CONESTOGA-ROVERS & ASSOCIATES

5900 Hollis Street, Suite A
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TRANSMITTAL

DATE: October 29, 2013

REFERENCE NO.: 240524

PROJECT NAME: 4255 MacArthur Boulevard, Oakland

TO: Jerry Wickham
Alameda County Environmental Health
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502-6577

Please find enclosed:
- ☐ Draft
- ☐ Originals
- ☐ Prints
- ☒ Final
- ☐ Other

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- ☐ Mail
- ☐ Overnight Courier
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- ☒ Other GeoTracker and Alameda County FTP

QUANTITY	DESCRIPTION
1	Groundwater Monitoring Report – Third Quarter 2013

- ☐ As Requested
- ☐ For Your Use
- ☒ For Review and Comment
- ☐

COMMENTS:
If you have any questions regarding the contents of this document, please call the CRA project manager Peter Schaefer at (510) 420-3319 or the Shell program manager Perry Pineda at (425) 413-1164.

Copy to: Perry Pineda, Shell Oil Products US (electronic copy)
Laura Wong (property owner), Phua Management (electronic copy)
Kenneth Williams, MacArthur/High Trailer Park, c/o Bookkeeping, 332 Peyton Drive, Hayward, CA 94544
Ed C. Ralston, ConocoPhillips Risk Management & Remediation (electronic copy)

Completed by: Peter Schaefer Signed: Peter Schaefer

Filing: **Correspondence File**

Shell Oil Products US
Soil and Groundwater Focus Delivery Group
20945 S. Wilmington Avenue
Carson, CA 90810
Tel (425) 413 1164
Fax (425) 413 0988
Email perry.pineda@shell.com
Internet http://www.shell.com

Mr. Jerry Wickham
Alameda County Environmental Health
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502-6577

Re: 4255 MacArthur Boulevard
Oakland, California
SAP Code 135701
Incident No. 98995758
ACEH Case No. RO0000486

Dear Mr. Wickham:

The attached document is provided for your review and comment. Upon information and belief, I declare, under penalty of perjury, that the information contained in the attached document is true and correct.

As always, please feel free to contact me directly at (425) 413-1164 with any questions or concerns.

Sincerely,
Shell Oil Products US

Perry Pineda
Senior Environmental Program Manager

GROUNDWATER MONITORING REPORT – THIRD QUARTER 2013

FORMER SHELL SERVICE STATION
4255 MACARTHUR BOULEVARD
OAKLAND, CALIFORNIA

SAP CODE	135701
INCIDENT NO.	98995758
AGENCY NO.	RO0000486

Prepared by:
Conestoga-Rovers & Associates

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Emeryville, California
U.S.A. 94608

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OCTOBER 29, 2013
REF. NO. 240524 (27)
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TABLE OF CONTENTS

LIST OF FIGURES
(Following Text)

LIST OF TABLES
(Following Text)

LIST OF APPENDICES

1.0 INTRODUCTION

Conestoga-Rovers & Associates (CRA) prepared this report on behalf of Equilon Enterprises LLC dba Shell Oil Products US (Shell).

1.1 SITE INFORMATION

Site Address	4255 MacArthur Boulevard, Oakland
Site Use	Vacant
Shell Project Manager	Perry Pineda
CRA Project Manager	Peter Schaefer
Lead Agency and Contact	ACEH, Jerry Wickham
Agency Case No.	RO0000486
Shell SAP Code	135701
Shell Incident No.	98995758

Date of most recent agency correspondence was September 4, 2013 (electronic).

2.0 SITE ACTIVITIES, FINDINGS, AND DISCUSSION

2.1 CURRENT QUARTER'S ACTIVITIES

Blaine Tech Services, Inc. (Blaine) gauged and sampled the wells according to the established monitoring program for this site. Blaine coordinated groundwater sampling with the adjacent 76 Station No. 1156 located at 4276 MacArthur Boulevard, Oakland.

CRA prepared a vicinity map (Figure 1), a groundwater contour and chemical concentration map (Figure 2) including data from both sites, and a groundwater data table (Table 1). Blaine's field notes are presented in Appendix A, and the laboratory report is presented in Appendix B. The data tables for the 76 Station are included in Appendix C.

On April 1 and July 10, 2013, Blaine replaced the separate-phase hydrocarbon (SPH)-absorbent socks in wells MW-2, MW-3, and MW-4. No SPHs were measured in the wells during the April 1 or July 10, 2013 monitoring events. Approximately

2.82 pounds of SPHs were recovered from the absorbent socks during second and third quarters 2013. A summary of historical SPH removal is provided below.

SPH REMOVAL SUMMARY	
This Period (pounds)	*Cumulative Removal (pounds)*
2.82	43.70

In August and September 2013, CRA completed the additional on- and off-site soil vapor investigations proposed in our April 23, 2013 *Subsurface Investigation Work Plan*, which was approved in Alameda County Environmental Health's (ACEH's) May 28, 2013 letter. ACEH's September 4, 2013 electronic correspondence extended the due date for a soil vapor investigation report to November 29, 2013.

2.2 CURRENT QUARTER'S FINDINGS

Groundwater Flow Direction	Southwesterly to westerly
Hydraulic Gradient	Averages 0.04
Depth to Water	4.95 to 14.01 feet below top of well casing

2.3 PROPOSED ACTIVITIES

CRA will submit a soil vapor investigation report by November 29, 2013.

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

Blaine will continue to remove SPHs from wells MW-2, MW-3, and MW-4 using SPH-absorbent socks. The socks will be replaced quarterly until no SPHs are observed or recovered for four consecutive quarters.

All of Which is Respectfully Submitted,
CONESTOGA-ROVERS & ASSOCIATES

Peter Schaefer, CEG, CHG

Aubrey K. Cool, PG

FIGURES

12/16/08

I:\Shell\6-chars\2405--\240524-Oakland 4255 MacArthur\240524-FIGURES\240524 VICINITY.AI

FIGURE
1

0 1/8 1/4 1/2 1

SCALE : 1" = 1/4 MILE

Former Shell Service Station
4255 MacArthur Boulevard
Oakland, California

CONESTOGA-ROVERS
& ASSOCIATES

Vicinity Map

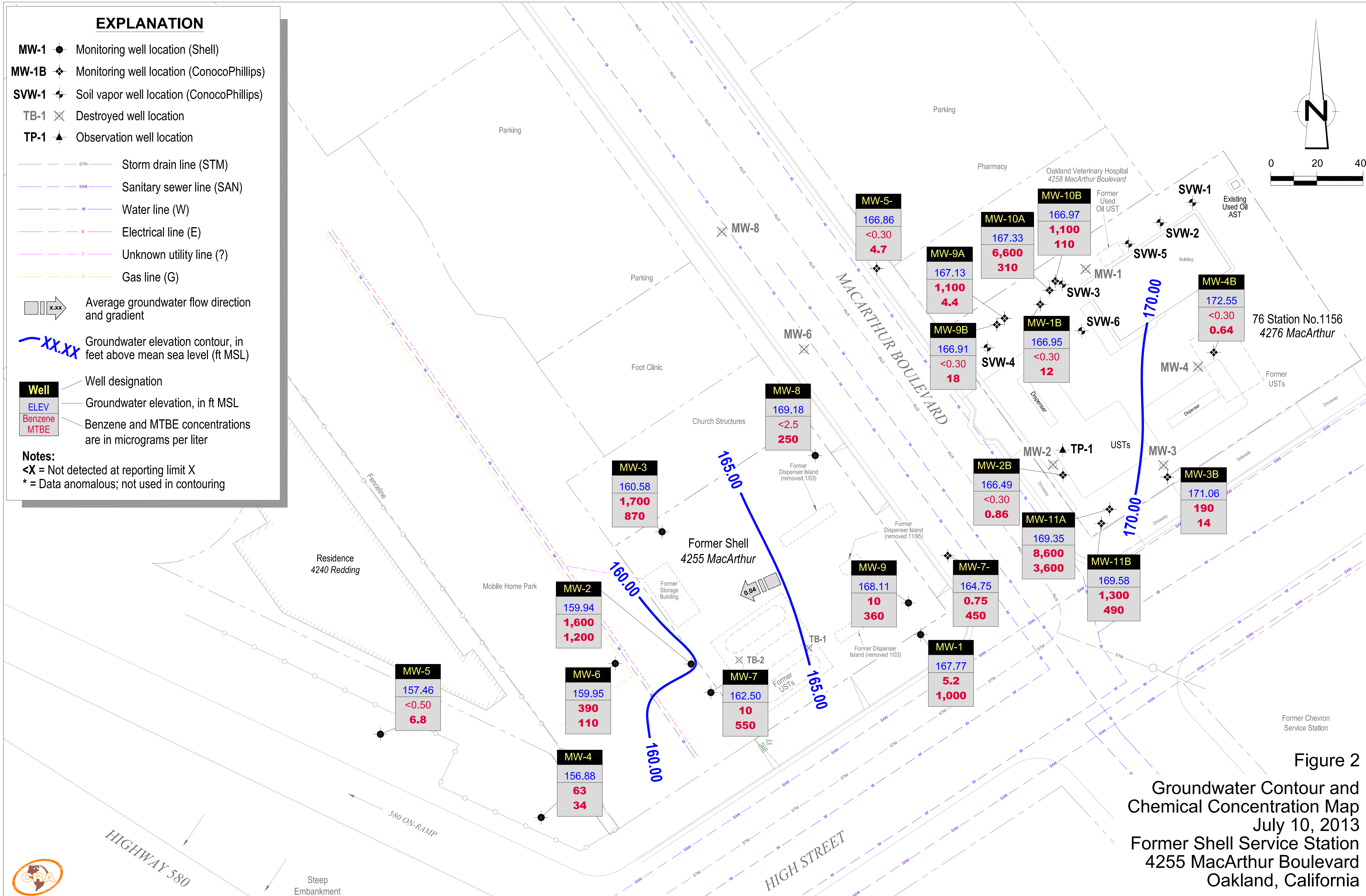

EXPLANATION
MW-1 Monitoring well location (Shell)
MW-1B Monitoring well location (ConocoPhillips)
SVW-1 Soil vapor well location (ConocoPhillips)
TB-1 Destroyed well location
TP-1 Observation well location
Storm drain line (STM)
Sanitary sewer line (SAN)
Water line (W)
Electrical line (E)
Unknown utility line (?)
Gas line (G)
Average groundwater flow direction and gradient
Groundwater elevation contour, in feet above mean sea level (ft MSL)
Well designation
Groundwater elevation, in ft MSL
Benzene and MTBE concentrations are in micrograms per liter
Notes:
<X = Not detected at reporting limit X
* = Data anomalous; not used in contouring
MW-5- 166.86 <0.30 4.7
MW-10A 167.33 6,600 310
MW-10B 166.97 1,100 110
MW-9A 167.13 1,100 4.4
MW-9B 166.91 <0.30 18
MW-1B 166.95 <0.30 12
MW-4B 172.55 <0.30 0.64
MW-8 169.18 <2.5 250
MW-3 160.58 1,700 870
MW-2B 166.49 <0.30 0.86
MW-11A 169.35 8,600 3,600
MW-3B 171.06 190 14
MW-11B 169.58 1,300 490
MW-9 168.11 10 360
MW-7- 164.75 0.75 450
MW-1 167.77 5.2 1,000
MW-2 159.94 1,600 1,200
MW-6 159.95 390 110
MW-7 162.50 10 550
MW-5 157.46 <0.50 6.8
MW-4 156.88 63 34
160.00
165.00
170.00
0.04
MACARTHUR BOULEVARD
HIGH STREET
HIGHWAY 580
580 ON-RAMP
Former Shell 4255 MacArthur
76 Station No.1156 4276 MacArthur
Oakland Veterinary Hospital 4258 MacArthur Boulevard
Residence 4240 Redding
Mobile Home Park
Church Structures
Foot Clinic
Parking
Pharmacy
Former Chevron Service Station
Steep Embankment
Former Used Oil UST
Existing Used Oil AST
Former USTs
USTs
0 20 40ft
N

Figure 2

Groundwater Contour and Chemical Concentration Map
July 10, 2013
Former Shell Service Station
4255 MacArthur Boulevard
Oakland, California

I:\Shell\6-chars\2405--\240524-Oakland 4255 MacArthur\240524-REPORTS\240524-RPT27-3Q13\240524 3QM13-QM.DWG (10/25/2013)

TABLE

TABLE 1

GROUNDWATER DATA
FORMER SHELL SERVICE STATION
4255 MACARTHUR BOULEVARD, OAKLAND, CALIFORNIA

Well ID	Date	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE 8020 (µg/L)	MTBE 8260 (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	EDB (µg/L)	1,2-DCA (µg/L)	Ethanol (µg/L)	TOC (ft MSL)	Depth to Water (ft TOC)	GW Elevation (ft MSL)	SPH Thickness (ft)	DO Reading (m/L)	ORP Reading (mV)
MW-1	11/17/1993	410	21	11	7.9	47	---	---	---	---	---	---	---	---	---	175.79	8.59	167.20	---	---	---
MW-1	01/20/1994	1,200	180	19	48	47	---	---	---	---	---	---	---	---	---	175.79	8.22	167.57	---	---	---
MW-1	04/25/1994	3,100	610	<10	130	27	---	---	---	---	---	---	---	---	---	175.79	7.63	168.16	---	---	---
MW-1	07/07/1994	2,400	1,000	10	250	20	---	---	---	---	---	---	---	---	---	175.79	8.31	167.48	---	---	---
MW-1	10/27/1994	2,200	500	3.1	72	1.8	---	---	---	---	---	---	---	---	---	175.79	8.84	166.95	---	---	---
MW-1	11/17/1994	---	---	---	---	---	---	---	---	---	---	---	---	---	---	175.79	7.60	168.19	---	---	---
MW-1	11/28/1994	---	---	---	---	---	---	---	---	---	---	---	---	---	---	175.79	7.56	168.23	---	---	---
MW-1	01/13/1995	570	75	2.5	6.7	11	---	---	---	---	---	---	---	---	---	175.79	7.11	168.68	---	---	---
MW-1	04/12/1995	1,800	480	<5.0	79	<5.0	---	---	---	---	---	---	---	---	---	175.79	7.08	168.71	---	---	---
MW-1	07/25/1995	120	15	1.1	2.1	2.9	---	---	---	---	---	---	---	---	---	175.79	7.73	168.06	---	---	---
MW-1 (D)	07/25/1995	300	88	2.4	11	6.5	---	---	---	---	---	---	---	---	---	175.79	7.73	168.06	---	---	---
MW-1	10/18/1995	130	9.5	0.8	1.3	1.7	---	---	---	---	---	---	---	---	---	175.79	8.42	167.37	---	---	---
MW-1 (D)	10/18/1995	120	11	0.8	1.4	1.8	---	---	---	---	---	---	---	---	---	175.79	8.42	167.37	---	---	---
MW-1	01/17/1996	250	22	0.9	1.6	2.3	---	---	---	---	---	---	---	---	---	175.79	7.83	167.96	---	---	---
MW-1	04/25/1996	<50	4.6	<0.5	<0.5	0.6	500b	---	---	---	---	---	---	---	---	175.79	7.35	168.44	---	---	---
MW-1	07/17/1996	<250	15	<2.5	<2.5	<2.5	540	---	---	---	---	---	---	---	---	175.79	7.70	168.09	---	---	---
MW-1	10/01/1996	1,200	500	12	57	82	1,900	---	---	---	---	---	---	---	---	175.79	8.07	167.72	---	---	---
MW-1	01/22/1997	640	170	4.3	33	33	1,200	---	---	---	---	---	---	---	---	175.79	7.21	168.58	---	---	---
MW-1	04/08/1997	<200	34	<2.0	3.3	4.3	950	---	---	---	---	---	---	---	---	175.79	7.75	168.04	---	---	---
MW-1 (D)	04/08/1997	<200	66	<2.0	6.4	8	740	---	---	---	---	---	---	---	---	175.79	7.75	168.04	---	---	---
MW-1	07/08/1997	190	49	1.2	5.8	8.6	560	---	---	---	---	---	---	---	---	175.79	8.01	167.78	---	---	---
MW-1	10/08/1997	<100	7	<1.0	<1.0	<1.0	620	---	---	---	---	---	---	---	---	175.79	8.10	167.69	---	---	---
MW-1	01/09/1998	970	390	12	48	71	1,200	---	---	---	---	---	---	---	---	175.79	7.14	168.65	---	---	---
MW-1	04/13/1998	<50	136	<0.50	1.5	1.8	170	---	---	---	---	---	---	---	---	175.79	6.78	169.01	---	---	---
MW-1	07/17/1998	2,500	750	11	88	67	150	---	---	---	---	---	---	---	---	175.79	7.28	168.51	---	---	---
MW-1	10/02/1998	8,000	970	36	270	440	35	---	---	---	---	---	---	---	---	175.79	7.77	168.02	---	---	---
MW-1	02/03/1999	210	56	0.82	<0.50	3.2	220	---	---	---	---	---	---	---	---	175.79	7.45	168.34	---	1.4	---
MW-1	04/29/1999	<50	4.5	<0.50	0.56	<0.50	140	196	---	---	---	---	---	---	---	175.79	7.58	168.21	---	1.2	140
MW-1	07/23/1999	<50.0	<0.500	<0.500	<0.500	<0.500	120	111 f	---	---	---	---	---	---	---	175.79	8.51	167.28	---	1.0	---
MW-1	11/01/1999	<50.0	<0.500	<0.500	<0.500	<0.500	2.90	---	---	---	---	---	---	---	---	175.79	8.30	167.49	---	1.4	-71
MW-1	01/17/2000	<50	<0.50	<0.50	<0.50	<0.50	3.30	---	---	---	---	---	---	---	---	175.79	8.04	167.75	---	16.9	64
MW-1	04/17/2000	<50.0	1.08	<0.500	<0.500	<0.500	<2.50	---	---	---	---	---	---	---	---	175.79	8.00	167.79	---	1.8	112
MW-1	07/26/2000	125	54.3	2.16	5.45	9.86	33.1	---	---	---	---	---	---	---	---	175.79	7.52	168.27	---	13.2	-140
MW-1	10/12/2000	101	40.7	2.68	3.00	5.18	25.0	---	---	---	---	---	---	---	---	175.79	7.71	168.08	---	>20	534
MW-1	01/15/2001	<50.0	0.633	<0.500	0.505	1.74	<2.50	---	---	---	---	---	---	---	---	175.79	7.33	168.46	---	16.9	-127
MW-1	04/09/2001	<50.0	<0.500	<0.500	<0.500	0.927	<2.50	---	---	---	---	---	---	---	---	175.79	7.68	168.11	---	12.8	-117
MW-1	07/24/2001	<50	4.0	0.65	0.53	1.3	---	<5.0	---	---	---	---	---	---	---	175.79	8.00	167.79	---	>20	43
MW-1	10/31/2001	<50	4.4	<0.50	<0.50	0.98	---	<5.0	---	---	---	---	---	---	---	175.79	7.94	167.85	---	13.6	123

