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Alameda County Environmental Health
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Alameda, CA 94502-6577

Shell Oil Products US

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**RE: 4411 Foothill Boulevard, Oakland, California
PlaNet Site ID 10059562
PlaNet Project ID 31733
ACEH Case No. RO0000415**

Dear Ms. Jurek:

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 to the best of my knowledge, 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
Principle Program Manager

February 13, 2017

Anne Jurek
Alameda County Environmental Health
1131 Harbor Bay Parkway
Alameda, CA 94502

Re: Second Semiannual 2016 Groundwater Monitoring Report
Former Shell Service Station
4411 Foothill Boulevard, Oakland, California
Shell PlaNet Site ID: 10059562
Shell PlaNet Project ID: 31733
Agency No. RO0000415

Dear Ms. Jurek:

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 fourth quarter of 2016 at the Former Shell Service Station located at 4411 Foothill 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, G.I.T.
Staff Geologist



Shane Olton, P.G.
Project Manager



Enclosures: Groundwater Monitoring Report

cc: Andrea Wing, Equilon Enterprises dba Shell Oil Products US
Laura Wong, Phua Management (property owner representative, electronic copy)

Second Semiannual 2016 Groundwater Monitoring Report

Former Shell Service Station
4411 Foothill Boulevard
Oakland, California

February 2017

Second Semiannual 2016 Groundwater Monitoring Report

Former Shell Service Station
4411 Foothill Boulevard
Oakland, California

PlaNNet Site ID 10059562
PlaNNet Project ID 31733
Agency No. RO0000415

Submitted to:

Anne Jurek
Alameda County Environmental Health
1131 Harbor Bay Parkway
Alameda, CA 94502

Submitted by:

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

On Behalf of

Equilon Enterprises dba Shell Oil Products US

February 13, 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:	<u>Former Shell Service Station</u>
Site Address:	<u>4411 Foothill Boulevard, Oakland, California</u>
Equilon Environmental Services Program Manager:	<u>Andrea Wing</u>
Consulting Company / Contact Person:	<u>AECOM / Shane Olton</u>
Primary Agencies:	<u>Alameda County Environmental Health (ACEH)</u>

1.2 Site Summary

Frequency of Groundwater Monitoring:	<u>Semiannually</u>
Wells Water Level Gauged:	<u>10</u>
Wells Sampled:	<u>10</u>
Is there any Free Product Present in On-Site Monitoring Wells:	<u>No</u>
Current Remediation Activity:	<u>None</u>

2 Site Activities

2.1 Current Activities

On December 23, 2016, Blaine Tech Services, Inc. (Blaine Tech) of San Jose, California gauged and sampled the wells according to the established monitoring program for this site. Chevron well C-11 was inaccessible and unable to be gauged or sampled during the December 23 event. On December 30, 2016, Blaine Tech returned to the site to sample and gauge Chevron well C-11. TestAmerica Laboratories, Inc. of Irvine, California, a California-certified 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), and a groundwater data table (Table 1). Blaine Tech's field notes are presented in Appendix A, and the laboratory report is presented in Appendix B.

2.2 Current Findings

Groundwater Elevation:	<u>30.01 to 31.61 in feet above mean sea level (C-11 not included)</u>
Groundwater Gradient (direction):	<u>Southwest</u>
Groundwater Gradient (magnitude):	<u>0.01 feet per foot</u>

2.3 Proposed Activities

The ACEH approved adding down-gradient Chevron well C-11 to the site monitoring program in a letter on September 9, 2016. Blaine Tech will gauge and sample wells according to the established monitoring program for this site. This site is monitored semiannually during the second and fourth quarters, and AECOM will issue groundwater monitoring reports semiannually following the sampling events.

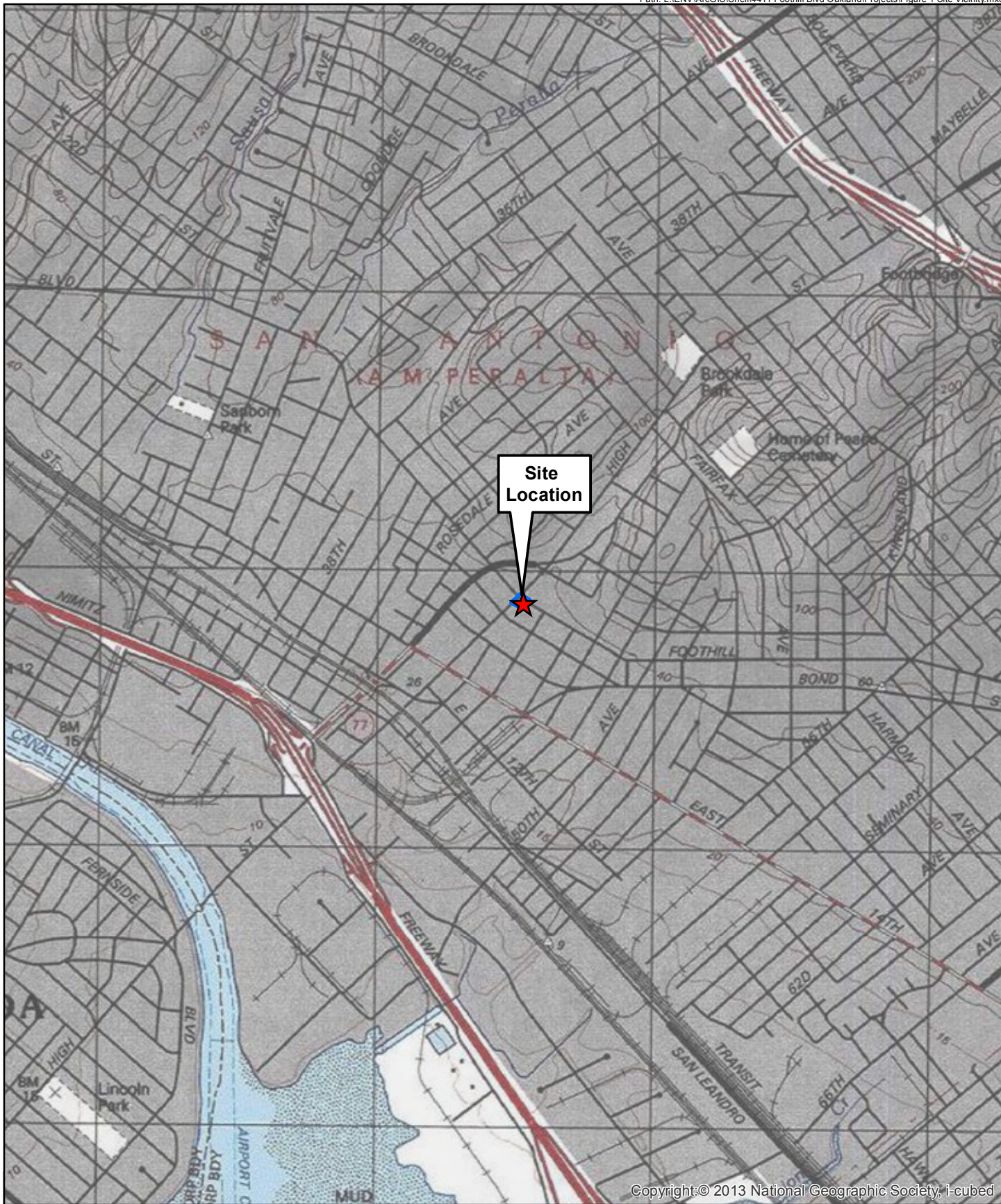
3 Conclusions and Recommendations

Ten wells (S-6 through S-14 and C-11) were analyzed for total petroleum hydrocarbons as gasoline (TPHg), benzene, toluene, ethylbenzene, total xylenes (BTEX), methyl tertiary-butyl ether (MTBE), tertiary-butyl alcohol (TBA), di-isopropyl ether (DIPE), ethyl tertiary-butyl ether (ETBE), and tertiary-amyl methyl ether (TAME). Eight wells (S-6 through S-12 and C-11) were additionally analyzed for total petroleum hydrocarbons as diesel (TPHd). The following petroleum constituents were detected:

- TPHd was detected in all eight wells it was analyzed for at concentrations ranging from 51 micrograms per liter ($\mu\text{g/L}$) (C-11) to 1,900 $\mu\text{g/L}$ (S-8).
- TPHg was detected in nine wells at concentrations ranging from 51 $\mu\text{g/L}$ (S-10) to 28,000 $\mu\text{g/L}$ (S-8).
- Benzene was detected in seven wells at concentrations ranging from 0.60 $\mu\text{g/L}$ (C-11) to 7,600 $\mu\text{g/L}$ (S-8).
- Toluene was detected in five wells at concentrations ranging from 2.2 $\mu\text{g/L}$ (S-14) to 830 $\mu\text{g/L}$ (S-8).
- Ethylbenzene was detected in six wells at concentrations ranging from 5.4 $\mu\text{g/L}$ (S-14) to 1,500 $\mu\text{g/L}$ (S-13).
- Total xylenes were detected in five wells at concentrations ranging from 7.4 $\mu\text{g/L}$ (S-14) to 5,600 $\mu\text{g/L}$ (S-13).
- MTBE was detected in two wells at concentrations of 0.80 $\mu\text{g/L}$ (S-12) and 86 $\mu\text{g/L}$ (S-7).
- TBA was detected in S-12 at a concentration of 11 $\mu\text{g/L}$.
- DIPE was detected in S-12 at a concentration of 2.0 $\mu\text{g/L}$.
- ETBE and TAME were not detected in any groundwater samples.

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

Figures



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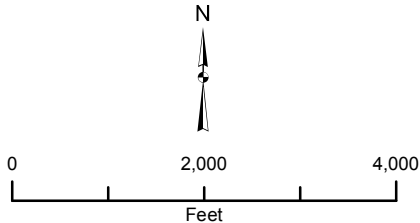


Figure 1
Site Vicinity Map

AECOM

Former Shell Service Station
4411 Foothill Boulevard, Oakland, California

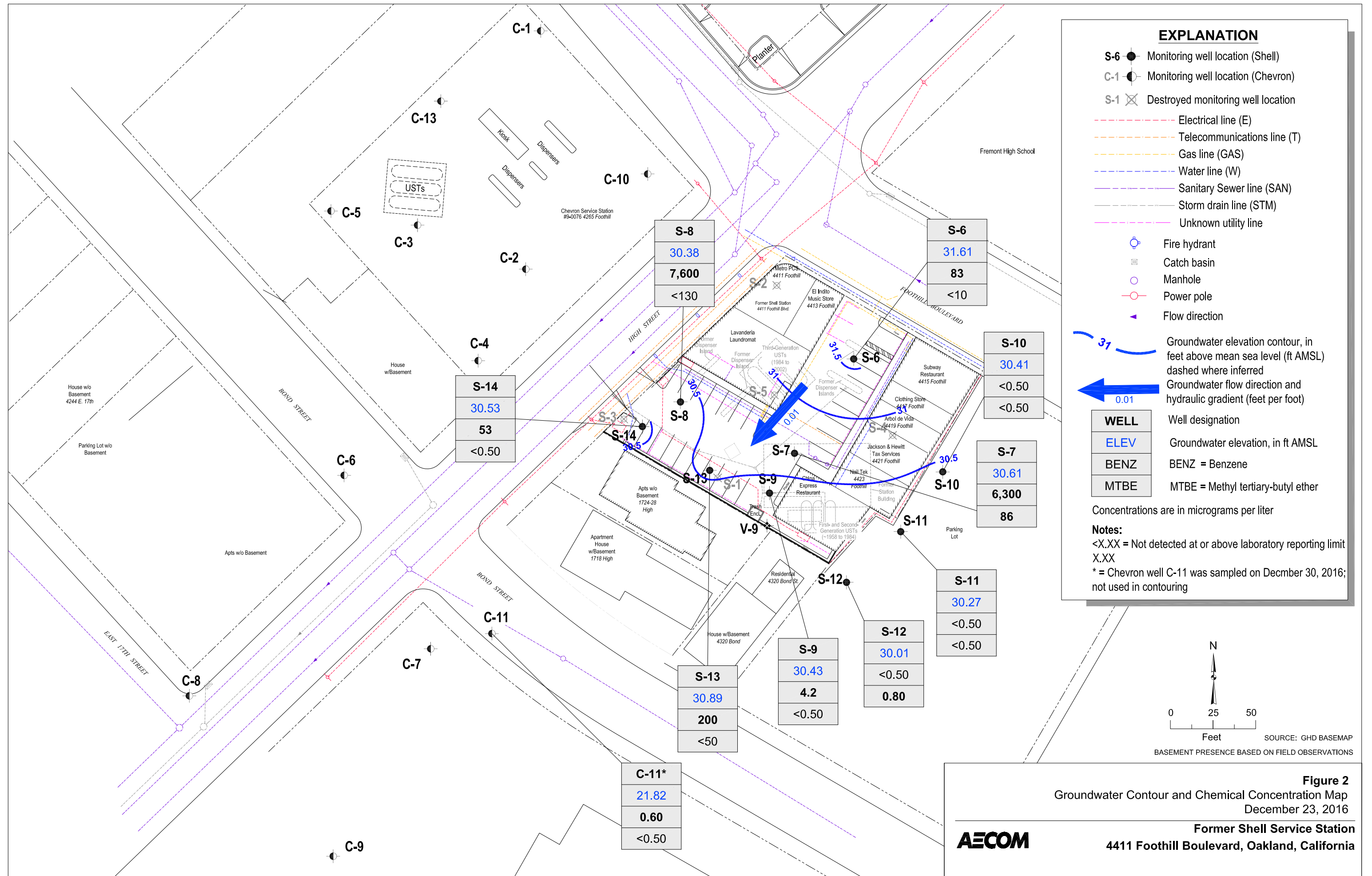
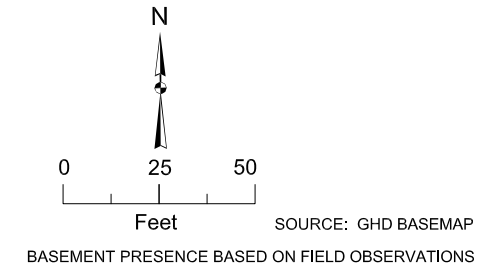


Figure 2
 Groundwater Contour and Chemical Concentration Map
 December 23, 2016

Former Shell Service Station
4411 Foothill Boulevard, Oakland, California



C-11*
21.82
0.60
<0.50

S-13
30.89
200
<50

S-9
30.43
4.2
<0.50

S-12
30.01
<0.50
0.80

S-11
30.27
<0.50
<0.50

S-7
30.61
6,300
86

S-10
30.41
<0.50
<0.50

S-6
31.61
83
<10

S-8
30.38
7,600
<130

S-14
30.53
53
<0.50

Tables

Table 1
Groundwater Data
Former Shell Service Station, 4411 Foothill Boulevard, Oakland, California

Well ID	Date	TPHd (µg/L)	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE 8020 (µg/L)	MTBE 8260 (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	1,2- DCA (µg/L)	EDB (µg/L)	TOC (ft MSL)	Depth to Water (ft TOC)	GW Elevation (ft MSL)	DO Reading (mg/L)
S-1	12/18/1992	---	41,000	3,100	1,100	1,200	8,700	---	---	---	---	---	---	---	---	38.31	9.06	---	---
S-1	05/26/1993	6,000	39,000	1,300	4,700	1,500	7,800	---	---	---	---	---	---	---	---	38.31	---	---	---
S-1	05/28/1993	---	---	---	---	---	---	---	---	---	---	---	---	---	---	38.31	12.13	26.18	---
S-1	06/03/1993	---	---	---	---	---	---	---	---	---	---	---	---	---	---	38.31	8.89	29.42	---
S-1	06/08/1993	---	---	---	---	---	---	---	---	---	---	---	---	---	---	38.31	8.80	29.51	---
S-1	09/21/1993	5,900	34,000	480	5,000	3,800	18,000	---	---	---	---	---	---	---	---	38.31	10.40	27.91	---
S-1	12/14/1993	13,000	25,000	1,100	5,000	2,200	11,000	---	---	---	---	---	---	---	---	38.31	9.66	28.65	---
S-1	03/17/1994	1,600	57,000	1,300	5,400	2,100	11,000	---	---	---	---	---	---	---	---	38.31	8.20	30.11	---
S-1	06/16/1994	3,000	57,000	1,600	6,000	2,000	13,000	---	---	---	---	---	---	---	---	38.31	9.41	28.90	---
S-1	09/22/1994	<250	39,000	1,300	2,100	1,500	7,100	---	---	---	---	---	---	---	---	38.31	11.13	27.18	---
S-1	12/15/1994	3,100 g	30,000	1,100	4,700	1,600	10,000	---	---	---	---	---	---	---	---	38.31	7.15	31.16	---
S-1	03/30/1995	3,100 a,g	30,000 a	1,400 a	4,000 a	1,500 a	11,000 a	---	---	---	---	---	---	---	---	38.31	6.09	32.22	---
S-1	06/20/1995	2,100	28,000	1,100	2,300	1,100	8,300	---	---	---	---	---	---	---	---	38.31	7.30	31.01	---
S-1	09/20/1995	2,600	40,000	840	3,600	1,300	8,600	---	---	---	---	---	---	---	---	38.31	10.02	28.29	---
S-1	12/06/1995	6,400 g	38,000	920	3,200	1,500	9,400	---	---	---	---	---	---	---	---	38.31	11.64	26.67	---
S-1	03/21/1996	---	48,000	700	4,200	1,100	8,600	---	---	---	---	---	---	---	---	38.31	6.87	31.44	---
S-1	09/06/1996	4,100	41,000	830	2,600	2,100	12,000	<250	---	---	---	---	---	---	---	38.31	10.50	27.81	---
S-1	12/19/1996	2,500	40,000	540	3,100	1,900	9,800	920	---	---	---	---	---	---	---	38.31	8.24	30.07	---
S-1	03/17/1997	4,700	42,000	610	2,700	1,700	11,000	3,500	---	---	---	---	---	---	---	38.31	7.26	31.05	---
S-1	06/11/1997	4,000	28,000	540	960	1,300	5,300	220	---	---	---	---	---	---	---	38.31	10.69	27.62	---
S-1 (D)	06/11/1997	3,900	30,000	580	1,000	1,400	5,400	<125	---	---	---	---	---	---	---	38.31	10.69	27.62	---
S-1	09/17/1997	4,400	27,000	310	1,200	1,900	9,000	170	---	---	---	---	---	---	---	38.31	10.26	28.05	---
S-1 (D)	09/17/1997	4,400	27,000	270	1,200	1,900	9,000	170	---	---	---	---	---	---	---	38.31	10.26	28.05	---
S-1	12/11/1997	3,400	21,000	350	820	1,500	6,500	<125	---	---	---	---	---	---	---	38.31	6.96	31.35	---
S-1	03/16/1998	2,500	25,000	250	820	670	5,000	<125	---	---	---	---	---	---	---	38.31	6.00	32.31	---
S-1 (D)	03/16/1998	---	26,000	250	840	720	5,100	<125	---	---	---	---	---	---	---	38.31	6.00	32.31	5.3/3.7
S-1	06/23/1998	230	<1,000	280	14	23	15	6,100	7,800	---	---	---	---	---	---	38.31	6.31	32.00	3.8/2.4
S-1	09/01/1998	2,300	26,000	370	620	1,300	33	1,400	120	---	---	---	---	---	---	38.31	9.17	29.14	1.4/2.6
S-1	12/30/1998	1,970	29,900	174	732	1,680	5,740	182	---	---	---	---	---	---	---	38.31	8.99	29.32	1.6/2.0
S-1	03/30/1999	1,150	14,200	1,360	260	1,070	3,580	<500	90.0	---	---	---	---	---	---	38.31	6.10	32.21	1.2/1.8
S-1	03/31/1999	---	---	---	---	---	---	---	---	---	---	---	---	---	---	38.31	7.84	30.47	---
S-1	06/14/1999	4,280	20,200	135	407	825	5,000	705	---	---	---	---	---	---	---	38.31	7.94	30.37	1.4/2.1
S-1	09/30/1999	3,120	18,300	189	531	1,250	4,740	322	---	---	---	---	---	---	---	38.31	10.04	28.27	4.3/2.0

Table 1
Groundwater Data
Former Shell Service Station, 4411 Foothill Boulevard, Oakland, California

Well ID	Date	TPHd (µg/L)	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE 8020 (µg/L)	MTBE 8260 (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	1,2- DCA (µg/L)	EDB (µg/L)	TOC (ft MSL)	Depth to Water (ft TOC)	GW Elevation (ft MSL)	DO Reading (mg/L)
S-1	12/22/1999	444 g	2,450	50.2	97.5	139	458	133	---	---	---	---	---	---	---	38.31	9.42	28.89	1.8/2.3
S-1	03/09/2000	1,200 g	1,230 a	21.2 a	115 a	116 a	411 a	45.1 a	---	---	---	---	---	---	---	38.30	6.21	32.09	2.0/2.9
S-1	06/20/2000	352 g	755	26.0	48.4	43.1	230	71.5	---	---	---	---	---	---	---	38.30	9.18	29.12	2.0/2.4
S-1	09/05/2000	783 g	2,980	43.5	117	168	871	192	---	---	---	---	---	---	---	38.30	10.14	28.16	0.6/0.3
S-1	12/04/2000	238 g	399	5.34	14.6	36.2	106	24.9	---	---	---	---	---	---	---	38.30	10.10	28.20	8.6/9.8
S-1	12/12/2000	---	---	---	---	---	---	---	---	---	---	---	---	---	---	38.30	9.22	29.08	---
S-1	03/08/2001	1,390 g	2,940	49.6	52.9	21.8	749	87.6	---	---	---	---	---	---	---	38.30	5.84	32.46	2.7 b
S-1	06/07/2001	1,400	10,000	120	370	680	2,400	150	---	---	---	---	---	---	---	38.30	8.80	29.50	6.2/2.2
S-1	09/13/2001	<200	240	1.8	8.9	16	53	---	17	---	---	---	---	---	---	38.30	10.25	28.05	7.8/8.9
S-1	11/19/2001	<300	1,400	14	42	110	260	---	27	---	---	---	---	---	---	38.30	9.87	28.43	7.7/7.3
S-1	03/18/2002	<300	7,500	40	370	560	2,000	---	20	---	---	---	---	---	---	38.30	5.08	33.22	5.6/6.1
S-1	06/19/2002	180	1,000	4.7	36	68	250	---	14	---	---	---	---	---	---	38.30	9.26	29.04	---
S-1	09/11/2002	<350	2,100	8.1	68	180	820	---	7.1	---	---	---	---	---	---	38.30	10.54	27.76	6.5
S-1	12/11/2002	<500	4,100	16	93	310	900	---	<20	---	---	---	---	---	---	38.04	9.97	28.07	8.0
S-1	03/11/2003	<1,600	14,000	71	470	1,000	3,300	---	<50	---	---	---	---	---	---	38.04	7.31	30.73	5.2
S-1	06/10/2003	110 g	1,700	7.7	44	190	340	---	4.5	---	---	---	---	---	---	38.04	8.14	29.90	14.0
S-1	09/09/2003	96 g	3,200	11	110	350	1,100	---	5.8	---	---	---	---	---	---	38.04	9.31	28.73	7.5
S-1	12/09/2003	1,000 g	6,000	20	170	530	1,700	---	6.1	---	---	---	---	---	---	38.04	7.24	30.80	28.6
S-1	03/09/2004	300 g	390	5.8	30	67	160	---	5.6	---	---	---	---	---	---	38.04	5.56	32.48	6.4
S-1	06/08/2004	2,500 g	5,600	11	140	660	1,900	---	5.0	---	---	---	---	---	---	38.04	8.82	29.22	30.0
S-1	09/07/2004	130 e	<50	<0.50	<0.50	<0.50	<1.0	---	0.75	<5.0	<2.0	<2.0	<2.0	---	---	38.04	9.84	28.20	14.4
S-1	12/06/2004	Unable to sample		---	---	---	---	---	---	---	---	---	---	---	---	38.04	9.20	28.84	---
S-1	12/15/2004	120 e	560	2.2	26	67	220	---	1.4	---	---	---	---	---	---	38.04	5.39	32.65	31.7
S-1	03/07/2005	460 e	12,000	12	310	830	2,600	---	<5.0	---	---	---	---	---	---	38.04	5.77	32.27	16.1
S-1	06/10/2005	1,200 e	13,000	25	310	1,200	3,300	---	<10	---	---	---	---	---	---	38.04	5.39	32.65	0.17
S-1	07/14/2005	Well destroyed		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-2	05/28/1993	---	---	---	---	---	---	---	---	---	---	---	---	---	---	38.79	9.51	29.28	---
S-2	06/03/1993	---	---	---	---	---	---	---	---	---	---	---	---	---	---	38.79	9.51	29.28	---
S-2	06/08/1993	---	---	---	---	---	---	---	---	---	---	---	---	---	---	38.79	9.57	29.22	---
S-2	06/29/1993	---	1,300	290	35	38	130	---	---	---	---	---	---	---	---	38.79	---	---	---
S-2	09/21/1993	---	3,300	870	24	190	120	---	---	---	---	---	---	---	---	38.79	10.54	28.25	---
S-2	12/14/1993	---	1,300	400	16	36	27	---	---	---	---	---	---	---	---	38.79	9.76	29.03	---

Table 1
Groundwater Data
Former Shell Service Station, 4411 Foothill Boulevard, Oakland, California

