CONESTOGA-ROVERS & ASSOCIATES

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TRANSMITTAL

DATE: May 14, 2012

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

RECEIVED
11:51 am, May 17, 2012
Alameda County
Environmental Health

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QUANTITY	DESCRIPTION
1	Groundwater Monitoring and Remediation Report – First Quarter 2012

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

COMMENTS:
If you have any questions regarding the contents of this document, please call Peter Schaefer at (510) 420-3319.

Copy to: Denis Brown, Shell Oil Products US (electronic copy)
Roland C. Malone Trust (property owner), Erik Parrish, Trustee, 1359 Napa Valley Lane, Eugene, OR 97404
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**

Denis L. Brown
Shell Oil Products US
HSE – Environmental Services
20945 S. Wilmington Ave.
Carson, CA 90810-1039
Tel (707) 865 0251
Fax (707) 865 2542
Email denis.l.brown@shell.com

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

Re: Former Shell Service Station
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.

If you have any questions or concerns, please call me at (707) 865-0251.

Sincerely,

Denis L. Brown
Senior Program Manager

GROUNDWATER MONITORING AND REMEDIATION REPORT - FIRST QUARTER 2012

FORMER SHELL SERVICE STATION
4255 MACARTHUR BOULEVARD
OAKLAND, CALIFORNIA

SAP CODE	135701
INCIDENT NO.	98995758
AGENCY NO.	RO0000486

Prepared by:
Conestoga-Rovers & Associates

5900 Hollis Street, Suite A
Emeryville, California
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MAY 14, 2012
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TABLE OF CONTENTS

		Page
1.0	INTRODUCTION	1
1.1	SITE INFORMATION	1
2.0	SITE ACTIVITIES, FINDINGS, AND DISCUSSION	1
2.1	CURRENT QUARTER'S ACTIVITIES	1
2.2	CURRENT QUARTER'S FINDINGS	2
2.3	PROPOSED ACTIVITIES	2
2.4	DISCUSSION	3

LIST OF FIGURES
(Following Text)

FIGURE 1 VICINITY MAP

FIGURE 2 GROUNDWATER CONTOUR AND CHEMICAL CONCENTRATION MAP

LIST OF TABLES
(Following Text)

TABLE 1 GROUNDWATER DATA

LIST OF APPENDICES

APPENDIX A BLAINE TECH SERVICES, INC. - FIELD NOTES

APPENDIX B TEST AMERICA - LABORATORY REPORT

APPENDIX C CRA - DATA TABLE FOR 76 SERVICE STATION NO. 1156

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	Denis Brown
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 April 9, 2012.

2.0 SITE ACTIVITIES, FINDINGS, AND DISCUSSION

2.1 CURRENT QUARTER'S ACTIVITIES

CRA submitted a *Soil Vapor Sampling Report* on January 9, 2012, which recommended resampling probes SVP-1, SVP-2, and SVP-6 following an extended period of dry weather.

CRA submitted a *Subsurface Investigation Report* on January 10, 2012 describing an on-site soil and groundwater investigation. Due to a laboratory error in reporting tertiary-butyl alcohol concentrations in grab groundwater samples, CRA submitted a *Revised Subsurface Investigation Report* on March 27, 2012.

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 table for the 76 Station is included in Appendix C.

On October 13, 2011 and January 23, 2012, Blaine replaced the separate-phase hydrocarbon (SPH)-absorbent socks in wells MW-2, MW-3, and MW-4. No SPHs were measured in any site wells during the October 13, 2011 and January 23, 2012 monitoring events. Approximately 2.64 pounds of SPHs were recovered from the absorbent socks during the fourth quarter of 2011 and the first quarter of 2012. A summary of historical SPH removal is provided below.

SPH REMOVAL SUMMARY	
This Period (pounds)	*Cumulative Removal (pounds)*
2.64	31.96

CRA submitted a *Subsurface Investigation Work Plan* to conduct a soil vapor investigation at 4240 Redding Street, Oakland on April 5, 2012. Alameda County Environmental Health's (ACEH's) April 9, 2012 letter approved the work plan. The proposed work was completed on April 17, 2012, and CRA submitted a *Subsurface Investigation Report* on May 4, 2012, which recommended no additional investigation on the property.

2.2 CURRENT QUARTER'S FINDINGS

Groundwater Flow Direction	Westerly to southwesterly
Hydraulic Gradient	Averages 0.04
Depth to Water	4.49 to 12.30 feet below top of well casing

2.3 PROPOSED ACTIVITIES

ACEH's April 9, 2012 letter also requested a soil vapor investigation work plan for the adjacent mobile home and church properties. We will provide ACEH with a subsurface investigation work plan by June 6, 2012.

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 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 for four consecutive quarters.

CRA's January 9, 2012 *Soil Vapor Sampling Report* proposed making an additional attempt to sample probes SVP-1 (3 and 5 feet below grade [fbg]), SVP-2 (5 fbg), and SVP-6 (3 and 5 fbg) following an extended period of dry weather. We will attempt to sample the probes in fall 2012.

2.4 DISCUSSION

Shell and ConocoPhilips Company have filed a comingled plume claim with the California Underground Storage Tank Cleanup Fund for the 4276 MacArthur Boulevard and 4255 MacArthur Boulevard, Oakland sites.

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

05/10/2012

Groundwater Contour and Chemical Concentration Map

January 23, 2012

EXPLANATION

- **MW-1** — Monitoring well location (Shell)
- **MW-1B** — Monitoring well location (ConocoPhillips)
- **SVP-1** — Soil vapor probe location (Shell)
- **SVP-9** — Temporary soil vapor probe location
- **TB-1** — Destroyed well location
- **SB-9** — Soil boring location (Shell)
- STM — Storm drain line (STM)
- SAN — Sanitary sewer line (SAN)
- W — Water line (W)
- x.xx — Average groundwater flow direction and gradient
- xx.xx — Groundwater elevation contour, in feet above mean sea level (ft MSL)

Well
ELEV
Benzene
MTBE

- Well designation
- Groundwater elevation, in ft MSL
- Benzene and MTBE concentrations are in micrograms per liter

Notes:
NA = Not available; well inaccessible
ND = Not detected
NDa = Elevated reporting limit, see laboratory report for details
NS = Not sampled

MACARTHUR BOULEVARD
REDDING STREET
HIGH STREET
HIGHWAY 580
580 ON-RAMP

Parking
Pharmacy
Foot Clinic
Church Structures
Residence
4240 Redding
Mobile Home Park
Former Storage Building
Former USTs
Former Dispenser Island (removed 1/03)
Former Dispenser Island (removed 11/95)
Former Shell
4255 MacArthur
76 Station #1156
4276 MacArthur
USTs
Dispenser
Driveway
Building
Fenceline
Steep Embankment

MW-5 167.20 ND 52
MW-8
MW-6
MW-1B 167.10 3.6 32
MW-1
MW-4B 172.49 ND 17
MW-4
MW-2
MW-3
MW-2B 166.59 0.73 95
MW-3B 170.87 39 56
MW-7 165.19 ND 390
MW-9 168.71 9.9 460
MW-8 169.64 NDa 320
MW-3 162.29 1,500 730
MW-6 161.71 300 61
MW-2 161.66 1,400 820
MW-7 NA NS
MW-1 167.91 49 1,200
MW-5 158.74 ND 5.7
MW-4 158.21 83 46

SVP-12, SVP-11, SVP-10, SVP-9, SVP-3, SVP-4, SVP-5, SVP-6, SVP-2, SVP-1, SVP-8
SB-16, SB-15, SB-14, SB-12, SB-13, SB-11, SB-9, SB-10
TB-1, TB-2

160.00
165.00
170.00
0.04

N

0 20 40 80
Scale (ft)

FIGURE
2

Former Shell Service Station
4255 MacArthur Boulevard
Oakland, California

CONESTOGA-ROVERS & ASSOCIATES

I:\Shell\6-chars\2405--\240524-Oakland 4255 MacArthur\240524-REPORTS\240524-RPT18-1Q12\240524 1QM12-GW.DWG

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
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

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	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-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	---	---	---

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	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
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

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	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	—	—	—
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	—	—

