	—	—	—
MW9F	07/22/98	11.38	—	—	—	—	—	—	—	—	—	—
MW9F	12/22/98	11.38	5.47	5.91	NLPH	<50	81	—	<0.5	<0.5	<0.5	<0.5
MW9F	02/26/99	11.38	5.35	6.03	NLPH	<50	<2.5	—	<0.5	<0.5	<0.5	<0.5
MW9F	05/18/99	11.38	5.62	5.76	NLPH	<50	61.6	—	<0.5	<0.5	<0.5	<0.5
MW9F	08/03/99	11.38	6.32	5.06	NLPH	<50	3.10	—	<0.5	<0.5	<0.5	<0.5
MW9F	12/03/99	11.38	5.59	5.79	NLPH	<50	<2	—	<0.5	<0.5	0.71	<0.5
MW9F	02/29/00	11.38	4.70	6.68	NLPH	<50	52	—	<0.5	<0.5	<0.5	<0.5
MW9F	05/18/00	11.38	5.37	6.01	NLPH	<50	65	—	<0.5	<0.5	<0.5	<0.5
MW9F	07/24/00	11.38	5.65	5.73	NLPH	<50	170	—	<0.5	<0.5	<0.5	<0.5
MW9F	10/09/00	11.38	5.71	5.67	NLPH	<50	170	—	<0.5	<0.5	<0.5	<0.5
MW9F	01/10/01	11.38	4.30	7.08	NLPH	<50	140	—	<0.5	<0.5	<0.5	<0.5
MW9F	04/10/01	11.38	5.20	6.18	NLPH	<50	50	—	<0.5	<0.5	<0.5	<0.5
MW9F	07/12/01	11.38	–	–	NLPH	<50	190	—	<0.5	<0.5	<0.5	<0.5
MW9F	08/17/01 d	11.38	–	–	–	–	–	—	–	–	–	–
MW9F	10/11/01	11.38	5.82	5.56	NLPH	<50	260	—	<0.5	<0.5	<0.5	<0.5
MW9F	11/01/01	11.38	Well surveyed in compliance with AB2886 requirements.									
MW9F	01/11/02	11.38	5.12	6.26	NLPH	<100	67.0e	—	<1.00	<1.00	<1.00	<1.00
MW9F	04/12/02	11.38	5.50	5.88	NLPH	55.9	58.6	—	<0.50	<0.50	<0.50	<0.50
MW9F	07/12/02	11.38	5.65	5.73	NLPH	102	121	—	<0.5	<0.5	<0.5	<0.5
MW9F	10/11/02	11.38	5.67	5.71	NLPH	99.9	128	138	<0.5	<0.5	<0.5	<0.5
MW9F	01/10/03	11.38	5.09	6.29	NLPH	<50.0	45.5	—	<0.5	<0.5	<0.5	<0.5
MW9F	04/09/03	11.38	5.39	5.99	NLPH	<50.0	50.8	—	<0.50	<0.5	<0.5	<0.5
MW9F	07/22/03	11.38	5.52	5.86	NLPH	82.3	64.0	—	<0.50	<0.5	<0.5	<0.5
MW9F	10/01/03	11.38	5.59	5.79	NLPH	67.0	–	56.4	<0.50	<0.5	<0.5	<0.5
MW9F	01/06/04	11.38	5.21	6.17	NLPH	<50.0	–	36.7	<0.50	<0.5	<0.5	<0.5
MW9F	06/07/04	11.38	6.03	5.35	NLPH	<50.0	–	20.5	<0.50	<0.5	<0.5	<0.5
MW9F	08/30/04	11.38	h	h	h	<50.0h	–	14.0h	<0.50h	<0.5h	<0.5h	<0.5h
MW9F	12/13/04	11.38	4.80	6.58	NLPH	<50.0	–	13.4	<0.50	<0.5	<0.5	<0.5
MW9F	03/14/05	11.38	5.10	6.28	NLPH	<50.0	–	4.20	<0.50	<0.5	<0.5	<0.5
MW9F	06/08/05	11.38	5.38	6.00	NLPH	<50.0	–	8.70	<0.50	<0.5	<0.5	<0.5
MW9F	09/01/05	11.38	5.53	5.85	NLPH	<50.0	—	19.6	<0.50	<0.50	<0.50	<0.50

TABLE 1A
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Former Exxon Service Station 7-0238
2200 East 12th Street
Oakland, California

Well ID	Sampling Date	TOC (feet)	DTW (feet)	GW Elev. (feet)	SUBJ	TPHg (µg/L)	MTBE 8021B (µg/L)	MTBE 8260B (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)
MW9F	12/09/05 j	11.38	—	—	—	—	—	—	—	—	—	—
MW9F	12/30/05	11.38	4.81	6.57	NLPH	<50.0	—	7.01	<0.50	<0.50	<0.50	<0.50
MW9F	03/07/06 j	11.38	—	—	—	—	—	—	—	—	—	—
MW9F	06/26/06 j	11.38	—	—	—	—	—	—	—	—	—	—
MW9F	09/25/06	11.38	5.56	5.82	NLPH	<50.0	—	6.52	<0.50	<0.50	<0.50	<0.50
MW9F	**12/15/06**	**11.38**	**5.10**	**6.28**	**NLPH**	**<50**	**—**	**7.2**	**<0.50**	**<0.50**	**<0.50**	**<0.50**
MW9G	12/06/88	—	—	—	—	—	—	—	0.8	<1.0	<2.0	<1.0
MW9G	10/13/89	—	—	—	—	—	—	—	<0.5	<0.5	<0.5	<3.0
MW9G	10/19/90	—	—	—	—	<50	—	—	<0.5	<0.5	<0.5	<0.5
MW9G	02/05/92	98.51 l	5.59	92.92	—	<50	—	—	<0.5	<0.5	<0.5	<0.5
MW9G	05/05/92	98.51 l	5.60	92.91	—	<50	—	—	1.5	3.8	1	4.7
MW9G	09/14/92	98.51 l	—	—	—	—	—	—	—	—	—	—
MW9G	11/16/92	98.51 l	5.78	92.73	—	<50	—	—	<0.5	<0.5	<0.5	<0.5
MW9G	02/03/93	98.51 l	5.05	93.46	—	64	—	—	<0.5	<0.5	<0.5	<0.5
MW9G	05/18/93	98.51 l	5.62	92.89	—	<50	—	—	<0.5	<0.5	<0.5	<0.5
MW9G	08/26/93	98.51 l	5.86	92.65	—	<50	—	—	<0.5	<0.5	<0.5	<0.5
MW9G	11/04/93	98.51 l	5.96	92.55	—	<50	—	—	<0.5	<0.5	<0.5	<0.5
MW9G	02/04/94	98.51 l	5.48	93.03	—	<50	—	—	<0.5	<0.5	<0.5	<0.5
MW9G	05/31/94	98.51 l	5.50	93.01	—	—	—	—	—	—	—	—
MW9G	10/26/94	9.95	5.76	4.19	—	—	—	—	—	—	—	—
MW9G	05/15/95	9.95	4.88	5.07	—	—	—	—	—	—	—	—
MW9G	11/02/95	9.95	5.92	4.03	NLPH	<50	<10	—	<0.5	<0.5	<0.5	<0.5
MW9G	04/26/96	9.95	5.28	4.67	NLPH	<50	18	—	<0.5	<0.5	<0.5	<0.5
MW9G	08/22/96	9.95	5.57	4.38	NLPH	<50	18	—	<0.5	<0.5	<0.5	<0.5
MW9G	02/24/97	9.95	5.30	4.65	NLPH	<50	240	—	<0.5	0.57	<0.5	0.62
MW9G	03/16/98	9.95	—	—	—	—	—	—	—	—	—	—
MW9G	04/21/98	9.95	—	—	—	—	—	—	—	—	—	—
MW9G	07/22/98	12.99	—	—	—	—	—	—	—	—	—	—
MW9G	12/22/98	12.99	5.28	7.71	NLPH	<50	1,100	—	<0.5	<0.5	<0.5	<0.5
MW9G	02/26/99	12.99	5.31	7.68	NLPH	<50	50	—	<0.5	<0.5	<0.5	<0.5
MW9G	05/18/99	12.99	5.18	7.81	NLPH	<1,000	3,990	—	<10	<10	<10	<10
MW9G	08/03/99	12.99	6.00	6.99	NLPH	<50	1,340	—	<0.5	<0.5	<0.5	<0.5
MW9G	12/03/99	12.99	5.27	7.72	NLPH	<50	<2	—	<0.5	<0.5	<0.5	0.55 b
MW9G	02/29/00	12.99	4.60	8.39	NLPH	<50	7,900	—	<0.5	<0.5	<0.5	<0.5
MW9G	05/18/00	12.99	5.16	7.83	NLPH	<50	2,400	—	<0.5	<0.5	<0.5	<0.5
MW9G	07/24/00	12.99	5.20	7.79	NLPH	<50	1,000	—	<0.5	<0.5	<0.5	<0.5
MW9G	10/09/00	12.99	5.26	7.73	NLPH	<50	180	—	<0.5	<0.5	<0.5	<0.5
MW9G	01/10/01	12.99	5.18	7.81	NLPH	<50	1,200	—	<0.5	<0.5	<0.5	<0.5
MW9G	04/10/01	12.99	5.08	7.91	NLPH	<50	9,100	—	<0.5	<0.5	<0.5	<0.5
MW9G	07/12/01	12.99	–	–	NLPH	<50	3,000	—	<0.5	<0.5	<0.5	<0.5
MW9G	08/17/01 d	12.99	—	—	—	—	—	—	—	—	—	—

TABLE 1A
CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA
Former Exxon Service Station 7-0238
2200 East 12th Street
Oakland, California

Well ID	Sampling Date	TOC (feet)	DTW (feet)	GW Elev. (feet)	SUBJ	TPHg (µg/L)	MTBE 8021B (µg/L)	MTBE 8260B (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)
MW9G	10/11/01	12.99	5.48	7.51	NLPH	<50	1,600	—	<0.5	<0.5	<0.5	<0.5
MW9G	11/01/01	12.98	Well surveyed in compliance with AB2886 requirements.									
MW9G	01/11/02	12.98	4.97	8.01	NLPH	419e	945e	—	<0.50	<0.50	<0.50	<0.50
MW9G	04/12/02	12.98	5.12	7.86	NLPH	10,700	11,000	—	<0.50	<0.50	<0.50	<0.50
MW9G	07/12/02	12.98	5.31	7.67	NLPH	2,310	3,140	—	<0.5	<0.5	<0.5	<0.5
MW9G	10/11/02	12.98	5.39	7.59	NLPH	1,630	2,040	2,090	<0.5	<0.5	<0.5	<0.5
MW9G	01/10/03	12.98	4.90	8.08	NLPH	367	566	—	<0.5	<0.5	<0.5	<0.5
MW9G	04/09/03	12.98	5.15	7.83	NLPH	3,730	3,990	—	<0.50	<0.5	<0.5	<0.5
MW9G	07/22/03	12.98	5.30	7.68	NLPH	1,070	968	—	<0.50	<0.5	<0.5	<0.5
MW9G	10/01/03	12.98	5.41	7.57	NLPH	1,300	—	1,570	<0.50	<0.5	<0.5	<0.5
MW9G	01/06/04	12.98	4.92	8.06	NLPH	568	—	918	<0.50	<0.5	<0.5	<0.5
MW9G	06/07/04	12.98	5.49	7.49	NLPH	457	—	324	<0.50	<0.5	<0.5	<0.5
MW9G	08/30/04	12.98	h	h	h	428h	—	369h	<0.50h	<0.5h	<0.5h	<0.5h
MW9G	12/13/04	12.98	5.01	7.97	NLPH	1,030	—	1,030	<0.50	<0.5	<0.5	<0.5
MW9G	03/14/05	12.98	4.98	8.00	NLPH	395	—	451	<0.50	<0.5	<0.5	<0.5
MW9G	06/08/05	12.98	5.54	7.44	NLPH	333	—	404	<0.50	<0.5	<0.5	<0.5
MW9G	09/01/05	12.98	6.35	6.63	NLPH	218	—	308	<0.50	<0.50	<0.50	0.63
MW9G	12/09/05 j	12.98	—	—	—	—	—	—	—	—	—	—
MW9G	12/30/05	12.98	4.83	8.15	NLPH	75.3	—	69.9	<0.50	<0.50	<0.50	<0.50
MW9G	03/07/06 j	12.98	—	—	—	—	—	—	—	—	—	—
MW9G	06/26/06 j	12.98	—	—	—	—	—	—	—	—	—	—
MW9G	09/25/06	12.98	8.41	4.57	NLPH	94.5	—	180	<0.50	<0.50	<0.50	<0.50
MW9G	**12/15/06**	**12.98**	**5.30**	**7.68**	**NLPH**	**50k**	**—**	**52**	**<0.50**	**<0.50**	**<0.50**	**<0.50**
MW9H	12/06/88	—	—	—	—	—	—	—	<0.5	<1.0	<2.0	<1.0
MW9H	10/13/89	—	—	—	—	—	—	—	<0.5	<0.5	<0.5	<3.0
MW9H	10/19/90	—	—	—	—	<50	—	—	<0.5	<0.5	<0.5	<0.5
MW9H	02/05/92	97.14 l	7.70	89.44	—	<50	—	—	<0.5	<0.5	<0.5	<0.5
MW9H	05/05/92	97.14 l	8.12	89.02	—	<50	—	—	<0.5	<0.5	<0.5	<0.5
MW9H	09/14/92	97.14 l	—	—	—	—	—	—	—	—	—	—
MW9H	11/16/92	97.14 l	—	—	—	—	—	—	—	—	—	—
MW9H	02/03/93	97.14 l	7.72	89.42	—	280	—	—	<0.5	<0.5	<0.5	<0.5
MW9H	05/18/93	97.14 l	8.12	89.02	—	<50	—	—	<0.5	<0.5	1.1	6.4
MW9H	08/26/93	97.14 l	8.14	89.00	—	<50	—	—	0.8	<0.5	<0.5	<0.5
MW9H	11/04/93	97.14 l	8.15	88.99	—	<50	—	—	<0.5	<0.5	<0.5	<0.5
MW9H	02/04/94	97.14 l	7.98	89.16	—	<50	—	—	<0.5	<0.5	<0.5	<0.5
MW9H	05/31/94	97.14 l	8.80	88.34	—	<50	—	—	0.92	1.1	<0.5	0.86
MW9H	10/26/94	8.58	8.12	0.46	—	<50	—	—	<0.5	<0.5	<0.5	<0.5
MW9H	05/15/95	8.58	7.88	0.70	—	<50	—	—	<0.5	<0.5	<0.5	<0.5
MW9H	11/02/95	8.58	8.40	0.18	NLPH	<50	<10	—	<0.5	<0.5	<0.5	<0.5
MW9H	04/26/96	8.58	8.05	0.53	NLPH	—	—	—	—	—	—	—
MW9H	08/22/96	8.58	8.17	0.41	NLPH	—	—	—	—	—	—	—

TABLE 1A
CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA
Former Exxon Service Station 7-0238
2200 East 12th Street
Oakland, California

Well ID	Sampling Date	TOC (feet)	DTW (feet)	GW Elev. (feet)	SUBJ	TPHg (µg/L)	MTBE 8021B (µg/L)	MTBE 8260B (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)
MW9H	02/24/97	8.58	—	—	—	—	—	—	—	—	—	—
MW9H	03/16/98	8.58	—	—	—	—	—	—	—	–	—	—
MW9H	04/21/98	8.58	—	—	—	—	—	—	—	—	—	—
MW9H	07/22/98	11.61	—	—	—	—	—	—	—	—	—	—
MW9H	12/22/98	11.61	7.81	3.80	NLPH	<50	<2.5	—	<0.5	<0.5	<0.5	<0.5
MW9H	02/26/99	11.61	7.61	4.00	NLPH	<50	<2.5	—	<0.5	<0.5	<0.5	<0.5
MW9H	05/18/99	11.61	8.00	3.61	NLPH	<50	3.98	—	<0.5	<0.5	<0.5	<0.5
MW9H	08/03/99	11.61	6.05	5.56	NLPH	<50	<2.5	—	<0.5	<0.5	<0.5	<0.5
MW9H	12/03/99	11.61	5.32	6.29	NLPH	<50	<2	—	<0.5	<0.5	<0.5	0.57 b
MW9H	02/29/00	11.61	7.10	4.51	NLPH	<50	<2	—	<0.5	<0.5	<0.5	<0.5
MW9H	05/18/00	11.61	7.84	3.77	NLPH	<50	9.7	—	<0.5	<0.5	<0.5	<0.5
MW9H	07/24/00	11.61	7.94	3.67	NLPH	<50	17	—	<0.5	<0.5	<0.5	<0.5
MW9H	10/09/00	11.61	8.09	3.52	NLPH	<50	13	—	<0.5	<0.5	<0.5	1.1
MW9H	01/10/01	11.61	7.89	3.72	NLPH	<50	11	—	<0.5	<0.5	<0.5	0.5
MW9H	04/10/01	11.61	8.71	2.90	NLPH	<50	44	—	<0.5	0.78	0.52	2.36
MW9H	07/12/01	11.61	–	–	NLPH	<50	28	—	<0.5	<0.5	<0.5	<0.5
MW9H	08/17/01 d	11.61	—	—	—	—		—	—	—	—	—
MW9H	10/11/01	11.61	8.15	3.46	NLPH	<50	30	—	<0.5	<0.5	<0.5	<0.5
MW9H	11/01/01	11.59	Well surveyed in compliance with AB2886 requirements.									
MW9H	01/11/02	11.59	7.48	4.11	NLPH	<50.0	20.5e	—	<0.50	<0.50	<0.50	<0.50
MW9H	04/12/02	11.59	7.68	3.91	NLPH	<50.0	32.8	—	<0.50	<0.50	<0.50	<0.50
MW9H	07/12/02	11.59	8.06	3.53	NLPH	<50.0	34.6	—	<0.5	<0.5	<0.5	<0.5
MW9H	10/11/02	11.59	7.83	3.76	NLPH	<50.0	33.1	28.7	<0.5	<0.5	<0.5	<0.5
MW9H	01/10/03	11.59	7.39	4.20	NLPH	<50.0	16.0	—	0.5	0.8	0.6	1.8
MW9H	04/09/03	11.59	7.69	3.90	NLPH	<50.0	26.8	—	<0.50	<0.5	<0.5	<0.5
MW9H	07/22/03	11.59	7.94	3.65	NLPH	55.3	34.7	—	<0.50	<0.5	<0.5	<0.5
MW9H	10/01/03	11.59	7.93	3.66	NLPH	<50.0	—	32.3	<0.50	<0.5	<0.5	0.9
MW9H	01/06/04	11.59	7.27	4.32	NLPH	<50.0	—	10	<0.50	<0.5	<0.5	<0.5
MW9H	06/07/04	11.59	7.99	3.60	NLPH	50.6	—	71.7	<0.50	<0.5	<0.5	<0.5
MW9H	08/30/04	11.59	h	h	h	64.2h	—	51.0h	<0.50h	<0.5h	<0.50h	<0.5h
MW9H	12/13/04	11.59	7.22	4.37	NLPH	<50.0	—	14.0	<0.50	<0.5	0.5	1.2
MW9H	03/14/05	11.59	6.96	4.63	NLPH	<50.0	—	27.4	<0.50	<0.5	<0.5	<0.5
MW9H	06/08/05	11.59	7.53	4.06	NLPH	52.6	—	68.8	<0.50	<0.5	<0.5	<0.5
MW9H	09/01/05	11.59	7.82	3.77	NLPH	140	—	71.6	<0.50	<0.50	<0.50	<0.50
MW9H	12/09/05 j	—	—	—	—	—	—	—	—	—	—	—
MW9H	12/30/05	11.59	7.27	4.32	NLPH	<50.0	—	13.7	<0.50	<0.50	<0.50	<0.50
MW9H	03/07/06 j	11.59	—	—	—	—	—	—	—	—	—	—
MW9H	06/26/06 j	11.59	—	—	—	—	—	—	—	—	—	—
MW9H	09/25/06	11.59	7.96	3.63	NLPH	59.5	—	71.0	<0.50	<0.50	<0.50	<0.50
MW9H	**12/15/06**	**11.59**	**7.42**	**4.17**	**NLPH**	**57**	**—**	**21**	**<0.50**	**<0.50**	**<0.50**	**<0.50**
MW9I	11/15/90	—	—	—	—	55	—	—	4.0	1.1	1.2	2.2