Well ID	Date	TPHd (µg/L)	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE 8020 (µg/L)	MTBE 8260 (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	1,2- DCA (µg/L)	EDB (µg/L)	TOC (ft MSL)	Depth to Water (ft TOC)	GW Elevation (ft MSL)	DO Reading (mg/L)
S-2	03/17/1994	---	4,500	610	27	92	110	---	---	---	---	---	---	---	---	38.79	9.92	28.87	---
S-2 (D)	03/17/1994	---	4,000	610	26	93	120	---	---	---	---	---	---	---	---	38.79	9.92	28.87	---
S-2	06/16/1994	---	2,800	690	45	97	140	---	---	---	---	---	---	---	---	38.79	10.11	28.68	---
S-2	09/22/1994	---	4,000	630	94	64	230	---	---	---	---	---	---	---	---	38.79	10.51	28.28	---
S-2	12/15/1994	---	1,600	450	300	67	130	---	---	---	---	---	---	---	---	38.79	9.12	29.67	---
S-2	03/30/1995	---	8,200 a	2,800 a	190 a	240 a	700 a	---	---	---	---	---	---	---	---	38.79	7.86	30.93	---
S-2	06/20/1995	---	9,600	2,600	160	170	500	---	---	---	---	---	---	---	---	38.79	9.51	29.28	---
S-2	09/20/1995	---	4,200	920	45	98	140	---	---	---	---	---	---	---	---	38.79	10.06	28.73	---
S-2	12/06/1995	---	<5,000	790	67	64	130	---	---	---	---	---	---	---	---	38.79	10.52	28.27	---
S-2	03/21/1996	---	3,700	850	45	96	170	---	---	---	---	---	---	---	---	38.79	8.60	30.19	---
S-2	09/06/1996	---	2,400	500	33	39	84	490	---	---	---	---	---	---	---	38.79	10.50	28.29	---
S-2	12/19/1996	---	1,200	330	15	24	31	430	---	---	---	---	---	---	---	38.79	9.40	29.39	---
S-2	03/17/1997	---	4,100	780	42	110	120	2,200	---	---	---	---	---	---	---	38.79	9.82	28.97	---
S-2	06/11/1997	---	760	120	<5.0	7.0	7.6	900	---	---	---	---	---	---	---	38.79	10.18	28.61	---
S-2	09/17/1997	---	1,500	230	8.6	40	27	480	---	---	---	---	---	---	---	38.79	9.90	28.89	---
S-2	12/11/1997	---	1,300	240	15	33	57	280	---	---	---	---	---	---	---	38.79	8.27	30.52	---
S-2	03/16/1998	---	1,100	830	48	<10	<10	4,700	4,800	---	---	---	---	---	---	38.79	7.97	30.82	7.0/4.3
S-2	06/23/1998	---	720	46	6.8	50	68	50	8.8	---	---	---	---	---	---	38.79	8.20	30.59	4.2/3.8
S-2 (D)	06/23/1998	---	810	49	7.1	50	70	49	8.8	---	---	---	---	---	---	38.79	8.20	30.59	4.2/3.8
S-2	09/01/1998	---	<2,000	170	<20	<20	<20	9,300	12,000	---	---	---	---	---	---	38.79	9.85	28.94	1.9/1.6
S-2	12/30/1998	---	<5,000	369	<50	<50	<50	14,300	---	---	---	---	---	---	---	38.79	9.84	28.95	2.0/1.8
S-2	03/30/1999	---	<2,000	234	<20.0	27.4	36.9	49,200	53,000	---	---	---	---	---	---	38.79	8.41	30.38	2.1/1.8
S-2	03/31/1999	---	---	---	---	---	---	---	---	---	---	---	---	---	---	38.79	8.67	30.12	---
S-2	06/14/1999	---	<1,000	175	<10.0	<10.0	11.1	67,500	---	---	---	---	---	---	---	38.79	9.80	28.99	---
S-2	09/30/1999	177 g	678	135	8.22	14.9	25.8	17,100	17,000 a	---	---	---	---	---	---	38.79	10.58	28.21	5.1/4.8
S-2	12/22/1999	142 g	316	55.8	10.1	5.26	10.4	9,410	8,810	---	---	---	---	---	---	38.79	10.13	28.66	9.6/5.2
S-2	03/09/2000	630 g	2,670	1,190 a	62.7	84.1	125	29,200 a	31,400 a	---	---	---	---	---	---	38.78	7.88	30.90	7.6/5.0
S-2	06/20/2000	401 g	<5,000	348	<50.0	50.4	127	35,800	33,900 a	---	---	---	---	---	---	38.78	10.27	28.51	1.9/2.2
S-2	09/05/2000	373 g	<5,000	106	<50.0	<50.0	<50.0	25,800	37,100 a	---	---	---	---	---	---	38.78	10.19	28.59	0.5/1.6
S-2	12/04/2000	1,730 g	<250	4.37	<2.50	<2.50	<2.50	4,500	5,130 a	---	---	---	---	---	---	38.78	10.30	28.48	10.6/9.4
S-2	12/12/2000	---	---	---	---	---	---	---	---	---	---	---	---	---	---	38.78	9.66	29.12	---
S-2	03/08/2001	<51.3	<2,500	318	45.7	53.5	88.5	15,500	17,500	---	---	---	---	---	---	38.78	8.57	30.21	2.7 b
S-2	06/07/2001	11,000	18,000	450	170	390	2,200	13,000	18,000	---	---	---	---	---	---	38.78	9.39	29.39	1.1/2.0

Table 1
Groundwater Data
Former Shell Service Station, 4411 Foothill Boulevard, Oakland, California

Well ID	Date	TPHd (µg/L)	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE 8020 (µg/L)	MTBE 8260 (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	1,2- DCA (µg/L)	EDB (µg/L)	TOC (ft MSL)	Depth to Water (ft TOC)	GW Elevation (ft MSL)	DO Reading (mg/L)
S-2	09/13/2001	<5,000	13,000	140	110	350	1,400	---	9,200	---	---	---	---	---	---	38.78	10.34	28.44	11.0/4.5
S-2	11/19/2001	8,700	15,000	71	27	86	330	---	7,500	---	---	---	---	---	---	38.78	9.90	28.88	5.0/3.1
S-2	03/18/2002	14,000	3,700	93	<20	35	100	---	7,500	---	---	---	---	---	---	38.78	9.91	28.87	0.9/4.2
S-2	06/19/2002	<2,000	2,100	92	<10	24	50	---	4,700	---	---	---	---	---	---	38.78	9.98	28.80	---
S-2	09/11/2002	<450	2,100	54	<5.0	19	55	---	1,900	---	---	---	---	---	---	38.78	10.25	28.53	3.5
S-2	12/11/2002	1,900	570	9.4	<2.5	7.2	14	---	1,100	---	---	---	---	---	---	38.47	9.99	28.48	2.0
S-2	03/11/2003	<1,800	2,900	150	5.5	54	84	---	870	---	---	---	---	---	---	38.47	9.25	29.22	2.4
S-2	06/10/2003	840 g	2,200	83	<5.0	22	52	---	970	---	---	---	---	---	---	38.47	9.20	29.27	5.0
S-2	09/09/2003	270 g	1,200	57	<2.5	11	33	---	740	---	---	---	---	---	---	38.47	9.70	28.77	3.7
S-2	12/09/2003	1,900 g	3,100	84	<5.0	45	90	---	660	---	---	---	---	---	---	38.47	9.31	29.16	24.21
S-2	03/09/2004	990 g	1,600	140	<5.0	31	49	---	610	---	---	---	---	---	---	38.47	8.24	30.23	2.6
S-2	06/08/2004	400 g	640	40	<2.5	4.2	6.6	---	460	---	---	---	---	---	---	38.47	9.40	29.07	8.2
S-2	09/07/2004	240 e	<100	6.6	<1.0	1.3	2.3	---	140	450	<4.0	<4.0	<4.0	---	---	38.47	9.78	28.69	2.4
S-2	12/06/2004	140 g	260	26	<1.0	2.0	<2.0	---	270	---	---	---	---	---	---	38.47	9.45	29.02	8.5
S-2	03/07/2005	450 e	2,300	100	<5.0	11	<10	---	570	---	---	---	---	---	---	38.47	7.82	30.65	16.7
S-2	06/10/2005	550 g	<2,500	200	<25	<25	<50	---	630	---	---	---	---	---	---	38.47	8.37	30.10	0.70
S-2	07/14/2005	Well destroyed		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-3	05/28/1993	---	---	---	---	---	---	---	---	---	---	---	---	---	---	37.33	8.45	28.88	---
S-3	06/03/1993	---	---	---	---	---	---	---	---	---	---	---	---	---	---	37.33	8.36	28.97	---
S-3	01/19/1900	---	---	---	---	---	---	---	---	---	---	---	---	---	---	37.33	8.41	28.92	---
S-3	06/29/1993	---	29,000	1,500	1,800	950	6,200	---	---	---	---	---	---	---	---	37.33	---	---	---
S-3	09/21/1993	---	15,000	900	2,200	2,600	11,000	---	---	---	---	---	---	---	---	37.33	10.08	27.25	---
S-3	12/14/1993	---	20,000	1,100	2,400	1,800	8,500	---	---	---	---	---	---	---	---	37.33	8.80	28.53	---
S-3	03/17/1994	---	14,000	580	190	750	1,700	---	---	---	---	---	---	---	---	37.33	8.34	28.99	---
S-3	06/16/1994	---	20,000	700	690	1,400	4,100	---	---	---	---	---	---	---	---	37.33	9.12	28.21	---
S-3 (D)	06/16/1994	---	19,000	680	560	1,300	3,700	---	---	---	---	---	---	---	---	37.33	---	---	---
S-3	09/22/1994	---	24,000	630	1,100	1,400	5,700	---	---	---	---	---	---	---	---	37.33	10.27	27.06	---
S-3 (D)	09/22/1994	---	25,000	720	1,100	1,500	6,100	---	---	---	---	---	---	---	---	37.33	---	---	---
S-3	12/15/1994	---	18,000	520	800	1,100	4,200	---	---	---	---	---	---	---	---	37.33	7.81	29.52	---
S-3 (D)	12/15/1994	---	23,000	1,000	1,900	2,000	8,600	---	---	---	---	---	---	---	---	37.33	---	---	---
S-3	03/30/1995	---	8,800 a	360 a	730 a	700 a	3,700 a	---	---	---	---	---	---	---	---	37.33	7.06	30.27	---
S-3 (D)	03/30/1995	---	7,600 a	330 a	570 a	600 a	2,600 a	---	---	---	---	---	---	---	---	37.33	---	---	---

Table 1
Groundwater Data
Former Shell Service Station, 4411 Foothill Boulevard, Oakland, California

Well ID	Date	TPHd (µg/L)	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE 8020 (µg/L)	MTBE 8260 (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	1,2- DCA (µg/L)	EDB (µg/L)	TOC (ft MSL)	Depth to Water (ft TOC)	GW Elevation (ft MSL)	DO Reading (mg/L)
S-3	06/20/1995	---	9,600	510	170	960	1,700	---	---	---	---	---	---	---	---	37.33	8.15	29.18	---
S-3 (D)	06/20/1995	---	9,800	500	170	950	1,700	---	---	---	---	---	---	---	---	37.33	---	---	---
S-3	09/20/1995	---	21,000	400	560	1,300	4,600	---	---	---	---	---	---	---	---	37.33	9.32	28.01	---
S-3	12/06/1995	---	24,000	630	1,400	1,400	6,000	---	---	---	---	---	---	---	---	37.33	10.53	26.80	---
S-3 (D)	12/06/1995	---	22,000	630	1,200	1,400	5,500	---	---	---	---	---	---	---	---	37.33	---	---	---
S-3	03/21/1996	---	9,100	290	110	490	1,600	---	---	---	---	---	---	---	---	37.33	7.32	30.01	---
S-3 (D)	03/21/1996	---	11,000	310	250	540	2,100	---	---	---	---	---	---	---	---	37.33	---	---	---
S-3	09/06/1996	---	15,000	440	300	1,100	3,000	500	---	---	---	---	---	---	---	37.33	10.10	27.23	---
S-3 (D)	09/06/1996	---	11,000	490	170	820	1,500	700	---	---	---	---	---	---	---	37.33	---	---	---
S-3	12/19/1996	---	12,000	600	380	850	2,500	380	---	---	---	---	---	---	---	37.33	8.36	28.97	---
S-3 (D)	12/19/1996	---	12,000	590	380	830	2,500	540	---	---	---	---	---	---	---	37.33	8.36	28.97	---
S-3	03/17/1997	---	12,000	520	140	740	1,400	320	---	---	---	---	---	---	---	37.33	8.57	28.76	---
S-3 (D)	03/17/1997	---	9,600	500	100	680	1,100	<250	---	---	---	---	---	---	---	37.33	8.57	28.76	---
S-3	06/11/1997	---	9,600	510	94	740	1,100	410	---	---	---	---	---	---	---	37.33	9.26	28.07	---
S-3	09/17/1997	---	21,000	140	560	1,800	7,200	130	---	---	---	---	---	---	---	37.33	9.62	27.71	---
S-3	12/11/1997	---	24,000	530	970	1,600	6,900	950	---	---	---	---	---	---	---	37.33	7.34	29.99	---
S-3 (D)	12/11/1997	---	29,000	520	1,000	1,600	7,300	970	---	---	---	---	---	---	---	37.33	7.34	29.99	---
S-3	03/16/1998	---	29,000	840	810	1,700	6,000	<250	---	---	---	---	---	---	---	37.33	5.75	31.58	3.0/3.4
S-3	06/23/1998	---	3,800	90	220	240	1,400	<50	---	---	---	---	---	---	---	37.33	5.98	31.35	4.2/2.0
S-3	09/01/1998	---	9,600	480	120	870	1,800	490	<50	---	---	---	---	---	---	37.33	8.98	28.35	1.9/2.8
S-3 (D)	09/01/1998	---	9,200	420	110	800	1,700	110	<50	---	---	---	---	---	---	37.33	8.98	28.35	1.9/2.8
S-3	12/30/1998	---	7,660	240	103	410	834	64.9	---	---	---	---	---	---	---	37.33	9.11	28.22	1.8/1.6
S-3	03/30/1999	---	2,070	195	10.0	<5.00	48.6	354	64.6	---	---	---	---	---	---	37.33	6.95	30.38	1.3/1.5
S-3	03/31/1999	---	---	---	---	---	---	---	---	---	---	---	---	---	---	37.33	7.48	29.85	---
S-3	06/14/1999	---	1,250	37.4	17.4	110	109	118	---	---	---	---	---	---	---	37.33	8.85	28.48	---
S-3	09/30/1999	2,020 g	8,270	226	113	686	1,440	184	---	---	---	---	---	---	---	37.33	9.66	27.67	3.5/2.8
S-3	12/22/1999	2,270 g	9,530	207	132	603	1,450	616	---	---	---	---	---	---	---	37.33	9.50	27.83	0.98/0.8
S-3	03/09/2000	1,600 g	2,290 a	84.5 a	17.0 a	104 a	105 a	29.3 a	---	---	---	---	---	---	---	37.30	6.25	31.05	1.0/1.4
S-3	06/20/2000	2,900 g	5,570	117	41.6	395	393	354	---	---	---	---	---	---	---	37.30	9.67	27.63	1.8/2.0
S-3	09/05/2000	1,600 g	6,930	127	85.5	354	535	509	---	---	---	---	---	---	---	37.30	9.49	27.81	1.1/1.9
S-3	12/04/2000	1,460 g	8,390	217	82.4	471	952	436	---	---	---	---	---	---	---	37.30	9.23	28.07	1.1/1.5
S-3	12/12/2000	---	---	---	---	---	---	---	---	---	---	---	---	---	---	37.30	9.23	28.07	---
S-3	03/08/2001	1,720 g	19,400	465	772	1,230	3,830	160	---	---	---	---	---	---	---	37.30	8.17	29.13	1.1 c

Table 1
Groundwater Data
Former Shell Service Station, 4411 Foothill Boulevard, Oakland, California

Well ID	Date	TPHd (µg/L)	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE 8020 (µg/L)	MTBE 8260 (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	1,2- DCA (µg/L)	EDB (µg/L)	TOC (ft MSL)	Depth to Water (ft TOC)	GW Elevation (ft MSL)	DO Reading (mg/L)
S-3	06/07/2001	1,400	12,000	230	110	900	1,100	120	---	---	---	---	---	---	---	37.30	8.78	28.52	0.8/0.9
S-3	09/13/2001	<2,000	32,000	400	880	2,000	7,000	---	<100	---	---	---	---	---	---	37.30	9.93	27.37	3.7/2.9
S-3	11/19/2001	<2,000	26,000	160	210	990	4,100	---	<50	---	---	---	---	---	---	37.30	9.33	27.97	2.9/1.9
S-3	03/18/2002	810	3,800	61	120	130	620	---	5.0	---	---	---	---	---	---	37.30	7.03	30.27	1.1/4.7
S-3	06/19/2002	<500	3,200	48	81	160	360	---	9.4	---	---	---	---	---	---	37.30	8.92	28.38	---
S-3	09/11/2002	<1,100	16,000	230	570	980	3,900	---	<50	---	---	---	---	---	---	37.30	9.54	27.76	3.0
S-3	12/11/2002	<1,500	16,000	130	270	770	3,000	---	<50	---	---	---	---	---	---	36.85	9.23	27.62	1.6
S-3	03/11/2003	<1,500	8,100	29	110	190	1,700	---	<20	---	---	---	---	---	---	36.85	7.32	29.53	3.9
S-3	06/10/2003	Well inaccessible		---	---	---	---	---	---	---	---	---	---	---	---	36.85	---	---	---
S-3	09/09/2003	640 g	5,900	44	140	130	1,500	---	4.4	---	---	---	---	---	---	36.85	8.99	27.86	2.2
S-3	12/09/2003	1,500 g	27,000	130	460	550	4,900	---	<20	---	---	---	---	---	---	36.85	7.67	29.18	1.6
S-3	03/09/2004	1,700 g	11,000	24	100	230	3,200	---	<5.0	---	---	---	---	---	---	36.85	6.35	30.50	2.1
S-3	06/08/2004	1,100 g	1,700	11	34	29	420	---	<2.5	---	---	---	---	---	---	36.85	8.25	28.60	0.1
S-3	09/07/2004	310 e	850	13	0.99	23	17	---	7.0	<5.0	<2.0	<2.0	<2.0	---	---	36.85	9.05	27.80	0.1
S-3	12/06/2004	Unable to sample		---	---	---	---	---	---	---	---	---	---	---	---	36.85	7.70	29.15	---
S-3	12/15/2004	270 e	620	1.9	7.8	10	180	---	<0.50	---	---	---	---	---	---	36.85	5.83	31.02	2.4
S-3	03/07/2005	400 e	4,500	<0.50	7.7	30	350	---	<0.50	---	---	---	---	---	---	36.85	4.58	32.27	4.4
S-3	06/10/2005	130 g	850	<0.50	1.3	7.4	53	---	<0.50	---	---	---	---	---	---	36.85	5.40	31.45	0.17
S-3	07/14/2005	Well destroyed		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-4	03/29/2000	---	---	---	---	---	---	---	---	---	---	---	---	---	---	39.06	8.37	30.69	---
S-4	03/31/2000	5,780 g	20,900	4,570	272	595	997	4,490	4,450 a	---	---	---	---	---	---	39.06	8.92	30.14	1.8/1.2
S-4	06/20/2000	244 g	19,500	4,590	309	723	1,290	3,740	---	---	---	---	---	---	---	39.06	8.77	30.29	2.7/2.9
S-4	09/05/2000	1,670 g	5,760	841	54.2	162	115	1,040	---	---	---	---	---	---	---	39.06	10.57	28.49	1.3/0.3
S-4	12/04/2000	1,050 g	3,990	949	<10.0	118	48.3	1,120	---	---	---	---	---	---	---	39.06	10.67	28.39	1.1/1.0
S-4	12/12/2000	---	---	---	---	---	---	---	---	---	---	---	---	---	---	39.06	10.64	28.42	---
S-4	03/08/2001	5,840 g	20,100	5,210	105	381	281	2,520	---	---	---	---	---	---	---	39.06	8.44	30.62	1.0/0.9
S-4	06/07/2001	3,500	11,000	2,500	86	370	170	2,000	---	---	---	---	---	---	---	39.06	10.57	28.49	0.7/0.6
S-4	09/13/2001	<800	4,200	790	14	110	48	---	690	---	---	---	---	---	---	39.06	11.27	27.79	3.8/3.9
S-4	11/19/2001	<600	2,300	230	4.1	21	22	---	590	---	---	---	---	---	---	39.06	10.83	28.23	3.6/1.6
S-4	03/18/2002	Unable to sample		---	---	---	---	---	---	---	---	---	---	---	---	39.06	8.75	30.31	---
S-4	03/29/2002	---	14,000	1,700	30	280	250	---	960	---	---	---	---	---	---	39.06	8.85 d	30.21	3.0/3.1
S-4	06/19/2002	<1,500	4,700	620	9.5	84	37	---	490	---	---	---	---	---	---	---	10.37 d	---	---

Table 1
Groundwater Data
Former Shell Service Station, 4411 Foothill Boulevard, Oakland, California

Well ID	Date	TPHd (µg/L)	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE 8020 (µg/L)	MTBE 8260 (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	1,2- DCA (µg/L)	EDB (µg/L)	TOC (ft MSL)	Depth to Water (ft TOC)	GW Elevation (ft MSL)	DO Reading (mg/L)
S-4	09/11/2002	280	2,700	280	4.6	23	13	---	410	---	---	---	---	---	---	---	11.14	---	0.6
S-4	12/11/2002	<900	3,300	320	5.7	24	15	---	420	---	---	---	---	---	---	38.69	10.78	27.91	2.2
S-4	03/11/2003	<5,600	12,000	1,900	63	360	280	---	930	---	---	---	---	---	---	38.69	9.31	29.38	1.5
S-4	06/10/2003	3,100 g	13,000	2,400	86	650	380	---	1,100	---	---	---	---	---	---	38.69	9.77	28.92	0.8
S-4	09/09/2003	1,700 g	3,700	510	12	43	43	---	650	---	---	---	---	---	---	38.69	10.78	27.91	0.9
S-4	12/09/2003	390 g	3,900	150	4.2	7.5	13	---	510	---	---	---	---	---	---	38.69	10.20	28.49	0.1
S-4	03/09/2004	3,100 g	13,000	2,500	110	810	1,100	---	1,100	---	---	---	---	---	---	38.69	7.67	31.02	0.7
S-4	06/08/2004	1,400 g	6,100	870	30	120	150	---	420	---	---	---	---	---	---	38.69	10.27	28.42	0.3
S-4	09/07/2004	890 e	3,100	290	6.4	18	14	---	250	140	<10	<10	<10	---	---	38.69	10.91	27.78	0.1
S-4	12/06/2004	670 e	4,900	520	9.9	38	24	---	290	---	---	---	---	---	---	38.69	10.03	28.66	0.2
S-4	03/07/2005	2,900 e	28,000	2,300	130	690	770	---	770	---	---	---	---	---	---	38.69	6.20	32.49	0.2
S-4	06/10/2005	2,700 e	13,000	1,900	81	380	460	---	890	---	---	---	---	---	---	38.69	8.90	29.79	0.15
S-4	07/14/2005	Well destroyed		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-5	05/31/2002	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	9.54	---	---
S-5	06/19/2002	<2,000	16,000	2,600	320	180	1,600	---	5,300	---	---	---	---	---	---	---	9.87	---	---
S-5	09/11/2002	<1,200	8,800	1,500	64	89	120	---	5,600	---	---	---	---	---	---	---	10.28	---	0.9
S-5	12/11/2002	<1,000	4,400	280	61	130	130	---	4,000	---	---	---	---	---	---	---	9.87	---	2.9
S-5	03/11/2003	<900	2,300	28	5.6	59	15	---	2,400	---	---	---	---	---	---	38.05	8.26	29.79	1.6
S-5	06/10/2003	620 g	2,400	11	7.2	56	38	---	1,100	---	---	---	---	---	---	38.05	8.51	29.54	0.1
S-5	09/09/2003	660 g	3,700	23	14	44	150	---	440	---	---	---	---	---	---	38.05	9.44	28.61	0.1
S-5	12/09/2003	600 g	12,000	200	80	41	320	---	580	---	---	---	---	---	---	38.05	9.50	28.55	0.4
S-5	03/09/2004	550 g	2,300	130	3.5	6.9	13	---	250	---	---	---	---	---	---	38.05	7.04	31.01	0.2
S-5	06/08/2004	490 g	2,900	11	<2.5	8.9	18	---	120	---	---	---	---	---	---	38.05	8.87	29.18	0.2
S-5	09/07/2004	650 e	3,600	17	11	12	30	---	120	3,700	<10	<10	<10	---	---	38.05	9.45	28.60	0.1
S-5	12/06/2004	460 e	4,700	99	28	14	69	---	180	---	---	---	---	---	---	38.05	8.75	29.30	0.1
S-5	03/07/2005	360 e	4,700	440	<2.5	<2.5	<5.0	---	200	---	---	---	---	---	---	38.05	7.28	30.77	0.1
S-5	06/10/2005	240 e	1,200	1.3	<0.50	<0.50	1.2	---	80	---	---	---	---	---	---	38.05	7.26	30.79	0.25
S-5	07/14/2005	Well destroyed		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-6	02/22/2007	---	---	---	---	---	---	---	---	---	---	---	---	---	---	37.86	8.18	29.68	---
S-6	03/02/2007	1,700	5,100 a	630 a	23	200	110	---	140	280	---	---	---	13	<0.50	37.86	7.73	30.13	---
S-6	05/23/2007	2,600	5,600 f	510	16	11	144	---	72	66	---	---	---	<2.5	<5.0	37.86	8.13	29.73	---

Table 1
Groundwater Data
Former Shell Service Station, 4411 Foothill Boulevard, Oakland, California

