ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
ALEX BRISCOE, Director

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

April 4, 2013

Mr. Denis Brown
Shell Oil Products US
20945 S. Wilmington Ave.
Carson, CA 90810-1039

J.T., Elizabeth G., W.T., and Jeanette Watters, Trust
600 Caldwell Road
Oakland, CA 94611

Subject: Case Closure for Fuel Leak Case No. RO0000220 and GeoTracker Global ID T0600101245, Shell #13-5691, 285 Hegenberger Road, Oakland, CA 94621

Dear Mr. Brown and J.T., Elizabeth G., W.T., and Jeanette Watters, Trust:

This letter transmits the enclosed underground storage tank (UST) case closure letter in accordance with Chapter 6.75 (Article 4, Section 25299.37[h]). The State Water Resources Control Board adopted this letter on February 20, 1997. As of March 1, 1997, the Alameda County Environmental Health (ACEH) is required to use this case closure letter for all UST leak sites. We are also transmitting to you the enclosed case closure summary. These documents confirm the completion of the investigation and cleanup of the reported release at the subject site. The subject fuel leak case is closed. This case closure letter and the case closure summary can also be viewed on the State Water Resources Control Board's Geotracker website (http://geotracker.swrcb.ca.gov) and the Alameda County Environmental Health website (http://www.acgov.org/aceh/index.htm).

SITE INVESTIGATION AND CLEANUP SUMMARY

Please be advised that the following conditions exist at the site:

- Total Petroleum hydrocarbons as gasoline remains in soil at concentrations up to 6,500 ppm.
- Benzene remains in soil at concentrations up to 13.2 ppm.
- As described in section IV of the attached Case Closure Summary, the case was closed with Site Management Requirements that limit future land use to the current commercial land use as an active fueling station only.

If you have any questions, please call Jerry Wickham at (510) 567-6791. Thank you.

Sincerely,

Donna L. Drogos, P.E.
Division Chief

Enclosures:
1. Remedial Action Completion Certification
2. Case Closure Summary

cc:

Leroy Griffin (w/enc)
Oakland Fire Department
250 Frank H. Ogawa Plaza, Ste. 3341
Oakland, CA 94612-2032
(*Sent via E-mail to: lgriffin@oaklandnet.com*)

Closure Unit
State Water Resources Control Board
UST Cleanup Fund
P.O. Box 944212
Sacramento, CA 94244-2120
(uploaded to GeoTracker)

Peter Schaefer
Conestoga-Rovers & Associates
5900 Hollis Street, Suite A
Emeryville, CA 94608 2032
(*Sent via E-mail to: pschaefer@craworld.com*

Donna Drogos, ACEH (*Sent via E-mail to: donna.drogos@acgov.org*)
Jerry Wickham, ACEH (*Sent via E-mail to: jerry.wickham@acgov.org*)

GeoTracker (w/enc)
eFile (w/orig enc)

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
ALEX BRISCOE, Director

DEPARTMENT OF ENVIRONMENTAL HEALTH
OFFICE OF THE DIRECTOR
1131 HARBOR BAY PARKWAY
ALAMEDA, CA 94502
(510) 567-6777
FAX (510) 337-9135

REMEDIAL ACTION COMPLETION CERTIFICATION

April 4, 2013

Mr. Denis Brown
Shell Oil Products US
20945 S. Wilmington Ave.
Carson, CA 90810-1039

J.T., Elizabeth G., W.T., and Jeanette Watters, Trust
600 Caldwell Road
Oakland, CA 94611

Subject: Case Closure for Fuel Leak Case No. RO0000220 and GeoTracker Global ID T0600101245, Shell #13-5691, 285 Hegenberger Road, Oakland, CA 94621

Dear Mr. Brown and J.T., Elizabeth G., W.T., and Jeanette Watters, Trust:

This letter confirms the completion of a site investigation and remedial action for the underground storage tanks formerly located at the above-described location. Thank you for your cooperation throughout this investigation. Your willingness and promptness in responding to our inquiries concerning the former underground storage tank(s) are greatly appreciated.

Based on information in the above-referenced file and with the provision that the information provided to this agency was accurate and representative of site conditions, this agency finds that the site investigation and corrective action carried out at your underground storage tank(s) site is in compliance with the requirements of subdivisions (a) and (b) of Section 25299.37 of the Health and Safety Code and with corrective action regulations adopted pursuant to Section 25299.77 of the Health and Safety Code and that no further action related to the petroleum release(s) at the site is required.

Claims for reimbursement of corrective action costs submitted to the Underground Storage Tank Cleanup Fund more than 365 days after the date of this letter or issuance or activation of the Fund's Letter of Commitment, whichever occurs later, will not be reimbursed unless one of the following exceptions applies:

- Claims are submitted pursuant to Section 25299.57, subdivision (k) (reopened UST case); or
- Submission within the timeframe was beyond the claimant's reasonable control, ongoing work is required for closure that will result in the submission of claims beyond that time period, or that under the circumstances of the case, it would be unreasonable or inequitable to impose the 365-day time period.

This notice is issued pursuant to subdivision (h) of Section 25299.37 of the Health and Safety Code. Please contact our office if you have any questions regarding this matter.

Sincerely,

Ariu Levi
Director

CASE CLOSURE SUMMARY
LEAKING UNDERGROUND FUEL STORAGE TANK - LOCAL OVERSIGHT PROGRAM

I. AGENCY INFORMATION

Date: October 3, 2012

Agency Name: Alameda County Environmental Health	Address: 1131 Harbor Bay Parkway
City/State/Zip: Alameda, CA 94502-6577	Phone: (510) 567-6791
Responsible Staff Person: Jerry Wickham	Title: Senior Hazardous Materials Specialist

II. CASE INFORMATION

Site Facility Name: Shell #13-5691		
Site Facility Address: 285 Hegenberger Road, Oakland, CA 94621		
RB Case No.: 01-1350	Local Case No.: STiD 530	LOP Case No.: RO0000220
URF Filing Date: 06/12/1992	Geotracker ID: T0600101245	APN: 42-4425-18-2

Responsible Parties	Addresses	Phone Numbers
J.T., Elizabeth G., W.T., and Jeanette Watters, Trust	600 Caldwell Road Oakland, CA 94611	---
Denis Brown Shell Oil Products, US	20945 S. Wilmington Avenue Carson, CA 90810-1039	(707) 865-0251

Tank I.D. No	Size in Gallons	Contents	Closed In Place/Removed?	Date
---	Not Reported	Gasoline	Removed	1984
---	550	Waste Oil	Removed	03/30/1992
Piping			Upgraded	07/2004

III. RELEASE AND SITE CHARACTERIZATION INFORMATION

Cause and Type of Release: Unknown. Site investigation was initiated in 1989 in response to detection of petroleum hydrocarbons in soil samples collected near the northern property line. .		
Site characterization complete? Yes	Date Approved By Oversight Agency: -----	
Monitoring wells installed? Yes	Number: 13	Proper screened interval? Yes
Highest GW Depth Below Ground Surface: 1.14 fbgs	Lowest Depth: 9.56 fbgs	Flow Direction: Predominantly to the southeast.
Most Sensitive Current Use: Potential drinking water source.		

Summary of Production Wells in Vicinity: The nearest water supply well is an irrigation well located approximately 600 feet northeast of the site. Based on the cross gradient location and distance from the site, the irrigation well is not expected to be a receptor for the site. A second irrigation well is located approximately 1,900 feet southeast of the site. Based on the distance from the site, the second irrigation well is not expected to be a receptor for the site. No other water supply wells are located within 2,000 feet of the site.	
Are drinking water wells affected? No	Aquifer Name: East Bay Plain
Is surface water affected? No	Nearest SW Name: San Leandro Channel is approximately 80 south of the site.
Off-Site Beneficial Use Impacts (Addresses/Locations): None identified.	
Reports on file? Yes	Where are reports filed? Alameda County Environmental Health and City of Oakland Fire Department

TREATMENT AND DISPOSAL OF AFFECTED MATERIAL

Material	Amount (Include Units)	Action (Treatment or Disposal w/Destination)	Date
Tanks	1-550-gallon	Not Reported	03/30/1992
Piping	Not Reported	Not Reported	07/2004
Free Product	----	----	----
Soil	20 cubic yards	Disposed off-site at Laidlaw Environmental Services Landfill in Buttonwillow, CA	03/1992
	70 cubic yards	Disposed off-site at Forward Landfill in Manteca, CA	07/13/2004
Groundwater	----	----	----

MAXIMUM DOCUMENTED CONTAMINANT CONCENTRATIONS BEFORE AND AFTER CLEANUP
(Please see Attachments 1 through 6 for additional information on contaminant locations and concentrations)

Contaminant	Soil (ppm)		Water (ppb)	
	Before	After	Before	After
TPH (Gas)	31,000	6,500	140,000(1)	23,000(1)
TPH (Diesel)	7,600	170	460,000(2)	1,800(2)
Oil and Grease	6,800	6,800	720,000(3)	Not Analyzed(3)
Benzene	22	13.2	28,000(4)	10,000(4)
Toluene	110	38	26,000(5)	81(5)
Ethylbenzene	100	61	13,000(6)	510(6)
Xylenes	510	500	22,000(7)	190(7)
Heavy Metals (Cd, Cr, Pb, Ni, Zn)	34(8)	34(8)	Not Analyzed	Not Analyzed
MTBE	40(9)	7.1(10)	32,000(11)	230(12)
Other (8240/8270)	Not Detected(13)	Not Detected(13)	Not Detected(13)	Not Detected(13)

1) The maximum concentration before cleanup is from a groundwater sample from well MW-7 on 04/10/1991; the maximum concentration after cleanup is from a groundwater sample collected from well MW-10 during the most recent groundwater monitoring event on 01/05/2012.
(2) The maximum concentration before cleanup is from a grab groundwater sample from boring SLH-1 collected on 02/12/1992; the maximum concentration after cleanup is from a groundwater sample collected from well VEW-6 during the most recent groundwater monitoring event on 01/05/2012.
(3) The maximum concentration before cleanup is from a grab groundwater sample from boring SLH-1 collected on 02/12/1992; no groundwater samples were analyzed for oil & grease after 1992.
(4) The maximum concentration before cleanup is from a groundwater sample from well MW-7 on 01/14/1993; the maximum concentration after cleanup is from a groundwater sample collected from well MW-10 during the most recent groundwater monitoring event on 01/05/2012.
(5) The maximum concentration before cleanup is from a groundwater sample from well MW-7 on 07/23/1990; the maximum concentration after cleanup is from a groundwater sample collected from well MW-10 during the most recent groundwater monitoring event on 01/05/2012.
(6) The maximum concentration before cleanup is from a groundwater sample from well MW-7 on 07/23/1990; the maximum concentration after cleanup is from a groundwater sample collected from well MW-10 during the most recent groundwater monitoring event on 01/05/2012.
(7) The maximum concentration before cleanup is from a groundwater sample from well MW-10 on 01/10/2005; the maximum concentration after cleanup is from a groundwater sample collected from well MW-10 during the most recent groundwater monitoring event on 01/05/2012.
(8) Total lead = 34 ppm; Cadmium <0.5 ppm; Chromium = 23 ppm; Nickel = 29 ppm; and Zinc = 30 ppm.
(9) MTBE = 40 ppm; EDB and EDC < 1.0 ppm; no other fuel oxygenates analyzed.
(10) MTBE = 7.1 ppm; EDB and EDC <1.0 ppm; no other fuel oxygenates analyzed.
(11) MTBE = 32,000 ppb; TBA = 9,800 ppb; DIPE; ETBE and TAME <2.0 ppb; EDB and EDC not analyzed.
(12) During the most recent groundwater monitoring event on 01/05/2012, MTBE = 230 ppb; TBA = 160 ppb; DIPE, ETBE, and TAME <2.0 ppb; EDB and EDC not analyzed.
(13) VOCs and PCBs not detected above various reporting limits.

Site History and Description of Corrective Actions:

The site is an active gasoline service station located at the intersection of Leet Drive and Hegenberger Road in Oakland, CA. Surrounding land use is commercial. San Leandro Channel is approximately 80 feet south of the site on the opposite side of Leet Drive.

In 1984, the on-site USTs were replaced with single-wall fiberglass tanks, but no records are available that document their removal. Between February and November 1989, ten groundwater monitoring wells were installed. Up to 31,000 ppm of total petroleum hydrocarbons as gasoline (TPHg) and 14 ppm of benzene were detected in soil samples collected during well installation. During August and September 1990, soil borings were advanced at the adjacent property (295 Hegenberger Road) occupied by Rollins Trucking. Up to 4,000 ppm of TPHg and 22 ppm of benzene were detected in soil samples from the borings.

In July 1991, a soil gas survey was conducted in backfill for a 54-inch storm drain in the southbound lanes of Hegenberger Road to investigate the presence of hydrocarbons in a utility trench. Up to 62 milligrams per liter (mg/L) of TPHg and 0.89 mg/l of benzene were detected in the five soil gas samples.

In November 1991, one soil vapor extraction (SVE) well and three soil vapor monitoring points were installed. Short-term SVE tests using the wells indicated a radius of influence of 30 to 35 feet with heterogeneous vapor permeability.

In February and March 1992, hydraulic lifts, an oil/water separator, and a waste oil tank were removed. Due to detections in confirmation soil samples, additional excavation was conducted in the three areas on April 21, 1992. From May 18 to 20, 1992, additional excavation occurred around the northern product island during station remodeling activities. Post-excavation soil samples contained up to 1,800 ppm of TPHg, 7,600 ppm TPHd, and 1.9 ppm benzene.

In June 1993, three groundwater monitoring wells and four dual-completion soil vapor extraction and air sparging (SVE/AS) wells were installed. An SVE system was operated between August 1993 and February 1995. System operation was discontinued in February 1995 due to negligible hydrocarbon removal. The SVE system removed approximately 707 pounds of TPHg and 6.9 pounds of benzene. SVE well VEW-5 was destroyed on September 14, 1995 to accommodate car wash construction. Monitoring wells MW-5 and MW-7 were also destroyed in 1995

The USTs and dispensers were upgraded in July 1998. Soil samples collected beneath the dispensers contained up to 790 ppm TPHg, 400 ppm TPHd, and 2.0 ppm benzene.

In March 1999, three soil borings were advanced between the site and a 54-inch storm drain running along the westbound lands of Hegenberger Road. Up to 43 ppm TPHg and 36 ppm TPHd were detected in soil samples from the borings. Benzene and MTBE were not detected at concentrations above the reporting limit in soil samples from the borings. Up to 16,500 ppb of TPHg, 5,080 ppb of TPHd, and 268 ppb of benzene, and 180 ppb of MTBE were detected in grab groundwater samples collected from the borings. Based on the higher concentrations of petroleum hydrocarbons in soil and groundwater samples from the borings than in downgradient monitoring wells, the data suggested that the storm drain intercepted the plume or the plume stabilized prior to reaching the downgradient monitoring wells. Based on a method for estimation of contaminant transport within utility corridors, the discharge concentration to San Leandro Channel was estimated at 2,680 ppb TPHg, 23 ppb benzene and 13 ppb MTBE.

In November 1999, short-term SVE testing was conducted using four existing SVE wells followed by a 5-day SVE test using wells VW-1 and VW-4. During the short-term tests, TPHg removal rates were 0.95 to 2.1 pounds per day per well. During the long-term test, the TPHg removal rate ranged from 2.13 to 5.95 pounds per day. A total of 18.7 pounds of TPHg, 2.3 pounds of MTBE, and 0.97 pounds of benzene were removed during SVE testing.

Site History and Description of Corrective Actions (continued):

In June 2000, three additional SVE/AS wells were installed along the southeast side of the site. Up to 1,800 ppm of TPHg, 2.93 ppm MTBE, and 13.2 ppm of benzene were detected in soil samples from the well borings. Between March 2002 and February 2003, an SVE/As system was operated using wells VEW-5/AS-1, VEW-6/AS-2, and/or VEW-7/AS-3. The system was shutdown in February 2003 due to declining influent concentrations. The SVE/AS system removed an estimated 99.3 pounds of TPHg, 0.18 pounds of MTBE, and 0.48 pounds of benzene.

In June and July 2004, the fuel dispensers and piping were upgraded. Nine soil samples collected from beneath the dispensers and piping. Up to 7,200 ppm of TPHg, 1,800 ppm of TPHd, and 3.3 ppm of benzene, and 40 ppm of MTBE were detected in the soil samples. Following overexcavation of the piping trenches, seven additional soil samples were collected. Up to 6,500 ppm of TPHg, 170 ppm of TPHd, 3.6 ppm of benzene, and 21 ppm of MTBE were detected in over-excavation soil samples.

In November 2004, a dual-phase extraction (DPE) test was conducted using wells MW-1, MW-9, and MW-10. Vacuum influence was monitored but not detected in surrounding wells. A low groundwater extraction rate resulted in 950 gallons removed during 213 hours of DPE operation.

In April 2005, an additional DPE test was conducted using well MW-10. During 148.5 hours of operation, an estimated 2.19 pounds of TPHg, 0.157 pounds of benzene, and 0.425 pounds of MTBE were removed from well MW-10. A total of approximately 1,000 gallons of water was extracted during 148.5 hours of DPE for an average extraction rate of 0.11 gallons per minute.

Groundwater has been monitored at the site since February 1989. The monitoring data indicate that the plume generally appears to be stable with slowly decreasing trends in concentrations observed in site monitoring well data.

IV. CLOSURE

Does completed corrective action protect existing beneficial uses per the Regional Board Basin Plan? Yes		
Does completed corrective action protect potential beneficial uses per the Regional Board Basin Plan? Yes		
Does corrective action protect public health for current land use? Alameda County Environmental Health staff does not make specific determinations concerning public health risk. However, based upon the information available in our files to date, closure of this site appears to be consistent with the policies established by the State Water Resources Control Board Low-Threat Underground Storage Tank Closure Policy which became effective on August 17, 2012.		
Site Management Requirements: This fuel leak case has been evaluated for closure consistent with the criteria in the State Water Resources Control Board Low-Threat Underground Storage Tank Closure Policy (LTCP). Benzene concentrations in shallow soil exceed the direct contact and outdoor air exposure criteria prescribed in the LTCP for residential and commercial land use. Under the current land use as an active fueling station, most of the site is paved with minor landscaped areas near the site boundaries resulting in a low potential for direct exposure under the current land use. Therefore, case closure is granted for the current commercial land use as an active fueling station. If a change in land use to any residential, commercial other than as a commercial fueling station, or conservative land use, or if any re-development occurs, Alameda County Environmental Health (ACEH) must be notified as required by Government Code Section 65850.2.2. Due to the potential for direct exposure and vapor intrusion to indoor air for future buildings, ACEH will re-evaluate the case upon receipt of approved development/construction plans. Excavation or construction activities in areas of residual contamination require planning and implementation of appropriate health and safety procedures by the responsible party prior to and during excavation and construction activities This site is to be entered into the City of Oakland Permit Tracking System due to the residual contamination on site.		
Should corrective action be reviewed if land use changes? Yes		
Was a deed restriction or deed notification filed? No		Date Recorded: ---
Monitoring Wells Decommissioned: No	Number Decommissioned: 3	Number Retained: 10
List Enforcement Actions Taken: None		
List Enforcement Actions Rescinded: None		

V. ADDITIONAL COMMENTS, DATA, ETC.

Considerations and/or Variances:

Because the site is an active commercial fueling station, the LTCP does not require evaluation of the potential for vapor intrusion to indoor air and does not consider the potential for vapor intrusion if land use changes in the future. Therefore, this site has not been evaluated for vapor intrusion to indoor air. The depth to groundwater is typically less than five feet and the highest concentrations of residual contamination appear to be within the capillary fringe zone. If future on-site land use changes to something other than a retail fueling station, the potential for vapor intrusion to indoor air should be re-evaluated.

Based on the apparent horizontal distance between off-site buildings and the residual contamination and the criteria for consideration of bioattenuation zones described in the LTCP, evaluation of the potential for vapor intrusion to indoor air does not appear to be warranted for the off-site buildings.

San Leandro Creek is less than 100 feet from the edge of the hydrocarbon plume. Based on this limited distance to a surface water receptor, the site does not meet the criteria for low-threat closure within any of the four prescribed groundwater classifications in the LTCP. However, based on the age of the plume, site hydrogeology, and apparent stability of the plume, the potential for the plume to pose a threat to San Leandro Creek appears to be low. The potential for migration along preferential pathways provided by utility corridors has been evaluated for the site. Based this evaluation, potential discharges from the utility corridors to San Leandro Creek are not expected to pose a significant risk to water quality in San Leandro Creek.'

Benzene concentrations in shallow soil exceed the direct contact and outdoor air exposure criteria prescribed in the LTCP for residential land use, commercial land use, and utility workers. Under the current land use as an active fueling station, most of the site is paved with minor landscaped areas near the site boundaries resulting in a low potential for direct exposure under the current land use. Future risks from direct contact and outdoor air exposure can be mitigated through the use of land use restrictions. Therefore, case closure is granted for the current commercial land use as an active commercial fueling station.

Conclusion:

Alameda County Environmental Health staff believe that the site meets the criteria for case closure under the State Water Resources Control Board Low-Threat Underground Storage Tank Closure Policy. Based upon the information available in our files to date, no further investigation or cleanup for the fuel leak case is necessary at this time. However, as specified in the Site Management Requirements, re-evaluation of this case is required if land uses changes to any residential, commercial other than as a commercial fueling station, or conservative land use, or construction or excavation activities take place.

VI. LOCAL AGENCY REPRESENTATIVE DATA

Prepared by: Jerry Wickham, P.G.	Title: Senior Hazardous Materials Specialist
Signature: Jerry Wickham	Date: 10/10/12
Approved by: Donna L. Drogos, P.E.	Title: Division Chief
Signature: Donna L. Drogos	Date: 10/10/12

This closure approval is based upon the available information and with the provision that the information provided to this agency was accurate and representative of site conditions.

VII. REGIONAL BOARD NOTIFICATION

Regional Board Staff Name: Cherie McCaulou	Title: Engineering Geologist
Notification Date: 10/10/12	

VIII. MONITORING WELL DECOMMISSIONING

Date Requested by ACEH: 12/6/12	Date of Well Decommissioning Report: 04/02/13	
All Monitoring Wells Decommissioned: Yes	Number Decommissioned: 24	Number Retained: Ø
Reason Wells Retained: NA		
Additional requirements for submittal of groundwater data from retained wells: NA		
ACEH Concurrence - Signature: Jerry Wickham		Date: 04/04/13

Attachments:

1. Site Vicinity Map and Aerial Photograph (2 pp)
2. Utility Map, Sample Location Maps, and Groundwater Contour Maps (7 pp)
3. Cross Sections (6 pp)
4. Soil Analytical Data (10 pp)
5. Groundwater Analytical Data (29 pp)
6. Boring Logs (59 pp)

This document and the related CASE CLOSURE LETTER & REMEDIAL ACTION COMPLETION CERTIFICATION shall be retained by the lead agency as part of the official site file.

Wickham, Jerry, Env. Health

From: MCcaulou, Cherie@Waterboards [Cherie.MCcaulou@waterboards.ca.gov]
Sent: Thursday, October 11, 2012 11:02 AM
To: Wickham, Jerry, Env. Health
Subject: RE: Pending closure for case RO220 285 Hegenberger Road, Oakland

Jerry – The Regional Water Board has not objection to the ALEH's recommendation for case closure. Thank you.

Cherie McCaulou

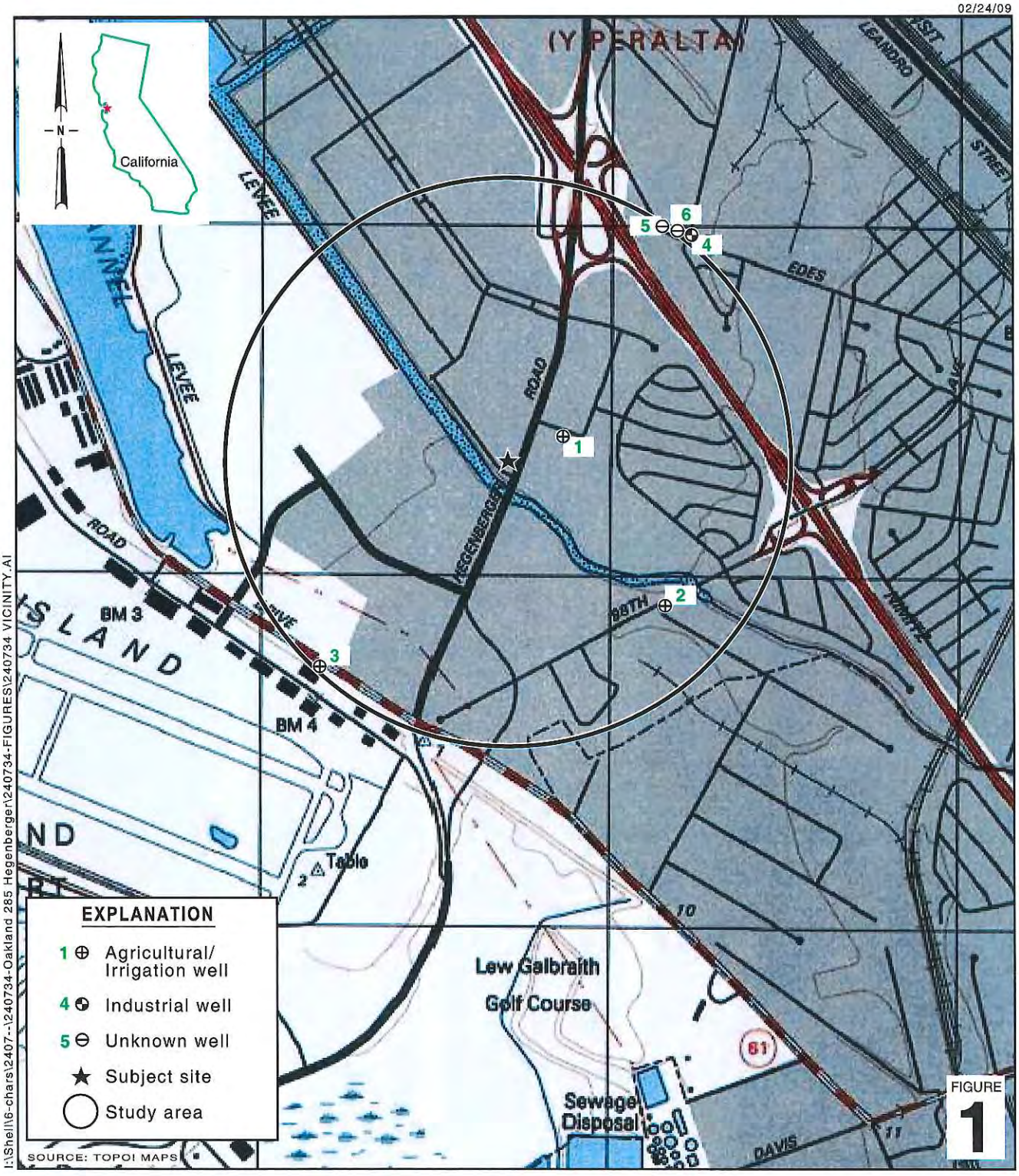
From: Wickham, Jerry, Env. Health [mailto:jerry.wickham@acgov.org]
Sent: Wednesday, October 10, 2012 6:44 PM
To: MCcaulou, Cherie@Waterboards
Subject: Pending closure for case RO220 285 Hegenberger Road, Oakland

Hi Cherie,

This email provides notification of pending closure for ACEH case RO220, 285 Hegenberger Road, Oakland.

Jerry Wickham
Alameda County Environmental Health
1131 Harbor Bay Parkway
Alameda, CA 94502-6577
phone: 510-567-6791
jerry.wickham@acgov.org

02/24/09



I:\Shell\6-chars\2407-\240734-Oakland 285 Hegenberger\240734-FIGURES\240734 VICINITY.AI

FIGURE 1

0 1/8 1/4 1/2 1

SCALE : 1" = 1/4 MILE

Shell-branded Service Station
285 Hegenberger Road
Oakland, California

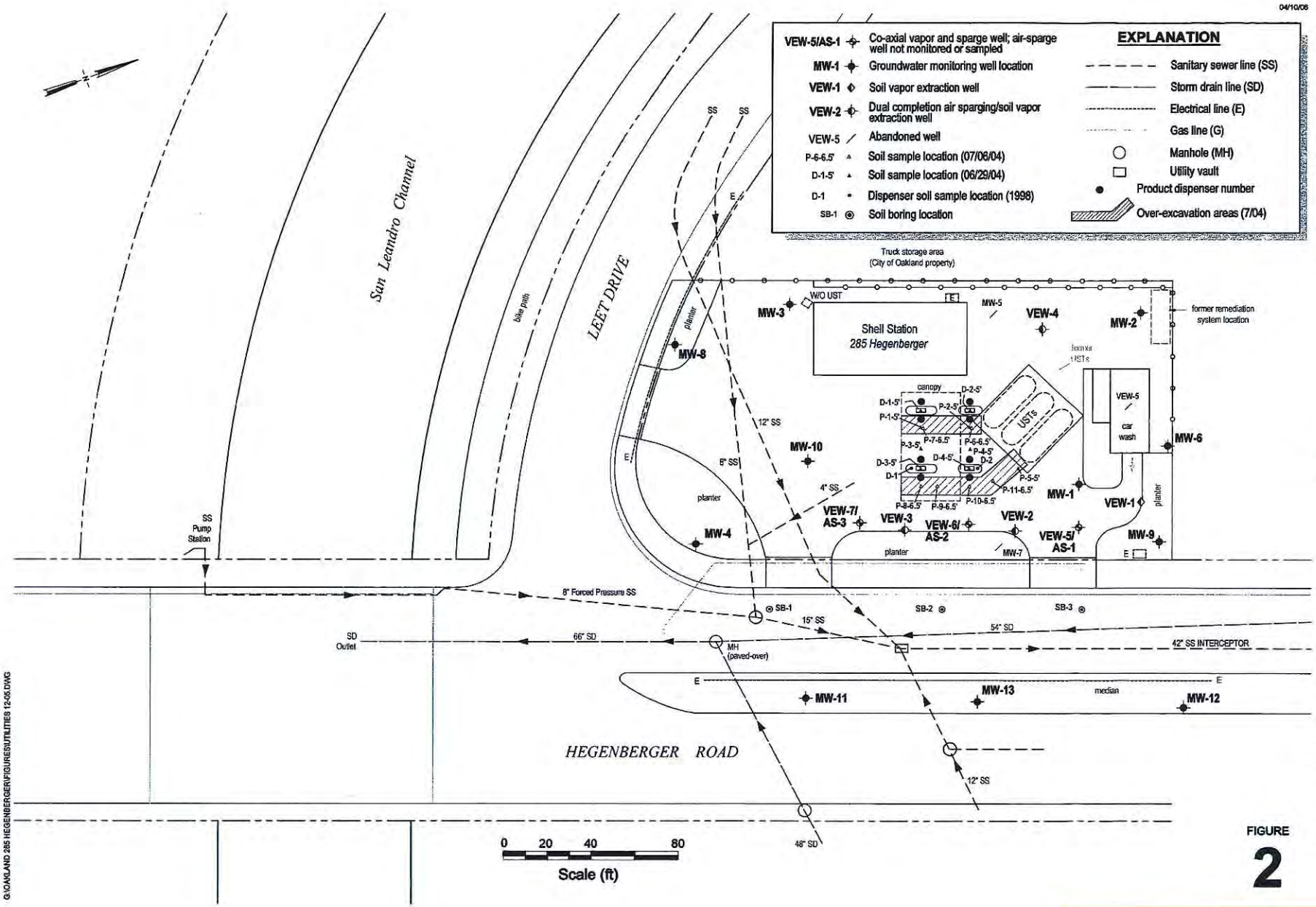
Vicinity Map

CONESTOGA-ROVERS & ASSOCIATES

ATTACHMENT 1

Google earth

feet 400
meters 100



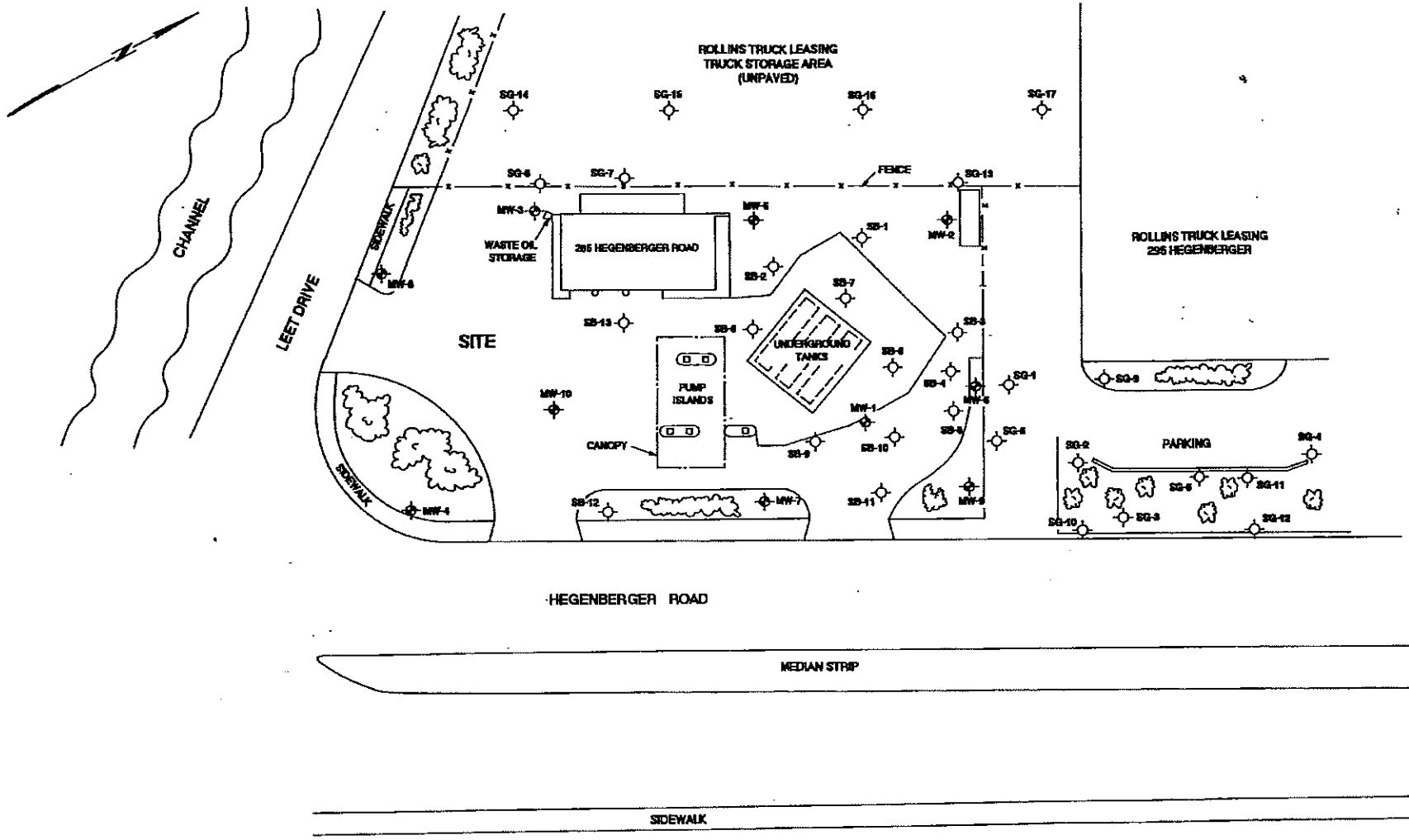
Underground Utility Location Map

CAMBRIA

Shell-branded Service Station
285 Hegenberger Road
Oakland, California
Incident No.98995749

FIGURE
2

ATTACHMENT 2



LEGEND

SB-1 SOIL BORING (locations approximate)

SG-1 OFF SITE SOIL BORING (locations approximate)

MW-1 GROUNDWATER MONITORING WELL

0 40 80

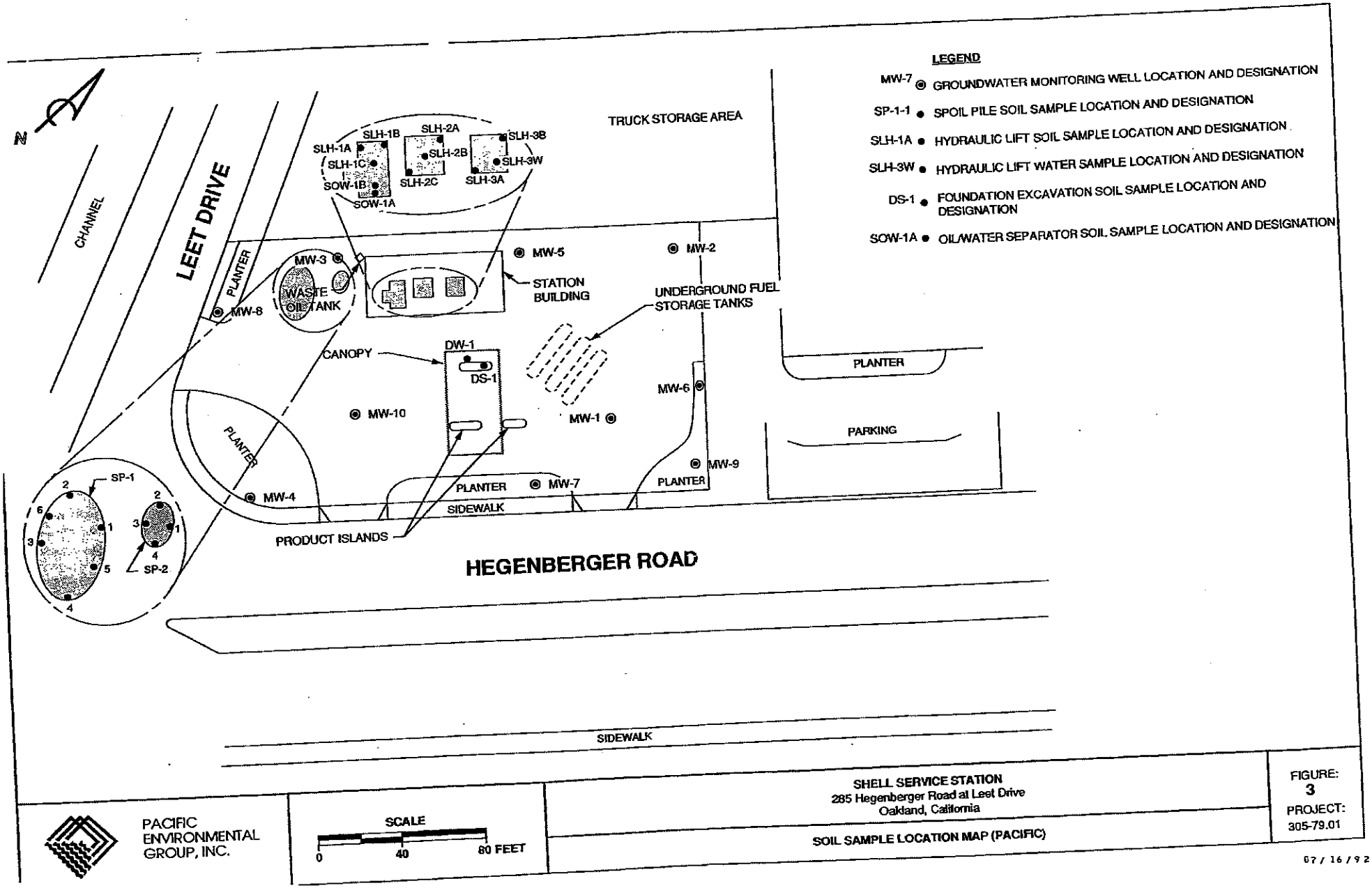
APPROXIMATE SCALE IN FEET

PLOT PLAN

SHELL OIL COMPANY
285 Hegenberger Road
Oakland, California

Converse Environmental West

Scale	AS SHOWN
Prepared by	DEN
Checked by	
Approved by	CRC
Project No.	88-44-358-20
Date	9/24/90
Drawing No.	2



PACIFIC ENVIRONMENTAL GROUP, INC.