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Well ID	Sampling Date	TOC (feet)	DTW (feet)	GW Elev. (feet)	SUBJ	TPHg (µg/L)	MTBE 8021B (µg/L)	MTBE 8260B (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)
MW9I	02/05/92	98.66 I	5.56	93.10	—	<50	—	—	<0.5	<0.5	<0.5	<0.5
MW9I	05/05/92	98.66 I	5.60	93.06	—	<50	—	—	0.9	<0.5	<0.5	0.7
MW9I	09/14/92	98.66 I	6.12	92.54	—	<50	—	—	<0.5	<0.5	<0.5	<0.5
MW9I	11/16/92	98.66 I	5.82	92.84	—	<50	—	—	<0.5	<0.5	<0.5	<0.5
MW9I	02/03/93	98.66 I	4.92	93.74	—	240	—	—	46	1.1	2.3	2.1
MW9I	05/18/93	98.66 I	5.60	93.06	—	79	—	—	<0.5	<0.5	<0.5	<0.5
MW9I	08/26/93	98.66 I	5.91	92.75	—	<50	—	—	<0.5	<0.5	<0.5	<0.5
MW9I	11/04/93	98.66 I	6.03	92.63	—	<50	—	—	<0.5	<0.5	<0.5	<0.5
MW9I	02/04/94	98.66 I	5.37	93.29	—	<50	—	—	<0.5	<0.5	<0.5	<0.5
MW9I	05/31/94	98.66 I	5.46	93.20	—	240	—	—	0.66	0.63	<0.5	1.4
MW9I	10/26/94	10.11	5.88	4.23	—	150	—	—	<0.5	<0.5	<0.5	<0.5
MW9I	05/15/95	10.11	4.94	5.17	—	56	—	—	<0.5	0.82	<0.5	<0.5
MW9I	11/02/95	10.11	6.04	4.07	NLPH	<50	<10	—	<0.5	<0.5	<0.5	<0.5
MW9I	04/26/96	10.11	5.27	4.84	NLPH	<50	99	—	<0.5	<0.5	<0.5	<0.5
MW9I	08/22/96	10.11	5.66	4.45	NLPH	<50	170	—	<0.5	<0.5	<0.5	<0.5
MW9I	02/24/97	10.11	5.24	4.87	NLPH	120	9,100	—	<0.5	<0.5	<0.5	<0.5
MW9I	03/16/98	10.11	4.91	5.20	NLPH	<200	59,000	—	13	<2.0	<2.0	<2.0
MW9I	04/21/98	10.11	5.08	5.03	NLPH	<500	59,000	—	<5.0	<5.0	<5.0	<5.0
MW9I	07/22/98	13.14	5.44	7.70	NLPH	<500	62,000	—	<5.0	<5.0	<5.0	<5.0
MW9I	12/22/98	13.14	5.32	7.82	NLPH	200	51,000	—	1.7	<0.5	<0.5	<0.5
MW9I	02/26/99	13.14	4.71	8.43	NLPH	<500	9,700	—	<5.0	<5.0	<5.0	<5.0
MW9I	05/18/99	13.14	5.30	7.84	NLPH	<1,000	3,730	—	<10	<10	<10	<10
MW9I	08/03/99	13.14	5.98	7.16	NLPH	<50	21,900	—	<0.5	0.650	<0.5	<0.5
MW9I	12/03/99	13.14	5.31	7.83	NLPH	<250	2,000	—	3.9	2.9	<2.5	14
MW9I	02/29/00	13.14	4.20	8.94	NLPH	50	16,000	—	0.74	<0.5	<0.5	<0.5
MW9I	05/18/00	13.14	5.12	8.02	NLPH	<50	2,900	—	<0.5	<0.5	<0.5	<0.5
MW9I	07/24/00	13.14	5.41	7.73	NLPH	<250	43,000	—	<2.5	<2.5	<2.5	<2.5
MW9I	10/09/00	13.14	5.41	7.73	NLPH	<2,500	54,000	—	1.6	<0.5	<0.5	<0.5
MW9I	01/10/01	13.14	5.24	7.90	NLPH	<250	36,000	—	<2.5	<2.5	<2.5	<2.5
MW9I	04/10/01	13.14	4.84	8.30	NLPH	<50	4,800	—	<0.5	<0.5	<0.5	<0.5
MW9I	07/12/01	13.14	—	—	NLPH	<50	8,400	—	<0.5	<0.5	<0.5	<0.5
MW9I	08/17/01	13.14	6.49	6.65	—	—	—	—	—	—	—	—
MW9I	10/11/01	13.14	5.64	7.50	NLPH	<250	38,000	—	<2.5	<2.5	<2.5	<2.5
MW9I	11/01/01	13.13	Well surveyed in compliance with AB2886 requirements.									
MW9I	01/11/02	13.13	4.80	8.33	NLPH	1,330e	5,400e	—	4.80e	<0.50	<0.50	<0.50
MW9I	04/12/02	13.13	5.22	7.91	NLPH	1,460	1,480	—	<0.50	<0.50	<0.50	<0.50
MW9I	07/12/02	13.13	5.50	7.63	NLPH	4,460	6,490	—	<0.5	<0.5	<0.5	<0.5
MW9I	10/11/02	13.13	5.35	7.78	NLPH	31,300	37,700	51,000	<5.0	<5.0	<5.0	<5.0
MW9I	01/10/03	13.13	4.75	8.38	NLPH	4,820	6,180	—	9.4	0.7	1.1	1.3
MW9I	04/09/03	13.13	5.15	7.98	NLPH	2,130	1,510	—	22.3	1.9	1.5	1.5
MW9I	07/22/03	13.13	5.50	7.63	NLPH	2,330	2,540	—	1.60	<0.5	<0.5	<0.5
MW9I	10/01/03	13.13	5.65	7.48	NLPH	6,080	—	4,610	1.00	<0.5	<0.5	<0.5

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Well ID	Sampling Date	TOC (feet)	DTW (feet)	GW Elev. (feet)	SUBJ	TPHg (µg/L)	MTBE 8021B (µg/L)	MTBE 8260B (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)
MW9I	01/06/04	13.13	4.50	8.63	NLPH	175	—	61.3	0.90	<0.5	0.5	<0.5
MW9I	06/07/04	13.13	6.87	6.26	NLPH	4,620	—	3,410	<0.50	<0.5	<0.5	<0.5
MW9I	08/30/04	13.13	h	h	h	817h	—	847h	<0.50h	<0.5h	<0.5h	<0.5h
MW9I	12/13/04	13.13	4.47	8.66	NLPH	<50.0	—	14.4	<0.50	<0.5	<0.5	<0.5
MW9I	03/14/05	13.13	5.05	8.08	NLPH	96.7	—	44.9	<0.50	<0.5	<0.5	<0.5
MW9I	06/08/05	13.13	6.47	6.66	NLPH	1,230	—	321	<0.50	<0.5	<0.5	0.8
MW9I	09/01/05	13.13	5.60	7.53	NLPH	170	—	62.3	1.22	0.77	<0.50	<0.50
MW9I	12/09/05	13.13	6.82	6.31	NLPH	78.3	—	81.0	<0.50	0.58	<0.50	<0.50
MW9I	12/30/05	13.13	4.23	8.90	NLPH	—	—	—	—	—	—	—
MW9I	03/07/06	13.13	5.08	8.05	NLPH	<50	—	0.96	<0.50	<0.50	<0.50	<0.50
MW9I	06/26/06	13.13	5.30	7.83	NLPH	<50	—	3.7	<0.50	<0.50	<0.50	<0.50
MW9I	09/25/06	13.13	6.17	6.96	NLPH	50.9	—	24.0	<0.50	<0.50	<0.50	<0.50
MW9I	**12/15/06**	**13.13**	**5.45**	**7.68**	**NLPH**	**<50**	**—**	**0.59**	**<0.50**	**<0.50**	**<0.50**	**<0.50**

Notes:

SUBJ	=	Results of subjective evaluation.
NLPH	=	No liquid-phase hydrocarbons present in well.
TOC	=	Top of well casing elevation; datum is mean sea level.
DTW	=	Depth to water.
GW Elev.	=	Groundwater elevation; datum is mean sea level
TPHg	=	Total petroleum hydrocarbons as gasoline analyzed using EPA Method 8015B.
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.
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.
EDB	=	1,2-Dibromoethane analyzed using EPA Method 8260B.
1,2-DCA	=	1,2-Dichloroethane analyzed using EPA Method 8260B.
DIPE	=	Di-isopropyl ether analyzed using EPA Method 8260B.
Ethanol	=	Ethanol analyzed using EPA Method 8260B.
µg/L	=	Micrograms per liter.
<	=	Less than the indicated reporting limit shown by the laboratory.
—	=	Not measured/Not sampled/Not analyzed.
a	=	Miscalculation in field. Field technician may have inadvertently monitored and sampled the wrong well. Resampled 05/27/99.
b	=	Analyte detected in the trip blank and/or bailer blank.
c	=	Due to measurement error during initial sampling event, DTW was re-measured on 08/17/01. Samples were not taken.
d	=	Well inaccessible.
e	=	Samples collected after fourth quarter 2001 analyzed by TestAmerica, Incorporated. Reported concentrations may be affected by differing laboratory quantitation methods.
f	=	Sample erroneously labeled MA9B on Chain-of-Custody form and laboratory report.
g	=	Insufficient sample volume to perform analyses.
h	=	Groundwater elevation data invalidated; analytical results suspect.
i	=	Well sampled using no-purge method.
j	=	Well not gauged and/or sampled due to encroachment permit restrictions.
k	=	Hydrocarbon result partly due to individual peak(s) in quantitation range.
l	=	Elevation relative to temporary benchmark with an arbitrary elevation of 100.0 feet.

TABLE 1B
ADDITIONAL CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA
Former Exxon Service Station 7-0238
2200 East 12th Street
Oakland, California

Well ID	Sampling Date	ETBE (µg/L)	TAME (µg/L)	TBA (µg/L)	EDB (µg/L)	1,2-DCA (µg/L)	DIPE (µg/L)	Ethanol (µg/L)
MW9A	06/13/88 - 07/12/02	Not analyzed for these analytes.						
MW9A	10/11/02	<0.50	<0.50	<10.0	<0.50	<0.50	<0.50	---
MW9A	01/10/03	---	---	---	---	---	---	---
MW9A	04/09/03	---	---	---	---	---	---	---
MW9A	07/22/03	---	---	---	---	---	---	---
MW9A	10/01/03	<0.50	2.80	1,100	<0.50	<0.50	<0.50	---
MW9A	01/06/04	<0.50	4.90	11,900	<0.50	<0.50	<0.50	---
MW9A	06/07/04	---	---	---	---	---	---	<2,500
MW9A	08/30/04 d	---	---	---	---	---	---	---
MW9A	12/13/04	---	---	---	---	---	---	---
MW9A	03/14/05	<0.50	1.00	14,400	<0.50	<0.50	<0.50	<50.0
MW9A	06/08/05	<0.50	<0.50	22,400	<0.50	<0.50	<0.50	<100
MW9A	09/01/05	---	---	---	---	---	---	---
MW9A	12/09/05	---	---	---	---	---	---	---
MW9A	12/30/05	---	---	---	---	---	---	---
MW9A	03/07/06	<5.0	<5.0	5,600	<5.0	<5.0	<5.0	<1,000
MW9A	06/26/06	---	---	---	---	---	---	<1,000
MW9A	09/25/06	<0.500	<0.500	<10.0	<0.500	<0.500	<0.500	<50.0
MW9A	**12/15/06**	**<5.0**	**<5.0**	**1,200**	**<5.0**	**<5.0**	**<5.0**	**<1,000**
MW9B	06/13/88 - 07/12/02	Not analyzed for these analytes.						
MW9B	10/11/02 f	<0.50	<0.50	<10.0	<0.50	<0.50	<0.50	---
MW9B	01/10/03	---	---	---	---	---	---	---
MW9B	04/09/03	---	---	---	---	---	---	---
MW9B	07/22/03	---	---	---	---	---	---	---
MW9B	10/01/03	<0.50	9.70	2,430	<0.50	<0.50	<0.50	---
MW9B	01/06/04	0.80	9.00	11,500	<0.50	<0.50	<0.50	---
MW9B	06/07/04	---	---	---	---	---	---	<50.0
MW9B	08/30/04	---	---	---	---	---	---	<50.0j
MW9B	12/13/04	---	---	---	---	---	---	---
MW9B	03/14/05	<0.50	<0.50	4,800	<0.50	<0.50	<0.50	<50.0
MW9B	06/08/05	<0.50	<0.50	2,320	<0.50	<0.50	<0.50	<100
MW9B	09/01/05	---	---	---	---	---	---	---
MW9B	12/09/05	---	---	---	---	---	---	---
MW9B	12/30/05	---	---	---	---	---	---	---
MW9B	03/07/06	<0.50	<0.50	1,200	<0.50	<0.50	<0.50	---
MW9B	06/26/06	---	---	---	---	---	---	---
MW9B	09/25/06	<0.500	<0.500	70.1	<0.500	<0.500	<0.500	---
MW9B	**12/15/06**	**<0.50**	**<0.50**	**56**	**<0.50**	**<0.50**	**<0.50**	**---**

TABLE 1B
ADDITIONAL CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA
Former Exxon Service Station 7-0238
2200 East 12th Street
Oakland, California

Well ID	Sampling Date	ETBE (µg/L)	TAME (µg/L)	TBA (µg/L)	EDB (µg/L)	1,2-DCA (µg/L)	DIPE (µg/L)	Ethanol (µg/L)
MW9C	06/13/88 - 07/12/02 Not analyzed for these analytes.							
MW9C	10/11/02	<0.50	34.3	<10.0	<0.50	<0.50	<0.50	---
MW9C	01/10/03	---	---	---	---	---	---	---
MW9C	04/09/03	---	---	---	---	---	---	---
MW9C	07/22/03	---	---	---	---	---	---	---
MW9C	10/01/03	<0.50	2.70	38,400	<0.50	<0.50	<0.50	---
MW9C	01/06/04	0.80	2.50	90,700	<0.50	<0.50	<0.50	---
MW9C	06/07/04	---	---	---	---	---	---	<50.0
MW9C	08/30/04	---	---	---	---	---	---	<50.0j
MW9C	12/13/04	---	---	---	---	---	---	---
MW9C	03/14/05	<0.50	<0.50	674	<0.50	<0.50	<0.50	<50.0
MW9C	06/08/05	<0.50	<0.50	817	<0.50	<0.50	<0.50	<100
MW9C	09/01/05	---	---	---	---	---	---	---
MW9C	12/09/05	---	---	---	---	---	---	---
MW9C	12/30/05	---	---	---	---	---	---	---
MW9C	03/07/06	<2.5	<2.5	160	<2.5	<2.5	<2.5	---
MW9C	06/26/06	---	---	---	---	---	---	---
MW9C	09/25/06	<0.500	<0.500	<10.0	<0.500	<0.500	<0.500	---
MW9C	**12/15/06**	**<2.5**	**<2.5**	**<60**	**<2.5**	**<2.5**	**<2.5**	**---**
MW9D	10/24/88 - 07/12/02 Not analyzed for these analytes.							
MW9D	10/11/02 g	---	---	---	---	---	---	---
MW9D	01/10/03	---	---	---	---	---	---	---
MW9D	04/09/03	---	---	---	---	---	---	---
MW9D	07/22/03	---	---	---	---	---	---	---
MW9D	10/01/03	<0.50	<0.50	235	<0.50	<0.50	<0.50	---
MW9D	01/06/04	<0.50	<0.50	51.8	<0.50	<0.50	<0.50	---
MW9D	06/07/04	---	---	---	---	---	---	<50.0
MW9D	08/30/04 h	---	---	---	---	---	---	---
MW9D	12/13/04	---	---	---	---	---	---	---
MW9D	03/14/05	<0.50	<0.50	<10.0	<0.50	<0.50	<0.50	<50.0
MW9D	06/08/05	<0.50	<0.50	57.8	<0.50	<0.50	<0.50	<100
MW9D	09/01/05	---	---	---	---	---	---	---
MW9D	12/09/05	---	---	---	---	---	---	---
MW9D	12/30/05 d	---	---	---	---	---	---	---
MW9D	03/07/06	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	---
MW9D	06/26/06	---	---	---	---	---	---	---
MW9D	09/25/06	<0.500	<0.500	<10.0	<0.500	<0.500	<0.500	---
MW9D	**12/15/06**	**<0.50**	**<0.50**	**<12**	**<0.50**	**<0.50**	**<0.50**	**---**
MW9E	10/24/88 - 10/19/90 Not analyzed for these analytes.							

TABLE 1B
ADDITIONAL CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA
Former Exxon Service Station 7-0238
2200 East 12th Street
Oakland, California

Well ID	Sampling Date	ETBE (µg/L)	TAME (µg/L)	TBA (µg/L)	EDB (µg/L)	1,2-DCA (µg/L)	DIPE (µg/L)	Ethanol (µg/L)
MW9F	12/06/88 - 07/12/02	Not analyzed for these analytes.						
MW9F	10/11/02	<0.50	<0.50	<10.0	<0.50	<0.50	<0.50	---
MW9F	01/10/03	---	---	---	---	---	---	---
MW9F	04/09/03	---	---	---	---	---	---	---
MW9F	07/22/03	---	---	---	---	---	---	---
MW9F	10/01/03	<0.50	<0.50	<10.0	<0.50	<0.50	<0.50	---
MW9F	01/06/04	<0.50	<0.50	13.7	<0.50	<0.50	<0.50	---
MW9F	06/07/04	---	---	---	---	---	---	<50.0
MW9F	08/30/04	---	---	---	---	---	---	<50.0j
MW9F	12/13/04	---	---	---	---	---	---	---
MW9F	03/14/05	<0.50	<0.50	<10.0	<0.50	<0.50	<0.50	<50.0
MW9F	06/08/05	<0.50	<0.50	<10.0	<0.50	<0.50	<0.50	<100
MW9F	09/01/05	---	---	---	---	---	---	---
MW9F	12/09/05 j	---	---	---	---	---	---	---
MW9F	12/30/05	---	---	---	---	---	---	---
MW9F	03/07/06 j	---	---	---	---	---	---	---
MW9F	06/26/06 j	---	---	---	---	---	---	---
MW9F	09/25/06	<0.500	<0.500	<10.0	<0.500	<0.500	<0.500	---
MW9F	**12/15/06**	**<0.50**	**<0.50**	**<20**	**<0.50**	**<0.50**	**<0.50**	**---**
MW9G	12/06/88 - 07/12/02	Not analyzed for these analytes.						
MW9G	10/11/02	<0.50	<0.50	<10.0	<0.50	<0.50	<0.50	---
MW9G	01/10/03	---	---	---	---	---	---	---
MW9G	04/09/03	---	---	---	---	---	---	---
MW9G	07/22/03	---	---	---	---	---	---	---
MW9G	10/01/03	<0.50	<0.50	17.1	<0.50	<0.50	<0.50	---
MW9G	01/06/04	<0.50	<0.50	367	<0.50	<0.50	<0.50	---
MW9G	06/07/04	---	---	---	---	---	---	<50.0
MW9G	08/30/04	---	---	---	---	---	---	<50.0j
MW9G	12/13/04	---	---	---	---	---	---	---
MW9G	03/14/05	<0.50	<0.50	569	<0.50	<0.50	<0.50	<50.0
MW9G	06/08/05	<0.50	<0.50	150	<0.50	<0.50	<0.50	<100
MW9G	09/01/05	---	---	---	---	---	---	---
MW9G	12/09/05 j	---	---	---	---	---	---	---
MW9G	12/30/05	---	---	---	---	---	---	---
MW9G	03/07/06 j	---	---	---	---	---	---	---
MW9G	06/26/06 j	---	---	---	---	---	---	---
MW9G	09/25/06	<0.500	<0.500	<10.0	<0.500	<0.500	<0.500	---
MW9G	**12/15/06**	**<0.50**	**<0.50**	**<12**	**<0.50**	**<0.50**	**<0.50**	**---**
MW9H	12/06/88 - 10/19/90	Not analyzed for these analytes.						
MW9H	11/02/95	---	---	---	<50	<10	<0.5	<0.5

TABLE 1B
ADDITIONAL CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA
Former Exxon Service Station 7-0238
2200 East 12th Street
Oakland, California

