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

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

November 21, 2008

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

Subject: Fuel Leak Case No. RO0002855 and Geotracker Global ID T0600115417, Shell #13-5693, 3600 Park Blvd., Oakland, CA 94610

Dear Mr. Brown:

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 remain in soil at concentrations up to 180 ppm.
- MTBE remains in shallow groundwater at concentrations up to 21 ppb.

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

Sincerely,

Donna L. Drogos, P.E.
LOP and Toxics Program Manager

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

cc:

Ms. Cherie McCaulou (w/enc)
SF- Regional Water Quality Control Board
1515 Clay Street, Suite 1400
Oakland, CA 94612

Closure Unit (w/enc)
State Water Resources Control Board
UST Cleanup Fund
P.O. Box 944212
Sacramento, CA 94244-2120

Mr. Leroy Griffin (w/enc)
City of Oakland Fire Department
250 Frank Ogawa Plaza
Suite 3341
Oakland, CA 94612

Mr. Peter Schaefer (w/o enc)
Conestoga-Rovers & Associates
5900 Hollis Street, Suite A
Emeryville, CA 94608

Ms. Ana Friel (w/o enc)
Conestoga-Rovers & Associates
19449 Riverside Drive, Suite 230
Sonoma, CA 95476

Jerry Wickham (w/orig enc), D. Drogos (w/enc), File (w/enc)

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REMEDIAL ACTION COMPLETION CERTIFICATION

November 21, 2008

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

Subject: Fuel Leak Case No. RO0002855 and Geotracker Global ID T0600115417, Shell #13-5693, 3600 Park Blvd., Oakland, CA 94610

Dear Mr. Brown:

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 25296.10 of the Health and Safety Code and with corrective action regulations adopted pursuant to Section 25299.3 of the Health and Safety Code and that no further action related to the petroleum release(s) at the site is required.

This notice is issued pursuant to subdivision (h) of Section 25296.10 of the Health and Safety Code. Please contact our office if you have any questions regarding this matter.

Sincerely,

Anu Levi
Director
Alameda County Environmental Health

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

I. AGENCY INFORMATION

Date: September 10, 2008

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 #13-5689		
Site Facility Address: 3600 Park Blvd, Oakland, CA 94610		
RB Case No.: ---	Local Case No.: ---	LOP Case No.: RO0002855
URF Filing Date: March 5, 1998 and August 24, 2004	Geotracker ID: T0600115417	APN: 023-0476-021-01

Responsible Parties	Addresses	Phone Numbers
Denis Brown, Shell Oil Products US	20945 S Wilmington Ave Carson, CA 90810-1039	707-865-0251

Tank I.D. No	Size in Gallons	Contents	Closed In Place/Removed?	Date
1	10,000	Gasoline	---	---
2	10,000	Gasoline	---	---
3	10,000	Gasoline	---	---
Piping			Dispensers upgraded	2/1998 and 6/2004

III. RELEASE AND SITE CHARACTERIZATION INFORMATION

Cause and Type of Release: Unknown. Soil staining and odor observed in soil beneath dispensers during dispenser upgrade.		
Site characterization complete? Yes	Date Approved By Oversight Agency: -----	
Monitoring wells installed? Yes	Number: 4	Proper screened interval? Yes
Highest GW Depth Below Ground Surface: 3.49'	Lowest Depth: 17.08'	Flow Direction: West to northwest
Most Sensitive Current Use: Potential drinking water source.		

Summary of Production Wells in Vicinity: No water-producing wells reported within ½ mile.	
Are drinking water wells affected? No	Aquifer Name: East Bay Plain
Is surface water affected? No	Nearest SW Name: Central Reservoir is approximately 3,000 feet southeast of site
Off-Site Beneficial Use Impacts (Addresses/Locations): None	
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
Tank	----	----	----
Piping	---	---	----
Free Product	----	----	----
Soil	5 cubic yards	Soil disposed at Forward Landfill in Manteca, CA	9/7/2004
Groundwater	12,000 gallons	Disposed off-site at Shell Martinez Refinery, Martinez, California	08/2004 to 09/2004

MAXIMUM DOCUMENTED CONTAMINANT CONCENTRATIONS BEFORE AND AFTER CLEANUP
(Please see Attachments 1 through 5 for additional information on contaminant locations and concentrations)

Contaminant	Soil (ppm)		Water (ppb)	
	Before	After	Before	After
TPH (Gas)	2,703[1]	180[2]	1,330[3]	<50[4]
TPH (Diesel)	Not analyzed	Not analyzed	Not analyzed	Not analyzed
Oil and Grease	Not analyzed	Not analyzed	Not analyzed	Not analyzed
Benzene	1.3[1]	<0.5[2]	0.86[5]	<0.5[4]
Toluene	20[1]	<0.5[2]	<25[5]	<1[4]
Ethylbenzene	11[1]	<0.5[2]	<25[5]	<1[4]
Xylenes	78[1]	<0.5[5]	<50[5]	<1[4]
Heavy Metals (Cd, Cr, Pb, Ni, Zn)	Not analyzed	Not analyzed	Not analyzed	Not analyzed
MTBE	49[1, a]	0.48[5, b]	3,800[5, c]	21[4, d]
Other (8240/8270)	Not analyzed	Not analyzed	Not analyzed	Not analyzed

a 49 ppm MTBE, TAME, ETBE, DIPE, TBA, EDB, and 1,2-DCA Not Analyzed.

b 0.48 ppm MTBE, <0.025 ppm TAME, <0.025 ppm ETBE, <0.05 ppm DIPE, 0.96 ppm TBA, <0.025 ppm EDB, and <0.025 ppm 1,2-DCA

c 3,800 ppb MTBE, <100 ppb TAME, <100 ppb ETBE, <100 ppb DIPE, 310 ppb TBA, <25 ppb EDB, and <25 ppb 1,2-DCA

d 21 ppb MTBE, <2 ppb TAME, <2 ppb ETBE, <2 ppb DIPE, <10 ppb TBA, <1 ppb EDB, and <0.5 ppb 1,2-DCA

1 Sampled February 20, 1998

2 Sampled August 20, 2004

3 Sampled January 24, 2006

4 Sampled April 8, 2008

5 Sampled January 3 & 4, 2006

Site History and Description of Corrective Actions:

In February 1998, secondary containment was added to the existing dispensers and turbine sumps. Soil staining and odor was observed beneath dispensers D-1 and D-2; no soil staining or odor was observed beneath dispensers D-3 and D-4. A total of three soil samples were collected beneath dispensers D-1 and D-2; no soil samples were collected beneath dispensers D-3 and D-4. One soil sample collected at a depth of 2 feet bgs beneath dispenser D-1 contained 930 ppm TPHg and 49 ppm MTBE. Soil samples collected at depths of 2 and 5 feet bgs beneath D-2 contained 2,703 and 180 ppm TPHg, respectively. Benzene was detected in all 3 of the soil samples at concentrations ranging from 1.0 to 1.3 ppm.

The fuel dispensers were upgraded again in June and July 2004. Soil samples were collected at depth of 4 to 5 feet bgs beneath each of the 4 dispensers. TPHg was detected in 2 of the 4 soil samples at a maximum concentration of 180 ppm. Benzene, toluene, ethylbenzene and MTBE were not detected in the 4 soil samples. Xylenes were detected in one soil sample at a concentration of 2.3 ppm.

On January 3 and 4, 2006, eight soil borings (SB-1 to SB-8) were advanced for the collection of soil and grab groundwater samples. TPHg was detected in 4 of 40 soil samples at a maximum concentration of 150 ppm. MTBE was detected in 22 of 40 soil samples at a maximum concentration of 0.65 ppm. TBA was detected in 13 of 40 soil samples at a maximum concentration of 0.96 ppm. BTEX and other fuel oxygenates were not detected in any of the soil samples. MTBE and TBA were detected in the grab groundwater samples at concentrations up to 3,800 ppb and 310 ppb, respectively. The highest concentrations of MTBE and TBA were detected in depth-discrete grab groundwater samples collected from soil boring SB-8. Four of the soil borings (SB-2, SB-4, SB-7, and SB-8) were converted into monitoring wells.

Quarterly groundwater sampling was conducted in the four monitoring wells from January 24, 2006 through April 8, 2008. The concentration of TPHg in groundwater from MW-4, which is the well nearest the dispensers, decreased from 1,330 ppb on January 24, 2008 to less than 50 ppb on April 8, 2008. The concentration of MTBE detected in groundwater from downgradient well MW-8 decreased from 592 ppb on January 24, 2008 to 19 ppb on April 8, 2008.

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, it does not appear that the release would present a risk to human health based upon current land use and conditions.		
Site Management Requirements: None		
Should corrective action be reviewed if land use changes? No		
Was a deed restriction or deed notification filed? No		**Date Recorded:** --
Monitoring Wells Decommissioned: No	**Number Decommissioned:** 0	**Number Retained:** 4
List Enforcement Actions Taken: None		
List Enforcement Actions Rescinded: --		

V. ADDITIONAL COMMENTS, DATA, ETC.

Considerations and/or Variances:

No soil vapor sampling was conducted for site. Based on the apparent absence of BTEX in soil and groundwater samples, soil vapor sampling does not appear to be necessary.

Conclusion:

Alameda County Environmental Health staff believe that the levels of residual contamination do not pose a significant threat to water resources, public health and safety, and the environment based upon the information available in our files to date. No further investigation or cleanup is necessary. ACEH staff recommend case closure for this site.