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	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-3	11/17/1993	18,000	5,400	660	720	2,200	---	---	---	---	---	---	---	---	---	174.61	15.40	159.21	---	---	---
MW-3	01/20/1994	55,000	13,000	2,600	2,200	6,500	---	---	---	---	---	---	---	---	---	174.61	14.61	160.00	---	---	---
MW-3	04/25/1994	96,000	11,000	1,600	3,100	9,900	---	---	---	---	---	---	---	---	---	174.61	13.12	161.49	---	---	---
MW-3 (D)	04/25/1994	78,000	12,000	1,900	2,600	7,300	---	---	---	---	---	---	---	---	---	174.61	13.12	161.49	---	---	---
MW-3	07/07/1994	---	---	---	---	---	---	---	---	---	---	---	---	---	---	174.61	14.54	160.09	0.02	---	---
MW-3	10/27/1994	---	---	---	---	---	---	---	---	---	---	---	---	---	---	174.61	15.62	159.03	0.05	---	---
MW-3	11/17/1994	---	---	---	---	---	---	---	---	---	---	---	---	---	---	174.61	13.83	160.78	---	---	---
MW-3	11/28/1994	---	---	---	---	---	---	---	---	---	---	---	---	---	---	174.61	14.02	160.59	---	---	---
MW-3	01/13/1995	180,000	3,200	2,700	1,700	5,200	---	---	---	---	---	---	---	---	---	174.61	12.13	162.48	---	---	---
MW-3 (D)	01/13/1995	23,000	4,000	690	960	3,000	---	---	---	---	---	---	---	---	---	174.61	12.13	162.48	---	---	---
MW-3	04/12/1995	56,000	8,700	1,500	2,100	6,300	---	---	---	---	---	---	---	---	---	174.61	12.96	161.65	---	---	---
MW-3	07/25/1995	---	---	---	---	---	---	---	---	---	---	---	---	---	---	174.61	14.28	160.38	0.06	---	---
MW-3	10/18/1995	---	---	---	---	---	---	---	---	---	---	---	---	---	---	174.61	15.88	158.77	0.05	---	---
MW-3	01/17/1996	---	---	---	---	---	---	---	---	---	---	---	---	---	---	174.61	13.86	160.94	0.24	---	---
MW-3	04/25/1996	---	---	---	---	---	---	---	---	---	---	---	---	---	---	174.61	13.82	160.81	0.02	---	---
MW-3	07/17/1996	---	---	---	---	---	---	---	---	---	---	---	---	---	---	174.61	16.11	158.52	0.03	---	---
MW-3	10/01/1996	46,000	7,300	530	1,700	3,900	3,200	---	---	---	---	---	---	---	---	174.61	16.56	158.05	---	---	---

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

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	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	---	---	---
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	---	---	---

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	07/23/2009	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-4	11/17/1994	---	---	---	---	---	---	---	---	---	---	---	---	---	---	164.06	6.62	157.44	---	---	---
MW-4	11/28/1994	2,900	200	17	76	260	---	---	---	---	---	---	---	---	---	164.06	6.11	157.95	---	---	---
MW-4	01/13/1995	1,900	130	5.6	13	40	---	---	---	---	---	---	---	---	---	164.06	6.05	158.01	---	---	---
MW-4	04/12/1995	680	150	<2.0	10	13	---	---	---	---	---	---	---	---	---	164.06	6.31	157.75	---	---	---
MW-4	07/25/1995	340	100	0.80	8.8	3.0	---	---	---	---	---	---	---	---	---	164.06	7.36	156.70	---	---	---
MW-4	10/18/1995	150	31	<0.50	3.5	0.80	---	---	---	---	---	---	---	---	---	164.06	8.54	155.52	---	---	---
MW-4	01/17/1996	290	14	<0.50	1.8	0.80	---	---	---	---	---	---	---	---	---	164.06	8.48	155.58	---	---	---
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

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	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
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	---	---

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	01/31/2011	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-5	01/04/2002	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	5.62	---	---	---	---
MW-5	01/10/2002	<50	<0.50	<0.50	<0.50	<0.50	---	110	---	---	---	---	---	---	---	164.06	5.88	158.18	---	3.3	172
MW-5	04/25/2002	<50	<0.50	<0.50	<0.50	<0.50	---	73	---	---	---	---	---	---	---	164.06	6.81	157.25	---	0.3	-44
MW-5	07/18/2002	<50	<0.50	<0.50	<0.50	<0.50	---	75	---	---	---	---	---	---	---	164.06	7.38	156.68	---	0.4	170
MW-5	10/07/2002	<50	<0.50	<0.50	<0.50	<0.50	---	41	---	---	---	---	---	---	---	164.14	6.75	157.39	---	1.5	16
MW-5	01/06/2003	<50	<0.50	<0.50	<0.50	<0.50	---	81	---	---	---	---	---	---	---	164.14	5.96	158.18	---	0.6	166
MW-5	04/07/2003	<50	<0.50	<0.50	<0.50	<1.0	---	77	28	---	---	---	---	---	---	164.14	6.51	157.63	---	0.8	174
MW-5	07/07/2003	<50	<0.50	<0.50	<0.50	<1.0	---	32	23	---	---	---	---	---	---	164.14	6.44	157.70	---	0.3	-17
MW-5	10/09/2003	<50	<0.50	<0.50	<0.50	<1.0	---	59	40	---	---	---	---	---	---	164.14	7.05	157.09	---	0.9	17
MW-5	01/14/2004	<50	<0.50	0.76	<0.50	<1.0	---	47	17	---	---	---	---	---	---	164.14	6.29	157.85	---	1.6	209
MW-5	04/28/2004	<50	<0.50	<0.50	<0.50	<1.0	---	31	11	---	---	---	---	---	---	164.14	6.84	157.30	---	0.4	136
MW-5	07/12/2004	<50	<0.50	<0.50	<0.50	<1.0	---	47	12	<2.0	<2.0	<2.0	---	---	<50	164.14	7.57	156.57	---	0.4	90
MW-5	10/25/2004	<50	<0.50	<0.50	<0.50	<1.0	---	41	13	---	---	---	---	---	---	164.14	6.50	157.64	---	1.74	-21
MW-5	01/17/2005	<50	<0.50	<0.50	<0.50	<1.0	---	41	12	---	---	---	---	---	---	164.14	5.83	158.31	---	0.1	-7
MW-5	04/06/2005	<50	<0.50	<0.50	<0.50	<1.0	---	12	<5.0	---	---	---	---	---	---	164.14	5.91	158.23	---	1.05	-62
MW-5	07/08/2005	<50	<0.50	<0.50	<0.50	<0.50	---	26	18	<0.50	<0.50	<0.50	---	---	<5.0	164.14	6.78	157.36	---	1.2	81
MW-5	10/07/2005	<50	<0.50	<0.50	<0.50	<1.0	---	28	24	---	---	---	---	---	---	164.14	7.64	156.50	---	---	---
MW-5	01/27/2006	<50.0	<0.500	<0.500	<0.500	<0.500	---	26.7	46.3	---	---	---	---	---	---	164.14	6.21	157.93	---	---	---
MW-5	04/28/2006	<50.0	<0.500	<0.500	<0.500	<0.500	---	39.1	15.0	---	---	---	---	---	---	164.14	6.05	158.09	---	---	---
MW-5	07/28/2006	103	<0.500	<0.500	<0.500	<0.500	---	35.5	<10.0	<0.500	<0.500	<0.500	---	---	<50.0	164.14	7.54	156.60	---	---	---
MW-5	10/27/2006	<50.0	<0.500	<0.500	<0.500	<0.500	---	19.7	26.0 d	---	---	---	---	---	---	164.14	7.91	156.23	---	---	---
MW-5	01/10/2007	<50	<0.50	<0.50	<0.50	<1.0	---	11	16	---	---	---	---	---	---	164.14	6.38	157.76	---	---	---
MW-5	04/13/2007	76 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	---	---	---

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	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-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-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-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-9	06/26/2006	---	---	---	---	---	---	---	---	---	---	---	---	---	---	175.20	6.41	168.79	---	---	---
MW-9	07/28/2006	5,690	19.2	2.64	2.02	57.7	---	5,780	166	<0.500	<0.500	2.74	---	---	<50.0	175.20	6.69	168.51	---	---	---
MW-9	10/27/2006	2,710	34.2	<0.500	2.76	4.75	---	2,140	29.2 d	---	---	---	---	---	---	175.20	6.90	168.30	---	---	---
MW-9	01/10/2007	1,500	340	6.8	8.9	27	---	2,300 f	1,400	---	---	---	---	---	---	175.20	6.14	169.06	---	---	---
MW-9	04/13/2007	1,600 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	---	---	---

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-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**	**---**	**---**	**---**
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
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

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)
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

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.