Well ID	Date	TPHd (µg/L)	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE 8020 (µg/L)	MTBE 8260 (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	1,2- DCA (µg/L)	EDB (µg/L)	TOC (ft MSL)	Depth to Water (ft TOC)	GW Elevation (ft MSL)	DO Reading (mg/L)	
S-6	08/28/2007	6,100 g	13,000 f	650	32	480	242	---	78	320	6.1	<10	<10	<2.5	<5.0	37.86	8.44	29.42	---	
S-6	11/13/2007	6,400 g	19,000 f	760	47	500	602	---	68	340	---	---	---	<5.0	<10	37.86	8.78	29.08	---	
S-6	02/08/2008	2,200 g	6,800 f	380	14	130	87.0	---	75	200	---	---	---	<2.5	<5.0	37.86	7.06	30.80	---	
S-6	05/20/2008	2,900 g	12,000 f	590	21	270	60	---	54	240	---	---	---	<2.5	<5.0	37.86	8.60	29.26	---	
S-6	08/12/2008	7,100 g	22,000	890	75	450	1,170	---	71	200	<20	<20	<20	<5.0	<10	37.86	9.21	28.65	---	
S-6	12/02/2008	4,600 g	26,000	1,500	170	670	1,500	---	87	260	---	---	---	<5.0	<10	37.86	8.72	29.14	---	
S-6	02/05/2009	5,200 g	29,000	1,200	210	910	3,400	---	78	230	---	---	---	<5.0	<10	37.86	9.19	28.67	---	
S-6	05/19/2009	1,900 g	8,600	660	22	120	110	---	94	460	---	---	---	<5.0	<10	37.86	8.26	29.60	---	
S-6	09/29/2009	---	---	---	---	---	---	---	---	---	---	---	---	---	---	37.86	6.70	31.16	---	
S-6	12/23/2009	1,800 g	4,800	550	12	38	16	---	170	290	<20	<20	<20	<5.0	<10	37.86	6.01	31.85	---	
S-6	03/16/2010	---	---	---	---	---	---	---	---	---	---	---	---	---	---	37.86	5.65	32.21	---	
S-6	06/21/2010	2,700 g	8,300	360	11	67	56	---	130	250	---	---	---	<2.5	<5.0	37.86	8.89	28.97	---	
S-6	12/28/2010	2,200 g	6,100	290	11	60	41	---	49	210	5.5	<4.0	<4.0	<1.0	<2.0	37.86	7.63	30.23	---	
S-6	12/23/2011	2,400	12,000	760	24	76	49	---	61	320	<10	<10	<10	<5.0	<5.0	37.86	8.34	29.52	---	
S-6	12/28/2012	1,400	6,500	350	12	14	<10	---	68	200	<5.0	<5.0	<5.0	---	---	37.86	6.50	31.36	---	
S-6	09/19/2013	---	---	---	---	---	---	---	---	---	---	---	---	---	---	37.86	8.53	29.33	---	
S-6	12/23/2013	2,600	16,000	970	43	340	260	---	45	200	7.0	<5.0	<5.0	---	---	37.86	8.77	29.09	---	
S-6	03/05/2014	---	---	---	---	---	---	---	---	---	---	---	---	---	---	37.86	8.57	29.29	---	
S-6	06/06/2014	---	---	---	---	---	---	---	---	---	---	---	---	---	---	37.86	8.44	29.42	---	
S-6	12/08/2014	2,400	12,000	320	15	73	50	---	28	110	<5.0	<5.0	<5.0	---	---	37.86	8.10	29.76	---	
S-6	06/03/2015	---	---	---	---	---	---	---	---	---	---	---	---	---	---	37.86	8.53	29.33	---	
S-6	12/17/2015	1,100	15,000	740	29	230	58	---	34	<200	<10	<10	<10	---	---	37.86	9.12	28.74	---	
S-6	06/03/2016	---	---	---	---	---	---	---	---	---	---	---	---	---	---	37.86	8.11	29.75	---	
S-6	12/23/2016	1,800	5,400	83	<10	13	<20	---	<10	<200	<10	<10	<10	---	---	37.86	6.25	31.61	---	

S-7	02/22/2007	---	---	---	---	---	---	---	---	---	---	---	---	---	---	37.58	7.39	30.19	---	
S-7	03/02/2007	2,500	100,000 a	32,000 a	9,700 a	2,900 a	14,000 a	---	310 a	480	---	---	---	---	<0.50	37.58	7.42	30.16	---	
S-7	05/23/2007	3,700	82,000 f,g	24,000	8,100	2,800	13,000	---	190	<200	---	---	---	---	<20	37.58	8.38	29.20	---	
S-7	08/28/2007	4,500 g	96,000 f	23,000	7,000	2,900	12,200	---	190 h	<2,000	<400	<400	<400	---	<200	37.58	9.32	28.26	---	
S-7	11/13/2007	25,000 g	100,000 f	22,000	6,500	3,000	12,400	---	<200	<2,000	---	---	---	---	<200	37.58	9.60	27.98	---	
S-7	02/08/2008	4,000 g	74,000 f	29,000	9,300	3,100	13,700	---	500	<2,000	---	---	---	---	<200	37.58	6.57	31.01	---	
S-7	05/20/2008	1,600 g	69,000 f	20,000	5,500	2,500	9,800	---	260	<2,000	---	---	---	---	<200	37.58	9.00	28.58	---	
S-7	08/12/2008	4,900 g	120,000	25,000	8,400	2,800	11,700	---	<200	<2,000	<400	<400	<400	<100	<200	37.58	9.81	27.77	---	

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Groundwater Data
Former Shell Service Station, 4411 Foothill Boulevard, Oakland, California

Well ID	Date	TPHd (µg/L)	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE 8020 (µg/L)	MTBE 8260 (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	1,2- DCA (µg/L)	EDB (µg/L)	TOC (ft MSL)	Depth to Water (ft TOC)	GW Elevation (ft MSL)	DO Reading (mg/L)	
S-7	12/02/2008	4,300 g	120,000	24,000	8,400	3,600	15,000	---	320	<2,000	---	---	---	<100	<200	37.58	9.91	27.67	---	
S-7	02/05/2009	3,800 g	99,000	25,000	7,600	2,500	12,000	---	370	<2,000	---	---	---	<100	<200	37.58	9.30	28.28	---	
S-7	05/19/2009	3,300 g	64,000	16,000	4,400	2,100	7,100	---	250	<2,000	---	---	---	<100	<200	37.58	8.30	29.28	---	
S-7	09/29/2009	---	---	---	---	---	---	---	---	---	---	---	---	---	---	37.57	6.13	31.44	---	
S-7	12/23/2009	3,900 g	98,000	25,000	7,100	2,100	9,000	---	400	<2000	<400	<400	<400	<100	<200	37.57	5.32	32.25	---	
S-7	03/16/2010	---	---	---	---	---	---	---	---	---	---	---	---	---	---	37.57	4.82	32.75	---	
S-7	06/21/2010	2,400 g	42,000	11,000	2,300	1,300	4,600	---	180	<1,000	---	---	---	<50	<100	37.57	8.19	29.38	---	
S-7	12/28/2010	3,500 g	48,000	13,000	3,700	1,800	7,200	---	160	<1,000	<200	<200	<200	<50	<100	37.57	7.05	30.52	---	
S-7	12/23/2011	3,200	40,000	11,000	3,300	1,400	6,600	---	<200	<2,000	<200	<200	<200	<100	<100	37.57	8.02	29.55	---	
S-7	12/28/2012	2,200	26,000	6,200	2,000	1,000	5,000	---	<100	<2,000	<100	<100	<100	---	---	37.57	5.88	31.69	---	
S-7	09/19/2013	---	---	---	---	---	---	---	---	---	---	---	---	---	---	37.57	9.08	28.49	---	
S-7	12/23/2013	1,600	28,000	9,900	1,200	750	3,300	---	<100	<2,000	<100	<100	<100	---	---	37.57	9.63	27.94	---	
S-7	03/05/2014	---	---	---	---	---	---	---	---	---	---	---	---	---	---	37.57	8.73	28.84	---	
S-7	06/06/2014	---	---	---	---	---	---	---	---	---	---	---	---	---	---	37.57	8.96	28.61	---	
S-7	12/08/2014	2,500	48,000 j	15,000	2,800	1,400	6,200	---	250	<2,000	<100	<100	<100	---	---	37.57	8.22	29.35	---	
S-7	06/03/2015	---	---	---	---	---	---	---	---	---	---	---	---	---	---	37.57	9.17	28.40	---	
S-7	12/17/2015	860	38,000	13,000	1,300	850	3,000	---	<200	<4,000	<200	<200	<200	---	---	37.57	9.95	27.62	---	
S-7	06/03/2016	---	---	---	---	---	---	---	---	---	---	---	---	---	---	37.57	8.75	28.82	---	
S-7	12/23/2016	540	13,000	6,300	250	270	730	---	86	<1,000	<50	<50	<50	---	---	37.57	6.96	30.61	---	
S-8	02/22/2007	---	---	---	---	---	---	---	---	---	---	---	---	---	---	37.05	6.65	30.40	---	
S-8	03/02/2007	2,300	72,000 a	12,000 a	5,600 a	2,900 a	15,000 a	---	120	230	---	---	---	150	<2.5	37.05	6.60	30.45	---	
S-8	05/23/2007	5,800	69,000 f,g	12,000	6,700	3,100	19,500	---	160	280	---	---	---	<10	<20	37.05	7.91	29.14	---	
S-8	08/28/2007	6,700 g	69,000 f	11,000	4,800	3,100	16,800	---	170	<1,000	<200	<200	<200	<50	<100	37.05	8.79	28.26	---	
S-8	11/13/2007	21,000 g	84,000 f	10,000	5,000	3,300	18,300	---	290	<1,000	---	---	---	<50	<100	37.05	8.93	28.12	---	
S-8	02/08/2008	4,500 g	54,000 f	11,000	5,500	3,500	18,200	---	200	<1,000	---	---	---	<50	<100	37.05	6.26	30.79	---	
S-8	05/20/2008	2,200 g	67,000 f	10,000	5,400	3,900	19,600	---	160	<1,000	---	---	---	<50	<100	37.05	7.40	29.65	---	
S-8	08/12/2008	5,200 g	77,000	9,300	3,200	2,500	14,300	---	210	<1,000	<200	<200	<200	<50	<100	37.05	9.10	27.95	---	
S-8	12/02/2008	3,600 g	70,000	9,500	2,700	2,500	12,300	---	290	1,200	---	---	---	<50	<100	37.05	9.39	27.66	---	
S-8	02/05/2009	3,500 g	74,000	10,000	3,500	2,600	15,000	---	240	<1,000	---	---	---	<50	<100	37.05	8.75	28.30	---	
S-8	05/19/2009	340 g	69,000	8,200	3,700	2,900	14,000	---	<100	<1,000	---	---	---	<50	<100	37.05	7.56	29.49	---	
S-8	09/29/2009	---	---	---	---	---	---	---	---	---	---	---	---	---	---	37.05	5.82	31.23	---	
S-8	12/23/2009	4,400 g	58,000	7,800	2,000	2,100	11,000	---	170	<1000	<200	<200	<200	<50	<100	37.05	7.02	30.03	---	

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Groundwater Data
Former Shell Service Station, 4411 Foothill Boulevard, Oakland, California

Well ID	Date	TPHd (µg/L)	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE 8020 (µg/L)	MTBE 8260 (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	1,2- DCA (µg/L)	EDB (µg/L)	TOC (ft MSL)	Depth to Water (ft TOC)	GW Elevation (ft MSL)	DO Reading (mg/L)
S-8	03/16/2010	---	---	---	---	---	---	---	---	---	---	---	---	---	---	37.05	4.26	32.79	---
S-8	06/21/2010	3,900 g	74,000	11,000	3,900	3,000	15,000	---	160	<1,000	---	---	---	<50	<100	37.05	7.77	29.28	---
S-8	12/28/2010	4,900 g	57,000	8,700	2,700	2,900	14,000	---	200	<1,000	<200	<200	<200	<50	<100	37.05	6.93	30.12	---
S-8	12/23/2011	4,300	55,000	9,500	3,000	3,700	15,000	---	<200	<2,000	<200	<200	<200	<100	<100	37.05	8.77	28.28	---
S-8	12/28/2012	3,500	55,000	8,300	2,600	3,600	15,000	---	180	<1,000	<50	<50	<50	---	---	37.05	5.92	31.13	---
S-8	09/19/2013	---	---	---	---	---	---	---	---	---	---	---	---	---	---	37.05	9.08	27.97	---
S-8	12/23/2013	2,800	55,000	11,000	2,400	3,400	12,000	---	210	<1,000	<50	<50	<50	---	---	37.05	9.49	27.56	---
S-8	03/05/2014	---	---	---	---	---	---	---	---	---	---	---	---	---	---	37.05	8.65	28.40	---
S-8	06/06/2014	---	---	---	---	---	---	---	---	---	---	---	---	---	---	37.05	8.68	28.37	---
S-8	12/08/2014	3,000	49,000 i,j	9,300	1,800	2,500	8,900	---	89	<1,000	<50	<50	<50	---	---	37.05	8.49	28.56	---
S-8	06/03/2015	---	---	---	---	---	---	---	---	---	---	---	---	---	---	37.05	8.90	28.15	---
S-8	12/17/2015	1,500	46,000	11,000	1,700	2,600	8,100	---	<130	<2,500	<130	<130	<130	---	---	37.05	9.53	27.52	---
S-8	06/03/2016	---	---	---	---	---	---	---	---	---	---	---	---	---	---	37.05	8.31	28.74	---
S-8	12/23/2016	1,900	28,000	7,600	830	1,000	3,500	---	<130	<2,500	<130	<130	<130	---	---	37.05	6.67	30.38	---
S-9	02/22/2007	---	---	---	---	---	---	---	---	---	---	---	---	---	---	37.52	7.59	29.93	---
S-9	03/02/2007	1,400	12,000	150	200	1,200	2,500	---	5.8	<50	---	---	---	<5.0	<5.0	37.52	7.30	30.22	---
S-9	05/23/2007	2,300	8,200 f	13	38	2.5 h	1,453	---	5.2 h	<100	---	---	---	<5.0	<10	37.52	8.43	29.09	---
S-9	08/28/2007	2,800 g	9,500 f	21	49	540	789	---	<10	<100	<20	<20	<20	<5.0	<10	37.52	9.59	27.93	---
S-9	11/13/2007	2,100 g	12,000 f	19	35	450	499	---	<10	<100	---	---	---	<5.0	<10	37.52	9.91	27.61	---
S-9	02/08/2008	1,900 g	10,000 f	18	67	1,100	1,451	---	<10	<100	---	---	---	<5.0	<10	37.52	6.40	31.12	---
S-9	05/20/2008	1,500 g	11,000 f	150	770	13,000	17,460	---	<100	<1,000	---	---	---	<50	<100	37.52	8.79	28.73	---
S-9	08/12/2008	2,000 g	9,400	16	59	700	834	---	<10	<100	<20	<20	<20	<5.0	<10	37.52	10.00	27.52	---
S-9	12/02/2008	1,300 g	14,000	10	62	980	1,139	---	<10	<100	---	---	---	<5.0	<10	37.52	10.22	27.30	---
S-9	02/05/2009	1,400 g	6,300	11	33	480	600	---	<10	<100	---	---	---	<5.0	<10	37.52	9.49	28.03	---
S-9	05/19/2009	1,500 g	12,000	11	64	940	880	---	<5.0	<50	---	---	---	<2.5	<5.0	37.52	8.20	29.32	---
S-9	09/29/2009	---	---	---	---	---	---	---	---	---	---	---	---	---	---	37.52	5.51	32.01	---
S-9	12/23/2009	200 g	890	1.4	<1.0	16	14	---	<1.0	<10	<2.0	<2.0	<2.0	<0.50	<1.0	37.52	4.61	32.91	---
S-9	03/16/2010	---	---	---	---	---	---	---	---	---	---	---	---	---	---	37.52	5.95	31.57	---
S-9	06/21/2010	520 g	1,300	2.4	4.2	180	26	---	<1.0	<10	---	---	---	<0.50	<1.0	37.52	8.29	29.23	---
S-9	12/28/2010	1,100 g	7,200	3.8	12	650	510	---	<5.0	<50	<10	<10	<10	<2.5	<5.0	37.52	7.04	30.48	---
S-9	12/23/2011	1,300	6,500	6.7	16	240	200	---	<4.0	<40	<4.0	<4.0	<4.0	<2.0	<2.0	37.52	8.48	29.04	---
S-9	12/28/2012	490	2,600	3.4	5.6	91	87	---	<1.3	<25	<1.3	<1.3	<1.3	---	---	37.52	5.90	31.62	---

Table 1
Groundwater Data
Former Shell Service Station, 4411 Foothill Boulevard, Oakland, California

Well ID	Date	TPHd (µg/L)	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE 8020 (µg/L)	MTBE 8260 (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	1,2- DCA (µg/L)	EDB (µg/L)	TOC (ft MSL)	Depth to Water (ft TOC)	GW Elevation (ft MSL)	DO Reading (mg/L)
S-9	09/19/2013	Well inaccessible		---	---	---	---	---	---	---	---	---	---	---	---	37.52	---	---	---
S-9	12/23/2013	660	4,600	4.1	15	15	130	---	<0.50	<10	<0.50	<0.50	<0.50	---	---	37.52	9.88	27.64	---
S-9	03/05/2014	---	---	---	---	---	---	---	---	---	---	---	---	---	---	37.52	9.11	28.41	---
S-9	06/06/2014	---	---	---	---	---	---	---	---	---	---	---	---	---	---	37.52	9.19	28.33	---
S-9	12/08/2014	810	3,900	5.1	8.5	11	92	---	<2.5	<50	<2.5	<2.5	<2.5	---	---	37.52	8.70	28.82	---
S-9	06/03/2015	---	---	---	---	---	---	---	---	---	---	---	---	---	---	37.52	9.41	28.11	---
S-9	12/17/2015	450	3,900	12	12	8.2	67	---	<0.50	<10	<0.50	<0.50	<0.50	---	---	37.52	10.61	26.91	---
S-9	06/03/2016	---	---	---	---	---	---	---	---	---	---	---	---	---	---	37.52	8.86	28.66	---
S-9	12/23/2016	440	3,200	4.2	11	8.0	38	---	<0.50	<10	<0.50	<0.50	<0.50	---	---	37.52	7.09	30.43	---
S-10	09/22/2009	---	---	---	---	---	---	---	---	---	---	---	---	---	---	37.43	4.98	32.45	---
S-10	09/29/2009	<50	320	<0.50	<1.0	<1.0	<1.0	---	<1.0	<10	---	---	---	<0.50	<1.0	37.43	5.07	32.36	---
S-10	12/23/2009	<50	<50	<0.50	<1.0	<1.0	<1.0	---	<1.0	<10	<2.0	<2.0	<2.0	<0.50	<1.0	37.43	4.48	32.95	---
S-10	03/16/2010	<50	140	<0.50	<1.0	<1.0	<1.0	---	<1.0	<10	---	---	---	<0.50	<1.0	37.43	4.47	32.96	---
S-10	06/21/2010	<50	130	<0.50	<1.0	<1.0	<1.0	---	<1.0	<10	---	---	---	<0.50	<1.0	37.43	8.28	29.15	---
S-10	12/28/2010	<50	140	<0.50	<1.0	<1.0	<1.0	---	<1.0	<10	<2.0	<2.0	<2.0	<0.50	<1.0	37.43	7.09	30.34	---
S-10	12/23/2011	<47	130	<0.50	<0.50	<0.50	<1.0	---	<1.0	<10	<1.0	<1.0	<1.0	<0.50	<0.50	37.43	8.20	29.23	---
S-10	12/28/2012	<48	180	<0.50	<0.50	<0.50	<1.0	---	<0.50	<10	<0.50	<0.50	<0.50	---	---	37.43	6.10	31.33	---
S-10	09/19/2013	Well not monitored		---	---	---	---	---	---	---	---	---	---	---	---	37.43	---	---	---
S-10	12/23/2013	<48	<50	<0.50	<0.50	<0.50	<1.0	---	<0.50	<10	<0.50	<0.50	<0.50	---	---	37.43	9.15	28.28	---
S-10	06/06/2014	---	---	---	---	---	---	---	---	---	---	---	---	---	---	37.43	8.91	28.52	---
S-10	12/08/2014	160 k	73	<0.50	<0.50	<0.50	<1.0	---	<0.50	<10	<0.50	<0.50	<0.50	---	---	37.43	7.55	29.88	---
S-10	06/03/2015	---	---	---	---	---	---	---	---	---	---	---	---	---	---	37.43	9.01	28.42	---
S-10	12/17/2015	81	<50	<0.50	<0.50	<0.50	<1.0	---	<0.50	<10	<0.50	<0.50	<0.50	---	---	37.43	9.44	27.99	---
S-10	06/03/2016	---	---	---	---	---	---	---	---	---	---	---	---	---	---	37.43	8.80	28.63	---
S-10	12/23/2016	60	51	<0.50	<0.50	<0.50	<1.0	---	<0.50	<10	<0.50	<0.50	<0.50	---	---	37.43	7.02	30.41	---
S-11	09/22/2009	---	---	---	---	---	---	---	---	---	---	---	---	---	---	36.44	4.50	31.94	---
S-11	09/29/2009	<50	<50	<0.50	<1.0	<1.0	<1.0	---	<1.0	<10	---	---	---	<0.50	<1.0	36.44	3.88	32.56	---
S-11	12/23/2009	<50	<50	<0.50	<1.0	<1.0	<1.0	---	<1.0	<10	<2.0	<2.0	<2.0	<0.50	<1.0	36.44	3.71	32.73	---
S-11	03/16/2010	<50	<50	<0.50	<1.0	<1.0	<1.0	---	<1.0	<10	---	---	---	<0.50	<1.0	36.44	3.30	33.14	---
S-11	06/21/2010	<50	<50	<0.50	<1.0	<1.0	<1.0	---	<1.0	<10	---	---	---	<0.50	<1.0	36.44	7.49	28.95	---
S-11	12/28/2010	<50	<50	<0.50	<1.0	<1.0	<1.0	---	<1.0	<10	<2.0	<2.0	<2.0	<0.50	<1.0	36.44	5.96	30.48	---

Table 1
Groundwater Data
Former Shell Service Station, 4411 Foothill Boulevard, Oakland, California

Well ID	Date	TPHd (µg/L)	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE 8020 (µg/L)	MTBE 8260 (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	1,2- DCA (µg/L)	EDB (µg/L)	TOC (ft MSL)	Depth to Water (ft TOC)	GW Elevation (ft MSL)	DO Reading (mg/L)
S-11	12/23/2011	<47	<50	<0.50	<0.50	<0.50	<1.0	---	<1.0	<10	<1.0	<1.0	<1.0	<0.50	<0.50	36.44	7.28	29.16	---
S-11	12/28/2012	<48	<50	<0.50	<0.50	<0.50	<1.0	---	<0.50	<10	<0.50	<0.50	<0.50	---	---	36.44	5.00	31.44	---
S-11	09/19/2013	Well not monitored		---	---	---	---	---	---	---	---	---	---	---	---	36.44	---	---	---
S-11	12/23/2013	<48	<50	<0.50	<0.50	<0.50	<1.0	---	0.55	<10	<0.50	<0.50	<0.50	---	---	36.44	9.82	26.62	---
S-11	06/06/2014	---	---	---	---	---	---	---	---	---	---	---	---	---	---	36.44	8.16	28.28	---
S-11	12/08/2014	77 k	<50	<0.50	<0.50	<0.50	<1.0	---	<0.50	<10	<0.50	<0.50	<0.50	---	---	36.44	6.72	29.72	---
S-11	06/03/2015	---	---	---	---	---	---	---	---	---	---	---	---	---	---	36.44	8.28	28.16	---
S-11	12/17/2015	110	<50	<0.50	<0.50	<0.50	<1.0	---	0.52	<10	<0.50	<0.50	<0.50	---	---	36.44	8.90	27.54	---
S-11	06/03/2016	---	---	---	---	---	---	---	---	---	---	---	---	---	---	36.44	8.04	28.40	---
S-11	12/23/2016	66	<50	<0.50	<0.50	<0.50	<1.0	---	<0.50	<10	<0.50	<0.50	<0.50	---	---	36.44	6.17	30.27	---
S-12	09/22/2009	Unable to access		---	---	---	---	---	---	---	---	---	---	---	---	36.00	---	---	---
S-12	09/25/2009	---	---	---	---	---	---	---	---	---	---	---	---	---	---	36.00	5.10	30.90	---
S-12	09/29/2009	91 g	280	<0.50	<1.0	<1.0	<1.0	---	<1.0	<10	---	---	---	<0.50	<1.0	36.00	3.62	32.38	---
S-12	12/23/2009	120 g	340	<0.50	<1.0	<1.0	<1.0	---	<1.0	15	<2.0	<2.0	<2.0	<0.50	<1.0	36.00	2.91	33.09	---
S-12	03/16/2010	<50	78	<0.50	<1.0	<1.0	<1.0	---	<1.0	<10	---	---	---	<0.50	<1.0	36.00	2.78	33.22	---
S-12	06/21/2010	210 g	380	7.6	<1.0	<1.0	<1.0	---	4.8	50	---	---	---	<0.50	<1.0	36.00	8.48	27.52	---
S-12	12/28/2010	81	410	<0.50	<1.0	<1.0	<1.0	---	<1.0	30	2.4	<2.0	<2.0	<0.50	<1.0	36.00	5.60	30.40	---
S-12	12/23/2011	140	490	<0.50	<0.50	<0.50	<1.0	---	<1.0	14	1.4	<1.0	<1.0	<0.50	<0.50	36.00	7.01	28.99	---
S-12	12/28/2012	Well inaccessible		---	---	---	---	---	---	---	---	---	---	---	---	36.00	---	---	---
S-12	09/19/2013	Well not monitored		---	---	---	---	---	---	---	---	---	---	---	---	36.00	---	---	---
S-12	12/23/2013	80	180	<0.50	<0.50	<0.50	<1.0	---	1.7	51	3.7	<0.50	<0.50	---	---	36.00	8.35	27.65	---
S-12	06/06/2014	---	---	---	---	---	---	---	---	---	---	---	---	---	---	36.00	7.99	28.01	---
S-12	12/08/2014	110	400	<0.50	<0.50	<0.50	<1.0	---	1.2	29	2.5	<0.50	<0.50	---	---	36.00	6.40	29.60	---
S-12	06/03/2015	---	---	---	---	---	---	---	---	---	---	---	---	---	---	36.00	8.16	27.84	---
S-12	12/17/2015	130	110	<0.50	<0.50	<0.50	<1.0	---	1.3	26	2.9	<0.50	<0.50	---	---	36.00	8.88	27.12	---
S-12	06/03/2016	---	---	---	---	---	---	---	---	---	---	---	---	---	---	36.00	7.84	28.16	---
S-12	12/23/2016	140	310	<0.50	<0.50	<0.50	<1.0	---	0.80	11	2.0	<0.50	<0.50	---	---	36.00	5.99	30.01	---
S-13	09/06/2013	---	---	---	---	---	---	---	---	---	---	---	---	---	---	37.19	9.34	27.85	---
S-13	09/19/2013	---	25,000	210	420	520	7,600	---	<20	<400	<20	<20	<20	---	---	37.19	9.33	27.86	---
S-13	12/23/2013	---	32,000	280	750	1,900	9,000	---	<10	<200	<10	<10	<10	---	---	37.19	9.82	27.37	---
S-13	03/05/2014	---	24,000	220	660	1,300	6,700	---	<20	<400	<20	<20	<20	---	---	37.19	8.85	28.34	---

