Shell Oil Products US
DS Soil & Groundwater Focus Delivery Group
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Ms. Kit Soo
Alameda County Environmental Health
1131 Harbor Parkway, Suite 250
Alameda, CA 94502-6577

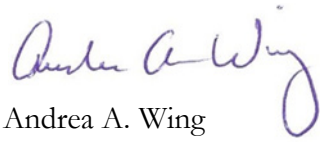
RE: 4255 MacArthur Boulevard, Oakland, California
PlaNet Site ID 10059253
PlaNet Project ID 38573
ACEH Case No. RO0000486

Dear Ms. Soo:

I am informed and believe that, based on a reasonably diligent inquiry undertaken by AECOM on behalf of Equilon Enterprises LLC dba Shell Oil Products US, the information and/or recommendations contained in the attached document is true, and on that ground I declare under penalty of perjury in accordance with Water Code section 13267 that this statement is true and correct.

As always, please feel free to contact me directly at (714) 731-1050 with any questions or concerns.

Sincerely,
Shell Oil Products US



Andrea A. Wing
Principal Program Manager

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510-894-3600 tel
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April 14, 2017

Kit Soo
Alameda County Environmental Health
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502

Re: First Semiannual 2017 Groundwater Monitoring Report
Former Shell Service Station
4255 MacArthur Boulevard, Oakland, California
Shell PlaNet Site ID: 10059253
Shell PlaNet Project ID: 38573
Agency No. RO0000486

Dear Mr. Soo:

On behalf of Equilon Enterprises LLC dba Shell Oil Products US, AECOM Technical Services, Inc. is pleased to submit this report for groundwater monitoring performed during the first quarter of 2017 at the Former Shell Service Station at 4255 MacArthur Boulevard in Oakland, California.

If you have any questions regarding this submittal, please contact Shane Olton at 916-414-5849 or Shane.Olton@aecom.com.

Sincerely,

Josh Fox
Staff Geologist

Shane Olton, P.G.
Project Manager

Enclosures: Groundwater Monitoring Report

cc: Andrea Wing, Equilon Enterprises LLC dba Shell Oil Products US (electronic copy)

Ellen Tam (property owner's agent)
Phua Management (electronic copy)

Kenneth Williams
MacArthur/High Trailer Park

Ed C. Ralston, Phillips 66
Remediation Management (electronic copy)

AECOM

First Semiannual 2017 Groundwater Monitoring Report

Former Shell Service Station
4255 MacArthur Boulevard
Oakland, California

April 2017

AECOM

First Semiannual 2017 Groundwater Monitoring Report

Former Shell Service Station
4255 MacArthur Boulevard
Oakland, California

PlaNet Site ID	10059253
PlaNet Project ID	38573
Agency No.	RO0000486

Submitted to:

Kit Soo
Alameda County Environmental Health
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502

Submitted by:

AECOM Technical Services, Inc.
300 Lakeside Drive, Suite 400
Oakland, California 94612

On Behalf of

Equilon Enterprises LLC dba Shell Oil Products US

April 14, 2017

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1 Introduction

AECOM Technical Services, Inc. (AECOM) prepared this report on behalf of Equilon Enterprises LLC dba Shell Oil Products US (Equilon).

1.1 Site Information

Site Name:	Former Shell Service Station (the Site)
Site Address:	4255 MacArthur Boulevard, Oakland, California
Equilon Environmental Services Program Manager:	Andrea Wing
Consulting Company / Contact Person:	AECOM / Shane Olton
Primary Agencies:	Alameda County Environmental Health

1.2 Site Summary

Frequency of Groundwater Monitoring:	Semiannual
Wells Water Level Gauged:	8
Wells Sampled:	8
Is There Any Separate-Phase Hydrocarbon (SPH) Present in Site Monitoring Wells:	Yes
Current Remediation Activity:	SPH-absorbent socks and hand bailing

2 Site Activities

2.1 Current Activities

On January 12, 2017, Blaine Tech Services, Inc. (Blaine Tech) of San Jose, California gauged and sampled all accessible wells according to the established monitoring program for this site. This was a coordinated groundwater sampling event with the adjacent 76 Station No.1156 located at 4276 MacArthur Boulevard in Oakland, California. Well MW-2 was inaccessible during this sampling event. TestAmerica Laboratories, Inc. of Irvine, California, a certified California laboratory, completed the analyses of the groundwater samples.

AECOM prepared a site vicinity map (Figure 1), a groundwater contour and chemical concentration map (Figure 2), a groundwater data table (Table 1), and a SPH removal data table (Table 2). Blaine Tech's field notes are presented in Appendix A, the laboratory report is presented in Appendix B, and coordinated sample data for 76 Service Station No. 1156 are available in Appendix C.

SPH was detected in wells MW-3 and MW-4. SPH was removed by absorbent socks during the first quarter 2017. Historical SPH removal data are presented in Table 2, and a summary of SPH removal is provided below:

SPH Removal Summary	
Total SPH removed this event (pounds)	**Total SPH removed (pounds)**
2.40	59.67

2.2 Current Findings at the Former Shell Service Station

Groundwater Elevation:	159.30 to 170.45 in feet above mean sea level
Groundwater Gradient (direction):	West-Southwest
Groundwater Gradient (magnitude):	0.04 feet per foot

2.3 Proposed Activities

Blaine Tech will gauge and sample wells according to the established monitoring program for this site. This site is monitored semiannually during the first and third quarters, and AECOM will issue groundwater monitoring reports semiannually following the sampling events. Blaine Tech will coordinate sampling events with 76 Station No. 1156.

Blaine Tech will replace SPH absorbent socks in wells MW-2, MW-3, and MW-4 if SPH is observed during future sampling events.

3 Conclusions and Recommendations

SPH were detected in wells MW-3 and MW-4 during this monitoring event.

Petroleum constituents were detected in several wells sampled during this semiannual event including:

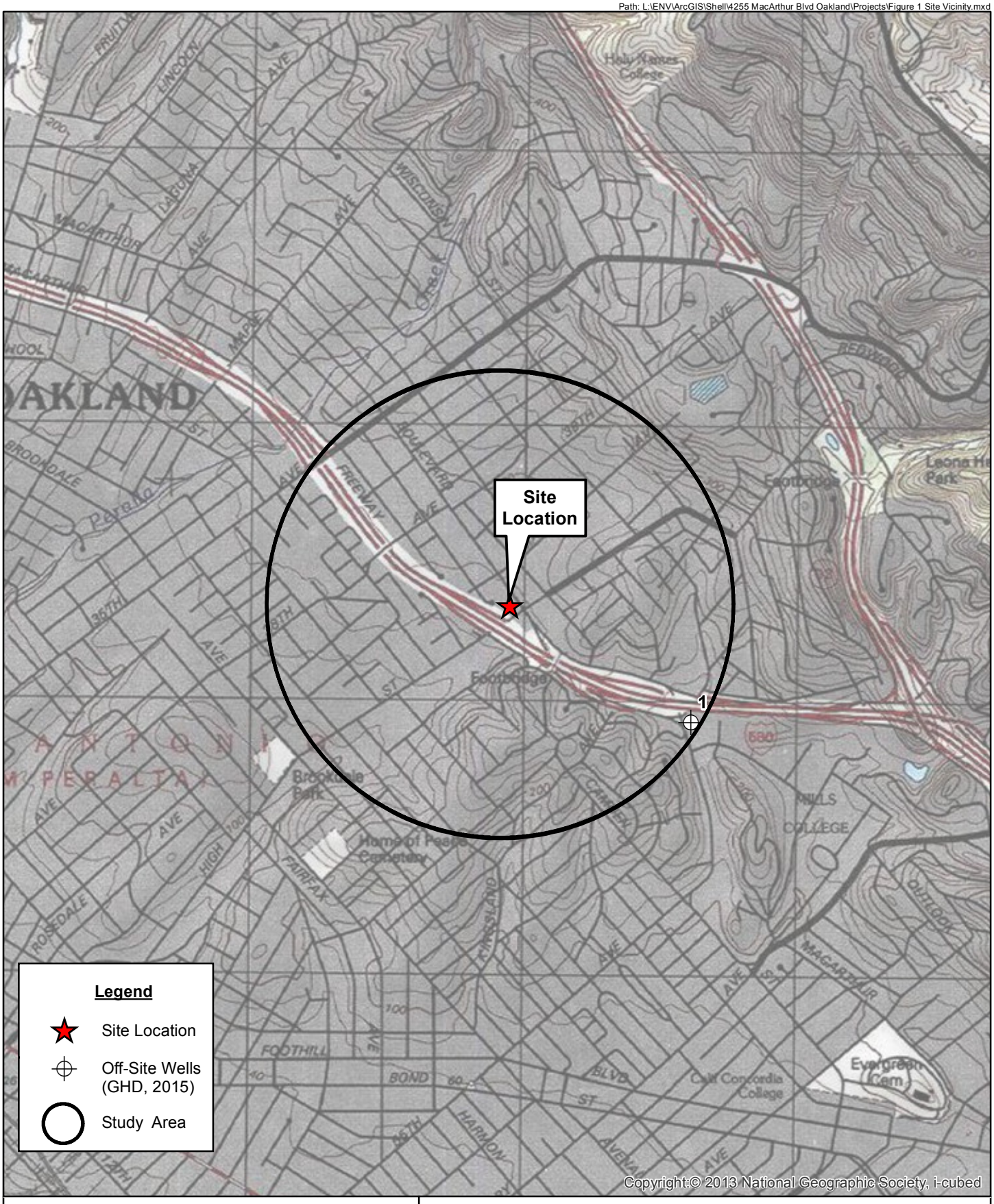
- Total petroleum hydrocarbons as gasoline was detected in four wells at concentrations ranging from 100 micrograms per liter (µg/L) (MW-8) to 26,000 µg/L (MW-4).
- Benzene was detected in three wells at concentrations ranging from 0.67 µg/L (MW-9) to 1,000 µg/L (MW-3).
- Toluene was detected in wells MW-3 and MW-4 at concentrations of 11 µg/L and 35 µg/L, respectively.
- Ethylbenzene was detected in wells MW-3 and MW-4 at concentrations of 560 µg/L and 850 µg/L, respectively.
- Total xylenes were detected in wells MW-3 and MW-4 at concentrations of 420 µg/L and 2,400 µg/L, respectively.
- Methyl tertiary-butyl ether was detected in seven wells at concentrations ranging from 0.56 µg/L (MW-7) to 270 µg/L (MW-3).
- Tertiary-butyl alcohol was detected in three wells at concentrations ranging from 11 µg/L (MW-9) to 450 µg/L (MW-3).

AECOM recommends continuing with the established groundwater monitoring program for this site.

Conestoga-Rovers & Associates, Inc. (CRA) submitted a *Corrective Action Plan* on February 23, 2015 recommending monitored natural attenuation (MNA). CRA also recommended reevaluating MNA once site redevelopment plans are available and future land use is known. AECOM, Equilon, the property owner, Bill Phua, and the property owner's legal representative, Ken Phares, met with Alameda County Department of Environmental Health (ACDEH) on September 12, 2016, to discuss pending site redevelopment. The property will be redeveloped into a multiuse property with commercial on the ground floor and residential units on the top floors. ACDEH requested AECOM do an evaluation of current site conditions and update with site development plans to determine the path forward. AECOM is prepared to begin work on ACDEH requested deliverables upon receipt of a directive.

Figures

Path: L:\ENV\ArcGIS\Shell\4255 MacArthur Blvd Oakland\Projects\Figure 1 Site Vicinity.mxd



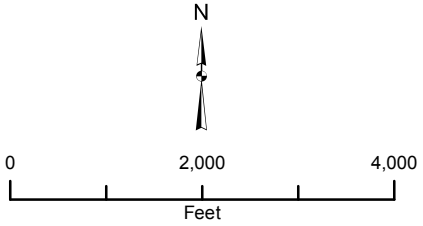


Figure 1
Site Vicinity Map

AECOM

Former Shell Service Station
4255 MacArthur Boulevard, Oakland, California

EXPLANATION

- MW-1 — Monitoring well location (Shell)
- MW-1B — Monitoring well location (ConocoPhillips)
- SVW-1 — Soil vapor well location (ConocoPhillips)
- TB-1 — Destroyed well location
- Storm drain line (STM)
- Sanitary sewer line (SAN)
- Water line (W)
- Electrical line (E)
- Unknown utility line (?)
- Gas line (G)
- 160 — Groundwater elevation contour referenced to mean sea level (ft AMSL)
- 0.04 — Groundwater flow direction and gradient (feet per foot)

WELL	Well designation
ELEV	Groundwater elevation, in ft AMSL
Benz	BENZ = Benzene
MTBE	MTBE = Methyl tertiary-butyl ether

Concentrations are in micrograms per liter

Notes:
<X.XX = Not detected at or above laboratory reporting limit X.XX
NM = Not measured
* = Data anomalous; not used in groundwater contouring

MW-3
165.69
1,000
270

MW-8*
170.31
<0.50
99

MW-5
168.28
<0.30
4.3

MW-9A*
165.04
1,700
84

MW-10A
168.32
4,400
410

MW-10B
168.94
1,600
75

MW-10S
170.39
14
5.1

MW-9B
168.85
<0.30
9.0

MW-1B
168.85
<0.30
2.4

MW-2B
169.60
<0.30
5.6

MW-4B
176.19
<0.30
1.7

MW-3B
174.63
230
9.2

MW-7*
166.33
<0.30
2.1

MW-11B*
167.18
6,000
1,400

MW-11A
171.94
4,900
1,800

MW-11S
174.02
<0.30
<0.50

MW-2
NM

MW-6
163.49
<0.50
2.5

MW-5
159.82
<0.50
<0.50

MW-1
170.00
<0.50
21

MW-9
170.45
0.67
97

MW-4
159.30
69
15

MW-7
165.52
<0.50
0.56

Parking
Pharmacy
Oakland Veterinary Hospital
4258 MacArthur Boulevard
Former Used Oil UST
Existing Used Oil AST
Foot Clinic
Church Structures
MACARTHUR BOULEVARD
Former Dispenser Island (removed 1/03)
Former Dispenser Island (removed 11/95)
76 Station #1156
4276 MacArthur
Former USTs
USTs
Proposed Building
Proposed Total Footprint
Former Storage Building
Former Lifts
Former Dispenser Island (removed 1/03)
Former Shell
4255 MacArthur
Former Chevron Service Station
Fenceline
Residence
4240 Redding
Mobile Home Park
Steep Embankment
HIGHWAY 580
580 ON-RAMP
HIGH STREET
Driveway
Dispenser
Sidewalk
Building

N

0 20 40
Feet

SOURCE: BASE MAP GHD

Figure 2
Groundwater Contour and Chemical Concentration Map
January 12, 2017

AECOM

Former Shell Service Station
4255 MacArthur Boulevard, Oakland California

L:\ENV\ARCGIS\SHELL\4255 MACARTHUR BLVD OAKLAND\PROJECTS\1Q2017\FIGURE 2 GROUNDWATER CONTOURS AND CHEMICAL CONCENTRATION MAPUPDATED BUILDING.DWG - 17 Feb 2017

Tables

Table 1
Groundwater Data
Former Shell Service Station, 4255 MacArthur Boulevard, Oakland, California

Well ID	Date	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)	EDB (µg/L)	1,2-DCA (µg/L)	Ethanol (µg/L)	TOC (ft AMSL)	Depth to Water (ft TOC)	GW Elevation (ft AMSL)	SPH Thickness (ft)	DO Reading (mg/L)	ORP Reading (mV)
MW-1	11/17/1993	410	21	11	7.9	47	---	---	---	---	---	---	---	---	---	175.79	8.59	167.20	---	---	---
MW-1	01/20/1994	1,200	180	19	48	47	---	---	---	---	---	---	---	---	---	175.79	8.22	167.57	---	---	---
MW-1	04/25/1994	3,100	610	<10	130	27	---	---	---	---	---	---	---	---	---	175.79	7.63	168.16	---	---	---
MW-1	07/07/1994	2,400	1,000	10	250	20	---	---	---	---	---	---	---	---	---	175.79	8.31	167.48	---	---	---
MW-1	10/27/1994	2,200	500	3.1	72	1.8	---	---	---	---	---	---	---	---	---	175.79	8.84	166.95	---	---	---
MW-1	11/17/1994	---	---	---	---	---	---	---	---	---	---	---	---	---	---	175.79	7.60	168.19	---	---	---
MW-1	11/28/1994	---	---	---	---	---	---	---	---	---	---	---	---	---	---	175.79	7.56	168.23	---	---	---
MW-1	01/13/1995	570	75	2.5	6.7	11	---	---	---	---	---	---	---	---	---	175.79	7.11	168.68	---	---	---
MW-1	04/12/1995	1,800	480	<5.0	79	<5.0	---	---	---	---	---	---	---	---	---	175.79	7.08	168.71	---	---	---
MW-1	07/25/1995	120	15	1.1	2.1	2.9	---	---	---	---	---	---	---	---	---	175.79	7.73	168.06	---	---	---
MW-1 (D)	07/25/1995	300	88	2.4	11	6.5	---	---	---	---	---	---	---	---	---	175.79	7.73	168.06	---	---	---
MW-1	10/18/1995	130	9.5	0.8	1.3	1.7	---	---	---	---	---	---	---	---	---	175.79	8.42	167.37	---	---	---
MW-1 (D)	10/18/1995	120	11	0.8	1.4	1.8	---	---	---	---	---	---	---	---	---	175.79	8.42	167.37	---	---	---
MW-1	01/17/1996	250	22	0.9	1.6	2.3	---	---	---	---	---	---	---	---	---	175.79	7.83	167.96	---	---	---
MW-1	04/25/1996	<50	4.6	<0.5	<0.5	0.6	500b	---	---	---	---	---	---	---	---	175.79	7.35	168.44	---	---	---
MW-1	07/17/1996	<250	15	<2.5	<2.5	<2.5	540	---	---	---	---	---	---	---	---	175.79	7.70	168.09	---	---	---
MW-1	10/01/1996	1,200	500	12	57	82	1,900	---	---	---	---	---	---	---	---	175.79	8.07	167.72	---	---	---
MW-1	01/22/1997	640	170	4.3	33	33	1,200	---	---	---	---	---	---	---	---	175.79	7.21	168.58	---	---	---
MW-1	04/08/1997	<200	34	<2.0	3.3	4.3	950	---	---	---	---	---	---	---	---	175.79	7.75	168.04	---	---	---
MW-1 (D)	04/08/1997	<200	66	<2.0	6.4	8	740	---	---	---	---	---	---	---	---	175.79	7.75	168.04	---	---	---
MW-1	07/08/1997	190	49	1.2	5.8	8.6	560	---	---	---	---	---	---	---	---	175.79	8.01	167.78	---	---	---
MW-1	10/08/1997	<100	7	<1.0	<1.0	<1.0	620	---	---	---	---	---	---	---	---	175.79	8.10	167.69	---	---	---
MW-1	01/09/1998	970	390	12	48	71	1,200	---	---	---	---	---	---	---	---	175.79	7.14	168.65	---	---	---
MW-1	04/13/1998	<50	136	<0.50	1.5	1.8	170	---	---	---	---	---	---	---	---	175.79	6.78	169.01	---	---	---
MW-1	07/17/1998	2,500	750	11	88	67	150	---	---	---	---	---	---	---	---	175.79	7.28	168.51	---	---	---
MW-1	10/02/1998	8,000	970	36	270	440	35	---	---	---	---	---	---	---	---	175.79	7.77	168.02	---	---	---
MW-1	02/03/1999	210	56	0.82	<0.50	3.2	220	---	---	---	---	---	---	---	---	175.79	7.45	168.34	---	1.4	---
MW-1	04/29/1999	<50	4.5	<0.50	0.56	<0.50	140	196	---	---	---	---	---	---	---	175.79	7.58	168.21	---	1.2	140
MW-1	07/23/1999	<50.0	<0.500	<0.500	<0.500	<0.500	120	111 f	---	---	---	---	---	---	---	175.79	8.51	167.28	---	1.0	---
MW-1	11/01/1999	<50.0	<0.500	<0.500	<0.500	<0.500	2.90	---	---	---	---	---	---	---	---	175.79	8.30	167.49	---	1.4	-71
MW-1	01/17/2000	<50	<0.50	<0.50	<0.50	<0.50	3.30	---	---	---	---	---	---	---	---	175.79	8.04	167.75	---	16.9	64
MW-1	04/17/2000	<50.0	1.08	<0.500	<0.500	<0.500	<2.50	---	---	---	---	---	---	---	---	175.79	8.00	167.79	---	1.8	112
MW-1	07/26/2000	125	54.3	2.16	5.45	9.86	33.1	---	---	---	---	---	---	---	---	175.79	7.52	168.27	---	13.2	-140
MW-1	10/12/2000	101	40.7	2.68	3.00	5.18	25.0	---	---	---	---	---	---	---	---	175.79	7.71	168.08	---	>20	534
MW-1	01/15/2001	<50.0	0.633	<0.500	0.505	1.74	<2.50	---	---	---	---	---	---	---	---	175.79	7.33	168.46	---	16.9	-127
MW-1	04/09/2001	<50.0	<0.500	<0.500	<0.500	0.927	<2.50	---	---	---	---	---	---	---	---	175.79	7.68	168.11	---	12.8	-117
MW-1	07/24/2001	<50	4.0	0.65	0.53	1.3	---	<5.0	---	---	---	---	---	---	---	175.79	8.00	167.79	---	>20	43

Table 1
Groundwater Data
Former Shell Service Station, 4255 MacArthur Boulevard, Oakland, California

Well ID	Date	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)	EDB (µg/L)	1,2-DCA (µg/L)	Ethanol (µg/L)	TOC (ft AMSL)	Depth to Water (ft TOC)	GW Elevation (ft AMSL)	SPH Thickness (ft)	DO Reading (mg/L)	ORP Reading (mV)
MW-1	10/31/2001	<50	4.4	<0.50	<0.50	0.98	---	<5.0	---	---	---	---	---	---	---	175.79	7.94	167.85	---	13.6	123
MW-1	01/10/2002	<50	2.2	<0.50	<0.50	1.2	---	6.1	---	---	---	---	---	---	---	175.79	7.63	168.16	---	0.1	63
MW-1	04/25/2002	<50	2.0	<0.50	<0.50	<0.50	---	<5.0	---	---	---	---	---	---	---	175.79	7.76	168.03	---	0.3	54
MW-1	07/18/2002	<50	6.1	<0.50	<0.50	0.98	---	<5.0	---	---	---	---	---	---	---	175.79	8.29	167.50	---	1.1	32
MW-1	10/07/2002	500	17	14	11	60	---	9.0	---	---	---	---	---	---	---	175.76	8.34	167.42	---	2.8	-26
MW-1	01/06/2003	<50	12	<0.50	0.73	0.58	---	14	---	---	---	---	---	---	---	175.76	7.18	168.58	---	0.5	-22
MW-1	04/07/2003	<50	<0.50	<0.50	<0.50	<1.0	---	12	<5.0	---	---	---	---	---	---	175.76	7.75	168.01	---	0.7	-24
MW-1	07/07/2003	<50	6.6	<0.50	<0.50	<1.0	---	8.1	<5.0	---	---	---	---	---	---	175.76	7.75	168.01	---	0.5	16
MW-1	10/09/2003	<50	1.9	<0.50	<0.50	<1.0	---	22	<5.0	---	---	---	---	---	---	175.76	8.45	167.31	---	0.7	80
MW-1	01/14/2004	<100	19	<1.0	<1.0	<2.0	---	180	63	---	---	---	---	---	---	175.76	7.45	168.31	---	0.8	242
MW-1	04/28/2004	<50	2.1	<0.50	<0.50	<1.0	---	110	33	---	---	---	---	---	---	175.76	8.25	167.51	---	0.5	64
MW-1	07/12/2004	<50	2.5	<0.50	<0.50	<1.0	---	120	26	<2.0	<2.0	<2.0	---	---	<50	175.76	6.20	169.56	---	0.5	72
MW-1	10/25/2004	<500	<5.0	<5.0	<5.0	<10	---	550	240	---	---	---	---	---	---	175.76	7.98	167.78	---	3.15	-72
MW-1	01/17/2005	<250	8.0	<2.5	<2.5	<5.0	---	500	310	---	---	---	---	---	---	175.76	7.42	168.34	---	0.2	9
MW-1	04/06/2005	<250	<2.5	<2.5	<2.5	<5.0	---	230	330*	---	---	---	---	---	---	175.76	8.15	167.61	---	2.49	143
MW-1	07/08/2005	<50	<0.50	<0.50	<0.50	<0.50	---	380	510	<0.50	<0.50	<0.50	---	---	<5.0	175.76	7.45	168.31	---	1.1	12
MW-1	10/07/2005	<500 c	<5.0	<5.0	<5.0	<10	---	1,600	1,600	---	---	---	---	---	---	175.76	7.72	168.04	---	---	---
MW-1	01/27/2006	1,720	6.92	<0.500	<0.500	<0.500	---	1,270	1,380	---	---	---	---	---	---	175.76	6.68	169.08	---	---	---
MW-1	04/28/2006	2,420	6.90	1.19	<0.500	0.980	---	2,080	1,870	---	---	---	---	---	---	175.76	6.67	169.09	---	---	---
MW-1	07/28/2006	3,230	2.06	<0.500	<0.500	<0.500	---	1,770	1,730	<0.500	<0.500	1.14	---	---	<50.0	175.76	7.65	168.11	---	---	---
MW-1	10/27/2006	1,020	3.22	<0.500	1.72	<0.500	---	690	884	---	---	---	---	---	---	175.76	7.90	167.86	---	---	---
MW-1	01/10/2007	1,100	3.0	<0.50	<0.50	<1.0	---	2,300	2,900	---	---	---	---	---	---	175.76	7.62	168.14	---	---	---
MW-1	04/13/2007	620 c,g	7.1	0.24 h	<1.0	<1.0	---	2,800	3,600	---	---	---	---	---	---	175.76	6.98	168.78	---	---	---
MW-1	07/09/2007	960 c,g	4.3 h	<20	<20	<20	---	1,900	2,100	<40	<40	<40	---	---	<2,000	175.76	7.60	168.16	---	---	---
MW-1	10/08/2007	590 c,g	5.9 h	<20	<20	<20	---	3,200	2,200	---	---	---	---	---	---	175.76	8.05	167.71	---	---	---
MW-1	01/09/2008	470 c,g	36	<10	<10	<10	---	660	1,300	---	---	---	---	---	---	175.76	6.99	168.77	---	---	---
MW-1	04/04/2008	2,200	<10	<20	<20	<20	---	2,000	1,500	---	---	---	---	---	---	175.76	6.94	168.82	---	---	---
MW-1	07/03/2008	1,800	<10	<20	<20	<20	---	1,800	3,400	<40	<40	<40	---	---	<2,000	175.76	8.03	167.73	---	---	---
MW-1	10/03/2008	2,000	<10	<20	<20	<20	---	2,000	2,800	---	---	---	---	---	---	175.76	8.58	167.18	---	---	---
MW-1	01/22/2009	2,400	14	<20	<20	<20	---	1,600	3,200	---	---	---	---	---	---	175.76	8.15	167.61	---	---	---
MW-1	04/13/2009	1,800	<10	<20	<20	<20	---	970	1,900	---	---	---	---	---	---	175.76	2.13	173.63	---	---	---
MW-1	07/23/2009	1,800	6.9	<10	<10	<10	---	1,500	2,800	<20	<20	<20	---	---	<1000	175.76	8.15	167.61	---	---	---
MW-1	02/01/2010	910	94	<5.0	<5.0	<5.0	---	620	1,800	---	---	---	---	---	---	175.76	7.44	168.32	---	---	---
MW-1	08/02/2010	1,600	8.4	<5.0	<5.0	<5.0	---	2,100	2,100	---	---	---	---	---	---	175.76	7.49	168.27	---	---	---
MW-1	01/31/2011	1,100 c	41	<10	<10	<10	---	2,000	2,600	---	---	---	<10	<10	---	175.76	7.45	168.31	---	---	---
MW-1	07/25/2011	520 c	31	<2.5	<2.5	<5.0	---	530	1,600	<5.0	<5.0	<5.0	---	---	<750	175.76	7.39	168.37	---	---	---
MW-1	01/23/2012	<1,000	49	<10	<10	<20	---	1,200	1,200	---	---	---	---	---	---	175.76	7.85	167.91	---	---	---