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)

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 # 111013-IW3 Date 10/13/11 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-2	1540	4	ODOR	Interface probe used no product detected			10.18	—		
MW-3	1517	4	ODOR	INTERFACE PROBE USED, NO PRODUCT DETECTED.			13.02	—		
MW-4	1553	2	ODOR	Interface probe used no product detected			~~10.18~~ 7.57	—		

SHELL WELL MONITORING DATA SHEET

BTS #: 111013-IW3	Site: 4255 MacArthur Blvd., Oakland CA
Sampler: IW	Date: 10/13/11
Well I.D.: MW-2	Well Diameter: 2 3 (4) 6 8 ___
Total Well Depth (TD): ___	Depth to Water (DTW): 10.18
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	radius^2 * 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: 0.72kg (1.56lbs)						
• INSTALLED 2 NEW SOCKS IN WELL. TOTAL WEIGHT: 0.28kg (0.62lbs)						

Did well dewater? Yes / No	Gallons actually evacuated:		
Sampling Date: 10/13/11	Sampling Time:	Depth to Water:	
Sample I.D.: MW-2	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 #: 111013 - IW3	Site: 4255 MACARTHUR BLVD, OAKLAND, CA
Sampler: IW	Date: 10/13/11
Well I.D.: MW-3	Well Diameter: 2 3 (4) 6 8 ____
Total Well Depth (TD): ____	Depth to Water (DTW): 13.02
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	radius^2 * 0.163

Time	Temp (°F)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
* NO PRODUCT DETECTED IN WELL.						
* 2 SOCKS IN WELL FOUND ABOVE WATER LEVEL,						
NOT IN WATER COLUMN. SOCKS LOWERED TO 15'						
BELOW TOP OF CASING.						

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 #: 111013 – IW3	Site: 4255 MacArthur Blvd., Oakland CA
Sampler: IW	Date: 10/13/11
Well I.D.: MW-4	Well Diameter: (2) 3 4 6 8 ____
Total Well Depth (TD): ———	Depth to Water (DTW): 7.57
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 1 SOCK FROM WELL TOTAL WEIGHT 0.40 kg (0.90 lbs)						
• INSTALLED 1 NEW SOCK IN WELL TOTAL WEIGHT ~~0.28 kg~~ 0.13 kg (0.28 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 WELLHEAD INSPECTION FORM

(FOR SAMPLE TECHNICIAN)

Site Address 4255 MacArthur Blvd., Okland CA Date 10/13/11

Job Number 111013-IW3 Technician Ian Williams Page 1 of 1

Well ID	Well Inspected - No Corrective Action Required	Well Box Meets Compliance Requirements *See Below	Water Bailed From Wellbox	Cap Replaced	Lock Replaced	Well Not Inspected (explain in notes)	New Deficiency Identified	Previously Identified Deficiency Persists	Notes
MW-2		X					X		1/2 bolts stripped
MW-3	X	X							
MW-4	X	X							

*Well box must meet all three criteria to be compliant: 1) WELL IS SECURABLE BY DESIGN (12"or less) 2) WELL IS MARKED WITH THE WORDS "MONITORING WELL" (12"or less) 3) WELL TAG IS PRESENT, SECURE, AND CORRECT

Notes:

WELL GAUGING DATA

Project # 120123-dw1 Date 1/23/12 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-1	0936	4					7.85	23.35		
mw-2	0955	4	No	Product detected			9.22	19.80		
mw-3	0948	4	No	Product detected			12.30	21.90		
mw-4	1002	2	No	Product detected			5.82	30.60		
mw-5	1545	2					5.40	19.86		
mw-6	0941	2					8.18	23.35		
mw-7	*	unable to access car parked over well								
mw-8	0920	4					4.49	29.81		
mw-9	0925	4					6.49	29.84		

SHELL WELL MONITORING DATA SHEET

BTS #: 120123-DW1	Site: 4255 MacArthur Blvd, Oakla
Sampler: DW	Date: 1/23/12
Well I.D.: MW-1	Well Diameter: 2 3 (4) 6 8 ___
Total Well Depth (TD): 23.35	Depth to Water (DTW): 7.85
Depth to Free Product: ———	Thickness of Free Product (feet): ———
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 10.95	

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: ___

10.1 (Gals.) X	3	= 30.3 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
1106	64.6	6.81	1048	12	10.1	
1107	well dewatered		@	110gals		
1410	62.7	6.99	1044	19	Grab	

Did well dewater? (Yes) No Gallons actually evacuated: 11.0

Sampling Date: 1/23/12 Sampling Time: 1410 Depth to Water: 12.74 (2hr)

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 #: 120123-DW1	Site: 4255 MacArthur Blvd, Oakla
Sampler: DW	Date: 1/23/12
Well I.D.: MW-2	Well Diameter: 2 3 (4) 6 8 ___
Total Well Depth (TD): 19.80	Depth to Water (DTW): 9.22
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]: 11.33	

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: ___

6.9 (Gals.) X 3 = 20.6 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
1206	64.1	6.72	780.7	95	6.9	ODOR
1207	well dewatered		@ 8.0 gals			" "
*	Removed	One Sock	from well. Total Weight (0.40kg 0.86lb			
*	Installed	one Sock	into well. Total weight (0.16kg 0.33lbs			
1450	63.8	6.88	854.3	65	Grab	Heavy Sheen

Did well dewater? (Yes) No Gallons actually evacuated: 8.0

Sampling Date: 1/23/12 Sampling Time: 1450 Depth to Water: 9.22

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 #: 120123-DW1	Site: 4255 MacArthur Blvd, Oakla
Sampler: DW	Date: 1/23/12
Well I.D.: MW-3	Well Diameter: 2 3 (4) 6 8 ___
Total Well Depth (TD): 21.90	Depth to Water (DTW): 12.30
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]: 14.22	

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: ___

6.2 (Gals.) X 3 = 18.6 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
1150	62.8	6.81	1180	295	6.2	
1151	well	dewatered	@ 7.0	gals		
* Removed one sock from well. Total Weight (0.31 kg, 0.69 lbs)						
* Installed one sock into well. Total Weight (0.16 kg, 0.34 lbs)						
1425	62.8	6.95	1134	52	Grab	

Did well dewater? (Yes) No — Gallons actually evacuated: 7.0

Sampling Date: 1/23/12 — Sampling Time: 1425 — Depth to Water: 13.20

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 #: 120123-DW1	Site: 4255 MacArthur Blvd, Oakland
Sampler: DW	Date: 1/23/12
Well I.D.: MW-4	Well Diameter: (2) 3 4 6 8 ___
Total Well Depth (TD): 5.82 30.60	Depth to Water (DTW): 30.60 5.82
Depth to Free Product: —	Thickness of Free Product (feet): —
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 10.78	

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

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

4.0 (Gals.) X 3 = 12.0 Gals.
1 Case Volume | Specified Volumes | Calculated Volume

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

Time	Temp (°F)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
1233	61.0	6.85	1098	281	4.0	Strong odor
1239	62.6	6.72	1079	511	8.0	" "
1244	62.8	6.69	1058	641	12.0	" "
*	Removed one sock from well.				Total Weight (0.26kg, 0.56lbs	
*	Installed one sock into well.				Total Weight (0.16kg, 0.32 lbs	

Did well dewater? Yes (No) Gallons actually evacuated: 12.0

Sampling Date: 1/23/12 Sampling Time: 1300 Depth to Water: 10.68

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 #: 120123-DW1	Site: 4255 MacArthur Blvd, Oakland
Sampler: DW	Date: 1/23/12
Well I.D.: MW-5	Well Diameter: (2) 3 4 6 8 ___
Total Well Depth (TD): 19.86	Depth to Water (DTW): 5.40
Depth to Free Product: ___	Thickness of Free Product (feet): ___
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 8.29	