VI. LOCAL AGENCY REPRESENTATIVE DATA

Prepared by: Jerry Wickham	**Title:** Senior Hazardous Materials Specialist
Signature: Jerry Wickham	**Date:** 09/10/08
Approved by: Donna L. Drogos, P.E.	**Title:** Supervising Hazardous Materials Specialist
Signature:	**Date:** 09/10/08

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
RB Response: Concur, based solely upon information contained in this case closure summary.	**Date Submitted to RB:** 9/10/08
Signature: Cherie McCaulou	**Date:** 9/12/08

VIII. MONITORING WELL DECOMMISSIONING

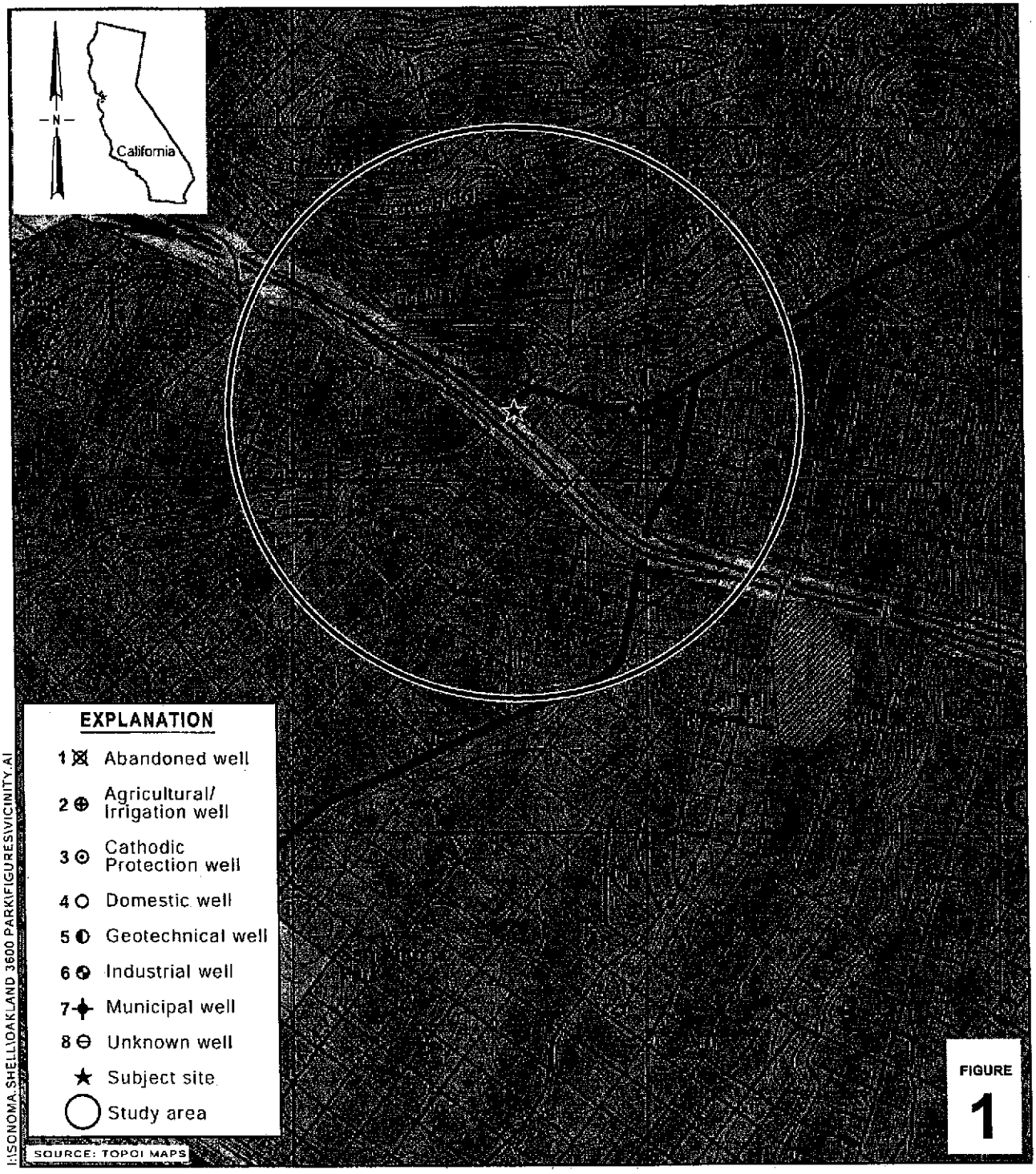
Date Requested by ACEH: 09/18/08	Date of Well Decommissioning Report: 11/18/08	
All Monitoring Wells Decommissioned: (Yes) No	Number Decommissioned: 4	Number Retained: Ø
Reason Wells Retained: N/A		
Additional requirements for submittal of groundwater data from retained wells: None		
ACEH Concurrence - Signature: Jerry Wickham		Date: 11/21/08

Attachments:

1. Site Vicinity Map (1 page)
2. Groundwater Contour and Concentration Map and Site Plan with Soil and Groundwater Concentrations (2 pages)
3. Well and Boring Data and Groundwater Elevation Contour Map (2 pages)
4. Soil Analytical Data (3 pages)
5. Groundwater Analytical Data (4 pages)
6. Boring Logs (11 pages)

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

08/07/07



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Shell-branded Service Station
3600 Park Boulevard
Oakland, California