Table 1
Groundwater Data
Former Shell Service Station, 4411 Foothill Boulevard, Oakland, California

Well ID	Date	TPHd (µg/L)	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE 8020 (µg/L)	MTBE 8260 (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	1,2- DCA (µg/L)	EDB (µg/L)	TOC (ft MSL)	Depth to Water (ft TOC)	GW Elevation (ft MSL)	DO Reading (mg/L)
S-13	06/06/2014	---	45,000 i	300	990	2,500	11,000	---	<20	<400	<20	<20	<20	---	---	37.19	8.81	28.38	---
S-13	12/08/2014	---	19,000	190	380	950	4,000	---	<20	<400	<20	<20	<20	---	---	37.19	8.98	28.21	---
S-13	06/03/2015	---	30,000	210	730	2,200	7,400	---	<50	<1,000	<50	<50	<50	---	---	37.19	9.92	27.27	---
S-13	12/17/2015	1,200	34,000	240	750	2,600	8,100	---	<50	<1,000	<50	<50	<50	---	---	37.19	10.41	26.78	---
S-13	06/03/2016	---	21,000	200	370	1,300 l	3,300	---	<20	<400	<20	<20	<20	---	---	37.19	8.22	28.97	---
S-13	12/23/2016	---	24,000	200	570	1,500	5,600	---	<50	<1,000	<50	<50	<50	---	---	37.19	6.30	30.89	---
S-14	09/06/2013	---	---	---	---	---	---	---	---	---	---	---	---	---	---	37.14	9.28	27.86	---
S-14	09/19/2013	---	7,600	360	48	140	490	---	8.8	<50	<2.5	<2.5	<2.5	---	---	37.14	9.41	27.73	---
S-14	12/23/2013	---	10,000	620	77	610	670	---	<5.0	<100	<5.0	<5.0	<5.0	---	---	37.14	9.71	27.43	---
S-14	03/05/2014	---	8,000	470	79	450	630	---	<2.5	<50	<2.5	<2.5	<2.5	---	---	37.14	8.63	28.51	---
S-14	06/06/2014	---	6,400 i	270	39	240	370	---	2.9	<50	<2.5	<2.5	<2.5	---	---	37.14	9.08	28.06	---
S-14	12/08/2014	---	8,800	430	58	520	570	---	4.4	<50	<2.5	<2.5	<2.5	---	---	37.14	8.60	28.54	---
S-14	06/03/2015	---	9,500	160	28	350	700	---	<5.0	<100	<5.0	<5.0	<5.0	---	---	37.14	9.02	28.12	---
S-14	12/17/2015	890	13,000	490	58	460	1,000	---	<5.0	<100	<5.0	<5.0	<5.0	---	---	37.14	9.87	27.27	---
S-14	06/03/2016	---	670	19	1.4	6.3	25	---	<0.50	10	<0.50	<0.50	<0.50	---	---	37.14	8.65	28.49	---
S-14	12/23/2016	---	1,900	53	2.2	5.4	7.4	---	<0.50	<10	<0.50	<0.50	<0.50	---	---	37.14	6.61	30.53	---
BW-A	09/30/1999	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	10.55	---	2.3
BW-A	12/22/1999	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	9.52	---	2.2
BW-A	03/09/2000	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	3.99	---	1.5
BW-A	06/20/2000	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	9.69	---	2.4
BW-A	09/05/2000	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	9.43	---	1.0
BW-A	12/04/2000	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	8.96	---	1.3
BW-A	12/12/2000	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	8.71	---	---
BW-A	03/08/2001	1,370 g	<2,500	46.6	<25.0	<25.0	<25.0	10,600	11,700	---	---	---	---	---	---	---	6.38	---	0.9/1.4
BW-A	06/07/2001	960	1,100	<10	<10	<10	17	7,200	---	---	---	---	---	---	---	---	9.82	---	3.6/0.8
BW-A	09/13/2001	460	<2,000	<20	<20	<20	<50	---	13,000	---	---	---	---	---	---	---	10.49	---	3.3/1.7
BW-A	11/19/2001	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	9.89	---	---
C-11	12/30/2016	51	150	0.60	<0.50	<0.50	<1.0	---	<0.50	<10	<0.50	<0.50	<0.50	---	---	36.79	14.97	21.82	---

Notes: See following page

Table 1
Groundwater Data
Former Shell Service Station, 4411 Foothill Boulevard, Oakland, California

- Notes:**
- TPHd = Total petroleum hydrocarbons as diesel (C10-C28) by modified EPA Method 8015; after February 22, 2007, analyzed with silica gel cleanup
 - TPHg = Total petroleum hydrocarbons as gasoline (C4-C12) by EPA Method 8260B; prior to September 13, 2001, analyzed by EPA Method 8015 unless otherwise noted
 - BTEX = Benzene, toluene, ethylbenzene, and total xylenes analyzed by EPA Method 8260B; prior to September 13, 2001, analyzed by EPA Method 8020
 - MTBE = Methyl tertiary-butyl ether analyzed by method noted
 - TBA = Tertiary-butyl alcohol analyzed by EPA Method 8260B
 - DIPE = Di-isopropyl ether analyzed by EPA Method 8260B
 - ETBE = Ethyl tertiary-butyl ether analyzed by EPA Method 8260B
 - TAME = Tertiary-amyl methyl ether analyzed by EPA Method 8260B
 - 1,2-DCA = 1,2-Dichloroethane analyzed by EPA Method 8260B
 - EDB = 1,2-Dibromoethane analyzed by EPA Method 8260B
 - TOC = Top of casing elevation, in feet relative to mean sea level
 - GW = Groundwater
 - DO = Dissolved oxygen
 - µg/L = Micrograms per liter
 - ft = Feet
 - MSL = Mean sea level
 - mg/L = Milligrams per liter
 - <X.XX = Not detected at or above reporting limit X.XX
 - = Not analyzed or not available
 - x/x = Pre-purge/post-purge DO reading
 - a = Sample analyzed outside the EPA recommended holding time.
 - b = Post-purge DO reading.
 - c = Pre-purge DO reading.
 - d = Estimated depth to water.
 - e = Hydrocarbon reported is in the early diesel range and does not match the laboratory's standard.
 - f = Analyzed by EPA Method 8015B (M).
 - g = The sample chromatographic pattern for TPH does not match the chromatographic pattern of the specified standard. Quantitation of the unknown hydrocarbon(s) in the sample was based upon the specified standard.
 - h = Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
 - i = Concentration reported is due to the presence of discrete peaks of xylenes.
 - j = Concentration reported is due to the presence of discrete peak of benzene.
 - k = Hydrocarbon result partly due to individual peak in quantitation range.
 - l = MS and/or MSD Recovery is outside acceptance limits.

Prior to December 12, 2002, depth to water referenced to top of well box elevation.
Wells S-1 through S-4 surveyed February 3, 2000 by Virgil Chavez Land Surveying.
Wells S-1 through S-4 surveyed March 5, 2002 by Virgil Chavez Land Surveying.
Well S-5 surveyed May 29, 2003 by Virgil Chavez Land Surveying.
Wells S-6 through S-9 surveyed February 21, 2007 by Virgil Chavez Land Surveying.
Wells S-6 through S-12 surveyed October 26, 2009 by Virgil Chavez Land Surveying.
Wells S-13 and S-14 surveyed on September 14, 2013 by Virgil Chavez Land Surveying.
Well C-11 is owned by Chevron at the adjacent site located at 4265 Foothill Blvd, surveyed in March, 2015 by Morrow Surveying

Appendix A

Field Notes (Blaine Tech Services, Inc.)

WELL GAUGING DATA

Project # 1101223-DS1 Date 12-23-16 Client Aelum

Site 4411 Foothill 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
S-6	0807	4	N				6.25	19.36		
S-7	0807	4	N				6.96	19.34		
S-8	0815 0815	4	N				6.67	19.58		
S-9	0800	4	N				7.09	19.45		
S-10	0753	4	N				7.02	19.56		
S-11	0751	4	N				6.17	19.60		
S-12	0755	4	N				5.99	19.60		
S-13	0810	4	ODOR				6.30	19.26		
S-14	0803	4	ODOR				6.61	19.25		
C-11	*	well parked over				*	cones not present			

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

BTS #: <u>161223-051</u>	Site: <u>98955746</u>
Sampler: <u>D_s</u>	Date: <u>12-23-14</u>
Well I.D.: <u>S-6</u>	Well Diameter: 2 3 <u>4</u> 6 8
Total Well Depth (TD): <u>19.30</u>	Depth to Water (DTW): <u>6.25</u>
Depth to Free Product: <u>—</u>	Thickness of Free Product (feet): <u>—</u>
Referenced to: <u>PVC</u> Grade	D.O. Meter (if req'd): <u>YSI</u> HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: <u>8.87</u>	

Purge Method: Bailer Waterra Sampling Method: Bailer
 Disposable Bailer Peristaltic Disposable Bailer
 Positive Air Displacement Extraction Pump Extraction Port
 Electric Submersible Other _____ Dedicated Tubing

Other: _____

$\frac{8.40 \text{ (Gals.)} \times 3}{\text{Specified Volumes}} = \frac{25.20 \text{ Gals.}}{\text{Calculated Volume}}$	<table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <tr> <th>Well Diameter</th> <th>Multiplier</th> <th>Well Diameter</th> <th>Multiplier</th> </tr> <tr> <td>1"</td> <td>0.04</td> <td>4"</td> <td>0.65</td> </tr> <tr> <td>2"</td> <td>0.16</td> <td>6"</td> <td>1.47</td> </tr> <tr> <td>3"</td> <td>0.37</td> <td>Other</td> <td>radius² * 0.163</td> </tr> </table>	Well Diameter	Multiplier	Well Diameter	Multiplier	1"	0.04	4"	0.65	2"	0.16	6"	1.47	3"	0.37	Other	radius ² * 0.163
Well Diameter	Multiplier	Well Diameter	Multiplier														
1"	0.04	4"	0.65														
2"	0.16	6"	1.47														
3"	0.37	Other	radius ² * 0.163														

Time	Temp (°F)	pH	Cond. (mS or <u>µS</u>)	Turbidity (NTUs)	Gals. Removed	Observations
1019	67.8	6.82	1048	19	8.40	OK
1023	68.1	6.80	1055	10	16.80	↓
1023	68.3	6.78	1061	13	25.20	↓

Did well dewater? Yes No Gallons actually evacuated: 25.20

Sampling Date: 12-23-14 Sampling Time: 1035 Depth to Water: 8.80

Sample I.D.: S-6 Laboratory: Test America Other _____

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: see w/c

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 #: 161223-DS1	Site: 9899 5746
Sampler: DS	Date: 12-23-16
Well I.D.: S-7	Well Diameter: 2 3 <u>4</u> 6 8
Total Well Depth (TD): 19.34	Depth to Water (DTW): 0.96
Depth to Free Product: —	Thickness of Free Product (feet): —
Referenced to: <u>PVC</u> Grade	D.O. Meter (if req'd): <u>YSI</u> HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 9.43	

Purge Method: Bailer Disposable Bailer Positive Air Displacement <u>Electric Submersible</u>	Waterra Peristaltic Extraction Pump Other _____	Sampling Method: <u>Bailer</u> Disposable Bailer Extraction Port Dedicated Tubing Other: _____
---	--	--

7.92 (Gals.) X	3	= 24 Gals.
I 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	radius ² * 0.163

Time	Temp (°F)	pH	Cond. (mS or μ S)	Turbidity (NTUs)	Gals. Removed	Observations
1102	70.4	6.84	1573	18	8	Chc
1104	70.8	6.87	1612	14	10	↓
1105	71.0	6.88	1620	12	24	

Did well dewater? Yes No Gallons actually evacuated: 24

Sampling Date: 12-23-16 Sampling Time: 1110 Depth to Water: 9.41

Sample I.D.: S-7 Laboratory: Test America Other _____

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

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 #: 161223-DS1	Site: 98995746
Sampler: DS	Date: 12-23-16
Well I.D.: SB	Well Diameter: 2 3 (4) 6 8
Total Well Depth (TD): 19.58	Depth to Water (DTW): 6.67
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]: 9.24	

Purge Method: Bailer Disposable Bailer Positive Air Displacement <u>Electric Submersible</u>	Waterra Peristaltic Extraction Pump Other _____	Sampling Method: <u>Bailer</u> Disposable Bailer Extraction Port Dedicated Tubing Other: _____
---	--	--

$8.3 \text{ (Gals.)} \times 3 = 24.9 \text{ Gals.}$ I Case Volume Specified Volumes Calculated Volume	<table border="1" style="width: 100%; border-collapse: collapse; font-size: small;"> <thead> <tr> <th>Well Diameter</th> <th>Multiplier</th> <th>Well Diameter</th> <th>Multiplier</th> </tr> </thead> <tbody> <tr> <td>1"</td> <td>0.04</td> <td>4"</td> <td>0.65</td> </tr> <tr> <td>2"</td> <td>0.16</td> <td>6"</td> <td>1.47</td> </tr> <tr> <td>3"</td> <td>0.37</td> <td>Other</td> <td>radius² * 0.163</td> </tr> </tbody> </table>	Well Diameter	Multiplier	Well Diameter	Multiplier	1"	0.04	4"	0.65	2"	0.16	6"	1.47	3"	0.37	Other	radius ² * 0.163
Well Diameter	Multiplier	Well Diameter	Multiplier														
1"	0.04	4"	0.65														
2"	0.16	6"	1.47														
3"	0.37	Other	radius ² * 0.163														

Time	Temp (°F)	pH	Cond. (mS or μ S)	Turbidity (NTUs)	Gals. Removed	Observations
1112	71.2	7.07	1371	16	8.3	clear
1114	70.9	7.03	1382	15	16.6	↓
1115	* well dewatered			⊙	18 gallons	
1240	70.2 70.2	7.04	1398	12	grab	clear

Did well dewater? Yes No Gallons actually evacuated: 18

Sampling Date: 12-23-16 Sampling Time: 1240 Depth to Water: 9.22

Sample I.D.: S-8 Laboratory: Test America Other _____

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

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 #: 1101223-DS1	Site: 98995746
Sampler: DS	Date: 12-23-16
Well I.D.: S-9	Well Diameter: 2 3 <u>4</u> 6 8
Total Well Depth (TD): 7.09 19.45	Depth to Water (DTW): 19.95 7.09
Depth to Free Product: —	Thickness of Free Product (feet): —
Referenced to: <u>PVC</u> Grade	D.O. Meter (if req'd): <u>YSI</u> HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 9.56	

Purge Method: Bailer Disposable Bailer Positive Air Displacement <u>Electric Submersible</u>	Waterra Peristaltic Extraction Pump Other _____	Sampling Method: <u>Bailer</u> Disposable Bailer Extraction Port Dedicated Tubing Other: _____
---	--	--

8.0 (Gals.) X 3 = 24.0 Gals.
 I 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	radius ² * 0.163

Time	Temp (°F)	pH	Cond. (mS or <u>µS</u>)	Turbidity (NTUs)	Gals. Removed	Observations
0930	71.0	6.54	990	40	8.0	clear
0932	71.2	6.67	955	82	16.0	↓
0933	71.3	6.69	942	102	24.0	↓

Did well dewater? Yes No Gallons actually evacuated: 24.0

Sampling Date: 12-23-16 Sampling Time: 0945 Depth to Water: 9.54

Sample I.D.: S-9 Laboratory: Test America Other _____

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

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 #: 161223-DS1	Site: 98775746 98995746
Sampler: DS	Date: 12-23-10
Well I.D.: S-10	Well Diameter: 2 3 <u>4</u> 6 8
Total Well Depth (TD): 7.02 19.56	Depth to Water (DTW): 17.56 7.02
Depth to Free Product: —	Thickness of Free Product (feet): —
Referenced to: <u>PVC</u> Grade	D.O. Meter (if req'd): <u>YSI</u> HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 9.53	

Purge Method: Bailer Waterra Sampling Method: Bailer
 Disposable Bailer Peristaltic Disposable Bailer
 Positive Air Displacement Extraction Pump Extraction Port
Electric Submersible Other _____ Dedicated Tubing

Other: _____

$\frac{8.00 \text{ (Gals.)} \times 3}{\text{Specified Volumes}} = \frac{24.00 \text{ Gals.}}{\text{Calculated Volume}}$	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Well Diameter</th> <th>Multiplier</th> <th>Well Diameter</th> <th>Multiplier</th> </tr> </thead> <tbody> <tr> <td>1"</td> <td>0.04</td> <td>4"</td> <td>0.65</td> </tr> <tr> <td>2"</td> <td>0.16</td> <td>6"</td> <td>1.47</td> </tr> <tr> <td>3"</td> <td>0.37</td> <td>Other</td> <td>radius² * 0.163</td> </tr> </tbody> </table>	Well Diameter	Multiplier	Well Diameter	Multiplier	1"	0.04	4"	0.65	2"	0.16	6"	1.47	3"	0.37	Other	radius ² * 0.163
Well Diameter	Multiplier	Well Diameter	Multiplier														
1"	0.04	4"	0.65														
2"	0.16	6"	1.47														
3"	0.37	Other	radius ² * 0.163														

Time	Temp (°F)	pH	Cond. (mS or <u>µS</u>)	Turbidity (NTUs)	Gals. Removed	Observations
0838	67.8	6.55	856	62	8	Clear ↓
0840	67.9	6.57	858	118	16	
0842	67.9	6.58	861	140	24	

Did well dewater? Yes No Gallons actually evacuated: 24

Sampling Date: 12-23-10 Sampling Time: 0845 Depth to Water: 9.53

Sample I.D.: S-10 Laboratory: Test America Other _____

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

EB I.D. (if applicable): @ _____ 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 #: 161223-DS1	Site: 93995746
Sampler: TDS	Date: 12-23-16
Well I.D.: S-11	Well Diameter: 2 3 ④ 6 8 ____
Total Well Depth (TD): 19.00	Depth to Water (DTW): 6.17
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]: 8.87	

Purge Method: Bailer Waterra Sampling Method: Bailer
 Disposable Bailer Peristaltic Disposable Bailer
 Positive Air Displacement Extraction Pump Extraction Port
Electric Submersible Other _____ Dedicated Tubing
 Other: _____

$8.00 \text{ (Gals.)} \times 3 = 25.80 \text{ Gals.}$ <p style="font-size: small; margin: 0;"> I Case Volume Specified Volumes Calculated Volume </p>	<table border="1" style="width: 100%; border-collapse: collapse; font-size: x-small;"> <thead> <tr> <th>Well Diameter</th> <th>Multiplier</th> <th>Well Diameter</th> <th>Multiplier</th> </tr> </thead> <tbody> <tr> <td>1"</td> <td>0.04</td> <td>4"</td> <td>0.65</td> </tr> <tr> <td>2"</td> <td>0.16</td> <td>6"</td> <td>1.47</td> </tr> <tr> <td>3"</td> <td>0.37</td> <td>Other</td> <td>radius² * 0.163</td> </tr> </tbody> </table>	Well Diameter	Multiplier	Well Diameter	Multiplier	1"	0.04	4"	0.65	2"	0.16	6"	1.47	3"	0.37	Other	radius ² * 0.163
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1"	0.04	4"	0.65														
2"	0.16	6"	1.47														
3"	0.37	Other	radius ² * 0.163														

Time	Temp (°F)	pH	Cond. (mS or μS)	Turbidity (NTUs)	Gals. Removed	Observations
0825	62.8	6.43	807	91	8.60	cloudy
0827	62.9	6.46	815	122	17.20	↓
0829	63.1	6.49	821	148	25.80	↓

Did well dewater? Yes No Gallons actually evacuated: 25.80

Sampling Date: 12/23/16 Sampling Time: 0830 Depth to Water: 8.78

Sample I.D.: S-11 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 #: 161223-DS1	Site: 98995746
Sampler: DS	Date: 12-23-16
Well I.D.: S-12	Well Diameter: 2 3 4 6 8
Total Well Depth (TD): 5.77 19.60	Depth to Water (DTW): 5.77
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]: 8.73	

Purge Method: Bailer Waterra Sampling Method: Bailer
 Disposable Bailer Peristaltic Disposable Bailer
 Positive Air Displacement Extraction Pump Extraction Port
 Electric Submersible Other _____ Dedicated Tubing

Other: _____

$8.70 \text{ (Gals.)} \times 3 = 26.1 \text{ Gals.}$ <p style="margin-top: 0;">1 Case Volume Specified Volumes Calculated Volume</p>	<table border="1" style="margin: 0 auto; border-collapse: collapse;"> <tr> <th>Well Diameter</th> <th>Multiplier</th> <th>Well Diameter</th> <th>Multiplier</th> </tr> <tr> <td>1"</td> <td>0.04</td> <td>4"</td> <td>0.65</td> </tr> <tr> <td>2"</td> <td>0.16</td> <td>6"</td> <td>1.47</td> </tr> <tr> <td>3"</td> <td>0.37</td> <td>Other</td> <td>radius² * 0.163</td> </tr> </table>	Well Diameter	Multiplier	Well Diameter	Multiplier	1"	0.04	4"	0.65	2"	0.16	6"	1.47	3"	0.37	Other	radius ² * 0.163
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1"	0.04	4"	0.65														
2"	0.16	6"	1.47														
3"	0.37	Other	radius ² * 0.163														

Time	Temp (°F)	pH	Cond (mS or μS)	Turbidity (NTUs)	Gals. Removed	Observations
0901	66.8	6.60	1126	54	8.70	clear
0903	67.2	6.61	1154	42	17.40	↓
0904	67.4	6.63	1148	40	26.10	

Did well dewater? Yes No Gallons actually evacuated: 26.10

Sampling Date: 12-23-16 Sampling Time: 0915 Depth to Water: 8.05

Sample I.D.: S-12 Laboratory: Test America Other _____

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

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 #: 161223-DS1	Site: 98995746
Sampler: DS	Date: 12-23-16
Well I.D.: 5-13	Well Diameter: 2 3 (4) 6 8
Total Well Depth (TD): 19.26	Depth to Water (DTW): 6.30
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]: 8.89	

Purge Method: <input type="checkbox"/> Bailer <input type="checkbox"/> Disposable Bailer <input type="checkbox"/> Positive Air Displacement <input checked="" type="checkbox"/> Electric Submersible	Waterra <input type="checkbox"/> Peristaltic <input type="checkbox"/> Extraction Pump <input type="checkbox"/> Other _____	Sampling Method: <input checked="" type="checkbox"/> Bailer <input type="checkbox"/> Disposable Bailer <input type="checkbox"/> Extraction Port <input type="checkbox"/> Dedicated Tubing Other: _____
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$\frac{8.30 \text{ (Gals.)} \times 3}{1 \text{ Case Volume}} = 24.9 \text{ Gals.}$ <p style="font-size: small; margin: 0;">Specified Volumes Calculated Volume</p>	<table border="1" style="width: 100%; border-collapse: collapse; font-size: x-small;"> <thead> <tr> <th>Well Diameter</th> <th>Multiplier</th> <th>Well Diameter</th> <th>Multiplier</th> </tr> </thead> <tbody> <tr> <td>1"</td> <td>0.04</td> <td>4"</td> <td>0.65</td> </tr> <tr> <td>2"</td> <td>0.16</td> <td>6"</td> <td>1.47</td> </tr> <tr> <td>3"</td> <td>0.37</td> <td>Other</td> <td>radius² * 0.163</td> </tr> </tbody> </table>	Well Diameter	Multiplier	Well Diameter	Multiplier	1"	0.04	4"	0.65	2"	0.16	6"	1.47	3"	0.37	Other	radius ² * 0.163
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1"	0.04	4"	0.65														
2"	0.16	6"	1.47														
3"	0.37	Other	radius ² * 0.163														

Time	Temp (°F)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
1046	68.2	7.02 7.02	983	16	8.30	clear
					10 gallons	
1230	68.4	7.00	990	14	grab	clear

Did well dewater? Yes No Gallons actually evacuated: 10

Sampling Date: 12-23-16 Sampling Time: 1230 Depth to Water: 8.71

Sample I.D.: 5-13 Laboratory: Test America Other _____

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

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 #: <u>16223-DS1</u>	Site: <u>98995746</u>
Sampler: <u>DS</u>	Date: <u>12-23-16</u>
Well I.D.: <u>S-14</u>	Well Diameter: 2 3 <u>(4)</u> 6 8 <u> </u>
Total Well Depth (TD): <u>19.25</u>	Depth to Water (DTW): <u>6.61</u>
Depth to Free Product: <u> </u>	Thickness of Free Product (feet): <u> </u>
Referenced to: <u>(PVC)</u> Grade	D.O. Meter (if req'd): <u>(YSI)</u> HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: <u>9.14</u>	