Table 1
Groundwater Data
Former Shell Service Station, 4255 MacArthur Boulevard, Oakland, California

Well ID	Date	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)	EDB (µg/L)	1,2-DCA (µg/L)	Ethanol (µg/L)	TOC (ft AMSL)	Depth to Water (ft TOC)	GW Elevation (ft AMSL)	SPH Thickness (ft)	DO Reading (mg/L)	ORP Reading (mV)
MW-1	07/24/2012	390	14	<2.5	<2.5	<5.0	---	350	1,100	<2.5	<2.5	<2.5	---	---	---	175.76	7.80	167.96	---	---	---
MW-1	01/23/2013	1,100	45	<1.0	<1.0	<2.0	---	1,400	1,600	---	---	---	---	---	---	175.76	7.26	168.50	---	---	---
MW-1	07/10/2013	1,000	5.2	<5.0	<5.0	<10	---	1,000	700	<5.0	<5.0	<5.0	---	---	<1,500	175.76	7.99	167.77	---	---	---
MW-1	01/16/2014	840	56	<5.0	<5.0	<10	---	750	960	---	---	---	---	---	---	175.76	8.60	167.16	---	---	---
MW-1	07/10/2014	1,100 i	<10	<10	<10	<20	---	980	600	<10	<10	<10	---	---	<3,000	175.76	8.11	167.65	---	---	---
MW-1	01/27/2015	150	33	<0.50	<0.50	<1.0	---	55	630	---	---	---	---	---	---	175.76	7.54	168.22	---	---	---
MW-1	07/21/2015	1100 i	<10	<10	<10	<20	---	950	510	<10	<10	<10	---	---	<3,000	175.76	8.34	167.42	---	---	---
MW-1	01/20/2016	1,300 i	6.4	<5.0	<5.0	<10	---	1,400	450	---	---	---	---	---	---	175.76	6.81	168.95	---	---	---
MW-1	07/20/2016	130	4.1	<1.0	<1.0	<2.0	---	130	280	<1.0	<1.0	<1.0	---	---	<300	175.76	8.11	167.65	---	---	---
MW-1	**01/12/2017**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<1.0**	**---**	**21**	**<10**	**---**	**---**	**---**	**---**	**---**	**---**	**175.76**	**5.76**	**170.00**	**---**	**---**	**---**
MW-2	11/17/1993	31,000	9,400	4,600	1,000	3,900	---	---	---	---	---	---	---	---	---	170.91	12.31	158.60	---	---	---
MW-2	01/20/1994	40,000	6,900	5,600	780	4,100	---	---	---	---	---	---	---	---	---	170.91	11.48	159.43	---	---	---
MW-2 (D)	01/20/1994	41,000	7,200	6,200	900	4,800	---	---	---	---	---	---	---	---	---	170.91	11.48	159.43	---	---	---
MW-2	04/25/1994	60,000	9,300	6,100	1,400	6,200	---	---	---	---	---	---	---	---	---	170.91	10.84	160.07	---	---	---
MW-2	07/07/1994	280,000 a	40,000	26,000	8,100	32,000	---	---	---	---	---	---	---	---	---	170.91	11.89	159.02	---	---	---
MW-2 (D)	07/07/1994	53,000	13,000	6,600	2,000	8,400	---	---	---	---	---	---	---	---	---	170.91	11.89	159.02	---	---	---
MW-2	10/27/1994	130,000	14,000	12,000	2,400	13,000	---	---	---	---	---	---	---	---	---	170.91	12.89	158.02	---	---	---
MW-2 (D)	10/27/1994	390,000	8,800	7,000	1,700	11,000	---	---	---	---	---	---	---	---	---	170.91	12.89	158.02	---	---	---
MW-2	11/17/1994	---	---	---	---	---	---	---	---	---	---	---	---	---	---	170.91	9.11	161.80	---	---	---
MW-2	11/28/1994	---	---	---	---	---	---	---	---	---	---	---	---	---	---	170.91	9.22	161.69	---	---	---
MW-2	01/13/1995	75,000	5,900	12,000	3,100	17,000	---	---	---	---	---	---	---	---	---	170.91	8.10	162.81	---	---	---
MW-2	04/12/1995	100,000	8,500	11,000	2,400	12,000	---	---	---	---	---	---	---	---	---	170.91	10.12	160.79	---	---	---
MW-2 (D)	04/12/1995	80,000	4,200	9,300	2,500	12,000	---	---	---	---	---	---	---	---	---	170.91	10.12	160.79	---	---	---
MW-2	07/25/1995	---	---	---	---	---	---	---	---	---	---	---	---	---	---	170.91	11.53	159.80	0.52	---	---
MW-2	10/18/1995	---	---	---	---	---	---	---	---	---	---	---	---	---	---	170.91	14.02	156.99	0.13	---	---
MW-2	01/17/1996	---	---	---	---	---	---	---	---	---	---	---	---	---	---	170.91	10.27	160.78	0.17	---	---
MW-2	04/25/1996	---	---	---	---	---	---	---	---	---	---	---	---	---	---	170.91	11.68	159.25	0.03	---	---
MW-2	07/17/1996	---	---	---	---	---	---	---	---	---	---	---	---	---	---	170.91	12.78	158.51	0.48	---	---
MW-2	10/01/1996	---	---	---	---	---	---	---	---	---	---	---	---	---	---	170.91	14.21	156.92	0.28	---	---
MW-2	01/22/1997	---	---	---	---	---	---	---	---	---	---	---	---	---	---	170.91	10.92	160.08	0.11	---	---
MW-2	04/08/1997	---	---	---	---	---	---	---	---	---	---	---	---	---	---	170.91	14.12	156.95	0.20	---	---
MW-2	07/08/1997	---	---	---	---	---	---	---	---	---	---	---	---	---	---	170.91	14.98	156.08	0.19	---	---
MW-2	10/08/1997	---	---	---	---	---	---	---	---	---	---	---	---	---	---	170.91	12.97	157.98	0.05	---	---
MW-2	01/08/1998	---	---	---	---	---	---	---	---	---	---	---	---	---	---	170.91	12.54	158.43	0.08	---	---
MW-2	04/13/1998	180,000	2,800	5,200	2,400	13,000	71,000	---	---	---	---	---	---	---	---	170.91	10.05	160.86	---	---	---
MW-2	07/17/1998	---	---	---	---	---	---	---	---	---	---	---	---	---	---	170.91	11.75	159.24	0.10	---	---

Table 1
Groundwater Data
Former Shell Service Station, 4255 MacArthur Boulevard, Oakland, California

Well ID	Date	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)	EDB (µg/L)	1,2-DCA (µg/L)	Ethanol (µg/L)	TOC (ft AMSL)	Depth to Water (ft TOC)	GW Elevation (ft AMSL)	SPH Thickness (ft)	DO Reading (mg/L)	ORP Reading (mV)
MW-2	10/02/1998	---	---	---	---	---	---	---	---	---	---	---	---	---	---	170.91	16.78	154.22	0.11	---	---
MW-2	02/03/1999	---	---	---	---	---	---	---	---	---	---	---	---	---	---	170.91	9.90	161.07	0.08	---	---
MW-2	04/29/1999	---	---	---	---	---	---	---	---	---	---	---	---	---	---	170.91	9.86	161.09	0.05	---	---
MW-2	07/23/1999	65,800	6,500	4,480	1,960	8,960	46,600	58,500 f	---	---	---	---	---	---	---	170.91	14.45	156.46	---	1.4	---
MW-2	11/01/1999	---	---	---	---	---	---	---	---	---	---	---	---	---	---	170.91	11.84	159.09	0.03	---	---
MW-2	01/17/2000	46,000	6,000	2,400	1,500	5,500	50,000	31,000	---	---	---	---	---	---	---	170.91	11.00	159.91	---	1.3	-54
MW-2	04/17/2000	96,300	8,150	10,200	2,820	14,900	112,000	108,000	---	---	---	---	---	---	---	170.91	11.06	159.85	---	2.6	125
MW-2	07/26/2000	72,400	8,680	5,620	2,810	13,400	66,200	46,300	---	---	---	---	---	---	---	170.91	12.82	158.09	---	2.2	113
MW-2	10/12/2000	63,200	5,840	4,180	2,310	11,100	61,200	66,600	---	---	---	---	---	---	---	170.91	11.32	159.59	---	0.4	55
MW-2	01/15/2001	59,700	2,630	4,800	2,050	11,500	44,400	5,080	---	---	---	---	---	---	---	170.91	10.19	160.72	---	1.1	-22
MW-2	04/09/2001	56,900	1,860	2,550	1,810	9,720	40,000	46,600	---	---	---	---	---	---	---	170.91	11.15	159.76	---	1.0	-55
MW-2	07/24/2001	84,000	3,000	4,600	2,500	13,000	---	41,000	---	---	---	---	---	---	---	170.91	11.67	159.24	---	0.2	53
MW-2	10/31/2001	45,000	2,200	3,000	1,500	7,700	---	29,000	51,000	<50	<50	<50	---	---	<500	170.91	11.04	159.87	---	1.2	-17
MW-2	01/10/2002	28,000	840	740	760	3,300	---	32,000	---	---	---	---	---	---	---	170.91	9.58	161.33	---	2.1	-76
MW-2	04/25/2002	41,000	1,900	2,000	1,200	6,900	---	17,000	---	---	---	---	---	---	---	170.91	11.40	159.51	---	0.8	-95
MW-2	07/18/2002	87,000	2,000	2,200	1,400	10,000	---	19,000	---	---	---	---	---	---	---	170.91	12.68	158.23	---	0.7	-34
MW-2	10/07/2002	110,000	3,900	6,700	2,700	15,000	---	20,000	---	---	---	---	---	---	---	170.88	11.58	159.30	---	1.4	-52
MW-2	01/06/2003	65,000	2,400	3,500	1,400	8,600	---	26,000	---	---	---	---	---	---	---	170.88	9.09	161.79	---	0.4	40
MW-2	04/07/2003	57,000	1,900	2,500	1,700	8,600	---	37,000	34,000	---	---	---	---	---	---	170.88	11.08	159.80	---	1.0	60
MW-2	07/07/2003	34,000	4,000	4,200	1,600	8,500	---	51,000	44,000	---	---	---	---	---	---	170.88	11.27	159.61	---	1.3	-17
MW-2	10/09/2003	---	---	---	---	---	---	---	---	---	---	---	---	---	---	170.88	11.64	159.26	0.03	---	---
MW-2	10/20/2003	---	---	---	---	---	---	---	---	---	---	---	---	---	---	170.88	11.88	159.03	0.04	---	---
MW-2	01/14/2004	---	---	---	---	---	---	---	---	---	---	---	---	---	---	170.88	10.96	159.93	0.01	---	---
MW-2	04/28/2004	35,000	2,200	2,200	2,300	8,200	---	26,000	28,000	---	---	---	---	---	---	170.88	11.05	159.83	---	0.1	-96
MW-2	07/12/2004	---	---	---	---	---	---	---	---	---	---	---	---	---	---	170.88	12.12	158.78	0.03	---	---
MW-2	10/25/2004	60,000	2,900	2,300	2,300	7,600	---	27,000	26,000	---	---	---	---	---	---	170.88	11.23	159.65	---	1.62	-69
MW-2	01/17/2005	62,000	1,900	1,800	1,800	5,700	---	22,000	21,000	---	---	---	---	---	---	170.88	8.78	162.10	---	0.8	-102
MW-2	04/06/2005	40,000	1,500	940	1,600	2,900	---	23,000	23,000	---	---	---	---	---	---	170.88	9.23	161.65	---	0.60	-104
MW-2	07/08/2005	50,000	2,300	1,500	1,700	6,600	---	24,000	25,000	<150	<150	<150	---	---	<1,500	170.88	10.99	159.91	0.02	0.01	-41
MW-2	10/07/2005	---	---	---	---	---	---	---	---	---	---	---	---	---	---	170.88	12.15	158.75	0.02	---	---
MW-2	01/27/2006	56,800	1,270	1,280	1,520	5,370	---	8,210	10,600	---	---	---	---	---	---	170.88	9.55	161.33	---	---	---
MW-2	03/16/2006	82,100	1,230	1,310	1,350	4,630	---	9,020	9,690	---	---	---	---	---	---	170.88	8.10	162.78	---	---	---
MW-2	04/28/2006	81,400	1,200	1,610	1,660	5,580	---	10,800	11,100	---	---	---	---	---	---	170.88	9.25	161.63	---	---	---
MW-2	05/15/2006	119,000	2,210	3,800	2,330	8,900	---	15,600	12,200	---	---	---	---	---	---	170.88	10.28	160.60	---	---	---
MW-2	06/19/2006	121,000	1,680	3,830	2,990	12,400	---	10,700	9,310	---	---	---	---	---	---	170.88	10.90	159.98	---	---	---
MW-2	07/28/2006	172,000	3,590	3,450	2,840	8,210	---	22,800	11,300	<0.500	<0.500	<0.500	---	---	<50.0	170.88	11.84	159.04	---	---	---
MW-2	08/31/2006	91,200	1,590	3,710	2,570	11,700	---	3,520	3,940	---	---	---	---	---	---	170.88	18.03	152.85	---	---	---

Table 1
Groundwater Data
Former Shell Service Station, 4255 MacArthur Boulevard, Oakland, California

Well ID	Date	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)	EDB (µg/L)	1,2-DCA (µg/L)	Ethanol (µg/L)	TOC (ft AMSL)	Depth to Water (ft TOC)	GW Elevation (ft AMSL)	SPH Thickness (ft)	DO Reading (mg/L)	ORP Reading (mV)
MW-2	09/26/2006	50,000	2,300	1,300	1,600	6,700	---	17,000	19,000	---	---	---	---	---	---	170.88	10.23	160.65	---	---	---
MW-2	10/27/2006	159,000	5,200	3,890	2,600	12,500	---	18,100	9,230 d	---	---	---	---	---	---	170.88	12.11	158.77	---	---	---
MW-2	11/22/2006	53,000	1,500	960	1,800	7,100	---	9,600	12,000	---	---	---	---	---	---	170.88	11.35	159.53	---	---	---
MW-2	12/26/2006	Unable to access		---	---	---	---	---	---	---	---	---	---	---	---	170.88	---	---	---	---	---
MW-2	01/10/2007	45,000	2,700	1,700	1,400	5,800	---	13,000	11,000	---	---	---	---	---	---	170.88	10.21	160.67	---	---	---
MW-2	02/19/2007	13,000	1,800	1,900	1,500	5,900	---	7,400	11,000	---	---	---	---	---	---	170.88	9.22	161.66	---	---	---
MW-2	03/16/2007	52,000	2,600	2,300	2,000	7,300	---	9,100	12,000	---	---	---	---	---	---	170.88	9.88	161.00	---	---	---
MW-2	04/13/2007	60,000 g	2,200	2,100	2,300	7,900	---	13,000	20,000	---	---	---	---	---	---	170.88	10.61	160.29	0.02	---	---
MW-2	07/09/2007	---	---	---	---	---	---	---	---	---	---	---	---	---	---	170.88	11.77	159.20	0.11	---	---
MW-2	10/08/2007	---	---	---	---	---	---	---	---	---	---	---	---	---	---	170.88	12.70	158.33	0.19	---	---
MW-2	11/19/2007	---	---	---	---	---	---	---	---	---	---	---	---	---	---	170.88	8.00	162.88	---	---	---
MW-2	12/10/2007	---	---	---	---	---	---	---	---	---	---	---	---	---	---	170.88	6.49	164.39	---	---	---
MW-2	01/09/2008	Unable to access		---	---	---	---	---	---	---	---	---	---	---	---	170.88	---	---	---	---	---
MW-2	01/22/2008	Unable to access		---	---	---	---	---	---	---	---	---	---	---	---	170.88	---	---	---	---	---
MW-2	02/21/2008	---	---	---	---	---	---	---	---	---	---	---	---	---	---	170.88	8.86	162.02	---	---	---
MW-2	03/20/2008	---	---	---	---	---	---	---	---	---	---	---	---	---	---	170.88	10.24	160.66	0.02	---	---
MW-2	04/04/2008	Unable to access		---	---	---	---	---	---	---	---	---	---	---	---	170.88	---	---	---	---	---
MW-2	05/27/2008	---	---	---	---	---	---	---	---	---	---	---	---	---	---	170.88	12.44	158.46	0.03	---	---
MW-2	06/11/2008	---	---	---	---	---	---	---	---	---	---	---	---	---	---	170.88	11.10	159.85	0.09	---	---
MW-2	06/11/2008	---	---	---	---	---	---	---	---	---	---	---	---	---	---	170.88	11.10	159.85	0.09	---	---
MW-2	07/03/2008	---	---	---	---	---	---	---	---	---	---	---	---	---	---	170.88	11.62	159.37	0.14	---	---
MW-2	08/04/2008	---	---	---	---	---	---	---	---	---	---	---	---	---	---	170.88	11.88	159.05	0.06	---	---
MW-2	09/17/1998	Unable to access		---	---	---	---	---	---	---	---	---	---	---	---	170.88	---	---	---	---	---
MW-2	10/03/2008	---	---	---	---	---	---	---	---	---	---	---	---	---	---	170.88	12.66	158.43	0.26	---	---
MW-2	11/26/2008	Unable to access		---	---	---	---	---	---	---	---	---	---	---	---	170.88	---	---	---	---	---
MW-2	12/30/2008	Unable to access		---	---	---	---	---	---	---	---	---	---	---	---	170.88	---	---	---	---	---
MW-2	01/22/2009	86,000	3,800	1,600	2,500	9,800	---	10,000	7,900	---	---	---	---	---	---	170.88	10.74	160.14	---	---	---
MW-2	02/27/2009	Unable to access		---	---	---	---	---	---	---	---	---	---	---	---	170.88	---	---	---	---	---
MW-2	04/13/2009	60,000	1,700	980	2,000	7,000	---	4,300	4,600	---	---	---	---	---	---	170.88	10.36	160.53	0.01	---	---
MW-2	07/23/2009	---	---	---	---	---	---	---	---	---	---	---	---	---	---	170.88	11.91	159.13	0.20	---	---
MW-2	11/10/2009	---	---	---	---	---	---	---	---	---	---	---	---	---	---	170.88	10.87	160.04	0.04	---	---
MW-2	02/01/2010	Unable to access		---	---	---	---	---	---	---	---	---	---	---	---	170.88	---	---	---	---	---
MW-2	02/09/2010	Unable to access		---	---	---	---	---	---	---	---	---	---	---	---	170.88	---	---	---	---	---
MW-2	08/02/2010	---	---	---	---	---	---	---	---	---	---	---	---	---	---	170.88	11.38	159.53	0.04	---	---
MW-2	01/31/2011	77,000	1,700	1,500	2,600	9,000	---	2,100	2,700	---	---	---	<25	<25	---	170.88	9.09	161.79	---	---	---
MW-2	04/26/2011	---	---	---	---	---	---	---	---	---	---	---	---	---	---	170.88	9.98	160.90	---	---	---
MW-2	07/25/2011	46,000	990	560	2,500	5,100	---	1,600	1,900	<50	<50	<50	---	---	<7,500	170.88	10.76	160.12	---	---	---

Table 1
Groundwater Data
Former Shell Service Station, 4255 MacArthur Boulevard, Oakland, California

Well ID	Date	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)	EDB (µg/L)	1,2-DCA (µg/L)	Ethanol (µg/L)	TOC (ft AMSL)	Depth to Water (ft TOC)	GW Elevation (ft AMSL)	SPH Thickness (ft)	DO Reading (mg/L)	ORP Reading (mV)
MW-2	10/13/2011	---	---	---	---	---	---	---	---	---	---	---	---	---	---	170.88	10.18	160.70	---	---	---
MW-2	01/23/2012	48,000	1,400	1,100	2,200	6,100	---	820	1,200	---	---	---	---	---	---	170.88	9.22	161.66	---	---	---
MW-2	04/23/2012	---	---	---	---	---	---	---	---	---	---	---	---	---	---	170.88	9.20	161.68	---	---	---
MW-2	07/24/2012	63,000	1,400	970	2,600	7,100	---	1,000	980	<20	<20	<20	---	---	---	170.88	10.82	160.06	---	---	---
MW-2	11/07/2012	---	---	---	---	---	---	---	---	---	---	---	---	---	---	170.88	10.76	160.12	---	---	---
MW-2	01/23/2013	48,000	1,500	1,300	1,800	5,400	---	1,100	1,400	---	---	---	---	---	---	170.88	10.30	160.58	---	---	---
MW-2	04/01/2013	---	---	---	---	---	---	---	---	---	---	---	---	---	---	170.88	10.30	160.58	---	---	---
MW-2	07/10/2013	32,000	1,600	670	1,800	3,500	---	1,200	1,700	<20	<20	<20	---	---	<6,000	170.88	10.94	159.94	---	---	---
MW-2	10/01/2013	---	---	---	---	---	---	---	---	---	---	---	---	---	---	170.88	11.93	158.95	---	---	---
MW-2	01/16/2014	92,000	2,700	4,200	3,600	13,000	---	830	900	---	---	---	---	---	---	170.88	11.85	159.03	---	---	---
MW-2	04/29/2014	---	---	---	---	---	---	---	---	---	---	---	---	---	---	170.88	10.54	160.34	---	---	---
MW-2	07/10/2014	35,000	1,500	410	2,300	3,500	---	1,600	1,200	<50	<50	<50	---	---	<15,000	170.88	11.77	159.11	---	---	---
MW-2	10/14/2014	Unable to access		---	---	---	---	---	---	---	---	---	---	---	---	170.88	---	---	---	---	---
MW-2	01/27/2015	---	---	---	---	---	---	---	---	---	---	---	---	---	---	170.88	10.62	160.28	0.02	---	---
MW-2	07/21/2015	---	---	---	---	---	---	---	---	---	---	---	---	---	---	170.88	11.78	159.10	---	---	---
MW-2	01/20/2016	Unable to access		---	---	---	---	---	---	---	---	---	---	---	---	170.88	---	---	---	---	---
MW-2	02/22/2016	---	---	---	---	---	---	---	---	---	---	---	---	---	---	170.88	9.72	161.19	0.04	---	---
MW-2	07/20/2016	Unable to access		---	---	---	---	---	---	---	---	---	---	---	---	170.88	---	---	---	---	---
MW-2	**01/12/2017**	**Unable to access**		**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**170.88**	**---**	**---**	**---**	**---**	**---**
MW-3	11/17/1993	18,000	5,400	660	720	2,200	---	---	---	---	---	---	---	---	---	174.61	15.40	159.21	---	---	---
MW-3	01/20/1994	55,000	13,000	2,600	2,200	6,500	---	---	---	---	---	---	---	---	---	174.61	14.61	160.00	---	---	---
MW-3	04/25/1994	96,000	11,000	1,600	3,100	9,900	---	---	---	---	---	---	---	---	---	174.61	13.12	161.49	---	---	---
MW-3 (D)	04/25/1994	78,000	12,000	1,900	2,600	7,300	---	---	---	---	---	---	---	---	---	174.61	13.12	161.49	---	---	---
MW-3	07/07/1994	---	---	---	---	---	---	---	---	---	---	---	---	---	---	174.61	14.54	160.09	0.02	---	---
MW-3	10/27/1994	---	---	---	---	---	---	---	---	---	---	---	---	---	---	174.61	15.62	159.03	0.05	---	---
MW-3	11/17/1994	---	---	---	---	---	---	---	---	---	---	---	---	---	---	174.61	13.83	160.78	---	---	---
MW-3	11/28/1994	---	---	---	---	---	---	---	---	---	---	---	---	---	---	174.61	14.02	160.59	---	---	---
MW-3	01/13/1995	180,000	3,200	2,700	1,700	5,200	---	---	---	---	---	---	---	---	---	174.61	12.13	162.48	---	---	---
MW-3 (D)	01/13/1995	23,000	4,000	690	960	3,000	---	---	---	---	---	---	---	---	---	174.61	12.13	162.48	---	---	---
MW-3	04/12/1995	56,000	8,700	1,500	2,100	6,300	---	---	---	---	---	---	---	---	---	174.61	12.96	161.65	---	---	---
MW-3	07/25/1995	---	---	---	---	---	---	---	---	---	---	---	---	---	---	174.61	14.28	160.38	0.06	---	---
MW-3	10/18/1995	---	---	---	---	---	---	---	---	---	---	---	---	---	---	174.61	15.88	158.77	0.05	---	---
MW-3	01/17/1996	---	---	---	---	---	---	---	---	---	---	---	---	---	---	174.61	13.86	160.94	0.24	---	---
MW-3	04/25/1996	---	---	---	---	---	---	---	---	---	---	---	---	---	---	174.61	13.82	160.81	0.02	---	---
MW-3	07/17/1996	---	---	---	---	---	---	---	---	---	---	---	---	---	---	174.61	16.11	158.52	0.03	---	---
MW-3	10/01/1996	46,000	7,300	530	1,700	3,900	3,200	---	---	---	---	---	---	---	---	174.61	16.56	158.05	---	---	---

Table 1
Groundwater Data
Former Shell Service Station, 4255 MacArthur Boulevard, Oakland, California