CONESTOGA-ROVERS & ASSOCIATES

Vicinity Map

ATTACHMENT 1

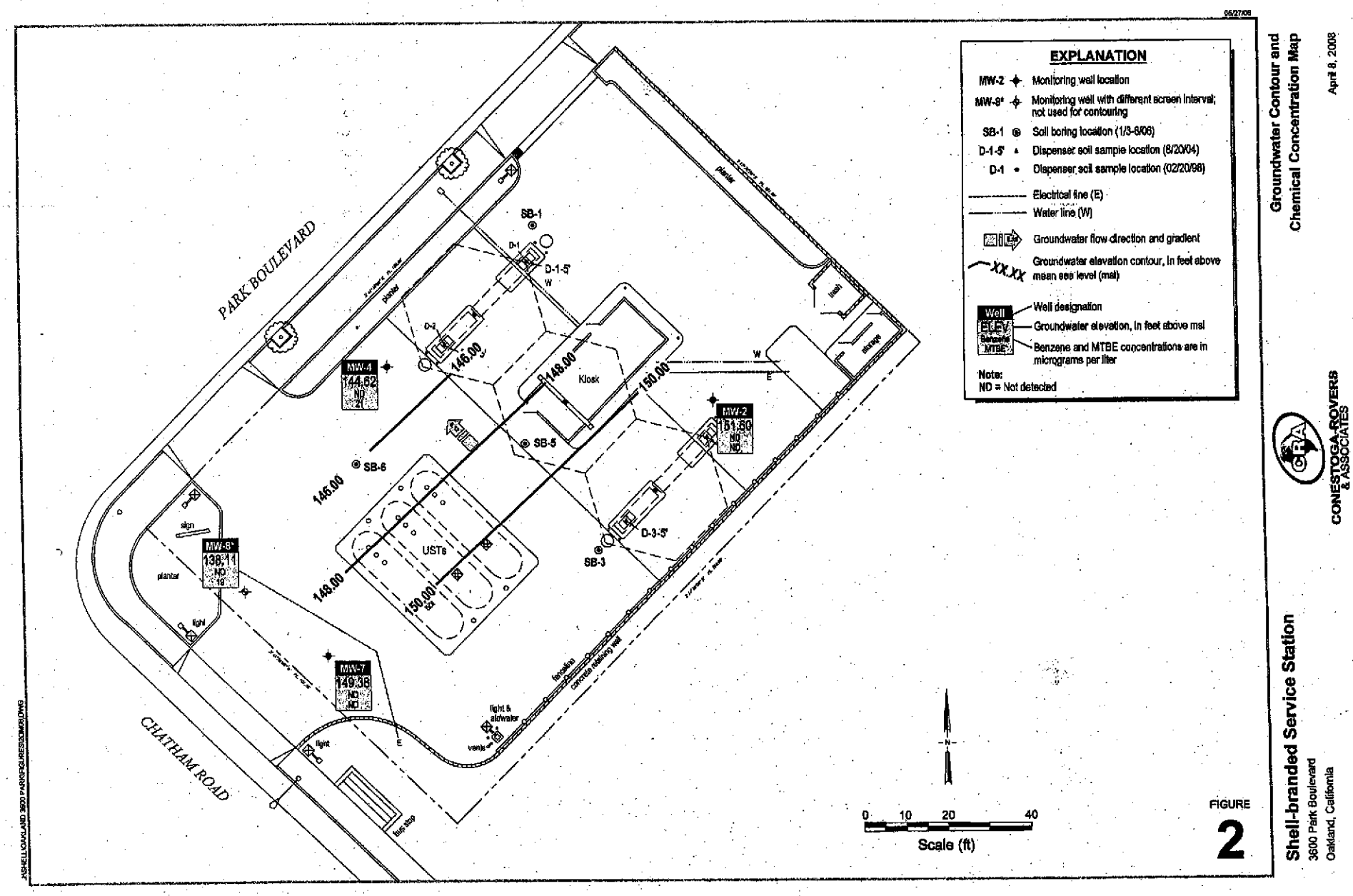

FIGURE
2

Groundwater Contour and Chemical Concentration Map

Shell-branded Service Station
3600 Park Boulevard
Oakland, California

April 8, 2008

CONESTOGA-ROVERS & ASSOCIATES

ASHELL\OAKLAND 3600 PARK\FIGURES\3600R01W6

ATTACHMENT 2

02/28/06

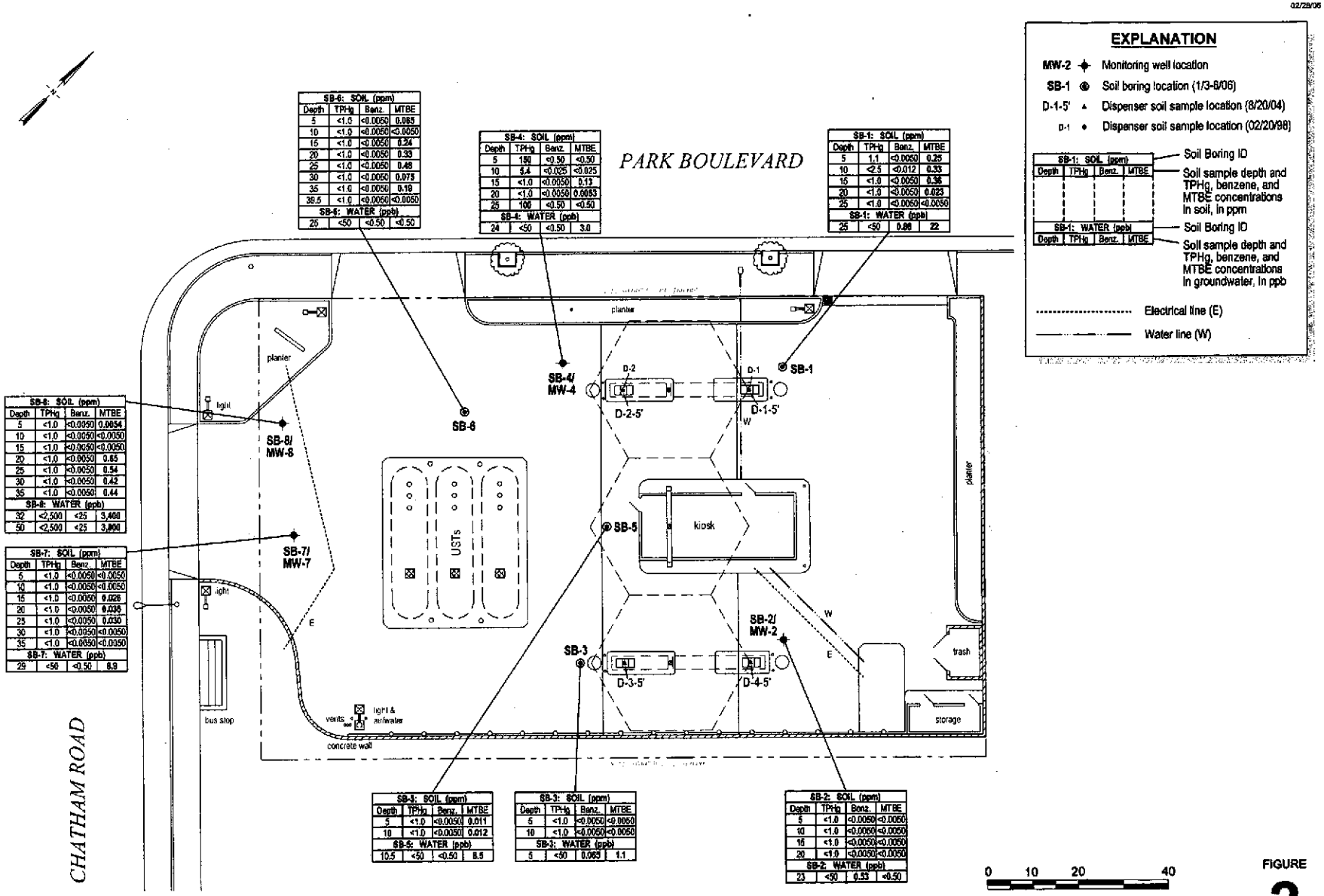

FIGURE
2

Site Plan with Soil and Groundwater Chemical Concentrations

Shell-branded Service Station
3600 Park Boulevard
Oakland, California
Incident No.98995747

CAMBRIA

G:\OAKLAND 3600 PARK\FIGURES\SITE PLAN 1-06.DWG

D:\OAKLAND 3600 PARK\FIGURES\1DM06.DWG

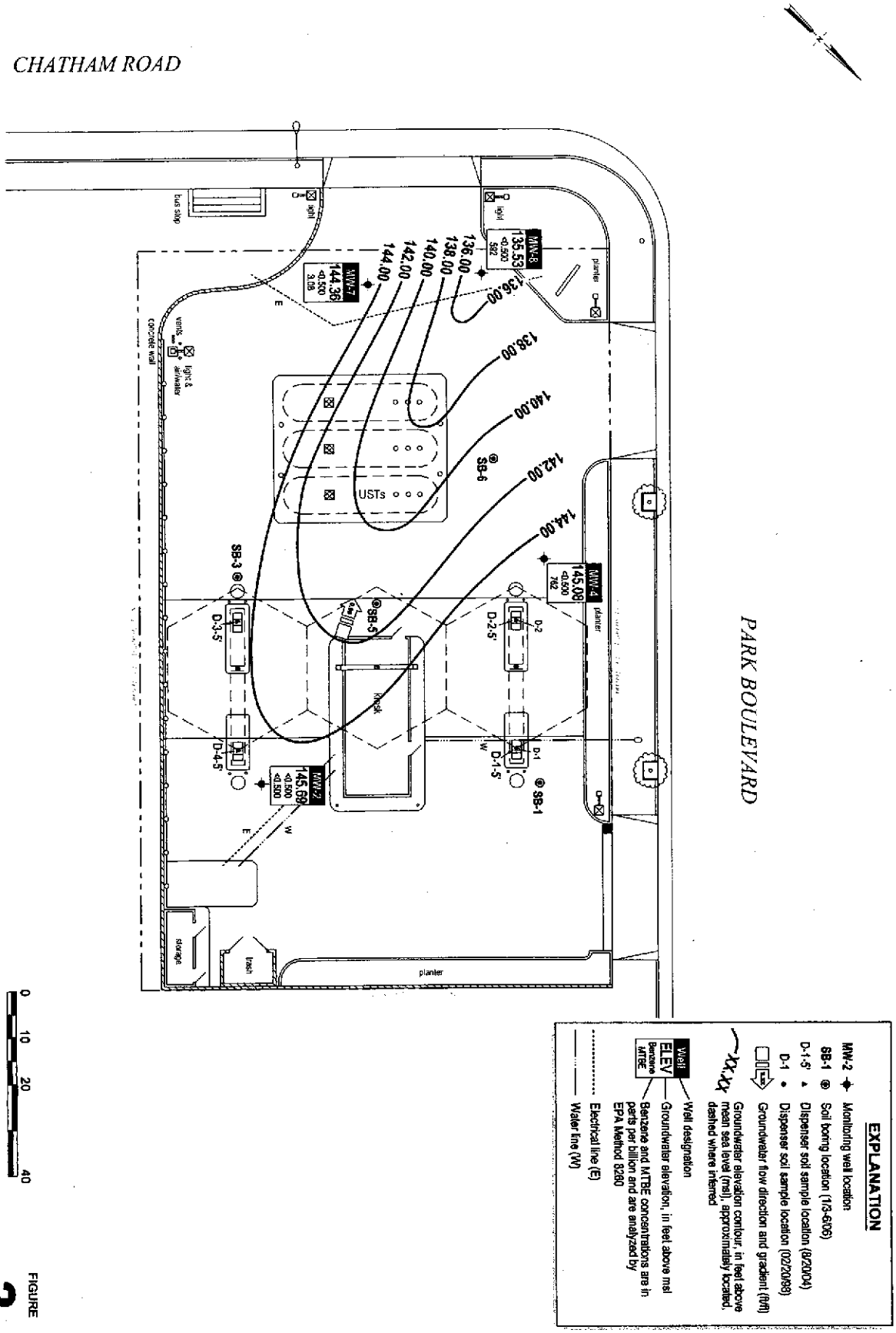

FIGURE 3

Shell-branded Service Station
3600 Park Boulevard
Oakland, California
Incident No.98995747

CAMBRIA

Groundwater Elevation Contour Map

January 24, 2006

Table 1. Well and Boring Data, Shell-branded Service Station, 3600 Park Boulevard, Oakland, California

Name	Type	Boring Date	TOC Elev (ft msl)	Total Depth (fbg)	Soil Sampling Interval (ft)	First Encountered Groundwater Depth (fbg)	First Encountered Groundwater Elev (ft msl)	Screen Diam. (in)	Screen Depth (fbg) Top	Screen Depth (fbg) Bottom
SB-1	3" Geoprobe boring	1/4/2006	-	28	5	25	-	-	-	-
MW-2	3" Geoprobe boring converted to 4" monitoring well	1/3/2006	156.92	30	5	24	145.69	4	20	30
SB-3	3" Geoprobe boring	1/3/2006	-	12	5	8 (a)	-	-	-	-
MW-4	3" Geoprobe boring converted to 4" monitoring well	1/3/2006	155.00	30	5	24	145.08	4	20	30
SB-5	3" Geoprobe boring	1/3/2006	-	12	5	8 (a)	-	-	-	-
SB-6	3" Geoprobe boring	1/3/2006	-	40	5	39	-	-	-	-
MW-7	3" Geoprobe boring converted to 4" monitoring well	1/4/2006	154.00	40	5	35	144.36	4	28	38
MW-8	3" Geoprobe boring converted to 4" monitoring wel	1/4/2006	152.61	50	5	33	135.53	4	40	50