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: _____

2.3 (Gals.) X	3	= 6.9 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
1547	57.9	7.21	764.4	345	2.3	
1550	58.9	6.78	749.2	604	4.6	
1554	59.3	6.72	738.7	7.91	6.9	

Did well dewater? Yes (No) Gallons actually evacuated: 6.9

Sampling Date: 1/23/12 Sampling Time: 1620 Depth to Water: 8.13

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 #: 120123-DW1	Site: 4255 MacArthur Blvd, Oakla
Sampler: DW	Date: 1/23/12
Well I.D.: MW-6	Well Diameter: (2) 3 4 6 8 ___
Total Well Depth (TD): 23.35	Depth to Water (DTW): 8.18
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]: 11.21	

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: ___

2.4 (Gals.) X 3 = 7.2 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	radius² * 0.163

Time	Temp (°F)	pH	Cond. (mS or (uS))	Turbidity (NTUs)	Gals. Removed	Observations
1119	61.5	6.80	1250	668	2.4	
1122	62.3	6.67	1277	71000	4.8	
1124	62.9	6.66	1250	71000	7.2	

Did well dewater? Yes (No) Gallons actually evacuated: 7.2

Sampling Date: 1/23/12 Sampling Time: 1130 Depth to Water: 9.09

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 #: 120123-DW1	Site: 4255 MacArthur Blvd, Oakland
Sampler: DW	Date: 1/23/12
Well I.D.: MW-7	Well Diameter: 2 3 4 6 8 ____
Total Well Depth (TD): —	Depth to Water (DTW): —
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: PVC Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:	

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

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

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

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

Time	Temp (°F)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
	- UNABLE TO ACCESS WELL DUE TO PARKED					
		VEHICLE				
	-	NO	SAMPLE	TAKEN		

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 #: 120123-DW1	Site: 4255 MacArthur Blvd, Oakland
Sampler: DW	Date: 1/23/12
Well I.D.: MW-8	Well Diameter: 2 3 (4) 6 8 ___
Total Well Depth (TD): 29.81	Depth to Water (DTW): 4.49
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]: 9.55	

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: ___

16.5 (Gals.) X 3 = 49.5 Gals.
1 Case Volume | Specified Volumes | Calculated Volume

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

Time	Temp (°F)	pH	Cond. (mS or (µS))	Turbidity (NTUs)	Gals. Removed	Observations
1038	62.4	6.72	971.7	21	16.5	
1641	65.2	6.61	1043	27	33.0	
1043	well	dewatered	@	40	gals	
1320	61.9	7.11	1036	44	Grab	

Did well dewater? (Yes) No Gallons actually evacuated: ~~44.0~~ (EW) 40.0

Sampling Date: 1/23/12 Sampling Time: 1320 Depth to Water: 6.90

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 #: 120123-DW1	Site: 4255 MacArthur Blvd, Oakla
Sampler: DW	Date: 1/23/12
Well I.D.: MW-9	Well Diameter: 2 3 (4) 6 8 ___
Total Well Depth (TD): 29.64	Depth to Water (DTW): 6.49
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]: 11.12	

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

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

15.0 (Gals.)	X 3	= 45.0 Gals.
1 Case Volume	Specified Volumes	Calculated Volume

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

Time	Temp (°F)	pH	Cond. (mS or (µS))	Turbidity (NTUs)	Gals. Removed	Observations
1053	64.0	7.03	692.1	23	15.0	
1056	65.5	6.76	787.4	22	30.0	
1057	well	dewatered	@ 35.0 gals			
1355	62.3	7.20	853.5	21	Grab	

Did well dewater? (Yes) No Gallons actually evacuated: 35.0

Sampling Date: 1/23/12 Sampling Time: 1355 Depth to Water: 14.80 (2hr)

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 # 98491 5458 | ADDRESS 4255 MacArthur Blvd

DATE: 1/23/12 | 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) 6		Y	N	G	R	G	R	NL	G	P	1/2 bolts missing, 1/2 bolts broken	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)		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:	Photos of Condition Y	Photos of Condition N
			N/A			N

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

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

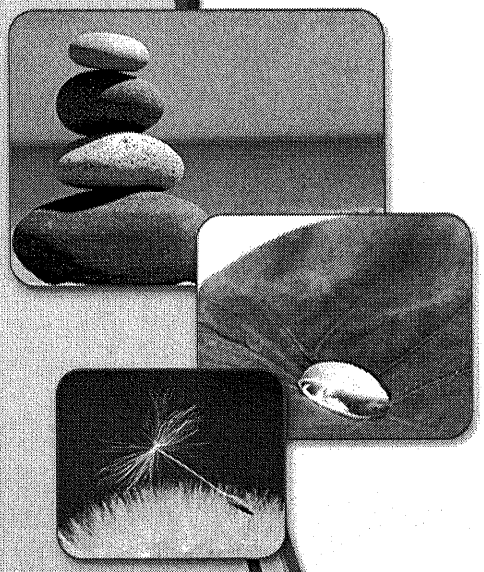
All environmental wells and the remediation compound were in good condition, locked, and secured upon my departure (unless otherwise noted above).

Daniel Allen, BTS

Print or type Name of Field Personnel & Consultant Company

APPENDIX B

TEST AMERICA –
LABORATORY 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: 440-825-1
Client Project/Site: 4255 MacArthur Blvd., Oakland, CA

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

Attn: Peter Schaefrer

Philip Sanelle

Authorized for release by:
2/9/2012 12:49:40 PM

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

Table of Contents

Cover Page 1
Table of Contents 2
Sample Summary 3
Client Sample Results 4
Chronicle 8
QC Sample Results 10
QC Association 15
Definitions 17
Certification Summary 18
Chain of Custody 19
Receipt Checklists 20

Sample Summary

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

TestAmerica Job ID: 440-825-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
440-825-1	MW-1	Water	01/23/12 14:10	01/26/12 09:45
440-825-2	MW-2	Water	01/23/12 14:50	01/26/12 09:45
440-825-3	MW-3	Water	01/23/12 14:25	01/26/12 09:45
440-825-4	MW-4	Water	01/23/12 13:00	01/26/12 09:45
440-825-5	MW-5	Water	01/23/12 16:20	01/26/12 09:45
440-825-6	MW-6	Water	01/23/12 11:30	01/26/12 09:45
440-825-7	MW-8	Water	01/23/12 13:20	01/26/12 09:45
440-825-8	MW-9	Water	01/23/12 13:55	01/26/12 09:45

Client Sample Results

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

TestAmerica Job ID: 440-825-1

Client Sample ID: MW-1

Date Collected: 01/23/12 14:10
Date Received: 01/26/12 09:45

Lab Sample ID: 440-825-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Volatile Fuel Hydrocarbons (C4-C12)	ND		1000		ug/L			02/02/12 01:45	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*92*		*80 - 120*		*02/02/12 01:45*	*20*
4-Bromofluorobenzene (Surr)	*94*		*80 - 120*		*02/02/12 01:45*	*20*
Toluene-d8 (Surr)	*106*		*80 - 120*		*02/02/12 01:45*	*20*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**49**		10		ug/L			02/02/12 01:45	20
Ethylbenzene	ND		10		ug/L			02/02/12 01:45	20
Methyl-t-Butyl Ether (MTBE)	**1200**		10		ug/L			02/02/12 01:45	20
tert-Butyl alcohol (TBA)	**1200**		200		ug/L			02/02/12 01:45	20
Toluene	ND		10		ug/L			02/02/12 01:45	20
Xylenes, Total	ND		20		ug/L			02/02/12 01:45	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*80 - 120*		*02/02/12 01:45*	*20*
Dibromofluoromethane (Surr)	*92*		*80 - 120*		*02/02/12 01:45*	*20*
Toluene-d8 (Surr)	*106*		*80 - 120*		*02/02/12 01:45*	*20*