Well ID	Sampling Date	ETBE (µg/L)	TAME (µg/L)	TBA (µg/L)	EDB (µg/L)	1,2-DCA (µg/L)	DIPE (µg/L)	Ethanol (µg/L)
MW9H	04/26/96 - 07/12/02	Not analyzed for these analytes.						
MW9H	10/11/02	<0.50	<0.50	<10.0	<0.50	<0.50	<0.50	---
MW9H	01/10/03	---	---	---	---	---	---	---
MW9H	04/09/03	---	---	---	---	---	---	---
MW9H	07/22/03	---	---	---	---	---	---	---
MW9H	10/01/03	<0.50	<0.50	<10.0	<0.50	<0.50	<0.50	---
MW9H	01/06/04	<0.50	<0.50	<10.0	<0.50	<0.50	<0.50	---
MW9H	06/07/04	---	---	---	---	---	---	<50.0
MW9H	08/30/04	---	---	---	---	---	---	<50.0j
MW9H	12/13/04	---	---	---	---	---	---	---
MW9H	03/14/05	<0.50	<0.50	<10.0	<0.50	<0.50	<0.50	<50.0
MW9H	06/08/05	<0.50	<0.50	<10.0	<0.50	<0.50	<0.50	<100
MW9H	09/01/05	---	---	---	---	---	---	---
MW9H	12/09/05 j	---	---	---	---	---	---	---
MW9H	12/30/05	---	---	---	---	---	---	---
MW9H	03/07/06 j	---	---	---	---	---	---	---
MW9H	06/26/06 j	---	---	---	---	---	---	---
MW9H	09/25/06	<0.500	<0.500	<10.0	<0.500	<0.500	<0.500	---
MW9H	**12/15/06**	**<0.50**	**<0.50**	**<12**	**<0.50**	**<0.50**	**<0.50**	**---**
MW9I	11/15/90 - 07/12/02	Not analyzed for these analytes.						
MW9I	10/11/02	<0.50	24.1	<10.0	<0.50	<0.50	<0.50	---
MW9I	01/10/03	---	---	---	---	---	---	---
MW9I	04/09/03	---	---	---	---	---	---	---
MW9I	07/22/03	---	---	---	---	---	---	---
MW9I	10/01/03	<0.50	1.50	30,300	<0.50	<0.50	<0.50	---
MW9I	01/06/04	<0.50	<0.50	377	<0.50	<0.50	<0.50	---
MW9I	06/07/04	---	---	---	---	---	---	<50.0
MW9I	08/30/04	---	---	---	---	---	---	<50.0j
MW9I	12/13/04	---	---	---	---	---	---	---
MW9I	03/14/05	<0.50	<0.50	1,640	<0.50	<0.50	<0.50	<50.0
MW9I	06/08/05	<0.50	<0.50	47,000	<0.50	<0.50	<0.50	<100
MW9I	09/01/05	---	---	---	---	---	---	---
MW9I	12/09/05	---	---	---	---	---	---	---
MW9I	12/30/05	---	---	---	---	---	---	---
MW9I	03/07/06	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	<100
MW9I	06/26/06	---	---	---	---	---	---	<100
MW9I	09/25/06	<0.500	<0.500	10,300	<0.500	<0.500	<0.500	<50.0
MW9I	**12/15/06**	**<0.50**	**<0.50**	**730**	**<0.50**	**<0.50**	**<0.50**	**<100**

TABLE 1B
ADDITIONAL CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA
Former Exxon Service Station 7-0238
2200 East 12th Street
Oakland, California

Notes:

SUBJ	=	Results of subjective evaluation.
NLPH	=	No liquid-phase hydrocarbons present in well.
TOC	=	Top of well casing elevation; datum is mean sea level.
DTW	=	Depth to water.
GW Elev.	=	Groundwater elevation; datum is mean sea level
TPHg	=	Total petroleum hydrocarbons as gasoline analyzed using EPA Method 8015B.
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.
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.
EDB	=	1,2-Dibromoethane analyzed using EPA Method 8260B.
1,2-DCA	=	1,2-Dichloroethane analyzed using EPA Method 8260B.
DIPE	=	Di-isopropyl ether analyzed using EPA Method 8260B.
Ethanol	=	Ethanol analyzed using EPA Method 8260B.
µg/L	=	Micrograms per liter.
<	=	Less than the indicated reporting limit shown by the laboratory.
---	=	Not measured/Not sampled/Not analyzed.
a	=	Miscalculation in field. Field technician may have inadvertently monitored and sampled the wrong well. Resampled 05/27/99.
b	=	Analyte detected in the trip blank and/or bailer blank.
c	=	Due to measurement error during initial sampling event, DTW was re-measured on 08/17/01. Samples were not taken.
d	=	Well inaccessible.
e	=	Samples collected after fourth quarter 2001 analyzed by TestAmerica, Incorporated. Reported concentrations may be affected by differing laboratory quantitation methods.
f	=	Sample erroneously labeled MA9B on Chain-of-Custody form and laboratory report.
g	=	Insufficient sample volume to perform analyses.
h	=	Groundwater elevation data invalidated; analytical results suspect.
i	=	Well sampled using no-purge method.
j	=	Well not gauged and/or sampled due to encroachment permit restrictions.
k	=	Hydrocarbon result partly due to individual peak(s) in quantitation range.
l	=	Elevation relative to temporary benchmark with an arbitrary elevation of 100.0 feet.

TABLE 2A
CUMULATIVE ANALYTICAL RESULTS OF SOIL SAMPLES
Former Exxon Service Station 7-0238
2200 East 12th Street
Oakland, California

Sample ID	Sample Date	Depth (fbgs)	TPHd (mg/kg)	TPHg (mg/kg)	MTBE (mg/kg)	B (mg/kg)	T (mg/kg)	E (mg/kg)	X (mg/kg)
Soil Boring Samples									
MW-9D	10/05/88	6.0	---	<10	---	<0.05	<0.1	<0.2	<0.1
MW-9D	10/05/88	10.5	---	<10	---	<0.05	<0.1	<0.2	<0.1
MW-9E	10/05/88	5.5	---	1,900	---	<0.05	<0.1	18	<0.1
MW-9E	10/05/88	9.0	---	<10	---	<0.05	<0.1	<0.2	<0.1
MW-9G	11/22/88	4.0	---	<10	---	<0.05	0.2	<0.2	<0.1
SB-1	11/22/88	4.8	---	<10	---	0.30	0.2	<0.2	<0.1
SB-9-1	10/06/88	5.0	---	<10	---	<0.05	<0.1	<0.2	<0.1
SB-9-1	10/06/88	9.0	---	<10	---	<0.05	<0.1	<0.2	<0.1
SB-9-1	10/06/88	12.0	---	<10	---	<0.05	<0.1	<0.2	<0.1
SB-9-2	10/06/88	5.0	---	<10	---	<0.05	<0.1	<0.2	<0.1
SB-9-2	10/06/88	9.0	---	<10	---	<0.05	<0.1	<0.2	<0.1
SB-9-2	10/06/88	10.5	---	<10	---	<0.05	<0.1	<0.2	<0.1
SB-9-2	10/06/88	13.0	---	<10	---	<0.05	<0.1	<0.2	<0.1
SB-4	01/12/89	4.0	---	160	---	1.0	0.9	2.3	5.8
SB-4	01/12/89	9.0	---	<10	---	<0.05	<0.1	<0.2	<0.1
SB-5	01/12/89	4.0	---	<10	---	0.33	<0.1	<0.2	<0.1
SB-5	01/12/89	9.0	---	<10	---	<0.05	<0.1	<0.2	<0.1
SB-6	01/12/89	5.0	---	<10	---	<0.05	<0.1	<0.2	<0.1
SB-6	01/12/89	5.5	---	<10	---	<0.05	<0.1	<0.2	<0.1
SB-7	01/12/89	4.0	---	<10	---	<0.05	<0.1	<0.2	<0.1
SB-7	01/12/89	8.5	---	<10	---	<0.05	<0.1	<0.2	<0.1
SB-8	01/12/89	5.5	---	<10	---	0.43	<0.1	<0.2	<0.1
SB-8	01/12/89	9.0	---	<10	---	<0.05	<0.1	<0.2	<0.1
SB-9	01/12/89	4.0	---	39	---	<0.05	<0.1	0.4	1.1
SB-9	01/12/89	9.0	---	<10	---	<0.05	<0.1	<0.2	<0.1
SB-10-1	03/02/89	5.0	---	<10	---	<0.05	<0.1	<0.2	<0.1
SB-10-2	03/02/89	10.0	---	<10	---	<0.05	<0.1	<0.2	<0.1

TABLE 2A
CUMULATIVE ANALYTICAL RESULTS OF SOIL SAMPLES
Former Exxon Service Station 7-0238
2200 East 12th Street
Oakland, California

Sample ID	Sample Date	Depth (fbgs)	TPHd (mg/kg)	TPHg (mg/kg)	MTBE (mg/kg)	B (mg/kg)	T (mg/kg)	E (mg/kg)	X (mg/kg)
SB-11-1	03/02/89	5.0	---	<10	---	<0.05	0.1	<0.2	<0.1
SB-11-2	03/02/89	10.0	---	<10	---	<0.05	<0.1	<0.2	<0.1
SB-12	09/19/89	3.5	---	11	---	0.09	0.2	0.07	0.09
SB-13	09/19/89	4.0	---	1.7	---	<0.05	0.1	<0.2	<0.1
SB-14	09/19/89	4.5	---	3.5	---	<0.05	<0.1	<0.2	<0.1
SB-15	09/19/89	3.5	---	6.3	---	0.07	<0.1	<0.2	<0.1
SB-16	09/19/89	4.5	---	9.0	---	0.21	<0.1	0.08	<0.1
SB-17	09/19/89	5.0	---	42	---	0.093	0.043	0.139	<0.01
SB-18	09/19/89	5.0	---	5	---	<0.01	0.245	0.021	0.015
SB-19	09/19/89	5.0	---	6	---	<0.01	0.078	0.022	<0.01
SB-20	09/19/89	5.0	---	7	---	0.035	0.038	0.017	<0.01
S-20-DPE1	06/05/03	20	---	<5	2.03/2.36c	0.0011	<0.001	<0.001	<0.001
S-20-DPE2	06/04/03	20	---	<5	0.165/0.102c	<0.001	<0.001	<0.001	<0.001
S-20-DPE3	06/04/03	20	---	<5	0.089/0.0317c	<0.001	<0.001	<0.001	0.0033
S-20-DPE4	06/05/03	20	---	<5	0.047/0.0356c	<0.001	<0.001	<0.001	<0.001
Excavation Boundaries Samples									
S1	Oct-90	5	1.4	9.5	---	0.66	0.038	0.77	0.076
S2	Oct-90	5	6.1	40	---	0.32	0.15	1.5	0.17
S3	Oct-90	6	<1.0	2.3	---	0.49	0.028	0.15	0.16
S4	Oct-90	5	1.3	16	---	1.2	0.056	1.7	0.052
S5	Oct-90	5	22	290	---	2.8	1.5	12	<0.0050
S6	Oct-90	6	10	7.7	---	0.28	0.028	0.52	0.21
S7	Oct-90	7	1.4	17	---	0.30	0.070	0.68	0.36
S8	Oct-90	7	2.2	52	---	0.068	0.19	0.20	0.27
Tank Hole Samples									
TP1	09/04/91	11.0	---	190	---	0.22	0.26	0.32	0.65
TP2	09/04/91	11.0	340	1,100	---	0.88	1.6	14	7.7
TP3	09/04/91	11.0	---	<0.2	---	<0.001	<0.001	<0.001	<0.001

TABLE 2A
CUMULATIVE ANALYTICAL RESULTS OF SOIL SAMPLES
Former Exxon Service Station 7-0238
2200 East 12th Street
Oakland, California

Sample ID	Sample Date	Depth (fbgs)	TPHd (mg/kg)	TPHg (mg/kg)	MTBE (mg/kg)	B (mg/kg)	T (mg/kg)	E (mg/kg)	X (mg/kg)
TP4	09/04/91	11.0	---	<0.2	---	<0.001	<0.001	<0.001	<0.001
TP5	09/04/91	11.0	---	0.78	---	0.0014	<0.001	0.0092	0.025
TP6	09/04/91	11.0	---	0.47	---	0.0033	<0.001	0.0012	0.0017
Tank Hole Overexcavation Confirmation Samples									
TC1	09/05/91	12.0	---	2.5	---	0.005	0.012	0.078	0.12
TC2	09/05/91	5.0	---	2.0	---	0.078	0.022	0.009	0.013
TC2	09/05/91	11.0	---	<0.2	---	<0.001	<0.001	<0.001	<0.001
TC3	09/05/91	5.0	---	1.6	---	0.026	0.017	0.0043	0.011
TC3	09/05/91	12.0	---	<0.2	---	<0.001	<0.001	<0.001	<0.001
TC4	09/05/91	11.0	---	<0.2	---	<0.001	<0.001	<0.001	0.0018
Product Line Trench Samples									
P1	09/04/91	3.0	---	27	---	0.44	0.13	0.89	0.29
P2	09/04/91	6.0	---	1,200	---	10	55	16	88
P3	09/04/91	3.0	---	190	---	0.41	2.2	0.93	5.4
P4	09/04/91	4.0	---	1.9	---	0.007	0.013	0.024	0.034
P5	09/04/91	3.0	---	35	---	0.41	0.26	0.34	1.4
P6	09/04/91	3.0	---	240	---	0.18	0.67	1.7	2.7
Product Line Trench Overexcavation Confirmation Samples									
P2	09/11/91	13.0	---	0.25	---	0.014	0.0077	0.007	0.023
P3	09/11/91	12.0	---	1.5	---	0.68	<0.005	<0.005	0.009
P6	09/11/91	11.0	---	1.3	---	0.005	<0.005	0.081	0.37
Waste-Oil Tank Removal Sample									
WO-10'	09/17/97	10.0	440	11	---	0.024	0.011	0.064	0.11
Stockpile									
SP1	Sep. 1991	---	---	3.0	---	<0.001	<0.001	0.0053	0.0059
SP2	Sep. 1991	---	---	<0.2	---	<0.001	<0.001	<0.001	<0.001
SP3	Sep. 1991	---	---	0.36	---	<0.001	0.001	<0.001	0.0014
SP4	Sep. 1991	---	---	0.82	---	<0.001	0.0058	0.0017	0.011
SP5	Sep. 1991	---	---	72	---	<0.01	0.67	0.60	0.71
SP6	Sep. 1991	---	---	1.1	---	<0.001	0.0096	0.0018	0.0049
SP7	Sep. 1991	---	---	32	---	<0.025	0.18	0.1	0.34
SP8	Sep. 1991	---	---	2.9	---	0.0023	0.0012	0.01	0.06
SP9	Sep. 1991	---	---	25	---	<0.02	<0.02	0.036	0.27
SP10	Sep. 1991	---	---	320	---	<0.2	<0.2	0.28	1.5
SP11	Sep. 1991	---	---	16	---	<0.01	0.065	0.052	0.25

TABLE 2A
CUMULATIVE ANALYTICAL RESULTS OF SOIL SAMPLES
Former Exxon Service Station 7-0238
2200 East 12th Street
Oakland, California

Sample ID	Sample Date	Depth (fbgs)	TPHd (mg/kg)	TPHg (mg/kg)	MTBE (mg/kg)	B (mg/kg)	T (mg/kg)	E (mg/kg)	X (mg/kg)
SP12	Sep. 1991	---	---	13	---	0.005	0.01	0.062	0.18
SP13	Sep. 1991	---	---	35	---	0.036	0.077	0.13	0.46
WOSP-(A-D) a	09/19/97	---	40	<1.0	---	<0.0050	<0.0050	<0.0050	<0.0050
SP1-1-(1-4)	06/05/03	---	---	<5	0.261	0.0076/<0.002c	0.0041/<0.002c	0.1303/0.0048c	0.079/0.0066c

Notes:

TPHd	=	Total petroleum hydrocarbons as diesel analyzed using EPA Method 8015B.
TPHg	=	Total petroleum hydrocarbons as gasoline analyzed using EPA Method 8015/8015B.
MTBE	=	Methyl tertiary butyl ether analyzed using EPA Method 8021B.
BTEX	=	Benzene, toluene, ethylbenzene, and total xylenes analyzed using EPA Method 8020.
Metals	=	Metals analyzed using method Title 22.
ETBE	=	Ethyl tertiary butyl ether analyzed using EPA Method 8260B.
TAME	=	Tertiary butyl methyl ether analyzed using EPA Method 8260B.
TBA	=	Tertiary butyl alcohol analyzed using EPA Method 8260B.
EDB	=	1,2-Dibromoethane analyzed using EPA Method 8260B.
1,2-DCA	=	1,2-Dichloroethane analyzed using EPA Method 8260B.
DIPE	=	Di-isopropyl ether analyzed using EPA Method 8260B.
Other VOCs	=	Other volatile organic compounds analyzed using EPA Method 8260B.
fbgs	=	Feet below ground surface.
mg/kg	=	Milligrams per kilogram.
---	=	Not analyzed/Not sampled/Not measured.
a	=	Also analyzed for volatile organic compounds using EPA Method 8240 and semivolatile organic compounds using EPA Method 8270. Results were not detected at or above the method reporting limit.
b	=	Analyzed using CA DHS Method #338
c	=	Analyzed using EPA Method 8260B.
d	=	Analyzed using EPA Method 6010/200.7.
e	=	Results not detected at or above the laboratory reporting limit except: Acetone: 0.0501 mg/kg; carbon disulfide: 0.00368 mg/kg; isopropylbenzene: 0.00219 mg/kg; naphthalene: 0.0105 mg/kg; n-propylbenzene: 0.00805 mg/kg; 1,2,4-trimethylbenzene: 0.0061 mg/kg; and 1,3,5-rrimethylbenzene: 0.00249 mg/kg.

TABLE 2B
ADDITIONAL CUMULATIVE ANALYTICAL RESULTS OF SOIL SAMPLES-VOLATILE ORGANIC COMPOUNDS
Former Exxon Service Station 7-0238
2200 East 12th Street
Oakland, California

Sample ID	Sample Date	Depth (fbgs)	ETBE (mg/kg)	TAME (mg/kg)	TBA (mg/kg)	EDB (mg/kg)	1,2-DCA (mg/kg)	DIPE (mg/kg)	Other VOCs (mg/kg)
Soil Boring Samples									
Borings MW-9D, MW-9E, MW-9G, and SB-1 through SB-20 not analyzed for these analytes.									
S-20-DPE1	06/05/03	20	<0.002	<0.002	0.644	<0.00201	<0.002	<0.01	---
S-20-DPE2	06/04/03	20	<0.002	<0.002	0.41	<0.00201	<0.002	<0.01	---
S-20-DPE3	06/04/03	20	<0.002	<0.002	<0.0496	<0.00198	<0.002	<0.0099	---
S-20-DPE4	06/05/03	20	<0.002	<0.002	<0.0503	<0.00201	<0.002	<0.0101	---
Excavation Boundaries Samples									
Not analyzed for these analytes.									
Tank Hole Samples									
Not analyzed for these analytes.									
Tank Hole Overexcavation Confirmation Samples									
Not analyzed for these analytes.									
Product Line Trench Samples									
Not analyzed for these analytes.									
Product Line Trench Overexcavation Confirmation Samples									
Not analyzed for these analytes.									
Waste-Oil Tank Removal Sample									
Not analyzed for these analytes.									
Stockpile									
Samples SP1 through SP13 and WOSP-(A-D) not analyzed for these analytes.									
SP1-1-(1-4)	06/05/03	---	---	---	---	<0.00199	<0.002	---	e

TABLE 2B
ADDITIONAL CUMULATIVE ANALYTICAL RESULTS OF SOIL SAMPLES-VOLATILE ORGANIC COMPOUNDS
Former Exxon Service Station 7-0238
2200 East 12th Street
Oakland, California

Notes:		
TPHd	=	Total petroleum hydrocarbons as diesel analyzed using EPA Method 8015B.
TPHg	=	Total petroleum hydrocarbons as gasoline analyzed using EPA Method 8015/8015B.
MTBE	=	Methyl tertiary butyl ether analyzed using EPA Method 8021B.
BTEX	=	Benzene, toluene, ethylbenzene, and total xylenes analyzed using EPA Method 8020.
Metals	=	Metals analyzed using method Title 22.
ETBE	=	Ethyl tertiary butyl ether analyzed using EPA Method 8260B.
TAME	=	Tertiary butyl methyl ether analyzed using EPA Method 8260B.
TBA	=	Tertiary butyl alcohol analyzed using EPA Method 8260B.
EDB	=	1,2-Dibromoethane analyzed using EPA Method 8260B.
1,2-DCA	=	1,2-Dichloroethane analyzed using EPA Method 8260B.
DIPE	=	Di-isopropyl ether analyzed using EPA Method 8260B.
Other VOCs	=	Other volatile organic compounds analyzed using EPA Method 8260B.
fbgs	=	Feet below ground surface.
mg/kg	=	Milligrams per kilogram.
---	=	Not analyzed/Not sampled/Not measured.
a	=	Also analyzed for volatile organic compounds using EPA Method 8240 and semivolatile organic compounds using EPA Method 8270. Results were not detected at or above the method reporting limit.
b	=	Analyzed using CA DHS Method #338
c	=	Analyzed using EPA Method 8260B.
d	=	Analyzed using EPA Method 6010/200.7.
e	=	Results not detected at or above the laboratory reporting limit except: Acetone: 0.0501 mg/kg; carbon disulfide: 0.00368 mg/kg; isopropylbenzene: 0.00219 mg/kg; naphthalene: 0.0105 mg/kg; n-propylbenzene: 0.00805 mg/kg; 1,2,4-trimethylbenzene: 0.0061 mg/kg; and 1,3,5-rrimethylbenzene: 0.00249 mg/kg.