Well ID	Date	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)	EDB (µg/L)	1,2-DCA (µg/L)	Ethanol (µg/L)	TOC (ft AMSL)	Depth to Water (ft TOC)	GW Elevation (ft AMSL)	SPH Thickness (ft)	DO Reading (mg/L)	ORP Reading (mV)
MW-3 (D)	10/01/1996	47,000	7,100	530	1,700	4,000	2,900	---	---	---	---	---	---	---	---	174.61	16.56	158.05	---	---	---
MW-3	01/22/1997	82,000	5,200	1,300	2,800	8,900	1,100	---	---	---	---	---	---	---	---	174.61	13.07	161.54	---	---	---
MW-3 (D)	01/22/1997	61,000	8,400	1,100	2,300	7,000	2,700	---	---	---	---	---	---	---	---	174.61	13.07	161.54	---	---	---
MW-3	04/08/1997	---	---	---	---	---	---	---	---	---	---	---	---	---	---	174.61	17.09	157.54	0.03	---	---
MW-3	07/08/1997	56,000	8,800	580	2,000	4,900	2,800	---	---	---	---	---	---	---	---	174.61	15.85	158.76	---	---	---
MW-3	10/08/1997	48,000	8,000	590	1,700	3,400	5,100	---	---	---	---	---	---	---	---	174.61	16.22	158.39	---	---	---
MW-3	01/08/1998	47,000	9,400	810	2,300	4,700	6,300	---	---	---	---	---	---	---	---	174.61	13.80	160.81	---	---	---
MW-3 (D)	01/08/1998	48,000	8,100	750	2,000	4,100	5,800	---	---	---	---	---	---	---	---	174.61	13.80	160.81	---	---	---
MW-3	04/13/1998	32,000	6,800	540	1,400	3,400	4,000	---	---	---	---	---	---	---	---	174.61	12.97	161.64	---	---	---
MW-3 (D)	04/13/1998	36,000	7,300	660	1,600	3,700	4,000	---	---	---	---	---	---	---	---	174.61	12.97	161.64	---	---	---
MW-3	07/17/1998	71,000	11,000	590	2,200	6,900	3,900	---	---	---	---	---	---	---	---	174.61	11.51	163.10	---	---	---
MW-3 (D)	07/17/1998	76,000	12,000	700	2,600	8,000	3,000	---	---	---	---	---	---	---	---	174.61	11.51	163.10	---	---	---
MW-3	10/02/1998	66,000	8,900	510	2,000	4,900	4,600	---	---	---	---	---	---	---	---	174.61	16.50	158.11	---	---	---
MW-3 (D)	10/02/1998	59,000	9,400	460	2,000	4,900	4,700	---	---	---	---	---	---	---	---	174.61	16.50	158.11	---	---	---
MW-3	02/03/1999	36,000	6,800	300	1,600	2,900	18,000	---	---	---	---	---	---	---	---	174.61	15.21	159.40	---	1.3	---
MW-3	04/29/1999	45,000	8,100	580	2,200	5,800	4,700	5,150	---	---	---	---	---	---	---	174.61	15.43	159.18	---	1.5	-68
MW-3	07/23/1999	29,400	3,540	215	810	3,800	4,720	6,950 f	---	---	---	---	---	---	---	174.61	14.95	159.66	---	1.3	---
MW-3	11/01/1999	20,000	4,190	294	1,060	1,740	5,540	8,590	---	---	---	---	---	---	---	174.61	14.66	159.95	---	0.6	-110
MW-3	01/17/2000	17,000	3,900	89	1,100	1,200	7,900	---	---	---	---	---	---	---	---	174.61	13.94	160.67	---	1.3	-40
MW-3	04/17/2000	28,100	5,240	247	1,540	2,750	16,600	---	---	---	---	---	---	---	---	174.61	14.00	160.61	---	1.1	-86
MW-3	07/26/2000	24,300	6,680	159	1,610	1,640	17,100	---	---	---	---	---	---	---	---	174.61	13.72	160.89	---	0.9	-70
MW-3	10/12/2000	14,300	2,630	86.7	241	1,360	16,300	---	---	---	---	---	---	---	---	174.61	14.15	160.46	---	0.9	50
MW-3	01/15/2001	22,100	4,400	266	977	2,990	13,200	---	---	---	---	---	---	---	---	174.61	13.05	161.56	---	1.3	-40
MW-3	04/09/2001	33,800	7,100	147	1,700	2,660	13,000	---	---	---	---	---	---	---	---	174.61	13.59	161.02	---	0.6	-56
MW-3	07/24/2001	220,000	5,600	1,900	4,400	19,000	---	12,000	---	---	---	---	---	---	---	174.61	14.43	160.18	---	0.4	29
MW-3	10/31/2001	65,000	2,700	510	1,800	7,200	---	9,800	5,200	<20	<20	<20	---	---	<500	174.61	14.59	160.02	---	0.9	-27
MW-3	01/10/2002	66,000	2,400	490	1,700	6,600	---	5,500	---	---	---	---	---	---	---	174.61	12.65	161.96	---	1.7	-76
MW-3	04/25/2002	55,000	4,600	460	2,400	6,900	---	8,100	---	---	---	---	---	---	---	174.61	14.13	160.48	---	1.2	-96
MW-3	07/18/2002	56,000	3,300	270	1,700	5,000	---	8,400	---	---	---	---	---	---	---	174.61	15.48	159.15	0.03	0.8	-41
MW-3	10/07/2002	---	---	---	---	---	---	---	---	---	---	---	---	---	---	174.59	14.60	160.15	0.20	---	---
MW-3	01/06/2003	57,000	3,200	330	1,800	5,400	---	5,100	---	---	---	---	---	---	---	174.59	11.62	162.99	0.02	0.4	33
MW-3	04/07/2003	57,000	6,200	500	2,400	6,700	---	8,200	3,900	---	---	---	---	---	---	174.59	13.80	160.79	---	0.5	61
MW-3	07/07/2003	28,000	4,900	300	1,500	4,100	---	7,900	4,700	---	---	---	---	---	---	174.59	14.00	160.59	---	1.0	-11
MW-3	10/09/2003	---	---	---	---	---	---	---	---	---	---	---	---	---	---	174.59	14.44	160.21	0.08	---	---
MW-3	10/20/2003	---	---	---	---	---	---	---	---	---	---	---	---	---	---	174.59	14.68	159.97	0.07	---	---
MW-3	01/14/2004	---	---	---	---	---	---	---	---	---	---	---	---	---	---	174.59	12.47	162.14	0.02	---	---
MW-3	04/28/2004	32,000	7,300	190	2,100	4,300	---	3,700	2,500	---	---	---	---	---	---	174.59	13.66	160.93	---	0.1	-16

Table 1
Groundwater Data
Former Shell Service Station, 4255 MacArthur Boulevard, Oakland, California

Well ID	Date	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)	EDB (µg/L)	1,2-DCA (µg/L)	Ethanol (µg/L)	TOC (ft AMSL)	Depth to Water (ft TOC)	GW Elevation (ft AMSL)	SPH Thickness (ft)	DO Reading (mg/L)	ORP Reading (mV)
MW-3	07/12/2004	---	---	---	---	---	---	---	---	---	---	---	---	---	---	174.59	14.87	159.75	0.04	---	---
MW-3	10/25/2004	49,000	5,100	61	1,800	3,600	---	5,400	2,700	---	---	---	---	---	---	174.59	14.12	160.47	---	2.70	-59
MW-3	01/17/2005	57,000	8,000	190	2,000	4,000	---	4,600	3,300	---	---	---	---	---	---	174.59	10.59	164.00	---	0.2	-18
MW-3	04/06/2005	57,000	7,300	180	2,200	3,300	---	4,100	2,700	---	---	---	---	---	---	174.59	10.58	164.01	---	0.95	-77
MW-3	07/08/2005	28,000	2,900	47	1,100	2,000	---	2,800	1,900	<20	<20	<20	---	---	<200	174.59	13.46	161.13	---	0.1	-51
MW-3	10/07/2005	23,000	3,200	39	960	1,300	---	2,600	1,900	---	---	---	---	---	---	174.59	14.76	159.83	---	---	---
MW-3	01/27/2006	38,500	6,520	139	1,350	2,160	---	1,940	1,490	---	---	---	---	---	---	174.59	11.69	162.90	---	---	---
MW-3	03/16/2006	65,100	5,280	181	1,580	2,520	---	2,410	12,300	---	---	---	---	---	---	174.59	10.08	164.51	---	---	---
MW-3	04/28/2006	<1000	4,330	157	1,480	2,690	---	2,470	1,520	---	---	---	---	---	---	174.59	3.31	171.28	---	---	---
MW-3	05/15/2006	69,600	6,100	159	1,690	2,640	---	3,520	1,720	---	---	---	---	---	---	174.59	12.69	161.90	---	---	---
MW-3	06/19/2006	103,000	5,070	117	2,210	3,950	---	2,790	1,080	---	---	---	---	---	---	174.59	13.28	161.31	---	---	---
MW-3	07/28/2006	86,600	4,890	85.7	1,570	2,250	---	2,790	1,260	7.28	<0.500	<0.500	---	---	<50.0	174.59	14.72	159.87	---	---	---
MW-3	08/31/2006	45,700	4,600	204	1,740	2,680	---	2,580	1,520	---	---	---	---	---	---	174.59	14.75	159.84	---	---	---
MW-3	09/26/2006	29,000	3,900	76	1,500	2,100	---	2,700	1,500	---	---	---	---	---	---	174.59	14.97	159.62	---	---	---
MW-3	10/27/2006	41,000	3,690	65.2	1,210	1,650	---	1,760	867 d	---	---	---	---	---	---	174.59	15.00	159.59	---	---	---
MW-3	11/22/2006	30,000	3,300	51	810	1,500	---	1,900	1,300	---	---	---	---	---	---	174.59	14.26	160.33	---	---	---
MW-3	12/26/2006	31,000	2,500	56	1,100	1,500	---	2,200	2,000	---	---	---	---	---	---	174.59	12.52	162.07	---	---	---
MW-3	01/10/2007	18,000	2,600	43	750	940	---	2,100	2,100	---	---	---	---	---	---	174.59	12.81	161.78	---	---	---
MW-3	02/19/2007	27,000	3,800	110	1,200	1,500	---	2,400	3,200	---	---	---	---	---	---	174.59	11.65	162.94	---	---	---
MW-3	03/16/2007	25,000	4,000	80	1,300	1,500	---	2,100	2,400	---	---	---	---	---	---	174.59	12.20	162.39	---	---	---
MW-3	04/13/2007	30,000 g	4,400	73	1,500	1,920	---	2,800	3,900	---	---	---	---	---	---	174.59	13.37	161.22	---	---	---
MW-3	07/09/2007	25,000 g	3,800	57	1,400	1,456	---	1,900	1,500	<100	<100	<100	---	---	<5,000	174.59	14.30	160.29	---	---	---
MW-3	10/08/2007	20,000 g	3,200	35 h	1,300	1,124 h	---	1,700	1,500	---	---	---	---	---	---	174.59	15.19	159.41	0.01	---	---
MW-3	11/19/2007	Unable to access			---	---	---	---	---	---	---	---	---	---	---	174.59	---	---	---	---	---
MW-3	11/30/2007	---	---	---	---	---	---	---	---	---	---	---	---	---	---	174.59	14.07	160.52	---	---	---
MW-3	12/10/2007	---	---	---	---	---	---	---	---	---	---	---	---	---	---	174.59	13.78	160.81	---	---	---
MW-3	01/09/2008	33,000 g	2,800	34	910	782 h	---	1,000	1,100	---	---	---	---	---	---	174.59	11.09	163.50	---	---	---
MW-3	02/21/2008	---	---	---	---	---	---	---	---	---	---	---	---	---	---	174.59	12.22	162.37	---	---	---
MW-3	03/20/2008	---	---	---	---	---	---	---	---	---	---	---	---	---	---	174.59	13.03	161.56	---	---	---
MW-3	04/04/2008	24,000	3,300	55	1,100	844	---	1,900	1,200	---	---	---	---	---	---	174.59	13.41	161.18	---	---	---
MW-3	05/27/2008	---	---	---	---	---	---	---	---	---	---	---	---	---	---	174.59	20.49	154.11	0.01	---	---
MW-3	06/11/2008	---	---	---	---	---	---	---	---	---	---	---	---	---	---	174.59	13.95	160.65	0.01	---	---
MW-3	07/03/2008	33,000	3,800	38	1,500	1,200	---	2,600	1,800	<50	<50	<50	---	---	<2,500	174.59	10.48	164.12	0.01	---	---
MW-3	09/17/1998	---	---	---	---	---	---	---	---	---	---	---	---	---	---	174.59	14.76	159.83	---	---	---
MW-3	09/17/1998	---	---	---	---	---	---	---	---	---	---	---	---	---	---	174.59	14.95	159.65	0.01	---	---
MW-3	10/03/2008	26,000	3,000	29	1,200	750	---	1,700	1,400	---	---	---	---	---	---	174.59	15.32	159.28	0.01	---	---
MW-3	11/26/2008	---	---	---	---	---	---	---	---	---	---	---	---	---	---	174.59	14.54	160.05	---	---	---

Table 1
Groundwater Data
Former Shell Service Station, 4255 MacArthur Boulevard, Oakland, California

Well ID	Date	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)	EDB (µg/L)	1,2-DCA (µg/L)	Ethanol (µg/L)	TOC (ft AMSL)	Depth to Water (ft TOC)	GW Elevation (ft AMSL)	SPH Thickness (ft)	DO Reading (mg/L)	ORP Reading (mV)
MW-3	12/30/2008	---	---	---	---	---	---	---	---	---	---	---	---	---	---	174.59	13.04	161.55	---	---	---
MW-3	01/22/2009	27,000	2,300	29	880	610	---	1,600	1,700	---	---	---	---	---	---	174.59	13.73	160.86	---	---	---
MW-3	02/27/2009	---	---	---	---	---	---	---	---	---	---	---	---	---	---	174.59	12.88	161.71	---	---	---
MW-3	04/13/2009	27,000	3,000	51	1,200	740	---	1,400	1,500	---	---	---	---	---	---	174.59	13.01	161.58	---	---	---
MW-3	07/23/2009	26,000	3,300	41	1,600	1,200	---	2,200	1,600	<50	<50	<50	---	---	<2,500	174.59	14.59	160.00	---	---	---
MW-3	11/10/2009	---	---	---	---	---	---	---	---	---	---	---	---	---	---	174.59	13.66	160.93	---	---	---
MW-3	02/01/2010	34,000	3,200	44	1,300	1,700	---	1,000	1,100	---	---	---	---	---	---	174.59	10.65	163.94	---	---	---
MW-3	08/02/2010	16,000	1,500	12	440	460	---	910	1,200	---	---	---	---	---	---	174.59	14.09	160.50	---	---	---
MW-3	01/31/2011	21,000	2,200	32	980	980	---	1,300	1,700	---	---	---	<20	<20	---	174.59	11.89	162.70	---	---	---
MW-3	04/26/2011	---	---	---	---	---	---	---	---	---	---	---	---	---	---	174.59	12.56	162.03	---	---	---
MW-3	07/25/2011	23,000	1,600	24	1,200	1,000	---	840	940	<25	<25	<25	---	---	<3,800	174.59	13.53	161.06	---	---	---
MW-3	10/13/2011	---	---	---	---	---	---	---	---	---	---	---	---	---	---	174.59	13.02	161.57	---	---	---
MW-3	01/23/2012	25,000	1,500	16	640	610	---	730	660	---	---	---	---	---	---	174.59	12.30	162.29	---	---	---
MW-3	04/23/2012	---	---	---	---	---	---	---	---	---	---	---	---	---	---	174.59	11.43	163.16	---	---	---
MW-3	07/24/2012	22,000	2,100	33	870	550	---	970	1,100	<10	<10	<10	---	---	---	174.59	13.84	160.76	0.01	---	---
MW-3	11/07/2012	---	---	---	---	---	---	---	---	---	---	---	---	---	---	174.59	13.81	160.78	---	---	---
MW-3	01/23/2013	36,000	1,600	18	900	830	---	800	1,200	---	---	---	---	---	---	174.59	12.85	161.74	---	---	---
MW-3	04/01/2013	---	---	---	---	---	---	---	---	---	---	---	---	---	---	174.59	13.33	161.26	---	---	---
MW-3	07/10/2013	14,000	1,700	17	250	330	---	870	970	<10	<10	<10	---	---	<3,000	174.59	14.01	160.58	---	---	---
MW-3	10/01/2013	---	---	---	---	---	---	---	---	---	---	---	---	---	---	174.59	14.87	159.72	---	---	---
MW-3	01/16/2014	31,000	2,100	27	1,600	1,700	---	830	960	---	---	---	---	---	---	174.59	15.37	159.22	---	---	---
MW-3	04/29/2014	---	---	---	---	---	---	---	---	---	---	---	---	---	---	174.59	12.99	161.60	---	---	---
MW-3	07/10/2014	19,000	1,900	26	510	560	---	910	1,000	<13	<13	<13	---	---	<3,800	174.59	14.63	159.96	---	---	---
MW-3	10/14/2014	---	---	---	---	---	---	---	---	---	---	---	---	---	---	174.59	15.93	158.66	---	---	---
MW-3	01/27/2015	20,000	1,700	22	430	370	---	730	1,100	---	---	---	---	---	---	174.59	13.23	161.36	---	---	---
MW-3	07/21/2015	13,000	2,000	18	98	110	---	700	1,000	<13	<13	<13	---	---	<3,800	174.59	14.61	159.98	---	---	---
MW-3	01/20/2016	21,000	2,000	<25	840	690	---	660	770 j	---	---	---	---	---	---	174.59	9.95	164.64	---	---	---
MW-3	07/20/2016	15,000	1,100	11	110	80	---	360	760	<10	<10	<10	---	---	<3,000	174.59	14.63	159.96	---	---	---
MW-3	**01/12/2017**	**14,000**	**1,000**	**11**	**560**	**420**	**---**	**270**	**450**	**---**	**---**	**---**	**---**	**---**	**---**	**174.59**	**8.90**	**165.69**	**---**	**---**	**---**
MW-4	11/17/1994	---	---	---	---	---	---	---	---	---	---	---	---	---	---	164.06	6.62	157.44	---	---	---
MW-4	11/28/1994	2,900	200	17	76	260	---	---	---	---	---	---	---	---	---	164.06	6.11	157.95	---	---	---
MW-4	01/13/1995	1,900	130	5.6	13	40	---	---	---	---	---	---	---	---	---	164.06	6.05	158.01	---	---	---
MW-4	04/12/1995	680	150	<2.0	10	13	---	---	---	---	---	---	---	---	---	164.06	6.31	157.75	---	---	---
MW-4	07/25/1995	340	100	0.80	8.8	3.0	---	---	---	---	---	---	---	---	---	164.06	7.36	156.70	---	---	---
MW-4	10/18/1995	150	31	<0.50	3.5	0.80	---	---	---	---	---	---	---	---	---	164.06	8.54	155.52	---	---	---
MW-4	01/17/1996	290	14	<0.50	1.8	0.80	---	---	---	---	---	---	---	---	---	164.06	8.48	155.58	---	---	---

Table 1
Groundwater Data
Former Shell Service Station, 4255 MacArthur Boulevard, Oakland, California

Well ID	Date	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)	EDB (µg/L)	1,2-DCA (µg/L)	Ethanol (µg/L)	TOC (ft AMSL)	Depth to Water (ft TOC)	GW Elevation (ft AMSL)	SPH Thickness (ft)	DO Reading (mg/L)	ORP Reading (mV)
MW-4	04/25/1996	<500	65	<5.0	<5.0	<5.0	1,700	---	---	---	---	---	---	---	---	164.06	7.40	156.66	---	---	---
MW-4 (D)	04/25/1996	<500	66	<5.0	8.7	<5.0	1,500	---	---	---	---	---	---	---	---	164.06	7.40	156.66	---	---	---
MW-4	07/17/1996	<500	84	<5.0	6.5	<5.0	1,500	---	---	---	---	---	---	---	---	164.06	7.75	156.31	---	---	---
MW-4 (D)	07/17/1996	<500	54	<5.0	<5.0	<5.0	1,700	2,100	---	---	---	---	---	---	---	164.06	7.75	156.31	---	---	---
MW-4	10/01/1996	<500	1.9	<5.0	<5.0	<5.0	3,000	---	---	---	---	---	---	---	---	164.06	8.82	155.24	---	---	---
MW-4	01/22/1997	580	130	<2.5	18	5.2	1,200	---	---	---	---	---	---	---	---	164.06	7.51	156.55	---	---	---
MW-4	04/08/1997	770	200	7.0	26	55	1,500	8.0	---	---	---	---	---	---	---	164.06	7.18	156.88	---	---	---
MW-4	07/08/1997	570	78	<5.0	14	11	1,200	---	---	---	---	---	---	---	---	164.06	9.00	155.06	---	---	---
MW-4 (D)	07/08/1997	640	81	<5.0	16	19	1,600	---	---	---	---	---	---	---	---	164.06	9.00	155.06	---	---	---
MW-4	10/08/1997	<500	40	<5.0	7.4	5.4	1,400	---	---	---	---	---	---	---	---	164.06	8.97	155.09	---	---	---
MW-4 (D)	10/08/1997	<500	36	<5.0	5.9	<5.0	1,400	---	---	---	---	---	---	---	---	164.06	8.97	155.09	---	---	---
MW-4	01/08/1998	<1,000	55	<10	13	<10	2,000	---	---	---	---	---	---	---	---	164.06	7.90	156.16	---	---	---
MW-4	04/13/1998	350	110	2.4	20	26	<2.5	---	---	---	---	---	---	---	---	164.06	7.35	156.71	---	---	---
MW-4	07/17/1998	210	66	0.78	5.4	9.8	1,700	---	---	---	---	---	---	---	---	164.06	6.95	157.11	---	---	---
MW-4	10/02/1998	<50	0.69	<0.50	<0.50	<0.50	2,900	---	---	---	---	---	---	---	---	164.06	7.35	156.71	---	---	---
MW-4	02/03/1999	560	120	2.5	29	34	6,800	---	---	---	---	---	---	---	---	164.06	7.71	156.35	---	0.9	---
MW-4	04/29/1999	390	80	1.9	13	19	7,000	8,360	---	---	---	---	---	---	---	164.06	7.83	156.23	---	1.1	-125
MW-4	07/23/1999	460	93.6	8.40	25.2	28.8	3,760	6,000 f	---	---	---	---	---	---	---	164.06	11.33	152.73	---	0.9	---
MW-4	11/01/1999	77.3	0.520	<0.500	<0.500	<0.500	539	---	---	---	---	---	---	---	---	164.06	10.66	153.40	---	2.8	3
MW-4	01/17/2000	160	27	<0.50	12	6.3	12,000	---	---	---	---	---	---	---	---	164.06	10.15	153.91	---	3.9	-17
MW-4	04/17/2000	<500	26	6.38	9.35	10.4	9,070	---	---	---	---	---	---	---	---	164.06	10.10	153.96	---	1.7	-129
MW-4	07/26/2000	<500	22.7	<5.00	7.59	6.96	7,660	---	---	---	---	---	---	---	---	164.06	10.09	153.97	---	1.4	-137
MW-4	10/12/2000	172	19.8	<0.500	7.47	4.50	8,290	---	---	---	---	---	---	---	---	164.06	9.35	154.71	---	3.5	529
MW-4	01/15/2001	53.6	1.50	<0.500	2.45	1.80	9,260	---	---	---	---	---	---	---	---	164.06	8.77	155.29	---	2.3	53
MW-4	04/09/2001	<500	<5.00	<5.00	<5.00	5.52	10,300	---	---	---	---	---	---	---	---	164.06	7.75	156.31	---	1.0	-133
MW-4	07/24/2001	58	3.8	<0.50	3.2	2.9	---	1,700	---	---	---	---	---	---	---	164.06	10.07	153.99	---	0.5	106
MW-4	10/31/2001	<1,000	<10	<10	<10	<10	---	7,400	---	---	---	---	---	---	---	164.06	9.97	154.09	---	0.8	22
MW-4	01/10/2002	<2,000	<20	<20	<20	<20	---	12,000	---	---	---	---	---	---	---	164.06	8.53	155.53	---	8.9	224
MW-4	04/25/2002	<2,000	<20	<20	<20	<20	---	7,900	---	---	---	---	---	---	---	164.06	7.33	156.73	---	3.6	-84
MW-4	07/18/2002	<2,000	<20	<20	<20	<20	---	7,200	---	---	---	---	---	---	---	164.06	9.05	155.01	---	1.7	120
MW-4	10/07/2002	<1,000	<10	<10	<10	<10	---	3,300	---	---	---	---	---	---	---	164.03	9.06	154.97	---	2.5	33
MW-4	01/06/2003	<500	21	<5.0	<5.0	<5.0	---	2,500	---	---	---	---	---	---	---	164.03	7.09	156.94	---	0.5	55
MW-4	04/07/2003	<2,500	<25	<25	<25	<50	---	1,700	5,900	---	---	---	---	---	---	164.03	8.26	155.77	---	1.2	69
MW-4	07/07/2003	<2,500	<25	<25	<25	<50	---	860	6,900	---	---	---	---	---	---	164.03	8.92	155.11	---	0.5	-3
MW-4	10/09/2003	<500	<5.0	<5.0	<5.0	<10	---	420	6,700	---	---	---	---	---	---	164.03	8.91	155.12	---	0.7	171
MW-4	01/14/2004	<1,000	24	<10	<10	<20	---	500	7,200	---	---	---	---	---	---	164.03	8.34	155.69	---	1.2	140
MW-4	04/28/2004	<500	6.0	<5.0	<5.0	<10	---	310	5,200	---	---	---	---	---	---	164.03	7.55	156.48	---	0.4	69

Table 1
Groundwater Data
Former Shell Service Station, 4255 MacArthur Boulevard, Oakland, California