Client Sample ID: MW-2

Date Collected: 01/23/12 14:50
Date Received: 01/26/12 09:45

Lab Sample ID: 440-825-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Volatile Fuel Hydrocarbons (C4-C12)	**48000**		5000		ug/L			01/31/12 01:01	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*103*		*80 - 120*		*01/31/12 01:01*	*100*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*		*01/31/12 01:01*	*100*
Toluene-d8 (Surr)	*108*		*80 - 120*		*01/31/12 01:01*	*100*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**1400**		50		ug/L			01/31/12 01:01	100
Ethylbenzene	**2200**		50		ug/L			01/31/12 01:01	100
Methyl-t-Butyl Ether (MTBE)	**820**		50		ug/L			01/31/12 01:01	100
tert-Butyl alcohol (TBA)	**1200**		1000		ug/L			01/31/12 01:01	100
Toluene	**1100**		50		ug/L			01/31/12 01:01	100
Xylenes, Total	**6100**		100		ug/L			01/31/12 01:01	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*		*01/31/12 01:01*	*100*
Dibromofluoromethane (Surr)	*103*		*80 - 120*		*01/31/12 01:01*	*100*
Toluene-d8 (Surr)	*108*		*80 - 120*		*01/31/12 01:01*	*100*

Client Sample ID: MW-3

Date Collected: 01/23/12 14:25
Date Received: 01/26/12 09:45

Lab Sample ID: 440-825-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Volatile Fuel Hydrocarbons (C4-C12)	25000		1300		ug/L			01/31/12 01:29	25

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*99*		*80 - 120*		*01/31/12 01:29*	*25*
4-Bromofluorobenzene (Surr)	*104*		*80 - 120*		*01/31/12 01:29*	*25*
Toluene-d8 (Surr)	*106*		*80 - 120*		*01/31/12 01:29*	*25*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	1500		13		ug/L			01/31/12 01:29	25
Ethylbenzene	640		13		ug/L			01/31/12 01:29	25
Methyl-t-Butyl Ether (MTBE)	730		13		ug/L			01/31/12 01:29	25
tert-Butyl alcohol (TBA)	660		250		ug/L			01/31/12 01:29	25
Toluene	16		13		ug/L			01/31/12 01:29	25
Xylenes, Total	610		25		ug/L			01/31/12 01:29	25

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*80 - 120*		*01/31/12 01:29*	*25*
Dibromofluoromethane (Surr)	*99*		*80 - 120*		*01/31/12 01:29*	*25*
Toluene-d8 (Surr)	*106*		*80 - 120*		*01/31/12 01:29*	*25*

Client Sample ID: MW-4

Date Collected: 01/23/12 13:00
Date Received: 01/26/12 09:45

Lab Sample ID: 440-825-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Volatile Fuel Hydrocarbons (C4-C12)	6100		250		ug/L			02/02/12 02:12	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*93*		*80 - 120*		*02/02/12 02:12*	*5*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*		*02/02/12 02:12*	*5*
Toluene-d8 (Surr)	*108*		*80 - 120*		*02/02/12 02:12*	*5*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	83		2.5		ug/L			02/02/12 02:12	5
Ethylbenzene	230		2.5		ug/L			02/02/12 02:12	5
Methyl-t-Butyl Ether (MTBE)	46		2.5		ug/L			02/02/12 02:12	5
tert-Butyl alcohol (TBA)	150		50		ug/L			02/02/12 02:12	5
Toluene	61		2.5		ug/L			02/02/12 02:12	5
Xylenes, Total	510		5.0		ug/L			02/02/12 02:12	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*		*02/02/12 02:12*	*5*
Dibromofluoromethane (Surr)	*93*		*80 - 120*		*02/02/12 02:12*	*5*
Toluene-d8 (Surr)	*108*		*80 - 120*		*02/02/12 02:12*	*5*

Client Sample ID: MW-5

Date Collected: 01/23/12 16:20
Date Received: 01/26/12 09:45

Lab Sample ID: 440-825-5

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Volatile Fuel Hydrocarbons (C4-C12)	ND		50		ug/L			01/31/12 02:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*98*		*80 - 120*		*01/31/12 02:24*	*1*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*		*01/31/12 02:24*	*1*
Toluene-d8 (Surr)	*108*		*80 - 120*		*01/31/12 02:24*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50		ug/L			01/31/12 02:24	1
Ethylbenzene	ND		0.50		ug/L			01/31/12 02:24	1
Methyl-t-Butyl Ether (MTBE)	**5.7**		0.50		ug/L			01/31/12 02:24	1
tert-Butyl alcohol (TBA)	ND		10		ug/L			01/31/12 02:24	1
Toluene	ND		0.50		ug/L			01/31/12 02:24	1
Xylenes, Total	ND		1.0		ug/L			01/31/12 02:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*		*01/31/12 02:24*	*1*
Dibromofluoromethane (Surr)	*98*		*80 - 120*		*01/31/12 02:24*	*1*
Toluene-d8 (Surr)	*108*		*80 - 120*		*01/31/12 02:24*	*1*

Client Sample ID: MW-6

Date Collected: 01/23/12 11:30
Date Received: 01/26/12 09:45

Lab Sample ID: 440-825-6

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Volatile Fuel Hydrocarbons (C4-C12)	**2100**		500		ug/L			01/31/12 02:52	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*99*		*80 - 120*		*01/31/12 02:52*	*10*
4-Bromofluorobenzene (Surr)	*102*		*80 - 120*		*01/31/12 02:52*	*10*
Toluene-d8 (Surr)	*108*		*80 - 120*		*01/31/12 02:52*	*10*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**300**		5.0		ug/L			01/31/12 02:52	10
Ethylbenzene	**5.1**		5.0		ug/L			01/31/12 02:52	10
Methyl-t-Butyl Ether (MTBE)	**61**		5.0		ug/L			01/31/12 02:52	10
tert-Butyl alcohol (TBA)	**3100**		100		ug/L			01/31/12 02:52	10
Toluene	**5.3**		5.0		ug/L			01/31/12 02:52	10
Xylenes, Total	**13**		10		ug/L			01/31/12 02:52	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*80 - 120*		*01/31/12 02:52*	*10*
Dibromofluoromethane (Surr)	*99*		*80 - 120*		*01/31/12 02:52*	*10*
Toluene-d8 (Surr)	*108*		*80 - 120*		*01/31/12 02:52*	*10*

Client Sample ID: MW-8

Lab Sample ID: 440-825-7

Date Collected: 01/23/12 13:20
Matrix: Water
Date Received: 01/26/12 09:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Volatile Fuel Hydrocarbons (C4-C12)	ND		250		ug/L			01/31/12 03:19	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*97*		*80 - 120*		*01/31/12 03:19*	*5*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*		*01/31/12 03:19*	*5*
Toluene-d8 (Surr)	*107*		*80 - 120*		*01/31/12 03:19*	*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			01/31/12 03:19	5
Ethylbenzene	ND		2.5		ug/L			01/31/12 03:19	5
Methyl-t-Butyl Ether (MTBE)	**320**		2.5		ug/L			01/31/12 03:19	5
tert-Butyl alcohol (TBA)	**98**		50		ug/L			01/31/12 03:19	5
Toluene	ND		2.5		ug/L			01/31/12 03:19	5
Xylenes, Total	ND		5.0		ug/L			01/31/12 03:19	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*		*01/31/12 03:19*	*5*
Dibromofluoromethane (Surr)	*97*		*80 - 120*		*01/31/12 03:19*	*5*
Toluene-d8 (Surr)	*107*		*80 - 120*		*01/31/12 03:19*	*5*

Client Sample ID: MW-9

Lab Sample ID: 440-825-8

Date Collected: 01/23/12 13:55
Matrix: Water
Date Received: 01/26/12 09:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Volatile Fuel Hydrocarbons (C4-C12)	**390**		100		ug/L			01/31/12 03:47	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*97*		*80 - 120*		*01/31/12 03:47*	*2*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*		*01/31/12 03:47*	*2*
Toluene-d8 (Surr)	*104*		*80 - 120*		*01/31/12 03:47*	*2*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**9.9**		1.0		ug/L			01/31/12 03:47	2
Ethylbenzene	**4.7**		1.0		ug/L			01/31/12 03:47	2
Methyl-t-Butyl Ether (MTBE)	**460**		1.0		ug/L			01/31/12 03:47	2
tert-Butyl alcohol (TBA)	**370**		20		ug/L			01/31/12 03:47	2
Toluene	ND		1.0		ug/L			01/31/12 03:47	2
Xylenes, Total	**5.8**		2.0		ug/L			01/31/12 03:47	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*		*01/31/12 03:47*	*2*
Dibromofluoromethane (Surr)	*97*		*80 - 120*		*01/31/12 03:47*	*2*
Toluene-d8 (Surr)	*104*		*80 - 120*		*01/31/12 03:47*	*2*