TABLE 2C
ADDITIONAL CUMULATIVE ANALYTICAL RESULTS OF SOIL SAMPLES-METALS
Former Exxon Service Station 7-0238
2200 East 12th Street
Oakland, California

Sample ID	Sample Date	Sample Depth	Antimony (mg/kg)	Arsenic (mg/kg)	Barium (mg/kg)	Beryllium (mg/kg)	Cadmium (mg/kg)	Chromium (mg/kg)	Cobalt (mg/kg)	Copper (mg/kg)	Lead (mg/kg)	Soluble Lead (mg/L)	Mercury (mg/kg)	Molybdenum (mg/kg)	Nickel (mg/kg)	Selenium (mg/kg)	Silver (mg/kg)	Thallium (mg/kg)	Vanadium (mg/kg)	Zinc (mg/kg)
Soil Boring Samples																				
Not analyzed for these analytes.																				
Excavation Boundaries Samples																				
Not analyzed for these analytes.																				
Tank Hole Samples																				
TP1	09/04/91	11.0	---	---	---	---	---	---	---	---	<0.2b	---	---	---	---	---	---	---	---	---
TP2	09/04/91	11.0	---	---	---	---	---	---	---	---	<0.2b	---	---	---	---	---	---	---	---	---
TP3	09/04/91	11.0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
TP4	09/04/91	11.0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
TP5	09/04/91	11.0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
TP6	09/04/91	11.0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Tank Hole Overexcavation Confirmation Samples																				
TC1	09/05/91	12.0	---	---	---	---	---	---	---	---	<0.2b	---	---	---	---	---	---	---	---	---
TC2	09/05/91	5.0	---	---	---	---	---	---	---	---	<0.2b	---	---	---	---	---	---	---	---	---
TC2	09/05/91	11.0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
TC3	09/05/91	5.0	---	---	---	---	---	---	---	---	<0.2b	---	---	---	---	---	---	---	---	---
TC3	09/05/91	12.0	---	---	---	---	---	---	---	---	<0.2b	---	---	---	---	---	---	---	---	---
TC4	09/05/91	11.0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Product Line Trench Samples																				
P1	09/04/91	3.0	---	---	---	---	---	---	---	---	<0.2b	---	---	---	---	---	---	---	---	---
P2	09/04/91	6.0	---	---	---	---	---	---	---	---	<0.2b	---	---	---	---	---	---	---	---	---
P3	09/04/91	3.0	---	---	---	---	---	---	---	---	<0.2b	---	---	---	---	---	---	---	---	---
P4	09/04/91	4.0	---	---	---	---	---	---	---	---	<0.2b	---	---	---	---	---	---	---	---	---
P5	09/04/91	3.0	---	---	---	---	---	---	---	---	<0.2b	---	---	---	---	---	---	---	---	---
P6	09/04/91	3.0	---	---	---	---	---	---	---	---	<0.2b	---	---	---	---	---	---	---	---	---
Product Line Trench Overexcavation Confirmation Samples																				
Not analyzed for these analytes.																				
Waste-Oil Tank Removal Sample																				
WO-10'	09/17/97	10.0	---	---	---	---	<0.50	18	---	---	27	---	---	---	24	---	---	---	---	35
Stockpile																				
SP1	Sep. 1991	---	---	---	---	---	---	---	---	---	---	<0.1d	---	---	---	---	---	---	---	---
SP2	Sep. 1991	---	---	---	---	---	---	---	---	---	---	<0.1d	---	---	---	---	---	---	---	---

TABLE 2C
ADDITIONAL CUMULATIVE ANALYTICAL RESULTS OF SOIL SAMPLES-METALS
Former Exxon Service Station 7-0238
2200 East 12th Street
Oakland, California

Sample ID	Sample Date	Sample Depth	Antimony (mg/kg)	Arsenic (mg/kg)	Barium (mg/kg)	Beryllium (mg/kg)	Cadmium (mg/kg)	Chromium (mg/kg)	Cobalt (mg/kg)	Copper (mg/kg)	Lead (mg/kg)	Soluble Lead (mg/L)	Mercury (mg/kg)	Molybdenum (mg/kg)	Nickel (mg/kg)	Selenium (mg/kg)	Silver (mg/kg)	Thallium (mg/kg)	Vanadium (mg/kg)	Zinc (mg/kg)
SP3	Sep. 1991	---	---	---	---	---	---	---	---	---	---	<0.1d	---	---	---	---	---	---	---	---
SP4	Sep. 1991	---	---	---	---	---	---	---	---	---	---	<0.1d	---	---	---	---	---	---	---	---
SP5	Sep. 1991	---	---	---	---	---	---	---	---	---	---	<0.1d	---	---	---	---	---	---	---	---
SP6	Sep. 1991	---	---	---	---	---	---	---	---	---	---	<0.1d	---	---	---	---	---	---	---	---
SP7	Sep. 1991	---	---	---	---	---	---	---	---	---	---	<0.1d	---	---	---	---	---	---	---	---
SP8	Sep. 1991	---	---	---	---	---	---	---	---	---	---	<0.1d	---	---	---	---	---	---	---	---
SP9	Sep. 1991	---	---	---	---	---	---	---	---	---	---	<0.1d	---	---	---	---	---	---	---	---
SP10	Sep. 1991	---	---	---	---	---	---	---	---	---	---	<0.1d	---	---	---	---	---	---	---	---
SP11	Sep. 1991	---	---	---	---	---	---	---	---	---	---	<0.1d	---	---	---	---	---	---	---	---
SP12	Sep. 1991	---	---	---	---	---	---	---	---	---	---	<0.1d	---	---	---	---	---	---	---	---
SP13	Sep. 1991	---	---	---	---	---	---	---	---	---	---	1.0d	---	---	---	---	---	---	---	---
WOSP-(A-D)	09/19/97	---	<5.0	8.9	97	<0.50	<0.50	40	6.8	21	47	0.78d	---	---	---	---	---	---	---	---
SP1-1-(1-4)	06/05/03	---	---	---	---	---	---	---	---	---	7.83d	---	0.051	<2.5	56	<5.0	<0.50	11	26	68

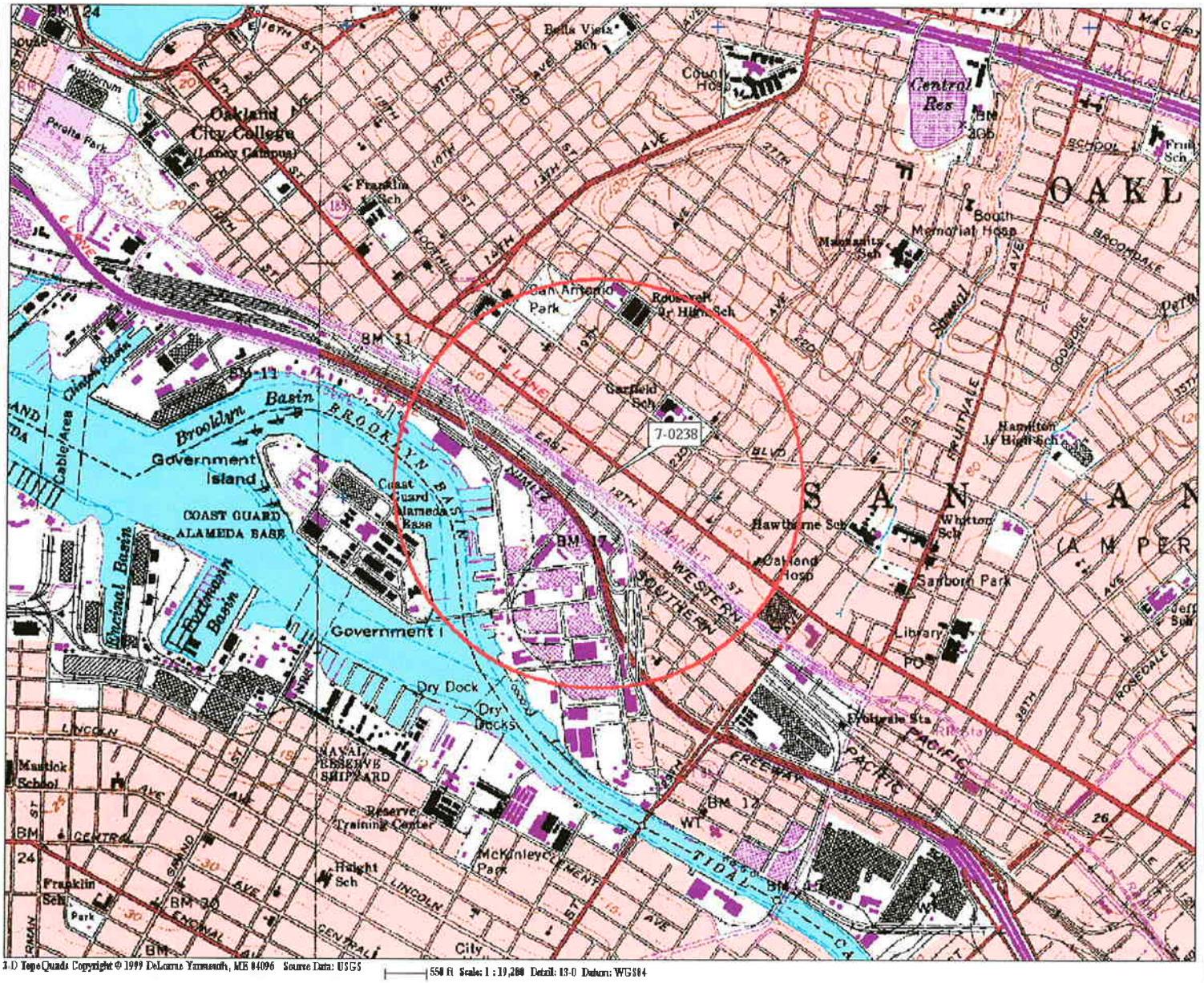
Notes:

TPHd	=	Total petroleum hydrocarbons as diesel analyzed using EPA Method 8015B.
TPHg	=	Total petroleum hydrocarbons as gasoline analyzed using EPA Method 8015/8015B.
MTBE	=	Methyl tertiary butyl ether analyzed using EPA Method 8021B.
BTEX	=	Benzene, toluene, ethylbenzene, and total xylenes analyzed using EPA Method 8020.
Metals	=	Metals analyzed using method Title 22.
ETBE	=	Ethyl tertiary butyl ether analyzed using EPA Method 8260B.
TAME	=	Tertiary butyl methyl ether analyzed using EPA Method 8260B.
TBA	=	Tertiary butyl alcohol analyzed using EPA Method 8260B.
EDB	=	1,2-Dibromoethane analyzed using EPA Method 8260B.
1,2-DCA	=	1,2-Dichloroethane analyzed using EPA Method 8260B.
DIPE	=	Di-isopropyl ether analyzed using EPA Method 8260B.
Other VOCs	=	Other volatile organic compounds analyzed using EPA Method 8260B.
fbgs	=	Feet below ground surface.
mg/kg	=	Milligrams per kilogram.
---	=	Not analyzed/Not sampled/Not measured.
a	=	Also analyzed for volatile organic compounds using EPA Method 8240 and semivolatile organic compounds using EPA Method 8270. Results were not detected at or above the method reporting limit.
b	=	Analyzed using CA DHS Method #338
c	=	Analyzed using EPA Method 8260B.
d	=	Analyzed using EPA Method 6010/200.7.
e	=	Results not detected at or above the laboratory reporting limit except: Acetone: 0.0501 mg/kg; carbon disulfide: 0.00368 mg/kg; isopropylbenzene: 0.00219 mg/kg; naphthalene: 0.0105 mg/kg; n-propylbenzene: 0.00805 mg/kg; 1,2,4-trimethylbenzene: 0.0061 mg/kg; and 1,3,5-rimethylbenzene: 0.00249 mg/kg.

TABLE 3
WELL CONSTRUCTION DETAILS
Former Exxon Service Station 7-0238
2200 East 12th Street
Oakland, California

Well ID	Date Well Installed	TOC Elevation (feet)	Borehole Diameter (inches)	Total Depth of Boring (feet)	Well Depth (feet)	Well Casing Diameter (inches)	Well Casing Material	Screened Interval (feet)	Slot Size (inches)	Filter Pack Interval (feet)	Filter Pack Material
MW9A	06/10/88	14.51	8	18	18	2	PVC	8-18	0.020	NS	NS
MW9B	06/10/88	12.84	8	20	18	2	PVC	8-18	0.020	NS	NS
MW9C	06/10/88	14.16	8	17	18	2	PVC	8-18	0.020	NS	NS
MW9D	10/05/88	15.97	12	16.5	14	NS	PVC	5-14	NS	NS	NS
MW9E	10/05/88	NS	12	18.5	14	NS	PVC	5-14	NS	NS	NS
MW9F	11/23/88	11.38	8	16	14	NS	PVC	4-14	NS	NS	NS
MW9G	11/22/88	12.98	8	16.5	14	NS	PVC	5-14	NS	NS	NS
MW9H	11/23/88	11.59	8	16.5	14	NS	PVC	5-14	NS	NS	NS
MW9I	11/02/90	13.13	12	16	16	NS	NS	4-14	NS	NS	NS
DPE1	06/05/03	NS	10	21	20	4	PVC	5-20	0.020	4-20	#3 Sand
DPE2	06/04/03	NS	10	21	20	4	PVC	5-20	0.020	4-20	#3 Sand
DPE3	06/04/03	NS	10	21	20	4	PVC	5-20	0.020	4-20	#3 Sand
DPE4	06/05/03	NS	10	21	20	4	PVC	5-20	0.020	4-20	#3 Sand
VP1	01/11/01	NS	8	20	20	2	PVC	5-20	0.020	4-20	#3 Sand
VP2	01/11/01	NS	8	20	20	2	PVC	5-20	0.020	4-20	#3 Sand

Notes:
TOC = Top of well casing elevation; datum is mean sea level.
NS = Not specified.
PVC = Polyvinyl chloride.



FN 2293TOPO

EXPLANATION

1/2-mile radius circle

N

APPROXIMATE SCALE

0 0.5 1 mile

SOURCE:
Modified from a map
provided by
DeLorme 3-D TopoQuads

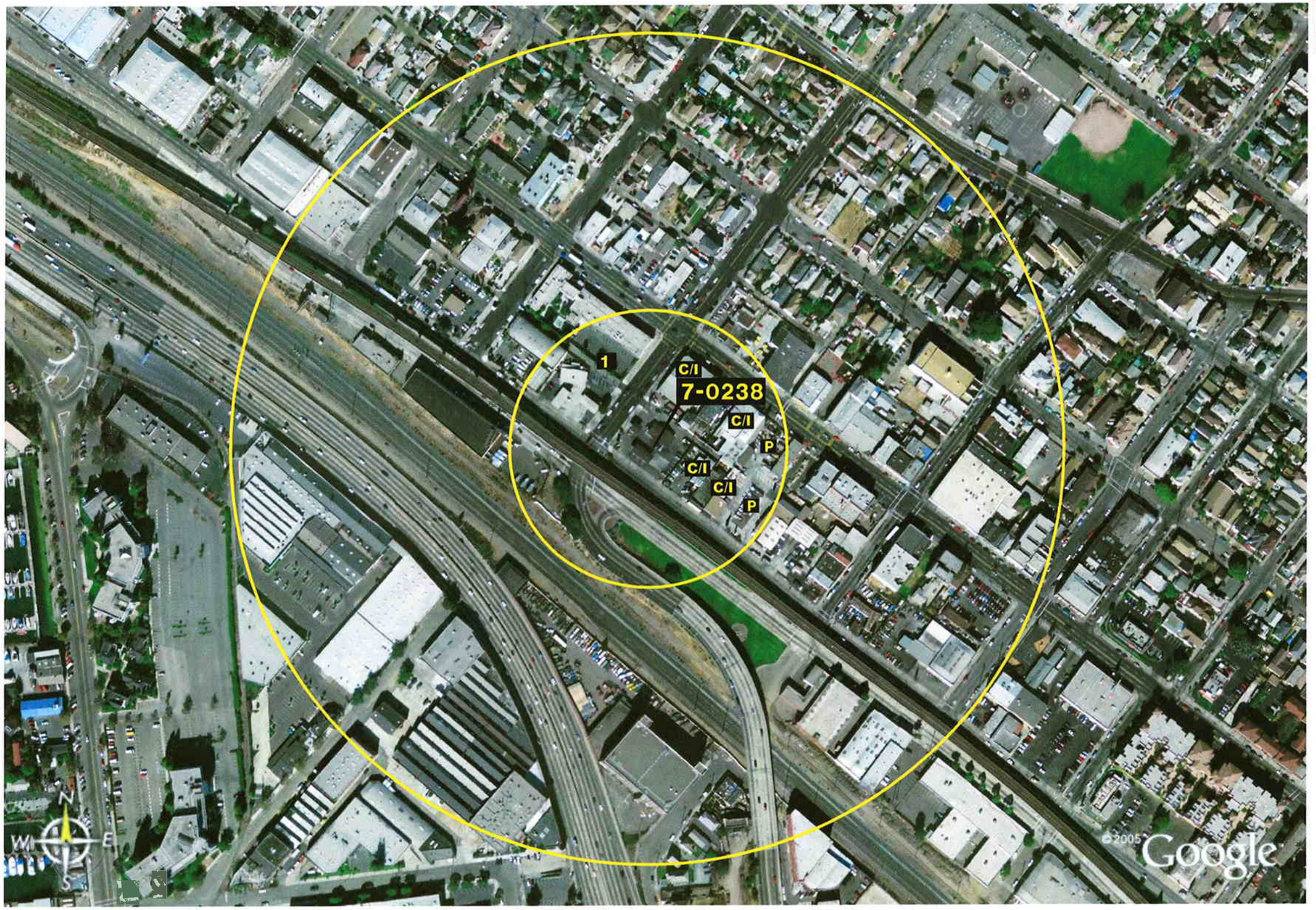
ERI
VALUE, QUALITY, RESPONSE

SITE VICINITY MAP

FORMER EXXON SERVICE STATION 7-0238
2200 East 12th Street
Oakland, California

PROJECT NO. 2293

PLATE 1



LEGEND

- C/I — Commericial / Industrial
- VAC — Vacant Lot
- P — Parking Lot
- R — Additional Residential

WELLS

1

There are no public or private wells within a 300-Meter radius. See the Regional Area Map.