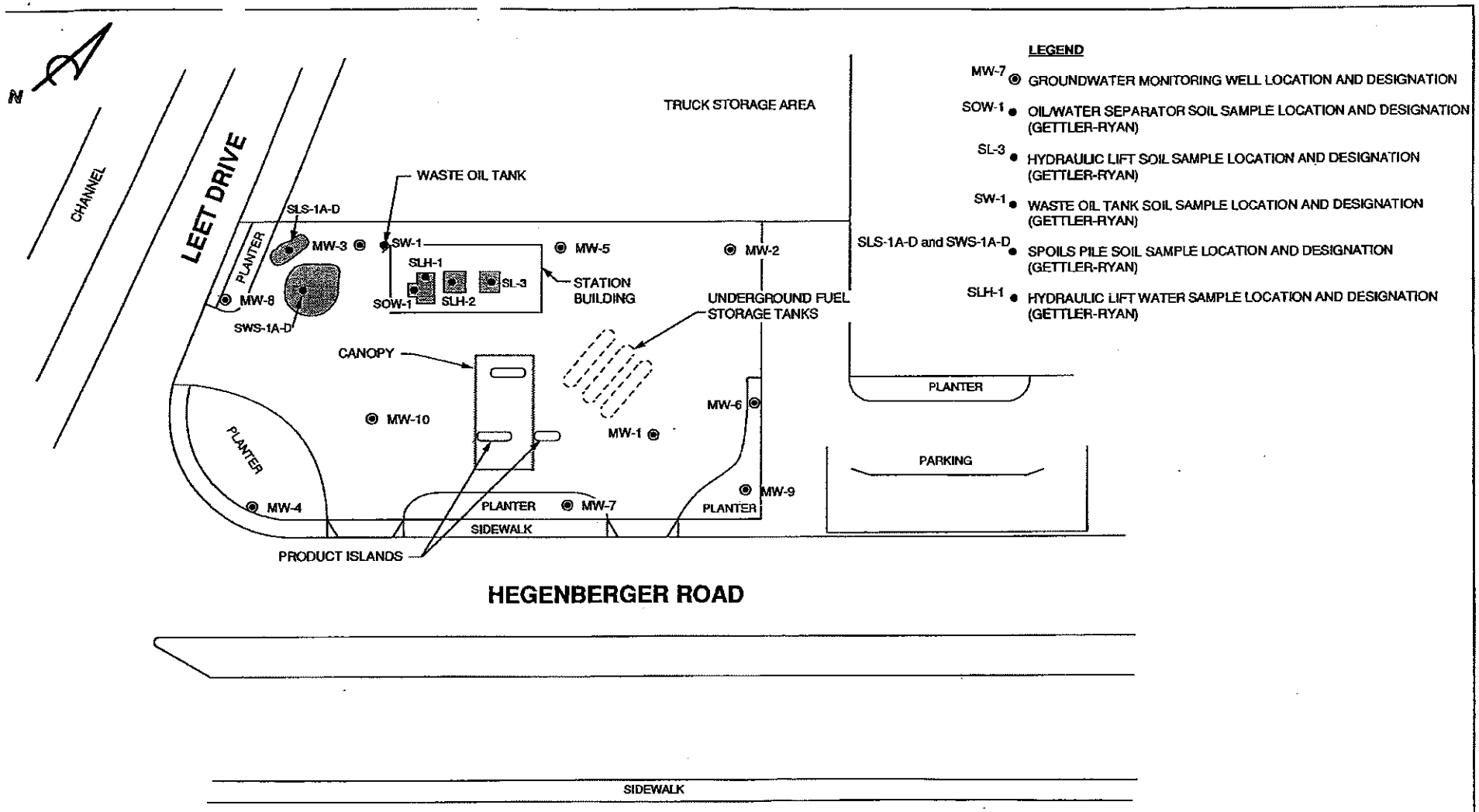
SCALE
0 40 80 FEET

SHELL SERVICE STATION
285 Hegenberger Road at Leet Drive
Oakland, California

SOIL SAMPLE LOCATION MAP (PACIFIC)

FIGURE: 3
PROJECT: 305-79.01

07/16/92



PACIFIC ENVIRONMENTAL GROUP, INC.

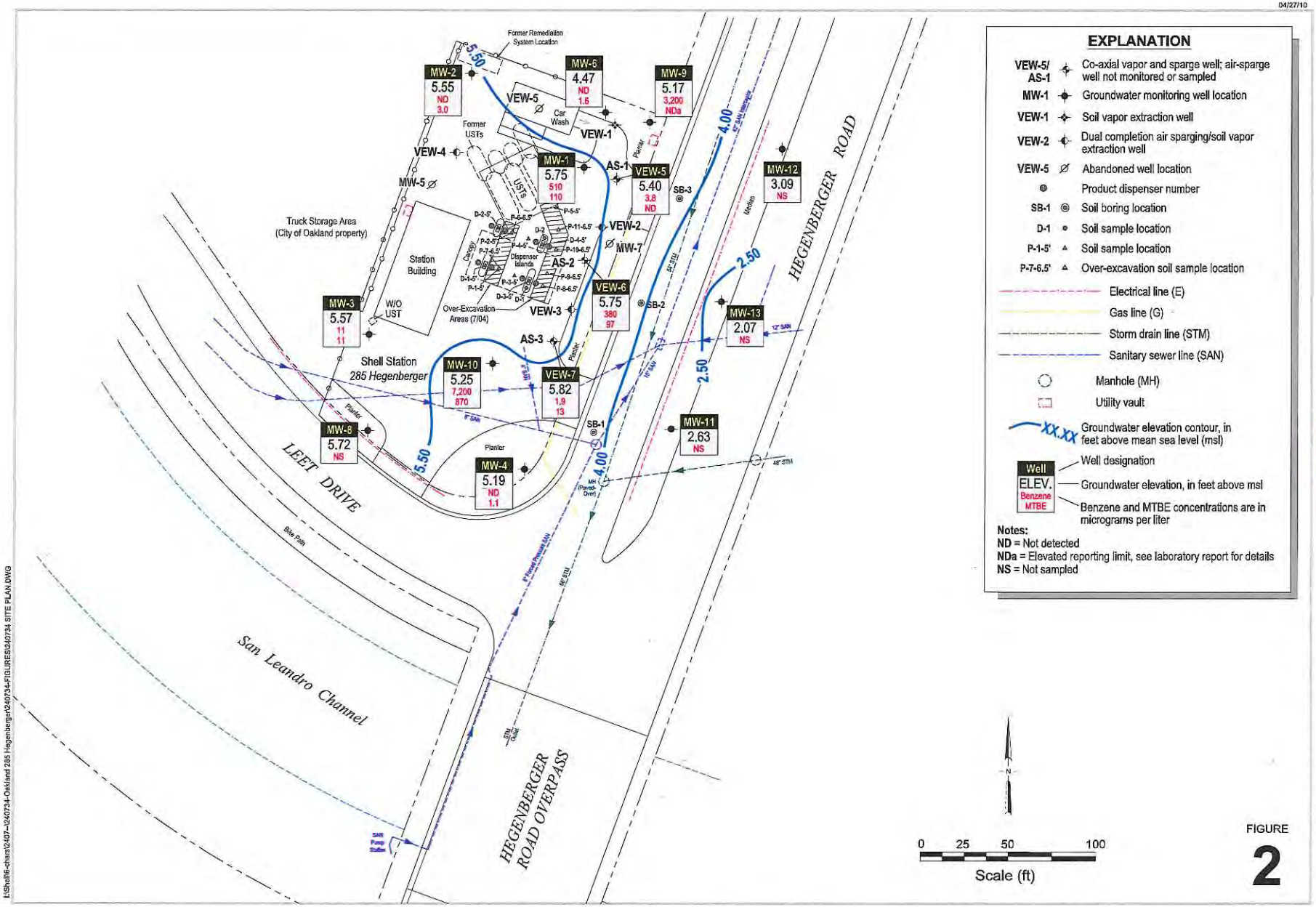
SCALE
0 40 80 FEET

SHELL SERVICE STATION
285 Hegenberger Road at Leet Drive
Oakland, California

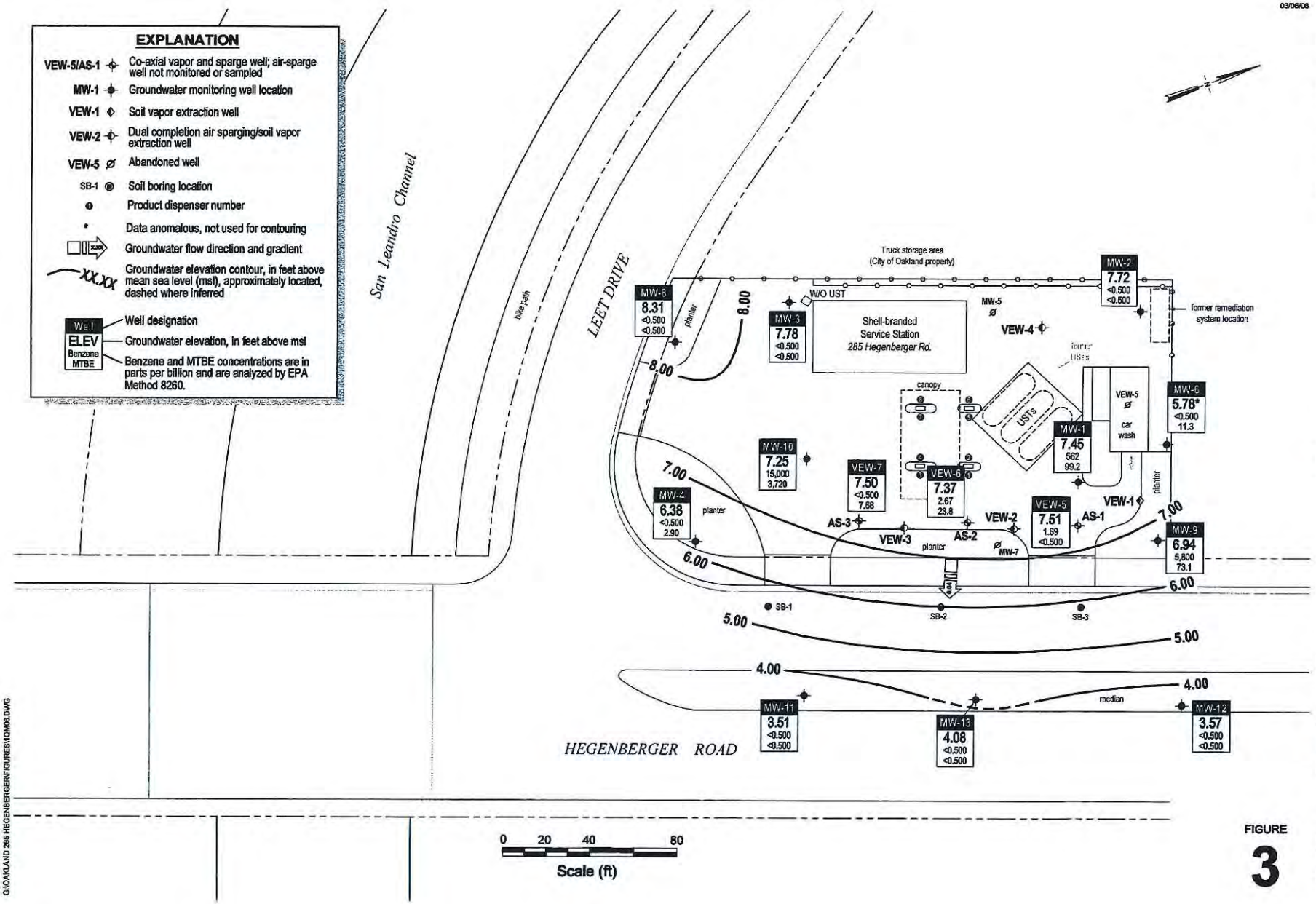
SOIL SAMPLE LOCATION MAP (GETTLER-RYAN)

FIGURE: 2
PROJECT: 305-79.01

07/17/92


04/27/10
Former Remediation System Location
MW-2 5.55 ND 3.0
MW-6 4.47 ND 1.6
MW-9 5.17 3,200 NDa
VEW-5
Car Wash
VEW-1
Former USTs
VEW-4
MW-1 5.75 510 110
AS-1
VEW-5 5.40 3.8 ND
SB-3
MW-12 3.09 NS
MW-5
Truck Storage Area (City of Oakland property)
Station Building
Dispenser Islands
AS-2
VEW-2
MW-7
W/O UST
Over-Excavation Areas (7/04)
VEW-3
MW-3 5.57 11 11
VEW-6 5.75 380 97
SB-2
MW-13 2.07 NS
AS-3
Shell Station
285 Hegenberger
MW-10 5.25 7,200 870
VEW-7 5.82 1.9 13
MW-8 5.72 NS
SB-1
MW-11 2.63 NS
MW-4 5.19 ND 1.1
LEET DRIVE
Bike Path
San Leandro Channel
HEGENBERGER ROAD OVERPASS
HEGENBERGER ROAD
5.50
4.00
2.50
EXPLANATION
VEW-5/ AS-1 Co-axial vapor and sparge well; air-sparge well not monitored or sampled
MW-1 Groundwater monitoring well location
VEW-1 Soil vapor extraction well
VEW-2 Dual completion air sparging/soil vapor extraction well
VEW-5 Abandoned well location
Product dispenser number
SB-1 Soil boring location
D-1 Soil sample location
P-1-5' Soil sample location
P-7-6.5' Over-excavation soil sample location
Electrical line (E)
Gas line (G)
Storm drain line (STM)
Sanitary sewer line (SAN)
Manhole (MH)
Utility vault
XX.XX Groundwater elevation contour, in feet above mean sea level (msl)
Well
ELEV.
Benzene
MTBE
Well designation
Groundwater elevation, in feet above msl
Benzene and MTBE concentrations are in micrograms per liter
Notes:
ND = Not detected
NDa = Elevated reporting limit, see laboratory report for details
NS = Not sampled
N
0 25 50 100
Scale (ft)
FIGURE
2
Site Plan
Shell-branded Service Station
285 Hegenberger Road
Oakland, California
CONESTOGA-ROVERS & ASSOCIATES
t:\Shell\6-chars\2407--1240734--Oakland 285 Hegenberger\240734-FIGURES\240734 SITE PLAN.DWG

12/18/09
Former Remediation System Location
MW-2
5.33
ND
2.9
MW-6
4.20
ND
24
MW-9
5.37
2,900
NDa
VEW-5
Car Wash
MW-1
5.45
110
37
VEW-1
Former USTs
VEW-4
MW-5
USTs
AS-1
VEW-5
5.16
6.6
9.3
Planter
MW-12
3.39
ND
ND
Truck Storage Area
(City of Oakland property)
VEW-2
MW-7
Canopy
Dispenser Islands
AS-2
Station Building
VEW-6
5.50
95
17
VEW-3
Median
W/O UST
MW-3
5.27
6.7
16
MW-10
5.51
6,100
910
VEW-7
5.69
5.2
25
AS-3
Planter
MW-13
2.83
ND
ND
5.50
Shell Station
285 Hegenberger
Planter
MW-8
5.68
ND
ND
LEET DRIVE
Planter
MW-4
5.13
ND
2.0
4.00
2.50
MW-11
2.44
ND
ND
HEGENBERGER ROAD
Bike Path
San Leandro Channel
EXPLANATION
VEW-5/ AS-1 Co-axial vapor and sparge well; air-sparge well not monitored or sampled
MW-1 Groundwater monitoring well location
VEW-1 Soil vapor extraction well
VEW-2 Dual completion air sparging/soil vapor extraction well
VEW-5 Abandoned well location
Product dispenser number
XX.XX Groundwater elevation contour, in feet above mean sea level (msl)
Well
ELEV.
Benzene
MTBE
Well designation
Groundwater elevation, in feet above msl
Benzene and MTBE concentrations are in micrograms per liter
Notes:
ND = Not detected
NDa = Elevated reporting limit, see laboratory report for details
N
0 20 40 80
Scale (ft)
FIGURE
1
Groundwater Contour and Chemical Concentration Map
July 1, 2009
Shell-branded Service Station
285 Hegenberger Road
Oakland, California
CONESTOGA-ROVERS & ASSOCIATES
t:\Shell\E-charts\2407--\240734--Oakland 285 Hegenberger\240734-REPORTS\240734-RPT3-3QO9\240734.3QM09-GW.DWG



03/06/06

Groundwater Elevation Contour Map

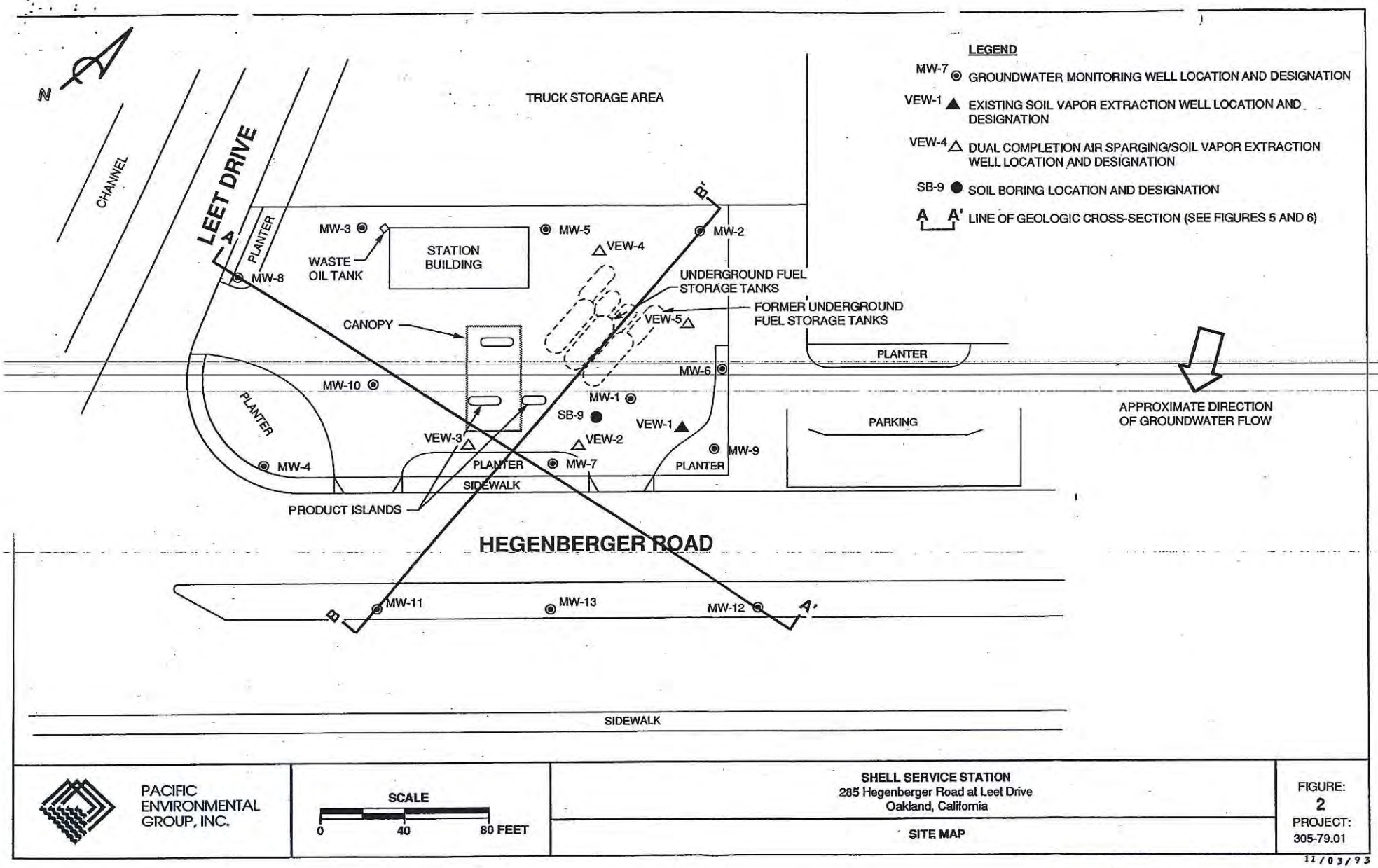
January 4, 2006

CAMBRIA

Shell-branded Service Station
285 Hegenberger Road
Oakland, California
Incident No.98995749

FIGURE
3

G:\OAKLAND 285 HEGENBERGER\FIGURES\1QM06.DWG



PACIFIC ENVIRONMENTAL GROUP, INC.

SCALE
0 40 80 FEET

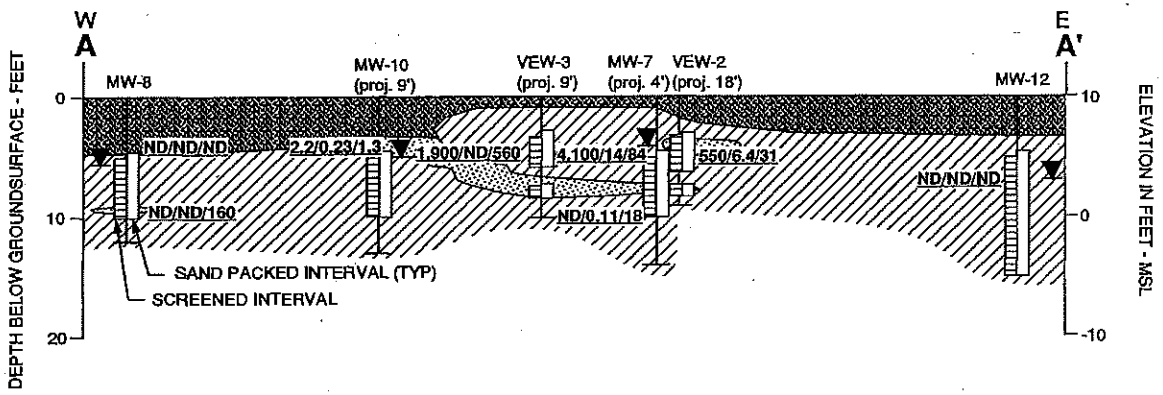
SHELL SERVICE STATION
285 Hegenberger Road at Leet Drive
Oakland, California

SITE MAP

FIGURE: 2
PROJECT: 305-79.01

11/03/93

ATTACHMENT 3

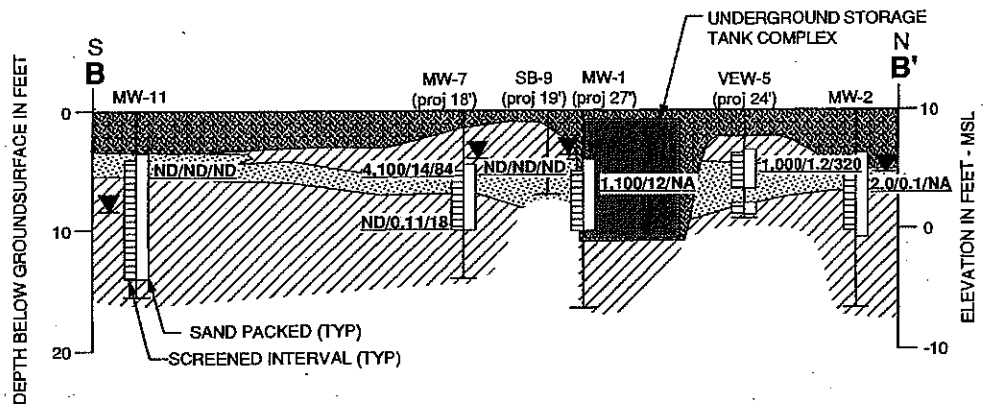


LEGEND

- ARTIFICIAL FILL
- PRIMARILY FINE GRAINED DEPOSITS - SILTS AND CLAYS
- PRIMARILY COARSE GRAINED DEPOSITS - SANDS AND GRAVELS
- MW-8 GROUNDWATER MONITORING WELL LOCATION AND DESIGNATION
- VEW-2 DUAL COMPLETION AIR SPARGING/SOIL VAPOR EXTRACTION WELL LOCATION AND DESIGNATION
- proj PROJECTED ONTO LINE OF SECTION IN FEET
- ▼ STATIC WATER LEVEL, 7-20-93
- 550/6.4/31 TPH-g/BENZENE/TPH-d CONCENTRATION IN SOIL, IN PARTS PER MILLION, 7-13-89 to 6-10-93
- ND NOT DETECTED
- NA NOT ANALYZED

PACIFIC ENVIRONMENTAL GROUP, INC.	**SCALE** HORIZONTAL : 1" = 40' VERTICAL : 1" = 10'	**SHELL SERVICE STATION** 285 Hegenberger Road at Leet Drive Oakland, California **GEOLOGIC CROSS-SECTION A-A"**	FIGURE: 3 PROJECT: 305-79.01

11/03/93



LEGEND

- ARTIFICIAL FILL
- PRIMARILY FINE GRAINED DEPOSITS - SILTS AND CLAYS
- PRIMARILY COARSE GRAINED DEPOSITS - SANDS AND GRAVELS
- MW-2 GROUNDWATER MONITORING WELL LOCATION AND DESIGNATION
- SB-9 SOIL BORING LOCATION AND DESIGNATION
- VEW-5 DUAL COMPLETION AIR SPARGING/SOIL VAPOR EXTRACTION WELL LOCATION AND DESIGNATION
- proj PROJECTED ONTO LINE OF SECTION IN FEET
- ▼ STATIC WATER LEVEL, 7-20-93
- 2.0/0.1/NA TPH-g/BENZENE/TPH-d CONCENTRATION IN SOIL, IN PARTS PER MILLION, 7-13-89 to 6-10-93
- ND NOT DETECTED
- NA NOT ANALYZED

PACIFIC ENVIRONMENTAL GROUP, INC.

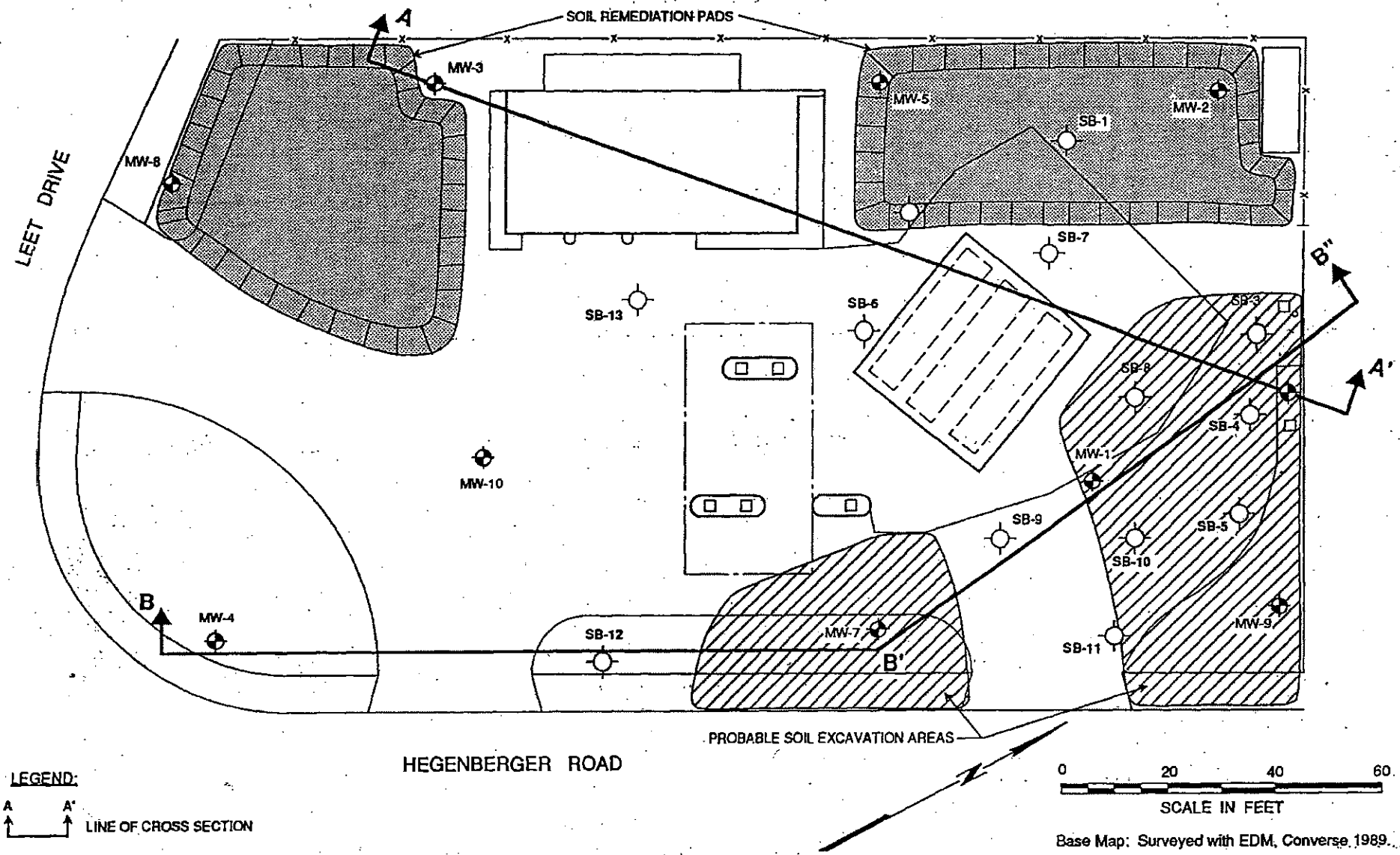
SCALE
HORIZONTAL : 1" = 40'
VERTICAL : 1" = 10'

SHELL SERVICE STATION
285 Hegenberger Road at Leet Drive
Oakland, California

GEOLOGIC CROSS-SECTION B-B'

FIGURE: 4
PROJECT: 305-79.01

11/03/93



LEGEND:

A A' LINE OF CROSS SECTION

SB-1 SOIL BORING

MW-1 GROUNDWATER MONITORING WELL

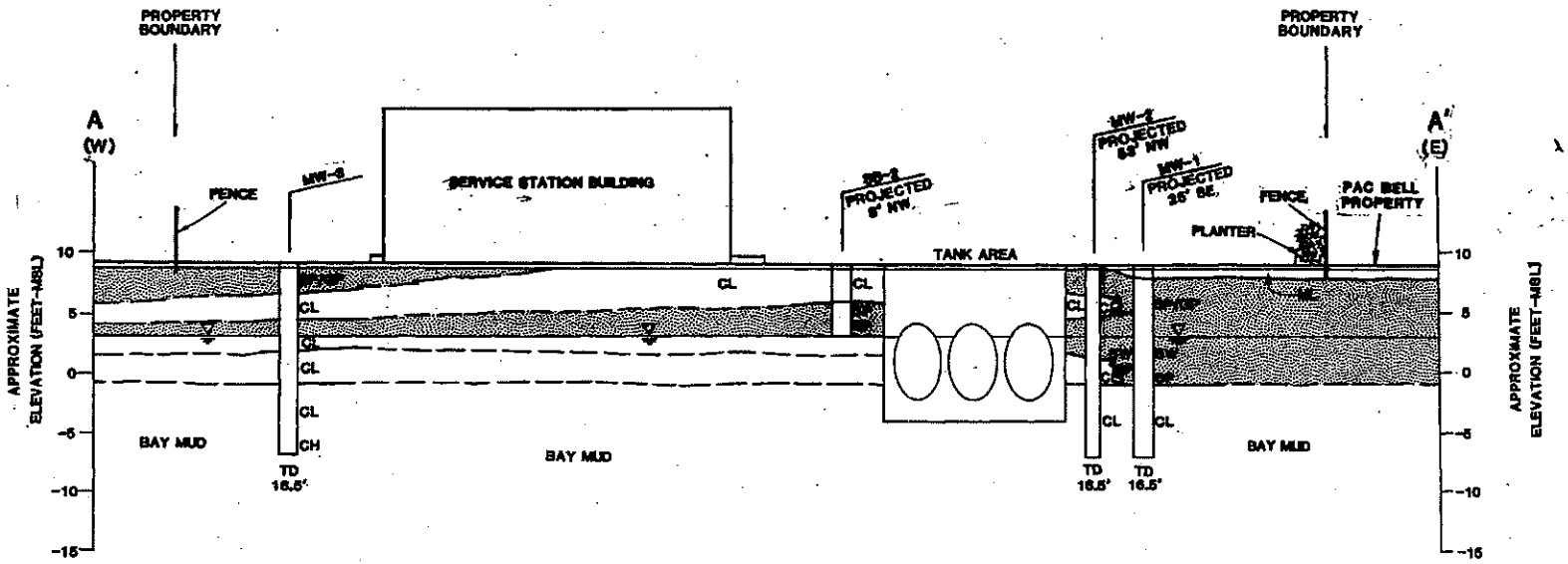
Base Map: Surveyed with EDM, Converse 1989.

PROPOSED SOIL EXCAVATION

SHELL OIL COMPANY
285 Hegenberger Road
Oakland, California

Converse Environmental West

Scale	AS SHOWN
Project No.	88-44-359-01
Prepared by	LQL
Date	12-30-89
Checked by	RMB
Drawing No.	12
Approved by	DWC



LEGEND

RELATIVELY IMPERMEABLE SEDIMENTS

RELATIVELY PERMEABLE SEDIMENTS

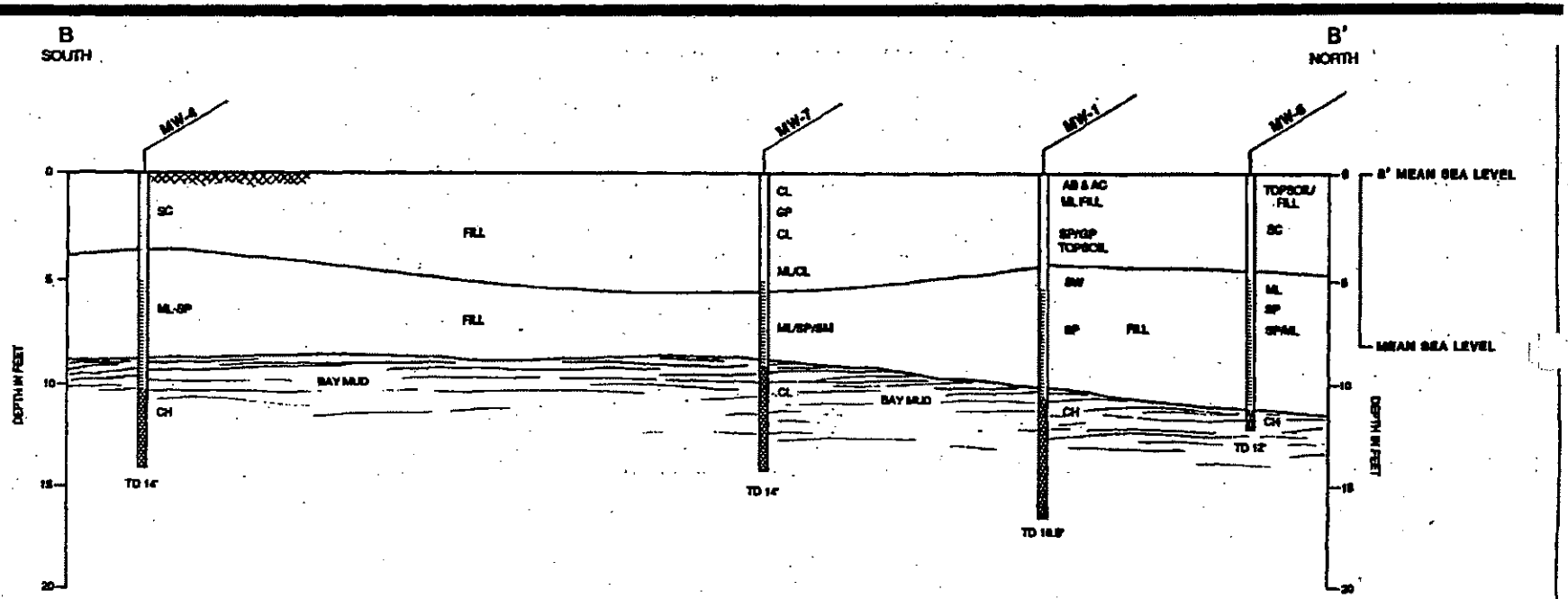
CROSS SECTION A – A'

SHELL OIL COMPANY
285 Hegenberger Road
Oakland, California

Converse Environmental Consultants California

Scale	AS SHOWN
Date	3/22/89
Prepared By	KGC
Checked By	REH
Approved By	
Project No.	88-44-359-01
Drawing No.	4

MODERN PASADENA BLUEPRINT / 99934



NOTE: AIR PHOTOS SHOW THAT FILL HAS BEEN PLACED ON THE OLD MARSH AREA, SINCE ABOUT 1948. THERE MAY HAVE BEEN A FEW EPISODES OF FILL.

0 20 40
SCALE FEET

LEGEND

- ASPHALT/CONCRETE
- FILL: CL, ML, GP/GM/GC, SP/SM/SC
- BAY MUD

MW-1
SCREEN
BENTONITE PLUG
GROUNDWATER MONITORING WELL

CROSS SECTION B-B'

SHELL Oil COMPANY
285 Hegenberger Road
Oakland, California

Scale: AS SHOWN
Date: 6/23/89
Project No: 88-44-338-01
Prepared By: KGC/CRB
Checked By: RMB
Approved By: DWC
Drawing No: 14

Converse Environmental Consultants California

MODERN PASADENA BLUEPRINT / 99834

Table 2. Historical Soil Analytical Data - Shell-branded Service Station, Incident #98995749, 285 Hegenberger Road, Oakland, California

Sample ID	Date Sampled	Depth (fbg)	TPHg (ppm)	TPHd (ppm)	TOG (ppm)	TPHmo (ppm)	Benzene (ppm)	Toluene (ppm)	Ethylbenzene (ppm)	Total Xylenes (ppm)	MTBE (ppm)
1992 Waste Oil Tank Removal											
SOW-1	2/12/1992	5	**1,900**	**400**	**830**	--	**2.2**	**2.6**	**25**	**82**	--
SL-3	2/12/1992	6.5	--	**1,100**	**15,000**	--	--	--	--	--	--
SLH-1A	4/21/1992	5.5	**690**	**550**	**550**	--	<2.5	<2.5	**2.4**	**19**	--
SLH-1B	4/21/1992	5.5	**1,500**	**1,700**	**1,700**	--	<2.5	<2.5	<2.5	**32**	--
SLH-1C	4/21/1992	5.5	**1,000**	**2,200**	**5,800**	--	<2.5	<2.5	**1.6**	**23**	--
SLH-2A	4/21/1992	5.5	**610**	**250**	**340**	--	<2.5	<2.5	<2.5	**3.7**	--
SLH-2B	4/21/1992	6	**70**	**80**	**170**	--	<2.5	**0.16**	**0.38**	**1.6**	--
SLH-2C	4/21/1992	6	**1,300**	**150**	**290**	--	<2.5	<2.5	**6.7**	**20**	--
SLH-3A	4/21/1992	6.5	**54**	**130**	**280**	--	**0.05**	**0.14**	**0.44**	**3.6**	--
SLH-3B	4/21/1992	6.5	**250**	**140**	**90**	--	<2.5	<2.5	**1.5**	**3.1**	--
SOW-1A	4/21/1992	4	**19**	**250**	**500**	--	**0.055**	<2.5	**0.14**	**0.7**	--
SOW-1B	4/21/1992	4	**1,800**	**7,600**	**6,800**	--	**1.9**	<2.5	**15**	**72**	--
DS-1	5/20/1992	1	**260**	--	--	--	<2.5	<2.5	<2.5	<2.5	--
1998 Dispenser Upgrades											
D-1	7/30/1998	1.5	**790**	**400**	--	--	**2.0**	**17**	**12**	**57**	**8.5 (22)**
D-2	7/30/1998	2	**160**	**190**	--	--	**0.090**	**0.27**	**0.14**	**1.7**	**4.7**
1999 Site Investigation											
SB-1-5.5	3/18/1999	5.5	<0.400	<5.00	--	--	<0.00200	<0.00200	<0.00200	<0.00400	<0.0100
SB-1-10	3/18/1999	10	<0.400	<5.00	--	--	<0.00200	<0.00200	<0.00200	<0.00400	<0.0100
SB-2-5.0	3/18/1999	5	**0.777**	**15.2**	--	--	<0.00200	<0.00200	<0.00200	<0.00400	<0.0100
SB-2-6.0	3/18/1999	6	**3.33**	**19.3**	--	--	<0.00200	**0.00598**	**0.00977**	**0.0259**	<0.0100
SB-2-7.5	3/18/1999	7.5	<0.400	<5.00	--	--	<0.00200	<0.00200	<0.00200	<0.00400	<0.0100
SB-2-10.0	3/18/1999	10	<0.400	<15.0	--	--	<0.00200	<0.00200	<0.00200	<0.00400	<0.0100
SB-2-10.5	3/18/1999	10.5	<0.400	<15.0	--	--	<0.00200	<0.00200	<0.00200	<0.00400	<0.0100
SB-2-12.0	3/18/1999	12	<0.400	<5.00	--	--	<0.00200	<0.00200	<0.00200	<0.00400	<0.0100
SB-3-7.5	3/18/1999	7.5	**5.94**	**14.8**	--	--	<0.00200	<0.00200	**0.0501**	**0.0548**	<0.0100
SB-3-9.0	3/18/1999	9	**27.6**	**13.1**	--	--	<0.0100	<0.0100	**0.0502**	**0.0948**	<0.0500
SB-3-10.5	3/18/1999	10.5	**43.3**	**35.8**	--	--	<0.0100	<0.0100	**0.354**	**0.548**	<0.0500
SB-3-11.5	3/18/1999	11.5	**9.90**	**27.6**	--	--	<0.0100	<0.0100	**0.0628**	**0.0973**	<0.0500
SB-3-15.0	3/18/1999	15	**23.5**	**26.5**	--	--	<0.0100	<0.0100	**0.291**	**0.424**	<0.0500
SB-3-17.0	3/18/1999	17	**0.508**	<5.00	--	--	<0.00200	<0.00200	**0.0269**	**0.0393**	<0.0100

ATTACHMENT 4

Table 2. Historical Soil Analytical Data - Shell-branded Service Station, Incident #98995749, 285 Hegenberger Road, Oakland, California

Sample ID	Date Sampled	Depth (fbg)	TPHg (ppm)	TPHd (ppm)	TOG (ppm)	TPHmo (ppm)	Benzene (ppm)	Toluene (ppm)	Ethylbenzene (ppm)	Total Xylenes (ppm)	MTBE (ppm)
2000 Site Investigation											
VE-5-5.5	6/28/2000	5.5	578	--	--	--	9.76	28.8	11.8	63.1	0.359
VE-5-10.5	6/28/2000	10.5	1.18	--	--	--	0.0205	0.0449	0.0181	0.099	<0.0500
VE-5-14.0	6/28/2000	14	<1.00	--	--	--	0.00500	0.0122	<0.00500	0.0220	<0.0500
VE-6-5.5	6/28/2000	5.5	1,290	--	--	--	13.2	44.9	28.5	123	2.93
VE-6-10.5	6/28/2000	10.5	25	--	--	--	0.364	0.700	0.610	2.87	0.154
VE-6-14.0	6/28/2000	14	<1.00	--	--	--	<0.00500	0.00830	0.00730	0.0360	<0.0500
VE-7-6.5	6/28/2000	6.5	1,800	--	--	--	11.6	60.8	34.6000	173	2.61
VE-7-10.5	6/28/2000	10.5	1,260	--	--	--	5.68	32.5	24.5	124	0.73
VE-7-14.0	6/28/2000	14	<1.00	--	--	--	<0.00500	0.132	<0.00500	0.00680	<0.0500
2004 Fuel System Upgrades [1]											
P-1-5'	6/29/2004	5	7,200	1,800	--	<500	<5.0	9.6	61	540	<5.0
P-2-5'	6/29/2004	5	890	810	--	<250	<0.50	<0.50	3.3	27	<0.50
P-3-5'	6/29/2004	5	<50	7.4	--	<50	0.51	<0.50	1.5	1.4	3.3
P-4-5'	6/29/2004	5	120	32	--	<50	2.2	<0.50	8.2	1.5	40
P-5-5'	6/29/2004	5	1,600	140	--	<50	3.3	0.83	38	60	3.0
D-1-5'	6/29/2004	5	<1.0	8	--	<50	<0.0050	<0.0050	0.0052	0.020	0.031
D-2-5'	6/29/2004	5	<1.0	2.1	--	<50	<0.0050	0.0056	<0.0050	0.005	0.0052
D-3-5'	6/29/2004	5	130	24	--	<50	<0.50	<0.50	2.2	2	<0.50
D-4-5'	6/29/2004	5	850	190	--	<50	<0.50	0.96	7.6	58	1.5
P-6-6.5'	7/6/2004	6.5	380	86	--	<50	3.6	14	7.2	38	4.4
P-7-6.5'	7/6/2004	6.5	490	17	--	<50	1.0	2.5	8.2	42	1.2
P-8-6.5'	7/6/2004	6.5	6,500	170	--	<100	<5.0	38	61	500	<5.0
P-9-6.5'	7/6/2004	6.5	380	37	--	<50	<1.0	1.6	4.7	26	21
P-10-6.5'	7/6/2004	6.5	120	16	--	<50	<1.0	<1.0	1.9	2.6	7.1
P-11-6.5'	7/6/2004	6.5	<100	12	--	<50	1.4	<1.0	2.9	1.7	3.3
P-12-6.5'	7/6/2004	6.5	1,100	38	--	<50	2.2	<1.0	23	30	2.8

Abbreviations and Notes:

TPHg = Total petroleum hydrocarbons as gasoline

TPHd = Total petroleum hydrocarbons as diesel

TOG = Total oil and grease

TPHmo = Total petroleum hydrocarbons as motor oil

MTBE = Methyl tertiary-butyl ether

fbg = Feet below grade

ppm = Parts per million, equivalent to mg/L

Table 2. Historical Soil Analytical Data - Shell-branded Service Station, Incident #98995749, 285 Hegenberger Road, Oakland, California

Sample ID	Date Sampled	Depth (fbg)	TPHg (ppm)	TPHd (ppm)	TOG (ppm)	TPHmo (ppm)	Benzene (ppm)	Toluene (ppm)	Ethylbenzene (ppm)	Total Xylenes (ppm)	MTBE (ppm)

mg/L = Miligrams per liter

-- = Not analyzed

<x = Not detected at laboratory reporting limit x

TPHg analyzed by EPA Method 5030 in 1992, EPA Method 8015M in 1998 and 1999, DHS LUFT in 2000, and EPA Method 8260B in 2004.