Abbreviations:
ft msl = Feet referenced to mean sea level
TOC = Top of casing
fbg = feet below grade
a = perched water zone, possibly the result of leaking water pipe on property

ATTACHMENT 3

Table 2. Historical Soil Analytical Results - Shell-branded Service Station, 3600 Park Blvd., Oakland, California,

Sample ID	Depth (fbg)	Date Sampled	TPHg	Benzene	Toluene	Ethylbenzene	Xylenes	TBA	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB
			(ppm) parts per million											
D-1	2	2/20/1998	**930**	**1.0**	**20**	**11**	**78**	—	**49**	—	—	—	—	—
D-2	2	2/20/1998	**2,703**	**1.2**	**1.1**	**1.9**	**14**	—	**4.5**	—	—	—	—	—
D-2	5	2/20/1998	**180**	**1.3**	**0.46**	**1.7**	**4.0**	—	**1.6**	—	—	—	—	—
D-1-5'	5	8/20/2004	**180**	<0.50	<0.50	<0.50	**2.3**	—	<0.50	—	—	—	—	—
D-2-5'	5	8/20/2004	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	—	<0.0050	—	—	—	—	—
D-3-5'	5	8/20/2004	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	—	<0.0050	—	—	—	—	—
D-4-5'	5	8/20/2004	**30**	<0.0050	<0.0050	<0.0050	<0.0050	—	<0.0050	—	—	—	—	—
SB-1-5	5	1/3/2006	**1.1**	<0.0050	<0.0050	<0.0050	<0.0050	**0.27**	**0.25**	<0.010	<0.0050	<0.0050	<0.0050	<0.0050
SB-1-10	10	1/3/2006	<2.5	<0.012	<0.012	<0.012	<0.012	**0.37**	**0.33**	<0.025	<0.012	<0.012	<0.012	<0.012
SB-1-15	15	1/3/2006	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.010	**0.36**	<0.010	<0.0050	<0.0050	<0.0050	<0.0050
SB-1-20	20	1/3/2006	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.010	**0.023**	<0.010	<0.0050	<0.0050	<0.0050	<0.0050
SB-1-25	25	1/3/2006	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050
SB-2-5	5	1/3/2006	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050
SB-2-10	10	1/3/2006	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050
SB-2-15	15	1/3/2006	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050
SB-2-20	20	1/3/2006	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050
SB-3-5	5	1/3/2006	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050
SB-3-10	10	1/3/2006	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050
SB-4-5	5	1/3/2006	**150**	<0.50	<0.50	<0.50	<0.50	<2.5	<0.50	<1.0	<0.50	<0.50	<0.50	<0.50
SB-4-10	10	1/3/2006	**5.4**	<0.025	<0.025	<0.025	<0.025	**0.092**	<0.025	<0.050	<0.025	<0.025	<0.025	<0.025

ATTACHMENT 4

Table 2. Historical Soil Analytical Results - Shell-branded Service Station, 3600 Park Blvd., Oakland, California,

Sample ID	Depth (fbg)	Date Sampled	TPHg	Benzene	Toluene	Ethylbenzene	Xylenes	TBA	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB
			(ppm) parts per million											
SB-4-15	15	1/3/2006	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	**0.030**	**0.13**	<0.010	<0.0050	<0.0050	<0.0050	<0.0050
SB-4-20	20	1/3/2006	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.010	**0.0053**	<0.010	<0.0050	<0.0050	<0.0050	<0.0050
SB-4-25	25	1/3/2006	**100**	<0.50	<0.50	<0.50	<0.50	<2.5	<0.50	<1.0	<0.50	<0.50	<0.50	<0.50
SB-5-5	5	1/3/2006	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.010	**0.011**	<0.010	<0.0050	<0.0050	<0.0050	<0.0050
SB-5-10	10	1/3/2006	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.010	**0.012**	<0.010	<0.0050	<0.0050	<0.0050	<0.0050
SB-6-5	5	1/3/2006	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	**0.96**	**0.0085**	<0.010	<0.0050	<0.0050	<0.0050	<0.0050
SB-6-10	10	1/3/2006	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050
SB-6-15	15	1/3/2006	<5.0	<0.025	<0.025	<0.025	<0.025	<0.050	**0.24**	<0.050	<0.025	<0.025	<0.025	<0.025
SB-6-20	20	1/3/2006	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	**0.032**	**0.33**	<0.010	<0.0050	<0.0050	<0.0050	<0.0050
SB-6-25	25	1/3/2006	<5.0	<0.025	<0.025	<0.025	<0.025	<0.050	**0.48**	<0.050	<0.025	<0.025	<0.025	<0.025
SB-6-30	30	1/3/2006	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.010	**0.075**	<0.010	<0.0050	<0.0050	<0.0050	<0.0050
SB-6-35	35	1/3/2006	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	**0.018**	**0.19**	<0.010	<0.0050	<0.0050	<0.0050	<0.0050
SB-6-39.5	39.5	1/3/2006	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050
SB-7-5	5	1/4/2006	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050
SB-7-10	10	1/4/2006	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050
SB-7-15	15	1/4/2006	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	**0.32**	**0.026**	<0.010	<0.0050	<0.0050	<0.0050	<0.0050
SB-7-20	20	1/4/2006	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.010	**0.035**	<0.010	<0.0050	<0.0050	<0.0050	<0.0050
SB-7-25	25	1/4/2006	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	**0.032**	**0.030**	<0.010	<0.0050	<0.0050	<0.0050	<0.0050
SB-7-30	30	1/4/2006	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050
SB-7-35	35	1/4/2006	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050

Table 2. Historical Soil Analytical Results - Shell-branded Service Station, 3600 Park Blvd., Oakland, California,

Sample ID	Depth (fbg)	Date Sampled	TPHg	Benzene	Toluene	Ethylbenzene	Xylenes	TBA	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB
			← (ppm) parts per million →											
SB-8-5	5	1/4/2006	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.010	**0.0054**	<0.010	<0.0050	<0.0050	<0.0050	<0.0050
SB-8-10	10	1/4/2006	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050
SB-8-15	15	1/4/2006	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050
SB-8-20	20	1/4/2006	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	**0.17**	**0.65**[a]	<0.010	<0.0050	<0.0050	<0.0050	<0.0050
SB-8-25	25	1/4/2006	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	**0.017**	**0.54**[a]	<0.010	<0.0050	<0.0050	<0.0050	<0.0050
SB-8-30	30	1/4/2006	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	**0.034**	**0.42**[a]	<0.010	<0.0050	<0.0050	<0.0050	<0.0050
SB-8-35	35	1/4/2006	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	**0.027**	**0.44**[a]	<0.010	<0.0050	<0.0050	<0.0050	<0.0050

Abbreviations and Notes:

TPHg = Total petroleum hydrocarbons as gasoline analyzed by EPA Method 8260B; prior to 2004, analyzed by EPA Mehtod 8015

Benzene, toluene, ethylbenzene, and xylenes analyzed by EPA Method 8260B; prior to 2004, analyzed by EPA Method 8020

TBA = Tert-butyl alcohol analyzed by EPA Method 8260B.

MTBE = methyl tertiary butyl ether analyzed by EPA Method 8260B; prior to 2004, analyzed by EPA Method 8020

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

ETBE = ethyl tert butyl ether analyzed by EPA Method 88260b.

TAME = Tert-amyl methyl ether analyzed by EPA Method 8260B.

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

EDB = 1,2-dibromomethane analyzed by EPA Method 8260B.

fbg = Feet below grade

--- = Not analyzed

a = Estimated value. The concentration exceeded the calibration of analysis.

Table 3. Grab Groundwater Analytical Results - Shell-branded Service Station, 3600 Park Blvd., Oakland, California

Sample	Date Sampled	Depth (fbg)	TPHg µg/L	Benzene µg/L	Toluene µg/L	Ethylbenzene µg/L	Xylenes µg/L	TBA µg/L	MTBE µg/L	DIPE µg/L	ETBE µg/L	TAME µg/L	1,2-DCA µg/L	EDB µg/L
			← (ppb) parts per billion →											
SB-1-25W	1/4/2006	25	<50	**0.86**	<0.50	<0.50	<1.0	<5.0	**22**	<2.0	<2.0	<2.0	<0.50	<0.50
SB-2-23W	1/3/2006	23	<50	**0.53**	<0.50	<0.50	<1.0	<5.0	<0.50	<2.0	<2.0	<2.0	<0.50	<0.50
SB-3-5W	1/3/2006	5.5	<50	**0.065**	<0.50	<0.50	<1.0	<5.0	**1.1**	<2.0	<2.0	<2.0	<0.50	<0.50
SB-4-24W	1/3/2006	24	<50	<0.50	<0.50	<0.50	<1.0	<5.0	**3.0**	<2.0	<2.0	<2.0	<0.50	<0.50
SB-5-10.5W	1/3/2006	5	<50	<0.50	<0.50	<0.50	<1.0	<5.0	**8.5**	<2.0	<2.0	<2.0	<0.50	<0.50
SB-6-25W	1/3/2006	25	<50	<0.50	<0.50	<0.50	<1.0	**37**	<0.50	<2.0	<2.0	<2.0	**0.75**	<0.50
SB-7-29W	1/4/2006	29	<50	<0.50	<0.50	<0.50	<1.0	<5.0	**8.9**	<2.0	<2.0	<2.0	<0.50	<0.50
SB-8-32W	1/4/2006	32	<2500	<25	<25	<25	<50	<250	**3,400**	<100	<100	<100	<25	<25
SB-8-50W	1/4/2006	50	<2500	<25	<25	<25	<50	**310**	**3,800**	<100	<100	<100	<25	<25

Abbreviations and Notes:

fbg = Feet below grade

TPHg = Total petroleum hydrocarbons as gasoline analyzed by EPA Method 8260B

Benzene, toluene, ethylbenzene, and xylenes analyzed by EPA Method 8260B

TBA = Tert-butyl alcohol analyzed by EPA Method 8260B.