WELLS (SPECIAL USE OR MUNICIPAL)

RESIDENCES

1 None

PUBLIC USE AREAS

1 Life Academy High School

SURFACE WATER

1 None

100-Meter and 300-Meter Radius

APPROXIMATE SCALE

0 80 160 METERS

LOCAL AREA MAP

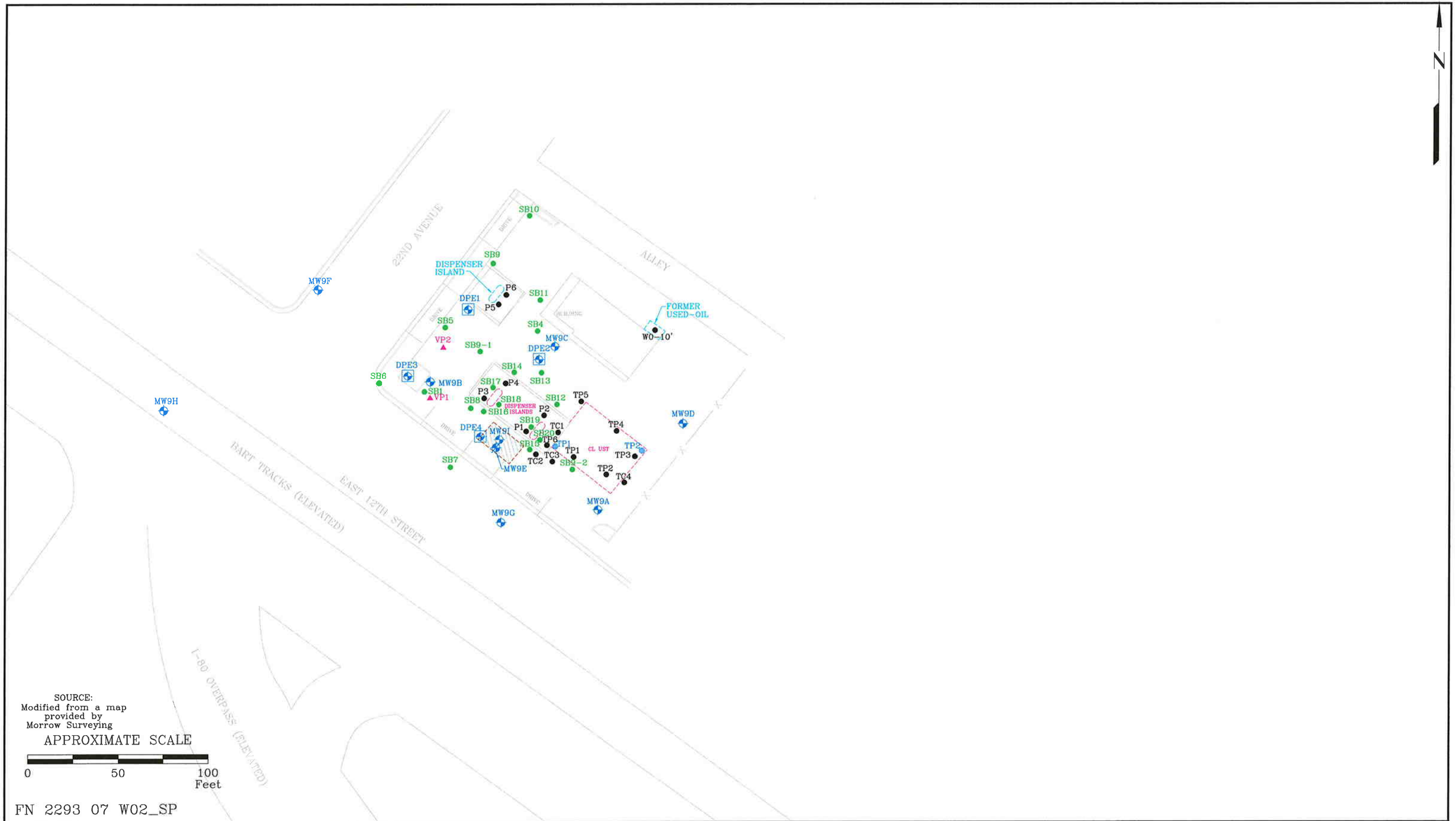
FORMER EXXON SERVICE STATION 7-0238
2200 East 12th Street
Oakland, California

ERI
VALUE, QUALITY, RESPONSE

PROJECT NO. 2293

PLATE 2

FN 2293 07 W02 AERIAL_SP



FN 2293 07 W02_SP

VALUE, QUALITY, RESPONSE

GENERALIZED SITE PLAN

FORMER EXXON SERVICE STATION 7-0238
2200 East 12th Street
Oakland, California

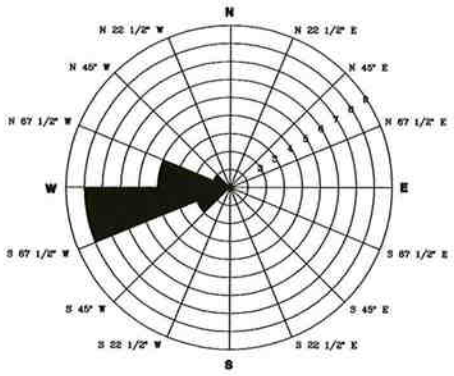
EXPLANATION

- MW9I — Groundwater Monitoring Well
- TP2 — Observation Well
- DPE4 — Dual-Phase Extraction Well
- VP2 — Soil Vapor Extraction Well
- SB11 — Soil Boring
- MW9E — Destroyed Groundwater Monitoring Well
- Excavation

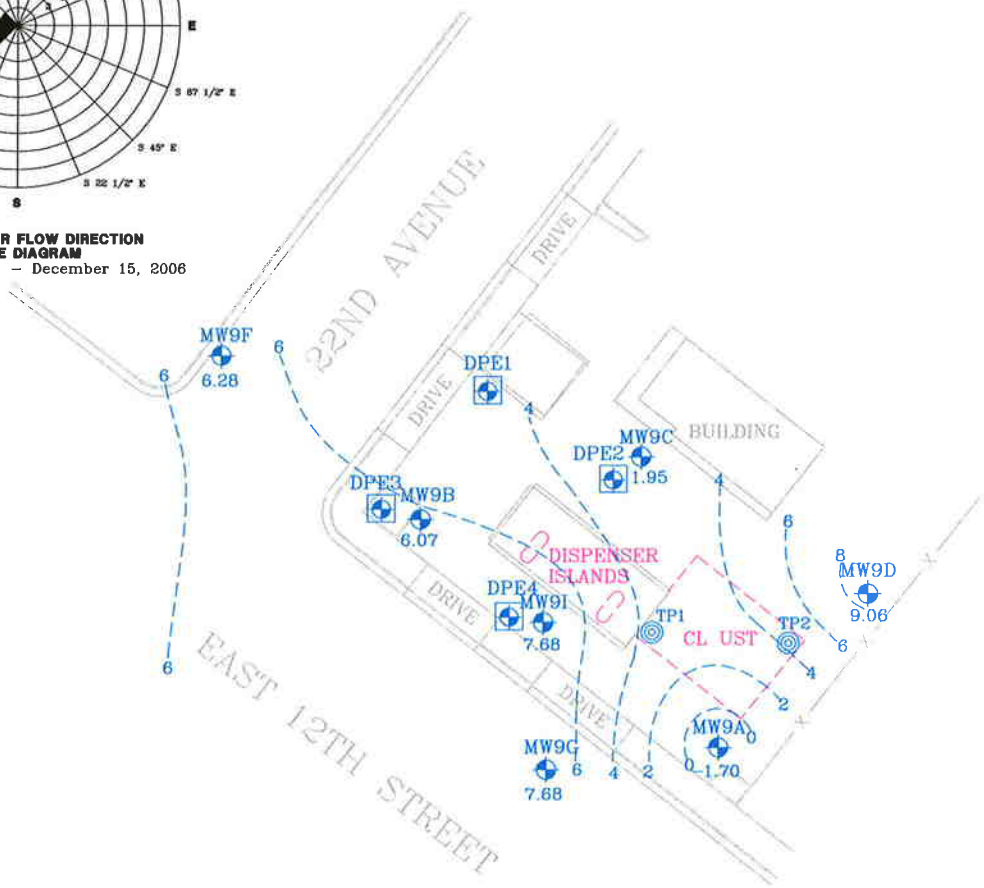
NOTE:
Former Groundwater Monitoring Well MW9E was in the current location of MW9I.

PROJECT NO.
2293

PLATE
3



GROUNDWATER FLOW DIRECTION ROSE DIAGRAM
January 10, 2003 – December 15, 2006



APPROXIMATE SCALE
0 60 120
FEET

SOURCE:
Modified from a map provided by Morrow Surveying

FN: 2293 07 W02 06 4QTR QM_SP

EXPLANATION

MW9I
Groundwater Monitoring Well
7.68 Groundwater elevation in feet; datum is mean sea level

8 — — — Line of Equal Groundwater Elevation; datum is mean sea level

DPE4
Dual-Phase Extraction Well

TP2
Tank Pit Well

ERI
VALUE, QUALITY, RESPONSE

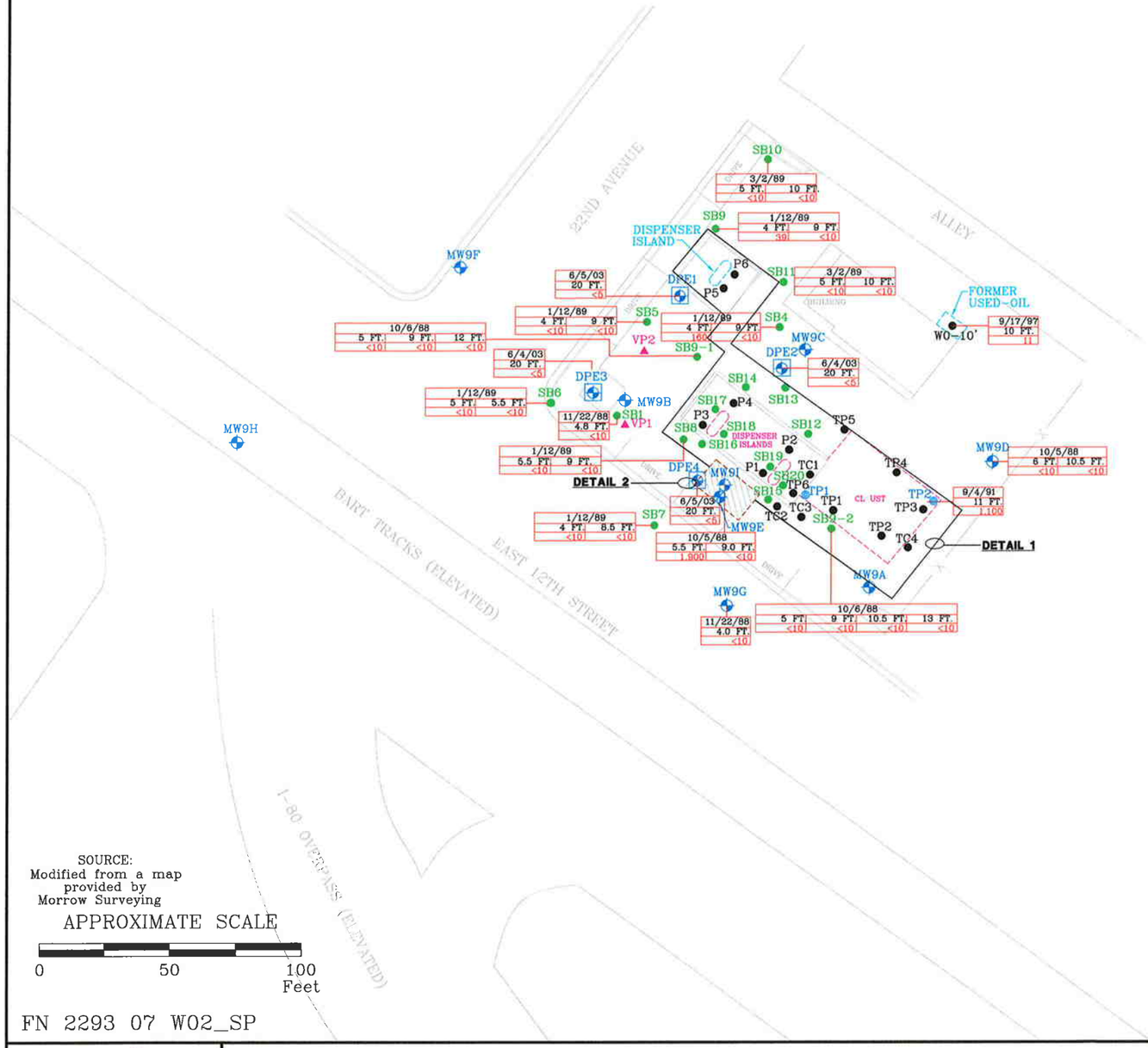
GROUNDWATER ELEVATION MAP
December 15, 2006

FORMER EXXON SERVICE STATION 7-0238
2200 East 12th Street
Oakland, California

PROJECT NO. 2293

PLATE 4

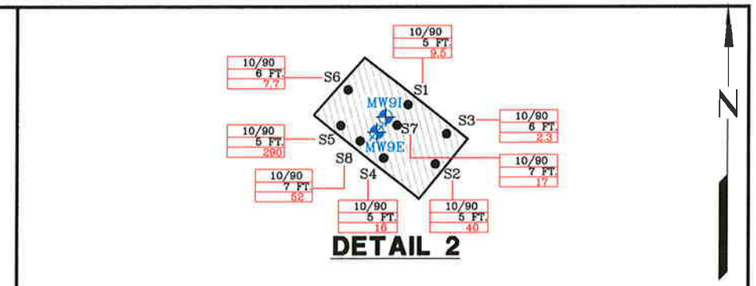
Analyte Concentrations in mg/kg
9/4/91 Sample Date
11 FT. Sample Depth
1,100 TPHg
< Less Than the Stated Laboratory Detection Limit
mg/kg Milligrams per kilogram



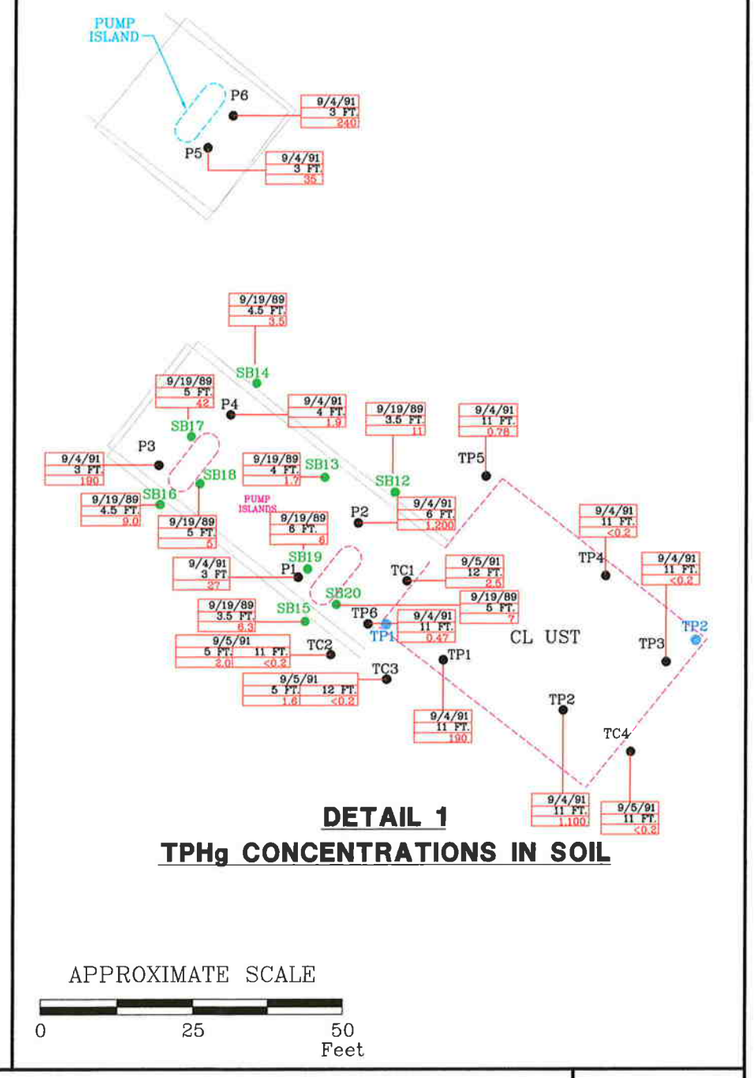
SOURCE:
Modified from a map provided by Morrow Surveying

APPROXIMATE SCALE
0 50 100 Feet

FN 2293 07 W02_SP



DETAIL 2



DETAIL 1
TPHg CONCENTRATIONS IN SOIL

APPROXIMATE SCALE
0 25 50 Feet

VALUE, QUALITY, RESPONSE

RESIDUAL TPHg CONCENTRATIONS IN SOIL

FORMER EXXON SERVICE STATION 7-0238
2200 East 12th Street
Oakland, California

EXPLANATION

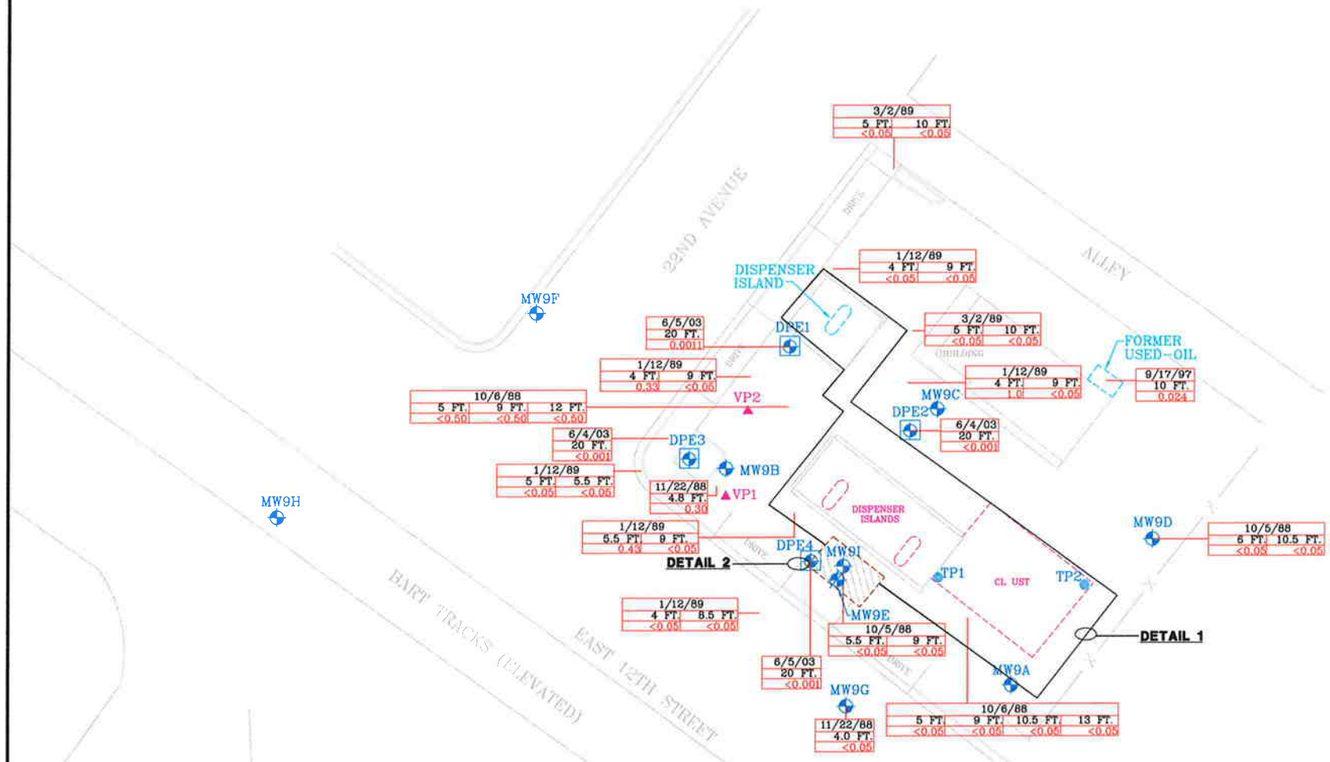
- MW9I — Groundwater Monitoring Well
- TP2 — Observation Well
- DPE4 — Dual-Phase Extraction Well
- VP2 — Soil Vapor Extraction Well
- SB11 — Soil Boring
- MW9E — Destroyed Groundwater Monitoring Well
- S8 — Excavation Sample
- Excavation

NOTE:
Former Groundwater Monitoring Well MW9E was in the current location of MW9I.