Well ID	Date	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)	EDB (µg/L)	1,2-DCA (µg/L)	Ethanol (µg/L)	TOC (ft AMSL)	Depth to Water (ft TOC)	GW Elevation (ft AMSL)	SPH Thickness (ft)	DO Reading (mg/L)	ORP Reading (mV)
MW-4	07/12/2004	<500	11	<5.0	7.8	<10	---	370	5,900	<20	<20	<20	---	---	<500	164.03	8.12	155.91	---	0.5	142
MW-4	10/25/2004	<500	<5.0	<5.0	5.6	<10	---	280	4,300	---	---	---	---	---	---	164.03	7.85	156.18	---	1.90	-70
MW-4	01/17/2005	<1,000	56	<10	10	<20	---	380	8,400	---	---	---	---	---	---	164.03	6.08	157.95	---	0.4	6
MW-4	04/06/2005	<1,000	52	<10	11	<20	---	450	12,000	---	---	---	---	---	---	164.03	8.10	155.93	---	0.49	11
MW-4	07/08/2005	<400	30	<4.0	6.0	<4.0	---	250	9,600	<4.0	<4.0	<4.0	---	---	<40	164.03	7.50	156.53	---	0.6	71
MW-4	07/08/2005	<400	30	<4.0	6.0	<4.0	---	250	9,600	<4.0	<4.0	<4.0	---	---	<40	164.03	7.50	156.53	---	0.6	71
MW-4	10/07/2005	<1,000	<10	<10	<10	<20	---	200	8,900	---	---	---	---	---	---	164.03	8.30	155.73	---	---	---
MW-4	01/27/2006	1,140	34.3	2.37	8.69	12.0	---	198	32,100	---	---	---	---	---	---	164.03	8.55	155.48	---	---	---
MW-4	04/28/2006	1,490	46.8	2.80	21.2	24.8	---	344	14,800	---	---	---	---	---	---	164.03	9.02	155.01	---	---	---
MW-4	07/28/2006	951	5.09	<0.500	<0.500	<0.500	---	169	4,830	1.57	<0.500	<0.500	---	---	<50.0	164.03	9.19	154.84	---	---	---
MW-4	10/27/2006	1,620	21.5	2.65	13.2	10.3	---	173	5,150	---	---	---	---	---	---	164.03	9.01	155.02	---	---	---
MW-4	01/10/2007	740	56	2.4	23	24	---	190	7,500 f	---	---	---	---	---	---	164.03	6.95	157.08	---	---	---
MW-4	04/13/2007	1,500 g	130	20	100	138	---	120	6,300	---	---	---	---	---	---	164.03	7.51	156.52	---	---	---
MW-4	07/09/2007	650 g	65	5.3 h	36	33.2 h	---	130	6,000	<20	<20	<20	---	---	<1,000	164.03	7.85	156.18	---	---	---
MW-4	10/08/2007	840 g	100	23	70	120	---	120	5,300	---	---	---	---	---	---	164.03	8.50	155.53	---	---	---
MW-4	01/09/2008	2,200 g	130	38	130	264	---	160	5,400	---	---	---	---	---	---	164.03	8.33	155.70	---	---	---
MW-4	04/04/2008	1,700	93	24	74	145	---	110	3,700	---	---	---	---	---	---	164.03	6.63	157.40	---	---	---
MW-4	07/03/2008	1,400	87	15	54	109	---	88	3,900	<20	<20	<20	---	---	<1,000	164.03	8.25	155.78	---	---	---
MW-4	10/03/2008	1,000	61	12	41	78	---	84	3,700	---	---	---	---	---	---	164.03	8.54	155.49	---	---	---
MW-4	01/22/2009	800	26	5.4	14	26	---	81	4,100	---	---	---	---	---	---	164.03	7.40	156.63	---	---	---
MW-4	04/13/2009	2,000	100	26	64	130	---	69	3,200	---	---	---	---	---	---	164.03	6.91	157.12	---	---	---
MW-4	07/23/2009	1,500	180	54	86	200	---	85	2,500	<10	<10	<10	---	---	<500	164.03	7.97	156.06	---	---	---
MW-4	02/01/2010	1,400	120	44	57	120	---	81	2,900	---	---	---	---	---	---	164.03	6.05	157.98	---	---	---
MW-4	08/02/2010	340,000	5,300	5,800	7,700	26,000	---	62	1,800	---	---	---	---	---	---	164.03	6.48	157.65	0.12	---	---
MW-4	01/31/2011	9,700	47	62	340	1,100	---	77	1,300	---	---	---	<5.0	<5.0	---	164.03	6.67	157.36	---	---	---
MW-4	04/26/2011	---	---	---	---	---	---	---	---	---	---	---	---	---	---	164.03	8.73	155.30	---	---	---
MW-4	07/25/2011	94,000	2,800	2,900	3,800	12,000	---	<100	<1,000	<100	<100	<100	---	---	<15,000	164.03	7.27	156.76	---	---	---
MW-4	10/13/2011	---	---	---	---	---	---	---	---	---	---	---	---	---	---	164.03	7.57	156.46	---	---	---
MW-4	01/23/2012	6,100	83	61	230	510	---	46	150	---	---	---	---	---	---	164.03	5.82	158.21	---	---	---
MW-4	04/23/2012	---	---	---	---	---	---	---	---	---	---	---	---	---	---	164.03	6.50	157.53	---	---	---
MW-4	07/24/2012	5,400	95	33	160	410	---	42	67	<2.5	<2.5	<2.5	---	---	---	164.03	7.19	156.84	---	---	---
MW-4	11/07/2012	---	---	---	---	---	---	---	---	---	---	---	---	---	---	164.03	6.96	157.07	---	---	---
MW-4	01/23/2013	31,000	110	190	950	3,400	---	33	<500	---	---	---	---	---	---	164.03	6.75	157.28	---	---	---
MW-4	04/01/2013	---	---	---	---	---	---	---	---	---	---	---	---	---	---	164.03	7.11	156.92	---	---	---
MW-4	07/10/2013	9,000	63	24	180	600	---	34	<100	<5.0	<5.0	<5.0	---	---	<1,500	164.03	7.15	156.88	---	---	---
MW-4	10/01/2013	---	---	---	---	---	---	---	---	---	---	---	---	---	---	164.03	8.36	155.67	---	---	---
MW-4	01/16/2014	10,000	150	100	430	1,300	---	30	<100	---	---	---	---	---	---	164.03	8.41	155.62	---	---	---

Table 1
Groundwater Data
Former Shell Service Station, 4255 MacArthur Boulevard, Oakland, California

Well ID	Date	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)	EDB (µg/L)	1,2-DCA (µg/L)	Ethanol (µg/L)	TOC (ft AMSL)	Depth to Water (ft TOC)	GW Elevation (ft AMSL)	SPH Thickness (ft)	DO Reading (mg/L)	ORP Reading (mV)
MW-4	04/29/2014	---	---	---	---	---	---	---	---	---	---	---	---	---	---	164.03	7.49	156.54	---	---	---
MW-4	07/10/2014	9,700	120	130	660	2,000	---	33	<100	<5.0	<5.0	<5.0	---	---	<1,500	164.03	8.28	155.75	---	---	---
MW-4	10/14/2014	---	---	---	---	---	---	---	---	---	---	---	---	---	---	164.03	9.54	154.49	---	---	---
MW-4	01/27/2015	8,300	73	43	350	1,100	---	35	<50	---	---	---	---	---	---	164.03	6.90	157.13	---	---	---
MW-4	07/21/2015	12,000	37	19	280	820	---	31	<100	<5.0	<5.0	<5.0	---	---	<1,500	164.03	8.03	156.00	---	---	---
MW-4	01/20/2016	5,500	20	6.1	120	360	---	41	<25	---	---	---	---	---	---	164.03	5.70	158.33	---	---	---
MW-4	07/20/2016	12,000	52	<25	300	830	---	34	<500	<25	<25	<25	---	---	<7,500	164.03	7.94	156.09	---	---	---
MW-4	**01/12/2017**	**26,000**	**69**	**35.0**	**850**	**2,400**	**---**	**15**	**<200**	**---**	**---**	**---**	**---**	**---**	**---**	**164.03**	**4.73**	**159.30**	**---**	**---**	**---**
MW-5	01/04/2002	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	5.62	---	---	---	---
MW-5	01/10/2002	<50	<0.50	<0.50	<0.50	<0.50	---	110	---	---	---	---	---	---	---	164.06	5.88	158.18	---	3.3	172
MW-5	04/25/2002	<50	<0.50	<0.50	<0.50	<0.50	---	73	---	---	---	---	---	---	---	164.06	6.81	157.25	---	0.3	-44
MW-5	07/18/2002	<50	<0.50	<0.50	<0.50	<0.50	---	75	---	---	---	---	---	---	---	164.06	7.38	156.68	---	0.4	170
MW-5	10/07/2002	<50	<0.50	<0.50	<0.50	<0.50	---	41	---	---	---	---	---	---	---	164.14	6.75	157.39	---	1.5	16
MW-5	01/06/2003	<50	<0.50	<0.50	<0.50	<0.50	---	81	---	---	---	---	---	---	---	164.14	5.96	158.18	---	0.6	166
MW-5	04/07/2003	<50	<0.50	<0.50	<0.50	<1.0	---	77	28	---	---	---	---	---	---	164.14	6.51	157.63	---	0.8	174
MW-5	07/07/2003	<50	<0.50	<0.50	<0.50	<1.0	---	32	23	---	---	---	---	---	---	164.14	6.44	157.70	---	0.3	-17
MW-5	10/09/2003	<50	<0.50	<0.50	<0.50	<1.0	---	59	40	---	---	---	---	---	---	164.14	7.05	157.09	---	0.9	17
MW-5	01/14/2004	<50	<0.50	0.76	<0.50	<1.0	---	47	17	---	---	---	---	---	---	164.14	6.29	157.85	---	1.6	209
MW-5	04/28/2004	<50	<0.50	<0.50	<0.50	<1.0	---	31	11	---	---	---	---	---	---	164.14	6.84	157.30	---	0.4	136
MW-5	07/12/2004	<50	<0.50	<0.50	<0.50	<1.0	---	47	12	<2.0	<2.0	<2.0	---	---	<50	164.14	7.57	156.57	---	0.4	90
MW-5	10/25/2004	<50	<0.50	<0.50	<0.50	<1.0	---	41	13	---	---	---	---	---	---	164.14	6.50	157.64	---	1.74	-21
MW-5	01/17/2005	<50	<0.50	<0.50	<0.50	<1.0	---	41	12	---	---	---	---	---	---	164.14	5.83	158.31	---	0.1	-7
MW-5	04/06/2005	<50	<0.50	<0.50	<0.50	<1.0	---	12	<5.0	---	---	---	---	---	---	164.14	5.91	158.23	---	1.05	-62
MW-5	07/08/2005	<50	<0.50	<0.50	<0.50	<0.50	---	26	18	<0.50	<0.50	<0.50	---	---	<5.0	164.14	6.78	157.36	---	1.2	81
MW-5	10/07/2005	<50	<0.50	<0.50	<0.50	<1.0	---	28	24	---	---	---	---	---	---	164.14	7.64	156.50	---	---	---
MW-5	01/27/2006	<50.0	<0.500	<0.500	<0.500	<0.500	---	26.7	46.3	---	---	---	---	---	---	164.14	6.21	157.93	---	---	---
MW-5	04/28/2006	<50.0	<0.500	<0.500	<0.500	<0.500	---	39.1	15.0	---	---	---	---	---	---	164.14	6.05	158.09	---	---	---
MW-5	07/28/2006	103	<0.500	<0.500	<0.500	<0.500	---	35.5	<10.0	<0.500	<0.500	<0.500	---	---	<50.0	164.14	7.54	156.60	---	---	---
MW-5	10/27/2006	<50.0	<0.500	<0.500	<0.500	<0.500	---	19.7	26.0 d	---	---	---	---	---	---	164.14	7.91	156.23	---	---	---
MW-5	01/10/2007	<50	<0.50	<0.50	<0.50	<1.0	---	11	16	---	---	---	---	---	---	164.14	6.38	157.76	---	---	---
MW-5	04/13/2007	76 c,g	<0.50	<1.0	<1.0	<1.0	---	35	37	---	---	---	---	---	---	164.14	6.58	157.56	---	---	---
MW-5	07/09/2007	<50 g	<0.50	<1.0	<1.0	<1.0	---	26	34	<2.0	<2.0	<2.0	---	---	<100	164.14	7.28	156.86	---	---	---
MW-5	10/08/2007	<50 g	<0.50	<1.0	<1.0	<1.0	---	25	28	---	---	---	---	---	---	164.14	8.01	156.13	---	---	---
MW-5	01/09/2008	<50 g	0.15 h	<1.0	<1.0	<1.0	---	11	7.6 h	---	---	---	---	---	---	164.14	5.45	158.69	---	---	---
MW-5	04/04/2008	50	<0.50	<1.0	<1.0	<1.0	---	17	<10	---	---	---	---	---	---	164.14	6.61	157.53	---	---	---
MW-5	07/03/2008	<50	<0.50	<1.0	<1.0	<1.0	---	16	11	<2.0	<2.0	<2.0	---	---	<100	164.14	7.40	156.74	---	---	---

Table 1
Groundwater Data
Former Shell Service Station, 4255 MacArthur Boulevard, Oakland, California

Well ID	Date	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)	EDB (µg/L)	1,2-DCA (µg/L)	Ethanol (µg/L)	TOC (ft AMSL)	Depth to Water (ft TOC)	GW Elevation (ft AMSL)	SPH Thickness (ft)	DO Reading (mg/L)	ORP Reading (mV)
MW-5	10/03/2008	<50	<0.50	<1.0	<1.0	<1.0	---	17	14	---	---	---	---	---	---	164.14	7.90	156.24	---	---	---
MW-5	01/22/2009	<50	<0.50	<1.0	<1.0	<1.0	---	9.2	<10	---	---	---	---	---	---	164.14	6.30	157.84	---	---	---
MW-5	04/13/2009	<50	<0.50	<1.0	<1.0	<1.0	---	8.4	<10	---	---	---	---	---	---	164.14	6.42	157.72	---	---	---
MW-5	07/23/2009	<50	<0.50	<1.0	<1.0	<1.0	---	15	<10	<2.0	<2.0	<2.0	---	---	<100	164.14	7.60	156.54	---	---	---
MW-5	02/01/2010	<50	<0.50	<1.0	<1.0	<1.0	---	9.0	<10	---	---	---	---	---	---	164.14	5.80	158.34	---	---	---
MW-5	08/02/2010	<50	<0.50	<1.0	<1.0	<1.0	---	7.5	<10	---	---	---	---	---	---	164.14	7.00	157.14	---	---	---
MW-5	01/31/2011	<50	<0.50	<0.50	<0.50	<1.0	---	7.5	<10	---	---	---	<0.50	<0.50	---	164.14	5.79	158.35	---	---	---
MW-5	07/25/2011	Unable to locate		---	---	---	---	---	---	---	---	---	---	---	---	164.14	---	---	---	---	---
MW-5	01/23/2012	<50	<0.50	<0.50	<0.50	<1.0	---	5.7	<10	---	---	---	---	---	---	164.14	5.40	158.74	---	---	---
MW-5	07/24/2012	<50	<0.50	<0.50	<0.50	<1.0	---	9.0	<10	<0.50	<0.50	<0.50	---	---	---	164.14	6.45	157.69	---	---	---
MW-5	01/23/2013	<50	<0.50	<0.50	<0.50	<1.0	---	6.0	<10	---	---	---	---	---	---	164.14	6.32	157.82	---	---	---
MW-5	07/10/2013	<50	<0.50	<0.50	<0.50	<1.0	---	6.8	<10	<0.50	<0.50	<0.50	---	---	<150	164.14	6.68	157.46	---	---	---
MW-5	01/16/2014	<50	<0.50	<0.50	<0.50	<1.0	---	2.5	<10	---	---	---	---	---	---	164.14	7.86	156.28	---	---	---
MW-5	07/10/2014	<50	<0.50	<0.50	<0.50	<1.0	---	6.0	<10	<0.50	<0.50	<0.50	---	---	<150	164.14	7.66	156.48	---	---	---
MW-5	01/27/2015	<50	<0.50	<0.50	<0.50	<1.0	---	2.9	<10	---	---	---	---	---	---	164.14	6.47	157.67	---	---	---
MW-5	07/21/2015	<50	<0.50	<0.50	<0.50	<1.0	---	3.0	<10	<0.50	<0.50	<0.50	---	---	<150	164.14	7.94	156.20	---	---	---
MW-5	01/20/2016	<50	<0.50	<0.50	<0.50	<1.0	---	1.1	<10	---	---	---	---	---	---	164.14	4.80	159.34	---	---	---
MW-5	07/20/2016	<50	<0.50	<0.50	<0.50	<1.0	---	3.2	<10	<0.50	<0.50	<0.50	---	---	<150	164.14	7.56	156.58	---	---	---
MW-5	**01/12/2017**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<1.0**	**---**	**<0.50**	**<10**	**---**	**---**	**---**	**---**	**---**	**---**	**164.14**	**4.32**	**159.82**	**---**	**---**	**---**
MW-6	06/26/2006	---	---	---	---	---	---	---	---	---	---	---	---	---	---	169.89	10.25	159.64	---	---	---
MW-6	07/28/2006	19,200	1,290	41.7	141	245	---	777	8,340	3.37	<0.500	<0.500	---	---	<50.0	169.89	11.00	158.89	---	---	---
MW-6	10/27/2006	11,400	1,250	41.0	155	242	---	569	7,270	---	---	---	---	---	---	169.89	11.41	158.48	---	---	---
MW-6	01/10/2007	7,000	1,000	26	270	240	---	770	17,000	---	---	---	---	---	---	169.89	9.43	160.46	---	---	---
MW-6	04/13/2007	4,200 g	820	22	72	71	---	490	9,500	---	---	---	---	---	---	169.89	9.81	160.08	---	---	---
MW-6	07/09/2007	6,100 g	960	23	65	116	---	280	8,400	<40	<40	<40	---	---	<2,000	169.89	10.80	159.09	---	---	---
MW-6	10/08/2007	3,600 g	960	17 h	27	76 h	---	260	7,000	---	---	---	---	---	---	169.89	11.64	158.25	---	---	---
MW-6	01/09/2008	Unable to access		---	---	---	---	---	---	---	---	---	---	---	---	169.89	---	---	---	---	---
MW-6	01/22/2008	4,100 g	610	14 h	31	19 h	---	180	7,700	---	---	---	---	---	---	169.89	8.81	161.08	---	---	---
MW-6	04/04/2008	6,100	760	<20	20	29	---	240	6,900	---	---	---	---	---	---	169.89	10.01	159.88	---	---	---
MW-6	07/03/2008	7,100	1,100	<20	25	50	---	220	9,400	<40	<40	<40	---	---	<2,000	169.89	10.94	158.95	---	---	---
MW-6	10/03/2008	7,400	1,000	<20	<20	116	---	270	8,400	---	---	---	---	---	---	169.89	11.87	158.02	---	---	---
MW-6	01/22/2009	Unable to access		---	---	---	---	---	---	---	---	---	---	---	---	169.89	---	---	---	---	---
MW-6	04/13/2009	5,300	690	<20	35	47	---	210	9,000	---	---	---	---	---	---	169.89	9.70	160.19	---	---	---
MW-6	07/23/2009	6,800	1,100	<20	<20	42	---	220	7,400	<40	<40	<40	---	---	<2000	169.89	11.09	158.80	---	---	---
MW-6	02/01/2010	4,000	460	<10	<10	<10	---	88	8,400	---	---	---	---	---	---	169.89	8.05	161.84	---	---	---
MW-6	08/02/2010	7,600	860	15	18	49	---	97	6,800	---	---	---	---	---	---	169.89	10.50	159.39	---	---	---

Table 1
Groundwater Data
Former Shell Service Station, 4255 MacArthur Boulevard, Oakland, California

Well ID	Date	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)	EDB (µg/L)	1,2-DCA (µg/L)	Ethanol (µg/L)	TOC (ft AMSL)	Depth to Water (ft TOC)	GW Elevation (ft AMSL)	SPH Thickness (ft)	DO Reading (mg/L)	ORP Reading (mV)
MW-6	01/31/2011	2,800	370	11	19	26	---	170	4,800	---	---	---	<5.0	<5.0	---	169.89	8.52	161.37	---	---	---
MW-6	07/25/2011	4,600	730	13	6.5	18	---	110	5,500	<10	<10	<10	---	---	<1,500	169.89	10.08	159.81	---	---	---
MW-6	01/23/2012	2,100	300	5.3	5.1	13	---	61	3,100	---	---	---	---	---	---	169.89	8.18	161.71	---	---	---
MW-6	07/24/2012	3,400	510	8.8	5.8	14	---	110	5,100	<5.0	<5.0	<5.0	---	---	---	169.89	10.01	159.88	---	---	---
MW-6	01/23/2013	2,400	260	5.4	30	15	---	110	4,600	---	---	---	---	---	---	169.89	9.62	160.27	---	---	---
MW-6	07/10/2013	3,000	390	6.3	<5.0	12	---	110	4,300	<5.0	<5.0	<5.0	---	---	<1,500	169.89	9.94	159.95	---	---	---
MW-6	01/16/2014	3,500	500	9.3	9.0	14	---	64	3,900	---	---	---	---	---	---	169.89	11.10	158.79	---	---	---
MW-6	07/10/2014	3,300	400	9.4	8.7	26	---	150	5,200	<5.0	<5.0	<5.0	---	---	<1,500	169.89	11.11	158.80	---	---	---
MW-6	01/27/2015	3,300	400	8.4	9.7	15	---	67	3,600	---	---	---	---	---	---	169.89	9.91	158.81	---	---	---
MW-6	07/21/2015	4,700	680	9.2	<5.0	14	---	73	4,400	<5.0	<5.0	<5.0	---	---	<1,500	169.89	11.03	158.86	---	---	---
MW-6	01/20/2016	1,100	82	1.8	0.89	4.0	---	32	1,500	---	---	---	---	---	---	169.89	6.90	162.99	---	---	---
MW-6	07/20/2016	2,800	580	7.5	<5.0	13.0	---	150	4,000	<5.0	<5.0	<5.0	---	---	<1,500	169.89	10.70	159.19	---	---	---
MW-6	**01/12/2017**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<1.0**	**---**	**2.5**	**25**	**---**	**---**	**---**	**---**	**---**	**---**	**169.89**	**6.40**	**163.49**	**---**	**---**	**---**
MW-7	06/26/2006	---	---	---	---	---	---	---	---	---	---	---	---	---	---	170.87	9.59	161.28	---	---	---
MW-7	07/28/2006	5,860	72.0	6.67	25.4	165	---	3,940	1,420	<0.500	<0.500	2.89	---	---	<50.0	170.87	10.08	160.79	---	---	---
MW-7	10/27/2006	1,180	8.67	<0.500	2.48	7.52	---	1,100	184	---	---	---	---	---	---	170.87	10.13	160.74	---	---	---
MW-7	01/10/2007	1,000	12	<5.0	<5.0	<10	---	2,200 f	2,400	---	---	---	---	---	---	170.87	8.41	162.46	---	---	---
MW-7	04/13/2007	1,100 c,g	54	<20	18 h	23.5 h	---	2,500	3,800	---	---	---	---	---	---	170.87	8.25	162.62	---	---	---
MW-7	07/09/2007	1,100 g	41	<20	8.8 h	4.5 h	---	2,000	1,200	<40	<40	<40	---	---	<2,000	170.87	9.22	161.65	---	---	---
MW-7	10/08/2007	400 g	25	<20	<20	<20	---	1,500	740	---	---	---	---	---	---	170.87	9.41	161.46	---	---	---
MW-7	01/09/2008	Unable to access		---	---	---	---	---	---	---	---	---	---	---	---	170.87	---	---	---	---	---
MW-7	01/22/2008	160 g	32	<10	<10	<10	---	1,900	820	---	---	---	---	---	---	170.87	7.63	163.24	---	---	---
MW-7	04/04/2008	Unable to access		---	---	---	---	---	---	---	---	---	---	---	---	170.87	---	---	---	---	---
MW-7	07/03/2008	1,500	11	<10	<10	<10	---	1,700	680	<20	<20	<20	---	---	<1,000	170.87	8.96	161.91	---	---	---
MW-7	10/03/2008	1,000	5.6	<10	<10	<10	---	970	550	---	---	---	---	---	---	170.87	9.57	161.30	---	---	---
MW-7	01/22/2009	880	<5.0	<10	<10	18	---	550	250	---	---	---	---	---	---	170.87	8.60	162.27	---	---	---
MW-7	04/13/2009	1,400	15	<10	<10	<10	---	820	440	---	---	---	---	---	---	170.87	8.24	162.63	---	---	---
MW-7	07/23/2009	1,400	12	<10	<10	<10	---	1,300	550	<20	<20	<20	---	---	<1000	170.87	9.10	161.77	---	---	---
MW-7	02/01/2010	1,300	20	<10	<10	<10	---	1,300	920	---	---	---	---	---	---	170.87	6.81	164.06	---	---	---
MW-7	08/02/2010	780	10	<5.0	<5.0	<5.0	---	890	680	---	---	---	---	---	---	170.87	8.55	162.32	---	---	---
MW-7	01/31/2011	340	12	3.2	6.1	17	---	390	480	---	---	---	<2.5	<2.5	---	170.87	7.58	163.29	---	---	---
MW-7	07/25/2011	480 c	8.8	<2.5	3.8	5.8	---	500	480	<5.0	<5.0	<5.0	---	---	<750	170.87	8.11	162.76	---	---	---
MW-7	01/23/2012	Unable to access		---	---	---	---	---	---	---	---	---	---	---	---	170.87	---	---	---	---	---
MW-7	07/24/2012	610	9.2	<2.5	<2.5	6.6	---	540	600	<2.5	<2.5	<2.5	---	---	---	170.87	8.30	162.57	---	---	---
MW-7	01/23/2013	700	26	<5.0	<5.0	15	---	520	640	---	---	---	---	---	---	170.87	7.79	163.08	---	---	---
MW-7	07/10/2013	710	10	<5.0	<5.0	<10	---	550	520	<5.0	<5.0	<5.0	---	---	<1,500	170.87	8.37	162.50	---	---	---

Table 1
Groundwater Data
Former Shell Service Station, 4255 MacArthur Boulevard, Oakland, California