TABLE 1

GROUNDWATER DATA
FORMER SHELL SERVICE STATION
4255 MACARTHUR BOULEVARD, OAKLAND, CALIFORNIA

Well ID	Date	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE 8020 (µg/L)	MTBE 8260 (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	EDB (µg/L)	1,2-DCA (µg/L)	Ethanol (µg/L)	TOC (ft MSL)	Depth to Water (ft TOC)	GW Elevation (ft MSL)	SPH Thickness (ft)	DO Reading (m/L)	ORP Reading (mV)
MW-1	01/10/2002	<50	2.2	<0.50	<0.50	1.2	---	6.1	---	---	---	---	---	---	---	175.79	7.63	168.16	---	0.1	63
MW-1	04/25/2002	<50	2.0	<0.50	<0.50	<0.50	---	<5.0	---	---	---	---	---	---	---	175.79	7.76	168.03	---	0.3	54
MW-1	07/18/2002	<50	6.1	<0.50	<0.50	0.98	---	<5.0	---	---	---	---	---	---	---	175.79	8.29	167.50	---	1.1	32
MW-1	10/07/2002	500	17	14	11	60	---	9.0	---	---	---	---	---	---	---	175.76	8.34	167.42	---	2.8	-26
MW-1	01/06/2003	<50	12	<0.50	0.73	0.58	---	14	---	---	---	---	---	---	---	175.76	7.18	168.58	---	0.5	-22
MW-1	04/07/2003	<50	<0.50	<0.50	<0.50	<1.0	---	12	<5.0	---	---	---	---	---	---	175.76	7.75	168.01	---	0.7	-24
MW-1	07/07/2003	<50	6.6	<0.50	<0.50	<1.0	---	8.1	<5.0	---	---	---	---	---	---	175.76	7.75	168.01	---	0.5	16
MW-1	10/09/2003	<50	1.9	<0.50	<0.50	<1.0	---	22	<5.0	---	---	---	---	---	---	175.76	8.45	167.31	---	0.7	80
MW-1	01/14/2004	<100	19	<1.0	<1.0	<2.0	---	180	63	---	---	---	---	---	---	175.76	7.45	168.31	---	0.8	242
MW-1	04/28/2004	<50	2.1	<0.50	<0.50	<1.0	---	110	33	---	---	---	---	---	---	175.76	8.25	167.51	---	0.5	64
MW-1	07/12/2004	<50	2.5	<0.50	<0.50	<1.0	---	120	26	<2.0	<2.0	<2.0	---	---	<50	175.76	6.20	169.56	---	0.5	72
MW-1	10/25/2004	<500	<5.0	<5.0	<5.0	<10	---	550	240	---	---	---	---	---	---	175.76	7.98	167.78	---	3.15	-72
MW-1	01/17/2005	<250	8.0	<2.5	<2.5	<5.0	---	500	310	---	---	---	---	---	---	175.76	7.42	168.34	---	0.2	9
MW-1	04/06/2005	<250	<2.5	<2.5	<2.5	<5.0	---	230	330*	---	---	---	---	---	---	175.76	8.15	167.61	---	2.49	143
MW-1	07/08/2005	<50	<0.50	<0.50	<0.50	<0.50	---	380	510	<0.50	<0.50	<0.50	---	---	<5.0	175.76	7.45	168.31	---	1.1	12
MW-1	10/07/2005	<500 c	<5.0	<5.0	<5.0	<10	---	1,600	1,600	---	---	---	---	---	---	175.76	7.72	168.04	---	---	---
MW-1	01/27/2006	1,720	6.92	<0.500	<0.500	<0.500	---	1,270	1,380	---	---	---	---	---	---	175.76	6.68	169.08	---	---	---
MW-1	04/28/2006	2,420	6.90	1.19	<0.500	0.980	---	2,080	1,870	---	---	---	---	---	---	175.76	6.67	169.09	---	---	---
MW-1	07/28/2006	3,230	2.06	<0.500	<0.500	<0.500	---	1,770	1,730	<0.500	<0.500	1.14	---	---	<50.0	175.76	7.65	168.11	---	---	---
MW-1	10/27/2006	1,020	3.22	<0.500	1.72	<0.500	---	690	884	---	---	---	---	---	---	175.76	7.90	167.86	---	---	---
MW-1	01/10/2007	1,100	3.0	<0.50	<0.50	<1.0	---	2,300	2,900	---	---	---	---	---	---	175.76	7.62	168.14	---	---	---
MW-1	04/13/2007	620 g,h	7.1	0.24 i	<1.0	<1.0	---	2,800	3,600	---	---	---	---	---	---	175.76	6.98	168.78	---	---	---
MW-1	07/09/2007	960 g,h	4.3 i	<20	<20	<20	---	1,900	2,100	<40	<40	<40	---	---	<2,000	175.76	7.60	168.16	---	---	---
MW-1	10/08/2007	590 g,h	5.9 i	<20	<20	<20	---	3,200	2,200	---	---	---	---	---	---	175.76	8.05	167.71	---	---	---
MW-1	01/09/2008	470 g,h	36	<10	<10	<10	---	660	1,300	---	---	---	---	---	---	175.76	6.99	168.77	---	---	---
MW-1	04/04/2008	2,200	<10	<20	<20	<20	---	2,000	1,500	---	---	---	---	---	---	175.76	6.94	168.82	---	---	---
MW-1	07/03/2008	1,800	<10	<20	<20	<20	---	1,800	3,400	<40	<40	<40	---	---	<2,000	175.76	8.03	167.73	---	---	---
MW-1	10/03/2008	2,000	<10	<20	<20	<20	---	2,000	2,800	---	---	---	---	---	---	175.76	8.58	167.18	---	---	---
MW-1	01/22/2009	2,400	14	<20	<20	<20	---	1,600	3,200	---	---	---	---	---	---	175.76	8.15	167.61	---	---	---
MW-1	04/13/2009	1,800	<10	<20	<20	<20	---	970	1,900	---	---	---	---	---	---	175.76	2.13	173.63	---	---	---
MW-1	07/23/2009	1,800	6.9	<10	<10	<10	---	1,500	2,800	<20	<20	<20	---	---	<1000	175.76	8.15	167.61	---	---	---
MW-1	02/01/2010	910	94	<5.0	<5.0	<5.0	---	620	1,800	---	---	---	---	---	---	175.76	7.44	168.32	---	---	---
MW-1	08/02/2010	1,600	8.4	<5.0	<5.0	<5.0	---	2,100	2,100	---	---	---	---	---	---	175.76	7.49	168.27	---	---	---
MW-1	01/31/2011	1,100 j	41	<10	<10	<10	---	2,000	2,600	---	---	---	<10	<10	---	175.76	7.45	168.31	---	---	---
MW-1	07/25/2011	520 j	31	<2.5	<2.5	<5.0	---	530	1,600	<5.0	<5.0	<5.0	---	---	<750	175.76	7.39	168.37	---	---	---
MW-1	01/23/2012	<1,000	49	<10	<10	<20	---	1,200	1,200	---	---	---	---	---	---	175.76	7.85	167.91	---	---	---
MW-1	07/24/2012	390	14	<2.5	<2.5	<5.0	---	350	1,100	<2.5	<2.5	<2.5	---	---	---	175.76	7.80	167.96	---	---	---
MW-1	01/23/2013	1,100	45	<1.0	<1.0	<2.0	---	1,400	1,600	---	---	---	---	---	---	175.76	7.26	168.50	---	---	---

TABLE 1

GROUNDWATER DATA
FORMER SHELL SERVICE STATION
4255 MACARTHUR BOULEVARD, OAKLAND, CALIFORNIA

Well ID	Date	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE 8020 (µg/L)	MTBE 8260 (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	EDB (µg/L)	1,2-DCA (µg/L)	Ethanol (µg/L)	TOC (ft MSL)	Depth to Water (ft TOC)	GW Elevation (ft MSL)	SPH Thickness (ft)	DO Reading (m/L)	ORP Reading (mV)
MW-1	**07/10/2013**	**1,000**	**5.2**	**<5.0**	**<5.0**	**<10**	**---**	**1,000**	**700**	**<5.0**	**<5.0**	**<5.0**	**---**	**---**	**<1,500**	**175.76**	**7.99**	**167.77**	**---**	**---**	**---**
MW-2	11/17/1993	31,000	9,400	4,600	1,000	3,900	---	---	---	---	---	---	---	---	---	170.91	12.31	158.60	---	---	---
MW-2	01/20/1994	40,000	6,900	5,600	780	4,100	---	---	---	---	---	---	---	---	---	170.91	11.48	159.43	---	---	---
MW-2 (D)	01/20/1994	41,000	7,200	6,200	900	4,800	---	---	---	---	---	---	---	---	---	170.91	11.48	159.43	---	---	---
MW-2	04/25/1994	60,000	9,300	6,100	1,400	6,200	---	---	---	---	---	---	---	---	---	170.91	10.84	160.07	---	---	---
MW-2	07/07/1994	280,000 a	40,000	26,000	8,100	32,000	---	---	---	---	---	---	---	---	---	170.91	11.89	159.02	---	---	---
MW-2 (D)	07/07/1994	53,000	13,000	6,600	2,000	8,400	---	---	---	---	---	---	---	---	---	170.91	11.89	159.02	---	---	---
MW-2	10/27/1994	130,000	14,000	12,000	2,400	13,000	---	---	---	---	---	---	---	---	---	170.91	12.89	158.02	---	---	---
MW-2 (D)	10/27/1994	390,000	8,800	7,000	1,700	11,000	---	---	---	---	---	---	---	---	---	170.91	12.89	158.02	---	---	---
MW-2	11/17/1994	---	---	---	---	---	---	---	---	---	---	---	---	---	---	170.91	9.11	161.80	---	---	---
MW-2	11/28/1994	---	---	---	---	---	---	---	---	---	---	---	---	---	---	170.91	9.22	161.69	---	---	---
MW-2	01/13/1995	75,000	5,900	12,000	3,100	17,000	---	---	---	---	---	---	---	---	---	170.91	8.10	162.81	---	---	---
MW-2	04/12/1995	100,000	8,500	11,000	2,400	12,000	---	---	---	---	---	---	---	---	---	170.91	10.12	160.79	---	---	---
MW-2 (D)	04/12/1995	80,000	4,200	9,300	2,500	12,000	---	---	---	---	---	---	---	---	---	170.91	10.12	160.79	---	---	---
MW-2	07/25/1995	---	---	---	---	---	---	---	---	---	---	---	---	---	---	170.91	11.53	159.80	0.52	---	---
MW-2	10/18/1995	---	---	---	---	---	---	---	---	---	---	---	---	---	---	170.91	14.02	156.99	0.13	---	---
MW-2	01/17/1996	---	---	---	---	---	---	---	---	---	---	---	---	---	---	170.91	10.27	160.78	0.17	---	---
MW-2	04/25/1996	---	---	---	---	---	---	---	---	---	---	---	---	---	---	170.91	11.68	159.25	0.03	---	---
MW-2	07/17/1996	---	---	---	---	---	---	---	---	---	---	---	---	---	---	170.91	12.78	158.51	0.48	---	---
MW-2	10/01/1996	---	---	---	---	---	---	---	---	---	---	---	---	---	---	170.91	14.21	156.92	0.28	---	---
MW-2	01/22/1997	---	---	---	---	---	---	---	---	---	---	---	---	---	---	170.91	10.92	160.08	0.11	---	---
MW-2	04/08/1997	---	---	---	---	---	---	---	---	---	---	---	---	---	---	170.91	14.12	156.95	0.20	---	---
MW-2	07/08/1997	---	---	---	---	---	---	---	---	---	---	---	---	---	---	170.91	14.98	156.08	0.19	---	---
MW-2	10/08/1997	---	---	---	---	---	---	---	---	---	---	---	---	---	---	170.91	12.97	157.98	0.05	---	---
MW-2	01/08/1998	---	---	---	---	---	---	---	---	---	---	---	---	---	---	170.91	12.54	158.43	0.08	---	---
MW-2	04/13/1998	180,000	2,800	5,200	2,400	13,000	71,000	---	---	---	---	---	---	---	---	170.91	10.05	160.86	---	---	---
MW-2	07/17/1998	---	---	---	---	---	---	---	---	---	---	---	---	---	---	170.91	11.75	159.24	0.10	---	---
MW-2	10/02/1998	---	---	---	---	---	---	---	---	---	---	---	---	---	---	170.91	16.78	154.22	0.11	---	---
MW-2	02/03/1999	---	---	---	---	---	---	---	---	---	---	---	---	---	---	170.91	9.90	161.07	0.08	---	---
MW-2	04/29/1999	---	---	---	---	---	---	---	---	---	---	---	---	---	---	170.91	9.86	161.09	0.05	---	---
MW-2	07/23/1999	65,800	6,500	4,480	1,960	8,960	46,600	58,500 f	---	---	---	---	---	---	---	170.91	14.45	156.46	---	1.4	---
MW-2	11/01/1999	---	---	---	---	---	---	---	---	---	---	---	---	---	---	170.91	11.84	159.09	0.03	---	---
MW-2	01/17/2000	46,000	6,000	2,400	1,500	5,500	50,000	31,000	---	---	---	---	---	---	---	170.91	11.00	159.91	---	1.3	-54
MW-2	04/17/2000	96,300	8,150	10,200	2,820	14,900	112,000	108,000	---	---	---	---	---	---	---	170.91	11.06	159.85	---	2.6	125
MW-2	07/26/2000	72,400	8,680	5,620	2,810	13,400	66,200	46,300	---	---	---	---	---	---	---	170.91	12.82	158.09	---	2.2	113
MW-2	10/12/2000	63,200	5,840	4,180	2,310	11,100	61,200	66,600	---	---	---	---	---	---	---	170.91	11.32	159.59	---	0.4	55
MW-2	01/15/2001	59,700	2,630	4,800	2,050	11,500	44,400	5,080	---	---	---	---	---	---	---	170.91	10.19	160.72	---	1.1	-22

GROUNDWATER DATA
FORMER SHELL SERVICE STATION
4255 MACARTHUR BOULEVARD, OAKLAND, CALIFORNIA

Well ID	Date	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE 8020 (µg/L)	MTBE 8260 (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	EDB (µg/L)	1,2-DCA (µg/L)	Ethanol (µg/L)	TOC (ft MSL)	Depth to Water (ft TOC)	GW Elevation (ft MSL)	SPH Thickness (ft)	DO Reading (m/L)	ORP Reading (mV)
MW-2	04/09/2001	56,900	1,860	2,550	1,810	9,720	40,000	46,600	---	---	---	---	---	---	---	170.91	11.15	159.76	---	1.0	-55
MW-2	07/24/2001	84,000	3,000	4,600	2,500	13,000	---	41,000	---	---	---	---	---	---	---	170.91	11.67	159.24	---	0.2	53
MW-2	10/31/2001	45,000	2,200	3,000	1,500	7,700	---	29,000	51,000	<50	<50	<50	---	---	<500	170.91	11.04	159.87	---	1.2	-17
MW-2	01/10/2002	28,000	840	740	760	3,300	---	32,000	---	---	---	---	---	---	---	170.91	9.58	161.33	---	2.1	-76
MW-2	04/25/2002	41,000	1,900	2,000	1,200	6,900	---	17,000	---	---	---	---	---	---	---	170.91	11.40	159.51	---	0.8	-95
MW-2	07/18/2002	87,000	2,000	2,200	1,400	10,000	---	19,000	---	---	---	---	---	---	---	170.91	12.68	158.23	---	0.7	-34
MW-2	10/07/2002	110,000	3,900	6,700	2,700	15,000	---	20,000	---	---	---	---	---	---	---	170.88	11.58	159.30	---	1.4	-52
MW-2	01/06/2003	65,000	2,400	3,500	1,400	8,600	---	26,000	---	---	---	---	---	---	---	170.88	9.09	161.79	---	0.4	40
MW-2	04/07/2003	57,000	1,900	2,500	1,700	8,600	---	37,000	34,000	---	---	---	---	---	---	170.88	11.08	159.80	---	1.0	60
MW-2	07/07/2003	34,000	4,000	4,200	1,600	8,500	---	51,000	44,000	---	---	---	---	---	---	170.88	11.27	159.61	---	1.3	-17
MW-2	10/09/2003	---	---	---	---	---	---	---	---	---	---	---	---	---	---	170.88	11.64	159.26	0.03	---	---
MW-2	10/20/2003	---	---	---	---	---	---	---	---	---	---	---	---	---	---	170.88	11.88	159.03	0.04	---	---
MW-2	01/14/2004	---	---	---	---	---	---	---	---	---	---	---	---	---	---	170.88	10.96	159.93	0.01	---	---
MW-2	04/28/2004	35,000	2,200	2,200	2,300	8,200	---	26,000	28,000	---	---	---	---	---	---	170.88	11.05	159.83	---	0.1	-96
MW-2	07/12/2004	---	---	---	---	---	---	---	---	---	---	---	---	---	---	170.88	12.12	158.78	0.03	---	---
MW-2	10/25/2004	60,000	2,900	2,300	2,300	7,600	---	27,000	26,000	---	---	---	---	---	---	170.88	11.23	159.65	---	1.62	-69
MW-2	01/17/2005	62,000	1,900	1,800	1,800	5,700	---	22,000	21,000	---	---	---	---	---	---	170.88	8.78	162.10	---	0.8	-102
MW-2	04/06/2005	40,000	1,500	940	1,600	2,900	---	23,000	23,000	---	---	---	---	---	---	170.88	9.23	161.65	---	0.60	-104
MW-2	07/08/2005	50,000	2,300	1,500	1,700	6,600	---	24,000	25,000	<150	<150	<150	---	---	<1,500	170.88	10.99	159.91	0.02	0.01	-41
MW-2	10/07/2005	---	---	---	---	---	---	---	---	---	---	---	---	---	---	170.88	12.15	158.75	0.02	---	---
MW-2	01/27/2006	56,800	1,270	1,280	1,520	5,370	---	8,210	10,600	---	---	---	---	---	---	170.88	9.55	161.33	---	---	---
MW-2	03/16/2006	82,100	1,230	1,310	1,350	4,630	---	9,020	9,690	---	---	---	---	---	---	170.88	8.10	162.78	---	---	---
MW-2	04/28/2006	81,400	1,200	1,610	1,660	5,580	---	10,800	11,100	---	---	---	---	---	---	170.88	9.25	161.63	---	---	---
MW-2	05/15/2006	119,000	2,210	3,800	2,330	8,900	---	15,600	12,200	---	---	---	---	---	---	170.88	10.28	160.60	---	---	---
MW-2	06/19/2006	121,000	1,680	3,830	2,990	12,400	---	10,700	9,310	---	---	---	---	---	---	170.88	10.90	159.98	---	---	---
MW-2	07/28/2006	172,000	3,590	3,450	2,840	8,210	---	22,800	11,300	<0.500	<0.500	<0.500	---	---	<50.0	170.88	11.84	159.04	---	---	---
MW-2	08/31/2006	91,200	1,590	3,710	2,570	11,700	---	3,520	3,940	---	---	---	---	---	---	170.88	18.03	152.85	---	---	---
MW-2	09/26/2006	50,000	2,300	1,300	1,600	6,700	---	17,000	19,000	---	---	---	---	---	---	170.88	10.23	160.65	---	---	---
MW-2	10/27/2006	159,000	5,200	3,890	2,600	12,500	---	18,100	9,230 d	---	---	---	---	---	---	170.88	12.11	158.77	---	---	---
MW-2	11/22/2006	53,000	1,500	960	1,800	7,100	---	9,600	12,000	---	---	---	---	---	---	170.88	11.35	159.53	---	---	---
MW-2	12/26/2006	Well inaccessible		---	---	---	---	---	---	---	---	---	---	---	---	170.88	---	---	---	---	---
MW-2	01/10/2007	45,000	2,700	1,700	1,400	5,800	---	13,000	11,000	---	---	---	---	---	---	170.88	10.21	160.67	---	---	---
MW-2	02/19/2007	13,000	1,800	1,900	1,500	5,900	---	7,400	11,000	---	---	---	---	---	---	170.88	9.22	161.66	---	---	---
MW-2	03/16/2007	52,000	2,600	2,300	2,000	7,300	---	9,100	12,000	---	---	---	---	---	---	170.88	9.88	161.00	---	---	---
MW-2	04/13/2007	60,000 g	2,200	2,100	2,300	7,900	---	13,000	20,000	---	---	---	---	---	---	170.88	10.61	160.29	0.02	---	---
MW-2	07/09/2007	---	---	---	---	---	---	---	---	---	---	---	---	---	---	170.88	11.77	159.20	0.11	---	---
MW-2	10/08/2007	---	---	---	---	---	---	---	---	---	---	---	---	---	---	170.88	12.70	158.33	0.19	---	---
MW-2	11/19/2007	---	---	---	---	---	---	---	---	---	---	---	---	---	---	170.88	8.00	162.88	---	---	---

TABLE 1

GROUNDWATER DATA
FORMER SHELL SERVICE STATION
4255 MACARTHUR BOULEVARD, OAKLAND, CALIFORNIA

Well ID	Date	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE 8020 (µg/L)	MTBE 8260 (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	EDB (µg/L)	1,2-DCA (µg/L)	Ethanol (µg/L)	TOC (ft MSL)	Depth to Water (ft TOC)	GW Elevation (ft MSL)	SPH Thickness (ft)	DO Reading (m/L)	ORP Reading (mV)
MW-2	12/10/2007	---	---	---	---	---	---	---	---	---	---	---	---	---	---	170.88	6.49	164.39	---	---	---
MW-2	01/09/2008	Unable to access		---	---	---	---	---	---	---	---	---	---	---	---	170.88	---	---	---	---	---
MW-2	01/22/2008	Unable to access		---	---	---	---	---	---	---	---	---	---	---	---	170.88	---	---	---	---	---
MW-2	02/21/2008	---	---	---	---	---	---	---	---	---	---	---	---	---	---	170.88	8.86	162.02	---	---	---
MW-2	03/20/2008	---	---	---	---	---	---	---	---	---	---	---	---	---	---	170.88	10.24	160.66	0.02	---	---
MW-2	04/04/2008	Unable to access		---	---	---	---	---	---	---	---	---	---	---	---	170.88	---	---	---	---	---
MW-2	05/27/2008	---	---	---	---	---	---	---	---	---	---	---	---	---	---	170.88	12.44	158.46	0.03	---	---
MW-2	06/11/2008	---	---	---	---	---	---	---	---	---	---	---	---	---	---	170.88	11.10	159.85	0.09	---	---
MW-2	06/11/2008	---	---	---	---	---	---	---	---	---	---	---	---	---	---	170.88	11.10	159.85	0.09	---	---
MW-2	07/03/2008	---	---	---	---	---	---	---	---	---	---	---	---	---	---	170.88	11.62	159.37	0.14	---	---
MW-2	08/04/2008	---	---	---	---	---	---	---	---	---	---	---	---	---	---	170.88	11.88	159.05	0.06	---	---
MW-2	09/17/1998	Unable to access		---	---	---	---	---	---	---	---	---	---	---	---	170.88	---	---	---	---	---
MW-2	10/03/2008	---	---	---	---	---	---	---	---	---	---	---	---	---	---	170.88	12.66	158.43	0.26	---	---
MW-2	11/26/2008	Unable to access		---	---	---	---	---	---	---	---	---	---	---	---	170.88	---	---	---	---	---
MW-2	12/30/2008	Unable to access		---	---	---	---	---	---	---	---	---	---	---	---	170.88	---	---	---	---	---
MW-2	01/22/2009	86,000	3,800	1,600	2,500	9,800	---	10,000	7,900	---	---	---	---	---	---	170.88	10.74	160.14	---	---	---
MW-2	02/27/2009	Unable to access		---	---	---	---	---	---	---	---	---	---	---	---	170.88	---	---	---	---	---
MW-2	04/13/2009	60,000	1,700	980	2,000	7,000	---	4,300	4,600	---	---	---	---	---	---	170.88	10.36	160.53	0.01	---	---
MW-2	07/23/2009	---	---	---	---	---	---	---	---	---	---	---	---	---	---	170.88	11.91	159.13	0.20	---	---
MW-2	11/10/2009	---	---	---	---	---	---	---	---	---	---	---	---	---	---	170.88	10.87	160.04	0.04	---	---
MW-2	02/01/2010	Unable to access		---	---	---	---	---	---	---	---	---	---	---	---	170.88	---	---	---	---	---
MW-2	02/09/2010	Unable to access		---	---	---	---	---	---	---	---	---	---	---	---	170.88	---	---	---	---	---
MW-2	08/02/2010	---	---	---	---	---	---	---	---	---	---	---	---	---	---	170.88	11.38	159.53	0.04	---	---
MW-2	01/31/2011	77,000	1,700	1,500	2,600	9,000	---	2,100	2,700	---	---	---	<25	<25	---	170.88	9.09	161.79	---	---	---
MW-2	04/26/2011	---	---	---	---	---	---	---	---	---	---	---	---	---	---	170.88	9.98	160.90	0.00	---	---
MW-2	07/25/2011	46,000	990	560	2,500	5,100	---	1,600	1,900	<50	<50	<50	---	---	<7,500	170.88	10.76	160.12	0.00	---	---
MW-2	10/13/2011	---	---	---	---	---	---	---	---	---	---	---	---	---	---	170.88	10.18	160.70	0.00	---	---
MW-2	01/23/2012	48,000	1,400	1,100	2,200	6,100	---	820	1,200	---	---	---	---	---	---	170.88	9.22	161.66	0.00	---	---
MW-2	04/23/2012	---	---	---	---	---	---	---	---	---	---	---	---	---	---	170.88	9.20	161.68	0.00	---	---
MW-2	07/24/2012	63,000	1,400	970	2,600	7,100	---	1,000	980	<20	<20	<20	---	---	---	170.88	10.82	160.06	0.00	---	---
MW-2	11/07/2012	---	---	---	---	---	---	---	---	---	---	---	---	---	---	170.88	10.76	160.12	0.00	---	---
MW-2	01/23/2013	48,000	1,500	1,300	1,800	5,400	---	1,100	1,400	---	---	---	---	---	---	170.88	10.30	160.58	0.00	---	---
MW-2	**04/01/2013**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**170.88**	**10.30**	**160.58**	**0.00**	**---**	**---**
MW-2	**07/10/2013**	**32,000**	**1,600**	**670**	**1,800**	**3,500**	**---**	**1,200**	**1,700**	**<20**	**<20**	**<20**	**---**	**---**	**<6,000**	**170.88**	**10.94**	**159.94**	**0.00**	**---**	**---**
MW-3	11/17/1993	18,000	5,400	660	720	2,200	---	---	---	---	---	---	---	---	---	174.61	15.40	159.21	---	---	---
MW-3	01/20/1994	55,000	13,000	2,600	2,200	6,500	---	---	---	---	---	---	---	---	---	174.61	14.61	160.00	---	---	---
MW-3	04/25/1994	96,000	11,000	1,600	3,100	9,900	---	---	---	---	---	---	---	---	---	174.61	13.12	161.49	---	---	---