Purge Method: <u>Bailer</u>	Waterra	Sampling Method: <u>(Bailer)</u>
Disposable Bailer	Peristaltic	Disposable Bailer
Positive Air Displacement	Extraction Pump	Extraction Port
<u>Electric Submersible</u>	Other <u> </u>	Dedicated Tubing
		Other: <u> </u>

$\frac{8.08 \text{ (Gals.)} \times 3}{1 \text{ Case Volume Specified Volumes}} = \frac{24.3 \text{ Gals.}}{\text{Calculated Volume}}$	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Well Diameter</th> <th>Multiplier</th> <th>Well Diameter</th> <th>Multiplier</th> </tr> </thead> <tbody> <tr> <td>1"</td> <td>0.04</td> <td>4"</td> <td>0.65</td> </tr> <tr> <td>2"</td> <td>0.16</td> <td>6"</td> <td>1.47</td> </tr> <tr> <td>3"</td> <td>0.37</td> <td>Other</td> <td>radius² * 0.163</td> </tr> </tbody> </table>	Well Diameter	Multiplier	Well Diameter	Multiplier	1"	0.04	4"	0.65	2"	0.16	6"	1.47	3"	0.37	Other	radius ² * 0.163
Well Diameter	Multiplier	Well Diameter	Multiplier														
1"	0.04	4"	0.65														
2"	0.16	6"	1.47														
3"	0.37	Other	radius ² * 0.163														

Time	Temp (°F)	pH	Cond. (mS or μ S)	Turbidity (NTUs)	Gals. Removed	Observations
1002	67.1	6.44	873	21	8.1	clear
1004	66.9	6.50	870	18	10.2	↓
1006	well	dewatered @		17	gallons	
1220	61.3	6.52	881	16	grab	clear

Did well dewater? (Yes) No Gallons actually evacuated: 17 gal

Sampling Date: 12-23-16 Sampling Time: 1220 Depth to Water: 9.02

Sample I.D.: S-14 Laboratory: (Test America) Other

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

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 #: 141223-DS1	Site: 9899 5746
Sampler: DS	Date: 12-23-16
Well I.D.: C-11	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): YSD HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:	

Purge Method: Bailer Waterra Sampling Method: Bailer
 Disposable Bailer Peristaltic Disposable Bailer
 Positive Air Displacement Extraction Pump Extraction Port
 Electric Submersible Other _____ 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	radius ² * 0.163

Time	Temp (°F)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
P	well	unrecoverable		parted 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

LAB (LOCATION)

- ACCUTEST
- CALSCIENCE
- ESTAMERICA
- Other



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



Please Check Appropriate Box

<input type="checkbox"/> BGV FDG	<input type="checkbox"/> PIPELINE	<input type="checkbox"/> RETAIL
<input type="checkbox"/> CHEMICALS	<input checked="" type="checkbox"/> CONSULTANT	<input type="checkbox"/> LUBES
<input type="checkbox"/> TRANSPORTATION	<input type="checkbox"/> OTHER	

Print Bill To Contact Name: Shane Olton
 Planef Site or Project ID: 31733
 PO #:
 GSAP Project ID:
 USPC/00250,USRT/00885

DATE: 12-23-16
 PAGE: 1 of 1

SAMPLING COMPANY: Blaine Tech Services, Inc.
 ADDRESS: 1680 Rogers Ave., San Jose, CA, 95112
 PROJECT CONTACT (Primary or POC Report): Bart Gebbie
 TELEPHONE: 310-885-4455 Ext. 103 FAX: 310-637-5802
 TO CONTACT E-MAIL: shane.olton@aecom.com

Lab Vendor #: 1364589 (TestAmerica)

LOG CODE: BTSS

SITE ADDRESS: Street and City: 4411 Foothill Blvd., Oakland State: CA
 AECOM Project/Task Number: 60482424
 AECOM Other ID: 10059562
 DELIVERABLE TO (Name, Company, Office Location): Margaret Baber, AECOM, Oakland, CA PHONE NO: 510-893-3600 E-MAIL: margaret.baber@aecom.com

TURNAROUND TIME (CALENDAR DAYS):
 STANDARD (14 DAY) 7 DAYS 5 DAYS 3 DAYS 24 HOURS RESULTS NEEDED ON WEEKEND

LA - RWQCB REPORT FORMAT JUST 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:

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

Email Invoice to USAPImaging@aecom.com

SAMPLER NAME(S) (PWT): Margaret Baber, AECOM, Oakland, CA 510-893-3600 margaret.baber@aecom.com 10059562

LAB USE ONLY

REQUESTED ANALYSIS

UNIT COST		NON-UNIT COST	
TPH-GRD, Purgeable (8260B)			
TPH-DRO, Extractable (8015M)			
5 OXYS (8260B)			

LAB USE ONLY	Field Sample Identification		SAMPLING		MATRIX	PRESERVATIVE					NO. OF CONT.	REQUESTED ANALYSIS				FIELD NOTES: TEMPERATURE ON RECEIPT C° Container PID Readings or Laboratory Notes		
			DATE	TIME		HCL	HNO3	H2SO4	NONE	OTHER		TPH-GRD, Purgeable (8260B)	TPH-DRO, Extractable (8015M)	5 OXYS (8260B)				
	S-6		12/23/16	1035	W	X			X		5	X	X	X	X			
	S-7			1110	W	X			Y		5	X	X	X	X			
	S-8			1240	W	X			X		5	X	X	X	X			
	S-9			0945	W	X			Y		5	X	X	X	X			
	S-10			0850	W	X			X		5	X	X	X	X			
	S-11			0830	W	X			X		5	X	X	X	X			
	S-12			0910	W	X			X		5	X	X	X	X			
	S-13			1230	W	X					3	X	X	X	X			
	S-14			1220	W	X					3	X	X	X	X			

Requested by: (Signature)	Received by: (Signature)	Date: 12/23/16	Time: 150030
Requested by: (Signature)	Received by: (Signature)	Date: 12/27/16	Time: 10120

ENVIRONMENTAL WELL, REMEDIATION COMPOUND, AND SITE INSPECTION FORM

INCIDENT # 98995740

ADDRESS 4411 Foothill Blvd

DATE: 12-23-16

CITY & STATE Oakland, CA

Well ID	Observations Upon Arrival														Note Repairs Made Detailed Explanation of Maintenance Recommended and Performed	Photos of Well Condition		Repair Date and PM Initials			
	Manway Cover, Type, Condition & Size					Well Labeled / Painted Properly*		Well Cap (Gripper) Condition		Well Lock Condition			Well Pad / Surface Condition								
S-6	Standpipe	Flush	G	P	Size (inch) 12	Y	N	G	R	G	R	NL	G	P		Y	N				
S-7	Standpipe	Flush	G	P	Size (inch) 12	Y	N	G	R	G	R	NL	G	P		Y	N				
S-8	Standpipe	Flush	G	P	Size (inch) 12	Y	N	G	R	G	R	NL	G	P		Y	N				
S-9	Standpipe	Flush	G	P	Size (inch) 12	Y	N	G	R	G	R	NL	G	P		Y	N				
S-10	Standpipe	Flush	G	P	Size (inch) 12	Y	N	G	R	G	R	NL	G	P		Y	N				
S-11	Standpipe	Flush	G	P	Size (inch) 12	Y	N	G	R	G	R	NL	G	P		Y	N				
S-12	Standpipe	Flush	G	P	Size (inch) 12	Y	N	G	R	G	R	NL	G	P		Y	N				
S-13	Standpipe	Flush	G	P	Size (inch) 12	Y	N	G	R	G	R	NL	G	P		Y	N				
S-14	Standpipe	Flush	G	P	Size (inch) 12	Y	N	G	R	G	R	NL	G	P		Y	N				
G-11	Standpipe	Flush	G	P	Size (inch)	Y	N	G	R	G	R	NL	G	P	*Well parked over	Y	N				
	Standpipe	Flush	G	P	Size (inch)	Y	N	G	R	G	R	NL	G	P		Y	N				
TOTAL # CAPS REPLACED =						= TOTAL # OF LOCKS REPLACED															
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																					
Building																					
Building w/ Fence Comp.		G	P	N/A	G	P	N/A	G	P	N/A	Y	N	N/A								
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
		Y	N	N/A	Y	N	N/A	G	P	N/A	Y	N	Y	N	N/A						

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).

Print or type Name of Field Personnel & Consultant Company

NON-HAZARDOUS WASTE DATA FORM

BESI # _____

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 10059562
4411 FOOTHILL BOULEVARD
OAKLAND, CA 94601

Generator's Phone: 510-874-3255

Container type removed from site: Drums Vacuum Truck Roll-off Truck Dump Truck Other BTS truck

Quantity: 200 gallons

Container type transported to receiving facility: Drums Vacuum Truck Roll-off Truck Dump Truck Other BTS truck

Quantity: 200 galls Volume _____

WASTE DESCRIPTION: NON-HAZARDOUS WATER

GENERATING PROCESS: WELL PURGING / DECON WATER

COMPONENTS OF WASTE			PPM	%	COMPONENTS OF WASTE			PPM	%
1.	WATER			99-100%	3.				
2.	TPH			<1%	4.				

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

HANDLING INSTRUCTIONS: WEAR ALL APPROPRIATE PERSONAL PROTECTIVE CLOTHING.

Generator Printed/Typed Name: Hans Su Signature: _____ Month: 12 Day: 23 Year: 16

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

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

Transporter 1 Printed/Typed Name: _____ Signature: _____ Month: 12 Day: 23 Year: 16

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

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.

GENERATOR

TRANSPORTER

RECEIVING FACILITY



AECOM Equilon SGW (US)
Daily Tailgate Meeting & Job Clearance Form

Issue: 1/2/2011
Revision 11: October 2016
Do NOT pre-populate any field.

Job Location:	4411 Foothill Blvd.	Date:	12-28-16
AECOM Site Supervisor:	Darren Suto	AECOM PM:	Shane Olton

List activities to be performed today:	Ground Water Monitoring
Permitted Activities (specific permit to be competed):	<input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Confined Space Entry <input type="checkbox"/> Excavation/Trenching <input type="checkbox"/> Hot Work <input type="checkbox"/> Hoisting/Rigging (any lifting with equipment, excluding drill rigs) <input type="checkbox"/> Natural Gas System Maintenance
The above Permit-required activities require onsite AECOM supervision unless approved by Regional Operations.	

Muster Point:	Subway	Spill Kit Location:	truck
First Aid Kit Location:	truck	Fire Extinguisher Location:	truck
Emergency cut-off switches:	N/A	Designated cell phone use area(s):	truck

Has the Site Manager/Owner been notified of the work activities and/or participated in a pre-work site walk?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
Is a fuel delivery scheduled for today? If yes, plan to Stop Work during fuel delivery.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
Has a site walk been performed to identify additional hazards?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No*
Have all personnel reviewed and understand the site specific HASP?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No*
Does each activity have a Job Safety Analysis (JSA)?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No*
Does each subcontractor have JSAs for their activities?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No* <input type="checkbox"/> N/A
Have JSAs been reviewed by the work team and newly identified hazards been added to the JSA?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No*
Per our lone worker procedure, is each employee either accompanied by or in communications with another?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No* <input type="checkbox"/> N/A
Has a Safe Lift Plan been completed and reviewed/approved by an AECOM Subject Matter Expert?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No* <input type="checkbox"/> N/A
Have all members of the work team confirmed understanding of the work, hazards, and controls/ mitigation?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No*
Has each person on the work team discussed all hazards and mitigation measures associated with any task which will require their feet to leave the ground?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No* <input type="checkbox"/> N/A
Have work areas been properly cordoned-off to protect workers, site staff, and the public?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No* <input type="checkbox"/> N/A
Have equipment checks been completed, documented, and reviewed?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No* <input type="checkbox"/> N/A
Have there been any equipment modifications made by subcontractor(s)? If yes, discuss modifications.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
Do all members of the work team have API Safety Keys (AECOM excluded)?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No* <input type="checkbox"/> N/A
Do all members of the work team have a Equilon "Life Saving Rules" Training card?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No*
Do all site workers understand injury/ intervention reporting requirements including immediately notifying the AECOM Site Supervisor of any injury, near miss, unsafe condition, hazard observation, or release?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No*
If permits are required, have they been reviewed and permit conditions understood by the Team?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No* <input type="checkbox"/> N/A
If drilling, did driller physically point out all pinch points to entire team (AECOM and all subs)?	<input type="checkbox"/> Yes <input type="checkbox"/> No* <input checked="" type="checkbox"/> N/A
If drilling, has the driller & crew agreed the audible and visible signals for "all clear" prior to engaging controls?	<input type="checkbox"/> Yes <input type="checkbox"/> No* <input checked="" type="checkbox"/> N/A

* If No, then work cannot be performed until corrective action is completed and documented.

Title of AECOM JSAs reviewed today:	Groundwater monitoring at shell sites	Title of Subcontractor's JSAs reviewed today:	HASP/JSA
-------------------------------------	---------------------------------------	---	----------

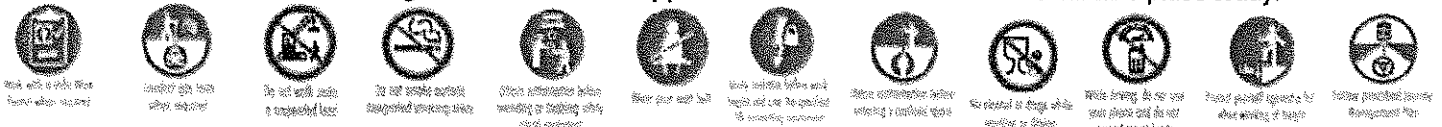
All personnel are wearing (regardless of activity):	<input checked="" type="checkbox"/> Hard Hat <input checked="" type="checkbox"/> Safety Glasses <input checked="" type="checkbox"/> Safety Vest <input checked="" type="checkbox"/> Steel-Toed Boots <input checked="" type="checkbox"/> Gloves (appropriate for task)
See JSA for additional task specific PPE requirements.	

Stop Work Authority & Obligation

- * All employees will stop the job any time anyone is concerned or uncertain about safety.
- * All employees will stop the job if anyone identifies a hazard or additional mitigation not recorded on the JSA.
- * All employees will be alerted to any changes in personnel or conditions at the worksite.
- * All employees will stop the job and reassess a task, hazards, and mitigations, and then amend the JSA as needed.

Other Items Discussed Today:

Circle the Life Saving Rule Icons that are applicable to the work/activities that will take place today:





AECOM Equilon SGW (US)
Daily Tailgate Meeting & Job Clearance Form

Issue: January 2, 2011
Revision 11: October 2016
Do NOT pre-populate any field.

SITE WORKERS (including AECOM Contractors and Subcontractors): By signing here, you are stating the following:

- * You understand that compliance with Equilon's Life Saving Rules is mandatory and that failing to follow to them may result in termination.
- * You have been involved in reviewing the JSAs and understand the hazards and control measures associated with each task you are about to perform.
- * You understand the permit to work requirements applicable to the work you are about to perform (if it includes permitted activities).
- * You understand the Equilon Life Saving Rules and are aware that tasks or work that is not risk-assessed shall not be performed.
- * You are aware of your authority and obligation to 'Stop Work'.

I arrived and departed fit for duty:

- * You are physically and mentally fit for duty,
- * You are not under the influence of any type of medication, drugs, or alcohol that could affect your ability to work safely.
- * You are aware of your responsibility to immediately report any illness, injury (regardless of where or when it occurred), or fatigue issue you may have to the AECOM Site Supervisor.
- * You will sign-out uninjured unless you have otherwise informed the AECOM Site Supervisor.

Print Name & Company	Signature	Initials & Sign In Time	Initials & Sign Out Time
Darren Soto / Blair Fuel	<i>[Signature]</i>	07:45 In & Fit DS	1410 Out & Fit DS
		In & Fit	Out & Fit
		In & Fit	Out & Fit
		In & Fit	Out & Fit
		In & Fit	Out & Fit

(Attach additional Site Worker sign-in/out sheets if needed)

PERSONAL SAFETY COMMITMENT (Attach additional Personal Safety Commitment sheets, if needed)

Print Name	"I will personally commit to do the following to positively improve site safety today":
Darren Soto	I will wear nitrile gloves All Day

SITE VISITORS (attach additional Site Visitor sign-in/out sheets if needed)

Print Name	Company Name	Arrival Time	Departure Time	Signature

SITE REPRESENTATIVE Sign In/Out (operating sites only, and signature must be requested. If the operator refuses to sign, note this on the Form)

Sign In: I have discussed this Job Clearance Form with the contractor		Sign Out: I have discussed this Job Clearance Form with the contractor	
Site Representative Name	Site Representative Signature	Site Representative Name	Site Representative Signature
N/A	N/A	N/A	N/A

TWILIGHT TOOL BOX TALK (Complete the following once field activities for the day have been concluded):

Were there any Incidents, Near Misses, Potential Incidents, or Positive Interventions today?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes, provide details:
Were there any 'Stop Work' interventions?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes, provide details:
Were there any areas for improvement noted?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes, provide details:
Is the Site Manager/Owner happy with the way you left the site (including the location of waste drums and/or equipment)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If no, provide details:
I certify that the above information is true and the job site is being left in a safe condition	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	AECOM Site Supervisor Signature:

WELL GAUGING DATA

Project # 161230-DB1 Date 12/30/16 Client SHELL

Site 4411 Foothill Blvd., Oakland

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
C-11	0618	2					14.97	19.62	↓	

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

BTS #: 161230-DB1	Site: 98995746
Sampler: <u>DB</u>	Date: 12/30/16
Well I.D.: C-11	Well Diameter: <u>(2)</u> 3 4 6 8
Total Well Depth (TD): 19.62	Depth to Water (DTW): 14.97
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <u>PVC</u> Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 15.90	

Purge Method: Bailer Waterra Sampling Method: Bailer
 Disposable Bailer Peristaltic Disposable Bailer
 Positive Air Displacement Extraction Pump Extraction Port
 Electric Submersible Other _____ Dedicated Tubing

Other: _____

$$\frac{0.95 \text{ (Gals.)} \times 3 \text{ Specified Volumes}}{1 \text{ Case Volume}} = 2.75 \text{ Gals. Calculated Volume}$$

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

Time	Temp (°F)	pH	Cond. (mS or <u>μS</u>)	Turbidity (NTUs)	Gals. Removed	Observations
0709	63.9	6.03	908.6	444	1	
0711	64.5	6.10	896.5	71000	1.5	
0712	64.7	6.12	891.6	71000	2.5	

Did well dewater? Yes (No) Gallons actually evacuated: 2.5

Sampling Date: 12/30/16 Sampling Time: 0830 Depth to Water: 15.85

Sample I.D.: C-11 Laboratory: Test America Other _____

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

EB I.D. (if applicable): @ _____ 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 ()



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



Please Check Appropriate Box:

<input type="checkbox"/> BGW FDG	<input type="checkbox"/> PIPELINE	<input type="checkbox"/> RETAIL
<input type="checkbox"/> CHEMICALS	<input checked="" type="checkbox"/> CONSULTANT	<input type="checkbox"/> LUBES
<input type="checkbox"/> TRANSPORTATION	<input type="checkbox"/> OTHER	

Print Bill To Contact Name: **Shane Olson** Planef Site or Project ID: **31733**
 PO # GSAP Project ID
 USPC/00250, USRT/00885

DATE: **12/30/16**
 PAGE: **1** of **1**

SAMPLING COMPANY: **Blaine Tech Services, Inc.**
 ADDRESS: **1680 Rogers Ave., San Jose, CA, 95112**
 PROJECT CONTACT (Name, Title or POC Report to): **Bart Gebble**
 TELEPHONE: **310-885-4465 Ext. 103** FAX: **310-637-5802**
 E-MAIL: **shane.olson@aecom.com**

SITE ADDRESS: Street and City: **4411 Foothill Blvd., Oakland** State: **CA**
 AECOM Project/Task Number: **60482424**
 EDP DELIVERABLE TO (Name, Company, Office Location): **Margaret Baber, AECOM, Oakland, CA** PHONE NO: **510-893-3600**
 E-MAIL: **margaret.baber@aecom.com** AECOM CONT ID: **10059562**

TURNAROUND TIME (CALENDAR DAYS):
 STANDARD (14 DAY) 7 DAYS 5 DAYS 3 DAYS 24 HOURS RESULTS NEEDED ON WEEKEND

LA - RWQCB REPORT FORMAT JUST AGENCY:

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

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

SAMPLER NAME(S) (Print): **Dustin Becker**
 LAB USE ONLY

SPECIAL INSTRUCTIONS OR NOTES:

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

Email invoice to USAPimaging@aecom.com

REQUESTED ANALYSIS		UNIT COST	NON-UNIT COST
TPH-GRO, Purgeable (R260B)			
TPH-DRO, Extractable (R016M)			
5 OXYS (R260B)			
STEX (R260B)			

FIELD NOTES:
 TEMPERATURE ON RECEIPT °C
 Container PID Readings or Laboratory Notes

LAB USE ONLY	Field Sample Identification		SAMPLING		MATRIX	PRESERVATIVE					NO. OF CONT.	REQUESTED ANALYSIS				
			DATE	TIME		HCL	HNO3	H2SO4	NONE	OTHER		TPH-GRO, Purgeable (R260B)	TPH-DRO, Extractable (R016M)	5 OXYS (R260B)	STEX (R260B)	
	C-11		12/30/16	0830	W6	X					5	X	X		X	X

Relinquished by: (Signature)	Received by: (Signature)	Date: 12/30/16	Time: 1000
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:

ENVIRONMENTAL WELL, REMEDIATION COMPOUND, AND SITE INSPECTION FORM

INCIDENT # 98995746

ADDRESS 2411 Foothill Blvd

DATE: 12/30/16

CITY & STATE Oakland, CA

Well ID	Observations Upon Arrival														Note Repairs Made Detailed Explanation of Maintenance Recommended and Performed	Photos of Well Condition		Repair Date and PM Initials				
	Manway Cover, Type, Condition & Size					Well Labeled / Painted Properly*		Well Cap (Gripper) Condition		Well Lock Condition			Well Pad / Surface Condition									
C-11	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					
	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					
	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					
	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					
	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					
	Standpipe	Flush	G	P	Size (inch)	Y	N	G	R	G	R	NL	G	P		Y	N					
TOTAL # CAPS REPLACED =										= TOTAL # OF LOCKS REPLACED												
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																						
Building		G			P			N/A			Y			N			N/A			Y		N
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		
	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.

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

* = Groundwater monitoring well covers must be painted and labeled in accordance with applicable regulations.
Version 2.4, March 2008

Dustin Becker, Blaine Tech
Print or type Name of Field Personnel & Consultant Company


NON-HAZARDOUS WASTE DATA FORM

BESI # _____

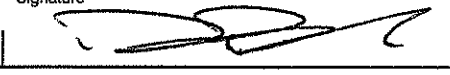
<p>Generator's Name and Mailing Address SHELL OIL PRODUCTS US C/O AECOM 1333 BROADWAY, SUITE 800 OAKLAND, CA 94612</p>	<p>Generator's Site Address (if different than mailing address) SHELL OIL 10059562 4411 FOOTHILL BOULEVARD OAKLAND, CA 94601</p>
--	--

<p>Generator's Phone: <u>510-874-3255</u></p> <p>Container type removed from site: <input type="checkbox"/> Drums <input type="checkbox"/> Vacuum Truck <input type="checkbox"/> Roll-off Truck <input type="checkbox"/> Dump Truck <input checked="" type="checkbox"/> Other <u>TANK TRUCK</u></p> <p>Quantity <u>3 gallons</u></p>	<p>Container type transported to receiving facility: <input type="checkbox"/> Drums <input type="checkbox"/> Vacuum Truck <input type="checkbox"/> Roll-off Truck <input type="checkbox"/> Dump Truck <input type="checkbox"/> Other _____</p> <p>Quantity _____ Volume _____</p>
---	--

<p>WASTE DESCRIPTION <u>NON-HAZARDOUS WATER</u></p> <table style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="width:30%;">COMPONENTS OF WASTE</th> <th style="width:10%;">PPM</th> <th style="width:10%;">%</th> </tr> </thead> <tbody> <tr> <td>1. <u>WATER</u></td> <td></td> <td><u>99-100%</u></td> </tr> <tr> <td>2. <u>TPH</u></td> <td></td> <td><u><1%</u></td> </tr> </tbody> </table> <p>Waste Profile _____ PROPERTIES: pH <u>7-10</u> <input type="checkbox"/> SOLID <input checked="" type="checkbox"/> LIQUID <input type="checkbox"/> SLUDGE <input type="checkbox"/> SLURRY <input type="checkbox"/> OTHER _____</p>	COMPONENTS OF WASTE	PPM	%	1. <u>WATER</u>		<u>99-100%</u>	2. <u>TPH</u>		<u><1%</u>	<p>GENERATING PROCESS <u>WELL PURGING / DECON WATER</u></p> <table style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="width:30%;">COMPONENTS OF WASTE</th> <th style="width:10%;">PPM</th> <th style="width:10%;">%</th> </tr> </thead> <tbody> <tr> <td>3. _____</td> <td></td> <td></td> </tr> <tr> <td>4. _____</td> <td></td> <td></td> </tr> </tbody> </table> <p>HANDLING INSTRUCTIONS: <u>WEAR ALL APPROPRIATE PERSONAL PROTECTIVE CLOTHING</u></p>	COMPONENTS OF WASTE	PPM	%	3. _____			4. _____		
COMPONENTS OF WASTE	PPM	%																	
1. <u>WATER</u>		<u>99-100%</u>																	
2. <u>TPH</u>		<u><1%</u>																	
COMPONENTS OF WASTE	PPM	%																	
3. _____																			
4. _____																			

Generator Printed/Typed Name <u>Dustin Becker</u>	Signature 	Month Day Year <u>12 30 16</u>
--	---	-----------------------------------

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

<p>Transporter 1 Company Name BLAINE TECH SERVICES, INC.</p> <p>Transporter 1 Printed/Typed Name <u>Dustin Becker</u></p>	<p>Phone# 408-573-0555</p> <p>Signature </p> <p>Month Day Year <u>12 30 16</u></p>
<p>Transporter Acknowledgment of Receipt of Materials</p>	
<p>Transporter 2 Company Name</p> <p>Transporter 2 Printed/Typed Name</p>	<p>Phone#</p> <p>Signature</p> <p>Month Day Year</p>
<p>Transporter Acknowledgment of Receipt of Materials</p>	

<p>Designated Facility Name and Site Address DEMENNO KERDOON 2000 N. ALAMEDA ST. COMPTON, CA 90222</p>	<p>Phone# 310-537-7100</p>	
Printed/Typed Name	Signature	Month Day Year
<p>Designated Facility Owner or Operator: Certification of receipt of materials covered by this data form.</p>		

GENERATOR

TRANSPORTER

RECEIVING FACILITY

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: 440-171279-1

Client Project/Site: Shell- 4411 Foothill Blvd., Oakland

For:

AECOM Technical Services Inc.