Well ID	Date	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)	EDB (µg/L)	1,2-DCA (µg/L)	Ethanol (µg/L)	TOC (ft AMSL)	Depth to Water (ft TOC)	GW Elevation (ft AMSL)	SPH Thickness (ft)	DO Reading (mg/L)	ORP Reading (mV)
MW-7	01/16/2014	<500	<5.0	<5.0	<5.0	<10	---	170	<100	---	---	---	---	---	---	170.87	9.13	161.74	---	---	---
MW-7	07/10/2014	590 i	11	<2.5	<2.5	5.4	---	500	490	<2.5	<2.5	<2.5	---	---	<750	170.87	8.82	162.05	---	---	---
MW-7	01/27/2015	510 i	9.6	<2.5	<2.5	<5.0	---	310	350	---	---	---	---	---	---	170.87	7.95	162.92	---	---	---
MW-7	07/21/2015	260 i	3.2	<2.5	<2.5	<5.0	---	220	320	<2.5	<2.5	<2.5	---	---	<750	170.87	8.79	162.08	---	---	---
MW-7	01/20/2016	Unable to access		---	---	---	---	---	---	---	---	---	---	---	---	170.87	---	---	---	---	---
MW-7	02/22/2016	650	90	<5.0	<5.0	18	---	480	1,100	---	---	---	---	---	---	170.87	7.43	163.44	---	---	---
MW-7	07/20/2016	310	7.7	<2.0	<2.0	<4.0	---	290	490	<2.0	<2.0	<2.0	---	---	<600	170.87	8.58	162.29	---	---	---
MW-7	**01/12/2017**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<1.0**	**---**	**0.56**	**<10**	**---**	**---**	**---**	**---**	**---**	**---**	**170.87**	**5.35**	**165.52**	**---**	**---**	**---**
MW-8	06/26/2006	---	---	---	---	---	---	---	---	---	---	---	---	---	---	174.13	4.53	169.60	---	---	---
MW-8	07/28/2006	2,300	<0.500	<0.500	<0.500	<0.500	---	1,380	<10.0	<0.500	<0.500	0.950	---	---	<50.0	174.13	4.55	169.58	---	---	---
MW-8	10/27/2006	1,570	2.79 e	<0.500	<0.500	<0.500	---	1,280 e	<10.0	---	---	---	---	---	---	174.13	4.87	169.26	---	---	---
MW-8	01/10/2007	540	<2.5	<2.5	<2.5	<5.0	---	1,200 f	750	---	---	---	---	---	---	174.13	4.17	169.96	---	---	---
MW-8	04/13/2007	450 c,g	<5.0	<10	<10	<10	---	1,400	<100	---	---	---	---	---	---	174.13	4.13	170.00	---	---	---
MW-8	07/09/2007	590 g	<5.0	<10	<10	<10	---	1,000	<100	<20	<20	<20	---	---	<1,000	174.13	6.33	167.80	---	---	---
MW-8	10/08/2007	270 c,g	<5.0	<10	<10	<10	---	1,200	<100	---	---	---	---	---	---	174.13	5.63	168.50	---	---	---
MW-8	01/09/2008	200 c,g	<2.5	<5.0	<5.0	<5.0	---	370	<50	---	---	---	---	---	---	174.13	4.17	169.96	---	---	---
MW-8	04/04/2008	1,000	<5.0	<10	<10	<10	---	930	<100	---	---	---	---	---	---	174.13	4.36	169.77	---	---	---
MW-8	07/03/2008	960	<5.0	<10	<10	<10	---	1,000	<100	<20	<20	<20	---	---	<1,000	174.13	5.05	169.08	---	---	---
MW-8	10/03/2008	820	<5.0	<10	<10	<10	---	830	<100	---	---	---	---	---	---	174.13	5.54	168.59	---	---	---
MW-8	01/22/2009	1,000	<2.5	<5.0	<5.0	<5.0	---	740	<50	---	---	---	---	---	---	174.13	5.00	169.13	---	---	---
MW-8	04/13/2009	810	<2.5	<5.0	<5.0	<5.0	---	520	<50	---	---	---	---	---	---	174.13	4.51	169.62	---	---	---
MW-8	07/23/2009	840	<2.5	<5.0	<5.0	<5.0	---	830	<50	<10	<10	<10	---	---	<500	174.13	4.92	169.21	---	---	---
MW-8	02/01/2010	270	<1.0	<2.0	<2.0	<2.0	---	260	<20	---	---	---	---	---	---	174.13	3.65	170.48	---	---	---
MW-8	08/02/2010	430	<2.5	<5.0	<5.0	<5.0	---	480	<50	---	---	---	---	---	---	174.13	4.52	169.61	---	---	---
MW-8	01/31/2011	<250	<2.5	<2.5	<2.5	<5.0	---	380	300	---	---	---	<2.5	<2.5	---	174.13	4.29	169.84	---	---	---
MW-8	07/25/2011	300 c	<2.0	<2.0	<2.0	<4.0	---	350	<40	<4.0	<4.0	<4.0	---	---	<600	174.13	4.56	169.57	---	---	---
MW-8	01/23/2012	<250	<2.5	<2.5	<2.5	<5.0	---	320	98	---	---	---	---	---	---	174.13	4.49	169.64	---	---	---
MW-8	07/24/2012	350	<2.5	<2.5	<2.5	<5.0	---	330	<50	<2.5	<2.5	<2.5	---	---	---	174.13	4.85	169.28	---	---	---
MW-8	01/23/2013	290	<2.5	<2.5	<2.5	<5.0	---	270	100	---	---	---	---	---	---	174.13	4.25	169.88	---	---	---
MW-8	07/10/2013	290	<2.5	<2.5	<2.5	<5.0	---	250	<50	<2.5	<2.5	<2.5	---	---	<750	174.13	4.95	169.18	---	---	---
MW-8	01/16/2014	<250	<2.5	<2.5	<2.5	<5.0	---	230	<50	---	---	---	---	---	---	174.13	5.60	168.53	---	---	---
MW-8	07/10/2014	<250	<2.5	<2.5	<2.5	<5.0	---	210	<50	<2.5	<2.5	<2.5	---	---	<750	174.13	4.92	169.21	---	---	---
MW-8	01/27/2015	280 i	<2.5	<2.5	<2.5	<5.0	---	150	<50	---	---	---	---	---	---	174.13	4.45	169.68	---	---	---
MW-8	07/21/2015	<50	<0.50	<0.50	<0.50	<1.0	---	41	<10	<0.50	<0.50	<0.50	---	---	<150	174.13	5.15	168.98	---	---	---
MW-8	01/20/2016	120 i	<0.50	<0.50	<0.50	<1.0	---	130	<10	---	---	---	---	---	---	174.13	3.66	170.47	---	---	---
MW-8	07/20/2016	110 i	<0.50	<0.50	<0.50	<1.0	---	130	<10	<0.50	<0.50	<0.50	---	---	<150	174.13	5.21	168.92	---	---	---

Table 1
Groundwater Data
Former Shell Service Station, 4255 MacArthur Boulevard, Oakland, California

Well ID	Date	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)	EDB (µg/L)	1,2-DCA (µg/L)	Ethanol (µg/L)	TOC (ft AMSL)	Depth to Water (ft TOC)	GW Elevation (ft AMSL)	SPH Thickness (ft)	DO Reading (mg/L)	ORP Reading (mV)
MW-8	**01/12/2017**	**100**	**<0.50**	**<0.50**	**<0.50**	**<1.0**	**---**	**99**	**<10**	**---**	**---**	**---**	**---**	**---**	**---**	**174.13**	**3.82**	**170.31**	**---**	**---**	**---**
MW-9	06/26/2006	---	---	---	---	---	---	---	---	---	---	---	---	---	---	175.20	6.41	168.79	---	---	---
MW-9	07/28/2006	5,690	19.2	2.64	2.02	57.7	---	5,780	166	<0.500	<0.500	2.74	---	---	<50.0	175.20	6.69	168.51	---	---	---
MW-9	10/27/2006	2,710	34.2	<0.500	2.76	4.75	---	2,140	29.2 d	---	---	---	---	---	---	175.20	6.90	168.30	---	---	---
MW-9	01/10/2007	1,500	340	6.8	8.9	27	---	2,300 f	1,400	---	---	---	---	---	---	175.20	6.14	169.06	---	---	---
MW-9	04/13/2007	1,600 c,g	390	4.1 h	8.6 h	4.7 h	---	3,700	120	---	---	---	---	---	---	175.20	6.17	169.03	---	---	---
MW-9	07/09/2007	1,200 g	55	<25	<25	<25	---	2,500	<250	<50	<50	<50	---	---	<2,500	175.20	6.65	168.55	---	---	---
MW-9	10/08/2007	520 c,g	9.1 h	<25	<25	<25	---	2,500	<250	---	---	---	---	---	---	175.20	7.58	167.62	---	---	---
MW-9	01/09/2008	350 c,g	3.4 h	<10	<10	<10	---	650	<100	---	---	---	---	---	---	175.20	6.30	168.90	---	---	---
MW-9	04/04/2008	1,500	88	<10	<10	<10	---	1,200	<100	---	---	---	---	---	---	175.20	6.05	169.15	---	---	---
MW-9	07/03/2008	2,600	70	<10	<10	<10	---	2,800	<100	<20	<20	<20	---	---	<1,000	175.20	7.00	168.20	---	---	---
MW-9	10/03/2008	2,600	160	<20	<20	<20	---	2,400	<200	---	---	---	---	---	---	175.20	7.39	167.81	---	---	---
MW-9	01/22/2009	2,900	130	<20	<20	30	---	1,900	<200	---	---	---	---	---	---	175.20	7.00	168.20	---	---	---
MW-9	04/13/2009	5,200	590	24	60	89	---	1,600	230	---	---	---	---	---	---	175.20	6.47	168.73	---	---	---
MW-9	07/23/2009	6,300	830	30	150	130	---	3,200	170	<20	<20	<20	---	---	<1000	175.20	7.05	168.15	---	---	---
MW-9	02/01/2010	18,000	1,900	130	770	1,200	---	2,400	430	---	---	---	---	---	---	175.20	5.70	169.50	---	---	---
MW-9	08/02/2010	2,200	270	<10	99	36	---	1,200	280	---	---	---	---	---	---	175.20	6.50	168.70	---	---	---
MW-9	01/31/2011	1,100	120	9.5	60	63	---	1,100	1,000	---	---	---	<5.0	<5.0	---	175.20	6.21	168.99	---	---	---
MW-9	07/25/2011	1,200	210	<5.0	67	15	---	710	480	<10	<10	<10	---	---	<1,500	175.20	6.53	168.67	---	---	---
MW-9	01/23/2012	390	9.9	<1.0	4.7	5.8	---	460	370	---	---	---	---	---	---	175.20	6.49	168.71	---	---	---
MW-9	07/24/2012	970	91	<5.0	15	<10	---	660	530	<5.0	<5.0	<5.0	---	---	---	175.20	6.95	168.25	---	---	---
MW-9	01/23/2013	940	84	<5.0	20	<10	---	640	540	---	---	---	---	---	---	175.20	6.24	168.96	---	---	---
MW-9	07/10/2013	540	10	<5.0	<5.0	<10	---	360	290	<5.0	<5.0	<5.0	---	---	<1,500	175.20	7.09	168.11	---	---	---
MW-9	01/16/2014	240 i	<1.3	<1.3	<1.3	<2.5	---	250	170	---	---	---	---	---	---	175.20	7.70	167.50	---	---	---
MW-9	07/10/2014	340 i	<1.0	<1.0	<1.0	<2.0	---	350	94	<1.0	<1.0	<1.0	---	---	<300	175.20	7.12	168.08	---	---	---
MW-9	01/27/2015	140 i	<1.0	<1.0	<1.0	<2.0	---	86	97	---	---	---	---	---	---	175.20	6.61	168.59	---	---	---
MW-9	07/21/2015	310 i	<1.0	<1.0	<1.0	<2.0	---	300	52	<1.0	<1.0	<1.0	---	---	<300	175.20	7.32	167.88	---	---	---
MW-9	01/20/2016	130 i	0.61	<0.50	<0.50	<1.0	---	130	18	---	---	---	---	---	---	175.20	5.87	169.33	---	---	---
MW-9	07/20/2016	86	<0.50	<0.50	<0.50	<1.0	---	100	21	<0.50	<0.50	<0.50	---	---	<150	175.20	7.10	168.10	---	---	---
MW-9	**01/12/2017**	**110**	**0.67**	**<0.50**	**<0.50**	**<1.0**	**---**	**97**	**11 j**	**---**	**---**	**---**	**---**	**---**	**---**	**175.20**	**4.75**	**170.45**	**---**	**---**	**---**
TB-1	04/29/1999	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	6.00	---	---	3.8	-132
TB-1	11/01/1999	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	12.65	---	---	0.2	-165
TB-1	01/17/2000	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	7.72	---	---	0.8	-178
TB-1	04/17/2000	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	7.65	---	---	0.5	-152
TB-1	07/26/2000	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	5.13	---	---	1.0	-124

Table 1
Groundwater Data
Former Shell Service Station, 4255 MacArthur Boulevard, Oakland, California

Well ID	Date	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)	EDB (µg/L)	1,2-DCA (µg/L)	Ethanol (µg/L)	TOC (ft AMSL)	Depth to Water (ft TOC)	GW Elevation (ft AMSL)	SPH Thickness (ft)	DO Reading (mg/L)	ORP Reading (mV)
TB-1	10/12/2000	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	5.20	---	---	0.7	-73
TB-1	01/15/2001	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	5.09	---	---	1.2	-118
TB-1	04/09/2001	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	4.96	---	---	1.0	-72
TB-1	07/24/2001	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	6.03	---	---	1.4	31
TB-1	10/31/2001	1,000	85	<10	<10	42	---	4,100	---	---	---	---	---	---	---	---	5.89	---	---	1.8	88
TB-1	01/10/2002	5,000	410	390	65	620	---	9,000	---	---	---	---	---	---	---	---	7.47	---	---	2.0	95
TB-1	04/25/2002	5,000	780	60	49	91	---	6,000	---	---	---	---	---	---	---	---	11.71	---	---	1.7	-136
TB-1	07/18/2002	Insufficient water		---	---	---	---	---	---	---	---	---	---	---	---	---	13.50	---	---	---	---
TB-1	10/07/2002	4,600	480	36	98	200	---	4,000	---	---	---	---	---	---	---	---	12.95	---	---	1.6	-48
TB-1	01/06/2003	130	30	<0.50	<0.50	0.78	---	330	---	---	---	---	---	---	---	---	5.56	---	---	0.4	-20
TB-2	04/29/1999	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	4.76	---	---	4.2	-108
TB-2	11/01/1999	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	11.33	---	---	0.5	-148
TB-2	01/17/2000	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	9.79	---	---	0.7	-162
TB-2	04/17/2000	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	9.75	---	---	0.9	-121
TB-2	07/26/2000	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	4.73	---	---	0.9	-85
TB-2	10/12/2000	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	4.05	---	---	0.6	-47
TB-2	01/15/2001	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	3.87	---	---	0.7	-91
TB-2	04/09/2001	46,600	1,240	1,310	1,110	12,100	31,300	---	---	---	---	---	---	---	---	---	3.76	---	---	0.8	-24
TB-2	07/24/2001	11,000	630	<25	310	200	---	11,000	---	---	---	---	---	---	---	---	4.75	---	---	0.4	-51
TB-2	10/31/2001	7,500	530	1,500	100	500	---	2,500	---	---	---	---	---	---	---	---	4.24	---	---	0.6	-7
TB-2	01/10/2002	<5,000	480	47	34	110	---	12,000	---	---	---	---	---	---	---	---	6.26	---	---	1.3	-81
TB-2	04/25/2002	4,700	470	140	<20	80	---	7,400	---	---	---	---	---	---	---	---	11.78	---	---	0.9	-107
TB-2	07/18/2002	7,500	630	650	<25	390	---	44,000	---	---	---	---	---	---	---	---	12.34	---	---	0.9	-67
TB-2	10/07/2002	<10,000	580	<100	<100	180	---	30,000	---	---	---	---	---	---	---	---	11.62	---	---	1.0	-41
TB-2	01/06/2003	120	4.8	<0.50	<0.50	2.0	---	220	---	---	---	---	---	---	---	---	4.35	---	---	0.5	-515

Notes: *See Following Page*

Table 1
Groundwater Data
Former Shell Service Station, 4255 MacArthur Boulevard, Oakland, California

Notes:

TPHg	=	Total petroleum hydrocarbons as gasoline analyzed by EPA Method 8260B; prior to July 24, 2001, analyzed by EPA Method 8015 unless otherwise noted.
BTEX	=	Benzene, toluene, ethylbenzene, and total xylenes analyzed by EPA Method 8260B; prior to July 24, 2001, analyzed by EPA Method 8020.
MTBE	=	Methyl tertiary-butyl ether analyzed by method as 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
EDB	=	1,2-Dibromoethane analyzed by EPA Method 8260B
1,2-DCA	=	1,2-Dichloroethane analyzed by EPA Method 8260B
Ethanol analyzed by EPA Method 8260B		
TOC	=	Top of casing elevation, in feet relative to mean sea level
SPH	=	Separate-phase hydrocarbon
GW	=	Groundwater
DO	=	Dissolved oxygen
ORP	=	Oxidation reduction potential
µg/L	=	Micrograms per liter
ft	=	Feet
AMSL	=	Above mean sea level
mg/L	=	Milligrams per liter
mV	=	Millivolts
<X.XX	=	Not detected at or above reporting limit X.XX
---	=	Not analyzed or not available
(D)	=	Duplicate sample

a	=	Groundwater surface had a sheen when sampled.
b	=	MTBE value is estimated by laboratory
c	=	The concentration reported reflects individual or discrete unidentified peaks not matching a typical fuel pattern.
d	=	Secondary ion abundances were outside method requirements. Identification based on analytical judgment.
e	=	pH>2
f	=	Sample analyzed outside the EPA recommended holding time.
g	=	Analyzed by EPA Method 8015B (M).
h	=	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
i	=	TPHg concentration is due to the presence of a discrete peak of MTBE.
j	=	Analyte identified by retention time and presence of single mass ion.

When SPHs are present, groundwater elevation is adjusted using the relation: Corrected groundwater elevation = TOC - Depth to Water + (0.8 x Hydrocarbon Thickness).
Site wells surveyed March 14, 2002 by Virgil Chavez Land Surveying
Wells MW-6, MW-7, MW-8 and MW-9 surveyed July 12, 2006 by Virgil Chavez Land Surveying

Table 2
Separate-Phase Hydrocarbon Removal Data
Former Shell Service Station, 4255 Macarthur Boulevard, Oakland, California

Well ID	Date	SPH observed in 2" bailer (feet)	SPH observed in 2" bailer/ skimmer (ml)	SPH measured with interface probe (feet)	SPH calculated volume (ml)	Bailer / Skimmer			Sock			
						SPH removed (ml)	SPH removed (pounds)	Cumulative SPH removed (pounds)	Initial weight (pounds)	Final weight (pounds)	SPH removed (pounds)	Cumulative SPH removed (pounds)
MW-2	07/25/1995	---	---	0.52	1279	0	0.00	0.00	---	---	---	0.00
MW-2	08/10/1995	---	---	0.56	1378	2,000	3.28	3.28	---	---	---	0.00
MW-2	10/18/1995	---	---	0.13	320	0	0.00	3.28	---	---	---	0.00
MW-2	01/17/1996	---	---	0.17	418	1,000	1.64	4.93	---	---	---	0.00
MW-2	04/25/1996	---	---	0.03	74	400	0.66	5.58	---	---	---	0.00
MW-2	07/17/1996	---	---	0.48	1181	1,200	1.97	7.55	---	---	---	0.00
MW-2	10/01/1996	---	---	0.28	689	500	0.82	8.37	---	---	---	0.00
MW-2	01/22/1997	---	---	0.11	271	300	0.49	8.87	---	---	---	0.00
MW-2	04/08/1997	---	---	0.20	492	600	0.99	9.85	---	---	---	0.00
MW-2	07/08/1997	---	---	0.19	467	600	0.99	10.84	---	---	---	0.00
MW-2	10/08/1997	---	---	0.05	123	500	0.82	11.66	---	---	---	0.00
MW-2	01/08/1998	---	---	0.08	197	800	1.31	12.97	---	---	---	0.00
MW-2	04/13/1998	---	10	0.00	0	10	0.02	12.99	---	---	---	0.00
MW-2	07/17/1998	---	---	0.10	246	500	0.82	13.81	---	---	---	0.00
MW-2	10/02/1998	---	---	0.11	271	500	0.82	14.63	---	---	---	0.00
MW-2	02/03/1999	---	---	0.08	197	150	0.25	14.88	---	---	---	0.00
MW-2	04/29/1999	---	---	0.05	123	200	0.33	15.21	---	---	---	0.00
MW-2	07/23/1999	---	---	0.00	0	0	0.00	15.21	---	---	---	0.00
MW-2	11/01/1999	---	20	0.03	74	35	0.06	15.26	---	---	---	0.00
MW-2	01/17/2000	---	200	0.00	0	200	0.33	15.59	---	---	---	0.00
MW-2	04/17/2000	---	---	0.00	0	0	0.00	15.59	---	---	---	0.00
MW-2	07/26/2000	---	0	0.00	0	0	0.00	15.59	---	---	---	0.00
MW-2	10/12/2000	---	0	0.00	0	0	0.00	15.59	---	---	---	0.00
MW-2	01/15/2001	---	0	0.00	0	0	0.00	15.59	---	---	---	0.00
MW-2	04/09/2001	---	---	0.00	0	0	0.00	15.59	---	---	---	0.00
MW-2	07/24/2001	---	---	0.00	0	0	0.00	15.59	---	---	---	0.00
MW-2	10/31/2001	---	---	0.00	0	0	0.00	15.59	---	---	---	0.00
MW-2	01/10/2002	---	---	0.00	0	0	0.00	15.59	---	---	---	0.00
MW-2	04/25/2002	---	---	0.00	0	0	0.00	15.59	---	---	---	0.00
MW-2	10/07/2002	---	---	0.00	0	0	0.00	15.59	---	---	---	0.00
MW-2	01/06/2003	---	---	0.00	0	0	0.00	15.59	---	---	---	0.00
MW-2	04/07/2003	---	---	0.00	0	0	0.00	15.59	---	---	---	0.00

Table 2
Separate-Phase Hydrocarbon Removal Data
Former Shell Service Station, 4255 Macarthur Boulevard, Oakland, California

Well ID	Date	SPH observed in 2" bailer (feet)	SPH observed in 2" bailer/ skimmer (ml)	SPH measured with interface probe (feet)	SPH calculated volume (ml)	Bailer / Skimmer			Sock			
						SPH removed (ml)	SPH removed (pounds)	Cumulative SPH removed (pounds)	Initial weight (pounds)	Final weight (pounds)	SPH removed (pounds)	Cumulative SPH removed (pounds)
MW-2	07/07/2003	---	---	0.00	0	0	0.00	15.59	---	---	---	0.00
MW-2	10/09/2003	---	---	0.03	74	0	0.00	15.59	---	---	---	0.00
MW-2	10/20/2003	---	---	0.04	98	100	0.16	15.76	---	---	---	0.00
MW-2	01/14/2004	---	---	0.01	25	25	0.04	15.80	---	---	---	0.00
MW-2	04/28/2004	---	---	0.00	0	0	0.00	15.80	---	---	---	0.00
MW-2	07/12/2004	---	---	0.03	74	73	0.12	15.92	---	---	---	0.00
MW-2	10/25/2004	---	---	0.01	25	15	0.02	15.94	---	---	---	0.00
MW-2	01/17/2005	---	---	0.00	0	0	0.00	15.94	---	---	---	0.00
MW-2	04/06/2005	---	---	0.00	0	0	0.00	15.94	---	---	---	0.00
MW-2	07/08/2005	---	---	0.02	49	49	0.08	16.02	---	---	---	0.00
MW-2	10/07/2005	---	---	0.02	49	250	0.41	16.43	---	---	---	0.00
MW-2	01/27/2006	---	---	0.00	0	0	0.00	16.43	---	---	---	0.00
MW-2	03/16/2006	---	---	0.00	0	0	0.00	16.43	---	---	---	0.00
MW-2	04/28/2006	---	---	0.00	0	0	0.00	16.43	---	---	---	0.00
MW-2	05/15/2006	---	---	0.00	0	0	0.00	16.43	---	---	---	0.00
MW-2	07/28/2006	---	---	0.00	0	0	0.00	16.43	---	---	---	0.00
MW-2	08/31/2006	---	---	0.00	0	0	0.00	16.43	---	---	---	0.00
MW-2	09/26/2006	---	---	0.00	0	0	0.00	16.43	---	---	---	0.00
MW-2	10/27/2006	---	---	0.00	0	0	0.00	16.43	---	---	---	0.00
MW-2	11/22/2006	---	---	0.00	0	0	0.00	16.43	---	---	---	0.00
MW-2	12/26/2006	---	---	0.00	0	0	0.00	16.43	---	---	---	0.00
MW-2	01/10/2007	---	---	0.00	0	0	0.00	16.43	---	---	---	0.00
MW-2	02/19/2007	---	---	0.00	0	0	0.00	16.43	---	---	---	0.00
MW-2	03/16/2007	---	---	0.00	0	0	0.00	16.43	---	---	---	0.00
MW-2	04/13/2007	---	---	0.02	49	49	0.08	16.51	---	---	---	0.00
MW-2	07/09/2007	---	---	0.11	271	271	0.45	16.96	---	---	---	0.00
MW-2	10/08/2007	---	---	0.19	467	467	0.77	17.72	---	---	---	0.00
MW-2	01/09/2008	Unable to access		---	---	0	0.00	17.72	---	---	---	0.00
MW-2	02/21/2008	---	---	0.00	0	0	0.00	17.72	---	---	---	0.00
MW-2	03/20/2008	---	---	0.02	49	49	0.08	17.81	---	---	---	0.00
MW-2	04/04/2008	Unable to access		---	---	0	0.00	17.81	---	---	---	0.00
MW-2	05/27/2008	---	---	0.03	74	73	0.12	17.92	---	---	---	0.00

Table 2
Separate-Phase Hydrocarbon Removal Data
Former Shell Service Station, 4255 Macarthur Boulevard, Oakland, California