Lab Chronicle

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

TestAmerica Job ID: 440-825-1

Client Sample ID: MW-1

Lab Sample ID: 440-825-1

Date Collected: 01/23/12 14:10

Matrix: Water

Date Received: 01/26/12 09:45

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	4686	02/02/12 01:45	MR	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTMS		20	10 mL	10 mL	4687	02/02/12 01:45	MR	TAL IRV

Client Sample ID: MW-2

Lab Sample ID: 440-825-2

Date Collected: 01/23/12 14:50

Matrix: Water

Date Received: 01/26/12 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		100	10 mL	10 mL	4350	01/31/12 01:01	KD	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTMS		100	10 mL	10 mL	4351	01/31/12 01:01	KD	TAL IRV

Client Sample ID: MW-3

Lab Sample ID: 440-825-3

Date Collected: 01/23/12 14:25

Matrix: Water

Date Received: 01/26/12 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		25	10 mL	10 mL	4350	01/31/12 01:29	KD	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTMS		25	10 mL	10 mL	4351	01/31/12 01:29	KD	TAL IRV

Client Sample ID: MW-4

Lab Sample ID: 440-825-4

Date Collected: 01/23/12 13:00

Matrix: Water

Date Received: 01/26/12 09:45

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	4686	02/02/12 02:12	MR	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTMS		5	10 mL	10 mL	4687	02/02/12 02:12	MR	TAL IRV

Client Sample ID: MW-5

Lab Sample ID: 440-825-5

Date Collected: 01/23/12 16:20

Matrix: Water

Date Received: 01/26/12 09:45

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	4350	01/31/12 02:24	KD	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTMS		1	10 mL	10 mL	4351	01/31/12 02:24	KD	TAL IRV

Client Sample ID: MW-6

Lab Sample ID: 440-825-6

Date Collected: 01/23/12 11:30

Matrix: Water

Date Received: 01/26/12 09:45

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	4350	01/31/12 02:52	KD	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTMS		10	10 mL	10 mL	4351	01/31/12 02:52	KD	TAL IRV

Lab Chronicle

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

TestAmerica Job ID: 440-825-1

Client Sample ID: MW-8

Lab Sample ID: 440-825-7

Date Collected: 01/23/12 13:20

Matrix: Water

Date Received: 01/26/12 09:45

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	4350	01/31/12 03:19	KD	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTMS		5	10 mL	10 mL	4351	01/31/12 03:19	KD	TAL IRV

Client Sample ID: MW-9

Lab Sample ID: 440-825-8

Date Collected: 01/23/12 13:55

Matrix: Water

Date Received: 01/26/12 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		2	10 mL	10 mL	4350	01/31/12 03:47	KD	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTMS		2	10 mL	10 mL	4351	01/31/12 03:47	KD	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 440-4350/4
Matrix: Water
Analysis Batch: 4350

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50		ug/L			01/30/12 20:28	1
Ethylbenzene	ND		0.50		ug/L			01/30/12 20:28	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50		ug/L			01/30/12 20:28	1
tert-Butyl alcohol (TBA)	ND		10		ug/L			01/30/12 20:28	1
Toluene	ND		0.50		ug/L			01/30/12 20:28	1
Xylenes, Total	ND		1.0		ug/L			01/30/12 20:28	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*		*01/30/12 20:28*	*1*
Dibromofluoromethane (Surr)	*93*		*80 - 120*		*01/30/12 20:28*	*1*
Toluene-d8 (Surr)	*103*		*80 - 120*		*01/30/12 20:28*	*1*

Lab Sample ID: LCS 440-4350/5
Matrix: Water
Analysis Batch: 4350

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	27.3		ug/L		109	70 - 120
Ethylbenzene	25.0	27.6		ug/L		110	75 - 125
m,p-Xylene	50.0	55.9		ug/L		112	75 - 125
Methyl-t-Butyl Ether (MTBE)	25.0	26.7		ug/L		107	60 - 135
o-Xylene	25.0	28.2		ug/L		113	75 - 125
tert-Butyl alcohol (TBA)	125	127		ug/L		101	70 - 135
Toluene	25.0	26.6		ug/L		106	70 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*102*		*80 - 120*
Dibromofluoromethane (Surr)	*97*		*80 - 120*
Toluene-d8 (Surr)	*105*		*80 - 120*

Lab Sample ID: 440-828-A-1 MS
Matrix: Water
Analysis Batch: 4350

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	ND		25.0	26.3		ug/L		105	65 - 125
Ethylbenzene	ND		25.0	25.2		ug/L		101	65 - 130
m,p-Xylene	ND		50.0	52.4		ug/L		105	65 - 130
Methyl-t-Butyl Ether (MTBE)	0.77		25.0	26.2		ug/L		102	55 - 145
o-Xylene	ND		25.0	26.1		ug/L		104	65 - 125
tert-Butyl alcohol (TBA)	ND		125	132		ug/L		105	65 - 140
Toluene	ND		25.0	25.7		ug/L		103	70 - 125

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*
Dibromofluoromethane (Surr)	*98*		*80 - 120*
Toluene-d8 (Surr)	*106*		*80 - 120*

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

Lab Sample ID: 440-828-A-1 MSD
Matrix: Water
Analysis Batch: 4350

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	27.0		ug/L		108	65 - 125	3	20
Ethylbenzene	ND		25.0	26.4		ug/L		106	65 - 130	5	20
m,p-Xylene	ND		50.0	52.5		ug/L		105	65 - 130	0	25
Methyl-t-Butyl Ether (MTBE)	0.77		25.0	27.0		ug/L		105	55 - 145	3	25
o-Xylene	ND		25.0	27.2		ug/L		109	65 - 125	4	20
tert-Butyl alcohol (TBA)	ND		125	128		ug/L		102	65 - 140	3	25
Toluene	ND		25.0	26.5		ug/L		106	70 - 125	3	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*
Dibromofluoromethane (Surr)	*100*		*80 - 120*
Toluene-d8 (Surr)	*106*		*80 - 120*

Lab Sample ID: MB 440-4686/4
Matrix: Water
Analysis Batch: 4686

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			02/01/12 19:25	1
Ethylbenzene	ND		0.50		ug/L			02/01/12 19:25	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50		ug/L			02/01/12 19:25	1
tert-Butyl alcohol (TBA)	ND		10		ug/L			02/01/12 19:25	1
Toluene	ND		0.50		ug/L			02/01/12 19:25	1
Xylenes, Total	ND		1.0		ug/L			02/01/12 19:25	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*80 - 120*		*02/01/12 19:25*	*1*
Dibromofluoromethane (Surr)	*87*		*80 - 120*		*02/01/12 19:25*	*1*
Toluene-d8 (Surr)	*106*		*80 - 120*		*02/01/12 19:25*	*1*

Lab Sample ID: LCS 440-4686/5
Matrix: Water
Analysis Batch: 4686

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	25.0	26.8		ug/L		107	70 - 120
Ethylbenzene	25.0	24.9		ug/L		100	75 - 125
m,p-Xylene	50.0	51.9		ug/L		104	75 - 125
Methyl-t-Butyl Ether (MTBE)	25.0	24.8		ug/L		99	60 - 135
o-Xylene	25.0	25.8		ug/L		103	75 - 125
tert-Butyl alcohol (TBA)	125	119		ug/L		95	70 - 135
Toluene	25.0	25.2		ug/L		101	70 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*94*		*80 - 120*
Dibromofluoromethane (Surr)	*91*		*80 - 120*
Toluene-d8 (Surr)	*105*		*80 - 120*

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

Lab Sample ID: 440-822-B-4 MS
Matrix: Water
Analysis Batch: 4686

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	ND		25.0	26.2		ug/L		104	65 - 125
Ethylbenzene	0.50		25.0	24.7		ug/L		97	65 - 130
m,p-Xylene	ND		50.0	49.6		ug/L		99	65 - 130
Methyl-t-Butyl Ether (MTBE)	86		25.0	112		ug/L		106	55 - 145
o-Xylene	ND		25.0	24.7		ug/L		99	65 - 125
tert-Butyl alcohol (TBA)	300		125	414		ug/L		90	65 - 140
Toluene	ND		25.0	25.2		ug/L		101	70 - 125