TABLE 1

GROUNDWATER DATA
FORMER SHELL SERVICE STATION
4255 MACARTHUR BOULEVARD, OAKLAND, CALIFORNIA

Well ID	Date	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE 8020 (µg/L)	MTBE 8260 (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	EDB (µg/L)	1,2-DCA (µg/L)	Ethanol (µg/L)	TOC (ft MSL)	Depth to Water (ft TOC)	GW Elevation (ft MSL)	SPH Thickness (ft)	DO Reading (m/L)	ORP Reading (mV)
MW-3 (D)	04/25/1994	78,000	12,000	1,900	2,600	7,300	---	---	---	---	---	---	---	---	---	174.61	13.12	161.49	---	---	---
MW-3	07/07/1994	---	---	---	---	---	---	---	---	---	---	---	---	---	---	174.61	14.54	160.09	0.02	---	---
MW-3	10/27/1994	---	---	---	---	---	---	---	---	---	---	---	---	---	---	174.61	15.62	159.03	0.05	---	---
MW-3	11/17/1994	---	---	---	---	---	---	---	---	---	---	---	---	---	---	174.61	13.83	160.78	---	---	---
MW-3	11/28/1994	---	---	---	---	---	---	---	---	---	---	---	---	---	---	174.61	14.02	160.59	---	---	---
MW-3	01/13/1995	180,000	3,200	2,700	1,700	5,200	---	---	---	---	---	---	---	---	---	174.61	12.13	162.48	---	---	---
MW-3 (D)	01/13/1995	23,000	4,000	690	960	3,000	---	---	---	---	---	---	---	---	---	174.61	12.13	162.48	---	---	---
MW-3	04/12/1995	56,000	8,700	1,500	2,100	6,300	---	---	---	---	---	---	---	---	---	174.61	12.96	161.65	---	---	---
MW-3	07/25/1995	---	---	---	---	---	---	---	---	---	---	---	---	---	---	174.61	14.28	160.38	0.06	---	---
MW-3	10/18/1995	---	---	---	---	---	---	---	---	---	---	---	---	---	---	174.61	15.88	158.77	0.05	---	---
MW-3	01/17/1996	---	---	---	---	---	---	---	---	---	---	---	---	---	---	174.61	13.86	160.94	0.24	---	---
MW-3	04/25/1996	---	---	---	---	---	---	---	---	---	---	---	---	---	---	174.61	13.82	160.81	0.02	---	---
MW-3	07/17/1996	---	---	---	---	---	---	---	---	---	---	---	---	---	---	174.61	16.11	158.52	0.03	---	---
MW-3	10/01/1996	46,000	7,300	530	1,700	3,900	3,200	---	---	---	---	---	---	---	---	174.61	16.56	158.05	---	---	---
MW-3 (D)	10/01/1996	47,000	7,100	530	1,700	4,000	2,900	---	---	---	---	---	---	---	---	174.61	16.56	158.05	---	---	---
MW-3	01/22/1997	82,000	5,200	1,300	2,800	8,900	1,100	---	---	---	---	---	---	---	---	174.61	13.07	161.54	---	---	---
MW-3 (D)	01/22/1997	61,000	8,400	1,100	2,300	7,000	2,700	---	---	---	---	---	---	---	---	174.61	13.07	161.54	---	---	---
MW-3	04/08/1997	---	---	---	---	---	---	---	---	---	---	---	---	---	---	174.61	17.09	157.54	0.03	---	---
MW-3	07/08/1997	56,000	8,800	580	2,000	4,900	2,800	---	---	---	---	---	---	---	---	174.61	15.85	158.76	---	---	---
MW-3	10/08/1997	48,000	8,000	590	1,700	3,400	5,100	---	---	---	---	---	---	---	---	174.61	16.22	158.39	---	---	---
MW-3	01/08/1998	47,000	9,400	810	2,300	4,700	6,300	---	---	---	---	---	---	---	---	174.61	13.80	160.81	---	---	---
MW-3 (D)	01/08/1998	48,000	8,100	750	2,000	4,100	5,800	---	---	---	---	---	---	---	---	174.61	13.80	160.81	---	---	---
MW-3	04/13/1998	32,000	6,800	540	1,400	3,400	4,000	---	---	---	---	---	---	---	---	174.61	12.97	161.64	---	---	---
MW-3 (D)	04/13/1998	36,000	7,300	660	1,600	3,700	4,000	---	---	---	---	---	---	---	---	174.61	12.97	161.64	---	---	---
MW-3	07/17/1998	71,000	11,000	590	2,200	6,900	3,900	---	---	---	---	---	---	---	---	174.61	11.51	163.10	---	---	---
MW-3 (D)	07/17/1998	76,000	12,000	700	2,600	8,000	3,000	---	---	---	---	---	---	---	---	174.61	11.51	163.10	---	---	---
MW-3	10/02/1998	66,000	8,900	510	2,000	4,900	4,600	---	---	---	---	---	---	---	---	174.61	16.50	158.11	---	---	---
MW-3 (D)	10/02/1998	59,000	9,400	460	2,000	4,900	4,700	---	---	---	---	---	---	---	---	174.61	16.50	158.11	---	---	---
MW-3	02/03/1999	36,000	6,800	300	1,600	2,900	18,000	---	---	---	---	---	---	---	---	174.61	15.21	159.40	---	1.3	---
MW-3	04/29/1999	45,000	8,100	580	2,200	5,800	4,700	5,150	---	---	---	---	---	---	---	174.61	15.43	159.18	---	1.5	-68
MW-3	07/23/1999	29,400	3,540	215	810	3,800	4,720	6,950 f	---	---	---	---	---	---	---	174.61	14.95	159.66	---	1.3	---
MW-3	11/01/1999	20,000	4,190	294	1,060	1,740	5,540	8,590	---	---	---	---	---	---	---	174.61	14.66	159.95	---	0.6	-110
MW-3	01/17/2000	17,000	3,900	89	1,100	1,200	7,900	---	---	---	---	---	---	---	---	174.61	13.94	160.67	---	1.3	-40
MW-3	04/17/2000	28,100	5,240	247	1,540	2,750	16,600	---	---	---	---	---	---	---	---	174.61	14.00	160.61	---	1.1	-86
MW-3	07/26/2000	24,300	6,680	159	1,610	1,640	17,100	---	---	---	---	---	---	---	---	174.61	13.72	160.89	---	0.9	-70
MW-3	10/12/2000	14,300	2,630	86.7	241	1,360	16,300	---	---	---	---	---	---	---	---	174.61	14.15	160.46	---	0.9	50
MW-3	01/15/2001	22,100	4,400	266	977	2,990	13,200	---	---	---	---	---	---	---	---	174.61	13.05	161.56	---	1.3	-40
MW-3	04/09/2001	33,800	7,100	147	1,700	2,660	13,000	---	---	---	---	---	---	---	---	174.61	13.59	161.02	---	0.6	-56

GROUNDWATER DATA
FORMER SHELL SERVICE STATION
4255 MACARTHUR BOULEVARD, OAKLAND, CALIFORNIA

Well ID	Date	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE 8020 (µg/L)	MTBE 8260 (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	EDB (µg/L)	1,2-DCA (µg/L)	Ethanol (µg/L)	TOC (ft MSL)	Depth to Water (ft TOC)	GW Elevation (ft MSL)	SPH Thickness (ft)	DO Reading (m/L)	ORP Reading (mV)
MW-3	07/24/2001	220,000	5,600	1,900	4,400	19,000	---	12,000	---	---	---	---	---	---	---	174.61	14.43	160.18	---	0.4	29
MW-3	10/31/2001	65,000	2,700	510	1,800	7,200	---	9,800	5,200	<20	<20	<20	---	---	<500	174.61	14.59	160.02	---	0.9	-27
MW-3	01/10/2002	66,000	2,400	490	1,700	6,600	---	5,500	---	---	---	---	---	---	---	174.61	12.65	161.96	---	1.7	-76
MW-3	04/25/2002	55,000	4,600	460	2,400	6,900	---	8,100	---	---	---	---	---	---	---	174.61	14.13	160.48	---	1.2	-96
MW-3	07/18/2002	56,000	3,300	270	1,700	5,000	---	8,400	---	---	---	---	---	---	---	174.61	15.48	159.15	0.03	0.8	-41
MW-3	10/07/2002	---	---	---	---	---	---	---	---	---	---	---	---	---	---	174.59	14.60	160.15	0.20	---	---
MW-3	01/06/2003	57,000	3,200	330	1,800	5,400	---	5,100	---	---	---	---	---	---	---	174.59	11.62	162.99	0.02	0.4	33
MW-3	04/07/2003	57,000	6,200	500	2,400	6,700	---	8,200	3,900	---	---	---	---	---	---	174.59	13.80	160.79	---	0.5	61
MW-3	07/07/2003	28,000	4,900	300	1,500	4,100	---	7,900	4,700	---	---	---	---	---	---	174.59	14.00	160.59	---	1.0	-11
MW-3	10/09/2003	---	---	---	---	---	---	---	---	---	---	---	---	---	---	174.59	14.44	160.21	0.08	---	---
MW-3	10/20/2003	---	---	---	---	---	---	---	---	---	---	---	---	---	---	174.59	14.68	159.97	0.07	---	---
MW-3	01/14/2004	---	---	---	---	---	---	---	---	---	---	---	---	---	---	174.59	12.47	162.14	0.02	---	---
MW-3	04/28/2004	32,000	7,300	190	2,100	4,300	---	3,700	2,500	---	---	---	---	---	---	174.59	13.66	160.93	---	0.1	-16
MW-3	07/12/2004	---	---	---	---	---	---	---	---	---	---	---	---	---	---	174.59	14.87	159.75	0.04	---	---
MW-3	10/25/2004	49,000	5,100	61	1,800	3,600	---	5,400	2,700	---	---	---	---	---	---	174.59	14.12	160.47	---	2.70	-59
MW-3	01/17/2005	57,000	8,000	190	2,000	4,000	---	4,600	3,300	---	---	---	---	---	---	174.59	10.59	164.00	---	0.2	-18
MW-3	04/06/2005	57,000	7,300	180	2,200	3,300	---	4,100	2,700	---	---	---	---	---	---	174.59	10.58	164.01	---	0.95	-77
MW-3	07/08/2005	28,000	2,900	47	1,100	2,000	---	2,800	1,900	<20	<20	<20	---	---	<200	174.59	13.46	161.13	---	0.1	-51
MW-3	10/07/2005	23,000	3,200	39	960	1,300	---	2,600	1,900	---	---	---	---	---	---	174.59	14.76	159.83	---	---	---
MW-3	01/27/2006	38,500	6,520	139	1,350	2,160	---	1,940	1,490	---	---	---	---	---	---	174.59	11.69	162.90	---	---	---
MW-3	03/16/2006	65,100	5,280	181	1,580	2,520	---	2,410	12,300	---	---	---	---	---	---	174.59	10.08	164.51	---	---	---
MW-3	04/28/2006	<1000	4,330	157	1,480	2,690	---	2,470	1,520	---	---	---	---	---	---	174.59	3.31	171.28	---	---	---
MW-3	05/15/2006	69,600	6,100	159	1,690	2,640	---	3,520	1,720	---	---	---	---	---	---	174.59	12.69	161.90	---	---	---
MW-3	06/19/2006	103,000	5,070	117	2,210	3,950	---	2,790	1,080	---	---	---	---	---	---	174.59	13.28	161.31	---	---	---
MW-3	07/28/2006	86,600	4,890	85.7	1,570	2,250	---	2,790	1,260	7.28	<0.500	<0.500	---	---	<50.0	174.59	14.72	159.87	---	---	---
MW-3	08/31/2006	45,700	4,600	204	1,740	2,680	---	2,580	1,520	---	---	---	---	---	---	174.59	14.75	159.84	---	---	---
MW-3	09/26/2006	29,000	3,900	76	1,500	2,100	---	2,700	1,500	---	---	---	---	---	---	174.59	14.97	159.62	---	---	---
MW-3	10/27/2006	41,000	3,690	65.2	1,210	1,650	---	1,760	867 d	---	---	---	---	---	---	174.59	15.00	159.59	---	---	---
MW-3	11/22/2006	30,000	3,300	51	810	1,500	---	1,900	1,300	---	---	---	---	---	---	174.59	14.26	160.33	---	---	---
MW-3	12/26/2006	31,000	2,500	56	1,100	1,500	---	2,200	2,000	---	---	---	---	---	---	174.59	12.52	162.07	---	---	---
MW-3	01/10/2007	18,000	2,600	43	750	940	---	2,100	2,100	---	---	---	---	---	---	174.59	12.81	161.78	---	---	---
MW-3	02/19/2007	27,000	3,800	110	1,200	1,500	---	2,400	3,200	---	---	---	---	---	---	174.59	11.65	162.94	---	---	---
MW-3	03/16/2007	25,000	4,000	80	1,300	1,500	---	2,100	2,400	---	---	---	---	---	---	174.59	12.20	162.39	---	---	---
MW-3	04/13/2007	30,000 g	4,400	73	1,500	1,920	---	2,800	3,900	---	---	---	---	---	---	174.59	13.37	161.22	---	---	---
MW-3	07/09/2007	25,000 g	3,800	57	1,400	1,456	---	1,900	1,500	<100	<100	<100	---	---	<5,000	174.59	14.30	160.29	---	---	---
MW-3	10/08/2007	20,000 g	3,200	35 i	1,300	1,124 i	---	1,700	1,500	---	---	---	---	---	---	174.59	15.19	159.41	0.01	---	---
MW-3	11/19/2007	Unable to access			---	---	---	---	---	---	---	---	---	---	---	174.59	---	---	---	---	---
MW-3	11/30/2007	---	---	---	---	---	---	---	---	---	---	---	---	---	---	174.59	14.07	160.52	---	---	---

GROUNDWATER DATA
FORMER SHELL SERVICE STATION
4255 MACARTHUR BOULEVARD, OAKLAND, CALIFORNIA

Well ID	Date	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE 8020 (µg/L)	MTBE 8260 (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	EDB (µg/L)	1,2-DCA (µg/L)	Ethanol (µg/L)	TOC (ft MSL)	Depth to Water (ft TOC)	GW Elevation (ft MSL)	SPH Thickness (ft)	DO Reading (m/L)	ORP Reading (mV)
MW-3	12/10/2007	---	---	---	---	---	---	---	---	---	---	---	---	---	---	174.59	13.78	160.81	---	---	---
MW-3	01/09/2008	33,000 g	2,800	34	910	782 i	---	1,000	1,100	---	---	---	---	---	---	174.59	11.09	163.50	---	---	---
MW-3	02/21/2008	---	---	---	---	---	---	---	---	---	---	---	---	---	---	174.59	12.22	162.37	---	---	---
MW-3	03/20/2008	---	---	---	---	---	---	---	---	---	---	---	---	---	---	174.59	13.03	161.56	---	---	---
MW-3	04/04/2008	24,000	3,300	55	1,100	844	---	1,900	1,200	---	---	---	---	---	---	174.59	13.41	161.18	---	---	---
MW-3	05/27/2008	---	---	---	---	---	---	---	---	---	---	---	---	---	---	174.59	20.49	154.11	0.01	---	---
MW-3	06/11/2008	---	---	---	---	---	---	---	---	---	---	---	---	---	---	174.59	13.95	160.65	0.01	---	---
MW-3	07/03/2008	33,000	3,800	38	1,500	1,200	---	2,600	1,800	<50	<50	<50	---	---	<2,500	174.59	10.48	164.12	0.01	---	---
MW-3	09/17/1998	---	---	---	---	---	---	---	---	---	---	---	---	---	---	174.59	14.76	159.83	0.00	---	---
MW-3	09/17/1998	---	---	---	---	---	---	---	---	---	---	---	---	---	---	174.59	14.95	159.65	0.01	---	---
MW-3	10/03/2008	26,000	3,000	29	1,200	750	---	1,700	1,400	---	---	---	---	---	---	174.59	15.32	159.28	0.01	---	---
MW-3	11/26/2008	---	---	---	---	---	---	---	---	---	---	---	---	---	---	174.59	14.54	160.05	0.00	---	---
MW-3	12/30/2008	---	---	---	---	---	---	---	---	---	---	---	---	---	---	174.59	13.04	161.55	---	---	---
MW-3	01/22/2009	27,000	2,300	29	880	610	---	1,600	1,700	---	---	---	---	---	---	174.59	13.73	160.86	---	---	---
MW-3	02/27/2009	---	---	---	---	---	---	---	---	---	---	---	---	---	---	174.59	12.88	161.71	---	---	---
MW-3	04/13/2009	27,000	3,000	51	1,200	740	---	1,400	1,500	---	---	---	---	---	---	174.59	13.01	161.58	---	---	---
MW-3	07/23/2009	26,000	3,300	41	1,600	1,200	---	2,200	1,600	<50	<50	<50	---	---	<2,500	174.59	14.59	160.00	---	---	---
MW-3	11/10/2009	---	---	---	---	---	---	---	---	---	---	---	---	---	---	174.59	13.66	160.93	---	---	---
MW-3	02/01/2010	34,000	3,200	44	1,300	1,700	---	1,000	1,100	---	---	---	---	---	---	174.59	10.65	163.94	---	---	---
MW-3	08/02/2010	16,000	1,500	12	440	460	---	910	1,200	---	---	---	---	---	---	174.59	14.09	160.50	---	---	---
MW-3	01/31/2011	21,000	2,200	32	980	980	---	1,300	1,700	---	---	---	<20	<20	---	174.59	11.89	162.70	---	---	---
MW-3	04/26/2011	---	---	---	---	---	---	---	---	---	---	---	---	---	---	174.59	12.56	162.03	0.00	---	---
MW-3	07/25/2011	23,000	1,600	24	1,200	1,000	---	840	940	<25	<25	<25	---	---	<3,800	174.59	13.53	161.06	0.00	---	---
MW-3	10/13/2011	---	---	---	---	---	---	---	---	---	---	---	---	---	---	174.59	13.02	161.57	0.00	---	---
MW-3	01/23/2012	25,000	1,500	16	640	610	---	730	660	---	---	---	---	---	---	174.59	12.30	162.29	0.00	---	---
MW-3	04/23/2012	---	---	---	---	---	---	---	---	---	---	---	---	---	---	174.59	11.43	163.16	0.00	---	---
MW-3	07/24/2012	22,000	2,100	33	870	550	---	970	1,100	<10	<10	<10	---	---	---	174.59	13.84	160.76	0.01	---	---
MW-3	11/07/2012	---	---	---	---	---	---	---	---	---	---	---	---	---	---	174.59	13.81	160.78	0.00	---	---
MW-3	01/23/2013	36,000	1,600	18	900	830	---	800	1,200	---	---	---	---	---	---	174.59	12.85	161.74	0.00	---	---
MW-3	**04/01/2013**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**174.59**	**13.33**	**161.26**	**0.00**	**---**	**---**
MW-3	**07/10/2013**	**14,000**	**1,700**	**17**	**250**	**330**	**---**	**870**	**970**	**<10**	**<10**	**<10**	**---**	**---**	**<3,000**	**174.59**	**14.01**	**160.58**	**0.00**	**---**	**---**
MW-4	11/17/1994	---	---	---	---	---	---	---	---	---	---	---	---	---	---	164.06	6.62	157.44	---	---	---
MW-4	11/28/1994	2,900	200	17	76	260	---	---	---	---	---	---	---	---	---	164.06	6.11	157.95	---	---	---
MW-4	01/13/1995	1,900	130	5.6	13	40	---	---	---	---	---	---	---	---	---	164.06	6.05	158.01	---	---	---
MW-4	04/12/1995	680	150	<2.0	10	13	---	---	---	---	---	---	---	---	---	164.06	6.31	157.75	---	---	---
MW-4	07/25/1995	340	100	0.80	8.8	3.0	---	---	---	---	---	---	---	---	---	164.06	7.36	156.70	---	---	---
MW-4	10/18/1995	150	31	<0.50	3.5	0.80	---	---	---	---	---	---	---	---	---	164.06	8.54	155.52	---	---	---