TPHd analyzed by EPA Method 3550 in 1992, EPA Method 8015M in 1998, 1999, and 2004.

TOG analyzed by EPA Method 5520D.

TPHmo analyzed by EPA Method 8015M.

Benzene, toluene, ethylbenzene, and total xylenes analyzed by EPA Method 8020 in 1992, 1998, and 1999, by DHS LUFT in 2000, and by EPA Method 8260B in 2004.

MTBE analyzed by EPA Method 8020 in 1998 and 1999, and by EPA Method 8260B in 2000 and 2004. 1998 results in parentheses analyzed by EPA Method 8260B.

1. Shading indicates that the data represents soil that has been removed from the site.

TABLE 3. RESULTS OF SOIL CHEMICAL ANALYSES

Shell Oil Company Facility
285 Hegenberger Road
Oakland, California

Boring No.	Sample Depth (ft bgs)	Date Sampled	Concentration (mg/kg) TPH-g	TPH-d	Benzene	Toluene	Ethyl-benzene	Xylenes	Lead[1]
SB-1	4.0	2/13/89	140	NA	0.3	0.8	1.4	0.6	14.7
SB-2	5.0	2/13/89	3700	NA	<8	120	110	530	9.17
SB-3	4.0	5/24/89	1300	180	0.54	8.4	18	24	0.2
SB-3	2,4**	5/24/89	250	100	<0.25	1.1	1.9	3.2	<0.2
SB-4	2,4**	5/24/89	1300	12	0.54	0.4	18	24	
SB-4	4.0	5/24/89	50	20	0.12	0.43	0.45	0.18	<0.2
SB-5	2.0	5/24/89	31000	370	4.7	18	66	150	<0.2
SB-8	6.5	7/13/89	1900	360	<0.025	<0.025	25	82	6.2
SB-9	5.0	7/13/89	<10	<10	<0.025	<0.025	<0.075	<0.075	3.9
SB-10	4.5	7/13/89	550	75	2.3	11	13	71	5.8
SB-11	5.0	7/13/89	190	440	3.8	16	5.7	28	17
SB-12	5.0	11/16/89	<1	1.4	<0.0025	<0.0028	<0.0025	<0.0025	4.8
SB-12	7.0	11/16/89	<1	1.4	0.0068	0.046	<0.0025	0.0098	4.6
SB-13	5.0	11/16/89	650	60	1.4	5.2	6.0	25	5.5
MW-1	5.5	2/14/89	1100	NA	12	36	27	120	12.7
MW-2	6.0	2/15/89	2.0	NA	0.1	<0.1	<0.1	<0.1	3.31
MW-3	5.0	2/14/89	3.0	NA	<0.1	<0.1	<0.1	<0.1	1.42
MW-4	5.0	4/28/89	<10	<10	<0.025	<0.025	0.056	<0.075	34
MW-4	10.0	4/28/89	<10	<10	<0.025	0.052	<0.075	<0.075	2.3
MW-5	5.0	4/27/89	<10	<10	<0.025	<0.025	<0.075	<0.075	5.3
MW-5	10.0	4/27/89	<10	<10	<0.025	0.037	<0.075	<0.075	4.3
MW-6	5.0	4/28/89	<10	<10	0.033	0.079	<0.075	<0.075	8.2
MW-6	10.0	4/28/89	<10	<10	<0.025	0.12	<0.075	<0.075	7.0
MW-7	5.0	4/28/89	4100	84	14	92	14	190	14
MW-7	10.0	4/27/89	<10	18	0.11	0.045	<0.075	<0.075	14

TABLE 3 (cont'd). RESULTS OF SOIL CHEMICAL ANALYSES

Shell Oil Company Facility
285 Hegenberger Road
Oakland, California

Boring No.	Sample Depth (ft bgs)	Date Sampled	Concentration (mg/kg) TPH-g	TPH-d	Benzene	Toluene	Ethyl-benzene	Xylenes	Lead[1]
MW-8	5.0	4/28/89	<10	<10	<0.025	0.089	<0.075	<0.075	3.4
MW-8	10.0	7/13/89	<10	160	<0.025	0.087	<0.075	<0.075	22
MW-9	5.0	7/13/89	120	<10	1.1	0.64	3.7	0.46	4.1
MW-10	5.0	11/16/89	2.2	1.3	0.23	0.22	0.21	0.61	3.6
SG-1	3.0	8/06/90	<0.1	NA	<0.005	<0.005	<0.005	0.043	NA
SG-1	6.0		4.0	NA	0.140	0.018	0.076	0.037	NA
SG-2	3.0	8/06/90	<0.1	NA	<0.005	<0.005	<0.005	<0.005	NA
SG-2	5.5		4000	NA	22.0	110	100	510	NA
SG-3	3.0	8/06/90	<0.1	NA	<0.005	0.010	0.008	0.042	NA
SG-3	6.0		110	NA	0.640	<0.005	3.50	16.0	NA
SG-4	3.0	8/06/90	<0.1	NA	<0.005	<0.005	<0.005	<0.005	NA
SG-4	6.0		1.70	NA	<0.005	<0.005	<0.005	0.026	NA
SG-5	3.0	8/06/90	<0.1	NA	<0.005	<0.005	<0.005	<0.005	NA
SG-5	6.0		610	NA	<0.005	<0.005	<0.005	<0.005	NA
SG-6	3.0	8/06/90	<0.1	NA	<0.005	0.009	<0.005	<0.005	NA
SG-6	6.0		2.90	NA	<0.005	0.006	0.023	0.064	NA
SG-7	6.0	8/07/90	<0.1	NA	<0.005	<0.005	<0.005	<0.005	NA
SG-7	6.0		1900	NA	<0.005	<0.005	<0.005	35.0	NA
SG-8	3.0	8/07/90	16.0	NA	0.220	0.073	0.320	0.084	NA
SG-8	5.5		51.0	NA	1.90	<0.005	3.20	9.30	NA
SG-9	3.0	8/07/90	<0.1	NA	<0.005	<0.005	<0.005	<0.005	NA
SG-9	6.0		<0.1	NA	<0.005	<0.005	<0.005	<0.005	NA
SG-10	3.0	8/07/90	<0.1	NA	<0.005	<0.005	<0.005	<0.005	NA
SG-10	6.0		3000	NA	11.0	44.0	73.0	400	NA
SG-11	3.0	8/07/90	<0.1	NA	<0.005	<0.005	<0.005	<0.005	NA
SG-11	6.0		240	NA	<0.005	<0.005	1.40	2.60	NA
SG-12	3.0	8/07/90	<0.1	NA	<0.005	<0.005	<0.005	<0.005	NA
SG-12	6.0		960	NA	<0.005	<0.005	15.0	42.0	NA
SG-13	3	8/17/90	<0.1	NA	<0.005	<0.005	<0.005	<0.005	NA
SG-13	6		<0.1	NA	<0.005	<0.005	<0.005	<0.005	NA

TABLE 3 (cont'd). RESULTS OF SOIL CHEMICAL ANALYSES

Shell Oil Company Facility
285 Hegenberger Road
Oakland, California

Boring No.	Sample Depth (ft bgs)	Date Sampled	Concentration (mg/kg) TPH-g	TPH-d	Benzene	Toluene	Ethyl-benzene	Xylenes	TPH-mo
SG-14	3'	9/13/90	<1.0	<1.0	<0.0025	0.0063	<0.0025	<0.0025	<10
	6'		<1.0	<1.0	0.190	0.0250	0.0170	0.037	<10
SG-15	3'	9/13/90	<1.0	<1.0	<0.0025	0.0100	<0.0025	0.0026	<10
	6'		<1.0	<1.0	<0.0025	0.0270	<0.0025	0.0039	<10
SG-16	3'	9/13/90	<1.0	<1.0	<0.0025	0.0120	<0.0025	0.0029	<10
	6'		<1.0	<1.0	<0.0025	0.0260	<0.0025	0.0036	12
SG-17	3'	9/13/90	<1.0	<1.0	<0.0025	0.0110	<0.0025	<0.0025	<10
	6'		<1.0	4.0	<0.0025	0.0073	<0.0025	<0.0025	<10

NOTES:

[1]	Analysis by EPA Method 7421
**	Composite sample
ft bgs	Feet below ground surface
MW	Monitoring well
ppm	Part per million
SB	Soil boring
TPH-g	Total Petroleum Hydrocarbons as Gasoline (GCFID)
TPH-d	Total Petroleum Hydrocarbons as Diesel (GCFID)

Table 2
Soil Analytical Data
Total Petroleum Hydrocarbons
(TPH as Gasoline, BTEX Compounds, and TPH as Diesel)

Shell Service Station
285 Hegenberger Road at Leet Drive
Oakland, California

Well Number	Sample Depth (Feet)	TPH as Gasoline (ppm)	Benzene (ppm)	Toluene (ppm)	Ethylbenzene (ppm)	Xylenes (ppm)	TPH as Diesel (ppm)
MW-11	5-5.5	ND	ND	0.008	ND	ND	ND
MW-12	5-5.5	ND	ND	ND	ND	ND	ND
MW-13	6-6.5	ND	ND	ND	ND	ND	ND
VEW-2	4.5-5	550	6.4	15	13	52	31[a]
VEW-3	4.5-5	1,900	ND	16	40	94	560[a]
VEW-4	4.5-5	ND	ND	ND	ND	ND	10[a]
VEW-5	4.5-5	1,000	1.2	0.9	21	14	320[a]

ppm = Parts per million
ND = Not detected
a. The laboratory noted that compound detected and calculated as TPH-d is due to a non-diesel mix.
See individual certified analytical reports for detection limits.

MW-11 and MW-12 samples collected on 6-8-1993.
VEW-2, VEW-4, and VEW-5 samples collected on 6-9-1993.
MW-13 and VEW-3 samples collected on 6-10-1993.

SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Gettler Ryan	Client Project ID:	7682.01 Shell, Oakland	Sampled:	Mar 30, 1992
2150 W. Winton Avenue	Sample Descript:	Soil	Received:	Apr 1, 1992
Hayward, CA 94545	Analysis Method:	EPA 8080	Extracted:	Apr 2, 1992
Attention: John Wertal/ C. Galentin	Lab Number:	204-0088	Analyzed:	Apr 8, 1992
			Reported:	Apr 8, 1992

POLYCHLORINATED BIPHENYLS (EPA 8080)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
PCB 1016	20	N.D.
PCB 1221	80	N.D.
PCB 1232	20	N.D.
PCB 1242	20	N.D.
PCB 1248	20	N.D.
PCB 1254	20	N.D.
PCB 1260	20	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Vickie Tague
Project Manager

SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Gettler Ryan	Client Project ID:	7682.01, Shell, Oakland	Sampled:	Mar 20, 1992
2150 W. Winton Avenue	Sample Descript:	Soil, SW-1	Received:	Mar 20, 1992
Hayward, CA 94545	Analysis Method:	EPA 8240	Analyzed:	Mar 25, 1992
Attention: Clyde Galantine	Lab Number:	203-3608	Reported:	Mar 27, 1992

VOLATILE ORGANICS by GC/MS (EPA 8240)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Acetone	500	N.D.
Benzene	100	N.D.
Bromodichloromethane	100	N.D.
Bromoform	100	N.D.
Bromomethane	100	N.D.
2-Butanone	500	N.D.
Carbon disulfide	100	N.D.
Carbon tetrachloride	100	N.D.
Chlorobenzene	100	N.D.
Chloroethane	100	N.D.
2-Chloroethyl vinyl ether	500	N.D.
Chloroform	100	N.D.
Chloromethane	100	N.D.
Dibromochloromethane	100	N.D.
1,1-Dichloroethane	100	N.D.
1,2-Dichloroethane	100	N.D.
1,1-Dichloroethene	100	N.D.
cis-1,2-Dichloroethene	100	N.D.
trans-1,2-Dichloroethene	100	N.D.
1,2-Dichloropropane	100	N.D.
cis-1,3-Dichloropropene	100	N.D.
trans-1,3-Dichloropropene	100	N.D.
Ethylbenzene	100	N.D.
2-Hexanone	500	N.D.
Methylene chloride	250	N.D.
4-Methyl-2-pentanone	500	N.D.
Styrene	100	N.D.
1,1,2,2-Tetrachloroethane	100	N.D.
Tetrachloroethene	100	N.D.
Toluene	100	N.D.
1,1,1-Trichloroethane	100	N.D.
1,1,2-Trichloroethane	100	N.D.
Trichloroethene	100	N.D.
Trichlorofluoromethane	100	N.D.
Vinyl acetate	100	N.D.
Vinyl chloride	100	N.D.
Total Xylenes	100	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Vickie Tague
Project Manager

SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Gettler Ryan	Client Project ID:	7682.01, Shell, Oakland	Sampled:	Mar 20, 1992
2150 W. Winton Avenue	Sample Descript:	Soil, SW-1	Received:	Mar 20, 1992
Hayward, CA 94545			Extracted:	Mar 24, 1992
Attention: Clyde Galantine	Lab Number:	203-3608	Analyzed:	Mar 24, 1992
			Reported:	Mar 27, 1992

LABORATORY ANALYSIS

Analyte	Detection Limit mg/kg	Sample Results mg/kg
Cadmium	0.50	N.D.
Chromium	0.50	23
Lead	0.25	1.4
Nickel	2.5	29
Zinc	0.50	30

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Vickie Tague
Project Manager

2033608.GET <5>

TABLE 1

GROUNDWATER DATA
SHELL-BRANDED SERVICE STATION
285 HEGENBERGER ROAD, OAKLAND, CALIFORNIA

Well ID	Date	TPHmo (µg/L)	TPHd (µg/L)	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE 8020 (µg/L)	MTBE 8260 (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	TOC (ft MSL)	Depth to Water (ft TOC)	GW Elevation (ft MSL)	DO Reading (mg/L)
MW-1	02/16/1989	—	—	99,000	20,000	23,000	5,700	2,300	—	—	—	—	—	—	6.64	3.83	2.81	—
MW-1	05/23/1989	—	11,000	48,000	4,200	5,200	1,200	7,700	—	—	—	—	—	—	6.64	3.59	3.05	—
MW-1	08/03/1989	—	11,000	63,000	5,500	5,500	3,200	9,500	—	—	—	—	—	—	6.64	4.04	2.60	—
MW-1	12/15/1989	—	11,000	30,000	ND	ND	ND	ND	—	—	—	—	—	—	6.64	4.22	2.42	—
MW-1	02/07/1990	—	10,000	93,000	13,000	9,600	2,400	14,000	—	—	—	—	—	—	6.64	4.60	2.04	—
MW-1	04/18/1990	—	8,700	55,000	14,000	8,400	3,200	13,000	—	—	—	—	—	—	6.64	4.02	2.62	—
MW-1	07/23/1990	—	3,600	73,000	16,000	7,400	2,800	15,000	—	—	—	—	—	—	6.64	4.17	2.47	—
MW-1	09/27/1990	—	1,700	45,000	8,000	4,300	2,000	11,000	—	—	—	—	—	—	6.64	4.60	2.04	—
MW-1	01/03/1991	—	3,100	43,000	10,000	3,400	1,900	11,000	—	—	—	—	—	—	6.64	4.88	1.76	—
MW-1	04/10/1991	—	1,800	67,000	20,000	9,600	3,500	16,000	—	—	—	—	—	—	6.64	3.55	3.09	—
MW-1	07/12/1991	—	—	—	—	—	—	—	—	—	—	—	—	—	6.64	3.97	2.67	—
MW-1	10/08/1991	—	7,400	55,000	18,000	3,500	2,300	8,600	—	—	—	—	—	—	6.64	4.26	2.38	—
MW-1	02/06/1992	—	15,000 a	48,000	12,000	2,800	1,900	7,400	—	—	—	—	—	—	6.64	4.94	1.70	—
MW-1	05/04/1992	—	10,000 a	71,000	16,000	6,000	3,100	14,000	—	—	—	—	—	—	6.64	3.58	3.06	—
MW-1	07/28/1992	—	18,000 a	68,000	21,000	5,500	3,400	15,000	—	—	—	—	—	—	6.64	3.91	2.73	—
MW-1 (D)	07/28/1992	—	19,000 a	70,000	17,000	5,000	2,700	13,000	—	—	—	—	—	—	6.64	3.91	2.73	—
MW-1	10/27/1992	—	1,300	53,000	18,000	3,700	3,400	11,000	—	—	—	—	—	—	6.64	4.79	1.85	—
MW-1 (D)	10/27/1992	—	2,500 a	48,000	17,000	3,600	3,100	9,900	—	—	—	—	—	—	6.64	4.79	1.85	—
MW-1	01/14/1993	—	2,200 a	84,000	17,000	5,400	3,000	13,000	—	—	—	—	—	—	6.64	3.39	3.25	—
MW-1	04/23/1993	—	2,300 a	100,000	18,000	7,800	4,700	20,000	—	—	—	—	—	—	6.64	2.67	3.97	—
MW-1	07/20/1993	—	3,100 a	41 a	12,000	870	1,500	4,400	—	—	—	—	—	—	9.50	3.48	6.02	—
MW-1	10/18/1993	—	8,100 a	33,000	14,000	1,200	2,000	4,900	—	—	—	—	—	—	9.50	4.20	5.30	—
MW-1 (D)	10/18/1993	—	3,700 a	44,000	14,000	1,200	2,000	4,900	—	—	—	—	—	—	9.50	4.20	5.30	—
MW-1	01/06/1994	—	9,000 a	71,000	9,000	870	1,600	5,100	—	—	—	—	—	—	9.50	4.13	5.37	—
MW-1	04/12/1994	—	5,900	42,000	6,600	170	2,300	4,700	—	—	—	—	—	—	9.50	2.42	7.08	—
MW-1 (D)	04/12/1994	—	4,700	40,000	6,300	180	2,000	4,400	—	—	—	—	—	—	9.50	2.42	7.08	—
MW-1	07/25/1994	—	7,000 a	13,000	4,400	110	460	1,400	—	—	—	—	—	—	9.50	3.37	6.13	—
MW-1	10/25/1994	—	3,900	19,000	5,500	210	880	2,000	—	—	—	—	—	—	9.50	4.07	5.43	—
MW-1	01/09/1995	—	8,600 a	37,000	6,700	800	2,800	8,900	—	—	—	—	—	—	9.50	2.65	6.85	—
MW-1	04/11/1995	—	5,500	26,000	4,700	270	1,800	3,400	—	—	—	—	—	—	9.50	2.38	7.12	—
MW-1	07/18/1995	—	7,000	57,000	7,500	880	4,100	11,000	—	—	—	—	—	—	9.50	3.49	6.01	—
MW-1 (D)	07/19/1995	—	6,600	46,000	6,000	670	3,200	7,500	—	—	—	—	—	—	9.50	3.49	6.01	—
MW-1	10/18/1995	—	3,200 b	37,000 b	5,400 b	450 b	2,600 b	7,400 b	10,000 b	—	—	—	—	—	9.50	—	—	—
MW-1	01/09/1996	—	—	32,000	3,000	240	1,900	3,500	6,100	—	—	—	—	—	9.50	2.95	6.55	—
MW-1	04/02/1996	—	—	30,000	3,100	260	2.0	3,900	8.0	—	—	—	—	—	9.50	2.00	7.50	—
MW-1	10/03/1996	—	2,800	18,000	3,000	120	1,200	1,700	7,500	—	—	—	—	—	9.50	3.21	6.29	2.2
MW-1	04/03/1997	—	3,000	29,000	2,300	170	2,300	2,900	4,300	—	—	—	—	—	9.50	2.84	6.66	2.2
MW-1	10/08/1997	—	3,600	22,000	920	71	2,400	2,200	820	—	—	—	—	—	9.50	2.58	6.92	1.5
MW-1	06/10/1998	—	2,900	13,000	860	<100	1,300	500	29,000	32,000	—	—	—	—	9.50	2.67	6.83	0.5/0.5

ATTACHMENT 5

TABLE 1

GROUNDWATER DATA
SHELL-BRANDED SERVICE STATION
285 HEGENBERGER ROAD, OAKLAND, CALIFORNIA

Well ID	Date	TPHmo (µg/L)	TPHd (µg/L)	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE 8020 (µg/L)	MTBE 8260 (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	TOC (ft MSL)	Depth to Water (ft TOC)	GW Elevation (ft MSL)	DO Reading (mg/L)
MW-1 (D)	06/10/1998	---	2,100	9,400	870	<50	1,300	520	28,000	---	---	---	---	---	9.50	2.67	6.83	0.5/0.5
MW-1	12/30/1998	---	1,540	6,930	714	52.7	243	<25.0	9,000	---	---	---	---	---	9.50	4.68	4.82	1.6/1.4
MW-1	06/25/1999	r	r	12,600	1,110	44.7	1,340	710	6,080	---	---	---	---	---	9.50	2.86	6.64	1.2/2.1
MW-1	12/28/1999	---	1,170	3,260	527	14.0	50.7	40.3	5,430	7,060 b	---	---	---	---	9.50	3.23	6.27	1.4/1.8
MW-1	05/31/2000	---	2,050	6,820	1,620	<50.0	116	<50.0	6,070	4,710	---	---	---	---	9.50	2.39	7.11	0.98/2.27
MW-1	10/17/2000	---	995 a	2,530	388	<10.0	16.4	22.1	917	---	---	---	---	---	9.50	2.05	7.45	4.0/3.1
MW-1	05/01/2001	---	1,510	12,300	1,480	19.5	205	111	4,160	---	---	---	---	---	9.50	3.55	5.95	1.6/1.3
MW-1	11/05/2001	---	---	---	---	---	---	---	---	---	---	---	---	---	9.85 e	4.43	5.42	0.4
MW-1	11/07/2001	---	<1,000	3,000	290	6.0	11	15	---	870	---	---	---	---	9.85	4.00	5.85	2.1/1.4
MW-1	05/01/2002	---	<2,000	11,000	2,100	29	180	68	---	1,500	---	---	---	---	9.85	3.14	6.71	3.4/2.3
MW-1	07/16/2002	---	<1,500	7,400	1,200	22	37	24	---	1,900	---	---	---	---	9.85	3.69	6.16	0.9/0.8
MW-1	10/17/2002	---	<2,000	4,600	810	16	68	31	---	1,600	---	---	---	---	9.44	4.76	4.68	0.8/1.2
MW-1	01/21/2003	---	<7,000	11,000	1,100	28	210	53	---	1,100	---	---	---	---	9.44	3.50	5.94	0.3/0.7
MW-1	05/01/2003	---	4,900 a	13,000	1,500	33	260	68	---	1,700	---	---	---	---	9.44	3.04	6.40	---
MW-1	07/17/2003	---	3,200 a,f	10,000	2,400	<50	250	<100	---	3,100	---	---	---	---	9.44	3.92	5.52	---
MW-1	10/02/2003	Well inaccessible		---	---	---	---	---	---	---	---	---	---	---	9.44	---	---	---
MW-1	10/16/2003	---	3,700 a	8,500	1,100	26	140	41	---	1,700	---	---	---	---	9.44	4.65	4.79	---
MW-1	01/05/2004	---	4,300 a	11,000	1,600	29	200	45	---	1,400	---	---	---	---	9.44	2.39	7.05	---
MW-1	04/01/2004	---	3,700 a	10,000	1,500	28	330	59	---	630	---	---	---	---	9.44	3.06	6.38	---
MW-1	08/02/2004	<1,000	4,600 a	9,100	1,700	17	200	24	---	1,700	2,900	<40	<40	<40	9.44	4.50	4.94	---
MW-1	11/02/2004	<500	3,100 g	9,100	2,100	50	140	70	---	680	---	---	---	---	9.44	3.08	6.36	---
MW-1	01/10/2005	<500	3,600 g	21,000	2,700	31	1,000	880	---	1,000	---	---	---	---	9.44	2.43	7.01	---
MW-1	04/13/2005	740	2,500 a	8,800	1,500	20	180	130	---	430	---	---	---	---	9.44	2.44	7.00	---
MW-1	07/20/2005	530	5,900 g	11,000	880	23	150	99	---	570	2,100	<40	<40	<40	9.44	4.65	4.79	---
MW-1	10/24/2005	1,100 l	5,100 a	8,900	2,100	23	68	37	---	780	760	---	---	---	9.37	3.70	5.67	---
MW-1	01/04/2006	279 f	2,830 f	11,800	562	12.6	35.0	24.4	---	99.2	90.7	---	---	---	9.37	1.92	7.45	---
MW-1	07/26/2006	690	5,100	12,700	389	15.9	55.5	40.1	---	727	841	<0.500	<0.500	<0.500	9.37	3.18	6.19	---
MW-1	01/02/2007	<100 f	1,200 f	8,700	1,000	23	59	32	---	230	<5.0	---	---	---	9.37	3.21	6.16	---
MW-1	07/12/2007	<250 f	2,500 f	6,600 m	1,400	22 n	47	28.0 n	---	390	310	<50	<50	<50	9.37	3.91	5.46	---
MW-1	01/10/2008	<250 f	1,400 f,o	7,100 m	1,500	25	39	34	---	190	840	---	---	---	9.37	3.03	6.34	---
MW-1	07/31/2008	<250 f	2,500 f,o	12,000	930	26	33	29	---	86	<200	<40	<40	<40	9.37	3.72	5.65	---
MW-1	01/06/2009	<250 f	2,600 f,o	6,200	840	29	72	41	---	180	260	---	---	---	9.37	3.73	5.64	---
MW-1	07/01/2009	<250 f	95 f	710	110	7.7	3.8	4.1	---	37	110	<2.0	<2.0	<2.0	9.37	3.92	5.45	---
MW-1	01/04/2010	<250 f	1,000 f, o	4,400	510	17	39	23	---	110	250	---	---	---	9.37	3.62	5.75	---
MW-1	01/18/2011	---	1,500 q	4,300	360	12	18	26	---	31	<100	<10	<10	<10	9.37	3.02	6.35	---
MW-1	**01/05/2012**	**---**	**550 f**	**4,000 m**	**39 s**	**6.1 s**	**7.7 s**	**18 s**	**---**	**9.6 s**	**35 s**	**<1.0 s**	**<1.0 s**	**<1.0 s**	**9.37**	**2.83**	**6.54**	**---**
MW-2	02/16/1989	---	---	20,000	200	900	2,700	9,600	---	---	---	---	---	---	7.68	5.33	2.35	---
MW-2	05/23/1989	---	1,600	1,500	4.3	2.9	11	150	---	---	---	---	---	---	7.68	5.23	2.45	---

TABLE 1

GROUNDWATER DATA
SHELL-BRANDED SERVICE STATION
285 HEGENBERGER ROAD, OAKLAND, CALIFORNIA

Well ID	Date	TPHmo (µg/L)	TPHd (µg/L)	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE 8020 (µg/L)	MTBE 8260 (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	TOC (ft MSL)	Depth to Water (ft TOC)	GW Elevation (ft MSL)	DO Reading (mg/L)
MW-2	08/03/1989	—	7,400	15,000	75	120	850	2,200	—	—	—	—	—	—	7.68	6.03	1.65	—
MW-2	12/15/1989	—	2,600	5,000	52	13	4.1	290	—	—	—	—	—	—	7.68	6.43	1.25	—
MW-2	02/07/1990	—	4,800	13,000	32	34	230	640	—	—	—	—	—	—	7.68	5.82	1.86	—
MW-2	04/18/1990	—	3,200	9,800	33	19	460	1,700	—	—	—	—	—	—	7.68	5.88	1.80	—
MW-2	07/23/1990	—	2,700	9,600	41	27	540	940	—	—	—	—	—	—	7.68	6.05	1.63	—
MW-2	10/01/1990	—	1,600	390	3.4	15	8.5	25	—	—	—	—	—	—	7.68	—	—	—
MW-2	01/03/1991	—	830	1,800	56	4.4	4.8	92	—	—	—	—	—	—	7.68	6.82	0.86	—
MW-2	04/10/1991	—	280	1,900	ND	28	140	490	—	—	—	—	—	—	7.68	4.80	2.88	—
MW-2	07/12/1991	—	1,100	8,100	89	66	350	930	—	—	—	—	—	—	7.68	5.70	1.98	—
MW-2	10/08/1991	—	2,600	1,400	5.1	1.5	36	270	—	—	—	—	—	—	7.68	6.40	1.28	—
MW-2	02/06/1992	—	5,400 a	2,000	7.8	2.5	130	210	—	—	—	—	—	—	7.68	6.40	1.28	—
MW-2	05/04/1992	—	1,000	21	ND	ND	300	960	—	—	—	—	—	—	7.68	4.68	3.00	—
MW-2	07/28/1992	—	830 a	2,100	7.7	3.3	130	310	—	—	—	—	—	—	7.68	5.86	1.82	—
MW-2	10/27/1992	—	530	1,100	16	3.1	4.5	25	—	—	—	—	—	—	7.68	6.96	0.72	—
MW-2	01/14/1993	—	170 a	290	5.2	3.1	8.4	21	—	—	—	—	—	—	7.68	4.12	3.56	—
MW-2	04/23/1993	—	1,200 a	2,400	ND	ND	210	610	—	—	—	—	—	—	7.68	3.84	3.84	—
MW-2	07/20/1993	—	130	440	1.7	1.7	15	38	—	—	—	—	—	—	10.55	5.17	5.38	—
MW-2	10/18/1993	—	1,600 a	2,100	ND	ND	90	110	—	—	—	—	—	—	10.55	6.20	4.35	—
MW-2	01/06/1994	—	130	1.9 a	ND	6.7	7.1	12	—	—	—	—	—	—	10.55	5.39	5.16	—
MW-2	04/12/1994	—	130	120	ND	ND	3.4	4.3	—	—	—	—	—	—	10.55	4.72	5.83	—
MW-2	07/25/1994	—	280 a	0.18 a	5.3	ND	6.2	8.2	—	—	—	—	—	—	10.55	5.44	5.11	—
MW-2	10/25/1994	—	400	170	ND	ND	ND	ND	—	—	—	—	—	—	10.55	6.73	3.82	—
MW-2	01/09/1995	—	ND	ND	ND	ND	ND	ND	—	—	—	—	—	—	10.55	4.34	6.21	—
MW-2	04/11/1995	—	ND	ND	ND	ND	ND	ND	—	—	—	—	—	—	10.55	3.72	6.83	—
MW-2	07/18/1995	—	160	250	2.8	0.5	12	13	—	—	—	—	—	—	10.55	4.91	5.64	—
MW-2	10/18/1995	—	—	—	—	—	—	—	—	—	—	—	—	—	10.55	5.88	4.67	—
MW-2	01/09/1996	—	130	790	5.1	1.5	2.4	4.6	1,400	—	—	—	—	—	10.55	4.75	5.80	—
MW-2	04/02/1996	—	—	260	<2	<2	13	6.9	540	—	—	—	—	—	10.55	3.25	7.30	—
MW-2	10/03/1996	—	620	<2,000	<20	<20	<20	<20	13,000	—	—	—	—	—	10.55	5.27	5.28	2.3
MW-2	04/03/1997	—	190	<1,000	<10	<10	<10	<10	2,800	—	—	—	—	—	10.55	3.99	6.56	2.2
MW-2	10/08/1997	—	1,100	<5,000	<50	<50	<50	<50	d	—	—	—	—	—	10.55	5.03	5.52	1.6
MW-2	06/10/1998	—	310	120	1.7	<1.0	<1.0	<1.0	3,800	—	—	—	—	—	10.55	4.11	6.44	0.7/0.6
MW-2	12/30/1998	—	1,050	<5,000	<50.0	<50.0	<50.0	<50.0	12,100	15,300	—	—	—	—	10.55	4.76	5.79	1.3/1.2
MW-2	06/25/1999	r	r	<1,000	<10.0	<10.0	<10.0	<10.0	7,570	—	—	—	—	—	10.55	4.63	5.92	2.3/2.5
MW-2	12/28/1999	—	446	228	4.54	<0.500	<0.500	<0.500	4,260	—	—	—	—	—	10.55	4.95	5.60	2.1/2.4
MW-2	05/31/2000	—	187	597	19.3	<0.500	0.860	<0.500	2,480	—	—	—	—	—	10.55	4.06	6.49	1.8/2.7
MW-2	10/17/2000	Well inaccessible		—	—	—	—	—	—	—	—	—	—	—	10.55	—	—	—
MW-2	05/01/2001	Well inaccessible		—	—	—	—	—	—	—	—	—	—	—	10.55	—	—	—
MW-2	11/05/2001	—	610	<500	<5.0	<5.0	<5.0	<5.0	—	1,800	—	—	—	—	10.55	6.12	4.43	0.6/1.1

TABLE 1

GROUNDWATER DATA
SHELL-BRANDED SERVICE STATION
285 HEGENBERGER ROAD, OAKLAND, CALIFORNIA

Well ID	Date	TPHmo (µg/L)	TPHd (µg/L)	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE 8020 (µg/L)	MTBE 8260 (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	TOC (ft MSL)	Depth to Water (ft TOC)	GW Elevation (ft MSL)	DO Reading (mg/L)
MW-2	05/01/2002	---	<50	440	<2.5	<2.5	<2.5	<2.5	---	1,300	---	---	---	---	10.55	3.85	6.70	6.2/0.9
MW-2	07/16/2002	---	250	<500	<5.0	<5.0	<5.0	<5.0	---	2,100	---	---	---	---	10.55	4.56	5.99	0.9/1.3
MW-2	10/17/2002	---	240	280	<1.0	<1.0	<1.0	<1.0	---	270	---	---	---	---	10.10	5.90	4.20	0.6/2.2
MW-2	01/21/2003	---	72	160	<0.50	<0.50	<0.50	<0.50	---	380	---	---	---	---	10.10	4.11	5.99	0.5/1.0
MW-2	05/01/2003	---	<50	350	<0.50	<0.50	<0.50	<1.0	---	110	---	---	---	---	10.10	4.18	5.92	---
MW-2	07/17/2003	---	61 a,f	120	<0.50	<0.50	<0.50	<1.0	---	14	---	---	---	---	10.10	4.72	5.38	---
MW-2	10/02/2003	---	200 a	190	1.6	<0.50	<0.50	<1.0	---	17	---	---	---	---	10.10	5.76	4.34	---
MW-2	01/05/2004	---	<50	77	<0.50	0.86	<0.50	<1.0	---	1.3	---	---	---	---	10.10	3.28	6.82	---
MW-2	04/01/2004	---	<50	450 a	<0.50	<0.50	<0.50	<1.0	---	1.6	---	---	---	---	10.10	3.71	6.39	---
MW-2	08/02/2004	<500	130 a	110	<0.50	<0.50	<0.50	<1.0	---	3.9	150	<2.0	<2.0	<2.0	10.10	5.50	4.60	---
MW-2	11/02/2004	<500	55 a	130	<0.50	<0.50	<0.50	<1.0	---	1.7	---	---	---	---	10.10	4.37	5.73	---
MW-2	01/10/2005	<500	<50	81	<0.50	<0.50	<0.50	<1.0	---	0.65	---	---	---	---	10.10	3.70	6.40	---
MW-2	04/13/2005	<500 b	<50 b	500	<0.50	<0.50	<0.50	<1.0	---	<0.50	---	---	---	---	10.10	3.13	6.97	---
MW-2	07/20/2005	<500	330 a	810	11	<5.0	<5.0	<10	---	11	1,800	<20	<20	<20	10.10	5.75	4.35	---
MW-2	10/24/2005	<500	100 a	320	<0.50	<0.50	<0.50	<1.0	---	4.7	570	---	---	---	10.07	5.30	4.77	---
MW-2	01/04/2006	<100 f	<100 f	<50.0	<0.500	<0.500	<0.500	<0.500	---	<0.500	<10.0	---	---	---	10.07	2.35	7.72	---
MW-2	07/26/2006	295	<93.9	402	<0.500	<0.500	<0.500	<0.500	---	2.11	19.4	<0.500	<0.500	<0.500	10.07	4.40	5.67	---
MW-2	01/02/2007	<100 f	<50 f	210	<0.50	<0.50	<0.50	<1.0	---	1.7	<5.0	---	---	---	10.07	4.37	5.70	---
MW-2	07/12/2007	<250 f	85 f	140 m	<0.50	<1.0	<1.0	<1.0	---	2.9	150	<2.0	<2.0	<2.0	10.07	5.12	4.95	---
MW-2	01/10/2008	<250 f	54 f,o	110 m	<0.50	<1.0	<1.0	<1.0	---	2.0	45	---	---	---	10.07	3.81	6.26	---
MW-2	07/31/2008	Well inaccessible		---	---	---	---	---	---	---	---	---	---	---	10.07	---	---	---
MW-2	08/07/2008	<250 f	56 f	68	<0.50	<1.0	<1.0	<1.0	---	4.8	290	<2.0	<2.0	<2.0	10.07	5.30	4.77	---
MW-2	01/06/2009	290 f	66 f	80	<0.50	<1.0	<1.0	<1.0	---	4.1	330	---	---	---	10.07	4.78	5.29	---
MW-2	07/01/2009	<250 f	<50 f	310	<0.50	<1.0	<1.0	<1.0	---	2.9	180	<2.0	<2.0	<2.0	10.07	4.74	5.33	---
MW-2	01/04/2010	<250 f	<50 f	100	<0.50	<1.0	<1.0	<1.0	---	3.0	110	---	---	---	10.07	4.52	5.55	---
MW-3	02/16/1989	---	---	60,000	5,500	ND	3,200	5,200	---	---	---	---	---	---	7.81	5.17	2.64	---
MW-3	05/23/1989	---	1,500	ND	ND	200	ND	ND	---	---	---	---	---	---	7.81	5.09	2.72	---
MW-3	08/03/1989	---	1,200	2,000	120	ND	ND	86	---	---	---	---	---	---	7.81	5.34	2.47	---
MW-3	12/15/1989	---	1,700	5,200	380	12	17	410	---	---	---	---	---	---	7.81	6.02	1.79	---
MW-3	02/07/1990	---	230	260	17	47	5.4	2.5	---	---	---	---	---	---	7.81	4.95	2.86	---
MW-3	04/18/1990	---	ND	260	ND	ND	ND	9.4	---	---	---	---	---	---	7.81	5.55	2.26	---
MW-3	07/23/1990	---	210	510	46	ND	ND	9.3	---	---	---	---	---	---	7.81	5.81	2.00	---
MW-3	09/27/1990	---	350	460	6.3	1.2	ND	15	---	---	---	---	---	---	7.81	6.86	0.95	---
MW-3	01/03/1991	---	630	4,800	920	1.7	ND	190	---	---	---	---	---	---	7.81	6.84	0.97	---
MW-3	04/10/1991	---	60	120	1.2	8.8	3.5	21	---	---	---	---	---	---	7.81	4.93	2.88	---
MW-3	07/12/1991	---	ND	430	12	0.8	ND	7.7	---	---	---	---	---	---	7.81	5.56	2.25	---
MW-3	10/08/1991	---	560	770	140	ND	ND	53	---	---	---	---	---	---	7.81	6.62	1.19	---
MW-3	02/06/1992	---	340 a	500	74	0.7	5.2	5.3	---	---	---	---	---	---	7.81	6.28	1.53	---