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*96*		*80 - 120*
Dibromofluoromethane (Surr)	*96*		*80 - 120*
Toluene-d8 (Surr)	*106*		*80 - 120*

Lab Sample ID: 440-822-B-4 MSD
Matrix: Water
Analysis Batch: 4686

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	27.4		ug/L		108	65 - 125	4	20
Ethylbenzene	0.50		25.0	25.2		ug/L		99	65 - 130	2	20
m,p-Xylene	ND		50.0	51.6		ug/L		103	65 - 130	4	25
Methyl-t-Butyl Ether (MTBE)	86		25.0	108		ug/L		88	55 - 145	4	25
o-Xylene	ND		25.0	25.7		ug/L		103	65 - 125	4	20
tert-Butyl alcohol (TBA)	300		125	426		ug/L		100	65 - 140	3	25
Toluene	ND		25.0	25.7		ug/L		103	70 - 125	2	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*96*		*80 - 120*
Dibromofluoromethane (Surr)	*96*		*80 - 120*
Toluene-d8 (Surr)	*106*		*80 - 120*

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

Lab Sample ID: MB 440-4351/4
Matrix: Water
Analysis Batch: 4351

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Volatile Fuel Hydrocarbons (C4-C12)	ND		50		ug/L			01/30/12 20:28	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*93*		*80 - 120*		*01/30/12 20:28*	*1*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*		*01/30/12 20:28*	*1*
Toluene-d8 (Surr)	*103*		*80 - 120*		*01/30/12 20:28*	*1*

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

Lab Sample ID: LCS 440-4351/6
Matrix: Water
Analysis Batch: 4351

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	499		ug/L		100	55 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*96*		*80 - 120*
4-Bromofluorobenzene (Surr)	*104*		*80 - 120*
Toluene-d8 (Surr)	*107*		*80 - 120*

Lab Sample ID: 440-828-A-1 MS
Matrix: Water
Analysis Batch: 4351

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	1380		ug/L		80	50 - 145

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*98*		*80 - 120*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*
Toluene-d8 (Surr)	*106*		*80 - 120*

Lab Sample ID: 440-828-A-1 MSD
Matrix: Water
Analysis Batch: 4351

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		83	50 - 145	4	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*100*		*80 - 120*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*
Toluene-d8 (Surr)	*106*		*80 - 120*

Lab Sample ID: MB 440-4687/4
Matrix: Water
Analysis Batch: 4687

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			02/01/12 19:25	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*87*		*80 - 120*		*02/01/12 19:25*	*1*
4-Bromofluorobenzene (Surr)	*94*		*80 - 120*		*02/01/12 19:25*	*1*
Toluene-d8 (Surr)	*106*		*80 - 120*		*02/01/12 19:25*	*1*

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

Lab Sample ID: LCS 440-4687/6
Matrix: Water
Analysis Batch: 4687

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	469		ug/L		94	55 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*90*		*80 - 120*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*
Toluene-d8 (Surr)	*106*		*80 - 120*

Lab Sample ID: 440-822-B-4 MS
Matrix: Water
Analysis Batch: 4687

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)	240		1730	1570		ug/L		77	50 - 145		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*96*		*80 - 120*
4-Bromofluorobenzene (Surr)	*96*		*80 - 120*
Toluene-d8 (Surr)	*106*		*80 - 120*

Lab Sample ID: 440-822-B-4 MSD
Matrix: Water
Analysis Batch: 4687

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)	240		1730	1570		ug/L		78	50 - 145	1	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*96*		*80 - 120*
4-Bromofluorobenzene (Surr)	*96*		*80 - 120*
Toluene-d8 (Surr)	*106*		*80 - 120*

QC Association Summary

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

TestAmerica Job ID: 440-825-1

GC/MS VOA

Analysis Batch: 4350

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-825-2	MW-2	Total/NA	Water	8260B	
440-825-3	MW-3	Total/NA	Water	8260B	
440-825-5	MW-5	Total/NA	Water	8260B	
440-825-6	MW-6	Total/NA	Water	8260B	
440-825-7	MW-8	Total/NA	Water	8260B	
440-825-8	MW-9	Total/NA	Water	8260B	
440-828-A-1 MS	Matrix Spike	Total/NA	Water	8260B	
440-828-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	
LCS 440-4350/5	Lab Control Sample	Total/NA	Water	8260B	
MB 440-4350/4	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 4351

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-825-2	MW-2	Total/NA	Water	8260B/CA_LUFT MS	
440-825-3	MW-3	Total/NA	Water	8260B/CA_LUFT MS	
440-825-5	MW-5	Total/NA	Water	8260B/CA_LUFT MS	
440-825-6	MW-6	Total/NA	Water	8260B/CA_LUFT MS	
440-825-7	MW-8	Total/NA	Water	8260B/CA_LUFT MS	
440-825-8	MW-9	Total/NA	Water	8260B/CA_LUFT MS	
440-828-A-1 MS	Matrix Spike	Total/NA	Water	8260B/CA_LUFT MS	
440-828-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B/CA_LUFT MS	
LCS 440-4351/6	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT MS	
MB 440-4351/4	Method Blank	Total/NA	Water	8260B/CA_LUFT MS	

Analysis Batch: 4686

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-822-B-4 MS	Matrix Spike	Total/NA	Water	8260B	
440-822-B-4 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	
440-825-1	MW-1	Total/NA	Water	8260B	
440-825-4	MW-4	Total/NA	Water	8260B	
LCS 440-4686/5	Lab Control Sample	Total/NA	Water	8260B	
MB 440-4686/4	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 4687

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-822-B-4 MS	Matrix Spike	Total/NA	Water	8260B/CA_LUFT MS	
440-822-B-4 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B/CA_LUFT MS	
440-825-1	MW-1	Total/NA	Water	8260B/CA_LUFT MS	
440-825-4	MW-4	Total/NA	Water	8260B/CA_LUFT MS	
LCS 440-4687/6	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT MS	

GC/MS VOA (Continued)

Analysis Batch: 4687 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 440-4687/4	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
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
EDL	Estimated Detection Limit
EPA	United States Environmental Protection Agency
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RL	Reporting Limit
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: 440-825-1

Laboratory	Authority	Program	EPA Region	Certification ID
TestAmerica Irvine	Arizona	State Program	9	AZ0671
TestAmerica Irvine	California	State Program	9	2706
TestAmerica Irvine	Nevada	State Program	9	CA015312007A
TestAmerica Irvine	Oregon	NELAC	10	4005
TestAmerica Irvine	USDA	USDA		P330-09-00080

Accreditation may not be offered or required for all methods and analytes reported in this package . Please contact your project manager for the laboratory's current list of certified methods and analytes.

Shell Oil Products Chain Of Custody Record

LAB (LOCATION)

- ☐ CALSCIENCE (________)
- ☐ SPL (________)
- ☐ XENCO (________)
- ☑ TEST AMERICA (IRVINE)
- ☐ OTHER (________)

Please Check Appropriate Box:

- ☐ ENV. SERVICES
- ☐ MOTIVA RETAIL
- ☐ SHELL RETAIL
- ☐ MOTIVA SD&CM
- ☑ CONSULTANT
- ☐ LUBES
- ☐ SHELL PIPELINE
- ☐ OTHER ________

Print Bill To Contact Name: Peter Schaefer 240524

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

☐ CHECK IF NO INCIDENT # APPLIES

PO #: 4 0 - 4 0 3 4 9 7 3

SAP #:

DATE: 1/23/12

PAGE: 1 of 1

SAMPLING COMPANY:	Blaine Tech Services
LOG CODE:	BTSS
ADDRESS:	1680 Rogers Avenue, San Jose, CA
PROJECT CONTACT (Hardcopy or PDF Report to):	Lorin King
TELEPHONE:	310-995-4455 x 108
FAX:	310-637-5802
E-MAIL:	lking@blainetech.com
SITE ADDRESS: Street and City	4255 MacArthur Blvd., Oakland
State	CA
GLOBAL ID NO.:	T0600101261
EDF DELIVERABLE TO (Name, Company, Office Location):	Brenda Carter, CRA, Emeryville
PHONE NO.:	510-420-3343
E-MAIL:	shelledf@craworld.com
CONSULTANT PROJECT NO.:	120123-DW1
SAMPLER NAME(S) (Print):	Daniel Allen
LAB USE ONLY	440-825