MTBE = methyl tertiary butyl ether analyzed by EPA Method 8260B

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

ETBE = ethyl tert butyl ether analyzed by EPA Method 8260B.

TAME = Tert-amyl methyl ether analyzed by EPA Method 8260B.

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

EDB = 1,2-dibromomethane analyzed by EPA Method 8260B.

WELL CONCENTRATIONS
Shell Service Station
3600 Park Boulevard
Oakland, CA

Well ID	Date	TPPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE 8260 (ug/L)	DIPE (ug/L)	ETBE (ug/L)	TAME (ug/L)	TBA (ug/L)	1,2-DCA (ug/L)	EDB (ug/L)	TOC (MSL)	Depth to Water (ft.)	GW Elevation (MSL)
MW-2	1/12/2006	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	156.92	11.62	145.30
MW-2	1/19/2006	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	156.92	8.72	148.20
MW-2	1/24/2006	<50.0	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<10.0	<0.500	<0.500	156.92	11.23	145.69
MW-2	4/27/2006	<50.0	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<10.0	2.53	<0.500	156.92	4.43	152.49
MW-2	7/11/2006	<50.0	<0.500	<0.500	<0.500	<1.50	<0.500	<0.500	<0.500	<0.500	<10.0	<0.500	<0.500	156.92	4.48	152.44
MW-2	10/26/2006	<50.0	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<10.0	<0.500	<0.500	156.92	4.64	152.28
MW-2	1/19/2007	<50	<0.50	<0.50	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<0.50	<0.50	156.92	4.73	152.19
MW-2	4/2/2007	<50 a	<0.50	<1.0	<1.0	<1.0	<1.0	<2.0	<2.0	<2.0	<10	<0.50	<1.0	156.92	4.70	152.22
MW-2	7/18/2007	<50 a	<0.50	<1.0	<1.0	<1.0	<1.0	<2.0	<2.0	<2.0	<10	<0.50	<1.0	156.92	4.77	152.15
MW-2	10/30/2007	<50 a	<0.50	<1.0	<1.0	<1.0	<1.0	<2.0	<2.0	<2.0	<10	<0.50	<1.0	156.92	5.31	151.61
MW-2	2/6/2008	53 a	<0.50	<1.0	<1.0	<1.0	<1.0	<2.0	<2.0	<2.0	<10	<0.50	<1.0	156.92	5.37	151.55
MW-2	**4/8/2008**	**<50 a**	**<0.50**	**<1.0**	**<1.0**	**<1.0**	**<1.0**	**<2.0**	**<2.0**	**<2.0**	**<10**	**<0.50**	**<1.0**	**156.92**	**5.32**	**151.60**
MW-4	1/12/2006	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	155.00	9.43	145.57
MW-4	1/19/2006	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	155.00	9.45	145.55
MW-4	1/24/2006	1,330	<0.500	<0.500	<0.500	<0.500	762	<0.500	<0.500	1.72	<10.0	1.35	<0.500	155.00	9.92	145.08
MW-4	4/27/2006	<50.0	<0.500	<0.500	<0.500	<0.500	72.7	<0.500	<0.500	<0.500	<10.0	1.00	<0.500	155.00	9.33	145.67
MW-4	7/11/2006	<50.0	<0.500	<0.500	<0.500	<0.500	38.8	<0.500	<0.500	<0.500	<10.0	<0.500	<0.500	155.00	9.68	145.32
MW-4	10/26/2006	<50.0	<0.500	<0.500	<0.500	<0.500	39.8	<0.500	<0.500	<0.500	<10.0	<0.500	<0.500	155.00	10.28	144.72
MW-4	1/19/2007	<50	<0.50	<0.50	<0.50	<1.0	28	<1.0	<1.0	<1.0	<10	0.68	<0.50	155.00	10.26	144.74
MW-4	4/2/2007	<50 a	<0.50	<1.0	<1.0	<1.0	20	<2.0	<2.0	<2.0	<10	0.39 b	<1.0	155.00	9.93	145.07
MW-4	7/18/2007	<50 a	<0.50	<1.0	<1.0	<1.0	59	<2.0	<2.0	<2.0	<10	0.35 b	<1.0	155.00	10.34	144.66
MW-4	10/30/2007	<50 a	<0.50	<1.0	<1.0	<1.0	28	<2.0	<2.0	<2.0	<10	0.41 b	<1.0	155.00	10.68	144.32
MW-4	2/6/2008	57 a	<0.50	<1.0	<1.0	<1.0	72	<2.0	<2.0	<2.0	<10	<0.50	<1.0	155.00	10.27	144.73
MW-4	**4/8/2008**	**<50 a**	**<0.50**	**<1.0**	**<1.0**	**<1.0**	**21**	**<2.0**	**<2.0**	**<2.0**	**<10**	**<0.50**	**<1.0**	**155.00**	**10.38**	**144.62**
MW-7	1/12/2006	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	154.00	5.97	148.03
MW-7	1/19/2006	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	154.00	6.40	147.60

WELL CONCENTRATIONS
Shell Service Station
3600 Park Boulevard
Oakland, CA

Well ID	Date	TPPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE 8260 (ug/L)	DIPE (ug/L)	ETBE (ug/L)	TAME (ug/L)	TBA (ug/L)	1,2-DCA (ug/L)	EDB (ug/L)	TOC (MSL)	Depth to Water (ft.)	GW Elevation (MSL)
MW-7	1/24/2006	<50.0	<0.500	<0.500	<0.500	<0.500	3.08	<0.500	<0.500	<0.500	<10.0	<0.500	<0.500	154.00	9.64	144.36
MW-7	4/27/2006	<50.0	<0.500	<0.500	<0.500	<0.500	0.690	<0.500	<0.500	<0.500	<10.0	2.32	<0.500	154.00	3.49	150.51
MW-7	7/11/2006	<50.0	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<10.0	<0.500	<0.500	154.00	3.96	150.04
MW-7	10/26/2006	<50.0	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<10.0	<0.500	<0.500	154.00	5.11	148.89
MW-7	1/19/2007	<50	<0.50	<0.50	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<0.50	<0.50	154.00	4.62	149.38
MW-7	4/2/2007	<50 a	<0.50	<1.0	<1.0	<1.0	<1.0	<2.0	<2.0	<2.0	<10	<0.50	<1.0	154.00	4.23	149.77
MW-7	7/18/2007	<50 a	<0.50	<1.0	<1.0	<1.0	0.31 b	<2.0	<2.0	<2.0	<10	<0.50	<1.0	154.00	5.08	148.92
MW-7	10/30/2007	<50 a	<0.50	<1.0	<1.0	<1.0	0.84 b	<2.0	<2.0	<2.0	<10	<0.50	<1.0	154.00	5.58	148.42
MW-7	2/6/2008	<50 a	<0.50	<1.0	<1.0	<1.0	<1.0	<2.0	<2.0	<2.0	<10	<0.50	<1.0	154.00	5.15	148.85
MW-7	**4/8/2008**	**<50 a**	**<0.50**	**<1.0**	**<1.0**	**<1.0**	**<1.0**	**<2.0**	**<2.0**	**<2.0**	**<10**	**<0.50**	**<1.0**	**154.00**	**4.62**	**149.38**
MW-8	1/12/2006	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	152.61	16.84	135.77
MW-8	1/19/2006	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	152.61	16.00	136.61
MW-8	1/24/2006	1,120	<0.500	<0.500	<0.500	<0.500	592	<0.500	<0.500	<0.500	<10.0	<0.500	<0.500	152.61	17.08	135.53
MW-8	4/27/2006	<50.0	<0.500	<0.500	<0.500	<0.500	26.4	<0.500	<0.500	<0.500	<10.0	2.32	<0.500	152.61	12.97	139.64
MW-8	7/11/2006	<50.0	<0.500	<0.500	<0.500	<0.500	16.8	<0.500	<0.500	<0.500	<10.0	<0.500	<0.500	152.61	12.91	139.70
MW-8	10/26/2006	<50.0	<0.500	<0.500	<0.500	<0.500	6.09	<0.500	<0.500	<0.500	<10.0	<0.500	<0.500	152.61	14.28	138.33
MW-8	1/19/2007	<50	<0.50	<0.50	<0.50	<1.0	8.3	<1.0	<1.0	<1.0	<10	<0.50	<0.50	152.61	14.45	138.16
MW-8	4/2/2007	<50 a	<0.50	<1.0	<1.0	<1.0	23	<2.0	<2.0	<2.0	<10	<0.50	<1.0	152.61	14.54	138.07
MW-8	7/18/2007	<50 a	<0.50	<1.0	<1.0	<1.0	24	<2.0	<2.0	<2.0	<10	<0.50	<1.0	152.61	14.71	137.90
MW-8	10/30/2007	<50 a	<0.50	<1.0	<1.0	<1.0	14	<2.0	<2.0	<2.0	<10	<0.50	<1.0	152.61	15.45	137.16
MW-8	2/6/2008	57 a	<0.50	<1.0	<1.0	<1.0	8.1	<2.0	<2.0	<2.0	<10	<0.50	<1.0	152.61	15.27	137.34
MW-8	**4/8/2008**	**<50 a**	**<0.50**	**<1.0**	**<1.0**	**<1.0**	**19**	**<2.0**	**<2.0**	**<2.0**	**<10**	**<0.50**	**<1.0**	**152.61**	**14.50**	**138.11**