TABLE 1

GROUNDWATER DATA
SHELL-BRANDED SERVICE STATION
285 HEGENBERGER ROAD, OAKLAND, CALIFORNIA

Well ID	Date	TPHmo (µg/L)	TPHd (µg/L)	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE 8020 (µg/L)	MTBE 8260 (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	TOC (ft MSL)	Depth to Water (ft TOC)	GW Elevation (ft MSL)	DO Reading (mg/L)
MW-3	05/04/1992	—	290 a	310	47	0.9	17	16	—	—	—	—	—	—	7.81	4.65	3.16	—
MW-3	07/28/1992	—	100 a	780	130	ND	13	4.2	—	—	—	—	—	—	7.81	5.56	2.25	—
MW-3	10/27/1992	—	69 a	740	92	ND	7.8	9.6	—	—	—	—	—	—	7.81	6.65	1.16	—
MW-3	01/14/1993	—	ND	ND	2.4	2.8	ND	ND	—	—	—	—	—	—	7.81	3.88	3.93	—
MW-3	01/06/1994	—	64	130	1.7	ND	ND	0.93	—	—	—	—	—	—	11.25 (TOB)	5.54	—	—
MW-3	04/12/1994	—	75	ND	0.82	ND	ND	0.7	—	—	—	—	—	—	11.25 (TOB)	4.82	—	—
MW-3	07/25/1994	—	ND	0.06 a	2.8	ND	ND	0.7	—	—	—	—	—	—	11.25 (TOB)	6.03 (TOB)	5.22	—
MW-3	10/25/1994	—	100	70	ND	ND	ND	ND	—	—	—	—	—	—	11.25 (TOB)	6.48	—	—
MW-3	01/09/1995	—	ND	ND	ND	ND	ND	ND	—	—	—	—	—	—	11.25 (TOB)	4.86 (TOB)	6.39	—
MW-3	04/11/1995	—	ND	ND	ND	ND	ND	ND	—	—	—	—	—	—	11.25 (TOB)	4.22 (TOB)	7.03	—
MW-3	07/18/1995	—	90	ND	2.8	ND	ND	ND	—	—	—	—	—	—	11.25 (TOB)	5.44 (TOB)	5.81	—
MW-3	10/18/1995	—	—	—	—	—	—	—	—	—	—	—	—	—	11.25 (TOB)	5.72	—	—
MW-3	01/09/1996	—	90	90	1.7	ND	<0.5	<0.5	61	—	—	—	—	—	11.25 (TOB)	4.96	—	—
MW-3	04/02/1996	—	—	<50	<0.5	<0.5	<0.5	<0.5	24	—	—	—	—	—	11.25 (TOB)	3.43	—	—
MW-3	10/03/1996	—	180	<500	<5	<5	<5	<5	1,200	—	—	—	—	—	11.25 (TOB)	5.39	—	2.4
MW-3	04/03/1997	—	83	150	3.2	<0.50	<0.50	0.81	280	—	—	—	—	—	11.25 (TOB)	4.20	—	2.0
MW-3	10/08/1997	—	120	180	7.3	0.68	0.54	3.9	1,700	—	—	—	—	—	11.25 (TOB)	5.51(TOB)	5.74	2.1
MW-3	06/10/1998	—	120	130	12	0.85	<0.50	2.1	600	—	—	—	—	—	11.25 (TOB)	3.91(TOB)	7.34	0.8/0.9
MW-3	12/30/1998	—	108	<250	<2.50	<2.50	<2.50	<2.50	1,010	—	—	—	—	—	11.25 (TOB)	5.76 (TOB)	5.49	1.3/1.4
MW-3	06/25/1999	r	r	269	4.24	<2.50	<2.50	<2.50	1,180	—	—	—	—	—	11.25 (TOB)	4.73	—	1.4/1.9
MW-3	12/28/1999	—	122	333	41.4	6.48	6.57	21.3	2,680	—	—	—	—	—	11.25 (TOB)	5.75 (TOB)	5.50	1.3/1.5
MW-3	05/31/2000	—	89.2	1,180	19.1	1.92	3.26	<1.00	2,130	—	—	—	—	—	11.25 (TOB)	4.96 (TOB)	6.29	1.2/2.2
MW-3	10/17/2000	—	183 a	156	5.22	0.819	<0.500	1.53	2,250	—	—	—	—	—	11.25 (TOB)	5.70 (TOB)	5.55	2.0/2.1
MW-3	05/01/2001	—	95.9	286	<2.50	<2.50	<2.50	<2.50	1,470	—	—	—	—	—	11.25 (TOB)	4.88 (TOB)	6.37	1.9/2.7
MW-3	05/29/2001	—	—	—	—	—	—	—	—	—	—	—	—	—	11.25 (TOB)	5.25 (TOB)	6.00	3.0/1.9
MW-3	11/05/2001	—	<50	<500	<5.0	<5.0	<5.0	<5.0	—	2,100	—	—	—	—	11.25 (TOB)	6.25 (TOB)	5.00	0.5/1.9
MW-3	05/01/2002	—	80	<100	<1.0	<1.0	<1.0	<1.0	—	430	—	—	—	—	11.25 (TOB)	4.77 (TOB)	6.48	4.1/0.7
MW-3	07/16/2002	—	340	410	12	2.0	<2.0	3.5	—	530	—	—	—	—	11.25 (TOB)	5.44 (TOB)	5.81	0.3/1.7
MW-3	10/17/2002	—	82	220	2.5	<2.0	<2.0	2.3	—	25	—	—	—	—	10.58	6.03	4.55	0.8/2.4
MW-3	01/21/2003	—	150	<50	<0.50	<0.50	<0.50	<0.50	—	28	—	—	—	—	10.58	4.30	6.28	1.2/1.0
MW-3	05/01/2003	—	<50	60	<0.50	<0.50	<0.50	<1.0	—	16	—	—	—	—	10.58	4.30	6.28	—
MW-3	07/17/2003	—	<50	120	1.2	<0.50	<0.50	<1.0	—	11	—	—	—	—	10.58	5.36	5.22	—
MW-3	10/02/2003	—	56 a	160	3.1	1.1	<0.50	2.1	—	8.2	—	—	—	—	10.58	6.00	4.58	—
MW-3	01/05/2004	—	<50	54	<0.50	<0.50	<0.50	<1.0	—	15	—	—	—	—	10.58	4.44	6.14	—
MW-3	04/01/2004	—	<50	<50	<0.50	<0.50	<0.50	<1.0	—	4.2	—	—	—	—	10.58	4.29	6.29	—
MW-3	08/02/2004	<500	<50	300	<2.5	<2.5	<2.5	<5.0	—	17	1,900	<10	<10	<10	10.58	5.80	4.78	—
MW-3	11/02/2004	<500	<50	72	0.51	<0.50	<0.50	<1.0	—	3.0	—	—	—	—	10.58	5.00	5.58	—
MW-3	01/10/2005	<500	<50	<50	<0.50	<0.50	<0.50	<1.0	—	<0.50	—	—	—	—	10.58	3.01	7.57	—
MW-3	04/13/2005	<500	<50	<50	<0.50	<0.50	<0.50	<1.0	—	0.69	—	—	—	—	10.58	2.89	7.69	—

GROUNDWATER DATA
SHELL-BRANDED SERVICE STATION
285 HEGENBERGER ROAD, OAKLAND, CALIFORNIA

Well ID	Date	TPHmo (µg/L)	TPHd (µg/L)	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE 8020 (µg/L)	MTBE 8260 (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	TOC (ft MSL)	Depth to Water (ft TOC)	GW Elevation (ft MSL)	DO Reading (mg/L)
MW-3	07/20/2005	<500	60 g	300	1.3	0.61	<0.50	1.2	—	4.7	780	<2.0	<2.0	<2.0	10.58	5.10	5.48	—
MW-3	10/24/2005	<500	57 a	210	1.2	<1.0	<1.0	<2.0	—	6.3	1,300	—	—	—	10.58	5.68	4.90	—
MW-3	01/04/2006	<100 f	<100 f	<50.0	<0.500	<0.500	<0.500	<0.500	—	<0.500	<10.0	—	—	—	10.58	2.80	7.78	—
MW-3	07/26/2006	264	94.6	681	1.67	1.04	<0.500	1.75	—	13.4	1,500	<0.500	<0.500	<0.500	10.58	4.70	5.88	—
MW-3	01/02/2007	<100 f	<50 f	150	<0.50	<0.50	<0.50	<1.0	—	3.7	600	—	—	—	10.58	4.96	5.62	—
MW-3	07/12/2007	<250 f	<50 f	240 m	0.28 n	0.45 n	<1.0	0.93 n	—	9.6	1,000	<2.0	0.48 n	<2.0	10.58	5.50	5.08	—
MW-3	01/10/2008	<250 f	82 f,o	160 m	<1.0	<2.0	<2.0	<2.0	—	4.2	940	—	—	—	10.58	4.72	5.86	—
MW-3	07/31/2008	<250 f	<50 f	160	<1.0	<2.0	<2.0	<2.0	—	11	1,300	<4.0	<4.0	<4.0	10.58	5.63	4.95	—
MW-3	01/06/2009	310 f	220 f	130	<1.0	<2.0	<2.0	<2.0	—	8.9	870	—	—	—	10.58	5.48	5.10	—
MW-3	07/01/2009	<250 f	260 f	170	6.7	<1.0	<1.0	1.4	—	16	640	<2.0	<2.0	<2.0	10.58	5.31	5.27	—
MW-3	01/04/2010	<250 f	95 f	290	11	1.0	<1.0	1.3	—	11	370	—	—	—	10.58	5.01	5.57	—
MW-3	01/18/2011	<470	<470	<50	2.2	<0.50	<0.50	<1.0	—	2.6	200	<1.0	<1.0	<1.0	10.58	3.84	6.74	—
MW-3	**01/05/2012**	**—**	**240 f**	**<50 m**	**0.93**	**<0.50**	**<0.50**	**<1.0**	**—**	**1.0**	**160**	**<1.0**	**<1.0**	**<1.0**	**10.58**	**5.13**	**5.45**	**—**
MW-4	05/23/1989	—	ND	ND	ND	ND	ND	ND	—	—	—	—	—	—	7.38	5.60	1.78	—
MW-4	08/03/1989	—	ND	ND	ND	ND	ND	ND	—	—	—	—	—	—	7.38	6.37	1.01	—
MW-4	12/15/1989	—	ND	ND	ND	ND	ND	ND	—	—	—	—	—	—	7.38	6.91	0.47	—
MW-4	03/08/1990	—	ND	ND	ND	ND	ND	ND	—	—	—	—	—	—	7.38	6.06	1.32	—
MW-4	04/18/1990	—	—	—	—	—	—	—	—	—	—	—	—	—	7.38	5.84	1.54	—
MW-4	07/23/1990	—	ND	ND	ND	ND	ND	ND	—	—	—	—	—	—	7.38	6.92	0.46	—
MW-4	09/27/1991	—	ND	ND	ND	ND	ND	ND	—	—	—	—	—	—	7.38	8.03	-0.65	—
MW-4	01/03/1991	—	—	—	—	—	—	—	—	—	—	—	—	—	7.38	7.54	-0.16	—
MW-4	04/10/1991	—	ND	ND	ND	ND	ND	ND	—	—	—	—	—	—	7.38	5.06	2.32	—
MW-4	07/12/1991	—	ND	ND	ND	ND	ND	ND	—	—	—	—	—	—	7.38	6.86	0.52	—
MW-4	10/08/1991	—	ND	ND	ND	ND	ND	ND	—	—	—	—	—	—	7.38	7.44	-0.06	—
MW-4	02/06/1992	—	2,500 a	120	ND	ND	ND	ND	—	—	—	—	—	—	7.38	7.29	0.09	—
MW-4	05/04/1992	—	53	ND	ND	ND	ND	ND	—	—	—	—	—	—	7.38	5.33	2.05	—
MW-4	07/28/1992	—	60	ND	ND	ND	ND	ND	—	—	—	—	—	—	7.38	6.95	0.43	—
MW-4	10/27/1992	—	ND	ND	ND	ND	ND	ND	—	—	—	—	—	—	7.38	7.65	-0.27	—
MW-4	01/14/1993	—	ND	ND	ND	ND	ND	ND	—	—	—	—	—	—	7.38	4.84	2.54	—
MW-4	04/23/1993	—	ND	ND	ND	ND	ND	ND	—	—	—	—	—	—	7.38	4.84	2.54	—
MW-4	07/20/1993	—	ND	ND	2.2	ND	1.1	7.7	—	—	—	—	—	—	10.28	6.47	3.81	—
MW-4	10/18/1993	—	ND	ND	ND	1.2	ND	ND	—	—	—	—	—	—	10.28	7.35	2.93	—
MW-4	01/06/1994	—	ND	ND	ND	ND	ND	ND	—	—	—	—	—	—	10.28	7.64	2.64	—
MW-4	04/12/1994	—	76	ND	ND	ND	ND	ND	—	—	—	—	—	—	10.28	6.39	3.89	—
MW-4	07/25/1994	—	ND	ND	ND	ND	ND	ND	—	—	—	—	—	—	10.28	7.00	3.28	—
MW-4	10/25/1994	—	ND	ND	ND	ND	ND	ND	—	—	—	—	—	—	10.28	7.53	2.75	—
MW-4	01/09/1995	—	70 a	ND	ND	ND	ND	ND	—	—	—	—	—	—	10.28	4.90	5.38	—
MW-4	04/11/1995	—	140	ND	1.5	ND	0.6	3.4	—	—	—	—	—	—	10.28	5.04	5.24	—

TABLE 1

GROUNDWATER DATA
SHELL-BRANDED SERVICE STATION
285 HEGENBERGER ROAD, OAKLAND, CALIFORNIA

Well ID	Date	TPHmo (µg/L)	TPHd (µg/L)	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE 8020 (µg/L)	MTBE 8260 (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	TOC (ft MSL)	Depth to Water (ft TOC)	GW Elevation (ft MSL)	DO Reading (mg/L)
MW-4	07/18/1995	---	160	ND	13	3.4	ND	ND	---	---	---	---	---	---	10.28	6.18	4.10	---
MW-4	10/18/1995	---	---	---	---	---	---	---	---	---	---	---	---	---	10.28	6.63	3.65	---
MW-4	01/09/1996	---	ND	<50	<0.5	ND	<0.5	<0.5	ND	---	---	---	---	---	10.28	3.82	6.46	---
MW-4	04/02/1996	---	---	<50	<0.5	<0.5	<0.5	<0.5	<2.5	---	---	---	---	---	10.28	3.97	6.31	---
MW-4	10/03/1996	---	81	<50	<0.5	<0.5	<0.5	<0.5	<2.5	---	---	---	---	---	10.28	3.74	6.54	---
MW-4	04/03/1997	---	69	<50	<0.50	<0.50	<0.50	<0.50	<2.5	---	---	---	---	---	10.28	3.74	6.54	1.8
MW-4	10/08/1997	---	75	<50	<0.50	<0.50	<0.50	<0.50	13	---	---	---	---	---	10.28	4.89	5.39	2.0
MW-4 (D)	10/08/1997	---	---	<50	<0.50	<0.50	<0.50	<0.50	<2.5	---	---	---	---	---	10.28	4.89	5.39	2.0
MW-4	06/10/1998	---	---	---	---	---	---	---	---	---	---	---	---	---	10.28	4.39	5.89	---
MW-4	12/30/1998	---	94.1	<50.0	<0.500	<0.500	<0.500	0.580	7.33	---	---	---	---	---	10.28	5.58	4.70	1.7/1.6
MW-4	06/25/1999	---	---	---	---	---	---	---	---	---	---	---	---	---	10.28	4.17	6.11	---
MW-4	12/28/1999	---	<50.0	<50.0	<0.500	<0.500	<0.500	<0.500	<5.00	---	---	---	---	---	10.28	4.54	5.74	1.4/1.5
MW-4	05/31/2000	---	---	---	---	---	---	---	---	---	---	---	---	---	10.28	3.85	6.43	---
MW-4	10/17/2000	---	274 a	<50.0	<0.500	<0.500	<0.500	<0.500	9.40	---	---	---	---	---	10.28	3.50	6.78	3.8/4.0
MW-4	05/01/2001	---	---	---	---	---	---	---	---	---	---	---	---	---	10.28	4.10	6.18	---
MW-4	11/05/2001	---	<50	<50	<0.50	<0.50	<0.50	<0.50	---	8.4	---	---	---	---	10.28	5.21	5.07	1.3/1.5
MW-4	05/01/2002	---	<50	<50	<0.50	<0.50	<0.50	<0.50	---	<5.0	---	---	---	---	10.28	4.28	6.00	2.6/1.1
MW-4	07/16/2002	---	---	---	---	---	---	---	---	---	---	---	---	---	10.28	3.87	6.41	---
MW-4	10/17/2002	---	<50	<50	<0.50	<0.50	<0.50	<0.50	---	<5.0	---	---	---	---	9.83	4.66	5.17	1.4/2.4
MW-4	01/21/2003	---	---	---	---	---	---	---	---	---	---	---	---	---	9.83	3.87	5.96	---
MW-4	05/01/2003	---	57 a	<50	<0.50	<0.50	<0.50	<1.0	---	<5.0	---	---	---	---	9.83	4.49	5.34	---
MW-4	07/17/2003	---	---	---	---	---	---	---	---	---	---	---	---	---	9.83	5.46	4.37	---
MW-4	10/02/2003	---	<50	<50	<0.50	<0.50	<0.50	<1.0	---	5.9	---	---	---	---	9.83	5.51	4.32	---
MW-4	01/05/2004	---	---	---	---	---	---	---	---	---	---	---	---	---	9.83	3.83	6.00	---
MW-4	04/01/2004	---	<50	<50	<0.50	<0.50	<0.50	<1.0	---	3.0	---	---	---	---	9.83	4.43	5.40	---
MW-4	08/02/2004	---	---	---	---	---	---	---	---	---	---	---	---	---	9.83	5.05	4.78	---
MW-4	11/02/2004	<500	<50	<50	<0.50	<0.50	<0.50	<1.0	---	3.8	---	---	---	---	9.83	4.31	5.52	---
MW-4	01/10/2005	---	---	---	---	---	---	---	---	---	---	---	---	---	9.83	3.51	6.32	---
MW-4	04/13/2005	<500 b	83 a,b	<50	<0.50	<0.50	<0.50	<1.0	---	5.1	---	---	---	---	9.83	3.77	6.06	---
MW-4	07/20/2005	---	---	---	---	---	---	---	---	---	---	---	---	---	9.83	5.91	3.92	---
MW-4	10/24/2005	<500	92 g	<50	<0.50	<0.50	<0.50	<1.0	---	3.9	---	---	---	---	9.83	3.98	5.85	---
MW-4	01/04/2006	<100 f	<100 f	<50.0	<0.500	<0.500	<0.500	<0.500	---	2.90	<10.0	---	---	---	9.83	3.45	6.38	---
MW-4	07/26/2006	364	<93.9	<50.0	<0.500	<0.500	<0.500	<0.500	---	2.39	55.5	<0.500	<0.500	<0.500	9.83	3.65	6.18	---
MW-4	01/02/2007	<100 f	<50 f	<50	<0.50	<0.50	<0.50	<1.0	---	1.6	---	---	---	---	9.83	4.15	5.68	---
MW-4	07/12/2007	<250 f	<50 f	<50 m	<0.50	<1.0	<1.0	<1.0	---	2.0	<10	<2.0	<2.0	<2.0	9.83	4.40	5.43	---
MW-4	01/10/2008	<250 f	76 f,o	<50 m	<0.50	<1.0	<1.0	<1.0	---	2.0	---	---	---	---	9.83	4.27	5.56	---
MW-4	07/31/2008	<250 f	<50 f	<50	<0.50	<1.0	<1.0	<1.0	---	1.9	<10	<2.0	<2.0	<2.0	9.83	4.00	5.83	---
MW-4	01/06/2009	<250 f	96 f	<50	<0.50	<1.0	<1.0	<1.0	---	1.8	---	---	---	---	9.83	4.73	5.10	---
MW-4	07/01/2009	<250 f	<50 f	<50	<0.50	<1.0	<1.0	<1.0	---	2.0	<10	<2.0	<2.0	<2.0	9.83	4.70	5.13	---

TABLE 1

GROUNDWATER DATA
SHELL-BRANDED SERVICE STATION
285 HEGENBERGER ROAD, OAKLAND, CALIFORNIA

Well ID	Date	TPHmo (µg/L)	TPHd (µg/L)	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE 8020 (µg/L)	MTBE 8260 (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	TOC (ft MSL)	Depth to Water (ft TOC)	GW Elevation (ft MSL)	DO Reading (mg/L)
MW-4	01/04/2010	<250 f	53 f	<50	<0.50	<1.0	<1.0	<1.0	—	1.1	<10	—	—	—	9.83	4.64	5.19	—
MW-5	05/23/1989	—	7,000	26,000	1,500	280	ND	8,100	—	—	—	—	—	—	8.18	5.47	2.71	—
MW-5	08/03/1989	—	8,700	12,000	860	94	ND	2,600	—	—	—	—	—	—	8.18	5.94	2.24	—
MW-5	12/15/1989	—	710	1,000	22	35	18	44	—	—	—	—	—	—	8.18	6.75	1.43	—
MW-5	02/07/1990	—	620	ND	0.8	ND	ND	ND	—	—	—	—	—	—	8.18	6.03	2.15	—
MW-5	04/18/1990	—	5,000	19,000	4,500	850	97	8,000	—	—	—	—	—	—	8.18	5.80	2.38	—
MW-5	07/23/1990	—	2,700	23,000	3,600	400	160	6,500	—	—	—	—	—	—	8.18	6.00	2.18	—
MW-5	09/23/1990	—	550	5,400	1,400	26	13	1,300	—	—	—	—	—	—	8.18	7.18	1.00	—
MW-5	01/03/1991	—	560	860	280	2.8	0.8	45	—	—	—	—	—	—	8.18	7.17	1.01	—
MW-5	04/10/1991	—	1,800	12,000	710	130	500	2,400	—	—	—	—	—	—	8.18	5.25	2.93	—
MW-5	07/12/1991	—	1,700	24,000	2,200	280	430	5,700	—	—	—	—	—	—	8.18	5.70	2.48	—
MW-5	10/08/1991	—	1,400	2,800	860	13	ND	580	—	—	—	—	—	—	8.18	6.50	1.68	—
MW-5	02/06/1992	—	1,200	1,000	300	ND	14	62	—	—	—	—	—	—	8.18	6.35	1.83	—
MW-5	05/04/1992	—	4,100 a	10,000	1,500	350	710	2,300	—	—	—	—	—	—	8.18	4.87	3.31	—
MW-5	07/28/1992	—	3,800 a	12,000	2,200	63	1,400	3,500	—	—	—	—	—	—	8.18	5.73	2.45	—
MW-5	10/27/1992	—	480 a	7,500	1,100	59	230	900	—	—	—	—	—	—	8.18	6.98	1.20	—
MW-5	01/14/1993	—	1,100 a	7,700	420	49	570	840	—	—	—	—	—	—	8.18	4.70	3.48	—
MW-5	04/23/1993	—	1,600 a	110,000	2,900	2,500	3,400	12,000	—	—	—	—	—	—	8.18	4.19	3.99	—
MW-5	07/20/1993	—	1,200 a	18a	1,400	84	1,500	3,200	—	—	—	—	—	—	10.87	5.10	5.77	—
MW-5	10/18/1993	—	5,800 a	14,000	2,000	100	2,300	5,100	—	—	—	—	—	—	10.87	5.79	5.08	—
MW-5	01/06/1994	—	1,100 a	81,000	11,000	9,300	3,600	12,000	—	—	—	—	—	—	10.87	5.56	5.31	—
MW-5	04/12/1994	—	4,100	17,000	2,900	380	430	1,300	—	—	—	—	—	—	10.87	4.90	5.97	—
MW-5	07/25/1994	—	5,400 a	5,900	1,500	42	34	170	—	—	—	—	—	—	10.87	5.38	5.49	—
MW-5	10/25/1994	—	1,900 a	2,300	35	3	ND	8	—	—	—	—	—	—	10.87	6.16	4.71	—
MW-5	01/09/1995	—	3,700 a	8,300	1,500	95	330	1,900	—	—	—	—	—	—	10.87	4.60	6.27	—
MW-5	04/11/1995	—	9,800	7,300	1,200	230	600	550	—	—	—	—	—	—	10.87	3.74	7.13	—
MW-5	07/18/1995	—	5,100	17,000	2,300	730	770	2,500	—	—	—	—	—	—	10.87	4.97	5.90	—
MW-5	10/18/1995	Well abandoned		—	—	—	—	—	—	—	—	—	—	—	10.87	5.67	5.20	—
MW-6	05/23/1989	—	7,000	22,000	16	6.5	7	3,400	—	—	—	—	—	—	8.21	5.47	2.74	—
MW-6	08/03/1989	—	8,800	28,000	1,200	130	2,100	2,800	—	—	—	—	—	—	8.21	5.91	2.30	—
MW-6	12/15/1989	—	5,500	16,000	370	92	200	180	—	—	—	—	—	—	8.21	5.98	2.23	—
MW-6	02/07/1990	—	2,600	22,000	520	85	630	770	—	—	—	—	—	—	8.21	5.47	2.74	—
MW-6	04/18/1990	—	5,700	21,000	900	77	2,700	2,700	—	—	—	—	—	—	8.21	5.80	2.41	—
MW-6	07/23/1990	—	3,000	24,000	1,000	94	3,400	2,700	—	—	—	—	—	—	8.21	5.85	2.36	—
MW-6	09/27/1990	—	ND	22,000	700	93	2,500	2,400	—	—	—	—	—	—	8.21	6.42	1.79	—
MW-6	01/03/1991	—	960	25,000	1,000	88	2,600	3,700	—	—	—	—	—	—	8.21	6.73	1.48	—
MW-6	04/10/1991	—	920	18,000	560	190	480	830	—	—	—	—	—	—	8.21	5.24	2.97	—

GROUNDWATER DATA
SHELL-BRANDED SERVICE STATION
285 HEGENBERGER ROAD, OAKLAND, CALIFORNIA

Well ID	Date	TPHmo (µg/L)	TPHd (µg/L)	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE 8020 (µg/L)	MTBE 8260 (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	TOC (ft MSL)	Depth to Water (ft TOC)	GW Elevation (ft MSL)	DO Reading (mg/L)
MW-6	07/12/1991	—	1,900	9,500	670	51	1,100	920	—	—	—	—	—	—	8.21	5.78	2.43	—
MW-6	10/08/1991	—	5,100	11,000	1,000	43	ND	ND	—	—	—	—	—	—	8.21	6.36	1.85	—
MW-6	02/06/1992	—	1,500 a	7,200	560	8	720	160	—	—	—	—	—	—	8.21	6.15	2.06	—
MW-6	05/04/1992	—	2,900 a	7,900	610	ND	1,500	240	—	—	—	—	—	—	8.21	5.07	3.14	—
MW-6	07/28/1992	—	3,200 a	17,000	1,200	ND	3,000	610	—	—	—	—	—	—	8.21	5.85	2.36	—
MW-6	10/27/1992	—	1,300 a	15,000	1,300	130	1,700	490	—	—	—	—	—	—	8.21	6.69	1.52	—
MW-6	01/14/1993	—	1,600 a	4,900	80	31	330	37	—	—	—	—	—	—	8.21	4.52	3.69	—
MW-6	04/23/1993	—	1,800 a	4,800	120	ND	780	73	—	—	—	—	—	—	8.21	4.32	3.89	—
MW-6	07/20/1993	—	910 a	19 a	570	18	1,100	130	—	—	—	—	—	—	11.04	5.39	5.65	—
MW-6	10/18/1993	—	2,500 a	24,000	770	440	1,600	830	—	—	—	—	—	—	11.04	6.67	4.37	—
MW-6	01/06/1994	—	2,300 a	20 a	450	30	530	52	—	—	—	—	—	—	11.04	5.66	5.38	—
MW-6	04/12/1994	—	1,600	3,600	150	ND	340	21	—	—	—	—	—	—	11.04	4.91	6.13	—
MW-6	07/25/1994	—	2,200 a	1,600	160	ND	ND	10	—	—	—	—	—	—	11.04	5.55	5.49	—
MW-6 (D)	07/25/1994	—	2,400 a	1,000	160	ND	ND	18	—	—	—	—	—	—	11.04	5.55	5.49	—
MW-6	10/25/1994	—	3,000 a	9,800	390	22	300	57	—	—	—	—	—	—	11.04	6.24	4.80	—
MW-6	01/09/1995	—	800 a	2,200	74	12	400	39	—	—	—	—	—	—	11.04	4.58	6.46	—
MW-6	04/11/1995	—	7,700	5,000	330	15	760	85	—	—	—	—	—	—	11.04	4.04	7.00	—
MW-6	07/18/1995	—	1,700	4,200	320	11	490	22	—	—	—	—	—	—	11.04	5.01	6.03	—
MW-6	10/18/1995	—	—	—	—	—	—	—	—	—	—	—	—	—	11.04	5.86	5.18	—
MW-6	01/09/1996	—	790	5,600	59	<5	180	12	14,000	—	—	—	—	—	11.04	4.75	6.29	—
MW-6	04/02/1996	—	—	1,500	12	<5	170	9	1,900	—	—	—	—	—	11.04	3.82	7.22	—
MW-6	10/03/1996	—	1,800	2,600	110	<25	<25	<25	11,000	—	—	—	—	—	11.04	5.27	5.77	2.2
MW-6	04/03/1997	—	650	<2,500	30	<25	32	<25	10,000	—	—	—	—	—	11.04	4.42	6.62	2.0
MW-6	10/08/1997	—	1,100	1,900	31	<5.0	6.1	<5.0	2,600	—	—	—	—	—	11.04	4.70	6.34	1.0
MW-6	06/10/1998	—	1,500	<1,000	17	12	14	88	14,000	—	—	—	—	—	11.04	4.36	6.68	0.4/0.4
MW-6	12/30/1998	—	528	260	<2.50	<2.50	<2.50	<2.50	909	—	—	—	—	—	11.04	4.98	6.06	2.1/1.6
MW-6	06/25/1999	r	r	<2,500	<25.0	<25.0	<25.0	<25.0	8,850	7,630	—	—	—	—	11.04	4.81	6.23	1.4/3.6
MW-6	12/28/1999	—	416	526	7.60	<1.00	<1.00	<1.00	1,510	—	—	—	—	—	11.04	5.17	5.87	1.8/2.0
MW-6	05/31/2000	—	998	2,870	45.7	4.70	8.61	<2.50	3,780	—	—	—	—	—	11.04	4.58	6.46	0.92/2.30
MW-6	10/17/2000	—	944 a	2,370	49.8	5.36	<5.00	<5.00	746	—	—	—	—	—	11.04	4.80	6.24	2.5/2.1
MW-6	05/01/2001	—	706	3,000	2.72	<2.50	4.46	<2.50	473	—	—	—	—	—	11.04	4.75	6.29	2.2/1.6
MW-6	05/29/2001	—	—	—	—	—	—	—	—	—	—	—	—	—	11.04	4.86	6.18	2.0/1.3
MW-6	11/05/2001	—	—	—	—	—	—	—	—	—	—	—	—	—	11.04	5.73	5.31	0.6
MW-6	11/07/2001	—	180	1,700	1.3	1.2	1.3	1.1	—	430	—	—	—	—	11.04	5.75	5.29	2.4/1.8
MW-6	05/01/2002	—	<300	1,400	2.0	0.61	4.3	0.68	—	220	—	—	—	—	11.04	4.47	6.57	2.5/2.0
MW-6	07/16/2002	—	<600	3,500	31	1.5	5.7	1.2	—	220	—	—	—	—	11.04	5.05	5.99	0.6/0.6
MW-6	10/17/2002	—	<700	3,000	27	1.7	2.9	1.8	—	340	—	—	—	—	10.59	5.80	4.79	1.2/1.1
MW-6	01/21/2003	—	<200	900	1.5	<0.50	1.4	<0.50	—	73	—	—	—	—	10.59	4.39	6.20	0.8/0.6
MW-6	05/01/2003	—	160 a	700 a	0.58	<0.50	0.82	<1.0	—	71	—	—	—	—	10.59	4.19	6.40	—

GROUNDWATER DATA
SHELL-BRANDED SERVICE STATION
285 HEGENBERGER ROAD, OAKLAND, CALIFORNIA

Well ID	Date	TPHmo (µg/L)	TPHd (µg/L)	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE 8020 (µg/L)	MTBE 8260 (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	TOC (ft MSL)	Depth to Water (ft TOC)	GW Elevation (ft MSL)	DO Reading (mg/L)
MW-6	07/17/2003	—	220 a,f	<1,200	<12	<12	<12	<25	—	840	—	—	—	—	10.59	5.22	5.37	—
MW-6	10/02/2003	—	300 a	<1,000	<10	<10	<10	<20	—	1,500	—	—	—	—	10.59	5.86	4.73	—
MW-6	01/05/2004	—	140 a	520	<0.50	0.72	<0.50	<1.0	—	30	—	—	—	—	10.59	3.79	6.80	—
MW-6	04/01/2004	—	220 a	650	<0.50	<0.50	0.54	<1.0	—	130	—	—	—	—	10.59	4.28	6.31	—
MW-6	08/02/2004	<500	500 a	1,600	<2.5	<2.5	<2.5	<5.0	—	480	900	<10	<10	<10	10.59	5.78	4.81	—
MW-6	11/02/2004	<500	150 g	580	<0.50	<0.50	<0.50	<1.0	—	55	—	—	—	—	10.59	4.73	5.86	—
MW-6	01/10/2005	<500	230 g	620	<0.50	<0.50	0.50	<1.0	—	17	—	—	—	—	10.59	3.70	6.89	—
MW-6	04/13/2005	520 b	570 a,b	2,000	0.98	1.7	1.2	1.2	—	190	—	—	—	—	10.59	3.75	6.84	—
MW-6	07/20/2005	<500	1,200 a	2,800	<2.0	2.1	<2.0	<4.0	—	320	1,800	<8.0	<8.0	<8.0	10.59	5.95	4.64	—
MW-6	10/24/2005	<500	1,300 a	2,000	<2.0	<2.0	<2.0	<4.0	—	200	560	—	—	—	9.14	5.21	3.93	—
MW-6	01/04/2006	<100 f	216 f	1,140	<0.500	<0.500	<0.500	<0.500	—	11.3	50.4	—	—	—	9.14	3.36	5.78	—
MW-6	07/26/2006	881	1,460	4,650	1.63	1.71	0.580	1.64	—	128	375	<0.500	<0.500	<0.500	9.14	4.76	4.38	—
MW-6	01/02/2007	<100 f	180 f	1,300	0.51	0.52	<0.50	<1.0	—	39	81	—	—	—	9.14	4.54	4.60	—
MW-6	07/12/2007	<250 f	540 f	1,700 m	0.31 n	1.0	0.24 n	0.94 n	—	49	120	<2.0	<2.0	<2.0	9.14	5.12	4.02	—
MW-6	01/10/2008	<250 f	200 f,o	900 m	<0.50	<1.0	<1.0	<1.0	—	4.0	11	—	—	—	9.14	4.33	4.81	—
MW-6	07/31/2008	<250 f	110 f,o	740	<0.50	<1.0	<1.0	<1.0	—	12	<10	<2.0	<2.0	<2.0	9.14	4.95	4.19	—
MW-6	01/06/2009	<250 f	120 f,o	480	<0.50	<1.0	<1.0	<1.0	—	4.0	11	—	—	—	9.14	4.80	4.34	—
MW-6	07/01/2009	<250 f	190 f,o	1,200	<0.50	<1.0	<1.0	<1.0	—	24	85	<2.0	<2.0	<2.0	9.14	4.94	4.20	—
MW-6	01/04/2010	<250 f	63 f,o	390	<0.50	<1.0	<1.0	<1.0	—	1.6	11	—	—	—	9.14	4.67	4.47	—
MW-6	01/18/2011	—	820 q	160	<0.50	<0.50	<0.50	<1.0	—	<1.0	<10	<1.0	<1.0	<1.0	9.14	4.45	4.69	—
MW-6	**01/05/2012**	**—**	**110 f**	**350 m**	**<0.50**	**<0.50**	**<0.50**	**<1.0**	**—**	**<1.0**	**<10**	**<1.0**	**<1.0**	**<1.0**	**9.14**	**4.82**	**4.32**	**—**
MW-7	05/23/1989	—	11,000	47,000	3,500	5,000	1,500	7,800	—	—	—	—	—	—	7.44	5.48	1.96	—
MW-7	08/03/1989	—	22,000	68,000	6,200	6,600	3,600	8,800	—	—	—	—	—	—	7.44	4.22	3.22	—
MW-7	12/15/1989	—	12,000	100,000	4,500	5,300	1,300	5,300	—	—	—	—	—	—	7.44	4.58	2.86	—
MW-7	02/07/1990	—	8,100	96,000	15,000	15,000	2,500	14,000	—	—	—	—	—	—	7.44	5.34	2.10	—
MW-7	04/18/1990	—	10,000	94,000	25,000	13,000	3,300	13,000	—	—	—	—	—	—	7.44	4.92	2.52	—
MW-7	07/23/1990	—	12,000	84,000	3,800	26,000	13,000	3,000	—	—	—	—	—	—	7.44	4.99	2.45	—
MW-7	09/27/1990	—	ND	43,000	25,000	6,100	2,400	9,000	—	—	—	—	—	—	7.44	6.16	1.28	—
MW-7	01/03/1991	—	3,100	78,000	26,000	16,000	3,000	14,000	—	—	—	—	—	—	7.44	4.96	2.48	—
MW-7	04/10/1991	—	1,800	140,000	26,000	16,000	2,200	14,000	—	—	—	—	—	—	7.44	4.13	3.31	—
MW-7	07/12/1991	—	1,100	79,000	7,700	7,200	2,300	10,000	—	—	—	—	—	—	7.44	4.98	2.46	—
MW-7	10/08/1991	—	390 a	55,000	29,000	7,500	1,800	9,300	—	—	—	—	—	—	7.44	5.48	1.96	—
MW-7	02/06/1992	—	9,600 a	63,000	16,000	8,700	1,600	7,400	—	—	—	—	—	—	7.44	5.05	2.39	—
MW-7	05/04/1992	—	9,800 a	67,000	22,000	13,000	1,800	9,400	—	—	—	—	—	—	7.44	4.43	3.01	—
MW-7	07/28/1992	—	13,000 a	85,000	26,000	17,000	2,900	15,000	—	—	—	—	—	—	7.44	4.88	2.56	—
MW-7	10/27/1992	—	1,900 a	63,000	21,000	11,000	3,000	11,000	—	—	—	—	—	—	7.44	5.39	2.05	—
MW-7	01/14/1993	—	2,300 a	120,000	28,000	21,000	1,600	15,000	—	—	—	—	—	—	7.44	4.26	3.18	—
MW-7	04/23/1993	—	12,000 a	60,000	17,000	3,700	2,200	11,000	—	—	—	—	—	—	7.44	4.04	3.40	—

TABLE 1

GROUNDWATER DATA
SHELL-BRANDED SERVICE STATION
285 HEGENBERGER ROAD, OAKLAND, CALIFORNIA

Well ID	Date	TPHmo (µg/L)	TPHd (µg/L)	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE 8020 (µg/L)	MTBE 8260 (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	TOC (ft MSL)	Depth to Water (ft TOC)	GW Elevation (ft MSL)	DO Reading (mg/L)
MW-7 (D)	04/23/1993	—	14,000 a	50,000	17,000	4,200	2,200	11,000	—	—	—	—	—	—	7.44	4.04	3.40	—
MW-7	07/20/1993	—	13,000	47,000	23,000	9,900	2,200	12,000	—	—	—	—	—	—	10.28	4.36	5.92	—
MW-7	10/18/1993	—	10,000 a	44,000	22,000	3,800	2,600	10,000	—	—	—	—	—	—	10.28	5.14	5.14	—
MW-7	01/06/1994	—	5,200 a	65,000	16,000	4,900	1,900	8,500	—	—	—	—	—	—	10.28	4.83	5.45	—
MW-7	04/12/1994	—	3,400	68,000	12,000	2,000	580	6,400	—	—	—	—	—	—	10.28	4.24	6.04	—
MW-7	07/25/1994	—	4,200 a	63,000	16,000	5,800	300	8,300	—	—	—	—	—	—	10.28	4.58	5.70	—
MW-7	10/25/1994	—	3,800 a	46,000	16,000	3,700	1,200	7,300	—	—	—	—	—	—	10.28	5.07	5.21	—
MW-7	01/09/1995	—	3,300 a	62,000	24,000	8,500	1,100	9,400	—	—	—	—	—	—	10.28	3.38	6.90	—
MW-7 (D)	01/11/1995	—	3,200 a	57,000	9,500	7,900	620	8,000	—	—	—	—	—	—	10.28	3.38	6.90	—
MW-7	04/11/1995	—	7,000	53,000	13,000	4,200	1,500	7,700	—	—	—	—	—	—	10.28	3.52	6.76	—
MW-7 (D)	04/12/1995	—	7,600	55,000	11,000	3,700	1,300	6,400	—	—	—	—	—	—	10.28	3.52	6.76	—
MW-7	07/18/1995	—	2,700	95,000	24,000	8,000	2,100	12,000	—	—	—	—	—	—	10.28	4.70	5.58	—
MW-7	10/18/1995	Well abandoned		—	—	—	—	—	—	—	—	—	—	—	10.28	5.25	5.03	—
MW-8	05/23/1989	—	100	ND	ND	ND	ND	ND	—	—	—	—	—	—	7.79	6.62	1.17	—
MW-8	08/03/1989	—	75	ND	ND	ND	ND	ND	—	—	—	—	—	—	7.79	6.62	1.17	—
MW-8	12/15/1989	—	ND	ND	ND	ND	ND	ND	—	—	—	—	—	—	7.79	6.71	1.08	—
MW-8	03/08/1990	—	ND	ND	ND	ND	ND	ND	—	—	—	—	—	—	7.79	4.95	2.84	—
MW-8	04/18/1990	—	—	—	—	—	—	—	—	—	—	—	—	—	7.79	6.40	1.39	—
MW-8	07/23/1990	—	ND	ND	ND	ND	ND	ND	—	—	—	—	—	—	7.79	6.62	1.17	—
MW-8	09/27/1990	—	1,100	ND	ND	ND	ND	ND	—	—	—	—	—	—	7.79	6.98	0.81	—
MW-8	01/03/1991	—	ND	ND	1.3	ND	ND	ND	—	—	—	—	—	—	7.79	7.03	0.76	—
MW-8	04/10/1991	—	ND	50	0.7	1.1	0.8	1	—	—	—	—	—	—	7.79	4.40	3.39	—
MW-8	07/12/1991	—	ND	ND	ND	ND	ND	ND	—	—	—	—	—	—	7.79	6.80	0.99	—
MW-8	10/08/1991	—	ND	ND	1.4	ND	ND	ND	—	—	—	—	—	—	7.79	7.56	0.23	—
MW-8	02/06/1992	—	60 a	ND	ND	0.7	ND	ND	—	—	—	—	—	—	7.79	6.94	0.85	—
MW-8	05/04/1992	—	210 a	ND	ND	ND	ND	ND	—	—	—	—	—	—	7.79	5.86	1.93	—
MW-8	07/28/1992	—	ND	51	ND	ND	1	0.6	—	—	—	—	—	—	7.79	6.94	0.85	—
MW-8	10/27/1992	—	ND	ND	ND	6.6	ND	ND	—	—	—	—	—	—	7.79	7.83	-0.04	—
MW-8	01/14/1993	—	64 a	ND	ND	ND	ND	ND	—	—	—	—	—	—	7.79	3.60	4.19	—
MW-8 (D)	01/14/1993	—	—	ND	ND	ND	ND	ND	—	—	—	—	—	—	7.79	3.60	4.19	—
MW-8	04/23/1993	—	ND	ND	ND	ND	ND	ND	—	—	—	—	—	—	7.79	4.12	3.67	—
MW-8	07/20/1993	—	ND	ND	0.7	0.7	0.8	4.1	—	—	—	—	—	—	10.61	6.38	4.23	—
MW-8	10/18/1993	—	ND	ND	ND	800	ND	ND	—	—	—	—	—	—	10.61	7.47	3.14	—
MW-8	01/06/1994	—	ND	ND	ND	ND	ND	ND	—	—	—	—	—	—	10.61	7.20	3.41	—
MW-8	04/12/1994	—	ND	ND	ND	ND	ND	ND	—	—	—	—	—	—	10.61	6.16	4.45	—
MW-8	07/25/1994	—	ND	ND	ND	ND	ND	ND	—	—	—	—	—	—	10.61	6.94	3.67	—
MW-8	10/25/1994	—	ND	ND	ND	1	ND	ND	—	—	—	—	—	—	10.61	7.43	3.18	—
MW-8	01/09/1995	—	70 a	ND	ND	ND	ND	ND	—	—	—	—	—	—	10.61	3.98	6.63	—