Well ID	Date	SPH observed in 2" bailer (feet)	SPH observed in 2" bailer/ skimmer (ml)	SPH measured with interface probe (feet)	SPH calculated volume (ml)	Bailer / Skimmer			Sock			
						SPH removed (ml)	SPH removed (pounds)	Cumulative SPH removed (pounds)	Initial weight (pounds)	Final weight (pounds)	SPH removed (pounds)	Cumulative SPH removed (pounds)
MW-2	06/11/2008	---	---	0.09	221	221	0.36	18.29	---	---	---	0.00
MW-2	07/03/2008	---	---	0.14	344	344	0.56	18.85	---	---	---	0.00
MW-2	08/04/2008	---	---	0.06	148	150	0.25	19.10	---	---	---	0.00
MW-2	09/17/2008	Unable to access		---	---	0	0.00	19.10	---	---	---	0.00
MW-2	10/03/2008	---	---	0.26	640	640	1.05	20.15	---	---	---	0.00
MW-2	11/26/2008	Unable to access		---	---	0	0.00	20.15	---	---	---	0.00
MW-2	12/30/2008	Unable to access		---	---	0	0.00	20.15	---	---	---	0.00
MW-2	01/22/2009	---	---	0.00	0	0	0.00	20.15	---	---	---	0.00
MW-2	02/27/2009	Unable to access		---	---	0	0.00	20.15	---	---	---	0.00
MW-2	04/13/2009	---	---	0.01	25	0	0.00	20.15	---	---	---	0.00
MW-2	07/23/2009	---	---	0.20	492	492	0.81	20.96	---	---	---	0.00
MW-2	11/10/2009	---	---	0.04	98	242	0.40	21.36	---	---	---	0.00
MW-2	02/01/2010	Unable to access		---	---	0	0.00	21.36	---	---	---	0.00
MW-2	02/09/2010	Unable to access		---	---	0	0.00	21.36	---	---	---	0.00
MW-2	06/29/2010	0.00	0.0	0.00	0	0	0.00	21.36	---	---	---	0.00
MW-2	07/06/2010	0.00	0.0	0.01	25	0	0.00	21.36	---	---	---	0.00
MW-2	07/13/2010	0.01	6.2	0.02	49	0.51	0.00	21.36	---	---	---	0.00
MW-2	07/20/2010	0.125	6.4	0.01	25	77	0.13	21.48	---	---	---	0.00
MW-2	07/27/2010	0.02	1.0	0.03	74	1.0	0.00	21.48	---	---	---	0.00
MW-2	08/02/2010	0.04	50	0.04	98	148	0.24	21.73	---	---	---	0.00
MW-2	08/10/2010	0.51	26	0.04	98	26	0.04	21.77	---	---	---	0.00
MW-2	08/24/2010	0.02	1.0	0.07	172	1	0.00	21.77	---	---	---	0.00
MW-2	09/07/2010	0.02	1.0	0.06	148	30	0.05	21.82	---	---	---	0.00
MW-2	10/05/2010	0.02	1.0	0.07	172	145	0.24	22.06	---	---	---	0.00
MW-2	11/02/2010	0.02	1.0	0.17	418	80	0.13	22.19	---	---	---	0.00
MW-2	12/07/2010	0.03	1.5	0.01	25	28	0.05	22.24	---	---	---	0.00
MW-2	01/31/2011	---	---	0.00	0	0	0.00	22.24	---	---	---	0.00
MW-2	02/17/2011	---	---	0.01	25	0	0.00	22.24	---	---	---	0.00
MW-2	04/26/2011	---	---	0.00	0	0	0.00	22.24	0.68	1.19	0.51	0.51
MW-2	07/25/2011	---	---	0.00	0	0	0.00	22.24	0.64	1.01	0.37	0.88
MW-2	10/13/2011	---	---	0.00	0	0	0.00	22.24	0.66	1.56	0.90	1.78
MW-2	01/23/2012	---	---	0.00	0	0	0.00	22.24	0.62	0.86	0.24	2.02

Table 2
Separate-Phase Hydrocarbon Removal Data
Former Shell Service Station, 4255 Macarthur Boulevard, Oakland, California

Well ID	Date	SPH observed in 2" bailer (feet)	SPH observed in 2" bailer/ skimmer (ml)	SPH measured with interface probe (feet)	SPH calculated volume (ml)	Bailer / Skimmer			Sock			
						SPH removed (ml)	SPH removed (pounds)	Cumulative SPH removed (pounds)	Initial weight (pounds)	Final weight (pounds)	SPH removed (pounds)	Cumulative SPH removed (pounds)
MW-2	04/23/2012	---	---	0.00	0	0	0.00	22.24	0.33	1.60	1.27	3.29
MW-2	07/24/2012	---	---	0.00	0	0	0.00	22.24	0.54	1.22	0.68	3.97
MW-2	11/07/2012	---	---	0.00	0	0	0.00	22.24	0.68	1.60	0.92	4.89
MW-2	01/23/2013	---	---	0.00	0	0	0.00	22.24	0.66	1.88	1.22	6.11
MW-2	04/01/2013	---	---	0.00	0	0	0.00	22.24	0.64	1.14	0.50	6.61
MW-2	07/10/2013	---	---	0.00	0	0	0.00	22.24	0.60	1.28	0.68	7.29
MW-2	10/01/2013	---	---	0.00	0	0	0.00	22.24	0.66	1.28	0.62	7.91
MW-2	01/16/2014	---	---	0.00	0	0	0.00	22.24	0.88	1.42	0.54	8.45
MW-2	04/29/2014	---	---	0.00	0	0	0.00	22.24	0.72	2.14	1.42	9.87
MW-2	07/10/2014	---	---	0.00	0	0	0.00	22.24	0.74	1.03	0.29	10.16
MW-2	10/14/2014	Unable to access		---	---	0	0.00	22.24	---	---	0.00	10.16
MW-2	01/27/2015	---	---	0.02	49	0	0.00	22.24	0.74	2.44	1.70	11.86
MW-2	07/21/2015	---	---	0.07	200	200	0.33	22.56	0.80	---	0.00	11.86
MW-2	01/20/2016	Unable to access		---	---	0	0.00	22.56	---	---	0.00	11.86
MW-2	02/22/2016	---	---	0.04	98	0	0.00	22.56	0.40	2.12	1.72	13.58
MW-2	07/20/2016	Unable to access		---	---	0	0.00	22.56	---	---	0.00	13.58
MW-2	**01/12/2017**	**Unable to access**		**---**	**---**	**0**	**0.00**	**22.56**	**---**	**---**	**0.00**	**13.58**
MW-3	07/07/1994	---	---	0.02	49	250	0.41	0.41	---	---	---	0.00
MW-3	10/27/1994	---	---	0.05	123	400	0.66	1.07	---	---	---	0.00
MW-3	01/13/1995	---	15	---	---	15	0.02	1.09	---	---	---	0.00
MW-3	04/12/1995	---	---	---	---	0	0.00	1.09	---	---	---	0.00
MW-3	07/25/1995	---	---	0.06	148	0	0.00	1.09	---	---	---	0.00
MW-3	08/10/1995	---	---	0.05	123	50	0.08	1.17	---	---	---	0.00
MW-3	10/18/1995	---	---	0.05	123	0	0.00	1.17	---	---	---	0.00
MW-3	01/17/1996	---	---	0.24	590	1500	2.46	3.64	---	---	---	0.00
MW-3	04/25/1996	---	---	0.02	49	200	0.33	3.97	---	---	---	0.00
MW-3	07/17/1996	---	---	0.03	74	400	0.66	4.62	---	---	---	0.00
MW-3	10/01/1996	---	---	0.00	0	0	0.00	4.62	---	---	---	0.00
MW-3	01/22/1997	---	---	0.00	0	0	0.00	4.62	---	---	---	0.00
MW-3	04/08/1997	---	---	0.03	74	100	0.16	4.79	---	---	---	0.00
MW-3	07/08/1997	---	---	0.00	0	0	0.00	4.79	---	---	---	0.00

Table 2
Separate-Phase Hydrocarbon Removal Data
Former Shell Service Station, 4255 Macarthur Boulevard, Oakland, California

Well ID	Date	SPH observed in 2" bailer (feet)	SPH observed in 2" bailer/ skimmer (ml)	SPH measured with interface probe (feet)	SPH calculated volume (ml)	Bailer / Skimmer			Sock			
						SPH removed (ml)	SPH removed (pounds)	Cumulative SPH removed (pounds)	Initial weight (pounds)	Final weight (pounds)	SPH removed (pounds)	Cumulative SPH removed (pounds)
MW-3	10/08/1997	---	---	0.00	0	0	0.00	4.79	---	---	---	0.00
MW-3	01/08/1998	---	---	0.00	0	0	0.00	4.79	---	---	---	0.00
MW-3	04/13/1998	---	0	0.00	0	0	0.00	4.79	---	---	---	0.00
MW-3	07/17/1998	---	0	0.00	0	0	0.00	4.79	---	---	---	0.00
MW-3	07/17/1998	---	---	0.00	0	0	0.00	4.79	---	---	---	0.00
MW-3	02/03/1999	---	0	0.00	0	0	0.00	4.79	---	---	---	0.00
MW-3	04/29/1999	---	0	0.00	0	0	0.00	4.79	---	---	---	0.00
MW-3	07/23/1999	---	---	0.00	0	0	0.00	4.79	---	---	---	0.00
MW-3	11/01/1999	---	---	0.00	0	0	0.00	4.79	---	---	---	0.00
MW-3	01/17/2000	---	---	0.00	0	0	0.00	4.79	---	---	---	0.00
MW-3	04/17/2000	---	---	0.00	0	0	0.00	4.79	---	---	---	0.00
MW-3	07/26/2000	---	---	0.00	0	0	0.00	4.79	---	---	---	0.00
MW-3	10/12/2000	---	---	0.00	0	0	0.00	4.79	---	---	---	0.00
MW-3	01/15/2001	---	---	0.00	0	0	0.00	4.79	---	---	---	0.00
MW-3	04/09/2001	---	---	0.00	0	0	0.00	4.79	---	---	---	0.00
MW-3	07/24/2001	---	---	0.00	0	0	0.00	4.79	---	---	---	0.00
MW-3	10/31/2001	---	---	0.00	0	0	0.00	4.79	---	---	---	0.00
MW-3	01/10/2002	---	---	0.00	0	0	0.00	4.79	---	---	---	0.00
MW-3	04/25/2002	---	---	0.00	0	0	0.00	4.79	---	---	---	0.00
MW-3	07/18/2002	---	---	0.03	74	50	0.08	4.87	---	---	---	0.00
MW-3	10/07/2002	---	---	0.20	492	0	0.00	4.87	---	---	---	0.00
MW-3	01/06/2003	---	---	0.02	49	0	0.00	4.87	---	---	---	0.00
MW-3	04/07/2003	---	---	0.00	0	0	0.00	4.87	---	---	---	0.00
MW-3	07/07/2003	---	---	0.00	0	0	0.00	4.87	---	---	---	0.00
MW-3	10/20/2003	---	---	0.08	197	0	0.00	4.87	---	---	---	0.00
MW-3	10/20/2003	---	---	0.07	172	150	0.25	5.12	---	---	---	0.00
MW-3	01/14/2004	---	---	0.02	49	50	0.08	5.20	---	---	---	0.00
MW-3	04/28/2004	---	---	0.00	0	0	0.00	5.20	---	---	---	0.00
MW-3	07/12/2004	---	---	0.03	74	98	0.16	5.36	---	---	---	0.00
MW-3	10/25/2004	---	---	0.00	0	0	0.00	5.36	---	---	---	0.00
MW-3	01/17/2005	---	---	0.00	0	0	0.00	5.36	---	---	---	0.00
MW-3	04/06/2005	---	---	0.00	0	0	0.00	5.36	---	---	---	0.00

Table 2
Separate-Phase Hydrocarbon Removal Data
Former Shell Service Station, 4255 Macarthur Boulevard, Oakland, California

Well ID	Date	SPH observed in 2" bailer (feet)	SPH observed in 2" bailer/ skimmer (ml)	SPH measured with interface probe (feet)	SPH calculated volume (ml)	Bailer / Skimmer			Sock			
						SPH removed (ml)	SPH removed (pounds)	Cumulative SPH removed (pounds)	Initial weight (pounds)	Final weight (pounds)	SPH removed (pounds)	Cumulative SPH removed (pounds)
MW-3	07/08/2005	---	---	0.00	0	0	0.00	5.36	---	---	---	0.00
MW-3	08/31/2006	---	---	0.00	0	0	0.00	5.36	---	---	---	0.00
MW-3	10/07/2005	---	---	0.00	0	0	0.00	5.36	---	---	---	0.00
MW-3	01/27/2006	---	---	0.00	0	0	0.00	5.36	---	---	---	0.00
MW-3	03/16/2006	---	---	0.00	0	0	0.00	5.36	---	---	---	0.00
MW-3	04/28/2006	---	---	0.00	0	0	0.00	5.36	---	---	---	0.00
MW-3	05/15/2006	---	---	0.00	0	0	0.00	5.36	---	---	---	0.00
MW-3	07/28/2006	---	---	0.00	0	0	0.00	5.36	---	---	---	0.00
MW-3	09/26/2006	---	---	0.00	0	0	0.00	5.36	---	---	---	0.00
MW-3	10/27/2006	---	---	0.00	0	0	0.00	5.36	---	---	---	0.00
MW-3	12/26/2006	---	---	0.00	0	0	0.00	5.36	---	---	---	0.00
MW-3	01/10/2007	---	---	0.00	0	0	0.00	5.36	---	---	---	0.00
MW-3	02/19/2007	---	---	0.00	0	0	0.00	5.36	---	---	---	0.00
MW-3	03/16/2007	---	---	0.00	0	0	0.00	5.36	---	---	---	0.00
MW-3	04/13/2007	---	---	0.00	0	0	0.00	5.36	---	---	---	0.00
MW-3	07/09/2007	---	---	0.00	0	0	0.00	5.36	---	---	---	0.00
MW-3	10/08/2007	---	---	0.01	25	0	0.00	5.36	---	---	---	0.00
MW-3	01/09/2008	---	---	0.00	0	0	0.00	5.36	---	---	---	0.00
MW-3	02/21/2008	---	---	0.00	0	0	0.00	5.36	---	---	---	0.00
MW-3	03/20/2008	---	---	0.00	0	0	0.00	5.36	---	---	---	0.00
MW-3	04/04/2008	---	---	0.00	0	0	0.00	5.36	---	---	---	0.00
MW-3	05/27/2008	---	---	0.01	25	24	0.04	5.40	---	---	---	0.00
MW-3	06/11/2008	---	---	0.01	25	25	0.04	5.44	---	---	---	0.00
MW-3	07/03/2008	---	---	0.01	25	25	0.04	5.48	---	---	---	0.00
MW-3	08/04/2008	---	---	0.00	0	0	0.00	5.48	---	---	---	0.00
MW-3	09/17/2008	---	---	0.01	24	24	0.04	5.52	---	---	---	0.00
MW-3	10/03/2008	---	---	0.01	25	0	0.00	5.52	---	---	---	0.00
MW-3	11/26/2008	---	---	0.00	0	0	0.00	5.52	---	---	---	0.00
MW-3	12/30/2008	---	---	0.00	0	0	0.00	5.52	---	---	---	0.00
MW-3	01/22/2009	---	---	0.00	0	0	0.00	5.52	---	---	---	0.00
MW-3	11/10/2009	---	---	0.00	0	0	0.00	5.52	---	---	---	0.00
MW-3	02/01/2010	---	---	0.00	0	0	0.00	5.52	---	---	---	0.00

Table 2
Separate-Phase Hydrocarbon Removal Data
Former Shell Service Station, 4255 Macarthur Boulevard, Oakland, California

Well ID	Date	SPH observed in 2" bailer (feet)	SPH observed in 2" bailer/ skimmer (ml)	SPH measured with interface probe (feet)	SPH calculated volume (ml)	Bailer / Skimmer			Sock			
						SPH removed (ml)	SPH removed (pounds)	Cumulative SPH removed (pounds)	Initial weight (pounds)	Final weight (pounds)	SPH removed (pounds)	Cumulative SPH removed (pounds)
MW-3	08/02/2010	---	---	0.00	0	0	0.00	5.52	---	---	---	0.00
MW-3	01/31/2011	---	---	0.00	0	0	0.00	5.52	---	---	---	0.00
MW-3	02/17/2011	---	---	0.01	25	0	0.00	5.52	---	---	---	0.00
MW-3	04/26/2011	---	---	0.00	0	0	0.00	5.52	0.70	1.12	0.42	0.42
MW-3	07/25/2011	---	---	0.00	0	0	0.00	5.52	0.66	0.74	0.08	0.50
MW-3	10/13/2011	---	---	0.00	0	0	0.00	5.52	0.00	0.00	0.00	0.50
MW-3	01/23/2012	---	---	0.00	0	0	0.00	5.52	0.64	0.64	0.00	0.50
MW-3	04/23/2012	---	---	0.00	0	0	0.00	5.52	0.34	1.50	1.16	1.66
MW-3	07/24/2012	---	---	0.01	25	0	0.00	5.52	0.52	1.04	0.52	2.18
MW-3	11/07/2012	---	---	0.00	0	0	0.00	5.52	0.68	2.30	1.62	3.80
MW-3	01/23/2013	---	---	0.00	0	0	0.00	5.52	0.66	1.70	1.04	4.84
MW-3	04/01/2013	---	---	0.00	0	0	0.00	5.52	0.64	1.80	1.16	6.00
MW-3	07/10/2013	---	---	0.00	0	0	0.00	5.52	0.60	1.00	0.40	6.40
MW-3	10/01/2013	---	---	0.00	0	0	0.00	5.52	0.72	1.41	0.69	7.09
MW-3	01/16/2014	---	---	0.00	0	0	0.00	5.52	0.84	2.36	1.52	8.61
MW-3	04/29/2014	---	---	0.00	0	0	0.00	5.52	0.75	0.92	0.17	8.78
MW-3	07/10/2014	---	---	0.00	0	0	0.00	5.52	0.74	0.92	0.18	8.96
MW-3	10/14/2014	---	---	0.00	0	0	0.00	5.52	0.74	2.23	1.49	10.45
MW-3	01/27/2015	---	---	0.00	0	0	0.00	5.52	0.74	1.74	1.00	11.45
MW-3	**01/12/2017**	**---**	**---**	**0.00**	**0**	**0**	**0.00**	**5.52**	**0.38**	**1.94**	**1.56**	**13.01**
MW-4	08/02/2010	---	---	0.12	73	72	0.12	0.12	---	---	---	0.00
MW-4	08/24/2010	---	---	0.10	61	0	0.00	0.12	---	---	---	0.00
MW-4	09/07/2010	---	---	0.13	79	30	0.05	0.17	---	---	---	0.00
MW-4	10/05/2010	---	---	0.19	115	40	0.07	0.23	---	---	---	0.00
MW-4	11/02/2010	---	---	0.03	18	20	0.03	0.27	---	---	---	0.00
MW-4	12/07/2010	---	---	0.01	6.1	2	0.00	0.27	---	---	---	0.00
MW-4	01/31/2011	---	---	0.00	0	0	0.00	0.27	---	---	---	0.00
MW-4	04/26/2011	---	---	0.00	0	0	0.00	0.27	---	---	---	0.00
MW-4	07/25/2011	---	---	0.00	0	0	0.00	0.27	0.31	0.62	0.31	0.31
MW-4	10/13/2011	---	---	0.00	0	0	0.00	0.27	0.34	0.90	0.56	0.87
MW-4	01/23/2012	---	---	0.00	0	0	0.00	0.27	0.28	0.56	0.28	1.15

Table 2
Separate-Phase Hydrocarbon Removal Data
Former Shell Service Station, 4255 Macarthur Boulevard, Oakland, California

Well ID	Date	SPH observed in 2" bailer (feet)	SPH observed in 2" bailer/ skimmer (ml)	SPH measured with interface probe (feet)	SPH calculated volume (ml)	Bailer / Skimmer			Sock			
						SPH removed (ml)	SPH removed (pounds)	Cumulative SPH removed (pounds)	Initial weight (pounds)	Final weight (pounds)	SPH removed (pounds)	Cumulative SPH removed (pounds)
MW-4	04/23/2012	---	---	0.00	0	0	0.00	0.27	0.32	0.60	0.28	1.43
MW-4	07/24/2012	---	---	0.00	0	0	0.00	0.27	0.36	0.36	0.00	1.43
MW-4	11/07/2012	---	---	0.00	0	0	0.00	0.27	0.34	1.20	0.86	2.29
MW-4	01/23/2013	---	---	0.00	0	0	0.00	0.27	0.34	0.31	-0.03	2.26
MW-4	04/01/2013	---	---	0.00	0	0	0.00	0.27	0.74	0.64	-0.10	2.16
MW-4	07/10/2013	---	---	0.00	0	0	0.00	0.27	0.30	0.38	0.08	2.24
MW-4	10/01/2013	---	---	0.00	0	0	0.00	0.27	0.35	0.38	0.03	2.27
MW-4	01/16/2014	---	---	0.00	0	0	0.00	0.27	0.35	1.08	0.73	3.00
MW-4	04/29/2014	---	---	0.00	0	0	0.00	0.27	0.64	0.60	-0.04	2.96
MW-4	07/10/2014	---	---	0.00	0	0	0.00	0.27	0.37	0.42	0.05	3.01
MW-4	10/14/2014	---	---	0.00	0	0	0.00	0.27	0.37	0.41	0.04	3.05
MW-4	01/27/2015	---	---	0.00	0	0	0.00	0.27	0.40	1.24	0.84	3.89
MW-4	**01/12/2017**	**---**	**---**	**0.00**	**0**	**0**	**0.00**	**0.27**	**0.40**	**1.24**	**0.84**	**4.73**

SPH removed by bailer/skimmer this period:	0.00	***SPH removed by socks this period:***	2.40
Cumulative SPH removed by bailer/skimmer:	28.35	***Cumulative SPH removed by Socks:***	31.32
Total SPH removed this event (pounds):	2.40		
Total SPH removed (pounds):	59.67		

Notes:

SPH = Separate-phase hydrocarbon

Sock = SPH-absorbent sock

ml = Milliliters

Appendix A

Field Notes
(Blaine Tech Services, Inc.)

WELL GAUGING DATA

Project # 170112-N01 Date 1/12/17 Client Shell

Site 4255 MacArthur Blvd. - Oakland, CA

Well ID	Time	Well Size (in.)	Sheen / Odor	Depth to Immiscible Liquid (ft.)	Thickness of Immiscible Liquid (ft.)	Volume of Immiscibles Removed (ml)	Depth to water (ft.)	Depth to well bottom (ft.)	Survey Point: TOB or TOC	Notes
MW-1	1000	4					5.76	23.32	TOC	
MW-2	X	Parked over, unable to access well							X	
MW-3	1025	4	odor				8.90	21.88	TOC	sock
MW-4	1010	2	sheen				4.73	30.56		sock
MW-5	1015	2					4.32	19.75		
MW-6	1020	2					6.40	23.44		
MW-7	1030	4					5.35	29.08		
MW-8	1040	4					3.82	29.80		
MW-9	1045	4					4.75	29.69		

Equilon Enterprises LLC dba Shell Oil Products US (Equilon) Field Data Sheet

BTS #: 170112-ND1	Site: 98995758
Sampler: ND	Date: 1/12/17
Well I.D.: MW-1	Well Diameter: 2 3 (4) 6 8 ____
Total Well Depth (TD): 23.32	Depth to Water (DTW): 5.76
Depth to Free Product: -	Thickness of Free Product (feet): -
Referenced to: (TOC) Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 9.27	

Purge Method: Bailer, Disposable Bailer, Positive Air Displacement, Electric Submersible, Waterra, Peristaltic, Extraction Pump, Other_____

Sampling Method: Bailer, (Disposable Bailer), Extraction Port, Dedicated Tubing, Other: _____

11.5 (Gals.) X	3	=	34.5 Gals.
1 Case Volume	Specified Volumes		Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius² * 0.163

Time	Temp (°F)	pH	Cond. (mS or (µS))	Turbidity (NTUs)	Gals. Removed	Observations
1157	68.9	6.77	892	10	11.5	
1202	68.4	6.73	905	7	23.0	
1204	well	dewatered	@		25.0	
1445	70.2	6.70	877	.3	GRAB	

Did well dewater? (Yes) No Gallons actually evacuated: 25.0

Sampling Date: 1/12/17 Sampling Time: 1450 Depth to Water: 8.19

Sample I.D.: MW-1 Laboratory: (Test America) Other_____

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: See COC

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

Equilon Enterprises LLC dba Shell Oil Products US (Equilon) Field Data Sheet

BTS #: 170112-ND1	Site: 98995758
Sampler: ND	Date: 1/12/17
Well I.D.: MW-2	Well Diameter: 2 3 4 6 8 ____
Total Well Depth (TD):	Depth to Water (DTW):
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: PVC Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:	

Purge Method: Bailer, Disposable Bailer, Positive Air Displacement, Electric Submersible, Waterra, Peristaltic, Extraction Pump, Other_____

Sampling Method: Bailer, Disposable Bailer, Extraction Port, Dedicated Tubing, Other: _____

_____(Gals.) X _____ = _____ Gals.
1 Case Volume | Specified Volumes | Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius² * 0.163

Time	Temp (°F)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
	Unable to access					
	well parked over					

Did well dewater? Yes No Gallons actually evacuated:

Sampling Date: Sampling Time: Depth to Water:

Sample I.D.: Laboratory: Test America Other_____

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

Equilon Enterprises LLC dba Shell Oil Products US (Equilon) Field Data Sheet

BTS #: 170112-ND1	Site: 9899575 58
Sampler: ND	Date: 1/12/17
Well I.D.: MW-3	Well Diameter: 2 3 (4) 6 8 ____
Total Well Depth (TD): 21.88	Depth to Water (DTW): 8.90
Depth to Free Product: —	Thickness of Free Product (feet): —
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 11.50	

Purge Method: Bailer; Disposable Bailer; Positive Air Displacement; Electric Submersible; Waterra; Peristaltic; Extraction Pump; Other_____

Sampling Method: Bailer; (Disposable Bailer); Extraction Port; Dedicated Tubing; Other: _____

8.5 (Gals.) X	3	=	25.5 Gals.
1 Case Volume	Specified Volumes		Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius² * 0.163

Time	Temp (°F)	pH	Cond. (mS or (µS))	Turbidity (NTUs)	Gals. Removed	Observations
1053	62.4	6.81	1193	19	8.5	odor
1056	62.1	6.77	1205	22	17	↓
1057	well		dewatered @		19.0	↓
1410	68.9	6.76	1199	.14	ORAB	

Did well dewater? (Yes) No Gallons actually evacuated: 19.0

Sampling Date: 1/12/17 Sampling Time: 1415 Depth to Water: 10.19

Sample I.D.: MW-3 Laboratory: (Test America) Other_____

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) (Other): See COC

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

AECOM

SORBENT SOCK EVALUATION FORM

Name: Nicholas Drachenberg	Date: 1/12/17	Project Number: 170112-ND1
Site Address: 4255 MacArthur Blvd. Oakland, CA	Well ID: MW-3	Weather: Overcast

1) Time absorbent sock removed from well for inspection: 1445

2) Condition of sock:

   a. Length of sock showing product saturation: 8"

   b. Length of sock showing dryness: 4"

   c. Color of sock showing product saturation: Black, orange

   d. Weight of the removed sock: 0.86 kg; 1.94 lb

   e. Weight of a new/clean/dry sock: 0.16 kg; 0.38 lb

   f. Difference in weight (2d-2e) to 0.01 lb/kg: 0.70 kg; 1.56 lb

3) Picture of sock removed from well taken: ☐

4) Sock removed from well deposited in waste drum:

   Is drum labeled? (Y) N How full is the drum? 1/4

5) After at least 15 minutes of removing the sock from the well, measure to 0.01 feet from the top of the well casing:

   a. Depth of product: No product

   b. Depth to water: 8.90

   c. Thickness of product (5b-5a): —

6) Size and type of sock installed: 18" x 3" Pig Sump Skimmer

7) Comments: _____

Equilon Enterprises LLC dba Shell Oil Products US (Equilon) Field Data Sheet

BTS #: 170112 - ND1	Site: 98995758
Sampler: ND	Date: 1/12/17
Well I.D.: MW-4	Well Diameter: 2 3 (4) 6 8 ____
Total Well Depth (TD): 30.56	Depth to Water (DTW): 4.73
Depth to Free Product: —	Thickness of Free Product (feet): —
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 9.90	