GROUNDWATER DATA
FORMER SHELL SERVICE STATION
4255 MACARTHUR BOULEVARD, OAKLAND, CALIFORNIA

Well ID	Date	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE 8020 (µg/L)	MTBE 8260 (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	EDB (µg/L)	1,2-DCA (µg/L)	Ethanol (µg/L)	TOC (ft MSL)	Depth to Water (ft TOC)	GW Elevation (ft MSL)	SPH Thickness (ft)	DO Reading (m/L)	ORP Reading (mV)
MW-4	01/17/1996	290	14	<0.50	1.8	0.80	---	---	---	---	---	---	---	---	---	164.06	8.48	155.58	---	---	---
MW-4	04/25/1996	<500	65	<5.0	<5.0	<5.0	1,700	---	---	---	---	---	---	---	---	164.06	7.40	156.66	---	---	---
MW-4 (D)	04/25/1996	<500	66	<5.0	8.7	<5.0	1,500	---	---	---	---	---	---	---	---	164.06	7.40	156.66	---	---	---
MW-4	07/17/1996	<500	84	<5.0	6.5	<5.0	1,500	---	---	---	---	---	---	---	---	164.06	7.75	156.31	---	---	---
MW-4 (D)	07/17/1996	<500	54	<5.0	<5.0	<5.0	1,700	2,100	---	---	---	---	---	---	---	164.06	7.75	156.31	---	---	---
MW-4	10/01/1996	<500	1.9	<5.0	<5.0	<5.0	3,000	---	---	---	---	---	---	---	---	164.06	8.82	155.24	---	---	---
MW-4	01/22/1997	580	130	<2.5	18	5.2	1,200	---	---	---	---	---	---	---	---	164.06	7.51	156.55	---	---	---
MW-4	04/08/1997	770	200	7.0	26	55	1,500	8.0	---	---	---	---	---	---	---	164.06	7.18	156.88	---	---	---
MW-4	07/08/1997	570	78	<5.0	14	11	1,200	---	---	---	---	---	---	---	---	164.06	9.00	155.06	---	---	---
MW-4 (D)	07/08/1997	640	81	<5.0	16	19	1,600	---	---	---	---	---	---	---	---	164.06	9.00	155.06	---	---	---
MW-4	10/08/1997	<500	40	<5.0	7.4	5.4	1,400	---	---	---	---	---	---	---	---	164.06	8.97	155.09	---	---	---
MW-4 (D)	10/08/1997	<500	36	<5.0	5.9	<5.0	1,400	---	---	---	---	---	---	---	---	164.06	8.97	155.09	---	---	---
MW-4	01/08/1998	<1,000	55	<10	13	<10	2,000	---	---	---	---	---	---	---	---	164.06	7.90	156.16	---	---	---
MW-4	04/13/1998	350	110	2.4	20	26	<2.5	---	---	---	---	---	---	---	---	164.06	7.35	156.71	---	---	---
MW-4	07/17/1998	210	66	0.78	5.4	9.8	1,700	---	---	---	---	---	---	---	---	164.06	6.95	157.11	---	---	---
MW-4	10/02/1998	<50	0.69	<0.50	<0.50	<0.50	2,900	---	---	---	---	---	---	---	---	164.06	7.35	156.71	---	---	---
MW-4	02/03/1999	560	120	2.5	29	34	6,800	---	---	---	---	---	---	---	---	164.06	7.71	156.35	---	0.9	---
MW-4	04/29/1999	390	80	1.9	13	19	7,000	8,360	---	---	---	---	---	---	---	164.06	7.83	156.23	---	1.1	-125
MW-4	07/23/1999	460	93.6	8.40	25.2	28.8	3,760	6,000 f	---	---	---	---	---	---	---	164.06	11.33	152.73	---	0.9	---
MW-4	11/01/1999	77.3	0.520	<0.500	<0.500	<0.500	539	---	---	---	---	---	---	---	---	164.06	10.66	153.40	---	2.8	3
MW-4	01/17/2000	160	27	<0.50	12	6.3	12,000	---	---	---	---	---	---	---	---	164.06	10.15	153.91	---	3.9	-17
MW-4	04/17/2000	<500	26	6.38	9.35	10.4	9,070	---	---	---	---	---	---	---	---	164.06	10.10	153.96	---	1.7	-129
MW-4	07/26/2000	<500	22.7	<5.00	7.59	6.96	7,660	---	---	---	---	---	---	---	---	164.06	10.09	153.97	---	1.4	-137
MW-4	10/12/2000	172	19.8	<0.500	7.47	4.50	8,290	---	---	---	---	---	---	---	---	164.06	9.35	154.71	---	3.5	529
MW-4	01/15/2001	53.6	1.50	<0.500	2.45	1.80	9,260	---	---	---	---	---	---	---	---	164.06	8.77	155.29	---	2.3	53
MW-4	04/09/2001	<500	<5.00	<5.00	<5.00	5.52	10,300	---	---	---	---	---	---	---	---	164.06	7.75	156.31	---	1.0	-133
MW-4	07/24/2001	58	3.8	<0.50	3.2	2.9	---	1,700	---	---	---	---	---	---	---	164.06	10.07	153.99	---	0.5	106
MW-4	10/31/2001	<1,000	<10	<10	<10	<10	---	7,400	---	---	---	---	---	---	---	164.06	9.97	154.09	---	0.8	22
MW-4	01/10/2002	<2,000	<20	<20	<20	<20	---	12,000	---	---	---	---	---	---	---	164.06	8.53	155.53	---	8.9	224
MW-4	04/25/2002	<2,000	<20	<20	<20	<20	---	7,900	---	---	---	---	---	---	---	164.06	7.33	156.73	---	3.6	-84
MW-4	07/18/2002	<2,000	<20	<20	<20	<20	---	7,200	---	---	---	---	---	---	---	164.06	9.05	155.01	---	1.7	120
MW-4	10/07/2002	<1,000	<10	<10	<10	<10	---	3,300	---	---	---	---	---	---	---	164.03	9.06	154.97	---	2.5	33
MW-4	01/06/2003	<500	21	<5.0	<5.0	<5.0	---	2,500	---	---	---	---	---	---	---	164.03	7.09	156.94	---	0.5	55
MW-4	04/07/2003	<2,500	<25	<25	<25	<50	---	1,700	5,900	---	---	---	---	---	---	164.03	8.26	155.77	---	1.2	69
MW-4	07/07/2003	<2,500	<25	<25	<25	<50	---	860	6,900	---	---	---	---	---	---	164.03	8.92	155.11	---	0.5	-3
MW-4	10/09/2003	<500	<5.0	<5.0	<5.0	<10	---	420	6,700	---	---	---	---	---	---	164.03	8.91	155.12	---	0.7	171
MW-4	01/14/2004	<1,000	24	<10	<10	<20	---	500	7,200	---	---	---	---	---	---	164.03	8.34	155.69	---	1.2	140
MW-4	04/28/2004	<500	6.0	<5.0	<5.0	<10	---	310	5,200	---	---	---	---	---	---	164.03	7.55	156.48	---	0.4	69

TABLE 1

GROUNDWATER DATA
FORMER SHELL SERVICE STATION
4255 MACARTHUR BOULEVARD, OAKLAND, CALIFORNIA

Well ID	Date	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE 8020 (µg/L)	MTBE 8260 (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	EDB (µg/L)	1,2-DCA (µg/L)	Ethanol (µg/L)	TOC (ft MSL)	Depth to Water (ft TOC)	GW Elevation (ft MSL)	SPH Thickness (ft)	DO Reading (m/L)	ORP Reading (mV)
MW-4	07/12/2004	<500	11	<5.0	7.8	<10	---	370	5,900	<20	<20	<20	---	---	<500	164.03	8.12	155.91	---	0.5	142
MW-4	10/25/2004	<500	<5.0	<5.0	5.6	<10	---	280	4,300	---	---	---	---	---	---	164.03	7.85	156.18	---	1.90	-70
MW-4	01/17/2005	<1,000	56	<10	10	<20	---	380	8,400	---	---	---	---	---	---	164.03	6.08	157.95	---	0.4	6
MW-4	04/06/2005	<1,000	52	<10	11	<20	---	450	12,000	---	---	---	---	---	---	164.03	8.10	155.93	---	0.49	11
MW-4	07/08/2005	<400	30	<4.0	6.0	<4.0	---	250	9,600	<4.0	<4.0	<4.0	---	---	<40	164.03	7.50	156.53	---	0.6	71
MW-4	07/08/2005	<400	30	<4.0	6.0	<4.0	---	250	9,600	<4.0	<4.0	<4.0	---	---	<40	164.03	7.50	156.53	---	0.6	71
MW-4	10/07/2005	<1,000	<10	<10	<10	<20	---	200	8,900	---	---	---	---	---	---	164.03	8.30	155.73	---	---	---
MW-4	01/27/2006	1,140	34.3	2.37	8.69	12.0	---	198	32,100	---	---	---	---	---	---	164.03	8.55	155.48	---	---	---
MW-4	04/28/2006	1,490	46.8	2.80	21.2	24.8	---	344	14,800	---	---	---	---	---	---	164.03	9.02	155.01	---	---	---
MW-4	07/28/2006	951	5.09	<0.500	<0.500	<0.500	---	169	4,830	1.57	<0.500	<0.500	---	---	<50.0	164.03	9.19	154.84	---	---	---
MW-4	10/27/2006	1,620	21.5	2.65	13.2	10.3	---	173	5,150	---	---	---	---	---	---	164.03	9.01	155.02	---	---	---
MW-4	01/10/2007	740	56	2.4	23	24	---	190	7,500 f	---	---	---	---	---	---	164.03	6.95	157.08	---	---	---
MW-4	04/13/2007	1,500 g	130	20	100	138	---	120	6,300	---	---	---	---	---	---	164.03	7.51	156.52	---	---	---
MW-4	07/09/2007	650 g	65	5.3 i	36	33.2 i	---	130	6,000	<20	<20	<20	---	---	<1,000	164.03	7.85	156.18	---	---	---
MW-4	10/08/2007	840 g	100	23	70	120	---	120	5,300	---	---	---	---	---	---	164.03	8.50	155.53	---	---	---
MW-4	01/09/2008	2,200 g	130	38	130	264	---	160	5,400	---	---	---	---	---	---	164.03	8.33	155.70	---	---	---
MW-4	04/04/2008	1,700	93	24	74	145	---	110	3,700	---	---	---	---	---	---	164.03	6.63	157.40	---	---	---
MW-4	07/03/2008	1,400	87	15	54	109	---	88	3,900	<20	<20	<20	---	---	<1,000	164.03	8.25	155.78	---	---	---
MW-4	10/03/2008	1,000	61	12	41	78	---	84	3,700	---	---	---	---	---	---	164.03	8.54	155.49	---	---	---
MW-4	01/22/2009	800	26	5.4	14	26	---	81	4,100	---	---	---	---	---	---	164.03	7.40	156.63	---	---	---
MW-4	04/13/2009	2,000	100	26	64	130	---	69	3,200	---	---	---	---	---	---	164.03	6.91	157.12	---	---	---
MW-4	07/23/2009	1,500	180	54	86	200	---	85	2,500	<10	<10	<10	---	---	<500	164.03	7.97	156.06	---	---	---
MW-4	02/01/2010	1,400	120	44	57	120	---	81	2,900	---	---	---	---	---	---	164.03	6.05	157.98	---	---	---
MW-4	08/02/2010	340,000	5,300	5,800	7,700	26,000	---	62	1,800	---	---	---	---	---	---	164.03	6.48	157.65	0.12	---	---
MW-4	01/31/2011	9,700	47	62	340	1,100	---	77	1,300	---	---	---	<5.0	<5.0	---	164.03	6.67	157.36	---	---	---
MW-4	04/26/2011	---	---	---	---	---	---	---	---	---	---	---	---	---	---	164.03	8.73	155.30	0.00	---	---
MW-4	07/25/2011	94,000	2,800	2,900	3,800	12,000	---	<100	<1,000	<100	<100	<100	---	---	<15,000	164.03	7.27	156.76	0.00	---	---
MW-4	10/13/2011	---	---	---	---	---	---	---	---	---	---	---	---	---	---	164.03	7.57	156.46	0.00	---	---
MW-4	01/23/2012	6,100	83	61	230	510	---	46	150	---	---	---	---	---	---	164.03	5.82	158.21	0.00	---	---
MW-4	04/23/2012	---	---	---	---	---	---	---	---	---	---	---	---	---	---	164.03	6.50	157.53	0.00	---	---
MW-4	07/24/2012	5,400	95	33	160	410	---	42	67	<2.5	<2.5	<2.5	---	---	---	164.03	7.19	156.84	0.00	---	---
MW-4	11/07/2012	---	---	---	---	---	---	---	---	---	---	---	---	---	---	164.03	6.96	157.07	0.00	---	---
MW-4	01/23/2013	31,000	110	190	950	3,400	---	33	<500	---	---	---	---	---	---	164.03	6.75	157.28	0.00	---	---
MW-4	**04/01/2013**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**164.03**	**7.11**	**156.92**	**0.00**	**---**	**---**
MW-4	**07/10/2013**	**9,000**	**63**	**24**	**180**	**600**	**---**	**34**	**<100**	**<5.0**	**<5.0**	**<5.0**	**---**	**---**	**<1,500**	**164.03**	**7.15**	**156.88**	**0.00**	**---**	**---**
MW-5	01/04/2002	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	5.62	---	---	---	---
MW-5	01/10/2002	<50	<0.50	<0.50	<0.50	<0.50	---	110	---	---	---	---	---	---	---	164.06	5.88	158.18	---	3.3	172

GROUNDWATER DATA
FORMER SHELL SERVICE STATION
4255 MACARTHUR BOULEVARD, OAKLAND, CALIFORNIA

Well ID	Date	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE 8020 (µg/L)	MTBE 8260 (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	EDB (µg/L)	1,2-DCA (µg/L)	Ethanol (µg/L)	TOC (ft MSL)	Depth to Water (ft TOC)	GW Elevation (ft MSL)	SPH Thickness (ft)	DO Reading (m/L)	ORP Reading (mV)
MW-5	04/25/2002	<50	<0.50	<0.50	<0.50	<0.50	---	73	---	---	---	---	---	---	---	164.06	6.81	157.25	---	0.3	-44
MW-5	07/18/2002	<50	<0.50	<0.50	<0.50	<0.50	---	75	---	---	---	---	---	---	---	164.06	7.38	156.68	---	0.4	170
MW-5	10/07/2002	<50	<0.50	<0.50	<0.50	<0.50	---	41	---	---	---	---	---	---	---	164.14	6.75	157.39	---	1.5	16
MW-5	01/06/2003	<50	<0.50	<0.50	<0.50	<0.50	---	81	---	---	---	---	---	---	---	164.14	5.96	158.18	---	0.6	166
MW-5	04/07/2003	<50	<0.50	<0.50	<0.50	<1.0	---	77	28	---	---	---	---	---	---	164.14	6.51	157.63	---	0.8	174
MW-5	07/07/2003	<50	<0.50	<0.50	<0.50	<1.0	---	32	23	---	---	---	---	---	---	164.14	6.44	157.70	---	0.3	-17
MW-5	10/09/2003	<50	<0.50	<0.50	<0.50	<1.0	---	59	40	---	---	---	---	---	---	164.14	7.05	157.09	---	0.9	17
MW-5	01/14/2004	<50	<0.50	0.76	<0.50	<1.0	---	47	17	---	---	---	---	---	---	164.14	6.29	157.85	---	1.6	209
MW-5	04/28/2004	<50	<0.50	<0.50	<0.50	<1.0	---	31	11	---	---	---	---	---	---	164.14	6.84	157.30	---	0.4	136
MW-5	07/12/2004	<50	<0.50	<0.50	<0.50	<1.0	---	47	12	<2.0	<2.0	<2.0	---	---	<50	164.14	7.57	156.57	---	0.4	90
MW-5	10/25/2004	<50	<0.50	<0.50	<0.50	<1.0	---	41	13	---	---	---	---	---	---	164.14	6.50	157.64	---	1.74	-21
MW-5	01/17/2005	<50	<0.50	<0.50	<0.50	<1.0	---	41	12	---	---	---	---	---	---	164.14	5.83	158.31	---	0.1	-7
MW-5	04/06/2005	<50	<0.50	<0.50	<0.50	<1.0	---	12	<5.0	---	---	---	---	---	---	164.14	5.91	158.23	---	1.05	-62
MW-5	07/08/2005	<50	<0.50	<0.50	<0.50	<0.50	---	26	18	<0.50	<0.50	<0.50	---	---	<5.0	164.14	6.78	157.36	---	1.2	81
MW-5	10/07/2005	<50	<0.50	<0.50	<0.50	<1.0	---	28	24	---	---	---	---	---	---	164.14	7.64	156.50	---	---	---
MW-5	01/27/2006	<50.0	<0.500	<0.500	<0.500	<0.500	---	26.7	46.3	---	---	---	---	---	---	164.14	6.21	157.93	---	---	---
MW-5	04/28/2006	<50.0	<0.500	<0.500	<0.500	<0.500	---	39.1	15.0	---	---	---	---	---	---	164.14	6.05	158.09	---	---	---
MW-5	07/28/2006	103	<0.500	<0.500	<0.500	<0.500	---	35.5	<10.0	<0.500	<0.500	<0.500	---	---	<50.0	164.14	7.54	156.60	---	---	---
MW-5	10/27/2006	<50.0	<0.500	<0.500	<0.500	<0.500	---	19.7	26.0 d	---	---	---	---	---	---	164.14	7.91	156.23	---	---	---
MW-5	01/10/2007	<50	<0.50	<0.50	<0.50	<1.0	---	11	16	---	---	---	---	---	---	164.14	6.38	157.76	---	---	---
MW-5	04/13/2007	76 g,h	<0.50	<1.0	<1.0	<1.0	---	35	37	---	---	---	---	---	---	164.14	6.58	157.56	---	---	---
MW-5	07/09/2007	<50 g	<0.50	<1.0	<1.0	<1.0	---	26	34	<2.0	<2.0	<2.0	---	---	<100	164.14	7.28	156.86	---	---	---
MW-5	10/08/2007	<50 g	<0.50	<1.0	<1.0	<1.0	---	25	28	---	---	---	---	---	---	164.14	8.01	156.13	---	---	---
MW-5	01/09/2008	<50 g	0.15 i	<1.0	<1.0	<1.0	---	11	7.6 i	---	---	---	---	---	---	164.14	5.45	158.69	---	---	---
MW-5	04/04/2008	50	<0.50	<1.0	<1.0	<1.0	---	17	<10	---	---	---	---	---	---	164.14	6.61	157.53	---	---	---
MW-5	07/03/2008	<50	<0.50	<1.0	<1.0	<1.0	---	16	11	<2.0	<2.0	<2.0	---	---	<100	164.14	7.40	156.74	---	---	---
MW-5	10/03/2008	<50	<0.50	<1.0	<1.0	<1.0	---	17	14	---	---	---	---	---	---	164.14	7.90	156.24	---	---	---
MW-5	01/22/2009	<50	<0.50	<1.0	<1.0	<1.0	---	9.2	<10	---	---	---	---	---	---	164.14	6.30	157.84	---	---	---
MW-5	04/13/2009	<50	<0.50	<1.0	<1.0	<1.0	---	8.4	<10	---	---	---	---	---	---	164.14	6.42	157.72	---	---	---
MW-5	07/23/2009	<50	<0.50	<1.0	<1.0	<1.0	---	15	<10	<2.0	<2.0	<2.0	---	---	<100	164.14	7.60	156.54	---	---	---
MW-5	02/01/2010	<50	<0.50	<1.0	<1.0	<1.0	---	9.0	<10	---	---	---	---	---	---	164.14	5.80	158.34	---	---	---
MW-5	08/02/2010	<50	<0.50	<1.0	<1.0	<1.0	---	7.5	<10	---	---	---	---	---	---	164.14	7.00	157.14	---	---	---
MW-5	01/31/2011	<50	<0.50	<0.50	<0.50	<1.0	---	7.5	<10	---	---	---	<0.50	<0.50	---	164.14	5.79	158.35	---	---	---
MW-5	07/25/2011	Unable to locate		---	---	---	---	---	---	---	---	---	---	---	---	164.14	---	---	---	---	---
MW-5	01/23/2012	<50	<0.50	<0.50	<0.50	<1.0	---	5.7	<10	---	---	---	---	---	---	164.14	5.40	158.74	---	---	---
MW-5	07/24/2012	<50	<0.50	<0.50	<0.50	<1.0	---	9.0	<10	<0.50	<0.50	<0.50	---	---	---	164.14	6.45	157.69	---	---	---
MW-5	01/23/2013	<50	<0.50	<0.50	<0.50	<1.0	---	6.0	<10	---	---	---	---	---	---	164.14	6.32	157.82	---	---	---
MW-5	**07/10/2013**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<1.0**	**---**	**6.8**	**<10**	**<0.50**	**<0.50**	**<0.50**	**---**	**---**	**<150**	**164.14**	**6.68**	**157.46**	**---**	**---**	**---**