PROJECT NO. 2293

PLATE 5

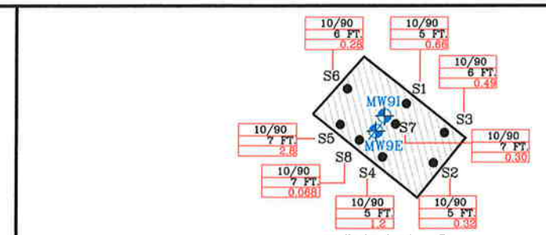
Analyte Concentrations in mg/kg
9/4/91 Sample Date
11 FT. Sample Depth
0.66 Benzene
< Less Than the Stated Laboratory Detection Limit
mg/kg Milligrams per kilogram



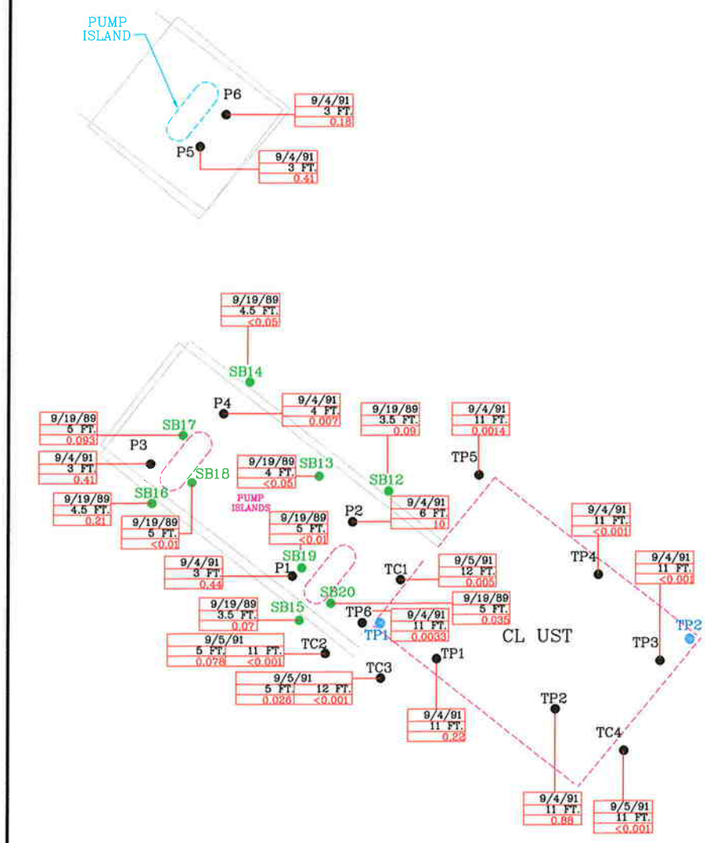
SOURCE:
Modified from a map provided by Morrow Surveying

APPROXIMATE SCALE
0 50 100 Feet

FN 2293 07 W02_SP



DETAIL 2



DETAIL 1
BENZENE CONCENTRATIONS IN SOIL

APPROXIMATE SCALE
0 25 50 Feet

VALUE, QUALITY, RESPONSE

RESIDUAL BENZENE CONCENTRATIONS IN SOIL

FORMER EXXON SERVICE STATION 7-0238
2200 East 12th Street
Oakland, California

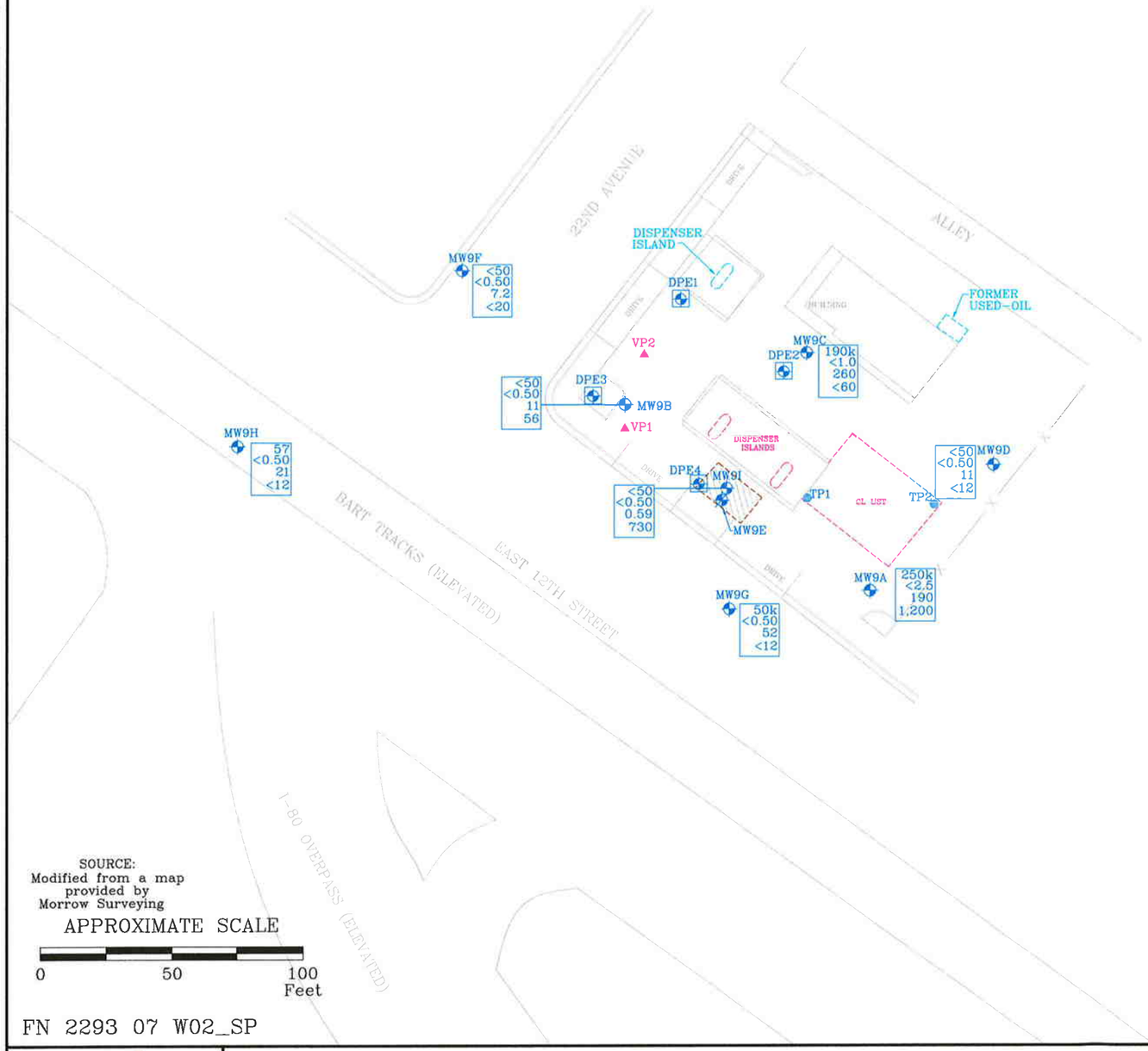
EXPLANATION

- MW9I — Groundwater Monitoring Well
- TP2 — Observation Well
- DPE4 — Dual-Phase Extraction Well
- VP2 — Soil Vapor Extraction Well
- MW9E — Destroyed Groundwater Monitoring Well
- S8 — Excavation Sample
- Excavation

NOTE:
Former Groundwater Monitoring Well MW9E was in the current location of MW9I.

PROJECT NO. 2293

PLATE 6



SOURCE:
Modified from a map provided by Morrow Surveying

APPROXIMATE SCALE

0 50 100 Feet

FN 2293 07 W02_SP

Analyte Concentrations in ug/L
Sampled December 15, 2006

250k Total Petroleum Hydrocarbons as gasoline
<2.5 Benzene
190 Methyl Tertiary Butyl Ether
1,200 Tertiary Butyl Alcohol
< Less Than the Stated Laboratory Reporting Limit
ug/L Micrograms per Liter
k Hydrocarbon result partly due to individual peak(s) in quantitation range.

ERI
VALUE, QUALITY, RESPONSE

SELECT GROUNDWATER ANALYTICAL RESULTS
December 15, 2006

FORMER EXXON SERVICE STATION 7-0238
2200 East 12th Street
Oakland, California

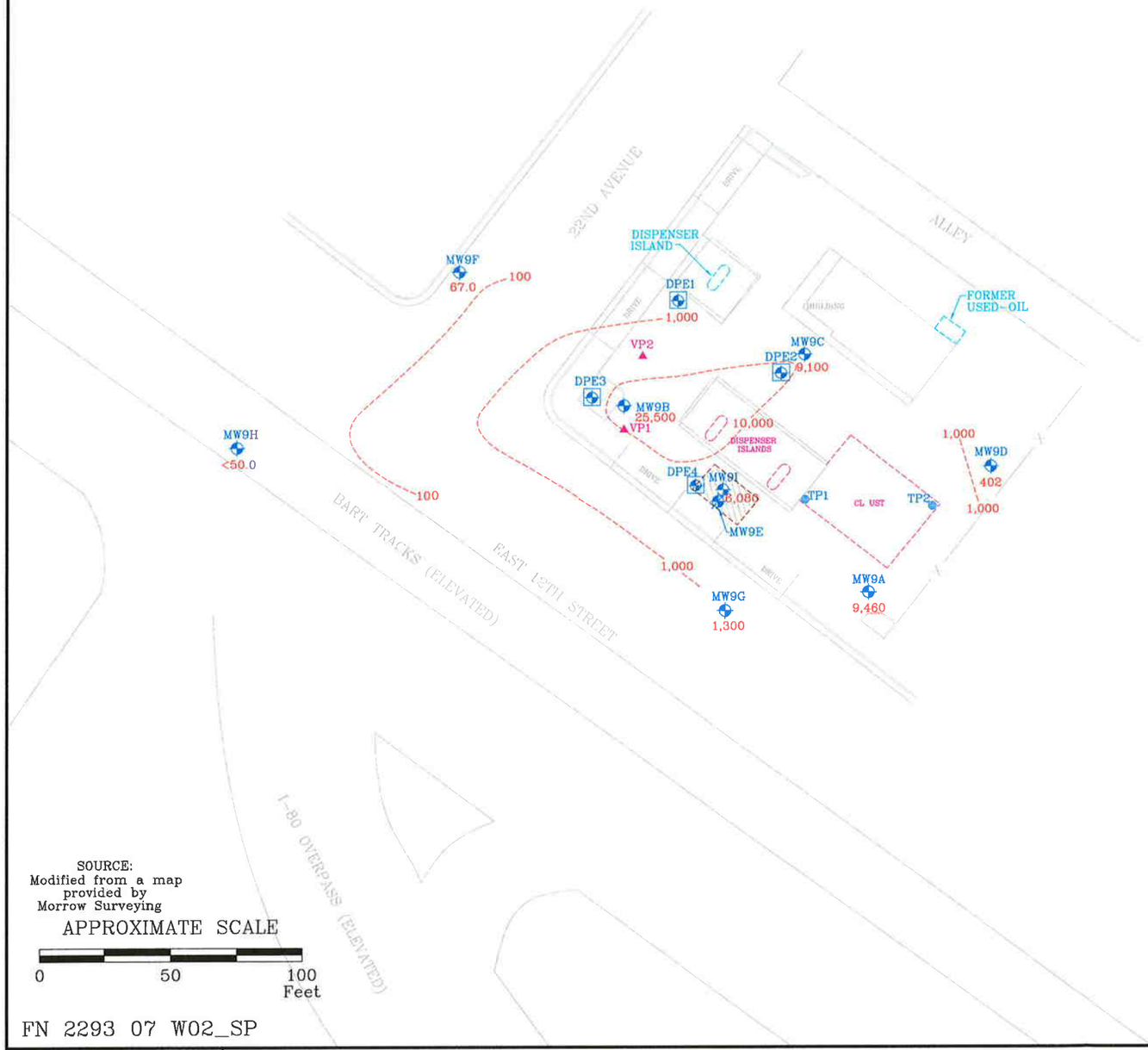
EXPLANATION

MW9I Groundwater Monitoring Well
TP2 Observation Well
DPE4 Dual-Phase Extraction Well
VP2 Soil Vapor Extraction Well
MW9E Destroyed Groundwater Monitoring Well
Excavation

NOTE:
Former Groundwater Monitoring Well MW9E was in the current location of MW9I.

PROJECT NO. 2293

PLATE 7



N

SOURCE:
Modified from a map provided by Morrow Surveying

APPROXIMATE SCALE

0 50 100 Feet

FN 2293 07 W02_SP

10,000---- Line of Equal TPHg Concentration (ug/L)
(Micrograms per liter [ug/L])

ERI
VALUE, QUALITY, RESPONSE

TPHg ISOCONCENTRATION MAP
October 1, 2003

FORMER EXXON SERVICE STATION 7-0238
2200 East 12th Street
Oakland, California

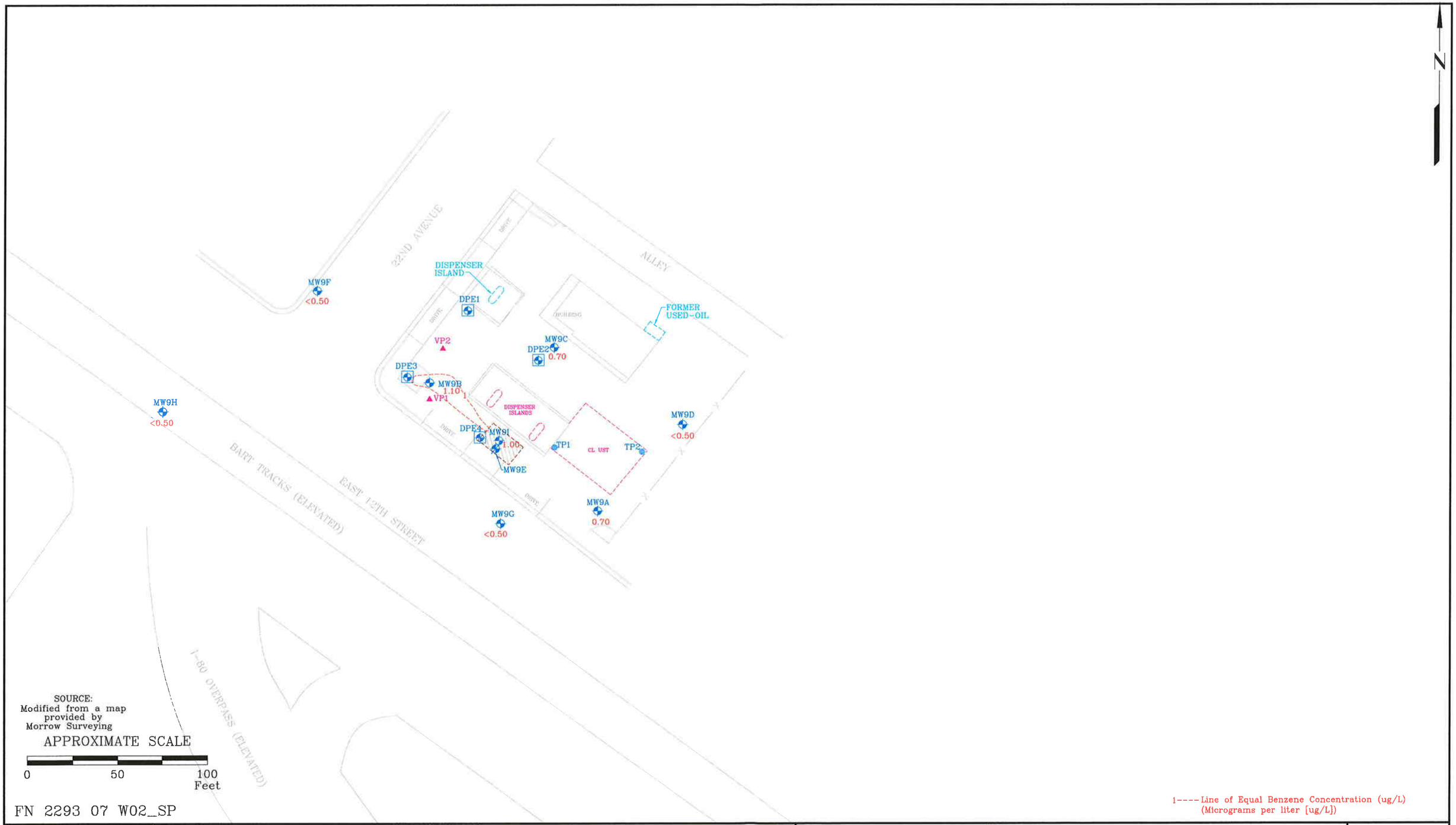
EXPLANATION

- MW9I — Groundwater Monitoring Well
- 6,080 TPHg concentration (ug/L)
- TP2 — Observation Well
- DPE4 — Dual-Phase Extraction Well
- VP2 — Soil Vapor Extraction Well
- MW9E — Destroyed Groundwater Monitoring Well
- Excavation

NOTE:
Former Groundwater Monitoring Well MW9E was in the current location of MW9I.

PROJECT NO.
2293

PLATE
8



FN 2293 07 W02_SP

1----Line of Equal Benzene Concentration (ug/L)
(Micrograms per liter [ug/L])

ERI
VALUE, QUALITY, RESPONSE

BENZENE ISOCONCENTRATION MAP
October 1, 2003

FORMER EXXON SERVICE STATION 7-0238
2200 East 12th Street
Oakland, California

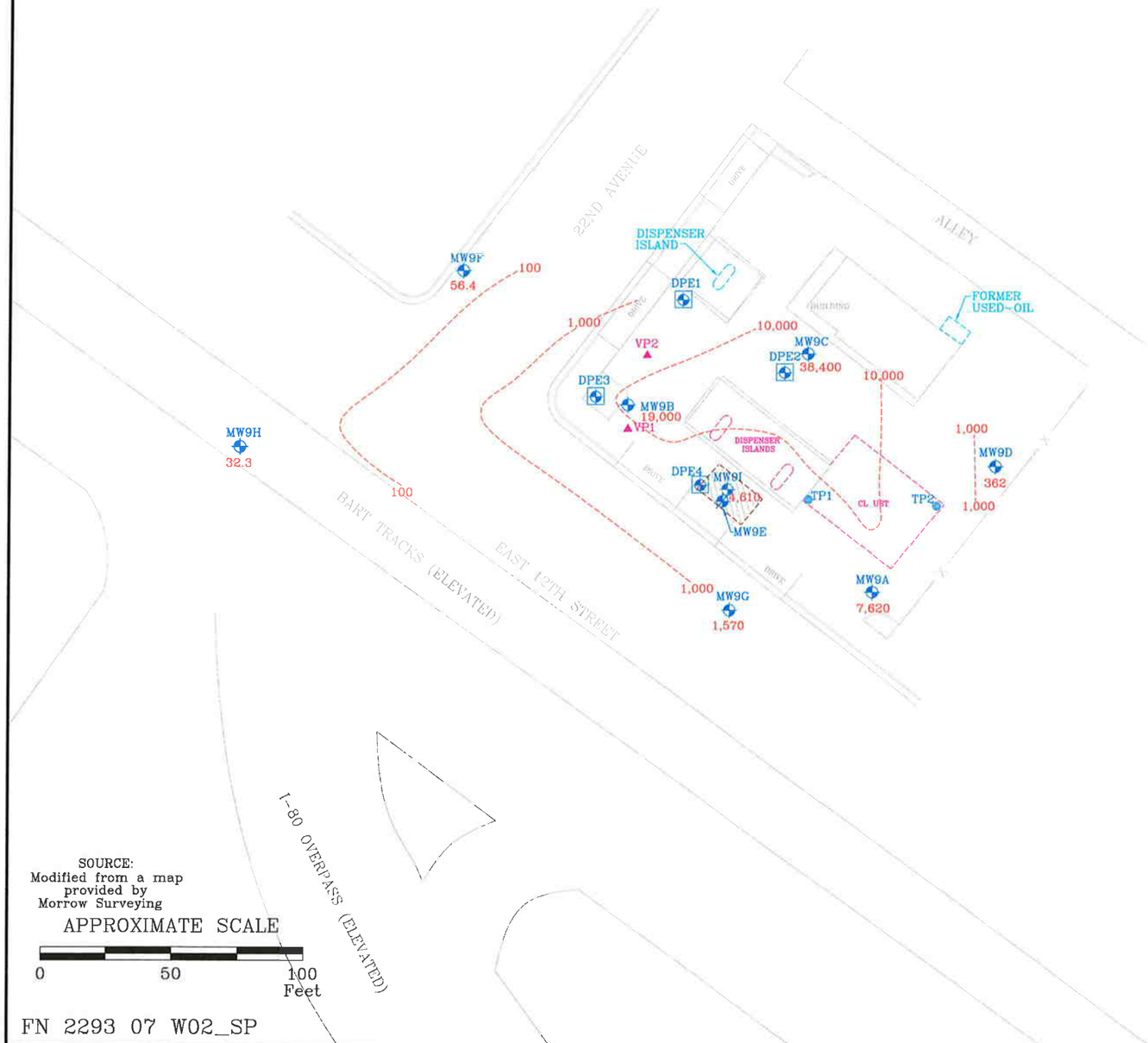
EXPLANATION

- MW9I — Groundwater Monitoring Well
- 1.00 — Benzene concentration (ug/L)
- TP2 — Observation Well
- DPE4 — Dual-Phase Extraction Well
- VP2 — Soil Vapor Extraction Well
- MW9E — Destroyed Groundwater Monitoring Well
- Excavation

NOTE:
Former Groundwater Monitoring Well MW9E was in the current location of MW9I.