WELL CONCENTRATIONS
Shell Service Station
3600 Park Boulevard
Oakland, CA

Well ID	Date	TPPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE 8260 (ug/L)	DIPE (ug/L)	ETBE (ug/L)	TAME (ug/L)	TBA (ug/L)	1,2-DCA (ug/L)	EDB (ug/L)	TOC (MSL)	Depth to Water (ft.)	GW Elevation (MSL)

Abbreviations:
TPPH = Total petroleum hydrocarbons as gasoline by modified EPA Method 8260B.
BTEX = Benzene, toluene, ethylbenzene, xylenes by EPA Method 8260B.
MTBE = Methyl tertiary butyl ether
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
TBA = Tertiary butyl alcohol or tertiary butanol, analyzed by EPA Method 8260B
1,2-DCA = 1,2-Dichloroethane, analyzed by EPA Method 8260B
EDB = Ethylene Dibromide, analyzed by EPA Method 8260B
TOC = Top of Casing Elevation
GW = Groundwater
ug/L = Parts per billion
MSL = Mean sea level
ft. = Feet
<n = Below detection limit
NA = Not applicable

Notes:
a = Analyzed by EPA Method 8015B (M).
b = Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
Site surveyed on February 2, 2006 by Virgil Chavez Land Surveying of Vallejo, CA.

Cambria Environmental Technology, Inc.
5900 Hollis Street, Suite A
Emeryville, CA 94608
Telephone: 510-420-0700
Fax: 510-420-9170

BORING/WELL LOG

CLIENT NAME	Shell Oil Products US	**BORING/WELL NAME**	SB-1
JOB/SITE NAME	Shell-branded Service Station	**DRILLING STARTED**	03-Jan-06
LOCATION	3600 Park Boulevard, Oakland, California	**DRILLING COMPLETED**	03-Jan-06
PROJECT NUMBER	248-0937-008	**WELL DEVELOPMENT DATE (YIELD)**	NA
DRILLER	Gregg Drilling	**GROUND SURFACE ELEVATION**	Not Surveyed
DRILLING METHOD	Hydraulic push	**TOP OF CASING ELEVATION**	Not Surveyed
BORING DIAMETER	3"	**SCREENED INTERVALS**	NA
LOGGED BY	S. Dalie IV	**DEPTH TO WATER (First Encountered)**	25.0 fbg (03-Jan-06)
REVIEWED BY	D. Gibbs P.G. # 7804	**DEPTH TO WATER (Static)**	NA
REMARKS	Hand augered to 5 fbg.		

PID (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (fbg)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (fbg)	WELL DIAGRAM
							ASPHALT	0.8	
					CL		**CLAY** Grayish brown 2.5Y5/2; moist; 80% clay, 10% silt, 5% fine sand, 5% fine gravel; high plasticity.		
79		SB-1-5		5	CL		@ 5 fbg, CLAY with Sand; 2.5Y4/1 Dark gray; moist; 65% clay, 15% silt, 15% fine sand, 5% fine gravel; medium plasticity.	5.0	
					ML		**SILT with Sand** 2.5Y4/1 Dark gray; moist; 10% clay, 70% silt, 20% fine sand; no plasticity.	7.0	
					SM		**Silty SAND with Gravel** 5Y5/2 Dark gray; moist; 25% silt, 60% fine sand, 15% fine gravel.	9.0	
15		SB-1-10		10	ML		**SILT with Sand and Gravel** 5Y5/2 Dark gray; moist; 5% clay, 60% silt, 15% fine sand, 20% fine gravel, low plasticity.	10.0	
							CLAY with Silt 5Y5/6 Olive; moist; 60% clay, 35% silt, 5% fine sand; high plasticity.	13.0	Portland Type I/II
0.5		SB-1-15		15					
0		SB-1-20		20	CL				
0		SB-1-25 SB-1-25W		25			@ 25 Wet.		
							@ 26.5 CLAY with Gravel; 2.5YR5/1 Black; damp; 75% clay, 10% silt, 15% coarse gravel; medium plasticity.	28.0	Bottom of Boring @ 28 fbg

WELL LOG (PID): G:\OAKLAND 3600 PARK\GINT\GINT.GPJ DEFAULT.GDT 3/21/06

ATTACHMENT 6

Cambria Environmental Technology, Inc.
5900 Hollis Street, Suite A
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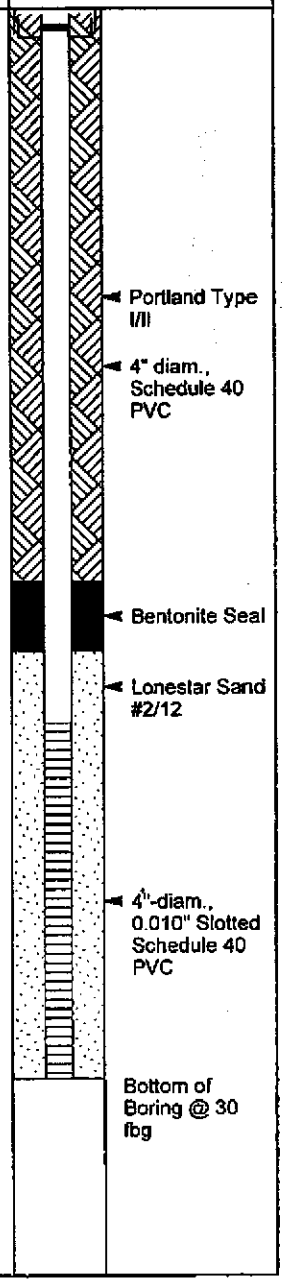
BORING/WELL LOG

CLIENT NAME	Shell Oil Products US	**BORING/WELL NAME**	MW-2
JOB/SITE NAME	Shell-branded Service Station	**DRILLING STARTED**	04-Jan-06
LOCATION	3600 Park Boulevard, Oakland, California	**DRILLING COMPLETED**	05-Jan-06
PROJECT NUMBER	248-0937-008	**WELL DEVELOPMENT DATE (YIELD)**	19-Jan-06 (29 gallons purged.)
DRILLER	Gregg Drilling	**GROUND SURFACE ELEVATION**	157.50 ft above msl
DRILLING METHOD	Hydraulic push / hollow stem auger	**TOP OF CASING ELEVATION**	156.92 ft above msl
BORING DIAMETER	3" / 10"	**SCREENED INTERVALS**	20 to 30 fbg
LOGGED BY	S. Dalie IV	**DEPTH TO WATER (First Encountered)**	24.0 fbg (03-Jan-06) ▽
REVIEWED BY	D. Gibbs P.G. # 7804	**DEPTH TO WATER (Static)**	11.23 fbg (24-Jan-06) ▼

REMARKS Air knifed to 5 fbg. First encountered groundwater at 24 fbg. Water rose to 23 fbg before being sampled via hydropunch.

PID (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (fbg)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (fbg)
							ASPHALT	0.6
					CL		**CLAY with Sand and Gravel** 5Y4/3 Olive; moist; 70% clay, 10% silt, 10% fine sand, 10% fine gravel; high plasticity.	5.0
0.4		SB-2-5		5	CL		@ 5 fbg, CLAY with Sand and Gravel; 5Y6/6 Olive yellow; moist; 70% clay, 15% fine sand, 15% fine gravel; medium plasticity.	7.0
					ML		**SILT** 2.5Y5/4 Light olive brown; moist; 20% clay, 80% silt.	9.0
0.4		SB-2-10		10	CL		**CLAY with Sand** 2.5Y5/2 Grayish brown; moist; 65% clay, 20% silt, 10% fine sand, 5% fine gravel. ▼	12.0
0		SB-2-15		15	ML		**SILT** 5Y6/6 Olive yellow; moist; 25% clay, 65% silt, 10% fine sand.	21.0
0		SB-2-20		20	SC		**Clayey SAND** 2.5Y4/3 Olive brown; moist; 20% clay, 80% medium sand.	23.0
		SB-2-23W		25	SP SC		**Poorly Graded SAND with Gravel** 2.5Y4/3 Olive brown; wet; 5% clay, 5% silt, 75% fine sand; 15% fine gravel. ▽	30.0
				30				

WELL DIAGRAM



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BORING/WELL LOG

CLIENT NAME	Shell Oil Products US	**BORING/WELL NAME**	SB-3
JOB/SITE NAME	Shell-branded Service Station	**DRILLING STARTED**	03-Jan-06
LOCATION	3600 Park Boulevard, Oakland, California	**DRILLING COMPLETED**	04-Jan-06
PROJECT NUMBER	248-0937-008	**WELL DEVELOPMENT DATE (YIELD)**	NA
DRILLER	Gregg Drilling	**GROUND SURFACE ELEVATION**	Not Surveyed
DRILLING METHOD	Hydraulic push	**TOP OF CASING ELEVATION**	Not Surveyed
BORING DIAMETER	3"	**SCREENED INTERVALS**	NA
LOGGED BY	S. Dalie IV	**DEPTH TO WATER (First Encountered)**	8.0 fbg (03-Jan-06)
REVIEWED BY	D. Gibbs P.G. # 7804	**DEPTH TO WATER (Static)**	5.50 fbg (03-Jan-06)

REMARKS Hand augered to 5 fbg. Water was sampled by disposable baller @ 5.5 fbg.