TABLE 1

GROUNDWATER DATA
SHELL-BRANDED SERVICE STATION
285 HEGENBERGER ROAD, OAKLAND, CALIFORNIA

Well ID	Date	TPHmo (µg/L)	TPHd (µg/L)	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE 8020 (µg/L)	MTBE 8260 (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	TOC (ft MSL)	Depth to Water (ft TOC)	GW Elevation (ft MSL)	DO Reading (mg/L)
MW-8	04/11/1995	—	78	ND	0.63	1.3	ND	0.75	—	—	—	—	—	—	10.61	4.12	6.49	—
MW-8	07/18/1995	—	130	ND	ND	ND	ND	ND	—	—	—	—	—	—	10.61	5.21	5.40	—
MW-8	10/18/1995	—	—	—	—	—	—	—	—	—	—	—	—	—	10.61	5.58	5.03	—
MW-8	01/09/1996	—	ND	<50	<0.5	<0.5	<0.5	<0.5	ND	—	—	—	—	—	10.61	5.09	5.52	—
MW-8	04/02/1996	—	—	<50	<0.5	<0.5	<0.5	<0.5	<2.5	—	—	—	—	—	10.61	3.42	7.19	—
MW-8	10/03/1996	—	<69	<50	<0.5	<0.5	<0.5	<0.5	<2.5	—	—	—	—	—	10.61	4.30	6.31	—
MW-8	04/03/1997	—	62	<50	<0.50	<0.50	<0.50	0.91	<2.5	—	—	—	—	—	10.61	4.58	6.03	2.6
MW-8	10/08/1997	—	57	<50	<0.50	<0.50	<0.50	<0.50	<2.5	—	—	—	—	—	10.61	3.00	7.61	3.6
MW-8	06/10/1998	—	—	—	—	—	—	—	—	—	—	—	—	—	10.61	2.88	7.73	—
MW-8	12/30/1998	—	<50.0	<50.0	<0.500	<0.500	<0.500	<0.500	<2.00	—	—	—	—	—	10.61	5.38	5.23	0.8/0.9
MW-8	06/25/1999	—	—	—	—	—	—	—	—	—	—	—	—	—	10.61	4.53	6.08	—
MW-8	12/28/1999	—	<50.0	<50.0	<0.500	<0.500	<0.500	<0.500	<5.00	—	—	—	—	—	10.61	4.93	5.68	1.0/0.9
MW-8	05/31/2000	—	—	—	—	—	—	—	—	—	—	—	—	—	10.61	4.02	6.59	—
MW-8	10/17/2000	—	143 a	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	—	—	—	—	—	10.61	3.10	7.51	4.0/4.1
MW-8	05/01/2001	—	—	—	—	—	—	—	—	—	—	—	—	—	10.61	4.12	6.49	—
MW-8	11/05/2001	—	<50	<50	<0.50	0.99	<0.50	<0.50	—	<5.0	—	—	—	—	10.61	5.00	5.61	0.6/1.3
MW-8	05/01/2002	—	<50	<50	<0.50	<0.50	<0.50	<0.50	—	<5.0	—	—	—	—	10.61	3.25	7.36	0.6/3.6
MW-8	07/16/2002	—	—	—	—	—	—	—	—	—	—	—	—	—	10.61	3.64	6.97	—
MW-8	10/17/2002	—	<50	<50	<0.50	<0.50	<0.50	<0.50	—	<5.0	—	—	—	—	10.18	4.53	5.65	3.3/2.2
MW-8	01/21/2003	—	—	—	—	—	—	—	—	—	—	—	—	—	10.18	3.98	6.20	—
MW-8	05/01/2003	—	<50	<50	<0.50	<0.50	<0.50	<1.0	—	<5.0	—	—	—	—	10.18	4.00	6.18	—
MW-8	07/17/2003	—	—	—	—	—	—	—	—	—	—	—	—	—	10.18	4.37	5.81	—
MW-8	10/02/2003	—	<50	<50	<0.50	<0.50	<0.50	<1.0	—	<0.50	—	—	—	—	10.18	4.56	5.62	—
MW-8	01/05/2004	—	—	—	—	—	—	—	—	—	—	—	—	—	10.18	2.90	7.28	—
MW-8	04/01/2004	—	<50	<50	<0.50	<0.50	<0.50	<1.0	—	<0.50	—	—	—	—	10.18	3.83	6.35	—
MW-8	08/02/2004	—	—	—	—	—	—	—	—	—	—	—	—	—	10.18	5.35	4.83	—
MW-8	11/02/2004	<500	<50	<50	<0.50	<0.50	<0.50	<1.0	—	<0.50	—	—	—	—	10.18	4.28	5.90	—
MW-8	01/10/2005	—	—	—	—	—	—	—	—	—	—	—	—	—	10.18	2.44	7.74	—
MW-8	04/13/2005	<500	120 h	<50 i	<0.50	<0.50	<0.50	<1.0	—	<0.50	—	—	—	—	10.18	2.75	7.43	—
MW-8	07/20/2005	—	—	—	—	—	—	—	—	—	—	—	—	—	10.18	4.95	5.23	—
MW-8	10/24/2005	<500	<50	<50	<0.50	<0.50	<0.50	<1.0	—	<0.50	—	—	—	—	10.18	3.94	6.24	—
MW-8	01/04/2006	206 f	224 f	<50.0	<0.500	<0.500	<0.500	<0.500	—	<0.500	<10.0	—	—	—	10.18	1.87	8.31	—
MW-8	07/26/2006	315	<93.9	<50.0	<0.500	<0.500	<0.500	<0.500	—	<0.500	—	—	—	—	10.18	4.07	6.11	—
MW-8	01/02/2007	—	—	—	—	—	—	—	—	—	—	—	—	—	10.18	3.94	6.24	—
MW-8	07/12/2007	<250 f	<50 f	<50 m	<0.50	<1.0	<1.0	<1.0	—	<1.0	—	—	—	—	10.18	4.08	6.10	—
MW-8	01/10/2008	—	—	—	—	—	—	—	—	—	—	—	—	—	10.18	3.00	7.18	—
MW-8	07/31/2008	<250 f	<50 f	<50	<0.50	<1.0	<1.0	<1.0	—	<1.0	—	—	—	—	10.18	4.24	5.94	—
MW-8	01/06/2009	—	—	—	—	—	—	—	—	—	—	—	—	—	10.18	4.41	5.77	—
MW-8	07/01/2009	<250 f	<50 f	<50	<0.50	<1.0	<1.0	<1.0	—	<1.0	—	—	—	—	10.18	4.50	5.68	—

TABLE 1

GROUNDWATER DATA
SHELL-BRANDED SERVICE STATION
285 HEGENBERGER ROAD, OAKLAND, CALIFORNIA

Well ID	Date	TPHmo (µg/L)	TPHd (µg/L)	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE 8020 (µg/L)	MTBE 8260 (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	TOC (ft MSL)	Depth to Water (ft TOC)	GW Elevation (ft MSL)	DO Reading (mg/L)
MW-8	01/04/2010	—	—	—	—	—	—	—	—	—	—	—	—	—	10.18	4.46	5.72	—
MW-9	08/03/1989	—	12,000	47,000	5,600	6,600	1,500	8,500	—	—	—	—	—	—	7.63	5.78	1.85	—
MW-9	12/15/1989	—	9,200	88,000	4,300	5,400	140	5,600	—	—	—	—	—	—	7.63	5.24	2.39	—
MW-9	02/07/1990	—	7,400	50,000	1,800	1,400	3,200	1,800	—	—	—	—	—	—	7.63	5.23	2.40	—
MW-9	04/18/1990	—	7,500	50,000	14,000	11,000	730	10,000	—	—	—	—	—	—	7.63	5.34	2.29	—
MW-9	07/23/1990	—	3,200	62,000	19,000	16,000	950	15,000	—	—	—	—	—	—	7.63	5.65	1.98	—
MW-9	09/27/1990	—	2,700	30,000	16,000	6,500	980	11,000	—	—	—	—	—	—	7.63	5.96	1.67	—
MW-9	01/03/1991	—	2,500	34,000	9,200	3,200	770	7,000	—	—	—	—	—	—	7.63	6.23	1.40	—
MW-9	04/10/1991	—	2,200	66,000	17,000	13,000	1,400	14,000	—	—	—	—	—	—	7.63	4.65	2.98	—
MW-9	07/12/1991	—	2,000	40,000	7,700	3,200	1,100	9,400	—	—	—	—	—	—	7.63	5.65	1.98	—
MW-9	10/08/1991	—	4,700 a	20,000	11,000	640	240	6,000	—	—	—	—	—	—	7.63	6.08	1.55	—
MW-9	02/06/1992	—	6,600 a	36,000	11,000	490	1,100	6,700	—	—	—	—	—	—	7.63	5.92	1.71	—
MW-9	05/04/1992	—	5,800 a	31,000	11,000	1,700	1,200	8,700	—	—	—	—	—	—	7.63	4.80	2.83	—
MW-9	07/28/1992	—	14,000	50,000	17,000	1,200	1,500	12,000	—	—	—	—	—	—	7.63	5.61	2.02	—
MW-9	10/27/1992	—	880 a	43,000	15,000	680	1,700	8,100	—	—	—	—	—	—	7.63	6.24	1.39	—
MW-9	01/14/1993	—	730 a	52,000	9,600	1,100	1,100	7,000	—	—	—	—	—	—	7.63	4.95	2.68	—
MW-9	04/23/1993	—	8,000 a	45,000	11,000	1,400	1,500	10,000	—	—	—	—	—	—	7.63	4.54	3.09	—
MW-9	07/20/1993	—	5,100	25,000	10,000	320	1,100	7,100	—	—	—	—	—	—	10.48	5.25	5.23	—
MW-9	10/18/1993	—	4,900 a	32,000	14,000	530	2,000	10,000	—	—	—	—	—	—	10.48	6.00	4.48	—
MW-9	01/06/1994	—	7,700 a	41,000	15,000	810	1,400	9,000	—	—	—	—	—	—	10.48	5.62	4.86	—
MW-9 (D)	01/06/1994	—	8,300 a	43,000	15,000	920	1,300	8,000	—	—	—	—	—	—	10.48	5.62	4.86	—
MW-9	04/12/1994	—	2,000	39,000	8,300	ND	ND	4,000	—	—	—	—	—	—	10.48	4.31	6.17	—
MW-9	07/25/1994	—	3,600 a	22,000	7,500	150	ND	4,100	—	—	—	—	—	—	10.48	5.43	5.05	—
MW-9	10/25/1994	—	3,200 a	31,000	13,000	240	1,000	8,500	—	—	—	—	—	—	10.48	6.00	4.48	—
MW-9 (D)	10/26/1994	—	3,500 a	31,000	13,000	220	1,100	8,300	—	—	—	—	—	—	10.48	6.00	4.48	—
MW-9	01/09/1995	—	2,300 a	4,800	1,200	510	42	1,400	—	—	—	—	—	—	10.48	4.26	6.22	—
MW-9	04/11/1995	—	3,400	20,000	5,100	460	400	3,400	—	—	—	—	—	—	10.48	4.08	6.40	—
MW-9	07/18/1995	—	2,900	43,000	12,000	1,800	960	9,100	—	—	—	—	—	—	10.48	5.07	5.41	—
MW-9	10/18/1995	—	—	—	—	—	—	—	—	—	—	—	—	—	10.48	5.82	4.66	—
MW-9	01/09/1996	—	2,800	64,000	12,000	5,400	1,800	10,000	2100	—	—	—	—	—	10.48	4.36	6.12	—
MW-9	04/02/1996	—	—	39,000	10,000	100	520	4,100	<500	—	—	—	—	—	10.48	3.86	6.62	—
MW-9	10/03/1996	—	3,100	46,000	12,000	180	1,400	6,700	2,300	—	—	—	—	—	10.48	4.90	5.58	1.4
MW-9	04/03/1997	—	2,300	36,000	9,700	140	580	3,900	<500	—	—	—	—	—	10.48	3.98	6.50	1.8
MW-9	10/08/1997	—	3,500	34,000	6,900	<100	830	4,500	<125	—	—	—	—	—	10.48	4.17	6.31	0.8
MW-9	06/10/1998	—	2,500	20,000	9,900	250	3,100	170	460	—	—	—	—	—	10.48	3.84	6.64	0.3/0.4
MW-9	12/30/1998	—	1,900	30,100	8,500	166	603	3,340	<100	—	—	—	—	—	10.48	4.72	5.76	1.1/1.2
MW-9	06/25/1999	r	r	26,300	8,090	73.5	409	2,730	<100	—	—	—	—	—	10.48	4.47	6.01	1.2/2.4
MW-9	12/28/1999	—	839	4,130	1,260	57.9	103	213	1,470	—	—	—	—	—	10.48	4.82	5.66	1.0/1.1

GROUNDWATER DATA
SHELL-BRANDED SERVICE STATION
285 HEGENBERGER ROAD, OAKLAND, CALIFORNIA

Well ID	Date	TPHmo (µg/L)	TPHd (µg/L)	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE 8020 (µg/L)	MTBE 8260 (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	TOC (ft MSL)	Depth to Water (ft TOC)	GW Elevation (ft MSL)	DO Reading (mg/L)
MW-9	05/31/2000	—	1,300	8,210	9,290	62.3	141	908	565	---	—	---	—	—	10.48	3.87	6.61	2.8/c
MW-9	10/17/2000	—	1,510 a	19,000	5,420	54.5	479	2,680	<250	—	—	—	—	—	10.48	3.87	6.61	3.0/3.5
MW-9	05/01/2001	—	976	24,300	11,200	52.9	159	1,610	<250	—	—	—	—	—	10.48	4.44	6.04	1.6/1.0
MW-9	05/29/2001	—	—	---	—	—	---	—	---	—	---	---	---	—	10.48	3.99	6.49	1.9/1.5
MW-9	11/05/2001	—	—	—	—	—	—	---	—	—	—	—	—	—	10.48	5.41	5.07	0.7
MW-9	11/07/2001	—	<1,000	25,000	7,300	85	630	4,100	—	<250	—	—	—	—	10.48	5.60	4.88	1.4/1.1
MW-9	05/01/2002	—	<700	27,000	11,000	79	260	1,300	—	<500	—	—	—	—	10.48	3.38	7.10	2.9/1.1
MW-9	07/16/2002	—	<700	29,000	12,000	<50	74	810	—	<500	—	—	—	—	10.48	4.04	6.44	0.7/0.4
MW-9	10/17/2002	—	<800	15,000	10,000	31	36	490	—	53	—	—	—	—	10.07	4.92	5.15	1.0/1.2
MW-9	01/21/2003	—	<400	8,500	3,100	39	190	590	—	<200	—	—	—	—	10.07	4.52	5.55	0.4/0.8
MW-9	05/01/2003	—	1,600 a	16,000 a	4,900	<100	<100	1,500	—	<1,000	—	—	—	—	10.07	4.05	6.02	—
MW-9	07/17/2003	—	1,300 a,f	14,000	9,900	130	<120	2,300	—	<120	—	—	—	—	10.07	4.82	5.25	—
MW-9	10/02/2003	—	3,100 a	13,000	8,500	190	770	5,100	—	<100	—	—	—	—	10.07	5.17	4.90	—
MW-9	01/05/2004	—	1,500 a	37,000	15,000	250	750	3,800	—	<100	—	—	—	—	10.07	3.94	6.13	—
MW-9	04/01/2004	—	1,800 a	14,000	6,800	80	230	1,800	—	<50	—	—	—	—	10.07	4.24	5.83	—
MW-9	08/02/2004	<500	710 g	12,000	8,200	<50	66	650	—	<50	<500	<200	<200	<200	10.07	5.10	4.97	—
MW-9	11/02/2004	<500	1,500 g	15,000	9,300	73	240	1,400	—	70	—	—	—	—	10.07	4.21	5.86	—
MW-9	01/10/2005	<500	1,700 g	28,000	7,400	1,100	1,400	5,400	—	<50	—	—	—	—	10.07	3.45	6.62	—
MW-9	04/13/2005	690	5,100 g	55,000	15,000	3,300	2,800	12,000	—	<50	—	—	—	—	10.07	3.53	6.54	—
MW-9	07/20/2005	<1,000	6,700 g	27,000	5,100	320	900	3,200	—	<50	<500	<200	<200	<200	10.07	5.75	4.32	—
MW-9	10/24/2005	<500	4,200 g	25,000	11,000	680	890	3,900	—	<50	—	—	—	—	10.04	4.42	5.62	—
MW-9	01/04/2006	427 f	3,400 f	39,600	5,800	636	187	6,130	—	73.1	139	—	—	—	10.04	3.10	6.94	—
MW-9	07/26/2006	685	1,580	41,000	11,800	421	979	2,520	—	54.2	85.1	<0.500	<0.500	<0.500	10.04	4.45	5.59	—
MW-9	01/02/2007	100 f	740 f	19,000	6,900	300	660	2,500	—	30	—	—	—	—	10.04	4.81	5.23	—
MW-9	07/12/2007	<250 f	730 f	13,000 m	6,100	44 n	100	561 n	—	29 n	<500	<100	<100	<100	10.04	4.50	5.54	—
MW-9	01/10/2008	<250 f	850 f,o	22,000 m,o	8,800	180	270	1,330	—	12	47	—	—	—	10.04	4.32	5.72	—
MW-9	07/31/2008 p	<250 f	600 f,o	170	69	<1.0	<1.0	1.8	—	<1.0	<10	<2.0	<2.0	<2.0	10.04	3.78	6.26	—
MW-9	08/29/2008	1,600 f,o	2,200 f,o	20,000	5,900	<100	450	2,500	—	<100	<1,000	<200	<200	<200	10.04	4.24	5.80	—
MW-9	01/06/2009	2,100 f	1,500 f,o	11,000	5,500	41	110	920	—	29	—	—	—	—	10.04	4.70	5.34	—
MW-9	07/01/2009	<250 f	250 f,o	6,700	2,900	<25	<25	220	—	<25	<250	<50	<50	<50	10.04	4.67	5.37	—
MW-9	01/04/2010	1,100 f, o	470 f,o	8,300	3,200	<50	<50	110	—	<50	<500	—	—	—	10.04	4.87	5.17	—
MW-9	01/18/2011	630 q	1,200 q	6,800	2,800	38	240	590	—	<50	<500	<50	<50	<50	10.04	3.92	6.12	—
MW-9	**01/05/2012**	**93 f**	**260 f**	**10,000 m**	**4,400**	**52**	**74**	**190**	**—**	**<50**	**<500**	**<50**	**<50**	<50	**10.04**	**4.40**	**5.64**	**—**
MW-10	12/15/1989	—	3,100	ND	1,500	ND	ND	ND	—	---	—	—	—	—	7.45	6.33	1.12	—
MW-10	03/08/1990	—	1,800	25,000	17,000	330	2,100	1,400	—	---	—	—	—	—	7.45	5.41	2.04	—
MW-10	04/18/1990	—	3,600	23,000	15,000	1,200	190	3,300	—	---	—	—	—	—	7.45	5.60	1.85	—
MW-10	07/23/1990	—	1,900	18,000	12,000	380	ND	1,400	—	—	---	—	—	—	7.45	5.81	1.64	—
MW-10	09/27/1990	—	430	9,500	13,000	100	1,800	230	—	—	—	—	—	—	7.45	6.64	0.81	—

GROUNDWATER DATA
SHELL-BRANDED SERVICE STATION
285 HEGENBERGER ROAD, OAKLAND, CALIFORNIA

Well ID	Date	TPHmo (µg/L)	TPHd (µg/L)	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE 8020 (µg/L)	MTBE 8260 (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	TOC (ft MSL)	Depth to Water (ft TOC)	GW Elevation (ft MSL)	DO Reading (mg/L)
MW-10	01/03/1991	---	630	4,300	3,700	10	ND	110	---	---	---	---	---	---	7.45	6.96	0.49	---
MW-10	04/10/1991	---	1,400	45,000	16,000	4,600	3,000	6,900	---	---	---	---	---	---	7.45	4.70	2.75	---
MW-10	07/12/1991	---	ND	ND	ND	ND	ND	ND	---	---	---	---	---	---	7.45	5.90	1.55	---
MW-10	10/08/1991	---	1,500 a	3,800	13,000	82	9	500	---	---	---	---	---	---	7.45	6.68	0.77	---
MW-10	02/06/1992	---	1,600 a	22,000	12,000	ND	600	170	---	---	---	---	---	---	7.45	7.04	0.41	---
MW-10	05/04/1992	---	8,000 a	39,000	14,000	5,000	1,800	5,000	---	---	---	---	---	---	7.45	4.69	2.76	---
MW-10	07/28/1992	---	8,700 a	38,000	17,000	2,800	1,500	4,000	---	---	---	---	---	---	7.45	6.00	1.45	---
MW-10	01/14/1993	---	950 a	26,000	10,000	ND	ND	160	---	---	---	---	---	---	7.45	6.07	1.38	---
MW-10	04/23/1993	---	1,900 a	80,000	21,000	13,000	3,400	12,000	---	---	---	---	---	---	7.45	4.14	3.31	---
MW-10	07/20/1993	---	4,800	31,000	14,000	4,200	1,700	5,500	---	---	---	---	---	---	10.61	5.62	4.99	---
MW-10	10/18/1993	---	1,200 a	13,000	8,600	220	ND	450	---	---	---	---	---	---	10.61	6.43	4.18	---
MW-10	01/06/1994	---	670 a	16,000	9,700	<125	<125	210	---	---	---	---	---	---	10.61	6.74	3.87	---
MW-10	04/12/1994	---	860	16,000	5,600	ND	ND	ND	---	---	---	---	---	---	10.61	5.98	4.63	---
MW-10	07/25/1994	---	2,100 a	2,300	1,400	26	25	51	---	---	---	---	---	---	10.61	6.31	4.30	---
MW-10	10/25/1994	---	1,000 a	1,400	290	5	2	38	---	---	---	---	---	---	10.61	6.64	3.97	---
MW-10	01/09/1995	---	2,300 a	16,000	7,500	1,400	230	1,500	---	---	---	---	---	---	10.61	5.70	4.91	---
MW-10	04/11/1995	---	5,000	54,000	13,000	4,500	1,500	4,500	---	---	---	---	---	---	10.61	5.82	4.79	---
MW-10	07/18/1995	---	2,600	72,000	20,000	7,200	2,800	9,000	---	---	---	---	---	---	10.61	6.79	3.82	---
MW-10	10/18/1995	---	---	---	---	---	---	---	---	---	---	---	---	---	10.61	5.31	5.30	---
MW-10	01/09/1996	---	2,100	32,000	8,000	1,600	880	3,200	12,000	---	---	---	---	---	10.61	5.92	4.69	---
MW-10	04/02/1996	---	---	68,000	9,100	2,300	1,100	3,700	3,300	---	---	---	---	---	10.61	5.43	5.18	---
MW-10	10/03/1996	---	2,900	33,000	11,000	1,300	830	2,400	7,300	---	---	---	---	---	10.61	6.07	4.54	1.7
MW-10 (D)	10/03/1996	---	3,300	40,000	12,000	1,700	1,100	3,100	6,500	---	---	---	---	---	10.61	6.07	4.54	1.7
MW-10	04/03/1997	---	3,400	36,000	12,000	2,300	1,400	4,500	2,300	---	---	---	---	---	10.61	3.45	7.16	1.8
MW-10 (D)	04/03/1997	---	3,000	52,000	12,000	2,300	1,400	4,500	2,100	---	---	---	---	---	10.61	3.45	7.16	1.8
MW-10	10/08/1997	---	3,100	20,000	7,500	420	470	1,300	1,500	---	---	---	---	---	10.61	3.72	6.89	1.2
MW-10	06/10/1998	---	2,500	48,000	14,000	2,600	1,500	4,800	1,800	---	---	---	---	---	10.61	4.00	6.61	0.7/0.5
MW-10	12/30/1998	---	2,820	17,800	6,000	136	344	639	1,250	---	---	---	---	---	10.61	5.26	5.35	1.0/0.7
MW-10	06/25/1999	r	r	17,600	6,150	212	287	687	1,740	---	---	---	---	---	10.61	4.49	6.12	0.9/2.5
MW-10	12/28/1999	---	1,400	10,800	3,370	155	321	626	3,740	---	---	---	---	---	10.61	4.87	5.74	1.2/1.4
MW-10	05/31/2000	---	2,270	3,020	1,080	34.3	118	251	775	---	---	---	---	---	10.61	3.48	7.13	2.8/3.9
MW-10	10/17/2000	---	1,750 a	15,500	7,450	54.7	387	308	3,840	4,300	---	---	---	---	10.61	4.25	6.36	2.3/3.0
MW-10	05/01/2001	---	2,260	27,900	9,920	1,050	1,020	2,370	2,180	---	---	---	---	---	10.61	5.40	5.21	2.0/1.1
MW-10	05/29/2001	---	---	---	---	---	---	---	---	---	---	---	---	---	10.61	3.74	6.87	3.70/1.8
MW-10	11/05/2001	---	---	---	---	---	---	---	---	---	---	---	---	---	10.61	6.08	4.53	0.6
MW-10	11/07/2001	---	360	14,000	5,300	260	430	810	---	1,700	---	---	---	---	10.61	5.45	5.16	1.8/1.0
MW-10	05/01/2002	---	<1,500	79,000	16,000	4,400	3,300	8,800	---	890	---	---	---	---	10.61	4.62	5.99	4.0/0.5
MW-10	07/16/2002	---	<1,000	21,000	6,500	350	460	1,000	---	1,200	---	---	---	---	10.61	5.80	4.81	0.5/1.5
MW-10	10/17/2002	---	<1,800	17,000	5,800	290	520	1,100	---	980	---	---	---	---	9.81	5.27	4.54	0.8/1.2

GROUNDWATER DATA
SHELL-BRANDED SERVICE STATION
285 HEGENBERGER ROAD, OAKLAND, CALIFORNIA

Well ID	Date	TPHmo (µg/L)	TPHd (µg/L)	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE 8020 (µg/L)	MTBE 8260 (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	TOC (ft MSL)	Depth to Water (ft TOC)	GW Elevation (ft MSL)	DO Reading (mg/L)
MW-10	01/21/2003	---	<2,000	52,000	13,000	2,000	2,100	4,800	---	<1,000	---	---	---	---	9.81	5.72	4.09	0.3/0.6
MW-10	05/01/2003	---	3,800 a	40,000	13,000	1,700	2,200	5,000	---	2,900	---	---	---	---	9.81	4.29	5.52	---
MW-10	07/17/2003	---	1,700 a,f	13,000	7,200	250	740	1,500	---	2,400	---	---	---	---	9.81	5.05	4.76	---
MW-10	10/02/2003	---	1,400 a	<5,000	2,700	<50	56	<100	---	2,800	---	---	---	---	9.81	5.46	4.35	---
MW-10	01/05/2004	---	2,300 a	77,000	21,000	4,200	3,900	8,500	---	1,900	---	---	---	---	9.81	3.52	6.29	---
MW-10	04/01/2004	---	3,100 a	33,000	11,000	1,000	1,600	3,600	---	5,200	---	---	---	---	9.81	4.12	5.69	---
MW-10	08/02/2004	570	1,100 a	9,900	4,100	140	500	700	---	3,800	710	<100	<100	<100	9.81	5.35	4.46	---
MW-10	11/02/2004	<500	3,500 g	48,000	16,000	1,400	3,100	6,000	---	3,100	---	---	---	---	9.81	5.06	4.75	---
MW-10	01/10/2005	<500	4,200 g	120,000	21,000	20,000	5,400	22,000	---	16,000	---	---	---	---	9.81	3.14	6.67	---
MW-10	04/13/2005	<1,000	9,100 g	83,000	22,000	13,000	5,500	18,000	---	22,000	---	---	---	---	9.81	3.12	6.69	---
MW-10	07/20/2005	<2,500	11,000 g	82,000	14,000	9,700	4,700	20,000	---	32,000	9,800	<500	<500	<500	9.81	5.33	4.48	---
MW-10	10/24/2005	<1,000	9,800 g	67,000	12,000	4,000	4,500	13,000	---	14,000	6,200	---	---	---	9.78	4.24	5.54	---
MW-10	01/04/2006	364 f	5,690 f	114,000	15,000	5,110	1,310	17,400	---	3,720	1,150	---	---	---	9.78	2.53	7.25	---
MW-10	07/26/2006	260	1,070	66,600	10,600	137	2,740	5,430	---	2,660	3,280	0.750	<0.500	<0.500	9.78	3.98	5.80	---
MW-10	01/02/2007	140 f	1,500 f	46,000	10,000	860	3,800	8,000	---	1,200	1,400	---	---	---	9.78	4.02	5.76	---
MW-10	07/12/2007	<250 f	3,900 f	28,000 m	7,700	160	2,100	2,960	---	1,200	2,600	<100	<100	<100	9.78	4.18	5.60	---
MW-10	01/10/2008	<250 f	4,700 f,o	31,000 m	10,000	75	2,800	3,270	---	1,400	2,000	---	---	---	9.78	4.34	5.44	---
MW-10	07/31/2008	<250 f	1,500 f,o	38,000	11,000	<100	1,800	970	---	3,100	7,500	<200	<200	<200	9.78	4.10	5.68	---
MW-10	01/06/2009	340 f	3,800 f,o	26,000	9,600	<100	2,300	790	---	1,600	2,300	---	---	---	9.78	4.25	5.53	---
MW-10	07/01/2009	<250 f	<50 f	17,000	6,100	<50	1,100	110	---	910	2,900	<100	<100	<100	9.78	4.27	5.51	---
MW-10	01/04/2010	<250 f	2,500 f,o	22,000	7,200	<100	1,000	<100	---	870	2,600	---	---	---	9.78	4.53	5.25	---
MW-10	01/18/2011	---	2,700 q	18,000	8,900	<100	1,500	<200	---	320	<2,000	<200	<200	<200	9.78	3.28	6.50	---
MW-10	**01/05/2012**	**---**	**1,500 f**	**23,000 m**	**10,000**	**81**	**510**	**<100**	**---**	**230**	**<1,000**	**<100**	**<100**	**<100**	**9.78**	**3.86**	**5.92**	**---**
MW-11	07/20/1993	---	ND	50	2.5	1.9	3.9	18	---	---	---	---	---	---	10.56	8.08	2.48	---
MW-11	10/18/1993	---	65	ND	ND	ND	ND	ND	---	---	---	---	---	---	10.56	8.24	2.32	---
MW-11	01/06/1994	---	ND	ND	ND	ND	ND	ND	---	---	---	---	---	---	10.56	8.47	2.09	---
MW-11	04/12/1994	---	ND	ND	1.1	0.87	ND	1.5	---	---	---	---	---	---	10.56	8.44	2.12	---
MW-11	07/25/1994	---	ND	ND	ND	ND	ND	ND	---	---	---	---	---	---	10.56	8.20	2.36	---
MW-11	10/25/1994	---	100	ND	ND	ND	ND	ND	---	---	---	---	---	---	10.56	8.67	1.89	---
MW-11	01/09/1995	---	ND	ND	ND	ND	ND	ND	---	---	---	---	---	---	10.56	7.63	2.93	---
MW-11	04/11/1995	---	140	ND	ND	0.7	ND	0.5	---	---	---	---	---	---	10.56	8.06	2.50	---
MW-11	07/18/1995	---	50	ND	ND	ND	ND	ND	---	---	---	---	---	---	10.56	9.31	1.25	---
MW-11	10/18/1995	---	---	---	---	---	---	---	---	---	---	---	---	---	10.56	8.34	2.22	---
MW-11	01/09/1996	---	ND	<50	<0.5	<0.5	<0.5	<0.5	ND	---	---	---	---	---	10.56	8.22	2.34	---
MW-11	04/02/1996	---	---	<50	<0.5	<0.5	<0.5	<0.5	<2.5	---	---	---	---	---	10.56	7.97	2.59	---
MW-11	10/03/1996	---	<50	<50	<0.5	<0.5	<0.5	<0.5	<2.5	---	---	---	---	---	10.56	8.37	2.19	3.6
MW-11	04/03/1997	---	<50	<50	<0.50	<0.50	<0.50	<0.50	<2.5	---	---	---	---	---	10.56	8.31	2.25	2.2
MW-11	10/08/1997	---	54	<50	<0.50	<0.50	<0.50	<0.50	<2.5	---	---	---	---	---	10.56	8.56	2.00	1.2

GROUNDWATER DATA
SHELL-BRANDED SERVICE STATION
285 HEGENBERGER ROAD, OAKLAND, CALIFORNIA

Well ID	Date	TPHmo (µg/L)	TPHd (µg/L)	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE 8020 (µg/L)	MTBE 8260 (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	TOC (ft MSL)	Depth to Water (ft TOC)	GW Elevation (ft MSL)	DO Reading (mg/L)
MW-11	06/10/1998	—	—	—	—	—	—	—	—	—	—	—	—	—	10.56	7.85	2.71	—
MW-11	12/30/1998	—	66.2	<50.0	<0.500	<0.500	<0.500	<0.500	<2.00	—	—	—	—	—	10.56	8.51	2.05	0.7/0.6
MW-11	06/25/1999	—	—	—	—	—	—	—	—	—	—	—	—	—	10.56	8.01	2.55	—
MW-11	12/28/1999	—	<50.0	<50.0	<0.500	<0.500	<0.500	<0.500	<5.00	—	—	—	—	—	10.56	8.39	2.17	0.8/1.0
MW-11	05/31/2000	—	—	—	—	—	—	—	—	—	—	—	—	—	10.56	7.38	3.18	—
MW-11	10/17/2000	—	<50.0	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	—	—	—	—	—	10.56	8.35	2.21	4.1/4.0
MW-11	05/01/2001	—	—	—	—	—	—	—	—	—	—	—	—	—	10.56	8.15	2.41	—
MW-11	11/05/2001	Unable to locate		—	—	—	—	—	—	—	—	—	—	—	10.56	—	—	—
MW-11	05/01/2002	Unable to locate		—	—	—	—	—	—	—	—	—	—	—	10.56	—	—	—
MW-11	05/08/2002	—	<50	<50	<0.50	<0.50	<0.50	<0.50	—	<5.0	—	—	—	—	10.56	7.82	2.74	1.0/1.1
MW-11	07/16/2002	—	—	—	—	—	—	—	—	—	—	—	—	—	10.56	7.64	2.92	—
MW-11	10/17/2002	—	<50	<50	<0.50	<0.50	<0.50	<0.50	—	<5.0	—	—	—	—	—	7.95	—	1.3/1.0
MW-11	01/21/2003	—	—	—	—	—	—	—	—	—	—	—	—	—	—	7.57	—	—
MW-11	05/01/2003	—	<50	<50	<0.50	<0.50	<0.50	<1.0	—	<5.0	—	—	—	—	—	7.62	—	—
MW-11	07/17/2003	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6.93	—	—
MW-11	10/02/2003	—	<50	<50	<0.50	<0.50	<0.50	<1.0	—	<0.50	—	—	—	—	—	7.56	—	—
MW-11	01/05/2004	—	—	—	—	—	—	—	—	—	—	—	—	—	—	7.03	—	—
MW-11	04/01/2004	—	<50	<50	<0.50	<0.50	<0.50	<1.0	—	<0.50	—	—	—	—	—	7.55	—	—
MW-11	08/02/2004	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6.50	—	—
MW-11	11/02/2004	<500	<50	<50	<0.50	<0.50	<0.50	<1.0	—	<0.50	—	—	—	—	—	7.41	—	—
MW-11	01/10/2005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6.45	—	—
MW-11	04/13/2005	<500	84 a	<50	<0.50	<0.50	<0.50	<1.0	—	<0.50	—	—	—	—	—	7.35	—	—
MW-11	07/20/2005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	9.56	—	—
MW-11	10/24/2005	<500	66 a	<50	<0.50	<0.50	<0.50	<1.0	—	<0.50	—	—	—	—	10.06	7.72	2.34	—
MW-11	01/04/2006	<100 f	<100 f	<50.0	<0.500	<0.500	<0.500	<0.500	—	<0.500	<10.0	—	—	—	10.06	6.55	3.51	—
MW-11	07/26/2006	914	105	<50.0	<0.500	<0.500	<0.500	<0.500	—	<0.500	—	—	—	—	10.06	7.37	2.69	—
MW-11	01/02/2007	—	—	—	—	—	—	—	—	—	—	—	—	—	10.06	7.63	2.43	—
MW-11	07/12/2007	340 f	100 f	<50 m	<0.50	<1.0	<1.0	<1.0	—	<1.0	—	—	—	—	10.06	7.18	2.88	—
MW-11	01/10/2008	—	—	—	—	—	—	—	—	—	—	—	—	—	10.06	6.03	4.03	—
MW-11	07/31/2008	<250 f	<50 f	<50	<0.50	<1.0	<1.0	<1.0	—	<1.0	—	—	—	—	10.06	7.25	2.81	—
MW-11	01/06/2009	—	—	—	—	—	—	—	—	—	—	—	—	—	10.06	8.03	2.03	—
MW-11	07/01/2009	<250 f	<50 f	<50	<0.50	<1.0	<1.0	<1.0	—	<1.0	—	—	—	—	10.06	7.62	2.44	—
MW-11	01/04/2010	—	—	—	—	—	—	—	—	—	—	—	—	—	10.06	7.43	2.63	—
MW-11	01/18/2011	<480	<480	<50	<0.50	<0.50	<0.50	<1.0	—	<1.0	<10	<1.0	<1.0	<1.0	10.06	7.03	3.03	—
MW-11	**01/05/2012**	**Well inaccessible**		—	—	—	—	—	—	—	—	—	—	—	**10.06**	—	—	—
MW-12	07/20/1993	—	1,500	ND	2.8	1.9	3.2	ND	—	—	—	—	—	—	9.56	6.76	2.80	—
MW-12	10/18/1993	—	ND	ND	ND	ND	ND	ND	—	—	—	—	—	—	9.56	7.12	2.44	—
MW-12	01/06/1994	—	ND	ND	ND	ND	ND	ND	—	—	—	—	—	—	9.56	7.15	2.41	—