GROUNDWATER DATA
FORMER SHELL SERVICE STATION
4255 MACARTHUR BOULEVARD, OAKLAND, CALIFORNIA

Well ID	Date	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE 8020 (µg/L)	MTBE 8260 (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	EDB (µg/L)	1,2-DCA (µg/L)	Ethanol (µg/L)	TOC (ft MSL)	Depth to Water (ft TOC)	GW Elevation (ft MSL)	SPH Thickness (ft)	DO Reading (m/L)	ORP Reading (mV)
MW-6	06/26/2006	---	---	---	---	---	---	---	---	---	---	---	---	---	---	169.89	10.25	159.64	---	---	---
MW-6	07/28/2006	19,200	1,290	41.7	141	245	---	777	8,340	3.37	<0.500	<0.500	---	---	<50.0	169.89	11.00	158.89	---	---	---
MW-6	10/27/2006	11,400	1,250	41.0	155	242	---	569	7,270	---	---	---	---	---	---	169.89	11.41	158.48	---	---	---
MW-6	01/10/2007	7,000	1,000	26	270	240	---	770	17,000	---	---	---	---	---	---	169.89	9.43	160.46	---	---	---
MW-6	04/13/2007	4,200 g	820	22	72	71	---	490	9,500	---	---	---	---	---	---	169.89	9.81	160.08	---	---	---
MW-6	07/09/2007	6,100 g	960	23	65	116	---	280	8,400	<40	<40	<40	---	---	<2,000	169.89	10.80	159.09	---	---	---
MW-6	10/08/2007	3,600 g	960	17 i	27	76 i	---	260	7,000	---	---	---	---	---	---	169.89	11.64	158.25	---	---	---
MW-6	01/09/2008	Unable to access			---	---	---	---	---	---	---	---	---	---	---	169.89	---	---	---	---	---
MW-6	01/22/2008	4,100 g	610	14 i	31	19 i	---	180	7,700	---	---	---	---	---	---	169.89	8.81	161.08	---	---	---
MW-6	04/04/2008	6,100	760	<20	20	29	---	240	6,900	---	---	---	---	---	---	169.89	10.01	159.88	---	---	---
MW-6	07/03/2008	7,100	1,100	<20	25	50	---	220	9,400	<40	<40	<40	---	---	<2,000	169.89	10.94	158.95	---	---	---
MW-6	10/03/2008	7,400	1,000	<20	<20	116	---	270	8,400	---	---	---	---	---	---	169.89	11.87	158.02	---	---	---
MW-6	01/22/2009	Unable to access			---	---	---	---	---	---	---	---	---	---	---	169.89	---	---	---	---	---
MW-6	04/13/2009	5,300	690	<20	35	47	---	210	9,000	---	---	---	---	---	---	169.89	9.70	160.19	---	---	---
MW-6	07/23/2009	6,800	1,100	<20	<20	42	---	220	7,400	<40	<40	<40	---	---	<2000	169.89	11.09	158.80	---	---	---
MW-6	02/01/2010	4,000	460	<10	<10	<10	---	88	8,400	---	---	---	---	---	---	169.89	8.05	161.84	---	---	---
MW-6	08/02/2010	7,600	860	15	18	49	---	97	6,800	---	---	---	---	---	---	169.89	10.50	159.39	---	---	---
MW-6	01/31/2011	2,800	370	11	19	26	---	170	4,800	---	---	---	<5.0	<5.0	---	169.89	8.52	161.37	---	---	---
MW-6	07/25/2011	4,600	730	13	6.5	18	---	110	5,500	<10	<10	<10	---	---	<1,500	169.89	10.08	159.81	---	---	---
MW-6	01/23/2012	2,100	300	5.3	5.1	13	---	61	3,100	---	---	---	---	---	---	169.89	8.18	161.71	---	---	---
MW-6	07/24/2012	3,400	510	8.8	5.8	14	---	110	5,100	<5.0	<5.0	<5.0	---	---	---	169.89	10.01	159.88	---	---	---
MW-6	01/23/2013	2,400	260	5.4	30	15	---	110	4,600	---	---	---	---	---	---	169.89	9.62	160.27	---	---	---
MW-6	**07/10/2013**	**3,000**	**390**	**6.3**	**<5.0**	**12**	**---**	**110**	**4,300**	**<5.0**	**<5.0**	**<5.0**	**---**	**---**	**<1,500**	**169.89**	**9.94**	**159.95**	**---**	**---**	**---**
MW-7	06/26/2006	---	---	---	---	---	---	---	---	---	---	---	---	---	---	170.87	9.59	161.28	---	---	---
MW-7	07/28/2006	5,860	72.0	6.67	25.4	165	---	3,940	1,420	<0.500	<0.500	2.89	---	---	<50.0	170.87	10.08	160.79	---	---	---
MW-7	10/27/2006	1,180	8.67	<0.500	2.48	7.52	---	1,100	184	---	---	---	---	---	---	170.87	10.13	160.74	---	---	---
MW-7	01/10/2007	1,000	12	<5.0	<5.0	<10	---	2,200 f	2,400	---	---	---	---	---	---	170.87	8.41	162.46	---	---	---
MW-7	04/13/2007	1,100 g,h	54	<20	18 i	23.5 i	---	2,500	3,800	---	---	---	---	---	---	170.87	8.25	162.62	---	---	---
MW-7	07/09/2007	1,100 g	41	<20	8.8 i	4.5 i	---	2,000	1,200	<40	<40	<40	---	---	<2,000	170.87	9.22	161.65	---	---	---
MW-7	10/08/2007	400 g	25	<20	<20	<20	---	1,500	740	---	---	---	---	---	---	170.87	9.41	161.46	---	---	---
MW-7	01/09/2008	Unable to access			---	---	---	---	---	---	---	---	---	---	---	170.87	---	---	---	---	---
MW-7	01/22/2008	160 g	32	<10	<10	<10	---	1,900	820	---	---	---	---	---	---	170.87	7.63	163.24	---	---	---
MW-7	04/04/2008	Unable to access			---	---	---	---	---	---	---	---	---	---	---	170.87	---	---	---	---	---
MW-7	07/03/2008	1,500	11	<10	<10	<10	---	1,700	680	<20	<20	<20	---	---	<1,000	170.87	8.96	161.91	---	---	---
MW-7	10/03/2008	1,000	5.6	<10	<10	<10	---	970	550	---	---	---	---	---	---	170.87	9.57	161.30	---	---	---
MW-7	01/22/2009	880	<5.0	<10	<10	18	---	550	250	---	---	---	---	---	---	170.87	8.60	162.27	---	---	---

GROUNDWATER DATA
FORMER SHELL SERVICE STATION
4255 MACARTHUR BOULEVARD, OAKLAND, CALIFORNIA

Well ID	Date	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE 8020 (µg/L)	MTBE 8260 (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	EDB (µg/L)	1,2-DCA (µg/L)	Ethanol (µg/L)	TOC (ft MSL)	Depth to Water (ft TOC)	GW Elevation (ft MSL)	SPH Thickness (ft)	DO Reading (m/L)	ORP Reading (mV)
MW-7	04/13/2009	1,400	15	<10	<10	<10	---	820	440	---	---	---	---	---	---	170.87	8.24	162.63	---	---	---
MW-7	07/23/2009	1,400	12	<10	<10	<10	---	1,300	550	<20	<20	<20	---	---	<1000	170.87	9.10	161.77	---	---	---
MW-7	02/01/2010	1,300	20	<10	<10	<10	---	1,300	920	---	---	---	---	---	---	170.87	6.81	164.06	---	---	---
MW-7	08/02/2010	780	10	<5.0	<5.0	<5.0	---	890	680	---	---	---	---	---	---	170.87	8.55	162.32	---	---	---
MW-7	01/31/2011	340	12	3.2	6.1	17	---	390	480	---	---	---	<2.5	<2.5	---	170.87	7.58	163.29	---	---	---
MW-7	07/25/2011	480 j	8.8	<2.5	3.8	5.8	---	500	480	<5.0	<5.0	<5.0	---	---	<750	170.87	8.11	162.76	---	---	---
MW-7	01/23/2012	Unable to access		---	---	---	---	---	---	---	---	---	---	---	---	170.87	---	---	---	---	---
MW-7	07/24/2012	610	9.2	<2.5	<2.5	6.6	---	540	600	<2.5	<2.5	<2.5	---	---	---	170.87	8.30	162.57	---	---	---
MW-7	01/23/2013	700	26	<5.0	<5.0	15	---	520	640	---	---	---	---	---	---	170.87	7.79	163.08	---	---	---
MW-7	**07/10/2013**	**710**	**10**	**<5.0**	**<5.0**	**<10**	**---**	**550**	**520**	**<5.0**	**<5.0**	**<5.0**	**---**	**---**	**<1,500**	**170.87**	**8.37**	**162.50**	**---**	**---**	**---**
MW-8	06/26/2006	---	---	---	---	---	---	---	---	---	---	---	---	---	---	174.13	4.53	169.60	---	---	---
MW-8	07/28/2006	2,300	<0.500	<0.500	<0.500	<0.500	---	1,380	<10.0	<0.500	<0.500	0.950	---	---	<50.0	174.13	4.55	169.58	---	---	---
MW-8	10/27/2006	1,570	2.79 e	<0.500	<0.500	<0.500	---	1,280 e	<10.0	---	---	---	---	---	---	174.13	4.87	169.26	---	---	---
MW-8	01/10/2007	540	<2.5	<2.5	<2.5	<5.0	---	1,200 f	750	---	---	---	---	---	---	174.13	4.17	169.96	---	---	---
MW-8	04/13/2007	450 g,h	<5.0	<10	<10	<10	---	1,400	<100	---	---	---	---	---	---	174.13	4.13	170.00	---	---	---
MW-8	07/09/2007	590 g	<5.0	<10	<10	<10	---	1,000	<100	<20	<20	<20	---	---	<1,000	174.13	6.33	167.80	---	---	---
MW-8	10/08/2007	270 g,h	<5.0	<10	<10	<10	---	1,200	<100	---	---	---	---	---	---	174.13	5.63	168.50	---	---	---
MW-8	01/09/2008	200 g,h	<2.5	<5.0	<5.0	<5.0	---	370	<50	---	---	---	---	---	---	174.13	4.17	169.96	---	---	---
MW-8	04/04/2008	1,000	<5.0	<10	<10	<10	---	930	<100	---	---	---	---	---	---	174.13	4.36	169.77	---	---	---
MW-8	07/03/2008	960	<5.0	<10	<10	<10	---	1,000	<100	<20	<20	<20	---	---	<1,000	174.13	5.05	169.08	---	---	---
MW-8	10/03/2008	820	<5.0	<10	<10	<10	---	830	<100	---	---	---	---	---	---	174.13	5.54	168.59	---	---	---
MW-8	01/22/2009	1,000	<2.5	<5.0	<5.0	<5.0	---	740	<50	---	---	---	---	---	---	174.13	5.00	169.13	---	---	---
MW-8	04/13/2009	810	<2.5	<5.0	<5.0	<5.0	---	520	<50	---	---	---	---	---	---	174.13	4.51	169.62	---	---	---
MW-8	07/23/2009	840	<2.5	<5.0	<5.0	<5.0	---	830	<50	<10	<10	<10	---	---	<500	174.13	4.92	169.21	---	---	---
MW-8	02/01/2010	270	<1.0	<2.0	<2.0	<2.0	---	260	<20	---	---	---	---	---	---	174.13	3.65	170.48	---	---	---
MW-8	08/02/2010	430	<2.5	<5.0	<5.0	<5.0	---	480	<50	---	---	---	---	---	---	174.13	4.52	169.61	---	---	---
MW-8	01/31/2011	<250	<2.5	<2.5	<2.5	<5.0	---	380	300	---	---	---	<2.5	<2.5	---	174.13	4.29	169.84	---	---	---
MW-8	07/25/2011	300 j	<2.0	<2.0	<2.0	<4.0	---	350	<40	<4.0	<4.0	<4.0	---	---	<600	174.13	4.56	169.57	---	---	---
MW-8	01/23/2012	<250	<2.5	<2.5	<2.5	<5.0	---	320	98	---	---	---	---	---	---	174.13	4.49	169.64	---	---	---
MW-8	07/24/2012	350	<2.5	<2.5	<2.5	<5.0	---	330	<50	<2.5	<2.5	<2.5	---	---	---	174.13	4.85	169.28	---	---	---
MW-8	01/23/2013	290	<2.5	<2.5	<2.5	<5.0	---	270	100	---	---	---	---	---	---	174.13	4.25	169.88	---	---	---
MW-8	**07/10/2013**	**290**	**<2.5**	**<2.5**	**<2.5**	**<5.0**	**---**	**250**	**<50**	**<2.5**	**<2.5**	**<2.5**	**---**	**---**	**<750**	**174.13**	**4.95**	**169.18**	**---**	**---**	**---**
MW-9	06/26/2006	---	---	---	---	---	---	---	---	---	---	---	---	---	---	175.20	6.41	168.79	---	---	---
MW-9	07/28/2006	5,690	19.2	2.64	2.02	57.7	---	5,780	166	<0.500	<0.500	2.74	---	---	<50.0	175.20	6.69	168.51	---	---	---
MW-9	10/27/2006	2,710	34.2	<0.500	2.76	4.75	---	2,140	29.2 d	---	---	---	---	---	---	175.20	6.90	168.30	---	---	---
MW-9	01/10/2007	1,500	340	6.8	8.9	27	---	2,300 f	1,400	---	---	---	---	---	---	175.20	6.14	169.06	---	---	---

GROUNDWATER DATA
FORMER SHELL SERVICE STATION
4255 MACARTHUR BOULEVARD, OAKLAND, CALIFORNIA

Well ID	Date	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE 8020 (µg/L)	MTBE 8260 (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	EDB (µg/L)	1,2-DCA (µg/L)	Ethanol (µg/L)	TOC (ft MSL)	Depth to Water (ft TOC)	GW Elevation (ft MSL)	SPH Thickness (ft)	DO Reading (m/L)	ORP Reading (mV)
MW-9	04/13/2007	1,600 g,h	390	4.1 i	8.6 i	4.7 i	---	3,700	120	---	---	---	---	---	---	175.20	6.17	169.03	---	---	---
MW-9	07/09/2007	1,200 g	55	<25	<25	<25	---	2,500	<250	<50	<50	<50	---	---	<2,500	175.20	6.65	168.55	---	---	---
MW-9	10/08/2007	520 g,h	9.1 i	<25	<25	<25	---	2,500	<250	---	---	---	---	---	---	175.20	7.58	167.62	---	---	---
MW-9	01/09/2008	350 g,h	3.4 i	<10	<10	<10	---	650	<100	---	---	---	---	---	---	175.20	6.30	168.90	---	---	---
MW-9	04/04/2008	1,500	88	<10	<10	<10	---	1,200	<100	---	---	---	---	---	---	175.20	6.05	169.15	---	---	---
MW-9	07/03/2008	2,600	70	<10	<10	<10	---	2,800	<100	<20	<20	<20	---	---	<1,000	175.20	7.00	168.20	---	---	---
MW-9	10/03/2008	2,600	160	<20	<20	<20	---	2,400	<200	---	---	---	---	---	---	175.20	7.39	167.81	---	---	---
MW-9	01/22/2009	2,900	130	<20	<20	30	---	1,900	<200	---	---	---	---	---	---	175.20	7.00	168.20	---	---	---
MW-9	04/13/2009	5,200	590	24	60	89	---	1,600	230	---	---	---	---	---	---	175.20	6.47	168.73	---	---	---
MW-9	07/23/2009	6,300	830	30	150	130	---	3,200	170	<20	<20	<20	---	---	<1000	175.20	7.05	168.15	---	---	---
MW-9	02/01/2010	18,000	1,900	130	770	1,200	---	2,400	430	---	---	---	---	---	---	175.20	5.70	169.50	---	---	---
MW-9	08/02/2010	2,200	270	<10	99	36	---	1,200	280	---	---	---	---	---	---	175.20	6.50	168.70	---	---	---
MW-9	01/31/2011	1,100	120	9.5	60	63	---	1,100	1,000	---	---	---	<5.0	<5.0	---	175.20	6.21	168.99	---	---	---
MW-9	07/25/2011	1,200	210	<5.0	67	15	---	710	480	<10	<10	<10	---	---	<1,500	175.20	6.53	168.67	---	---	---
MW-9	01/23/2012	390	9.9	<1.0	4.7	5.8	---	460	370	---	---	---	---	---	---	175.20	6.49	168.71	---	---	---
MW-9	07/24/2012	970	91	<5.0	15	<10	---	660	530	<5.0	<5.0	<5.0	---	---	---	175.20	6.95	168.25	---	---	---
MW-9	01/23/2013	940	84	<5.0	20	<10	---	640	540	---	---	---	---	---	---	175.20	6.24	168.96	---	---	---
MW-9	**07/10/2013**	**540**	**10**	**<5.0**	**<5.0**	**<10**	**---**	**360**	**290**	**<5.0**	**<5.0**	**<5.0**	**---**	**---**	**<1,500**	**175.20**	**7.09**	**168.11**	**---**	**---**	**---**
TB-1	04/29/1999	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	6.00	---	---	3.8	-132
TB-1	11/01/1999	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	12.65	---	---	0.2	-165
TB-1	01/17/2000	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	7.72	---	---	0.8	-178
TB-1	04/17/2000	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	7.65	---	---	0.5	-152
TB-1	07/26/2000	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	5.13	---	---	1.0	-124
TB-1	10/12/2000	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	5.20	---	---	0.7	-73
TB-1	01/15/2001	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	5.09	---	---	1.2	-118
TB-1	04/09/2001	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	4.96	---	---	1.0	-72
TB-1	07/24/2001	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	6.03	---	---	1.4	31
TB-1	10/31/2001	1,000	85	<10	<10	42	---	4,100	---	---	---	---	---	---	---	---	5.89	---	---	1.8	88
TB-1	01/10/2002	5,000	410	390	65	620	---	9,000	---	---	---	---	---	---	---	---	7.47	---	---	2.0	95
TB-1	04/25/2002	5,000	780	60	49	91	---	6,000	---	---	---	---	---	---	---	---	11.71	---	---	1.7	-136
TB-1	07/18/2002	Insufficient water		---	---	---	---	---	---	---	---	---	---	---	---	---	13.50	---	---	---	---
TB-1	10/07/2002	4,600	480	36	98	200	---	4,000	---	---	---	---	---	---	---	---	12.95	---	---	1.6	-48
TB-1	01/06/2003	130	30	<0.50	<0.50	0.78	---	330	---	---	---	---	---	---	---	---	5.56	---	---	0.4	-20
TB-2	04/29/1999	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	4.76	---	---	4.2	-108
TB-2	11/01/1999	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	11.33	---	---	0.5	-148
TB-2	01/17/2000	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	9.79	---	---	0.7	-162

GROUNDWATER DATA
FORMER SHELL SERVICE STATION
4255 MACARTHUR BOULEVARD, OAKLAND, CALIFORNIA

Well ID	Date	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE 8020 (µg/L)	MTBE 8260 (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	EDB (µg/L)	1,2-DCA (µg/L)	Ethanol (µg/L)	TOC (ft MSL)	Depth to Water (ft TOC)	GW Elevation (ft MSL)	SPH Thickness (ft)	DO Reading (m/L)	ORP Reading (mV)
TB-2	04/17/2000	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	9.75	---	---	0.9	-121
TB-2	07/26/2000	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	4.73	---	---	0.9	-85
TB-2	10/12/2000	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	4.05	---	---	0.6	-47
TB-2	01/15/2001	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	3.87	---	---	0.7	-91
TB-2	04/09/2001	46,600	1,240	1,310	1,110	12,100	31,300	---	---	---	---	---	---	---	---	---	3.76	---	---	0.8	-24
TB-2	07/24/2001	11,000	630	<25	310	200	---	11,000	---	---	---	---	---	---	---	---	4.75	---	---	0.4	-51
TB-2	10/31/2001	7,500	530	1,500	100	500	---	2,500	---	---	---	---	---	---	---	---	4.24	---	---	0.6	-7
TB-2	01/10/2002	<5,000	480	47	34	110	---	12,000	---	---	---	---	---	---	---	---	6.26	---	---	1.3	-81
TB-2	04/25/2002	4,700	470	140	<20	80	---	7,400	---	---	---	---	---	---	---	---	11.78	---	---	0.9	-107
TB-2	07/18/2002	7,500	630	650	<25	390	---	44,000	---	---	---	---	---	---	---	---	12.34	---	---	0.9	-67
TB-2	10/07/2002	<10,000	580	<100	<100	180	---	30,000	---	---	---	---	---	---	---	---	11.62	---	---	1.0	-41
TB-2	01/06/2003	120	4.8	<0.50	<0.50	2.0	---	220	---	---	---	---	---	---	---	---	4.35	---	---	0.5	-515

Notes:
TPHg = Total petroleum hydrocarbons as gasoline analyzed by EPA Method 8260B; prior to July 24, 2001, analyzed by EPA Method 8015 unless otherwise noted.
BTEX = Benzene, toluene, ethylbenzene, and total xylenes analyzed by EPA Method 8260B; prior to July 24, 2001, analyzed by EPA Method 8020.
MTBE = Methyl tertiary-butyl ether analyzed by method as noted
TBA = Tertiary-butyl alcohol analyzed by EPA Method 8260B
DIPE = Di-isopropyl ether analyzed by EPA Method 8260B
ETBE = Ethyl tertiary-butyl ether analyzed by EPA Method 8260B
TAME = Tertiary-amyl methyl ether analyzed by EPA Method 8260B
EDB = 1,2-dibromoethane analyzed by EPA Method 8260B
1,2-DCA = 1,2-dichloroethane analyzed by EPA Method 8260B
Ethanol analyzed by EPA Method 8260B.
TOC = Top of casing elevation, in feet relative to mean sea level
SPH = Separate-phase hydrocarbon
GW = Groundwater
DO = Dissolved oxygen
ORP = Oxidation reduction potential
µg/L = Micrograms per liter
ft = Feet
MSL = Mean sea level
m/L = Milligrams per liter
mV = Millivolts
<x = Not detected at reporting limit x
--- = Not analyzed or not available
(D) = Duplicate sample

GROUNDWATER DATA
FORMER SHELL SERVICE STATION
4255 MACARTHUR BOULEVARD, OAKLAND, CALIFORNIA

Well ID	Date	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE 8020 (µg/L)	MTBE 8260 (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	EDB (µg/L)	1,2-DCA (µg/L)	Ethanol (µg/L)	TOC (ft MSL)	Depth to Water (ft TOC)	GW Elevation (ft MSL)	SPH Thickness (ft)	DO Reading (m/L)	ORP Reading (mV)

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

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

APPENDIX A

BLAINE TECH SERVICES, INC. - FIELD NOTES

WELL GAUGING DATA

Project # 130401-BW1 Date 4/1/13 Client Shell

Site 4255 MacArthur 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
MW-2	1310	4	odor	—	—	—	10.30	19.38	↓	
MW-3	1332	4	odor	—	—	—	13.33	21.83		
MW-4	1350	2	odor	—	—	—	7.11	30.57		

SHELL WELL MONITORING DATA SHEET

BTS #: 130401-BLW1	Site: 4255 MacArthur Blvd. Oakland
Sampler: BW	Date: 4/1/13
Well I.D.: MW-2	Well Diameter: 2 3 (4) 6 8 ___
Total Well Depth (TD): 19.38	Depth to Water (DTW): 10.30
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]: —	

Purge Method: Bailer / Disposable Bailer / Positive Air Displacement / Electric Submersible / Waterra / Peristaltic / Extraction Pump / Other ___

Sampling Method: Bailer / Disposable Bailer / Extraction Port / Dedicated Tubing / Other: ___

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

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

Time	Temp (°F)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
* No SPH Detected w/ Interface Probe						
* Removed 2 socks from well - Total Weight: 0.51 Kg (1.14 lbs)						
* Installed 2 new socks in well - Total Weight: 0.28 Kg (0.60 lbs)						

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

SHELL WELL MONITORING DATA SHEET

BTS #: 130401 - BW1	Site: 4255 MacArthur Blvd. Oakland
Sampler: BW	Date: 4/1/13
Well I.D.: MW-3	Well Diameter: 2 3 (4) 6 8 ___
Total Well Depth (TD): 21.83	Depth to Water (DTW): 13.33
Depth to Free Product: —	Thickness of Free Product (feet): —
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: ⟶	

Purge Method: Bailer / Disposable Bailer / Positive Air Displacement / Electric Submersible / Waterra / Peristaltic / Extraction Pump / Other ___

Sampling Method: Bailer / Disposable Bailer / Extraction Port / Dedicated Tubing / Other: ___

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

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

Time	Temp (°F)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
* No SPH Detected w/ Interface Probe						
* Removed 2 socks from well. Total Weight: 0.83 kg (1.80 lbs)						
* Installed 2 new socks in well. Total Weight: 0.28 kg (0.60 lbs)						

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

SHELL WELL MONITORING DATA SHEET

BTS #: 130401-BW1	Site: 4255 MacArthur Blvd. Oakland
Sampler: BW	Date: 4/1/13
Well I.D.: MW-4	Well Diameter: (2) 3 4 6 8 ___
Total Well Depth (TD): 30.57	Depth to Water (DTW): 7.11
Depth to Free Product: —	Thickness of Free Product (feet): —
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:	

Purge Method: Bailer / Disposable Bailer / Positive Air Displacement / Electric Submersible / Waterra / Peristaltic / Extraction Pump / Other

Sampling Method: Bailer / Disposable Bailer / Extraction Port / Dedicated Tubing / Other:

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

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

Time	Temp (°F)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
* No SPH Detected w/ Interface Probe						
* Removed 1 sock from well.				Total Weight: 0.29 Kg		(0.64 lbs)
* Installed 1 new sock in well.				Total Weight: 0.14 Kg		(0.30 lbs)

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

INCIDENT # 98995758

DATE: 4/1/13

ADDRESS 4255 MacArthur Blvd.