PID (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (fbg)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (fbg)	WELL DIAGRAM
							ASPHALT	0.6	
					CL		**CLAY** 2.5Y5/2 Grayish brown; moist; 85% clay, 10% silt, 5% fine sand; high plasticity.		
				5				5.0	
0		SB-3-5 SB-3-5W			CL		@ 5 fbg CLAY with Sand 2.5Y6/6 Olive yellow; moist to wet; 85% clay, 15% fine sand; high plasticity. ▼	6.5	Portland Type I/II
					SP		**Poorly Graded SAND with Silt** 2.5Y6/6; moist to wet; 10% silt, 85% fine sand, 5% fine gravel. ▼		
				10				10.0	
0.1		SB-3-10			CL		**CLAY with Sand** 2.5Y6/6; wet; 70% clay, 15% silt, 15% fine sand; high plasticity.	12.0	Bottom of Boring @ 12 fbg

Note: Initial groundwater was encountered at 8 fbg. After removing the tooling from the ground water rose to 5.5 fbg where a sample was collect in the open hole using a disposable bailer. Soil was moist during soil sampling below 5 fbg to 8 fbg. After removing the tools from the ground the soil became saturated as water charged in up to 5 fbg..

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BORING/WELL LOG

CLIENT NAME	Shell Oil Products US	**BORING/WELL NAME**	MW-4
JOB/SITE NAME	Shell-branded Service Station	**DRILLING STARTED**	04-Jan-06
LOCATION	3600 Park Boulevard, Oakland, California	**DRILLING COMPLETED**	05-Jan-06
PROJECT NUMBER	248-0937-008	**WELL DEVELOPMENT DATE (YIELD)**	19-Jan-06 (29 gallons purged.)
DRILLER	Gregg Drilling	**GROUND SURFACE ELEVATION**	155.33 ft above msl
DRILLING METHOD	Hydraulic push / hollow stem auger	**TOP OF CASING ELEVATION**	155.00 ft above msl
BORING DIAMETER	3" / 10"	**SCREENED INTERVALS**	20 to 30 fbg
LOGGED BY	S. Dalie IV	**DEPTH TO WATER (First Encountered)**	24.0 fbg (03-Jan-06)
REVIEWED BY	D. Gibbs P.G. # 7804	**DEPTH TO WATER (Static)**	9.92 fbg (24-Jan-06)
REMARKS	Air knifed to 5 fbg.		

PID (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (fbg)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (fbg)
							ASPHALT	0.6
					CL		**CLAY with Sand** 2.5Y5/3 Light olive brown; moist; 70% clay, 15% silt, 15% fine sand; high plasticity.	2.3
					SM		**Silty SAND** 2.5Y4/3 Dark brown; moist; 45% silt, 55% fine sand.	
21		SB-4-5		5				6.0
					CL		**CLAY** 2.5Y3/1 Very dark gray; moist; 65% clay, 25% silt, 10% fine sand.	
14.9		SB-4-10		10				11.0
					SM		**Silty SAND** 2.5Y5/2 Grayish brown; moist; 10% clay, 40% silt, 50% fine sand.	12.0
					CL		**CLAY** 2.5Y5/2 Grayish brown; moist; 80% clay, 10% silt, 10% fine sand; high plasticity.	
12.9		SB-4-15		15				
					ML		**SILT** 2.5Y5/2 Grayish brown; moist; 20% clay, 75% silt, 5% fine sand.	18.1
0		SB-4-20		20				20.0
					CL		**CLAY** 2.5Y5/2 Grayish brown; moist; 65% clay, 25% silt, 10% fine sand; low plasticity.	
					SM		**Silty SAND** 2.5Y3/1 Very dark gray; moist to wet, 5% clay, 40% silt, 55% fine sand.	22.0
		SB-4-24W						24.0
0		SB-4-25		25	SP SM		**Poorly Graded SAND** 2.5Y3/1 Very dark gray; wet; 5% clay, 5% silt, 80% medium sand, 10% fine gravel.	
				30				30.0

WELL DIAGRAM

- Portland Type I/II
- 4" diam., Schedule 40 PVC
- Bentonite Seal
- Lonestar Sand #2/12
- 4"-diam., 0.010" Slotted Schedule 40 PVC
- Bottom of Boring @ 30 fbg

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BORING/WELL LOG

CLIENT NAME	Shell Oil Products US	**BORING/WELL NAME**	SB-5
JOB/SITE NAME	Shell-branded Service Station	**DRILLING STARTED**	03-Jan-06
LOCATION	3600 Park Boulevard, Oakland, California	**DRILLING COMPLETED**	03-Jan-06
PROJECT NUMBER	248-0937-008	**WELL DEVELOPMENT DATE (YIELD)**	NA
DRILLER	Gregg Drilling	**GROUND SURFACE ELEVATION**	Not Surveyed
DRILLING METHOD	Hydraulic push	**TOP OF CASING ELEVATION**	Not Surveyed
BORING DIAMETER	3"	**SCREENED INTERVALS**	NA
LOGGED BY	S. Dalle IV	**DEPTH TO WATER (First Encountered)**	8.0 fbg (03-Jan-06)
REVIEWED BY	D. Gibbs P.G. # 7804	**DEPTH TO WATER (Static)**	5.00 fbg (03-Jan-06)
REMARKS	Hand augered to 5 fbg. First encountered water at 8 fbg. Water rose to 5 fbg where it was sampled by a disposable bailer.		

PID (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (fbg)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (fbg)	WELL DIAGRAM
							CONCRETE	0.8	
					CL		**CLAY with Sand** 2.5Y5/1 Gray; moist; 70% clay, 15% silt, 15% fine sand; high plasticity.	4.5	
0.2		SB-5-5		5	CL		@ 4.5 fbg CLAY with Sand and Gravel 2.5Y6/6 Olive yellow; moist; 70% clay, 15% fine sand, 15% fine gravel; medium plasticity.	7.0	Portland Type I/II
					ML		**SILT with Gravel** 2.5Y6/6 Olive yellow; moist to wet; 25% clay, 60% silt, 15% fine gravel.	10.0	
0		SB-5-10		10	CL		**CLAY with Sand** 2.5Y6/6 Olive yellow; wet; 70% clay; 15% silt, 15% fine sand; high plasticity.	12.0	Bottom of Boring @ 12 fbg

Note: Initial groundwater was encountered at 8 fbg. After removing the tooling from the ground water rose to 5 fbg where a sample was collect in the open hole using a disposable bailer. Soil was moist during soil sampling below 5 fbg to 8 fbg. After removing the tools from the ground the soil became saturated as water charged in up to 5 fbg..

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BORING/WELL LOG

CLIENT NAME	Shell Oil Products US	**BORING/WELL NAME**	SB-6
JOB/SITE NAME	Shell-branded Service Station	**DRILLING STARTED**	03-Jan-06
LOCATION	3600 Park Boulevard, Oakland, California	**DRILLING COMPLETED**	03-Jan-06
PROJECT NUMBER	248-0937-008	**WELL DEVELOPMENT DATE (YIELD)**	NA
DRILLER	Gregg Drilling	**GROUND SURFACE ELEVATION**	Not Surveyed
DRILLING METHOD	Hydraulic push	**TOP OF CASING ELEVATION**	Not Surveyed
BORING DIAMETER	3"	**SCREENED INTERVALS**	NA
LOGGED BY	S. Datie IV	**DEPTH TO WATER (First Encountered)**	39.0 fbg (03-Jan-06)
REVIEWED BY	D. Gibbs P.G. # 7804	**DEPTH TO WATER (Static)**	25.00 fbg (03-Jan-06)

REMARKS Hand augered to 5 fbg. First water encountered at 39 fbg. Water rose rapidly to 25 fbg, where water was sampled via hydropunch

PID (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (fbg)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (fbg)	WELL DIAGRAM
							ASPHALT	0.6	
					CL		**CLAY with Sand and Gravel** 2.5Y5/2 Light olive brown; moist; 70% clay, 30% silt; high plasticity.		
0.1		SB-6-5		5			**CLAY with Sand and Gravel** 2.5Y4/3 Olive brown; dry; 70% clay, 15% fine sand, 15% fine gravel; medium plasticity.	7.0	
					GC		**Clayey GRAVEL**; 2.5Y4/2 Dark grayish brown; dry; 40% clay, 5% fine sand, 55% coarse gravel; no to low plasticity.		
0.2		SB-6-10		10				11.0	
					CL		**CLAY with Sand** 2.5Y4/4 Olive brown; dry; 75% clay, 25% fine sand; no to low plasticity.	12.5	
					ML		**SILT with Sand** 2.5Y4/4 Olive brown; moist; 80% silt, 20% fine sand; no to low plasticity.	14.5	
0		SB-6-15		15			**CLAY with Sand** 2.5Y4/4 Olive brown; moist; 70% clay, 10% silt, 20% fine sand; high plasticity.		
							@ 18 fbg CLAY 2.5Y4/4 Olive brown; moist; 65% clay, 35% silt; low plasticity.		
3.9		SB-6-20		20	CL				Portland Type I/II
1.9		SB-6-25 SB-6-25W		25				26.0	
					ML		**SILT with Sand** 2.5Y5/4 Light olive brown; moist; 15% clay, 70% silt, 15% medium sand.		