GROUNDWATER DATA
SHELL-BRANDED SERVICE STATION
285 HEGENBERGER ROAD, OAKLAND, CALIFORNIA

Well ID	Date	TPHmo (µg/L)	TPHd (µg/L)	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE 8020 (µg/L)	MTBE 8260 (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	TOC (ft MSL)	Depth to Water (ft TOC)	GW Elevation (ft MSL)	DO Reading (mg/L)
MW-12	04/12/1994	—	ND	ND	0.61	ND	ND	1.1	—	—	—	—	—	—	9.56	6.68	2.88	—
MW-12	07/25/1994	—	ND	ND	ND	ND	ND	ND	—	—	—	—	—	—	9.56	6.83	2.73	—
MW-12	10/25/1994	—	ND	ND	ND	ND	ND	ND	—	—	—	—	—	—	9.56	7.34	2.22	—
MW-12	01/09/1995	—	80 a	ND	ND	ND	ND	ND	—	—	—	—	—	—	9.56	5.02	4.54	—
MW-12	04/11/1995	—	200	ND	ND	ND	ND	ND	—	—	—	—	—	—	9.56	7.38	2.18	—
MW-12	07/18/1995	—	90	ND	ND	ND	ND	ND	—	—	—	—	—	—	9.56	8.50	1.06	—
MW-12	10/18/1995	—	—	—	—	—	—	—	—	—	—	—	—	—	9.56	6.63	2.93	—
MW-12	01/09/1996	—	ND	<50	<0.5	<0.5	<0.5	<0.5	ND	—	—	—	—	—	9.56	6.32	3.24	—
MW-12	04/02/1996	—	—	<50	<0.5	<0.5	<0.5	<0.5	<2.5	—	—	—	—	—	9.56	5.60	3.96	—
MW-12	10/03/1996	—	72	<50	<0.5	<0.5	<0.5	<0.5	<2.5	—	—	—	—	—	9.56	3.30	6.26	2.5
MW-12	04/03/1997	—	74	<50	<0.50	<0.50	<0.50	<0.50	<2.5	—	—	—	—	—	9.56	6.13	3.43	2.2
MW-12	10/08/1997	—	73	<50	<0.50	<0.50	<0.50	<0.50	<2.5	—	—	—	—	—	9.56	6.49	3.07	3.0
MW-12	06/10/1998	—	—	—	—	—	—	—	—	—	—	—	—	—	9.56	5.85	3.71	—
MW-12	12/30/1998	—	<50.0	<50.0	<0.500	<0.500	<0.500	<0.500	<2.00	—	—	—	—	—	9.56	8.42	1.14	1.3/0.9
MW-12	06/25/1999	—	—	—	—	—	—	—	—	—	—	—	—	—	9.56	7.89	1.67	—
MW-12	12/28/1999	—	<50.0	<50.0	<0.500	<0.500	<0.500	<0.500	<5.00	—	—	—	—	—	9.56	8.26	1.30	1.0/1.2
MW-12	05/31/2000	—	—	—	—	—	—	—	—	—	—	—	—	—	9.56	7.21	2.35	—
MW-12	10/17/2000	—	82.9 a	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	—	—	—	—	—	9.56	6.80	2.76	5.1/3.0
MW-12	05/01/2001	—	—	—	—	—	—	—	—	—	—	—	—	—	9.56	5.95	3.61	—
MW-12	11/05/2001	Unable to locate		—	—	—	—	—	—	—	—	—	—	—	9.56	—	—	—
MW-12	05/01/2002	Unable to locate		—	—	—	—	—	—	—	—	—	—	—	9.56	—	—	—
MW-12	05/08/2002	—	<50	<50	<0.50	<0.50	<0.50	<0.50	—	<5.0	—	—	—	—	9.56	4.75	4.81	1.2/0.9
MW-12	07/16/2002	—	—	—	—	—	—	—	—	—	—	—	—	—	9.56	4.88	4.68	—
MW-12	10/17/2002	—	81	<50	<0.50	<0.50	<0.50	<0.50	—	<5.0	—	—	—	—	—	5.11	—	1.8/1.5
MW-12	01/21/2003	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5.76	—	—
MW-12	05/01/2003	—	95 a	<50	<0.50	<0.50	<0.50	<1.0	—	<5.0	—	—	—	—	—	5.00	—	—
MW-12	07/17/2003	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5.85	—	—
MW-12	10/02/2003	—	<50	<50	<0.50	<0.50	<0.50	<1.0	—	<0.50	—	—	—	—	—	5.02	—	—
MW-12	01/05/2004	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.95	—	—
MW-12	04/01/2004	—	<50	<50	<0.50	<0.50	<0.50	<1.0	—	<0.50	—	—	—	—	—	5.04	—	—
MW-12	08/02/2004	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5.42	—	—
MW-12	11/02/2004	<500	150 h	<50	<0.50	<0.50	<0.50	<1.0	—	<0.50	—	—	—	—	—	4.55	—	—
MW-12	01/10/2005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5.81	—	—
MW-12	04/13/2005	<500	120 a	<50	<0.50	<0.50	<0.50	<1.0	—	<0.50	—	—	—	—	—	4.01	—	—
MW-12	07/20/2005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6.00	—	—
MW-12	10/24/2005	<500	94 a	<50	<0.50	<0.50	<0.50	<1.0	—	<0.50	—	—	—	—	9.09	4.83	4.26	—
MW-12	01/04/2006	675 f	330 f	<50.0	<0.500	<0.500	<0.500	<0.500	—	<0.500	<10.0	—	—	—	9.09	5.52	3.57	—
MW-12	07/26/2006	153	<93.9	<50.0	<0.500	<0.500	<0.500	<0.500	—	<0.500	—	—	—	—	9.09	4.47	4.62	—
MW-12	01/02/2007	—	—	—	—	—	—	—	—	—	—	—	—	—	9.09	5.70	3.39	—

GROUNDWATER DATA
SHELL-BRANDED SERVICE STATION
285 HEGENBERGER ROAD, OAKLAND, CALIFORNIA

Well ID	Date	TPHmo (µg/L)	TPHd (µg/L)	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE 8020 (µg/L)	MTBE 8260 (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	TOC (ft MSL)	Depth to Water (ft TOC)	GW Elevation (ft MSL)	DO Reading (mg/L)
MW-12	07/12/2007	<250 f	63 f	<50 m	<0.50	<1.0	<1.0	<1.0	—	<1.0	—	—	—	—	9.09	5.03	4.06	—
MW-12	01/10/2008	—	—	—	—	—	—	—	—	—	—	—	—	—	9.09	4.20	4.89	—
MW-12	07/31/2008	<250 f	<50 f	<50	<0.50	<1.0	<1.0	<1.0	—	<1.0	—	—	—	—	9.09	4.52	4.57	—
MW-12	01/06/2009	—	—	—	—	—	—	—	—	—	—	—	—	—	9.09	4.79	4.30	—
MW-12	07/01/2009	<250 f	<50 f	<50	<0.50	<1.0	<1.0	<1.0	—	<1.0	—	—	—	—	9.09	5.70	3.39	—
MW-12	01/04/2010	—	—	—	—	—	—	—	—	—	—	—	—	—	9.09	6.00	3.09	—
MW-12	01/18/2011	<480	<480	<50	<0.50	<0.50	<0.50	<1.0	—	<1.0	<10	<1.0	<1.0	<1.0	9.09	5.61	3.48	—
MW-12	**01/05/2012**	**Well inaccessible**		—	—	—	—	—	—	—	—	—	—	—	9.09	—	—	—
MW-13	07/20/1993	—	1,500	ND	ND	ND	ND	ND	—	—	—	—	—	—	10.10	8.32	1.78	—
MW-13 (D)	07/21/1993	—	1,000	ND	ND	ND	ND	ND	—	—	—	—	—	—	10.10	8.32	1.78	—
MW-13	10/18/1993	—	ND	ND	ND	ND	ND	ND	—	—	—	—	—	—	10.10	8.66	1.44	—
MW-13	01/06/1994	—	ND	ND	ND	ND	ND	ND	—	—	—	—	—	—	10.10	8.70	1.40	—
MW-13	04/12/1994	—	100	ND	1.7	1.2	0.59	2.4	—	—	—	—	—	—	10.10	8.20	1.90	—
MW-13	07/25/1994	—	ND	ND	ND	ND	ND	ND	—	—	—	—	—	—	10.10	8.39	1.71	—
MW-13	10/25/1994	—	ND	ND	ND	ND	ND	ND	—	—	—	—	—	—	10.10	8.70	1.40	—
MW-13	01/09/1995	—	ND	ND	ND	ND	ND	ND	—	—	—	—	—	—	10.10	7.35	2.75	—
MW-13	04/11/1995	—	320	ND	ND	ND	ND	ND	—	—	—	—	—	—	10.10	5.50	4.60	—
MW-13	07/18/1995	—	ND	ND	ND	ND	ND	ND	—	—	—	—	—	—	10.10	6.63	3.47	—
MW-13	10/18/1995	—	—	—	—	—	—	—	—	—	—	—	—	—	10.10	8.12	1.98	—
MW-13	01/09/1996	—	ND	<50	<0.5	<0.5	<0.5	<0.5	ND	—	—	—	—	—	10.10	7.74	2.36	—
MW-13	04/02/1996	—	—	<50	<0.5	<0.5	<0.5	<0.5	<2.5	—	—	—	—	—	10.10	6.30	3.80	—
MW-13	10/03/1996	—	<50	<50	<0.5	<0.5	<0.5	<0.5	<2.5	—	—	—	—	—	10.10	6.50	3.60	3.0
MW-13	04/03/1997	—	<50	<50	<0.50	<0.50	<0.50	<0.50	<2.5	—	—	—	—	—	10.10	7.58	2.52	2.0
MW-13	10/08/1997	—	<50	<50	<0.50	<0.50	<0.50	<0.50	<2.5	—	—	—	—	—	10.10	8.17	1.93	1.0
MW-13	06/10/1998	—	—	—	—	—	—	—	—	—	—	—	—	—	10.10	7.54	2.56	—
MW-13	12/30/1998	—	69.0	<50.0	<0.500	<0.500	<0.500	<0.500	<2.00	—	—	—	—	—	10.10	6.91	3.19	1.1/0.8
MW-13	06/25/1999	—	—	—	—	—	—	—	—	—	—	—	—	—	10.10	6.31	3.79	—
MW-13	12/28/1999	—	<50.0	<50.0	<0.500	<0.500	<0.500	<0.500	<5.00	—	—	—	—	—	10.10	6.65	3.45	0.8/1.0
MW-13	05/31/2000	—	—	—	—	—	—	—	—	—	—	—	—	—	10.10	5.94	4.16	—
MW-13	10/17/2000	—	121 a	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	—	—	—	—	—	10.10	8.38	1.72	2.5/2.8
MW-13	05/01/2001	—	—	—	—	—	—	—	—	—	—	—	—	—	10.10	7.65	2.45	—
MW-13	11/05/2001	Unable to locate		—	—	—	—	—	—	—	—	—	—	—	10.10	—	—	—
MW-13	05/01/2002	—	<50	<50	<0.50	<0.50	<0.50	<0.50	—	<5.0	—	—	—	—	10.10	6.80	3.30	3.5/3.5
MW-13	07/16/2002	—	—	—	—	—	—	—	—	—	—	—	—	—	10.10	6.84	3.26	—
MW-13	10/17/2002	—	<50	<50	<0.50	<0.50	<0.50	<0.50	—	<5.0	—	—	—	—	9.64	6.73	2.91	1.4/0.9
MW-13	01/21/2003	—	—	—	—	—	—	—	—	—	—	—	—	—	9.64	6.99	2.65	—
MW-13	05/01/2003	—	<50	<50	3.4	0.75	1.1	2.7	—	<5.0	—	—	—	—	9.64	6.62	3.02	—
MW-13	07/17/2003	—	—	—	—	—	—	—	—	—	—	—	—	—	9.64	5.99	3.65	—

GROUNDWATER DATA
SHELL-BRANDED SERVICE STATION
285 HEGENBERGER ROAD, OAKLAND, CALIFORNIA

Well ID	Date	TPHmo (µg/L)	TPHd (µg/L)	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE 8020 (µg/L)	MTBE 8260 (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	TOC (ft MSL)	Depth to Water (ft TOC)	GW Elevation (ft MSL)	DO Reading (mg/L)
MW-13	10/02/2003	—	<50	<50	<0.50	<0.50	<0.50	<1.0	—	<0.50	—	—	—	—	9.64	6.81	2.83	—
MW-13	01/05/2004	—	—	—	—	—	—	—	—	—	—	—	—	—	9.64	5.98	3.66	—
MW-13	04/01/2004	—	<50	<50	<0.50	<0.50	<0.50	<1.0	—	<0.50	—	—	—	—	9.64	5.09	4.55	—
MW-13	08/02/2004	—	—	—	—	—	—	—	—	—	—	—	—	—	9.64	5.49	4.15	—
MW-13	11/02/2004	<500	<50	<50	<0.50	<0.50	<0.50	<1.0	—	<0.50	—	—	—	—	9.64	5.99	3.65	—
MW-13	01/10/2005	—	—	—	—	—	—	—	—	—	—	—	—	—	9.64	5.63	4.01	—
MW-13	04/13/2005	<500	72 a	<50	<0.50	<0.50	<0.50	<1.0	—	<0.50	—	—	—	—	9.64	6.00	3.64	—
MW-13	07/20/2005	—	—	—	—	—	—	—	—	—	—	—	—	—	9.64	8.31	1.33	—
MW-13	10/24/2005	<500	52 a	<50	<0.50	<0.50	<0.50	<1.0	—	<0.50	—	—	—	—	9.62	5.00	4.62	—
MW-13	01/04/2006	<100 f	<100 f	<50.0	<0.500	<0.500	<0.500	<0.500	—	<0.500	<10.0	—	—	—	9.62	5.54	4.08	—
MW-13	07/26/2006	280	<93.9	<50.0	<0.500	<0.500	<0.500	<0.500	—	<0.500	—	—	—	—	9.62	4.92	4.70	—
MW-13	01/02/2007	—	—	—	—	—	—	—	—	—	—	—	—	—	9.62	7.37	2.25	—
MW-13	07/12/2007	<250 f	<50 f	<50 m	<0.50	<1.0	<1.0	<1.0	—	<1.0	—	—	—	—	9.62	4.60	5.02	—
MW-13	01/10/2008	—	—	—	—	—	—	—	—	—	—	—	—	—	9.62	4.32	5.30	—
MW-13	07/31/2008	<250 f	<50 f	<50	<0.50	<1.0	<1.0	<1.0	—	<1.0	—	—	—	—	9.62	7.10	2.52	—
MW-13	01/06/2009	—	—	—	—	—	—	—	—	—	—	—	—	—	9.62	4.95	4.67	—
MW-13	07/01/2009	<250 f	<50 f	<50	<0.50	<1.0	<1.0	<1.0	—	<1.0	—	—	—	—	9.62	6.79	2.83	—
MW-13	01/04/2010	—	—	—	—	—	—	—	—	—	—	—	—	—	9.62	7.55	2.07	—
MW-13	01/18/2011	<470	<470	<50	<0.50	<0.50	<0.50	<1.0	—	<1.0	<10	<1.0	<1.0	<1.0	9.62	5.52	4.10	—
MW-13	**01/05/2012**	**Well inaccessible**		—	—	—	—	—	—	—	—	—	—	—	**9.62**	—	—	—
VEW-5	09/26/2000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.91	—	—
VEW-5	10/17/2000	—	4,180 a	74,800	9,090	14,600	2,630	14,500	632	—	—	—	—	—	—	2.65	—	3.0/3.1
VEW-5	05/01/2001	—	5,350	94,800	11,300	12,900	4,520	22,200	419	—	—	—	—	—	—	2.86	—	0.4/0.6
VEW-5	11/05/2001	—	<1,600	82,000	14,000	7,400	2,900	15,000	—	740	—	—	—	—	—	4.11	—	0.6/c
VEW-5	05/01/2002	—	<3,000	16,000	610	320	7.9	3,600	—	310	—	—	—	—	—	2.63	—	4.7/2.9
VEW-5	07/16/2002	—	<3,000	45,000	7,900	2,700	1,000	4,600	—	920	—	—	—	—	—	2.96	—	0.4/0.3
VEW-5	10/17/2002	—	200	<50	<0.50	<0.50	<0.50	<0.50	—	46	—	—	—	—	8.81	3.55	5.26	1.1/1.0
VEW-5	01/21/2003	—	1,200	740	53	22	17	70	—	17	—	—	—	—	8.81	2.06	6.75	1.6/0.5
VEW-5	05/01/2003	—	1,000 a	1,500	140	92	120	290	—	11	—	—	—	—	8.81	2.34	6.47	—
VEW-5	07/17/2003	—	1,400 a,f	4,200	630	1,300	360	1,400	—	38	—	—	—	—	8.81	3.36	5.45	—
VEW-5	10/02/2003	—	3,500 a	10,000	690	1,200	420	1,800	—	54	—	—	—	—	8.81	3.65	5.16	—
VEW-5	01/05/2004	—	530 a	180	5.0	0.73	6.5	11	—	1.9	—	—	—	—	8.81	2.02	6.79	—
VEW-5	04/01/2004	—	2,500 a	2,800	520	23	260	290	—	55	—	—	—	—	8.81	2.77	6.04	—
VEW-5	08/02/2004	550	3,800 a	8,900	790	74	600	1,600	—	62	<100	<40	<40	<40	8.81	3.55	5.26	—
VEW-5	11/02/2004	<500	830 g	1,200	72	5.8	83	100	—	11	—	—	—	—	8.81	2.89	5.92	—
VEW-5	01/10/2005	700	320 a	<50	<0.50	<0.50	<0.50	2.0	—	0.56	—	—	—	—	8.81	1.14	7.67	—
VEW-5	04/13/2005	1,100	540 a	270	23	1.4	11	15	—	2.0	—	—	—	—	8.81	2.17	6.64	—
VEW-5	07/20/2005	<500	100 g	130	5.7	0.65	1.4	9.3	—	7.7	41	<2.0	<2.0	<2.0	8.81	4.39	4.42	—

GROUNDWATER DATA
SHELL-BRANDED SERVICE STATION
285 HEGENBERGER ROAD, OAKLAND, CALIFORNIA

Well ID	Date	TPHmo (µg/L)	TPHd (µg/L)	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE 8020 (µg/L)	MTBE 8260 (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	TOC (ft MSL)	Depth to Water (ft TOC)	GW Elevation (ft MSL)	DO Reading (mg/L)
VEW-5	10/24/2005	3,700 l	8,900 a	2,300	260	17	28	140	—	13	41	—	—	—	8.79	3.15	5.64	—
VEW-5	01/04/2006	710 f	883 f	493	1.69	<0.500	2.72	6.19	—	<0.500	<10.0	—	—	—	8.79	1.28	7.51	—
VEW-5	07/26/2006	744	299	860	15.8	2.49	2.55	8.77	—	3.69	<10.0	<0.500	<0.500	<0.500	8.79	2.98	5.81	—
VEW-5	01/02/2007	170 f	210 f	1,700	77	4.1	13	13	—	3.9	<5.0	—	—	—	8.79	3.30	5.49	—
VEW-5	07/12/2007	390 f	710 f	1,000 m	85	3.6	2.0	12.5	—	6.3	10	<2.0	<2.0	<2.0	8.79	3.26	5.53	—
VEW-5	01/10/2008	290 o	210 f,o	460 m	1.4	1.3	1.0	6.8	—	<1.0	<10	—	—	—	8.79	2.18	6.61	—
VEW-5	07/31/2008 p	<250 f	180 f,o	170,000	14,000	370	690	1,650	—	1,900	<1,000	<200	<200	<200	8.79	2.98	5.81	—
VEW-5	08/29/2008	1,800 f	720 f,o	1,600	110	4.6	5.1	13.4	—	<1.0	20	<2.0	<2.0	<2.0	8.79	3.14	5.65	—
VEW-5	01/06/2009	580 f	200 f,o	<50	2.0	1.4	<1.0	<1.0	—	1.4	<10	—	—	—	8.79	3.35	5.44	—
VEW-5	07/01/2009	<250 f	95 f,o	86	6.6	<1.0	<1.0	2.2	—	9.3	25	<2.0	<2.0	<2.0	8.79	3.63	5.16	—
VEW-5	01/04/2010	300 f	150 f,o	<50	3.8	<1.0	<1.0	<1.0	—	<1.0	<10	—	—	—	8.79	3.39	5.40	—
VEW-5	01/18/2011	500	<470	<50	3.5	<0.50	5.5	2.3	—	<1.0	<10	<1.0	<1.0	<1.0	8.79	2.65	6.14	—
VEW-5	**01/05/2012**	170 f	170 f	60 m	1.1	<0.50	<0.50	<1.0	—	1.7	<10	<1.0	<1.0	<1.0	8.79	3.02	5.77	—
VEW-6	09/26/2000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.94	—	—
VEW-6	10/17/2000	—	4,820 a	63,800	6,940	2,750	2,760	18,700	3,700	—	—	—	—	—	—	3.13	—	2.0/2.1
VEW-6	05/01/2001	—	3,460	57,000	6,280	697	2,640	15,800	6,240	—	—	—	—	—	—	3.25	—	0.8/1.2
VEW-6	05/29/2001	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.17	—	3.0/1.7
VEW-6	11/05/2001	—	<1,300	39,000	6,800	380	1,900	7,900	—	8,800	—	—	—	—	—	4.35	—	0.8/1.3
VEW-6	05/01/2002	—	<4,500	24,000	1,800	270	470	3,700	—	3,100	—	—	—	—	—	2.73	—	0.2/0.4
VEW-6	07/16/2002	—	<2,700	19,000	1,900	250	140	3,500	—	2,900	—	—	—	—	—	3.59	—	0.3/0.2
VEW-6	10/17/2002	—	110	<50	<0.50	<0.50	<0.50	<0.50	—	13	—	—	—	—	9.33	4.33	5.00	0.9/1.3
VEW-6	01/21/2003	—	<500	900	30	1.1	20	61	—	110	—	—	—	—	9.33	3.08	6.25	4.6/5.6
VEW-6	05/01/2003	—	290 a	1,100 a	41	<5.0	58	66	—	89	—	—	—	—	9.33	2.79	6.54	—
VEW-6	07/17/2003	—	1,400 a,f	3,100	400	30	280	820	—	1,400	—	—	—	—	9.33	3.80	5.53	—
VEW-6	10/02/2003	—	1,200 a	2,100	310	37	200	420	—	1,500	—	—	—	—	9.33	4.10	5.23	—
VEW-6	01/05/2004	—	170 a	320	4.9	0.54	3.3	18	—	68	—	—	—	—	9.33	2.31	7.02	—
VEW-6	04/01/2004	—	270 a	450	44	1.6	23	24	—	180	—	—	—	—	9.33	2.87	6.46	—
VEW-6	08/02/2004	Well inaccessible		—	—	—	—	—	—	—	—	—	—	—	9.33	—	—	—
VEW-6	11/02/2004	<500	210 g	910	35	1.4	39	79	—	74	—	—	—	—	9.33	3.26	6.07	—
VEW-6	01/10/2005	<500	150 a	110	1.3	<0.50	1.3	3.3	—	4.7	—	—	—	—	9.33	2.01	7.32	—
VEW-6	04/13/2005	1,000 b	330 a,b	98	10	<0.50	2.4	2.6	—	77	—	—	—	—	9.33	2.05	7.28	—
VEW-6	07/20/2005	<500	<50	150	4.3	<0.50	1.1	7.1	—	7.8	37	<2.0	<2.0	<2.0	9.33	4.27	5.06	—
VEW-6	10/24/2005	1,600 l	3,300 a	4,800	150	4.6	280	720	—	120	160	—	—	—	9.22	3.56	5.66	—
VEW-6	01/04/2006	1,010 f	1,260 f	1,010	2.67	<0.500	4.79	12.6	—	23.8	93.6	—	—	—	9.22	1.85	7.37	—
VEW-6	07/26/2006	2,520	1,750	31,900	2,730	6,130	270	2,590	—	303	189	<0.500	<0.500	69.4	9.22	3.52	5.70	—
VEW-6	01/02/2007	6,700 f	4,900 f	6,100	42	740	89	850	—	25	51	—	—	—	9.22	3.38	5.84	—
VEW-6	07/12/2007	1,400 f	1,700 f	2,900 m	220	83	94	430	—	140	180	<4.0	<4.0	<4.0	9.22	3.72	5.50	—
VEW-6	01/10/2008	2,200 f	1,100 f,o	2,200 m	25	52	17	178	—	8.2	38	—	—	38	9.22	2.91	6.31	—

GROUNDWATER DATA
SHELL-BRANDED SERVICE STATION
285 HEGENBERGER ROAD, OAKLAND, CALIFORNIA

Well ID	Date	TPHmo (µg/L)	TPHd (µg/L)	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE 8020 (µg/L)	MTBE 8260 (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	TOC (ft MSL)	Depth to Water (ft TOC)	GW Elevation (ft MSL)	DO Reading (mg/L)
VEW-6	07/31/2008	420 f	470 f,o	2,000	150	9.2	18	102	—	120	290	<2.0	<2.0	<2.0	9.22	3.43	5.79	—
VEW-6	01/06/2009	3,000 f	1,600 f,o	780	120	5.3	11	20	—	61	180	—	—	—	9.22	3.37	5.85	—
VEW-6	07/01/2009	1,200 f	680 f,o	690	95	4.5	12	30	—	17	180	<2.0	<2.0	<2.0	9.22	3.72	5.50	—
VEW-6	01/04/2010	440 f	310 f,o	1,100	380	3.7	7.4	6.8	—	97	480	—	—	—	9.22	3.47	5.75	—
VEW-6	01/18/2011	2,200	2,500	360	150	2.1	3.2	<4.0	—	53	220	<4.0	<4.0	<4.0	9.22	3.10	6.12	—
VEW-6	**01/05/2012**	**980 f**	**1,800 f**	**670 m**	**110**	**2.3**	**1.0**	**4.9**	**—**	**42**	**370**	**<1.0**	**<1.0**	**<1.0**	**9.22**	**3.43**	**5.79**	**—**
VEW-7	09/26/2000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.59	—	—
VEW-7	10/17/2000	—	3,990 a	74,300	11,900	12,500	1,640	15,500	36,600	—	—	—	—	—	—	3.72	—	3.5/4.1
VEW-7	05/01/2001	—	1,930	46,000	7,250	5,300	1,960	9,820	15,600	16,900	—	—	—	—	—	3.40	—	0.8/0.8
VEW-7	05/29/2001	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.54	—	2.5/1.4
VEW-7	11/05/2001	—	<900	38,000	9,300	610	1,700	6,000	—	21,000	—	—	—	—	—	4.85	—	3.52/c
VEW-7	05/01/2002	—	<600	590	6.3	7.2	<2.5	81	—	1,100	—	—	—	—	—	2.62	—	2.9/3.3
VEW-7	07/16/2002	—	54	95	1.5	<0.50	1.5	6.1	—	100	—	—	—	—	—	3.84	—	3.6/2.5
VEW-7	10/17/2002	—	110	<50	1.4	<0.50	<0.50	<0.50	—	34	—	—	—	—	9.49	4.93	4.56	3.0/1.9
VEW-7	01/21/2003	—	180	<50	0.88	<0.50	<0.50	4.2	—	19	—	—	—	—	9.49	3.27	6.22	0.3/0.8
VEW-7	05/01/2003	—	1,000 a	2,200	62	8.0	230	80	—	360	—	—	—	—	9.49	2.95	6.54	—
VEW-7	07/17/2003	—	590 a,f	<1,200	97	19	150	110	—	830	—	—	—	—	9.49	3.94	5.55	—
VEW-7	10/02/2003	—	1,300 a	800	78	11	170	49	—	1,200	—	—	—	—	9.49	5.00	4.49	—
VEW-7	01/05/2004	—	970 a	2,500	120	13	86	300	—	660	—	—	—	—	9.49	2.82	6.67	—
VEW-7	04/01/2004	—	1,500 a	4,700	100	42	240	680	—	830	—	—	—	—	9.49	2.99	6.50	—
VEW-7	08/02/2004	<500	830 a	1,100	60	6.5	30	120	—	920	430	<20	<20	<20	9.49	4.45	5.04	—
VEW-7	11/02/2004	Well inaccessible		—	—	—	—	—	—	—	—	—	—	—	9.49	—	—	—
VEW-7	11/04/2004	<500	2,700 g	7,900	410	26	280	1,100	—	2,100	—	—	—	—	9.49	3.57	5.92	—
VEW-7	01/10/2005	<500	690 g	1,200	110	<5.0	49	73	—	530	—	—	—	—	9.49	2.26	7.23	—
VEW-7	04/13/2005	530	280 a	760	18	3.3	28	84	—	120	—	—	—	—	9.49	2.28	7.21	—
VEW-7	07/20/2005	<500	250 g	160	4.8	0.57	1.9	11	—	9.3	37	<2.0	<2.0	<2.0	9.49	4.50	4.99	—
VEW-7	10/24/2005	630 l	1,100 a	540	11	1.7	2.8	11	—	36	490	—	—	—	9.43	3.74	5.69	—
VEW-7	01/04/2006	305 f	386 f	<50.0	<0.500	<0.500	<0.500	<0.500	—	7.68	96.7	—	—	—	9.43	1.93	7.50	—
VEW-7	07/26/2006	803	383	1,140	31.2	2.92	6.09	42.1	—	87.3	257	<0.500	<0.500	<0.500	9.43	3.77	5.66	—
VEW-7	01/02/2007	220 f	230 f	1,100	8.5	0.79	4.4	11	—	18	180	—	—	—	9.43	3.47	5.96	—
VEW-7	07/12/2007	<250 f	480 f	860 m	17	1.6	3.0	46.1	—	37	240	<2.0	<2.0	<2.0	9.43	3.60	5.83	—
VEW-7	01/10/2008	<250 f	250 f,o	510 m	6.8	0.91 n	0.95 n	8.28 n	—	20	280	—	—	—	9.43	2.69	6.74	—
VEW-7	07/31/2008	<250 f	260 f,o	1,500	11	1.3	3.6	48.6	—	45	340	<2.0	<2.0	<2.0	9.43	3.65	5.78	—
VEW-7	01/06/2009	400 f	420 f,o	680	5.4	1.6	9.2	28	—	27	360	—	—	—	9.43	3.70	5.73	—
VEW-7	07/01/2009	<250 f	210 f,o	440	5.2	1.2	3.9	17	—	25	300	<2.0	<2.0	<2.0	9.43	3.74	5.69	—
VEW-7	01/04/2010	<250 f	130 f,o	150	1.9	<1.0	<1.0	3.3	—	13	400	—	—	—	9.43	3.61	5.82	—
VEW-7	01/18/2011	—	<480	280	5.6	0.69	0.99	3.7	—	8.4	310	<1.0	<1.0	<1.0	9.43	3.16	6.27	—
VEW-7	**01/05/2012**	**—**	**90 f**	**<500 m**	**<0.50**	**<0.50**	**<0.50**	**<1.0**	**—**	**9.0**	**450**	**<1.0**	**<1.0**	**<1.0**	**9.43**	**3.74**	**5.69**	**—**

GROUNDWATER DATA
SHELL-BRANDED SERVICE STATION
285 HEGENBERGER ROAD, OAKLAND, CALIFORNIA

Well ID	Date	TPHmo (µg/L)	TPHd (µg/L)	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE 8020 (µg/L)	MTBE 8260 (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	TOC (ft MSL)	Depth to Water (ft TOC)	GW Elevation (ft MSL)	DO Reading (mg/L)
AS-1	09/26/2000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6.67	—	—
AS-1	10/17/2000	—	3,280 a	13,400	1,600	82.8	<20.0	2,600	498	—	—	—	—	—	—	5.50	—	2.0/2.5
AS-1	05/01/2001	Well inaccessible		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
AS-1	11/05/2001	—	<900	5,300	85	26	46	120	—	190	—	—	—	—	—	6.11	—	0.4/0.5
AS-1	05/01/2002	Well inaccessible		—	—	—	—	—	—	—	—	—	—	—	—	14.73	—	—
AS-1	07/16/2002	—	<150	210	8.2	<0.50	7.9	3.5	—	25	—	—	—	—	—	5.59	—	4.6/2.8
AS-1	10/17/2002	Well dry	—	—	—	—	—	—	—	—	—	—	—	—	8.23	—	—	—
AS-1	01/21/2003	—	220	<50	0.62	<0.50	<0.50	<0.50	—	<5.0	—	—	—	—	8.23	9.51	-1.28	2.2/2.5
AS-1	05/01/2003	—	96 a	79	2.2	0.99	5.1	4.8	—	<5.0	—	—	—	—	8.23	5.75	2.48	—
AS-1	07/17/2003	—	79 a,f	<50	1.2	0.60	0.95	1.7	—	3.6	—	—	—	—	8.23	5.90	2.33	—
AS-1	10/02/2003	—	99 a	440	12	49	22	94	—	3.5	—	—	—	—	8.23	5.90	2.33	—
AS-1	01/05/2004	—	76 a	<50	0.75	<0.50	0.70	<1.0	—	2.4	—	—	—	—	8.23	5.64	2.59	—
AS-1	04/01/2004	—	<50	<50	0.79	<0.50	<0.50	<1.0	—	3.2	—	—	—	—	8.23	5.86	2.37	—
AS-2	09/26/2000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5.38	—	—
AS-2	10/17/2000	—	1,380 a	4,380	167	<10.0	225	680	315	—	—	—	—	—	—	5.50	—	3.1/3.0
AS-2	05/01/2001	Well inaccessible		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
AS-2	11/05/2001	—	<300	2,200	100	0.99	91	21	—	220	—	—	—	—	—	5.99	—	0.8/0.6
AS-2	05/01/2002	—	<300	880	19	<0.50	31	22	—	57	—	—	—	—	—	5.25	—	1.0/0.8
AS-2	07/16/2002	—	<200	910	40	4.1	39	43	—	78	—	—	—	—	—	5.53	—	0.7/0.9
AS-2	10/17/2002	Well dry	—	—	—	—	—	—	—	—	—	—	—	—	8.65	—	—	—
AS-2	01/21/2003	—	140	<50	1.4	<0.50	2.0	0.94	—	19	—	—	—	—	8.65	9.32	-0.67	1.4/1.6
AS-2	05/01/2003	—	120 a	56	2.1	<0.50	4.7	<1.0	—	12	—	—	—	—	8.65	6.74	1.91	—
AS-2	07/17/2003	—	80 a,f	180	11	0.56	34	13	—	23	—	—	—	—	8.65	6.40	2.25	—
AS-2	10/02/2003	—	190 a	320	8.5	6.3	24	25	—	21	—	—	—	—	8.65	6.20	2.45	—
AS-2	01/05/2004	—	160 a	210	1.4	<0.50	21	1.6	—	15	—	—	—	—	8.65	6.32	2.33	—
AS-2	04/01/2004	—	130 a	200	0.87	<0.50	17	<1.0	—	18	—	—	—	—	8.65	6.15	2.50	—
AS-3	09/26/2000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5.75	—	—
AS-3	10/17/2000	—	942 a	3,520	588	521	41.2	566	1,740	—	—	—	—	—	—	6.18	—	3.1/3.0
AS-3	05/01/2001	Well inaccessible		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
AS-3	11/05/2001	—	110	1,600	41	4.9	8.2	30	—	240	—	—	—	—	—	6.41	—	1.1/3.2
AS-3	05/01/2002	Insufficient water		—	—	—	—	—	—	—	—	—	—	—	—	14.90	—	—
AS-3	07/16/2002	Well dry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
AS-3	10/17/2002	Insufficient water		—	—	—	—	—	—	—	—	—	—	—	8.84	14.78	-5.94	—
AS-3	01/21/2003	—	320	<50	<0.50	<0.50	<0.50	<0.50	—	<5.0	—	—	—	—	8.84	11.59	-2.75	2.2/1.1
AS-3	05/01/2003	—	150 a	57	0.53	<0.50	4.7	2.7	—	<5.0	—	—	—	—	8.84	6.44	2.40	—
AS-3	07/17/2003	—	110 a,f	<50	0.83	2.1	2.4	5.4	—	2.5	—	—	—	—	8.84	6.55	2.29	—

GROUNDWATER DATA
SHELL-BRANDED SERVICE STATION
285 HEGENBERGER ROAD, OAKLAND, CALIFORNIA

Well ID	Date	TPHmo (µg/L)	TPHd (µg/L)	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE 8020 (µg/L)	MTBE 8260 (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	TOC (ft MSL)	Depth to Water (ft TOC)	GW Elevation (ft MSL)	DO Reading (mg/L)
AS-3	10/02/2003	—	96 a	<50	2.9	3.9	8.4	15	—	8.1	—	—	—	—	8.84	6.55	2.29	—
AS-3	01/05/2004	—	120 a	<50	<0.50	<0.50	<0.50	<1.0	—	1.5	—	—	—	—	8.84	6.47	2.37	—
AS-3	04/01/2004	—	110 a	<50	<0.50	<0.50	<0.50	<1.0	—	2.8	—	—	—	—	8.84	6.32	2.52	—

Notes:
TPHmo = Total petroleum hydrocarbons as motor oil analyzed by EPA Method 8015M.
TPHd = Total petroleum hydrocarbons as diesel analyzed by EPA Method 8015M.
TPHg = Total petroleum hydrocarbons as gasoline analyzed by EPA Method 8260B; prior to November 5, 2001, analyzed by EPA Method 8015 unless otherwise noted..
BTEX = Benzene, toluene, ethylbenzene, and total xylenes analyzed by EPA Method 8260B; prior to November 5, 2001, analyzed by EPA Method 8020.
MTBE = Methyl tertiary-butyl ether analyzed by method noted
TBA = Tertiary-butyl alcohol, analyzed by EPA Method 8260B
DIPE = Di-isopropyl ether, analyzed by EPA Method 8260B
ETBE = Ethyl tertiary-butyl ether, analyzed by EPA Method 8260B
TAME = Tertiary-amyl methyl ether, analyzed by EPA Method 8260B
TOC = Top of casing elevation, in feet relative to mean sea level
GW = Groundwater
DO = Dissolved oxygen
µg/L = Micrograms per liter
ft = Feet
MSL = Mean sea level
mg/L = Milligrams per liter
<x = Not detected at reporting limit x
— = Not analyzed or not available
(D) = Duplicate sample
x/x = DO reading; pre-purge/post-purge.
TOB = Top of well box elevation

a = Chromatogram pattern indicates an unidentified hydrocarbon/Hydrocarbon does not match pattern of laboratory's standard.
b = Sample analyzed outside of EPA-recommended holding time.
c = Post-purge DO reading not collected.
d = Laboratory did not record detected result.
e = Change in TOC due to wellhead maintenance.
f = Analysis with Silica Gel Cleanup.
g = Hydrocarbon reported is in the early Diesel range and does not match the laboratory's standard.
h = Hydrocarbon reported is in the late Diesel range and does not match the laboratory's standard.
i = The concentration reported reflect(s) individual or discrete unidentified peaks not matching a typical fuel pattern.
l = Quantity of unknown hydrocarbon(s) in sample based on motor oil.
m = Analyzed by EPA Method 8015B (M).
n = Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.

GROUNDWATER DATA
SHELL-BRANDED SERVICE STATION
285 HEGENBERGER ROAD, OAKLAND, CALIFORNIA

Well ID	*Date*	*TPHmo* (µg/L)	*TPHd* (µg/L)	*TPHg* (µg/L)	*B* (µg/L)	*T* (µg/L)	*E* (µg/L)	*X* (µg/L)	*MTBE 8020* (µg/L)	*MTBE 8260* (µg/L)	*TBA* (µg/L)	*DIPE* (µg/L)	*ETBE* (µg/L)	*TAME* (µg/L)	*TOC* (ft MSL)	*Depth to Water* (ft TOC)	*GW Elevation* (ft MSL)	*DO Reading* (mg/L)

o = The sample chromatographic pattern for TPG does not match the chromatographic pattern of the specified standard. Quantitation of the unknown hydrocarbon(s) in the sample was based upon the specified standard.
p = Samples for wells MW-9 and VEW-5 on 7/31/08 appear to have been switched and were re-sampled 8/29/08.
q = Hydrocarbon result partly due to individual peak(s) in quantitation range.
r = All diesel and motor oil samples for this event were lost in laboratory fire.
s = Sample container contained headspace

All site wells except MW-11 and MW-12 surveyed on March 18, 2002 by Virgil Chavez Land Surveying
Wells MW-1 through MW-4, MW-6, MW-9 through MW-13, VEW-5, VEW-6, and VEW-7 surveyed on September 27, 2005 by Virgil Chavez Land Surveying

Table 2
Groundwater Analytical Data
TPH-g, BTEX compounds, TPH-d, and oil and grease

Shell Service Station
285 Hegenberger Road at Leet Drive
Oakland, California

Sample	Date Sampled	TPH-g (ppb)	Benzene (ppb)	Toluene (ppb)	Ethylbenzene (ppb)	Xylenes (ppb)	TPH-d (ppb)	Oil and Grease (ppb)
SLH-1	02/12/92	NA	NA	NA	NA	NA	460,000	720,000
SLH-2	02/12/92	NA	NA	NA	NA	NA	370,000	400,000
SLH-3W	04/21/92	88,000	6,100	2,400	780	1,700	NA	NA
DW-1	05/20/92	87,000	18,000	19,000	5,700	22,000	11,000	NA

ppb = Parts per billion
NA = Not Analyzed
* = The positive result for petroleum hydrocarbon as diesel appears to be a combination of heavier and lighter hydrocarbons, rather than diesel.