CITY & STATE Oakland, CA

Well ID	Observations Upon Arrival: Manway Cover, Type, Condition & Size					Well Labeled / Painted Properly*		Well Cap (Gripper) Condition		Well Lock Condition			Well Pad / Surface Condition		Note Repairs Made Detailed Explanation of Maintenance Recommended and Performed	Photos of Well Condition		Repair Date and PM Initials
MW-2	Standpipe	**Flush**	**G**	P	Size (inch) **12**	**Y**	N	**G**	R	**G**	R	NL	**G**	P		Y	N	
MW-3	Standpipe	**Flush**	**G**	P	Size (inch) **12**	**Y**	N	**G**	R	**G**	R	NL	**G**	P		Y	N	
MW-4	Standpipe	**Flush**	**G**	P	Size (inch) **12**	**Y**	N	**G**	R	**G**	R	NL	**G**	P		Y	N	
	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	X	G	P	N/A	G	P	N/A	G	P	N/A	Y	N	N/A		Y	N	
Building																	
Building w/ Fence Comp.																	
Fenced Compound																	
Trailer																	

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

G = Good (Acceptable) R = Replaced

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

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

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

Version 2.4, March 2008

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

Brian Weeks - Blaine Tech Services

Print or type Name of Field Personnel & Consultant Company

WELL GAUGING DATA

Project # 130710-MM1 Date 7-10-13 Client shell

Site 4255 Macarthur Blvd. Oakland, CA

Well ID	Time	Well Size (in.)	Sheen / Odor	Depth to Immiscible Liquid (ft.)	Thickness of Immiscible Liquid (ft.)	Volume of Immiscibles Removed (ml)	Depth to water (ft.)	Depth to well bottom (ft.)	Survey Point: TOB or TOC	Notes
MW-1	0832	4					7.99	23.30		
MW-2	0856	4	ODOR	—	—	—	10.94	19.60		sock
MW-3	0850	4	ODOR	—	—	—	14.01	21.91		sock
MW-4	0901	2	ODOR	—	—	—	7.15	30.60		sock
MW-5	0810	2					6.68	19.83		
MW-6	0843	2					9.94	23.55		soft bottom
MW-7	0826	4					8.37	29.01		
MW-8	0820	4					4.95	29.72		
MW-9	0837	4					7.09	29.65	↓	

SHELL WELL MONITORING DATA SHEET

BTS #: 130710-MM1	Site: 4255 MacArthur Blvd. Oakland, CA
Sampler: MM	Date: 7-10-13
Well I.D.: MW-1	Well Diameter: 2 3 (4) 6 8 ___
Total Well Depth (TD): 23.30	Depth to Water (DTW): 7.99
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 11.05	

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

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

10 (Gals.) X 3 = 30 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
1034	69.6	6.96	960	20	10	
	WELL	DEWATERED	AT	12 GAL		
1300	69.3	6.99	1000	7	GRAB	

Did well dewater? (Yes) No Gallons actually evacuated: 12

Sampling Date: 7-10-13 Sampling Time: 1300 Depth to Water: 13.20 (2 HR)

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

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

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

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

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

SHELL WELL MONITORING DATA SHEET

BTS #: 13C710-MM1	Site: 4255 MacArthur Blvd. Oakland, CA
Sampler: MM	Date: 7-10-13
Well I.D.: MW-2	Well Diameter: 2 3 (4) 6 8 ___
Total Well Depth (TD): 19.60	Depth to Water (DTW): 10.94
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:	

Purge Method: Bailer / Disposable Bailer / Positive Air Displacement / Electric Submersible / Waterra / Peristaltic / Extraction Pump / Other ____

Sampling Method: Bailer / Disposable Bailer / Extraction Port / Dedicated Tubing / Other: ____

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

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

Time	Temp (°F)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
• NO PRODUCT DETECTED						
• REMOVED 2 SOCKS FROM WELL TOTAL WEIGHT:					0.57 Kg	1.28 LBS
• INSTALLED 2 NEW SOCKS IN WELL TOTAL WEIGHT:					0.30 Kg	0.66 LBS

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

SHELL WELL MONITORING DATA SHEET

BTS #: 130710-MM1	Site: 4255 MacArthur Blvd. Oakland CA
Sampler: MM	Date: 7/10/13
Well I.D.: MW-2	Well Diameter: 2 3 (4) 6 8 ___
Total Well Depth (TD): 19.60	Depth to Water (DTW): 10.94
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]: 12.67	

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

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

5.6 (Gals.) X 3 = 16.8 Gals.
1 Case Volume | Specified Volumes | Calculated Volume

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

Time	Temp (°F)	pH	Cond. (mS or (µS))	Turbidity (NTUs)	Gals. Removed	Observations
1148	70.2	7.12	767	24	5.6	ODOR
	WELL	DEWATERED	AT	6 Gal		
1330	72.2	6.72	750	32	GRAB	

Did well dewater? (Yes) No Gallons actually evacuated: 6

Sampling Date: 7/10/13 Sampling Time: 1330 Depth to Water: 11.48

Sample I.D.: MW-2 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

SHELL WELL MONITORING DATA SHEET

BTS #: 130710-MM1	Site: 4255 MacArthur Blvd. Oakland, CA
Sampler: MM	Date: 7-10-13
Well I.D.: MW-3	Well Diameter: 2 3 (4) 6 8 ___
Total Well Depth (TD): 21.91	Depth to Water (DTW): 14.01
Depth to Free Product: NO PRODUCT DETECTED	Thickness of Free Product (feet): —
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: —	

Purge Method: Bailer / Disposable Bailer / Positive Air Displacement / Electric Submersible / Waterra / Peristaltic / Extraction Pump / Other ____

Sampling Method: Bailer / Disposable Bailer / Extraction Port / Dedicated Tubing / Other: ____

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

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

Time	Temp (°F)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
• NO PRODUCT DETECTED						
• REMOVED 2 SOCKS FROM WELL. TOTAL WEIGHT:					0.49 Kg	(1.00 LBS)
• INSTALLED 2 NEW SOCKS IN WELL. TOTAL WEIGHT:					0.32 Kg	(0.72 LBS)

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

SHELL WELL MONITORING DATA SHEET

BTS #: 130710-MM1	Site: 4255 MacArthur Blvd. Oakland, CA
Sampler: MM	Date: 7-10-13
Well I.D.: MW-3	Well Diameter: 2 3 (4) 6 8 ___
Total Well Depth (TD): 21.91	Depth to Water (DTW): 14.01
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]: 15.59	

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

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

5.1 (Gals.) X 3 = 15.3 Gals.
1 Case Volume | Specified Volumes | Calculated Volume

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

Time	Temp (°F)	pH	Cond. (mS or (µS))	Turbidity (NTUs)	Gals. Removed	Observations
1138	70.9	6.87	1126	38	5	odor
well	dewatered @ 6 Gal				6	
1320	71.0	6.70	1133	255	GRAB	

Did well dewater? (Yes) No Gallons actually evacuated: 6

Sampling Date: 7-10-13 Sampling Time: 1320 Depth to Water: 15.01

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

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

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

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

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

SHELL WELL MONITORING DATA SHEET

BTS #: 130710-MM1	Site: 4255 MacArthur Blvd. Oakland, CA
Sampler: MM	Date: 7-10-13
Well I.D.: MW-4	Well Diameter: ② 3 4 6 8 ___
Total Well Depth (TD): 30.60	Depth to Water (DTW): 7.15
Depth to Free Product: —	Thickness of Free Product (feet): —
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: —	

Purge Method: Bailer / Disposable Bailer / Positive Air Displacement / Electric Submersible / Waterra / Peristaltic / Extraction Pump / Other ____

Sampling Method: Bailer / Disposable Bailer / Extraction Port / Dedicated Tubing / Other: ____

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

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

Time	Temp (°F)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
• NO PRODUCT DETECTED						
• REMOVED 1 SOCK FROM WELL TOTAL WEIGHT:					0.18 Kg	(0.38 LB)
• INSTALLED 1 NEW SOCK IN WELL TOTAL WEIGHT:					0.16 Kg	(0.35 LB)

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

SHELL WELL MONITORING DATA SHEET

BTS #: 130710-MM1	Site: 4255 MacArthur Blvd, Oakland, CA
Sampler: MM	Date: 7-10-13
Well I.D.: MW-4	Well Diameter: (2) 3 4 6 8 ____
Total Well Depth (TD): 30.60	Depth to Water (DTW): 7.15
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 11.84	

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

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

3.8 (Gals.) X 3 = 11.4 Gals.
1 Case Volume | Specified Volumes | Calculated Volume

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

Time	Temp (°F)	pH	Cond. (mS or (µS))	Turbidity (NTUs)	Gals. Removed	Observations
1208	72.6	6.98	994	125	3.8	ODOR
1212	72.7	6.80	997	235	7.6	ODOR
1215	74.7	6.81	980	248	11.4	ODOR

Did well dewater? Yes (No) Gallons actually evacuated: 11.5

Sampling Date: 7-10-13 Sampling Time: 1228 Depth to Water: 11.49

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

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

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

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

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

SHELL WELL MONITORING DATA SHEET

BTS #: 130710-MM1	Site: 4255 MacArthur Blvd Oakland, CA
Sampler: MM,	Date: 7-10-13
Well I.D.: MW-5	Well Diameter: (2) 3 4 6 8 ___
Total Well Depth (TD): 19.83	Depth to Water (DTW): 6.68
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]: 9.31	

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

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

2.1 (Gals.) X 3 = 6.3 Gals.
1 Case Volume | Specified Volumes | Calculated Volume

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

Time	Temp (°F)	pH	Cond. (mS or (µS))	Turbidity (NTUs)	Gals. Removed	Observations
0932	63.6	6.33	743	225	2.1	
0935	62.7	6.60	683	242	4.2	
0939	62.6	6.66	662	434	6.3	

Did well dewater? Yes (No) Gallons actually evacuated: 6.5

Sampling Date: 7-10-13 Sampling Time: 0950 Depth to Water: 9.12

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

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

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

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

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

SHELL WELL MONITORING DATA SHEET

BTS #: 130710-MM1	Site: 4255 MacArthur Blvd. Oakland, CA
Sampler: MM	Date: 7-10-13
Well I.D.: MW-6	Well Diameter: (2) 3 4 6 8 ___
Total Well Depth (TD): 23.55	Depth to Water (DTW): 9.94
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]: 12.66	

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

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

2.2 (Gals.) X 3 = 6.6 Gals.
1 Case Volume | Specified Volumes | Calculated Volume

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

Time	Temp (°F)	pH	Cond. (mS or (µS))	Turbidity (NTUs)	Gals. Removed	Observations
1106	70.8	6.95	1111	>1000	2.2	ODOR
1109	69.4	6.69	1126	>1000	4.4	ODOR
1101	70.3	6.71	1124	>1000	6.6	ODOR

Did well dewater? Yes (No) Gallons actually evacuated: 6.6

Sampling Date: 7-10-13 Sampling Time: 1112 Depth to Water: 11.65

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

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

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

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

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

SHELL WELL MONITORING DATA SHEET

BTS #: 130710-MM1	Site: 4255 MacArthur Blvd. Oakland, CA
Sampler: MM	Date: 7-10-13
Well I.D.: MW-7	Well Diameter: 2 3 (4) 6 8 ___
Total Well Depth (TD): 29.01	Depth to Water (DTW): 8.37
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]: 12.49	

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

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

13.4 (Gals.) X 3 = 40.2 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
1021	68.0	7.26	877	25	13.5	ODOR
	WELL	DEWATERED AT	23 GAL			
1249	69.3	7.49	851	7	GRAB	

Did well dewater? (Yes) No Gallons actually evacuated: 23

Sampling Date: 7-10-13 Sampling Time: 12:49 Depth to Water: 23.56 (2 HR)

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

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

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

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

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

SHELL WELL MONITORING DATA SHEET

BTS #: 130710-MM1	Site: 4255 MacArthur Blvd. Oakland, CA
Sampler: MM	Date: 7-10-13
Well I.D.: MW-8	Well Diameter: 2 3 (4) 6 8 ___
Total Well Depth (TD): 29.72	Depth to Water (DTW): 4.95
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 9.90	

Purge Method: Bailer; Disposable Bailer; Positive Air Displacement; ~~Electric Submersible~~; Waterra Peristaltic; Extraction Pump; Other ____

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

16.1 (Gals.) X 3 = 48.3 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
1002	68.0	6.94	934	142	16.1	slight odor
1007	66.8	6.96	954	53	32.2	↓ ↓
	WELL DEWATERED AT			35 GAL		
1238	69.9	7.19	994.6	39	Grab	

Did well dewater? (Yes) No Gallons actually evacuated: 35

Sampling Date: 7-10-13 Sampling Time: 1238 Depth to Water: 7.70

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

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

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

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

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

SHELL WELL MONITORING DATA SHEET

BTS #: 130710-MM1	Site: 4255 MacArthur Blvd. Oakland, CA
Sampler: MM	Date: 7-10-13
Well I.D.: MW-9	Well Diameter: 2 3 (4) 6 8 ___
Total Well Depth (TD): 29.65	Depth to Water (DTW): 7.09
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 11.60	

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

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

14.7 (Gals.) X	3	=	44.1 Gals.
1 Case Volume	Specified Volumes		Calculated Volume

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

Time	Temp (°F)	pH	Cond. (mS or (µS))	Turbidity (NTUs)	Gals. Removed	Observations
1044	71.8	6.98	867	20	14.7	ODOR
1047	70.0	6.92	818	22	29.5	ODOR
	WELL	DEWATERED AT 31	GAL			
1310	71.0	7.23	839	11	GRAB	

Did well dewater? (Yes) No Gallons actually evacuated: 31

Sampling Date: 7-10-13 Sampling Time: 1310 Depth to Water: 16.10 (2 HR)

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

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

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

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

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

INCIDENT # 98995758

ADDRESS 4255 Macarthur Blvd.

DATE: 7-10-13

CITY & STATE Oakland, CA

Well ID	Observations Upon Arrival: Manway Cover, Type, Condition & Size					Well Labeled / Painted Properly*		Well Cap (Gripper) Condition		Well Lock Condition			Well Pad / Surface Condition		Note Repairs Made Detailed Explanation of Maintenance Recommended and Performed	Photos of Well Condition		Repair Date and PM Initials
MW-1	Standpipe	Flush	G	P	Size (inch) 8	Y	N	G	R	G	R	NL	G	P	1/2 tabs broken 1/2 bolts missing	Y	N	
MW-2	Standpipe	Flush	G	P	Size (inch) 12	Y	N	G	R	G	R	NL	G	P		Y	N	
MW-3	Standpipe	Flush	G	P	Size (inch) 12	Y	N	G	R	G	R	NL	G	P		Y	N	
MW-4	Standpipe	Flush	G	P	Size (inch) 12	Y	N	G	R	G	R	NL	G	P		Y	N	
MW-5	Standpipe	Flush	G	P	Size (inch) 12	Y	N	G	R	G	R	NL	G	P		Y	N	
MW-6	Standpipe	Flush	G	P	Size (inch) 12	Y	N	G	R	G	R	NL	G	P		Y	N	
MW-7	Standpipe	Flush	G	P	Size (inch) 12	Y	N	G	R	G	R	NL	G	P		Y	N	
MW-8	Standpipe	Flush	G	P	Size (inch) 12	Y	N	G	R	G	R	NL	G	P		Y	N	
MW-9	Standpipe	Flush	G	P	Size (inch) 12	Y	N	G	R	G	R	NL	G	P		Y	N	
	Standpipe	Flush	G	P	Size (inch)	Y	N	G	R	G	R	NL	G	P		Y	N	
	Standpipe	Flush	G	P	Size (inch)	Y	N	G	R	G	R	NL	G	P		Y	N	
TOTAL # CAPS REPLACED = 0										0 = 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	✓	G	P	N/A	G	P	N/A	G	P	N/A	Y	N	N/A		Y	N	
Building																	
Building w/ Fence Comp.																	
Fenced Compound																	
Trailer																	

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

G = Good (Acceptable) R = Replaced

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

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

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

Version 2.4, March 2008

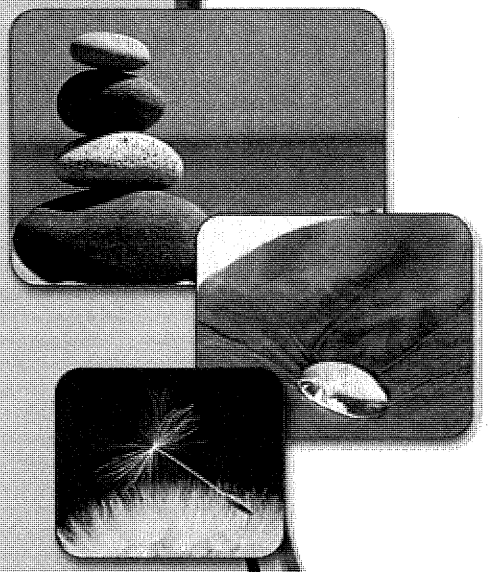
All environmental wells and the remediation compound were in good condition, locked, and secured upon my departure (unless otherwise noted above).

Mark McCulloch BTS

Print or type Name of Field Personnel & Consultant Company

APPENDIX B

TESTAMERICA LABORATORIES, INC. – ANALYTICAL REPORT



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: 440-51624-1
Client Project/Site: 4255 MacArthur Blvd., Oakland, CA

For:
Conestoga-Rovers & Associates, Inc.
19449 Riverside Drive, Suite 230
Sonoma, California 95476

Attn: Peter Schaefer

Philip Sanelle

Authorized for release by:
8/1/2013 10:00:58 AM

Philip Sanelle, Project Manager I
philip.sanelle@testamericainc.com

Table of Contents

Sample Summary

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 4255 MacArthur Blvd., Oakland, CA

TestAmerica Job ID: 440-51624-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
440-51624-1	MW-1	Ground Water	07/10/13 13:00	07/13/13 10:55
440-51624-2	MW-2	Ground Water	07/10/13 13:30	07/13/13 10:55
440-51624-3	MW-3	Ground Water	07/10/13 13:20	07/13/13 10:55
440-51624-4	MW-4	Ground Water	07/10/13 12:28	07/13/13 10:55
440-51624-5	MW-5	Ground Water	07/10/13 09:50	07/13/13 10:55
440-51624-6	MW-6	Ground Water	07/10/13 11:12	07/13/13 10:55
440-51624-7	MW-7	Ground Water	07/10/13 12:49	07/13/13 10:55
440-51624-8	MW-8	Ground Water	07/10/13 12:38	07/13/13 10:55
440-51624-9	MW-9	Ground Water	07/10/13 13:10	07/13/13 10:55

Case Narrative

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 4255 MacArthur Blvd., Oakland, CA

TestAmerica Job ID: 440-51624-1

Job ID: 440-51624-1

Laboratory: TestAmerica Irvine

Narrative

Job Narrative
440-51624-1

Comments
No additional comments.

Receipt
The samples were received on 7/13/2013 10:55 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 5.5° C.

GC/MS VOA
No analytical or quality issues were noted.

VOA Prep
No analytical or quality issues were noted.