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:

SPECIAL INSTRUCTIONS OR NOTES :

Email invoice and copy of final report to Shell.Lab.Billing@craworld.com

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

TEMPERATURE ON RECEIPT C°: (CS) 4.1

REQUESTED ANALYSIS

Field Sample Identification	DATE	TIME	MATRIX	HCL	HNO3	H2SO4	NONE	OTHER	NO. OF CONT.	TPH -GRO, Purgeable (8260B)	TPH -DRO, Extractable (8015M)	TPHg (8015M)	BTEX (8260B)	BTEX + MTBE (8260B)	BTEX + MTBE + TBA (8260B)	BTEX + 5 OXYs (MTBE, TBA, DIPE, TAME, ETBE) 8260B	Full VOC list (8260B)	Single Compound: ___ (8260B)	1,2-DCA (8260B)	EDB (8260B)	Ethanol (8260B)	Methanol (8015M)	Container PID Readings or Laboratory Notes
MW-1	1/23/12	1410	WG	X					3	X					X								
MW-2	↓	1450	↓	X					3	X					X								
MW-3	↓	1425	↓	X					3	X					X								
MW-4	↓	1300	↓	X					3	X					X								
MW-5	↓	1620	↓	X					3	X					X								
MW-6	↓	1130	↓	X					3	X					X								
MW-8	↓	1320	↓	X					3	X					X								
MW-9	↓	1355	↓	X					3	X					X								

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Daniel Allen	Daniel Allen (custodian)	1/23/12	1730
[signature] (sample custodian)	Gerald Naylor	1-25-12	11:50
Gerald Naylor 1-25-12 17:00	[signature]	1/26/12	9:45

05/2/06 Revision

2/9/2012

Login Sample Receipt Checklist

Client: Conestoga-Rovers & Associates, Inc.

Job Number: 440-825-1

Login Number: 825

List Number: 1

Creator: Van Banh, Vu

List Source: TestAmerica Irvine

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	
The cooler's custody seal, if present, is 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	Darrel Allen
There are no discrepancies between the sample IDs on the containers 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.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

APPENDIX C

CRA –
DATA TABLE FOR 76 SERVICE STATION NO. 1156

TABLE 1

GROUNDWATER MONITORING AND SAMPLING DATA
UNOCAL STATION# 1156 (UNION OIL SITE 351645)
4276 MACARTHUR BLVD.
OAKLAND, CALIFORNIA

					HYDROCARBONS			PRIMARY VOCS											
Location	Date	TOC	DTW	GWE	Oil And Grease	TPHd	TPHg	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE by SW8260	Diisopropyl ether (DIPE)	tert-Butyl ethyl ether (ETBE)	tert-Amyl methyl ether (TAME)	tert-Butyl alcohol (TBA)	1,2-Dibromoethane (EDB)	1,2-Dichloroethane (1,2-DCA)	Ethanol
	Units	ft	ft	ft-amsl	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MW-1B	07/25/2011	174.06	6.69	167.37	<5.0	<40	140	7.8	0.35	<0.30	<0.60	47	<0.50	<0.50	<0.50	28	<0.50	0.75	<250
MW-1B	10/07/2011	174.06	6.86	167.20	<5.0	<40	120	5.7	<0.30	<0.30	<0.60	41	<0.50	<0.50	<0.50	30	<0.50	<0.50	<250
MW-1B	**01/23/2012**	**174.06**	**6.96**	**167.10**	**<5.0**	**<40**	**89**	**3.6**	**<0.30**	**<0.30**	**<0.60**	**32**	**<0.50**	**<0.50**	**<0.50**	**23**	**<0.50**	**<0.50**	**<250**
MW-2B	07/25/2011	173.55	3.91	169.64	-	<40	210	1.7	<0.30	<0.30	<0.60	170	<0.50	<0.50	<0.50	1,100	<0.50	<0.50	<250
MW-2B	10/07/2011	173.55	4.50	169.05	-	52	110	1.0	<0.30	<0.30	<0.60	100	<0.50	<0.50	<0.50	840	<0.50	<0.50	<250
MW-2B	**01/23/2012**	**173.55**	**6.96**	**166.59**	**-**	**<40**	**110**	**0.73**	**<0.30**	**<0.30**	**<0.60**	**95**	**<0.50**	**<0.50**	**<0.50**	**370**	**<0.50**	**<0.50**	**<250**
MW-3B	07/25/2011	177.77	5.53	172.24	-	100	1,700	28	33	80	73	62	<0.50	<0.50	<0.50	47	<0.50	<0.50	<250
MW-3B	10/07/2011	177.77	6.08	171.69	-	81	1,700	32	20	88	47	61	<0.50	<0.50	<0.50	64	<0.50	<0.50	<250
MW-3B	**01/23/2012**	**177.77**	**6.90**	**170.87**	**-**	**120**	**1,800**	**39**	**17**	**75**	**20**	**56**	**<0.50**	**<0.50**	**<0.50**	**<10**	**<0.50**	**<0.50**	**<250**
MW-4B	07/25/2011	179.07	5.52	173.55	-	<40	<50	<0.30	<0.30	<0.30	<0.60	28	<0.50	<0.50	<0.50	<10	<0.50	<0.50	<250
MW-4B	10/07/2011	179.07	6.04	173.03	-	<40	<50	<0.30	0.46	<0.30	<0.60	25	<0.50	<0.50	<0.50	25	<0.50	<0.50	<250
MW-4B	**01/23/2012**	**179.07**	**6.58**	**172.49**	**-**	**<40**	**<50**	**<0.30**	**0.36**	**0.87**	**<0.60**	**17**	**<0.50**	**<0.50**	**<0.50**	**<10**	**<0.50**	**<0.50**	**<250**
MW-5	07/25/2011	169.18	1.79	167.39	-	<40	140	<0.30	<0.30	<0.30	<0.60	130	<0.50	<0.50	<0.50	<10	<0.50	1.6	<250
MW-5	10/07/2011[1]	169.18	2.18	167.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-5	**01/23/2012**	**169.18**	**1.98**	**167.20**	**-**	**<40**	**<50**	**<0.30**	**<0.30**	**<0.30**	**<0.60**	**52**	**<0.50**	**<0.50**	**<0.50**	**22**	**<0.50**	**0.92**	**<250**

TABLE 1

GROUNDWATER MONITORING AND SAMPLING DATA
UNOCAL STATION# 1156 (UNION OIL SITE 351645)
4276 MACARTHUR BLVD.
OAKLAND, CALIFORNIA

					HYDROCARBONS			PRIMARY VOCS											
Location	Date	TOC	DTW	GWE	Oil And Grease	TPHd	TPHg	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE by SW8260	Diisopropyl ether (DIPE)	tert-Butyl ethyl ether (ETBE)	tert-Amyl methyl ether (TAME)	tert-Butyl alcohol (TBA)	1,2-Dibromoethane (EDB)	1,2-Dichloroethane (1,2-DCA)	Ethanol
	Units	ft	ft	ft-amsl	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MW-7	07/25/2011	172.11	6.89	165.22	-	<40	610	2.5	<0.30	<0.30	<0.60	620	<0.50	<0.50	<0.50	220	<0.50	1.6	<250
MW-7	10/07/2011[1]	172.11	7.15	164.96	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-7	**01/23/2012**	**172.11**	**6.92**	**165.19**	**-**	**<40**	**300**	**<0.30**	**0.55**	**<0.30**	**<0.60**	**390**	**<0.50**	**<0.50**	**<0.50**	**190**	**<0.50**	**1.2**	**<250**

Abbreviations and Notes:

TOC = Top of Casing

DTW = Depth to Water

GWE = Groundwater elevation

(ft-amsl) = Feet Above Mean sea level

ft = Feet

µg/L = Micrograms per Liter

mg/L = Milligrams per Liter

TPHd = Diesel Range Organics

TPHg = Gasoline Range Organics

VOCS = Volatile Organic Compounds

MTBE = Methyl tert butyl ether

-- = Not available / not applicable

<x = Not detected above laboratory reported practical quantitation level.

1 Only monitored during 2nd and 4th quarters