Table 2. Water Analytical Data - Shell-branded Service Station - Incident #98995749, 285 Hegenberger Rd., Oakland, California

Sample ID	TPHg	TPHd	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes
	←			(ppb)			→
March 18, 1999 Samples:							
SB-1	<50.0	182	86.3	<0.500	<0.500	<0.500	<0.500
SB-2	3,650	1,290	33.9	4.96	<0.500	3.11	2.76
SB-3	16,500	5,080	180(<5.00)	268	8.11	901	1,400

Notes and Abbreviations:

ppb = parts per billion
TPHg = Total petroleum hydrocarbons as gasoline by modified EPA Method 8015.
TPHd = Total petroleum hydrocarbons as diesel by modified EPA Method 8015
MTBE = Methyl tert-butyl ether by EPA Method 8020. Result in parentheses represents MTBE by EPA Method 8260B.
Benzene, ethylbenzene, toluene, xylenes by EPA Method 8020.
<n = Below detection limit of n mg/kg

Table 1. Existing Well Data, Shell-branded Service Station, Incident #98995749, 285 Hegenberger Road, Oakland, California

Name	Type/ Drilling Method	Date Installed	TOC[1] (ft msl)	Total Boring Depth (fbg)	Soil Sample Interval (ft)	First Encountered GW Depth (fbg)	First Encountered GW Elev (ft msl)	Screen Diam. (in)	Screen Depth (fbg) Top	Screen Depth (fbg) Bottom	Comments
MW-1	Monitoring Well/HSA	14-Feb-89	9.37	16.5	5	6	3.37	4	5	10	
MW-2	Monitoring Well/HSA	15-Feb-89	10.07	16.5	5	6	4.07	4	5	10	
MW-3	Monitoring Well/HSA	14-Feb-89	10.58	16.5	5	6	4.58	4	5	10	
MW-4	Monitoring Well/HSA	28-Apr-89	9.83	14	5	7	2.83	4	5	10	
MW-6	Monitoring Well/HSA	28-Apr-89	9.14	12	5	5.5	3.64	4	5	10	
MW-8	Monitoring Well/HSA	28-Apr-89	-	12	5	9	-	4	5	10	
MW-9	Monitoring Well/HSA	13-Jul-89	10.04	10.5	5	6	4.04	4	5	10	
MW-10	Monitoring Well/HSA	16-Nov-89	9.78	13	5	6.5	3.28	4	5	10	
MW-11	Monitoring Well/HSA	8-Jun-93	10.06	15.5	5	8.5	1.56	4	4	14	
MW-12	Monitoring Well/HSA	8-Jun-93	9.09	15.5	5	8.5	0.59	4	5	15	
MW-13	Monitoring Well/HSA	10-Jun-93	9.62	15.5	5	8.5	1.12	4	5	15	
VEW-1	Vapor Ext. Well/HA	21-Nov-91	-	7	5	6	-	4	3.5	6.5	
VEW-2	Vapor Ext. Well/HSA	9-Jun-93	8.87	8.5	5	4.5	4.37	2	3.5	6.5	
VEW-2	Sparge Well/HSA	9-Jun-93	-	8.5	5	4.5	-	2	7.5	8.5	
VEW-3	Vapor Ext. Well/HSA	9-Jun-93	9.21	10	5	4.5	4.71	2	3.5	6.5	
VEW-3	Sparge Well/HSA	9-Jun-93	-	10	5	4.5	-	2	7.5	8.5	
VEW-4	Vapor Ext. Well/HSA	9-Jun-93	9.26	9.5	5	5	4.26	2	3.5	6.5	
VEW-4	Sparge Well/HSA	9-Jun-93	-	9.5	5	5	-	2	8	9	
VEW-5	Vapor Ext. Well/HSA	28-Jun-00	8.79	10	5	4	4.79	4	3	10	
AS-1	Sparge Well/HSA		-	15			-	2	13	15	
VEW-6	Vapor Ext. Well/HSA	28-Jun-00	9.22	10	5	4	5.22	4	3	10	
AS-2	Sparge Well/HSA		-	15			-	2	13	15	
VEW-7	Vapor Ext. Well/HSA	28-Jun-00	9.43	10	5	4	5.43	4	3	10	
AS-3	Sparge Well/HSA		-	15			-	2	13	15	

Abbreviations:

HSA = Hollow stem auger

Ext. = Extraction

HA = Hand auger

TOC = Top of casing

ft msl = Feet referenced to mean sea level

fbg = Feet below grade

ft = Feet

in = Inches

GW = Groundwater

Table 1. Existing Well Data, Shell-branded Service Station, Incident #98995749, 285 Hegenberger Road, Oakland, California

Name	Type/ Drilling Method	Date Installed	TOC[1] (ft msl)	Total Boring Depth (fbg)	Soil Sample Interval (ft)	First Encountered GW Depth (fbg)	First Encountered GW Elev (ft msl)	Screen Diam. (in)	Screen Depth (fbg) Top	Screen Depth (fbg) Bottom	Comments

Diam. = Diameter

1. TOC elevations from October 11, 2005 monitoring well survey report, Virgil Chavez Land Surveying.

LOG OF BORING NO. MW-1

DATE DRILLED: 2/14/89 | ELEVATION: | WL TAKEN: 2-14-89 | EQUIPMENT: Hollow Stem Auger

DEPTH (ft)	SAMPLE	WATER LEVEL	SYMBOL	MOISTURE	PLASTICITY	COLOR	DESCRIPTION		WELL CONSTRUCTION	TOTAL PETROLEUM HYDROCARBONS mg/kg	TESTS
					hard		0-2" ASPHALT, 2"-12" BASE ROCK				
				dry	firm	brown to black	SANDY SILT	ML			
							CLAYEY SAND and GRAVEL (Fill)	SP/GP			
5	D			wet	loose	gray-black	CLAYEY fine SAND (Bay Mud) Some gasoline odor	SW			
								SP			
10	D			moist	soft to medium	gray-black	CLAY (Bay Mud) No gasoline odor	CH			
15	D			slightly damp	medium	gray-black	SANDY CLAY Trace of gravel	CH/CL			
20							Bottom of Hole at 16.5 ft.				

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Project No.
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Drawing No.
A-3

ATTACHMENT 6

LOG OF BORING NO. MW-2

DATE DRILLED: 2/15/89 | ELEVATION: | WL TAKEN: 2-15-89 | EQUIPMENT: Hollow Stem Auger

DEPTH (ft)	SAMPLE	WATER LEVEL	SYMBOL	MOISTURE	PLASTICITY	COLOR	DESCRIPTION		WELL CONSTRUCTION	TOTAL PETROLEUM HYDROCARBONS mg/kg	TESTS
					hard		0-2" ASPHALT; 2-6" BASEROCK				
				dry	medium dense	brown	SILTY SAND and GRAVEL (Fill)	SM/GM			
				slightly damp	soft to medium	gray	SANDY CLAY (Fill)	CL			
5	D			wet	soft	dark gray	CLAYEY SAND (Bay Mud) Trace of gravel	SP/CL			
							SANDY CLAY (Bay Mud)	CL			
10	D			moist	soft, firmer with depth	gray	CLAY (Bay Mud)	CH			
15	D						SANDY CLAY				
							Bottom of Hole at 16.5 ft.				
20											

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Drawing No.
A-4

LOG OF BORING NO. MW-3

DATE DRILLED: 2/14/89 | ELEVATION: | WL TAKEN: 2-14-89 | EQUIPMENT: Hollow Stem Auger

DEPTH (ft)	SAMPLE	WATER LEVEL	SYMBOL	MOISTURE	PLASTICITY	COLOR	DESCRIPTION	WELL CONSTRUCTION	TOTAL PETROLEUM HYDROCARBONS ppm	TESTS
					hard		0-2" ASPHALT; 2-12" BASE ROCK			
				moist	medium dense	brown to black	CLAYEY SAND and GRAVEL (Fill) SP/GP			
							CH			
5	D			moist	soft	brown	SILTY SAND and GRAVEL (Fill) SW/GP			
				wet	soft	black	CLAYEY SAND (Fill) CL			
							SILTY CLAY (Bay Mud) Some fine sand			
10	D			sat.	soft, firmer with depth		CLAY (Bay Mud) CH			
15	D			moist	medium	gray-black				
20							Bottom of Hole at 16.5 ft.			

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Drawing No.
A-5

LOG OF BORING NO. MW-4

DATE DRILLED: 4/28/89 | ELEVATION: | WL TAKEN: 4-28-89 | EQUIPMENT: Hollow Stem Auger

DEPTH (ft)	SAMPLE	WATER LEVEL	SYMBOL	MOISTURE	PLASTICITY	COLOR	DESCRIPTION		WELL CONSTRUCTION	BLOWS/FT.	T.P.H Mg/Kg	TESTS
				moist	medium	brown	Import Top Soil					
				moist	medium	brown	CLAYEY SAND and rock fragment (Fill)	SC				
	D			moist	medium	brown-gray	Mix SILTS and SANDS Trace dry Bay Mud	ML-SM		7		
5	D			very moist			Lenses and pockets silts, sand, clayey silt, trace organics			12		
	D			wet	loose		Lenses and layers of silts, fine sands			3		
	D			very moist	soft	light gray	BAY MUD	CH		1		
10	D					dark gray	Calcareous, trace vertical organics			8		
	D				medium							
	D				stiff					20		
						gray	Calcareous SILTY CLAY	CL				
15							Bottom of Hole at 14 ft.					
20												

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Drawing No.
A-1

LOG OF BORING NO. MW-5

DATE DRILLED: 4/27/89 | ELEVATION: N/A | WL TAKEN: 4-27-89 | EQUIPMENT: Hollow Stem Auger

DEPTH (ft)	SAMPLE	WATER LEVEL	SYMBOL	MOISTURE	PLASTICITY	COLOR	DESCRIPTION		WELL CONSTRUCTION	BLOWS/FT.	T.P.H Mg/Kg	TESTS
				slightly moist			ASPHALT: 1-1/2", base: 6"					
					medium dense	light brown to yellow-brown	CLAYEY SAND Little rock fragments	SC				
				slightly moist	stiff	gray	SILTY CLAY Pocket of bay mud	CL				
5	D			slightly moist	medium dense	brown	Fine to coarse SAND	SP		23		
	D						Layer coarse sand to pea gravels					
				wet			Lenses fine to medium sand			8		
	D			very moist	soft	gray	CLAYEY SILT	ML				
				wet			Sand lens			7		
	D						CLAYEY SILT					
							Fine sandy silt					
10	D						SILTY CLAY (Bay Mud)	CH		1		
	D					dark gray	Trace vertical organics			4		
	D						Trace of calcareous SILTY CLAY			10		
15							Bottom of Hole at 14 ft.					
20												

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Drawing No.
A-2

LOG OF BORING NO. MW-6

DATE DRILLED: 4/28/89 | ELEVATION: N/A | WL TAKEN: 4-28-89 | EQUIPMENT: Hollow Stem Auger

DEPTH (ft)	SAMPLE	WATER LEVEL	SYMBOL	MOISTURE	PLASTICITY	COLOR	DESCRIPTION	WELL CONSTRUCTION	BLOWS/FT.	T.P.H Ma/Kg	TESTS
				moist	loose	brown	Import Top Soil				
				moist	loose	yellow-brown	CLAYEY SAND SC and rock fragments Trace cobble size fragments				
	D						Sandy clay, trace rock fragments				
5				very moist	soft	gray	CLAYEY SILTS ML		23		
	D						Layer pea gravel possible floating product				
							Fine to medium sand		8		
							Layer coarse sand, pea gravel				
							Fine to medium SAND SP-ML				
									7		
10	D			wet			Claysy silt, trace fine sands				
	D						Fine sandy silts		1		
							Bay Mud, trace organics CH		4		
							Bottom of Hole at 12 ft.		10		
15											
20											

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Drawing No.
A-3

LOG OF BORING NO. MW-7

DATE DRILLED: 4/27/89 | ELEVATION: N/A | ML TAKEN: 4-27-89 | EQUIPMENT: Hollow Stem Auger

DEPTH (ft)	SAMPLE	WATER LEVEL	SYMBOL	MOISTURE	PLASTICITY	COLOR	DESCRIPTION	WELL CONSTRUCTION	BLOWS/FT.	T.P.H Mg/Kg	TESTS
				very moist	stiff	brown	SILTY CLAY (Fill) CL				
				wet	stiff		Zone of coarse size rock fragment GP				
				very moist	stiff	black	SILTY CLAY CL Mix with sandy clays				
	D					gray-brown					
5	D	▽		very moist	soft to medium	gray	SILT & SAND, SILTY CLAY ML-CL Strong odor		5		
	D			wet			Fine SANDY SILT ML		9		
				v. moist			Fine SANDY SILT to fine SAND Trace silt				
	D			wet		dark gray	CLAYEY SILT ML				
				very moist to wet		brown	Bay Mud, some peat. Grades to Bay Mud CH				
10	D					dark gray			2		
	D								10		
	O					gray	Calcareous SILTY CLAY CL Trace vertical organics		12		
15							Bottom of Hole at 14 ft.				
20											

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Drawing No.
A-4

LOG OF BORING NO. MW-8

DATE DRILLED: 4/28/89 | ELEVATION: | WL TAKEN: 4-28-89 | EQUIPMENT: Hollow Stem Auger

DEPTH (ft)	SAMPLE	WATER LEVEL	SYMBOL	MOISTURE	PLASTICITY	COLOR	DESCRIPTION	WELL CONSTRUCTION	BLOWS/FT.	P.I. Kg/Kg	TESTS
				moist	medium	brown	Import Top Soil Silt and Clay with fine Sand CL				
				moist	medium dense	yellow-brown	CLAYEY SAND With rock fragments (Fill) SC				
						brown	SANDY CLAY With rock fragments (Fill)				
5	D			moist	medium dense	gray	CLAYEY SILT ML Pockets and lenses of silts, fine sands, and clayey silts		11		
	D	▽		wet	loose	dk.gray	SILTY Fine SAND SM				
10	D			wet	soft	gray	BAY MUD CH Trace organics		5		
						dark gray			5		
							Bottom of Hole at 12 ft.				
15											
20											

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Drawing No.
A-5

LOG OF BORING NO. MW-9

DATE DRILLED: 7-13-89	ELEVATION:	WL TAKEN: 7-13-89	EQUIPMENT: 6-1/4"x 10" Hollow Auger

DEPTH (ft)	SAMPLE	WATER LEVEL	SYMBOL	MOISTURE	CONSISTENCY	COLOR	DESCRIPTION	WELL CONSTRUCTION	BLOWS/FT.	O.V.M. (ppm)	T.P.H. (ppm)
							Crush ROCK 2" Plastic, [topsoil]				
				slightly moist to moist	medium	brown	Silty CLAY Clayey SILT ML/CL [topsoil]				
				moist	stiff	grey	Silty CLAY CL				
5	1			s. moist	medium	light gray	Clayey SILT ML Strong odor		7	320	
	2			moist					8	450	
				wet		grey	Fine Sandy SILT ML				
							Silty SAND				
	3			wet		mottled gray	Bay Mud (tidial zone) CH/OH		6	112	
10	4						Trace calcareous with depth		5	40	
							Bottom of Hole at 10.5 ft.				
15											
20											

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Drawing No.
A-7

LOG OF BORING NO. MW-10

DATE DRILLED: 11-16-89	ELEVATION:	WL TAKEN: n/a	EQUIPMENT: 3 3/4"x 8" Hollow-Stem Auger

DEPTH (ft)	SAMPLE	WATER LEVEL	SYMBOL	MOISTURE	CONSISTENCY	COLOR	DESCRIPTION		WELL CONSTRUCTION	BLOWS/FT.	O.V.H. (ppm)	T.P.H. (ppm)
				sl moist	m dense	gray	GRAVEL sub-base. (Fill)	GM				
				moist		yellow brown	Silty SAND. (Fill)	ML				
					medium	green	Sandy CLAY, trace Gravel.	SC			0	
						black	Silty CLAY, trace Gravel. (Fill) Odor.	CL			2	
				- - - -	- - - -	- - - -	- - - - - - - - - - - - - - - - - -	SM				
	1			very moist	medium dense	dark gray	Silty SAND, trace Clay.			6	35	
5					medium	gray	Silty CLAY, wet Sandy SP lenses. Green staining. Odor.	CL		11		
										11	50	
				wet	soft		Silty CLAY, trace brown organics.			5		
					soft	black	Silty CLAY, trace organincs. Bay Mud.	CH		7	3	
										4		
10						black mottled gray				4	0	
										4		
										7	0	
							Total Depth of Boring: 13 ft Below Ground Surface.					
15												
20												

SHELL OIL COMPANY
285 Hegenberger Road
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Project No.
88-44-359-01

Converse Environmental West

Drawing No.
A-4

LOG OF BORING NO. VEW-1

Start: *11/21/91* Completion: *11/21/91* Water Measure: *N/A*	Geologist: *P. A. Fuller* Assistant Geol.: *N/A* Drilling Co.: *Kvilhaug*	Driller/Helper: Drilling Method: *Hand Auger* Auger/Bit Dia.:

DEPTH (FT)	SAMPLE	WATER LEVEL	SYMBOL	WELL CONSTRUCT.	DESCRIPTION		MOISTURE	SOIL CONSISTENCY OR ROCK HARDNESS	COLOR	BLOWS / 6"	PERCENT RECOVERY
					Asphalt and Base						
					Silty Clay	CL	slightly moist		gray/black		
					Sandy Clay	CL	moist		gray/black		
5					Clayey pebbly Sand	SC	very moist		black		
					Total Depth of Boring: 7 ft.						
					Casing: Blank 4" ID Sch. 40 PVC Screen: Slotted 4" ID Sch. 40 PVC, 0.020" slots Filter Pack: 2/12 sand						
10											
15											
20											

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Project No.
88-44-359-20

Converse Environmental West

Drawing No.
A-2

LOG OF BORING NO. VM-2

Start: *11/21/91* Completion: *11/21/91* Water Measure: *N/A*	Geologist: *P. A. Fuller* Assistant Geol.: *N/A* Drilling Co.: *Kvilhaug*	Driller/Helper: Drilling Method: *Hand Auger* Auger/Bit Dia.:

DEPTH (FT)	SAMPLE	WATER LEVEL	SYMBOL	WELL CONSTRUCT.	DESCRIPTION		MOISTURE	SOIL CONSISTENCY OR ROCK HARDNESS	COLOR	BLOWS / 6"	PERCENT RECOVERY
					Asphalt and Base						
					Silty Clay	CL	slightly moist		gray/black		
					Medium Sand	SP	very moist		gray/black		
5		▽			Clayey fine Sand	SC	very moist		black		
					Total Depth of Boring: 7 ft. Casing: Blank 1" ID Sch. 40 PVC Screen: Slotted 1" ID Sch. 40 PVC, 0.020" slots Filter Pack: 2/12 sand						
10											
15											
20											

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Project No.
88-44-359-20

Converse Environmental West

Drawing No.
A-3

LOG OF BORING NO. VM-3

Start: *11/21/91* Completion: *11/21/91* Water Measure: *N/A*	Geologist: *P. A. Fuller* Assistant Geol.: *N/A* Drilling Co.: *Kvilhaug*	Driller/Helper: Drilling Method: *Hand Auger* Auger/Bit Dia.:

DEPTH (FT)	SAMPLE	WATER LEVEL	SYMBOL	WELL CONSTRUCT.	DESCRIPTION		MOISTURE	SOIL CONSISTENCY OR ROCK HARDNESS	COLOR	BLOWS / 6"	PERCENT RECOVERY
					Asphalt and Base						
					Silty Clay	CL	slightly moist		gray green		
					Fine Sand	SW			black		
5		▽			Clayey fine Sand	SC	very moist		gray		
					Total Depth of Boring: 7 ft.						
					Casing: Blank 1" ID Sch. 40 PVC Screen: Slotted 1" ID Sch. 40 PVC, 0.020" slots Filter Pack: 2/12 sand						
10											
15											
20											

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Project No.
88-44-359-20

Converse Environmental West

Drawing No.
A-4

LOG OF BORING NO. VM-4

Start: *11/21/91* Completion: *11/21/91* Water Measure: *N/A*	Geologist: *P. A. Fuller* Assistant Geol.: *N/A* Drilling Co.: *Kvilhaug*	Driller/Helper: Drilling Method: *Hand Auger* Auger/Bit Dia.:

DEPTH (FT)	SAMPLE	WATER LEVEL	SYMBOL	WELL CONSTRUCT.	DESCRIPTION		MOISTURE	SOIL CONSISTENCY OR ROCK HARDNESS	COLOR	BLOWS / 6"	PERCENT RECOVERY
					Asphalt and Base						
					Silty Clay, some organics	CL	slightly moist		black		
					Clay with organics	CL	moist		black		
5					Sandy Clay	CL	very moist		black		
					Total Depth of Boring: 7 ft. Casing: Blank 1" ID Sch. 40 PVC Screen: Slotted 1" ID Sch. 40 PVC, 0.020" slots Filter Pack: 2/12 sand						
10											
15											
20											

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SHELL OIL COMPANY
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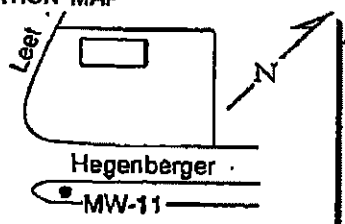
Oakland, California

Project No.
88-44-359-20

Converse Environmental West

Drawing No.
A-5

LOCATION MAP



NORTHING 847.72 EASTING 998.93 ELEVATION 10.56TOC

PACIFIC ENVIRONMENTAL GROUP, INC.

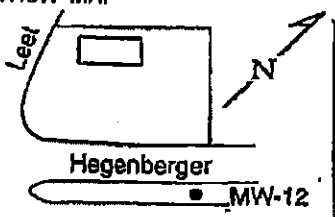
WELL NO. MW-11
PAGE 1 OF 1

PROJECT NO. 305-79.01
LOGGED BY: CM
DRILLER: GREGG
DRILLING METHOD: HSA
SAMPLING METHOD: CAL MOD
CASING TYPE: Sch 40 PVC
SLOT SIZE: 0.020"
GRAVEL PACK: 2X12

CLIENT: SHELL
DATE DRILLED: 6-8-93
LOCATION: 285 Hegenberger Rd.
HOLE DIAMETER: 10"
HOLE DEPTH: 15.5'
WELL DIAMETER: 4"
WELL DEPTH: 14'
CASING STICKUP: NA

WELL COMPLETION	MOISTURE CONTENT	PID	PENETRATION (BLOWS/FT)	DEPTH (FEET)	RECOVERY / SAMPLE INTERVAL / GRAPHIC	SOIL TYPE	LITHOLOGY / REMARKS
GROUT				1–3		SM / GM	SILTY SAND SANDY GRAVEL - FILL: strong brown; angular large chunks of brick and rock; some rusted metal.
	Mst	2	13 25	4–5		SM / SC	SILTY SAND: dark brown; 25-30% sill; fine to medium sand; no product odor. CLAYEY SAND: dark brown; 20-25% clay; fine sand.
BENTONITE				6–9		CH	CLAY: black; high plasticity; mottled with grey patches; very stiff; no product odor.
SAND	Sat	2	2 5	10–13			@10': grey to black; high plasticity; large 3-5 mm open rootholes and cracks filled with water; iron oxide stain along fractures; reeds and roots; firm; no product odor.
	Sat	0	3 11	14–15			@14': dark grey; high plasticity; water filled rootholes; roots; stiff; no product odor.
				16–22			BOTTOM OF BORING AT 15.5'

LOCATION MAP



NORTHING	EASTING	ELEVATION
995.66	1088.10	9.56TOC

PACIFIC ENVIRONMENTAL GROUP, INC.

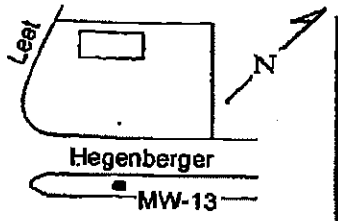
WELL NO. MW-12
PAGE 1 OF 1

PROJECT NO. 305-79.01
LOGGED BY: CM
DRILLER: GREGG
DRILLING METHOD: HSA
SAMPLING METHOD: CAL MOD
CASING TYPE: Sch 40 PVC
SLOT SIZE: 0.020"
GRAVEL PACK: 2X12

CLIENT: SHELL
DATE DRILLED: 6-8-93
LOCATION: 285 Hegenberger Rd.
HOLE DIAMETER: 10"
HOLE DEPTH: 15.5'
WELL DIAMETER: 4"
WELL DEPTH: 15'
CASING STICKUP: NA

WELL COMPLETION	MOISTURE CONTENT	PID	PENETRATION (BLOWS/FT)	DEPTH (FEET)	RECOVERY / SAMPLE INTERVAL	GRAPHIC	SOIL TYPE	LITHOLOGY / REMARKS
GROUT				1			SM	SILTY SAND
	Dp			2			GM	SANDY GRAVEL - FILL: large angular chuncks of iron oxide stained chert.
				3				
	Mst	3	P	4			ML	CLAYEY SILT: sandy; dark greyish brown; 20-25% clay; 15-20% very fine sand; iron oxide staining along tiny roots; no product odor.
				5				
BENTONITE				6				
				7				
				8			CH	CLAY: black; high plasticity; roots; rootholes; rootholes filled with water; soft; no product odor.
SAND	Sat	4	3	9				
			2	10				
				11				
				12				
				13				
				14				@12.5': greenish grey; high plasticity; 0-5% sill; calcite nodules; roots and water filled rootholes; stiff; no product odor.
	Sat	0	9	15				
			10	16				BOTTOM OF BORING AT 15.5'
				17				
				18				
				19				
				20				
				21				
				22				

LOCATION MAP



NORTHING 914.88 | EASTING 1039.19 | ELEVATION 10.10TOC

ACIFIC ENVIRONMENTAL GROU , INC.

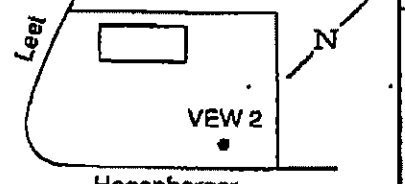
WELL NO. MW-13
PAGE 1 OF 1

PROJECT NO. 305-79.01
LOGGED BY: CM
DRILLER: GREGG
DRILLING METHOD: HSA
SAMPLING METHOD: CAL MOD
CASING TYPE: Sch 40 PVC
SLOT SIZE: 0.020"
GRAVEL PACK: 2X12

CLIENT: SHELL
DATE DRILLED: 6-10-93
LOCATION: 285 Hegenberger Rd.
HOLE DIAMETER: 10"
HOLE DEPTH: 15.5'
WELL DIAMETER: 4"
WELL DEPTH: 15'
CASING STICKUP: NA

WELL COMPLETION	MOISTURE CONTENT	PID	PENETRATION (BLOWS/FT)	DEPTH (FEET)	SOIL TYPE	LITHOLOGY / REMARKS
GROUT				1	SM	SILTY SAND
				2	GW	SANDY GRAVEL - FILL: large angular chuncks of iron oxide stained chert; no product odor.
				3		
				4	SC	CLAYEY SAND: silty; olive brown; 30-35% clay; 20-25% silt; very fine sand; roots; loose; no product odor.
				5		
	Mst	0	8	6		
			4	7		
BENTONITE				8		
				9	CL	CLAY: dark greyish brown; moderate plasticity; 10-15% silt; iron oxide stain along roots; no product odor.
SAND	Mst	0	3	10	CH	CLAY: black; high plasticity; roots; odor of decaying organics; firm; no product odor.
			3	11		
				12		
				13		
				14		
	Mst	0	8	15		CLAY: dark greenish grey; high plasticity; calcite nodules and caliche; roots; stiff; no product odor.
			6	16		BOTTOM OF BORING AT 15.5'
				17		
				18		
				19		
				20		
				21		
				22		

LOCATION MAP



NORTHING EASTING ELEVATION

CIFIC ENVIRONMENTAL GROU NC.

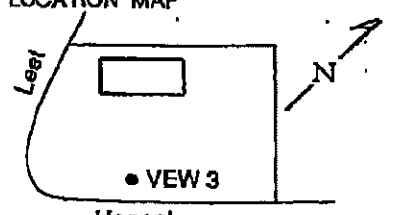
WELL NO. VEW 2
PAGE 1 OF 1

PROJECT NO. 305-79.01
LOGGED BY: CM
DRILLER: GREGG
DRILLING METHOD: HSA
SAMPLING METHOD: CAL MOD
CASING TYPE: Sch 40 PVC
SLOT SIZE: 0.020"
GRAVEL PACK: 2X12

CLIENT: SHELL
DATE DRILLED: 6-9-93
LOCATION: 285 Hegenberger Rd
HOLE DIAMETER: 10"
HOLE DEPTH: 8.5'
WELL DIAMETER: 2"
WELL DEPTH: 8.5' and 6.5'
CASING STICKUP: NA

WELL COMPLETION	MOISTURE CONTENT	PID	PENETRATION (BLOWS/FT)	DEPTH (FEET)	RECOVERY / SAMPLE INTERVAL	GRAPHIC	SOIL TYPE	LITHOLOGY / REMARKS
GROUT	Dp			1			SC	ASPHALT 2" CLAYEY SAND - FILL: gravelly; strong brown; 20-25% clay; fine to coarse sand; 15-20% angular gravel.
	Mst			2			CL	CLAY: dark greenish grey to black; moderate plasticity; moderate product odor becoming strong product odor at 3 feet; roots.
SAND	Wet	100	5 4	4 5			SM	SILTY SAND: dark grey; 30-35% silt; very fine sand; roots; loose; strong product odor.
	Mst			6			CH	CLAY: black; high plasticity; roots; strong product odor.
	Sat	80	1 4	7 8			ML	CLAYEY SILT: with sand lenses; dark grey to black; moderate plasticity; horizontal laminae; roots; sand lenses of fine to medium sand up to 2 inches thick; soft; strong product odor.
SAND / BENTONITE				9			CL	CLAY: dark grey; moderate plasticity; moderate product odor.
				10				BOTTOM OF BORING AT 8.5'
				11				
				12				
				13				
				14				
				15				
				16				
				17				
				18				
				19				
				20				
				21				
				22				

LOCATION MAP



NORTHING EASTING ELEVATION

PACIFIC ENVIRONMENTAL GRO , INC.

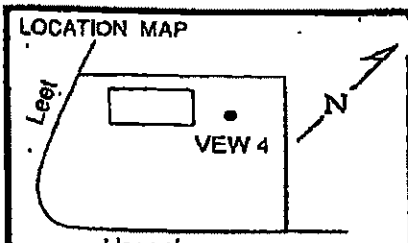
WELL NO. VEW 3
PAGE 1 OF 1

PROJECT NO. 305-79.01
LOGGED BY: CM
DRILLER: GREGG
DRILLING METHOD: HSA
SAMPLING METHOD: CAL MOD
CASING TYPE: Sch 40 PVC
SLOT SIZE: 0.020"
GRAVEL PACK: 2X12

CLIENT: SHELL
DATE DRILLED: 5-10-93
LOCATION: 285 Hegenberger Road
HOLE DIAMETER: 10"
HOLE DEPTH: 10'
WELL DIAMETER: 2"
WELL DEPTH: 8.5' and 6'
CASING STICKUP: NA

WELL COMPLETION	MOISTURE CONTENT	PID	PENETRATION (BLOWS/FT)	DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	GRAPHIC	SOIL TYPE	LITHOLOGY / REMARKS
GROUT				1				GW	ASPHALT 2" SANDY GRAVEL - FILL: strong brown.
	Mst			2				CL	SILTY CLAY: black; moderate plasticity; 20-25% silt; roots; no product odor.
				3					
				4				CH	CLAY: black; high plasticity; roots; stiff; strong product odor.
SAND	Mst	120	8 6	5					
				6					
				7				SM	SILTY SAND: dark blue grey; 5-10% clay; 15-20% silt; very fine sand; roots; separate phase hydrocarbon sheen along roots; soft; strong product odor.
	Sat	80	2 2	8					
SAND	Mst	15	3 2	9				CH	CLAY: dark greenish grey to black; high plasticity; abundant roots; at 9.5'; 3-4" thick peat horizon; soft; moderate product odor.
BENTONITE				10					BOTTOM OF BORING AT 10'
				11					
				12					
				13					
				14					
				15					
				16					
				17					
				18					
				19					
				20					
				21					
				22					

LOCATION MAP



NORTHING EASTING ELEVATION

ACIFIC ENVIRONMENTAL GROL INC.

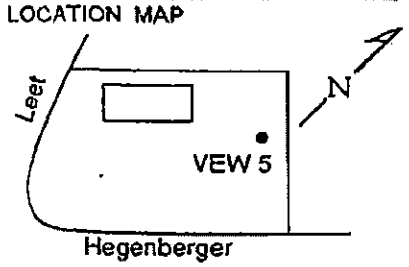
WELL NO. VEW 4
PAGE 1 OF 1

PROJECT NO. 305-79.01
LOGGED BY: CM
DRILLER: GREGG
DRILLING METHOD: HSA
SAMPLING METHOD: CAL MOD
CASING TYPE: Sch 40 PVC
SLOT SIZE: 0.020"
GRAVEL PACK: 2X12

CLIENT: SHELL
DATE DRILLED: 6-9-93
LOCATION: 285 Hegenberger Rd.
HOLE DIAMETER: 10"
HOLE DEPTH: 9.5'
WELL DIAMETER: 2"
WELL DEPTH: 9' and 6.5'
CASING STICKUP: NA

WELL COMPLETION	MOISTURE CONTENT	PID	PENETRATION (BLOWS/FT)	DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	GRAPHIC	SOIL TYPE	LITHOLOGY / REMARKS
GROUT				1				SC	ASPHALT 2" CLAYEY SAND - FILL: gravelly; strong brown; 25-30% clay; fine to medium sand; 15-20% gravel; no product odor.
				2					
				3				CL	CLAY: dark grey to black; moderate plasticity; faint product odor.
				4				CL/SW	SILTY SAND with CLAY: (interbedded); silty sand: dark grey; 15-20% silt; fine to medium sand; faint product odor; clay: dark grey; moderate plasticity; some rootlets; very stiff; faint product odor.
SAND	Wet	14	12	5					
			12	6					
	Sat	7	7	7					@7.5': firm; faint product odor.
			4	8					
	Sat	0	8	9				SM	SILTY SAND: dark grey; 15-20% silt; very fine sand; faint to no product odor.
			4					ML	CLAYEY SILT: dark grey; 25-30% clay; 10-15% very fine sand; firm; faint to no product odor.
SAND				10					BOTTOM OF BORING AT 9.5'
BENTONITE				11					
				12					
				13					
				14					
				15					
				16					
				17					
				18					
				19					
				20					
				21					
				22					

LOCATION MAP



NORTHING EASTING ELEVATION

PACIFIC ENVIRONMENTAL GROUP, INC.

WELL NO. VEW 5
PAGE 1 OF 1

PROJECT NO. 305-79.01
LOGGED BY: CM
DRILLER: GREGG
DRILLING METHOD: HSA
SAMPLING METHOD: CAL MOD
CASING TYPE: Sch 40 PVC
SLOT SIZE: 0.020"
GRAVEL PACK: 2X12

CLIENT: SHELL
DATE DRILLED: 6-9-93
LOCATION: 285 Hegenberger Rd.
HOLE DIAMETER: 10"
HOLE DEPTH: 9'
WELL DIAMETER: 2"
WELL DEPTH: 8.5' and 6.5'
CASING STICKUP: NA

WELL COMPLETION	MOISTURE CONTENT	PID	PENETRATION (BLOWS/FT)	DEPTH (FEET)	RECOVERY / SAMPLE INTERVAL	GRAPHIC	SOIL TYPE	LITHOLOGY / REMARKS
								Note: 1st hole had 2 1" pipes and 1.5'. Broke one line but it appears abandoned.
GROUT				1			SW	ASPHALT 2" GRAVELLY SAND - FILL: clayey; strong brown; 20-25% clay; 25-30% large angular rocks; no product odor.
				2			CL	CLAY: mottled grey and brown; moderate plasticity; 5-10% fine to medium sand; staining (grey) and moderate to strong product odor begins at 3.5'.
SAND	Sat	150	9 8	4 5			CH/SW	CLAY and SAND: (interbedded); clay: dark greenish grey; high plasticity; strong product odor; sand: dark greenish grey; 5-10% silt; fine to medium sand; stiff; strong product odor.
	Sat	30	2 2	8 9			CH	CLAY: soft; moderate to faint product odor.
SAND / BENTONITE				10				BOTTOM OF BORING AT 9'

Cambria Environmental Technology, Inc.
1144 - 65th St.
Oakland, CA 94608
Telephone: (510) 420-0700
Fax: (510) 420-9170

BORING/WELL LOG

CLIENT NAME	Equiva Services LLC	**BORING/WELL NAME**	VE-5
JOB/SITE NAME	Shell-branded service station	**DRILLING STARTED**	28-Jun-00
LOCATION	285 Hegenberger Road, Oakland, California	**DRILLING COMPLETED**	28-Jun-00
PROJECT NUMBER	241-0734	**WELL DEVELOPMENT DATE (YIELD)**	NA
DRILLER	Gregg Drilling	**GROUND SURFACE ELEVATION**	Not Surveyed
DRILLING METHOD	Hollow-stem auger	**TOP OF CASING ELEVATION**	Not Surveyed
BORING DIAMETER	10"	**SCREENED INTERVAL**	NA; NA
LOGGED BY	J. Loetterle	**DEPTH TO WATER (First Encountered)**	4.0 ft (28-Jun-00) ▽
REVIEWED BY	S. Bork, RG# 5620	**DEPTH TO WATER (Static)**	NA ▼
REMARKS	Hand augered to 5 fbg. Located at the south end of the south east pumps, adjacent to the planter on Hegenberger Rd.		

TPHg (mg/kg)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (ft bgs)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (ft bgs)
							ASPHALT	0.3
					ML		**FILL**; brown; moist; 35% silt, 50% fine to medium sand, 15% gravel; no plasticity; high estimated permeability.	1.0
							Clayey Silt (ML); grey; moist; 35% clay, 55% silt, 10% sand; high plasticity; low estimated permeability; contains organics.	3.0
					SP		@ 2' - damp.	4.0
	2 2 3	VE-5- 5.5		5	ML		**Gravelly SAND** (SM); grey; damp; 20% silt, 55% fine to medium sand, 25% fine gravel; no plasticity; high estimated permeability.	6.0
					SM		**Sandy Silt** (ML); wet; grey. @ 5' - dark grey; loose; 15% clay, 65% silt, 20% sand; medium plasticity; low estimated permeability; contains organics.	
							Silty SAND (SM); dark grey; wet; 5% clay, 20% silt, 75% fine sand; no plasticity; moderate permeability.	
	2 2 3	VE-5- 10.5		10			**Clayey SILT** (ML); grey; loose; damp; 30% clay, 60% silt, 10% fine sand; high plasticity; low estimated permeability; contains rootlets.	10.0
					ML			
	3 4 7	VE-5- 14.0		15			@ 13' green/grey; medium dense; 5% clay, 55% silt, 40% fine to medium sand with trace coarse sand; low plasticity; moderate estimated permeability.	15.0

WELL DIAGRAM

- Portland Type I/II
- Bentonite Seal
- Monterey Sand #2/12
- 4"-diam., 0.020" Slotted Schedule 40 PVC
- Bentonite Seal
- Monterey Sand #2/12
- 1"-diam., 0.020" Slotted Schedule 40 PVC

Bottom of Boring @ 15 ft

WELL LOG (COAXIAL/TPHG) G:\OA191C-1\GINT\OKLND285.GPJ DEFAULT.GDT 7/5/00

Cambria Environmental Technology, Inc.
1144 - 65th St.
Oakland, CA 94608
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BORING/WELL LOG

CLIENT NAME	Equiva Services LLC	**BORING/WELL NAME**	VE-6
JOB/SITE NAME	Shell-branded service station	**DRILLING STARTED**	28-Jun-00
LOCATION	285 Hegenberger Road, Oakland, California	**DRILLING COMPLETED**	28-Jun-00
PROJECT NUMBER	241-0734	**WELL DEVELOPMENT DATE (YIELD)**	NA
DRILLER	Gregg Drilling	**GROUND SURFACE ELEVATION**	Not Surveyed
DRILLING METHOD	Hollow-stem auger	**TOP OF CASING ELEVATION**	Not Surveyed
BORING DIAMETER	10"	**SCREENED INTERVAL**	NA; NA
LOGGED BY	J. Loetterle	**DEPTH TO WATER (First Encountered)**	4.0 ft (28-Jun-00)
REVIEWED BY	S. Bork, RG# 5620	**DEPTH TO WATER (Static)**	NA

REMARKS Hand augered to 5 fbg. Located adjacent to the planter on Hegenberger Rd. by the southeast pumps.

TPHg (mg/kg)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (ft bgs)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (ft bgs)	WELL DIAGRAM
							ASPHALT	0.3	Portland Type I/II
					MH		FILL: brown; moist; 35% silt, 50% fine to medium sand, 15% gravel; no plasticity; high estimated permeability.	1.0	
							Clayey SILT (MH); grey; moist; 35% clay, 55% silt, 10% sand; high plasticity; low estimated permeability; contains organics.	3.0	Bentonite Seal
					SM		Silty SAND (SM); blue/grey; loose; wet; 3% clay, 27% silt, 70% fine sand; no plasticity; moderate estimated permeability.		Monterey Sand #2/12
	2 4 6	VE-6- 5.5		5			@ 4' - 20% silt, 60% fine to coarse sand, 20% fine gravel; high estimated permeability.	5.0	
							Sandy SILT (ML); light grey; loose; damp; 5% clay, 75% silt, 20% sand, low plasticity; moderate estimated permeability; contains organics.		4"-diam., 0.020" Slotted Schedule 40 PVC
							@ 6' - 25% clay, 60% silt, 15% sand; medium plasticity; low estimated permeability.		
	1 2 3	VE-6- 10.5		10	ML		@ 10' - grey; 15% clay, 65% silt, 20% sand.		Bentonite Seal
							@ 11' - grey/brown; 20% clay, 50% silt, 30% fine to coarse sand; moderate estimated permeability.		Monterey Sand #2/12
	4 6 7	VE-6- 14.0							1"-diam., 0.020" Slotted Schedule 40 PVC
				15			@ 14' - light grey; medium dense; moist; 30% clay, 50%silt, 20% sand; low estimated permeability.	15.0	Bottom of Boring @ 15 ft

WELL LOG (COAXIAL/TPHG) G:\OA1810-1\GINT\OKLND285.GPJ DEFAULT.GDT 7/8/00

Cambria Environmental Technology, Inc.
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BORING/WELL LOG

CLIENT NAME	Equiva Services LLC	**BORING/WELL NAME**	VE-7
JOB/SITE NAME	Shell-branded service station	**DRILLING STARTED**	28-Jun-00
LOCATION	285 Hegenberger Road, Oakland, California	**DRILLING COMPLETED**	28-Jun-00
PROJECT NUMBER	241-0734	**WELL DEVELOPMENT DATE (YIELD)**	NA
DRILLER	Gregg Drilling	**GROUND SURFACE ELEVATION**	Not Surveyed
DRILLING METHOD	Hollow-stem auger	**TOP OF CASING ELEVATION**	Not Surveyed
BORING DIAMETER	10"	**SCREENED INTERVAL**	NA; NA
LOGGED BY	J. Loetterle	**DEPTH TO WATER (First Encountered)**	4.0 ft (28-Jun-00)
REVIEWED BY	S. Bork, RG# 5620	**DEPTH TO WATER (Static)**	NA
REMARKS	Hand augered to 5 fbg. Located in the middle of the exit driveway of the car wash.		