Client Sample ID: MW-1

Lab Sample ID: 440-51624-1

Date Collected: 07/10/13 13:00
Matrix: Ground Water
Date Received: 07/13/13 10:55

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)	**1000**		500		ug/L			07/17/13 02:00	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*110*		*80 - 120*		*07/17/13 02:00*	*10*
4-Bromofluorobenzene (Surr)	*102*		*80 - 120*		*07/17/13 02:00*	*10*
Toluene-d8 (Surr)	*111*		*80 - 120*		*07/17/13 02:00*	*10*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**5.2**		5.0		ug/L			07/17/13 02:00	10
Isopropyl Ether (DIPE)	ND		5.0		ug/L			07/17/13 02:00	10
Ethanol	ND		1500		ug/L			07/17/13 02:00	10
Ethyl-t-butyl ether (ETBE)	ND		5.0		ug/L			07/17/13 02:00	10
Ethylbenzene	ND		5.0		ug/L			07/17/13 02:00	10
Methyl-t-Butyl Ether (MTBE)	**1000**		5.0		ug/L			07/17/13 02:00	10
Tert-amyl-methyl ether (TAME)	ND		5.0		ug/L			07/17/13 02:00	10
tert-Butyl alcohol (TBA)	**700**		100		ug/L			07/17/13 02:00	10
Toluene	ND		5.0		ug/L			07/17/13 02:00	10
Xylenes, Total	ND		10		ug/L			07/17/13 02:00	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*80 - 120*		*07/17/13 02:00*	*10*
Dibromofluoromethane (Surr)	*110*		*80 - 120*		*07/17/13 02:00*	*10*
Toluene-d8 (Surr)	*111*		*80 - 120*		*07/17/13 02:00*	*10*

Client Sample ID: MW-2

Lab Sample ID: 440-51624-2

Date Collected: 07/10/13 13:30
Matrix: Ground Water
Date Received: 07/13/13 10:55

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)	**32000**		2000		ug/L			07/17/13 02:30	40

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*106*		*80 - 120*		*07/17/13 02:30*	*40*
4-Bromofluorobenzene (Surr)	*107*		*80 - 120*		*07/17/13 02:30*	*40*
Toluene-d8 (Surr)	*113*		*80 - 120*		*07/17/13 02:30*	*40*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**1600**		20		ug/L			07/17/13 02:30	40
Isopropyl Ether (DIPE)	ND		20		ug/L			07/17/13 02:30	40
Ethanol	ND		6000		ug/L			07/17/13 02:30	40
Ethyl-t-butyl ether (ETBE)	ND		20		ug/L			07/17/13 02:30	40
Ethylbenzene	**1800**		20		ug/L			07/17/13 02:30	40
Methyl-t-Butyl Ether (MTBE)	**1200**		20		ug/L			07/17/13 02:30	40
Tert-amyl-methyl ether (TAME)	ND		20		ug/L			07/17/13 02:30	40
tert-Butyl alcohol (TBA)	**1700**		400		ug/L			07/17/13 02:30	40
Toluene	**670**		20		ug/L			07/17/13 02:30	40

Client Sample ID: MW-2

Lab Sample ID: 440-51624-2

Date Collected: 07/10/13 13:30
Matrix: Ground Water
Date Received: 07/13/13 10:55

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	**3500**		40		ug/L			07/17/13 02:30	40

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*80 - 120*		*07/17/13 02:30*	*40*
Dibromofluoromethane (Surr)	*106*		*80 - 120*		*07/17/13 02:30*	*40*
Toluene-d8 (Surr)	*113*		*80 - 120*		*07/17/13 02:30*	*40*

Client Sample ID: MW-3

Lab Sample ID: 440-51624-3

Date Collected: 07/10/13 13:20
Matrix: Ground Water
Date Received: 07/13/13 10:55

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Volatile Fuel Hydrocarbons (C4-C12)	**14000**		1000		ug/L			07/17/13 03:00	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*106*		*80 - 120*		*07/17/13 03:00*	*20*
4-Bromofluorobenzene (Surr)	*107*		*80 - 120*		*07/17/13 03:00*	*20*
Toluene-d8 (Surr)	*111*		*80 - 120*		*07/17/13 03:00*	*20*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**1700**		10		ug/L			07/17/13 03:00	20
Isopropyl Ether (DIPE)	ND		10		ug/L			07/17/13 03:00	20
Ethanol	ND		3000		ug/L			07/17/13 03:00	20
Ethyl-t-butyl ether (ETBE)	ND		10		ug/L			07/17/13 03:00	20
Ethylbenzene	**250**		10		ug/L			07/17/13 03:00	20
Methyl-t-Butyl Ether (MTBE)	**870**		10		ug/L			07/17/13 03:00	20
Tert-amyl-methyl ether (TAME)	ND		10		ug/L			07/17/13 03:00	20
tert-Butyl alcohol (TBA)	**970**		200		ug/L			07/17/13 03:00	20
Toluene	**17**		10		ug/L			07/17/13 03:00	20
Xylenes, Total	**330**		20		ug/L			07/17/13 03:00	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*80 - 120*		*07/17/13 03:00*	*20*
Dibromofluoromethane (Surr)	*106*		*80 - 120*		*07/17/13 03:00*	*20*
Toluene-d8 (Surr)	*111*		*80 - 120*		*07/17/13 03:00*	*20*

Client Sample ID: MW-4

Lab Sample ID: 440-51624-4

Date Collected: 07/10/13 12:28
Matrix: Ground Water
Date Received: 07/13/13 10:55

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)	**9000**		500		ug/L			07/19/13 03:43	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*115*		*80 - 120*		*07/19/13 03:43*	*10*
4-Bromofluorobenzene (Surr)	*97*		*80 - 120*		*07/19/13 03:43*	*10*
Toluene-d8 (Surr)	*106*		*80 - 120*		*07/19/13 03:43*	*10*

Client Sample ID: MW-4

Lab Sample ID: 440-51624-4

Date Collected: 07/10/13 12:28
Matrix: Ground Water
Date Received: 07/13/13 10:55

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**63**		5.0		ug/L			07/19/13 03:43	10
Isopropyl Ether (DIPE)	ND		5.0		ug/L			07/19/13 03:43	10
Ethanol	ND		1500		ug/L			07/19/13 03:43	10
Ethyl-t-butyl ether (ETBE)	ND		5.0		ug/L			07/19/13 03:43	10
Ethylbenzene	**180**		5.0		ug/L			07/19/13 03:43	10
Methyl-t-Butyl Ether (MTBE)	**34**		5.0		ug/L			07/19/13 03:43	10
Tert-amyl-methyl ether (TAME)	ND		5.0		ug/L			07/19/13 03:43	10
tert-Butyl alcohol (TBA)	ND		100		ug/L			07/19/13 03:43	10
Toluene	**24**		5.0		ug/L			07/19/13 03:43	10
Xylenes, Total	**600**		10		ug/L			07/19/13 03:43	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*80 - 120*		*07/19/13 03:43*	*10*
Dibromofluoromethane (Surr)	*115*		*80 - 120*		*07/19/13 03:43*	*10*
Toluene-d8 (Surr)	*106*		*80 - 120*		*07/19/13 03:43*	*10*

Client Sample ID: MW-5

Lab Sample ID: 440-51624-5

Date Collected: 07/10/13 09:50
Matrix: Ground Water
Date Received: 07/13/13 10:55

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			07/17/13 03:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*102*		*80 - 120*		*07/17/13 03:59*	*1*
4-Bromofluorobenzene (Surr)	*104*		*80 - 120*		*07/17/13 03:59*	*1*
Toluene-d8 (Surr)	*110*		*80 - 120*		*07/17/13 03:59*	*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			07/17/13 03:59	1
Isopropyl Ether (DIPE)	ND		0.50		ug/L			07/17/13 03:59	1
Ethanol	ND		150		ug/L			07/17/13 03:59	1
Ethyl-t-butyl ether (ETBE)	ND		0.50		ug/L			07/17/13 03:59	1
Ethylbenzene	ND		0.50		ug/L			07/17/13 03:59	1
Methyl-t-Butyl Ether (MTBE)	**6.8**		0.50		ug/L			07/17/13 03:59	1
Tert-amyl-methyl ether (TAME)	ND		0.50		ug/L			07/17/13 03:59	1
tert-Butyl alcohol (TBA)	ND		10		ug/L			07/17/13 03:59	1
Toluene	ND		0.50		ug/L			07/17/13 03:59	1
Xylenes, Total	ND		1.0		ug/L			07/17/13 03:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*80 - 120*		*07/17/13 03:59*	*1*
Dibromofluoromethane (Surr)	*102*		*80 - 120*		*07/17/13 03:59*	*1*
Toluene-d8 (Surr)	*110*		*80 - 120*		*07/17/13 03:59*	*1*

Client Sample ID: MW-6

Lab Sample ID: 440-51624-6

Date Collected: 07/10/13 11:12
Matrix: Ground Water
Date Received: 07/13/13 10:55

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)	**3000**		500		ug/L			07/17/13 04:29	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*109*		*80 - 120*		*07/17/13 04:29*	*10*
4-Bromofluorobenzene (Surr)	*103*		*80 - 120*		*07/17/13 04:29*	*10*
Toluene-d8 (Surr)	*110*		*80 - 120*		*07/17/13 04:29*	*10*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**390**		5.0		ug/L			07/17/13 04:29	10
Isopropyl Ether (DIPE)	ND		5.0		ug/L			07/17/13 04:29	10
Ethanol	ND		1500		ug/L			07/17/13 04:29	10
Ethyl-t-butyl ether (ETBE)	ND		5.0		ug/L			07/17/13 04:29	10
Ethylbenzene	ND		5.0		ug/L			07/17/13 04:29	10
Methyl-t-Butyl Ether (MTBE)	**110**		5.0		ug/L			07/17/13 04:29	10
Tert-amyl-methyl ether (TAME)	ND		5.0		ug/L			07/17/13 04:29	10
tert-Butyl alcohol (TBA)	**4300**		100		ug/L			07/17/13 04:29	10
Toluene	**6.3**		5.0		ug/L			07/17/13 04:29	10
Xylenes, Total	**12**		10		ug/L			07/17/13 04:29	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*80 - 120*		*07/17/13 04:29*	*10*
Dibromofluoromethane (Surr)	*109*		*80 - 120*		*07/17/13 04:29*	*10*
Toluene-d8 (Surr)	*110*		*80 - 120*		*07/17/13 04:29*	*10*

Client Sample ID: MW-7

Lab Sample ID: 440-51624-7

Date Collected: 07/10/13 12:49
Matrix: Ground Water
Date Received: 07/13/13 10:55

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)	**710**		500		ug/L			07/17/13 04:59	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*109*		*80 - 120*		*07/17/13 04:59*	*10*
4-Bromofluorobenzene (Surr)	*102*		*80 - 120*		*07/17/13 04:59*	*10*
Toluene-d8 (Surr)	*109*		*80 - 120*		*07/17/13 04:59*	*10*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**10**		5.0		ug/L			07/17/13 04:59	10
Isopropyl Ether (DIPE)	ND		5.0		ug/L			07/17/13 04:59	10
Ethanol	ND		1500		ug/L			07/17/13 04:59	10
Ethyl-t-butyl ether (ETBE)	ND		5.0		ug/L			07/17/13 04:59	10
Ethylbenzene	ND		5.0		ug/L			07/17/13 04:59	10
Methyl-t-Butyl Ether (MTBE)	**550**		5.0		ug/L			07/17/13 04:59	10
Tert-amyl-methyl ether (TAME)	ND		5.0		ug/L			07/17/13 04:59	10
tert-Butyl alcohol (TBA)	**520**		100		ug/L			07/17/13 04:59	10
Toluene	ND		5.0		ug/L			07/17/13 04:59	10

Client Sample ID: MW-7

Lab Sample ID: 440-51624-7

Date Collected: 07/10/13 12:49
Matrix: Ground Water
Date Received: 07/13/13 10:55

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	ND		10		ug/L			07/17/13 04:59	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*80 - 120*		*07/17/13 04:59*	*10*
Dibromofluoromethane (Surr)	*109*		*80 - 120*		*07/17/13 04:59*	*10*
Toluene-d8 (Surr)	*109*		*80 - 120*		*07/17/13 04:59*	*10*

Client Sample ID: MW-8

Lab Sample ID: 440-51624-8

Date Collected: 07/10/13 12:38
Matrix: Ground Water
Date Received: 07/13/13 10:55

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)	**290**		250		ug/L			07/17/13 05:29	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*111*		*80 - 120*		*07/17/13 05:29*	*5*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*		*07/17/13 05:29*	*5*
Toluene-d8 (Surr)	*111*		*80 - 120*		*07/17/13 05:29*	*5*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		2.5		ug/L			07/17/13 05:29	5
Isopropyl Ether (DIPE)	ND		2.5		ug/L			07/17/13 05:29	5
Ethanol	ND		750		ug/L			07/17/13 05:29	5
Ethyl-t-butyl ether (ETBE)	ND		2.5		ug/L			07/17/13 05:29	5
Ethylbenzene	ND		2.5		ug/L			07/17/13 05:29	5
Methyl-t-Butyl Ether (MTBE)	**250**		2.5		ug/L			07/17/13 05:29	5
Tert-amyl-methyl ether (TAME)	ND		2.5		ug/L			07/17/13 05:29	5
tert-Butyl alcohol (TBA)	ND		50		ug/L			07/17/13 05:29	5
Toluene	ND		2.5		ug/L			07/17/13 05:29	5
Xylenes, Total	ND		5.0		ug/L			07/17/13 05:29	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*		*07/17/13 05:29*	*5*
Dibromofluoromethane (Surr)	*111*		*80 - 120*		*07/17/13 05:29*	*5*
Toluene-d8 (Surr)	*111*		*80 - 120*		*07/17/13 05:29*	*5*

Client Sample ID: MW-9

Lab Sample ID: 440-51624-9

Date Collected: 07/10/13 13:10
Matrix: Ground Water
Date Received: 07/13/13 10:55

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)	**540**		500		ug/L			07/17/13 05:59	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*110*		*80 - 120*		*07/17/13 05:59*	*10*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*		*07/17/13 05:59*	*10*
Toluene-d8 (Surr)	*111*		*80 - 120*		*07/17/13 05:59*	*10*

Client Sample ID: MW-9
Date Collected: 07/10/13 13:10
Date Received: 07/13/13 10:55

Lab Sample ID: 440-51624-9
Matrix: Ground Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**10**		5.0		ug/L			07/17/13 05:59	10
Isopropyl Ether (DIPE)	ND		5.0		ug/L			07/17/13 05:59	10
Ethanol	ND		1500		ug/L			07/17/13 05:59	10
Ethyl-t-butyl ether (ETBE)	ND		5.0		ug/L			07/17/13 05:59	10
Ethylbenzene	ND		5.0		ug/L			07/17/13 05:59	10
Methyl-t-Butyl Ether (MTBE)	**360**		5.0		ug/L			07/17/13 05:59	10
Tert-amyl-methyl ether (TAME)	ND		5.0		ug/L			07/17/13 05:59	10
tert-Butyl alcohol (TBA)	**290**		100		ug/L			07/17/13 05:59	10
Toluene	ND		5.0		ug/L			07/17/13 05:59	10
Xylenes, Total	ND		10		ug/L			07/17/13 05:59	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*		*07/17/13 05:59*	*10*
Dibromofluoromethane (Surr)	*110*		*80 - 120*		*07/17/13 05:59*	*10*
Toluene-d8 (Surr)	*111*		*80 - 120*		*07/17/13 05:59*	*10*

Method Summary

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 4255 MacArthur Blvd., Oakland, CA

TestAmerica Job ID: 440-51624-1

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

Protocol References:

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

Laboratory References:

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

Lab Chronicle

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 4255 MacArthur Blvd., Oakland, CA

TestAmerica Job ID: 440-51624-1

Client Sample ID: MW-1

Lab Sample ID: 440-51624-1

Date Collected: 07/10/13 13:00

Matrix: Ground Water

Date Received: 07/13/13 10:55

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		10	10 mL	10 mL	117978	07/17/13 02:00	NS	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTMS		10	10 mL	10 mL	117979	07/17/13 02:00	NS	TAL IRV

Client Sample ID: MW-2

Lab Sample ID: 440-51624-2

Date Collected: 07/10/13 13:30

Matrix: Ground Water

Date Received: 07/13/13 10:55

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		40	10 mL	10 mL	117978	07/17/13 02:30	NS	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTMS		40	10 mL	10 mL	117979	07/17/13 02:30	NS	TAL IRV

Client Sample ID: MW-3

Lab Sample ID: 440-51624-3

Date Collected: 07/10/13 13:20

Matrix: Ground Water

Date Received: 07/13/13 10:55

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	117978	07/17/13 03:00	NS	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTMS		20	10 mL	10 mL	117979	07/17/13 03:00	NS	TAL IRV

Client Sample ID: MW-4

Lab Sample ID: 440-51624-4

Date Collected: 07/10/13 12:28

Matrix: Ground Water

Date Received: 07/13/13 10:55

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		10	10 mL	10 mL	118571	07/19/13 03:43	AA	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTMS		10	10 mL	10 mL	118572	07/19/13 03:43	AA	TAL IRV

Client Sample ID: MW-5

Lab Sample ID: 440-51624-5

Date Collected: 07/10/13 09:50

Matrix: Ground Water

Date Received: 07/13/13 10:55

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	117978	07/17/13 03:59	NS	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTMS		1	10 mL	10 mL	117979	07/17/13 03:59	NS	TAL IRV

Lab Chronicle

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 4255 MacArthur Blvd., Oakland, CA

TestAmerica Job ID: 440-51624-1

Client Sample ID: MW-6

Lab Sample ID: 440-51624-6

Date Collected: 07/10/13 11:12
Matrix: Ground Water
Date Received: 07/13/13 10:55

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		10	10 mL	10 mL	117978	07/17/13 04:29	NS	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTMS		10	10 mL	10 mL	117979	07/17/13 04:29	NS	TAL IRV

Client Sample ID: MW-7

Lab Sample ID: 440-51624-7

Date Collected: 07/10/13 12:49
Matrix: Ground Water
Date Received: 07/13/13 10:55

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		10	10 mL	10 mL	117978	07/17/13 04:59	NS	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTMS		10	10 mL	10 mL	117979	07/17/13 04:59	NS	TAL IRV

Client Sample ID: MW-8

Lab Sample ID: 440-51624-8

Date Collected: 07/10/13 12:38
Matrix: Ground Water
Date Received: 07/13/13 10:55

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		5	10 mL	10 mL	117978	07/17/13 05:29	NS	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTMS		5	10 mL	10 mL	117979	07/17/13 05:29	NS	TAL IRV

Client Sample ID: MW-9

Lab Sample ID: 440-51624-9

Date Collected: 07/10/13 13:10
Matrix: Ground Water
Date Received: 07/13/13 10:55

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		10	10 mL	10 mL	117978	07/17/13 05:59	NS	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTMS		10	10 mL	10 mL	117979	07/17/13 05:59	NS	TAL IRV

Laboratory References:

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

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

Lab Sample ID: MB 440-117978/4
Matrix: Water
Analysis Batch: 117978

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			07/16/13 21:10	1
Isopropyl Ether (DIPE)	ND		0.50		ug/L			07/16/13 21:10	1
Ethanol	ND		150		ug/L			07/16/13 21:10	1
Ethyl-t-butyl ether (ETBE)	ND		0.50		ug/L			07/16/13 21:10	1
Ethylbenzene	ND		0.50		ug/L			07/16/13 21:10	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50		ug/L			07/16/13 21:10	1
Tert-amyl-methyl ether (TAME)	ND		0.50		ug/L			07/16/13 21:10	1
tert-Butyl alcohol (TBA)	ND		10		ug/L			07/16/13 21:10	1
Toluene	ND		0.50		ug/L			07/16/13 21:10	1
Xylenes, Total	ND		1.0		ug/L			07/16/13 21:10	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*		*07/16/13 21:10*	*1*
Dibromofluoromethane (Surr)	*98*		*80 - 120*		*07/16/13 21:10*	*1*
Toluene-d8 (Surr)	*109*		*80 - 120*		*07/16/13 21:10*	*1*

Lab Sample ID: LCS 440-117978/5
Matrix: Water
Analysis Batch: 117978

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	23.0		ug/L		92	68 - 130
Isopropyl Ether (DIPE)	25.0	19.3		ug/L		77	58 - 139
Ethanol	250	241		ug/L		97	50 - 149
Ethyl-t-butyl ether (ETBE)	25.0	18.8		ug/L		75	60 - 136
Ethylbenzene	25.0	25.0		ug/L		100	70 - 130
m,p-Xylene	50.0	52.2		ug/L		104	70 - 130
Methyl-t-Butyl Ether (MTBE)	25.0	21.5		ug/L		86	63 - 131
o-Xylene	25.0	24.7		ug/L		99	70 - 130
Tert-amyl-methyl ether (TAME)	25.0	21.2		ug/L		85	57 - 139
tert-Butyl alcohol (TBA)	125	111		ug/L		88	70 - 130
Toluene	25.0	25.0		ug/L		100	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*
Dibromofluoromethane (Surr)	*98*		*80 - 120*
Toluene-d8 (Surr)	*110*		*80 - 120*

Lab Sample ID: 440-51622-A-8 MS
Matrix: Water
Analysis Batch: 117978

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	22.9		ug/L		92	66 - 130
Isopropyl Ether (DIPE)	ND		25.0	21.3		ug/L		85	64 - 138
Ethanol	ND		250	270		ug/L		108	54 - 150
Ethyl-t-butyl ether (ETBE)	ND		25.0	20.6		ug/L		82	70 - 130

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

Lab Sample ID: 440-51622-A-8 MS
Matrix: Water
Analysis Batch: 117978

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
Ethylbenzene	ND		25.0	24.1		ug/L		97	70 - 130
m,p-Xylene	ND		50.0	50.5		ug/L		101	70 - 133
Methyl-t-Butyl Ether (MTBE)	ND		25.0	24.4		ug/L		98	70 - 130
o-Xylene	ND		25.0	24.7		ug/L		99	70 - 133
Tert-amyl-methyl ether (TAME)	ND		25.0	23.5		ug/L		94	68 - 133
tert-Butyl alcohol (TBA)	ND		125	114		ug/L		92	70 - 130
Toluene	ND		25.0	24.9		ug/L		100	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*104*		*80 - 120*
Dibromofluoromethane (Surr)	*108*		*80 - 120*
Toluene-d8 (Surr)	*110*		*80 - 120*

Lab Sample ID: 440-51622-A-8 MSD
Matrix: Water
Analysis Batch: 117978

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	22.3		ug/L		89	66 - 130	3	20
Isopropyl Ether (DIPE)	ND		25.0	20.6		ug/L		82	64 - 138	4	25
Ethanol	ND		250	260		ug/L		104	54 - 150	4	30
Ethyl-t-butyl ether (ETBE)	ND		25.0	19.7		ug/L		79	70 - 130	5	25
Ethylbenzene	ND		25.0	23.2		ug/L		93	70 - 130	4	20
m,p-Xylene	ND		50.0	49.4		ug/L		99	70 - 133	2	25
Methyl-t-Butyl Ether (MTBE)	ND		25.0	23.4		ug/L		93	70 - 130	4	25
o-Xylene	ND		25.0	24.2		ug/L		97	70 - 133	2	20
Tert-amyl-methyl ether (TAME)	ND		25.0	22.5		ug/L		90	68 - 133	5	30
tert-Butyl alcohol (TBA)	ND		125	114		ug/L		91	70 - 130	1	25
Toluene	ND		25.0	23.9		ug/L		96	70 - 130	4	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*105*		*80 - 120*
Dibromofluoromethane (Surr)	*104*		*80 - 120*
Toluene-d8 (Surr)	*110*		*80 - 120*