300 Lakeside Drive

Suite 400

Oakland, California 94612

Attn: Sara Heikkila



Authorized for release by:

1/12/2017 2:25:33 PM

Heather Clark, Project Manager I

(949)261-1022

heather.clark@testamericainc.com

LINKS

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results through

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Have a Question?



Visit us at:

www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Sample Summary

Client: AECOM Technical Services Inc.
Project/Site: Shell- 4411 Foothill Blvd., Oakland

TestAmerica Job ID: 440-171279-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
440-171279-1	S-6	Water	12/23/16 10:35	12/28/16 09:30
440-171279-2	S-7	Water	12/23/16 11:10	12/28/16 09:30
440-171279-3	S-8	Water	12/23/16 12:40	12/28/16 09:30
440-171279-4	S-9	Water	12/23/16 09:45	12/28/16 09:30
440-171279-5	S-10	Water	12/23/16 08:50	12/28/16 09:30
440-171279-6	S-11	Water	12/23/16 08:30	12/28/16 09:30
440-171279-7	S-12	Water	12/23/16 09:10	12/28/16 09:30
440-171279-8	S-13	Water	12/23/16 12:30	12/28/16 09:30
440-171279-9	S-14	Water	12/23/16 12:20	12/28/16 09:30



Case Narrative

Client: AECOM Technical Services Inc.
Project/Site: Shell- 4411 Foothill Blvd., Oakland

TestAmerica Job ID: 440-171279-1

Job ID: 440-171279-1

Laboratory: TestAmerica Irvine

Narrative

Job Narrative 440-171279-1

Comments

No additional comments.

Receipt

The samples were received on 12/28/2016 9:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 1.0° C and 3.4° C.

GC/MS VOA

Method(s) 8260B/CA_LUFTMS: The Gasoline Range Organics (GRO) concentration reported for the following sample is due to the presence of discrete peak: S-7 (440-171279-2). Benzene.

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

GC Semi VOA

Method(s) 8015B: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with batch preparation batch 440-378790 and analytical batch 440-378870 . The laboratory control sample (LCS) was performed in duplicate to provide precision data for this batch. (LCS 440-378790/2-A)

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

Organic Prep

No analytical or quality issues were noted, other than those described 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 Results

Client: AECOM Technical Services Inc.
Project/Site: Shell- 4411 Foothill Blvd., Oakland

TestAmerica Job ID: 440-171279-1

Client Sample ID: S-6

Date Collected: 12/23/16 10:35

Date Received: 12/28/16 09:30

Lab Sample ID: 440-171279-1

Matrix: Water

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)	5400		1000		ug/L			01/03/17 16:47	20
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	105		76 - 132					01/03/17 16:47	20
4-Bromofluorobenzene (Surr)	107		80 - 120					01/03/17 16:47	20
Toluene-d8 (Surr)	111		80 - 128					01/03/17 16:47	20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	83		10		ug/L			01/03/17 16:47	20
Isopropyl Ether (DIPE)	ND		10		ug/L			01/03/17 16:47	20
Ethanol	ND		3000		ug/L			01/03/17 16:47	20
Ethyl-t-butyl ether (ETBE)	ND		10		ug/L			01/03/17 16:47	20
Ethylbenzene	13		10		ug/L			01/03/17 16:47	20
m,p-Xylene	ND		20		ug/L			01/03/17 16:47	20
Methyl-t-Butyl Ether (MTBE)	ND		10		ug/L			01/03/17 16:47	20
o-Xylene	ND		10		ug/L			01/03/17 16:47	20
Tert-amyl-methyl ether (TAME)	ND		10		ug/L			01/03/17 16:47	20
tert-Butyl alcohol (TBA)	ND		200		ug/L			01/03/17 16:47	20
Toluene	ND		10		ug/L			01/03/17 16:47	20
Xylenes, Total	ND		20		ug/L			01/03/17 16:47	20
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		80 - 120					01/03/17 16:47	20
Dibromofluoromethane (Surr)	105		76 - 132					01/03/17 16:47	20
Toluene-d8 (Surr)	111		80 - 128					01/03/17 16:47	20

Method: 8015B - Diesel Range Organics (DRO) (GC) Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C28	1.8		0.047		mg/L		12/29/16 06:22	12/29/16 18:53	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
n-Octacosane	57		45 - 120				12/29/16 06:22	12/29/16 18:53	1

Client Sample ID: S-7

Date Collected: 12/23/16 11:10

Date Received: 12/28/16 09:30

Lab Sample ID: 440-171279-2

Matrix: Water

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)	13000		5000		ug/L			01/04/17 15:40	100
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	110		76 - 132					01/04/17 15:40	100
4-Bromofluorobenzene (Surr)	101		80 - 120					01/04/17 15:40	100
Toluene-d8 (Surr)	108		80 - 128					01/04/17 15:40	100

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	6300		50		ug/L			01/04/17 15:40	100

TestAmerica Irvine

Client Sample Results

Client: AECOM Technical Services Inc.
Project/Site: Shell- 4411 Foothill Blvd., Oakland

TestAmerica Job ID: 440-171279-1

Client Sample ID: S-7

Date Collected: 12/23/16 11:10

Date Received: 12/28/16 09:30

Lab Sample ID: 440-171279-2

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropyl Ether (DIPE)	ND		50		ug/L			01/04/17 15:40	100
Ethanol	ND		15000		ug/L			01/04/17 15:40	100
Ethyl-t-butyl ether (ETBE)	ND		50		ug/L			01/04/17 15:40	100
Ethylbenzene	270		50		ug/L			01/04/17 15:40	100
m,p-Xylene	610		100		ug/L			01/04/17 15:40	100
Methyl-t-Butyl Ether (MTBE)	86		50		ug/L			01/04/17 15:40	100
o-Xylene	120		50		ug/L			01/04/17 15:40	100
Tert-amyl-methyl ether (TAME)	ND		50		ug/L			01/04/17 15:40	100
tert-Butyl alcohol (TBA)	ND		1000		ug/L			01/04/17 15:40	100
Toluene	250		50		ug/L			01/04/17 15:40	100
Xylenes, Total	730		100		ug/L			01/04/17 15:40	100

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		80 - 120		01/04/17 15:40	100
Dibromofluoromethane (Surr)	110		76 - 132		01/04/17 15:40	100
Toluene-d8 (Surr)	108		80 - 128		01/04/17 15:40	100

Method: 8015B - Diesel Range Organics (DRO) (GC) Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C28	0.54		0.048		mg/L		12/29/16 06:22	12/29/16 19:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
n-Octacosane	47		45 - 120	12/29/16 06:22	12/29/16 19:13	1

Client Sample ID: S-8

Date Collected: 12/23/16 12:40

Date Received: 12/28/16 09:30

Lab Sample ID: 440-171279-3

Matrix: Water

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)	28000		13000		ug/L			01/03/17 17:42	250

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	111		76 - 132		01/03/17 17:42	250
4-Bromofluorobenzene (Surr)	107		80 - 120		01/03/17 17:42	250
Toluene-d8 (Surr)	111		80 - 128		01/03/17 17:42	250

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	7600		130		ug/L			01/03/17 17:42	250
Isopropyl Ether (DIPE)	ND		130		ug/L			01/03/17 17:42	250
Ethanol	ND		38000		ug/L			01/03/17 17:42	250
Ethyl-t-butyl ether (ETBE)	ND		130		ug/L			01/03/17 17:42	250
Ethylbenzene	1000		130		ug/L			01/03/17 17:42	250
m,p-Xylene	3000		250		ug/L			01/03/17 17:42	250
Methyl-t-Butyl Ether (MTBE)	ND		130		ug/L			01/03/17 17:42	250
o-Xylene	450		130		ug/L			01/03/17 17:42	250
Tert-amyl-methyl ether (TAME)	ND		130		ug/L			01/03/17 17:42	250
tert-Butyl alcohol (TBA)	ND		2500		ug/L			01/03/17 17:42	250
Toluene	830		130		ug/L			01/03/17 17:42	250

TestAmerica Irvine

Client Sample Results

Client: AECOM Technical Services Inc.
 Project/Site: Shell- 4411 Foothill Blvd., Oakland

TestAmerica Job ID: 440-171279-1

Client Sample ID: S-8

Date Collected: 12/23/16 12:40

Date Received: 12/28/16 09:30

Lab Sample ID: 440-171279-3

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	3500		250		ug/L			01/03/17 17:42	250
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		80 - 120					01/03/17 17:42	250
Dibromofluoromethane (Surr)	111		76 - 132					01/03/17 17:42	250
Toluene-d8 (Surr)	111		80 - 128					01/03/17 17:42	250

Method: 8015B - Diesel Range Organics (DRO) (GC) Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C28	1.9		0.047		mg/L		12/29/16 06:22	12/29/16 20:13	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
n-Octacosane	70		45 - 120				12/29/16 06:22	12/29/16 20:13	1

Client Sample ID: S-9

Date Collected: 12/23/16 09:45

Date Received: 12/28/16 09:30

Lab Sample ID: 440-171279-4

Matrix: Water

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)	3200		50		ug/L			01/03/17 14:57	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	109		76 - 132					01/03/17 14:57	1
4-Bromofluorobenzene (Surr)	105		80 - 120					01/03/17 14:57	1
Toluene-d8 (Surr)	113		80 - 128					01/03/17 14:57	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	4.2		0.50		ug/L			01/03/17 14:57	1
Isopropyl Ether (DIPE)	ND		0.50		ug/L			01/03/17 14:57	1
Ethanol	ND		150		ug/L			01/03/17 14:57	1
Ethyl-t-butyl ether (ETBE)	ND		0.50		ug/L			01/03/17 14:57	1
Ethylbenzene	8.0		0.50		ug/L			01/03/17 14:57	1
m,p-Xylene	34		1.0		ug/L			01/03/17 14:57	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50		ug/L			01/03/17 14:57	1
o-Xylene	3.9		0.50		ug/L			01/03/17 14:57	1
Tert-amyl-methyl ether (TAME)	ND		0.50		ug/L			01/03/17 14:57	1
tert-Butyl alcohol (TBA)	ND		10		ug/L			01/03/17 14:57	1
Toluene	11		0.50		ug/L			01/03/17 14:57	1
Xylenes, Total	38		1.0		ug/L			01/03/17 14:57	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		80 - 120					01/03/17 14:57	1
Dibromofluoromethane (Surr)	109		76 - 132					01/03/17 14:57	1
Toluene-d8 (Surr)	113		80 - 128					01/03/17 14:57	1

Method: 8015B - Diesel Range Organics (DRO) (GC) Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C28	0.44		0.048		mg/L		12/29/16 06:22	12/29/16 17:53	1

TestAmerica Irvine

Client Sample Results

Client: AECOM Technical Services Inc.
Project/Site: Shell- 4411 Foothill Blvd., Oakland

TestAmerica Job ID: 440-171279-1

Client Sample ID: S-9
Date Collected: 12/23/16 09:45
Date Received: 12/28/16 09:30

Lab Sample ID: 440-171279-4
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>n</i> -Octacosane	63		45 - 120	12/29/16 06:22	12/29/16 17:53	1

Client Sample ID: S-10
Date Collected: 12/23/16 08:50
Date Received: 12/28/16 09:30

Lab Sample ID: 440-171279-5
Matrix: Water

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)	51		50		ug/L			01/03/17 15:24	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>Dibromofluoromethane (Surr)</i>	101		76 - 132					01/03/17 15:24	1
<i>4-Bromofluorobenzene (Surr)</i>	101		80 - 120					01/03/17 15:24	1
<i>Toluene-d8 (Surr)</i>	112		80 - 128					01/03/17 15:24	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			01/03/17 15:24	1
Isopropyl Ether (DIPE)	ND		0.50		ug/L			01/03/17 15:24	1
Ethanol	ND		150		ug/L			01/03/17 15:24	1
Ethyl-t-butyl ether (ETBE)	ND		0.50		ug/L			01/03/17 15:24	1
Ethylbenzene	ND		0.50		ug/L			01/03/17 15:24	1
m,p-Xylene	ND		1.0		ug/L			01/03/17 15:24	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50		ug/L			01/03/17 15:24	1
o-Xylene	ND		0.50		ug/L			01/03/17 15:24	1
Tert-amyl-methyl ether (TAME)	ND		0.50		ug/L			01/03/17 15:24	1
tert-Butyl alcohol (TBA)	ND		10		ug/L			01/03/17 15:24	1
Toluene	ND		0.50		ug/L			01/03/17 15:24	1
Xylenes, Total	ND		1.0		ug/L			01/03/17 15:24	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>4-Bromofluorobenzene (Surr)</i>	101		80 - 120					01/03/17 15:24	1
<i>Dibromofluoromethane (Surr)</i>	101		76 - 132					01/03/17 15:24	1
<i>Toluene-d8 (Surr)</i>	112		80 - 128					01/03/17 15:24	1

Method: 8015B - Diesel Range Organics (DRO) (GC) Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C28	0.060		0.048		mg/L		12/29/16 06:22	12/29/16 19:33	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>n</i> -Octacosane	70		45 - 120				12/29/16 06:22	12/29/16 19:33	1

Client Sample ID: S-11
Date Collected: 12/23/16 08:30
Date Received: 12/28/16 09:30

Lab Sample ID: 440-171279-6
Matrix: Water

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			01/03/17 15:52	1

TestAmerica Irvine

Client Sample Results

Client: AECOM Technical Services Inc.
Project/Site: Shell- 4411 Foothill Blvd., Oakland

TestAmerica Job ID: 440-171279-1

Client Sample ID: S-11

Date Collected: 12/23/16 08:30

Date Received: 12/28/16 09:30

Lab Sample ID: 440-171279-6

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	109		76 - 132		01/03/17 15:52	1
4-Bromofluorobenzene (Surr)	99		80 - 120		01/03/17 15:52	1
Toluene-d8 (Surr)	114		80 - 128		01/03/17 15:52	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			01/03/17 15:52	1
Isopropyl Ether (DIPE)	ND		0.50		ug/L			01/03/17 15:52	1
Ethanol	ND		150		ug/L			01/03/17 15:52	1
Ethyl-t-butyl ether (ETBE)	ND		0.50		ug/L			01/03/17 15:52	1
Ethylbenzene	ND		0.50		ug/L			01/03/17 15:52	1
m,p-Xylene	ND		1.0		ug/L			01/03/17 15:52	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50		ug/L			01/03/17 15:52	1
o-Xylene	ND		0.50		ug/L			01/03/17 15:52	1
Tert-amyl-methyl ether (TAME)	ND		0.50		ug/L			01/03/17 15:52	1
tert-Butyl alcohol (TBA)	ND		10		ug/L			01/03/17 15:52	1
Toluene	ND		0.50		ug/L			01/03/17 15:52	1
Xylenes, Total	ND		1.0		ug/L			01/03/17 15:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		80 - 120		01/03/17 15:52	1
Dibromofluoromethane (Surr)	109		76 - 132		01/03/17 15:52	1
Toluene-d8 (Surr)	114		80 - 128		01/03/17 15:52	1

Method: 8015B - Diesel Range Organics (DRO) (GC) Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C28	0.066		0.049		mg/L		12/29/16 06:22	12/29/16 19:53	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
n-Octacosane	72		45 - 120	12/29/16 06:22	12/29/16 19:53	1

Client Sample ID: S-12

Date Collected: 12/23/16 09:10

Date Received: 12/28/16 09:30

Lab Sample ID: 440-171279-7

Matrix: Water

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)	310		50		ug/L			01/03/17 16:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	103		76 - 132		01/03/17 16:19	1
4-Bromofluorobenzene (Surr)	106		80 - 120		01/03/17 16:19	1
Toluene-d8 (Surr)	117		80 - 128		01/03/17 16:19	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			01/03/17 16:19	1
Isopropyl Ether (DIPE)	2.0		0.50		ug/L			01/03/17 16:19	1
Ethanol	ND		150		ug/L			01/03/17 16:19	1
Ethyl-t-butyl ether (ETBE)	ND		0.50		ug/L			01/03/17 16:19	1
Ethylbenzene	ND		0.50		ug/L			01/03/17 16:19	1

TestAmerica Irvine

Client Sample Results

Client: AECOM Technical Services Inc.
Project/Site: Shell- 4411 Foothill Blvd., Oakland

TestAmerica Job ID: 440-171279-1

Client Sample ID: S-12

Date Collected: 12/23/16 09:10

Date Received: 12/28/16 09:30

Lab Sample ID: 440-171279-7

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
m,p-Xylene	ND		1.0		ug/L			01/03/17 16:19	1
Methyl-t-Butyl Ether (MTBE)	0.80		0.50		ug/L			01/03/17 16:19	1
o-Xylene	ND		0.50		ug/L			01/03/17 16:19	1
Tert-amyl-methyl ether (TAME)	ND		0.50		ug/L			01/03/17 16:19	1
tert-Butyl alcohol (TBA)	11		10		ug/L			01/03/17 16:19	1
Toluene	ND		0.50		ug/L			01/03/17 16:19	1
Xylenes, Total	ND		1.0		ug/L			01/03/17 16:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		80 - 120		01/03/17 16:19	1
Dibromofluoromethane (Surr)	103		76 - 132		01/03/17 16:19	1
Toluene-d8 (Surr)	117		80 - 128		01/03/17 16:19	1

Method: 8015B - Diesel Range Organics (DRO) (GC) Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C28	0.14		0.048		mg/L		12/29/16 06:22	12/29/16 18:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
n-Octacosane	79		45 - 120	12/29/16 06:22	12/29/16 18:13	1

Client Sample ID: S-13

Date Collected: 12/23/16 12:30

Date Received: 12/28/16 09:30

Lab Sample ID: 440-171279-8

Matrix: Water

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)	24000		5000		ug/L			01/04/17 01:33	100

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	103		76 - 132		01/04/17 01:33	100
4-Bromofluorobenzene (Surr)	96		80 - 120		01/04/17 01:33	100
Toluene-d8 (Surr)	106		80 - 128		01/04/17 01:33	100

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	200		50		ug/L			01/04/17 01:33	100
Isopropyl Ether (DIPE)	ND		50		ug/L			01/04/17 01:33	100
Ethanol	ND		15000		ug/L			01/04/17 01:33	100
Ethyl-t-butyl ether (ETBE)	ND		50		ug/L			01/04/17 01:33	100
Ethylbenzene	1500		50		ug/L			01/04/17 01:33	100
m,p-Xylene	4900		100		ug/L			01/04/17 01:33	100
Methyl-t-Butyl Ether (MTBE)	ND		50		ug/L			01/04/17 01:33	100
o-Xylene	680		50		ug/L			01/04/17 01:33	100
Tert-amyl-methyl ether (TAME)	ND		50		ug/L			01/04/17 01:33	100
tert-Butyl alcohol (TBA)	ND		1000		ug/L			01/04/17 01:33	100
Toluene	570		50		ug/L			01/04/17 01:33	100
Xylenes, Total	5600		100		ug/L			01/04/17 01:33	100

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		80 - 120		01/04/17 01:33	100

TestAmerica Irvine

Client Sample Results

Client: AECOM Technical Services Inc.
 Project/Site: Shell- 4411 Foothill Blvd., Oakland

TestAmerica Job ID: 440-171279-1

Client Sample ID: S-13

Date Collected: 12/23/16 12:30

Date Received: 12/28/16 09:30

Lab Sample ID: 440-171279-8

Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	103		76 - 132		01/04/17 01:33	100
Toluene-d8 (Surr)	106		80 - 128		01/04/17 01:33	100

Client Sample ID: S-14

Date Collected: 12/23/16 12:20

Date Received: 12/28/16 09:30

Lab Sample ID: 440-171279-9

Matrix: Water

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)	1900		50		ug/L			01/04/17 16:08	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	107		76 - 132		01/04/17 16:08	1
4-Bromofluorobenzene (Surr)	102		80 - 120		01/04/17 16:08	1
Toluene-d8 (Surr)	107		80 - 128		01/04/17 16:08	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	53		0.50		ug/L			01/04/17 16:08	1
Isopropyl Ether (DIPE)	ND		0.50		ug/L			01/04/17 16:08	1
Ethanol	ND		150		ug/L			01/04/17 16:08	1
Ethyl-t-butyl ether (ETBE)	ND		0.50		ug/L			01/04/17 16:08	1
Ethylbenzene	5.4		0.50		ug/L			01/04/17 16:08	1
m,p-Xylene	6.7		1.0		ug/L			01/04/17 16:08	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50		ug/L			01/04/17 16:08	1
o-Xylene	0.69		0.50		ug/L			01/04/17 16:08	1
Tert-amyl-methyl ether (TAME)	ND		0.50		ug/L			01/04/17 16:08	1
tert-Butyl alcohol (TBA)	ND		10		ug/L			01/04/17 16:08	1
Toluene	2.2		0.50		ug/L			01/04/17 16:08	1
Xylenes, Total	7.4		1.0		ug/L			01/04/17 16:08	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		80 - 120		01/04/17 16:08	1
Dibromofluoromethane (Surr)	107		76 - 132		01/04/17 16:08	1
Toluene-d8 (Surr)	107		80 - 128		01/04/17 16:08	1

TestAmerica Irvine

Method Summary

Client: AECOM Technical Services Inc.
Project/Site: Shell- 4411 Foothill Blvd., Oakland

TestAmerica Job ID: 440-171279-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL IRV
8260B/CA_LUFTM S	Volatile Organic Compounds by GC/MS	SW846	TAL IRV
8015B	Diesel Range Organics (DRO) (GC) Low Level	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- 4411 Foothill Blvd., Oakland

TestAmerica Job ID: 440-171279-1

Client Sample ID: S-6

Date Collected: 12/23/16 10:35

Date Received: 12/28/16 09:30

Lab Sample ID: 440-171279-1

Matrix: 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	379400	01/03/17 16:47	TCN	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTV S		20	10 mL	10 mL	379401	01/03/17 16:47	TCN	TAL IRV
Total/NA	Prep	3510C			1055 mL	1 mL	378790	12/29/16 06:22	L2A	TAL IRV
Total/NA	Analysis	8015B		1			378868	12/29/16 18:53	LMB	TAL IRV

Client Sample ID: S-7

Date Collected: 12/23/16 11:10

Date Received: 12/28/16 09:30

Lab Sample ID: 440-171279-2

Matrix: 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		100	10 mL	10 mL	379672	01/04/17 15:40	HR	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTV S		100	10 mL	10 mL	379673	01/04/17 15:40	HR	TAL IRV
Total/NA	Prep	3510C			1045 mL	1 mL	378790	12/29/16 06:22	L2A	TAL IRV
Total/NA	Analysis	8015B		1			378868	12/29/16 19:13	LMB	TAL IRV

Client Sample ID: S-8

Date Collected: 12/23/16 12:40

Date Received: 12/28/16 09:30

Lab Sample ID: 440-171279-3

Matrix: 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		250	10 mL	10 mL	379400	01/03/17 17:42	TCN	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTV S		250	10 mL	10 mL	379401	01/03/17 17:42	TCN	TAL IRV
Total/NA	Prep	3510C			1055 mL	1 mL	378790	12/29/16 06:22	L2A	TAL IRV
Total/NA	Analysis	8015B		1			378870	12/29/16 20:13	LMB	TAL IRV

Client Sample ID: S-9

Date Collected: 12/23/16 09:45

Date Received: 12/28/16 09:30

Lab Sample ID: 440-171279-4

Matrix: 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	379400	01/03/17 14:57	TCN	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTV S		1	10 mL	10 mL	379401	01/03/17 14:57	TCN	TAL IRV
Total/NA	Prep	3510C			1045 mL	1 mL	378790	12/29/16 06:22	L2A	TAL IRV
Total/NA	Analysis	8015B		1			378868	12/29/16 17:53	LMB	TAL IRV

TestAmerica Irvine

Lab Chronicle

Client: AECOM Technical Services Inc.
Project/Site: Shell- 4411 Foothill Blvd., Oakland

TestAmerica Job ID: 440-171279-1

Client Sample ID: S-10

Date Collected: 12/23/16 08:50

Date Received: 12/28/16 09:30

Lab Sample ID: 440-171279-5

Matrix: 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	379400	01/03/17 15:24	TCN	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTV S		1	10 mL	10 mL	379401	01/03/17 15:24	TCN	TAL IRV
Total/NA	Prep	3510C			1040 mL	1 mL	378790	12/29/16 06:22	L2A	TAL IRV
Total/NA	Analysis	8015B		1			378870	12/29/16 19:33	LMB	TAL IRV

Client Sample ID: S-11

Date Collected: 12/23/16 08:30

Date Received: 12/28/16 09:30

Lab Sample ID: 440-171279-6

Matrix: 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	379400	01/03/17 15:52	TCN	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTV S		1	10 mL	10 mL	379401	01/03/17 15:52	TCN	TAL IRV
Total/NA	Prep	3510C			1030 mL	1 mL	378790	12/29/16 06:22	L2A	TAL IRV
Total/NA	Analysis	8015B		1			378870	12/29/16 19:53	LMB	TAL IRV