TPHg (mg/kg)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (ft bgs)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (ft bgs)	WELL DIAGRAM
							ASPHALT	0.3	Portland Type I/II
					ML		FILL: brown; moist; 35% silt, 50% fine to medium sand, 15% gravel; no plasticity; high estimated permeability.	1.0	Bentonite Seal
							Clayey SILT (ML); black; damp; 30% clay, 60% silt, 10% sand; high plasticity; low estimated permeability.		Monterey Sand #2/12
							@ 2' - grey.	3.0	
				5	SM		Silty SAND (ML); blue/grey; wet.		
	4 4 5	VE-7-6.5					@ 6.5' - grey/brown; loose; 5% clay, 30%silt, 60% fine to medium sand, 5% fine gravel; low plasticity; moderate estimated permeability.	7.0	4"-diam., 0.020" Slotted Schedule 40 PVC
							Silty CLAY (CH)		
	2 2 4	VE-7-10.5		10	CH		@ 10.5' - dark grey; medium stiff; moist; 65% clay, 30% silt, 5% sand; high plasticity; very low estimated permeability; contains organics.		Bentonite Seal
									Monterey Sand #2/12
	5 7 9	VE-7-14.0			ML		@ 13.5' - light grey/green; 60% clay, 30% silt, 10% sand.	14.0	1"-diam., 0.020" Slotted Schedule 40 PVC
				15			Clayey SILT (ML); light grey; very stiff; moist; 30% clay, 50% silt, 20% fine sand; medium plasticity; low estimated permeability.	15.0	Bottom of Boring @ 15 ft

WELL LOG (COAXIAL/TPHG) G:\OA1\1C~1\GINT\OKLND285.GPJ DEFAULT.GDT 7/9/00

LOG OF BORING NO. 1 (SB-1)

DATE DRILLED: 2/13/89 | ELEVATION: | ML TAKEN: None | EQUIPMENT: Hand Auger

DEPTH (ft)	SAMPLE	WATER LEVEL	SYMBOL	MOISTURE	PLASTICITY	COLOR	DESCRIPTION	BLOWS/FT.	DRY WEIGHT %	DRY DENSITY lb/ft³	TESTS
							0-2" ASPHALT, 2-6" BASE ROCK SP				
				damp moist	firm	brown	CLAY (Fill) CL Some sand and gravel				
	D			damp	firm to soft	black dark gray	SILTY CLAY CL/GP Some gravel				
				damp			SILTY SAND AND GRAVEL. SP/	23			
5	D			wet			Fine SAND SW/GW	8			
							Bottom of Boring at 6.5 FT. Water seeping into hole				
10											
15											
20											

REGISTERED PROFESSIONAL GEOLOGIST
Douglas W. Charlton
No. 4110
STATE OF CALIFORNIA

SHELL OIL COMPANY
258 Hegenberger Road
Oakland, California

Project No.
88-44-359-01

Converse Environmental Consultants California

Drawing No.
A-1

LOG OF BORING NO.2 (SB-2)

DATE DRILLED: 2/13/89 | ELEVATION: | WL TAKEN: None | EQUIPMENT: Hand Auger

DEPTH (ft)	SAMPLE	WATER LEVEL	SYMBOL	MOISTURE	PLASTICITY	COLOR	DESCRIPTION	BLOWS/FT.	DRY WEIGHT %	DRY DENSITY lb/ft³	TESTS
					hard		0-2" ASPHALT, 2-12" BASE ROCK				
				slightly damp	firm	gray	SILTY AND SANDY CLAY (Fill) CL/CH Some gravel				
5	D			moist	firm	gray	CLAYEY SAND SP/GP Some gravel. Odor of gasoline	27			
							Bottom of Boring at 6 ft. Water in hole at 6 ft.				
10											
15											
20											

REGISTERED PROFESSIONAL GEOLOGIST
Douglas W. Charlton
No. 4110
STATE OF CALIFORNIA

SHELL OIL COMPANY
258 Hegenberger Road
Oakland, California

Project No.
88-44-359-01

Converse Environmental Consultants California

Drawing No.
A-2

LOG OF BORING NO. SB-A (SB-3)

DATE DRILLED: 5/24/89	ELEVATION:	ML TAKEN: 5/24/89	EQUIPMENT:

DEPTH (ft)	SAMPLE	WATER LEVEL	SYMBOL	MOISTURE	PLASTICITY	COLOR	DESCRIPTION	BLOWS/FT.	MOISTURE CONTENT	DRY DENSITY lb/ft³	TESTS
	D			slightly moist	loose	tan	SANDY GRAVEL (Fill)	12			
				moist	medium	black	SILTY CLAY CL				
	D			very moist	loose	grey	SANDY GRAVEL Strong odor GM	16			
5		▼		wet	loose	black	SILTY CLAY and SAND CL				
							Bottom of Hole at 6 ft.				
10											
15											
20											

SHELL OIL COMPANY
285 Hagenberger Road
Oakland, California

Project No.
88-44-359-02

Converse Environmental Consultants California

Drawing No.
A-6

LOG OF BORING NO. SB-B (SB-4)

DATE DRILLED: 5/24/89 | ELEVATION: | ML TAKEN: N/A | EQUIPMENT:

DEPTH (ft)	SAMPLE	WATER LEVEL	SYMBOL	MOISTURE	PLASTICITY	COLOR	DESCRIPTION	BLOWS/FT.	MOISTURE CONTENT	DRY DENSITY lb/ft³	TESTS
				moist	loose	brown	SANDY GRAVEL (Fill)				
	D				medium	black	SILTY CLAY and fine SAND CL	9			
							Odor				
	D			very moist			Gravelly clay and sand	5			
5							Bottom of Hole at 4 ft.				
10											
15											
20											

REGISTERED PROFESSIONAL ENGINEER
Douglas W. Charlton
No. 4119
STATE OF CALIFORNIA

SHELL OIL COMPANY
285 Hagenberger Road
Oakland, California

Project No.
88-44-359-02

Converse Environmental Consultants California

Drawing No.
A-7

LOG OF BORING NO. SB-C (SB-5)

DATE DRILLED: 5/24/89	ELEVATION:	WL TAKEN: 5/24/89	EQUIPMENT:

DEPTH (ft)	SAMPLE	WATER LEVEL	SYMBOL	MOISTURE	PLASTICITY	COLOR	DESCRIPTION	BLOWS/FT.	MOISTURE CONTENT	DRY DENSITY lb/ft3	TESTS
				very moist		black	SILTY CLAY and SAND CL				
	D					gray	SILTY fine SAND SM	13			
						black	SILTY CLAY and SAND CL Strong odor				
5	D	▼		wet				4			
							Bottom of Hole at 6 ft.				
10											
15											
20											

REGISTERED PROFESSIONAL GEOLOGIST
Douglas W. Charles
No. 4110
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SHELL OIL COMPANY
285 Hagenberger Road
Oakland, California

Project No.
88-44-359-02

Converse Environmental Consultants California

Drawing No.
A-8

LOG OF BORING NO. SB-6

DATE DRILLED: 7-13-89	ELEVATION:	WL TAKEN: 7-13-89	EQUIPMENT: 3-1/4"x 6" Hollow Auger

DEPTH (ft)	SAMPLE	WATER LEVEL	SYMBOL	MOISTURE	CONSISTENCY	COLOR	DESCRIPTION	BLOWS/FT.	O.V.M. (ppm)	DRY DENSITY lb/ft³	TESTS
							ASPHALT 3" CONC. SLAB. 6"				
				dry	loose	gray	GRAVEL backfill				
5							Filter fabric				
	1			wet	medium	light gray	Lenses-layers SILT and fine SAND ML Odor	9			
							Bottom of Hole at 7 ft.				
10											
15											
20											

REGISTERED PROFESSIONAL GEOLOGIST
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STATE OF CALIFORNIA

SHELL OIL COMPANY
285 Hegenberger Road
Oakland, California

Project No.
88-44-359-01

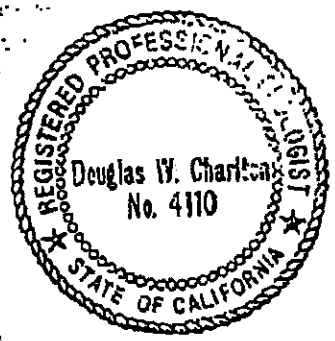
Converse Environmental Consultants California

Drawing No.
A-1

LOG OF BORING NO. SB-7

DATE DRILLED: 7-13-89	ELEVATION:	WL TAKEN: 7-13-89	EQUIPMENT: 3-1/4"x 6" Hollow Auger

DEPTH (ft)	SAMPLE	WATER LEVEL	SYMBOL	MOISTURE	CONSISTENCY	COLOR	DESCRIPTION	BLOWS/FT.	O.V.M. (ppm)	DRY DENSITY lb/ft³	TESTS
0							ASPHALT 4" BASE 6"				
							GRAVEL backfill				
5				wet			No odor				
							Bottom of Hole at 7 ft.				
10											
15											
20											



SHELL OIL COMPANY
285 Hegenberger Road
Oakland, California

Project No.
88-44-359-01

Converse Environmental Consultants California

Drawing No.
A-2

LOG OF BORING NO. SB-8

DATE DRILLED: 7-13-89	ELEVATION:	WL TAKEN: 7-13-89	EQUIPMENT: 3-1/4"x 6" Hollow Auger

DEPTH (Ft)	SAMPLE	WATER LEVEL	SYMBOL	MOISTURE	CONSISTENCY	COLOR	DESCRIPTION	BLOWS/FT.	O.V.H. (ppm)	DRY DENSITY lb/ft³	TESTS
							ASPHALT 2" BASE 6"				
							Mix Bay Mud, SAND SP Odor				
5	1			moist	loose	grey	Silty fine SAND trace SM shells fragments Strong odor	5	250		
	2	▼		V. moist							
				wet	loose			5	250		
							Bottom of Hole at 6.5 ft.				
10											
15											
20											

REGISTERED PROFESSIONAL GEOLOGIST
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SHELL OIL COMPANY
285 Hegenberger Road
Oakland, California

Project No.
88-44-359-01

Converse Environmental Consultants California

Drawing No.
A-3

LOG OF BORING NO. SB-9

DATE DRILLED: 7-13-89	ELEVATION:	ML TAKEN: 7-13-89	EQUIPMENT: 3-1/4"x 6" Hollow Auger

DEPTH (ft)	SAMPLE	WATER LEVEL	SYMBOL	MOISTURE	CONSISTENCY	COLOR	DESCRIPTION		BLOWS/FT.	O.V.M. (ppm)	DRY DENSITY lb/ft³	TESTS
					medium dense	black brown	ASPHALT 2" BASE 6"					
				moist	medium	dark gray	Silty CLAY Odor	CL				
5	1			moist v. moist	loose	gray	Fine Sandy SILT Odor	ML	6	280		
	2	▽		wet	firm to stiff		Silty CLAY Bay Mud Slight odor Clayey SILT rootlets	CH	8	15		
							Bottom of Hole at 7 ft.					
10												
15												
20												

REGISTERED PROFESSIONAL GEOLOGIST
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SHELL OIL COMPANY
285 Hegenberger Road
Oakland, California

Project No.
88-44-359-01

Converse Environmental Consultants California

Drawing No.
A-4

LOG OF BORING NO. SB-10

DATE DRILLED: 7-13-89	ELEVATION:	ML TAKEN: 7-13-89	EQUIPMENT: 3-1/4"x 6" Hollow Auger

DEPTH (ft)	SAMPLE	WATER LEVEL	SYMBOL	MOISTURE	CONSISTENCY	COLOR	DESCRIPTION		BLOWS/FT.	O.V.M. (ppm)	DRY DENSITY lb/ft³	TESTS
							ASPHALT 2" BASE 6"					
						gray	Silty CLAY Odor	CL		50		
						light gray	Fine SAND trace SILT	SP/SM		80		
						dark gray	Silty CLAY and Clayey SILT. Strong odor	ML/CL		500		
				wet								
5	1	▽					Coarse SAND and pea GRAVEL	SP/GP	7			
	2					—			11		--	
							Bottom of Hole at 6.5 ft.					
10												
15												
20												

REGISTERED PROFESSIONAL GEOLOGIST
Douglas W. Charlton
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SHELL OIL COMPANY
285 Hegenberger Road
Oakland, California

Project No.
88-44-359-01

Converse Environmental Consultants California

Drawing No.
A-5

LOG OF BORING NO. SB-11

DATE DRILLED: 7-13-89	ELEVATION:	ML TAKEN: 7-13-89	EQUIPMENT: 3-1/4"x 6" Hollow Auger

DEPTH (ft)	SAMPLE	WATER LEVEL	SYMBOL	MOISTURE	CONSISTENCY	COLOR	DESCRIPTION	BLOWS/FT.	O.V.M. (ppm)	DRY DENSITY lb/ft3	TESTS
							ASPHALT 2" BASE 6"				
				moist	stiff	gray	Pavement badly cracked in this area. Surface infiltration CL/CH		60		
							Silty CLAY CL/CH trace concrete rubble				
							Silty CLAY increase moisture		30		
	1			very moist	medium		Clayey SILT ML trace fine SAND Odor	6	280		
5	2	▽				black	Saturated fine SAND SP	9	30		
						gray	SILT trace fine SAND ML				
							Bottom of Hole at 7 ft.				
10											
15											
20											

REGISTERED PROFESSIONAL ENGINEER
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SHELL OIL COMPANY
285 Hegenberger Road
Oakland, California

Project No.
88-44-359-01

Converse Environmental Consultants California

Drawing No.
A-6

LOG OF BORING NO. SB-12

DATE DRILLED: 11-16-89	ELEVATION:	ML TAKEN: n/a	EQUIPMENT: 3 3/4"x 8" Hollow-Stem Auger

DEPTH (ft)	SAMPLE	WATER LEVEL	SYMBOL	MOISTURE	CONSISTENCY	COLOR	DESCRIPTION	BLOWS/FT.	O.V.M. (ppm)	DRY DENSITY lb/ft³	TESTS
				very moist	soft	dark brown	Sandy SILT. (Topsoil) ML				
					soft	dark gray	Silty CLAY, trace Gravel. CL				
5	1				medium	dark gray	Silty CLAY, trace organics. Trace green staining.	10	0		
	2						Trace to little Sand.	12	0		
	3	▽		wet			Silty CLAY, little Sand.	13	0		
10							Total Depth of Boring: 9 ft Below Ground Surface.				
15											
20											

REGISTERED PROFESSIONAL GEOLOGIST
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SHELL OIL COMPANY
285 Hegenberger Road
Oakland, California

Project No.
88-44-359-01

Converse Environmental West

Drawing No.
A-2

LOG OF BORING NO. SB-13

DATE DRILLED: 11-16-89	ELEVATION:	WL TAKEN: n/a	EQUIPMENT: 3 3/4"x 8" Hollow-Stem Auger

DEPTH (ft)	SAMPLE	WATER LEVEL	SYMBOL	MOISTURE	CONSISTENCY	COLOR	DESCRIPTION	BLOWS/FT.	O.V.H. (ppm)	DRY DENSITY lb/ft3	TESTS
				moist	medium dense	dark gray	Sandy GRAVEL. (sub-base) GP				
				very moist	medium	green	Sandy CLAY, some Cobble, little Rubble. (Fill) Gravelly lens 4". CL		0		
				wet	m dense						
				very moist	medium	black	Silty CLAY, increased Sand, trace Gravel. Slight odor. CL		0		
	1			moist		gray green					
5							Gravelly rounded SAND. SP	40	215		
				wet		dark gray	Strong odor.				
	2	▽		wet	medium dense		Fine to medium SAND. SP	29	142		
							Total Depth of Boring: 7 ft Below Ground Surface.				
10											
15											
20											

REGISTERED PROFESSIONAL GEOLOGIST
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OF CALIFORNIA

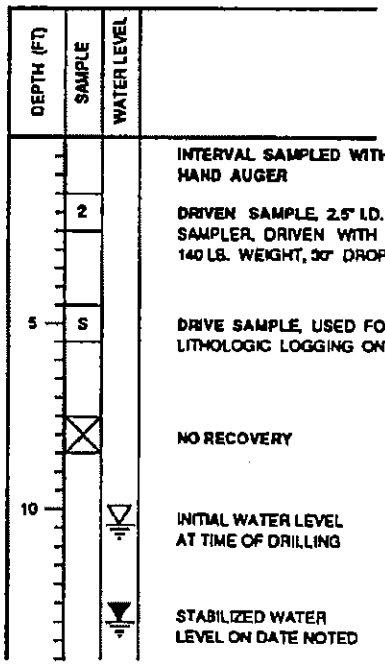
SHELL OIL COMPANY
285 Hegenberger Road
Oakland, California

Project No.
88-44-359-01

Converse Environmental West

Drawing No.
A-3

MAJOR DIVISIONS			SYMBOLS	TYPICAL NAMES
COARSE GRAINED SOILS MORE THAN HALF IS LARGER THAN NO. 200 SIEVE	GRAVELS MORE THAN HALF COARSE FRACTION IS LARGER THAN NO. 4 SIEVE	CLEAN GRAVELS WITH LITTLE OR NO FINES	GW	WELL GRADED GRAVELS, GRAVEL-SAND MIXTURES
			GP	POORLY GRADED GRAVELS, GRAVEL-SAND MIXTURES
		GRAVELS WITH OVER 12 % FINES	GM	SILTY GRAVELS, POORLY GRADED GRAVEL-SAND-SILT MIXTURES
			GC	CLAYEY GRAVELS, POORLY GRADED GRAVEL-SAND-CLAY MIXTURES
	SANDS MORE THAN HALF COARSE FRACTION IS SMALLER THAN NO. 4 SIEVE	CLEAN SANDS WITH LITTLE OR NO FINES	SW	WELL GRADED SANDS, GRAVELLY SANDS
			SP	POORLY GRADED SANDS, GRAVELLY SANDS
		SANDS WITH OVER 12 % FINES	SM	SILTY SANDS, POORLY GRADED SAND-SILT MIXTURES
			SC	CLAYEY SANDS, POORLY GRADED SAND-CLAY MIXTURES
FINE GRAINED SOILS MORE THAN HALF IS SMALLER THAN NO. 200 SIEVE	SILTS AND CLAYS LIQUID LIMIT LESS THAN 50		ML	INORGANIC SILTS AND VERY FINE SANDS, ROCK FLOUR, SILTY OR CLAYEY FINE SANDS, OR CLAYEY SILTS WITH SLIGHT PLASTICITY
			CL	INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAY
			OL	ORGANIC CLAYS AND ORGANIC SILTY CLAYS OF LOW PLASTICITY
	SILTS AND CLAYS LIQUID LIMIT GREATER THAN 50		MH	INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS FINE, SANDY OR SILTY SOILS, ELASTIC SILTS
			CH	INORGANIC CLAYS OF HIGH PLASTICITY, FAT CLAYS
			OH	ORGANIC CLAYS OF MEDIUM TO HIGH PLASTICITY, ORGANIC SILTS
HIGHLY ORGANIC SOILS			Pt	PEAT AND OTHER HIGHLY ORGANIC SOILS



NOTE:

SOIL CONDITIONS INDICATED BY BORING LOGS APPLY ONLY AT THE LOCATION OF THE PARTICULAR BORING AND AT THE TIME OF DRILLING. SUBSURFACE CONDITIONS MAY DIFFER AT OTHER LOCATIONS AND MAY CHANGE AT THE BORING LOCATION WITH THE PASSAGE OF TIME. DATA PRESENTED IN THE LOGS REPRESENT A SIMPLIFICATION OF THE ACTUAL CONDITIONS ENCOUNTERED.

UNIFIED SOIL CLASSIFICATION, BORING LOG AND WELL CONSTRUCTION SYMBOLS

Shell Oil Company
285 Hegenberger Road
Oakland, California

Project No.
88-44-359-20

Converse Environmental West

Drawing No.
A-1

LOG OF BORING NO. SG-1

DATE DRILLED : 8/6/90	ELEVATION :	W.L. TAKEN :	EQUIPMENT : Hand Auger

DEPTH (FT)	SAMPLE	WATER LEVEL	SYMBOL	MOISTURE	PLASTICITY	COLOR	DESCRIPTION	BLOWS / FOOT	O.V.M. (ppm)	DRY DENSITY (lb / ft³)	TEST
				dry		dark brown tan	Top soil. Gravelly Silts and fine Sands with abundant roots and other organic material				
				moist		gray	Sandy Gravelly Clay GC/CL				
5							Fine to coarse Sand SP				
				wet		black	Silty Clay (last 2") CL				
							Total Depth of Boring at 6 ft - B.G.S.				
10											
15											
20											

CERTIFIED ENGINEERING GEOLOGIST
CHARLES R. COMSTOCK
No. 1010
STATE OF CALIFORNIA

Shell Oil Company
285 Hegenberger Road
Oakland, California

Project No.
88-44-359-20

Converse Environmental West

Drawing No.
A-2

LOG OF BORING NO. SG-2

DATE DRILLED : 8/6/90	ELEVATION :	W.L. TAKEN :	EQUIPMENT : Hand Auger

DEPTH (FT)	SAMPLE	WATER LEVEL	SYMBOL	MOISTURE	PLASTICITY	COLOR	DESCRIPTION	BLOWS / FOOT	O.V.M. (ppm)	DRY DENSITY (lb/ft³)	TEST
							Top soil. Gravelly Silts and fine Sands				
				moist		tan gray	Very fine Sand grading into Silty Clay — SM/CL				
5				moist			Silty Clay — CL Silty Clay grading to Silty very fine Sand — SM				
							Total Depth of Boring at 5.5 ft - B.G.S.				
10											
15											
20											

CERTIFIED ENGINEERING GEOLOGIST
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No. 1010
STATE OF CALIFORNIA

Shell Oil Company
285 Hegenberger Road
Oakland, California

Project No.
88-44-359-20

Converse Environmental West

Drawing No.
A-3

LOG OF BORING NO. SG-3

DATE DRILLED : 8/6/90	ELEVATION :	W.L. TAKEN :	EQUIPMENT : Hand Auger

DEPTH (FT)	SAMPLE	WATER LEVEL	SYMBOL	MOISTURE	PLASTICITY	COLOR	DESCRIPTION	BLOWS / FOOT	O.V.M. (ppm)	DRY DENSITY (lb / ft³)	TEST
							Planter, top soil				
	X			dry to moist		tan	Clayey Sand SC				
5	X			wet		dark gray	Silty Clay CL				
							Total Depth of Boring at 6 ft - B.G.S.				
10											
15											
20											

CERTIFIED ENGINEERING GEOLOGIST
CHARLES R. COMSTOCK
No. 1010
STATE OF CALIFORNIA

Shell Oil Company
285 Hegenberger Road
Oakland, California

Project No.
88-44-359-20

Converse Environmental West

Drawing No.
A-4

LOG OF BORING NO. SG-4

DATE DRILLED: 8/6/90	ELEVATION:	W.L. TAKEN:	EQUIPMENT: Hand Auger

DEPTH (FT)	SAMPLE	WATER LEVEL	SYMBOL	MOISTURE	PLASTICITY	COLOR	DESCRIPTION	BLOWS / FOOT	O.V.M. (ppm)	DRY DENSITY (lb/ft³)	TEST
							Top soil, Sandy Gravel				
	X			dry		red brown	Fine Sands, trace Clay SM				
5	X			moist		black	Fine Sandy Silts SM				
							Total Depth of Boring at 6 ft - B.G.S.				
10											
15											
20											

CERTIFIED ENGINEERING GEOLOGIST
CHARLES R. COMSTOCK
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STATE OF CALIFORNIA

Shell Oil Company
285 Hegenberger Road
Oakland, California

Project No.
88-44-359-20

Converse Environmental West

Drawing No.
A-5

LOG OF BORING NO. SG-5

DATE DRILLED : *8/6/90*	ELEVATION :	W.L. TAKEN :	EQUIPMENT : *Hand Auger*

DEPTH (FT)	SAMPLE	WATER LEVEL	SYMBOL	MOISTURE	PLASTICITY	COLOR	DESCRIPTION	BLOWS / FOOT	O.V.M. (ppm)	DRY DENSITY (lb / ft³)	TEST
							Top soil - Gravel				
				dry		brown	Gravelly Clay GC/CL				
5				moist		gray black	Silty Clay SM/CL				
							Total Depth of Boring at 6 ft - B.G.S.				
10											
15											
20											

CERTIFIED ENGINEERING GEOLOGIST
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Shell Oil Company
285 Hegenberger Road
Oakland, California

Project No.
88-44-359-20

Converse Environmental West

Drawing No.
A-6

LOG OF BORING NO. SG-6

DATE DRILLED : 8/6/90	ELEVATION :	W.L. TAKEN :	EQUIPMENT : Hand Auger

DEPTH (FT)	SAMPLE	WATER LEVEL	SYMBOL	MOISTURE	PLASTICITY	COLOR	DESCRIPTION	BLOWS / FOOT	O.V.M. (ppm)	DRY DENSITY (lb / ft^3)	TEST
				dry		brown	Top soil Sandy Gravel GP				
5				very moist		gray	Coarse Gravel some Sand (cuttings) Coarse Sand (angular) SP				
10							Total Depth of Boring at 6 ft - B.G.S.				
15											
20											

CERTIFIED ENGINEERING GEOLOGIST
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STATE OF CALIFORNIA

Shell Oil Company
285 Hegenberger Road
Oakland, California

Project No.
88-44-359-20

Converse Environmental West

Drawing No.
A-7

LOG OF BORING NO. SG-7

DATE DRILLED : 8/7/90	ELEVATION :	W.L. TAKEN :	EQUIPMENT : Hand Auger

DEPTH (FT)	SAMPLE	WATER LEVEL	SYMBOL	MOISTURE	PLASTICITY	COLOR	DESCRIPTION	BLOWS / FOOT	O.V.M. (ppm)	DRY DENSITY (lb / ft³)	TEST
				dry			Top soil - Gravelly Sand				
	X			moist		dark gray	Gravelly Silt some Sand and Clay SM/GM				
5	X			moist		black	Clay Silty Sand, trace Gravel SM/SC				
							Total Depth of Boring at 6 ft - B.G.S.				
10											
15											
20											

CERTIFIED ENGINEERING GEOLOGIST
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No. 1010
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Shell Oil Company
285 Hegenberger Road
Oakland, California

Project No.
88-44-359-20

Converse Environmental West

Drawing No.
A-8

LOG OF BORING NO. SG-8

DATE DRILLED : 8/7/90	ELEVATION :	W.L. TAKEN :	EQUIPMENT : Hand Auger

DEPTH (FT)	SAMPLE	WATER LEVEL	SYMBOL	MOISTURE	PLASTICITY	COLOR	DESCRIPTION	BLOWS / FOOT	O.V.M. (ppm)	DRY DENSITY (lb/ft³)	TEST
				dry		brown	Top soil - Sandy Gravel				
	X			slightly moist		brown	Sandy Silts some Clay SM				
5	X			moist		black	Silty Sands trace Clay SP				
							Total Depth of Boring at 6 ft - B.G.S.				
10											
15											
20											

CERTIFIED ENGINEERING GEOLOGIST
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No. 1610
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Shell Oil Company
285 Hegenberger Road
Oakland, California

Project No.
88-44-359-20

Converse Environmental West

Drawing No.
A-9

LOG OF BORING NO. SG-9

DATE DRILLED : 8/7/90	ELEVATION :	W.L. TAKEN :	EQUIPMENT : Hand Auger

DEPTH (FT)	SAMPLE	WATER LEVEL	SYMBOL	MOISTURE	PLASTICITY	COLOR	DESCRIPTION	BLOWS / FOOT	O.V.M. (ppm)	DRY DENSITY (lb / ft³)	TEST
						brown	Top soil - fine Sand				
	X			slightly moist		dark brown	Gravelly Sand some Silt trace Clay SP/SM		28		
5	X			moist		dark gray	Silty Sand some Clay SC		10		
							Total Depth of Boring at 6 ft - B.G.S.				
10											
15											
20											

CERTIFIED ENGINEERING GEOLOGIST
CHARLES R. COMSTOCK
No. 1010
STATE OF CALIFORNIA

Shell Oil Company
285 Hegenberger Road
Oakland, California

Project No.
88-44-359-20

Converse Environmental West

Drawing No.
A-10

LOG OF BORING NO. SG-10

DATE DRILLED : 8/7/90	ELEVATION :	W.L. TAKEN :	EQUIPMENT : Hand Auger

DEPTH (FT)	SAMPLE	WATER LEVEL	SYMBOL	MOISTURE	PLASTICITY	COLOR	DESCRIPTION	BLOWS / FOOT	O.V.M. (ppm)	DRY DENSITY (lb / ft^3)	TEST
				dry		brown	Top soil - Sandy Gravel				
	X			moist		brown	Fine Sand. Chunk of wood SP				
5	X			moist		black	Clayey Silt trace Sand SC				
							Total Depth of Boring at 6 ft - B.G.S.				
10											
15											
20											

CERTIFIED ENGINEERING GEOLOGIST
CHARLES P. COMSTOCK
No. 1010
STATE OF CALIFORNIA

Shell Oil Company
285 Hegenberger Road
Oakland, California

Project No.
88-44-359-20

Converse Environmental West

Drawing No.
A-11

LOG OF BORING NO. SG-11

DATE DRILLED : 8/7/90	ELEVATION :	W.L. TAKEN :	EQUIPMENT : Hand Auger

DEPTH (FT)	SAMPLE	WATER LEVEL	SYMBOL	MOISTURE	PLASTICITY	COLOR	DESCRIPTION	BLOWS / FOOT	O.V.M. (ppm)	DRY DENSITY (lb / ft^3)	TEST
							Fill - Sandy Gravel				
	X			dry		brown	Fine Sands trace Silt some Gravel SP				
5	X			moist		black	Clayey Silt SM				
							Total Depth of Boring at 6 ft - B.G.S.				
10											
15											
20											

CERTIFIED ENGINEERING GEOLOGIST
CHARLES R. COMSTOCK
No. 1010
STATE OF CALIFORNIA

Shell Oil Company
285 Hegenberger Road
Oakland, California

Project No.
88-44-359-20

Converse Environmental West

Drawing No.
A-12

LOG OF BORING NO. SG-12

DATE DRILLED : 8/7/90	ELEVATION :	W.L. TAKEN :	EQUIPMENT : Hand Auger/Slide Hammer

DEPTH (FT)	SAMPLE	WATER LEVEL	SYMBOL	MOISTURE	PLASTICITY	COLOR	DESCRIPTION	BLOWS / FOOT	O.V.M. (ppm)	DRY DENSITY (lb/ft^3)	TEST
							Top soil - Sandy Gravel				
				dry		tan	Silty Sand SP/SM				
5				moist		black	Clayey Silt trace Sand SM				
							Total Depth of Boring at 6 ft - B.G.S.				
10											
15											
20											

CERTIFIED ENGINEERING GEOLOGIST
CHARLES R. COMSTOCK
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STATE OF CALIFORNIA

Shell Oil Company
285 Hegenberger Road
Oakland, California

Project No.
88-44-359-20

Converse Environmental West

Drawing No.
A-13

LOG OF BORING NO. SG-13

DATE DRILLED: 8/7/90	ELEVATION:	W.L. TAKEN:	EQUIPMENT: Hand Auger/Slide Hammer Sampler

DEPTH (FT)	SAMPLE	WATER LEVEL	SYMBOL	MOISTURE	PLASTICITY	COLOR	DESCRIPTION	BLOWS / FOOT	O.V.M. (ppm)	DRY DENSITY (lb/ft³)	TEST
							Top soil - Silty Sand				
	X			moist		dark gray	Clayey Silt SM				
5	X			very moist		black	Sandy Silt SM				
							Total Depth of Boring at 6 ft - B.G.S.				
10											
15											
20											

CERTIFIED ENGINEERING GEOLOGIST
CHARLES R. COMSTOCK
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Shell Oil Company
285 Hegenberger Road
Oakland, California

Project No.
88-44-359-20

Converse Environmental West

Drawing No.
A-14

LOG OF BORING NO. SG-14

DATE DRILLED: 9/13/90	ELEVATION:	W.L TAKEN:	EQUIPMENT: Hand Auger

DEPTH (FT)	SAMPLE	WATER LEVEL	SYMBOL	MOISTURE	PLASTICITY	COLOR	DESCRIPTION	BLOWS / 6"	O.V.M. (ppm)	DRY DENSITY (lb/ft³)	TEST
						tan	Sandy Gravel base 6"				
						brown	Coarse Gravel GP				
				moist	loose		Sandy Gravel/Gravelly Sand SP/GP				
	1							5			
								8			
5							Silty Clay CH				
	2			wet	soft	black	Sandy Silt (last 2") ML	3			
								4			
							Total Depth of Boring at 6 ft				
10											
15											
20											

REGISTERED PROFESSIONAL GEOLOGIST
JAY A. ACH
No. 4595
STATE OF CALIFORNIA

Shell Oil Company
285 Hegenberger Road
Oakland, California

Project No.
88-44-359-20

Converse Environmental West

Drawing No.
A-15

LOG OF BORING NO. SG-15

DATE DRILLED : 9/13/90	ELEVATION :	W.L. TAKEN :	EQUIPMENT : Hand Auger

DEPTH (FT)	SAMPLE	WATER LEVEL	SYMBOL	MOISTURE	PLASTICITY	COLOR	DESCRIPTION	BLOWS/6"	O.V.M. (ppm)	DRY DENSITY (lb/ft³)	TEST
							Sandy Gravel base GP				
	1			slightly moist	medium dense	brown	Fine to coarse Sand SP	8 9			
5				moist	soft	black	Silty Clay CH				
	2				medium	black	Silty Sand SM	4 4			
							Total Depth of Boring at 6 ft				
10											
15											
20											

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Shell Oil Company
285 Hegenberger Road
Oakland, California

Project No.
88-44-359-20

Converse Environmental West

Drawing No.
A-16

LOG OF BORING NO. SG-16

DATE DRILLED : 9/13/90	ELEVATION :	W.L. TAKEN :	EQUIPMENT : Hand Auger

DEPTH (FT)	SAMPLE	WATER LEVEL	SYMBOL	MOISTURE	PLASTICITY	COLOR	DESCRIPTION	BLOWS / 6"	O.V.M. (ppm)	DRY DENSITY (lb / ft^3)	TEST
							Sandy Gravel base GP				
	1			moist	soft	brown black	Clayey Silt mixed with fine Sand ML/SP	4 3			
5	2			v. moist		black	Silty Sand ML	4 3			
							Total Depth of Boring at 6 ft				
10											
15											
20											

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285 Hegenberger Road
Oakland, California

Project No.
88-44-359-20

Converse Environmental West

Drawing No.
A-17

LOG OF BORING NO. SG-17

DATE DRILLED : 9/13/90	ELEVATION :	W.L. TAKEN :	EQUIPMENT : Hand Auger

DEPTH (FT)	SAMPLE	WATER LEVEL	SYMBOL	MOISTURE	PLASTICITY	COLOR	DESCRIPTION	BLOWS / 6"	O.V.M. (ppm)	DRY DENSITY (lb/ft³)	TEST
							Concrete 6"				
				moist	loose	black	Sandy Silt, trace Gravel ML				
	1							3 3			
5				v. moist to wet	loose	black	Silty Sand, some Gravel SM				
	2							3 1			
							Total Depth of Boring at 6 ft				
10											
15											
20											

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Shell Oil Company
285 Hegenberger Road
Oakland, California

Project No.
88-44-359-20

Converse Environmental West

Drawing No.
A-18

Cambria Environmental Technology, Inc.
1144 - 65th St.
Oakland, CA 94608
Telephone: (510) 420-0700
Fax: (510) 420-9170

BORING/WELL LOG

CLIENT NAME	Equiva Services LLC	BORING/WELL NAME	SB-1
JOB/SITE NAME	Oakland 285	DRILLING STARTED	18-Mar-99
LOCATION	285 Hegenberger Road, Oakland, California	DRILLING COMPLETED	18-Mar-99
PROJECT NUMBER	241-0734	WELL DEVELOPMENT DATE (YIELD)	NA
DRILLER	Gregg Drilling	GROUND SURFACE ELEVATION	Not Surveyed
DRILLING METHOD	Hydraulic push	TOP OF CASING ELEVATION	NA
BORING DIAMETER	2"	SCREENED INTERVAL	NA
LOGGED BY	M. Pavoa	DEPTH TO WATER (First Encountered)	6.0 ft (18-Mar-99)
REVIEWED BY		DEPTH TO WATER (Static)	NA
REMARKS	Hand augered to 9.5' bgs.		

TPHg (mg/kg)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (ft bgs)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (ft bgs)	BORING BACKFILL
		SB-1 -5.5'		5	SC		Gravelly Clayey SAND; (SC); brown; 20% clay, 10% silt, 50% sand, 20% gravel; low plasticity; high estimated permeability. @ 5' - wet.	7.0	Portland Type I/II
		SB-1 -10.0'		10	CL		Sandy CLAY; (CL); green to brown; wet; 50% clay, 10% silt, 30% sand, 10% gravel; medium plasticity; low estimated permeability.	11.5	Bottom of Boring @ 11.5 ft

BOR LOG (TPH-G) G:\OAKLAND\285.GPJ DEFAULT GDT 4/26/00

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BORING/WELL LOG

CLIENT NAME	Equiva Services LLC	BORING/WELL NAME	SB-2
JOB/SITE NAME	Oakland 285	DRILLING STARTED	18-Mar-99
LOCATION	285 Hegenberger Road, Oakland, California	DRILLING COMPLETED	18-Mar-99
PROJECT NUMBER	241-0734	WELL DEVELOPMENT DATE (YIELD)	NA
DRILLER	Gregg Drilling	GROUND SURFACE ELEVATION	Not Surveyed
DRILLING METHOD	Hydraulic push	TOP OF CASING ELEVATION	NA
BORING DIAMETER	2"	SCREENED INTERVAL	NA
LOGGED BY	M. Paves	DEPTH TO WATER (First Encountered)	5.0 ft (18-Mar-99)
REVIEWED BY		DEPTH TO WATER (Static)	6.50 ft
REMARKS	Hand augered to 6' bgs.		

TPHg (mg/kg)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (ft bgs)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (ft bgs)	BORING BACKFILL
							ASPHALT.	0.5	
							SAND: (FILL); brown.		
							@ 1' - Silty SAND (FILL).		
								3.0	
					SP		Gravelly SAND: (SP); greenish brown; moist; 10% clay,	3.5	
					CL		10% silt, 50% sand, 30% gravel; low plasticity; high estimated permeability.		
				5			Gravelly Sandy CLAY: (CL); greenish brown; moist;	5.0	
		SB-2 -6.0'			SP		50% clay, 10% silt, 20% sand, 20% gravel; medium plasticity; moderate estimated permeability.		
							Gravelly Silty SAND: (SP); dark brown; wet; 10% clay,	7.5	Portland Type I/II
		SB-2 -7.5'			SP		20% silt, 50% sand, 20% gravel; low plasticity; high estimated permeability.		
							Gravelly SAND: (SP); light brown; wet; 10% clay, 10%	9.5	
				10			silt; 50% sand, 30% gravel; low plasticity; high estimated permeability.		
		SB-2 -10.0'			CH		Silty CLAY: (CH); gray; moist; 60% clay, 30% silt, 10% sand; high plasticity; low estimated permeability.		
		SB-2 -11.5'					No Recovery.	12.0	
				15				15.0	Bottom of Boring @ 15 ft

BOR LOG (TPH-G) 5:\OA\191C-1\GINT\OAKLAND285.GPJ DEFAULT.GDT 4/26/00

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BORING/WELL LOG

CLIENT NAME	Equiva Services LLC	BORING/WELL NAME	SB-3
JOB/SITE NAME	Oakland 285	DRILLING STARTED	16-Mar-99
LOCATION	285 Hegenberger Road, Oakland, California	DRILLING COMPLETED	16-Mar-99
PROJECT NUMBER	241-0734	WELL DEVELOPMENT DATE (YIELD)	NA
DRILLER	Gregg Drilling	GROUND SURFACE ELEVATION	Not Surveyed
DRILLING METHOD	Hydraulic push	TOP OF CASING ELEVATION	NA
BORING DIAMETER	2"	SCREENED INTERVAL	NA
LOGGED BY	M. Paves	DEPTH TO WATER (First Encountered)	6.0 ft (16-Mar-99) ▽
REVIEWED BY		DEPTH TO WATER (Static)	NA ▼
REMARKS	Hand augered to 5' bgs.		

TPHg (mg/kg)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (ft bgs)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (ft bgs)	BORING BACKFILL
							ASPHALT.	0.4	
							Sandy FILL: (FILL); dry; light brown.		
							@ 2' - green; 10% clay, 10% silt, 50% sand, 30% gravel; low plasticity; high estimated permeability.	3.5	
					GP		Sandy GRAVEL; (GP); dry; 10% silt, 30% sand, 60% gravel; low plasticity; high estimated permeability.	5.0	
				5			No recovery. ▽	6.0	
					SP		Gravelly SAND; (GP); green; wet; 5% clay, 10% silt, 50% sand, 35% gravel; low plasticity; high estimated permeability.	7.3	
		SB-3 -7.0'			CL		Sandy Gravelly CLAY; (CL); greenish gray; wet; 50% clay, 10% silt, 20% sand, 20% gravel; medium plasticity; moderate estimated permeability.	8.8	Portland Type I/II
		SB-3 -8.5'			SP		Gravelly SAND; (SP); wet.	10.3	
		SB-3 -10.0'		10	CL		Silty Sandy CLAY; (CL); greenish gray; wet; 50% clay, 20% silt, 20% sand, 10% gravel; medium plasticity; moderate estimated permeability.	11.0	
		SB-3 -11.0'			CH		Silty CLAY; (CL); gray; stiff; moist; 60% clay, 30% silt, 10% sand; high plasticity; low estimated permeability.	14.0	
		SB-3 -14.5'		15	CL		Gravelly Sandy CLAY; (CL); brownish gray; moist; 50% clay, 30% sand, 20% gravel; low plasticity; low to moderate estimated permeability.	16.0	
		SB-3 -16.5'			CH		Silty CLAY; (CH); green brown; moist; 60% clay, 30% silt, 10% sand; high plasticity; low estimated permeability.	17.0	Bottom of Boring @ 17 ft

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