Lab Sample ID: MB 440-118571/4
Matrix: Water
Analysis Batch: 118571

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			07/18/13 20:57	1
Isopropyl Ether (DIPE)	ND		0.50		ug/L			07/18/13 20:57	1
Ethanol	ND		150		ug/L			07/18/13 20:57	1
Ethyl-t-butyl ether (ETBE)	ND		0.50		ug/L			07/18/13 20:57	1
Ethylbenzene	ND		0.50		ug/L			07/18/13 20:57	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50		ug/L			07/18/13 20:57	1
Tert-amyl-methyl ether (TAME)	ND		0.50		ug/L			07/18/13 20:57	1
tert-Butyl alcohol (TBA)	ND		10		ug/L			07/18/13 20:57	1

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

Lab Sample ID: MB 440-118571/4
Matrix: Water
Analysis Batch: 118571

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	ND		0.50		ug/L			07/18/13 20:57	1
Xylenes, Total	ND		1.0		ug/L			07/18/13 20:57	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*80 - 120*		*07/18/13 20:57*	*1*
Dibromofluoromethane (Surr)	*110*		*80 - 120*		*07/18/13 20:57*	*1*
Toluene-d8 (Surr)	*103*		*80 - 120*		*07/18/13 20:57*	*1*

Lab Sample ID: LCS 440-118571/5
Matrix: Water
Analysis Batch: 118571

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	19.3		ug/L		77	68 - 130
Isopropyl Ether (DIPE)	25.0	25.7		ug/L		103	58 - 139
Ethanol	250	275		ug/L		110	50 - 149
Ethyl-t-butyl ether (ETBE)	25.0	25.1		ug/L		100	60 - 136
Ethylbenzene	25.0	22.6		ug/L		90	70 - 130
m,p-Xylene	50.0	48.8		ug/L		98	70 - 130
Methyl-t-Butyl Ether (MTBE)	25.0	25.7		ug/L		103	63 - 131
o-Xylene	25.0	25.3		ug/L		101	70 - 130
Tert-amyl-methyl ether (TAME)	25.0	23.5		ug/L		94	57 - 139
tert-Butyl alcohol (TBA)	125	137		ug/L		110	70 - 130
Toluene	25.0	21.3		ug/L		85	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*97*		*80 - 120*
Dibromofluoromethane (Surr)	*108*		*80 - 120*
Toluene-d8 (Surr)	*107*		*80 - 120*

Lab Sample ID: 440-51859-A-5 MS
Matrix: Water
Analysis Batch: 118571

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	19.1		ug/L		77	66 - 130
Isopropyl Ether (DIPE)	ND		25.0	24.1		ug/L		96	64 - 138
Ethanol	ND		250	282		ug/L		113	54 - 150
Ethyl-t-butyl ether (ETBE)	ND		25.0	23.6		ug/L		95	70 - 130
Ethylbenzene	ND		25.0	23.0		ug/L		92	70 - 130
m,p-Xylene	ND		50.0	48.2		ug/L		96	70 - 133
Methyl-t-Butyl Ether (MTBE)	0.74		25.0	24.2		ug/L		94	70 - 130
o-Xylene	ND		25.0	24.4		ug/L		98	70 - 133
Tert-amyl-methyl ether (TAME)	ND		25.0	21.4		ug/L		86	68 - 133
tert-Butyl alcohol (TBA)	ND		125	142		ug/L		114	70 - 130
Toluene	ND		25.0	21.2		ug/L		85	70 - 130

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

Lab Sample ID: 440-51859-A-5 MS
Matrix: Water
Analysis Batch: 118571

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

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*93*		*80 - 120*
Dibromofluoromethane (Surr)	*109*		*80 - 120*
Toluene-d8 (Surr)	*103*		*80 - 120*

Lab Sample ID: 440-51859-A-5 MSD
Matrix: Water
Analysis Batch: 118571

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	18.6		ug/L		74	66 - 130	3	20
Isopropyl Ether (DIPE)	ND		25.0	23.9		ug/L		96	64 - 138	1	25
Ethanol	ND		250	261		ug/L		105	54 - 150	8	30
Ethyl-t-butyl ether (ETBE)	ND		25.0	23.7		ug/L		95	70 - 130	0	25
Ethylbenzene	ND		25.0	23.3		ug/L		93	70 - 130	1	20
m,p-Xylene	ND		50.0	48.4		ug/L		97	70 - 133	0	25
Methyl-t-Butyl Ether (MTBE)	0.74		25.0	25.0		ug/L		97	70 - 130	3	25
o-Xylene	ND		25.0	24.9		ug/L		100	70 - 133	2	20
Tert-amyl-methyl ether (TAME)	ND		25.0	21.8		ug/L		87	68 - 133	2	30
tert-Butyl alcohol (TBA)	ND		125	131		ug/L		105	70 - 130	8	25
Toluene	ND		25.0	20.8		ug/L		83	70 - 130	2	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*89*		*80 - 120*
Dibromofluoromethane (Surr)	*106*		*80 - 120*
Toluene-d8 (Surr)	*102*		*80 - 120*

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

Lab Sample ID: MB 440-117979/4
Matrix: Water
Analysis Batch: 117979

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			07/16/13 21:10	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*98*		*80 - 120*		*07/16/13 21:10*	*1*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*		*07/16/13 21:10*	*1*
Toluene-d8 (Surr)	*109*		*80 - 120*		*07/16/13 21:10*	*1*

Lab Sample ID: LCS 440-117979/6
Matrix: Water
Analysis Batch: 117979

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	431		ug/L		86	55 - 130

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

Lab Sample ID: LCS 440-117979/6
Matrix: Water
Analysis Batch: 117979

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

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*95*		*80 - 120*
4-Bromofluorobenzene (Surr)	*105*		*80 - 120*
Toluene-d8 (Surr)	*111*		*80 - 120*

Lab Sample ID: 440-51622-A-8 MS
Matrix: Water
Analysis Batch: 117979

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	1270		ug/L		71	50 - 145

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*108*		*80 - 120*
4-Bromofluorobenzene (Surr)	*104*		*80 - 120*
Toluene-d8 (Surr)	*110*		*80 - 120*

Lab Sample ID: 440-51622-A-8 MSD
Matrix: Water
Analysis Batch: 117979

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	1240		ug/L		69	50 - 145	2	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*104*		*80 - 120*
4-Bromofluorobenzene (Surr)	*105*		*80 - 120*
Toluene-d8 (Surr)	*110*		*80 - 120*

Lab Sample ID: MB 440-118572/4
Matrix: Water
Analysis Batch: 118572

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			07/18/13 20:57	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*110*		*80 - 120*		*07/18/13 20:57*	*1*
4-Bromofluorobenzene (Surr)	*94*		*80 - 120*		*07/18/13 20:57*	*1*
Toluene-d8 (Surr)	*103*		*80 - 120*		*07/18/13 20:57*	*1*

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

Lab Sample ID: LCS 440-118572/6
Matrix: Water
Analysis Batch: 118572

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	467		ug/L		93	55 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*109*		*80 - 120*
4-Bromofluorobenzene (Surr)	*93*		*80 - 120*
Toluene-d8 (Surr)	*104*		*80 - 120*

Lab Sample ID: 440-51859-A-5 MS
Matrix: Water
Analysis Batch: 118572

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	1460		ug/L		82	50 - 145		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*109*		*80 - 120*
4-Bromofluorobenzene (Surr)	*93*		*80 - 120*
Toluene-d8 (Surr)	*103*		*80 - 120*

Lab Sample ID: 440-51859-A-5 MSD
Matrix: Water
Analysis Batch: 118572

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	1430		ug/L		80	50 - 145	2	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*106*		*80 - 120*
4-Bromofluorobenzene (Surr)	*89*		*80 - 120*
Toluene-d8 (Surr)	*102*		*80 - 120*

GC/MS VOA

Analysis Batch: 117978

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-51622-A-8 MS	Matrix Spike	Total/NA	Water	8260B	
440-51622-A-8 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	
440-51624-1	MW-1	Total/NA	Ground Water	8260B	
440-51624-2	MW-2	Total/NA	Ground Water	8260B	
440-51624-3	MW-3	Total/NA	Ground Water	8260B	
440-51624-5	MW-5	Total/NA	Ground Water	8260B	
440-51624-6	MW-6	Total/NA	Ground Water	8260B	
440-51624-7	MW-7	Total/NA	Ground Water	8260B	
440-51624-8	MW-8	Total/NA	Ground Water	8260B	
440-51624-9	MW-9	Total/NA	Ground Water	8260B	
LCS 440-117978/5	Lab Control Sample	Total/NA	Water	8260B	
MB 440-117978/4	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 117979

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-51622-A-8 MS	Matrix Spike	Total/NA	Water	8260B/CA_LUFT MS	
440-51622-A-8 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B/CA_LUFT MS	
440-51624-1	MW-1	Total/NA	Ground Water	8260B/CA_LUFT MS	
440-51624-2	MW-2	Total/NA	Ground Water	8260B/CA_LUFT MS	
440-51624-3	MW-3	Total/NA	Ground Water	8260B/CA_LUFT MS	
440-51624-5	MW-5	Total/NA	Ground Water	8260B/CA_LUFT MS	
440-51624-6	MW-6	Total/NA	Ground Water	8260B/CA_LUFT MS	
440-51624-7	MW-7	Total/NA	Ground Water	8260B/CA_LUFT MS	
440-51624-8	MW-8	Total/NA	Ground Water	8260B/CA_LUFT MS	
440-51624-9	MW-9	Total/NA	Ground Water	8260B/CA_LUFT MS	
LCS 440-117979/6	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT MS	
MB 440-117979/4	Method Blank	Total/NA	Water	8260B/CA_LUFT MS	

Analysis Batch: 118571

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-51624-4	MW-4	Total/NA	Ground Water	8260B	
440-51859-A-5 MS	Matrix Spike	Total/NA	Water	8260B	
440-51859-A-5 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	
LCS 440-118571/5	Lab Control Sample	Total/NA	Water	8260B	
MB 440-118571/4	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 118572

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-51624-4	MW-4	Total/NA	Ground Water	8260B/CA_LUFT MS	
440-51859-A-5 MS	Matrix Spike	Total/NA	Water	8260B/CA_LUFT MS	

GC/MS VOA (Continued)

Analysis Batch: 118572 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-51859-A-5 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B/CA_LUFT MS	
LCS 440-118572/6	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT MS	
MB 440-118572/4	Method Blank	Total/NA	Water	8260B/CA_LUFT MS	

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
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: Conestoga-Rovers & Associates, Inc.
Project/Site: 4255 MacArthur Blvd., Oakland, CA

TestAmerica Job ID: 440-51624-1

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	06-30-14
Arizona	State Program	9	AZ0671	10-13-13
California	LA Cty Sanitation Districts	9	10256	01-31-14
California	NELAP	9	1108CA	01-31-14
California	State Program	9	2706	06-30-14
Guam	State Program	9	Cert. No. 12.002r	01-28-14 *
Hawaii	State Program	9	N/A	01-31-14
New Mexico	State Program	6	N/A	01-31-14
Northern Mariana Islands	State Program	9	MP0002	01-31-14
Oregon	NELAP	10	4005	09-12-13
USDA	Federal		P330-09-00080	06-06-14
USEPA UCMR	Federal	1	CA01531	01-31-15

* Expired certification is currently pending renewal and is considered valid.

Shell Oil Products Chain Of Custody Record

LAB (LOCATION)
- ☐ CALSCIENCE (_____)
- ☐ SPL Houston (_____)
- ☐ XENCO (_____)
- ☑ TEST AMERICA (IRVINE)
- ☐ OTHER (_____)

Please Check Appropriate Box:
- ☐ ENV. SERVICES
- ☐ MOTIVA RETAIL
- ☐ SHELL RETAIL
- ☐ MOTIVA SC&CM
- ☑ CONSULTANT
- ☐ LUBES
- ☐ SHELL PIPELINE
- ☐ OTHER _____

Print Bill To Contact Name: 240524 Peter Schaefer

PO #

INCIDENT # (ENV SERVICES): 9 8 9 9 5 7 5 8

SAP #: 1 3 5 7 0 1

☐ CHECK IF NO INCIDENT # APPLIES

DATE 7-10-13

PAGE 1 of 1

SAMPLING COMPANY: Blaine Tech Services	LOG CODE: BTSS	SITE ADDRESS: Street and City: 4255 MacArthur Blvd., Oakland	State: CA	GLOBAL ID NO.: T0600101261
ADDRESS: 1680 Rogers Avenue, San Jose, CA		EDF DELIVERABLE TO (Name, Company, Office Location): Brenda Carter, CRA, Emeryville, CA	PHONE NO.: 510-420-3343	E-MAIL: ShellEDF@CRAWorld.com; Shell-US-LabDataManagement@CRAworld.com	CONSULTANT PROJECT NO.: 240524-95-12.01
PROJECT CONTACT (Hardcopy or PDF Report to): Lorin King				
TELEPHONE: (310) 885-4455 x 108	FAX: (310) 637-5802	E-MAIL: lking@blainetech.com		
SAMPLER NAME(S) (Print): Mark McCulloch				LAB USE ONLY: 440-51624

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

☐ LA - RWQCB REPORT FORMAT ☐ UST AGENCY:

REQUESTED ANALYSIS

SPECIAL INSTRUCTIONS OR NOTES:

1) Please upload the "CRA EQuIS 4-file EDD" to the CRA Website (http://cralabedduploadcraworld.com/equis/default.aspx) and/or send it to the Shell-US-LabDataManagement@CRAworld.com email folder. 2) Please indicate that you have uploaded the EDD by including "EDD Uploaded to CRA website" in the body of the email used to deliver the final PDF report to the Shell-US-LabDataManagement@CRAworld.com email folder.

Copy final report to Shell.Lab.Billing@craworld.com, ShellEDF@craworld.com,Shell-US-LabDataManagement@CRAworld.com, and pschaefer@CRAWorld.com

Email invoice to Shell.Lab.Billing@craworld.com

- ☑ SHELL CONTRACT RATE APPLIES
- ☐ STATE REIMBURSEMENT RATE APPLIES
- ☐ EDD NOT NEEDED
- ☑ RECEIPT VERIFICATION REQUESTED

Matrix Codes - WG (groundwater), WS (surface water), WP (drinking water source), W (Trip or Temp Blank)

TEMPERATURE ON RECEIPT, °C: 1.9°

LAB USE ONLY	SAMPLE ID: PROJECT NUMBER	DATE (MMDDYY)	SAMPLER INITIALS	WELL ID	TIME	MATRIX	PRESERVATIVE: HCL	HNO3	H2SO4	NONE	OTHER	NO. OF CONT.	TPH-GRO, Purgeable (8260B)	TPH-DRO, Extractable (8015M)	BTEX (8260B)	BTEX + MTBE (8260B)	BTEX + MTBE + TBA (8260B)	BTEX + 5 OXYs (MTBE, TBA, DIPE, TAME, ETBE) 8260B	VOCs Full list (8260B)	Single Compound: _____ (8260B)	1,2 DCA (8260B)	EDB (8260B)	Ethanol (8260B)	Methanol (8015B)	
25	WG - 130710-MM	(07/10/13)	MM	MW-1	1300	WG	X					3	X					X					X		
	- 130710-MM1	-	MM	MW-2	1330		X					3	X					X					X		
	-	-	MM	MW-3	1320		X					3	X					X					X		
	-	-	MM	MW-4	1228		X					3	X					X					X		
	-	-	MM	MW-5	0950		X					3	X					X					X		
	-	-	MM	MW-6	1112		X					3	X					X					X		
	-	-	MM	MW-7	1249		X					3	X					X					X		
	-	-	MM	MW-8	1238		X					3	X					X					X	10:55	
	-	-	MM	MW-9	1310		X					3	X					X					X		
	-	-	-	-																				7-15-13	

	Relinquished by (Signature)	Received by (Signature)	Date	Time
		Sample Custodian	7-10-13	1730
	BTS	TAP	07/11/13	1715
	TA 7/12/13 1600	TA	07/11/13	1855
		Tim Sullivan	7/13/13	1055

5.5°C

440-51624 Chain of Custody

Page 24 of 25

8/1/2013

Login Sample Receipt Checklist

Client: Conestoga-Rovers & Associates, Inc.

Job Number: 440-51624-1

Login Number: 51624

List Source: TestAmerica Irvine

List Number: 1

Creator: Escalante, Maria

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
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	MARK McCOLLECH
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

APPENDIX C

AECOM –
DATA TABLES FOR 76 SERVICE STATION NO. 1156

Table 2
Current Groundwater Monitoring Data and Analytical Results
76 Service Station No. 1156 (351645)
4276 MacArthur Boulevard
Oakland, California

WELL ID	DATE SAMPLED	TOC* (ft)	DTW (ft)	LNAPL (ft)	GWE* (ft)	OIL AND GREASE (µg/L)	TPH-DRO WITH SGC (µg/L)	TPH-GRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	COMMENTS
MW-1B	7/10/2013	174.06	7.11	0	166.95	ND<5,000	ND<40	ND<50	ND<0.30	ND<0.30	ND<0.30	0.61	
MW-2B	7/10/2013	173.55	7.06	0	166.49	--	ND<40	ND<50	ND<0.30	ND<0.30	ND<0.30	ND<0.60	
MW-3B	7/10/2013	177.77	6.71	0	171.06	--	350	2,800	190	60	530	82	
MW-4B	7/10/2013	179.07	6.52	0	172.55	--	ND<40	ND<50	ND<0.30	ND<0.30	ND<0.30	ND<0.60	
MW-5	7/10/2013	169.18	2.32	0	166.86	--	ND<40	ND<50	ND<0.30	ND<0.30	ND<0.30	ND<0.60	
MW-7	7/10/2013	172.11	7.36	0	164.75	--	ND<40	340	0.75	ND<0.30	0.46	0.69	
MW-9A	7/10/2013	173.01	5.88	0	167.13	--	220	4,600	1,100	14	220	140	
MW-9B	7/10/2013	172.78	5.87	0	166.91	--	ND<40	ND<50	ND<0.30	ND<0.30	ND<0.30	ND<0.60	
MW-10A	7/10/2013	174.48	7.15	0	167.33	--	1,300	23,000	6,600	76	750	1,900	
MW-10B	7/10/2013	174.62	7.65	0	166.97	--	170	4,100	1,100	34	130	140	
MW-11A	7/10/2013	175.37	6.02	0	169.35	--	730	45,000	8,600	5,900	940	7,600	
MW-11B	7/10/2013	174.65	5.07	0	169.58	--	ND<40	3,800	1,300	52	41	300	
QA	7/10/2013	--	--	--	--	--	--	ND<50	ND<0.30	ND<0.30	ND<0.30	ND<0.60	

NOTES:
* TOC and GWE are in feet above mean sea level
ND<# = Analyte not detected at or above indicated practical quantitation limit
Oil and grease analyzed by United States Environmental Protection Agency (EPA) Method 1664A HEM
TPH-DRO with SGC analyzed by EPA Method 8015B/TPH-d
TPH-GRO analyzed by EPA Method 8015B
BTEX analyzed by EPA Method 8020

TOC = Top of casing
ft = Feet
DTW = Depth to water below TOC
GWE = Groundwater elevation
µg/L = Micrograms per liter
-- = Not available/not sampled
LNAPL = Light non-aqueous phase liquid
QA = Trip blank
ID = Identification

TPH-DRO = Total petroleum hydrocarbons-diesel range organics
SGC = Silica gel cleanup
TPH-GRO = Total petroleum hydrocarbons-gasoline range organics
B = Benzene
T = Toluene
E = Ethylbenzene
X = Total xylenes

Table 3
Current Groundwater Analytical Results - Oxygenate Compounds
76 Service Station No. 1156 (351645)
4276 MacArthur Boulevard
Oakland, California

WELL ID	DATE	MTBE (µg/L)	TBA (µg/L)	ETHANOL (µg/L)	1,2-EDC (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)
MW-1B	7/10/2013	12	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50
MW-2B	7/10/2013	0.86	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50
MW-3B	7/10/2013	14	ND<100	ND<2,500	ND<5.0	ND<5.0	ND<5.0	ND<5.0
MW-4B	7/10/2013	0.64	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50
MW-5	7/10/2013	4.7	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50
MW-7	7/10/2013	450	44	ND<250	1.2	ND<0.50	ND<0.50	ND<0.50
MW-9A	7/10/2013	4.4	1,700	ND<250	16	ND<0.50	ND<0.50	ND<0.50
MW-9B	7/10/2013	18	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50
MW-10A	7/10/2013	310	1,500	ND<2,500	ND<5.0	ND<5.0	ND<5.0	ND<5.0
MW-10B	7/10/2013	110	370	ND<250	3.5	ND<0.50	ND<0.50	ND<0.50
MW-11A	7/10/2013	3,600	4,900	ND<6,200	ND<12	ND<12	ND<12	ND<12
MW-11B	7/10/2013	490	1,500	ND<1,200	57	ND<2.5	ND<2.5	ND<2.5
QA	7/10/2013	ND<0.50	--	--	--	--	--	--

NOTES:
Oxygenate compounds analyzed by United States Environmental Protection Agency Method 8260B
ND<# = Analyte not detected at or above indicated practical quantitation limit

-- = Not sampled
µg/L = Micrograms per liter
QA = Trip blank
MTBE = Methyl t-butyl ether
TBA = t-butyl alcohol
EDB = 1,2-dibromoethane
1,2-EDC = 1,2-dichloroethane
DIPE = Diisopropyl ether
ETBE = Ethyl t-butyl ether
TAME = t-amyl methyl ether
ID = Identification