Purge Method: Bailer; (Disposable Bailer); Positive Air Displacement; Electric Submersible; Waterra; Peristaltic; Extraction Pump; Other____

Sampling Method: Bailer; (Disposable Bailer); Extraction Port; Dedicated Tubing; Other: ____

4.2 (Gals.) X 3 = 12.6 Gals.
1 Case Volume | Specified Volumes | Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius² * 0.163

Time	Temp (°F)	pH	Cond. (mS or (µS))	Turbidity (NTUs)	Gals. Removed	Observations
1215	68.3	6.58	1079	11	4.2	sock
1223	67.9	6.56	1093	9	8.4	
1230	67.7	6.55	1104	6	12.6	

Did well dewater? Yes (No) Gallons actually evacuated: 12.6

Sampling Date: 1/12/17 Sampling Time: 1235 Depth to Water: 8.78

Sample I.D.: MW-4 Laboratory: (Test America) Other____

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) (Other): See COC

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

AECOM

SORBENT SOCK EVALUATION FORM

Name: Nicholas Drachenberg	Date: 1/12/17	Project Number: 170112-ND1
Site Address: 4255 MacArthur Blvd. Oakland, CA	Well ID: MW-4	Weather: Overcast

1) Time absorbent sock removed from well for inspection: 1420

2) Condition of sock:

   a. Length of sock showing product saturation: 6"

   b. Length of sock showing dryness: 6"

   c. Color of sock showing product saturation: brown

   d. Weight of the removed sock: 0.57 kg ; 1.24 lb

   e. Weight of a new/clean/dry sock: 0.17 kg ; 0.40 lb

   f. Difference in weight (2d-2e) to 0.01 lb/kg: 0.40 kg ; 0.84 lb

3) Picture of sock removed from well taken: ☐

4) Sock removed from well deposited in waste drum:

   Is drum labeled? (Y) N How full is the drum? 1/4

5) After at least 15 minutes of removing the sock from the well, measure to 0.01 feet from the top of the well casing:

   a. Depth of product: No product

   b. Depth to water: 4.73

   c. Thickness of product (5b-5a): —

6) Size and type of sock installed: 20" x 2" well skimmer absorbant sock

7) Comments: _____

Equilon Enterprises LLC dba Shell Oil Products US (Equilon) Field Data Sheet

BTS #: 170112-ND1	Site: 98995758
Sampler: ND	Date: 1/12/17
Well I.D.: MW-5	Well Diameter: (2) 3 4 6 8 ____
Total Well Depth (TD): 19.75	Depth to Water (DTW): 4.32
Depth to Free Product: —	Thickness of Free Product (feet): —
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 7.41	

Purge Method: Bailer; (Disposable Bailer); Positive Air Displacement; Electric Submersible; Waterra; Peristaltic; Extraction Pump; Other_____

Sampling Method: Bailer; (Disposable Bailer); Extraction Port; Dedicated Tubing; Other: _____

2.5 (Gals.) X 3 = 7.5 Gals.
1 Case Volume | Specified Volumes | Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius² * 0.163

Time	Temp (°F)	pH	Cond. (mS or (µS))	Turbidity (NTUs)	Gals. Removed	Observations
1245	67.8	6.21	791	>1000	2.5	
1248	67.9	6.24	818	693	5.0	
1251	67.9	6.22	833	475	7.5	

Did well dewater? Yes (No) Gallons actually evacuated: 7.5

Sampling Date: 1/12/17 Sampling Time: 1255 Depth to Water: 6.10

Sample I.D.: MW-5 Laboratory: (Test America) Other_____

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: See COC

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

Equilon Enterprises LLC dba Shell Oil Products US (Equilon) Field Data Sheet

BTS #: 170112-ND1	Site: 98995758
Sampler: ND	Date: 1/12/17
Well I.D.: MW-6	Well Diameter: (2) 3 4 6 8 ____
Total Well Depth (TD): 23.44	Depth to Water (DTW): 6.40
Depth to Free Product: —	Thickness of Free Product (feet): —
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 9.81	

Purge Method: Bailer; (Disposable Bailer); ~~Positive Air Displacement~~; Electric Submersible; Waterra; Peristaltic; Extraction Pump; Other_____

Sampling Method: Bailer; (Disposable Bailer); Extraction Port; Dedicated Tubing; Other: _____

2.8 (Gals.) X	3	=	8.4 Gals.
1 Case Volume	Specified Volumes		Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius² * 0.163

Time	Temp (°F)	pH	Cond. (mS or (µS))	Turbidity (NTUs)	Gals. Removed	Observations
1314	69.3	6.78	936	>1000	2.8	
1320	69.1	6.67	982	>1000	5.6	
1325	69.1	6.69	1014	761	8.4	

Did well dewater? Yes (No) Gallons actually evacuated: 8.4

Sampling Date: 1/12/17 Sampling Time: 1330 Depth to Water: 7.92

Sample I.D.: MW-6 Laboratory: (Test America) Other_____

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) (Other:) See COC

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

Equilon Enterprises LLC dba Shell Oil Products US (Equilon) Field Data Sheet

BTS #: 170112-ND1	Site: 98995758
Sampler: ND	Date: 1/12/17
Well I.D.: MW-7	Well Diameter: 2 3 (4) 6 8 ____
Total Well Depth (TD): 29.08	Depth to Water (DTW): 5.35
Depth to Free Product: —	Thickness of Free Product (feet): —
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 10.10	

Purge Method: Bailer; Disposable Bailer; Positive Air Displacement; (Electric Submersible); Waterra; Peristaltic; Extraction Pump; Other_____

Sampling Method: Bailer; (Disposable Bailer); Extraction Port; Dedicated Tubing; Other: _____

15.5 (Gals.) X 3 = 46.5 Gals.
1 Case Volume | Specified Volumes | Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius² * 0.163

Time	Temp (°F)	pH	Cond. (mS or (µS))	Turbidity (NTUs)	Gals. Removed	Observations
1349	70.3	6.97	637	14	15.5	
1357	70.1	6.91	747	11	31.0	
1404	Well dewatered		@		40.0	
1455	70.7	7.03	813	4	GRAB	

Did well dewater? (Yes) No Gallons actually evacuated: 40.0

Sampling Date: 1/12/17 Sampling Time: ~~1440~~ 1500 (ND) Depth to Water: 9.13

Sample I.D.: MW-7 Laboratory: (Test America) Other_____

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) (Other:) See COC

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

Equilon Enterprises LLC dba Shell Oil Products US (Equilon) Field Data Sheet

BTS #: 170112-ND1	Site: 98995758
Sampler: ND	Date: 1/12/17
Well I.D.: MW-8	Well Diameter: 2 3 (4) 6 8 ____
Total Well Depth (TD): 29.80	Depth to Water (DTW): 3.82
Depth to Free Product: —	Thickness of Free Product (feet): —
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 9.02	

Purge Method: Bailer; Disposable Bailer; Positive Air Displacement; Electric Submersible; Waterra; Peristaltic; Extraction Pump; Other_____

Sampling Method: Bailer; Disposable Bailer; Extraction Port; Dedicated Tubing; Other: _____

17 (Gals.) X 3 = 51.0 Gals.
1 Case Volume | Specified Volumes | Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius² * 0.163

Time	Temp (°F)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
1109	64.4	6.66	755	31	17.0	
1116	64.2	6.61	789	18	34.0	
1118	Well dewatered @				41.0	
1420	69.4	6.70	912	15	GRAB	

Did well dewater? (Yes) No Gallons actually evacuated: 41.0

Sampling Date: 1/12/17 Sampling Time: 1425 Depth to Water: 7.07

Sample I.D.: MW-8 Laboratory: (Test America) Other_____

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) (Other) See COC

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

Equilon Enterprises LLC dba Shell Oil Products US (Equilon) Field Data Sheet

BTS #: 170112-ND1	Site: 98995758
Sampler: ND	Date: 1/12/17
Well I.D.: MW-9	Well Diameter: 2 3 (4) 6 8 ____
Total Well Depth (TD): 29.69	Depth to Water (DTW): 4.75
Depth to Free Product: -	Thickness of Free Product (feet): -
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 9.74	

Purge Method: Bailer; Disposable Bailer; Positive Air Displacement; Electric Submersible; Waterra; Peristaltic; Extraction Pump; Other_____

Sampling Method: Bailer; Disposable Bailer; Extraction Port; Dedicated Tubing; Other: _____

16.2 (Gals.) X 3 = 48.6 Gals.
1 Case Volume | Specified Volumes | Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius² * 0.163

Time	Temp (°F)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
1133	65.0	6.86	571	13	16.2	
1141	64.8	6.82	599	12	32.4	
1143	well dewatered		@		40	
1435	70.3	6.91	601	24	GRAB	

Did well dewater? (Yes) No Gallons actually evacuated: 40.0

Sampling Date: 1/12/17 Sampling Time: 1440 Depth to Water: 6.30

Sample I.D.: MW-9 Laboratory: (Test America) Other_____

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: See COC

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

LAB (LOCATION)

☐ ACCUTEST (_____)
☐ CALSCIENCE (_____)
☑ TESTAMERICA (_____)
☐ Other (_____)

Lab Vendor # 1364589 (TestAmerica)

Equilon Enterprises LLC dba Shell Oil Products US Chain Of Custody Record

AECOM

Please Check Appropriate Box:		
☐ GW FDG	☐ PIPELINE	☐ RETAIL
☐ CHEMICALS	☑ CONSULTANT	☐ UBES
☐ TRANSPORTATION	☐ OTHER _____	

Print Bill To Contact Name:	PlaNet Site or Project ID	☐ CHECK IF NO INCIDENT # APPLIES
Shane Olton	38573	DATE: 1/12/17
PO #	GSAP Project ID	PAGE: 1 of 1
	USPC/00308;USRT/00752	

SAMPLING COMPANY: Blaine Tech Services, Inc.
LOG CODE: BTSS
ADDRESS: 1680 Rogers Ave., San Jose, CA, 95112
PROJECT CONTACT (Hardcopy or PDF Report to): Bart Gebbie
TELEPHONE: 310-885-4455 Ext. 103
FAX: 310-637-5802
Bill To Contact E-MAIL: shane.olton@aecom.com

SITE ADDRESS: Street and City: 4255 MacArthur Blvd., Oakland
State: CA
AECOM Project / Task Number: 60482422
EDF DELIVERABLE TO (Name, Company, Office Location): Margaret Baber, AECOM, Oakland, CA
PHONE NO.: 510-893-3600
E-MAIL: margaret.baber@aecom.com
AECOM Other ID: 10059253
SAMPLER NAME(S) (Print): Nicholas Drachenberg
LAB USE ONLY

TURNAROUND TIME (CALENDAR DAYS):
☑ STANDARD (14 DAY) ☐ 5 DAYS ☐ 3 DAYS ☐ 2 DAYS ☐ 24 HOURS ☐ RESULTS NEEDED ON WEEKEND

☐ LA - RWQCB REPORT FORMAT ☐ UST AGENCY:

DELIVERABLES: ☑ LEVEL 1 ☐ LEVEL 2 ☐ LEVEL 3 ☐ LEVEL 4 ☐ OTHER (SPECIFY) _____

TEMPERATURE ON RECEIPT C°: Cooler #1 | Cooler #2 | Cooler #3

SPECIAL INSTRUCTIONS OR NOTES :

Email invoice to USAPimaging@aecom.com

☑ SHELL CONTRACT RATE APPLIES
☐ STATE REIMBURSEMENT RATE APPLIES
☐ EDD NOT NEEDED
☑ RECEIPT VERIFICATION REQUESTED
☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS

LAB USE ONLY	Field Sample Identification	SAMPLING DATE	SAMPLING TIME	MATRIX	PRESERVATIVE HCL	HNO3	H2SO4	NONE	OTHER	NO. OF CONT.	UNIT COST: TPH-GRO, Purgeable (8260B)	UNIT COST: BTEX, MTBE, TBA (8260B)	NON-UNIT COST: BTEX, MTBE (8260B)	NON-UNIT COST: 5 OXYS (8260B)	NON-UNIT COST: Ethanol (8260B)	Container PID Readings or Laboratory Notes
	MW-1	1/12/17	1450	WG	X					3	X	X				
	MW-3	"	1415	WG	X					3	X	X				
	MW-4	"	1235	WG	X					3	X	X				
	MW-5	"	1255	WG	X					3	X	X				
	MW-6	"	1330	WG	X					3	X	X				
	MW-7	"	1500	WG	X					3	X	X				
	MW-8	"	1425	WG	X					3	X	X				
	MW-9	↓	1440	WG	X					3	X	X				

FIELD NOTES:

TEMPERATURE ON RECEIPT C°

Relinquished by: (Signature)	Received by: (Signature)	Date: 1/12/17	Time: 1500
Relinquished by: (Signature)	Received by: (Signature)	Date: 1/13/17	Time: 1015
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:

Version: 14Dec15

ENVIRONMENTAL WELL, REMEDIATION COMPOUND, AND SITE INSPECTION FORM

INCIDENT # 98995758

ADDRESS 4255 MacArthur Blvd.

DATE: 1/12/17

CITY & STATE Oakland, CA

Well ID	Observations Upon Arrival: Manway Cover, Type, Condition & Size					Well Labeled / Painted Properly*		Well Cap (Gripper) Condition		Well Lock Condition			Well Pad / Surface Condition		Note Repairs Made Detailed Explanation of Maintenance Recommended and Performed	Photos of Well Condition		Repair Date and PM Initials
MW-1	Standpipe	(Flush)	G	(P)	Size (inch) 8	(Y)	N	(G)	R	(G)	R	NL	(G)	P	2/2 tabs broken	Y	(N)	
MW-2	Standpipe	Flush	G	P	Size (inch)	Y	N	G	R	G	R	NL	G	P	Parked over - unable to access	Y	N	
MW-3	Standpipe	(Flush)	(G)	P	Size (inch) 12	(Y)	N	(G)	R	(G)	R	NL	(G)	P		Y	(N)	
MW-4	Standpipe	(Flush)	(G)	P	Size (inch) 12	(Y)	N	(G)	R	(G)	R	NL	(G)	P		Y	(N)	
MW-5	Standpipe	(Flush)	(G)	P	Size (inch) 12	(Y)	N	(G)	R	(G)	R	NL	(G)	P		Y	(N)	
MW-6	Standpipe	(Flush)	(G)	P	Size (inch) 12	(Y)	N	(G)	R	(G)	R	NL	(G)	P		Y	(N)	
MW-7	Standpipe	(Flush)	(G)	P	Size (inch) 12	(Y)	N	(G)	R	(G)	R	NL	(G)	P		Y	(N)	
MW-8	Standpipe	(Flush)	(G)	P	Size (inch) 12	(Y)	N	(G)	R	(G)	R	NL	(G)	P		Y	(N)	
MW-9	Standpipe	(Flush)	(G)	P	Size (inch) 12	(Y)	N	(G)	R	(G)	R	NL	(G)	P		Y	(N)	
	Standpipe	Flush	G	P	Size (inch)	Y	N	G	R	G	R	NL	G	P		Y	N	
	Standpipe	Flush	G	P	Size (inch)	Y	N	G	R	G	R	NL	G	P		Y	N	
TOTAL # CAPS REPLACED =									(Ø)		(Ø)	= TOTAL # OF LOCKS REPLACED (1 LOCK USED TO SECURE GATE)						

Condition of Soil Boring Patches or Abandoned Monitoring Wells:	G	P	(N/A)	If POOR, Borings/Well IDs or Location Description:	—	Y	(N)	

Remediation Compound Type (Check boxes that apply)		Condition of Enclosure			Condition of Area Inside Enclosure			Compound Security			Emergency Contact Info Visible			Cleaning / Repairs Recommended and Conducted	Photos of Condition		Repair Date and PM Initials
NA	X	G	P	(N/A)	G	P	(N/A)	G	P	(N/A)	Y	N	(N/A)		Y	(N)	
Building																	
Building w/ Fence Comp.																	
Fenced Compound																	
Trailer																	

Number of Drums On-site	Does the Label Reveal the Source of the Contents			Labeled Correctly and Writing Legible			Drum Condition			Confirm Drums Related to Environmental		Drums Located to Min Business Interference			Detailed Explanation of Any Issues Resolved	Photos of Drum Condition		Date Drums Removed from Site and PM Initials
(Ø) 1 DRS	(Y)	N	(N/A)	(Y)	N	(N/A)	(G)	P	(N/A)	(Y)	(N)	(Y)	N	(N/A)		Y	(N)	

G = Good (Acceptable) R = Replaced

P = Poor (needs attention) NL = No Lock Required

Note: All repairs other than locks and grippers require Shell PM approval prior to repair.

* = Groundwater monitoring well covers must be painted and labeled in accordance with applicable regulations.

Version 2.4, March 2008

All environmental wells and the remediation compound were in good condition, locked, and secured upon my departure (unless otherwise noted above).

Nick Drachenberg + BTS

Print or type Name of Field Personnel & Consultant Company

NO. 721571

NON-HAZARDOUS WASTE DATA FORM

BESI #

GENERATOR

Generator's Name and Mailing Address

SHELL OIL PRODUCTS US
C/O AECOM
1333 BROADWAY, SUITE 800
OAKLAND, CA 94612

Generator's Site Address (if different than mailing address)

SHELL OIL 10059253
4255 MACARTHUR BOULEVARD
OAKLAND, CA 94619

Generator's Phone: 510-874-3255

Container type removed from site:

☐ Drums ☐ Vacuum Truck ☐ Roll-off Truck ☐ Dump Truck

☒ Other Tank truck

Quantity 198 gal.

Container type transported to receiving facility:

☐ Drums ☐ Vacuum Truck ☐ Roll-off Truck ☐ Dump Truck

☐ Other _____

Quantity _____ Volume _____

WASTE DESCRIPTION NON-HAZARDOUS WATER

GENERATING PROCESS WELL PURGING / DECON WATER

COMPONENTS OF WASTE	PPM	%
1. WATER		99-100%
2. TPH		<1%

COMPONENTS OF WASTE	PPM	%
3.		
4.		

Waste Profile _____ PROPERTIES: pH 7-10 ☐ SOLID ☒ LIQUID ☐ SLUDGE ☐ SLURRY ☐ OTHER _____

HANDLING INSTRUCTIONS: WEAR ALL APPROPRIATE PERSONAL PROTECTIVE CLOTHING

Generator Printed/Typed Name: Nicholas Drachenberg — Signature — Month 1 Day 12 Year 17

The Generator certifies that the waste as described is 100% non-hazardous

TRANSPORTER

Transporter 1 Company Name: BLAINE TECH SERVICES, INC. — Phone#: 408-573-0555

Transporter 1 Printed/Typed Name: Nicholas Drachenberg — Signature — Month 1 Day 12 Year 17

Transporter Acknowledgment of Receipt of Materials

Transporter 2 Company Name — Phone#

Transporter 2 Printed/Typed Name — Signature — Month Day Year

Transporter Acknowledgment of Receipt of Materials

RECEIVING FACILITY

Designated Facility Name and Site Address

DEMENNO KERDOON
2000 N. ALAMEDA ST.
COMPTON, CA 90222

Phone#: 310-537-7100

Printed/Typed Name — Signature — Month Day Year

Designated Facility Owner or Operator: Certification of receipt of materials covered by this data form.

Appendix B

Analytical Report
(TestAmerica Laboratories, Inc.)

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Irvine
17461 Derian Ave
Suite 100
Irvine, CA 92614-5817
Tel: (949)261-1022

TestAmerica Job ID: 440-173486-1
Client Project/Site: Shell - 4255 MacArthur Blvd., Oakland

For:
AECOM Technical Services Inc.
300 Lakeside Drive
Suite 400
Oakland, California 94612

Attn: Helen Hild

Authorized for release by:
1/19/2017 12:38:07 PM

Laura Turpen, Project Manager I
(916)374-4414
laura.turpen@testamericainc.com

Table of Contents

Sample Summary

Client: AECOM Technical Services Inc.
Project/Site: Shell - 4255 MacArthur Blvd., Oakland

TestAmerica Job ID: 440-173486-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
440-173486-1	MW-1	Ground Water	01/12/17 14:50	01/14/17 11:45
440-173486-2	MW-3	Ground Water	01/12/17 14:15	01/14/17 11:45
440-173486-3	MW-4	Ground Water	01/12/17 12:35	01/14/17 11:45
440-173486-4	MW-5	Ground Water	01/12/17 12:55	01/14/17 11:45
440-173486-5	MW-6	Ground Water	01/12/17 13:30	01/14/17 11:45
440-173486-6	MW-7	Ground Water	01/12/17 15:00	01/14/17 11:45
440-173486-7	MW-8	Ground Water	01/12/17 14:25	01/14/17 11:45
440-173486-8	MW-9	Ground Water	01/12/17 14:40	01/14/17 11:45

Job ID: 440-173486-1

Laboratory: TestAmerica Irvine

Narrative

Job Narrative
440-173486-1

Comments
No additional comments.

Receipt
The samples were received on 1/14/2017 11:45 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.8º C.

GC/MS VOA
Method(s) 8260B: The following sample was collected in properly preserved vials for analysis of volatile organic compounds (VOCs). However, the pH of 7 was outside the required criteria when verified by the laboratory, and corrective action was not possible: MW-5 (440-173486-4). The sample was analyzed within 7 days per EPA recommendation.

Method(s) 8260B/CA_LUFTMS: The following sample was collected in properly preserved vials for analysis of volatile organic compounds (VOCs). However, the pH of 7 was outside the required criteria when verified by the laboratory, and corrective action was not possible: MW-5 (440-173486-4). The sample was analyzed within 7 days per EPA recommendation.

Method(s) 8260B/CA_LUFTMS: The Gasoline Range Organics (GRO) concentration reported for the following sample is due to the presence of discrete peaks: MW-8 (440-173486-7) and MW-9 (440-173486-8). Methyl-tert-butyl ether.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

VOA Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Client Sample ID: MW-1

Lab Sample ID: 440-173486-1
Date Collected: 01/12/17 14:50
Matrix: Ground Water
Date Received: 01/14/17 11:45

Method: 8260B/CA_LUFTMS - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Volatile Fuel Hydrocarbons (C4-C12)	ND		50		ug/L			01/18/17 20:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*100*		*76 - 132*		*01/18/17 20:58*	*1*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*		*01/18/17 20:58*	*1*
Toluene-d8 (Surr)	*112*		*80 - 128*		*01/18/17 20:58*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50		ug/L			01/18/17 20:58	1
Ethylbenzene	ND		0.50		ug/L			01/18/17 20:58	1
Methyl-t-Butyl Ether (MTBE)	**21**		0.50		ug/L			01/18/17 20:58	1
tert-Butyl alcohol (TBA)	ND		10		ug/L			01/18/17 20:58	1
Toluene	ND		0.50		ug/L			01/18/17 20:58	1
Xylenes, Total	ND		1.0		ug/L			01/18/17 20:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*		*01/18/17 20:58*	*1*
Dibromofluoromethane (Surr)	*100*		*76 - 132*		*01/18/17 20:58*	*1*
Toluene-d8 (Surr)	*112*		*80 - 128*		*01/18/17 20:58*	*1*

Client Sample ID: MW-3

Lab Sample ID: 440-173486-2
Date Collected: 01/12/17 14:15
Matrix: Ground Water
Date Received: 01/14/17 11:45

Method: 8260B/CA_LUFTMS - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Volatile Fuel Hydrocarbons (C4-C12)	**14000**		1000		ug/L			01/19/17 00:53	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*103*		*76 - 132*		*01/19/17 00:53*	*20*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*		*01/19/17 00:53*	*20*
Toluene-d8 (Surr)	*110*		*80 - 128*		*01/19/17 00:53*	*20*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**1000**		10		ug/L			01/19/17 00:53	20
Ethylbenzene	**560**		10		ug/L			01/19/17 00:53	20
Methyl-t-Butyl Ether (MTBE)	**270**		10		ug/L			01/19/17 00:53	20
tert-Butyl alcohol (TBA)	**450**		200		ug/L			01/19/17 00:53	20
Toluene	**11**		10		ug/L			01/19/17 00:53	20
Xylenes, Total	**420**		20		ug/L			01/19/17 00:53	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*		*01/19/17 00:53*	*20*
Dibromofluoromethane (Surr)	*103*		*76 - 132*		*01/19/17 00:53*	*20*
Toluene-d8 (Surr)	*110*		*80 - 128*		*01/19/17 00:53*	*20*

Client Sample ID: MW-4 — Lab Sample ID: 440-173486-3

Date Collected: 01/12/17 12:35 — **Matrix: Ground Water**
Date Received: 01/14/17 11:45

Method: 8260B/CA_LUFTMS - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Volatile Fuel Hydrocarbons (C4-C12)	**26000**		1000		ug/L			01/19/17 01:22	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*103*		*76 - 132*		*01/19/17 01:22*	*20*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*		*01/19/17 01:22*	*20*
Toluene-d8 (Surr)	*109*		*80 - 128*		*01/19/17 01:22*	*20*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**69**		10		ug/L			01/19/17 01:22	20
Ethylbenzene	**850**		10		ug/L			01/19/17 01:22	20
Methyl-t-Butyl Ether (MTBE)	**15**		10		ug/L			01/19/17 01:22	20
tert-Butyl alcohol (TBA)	ND		200		ug/L			01/19/17 01:22	20
Toluene	**35**		10		ug/L			01/19/17 01:22	20
Xylenes, Total	**2400**		20		ug/L			01/19/17 01:22	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*		*01/19/17 01:22*	*20*
Dibromofluoromethane (Surr)	*103*		*76 - 132*		*01/19/17 01:22*	*20*
Toluene-d8 (Surr)	*109*		*80 - 128*		*01/19/17 01:22*	*20*

Client Sample ID: MW-5 — Lab Sample ID: 440-173486-4

Date Collected: 01/12/17 12:55 — **Matrix: Ground Water**
Date Received: 01/14/17 11:45

Method: 8260B/CA_LUFTMS - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Volatile Fuel Hydrocarbons (C4-C12)	ND		50		ug/L			01/18/17 22:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*100*		*76 - 132*		*01/18/17 22:25*	*1*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*		*01/18/17 22:25*	*1*
Toluene-d8 (Surr)	*111*		*80 - 128*		*01/18/17 22:25*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50		ug/L			01/18/17 22:25	1
Ethylbenzene	ND		0.50		ug/L			01/18/17 22:25	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50		ug/L			01/18/17 22:25	1
tert-Butyl alcohol (TBA)	ND		10		ug/L			01/18/17 22:25	1
Toluene	ND		0.50		ug/L			01/18/17 22:25	1
Xylenes, Total	ND		1.0		ug/L			01/18/17 22:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*		*01/18/17 22:25*	*1*
Dibromofluoromethane (Surr)	*100*		*76 - 132*		*01/18/17 22:25*	*1*
Toluene-d8 (Surr)	*111*		*80 - 128*		*01/18/17 22:25*	*1*