PROJECT NO.
2293

PLATE
9



ERI
VALUE, QUALITY, RESPONSE

MTBE ISOCONCENTRATION MAP
October 1, 2003
FORMER EXXON SERVICE STATION 7-0238
2200 East 12th Street
Oakland, California

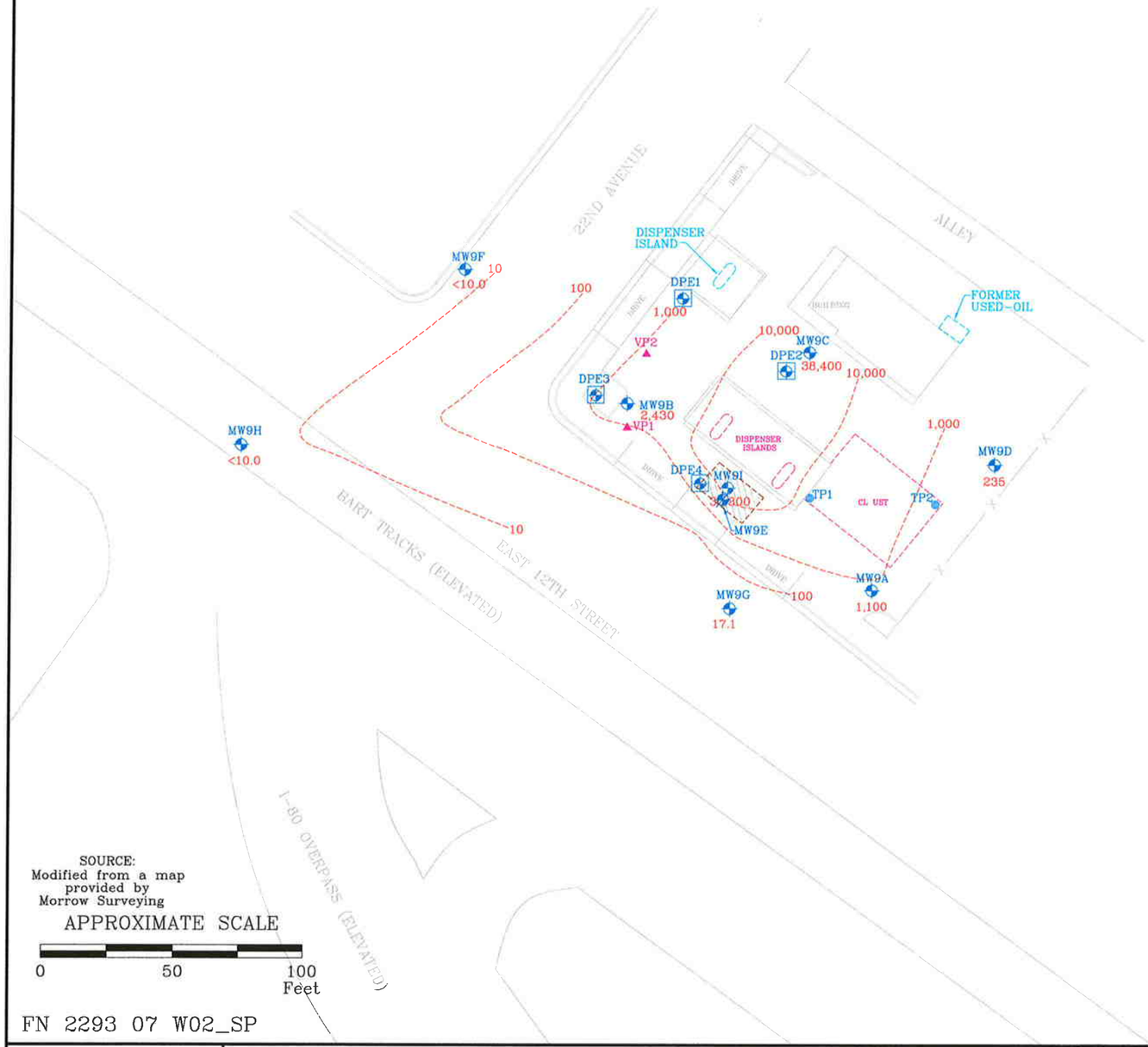
EXPLANATION

- MW9I — Groundwater Monitoring Well
- 4,610 MTBE concentration (ug/L)
- TP2 — Observation Well
- DPE4 — Dual-Phase Extraction Well
- VP2 — Soil Vapor Extraction Well
- MW9E — Destroyed Groundwater Monitoring Well
- Excavation

NOTE:
Former Groundwater Monitoring Well MW9E was in the current location of MW9I.

PROJECT NO.
2293

PLATE
10



SOURCE:
Modified from a map provided by Morrow Surveying

APPROXIMATE SCALE

0 50 100 Feet

FN 2293 07 W02_SP

10,000---- Line of Equal TBA Concentration (ug/L)
(Micrograms per liter [ug/L])

ERI
VALUE, QUALITY, RESPONSE

TBA ISOCONCENTRATION MAP
October 1, 2003

FORMER EXXON SERVICE STATION 7-0238
2200 East 12th Street
Oakland, California

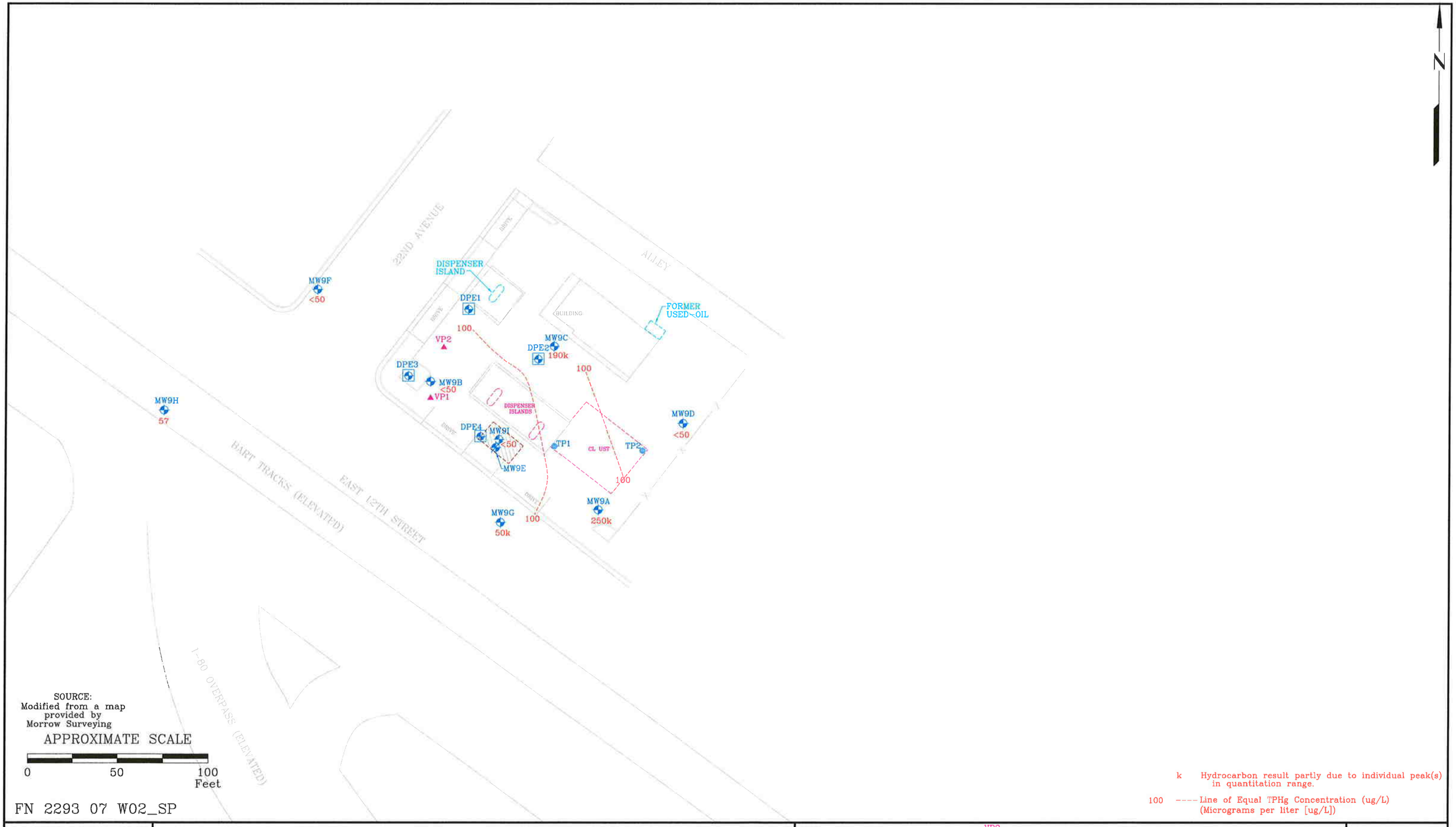
EXPLANATION

- MW9I — Groundwater Monitoring Well — 30,300 TBA concentration (ug/L)
- TP2 — Observation Well
- DPE4 — Dual-Phase Extraction Well
- VP2 — Soil Vapor Extraction Well
- MW9E — Destroyed Groundwater Monitoring Well
- Excavation

NOTE:
Former Groundwater Monitoring Well MW9E was in the current location of MW9I.

PROJECT NO. 2293

PLATE 11



SOURCE:
Modified from a map provided by Morrow Surveying

APPROXIMATE SCALE

0 50 100 Feet

FN 2293 07 W02_SP

k Hydrocarbon result partly due to individual peak(s) in quantitation range.

100 ---- Line of Equal TPHg Concentration (ug/L) (Micrograms per liter [ug/L])

ERI
VALUE, QUALITY, RESPONSE

THPg ISOCONCENTRATION MAP
December 15, 2006

FORMER EXXON SERVICE STATION 7-0238
2200 East 12th Street
Oakland, California

EXPLANATION

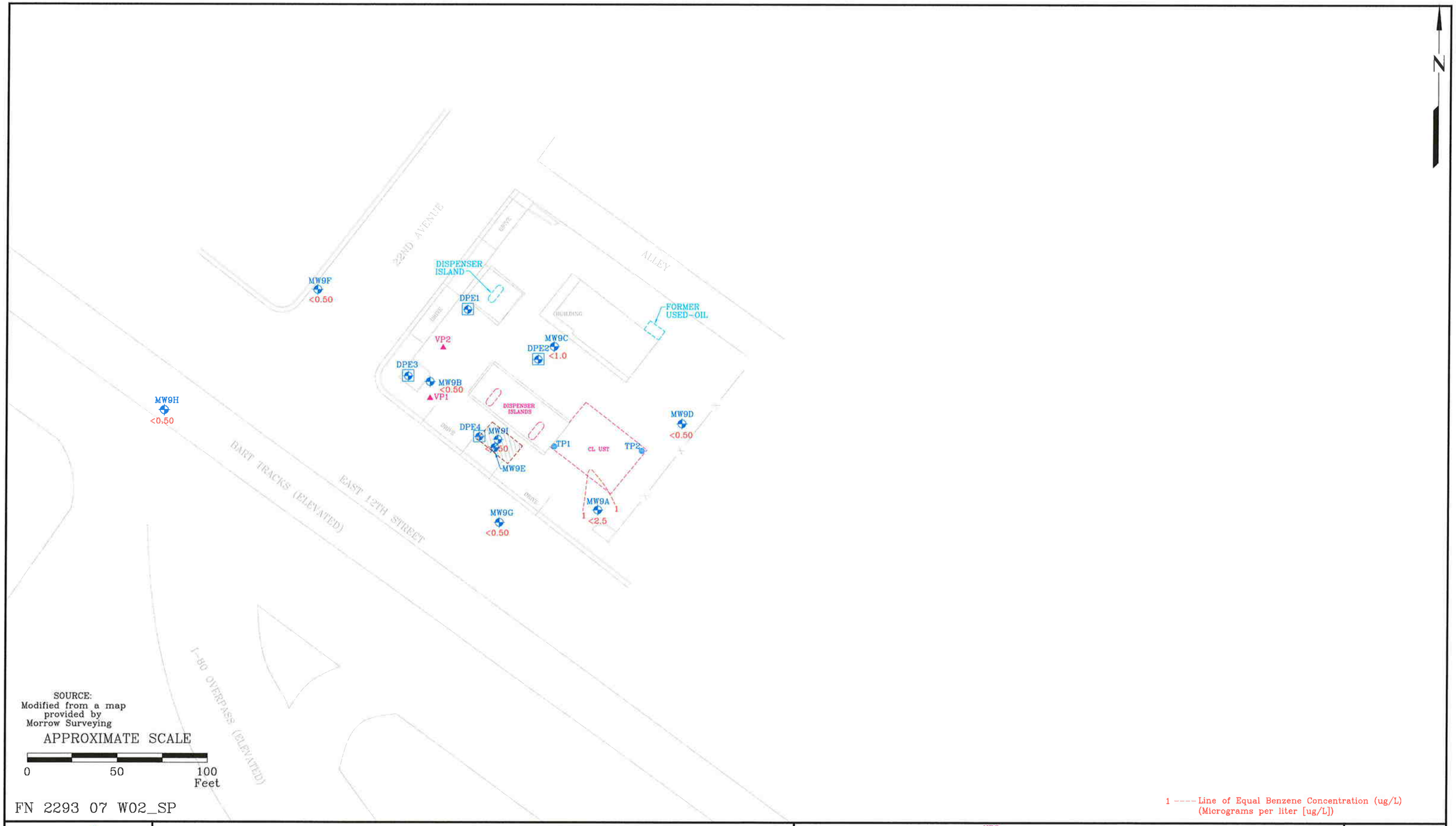
- MW9I — Groundwater Monitoring Well
- <50 — TPHg concentration (ug/L)
- TP2 — Observation Well
- DPE4 — Dual-Phase Extraction Well
- VP2 — Soil Vapor Extraction Well
- MW9E — Destroyed Groundwater Monitoring Well

NOTE:
Former Groundwater Monitoring Well MW9E was in the current location of MW9I.

Excavation

PROJECT NO. 2293

PLATE 12



ERI
VALUE, QUALITY, RESPONSE

BENZENE ISOCONCENTRATION MAP
December 15, 2006

FORMER EXXON SERVICE STATION 7-0238
2200 East 12th Street
Oakland, California

EXPLANATION

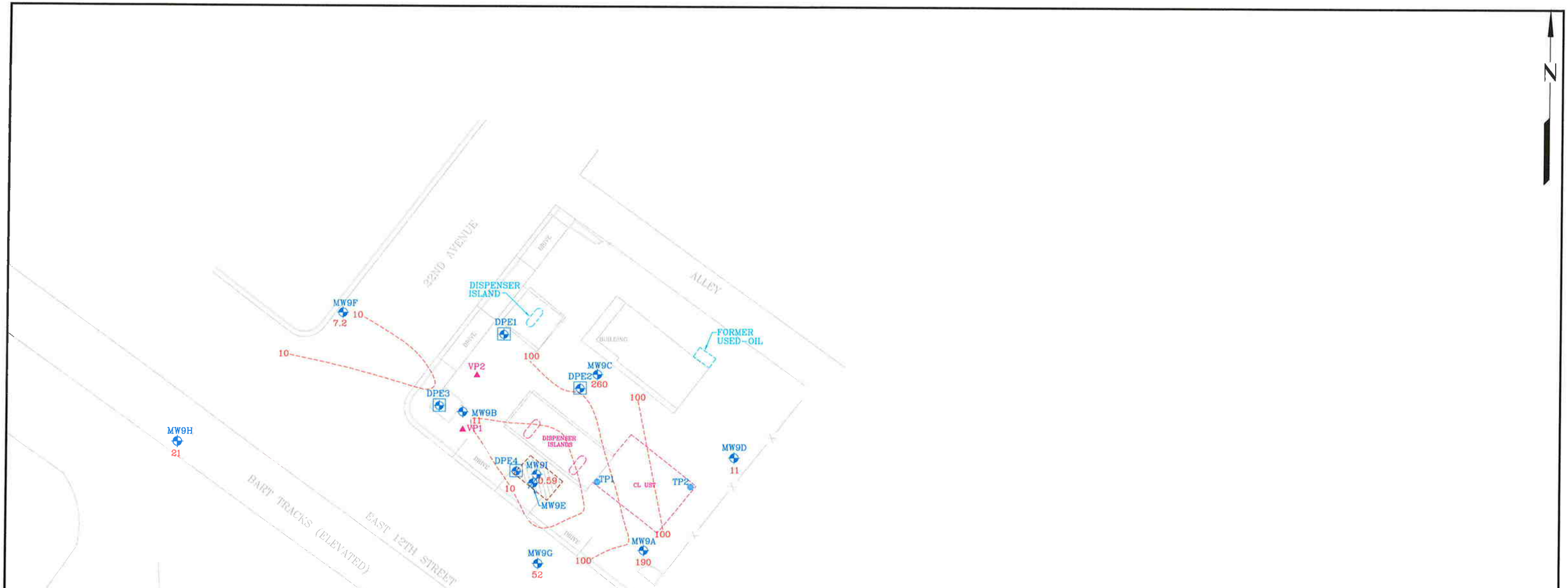
- MW9I — Groundwater Monitoring Well
- <0.50 Benzene concentration (ug/L)
- TP2 — Observation Well
- DPE4 — Dual-Phase Extraction Well
- VP2 — Soil Vapor Extraction Well
- MW9E — Destroyed Groundwater Monitoring Well

NOTE:
Former Groundwater Monitoring Well MW9E was in the current location of MW9I.

Excavation

PROJECT NO. 2293

PLATE 13



SOURCE:
Modified from a map provided by Morrow Surveying

APPROXIMATE SCALE

0 50 100 Feet

FN 2293 07 W02_SP

100 ----Line of Equal MTBE Concentration (ug/L) (Micrograms per liter [ug/L])

ERI
VALUE, QUALITY, RESPONSE

MTBE ISOCONCENTRATION MAP
December 15, 2006

FORMER EXXON SERVICE STATION 7-0238
2200 East 12th Street
Oakland, California

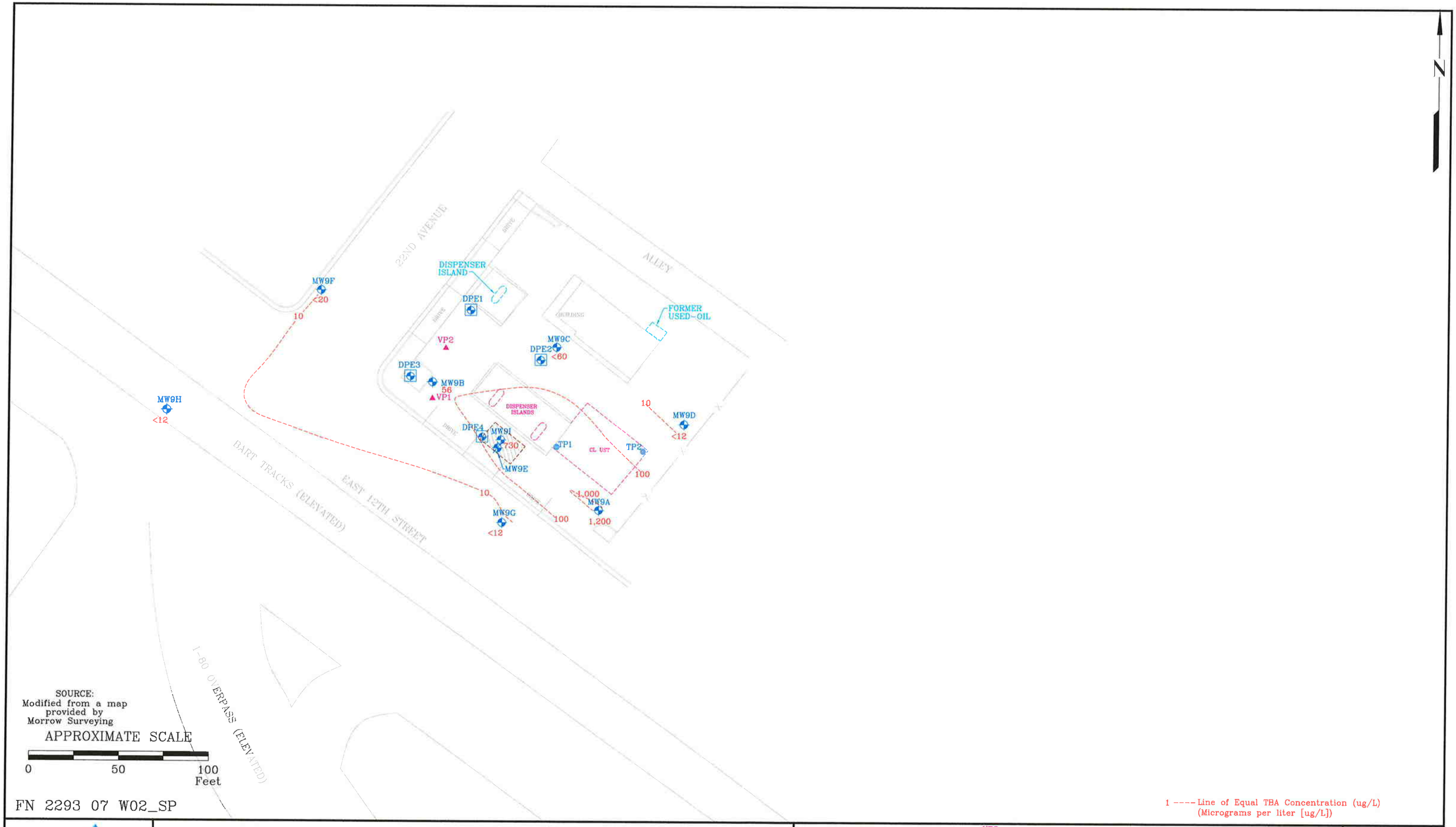
EXPLANATION

- MW9I — Groundwater Monitoring Well
- 0.59 — MTBE concentration (ug/L)
- TP2 — Observation Well
- DPE4 — Dual-Phase Extraction Well
- VP2 — Soil Vapor Extraction Well
- MW9E — Destroyed Groundwater Monitoring Well
- Excavation

NOTE:
Former Groundwater Monitoring Well MW9E was in the current location of MW9I.

PROJECT NO. 2293

PLATE 14



ERI
VALUE, QUALITY, RESPONSE

TBA ISOCONCENTRATION MAP
December 15, 2006
FORMER EXXON SERVICE STATION 7-0238
2200 East 12th Street
Oakland, California

EXPLANATION

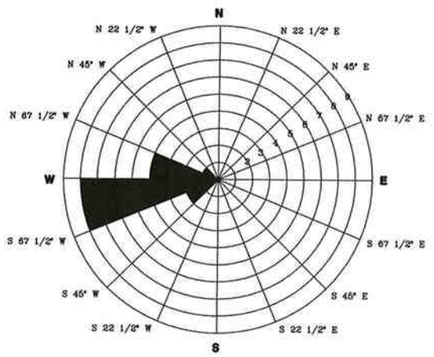
- MW9I — Groundwater Monitoring Well
- 730 — TBA concentration (ug/L)
- TP2 — Observation Well
- DPE4 — Dual-Phase Extraction Well
- VP2 — Soil Vapor Extraction Well
- MW9E — Destroyed Groundwater Monitoring Well

NOTE:
Former Groundwater Monitoring Well MW9E was in the current location of MW9I.