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BORING/WELL LOG

CLIENT NAME	Shell Oil Products US	**BORING/WELL NAME**	SB-6
JOB/SITE NAME	Shell-branded Service Station	**DRILLING STARTED**	03-Jan-06
LOCATION	3600 Park Boulevard, Oakland, California	**DRILLING COMPLETED**	03-Jan-06

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PID (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (fbg)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (fbg)	WELL DIAGRAM
0.1		SB-6-30		30					
							CLAY with Sand and Gravel 2.5Y/1 Black; moist; 70% clay, 10% silt, 10% fine sand, 10% fine gravel; high plasticity.	30.5	
0.1		SB-6-35		35	CL				
							▽	39.0	
0		SB-6-40		40	SP SM		**Poorly Graded SAND with Silt** 2.5Y4/4 Olive brown; wet; 10% silt, 90% medium sand.	40.0	Bottom of Boring @ 40 fbg

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BORING/WELL LOG

CLIENT NAME	Shell Oil Products US	**BORING/WELL NAME**	MW-7
JOB/SITE NAME	Shell-branded Service Station	**DRILLING STARTED**	04-Jan-06
LOCATION	3600 Park Boulevard, Oakland, California	**DRILLING COMPLETED**	06-Jan-06
PROJECT NUMBER	248-0937-008	**WELL DEVELOPMENT DATE (YIELD)**	19-Jan-06 (41 gallons purged.)
DRILLER	Gregg Drilling	**GROUND SURFACE ELEVATION**	154.37 ft above msl
DRILLING METHOD	Hydraulic push / hollow stem auger	**TOP OF CASING ELEVATION**	154.00 ft above msl
BORING DIAMETER	3" / 10"	**SCREENED INTERVALS**	28 to 38 fbg
LOGGED BY	S. Dalie IV	**DEPTH TO WATER (First Encountered)**	35.0 fbg (04-Jan-06) ▽
REVIEWED BY	D. Gibbs P.G. # 7804	**DEPTH TO WATER (Static)**	9.64 fbg (24-Jan-06) ▼

REMARKS Air knifed to 5 fbg. First encountered water at 35 fbg. Water rose to 29 fbg before being sampled via hydropunch.

PID (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (fbg)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (fbg)	WELL DIAGRAM
							ASPHALT	0.6	Bottom of Boring @ 1 fbg
					CL		**CLAY with Gravel** 10YR5/6 Yellowish brown; moist; 65% clay, 10% silt, 10% fine sand, 15% fine gravel; high plasticity.	3.0	
0.9		SB-7-5			ML		**Silt with SAND** 10YR5/6 Yellowish brown; moist; 10% clay, 75% silt, 15% fine sand.	6.5	
					SM		**Silty SAND with Gravel** 10YR5/3 Brown; moist; 20% silt, 65% fine sand, 15% fine gravel.	8.0	
					SC		**Clayey SAND with Gravel** 10YR4/3 Brown; moist; 25% clay, 60% fine sand, 15% fine gravel.	9.5	
0.1		SB-7-10			SP		**Poorly Graded SAND** 10YR4/3 Brown; wet; 100% fine sand.	10.3	
					SC		**Clayey SAND with Gravel** 10YR4/3 Brown; moist; 25% clay, 60% fine sand, 15% fine gravel.	14.0	Portland Type I/II
0.1		SB-7-15			GC		**Clayey GRAVEL** 10YR5/2 Grayish brown; moist; 40% clay, 5% silt, 55% coarse gravel.	18.0	4" diam., Schedule 40 PVC
0		SB-7-20			CL		**CLAY** 10YR5/3 Brown; moist; 55% clay, 40% silt, 5% fine sand; low plasticity.		

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BORING/WELL LOG

CLIENT NAME	Shell Oil Products US	**BORING/WELL NAME**	MW-7
JOB/SITE NAME	Shell-branded Service Station	**DRILLING STARTED**	04-Jan-06
LOCATION	3600 Park Boulevard, Oakland, California	**DRILLING COMPLETED**	06-Jan-06

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PID (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (fbg)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (fbg)	WELL DIAGRAM
								25.0	Bentonite Seal
0		SB-7-25			ML		**SILT** 10YR5/3 Brown; moist; 45% clay, 55% silt; no to low plasticity.		Lonestar Sand #2/12
		SB-7-29W						28.8	
0		SB-7-30			CL		**CLAY** 10YR4/3 Brown; moist; 75% clay, 20% silt, 5% fine sand; high plasticity.	32.0	
					SC		**Clayey SAND** 10YR4/3 Brown; moist; 25% clay, 70% fine sand; 5% fine gravel.		4"-diam., 0.010" Slotted Schedule 40 PVC
0		SB-7-35			SP		▽ **Poorly Graded SAND** 10YR4/3 Brown; wet; 100% fine sand.	35.0	
								38.0	
0		SB-7-40			CL		**CLAY** 10YR4/3 Brown; wet; 65% clay, 25% silt, 10% fine sand; high plasticity.	40.0	

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BORING/WELL LOG

CLIENT NAME	Shell Oil Products US	**BORING/WELL NAME**	MW-8
JOB/SITE NAME	Shell-branded Service Station	**DRILLING STARTED**	04-Jan-06
LOCATION	3600 Park Boulevard, Oakland, California	**DRILLING COMPLETED**	06-Jan-06
PROJECT NUMBER	248-0937-008	**WELL DEVELOPMENT DATE (YIELD)**	19-Jan-06 (34 gallons purged.)
DRILLER	Gregg Drilling	**GROUND SURFACE ELEVATION**	152.86 ft above msl
DRILLING METHOD	Hydraulic push / hollow stem auger	**TOP OF CASING ELEVATION**	152.61 ft above msl
BORING DIAMETER	3" / 10"	**SCREENED INTERVALS**	40 to 50 fbg
LOGGED BY	S. Dalie IV	**DEPTH TO WATER (First Encountered)**	33.0 fbg (04-Jan-06)
REVIEWED BY	D. Gibbs P.G. # 7804	**DEPTH TO WATER (Static)**	17.08 fbg (24-Jan-06)

REMARKS Air knifed to 5 fbg. First encountered water at 33 fbg. Sampled water discretely at 32 fbg, and 50 fbg via hydropunch.

PID (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (fbg)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (fbg)	WELL DIAGRAM
							ASPHALT	0.6	
					CL		**CLAY with Sand** 10YR5/4 Yellowish brown; moist; 65% clay, 10% silt, 25% medium sand; high plasticity.	3.3	
0.9		SB-8-5		5	SM		**Silty SAND** 10YR5/4 Yellowish brown; moist; 15% clay, 25% silt, 60% medium sand.	7.0	
					CL		**CLAY** 10YR5/3 Brown; moist; 70% clay, 20% silt, 10% fine sand; medium plasticity.	9.0	
0.1		SB-8-10		10	ML		**SILT** 10YR5/2 Grayish brown; moist; 35% clay, 55% silt, 10% fine sand; low plasticity.	12.0	
					GC		**Clayey GRAVEL** 10YR5/2 Grayish brown; moist; 25% clay, 15% silt, 60% fine gravel.		
0.1		SB-8-15		15				16.0	
					ML		**SILT** 10YR5/2 Grayish brown; moist; 25% clay, 65% silt, 10% fine sand. ▼		Portland Type I/II
0		SB-8-20		20					4" diam., Schedule 40 PVC
0		SB-8-25		25				26.0	
							CLAY with Gravel 10YR4/3 Brown; moist; 60% clay, 15% silt, 5% fine sand; 20% fine gravel; no to low plasticity. @ 27 fbg 10YR3/3 Dark brown.		

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BORING/WELL LOG

CLIENT NAME	Shell Oil Products US	**BORING/WELL NAME**	MW-8
JOB/SITE NAME	Shell-branded Service Station	**DRILLING STARTED**	04-Jan-06
LOCATION	3600 Park Boulevard, Oakland, California	**DRILLING COMPLETED**	06-Jan-06

Continued from Previous Page

PID (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (fbg)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (fbg)	WELL DIAGRAM
0		SB-8-30		30	CL		@ 30 fbg CLAY with Gravel; 10YR5/1 Black; moist; 75% clay, 10% silt, 5% fine sand, 10% fine gravel; high plasticity.		
		SB-8-32W						▽ 33.0	
0		SB-8-35		35			Clayey SAND with Gravel 10YR4/3 Brown; wet; 20% clay, 15% silt, 50% fine sand, 15% fine gravel.		Bentonite Seal
				40	SC				Lonestar Sand #2/12
				45					4"-diam., 0.010" Slotted Schedule 40 PVC
		SB-8-50W		50				50.0	Bottom of Boring @ 50 fbg

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