Client Sample ID: S-12

Date Collected: 12/23/16 09:10

Date Received: 12/28/16 09:30

Lab Sample ID: 440-171279-7

Matrix: 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	379400	01/03/17 16:19	TCN	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTV S		1	10 mL	10 mL	379401	01/03/17 16:19	TCN	TAL IRV
Total/NA	Prep	3510C			1045 mL	1 mL	378790	12/29/16 06:22	L2A	TAL IRV
Total/NA	Analysis	8015B		1			378868	12/29/16 18:13	LMB	TAL IRV

Client Sample ID: S-13

Date Collected: 12/23/16 12:30

Date Received: 12/28/16 09:30

Lab Sample ID: 440-171279-8

Matrix: 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		100	10 mL	10 mL	379519	01/04/17 01:33	WK	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTV S		100	10 mL	10 mL	379520	01/04/17 01:33	WK	TAL IRV

Client Sample ID: S-14

Date Collected: 12/23/16 12:20

Date Received: 12/28/16 09:30

Lab Sample ID: 440-171279-9

Matrix: 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	379672	01/04/17 16:08	HR	TAL IRV

TestAmerica Irvine

Lab Chronicle

Client: AECOM Technical Services Inc.
Project/Site: Shell- 4411 Foothill Blvd., Oakland

TestAmerica Job ID: 440-171279-1

Client Sample ID: S-14

Lab Sample ID: 440-171279-9

Date Collected: 12/23/16 12:20

Matrix: Water

Date Received: 12/28/16 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTV S		1	10 mL	10 mL	379673	01/04/17 16:08	HR	TAL IRV

Laboratory References:

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

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13

QC Sample Results

Client: AECOM Technical Services Inc.
 Project/Site: Shell- 4411 Foothill Blvd., Oakland

TestAmerica Job ID: 440-171279-1

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

Lab Sample ID: MB 440-379400/5

Matrix: Water

Analysis Batch: 379400

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			01/03/17 09:53	1
Isopropyl Ether (DIPE)	ND		0.50		ug/L			01/03/17 09:53	1
Ethanol	ND		150		ug/L			01/03/17 09:53	1
Ethyl-t-butyl ether (ETBE)	ND		0.50		ug/L			01/03/17 09:53	1
Ethylbenzene	ND		0.50		ug/L			01/03/17 09:53	1
m,p-Xylene	ND		1.0		ug/L			01/03/17 09:53	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50		ug/L			01/03/17 09:53	1
o-Xylene	ND		0.50		ug/L			01/03/17 09:53	1
Tert-amyl-methyl ether (TAME)	ND		0.50		ug/L			01/03/17 09:53	1
tert-Butyl alcohol (TBA)	ND		10		ug/L			01/03/17 09:53	1
Toluene	ND		0.50		ug/L			01/03/17 09:53	1
Xylenes, Total	ND		1.0		ug/L			01/03/17 09:53	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		80 - 120		01/03/17 09:53	1
Dibromofluoromethane (Surr)	104		76 - 132		01/03/17 09:53	1
Toluene-d8 (Surr)	110		80 - 128		01/03/17 09:53	1

Lab Sample ID: LCS 440-379400/6

Matrix: Water

Analysis Batch: 379400

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	25.8		ug/L		103	68 - 130
Isopropyl Ether (DIPE)	25.0	29.5		ug/L		118	58 - 139
Ethanol	1000	1110		ug/L		111	50 - 149
Ethyl-t-butyl ether (ETBE)	25.0	27.9		ug/L		112	60 - 136
Ethylbenzene	25.0	25.6		ug/L		102	70 - 130
m,p-Xylene	25.0	26.4		ug/L		105	70 - 130
Methyl-t-Butyl Ether (MTBE)	25.0	26.8		ug/L		107	63 - 131
o-Xylene	25.0	27.3		ug/L		109	70 - 130
Tert-amyl-methyl ether (TAME)	25.0	26.6		ug/L		107	57 - 139
tert-Butyl alcohol (TBA)	250	281		ug/L		112	70 - 130
Toluene	25.0	25.0		ug/L		100	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	99		80 - 120
Dibromofluoromethane (Surr)	106		76 - 132
Toluene-d8 (Surr)	107		80 - 128

Lab Sample ID: 440-170887-B-13 MS

Matrix: Water

Analysis Batch: 379400

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.73		25.0	27.1		ug/L		106	66 - 130
Isopropyl Ether (DIPE)	21		25.0	50.4		ug/L		117	64 - 138

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QC Sample Results

Client: AECOM Technical Services Inc.
 Project/Site: Shell- 4411 Foothill Blvd., Oakland

TestAmerica Job ID: 440-171279-1

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

Lab Sample ID: 440-170887-B-13 MS

Matrix: Water

Analysis Batch: 379400

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethanol	ND		1000	975		ug/L		97	54 - 150
Ethyl-t-butyl ether (ETBE)	ND		25.0	28.2		ug/L		113	70 - 130
Ethylbenzene	ND		25.0	24.6		ug/L		98	70 - 130
m,p-Xylene	ND		25.0	25.6		ug/L		102	70 - 133
Methyl-t-Butyl Ether (MTBE)	1.2		25.0	28.7		ug/L		110	70 - 130
o-Xylene	ND		25.0	25.6		ug/L		102	70 - 133
Tert-amyl-methyl ether (TAME)	ND		25.0	26.9		ug/L		107	68 - 133
tert-Butyl alcohol (TBA)	ND		250	260		ug/L		104	70 - 130
Toluene	ND		25.0	24.6		ug/L		98	70 - 130

Surrogate	MS %Recovery	MS Qualifier	MS Limits
4-Bromofluorobenzene (Surr)	101		80 - 120
Dibromofluoromethane (Surr)	105		76 - 132
Toluene-d8 (Surr)	102		80 - 128

Lab Sample ID: 440-170887-B-13 MSD

Matrix: Water

Analysis Batch: 379400

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.73		25.0	27.7		ug/L		108	66 - 130	2	20
Isopropyl Ether (DIPE)	21		25.0	51.3		ug/L		121	64 - 138	2	25
Ethanol	ND		1000	1050		ug/L		105	54 - 150	8	30
Ethyl-t-butyl ether (ETBE)	ND		25.0	29.2		ug/L		117	70 - 130	3	25
Ethylbenzene	ND		25.0	24.9		ug/L		99	70 - 130	1	20
m,p-Xylene	ND		25.0	26.1		ug/L		104	70 - 133	2	25
Methyl-t-Butyl Ether (MTBE)	1.2		25.0	29.4		ug/L		113	70 - 130	2	25
o-Xylene	ND		25.0	26.5		ug/L		106	70 - 133	4	20
Tert-amyl-methyl ether (TAME)	ND		25.0	27.5		ug/L		110	68 - 133	2	30
tert-Butyl alcohol (TBA)	ND		250	270		ug/L		108	70 - 130	4	25
Toluene	ND		25.0	25.3		ug/L		101	70 - 130	3	20

Surrogate	MSD %Recovery	MSD Qualifier	MSD Limits
4-Bromofluorobenzene (Surr)	100		80 - 120
Dibromofluoromethane (Surr)	105		76 - 132
Toluene-d8 (Surr)	104		80 - 128

Lab Sample ID: MB 440-379519/4

Matrix: Water

Analysis Batch: 379519

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			01/03/17 19:35	1
Isopropyl Ether (DIPE)	ND		0.50		ug/L			01/03/17 19:35	1
Ethanol	ND		150		ug/L			01/03/17 19:35	1
Ethyl-t-butyl ether (ETBE)	ND		0.50		ug/L			01/03/17 19:35	1
Ethylbenzene	ND		0.50		ug/L			01/03/17 19:35	1
m,p-Xylene	ND		1.0		ug/L			01/03/17 19:35	1

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QC Sample Results

Client: AECOM Technical Services Inc.
 Project/Site: Shell- 4411 Foothill Blvd., Oakland

TestAmerica Job ID: 440-171279-1

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

Lab Sample ID: MB 440-379519/4
Matrix: Water
Analysis Batch: 379519

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl-t-Butyl Ether (MTBE)	ND		0.50		ug/L			01/03/17 19:35	1
o-Xylene	ND		0.50		ug/L			01/03/17 19:35	1
Tert-amyl-methyl ether (TAME)	ND		0.50		ug/L			01/03/17 19:35	1
tert-Butyl alcohol (TBA)	ND		10		ug/L			01/03/17 19:35	1
Toluene	ND		0.50		ug/L			01/03/17 19:35	1
Xylenes, Total	ND		1.0		ug/L			01/03/17 19:35	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		80 - 120		01/03/17 19:35	1
Dibromofluoromethane (Surr)	99		76 - 132		01/03/17 19:35	1
Toluene-d8 (Surr)	104		80 - 128		01/03/17 19:35	1

Lab Sample ID: LCS 440-379519/5
Matrix: Water
Analysis Batch: 379519

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	26.3		ug/L		105	68 - 130
Isopropyl Ether (DIPE)	25.0	32.9		ug/L		132	58 - 139
Ethanol	1000	992		ug/L		99	50 - 149
Ethyl-t-butyl ether (ETBE)	25.0	29.1		ug/L		117	60 - 136
Ethylbenzene	25.0	25.7		ug/L		103	70 - 130
m,p-Xylene	25.0	27.1		ug/L		108	70 - 130
Methyl-t-Butyl Ether (MTBE)	25.0	29.8		ug/L		119	63 - 131
o-Xylene	25.0	27.6		ug/L		110	70 - 130
Tert-amyl-methyl ether (TAME)	25.0	26.9		ug/L		107	57 - 139
tert-Butyl alcohol (TBA)	250	260		ug/L		104	70 - 130
Toluene	25.0	26.8		ug/L		107	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	106		80 - 120
Dibromofluoromethane (Surr)	112		76 - 132
Toluene-d8 (Surr)	112		80 - 128

Lab Sample ID: 440-171714-A-7 MS
Matrix: Water
Analysis Batch: 379519

Client Sample ID: Matrix Spike
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
Isopropyl Ether (DIPE)	ND		25.0	30.4		ug/L		121	64 - 138
Ethanol	ND		1000	941		ug/L		94	54 - 150
Ethyl-t-butyl ether (ETBE)	ND		25.0	28.4		ug/L		114	70 - 130
Ethylbenzene	ND		25.0	23.2		ug/L		93	70 - 130
m,p-Xylene	ND		25.0	24.5		ug/L		98	70 - 133
Methyl-t-Butyl Ether (MTBE)	1.0		25.0	31.7		ug/L		123	70 - 130
o-Xylene	ND		25.0	25.4		ug/L		102	70 - 133
Tert-amyl-methyl ether (TAME)	ND		25.0	27.5		ug/L		110	68 - 133

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QC Sample Results

Client: AECOM Technical Services Inc.
Project/Site: Shell- 4411 Foothill Blvd., Oakland

TestAmerica Job ID: 440-171279-1

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

Lab Sample ID: 440-171714-A-7 MS

Matrix: Water

Analysis Batch: 379519

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
tert-Butyl alcohol (TBA)	ND		250	258		ug/L		103	70 - 130
Toluene	ND		25.0	25.7		ug/L		103	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
4-Bromofluorobenzene (Surr)	101		80 - 120						
Dibromofluoromethane (Surr)	107		76 - 132						
Toluene-d8 (Surr)	106		80 - 128						

Lab Sample ID: 440-171714-A-7 MSD

Matrix: Water

Analysis Batch: 379519

Client Sample ID: Matrix Spike Duplicate

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	24.8		ug/L		99	66 - 130	7	20
Isopropyl Ether (DIPE)	ND		25.0	27.4		ug/L		110	64 - 138	10	25
Ethanol	ND		1000	932		ug/L		93	54 - 150	1	30
Ethyl-t-butyl ether (ETBE)	ND		25.0	26.1		ug/L		104	70 - 130	9	25
Ethylbenzene	ND		25.0	24.6		ug/L		98	70 - 130	6	20
m,p-Xylene	ND		25.0	25.9		ug/L		104	70 - 133	6	25
Methyl-t-Butyl Ether (MTBE)	1.0		25.0	27.2		ug/L		105	70 - 130	15	25
o-Xylene	ND		25.0	25.7		ug/L		103	70 - 133	1	20
Tert-amyl-methyl ether (TAME)	ND		25.0	27.1		ug/L		109	68 - 133	1	30
tert-Butyl alcohol (TBA)	ND		250	256		ug/L		102	70 - 130	1	25
Toluene	ND		25.0	23.5		ug/L		94	70 - 130	9	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
4-Bromofluorobenzene (Surr)	102		80 - 120								
Dibromofluoromethane (Surr)	100		76 - 132								
Toluene-d8 (Surr)	99		80 - 128								

Lab Sample ID: MB 440-379672/5

Matrix: Water

Analysis Batch: 379672

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			01/04/17 08:46	1
Isopropyl Ether (DIPE)	ND		0.50		ug/L			01/04/17 08:46	1
Ethanol	ND		150		ug/L			01/04/17 08:46	1
Ethyl-t-butyl ether (ETBE)	ND		0.50		ug/L			01/04/17 08:46	1
Ethylbenzene	ND		0.50		ug/L			01/04/17 08:46	1
m,p-Xylene	ND		1.0		ug/L			01/04/17 08:46	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50		ug/L			01/04/17 08:46	1
o-Xylene	ND		0.50		ug/L			01/04/17 08:46	1
Tert-amyl-methyl ether (TAME)	ND		0.50		ug/L			01/04/17 08:46	1
tert-Butyl alcohol (TBA)	ND		10		ug/L			01/04/17 08:46	1
Toluene	ND		0.50		ug/L			01/04/17 08:46	1
Xylenes, Total	ND		1.0		ug/L			01/04/17 08:46	1

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QC Sample Results

Client: AECOM Technical Services Inc.
 Project/Site: Shell- 4411 Foothill Blvd., Oakland

TestAmerica Job ID: 440-171279-1

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

Lab Sample ID: MB 440-379672/5
Matrix: Water
Analysis Batch: 379672

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

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
4-Bromofluorobenzene (Surr)	100		80 - 120		01/04/17 08:46	1
Dibromofluoromethane (Surr)	110		76 - 132		01/04/17 08:46	1
Toluene-d8 (Surr)	106		80 - 128		01/04/17 08:46	1

Lab Sample ID: LCS 440-379672/6
Matrix: Water
Analysis Batch: 379672

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Isopropyl Ether (DIPE)	25.0	28.0		ug/L		112	58 - 139
Ethanol	1000	996		ug/L		100	50 - 149
Ethyl-t-butyl ether (ETBE)	25.0	28.4		ug/L		114	60 - 136
Ethylbenzene	25.0	25.5		ug/L		102	70 - 130
m,p-Xylene	25.0	26.2		ug/L		105	70 - 130
Methyl-t-Butyl Ether (MTBE)	25.0	27.9		ug/L		112	63 - 131
o-Xylene	25.0	26.9		ug/L		108	70 - 130
Tert-amyl-methyl ether (TAME)	25.0	27.0		ug/L		108	57 - 139
tert-Butyl alcohol (TBA)	250	263		ug/L		105	70 - 130
Toluene	25.0	25.0		ug/L		100	70 - 130

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	97		80 - 120
Dibromofluoromethane (Surr)	110		76 - 132
Toluene-d8 (Surr)	105		80 - 128

Lab Sample ID: 440-170920-C-2 MS
Matrix: Water
Analysis Batch: 379672

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Isopropyl Ether (DIPE)	ND		25.0	29.5		ug/L		118	64 - 138
Ethanol	ND		1000	948		ug/L		95	54 - 150
Ethyl-t-butyl ether (ETBE)	ND		25.0	29.9		ug/L		120	70 - 130
Ethylbenzene	ND		25.0	24.4		ug/L		98	70 - 130
m,p-Xylene	ND		25.0	24.8		ug/L		99	70 - 133
Methyl-t-Butyl Ether (MTBE)	ND		25.0	30.5		ug/L		122	70 - 130
o-Xylene	ND		25.0	25.8		ug/L		103	70 - 133
Tert-amyl-methyl ether (TAME)	ND		25.0	28.6		ug/L		114	68 - 133
tert-Butyl alcohol (TBA)	ND		250	263		ug/L		105	70 - 130
Toluene	ND		25.0	23.7		ug/L		95	70 - 130

Surrogate	MS MS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	97		80 - 120
Dibromofluoromethane (Surr)	111		76 - 132
Toluene-d8 (Surr)	100		80 - 128

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QC Sample Results

Client: AECOM Technical Services Inc.
Project/Site: Shell- 4411 Foothill Blvd., Oakland

TestAmerica Job ID: 440-171279-1

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

Lab Sample ID: 440-170920-C-2 MSD

Matrix: Water

Analysis Batch: 379672

Client Sample ID: Matrix Spike Duplicate

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	26.4		ug/L		106	66 - 130	2	20
Isopropyl Ether (DIPE)	ND		25.0	29.4		ug/L		118	64 - 138	0	25
Ethanol	ND		1000	980		ug/L		98	54 - 150	3	30
Ethyl-t-butyl ether (ETBE)	ND		25.0	29.4		ug/L		118	70 - 130	2	25
Ethylbenzene	ND		25.0	24.5		ug/L		98	70 - 130	0	20
m,p-Xylene	ND		25.0	24.9		ug/L		100	70 - 133	1	25
Methyl-t-Butyl Ether (MTBE)	ND		25.0	29.4		ug/L		117	70 - 130	4	25
o-Xylene	ND		25.0	25.7		ug/L		103	70 - 133	0	20
Tert-amyl-methyl ether (TAME)	ND		25.0	28.1		ug/L		112	68 - 133	2	30
tert-Butyl alcohol (TBA)	ND		250	271		ug/L		109	70 - 130	3	25
Toluene	ND		25.0	24.3		ug/L		97	70 - 130	3	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	99		80 - 120
Dibromofluoromethane (Surr)	110		76 - 132
Toluene-d8 (Surr)	100		80 - 128

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

Lab Sample ID: MB 440-379401/5

Matrix: Water

Analysis Batch: 379401

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			01/03/17 09:53	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	104		76 - 132		01/03/17 09:53	1
4-Bromofluorobenzene (Surr)	99		80 - 120		01/03/17 09:53	1
Toluene-d8 (Surr)	110		80 - 128		01/03/17 09:53	1

Lab Sample ID: LCS 440-379401/7

Matrix: Water

Analysis Batch: 379401

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	397		ug/L		79	55 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Dibromofluoromethane (Surr)	107		76 - 132
4-Bromofluorobenzene (Surr)	101		80 - 120
Toluene-d8 (Surr)	110		80 - 128

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QC Sample Results

Client: AECOM Technical Services Inc.
 Project/Site: Shell- 4411 Foothill Blvd., Oakland

TestAmerica Job ID: 440-171279-1

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

Lab Sample ID: 440-170887-B-13 MS

Matrix: Water
Analysis Batch: 379401

Client Sample ID: Matrix Spike
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)	96		1730	1620		ug/L		88	50 - 145
Surrogate	%Recovery	MS Qualifier	Limits						
Dibromofluoromethane (Surr)	105		76 - 132						
4-Bromofluorobenzene (Surr)	101		80 - 120						
Toluene-d8 (Surr)	102		80 - 128						

Lab Sample ID: 440-170887-B-13 MSD

Matrix: Water
Analysis Batch: 379401

Client Sample ID: Matrix Spike Duplicate
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)	96		1730	1610		ug/L		88	50 - 145	1	20
Surrogate	%Recovery	MSD Qualifier	Limits								
Dibromofluoromethane (Surr)	105		76 - 132								
4-Bromofluorobenzene (Surr)	100		80 - 120								
Toluene-d8 (Surr)	104		80 - 128								

Lab Sample ID: MB 440-379520/4

Matrix: Water
Analysis Batch: 379520

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			01/03/17 19:35	1
Surrogate	%Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	99		76 - 132					01/03/17 19:35	1
4-Bromofluorobenzene (Surr)	101		80 - 120					01/03/17 19:35	1
Toluene-d8 (Surr)	104		80 - 128					01/03/17 19:35	1

Lab Sample ID: LCS 440-379520/6

Matrix: Water
Analysis Batch: 379520

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	458		ug/L		92	55 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
Dibromofluoromethane (Surr)	103		76 - 132				
4-Bromofluorobenzene (Surr)	103		80 - 120				
Toluene-d8 (Surr)	100		80 - 128				

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QC Sample Results

Client: AECOM Technical Services Inc.
 Project/Site: Shell- 4411 Foothill Blvd., Oakland

TestAmerica Job ID: 440-171279-1

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

Lab Sample ID: 440-171714-A-7 MS

Matrix: Water
Analysis Batch: 379520

Client Sample ID: Matrix Spike
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	1600		ug/L		93	50 - 145
Surrogate	%Recovery	MS Qualifier	Limits						
Dibromofluoromethane (Surr)	107		76 - 132						
4-Bromofluorobenzene (Surr)	101		80 - 120						
Toluene-d8 (Surr)	106		80 - 128						

Lab Sample ID: 440-171714-A-7 MSD

Matrix: Water
Analysis Batch: 379520

Client Sample ID: Matrix Spike Duplicate
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	1460		ug/L		85	50 - 145	9	20
Surrogate	%Recovery	MSD Qualifier	Limits								
Dibromofluoromethane (Surr)	100		76 - 132								
4-Bromofluorobenzene (Surr)	102		80 - 120								
Toluene-d8 (Surr)	99		80 - 128								

Lab Sample ID: MB 440-379673/5

Matrix: Water
Analysis Batch: 379673

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			01/04/17 08:46	1
Surrogate	%Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	110		76 - 132					01/04/17 08:46	1
4-Bromofluorobenzene (Surr)	100		80 - 120					01/04/17 08:46	1
Toluene-d8 (Surr)	106		80 - 128					01/04/17 08:46	1

Lab Sample ID: LCS 440-379673/7

Matrix: Water
Analysis Batch: 379673

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	438		ug/L		88	55 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
Dibromofluoromethane (Surr)	109		76 - 132				
4-Bromofluorobenzene (Surr)	99		80 - 120				
Toluene-d8 (Surr)	108		80 - 128				

TestAmerica Irvine

QC Sample Results

Client: AECOM Technical Services Inc.
 Project/Site: Shell- 4411 Foothill Blvd., Oakland

TestAmerica Job ID: 440-171279-1

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

Lab Sample ID: 440-170920-C-2 MS

Matrix: Water
Analysis Batch: 379673

Client Sample ID: Matrix Spike
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	1640		ug/L		95	50 - 145
Surrogate	%Recovery	MS Qualifier	Limits						
Dibromofluoromethane (Surr)	111		76 - 132						
4-Bromofluorobenzene (Surr)	97		80 - 120						
Toluene-d8 (Surr)	100		80 - 128						

Lab Sample ID: 440-170920-C-2 MSD

Matrix: Water
Analysis Batch: 379673

Client Sample ID: Matrix Spike Duplicate
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	1600		ug/L		93	50 - 145	3	20
Surrogate	%Recovery	MSD Qualifier	Limits								
Dibromofluoromethane (Surr)	110		76 - 132								
4-Bromofluorobenzene (Surr)	99		80 - 120								
Toluene-d8 (Surr)	100		80 - 128								

Method: 8015B - Diesel Range Organics (DRO) (GC) Low Level

Lab Sample ID: MB 440-378790/1-A

Matrix: Water
Analysis Batch: 378870

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 378790

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C28	ND		0.050		mg/L		12/29/16 06:22	12/29/16 17:33	1
Surrogate	%Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
n-Octacosane	69		45 - 120				12/29/16 06:22	12/29/16 17:33	1

Lab Sample ID: LCS 440-378790/2-A

Matrix: Water
Analysis Batch: 378870

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 378790

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
C10-C28	1.00	0.683		mg/L		68	40 - 115
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
n-Octacosane	71		45 - 120				

TestAmerica Irvine

QC Sample Results

Client: AECOM Technical Services Inc.
 Project/Site: Shell- 4411 Foothill Blvd., Oakland

TestAmerica Job ID: 440-171279-1

Method: 8015B - Diesel Range Organics (DRO) (GC) Low Level (Continued)

Lab Sample ID: LCSD 440-378790/3-A
Matrix: Water
Analysis Batch: 378870

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 378790

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	RPD Limit
C10-C28	1.00	0.638		mg/L		64	40 - 115	7	25
Surrogate		%Recovery	Qualifier						Limits
<i>n-Octacosane</i>		70							45 - 120

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QC Association Summary

Client: AECOM Technical Services Inc.
 Project/Site: Shell- 4411 Foothill Blvd., Oakland

TestAmerica Job ID: 440-171279-1

GC/MS VOA

Analysis Batch: 379400

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-171279-1	S-6	Total/NA	Water	8260B	
440-171279-3	S-8	Total/NA	Water	8260B	
440-171279-4	S-9	Total/NA	Water	8260B	
440-171279-5	S-10	Total/NA	Water	8260B	
440-171279-6	S-11	Total/NA	Water	8260B	
440-171279-7	S-12	Total/NA	Water	8260B	
MB 440-379400/5	Method Blank	Total/NA	Water	8260B	
LCS 440-379400/6	Lab Control Sample	Total/NA	Water	8260B	
440-170887-B-13 MS	Matrix Spike	Total/NA	Water	8260B	
440-170887-B-13 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	

Analysis Batch: 379401

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-171279-1	S-6	Total/NA	Water	8260B/CA_LUFT MS	
440-171279-3	S-8	Total/NA	Water	8260B/CA_LUFT MS	
440-171279-4	S-9	Total/NA	Water	8260B/CA_LUFT MS	
440-171279-5	S-10	Total/NA	Water	8260B/CA_LUFT MS	
440-171279-6	S-11	Total/NA	Water	8260B/CA_LUFT MS	
440-171279-7	S-12	Total/NA	Water	8260B/CA_LUFT MS	
MB 440-379401/5	Method Blank	Total/NA	Water	8260B/CA_LUFT MS	
LCS 440-379401/7	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT MS	
440-170887-B-13 MS	Matrix Spike	Total/NA	Water	8260B/CA_LUFT MS	
440-170887-B-13 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B/CA_LUFT MS	

Analysis Batch: 379519

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-171279-8	S-13	Total/NA	Water	8260B	
MB 440-379519/4	Method Blank	Total/NA	Water	8260B	
LCS 440-379519/5	Lab Control Sample	Total/NA	Water	8260B	
440-171714-A-7 MS	Matrix Spike	Total/NA	Water	8260B	
440-171714-A-7 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	

Analysis Batch: 379520

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-171279-8	S-13	Total/NA	Water	8260B/CA_LUFT MS	
MB 440-379520/4	Method Blank	Total/NA	Water	8260B/CA_LUFT MS	
LCS 440-379520/6	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT MS	
440-171714-A-7 MS	Matrix Spike	Total/NA	Water	8260B/CA_LUFT MS	
440-171714-A-7 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B/CA_LUFT MS	

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QC Association Summary

Client: AECOM Technical Services Inc.
Project/Site: Shell- 4411 Foothill Blvd., Oakland

TestAmerica Job ID: 440-171279-1

GC/MS VOA (Continued)

Analysis Batch: 379672

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-171279-2	S-7	Total/NA	Water	8260B	
440-171279-9	S-14	Total/NA	Water	8260B	
MB 440-379672/5	Method Blank	Total/NA	Water	8260B	
LCS 440-379672/6	Lab Control Sample	Total/NA	Water	8260B	
440-170920-C-2 MS	Matrix Spike	Total/NA	Water	8260B	
440-170920-C-2 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	

Analysis Batch: 379673

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-171279-2	S-7	Total/NA	Water	8260B/CA_LUFT MS	
440-171279-9	S-14	Total/NA	Water	8260B/CA_LUFT MS	
MB 440-379673/5	Method Blank	Total/NA	Water	8260B/CA_LUFT MS	
LCS 440-379673/7	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT MS	
440-170920-C-2 MS	Matrix Spike	Total/NA	Water	8260B/CA_LUFT MS	
440-170920-C-2 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B/CA_LUFT MS	

GC Semi VOA

Prep Batch: 378790

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-171279-1	S-6	Total/NA	Water	3510C	
440-171279-2	S-7	Total/NA	Water	3510C	
440-171279-3	S-8	Total/NA	Water	3510C	
440-171279-4	S-9	Total/NA	Water	3510C	
440-171279-5	S-10	Total/NA	Water	3510C	
440-171279-6	S-11	Total/NA	Water	3510C	
440-171279-7	S-12	Total/NA	Water	3510C	
MB 440-378790/1-A	Method Blank	Total/NA	Water	3510C	
LCS 440-378790/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 440-378790/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 378868

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-171279-1	S-6	Total/NA	Water	8015B	378790
440-171279-2	S-7	Total/NA	Water	8015B	378790
440-171279-4	S-9	Total/NA	Water	8015B	378790
440-171279-7	S-12	Total/NA	Water	8015B	378790

Analysis Batch: 378870

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-171279-3	S-8	Total/NA	Water	8015B	378790
440-171279-5	S-10	Total/NA	Water	8015B	378790
440-171279-6	S-11	Total/NA	Water	8015B	378790
MB 440-378790/1-A	Method Blank	Total/NA	Water	8015B	378790
LCS 440-378790/2-A	Lab Control Sample	Total/NA	Water	8015B	378790
LCSD 440-378790/3-A	Lab Control Sample Dup	Total/NA	Water	8015B	378790

TestAmerica Irvine

Definitions/Glossary

Client: AECOM Technical Services Inc.
Project/Site: Shell- 4411 Foothill Blvd., Oakland

TestAmerica Job ID: 440-171279-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	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- 4411 Foothill Blvd., Oakland

TestAmerica Job ID: 440-171279-1

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

* Certification renewal pending - certification considered valid.