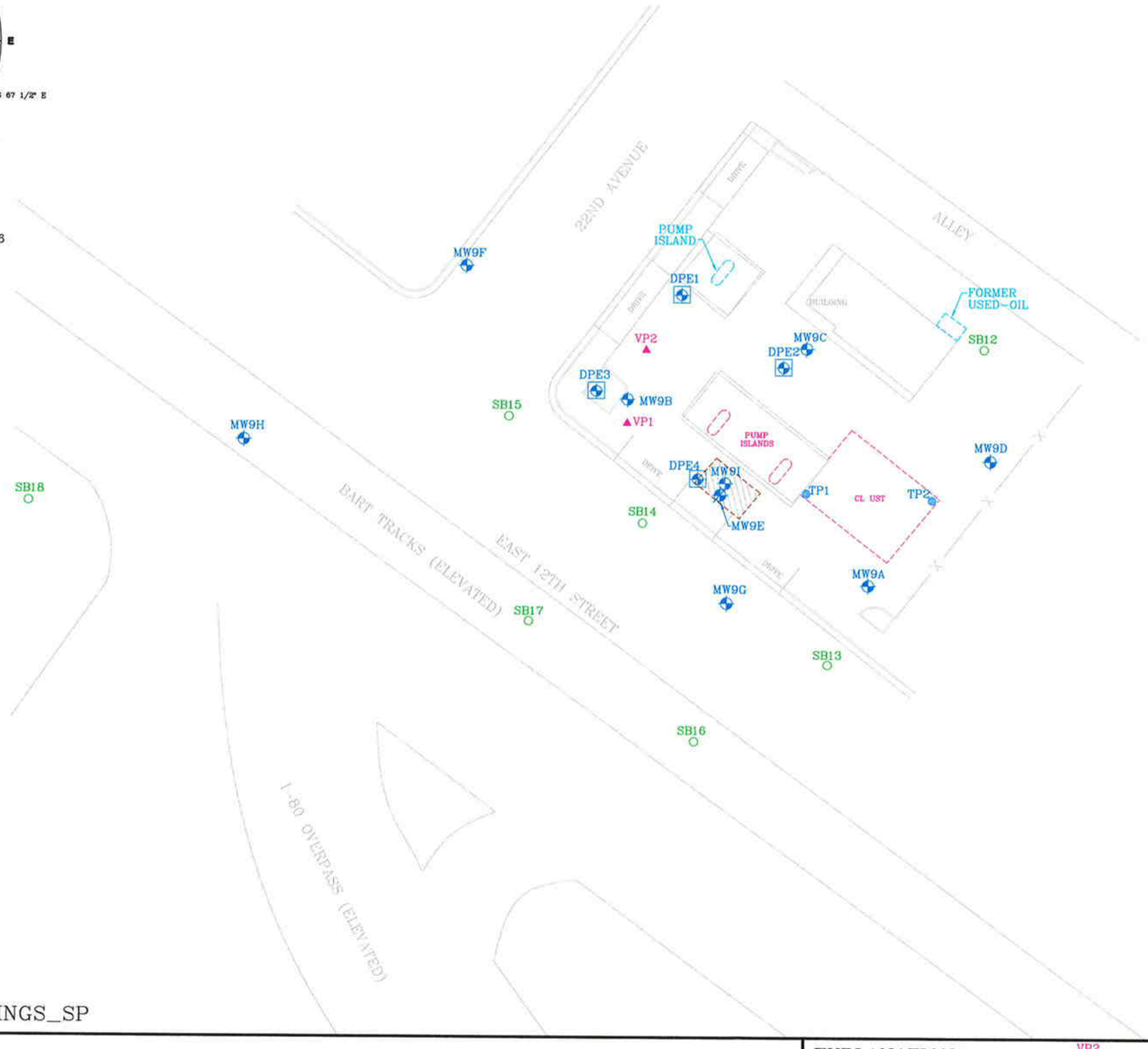
Excavation

PROJECT NO. 2293

PLATE 15



GROUNDWATER FLOW DIRECTION ROSE DIAGRAM
January 10, 2003 – December 15, 2006



SOURCE:
Modified from a map provided by Morrow Surveying

APPROXIMATE SCALE

0 50 100 Feet

FN 2293 07 W02 PROP BORINGS_SP

ERI
VALUE, QUALITY, RESPONSE

PROPOSED SOIL BORING LOCATIONS

FORMER EXXON SERVICE STATION 7-0238
2200 East 12th Street
Oakland, California

EXPLANATION

- MW9I — Groundwater Monitoring Well
- TP2 — Observation Well
- DPE4 — Dual-Phase Extraction Well
- VP2 — Soil Vapor Extraction Well
- MW9E — Destroyed Groundwater Monitoring Well
- SB19 — Proposed Soil Boring
- Excavation

NOTE:
Former Groundwater Monitoring Well MW9E was in the current location of MW9I.

PROJECT NO. 2293

PLATE 16

ATTACHMENT A

REGULATORY CORRESPONDENCE

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
DAVID J. KEARS, Agency Director

RECEIVED
JAN 19 2007
BY:

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

January 17, 2007

Ms. Jennifer Sedlachek
ExxonMobil Refining & Supply – Global Remediation
4096 Piedmont Avenue #194
Oakland, CA 94611

Mr. Arron Wong and Mr. Stanley Wong
2200 East 12th Street
Oakland, CA 94606-4325

Mr. Satya Sinha
Chevron Environmental Management Company
6001 Bollinger Canyon Rd. K2256
San Ramon, CA 94583-2324

Subject: Fuel Leak Case No. RO0000390, Exxon #7-0238, 2200 E 12th Street, Oakland CA

Dear Ms. Sedlachek and Messrs. Wong and Sinha

Alameda County Environmental Health Department (ACEH) staff has reviewed the recently submitted report entitled, "Groundwater Monitoring Report, Second Quarter 2006". ACEH is concerned that tert-BUTYL ALCOHOL (TBA) present in groundwater monitoring wells MW-9A, MW-9B, MW-9C and MW-9I may indicate residual contamination in the source area is continuing to add mass to groundwater beneath the site.

Our review of historical water quality data indicates the presence of high concentrations of MtBE prior to installation of the Dual Phase Vapor Extraction (DPE) system in March 2004. In addition, recent water quality data for monitoring well MW-9I indicate the fluctuation in concentrations of TBA have varied by up to four orders of magnitude during one complete monitoring cycle, four quarterly monitoring events. The high concentrations of MtBE prior to the start up of the DPE system combined with more recent water quality data indicating high concentrations of TBA demonstrate that additional investigation downgradient of the site is warranted. Furthermore, the monitoring well array in its current configuration may not be adequate to properly characterize the contamination plume downgradient of the site.

We request that you prepare a work plan to address the following technical comments and send us the reports described below. Please provide 72-hour advance written notification to this office (e-mail preferred to steven.plunkett@acgov.org) prior to the start of field activities.

TECHNICAL COMMENTS

1. **MtBE and TBA Plume Migration.** Prior to the installation and startup of the DPE system in 2004, high concentrations of MtBE were present in monitoring wells MW-9A, MW-9B, MW-9C, MW-9G and MW-9I at up to 53,000 µg/L, 42,100 µg/L, 150,000 µg/L, 11,000 µg/L and 62,000 µg/L, respectively. ACEH is concerned that the extent of the MtBE/TBA plume is undefined at your site. Furthermore, recent water quality data suggest that residual

undefined at your site. Furthermore, recent water quality data suggest that residual contamination in the source area may be continuing to add mass to the groundwater contamination plume. In particular, TBA concentrations in monitoring wells MW-9A, MW-9B have seen a decrease in TBA concentration by up to two orders of magnitude. However, TBA concentrations in monitoring well MW-9I have increased by three orders of magnitude. Please present a plausible explanation as to the fluctuations of TBA in groundwater in the Work Plan requested below.

MTBE is highly soluble and very mobile in groundwater and is not readily biodegradable. Conventional monitoring well networks currently installed at fuel leak sites are generally insufficient to properly locate and define the extent of MTBE plumes. MTBE plumes can be long, narrow, and erratic (meandering). In addition, MtBE plumes can appear as discontinuous slugs particularly for those releases that occurred during the use of MTBE as a wintertime oxygenate (the period 1991 to 1995 in northern California). Thus, the positioning of current monitoring well networks can miss the MTBE plume core, and monitoring well design can incorrectly reflect the severity of the release. Therefore, we request that you perform a detailed assessment to define and quantify the full three-dimensional extent of MTBE, Total Petroleum Hydrocarbons, Benzene, and other contamination in groundwater.

Discuss your proposal for performing this work in the Work Plan requested below. Report the results of your investigation in the Soil and Water Investigation (SWI) Report requested below.

2. **Preferential Pathway Study**

The purpose of the preferential pathway study is to locate potential migration pathways and conduits and determine the probability of the NAPL and/or plume encountering preferential pathways or conduits that could spread contamination.

We request that you perform a preferential pathway study that details the potential migration pathways and potential conduits (wells, utilities, pipelines, etc.) for horizontal and vertical migration that may be present in the vicinity of the site. Discuss your analysis and interpretation of the results of the preferential pathway study (including the detailed well survey and utility survey requested below) and report your results in the report requested below. Include an evaluation of the probability of the dissolved phase and NAPL plumes for all constituents of concern encountering preferential pathways and conduits that could spread the contamination, particularly in the lateral direction downgradient of your site. The results of your study shall contain all information required by 23 CCR, Section 2654(b).

a) **Utility Survey**

An evaluation of all utility lines and trenches (including sewers, storm drains, pipelines, trench backfill, etc.) within and near the site and plume area(s) is required as part of your study. Submittal of map(s) and cross-sections showing the location and depth of all utility lines and trenches within and near the site and plume area(s) is required as part of your study.

b) **Well Survey**

The preferential pathway study shall include a detailed well survey of all wells (monitoring and production wells: active, inactive, standby decommissioned (sealed with concrete), abandoned, (improperly decommissioned or lost); and dewatering and cathodic protection wells) within a 2000 feet radius of the subject site. The well survey should include well data from California Department of Water Resource well database and Alameda County Department of Public Works. Submittal of map(s) showing the location of all wells identified in your study, and the use of tables to report the data collected as part of your survey are required. Please refer to the Regional Board's guidance for identification, location, and evaluation of potential deep well conduits when conducting your preferential pathway study. Present the result from the preferential pathway study in the report requested below.

3. **Project Approach and Investigation Reporting** – Site Conceptual Model

We anticipate that characterization and remediation work in addition to what is requested in this letter will be necessary at and down gradient from your site. Considerable cost savings can be realized if your consultant focuses on developing and refining a viable Site Conceptual Model (SCM) for the project. A SCM is a set of working hypotheses pertaining to all aspects of the contaminant release, including site geology, hydrogeology, release history, residual and dissolved contamination, attenuation mechanisms, pathways to nearby receptors, and likely magnitude of potential impacts to receptors. The SCM is used to identify data gaps that are subsequently filled as the investigation proceeds. As the data gaps are filled, the working hypotheses are modified, and the overall SCM is refined and strengthened. Subsurface investigations continue until the SCM no longer changes as new data are collected. At this point, the SCM is said to be "validated." The validated SCM then forms the foundation for developing the most cost-effective corrective action plan to protect existing and potential receptors.

When performed properly, the process of developing, refining and ultimately validating the SCM effectively guides the scope of the entire site investigation. We have identified, based on our review of existing data, some initial key data gaps in this letter and have described several tasks that we believe will provide important new data to refine the SCM. We request that your consultant develop a SCM for this site, identify data gaps, and propose specific supplemental tasks for future investigations. There may need to be additional phases of investigations, each building on the results of the prior work, to validate the SCM. Characterizing the site in this way will improve the efficiency of the work and limit its overall cost.

Both industry and the regulatory community endorse the SCM approach. Technical guidance for developing SCMs is presented in API's Publication No. 4699 and EPA's Publication No. EPA 510-B-97-001 both referenced above; and "Guidelines for Investigation and Cleanup of MTBE and Other Ether-Based Oxygenates, Appendix C," prepared by the State Water Resources Control Board, dated March 27, 2000.

The SCM for this project shall incorporate, but not be limited to, the following:

a) A concise narrative discussion of the regional geologic and hydrogeologic setting obtained from your background study. Include a list of technical references you reviewed,

and copies (photocopies are sufficient) of regional geologic maps, groundwater contours, cross-sections, etc.

b) A concise discussion of the on-site and off-site geology, hydrogeology, release history, source zone, plume development and migration, attenuation mechanisms, preferential pathways, and potential threat to down gradient and above-ground receptors. Be sure to include the vapor pathway in your analysis. Maximize the use of large-scale graphics (e.g., maps, cross-sections, contour maps, etc.) and conceptual diagrams to illustrate key points. Geologic cross-sections, which include an interpretive drawing of the vertical extent of soil and groundwater contamination (i.e., an interpretive drawing—not a plot of laboratory results). The SCM report requested below is to include one cross section parallel and one cross section perpendicular to the contaminant plume axis. Each cross section should include, but not be restricted to, the following:

1. Subsurface geologic features, depth to groundwater and man-made condults.
2. Surface topography. The cross sections should be extended off-site where necessary to show significant breaks in slope.
3. Soil descriptions for all borings and wells along the line of section.
4. Screen and filter pack intervals for each monitoring well.
5. Sampling locations and results for soil and grab groundwater samples.
6. Site features such as the tank pit, dispensers, buildings etc. Where appropriate, monitoring well location and soil boring locations will be projected back to the strike of the cross section line.

c) Identification and listing of specific data gaps that require further investigation during subsequent phases of work.

d) Proposed activities to investigate and fill data gaps identified above.

e) The SCM shall include an analysis of the hydraulic flow system at and down gradient from the site. Include rose diagrams for groundwater gradients. The rose diagram shall be plotted on groundwater contour maps and updated in all future reports submitted for your site. Include an analysis of vertical hydraulic gradients. Note that these likely change due to seasonal precipitation and pumping.

f) Temporal changes in the plume location and concentrations are also a key element of the SCM. In addition to providing a measure of the magnitude of the problem, these data are often useful to confirm details of the flow system inferred from the hydraulic head measurements. Include plots of the contaminant plumes on your maps, cross-sections, and diagrams.

g) Several other contaminant release sites exist in the vicinity of your site. Hydrogeologic and contaminant data from those sites may prove helpful in testing certain hypotheses for your SCM. Include a summary of work and technical findings from nearby release sites and incorporate the findings from nearby site investigations into your SCM.

h) Plots of chemical concentrations vs. time and vs. distance from the source. Plots should be shown for each monitoring well, which has had detectable levels of contaminants

Paula M. Sime

From: Janice A. Jacobson
Sent: Wednesday, March 21, 2007 2:24 PM
To: Paula M. Sime
Subject: FW: Fuel Leak Case No. RO390 (7-0238)

From: Plunkett, Steven, Env. Health [mailto:steven.plunkett@acgov.org]
Sent: Wednesday, January 24, 2007 10:17 AM
To: Janice A. Jacobson
Subject: RE: Fuel Leak Case No. RO390 (7-0238)

Janice,

Regarding RO 390:

I will allow an extension for both the SCM and the Work Plan submission. However, a 30 day extension for the SCM should be adequate to prepare necessary documents. The time extension will place the date for submission of the SCM at March 15, 2006. In addition, I will provide an additional 30 day extension for the submission of a Work Plan, with the require submission on April 15, 2007

Regarding the site RO358:

The SCM is to be submitted after the completion of the offsite investigation, which has yet to be determined. If there are delays for the offsite investigation and access ACEH will grant an extension to May 1, 2007. However, if the offsite investigation moves forward without delay ACEH will require the SWI and SCM to be submitted by April 15, 2007.

ACEH understand the difficulties associated with offsite investigations and access issues. Should problems arise we will reconsider the reporting deadlines.

Best Regards,
Steven Plunkett
Hazardous Materials Specialist
Alameda County Environmental Health
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577
510-383-1767
510-337-9355 Fax
steven.plunkett@acgov.org

From: Janice A. Jacobson [mailto:jjacobson@ERI-US.com]
Sent: Tuesday, January 23, 2007 4:05 PM
To: Plunkett, Steven, Env. Health
Cc: Jim F. Chappell; jennifer.c.sedlachek@exxonmobil.com
Subject: Fuel Leak Case No. RO390 (7-0238)

Former Exxon 7-0238
2200 East 12th Street

Oakland, CA

Steven:
Jim Chappell and I spoke to you today regarding your request, in a letter dated January 17, 2007, for a SCM report submittal by February 15, 2006, and a
Work Plan submittal by February 30, 2006. You indicated in our conversation that you would be willing to grant an extension to the SCM and the Work
Plan submittal. ERI is requesting an extension of April 15, 2007 for the SCM and an extension of May 15, 2007 for the Work Plan. Please respond to this
email so I have your approval for the extensions in writing.
Please call me if you have any questions.
Thank you,
Janice

Janice A. Jacobson
Project Manager
jjacobson@eri-us.com

phone: 707.766.2018
fax: 707.789.0414
cell: 707.975.0931

Environmental Resolutions, Inc.
601 North McDowell Boulevard
Petaluma, California 94954
www.eri-us.com

ATTACHMENT 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 and the drilling of soil borings at the work 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 by appropriate parties 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 public 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 soil borings will be advanced using dual-tube or direct-push technology. A dual tube system consists of a large diameter (up to 3.5 inches) outer rod which serves as a temporary drive casing nested with an inner sample rods and sample barrel (up to 2.6 inches) used to obtain and retrieve the soil cores. The dual tubes are simultaneously pushed, pounded, or vibrated into the ground.

As the rods are advanced, soil is forced up inside of a three-foot sample barrel that is attached to the end of the inner rods. Soil samples are collected in stainless steel or clear plastic sample liners inside the sample barrel as both rods are advanced. After being driven three feet, the inner rods and sample barrel are retrieved, and the sample liners are removed from the sample barrel and are either package for chemical analysis or visually inspected for lithologic identification. Clean empty liners are placed into a new three foot sample barrel and attached to the rods and lowered to the bottom of the hole and the process is repeated until the total depth of the borehole is reached.

The larger outer diameter rods are left in place while the inner rod and sample barrel is retrieved. This prevents the borehole from collapsing and ensures that the soil samples are collected from the targeted depth rather than potentially be contaminated with slough from higher up in the borehole.

The drive casing, sampling rods, sample barrels, and tools will be steam-cleaned before use and between boreholes to minimize the possibility of cross-hole contamination. The rinsate will be contained in drums and stored on site. ERI will coordinate with Exxon Mobil for appropriate disposal of the rinsate.

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

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. Soil samples selected for possible chemical analysis will be sealed promptly with Teflon® tape and plastic caps. 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 and left at the site. ERI will coordinate with Exxon Mobil for the soil to be removed to an appropriate disposal facility.

Grab Groundwater Sample Collection through Direct Push Rods

At first encountered groundwater, the sample barrel and inner rods will be removed from the borehole. Small diameter well casing with 0.010" slotted well screen may be installed to facilitate the collection of groundwater samples. The temporary well is lowered through the drive casing and then the drive casing is pulled up approximately 0.5 feet to 2 feet to expose the slotted interval and allow groundwater to flow into the borehole. Groundwater samples may then be collected from within the drive casing with a new disposable bailer or peristaltic pump. When using dual-wall direct-push technology, the outer rods seal off upper portions of the aquifer while coring to the lower depths. Groundwater samples from lower depths can be collected by removing the inner coring rods while the outer rods remain in place, and attaching drive rods to a groundwater sampling probe such as the HydroPunch II® (HP II), which is then inserted inside the outer rods of the dual-wall equipment. A 5-foot long disposable screen and tip is inserted into the HP-II, the HP-II is pushed to the desired depth and the outer body of the HP-II is retracted. The disposable screen is exposed to the ground water and a ¾-inch inner-diameter bailer is lowered through the rods and into the screened zone for sample collection.

Grab Groundwater Sampling

The Hydropunch® sampler (or similar) provides a method for collecting groundwater samples at multiple depths in the same borehole. To sample groundwater, the sample tool is pushed to the selected depth beneath the water table, then withdrawn to expose an inlet screen. Alternatively, a temporary casing is placed within the casing. A water sample is then collected and promptly transported in iced storage in a thermally-insulated ice chest, accompanied by a Chain of Custody Record, to a California-certified laboratory.

Borehole Grouting

After soil and grab groundwater sampling have been completed, all boreholes will be backfilled with cement grout containing less that 5 percent pure sodium bentonite. The grout will be pumped through a tremie pipe positioned at the bottom of the boreholes.