Client: AECOM Technical Services Inc.
Project/Site: Shell - 4255 MacArthur Blvd., Oakland

TestAmerica Job ID: 440-173486-1

Client Sample ID: MW-6

Lab Sample ID: 440-173486-5

Date Collected: 01/12/17 13:30

Matrix: Ground Water

Date Received: 01/14/17 11:45

Method: 8260B/CA_LUFTMS - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Volatile Fuel Hydrocarbons (C4-C12)	ND		50		ug/L			01/18/17 22:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*100*		*76 - 132*		*01/18/17 22:55*	*1*
4-Bromofluorobenzene (Surr)	*97*		*80 - 120*		*01/18/17 22:55*	*1*
Toluene-d8 (Surr)	*110*		*80 - 128*		*01/18/17 22:55*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50		ug/L			01/18/17 22:55	1
Ethylbenzene	ND		0.50		ug/L			01/18/17 22:55	1
Methyl-t-Butyl Ether (MTBE)	**2.5**		0.50		ug/L			01/18/17 22:55	1
tert-Butyl alcohol (TBA)	**25**		10		ug/L			01/18/17 22:55	1
Toluene	ND		0.50		ug/L			01/18/17 22:55	1
Xylenes, Total	ND		1.0		ug/L			01/18/17 22:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*80 - 120*		*01/18/17 22:55*	*1*
Dibromofluoromethane (Surr)	*100*		*76 - 132*		*01/18/17 22:55*	*1*
Toluene-d8 (Surr)	*110*		*80 - 128*		*01/18/17 22:55*	*1*

Client Sample ID: MW-7

Lab Sample ID: 440-173486-6

Date Collected: 01/12/17 15:00

Matrix: Ground Water

Date Received: 01/14/17 11:45

Method: 8260B/CA_LUFTMS - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Volatile Fuel Hydrocarbons (C4-C12)	ND		50		ug/L			01/18/17 23:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*103*		*76 - 132*		*01/18/17 23:24*	*1*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*		*01/18/17 23:24*	*1*
Toluene-d8 (Surr)	*111*		*80 - 128*		*01/18/17 23:24*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50		ug/L			01/18/17 23:24	1
Ethylbenzene	ND		0.50		ug/L			01/18/17 23:24	1
Methyl-t-Butyl Ether (MTBE)	**0.56**		0.50		ug/L			01/18/17 23:24	1
tert-Butyl alcohol (TBA)	ND		10		ug/L			01/18/17 23:24	1
Toluene	ND		0.50		ug/L			01/18/17 23:24	1
Xylenes, Total	ND		1.0		ug/L			01/18/17 23:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*		*01/18/17 23:24*	*1*
Dibromofluoromethane (Surr)	*103*		*76 - 132*		*01/18/17 23:24*	*1*
Toluene-d8 (Surr)	*111*		*80 - 128*		*01/18/17 23:24*	*1*

Client Sample ID: MW-8 — Lab Sample ID: 440-173486-7

Date Collected: 01/12/17 14:25 — **Matrix: Ground Water**
Date Received: 01/14/17 11:45

Method: 8260B/CA_LUFTMS - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Volatile Fuel Hydrocarbons (C4-C12)	**100**		50		ug/L			01/18/17 23:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*101*		*76 - 132*		*01/18/17 23:54*	*1*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*		*01/18/17 23:54*	*1*
Toluene-d8 (Surr)	*111*		*80 - 128*		*01/18/17 23:54*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50		ug/L			01/18/17 23:54	1
Ethylbenzene	ND		0.50		ug/L			01/18/17 23:54	1
Methyl-t-Butyl Ether (MTBE)	**99**		0.50		ug/L			01/18/17 23:54	1
tert-Butyl alcohol (TBA)	ND		10		ug/L			01/18/17 23:54	1
Toluene	ND		0.50		ug/L			01/18/17 23:54	1
Xylenes, Total	ND		1.0		ug/L			01/18/17 23:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*		*01/18/17 23:54*	*1*
Dibromofluoromethane (Surr)	*101*		*76 - 132*		*01/18/17 23:54*	*1*
Toluene-d8 (Surr)	*111*		*80 - 128*		*01/18/17 23:54*	*1*

Client Sample ID: MW-9 — Lab Sample ID: 440-173486-8

Date Collected: 01/12/17 14:40 — **Matrix: Ground Water**
Date Received: 01/14/17 11:45

Method: 8260B/CA_LUFTMS - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Volatile Fuel Hydrocarbons (C4-C12)	**110**		50		ug/L			01/19/17 00:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*102*		*76 - 132*		*01/19/17 00:23*	*1*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*		*01/19/17 00:23*	*1*
Toluene-d8 (Surr)	*109*		*80 - 128*		*01/19/17 00:23*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.67**		0.50		ug/L			01/19/17 00:23	1
Ethylbenzene	ND		0.50		ug/L			01/19/17 00:23	1
Methyl-t-Butyl Ether (MTBE)	**97**		0.50		ug/L			01/19/17 00:23	1
tert-Butyl alcohol (TBA)	**11**	**ID**	10		ug/L			01/19/17 00:23	1
Toluene	ND		0.50		ug/L			01/19/17 00:23	1
Xylenes, Total	ND		1.0		ug/L			01/19/17 00:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*		*01/19/17 00:23*	*1*
Dibromofluoromethane (Surr)	*102*		*76 - 132*		*01/19/17 00:23*	*1*
Toluene-d8 (Surr)	*109*		*80 - 128*		*01/19/17 00:23*	*1*

Method Summary

Client: AECOM Technical Services Inc.
Project/Site: Shell - 4255 MacArthur Blvd., Oakland

TestAmerica Job ID: 440-173486-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL IRV
8260B/CA_LUFTMS	Volatile Organic Compounds by GC/MS	SW846	TAL IRV

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

Lab Chronicle

Client: AECOM Technical Services Inc.
Project/Site: Shell - 4255 MacArthur Blvd., Oakland

TestAmerica Job ID: 440-173486-1

Client Sample ID: MW-1

Date Collected: 01/12/17 14:50
Date Received: 01/14/17 11:45

Lab Sample ID: 440-173486-1
Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	382960	01/18/17 20:58	WK	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTMS		1	10 mL	10 mL	382961	01/18/17 20:58	WK	TAL IRV

Client Sample ID: MW-3

Date Collected: 01/12/17 14:15
Date Received: 01/14/17 11:45

Lab Sample ID: 440-173486-2
Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		20	10 mL	10 mL	382960	01/19/17 00:53	WK	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTMS		20	10 mL	10 mL	382961	01/19/17 00:53	WK	TAL IRV

Client Sample ID: MW-4

Date Collected: 01/12/17 12:35
Date Received: 01/14/17 11:45

Lab Sample ID: 440-173486-3
Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		20	10 mL	10 mL	382960	01/19/17 01:22	WK	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTMS		20	10 mL	10 mL	382961	01/19/17 01:22	WK	TAL IRV

Client Sample ID: MW-5

Date Collected: 01/12/17 12:55
Date Received: 01/14/17 11:45

Lab Sample ID: 440-173486-4
Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	382960	01/18/17 22:25	WK	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTMS		1	10 mL	10 mL	382961	01/18/17 22:25	WK	TAL IRV

Client Sample ID: MW-6

Date Collected: 01/12/17 13:30
Date Received: 01/14/17 11:45

Lab Sample ID: 440-173486-5
Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	382960	01/18/17 22:55	WK	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTMS		1	10 mL	10 mL	382961	01/18/17 22:55	WK	TAL IRV

Lab Chronicle

Client: AECOM Technical Services Inc.
Project/Site: Shell - 4255 MacArthur Blvd., Oakland

TestAmerica Job ID: 440-173486-1

Client Sample ID: MW-7

Date Collected: 01/12/17 15:00
Date Received: 01/14/17 11:45

Lab Sample ID: 440-173486-6

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	382960	01/18/17 23:24	WK	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTMS		1	10 mL	10 mL	382961	01/18/17 23:24	WK	TAL IRV

Client Sample ID: MW-8

Date Collected: 01/12/17 14:25
Date Received: 01/14/17 11:45

Lab Sample ID: 440-173486-7

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	382960	01/18/17 23:54	WK	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTMS		1	10 mL	10 mL	382961	01/18/17 23:54	WK	TAL IRV

Client Sample ID: MW-9

Date Collected: 01/12/17 14:40
Date Received: 01/14/17 11:45

Lab Sample ID: 440-173486-8

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	382960	01/19/17 00:23	WK	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTMS		1	10 mL	10 mL	382961	01/19/17 00:23	WK	TAL IRV

Laboratory References:

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 440-382960/4
Matrix: Water
Analysis Batch: 382960

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50		ug/L			01/18/17 19:29	1
Ethylbenzene	ND		0.50		ug/L			01/18/17 19:29	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50		ug/L			01/18/17 19:29	1
tert-Butyl alcohol (TBA)	ND		10		ug/L			01/18/17 19:29	1
Toluene	ND		0.50		ug/L			01/18/17 19:29	1
Xylenes, Total	ND		1.0		ug/L			01/18/17 19:29	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*		*01/18/17 19:29*	*1*
Dibromofluoromethane (Surr)	*102*		*76 - 132*		*01/18/17 19:29*	*1*
Toluene-d8 (Surr)	*110*		*80 - 128*		*01/18/17 19:29*	*1*

Lab Sample ID: LCS 440-382960/5
Matrix: Water
Analysis Batch: 382960

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	25.0	29.7		ug/L		119	68 - 130
Ethylbenzene	25.0	27.8		ug/L		111	70 - 130
m,p-Xylene	25.0	28.8		ug/L		115	70 - 130
Methyl-t-Butyl Ether (MTBE)	25.0	30.0		ug/L		120	63 - 131
o-Xylene	25.0	29.5		ug/L		118	70 - 130
tert-Butyl alcohol (TBA)	250	302		ug/L		121	70 - 130
Toluene	25.0	28.1		ug/L		112	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*
Dibromofluoromethane (Surr)	*102*		*76 - 132*
Toluene-d8 (Surr)	*102*		*80 - 128*

Lab Sample ID: 440-173486-1 MS
Matrix: Ground Water
Analysis Batch: 382960

Client Sample ID: MW-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	ND		25.0	26.5		ug/L		106	66 - 130
Ethylbenzene	ND		25.0	25.8		ug/L		103	70 - 130
m,p-Xylene	ND		25.0	26.8		ug/L		107	70 - 133
Methyl-t-Butyl Ether (MTBE)	21		25.0	47.6		ug/L		108	70 - 130
o-Xylene	ND		25.0	26.7		ug/L		107	70 - 133
tert-Butyl alcohol (TBA)	ND		250	273		ug/L		109	70 - 130
Toluene	ND		25.0	25.8		ug/L		103	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*96*		*80 - 120*
Dibromofluoromethane (Surr)	*101*		*76 - 132*
Toluene-d8 (Surr)	*104*		*80 - 128*

Lab Sample ID: 440-173486-1 MSD
Matrix: Ground Water
Analysis Batch: 382960

Client Sample ID: MW-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	ND		25.0	26.9		ug/L		108	66 - 130	2	20
Ethylbenzene	ND		25.0	26.1		ug/L		104	70 - 130	1	20
m,p-Xylene	ND		25.0	27.3		ug/L		109	70 - 133	2	25
Methyl-t-Butyl Ether (MTBE)	21		25.0	48.3		ug/L		111	70 - 130	2	25
o-Xylene	ND		25.0	27.2		ug/L		109	70 - 133	2	20
tert-Butyl alcohol (TBA)	ND		250	273		ug/L		109	70 - 130	0	25
Toluene	ND		25.0	26.3		ug/L		105	70 - 130	2	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*97*		*80 - 120*
Dibromofluoromethane (Surr)	*101*		*76 - 132*
Toluene-d8 (Surr)	*104*		*80 - 128*

Method: 8260B/CA_LUFTMS - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 440-382961/4
Matrix: Water
Analysis Batch: 382961

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Volatile Fuel Hydrocarbons (C4-C12)	ND		50		ug/L			01/18/17 19:29	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*102*		*76 - 132*		*01/18/17 19:29*	*1*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*		*01/18/17 19:29*	*1*
Toluene-d8 (Surr)	*110*		*80 - 128*		*01/18/17 19:29*	*1*

Lab Sample ID: LCS 440-382961/6
Matrix: Water
Analysis Batch: 382961

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Volatile Fuel Hydrocarbons (C4-C12)			500	485		ug/L		97	55 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*102*		*76 - 132*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*
Toluene-d8 (Surr)	*110*		*80 - 128*

Lab Sample ID: 440-173486-1 MS
Matrix: Ground Water
Analysis Batch: 382961

Client Sample ID: MW-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Volatile Fuel Hydrocarbons (C4-C12)	ND		1730	1820		ug/L		106	50 - 145		

Method: 8260B/CA_LUFTMS - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 440-173486-1 MS
Matrix: Ground Water
Analysis Batch: 382961

Client Sample ID: MW-1
Prep Type: Total/NA

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*101*		*76 - 132*
4-Bromofluorobenzene (Surr)	*96*		*80 - 120*
Toluene-d8 (Surr)	*104*		*80 - 128*

Lab Sample ID: 440-173486-1 MSD
Matrix: Ground Water
Analysis Batch: 382961

Client Sample ID: MW-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Volatile Fuel Hydrocarbons (C4-C12)	ND		1730	1880		ug/L		109	50 - 145	3	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*101*		*76 - 132*
4-Bromofluorobenzene (Surr)	*97*		*80 - 120*
Toluene-d8 (Surr)	*104*		*80 - 128*

QC Association Summary

Client: AECOM Technical Services Inc.
Project/Site: Shell - 4255 MacArthur Blvd., Oakland

TestAmerica Job ID: 440-173486-1

GC/MS VOA

Analysis Batch: 382960

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-173486-1	MW-1	Total/NA	Ground Water	8260B	
440-173486-2	MW-3	Total/NA	Ground Water	8260B	
440-173486-3	MW-4	Total/NA	Ground Water	8260B	
440-173486-4	MW-5	Total/NA	Ground Water	8260B	
440-173486-5	MW-6	Total/NA	Ground Water	8260B	
440-173486-6	MW-7	Total/NA	Ground Water	8260B	
440-173486-7	MW-8	Total/NA	Ground Water	8260B	
440-173486-8	MW-9	Total/NA	Ground Water	8260B	
MB 440-382960/4	Method Blank	Total/NA	Water	8260B	
LCS 440-382960/5	Lab Control Sample	Total/NA	Water	8260B	
440-173486-1 MS	MW-1	Total/NA	Ground Water	8260B	
440-173486-1 MSD	MW-1	Total/NA	Ground Water	8260B	

Analysis Batch: 382961

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-173486-1	MW-1	Total/NA	Ground Water	8260B/CA_LUFT MS	
440-173486-2	MW-3	Total/NA	Ground Water	8260B/CA_LUFT MS	
440-173486-3	MW-4	Total/NA	Ground Water	8260B/CA_LUFT MS	
440-173486-4	MW-5	Total/NA	Ground Water	8260B/CA_LUFT MS	
440-173486-5	MW-6	Total/NA	Ground Water	8260B/CA_LUFT MS	
440-173486-6	MW-7	Total/NA	Ground Water	8260B/CA_LUFT MS	
440-173486-7	MW-8	Total/NA	Ground Water	8260B/CA_LUFT MS	
440-173486-8	MW-9	Total/NA	Ground Water	8260B/CA_LUFT MS	
MB 440-382961/4	Method Blank	Total/NA	Water	8260B/CA_LUFT MS	
LCS 440-382961/6	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT MS	
440-173486-1 MS	MW-1	Total/NA	Ground Water	8260B/CA_LUFT MS	
440-173486-1 MSD	MW-1	Total/NA	Ground Water	8260B/CA_LUFT MS	

Definitions/Glossary

Client: AECOM Technical Services Inc.
Project/Site: Shell - 4255 MacArthur Blvd., Oakland

TestAmerica Job ID: 440-173486-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
ID	Analyte identified by RT & presence of single mass ion

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Certification Summary

Client: AECOM Technical Services Inc.
Project/Site: Shell - 4255 MacArthur Blvd., Oakland

TestAmerica Job ID: 440-173486-1

Laboratory: TestAmerica Irvine

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska	State Program	10	CA01531	06-30-17
Arizona	State Program	9	AZ0671	10-14-17
California	LA Cty Sanitation Districts	9	10256	01-31-17 *
California	State Program	9	CA ELAP 2706	06-30-18
Guam	State Program	9	Cert. No. 16-001r	01-23-17 *
Hawaii	State Program	9	N/A	01-29-17 *
Kansas	NELAP Secondary AB	7	E-10420	07-31-17
Nevada	State Program	9	CA015312016-2	07-31-17
New Mexico	State Program	6	N/A	01-29-17 *
Northern Mariana Islands	State Program	9	MP0002	01-29-17 *
Oregon	NELAP	10	4028	01-29-17 *
USDA	Federal		P330-15-00184	07-08-18
Washington	State Program	10	C900	09-03-17

Laboratory: TestAmerica Pleasanton

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
California	State Program	9	2496	01-31-18

* Certification renewal pending - certification considered valid.

LAB (LOCATION)

☐ ACCUTEST (_____)
☐ CALSCIENCE (_____)
☑ TESTAMERICA (_____)
☐ Other (_____)

Lab Vendor # 1364589 (TestAmerica)

Equilon Enterprises LLC dba Shell Oil Products US Chain Of Custody Record

AECOM

Please Check Appropriate Box:		
☐ GW FDG	☐ PIPELINE	☐ RETAIL
☐ CHEMICALS	☑ CONSULTANT	☐ LUBES
☐ TRANSPORTATION	☐ OTHER _____	

Print Bill To Contact Name:	PlaNet Site or Project ID
Shane Olton	38573
PO #	GSAP Project ID
	USPC/00308;USRT/00752

☐ CHECK IF NO INCIDENT # APPLIES

DATE: 1/12/17

PAGE: 1 of 1

SAMPLING COMPANY: Blaine Tech Services, Inc.

LOG CODE: BTSS

SITE ADDRESS: Street and City: 4255 MacArthur Blvd., Oakland

State: CA

AECOM Project / Task Number: 60482422

ADDRESS: 1680 Rogers Ave., San Jose, CA, 95112

EDF DELIVERABLE TO (Name, Company, Office Location): Margaret Baber, AECOM, Oakland, CA

PHONE NO.: 510-893-3600

E-MAIL: margaret.baber@aecom.com

AECOM Other ID: 10059253

PROJECT CONTACT (Hardcopy or PDF Report to): Bart Gebbie

TELEPHONE: 310-885-4455 Ext. 103

FAX: 310-637-5802

Bill To Contact E-MAIL: shane.olton@aecom.com

SAMPLER NAME(S) (Print): Nicholas Drachenberg

LAB USE ONLY

TURNAROUND TIME (CALENDAR DAYS):
☑ STANDARD (14 DAY) ☐ 5 DAYS ☐ 3 DAYS ☐ 2 DAYS ☐ 24 HOURS ☐ RESULTS NEEDED ON WEEKEND

☐ LA - RWQCB REPORT FORMAT ☐ UST AGENCY:

DELIVERABLES: ☑ LEVEL 1 ☐ LEVEL 2 ☐ LEVEL 3 ☐ LEVEL 4 ☐ OTHER (SPECIFY) _____

TEMPERATURE ON RECEIPT C°: Cooler #1 | Cooler #2 | Cooler #3

SPECIAL INSTRUCTIONS OR NOTES :

Email invoice to USAPimaging@aecom.com

☑ SHELL CONTRACT RATE APPLIES
☐ STATE REIMBURSEMENT RATE APPLIES
☐ EDD NOT NEEDED
☑ RECEIPT VERIFICATION REQUESTED
☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS

UNIT COST: TPH-GRO, Purgeable (8260B); BTEX, MTBE, TBA (8260B); BTEX, MTBE (8260B); 5 OXYS (8260B); Ethanol (8260B)

NON-UNIT COST

FIELD NOTES:

TEMPERATURE ON RECEIPT C°

Container PID Readings or Laboratory Notes

LAB USE ONLY	Field Sample Identification	SAMPLING DATE	SAMPLING TIME	MATRIX	PRESERVATIVE HCL	HNO3	H2SO4	NONE	OTHER	NO. OF CONT.	TPH-GRO	BTEX, MTBE, TBA	BTEX, MTBE	5 OXYS	Ethanol
	MW-1	1/12/17	1450	WG	X					3	X	X			
	MW-3		1415	WG	X					3	X	X			
	MW-4		1235	WG	X					3	X	X			
	MW-5		1255	WG	X					3	X	X			
	MW-6		1330	WG	X					3	X	X			
	MW-7		1500	WG	X					3	X	X			
	MW-8		1425	WG	X					3	X	X			
	MW-9	↓	1440	WG	X					3	X	X			

440-173486 Chain of Custody

3.3 | 3.8

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
		1/12/17	1500
		1/13/17	145
	1.3°C	1/13/17	1400

1/13/17 1430

01/14/17 1145

Version: 14Dec15

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1/19/2017

Login Sample Receipt Checklist

Client: AECOM Technical Services Inc. Job Number: 440-173486-1

Login Number: 173486 **List Source: TestAmerica Irvine**
List Number: 1
Creator: Garcia, Veronica G

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Appendix C

Current Groundwater Gauging and Analytical Results, 76 Service Station No. 1156

Appendix C
Current Groundwater Gauging and Analytical Results
76 Service Station No. 1156 (351645), 4276 MacArthur Boulevard, Oakland, California

Well ID	Date Sampled	TOC Elevation (feet MSL)	DTW (feet bTOC)	SPH Thickness (feet)	Groundwater Elevation (feet MSL)	Previous Quarter GWE (feet MSL)	Change in Elevation (feet)	TPH-d SGT (µg/L)	TPH-g (µg/L)	TPH-O&G (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	TBA (µg/L)	TAME (µg/L)	DIPE (µg/L)	ETBE (µg/L)	EDB (µg/L)	1,2-DCA (µg/L)	Ethanol (µg/L)	Comments
MW-1B	1/12/2017	174.06	5.21	0.00	168.85	167.03	1.82	<40	<50	NA	<0.30	<0.30	<0.30	<0.60	**2.4**	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<250	
MW-2B	1/12/2017	173.55	3.95	0.00	169.60	166.06	3.54	<40	<50	NA	<0.30	<0.30	<0.30	<0.60	**5.6**	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<250	
MW-3B	1/12/2017	177.77	3.14	0.00	174.63	170.89	3.74	**1,200**	**7,800**	NA	**230**	**200**	**560**	**590**	**9.2**	<100	<5.0	<5.0	<5.0	<5.0	<5.0	<2,500	A01, A07, A52
MW-4B	1/12/2017	179.07	2.88	0.00	176.19	172.17	4.02	<40	<50	NA	<0.30	<0.30	<0.30	<0.60	**1.7**	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<250	
MW-5	1/12/2017	169.18	0.90	0.00	168.28	165.82	2.46	<40	<50	NA	<0.30	<0.30	<0.30	<0.60	**4.3**	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<250	
MW-7	1/12/2017	172.11	5.78	0.00	166.33	164.79	1.54	<40	<50	NA	<0.30	<0.30	<0.30	<0.60	**2.1**	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<250	
MW-9A	1/12/2017	173.01	7.97	0.00	165.04	162.97	2.07	**660**	**9,600**	NA	**1,700**	**22**	**81**	**27**	**84**	**2,100**	<5.0	<5.0	<5.0	<5.0	<5.0	<2,500	A01, A07, A52
MW-9B	1/12/2017	172.78	3.93	0.00	168.85	166.97	1.88	<40	<50	NA	<0.30	<0.30	<0.30	<0.60	**9.0**	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<250	
MW-10A	1/12/2017	174.48	6.16	0.00	168.32	168.67	-0.35	**2,200**	**30,000**	NA	**4,400**	**230**	**1,000**	**1,300**	**410**	**2,300**	<10	<10	<10	<10	<10	<5,000	A01, A07, A52
MW-10B	1/12/2017	174.62	5.68	0.00	168.94	166.93	2.01	**1,100**	**7,500**	NA	**1,600**	**69**	**270**	**480**	**75**	<100	<5.0	<5.0	<5.0	<5.0	<5.0	<2,500	A01, A07, A52
MW-10S	1/12/2017	175.57	5.18	0.00	170.39	167.98	2.41	**40**	**170**	<5.0	**14**	<0.30	**23**	<0.60	**5.1**	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<250	A52
MW-11A	1/12/2017	175.37	3.43	0.00	171.94	170.16	1.78	**10,000**	**64,000**	NA	**4,900**	**2,900**	**1,600**	**11,000**	**1,800**	**3,300**	<25	<25	<25	<25	<25	<12,000	A01, A07, A52
MW-11B	1/12/2017	174.65	7.47	0.00	167.18	168.90	-1.72	**2,100**	**30,000**	NA	**6,000**	**700**	**740**	**1,600**	**1,400**	**4,600**	<25	<25	<25	<25	<25	<12,000	A01, A52
MW-11S	1/12/2017	176.09	2.07	0.00	174.02	170.34	3.68	<40	<50	<5.0	<0.30	<0.30	<0.30	<0.60	<0.50	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<250	

Standard Abbreviations

TOC	top of casing (surveyed reference elevation)
MSL	relative to mean sea level
DTW	depth to water
bTOC	below top of casing
SPH	separate phase hydrocarbons
µg/l	micrograms per liter (approx. equivalent to parts per billion, ppb)
NA	not available/not applicable
<	denotes less than laboratory reporting limit

Analytes

TPH-d SGT	total petroleum hydrocarbons as diesel range organics (C12-C24) Silica Gel Treated
TPH-g	total petroleum hydrocarbons as gasoline range organics (C6-C12)
TPH-O&G	total petroleum hydrocarbons as oil and grease range organics
MTBE	methyl tertiary butyl ether
TBA	tertiary butyl alcohol
TAME	tertiary amyl methyl ether
DIPE	di-isopropyl ether
ETBE	ethyl tertiary butyl ether
EDB	ethylene dibromide (same as 1,2-dibromoethane)
1,2-DCA	1,2-dichloroethane (same ethylene dichloride)

Notes

A01	Practical quantitation limit and method detection limit for TPH-d are raised due to sample dilution
A07	Detection and quantitation limits were raised due to sample dilution caused by high analyte concentration or matrixinterference.
A52	Chromatogram not typical of diesel

Calc. GW Elev. = Calculated groundwater elevation = TOC - Depth to Water + 0.75*(Measured SPH Thickness); assuming a specific gravity of 0.75 for SPH

BOLD Concentration detected above laboratory practical quantitation limit