TestAmerica Irvine

LAB (LOCATION)

ACCUTEST ()
 CALSCIENCE ()
 ESTAMERICA ()
 Other ()

Lab Vendor #: 1364589 (TestAmerica)



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



Please Check Appropriate Box:

<input type="checkbox"/> BGW FDG	<input type="checkbox"/> PIPELINE	<input type="checkbox"/> RETAIL
<input type="checkbox"/> CHEMICALS	<input checked="" type="checkbox"/> CONSULTANT	<input type="checkbox"/> UBES
<input type="checkbox"/> TRANSPORTATION	<input type="checkbox"/> OTHER	

Print Bill To Contact Name: Shane Olton
 Planef Site or Project ID: 31733
 PO #: GSAP Project ID:
 USPG/00250, USRT/00885

CHECK IF NO INCIDENT # APPLIES
 DATE: 12-23-16
 PAGE: 1 of 1

SAMPLING COMPANY: Blaine Tech Services, Inc.
 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
 E-MAIL: bartgeb@blainetech.com

LOG CODE: BTSS
 SITE ADDRESS: Street and City: 4411 Foothill Blvd., Oakland, CA
 AECOM Project / Tab# Number: 60482424
 EDI 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: 10059562
 SAMPLER NAME(S) (Print): Darren Suto
 LAB USE ONLY:

TURNAROUND TIME (CALENDAR DAYS):
 STANDARD (14 DAY) DAYS DAYS DAYS 4 HOURS RESULTS NEEDED ON WEEKEND

LA - RWQCB REPORT FORMAT JUST 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:

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

Email invoice to USAPimaging@aecom.com

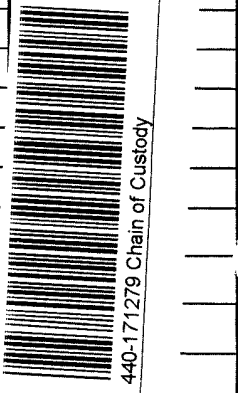
		REQUESTED ANALYSIS	
		UNIT COST	NON-UNIT COST
TPH-GRO, Purgeable (8260B)			
TPH-DRO, Extractable (8015M)			
BTEX (8260B)			
5 OXYS (8260B)			

FIELD NOTES:

TEMPERATURE ON RECEIPT °C

Container PID Readings or Laboratory Notes

LAB USE ONLY	Field Sample Identification	SAMPLING		MATRIX	PRESERVATIVE					NO. OF CONT.	REQUESTED ANALYSIS			
		DATE	TIME		HCL	HNO3	H2SO4	NONE	OTHER		TPH-GRO, Purgeable (8260B)	TPH-DRO, Extractable (8015M)	BTEX (8260B)	5 OXYS (8260B)
	S-6	12/23/16	1035	W	X			X		5	X	X	X	X
	S-7		1110	W	X			X		5	X	X	X	X
	S-8		1240	W	X			X		5	X	X	X	X
	S-9		0945	W	X			X		5	X	X	X	X
	S-10		0850	W	X			X		5	X	X	X	X
	S-11		0830	W	X			X		5	X	X	X	X
	S-12		0910	W	X			X		5	X	X	X	X
	S-13		1230	W	X			X		3	X	X	X	X
	S-14		1220	W	X			X		3	X	X	X	X



Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
<i>[Signature]</i>	<i>[Signature]</i>	12/23/16	15:30
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
<i>[Signature]</i>	<i>[Signature]</i>	12/27/16	10:20
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
<i>[Signature]</i>	<i>[Signature]</i>	12/27/16	12:54

Don Kuehl 12-27-16/600 Stephanie 12/28/16 @ 9:30
 Ted - 7190 0724 1854
 Version: 14Dec15
 4.0/3-41274
 1-411-0-C



Login Sample Receipt Checklist

Client: AECOM Technical Services Inc.

Job Number: 440-171279-1

Login Number: 171279

List Number: 1

Creator: Skinner, Alma D

List Source: TestAmerica Irvine

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	



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: 440-172044-1

Client Project/Site: Shell- 4411 Foothill Blvd., Oakland

For:

AECOM Technical Services Inc.

300 Lakeside Drive

Suite 400

Oakland, California 94612

Attn: Sara Heikkila



Authorized for release by:

1/18/2017 11:47:19 AM

Heather Clark, Project Manager I

(949)261-1022

heather.clark@testamericainc.com

LINKS

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results through

TotalAccess

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www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Sample Summary

Client: AECOM Technical Services Inc.
Project/Site: Shell- 4411 Foothill Blvd., Oakland

TestAmerica Job ID: 440-172044-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
440-172044-1	C-11	Water	12/30/16 08:30	01/04/17 15:45

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Case Narrative

Client: AECOM Technical Services Inc.
Project/Site: Shell- 4411 Foothill Blvd., Oakland

TestAmerica Job ID: 440-172044-1

Job ID: 440-172044-1

Laboratory: TestAmerica Irvine

Narrative

**Job Narrative
440-172044-1**

Comments

No additional comments.

Receipt

The sample was received on 1/4/2017 3:45 PM; the sample arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.1° C.

GC/MS VOA

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

GC Semi VOA

Method(s) 8015B: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with batch 440-379677 The laboratory control sample (LCS) was performed in duplicate to provide precision data for this batch.(LCS 440-379677/2-A)

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

Organic Prep

No analytical or quality issues were noted, other than those described 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 Results

Client: AECOM Technical Services Inc.
 Project/Site: Shell- 4411 Foothill Blvd., Oakland

TestAmerica Job ID: 440-172044-1

Client Sample ID: C-11
Date Collected: 12/30/16 08:30
Date Received: 01/04/17 15:45

Lab Sample ID: 440-172044-1
Matrix: Water

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)	150		50		ug/L			01/05/17 23:12	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	111		76 - 132					01/05/17 23:12	1
4-Bromofluorobenzene (Surr)	100		80 - 120					01/05/17 23:12	1
Toluene-d8 (Surr)	108		80 - 128					01/05/17 23:12	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.60		0.50		ug/L			01/05/17 23:12	1
Isopropyl Ether (DIPE)	ND		0.50		ug/L			01/05/17 23:12	1
Ethyl-t-butyl ether (ETBE)	ND		0.50		ug/L			01/05/17 23:12	1
Ethylbenzene	ND		0.50		ug/L			01/05/17 23:12	1
m,p-Xylene	ND		1.0		ug/L			01/05/17 23:12	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50		ug/L			01/05/17 23:12	1
o-Xylene	ND		0.50		ug/L			01/05/17 23:12	1
Tert-amyl-methyl ether (TAME)	ND		0.50		ug/L			01/05/17 23:12	1
tert-Butyl alcohol (TBA)	ND		10		ug/L			01/05/17 23:12	1
Toluene	ND		0.50		ug/L			01/05/17 23:12	1
Xylenes, Total	ND		1.0		ug/L			01/05/17 23:12	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		80 - 120					01/05/17 23:12	1
Dibromofluoromethane (Surr)	111		76 - 132					01/05/17 23:12	1
Toluene-d8 (Surr)	108		80 - 128					01/05/17 23:12	1

Method: 8015B - Diesel Range Organics (DRO) (GC) Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C28	0.051		0.048		mg/L		01/05/17 06:37	01/05/17 18:29	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
n-Octacosane	73		45 - 120				01/05/17 06:37	01/05/17 18:29	1

Method Summary

Client: AECOM Technical Services Inc.
Project/Site: Shell- 4411 Foothill Blvd., Oakland

TestAmerica Job ID: 440-172044-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL IRV
8260B/CA_LUFTM S	Volatile Organic Compounds by GC/MS	SW846	TAL IRV
8015B	Diesel Range Organics (DRO) (GC) Low Level	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- 4411 Foothill Blvd., Oakland

TestAmerica Job ID: 440-172044-1

Client Sample ID: C-11

Date Collected: 12/30/16 08:30

Date Received: 01/04/17 15:45

Lab Sample ID: 440-172044-1

Matrix: 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	380125	01/05/17 23:12	WC	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTV S		1	10 mL	10 mL	380126	01/05/17 23:12	WC	TAL IRV
Total/NA	Prep	3510C			1050 mL	1 mL	379677	01/05/17 06:37	L2A	TAL IRV
Total/NA	Analysis	8015B		1			380022	01/05/17 18:29	LMB	TAL IRV

Laboratory References:

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

QC Sample Results

Client: AECOM Technical Services Inc.
 Project/Site: Shell- 4411 Foothill Blvd., Oakland

TestAmerica Job ID: 440-172044-1

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

Lab Sample ID: MB 440-380125/4
Matrix: Water
Analysis Batch: 380125

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			01/05/17 19:03	1
Isopropyl Ether (DIPE)	ND		0.50		ug/L			01/05/17 19:03	1
Ethyl-t-butyl ether (ETBE)	ND		0.50		ug/L			01/05/17 19:03	1
Ethylbenzene	ND		0.50		ug/L			01/05/17 19:03	1
m,p-Xylene	ND		1.0		ug/L			01/05/17 19:03	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50		ug/L			01/05/17 19:03	1
o-Xylene	ND		0.50		ug/L			01/05/17 19:03	1
Tert-amyl-methyl ether (TAME)	ND		0.50		ug/L			01/05/17 19:03	1
tert-Butyl alcohol (TBA)	ND		10		ug/L			01/05/17 19:03	1
Toluene	ND		0.50		ug/L			01/05/17 19:03	1
Xylenes, Total	ND		1.0		ug/L			01/05/17 19:03	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		80 - 120		01/05/17 19:03	1
Dibromofluoromethane (Surr)	109		76 - 132		01/05/17 19:03	1
Toluene-d8 (Surr)	108		80 - 128		01/05/17 19:03	1

Lab Sample ID: LCS 440-380125/5
Matrix: Water
Analysis Batch: 380125

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	25.9		ug/L		104	68 - 130
Isopropyl Ether (DIPE)	25.0	28.6		ug/L		114	58 - 139
Ethanol	1000	1020		ug/L		102	50 - 149
Ethyl-t-butyl ether (ETBE)	25.0	28.5		ug/L		114	60 - 136
Ethylbenzene	25.0	24.0		ug/L		96	70 - 130
m,p-Xylene	25.0	24.8		ug/L		99	70 - 130
Methyl-t-Butyl Ether (MTBE)	25.0	28.4		ug/L		113	63 - 131
o-Xylene	25.0	25.0		ug/L		100	70 - 130
Tert-amyl-methyl ether (TAME)	25.0	27.2		ug/L		109	57 - 139
tert-Butyl alcohol (TBA)	250	257		ug/L		103	70 - 130
Toluene	25.0	24.0		ug/L		96	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	99		80 - 120
Dibromofluoromethane (Surr)	110		76 - 132
Toluene-d8 (Surr)	101		80 - 128

Lab Sample ID: 440-171892-A-1 MS
Matrix: Water
Analysis Batch: 380125

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	ND		25.0	26.4		ug/L		105	66 - 130
Isopropyl Ether (DIPE)	ND		25.0	29.2		ug/L		117	64 - 138
Ethanol	ND		1000	1070		ug/L		107	54 - 150

TestAmerica Irvine

QC Sample Results

Client: AECOM Technical Services Inc.
 Project/Site: Shell- 4411 Foothill Blvd., Oakland

TestAmerica Job ID: 440-172044-1

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

Lab Sample ID: 440-171892-A-1 MS

Matrix: Water

Analysis Batch: 380125

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethyl-t-butyl ether (ETBE)	ND		25.0	28.7		ug/L		115	70 - 130
Ethylbenzene	ND		25.0	24.8		ug/L		99	70 - 130
m,p-Xylene	ND		25.0	25.6		ug/L		102	70 - 133
Methyl-t-Butyl Ether (MTBE)	ND		25.0	28.4		ug/L		114	70 - 130
o-Xylene	ND		25.0	25.8		ug/L		103	70 - 133
Tert-amyl-methyl ether (TAME)	ND		25.0	27.3		ug/L		109	68 - 133
tert-Butyl alcohol (TBA)	ND		250	261		ug/L		105	70 - 130
Toluene	ND		25.0	24.5		ug/L		98	70 - 130
MS MS									
Surrogate	%Recovery	Qualifier	Limits						
4-Bromofluorobenzene (Surr)	101		80 - 120						
Dibromofluoromethane (Surr)	111		76 - 132						
Toluene-d8 (Surr)	103		80 - 128						

Lab Sample ID: 440-171892-A-1 MSD

Matrix: Water

Analysis Batch: 380125

Client Sample ID: Matrix Spike Duplicate

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	25.8		ug/L		103	66 - 130	2	20
Isopropyl Ether (DIPE)	ND		25.0	28.2		ug/L		113	64 - 138	4	25
Ethanol	ND		1000	1030		ug/L		103	54 - 150	4	30
Ethyl-t-butyl ether (ETBE)	ND		25.0	28.7		ug/L		115	70 - 130	0	25
Ethylbenzene	ND		25.0	24.3		ug/L		97	70 - 130	2	20
m,p-Xylene	ND		25.0	25.1		ug/L		100	70 - 133	2	25
Methyl-t-Butyl Ether (MTBE)	ND		25.0	28.1		ug/L		112	70 - 130	1	25
o-Xylene	ND		25.0	25.7		ug/L		103	70 - 133	1	20
Tert-amyl-methyl ether (TAME)	ND		25.0	27.2		ug/L		109	68 - 133	0	30
tert-Butyl alcohol (TBA)	ND		250	261		ug/L		104	70 - 130	0	25
Toluene	ND		25.0	24.3		ug/L		97	70 - 130	1	20
MSD MSD											
Surrogate	%Recovery	Qualifier	Limits								
4-Bromofluorobenzene (Surr)	100		80 - 120								
Dibromofluoromethane (Surr)	109		76 - 132								
Toluene-d8 (Surr)	101		80 - 128								

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

Lab Sample ID: MB 440-380126/4

Matrix: Water

Analysis Batch: 380126

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			01/05/17 19:03	1
MB MB									
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
Dibromofluoromethane (Surr)	109		76 - 132				01/05/17 19:03	1	

TestAmerica Irvine

QC Sample Results

Client: AECOM Technical Services Inc.
 Project/Site: Shell- 4411 Foothill Blvd., Oakland

TestAmerica Job ID: 440-172044-1

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

Lab Sample ID: MB 440-380126/4
Matrix: Water
Analysis Batch: 380126

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

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
4-Bromofluorobenzene (Surr)	101		80 - 120		01/05/17 19:03	1
Toluene-d8 (Surr)	108		80 - 128		01/05/17 19:03	1

Lab Sample ID: LCS 440-380126/6
Matrix: Water
Analysis Batch: 380126

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
Dibromofluoromethane (Surr)	108		76 - 132
4-Bromofluorobenzene (Surr)	103		80 - 120
Toluene-d8 (Surr)	107		80 - 128

Lab Sample ID: 440-171892-A-1 MS
Matrix: Water
Analysis Batch: 380126

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits

Surrogate	MS MS		Limits
	%Recovery	Qualifier	
Dibromofluoromethane (Surr)	111		76 - 132
4-Bromofluorobenzene (Surr)	101		80 - 120
Toluene-d8 (Surr)	103		80 - 128

Lab Sample ID: 440-171892-A-1 MSD
Matrix: Water
Analysis Batch: 380126

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit

Surrogate	MSD MSD		Limits
	%Recovery	Qualifier	
Dibromofluoromethane (Surr)	109		76 - 132
4-Bromofluorobenzene (Surr)	100		80 - 120
Toluene-d8 (Surr)	101		80 - 128

QC Sample Results

Client: AECOM Technical Services Inc.
 Project/Site: Shell- 4411 Foothill Blvd., Oakland

TestAmerica Job ID: 440-172044-1

Method: 8015B - Diesel Range Organics (DRO) (GC) Low Level

Lab Sample ID: MB 440-379677/1-A
Matrix: Water
Analysis Batch: 379656

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 379677

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C28	ND		0.050		mg/L		01/04/17 06:59	01/04/17 19:21	1
Surrogate	%Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
n-Octacosane	81		45 - 120				01/04/17 06:59	01/04/17 19:21	1

Lab Sample ID: LCS 440-379677/2-A
Matrix: Water
Analysis Batch: 379656

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 379677

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits		
C10-C28	1.00	0.749		mg/L		75	40 - 115		
Surrogate	%Recovery	LCS Qualifier	Limits						
n-Octacosane	75		45 - 120						

Lab Sample ID: LCSD 440-379677/3-A
Matrix: Water
Analysis Batch: 379656

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 379677

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
C10-C28	1.00	0.790		mg/L		79	40 - 115	5	25
Surrogate	%Recovery	LCSD Qualifier	Limits						
n-Octacosane	82		45 - 120						

QC Association Summary

Client: AECOM Technical Services Inc.
Project/Site: Shell- 4411 Foothill Blvd., Oakland

TestAmerica Job ID: 440-172044-1

GC/MS VOA

Analysis Batch: 380125

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-172044-1	C-11	Total/NA	Water	8260B	
MB 440-380125/4	Method Blank	Total/NA	Water	8260B	
LCS 440-380125/5	Lab Control Sample	Total/NA	Water	8260B	
440-171892-A-1 MS	Matrix Spike	Total/NA	Water	8260B	
440-171892-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	

Analysis Batch: 380126

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-172044-1	C-11	Total/NA	Water	8260B/CA_LUFT MS	
MB 440-380126/4	Method Blank	Total/NA	Water	8260B/CA_LUFT MS	
LCS 440-380126/6	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT MS	
440-171892-A-1 MS	Matrix Spike	Total/NA	Water	8260B/CA_LUFT MS	
440-171892-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B/CA_LUFT MS	

GC Semi VOA

Analysis Batch: 379656

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 440-379677/1-A	Method Blank	Total/NA	Water	8015B	379677
LCS 440-379677/2-A	Lab Control Sample	Total/NA	Water	8015B	379677
LCSD 440-379677/3-A	Lab Control Sample Dup	Total/NA	Water	8015B	379677

Prep Batch: 379677

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-172044-1	C-11	Total/NA	Water	3510C	
MB 440-379677/1-A	Method Blank	Total/NA	Water	3510C	
LCS 440-379677/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 440-379677/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 380022

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-172044-1	C-11	Total/NA	Water	8015B	379677

Definitions/Glossary

Client: AECOM Technical Services Inc.
Project/Site: Shell- 4411 Foothill Blvd., Oakland

TestAmerica Job ID: 440-172044-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	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- 4411 Foothill Blvd., Oakland

TestAmerica Job ID: 440-172044-1

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

* Certification renewal pending - certification considered valid.

TestAmerica Irvine

LAB (LOCATION)

- ACCUTEST ()
- CALSCIENCE ()
- TESTAMERICA ()
- Other ()

Lab Vendor # 1964589 (TestAmerica)



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



Please Check Appropriate Box:

<input type="checkbox"/> GW FDG	<input type="checkbox"/> PIPELINE	<input type="checkbox"/> RETAIL
<input type="checkbox"/> CHEMICALS	<input checked="" type="checkbox"/> CONSULTANT	<input type="checkbox"/> LUBES
<input type="checkbox"/> TRANSPORTATION	<input type="checkbox"/> OTHER _____	

Print Bill To Contact Name: Shane Olton
 PO #: _____
 Print Site or Project ID: 31733
 GSAP Project ID: _____
 USPC/00250, USRT/00885

CHECK IF NO INCIDENT # APPLIES
 DATE: 12/30/16
 PAGE: 1 of 1

SAMPLING COMPANY: Blaine Tech Services, Inc.
 ADDRESS: 1680 Rogers Ave., San Jose, CA, 95112
 LOG CODE: BTSS

SITE ADDRESS: Street and City: 4411 Foothill Blvd., Oakland
 STATE: CA
 AECOM Project/Task Number: 60482424

PROJECT CONTACT (Hardcopy or PDF Report to):
 Bart Gebbie
 TELEPHONE: 310-885-4455 Ext. 103
 FAX: 310-637-5802
 BR TO Contact E-MAIL: shane.olton@aecom.com

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: 10059562

TURNAROUND TIME (CALENDAR DAYS):
 STANDARD (14 DAY) 5 DAYS 7 DAYS 10 DAYS 14 HOURS RESULTS NEEDED ON WEEKEND

LA - RWQCB REPORT FORMAT JUST AGENCY:

SAMPLER NAME(S) (Print): Justin Becker
 LAB USE ONLY

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

REQUESTED ANALYSIS

UNIT COST	NON-UNIT COST
TPH-GRO, Purgeable (B260B)	
TPH-DRO, Extractable (B0-15M)	
5 OXYS (B260B)	
(9028) XLS	

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

FIELD NOTES:
 TEMPERATURE ON RECEIPT °C: _____
 Container PID Readings or Laboratory Notes

SPECIAL INSTRUCTIONS OR NOTES:

- SHELL CONTRACT RATE APPLIES
- STATE REIMBURSEMENT RATE APPLIES
- LEDD NOT NEEDED
- RECEIPT VERIFICATION REQUESTED
- PROVIDE LEDD DISK

Email invoice to USAPimaging@aecom.com

LAB USE ONLY	Field Sample Identification		SAMPLING		MATRIX	PRESERVATIVE					NO. OF CONT.	REQUESTED ANALYSIS		FIELD NOTES		
			DATE	TIME		HCL	HNO3	H2SO4	NONE	OTHER		UNIT COST	NON-UNIT COST			
	C-11		12/30/16	0830	WB	X			X		5	X	X	X	X	



Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
<i>[Signature]</i>	<i>[Signature]</i> (SAMPLE CUSTODIAN)	12/30/16	1000
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
<i>[Signature]</i>	<i>[Signature]</i>	1/3/17	12:20
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
<i>[Signature]</i>	<i>[Signature]</i>	1/3/17	7545

John Miller 1-3-17 1600
 TRK-7197 0726 2348
 1/4/17 945
 2.7°C
 37°C/3.1
 12-74



Login Sample Receipt Checklist

Client: AECOM Technical Services Inc.

Job Number: 440-172044-1

Login Number: 172044

List Number: 1

Creator: Skinner, Alma D

List Source: TestAmerica Irvine

Question	Answer	Comment
Radioactivity wasn't checked or is \leq 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 <math><6\text{mm}</math> (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

